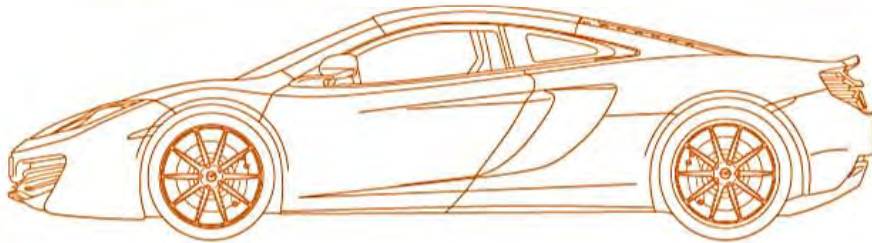
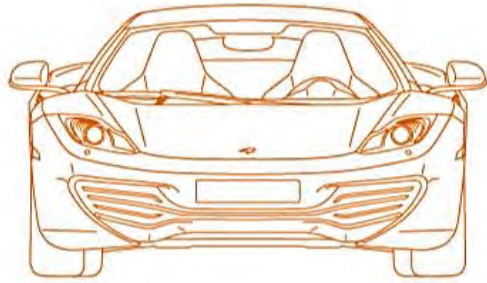
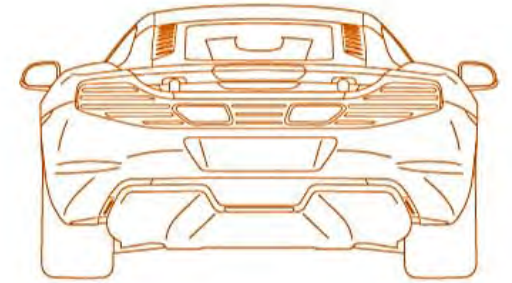
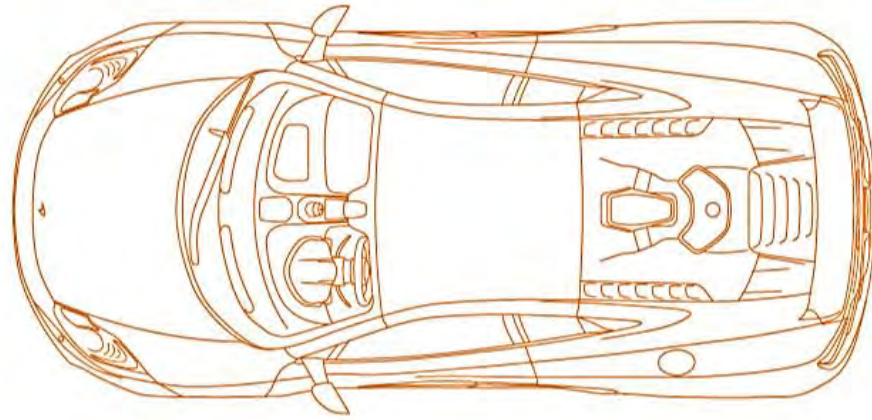
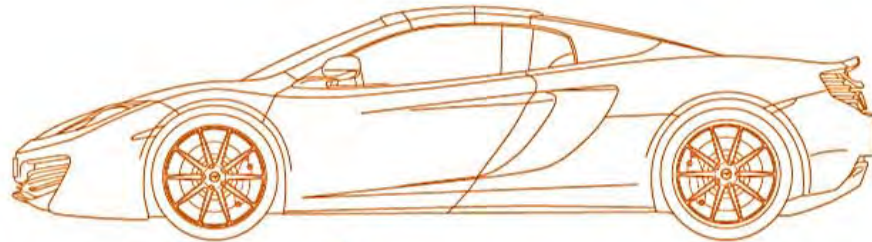


McLaren
AUTOMOTIVE



MP4-12C

Repair Procedures:

Fender Cover Inner	2
Adjust Headlamp	4
Luggage Bin	5
Bleed Steering Fluid	7
Engine Oil Level	9
Lift Vehicle	13
Wheel – Remove	15
Brakes – Check Brake Discs	17
Front Brakes – Pads	37
Front Brakes – Calipers	41
Front Brakes – Discs	46
Front Brakes – Hoses	49
Rear Brakes – Pads	54
Rear Brakes – Calipers	58
Rear Brakes – Discs	62
Rear Brakes – Hoses	66
Parking Brakes – Pads	71
Parking Brakes – Actuator	74
Parking Brakes – Caliper	77
Brakes – Bleed	80
Brakes – Bed	88
Floor – Engine and Fuel Tank Panel	91
Floor – Front Panel	93
Floor – Tunnel Panel	96
Floor – Rear Lower Extension Panel	98
Floor – Guide Vanes	102
Floor – Transmission Panel	106
Suspension – Front Upper Wishbone	108
Suspension – Front Lower Wishbone	111
Suspension – Rear Upper Wishbone	114
Suspension – Rear Lower Wishbone	118
Suspension – Steering Track Rod	122
Suspension – Front Upright	125
Suspension – Front Hub	128
Suspension – Rear Tie Rod	130
Suspension – Rear Upright	133
Suspension – Rear Hub	137
Suspension – Rear Drop Link	139

Suspension – Z-Bar	141
Suspension – Wheel Alignment	144
Wheel Liner Rear	146
Engine Oil – Change	149
Turbo Oil Return Hose	156
Air Filter – Replace	159
Coolant – Drain Fluid	161
Clutch – Drain Fluid	170
Clutch – Replace Filter	175
Floor – Diffuser Floor Panel	177
Transmission – Drain Fluid	180
Transmission – Replace Filter	183
Fuel Filter – Replace	185
Body – Remove Door Cover	190
Body – Remove Lower Rear	191
Body – Remove Side Lower	197
Body – Remove Radiator Grills	199
Intake Sound Generator – Replace	201
Engine Compartment Side Cover	203
Spark Plugs – Replace	208

Service Sheets:

Mileage Dependent Tasks	215
1 Year / 10k Mile	216
2 Year / 20k Mile	221
3 Year / 30k Mile	226
4 Year / 40k Mile	231
5 Year / 50k Mile	236
6 Year / 60k Mile	241
7 Year / 70k Mile	245
8 Year / 80k Mile	250
9 Year / 90k Mile	255
10 Year / 100k Mile	260
11 Year / 110k Mile	265
12 Year / 120k Mile	270
13 Year / 130k Mile	275
14 Year / 140k Mile	289
15 Year / 150k Mile	285
Track Inspection	290

Instructions

FG02 Body Systems / A04 Panels Glazing Paint / Roof Panels Fenders Fuel Filler / AA-RM-02A04-03-001 - Remove/install fender cover - Inner

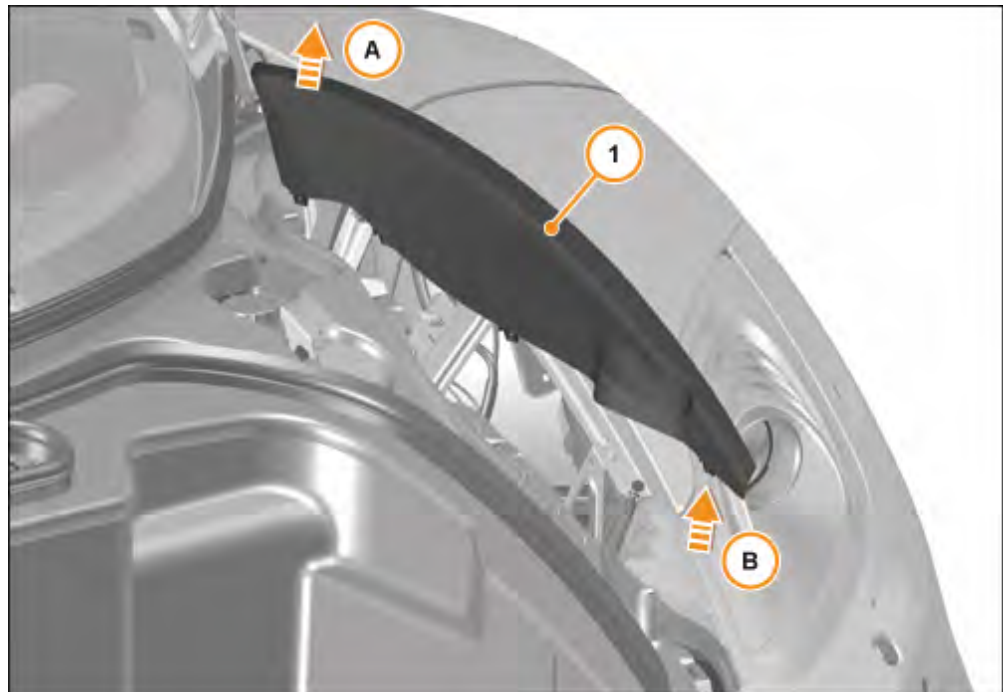
Remove fender cover - Inner

Care Point: Work carefully to prevent paint damage.

1. Open luggage compartment lid.

Care Point: Start pulling up cover fender from rear edge.

2. Remove fender inner (1).



Install fender cover - Inner

Care Point: Start with front edge because of firtree clip and ensure alignment with hole.

1. Install components in reverse order.

Instructions

FG02 Body Systems / A02 Exterior Trim Lighting Wipers / Frontlamps Side Markers / AA-RM-02A02-04-003 - Adjust headlamp

Preparation work

1. AA-RM-02A04-03-001 Remove/install fender cover - Inner

Care Point: Use suitable headlamp alignment equipment.

Care Point: First technician carries out adjustment, whilst second technician operates headlamp alignment equipment.

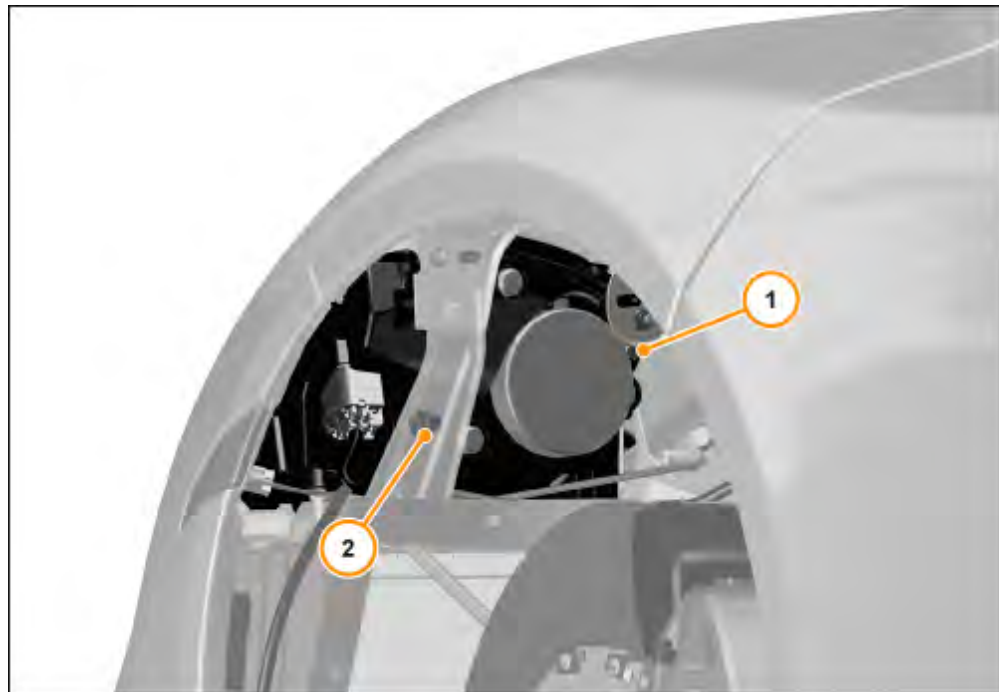
Adjust headlamp

Care Point: Inboard adjuster for vertical adjustment, outboard adjuster for horizontal adjustment.

1. Use adjuster for vertical adjustment (1).
2. Use adjuster for horizontal adjustment (2).

Care Point: Height equals 62cm with inclination of -1.2%. Ensure dipped beams are $\pm 0.1\%$ of 1.2%.

3. Carry out adjustment to country specific legislation in regards to angle and height.
4. Check headlamp functionality.

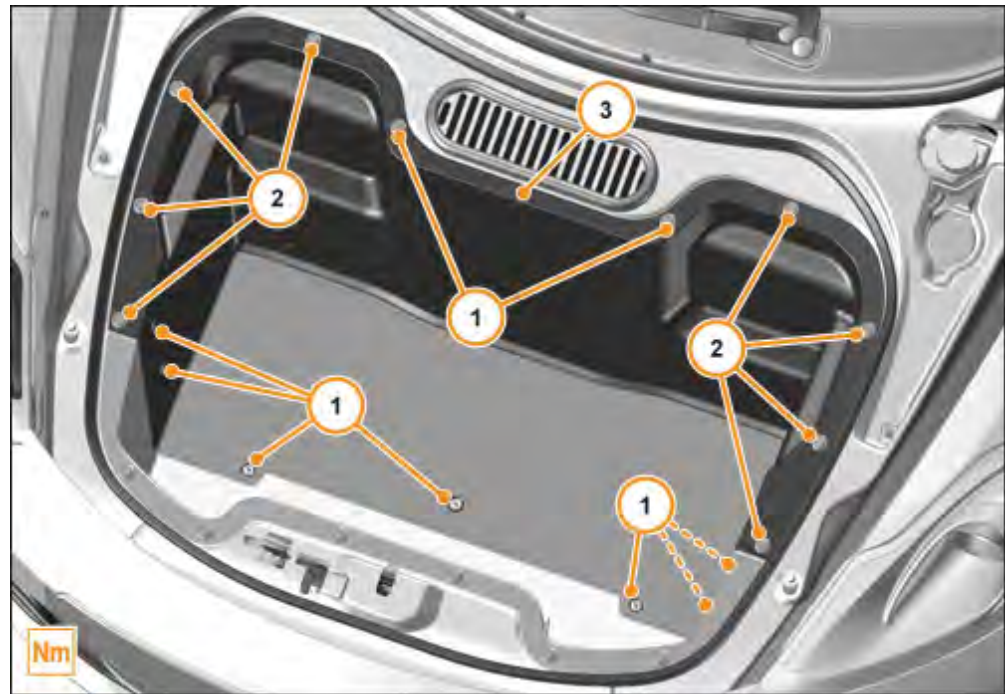


Instructions

FG02 Body Systems / A02 Exterior Trim Lighting Wipers / Luggage Cell Ducts Wheelarch Liners / AA-RM-02A02-03-004 - Remove/install luggage bin - Rear

Remove luggage bin - Rear

1. Open luggage compartment lid.
2. Remove contents of luggage bin.
3. Remove luggage bin finisher.
4. Remove bolts (1). M6 x 16 4 Nm
5. Remove fixings (2).
6. Remove luggage bin (3).



Install luggage bin - Rear

1. Install components in reverse order.

Torque settings

FG02 Body Systems / A02 Exterior Trim Lighting Wipers / Luggage Cell Ducts Wheelarch Liners / AA-RM-02A02-03-004 - Remove/install luggage bin - Rear

Description	Dimension	Value
Bolt luggage bin - Rear	M6 x 16	4 Nm

Instructions

FG03 Chassis / D01 Steering System / Steering System / AA-RM-03D01-01-008 - Fill/bleed fluid - Steering system

WARNING!

Risk of injury and poisoning working with hydraulic fluid under pressure!

Risk of injury to skin or eyes from hydraulic fluid spraying out under pressure. If any part of the hydraulic circuit has failed, a possibility of the system not depressurising can occur. Extra precaution is required in this event. If hydraulic fluid is swallowed, this can lead to poisoning symptoms such as headache, dizziness, nausea, vomiting, diarrhoea, cramps and unconsciousness. Always wear skin protection cream, protective gloves and safety glasses when working on a potentially pressurised system.

Fill/bleed fluid - Steering system

1. Open bonnet.
2. Remove power steering reservoir cap (1).
3. Fill up power steering reservoir (1.5 litres maximum). Pentosin CHF202



Care Point: Ensure the car is on the ground.

4. Turn steering wheel from lock (A) to lock (B) three times.
5. Check power steering fluid and fill up if necessary.
6. Install power steering reservoir cap.



Instructions

FG04 Powertrain / F02 Oil System Engine / Oil System Engine / AA-RM-04F02-01-007 - Check oil level

Check oil level

Care Point: The oil level check is completed with the engine running at 2000rpm for 40 seconds.

1. The following conditions must be met to allow an engine oil level check to be carried out:

Care Point:

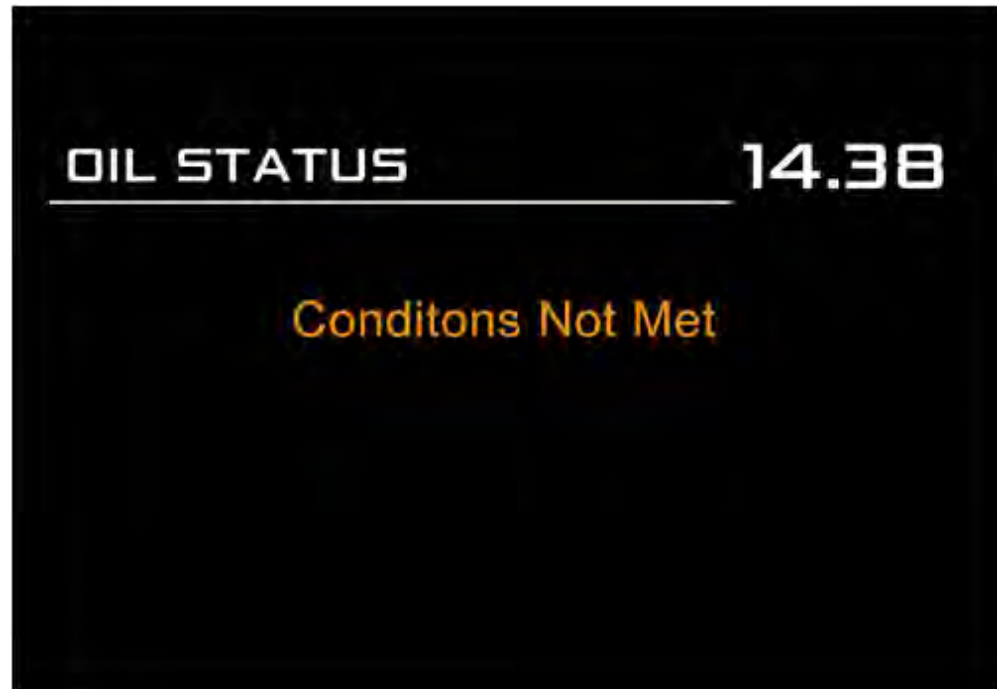
- The vehicle must be stationary and positioned on a level surface.
- Engine running with the throttle pedal fully released.
- Neutral gear selected and the foot brake applied (use left foot).

If any of these conditions are not met, a warning message will be displayed on the instrument cluster.

Care Point: The foot brake must be applied for the entire duration of the oil level check.

Care Point: The oil level status can be viewed in the Vehicle information section in the left hand instrument cluster display.

2. Start the engine and navigate to the left hand cluster display to oil level check.

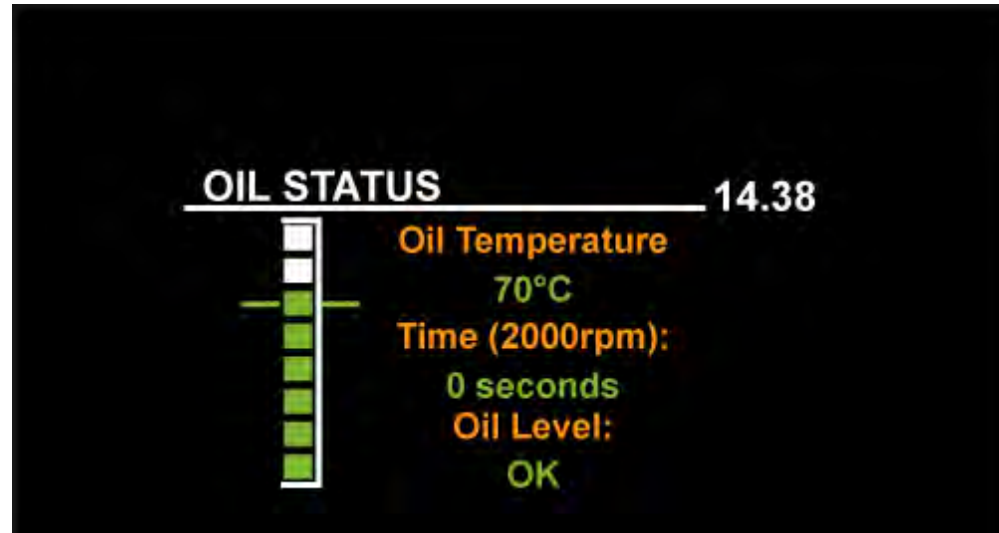


3. If all prerequisite conditions have been met you will be taken to the apply throttle screen.



Care Point: Allow the engine oil temperature to reach a temperature of 70°C (measured via the oil level sensor).

Care Point: The oil level check will limit the rpm input to 2000rpm once the test has begun, but the throttle must be applied for the duration of the oil level check. If the throttle pedal is released and the engine speed drops below 2000 rpm during the oil level check, then the oil level check will abort, and return you to the apply throttle screen.



The 40 second countdown timer will begin when the oil temperature has exceeded 40°C.

4. Apply throttle and raise the engine speed to 2000 rpm.

The 40 second countdown timer will begin when the oil temperature has exceeded 40°C.

Care Point: The line on the display indicates the target oil level.

Care Point: Once the oil level check has been completed and returned a value, do not continue to test the system. This may lead to aeration of the oil and return a false value. To end the oil level check, release the throttle and abort back to the vehicle info menu.

5. When the timer has reached '0



Care Point: When the timer has reached '0

Care Point: The engine must be switched off and the instrument cluster must be returned to the vehicle info menu before carrying out an oil top up and retest.

6. If the engine oil is below target level, top up with the correct quantity of oil, in accordance to the graphic opposite. Approximately 0.50 litres is required to raise the level from minimum to target level.
7. Carry out the oil level check process to ensure the level is correct.
8. Top up as required by repeating steps 1-6.



Instructions

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-007 - Lift vehicle on lifting platform



Risk of death working with lifting platforms!

Care must be taken while working with the lifting platform. Death may occur if a vehicle slips or topples off the lifting platform. Position the support plates on the lifting platform support points at the same height.

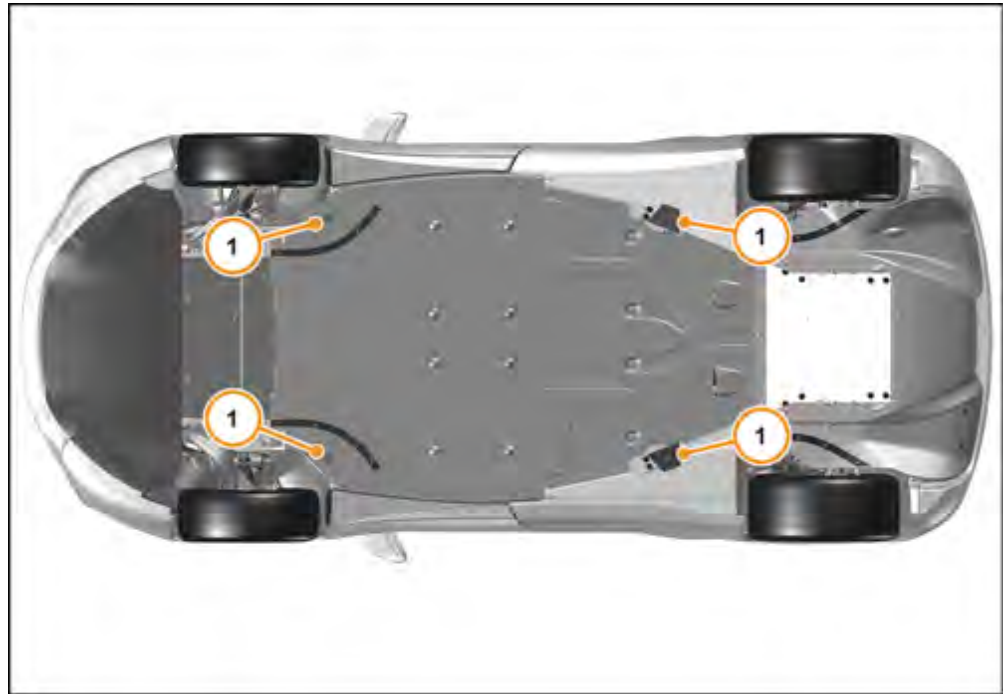
- Raise the vehicle a few inches first (wheels are still touching the ground) and check the position and fit of the support plates and lift points before raising the vehicle to the full lifted position.
- Do not raise the vehicle off the lifting platform plates when components are being supported.
- Centre the vehicle lengthwise and crosswise between the lifting platform columns.
- Comply with all relevant statutory and accident prevention regulations.

Lift vehicle

Care Point: Ensure vehicle is in correct orientation to allow door opening.

Care Point: Ensure lifting arm pads do not obstruct removal of floor panels.

1. Carefully position lifting arms on jacking points (1).
2. Raise vehicle.



Instructions

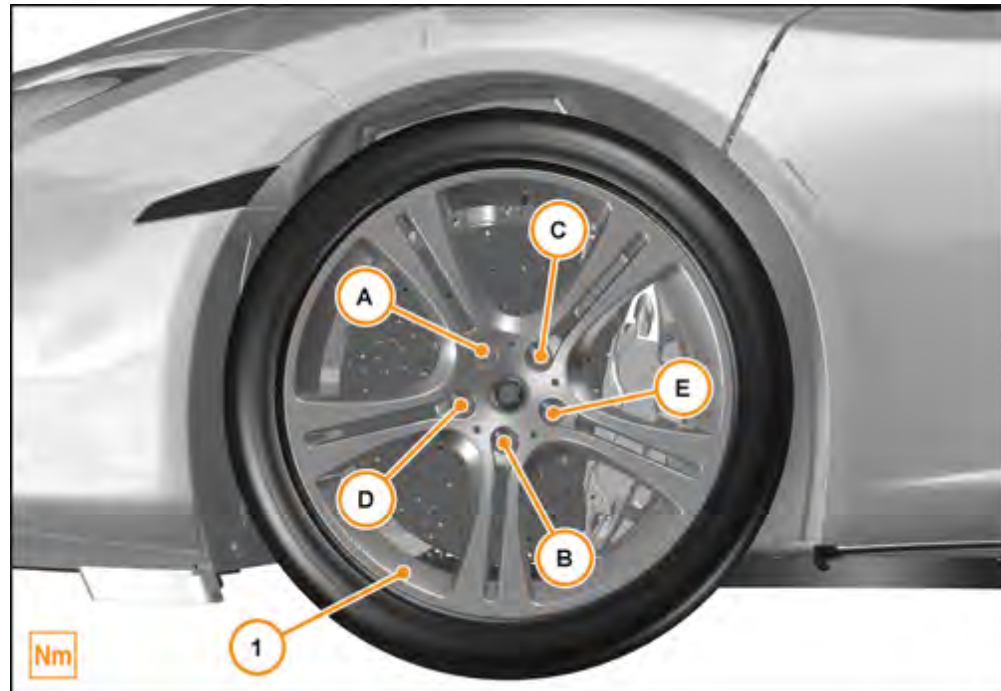
FG03 Chassis / B03 Wheels Tyres / Wheel Assembly / AA-RM-03B03-01-001 - Remove/install wheel

Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)

Remove wheel

1. Remove wheel bolts in sequence A - E. 130 Nm
2. Remove wheel (1).



Install wheel

Care Point: Ensure that the tyres are in the correct orientation. All Pzero, all winter, and rear corsa tyres are asymmetric. Front corsa tyres are directional.

Care Point: Measure tread depth, check rim and tyre for any damage.

1. Install components in reverse order.
2. Check tyre pressure and correct, if necessary.

Care Point: Once vehicle is on ground.

3. Apply pressure to top of wheel towards vehicle. If excessive inward movement of wheel is present, the upper ball joint has failed. The wishbone will require replacing.

Torque settings

FG03 Chassis / B03 Wheels Tyres / Wheel Assembly / AA-RM-03B03-01-001 - Remove/install wheel

Description	Dimension	Value
Bolt Wheel		130 Nm

Instructions

FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-006 - Cleaning/ Checking carbon ceramic brake disc (CCM)/Iron brake disc (Fe)

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/install wheels
3. AA-RM-03C01-01-002 Remove/install brake caliper - front
5. AA-RM-03C01-01-003 Remove/install brake - Disc - front
6. AA-RM-03C02-01-002 Remove/install caliper parking brake
7. AA-RM-03C01-03-001 Remove/install brake caliper - rear
9. AA-RM-03C01-03-002 Remove/install brake disc - rear

Cleaning/ Checking carbon ceramic brake disc (CCM)/Iron brake disc (Fe)

1. When carrying out this procedure the following safety equipment must be worn – dust mask, sleeve protection, and plastic gloves.

Care Point: Only pick up the disc from the bell housing. Do not handle from the ventilation channels.

Care Point: Cleaning of the discs, pads, and cross drilled holes must be carried out before replacement.

Care Point: It is important to keep all pads and discs free of dirt/ grease as these impurities can cause a loss of friction when braking.

Care Point: Do not under any circumstances soak brake discs/pads in solvent. Solvent must not be absorbed by the composite material.

Care Point: Pads and discs can only be cleaned with acetone solvents. Under no circumstances can standard brake cleaner be used.

Care Point: The use of a fine grade sand paper to lightly rub the surface is permissible.

Cleaning carbon ceramic brake disc (CCM)/Iron brake discs (Fe) and pads

1. Clean Iron brake discs (Fe) and pads.

Care Point: Do not machine cross drilled holes.

Care Point: Do not flare cross drilled holes.

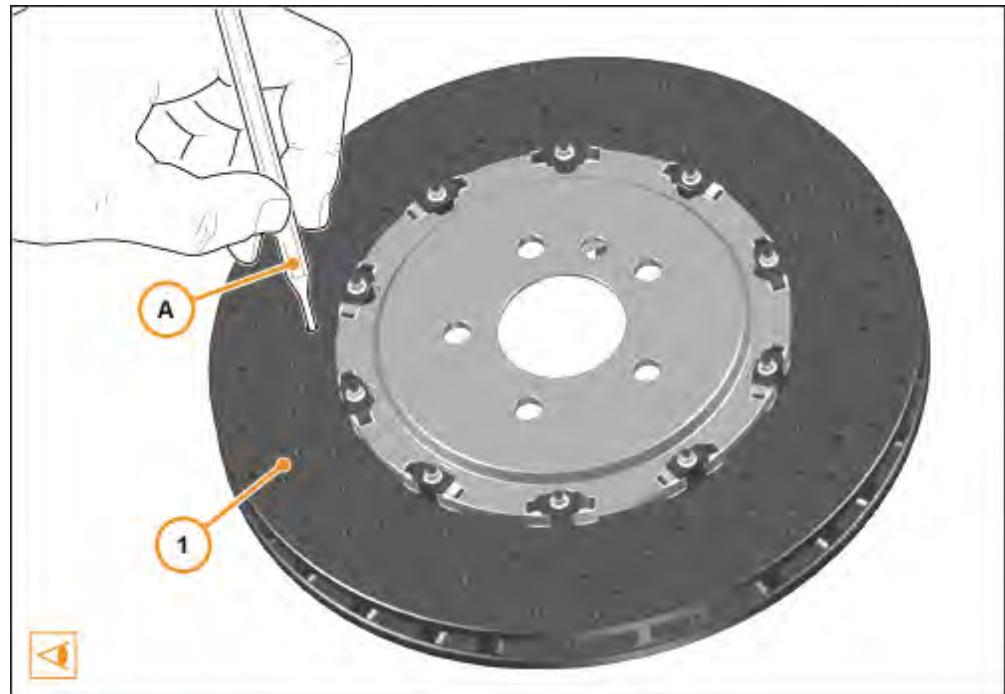
Care Point: Do not carry out any form of grinding on the disc.

Care Point: Cleaning of the discs, pads, and cross drilled holes must be carried out before replacement.

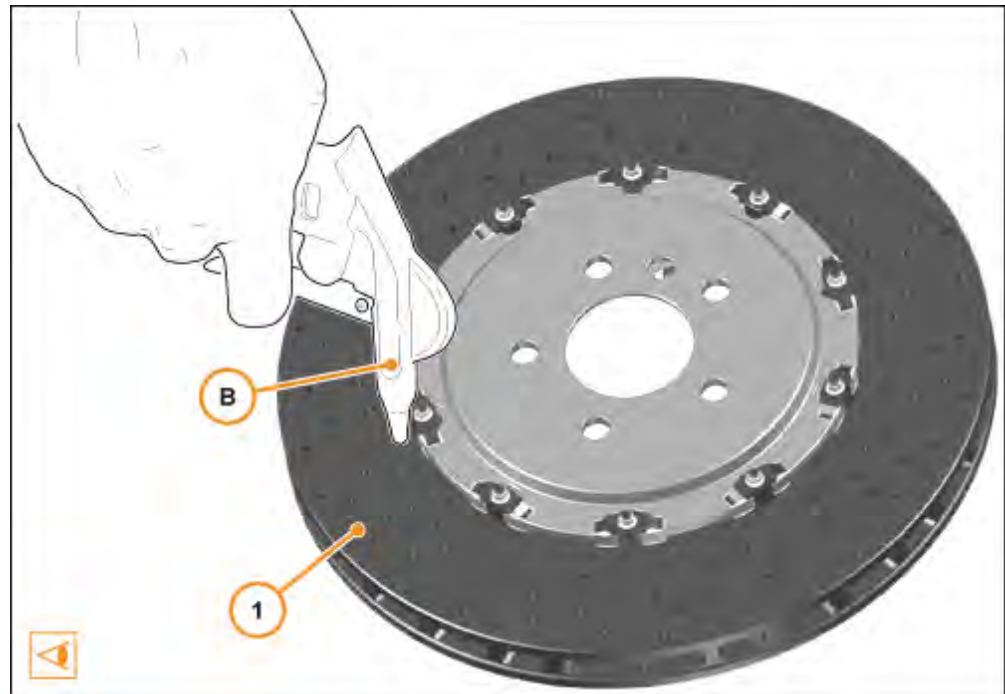
Care Point: Only use screwdriver/ punch with a max diameter of 5mm to clean cross drilled holes.

Cleaning cross drilled holes

1. Use a screwdriver/ punch (A) to initially clear the cross drilled holes of composite build up.



2. Once all holes are cleared, use a pressurised air gun (B) to clean out the final remnants of build up.



Disc replacement required

Care Point: Discs must be renewed in axle sets.

Care Point: The brake bedding procedure must be carried out whenever discs are renewed. This is to ensure a good mating condition between the pad and disc.

Care Point: When discs are renewed, pad wear must be checked. If pad wear has not reached 50%, they can be re-used if the brake bedding procedure is repeated. If this procedure is not observed, the disc may fail when sufficient pressure is applied when braking.

Care Point: **If any of the below conditions occur, the disc must be replaced regardless of the mileage covered by the vehicle**

1. The weight is within 20g of the minimum weight of the disc as stated on the bell or minimum thickness has been reached.
 2. The comfort level of the disc has reached an unacceptable condition.
 3. There has been an excessive drop in braking performance.
 4. The disc has been subjected to accidental damage.
 5. The disc face has been damaged due to 100% pad wear (metal to disc contact).
 6. If the vehicle has been involved in an accident where a wheel face has been impacted.
- For points 1, 2, and 3, these will occur to the brake discs through normal use over time.

Care Point: Please note that the CCM disc will only show signs of wear in two cases. These are if the vehicle has experienced hard use such as racing, or if the temperature experienced by the disc is greater than 500° C. In these situations, the composite within the discs will begin to oxidize, which leads to a more pronounced drop off in disc weight.

Care Point: If the vehicle is driven in an aggressive manner or experiences a lot of cornering, an increase in disc/pad wear will be experienced.

1. If required, replace disc.

Checking Iron brake disc – Visual inspection of surface/ wear

Care Point: Cracks will appear on the disc surface if it has been subjected to excessive thermal cycling.

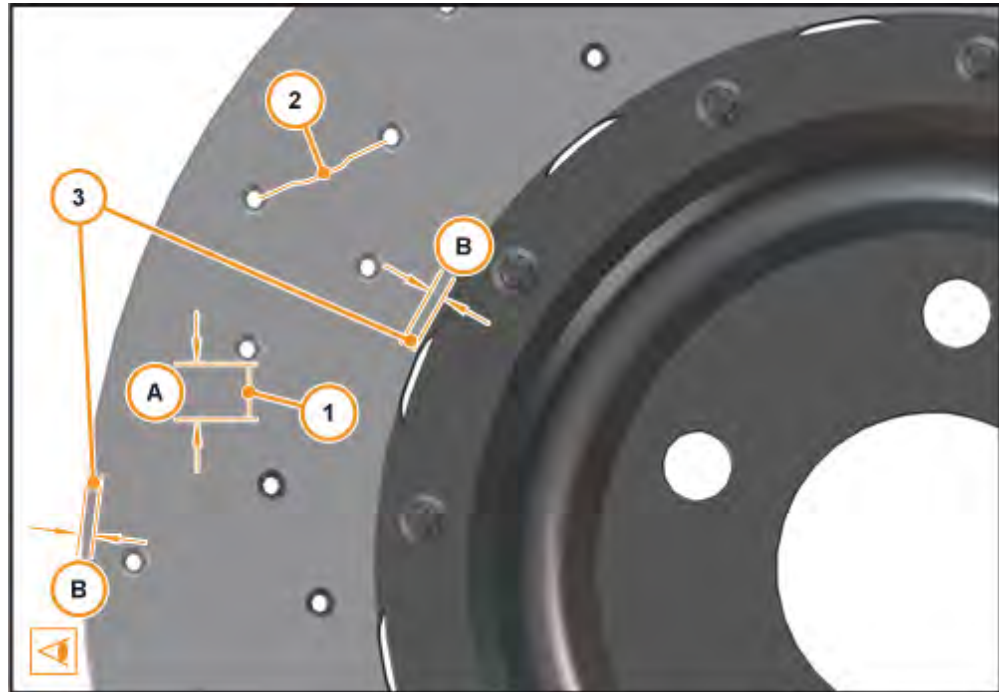
1. If disc surface contains cracks originating from a cross drilled hole (1), it must not exceed 20mm in length. If crack is greater than this, disc must be replaced.

A	20mm
B	5mm

2. If disc surface contains cracks originating from a cross drilled hole that joins a crack from an adjacent hole (2), disc must be replaced.
3. If disc surface contains cracks that go within 5mm of the outer (3), or inner edge (3), disc must be replaced.

Care Point: Differential wear must not exceed 0.5mm side to side.

4. Minimum disc thickness are 30mm (Front)/ 28mm (Rear).



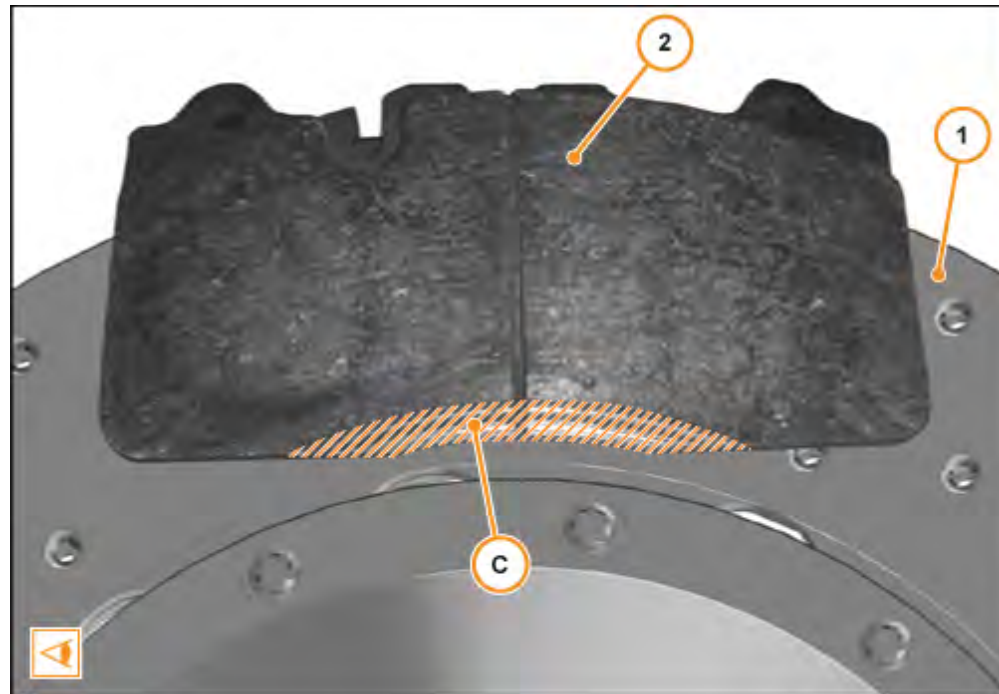
Care Point: Please note CCM discs do not lose performance once the braking surface shows indications of being worn, so may still be used. On CCM discs, it is common for the braking surface to change visually during use. The change is caused by temperature variance between the face of the disc and the ventilation channels. Please note that this does not affect the performance of the disc.

Care Point: If cross drilled holes are blocked by CCM material, discs must be fully cleaned.

Checking carbon ceramic brake disc – Visual inspection of surface/ wear

Care Point: If there is a build up of CCM on the internal diameter of the disc (1), this is due to it having a higher wear rate at the inner part of the disc (1).

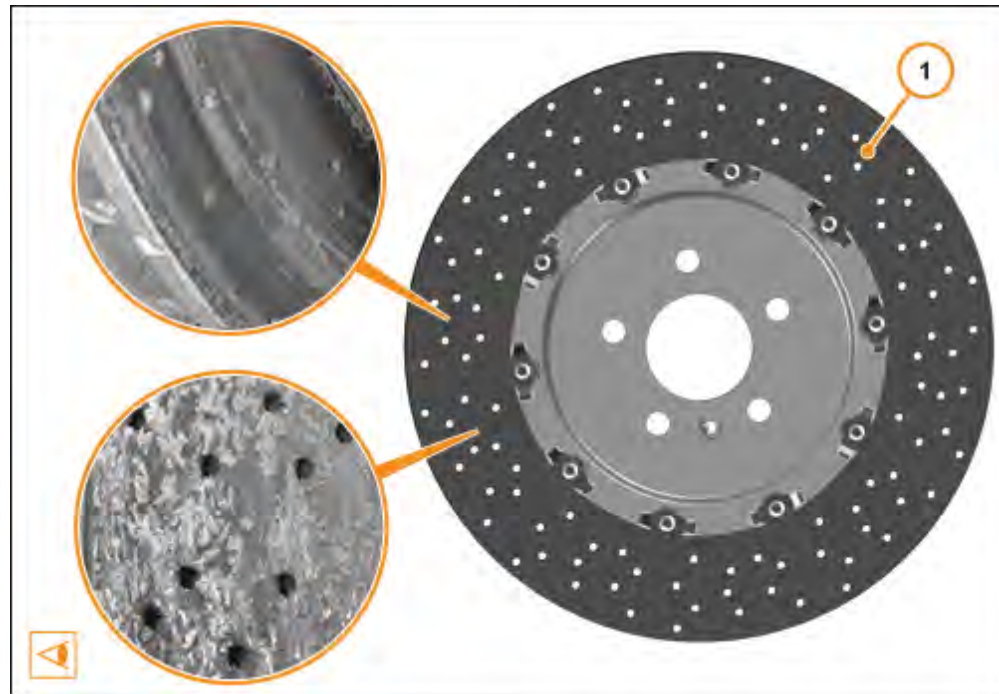
1. This condition (C) should be matched by the pad (2). Please note that this does not affect the performance of the disc (1).



**Care
Point:**

Discs must be replaced if pad wear has reached 100%. If pads have reached 100% wear, there is a high chance that the back plate has come into contact with the braking face (visible mark will be present).

2. Discs (1) must be replaced immediately if this circumstance has occurred due to contamination of the disc (1).

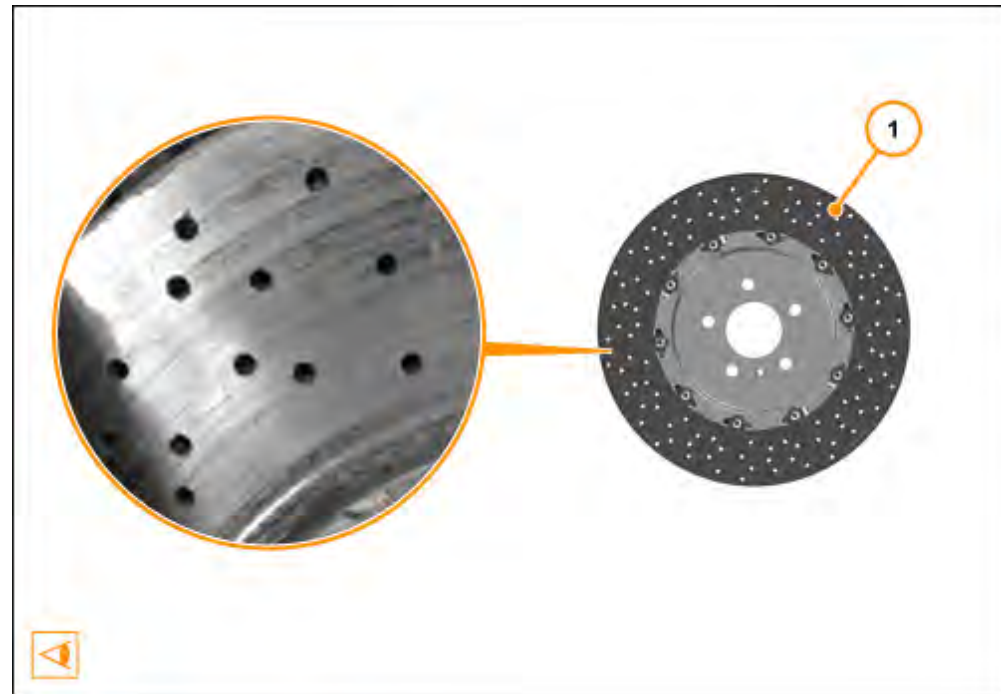


**Care
Point:**

Any visual change to the braking surface of the disc is caused when the fibres within the CCM experience a high level of thermal input. This then causes the fibres to oxidize, changing the surface appearance. This condition mainly occurs after extreme use, such as racing.

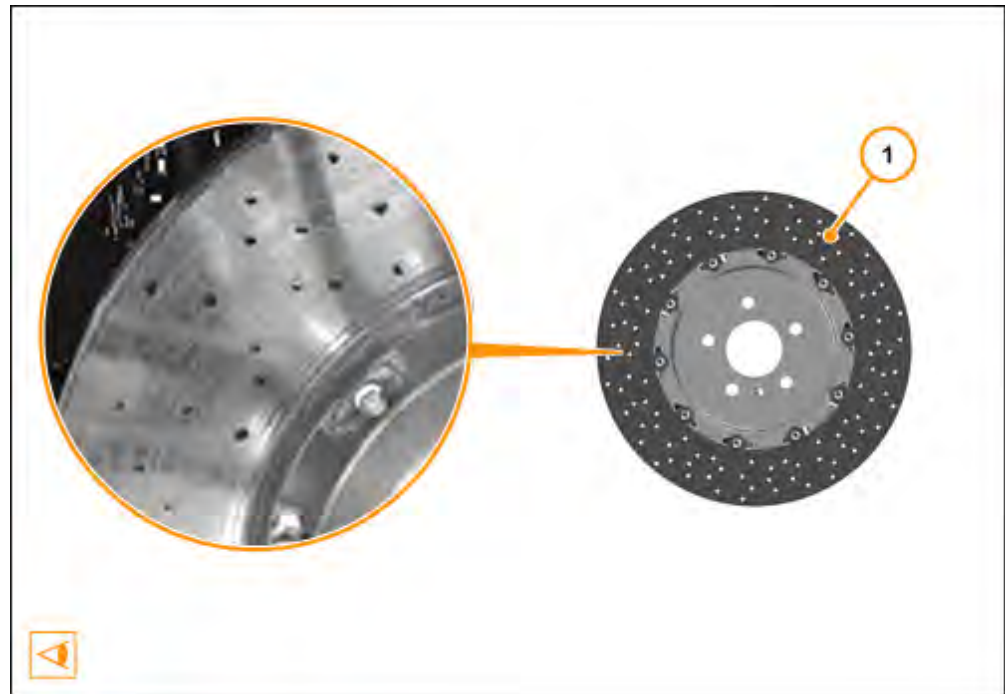
The oxidation level is calculated by disc porosity and surface roughness. Areas that are mainly affected by the change in the braking surface are an increase in pad wear, decreased NVH, and a decrease in disc performance.

If the level of oxidation experienced is very high, the disc must be replaced. See below for examples of the different levels of oxidation experienced:

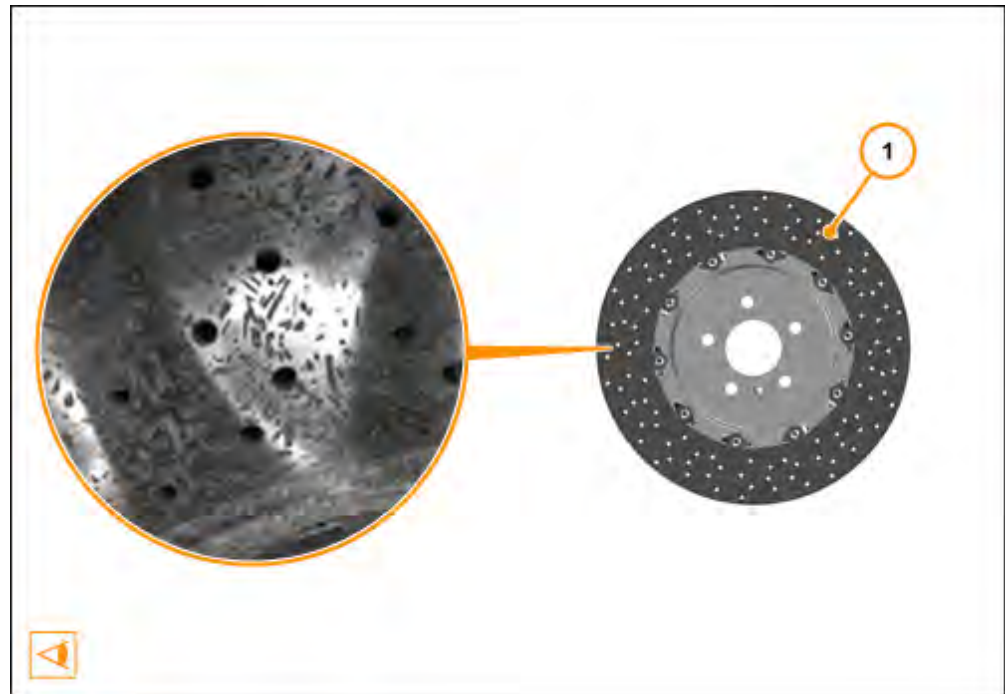


3. Disc surface (1) – Immediately after bedding –
Do not renew.

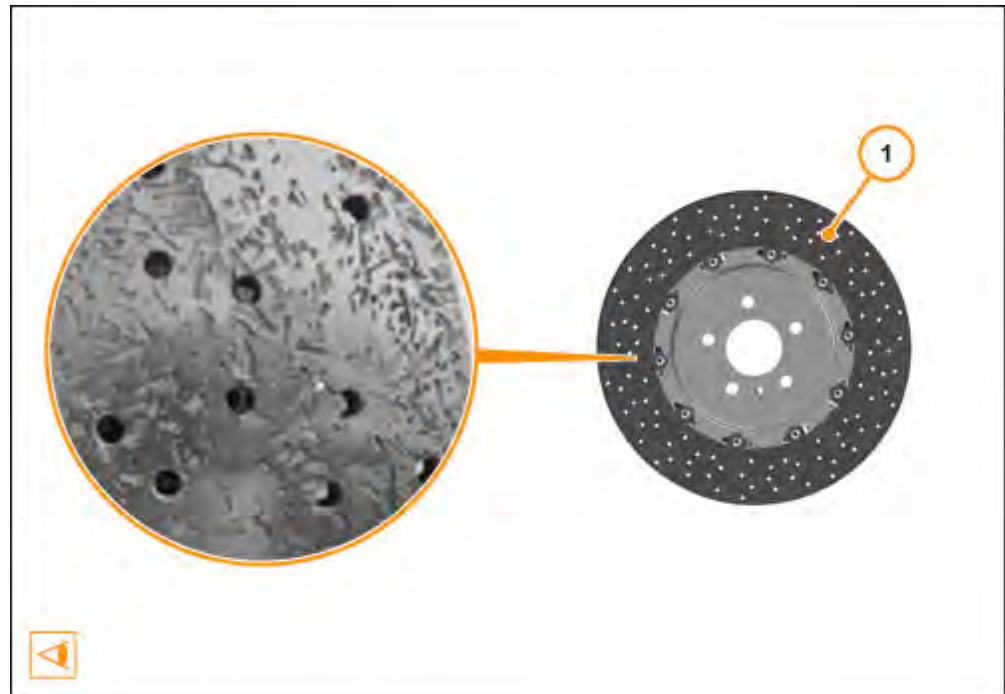
4. Disc surface (1) – 200 km racing on track – Do not renew.



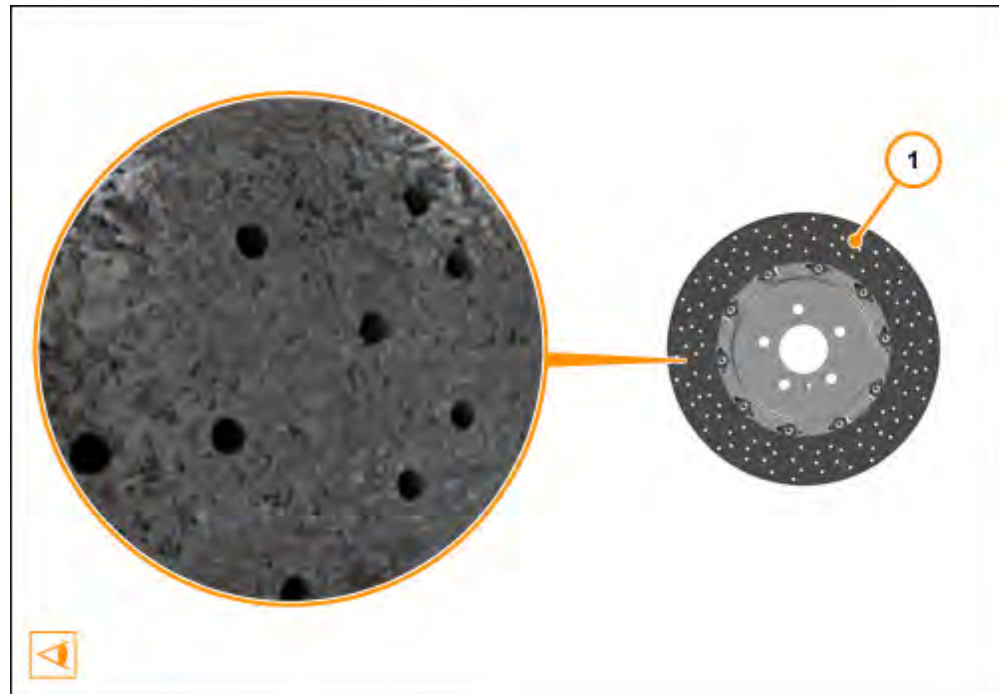
5. Disc surface (1) – 500 km racing on track – Do not renew.



6. Disc surface (1) – 1000 km hard racing on track – Check disc weight.



7. Disc surface (1) – 1500-2000 km racing on track – Renew disc (end of disc life).



Care Point: Tool used when assessing damage must be a precision gauge with a tolerance of 0.1mm.

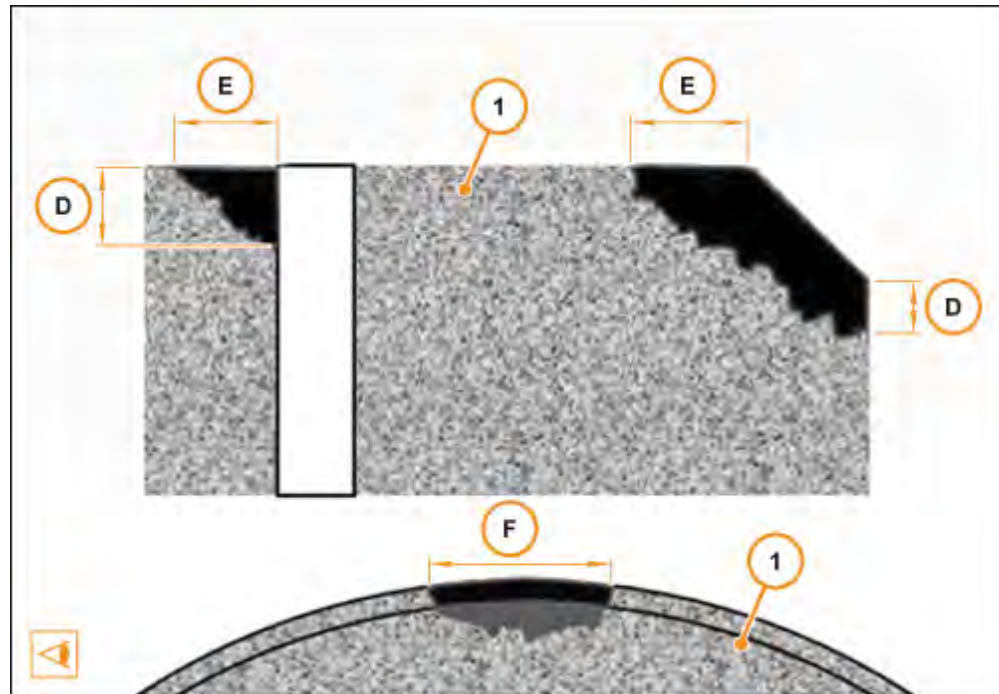
Care Point: If disc is damaged outside of specified figures along the edge of the braking surface, disc must be renewed.

Care Point: Any damage on the edge of the braking surface will not affect the disc weight due to the material density.

Checking CCM disc – Damage control specifications

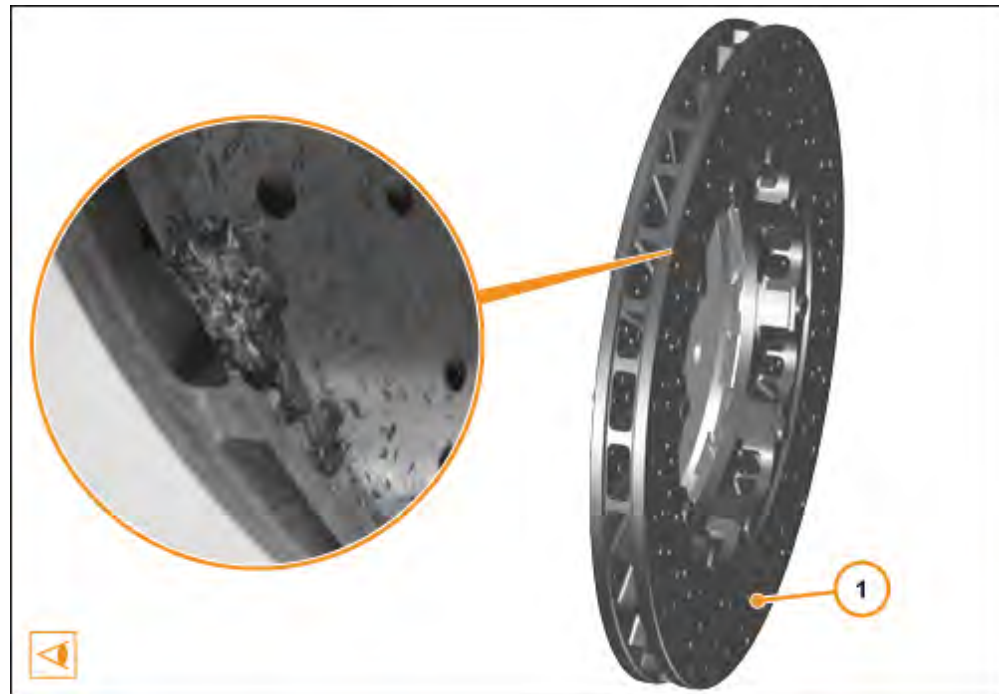
1. If the CCM disc becomes damaged whilst handling due to being dropped or knocked, please use the following guidelines.

Width (E)	Maximum allowed 4 mm
Depth (D)	Maximum allowed 3 mm
Length (F)	Maximum allowed 20 mm
Chips	Maximum allowed 3 per disc
Projected area	Maximum area allowed 40 mm

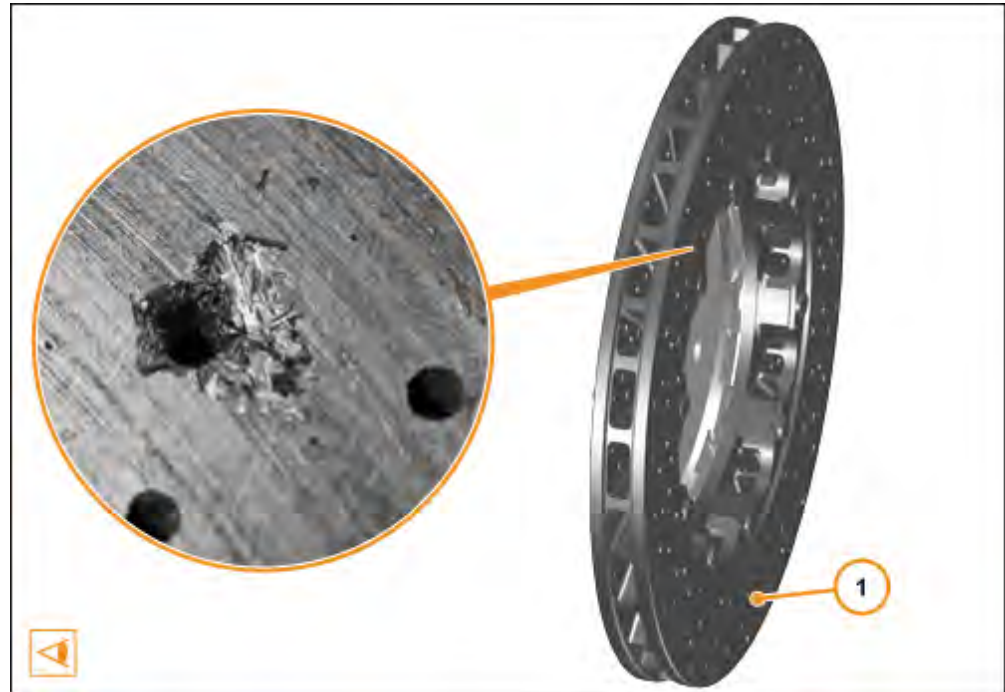


Care Point: See below examples of damage that may occur to a CCM disc (1), and the relevant action you should employ.

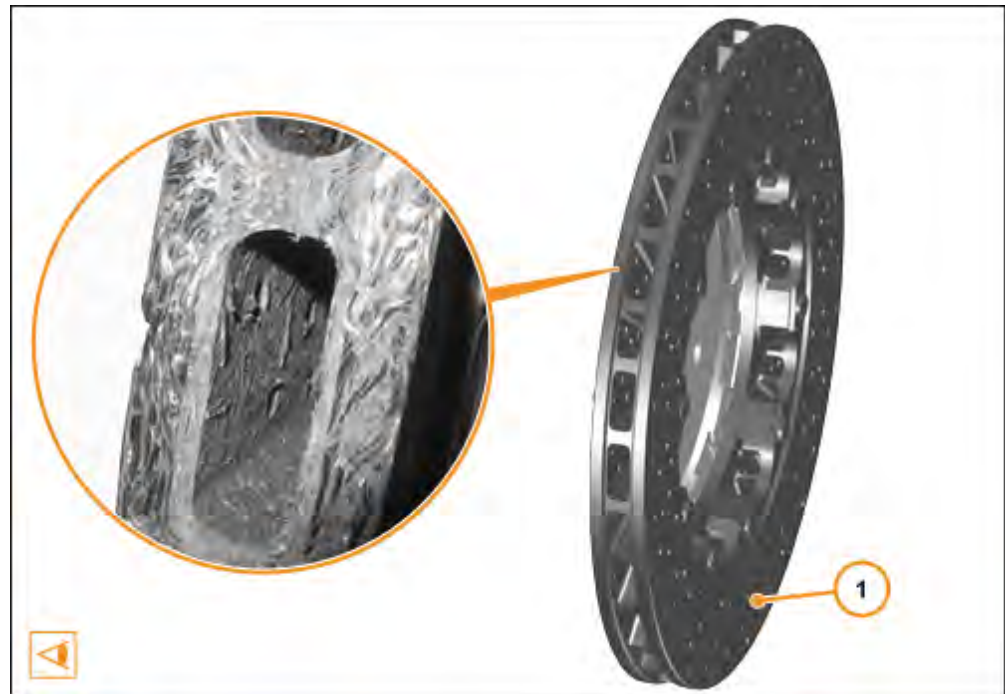
2. Disc Edge – Chip on used disc – Renew disc (1).



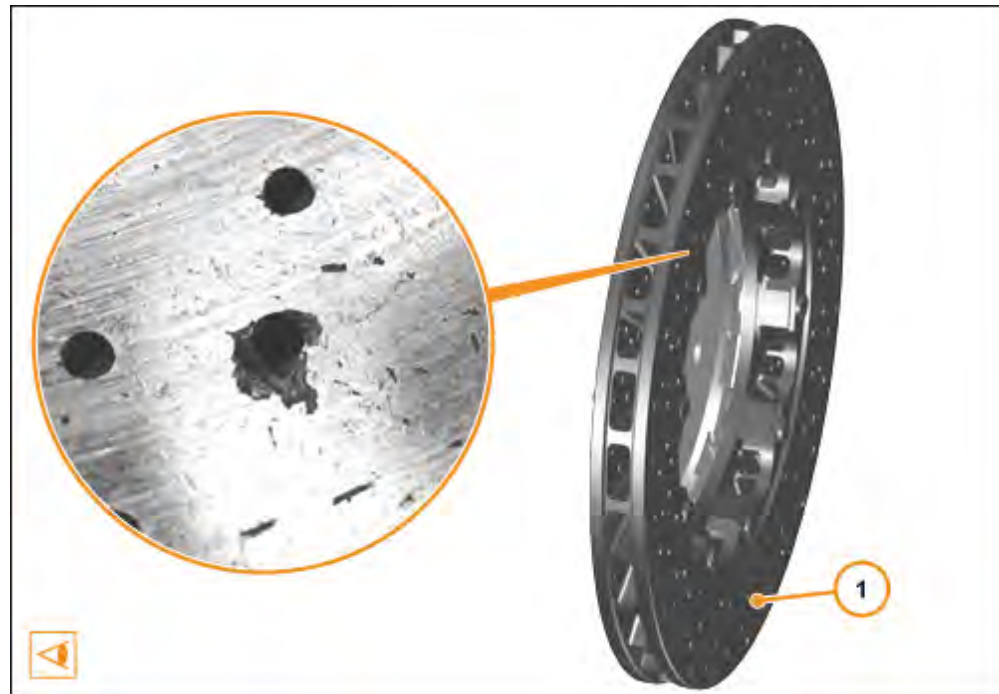
3. Disc Cross Drilled Hole – Chip on used disc –
Renew disc (1).



4. Disc Edge – Chip on disc – Do not renew disc (1).



5. Disc Cross Drilled Hole – Chip on disc – Do not renew disc (1).



Care If disc minimum weight is reached, renew discs as an axle set.

Point: If disc reaches its maximum mileage, there will be no loss in performance but an increased risk of permanently damaging the disc.

At every service or replacement of pad, please make a note in the service manual of the disc weight (measured and residual) and mileage of the vehicle. From this information an estimation of disc life can be created.

Residual disc weight is calculated by subtracting the minimum disc weight from the measured disc weight.

Estimated disc life calculations are only suitable if the same type of usage has occurred between measurements.

If estimated disc life is very close to the mileage vehicle is currently on, recommendation is to change discs.

Disc thickness must always be measured from the base of the outer edge. Maximum wear limit for a CCM disc is the original disc thickness minus 0.5mm. If the difference is greater than 0.5 mm, renew disc.

The thickness change in a CCM disc does not provide a conclusive level of wear experienced. To get this information the disc must be weighed.

Before weighing the disc, it must be thoroughly cleaned including all cross drilled holes.

The disc must be dry and free of moisture, due to the porous nature of the CCM material.

Suitable and calibrated weighing scales must be used when carrying out this procedure.

Due to the fibres in the CCM disc oxidizing when subjected to extreme thermal pressure, the mass of the disc will be reduced. Because of this the CCM brakes must be weighed annually, every 15000 km, and before and after track use to ensure that they are still suitable for use.

Checking carbon ceramic brake disc (CCM)– Weight

Care When weighing discs, ensure that

Point: the scales used have an accuracy range of +/- 2.5 grams.

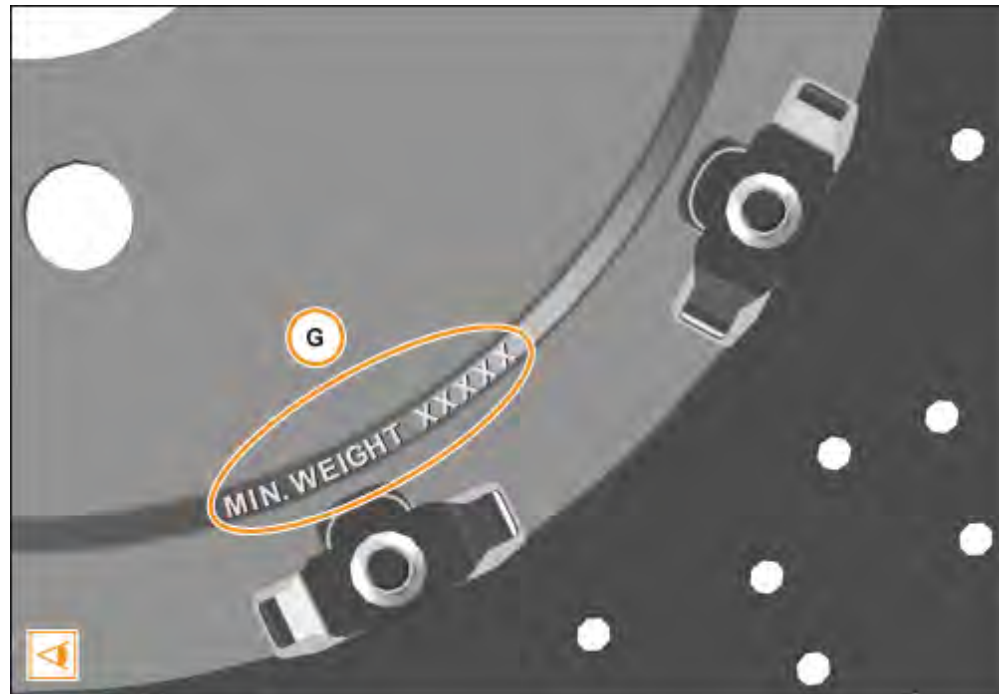
1.Put disc on scales.

2.Register measured disc weight.

Care Point: If measured weight is within 20g, equal to, or less than the marked minimum weight, the disc must be renewed. Please ensure that discs are renewed in axle sets.

3. Check measured weight against marked minimum weight on disc bell (G).
4. To measure the estimated disc life using data recorded for mileage and residual disc weight, please use the following formula:

1st Service mileage (ODO1) = 15000km	Residual weight (R1) = 118g
2nd Service mileage (ODO2) = 25000km	Residual weight (R2) = 67g
Wear estimate (WE) = $(R2 - R1) / (ODO2 - ODO1)$ $WE = (67 - 118) / (25000 - 15000)$ $WE = -51 / 10000$ $WE = -0.0051$	
Estimated disc life (EDL) = $ODO2 - (R2 / WE)$ $EDL = 25000 - (67 / -0.0051)$ $EDL = 25000 - (-13137)$ $EDL = 38137\text{km}$	



Instructions

FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-001 - Remove/install brake pads - Front

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.

Remove brake pads - Front



Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

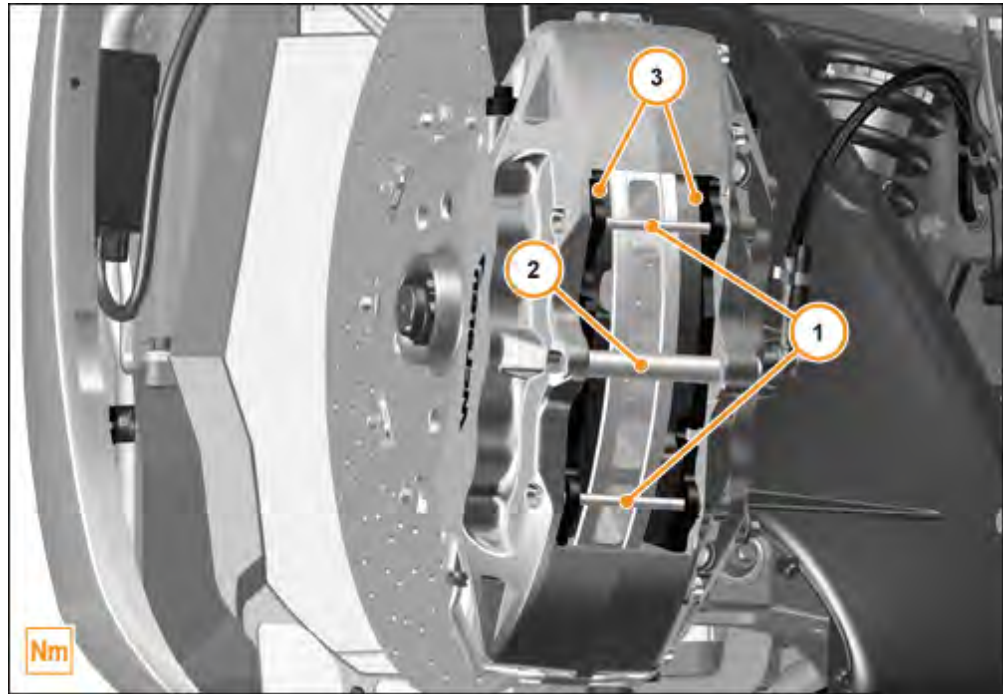
Wear safety glasses and protective clothing such as rubber gloves.

- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

1. Release brake fluid reservoir cap.

2. Disconnect brake pad wear indicator electrical connector.

3. Remove brake pad securing pins (1).
4. Remove bolt (2) and anti rattle clip. M10 x 38
35 Nm
Care Use suitable grip.
Point: Protect caliper from damage.
5. Push caliper pistons back.
6. Remove brake pads (3).



Install brake pads - Front

WARNING!

Risk of accident due to lack of braking effect!

When the brakes are used for the first time after any work was performed on the braking system's hydraulics area, the risk of an accident is increased due to an impaired braking effect. Press the brake pedal several times to build up pressure in the brake system after finishing work on the braking system's hydraulics area and before starting the vehicle.

- Hold the brake pedal in a pressed down position for approximately 30 s once pressure has been built up in the brake system, the pressure in the brake system must not drop during this time.

Care Ensure brake components are clean and free from dirt and debris.
Point: Observe direction arrow on anti rattle clip.

Care Ensure that the pad wear sensor and brake hose are secured with D-clip positioned perpendicular to the

Care Point: Ensure that the pad wear sensor and brake nose are secured with P-clips positioned perpendicular to the brake disc.

Care Point: If iron brakes are fitted to vehicle, proceed to step 2.

1. If carbon ceramic brakes are fitted to vehicle, before re-installing brake pads the brake discs must be weighed and checked. [AA-RM-03C01-01-006 - Cleaning/ Checking carbon ceramic brake disc \(CCM\)/Iron brake disc \(Fe\)](#)
2. Install components in reverse order.
3. Apply the footbrake several times to ensure the brake pads are correctly seated.

WARNING!

Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves.

- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

4. Check brake fluid level and refill, if necessary. [AA-RM-03C01-01-005 Fill/bleed fluid - Brake system](#)
5. If new brake pads/discs have been fitted, bed in the brakes. [AA-RM-03C01-01-004 - Bedding new brake pads/discs](#)

Torque settings

FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-001 - Remove/install brake pads - Front

Description	Dimension	Value
Bolt Securing bolt brake pads/antirattle clip - Front	M10 x 38	35 Nm

Instructions

FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-002 - Remove/install brake caliper - Front

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.

Remove brake caliper - Front



Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

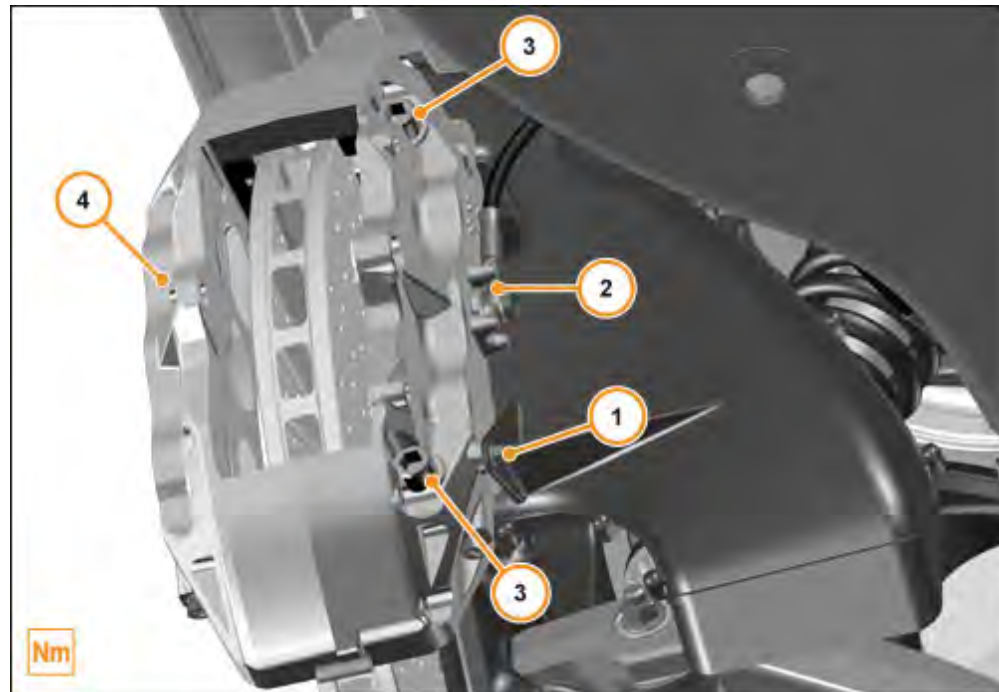
A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves.

- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

Care Point: Ensure brake fluid connections are clean and free from dirt and debris to avoid contamination.



Care Point: Collect the brake fluid that emerges in a suitable container.

Care Point: Close off the brake line with a suitable plug.

1.Remove bolt (1). M5 x 12 5 Nm

Care Point: Replace Copper washers.

2.Remove banjo bolt (2). M10 42 Nm

3.Remove bolts (3). M12 x 85 93 Nm

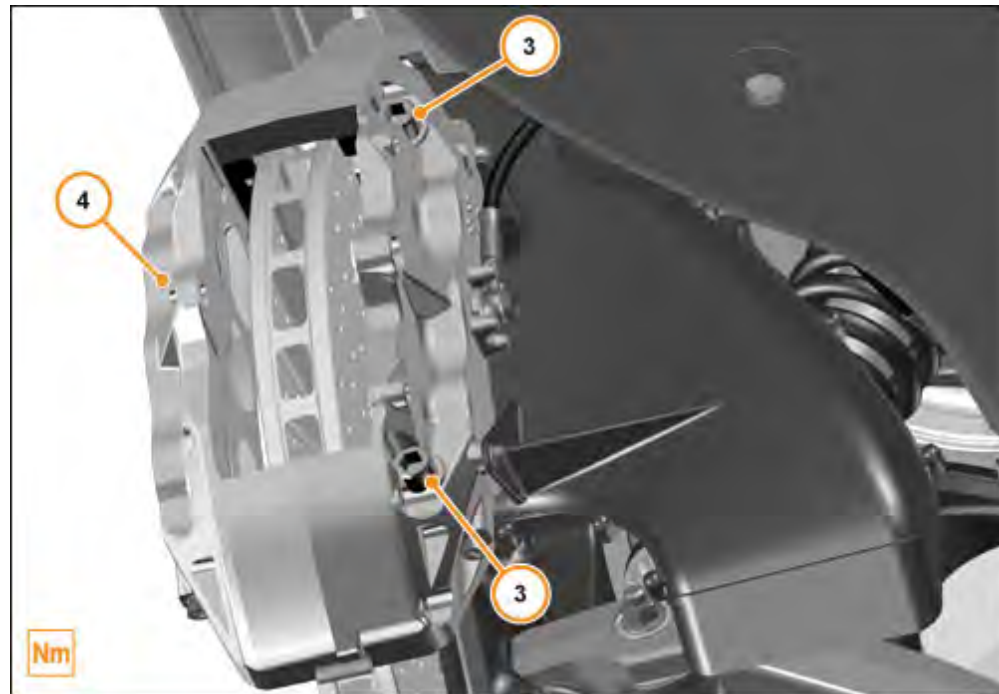
4.Remove caliper (4).

Detach brake caliper - Front

Care Point: Ensure brake fluid connections are clean and free from dirt and debris to avoid contamination.

Care Point: Do not let caliper hang on brake hose.

1. Remove bolts (3). M12 x 85 93 Nm
2. Detach caliper (4) and hang in suitable location with cable tie.



Install brake caliper - Front

WARNING!

Risk of accident due to lack of braking effect!

When the brakes are used for the first time after any work was performed on the braking system's hydraulics area, the risk of an accident is increased due to an impaired braking effect.

Press the brake pedal several times to build up pressure in the brake system after finishing work on the braking system's hydraulics area and before starting the vehicle.

- Hold the brake pedal in a pressed down position for approximately 30 s once pressure has been built up in the brake system, the pressure in the brake system must not drop during this time.

Care Point: Replace O-Ring seals and copper washers.

Care Point: Ensure brake components are clean and free from dirt and debris.

Care Point: Always renew bolts.

Care Point: Ensure that the pad wear sensor and brake hose are secured with P-clips positioned perpendicular to the brake disc.

Care Point: Where fitted, clean and apply loctite to disc cooling duct bolt. Loctite 243

1. Install components in reverse order.

2. Bleed brake system if necessary. AA-RM-03C01-01-005 Fill/bleed fluid - Brake system

Torque settings

FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-002 - Remove/install brake caliper - Front

Description	Dimension	Value
Bolt cooling duct - brake caliper	M5 x 12	5 Nm

Banjo bolt Brake hose - Caliper	M10	42 Nm
Bolt Caliper	M12 x 85	93 Nm
Bolt Caliper	M12 x 85	93 Nm

Instructions

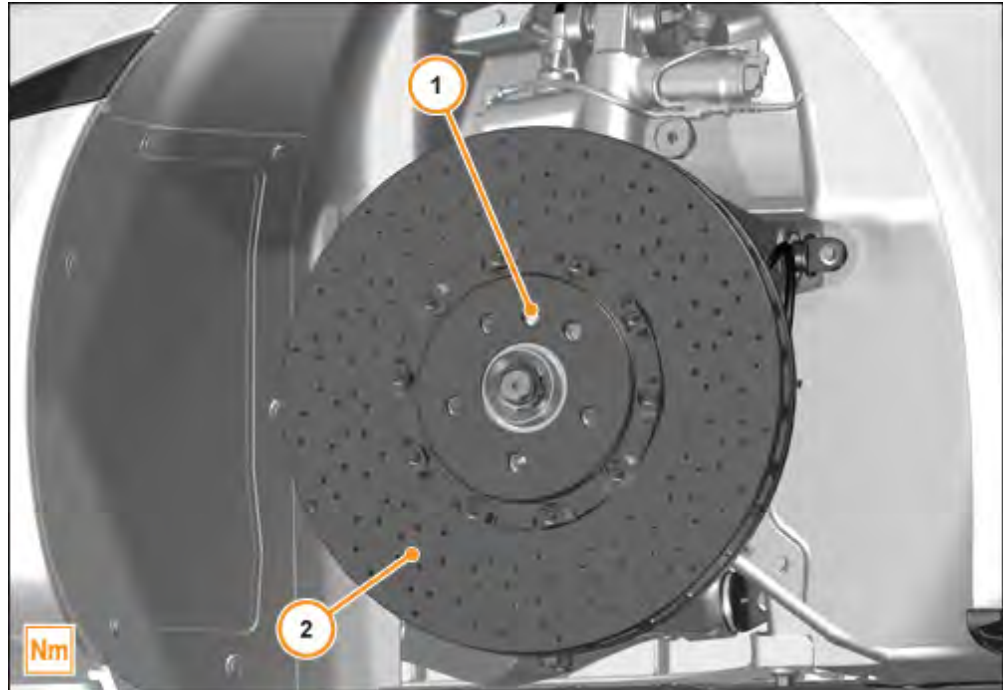
FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-003 - Remove/Install brake disc - Front

Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)
2. [AA-RM-03B03-01-001 Remove/install wheels](#)
3. [AA-RM-03C01-01-002 Remove/install brake caliper - Front](#)

Remove brake disc - Front

1. Remove bolt (1). [M6 x 15 10 Nm](#)
2. Remove brake disc (2).



Install brake disc - Front

Care Ensure all brake components are clean and free from dirt and debris.
Point: When fitting new brake discs ensure a new brake pad axle set is fitted.

1. Install in reverse order.
2. Apply the footbrake several times to ensure the brake pads are correctly seated.

 WARNING!

Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves.

- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

3. Check brake fluid level and refill, if necessary. AA-RM-03C01-01-005 Fill/bleed fluid - Brake system

 WARNING!

Risk of accident due to lack of braking effect!

When the brakes are used for the first time after any work was performed on the braking system's hydraulics area, the risk of an accident is increased due to an impaired braking effect.

Press the brake pedal several times to build up pressure in the brake system after finishing work on the braking system's hydraulics area and before starting the vehicle.

- Hold the brake pedal in a pressed down position for approximately 30 s once pressure has been built up in the brake system, the pressure in the brake system must not drop during this time.

4. If new brake pads/discs have been fitted, bed in the brakes. AA-RM-03C01-01-004 - Bedding new brake pads/discs

Torque settings

FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-003 - Remove/Install brake disc - Front

Description	Dimension	Value
Bolt Brake disc - Hub	M6 x 15	10 Nm

Instructions

FG03 Chassis / C01 Brake System / Brake Front Pipes / AA-RM-03C01-02-001 Remove/Install brake hose - Front

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/Install wheels

WARNING!

Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves.

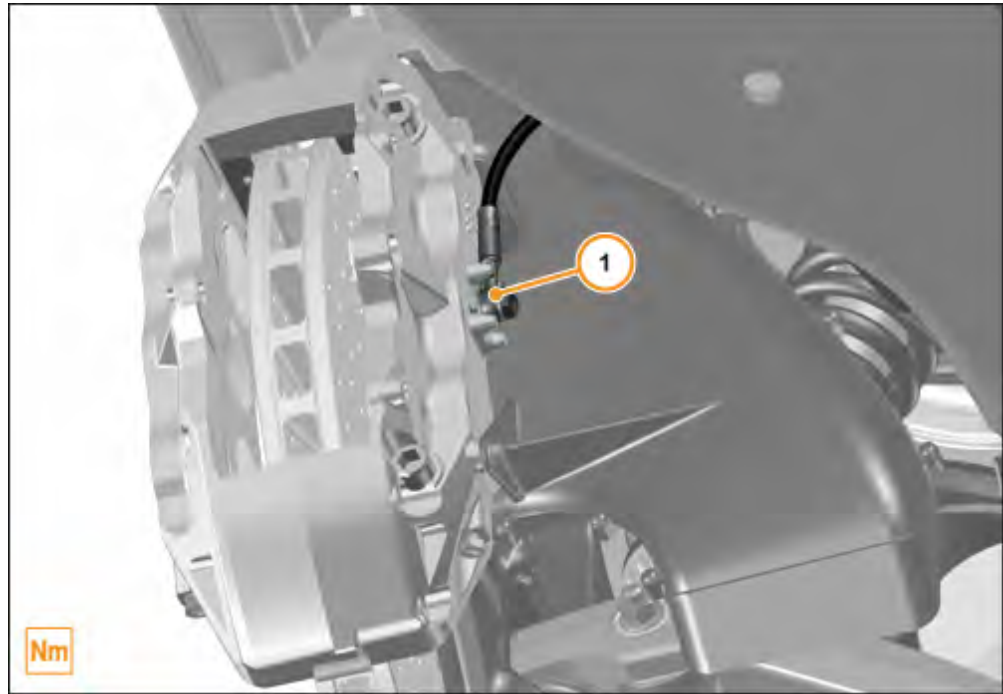
- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

Remove brake hose - Front

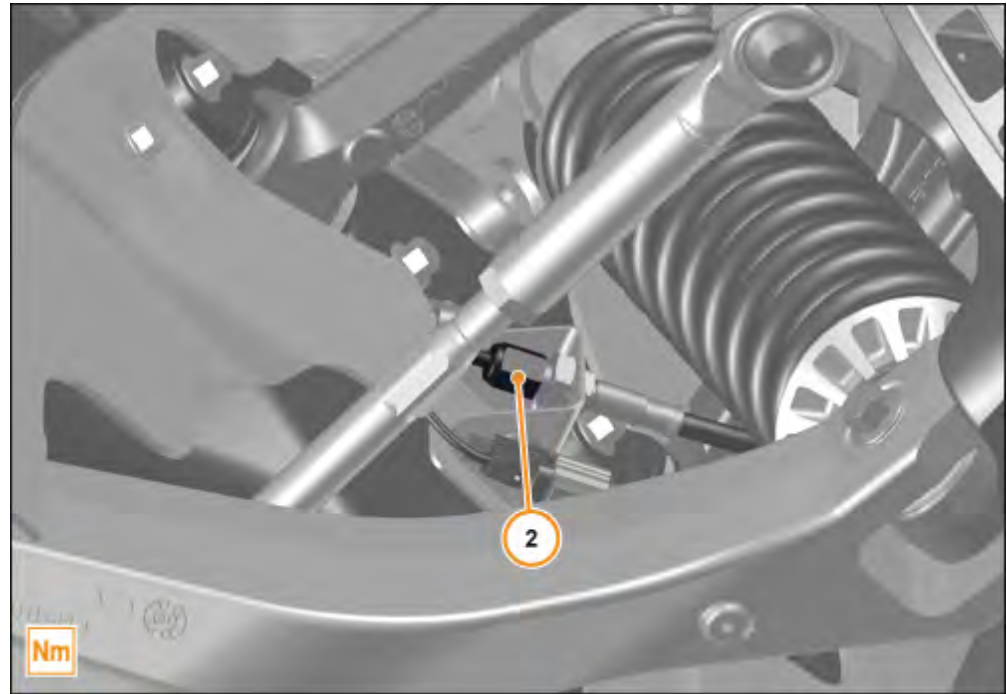
Care Point: Use a suitable container to catch the excess fluid.

Care Point: Close off the caliper with a suitable plug.

1. Remove banjo bolt (1) and Copper washer.
M10 42 Nm

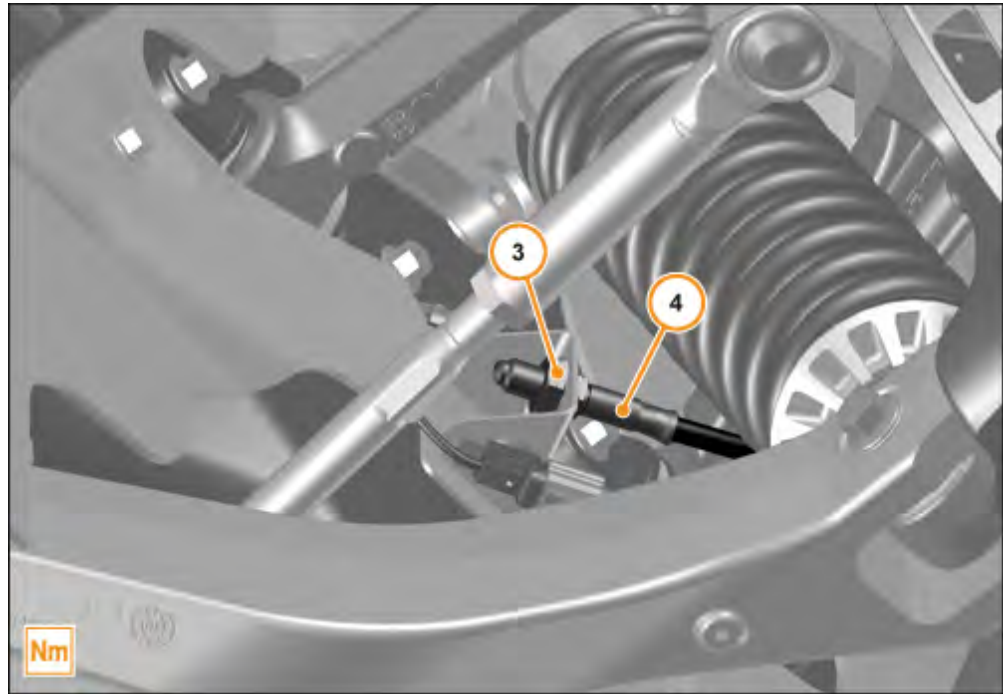


2. Detach union nut (2). M10 17 Nm



3. Loosen nut (3).

4. Remove front brake hose (4).



Install brake hose - Front

Care Point: Clean area around union.

Care Point: Replace Copper washers.

1. Install components in reverse order.
2. Bleed braking system. [AA-RM-03C01-01-005 Fill/bleed fluid - Brake system](#)

Torque settings

FG03 Chassis / C01 Brake System / Brake Front Pipes / AA-RM-03C01-02-001 Remove/Install brake hose - Front

Description	Dimension	Value
Banjo bolt Brake hose - Calliper	M10	42 Nm
Union nut Brake pipe - Brake hose	M10	17 Nm

Instructions

FG03 Chassis / C01 Brake System / Brake Discs Calipers Rear / AA-RM-03C01-03-003 - Remove/install brake pads - Rear

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/Install wheels.

Remove brake pads - Rear



Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves.

- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

1. Release brake fluid reservoir cap.

2. Disconnect brake pad wear indicator electrical connector.

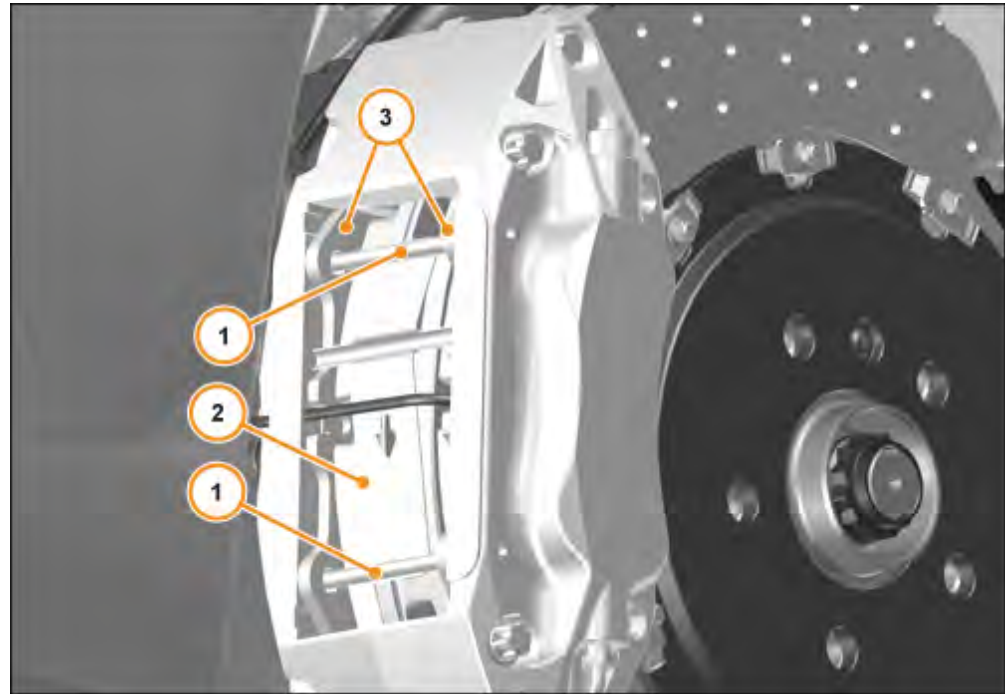
3. Remove brake pad securing pins (1) and anti rattle clip (2).

Care Use suitable grip.

Point: Protect caliper from damage.

4. Push caliper pistons back.

5. Remove brake pads (3).



Install brake pads - Rear

WARNING!

Risk of accident due to lack of braking effect!

When the brakes are used for the first time after any work was performed on the braking system's hydraulics area, the risk of an accident is increased due to an impaired braking effect.

Press the brake pedal several times to build up pressure in the brake system after finishing work on the braking system's hydraulics area and before starting the vehicle.

- Hold the brake pedal in a pressed down position for approximately 30 s once pressure has been built up in the brake system, the pressure in the brake system must not drop during this time.

Care Ensure brake components are clean and free from dirt and debris.

Point: Observe direction arrow on anti rattle clip.

Care If new brakes are fitted to vehicle, proceed to step 2.

Care Point: If iron brakes are fitted to vehicle, proceed to step 2.

1. If carbon ceramic brakes are fitted to vehicle, before re-installing brake pads the brake discs must be weighed and checked. AA-RM-03C01-01-006 - Cleaning/ Checking carbon ceramic brake disc (CCM)/Iron brake disc (Fe).
2. Install components in reverse order.
3. Apply the footbrake several times to ensure the brake pads are correctly seated.

 WARNING!

Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves.

- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

4. Check brake fluid level and refill, if necessary. AA-RM-03C01-01-005 Fill/bleed fluid - Brake system
5. If new brake pads/discs have been fitted, bed in the brakes. AA-RM-03C01-01-004 - Bedding new brake pads/discs

Instructions

FG03 Chassis / C01 Brake System / Brake Discs Calipers Rear / AA-RM-03C01-03-001 - Remove/install brake caliper - Rear

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.

Remove brake caliper - Rear



Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

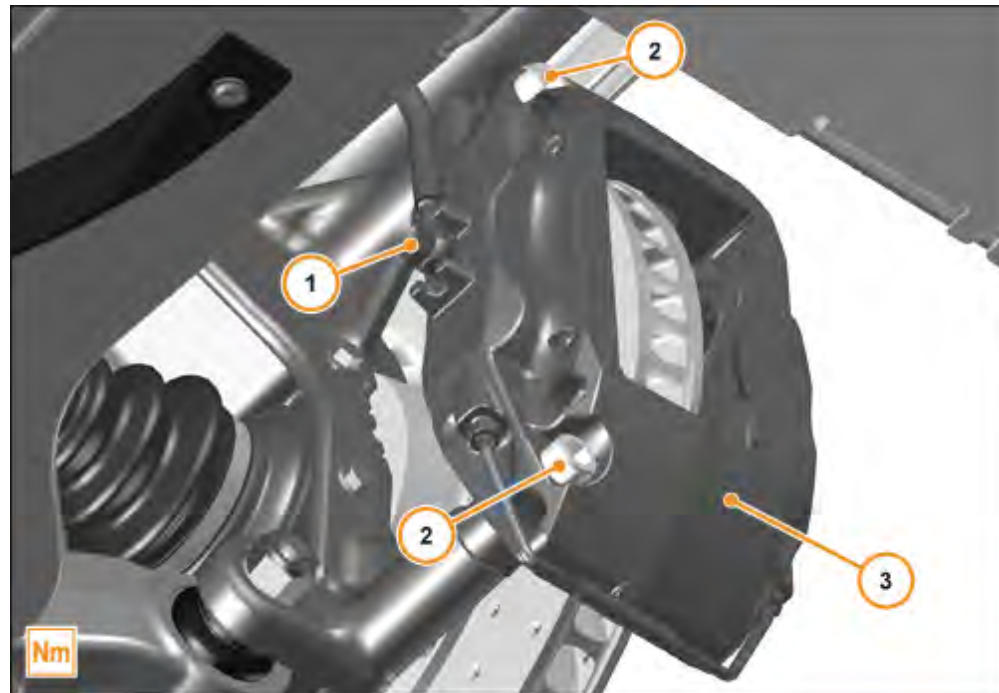
A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves.

- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

Care Point: Ensure brake fluid connections are clean and free from dirt and debris to avoid contamination.



Care Point: Collect the brake fluid that emerges in a suitable container.

Care Point: Close off the brake line with a suitable plug.

Care Point: Replace Copper washers.

1. Remove banjo bolt (1). M10 42 Nm

2. Remove bolts (2).

Carbon Ceramic (CCM): M12 x 85 93 Nm

Iron (Fe): M12 x 66 70 Nm

3. Remove caliper (3).

Detach brake caliper - Rear

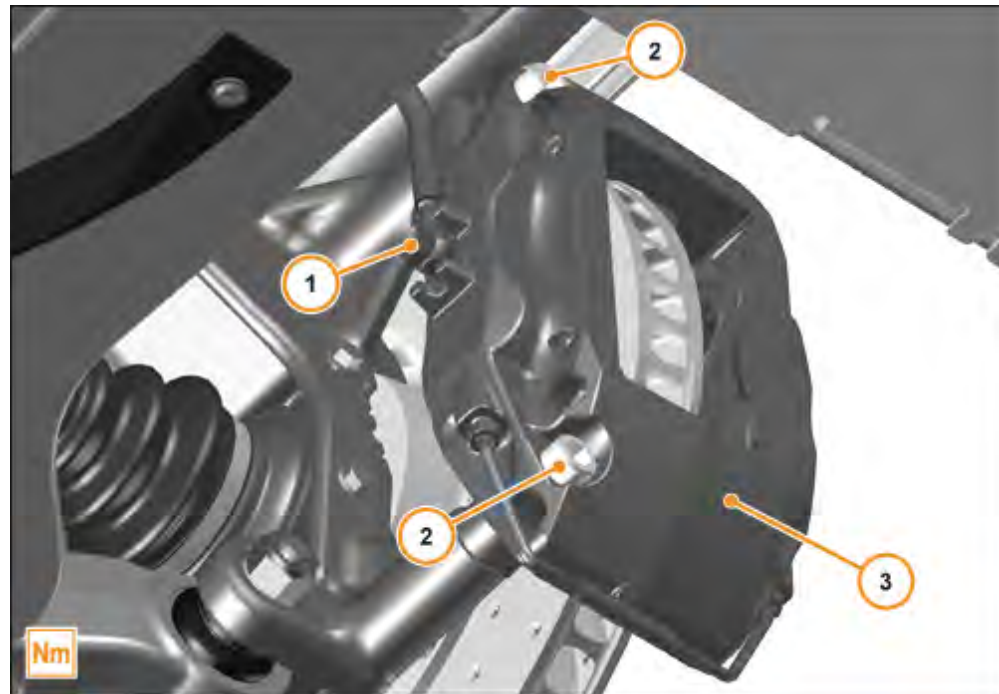
Care Point: Ensure brake fluid connections are clean and free from dirt and debris to avoid contamination.

Care Point: Do not let caliper hang on brake hose.

1. Remove bolts (2). M12 x 85 93 Nm

Care Point: Ensure the caliper in a suitable position with cable ties.

2. Detach caliper and hang in suitable location with cable tie (3).



Install brake caliper - Rear

WARNING!

Risk of accident due to lack of braking effect!

When the brakes are used for the first time after any work was performed on the braking system's hydraulics area, the risk of an accident is increased due to an impaired braking effect.

Press the brake pedal several times to build up pressure in the brake system after finishing work on the braking system's hydraulics area and before starting the vehicle.

- Hold the brake pedal in a pressed down position for approximately 30 s once pressure has been built up in the brake system, the pressure in the brake system must not drop during this time.

Care Point: Replace O-Ring seals and copper washers.

Care Point: Ensure brake components are clean and free from dirt and debris.

Care Point: Always renew bolts.

1. Install components in reverse order.
2. Bleed brake system if necessary. [AA-RM-03C01-01-005 Fill/bleed fluid - Brake system](#)

Torque settings

FG03 Chassis / C01 Brake System / Brake Discs Calipers Rear / AA-RM-03C01-03-001 - Remove/install brake caliper - Rear

Description	Dimension	Value
Banjo bolt Brake hose - Caliper	M10	42 Nm
Bolt Caliper (Carbon Ceramic Version)	M12 x 85	93 Nm
Bolt Caliper (Iron Version)	M12 x 66	70 Nm
Bolt Caliper	M12 x 85	93 Nm

Instructions

FG03 Chassis / C01 Brake System / Brake Discs Calipers Rear / AA-RM-03C01-03-002 - Remove/install brake disc - Rear

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/install wheels
3. AA-RM-03C02-01-002 Remove/install caliper parking brake
4. AA-RM-03C01-03-001 Remove/install brake caliper - rear

Remove brake disc - Rear

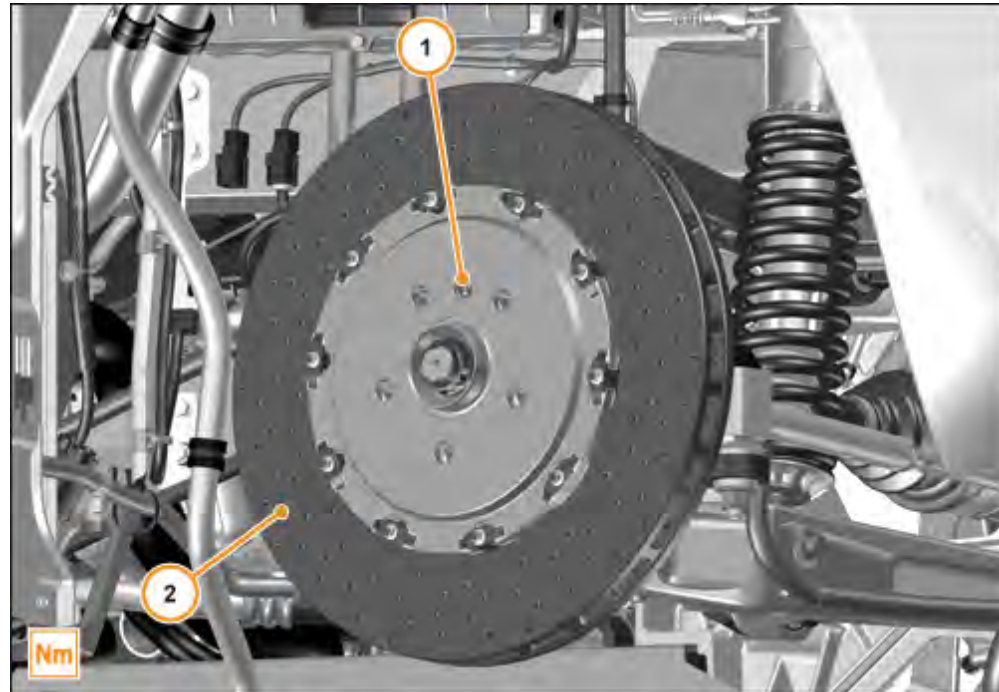
Care The Electronic parking brake in
Point: inoperative when this sequence is
carried out.

Care Before mechanical work on
Point: Parking Brake components you
must set calipers in fully open
position.

1. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Electronic parking brake (EPB)**.
2. Access Sequences section.
3. Carry out EPB Caliper Open.

4. Remove bolt (1). M6 x 15 10 Nm

5. Remove brake disc (2).



Install brake disc - Rear

Care Ensure all brake components are clean and free from dirt and debris.
Point: When fitting new brake discs ensure a new brake pad axle set is fitted.

1. Install in reverse order.
2. Apply the footbrake several times to ensure the brake pads are correctly seated.

WARNING!

Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves

wear safety glasses and protective clothing such as rubber gloves.

- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

3. Check brake fluid level and refill, if necessary. AA-RM-03C01-01-005 Fill/bleed fluid - Brake system

 WARNING!

Risk of accident due to lack of braking effect!

When the brakes are used for the first time after any work was performed on the braking system's hydraulics area, the risk of an accident is increased due to an impaired braking effect.

Press the brake pedal several times to build up pressure in the brake system after finishing work on the braking system's hydraulics area and before starting the vehicle.

- Hold the brake pedal in a pressed down position for approximately 30 s once pressure has been built up in the brake system, the pressure in the brake system must not drop during this time.

4. If new brake pads/discs have been fitted, bed in the brakes. AA-RM-03C01-01-004 - Bedding new brake pads/discs

 WARNING!

Risk of injury from moving parts!

When working on components which can be moved either by hand, by means of electric motors, or hydraulically/pneumatically via linkage, serious injuries can occur to body parts being trapped, crushed or severed.

Monitor hazard area.

- Secure area against unauthorised access when parts are in motion.
- Never touch the mechanism of a component while it is being actuated.
- Choose a test cable of sufficient length.

Care Point: After mechanical work on Parking Brake components you must set calipers in fully closed position.

Care The Parking Brake will be applied ensure it is safe to proceed with this sequence.

Point:

5. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Electronic parking brake (EPB)**.
6. Access Sequences section.
7. Carry out EBP caliper Closed.
8. Carry out EBP Assembly Check.

Torque settings

FG03 Chassis / C01 Brake System / Brake Discs Calipers Rear / AA-RM-03C01-03-002 - Remove/install brake disc - Rear

Description	Dimension	Value
Bolt Brake disc - Hub	M6 x 15	10 Nm

Instructions

FG03 Chassis / C01 Brake System / Brake Rear Pipes / AA-RM-03C01-04-001 Remove/install brake hose - Rear

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/Install wheels

WARNING!

Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves.

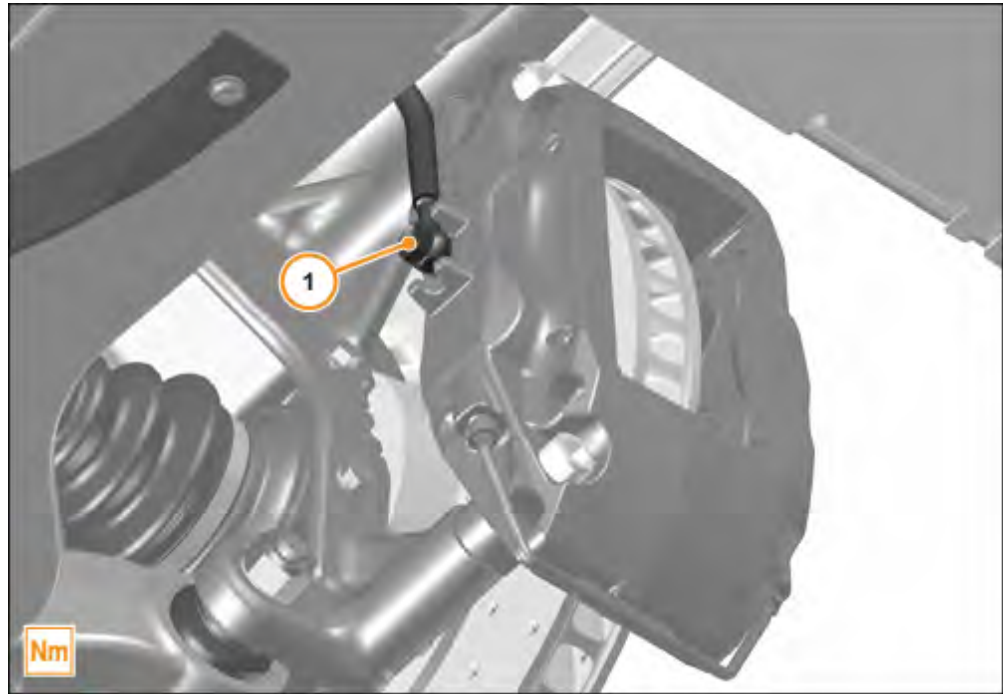
- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

Remove brake hose - Rear

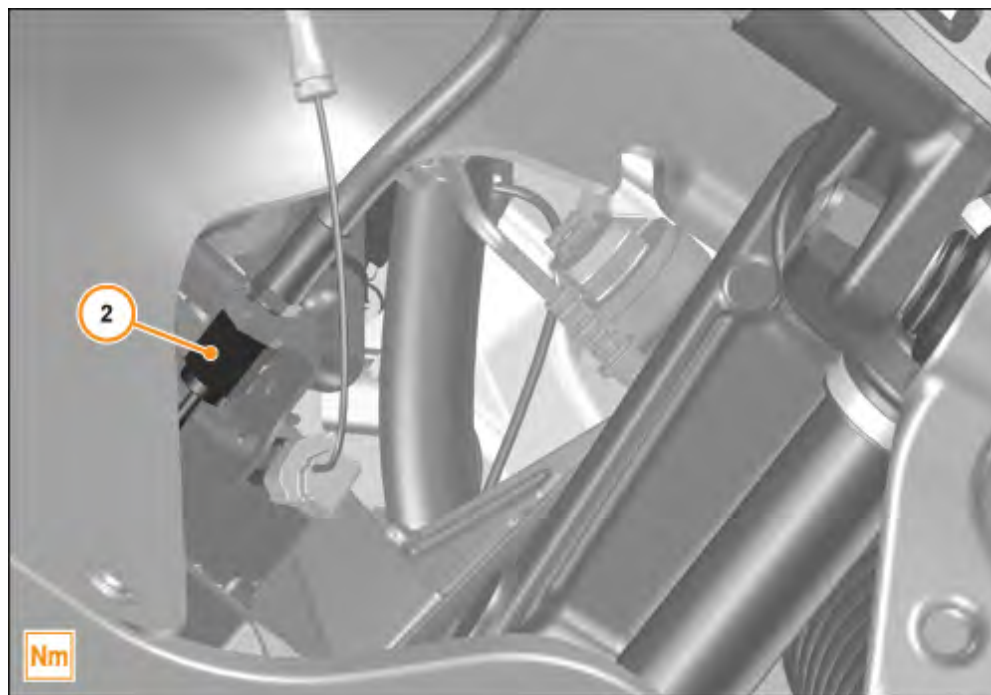
Care Point: Use a suitable container to catch the excess fluid.

Care Point: Close off the caliper with a suitable plug.

1. Remove banjo bolt (1) and copper washer.
M10 42 Nm

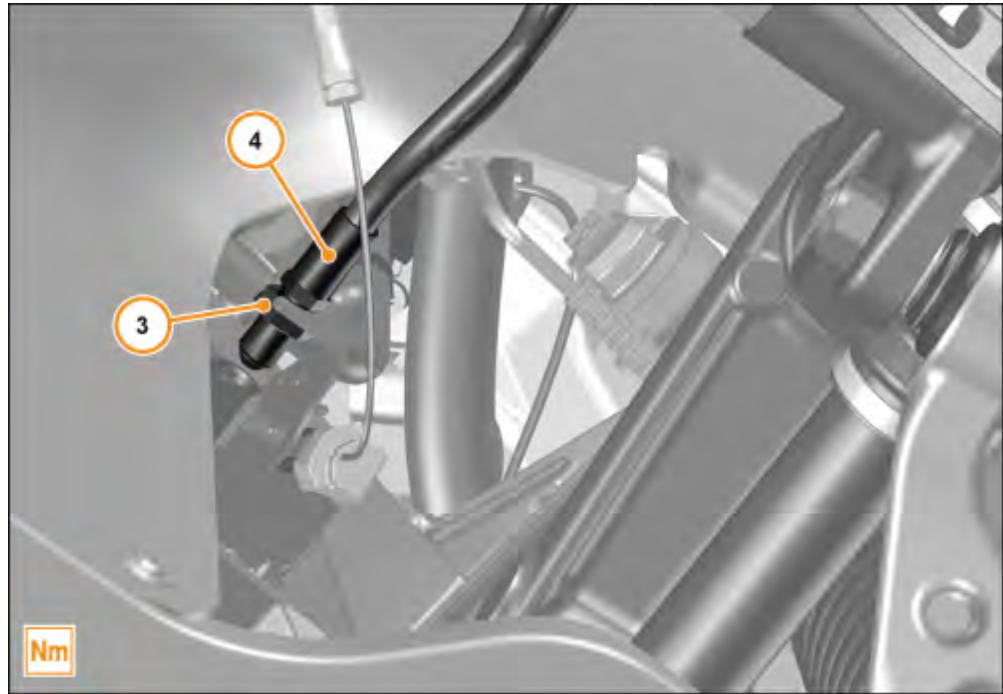


2. Detach union nut (2). M10 17 Nm



3. Loosen nut (3).

4. Remove rear brake hose (4).



Install brake hose - Rear

Care Point: Clean area around union.

Care Point: Replace copper washer.

1. Install components in reverse order.
2. Bleed braking system. [AA-RM-03C01-01-005 Fill/bleed fluid - Brake system](#)

Torque settings

FG03 Chassis / C01 Brake System / Brake Rear Pipes / AA-RM-03C01-04-001 Remove/install brake hose - Rear

Description	Dimension	Value
Banjo bolt Brake hose - Calliper	M10	42 Nm
Union nut Brake pipe - Brake hose	M10	17 Nm

Instructions

FG03 Chassis / C02 Parking Brake System / Parking Brake System / AA-RM-03C02-01-001 - Remove/install pads - Electronic parking brake

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.

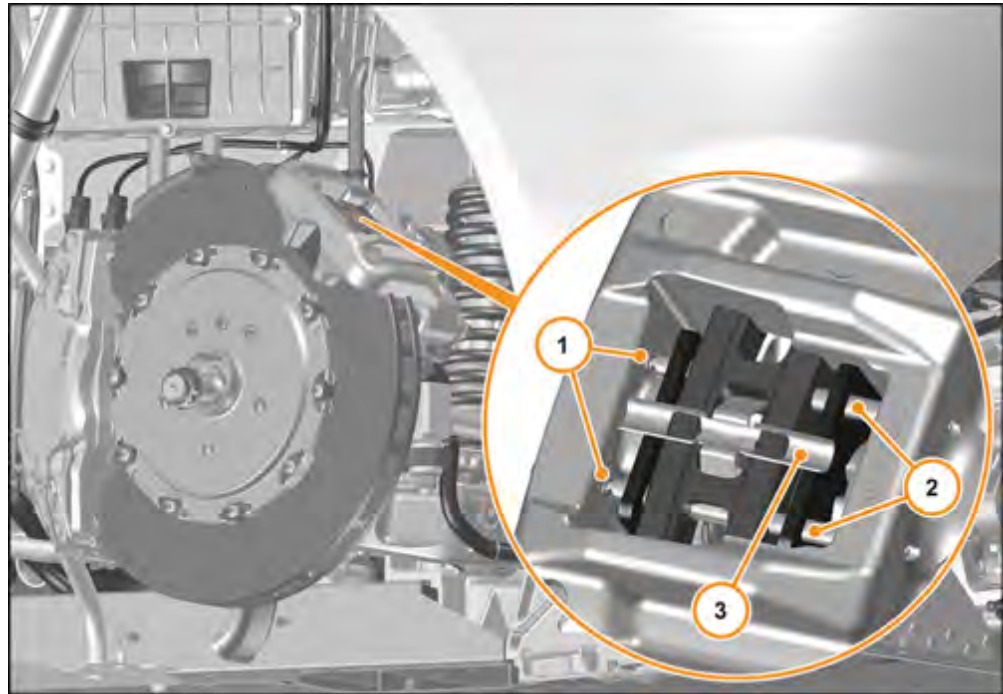
Remove pads - Electronic parking brake

Care Point: The electronic parking brake is inoperative when this sequence is carried out.

Care Point: Before mechanical work on Parking Brake components you must set callipers in fully open position.

1. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Electronic parking brake (EPB)**.
2. Access Sequences section.
3. Carry out EPB Calliper Open.

4. Remove pin securing clips (1).
5. Remove pad pins (2) and anti rattle clip (3).
6. Remove electronic parking brake pads.



Install pads - Electronic parking brake

1. Clean all contact areas.
2. Install components in reverse order.

 WARNING!

Risk of injury from moving parts!

When working on components which can be moved either by hand, by means of electric motors, or hydraulically/ pneumatically via linkage, serious injuries can occur to body parts being trapped, crushed or severed. Monitor hazard area.

- Secure area against unauthorised access when parts are in motion.
- Never touch the mechanism of a component while it is being actuated.
- Choose a test cable of sufficient length.

Care Point: After mechanical work on Parking Brake components you must set callipers in fully closed position.

Care Point: The Parking Brake will be applied ensure it is safe to proceed with this sequence.

3. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Electronic parking brake (EPB)**.
4. Access Sequences section.
5. Carry out EPB Calliper Closed.
6. Carry out EPB Assembly Check.

Instructions

FG03 Chassis / C02 Parking Brake System / Parking Brake System / AA-RM-03C02-01-003 - Remove/install electronic parking brake actuator

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.

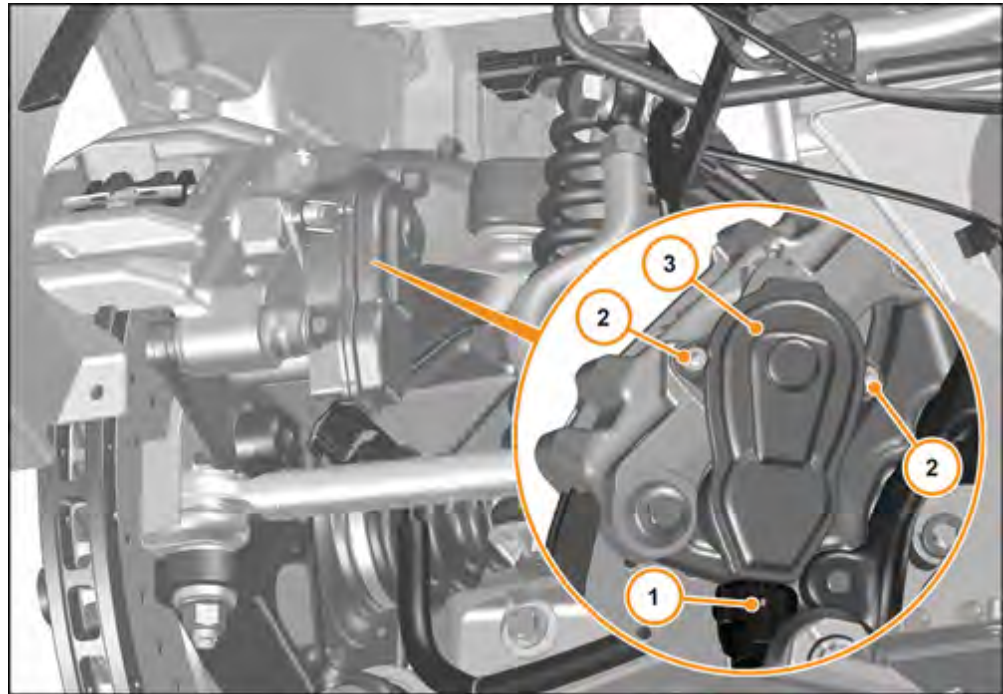
Remove electronic parking brake actuator

Care Point: The electronic parking brake is inoperative when this sequence is carried out.

Care Point: Before mechanical work on Parking Brake components you must set callipers in fully open position.

1. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Electronic parking brake (EPB)**.
2. Access Sequences section.
3. Carry out EPB Calliper Open.

4. Disconnect electronic parking brake actuator electrical connector (1).
5. Remove bolts (2). M6 x 12 11 Nm
6. Remove electronic parking brake actuator (3).



Install electronic parking brake actuator

Care Point: Conduct a pull test to ensure electronic parking brake actuator electrical connector is correctly fitted.

1. Install components in reverse order.

 WARNING!

Risk of injury from moving parts!

When working on components which can be moved either by hand, by means of electric motors, or hydraulically/pneumatically via linkage, serious injuries can occur to body parts being trapped, crushed or severed. Monitor hazard area.

- Secure area against unauthorised access when parts are in motion.
- Never touch the mechanism of a component while it is being actuated.
- Choose a test cable of sufficient length.

Care Point: After mechanical work on Parking Brake components you must set callipers in fully closed position.

Care Point: The Parking Brake will be applied ensure it is safe to proceed with this sequence.

2. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Electronic parking brake (EPB)**.
3. Access Sequences section.
4. Carry out EPB Calliper Closed.
5. Carry out EPB Assembly Check.

Torque settings

FG03 Chassis / C02 Parking Brake System / Parking Brake System / AA-RM-03C02-01-003 - Remove/install electronic parking brake actuator

Description	Dimension	Value
Bolt Electronic park brake actuator - caliper	M6 x 12	11 Nm

Instructions

FG03 Chassis / C02 Parking Brake System / Parking Brake System / AA-RM-03C02-01-002 - Remove/install caliper - Electronic parking brake

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.

WARNING!

Risk of injury from moving parts!

When working on components which can be moved either by hand, by means of electric motors, or hydraulically/pneumatically via linkage, serious injuries can occur to body parts being trapped, crushed or severed.

Monitor hazard area.

- Secure area against unauthorised access when parts are in motion.
- Never touch the mechanism of a component while it is being actuated.
- Choose a test cable of sufficient length.

Remove caliper - Electronic parking brake

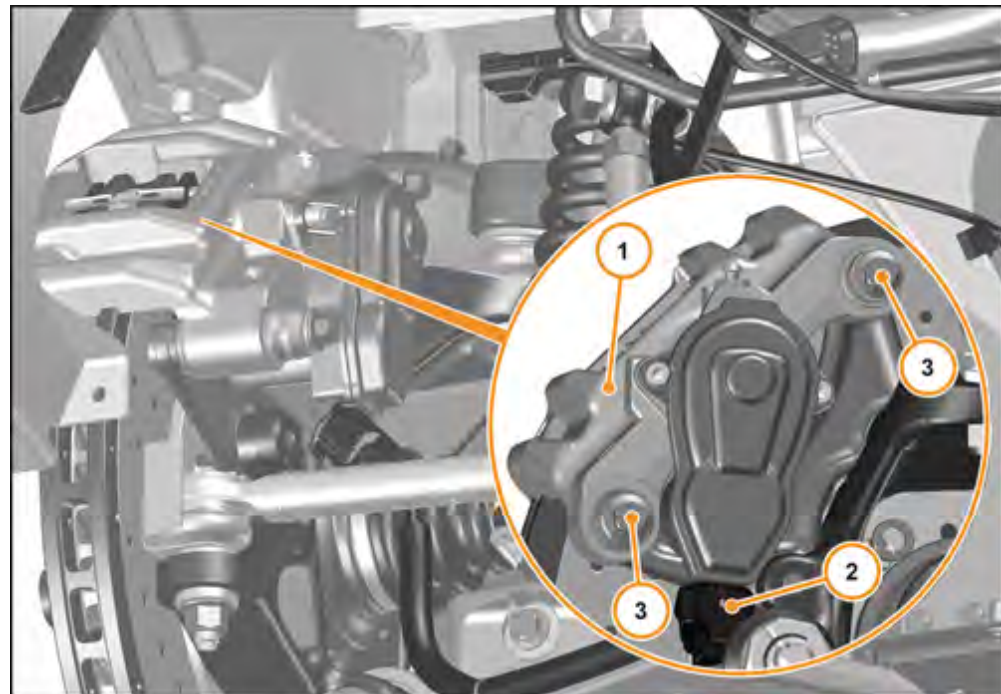
Care Point: The electronic parking brake is inoperative when this sequence is carried out.

Care Point: Before mechanical work on Parking Brake components you must set calipers in fully open position.

1. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Electronic parking brake (EPB)**.
2. Access Sequences section.
3. Carry out EPB caliper Open.

Care Point: Clean electrical connector before disconnection.
Do not use any hand tools to disconnect electrical connector.

4. Disconnect electronic parking brake actuator electrical connector (2).
5. Remove bolts (3). M10 x 85 33 Nm
6. Remove electronic parking brake caliper (1).



Install caliper - Electronic parking brake

Care Point: Ensure audible 'click' can be heard on connector installation.
Care Point: Conduct a pull test to ensure electronic parking brake actuator electrical connector is correctly fitted.

Care Point: Clean and apply Loctite 2701 to 25mm of the caliper bolts, starting from end of the thread.

1. Install components in reverse order.

Care Point: After mechanical work on Parking Brake components you must set calipers in fully closed position.

Care Point: The Parking Brake will be applied ensure it is safe to proceed with this sequence.

2. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Electronic parking brake (EPB)**.

3. Access Sequences section.

4. Carry out EPB caliper Closed.

5. Carry out EPB Assembly Check.

Torque settings

FG03 Chassis / C02 Parking Brake System / Parking Brake System / AA-RM-03C02-01-002 - Remove/install caliper - Electronic parking brake

Description	Dimension	Value
Bolt Electronic park brake caliper - upright	M10 x 85	33 Nm

Instructions

FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-005 Fill/bleed fluid - Brake system

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/install wheels

WARNING!

Risk of accident due to lack of braking effect!

When the brakes are used for the first time after any work was performed on the braking system's hydraulics area, the risk of an accident is increased due to an impaired braking effect.

Press the brake pedal several times to build up pressure in the brake system after finishing work on the braking system's hydraulics area and before starting the vehicle.

- Hold the brake pedal in a pressed down position for approximately 30 s once pressure has been built up in the brake system, the pressure in the brake system must not drop during this time.

WARNING!

Risk of poisoning and injury when handling brake fluid!

Swallowing brake fluid can cause symptoms of poisoning such as headaches, dizziness, stomach pains, vomiting, diarrhoea, cramps and unconsciousness.

A dose of more than 100 cm³ can have fatal consequences.

Contact with brake fluid can cause serious skin damage to unprotected skin.

Wear safety glasses and protective clothing such as rubber gloves.

- Ensure that brake fluid is only accessible to authorized personnel.
- Store brake fluid in original containers only.
- Only store brake fluid in suitable, appropriately marked containers.
- Never put brake fluid in beverage containers.

Fill/bleed fluid - Brake system

Care Point: The brake bleeding procedure is carried out using the MDS. The below steps reference the procedure stored on the MDS tool.

1 Connect MDS to vehicle.

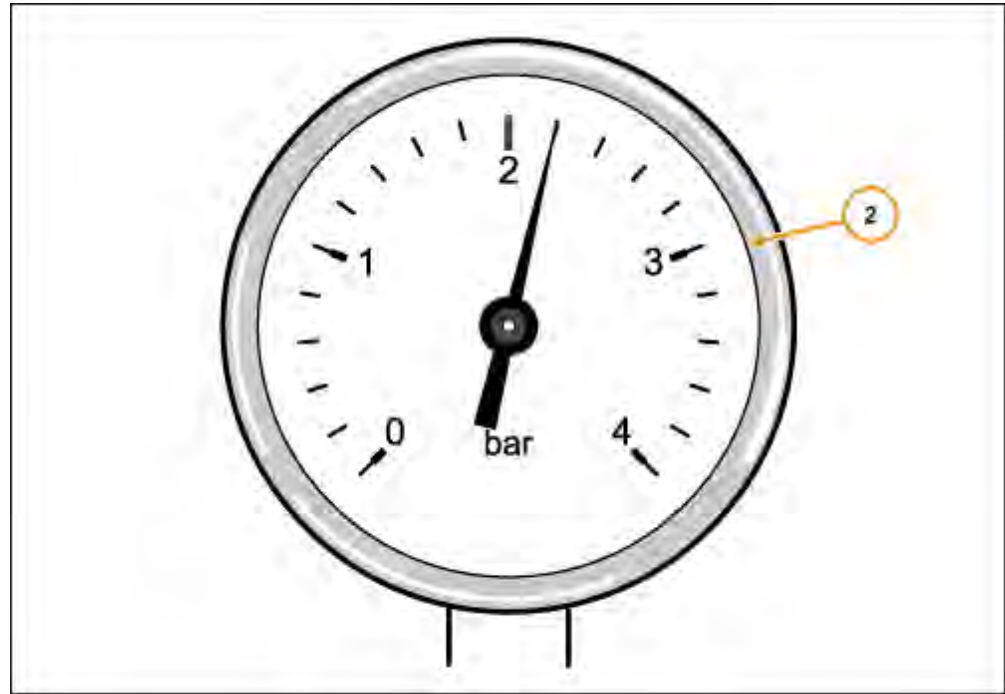


2 Open brake reservoir cap (1).



Care Point: Tool must deliver 2.2 bar pressure (2) and have a minimum of 2 Litres of brake fluid to carry out procedure correctly.

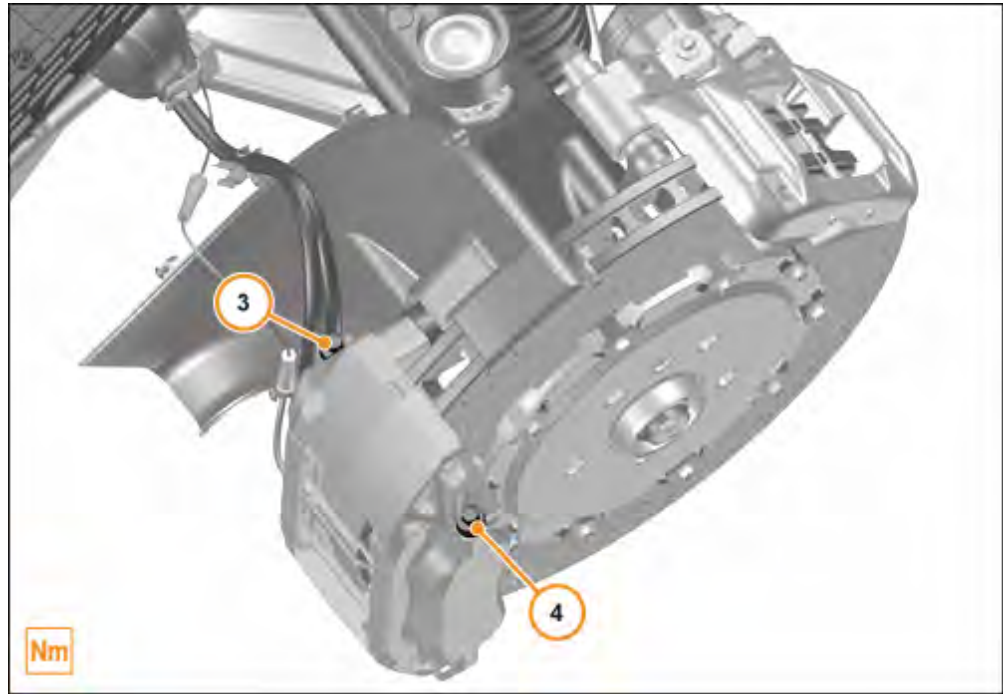
3 Connect pressure bleeding tool.



Care Point: Pump the brake pedal during each phase of the brake bleeding procedure.

Care Point: Pedal pump frequency = 3 seconds applied to 0.5 seconds released.

- 4 Fit bleed bottle to rear left calliper and open both inner and outer bleed screws (3, 4). M10 17 Nm
- 5 Pump pedal until no air is present.
- 6 Close bleed screws on rear left calliper (3, 4).



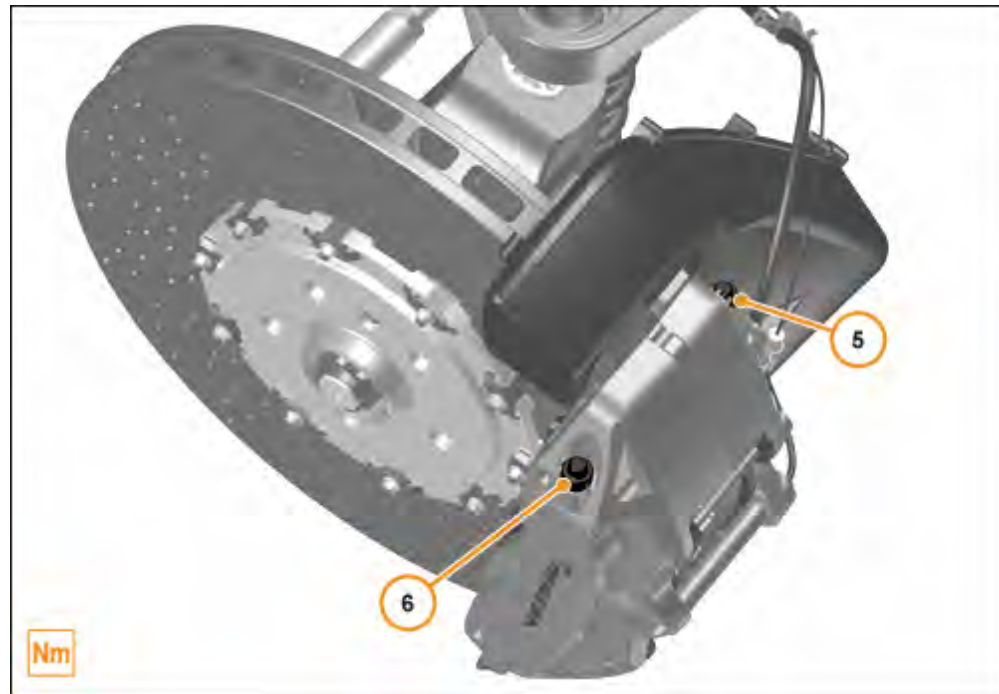
Care Point: Pedal pump frequency = 3 seconds applied to 0.5 seconds released.

7 Fit bleed bottle to front left calliper and open

both inner and outer bleed screws (5, 6).

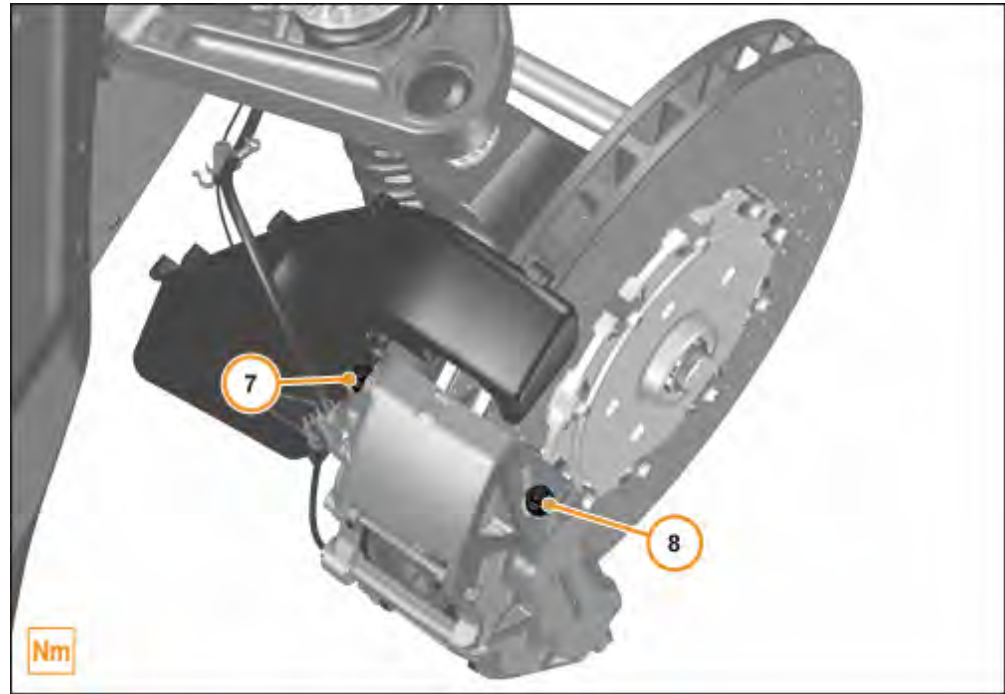
8 Pump pedal until no air is present.

9 Close bleed screws on front left calliper (5, 6).



Care Pedal pump frequency = 3
Point: seconds applied to 0.5 seconds released.

- 10 Fit bleed bottle to front right calliper and open
· both inner and outer bleed screws (7, 8).
- 11 Pump pedal until no air is present.
·
- 12 Close bleed screws on front right calliper (7,
· 8).



Care Point: Pedal pump frequency = 3 seconds applied to 0.5 seconds released.

13 Fit bleed bottle to rear right calliper and open both inner and outer bleed screws (9, 10).

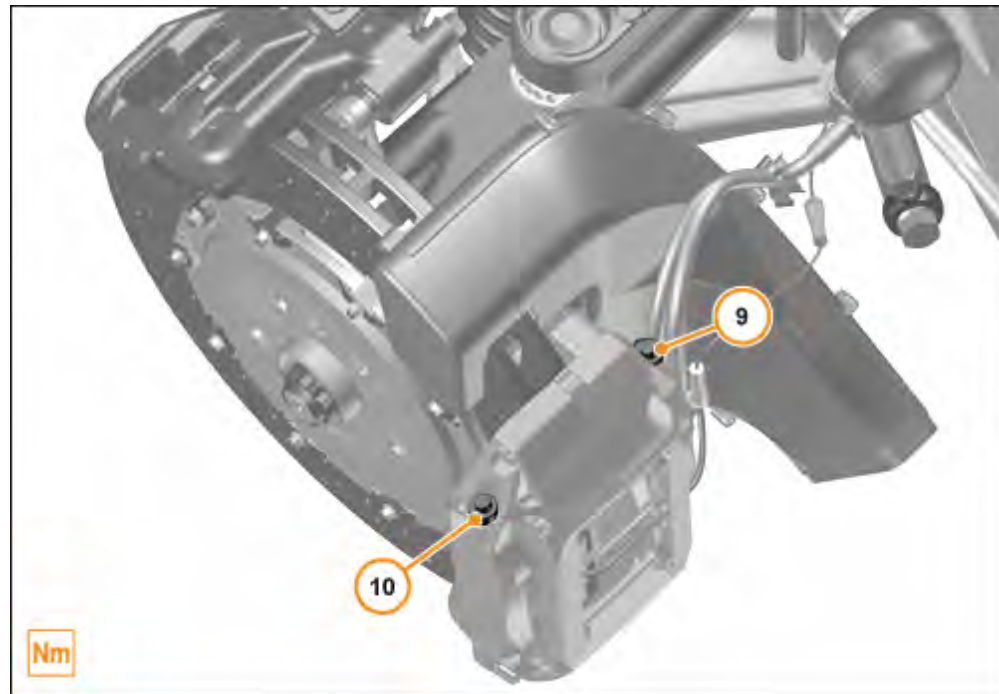
14 Pump pedal until no air is present.

15 Close bleed screws on rear right calliper (9, 10).

Care Point: If process needs to be repeated allow the system to rest for a minimum of 5 minutes to prevent damage being caused to the braking system.

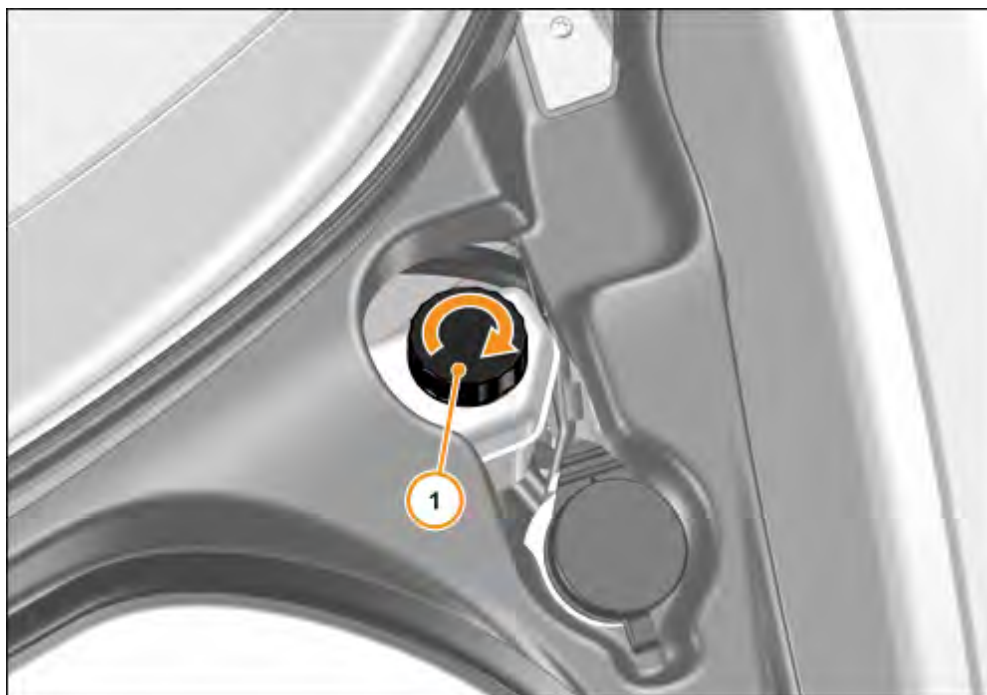
16 Disconnect pressure bleeding tool.

17 Check brake fluid level and fill to the correct level. Pentosin 5.1 or Mobil 1.5.1



18 Close brake fluid reservoir cap (1).

19 Check functionality.



Torque settings

FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-005 Fill/bleed fluid - Brake system

Description	Dimension	Value
Bleed Screw	M10	17 Nm

Instructions

FG03 Chassis / C01 Brake System / Brake Discs Calipers Front / AA-RM-03C01-01-004 - Bedding new brake pads/discs



New brake pads & discs.

If you do not 'bed-in' new brake pads &/or discs, the performance of the brakes can be decreased.
Follow the sequence of the procedure.

Care Point: New pads and discs must be bedded in, if not pad/ disc performance will be decreased.

Care Point: The brakes should be cold (Less than 40° C) before carrying out this procedure & if possible, only use light brake applications, whilst driving to the location

Bedding new brake pads/discs - carbon ceramic material (CCM)

1. Slow the vehicle sixteen times from 80 km/h (50 mph) to 30 km/h (19 mph) at 0.3g. The Max starting disc temperature should be 40°C, whilst the Max disc temperature reached should be 300°C at the end of the sixteenth stop. The cycle time is around 10 seconds (between brake applications).
2. Drive 3 km (2 miles) to allow the brakes to cool.
3. Slow the vehicle sixteen times from 120 km/h (75 mph) to 30 km/h (19 mph) at 0.5g. The Max starting disc temperature should be 40°C, whilst the Max disc temperature reached should be 400°C at the end of the sixteenth stop. The cycle time is around 15 seconds (between brake applications).
4. Drive 3 km (2 miles) to allow the brakes to cool.
5. Slow the vehicle ten times from 130 km/h (81 mph) to 30 km/h (19 mph) at 0.7g. The Max starting disc temperature should be 40°C, whilst the Max disc temperature reached should be 700°C at the end of the tenth stop. The cycle time is around 20 seconds (between brake applications).
6. Drive 4 km (2.5 miles) to allow the brakes to cool.
7. Use Full ABS (max pedal effort) and slow the vehicle three times from 100 km/h (62 mph) to 0 km/h (0 mph). The Max starting disc temperature should be 40°C. Increase the speed normally after you have slowed down.

Care Point: The cool-down periods are the minimum needed and can be longer.

8. Drive 8 km (5 miles) to allow the brakes to cool.
9. After bedding, visually inspect discs to ensure there is a good/consistent coating of pad material on the disc surface (transfer surface) and no surface defects.

CAUTION!

New brake pads & discs.

If you do not 'bed-in' new brake pads &/or discs, the performance of the brakes can be decreased. Follow the sequence of the procedure.

Care Point: `Max deceleration` should be the maximum deceleration without triggering ABS. ABS should never be triggered while bleeding brakes for iron discs and pads.

Bedding new brake pads/discs - Iron (Fe)

- 1 Slow the vehicle from 48 km/h (30 mph) to 0 km/h (0 mph) at 0.3g 6 times. Allow 60 seconds (1 minute) between each application.
- 2 Slow the vehicle six times from 100 km/h (62 mph) to 0 km/h (0 mph) at 0.5g. Allow 60 seconds (1 minute) between each application.
- 3 Drive 3 km (2 miles) to allow the brakes to cool.
- 4 Slow the vehicle five times from 100 km/h (62 mph) to 0 km/h (0 mph) at 0.7g. Allow 120 seconds (2 minutes) between each application.
- 5 Slow the vehicle five times from 100 km/h (62 mph) to 0 km/h (0 mph) at 0.7g. Allow 60 seconds (1 minute) between each application.
- 6 Slow the vehicle five times from 100 km/h (62 mph) to 0 km/h (0 mph) at 0.7g. Allow 30 seconds between each application.
- 7 Drive 4 km (2.5 miles) to allow the brakes to cool.
- 8 Slow the vehicle five times from 100 km/h (62 mph) to 0 km/h (0 mph) at 0.7g. Accelerate the vehicle as quickly as possible between stops and allow no pause between applications.
- 9 Drive 8 km (5 miles) to allow the brakes to cool.
- 10 After bedding, visually inspect discs to ensure there is a good/consistent coating of pad material on the disc surface (transfer layer) and no surface defects.

Instructions

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-001 - Remove/install floor panel - Engine/fuel tank

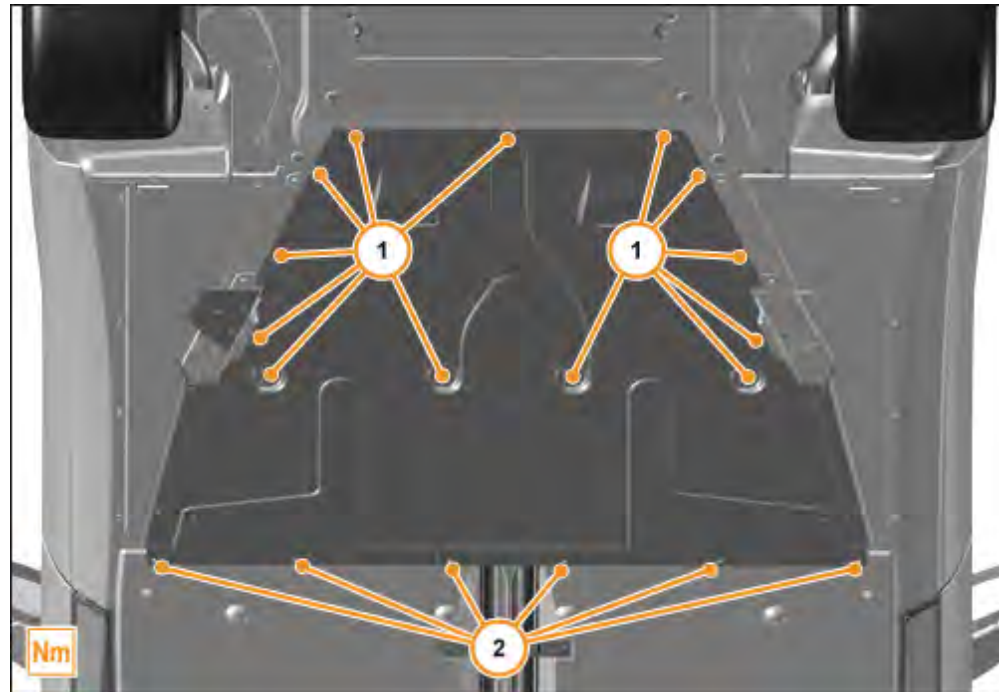
Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)

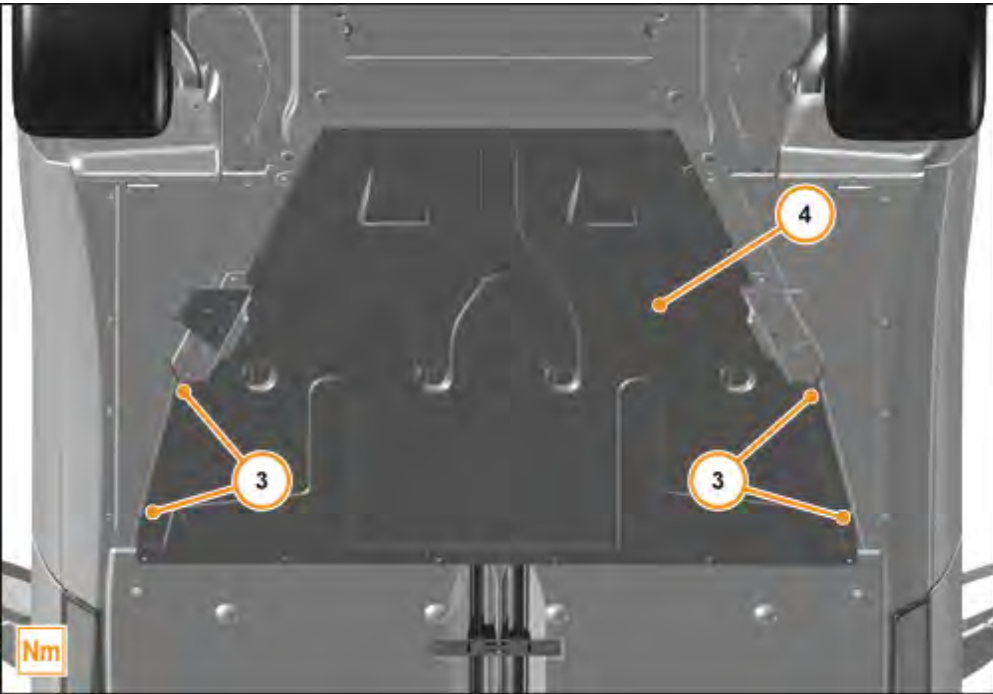
Remove floor panel - Engine/fuel tank

Care Point: Two technicians required.

1. Remove bolts (1) and washers. [M6 x 20 10 Nm](#)
2. Remove bolts (2). [M6 x 12 6 Nm](#)



- 3.Remove bolts (3). M6 x 16 10 Nm
- 4.Remove engine/fuel tank floor panel (4).



- Install floor panel - Engine/fuel tank**
1. Install components in reverse order.

Torque settings

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-001 - Remove/install floor panel - Engine/fuel tank

Description	Dimension	Value
Bolt Floor panel engine/fuel tank	M6 x 20	10 Nm
Bolt Floor panel engine/fuel tank	M6 x 12	6 Nm
Bolt Floor panel engine/fuel tank	M6 x 16	10 Nm

Instructions

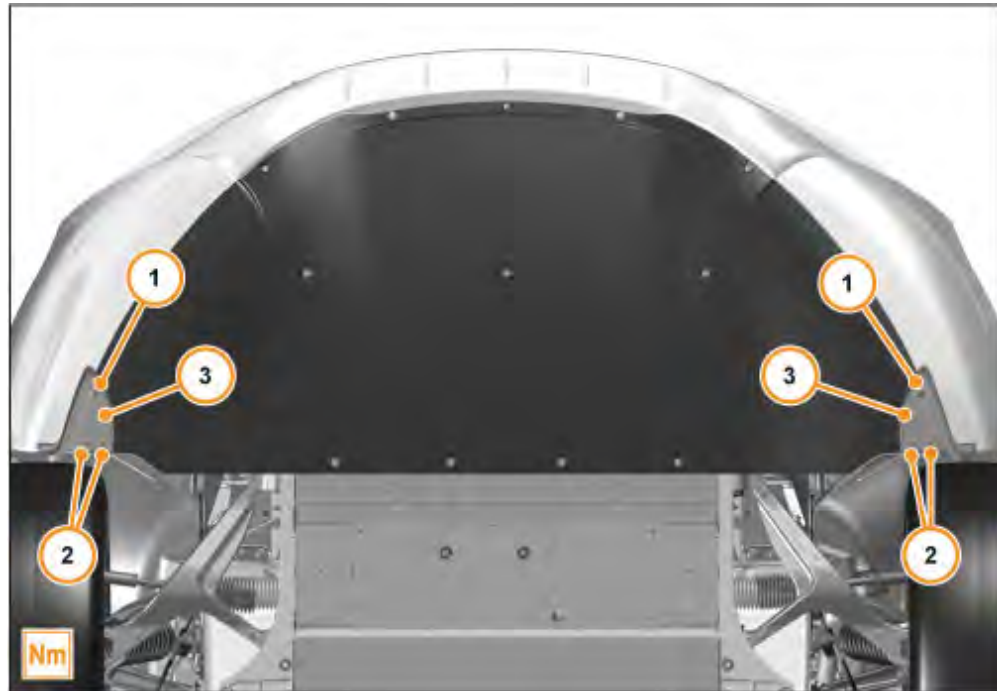
FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-002 - Remove/install floor panel - Front - Up to MY14

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform

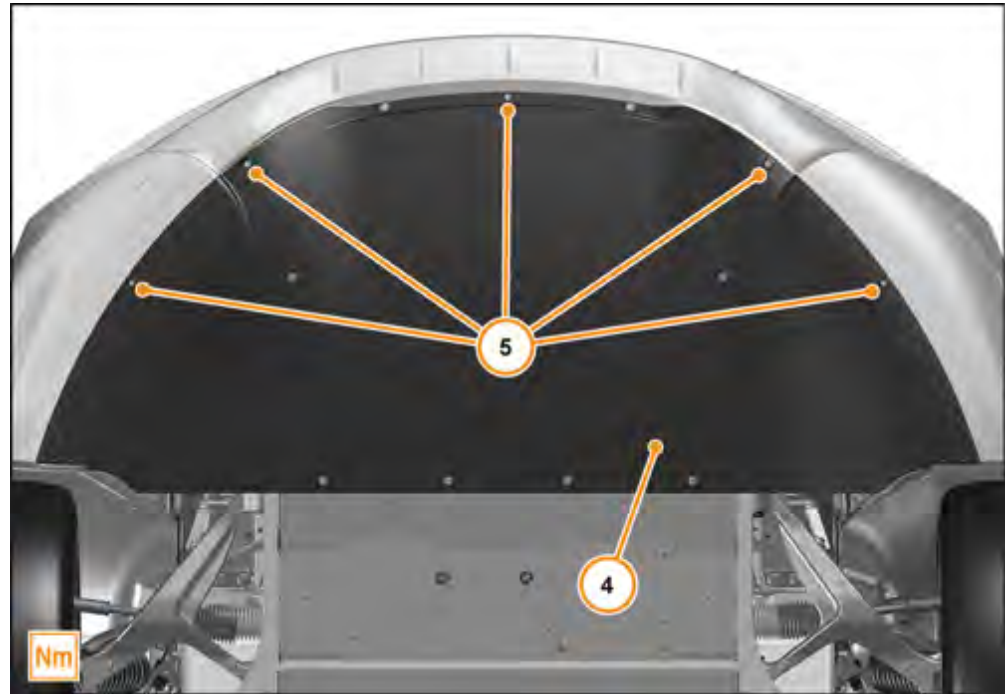
Remove floor panel - Front - Up to MY14

1. Remove bolts (1). M6 x 20 2 Nm
2. Remove bolts (2). M6 x 20 6 Nm .
3. Remove tyre spoiler (3).



4. Remove bolts (5). M6 x 20 4 Nm

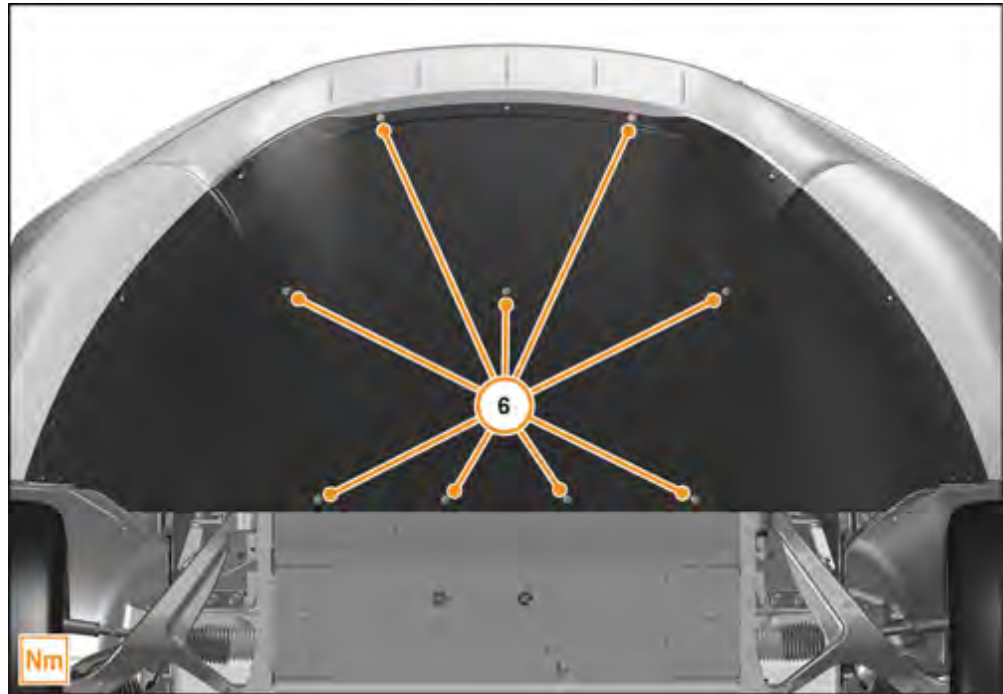
5. Detach floor panel (4).



Care Point: With the aid of another technician support the floor panel.

6. Remove bolts (6). M6 x 20 4 Nm

7. Remove floor panel.



Install floor panel - Front - Up to MY14

1. Install components in reverse order.

Torque settings

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-002 - Remove/install floor panel - Front - Up to MY14

Description	Dimension	Value
Bolt tyre spoiler - front panel	M6 x 20	2 Nm
Bolt Floor panel	M6 x 20	6 Nm
Bolt Front floor panel	M6 x 20	4 Nm
Bolt Front floor panel	M6 x 20	4 Nm

Instructions

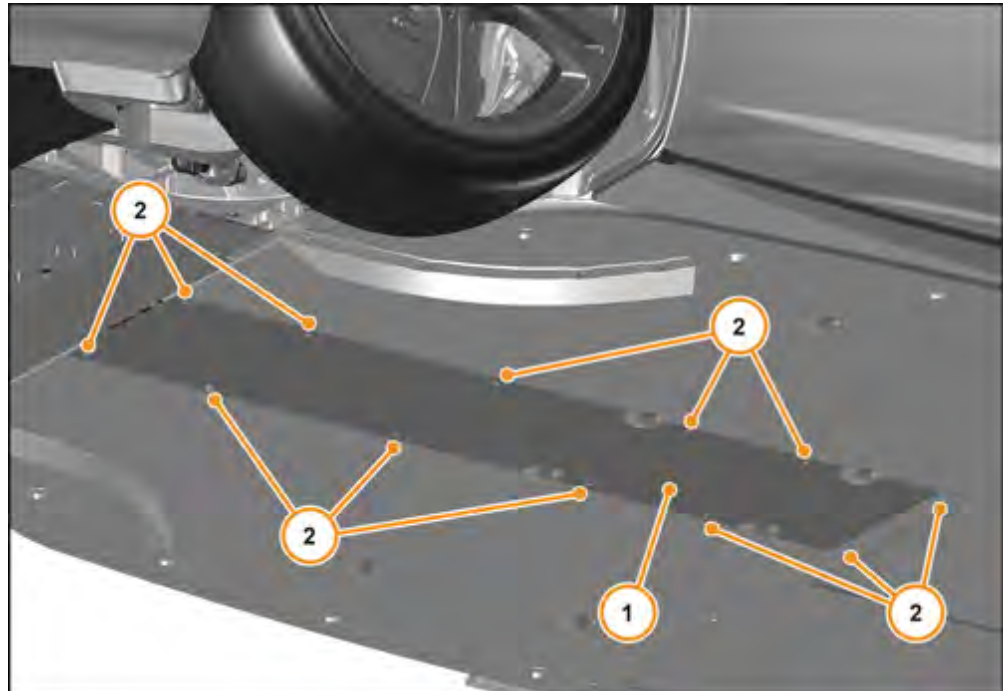
FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-003 - Remove/install floor panel - Tunnel

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform

Remove floor panel - Tunnel

1. Remove bolts M6 x 16 (2). M6 x 16 10 Nm
2. Remove tunnel floor panel (1).



Install floor panel - Tunnel

1. Install components in reverse order.

Torque settings

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-003 - Remove/install floor panel - Tunnel

Description	Dimension	Value
Bolt Floor panel tunnel	M6 x 16	10 Nm

Instructions

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-005 - Remove/install floor panel - Rear lower extension

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels
3. AA-RM-02A02-03-001 Remove/install wheel arch liner - Rear
4. AA-RM-02A04-04-001 Remove/install floor panel - Engine/fuel tank

Care Point: Ensure that the fuel filler drain hose does not become detached from the fuel filler bowl whilst carrying out this procedure.

Care Point: The fuel filler drain hose will only be attached to the left hand floor panel - rear lower extension.

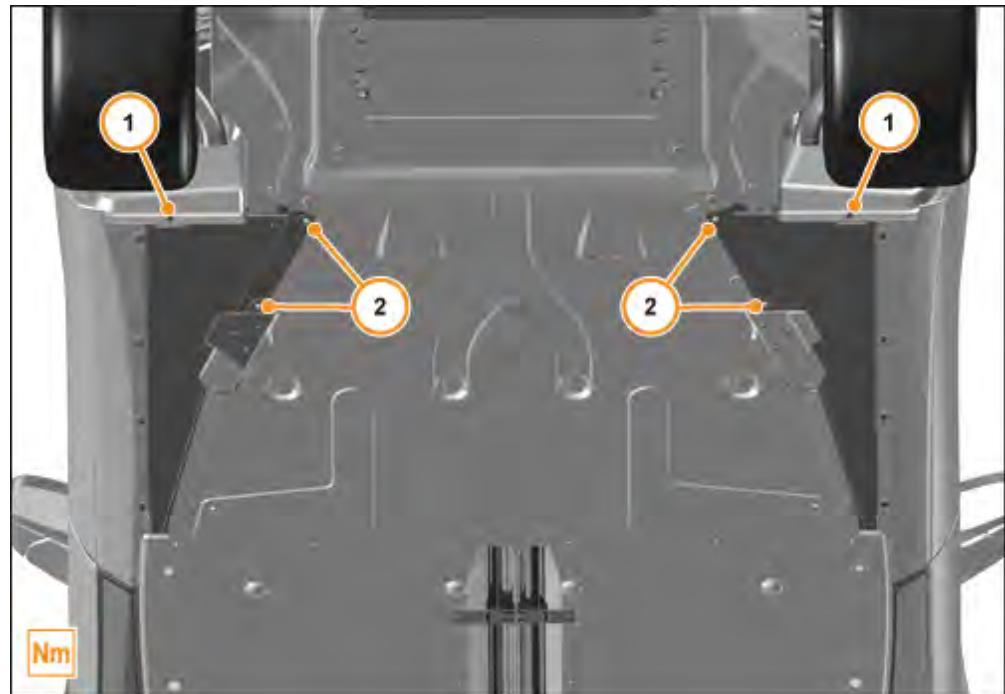
Care Point: Only carry out steps 1 and 2 if you are replacing both or the left hand only floor panel - rear lower extension.

Remove floor panel - Rear lower extension

1. Remove jubilee clip
2. Detach hose

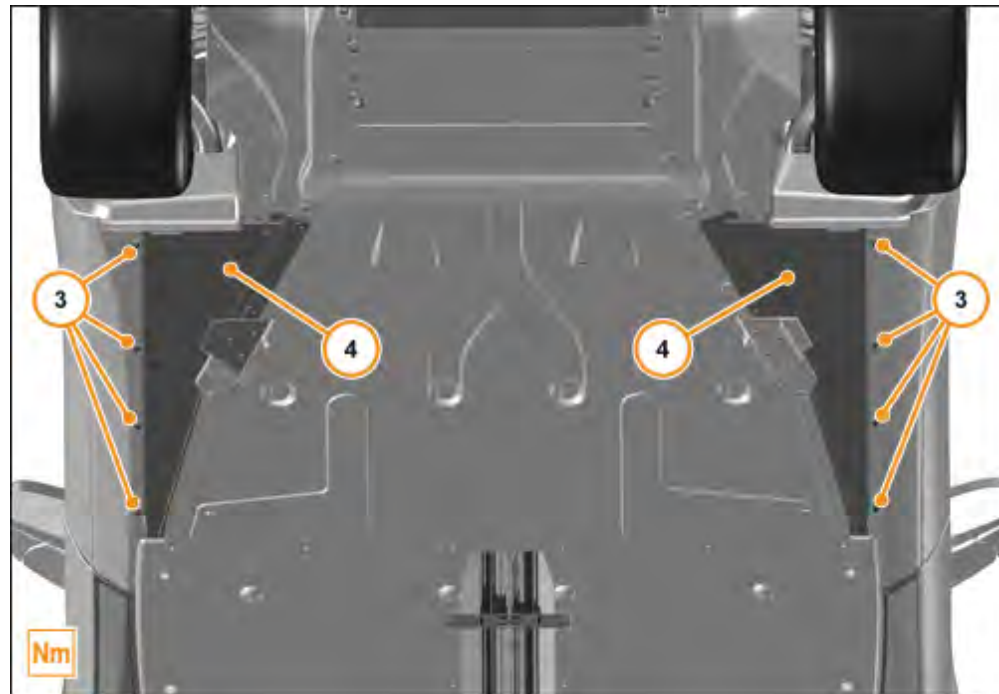
3.Remove bolt (1). M? 5 Nm

4.Remove bolts (2). M6 x 20 2 Nm



5.Remove bolts (3). 4.2 x 16 2 Nm

6.Remove floor panel - Rear lower extension (4).



Care Point: Please ensure that the fuel filler drain hose is fitted securely to the fuel filler bowl, and also the left hand floor panel - rear lower extension before installing all pre work components.

Install floor panel - Rear lower extension

1. Install components in reverse order.

Torque settings

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-005 - Remove/install floor panel - Rear lower extension

Description	Dimension	Value
Bolt Rear lower extension - Wheel arch liner	M?	5 Nm
Bolt tyre spoiler - front panel	M6 x 20	2 Nm

Screw tyre spoiler - front panel	4.2 x 16	2 Nm
----------------------------------	----------	------

Instructions

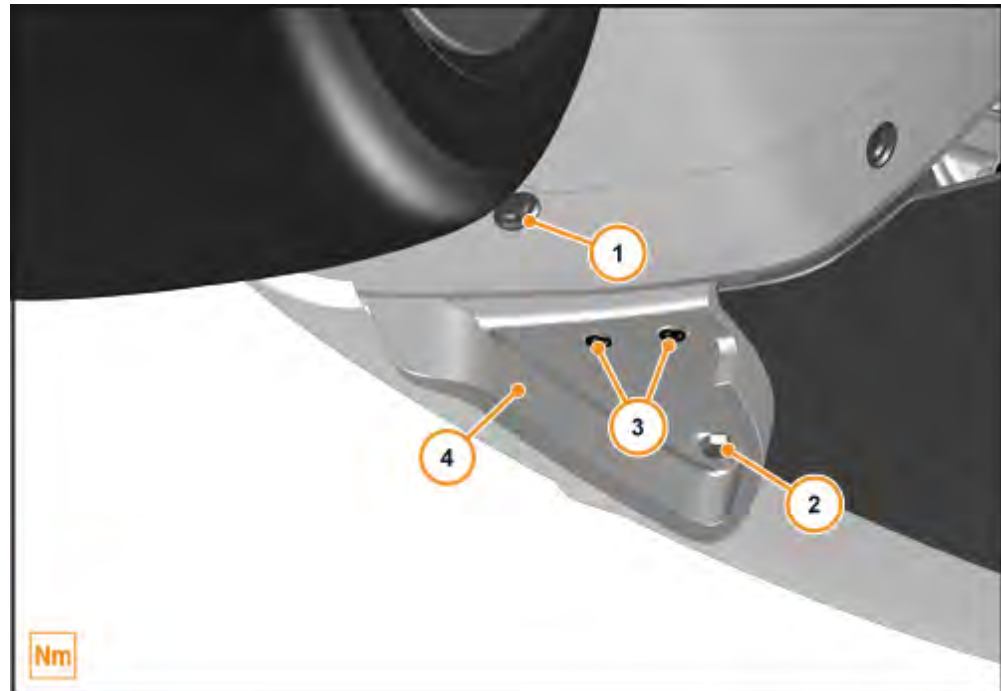
FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-006 - Remove/install tyre spoilers, front guide vanes, rear guide vanes

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.

Remove tyre spoilers - Up to MY14

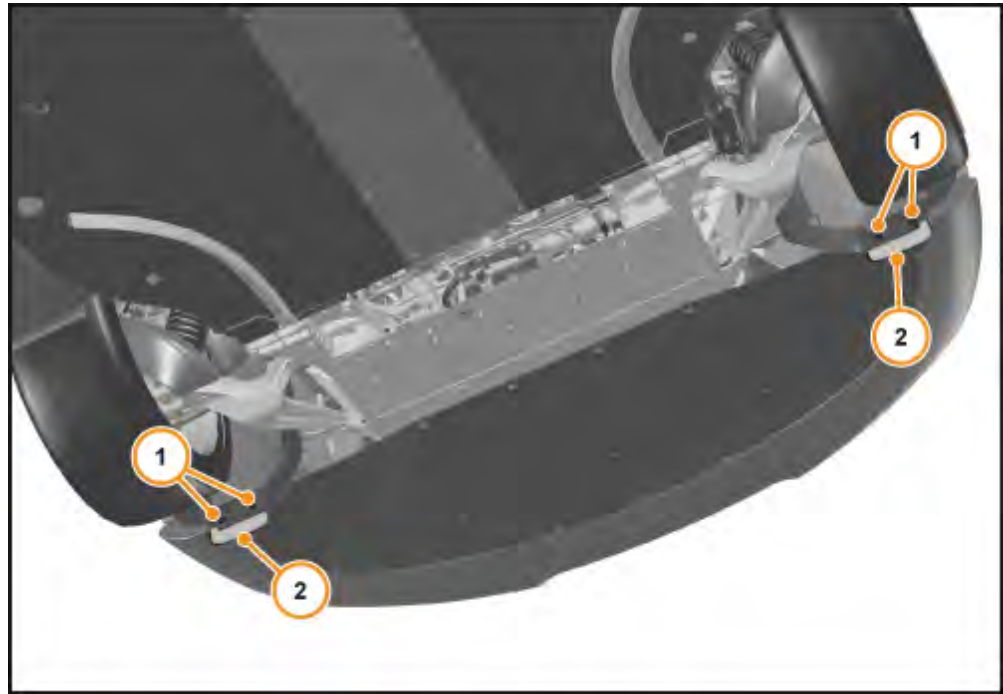
1. Remove screw (1).
2. Remove bolt (2). M6 x 20 2 Nm
3. Remove screws (3). 4.2 x 16 2 Nm
4. Remove tyre spoiler (4).



Remove tyre spoilers - From MY15 onwards

1.Remove bolts (1). M6 x 20 4 Nm

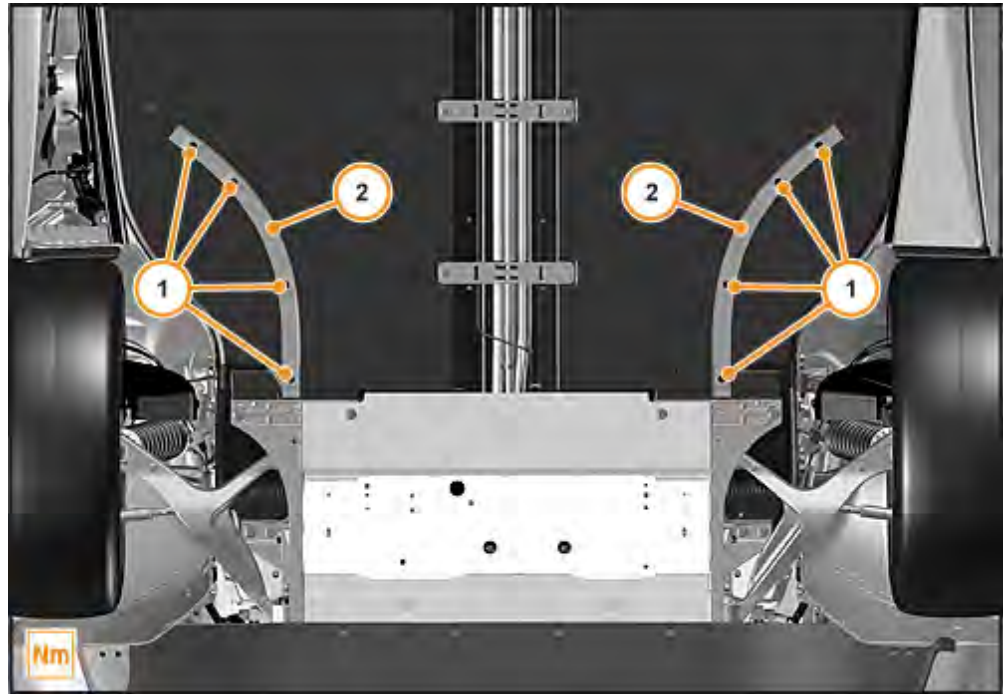
2.Remove tyre spoilers (2).



Remove front guide vanes

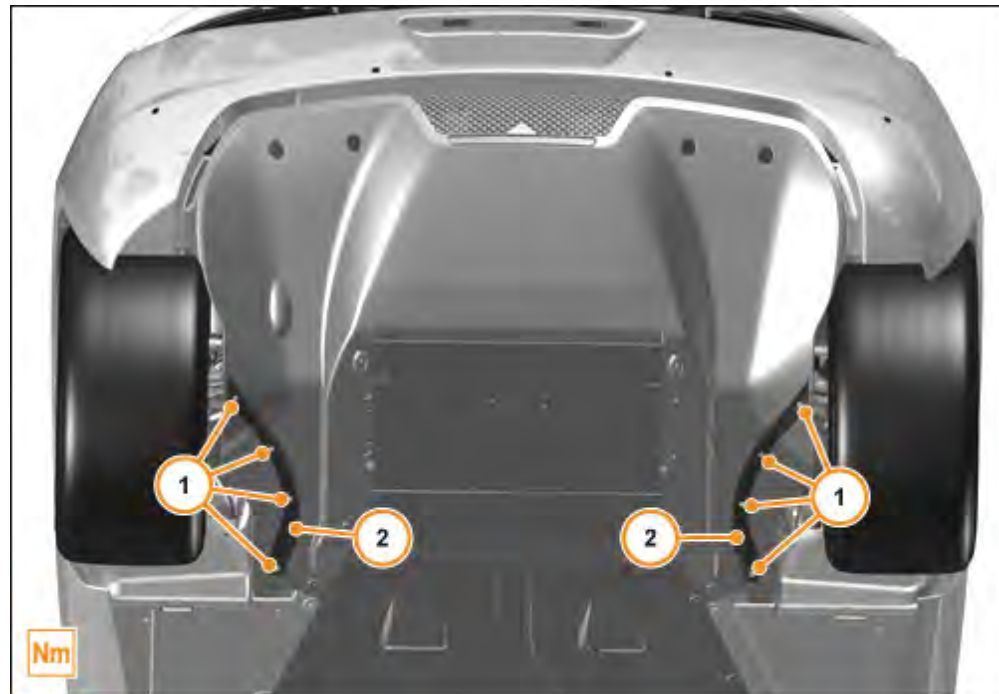
1.Remove screws (1). M6 x 16 6 Nm

2.Remove front guide vanes (2).



Remove rear guide vanes

- 1.Remove bolts (1). M6 x 16 2.5 Nm
- 2.Remove guide vanes (2).



Install tyre spoilers, front guide vanes, rear guide vanes

1. Install components in reverse order.

Torque settings

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-006 - Remove/install tyre spoilers, front guide vanes, rear guide vanes

Description	Dimension	Value
Bolt tyre spoiler - front panel	M6 x 20	2 Nm
Screw tyre spoiler - front panel	4.2 x 16	2 Nm
Bolt - Wheel arch liner/Floor - tyre spoiler (MY15)	M6 x 20	4 Nm
Screw front guide vane - tub	M6 x 16	6 Nm
Bolt Guide vane - Diffuser	M6 x 16	2.5 Nm

Instructions

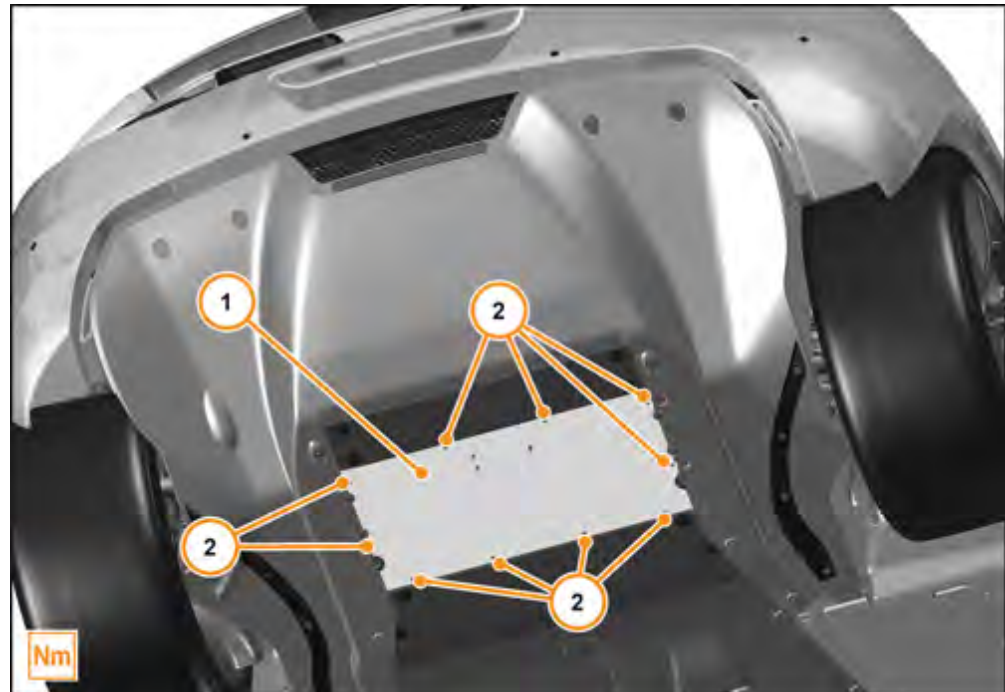
FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-008 - Remove/install floor panel - Transmission

Preparation work

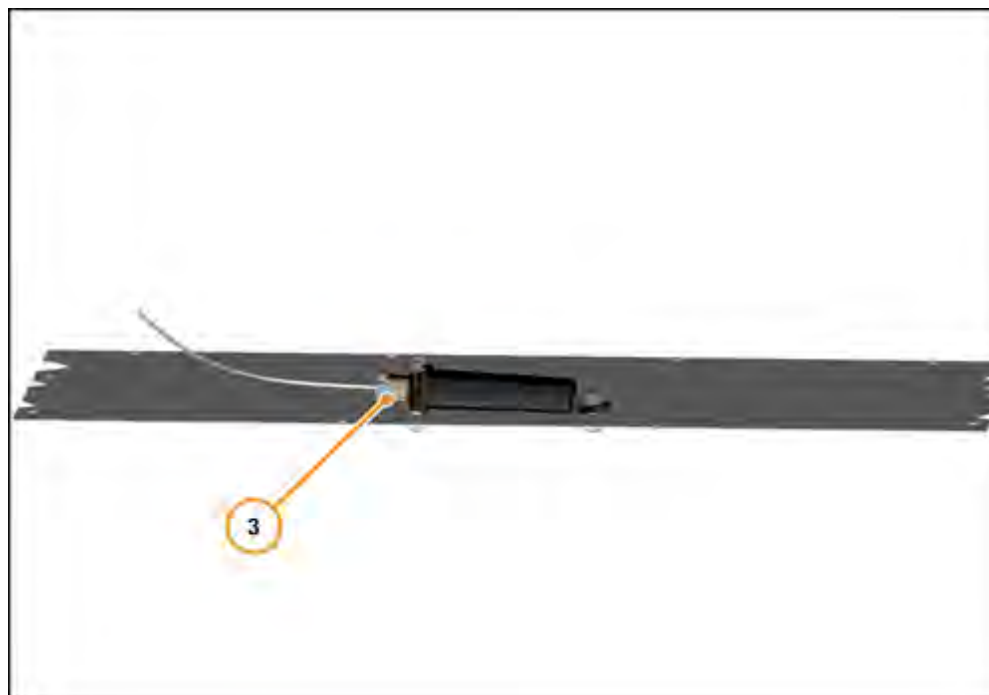
1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)

Remove floor panel - Transmission

1. Remove bolts (2). [M6 x 20 10 Nm](#)
2. Partially remove transmission floor panel (1).



3. Disconnect electrical connector (3).
4. Remove transmission floor panel.



Install floor panel - Transmission

1. Install components in reverse order

Torque settings

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-008 - Remove/install floor panel - Transmission

Description	Dimension	Value
Bolt Floor panel transmission	M6 x 20	10 Nm

Instructions

FG03 Chassis / B01 Front Suspension / Front Suspension LH / AA-RM-03B01-02-003 - Remove/install upper wishbone - Front

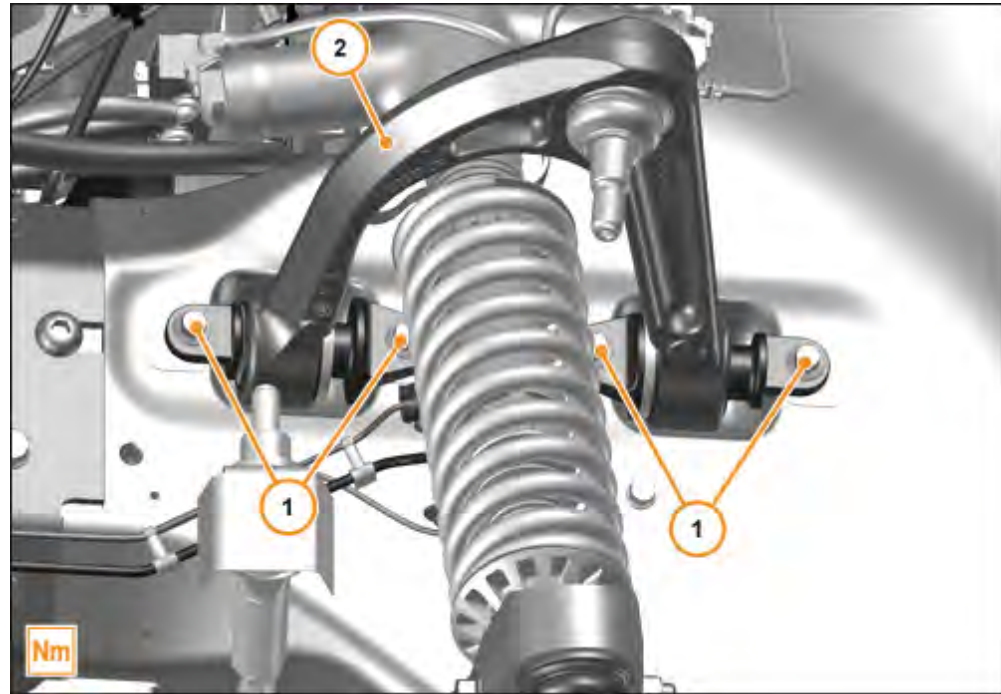
Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.
3. AA-RM-02A02-03-002 Remove/install wheel arch liner - Front
4. AA-RM-03C01-01-002 Remove/install brake - Caliper - Front.
5. AA-RM-02A02-03-005 Remove/install ducts - Brake disc cooling - Front.
6. AA-RM-03C01-01-003 Remove/install brake - Disc - Front.
7. AA-RM-05M02-01-006 Remove/install wheel speed sensor - Front
8. AA-RM-03B01-02-004 Remove/install upright - Front

Remove upper wishbone - Front

Care Point: Ensure correct torque value is applied to the correct bolt size. M8 (M8 x 30 33 Nm), M10 (M10 x 30 63 Nm).
Bolt size dependant on build date.

1. Remove bolts (1). M8 x 30 33 Nm M10 x 30 63 Nm
2. Remove wishbone (2).



Install upper wishbone - Front

1. Install components in reverse order.
2. Check chassis geometry. AA-RM-03B03-01-002 - Perform a wheel alignment check

Care Point: Once vehicle is on ground.

3. Apply pressure to top of wheel towards vehicle. If excessive inward movement of wheel is present, the upper ball joint has failed. The wishbone will require replacing.

Torque settings

FG03 Chassis / B01 Front Suspension / Front Suspension LH / AA-RM-03B01-02-003 - Remove/install upper wishbone - Front

Description	Dimension	Value
-------------	-----------	-------

Bolt Wishbone - Subframe - M8	M8 x 30	33 Nm
Bolt Wishbone - Subframe - M10	M10 x 30	63 Nm
Bolt Wishbone - Subframe - M8	M8 x 30	33 Nm
Bolt Wishbone - Subframe - M10	M10 x 30	63 Nm

Instructions

FG03 Chassis / B01 Front Suspension / Front Suspension LH / AA-RM-03B01-02-002 - Remove/install lower wishbone - Front

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.
3. AA-RM-02A02-03-002 Remove/install wheel arch liner - Front
4. AA-RM-03C01-01-002 Remove/install brake - Caliper - Front.
5. AA-RM-02A02-03-005 Remove/install ducts - Brake disc cooling - Front.
6. AA-RM-03C01-01-003 Remove/install brake - Disc - Front.
7. AA-RM-05M02-01-006 Remove/install wheel speed sensor - Front
8. AA-RM-03B01-02-004 Remove/install upright - Front

Remove lower wishbone - Front

1.Remove bolt (1). M5 x 10 5 Nm

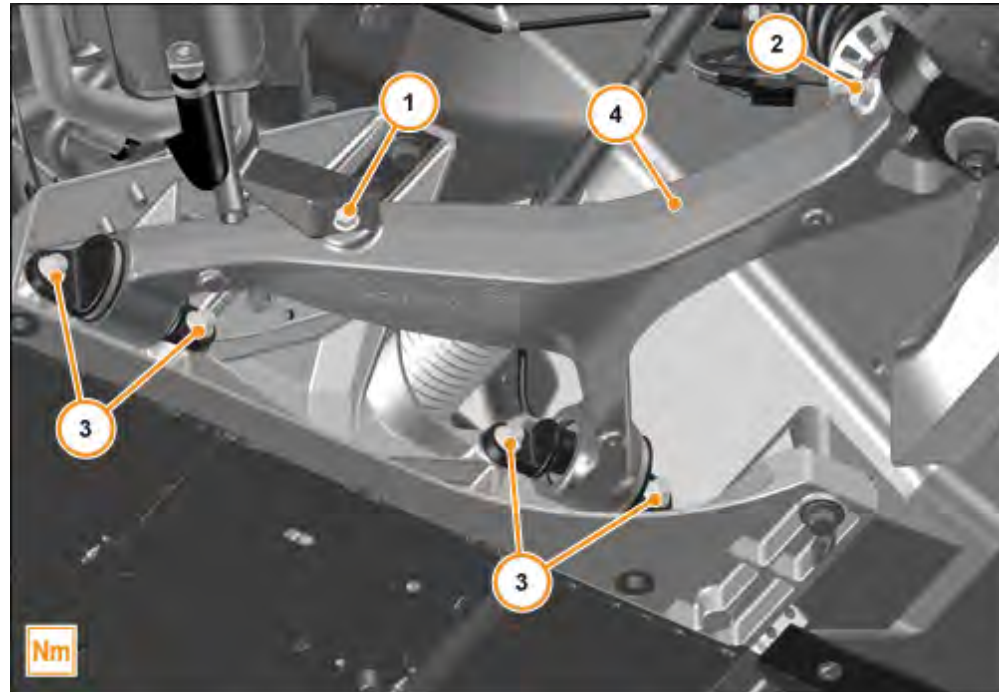
2.Remove bolt (2). M10 x 85 60 Nm

Care Point: Use the pre set special tool to achieve full access to the bolts, and to achieve the correct torque value.

Care Point: Ensure correct torque value is applied to the correct bolt size. M8 (M8 x 30 33 Nm), M10 (M10 x 30 63 Nm).
Bolt size dependant on build date.

3.Remove bolts (3). M8 x 30 33 Nm M10 x 30 63 Nm

4.Remove wishbone (4).



Install lower wishbone - Front

1. Install components in reverse order.

Care Point: Carry out steps 2 to 4, if a front lower wishbone is refitted or a new one is fitted.

2. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Power Chassis Control Unit (PCCU)**.

3. Access Sequences section.

4. Carry out Damping Sensor Calibration.

5. Check chassis geometry. [AA-RM-03B03-01-002 - Perform a wheel alignment check](#)

Care Point: Once vehicle is on ground.

6. Apply pressure to top of wheel towards vehicle. If excessive inward movement of wheel is present, the upper ball joint has failed. The wishbone will require replacing.

Torque settings

FG03 Chassis / B01 Front Suspension / Front Suspension LH / AA-RM-03B01-02-002 - Remove/install lower wishbone - Front

Description	Dimension	Value
Bolt Bracket sensor suspension displacement - Lower wishbone	M5 x 10	5 Nm
Bolt/nut Lower wishbone - Actuator	M10 x 85	60 Nm
Bolt Wishbone - Subframe - M8	M8 x 30	33 Nm
Bolt Wishbone - Subframe - M10	M10 x 30	63 Nm
Bolt Wishbone - Subframe - M8	M8 x 30	33 Nm
Bolt Wishbone - Subframe - M10	M10 x 30	63 Nm

Instructions

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-001 - Remove/install upper wishbone - Rear

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/install wheels
3. AA-RM-02A02-03-001 Remove/install wheel arch liner - rear
4. AA-RM-03C01-03-001 Remove/install brake caliper - rear
5. AA-RM-02A02-03-007 Remove/Install cooling duct

Remove upper wishbone - Rear

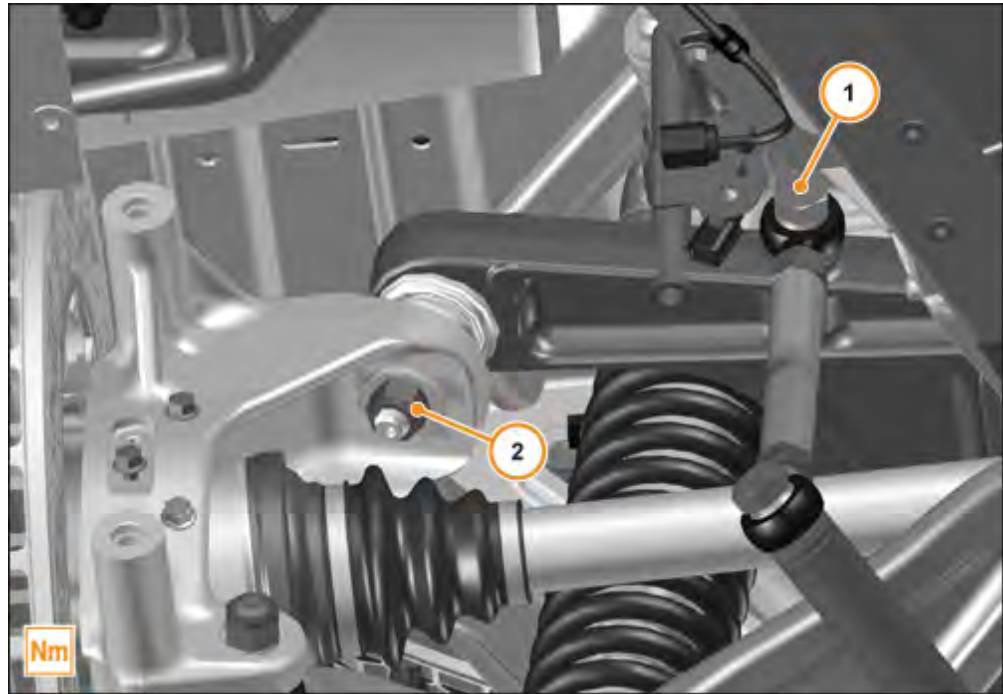
Care Point: Convex washers on left hand side only. Plain washer on right hand side.

1. Remove bolt (1). M14 x 60 100 Nm

Care Point: Observe excentric stepped washer.

Care Point: Use ball joint splitter to separate.

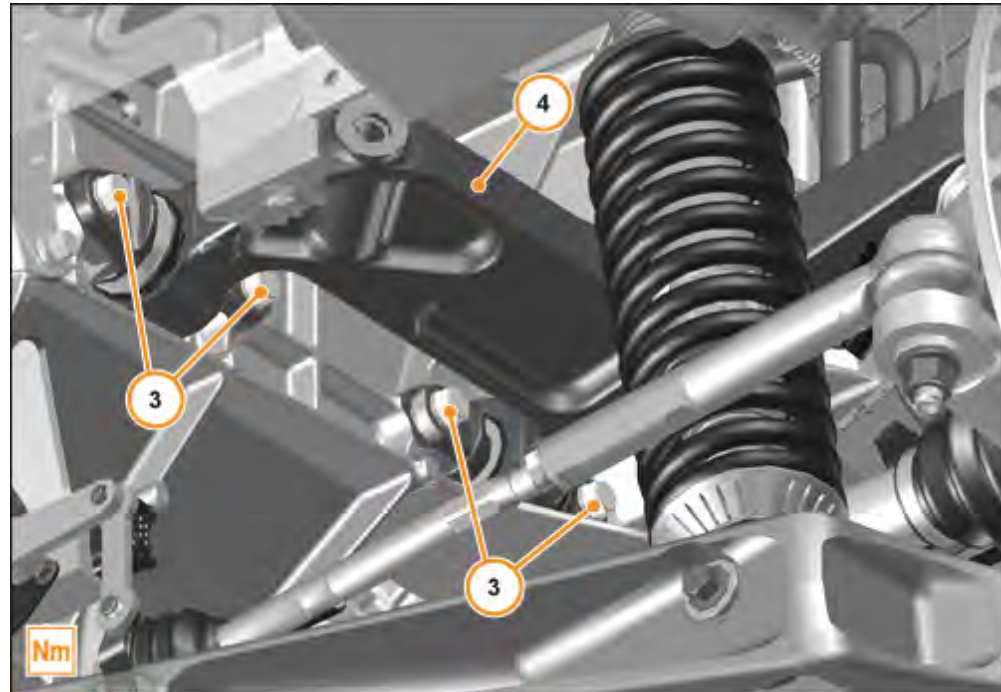
2. Remove nut (2). M14 100 Nm



Care Point: Use the pre set special tool to achieve full access to the bolts, and to achieve the correct torque value.

Care Point: Ensure correct torque value is applied to the correct bolt size. M8 (M8 x 25 33 Nm), M10 (M10 x 30 63 Nm).
Bolt size dependant on build date.

- 3.Remove bolts (3). M8 x 25 33 Nm M10 x 30 63 Nm
- 4.Remove upper wishbone (4).



Install upper wishbone - Rear

1. Install components in reverse order.
2. Check chassis geometry AA-RM-03B03-01-002 - Perform a wheel alignment check .

Care Point: Once vehicle is on ground.

3. Apply pressure to top of wheel towards vehicle. If excessive inward movement of wheel is present, the upper ball joint has failed. The wishbone will require replacing.

Torque settings

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-001 - Remove/install upper wishbone - Rear

Description	Dimension	Value
-------------	-----------	-------

Bolt Drop link	M14 x 60	100 Nm
Nut Upper wishbone - Upright	M14	100 Nm
Bolt Wishbone - Subframe - M8	M8 x 25	33 Nm
Bolt Wishbone - Subframe - M10	M10 x 30	63 Nm
Bolt Wishbone - Subframe - M8	M8 x 25	33 Nm
Bolt Wishbone - Subframe - M10	M10 x 30	63 Nm

Instructions

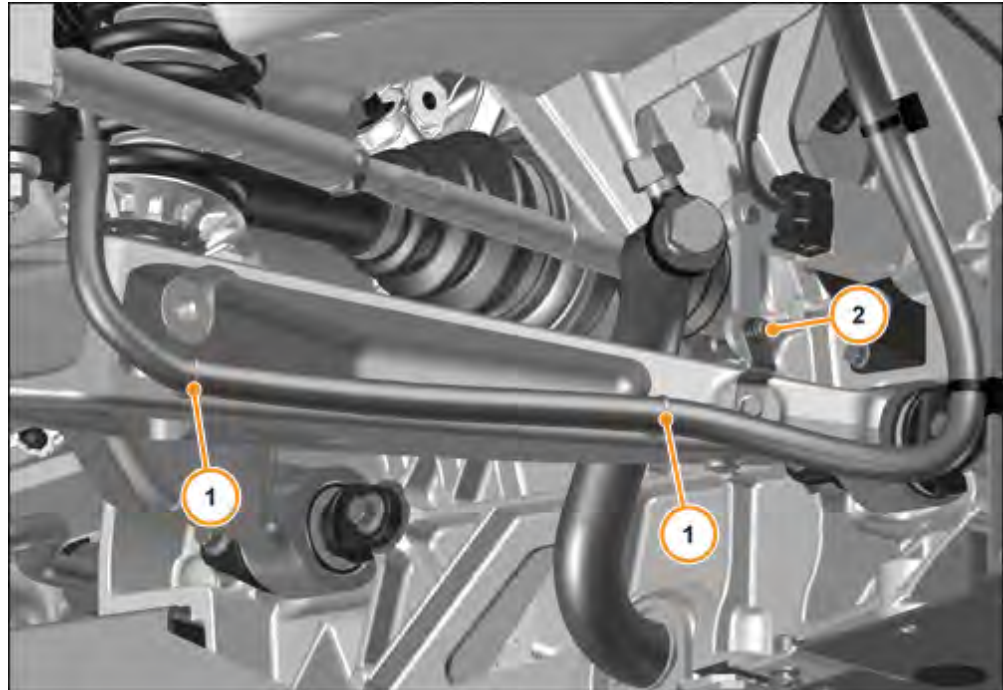
FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-002 - Remove/install lower wishbone - Rear

Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)
2. [AA-RM-03B03-01-001 Remove/install wheels](#)
3. [AA-RM-02A02-03-001 Remove/install wheel arch liner - rear](#)

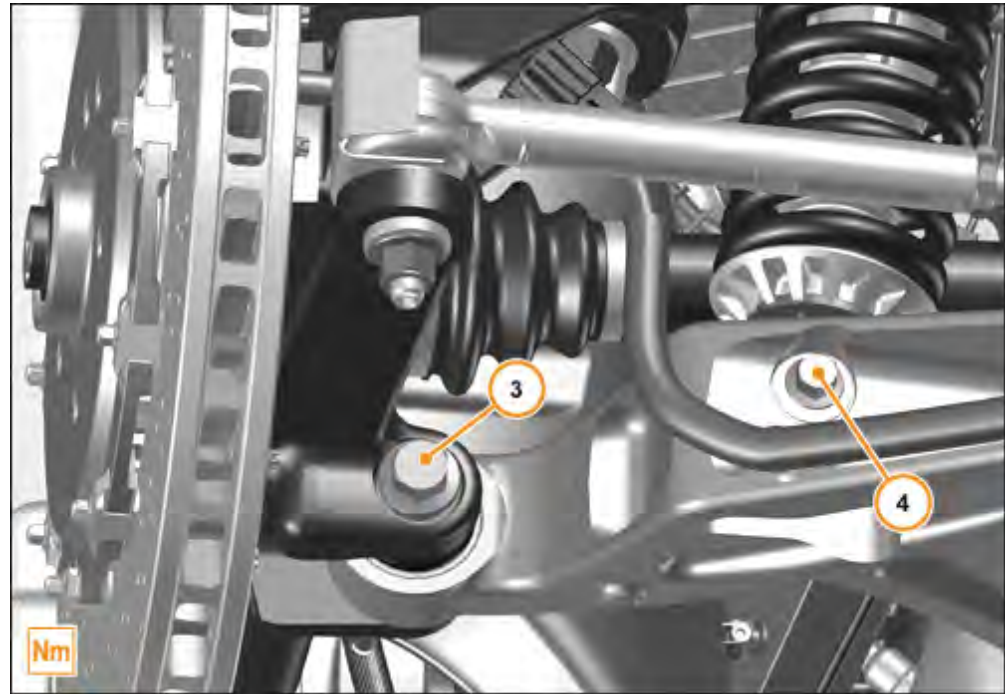
Remove lower wishbone - Rear

1. Cut cable ties (1).
2. Remove C-clip (2).



3.Remove bolt (3). M14 x 110 90 Nm

4.Detach bolt (4). M10 x 70 60 Nm



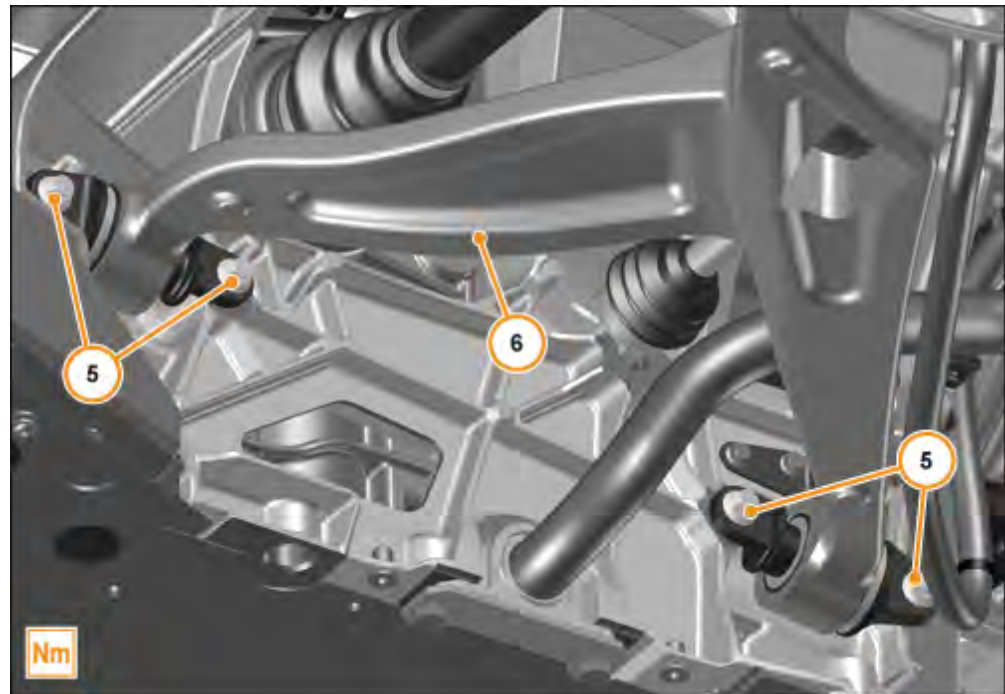
Care Point: Use the pre set special tool to achieve full access to the bolts, and to achieve the correct torque value.

Care Point: Ensure correct torque value is applied to the correct bolt size. M8 (M8 x 25 33 Nm), M10 (M10 x 30 63 Nm).
Bolt size dependant on build date.

5.Remove bolts (5). M10 x 30 63 Nm M8 x 25 33 Nm

6.Remove bolt (4).

7.Remove lower wishbone (6).



Install lower wishbone - Rear

1. Install components in reverse order.
2. Check chassis geometry [AA-RM-03B03-01-002 - Perform a wheel alignment check](#) .

Care Point: Carry out steps 2 to 4, if a rear lower wishbone is refitted or a new one is fitted.

3. Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Power Chassis Control Unit (PCCU)**.
4. Access Sequences section.
5. Carry out Damping Sensor Calibration.

Care Point: Once vehicle is on ground.

6. Apply pressure to top of wheel towards vehicle. If excessive inward movement of wheel is present, the upper ball joint has failed. The wishbone will require replacing.

Torque settings

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-002 - Remove/install lower wishbone - Rear

Description	Dimension	Value
Bolt Lower wishbone - Upright	M14 x 110	90 Nm
Bolt Actuator bottom - Lower wishbone	M10 x 70	60 Nm
Bolt Wishbone - Subframe - M8	M8 x 25	33 Nm
Bolt Wishbone - Subframe - M10	M10 x 30	63 Nm
Bolt Wishbone - Subframe - M10	M10 x 30	63 Nm
Bolt Wishbone - Subframe - M8	M8 x 25	33 Nm

Instructions

FG03 Chassis / D01 Steering System / Steering System / AA-RM-03D01-01-001 - Remove/install track rod

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/install wheels

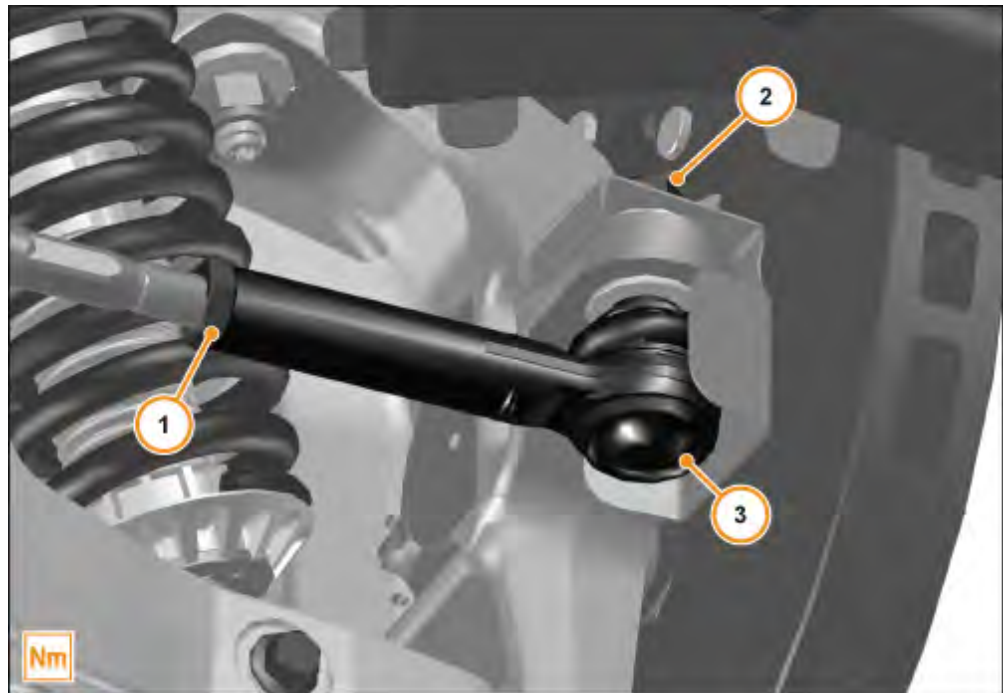
Remove track rod

Care Point: Only remove battery and washer fluid reservoir if removing left hand track rod.

1. Release lock nut (1) and wind up steering arm.
2. Remove nut (2). M14 30 Nm

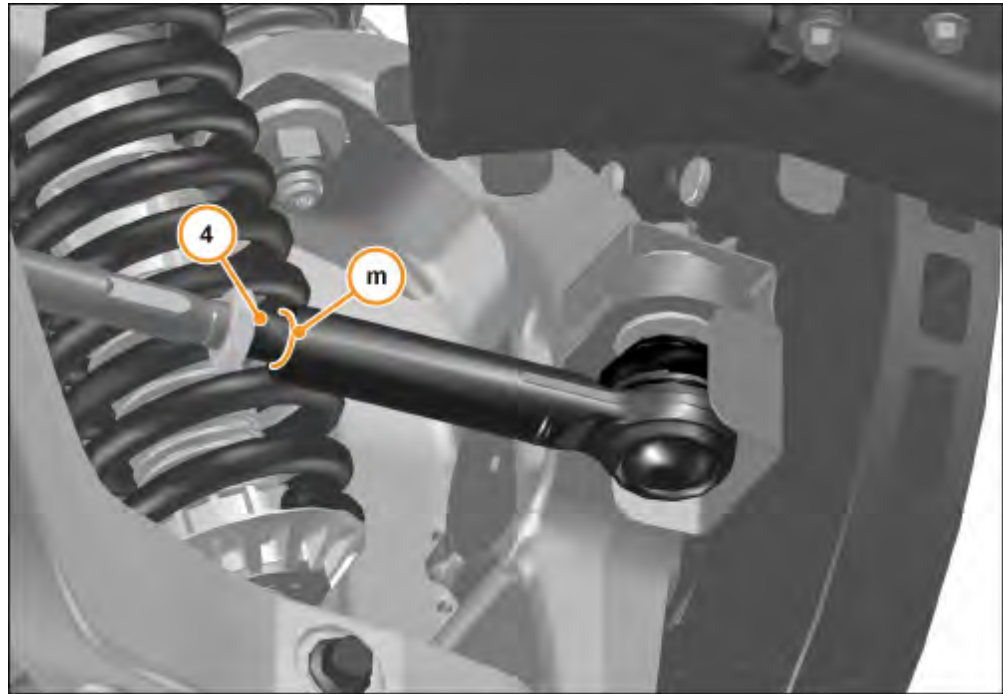
Care Point: Use a ball joint separator.

3. Separate track rod (3) from upright.



Care Point: Ensure the mark is clear and will not wipe off before new track rod is fitted.

4. Mark steering arm thread (4) with position of track rod (m).
5. Remove track rod (3), counting the number of full rotations it takes to remove.



Care Point: Count the number of full rotations while installing the track rod. This will align with the marking made on the steering arm thread (m).

Care Point: Ensure track rod is held with spanner across the machined flats when applying torque to lock nut (3).

Install track rod

1. Install components in reverse order.
2. Carry out steering alignment check. [AA-RM-03B03-01-002 - Perform a wheel alignment check](#)

Torque settings

FG03 Chassis / D01 Steering System / Steering System / AA-RM-03D01-01-001 - Remove/install track rod

Description	Dimension	Value
Track rod - steering rack	M14	30 Nm

Instructions

FG03 Chassis / B01 Front Suspension / Front Suspension LH / AA-RM-03B01-02-004 - Remove/install upright - Front

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.
3. AA-RM-03C01-01-002 Remove/install brake - Caliper - Front.
4. AA-RM-02A02-03-005 Remove/install ducts - Brake disc cooling - Front.
5. AA-RM-03C01-01-003 Remove/install brake - Disc - Front.
6. AA-RM-05M02-01-006 Remove/install wheel speed sensor - Front

Remove upright - Front

1. Remove nut (1). M12 70 Nm

Care Point: Use suitable ball joint separator.

2. Detach track rod ball joint (2) from upright (3).

3. Remove nut (4).

Care Point: Use suitable ball joint separator.

4. Detach lower wishbone ball joint (5) from upright (3)

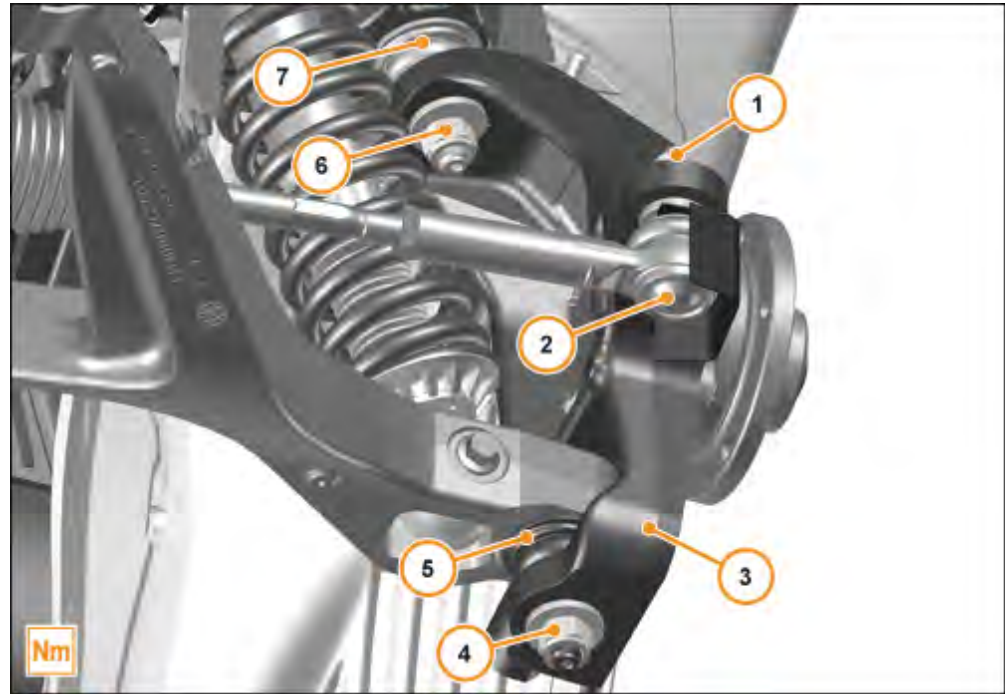
5. Remove nut (6).

Care Point: Observe excentric stepped washer.

Care Point: Use suitable ball joint separator.

6. Remove upright (3) from upper wishbone ball joint (7).

Install upright - Front



Care Point: Use a plain M14 half nut and wind onto the upper and lower ball joint threads. Torque these nuts (5, 6) to M14 60 Nm . Once torque has been achieved, remove slave nuts and fit specified nuts (5, 6). Torque these nuts (5, 6) to M14 100 Nm .

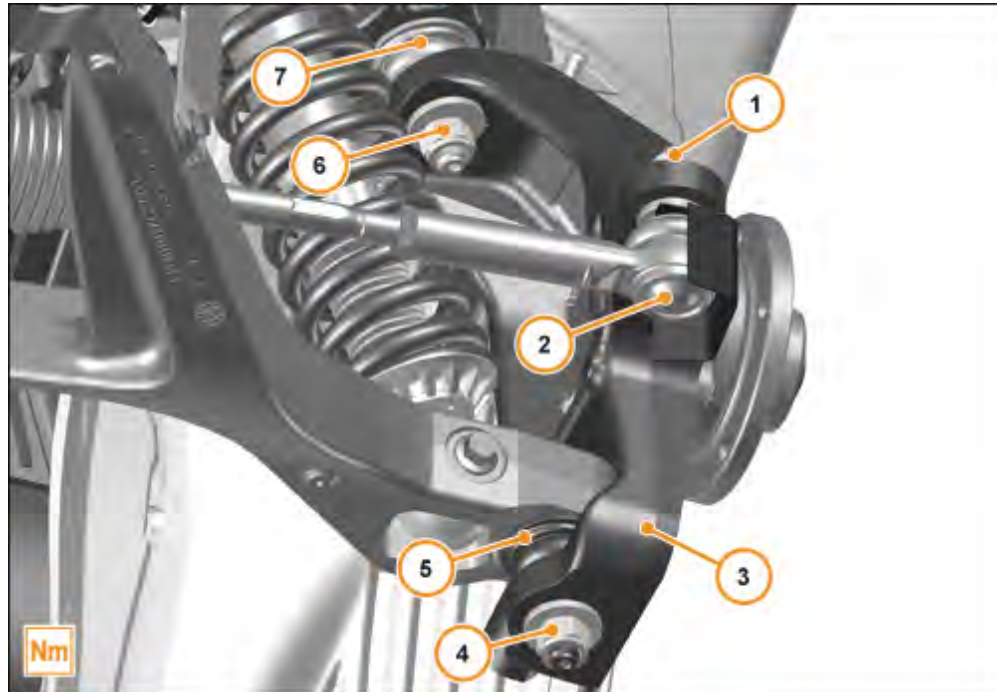
Care Point: If refitting or renewing camber tophat in upright, ensure Loctite 222 is used on the position fixing and a torque value of 1.2 Nm is applied.

1. Install components in reverse order.

2. Check chassis geometry. AA-RM-03B03-01-002 - Perform a wheel alignment check

Care Point: Once vehicle is on ground.

3. Apply pressure to top of wheel towards vehicle. If excessive inward movement of wheel is present, the upper ball joint has failed. The wishbone will require replacing.



Torque settings

FG03 Chassis / B01 Front Suspension / Front Suspension LH / AA-RM-03B01-02-004 - Remove/install upright - Front

Description	Dimension	Value
Nut Track rod - Upright	M12	70 Nm
Half Nut wishbone - Upright	M14	60 Nm
Nut wishbone - Upright	M14	100 Nm

Instructions

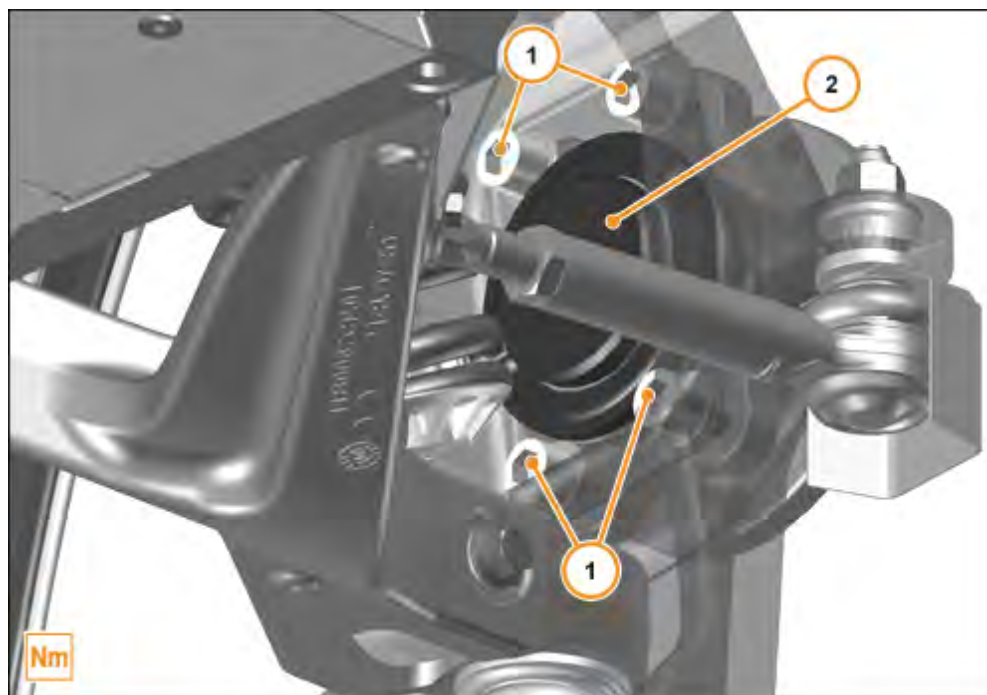
FG03 Chassis / B01 Front Suspension / Front Suspension LH / AA-RM-03B01-02-001 - Remove/install wheel hub assembly - Front

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.
3. AA-RM-02A02-03-005 Remove/install ducts - Brake disc cooling - Front.
4. AA-RM-03C01-01-002 Remove/install brake - Caliper - Front.
5. AA-RM-03C01-01-003 Remove/install brake - Disc - Front.
6. AA-RM-05M02-01-006 Remove/install wheel speed sensor - Front

Remove wheel hub assembly - Front

1. Remove bolts and washers (1). M12 x 30 70 Nm
2. Remove wheel hub (2).



Install wheel hub front

- Care** Renew hub nut if it has been detached.
Point: Tighten up hub nut to 320 Nm and stave it over.

1. Install components in reverse order.

Torque settings

FG03 Chassis / B01 Front Suspension / Front Suspension LH / AA-RM-03B01-02-001 - Remove/install wheel hub assembly - Front

Description	Dimension	Value
Bolts Hub - Upright	M12 x 30	70 Nm

Instructions

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-007 - Remove/install tie rod - Rear

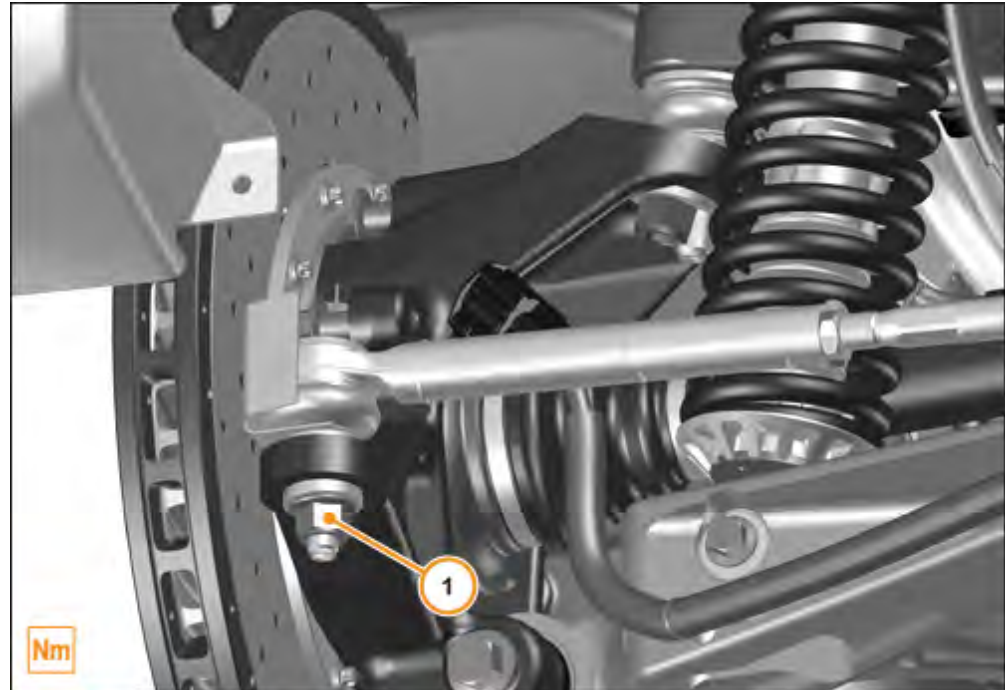
Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.](#)
2. [AA-RM-03B03-01-001 Remove/install wheels.](#)
3. [AA-RM-02A02-03-001 Remove/install wheel arch liner - rear.](#)

Remove tie rod - Rear

Care Point: Use ball joint splitter to separate.

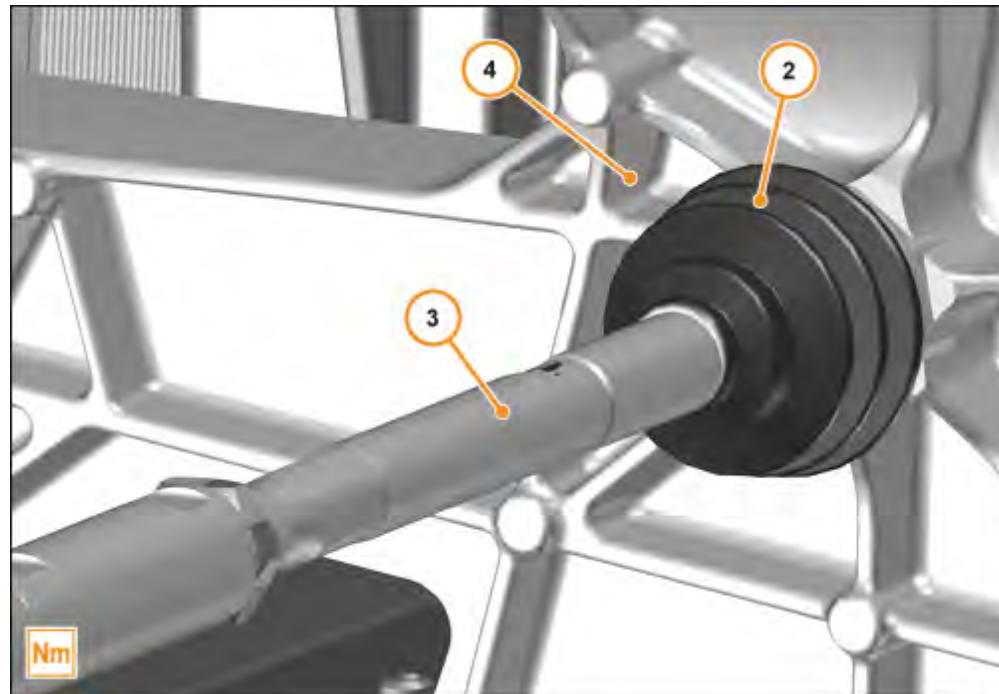
1. Remove nut (1). [M12 70 Nm](#)



2.Pull back dust cover (2).

3.Unscrew tie rod (3) from aluminium subframe (4). M16 x 1.5 80 Nm

4.Remove tie rod (3).



Install tie rod - Rear

Care Point: Apply an initial torque of 70Nm to the tie rod. Then apply a secondary torque of 80Nm. M16 x 1.5 80 Nm

1. Install components in reverse order.

2. Perform geometry check

3. Check chassis geometry AA-RM-03B03-01-002 - Perform a wheel alignment check .

Torque settings

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-007 - Remove/install tie rod - Rear

Description	Dimension	Value
-------------	-----------	-------

Nut Tie rod - Upright	M12	70 Nm
Bolt Tie rod - Aluminium subframe	M16 x 1.5	80 Nm
Bolt Tie rod - Aluminium subframe	M16 x 1.5	80 Nm

Instructions

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-003 - Remove/install upright - Rear

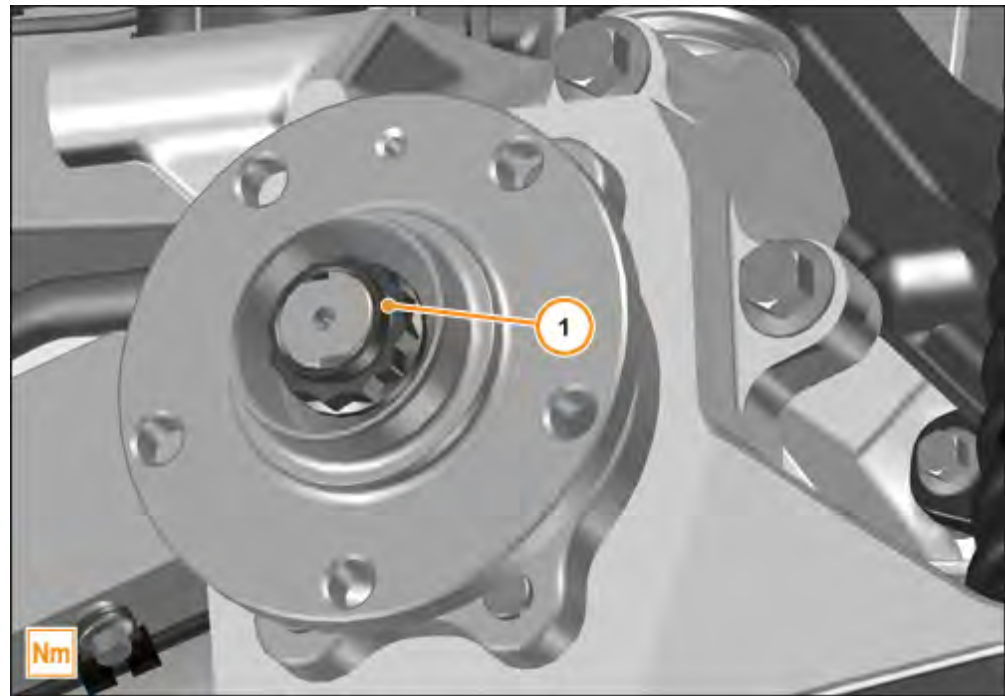
Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.
3. AA-RM-03C02-01-002 Remove/install caliper parking brake.
4. AA-RM-03C01-03-001 Remove/install brake caliper - rear.
5. AA-RM-02A02-03-007 Remove/install cooling duct
6. AA-RM-03C01-03-002 Remove/install brake disc - rear.

Remove upright - Rear

- 1 Remove electronic park brake (EPB) caliper
•  bracket bolts.
- 2 Remove EPB caliper bracket.
• 

3 Remove driveshaft nut (1). M26 320 Nm



4 Remove nut (2). M12 70 Nm



Care Point: Use ball joint separator.

5 Detach track rod from upright.



6 Remove bolt (3). M14 x 110 90 Nm



7 Remove nut (4).



Care Point: Observe excentric stepped washer.

Care Point: Use ball joint separator.

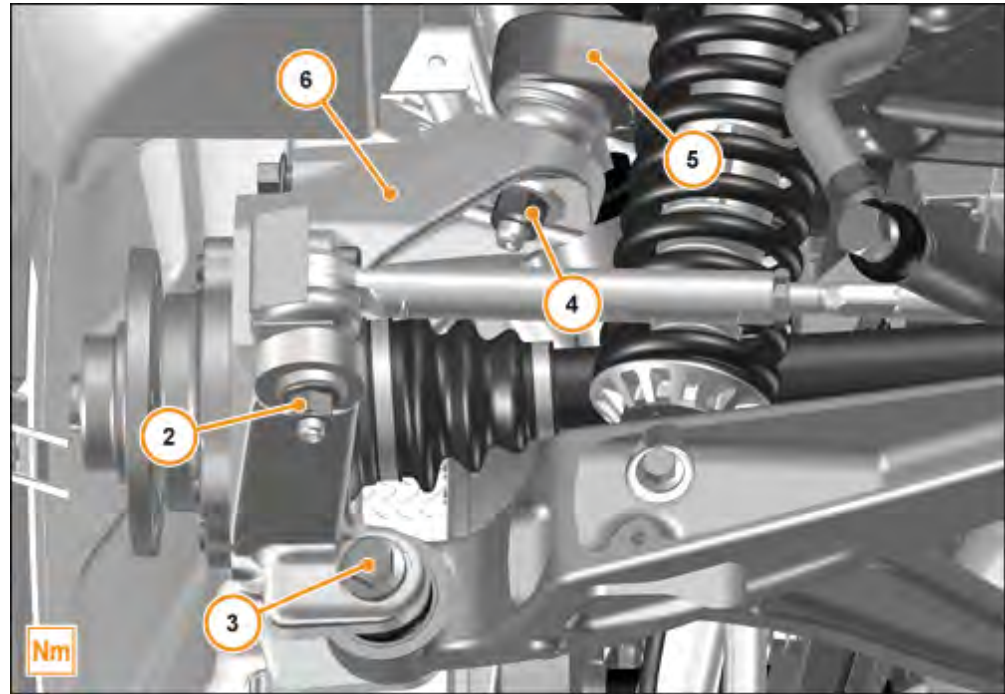
8 Detach upper wishbone (5) from upright (6).



9 Remove bolt (3).



10 Remove upright - Rear (6).



Remove upright - Rear

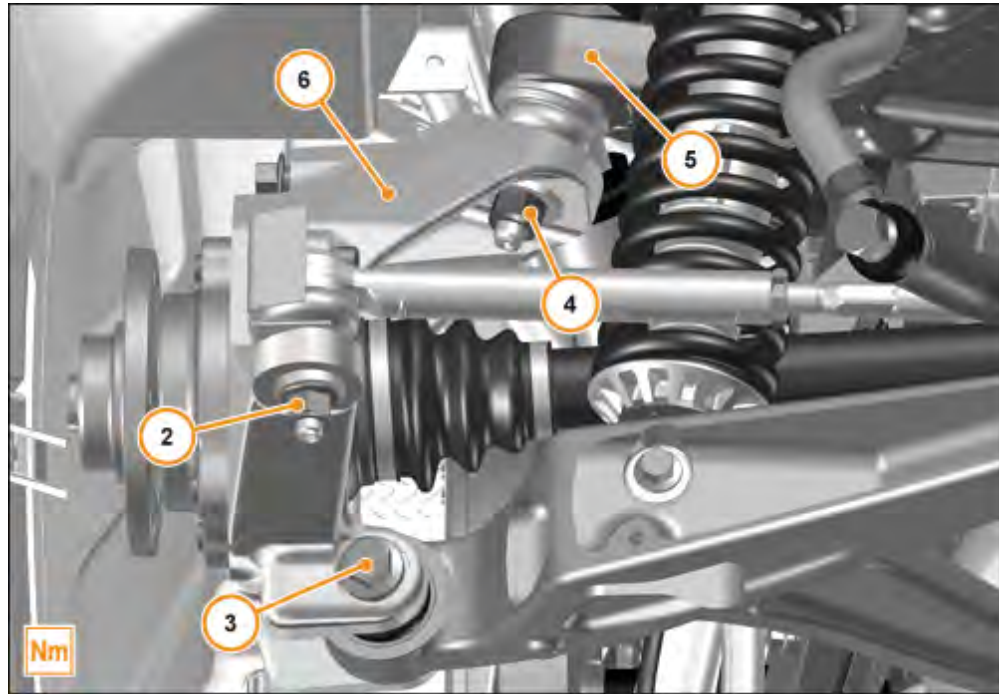
Care Point: Use a plain M14 half nut and wind onto the upper and lower ball joint threads. Torque these nut (4) to M14 60 Nm . Once torque has been achieved, remove slave nuts and fit specified nut (4). Torque these nut (4) to M14 100 Nm .

1. Install components in reverse order.

2. Check chassis geometry. AA-RM-03B03-01-002 - Perform a wheel alignment check

Care Point: Once vehicle is on ground.

3. Apply pressure to top of wheel towards vehicle. If excessive inward movement of wheel is present, the upper ball joint has failed. The wishbone will require replacing.



Torque settings

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-003 - Remove/install upright - Rear

Description	Dimension	Value
Nut Driveshaft	M26	320 Nm
Nut Tie rod - Upright	M12	70 Nm
Bolt Lower wishbone - Upright	M14 x 110	90 Nm
Half Nut wishbone - Upright	M14	60 Nm
Nut wishbone - Upright	M14	100 Nm

Instructions

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-004 - Remove/install hub - Rear

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.
3. AA-RM-03C02-01-002 Remove/install caliper parking brake.
4. AA-RM-03C01-03-001 Remove/install brake caliper - rear.
5. AA-RM-02A02-03-007 Remove/install cooling duct
6. AA-RM-05M02-01-007 Remove/install sensor - rear wheel speed
7. AA-RM-03C01-03-002 Remove/install brake disc - rear.
8. AA-RM-03B02-01-003 Remove/install upright.

CAUTION!

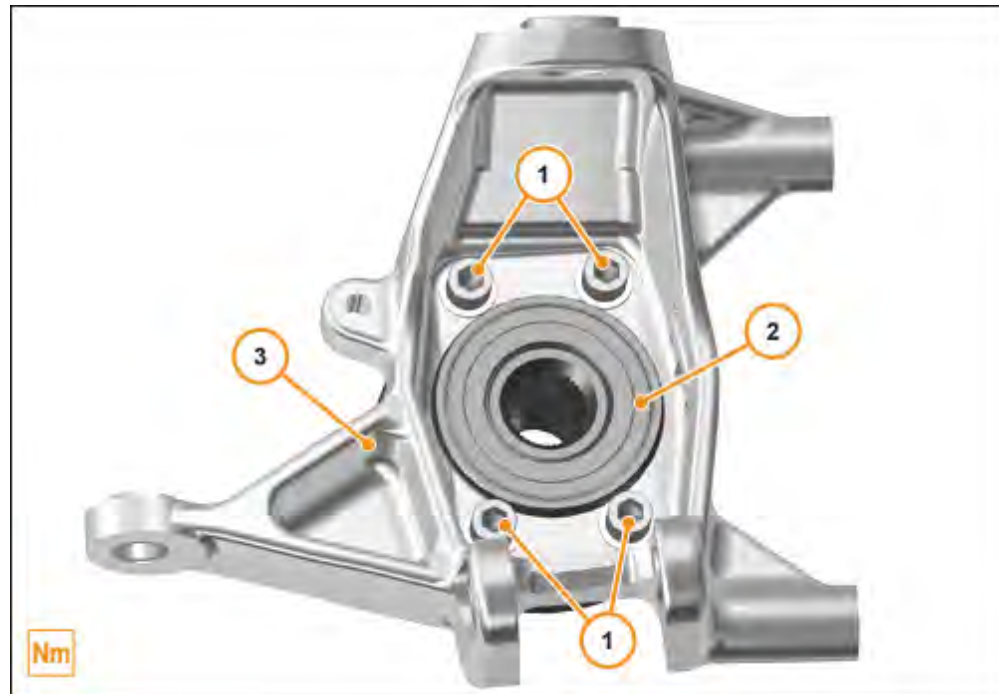
Risk of injury when unscrewing micro-encapsulated bolts!

There is an increased risk of injury when unscrewing micro-encapsulated bolts due to the sudden breakaway torque. Always replace bolts with locking splines, microencapsulated bolts and self-locking nuts after they have been used once.

- Re-cut the mating thread before new micro-encapsulated bolts are screwed in, in order to remove all residue of the old bolt locking compound.

Remove hub - Rear

- 1.Remove bolts (1). M12 x 30 70 Nm
- 2.Remove hub (2) from upright (3).



Install hub - Rear

1. Install in reverse order.
2. Check chassis geometry AA-RM-03B03-01-002 - Perform a wheel alignment check .

Torque settings

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-004 - Remove/install hub - Rear

Description	Dimension	Value
Bolt Wheel hub - Upright	M12 x 30	70 Nm

Instructions

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-006 - Remove/install drop link

Preparation work

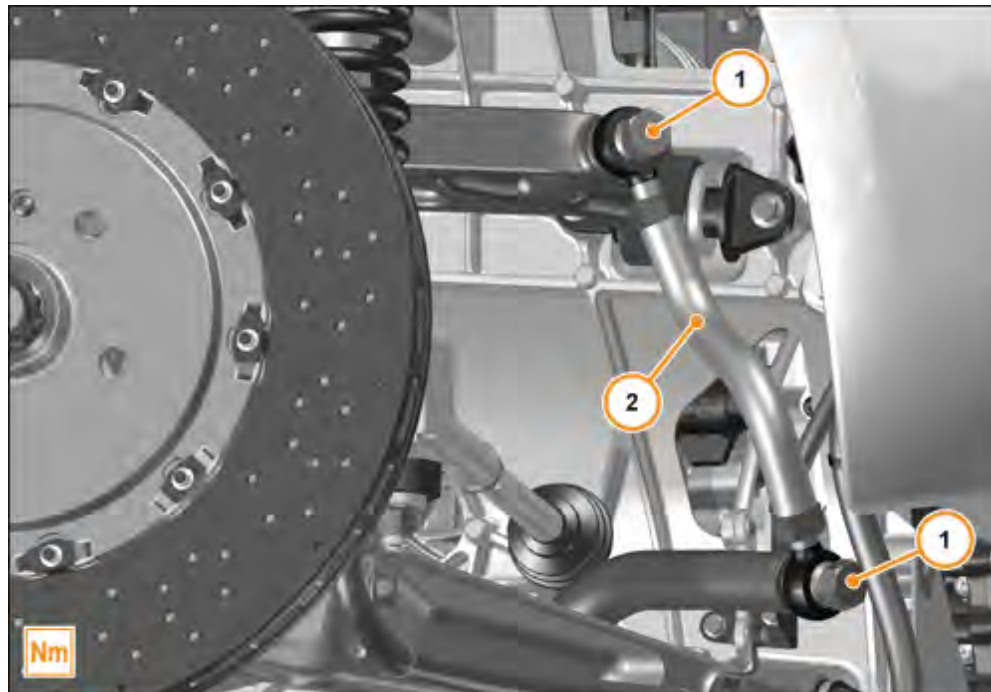
1. AA-RM-02A04-04-007 Secure/Lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/Install wheels.

Remove drop link

1. Detach wheel arch liner in mounting area.

Care Point: Mark upper side of drop link.
Convex washers on left hand side only. Plain washer on right hand side.

2. Remove bolts (1). M14 x 60 100 Nm
3. Remove drop link (2).



Install drop link

Care Point: During assembly do not apply tension to Z-bar.

1. Install in reverse order.

Torque settings

FG03 Chassis / B02 Rear Suspension / Rear Suspension LH / AA-RM-03B02-01-006 - Remove/install drop link

Description	Dimension	Value
Bolt Drop link	M14 x 60	100 Nm

Instructions

FG03 Chassis / B02 Rear Suspension / Z Bar Assembly / AA-RM-03B02-04-001 - Remove/install Z-bar

Preparation work

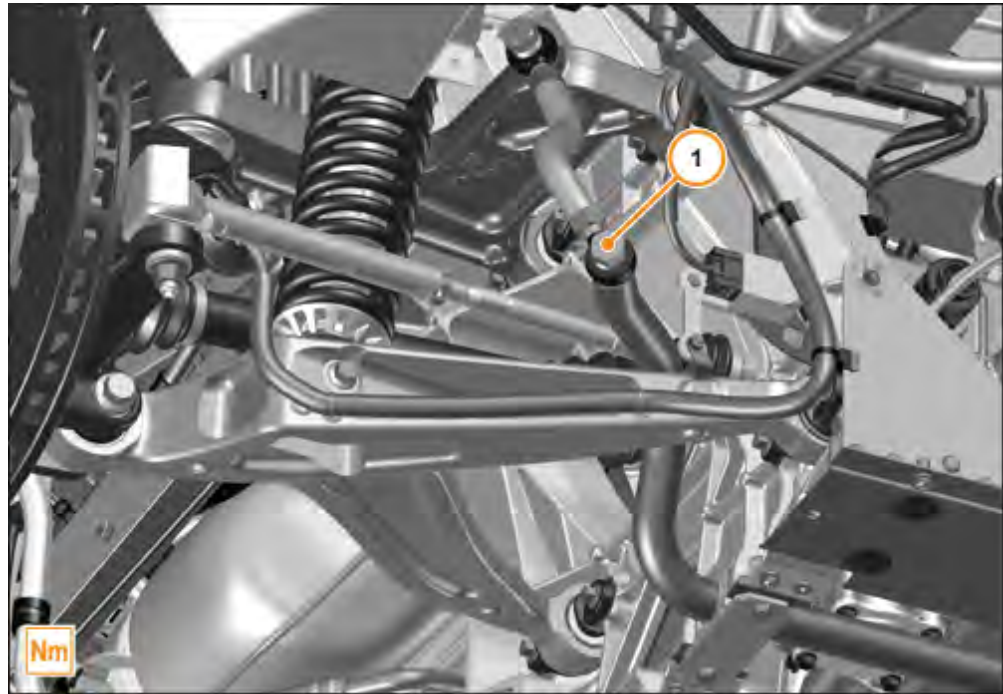
1. AA-RM-02A04-04-007 Secure/Lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/install wheels.
3. AA-RM-02A04-04-001 Remove/install floor panel engine/fuel tank.
4. AA-RM-02A04-04-004 Remove/install rear diffusor.

Remove Z-bar

1. Detach wheel arch liner in mounting area on both sides.

Care Point: Convex washers on left hand side only. Plain washer on right hand side.

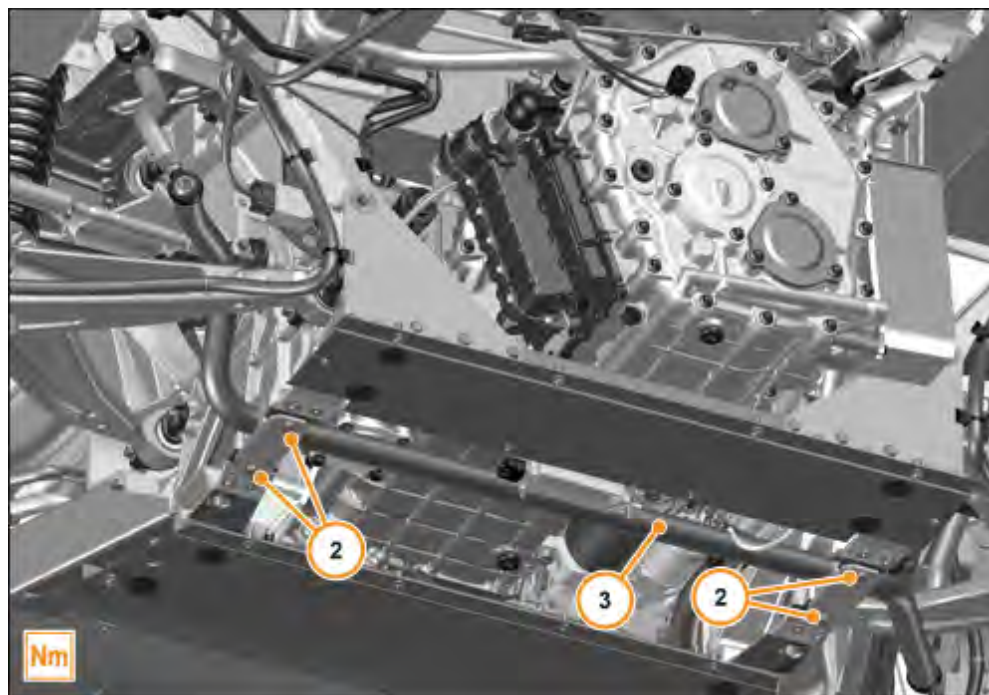
2. Remove bolts (1) on both sides of Z-bar. M14
x 60 100 Nm



Care Point: Observe the position of shims.

3.Remove bolts (2). M8 x 20 23 Nm

4.Remove Z-bar (3).



Install Z-bar

1. Install components in reverse order.

Torque settings

FG03 Chassis / B02 Rear Suspension / Z Bar Assembly / AA-RM-03B02-04-001 - Remove/install Z-bar

Description	Dimension	Value
Bolt Drop link	M14 x 60	100 Nm
Bolts Z-bar - Floor	M8 x 20	23 Nm

Instructions

FG03 Chassis / B03 Wheels Tyres / Wheel Assembly / AA-RM-03B03-01-002 - Perform a wheel alignment check

- 1 Ensure the vehicle is on level ground.



Care Point: Apply the following adjustments to the ride height figures if the tank is full with driver: Front -2mm / Rear -3mm.

Care Point: Apply the following adjustments to the ride height figures if the tank is empty with driver: Front + 2mm / Rear + 3mm.

Care Point: Driver weight range is between 70kg - 80kg

- 2 Ensure no additional weight is in the luggage compartment area.



Care Point: Ride heights are generally measured to the bottom of the flat floor on the front and rear axle lines.

Care Point: Specified ride heights - 120mm front, 140mm rear (with driver and half tank of fuel) Tolerance: +/-2mm.

- 3 Ensure vehicle is at correct ride height.



Care Point: Tyre pressure: Front (19in Wheels) 2.0 Bar, Rear (20in Wheels) 2.2 Bar.

- 4 Ensure the vehicle wheels are pointed in the straight ahead position.



- 5 Ensure the tyres are a matched axle set and at the correct pressures.



- 6 Ensure the fuel tank is to specified level (36 litres).



- 7 Ensure there are no leaks in the PAS system.



Care Point: Ensure the equipment manufacturers instructions are followed.

Point:

Care Point: Toe Front = $-0^{\circ}1'$ toe out (If machine uses decimal system = $-0^{\circ}017$) (0mm on 19" wheel). Toe Rear = $0^{\circ}04'$ toe in (If machine uses decimal system = $0^{\circ}067$) (0.5mm on 20" wheel). Tolerance $\pm 01'$ per wheel.

Care Point: Camber (at nominal ride height) Front = -1.5° , Rear = -1.0° , Tolerance $\pm 0.1^{\circ}$.

Care Point: Caster is not adjustable, but its nominal setting is between $4^{\circ} - 5^{\circ}$ positive.

Care Point: Carry out camber adjustment using the camber adjustment tophat on the upright.

8 Check for signs of wear or damage to the suspension components.



9 Carry out vehicle alignment.



10 Connect McLaren Diagnostic System, proceed to Diagnostic Toolbox within **Steering Angle Sensor (SAS)**.

11 Access Quick Test section check if update is available.

12 Proceed with Flashing if required.

13 Access Sequences section.

14 Carry out Fine Tune Zero Position procedure.

15 Read, delete error memory.

16. Check functionality.

Instructions

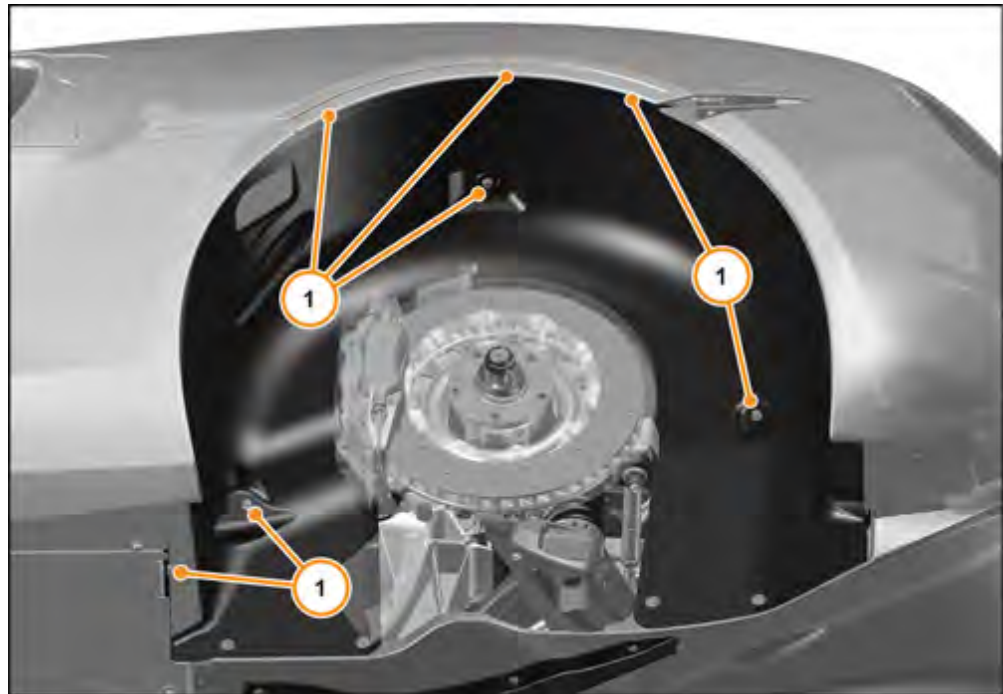
FG02 Body Systems / A02 Exterior Trim Lighting Wipers / Luggage Cell Ducts Wheelarch Liners / AA-RM-02A02-03-001 - Remove/install wheel arch liner - Rear

Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.](#)
2. [AA-RM-03B03-01-001 Remove/Install wheel.](#)

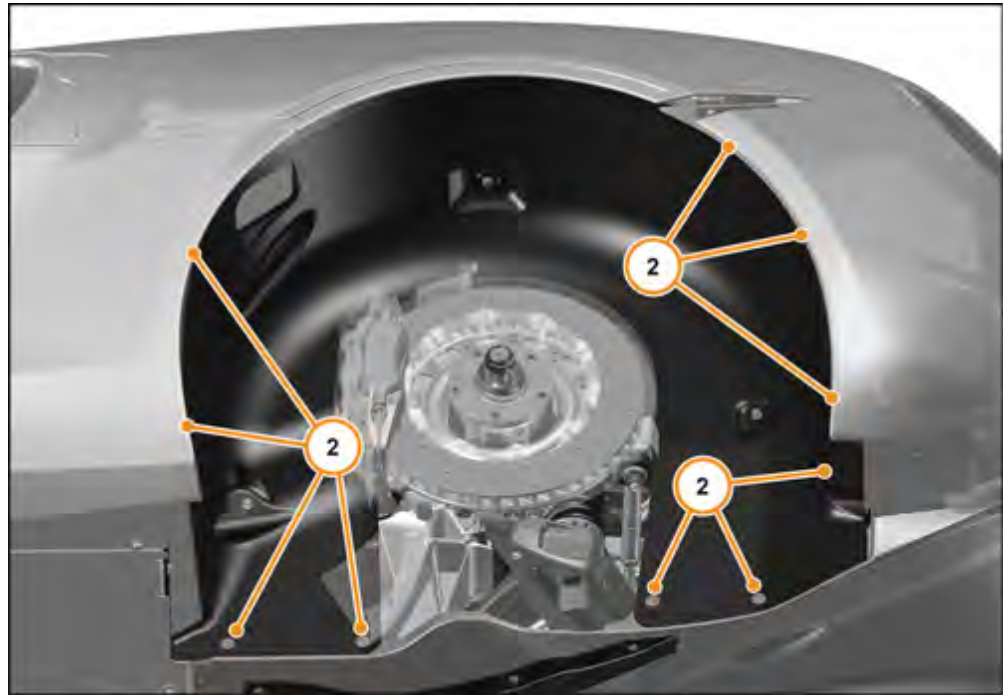
Remove wheel arch liner - Rear

1. Remove bolts (1). [M6 x 16 5 Nm](#)

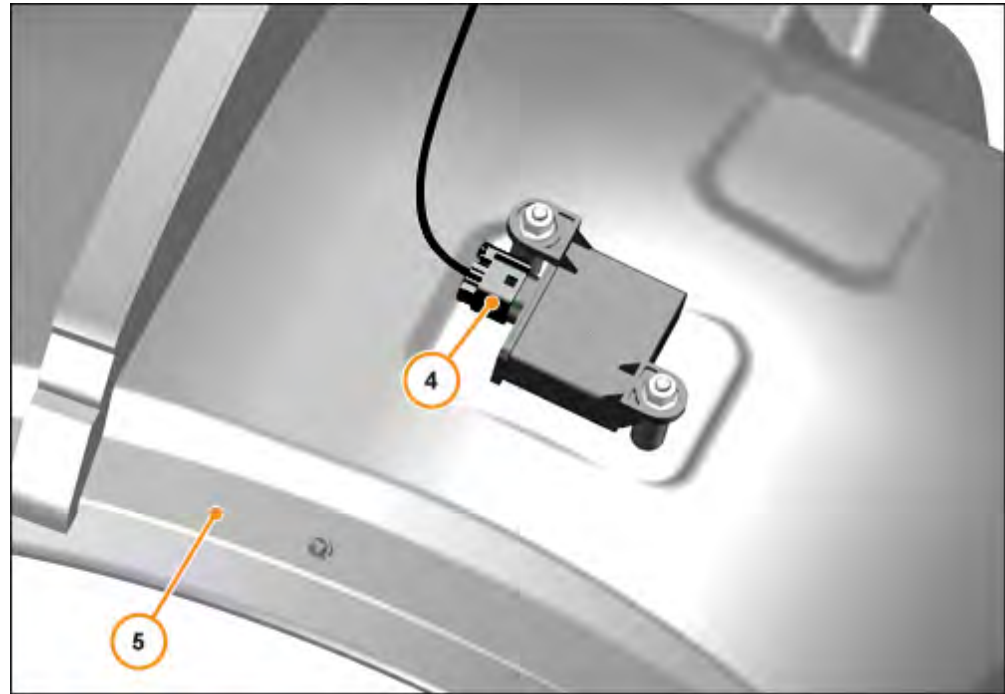


2. Remove bolts (2). M6 x 16 5 Nm

3. Partially remove wheel arch liner.



4. Disconnect tyre pressure monitor trigger electrical connector (4).
5. Remove wheel arch liner (5).



Install wheel arch liner - Rear

Care Point: Ensure tyre pressure monitor trigger electrical connector is located correctly.

1. Install components in reverse order.

Torque settings

FG02 Body Systems / A02 Exterior Trim Lighting Wipers / Luggage Cell Ducts Wheelarch Liners / AA-RM-02A02-03-001 - Remove/install wheel arch liner - Rear

Description	Dimension	Value
Bolt - Wheel arch liner	M6 x 16	5 Nm
Bolt - Wheel arch liner	M6 x 16	5 Nm

Instructions

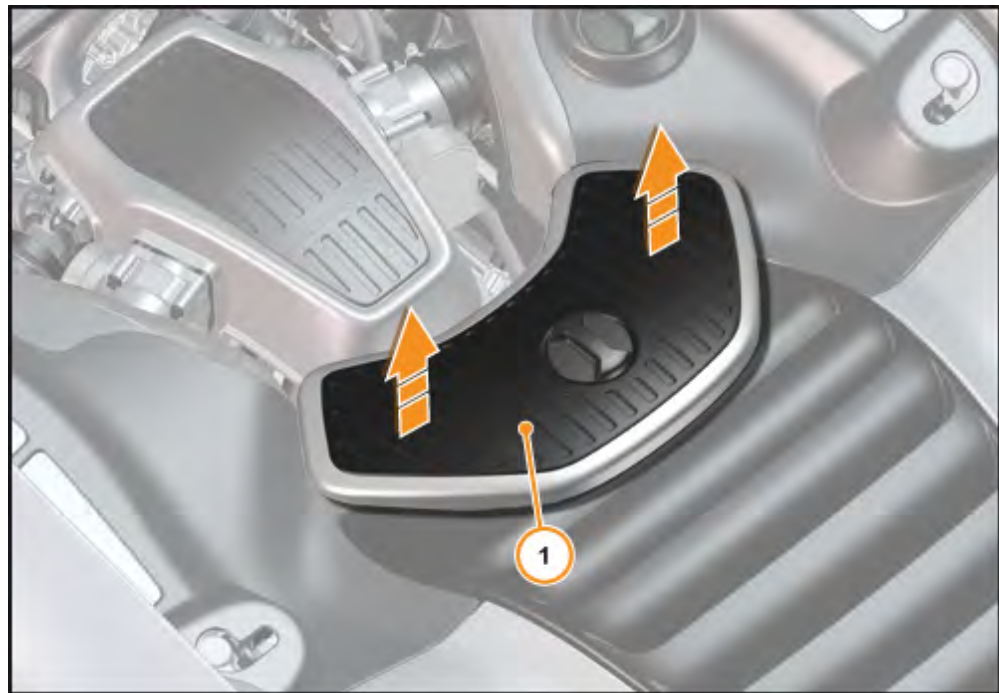
FG04 Powertrain / F02 Oil System Engine / Oil System Engine / AA-RM-04F02-01-011 - Drain/fill fluid - Engine oil

Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)
2. [AA-RM-02A04-04-001 Remove/install floor panel - engine/fuel tank](#)

Drain fluid - Engine oil

1. Remove cover (1).



Care Point: Ensure header tank clamps do not drop into the engine bay.

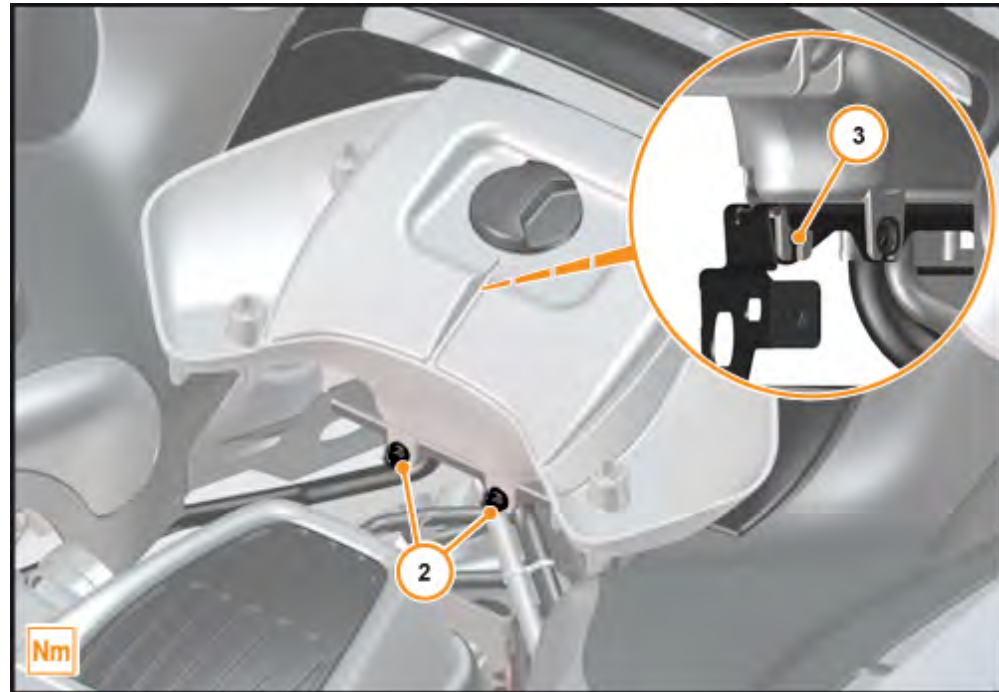
2. Remove bolts with washers (2). M6 x 16 6 Nm

Care Point: Use 10mm flexi-head ratchet spanner.

Care Point: Spacer is fitted between bracket and nut. Ensure this does not fall into the engine bay.

Care Point: Ensure grommet remains in place on header tank bracket.

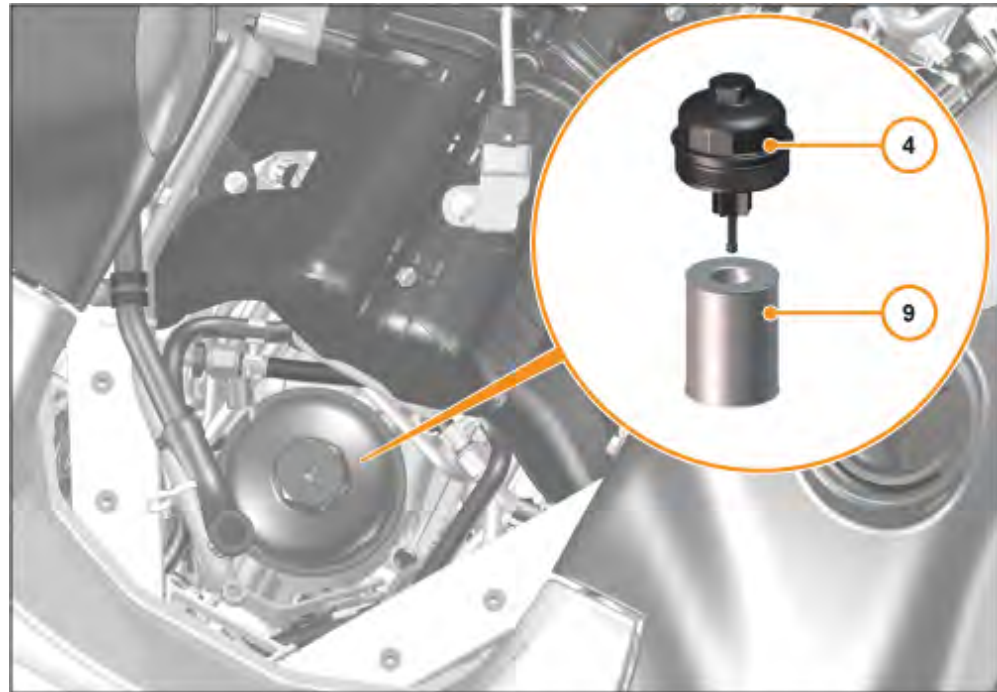
3. Remove nut (3). M6 6 Nm



**Care
Point:**

Ensure that the hoses connected to the coolant reservoir do not become detached, put under high tension, or become damaged during detachment and moving of the coolant reservoir to gain access to oil filter cap. Protect the area sufficiently before carrying out this step.

4. Remove oil filter cap (4). 25 Nm



Care Point: Use a suitable container to catch the excess fluid.

Care Point: Drain oil whilst at a warm temperature. Allow oil to drain for at least 15 minutes.

Care Point: Oil must also be drained from the turbocharger oil return hoses. AA-RM-04F01-01-035 - Remove/install turbo charger oil return hose Only disconnect the oil return hoses from the engine ladderframe. Renew O-ring on the oil return hose if it has become damaged.

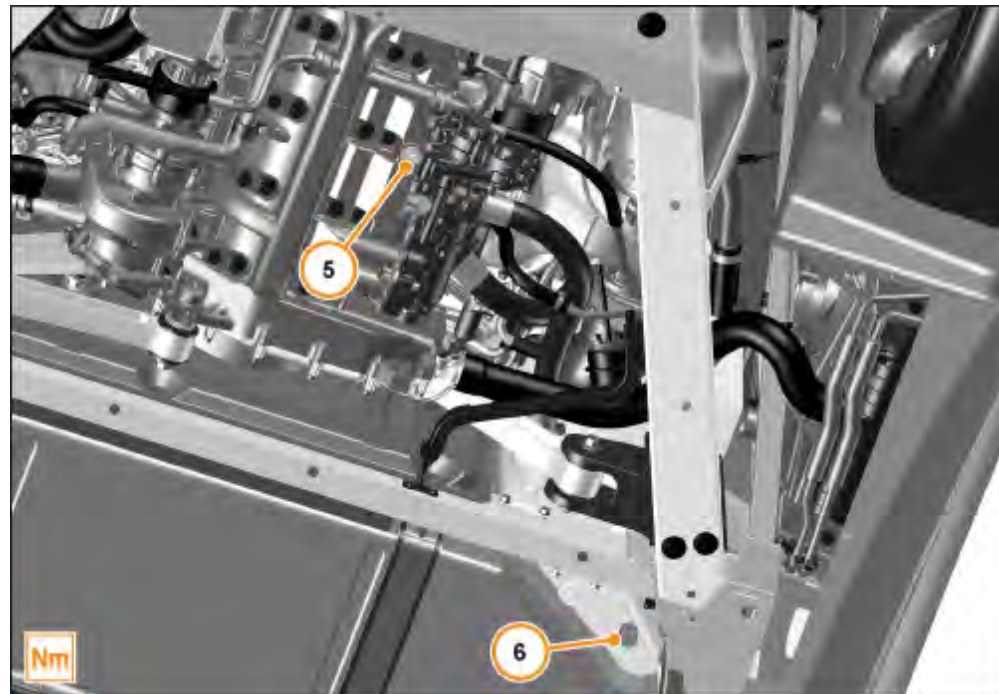
5. Remove plug (5). T50 24 Nm

6. Remove bolt (6). M14 18 Nm

7. Drain engine oil.

8. Remove oil filter (9).

Fill fluid - Engine oil



Care Filter cap torque figure is
Point: embossed on the cap. 25 Nm

1 Replace both O-rings (7).



2 Replace washers on tank bolt (6).



3 Renew sump plug incl. washer (5).



4 Install plug and bolt in reverse order.



5 Install oil filter (9) and filter cap (4).



6 Remove oil filler cap (8).



Care Point: Add no more than the specified quantity of oil to the tank at any one time.
Do not choke the filler tube with oil under any circumstances.

Care Point: Do not put more than 6.8 litres of oil into the system. If this quantity has been achieved with no movement to the oil level gauge, please give the vehicle a complete check of the oil system including use of the McLaren Diagnostic System. Under no circumstances should the above mentioned quantity be exceeded.

7 Fill up engine oil slowly using a funnel. Mobil

1 – 0W40

8 Check oil level. AA-RM-04F02-01-007 -

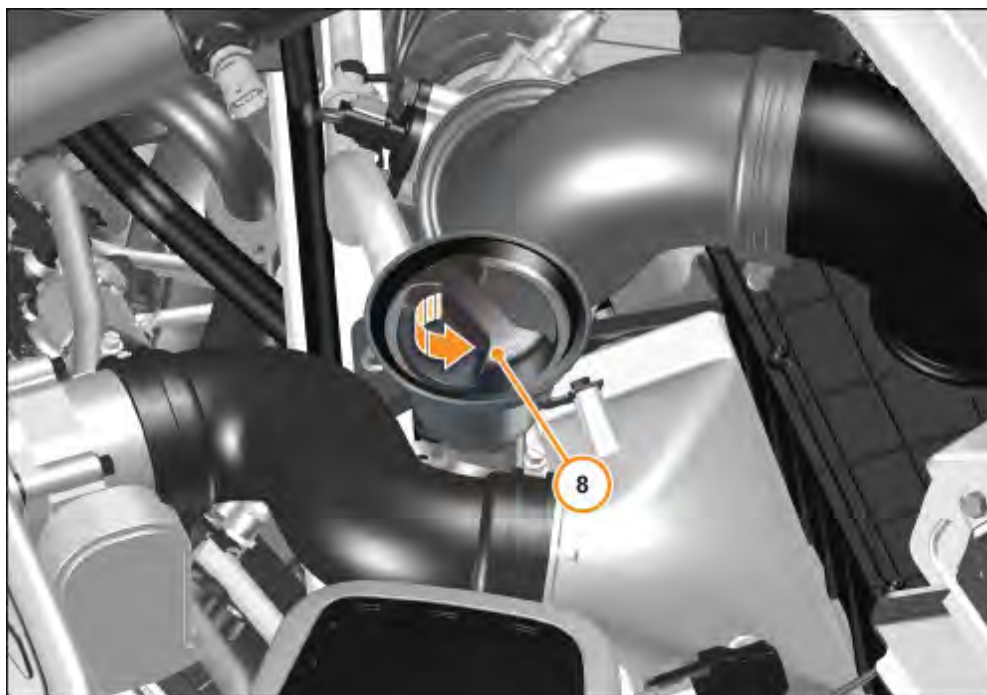
Check oil level

Care Point: Ensure oil filler cap is fitted correctly. The cap should align parallel with the vehicle (Front to back).

9 Install oil filler cap (8).



10 Install components in reverse order.



Torque settings

FG04 Powertrain / F02 Oil System Engine / Oil System Engine / AA-RM-04F02-01-011 - Drain/fill fluid - Engine oil

Description	Dimension	Value
-------------	-----------	-------

Bolt Reservoir coolant - Bracket	M6 x 16	6 Nm
Nut Reservoir coolant - Bracket	M6	6 Nm
Oil filter cap - Engine		25 Nm
Plug engine oil drain - engine	T50	24 Nm
Bolt engine oil drain - oil tank	M14	18 Nm
Oil filter cap - Engine		25 Nm

Instructions

FG04 Powertrain / F01 Power Unit / Power Unit / AA-RM-04F01-01-035 - Remove/install turbo charger oil return hose

Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)
2. [AA-RM-02A04-04-001 Remove/install floor panel - Engine/fuel tank](#)

Remove turbo charger oil return hose



WARNING!

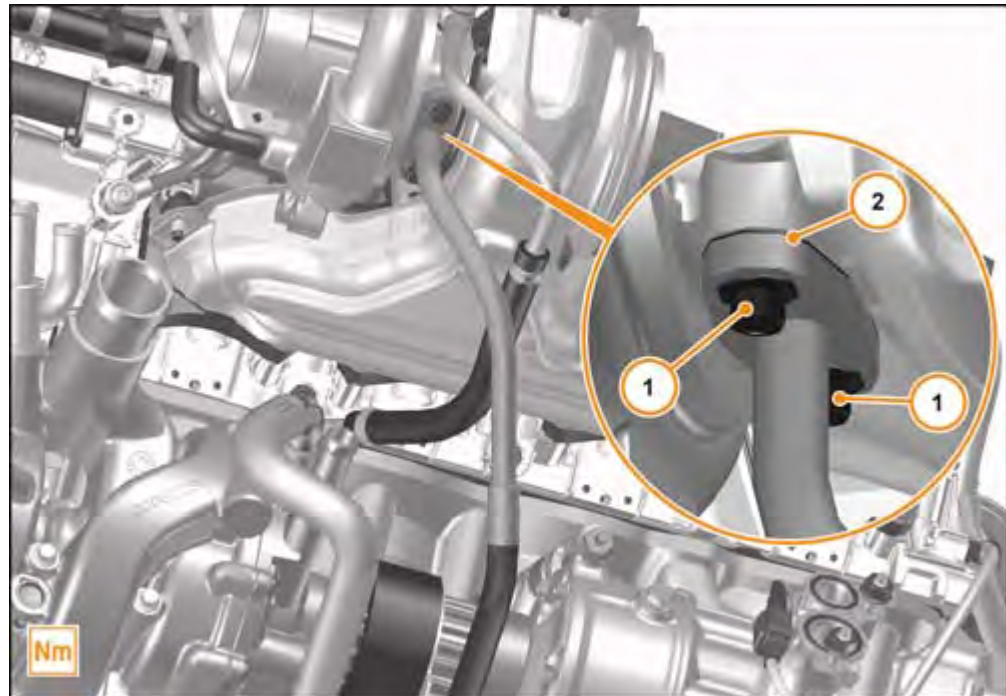
Risk of burning and fire when handling hot or glowing objects!

Unprotected contact with hot or glowing objects can cause severe burns to the skin and eyes. If glowing objects come into contact with water, hot steam or hot splashing water this can result in severe skin and eye burns. Severe and possibly permanent injuries can result if hot or glowing objects come into contact with unprotected skin or eyes. Fire can result if glowing objects come into contact with flammable materials or substances.

Wear protective clothing, safety glasses and heat resistant gloves.

- Avoid sparks and keep objects away from flammable materials and substances when handling glowing objects.

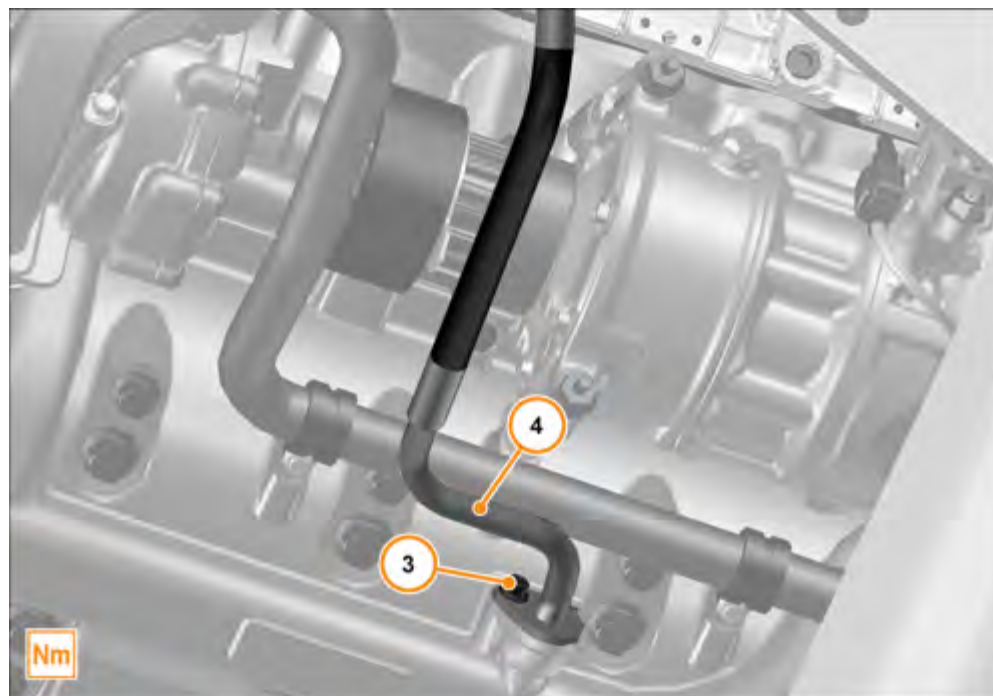
1. Remove bolts (1). [M6 x 16 10 Nm](#)
2. Remove paper gasket (2).



3.

Care When removing turbocharger oil return hose, catch oil in
Point: suitable container.

4. Remove turbocharger oil return hose (4).



Install turbocharger oil return hose

Care Clean sealing face of old gasket area.

Point: Replace oil with the exact quantity that was removed.

Replace paper gasket.

Replace o-ring seal if damaged. [P80 THIX](#)

If new hose is being fitted, this will already be fitted with an o-ring and paper gasket.

1. Install components in reverse order.
2. Check engine for leaks.
3. Check oil level. [AA-RM-04F02-01-007 - Check oil level](#)

Description	Dimension	Value
-------------	-----------	-------

Bolt Oil drain pipe - Turbo charger/ engine	M6 x 16	10 Nm
Bolt Oil drain pipe - Turbo charger/ engine	M6 x 16	10 Nm

Instructions

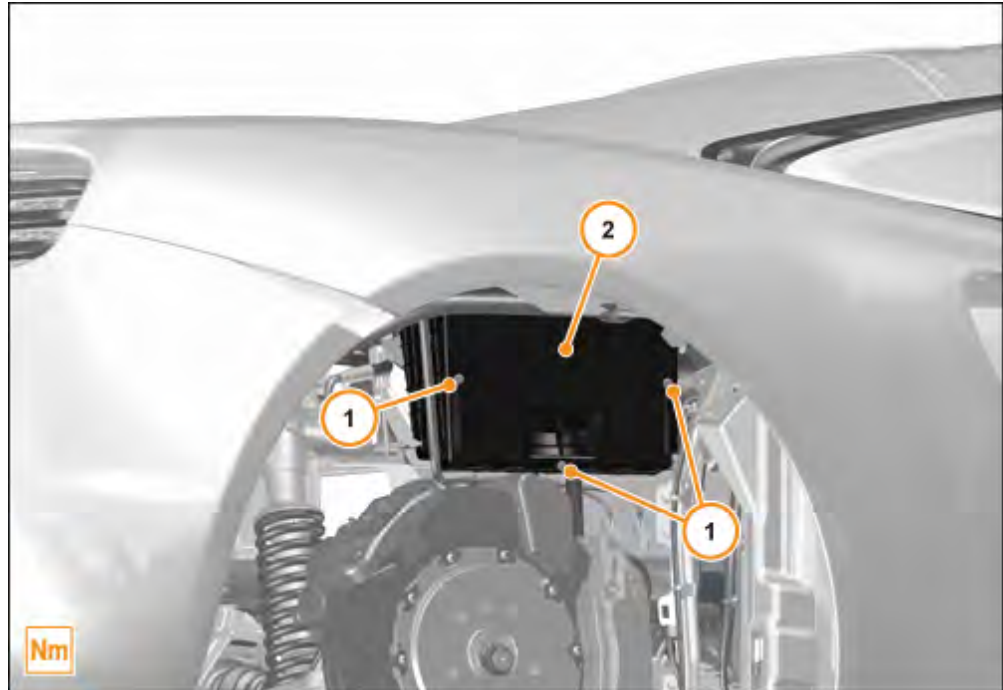
FG04 Powertrain / F01 Power Unit / Air Intake System / AA-RM-04F01-02-002 - Remove/install air filter

Preparation work

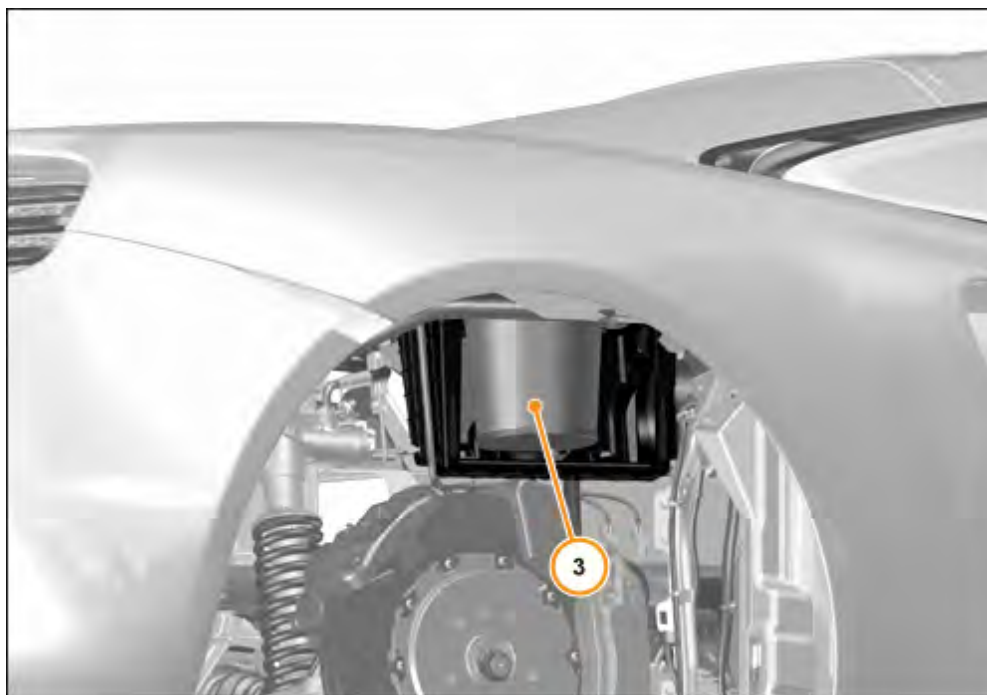
1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/Install wheels
3. AA-RM-02A02-03-001 Remove/Install wheel arch liner – Rear

Remove air filter

- 1.Remove bolts (1) M5 x 16 3 Nm .
- 2.Remove airbox access hatch (2).



3.Remove air filter (3).



Install air filter

Care Point: Ensure filter and airbox are clean and free of debris.

1. Install components in reverse order.

Torque settings

FG04 Powertrain / F01 Power Unit / Air Intake System / AA-RM-04F01-02-002 - Remove/install air filter

Description	Dimension	Value
Bolt - Airbox service panel	M5 x 16	3 Nm

Instructions

FG03 Chassis / L01 Cooling System / Engine Radiator / AA-RM-03L01-01-005 - Drain/fill fluid - coolant

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. **Care Point:** Up to MY14
AA-RM-02A04-04-002 Remove/install floor panel - Front
3. **Care Point:** MY15 onwards
AA-RM-02A04-04-002 Remove/install floor panel - Front
4. AA-RM-02A04-04-001 Remove/install floor panel - Engine/fuel tank

WARNING!

Risks of injury and poisoning when working with coolant!

When the engine is warm, the cooling system is pressurized. If the cooling system is opened suddenly, there is a risk of scalding from hot coolant which splashes out.

If coolant is swallowed, symptoms of poisoning such as headaches, dizziness, stomach pain, respiratory paralysis, unconsciousness, vomiting and cramps can occur.

Wear protective gloves, protective clothing and eye protection.

- Allow cooling system to cool down to a coolant temperature of less than 60 °C.
- Open cap of cooling system slowly; turn a conventional coolant cap as far as the first detent and turn a screwed coolant cap approx. 1/2 turn and release the pressure.
- Do not put coolant in beverage containers.

Care Point: Ensure vehicle is cold before commencing work.

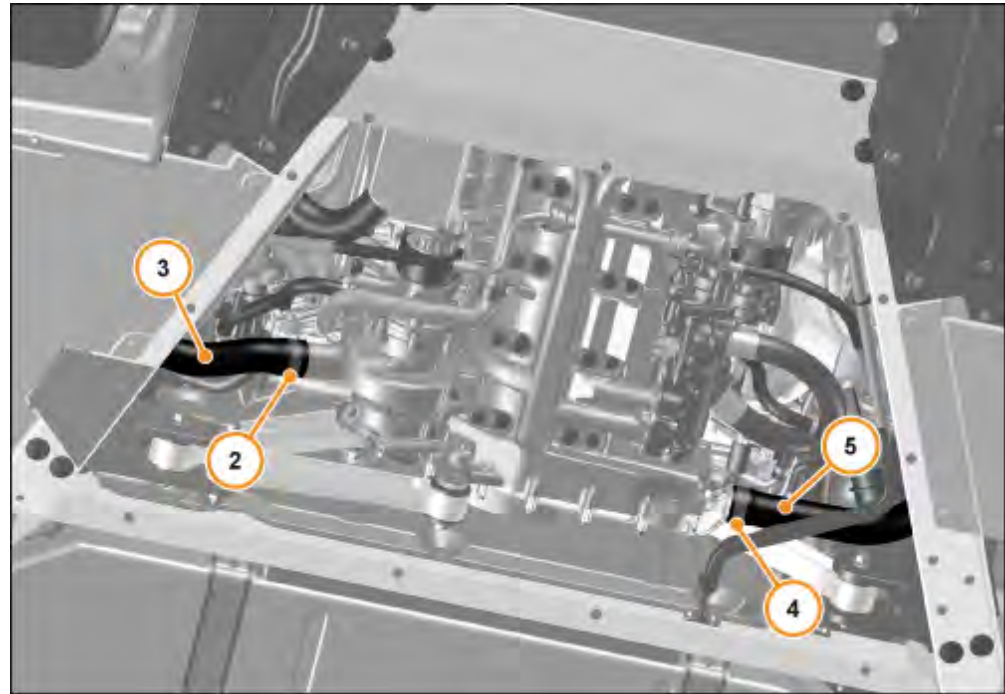
Drain fluid - coolant

1. Remove coolant reservoir cap (1).



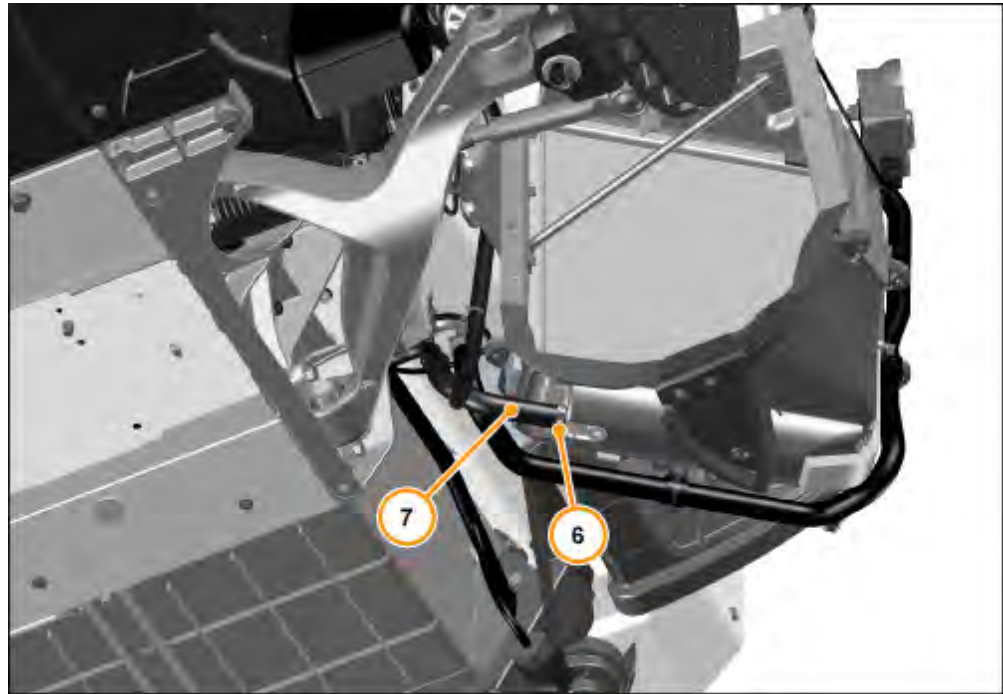
Care Point: Use a suitable container to catch the coolant.

2. Detach clamps (2, 4).
3. Detach coolant hoses (3, 5) from water pump and front cover.



Care Point: Use a suitable container to catch the coolant.

4. Remove clamp (6) right hand side and left hand side.
5. Detach coolant hoses (7) right hand side and left hand side from low temperature radiator.

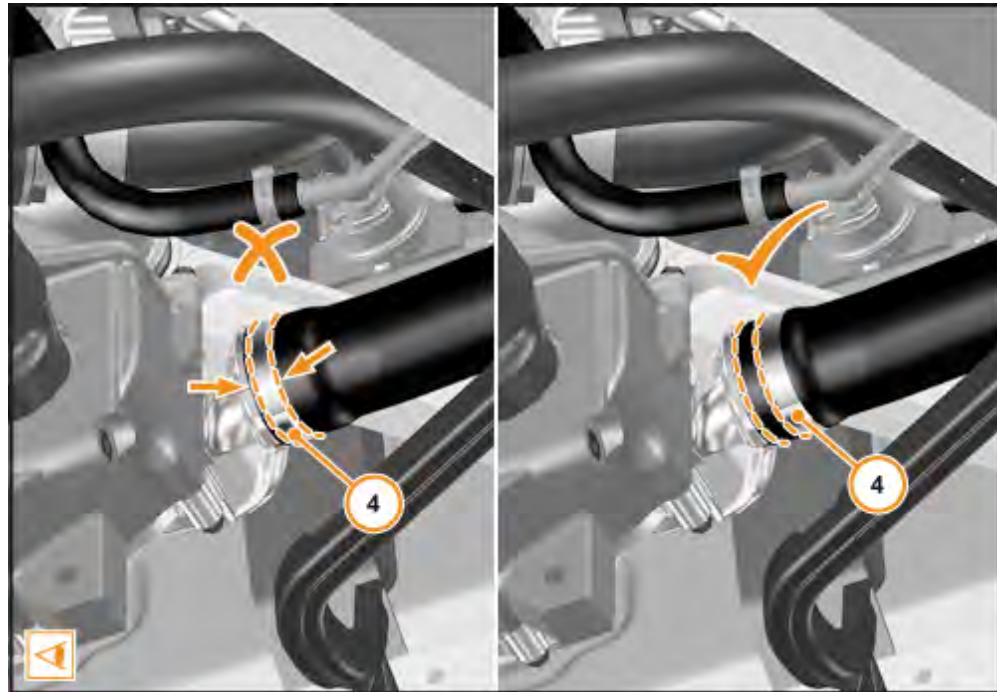


Fill fluid - coolant

**Care
Point:**

Renew Oetiker clips on coolant hoses.
Ensure Oetiker clip is positioned
just outside the positioning mark
(furthest from engine block).

- 1 Install all coolant hoses in reverse order.



Care Point: Maximum fill on a dry vehicle is 25 litres of coolant (mix ratio of 50:50 with water).

Care Point: Use MOBIL 1 Anti Freeze EXTRA .

Care Point: Ensure vacuum box is in a higher position than the coolant reservoir throughout the filling procedure.

Care Point: Ensure all relevant Personal Protective Equipment (PPE) is worn when carrying out this procedure (gloves, goggles, etc).

2 Attach adaptor to coolant reservoir (8).

3 Connect vacuum pump to coolant fill adaptor (8).

4 Connect vacuum box to coolant fill adaptor (9).



5 Close all valves on vacuum box (Venturi 10, Top 11, Lower 12, Fill 13).

6 Attach air line to top box connection (14).

7 Open top and lower valves on the vacuum box (11, 12).

Care Point: Do not exceed a vacuum of 0.5 bar vacuum at this stage.

8 Gradually open Venturi valve (10) on vacuum box to generate vacuum in system.

Care Point: Vacuum should not drop once top valve (11) is closed. If the vacuum cannot be held, please check system for leaks.

9 Close top valve (11) and ensure system can hold a vacuum.

10 Release vacuum by closing Venturi valve (10) and opening top valve (11).

11 Close lower valve (12).

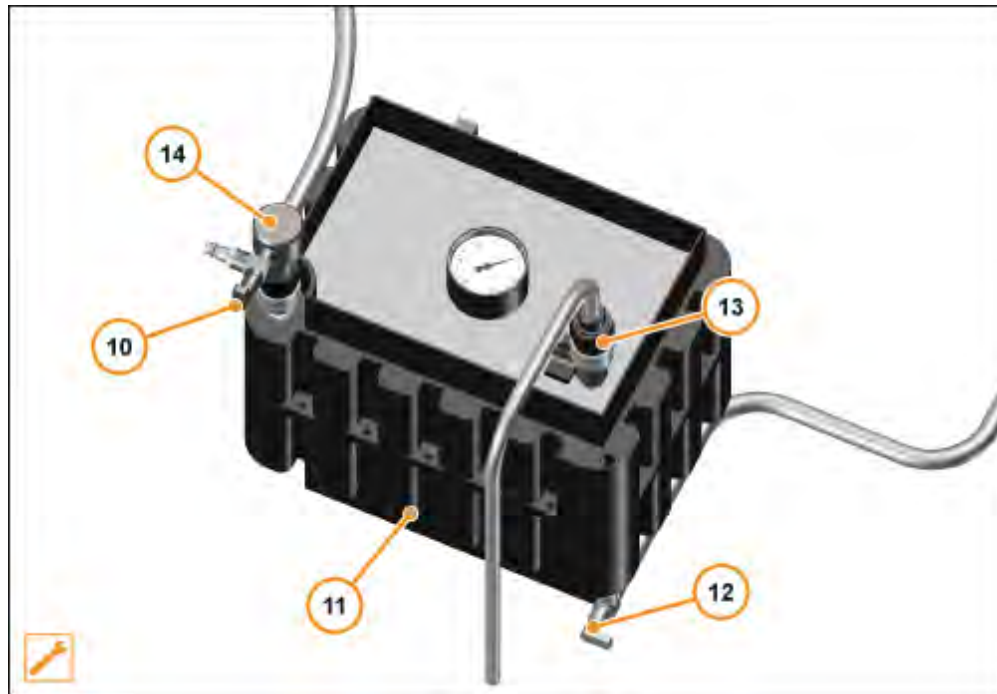
Care Point: Place open end of filler tube in to separate coolant filled container. Please ensure a minimum of 10 litres of coolant (50:50 mix with water) is in the separate container.

12 Connect filler tube (15) to fill valve (13).

13 Open filler valve (13).

Care Point: Only fill vacuum box to half way point.

14 Gradually open Venturi valve (10) to draw coolant mix into vacuum box.



- 15 Close Venturi valve (10) and fill valve (13)
· once vacuum box is half full.
16 Remove filler tube (15).

- 17 Open lower valve (12).

·
Care Ensure vacuum box fill level does
Point: not exceed sight level.

Care During this stage of the procedure
Point: do not exceed 0.8 bar vacuum.

- 18 Gradually open Venturi valve (10) to draw air
· out of vehicle coolant system. Continue until
no bubbles can be seen in the hose
connecting the vacuum box to the coolant
reservoir, or the box becomes full.

- 19 Close Venturi valve (10) and allow coolant to
· be drawn into the vehicle.

- 20 Repeat steps 10 – 18.

- 21 Detach equipment from vehicle.

- 22 Drain all coolant from vacuum box.

- 23 Repeat steps 2 - 10.

·
Care Ensure vacuum box fill level does
Point: not exceed sight level.

Care During this stage of the procedure
Point: do not exceed 0.8 bar vacuum.

- 24 Repeat steps 16 – 18 using a completely
· empty vacuum box.

- 25 Remove equipment.

- 26 Once vehicle has been filled, carry out a short



- . vehicle run up and repeat steps 2 - 24.

Care Point: Ensure coolant reservoir is filled to the minimum level. Once the reservoir is at the correct level, add an additional 350ml of coolant mix.

27 Install components in reverse order.

.

Instructions

FG04 Powertrain / G01 Transmission / Transmission / AA-RM-04G01-01-015 - Drain/fill fluid - Clutch

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/install wheels
3. AA-RM-02A02-03-001 Remove/install wheel arch liner - Rear
4. AA-RM-02A04-04-008 Remove/install transmission floor panel

Drain fluid - Clutch

Care Point: Ensure the clutches are opened, no gears engaged, no torque and operate airbrake a minimum of 2 times.

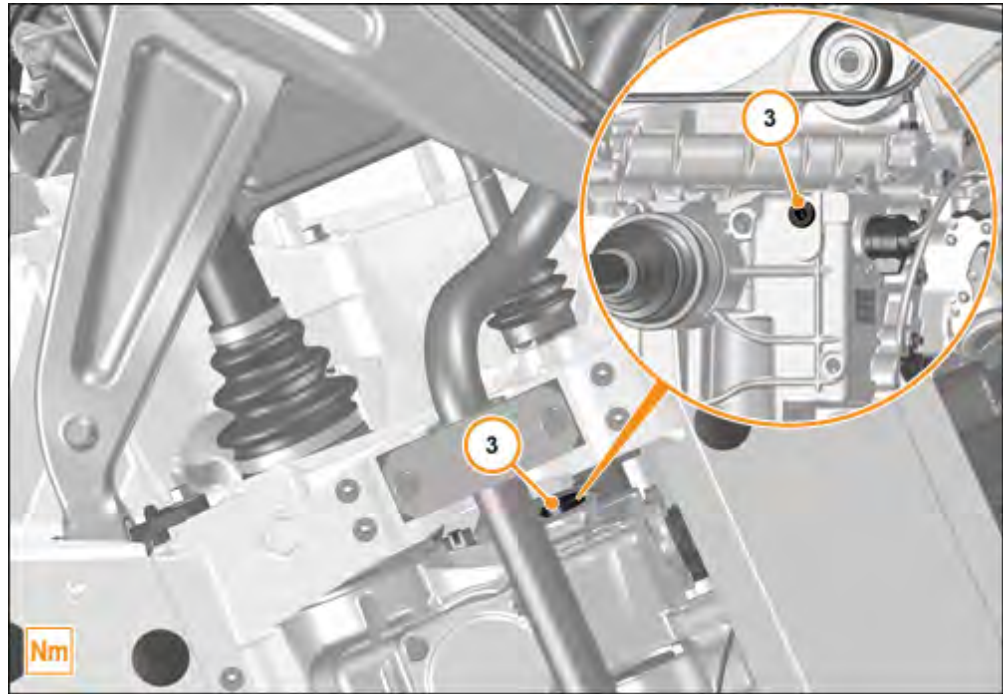
- 1.Run engine for 2 minute at 2000 rpm.

Care Point: Ensure airbrake is in a retracted position.

- 2.Stop engine.

Care Point: Ensure area around fill plug is cleaned with solvent before removing fill plug (3).

3. Remove fill plug (3).

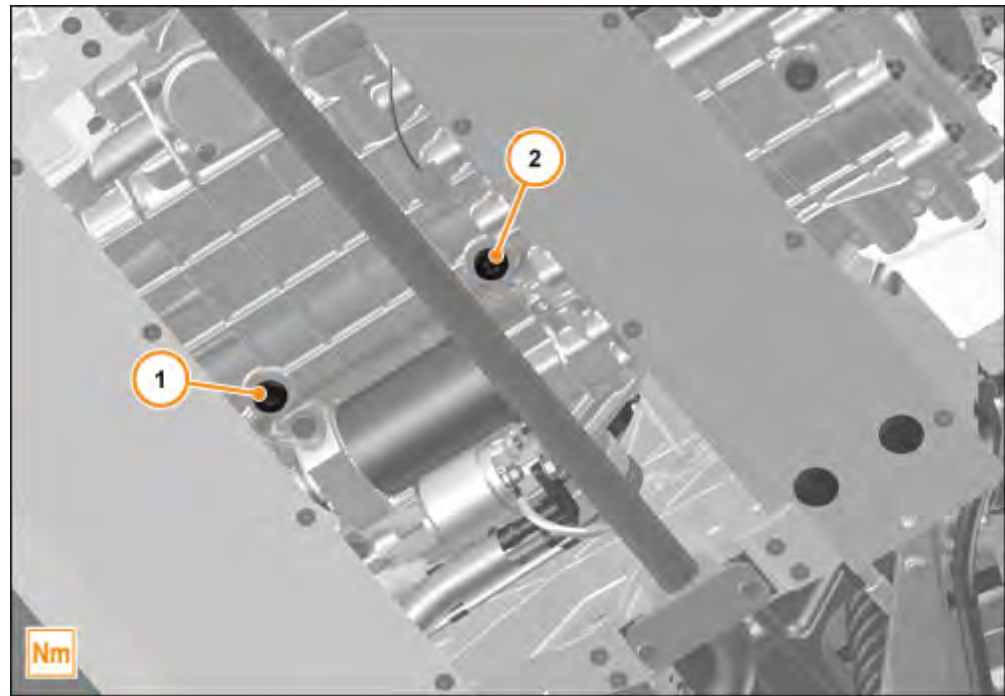


Care Point: Use a suitable container to catch the excess fluid.

4. Remove both drain plugs (1, 2).

Care Point: Allow approximately 5 minutes for oil to drain.

5. Let the oil drain completely.



Fill fluid - Clutch

Care Point: Renew washer on drain plug.

1 Install drain plug (2). 50 Nm



Care Point: The following process must be followed quickly, so the clutch fluid will not drain back into clutch sump.

Care Point: Ensure a **very clean** funnel and pipe are used.
Fill using **new** clutch oil only.

2 Fill clutch fluid to fill plug (3) level. Pentosin FFL-4



3 Install drain plug (1). torque to 10 Nm to avoid stress damage on threads.

3. Remove drain plug (2), torque to 50 Nm to avoid stress damage on threads.



4. Install fill plug (3), torque to 10 Nm to avoid stress damage on threads.



Care Point: Ensure the clutches are opened, no gears engaged, no torque.
Operate the airbrake a minimum of 2 times.

5. Run the engine for 2 minute at a fast idle speed of 2000 rpm.



Care Point: Ensure the airbrake is retracted.

6. Stop engine.



7. Remove fill plug (3).



Care Point: Use a suitable container to catch the excess fluid.

8. Remove drain plug (1).



Care Point: Approximately 1.0 litre of clutch fluid will be lost.
Flow of clutch oil will not stop completely.

9. Allow clutch oil to drain for 60 seconds.



Care Point: Drain plug (1) should remain removed.

10. Immediately top-up the clutch fluid within one minute until clutch fluid starts to drain out of fill point.



Care Point: Renew washer on drain plug.

11. Install drain plug (1). 50 Nm



12. Install fill plug (3), torque to 10 Nm to avoid stress damage on threads.



Care Ensure the clutches are opened, no gears engaged.
Point: Operate the airbrake a minimum of 2 times.

13 Run the engine for 2 minutes at fast idle speed of 2000 rpm.

14 Stop engine.

15 Top-up clutch fluid with 1.0 litres. Pentosin FFL-4

Care Renew washer on fill plug (3).
Point:

16 Install the fill plug (3), torque fully. 50 Nm

17 Install components in reverse order.

Torque settings

FG04 Powertrain / G01 Transmission / Transmission / AA-RM-04G01-01-015 - Drain/fill fluid - Clutch

Description	Dimension	Value
Clutch fill and drain plug		50 Nm
Plug - Clutch oil drain/fill - Fill torque		10 Nm
Plug - Clutch oil drain/fill - Fill torque		10 Nm
Clutch fill and drain plug		50 Nm
Plug - Clutch oil drain/fill - Fill torque		10 Nm
Clutch fill and drain plug		50 Nm

Instructions

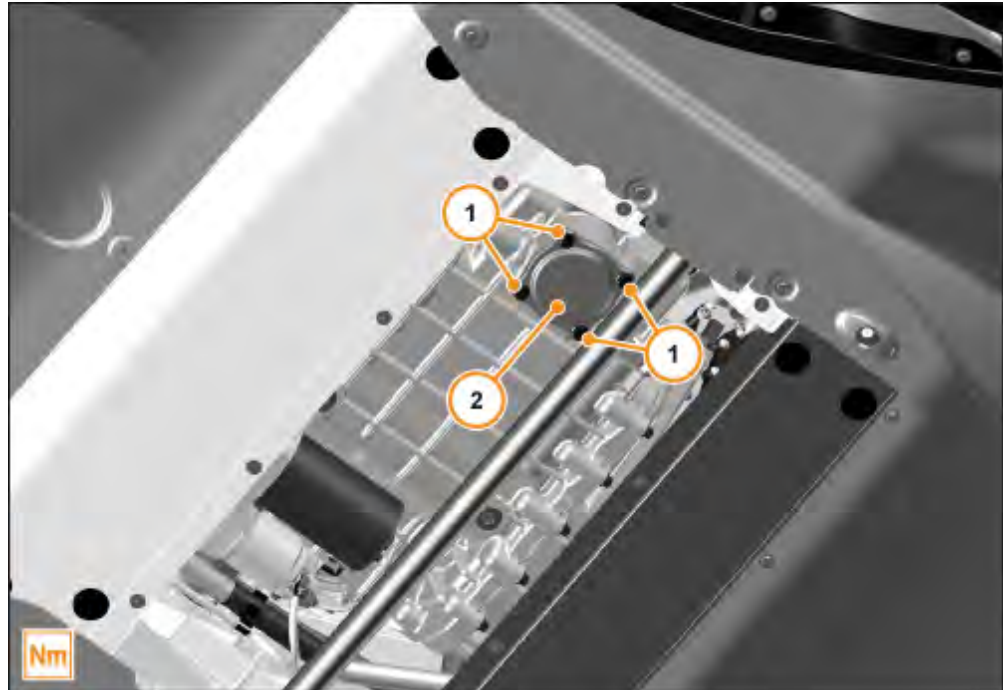
FG04 Powertrain / G01 Transmission / Transmission / AA-RM-04G01-01-017 - Remove/install filter - Clutch fluid

Preparation work

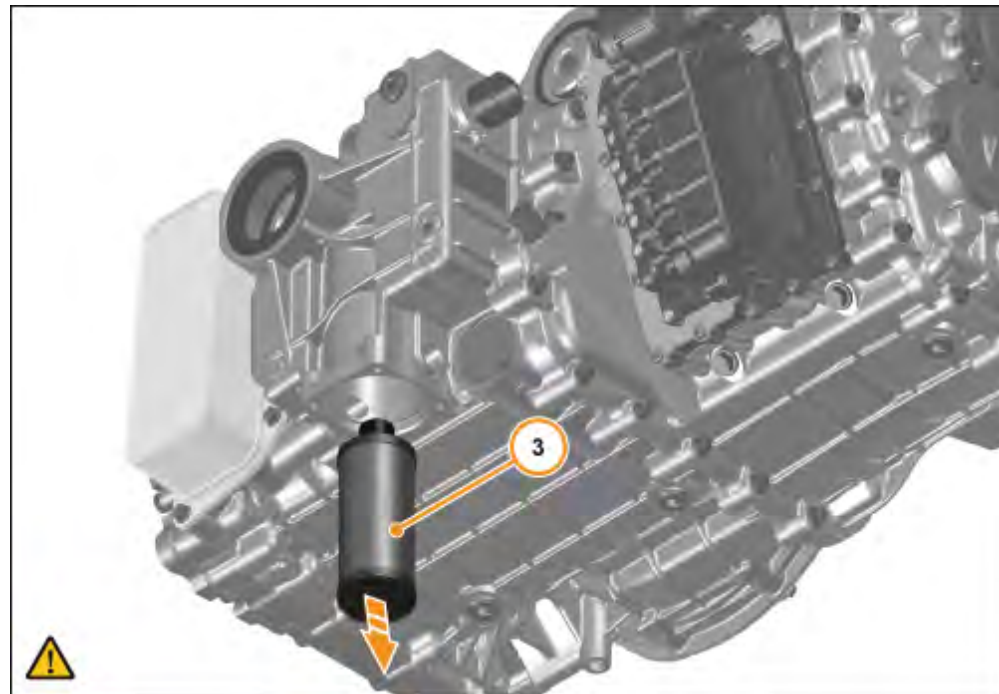
1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)
2. [AA-RM-02A04-04-008 Remove/install transmission floor panel](#)
3. [AA-RM-04G01-01-015 Clutch oil drain and refill](#)

Remove filter - Clutch fluid

1. Remove bolts (1). [M6 x 16 10 Nm](#)



2.Remove filter - Clutch fluid (3).



Install filter - Clutch fluid

Care Point: Ensure filter clutch fluid is clean and free from dirt and debris to avoid contamination.

1. Install components in reverse order.
2. Check transmission for leaks.

Torque settings

FG04 Powertrain / G01 Transmission / Transmission / AA-RM-04G01-01-017 - Remove/install filter - Clutch fluid

Description	Dimension	Value
Bolt Fluid cooler clutch - Transmission	M6 x 16	10 Nm

Instructions

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-004 - Remove/install floor panel - rear diffuser

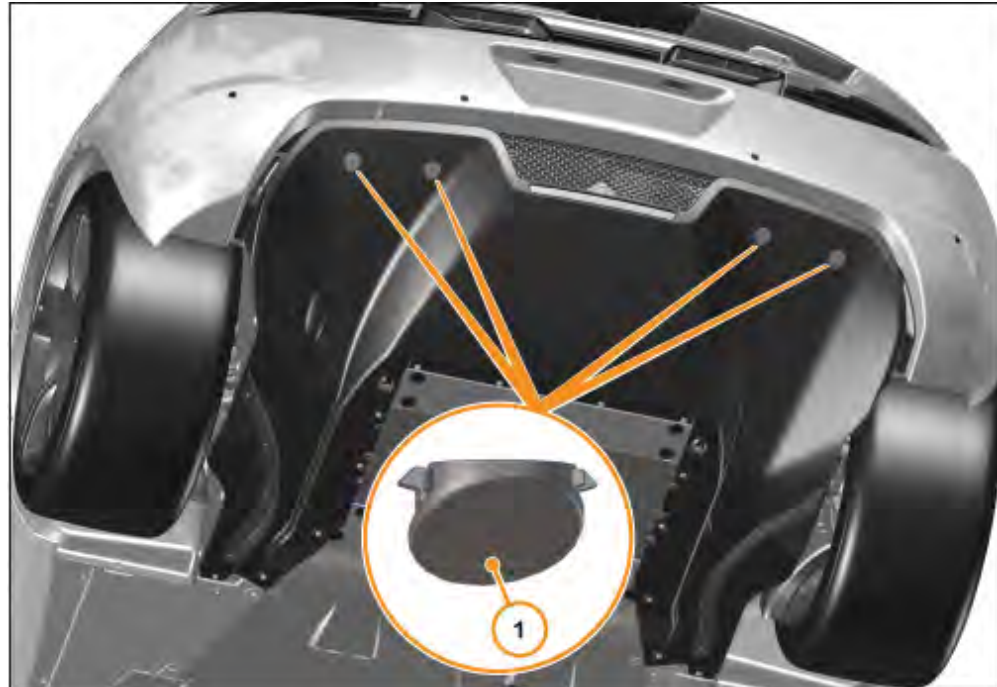
Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.

Remove floor panel - rear diffuser

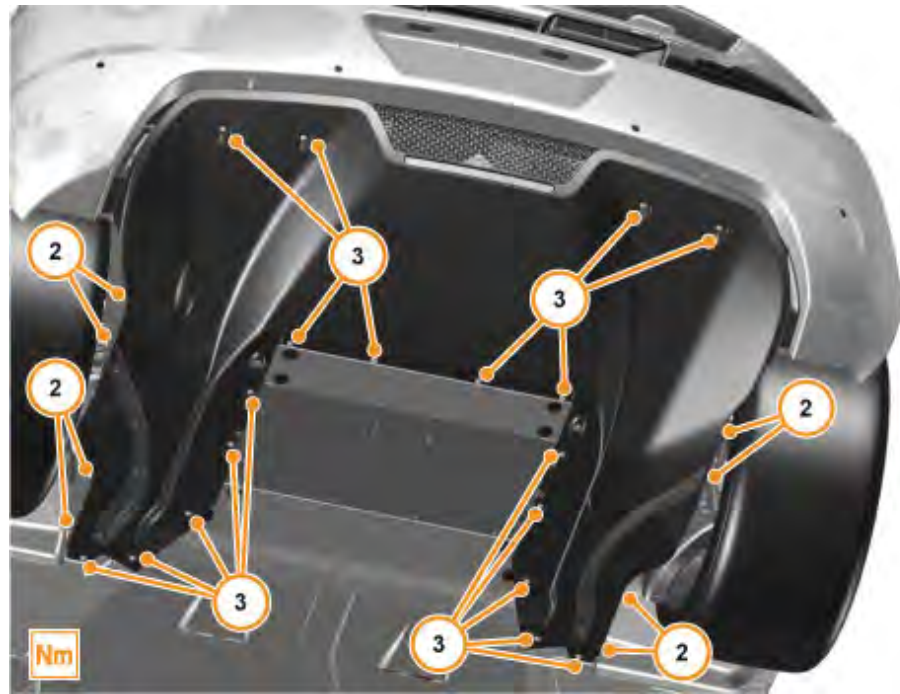
Care Point: Two technicians required.

1. Remove caps (1).

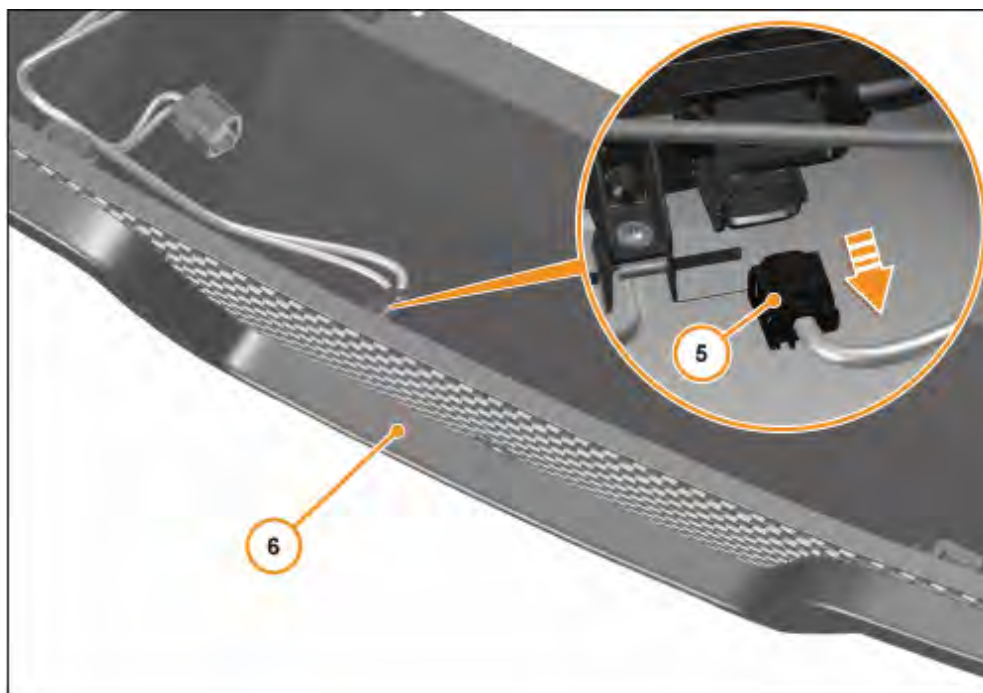


2.Remove bolts (2). M6 x 16 6 Nm

3.Remove torx bolts (3). M6 x 16 6 Nm



5. Disconnect fog/reverse lamp electrical connector (5).
6. Remove diffuser (6).



Install floor panel - rear diffuser

1. Install components in reverse order.
2. Check functionality of light and camera.

Torque settings

FG02 Body Systems / A04 Panels Glazing Paint / Floors Diffuser / AA-RM-02A04-04-004 - Remove/install floor panel - rear diffuser

Description	Dimension	Value
Bolt Diffuser - Wheel Arch Liner	M6 x 16	6 Nm
Bolt (Torx) Diffuser - Frame	M6 x 16	6 Nm

Instructions

FG04 Powertrain / G01 Transmission / Transmission / AA-RM-04G01-01-014 - Drain/fill fluid - Transmission oil

Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)
2. [AA-RM-02A04-04-004 Remove/install floor panel - rear diffuser](#)

Care Point: Use a suitable container to catch the excess fluid.

Drain fluid - Transmission oil

1. Remove drain plug (1).

Care Point: Allow approximately 2 minutes for oil to drain.

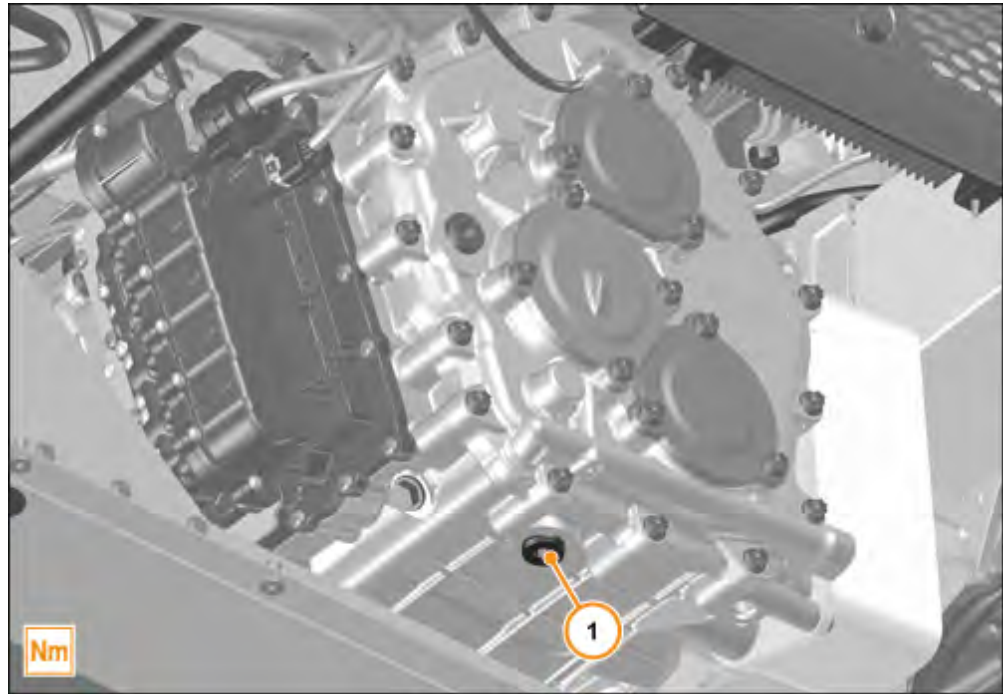
2. Let the oil drain completely.



Fill fluid - Transmission oil

Care Point: Renew drain plug copper washer.

- 1 Close drain plug (1). 50 Nm



- 2 Remove the plug (2).



Care Point: Use a clean funnel and pipe.

- 3 Fill up to level plug (2) (approximately 3



litres). Mobil PTX 75W-90

- 4 Install the plug (2).

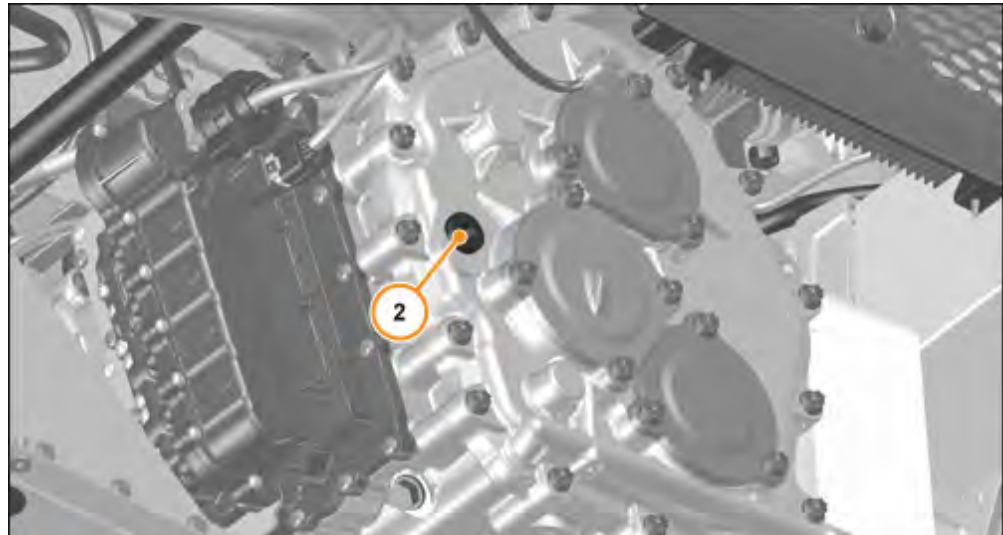


Care Point: Ensure the clutches are opened, no gears engaged, no torque.

- 5 Run the engine for 2 minute at idle speed.



- 6 Remove the plug (2).



Care Point: Level needs to be topped up within a minute of the stopping engine and removing plug (2).

7 Top up transmission oil until it reaches the . level plug (2).

8 Install the plug (2).



Care Point: Check the temperature with MDS.

9 Run the engine until transmission oil . temperature reaches a minimum of 95°C.

10 Remove the plug (2).

.

Care Point: Level needs to be topped up within a minute of reaching 95°C and removing the plug (2).

11 Top up transmission oil until it reaches the . level plug (2).

12 Renew fill plug copper washer..

.

13 Install the plug (2). 50 Nm

.



Torque settings

FG04 Powertrain / G01 Transmission / Transmission / AA-RM-04G01-01-014 - Drain/fill fluid - Transmission oil

Description	Dimension	Value
Transmission fill and drain plug		50 Nm
Transmission fill and drain plug		50 Nm

Instructions

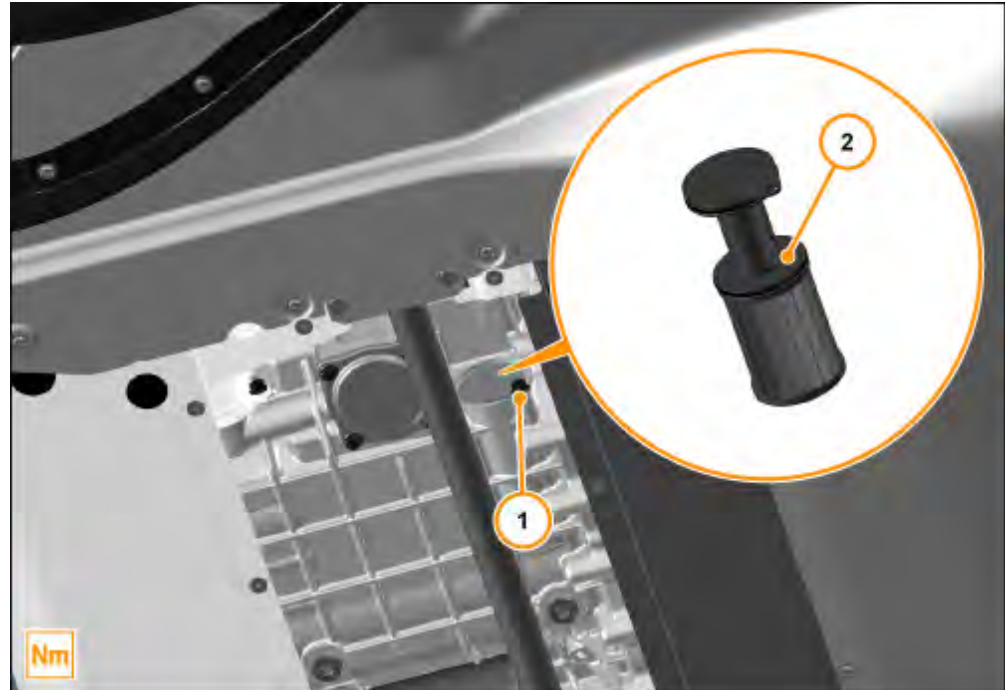
FG04 Powertrain / G01 Transmission / Transmission / AA-RM-04G01-01-016 - Remove/install filter - Transmission fluid

Preparation work

1. [AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform](#)
2. [AA-RM-02A04-04-008 Remove/install transmission floor panel](#)
3. [AA-RM-04G01-01-014 Transmission oil drain and refill](#)

Remove filter - Transmission fluid

1. Remove bolt (1). [M6 x 16 10 Nm](#)
2. Remove filter - Transmission fluid (2).



Install filter - Transmission fluid

Care Point: Ensure filter transmission fluid is clean and free from dirt and debris to avoid contamination.

1. Install components in reverse order.
2. Check transmission for leaks.

Torque settings

FG04 Powertrain / G01 Transmission / Transmission / AA-RM-04G01-01-016 - Remove/install filter - Transmission fluid

Description	Dimension	Value
Bolt Filter transmission fluid - Transmission	M6 x 16	10 Nm

Instructions

FG03 Chassis / K01 Fuel System / Fuel Tank / AA-RM-03K01-01-001 - Remove/install fuel filter

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-02A02-03-004 Remove/install luggage bin - Rear
3. AA-RM-05M01-01-001 Disconnect/connect battery ground line
4. AA-RM-03B03-01-001 Remove/install wheels
5. AA-RM-02A02-03-001 Remove/install wheel arch liner - Rear
6. AA-RM-02A04-04-001 Remove/install floor panel - Engine/fuel tank
7. AA-RM-02A04-04-005 Panel - Rear lower extension
8. AA-RM-03L01-01-005 Drain/fill cooling system
9. AA-RM-02A05-01-009 Draining and filling air conditioning
10. AA-RM-02A04-03-007 Remove/install bodyside lower
11. **Care Point:** Up to MY14
AA-RM-02A04-03-010 Remove/install panel - Side lower
12. **Care Point:** From MY15
AA-RM-02A04-03-010 Remove/install panel - Side lower - MY15
13. **Care Point:** Up to MY14
AA-RM-02A02-02-005 Remove/install radiator grille
14. **Care Point:** From MY15
AA-RM-02A02-02-005 Remove/install radiator grille - MY15
15. **Care Point:** Up to MY14
AA-RM-02A05-01-003 Remove/install condenser

16. **Care Point:** From MY15
AA-RM-02A05-01-003 Remove/install condenser - MY15
17. **Care Point:** Up to MY14
AA-RM-03L01-01-007 Remove/install radiator - water - rear
18. **Care Point:** From MY15
AA-RM-03L01-01-007 Remove/install radiator - water - rear - MY15
19. AA-RM-03K01-01-003 Drain/fill fuel tank
20. AA-RM-03K01-01-004 Remove/install fuel tank

WARNING!

Risk of explosion, poisoning and injury working with fuel!

Fuels are highly inflammable and toxic if inhaled. Fuel vapours are explosive, invisible and spread out at floor level. This vapour is poisonous when inhaled and has an anesthetizing effect in high concentrations. Fuel can cause damage to skin. For example, skin is degreased when it comes into contact with gasoline fuel.

Observe the national safety precautions and regulations.

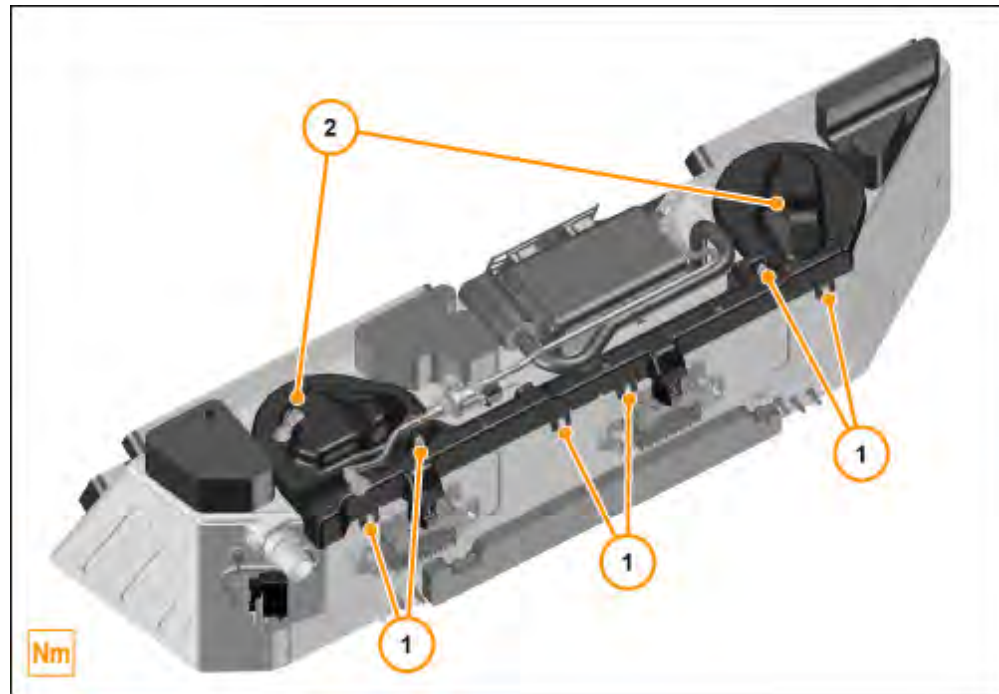
- Keep fuel away from fire, open light or ignition sources.
- Ensure the work place is adequately ventilated.
- Never drain or pour in fuels over assembly pits.
- Store drained fuel in a suitable and sealed vessel.
- Immediately eliminate any fuel which has flowed out.
- Conducting work on a vehicle with open flames (e. g. welding etc.).
- Before carrying out this work, remove relevant parts of fuel system and seal open fuel lines with plugs.

Remove fuel filter

1 Remove nuts (1). M6 8 Nm



2 Detach harness carrier (2).



3 Disconnect electrical connectors (3).



4 Remove harness carrier with harness.



5 Remove fuel feed line tank to engine bay (4).



6 Detach purge line (5).

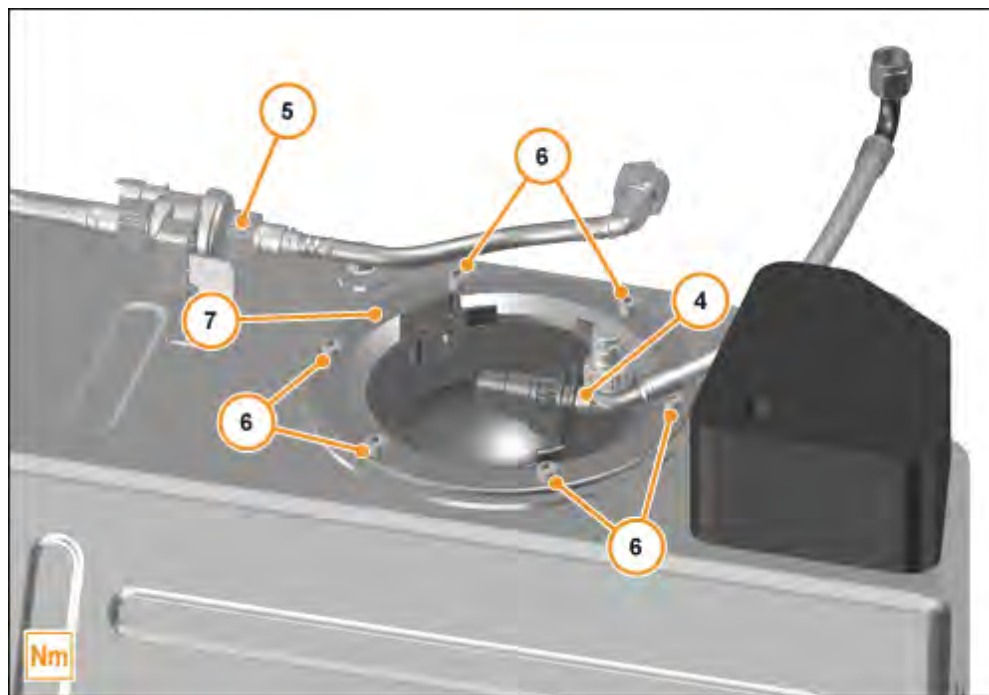


Care Point: Filter is on left hand access cover.

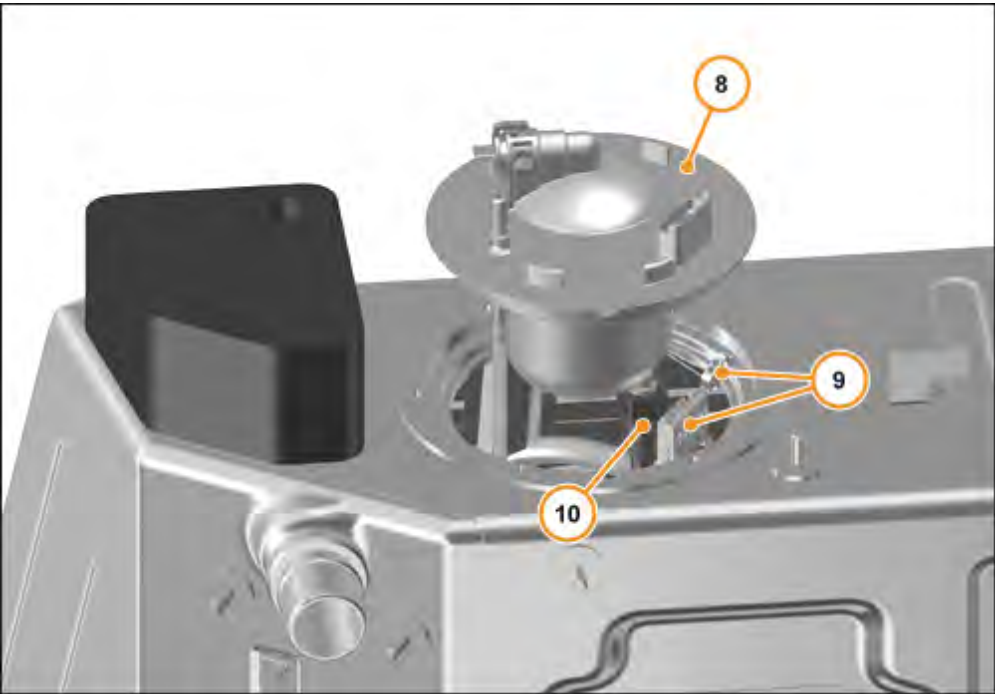
7 Remove bolts (6). M6 x 16 8 Nm



8 Remove retaining ring (7).



- 9 Remove access cover with fuel filter (8) partially.
- 10 Disconnect electrical connectors (9).
- 11 Detach fuel line (10).
- 12 Remove access cover with fuel filter (8) completely.



Install fuel filter

- 1. Renew access cover with fuel filter.
- 2. Renew sealing ring.
- 3. Install components in reverse order.

Torque settings

FG03 Chassis / K01 Fuel System / Fuel Tank / AA-RM-03K01-01-001 - Remove/install fuel filter

Description	Dimension	Value
Nut harness carrier - Fuel tank	M6	8 Nm
Bolts with washers Access cover retaining ring	M6 x 16	8 Nm

Instructions

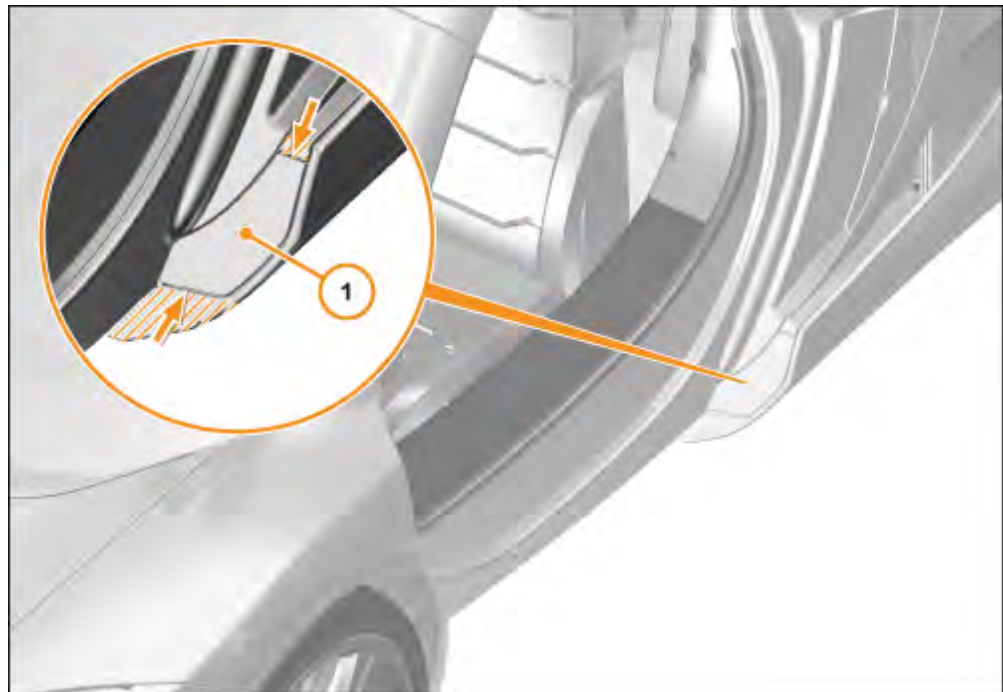
FG02 Body Systems / A03 Closures / Doors and Mirrors / AA-RM-02A03-03-003 - Remove/install cover door shut - Rear lower

Care Risk of paint damage.

Point:

Remove cover door shut - Rear lower

1. Open door.
2. Use tape to prevent paint damage.
3. Remove (arrows) cover door shut (1) using suitable trim tool.



Install cover door shut - Rear lower

1. Install components in reverse order.

Instructions

FG02 Body Systems / A04 Panels Glazing Paint / Roof Panels Fenders Fuel Filler / AA-RM-02A04-03-007 - Remove/install bodyside lower - Rear

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-03B03-01-001 Remove/install wheels
3. AA-RM-02A02-03-001 Remove/install wheel arch liner - Rear
4. AA-RM-02A03-03-003 Remove/install cover door shut - rear lower

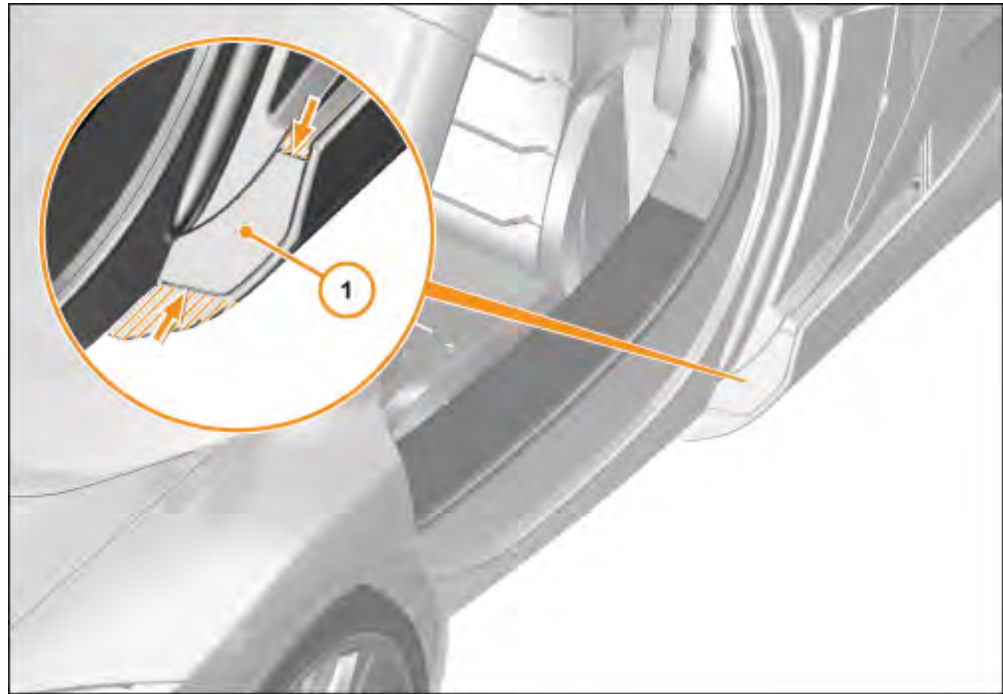
Care Risk of paint damage.
Point:

Remove bodyside lower - Rear

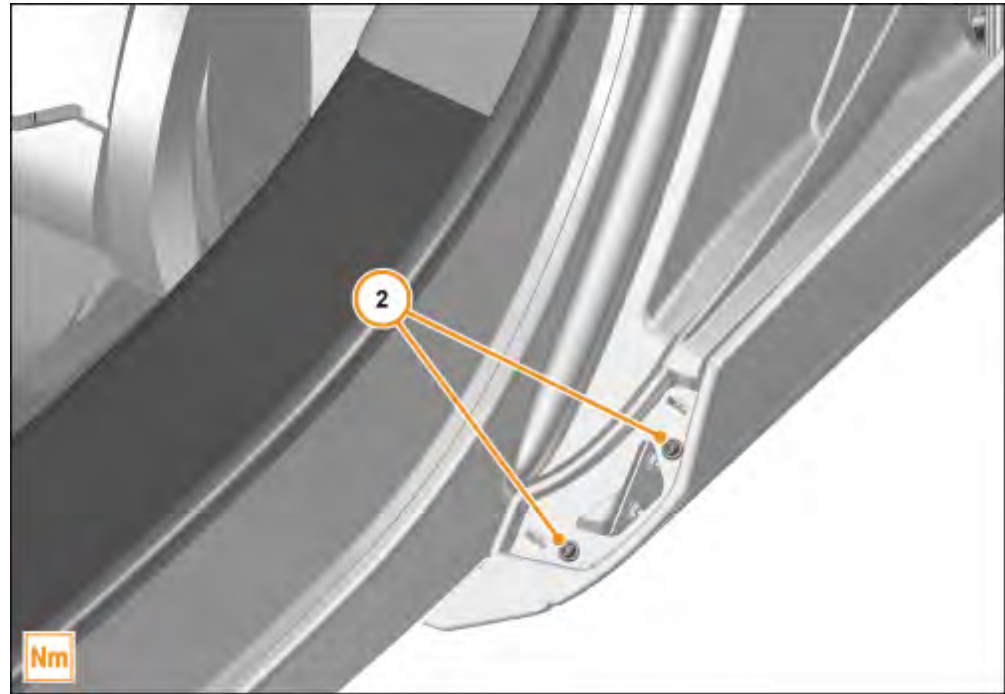
1. Open door.

2. Use tape to prevent paint damage (arrows).

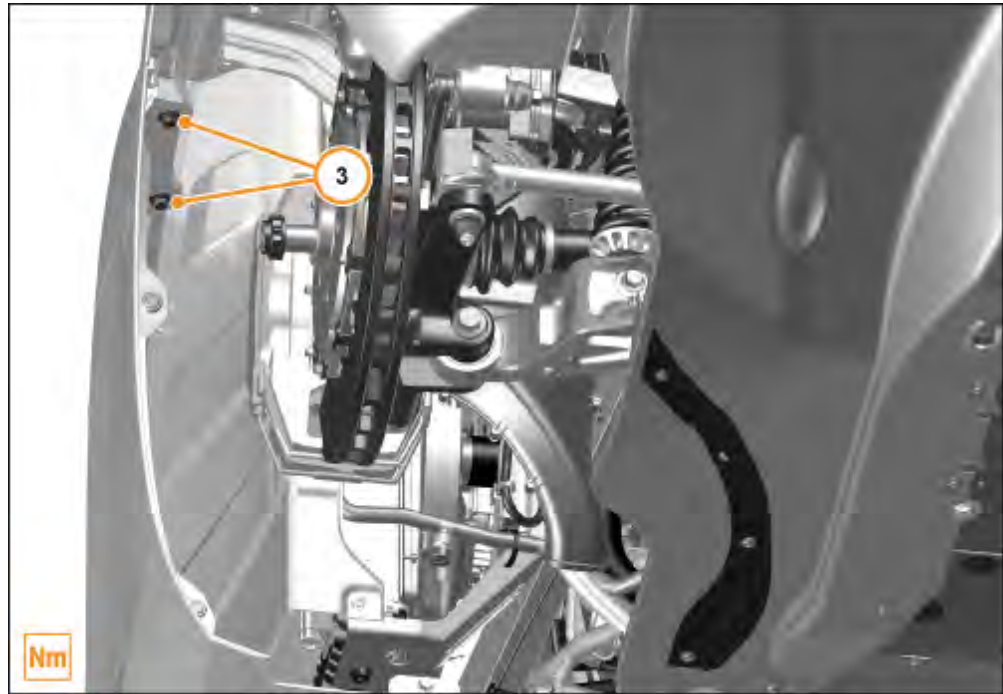
3. Prise out cover door shut (1).



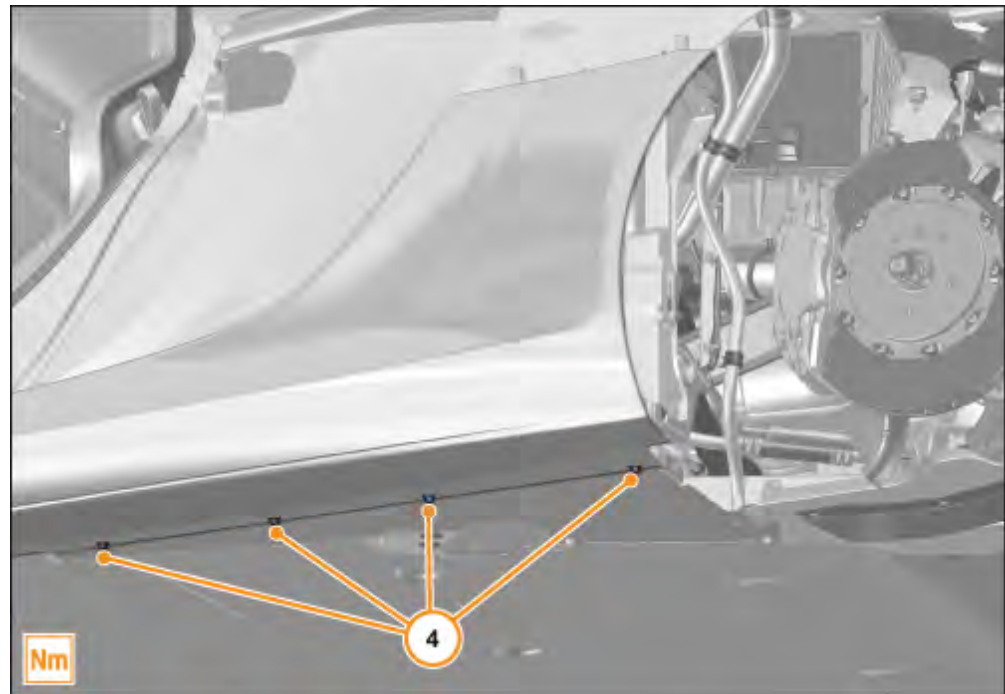
4.Remove bolts (2). M6 x 20 8 Nm



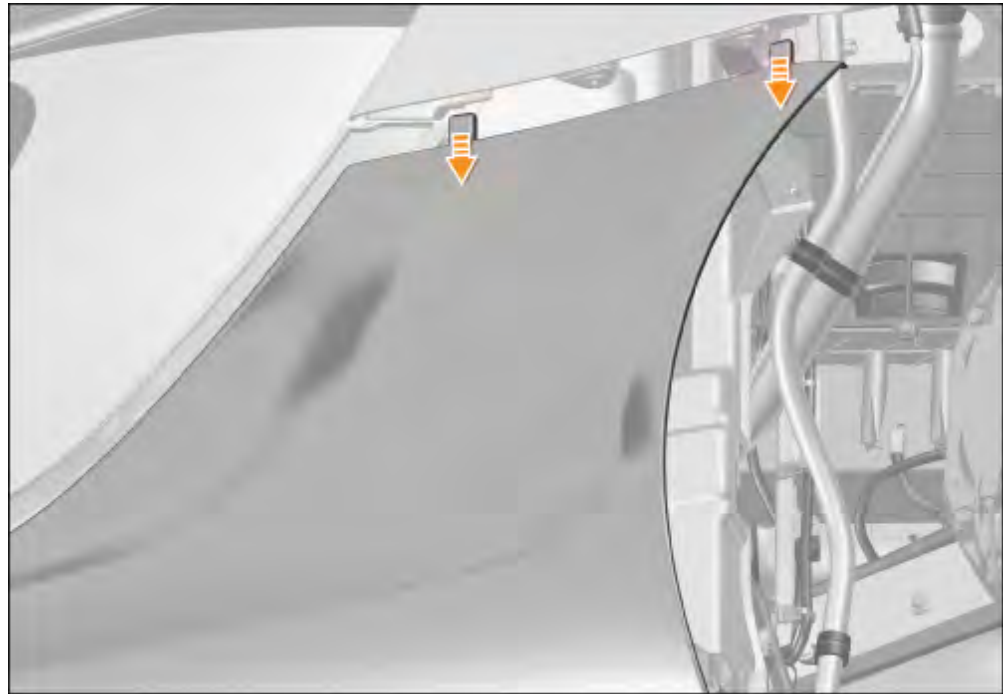
5.Remove bolts (3). M6 x 16 8 Nm



6.Remove bolts (4). M6 x 16 8 Nm



7.Remove bodyside lower rear (arrows).



Install bodyside lower - Rear

1. Install components in reverse order.

Instructions

FG02 Body Systems / A04 Panels Glazing Paint / Roof Panels Fenders Fuel Filler / AA-RM-02A04-03-010 - Remove/install panel - Side lower - Up to MY14

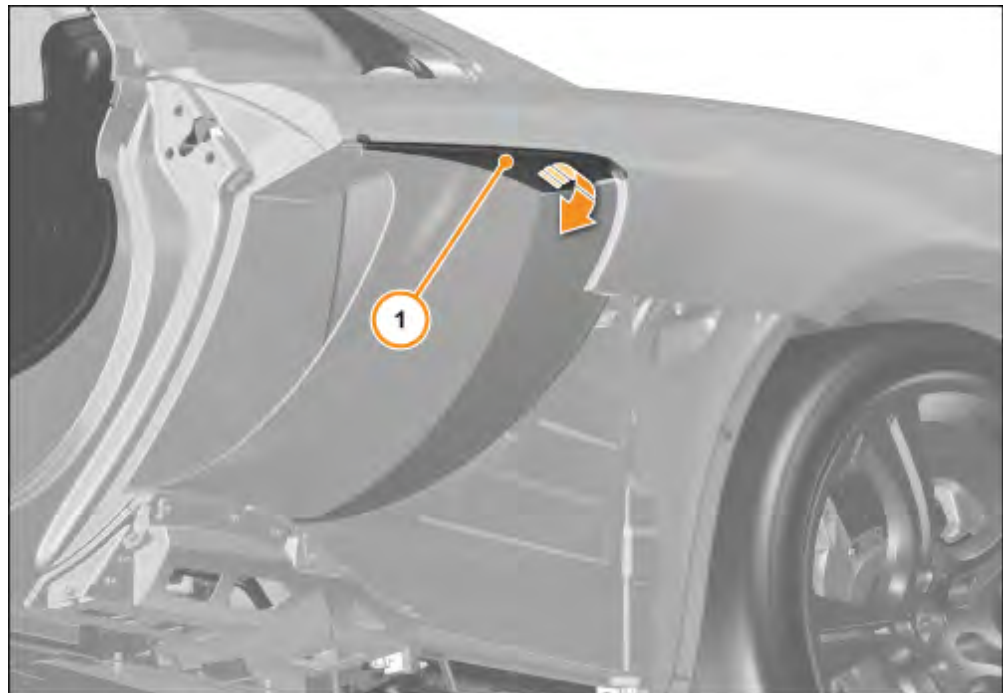
Preparation work

1. AA-RM-02A03-03-003 Remove/install cover door shut - rear lower
2. AA-RM-02A04-03-007 Remove/Install panel – bodyside rear lower.

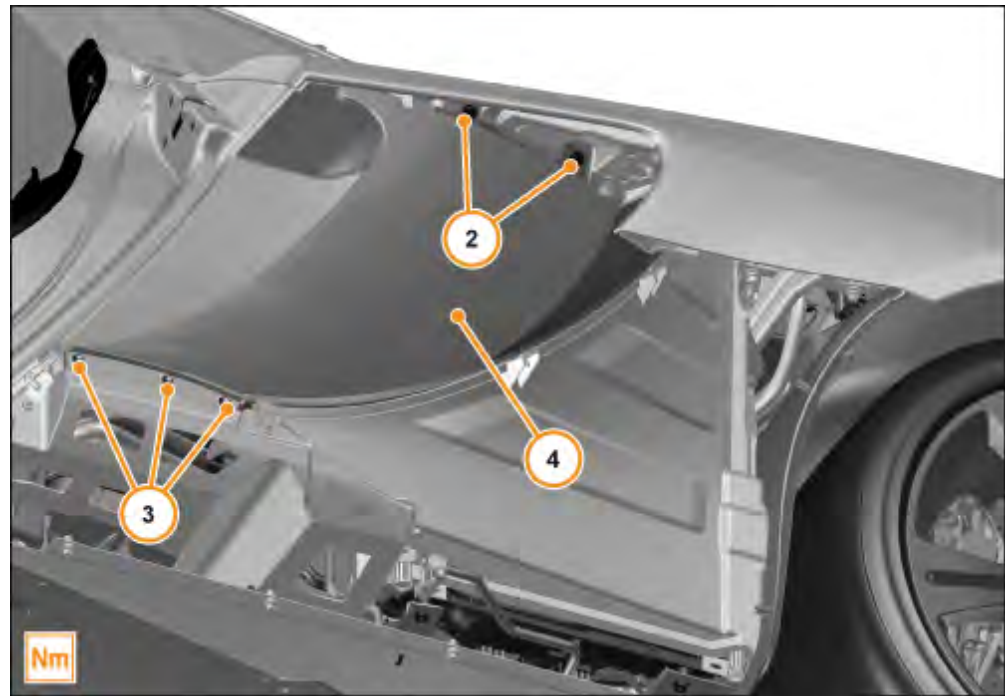
Remove panel - Side lower - Up to MY14

Care Point: Risk of paint damage.

1. Detach (arrow) cover (1).



- 2.Remove bolts (2). M10x20 5 Nm
- 3.Remove nuts (3). M6 6 Nm
- 4.Remove side lower panel (4).



Install panel - Side lower - Up to MY14

1. Install components in reverse order.

Torque settings

FG02 Body Systems / A04 Panels Glazing Paint / Roof Panels Fenders Fuel Filler / AA-RM-02A04-03-010 - Remove/install panel - Side lower - Up to MY14

Description	Dimension	Value
Bolt Panel - Side lower top	M10x20	5 Nm
Nut Panel - Side lower lower	M6	6 Nm

Instructions

FG02 Body Systems / A02 Exterior Trim Lighting Wipers / Finishers Badges Grilles Decals / AA-RM-02A02-02-005 - Remove/install radiator grille - Up to MY14

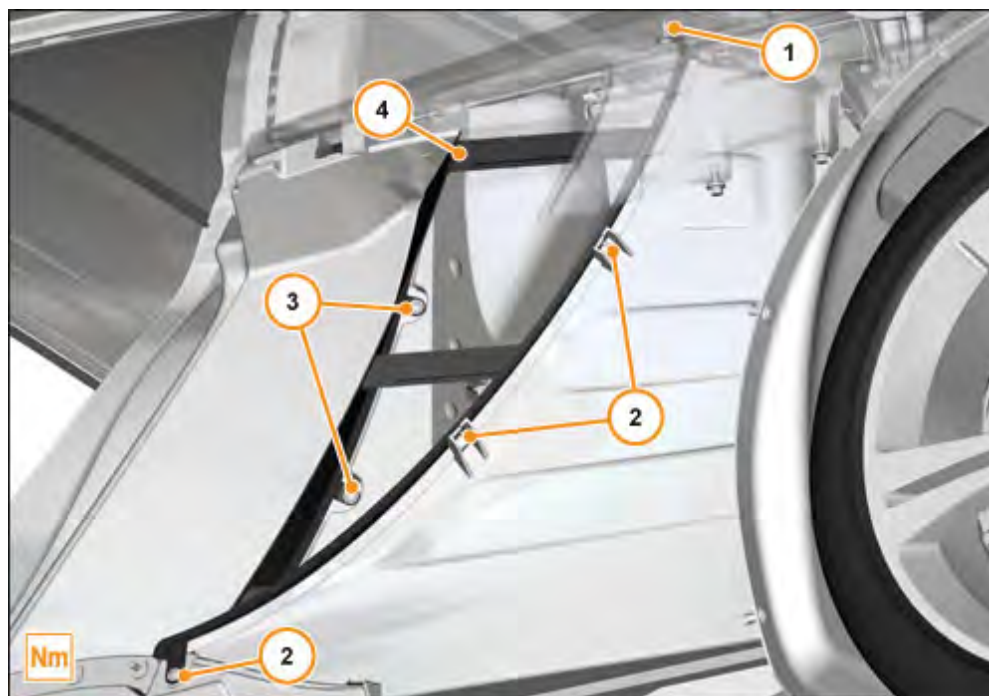
Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform.
2. AA-RM-03B03-01-001 Remove/Install wheels.
3. AA-RM-02A02-03-001 Remove/Install wheel arch liner – Rear.
4. AA-RM-02A03-03-003 Remove/install cover door shut - rear lower
5. AA-RM-02A04-03-007 Remove/Install panel – bodyside rear lower.
6. AA-RM-02A04-03-010 Remove/install panel - side lower

Remove radiator grille - Up to MY14

Care Point: Risk of paint damage.

- 1.Remove screw (1). M6 x 16 5 Nm
- 2.Remove button head screw (2). M6 x 16 5 Nm
- 3.Remove screw (3). 2 Nm
- 4.Remove radiator grille (4).



Install radiator grille - Up to MY14

1. Install components in reverse order.

Torque settings

FG02 Body Systems / A02 Exterior Trim Lighting Wipers / Finishers Badges Grilles Decals / AA-RM-02A02-02-005 - Remove/install radiator grille - Up to MY14

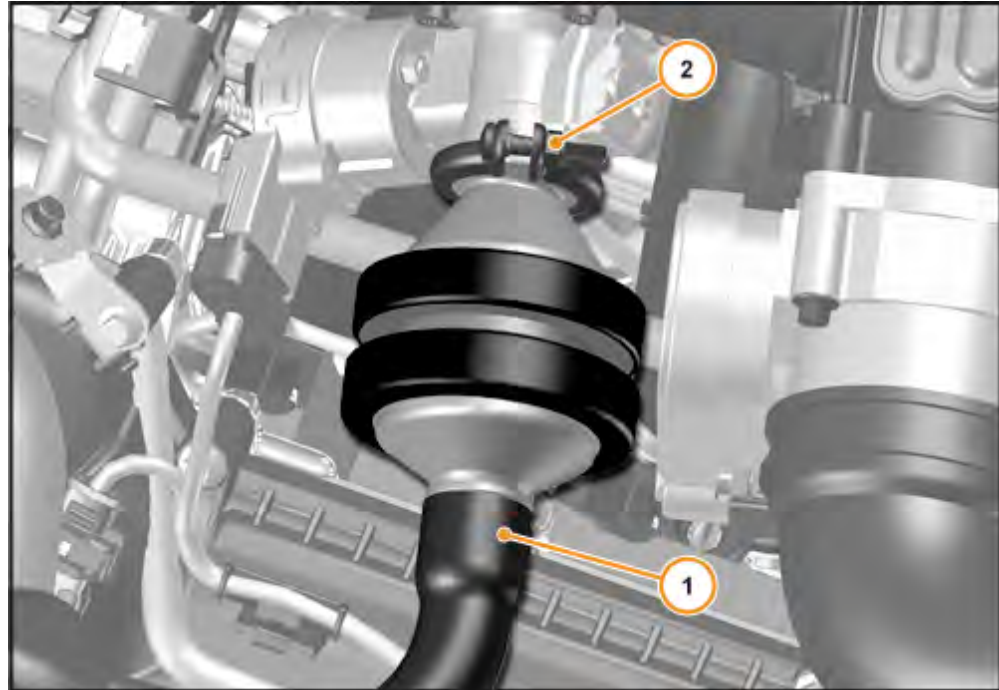
Description	Dimension	Value
Screw - Grille to Bodyside	M6 x 16	5 Nm
Button Head Screw - Grille to Rocker Panel	M6 x 16	5 Nm
Screw Grille - Radiator Duct		2 Nm

Instructions

FG04 Powertrain / F01 Power Unit / Power Unit / AA-RM-04F01-01-037 - Remove/Install engine intake sound generator

Remove engine intake sound generator

1. Remove inlet manifold cover.
2. Detach hose (1).
3. Remove clamp (2). M6 5 Nm
4. Remove engine intake sound generator.



Install engine intake sound generator

1. Install components in reverse order
2. Check functionality

Torque settings

FG04 Powertrain / F01 Power Unit / Power Unit / AA-RM-04F01-01-037 - Remove/Install engine intake sound generator

Description	Dimension	Value
Clamp - ISG to Throttle	M6	5 Nm

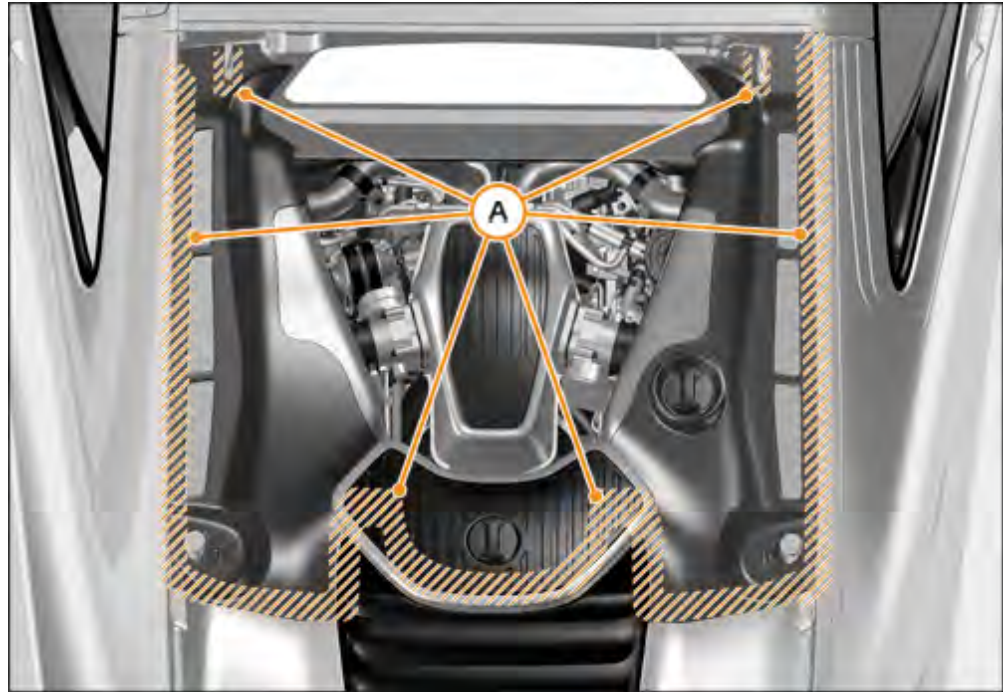
Instructions

FG02 Body Systems / A03 Closures / Engine Cover / AA-RM-02A03-04-005 - Remove/install engine compartment side cover

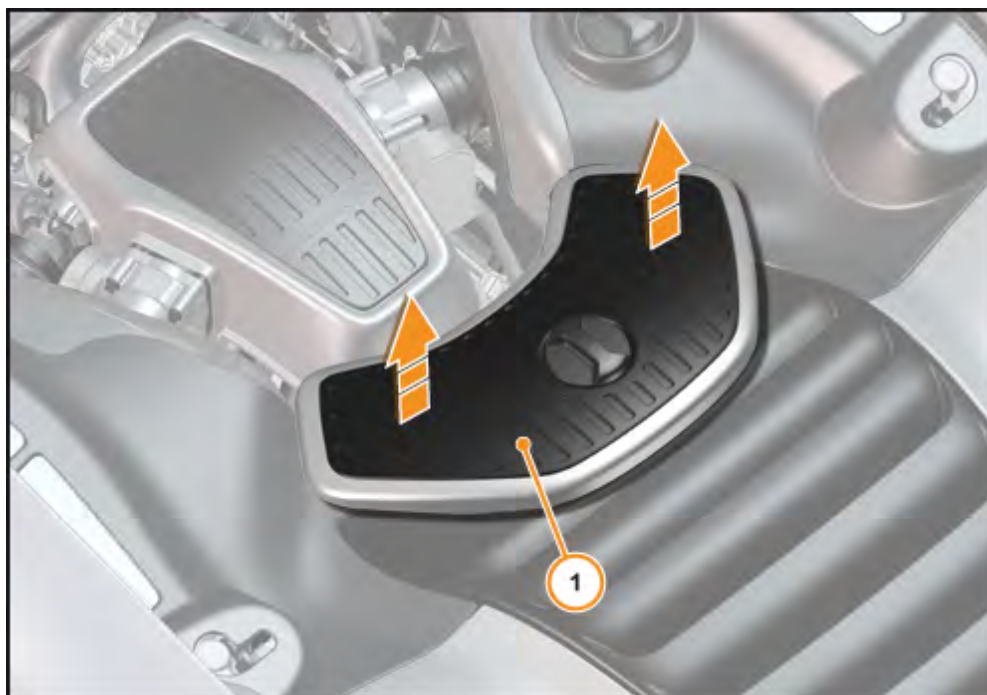
Remove cover

Care Apply tape in the following areas
Point: (A) on point of bodyside rears, rear deck, and engine side covers in gas strut hinge area.

1 Apply tape (A).



2 Remove cover (1).



Care Point: Ensure header tank clamps do not drop into the engine bay.

3 Remove bolts with washers (2). M6 x 16 6 Nm



Care Point: Use 10mm flexi-head ratchet spanner.

Care Point: Clamp is fitted between bracket and nut. Ensure this does not fall into the engine bay.

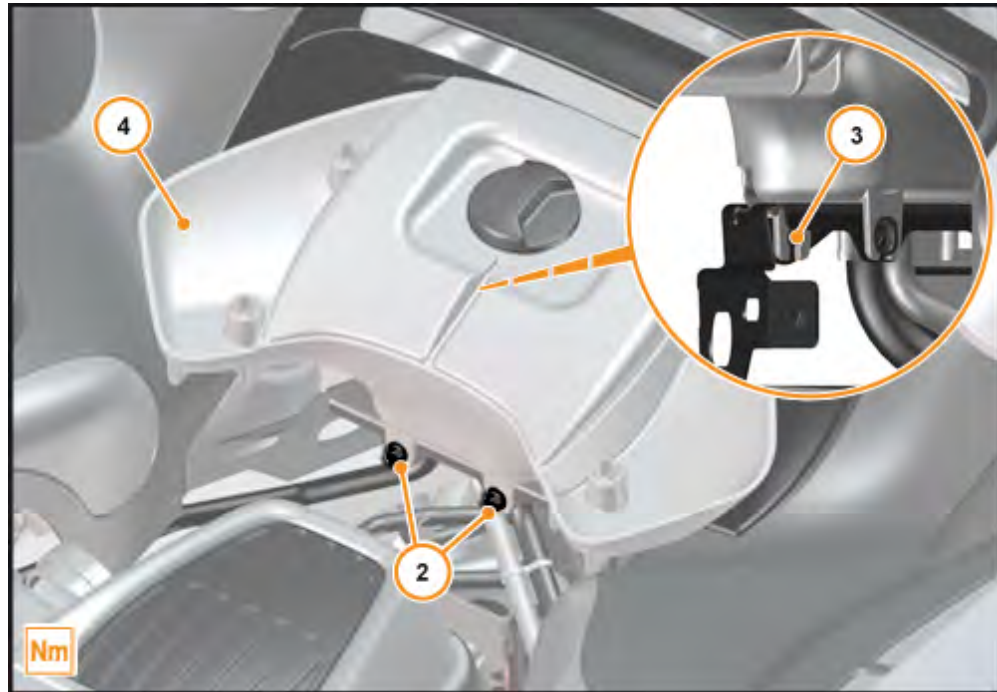
Care Point: Ensure grommet remains in place on header tank bracket.

4 Remove nut (3). M6 6 Nm



Care Point: Ensure that the hoses connected to the coolant reservoir do not become detached, put under high tension, or become damaged during detachment and rotation. Protect the area sufficiently before carrying out this step.

5 Move coolant reservoir (4) into raised position and turn 90°.



Care Point: Use second operator to hold engine cover.

Care Point: Remove gas strut and lower ball stud 10 Nm for side you want to remove.

6 Remove bolts (5). M6 x 16 4 Nm



7 Remove bolts (6). M6 x 12 5 Nm



Care Point: Risk of component damage.

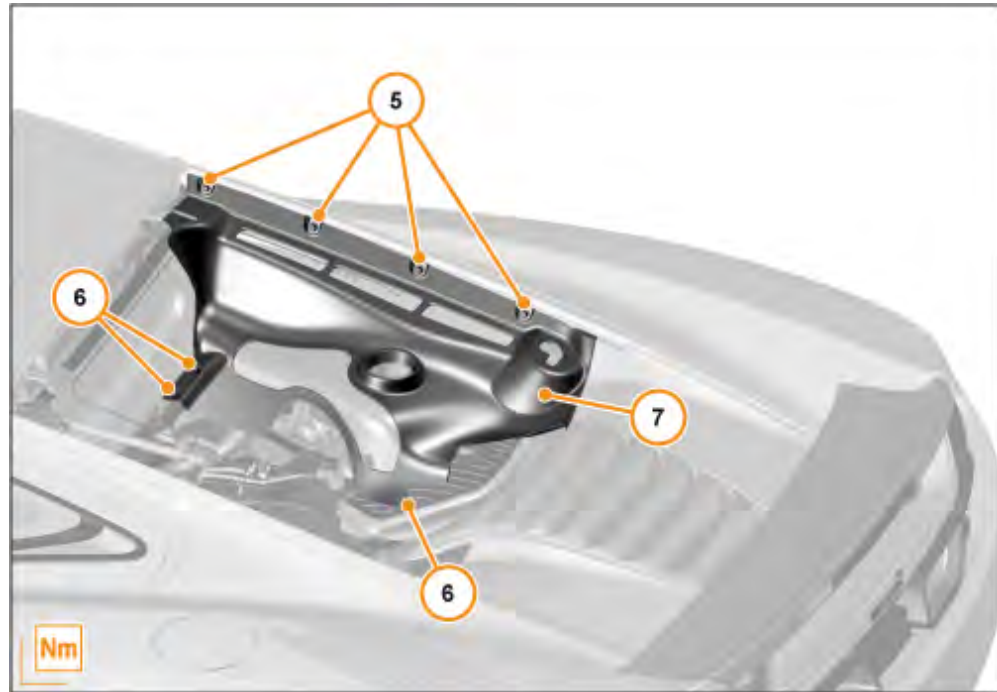
8 Remove engine compartment side cover (7).



9 Refit lower ball stud 10 Nm and gas strut.



10 Repeat steps 6 - 8 for opposite side.



Install engine compartment side cover

Care Point: Risk of component damage.

1. Install components in reverse order

Torque settings

FG02 Body Systems / A03 Closures / Engine Cover / AA-RM-02A03-04-005 - Remove/install engine compartment side cover

Description	Dimension	Value
Bolt Reservoir coolant - Bracket	M6 x 16	6 Nm
Nut Reservoir coolant - Bracket	M6	6 Nm

Ball stud - Engine Cover		10 Nm
Bolt Engine compartment side cover - Body	M6 x 16	4 Nm
Bolt Engine compartment side cover - Body	M6 x 12	5 Nm
Ball stud - Engine Cover		10 Nm

Instructions

FG04 Powertrain / F01 Power Unit / Power Unit / AA-RM-04F01-01-026 - Remove/install spark plug

Preparation work

1. AA-RM-02A04-04-007 Secure/lift vehicle on lifting platform
2. AA-RM-02A03-04-005 Remove/install side cover engine compartment cover



Risk of death from high voltages in the ignition system!

Electronic ignition systems operate within a hazardous power range both at the low voltage side (primary circuit) as well as on the high voltage side (secondary circuit). Contacts with such parts can result in burns, heart flutter or cardiac arrest. Persons with heart pacemakers must not perform any work on the ignition system.

Wear safety shoes (with rubber soles).

- Switch ignition off before commencing any work on the ignition system.
- Do not touch or dismantle components of ignition system when working on running or rotating engine with cranking speed.
- Detach the crankshaft position sensor connection either at the control unit or at the position sensor.
- Do not install any electrically conducting, uninsulated adapters or installation sensors into the ignition cable.



Risk of burning and fire when handling hot or glowing objects!

Unprotected contact with hot or glowing objects can cause severe burns to the skin and eyes. If glowing objects come into contact with water, hot steam or hot splashing water this can result in severe skin and eye burns. Severe and possibly permanent injuries can result if hot or glowing objects come into contact with unprotected skin or eyes. Fire can result if glowing objects come into contact with flammable materials or substances.

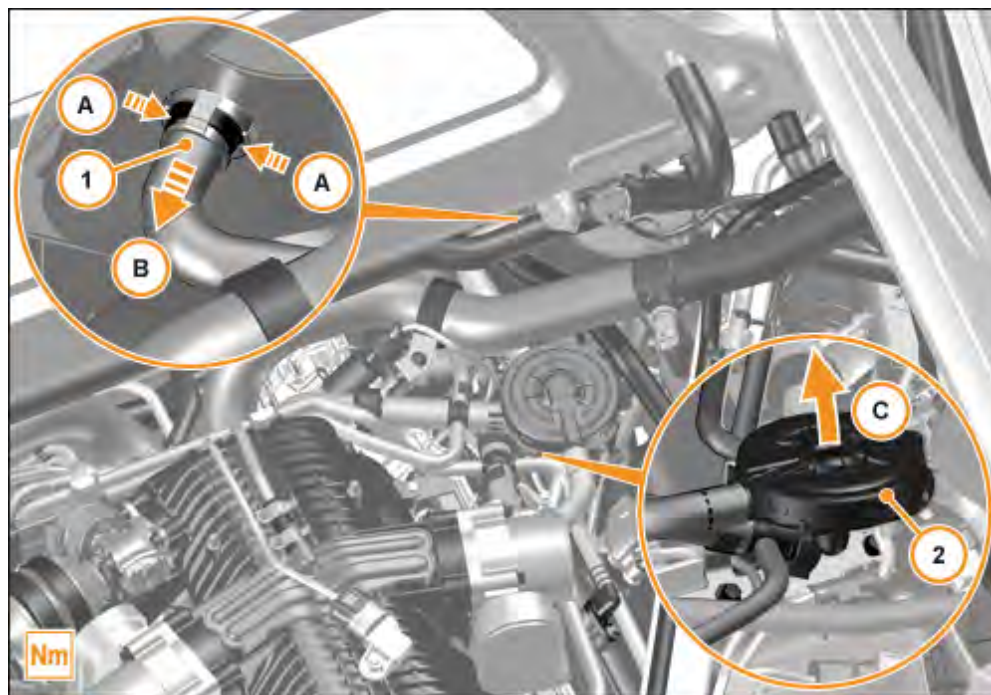
Wear protective clothing, safety glasses and heat resistant gloves.

- Avoid sparks and keep objects away from flammable materials and substances when handling glowing objects.

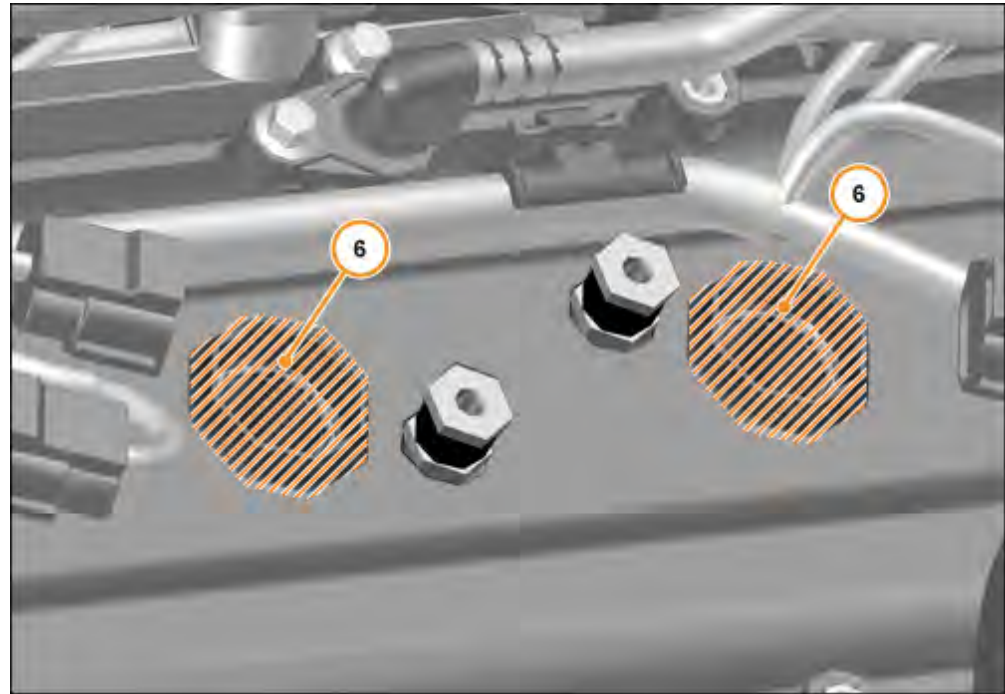
Care Allow hot parts to cool down first!
Point:

Remove spark plug

1. Detach crankcase ventilation hoses (1, A-B) from the oil tank.
2. Move crankcase breather (2) in direction (C).



3.Note overview of cylinder sequence 1 - 8.



Care Point: Must remove bolts (4) for ignition coils 4 and 8 before disconnect happens.

Care Point: To remove ignition coils (7) 4 and 8, once bolt (4) is removed turn 180° to disconnect electrical connectors (3).

Care Point: Remove ignition coils (7) 4 and 8 first to allow better access to disconnect ignition coils (7) 3 and 7.

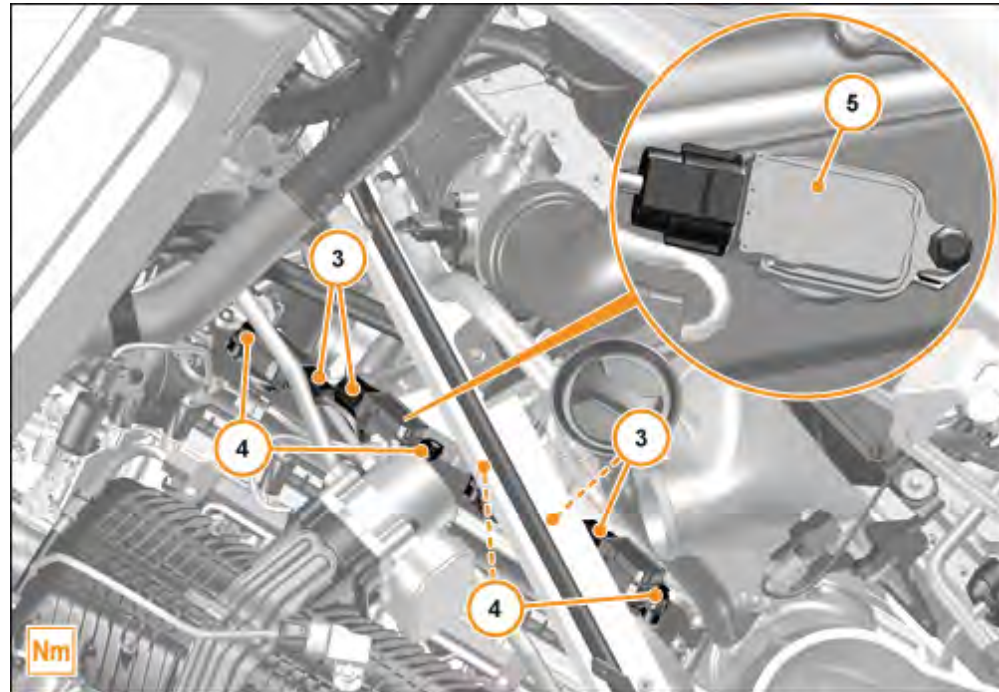
4. Disconnect electrical connectors (3).

Care Point: To remove bolt under frame for ignition coils (7) 3 and 7 access bolts from opposite side of vehicle with a magnetic socket.

5. Remove bolt (4). M6 x 20 6 Nm

Care Point: Prevent debris from falling in whilst selecting tools for spark plug removal.

6. Remove ignition coil (5).



**Care
Point:**

For spark plugs in position 1 and 5 the following tools are required:

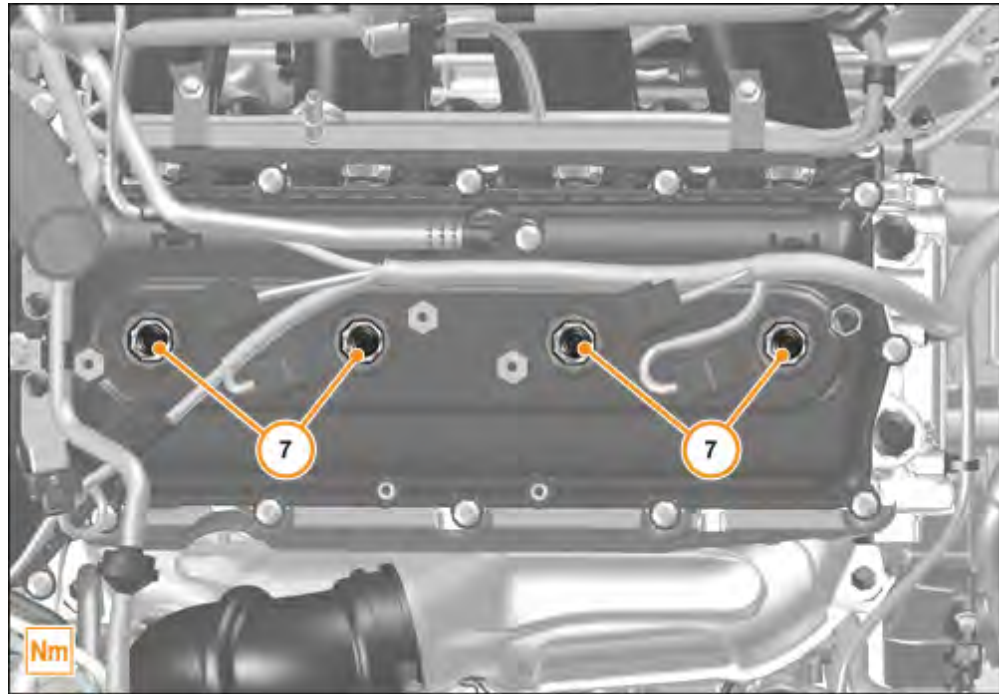
bent handle flexi head 3/8" drive ratchet with 6" locking extension
14mm spark plug socket that is either magnetic or has an interference fit

For all the remaining 6 spark plugs the following tools are required:

bent handle flexi head ratchet with 2" locking extension
universal joint
14mm spark plug socket that is either magnetic or has an interference fit

**Care
Point:**

Prevent debris from falling in whilst selecting tools for spark plug (7) removal.



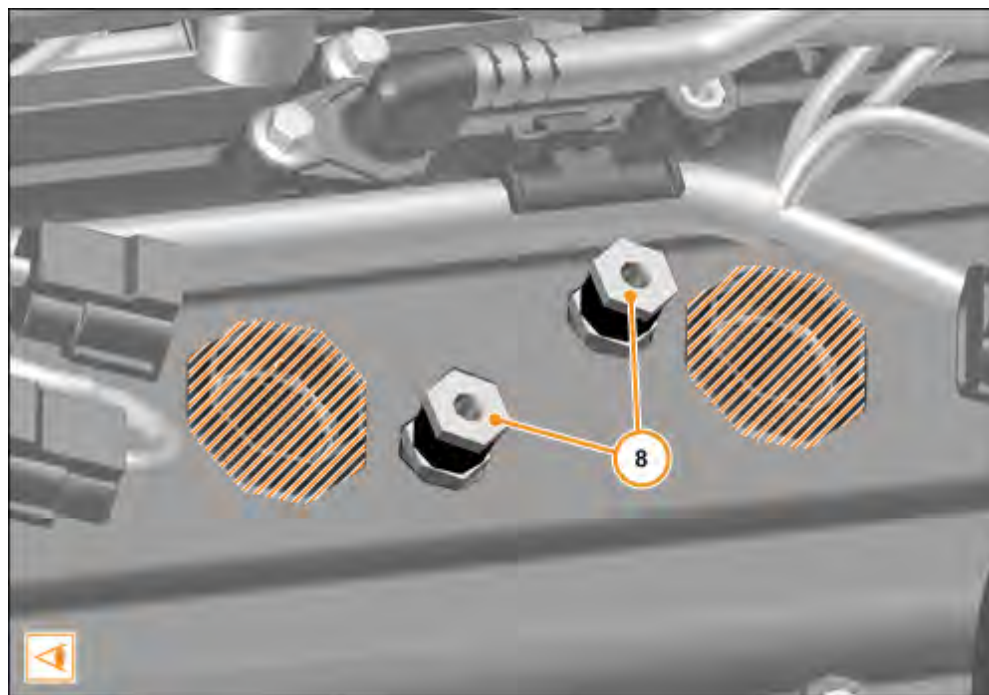
7. Remove spark plugs (7). NGK T20231A HR8
18 Nm

8. Cover holes with masking tape (6).

Install spark plug

Care Point: Ensure AV mount is tightend using the bottom hex head.

1. Replace ignition coil AV mount (8)



2. Check electrode distance (arrow) before you install the spark plugs (7).

Care Point: Check engine functions correctly with no misfires before installing engine side covers.

Care Point: Please follow the sequence when installing the ignition coil:

1. Ensure correct fittment of plug.
2. Rotate coil 90 degrees clockwise while applying firm downward pressure.
3. Rotate 180 degrees anti clockwise while applying firm downward pressure.
4. Rotate 90 degrees anti clockwise to sit above engine mount.

3. Install components in reverse order.

4. Read-out, delete error memory.



Torque settings

FG04 Powertrain / F01 Power Unit / Power Unit / AA-RM-04F01-01-026 - Remove/install spark plug

Description	Dimension	Value
Bolt Ignition coil - mount	M6 x 20	6 Nm
Spark plug	NGK T20231A HR8	18 Nm

Service sheet : Mileage Dependent Tasks

Please refer to this mileage chart against vehicle odometer reading whilst carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: Task specific
Address :		Invoice / Job no:

Engine compartment

Replace clutch oil and filter (Every 30,000km only or 20,000 miles only)	0.5 units
Replace transmission oil and clean filter (Every 60,000 km or 40,000 miles only)	0.5 units
Replace engine spark plugs (Every 90,000 km or 60,000 miles only)	2.8 units
Replace fuel system filter (Every 90,000 km or 60,000 miles only)	8.2 units
Clean out condensor area (Every 90,000 km or 60,000 miles only)	1.1 units

Associated Documents

Document Number	Document Title
AA-RM-02A03-04-006	Remove/install side cover - Engine compartment cover
AA-RM-02A04-04-008	Remove/install transmission floor panel
AA-RM-04G01-01-015	Drain and refill - Clutch fluid
AA-RM-04G01-01-017	Remove/install filter - Clutch fluid
AA-RM-04G01-01-014	Remove/install fluid - Transmission
AA-RM-04G01-01-016	Remove/install filter - Transmission fluid
AA-RM-04F01-01-026	Remove/install Spark plug
AA-RM-02A02-02-005	Remove/install Radiator grille
AA-RM-03K01-01-001	Remove/install Fuel filter

Consumables / Sundries

Comments

Technician Name:

Technician Signature:

Dealer Stamp:

Printed copy is not controlled

Service sheet : 1st year or 15,000 km (10,000 miles)

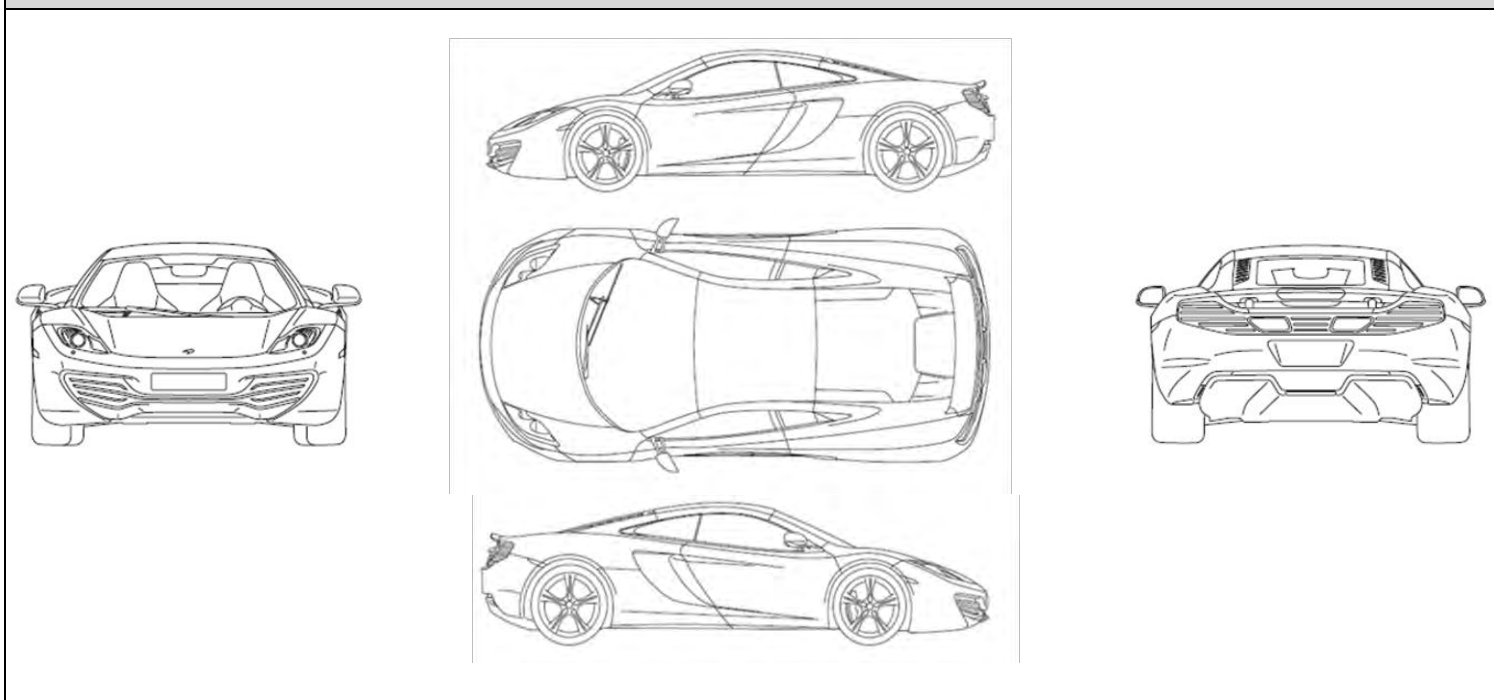
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 5.85 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)


Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Check cabin filter (replace as required) - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, fascia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Check EPB (Electronic Parking Brake) pads (replace if required)	☐	☐	
7.4 Check brake system for routing, leaks, and damage (bleed brakes if required)	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.6 while oil is draining)	Completed	Not Completed	Comments
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Check/clean air filter elements (replace as required) - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check transmission and clutch fluids are not overfilled	☐	☐	
9.5 Check front lower exhaust manifold nuts/studs and exhaust manifold	☐	☐	
9.6 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	
Technician Signature:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 2nd year or 30,000 km (20,000 miles)

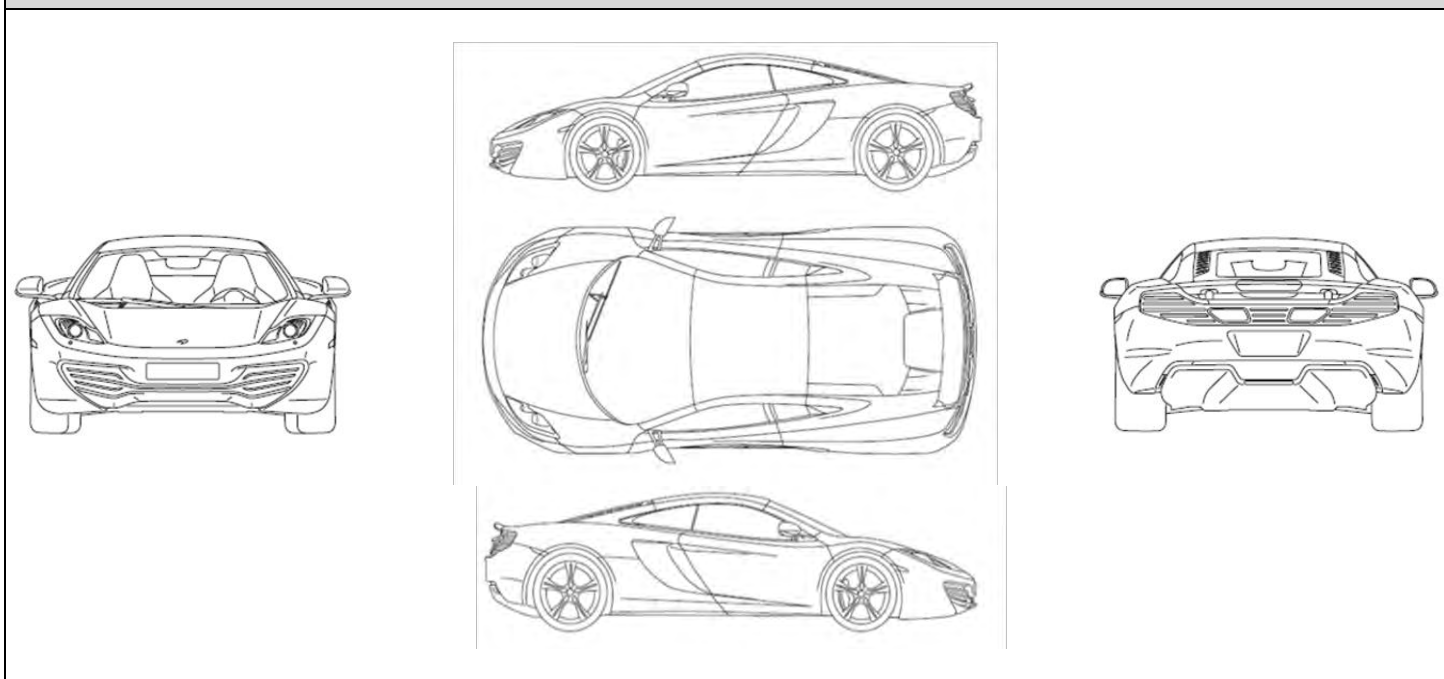
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 6.8 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)


Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Replace cabin filter - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Bleed brake fluid system as required (while servicing) - Ref. AA-RM-03C01-01-005	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, fascia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Replace electronic parking brake pads (every 2 years) - Ref. AA-RM-03C02-01-001	☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.6 while oil is draining)	Completed	Not Completed	Comments
Replace clutch oil and filter (Every 30,000km or 20,000 miles only)			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Replace air filter - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.5 Check transmission and clutch fluids (when mileage is not achieved) are not overfilled	☐	☐	
9.6 Replace clutch oil and filter (only if mileage achieved) - Ref. AA-RM-04G01-01-015/021	☐	☐	
9.7 Visually check condensor area for debris	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and re-check level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Replace wheel nut bolts	☐	☐	
12.3 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.12 and 7.4	AA-RM-03C01-01-005	Fill/bleed fluid - Brake system
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.3	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
7.3	AA-RM-03C02-01-001	Remove/install pads - parking brake
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.7	AA-RM-04G01-01-015	Remove/install fluid - Transmission / Clutch
9.7	AA-RM-04G01-01-017	Remove/install filter - Transmission / Clutch fluid
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	
Technician Signature:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 3rd year or 45,000 km (30,000 miles)

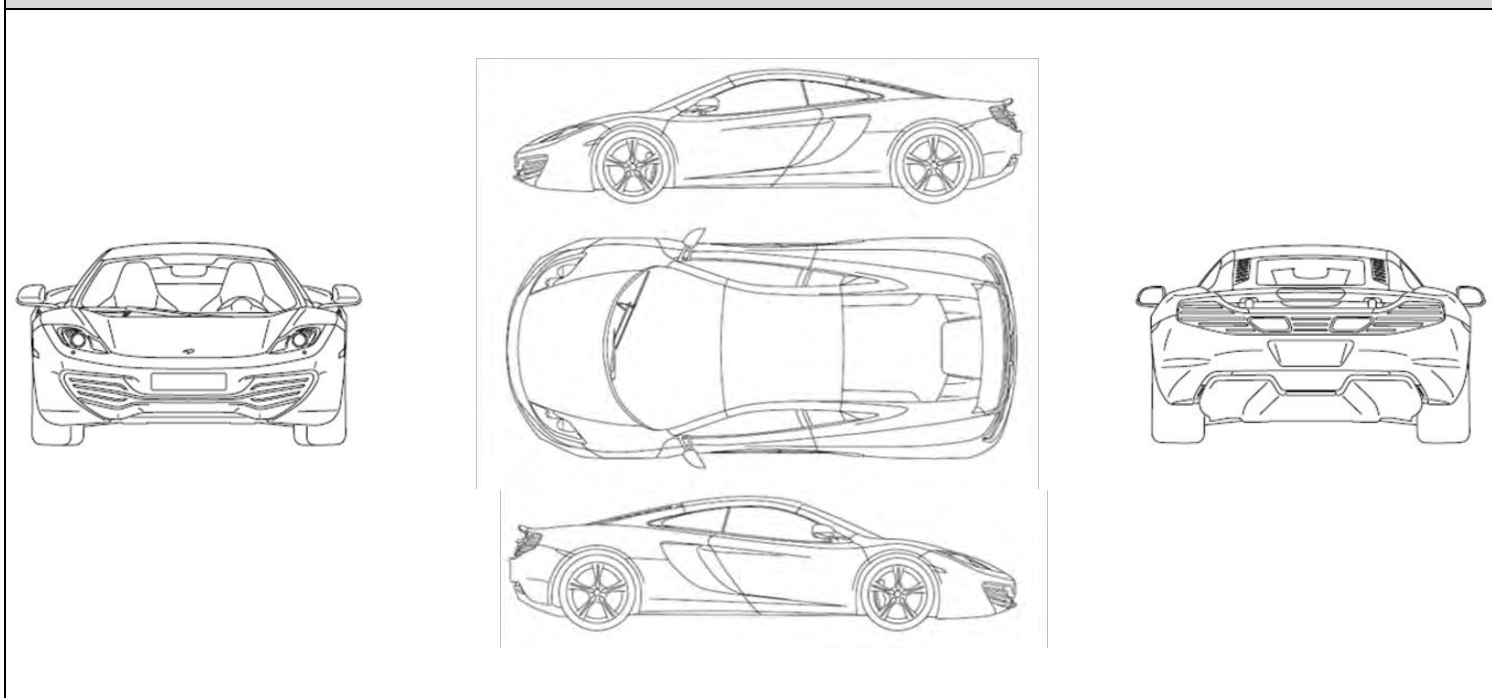
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 6.55 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)


Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Check cabin filter (replace as required) - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, fascia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Check EPB (Electronic Parking Brake) pads (replace if required)	☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.6 while oil is draining)	Completed	Not Completed	Comments
Replace cooling system fluid			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Check/clean air filter elements (replace as required) - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check transmission and clutch fluids are not overfilled	☐	☐	
9.5 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.6 Replace cooling system fluid - Ref. AA-RM-03L01-01-005	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Check expiry dates of fire extinguisher/tyre inflation kit (if fitted)	☐	☐	
15.5 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.6 Report and rectify all recorded defects	☐	☐	
15.7 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.7	AA-RM-03L01-01-005	Drain and refill cooling system
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	
Technician Signature:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 4th year or 60,000 km (40,000 miles)

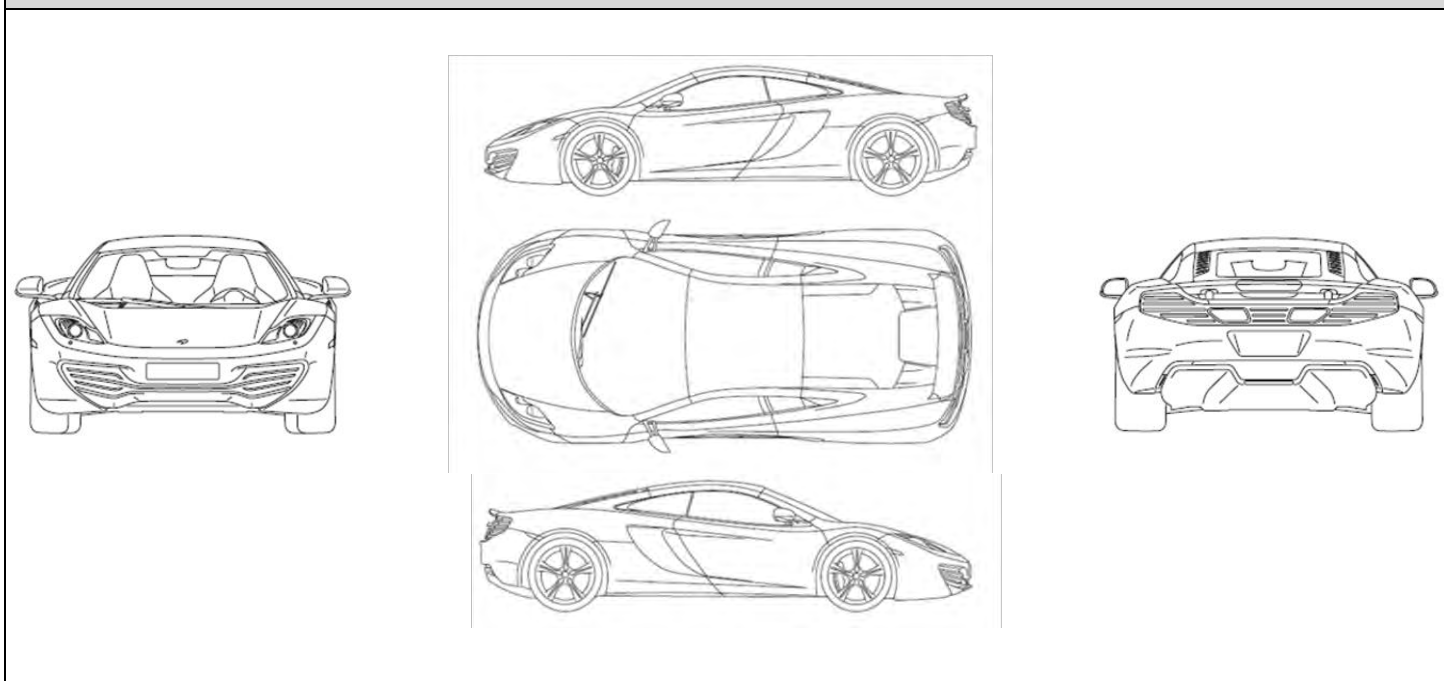
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 6.8 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)



Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Replace cabin filter - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Bleed brake fluid system as required (while servicing) - Ref. AA-RM-03C01-01-005	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, facia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Replace electronic parking brake pads (every 2 years) - Ref. AA-RM-03C02-01-001	☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.7 while oil is draining)	Completed	Not Completed	Comments
Replace clutch oil and filter (Every 30,000km or 20,000 miles only)			
Replace transmission oil and clean filter (Every 60,000 km or 40,000 miles only)			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Replace air filter - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.5 Check transmission and clutch fluids (when mileage is not achieved) are not overfilled	☐	☐	
9.6 Replace clutch oil and filter (only if mileage achieved) - Ref. AA-RM-04G01-01-015/021	☐	☐	
9.7 Replace transmission oil / clean filter (only if mileage achieved) - Ref. AA-RM-04G01-01-014/016	☐	☐	
9.8 Visually check condensor area for debris	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and re-check level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Replace wheel nut bolts	☐	☐	
12.3 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.12 and 7.4	AA-RM-03C01-01-005	Fill/bleed fluid - Brake system
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.3	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
7.3	AA-RM-03C02-01-001	Remove/install pads - parking brake
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.6	AA-RM-04G01-01-015	Drain and refill - Clutch fluid
9.6	AA-RM-04G01-01-017	Remove/install filter - Clutch fluid
9.7	AA-RM-04G01-01-014	Drain and refill - Transmission Fluid
9.7	AA-RM-04G01-01-016	Remove/install filter - Transmission fluid
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	
Technician Signature:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 5th year or 75,000 km (50,000 miles)

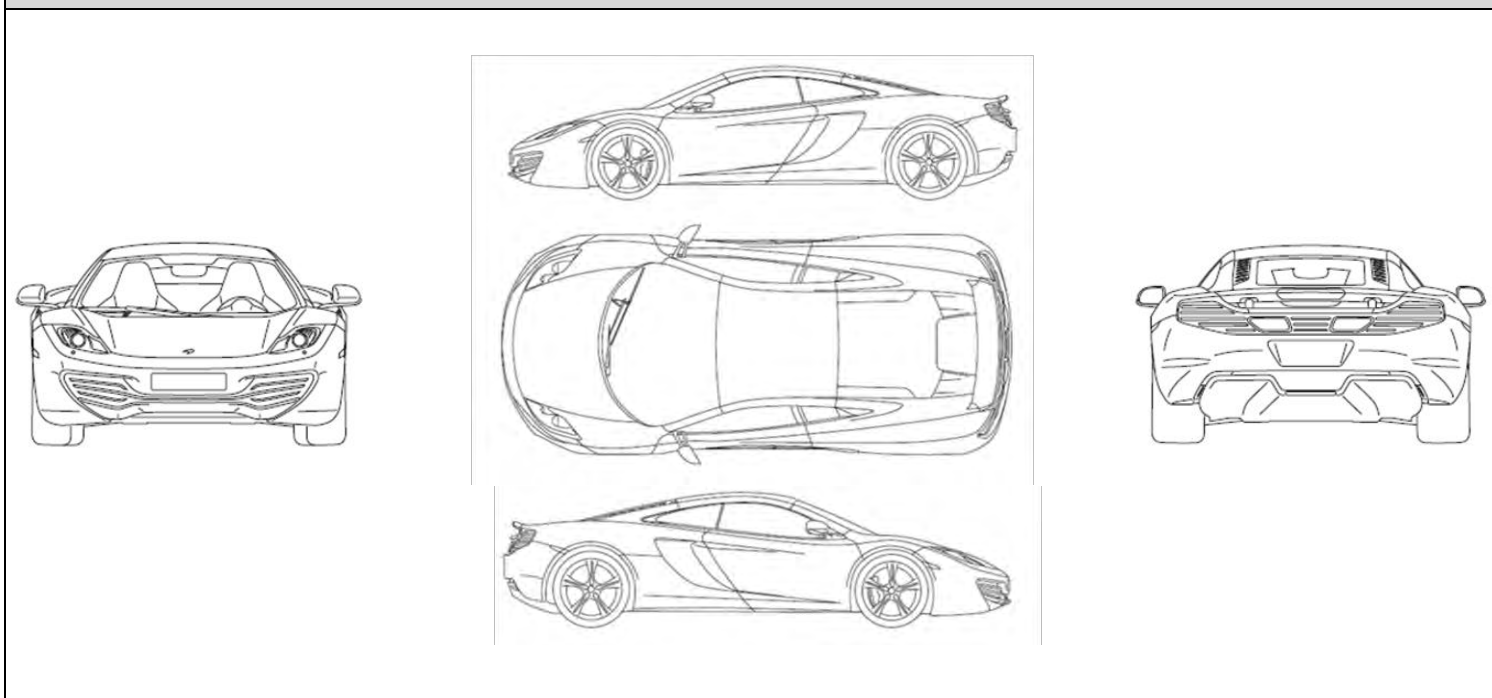
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 5.85 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)



Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Check cabin filter (replace as required) - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, fascia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Check EPB (Electronic Parking Brake) pads (replace if required)	☐	☐	
7.4 Check brake system for routing, leaks, and damage (bleed brakes if required)	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.5 while oil is draining)	Completed	Not Completed	Comments
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Check/clean air filter elements (replace as required) - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check transmission and clutch fluids are not overfilled	☐	☐	
9.5 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 6th year or 90,000 km (60,000 miles)

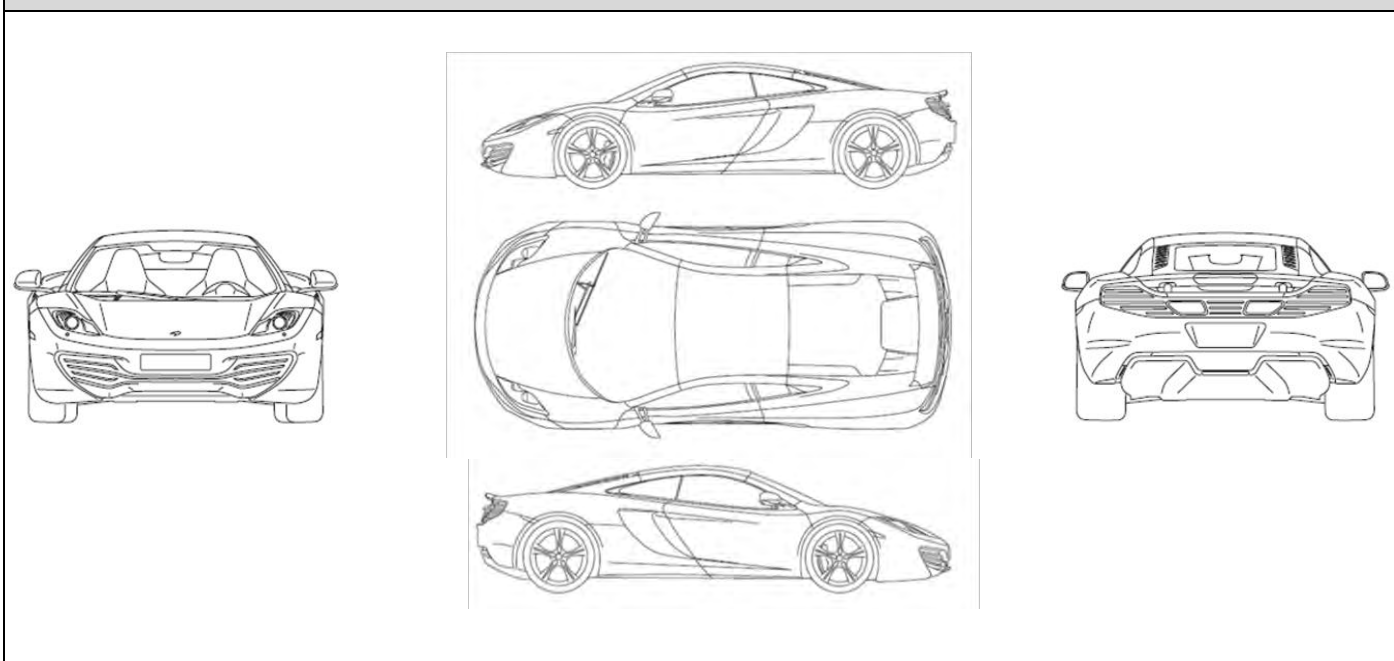
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 7.65 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)


Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Replace cabin filter - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, facia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	
7.0 - Remove wheels - Ref. AA-RM-03B03-01-001					Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)					☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006					☐	☐	
7.3 Replace electronic parking brake pads (every 2 years) - Ref. AA-RM-03C02-01-001					☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005					☐	☐	
7.5 Check/clean air ducts of brake system					☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008					Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)					☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)					☐	☐	
8.3 Check all visible steering components for leaks and damage					☐	☐	
8.4 Check engine mounts					☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)					☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002					☐	☐	
8.7 Check condition of drive shafts					☐	☐	

9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.8 while oil is draining)	Completed	Not Completed	Comments
Replace clutch oil and filter (Every 30,000km or 20,000 miles only)			
Replace fuel system filter (Every 90,000 km or 60,000 miles only)			
Replace cooling system fluid			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Replace air filter - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.5 Check transmission and clutch fluids (when mileage is not achieved) are not overfilled	☐	☐	
9.6 Replace cooling system fluid - Ref. AA-RM-03L01-01-005	☐	☐	
9.7 Replace clutch oil and filter (only if mileage achieved) AA-RM-04G01-01-015/021	☐	☐	
9.8 Replace fuel system filter (only if mileage achieved) - Ref. AA-RM-03K01-01-001	☐	☐	
9.9 Visually check condensor area for debris	☐	☐	
9.10 Clean out condensor area (only if mileage achieved) - Ref. AA-RM-02A02-02-005	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Replace wheel nut bolts	☐	☐	
12.3 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
Replace engine spark plugs (Every 90,000 km or 60,000 miles only)			
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Replace engine spark plugs (only if mileage achieved) - Ref. AA-RM-04F01-01-026	☐	☐	
13.6 Check injection/ignition system connections and harness	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Check expiry dates of fire extinguisher/tyre inflation kit (if fitted)	☐	☐	
15.5 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.6 Report and rectify all recorded defects	☐	☐	
15.7 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
7.3	AA-RM-03C02-01-001	Remove/install pads - Parking brake
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.6	AA-RM-03L01-01-005	Drain and refill cooling system
9.7	AA-RM-04G01-01-015	Drain and refill - Clutch fluid
9.7	AA-RM-04G01-01-017	Remove/install filter - Clutch fluid
9.8	AA-RM-03K01-01-001	Remove/install fuel filter
9.10	AA-RM-02A02-02-005	Remove/install Radiator grille
10.1	AA-RM-04F02-01-003	Remove/install oil filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.5	AA-RM-04F01-01-026	Remove/install spark plug
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries

Comments

Technician Name:

Technician Signature:

Dealer Stamp:

Printed copy is not controlled

Service sheet : 7th year or 105,000 km (70,000 miles)

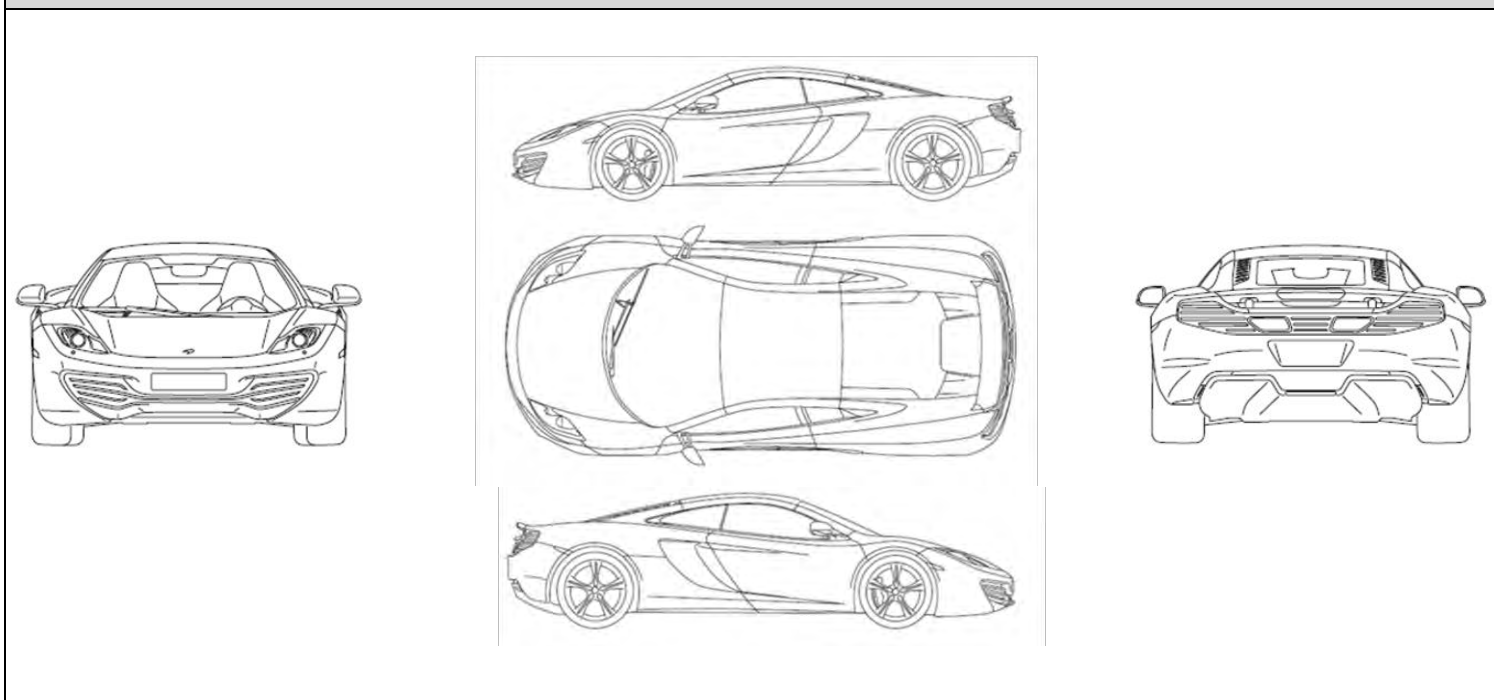
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 5.85 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)


Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Check cabin filter (replace as required) - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, fascia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Check EPB (Electronic Parking Brake) pads (replace if required)	☐	☐	
7.4 Check brake system for routing, leaks, and damage (bleed brakes if required)	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.5 while oil is draining)	Completed	Not Completed	Comments
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Check/clean air filter elements (replace as required) - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check transmission and clutch fluids are not overfilled	☐	☐	
9.5 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	
Technician Signature:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 8th year or 120,000 km (80,000 miles)

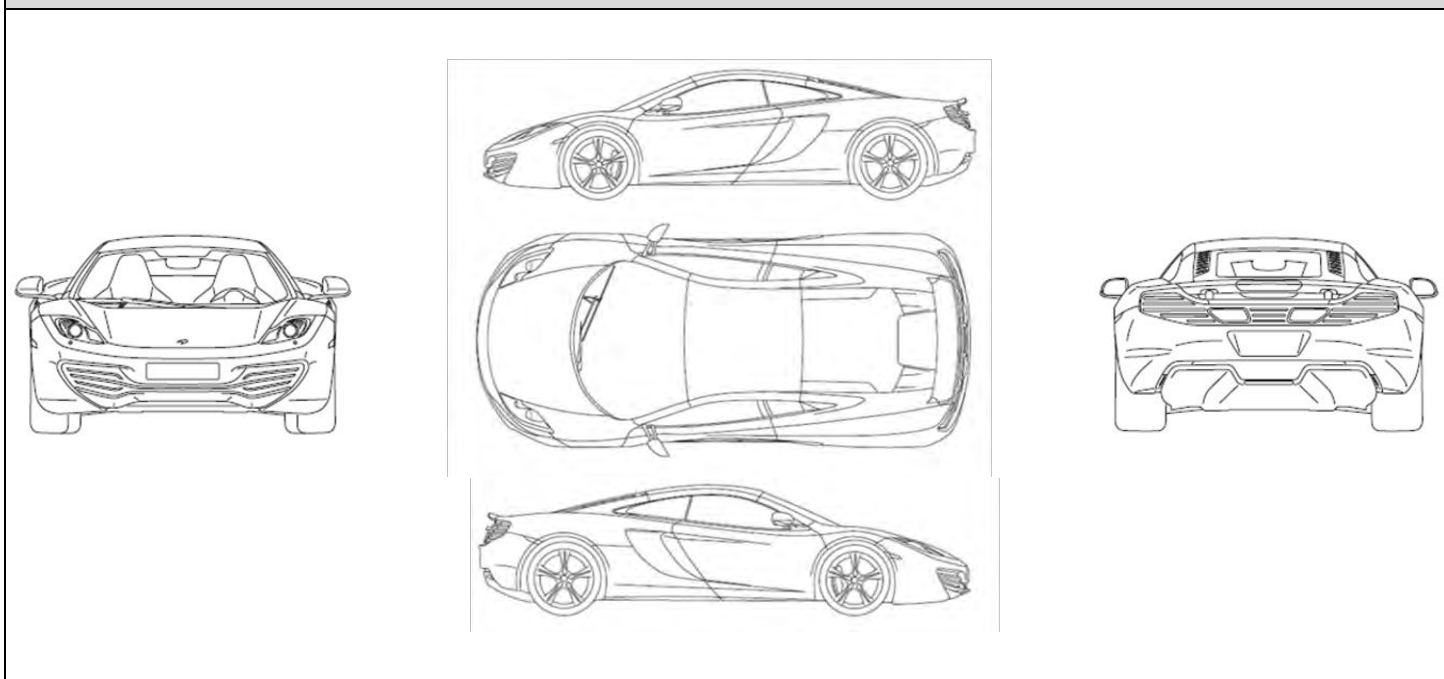
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 6.8 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)



Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Replace cabin filter - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Bleed brake fluid system as required (while servicing) - Ref. AA-RM-03C01-01-005	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, facia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Replace electronic parking brake pads (every 2 years) - Ref. AA-RM-03C02-01-001	☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.7 while oil is draining)	Completed	Not Completed	Comments
Replace clutch oil and filter (Every 30,000km or 20,000 miles only)			
Replace transmission oil and clean filter (Every 60,000 km or 40,000 miles only)			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Replace air filter - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.5 Check transmission and clutch fluids (when mileage is not achieved) are not overfilled	☐	☐	
9.6 Replace clutch oil and filter (only if mileage achieved) - Ref. AA-RM-04G01-01-015/021	☐	☐	
9.7 Replace transmission oil / clean filter (only if mileage achieved) - Ref. AA-RM-04G01-01-014/016	☐	☐	
9.8 Visually check condensor area for debris	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and re-check level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Replace wheel nut bolts	☐	☐	
12.3 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.12 and 7.4	AA-RM-03C01-01-005	Fill/bleed fluid - Brake system
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.3	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
7.3	AA-RM-03C02-01-001	Remove/install pads - parking brake
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.6	AA-RM-04G01-01-015	Drain and refill - Clutch fluid
9.6	AA-RM-04G01-01-017	Remove/install filter - Clutch fluid
9.7	AA-RM-04G01-01-014	Drain and refill - Transmission Fluid
9.7	AA-RM-04G01-01-016	Remove/install filter - Transmission fluid
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	
Technician Signature:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 9th year or 135,000 km (90,000 miles)

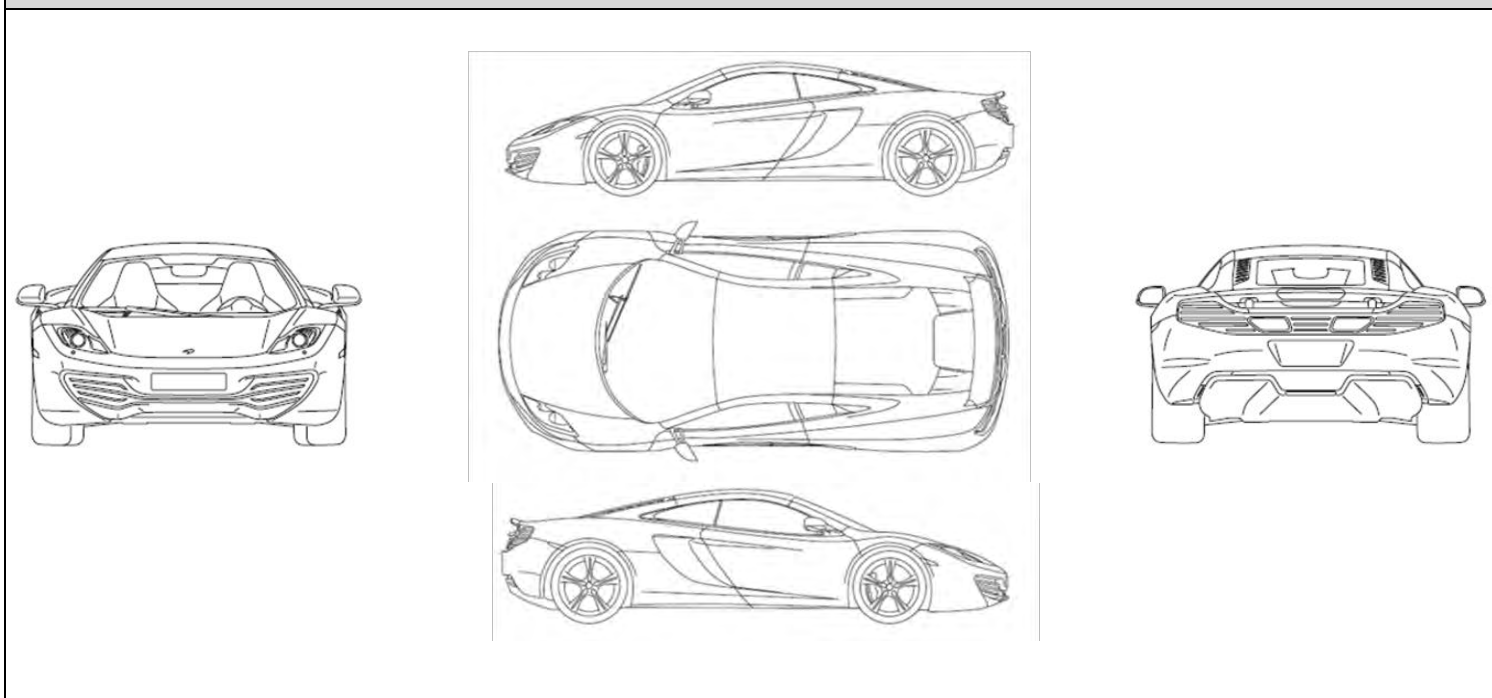
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 6.55 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)


Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Check cabin filter (replace as required) - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, fascia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Check EPB (Electronic Parking Brake) pads (replace if required)	☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.6 while oil is draining)	Completed	Not Completed	Comments
Replace cooling system fluid			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Check/clean air filter elements (replace as required) - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check transmission and clutch fluids are not overfilled	☐	☐	
9.5 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.6 Replace cooling system fluid - Ref. AA-RM-03L01-01-005	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Check expiry dates of fire extinguisher/tyre inflation kit (if fitted)	☐	☐	
15.5 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.6 Report and rectify all recorded defects	☐	☐	
15.7 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.6	AA-RM-03L01-01-005	Drain and refill cooling system
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	Dealer Stamp:
Technician Signature:	

Printed copy is not controlled

Service sheet : 10th year or 150,000 km (100,000 miles)

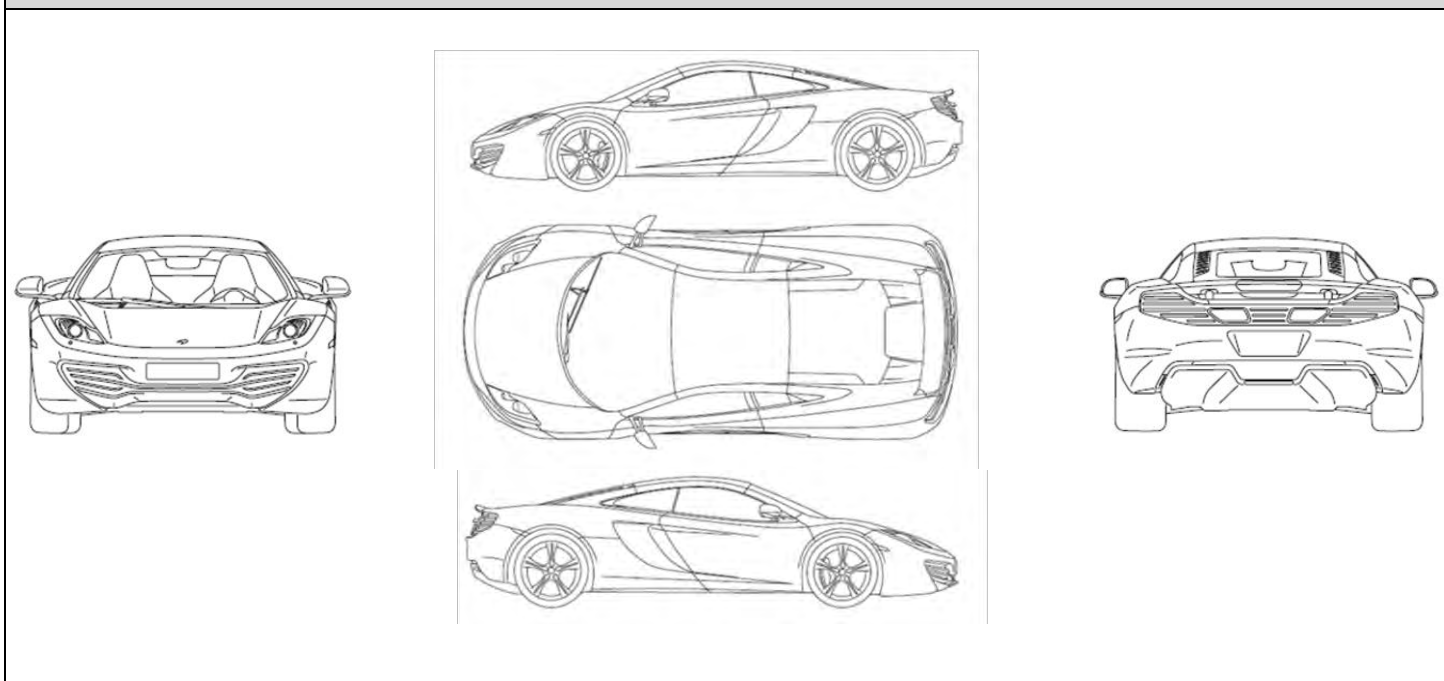
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 6.8 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)



Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Replace cabin filter - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Bleed brake fluid system as required (while servicing) - Ref. AA-RM-03C01-01-005	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, facia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Replace electronic parking brake pads (every 2 years) - Ref. AA-RM-03C02-01-001	☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.6 while oil is draining)	Completed	Not Completed	Comments
Replace clutch oil and filter (Every 30,000km or 20,000 miles only)			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Replace air filter - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.5 Check transmission and clutch fluids (when mileage is not achieved) are not overfilled	☐	☐	
9.6 Replace clutch oil and filter (only if mileage achieved) - Ref. AA-RM-04G01-01-015/021	☐	☐	
9.7 Visually check condensor area for debris	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and re-check level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Replace wheel nut bolts	☐	☐	
12.3 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.12 and 7.4	AA-RM-03C01-01-005	Fill/bleed fluid - Brake system
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.3	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
7.3	AA-RM-03C02-01-001	Remove/install pads - parking brake
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.7	AA-RM-04G01-01-015	Remove/install fluid - Transmission / Clutch
9.7	AA-RM-04G01-01-017	Remove/install filter - Transmission / Clutch fluid
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	
Technician Signature:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 11th year or 165,000 km (110,000 miles)

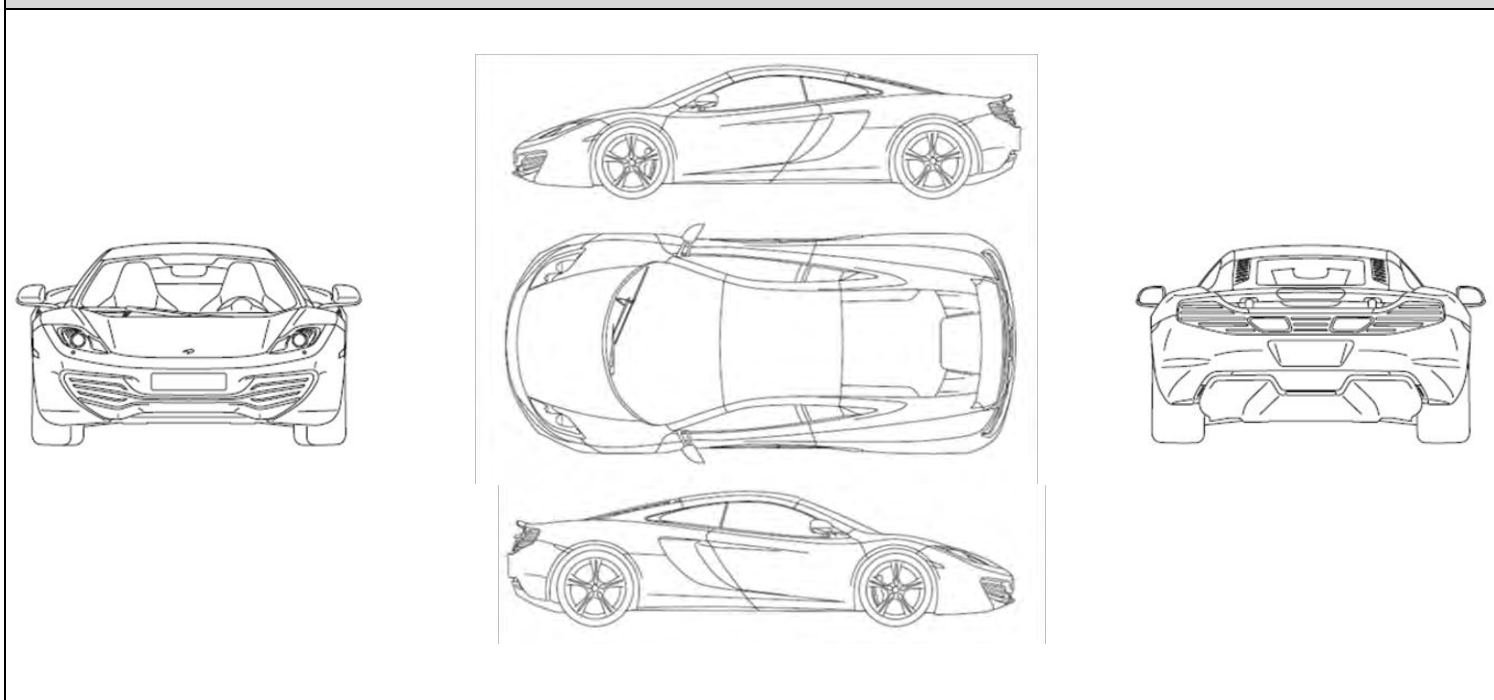
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 5.85 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)


Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Check cabin filter (replace as required) - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, fascia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Check EPB (Electronic Parking Brake) pads (replace if required)	☐	☐	
7.4 Check brake system for routing, leaks, and damage (bleed brakes if required)	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.6 while oil is draining)	Completed	Not Completed	Comments
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Check/clean air filter elements (replace as required) - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check transmission and clutch fluids are not overfilled	☐	☐	
9.5 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	
Technician Signature:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 12th year or 180,000 km (120,000 miles)

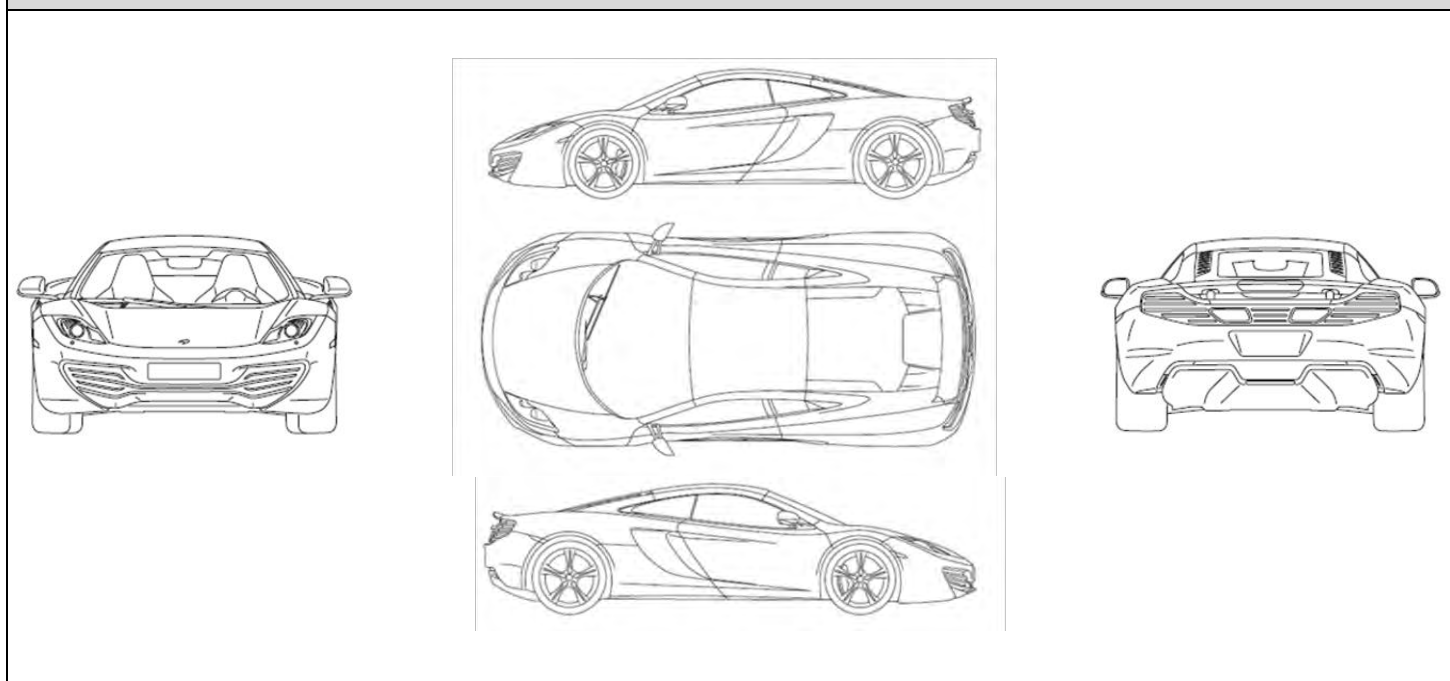
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 7.65 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)



Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Replace cabin filter - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, facia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Replace electronic parking brake pads (every 2 years) - Ref. AA-RM-03C02-01-001	☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.8 while oil is draining)	Completed	Not Completed	Comments
Replace clutch oil and filter (Every 30,000km or 20,000 miles only)			
Replace fuel system filter (Every 90,000 km or 60,000 miles only)			
Replace transmission oil and clean filter (Every 60,000 km or 40,000 miles only)			
Replace cooling system fluid			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Replace air filter - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.5 Check transmission and clutch fluids (when mileage is not achieved) are not overfilled	☐	☐	
9.6 Replace cooling system fluid - Ref. AA-RM-03L01-01-005	☐	☐	
9.7 Replace clutch oil and filter (only if mileage achieved) AA-RM-04G01-01-015/021	☐	☐	
9.8 Replace fuel system filter (only if mileage achieved) - Ref. AA-RM-03K01-01-001	☐	☐	
9.9 Replace transmission oil / clean filter (only if mileage achieved) - Ref. AA-RM-04G01-01-014/016	☐	☐	
9.10 Visually check condensor area for debris	☐	☐	
9.11 Clean out condensor area (only if mileage achieved) - Ref. AA-RM-02A02-02-005	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Replace wheel nut bolts	☐	☐	
12.3 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
Replace engine spark plugs (Every 90,000 km or 60,000 miles only)			
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Replace engine spark plugs (only if mileage achieved) - Ref. AA-RM-04F01-01-026	☐	☐	
13.6 Check injection/ignition system connections and harness	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Check expiry dates of fire extinguisher/tyre inflation kit (if fitted)	☐	☐	
15.5 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.6 Report and rectify all recorded defects	☐	☐	
15.7 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
7.3	AA-RM-03C02-01-001	Remove/install pads - Parking brake
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.6	AA-RM-03L01-01-005	Drain and refill cooling system
9.7	AA-RM-04G01-01-015	Drain and refill - Clutch fluid
9.7	AA-RM-04G01-01-017	Remove/install filter - Clutch fluid
9.8	AA-RM-03K01-01-001	Remove/install fuel filter
9.9	AA-RM-04G01-01-014	Drain and refill - Transmission Fluid
9.9	AA-RM-04G01-01-016	Remove/install filter - Transmission fluid
9.11	AA-RM-02A02-02-005	Remove/install Radiator grille
10.1	AA-RM-04F02-01-003	Remove/install oil filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.5	AA-RM-04F01-01-026	Remove/install spark plug
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries

Comments

Technician Name:

Technician Signature:

Dealer Stamp:

Printed copy is not controlled

Service sheet : 13th year or 195,000 km (130,000 miles)

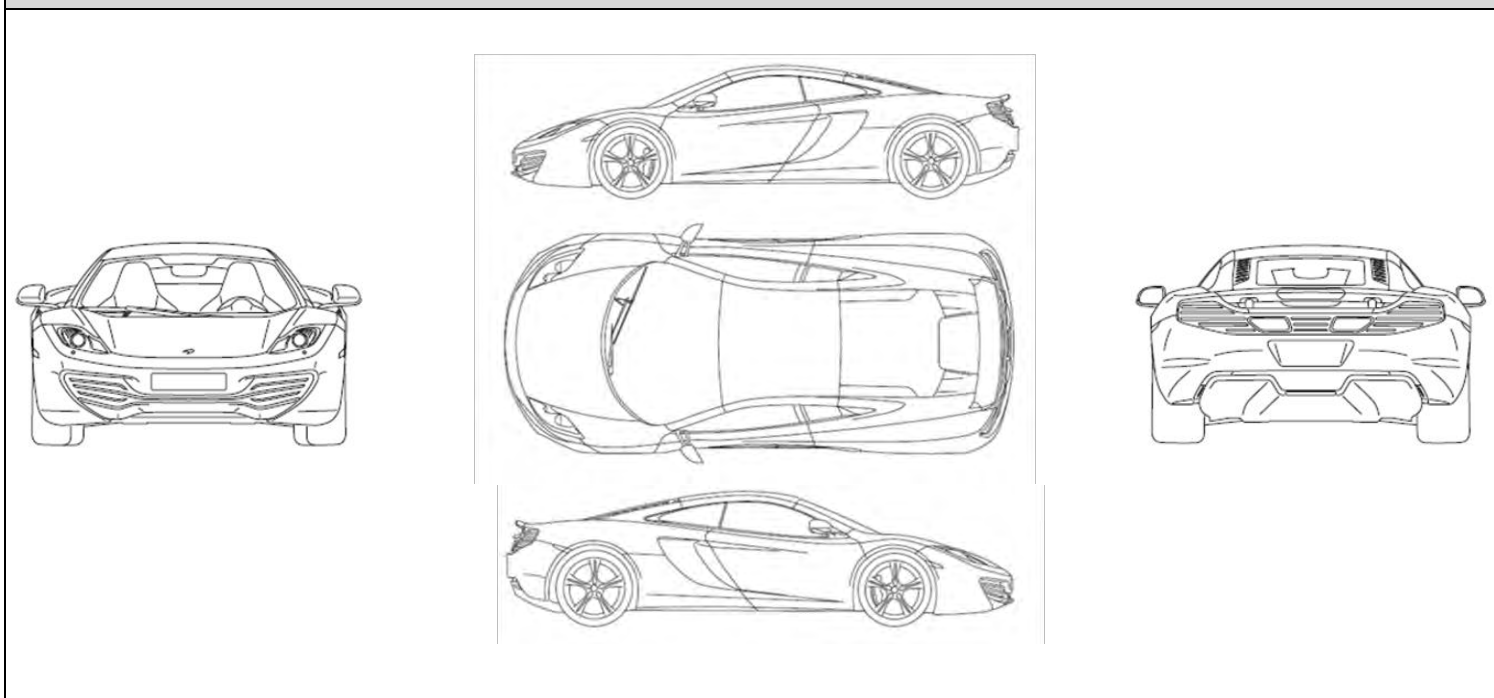
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 5.85 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)


Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Check cabin filter (replace as required) - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, fascia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Check EPB (Electronic Parking Brake) pads (replace if required)	☐	☐	
7.4 Check brake system for routing, leaks, and damage (bleed brakes if required)	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.5 while oil is draining)	Completed	Not Completed	Comments
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Check/clean air filter elements (replace as required) - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check transmission and clutch fluids are not overfilled	☐	☐	
9.5 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	Dealer Stamp:
Technician Signature:	

Printed copy is not controlled

Service sheet : 14th year or 210,000 km (140,000 miles)

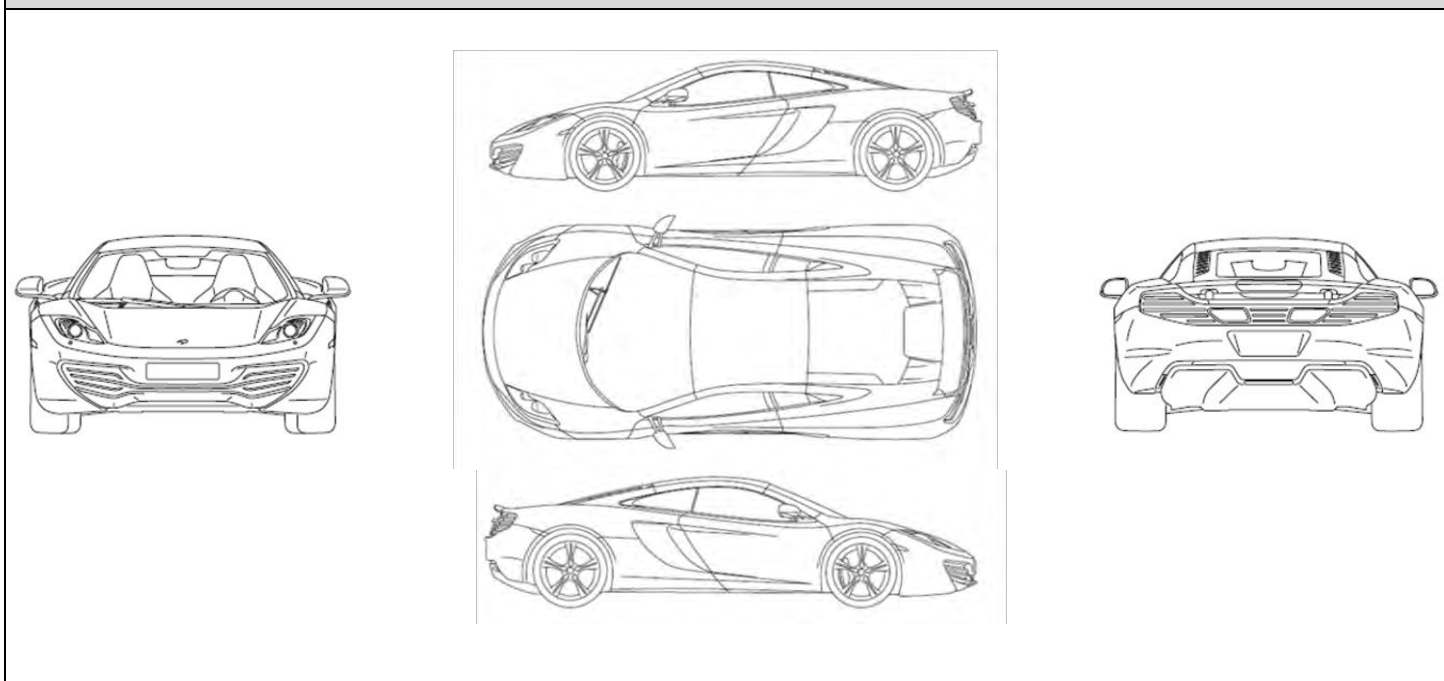
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 6.8 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)



Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Replace cabin filter - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Bleed brake fluid system as required (while servicing) - Ref. AA-RM-03C01-01-005	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, facia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Replace electronic parking brake pads (every 2 years) - Ref. AA-RM-03C02-01-001	☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.6 while oil is draining)	Completed	Not Completed	Comments
Replace clutch oil and filter (Every 30,000km or 20,000 miles only)			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Replace air filter - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.5 Check transmission and clutch fluids (when mileage is not achieved) are not overfilled	☐	☐	
9.6 Replace clutch oil and filter (only if mileage achieved) - Ref. AA-RM-04G01-01-015/021	☐	☐	
9.7 Visually check condensor area for debris	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and re-check level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Replace wheel nut bolts	☐	☐	
12.3 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.6 Check/adjust fluid level of cooling system	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
14.1 Check airbrake function	☐	☐	
14.2 Check navigation system (if fitted)	☐	☐	
15.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
15.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
15.2 Check function of all keys, locks, and fobs	☐	☐	
15.3 Check for towing eye	☐	☐	
15.4 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
15.5 Report and rectify all recorded defects	☐	☐	
15.6 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.12 and 7.4	AA-RM-03C01-01-005	Fill/bleed fluid - Brake system
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.3	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
7.3	AA-RM-03C02-01-001	Remove/install pads - parking brake
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.6	AA-RM-04G01-01-015	Drain and refill - Clutch fluid
9.6	AA-RM-04G01-01-017	Remove/install filter - Clutch
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator

Consumables / Sundries	
Comments	
Technician Name:	
Technician Signature:	Dealer Stamp:

Printed copy is not controlled

Service sheet : 15th year or 225,000 km (150,000 miles)

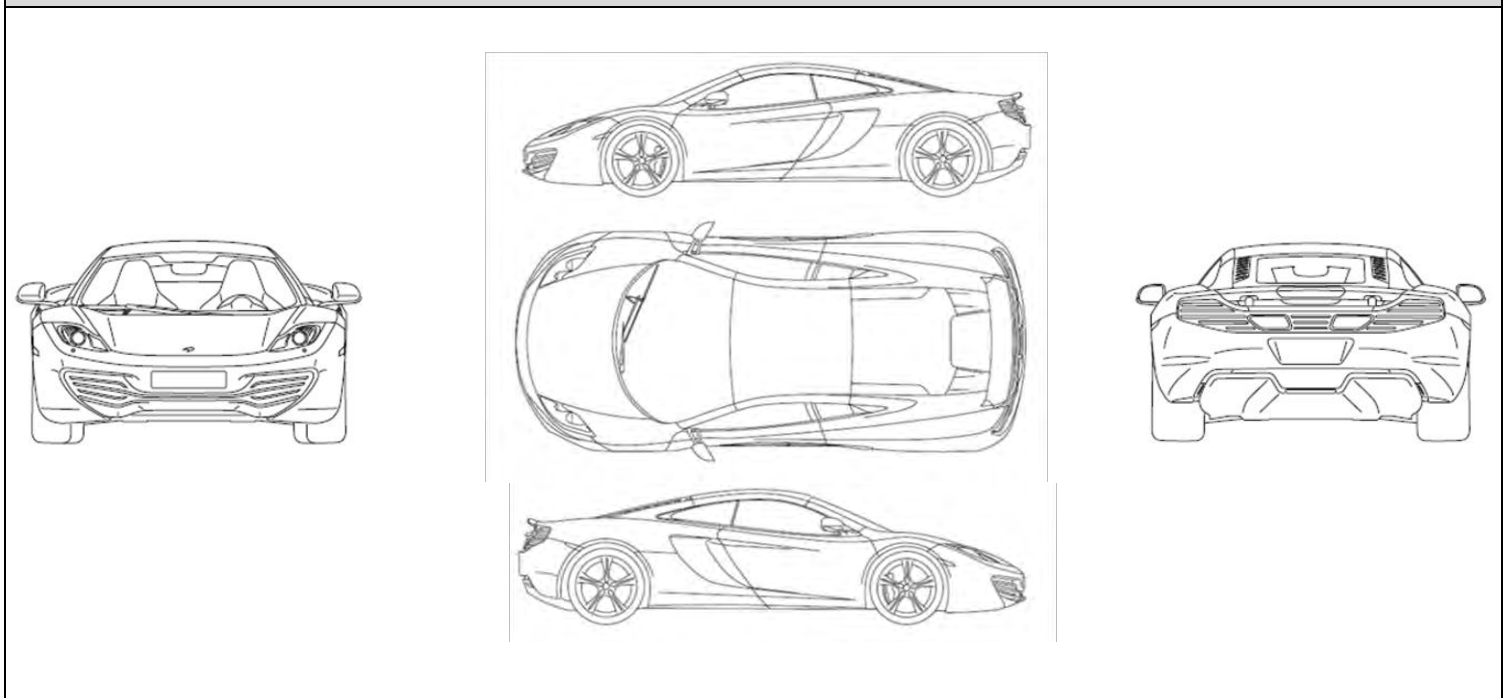
Please check vehicle odometer reading against mileage dependant task service sheet before carrying out service

Customer:		km / miles:
Vehicle registration :	VIN:	Date:
Colour:		Service Time: 12.0 units
Address :		Invoice / Job no:

Vehicle acceptance (customer present from 1.1 to 1.4)

1.0 - Vehicle pre-checks	Completed	Not Completed	Comments
1.1 Check for wheel locking key (if supplied)	☐	☐	
1.2 Check tyre orientation, damage, and crack formations	☐	☐	
1.3 Inspect wheel rim condition	☐	☐	
1.4 Check bodywork	☐	☐	
1.5 Check McLaren Retailer Portal for any outstanding campaigns on vehicle	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)


Vehicle exterior/fluid and battery checks - (ensure battery charger and body protection are fitted)

2.0 - Two technicians will be required for steps 2.1 and 2.2	Completed	Not Completed	Comments
2.1 Check exterior lighting function	☐	☐	
2.2 Check headlamp/windscreen washer system	☐	☐	
2.3 Check headlamp adjustment - Ref. AA-RM-02A02-04-003	☐	☐	
2.4 Replace wiper blade	☐	☐	
2.5 Check window glazing	☐	☐	
2.6 Check exterior light glazing	☐	☐	
2.7 Check gaps and seals of doors, engine cover, and luggage compartment lid	☐	☐	
2.8 Check fuel filler flap manual opening	☐	☐	

	Completed	Not Completed	Comments
2.9 Check controls and adjusters in general (hinges, doors, luggage lid and engine cover)	☐	☐	
2.10 Check battery connections and charge (physical check) - Ref. AA-RM-02A02-03-004	☐	☐	
2.11 Check cabin filter (replace as required) - Ref. AA-RM-02A02-03-004	☐	☐	
2.12 Check/adjust fluid level of brake system	☐	☐	
2.13 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
2.14 Check/adjust fluid level of windshield washer system	☐	☐	

Interior function checks

3.0 - Carry out cluster checks	Completed	Not Completed	Comments
3.1 Check battery condition	☐	☐	
3.2 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.3 Check TPMS (Tyre Pressure Monitoring System)	☐	☐	
3.4 Check indicator lamps and warning lamps	☐	☐	
4.0 - Carry out IRIS checks	Completed	Not Completed	Comments
4.1 Check operation of IRIS system (audio/phone/sat nav/pc/cameras)	☐	☐	
5.0 - Carry out interior functional checks	Completed	Not Completed	Comments
5.1 Check central locking and alarm system	☐	☐	
5.2 Check interior controls (switches, lights, windows) and parking sensors (if fitted)	☐	☐	
5.3 Check heated rear window function	☐	☐	
5.4 Check operation of heating, ventilation and air conditioning system	☐	☐	
5.5 Check condition of interior trim (seats, door casings, centre console, fascia, carpets)	☐	☐	
5.6 Check exterior door mirrors function and powerfold, rear view mirror, and sun visors	☐	☐	
5.7 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
5.8 Check brake pedal free play	☐	☐	
5.9 Check operation of EPB (Electronic Parking Brake)	☐	☐	

Mechanical checks

6.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Comments
6.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
6.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
6.3 Check front/rear axle wheel bearing play					☐	☐	
6.4 Check front/rear ball joints for play					☐	☐	
6.5 Check front/rear track rods for play					☐	☐	

7.0 - Remove wheels - Ref. AA-RM-03B03-01-001	Completed	Not Completed	Comments
7.1 Check brake pads (replace if necessary)	☐	☐	
7.2 Check condition of brake discs (weigh all of them if CCM) - Ref. AA-RM-03C01-01-006	☐	☐	
7.3 Check EPB (Electronic Parking Brake) pads (replace if required)	☐	☐	
7.4 Check brake system for leaks/damage (bleed as required) - Ref. AA-RM-03C01-01-005	☐	☐	
7.5 Check/clean air ducts of brake system	☐	☐	
8.0 - Remove all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
8.1 Check all visible parts for routing, leaks, and damage (cooling system)	☐	☐	
8.2 Check powertrain system for leaks (engine, transmission, and exhaust)	☐	☐	
8.3 Check all visible steering components for leaks and damage	☐	☐	
8.4 Check engine mounts	☐	☐	
8.5 Tighten screws, nuts, and bolts (including exhaust system, clips and strips in general)	☐	☐	
8.6 Check torques on suspension - Ref. AA-RM-03B01-02-002/003, 03B02-01-001/002	☐	☐	
8.7 Check condition of drive shafts	☐	☐	
9.0 - Remove rear wheel arch liners (carry out steps 9.2 to 9.6 while oil is draining)	Completed	Not Completed	Comments
Replace cooling system fluid			
9.1 Drain engine oil - Ref. AA-RM-04F02-01-011	☐	☐	
9.2 Check Z-bar drop links for play	☐	☐	
9.3 Check/clean air filter elements (replace as required) - Ref. AA-RM-04F01-02-002	☐	☐	
9.4 Check transmission and clutch fluids are not overfilled	☐	☐	
9.5 Check radiator/low temp cooler condition, check for any damage (clean as necessary)	☐	☐	
9.6 Replace cooling system fluid - Ref. AA-RM-03L01-01-005	☐	☐	
10.0 - Lower vehicle	Completed	Not Completed	Comments
10.1 Replace engine oil filter - Ref. AA-RM-04F02-01-003	☐	☐	
10.2 Fill engine oil (5 litres to start) - Ref. AA-RM-04F02-01-011	☐	☐	
10.3 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
10.4 Top up and recheck level as required	☐	☐	
11.0 - Lift vehicle	Completed	Not Completed	Comments
11.1 Visual inspection for general leaks	☐	☐	

Underside of vehicle

12.0 - Install all under floors - Ref. AA-RM-02A04-04-001/002/003/005/006/008	Completed	Not Completed	Comments
12.1 Check tyre orientation, damage, and crack formations	☐	☐	
12.2 Install wheels - Ref. AA-RM-03B03-01-001	☐	☐	
13.0 - Lower vehicle to ground	Completed	Not Completed	Comments
13.1 Check wheel bolt torque values (130 Nm)	☐	☐	
13.2 Replace engine ISG (Intake Sound Generator) - Ref. AA-RM-04F01-01-037	☐	☐	
13.3 Check corrosion/antifreeze protection and enter here: °C	☐	☐	
13.4 Check exhaust emission label (market specific)	☐	☐	
13.5 Check injection/ignition system connections and harness	☐	☐	
13.7 Check vehicle steering alignment (adjust as required)	☐	☐	
14.0 Ensure battery is disconnected - Ref. AA-RM-05M01-01-001	Completed	Not Completed	Comments
Replace all airbags and seatbelts (15 years only)			
14.1 Replace driver airbag - Ref. AA-RM-06N04-01-003	☐	☐	
14.2 Replace passenger airbag - Ref. AA-RM-06N04-01-004	☐	☐	
14.3 Replace driver head curtain airbags - Ref. AA-RM-06N04-01-002	☐	☐	
14.4 Replace passenger head curtain airbags - Ref. AA-RM-06N04-01-002	☐	☐	
14.5 Replace driver kneebag (market specific)	☐	☐	
14.6 Replace passenger kneebag (market specific)	☐	☐	
14.7 Replace driver seatbelt - Ref. AA-RM-06N04-01-001	☐	☐	
14.8 Replace passenger seatbelt - Ref. AA-RM-06N04-01-001	☐	☐	
15.0 - Road test (carry out 14.1 and 14.2 whilst on test. Max 30 min / 6 miles)	Completed	Not Completed	Comments
15.1 Check airbrake function	☐	☐	
15.2 Check navigation system (if fitted)	☐	☐	
16.0 - Finish road test and carry out documents/safety device/final checks	Completed	Not Completed	Comments
16.1 Replace key fob battery and clean contacts with Electrolube CCS	☐	☐	
16.2 Check function of all keys, locks, and fobs	☐	☐	
16.3 Check for towing eye	☐	☐	
16.4 Check expiry dates of fire extinguisher/tyre inflation kit (if fitted)	☐	☐	
16.5 Read out fault memory, clear errors, and zero service interval counter via MDS	☐	☐	
16.6 Report and rectify all recorded defects	☐	☐	
16.7 Check/stamp service and warranty guide	☐	☐	

Associated Documents

Step Reference	Document Number	Document Title
2.3	AA-RM-02A02-04-003	Adjust headlamp
2.10 and 2.11	AA-RM-02A02-03-004	Remove/install luggage bin - Rear
2.13	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
6.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
7.0 and 12.2	AA-RM-03B03-01-001	Remove/install Wheel
7.2	AA-RM-03C01-01-006	Cleaning/checking CCM brake discs
8.0 and 12.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank
8.0 and 12.0	AA-RM-02A04-04-002	Remove/install floor panel - Front
8.0 and 12.0	AA-RM-02A04-04-003	Remove/install floor panel - Tunnel
8.0 and 12.0	AA-RM-02A04-04-005	Remove/install floor panel - Rear lower extension
8.0 and 12.0	AA-RM-02A04-04-006	Remove/install guide vane
8.0 and 12.0	AA-RM-02A04-04-008	Remove/install transmission floor panel
8.6	AA-RM-03B01-02-002	Remove/install lower wishbone - front
8.6	AA-RM-03B01-02-003	Remove/install upper wishbone - front
8.6	AA-RM-03B02-01-001	Remove/install upper wishbone - rear
8.6	AA-RM-03B02-01-002	Remove/install lower wishbone - rear
9.1 and 10.2	AA-RM-04F02-01-011	Drain and refill engine oil
9.3	AA-RM-04F01-02-002	Remove/install air filter
9.6	AA-RM-03L01-01-005	Drain and refill cooling system
10.1	AA-RM-04F02-01-003	Remove/install Oil Filter
10.3	AA-RM-04F02-01-007	Check engine oil level
13.2	AA-RM-04F01-01-037	Remove/install intake sound generator
14.1	AA-RM-06N04-01-003	Remove/install driver airbag
14.2	AA-RM-06N04-01-004	Remove/install passenger airbag
14.3 and 14.4	AA-RM-06N04-01-002	Remove/install head curtain airbag
14.5	AA-RM-06N04-01-007	Remove/install driver kneebag
14.6	AA-RM-06N04-01-006	Remove/install passenger kneebag
14.7 and 14.8	AA-RM-06N04-01-001	Remove/install seatbelt

Consumables / Sundries	
Comments	
Technician Name:	Dealer Stamp:
Technician Signature:	

Track Day Event Pre/Post Checks

All checks to be carried out to the vehicle before/after a track day event

Customer :		km / miles :
Vehicle registration :	VIN :	Date :
Colour :		Service Time : 1.25 units (Fe discs) - 2.50 units (CCM discs)
Address :		Invoice / Job no :

Vehicle exterior and fluid checks

1.0 - Two technicians will be required for steps 1.1 and 1.2	Completed	Not Completed	Rectified
1.1 Check exterior lighting function	☐	☐	
1.2 Check window glazing	☐	☐	
1.3 Check fuel filler flap manual opening	☐	☐	
1.4 Check/adjust fluid level of brake system (bleed if required) - Ref. AA-RM-03C01-01-005	☐	☐	
1.5 Check/adjust fluid level of power steering - Ref. AA-RM-03D01-01-008	☐	☐	
1.6 Check windscreen wiper blade condition	☐	☐	

Interior function checks

2.0 - Carry out cluster checks	Completed	Not Completed	Rectified
2.1 Check engine oil level - Ref. AA-RM-04F02-01-007	☐	☐	
3.0 - Carry out interior functional checks	Completed	Not Completed	Rectified
3.1 Check condition and operation of seat belts/buckles (ensure belts are not twisted)	☐	☐	
3.2 Check Airbrake function using Dynamic Control Panel	☐	☐	

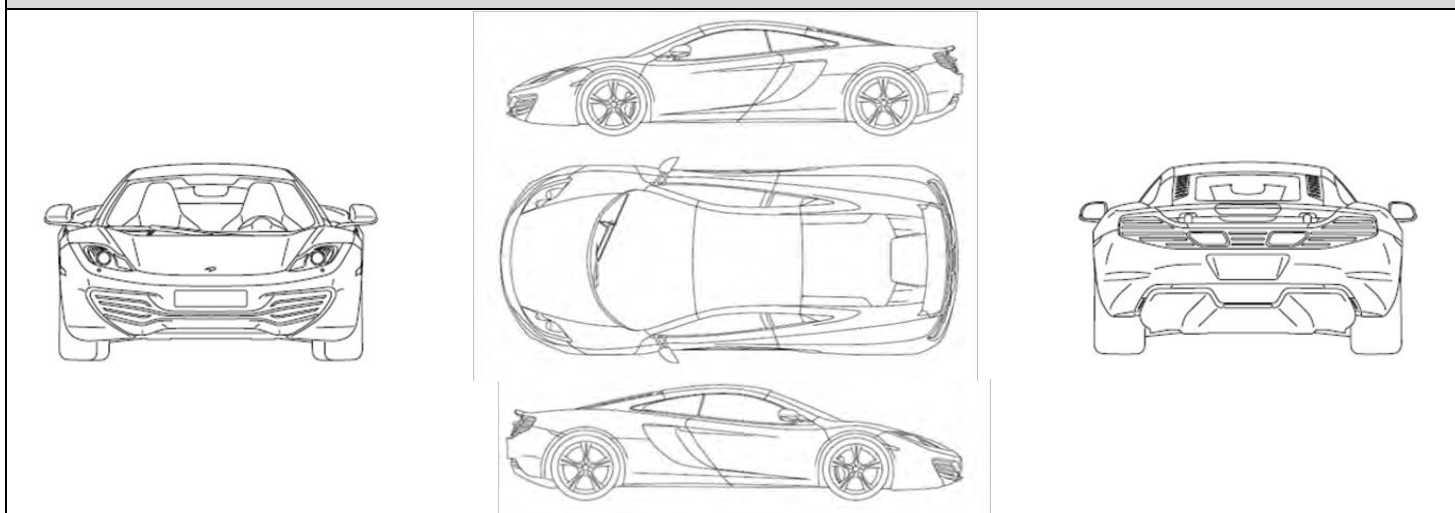
Mechanical checks

4.0 - Secure/lift vehicle on lifting platform - Ref. AA-RM-02A04-04-005					Completed	Not Completed	Rectified
4.1 Check/enter tyre pressure	FL:	FR:	RL:	RR:	☐	☐	
4.2 Measure tread depth (mm)	FL:	FR:	RL:	RR:	☐	☐	
	Outside						
	Center						
	Inside						
5.0 - Remove wheels - Ref. AA-RM-03B03-01-001					Completed	Not Completed	Comments
5.1 Check front/rear axle wheel bearing play					☐	☐	
5.2 Visually check brake pads (replace if necessary)					☐	☐	
5.3 Visually check condition of brake discs (Remove and weigh if CCM) - Ref. AA-RM-03C01-01-006					☐	☐	
5.4 Check/clean air ducts of brake system					☐	☐	
6.0 - Remove Engine floor panel - Ref. AA-RM-02A04-04-001					Completed	Not Completed	Rectified
6.1 Check Engine/Transmission for leaks					☐	☐	
6.2 Check condition of drive shafts					☐	☐	
6.3 Check front/rear ball joints and track rods for play					☐	☐	
6.4 Check torque on suspension components					☐	☐	
6.5 Check all underfloors, tyre spoilers and front/rear guide vanes for damage					☐	☐	
7.0 - Install Engine floor panel - Ref. AA-RM-02A04-04-001					Completed	Not Completed	Rectified
7.1 Inspect wheel rim condition					☐	☐	
7.2 Check tyre orientation, damage, and crack formations					☐	☐	
7.3 Install wheels - Ref. AA-RM-03B03-01-001					☐	☐	
8.0 - Lower vehicle to ground					Completed	Not Completed	Rectified
8.1 Check wheel bolt torque values (130Nm)					☐	☐	
8.2 Check/adjust fluid level of cooling system					☐	☐	

Final operations

9.0 - Carry out documents/safety devices checks	Completed	Not Completed	Rectified
9.1 Check for wheel locking key	☐	☐	
9.2 Check for emergency fuel funnel	☐	☐	
9.3 Install/Remove towing eye - Install (pre)/Remove (post)	☐	☐	
9.4 Check for fire extinguisher (option)	☐	☐	
9.5 Check for first aid kit (option)	☐	☐	
10.0 - Carry out final checks	Completed	Not Completed	Rectified
10.1 Report and rectify all recorded defects	☐	☐	

Check paint and panels for defects - please mark the picture as following: (D dent - S scratch - X damage)



Associated Documents

Step Reference	Document Number	Document Title
1.4	AA-RM-03C01-01-005	Fill/bleed fluid - Brake system
1.5	AA-RM-03D01-01-008	Fill/bleed fluid - Steering system
2.1	AA-RM-04F02-01-007	Check engine oil level
4.0	AA-RM-02A04-04-007	Secure/lift vehicle on lifting platform
5.0 and 7.3	AA-RM-03B03-01-001	Remove/install Wheel
5.3	AA-RM-03C01-01-006	Cleaning/Checking carbon ceramic discs (CCM) / Iron discs (Fe)
6.0 and 7.0	AA-RM-02A04-04-001	Remove/install floor panel - Engine/fuel tank

Consumables / Sundries

Comments

Technician Name :

Technician Signature :

Dealer Stamp :

Printed copy is not controlled

CONTENTS



BEFORE YOU DRIVE 8

DRIVING CONTROLS50

INSTRUMENTS 102

COMFORT AND CONVENIENCE132

MAINTAINING YOUR McLAREN154

VEHICLE DATA AND GLOSSARY 202

INDEX 215

INTRODUCTION

Introduction

Please read this information to familiarise yourself with your McLaren MP4-12C and its features before you drive. This provides the necessary information for you to get the optimum benefit and enjoyment from your McLaren.

This publication must not be reproduced, translated or reprinted, in whole or in part, without written permission from McLaren Automotive Ltd. The equipment fitted to your McLaren may vary from that shown depending on vehicle and market specification.

McLaren is constantly updating its vehicles to meet and exceed the latest technologies. McLaren therefore reserves the right to introduce changes in design, equipment and technical features at any time.

The documents supplied with your McLaren are an integral part of the vehicle. Ensure that you pass them onto the new owner if you sell the vehicle.

The information is divided into specific sections, to assist in finding the particular information you require:

Before you drive

Details the settings you need to make in the cockpit to ensure you are fully prepared and have safe and easy access to all controls before driving.

Driving Controls

This section contains detailed information regarding the equipment and driving controls fitted to your McLaren and how to use those controls to best effect during a journey.

Instruments

This section contains information on the instrument cluster, including information of how to view and change vehicle settings.

INTRODUCTION

Comfort and Convenience

Contains information on those systems and features which make the cockpit a pleasant environment in which to spend time.

Maintaining your McLaren

Information on maintaining your McLaren is here. Also included is advice on using your McLaren in winter weather and if you choose to drive your vehicle abroad, what to do if something should go wrong and how to manage any possible problems which arise as a result. Information on fuses, light bulbs and what to do if you experience a puncture.

Data and Technical glossary

Refer to this section when you need information regarding the fluids and quantities that are required for the various systems on your McLaren, or when you need to know a specific piece of data relating to your McLaren or its performance.

The Technical glossary contains a brief explanation of some of the more complex systems fitted to your McLaren. A McLaren Dealer will be able to assist should you need more information.

Index

The table of contents and the index will help you find information quickly, when you need it.

INTRODUCTION

Symbols

You will find the following symbols in this Owner handbook. These symbols are intended to give you an instant visual message on what type of information is being displayed.

Warnings	
	A warning draws your attention to activities that could cause injury or death.
Notes	
	Notes draw your attention to activities that contain possible risks to your McLaren, provide advice that you may find useful, or give additional information regarding a particular subject.

Optional equipment	
*	Optional equipment is identified with an asterisk. The equipment fitted to your McLaren may vary from that shown depending on vehicle specification.
Environmental note	
	Environmental notes give you tips on minimising the impact of you and your vehicle on the environment.

INTRODUCTION

Operating safety

 **WARNING:** *The electronic systems fitted to your McLaren interact with each other. Tampering with these systems could cause malfunctions in other interconnected systems. Such faults could seriously endanger the operational safety of your McLaren and your own safety.*

Additional work or modifications made to the vehicle, which have been carried out incorrectly can also affect its operating safety.

Vehicle use

Observe the following when using your McLaren:

- the safety notes throughout this information;
- road traffic laws and regulations.

 **WARNING:** *There are various warning labels attached to your McLaren. These are intended to make you and others aware of various risks. Do not remove any warning labels from the vehicle.*

If you remove these warning labels, you or others may not then be aware of dangers, which may result in an injury.

BEFORE YOU DRIVE

OPENING AND CLOSING

General	8
Opening a door	10
Locking a door	11
Mis-lock	12
Individual settings	12
Locking and unlocking from inside	12
Opening a door from inside	13
Closing a door	13
Automatic locking	14
Engine cover	15
Luggage compartment	16

ANTI-THEFT SYSTEM

Alarm system	18
Immobiliser	18
Tow-away protection	19
Interior motion sensor	20

SEATS

Safety	21
Manual seats	22
Electric seats	24

STEERING WHEEL AND STEERING COLUMN

Steering wheel adjustment	28
Horn	28

OCCUPANT SAFETY

Seat belts	29
------------------	----

Supplementary Restraint System	32
Child passengers	36
Footwells	38

MIRRORS

Safety	39
Interior mirror	39
Exterior mirrors	39

LIGHTING

Light switch	41
Main beam headlamps	42
Daytime running lamps	43
Rear fog lamp	43
Direction indicators	44
Hazard warning lamps	44
Parking lights	45

WIPER AND WASHERS

Windscreen wiper	46
------------------------	----

BEFORE YOU DRIVE

OPENING AND CLOSING

General

The vehicle can be unlocked or locked either by using the keyless entry feature, or by pressing the appropriate button on the key fob.

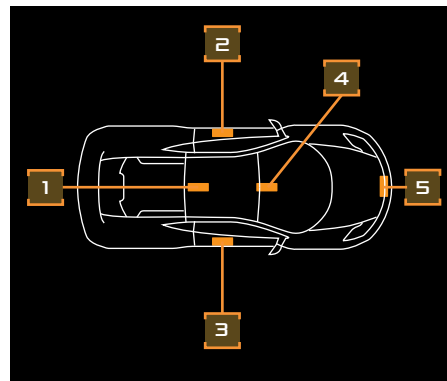
Both methods are activated by the key fob.

For your convenience, provided that the engine is not running, the car can be locked irrespective of the electrical status, see Vehicle electrical status, page 50.

Keyless entry

Keyless entry allows the driver to unlock and disarm the vehicle by simply opening the door when the key fob is within 1.5 metres (5 feet) of the vehicle. The key fob needs only to be on the driver's person or in a non-metallic container such as a bag. It does not need to be exposed or handled.

Five sensors detect where the key fob is around the vehicle.



1. In vehicle sensor
2. Left-hand door sensor
3. Right-hand door sensor
4. Cup holder sensor
5. Luggage compartment sensor

BEFORE YOU DRIVE

OPENING AND CLOSING

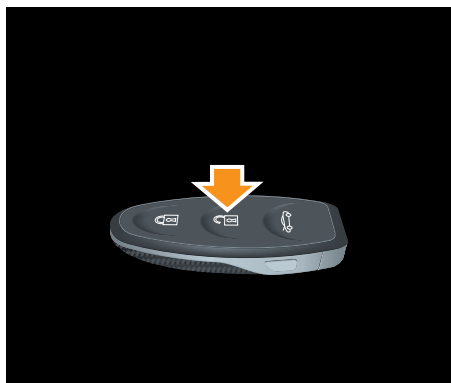
Key fob entry

Your McLaren includes two remote control key fobs. The key fob allows you to remotely lock and unlock the vehicle.

i *NOTE: To prevent theft, only use the key fob in the immediate vicinity of the vehicle.*

The key fob locks and unlocks the following:

- the doors (including fuel filler flap);
- the luggage compartment;



To unlock the vehicle, using the key fob, press the unlock button (arrowed) on the key fob. The front and rear direction indicators and the side repeaters flash twice and the anti-theft alarm system is deactivated.

⚠ **WARNING:** *The key fob allows the engine to be started and is also used to activate other features on the vehicle.*

Take the key fob with you, every time you leave the vehicle.

i *NOTE: Do not expose the key fob to high levels of electromagnetic radiation. Doing so may cause it to function incorrectly.*

Stowing the key fob

For security, it is recommended that the key fob stays on your person when you are in the car. If, however, you wish to stow the key fob within the car, ensure that it is not left in plain view.

i *NOTE: Do not stow the key fob in the centre console stowage compartment or in the cup holders as the system will not detect its presence and the engine will not start.*

Discharged battery

If you are unfortunate enough to experience a fully discharged battery, the vehicle can still be opened using the mechanical key, see Unlocking - discharged battery, page 177.

Car washes

i *NOTE: To prevent inadvertent opening of a door when using an automatic car wash, always lock the doors before entering the wash. If you intend to remain inside the vehicle, press the interior central locking button to ensure the doors do not open. The light in the button will illuminate to indicate that the doors are locked.*

For more information, see *Washing your McLaren*, page 192.

If using a car wash where your car will remain stationary during the wash cycle and you intend to exit the vehicle prior to washing, lock it using the key fob and stand well clear of the vehicle and the car wash, to ensure that the key fob is at least 3 metres (9.8 feet) or greater distance away from the vehicle and car wash.

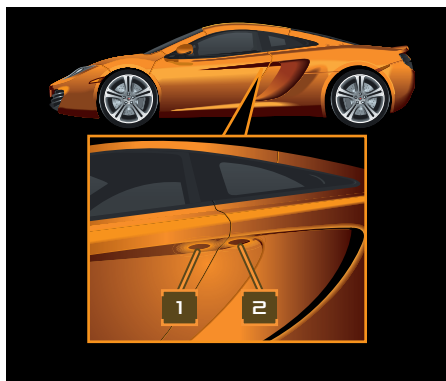
BEFORE YOU DRIVE

OPENING AND CLOSING

Opening a door

⚠ WARNING: Always stand to the rear of the door before opening it, as the opening action may cause injury. The speed that the door opens will be affected by ambient temperature.

i NOTE: Because the door opens outwards and then upwards, ensure sufficient side and overhead clearance before opening a door, see Vehicle dimensions, page 206.



1. Touch the underside of the door panel (1) and slowly move your hand from front to rear. If keyless entry is used, the front and rear direction indicators and the side repeaters flash twice and the anti-theft alarm system is deactivated.

i NOTE: The door needs to sense movement in the direction described to release the door latch. The sensor will not be activated if it is just touched or the hand is moved from the rear to the front.

2. The door latch will then release, allowing the door to be partially raised before it automatically swings outwards and upwards. The mirrors will unfold if folded.

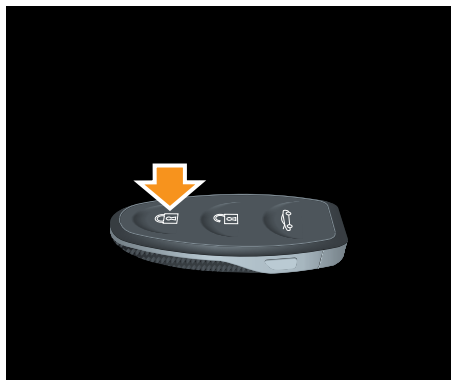
i NOTE: When the door is opened, the window will lower slightly. It will raise to the closed position once the door is shut. If the window does not lower, take care when opening and closing the door. Do not force the door during opening or closing, as this could lead to the door seals or window becoming damaged.

i NOTE: If the vehicle is unlocked using the key fob but the doors or luggage compartment are not opened, the vehicle will re-lock after 30 seconds.

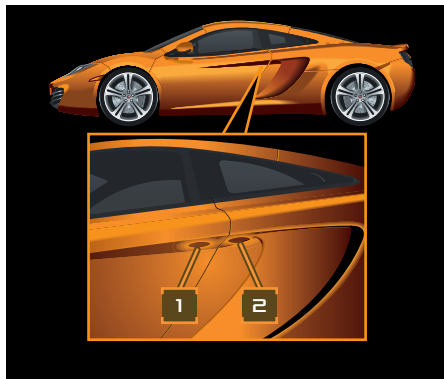
BEFORE YOU DRIVE

OPENING AND CLOSING

Locking a door



1. Close the door.
2. To lock the vehicle using the key fob, press the lock button (arrowed) on the key fob. The front and rear direction indicators and the side repeaters flash in a rapid, circular sequence around the car. The anti-theft alarm system is activated.



3. If using the keyless entry feature, touch the underside of the driver's side air intake panel (2).

i NOTE: Ensure the key is within a 1.5m (5 feet) range when using the keyless entry feature.

i NOTE: The sensor will recognise a single touch.

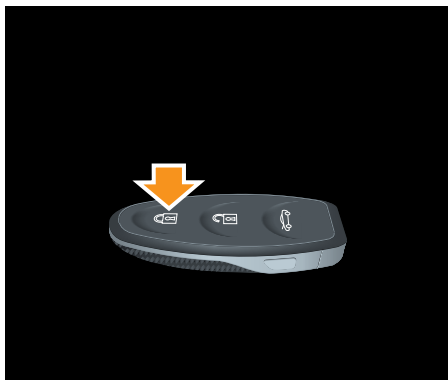
4. The indicators flash to indicate that the anti-theft alarm system is activated and the mirrors will fold.

i NOTE: An audible 'mis-lock' signal will sound if there is an attempt to lock the vehicle when the key fob is inside the vehicle, see Mis-lock, page 12.

BEFORE YOU DRIVE

OPENING AND CLOSING

Mis-lock



If either the door, the luggage compartment lid or the engine cover is left open or the key fob is still inside the vehicle and the lock button (arrowed) is pressed, there will be a momentary sounding of the alarm horn to alert you.

Check that the doors, the luggage compartment lid or the engine cover are all closed and re-lock the vehicle.

Individual settings

If you frequently travel without passengers, you can change the locking system so that only the driver's door is unlocked, see Auto Door Lock, page 112.

If only the driver's door has been configured to unlock, the passenger's door can only be unlocked by either touching the underside of the door panel for a second time, pressing the unlock button on the key fob again or by pressing the central locking button on the centre console.

Locking and unlocking from inside



1. Press the central locking button (arrowed) to lock the vehicle, the light in the button will illuminate to indicate that the vehicle is locked.
2. Press the central locking button again to unlock the vehicle and the light in the button will extinguish.

BEFORE YOU DRIVE

OPENING AND CLOSING

Opening a door from inside

A door can be opened from inside the vehicle at any time, even if it has been locked. Open the doors only if the vehicle is stationary and road and traffic conditions permit.

i **NOTE:** Because the door opens outwards and then upwards, ensure sufficient side and overhead clearance before opening a door.



1. Pull door handle upwards, in direction of arrow, and push the door outwards until the opening mechanism takes over. The door will then swing outwards and upwards automatically.

i **NOTE:** When the door is opened, the window will lower slightly. It will raise to the closed position once the door is shut. If the window does not lower, take care when opening and closing the door. Do not force the door during opening or closing, as this could lead to the door seals or window becoming damaged.

Closing a door

1. Exit the vehicle.
2. Push the door downwards and ensure that it latches securely.

⚠ **WARNING:** Ensure no-one can be trapped as the door closes.

i **NOTE:** If window does not close, this may be due to an anti-trap event. To resolve this, please try one of the below options:

- Reopen and close door;
- Press lock button on key fob to request window close;
- Lock vehicle using the sensor on the underside of the air intake panel.

In the event of continuous anti-trap events, you can revert the window to manual mode. This is done by placing your hand on the exterior lock sensor for a period of time. The window will continue to rise until you remove your hand from the sensor. This will only be available if the above three methods do not resolve the anti-trap event.

i **NOTE:** Do not force the door closed, the door seals or window could be damaged.

BEFORE YOU DRIVE

OPENING AND CLOSING

Automatic locking

The doors and the luggage compartment lock automatically after the vehicle has driven away.



NOTE: The doors unlock automatically in an accident if the force of the impact exceeds a predetermined level.

The automatic locking function can be switched off, see Auto Door Lock, page 112.

BEFORE YOU DRIVE

OPENING AND CLOSING

Engine cover

Opening

⚠ WARNING: The exhaust tail pipes can be very hot and there is a risk of severe burns. Only open the engine cover from the side of the vehicle.

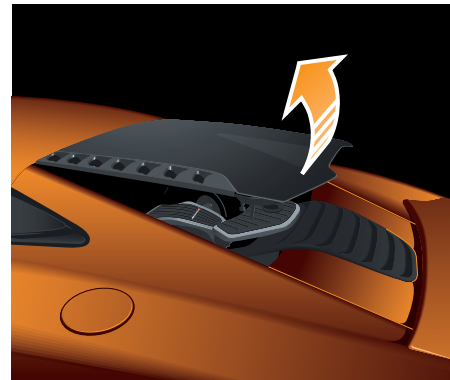
⚠ WARNING: There is a risk of injury if the engine cover is open, even when the engine is not running.

Engine components become very hot and there is a risk of severe burns.

The engine ignition system carries a high voltage. Never touch ignition system components; ignition coil, ignition cables, (spark plug connections).



1. Press the release button (arrowed) on the rear face of the driver's door, the engine cover will open slightly.



2. From the side of the vehicle, grasp the lower edge and lift the engine cover. The gas struts will support it in the raised position.

Closing

⚠ WARNING: The exhaust tail pipes can be very hot and there is a risk of severe burns. Only close the engine cover from the side of the vehicle.

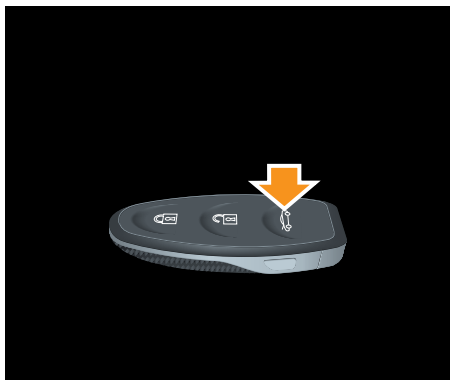
Pull the engine cover down squarely from the side of the vehicle and ensure that the cover latches securely on both sides.

BEFORE YOU DRIVE

OPENING AND CLOSING

Luggage compartment

Opening



1. Press the button (arrowed) on the key fob the luggage compartment will unlock and open slightly.

i *NOTE: The luggage compartment is located at the front of the vehicle.*



2. Alternatively, press the button (arrowed) to unlock and open the luggage compartment.

i *NOTE: The luggage compartment will only open if the vehicle is stationary.*



3. Release the safety latch and open the luggage compartment.

BEFORE YOU DRIVE

OPENING AND CLOSING

Closing

 **WARNING:** *Ensure that no-one can be trapped as you close the luggage compartment.*

1. Pull the luggage compartment lid down firmly and ensure that it is latched securely.

 **NOTE:** *Do not leave the key fob in the luggage compartment, as the vehicle will lock, and you may be locked out of the car.*

 **NOTE:** *If the vehicle had previously been locked, it will still be locked and the indicators will flash as the lid closes.*

BEFORE YOU DRIVE

ANTI-THEFT SYSTEM

Alarm system

A visual and audible alarm is triggered if the alarm system is armed and any of the following are opened.

- a door;
- the engine cover;
- the luggage compartment.

i *NOTE: The alarm remains triggered even if you close the open aperture. To silence the alarm, unlock the vehicle.*

The alarm system also incorporates the following features:

- tow-away protection;
- interior motion sensor.

Arming the alarm system

1. Lock the vehicle (using the keyless system or the key fob). The anti-theft alarm system will be armed after approximately 15 seconds.



2. The light in the central locking button (arrowed) will illuminate for a period of time and will begin flashing to indicate that the alarm is armed.

Disarming the alarm system

1. Unlock the vehicle (using the keyless system or the key fob), the alarm will disarm and the light in central locking button will stop flashing.

Immobiliser

The immobiliser prevents your McLaren from being started by an unauthorised person.

The vehicle is automatically immobilised when it senses that there is no key fob present in the vehicle.

Remobilisation occurs when a key fob is sensed inside the vehicle.

BEFORE YOU DRIVE

ANTI-THEFT SYSTEM

Tow-away protection

Tow-away protection is designed to prevent any attempt to steal the vehicle by suspended tow or by lifting onto a trailer.

The alarm is triggered if the vehicle is raised or tilted in any way.

Tow-away protection is armed approximately 30 seconds after the vehicle has been locked and is disarmed when the vehicle is unlocked.

Disabling tow-away protection

Disable tow-away protection manually if your vehicle is being transported, e.g. loaded onto a ferry or vehicle transporter or is parked on a movable surface, e.g. in a split-level garage.



1. To disable tow-away protection, switch off the ignition, open the driver's door and press the button (arrowed) on the rear edge of the driver's door. The light in the switch will illuminate to indicate that tow-away protection has been disabled.



NOTE: You cannot disable tow-away protection if the ignition is switched on.

2. Close the driver's door and lock the vehicle (using the keyless system or the key fob). Tow-away protection remains disabled until you unlock the vehicle.

BEFORE YOU DRIVE

ANTI-THEFT SYSTEM

Interior motion sensor

The alarm is triggered if your vehicle is locked and movement is detected inside, e.g. if someone breaks a window or reaches into the vehicle through an open window.

The interior motion sensor is armed approximately 30 seconds after the vehicle has been locked and is disarmed when the vehicle is unlocked.

i *NOTE: To prevent false alarms close the windows when leaving the vehicle and do not hang anything on the interior mirror.*

Disabling the interior motion sensor

Disable the interior motion sensor if people or animals are to remain in the locked vehicle.



1. To disable the interior motion sensor, switch off the ignition, open the driver's door and press the button (arrowed) on the rear edge of the driver's door. The light in the switch will illuminate to indicate that the interior motion sensor has been disabled.

i *NOTE: You cannot disable the interior motion sensor if the ignition is switched on.*

2. Close the driver's door and lock the vehicle (using the keyless system or the key fob). The interior motion sensor remains disabled until you unlock the vehicle.

BEFORE YOU DRIVE

SEATS

Safety

 **WARNING:** Adjust the driver's seat when the vehicle is stationary. You may not be able to observe road and traffic conditions and you could lose control of the vehicle as a result of the seat moving. You could therefore cause an accident.

 **WARNING:** The seats can be moved even without a key fob in the vehicle. Do not leave children unattended in the vehicle, they could be injured if a seat is moved accidentally.

 **WARNING:** Ensure that no-one can become trapped as the seat moves.

To reduce the risk of injuries in the event of an accident, observe the following:

- All vehicle occupants must select a seat position that allows the seat belt to be worn correctly, but is as far away from the front air bags as possible. The position of the driver's seat must allow the driver to drive the vehicle safely. The distance from the driver's seat to the pedals must be such that the driver can fully depress the pedals. The distance between the driver's chest and the centre of the air bag cover must be more than 25 centimetres. The driver's arms should be slightly bent when holding the steering wheel.
- Vehicle occupants must always wear their seat belt correctly.
- Position the passenger seat as far back as is comfortable.

 **WARNING:** To reduce the risk of injury to a child in an accident, sharp braking or a sudden change in direction:

- Children under 1.35 m tall or younger than 12 years of age must be secured in a suitable child restraint.
- If you are using a child restraint on the passenger seat, move the seat as far back as possible.

BEFORE YOU DRIVE

SEATS

Manual seats

Manual seat forward and rearward adjustment



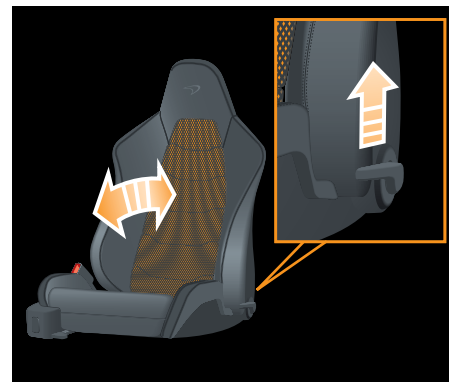
Lift the lever (arrowed), move the seat to the desired position and release the lever to lock the seat.

 **WARNING:** Ensure the seat is locked in position before driving.

 **NOTE:** Ensure that there are no items of luggage in the footwell or behind, underneath or to the side of the seats. This may lead to the seats being damaged.

Manual seat backrest rake adjustment

 **WARNING:** To minimise the risk of injury, position the backrest as close as possible to vertical.

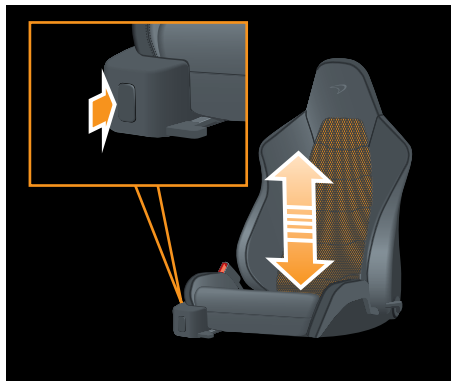


Lift the lever (arrowed), move the seat backrest to the position required, and release the lever.

BEFORE YOU DRIVE

SEATS

Manual seat height adjustment



Press the switch (arrowed) up or down until the seat reaches the desired height.

i *NOTE: Height adjustment is only available on the driver's seat.*

BEFORE YOU DRIVE

SEATS

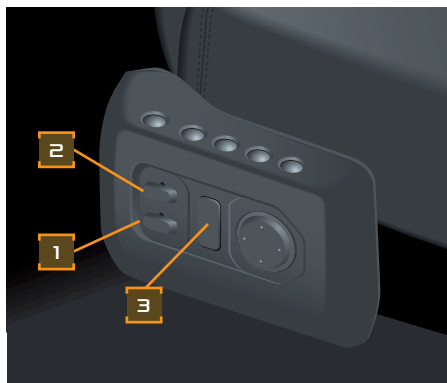
Electric seats*

Electric seat adjustment

The seat adjustment switch is on the front face of the seat base.

i NOTE: Ensure there are no items of luggage in the footwell or behind, beneath or to the side of the seats, or the seats may be damaged.

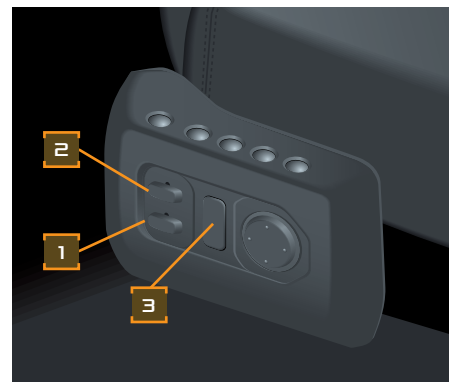
Forward or rearward adjustment



Press the switch (1) up or down until the seat reaches the desired position.

Electric seat backrest rake adjustment

! WARNING: To minimise the risk of injury, position the backrest as close as possible to vertical.



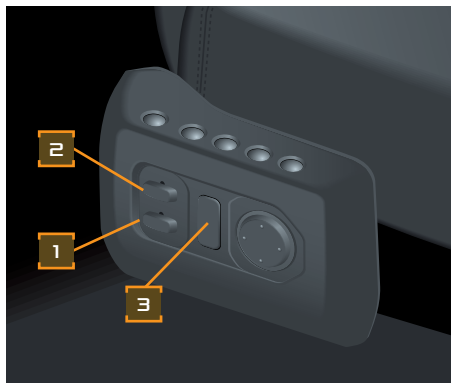
Press the switch (2) up or down until the backrest is in the required position.

! WARNING: Ensure there are no items beneath the passenger seat or the occupant protection system may not function correctly.

BEFORE YOU DRIVE

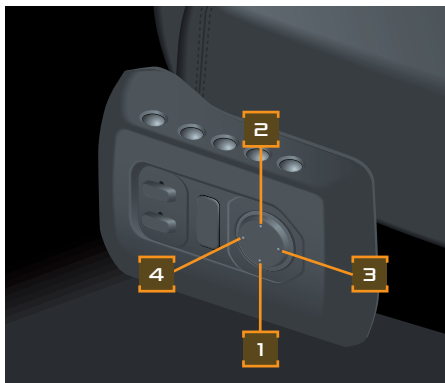
SEATS

Electric seat height adjustment



Press the switch **(3)** up or down until the seat reaches the desired height.

Electric seat lumbar adjustment

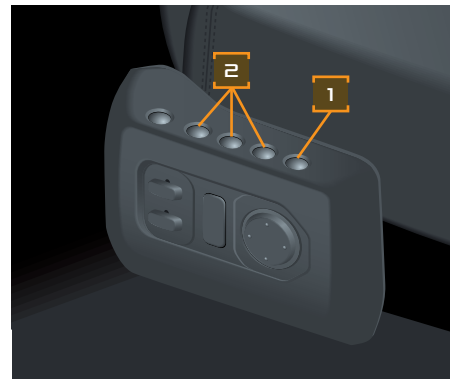


Press **(1)** to select lower lumbar support or press **(2)** to select upper lumbar support.

Press **(3)** to inflate or **(4)** to deflate the selected lumbar support.

Storing a seat and mirror position

Specific seat and exterior mirror positions can be stored for each driver.



Set the seat and mirrors to the desired positions, see Electric seats*, page 24 and Exterior mirrors, page 39.

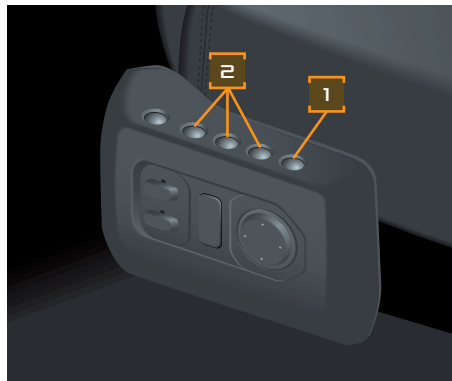
Press and hold the memory set button **(1)** and then simultaneously press any of the memory position buttons **(2)** to store the setting.

BEFORE YOU DRIVE

SEATS

Recalling a seat and mirror position

⚠ WARNING: *Only recall a seat and mirror position when the vehicle is stationary. You may not be able to observe road and traffic conditions and you could lose control of the vehicle as a result of the seat moving. You could therefore cause an accident.*



Press the button (2) where the required setting is stored, and hold until the seat and mirrors have completed their adjustment.

Comfort entry/exit

⚠ WARNING: *Ensure that no-one can become trapped as the seat moves.*

When Comfort entry/exit is active, the driver's seat will move fully rearwards and to its lowest position when the ignition is off and the driver's door is opened.

This assists exit from the vehicle. To switch the feature on or off, see Comfort Entry/Exit, page 113.

Use the seat and mirror memory recall feature to return the seat to your preferred position. If no seat positions are stored in memory, readjust the seat using the controls.

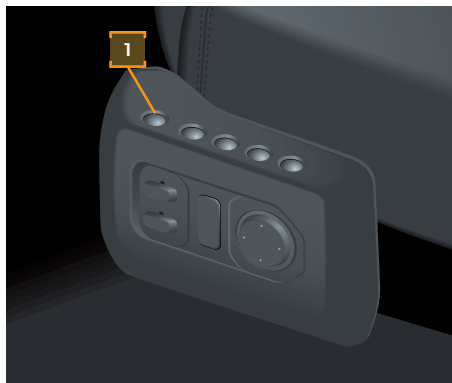
BEFORE YOU DRIVE

SEATS

Heated seats



WARNING: To avoid the risk of injury, constantly monitor the seat temperature.



Press button **(1)** once to switch seat heating to the low temperature setting, the button illuminates amber. Press again to switch to the high temperature setting, the button illuminates red.

Press button **(1)** again to switch seat heating off.

The seat heater will remain in operation until switched off.

BEFORE YOU DRIVE

STEERING WHEEL AND STEERING COLUMN

Steering wheel adjustment

⚠ WARNING: Only adjust the steering wheel when the vehicle is stationary. You may not be able to observe road and traffic conditions safely. This could lead to you losing control of the vehicle which may result in an accident.

The steering wheel can be adjusted for height and reach.



Push the lever (highlighted) downwards and position the steering wheel so that:

- your arms are slightly bent when you hold the wheel;
- you can move your legs freely;
- you can see all the displays in the instrument cluster clearly.

Pull the lever to secure the steering wheel. Ensure the lever is locked before driving.

Horn

Press the centre of the steering wheel to operate the horn.

i NOTE: The horn can be operated when the ignition is switched off.

BEFORE YOU DRIVE

OCCUPANT SAFETY

Seat belts

Seat belts and child restraint systems are the most effective means of restraining vehicle occupants from impact forces, which, in turn, minimises the danger of injury from interior impacts and the effects of whiplash.

 **WARNING:** A seat belt which is not worn, is worn incorrectly, or has not been engaged fully in the seat belt buckle, cannot perform its intended function. To avoid injuries, ensure that all vehicle occupants wear their seat belt correctly at all times.

Ensure that the belt:

- is routed as low as possible across your pelvic area, i.e. across your hip joints and not across your abdomen;
- fits closely;
- is not twisted;
- is routed across the middle of your shoulder;

- is not routed across your neck or under your arm;
- pull upwards on the shoulder belt to check it fits closely across your pelvic area.

Do not secure any objects with a seat belt if the seat belt is being used by a vehicle occupant.

Avoid wearing bulky clothing.

Do not route the belt across sharp edged or fragile objects especially if these are on or in your clothing. The seat belt could be damaged and you could be injured.

Only one person should use each seat belt at any one time.

Never allow children to travel on the lap of another occupant.

Children under 1.35 m tall or younger than 12 years of age must be secured in a suitable child restraint. Follow the manufacturer's instructions when installing child restraint systems.

BEFORE YOU DRIVE

OCCUPANT SAFETY



WARNING: Pregnant women should wear a seat belt to ensure maximum safety of mother and unborn child. Position the lap belt across the hips, beneath the abdomen and position the diagonal belt between the breasts and to the side of the abdomen. Ensure the belt is not slack or twisted.



WARNING: The seat belt only provides its intended degree of protection if the seat backrest is positioned close to vertical, and the occupant is sitting upright.



WARNING: The seat belt cannot perform its function correctly if the seat belt or buckle are dirty or damaged. Ensure the belt latch engages the buckle fully.

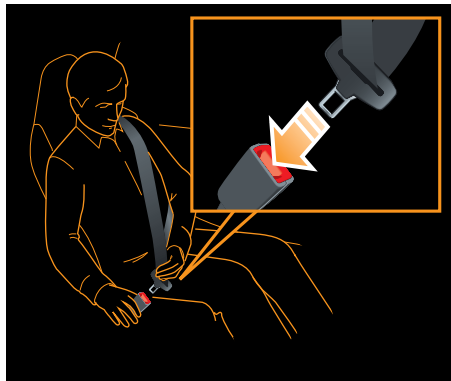
Check the seat belts regularly to ensure that they are not damaged, or routed over sharp edges and are not trapped. The belt could tear in an accident, causing injury to occupants.

Have seat belts checked if the belts have been damaged or subjected to a heavy load. Work on the seat belts should only be carried out by a McLaren Dealer.

BEFORE YOU DRIVE

OCCUPANT SAFETY

Wearing a seat belt



1. Ensure that you are seated comfortably and the controls are within easy reach.
2. Grasp the seat belt latch and pull across the body, ensuring that the belt lies flat across the mid point of the collar bone between the neck and shoulder, then across the chest and pelvis.

3. With the belt correctly positioned insert the latch into the buckle and press until a click is heard to confirm engagement.

Seat belt tensioners

The seat belts incorporate belt tensioners. Belt tensioners apply tension to the seat belts in an accident, pulling them tight against the occupant.

⚠ WARNING: Do not insert the belt latch into the passenger seat belt buckle if the passenger seat is unoccupied. The belt tensioners could be triggered in an accident.

⚠ WARNING: Belt tensioners do not correct an incorrect sitting position or incorrectly worn seat belts.

Belt tensioners do not pull occupants back towards the backrests.

The belt tensioner will be triggered for each seat belt, provided the belt latch is engaged in the seat belt buckle, if a head-on or rear-end collision occurs and the vehicle decelerates or accelerates rapidly.

If the belt tensioners are triggered, a bang will be heard, a small amount of dust may be released and the Supplementary Restraint System warning light will illuminate.

Belt force limiters

The seat belts incorporate belt force limiters. Belt force limiters are tuned to the front air bags and gradually release the tension being applied to the belts during an impact, thus reducing the force exerted on occupants.

Seat belt warning light



The seat belt warning light in the instrument cluster and a warning tone reminds vehicle occupants to fasten their seat belts. The seat belt warning light extinguishes and the warning tone ceases when the driver and passenger have fastened their seat belt.

BEFORE YOU DRIVE

OCCUPANT SAFETY

Supplementary Restraint System

Air bag system

Your McLaren is equipped with the following air bags:

- driver's front air bag in the steering wheel;
- passenger front air bag in the dashboard;
- side head air bags in the doors.

 **WARNING:** Air bags are not a substitute for correctly worn seat belts, they enhance the level of occupant protection offered by seat belts.

 **WARNING:** Correct operation of the air bags can only be guaranteed if the steering wheel, the passenger air bag cover and the door trim are not covered.

 **WARNING:** To reduce the risk of injuries in the event of an accident, observe the following points:

- Ensure that the driver's chest is at least 25 centimetres (10 inches) from the air bag cover.
- Do not lean forward over the dashboard while the vehicle is in motion.
- Do not rest your feet on the dashboard.
- Only hold the steering wheel by the outside of the rim. You could be injured if the air bag deploys and you are holding the inside of the steering wheel.
- Occupants, particularly children must not lean on the doors from inside the vehicle.
- Ensure that there are no other objects between the vehicle occupants and the deployment area of the air bags.
- Because of the high speed at which air bags deploy, there is a risk of injuries caused by an inflating air bag.

BEFORE YOU DRIVE

OCCUPANT SAFETY

Front air bags



The driver's front air bag (1) deploys in front of the steering wheel and the passenger front air bag (2) deploys in front of and above the dashboard.

The front air bags are deployed if the system determines they can offer additional protection for occupants against head and chest injuries.

i **NOTE:** The passenger front air bag is only triggered if the **PASSENGER AIR BAG OFF** warning light on the overhead console is **NOT** illuminated, see *Occupant classification system - front passenger seat*, page 34.

Side head air bags

⚠ **WARNING:** To reduce the risk of injury to occupants if a side head air bag is triggered, ensure that:

- there are no other objects between the vehicle occupants and the deployment area of the air bags;
- no accessories are attached to the doors;
- no heavy or sharp objects are left in the pockets in clothing;
- occupants - in particular, children - must never lean their head on the doors.



The side head air bags (left-hand arrowed) are located in the upper area of each door panel, and are deployed if the system determines they can offer additional protection for the head of the occupant on the side of the vehicle on which the impact occurs.

i **NOTE:** The passenger side head air bag is only deployed if the passenger seat is occupied.

BEFORE YOU DRIVE

OCCUPANT SAFETY

Occupant classification system - front passenger seat

The system can determine if the passenger seat is occupied using weight sensors in the seat base and by checking the seat belt buckle engagement on the passenger seat belt. The passenger front air bag will not be active unless a specific weight is exceeded. This allows child restraint systems to be used on the passenger seat.



The status of the air bags is indicated by the PASSENGER AIR BAG OFF warning light (arrowed) on the overhead console.

The PASSENGER AIR BAG OFF warning light illuminates when the ignition is switched on and extinguishes after 5 seconds.

The warning light will remain illuminated if the passenger seat is unoccupied or if a child seat is fitted.

i **NOTE:** The PASSENGER AIR BAG OFF warning light is always illuminated unless the specific weight is exceeded.

If the PASSENGER AIR BAG OFF warning light is illuminated, the passenger front air bag is not active. The side head air bag and the belt tensioner on the passenger side remain active even if the PASSENGER AIR BAG OFF warning light is illuminated.

⚠ **WARNING:** If the PASSENGER AIR BAG OFF warning light is not illuminated when the child seat is fitted, the front air bag is not deactivated. The child could be seriously injured if the passenger air bag inflates.

⚠ **WARNING:** To ensure that the occupant classification system functions correctly, never place objects under the seat.

⚠ **WARNING:** To ensure that the occupant classification system functions correctly, never place objects (e.g. a cushion) under the child restraint system. The entire base of the child restraint system must be in contact with the seat at all times. If a child restraint system is not fitted correctly it may not provide the intended degree of protection in the event of an accident and may cause injuries.

BEFORE YOU DRIVE

OCCUPANT SAFETY

Air bag deployment

In the event of a collision, the air bags deploy and the Supplementary Restraint System warning light will illuminate, see Supplementary Restraint System warning light, page 35.

Air bag deployment slows down and restricts the movement of the vehicle occupant reducing the load on the body. The air bags are in a depressurised state following an accident.

 **WARNING:** *If the air bags are deployed, a bang will be heard and a small amount of fine powder may be released. The noise will not damage your hearing and the powder does not constitute a health hazard nor does it imply that a fire has broken out. This powder could cause short-term breathing difficulties for persons suffering from asthma or other respiratory conditions. To prevent breathing difficulties, leave the vehicle as soon as possible or open a window.*

 **WARNING:** *After an air bag has been triggered, air bag parts are hot, do not touch them. Have the air bags replaced at a McLaren Dealer.*

Supplementary Restraint System warning light



The Supplementary Restraint System performs a self-test at regular intervals when the ignition is switched on and the engine is running.

The warning light in the instrument cluster illuminates when you switch on the ignition and extinguishes 5 seconds after the engine is started.

 **WARNING:** *A malfunction has occurred if any of the following occur. Contact a McLaren Dealer.*

- the warning light does not illuminate when you switch on the ignition;
- the light does not extinguish a few seconds after the engine is running;
- the light illuminates again, after the engine has started.

Safety features

If you are unfortunate enough to be involved in an accident the following events will occur to assist you and any recovery personnel:

- the doors will unlock;
- the hazard warning lights will switch on;
- the interior lighting will switch on;

In some instances, the fuel system will also be switched off;

BEFORE YOU DRIVE

OCCUPANT SAFETY

Child passengers

WARNING: Do not leave children unsupervised in the vehicle even if they are secured in a child restraint. Children could injure themselves on parts of the vehicle, open a door and be seriously or even fatally harmed by prolonged exposure to heat or cold.

If children open a door, they could cause injury to others in doing so or get out of the vehicle and possibly injure themselves or they could be injured by a passing vehicle.

Do not expose the child restraint system to direct sunlight. The metal parts of the child restraint system could burn the child.

Do not carry heavy or hard objects inside the vehicle unless they are secured.

An unsecured or incorrectly positioned load increases the risk of injury to the child during sharp braking, a sudden change of direction or an accident.

Child restraint systems

Secure any child under 1.35 m tall or younger than 12 years of age travelling in the vehicle in an appropriate category restraint according to their weight. McLaren recommend the use of specific child restraints. Contact a McLaren Dealer for advice.

Category	Weight
Category 0	Up to 10 kg
Category 0+s	Up to 13 kg
Category I	9 to 18 kg
Category II	15 to 25 kg
Category III	22 to 36 kg



WARNING: Never secure a rearward-facing child restraint system on the passenger seat if the passenger front air bag is active. The status is indicated by the PASSENGER AIR BAG OFF indicator.

BEFORE YOU DRIVE

OCCUPANT SAFETY



WARNING: If the **PASSENGER AIR BAG OFF** indicator does not illuminate, do not use a rearward-facing child restraint system on the passenger seat. Use a forward-facing child restraint system on the passenger seat. The warning label on the passenger side is there to remind you of this.

WARNING: If a forward facing child seat is fitted to the passenger seat, make sure that the passenger seat is fully rearwards and is positioned at the lowest height. A manual passenger seat does not have height adjustment.

WARNING: If the child restraint system has not been fitted correctly, the child cannot be restrained in an accident or sudden braking and could be injured. When fitting a child restraint system, observe the manufacturer's instructions on the correct use of the child restraint.

Never place objects (e.g. a cushion) underneath the child restraint. The base of the child restraint system must always be in full contact with the seat. If a child restraint system is not fitted correctly it may not provide the intended degree of protection and may even cause injuries.

BEFORE YOU DRIVE

OCCUPANT SAFETY

KISI child seat function

Your McLaren is fitted with a KISI system which is an automatic locking seat belt on the passenger side designed to temporarily lock the seat belt to securely hold the child restraint in the passenger seat.

1. Extend the passenger seat belt fully. The KISI system only engages when the seat belt is fully extended.

 **NOTE:** *If the vehicle is parked on a hill the inertia lock may stop the seat belt extending. If this occurs, release the seat belt slightly and continue to extend the seat belt carefully to avoid the engagement of the inertia lock.*

2. Pass the seat belt through the child restraint as described by the child restraint manufacturer and engage the belt latch in the buckle.
3. Adjust the belt so that the lower section is tight against the restraint and allow the upper section to retract. The KISI system will click as the belt retracts.

4. When the seat belt has retracted as far as possible, pull on the upper section to check that the seat belt has locked.

 **NOTE:** *The KISI system will disengage when the seat belt has fully retracted and can then be worn as a normal seat belt. Once the KISI system has unlocked, it will be necessary to fully extend the seat belt to engage the KISI system the next time a child restraint is used.*

Footwells

 **WARNING:** *Never store any items of any description in either footwell to ensure that nothing can impede operation of the controls or become a hazard in the event of an accident.*

Ensure any mats are correctly fitted and secured.

BEFORE YOU DRIVE

MIRRORS

Safety

 **WARNING:** Before driving, adjust all mirrors to give the best possible view of road and traffic conditions.

Interior mirror

Adjust the interior mirror, to get a good view of the road and traffic conditions.

Move the lever on the bottom of the mirror to avoid being dazzled by lights from vehicles behind.

Exterior mirrors

 **WARNING:** In some markets, the exterior mirrors have convex glass fitted. This type of mirror enlarges the field of vision, but reduces the size of the image. This means that objects are closer than they appear.

To avoid misjudging the distance to vehicles travelling behind and perhaps causing an accident, check the actual distance of the vehicle, before changing direction.

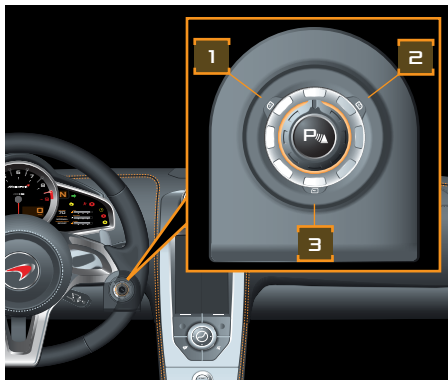
The exterior mirrors control is located on the dashboard between the steering wheel and the centre console.

BEFORE YOU DRIVE

MIRRORS

Adjusting mirrors

1. Switch the ignition on.



2. Rotate the control to the left (1) to adjust the left-hand mirror or to the right (2) to adjust the right-hand mirror.
3. Move the control up, down left and right to adjust the mirror to the desired position.

Exterior mirror fold

1. Switch the ignition on.
2. Rotate the control to position (3) to fold the mirrors.
3. To unfold the mirrors rotate the control away from position (3).

 **NOTE:** If the switch remains in position (3) the mirrors will be folded until the switch is moved.

Exterior mirror automatic fold

The exterior mirrors can be set so that they fold automatically when the vehicle is locked. Unfolding occurs as a door is opened, not when the vehicle is unlocked. See Auto Fold Mirrors, page 112.

Mirror dipping in reverse

The exterior mirrors can be set to dip when reverse is engaged. This provides a view of the ground to the rear of the vehicle. See Reverse Mirror Dip, page 113.

Heated mirrors

Exterior mirrors are heated when the rear screen heater is in operation, and the engine is running. They are also heated when the ambient temperature is below 5°C (41°F).

BEFORE YOU DRIVE

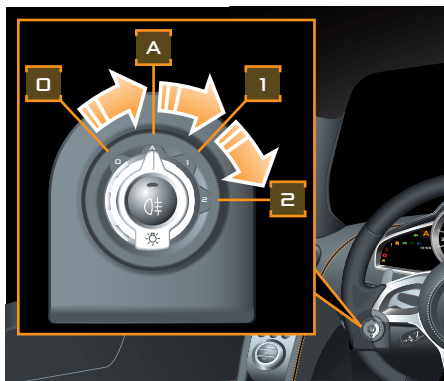
LIGHTING

Light switch

 **WARNING:** The lights do not switch on automatically in foggy conditions.

Automatic light control is only an aid, you are responsible for the vehicle's lighting at all times.

The light switch is located between the steering wheel and the door and has the following positions.



At position **(0)**, the lights are off.

Rotate the control to position **(A)** for automatic light control.

Rotate the control to position **(1)** for sidelamps or position **(2)** for headlamps. The side lamp or headlamp warning light illuminates in the instrument cluster.

 **NOTE:** A warning tone sounds if the driver's door is opened while the sidelamps or headlamps are switched on.

Automatic light control

The sidelamps and dipped beam headlamps are switched on automatically when ambient light falls below a predetermined level.

To switch on automatic light control, turn the light switch to position **(A)**.

BEFORE YOU DRIVE

LIGHTING

Sidelamps

The sidelamps and the daytime running lamps are a combined series of Light Emitting Diodes located around the outside of the dipped beam headlamp. The sidelamps operate at a lower intensity than the daytime running lamps, see Daytime running lamps, page 43.

The sidelamps and licence plate lamps illuminate when the light switch is turned to position **(1)**.



The sidelamps warning light in the instrument cluster illuminates.

Headlamps

To switch on the headlamps, turn the light switch to **(2)**.



The headlamps warning light in the instrument cluster illuminates.

Main beam headlamps



To switch to main beams, push the stalk away from you.



The main beam headlamps warning light illuminates in the instrument cluster.

Pull the stalk towards you, to revert to dipped beams.

Headlamp flash

Pull the stalk fully towards you.

The main beam headlamps operate for as long as the stalk is held.



The main beam headlamps warning light illuminates in the instrument cluster.

BEFORE YOU DRIVE

LIGHTING

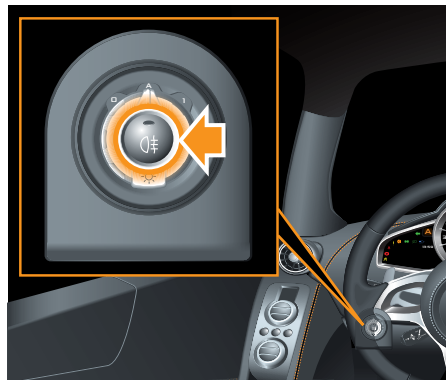
Daytime running lamps

Your McLaren is fitted with daytime running lamps which illuminate automatically when the ignition is switched on even if all lights are switched off. The sidelamps and the daytime running lamps are a combined series of Light Emitting Diodes located around the outside of the dipped beam headlamp. The daytime running lamps operate at a higher intensity than the sidelamps.

Rear fog lamp

i *NOTE: The rear fog lamp only operates when dipped beam headlamps are on.*

Ensure that the dipped beam headlamps are switched on.



Press the fog light button (arrowed) in the centre of the light switch.

Q The warning light in the instrument cluster and the light in the switch both illuminate.

BEFORE YOU DRIVE

LIGHTING

Direction indicators



Push the indicator/main beam stalk downwards (1) to switch on the left-hand indicator.

Push the indicator/main beam stalk upwards (2) to switch on the right-hand indicator.



The corresponding warning light in the instrument cluster will flash.

The stalk returns to its rest position as the steering wheel returns to its central position.

Indicators - lane change

Move the indicator/main beam stalk until resistance is felt when changing lanes on a motorway. The appropriate indicator flashes three times.

For further information about the lighting see Light switch, page 41.

Hazard warning lamps

The hazard warning lamps operate even if the ignition is switched off. As a safety feature, they switch on automatically when an air bag is triggered.

Operating the hazard warning lamps



1. Press the hazard warning lamps button (arrowed).
2. All the indicator lamps and both indicator warning lights in the instrument cluster flash.

BEFORE YOU DRIVE

LIGHTING

3. Press the hazard warning lamps button again to switch off.

i *NOTE: If the hazard warning lamps have been switched on automatically, press the hazard warning lamps button once to switch them off.*

Panic alarm

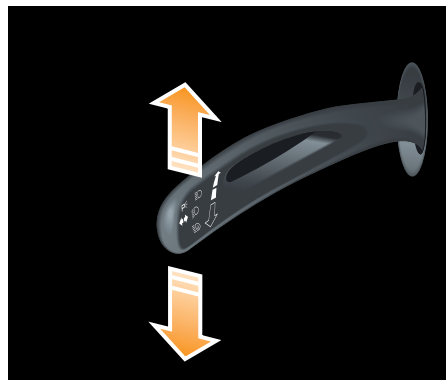
The panic alarm function is designed to attract attention by sounding the horn and flashing the indicator lamps repeatedly.

The panic alarm can be switched on by pressing the hazard warning lamps button for a period of 3 seconds or more.

The horn will cease after the panic alarm has been active for a long period of time, but the indicator lamps will continue to flash. The horn can be re-initiated by pressing the hazard warning lamps button for a period of 3 seconds or more.

To switch the panic alarm off, press the hazard warning lamps button a single time.

Parking lights



i *NOTE: The parking lights can only be switched on when the ignition is switched off.*

1. To switch the parking lights on, press the indicator/main beam stalk down for the left-hand side or push up for the right-hand side. The selected parking lights will illuminate.

2. To switch the parking lights off, move the indicator/main beam stalk to the central position.

i *NOTE: If the ignition is switched on while the parking lights are still on, the indicators will not operate until the parking lights are switched off.*

BEFORE YOU DRIVE

WIPER AND WASHERS

Windscreen wiper



1. Windscreen wiper off
2. Automatic wipe
3. Slow wipe
4. Fast wipe

i **NOTE:** Switch off the windscreen wiper in dry weather, dirt can cause inadvertent wiper sweeps which could damage the wiper blade or windscreen.

Operating the windscreen wiper

1. Ensure the ignition is switched on.
2. Move the wiper stalk to the required position

i **NOTE:** If the windscreen wiper is switched on and the vehicle comes to a halt, the windscreen wiper automatically switches to intermittent wipe, until the vehicle moves away.

Automatic wipe

A rain sensor, located on the windscreen behind the rear view mirror, measures the quantity of water on the screen and operates the wiper at the most appropriate speed.

To select, move the windscreen wiper stalk to the automatic wipe position (2).

The wiper will wipe once. The wipe frequency then depends on how wet the windscreen is.

Only select the automatic wipe position in damp weather conditions or when it is raining.

To adjust the sensitivity of the rain sensor, see Wiper Sensitivity, page 114.

i **NOTE:** Automatic wipe is cancelled when a door is opened. This prevents occupants exiting the vehicle from being sprayed with water. Wiping continues when the door is closed again.

Slow wipe

Move the wiper stalk to position (3), to operate the wipers at slow speed.

Return the stalk to position (1) to switch off.

Fast wipe

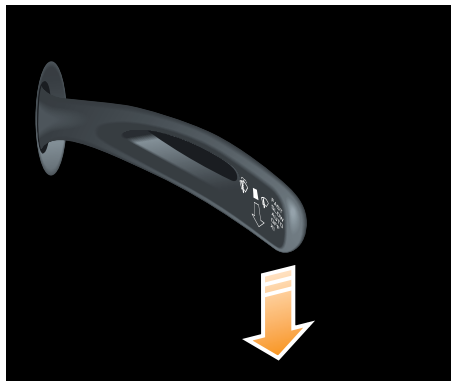
Move the wiper stalk to position (4), to operate the wipers at fast speed.

Return the stalk to position (1) to switch off.

BEFORE YOU DRIVE

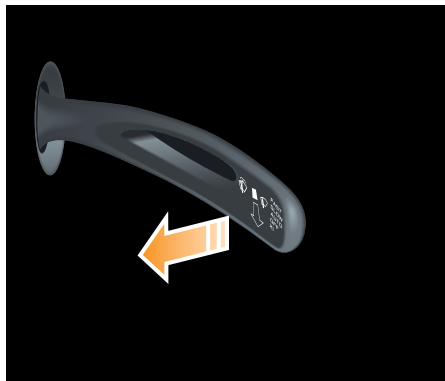
WIPER AND WASHERS

Single wipe



1. For a slow single wipe, briefly push the wiper stalk and release. The wiper will operate once at slow speed, without washers.
2. For a fast single wipe, push and hold the wiper stalk down. The windscreen wiper will perform a continuous fast wipe until the stalk is released.

Windscreen wash/wipe



Pull the wiper stalk towards you.

The windscreen washers and wiper will operate at a slow speed for as long as the stalk is held.

When the stalk is released, the wiper will complete its cycle and return to the parked position. After a period of time the wiper will operate once more to wipe any remaining washer fluid from the windscreen.

i *NOTE: The position of the washer jets are set during vehicle manufacture and should not need adjusting. If a problem occurs, consult a McLaren Dealer.*

Headlamp wash

The headlamp wash only operates when the headlights are on. The system monitors the windscreen wash/wipe function, and every seventh operation triggers the headlamp wash. When the ignition is switched off, the automatic headlamp wash count resets to zero.

i *NOTE: The headlamp washers do not operate at speeds above 100 mph, (160 kph).*

DRIVING CONTROLS

STARTING AND DRIVING

Vehicle electrical status	50
Switching on the ignition	51
Instruments and warning lights	52
Seamless Shift Gearbox gear positions	55
Parking brake	57
Brake pedal	59
Starting/stopping the engine	60
Driving	62
Parking Sensors	64

SEAMLESS SHIFT GEARBOX

Overview	66
Gear positions	66
Accelerator pedal position	67
Manual/Automatic mode	68

HANDLING AND POWERTRAIN CONTROLS

Active dynamics control	71
Active button	71
Handling control	72
Powertrain control	74
Winter mode	75
Launch control	76

DRIVING SAFETY SYSTEMS

General	78
Anti-lock Braking System	78
Brake Assist System	79
Brake disc wiping	79

Hill hold control	79
Brake-steer	80
Electronic brake pre-fill	80
Electronic Stability Control	80
Airbrake	83
Tyre Pressure Monitoring System	86

ACTIVE SPEED LIMITER (ASL)

Setting an upper speed limit	89
------------------------------------	----

CRUISE CONTROL

Overview	90
Using cruise control	91
Cancelling cruise control	92
Increasing cruise speed	92
Reducing cruise speed	93
Resuming a stored speed	93

RUNNING IN

Running in	94
Normal/Road use	95
Track use	95

REFUELLING

Filling with fuel	96
Recommended fuel	98

WINTER DRIVING

Winter driving	99
----------------------	----

DRIVING CONTROLS

STARTING AND DRIVING

Vehicle electrical status

The vehicle will implement one of the following statuses according to the criteria detailed.

 **NOTE:** The engine can be started from any of the following states, except Locked. If the car is in Sleep mode, the **START/STOP** button will need to be pressed for more than two seconds.

 **NOTE:** If the vehicle detects the battery charge is getting too low, it will adopt the Awake status to conserve energy. Accessory and Ignition will be prohibited, but Crank will still be available. This is to allow the engine to be started so that battery recharging can commence.

Locked

Vehicle is locked in low power mode.

Sleep

Vehicle is unlocked in low power mode.

Awake

Door is opened or **START/STOP** button pressed, when the car is in Sleep mode.

Time, odometer reading and battery status are available in the left-hand display. Fuel gauge operates in right-hand display.

If there is no further activity after two minutes, the vehicle will return to the Sleep status.

Accessory

START/STOP button is pressed, when car is in Awake mode.

Windows and Heater/air conditioning controls operate. Head unit and instrument cluster menus are available.

If there is no further activity after 15 minutes, the vehicle will return to the Sleep status.

DRIVING CONTROLS

STARTING AND DRIVING

Ignition

START/STOP button is pressed, when car is in Accessory mode.

i *NOTE: There is no time out with ignition on. Be aware that the battery could become discharged.*

Crank

See Starting/stopping the engine, page 60.

Switching on the ignition

1. Ensure that the key fob is inside the vehicle.



2. To switch on the ignition without starting the engine, press the **START/STOP** button (arrowed), without depressing the brake pedal.

i *NOTE: If the vehicle is in Awake mode, press the **START/STOP** button twice.*

3. The ignition will switch on, the oil temperature, water temperature and fuel gauges will operate and several of the warning lights will illuminate as a self-test. The instrument cluster will fully illuminate.

DRIVING CONTROLS

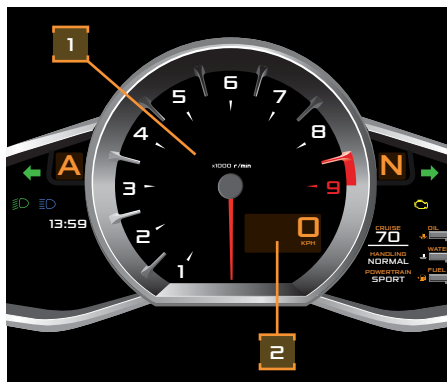
STARTING AND DRIVING

Instruments and warning lights

Warning lights can be divided into different categories, according to the colour that they illuminate.

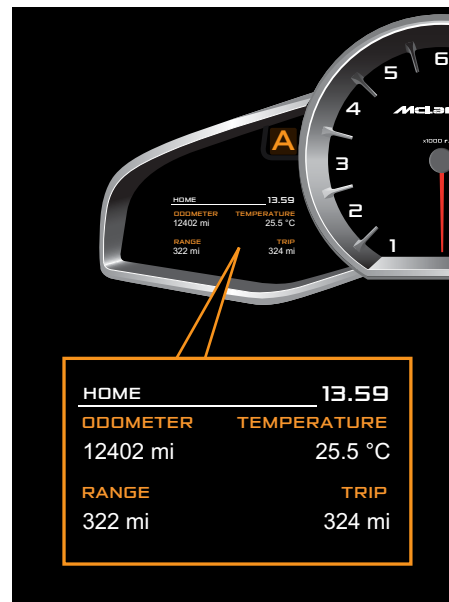
- RED, AMBER or YELLOW - indicates that a fault has been detected. A fault indicated by a RED light is more important than one displayed in AMBER or YELLOW.
- BLUE or GREEN - indicates that a system or feature is switched on and operating.

Main instruments overview



1. Tachometer, page 102
2. Speedometer, page 102

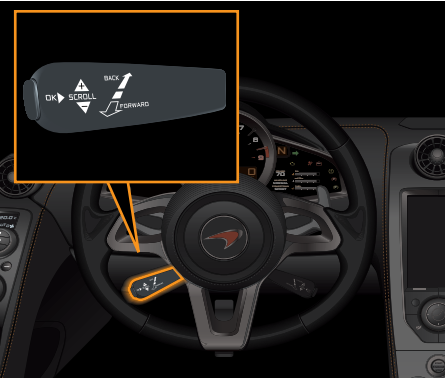
Left-hand display overview



The left-hand display provides vital information to the driver as well as the facility to personalise some vehicle settings. It also enables operation of the Media, Trip Computer, Navigation and Telephone.

DRIVING CONTROLS

STARTING AND DRIVING



Use the control stalk to navigate through the menus.

Warning lights - left-hand side

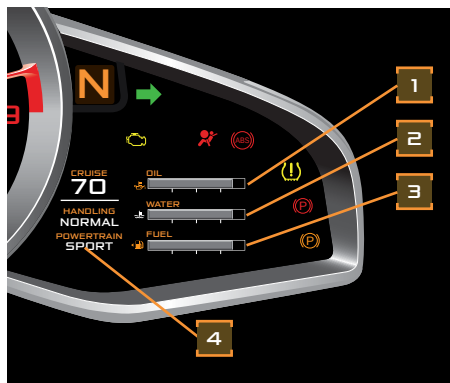


	Electronic Stability Control, page 80
	Electronic Stability Control, page 80
	Brake warning light, page 59
	Seat belt warning light, page 31
	General warning - illuminates in conjunction with other warning lights
	Rear fog lamp, page 43
	Sidelamps, page 42
	Headlamps, page 42
	Main beam headlamps, page 42
	Direction indicators, page 44
	Gearbox mode indicator

DRIVING CONTROLS

STARTING AND DRIVING

Right-hand display overview



1. Oil temperature, page 128
2. Water temperature, page 129
3. Fuel level, page 130
4. Handling control, page 72
Powertrain control, page 74

Warning lights - right-hand side

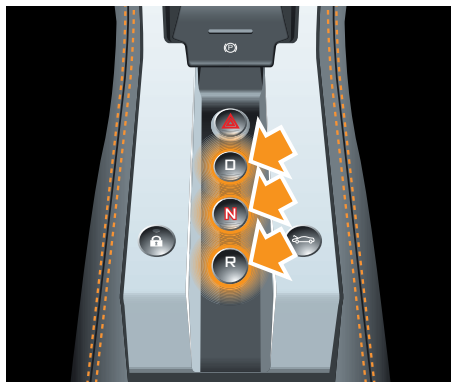


	Direction indicators, page 44
	Engine warning light, page 63
	Supplementary Restraint System warning light, page 35
	Anti-lock Braking System status light, page 79
	Tyre Pressure Monitoring System operation, page 86
	Parking brake, page 57
	Parking brake, page 57
	Gear position indicator

DRIVING CONTROLS

STARTING AND DRIVING

Seamless Shift Gearbox gear positions



The gearbox operates in either automatic or manual mode. Automatic mode is selected unless the driver chooses manual mode, see Manual/Automatic mode, page 68. If manual mode is active, gear changes are made using the gearshift paddles, see Gearshift paddles, page 69.

Drive

- All seven forward gears are available. Gear changes will be automatic, unless manual mode has been selected.

When drive is selected and the brakes are released, the vehicle will begin to move slowly without any throttle use making it useful for parking manoeuvres and for moving off in queuing traffic.

Neutral

- No gear is engaged. Releasing the brakes will allow the vehicle to move freely, e.g. by pushing or towing.

Reverse

- In normal circumstances, select reverse gear when the vehicle is stationary. When carrying out parking manoeuvres that require rapid changes from drive to reverse and back again, it is possible to engage reverse at speeds up to 6 mph (10 kph).

DRIVING CONTROLS

STARTING AND DRIVING

Gearshift paddles



To upshift, pull the right-hand paddle towards you. To downshift pull the left-hand paddle towards you. The current gear position appears in the gear position display, see Gear position indicator, page 126.

i **NOTE:** The single-piece paddle and central pivot enables upshifts and downshifts to be made using either paddle.

As an alternative, upshifts can be made by pushing the left-hand paddle away from you and downshifts can be made by pushing the right-hand paddle away from you.

The gearshift paddles operate irrespective of the handling and powertrain program selected, and there is no need to release the accelerator pedal to change gear.

⚠ WARNING: For safety, in manual mode only, the vehicle will monitor engine speed and may perform an automatic gear change if necessary.

⚠ WARNING: Do not change down for additional engine braking on a slippery surface.

i **NOTE:** If operating the paddles in automatic mode, the gearbox will revert to automatic changes if an eight second period elapses without a gear change being made.

To immediately shift to the lowest possible gear while the vehicle is moving, select a downshift and hold the paddle.

When the vehicle speed is below 6 mph (10 kph) or the vehicle is stationary with a gear selected, select a downshift and hold the paddle to select neutral.

DRIVING CONTROLS

STARTING AND DRIVING

Parking brake

WARNING: Do not place small items such as coins in the parking brake recess as this could inhibit the operation of the parking brake switch.

NOTE: When parking on steep downhill slopes, turn the front wheels towards the kerb. When parking on steep uphill slopes, turn the front wheels away from the kerb.



(P) Pull the parking brake switch upwards to apply. The bar in the parking brake switch and the red parking brake applied status light in the instrument cluster illuminates.

If the parking brake applied status light is flashing, the parking brake has failed to engage/disengage. To resolve, engage/disengage the parking brake again. The bar in the parking brake switch will always show the same state as the parking brake applied status light.

(P) If there is a malfunction with the parking brake, the amber parking brake malfunction status light in the instrument cluster illuminates and the bar in the parking brake switch flashes. Contact a McLaren Dealer as soon as possible.

DRIVING CONTROLS

STARTING AND DRIVING



 Keep the brake pedal depressed, and press the parking brake switch downwards to disengage. The bar in the parking brake switch and the red parking brake applied status light in the instrument cluster extinguishes.

 **WARNING:** If the parking brake is manually released, the vehicle may start to move.

 **NOTE:** If the parking brake is not manually released, it will automatically release as the vehicle is driven off forward, or in reverse as long as the following conditions are met:

- All doors are closed;
- Drivers seat belt is buckled.

 **NOTE:** It is only possible to disengage the parking brake with the ignition on. The parking brake can be applied in all ignition states, including car asleep.

 **NOTE:** In the event of total footbrake failure, the parking brake can be applied when in a when the vehicle is moving to slow the vehicle.

DRIVING CONTROLS

STARTING AND DRIVING

Brake pedal

 **WARNING:** Do not keep any objects in the driver's footwell. Ensure that floor mats or carpets are properly secured and do not obstruct the pedals.

If objects become trapped between the pedals, you would not be able to brake or accelerate, and this could lead to an accident.

 **WARNING:** The braking system is servo assisted when the engine is running. The brakes will still function with the engine off, but more pressure will be required to operate them.

 **WARNING:** Do not rest your foot on the brake pedal while travelling as this may overheat the brakes, reduce their efficiency and cause excessive wear.

 **WARNING:** If the brake warning light illuminates while the vehicle is in motion, stop the vehicle as soon as safety permits and contact a McLaren Dealer immediately.

Brake discs and pads

 **WARNING:** New brake pads require a period of bedding in. For the first 625 miles (1000 km), avoid situations where heavy braking is required.

Brake disc and pad wear depends on the driving style and driving conditions.

Brake warning light

 The brake warning light will illuminate when the ignition is switched on as a system test. If the brake warning light illuminates at any other time, a fault is indicated. Stop the vehicle as soon as safety permits and contact a McLaren Dealer immediately.

DRIVING CONTROLS

STARTING AND DRIVING

Starting/stopping the engine

WARNING: *Never run the engine when the vehicle is in an enclosed space. Exhaust fumes contain poisonous carbon monoxide. Breathing exhaust fumes could lead to unconsciousness and death.*

NOTE: *Do not depress the accelerator pedal when starting the engine.*

The engine can be either started using manual cranking or timed cranking.

To change between the cranking functions of the **START/STOP** button, see Timed Crank, page 113.

Manual cranking

1. Ensure that the key fob is in the vehicle.



2. Depress the brake pedal, and continuously press the **START/STOP** button, the engine will start.
3. Cranking can be stopped by either releasing the brake pedal, or releasing the **START/STOP** button.

Timed cranking

1. Ensure that the key fob is in the vehicle.



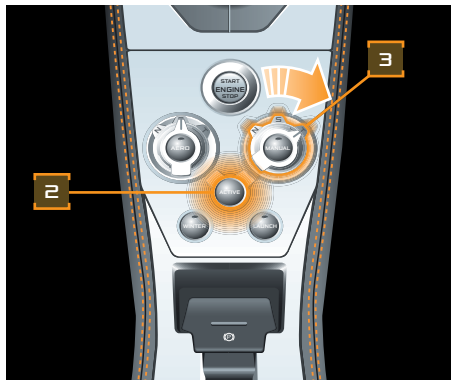
2. Depress the brake pedal, and press the **START/STOP** button, the engine will start.
3. If the **START/STOP** button is pressed again while the engine is cranking, cranking is stopped.

DRIVING CONTROLS

STARTING AND DRIVING

Loud start

i *NOTE: The loud start feature is only available when restarting a hot engine.*



1. Switch on the ignition, see Switching on the ignition, page 51.
2. Press the **ACTIVE** button.
3. Rotate the powertrain control to the 'T - Track' setting.

4. Depress the brake pedal and then press the **START/STOP** button to activate the 'loud start' feature. The engine speed will initially be higher on start up, giving an enhanced mechanical noise and exhaust note.

Stopping the engine

! *WARNING: The gearbox has no Park position to lock the gears. The parking brake is the only means of preventing the vehicle moving.*

i *NOTE: Do not depress the accelerator pedal when stopping the engine.*

Do not switch the engine off immediately after high speed/high load running. Allow it to run for 60 seconds so the engine temperature returns to normal.

i *NOTE: When parking on steep downhill slopes, turn the front wheels towards the kerb. When parking on steep uphill slopes, turn the front wheels away from the kerb.*

1. Pull the parking brake switch upwards to apply.

i *NOTE: If the parking brake is not applied manually, it will apply automatically when the engine is not running, and the drivers door is open. Automatic application can be overridden by holding the parking brake switch in the down position whilst opening the driver door.*

2. Select neutral.

DRIVING CONTROLS

STARTING AND DRIVING



3. Press the **START/STOP** button. The engine stops, the vehicle enters the Accessory state, see Vehicle electrical status, page 50. The immobiliser is activated.

i **NOTE:** If the **START/STOP** button is pressed for more than a second, the vehicle will enter the Awake state for a brief time before returning to Accessory state if no further inputs are made, see Vehicle electrical status, page 50.

Driving

Driving away

! **WARNING:** *Never turn the engine off while driving, there will be no assistance for the steering or the foot brake. You will need more effort to steer and brake and could lose control of the vehicle and cause an accident.*

i **NOTE:** Do not drive at high engine speeds until the engine has reached normal operating temperature.

i **NOTE:** The doors will lock when the vehicle reaches a speed of approximately 9 mph (15 kph).

🌿 **ENVIRONMENTAL:** When starting from cold, gear changes occur at higher engine speeds. The catalytic converter will reach its operating temperature quicker and reduce engine emissions.

1. With the engine running, press and hold the brake pedal.
2. Select drive or reverse gear, or initiate an upshift by operating the gearshift paddles. For more information, see Gearshift paddles, page 69 and Gear positions, page 66.
3. Keep the brake pedal depressed and release the parking brake switch. The red warning light in the instrument cluster and the bar in the parking brake switch extinguish.

! **WARNING:** *If the parking brake is manually released, the vehicle may start to move.*

i **NOTE:** *If the parking brake is not manually released, it will automatically release as the vehicle is driven off forward, or in reverse as long as the following conditions are met:*

- All doors are closed;
- Drivers seat belt is buckled.

4. Carefully depress the accelerator pedal.

DRIVING CONTROLS

STARTING AND DRIVING

Engine warning light



This engine warning light illuminates when the ignition is on and extinguishes as soon as the engine is started, provided no faults exist.

If the light illuminates while driving, an engine management fault has been detected and reduced engine performance may be experienced. Stop the vehicle as soon as safety permits and contact a McLaren Dealer immediately.

Economical driving

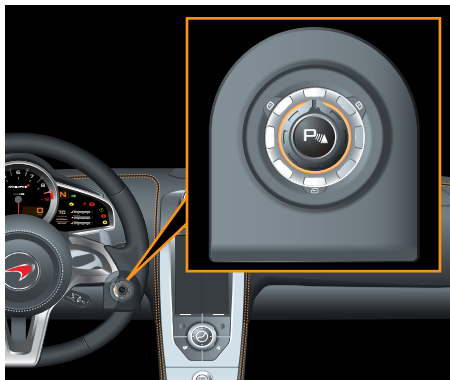
Improved fuel economy can be achieved by following this advice.

- accelerate smoothly and gently from a standing start;
- when in manual mode, avoid high engine rpm by changing to a higher gear as soon as possible;
- avoid labouring or over-revving the engine;
- switch off the air conditioning when it is not needed;
- avoid journeys where frequent stop start driving is involved;
- ensure that your driving style suits the prevailing road and traffic conditions; allow time for smooth, progressive acceleration and braking;
- use a fuel economy tracking website to track your mileage and fuel usage.

DRIVING CONTROLS

STARTING AND DRIVING

Parking Sensors*



The front parking sensors are automatically switched on when the ignition is switched on. The rear parking sensors are switched on when reverse gear is selected. The light around the parking sensors button will illuminate red to indicate that parking sensors are active.

The centre sensors on the front bumpers have a range of approximately 1 metre (3 feet). The centre sensors in the rear bumper have a range of approximately 1.5 metres (5 feet).

An intermittent tone is heard when an obstruction is within range. As the vehicle moves closer to the obstruction, the frequency of the tone increases. When the distance between the sensors and the obstruction is less than approximately 40 centimetres (1.5 feet), the tone becomes continuous.

The parking sensors alert the driver to any obstructions while manoeuvring at low speeds. The system comprises four ultrasonic sensors in the front bumper, four ultrasonic sensors in the rear bumper and two sounders. Each sounder has a different pitch to indicate whether the obstruction is at the front or the rear of the vehicle.

DRIVING CONTROLS

STARTING AND DRIVING

 **WARNING:** *The parking sensors may not detect moving objects such as children and animals, until they are dangerously close. Always manoeuvre with caution and always use your mirrors and look behind you.*

 **NOTE:** *The parking sensors are for guidance only and are not intended to replace the driver's visual checks for obstructions when manoeuvring. The parking sensors may not detect some obstructions, such as narrow posts or small obstructions close to the ground such as kerbs.*

The rear parking sensors are automatically switched off when reverse gear is de-selected.

The front parking sensors can be switched off manually by pressing the button, the light around the button will extinguish.

If a fault is detected, a long high-pitched tone will sound. If the sensors are obscured by dirt, ice or snow, clean them. If the problem persists, contact a McLaren Dealer.

DRIVING CONTROLS

SEAMLESS SHIFT GEARBOX

Overview

The gearbox is a 7-speed, dual clutch Seamless Shift Gearbox that can be operated in automatic or manual mode.

Automatic mode is selected unless the driver chooses manual mode, see Manual/Automatic mode, page 68.

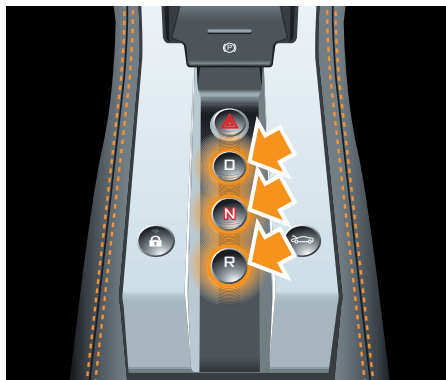
In automatic mode, the Gearbox automatically optimises the shift points to suit your style of driving by selecting the most appropriate gear depending on:

- Powertrain control, page 74;
- Accelerator pedal position, page 67;
- Vehicle speed;
- Braking effort.

i **NOTE:** Allow the engine and gearbox to warm up before driving at high engine speeds and high loads.

Avoid prolonged spinning of the rear wheels when driving on slippery surfaces as this could damage the drive train.

Gear positions



Press one of the gear position buttons (arrowed).

Drive

- D** All seven forward gears are available.
- D** Gear changes will be automatic, unless manual mode has been selected.

When drive is selected and the brakes are released, the vehicle will begin to move slowly without any throttle use making it useful for parking manoeuvres and for moving off in queuing traffic.

Neutral

- N** No gear is engaged. Releasing the brakes will allow the vehicle to move freely, e.g. for pushing or towing. For more information on use of neutral for towing, see Towing for recovery, page 198.

Reverse

- R** In normal circumstances, select reverse gear when the vehicle is stationary. When carrying out parking manoeuvres that require rapid changes from drive to reverse and back again, it is possible to engage reverse or drive at speeds up to 6mph (10 kph) whilst travelling in the opposite direction.

i **NOTE:** If reverse or drive is selected at speeds above 6 mph (10 kph), the transmission will engage neutral, as a self protection feature.

When reverse is selected and the brakes are released, the vehicle will begin to move slowly without any throttle use making it useful for parking manoeuvres.

DRIVING CONTROLS

SEAMLESS SHIFT GEARBOX



The gear (manual mode) or the gear position (automatic mode) selected will be shown in the instrument panel.

Accelerator pedal position

Your style of driving influences how the Seamless Shift Gearbox changes gear.

With light accelerator pedal use, upshifts are made at lower engine speeds. With firmer accelerator pedal use, upshifts are made at higher engine speeds.

Kickdown

Kickdown is designed to achieve immediate acceleration.

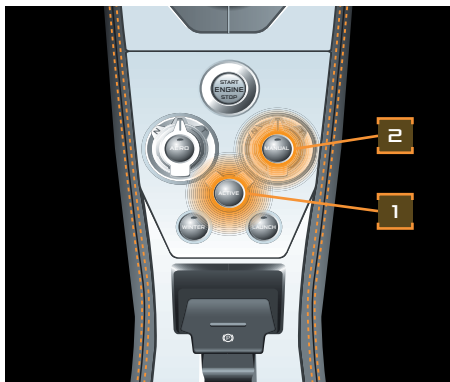
Depress the accelerator pedal fully beyond the pressure point, a click will be felt through the pedal. The gearbox will downshift immediately to the lowest appropriate gear, and maximum acceleration will follow. Once the pedal pressure is released, kickdown will cease and normal gear changes will resume.

i *NOTE: Moderate accelerator pedal pressure may also cause the gearbox to downshift, depending on vehicle speed.*

DRIVING CONTROLS

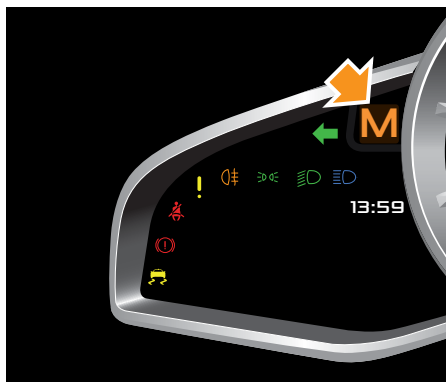
SEAMLESS SHIFT GEARBOX

Manual/Automatic mode



Press the **ACTIVE** button (1) to switch on the active dynamics panel.

The halo around the **ACTIVE** button will come on. When selecting the different drive modes, their respective button will become illuminated. You can deactivate your drive mode selection at anytime by pressing the **ACTIVE** button again. Press the **MANUAL** button (2) to select manual mode.



The gearbox mode indicator displays **M**. All forward gear changes are made by operating the gearshift paddles, see Gearshift paddles, page 69.

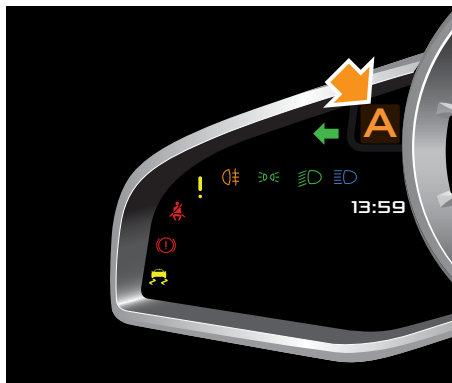


When driving in manual mode, the gear position indicator will change from orange to red to indicate that an upshift is required.

DRIVING CONTROLS

SEAMLESS SHIFT GEARBOX

Press the **MANUAL** button again to revert to automatic mode.



The gearbox mode indicator displays **A**. All gear changes occur automatically, but if a gearshift paddle is operated the gearbox will adopt a temporary manual mode. This mode will remain active for as long as the driver continues to make manual gear changes, each within an eight second period. The gearbox mode indicator displays **A/M**, see Gearbox mode indicator, page 122.

i **NOTE:** As soon as an eight second period has elapsed without a manual gear change being made, the gearbox will revert to automatic mode.

Gearshift paddles



To upshift, pull the right-hand paddle towards you. To downshift pull the left-hand paddle towards you. The current gear position appears in the gear position display, see Gear position indicator, page 126.

i **NOTE:** The single-piece paddle and central pivot enables upshifts and downshifts to be made using either paddle.

As an alternative, upshifts can be made by pushing the left-hand paddle away from you and downshifts can be made by pushing the right-hand paddle away from you.

The gearshift paddles operate irrespective of the handling and powertrain program selected, and there is no need to release the accelerator pedal to change gear.

! **WARNING:** For safety, in manual mode only, the vehicle will monitor engine speed and may perform an automatic gear change if necessary.

! **WARNING:** Do not change down for additional engine braking on a slippery surface.

DRIVING CONTROLS

SEAMLESS SHIFT GEARBOX

 **NOTE:** *If operating the paddles in automatic mode, the gearbox will revert to automatic changes if an eight second period elapses without a gear change being made.*

To immediately shift to the lowest possible gear while the vehicle is moving, select a downshift and hold the paddle.

When the vehicle speed is below 6 mph (10 kph) or the vehicle is stationary with a gear selected, select a downshift and hold the paddle to select neutral.

Pre-cog

 **WARNING:** *Do not allow this feature to distract you from the prevailing road and traffic conditions.*

It is possible to pre-select the next gear change using the 'pre-cog' feature, to enable a faster gear change. 'Pre-cog' (or 'pre-cognition') means 'foreknowledge'.

The paddles have two switching points. Pull and hold the appropriate paddle to the first point, this informs the gearbox of an impending gear change. The gearbox then prepares for that change by pre-selecting the next gear. When the change is required, pull the paddle fully and the gear change will be performed almost instantaneously.

DRIVING CONTROLS

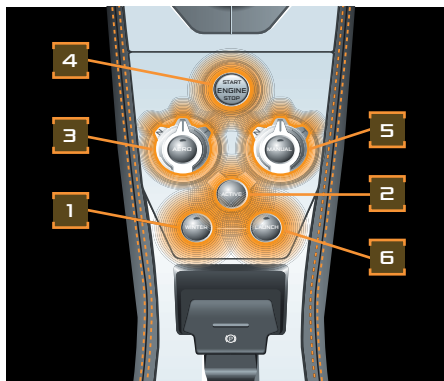
HANDLING AND POWERTRAIN CONTROLS

Active dynamics control

The handling and powertrain control switches, on the active dynamics panel, allow the driver to change the handling and performance characteristics of the vehicle.

Active dynamics panel

The active dynamics panel contains the following controls, and will only function with the engine running or the ignition switched on.



1. Winter mode, page 75
2. Active button, page 71
3. Handling control, page 72
4. STOP/START button
5. Powertrain control, page 74
6. Launch control, page 76

Active button



Pressing the **ACTIVE** button (arrowed) activates the handling and powertrain controls. The **ACTIVE** button and handling and powertrain switches will illuminate.

i **NOTE:** When the ignition is switched off, the controls on the active dynamics panel will also switch off. The handling and powertrain control settings will be remembered but it will be necessary to press the **ACTIVE** button again to operate the controls when the ignition is next switched on.

DRIVING CONTROLS

HANDLING AND POWERTRAIN CONTROLS

Handling control

The handling control switch affects the following vehicle characteristics:

- Roll stiffness
- Adaptive damping
- ESC settings
- Steering response

Selecting a setting



1. Press the **ACTIVE** button (arrowed) to switch on the active dynamics panel.



2. Rotate the handling control (arrowed) to select one of the following settings.

DRIVING CONTROLS

HANDLING AND POWERTRAIN CONTROLS

Settings

N	Normal	Suspension at its softest setting, offers a compliant ride while maintaining good body control through corners.
S	Sport	Suspension is stiffer, giving a firmer ride coupled with enhanced handling characteristics.
T	Track	The suspension is at its stiffest, giving almost race car handling and ride characteristics. The Electronic Stability Control warning light is permanently illuminated.

The mode selected will remain active, until the selection is changed, or the ignition is switched off.

 **NOTE:** If all the following conditions are not met when the selection is made, the mode will not be implemented until they are met.

- engine running with no fault conditions existing;
- no vehicle dynamic or stability interventions activated;
- vehicle speed below 114 mph (190 kph);
- steering wheel in straight ahead position, and not being turned, if the car is moving.

When the active dynamics panel is off, the Handling display in the right-hand instrument display will show Normal, see Handling and powertrain display, page 127.

 **NOTE:** In Track handling mode, the Electronic Stability Control system is still in operation. For further information, see Electronic Stability Control, page 80.

Proactive chassis control

The Proactive chassis control system features adjustable roll control using hydraulically interconnected dampers, in place of the typical mechanical anti-roll bars. Each handling mode adjusts the settings of the dampers to offer high levels of roll control, grip, traction and a unique combination of ride comfort and handling.

DRIVING CONTROLS

HANDLING AND POWERTRAIN CONTROLS

Powertrain control

Selecting a setting



1. Press the **ACTIVE** button (arrowed) to switch on the active dynamics panel.



2. Rotate the powertrain control (arrowed) to select one of the following settings.

Settings

N	Normal	Gear changes are configured to offer the optimum economy without sacrificing the vehicle's inherent performance.
S	Sport	Gear changes will occur at a higher engine speed and with a reduced shift duration.
T	Track	Gear change strategy is at its sharpest, changes occur instantly, according to throttle response.

The different gear change strategies outlined above are only relevant with automatic mode selected.

The mode selected will remain active, until the selection is changed, or the ignition is switched off.

When the active dynamics panel is off, the Powertrain display in the right-hand instrument display will show Normal, see Handling and powertrain display, page 127.

DRIVING CONTROLS

HANDLING AND POWERTRAIN CONTROLS

Winter mode

Selecting Winter mode



1. Press the **ACTIVE** button (arrowed) to switch on the active dynamics panel.



2. Press the **WINTER** button (arrowed), the button will illuminate and WINTER will appear in the Powertrain and Handling display.

3. Winter mode overrides both handling and powertrain controls. In winter mode, the roll stiffness, adaptive damping and Electronic Stability Control settings are changed to give the maximum assistance to the driver in slippery conditions. The engine speed, gearshift points and shift speed are also optimised for the slippery conditions.
4. For more information, see Winter driving, page 99.
5. To switch off, press the **WINTER** button again, alternatively switch off the ignition.

DRIVING CONTROLS

HANDLING AND POWERTRAIN CONTROLS

Launch control

Launch control is designed to offer the maximum acceleration from a standing start.

WARNING: Before initiating launch control, ensure that the prevailing road and traffic conditions are suitable for performing maximum acceleration manoeuvres.

i NOTE: Launch control can be operated in either automatic or manual modes and any handling or powertrain mode, but only when the active dynamics panel is activated.

i NOTE: The launch sequence can be deactivated at any point by carrying out any of the following actions:

- applying the parking brake;
- pressing the **ACTIVE** button to switch off the vehicle dynamics panel;
- or pressing the launch button to switch off launch control

i NOTE: If there is a fault or the launch procedure has not been followed correctly, a warning message Launch mode unavailable - see Owners Manual will be shown in the left-hand display. Repeat the launch procedure, ensuring that it is followed correctly. If the warning message remains, contact a McLaren Dealer.

1. Depress the brake pedal firmly with your left foot and select first gear.



2. Press the **ACTIVE** button (arrowed) to switch on the active dynamics panel.

DRIVING CONTROLS

HANDLING AND POWERTRAIN CONTROLS



3. Press the **LAUNCH** button (arrowed).

i **NOTE:** **L** will flash in the gearbox mode indicator, see Manual/Automatic mode, page 68.

4. With your left foot remaining on the brake pedal, press and hold the accelerator pedal down fully with your right foot, the engine speed will increase to 3000 rpm.

i **NOTE:** To abort launch control release the brake pedal before pressing the accelerator pedal or wait for approximately 60 seconds until launch control is deactivated.

5. Release the brake pedal with your left foot and the launch control system will perform a launch start to give maximum acceleration

i **NOTE:** To abort launch control release the accelerator pedal or wait for approximately 5-10 seconds until launch control is deactivated. If the launch is aborted, release the accelerator pedal and then press again to drive away.

6. Launch control will operate until aborted.

i **NOTE:** Whilst in launch control, the vehicle will carry out automatic gear shifts, and optimise traction. It will continue to do so until launch control is aborted. To abort launch control, release the accelerator pedal, apply the brake, or operate one of the gearshift paddles.

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS

General

This section contains information about the following safety systems:

- Anti-lock Braking System
- Brake Assist System
- Brake disc wiping
- Hill hold
- Brake-steer
- Electronic brake pre-fill
- Electronic Stability Control
- Airbrake

 **WARNING:** *The risk of an accident increases when driving quickly, especially when cornering, on wet and icy roads. Always maintain a safe distance to the vehicle in front.*

The driving safety systems described in this section are unable to override the laws of physics.

Always adapt your driving style to suit the road and weather conditions and maintain a sufficient distance from other road users and objects on the road.

 **NOTE:** *In winter conditions, the maximum effect of the Anti-lock Braking System, Brake Assist System and Electronic Stability Control can only be achieved if you use winter tyres, with snow chains where they are necessary.*

Anti-lock Braking System

The Anti-lock Braking System prevents the wheels from locking when you brake. This allows the vehicle to be steered during braking manoeuvres.

The Anti-lock Braking System works from a speed of approximately 5 mph (8 kph) upwards, regardless of road surface conditions. It works on slippery surfaces, even when you brake gently.

 **WARNING:** *Do not depress the brake pedal repeatedly in quick succession (pumping). Depress the brake pedal firmly and evenly. Pumping the brake pedal reduces the braking effect.*

If the Anti-lock Braking System operates during braking, the warning light flashes, and the brake pedal pulses as this happens.

When the Anti-lock Braking System is activated, maintain the force on the brake pedal until the braking situation is over.

 **WARNING:** *Always adapt your driving style to suit the prevailing road and weather conditions and maintain sufficient distance from other road users and objects on the road.*

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS

Anti-lock Braking System status light

 If there is a malfunction with the system, the status light will illuminate. Do not drive your vehicle, contact a McLaren Dealer as soon as possible.

 **WARNING: If the Anti-lock Braking System malfunctions, Brake Assist System and Electronic Stability Control are also deactivated.**

If the Anti-lock Braking System malfunctions, the wheels could lock when you brake. This may increase the stopping distance and impair your ability to steer.

Brake Assist System

Brake Assist System operates in emergency braking situations. If you depress the brake pedal quickly, the Brake Assist System automatically increases the force applied to the brakes and thus shortens the stopping distance.

Continue to depress the brake pedal firmly until the emergency situation is over, the Anti-lock Braking System prevents the wheels from locking.

When you release the brake pedal, the brakes will work as normal. Brake Assist System is deactivated.

 **WARNING: If the Brake Assist System malfunctions, the brakes will still operate. However, the braking force is not automatically boosted and this may increase the stopping distance.**

Brake disc wiping

Brake disc wiping operates automatically when the windscreen wiper is switched on. It prevents moisture build up on the brake discs during periods of heavy rain, improving braking performance.

Hill hold control

If the foot brake is applied to hold the vehicle on a hill, this function will continue to apply the brakes for two seconds after the pedal is released to assist a smooth start.

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS

Brake-steer

Brake steer offers the benefits of a torque vectoring differential, but is integrated into the braking system reducing weight and providing excellent speed of response.

If the system detects that the car is starting to understeer through a corner, the inside rear brake is gently applied. This helps to increase the yaw rate of the car, making the car feel more resistant to understeer. The lateral 'g' force is also increased giving better handling characteristics.

If the driver uses too much throttle exiting a corner, the inside rear wheel increases speed, which without brake steer could cause the car to become unstable. In this situation, brake steer will again gently apply the brake on the inside rear wheel, thereby restoring traction and stability.

Electronic brake pre-fill

If the accelerator pedal is suddenly released, the electronic brake pre-fill function immediately brings the brake pads into contact with the discs, ensuring rapid braking.

Electronic Stability Control

Electronic Stability Control monitors driving stability and traction between the tyres and the road surface.

Electronic Stability Control detects when a wheel starts to spin or the vehicle starts to skid and stabilises the vehicle by braking individual wheels, and/or limiting the engine power output. This also assists when pulling away on wet or slippery road surfaces and stabilises the vehicle when braking.



Electronic Stability Control operation is indicated by the warning light flashing.



NOTE: The Electronic Stability Control warning light is permanently illuminated when Track mode is selected on the Handling Control.



WARNING: If the Electronic Stability Control warning light flashes, do not deactivate Electronic Stability Control. Adapt your driving style to suit road and traffic conditions.

Electronic Stability Control cannot reduce the risk of an accident if you drive too fast. Electronic Stability Control is unable to override the laws of physics.



NOTE: Electronic Stability Control only functions properly if wheels with the recommended specification tyres are used.

Electronic Stability Control is activated automatically as soon as the engine is running.

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS

Traction control system

The traction control system is an integral part of Electronic Stability Control.

The traction control system reduces engine torque to prevent the wheels from spinning. If additional intervention is required to stop the wheels from spinning, the vehicle will apply the rear brakes individually. The traction control system brakes individual drive wheels to prevent them from spinning. This means that you can accelerate on slippery surfaces.

⚠ WARNING: The traction control system cannot reduce the risk of an accident if you drive too fast. The traction control system is unable to override the laws of physics.

Deactivating Electronic Stability Control

⚠ WARNING: When Electronic Stability Control is deactivated, the risk of the vehicle skidding is increased. Adapt your driving style to suit road and traffic conditions.

i NOTE: When you deactivate Electronic Stability Control, the following conditions result:

- the 'ESC OFF' warning light illuminates;
- Electronic Stability Control no longer improves driving stability;
- the engine's torque is no longer limited and the drive wheels could spin;
- the anti-lock braking system remains activated.

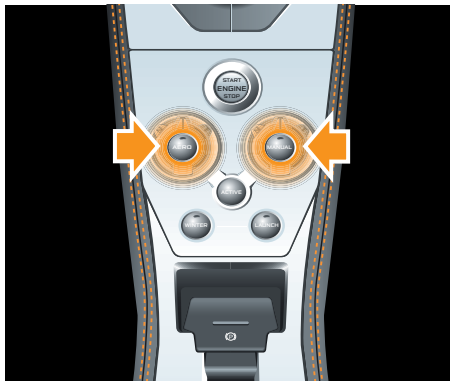
1. Ensure the vehicle is stationary, with the engine running and the brake pedal depressed.
2. Track powertrain and handling modes should be selected, but the dynamics panel should not be switched on, see Handling control, page 72.



3. Press and hold the **ACTIVE** button (arrowed) on the active dynamics panel for 5 seconds, a warning message will be displayed in the left-hand display 'Confirm ESC Off'.

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS



4. To confirm the selection, press and hold the **AERO** and **MANUAL** buttons (arrowed) together for 5 seconds.
5. The Electronic Stability Control OFF warning light illuminates and a confirmation message appears in the left-hand display.

Reactivating Electronic Stability Control



Perform any of the following to reactivate Electronic Stability Control:

- Press the **ACTIVE** button (arrowed) on the active dynamics panel, or
- Change the setting on either the handling or powertrain control, or
- Switch on cruise control, or
- Switch the ignition off and then switch on again.

The Electronic Stability Control OFF warning light in the instrument cluster goes out, and Electronic Stability Control is reactivated.

i *NOTE: Electronic Stability Control is automatically reactivated when the ignition is next switched off and on again.*

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS

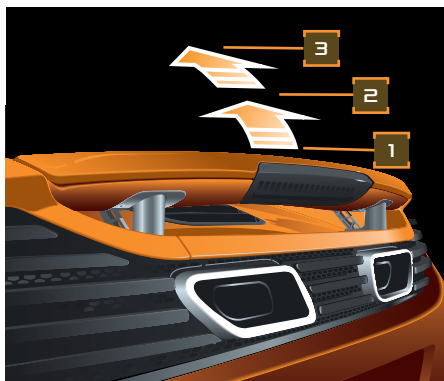
Airbrake

⚠ WARNING: *The driver is responsible for ensuring that no persons, or any part of their body can be trapped during airbrake movement.*

The airbrake is located at the rear of your McLaren and has three operating positions, as described below, and a self-test facility that initiates after every full ignition on/off cycle.

i NOTE: *The airbrake uses hydraulic pressure and will only operate with the engine running.*

i NOTE: *The airbrake system is automatically deactivated at temperatures below -4°C (24°F) or at engine speeds below 500 rpm. A warning message will appear on the instrument cluster if operation of the airbrake is selected. The airbrake system will become active when the ambient temperature rises above -4°C (24°F). or engine speed rises above 500 rpm.*



1. Normal driving position
2. Downforce position
3. Rapid braking position

Self-test

After each full ignition cycle, the first time the engine is started and at speeds above 9 mph (15 kph), the airbrake self-tests, rising to the downforce position and then returning slowly to its initial position.

⚠ WARNING: *If the airbrake fails the self-test, a message will appear in the left-hand display. Contact a McLaren Dealer as soon as convenient.*

i NOTE: *If the engine has been stopped with the airbrake in the downforce position, the self-test procedure will be reversed, i.e. the airbrake will lower fully then raise to the driver selected downforce position.*

Normal driving position mode

This is the default position with the active dynamics panel switched off and is used for normal driving conditions.

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS

Downforce position

In this position, the airbrake is raised to increase rear downforce. This position enhances vehicle stability with increased aerodynamic drag. The airbrake can be raised at any vehicle speed.



1. Press the **ACTIVE** button (arrowed) to switch on the active dynamics panel.



2. Press the **AERO** button (arrowed). The airbrake rises and locks in the downforce position.

Lowering the airbrake - vehicle moving

If the car is travelling at speeds above 9 mph (15 kph), press the **AERO** button, and the airbrake will lower to the normal driving position.

WARNING: Before deactivating the downforce position, check the airbrake for any objects which may obstruct movement, e.g. branches or leaves, and remove them or the airbrake may no longer function correctly. The driver is responsible for ensuring no person or object can be trapped during airbrake movement.

i **NOTE:** The airbrake will only lower if the speed of the vehicle meets the following criteria.

When cornering, the vehicle speed must be between 9 mph (15 kph) and 75 mph (120 kph).

When travelling in a straight line, the vehicle speed must be between 9 mph (15 kph) and 155 mph (250 kph).

This is to reduce the risk of any object being trapped.

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS

Lowering the airbrake - vehicle stationary

If the car is being parked and the airbrake is still deployed, press and hold the **AERO** button for 5 seconds, and the airbrake will start to lower. Keep the button pressed until the airbrake is fully lowered, remaining alert to any potential obstructions.

 **WARNING:** Before lowering, check the airbrake for any objects which may obstruct movement, e.g. branches or leaves, and remove them or the airbrake may no longer function correctly. The driver is responsible for ensuring no person or object can be trapped during airbrake movement.

 **NOTE:** If the **AERO** button is released before the airbrake is fully retracted, it will return to the previously selected position.

Rapid braking position

During hard braking at speeds above 60 mph (95 kph), the airbrake automatically rises to the fully deployed position to provide maximum braking assistance.

Once the pressure on the brake pedal is released, the airbrake will return to its previous position - either the driver selected downforce position or the normal driving position.

 **WARNING:** When activated by hard braking, the airbrake will temporarily block the view through the interior mirror. In this case, monitor the traffic behind you through the exterior mirrors.

 **NOTE:** The airbrake will lower just before the vehicle comes to a halt during hard braking.

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS

Tyre Pressure Monitoring System*

Tyre pressure monitoring system overview



The Tyre Pressure Monitoring System warns you when the pressure drops or the temperature increases above an acceptable level in one or more of the tyres.

The system monitors the tyre pressures and temperatures in each wheel using sensors located in each tyre valve and a receiver located within the vehicle. Communication between the sensors and the receiver is via Radio Frequency (RF) signals.

i *NOTE: The Tyre Pressure Monitoring System can suffer interference if you are operating radio transmitting equipment (e.g. radio headphones, two-way radios) in or near the vehicle.*

Tyre Pressure Monitoring System operation



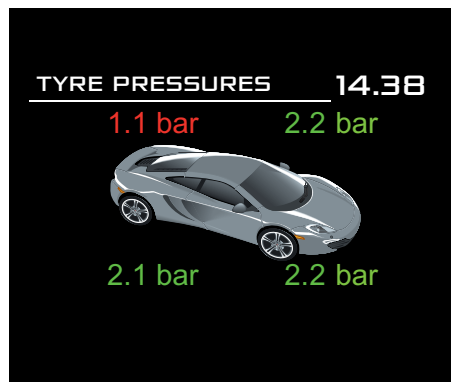
If a low tyre pressure is detected, the Tyre Pressure Monitoring System warning light will illuminate along with an associated error message in the left-hand display.

Stop the vehicle as soon as possible, check your tyres and inflate them to the recommended pressure, see Tyre pressures, page 189.

Navigate through the 'Vehicle Info' screen in the left-hand display to view the current tyre pressures, see Vehicle info, page 117.

DRIVING CONTROLS

DRIVING SAFETY SYSTEMS



The display shows the pressures of each of the 4 tyres. If the pressure figure appears in green, no action is required. If it appears as red text, inflate the associated tyre to the correct pressure as soon as possible.

⚠ WARNING: *The tyre pressures indicated in the left-hand display will be more accurate than with a pressure gauge. The Tyre Pressure Monitoring System is not a substitute for manually checking tyre pressures or checking for wear and damage. The system only provides a low tyre pressure warning and does not re-inflate the tyres.*

The Tyre Pressure Monitoring System cannot alert you to damage to a tyre. Regularly check the condition of your tyres.

⚠ WARNING: *If low pressure warnings occur frequently, have the tyres checked at a McLaren Dealer. Driving on an under-inflated tyre will cause the tyre to overheat and can lead to tyre failure.*

🌱 ENVIRONMENTAL: Under-inflated tyres reduce fuel efficiency and tyre tread life, and may affect the vehicle's handling and braking characteristics.

🌱 ENVIRONMENTAL: Check tyre pressures at least every 14 days.

DRIVING CONTROLS

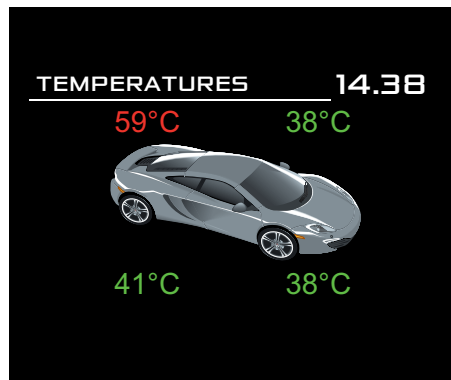
DRIVING SAFETY SYSTEMS

Tyre Temperature Monitoring System operation

If a high tyre temperature is detected, the Tyre Temperature Monitoring System will display an error message in the left-hand display.

Navigate through the 'Vehicle Info' screen in the left-hand display to view the current tyre temperatures, see Vehicle info, page 117.

This shows the current temperature of each of the 4 tyres. If the temperature figure appears in green, no action is required. If it appears as red text, the safe operating temperature of the tyres has been exceeded. Reduce speed or stop the vehicle until the temperatures are at a safe level, i.e. temperatures are displayed in green.



DRIVING CONTROLS

ACTIVE SPEED LIMITER (ASL)

Setting an upper speed limit

WARNING: It is the driver's responsibility to keep within road speed limits.

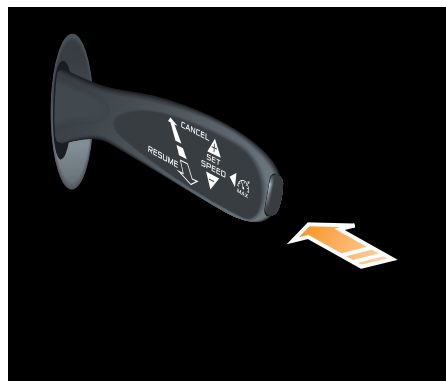
WARNING: The ASL feature may allow the vehicle to exceed the upper speed limit in certain situations, for example when descending steep gradients.

NOTE: ASL can be activated when the car is stationary. The upper speed limit will be set to a default speed of 20 mph (30 kph).

It is possible to use the ASL control to set an upper speed limit.

Selecting a speed

1. Press the button (arrowed) on the end of the cruise control stalk, to select ASL mode.
2. Accelerate or decelerate the vehicle to the desired speed.



3. Push the stalk up briefly to select the desired ASL upper speed limit.



4. The upper speed limit (arrowed) appears in the right-hand display.

DRIVING CONTROLS

CRUISE CONTROL

Overview

⚠ WARNING: Pay particular attention to road and traffic conditions, when cruise control is activated, and always travel at a speed which is safe for the current conditions.

Never use cruise control on winding or slippery roads or when visibility is poor, e.g. in fog, heavy rain or snow.

Cruise control allows the driver to maintain a constant speed without using the accelerator pedal. This is useful on motorway journeys where a constant speed, can be maintained for long periods.



All cruise control functions are operated by the cruise control stalk, positioned on the right of the steering column.

DRIVING CONTROLS

CRUISE CONTROL

Using cruise control



Accelerate to the desired speed and push the stalk up briefly, to activate cruise control. The set speed (arrowed) will appear in the right-hand display.

i **NOTE:** Cruise control will only operate at speeds in excess of 20 mph (30 kph).

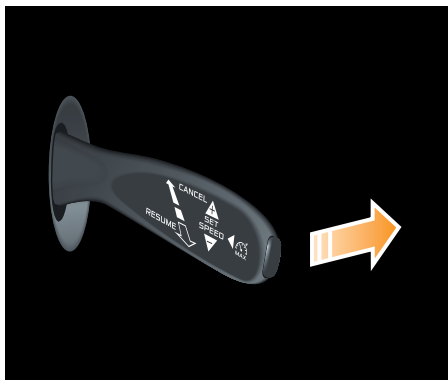
Speed can be increased at any time by pressing the accelerator pedal. Once the accelerator pedal is released the vehicle will return to the cruise speed.

⚠ **WARNING:** Always be aware that cruise is engaged and do not override cruise for extended periods. Releasing the accelerator in these circumstances could lead to the vehicle not decelerating as anticipated.

DRIVING CONTROLS

CRUISE CONTROL

Cancelling cruise control



Briefly press the cruise control stalk away from you.

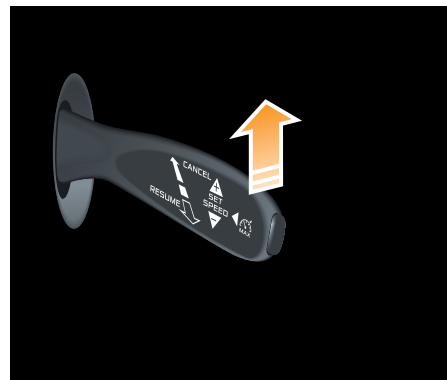
Cruise control is cancelled. The indicator in the instrument cluster extinguishes but the last speed set remains stored.

i *NOTE: The last speed stored is cleared when you switch off the engine.*

Cruise control is also cancelled if the foot brake is pressed, if neutral is selected or if Active Speed Limiter is selected.

i *NOTE: Cruise control is cancelled automatically if Electronic Stability Control is operating or is switched off.*

Increasing cruise speed

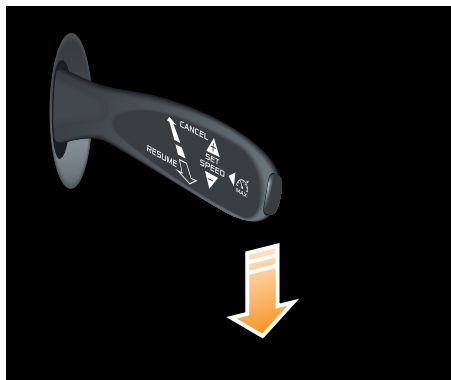


- A brief press of the stalk upwards will increase the vehicle speed in 1 mph (1 kph) increments (depending on the units selected, see Units, page 108);
- or press and hold the stalk upwards until the desired speed is reached, then release the stalk;
- or accelerate to the new desired speed and push the stalk up.

DRIVING CONTROLS

CRUISE CONTROL

Reducing cruise speed



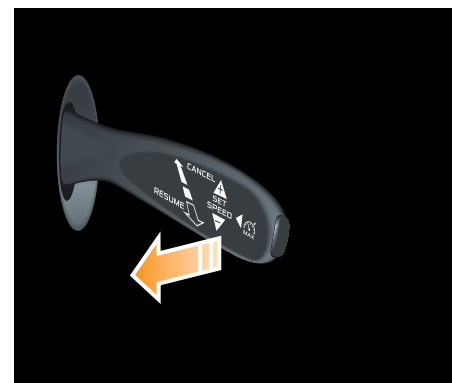
- A brief press of the stalk downwards will decrease the vehicle speed in 1 mph (1 kph) decrements (depending on the units selected, see Units, page 108);
- or press and hold the stalk downwards, the vehicle will decelerate, release the stalk when the desired speed has been reached.

i **NOTE:** If you decelerate using the cruise control stalk, the gearbox may shift down to increase the rate of deceleration.

Downshifting manually using the gear change paddles will not disengage cruise control.

Resuming a stored speed

⚠ WARNING: Only resume the stored speed if it is appropriate for the current road and traffic conditions. Sudden acceleration could endanger yourself and others.



Pull the cruise control stalk briefly towards you. Cruise control will adjust the vehicle's speed to the last speed stored.

DRIVING CONTROLS

RUNNING IN

Running in

Observe the following running in instructions when the vehicle is new or if any of these components have been replaced.

Engine and gearbox

For the first 625 miles (1000 km):

- drive at varying road and engine speeds;
- do not drive faster than 150 mph (240 kph);
- do not use your vehicle on a race track;
- avoid heavy loads on the engine (driving at full throttle);
- avoid driving at engine speeds less than 2000 rpm;
- avoid running at constant speed and load for long periods;
- avoid using kickdown;
- do not downshift for additional engine braking;
- avoid stopping the engine within 2 minutes of high speed and high load running.
- avoid idling the engine for more than 10 minutes.

After the 625 miles (1000 km) running in period, you may gradually use the vehicle's full performance.



NOTE: Failure to observe the engine and gearbox operating limits during the running in period may lead to premature wear or damage to the transmission.



NOTE: These running in instructions also apply for the first 625 miles (1000 km) after the engine or transmission has been replaced.



ENVIRONMENTAL: This advice will assist in improving fuel economy and should be adopted as normal driving practice even after the running in period.

Brakes

New brakes require an initial bedding in period. Avoid heavy braking situations for the first 625 miles (1000 km).

DRIVING CONTROLS

RUNNING IN

Normal/Road use

- Allow the engine to warm up before driving at high engine speeds and high loads. Limit engine speed to 5 000 rpm until the engine reaches full operating temperature;
- Avoid stopping the engine within 2 minutes of high speed/high load running;
- Avoid idling the engine for more than 10 minutes.

Track use



NOTE: Do not use the vehicle on a track during the running in period.

Before you use your vehicle on the track, consult a McLaren Dealer. McLaren recommend that your vehicle is inspected before and after track use.

DRIVING CONTROLS

REFUELLING

Filling with fuel

WARNING: Fuel is highly flammable. Fire, naked flames, smoking and using a mobile telephone are prohibited when handling fuels. Switch off the engine before refuelling.

WARNING: Fuel and fuel vapours can damage your health. Do not inhale fuel vapours or allow fuel to come into contact with skin or clothing.

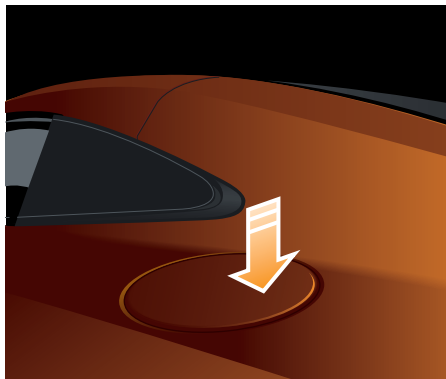
The fuel filler flap is located at the rear on the left-hand side. It is locked or unlocked automatically when the vehicle is locked or unlocked.

NOTE: Do not attempt to force the filler flap open if the car is locked. You may damage the flap and its locking mechanism.

NOTE: The fuel filler flap will remain locked if the engine is running.

Filling on the forecourt

1. Switch off the engine.



2. Press the rear edge of the fuel filler flap (arrowed), the latch will release.
3. Open the flap.

NOTE: Your vehicle is not fitted with a fuel filler cap.

4. Insert the nozzle into the fuel filler and dispense fuel. For fuel recommendations, see Recommended fuel, page 98.

5. Do not continue to fill the tank after the pump nozzle switches off.
6. Remove the nozzle.
7. Close the fuel filler flap, you will hear the latch engage.

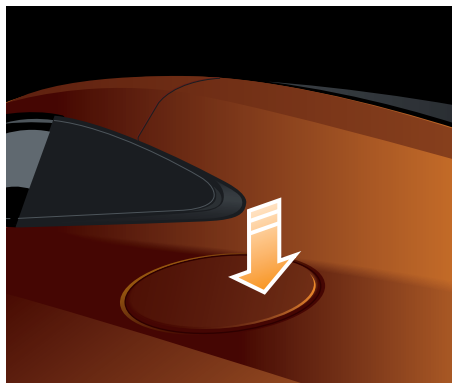
DRIVING CONTROLS

REFUELLING

Filling with the fuel funnel

i *NOTE: The fuel funnel should only be used when filling the fuel tank from sources other than a forecourt fuel pump.*

1. Switch off the engine.



2. Press the rear edge of the fuel filler flap (arrowed), the latch will release.
3. Open the flap.

i *NOTE: Your vehicle is not fitted with a fuel filler cap.*



4. Collect the fuel funnel from the luggage compartment, see Fuel funnel, page 163.
5. Insert the fuel funnel fully into the filler neck.
6. Insert the nozzle into the fuel funnel and dispense fuel. For fuel recommendations, see Recommended fuel, page 98.
7. Do not overfill.



WARNING: Take care to avoid spillages and overfilling. Ensure any spillages are cleaned immediately.

8. Remove the nozzle.
9. Remove the fuel funnel, clean thoroughly and store in the luggage compartment.
10. Close the fuel filler flap, you will hear the latch engage.

DRIVING CONTROLS

REFUELLING

Recommended fuel

For maximum engine performance the use of 98 RON/88 MON unleaded petrol meeting specification EN 228 is required.

In areas where 98 RON/88 MON is unavailable, use unleaded premium grade petrol with a minimum octane rating of 95 RON/85 MON, meeting specification EN 228.

 *NOTE: Information relating to the quality of fuel being dispensed is displayed on the filling pump.*

 *NOTE: The likelihood of engine wear or damage is increased if fuel does not meet the requirements of EN 228 for unleaded petrol or if fuel additives are used.*

Damage caused by use of incorrect fuel is not covered by the vehicle warranty.

DRIVING CONTROLS

WINTER DRIVING

Winter driving

It is recommended that you have your vehicle inspected at a McLaren Dealer at the onset of winter. This service includes the following:

- checking the antifreeze/anti-corrosion concentration;
- adding concentrated cleaning agent to the windscreen and headlamp cleaning system;
- checking the battery;
- changing the tyres.

Select Winter mode on the active dynamics panel, when conditions make it necessary, see Winter mode, page 75.

Winter tyres

Use winter tyres below 7°C (45°F) and on snow or ice-covered roads. The maximum effect of the Anti-lock Braking System and Electronic Stability Control systems is only achieved with these tyres.

Use winter tyres of the same make and tread on all wheels to maintain safe handling characteristics. Change the tyre type in 'Vehicle Settings' in the left-hand display, see Tyre Type, page 115.



WARNING: Replace winter tyres with a tread depth of less than 4 mm immediately. They are not suitable for winter use because they do not provide sufficient grip, and could cause an accident.



NOTE: A wheel change must be carried out at a McLaren Dealer. The vehicle could be damaged if it is jacked up incorrectly.

Consult a McLaren Dealer for advice and information regarding the maximum speed specified for the winter tyres fitted. Restrict the maximum speed of the vehicle using the ASL system, see Setting an upper speed limit, page 89.

DRIVING CONTROLS

WINTER DRIVING

Snow chains

McLaren recommends that you only use snow chains which have been approved for McLaren vehicles. If you are intending to fit snow chains, bear the following points in mind:

- Only ever fit snow chains to both rear wheels.
- Comply with the manufacturer's installation instructions.

 **NOTE:** *If snow chains are fitted on the front wheels, they may come into contact with the bodywork or axle components while the vehicle is being driven. As a result, the tyre or the vehicle could be damaged.*

Do not exceed the maximum permissible speed of 30 mph (50 kph). Remove the snow chains as soon as possible if you are no longer driving on snow-covered roads.

INSTRUMENTS

OVERVIEW

Overview	102
Tachometer	102
Speedometer	102

LEFT-HAND DISPLAY

Overview	103
Home screen.....	106
Settings	107
Vehicle info	117
Language	120
Trip	121
Time display	122
Gearbox mode indicator	122
Messages.....	123

RIGHT HAND DISPLAY

Gear position indicator	126
Display window	126
Handling and powertrain display	127
Oil temperature	128
Water temperature	129
Fuel level.....	130

INSTRUMENTS

OVERVIEW

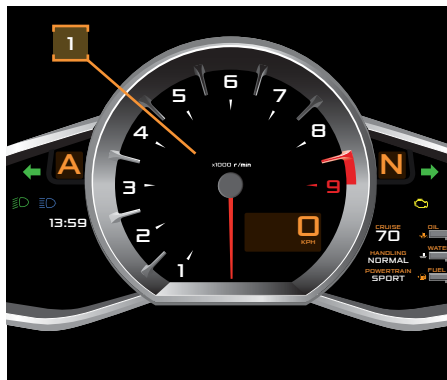
Overview

The instruments are activated when the ignition is switched on, see Switching on the ignition, page 51.

⚠ WARNING: No messages will be displayed if there is a malfunction in the instruments and/or one of the displays.

The vehicle's handling characteristics may be affected. Contact a McLaren Dealer immediately.

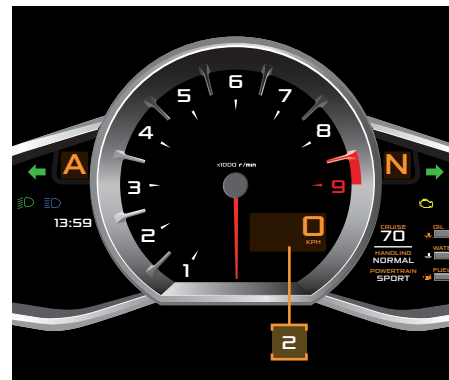
Tachometer



The tachometer **(1)** is mounted centrally within the instrument cluster. The red band in the display indicates the engine's maximum speed.

i **NOTE:** Do not operate the engine at or near its maximum speed for a significant length of time. The fuel supply is cut off to protect the engine when the maximum speed is reached.

Speedometer



The speedometer **(2)** is a digital display mounted within the tachometer.

i **NOTE:** The speedometer changes from mph to kph when the units are changed from miles to kilometres, see Units, page 108

INSTRUMENTS

LEFT-HAND DISPLAY

Overview

The left-hand display automatically presents the information and warning messages to the driver, as and when the computer determines it is required. Serious faults are also stored in the display and presented every time the ignition is switched on. Additional engine related warning messages will be displayed when the engine is switched on. These warning messages will be repeated until the fault has been rectified.

The stored messages can be viewed at any time when the ignition is on, see Error messages, page 117.

In addition to presenting vital information to the driver, the left-hand display also provides the facility to personalise some vehicle settings and enables operation of the Media and Trip features.

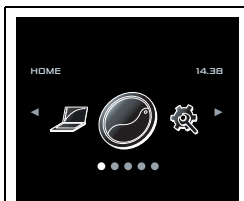


Navigation through the menu structure is achieved using the control stalk mounted on the left of the steering column.

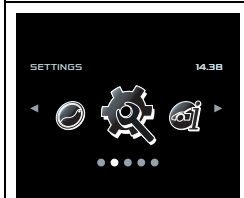
INSTRUMENTS

LEFT-HAND DISPLAY

The following categories are available.



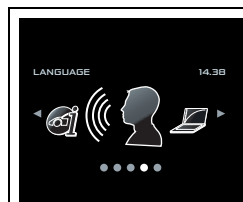
Home screen,
page 106



Settings, page 107



Vehicle info, page 117



Language, page 120



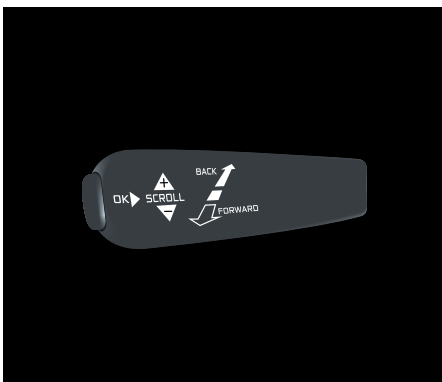
Trip, page 121

INSTRUMENTS

LEFT-HAND DISPLAY

To navigate through a category

1. Move the control stalk up or down (**SCROLL + or -**) to highlight your choice.
2. Pull the stalk towards you (**FORWARD**) to enter your selection.
3. Then select the topic of interest from the list, move the control stalk up or down (**SCROLL + or -**) to highlight your choice.
4. Pull the stalk towards you (**FORWARD**) to move through to the next menu in the structure.
5. At the end of each structure there will be a display of information or a screen where a setting can be changed



6. When the function required is selected or a setting is made, press **OK** on the end of the control stalk to confirm.
A setting is only changed if the **OK** button is pressed.

INSTRUMENTS

LEFT-HAND DISPLAY

Home screen

To change the content and layout of the Home screen, see Home screen, page 109

HOME	14.38
ODOMETER	TEMPERATURE
12402 mi	25.5 °C
RANGE	TRIP
322 mi	324 mi

In addition to the time, the Home Screen displays any four of the following five functions.

Odometer

The odometer displays the total distance the vehicle has travelled

Range

Range is the estimated distance until the vehicle requires refuelling.

Temperature

 **WARNING: Even if the temperature displayed is above freezing point, the road surface may still be icy. You should always adapt your driving style and speed to suit the weather conditions.**

Temperature is the current outside temperature. There is a short delay before a change in outside temperature is displayed.

When the outside air temperature falls below 3°C (37°F), the frost warning message will be displayed and the temperature reading will change colour after the message has been displayed.

When the outside temperature falls below 0°C (32°F), the ice warning will be displayed.

Trip

This displays the distance travelled since the trip meter was last reset.

Journey trip

This displays the distance travelled during the current journey.

INSTRUMENTS

LEFT-HAND DISPLAY

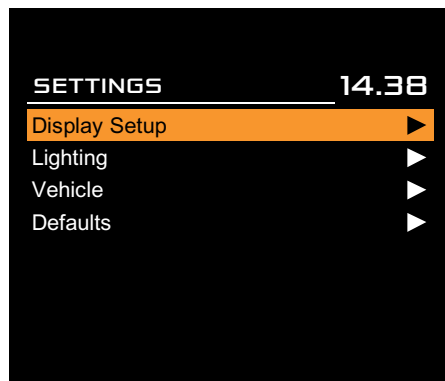
Settings

Overview

The following choices can be made from the Settings screen.

- Display setup, page 107
- Lighting, page 109
- Vehicle, page 110
- Defaults, page 116

Display setup



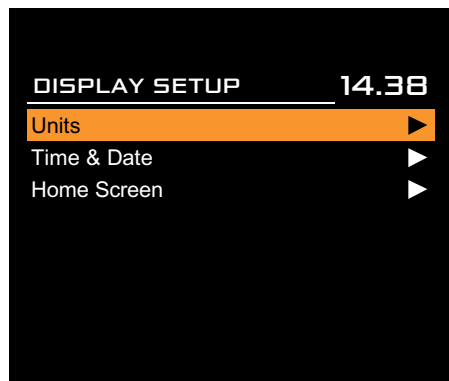
The following selections can be made from Display setup.

- Units, page 108
- Time and Date, page 108
- Home screen, page 109

INSTRUMENTS

LEFT-HAND DISPLAY

Units



The setting for your vehicle depends on the country or region where the vehicle was purchased. The units can be changed individually at any time.

Press the **OK** button on the end of the control stalk to confirm your selections.

 *NOTE: This feature also sets the units for the trip computer.*

On the Units screen you can set the following units of measurement.

Distance - select miles or km.

Speed - select mph or kph.

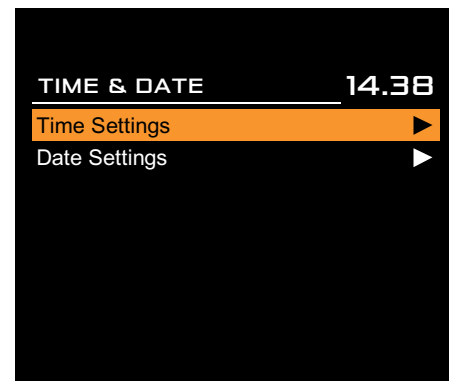
Temperature - select °C or °F.

Pressure - select kpa, Bar or PSI.

Fuel Consumption - select mpg, km/Litre or Litres/100 km.

Volume - select UK gallons, US gallons or litres.

Time and Date



Set the Time before setting the Date.

The time and date are both set manually.

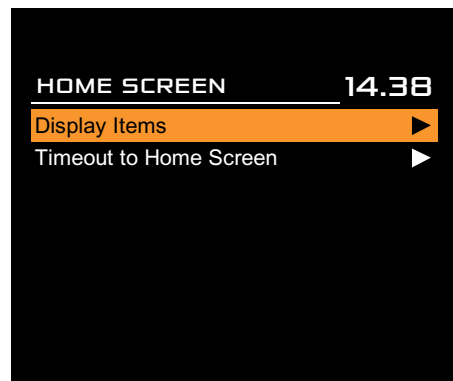
Press the **OK** button on the end of the control stalk to confirm your choice.

 *The time display can be set as 12 hour or 24 hour format, and the date display can be set as day followed by month or month followed by day.*

INSTRUMENTS

LEFT-HAND DISPLAY

Home screen



There are two choices available to you.

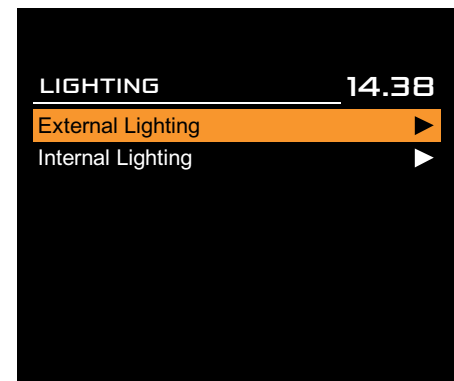
The first is to set four of the following five items, on the screen, in the position of your choice.

- Odometer
- Range
- Temperature
- Trip since reset
- Journey trip

The second selection is the duration of the time out for return to the Home screen. Choose 5, 10, 30 or 60 seconds.

Press the **OK** button on the end of the control stalk to confirm your choice.

Lighting

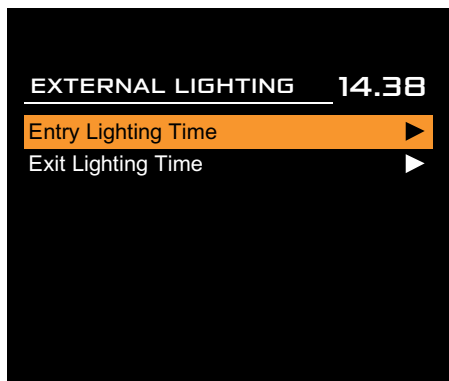


Select External lighting, page 110, or Internal lighting, page 110.

INSTRUMENTS

LEFT-HAND DISPLAY

External lighting

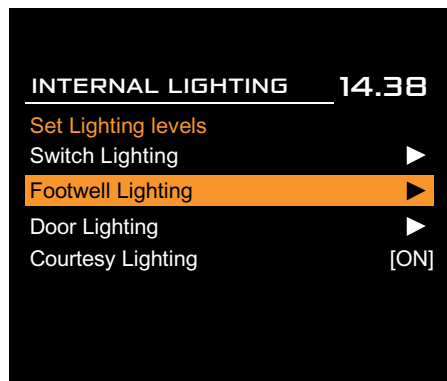


Two choices are available.

1. Set the duration that external lights remain on after the vehicle has been unlocked.
2. Set the duration that external lights remain on after the vehicle has been locked.

Press the **OK** button on the end of the control stalk to confirm your choice.

Internal lighting



There are the following choices to make.

1. Switch Lighting
2. Footwell Lighting
3. Door Lighting
4. Courtesy Lighting

A bar graph will appear. Move the control stalk up or down (**SCROLL + or -**) to highlight your choice

Press the **OK** button on the end of the control stalk to confirm your choice.

Vehicle

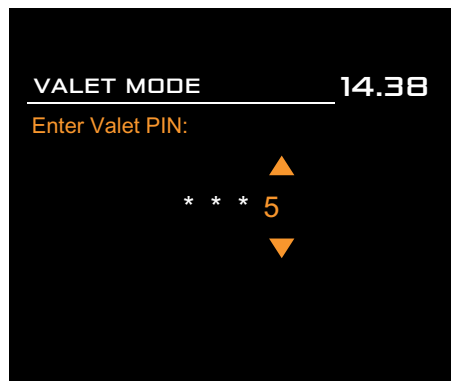
It is possible to make the following selections.

- Valet Mode, page 111
- Auto Door Lock, page 112
- Auto Fold Mirrors, page 112
- Auto Alarm, page 112
- Door Unlock, page 112
- Timed Crank, page 113
- Comfort Entry/Exit, page 113
- Silent Lock, page 113
- Reverse Mirror Dip, page 113
- Tyre Type, page 115
- Wiper Modes, page 114
- Wiper Sensitivity, page 114

INSTRUMENTS

LEFT-HAND DISPLAY

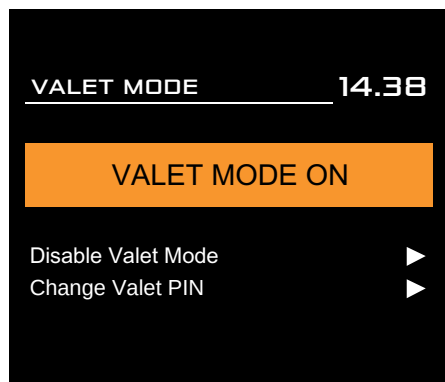
Valet Mode



To enter the PIN, press the control stalk up or down until the first digit appears in the display, then press the **OK** button on the end of the control stalk to confirm your choice.

Repeat the process to enter the full PIN.

The default PIN will be set to **0000**. You should change this PIN at the earliest opportunity.



For a 5 second period after entering Valet Mode, the PIN can be changed. Select Change Valet PIN and enter a 4 digit PIN of your choice.

With Valet Mode on, the luggage compartment remains locked, and a confirmation message appears in the left-hand display.

When Disable Valet Mode is selected, the PIN must be entered again, before the mode is disabled.

Press the **OK** button on the end of the control stalk to confirm your choice.

INSTRUMENTS

LEFT-HAND DISPLAY

Auto Door Lock

When you receive the vehicle, Auto door lock will be set to on.

The vehicle doors will automatically lock as the vehicle moves off.

Switch Auto Door Lock off, and the doors remain unlocked after moving off, unless, they are locked manually.

Press the **OK** button on the end of the control stalk to confirm your choice.

Auto Fold Mirrors

Switch Auto Fold Mirrors 'ON' or 'OFF'. When 'ON' is selected the exterior mirrors will fold as the door is closed and unfold when the door is opened. If 'OFF' is selected, the mirrors will remain in their driving position.

Press the **OK** button on the end of the control stalk to confirm your choice.

Auto Alarm

With Auto Alarm selected, the alarm will arm automatically if the vehicle is left unlocked but all doors and covers are fully closed.

Press the **OK** button on the end of the control stalk to confirm your choice.

Door Unlock

Select DRIVERS or GLOBAL. When DRIVERS is selected, only the driver's door will unlock or lock when an unlock or lock request is made. With GLOBAL selected, both doors will unlock or lock when an unlock or lock request is made.

Press the **OK** button on the end of the control stalk to confirm your choice.

INSTRUMENTS

LEFT-HAND DISPLAY

Timed Crank

With timed crank OFF, press and hold the **STOP/START** button until the engine starts.

With timed crank ON, a single press of the **STOP/START** button will cause the engine to crank until it starts.

Press the **OK** button on the end of the control stalk to confirm your choice.

Comfort Entry/Exit

When comfort entry/exit is ON, the driver's seat will move fully rearwards and to its lowest position when the ignition is off and the driver's door is opened.

When comfort entry/exit is OFF, the driver's seat will remain in position at all times.

Press the **OK** button on the end of the control stalk to confirm your choice.

Silent Lock

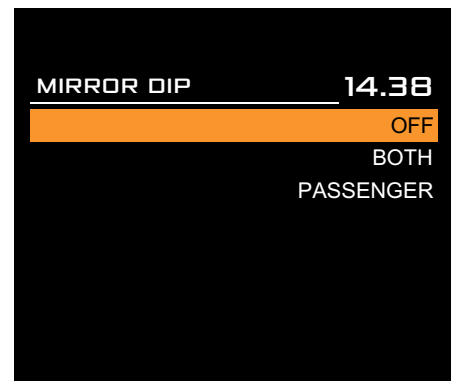
Switch silent lock 'ON' or 'OFF'. When 'ON' is selected the direction indicators are disabled when locking or unlocking using the keyless entry system.

If 'OFF' is selected, the direction indicators always flash when the car is locked or unlocked, irrespective of the method used.

All other lock and unlock features remain active.

Press the **OK** button on the end of the control stalk to confirm your choice.

Reverse Mirror Dip



Select 'OFF', 'BOTH' or 'PASSENGER'.

'OFF' - no mirror dip will occur when reverse is engaged.

'BOTH' - both mirrors will dip when reverse is engaged.

'PASSENGER' - passenger side mirror will dip when reverse is engaged.

Press the **OK** button on the end of the control stalk to confirm your choice.

INSTRUMENTS

LEFT-HAND DISPLAY

To set the amount the mirrors will dip when reverse is selected:

1. Select 'BOTH' or 'PASSENGER' in the mirror dip section of the cluster.
2. Depress brake and select reverse gear.
3. Adjust mirror(s) to desired position, see Adjusting mirrors, page 40.
4. Take vehicle out of reverse.

The next time reverse is selected, the vehicle will automatically move the mirror/mirrors to the previously set offset from the normal position. If you change the position of the mirror/mirrors in the normal position, you will have to reset your reverse dip position using the above process.

Wiper Modes

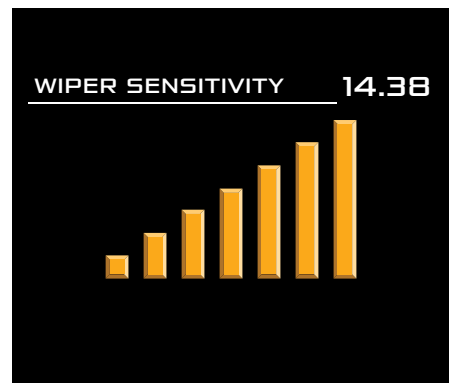
Select either AUTOMATIC or TIMED.

With AUTOMATIC selected, wiper operation in the Auto position will be controlled by the rain sensor.

With TIMED selected, wiper operation in the Auto position will be an intermittent wipe. To set the time delay for intermittent wipe, see Wiper Sensitivity, page 114

Press the **OK** button on the end of the control stalk to confirm your choice.

Wiper Sensitivity



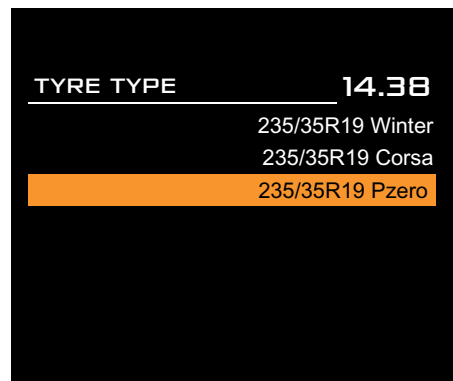
A bar graph will appear showing current wiper sensitivity setting move the control stalk up or down (**SCROLL + or -**) to achieve your preferred setting for the wiper operation. The selection on this screen will apply for both rain sensor level and intermittent wipe time delay.

Press the **OK** button on the end of the control stalk to confirm your choice.

INSTRUMENTS

LEFT-HAND DISPLAY

Tyre Type



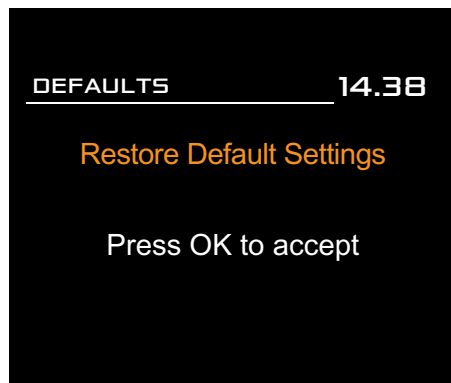
The display will show all the possible tyre types available. Select the tyres fitted to your vehicle.

Press the **OK** button on the end of the control stalk to confirm your choice.

INSTRUMENTS

LEFT-HAND DISPLAY

Defaults



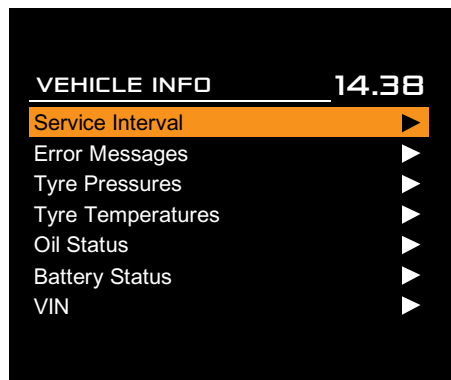
Select Restore Default Settings then press the **OK** button on the end of the control stalk to confirm that you wish to reset to the default settings

INSTRUMENTS

LEFT-HAND DISPLAY

Vehicle info

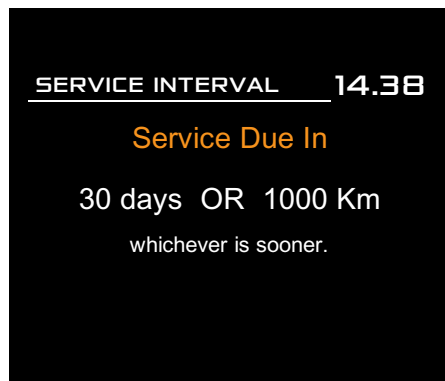
Overview



The following choices can be made from the Vehicle info screen.

- Service interval, page 117
- Error messages, page 117
- Tyre pressure monitoring, page 118
- Tyre temperature monitoring, page 118
- Oil status, page 118
- Battery status, page 119
- Vehicle identification, page 119

Service interval

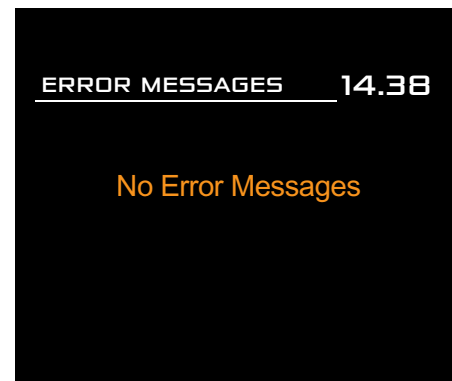


At approximately 30 days or 1000 km (625 miles) before a service, the above display appears.

The message will then appear every time the ignition is switched on, with the time/distance figures reducing. Once the service has been carried out, the display will be reset by a McLaren Dealer.

If a service becomes overdue, the display will show the distance it is overdue by.

Error messages



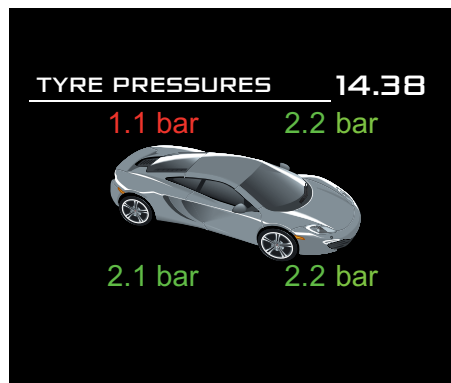
If no error messages have been logged, the display will confirm this.

If any errors have been logged, the screen will display Error Messages with arrows to scroll through the messages.

INSTRUMENTS

LEFT-HAND DISPLAY

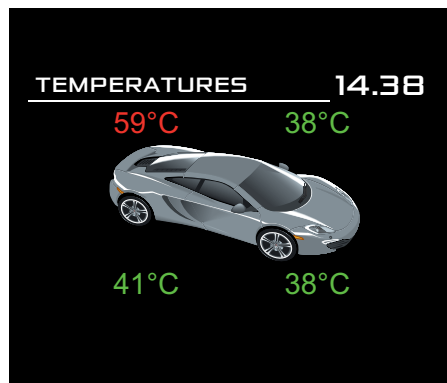
Tyre pressure monitoring



This shows the pressures of each of the 4 tyres. If the pressure figure appears in green, no action is required. If it appears as red text, have the pressure rectified as soon as possible.

Inspect the tyre(s) for any possible causes of reduced tyre pressure.

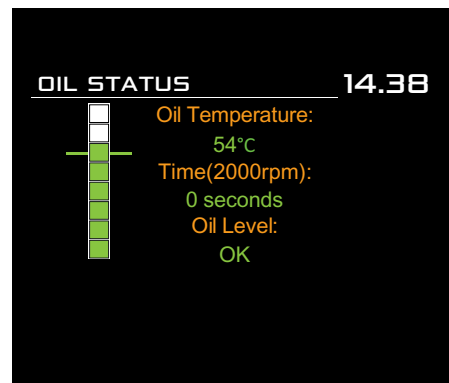
Tyre temperature monitoring



This shows the current temperature of each of the 4 tyres. If the temperature figure appears in green, no action is required. If it appears as red text, the safe operating temperature of the tyres has been exceeded. Reduce speed or stop the vehicle until the temperatures are at a safe level, i.e. temperatures are displayed in green.

Inspect the tyre(s) for any possible causes of increased tyre temperature.

Oil status



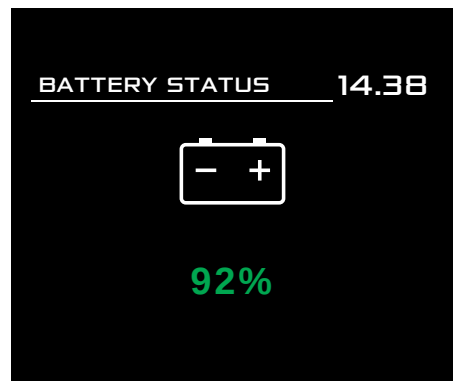
Displays a bar showing the quantity and level of oil, together with the oil temperature.

To check the engine oil level, see Checking the engine oil, page 154

INSTRUMENTS

LEFT-HAND DISPLAY

Battery status



Displays a battery symbol showing the level of charge.

When battery charge is too low, a message 'Battery Fault' will also be displayed.

For more information, see Charging the battery, page 165

Vehicle identification

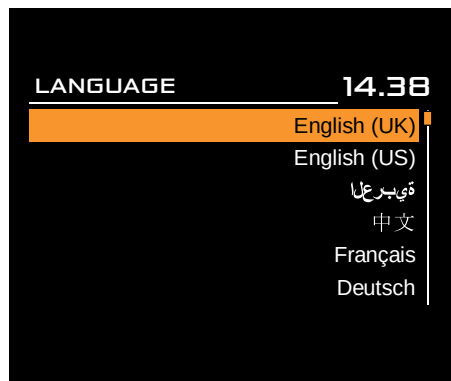


Displays the vehicle identification number.

INSTRUMENTS

LEFT-HAND DISPLAY

Language



The following choices are available.

- English UK
- English US
- Arabic
- Chinese
- French
- German
- Italian
- Japanese
- Russian
- Spanish

Press the **OK** button on the end of the control stalk to confirm your choice.

If a language is not available on your vehicle, **NOT SUPPORTED** will appear in the display. Consult a McLaren Dealer for further assistance.

Press the **OK** button on the end of the control stalk to confirm your choice.

Use this screen to set your preferred language.

INSTRUMENTS

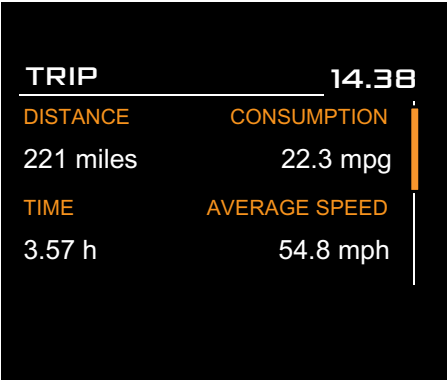
LEFT-HAND DISPLAY

Trip

The trip can display the following Information.

- Trip, page 121
- Journey trip, page 121

Trip

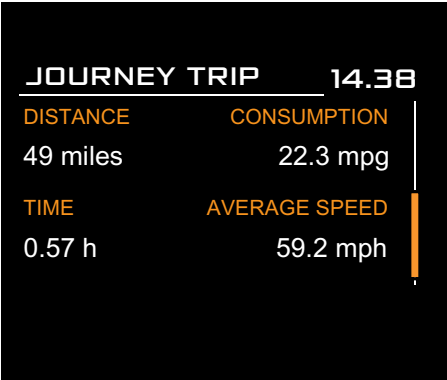


Displays distance, average fuel consumption and average speed since the last trip reset.

The hours displayed is the time that the engine has been running since the last trip reset.

Press the **OK** button on the end of the control stalk for 2 seconds to reset the information back to zero.

Journey trip



Displays distance, average fuel consumption and average speed for the current journey.

The hours displayed is the time that the engine has been running in the current journey.

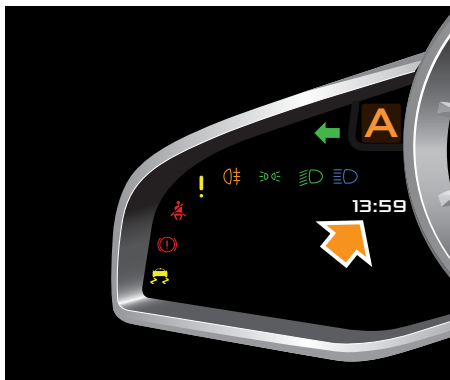
Press the **OK** button on the end of the control stalk for 2 seconds to reset the information back to zero.

The information will also reset to zero when the engine is switched off.

INSTRUMENTS

LEFT-HAND DISPLAY

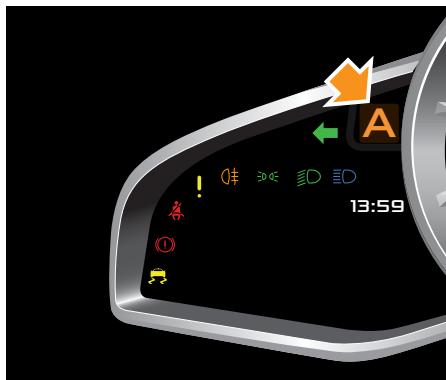
Time display



The clock (arrowed) appears in the top right-hand corner of the left-hand display

i **NOTE:** The time can be displayed in a 12 hour or 24 hour format. The time and date are set manually, see *Time and Date*, page 108.

Gearbox mode indicator



The gearbox mode indicator shows the current mode selected:

- Automatic **A**
- Manual **M**
- Temporary manual **A/M**
- Launch **L**

For more information, see *Manual/Automatic mode*, page 68.

INSTRUMENTS

LEFT-HAND DISPLAY

Messages

The left-hand display may show messages that refer you to the Owner Manual. The table below indicates what you should do when one of these messages is displayed.

Message	Action
ESC OFF Invalid Operation See Owners Manual	The ESC deactivation procedure has not been followed correctly. See Electronic Stability Control, page 80.
Airbrake Restricted Low Vehicle Speed See Owners Manual	• Raise the vehicle speed above 9 mph (15 kph) and press the AERO button • or to lower the airbrake while the vehicle is travelling below 9 mph (15 kph) or is stationary, press the AERO button for 5 seconds, the airbrake will begin to lower. Hold the AERO button for a further 3 seconds until the airbrake has lowered fully to the normal driving position.
Clutch Over Temperature See Owners Manual	The vehicle has been subject to extreme operating conditions. This may be caused by excessive hill starts, repeated hard acceleration, driving slowly up steep hills for extended periods. As a result, the gearbox may limit engine torque. Allow the engine to idle in neutral for a few minutes.
Launch Mode Unavailable See Owners Manual	The conditions to enable a Launch have not been met, see Launch control, page 76.
Immobiliser Failure See Owners Manual	Contact a McLaren Dealer immediately.
Use Emergency - Start Receptacle See Owners Manual	The key fob is not functioning correctly. To start the engine, see Starting the vehicle, page 179.

INSTRUMENTS

LEFT-HAND DISPLAY

Message	Action
Low brake fluid level See Owners Manual	Top-up brake fluid, see Brake fluid, page 159
Low steering fluid level See Owners Manual	Top-up the power steering fluid, see Power steering fluid, page 158
Front left tyre fault See Owners Manual	Inspect wheels and tyres, see Inspecting wheels and tyres, page 187
Front right tyre fault See Owners Manual	Inspect wheels and tyres, see Inspecting wheels and tyres, page 187
Rear left tyre fault See Owners Manual	Inspect wheels and tyres, see Inspecting wheels and tyres, page 187
Rear right tyre fault See Owners Manual	Inspect wheels and tyres, see Inspecting wheels and tyres, page 187
Airbrake system temporarily unavailable See Owners Manual	See Airbrake, page 83
Winter mode unavailable See Owners Manual	See Winter mode, page 75
Launch mode aborted See Owners Manual	See Launch control, page 76
Battery low please charge See Owners Manual	See Charging the battery, page 165

INSTRUMENTS

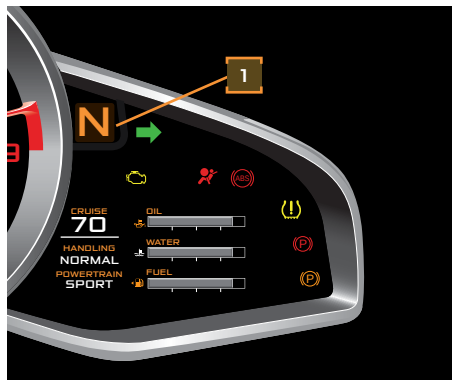
LEFT-HAND DISPLAY

Message	Action
Key battery low See Owners Manual	See Replacing key fob battery, page 182
Low windscreen washer fluid See Owners Manual	Top-up windscreen washer fluid, see Windscreen and headlamp washers, page 160
Passenger seat obstructed move seat upwards See Owners Manual	See Electric seats*, page 24

INSTRUMENTS

RIGHT HAND DISPLAY

Gear position indicator



The gear position indicator (1) shows the current gear position selected; drive, neutral or reverse.

When driving in manual mode, the gear position indicator will change from orange to red to indicate that an upshift is required.

Display window

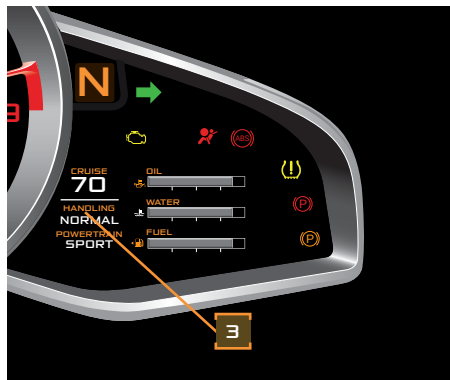


The display window (2) provides the driver with visual confirmation of cruise control speed and Electronic Stability Control status.

INSTRUMENTS

RIGHT HAND DISPLAY

Handling and powertrain display



Confirmation of the handling and powertrain mode selected (**3**) is displayed. For more information on the different settings that are available, see Active dynamics control, page 71.

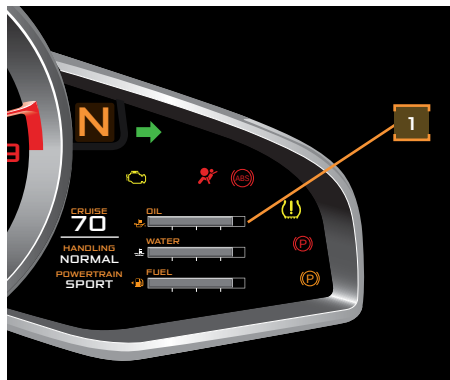
i NOTE: If the **ACTIVE** button has not been pressed (active dynamics panel is off), the Handling and Powertrain displays will both show Normal.

Additionally, if all conditions for a particular mode are not met when the selection is made, the mode will not be implemented until the conditions are met.

INSTRUMENTS

RIGHT HAND DISPLAY

Oil temperature



High temperature is indicated if the bar turns ORANGE and excessive temperature is indicated by the bar turning RED.

If the gauge shows high temperature, ORANGE, slow down until the temperature drops to normal. If the temperature continues to rise and the bar turns RED, a warning message will appear in the left-hand display.

Stop the vehicle as soon as safety permits and contact a McLaren Dealer immediately.

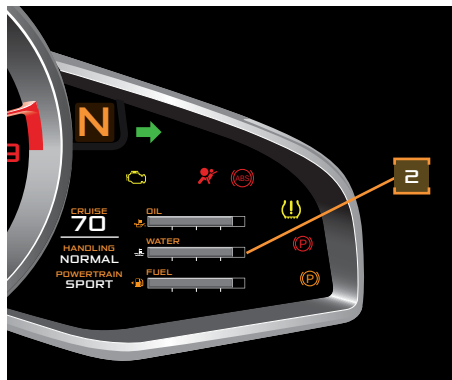
The oil temperature is displayed in the form of a coloured bar graph (1) on the right-hand side of the instrument cluster.

When the engine is first started the bar will be BLUE. As the engine warms up the colour will change to GREY, indicating normal temperature.

INSTRUMENTS

RIGHT HAND DISPLAY

Water temperature



The water temperature is displayed in the form of a coloured bar graph (2) on the right-hand side of the instrument cluster.

When the engine is first started the bar will be BLUE. As the engine warms up the colour will change to GREY, indicating normal temperature.

High temperature is indicated if the bar turns ORANGE and excessive temperature is indicated by the bar turning RED.

If the gauge shows high temperature, ORANGE, slow down until the temperature drops to normal. If the temperature continues to rise and the bar turns RED, a warning message will appear in the left-hand display.

Stop the vehicle as soon as safety permits and contact a McLaren Dealer.

RIGHT HAND DISPLAY

130

COMFORT AND CONVENIENCE

WINDOWS

Safety	132
Opening and closing	132

AIR CONDITIONING

Overview	134
Controls	134
AC button	135
Modes of operation	135
Temperature control	137
Blower speed control	138
Air distribution settings	139
Demisting/de-frosting	140
Air-recirculation mode	140
Heated rear screen	141

VEHICLE TRACKING

Overview	142
Automatic Driver Recognition cards	142
Remote Keypad	143
In the event of a theft	144
Disabling the Tracker system	145
Vehicle Tracking Centre	145
False alarms	146
False alarm policy	146

INTERIOR FEATURES

Interior lighting	147
Entry lighting	148
Exit lighting	148

Sun visors	148
Stowage net	148
Stowage compartment	149
Cup holders	150
Owner documentation	150
Accessory power sockets	151
Car cover	151

COMFORT AND CONVENIENCE

WINDOWS

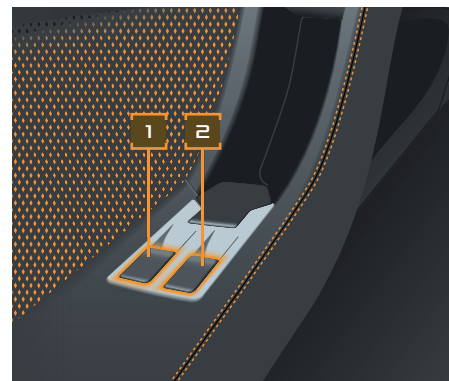
Safety

⚠ WARNING: Ensure that no-one can be trapped as you open or close the windows. Do not rest any part of your body against the window. There is a risk of becoming trapped by the movement of the window. If there is a risk of entrapment, stop movement of the window.

Opening and closing

⚠ WARNING: If the driver's window is obstructed during the closing procedure, operate the switch again within five seconds, and the window will close without anti-entrapment protection. Ensure that no-one can be trapped when you do this.

Switches for both windows are located on the driver door console. A switch for the passenger window is located on the passenger door console.



1. Driver's window switch
2. Passenger's window switch

COMFORT AND CONVENIENCE

WINDOWS

Press switch **(1)** or **(2)**. The window will open for as long as the switch is pressed.

Pull switch **(1)** or **(2)**. The window will close for as long as the switch is pressed.

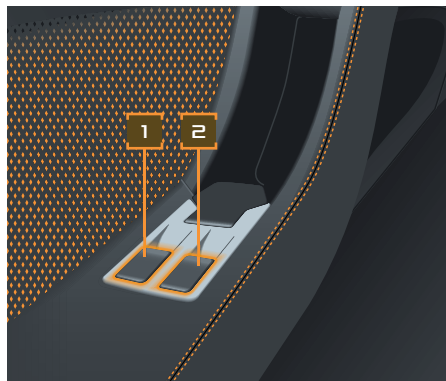
To open or close a window fully, press or pull switch **(1)** or **(2)** fully and release.

i **NOTE:** To stop a window opening or closing, press or pull the appropriate switch.

Resetting the windows

The windows must be reset if the battery has been discharged or disconnected, or if the anti-trap feature has been activated.

Ensure that both doors are closed and the ignition is switched on.



Push switches **(1)** and **(2)** downwards until the windows are open and hold them in this position for 5 seconds.

Pull both switches upwards until the windows are closed and hold them in this position for 5 seconds.

The windows are now reset.

If this does not resolve the issue, please contact a McLaren Dealer immediately.

Anti-trap protection

Anti-trap protection will stop windows opening or closing if an obstruction or resistance is detected.

If the anti-trap protection is triggered, check the window and the window aperture and remove any obstruction, before operating the windows again. In the event of an anti-trap event when closing the door, see Closing a door, page 13.

COMFORT AND CONVENIENCE

AIR CONDITIONING

Overview

The system can be operated in automatic mode or settings can be adjusted manually.

The combination filter reduces the quantity of dust and pollutants entering the car.

WARNING: Follow the recommended settings given for heating or cooling. If the windows mist up, you may no longer be able to observe road and traffic conditions and could cause an accident.

NOTE: The air conditioning system operates more effectively with the doors and windows closed. However, if the vehicle has been standing in a hot environment for a long time, ventilate by opening the windows briefly.

NOTE: The interior air temperature sensor is located between the steering wheel and the centre console. Do not obstruct airflow to this sensor or the performance of the air conditioning system will be reduced.

NOTE: The vehicle will retain the current air conditioning settings when the ignition is switched off.

Controls

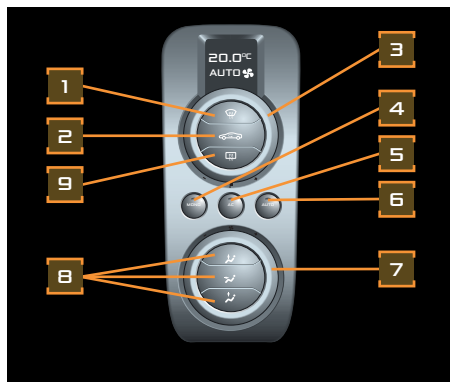


The air conditioning system is operated using controls located on the driver and passenger door consoles. When MONO is selected, the passenger can adjust the blower speed, and the temperature on the passenger side of the vehicle.

COMFORT AND CONVENIENCE

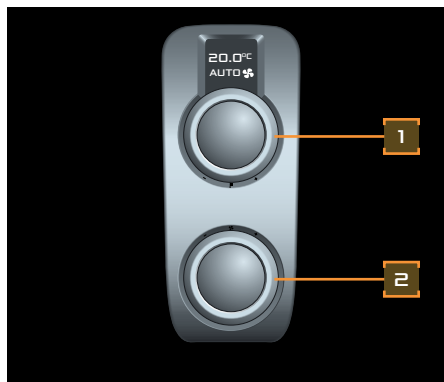
AIR CONDITIONING

Driver's air conditioning controls



1. Windscreen demist button
2. Air recirculation button
3. Temperature control
4. MONO button
5. Air conditioning (AC) button
6. AUTO button
7. Blower speed control
8. Air distribution buttons
9. Heated rear window button

Passenger's air conditioning controls



1. Temperature control
2. Blower speed control

AC button

The air conditioning can be switched off at any time in any mode. Press the AC button. The light on the button extinguishes.

To switch the air conditioning on, press the AC button again, the light on the button illuminates.

Modes of operation

Automatic mode

In automatic mode, the air conditioning system maintains the set interior temperature using a combination of differing blower speeds, air recirculation and air distribution.

To switch on automatic mode, press the AUTO button.

The light on the button illuminates and the air distribution, temperature and blower speed are adjusted automatically on both sides of the vehicle.

AUTO will appear on the display on driver and passenger door consoles.

In AUTO mode, there is no need to adjust the blower speed or air distribution, the system will operate whichever controls it needs to maintain the set temperature. If necessary, the system settings can be manually adjusted, see Manual mode, page 136.

COMFORT AND CONVENIENCE

AIR CONDITIONING

Manual mode

To adjust the air temperature manually, see Temperature control, page 137.

To adjust the blower speed manually, see Blower speed control, page 138.

When either the air temperature or blower speed is adjusted manually, the light on the AUTO button will extinguish and the blower speed will appear on the display on driver and passenger door consoles.

MONO mode button



MONO mode allows the driver to transfer their air temperature settings directly over to the passenger air conditioning control panel

Press the **MONO** button, the light on the button will illuminate and all air temperature settings will be transferred over to the passenger air conditioning control panel. Any changes the driver makes on their air conditioning control panel, will change automatically on the passengers air conditioning control panel.

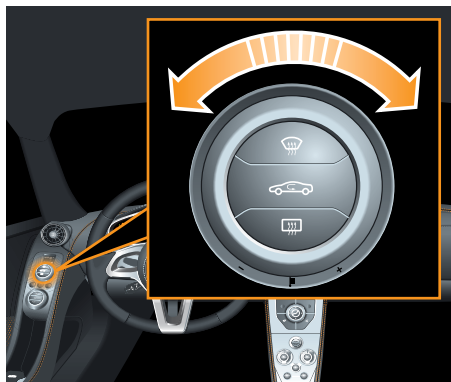
If the passenger then adjusts any of the air temperature settings on their air conditioning control panel, **MONO** mode will be deactivated. The **MONO** button light will then extinguish.

The driver can exit **MONO** mode at any time by a single press of the **MONO** button. The **MONO** button light will then extinguish.

COMFORT AND CONVENIENCE

AIR CONDITIONING

Temperature control



Rotate the control clockwise to increase the temperature, or anti-clockwise to decrease.

If in automatic mode, the light on the **AUTO** button will extinguish.

Press the **AUTO** button to return to automatic mode.

i *NOTE: The temperature can be adjusted in 1°C increments from 16°C to 28°C. Change the temperature in small increments, until the desired setting is achieved.*

To set the temperature to maximum, rotate the control clockwise until 'HI' is displayed. The air conditioning adjusts the air temperature to the highest setting, the blower speed is set to maximum and air is directed to the footwells.

To set the temperature to minimum, rotate the control anti-clockwise until 'LO' is displayed. The air conditioning sets the air temperature to the lowest setting, the blower speed is set to maximum and air is directed to the centre air vents.

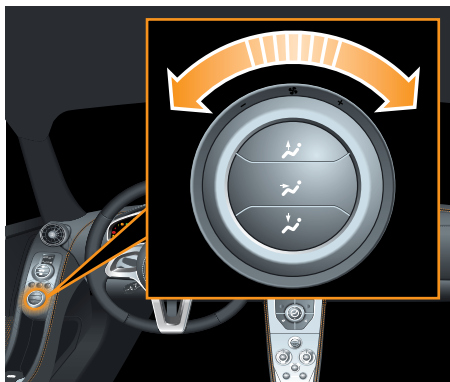
The temperature set will appear on the displays on the driver and passenger door consoles.

i *NOTE: With 'LO' selected, it is not possible to switch off the air conditioning or switch on demist mode.*

COMFORT AND CONVENIENCE

AIR CONDITIONING

Blower speed control



i *NOTE: When the engine is restarted from hot, the blower operates at low speed. This removes warm air from the vents, the blower speed will then increase to the requested setting.*

Rotate the blower control clockwise to increase or anti-clockwise to decrease blower speed.

If in automatic mode, the light on the **AUTO** button will extinguish.

The blower speed will appear on the displays on the driver and passenger door consoles.

Press the **AUTO** button to return to automatic mode.

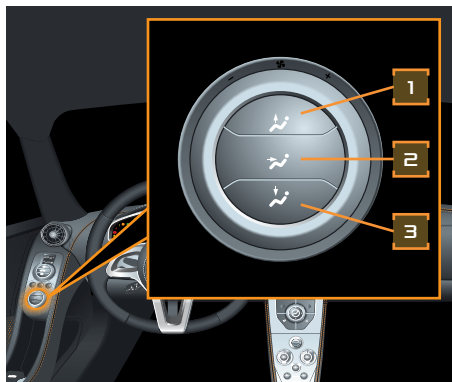
i *NOTE: When the engine is first started, the blower speed is limited and the air is directed at the windscreen until the engine has warmed up.*

Blower speed is also limited when the ignition is in the accessory position.

COMFORT AND CONVENIENCE

AIR CONDITIONING

Air distribution settings



The air distribution can be set using the air-distribution controls.

Press button **(1)** to direct air to the windscreen, press button **(2)** to direct air to the centre air vents, press button **(3)** to direct air to the footwell vents.

All three buttons, a combination of any two or an individual button can be selected at any time.

When an air distribution button is pressed, the icon on the button will illuminate and the setting will be displayed briefly on the control panel.

Dashboard air vents

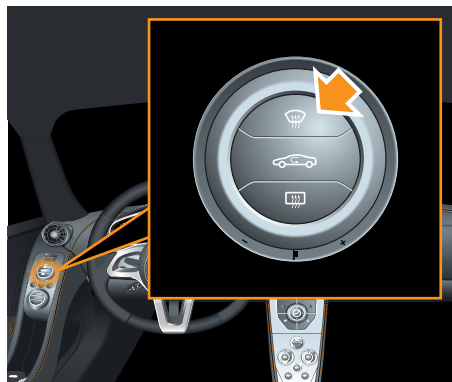


Turn a quarter turn in either direction until the vent is open or closed.

COMFORT AND CONVENIENCE

AIR CONDITIONING

Demisting/de-frosting



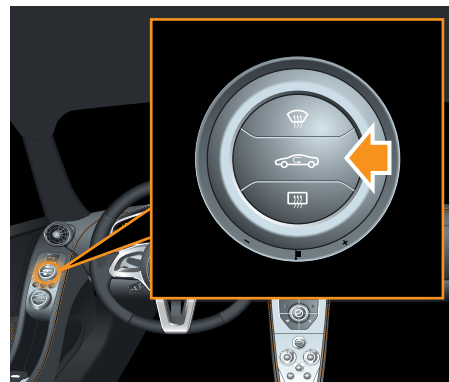
Press the demist button (arrowed). The icon on the button illuminates, the demist symbol appears in the control panel display and the air conditioning switches on if previously off. The blower will operate at full speed and the air temperature will be set to 'HI'.

i *NOTE: It is possible to manually reduce the blower speed using either the driver or passenger blower speed control, see Blower speed control, page 138.*

i *NOTE: Air recirculation is inhibited when demist mode is selected.*

Press the demist button again to exit the demist mode. The icon on the button extinguishes, and the air temperature and blower speed return to their original settings.

Air-recirculation mode



Select Air recirculation when unpleasant smells or fumes are entering the vehicle.

⚠ WARNING: Switch to air-recirculation mode briefly if outside temperatures are low. Be aware that the windows could mist up, which may impair your visibility. As a result, you could be distracted from road and traffic conditions and cause an accident.

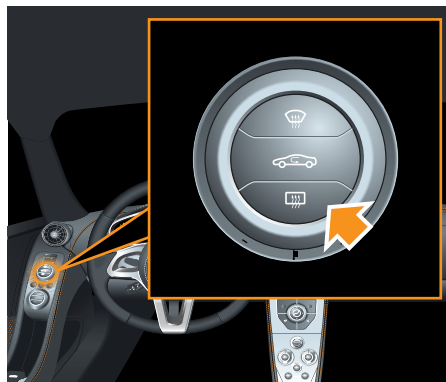
COMFORT AND CONVENIENCE

AIR CONDITIONING

i *NOTE: Switch on the air conditioning to prevent the windows misting.*

Press the air-recirculation button (arrowed), to select air recirculation. The icon on the button will illuminate. To switch off, press the air-recirculation button again and the icon on the button will extinguish.

Heated rear screen



⚠ WARNING: Remove any accumulated ice or snow from the windows before setting off. Impaired visibility could endanger yourself and others.

Press the button (arrowed), to heat the rear screen. The icon on the button will illuminate. To switch off, press the button again and the icon on the button will extinguish.

i *NOTE: Switching on the heated rear screen also switches on the exterior mirror heaters.*

The rear screen heating switches off automatically after a set time, depending on the outside air temperature.

COMFORT AND CONVENIENCE

VEHICLE TRACKING*

Overview

This section provides an overview of the Vehicle Tracking service. If you need further clarification, contact Vehicle Tracking Customer Service.

The tracking system is a subscription based service which tracks vehicle movements in the event of a theft, sabotage attempts, vehicle break-in or GPS antenna tampering.

Depending on market specification, you have been supplied with two unique Automatic Driver Recognition cards, or two remote keypads.

 **NOTE:** Each driver must carry an Automatic Driver Recognition card whenever they drive the vehicle. If a keypad has been supplied, this must be used to enter a code every time the car is to be driven.

Automatic Driver Recognition cards

When the ignition is switched off, the Vehicle Tracking system will automatically arm itself. If the vehicle is then moved (lifted, towed or driven) without the Automatic Driver Recognition card present, a silent alert is immediately sent to the Vehicle Tracking Centre.

 **NOTE:** Store your Automatic Driver Recognition card away from keys when the vehicle is not in use to reduce the risk of the card being taken in the event of key theft.

Do not leave your Automatic Driver Recognition card or certificate of tracker installation in the vehicle.

 **NOTE:** Up to seven cards can be programmed to work with the system. Replacement or additional Automatic Driver Recognition cards are available from a McLaren Dealer.

COMFORT AND CONVENIENCE

VEHICLE TRACKING*

Remote Keypad

Your keypad is used to enter and transmit a code to the McLaren Tracking Service, in order to activate your Tracker System.

Once you have received the code, sent to your mobile phone, follow the procedure described.

You will need to enter this code every time that you use your vehicle.

If you wish to add or remove a keypad, contact your McLaren Dealer. The Tracker system can recognise up to seven keypads

i *NOTE: Store your remote keypad away from keys when the vehicle is not in use to reduce the risk of the keypad being taken in the event of key theft.*

Do not leave your remote keypad or certificate of tracker installation in the vehicle.

i *NOTE: Up to seven keypads can be programmed to work with the system. Replacement or additional keypads are available from a McLaren Dealer.*

Entering a code



1. Press the centre button, the LED will start flashing.
2. Enter the code supplied to your mobile phone, and press the centre button again.
3. The LED will stop flashing once the code is validated.
4. The keypad is now activated.

i *NOTE: You will need to enter this code every time that you use your vehicle.*

COMFORT AND CONVENIENCE

VEHICLE TRACKING*

In the event of a theft

1. If you discover the vehicle has been stolen, call the Vehicle Tracking Centre in your home country,
or
if your vehicle is supplied with an Automatic Driver Recognition card and the vehicle is moved without this, the Vehicle Tracking Centre will initially send a text message to you to verify the vehicle movement. In addition to this, the Vehicle Tracking Centre will attempt to contact you using your mobile phone number then your home or office number provided you supplied them at the time of vehicle collection.
2. The Vehicle Tracking Centre will not contact the Police until they have spoken to you. Once you have confirmed the theft, they will commence the vehicle recovery procedure.
3. The Vehicle Tracking Centre will ask you to contact the Police to report the theft and call back with a Police incident number. Receipt of an alert does not constitute a confirmed theft, as the Police require your, or keyholder, verification of a theft.
If you are abroad at the time of theft, the Vehicle Tracking Centre will contact the Police in your home country for you to obtain a Police incident number.
4. The Vehicle Tracking Centre will then liaise with the relevant local Police to recover your vehicle.
In order to prevent your vehicle being moved following a theft, the Vehicle Tracking service may, under instruction from the Police, temporarily prevent the vehicle's engine from restarting (market dependant).
5. When the Police secure the stolen vehicle, arrangements will have to be made with you for the vehicle to be collected. The Police may recover the vehicle to a secure compound for further investigation.
You may be liable for any recovery and storage charges.

COMFORT AND CONVENIENCE

VEHICLE TRACKING*

Disabling the Tracker system

There will be instances when you wish to disable your Tracker for specific periods of time.

These will include visits to a McLaren Dealer or if the car is to be transported on a trailer, train or ferry.

You can contact the Vehicle Tracking Centre and advise them that you wish the system to be placed in either 'Transport' or 'Garage' mode.

The operator will request the exact time that this should be implemented and also the duration. This will ensure that the system is only disabled for the minimum time necessary.

Vehicle Tracking Centre

If your car is stolen, contact the appropriate number from the table.

Country	Telephone
UK	+44 (0) 844 239 0035
Germany	+49 (0) 700 767 724 3887
Italy	+39 (0) 331 1620856
Spain	+34 (0) 902 11 11 73
France	+33 (0) 8 92 70 14 40
Switzerland	+41 (0) 22 710 28 79
Belgium	+32 (0) 2 752 39 07
South Africa	+27 (0) 800 132 323

The Vehicle Tracking Centres are operational 24 hours every day throughout the year (bank holidays included).

For Customer service issues, contact the operators between 09:00 to 17:30, Monday to Friday.



NOTE: The cost of calls is calculated according to the national tariff.

COMFORT AND CONVENIENCE

VEHICLE TRACKING*

False alarms

To maintain the Vehicle Tracking service stolen vehicle recovery rates, customer support is needed to keep false alarms to a minimum.

 **NOTE:** *Ensure that the vehicle battery remains fully charged at all times, a discharged battery may lead to a false alarm.*

A disconnected battery may also lead to a false alarm.

False alarm policy

Following an alert, the Vehicle Tracking Centre will contact you to confirm the status of the vehicle. If the alert is a false alarm, this will be recorded on your account, you may be charged for excessive false alarms.

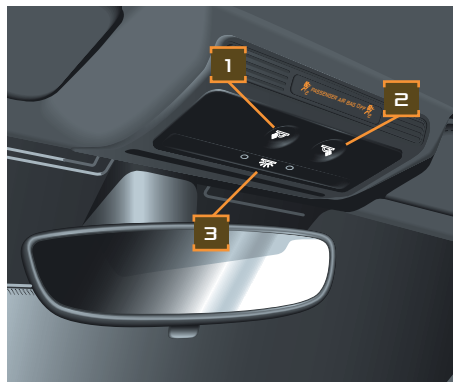
All Automatic Driver Recognition card users will be allowed up to 5 false alerts in a 12 month period.

 **NOTE:** *To avoid unnecessary alerts, contact the Vehicle Tracking Centre to inform them of any potential false alarms.*

COMFORT AND CONVENIENCE

INTERIOR FEATURES

Interior lighting



1. Left-hand reading light on/off/gradual touch pad
2. Right-hand reading light on/off/gradual touch pad
3. Interior lighting on/off touch pad

For full interior lighting, press the touch pad **(3)** quickly.

i **NOTE:** Ensure that the interior lighting is switched off when leaving the vehicle.

To switch off the interior lighting, press touch pad **(3)** again.

Reading lights

Press touch pads **(1)** or **(2)** to switch on the desired reading light.

For gradual reading illumination, press and hold touch pad **(1)** or **(2)** until desired lighting is achieved.

Press touch pads **(1)** or **(2)** again to switch off the respective reading light.

Courtesy lighting

The interior of your McLaren is lit in the following areas:

- the driver's and passenger's footwells, when you open a door;
- the centre console (illuminated by a light within the interior mirror), if the ignition is on;
- the interior door handles, if the ignition is on.

The courtesy lighting extinguishes one minute after the doors have been closed or when the ignition is switched on.

The luggage compartment light illuminates when the luggage compartment is opened.

COMFORT AND CONVENIENCE

INTERIOR FEATURES

Entry lighting

Entry lighting improves visibility and security when you approach the vehicle.

When the vehicle is unlocked, the headlamps and tail lamps illuminate for a period of time or until the ignition is switched on.

To set the entry lighting duration, see Internal lighting, page 110.

Exit lighting

Exit lighting improves visibility and security when you leave the vehicle by illuminating the headlamps and tail lamps for a period of time.

To set the exit lighting duration, see External lighting, page 110.

Sun visors



Fold the sun visors down to protect your eyes from bright sunlight as you are driving.

Stowage net

A stowage net is fitted on the bulkhead between the seats for storing small items.

⚠ WARNING: *Do not use the stowage net to transport any heavy, sharp-edged or breakable objects. Occupants could be injured by objects being thrown around during sharp braking, a sudden change of direction or an accident.*

COMFORT AND CONVENIENCE

INTERIOR FEATURES

Stowage compartment



A compartment (arrowed) is fitted in the centre console for storing small items.

WARNING: The stowage compartment must be closed when items are stored in it. Occupants could be injured by objects being thrown around during sharp braking, a sudden change of direction or an accident.



The USB connector and a 3.5 mm auxiliary socket are located in the stowage compartment.

NOTE: Always close the stowage compartment when leaving the vehicle, or the interior motion sensor will not function.

NOTE: The area behind the seats is not designed for storing luggage or any other personal items.

Stowage pocket

A pocket is fitted to the front edge of each seat for storing small items.

COMFORT AND CONVENIENCE

INTERIOR FEATURES

Cup holders



Utilise the two cup holders (arrowed) for safe convenient storage of closed drink containers when on a journey.



WARNING: *Drinking while the car is moving could cause you to become distracted which could lead to an accident.*

Owner documentation

Your McLaren is equipped with the following documents:

- Quick guide - which gives a brief overview of the controls and instruments fitted to your McLaren
- Service and Warranty booklet - provides information on what to do and who to contact in the event of problems.

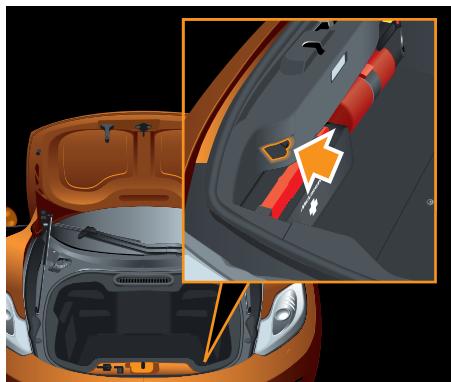


These documents are stored in a slot under the dashboard on the passenger's side (arrowed).

COMFORT AND CONVENIENCE

INTERIOR FEATURES

Accessory power sockets



Luggage compartment socket

i The accessory socket (arrowed), located in the luggage compartment, is the only one that can be used to connect the battery charger

i **NOTE:** Do not leave any device (except the battery charger), that draws power from the vehicle, connected to the socket for extended periods without the engine running. This may lead to excessive battery drain.



Interior socket

The interior accessory socket (arrowed) is located inside the passenger compartment, behind the centre console.

i **NOTE:** Do not connect the battery charger to the interior accessory socket.

Car cover

A car cover, suitable for use inside a garage, can be purchased from a McLaren Dealer

McLaren recommends that the car is covered if it is to be left in storage for periods over two weeks. Clean the vehicle inside and out, ensuring that it has fully dried, prior to fitting the cover.

i **NOTE:** Allow the engine to cool before fitting the cover or the hot exhaust pipes could cause damage to the cover.

MAINTAINING YOUR McLAREN

FLUID TOPPING UP

Engine oil	154
Gearbox oil level	156
Coolant.....	157
Power steering fluid	158
Brake fluid	159
Windscreen and headlamp washers	160

EMERGENCY EQUIPMENT

Luggage compartment equipment	161
Warning triangle	161
First-aid kit	162
Tyre sealant	162
Towing eye.....	162
Fuel funnel	163
Fire extinguisher	163

BATTERY CARE AND MAINTENANCE

Battery safety	164
Charging the battery	165
Boost starting from another vehicle	165

FUSES

Fuse replacement	168
Main fusebox.....	169
Secondary fuse box	172
Battery fuse box	174

LIGHTING

Vehicle lights	176
----------------------	-----

MANUAL UNLOCKING AND OPENING

Unlocking - discharged battery	177
Starting the vehicle	179
Door opening from inside - discharged battery	180
Opening luggage compartment - discharged battery	181
Replacing key fob battery	182

WASHERS AND WIPERS

Replacing the wiper blade	184
---------------------------------	-----

WHEELS AND TYRES

Wheels and tyres.....	185
Flat tyre	190

VEHICLE CARE

Washing your McLaren	192
Cleaning the interior	195

RAISING THE VEHICLE

Vehicle lifting points.....	196
-----------------------------	-----

McLAREN ASSISTANCE

McLaren Assistance	197
Replacement battery	197
In the event of a breakdown	197
Towing for recovery	198

DRIVING ABROAD

Driving abroad	199
----------------------	-----

MAINTAINING YOUR McLAREN

FLUID TOPPING UP

Engine oil



The engine uses approximately 0.1 litres of oil for every 625 miles (1000 km), depending on your style of driving. The oil consumption may be higher than this when the vehicle is new or if you frequently drive at high engine speeds.

You will only be able to estimate the oil consumption after the vehicle has been driven for several thousand miles or kilometres.

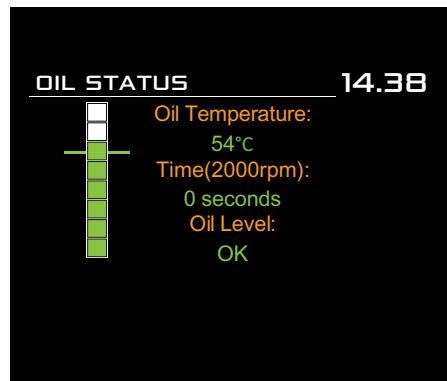
i *NOTE: Lubricant additives could damage the engine or gearbox. Damage caused by such additives is not covered by the vehicle warranty. Further information is available from a McLaren Dealer.*

Checking the engine oil

The engine oil level must be manually checked. No automatic level checks or warnings are provided.

To check the engine oil level manually:

1. Ensure the vehicle is stationary, positioned on a level surface with the parking brake applied and neutral selected prior to checking the oil level.
2. The level is viewed in the Vehicle Info section in the left-hand display, see Vehicle info, page 117.



3. Start the engine and hold the engine speed at 2000 rpm for 20 seconds. Allow the engine oil temperature to reach a temperature between 40°C (104°F) and 70°C (158°F).

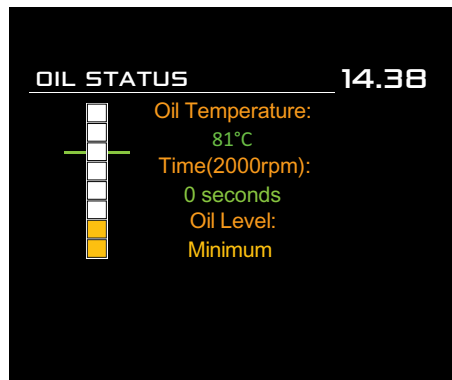
i *NOTE: The engine oil check will be aborted if the engine speed exceeds 3000 rpm or falls below 1750 rpm.*

MAINTAINING YOUR McLAREN

FLUID TOPPING UP

4. When the timer has reached '0', the oil level will be shown on the display along with a description.

i *NOTE: The line on the display indicates the maximum oil level.*



5. If the engine oil is at the minimum level, top-up the oil, 0,25 litre at a time.

Topping-up the engine oil

⚠ **WARNING: There is a risk of injury if the engine cover is open, even when the engine is not running.**

Engine components become very hot. Avoid contact, there is a risk of severe burns.

i *NOTE: McLaren only recommends the use of Mobil 1 New Life 0W-40 engine oil.*

1. Open the engine cover, see Engine cover, page 15.



2. Unscrew the engine oil filler cap (arrowed).
3. Top-up with the correct quantity of Mobil 1 New Life 0W-40 engine oil, in 0.25 litre quantities. Approximately 2.75 litres is required to raise the level from minimum to maximum.

i *NOTE: Do not overfill. Top-up in 0.25 litre quantities and then re-check before adding further oil.*

4. Check the left-hand display to ensure level is correct.

i *NOTE: If you have inadvertently overfilled the engine with oil, you must have any excess removed at a McLaren Dealer. The engine or the catalytic converter could be damaged.*

MAINTAINING YOUR McLAREN

FLUID TOPPING UP

5. Refit the engine oil filler cap.



ENVIRONMENTAL: When topping up, take care not to spill any oil. Oil must not be allowed to escape into the soil or waterways.

6. Close the engine cover, see Engine cover, page 15.

Oil temperature

If the oil temperature is too high, a warning will be displayed in the left-hand display. Reduce the vehicle speed until the warning message extinguishes.

Gearbox oil level

If you experience oil loss or problems with gear shifts, have the gearbox checked by your McLaren Dealer.



NOTE: The gearbox is sealed for life and does not need any servicing or topping-up.

MAINTAINING YOUR McLAREN

FLUID TOPPING UP

Coolant

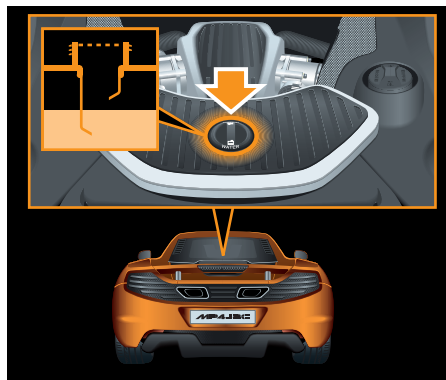
Coolant is a mixture of water and antifreeze/corrosion inhibitor. Only check the coolant when the vehicle is positioned on level ground and the engine is cool.

⚠ WARNING: *The cooling system is pressurised. Only unscrew the cap when the engine is cool. You could be scalded by hot escaping coolant.*

⚠ WARNING: *Coolant is highly flammable. Fire, naked flames and smoking are prohibited when handling coolant.*

⚠ WARNING: *Coolant is toxic. Keep containers sealed and away from children. If coolant is accidentally consumed, seek medical help straight away.*

1. Open the engine cover, see Engine cover, page 15.



2. Slowly unscrew the cap (arrowed) by half a turn anti-clockwise and allow excess pressure to escape.
3. Unscrew the cap fully and remove it.
4. The coolant level is correct when it is between the lower and upper steps inside the filler neck.

5. Top-up if necessary using only Mobil Antifreeze Extra.

6. Replace the cap by turning it clockwise to the stop.

7. Close the engine cover, see Engine cover, page 15.

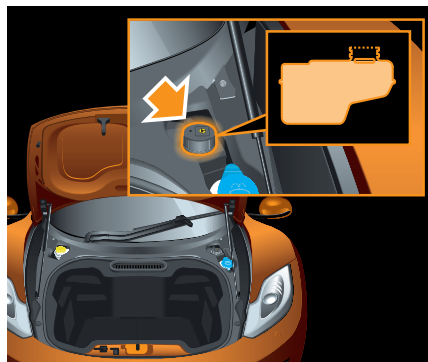
MAINTAINING YOUR McLAREN

FLUID TOPPING UP

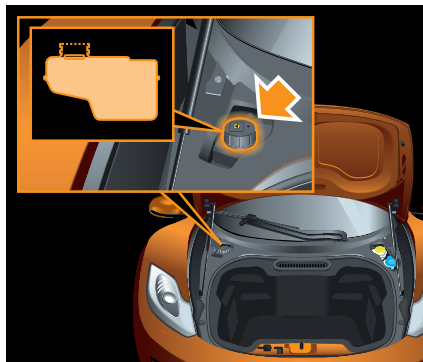
Power steering fluid

WARNING: Power steering fluid is highly flammable. Fire, naked flames and smoking are prohibited when handling power steering fluid.

WARNING: Power steering fluid is toxic. Keep containers sealed and away from children. If fluid is accidentally consumed, seek medical help straight away.



Right-hand drive models



Left-hand drive models

Checking fluid level

1. Switch the ignition on and select normal handling mode, see Handling control, page 72.
2. Allow the engine to idle for 20 seconds before checking the fluid level.
3. Open the luggage compartment, see Luggage compartment, page 16.
4. Turn the cap (arrowed) anti-clockwise and remove it.
5. The power steering fluid level is correct when it is between the lower and upper steps inside the filler neck.
6. Top up if necessary using only Pentosin CHF202 power steering fluid, contact a McLaren Dealer
7. Replace the cap by turning it to the stop.
8. Close the luggage compartment, see Luggage compartment, page 16.

MAINTAINING YOUR McLAREN

FLUID TOPPING UP

Brake fluid

⚠ WARNING: Brake fluid is highly flammable. Fire, naked flames and smoking are prohibited when handling brake fluid.

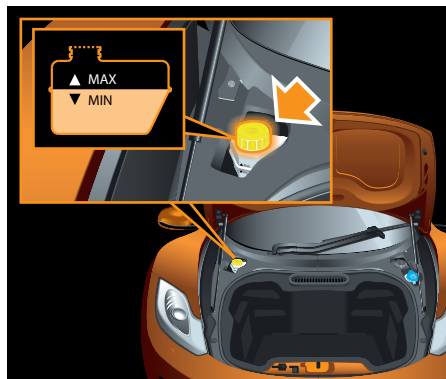
⚠ WARNING: Brake fluid is toxic. Keep containers sealed and away from children. If fluid is accidentally consumed, seek medical help straight away.

⚠ WARNING: Only use fluid from new, air tight containers.

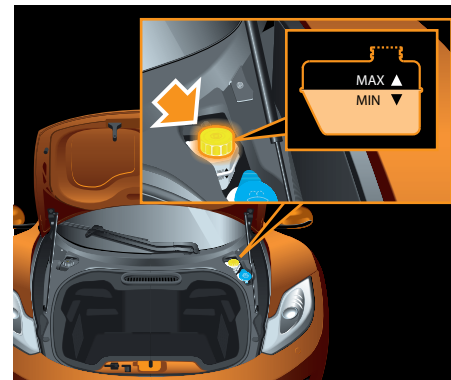
i NOTE: Avoid spilling brake fluid, it is harmful to painted surfaces. Any spillages must be removed immediately with a mixture of car shampoo and water.

Checking fluid level

1. Open the luggage compartment, see Luggage compartment, page 16.



Right-hand drive models



Left-hand drive models

2. Unscrew the cap (arrowed) anti-clockwise and remove it.
3. The brake fluid is correct if the level just covers the base of the filter in the filler neck.
4. Top up if necessary using only new Pentosin DoT 5.1 brake fluid.
5. Replace the cap by turning it to the stop.
6. Close the luggage compartment, see Luggage compartment, page 16.

MAINTAINING YOUR McLAREN

FLUID TOPPING UP

Windscreen and headlamp washers

WARNING: Some washer fluids are highly flammable. Fire, naked flames and smoking are prohibited when handling washer fluid.

WARNING: Washer fluid is toxic. Keep containers sealed and away from children. If fluid is accidentally consumed, seek medical help straight away.

NOTE: McLaren recommends the use of Esso Screenwash concentrate.

Use only an ammonia-free washer fluid suitable for plastic headlamp lenses. Unsuitable washer fluid may cause damage to the headlamps.

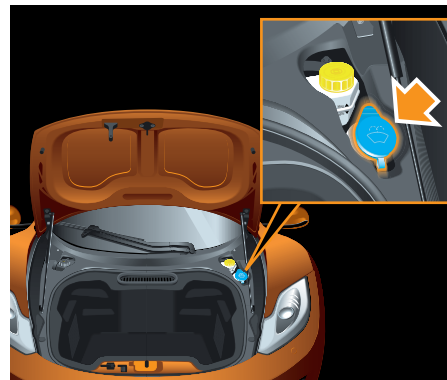
NOTE: Add washer fluid to the reservoir all year round.

The windscreen and headlamp washers share a common reservoir, which is located in the luggage compartment.

The reservoir has a capacity of approximately 4 litres.

Checking fluid level

1. Open the luggage compartment, see Luggage compartment, page 16.
2. Mix a solution of Esso Screenwash concentrate and water in a container before adding to the reservoir. Concentration of the washer solution should be mixed to suit the outside temperatures.

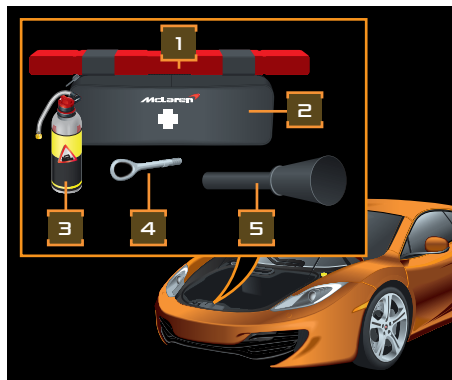


3. Open the reservoir cap, top up the reservoir with washer fluid and close the cap.
4. Close the luggage compartment, see Luggage compartment, page 16.

MAINTAINING YOUR McLAREN

EMERGENCY EQUIPMENT

Luggage compartment equipment



1. Warning triangle*, page 161
2. First-aid kit*, page 162
3. Tyre sealant, page 162
4. Towing eye, page 162
5. Fuel funnel, page 163

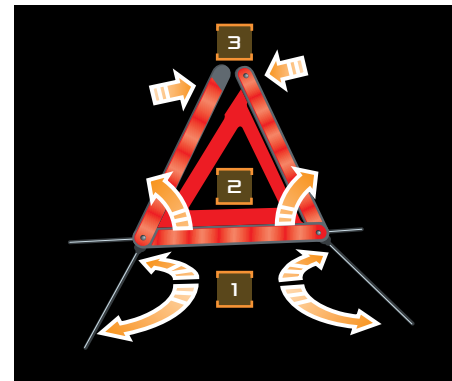
i **NOTE:** The towing eye and the fuel funnel are supplied fitted inside the first aid kit container.

Warning triangle*



The warning triangle (1) is located at the front of the luggage compartment.

Setting up the warning triangle



Fold the legs (1) sideways from the bottom.

Pull side reflectors (2) upwards to form a triangle and lock them at the top using press-stud (3).

Place the warning triangle at an appropriate distance from the vehicle to warn other traffic of a breakdown.

MAINTAINING YOUR McLAREN

EMERGENCY EQUIPMENT

First-aid kit*



The first-aid kit (2) is located at the front of the luggage compartment.

i *NOTE: Check the expiry dates of the first-aid kit materials every year, and replace them if necessary.*

Tyre sealant



The tyre sealant (3) is located at the front of the luggage compartment luggage.

For instructions on how to use the tyre sealant, see Flat tyre, page 190.

Towing eye



The towing eye (4) is located inside the first aid kit case at the front of the luggage compartment luggage.

i *NOTE: Your McLaren is equipped with a front towing eye mounting only. It is not possible to tow other vehicles.*

For information on installing the towing eye, see Towing eye and mounting, page 198.

MAINTAINING YOUR McLAREN

EMERGENCY EQUIPMENT

Fuel funnel



The fuel funnel (5) is located inside the first aid kit at the front of the luggage compartment luggage.

i **NOTE:** Only use the fuel funnel when filling the vehicle with fuel from sources other than a fuel pump on a garage forecourt.

Do not use the fuel funnel when topping-up coolant, engine oil or any other fluids in the vehicle.

Fire extinguisher*

The fire extinguisher is located at the front of the luggage compartment.



Release the retaining strap and remove the fire extinguisher.

To operate, follow the manufacturer's instructions on the side of the fire extinguisher.

i **NOTE:** The fire extinguisher must be checked every year or it may fail in an emergency. Once the extinguisher is used it will have to be replaced.

MAINTAINING YOUR McLAREN

BATTERY CARE AND MAINTENANCE

Battery safety

 **NOTE:** Your McLaren is fitted with a lithium ion battery. Only a lithium ion battery charger can be used on this type of battery. Contact a McLaren Dealer for more information.

Before using the battery charger, familiarise yourself with the following safety information.

 **WARNING:** Have the battery tested at a McLaren Dealer, every two years or 12 000 miles (20 000 km) and replaced if necessary. If it is necessary to replace the battery, contact a McLaren Dealer.

 **WARNING:** Before use, check that all cables are in good condition; do not use cables that are damaged.

Ensure that all cables are kept away from sharp edges, are not pinched or trapped and are not close to hot surfaces or water.

Never charge a damaged battery. The battery must only be charged in a well ventilated area; the charger must never be covered or placed on the battery.

Do not place any metal objects on a battery. You could cause a short circuit and the battery could ignite.

Keep the charger out of reach of children at all times.

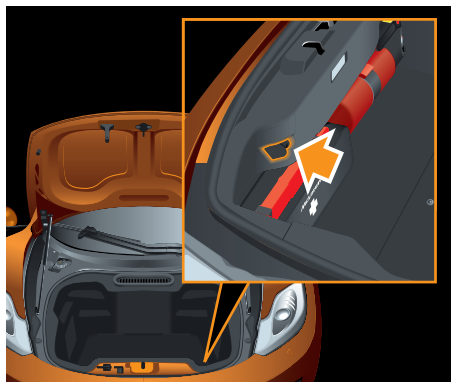
MAINTAINING YOUR McLAREN

BATTERY CARE AND MAINTENANCE

Charging the battery

i **NOTE:** To maintain your lithium ion battery in optimum condition, always leave the battery charger connected to the battery and switched on during periods when your vehicle is not in regular use.

i **NOTE:** Do not connect the battery charger to the interior accessory socket.



Refer to the instructions supplied with the battery charger. The charger connects to the accessory socket (arrowed) in the luggage compartment.

Boost starting from another vehicle

Using booster cables

! **WARNING:** Ensure that both batteries are 12V and that the booster cables have insulated clamps and are approved for use with 12V batteries.

! **WARNING:** Do not connect positive (+) terminals to negative (-) terminals.

! **WARNING:** Take care when working near rotating parts of the engine. Ensure cables are kept well clear.

i **NOTE:** Do not use a 24V booster start system. These produce excessive voltage and can damage the vehicle's electrical system.

i **NOTE:** It is not possible to push or tow start a vehicle with a discharged battery.

i **NOTE:** If using a donor vehicle, please allow it to have the engine running for a minimum of two minutes before trying to start the disabled vehicle.

MAINTAINING YOUR McLAREN

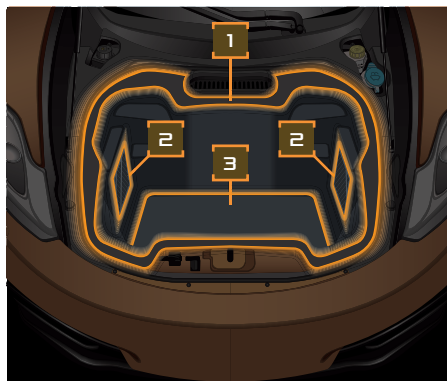
BATTERY CARE AND MAINTENANCE

Boosting procedure

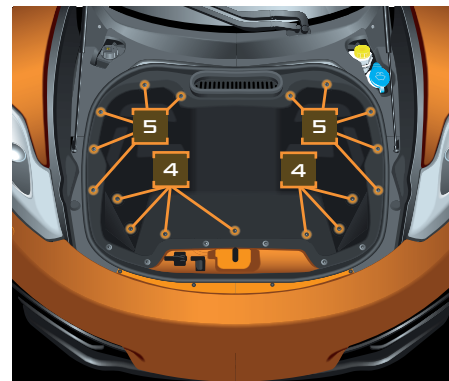
1. If a donor vehicle is to be used, park it so that the battery location is adjacent, but ensure the two vehicles do not touch.
2. Apply the parking brake and ensure that the transmission of both vehicles is set in neutral (or Park for vehicles with automatic transmission).
3. Switch off the ignition and all electrical equipment in both vehicles.

i *NOTE: Before connecting booster cables ensure that the battery connections on the disabled vehicle are correct and that all electrical equipment has been switched off.*

4. Open the luggage compartment and remove any items stowed inside.



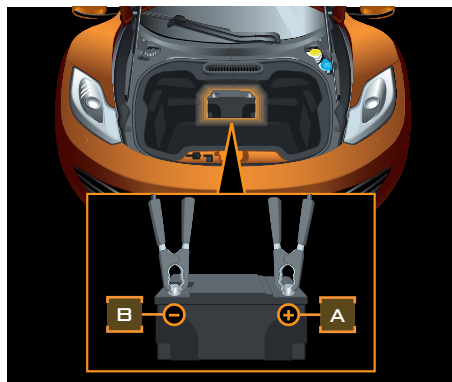
5. Remove the finisher (1) from around the top of the luggage compartment liner.
6. Remove the two stowage nets (2).
7. Remove the carpet (3).



8. Remove the 7 screws (4) securing the side and the base luggage compartment liner.
9. Remove the 10 screws (5) securing the top edge of the luggage compartment liner.
10. Remove the luggage compartment liner.

MAINTAINING YOUR McLAREN

BATTERY CARE AND MAINTENANCE



11. Connect one end of the positive (+) booster cable to the positive (+) terminal on the donor vehicle's battery.
12. Connect the other end of the positive (+) booster cable to the positive (+) terminal on the disabled vehicle's battery (A).
13. Connect one end of negative (-) booster cable to the negative (-) terminal on the donor vehicle's battery.

14. Connect the other end of the negative (-) booster cable to the negative (-) terminal on the disabled vehicle's battery (B).
15. Check that the cables are clear of any moving components and that all four connections are secure.

⚠ WARNING: Ensure that each connection is securely made and that there is no risk of the clips accidentally slipping or being pulled from the connection points/battery terminal - this could cause sparking, which could lead to fire or explosion.

16. Start the engine of the donor vehicle and allow it to run for two minutes.
17. The electrical system on the disabled vehicle should now be ready for the engine to be started.
18. Start the engine of the disabled vehicle.

19. Allow both vehicles to idle for two minutes.
20. Switch off the donor vehicle.

i NOTE: Do not switch on any electrical circuits on the previously disabled vehicle until after the booster cables have been removed.

i NOTE: If battery has gone flat, or has been disconnected, it may be necessary to reset the windows, see Resetting the windows, page 133. If this does not resolve the issue, please contact a McLaren Dealer immediately.

Disconnecting the cables

⚠ WARNING: To avoid serious injury, use caution when removing the booster cables as the engine on the previously disabled vehicle will be running. You will be working close to components carrying high voltage, or may be hot.

1. Disconnect the booster cables in the reverse order to that used for connection.
2. Refit the luggage compartment liner and secure with the 17 screws.
3. Fit the stowage nets, the carpet and the top finisher.
4. Stow the contents removed from the luggage compartment.

MAINTAINING YOUR McLAREN

FUSES

Fuse replacement



WARNING: Fuses protect the vehicle's electrical systems. The failure of any fuse will render the system it protects inoperative.

Use replacement fuses of the same rating and type. Incorrect fuse ratings can overload a system and cause a fire or malfunction. Blown fuses should be replaced and no attempt should be made to repair a blown fuse.



NOTE: Before removing a fuse, turn off all electrical equipment and switch off the ignition.

There are three fuseboxes fitted to your McLaren.

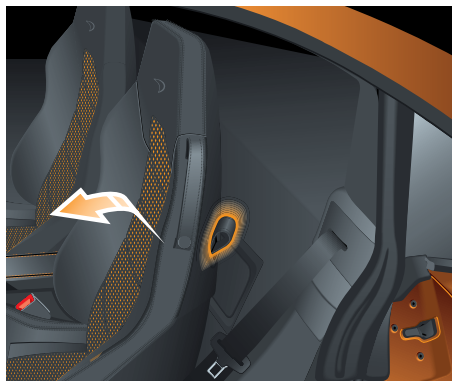
Fusebox	Location
Main fusebox	Behind a panel in the rear bulkhead, behind the left-hand seat
Secondary fusebox	Below the dashboard on the passenger side
Battery fusebox	On top of the battery

MAINTAINING YOUR McLAREN

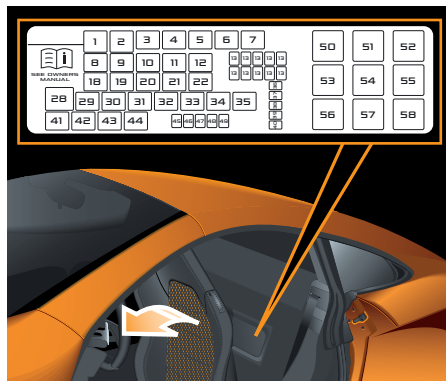
FUSES

Main fusebox

Main fusebox access



1. To access the main fuse box, pull the release strap and tilt the left-hand seat backrest forwards.



2. Release the two lower clips securing the panel to the bulkhead and remove the panel
3. Refer to the fuse specification chart to determine which fuse protects the non-functioning electrical system.

i NOTE: A label identifying the fuses is attached to the inside of the access panel.

4. Remove the appropriate fuse and replace it with a fuse of the same value as the original. If in doubt, check the fuse specification chart.
5. Fit the access panel by inserting the two upper retaining clips in the bulkhead and securing with the two lower clips.

i NOTE: If a replacement fuse does not solve the electrical problem, or it fails immediately, contact a McLaren Dealer.

MAINTAINING YOUR McLAREN

FUSES

Main fuse box fuse specification chart

No.	Amps	Circuit protected
F1	60	Secondary Air Pump
F2	-	-
F3	-	-
F4	-	-
F5	30	Powertrain Chassis Control Unit
F6	30	Powertrain Chassis Control Unit
F7	30	Starter
F8	30	Heated Rear Window
F9	30	Audio Amplifier
F10	-	-
F11	-	-
F12	15	Headlamp Wash Pump
F13	5	Powertrain Chassis Control Unit
F14	5	Engine ECU

No.	Amps	Circuit protected
F15	10	Relays
F16	10	OBD2 Diagnostics
F17	3	Door Locking Switch
F18	50	ECU Main Relay Control
F19	-	-
F20	30	Seat Driver
F21	30	Seat Passenger
F22	-	-
F23	5	Tilt and Microwave Sensor
F24	-	-
F25	10	Driver/Passenger Door Latch
F26	10	ICPC
F27	5	Electronic Park Brake
F28	-	-
F29	20	Vacuum Pump
F30	-	-
F31	50	Cooling Fan Left-Hand
F32	50	Cooling Fan Right-Hand

No.	Amps	Circuit protected
F33	30	Electronic Park Brake Motor Left-Hand
F34	30	Electronic Park Brake Motor Right-Hand
F35	-	-
F36	20	Battery Main Relay
F37	15	Emission Control Systems
F38	15	Fuel Injection and Ignition - Left-Hand Bank
F39	15	Fuel Injection and Ignition - Right-Hand Bank
F40	10	Engine Ancillaries
R41	-	Headlamp Wash Pump
R42	-	Vacuum Pump relay

MAINTAINING YOUR McLAREN

FUSES

No.	Amps	Circuit protected
R43	-	Vacuum Pump relay
R44	-	-
F45	10	Electrical Thermostats, Camshaft Actuators
F46	-	-
F47	-	-
F48	-	-
F49	-	-
R50	-	Fuel Pump relay 1

No.	Amps	Circuit protected
R51	-	Heated Rear Window and Umbilical
R52	-	Fuel Pump relay 2
R53	-	Powertrain Chassis Control Unit
R54	-	Powertrain Chassis Control Unit
R55	-	Starter
R56	-	Secondary Air Pump
R57	-	Cooling Fan Left-Hand
R58	-	ECU Main relay Control

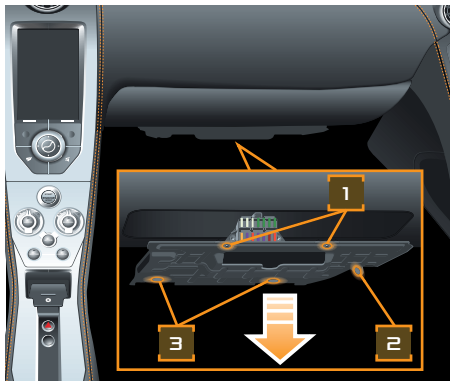
MAINTAINING YOUR McLAREN

FUSES

Secondary fuse box

Secondary fusebox access

1. Access to the secondary fusebox is gained by lowering the closing panel below the dashboard on the passenger's side.



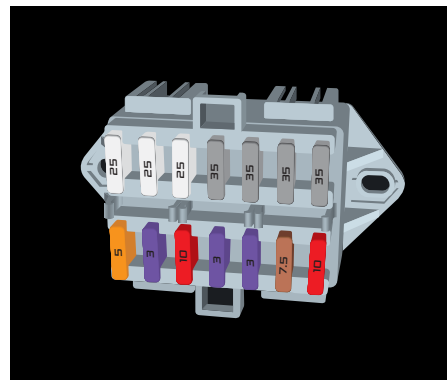
2. Remove the two front screws (1).

3. Remove the side fixing clip (2).

NOTE: If you wish to lower the closing panel fully, also remove the two clips at the rear (3).

4. Lower the closing panel, sufficiently to gain access to the fusebox.

 *NOTE: Do not lower the closing panel further than necessary as it could be damaged.*



5. Remove the appropriate fuse and replace it with a fuse of the same value as the original. If in doubt, check the fuse specification chart.
6. Raise the closing panel into position, fit the clip and fit and tighten the two front screws.

MAINTAINING YOUR McLAREN

FUSES

Secondary fuse box fuse specification chart

No.	Amps	Circuit protected
F1	25	Driver's door
F2	25	Passenger's door
F3	25	Lights
F4	35	Lights
F5	35	Body
F6	35	Body
F7	35	Alarm
F8	5	Electronic Stability Control (ESC)
F9	3	Door sensors
F10	10	Air conditioning
F11	3	Alarm Control Unit
F12	3	Tracker
F13	7.5	Alarm
F14	10	Instrument cluster

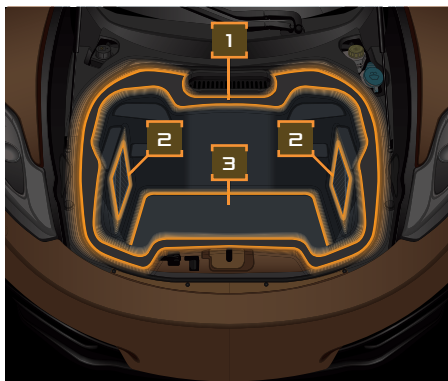
MAINTAINING YOUR McLAREN

FUSES

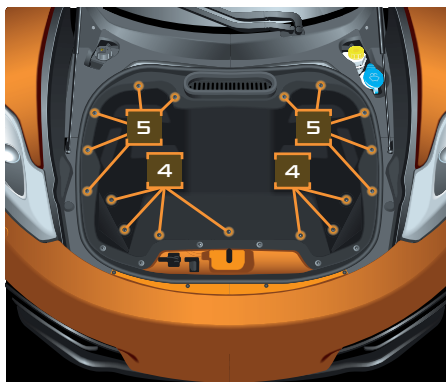
Battery fuse box

Battery fusebox access

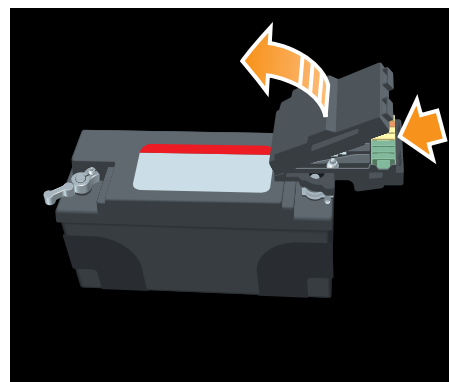
1. Open the luggage compartment and remove any items stowed inside.



2. Remove the finisher (1) from around the top of the luggage compartment liner.
3. Remove the two stowage nets (2).
4. Remove the carpet (3).



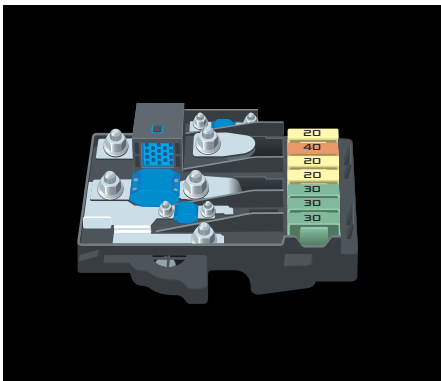
5. Remove the 7 screws (4) securing the side and the base luggage compartment liner.
6. Remove the 10 screws (5) securing the top edge of the luggage compartment liner.
7. Remove the luggage compartment liner.



8. Press the catch on the right-hand side of the cover (arrowed) and remove the cover from the fusebox.

MAINTAINING YOUR McLAREN

FUSES



9. Remove the appropriate fuse and replace it with a fuse of the same value as the original. If in doubt, check the fuse specification chart.
10. Engage the left-hand side of the cover with the fusebox, and push the right-hand side down to fully engage the clip.
11. Refit the luggage compartment liner and secure with the 17 screws.
12. Fit the stowage nets, the carpet and the top finisher.
13. Stow the contents removed from the luggage compartment.

Battery fuse box fuse specification chart

No.	Amps	Circuit protected
1	30	Fuel Pump 1 Relay Supply
2	30	Fuel Pump 2 Relay Supply
3	30	Air Conditioning - Motor - Control Module
4	20	Fascia Fuse Box - Supply
5	20	Electronic Stability Control valves
6	40	Electronic Stability Control motor
7	20	Auxiliary Power Socket - Luggage Compartment
8	-	Spare
9	80	Electro Hydraulic Power Assisted Steering
10	200	Main Fuse Box Supply
11	100	Secondary Fuse Box Supply

MAINTAINING YOUR McLAREN

LIGHTING

Vehicle lights

Lighting is an important aspect of vehicle safety. You must therefore ensure that all lights are working at all times.

The following lights on your McLaren use the latest Light Emitting Diode technology:

1. Daytime running lights
2. Direction indicators and side repeater lights
3. Reverse light
4. Rear fog light
5. Tail/brake lights

Unlike traditional filament bulbs, these lights have a long life and low power consumption while providing the same amount of illumination.

Headlamps

Your McLaren is fitted with bi-xenon headlamps. These provide greater visibility on both dipped and main beams, especially during adverse weather and driving conditions. In addition, the life of a bi-xenon bulb is significantly longer than that of a conventional headlamp bulb.



WARNING: Xenon bulbs contain mercury, operate at very high temperatures and with extremely high voltage.

Never attempt to replace a xenon bulb. Replacement of these bulbs must be carried out by a McLaren Dealer.



NOTE: Do not attempt to change bulbs or Light Emitting Diodes yourself, as you could damage the vehicle lighting systems. Have faulty lights rectified by a McLaren Dealer.

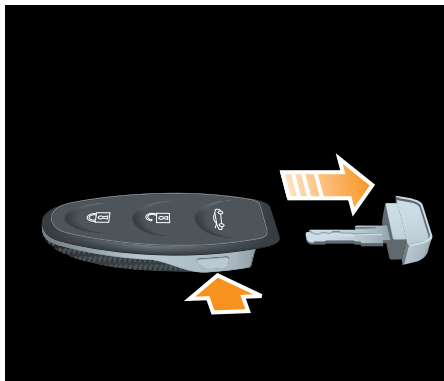
MAINTAINING YOUR McLAREN

MANUAL UNLOCKING AND OPENING

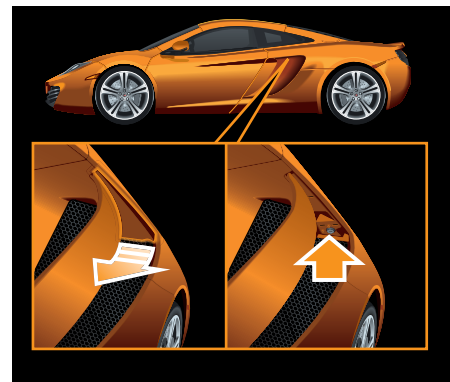
Unlocking - discharged battery

If you are unable to lock or unlock the vehicle because the vehicle battery or key fob battery has become discharged, use the mechanical key.

Unlocking and opening procedure



1. Press release catch and remove the mechanical key from the key fob.



2. The mechanical lock is located behind a panel on the upper face of the left-hand side air intake.
Using the recess at the rear of the panel, release the three clips securing the panel to the body and release the panel.
3. Push the panel back towards the mesh grille.

MAINTAINING YOUR McLAREN

MANUAL UNLOCKING AND OPENING

4. Rotate and carefully bend the panel slightly to release the front tab.

 **NOTE:** The panel is not tethered to the vehicle and can be removed completely after the clips have been released. Ensure that the panel is stored safely and cannot be damaged when the mechanical key is used.

5. Insert the mechanical key into the lock and turn the key until mechanical resistance is preventing full release of the door.

6. Apply pressure to the latch area of the door (to counteract pressure of the door seals), and turn the key further to release the door

 **NOTE:** If the vehicle battery is discharged, the windows will not lower. Take care when opening or closing the door. Do not force the door open or closed, the door seals or window could be damaged.

7. Fit the mechanical key back into the key fob.

 **NOTE:** Unlocking the vehicle using the mechanical key will activate the anti-theft system and may cause the alarm to sound. Once the door is open, place the key fob on the section of the cup holder housing immediately behind the switch panel. within 10 seconds. The vehicle will recognise the key fob and stop the alarm from sounding.

8. Replace the key fob battery at the earliest possible opportunity, see Replacing key fob battery, page 182.
9. Replace the cover panel.

MAINTAINING YOUR McLAREN

MANUAL UNLOCKING AND OPENING

Starting the vehicle



In this position the vehicle is able to sense the presence of the valid key fob and the vehicle can be started and driven.

Replace the key fob battery at the earliest possible opportunity, see Replacing key fob battery, page 182.

If the key fob battery has become discharged, and the engine will not start.

Place the key fob on the section of the cup holder housing immediately behind the switch panel.

MAINTAINING YOUR McLAREN

MANUAL UNLOCKING AND OPENING

Door opening from inside - discharged battery



The door latch will then release, allowing the door to be partially raised before it automatically swings outwards and upwards.

To refit the release strap, feed the strap into its holder and snap the retainers into place.

i *NOTE: Only use this strap when the battery has become discharged.*

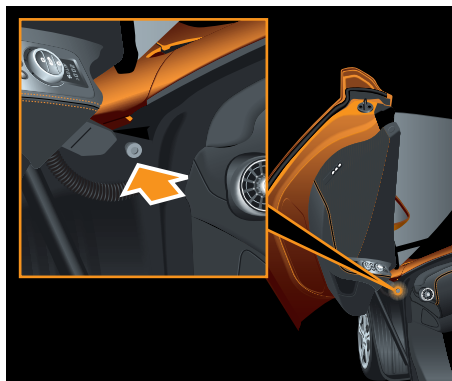
To release a door from inside, release the manual door release strap retainer and pull the strap.

MAINTAINING YOUR McLAREN

MANUAL UNLOCKING AND OPENING

Opening luggage compartment - discharged battery

i *NOTE: The luggage compartment will not open if the battery is discharged or disconnected*



Opening procedure

1. Pull the handle (arrowed) in the left-hand door aperture.
2. The luggage compartment will unlock and open slightly.
3. Release the safety latch and open the luggage compartment.

MAINTAINING YOUR McLAREN

MANUAL UNLOCKING AND OPENING

Replacing key fob battery

Fit a new key fob battery every 12 months. You can do this yourself, or entrust it to a McLaren Dealer.

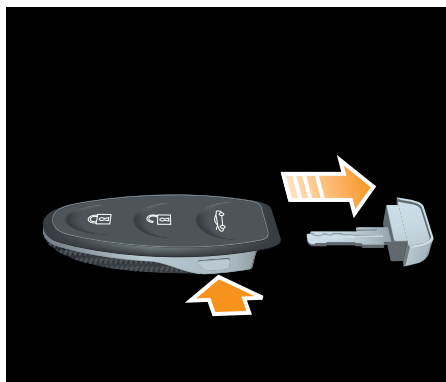
When the key fob battery is discharged, you will only be able to unlock the vehicle with the mechanical key.

You will require a single CR2032 3V battery.

 **WARNING: The battery contains toxic substances. If a battery is swallowed, contact a doctor immediately.**

 **ENVIRONMENTAL:** Do not dispose of the battery with the household waste. Batteries contain toxic substances.

Take the discharged battery to a McLaren Dealer or to a recycling point for used batteries.



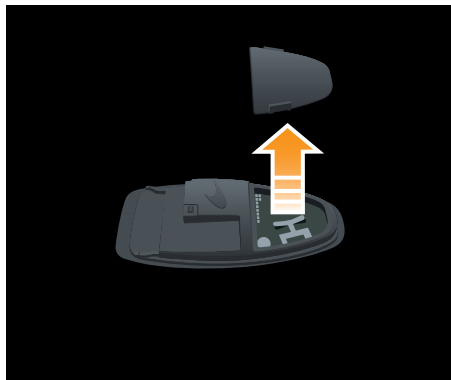
1. Press the release catch and remove the mechanical key from the key fob.



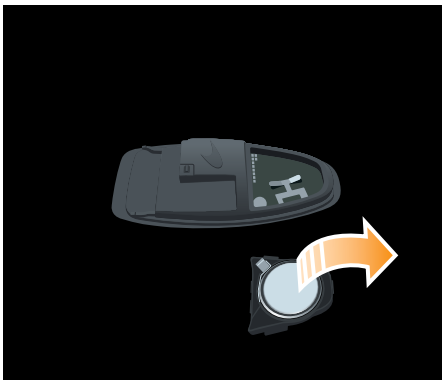
2. Slide the button pad away from the key fob.

MAINTAINING YOUR McLAREN

MANUAL UNLOCKING AND OPENING



3. Remove the back cover from the key fob and remove the battery holder.



4. Remove the discharged battery from the battery holder and install a new battery ensuring that the polarity is correct.



NOTE: Do not touch the new battery. Moisture and oil from fingers can affect battery life and cause corrosion of the contacts.

5. Fit the battery holder back into the key fob and replace the back cover.
6. Refit the button pad and the mechanical key.

MAINTAINING YOUR McLAREN

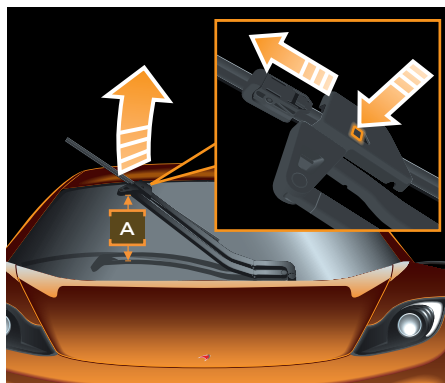
WASHERS AND WIPERS

Replacing the wiper blade

WARNING: Ensure the ignition is switched off before you replace the wiper blade. The windscreen wiper could be set in motion and injure you.

WARNING: Replace the wiper blade every twelve months or the windscreen will not be wiped properly. You may not be able to observe the road and traffic conditions as a result and could cause an accident.

To remove the wiper blade



1. Ensure the ignition is switched off and raise the wiper arm away from the windscreen.

NOTE: Do not raise the end of the wiper arm more than 300mm (12 inches), dimension **A** from the windscreen as the washer jet components may be damaged.

NOTE: Never open the luggage compartment lid when the wiper arm is positioned away from the windscreen. You could damage the luggage compartment cover and/or the wiper arm. Do not lower the wiper arm onto the windscreen without the wiper blade fitted.

2. Depress the clip and slide the wiper blade out from the arm.

To install a new wiper blade

1. Slide the wiper blade onto the wiper arm and ensure that the clip engages in the arm.
2. Lower the wiper arm onto the windscreen.

MAINTAINING YOUR McLAREN

WHEELS AND TYRES

Wheels and tyres

 **WARNING:** Have worn tyres replaced in axle pairs and ensure the tyres are fitted as specified, see Tyres, page 187. With worn tyres, the driving stability of the vehicle will be adversely affected, especially when driving at high speeds.

- With new tyres, avoid high speed cornering and excess speed.
- Only have wheels and tyres of the same type and make fitted.
- Never use a tyre which has been punctured and then repaired.
- Only have tyres of the correct size fitted.
- Tyres degrade over time due to the effects of ultraviolet light, extreme temperatures, high loads, and environmental conditions. It is recommended that tyres are replaced every six years, or sooner if required.

McLaren recommends that you only use Pirelli summer or winter tyres, See Wheel and tyre sizes, page 208.

These tyres best provide the best possible performance in conjunction with the safety systems on your vehicle and have been specifically approved by McLaren.

McLaren cannot accept any responsibility for damage that may result from use of other tyres and wheels. Further information about wheels and tyres can be obtained from a McLaren Dealer.

 **NOTE:** Using tyres other than those which have been recommended by McLaren, may adversely affect the handling, noise levels and fuel consumption. In addition, when driving with a load or when using snow chains, they could cause the tyres to contact the bodywork and axle components. This could result in damage to the tyres or the vehicle.

 **NOTE:** Retreaded tyres must not be used. Do not fit used tyres if you have no information about their previous usage.

 **NOTE:** Modification to the brake system and wheels is not permitted, nor is the use of spacer plates or brake dust shields. Any such modifications will invalidate the vehicle warranty.

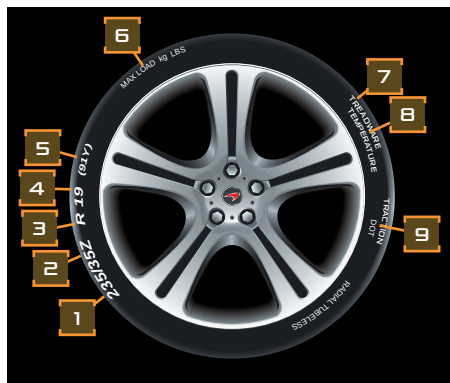
 **NOTE:** A wheel change must be carried out at a McLaren Dealer. The vehicle could be damaged if it is jacked up incorrectly

 **NOTE:** Store tyres in a cool, dry place, preferably in the dark. Protect the tyres from oil, grease and petrol.

MAINTAINING YOUR McLAREN

WHEELS AND TYRES

Tyre markings



1. Width of tyre in millimetres
2. Tyre profile given as percentage of tyre width.
3. Indicates that the tyre is radial ply.
4. Indicates the diameter of the wheel rim in inches.

5. The numbers denote load index and the letter indicates the speed rating. 91 indicates a weight of 1350 lbs (615 kg) and Y indicates speeds over 186 mph (300 kph).
6. Displays the maximum load which can be carried by the tyre
7. Wear rate indicator. The higher the figure the longer a tyre will last.
8. The alpha character denotes resistance to heat. An 'A' rated tyre offers most heat resistance.
9. Information about the manufacture of the tyre. Contains place and date of manufacture.

MAINTAINING YOUR McLAREN

WHEELS AND TYRES

Tyres

 **WARNING:** The tyres must be mounted according to the labelling on the tyre wall. The word 'OUTSIDE' must be on the outer edge of the tyre when it is fitted to the wheel or the stability of the vehicle will be adversely affected, especially at high speeds.

Asymmetric tyres



Asymmetric tyres have a tread pattern that is different from one side of the tread to the other. This combination of tread offers better grip in both wet and dry conditions.

The outer tread features a larger stiffer tread pattern that aids with cornering stability. The inner tread pattern aids stability in wet conditions. A central groove in the tyre aids straight line stability.

 **WARNING:** The tyres must be mounted according to the labelling on the tyre wall. The benefits of asymmetric tyres will only be available if the tyres are fitted correctly.

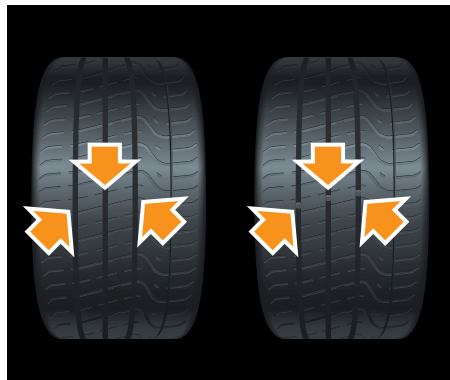
Inspecting wheels and tyres

At least every 14 days, check the tyres for cuts, punctures, tears, bumps, deformation and cracks. Check wheels for severe corrosion. Damaged wheels could cause a loss of tyre pressure.

Regularly check the tyre tread depth and the condition of the tread across the whole width of the tyre. Turn the front wheels to full lock in order to inspect the inner tread.

MAINTAINING YOUR McLAREN

WHEELS AND TYRES



When the tread is worn to 1.6 mm, the wear indicators appear on the surface of the tread pattern, producing a continuous band of rubber across the width of the tyre. Tyres must be replaced as soon as the wear indicator becomes visible, or sooner if legislation dictates replacement at a greater tread depth.

i **NOTE:** It is recommended that you always have your tyres replaced by a McLaren Dealer. If TPMS is fitted, each wheel has a tyre pressure sensor connected to the tyre valve. In order to avoid damage to the sensor, the tyres must be replaced using the correct procedure.

⚠ **WARNING:** Tyre grip decreases rapidly on wet or icy roads, particularly when the tread depth is close to the minimum. You could lose control of the vehicle and cause an accident due to the reduced grip of the tyres. Reduce your speed and drive with greater care.

i **NOTE:** If tread wear is uneven across the tyre, or becomes excessive, the wheel alignment should be checked.

Regularly check the pressure of all your tyres and correct the pressure as necessary, see Tyre pressures, page 189.

All wheels must have a valve cap fitted to protect the valve against dirt and moisture.

Driving precautions

When parking your McLaren, ensure that the tyres do not contact the kerb or other obstacles. If it is necessary to drive over kerbs, speed humps or potholes, drive slowly and at a shallow angle or the tyres could be damaged.

While driving, pay attention to vibrations, noises and unusual handling characteristics, e.g. pulling to one side. This may indicate that the tyres or wheels are damaged. If you experience anything unusual, reduce your speed and stop the vehicle as soon as safety permits to check the tyres and wheels for damage. If you find no signs of damage, have the tyres and wheels inspected at a McLaren Dealer.

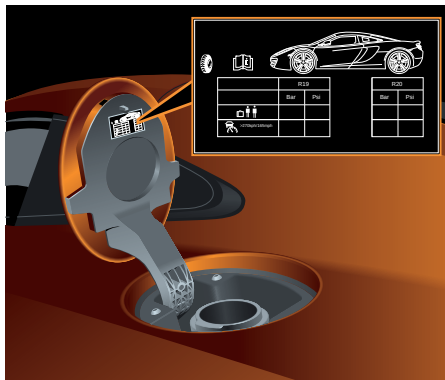
MAINTAINING YOUR McLAREN

WHEELS AND TYRES

Tyre pressures

⚠ WARNING: Tyre pressure that is too high or too low has a negative effect on the vehicle's active safety, this could lead to an accident. Frequently check the pressure of all tyres, particularly prior to long trips, and correct the pressure as necessary.

⚠ WARNING: If the pressure in a tyre drops repeatedly, inspect the tyre for foreign objects or signs of punctures, check the valve for air leaks.



For the tyre pressures for various operating conditions, see Tyre pressures, page 209. They are also printed on a label attached to the fuel filler flap.

If the vehicle is to be driven at high speeds, the tyre pressure must be checked, and if necessary adjusted.

i NOTE: In some markets, the tyre pressure label is attached to the driver's sill panel.

i NOTE: Tyre pressures given for low loads are minimum values which offer optimum ride comfort.

Increased pressures for higher loads will not adversely affect the running of the vehicle, but ride comfort will be impaired.

Check the pressures when the tyres are cold. If it is necessary to check the tyres when they are warm, pressures will be higher. Do not let air out of warm tyres to match the recommended cold tyre pressures.

MAINTAINING YOUR McLAREN

WHEELS AND TYRES

Driving with tyre pressure that is too high or too low can:

- create a risk of tyre failure with resultant accidents, causing injury or death;
- shorten the life of the tyres;
- cause increased tyre damage;
- have a negative effect on handling characteristics (e.g. by causing aquaplaning).



ENVIRONMENTAL: Check tyre pressures at least every 14 days.

Interchanging wheels



NOTE: Only approved wheels with winter tyres can be fitted to your McLaren as alternatives

Flat tyre

Your McLaren is equipped with a can of tyre sealant, which is located in the luggage compartment.

In the event of a puncture, follow the steps below to ensure your safety and the safety of other vehicle occupants and other road users.

Repairing a puncture

1. Stop the vehicle as far away as possible from traffic and on a firm and level surface.
2. If on a public highway, switch on the hazard warning lamps, see Hazard warning lamps, page 44.
3. Passengers should exit the vehicle safely and remain well away from the vehicle, the road and any traffic.
4. Apply the parking brake and select neutral.
5. Place the warning triangle at an appropriate distance from the vehicle to warn other traffic of a breakdown, see Warning triangle*, page 161.

MAINTAINING YOUR McLAREN

WHEELS AND TYRES

Using the tyre sealant



You can use the tyre sealant to seal small punctures, particularly those in the tyre's tread. The tyre sealant can be used at ambient temperatures down to -20°C (-4°F).

⚠ WARNING: *The tyre sealant is unable to seal punctures if:*

- *there are cuts or punctures in the tyre greater than 4 mm;*
- *the rims are damaged;*
- *you have driven at very low tyre pressures or with flat tyres.*

Contact a McLaren Dealer immediately.

Remove the tyre sealant from the luggage compartment and follow the instructions on the container.

i NOTE: *If possible, locate the cause of the puncture and position the wheel so the puncture is at the lowest point to enable the sealant to be more effective.*

Have the punctured tyre replaced as soon as possible.

⚠ WARNING: *Have punctured tyres replaced. McLaren do not recommend that punctured tyres are repaired.*

⚠ WARNING: *If the tyre sealant comes into contact with your eyes or skin, immediately rinse thoroughly with clean water, change out of clothing which has been in contact with the tyre sealant. If an allergic reaction occurs, contact a doctor immediately.*

⚠ WARNING: *Keep the tyre sealant out of reach of children. If tyre sealant is swallowed, immediately rinse the mouth thoroughly and drink a large amount of water. Do not induce vomiting. Contact a doctor immediately. Do not inhale tyre sealant fumes.*

i NOTE: *After using tyre sealant, the tyre valve, incorporating the tyre pressure monitoring system sensor*, will have to be replaced.*

MAINTAINING YOUR McLaren

VEHICLE CARE

Washing your McLaren

 **ENVIRONMENTAL:** Some cleaning products contain chemicals that are hazardous to the environment. Always take precautions to prevent fluids from spilling and never use excessive quantities.

Using an automatic car wash



 **NOTE:** To prevent damage to your McLaren always heed the following:

- switch off the windscreen wipers;
- lock the vehicle before it enters the wash, to prevent inadvertent opening of a door;
- on conveyor type car washes, switch on the ignition, engage neutral and release the parking brake.

 **NOTE:** If using a car wash where your car will remain stationary during the wash cycle and you intend to exit the vehicle prior to washing, lock it using the key fob and stand well clear of the vehicle and the car wash, to ensure that the key fob is at least 3 metres (9.8 feet) or greater distance away from the vehicle and car wash.

MAINTAINING YOUR McLAREN

VEHICLE CARE

Hand washing your McLaren

Prior to hand washing, lock the vehicle and place the key out of range (*at least 3 metres (9.8 feet) or greater distance*) to ensure that the doors do not open.

 **NOTE:** *Do not wash the vehicle in direct sunlight or if it is hot to the touch, this may cause water marks and streaks.*

Do not use household detergents, these products will discolour painted surfaces and remove protective wax finishes.

1. Pre-rinse the body thoroughly with a hose pipe held at a shallow angle to loosen any dirt and wet the paintwork ready for washing.
2. Prepare a bucket of warm water and a good quality car shampoo. Refer to the shampoo manufacturer's instructions for dilution ratios.

3. Working from the top of the vehicle down, wash the vehicle, ideally using a lambswool wash mitt rather than a sponge, use generous quantities of water paying particular attention to door shuts and other areas where dirt can accumulate. Use one wash mitt for the top of the vehicle (roof, bonnet and areas above the wheel arch line) and a separate mitt for areas below the wheel arch line.

 **NOTE:** *Do not clean the wheels with these wash mitts.*

 **NOTE:** *Do not allow the shampoo to dry, it will leave streaks on the paint work.*

4. Tar spots and stubborn grease marks can be removed using white spirit or denatured alcohol. After cleaning, immediately wash the area with soapy water to remove all traces of spirit or alcohol.

5. Once the vehicle is clean, work from the top of the vehicle down and rinse the vehicle thoroughly using a hose pipe held at a shallow angle.
6. Dry the vehicle using a chamois leather or drying towel.

MAINTAINING YOUR McLAREN

VEHICLE CARE

Washing the wheels

 **NOTE:** Wash the wheels frequently, do not allow brake dust to become ingrained in the wheel rim finish.

Wash the wheels using warm water, a good quality car shampoo and a wheel brush or wash mitt that is used only on the wheels. Apply polish to non-satin finished wheels to assist in keeping them clean.

 **NOTE:** Never apply polish to satin finish wheels, this will result in localised glossy patches on the surface of the wheel.

 **NOTE:** Do not use acid based wheel cleaners as these can damage the wheel rim finish leading to corrosion.

Wiper blades and rubber seals

Clean wiper blades and rubber seals using warm water and a good quality car shampoo only. Do not use petroleum or alcohol-based cleaners.

Windscreen, windows and mirrors

Regularly clean all windows inside and out using a window cleaning solution. An automotive glass cleaner is recommended. After washing the vehicle with car shampoo containing wax, clean the outside of the windscreen with glass cleaner. Do not use abrasive cleaning compounds as mirror glass is particularly susceptible to damage.

Underbody cleaning

Salt used on roads to control snow and ice during the winter can collect on the vehicle's underbody, if this is not removed, corrosion can occur. During the winter months, regularly hose the underbody with water paying particular attention to the wheel arches and areas where dirt can accumulate.

Polishing

Occasionally polish the paint work using a good quality polish, following up with a protective wax.

 **NOTE:** Do not use cutting compound, colour restoration products or polishes containing a harsh abrasive. These can scratch the surface and permanently damage the paint work.

Paint damage and rectification

Regularly inspect the paint work for damage. Any stone chips or deep scratches should be repaired as soon as possible. Contact a McLaren Dealer for advice.

MAINTAINING YOUR McLAREN

VEHICLE CARE

Cleaning the interior

 **NOTE:** A McLaren Dealer will be able to recommend products for cleaning the interior of your vehicle.

Carpet and fabrics

Before cleaning upholstery, always test the cleaning solution on a concealed area. Clean with diluted upholstery cleaner and a clean cloth.

Leather

Before cleaning leather, always test the cleaning solution on a concealed area. Clean with warm water and a non-detergent soap or a proprietary leather cleaner. Dry with a dry, clean, lint-free cloth. Do not use abrasive cleaning products or polish.

Do not polish the upper surfaces of the dashboard. Polished surfaces are reflective and may interfere with the driver's view. Clean with diluted upholstery cleaner, then wipe with a damp cloth.

Seat belts

Extend the belts and clean with warm soapy water only. Do not use any type of detergent or chemical cleaning product. Allow the belts to dry naturally while extended, preferably away from direct sunlight.

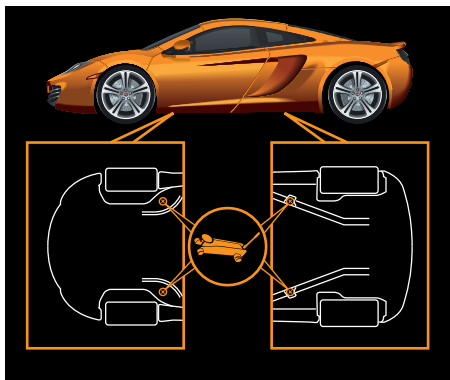
Instruments and display screens

Clean the instrument cluster using a damp cloth. Do not use abrasive cleaning products or polish.

MAINTAINING YOUR McLAREN

RAISING THE VEHICLE

Vehicle lifting points



Refer to the illustration, and labels on the vehicle, for correct lifting locations.

Make this information available to any third parties who may be assisting in the recovery of your McLaren.

i *NOTE: Lifting the vehicle at any other points will damage the vehicle.*

i *NOTE: Use a jack with a flat lifting platform and a rubber pad to protect the chassis from surface damage. Do not lift under a body panel.*

MAINTAINING YOUR McLAREN

McLAREN ASSISTANCE

McLaren Assistance

If your McLaren is immobilised, do not attempt to make your own arrangements for assistance.

Refer to your Service and Warranty documentation, this contains all the information you need.

Replacement battery

If your McLaren has been immobilised due to a fault with the vehicle battery, it is possible for your McLaren Dealer or the Assistance provider to fit a lead acid battery as an emergency short term solution.

 **NOTE:** *If a lead acid battery is fitted, it must be replaced with the correct specification lithium ion battery at the earliest opportunity.*

You will also notice error messages appearing in the left-hand display.

In the event of a breakdown

In the event of a problem with your vehicle, contact a McLaren Dealer. If a McLaren Dealer is unavailable, contact the Roadside Assistance Operator who is available 24 hours a day, 7 days a week.

 **NOTE:** *The contact details of your Roadside Assistance Operator can be found in your Service and Warranty booklet.*

The McLaren Dealer or Roadside Assistance Operator will verify your identity and that of your vehicle, as well as determining your exact location.

They will then discuss the problem with you and, with your agreement, determine the best solution.

MAINTAINING YOUR McLAREN

McLAREN ASSISTANCE

Towing for recovery

Your McLaren is equipped with a front towing eye mounting only.

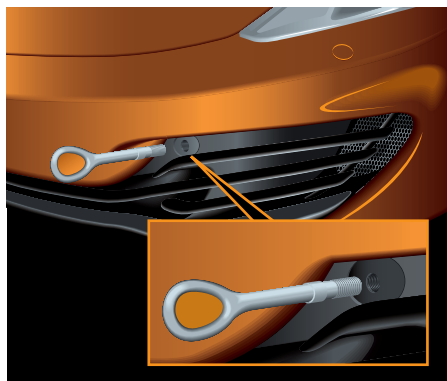
i *NOTE: Do not tow the vehicle, doing so could damage the gearbox. The towing eye must only be used to winch the vehicle onto a trailer or transporter for recovery purposes.*

Do not use a rigid bar to tow the vehicle.

Towing eye and mounting

The towing eye is located at the front of the luggage compartment.

1. Remove the cover from the towing eye mounting in the front bumper.



2. Screw the towing eye clockwise into the mounting hole, ensuring that it is screwed in to the full extent of the thread.

i *NOTE: To avoid damage to the towing eye and the vehicle, it is important to ensure that the towing eye is in full contact with the mating surface of the front structure.*

i *NOTE: A winch cable/strap must be secured to the towing eye only or the vehicle could be damaged.*

3. Remove the towing eye, stow it in the luggage compartment and refit the cover to the towing eye mounting as soon as the vehicle has been recovered.

MAINTAINING YOUR McLAREN

DRIVING ABROAD

Driving abroad

McLaren Dealers are also at your disposal when you are travelling abroad.

The legal requirements when driving abroad vary from country to country and are constantly changing. Always seek advice from a McLaren Dealer regarding what is required to remain legal in the countries in which you are travelling.

In certain countries, only low-octane fuel is available. For further information about fuel grades, see Recommended fuel, page 98.

VEHICLE DATA AND GLOSSARY

GENUINE McLAREN PARTS AND ACCESSORIES

Overview	202
----------------	-----

VEHICLE IDENTIFICATION

Vehicle identification number	203
-------------------------------------	-----

DATA

Overview	204
Vehicle operating temperatures	204
Engine	204
Speeds in each gear	205
Gear ratios	206
Vehicle dimensions	206
Turning circle	207
Vehicle weights	207
Wheel and tyre sizes	208
Tyre pressures	209

SERVICE PRODUCTS, FLUIDS AND CAPACITIES

Service products	210
Engine oil specification	210
Fuel	210
Coolant	211
Power steering fluid	211
Brake fluid	211

TECHNICAL GLOSSARY

Technical glossary	212
--------------------------	-----

VEHICLE DATA AND GLOSSARY

GENUINE McLAREN PARTS AND ACCESSORIES

Overview

McLaren recommends that you only use genuine McLaren replacement parts and accessories. The use of non-genuine parts could have a detrimental effect on the vehicle's operation and safety. McLaren tests replacement parts and accessories, for reliability, safety and suitability. McLaren accepts no responsibility for the use of non-genuine parts on their vehicles, even if they have been independently approved.

In many countries, replacement parts and accessories are only officially approved for installation if they comply with legal requirements. All genuine McLaren replacement parts and accessories meet these requirements.

Genuine McLaren parts and accessories can be obtained from a McLaren Dealer where the parts will be professionally fitted.

Ensure that any accessories are suitable for your McLaren. Accessories which constitute a modification to the vehicle could invalidate the vehicle's warranty. This applies if they:

- change the vehicle type approved in the warranty;
- could endanger road users;
- adversely affect the vehicle's emissions and noise levels.

Always quote the vehicle identification number, you will find this on the vehicle identification plate, and in the bottom left-hand corner of the windscreen.

VEHICLE DATA AND GLOSSARY

VEHICLE IDENTIFICATION

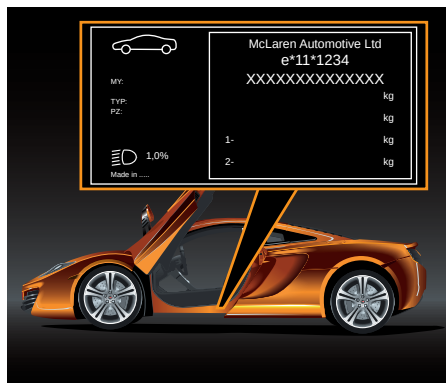
Vehicle identification number



The vehicle identification number can be found on the bottom left-hand corner of the windscreen.

The number can also be found engraved on the body behind the right-hand seat, stamped on a plate at the base of the driver's side B-post and viewed in the Vehicle Info section in the left-hand display, see Vehicle identification, page 119.

VIN plate



The vehicle identification number plate also contains the following:

- maximum permitted laden weight;
- maximum permitted laden weight including trailer;
- maximum permitted front axle laden weight;
- maximum permitted rear axle laden weight.

VEHICLE DATA AND GLOSSARY

DATA

Overview

This section contains all the necessary technical data for your vehicle and applies to the vehicle's standard equipment. The data may therefore differ for vehicles with optional equipment. You can obtain further information from a McLaren Dealer.

Vehicle operating temperatures

Minimum ambient operating temperature	-20°C (-4°F)
Maximum ambient operating temperature	+50°C (122°F)

 **NOTE:** If the vehicle is used outside the minimum and maximum ambient temperatures, performance degradation may be experienced.

Engine

Rated output in kW	441 @ 7 000 rpm
Rated output in PS	600 @ 7 000 rpm
Rated torque in Nm	600 @ 3 000 rpm
Rated torque in lb-ft	443 @ 3 000 rpm
Number of cylinders	8
Displacement	3 798 cm ³
Maximum engine speed	8 500 rpm
Power to weight ratio	461 PS/tonne

VEHICLE DATA AND GLOSSARY

DATA

Fuel consumption

Urban	15.3 mpg (18.5 l/100 km)
Extra urban	36.3 mpg (7.8 l/100 km)
Combined	24.2 mpg (11.7 l/100 km)

 **NOTE:** Fuel consumption is calculated in accordance with EU Directive RL 80/1268/EEC

 **NOTE:** Combined fuel consumption is calculated using a weighting of approximately 37% for urban driving and approximately 63% for extra-urban driving.

The vehicle uses more fuel in the following situations:

- at very low temperatures;
- in urban traffic on short trips;
- in mountainous terrain.

McLaren is constantly updating its vehicles using the latest technology. Depending on when the fuel consumption tests were carried out, it may be that the current consumption values are different than those listed.

Carbon Dioxide (CO₂) emissions

Urban	438 g/km
Extra urban	187 g/km
Combined	279 g/km

 **ENVIRONMENTAL:** Carbon Dioxide (CO₂) is the gas which is considered to be chiefly responsible for warming the earth's atmosphere. CO₂ emissions and fuel consumption depend on:

- the efficient use of fuel by the engine;
- the style of driving;
- other non-technical factors such as environmental influences or road conditions.

You can minimise CO₂ emissions by driving conservatively and having your McLaren serviced regularly.

Speeds in each gear

1st gear	50 mph (80 kph)
2nd gear	77 mph (124 kph)
3rd gear	106 mph (170 kph)
4th gear	137 mph (220 kph)
5th gear	175 mph (282 kph)
6th gear	205 mph (330 kph)
7th gear	186 mph (300 kph)
Acceleration from 0 to 100 kph	3.3 seconds (3.1 seconds with Corsa tyres)
Acceleration from 0 to 60 mph	3.2 seconds (3.0 seconds with Corsa tyres)

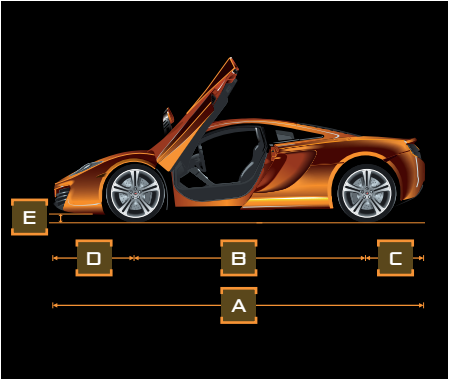
VEHICLE DATA AND GLOSSARY

DATA

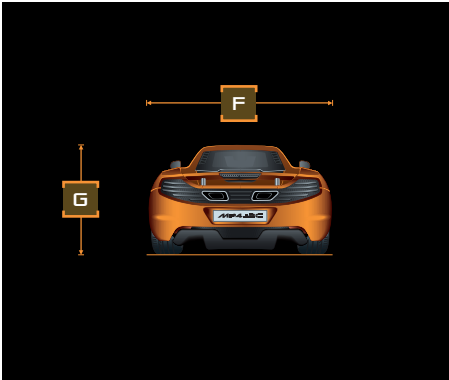
Gear ratios

1st gear	3.9812:1
2nd gear	2.6134:1
3rd gear	1.9045:1
4th gear	1.4789:1
5th gear	1.1613:1
6th gear	0.9059:1
7th gear	0.6860:1
Final drive	3.3077:1

Vehicle dimensions



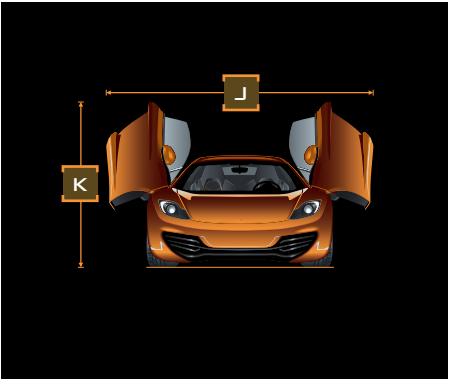
A	Vehicle length	4509 mm (14 ft 10 in)
B	Wheelbase	2670 mm (8 ft 9 in)
C	Rear overhang	783 mm (2 ft 8 in)
D	Front overhang	1056 mm (3 ft 6 in)
E	Ground clearance	120 mm (5 in)



F	Vehicle width (doors closed including mirrors)	2093 mm (6 ft 11 in)
G	Vehicle height (doors closed)	1199 mm (4 ft)

VEHICLE DATA AND GLOSSARY

DATA



J	Vehicle width (doors open at widest point)	3120 mm (10 ft 3 in)
K	Vehicle height (doors open)	1892 mm (6 ft 3 in)

i NOTE: All dimensions are approximate.

Turning circle

Turning circle kerb-to-kerb	12.3 metres (41 ft)
-----------------------------	---------------------

Vehicle weights

Dry weight	1336 kg (2945 lbs)
Dry weight (with lightweight options)	1301 kg (2868 lbs)
Unladen weight (all fluids and 90% fuel)	1434 kg (3161 lbs)
Kerb weight (as above plus 75 kg driver)	1509 kg (3327 lbs)
Kerb weight distribution - rear axle	854 kg (1882 lbs)

Kerb weight distribution - front axle	660 kg (1454 lbs)
Maximum gross vehicle weight (GVW)	1690 kg (3726 lbs)
Maximum gross vehicle weight distribution - front axle	794 kg (1750 lbs)
Maximum gross vehicle weight distribution - rear axle	896 kg (1975 lbs)
Maximum luggage load	50 kg (110 lbs)

VEHICLE DATA AND GLOSSARY

DATA

Wheel and tyre sizes

Wheel sizes

Front wheels	8.5J x 19
Rear wheels	11J x 20

Summer tyres

Front tyres	
- Pirelli PZero MC1	235/35 R19
- Pirelli Corsa MC1	235/35 R19

Rear tyres	
- Pirelli PZero MC1	305/30 R20
- Pirelli Corsa MC1	305/30 R20

Winter tyres

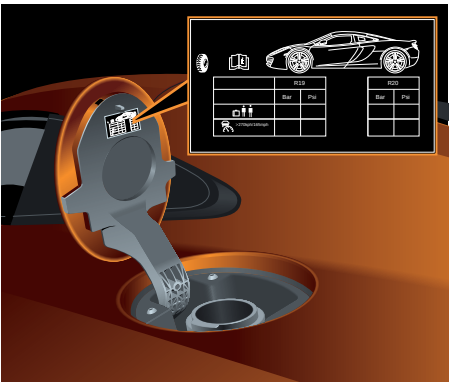
Front tyres	
- Pirelli SottoZero	235/35 R19

Rear tyres	
- Pirelli SottoZero	295/30 R20

VEHICLE DATA AND GLOSSARY

DATA

Tyre pressures



The tyre pressures are given below and can also be found on a label on the underside of the fuel filler flap.

Loading condition	Front wheels		Rear wheels	
	Bar	Psi	Bar	Psi
Normal use	2.0	29	2.2	32
Speeds over 165 mph (270 kph)	2.6	38	2.8	41

VEHICLE DATA AND GLOSSARY

SERVICE PRODUCTS, FLUIDS AND CAPACITIES

Service products

Service products are fuel, engine oil, coolant and brake fluid. McLaren recommends that you only use products tested and approved for McLaren. Damage resulting from using non-approved service products is not covered by the liability for material defects.

 **WARNING:** When handling, storing and disposing of any service products, please observe the relevant regulations. Failure to do so could endanger people and the environment. Do not allow service products to come into direct contact with your eyes or open wounds. Contact a doctor immediately if any service product is swallowed.

 **ENVIRONMENTAL:** Dispose of service products in an environmentally responsible manner.

Engine oil specification



Engine oil capacity	8.0 litres
---------------------	------------

 **NOTE:** McLaren recommends only Mobil 1 New Life 0W-40 engine oil.

You may obtain further information from a McLaren Dealer.

 **NOTE:** Do not use any special lubricant additives. These could lead to increased wear and damage to the mechanical assemblies. Damage caused by additives, which are not approved, is not covered by the McLaren warranty.

Fuel

 **WARNING:** Fuel is highly flammable. Fire, naked flames and smoking are therefore prohibited when handling fuels.

Switch off the engine before refuelling.

 **WARNING:** Do not allow fuel to come into contact with skin or clothing.

Allowing fuels to come into direct contact with your skin or inhaling fuel vapours is damaging to your health.

For more information about fuel, see Recommended fuel, page 98.

Fuel tank

Total capacity	15.8 gal. (72 litres)
Capacity remaining when low level lamp illuminates	2.4 UK gal. (11 litres)

VEHICLE DATA AND GLOSSARY

SERVICE PRODUCTS, FLUIDS AND CAPACITIES

Coolant

Cooling system capacity	20.0 litres
Antifreeze/corrosion inhibitor	Mobil Extra Antifreeze
Antifreeze quantity for protection to -20°C (-4°F)	10.0 litres

The coolant is a mixture of water, antifreeze and corrosion inhibitor. It performs the following functions in the cooling system:

- antifreeze protection;
- increased efficiency of the cooling system;
- offers anti-corrosion protection.

 **NOTE:** Use Mobil Extra Antifreeze in all climates, all year round. If coolant is not used, the cooling system will not be sufficiently protected from corrosion and the cooling system efficiency will be reduced.

 **NOTE:** To prevent damage to the engine, only top-up with a pre-mixed coolant that provides the desired level of antifreeze protection.

If antifreeze/corrosion inhibitor is present in the correct concentration, the boiling point of the coolant will be around 130°C (266°F). The antifreeze and corrosion inhibitor concentration in the cooling system should be approximately 50% ±5%. This will protect the cooling system against freezing in temperatures of -40°C (-40°F).

The antifreeze and corrosion inhibitor concentration in the cooling system should not exceed 55%, which provides antifreeze protection down to -45°C (-49°F), as a higher concentration will not dissipate heat so effectively.

If the vehicle is losing coolant, do not drive your vehicle and contact a McLaren Dealer.

Power steering fluid

Only use Pentosin CHF202 power steering fluid.

Brake fluid

Only use Pentosin DoT 5.1 Brake fluid.

Over a period of time, the brake fluid absorbs moisture from the air, this reduces its boiling point.

 **WARNING:** If the boiling point of the brake fluid is reduced too much, vapour pockets may form in the brake system when the brakes are applied hard (e.g. when driving downhill or track driving) impairing the braking efficiency. Therefore, have the brake fluid replaced at the recommended service intervals.

VEHICLE DATA AND GLOSSARY

TECHNICAL GLOSSARY

Technical glossary

Active dynamics control

A system that allows the driver to change the handling and performance characteristics of the vehicle.

Airbrake

The airbrake is a moveable wing that enhances the vehicle's driving stability and braking performance by increasing rear downforce.

Anti-lock Braking System

The Anti-lock Braking System prevents the wheels from locking when you brake. This allows the vehicle to be steered during braking manoeuvres.

Automatic Driver Recognition cards

A card which must be on the person entering the vehicle or the Tracker system signals that the vehicle is being moved without authorisation.

Bi-Xenon headlamps

The Bi-Xenon headlamps provide greater visibility for the driver, especially during adverse weather and driving conditions. The operational life of a Bi-Xenon bulb is significantly longer than that of a conventional headlamp bulb.

Brake Assist System

Brake Assist System operates in emergency braking situations. If you depress the brake pedal quickly, Brake Assist System automatically increases the force being applied to the brakes and thus shortens the stopping distance.

Brake disc wiping

Brake disc wiping operates when the windscreen wiper is switched on. It prevents moisture build up on the brake discs during periods of heavy rain, by applying the brakes momentarily, so that the pads touch the discs.

Brake steer

Brake steer offers the benefits of a torque vectoring differential, but is integrated into the braking system reducing weight and providing excellent speed of response.

If the system detects that the car is starting to understeer through a corner, the inside rear brake is gently applied. This helps to increase the yaw rate of the car, making the car feel more resistant to understeer. The lateral 'g' force is also increased giving better handling characteristics.

If the driver uses too much throttle exiting a corner, the inside rear wheel increases speed, which without brake steer could cause the car to become unstable. In this situation, brake steer will again gently apply the brake on the inside rear wheel, thereby restoring traction and stability.

VEHICLE DATA AND GLOSSARY

TECHNICAL GLOSSARY

Electronic brake pre-fill

If the accelerator pedal is suddenly released, the electronic brake pre-fill function immediately brings the brake pads into contact with the discs, making for more rapid braking.

Electronic Stability Control

ESC monitors driving stability and traction between the tyres and the road surface.

Global Positioning System

By means of the appropriate receivers, satellite signals supply information on the geographical position of the vehicle. These signals are compared with a digital map and used both to determine the position of the vehicle and for its route guidance.

Handling control

The handling control switch affects the following vehicle characteristics:

- Roll stiffness
- Adaptive damping
- ESC settings

Hill hold control

Hill hold control prevents roll-back on hill starts. The brake system automatically applies the brakes until the accelerator is pressed.

Launch control

Launch control is designed to give the maximum acceleration performance from a standing start.

Parking sensors*

The parking sensor system comprises four ultrasonic sensors in the front bumper, four ultrasonic sensors in the rear bumper and two sounders. When the parking sensors detect an obstruction while manoeuvring, the sounders provide an audible warning.

Pre-cog

'Pre-cog' (or 'pre-cognition') means 'fore knowledge'. When the appropriate paddle is pulled to the first pressure point, this informs the gearbox of an impending gear change. The gearbox then prepares for that change, and when it is required, the change is performed instantaneously.

Keyless Entry

Keyless Entry allows the driver to unlock the vehicle and disarm the alarm by simply opening the door when the key is within 1.5 metres (5 feet) of the vehicle.

VEHICLE DATA AND GLOSSARY

TECHNICAL GLOSSARY

Seamless Shift Gearbox

The seamless shift gearbox is a 7 speed, dual clutch gearbox. Gear changes can be fully automatic or driver controlled. The gear changes are almost instantaneous. It is this coupled with uninterrupted torque delivery from the engine which provides the relentless acceleration.

Supplementary Restraint System

System comprises a number of air bags which are automatically deployed in an accident to provide additional occupant protection.

Tyre Pressure Monitoring System *

Tyre Pressure Monitoring System constantly checks the pressure and temperature in all four tyres. It warns if the pressure drops or the temperature rises in one or more of the tyres.

Vehicle Identification Number

The vehicle identification number is a unique 17 digit number which provides information about your vehicle, as well as when and where it was built.

**Typical vehicle identification number =
SBM11AAA5AW000001**

INDEX

A

Accelerator pedal position	67
Accessories	202
Active dynamics panel	71
active button	71
handling control	72
launch control	76
powertrain control	74
winter mode	75
Active speed limiter	89
setting an upper speed limit	89
Air bags	32
child passengers	36
deployment	35
front air bags	33
occupant classification system	34
side head air bags	33
Air conditioning	134
automatic mode	135
manual mode	136
MONO mode	136
switching on/off	135
Air conditioning controls	134
air distribution	139
air vents	139
air-recirculation mode	140
blower speed	138
demisting	140

driver	135
passenger	135
temperature	137
Air distribution - air conditioning	139
Air vents	139
Airbrake	83
Alarm	18
arming	18
disarming	18
panic	45
Anti-lock Braking System	78
Anti-trap protection - windows	133
Asymmetric tyres	187
Automatic light control	41
Automatic locking	14
Automatic mode - transmission	68
Automatic wipe	46

B

Battery fusebox	174
fuses	174
Battery replacement - key fob	182
Battery safety	164
Belts - seat	29
Blower speed - air conditioning	138
Boost starting	165
brake - topping-up	159
Brake Assist System	79

Brake disc wiping	79
Brake fluid	211
topping-up	159
Brake pedal	59
Brakes	
Anti-lock Braking System	78
Anti-lock Braking System warning light	79
bedding-in	94
Brake Assist System	79
brake disc wiping	79
brake steer	80
electronic brake pre-fill	80
foot	59
hill hold control	79
parking	57
warning light	59
Brake-steer	80
Breakdown	197
Bulb replacement	176

C

Capacities	210
cooling system	211
engine oil	210
fuel tank	210
Car cover	151
Changing wheels	190
Checking engine oil	154

INDEX

Child passengers	36
Child restraint systems	36
Child restraints	
KISI child seat function	38
Cleaning the exterior	192
Cleaning the instruments and display screens	195
Cleaning the interior	195
Clock	122
Closing engine cover	15
Closing the luggage compartment	17
Closing windows	132
Coolant	211
topping-up	157
Cover - engine	15
closing	15
opening	15
Cruise control	90
cancelling	92
decreasing speed	93
increasing speed	92
resuming speed	93
setting	91
Cup holder	150

D

Data	204
Date display	122

Daytime running lamps	43
Defrosting	140
Demisting	140
Deployment - air bags	35
Dimensions	206
Dipped beam headlamps	42
Direction indicators	44
Discharged battery	9
Discharged key fob battery starting the engine	179
Display messages	123
Display screen cleaning	195
Door mirror heating	40
Doors	8
automatic locking	14
closing from outside	13
locking	11
locking and unlocking from inside	12
manual opening from inside	180
opening from inside	13
opening from inside - discharged battery	180
opening from outside	10
Drink holder	150
Driver air conditioning controls	135
Driving abroad	199
Driving away	62
Driving in winter	99
Driving precautions	188

Driving safety systems	78
------------------------------	----

E

Economical driving	63
Electric seat	
lumbar adjustment	25
Electric seat and mirror memory	25
Electric seats	24
forward or rearward adjustment	24
height adjustment	25
seat backrest rake adjustment	24
Electrical status	50
Electronic brake pre-fill	80
Electronic Stability Control	80
deactivating	81
reactivating	82
Emergency fuel filling funnel	163
Emissions	205
Engine	60
emissions	205
fuel consumption	205
loud start	61
power output	204
running in	94
starting	60
stopping	61
technical data	204
warning light	63

INDEX

Engine cover	15
closing	15
opening	15
Engine immobiliser	18
Engine oil	154
capacity	210
checking	154
specification	210
topping-up	155
usage	154
Engine oil level warnings	154
Engine oil temperature warnings	156
Entry lighting	148
Equipment	161
luggage compartment	161
Exit lighting	148
Exterior mirror memory	25
Exterior mirrors	39
heating	40
mirror automatic fold	40
mirror fold	40
reverse dip	40
Extinguisher	163
Eye - towing	162

F

Features	
12V Socket	151
stowage compartment	149
stowage net	148
sun visors	148
Filling with fuel	96
Fire extinguisher	163
First-aid kit	162
Fluid	159
brake	211
power steering	211
power steering - topping-up	158
Foot brake	59
Force limiters - seat belts	31
Front air bags	33
Fuel	96
Fuel consumption	205
Fuel funnel	163
Fuel level display	130
Fuel quality	98
Fuel safety	210
Fuel tank	210
Funnel - fuel	163
Fusebox	
main	169
Fuses	168
battery fusebox	174

main fusebox	172
replacement	168

G

Gear position indicator	126
Gear positions	55
Gear ratios	206
Gearbox	66
gear positions	66
gearshift paddles	69
kickdown	67
pre-cog	70
Gearbox mode indicator	122
Gearbox modes	68
Gearbox oil topping-up	156
Genuine McLaren parts and accessories	202
.....	202
Glossary - technical	212

H

Handling control	72
Hazard warning lamps	44
Headlamp flasher	42
Headlamp wash	47
Headlamp washers	160
Headlamps	42
Headlamps - main beam	42

INDEX

Heated rear screen	141
Heated seats	27
Hill hold control	79
Horn	28

I

Identification number - vehicle	203
Ignition - switching on	51
Immobiliser	18
In gear speeds	205
Individual settings	12
Inspecting tyres	187
Inspecting wheels	187
Instruments	
cleaning	195
clock	122
display messages	123
display window	126
fuel level display	130
gear position indicator	126
gearbox mode indicator	122
handling and powertrain display	127
home screen	106
left-hand display	103
oil temperature display	128
overview	102
right-hand display	126
settings	107

speedometer	102
tachometer	102
trip computer	121
vehicle info	117
water temperature display	129
Interchanging wheels	190
Interior accessory power socket	151
Interior lighting	147
courtesy lighting	147
Interior mirror	39
Interior motion sensor	20
Introduction	2

J

Jacking the vehicle	196
Jump starting	165

K

Key fob battery replacement	182
Key fob entry	9
Key fob stowing	9
Keyless entry	8
Kickdown	67
Kit - first-aid	162
Kit - tyre repair	190

L

Lamps - side	42
Launch control	76
Left-hand display	103
clock	122
home screen	106
messages	123
settings	107
trip computer	121
vehicle info	117
Left-hand display overview	52
Lifting points - vehicle	196
Light switch	41
Lighting	
automatic control	41
courtesy lighting	147
day time running lamps	43
dipped beam	42
direction indicators	44
hazard warning	44
headlamp flash	42
interior	147
main beam	42
parking lights	45
rear fog lamp	43
sidelamps	42
switch	41
Locking	11

INDEX

automatic	14
mis-lock	12
Locking from inside	12
Luggage compartment	16
closing	17
manual opening	181
opening - discharged battery	181
unlocking and opening	16
Luggage compartment equipment	161

M

Main beam	42
Main fusebox	169
fuses	169
Main instruments overview	52
Manual mode - air conditioning	136
Manual mode - transmission	68
Manual seats	22
backrest rake adjustment	22
forward and rearward adjustment	22
height adjustment	23
Manual unlocking	177
McLaren Assistance	197
McLaren parts and accessories	202
Mirror	
automatic exterior mirror fold	40
heating	40
Mirror memory	25

Mirrors	39
exterior	39
exterior mirror fold	40
interior	39
reverse dip	40
Mis-lock	12
Motion sensor - interior	20

O

Odometer	106
Oil	
engine	210
level	154
Oil - gearbox	156
Oil level	
check	154
top-up	155
Oil level warnings - engine	154
Oil temperature display	128
Oil temperature warnings - engine	156
Opening a door	
from inside	13
from outside	10
Opening and closing the vents	139
Opening engine cover	15
Opening windows	132
Operating temperatures - vehicle	204
Outside temperature display	106

Overview	
left-hand display	52
right-hand display	54
Owner documentation	150

P

Panic alarm	45
Parking brake	57
Parking lights	45
Parking sensors	64
Parts	202
Passenger air conditioning controls	135
Passengers - child	36
Power output	
engine	204
Power steering fluid	211
Power steering fluid - topping-up	158
Powertrain control	74
Precautions - driving	188
Pressures - tyre	209
Pressures - tyres	189
Products - service	210
Puncture repair kit	190

Q

Quick guide	150
-------------------	-----

R

Rain sensor	46
Ratios - gear	206
Reading lights	147
Rear fog lamp	43
Rear screen heating	141
Rear spoiler	83
Recirculation mode - air conditioning	140
Recommended fuel quality	98
Recovery of your vehicle	198
Refuelling	96
Replacement battery	197
Replacement fuses	168
Replacing	
bulbs	176
key fob battery	182
wiper blade	184
Restraint System	32
Restraints - child	36
Restraints - KISI child seat function	38
Rev counter	102
Right-hand display	126
display window	126
fuel level	130
gear position indicator	126
handling and powertrain display	127
oil temperature	128
water temperature	129

Right-hand display overview	54
Running in	94

S

Safety	29
air bags	32
battery	164
car washes	9
footwells	38
fuel	210
mirrors	39
seat belts	29
seats	21
Sealant - tyre	162
Seamless Shift Gearbox	66
gear positions	66
gearshift paddles	69
kickdown	67
pre-cog	70
Seamless Shift Gearbox mode	68
Seat belt warning light	31
Seat belts	
force limiters	31
safety	29
tensioners	31
wearing	31
Seat safety	21
Seats	21

electric seat adjustment	24
electric seat and mirror memory	25
electric seat backrest rake adjustment	24
electric seat forward or rearward adjustment	24
electric seat height adjustment	25
electric seat lumbar adjustment	25
heated seats	27
manual adjustment	22
manual seat backrest rake adjustment	22
manual seat forward and rearward adjustment	22
manual seat height adjustment	23
Secondary fusebox	172
fuses	172
Sensor - interior motion	20
Sensors	
parking	64
Service and Warranty	150
Service products	210
Setting up warning triangle	161
Settings - individual	12
Side head air bags	33
Sidelamps	42
Snow chains	100
Specification - engine oil	210
Speedometer	102
Speeds - in gear	205
Spoiler	83

INDEX

START/STOP button	51
Starting and driving	50
foot brake	59
gear positions	55
gearshift paddles	56
instruments and warning lights	52
main instruments	52
parking brake	57
starting the engine	60
switching on the ignition	51
warning lights	53
Starting the engine	60
loud start	61
Starting the vehicle	
discharged key fob battery	179
Steering column	28
Steering wheel	28
Steering wheel - horn	28
Steering wheel adjustment	28
Stopping the engine	61
Stowage compartment/audio interface ..	149
Stowage net	148
Stowing the key fob	9
Summer tyres	208
Sun visors	148
Supplementary Restraint System	32
Switch - lighting	41
Switching air conditioning on/off	135
Switching on the ignition	51

Symbols	4
---------------	---

T

Tachometer	102
Technical data	
engine	204
Technical glossary	212
Temperature - air conditioning	137
Temperature display	106
Tensioners - seat belt	31
Topping up	
headlamp washers	160
Topping-up	154
brake fluid	159
coolant	157
engine oil	155
gearbox oil	156
power steering fluid	158
Tow-away protection	19
Towing	198
Towing eye	162
Track driving	95
Tracking system	142
Traction control system	81
Triangle - warning	161
Turning circle	207
Tyre	
asymmetric	187

markings	186
pressures	189
Tyre monitoring system	86
Tyre pressures	209
Tyre repair kit	190
Tyre sealant	162
Tyres	185 187
inspecting	187
summer	208
winter	208

U

Unlocking - discharged battery	177
Unlocking and opening the luggage compartment	16
Unlocking from inside	12
Upper speed limit	
setting	89

V

Vehicle dimensions	206
Vehicle electrical status	50
Vehicle fuel consumption	205
Vehicle identification number	203
Vehicle lifting points	196
Vehicle operating temperatures	204
Vehicle speeds	205

INDEX

Vehicle starting	
discharged key fob battery	179
Vehicle Tracking	142
Vehicle use	95
Vehicle washing	192
Vehicle weights	207
Vents	139
Viewing tyre temperatures	88
Volumetric alarm	20

W

Warning		
engine oil temperature	156	
Warning light		
Anti-lock Braking System	79	
brakes	59	
engine	63	
seat belt	31	
Supplementary Restraint System	35	
Warning lights		
left-hand side	53	
right-hand side	54	
Warning triangle	161	
Warnings - engine oil level	154	
Wash - headlamp	47	
Washers		
headlamp	160	
windscreen	160	
Washing the vehicle	192	
Water temperature display	129	
Wearing seat belts	31	
Weights	207	
Wheel - steering	28	
Wheel sizes	208	
Wheels	185	
inspecting	187	
interchanging	190	
Window demisting	140	
Windows		
anti-trap protection	133	
opening and closing	132	
Windscreen washers	160	
Windscreen wiper	46	
rain sensor	46	
single wipe	47	
wash/wipe	47	
Winter driving	99	
Winter mode	75	
Winter tyres	208	
Wiper blade replacement	184	