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Air Conditioning - TDV6 2.7L Diesel - Air Conditioning (A/C) Compressor

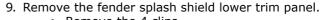
Removal and Installation

Removal

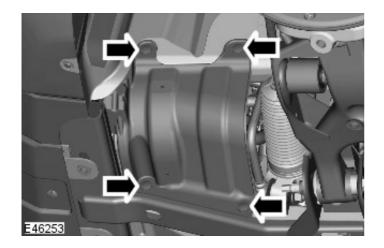
 WARNING: Do not work on or under a vehicle supported only by a jack. Always support the vehicle on safety stands.

Raise and support the vehicle. For additional information, refer to: Jacking (100-02, Description and Operation).

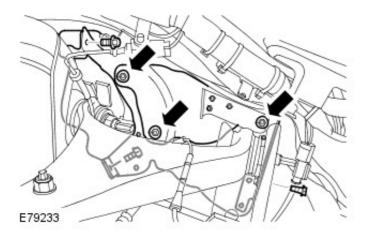
- 2. Disconnect the battery ground cable.
 For additional information, refer to: Specifications (414-00 Battery and Charging System General Information, Specifications).
- Remove the engine cover.
 For additional information, refer to: Engine Cover 2.7L V6 TdV6 (501-05 Interior Trim and Ornamentation, Removal and Installation).
- Recover the air conditioning (A/C) refrigerant.
 For additional information, refer to: <u>Air Conditioning (A/C) System Recovery, Evacuation and Charging</u> (412-00 Climate Control System General Information, General Procedures).
- 5. Remove the auxiliary battery tray. For additional information, refer to: <u>Auxiliary Battery Tray</u> (414-01 Battery, Mounting and Cables, Removal and Installation).
- 6. Remove the accessory drive belt. For additional information, refer to: Accessory Drive Belt (303-05C Accessory Drive TDV6 2.7L Diesel, Removal and Installation).
- 7. Remove the LH front wheel and tire.
- 8. Remove the front LH fender splash shield. For additional information, refer to: Fender Splash Shield (501-02 Front End Body Panels, Removal and Installation).

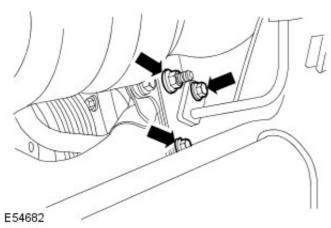


• Remove the 4 clips.



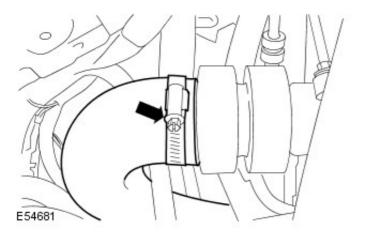
- Remove the upper arm and brake line heat shields for access.
 - Remove the 3 nuts.
 - Remove the 3 bolts.



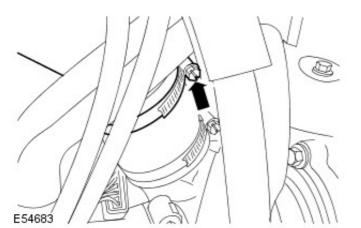


- 11. Release the charge air cooler inlet pipe.Remove the two retaining bolts.

 - Remove the retaining nut.



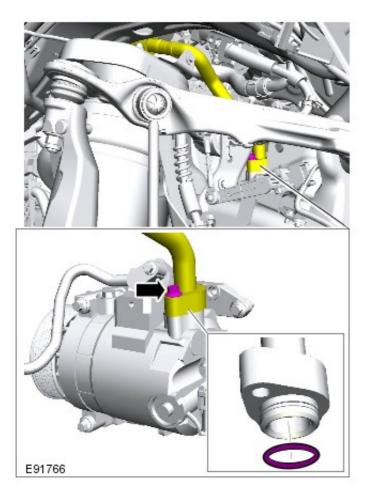
- 12. Disconnect the charge air cooler inlet hose.Loosen the clip.

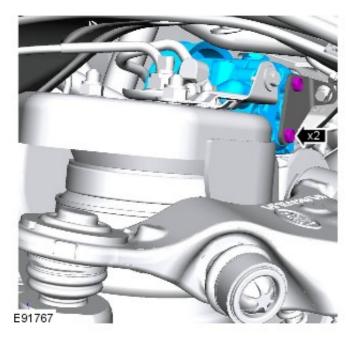


- 13. Disconnect the charge air cooler inlet hose.Loosen the clip.

14. CAUTIONS:

Immediately cap all refrigerant lines to prevent ingress of dirt and moisture.





Care must be taken to avoid damage to the mating surfaces.

Release the A/C low-pressure pipe from the compressor.

- Remove and discard the O-ring seal.
- Using a suitable tie strap, secure the A/C lowpressure pipe aside.

- 15. Release the power steering pump support bracket.
 - Reposition the charge air cooler inlet pipe to gain access to the power steering pump retaining bolts.
 - Remove the 2 bolts.

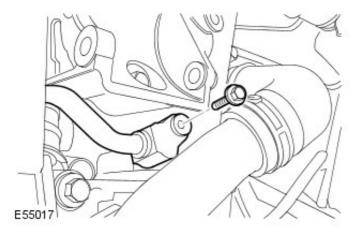
16. CAUTIONS:

Immediately cap all refrigerant lines to prevent ingress of dirt and moisture.

Care must be taken to avoid damage to the mating surfaces.

Disconnect the A/C compressor high-pressure pipe.

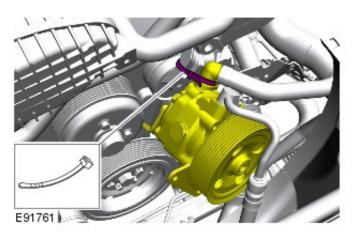
- Remove the LH retaining bolt.
- Remove and discard the O-ring seal.



17. Reposition the A/C compressor high-pressure pipe.

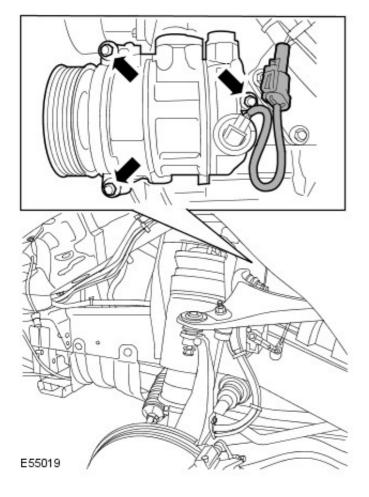


- 18. Release the power steering pump.Collect the support bracket.



19. Using a suitable tie strap, secure the power steering pump.

- 20. Remove the A/C compressor.Disconnect the A/C compressor electrical connector.
 - Remove the three retaining bolts.



Installation



Install the A/C compressor.

- Install the three retaining bolts.
- Tighten the bolts to 23 Nm (17 lb.ft).
- Connect the A/C compressor electrical connector.
- 2. Secure the power steering pump.
 - Remove and discard the tie strap.
 - Install the support bracket.
- 3. Reposition the A/C compressor high-pressure pipe.
- 4. Connect the A/C compressor high-pressure pipe.
 - Remove the blanking caps from the ports.
 - Install a new O-ring seal.
 - Tighten the retaining bolt to 9 Nm (7 lb.ft).
- 5. Install the power steering pump rear bolts.
 - Reposition the charge air cooler inlet pipe to gain access to the power steering pump retaining bolts.
 - Tighten the bolts to 22 Nm (16 lb.ft).
- 6. Connect the A/C compressor low-pressure pipe.
 - Remove the blanking caps from the ports.
 - Install a new O-ring seal.
 - Tighten the retaining bolt to 9 Nm (7 lb.ft).
- 7. Connect the charge air cooler inlet hose.
 - Tighten the clips.
- 8. Secure the charge air cooler inlet pipe.
 - Install the two retaining bolts.
 - Install the retaining nut.
 - Tighten to 10 Nm (7 lb.ft).

- 9. Install the upper arm and brake line heat shields.
 - Install the 3 bolts.
 - Install the 3 nuts.
- 10. Install the fender splash shield lower trim panel.
 - Install the 4 clips.
- 11. Install the front LH fender splash shield.
 For additional information, refer to: Fender Splash Shield (501-02 Front End Body Panels, Removal and Installation).
- 12. Install the wheel and tire.
 - Tighten nuts to 140 Nm (103 lb.ft).
- 13. Install the accessory drive belt.
 For additional information, refer to: Accessory Drive Belt (303-05C Accessory Drive TDV6 2.7L Diesel, Removal and Installation).
- 14. Install the auxiliary battery tray.
 For additional information, refer to: <u>Auxiliary Battery Tray</u> (414-01 Battery, Mounting and Cables, Removal and Installation).
- Recharge the A/C system
 For additional information, refer to: <u>Air Conditioning (A/C) System Recovery, Evacuation and Charging</u> (412-00 Climate Control System General Information, General Procedures).
- Install the engine cover.
 For additional information, refer to: Engine Cover 2.7L V6 TdV6 (501-05 Interior Trim and Ornamentation, Removal and Installation).
- 17. Connect the battery ground cable.
 For additional information, refer to: Specifications (414-00 Battery and Charging System General Information, Specifications).