Loss of Engine Performance – Low Fuel Pressure – Replace Fuel Delivery Module Hose – Service Action S144

MODEL	2000 MY S-TYPE
VIN	L00600-L27499

Remove and destroy Bulletin S310-01, dated 12/99.
Replace with this Bulletin.
This repair is now a Service Action.

Issue:

On some 2000 MY S-TYPE vehicles within the above VIN range, additives in certain fuel blends may lead to premature failure of a hose that is part of the fuel delivery module (the main pump assembly) located in the right side of the fuel tank. The hose concerned connects the pump outlet to an in-line filter. Hose failure may lead to abnormally low pressure in the fuel system, with a resulting loss of engine performance. A hose manufactured from a different material entered production from VIN L27500.

Action:

On all 2000 MY S-TYPE vehicles within the above VIN range, replace the existing hose with one manufactured from a different material, as used in production from VIN L27500.

> ⚠ **Warning:** During the following operations, observe all appropriate safety precautions when working on an open fuel tank and fuel system. Minor fuel dripping or fuel spillage is inevitable **as the fuel delivery module is removed from the fuel tank**.

To replace the hose:

1. Refer to Technical Bulletin S414-01 to record customer preferences. Disconnect the battery.

   > ⚠ **Warning:** After the battery has been disconnected, wait for one minute for the air bag system to disarm.

2. Remove the rear seat cushion.
3. Remove the right access plug to the fuel tank.
4. Protect the area of the rear seat back, seat cushion pan and floor carpet with clean plastic sheeting.
5. Disconnect the electrical connections from the fuel delivery module.
6. Depress the lock buttons to release the hose connections and disconnect them from the fuel delivery module.

7. Use special tool J310-169 (Fuel tank sender unit wrench) to release and remove the fuel delivery module retaining ring. Discard the gasket.
8. Have available a clean container into which the fuel delivery module may be placed immediately following its removal from the fuel tank, to minimize fuel dripping or spillage.
9. Place shop cloths around the opening in the seat pan to absorb fuel drips or spillage.

   Have more clean cloths available to allow fuel drips to be mopped up immediately.
10. Release and carefully withdraw the fuel delivery module from the fuel tank, taking great care not to damage the fuel level sender arm and float. It may be necessary to cut and remove the tie-strap, which retains the filter to the pump body, to allow the fuel delivery module to be removed. There are illustrations of these operations in JTIS, SRO 19.45.07.

    Note: Fuel drips or spillage will be inevitable.
11. Immediately place the fuel delivery module into the clean container to minimize drips within the vehicle, and remove the fuel delivery module clear of the vehicle as soon as possible.

    Note: Mop up all fuel spillage immediately. Safely dispose of all cloths that become soaked in fuel.

    When it is possible to complete the repair operation almost immediately, cover the aperture in the fuel tank from which the fuel delivery module has been removed, to prevent the entry of foreign objects into the fuel tank and to minimize the spread of fumes that can be absorbed by trim materials, leading to possible complaints of fuel odors. If the operation **cannot** be completed immediately, pump out the remaining contents of the tank, on both sides of the central division, before covering the opening.

    ⚠ **Caution:** Do not use a knife or other cutting tool during the following procedure.

HOSE CLAMPS ON FUEL FEED HOSE

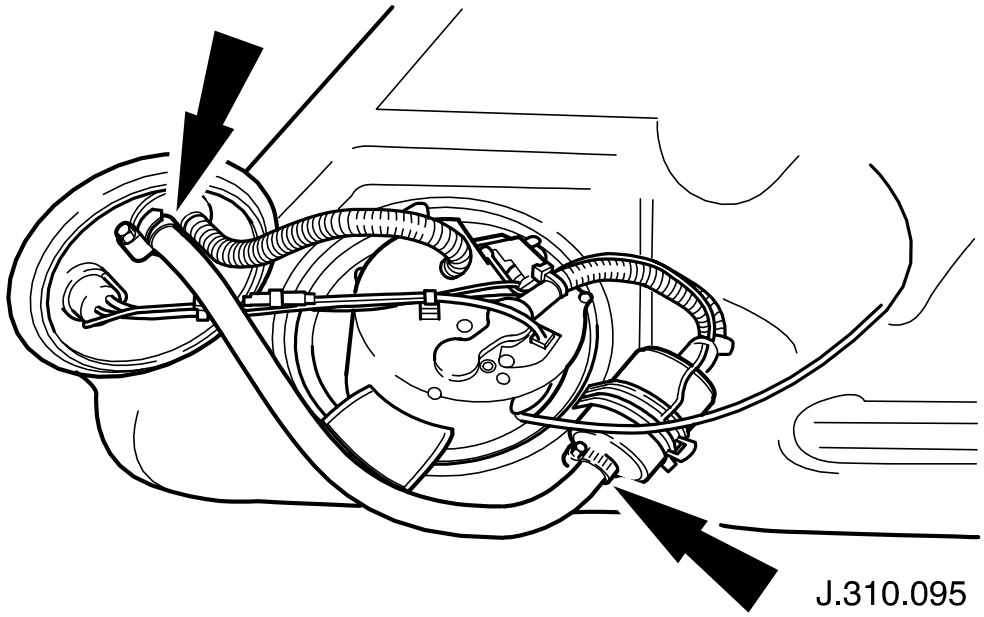

ILLUSTRATION 1

12. Loosen the two worm-drive hose clamps and remove them from the pipe stubs on the pump outlet and filter inlet connections (Illustration 1). Note the direction in which the worm-drive screws face.
13. Using only a twisting and pulling action, release and remove the hose from both pipe stubs. Under no circumstances should a knife or other cutting tool be used.

> ⚠ **Caution:** Do not use pliers on the hose, or pry with a screwdriver or similar tool. Discard the hose and clamps.

14. Install the replacement hose on one pipe stub, pushing and twisting the hose until it is within 1 - 2 mm of the abutment flange. This operation may be assisted by wetting the hose and pipe stub with fuel.
15. Thread **new** hose clamps on to the hose, their screws facing in the same direction (clockwise) as the hose clamps previously removed and discarded.

> **Note:** Do **not** reuse the existing hose clamps.

16. Engage the free end of the hose on the other pipe stub, as in step 12 above.
17. Position the hose clamps so that 1 - 2 mm of hose remains visible on the outer side of each clamp. Ensure that the clamps will remain clear of other hoses and plastic components, and partially tighten the worm-drive clamps. Torque the clamps to 2.0 - 2.5 Nm.
18. Where previously cut to enable removal of the fuel delivery module, install, but do not fully tighten, a new tie strap.

> **Note:** Ensure that the locking device is located against the clamp on the filter body. If the tie strap is fully-tightened at this stage, it will be impossible to reinstall the fuel delivery module into the tank.

19. Position the fuel delivery module in the fuel tank and fully seat the module.
20. Fully tighten the tie-strap, to hold the filter assembly tightly against the pump body, with no slack in the tie-strap.
21. Install a **new** gasket, then position and tighten the retaining ring, using special tool J310-169 to a torque of 60-70 Nm.
22. Reconnect the fuel hoses to the fuel delivery module. Check their security of each connector, without depressing the lock buttons, by pulling along the centerline of each hose, exerting a pull of 40 N (10 lbs.) away from the connector.
23. Reconnect the multiplug.
24. If the tank was previously drained, refill the tank.
25. Reconnect the battery. Start the engine. Check that no fuel leaks exist.
26. Clear away plastic sheeting from within the vehicle. Reinstall the rear seat.
27. Reset the clock and reset the compass.
28. When possible, park the vehicle with all windows open to allow any residual fuel odors to dissipate, before returning the vehicle to the customer. If parked in the open air, remove the keys and store in a secure location.

Parts Information:

DESCRIPTION	PART NUMBER	QTY
Tie-strap	ADU 9028	1
Clip, worm-drive	JHC 200101	2
Hose, fuel	XR8 17553	1
Gasket, retaining ring	XR8 5049	1

Warranty Information:

Service Action S144

VEHICLE	SUMMARY CODE	R.O. NUMBER	DESCRIPTION	TIME ALLOWANCE
S-TYPE 2000 MY VIN L00600-L27499 Model codes 6100, 6300	**GT**	19.91.53	Replace Fuel Hose	0.80 hrs.
S-TYPE 2000 MY VIN L00600-L27499 Model codes 6100, 6300	**GU**	19.91.53 10.10.10	Replace Fuel Hose Drive in/Drive out	0.80 hrs. 0.15 hrs,

NOTE: Always perform a DCS claim search first to determine whether this service action has been performed on this vehicle. The warranty selection under the vehicle inquiry will give a listing of all claims against the vehicle. If S144 appears in the fault code field, do not perform this service action.

CLAIM SUBMISSION PROCEDURE:

Warranty summary codes have been assigned to this service action in order to simplify claim submission. The dealership will be reimbursed the parts and labor time allowance as indicated.

DCS DEALERS

Submit claims using the appropriate summary code for the vehicle model and work performed. Follow standard campaign submission procedures.

NON-DCS DEALERS

Submit claims on the Recall Campaign Summary form W-25. Enter the appropriate summary code for the vehicle model and work performed in the Repair Code column. Do not use the W-1 warranty claim form.