2006 Dodge or Ram Truck RAM 2500 Truck 4WD L6-5.9L DSL Turbo VIN C Vehicle > Engine, Cooling and Exhaust > Engine > Engine Lubrication > Oil Pan > Service and Repair > Procedures

PAN, OIL

Special Tools



Removal

4x4

- 1. Open the hood.
- 2. Disconnect the battery negative cables.
- 3. Remove the intake air assembly.
- 4. Remove the radiator shroud retaining bolts.
- 5. Install engine support fixture #8534B.
- 6. Raise and support the vehicle.

WARNING: HOT OIL CAN CAUSE PERSONAL INJURY.

- 7. Drain the engine oil (Refer to See: Engine Oil > Procedures).
- 8. Loosen the front engine mount bolts.
- 9. Lower the vehicle.
- 10. Use the engine support fixture #8534B to raise engine out of the front mounts.
- 11. Remove the engine oil dipstick.
- 12. Raise and support the vehicle.
- 13. Remove oil pan bolts, break the pan to block seal, and lower pan slightly and remove oil suction tube fasteners.
- 14. Remove oil pan and suction tube.
- 15. Remove the 2 bolts from the front of the engine block stiffener.
- 16. Remove the oil pan.

4x2

- 1. Open the hood.
- 2. Remove the negative battery cables.
- 3. Raise and support the vehicle.

- 4. Remove the transmission oil cooler lines.
- 5. Remove the propeller shaft.
- 6. Remove the starter bolts.
- 7. Support the starter.
- 8. Remove the torque converter bolts.
- 9. Remove the exhaust hanger bolts.
- 10. Remove the gear shift cable.
- 11. Remove the wiring harness.
- 12. Remove the transmission mount.
- 13. Remove the crossover bolts.
- 14. Position the transmission jack.
- 15. Remove the bell housing bolts.
- 16. Remove the transmission.
- 17. Remove the flywheel housing bolts (8).
- 18. Remove the flex plate bolts (8).
- 19. Remove the engine oil dip stick.
- 20. Drain the oil.
- 21. Remove the steering rack bolts.
- 22. Remove the oil pan bolts.
- 23. Remove the oil pickup bolts.
- 24. Remove the oil pan.

Cleaning

Remove all gasket material from the oil pan and cylinder block sealing surfaces. Extra effort may be required around T-joint areas. Clean oil pan and flush suction tube with a suitable solvent.

Inspection

Inspect the oil pan, suction tube, and tube braces for cracks and damage. Replace any defective component. Inspect the oil drain plug and drain hole threads. Inspect the oil pan sealing surface for straightness. Repair any minor imperfections with a ball-peen hammer. Do not attempt to repair an oil pan by welding.

Installation

4x4

1. Clean the sealing surfaces of the cylinder block and oil pan with a suitable cleaner.

- 2. Clean the oil pan.
- 3. Clean the oil pan T-joints.

4. Fill the T-joint between the pan rail/gear housing and pan rail/rear seal retainer with sealant. Use Mopar Silicone Rubber Adhesive Sealant or equivalent.

5. Position the new oil pan gasket.

6. Place suction tube in oil pan and guide them into place. Using a new tube-to-block gasket, install and tighten the suction tube bolts by hand. Starting with the oil pump inlet bolts, tighten the bolts to 24 Nm (18 ft. lbs.) torque. Tighten the remaining tube brace bolts to 43 Nm (32 ft. lbs.) torque.

7. Starting in the center and working outward, tighten the oil pan bolts to 28 Nm (21 ft. lbs.) torque.

- 8. Install the engine oil dipstick.
- 9. Install the engine block stiffener.

- 10. Install the flywheel to crankshaft adapter. Torque to 137 Nm (101 ft. lbs.).
- 11. Lower vehicle.
- 12. Lower the engine into the motor mounts and tighten the through bolts to 88 Nm (64 ft. lbs.).
- 13. Remove the engine support fixture #8534B.
- 14. Install battery negative cables.
- 15. Fill the crankcase with new engine oil.
- 16. Start engine and check for leaks. Stop engine, check oil level, and adjust, if necessary.
- 17. Remove the engine support fixture #8534B.
- 18. Install the fan and fan shroud.(Refer to See: Radiator Cooling Fan > Procedures).

NOTE: Make sure that the fan shroud seal is properly seated in the radiator fan shroud and that it is not out of position causing excessive contact with the radiator coolant tubes.

19. Fill the engine oil.

- 20. Connect the battery negative cables.
- 21. Close the hood.

4x2

1. Clean the sealing surfaces of the cylinder block and oil pan with a suitable cleaner.

- 2. Clean the oil pan.
- 3. Clean the oil pan T-joints.

4. Fill the T-joint between the pan rail/gear housing and pan rail/rear seal retainer with sealant. Use Mopar Silicone Rubber Adhesive Sealant or equivalent.

5. Position the new oil pan gasket.

6. Place suction tube in oil pan and guide them into place. Using a new tube-to-block gasket, install and tighten the suction tube bolts by hand. Starting with the oil pump inlet bolts, tighten the bolts to 24 Nm (18 ft. lbs.) torque. Tighten the remaining tube brace bolts to 43 Nm (32 ft. lbs.) torque.

7. Starting in the center and working outward, tighten the oil pan bolts to 28 Nm (21 ft. lbs.) torque.

- 8. Install the steering rack bolts.
- 9. Install the flex plate.

10. Install the flywheel to crankshaft adapter. Torque to 137 Nm (101 ft. lbs.).

11. Install transmission and transfer case (if equipped).

12. Install the flywheel housing assembly with the starter motor attached and tighten bolts to 77 Nm (57 ft. lbs.) torque.

NOTE: A new clamping ring must be used on early or late builds, automatic or manual. Do not reuse clamping ring

13. Install the EGR cooler.

14. Install the fan and fan shroud.(Refer to See: Radiator Cooling Fan > Procedures).

NOTE: Make sure that the fan shroud seal is properly seated in the radiator fan shroud and that it is not out of position causing excessive contact with the radiator coolant tubes.

- 15. Remove the transmission jack.
- 16. Install the crossmember bolts.
- 17. Install the transmission mount.
- 18. Install the wiring harness.
- 19. Install the gear shift cable.

- 20. Install the exhaust hanger bolts.
- 21. Install the torque converter bolts.
- 22. Install the starter.
- 23. Install the starter bolts.
- 24. Install the transmission oil cooler lines.
- 25. Connect the negative battery cables.
- 26. Close the hood.