

Fitting your TE Low Brake Fluid Sensor and Alarm to an MG Midget or Austin-Healey Sprite



This installation relates to the fitment to a Negative Earth 1970 Midget, but is of course relevant to any Sprite / Midget irrespective of age or battery polarity, the only criterion being that the Brake Cylinder cap is the correct type for the kit, but you will have established that already !

Having opened the kit, you will have already appreciated the manner in which it has been presented to you: the loom already connected to the beeper and the warning light, which in turn is fitted to its housing, so you can see the end product as it should be. A wiring diagram for the alarm is printed on the general information leaflet enclosed with your pack from TE Electronics Ltd. (Please read both leaflets!)

You will also have every item that you will need to complete the installation successfully. You should only need to allow up to an hour to install this kit.

1) Establish which terminal on the fuse box is both fused and ignition switched. This is normally the terminal which has green wires connected to it, but can easily be checked using a test lamp – with the ignition off the bulb will not light up, but with the ignition switch in the on position it will light up.

2) As a precaution, the battery should be isolated before starting the installation by removing one of the battery terminal clamps.

3) Using the small screwdriver supplied, undo the 2 screws on the green connector for the orange and black wires that lead from the green connector to the beeper and panel lamp, noting where the wires came from so you can re-assemble correctly. The wiring loom is now in two parts – the part attached to the beeper and panel lamp can now be taken into the car. Find a suitable grommet hole in the bulkhead on the driver's side where you can feed the two wires through back into the engine area, and once done, re-connect the two wires correctly to the connector.



4) Decide whether you wish to use the LED housing or not. If you do, locate a suitable visible mounting point and drill the requisite holes to mount it. Likewise, decide whether you wish to drill-fix the beeper or just use the sticky pads, and choose your locating point – probably on the bulkhead area. If you decide to panel mount the LED indicator, you will need to drill a 14mm hole. In my case, I have fitted the LED indicator to my radio console, with the beeper stuck to the inside of the console. (The beeper is loud, so no worries regarding noise loss). If panel mounting, note which wire goes onto which terminal so that you re-connect correctly.

5) Back under the bonnet area, find a suitable earthing point on the bodywork. You should be able to find one that your existing wiring loom uses, otherwise drill a fresh one, and attach the earth spade connector supplied in the kit to the earth mounting point. Attach the black negative faston terminal to the spade connector.

6) Attach the red faston terminal to the fused and switched terminal on the fuse box.

7) Attach the green connector to your new master cylinder cap. The screws on the connector should show uppermost. Do not at this point screw the cap onto the brake cylinder – just leave it lying next to the cylinder.

8) Testing

Re-connect the battery. At this stage there should be no response from the LED or beeper – if there is, you have connected up to a non- ignition switched circuit. Switch on the ignition. The LED should flash once and the beeper will beep once. This is to show that the system is working ok. Wait for approx 30 seconds and the LED alarm will start to flash and the beeper sound continuously, warning you that you are low on brake fluid (well you will be, you haven't screwed the cap on yet !). This shows that the system is working, so you can now unplug the connector, swap caps over, and replace the connector.

Job done!

(If you experience other symptoms upon testing, please refer to “TESTING” in the TE Electronics general leaflet enclosed with your kit)



CONNECTOR ANGLE INCONVENIENT?

If the master cylinder cap tightens to leave the connector at an inconvenient angle then you can change it:

- Mark the cap lobe where you would like the connector
- Unplug and remove the sensor. Wipe the fluid from the internal metal cylinder.
- Using a No0 or No1 Pozidrive/Supadrive screwdriver, undo the five small self tapping screws that hold the PCB to the cap
- Wrap 2 or 3 turns of masking tape around the metal cylinder for grip/protection
- By hand, or using a small slip/water-pump pliers or similar, grip the cylinder and turn it CLOCKWISE (as viewed from inside the Master Cylinder) until the connector approaches the mark
- Now view the unit onto the PCB and continue turning slowly clockwise until the next set of fixing holes align with the 5 PCB holes.
- re-fix the 5 self tapping screws – *do not overtighten* (it's only Nylon....)
- carefully remove the masking tape from the metal cylinder
- screw sensor assembly back onto Master Cylinder and re-connect.

MASTER CYLINDER MAINTENANCE:

- UNPLUG THE SENSOR CONNECTOR BEFORE UNSCREWING THE MC CAP FOR ROUTINE INSPECTION/TOPPING UP. **RECONNECT AFTERWARDS.**
- **PERIODICALLY CHECK THAT THE PCB BREATHER HOLE IS CLEAR** (0.6mm hole between the top fixing screw and the "V" of the word LEVEL). If blocked, unplug the sensor and clear the hole with a short fine wire.

HELP

If you have a problem with your TE3509 Brake Fluid Sensor Kit, or have a suggestion for improvement, please contact us.

Your TE3509 Brake Fluid Sensor is guaranteed for 12 months. Please return any faulty devices to TE Electronics Ltd with your return address and a brief description of the problem.

If you have fitted your kit to a model not currently listed we'd like to hear your experiences and recommendations. *Perhaps we could even persuade you to become the author of the detailed instructions for your model!*
