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Crankshaft Front Seal (12.21.14)

Special Service Tools



Crankshaft TDC timing/locking tool
303-573



Remover crankshaft damper pulley
303-773



Remover oil seal front cover
303-107



Installer oil seal front cover
303-1148

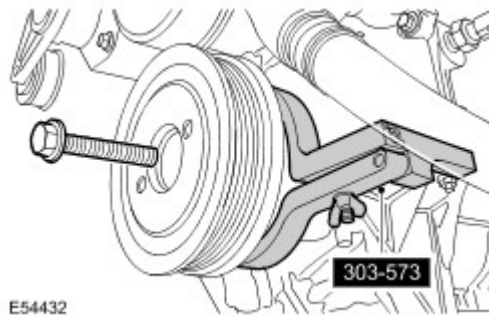


Installer crankshaft damper pulley
303-102

Removal

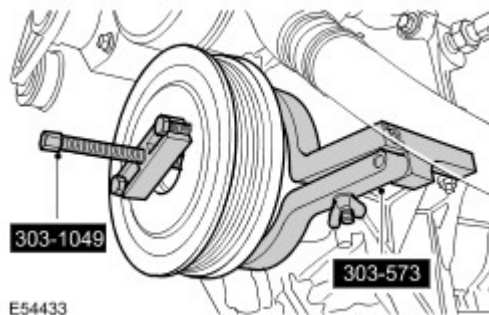
1. Disconnect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)
2. Remove the accessory drive belt. For additional information, refer to [Accessory Drive Belt \(86.10.03\)](#) (Section 303-05)
3. Using the special tool, retain the crankshaft front pulley.
4. **NOTE :**
The crankshaft pulley retaining bolt will be very tight.
Remove the crankshaft pulley retaining bolt.

► Discard the bolt.

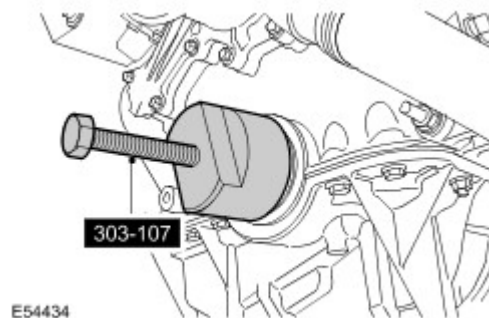


5. Using the special tools, remove the crankshaft pulley.

► Collect the washer.



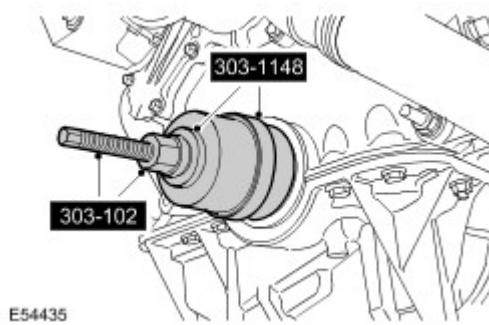
6. Remove the special tools from the crankshaft pulley.
7. Using the special tool, remove the crankshaft front seal.



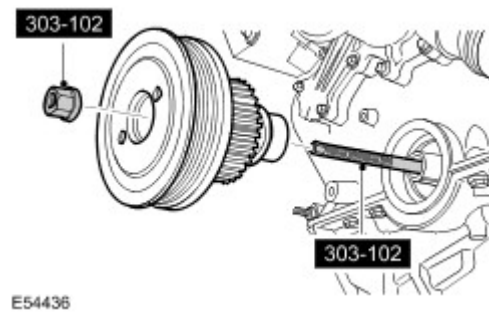
8. Check the crankshaft damper pulley and the washer for damage.

Installation

1. Clean all the crankshaft pulley mating faces.
2. Using the special tool, install the crankshaft front seal.
 - ▶ Lubricate the seal with clean engine oil.



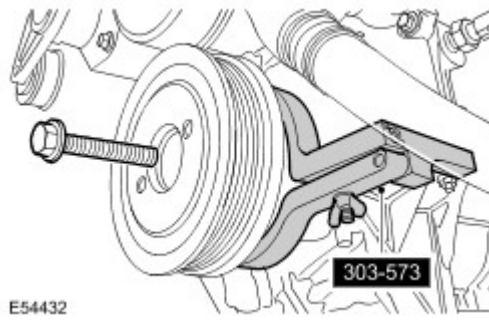
3. Using the special tool, install the crankshaft pulley.
 - ▶ Lubricate the seal with clean engine oil.
 - ▶ Remove the special tool.



4.  **CAUTION: The screw thread in the crankshaft pulley must be cleaned out before installing a new crankshaft pulley bolt.**

Install, but do not tighten, a new crankshaft pulley bolt.

5. Tighten the crankshaft pulley bolt.
 - ▶ Install the special tool.
 - ▶ Tighten the bolt to 45 Nm (33 lb.ft).
 - ▶ Tighten the bolt a further 85 degrees.
 - ▶ Remove the special tool.



- 6 . Install the accessory drive belt. For additional information, refer to [Accessory Drive Belt \(86.10.03\)](#) (Section 303-05)
- 7 . Connect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)