BROWN & GAMMONS LTD

MGF / TF
Water Level Sensor Kit
Fitting Instructions

Estimated Time: 2 hours

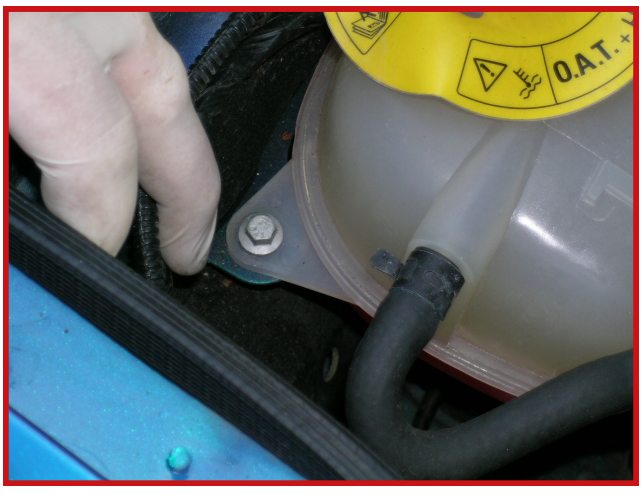
Tools Needed: Cross head screwdriver
Drill & 8mm drill bit
8mm Socket & Rachet
Electrical Side Cutters

1 From the inside of the vehicle, unclip the five clamps that hold in place the rear section of the hood, unzip the rear window and remove away from the bodywork outline by raising the hood. Once completed, remove the engine cover carpet and sound deadening from the inside the parcel shelf and place to one side.

2 Open boot, remove rear mesh cover, remove airfilter to throttle body link pipe

WARNING—DO NOT ATTEMPT THE NEXT STAGE WHILST THE ENGINE IS HOT. ALLOW AT LEAST ONE HOUR FOR THE ENGINE TO COOL.

3 Release the pressure in the expansion tank by unscrewing the lid slightly. Disconnect the small hose to the expansion tank and remove the two bolts securing the tank to the body. Clamp the large bottom hose and then remove the hose trying to keep fluid in the tank.



4 Clip the sensor to the bottom of the new expansion tank and fit the two supplied metal tubes into the plastic tank pipes as this will help to prevent the pipes from crushing when tightening the hose clips. Then refit tank in reverse order. Then top up with fluid from the old tank. You may find in necessary to top up with new anti-freeze/ water mixture.

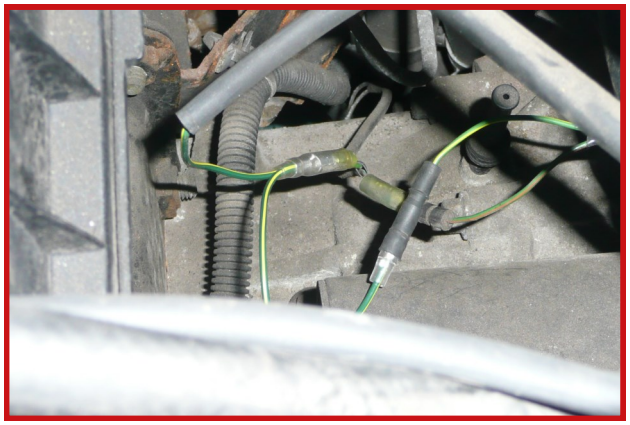
5 Secure ECU to triangular reinforcement section on left hand side of boot, with the aid of fir tree clip and double sided tape.

6 Secure earth eyelet to earth point near ECU.

7 Route expansion tank sensor wire behind engine ECU mount plate and over to tank on right-hand side of car. Connect to sensor beneath tank, and secure wire with tie wraps along rear panel.

VEHICLES WITH STEPTRONIC GEARBOXES WILL NEED TO REFER TO THE SUPPLEMENT INSTRUCTIONS FOR SECTION 8

8 Route green with yellow trace wire down to just above gearbox, disconnect original green with yellow going to reverse light switch and connect in new harness to bridge original harness.



9 Route long part of harness through grommet on left hand side just above car main harness grommet. You will need to make a hole in original grommet.

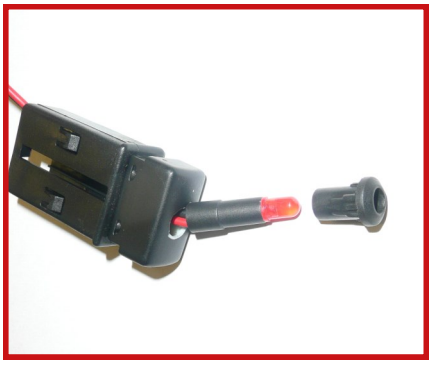
10 Route harness along side main harness on left hand side, down ‘B’ post and along sill.

11 Lift front section of carpet and run wire beneath carpet and up to centre console.

12 Remove left side panel with interior lamp, using double sided tape secure buzzer to panel and connect to harness.

13 Remove the left hand side panel to gain access to the rear of switches.

14 Drill a 8mm hole in a spare switch blank. Alternatively, if you have an early car, drill a hole in the centre of the switch mount. Fit lamp and connect wires (see picture which shows how unit comes apart for fitting).



15 To test water level sensor, switch ignition on. The buzzer will buzz twice and the light will illuminate for a short period. This signifies all is okay. If the light and buzzer continue, then check water level immediately.
At this point, also test that the reverse lamps still work.

16 Using the wraps supplied, secure all wiring where possible.

17 Refit all trim.

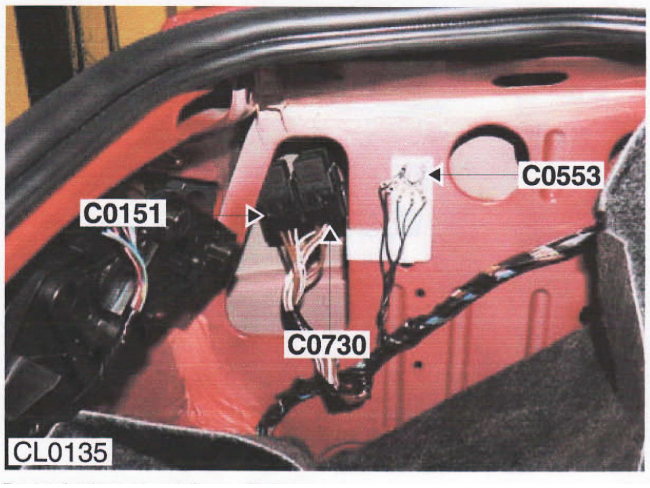
SUPPLEMENT FITTING INSTRUCTIONS FOR VEHICLES FITTED WITH STEPTRONIC GEARBOXES.

8 The live connection (*Green with Yellow trace wire*) needs to be spliced to a 12 volt ignition feed.

On vehicles up to chassis number 610317 this can be done by connecting to the white wire going into the relay pack situated behind the engine management ECU mounting plate.

On vehicles from 610318, the white wire on the fuel pump relay is situated in the boot, behind the boot liner on the LH side. There are two relays here and the one required is mounted furthest back. (see picture)

Once the green and yellow wire is spliced to the white wire, insulate the connection.



TROUBLE SHOOTING

PROBLEM	RECTIFICATION
The buzzer/light does not light up when ignition switch turned on	Does the buzzer/light work when you put it into reverse gear with the ignition on? If so, you have the power feed wire the wrong way round down by the gearbox
Only the buzzer or LED light works but not both	Reverse the wiring going into the plug on which either one is not working.
Both buzzer and LED light not working	A Check power supply with volt meter at gearbox wiring connection. If no power, check reverse fuse B) Check earth connection resistance using ohms meter. Clean connection if resistance is found.
Buzzer and LED light constantly going off	A) Disconnect wire connection at sensor on water bottle. This should stop it after 20 seconds. If this clears fault you need to fit a new sensor. Please call our parts department. B) Check float in water bottle moves up and down freely. If float is stuck then you need to fit a new bottle. Please contact our parts department.
Please note: If you want to check the kit when fitted, you will need to hold the float down for 30 seconds for it to activate.	