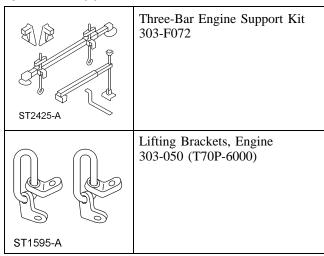
IN-VEHICLE REPAIR

Oil Pan

Special Tool(s)

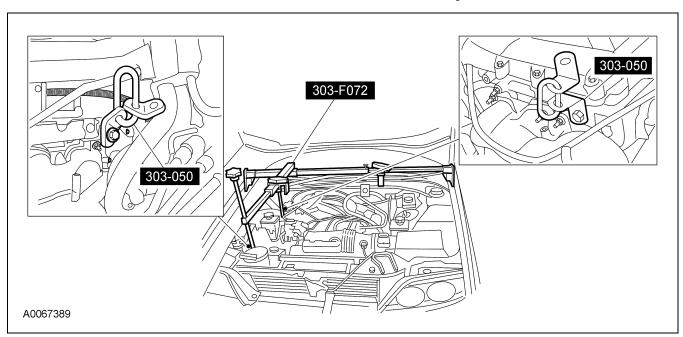


Material

Item	Specification
SAE 5W-20 Premium Synthetic Blend Motor Oil XO-5W20-QSP	WSS-M2C930-A
Silicone Gasket and Sealant TA-30 or equivalent	WSE-M4G323-A4
Metal Surface Cleaner ZC-21 or equivalent	WSE-M5B392-A

Removal

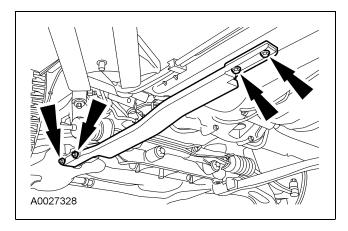
- 1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to Section 100-02.
- 2. Remove the radiator upper sight shield.
- 3. Remove the air cleaner assembly. For additional information, refer to Section 303-12.
- 4. Install the special tools.



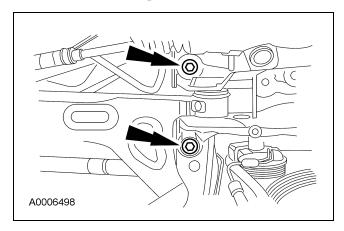
- 5. Remove the steering gear. For additional information, refer to Section 211-02.
- 6. Remove the RH front splash shield, the LH front splash shield and the front center splash shield.
- 7. Remove the generator. For additional information, refer to Section 414-02.
- 8. Remove the A/C compressor. For additional information, refer to Section 412-01.

IN-VEHICLE REPAIR (Continued)

- 9. Remove the oil pan drain plug and drain the engine oil.
 - Install the drain plug and tighten to 23 Nm (17 lb-ft).
- 10. Remove the 8 bolts and the 2 suspension crossmember I-braces.

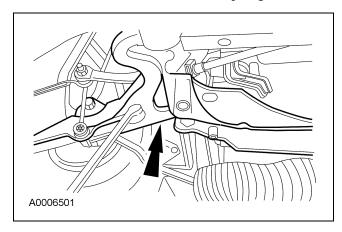


- 11. Remove the LH lower control arm through-bolt.
- 12. Remove the RH lower control arm through-bolt.
- 13. Remove the LH and RH engine mount-to-suspension crossmember nuts.
- 14. **NOTE:** LH shown, RH similar. Remove the 4 suspension crossmember bolts.



- 15. Remove the transmission cooler tube bracket nut and position the bracket aside.
- 16. Remove the nut and detach the power steering pressure (PSP) tube bracket from the oil pan stud bolt.
- 17. Remove the 4 transmission-to-oil pan bolts.

- 18. Remove the 13 oil pan bolts and the 2 oil pan stud bolts.
- 19. Gently pry the crossmember down and remove the oil pan.
 - Remove and discard the oil pan gasket.



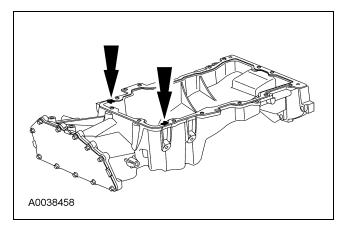
Installation

1. CAUTION: Do not use metal scrapers, wire brushes, power abrasive discs or other abrasive means to clean the sealing surfaces. These tools cause scratches and gouges which make leak paths.

Use a plastic scraping tool to remove all traces of the oil pan gasket.

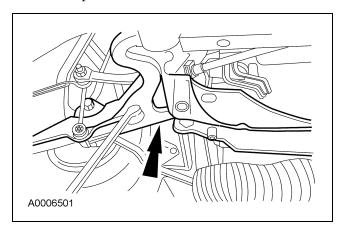
- Clean all surfaces with metal surface cleaner.
- 2. CAUTION: The oil pan must be installed and the bolts tightened within 4 minutes of the sealant application.

Apply a 10-mm (0.40-in) dot of silicone gasket and sealant to the oil pan gasket in the indicated positions.

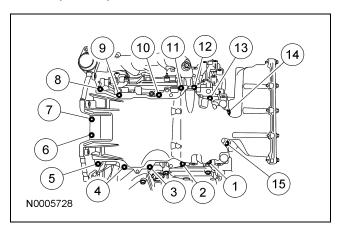


IN-VEHICLE REPAIR (Continued)

3. Gently pry the crossmember down and position the oil pan.



- 4. **NOTE:** Fastener No. 4 is a stud bolt. Install the 13 oil pan bolts and the oil pan stud bolt.
 - Tighten in the sequence shown to 25 Nm (18 lb-ft).



- 5. Install the 4 transmission-to-oil pan bolts.
 - Tighten to 45 Nm (33 lb-ft).
- 6. Attach PSP tube bracket to the oil pan stud bolt and install the nut.
 - Tighten to 8 Nm (71 lb-in).

- 7. Position the transmission cooler tube bracket and install the nut.
 - Tighten to 10 Nm (89 lb-in).
- 8. Install the 4 crossmember bolts.
 - Tighten to 104 Nm (77 lb-ft).
- 9. Install the LH and RH engine mount-to-suspension crossmember nuts.
 - Tighten to 63 Nm (46 lb-ft).
- 10. Install the RH lower control arm through-bolt.
 - Tighten to 175 Nm (129 lb-ft).
- 11. Install the LH lower control arm through-bolt.
 - Tighten to 175 Nm (129 lb-ft).
- 12. Position the 2 suspension crossmember I-braces and install the 8 bolts.
 - Tighten to 55 Nm (41 lb-ft).
- 13. Install the A/C compressor. For additional information, refer to Section 412-01.
- 14. Install the generator. For additional information, refer to Section 414-02.
- 15. Install the RH front splash shield, the LH front splash shield, and the front center splash shield.
- 16. Install the steering gear. For additional information, refer to Section 211-02.
- 17. Install the air cleaner assembly. For additional information, refer to Section 303-12.
- 18. Install the radiator upper sight shield.
- 19. Fill the engine with clean engine oil.