SUBJECT: New Evaporative (Charcoal) Canister Purge Line

MODEL: E38 and E39

Situation: A new style evaporative canister purge line has been introduced into production on all E38 and

E39 models approximately 3/97.

The function of the purge line is to allow outside air to enter the fuel tank via the evaporative canister. This equalizes pressure in the fuel tank as the fuel is drawn out during engine operation.

The one end of this line is open to atmosphere and the other end is connected to the center fitting of the evaporative canister.

If the evaporative canister purge line becomes restricted or clogged the resulting vacuum in the fuel tank will cause the tank to partially collapse.

The customer complaints may be:

A knocking or a tin canning type of noise from the fuel tank area of the vehicle and / or when removing the fuel tank filler cap a hissing noise is heard (pressure equalizing in the tank).

Investigation of restricted or clogged evaporative canister lines has indicated the following three possible causes:

- -- line pinched
- rubber grommet not seated correctly between the center fitting of the evaporative canister and purge line
- -- insect (spider) nests

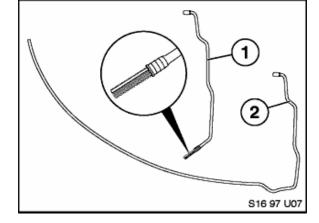
Note: If this type of line restriction is found blowing through the line with compressed air will not remove the nests completely due to the sticky nature of this substance. The line must be replaced in this case.

Correction:

Cause:

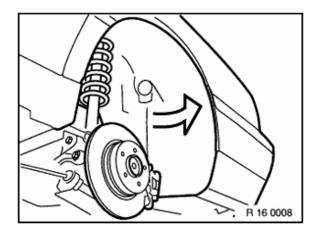
If the above customer complaint is received and the evaporative canister purge line is restricted or clogged on vehicles produced prior to 3/97, it should be replaced with the new style purge line.

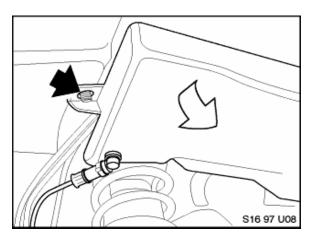
The new style purge line (1) is now shorter than the early style line (2) and incorporates a plastic screen on the end which is open to atmosphere as shown in the illustration below. The screen prevents unwanted objects from entering the open end of the line which may cause restrictions or a complete line blockage.

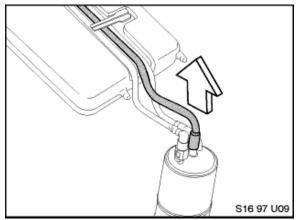


Procedure:

Evaporative canister purge line removal and installation:







Remove the left rear wheel.

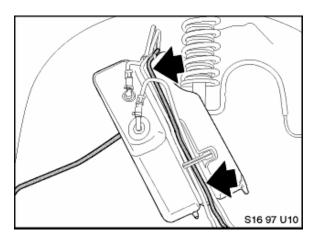
Remove the left rear wheel housing trim.

Note: On vehicles equipped with self leveling suspension the line which passes through the wheel housing trim should be removed at the accumulator.

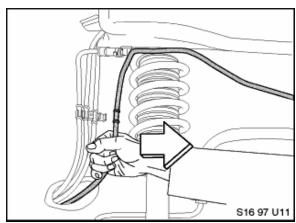
Refer to the repair manual section 32 13 006 for power steering bleeding instructions.

Remove the expansion tank and evaporative canister. Lines remain attached.

Remove the purge line from the center fitting of the evaporative canister.

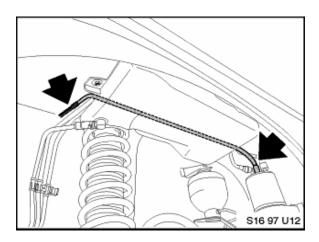


Remove the purge line from the top of the expansion tank.



Remove the purge line from the inner wheel house clip and pull the other end of the purge line out of the body duct.

Note: On E38 models an additional plastic hold down clip is installed on top of the fuel tank (not shown) to secure the early style purge line. A forceful pull will be required to remove the line from this clip.



Install the new purge line on top of the expansion tank and connect the open end to the center fitting on the evaporative canister.

Note: Make sure that the rubber grommet is seated correctly between the purge line and the evaporative canister fitting so it will not restrict or block the air flow.

Reinstall the evaporative canister and expansion tank.

Reinstall the left rear wheel housing.

Reinstall the left rear wheel.

Parts Information:Part NumberQty.Description16 13 1 183 9961Purge Line E3816 13 1 183 9971Purge Line E39

Warranty Information: Covered under the terms of the BMW Emissions and New Car Limited Warranty.

Defect Code: 16 13 00 76 00

Labor Operation: 16 11 120

Labor Allowance: E39 and E38 without

self leveling suspension 6FRU

E38 with self leveling suspension

(includes bleeding the power

steering system after repairs) 11FRU

Sublet Allowance: E38 models with self leveling suspension only,

\$6.00 for 1/2 liter of Pentosin CHF11S fluid.