

2015.0 F-TYPE (X152), 303-01

ENGINE - V6 S/C 3.0L PETROL

## CRANKSHAFT PULLEY (G1851000)

### REMOVAL AND INSTALLATION

12.21.09

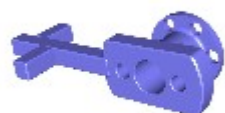
CRANKSHAFT  
DAMPER -  
RENEW

ALL  
DERIVATIVES

3.8

USED  
WITHINS

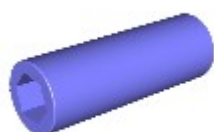
### SPECIAL TOOL(S)



E115256

**303-1437**

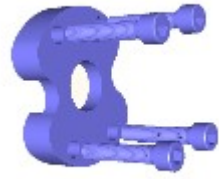
Crankshaft Damper  
Remover/Installer



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**

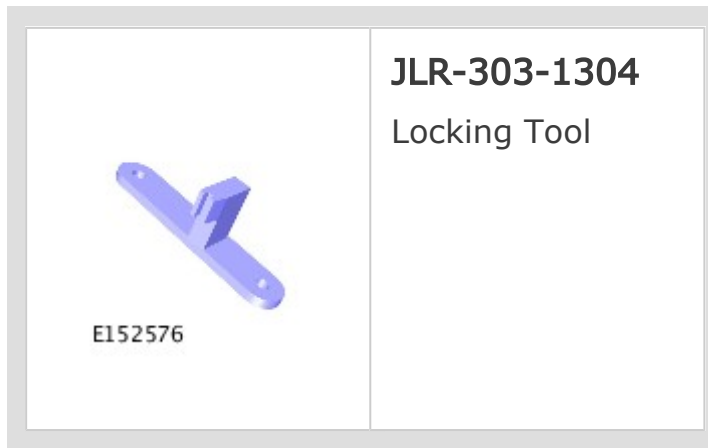
Crankshaft Damper  
Remover/Installer  
Body



E115266

**303-1448**

Locking Tool



## REMOVAL

### NOTES:

- Some illustrations may show the engine removed for clarity.
- Some variation in the illustrations may occur, but the essential information is always correct.

1. Disconnect the battery ground cable.  
Refer to: [Specifications](#) (414-01 Battery, Mounting and Cables, Specifications).

2. **WARNING:**

Make sure to support the vehicle with axle stands.

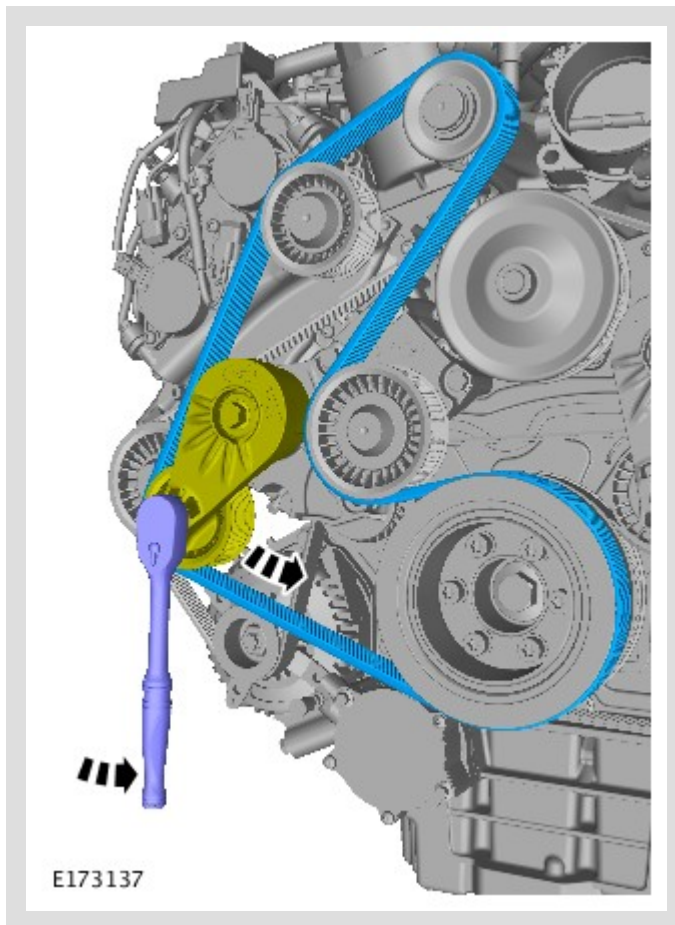
Raise and support the vehicle.

3. Remove the cooling fan.  
Refer to: [Cooling Fan \(303-03C, Removal and Installation\)](#).

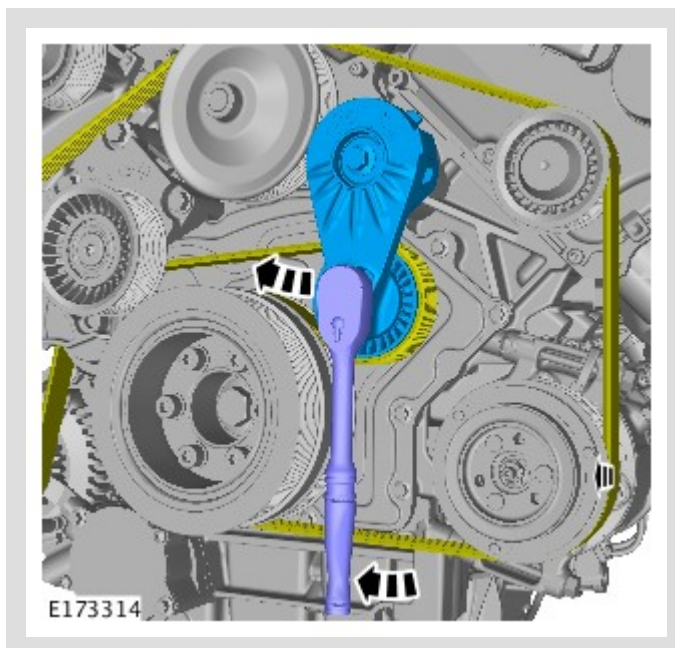
4. Remove the starter motor.

Refer to: Starter Motor (303-06C, Removal and Installation).

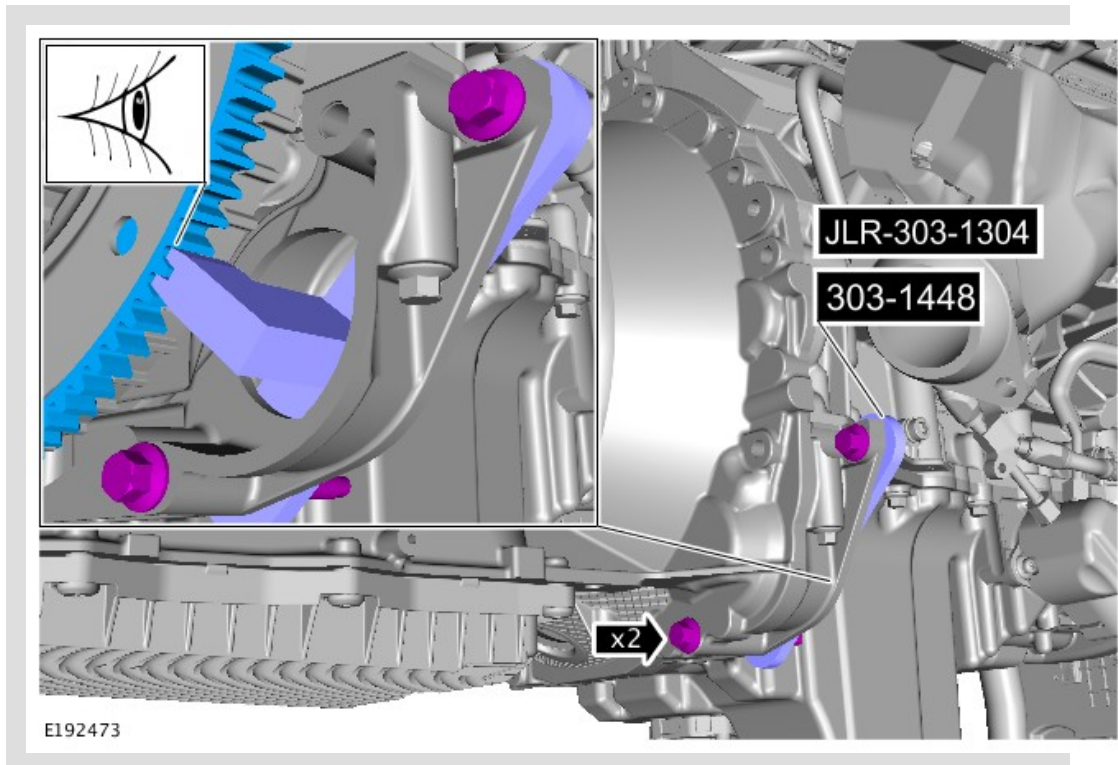
5.



6.



7.



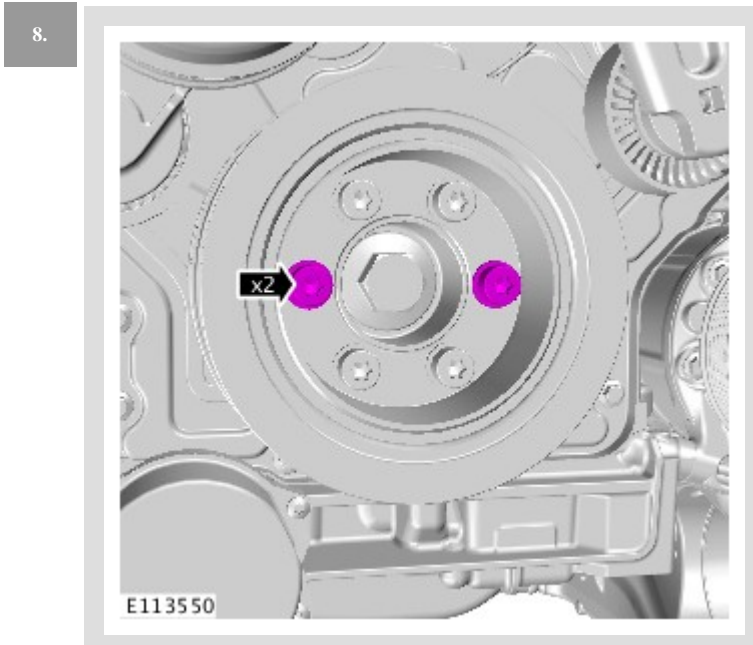
Install the special tool.

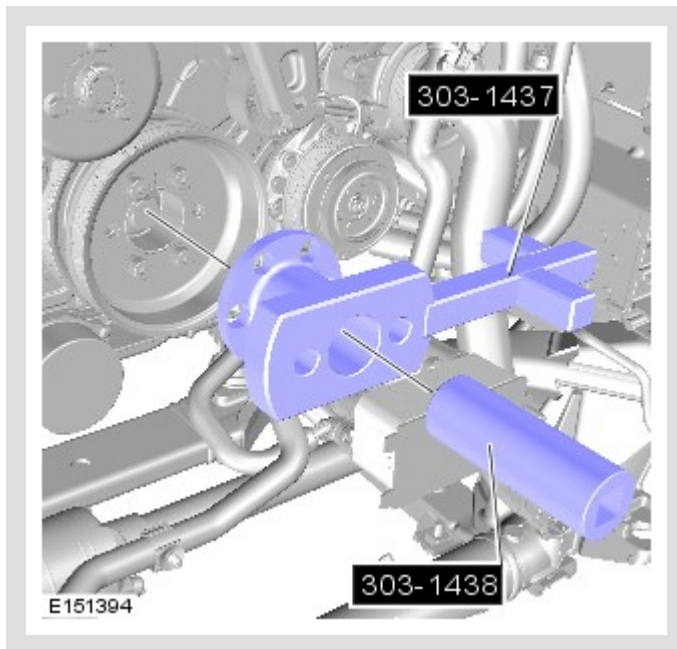
Vehicles without Auto stop/start system.

*Special Tool(s):* [303-1448](#)

Vehicles with Auto stop/start system.

*Special Tool(s):* [JLR-303-1304](#)



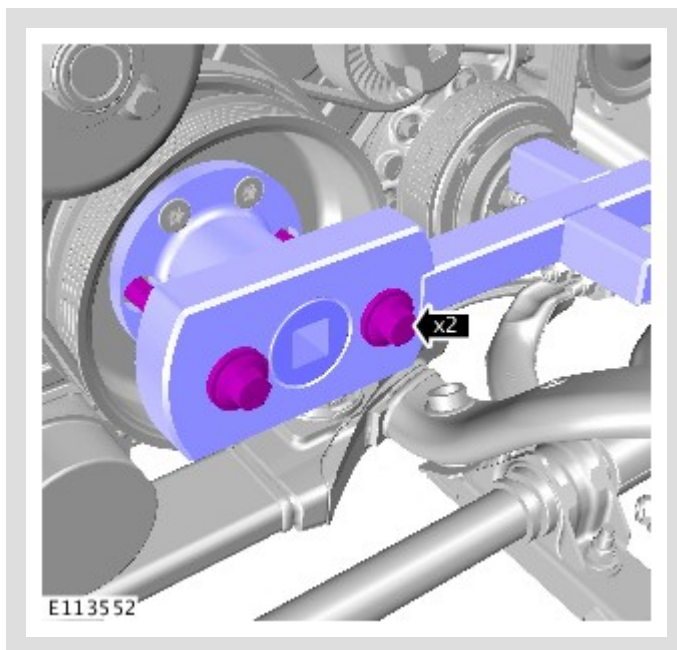


Install the special tools.

*Special Tool(s):* [303-1437](#)

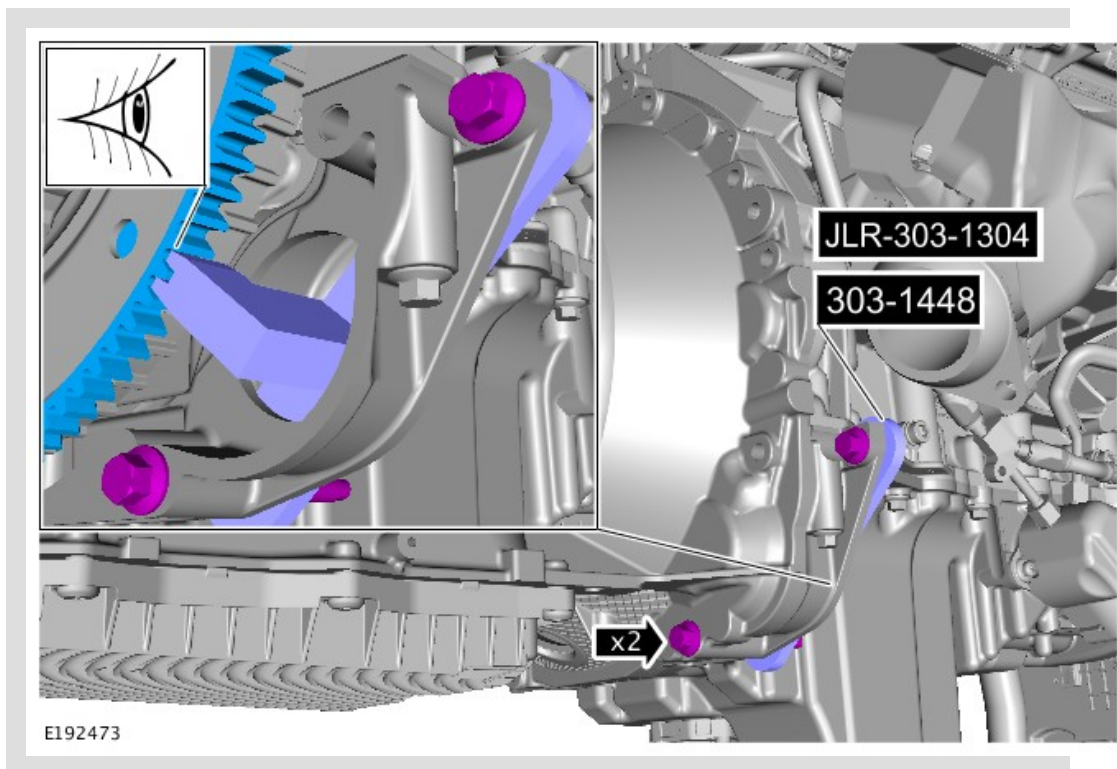
*Special Tool(s):* [303-1438](#)

10.



**Torque: 25 Nm**

11.



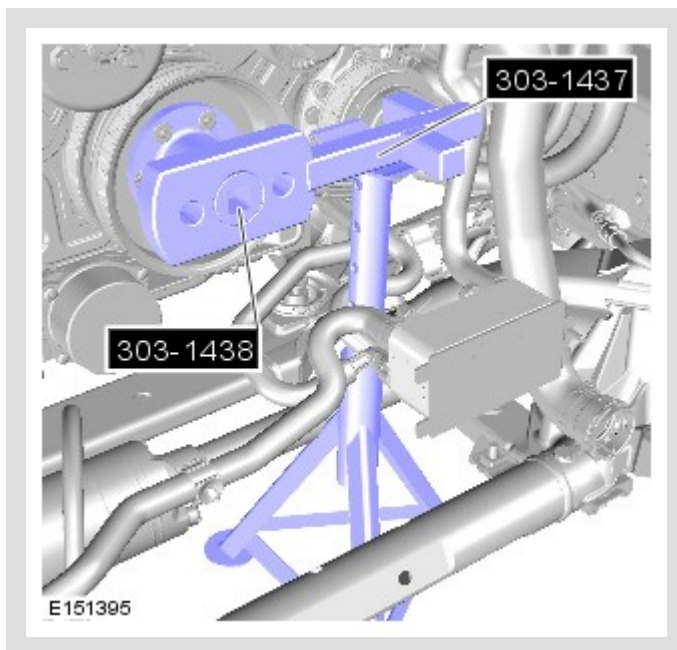
Remove the special tool.

Vehicles without Auto stop/start system.

*Special Tool(s):* [303-1448](#)

Vehicles with Auto stop/start system.

*Special Tool(s):* [JLR-303-1304](#)



Using a suitable vehicle stand, support the special tools.

*Special Tool(s):* [303-1437](#)

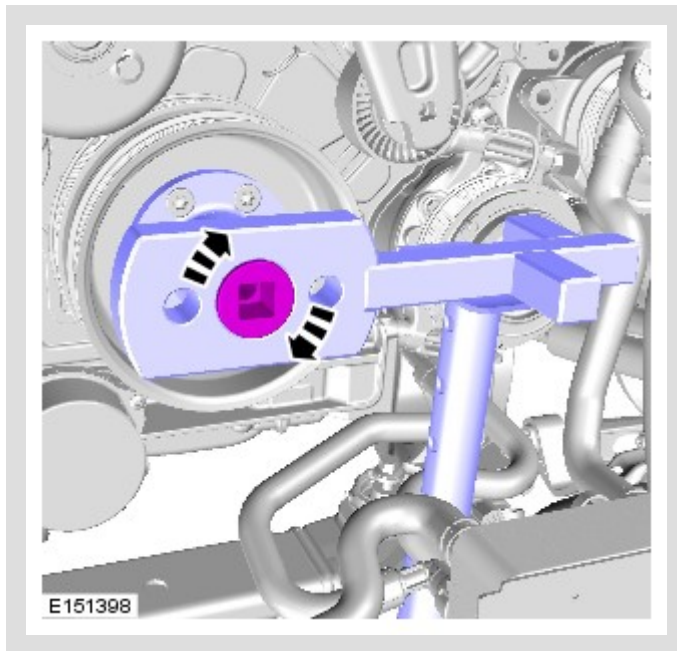
*Special Tool(s):* [303-1438](#)

13.

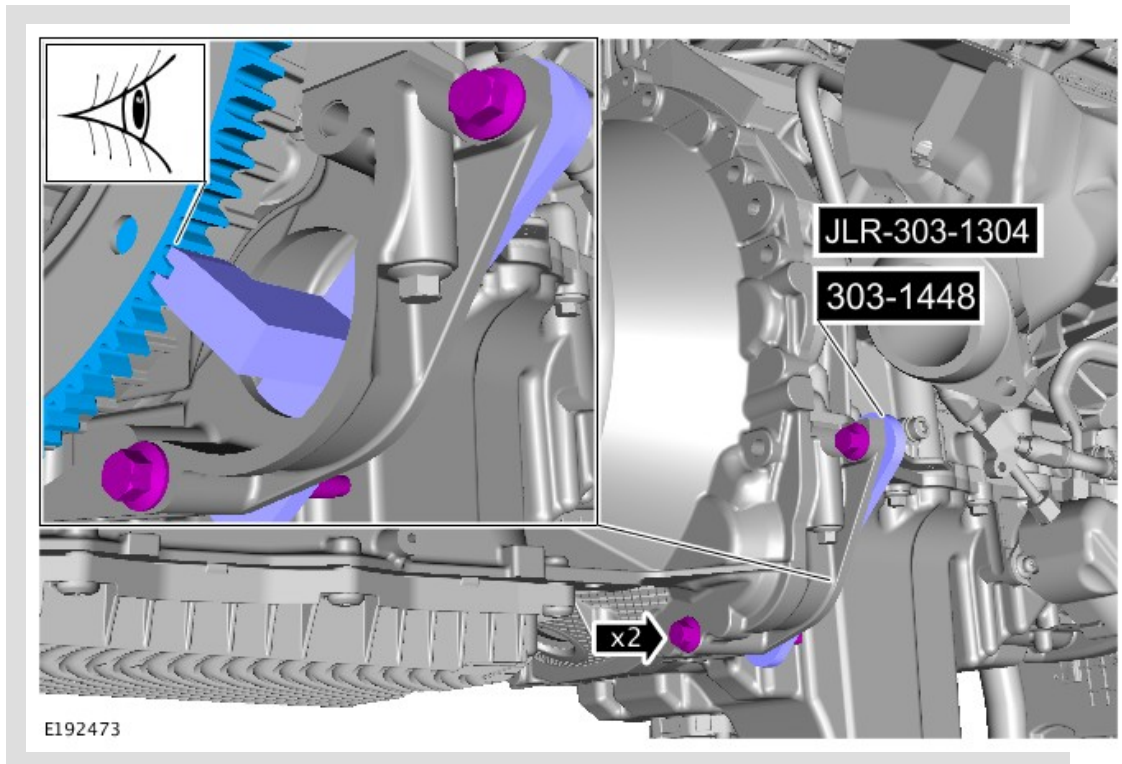
 **NOTE:**

The crankshaft pulley bolt will be very tight.





14.



Install the special tool.

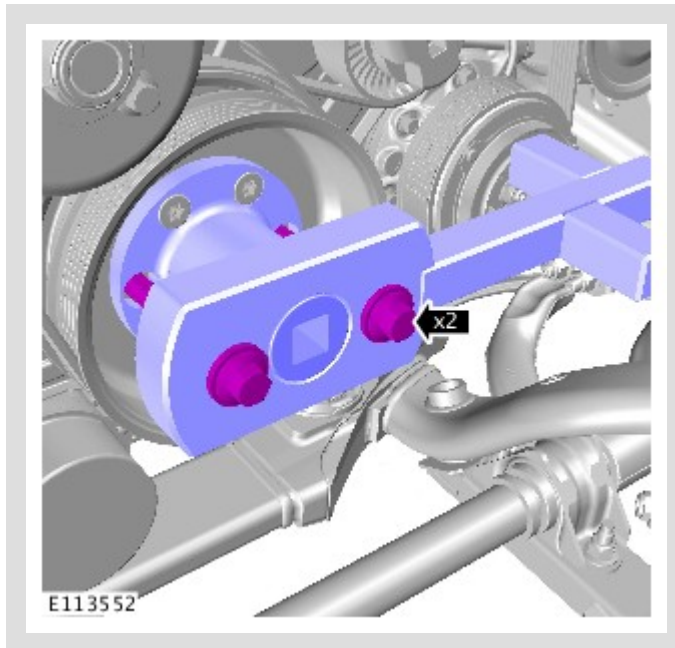
Vehicles without Auto stop/start system.

*Special Tool(s):* [303-1448](#)

Vehicles with Auto stop/start system.

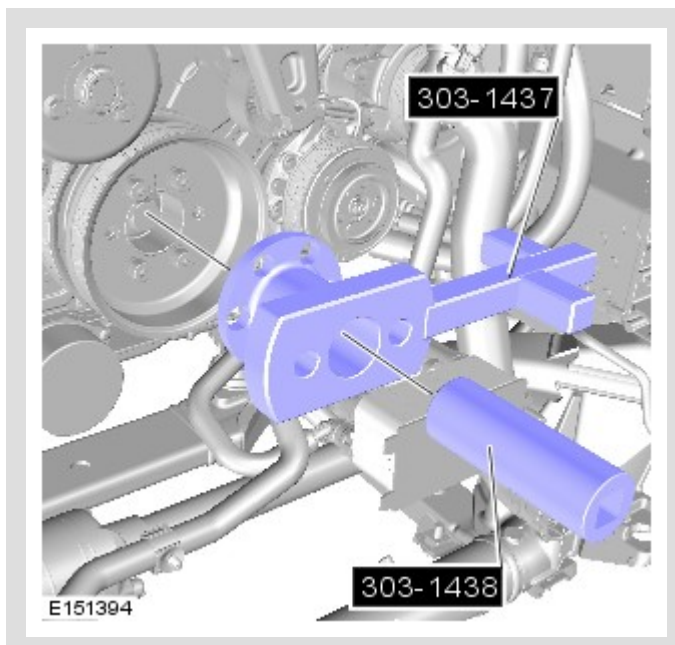
*Special Tool(s):* [JLR-303-1304](#)

15.



Remove the two bolts.

16.



Remove the special tools.

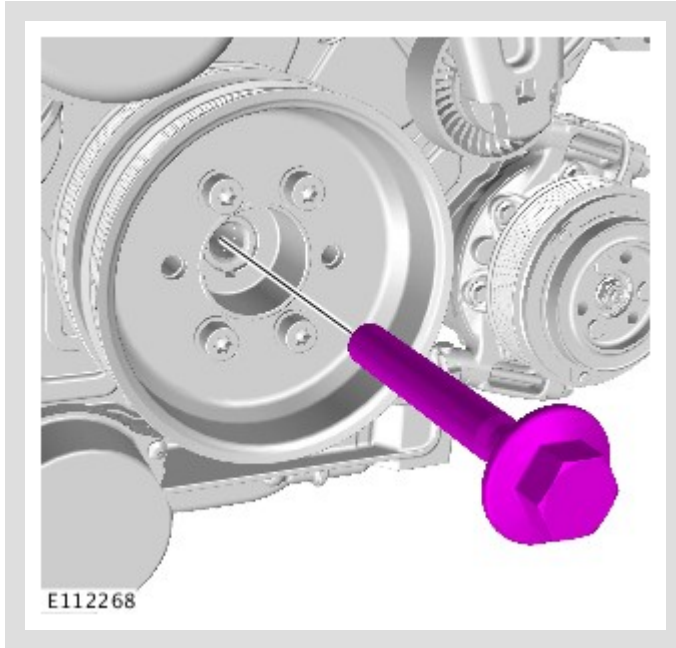
*Special Tool(s):* [303-1437](#)

*Special Tool(s):* [303-1438](#)

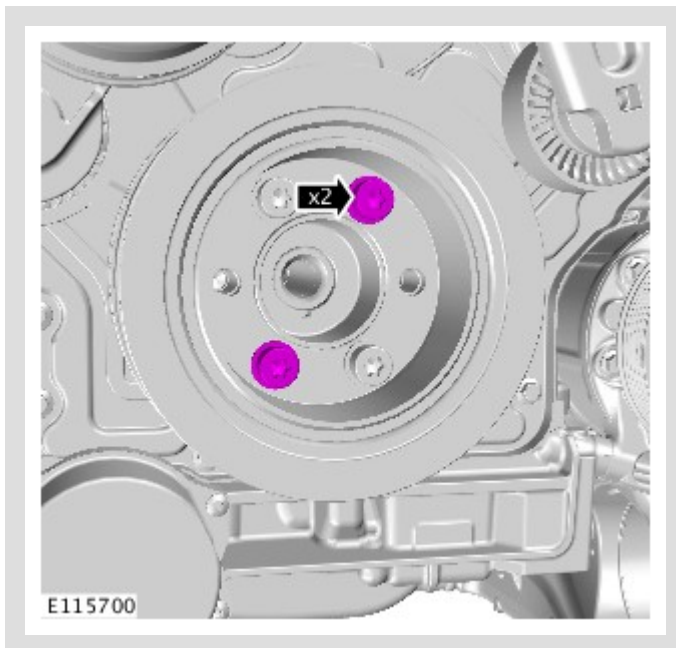
17.

**⚠ CAUTION:**

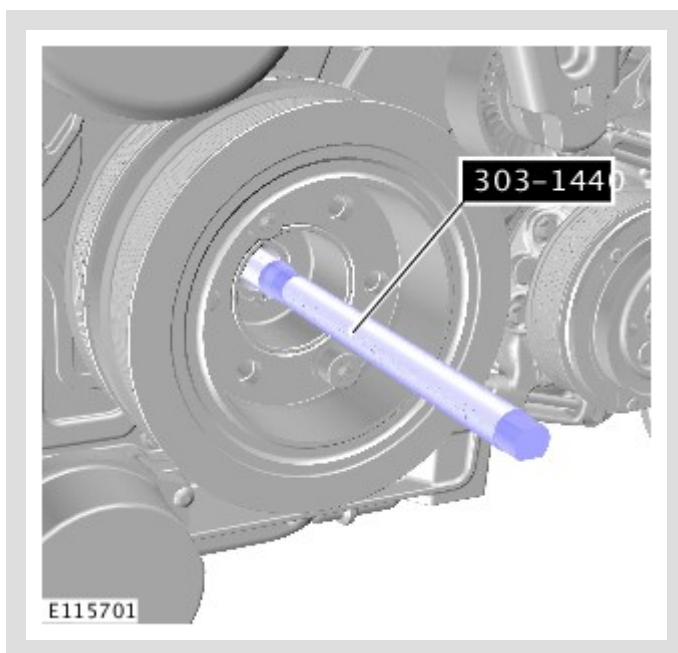
Discard the bolt.



18.



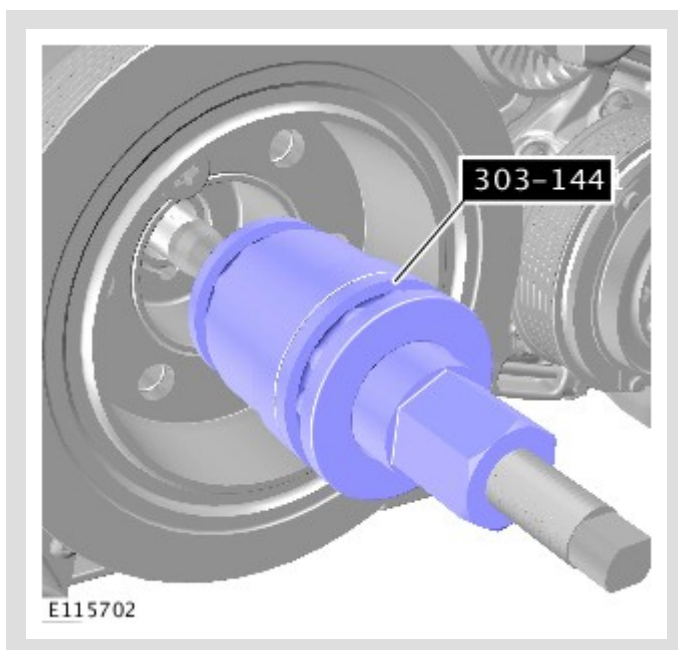
19.



Install the special tool.

*Special Tool(s):* [303-1440](#)

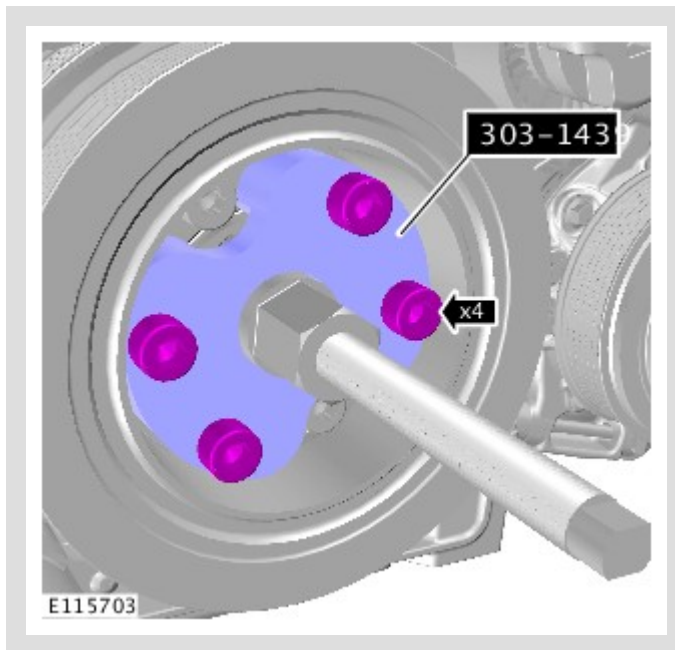
20.



Install the special tool.

*Special Tool(s):* [303-1441](#)

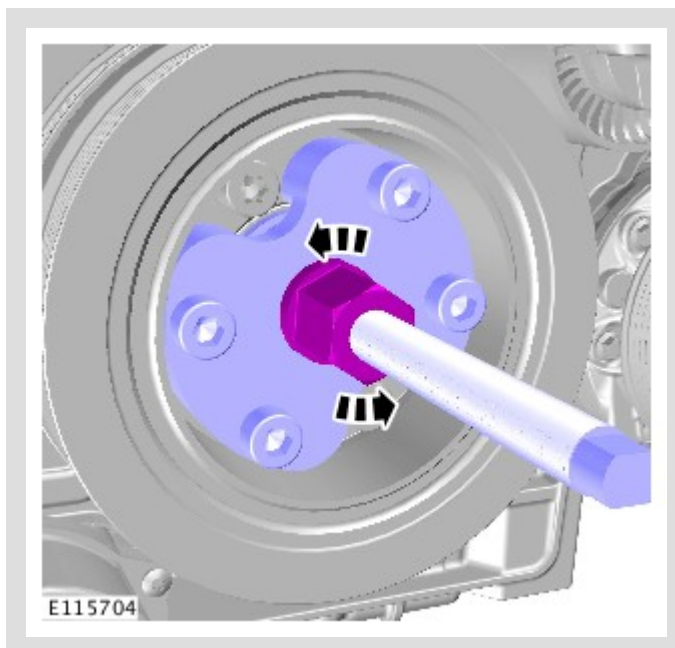
21.



Install the special tool.

*Special Tool(s):* [303-1439](#)


22.



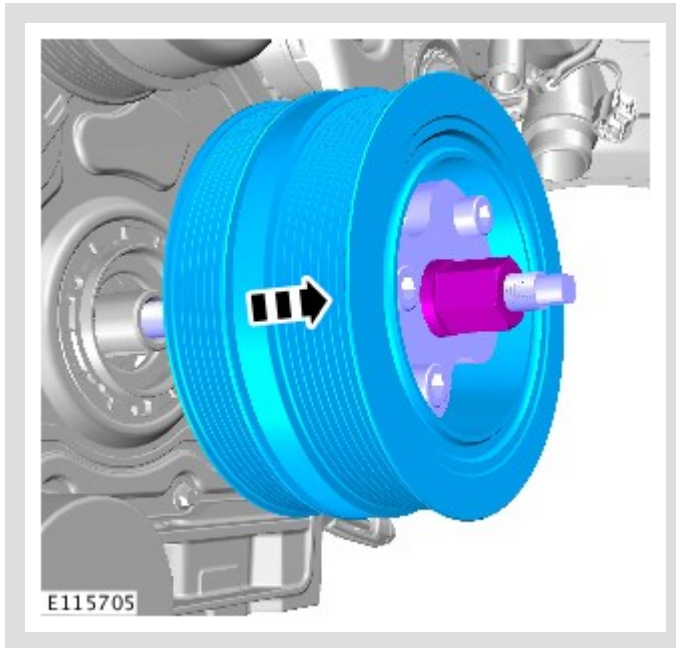
23.

**⚠ CAUTION:**

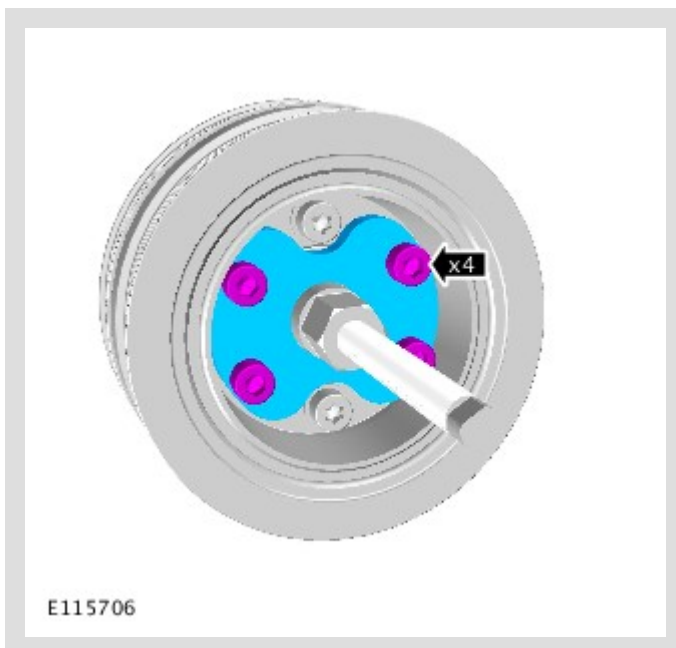
Discard the friction washer after removing the crankshaft pulley.

 NOTE:

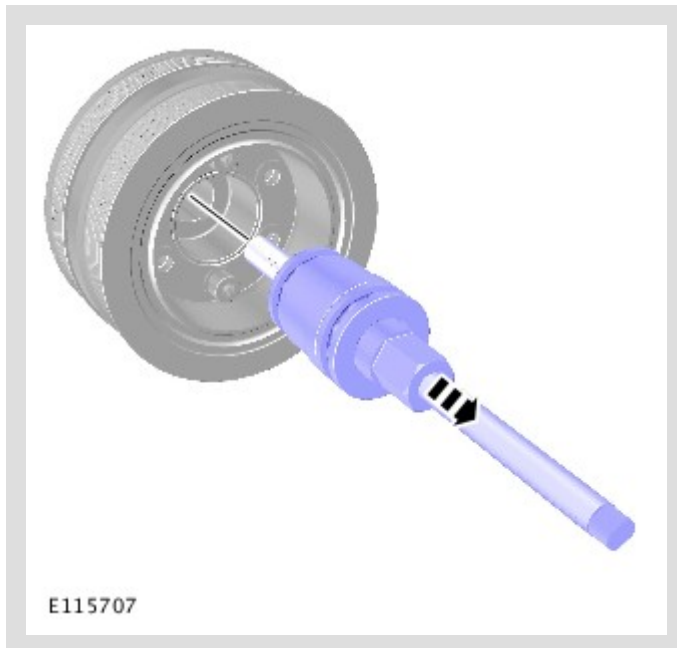
Make sure to clean the threads in the end of the crankshaft and that the crank nose is free of any foreign materials.



24.

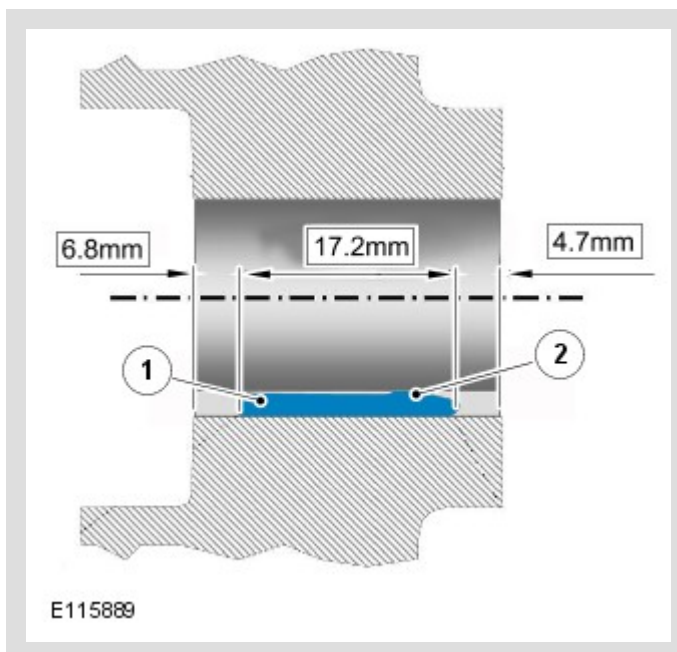


25.



## INSTALLATION

1.



1. Apply RTV sealant to the crankshaft pulley keyway.

1. Make sure that the RTV sealant is applied in a 2mm diameter bead.

1. Make sure that when the RTV sealant is applied that the RTV sealant is level with the top of the keyway.

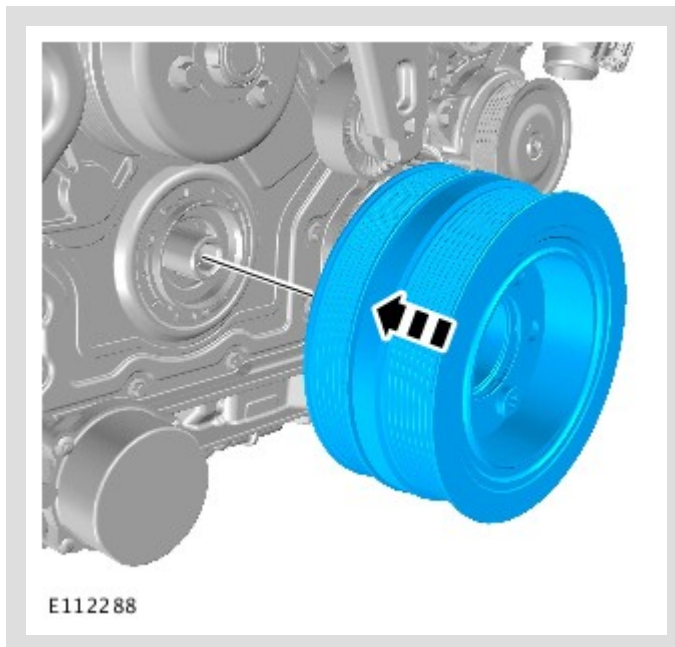
2.

**⚠ CAUTION:**

Install a new friction washer before installing the crankshaft pulley.

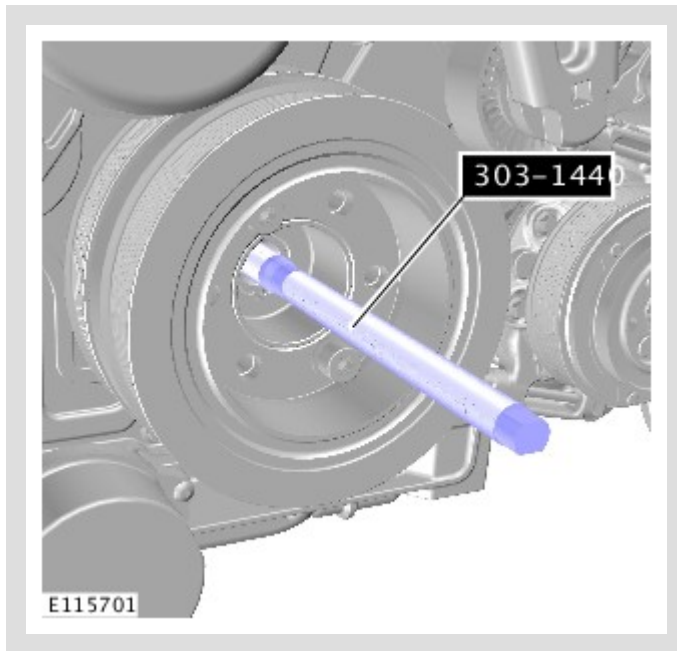
**△ NOTE:**

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



3.

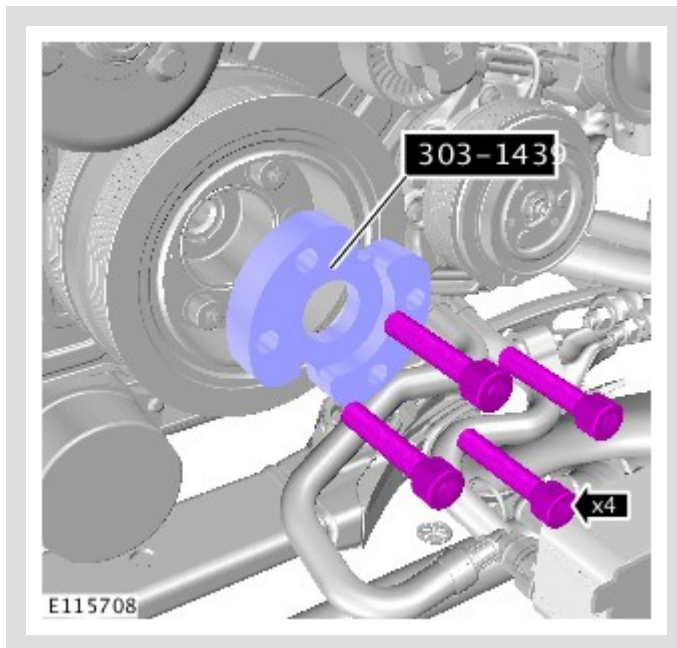




Install the special tool.

*Special Tool(s):* 303-1440

4.

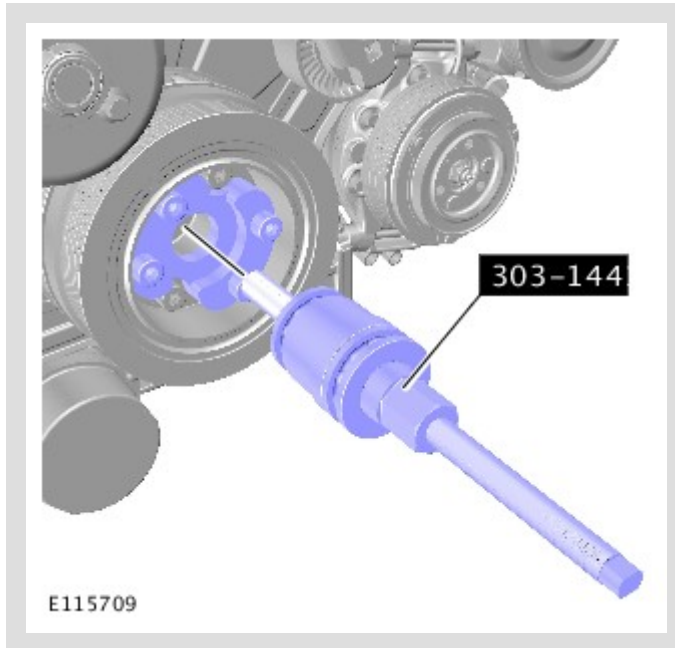


Install the special tool.

*Special Tool(s):* 303-1439

*Torque:* 25 Nm

5.



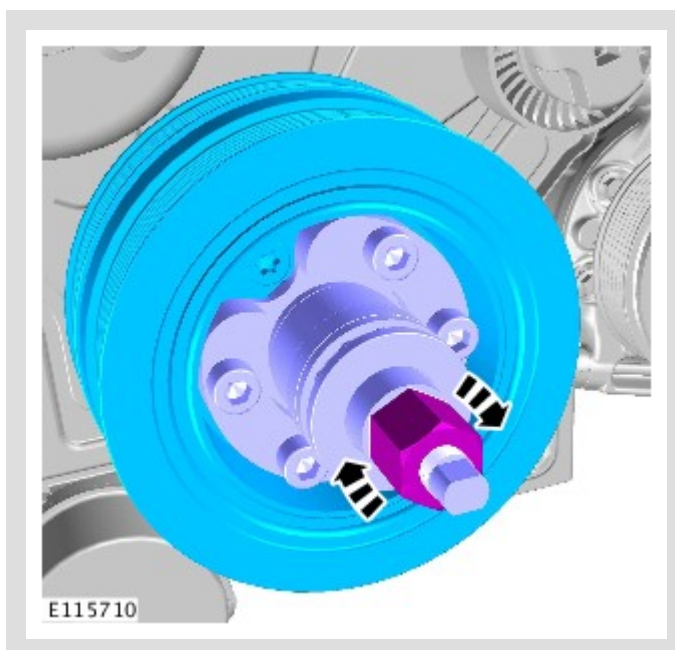
Install the special tool.

*Special Tool(s):* [303-1441](#)

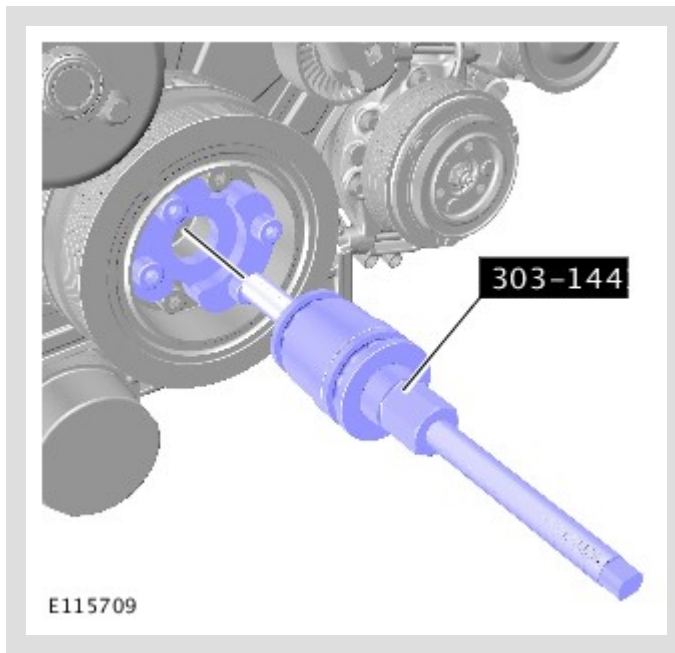
6.

**⚠ 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.

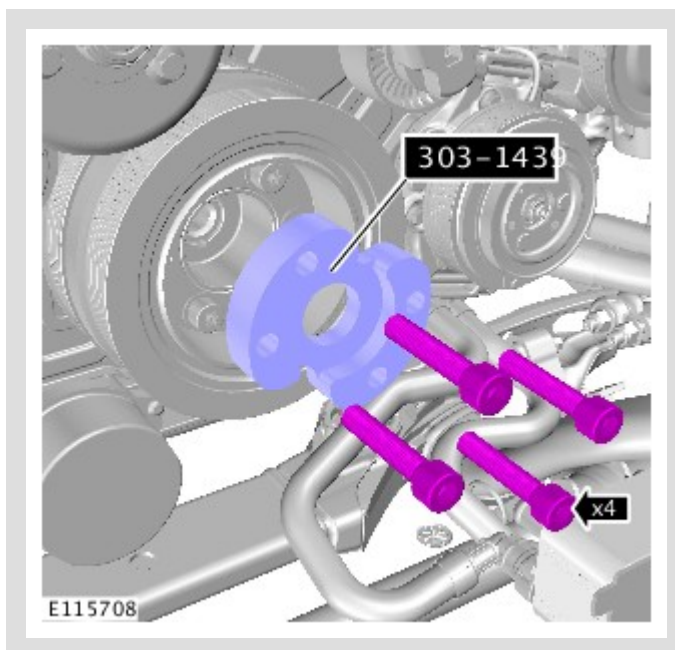


7.



Remove the special tool.

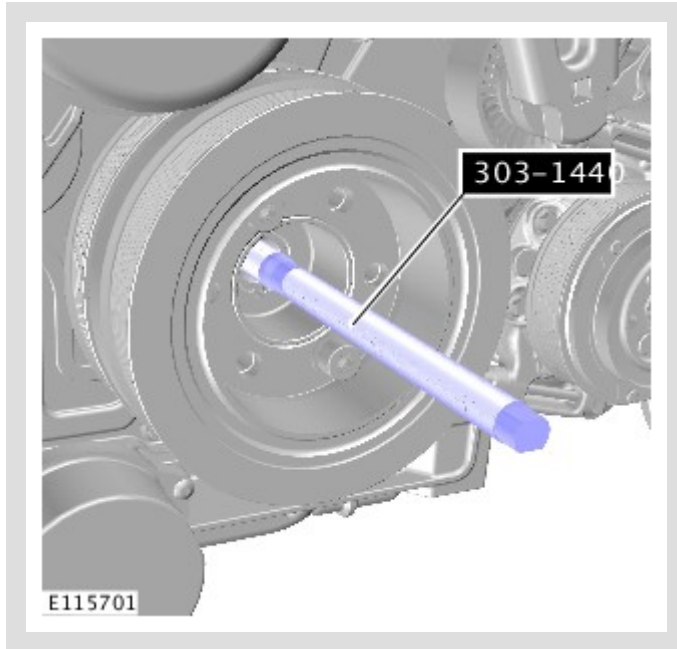
8.



Remove the special tool.

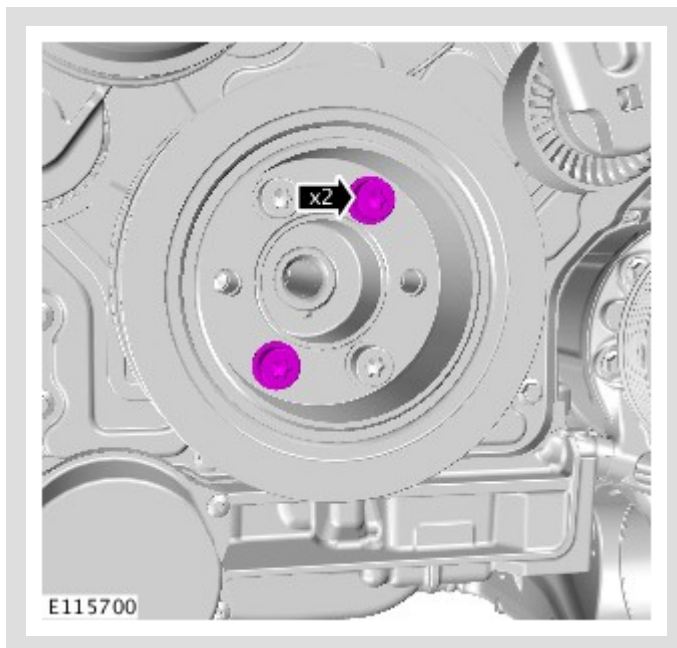
*Special Tool(s):* [303-1439](#)

9.



Remove the special tool.

10.



ⓘ CAUTION:

Make sure that a new bolts are installed.

Apply loctite 270 to the thread of the bolts.

*Torque: 65 Nm*

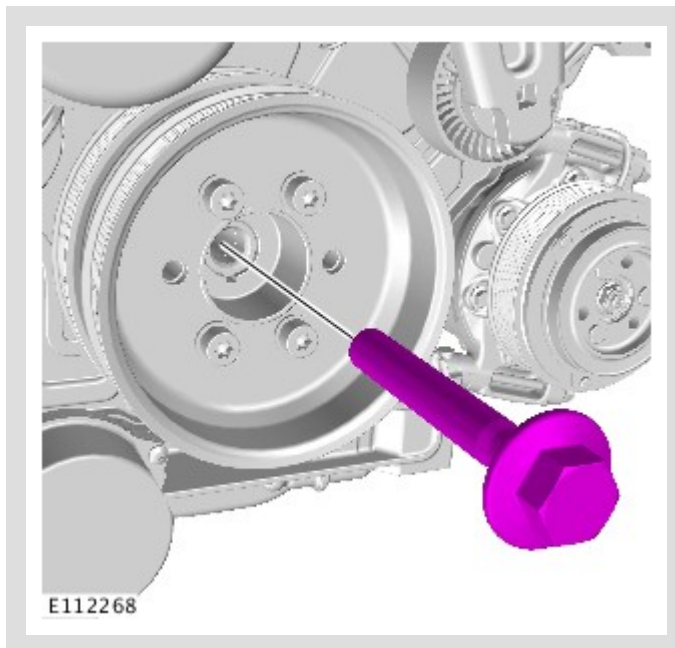
11.

**⚠ WARNING:**

Make sure that a new bolt is installed.

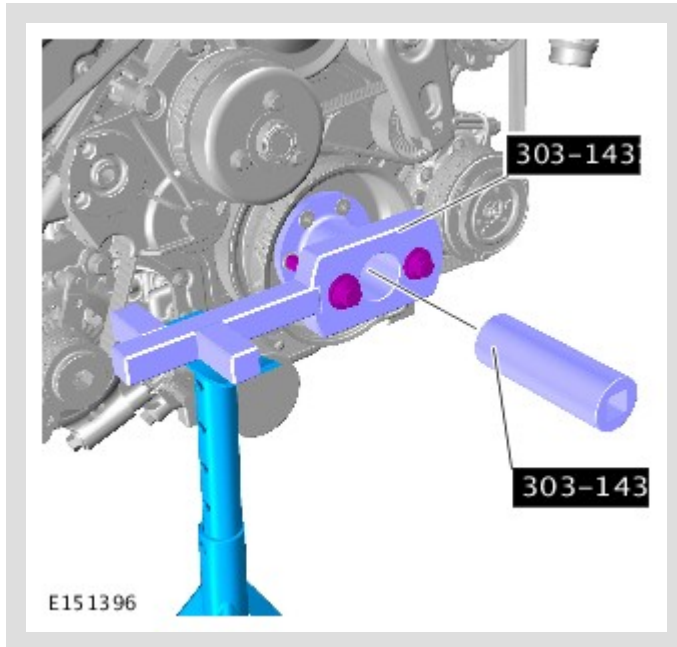
**⚠ CAUTION:**

Tighten the component finger tight first.



Install the crankshaft pulley bolt.

12.

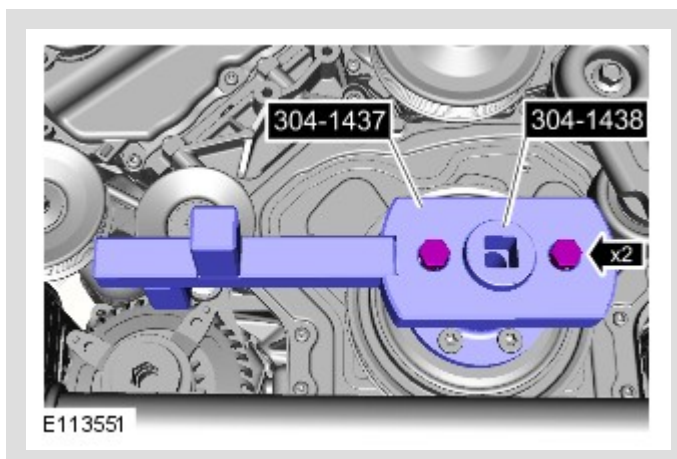


Install the special tools.

*Special Tool(s):* 303-1437

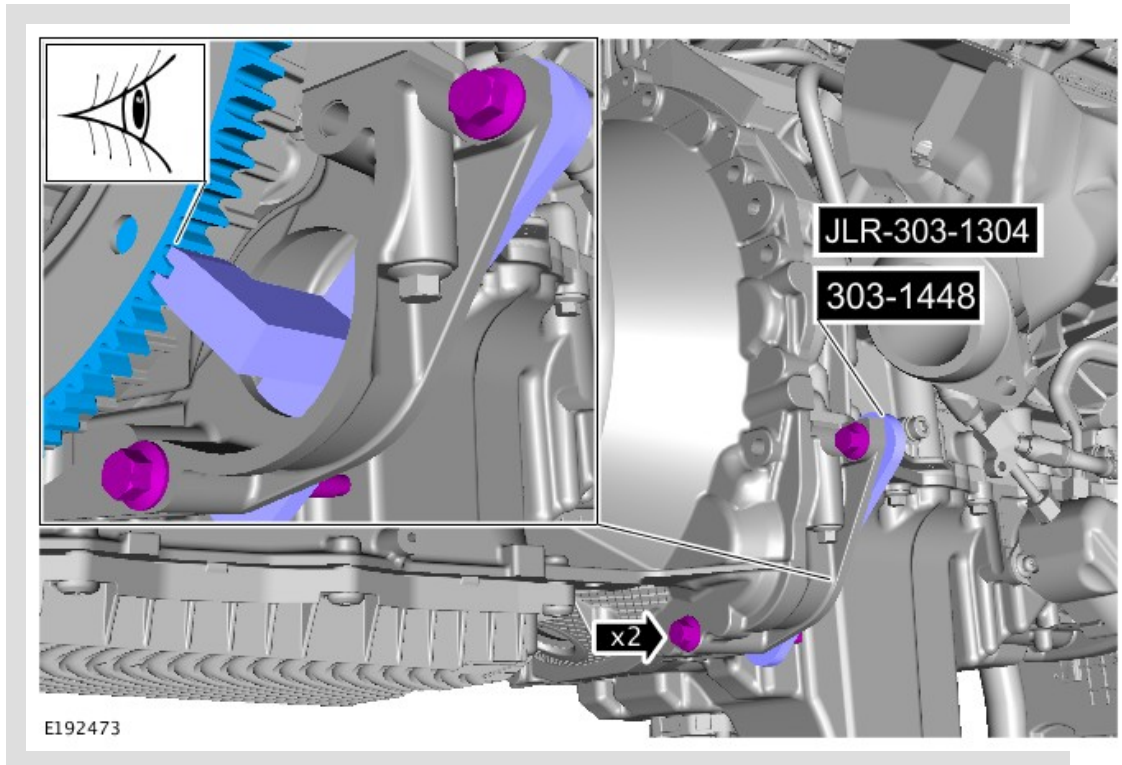
*Special Tool(s):* 303-1438

13.



*Torque:* 25 Nm

14.



Remove the special tool.

Vehicles without Auto stop/start system.

*Special Tool(s):* [303-1448](#)

Vehicles with Auto stop/start system.

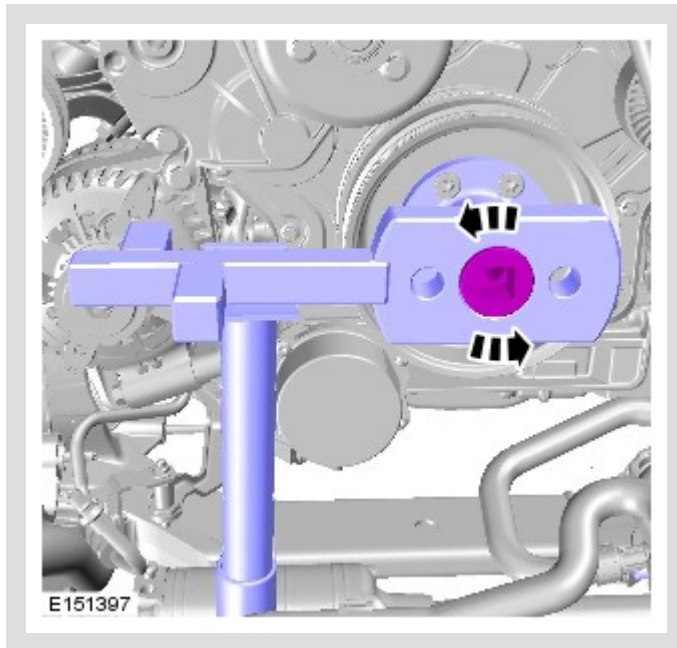
*Special Tool(s):* [JLR-303-1304](#)

15.



#### 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.



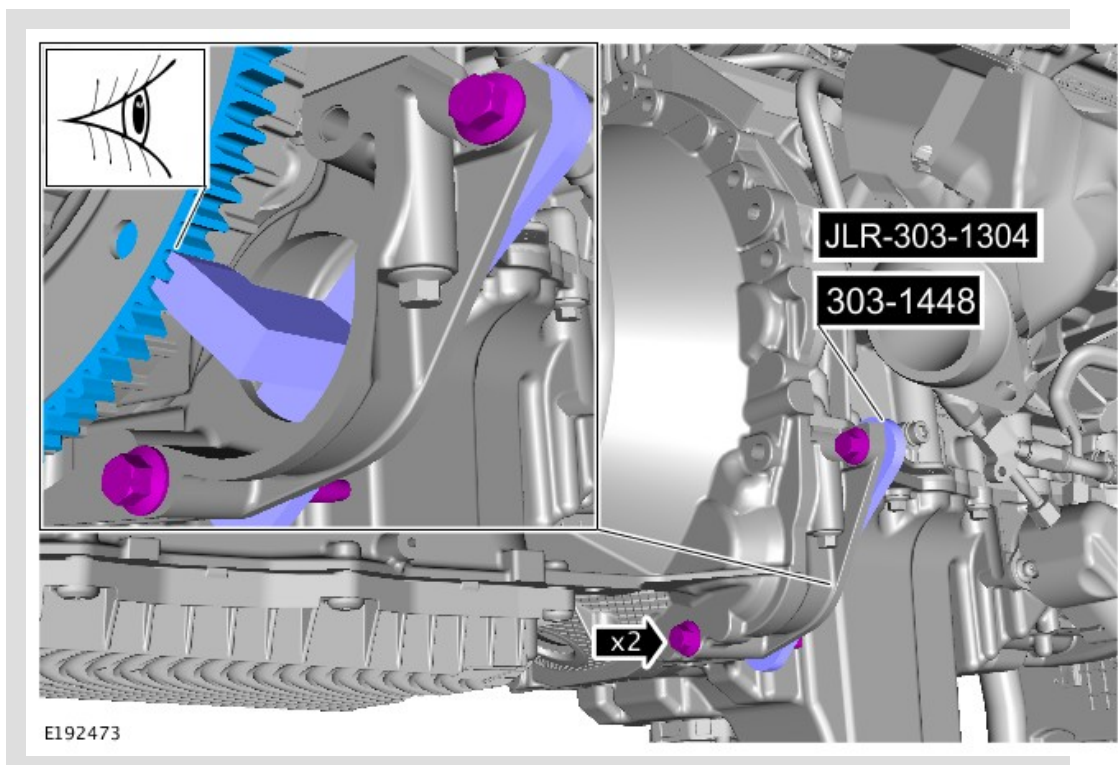
Tighten the crankshaft pulley bolt. Make sure that the socket is turned through 270 degrees not the torque wrench.

*Torque:*

Stage 1: **200 Nm**

Stage 2: **270°**

16.





Install the special tool.

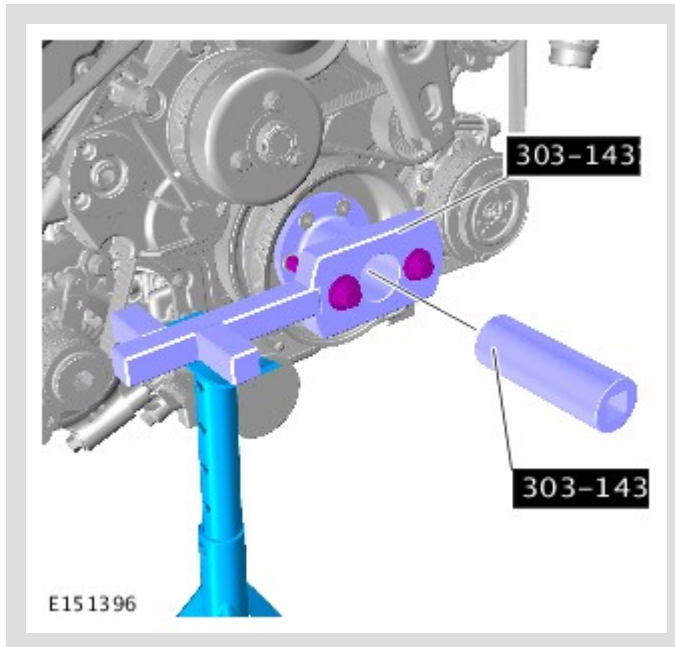
Vehicles without Auto stop/start system.

*Special Tool(s):* [303-1448](#)

Vehicles with Auto stop/start system.

*Special Tool(s):* [JLR-303-1304](#)

17.

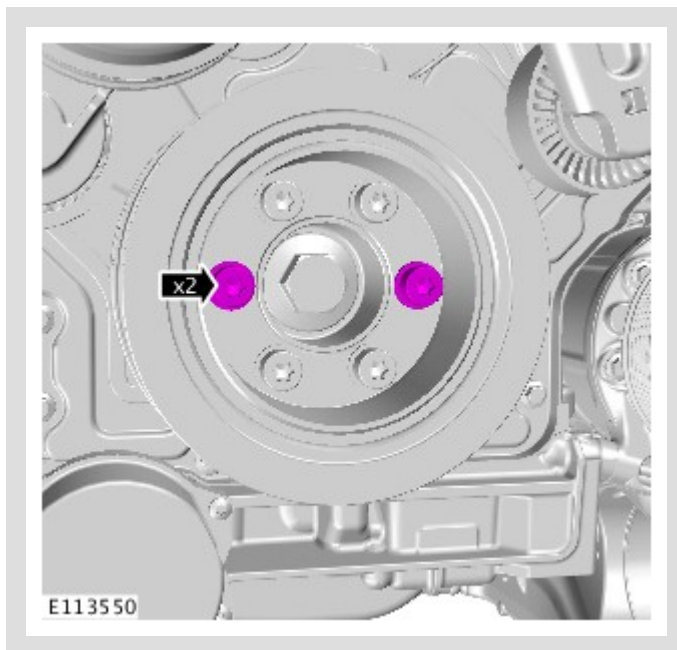


Remove the special tools.

18.

**ⓘ CAUTION:**

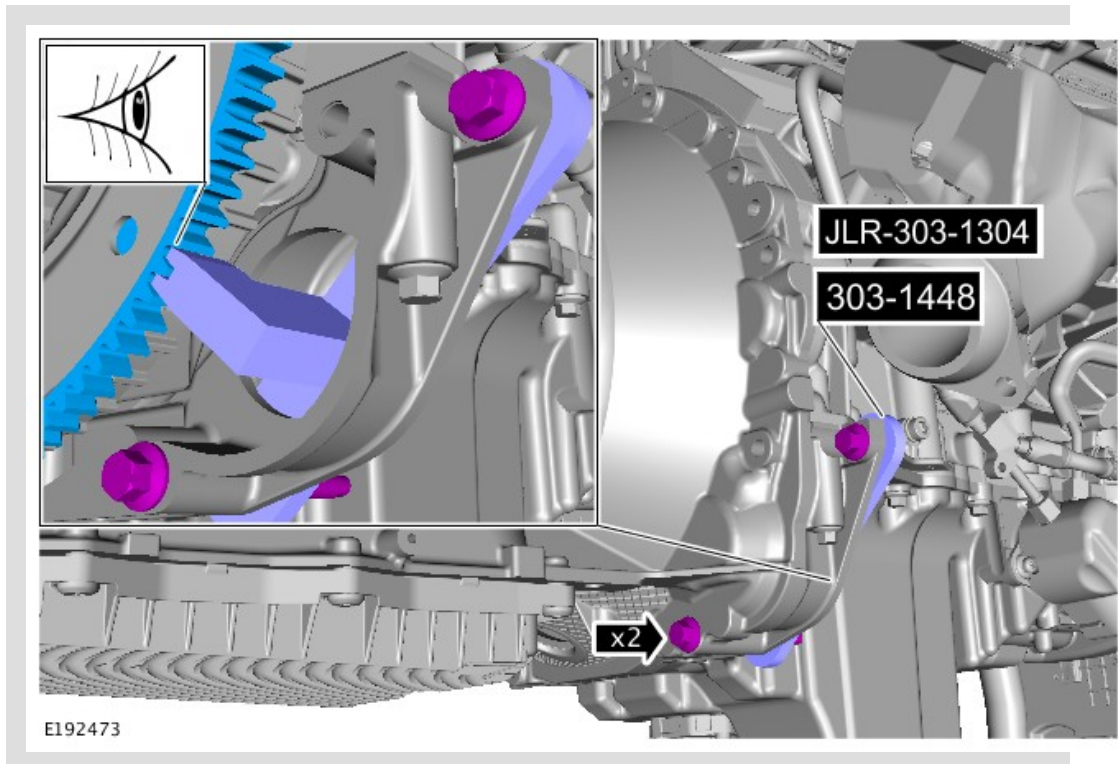
Make sure that a new bolts are installed.



 **NOTE:**

Apply loctite 270 to the thread of the bolts.

*Torque:* **65 Nm**



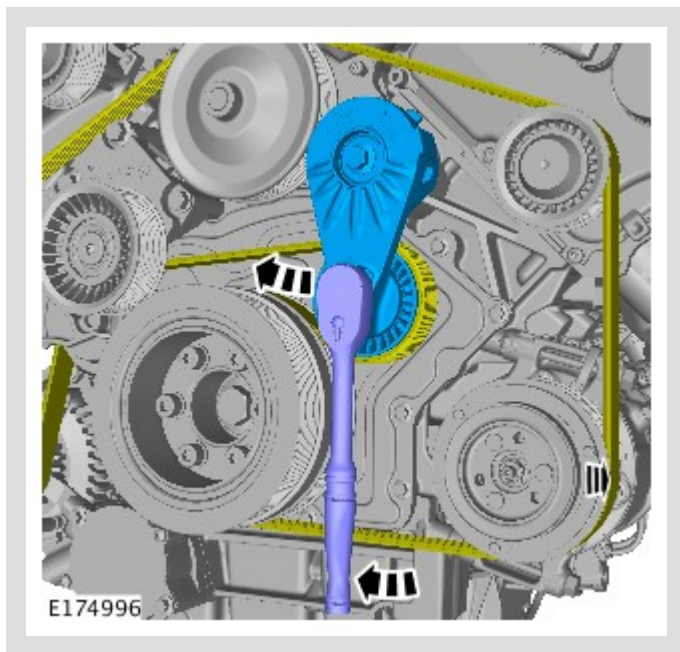
Remove the special tool.

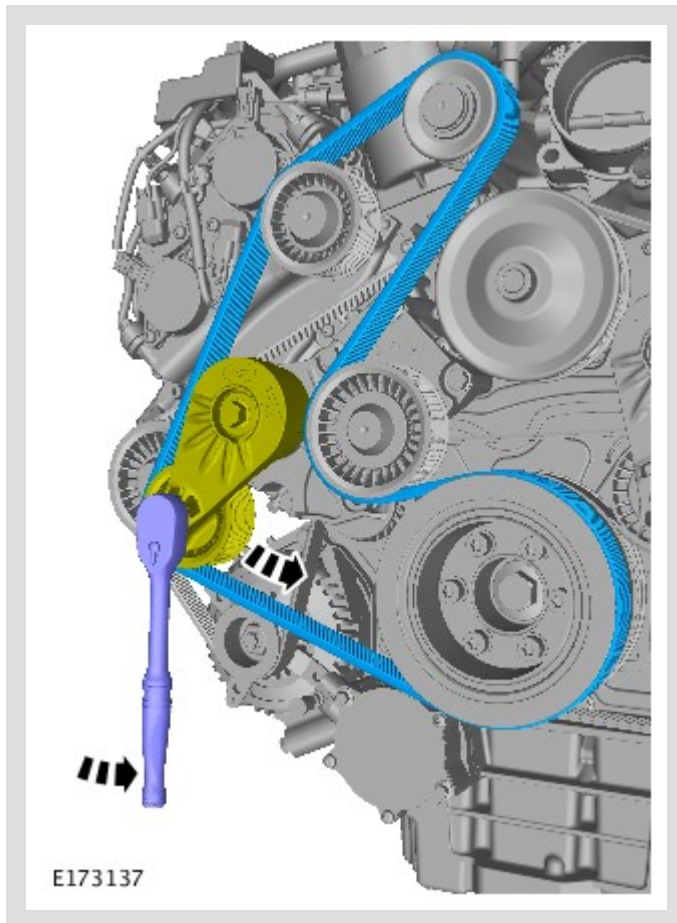
Vehicles without Auto stop/start system.

*Special Tool(s):* [303-1448](#)

Vehicles with Auto stop/start system.

*Special Tool(s):* [JLR-303-1304](#)





22. Install the cooling fan.  
Refer to: Cooling Fan (303-03C, Removal and Installation).

23. Install the starter motor.