

Vauxhall Cavalier/Opel

The Vauxhall Cavalier 4x4 Transfer box Temperature Sensor, Removal & Installation & Oil Level Checking.

Warning:

- The 4x4 transfer box (txb) temperature sensor is fragile and easily damaged.
- There is absolutely no reason to remove the temperature sensor unless it is being replaced.

700. Removing the Temperature Sensor

701. With the txb cold, trace the cabling back from the txb sensor (Fig.2D) to its connector at the bulkhead (Fig.A & B).

702. Disconnect the sensor, remove the detachable plastic part of the connector (txb side - Fig.1D) and carefully withdraw the cabling back to the underneath of the vehicle - (Facilitates threading through the ring spanner)

703. Thread a 3/4" AF spanner over the cable to place on the sensor for removal.

3/4" AF Ring spanner.

CAUTION: Check spanner is good fit.

704. Break the thread seal and carefully start to turn the sensor out. Be careful to unwind the cable as well, to stop it twisting and damaging the connections at the sensor. If you are removing a dud sensor this is good practise ready for reinserting the new sensor.

Drip tray

CAUTION: Make sure the spanner is square to the sensor - do not let it slip under hand pressure.

CAUTION: Some txb oil spillage likely.

710. Installing the txb Temperature Sensor

711. Remove the detachable collar from the new connector and set aside - (Fig.1D).

712. Thread the 3/4" AF ring spanner over the cable.

3/4" AF Ring Spanner.

713. Wind up the cable and temporarily tie to make it easier to handle while turning in the new sensor into position.

Small nylon ties.

714. Treat the threads of the sensor with 'Loctite' and place the new/recovered copper sealing washer over the threads.

Loctite.

715. Carefully turn the sensor into position pausing to keep the cabling from twisting excessively, and tighten.

716. Pass the connector end of the cable up through the rear of the bulkhead, behind the tie bar and most other pipe work, to the bulkhead.

717. Reattach the plastic collar (Fig.1D) and reconnect the cable. (Fig.1A & B)

718. From underneath, clip the cable to the clip on the cast support bracket. From the top, establish there is minimal slack in the cable at the txb end and nylon tie the cable to the servo vacuum pipe to guard against the cabling falling back onto the exhaust pipe.

719. Any further slack can now be retained in the bulkhead clips along with the other cabling etc.

CAUTION: Make sure the cabling is not pulled tight at the txb end.

CAUTION: Make sure the cabling is nowhere near the exhaust pipe or any other moving parts.

720. Check the txb oil level with the vehicle on level ground and not jacked up. (See para 726)

725. Transfer box - Oil Level Checking [top](#)

726. It may be necessary to jack the car off the ground, offside front, to gain the required access.

CAUTION: Prepare for some oil spillage.

727. Place a drip tray under the txb and remove the lower mounting bolt adjacent to, and to the rear of the sensor (Fig.2B).

1/2" AF Ring Spanner.

728. Recover the end of the txb filler/breather pipe from the area of the water header tank, at the rear offside of the

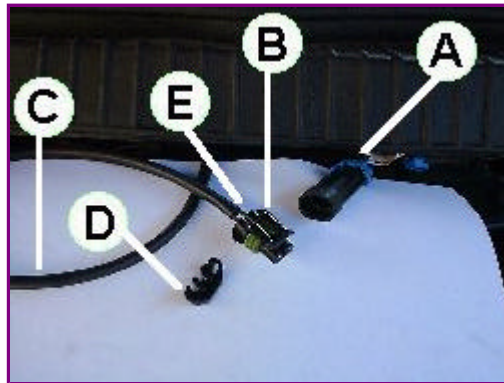


Figure 1

The bulkhead connections for the txb temperature sensor

- A. Bulkhead txb connector.
- B. Txb connector
- C. txb cabling.
- D. Plastic cap which fits
- E.here on the txb connector.

bulkhead. (If uncertain, trace the pipe to &/or from the top of the txb) and insert a very small funnel into the end of the pipe.

Small Funnel.
Synthetic Transfer Box Oil
GM Part No: 90443530.
Drip Tray Loctite.

729. Site the funnel so it is upright and lodged tight. Do not allow any foreign material to fall into the pipe.

730. Lower the car, if jacked up, and introduce the txb oil, as specified, into the top of the funnel and allow it to seep down into the txb. The level is correct when the oil ceases to flow out of the mounting hole, with the vehicle level.

731. Apply 'Loctite' to the threads of the mounting bolt, replace and tighten.

732. Remove the funnel and press the filler tube into the cavity beside the water header tank and then turn the end of the pipe over and tuck down the back. The pipe should be secure and without kinks. This allows the txb to 'breathe' in service.

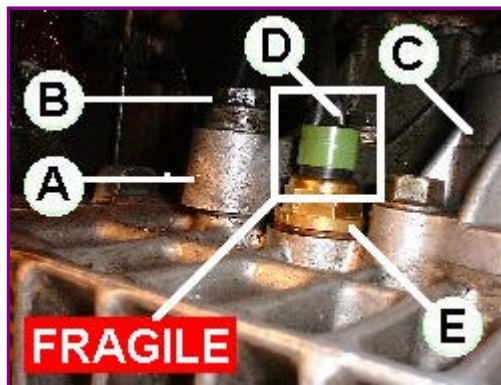


Figure 2

The txb from underneath, looking up.

- A. The offside cast support bracket.
- B. The lower mounting bolt, used for level checking.
- C. The offside drive shaft coupling.
- D. txb temperature sensor wire connections.
- E. The temperature Sensor.

24th October 2001