#### MCLEOD SCHOOL OF MOTORING

# VEHICLE CHECKS

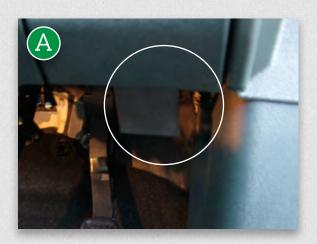
#### PRE-TEST VEHICLE CHECKS

Before you take the driving test you will be asked to demonstrate knowledge and understanding of your vehicle and the safety checks that should be made on it.

- **1** Engine compartment
- 1
  1
  2
  Handbrake
- 03 Lights
- Tyres
- 05 Lights

#### O1 OPEN THE BONNET

- A Find the bonnet release lever.
- B Release the bonnet catch and open the bonnet.
- C When the bonnet is secured you are ready to start the engine checks.







There are three oil levels to check: Engine oil - Brake fluid - Steering fluid

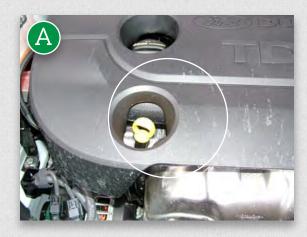
On some vehicles with hydraulic clutches there may be a separate reservoir for the clutch fluid. On some vehicles with hydraulic clutches the reservoir may be for brake and clutch fluid.

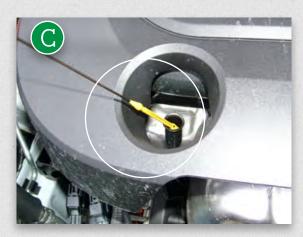
There are two water levels to check: Engine coolant - Windscreen wash

#### 01 ENGINE OIL

Engine oil lubricates and cools the engine, it also prevents damage to the moving components inside the engine

- A Locate the yellow handle of the engine dip stick.
- B Pull out the dip stick, wipe it and place it back in the engine.
- C Pull out the dip stick and observe the level.
- D There will be marks on the dip stick indicating maximum and minimum levels.
- E If the level is low you will have to top it up.
- F To top up the oil undo the filler cap on top off the engine.
- G Pour in the correct type of oil for your engine and refit the filler cap.





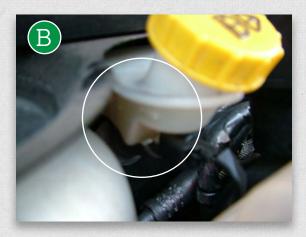


#### 01 BRAKE FLUID

The brake fluid level must be maintained or loss of hydraulic pressure in the braking system could result.

- A Look for the clear reservoir container with the brake symbol.
- B Look on the side of the reservoir and you will see maximum and minimum level markings.
- C You should be able to see the brake fluid level through the clear plastic container.
- D The level should be between the maximum and minimum marks.
- E If the level is low you will have to top it up with brake and clutch fluid.





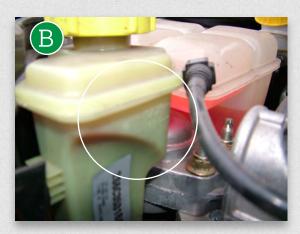
If the brake fluid level drops below minimum the brakes will feel spongy. More pressure on the brake pedal will be required to slow the vehicle. It will take a longer distance for your car to come to a stop.

## 01 STEERING FLUID

The steering fluid level must be maintained or loss of power assisted steering will occur. This could result in under or over compensation of the steering and error in road positioning while steering could occur.

- A Look for the clear reservoir container with this mark.
- B Look on the side of the reservoir and you will see maximum and minimum level markings.
- C You should be able to see the brake fluid level through the clear plastic container.
- D The level should be between the maximum and minimum marks.
- E If the level is low you will have to top it up with brake and clutch fluid.





If power assistance is lost the steering would become heavy and more effort would be required to steer. Error in road positioning could result.

#### O1 ENGINE COOLANT

The engine coolant level must be maintained or over heating of the engine could occur.

- A Look for the clear reservoir container with this mark.
- B Look on the side of the reservoir and you will see maximum and minimum level markings.
- C You should be able to see the engine coolant level through the clear plastic container.
- D The level should be between the maximum and minimum marks.
- E If the level is low you will have to top it up with water or water and anti-freeze.





If the engine overheats it could be damaged. This could result in the engine cutting out as you drive.

#### O1 ENGINE COMPARTMENT WINDOW WASH WIPE

The windscreen wash level must be maintained.

- A Look for the clear reservoir container with this mark.
- B You should be able to see the windscreen wash level through the clear plastic container.
- C The level should be above the minimum mark.
- D If the level is low you will have to top it up with water or water and windscreen wash soap solution.





If you cannot wash the windscreen your vehicle becomes illegal. If you cannot see out of your windscreen you could cause an accident. A vehicle would not pass an MOT inspection if there was no water in the system.

#### 02 HANDBRAKE

The handbrake pulls on the brakes of the rear wheels only.

- A Pull on the handbrake by first pushing in the release button.
- B Pull up the handbrake until you feel it come to a stop and then release the button. The handbrake does not have to be pulled up to maximum travel.
- C When the handbrake is on this icon will show on the dashboard.



If the handbrake has too much travel (pulls up too far) it may not hold the brakes on effectively.

# 03 SWITCHING LIGHTS ON

On some vehicles you may have to switch on the ignition, without starting the engine, in order to check the headlights. On other vehicles you may be able to check the headlights without the key in the ignition.

A Switch on the ignition.



There are seven sets of lights to check;

Headlights
Indicators
Brake lights
Fog lights
Reverse lights
Number plate lights
Hazard warning lights

Lights must be operational and in good working order. When your vehicle is moving forward you should not show red lights to the front of the vehicle, or white lights to the rear.

#### 03 HEADLIGHTS

You have to ensure your headlights and tail lights are working properly.

- A Switch on ignition.
- B Turn light control to dipped headlights.
- C Walk around the vehicle checking both front headlights.
- D Continue walking around the vehicle to check both rear tail lights.
- E Switch off light switch.
- F Switch off ignition.









One faulty headlight may cause other road users to misjudge the width of your car. Faulty taillights could result in following vehicles not knowing of your presence.

## 03 BRAKE LIGHTS

Some vehicles have three brake lights, some only two.

- A Switch on ignition.
- B Push down the brake pedal.
- C Observe the brake lights as a reflection against a flat surface, in a shop window or against the shiny surface of another vehicle.
- D You could ask someone to observe the lights as you push down the brake pedal..
- E Switch off ignition.





All brake lights must be operational. Faulty brake light bulbs need to be replaced straight away. If following vehicles cannot see brake lights they will not know that you are braking to slow your vehicle. Some vehicles have combined brake and tail lights. This means one bulb with two filaments, one for the tail light and one for the brake light.

If your brake lights are not operating following vehicles will not know you are slowing down.

#### 03 FOG LIGHTS

Headlights need to be switched on before fog lights can be switched on. Some vehicles have two fog lights, some have one. Some vehicles are fitted with front fog lights.

- A Switch on ignition.
- B Switch on dipped headlights.
- C Switch on fog lights
- D Fog light icon will appear on the dash board
- E Walk around the vehicle to check the fog lights are illuminated.
- F Switch off fog lights.
- G Switch off headlights
- H Switch off ignition

Fog lights are high intensity lights and should only be used in reduced visibility below 100 metres.







### 03 REVERSE LIGHTS

Reverse lights come on when reverse gear is selected. Some vehicles have one reverse light, some have two.

- A Switch on ignition.
- B Select reverse gear.
- C Walk around the vehicle to check the reverse lights are illuminated.
- D Select neutral.
- E Switch off ignition.





The reverse light is the only white light to be shown directly to following vehicles. It signals to others that you are going against the flow of traffic and coming towards them.

## 03 NUMBER PLATE LIGHTS

When you switch on the headlights the rear number plate lights are automatically switched on.

- A Switch on ignition.
- B Switch on dipped headlights.
- C Walk around the vehicle to check the number plate lights are illuminated.
- D Switch off dipped headlights.
- E Switch off ignition





The number plate light is an indirect white light to illuminate the vehicles registration number. Your vehicle will be illegal if your number plate is not illuminated.

### 03 HAZARD WARNING LIGHTS

Hazard warning lights are the indicators flashing simultaneously.

- A Switch on the hazard warning lights.
- B Walk around the vehicle and observe the lights are operational.
- C Switch off the lights





Hazard warning lights mean you are a temporary hazard to other road users. They must not be used as an excuse for bad parking.

## O4 TYRE CHECKS

Your tyres must have the correct pressures and the tread depth must be above the minimum legal requirement.

As vehicle size varies tyre size varies.

A Tyre size will be shown on the tyre wall. It should look similar to this 195 / 50 / R15 82H



There are three checks to made on tyres;

**Pressures** 

**Tread** 

**Damage** 

When you go to fit a new tyre to a wheel you will be asked for the tyre size along with the speed rating. 195 / 50 / R15 (tyre size) 82H (speed rating)

## O4 TYRE PRESSURE

Correct tyre pressures are important for road holding when cornering, steering and braking.

- A Find the tyre size from the side wall of the tyre.
- B Look for the tyre pressure information plate near the driver's or passenger's door.
- C Alternatively look for the tyre pressure in the vehicle handbook.
- D You could also look for the tyre pressure on a tyre pressure chart in a garage forecourt.

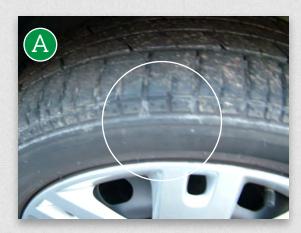


Incorrect pressures could result in loss of control or premature wear to tyres

#### O4 TYRE TREAD

A new tyre starts with a tread of 9mm. The minimum legal requirement for car tyres is 1.6mm over the middle <sup>3</sup>/<sub>4</sub> of the tyre. Water enters the tread and is sprayed out the at the sidewall. This allows the tyre to keep contact with the road surface in wet conditions.

- A On the sidewall of the tyre look for the tread wear indicator icon.
- B Look directly across the face of the tyre and the tread wear indicator can be seen in the grooves.
- C The tyre is illegal if the tread depth is level with the tread wear indicator.





Less tread means less grip. In wet conditions this could lead to loss of control or aquaplaning

## O4 TYRES DAMAGE

Try to avoid scrubbing tyres against kerbs when parking as this wears away the sidewall. Avoid striking tyres off kerbs when parking or turning into openings.

- A On the sidewall of the tyre look for any cuts or abrasions.
- B Uneven wear to the tread can indicate wheel alignment problems due to striking kerbs.
- C Damage to a wheel rim can produce a poor fitting tyre.





When a tyre with a damaged sidewall heats up a blow out can occur.

#### 05 AUXILLIARY CHECKS

There are more controls other than main controls and components that need to be considered.

Horn

**Wipers** 

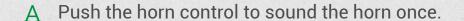
Interior fan

Rear screen demister

Fuel

#### HORN

In a quiet area sound the horn to ensure it is operational.





A horn warning is a warning of your presence. It is illegal to sound the horn as a rebuke, when your vehicle is stationary or between the hours of 11.30pm and 7.00am

#### 03 INDICATORS

You have to ensure all three indicator lamps are operational on both sides of the vehicle.

- A Switch on ignition.
- B Push the indicator switch up or down for left.
- C Walk around the vehicle to check all three indicator lights are illuminated.
- D Push the indicator switch up or down for right.
- E Walk around the vehicle to check all three indicator lights are illuminated.
- F Switch off the indicator switch.
- G Switch off ignition









If one of the indicator lamps on one side is out the remaining lamps will flash quicker. If a rear indicator lamp is out following vehicle will not know your intention is to change position. If a front indicator lamp is out oncoming vehicles will not know your intention is to turn off a road or cut across their path.

## 05 AUXILLIARY CHECKS WIPERS

Check the wipers for tears.

- A Lift the wiper blade clear of the screen.
- B Run your finger along the edge of the blade to expose any damage.
- C If there is damage the blade needs to be replaced
- D Place the blade back down on the screen.



Tears on the wiper blade can produce smears on the wind screen resulting in poor vision. Tears can also lead to damage on the screen resulting in the need for a new windscreen.

#### 05 AUXILLIARY CHECKS INTERIOR FAN

In the winter the heater is used to warm the inside of the vehicle and clear the inside of windscreens. In the summer it is used to cool driver and passengers and clear the insides of the windscreen. There are three controls on the heater.

- A Fan speed
- B Air temperature
- C Air direction



If the fan is used incorrectly windows can steam up and passengers can become uncomfortable.

#### 05 AUXILLIARY CHECKS REAR SCREEN DEMISTER

If the rear windscreen mists you can heat the screen to clear it. Some vehicles have rear screen and front screen demisters.

A Push in the demister button.



Some demisters are on a timer and switch off automatically. Some demisters have to be switched off after the screen has cleared.

#### 05 FUEL

There are various fuel types. You have to know which engine type is in your vehicle and use the correct fuel. There are engines designed to run on diesel fuel, unleaded petrol, liquefied petroleum gas and bio-fuels.

- A Open the fuel flap. (Some fuel flaps can be opened from inside vehicles, some with a key)
- B Open up the fuel cap. (Some fuel caps can be opened by unscrewing them, some with a key)
- C Insert the fuel nozzle into the filler pipe and pull the trigger.
- D When the tank has been filled take out the nozzle.
- E Lock the fuel cap and flap.





Do not use the wrong fuel type as this can damage an engine.

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