

PUBLISHED: 02-AUG-2017
2011.75 XJ RANGE (X351), 303-01C

ENGINE - V8 N/A 5.0L PETROL

CRANKSHAFT PULLEY [C1271888]

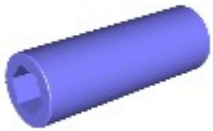
SPECIAL TOOL(S)



E115256

303-1437

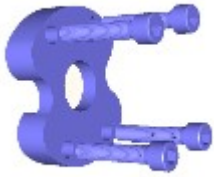
Crankshaft Damper Remover/Installer



E115257

303-1438

Crankshaft Damper Bolt Remover/Installer



E115258

303-1439

Crankshaft Damper Removal Plate



E115259

303-1440

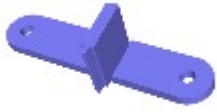
Crankshaft Damper Removal/Installation Stud



E115260

303-1441

Crankshaft Damper Remover/Installer Body



E115266

303-1448

Locking Tool



E152576

JLR-303-1304

Locking Tool

PART(S)

STEP	PART NAME	QUANTITY
Installation Step 2	Crankshaft pulley friction washer	1
Installation Step 11	Crankshaft pulley bolt	1

REMOVAL

NOTES:

- Removal steps in this procedure may contain installation details.
- Some illustrations may show the engine removed for clarity.
- Some variation in the illustrations may occur, but the essential information is always correct.

1. Refer to: [Startup Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).

2.

 **WARNING:**

Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

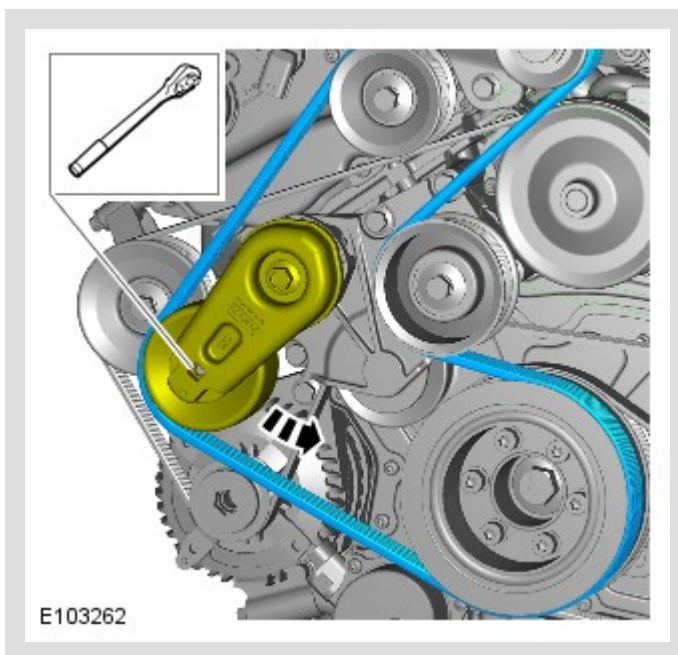
3. Remove the Radiator.

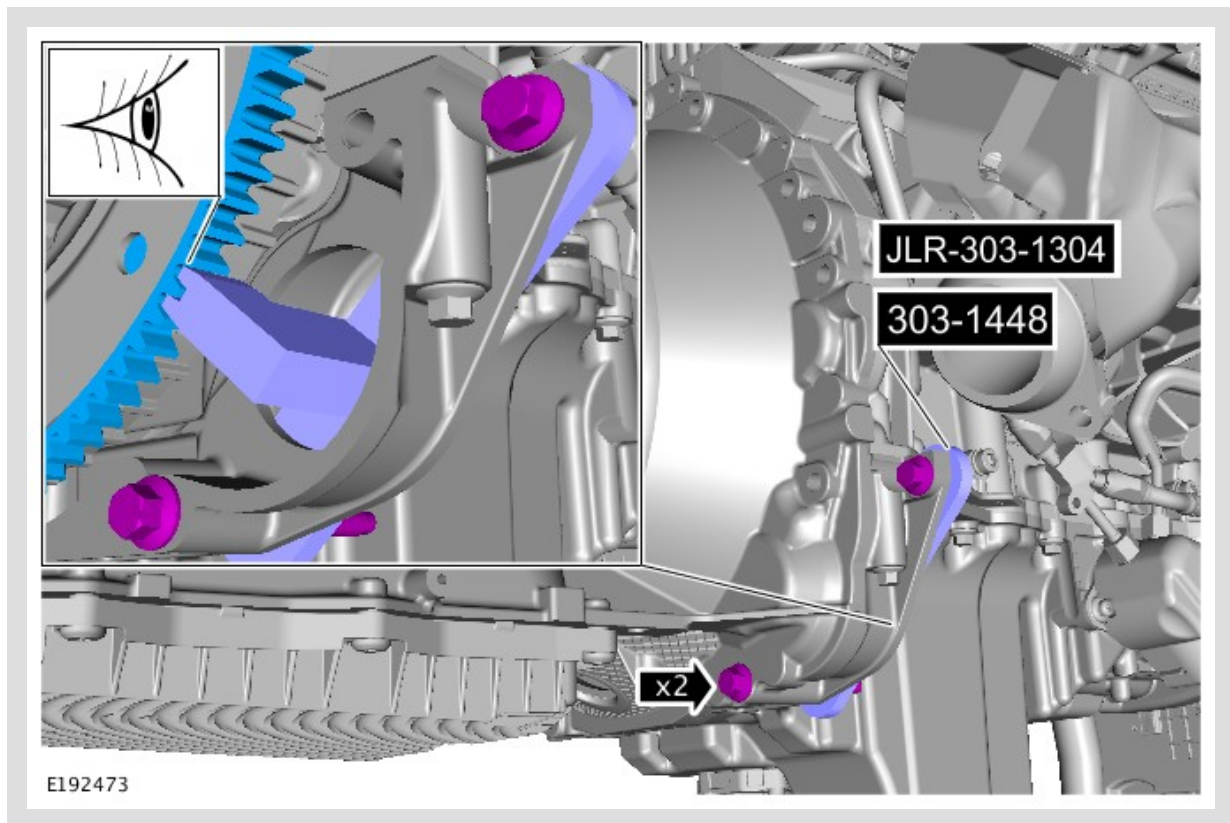
Refer to: [Radiator - V8 S/C 5.0L Petrol](#) (303-03A Engine Cooling - V8 N/A 5.0L Petrol/V8 S/C 5.0L Petrol, Removal and Installation).

4. Remove the Starter Motor.

Refer to: [Starter Motor](#) (303-06B Starting System - V8 N/A 5.0L Petrol/V8 S/C 5.0L Petrol, Removal and Installation).

5.



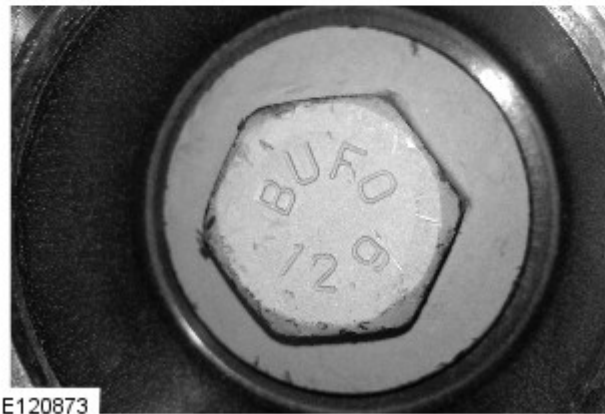


- Install the special tool.
- Vehicles without Auto stop/start system.
Special Tool(s): [303-1448](#)
- Vehicles with Auto stop/start system.
Special Tool(s): [JLR-303-1304](#)

7.

⚠ CAUTION:

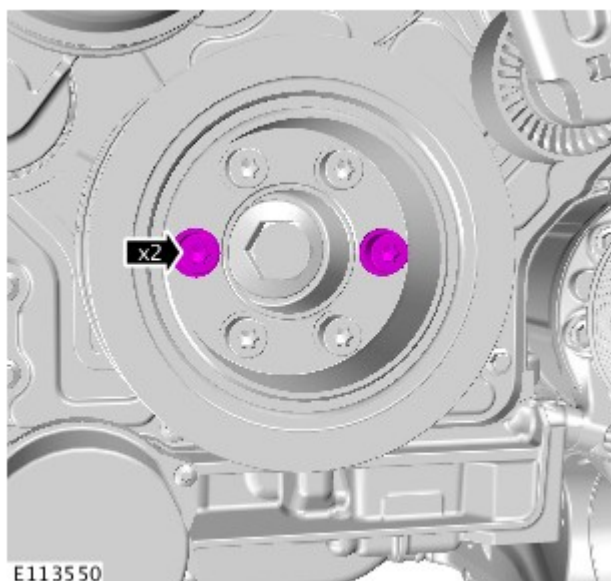
Before removing the crankshaft pulley bolt, note the numbers on the bolt head. If the bolt head shows 10.9, the bolt must be removed counter clockwise. If the bolt head shows 12.9, the bolt must be removed clockwise. Failure to follow this instruction may result in damage to the crankshaft.



E120873

Note the markings on the crankshaft pulley bolt.

8.

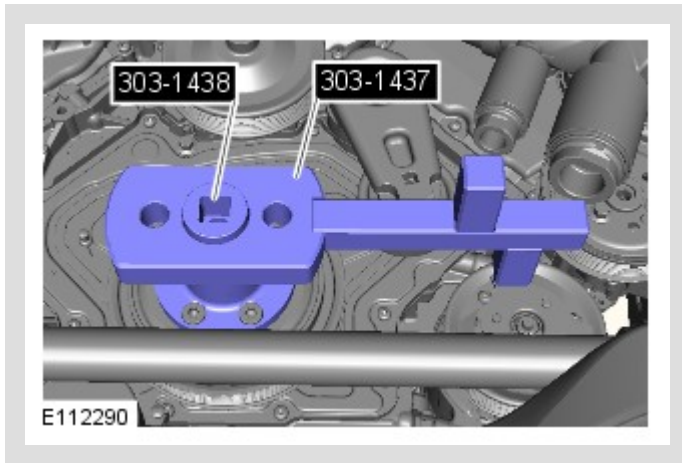


E113550

9.

 **NOTE:**

The illustration shows the tool positioning for LH threaded crankshaft damper bolts, RH threaded crankshaft bolts will require the tool position to be the opposite direction.

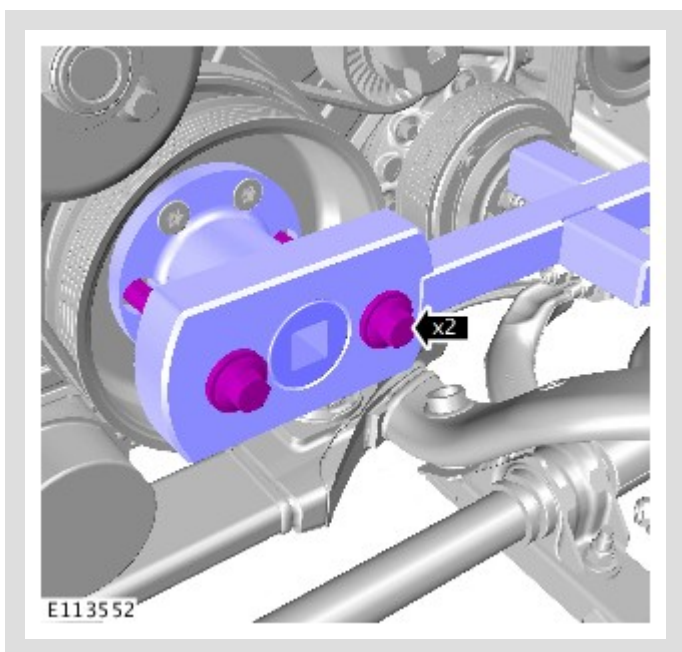


- Install the special tools.
- *Special Tool(s):* 303-1438
- *Special Tool(s):* 303-1437

10.

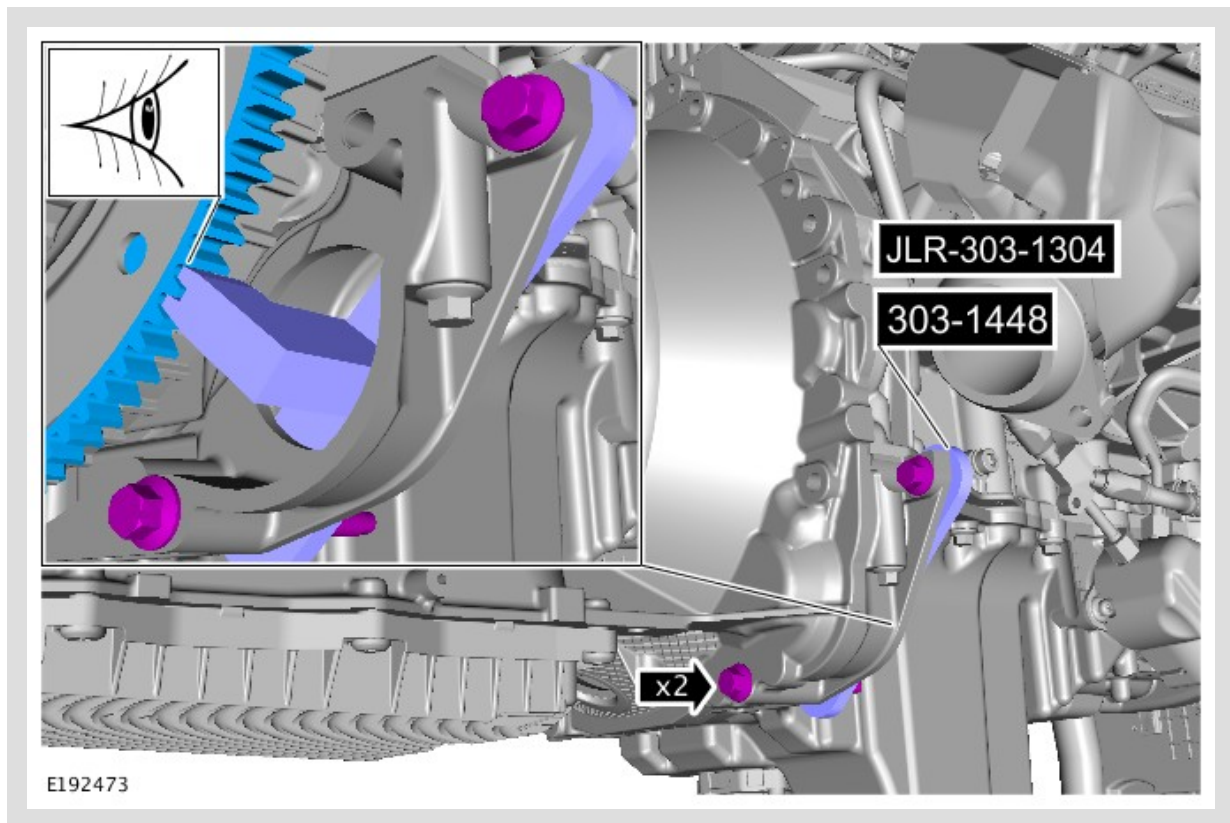
 **NOTE:**

The illustration shows the tool positioning for LH threaded crankshaft damper bolts, RH threaded crankshaft bolts will require the tool position to be the opposite direction.




Torque: 25 Nm

11.

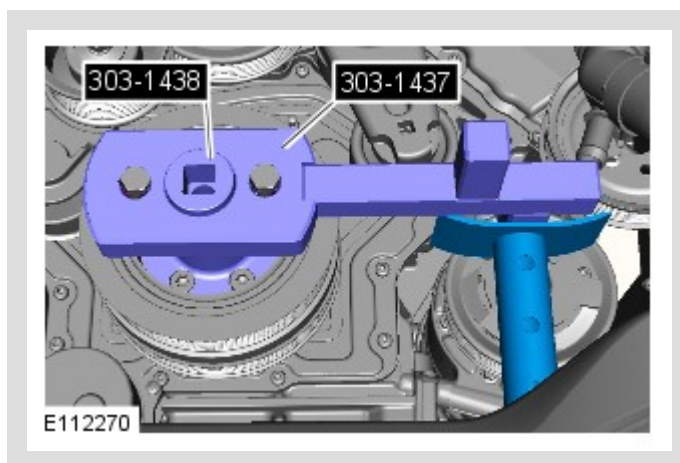


- Remove the special tool.
- Vehicles without Auto stop/start system.
Special Tool(s): [303-1448](#)
- Vehicles with Auto stop/start system.
Special Tool(s): [JLR-303-1304](#)

12.

 **NOTE:**

The illustration shows the tool positioning for LH threaded crankshaft damper bolts, RH threaded crankshaft bolts will require the tool position to be the opposite direction.



Using a suitable stand, support the special tool.

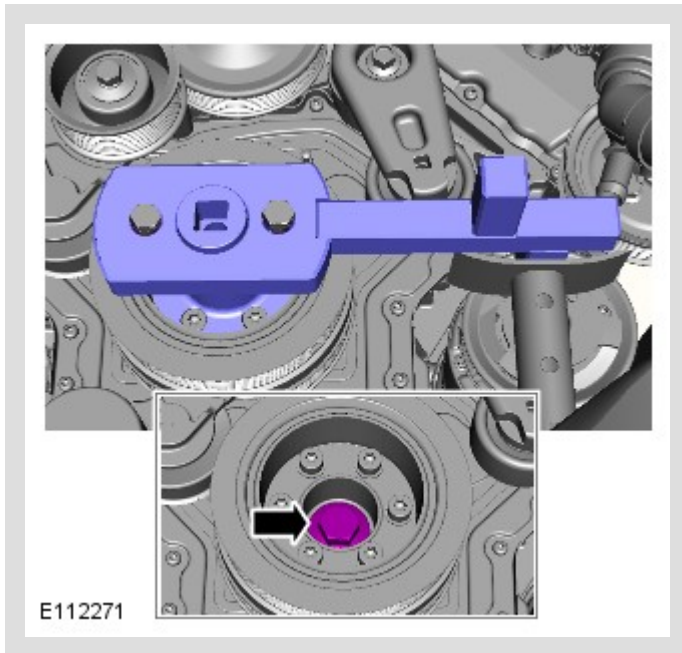
13.

⚠ CAUTION:

Discard the bolt.

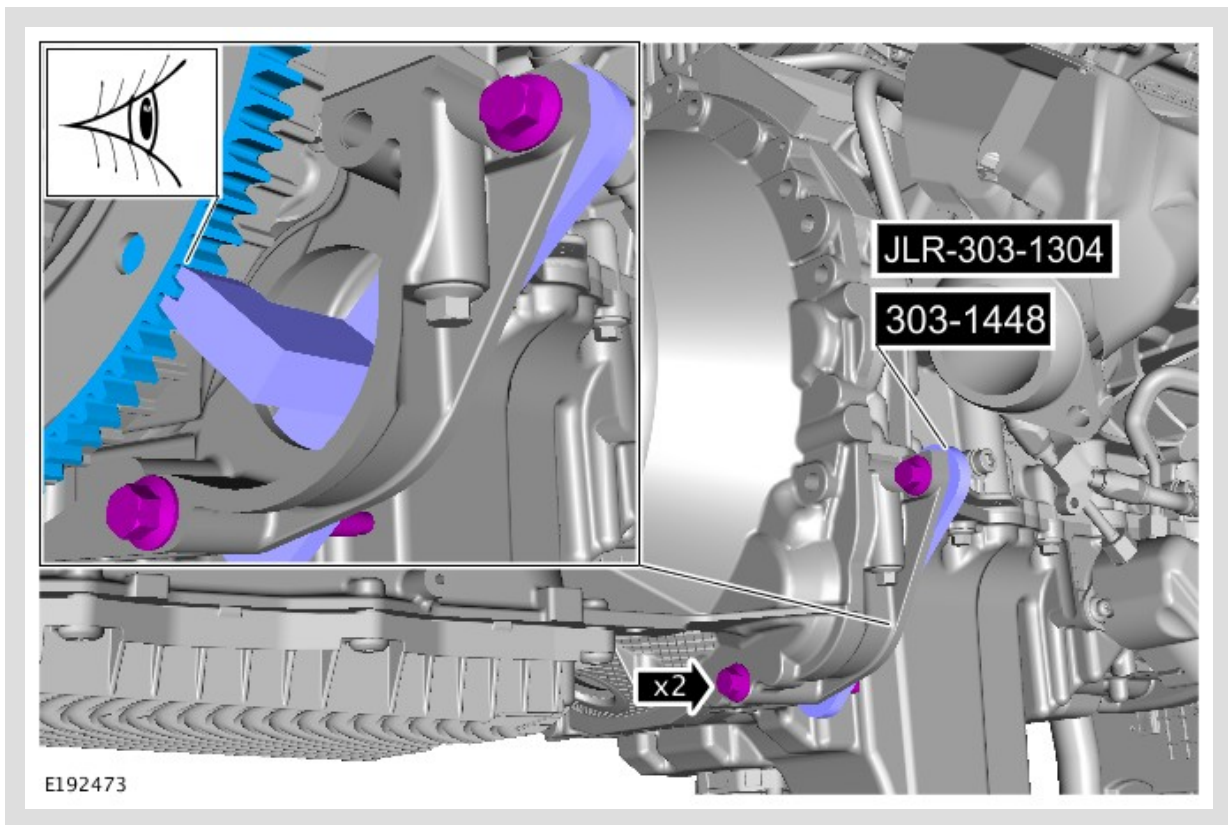
⚠ NOTES:

- The illustration shows the tool positioning for LH threaded crankshaft damper bolts, RH threaded crankshaft bolts will require the tool position to be the opposite direction.
- The crankshaft pulley bolt will be very tight.



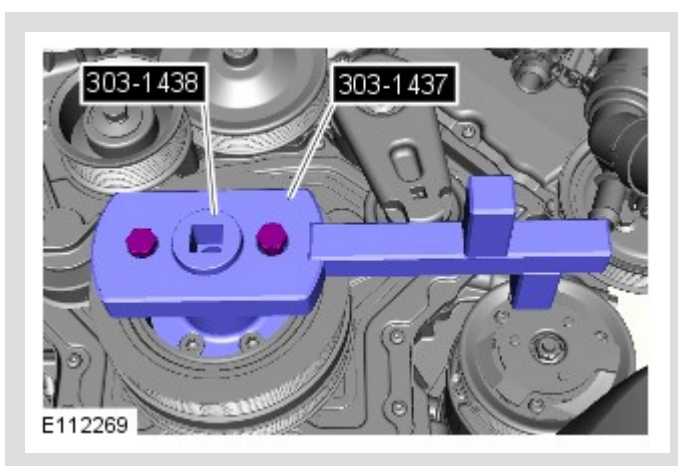
Remove the crankshaft damper bolt, make sure the bolt thread direction has been noted as described in step 7.

14.



- Install the special tool.
- Vehicles without Auto stop/start system.
Special Tool(s): [303-1448](#)
- Vehicles with Auto stop/start system.
Special Tool(s): [JLR-303-1304](#)

15.

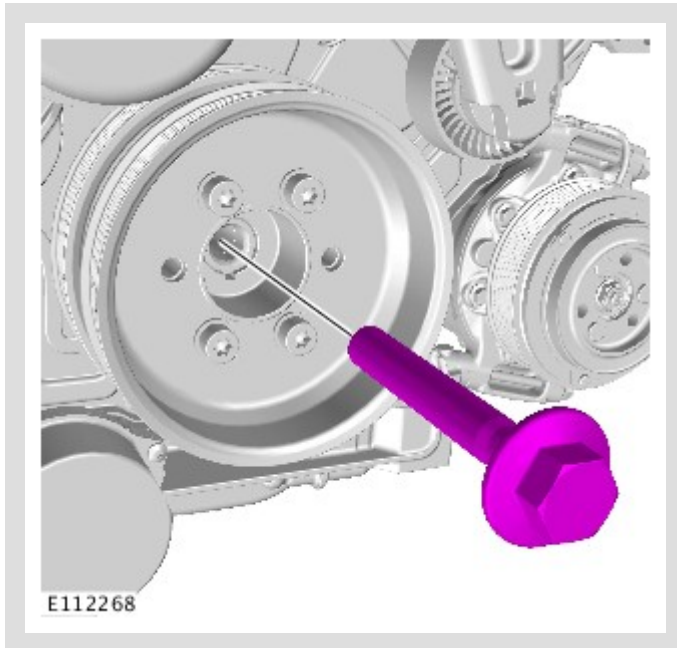


Remove the special tool.

16.

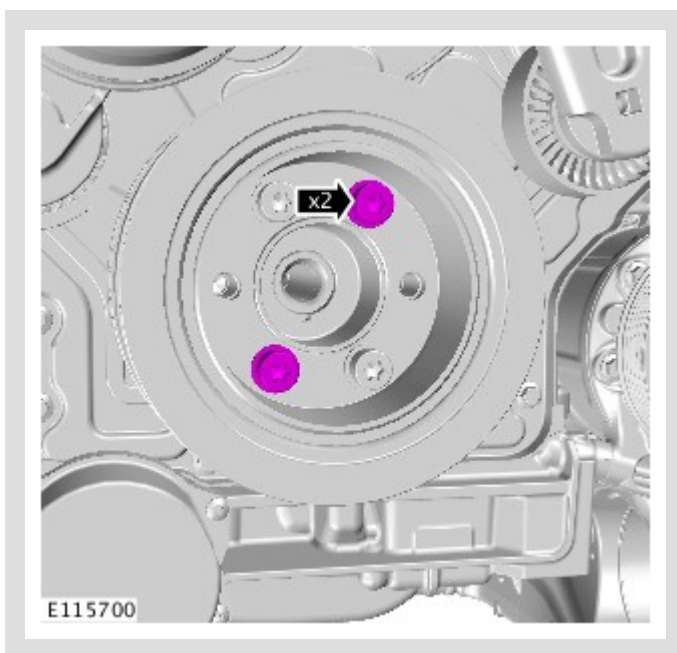
 NOTE:

Discard the bolt after removal.

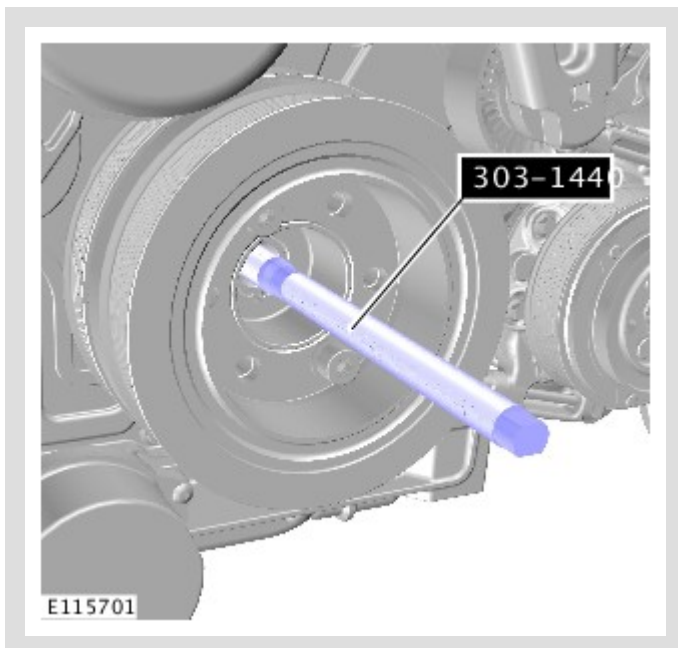


Remove the crankshaft damper bolt.

17.

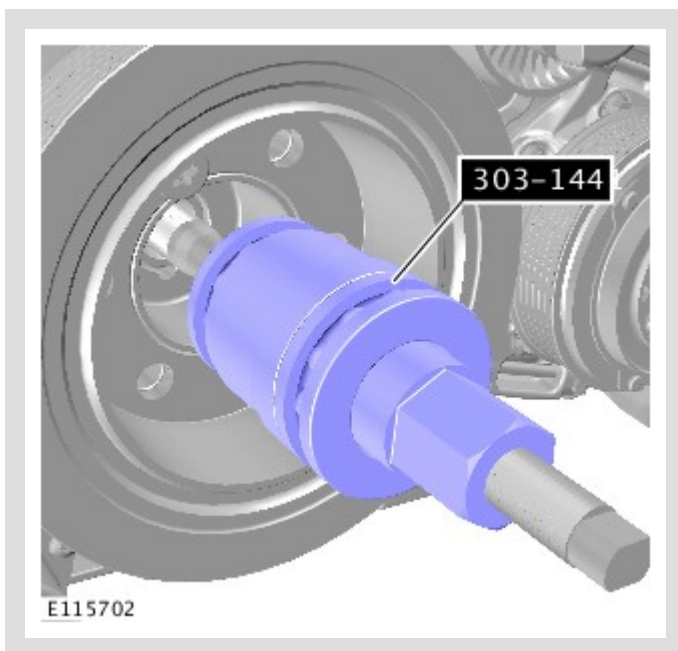


18.



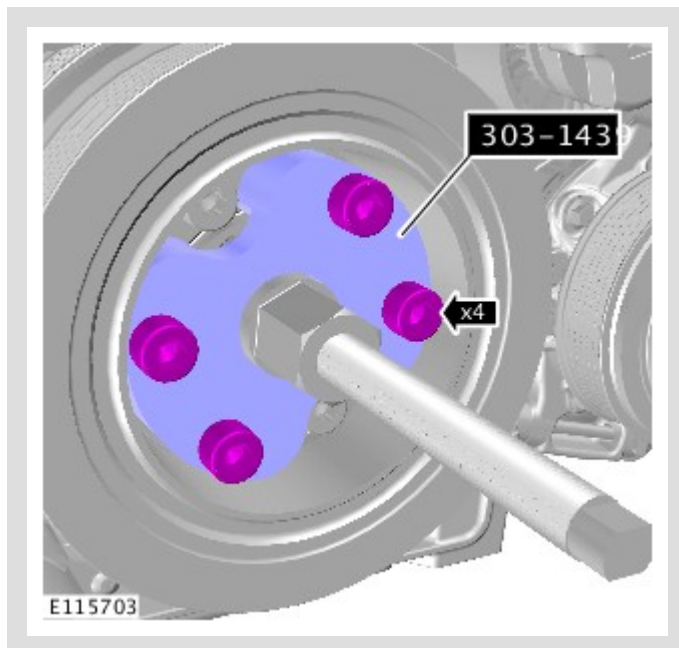
- Install the special tool.
- *Special Tool(s):* [303-1440](#)

19.



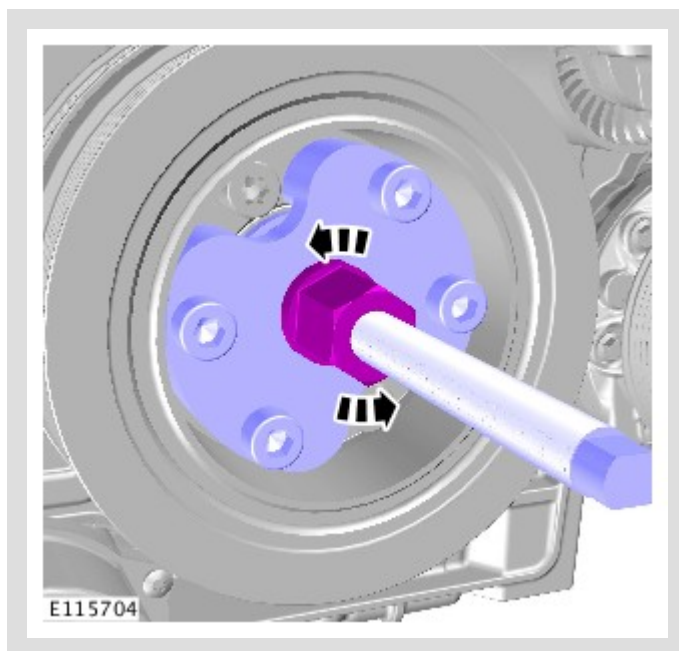
- Install the special tool.
- *Special Tool(s):* [303-1441](#)

20.



- Install the special tool.
- *Special Tool(s):* [303-1439](#)

21.



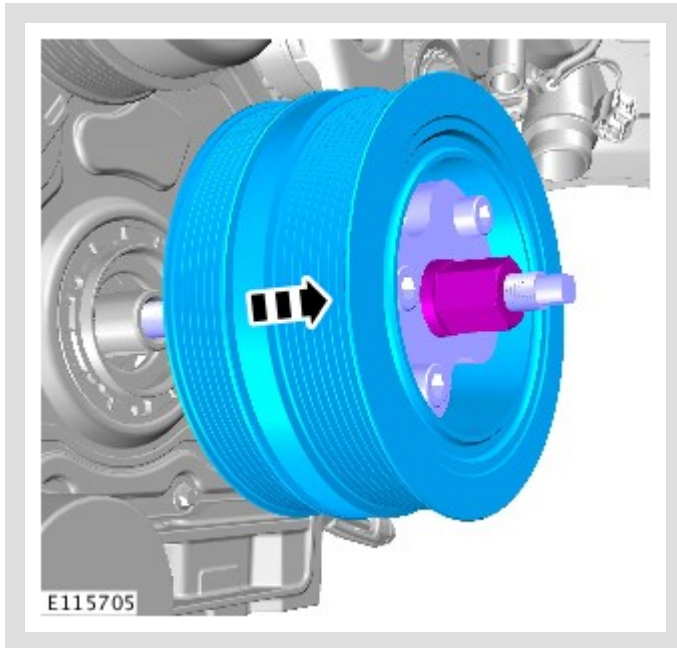
22.

⚠ CAUTION:

Discard the friction washer after removing the crankshaft pulley.

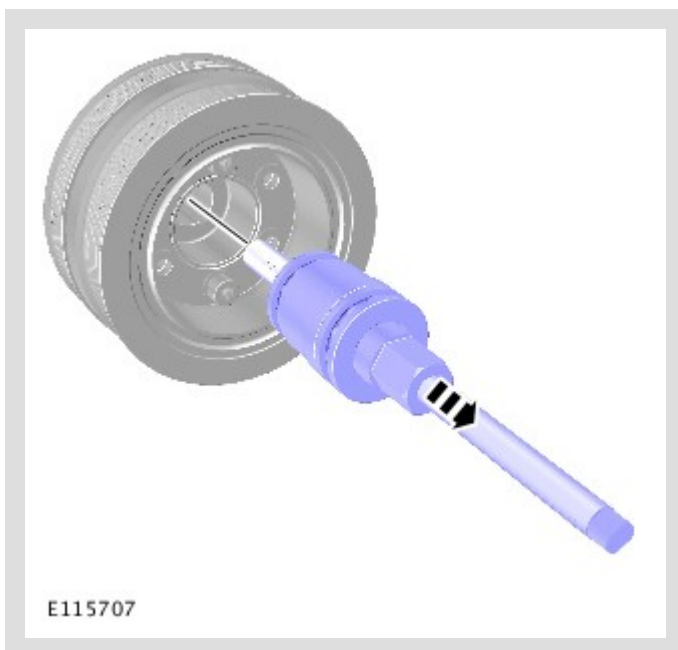
⚠ NOTE:

Make sure to clean the threads in the end of the crankshaft and that the crank nose is free of any foreign materials.



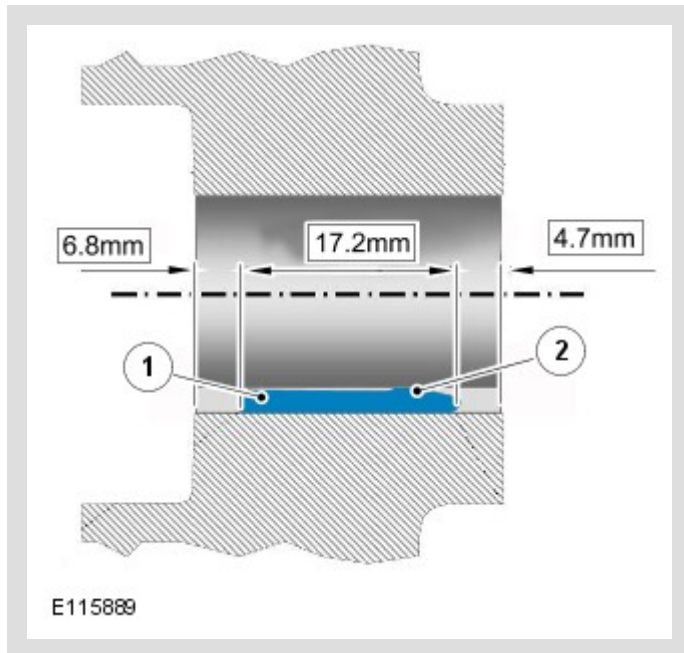
23.





INSTALLATION

1.



- Apply RTV sealant to the crankshaft pulley keyway.
- Make sure that the RTV sealant is applied in a 2mm diameter bead.
- Make sure that when the RTV sealant is applied that the RTV sealant is level with the top of the keyway.

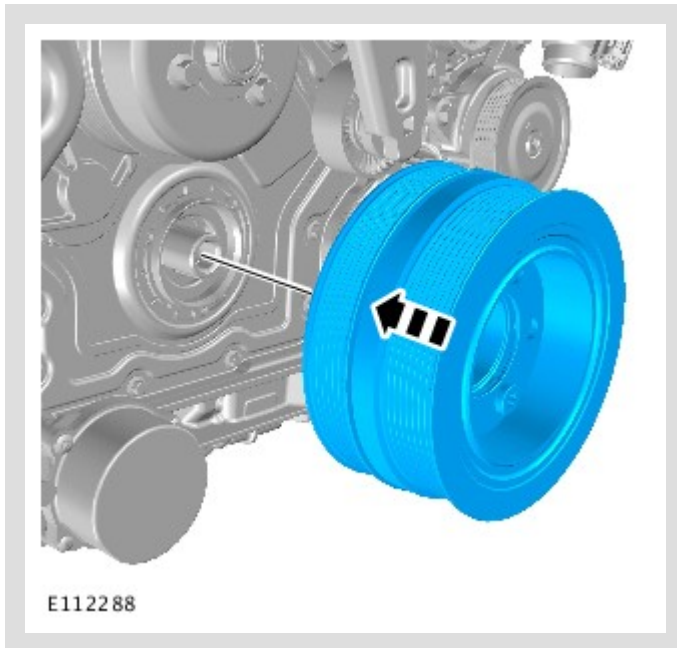
2.

⚠ CAUTION:

Install a new friction washer before installing the crankshaft pulley.

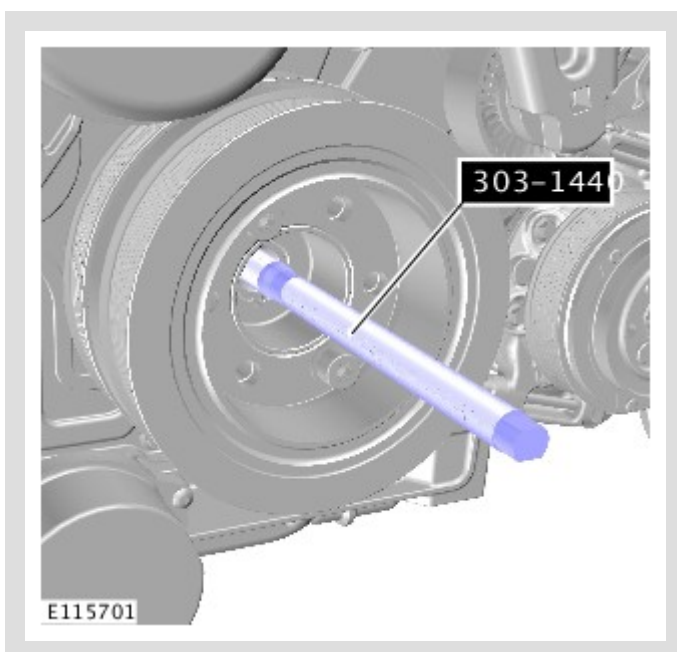
△ NOTES:

- Make sure to clean the threads in the end of the crankshaft and that the crank nose is free of any foreign materials.
- Skip to step 11 for engines fitted with early RH thread crankshaft bolt.



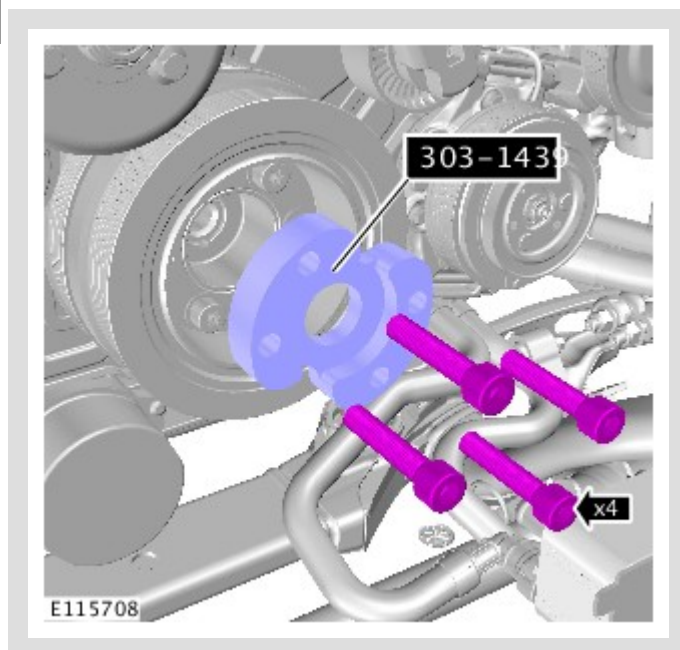
Renew Part: *Crankshaft pulley friction washer* Quantity: 1.

3.



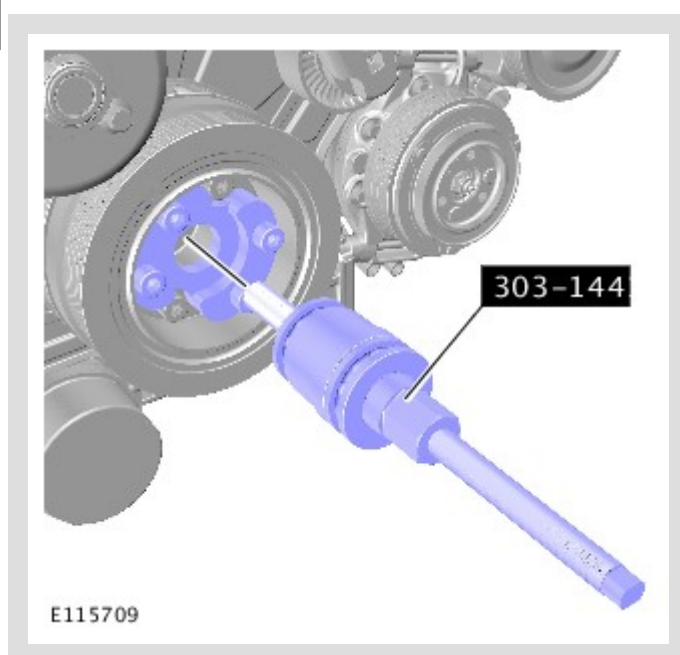
Install the special tool.

4.



Install the special tool.

5.

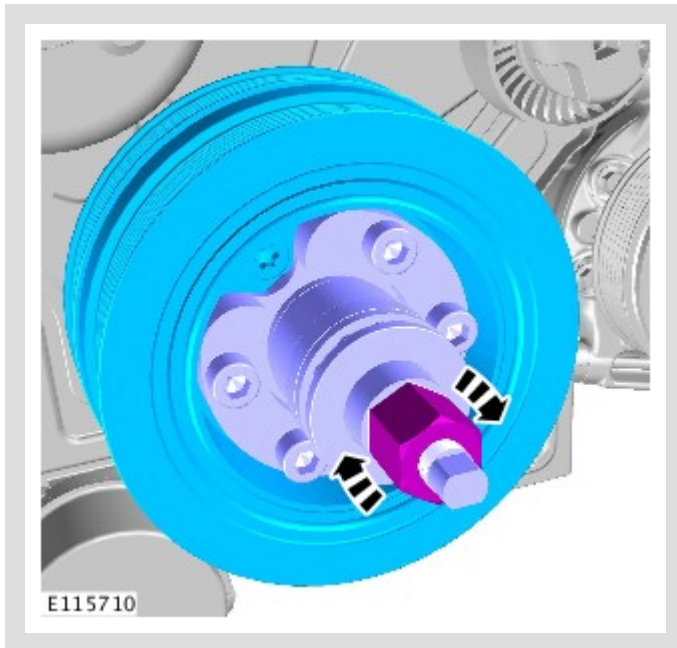


Install the special tool.

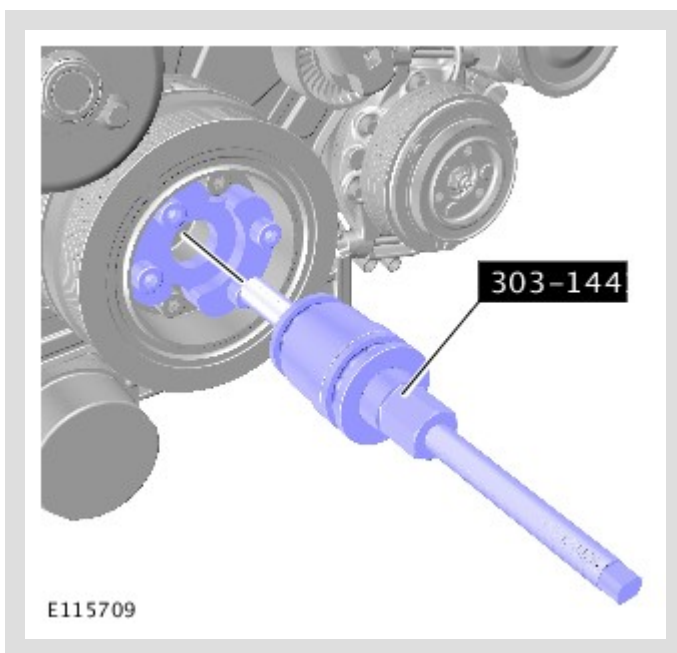
6.

⚠ CAUTION:

Rotate the crankshaft pulley installation tool until the pulley is fully located, do not over tighten.
Failure to do this may result in damage to the components.

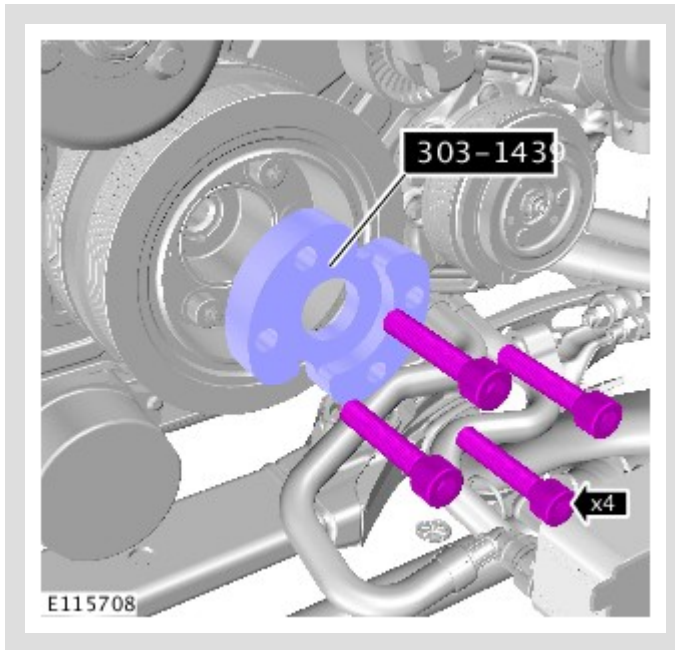


7.



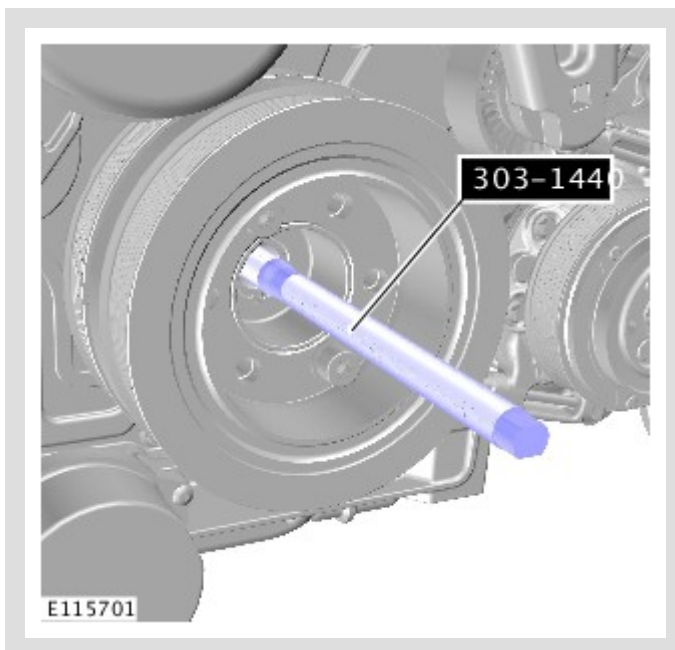
Remove the special tool.

8.



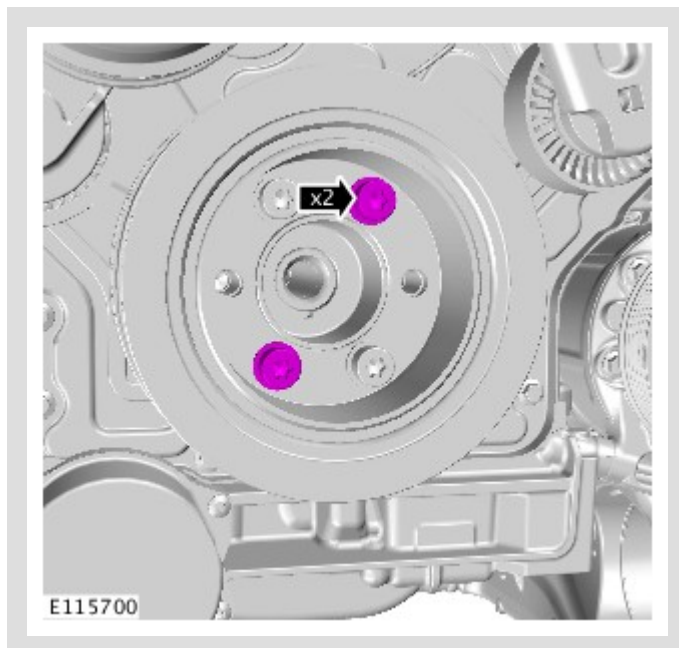
- Remove the special tool.

9.



Remove the special tool.

10.



 **NOTE:**

The original M10 bolts can be reused.

Clean the original crankshaft pulley bolts and apply Loctite 270 to the threads before installation.

- **Torque: 65 Nm**

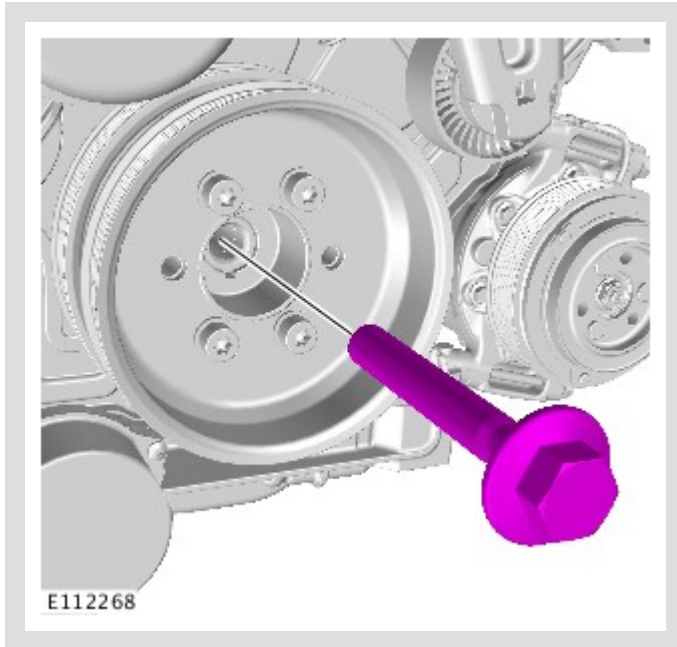
11.

WARNING:

Make sure that a new bolt is installed.

CAUTION:

Tighten the component finger tight first.



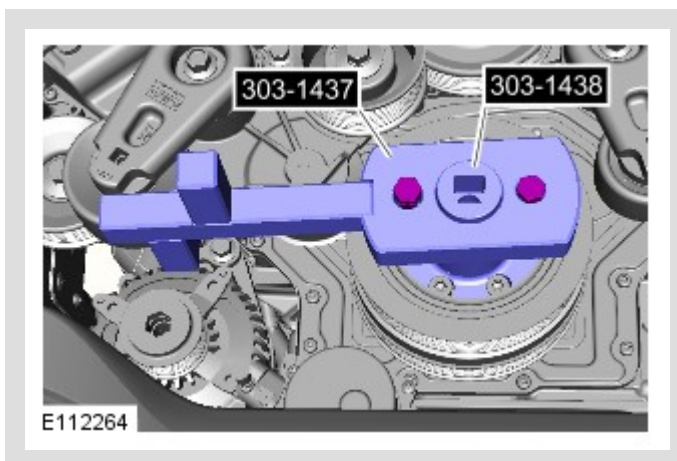
Install a new crankshaft damper bolt.

Renew Part: *Crankshaft pulley bolt* Quantity: 1.

12.

NOTE:

The illustration shows the tool positioning for LH threaded crankshaft damper bolts, RH threaded crankshaft bolts will require the tool position to be the opposite direction.

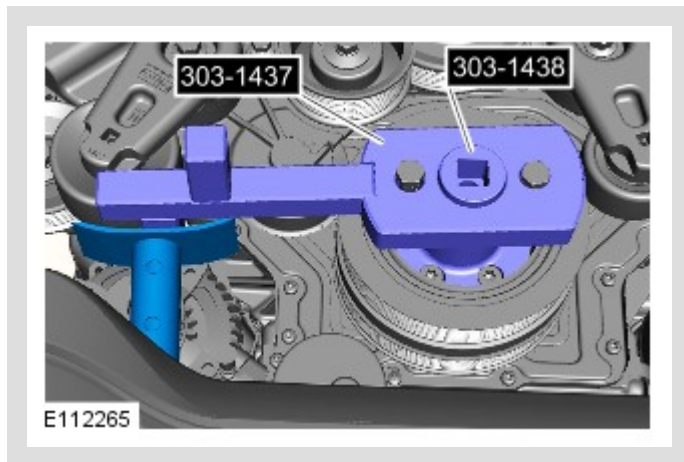


Torque: 25 Nm

13.

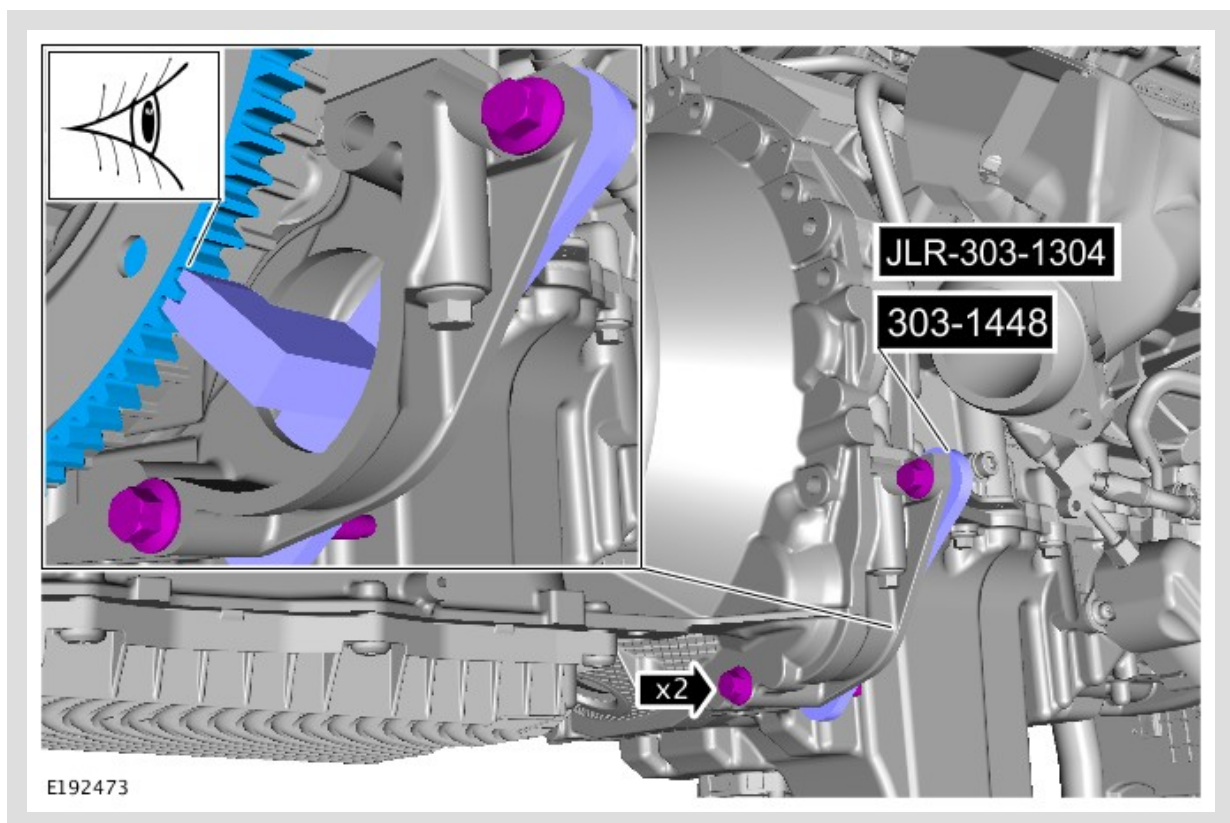
 **NOTE:**

The illustration shows the tool positioning for LH threaded crankshaft damper bolts, RH threaded crankshaft bolts will require the tool position to be the opposite direction.



Using a suitable stand, support the special tool.

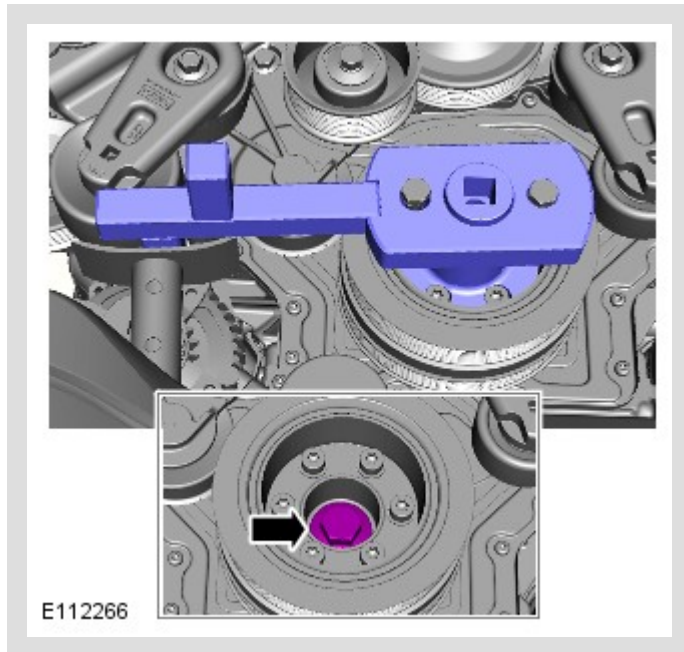
14.



- Remove the special tool.
- Vehicles without Auto stop/start system.
Special Tool(s): [303-1448](#)
- Vehicles with Auto stop/start system.
Special Tool(s): [JLR-303-1304](#)

 **NOTES:**

- The use of a torque multiplier capable of 600Nm will be required.
- The illustration shows the tool positioning for LH threaded crankshaft damper bolts, RH threaded crankshaft bolts will require the tool position to be the opposite direction.



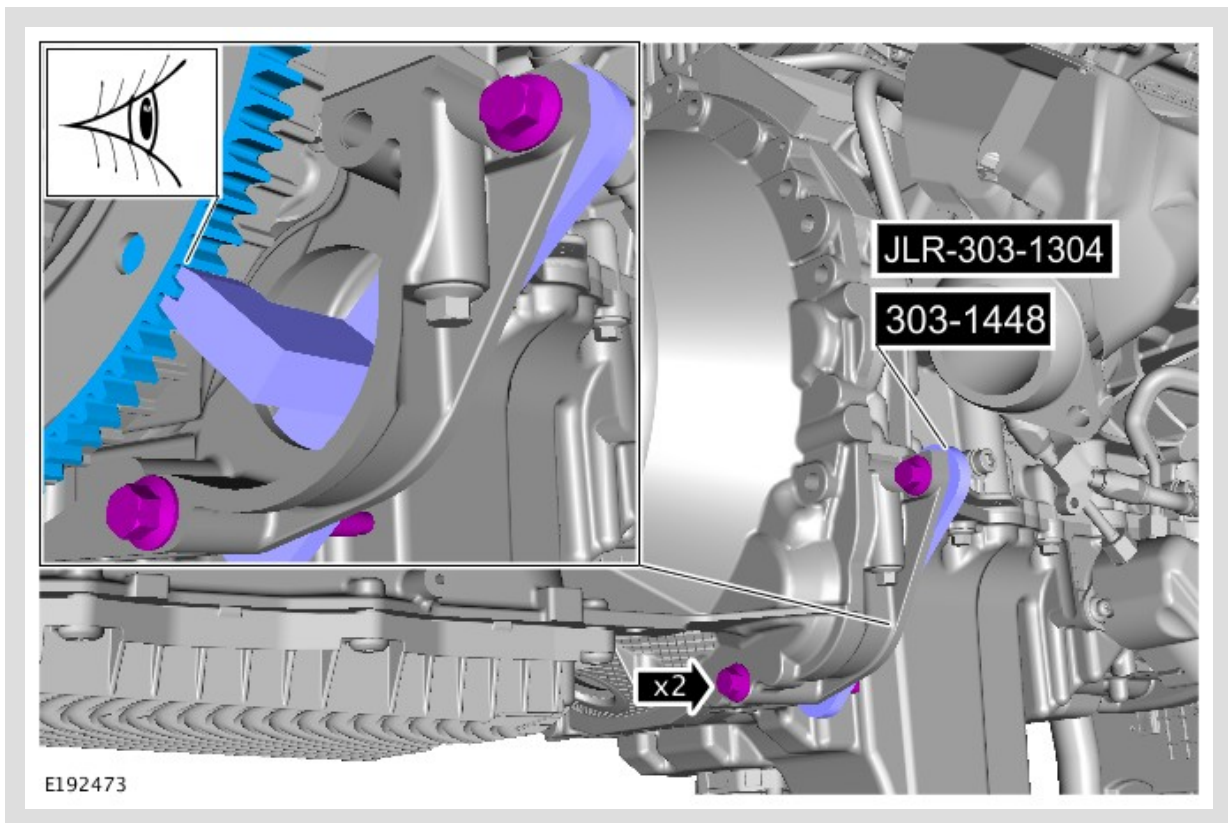
Tighten the crankshaft pulley bolt. Make sure that the socket is turned through 270 degrees not the torque wrench.

Torque

Stage1: **200 Nm**

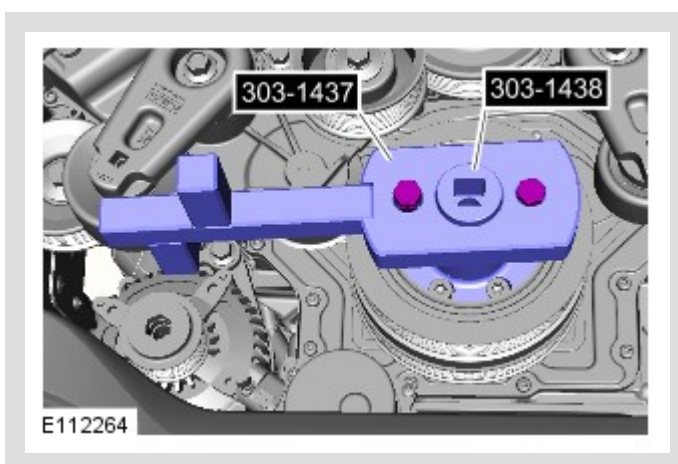
Stage2: **270°**

16.




- Install the special tool.
- Vehicles without Auto stop/start system.
Special Tool(s): [303-1448](#)
- Vehicles with Auto stop/start system.
Special Tool(s): [JLR-303-1304](#)

17.

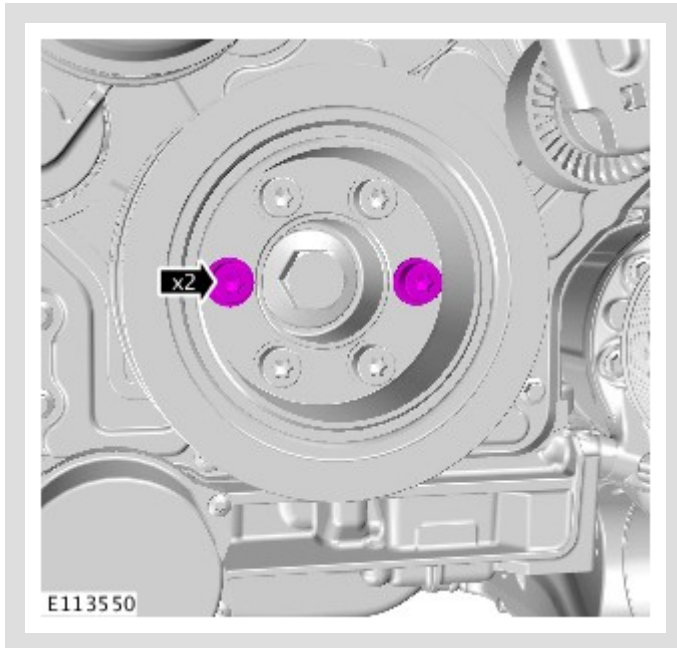


Remove the special tool and stand.

18.

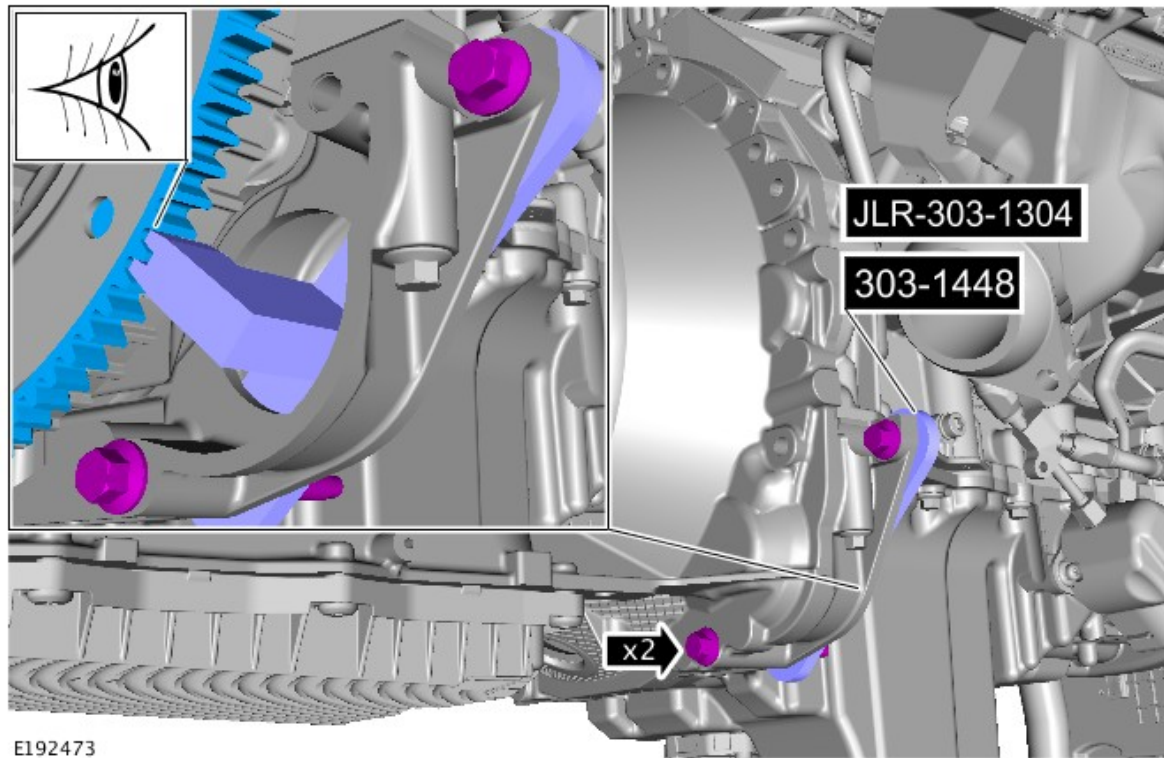
 **NOTE:**

The original M10 bolts can be reused.



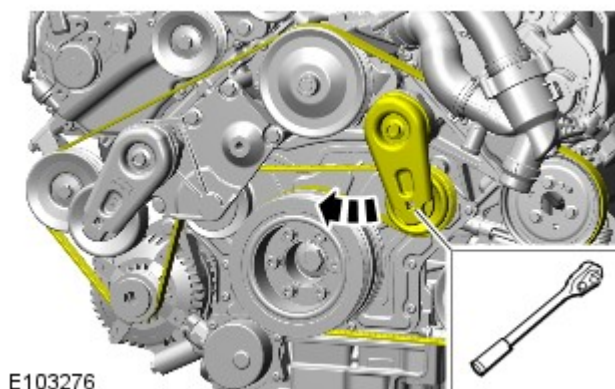
- Clean the original crankshaft pulley bolts and apply Loctite 270 to the threads before installation.
- *Torque:* **65 Nm**

19.

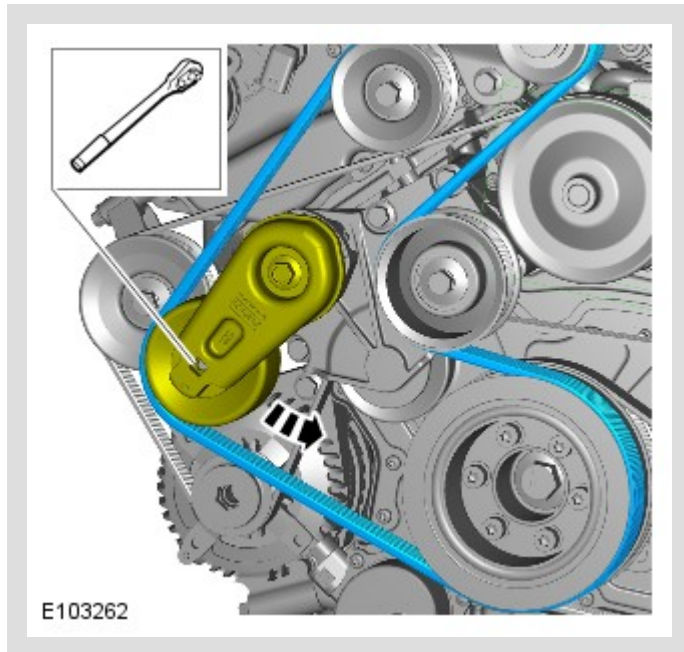


- Remove the special tool.
- Vehicles without Auto stop/start system.
Special Tool(s): [303-1448](#)
- Vehicles with Auto stop/start system.
Special Tool(s): [JLR-303-1304](#)

20.



21.



22. Install the Starter Motor.

Refer to: [Starter Motor](#) (303-06B Starting System - V8 N/A 5.0L Petrol/V8 S/C 5.0L Petrol, Removal and Installation).

23. Install the Radiator.

Refer to: [Radiator - V8 S/C 5.0L Petrol](#) (303-03A Engine Cooling - V8 N/A 5.0L Petrol/V8 S/C 5.0L Petrol, Removal and Installation).

24. Connect the battery ground cable.

Refer to: [Startup Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).