

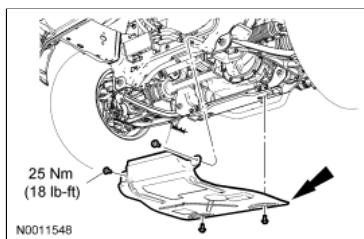
## Oil Pan, Oil Pump, Oil Pump Screen and Pickup Tube

[Printable View \(732 KB\)](#)

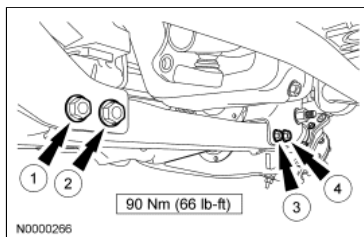
## Material

Item	Specification
Super Premium SAE 5W-30 Motor Oil XO-5W30-QSP or equivalent	WSS-M2C153-G
Metal Surface Prep ZC-31	—
Silicone Gasket Remover ZC-30	—

1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to [Section 100-00](#).
2. If oil pump removal is necessary, remove the timing drive components. For additional information, refer to [Timing Drive Components](#) in this section.
3. Drain the engine oil.
4. If equipped, remove the skid plate.



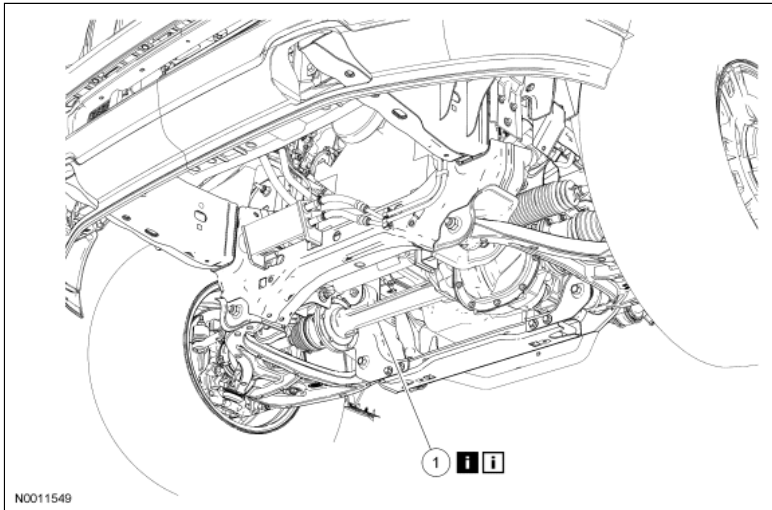
5. Remove the bolts in sequence shown and remove the crossmember.



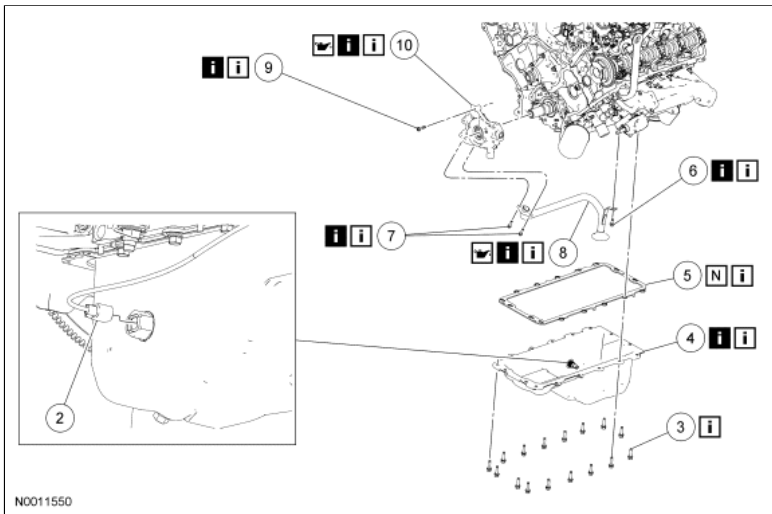
6. Remove the parts in the order indicated in the following illustrations and tables.

To remove individual parts, only carry out the listed steps:

Part	Steps
Oil pan 4x4	1-5
Oil pan 4x2	2-5
Oil pump 4x4	1-10
Oil pump 4x2	2-10
Oil pump screen and pickup tube 4x4	1-8
Oil pump screen and pickup tube 4x2	2-8



Item	Part Number	Description
1	—	Front drive axle assembly Removal Note Installation Note

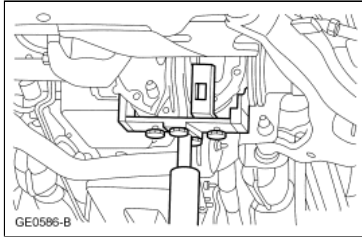


Item	Part Number	Description
2	—	Oil level sensor electrical connector (part of 12B637)
3	W701605	Oil pan bolts (16 req'd) Installation Note
4	6675	Oil pan Removal Note Installation Note
5	6710	Oil pan gasket Installation Note
6	N605904	Oil pump screen and pickup tube bolt Removal Note Installation Note
7	N806155	Oil pump screen and pickup tube bolts (2 req'd) Removal Note Installation Note
8	6622	Oil pump screen and pickup tube Removal Note Installation Note
9	N806183	Oil pump bolts (3 req'd) Removal Note Installation Note
10	6621	Oil pump Removal Note Installation Note

- To install, reverse the removal procedure.

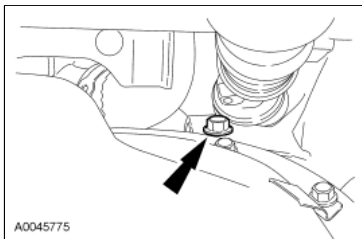
#### Item 1: Front Drive Axle Assembly Removal Note

- Position a suitable hydraulic jack under the front axle. Securely strap the jack to the axle.

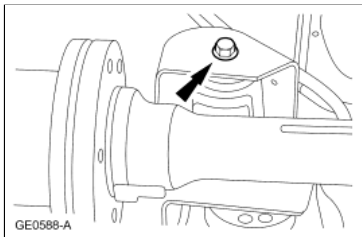


- NOTE:** Rotate the steering column so the pinch bolt for the steering column coupling allows clearance for the isolator bolt.

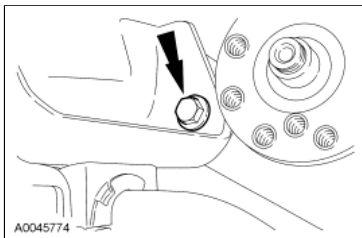
Remove the upper front axle carrier mounting bushing bolt.



- Remove the axle shaft housing carrier bushing bolt.



- Remove the lower front axle carrier mounting bushing bolt.



- Partially lower the front axle assembly.

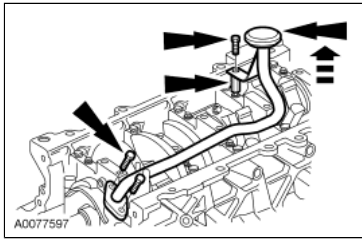
#### Item 4: Oil Pan Removal Note

- NOTICE:** Do not use metal scrapers, wire brushes, power abrasive discs, or other abrasive means to clean the sealing surfaces. These may cause scratches and gouges resulting in leak paths. Use a plastic scraper to clean the sealing surfaces.

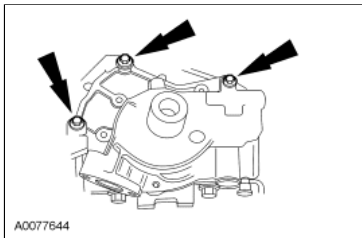
Remove and discard the oil pan gasket. Clean the sealing surfaces with silicone gasket remover and metal surface prep. Follow the directions on the packaging. Inspect the mating surfaces.

#### Items 6-10: Oil Pump, Oil Pump Screen and Pickup Tube and Bolts Removal Note

- Remove the three bolts, the oil pump screen and pickup tube and the spacer.

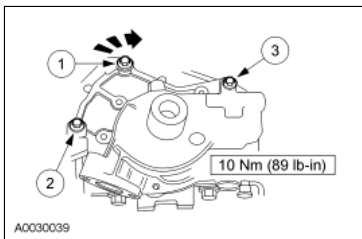


2. Remove the oil pump.
  - Remove the three bolts.
  - Remove the oil pump.



#### Items 10-6: Oil Pump, Oil Pump Screen and Pickup Tube and Bolts Installation Note

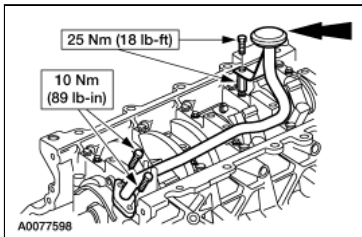
1. **NOTE:** Lubricate the new O-ring seal with clean engine oil.  
Clean and inspect the mating surfaces and install a new O-ring seal.
2. Install the oil pump and loosely install the bolts.
  - Position the oil pump.
  - Loosely install the bolts.
  - Tighten the bolts in the sequence shown.



3. **NOTICE:** Make sure the O-ring is in place and not damaged. A missing or damaged O-ring can cause foam in the lubrication system, low oil pressure and severe engine damage.

**NOTE:** Install a new O-ring and lubricate with clean engine oil.

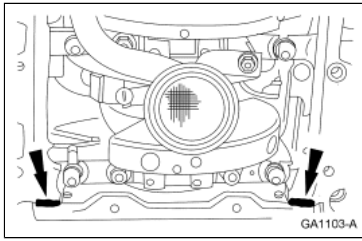
Install the spacer, oil pump screen and pickup tube and the bolts.



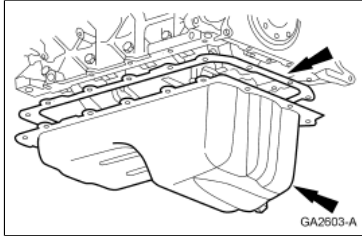
#### Items 5-3: Oil Pan, Gasket and Bolts Installation Note

1. **NOTE:** If the oil pan is not secured within four minutes, the sealant must be removed and the sealing area cleaned. To clean the sealing area, use silicone gasket remover and metal surface prep. Follow the directions on the packaging. Failure to follow this procedure can cause future oil leakage.

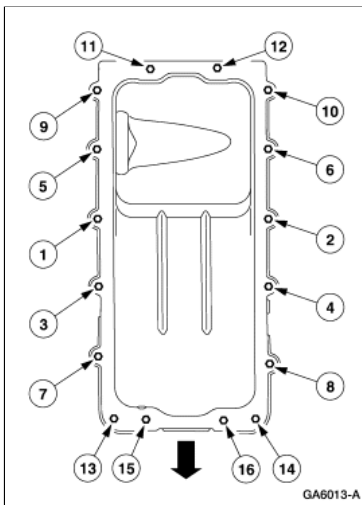
Apply silicone gasket and sealant in the locations shown.



2. Position the new oil pan gasket and the oil pan and loosely install the bolts.

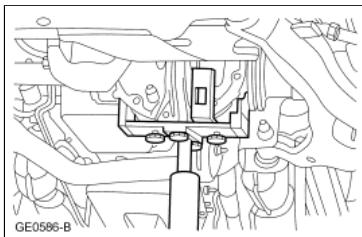


3. Tighten the bolts in three stages in the sequence shown.
- Stage 1: Tighten to 2 Nm (18 lb-in).
  - Stage 2: Tighten to 20 Nm (15 lb-ft).
  - Stage 3: Tighten an additional 60 degrees.

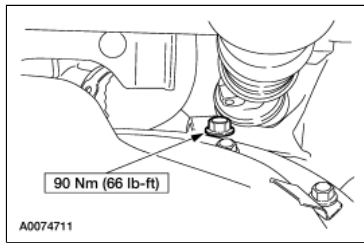


#### Item 1: Front Drive Axle Assembly Installation Note

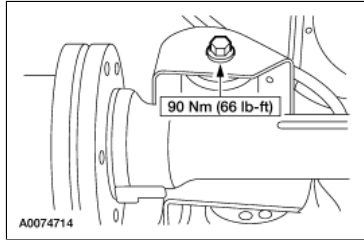
1. Position the front axle.



2. **NOTE:** Rotate the steering column so the pinch bolt for the steering column coupling allows clearance for the isolator bolt.  
Install the upper front axle carrier mounting bushing bolt.



3. Install the axle shaft housing carrier bushing nut and bolt.



4. Install the lower front axle carrier mounting bushing bolt.

