Fuel Tank and Lines - Fuel Tank

Removal and Installation

Special Tool(s)	
E1841	Release tool 5/16" snap coupling 310-054
E31842	Fuel tank retaining strap cam adjuster 310-094

Removal

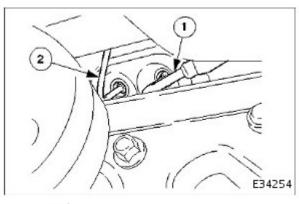
• NOTE: This removal/installation procedure is applicable to all tank assembly variants.

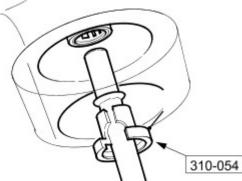
- 1. Remove the battery. For additional information, refer to Section <u>414-01 Battery, Mounting and Cables</u>.
- 2. Remove the trunk floor carpet.
- **3.** Remove the trunk front liner. For additional information, refer to Section <u>501-05 Interior Trim and Ornamentation</u>.
- Remove the rear lamp assembly interior trim finisher. For additional information, refer to Section <u>417-01 Exterior</u> <u>Lighting</u>.
- **5.** Remove the trunk seal retainer. For additional information, refer to Section <u>501-05 Interior Trim and Ornamentation</u>.
- **6.** Remove the trunk side liner, lefthand. For additional information, refer to Section <u>501-05 Interior Trim and Ornamentation</u>.

7. WARNING: BEFORE PROCEEDING, IT IS ESSENTIAL THAT THE WARNING NOTES GIVEN IN SECTION 100-00 (UNDER THE HEADING 'SAFETY PRECAUTIONS') ARE READ AND UNDERSTOOD.

Remove the trunk side liner, righthand. For additional information, refer to Section <u>501-05 Interior Trim and</u> <u>Ornamentation</u>.

- Drain the fuel tank using a suitable suction pump/tanker. If the On-board Refueling Vapour Recovery (ORVR) system is fitted, refer to Section <u>310-00 Fuel System - General Information</u>.
- **9.** From under the vehicle, identify the fuel feed and return tank/pipe connections which are located above and slightly to the rear of the rear axle assembly.
 - 1. Locate the fuel feed pipe.
 - 2. Locate the fuel return pipe.



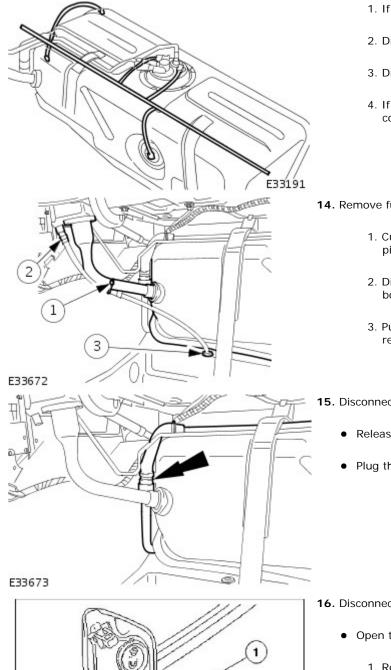


10. Disconnect the fuel feed and return pipes from the fuel tank

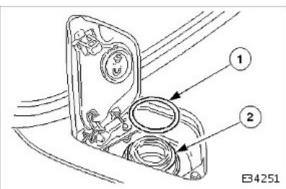
- Fit special tool JD-203 around the pipe as shown. Press the tool in between the fuel pipe and tank connector to release the quick-fit tangs. While holding the tool firmly in, pull out the fuel pipe.
- Repeat for the second pipe.
- Plug the tank outlet connectors and the fuel pipes.
- **11.** From the underside of the vehicle, release the fuel filler latch box drain pipe from the clip on the spare wheel well.

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- **12.** Disconnect and reposition the trunk harness if it is routed between the filler tube and the tank breather or pressure relief pipe.
 - 1. Disconnect the lefthand rear lamp harness connector.
 - 2. Disconnect the fuel flap lock actuator connector.
 - 3. If fitted, disconnect the lefthand side marker lamp connector and harness from the underside of the vehicle. Withdraw the marker lamp harness and grommet through the trunk floor access hole.
 - 4. Release the harness securing clip from the mounting bracket.
 - Withdraw the trunk harness from between the filler tube and the breather pipe or pressure relief pipe.
- 13. Disconnect the tank harness connections.

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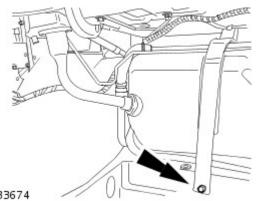
- 1. If fitted, disconnect the wiring to the accelerometer.
- 2. Disconnect the wiring to the fuel level sensor harness.
- 3. Disconnect the wiring to the fuel pump connector.
- 4. If fitted, disconnect the wiring to the pressure sensor connector.
- 14. Remove fuel filler latch box drain pipe.
 - 1. Cut and remove the ratchet strap securing the drain pipe to the filler tube.
 - 2. Disconnect the drain pipe from the fuel filler latch box.
 - 3. Pull the drain pipe through the body grommet and remove.
- **15.** Disconnect the vapour outlet pipe.
 - Release the quick-fit coupling .
 - Plug the vapour pipes.



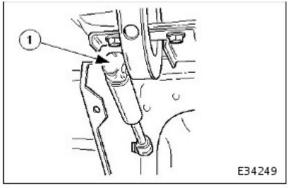
- **16.** Disconnect the fuel filler latch box from the filler tube.
 - Open the fuel filler flap and remove the filler cap.
 - 1. Remove the spring ring securing the fuel filler latch box to the filler neck.
 - 2. Pull the fuel filler latch box free of the filler tube.

17. Detach the tank retaining straps.

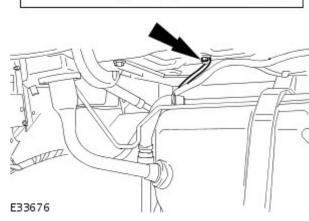
• Tape or tie the two retaining straps/brackets to the rear scuttle to allow tank removal.



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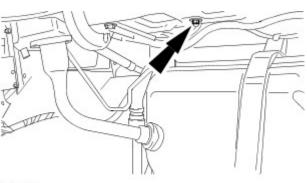
- 18. On non-ORVR vehicles, disconnect the trunk lid lefthand strut rear pivot.
 - Place a suitable support under trunk lid or tie to exterior • mirror.
 - 1. Using a screwdriver, release clip at rear end of strut, withdraw end from trunk lid pivot and lower strut.
- **19.** Disconnect the tank ground cable from the vehicle body.



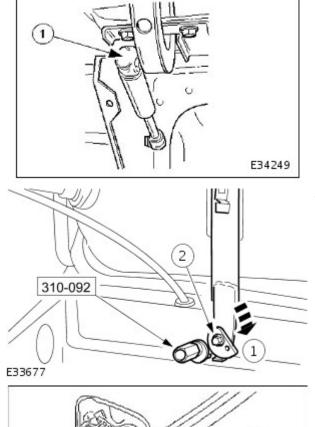
- 20. Remove the tank from the vehicle.
- 21. Drain any remaining fuel from the tank.

Installation

- 1. Fit the fuel tank assembly.
- 2. Re-connect the tank ground cable to the vehicle.
 - Tighten to 12 Nm.



3. On non-ORVR fuel tanks, position the trunk lid lefthand strut between the filler tube and the breather pipe.



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- **4.** Fully seat the tank into position, ensuring that no harness wiring is trapped.
- 5. On non-ORVR vehicles, reconnect the trunk lid lefthand strut rear pivot.
 - 1. Fit the retaining clip on to the end of the trunk lid strut and fit the strut to the trunk lid pivot. Reposition retaining clip to secure the strut.
 - Remove any temporary trunk lid supports and check that the lid operates correctly.

6. NOTE: Make sure the special tool locating peg is correctly installed to the cam.

Using the special tool, tighten the fuel tank retaining straps.

- 1. Rotate the cam clockwise to a torque of 6 Nm.
- NOTE: Using an open ended wrench, maintain the torque on the special tool.
 - 2. Tighten the fuel tank retaining strap bolt to 25 Nm.

7. Connect the filler neck to the fuel filler latch box seal.

- 1. Fit the fuel filler latch box seal over the filler neck.
- 2. Secure with the spring ring
- Fit the fuel filler cap.

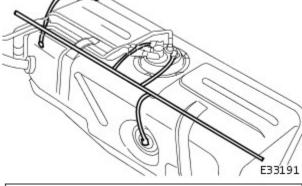
8. Connect the vapour outlet pipe.

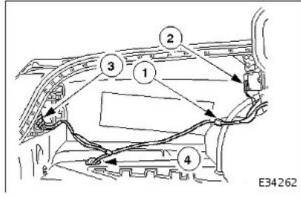
- Unplug the vapour pipes.
- Reconnect the tank and underfloor vapour pipes via the quick-fit coupling .

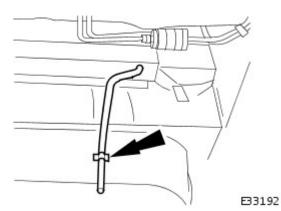
9. Fit the fuel filler latch box drain pipe.

- 1. Feed the drain pipe through the floor grommet.
- 2. Connect the drain pipe to the fuel filler latch box stub

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10. Reconnect the trunk harness connections.

strap. Trim strap.

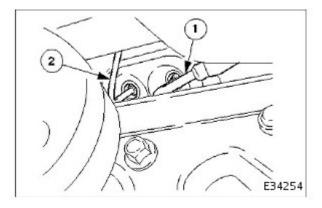
1. If fitted, connect the wiring to the accelerometer.

3. Tie the drain pipe to the filler tube using a ratchet

- 2. Connect the wiring to the fuel level sensor harness.
- 3. Connect the wiring to the fuel pump connector.
- 4. If fitted, connect the wiring to the pressure sensor connector.
- **11.** Reconnect the lefthand side trunk harness if it has been necessary to move it for access. Route the harness behind both the filler tube and breather or pressure relief pipe.
 - 1. Fit the harness securing clip to the mounting bracket.
 - 2. Connect the fuel flap lock actuator connector.
 - 3. Connect the lefthand rear lamp harness connector.
 - 4. If applicable, feed the side marker lamp harness through the access hole in the floor and reseat the sealing grommet.
 - On the underside of the vehicle, fit the side marker lamp connector and fix the harness to the securing clips.
- **12.** On the underside of the vehicle, fit the drain pipe to the securing clip.

- **13.** On the underside of the vehicle, reconnect the fuel feed and return pipes.
 - Remove the plugs from the tank and fuel feed and return

pipe.



pipes.

- 1. Push the fuel feed pipe into the quick-fit tank connector. Ensure the pipe is fully home.
- 2. Push the fuel return pipe into the quick-fit tank connector. Ensure the pipe is fully home.
- **14.** Fit the trunk side liner, lefthand. For additional information, refer to Section <u>501-05 Interior Trim and Ornamentation</u>.
- **15.** Fit the trunk side liner, righthand. For additional information, refer to Section<u>501-05 Interior Trim and Ornamentation</u>.
- **16.** Fit the trunk seal retainer. For additional information, refer to Section <u>501-05 Interior Trim and Ornamentation</u>.
- **17.** Fit the rear lamp assembly interior trim finisher. For additional information, refer to Section <u>417-01 Exterior</u> Lighting.
- **18.** Fit the trunk front liner. For additional information, refer to Section <u>501-05 Interior Trim and Ornamentation</u>.
- 19. Fit the trunk floor carpet.
- **20.** Ensure that the fuel feed pipes in the engine compartment are reconnected after tank draining.
- **21.** Re-fit the battery. For additional information, refer to Section <u>414-01 Battery, Mounting and Cables</u>.
- 22. Carry out a leak test of the evaporative emissions system.