



XK

DATE 06/03

303-61

SERVICE

## TECHNICAL BULLETIN

Fuel Vapor Odor In Interior –  
Convertible Models Only –  
Repair ProcedureMODEL 1999-2003 MY  
XK Convertible  
VIN 031303-A35945**Issue:**

Owners of some 1999-2003 XK Convertible vehicles may complain of fuel vapor odors in the vehicle interior.

After performing vehicles check using the WDS, an additional tank-to-body seal can be installed to resolve this concern.

**Action:**

In case of a verified customer complaint of fuel vapor fumes entering the vehicle cabin on a 1999-2003 XK Convertible within the above VIN range, follow the workshop procedure outlined below.

WORKSHOP PROCEDURE

**Note:** Ensure WDS is loaded with software release JTP 759/24 or later.

1. Position WDS alongside vehicle, switch Portable Test Unit (PTU) 'ON' and allow software to load.
2. Connect PTU to vehicle using diagnostic cable.
3. Enter VIN and allow the software to load to 'Content Model' screen.
4. Highlight 'Engine System' and select 'DTC Monitor' tab at top of the screen.
5. Allow software to load then select the 'Read DTC' icon on the right hand side of screen.

**Note:** If any DTCs are stored, the repairs are to be carried out as a separate Warranty Claim before continuing with the Workshop Procedure.

On all vehicles up to VIN A30644 to confirm fuel purge system is operating correctly, continue from step 6. For vehicles from VIN A30644-on continue from step 10.

6. Select 'Vehicle Configuration' main menu tab at the top of the screen.
7. Select 'Special Applications'.
8. Display 'Engine Emission Control' drop down menu and select 'Purge Flow' and work through the diagnostic routine following on-screen prompts.

9. If after the diagnostic procedure has checked the system integrity, a screen is displayed stating that ‘Fuel Tank Purge Flow has been verified to be operating correctly’ continue from next step.

**Note:** If, after the diagnostic procedure has checked the system integrity, a screen is displayed informing the technician to “Check the vacuum drive signal outlet pipe from the evaporative purge valve to the inlet manifold is not blocked or damaged. A vacuum should be present at the vacuum drive signal outlet pipe with the engine running,” continue with the diagnostic procedure. The repairs are to be carried out as a separate Warranty Claim before continuing with the Workshop Procedure below.

### **On all vehicles**

10. Switch ‘OFF’ the PTU, disconnect from the vehicle and return WDS to original location.

- ⚠ Warning:** Place the vehicle in a quarantined area and arrange ‘no smoking/gasoline fumes’ signs about the vehicle.
- ⚠ Warning:** Before any work is carried out on the fuel system, ground the vehicle to earth and maintain the ground connection until the work is complete.
- ⚠ Warning:** Do not smoke or carry lighted tobacco or open flame of any type when working on or near any fuel related components. Highly flammable vapors are always present and may ignite. Failure to follow these instructions may result in personal injury.
- ⚠ Warning:** The fuel system remains pressurized for a long time after the ignition is switched off. The fuel pressure must be relieved before attempting any repairs. Failure to follow these instructions may result in personal injury.
- ⚠ Warning:** After carrying out repairs, the fuel system must be checked visually for leaks. Failure to follow these instructions may result in personal injury.
- ⚠ Warning:** This procedure involves fuel handling. Be prepared for fuel spillage at all times and always observe fuel handling precautions. Failure to follow these instructions may result in personal injury.
- ⚠ Warning:** If taken internally do not induce vomiting, seek immediate medical attention. Failure to follow these instructions may result in personal injury.
- ⚠ Warning:** If fuel contacts the eyes, flush the eyes with cold water or eyewash solution and seek medical attention.

**⚠ Warning:** Wash hands thoroughly after handling, as prolonged contact may cause irritation. Should irritation develop, seek medical attention.

**⚠ Warning:** Do not carry or operate cellular phones when working on or near any fuel related components. Highly flammable vapors are always present and may ignite. Failure to follow these instructions may result in personal injury.

11. Remove fuel tank (see Workshop Manual, JTIS CD ROM, section: 310-01, SRO 19.55.01).

**Note:** When removing the fuel tank, refer to the drain procedure for XK 2003 MY in Workshop Manual, JTIS CD ROM, section: 310-00 for vehicles with On-Board Refueling Vapor Recovery (ORVR).

12. Ensure the existing fuel tank to body seal is correctly positioned over the fuel tank return outlet (see Illustration 1).

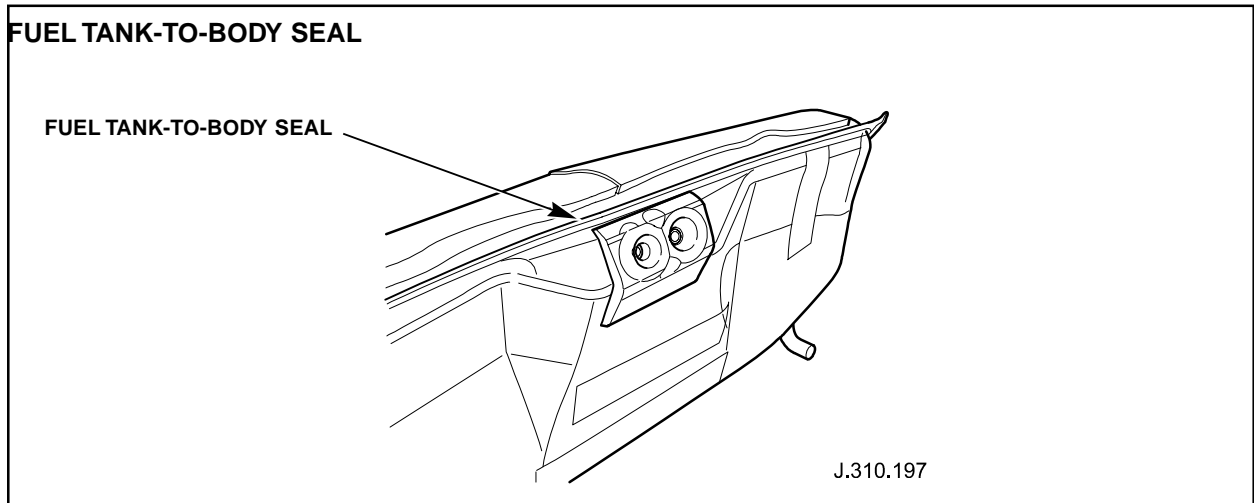
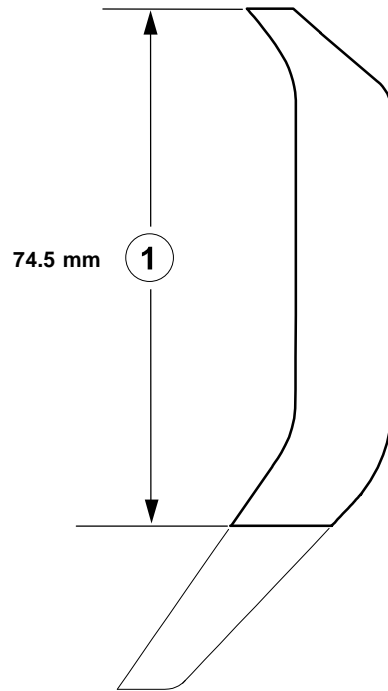


ILLUSTRATION 1

### CROSS-SECTIONAL VIEW OF BODY SEAL

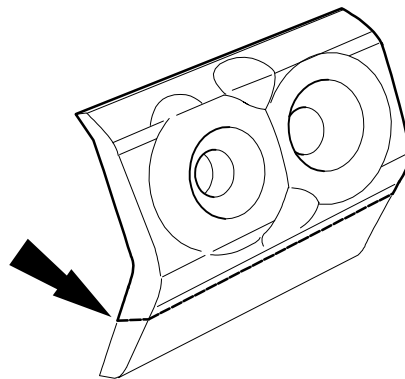


J.310.204

ILLUSTRATION 2

13. Place new fuel tank to body seal to front, measure and mark the position for the cut on the new seal (74.5 mm from the short lip see 1, Illustration 2).

### LOCATION TO CUT BODY SEAL



J.310.198

ILLUSTRATION 3

14. Using a suitable sharp bladed tool and straight edge, cut and remove portion of the new seal (see Illustration 3).
15. Remove and discard backing paper from the new seal.

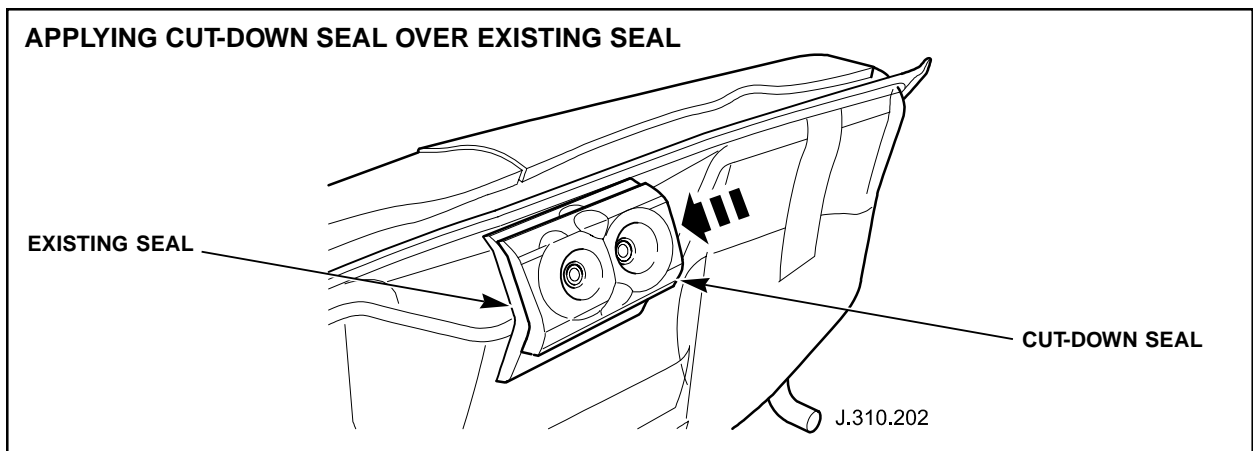


ILLUSTRATION 4

16. Align and install the new cutdown portion of the seal onto the existing fuel tank to body seal (see Illustration 4).

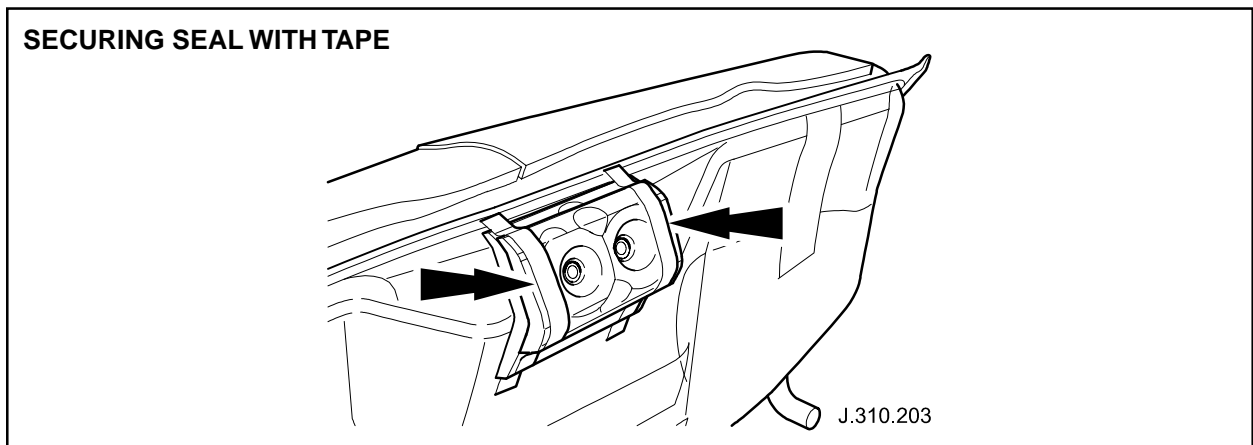


ILLUSTRATION 5

17. Using suitable adhesive tape, secure both seals at each end (see Illustration 5).
18. Install fuel tank (see Workshop Manual, JTIS CD ROM, section: 310-01, SRO 19.55.01).

**Vehicles within VIN 031303-A33647 only**

On all vehicles within the VIN range 031303-A33647, relocate and install a new evaporative emission canister (EVAP canister) vent hose and filter.

19. Raise vehicle on lift.

## EVAP CANISTER VENT HOSE

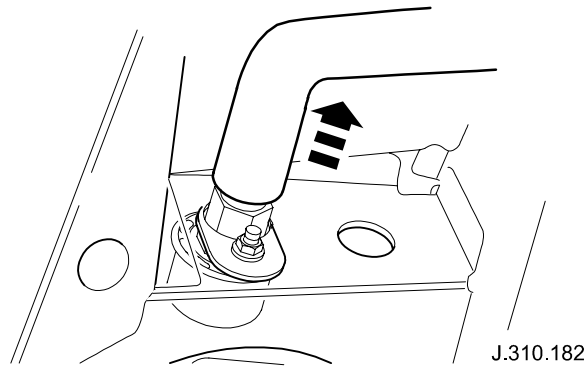


ILLUSTRATION 6

20. Disconnect the EVAP canister vent hose from the original filter (see Illustration 6).
21. Displace the vent pipe from the plastic body clips.
22. Reposition canister close valve electrical connector rubber cover and disconnect the electrical connector.
23. Release and reposition the canister close valve to the EVAP canister hose securing clip.
24. Remove canister close valve to body securing nut.
25. Remove EVAP canister to body securing nut (nut adjacent to canister inlet/outlet pipes).
26. Displace and reposition canister close valve and EVAP canister from body studs for access.
27. Disconnect canister close valve from EVAP canister hose.
28. Remove canister close valve/vent pipe assembly from vehicle.
29. Release and reposition vapor pipe hose to canister close valve securing clip.
30. Remove canister close valve from vapor pipe hose; remove securing clip and retain.
31. Cut, remove and discard clip securing original filter vent hose to vent pipe.
32. Remove original filter vent hose from vent pipe.
33. Install original filter vent hose on original filter, so that the filter can be held in place when the nut is removed.

**Note:** If the filter falls into the suspension turret, the spring/shock assembly will have to be removed to retrieve the filter.

34. Assemble new filter and bracket.

Remove original filter securing nut (see Illustration 7).

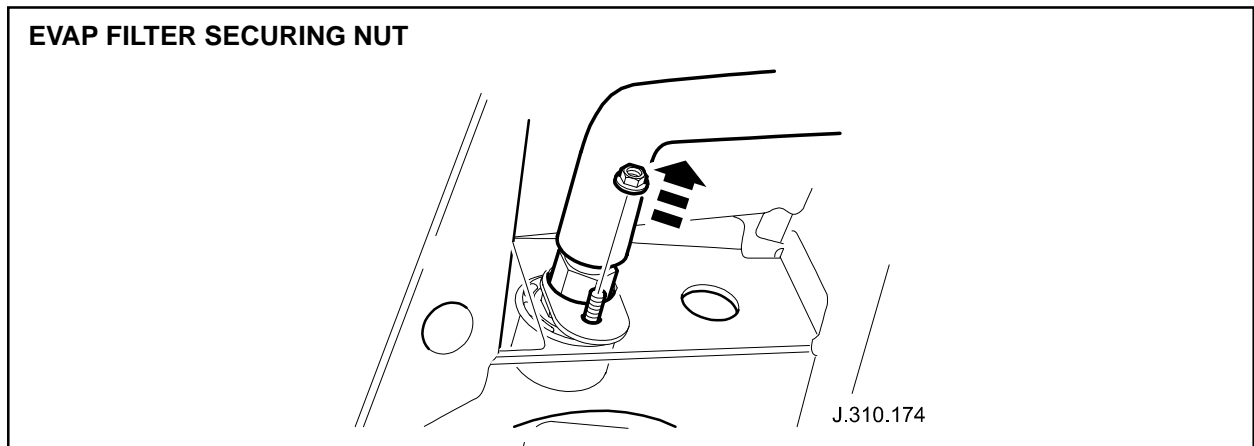


ILLUSTRATION 7

35. Holding original filter in place by hose, install new filter/bracket assembly to existing filter stud (see Illustration 8).

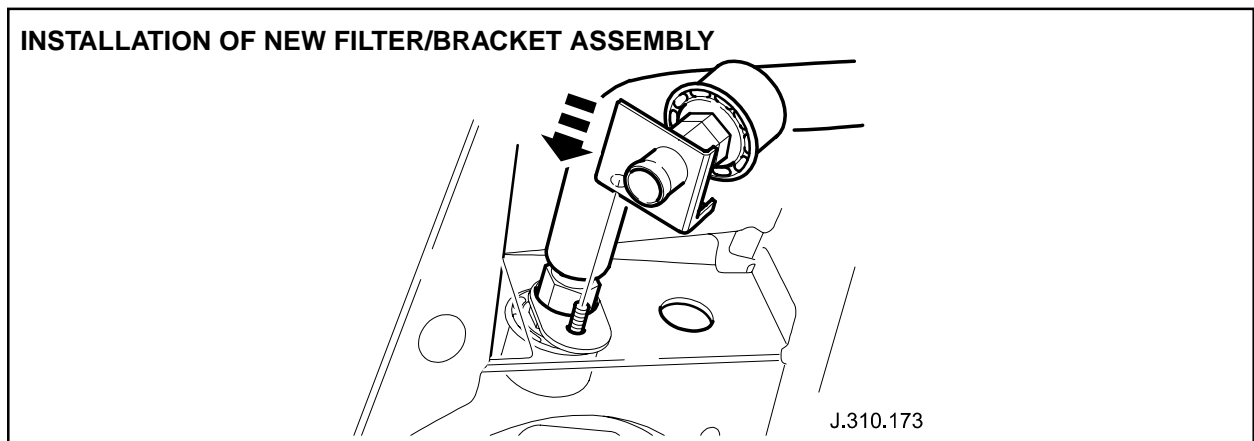


ILLUSTRATION 8

36. Install but do not fully tighten securing nut.

**Note:** To aid operation, secure nut to a deep socket with masking tape (see Illustration 9).

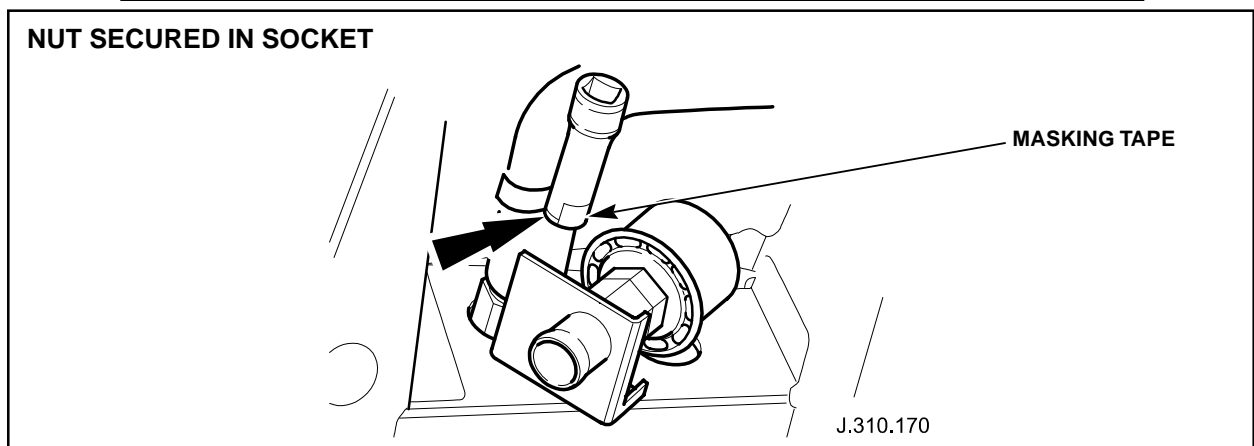


ILLUSTRATION 9

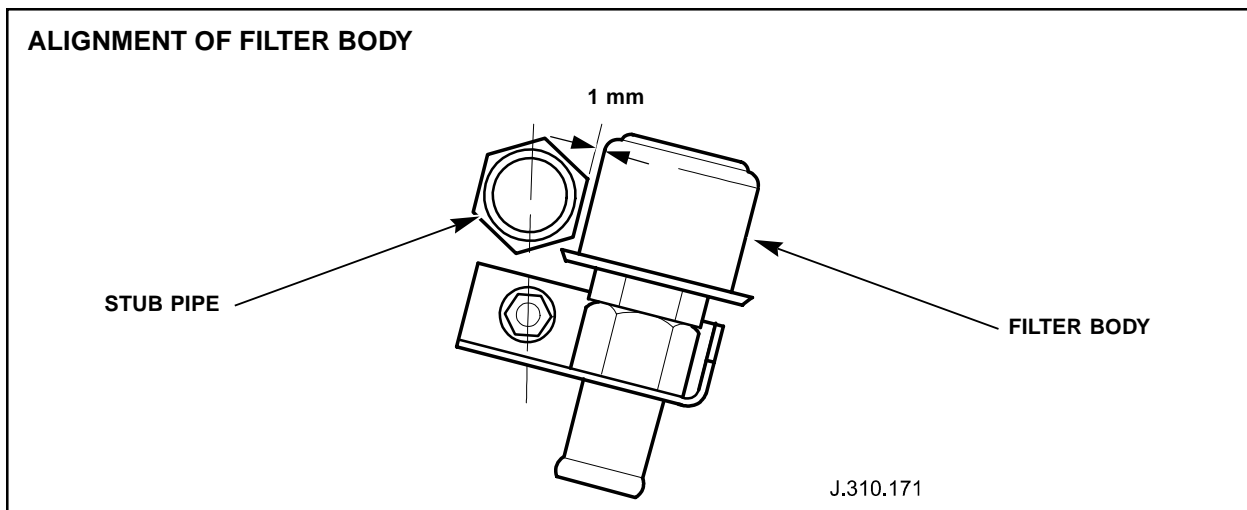


ILLUSTRATION 10

37. Remove and discard original filter vent hose.
38. Align new filter body to give approximately 1 mm clearance from original filter stub pipe (see Illustration 10).
39. Final tighten new filter securing nut.
40. Place new vapor pipe and hose assembly to front.
41. Install securing clip to vapor pipe hose.
42. Install canister close valve to vapor pipe hose.
43. Reposition vapor pipe hose to canister close valve securing clip.
44. Install canister close valve/vent pipe assembly to vehicle.
45. Connect canister close valve to EVAP canister hose.
46. Reposition EVAP canister and canister close valve to body studs.

**Note:** During previous operation, ensure canister close valve bracket alignment tang engages body hole.

47. Install and tighten EVAP canister to body securing nut.
48. Install and tighten canister close valve to body securing nut.
49. Reposition and secure canister close valve to EVAP canister hose securing clip.
50. Connect canister close valve electrical connector and realign rubber cover.
51. Secure vent pipe to plastic body clips.
52. Connect EVAP canister vent hose to new filter.



53. Install new blanking plug to the left hand side rear road spring turret (see Illustration 11).

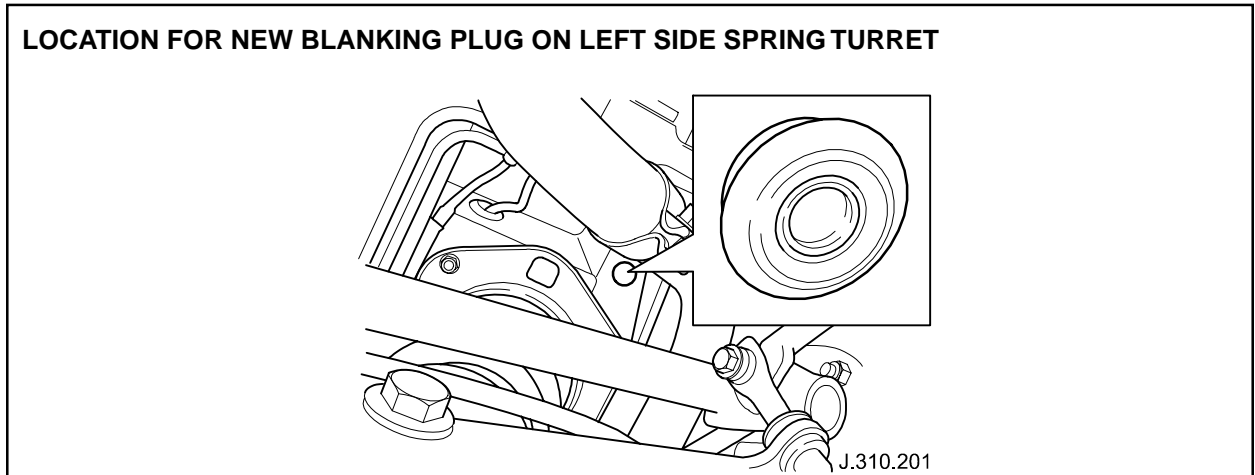


ILLUSTRATION 11

54. Install new blanking plug to the right hand side rear road spring turret (see Illustration 12).

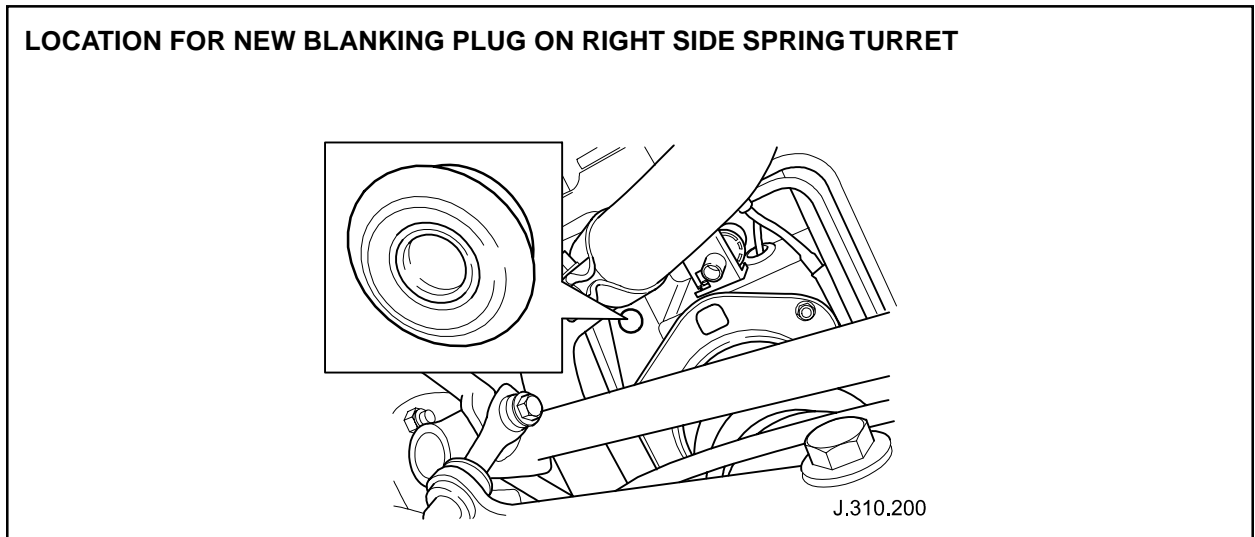


ILLUSTRATION 12

55. Lower vehicle.

**Parts Information:**

<b><u>DESCRIPTION</u></b>	<b><u>PART NUMBER</u></b>	<b><u>QTY.</u></b>
Filter bracket	NND 6124 AE	1
Filter	NND 6092AA	1
Blanking plug	C2S 10713	2
Pad	NJA 6029AD	1
Pipe assembly	NJC 6107AD	1

**Warranty Information:**

<b>Description</b>	<b>SRO</b>	<b>Time</b>	<b>Causal Part Number</b>
Check DTCs, confirm fuel purge system is operating correctly, carry out fuel tank modification and install a new EVAP canister vent hose and filter up to VIN A30644.	17.91.38	2.9 hrs.	NJA 6029AA
Check DTCs, carry out fuel tank modification and install a new EVAP canister vent hose and filter from VIN A30645 to A33647.	17.91.38	2.9 hrs.	NJA 6029AA
Check DTCs, carry out fuel tank modification from VIN A33648 to A35945.	17.91.38	2.4 hrs.	NJA 6029AA