



Crankshaft Pulley (12.21.01)

Special Service Tools



Crankshaft TDC timing/locking tool
303-573



Remover crankshaft damper pulley
303-1049



Remover oil seal front cover
303-107



Installer oil seal front cover
303-1148



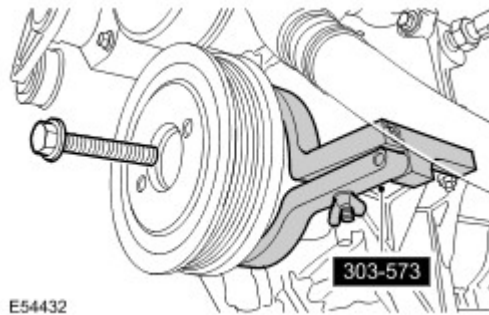
Installer crankshaft damper pulley
303-102

Removal

1. Disconnect the battery ground cable.
2. Remove the accessory drive belt.
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.

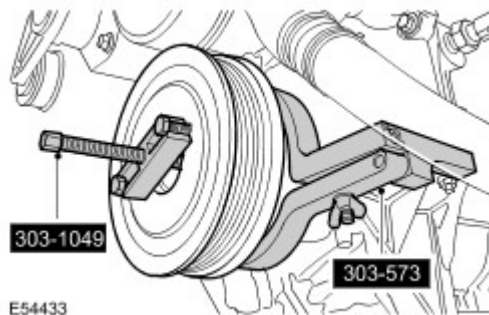
► Discard the bolt.



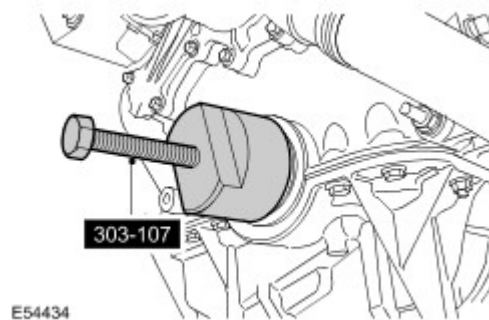
5. Using the special tools, remove the crankshaft pulley.

► Collect the washer.

► Remove the special tools.



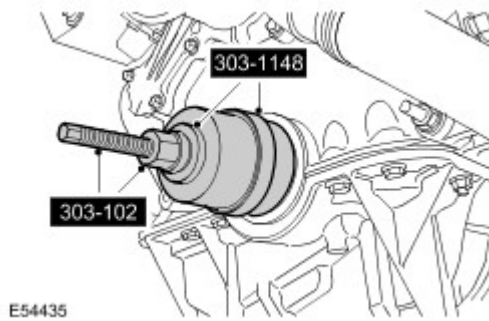
6. Using the special tool, remove the crankshaft front seal.



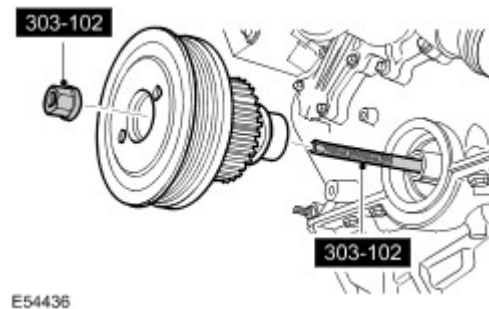
7. Check the crankshaft damper pulley and the washer for damage.

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.



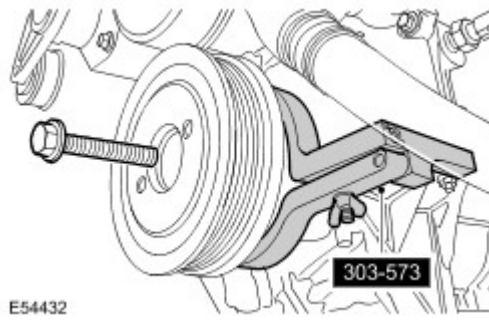
- 3 . Using the special tool, install the crankshaft pulley.
 - ▶ Lubricate the seal with clean engine oil.
 - ▶ Remove the special tool.



- 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.
- 7 . Connect the battery ground cable.