



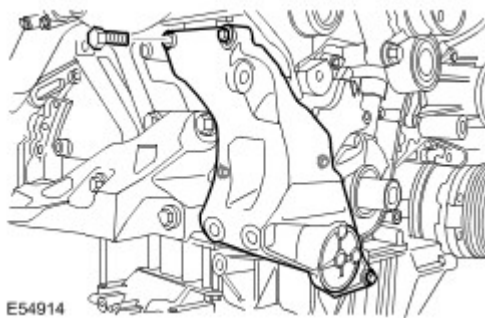
## Oil Pump (12.60.26)

### Removal

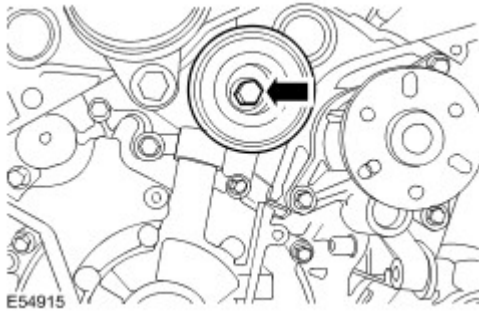
1. Disconnect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)
2. Remove the generator. For additional information, refer to [Generator \(86.10.02\)](#) (Section 414-02)
3. Remove the accessory drive belt tensioner.
  - ▶ Remove the retaining bolt.




4. Remove the crankshaft front oil seal. For additional information, refer to [Crankshaft Front Seal \(12.21.14\)](#) (Section 303-01)
5. Remove the generator mounting bracket.
  - ▶ Remove the five retaining bolts.




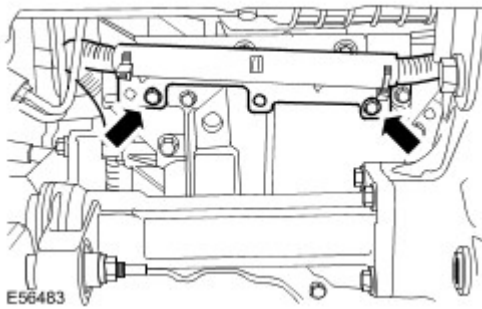
6. Remove the timing belt idler pulley.
  - ▶ Remove the retaining bolt.




7.  **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.

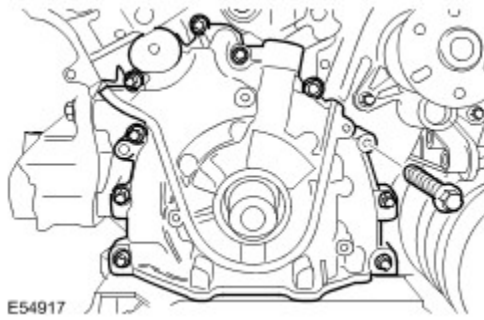
8. Release the battery positive cable.  
 Remove the two retaining bolts.




9. Remove the oil pump lower retaining bolts.  
 Remove the four retaining bolts.



10. Remove the oil pump.  
 Remove the ten retaining bolts.  
 Remove the timing belt cover sealing strips.  
 Remove and discard the gasket.









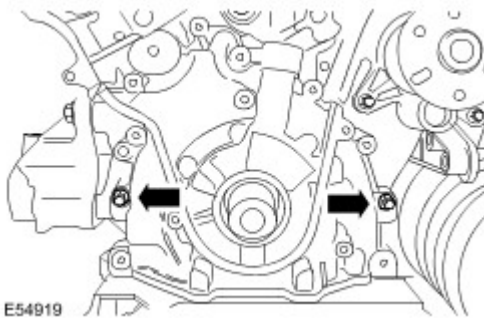
## Installation




1.  **CAUTION: Make sure the gasket is installed correctly.**

-  **CAUTION: Tighten the 10 bolts securing the oil pump to the cylinder block before tightening the 4 lower oil pump retaining bolts.**

Install the oil pump.

-  Clean the component mating faces.
-  Install a new gasket.
-  Locate the oil pump onto the lower cylinder block.
-  Align the oil pump with the cylinder block dowels.
-  Install two oil pump retaining bolts in the positions shown, but do not tighten at this stage.
-  Install the 8 remaining bolts and tighten all bolts evenly to 10 Nm (7 lb.ft).



2. Install the oil pump lower retaining bolts.
-  Tighten the 4 bolts to 10 Nm (7 lb.ft).
3. Install the battery positive cable.
-  Tighten the two retaining bolts to 10 Nm (7 lb.ft).
4. Install the timing belt idler pulley.
-  Tighten the bolt to 45 Nm (33 lb.ft).

- 5 . Install the crankshaft front oil seal. For additional information, refer to [Crankshaft Front Seal \(12.21.14\)](#) (Section 303-01)
- 6 . Install the generator mounting bracket.
  - ▶ Tighten the bolts to 22 Nm (16 lb.ft).
- 7 . Install the accessory drive belt tensioner.
  - ▶ Tighten the bolt to 45 Nm (33 lb.ft).
- 8 . Install the generator. For additional information, refer to [Generator \(86.10.02\)](#) (Section 414-02)
- 9 . Connect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)