

PUBLISHED: 20-MAR-2017
2017.0 DISCOVERY (LR), 303-01A


ENGINE - TDV6 3.0L DIESEL


TIMING BELT (G1947729)

REMOVAL AND INSTALLATION

12.65.18	TIMING BELT - CAMSHAFT - RENEW	3000 CC, TDV6	3.40	USED WITHINS	+
----------	---	------------------	------	--------------	---


SPECIAL TOOL(S)






303-1117
Timing Peg, Automatic Transmission

E54540





303-1126
Timing Peg, Camshaft Pulley

E54551

REMOVAL

NOTES:

- This procedure contains some variation in the illustration depending on the vehicle specification, but essential information is always correct.
- This procedure contains illustrations showing certain components removed to provide extra clarity.

1.

WARNING:

Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

2.

Disconnect the startup battery ground cable.

Refer to: [Specifications](#) (414-01 Battery, Mounting and Cables, Specifications).

3.

Remove the timing belt cover.

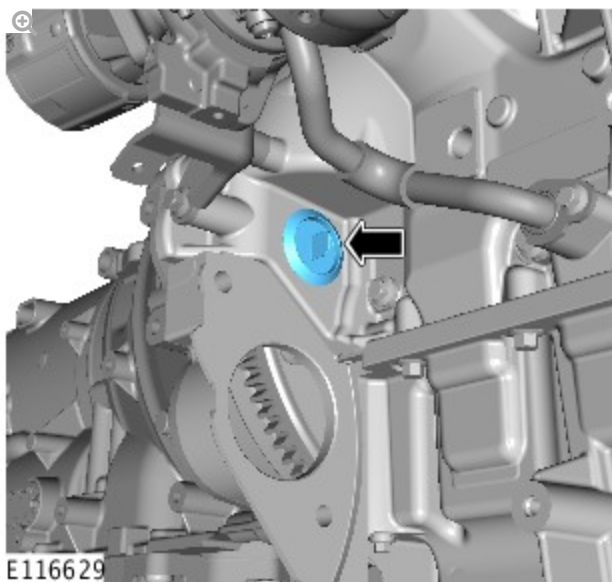
Refer to: [Timing Cover](#) (303-01A Engine - TDV6 3.0L Diesel, Removal and Installation).

4.

Remove the starter motor.

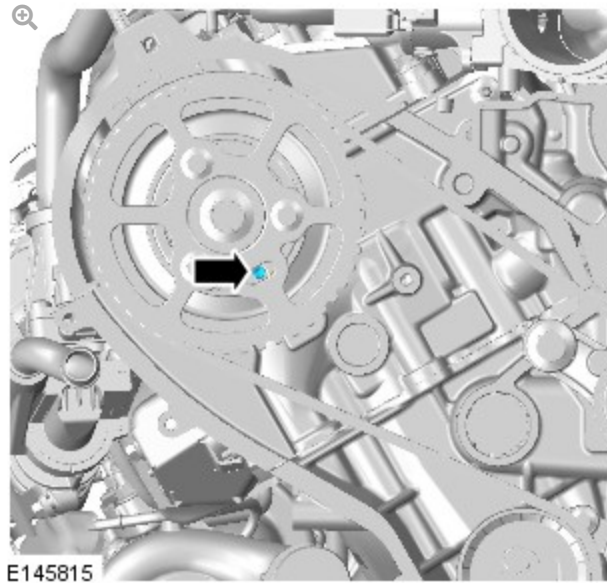
Refer to: [Starter Motor](#) (303-06A Starting System - TDV6 3.0L Diesel, Removal and Installation).

5.



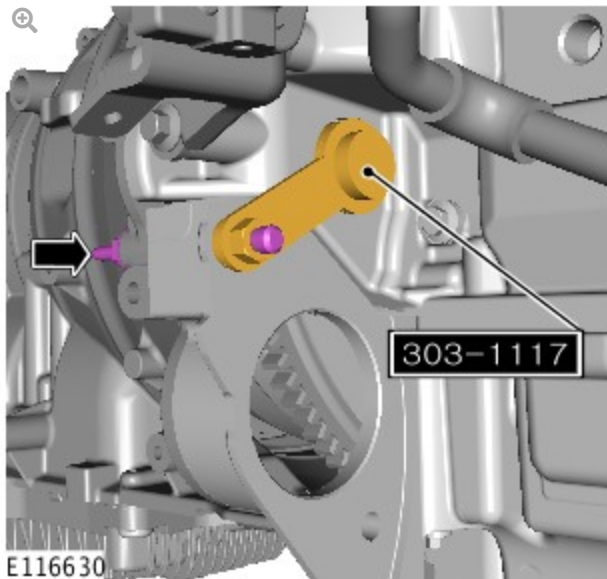
6. Rotate the crankshaft clockwise to align the crankshaft alignment hole in the flywheel or flexplate with the block aperture.

7.



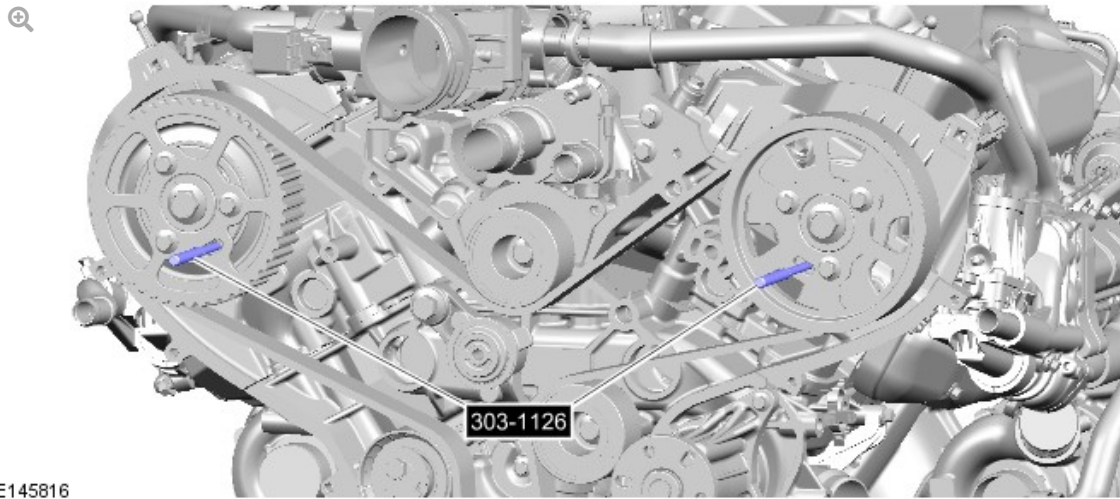
Check the camshaft pulley alignment holes are correctly aligned. If the alignment holes are not aligned, rotate the crankshaft one full turn clockwise.

8.



Special Tool(s): [303-1117](#)

9.



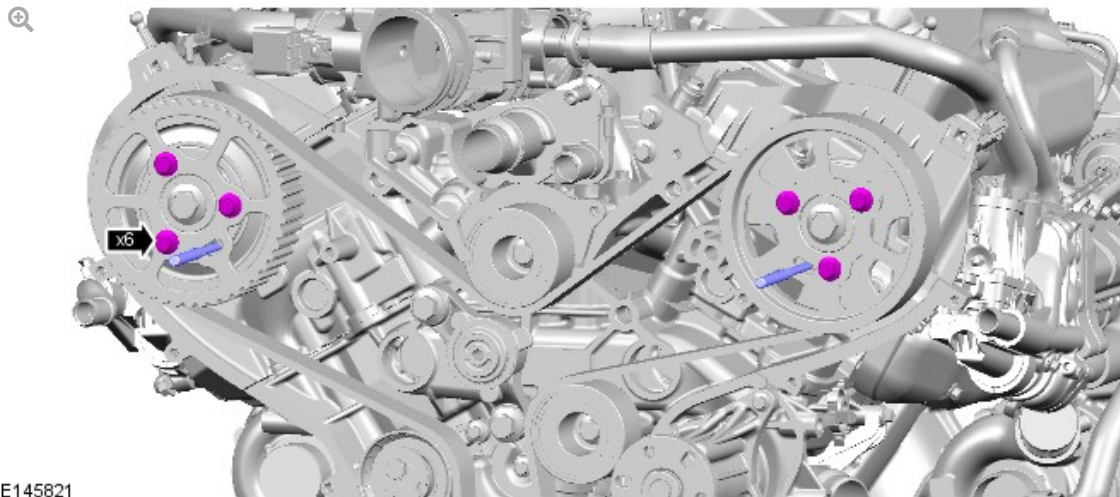
E145816

Special Tool(s): [303-1126](#)

10.

CAUTION:
Do not rotate camshafts against locking peg. Failure to follow this instruction may result in damage to the engine or the special tools.

NOTE:
Do not loosen the bolts more than 2 turns.

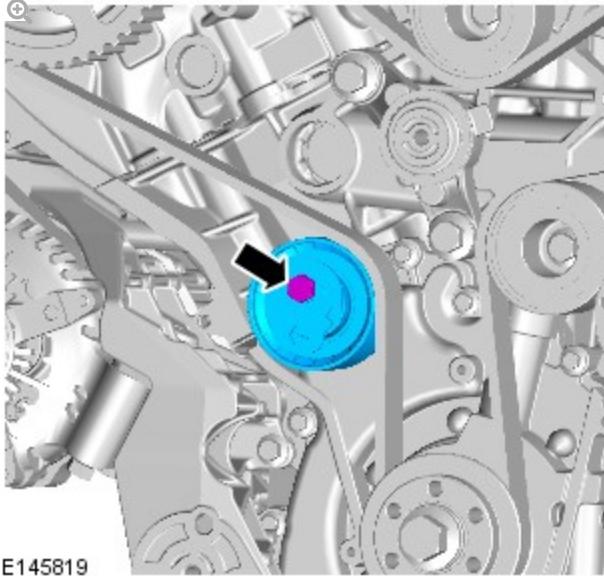


E145821

11.

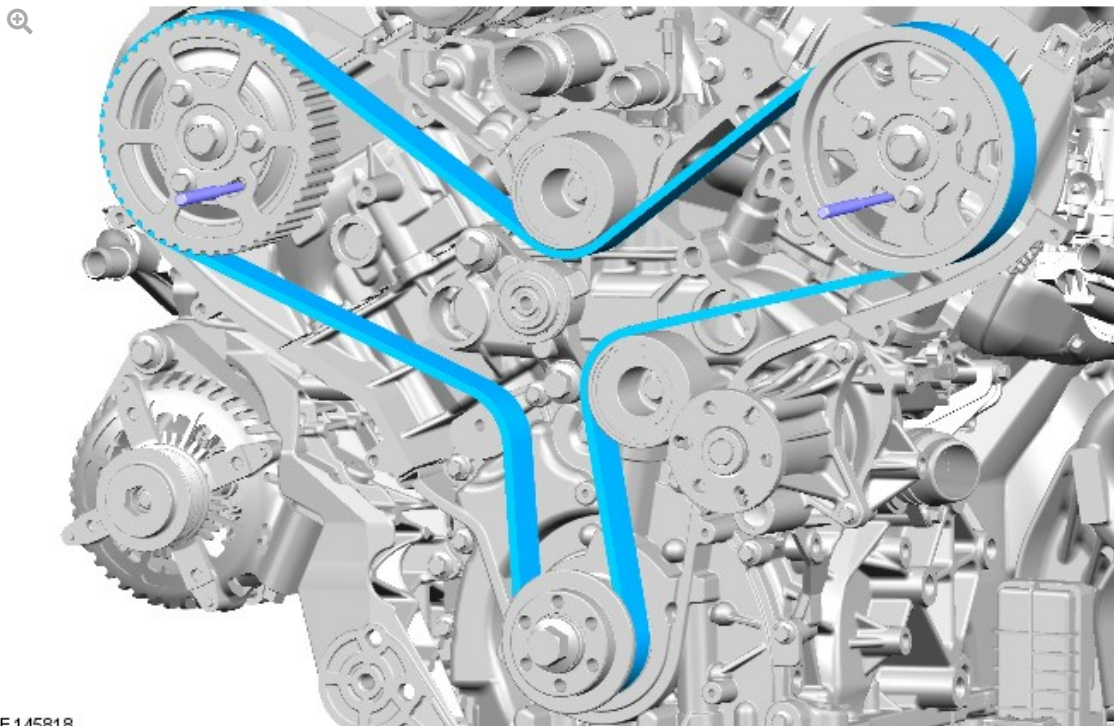
CAUTIONS:

- Discard the component.
- Discard the bolt.



12.

CAUTION:
Discard the component.



E145818

INSTALLATION

1.

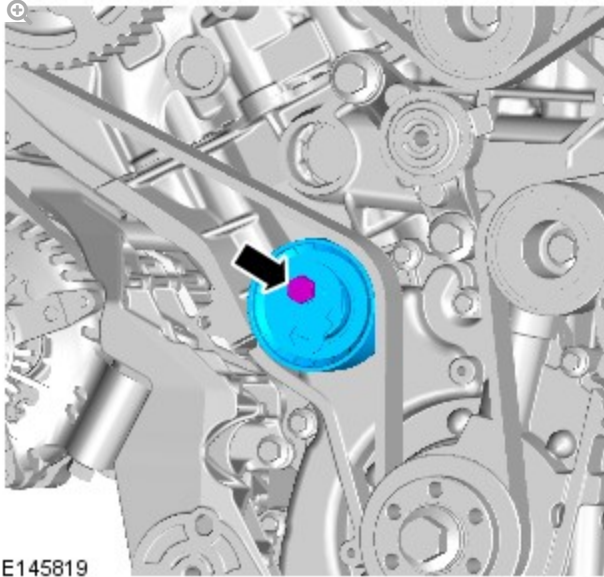


E145820

2.

CAUTIONS:

- Make sure that a new bolt is installed.
- Only tighten the bolts finger-tight at this stage.
- Make sure that new components are installed.

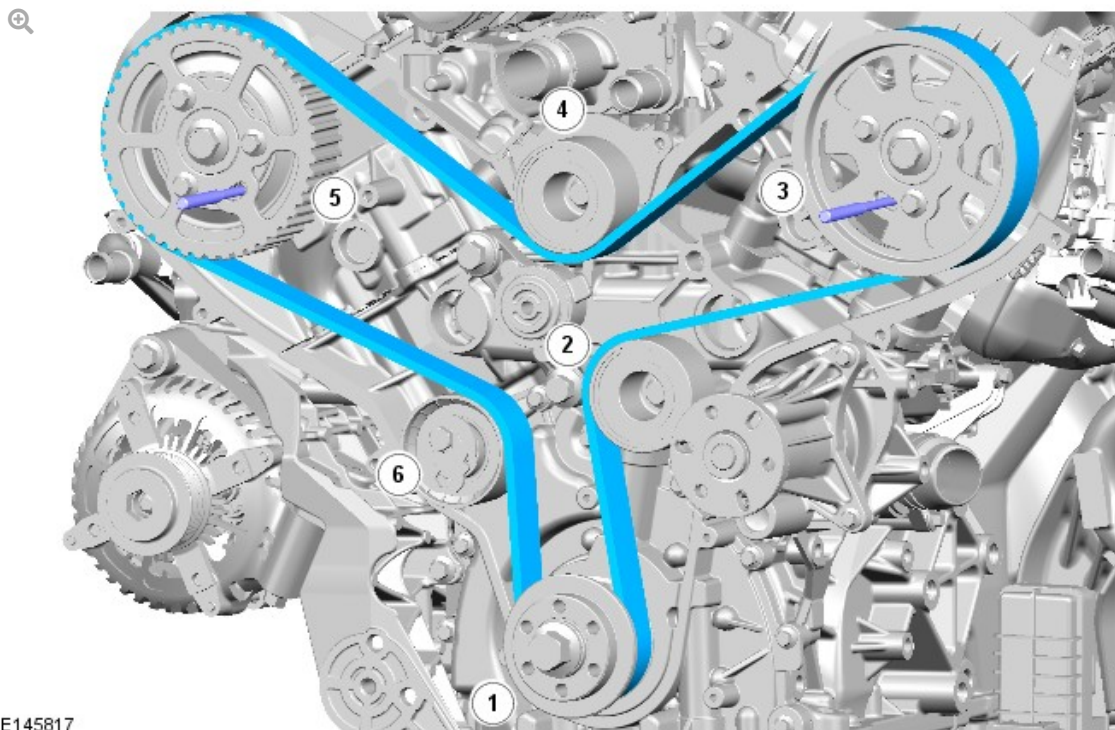


Install the timing belt tensioner and retaining bolt.

3.

CAUTION:

Make sure the camshaft pulleys remain in the clockwise position.



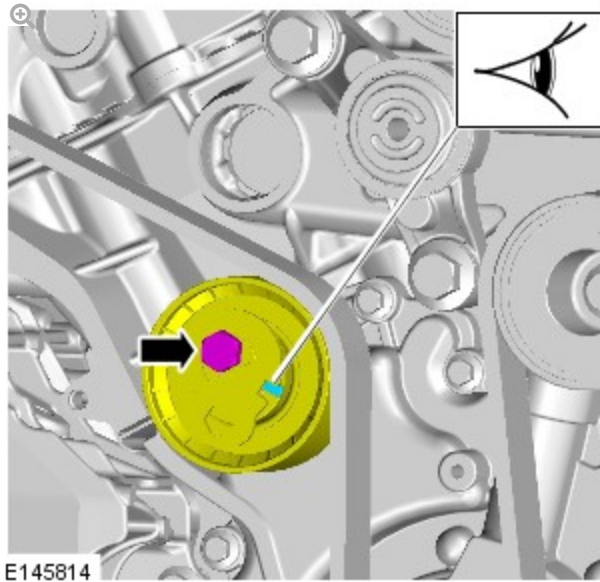
E145817

- Install the new timing belt.
- Starting at the crankshaft pulley, install the timing belt in a counter-clockwise direction, in the sequence shown.
- Stage one: Attach the timing belt to the crankshaft pulley.
- Stage two: Attach the timing belt to the idler pulley.
- Stage three: Attach the timing belt to the left-hand camshaft pulley.
- Stage four: Attach the timing belt to the idler pulley.
- Stage five: Attach the timing belt to the RH camshaft pulley.
- Stage six: Attach the timing belt to the timing belt tensioner.

4.

CAUTION:

Make sure the timing belt tensioner window is aligned with the groove as illustrated.

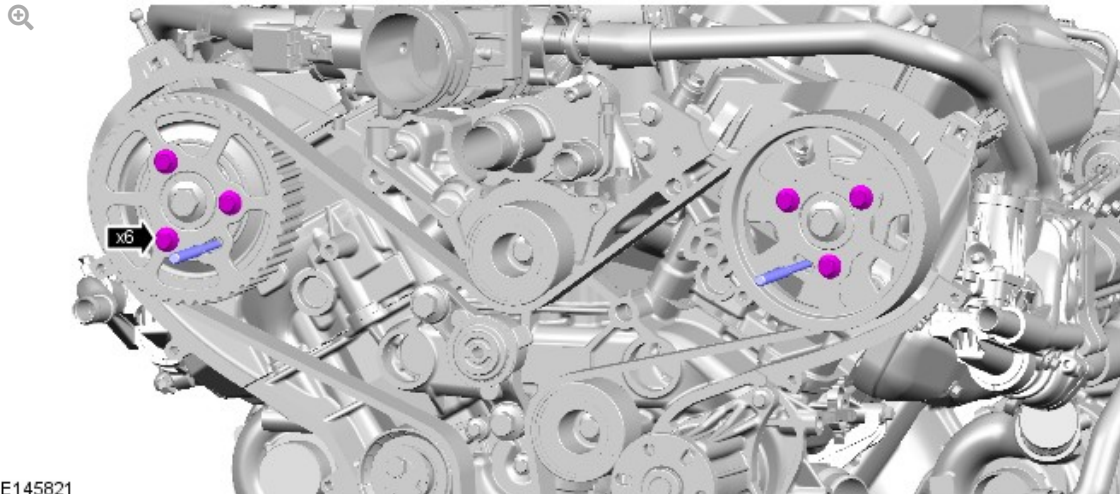


- Tension the timing belt.
- Rotate the tensioner assembly counter-clockwise.
- *Torque: 26Nm*

5.

CAUTION:

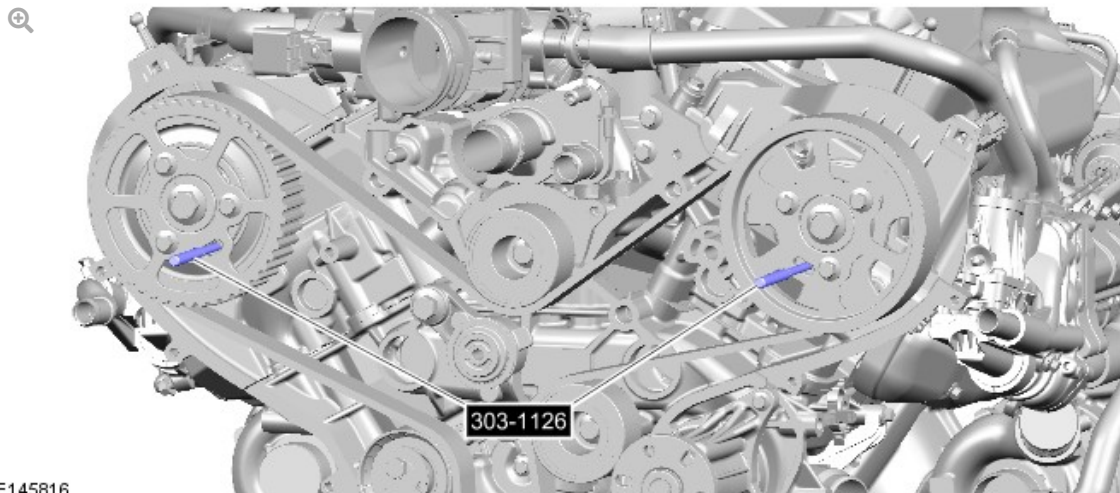
Do not rotate camshafts against locking peg. Failure to follow this instruction may result in damage to the engine or the special tools.



E145821

- Using a suitable tool, counterhold the camshaft pulley center retaining bolts.
- *Torque: 23Nm*

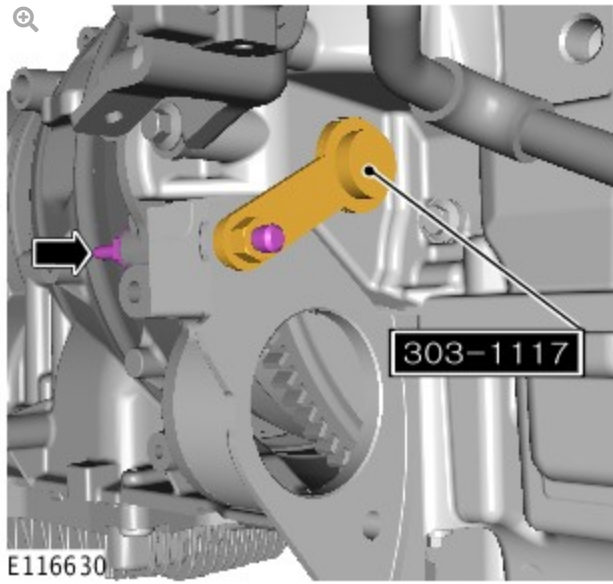
6.



E145816

Remove the special tools.

7.



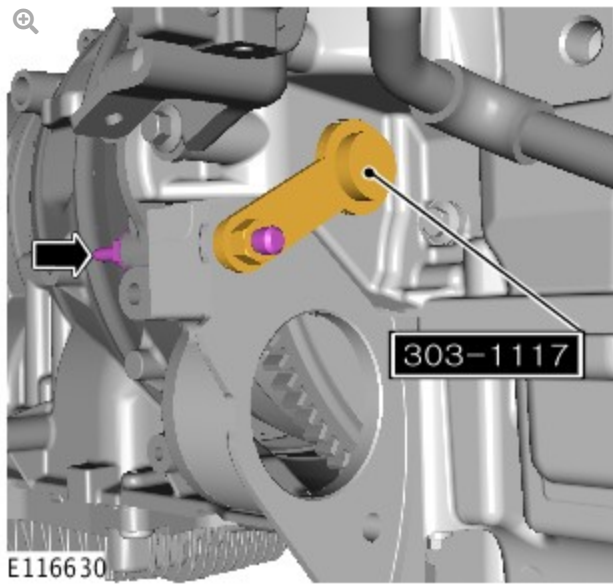
Remove the special tools.

8.

CAUTION:
Only rotate the crankshaft clockwise.

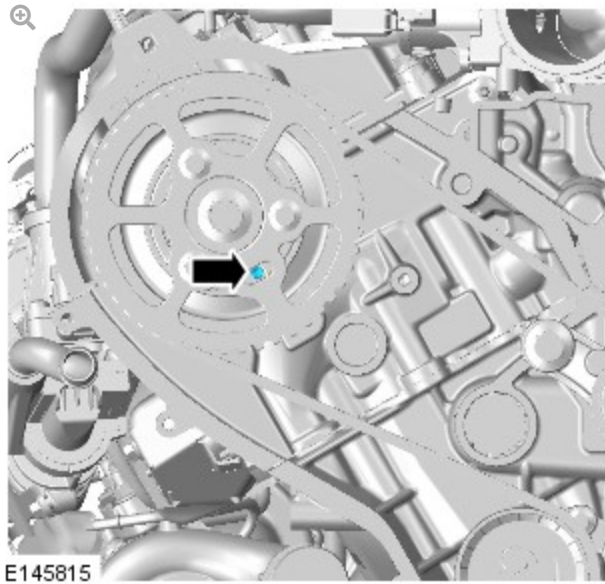
Rotate the engine two complete turns clockwise.

9.



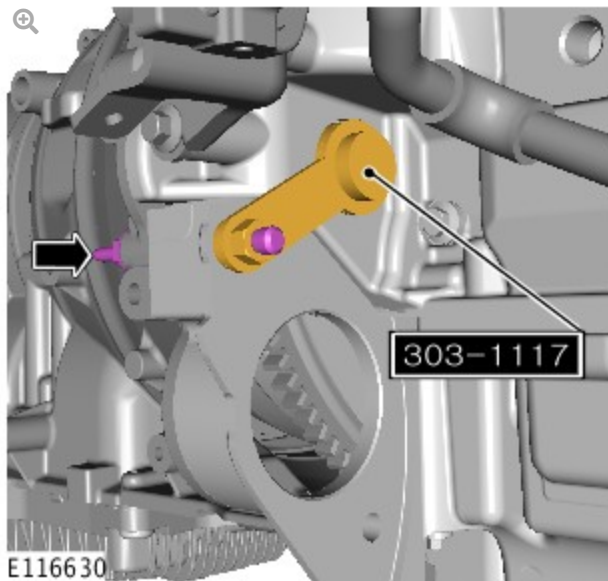
Install the special tools.

10.



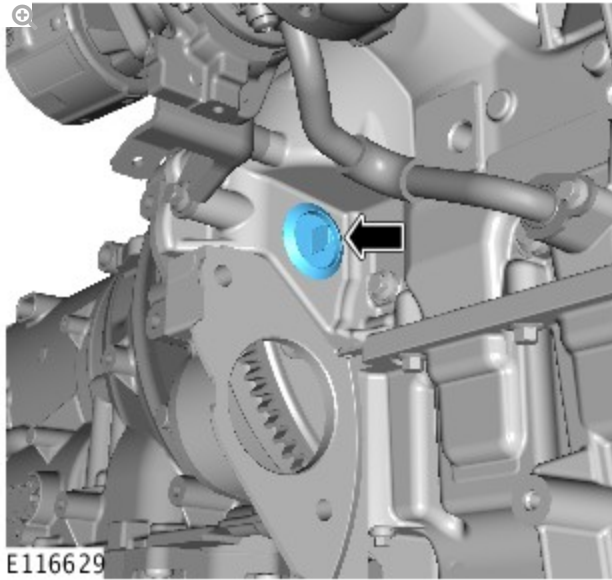
- Install the special tools to the exhaust camshaft pulleys.
- If the special tool does not fit correctly, repeat the timing belt installation procedure.
- Remove the special tools from the camshaft pulleys.

11.



Remove the special tool.

12.



-
13. Install the starter motor.
Refer to: [Starter Motor](#) (303-06A Starting System - TDV6 3.0L Diesel, Removal and Installation).
-
14. Install the timing belt cover.
Refer to: [Timing Cover](#) (303-01A Engine - TDV6 3.0L Diesel, Removal and Installation).
-
15. Connect the startup battery ground cable.
Refer to: [Specifications](#) (414-01 Battery, Mounting and Cables, Specifications).