

# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

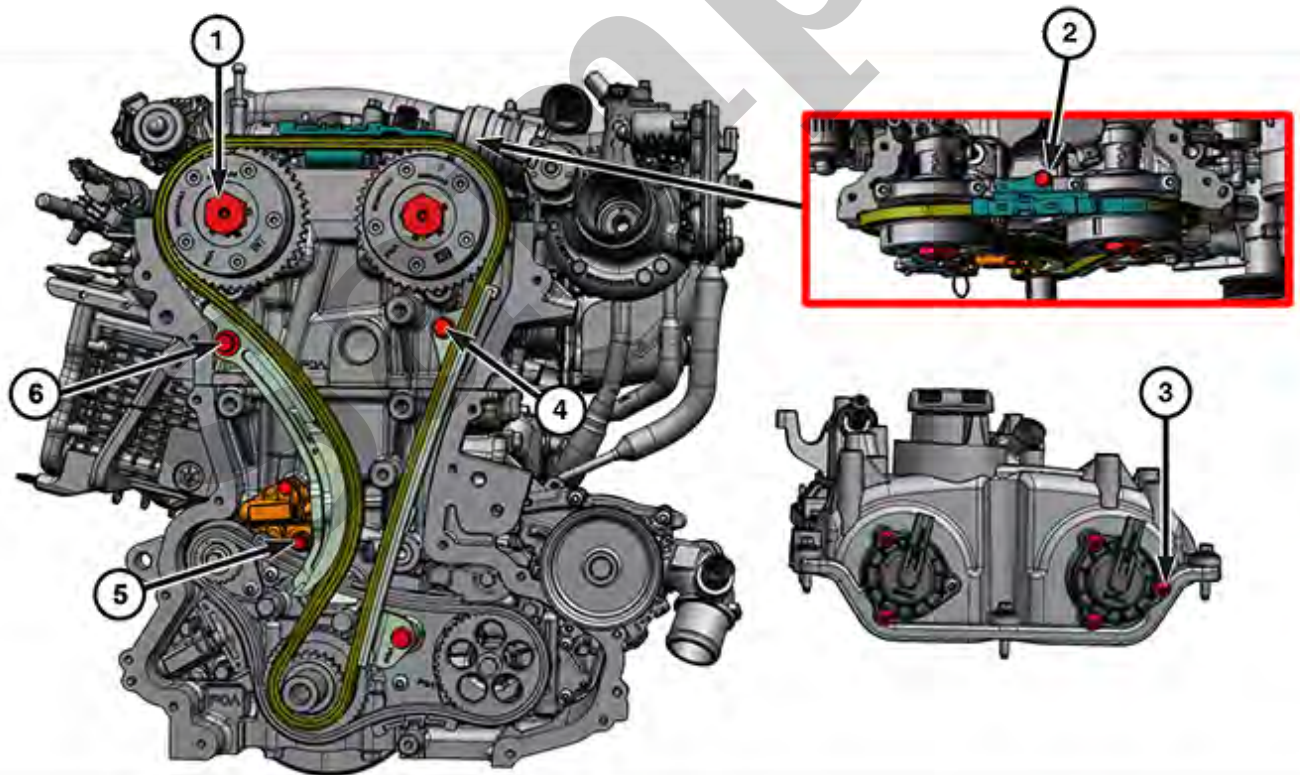
## 2009 Jeep CHEROKEE Service Manual

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and release the tensioner arm.

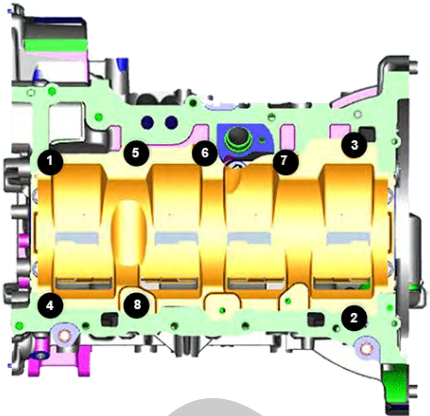
3. Temporarily reinstall the timing chain cover and the crankshaft damper in order to verify valve timing.
4. Rotate the crankshaft clockwise two complete revolutions and verify correct valve timing ([Refer to Engine/Valve Timing/Standard Procedure](#))([Refer To List 2](#)).
5. If the valve timing is not correct, repeat this procedure.
6. Install the timing chain cover ([Refer to Engine/Valve Timing/COVER\(S\), Engine Timing/Removal and Installation](#))([Refer To List 1](#)).
7. If removed, install the oil filter and fill the engine crankcase with the proper oil to the correct level ([Refer to Engine/Lubrication/Standard Procedure](#))([Refer To List 3](#)).
8. Run the engine until it reaches normal operating temperature. Check the cooling system for correct fluid level.

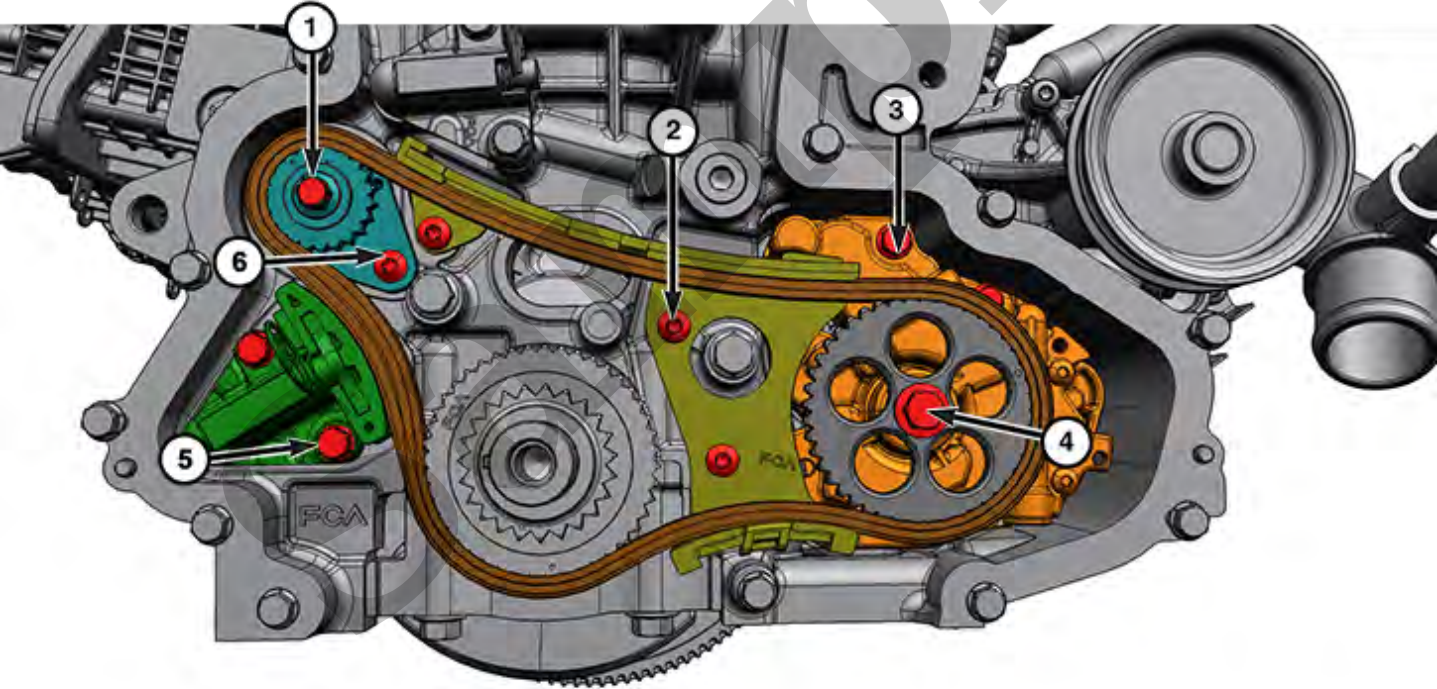
#### TORQUE SPECIFICATIONS - VALVE TIMING



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CALLOUT	DESCRIPTION	SPECIFICATION	COMMENTS
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CALLOUT	DESCRIPTION	SPECIFICATION	COMMENTS
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CALLOUT	DESCRIPTION	SPECIFICATION	COMMENTS
1	Balance Shaft Sprocket Bolt	-	Serviced with Balance Shaft

CALLOUT	DESCRIPTION	SPECIFICATION	COMMENTS
3	Front Cover to Block M10 Torx Bolt	<b>28 N·m (20 Ft. Lbs.)</b>	-
4	Belt Tensioner M10 Bolt	<b>50 N·m (37 Ft. Lbs.)</b>	-
5	Damper Pulley to Crankshaft	<b>50 N·m (37 Ft. Lbs.) + 80°</b>	Do not reuse these fasteners. If removed, a <b>NEW</b> fastener must be installed and tightened to specifications.
6	Idler Pulley to Block	<b>25 N·m (18 Ft. Lbs.)</b>	-

#### Refer To List:

##### List 1

- [09 - Engine, 2.0L / Valve Timing / COVER\(S\), Engine Timing / Removal and Installation](#)
- [09 - Engine, 3.6L / Valve Timing / COVER\(S\), Engine Timing / Removal and Installation](#)
- [09 - Engine, 5.7L / Valve Timing / COVER\(S\), Engine Timing / Removal and Installation](#)

##### List 2

- [09 - Engine, 2.0L / Valve Timing / Standard Procedure](#)
- [09 - Engine, 3.6L / Valve Timing / Standard Procedure](#)
- [09 - Engine, 5.7L / Valve Timing / Standard Procedure](#)

##### List 3

- [09 - Engine, 2.0L / Lubrication / Standard Procedure](#)
- [09 - Engine, 3.6L / Lubrication / Standard Procedure](#)
- [09 - Engine, 5.7L / Lubrication / Standard Procedure](#)



1 - Timing Chain Tensioner Bolt

2 - Timing Chain Tensioner

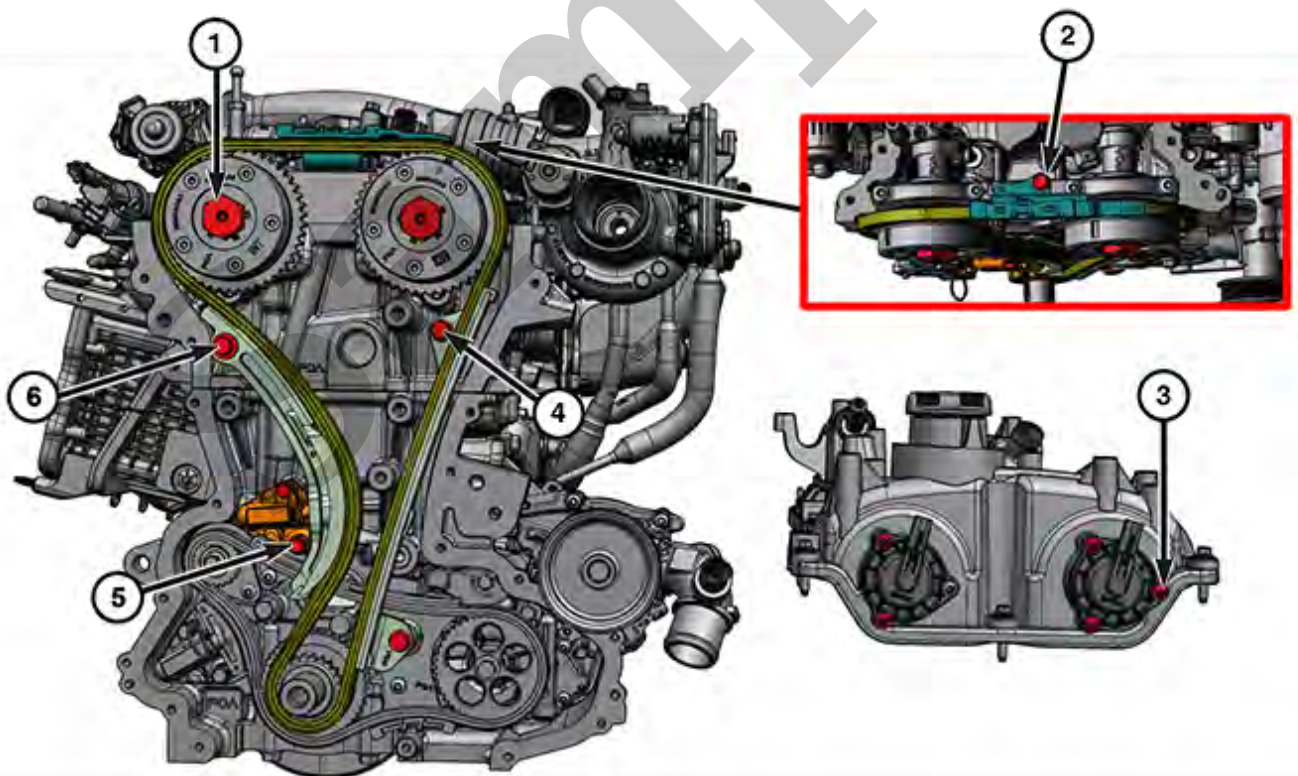
5. Remove the timing chain tensioner bolts and the timing chain tensioner.

## INSTALLATION

Follow the removal procedure in reverse for general reassembly of the components on the vehicle. The steps listed below are calling out specific procedures that should be followed during installation.

- Rotate the crankshaft clockwise two complete revolutions and verify correct valve timing ([Refer to Engine/Valve Timing/Standard Procedure](#))([Refer To List 2](#)).
- If the valve timing is not correct, repeat this procedure.
- If removed, install the oil filter and fill the engine crankcase with the proper oil to the correct level ([Refer to 09 - Engine/Lubrication/Standard Procedure](#))([Refer To List 3](#)).
- Run the engine until it reaches normal operating temperature. Check the cooling system for correct fluid level ([Refer to 09 - Engine/Cooling Systems/Engine Cooling/Standard Procedure](#))([Refer To List 4](#)).

## TORQUE SPECIFICATIONS - VALVE TIMING



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CALLOUT	DESCRIPTION	SPECIFICATION	COMMENTS
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YOUR CURRENT VEHICLE

## Serpentine Belt

### SERPENTINE BELT

#### REMOVAL

##### CAUTION

Do not let the tensioner arm snap back to the freearm position, severe damage may occur to the tensioner.

1. Remove the engine cover.
2. Remove the intake air tube ([Refer to Engine/Air Intake System/TUBE, Intake Air/Removal and Installation](#)) ([Refer To List 1](#)).
3. Remove the air cleaner resonator ([Refer to Engine/Air Intake System/RESONATOR, Air Cleaner/Removal and Installation](#)).

1 - Idler Pulley

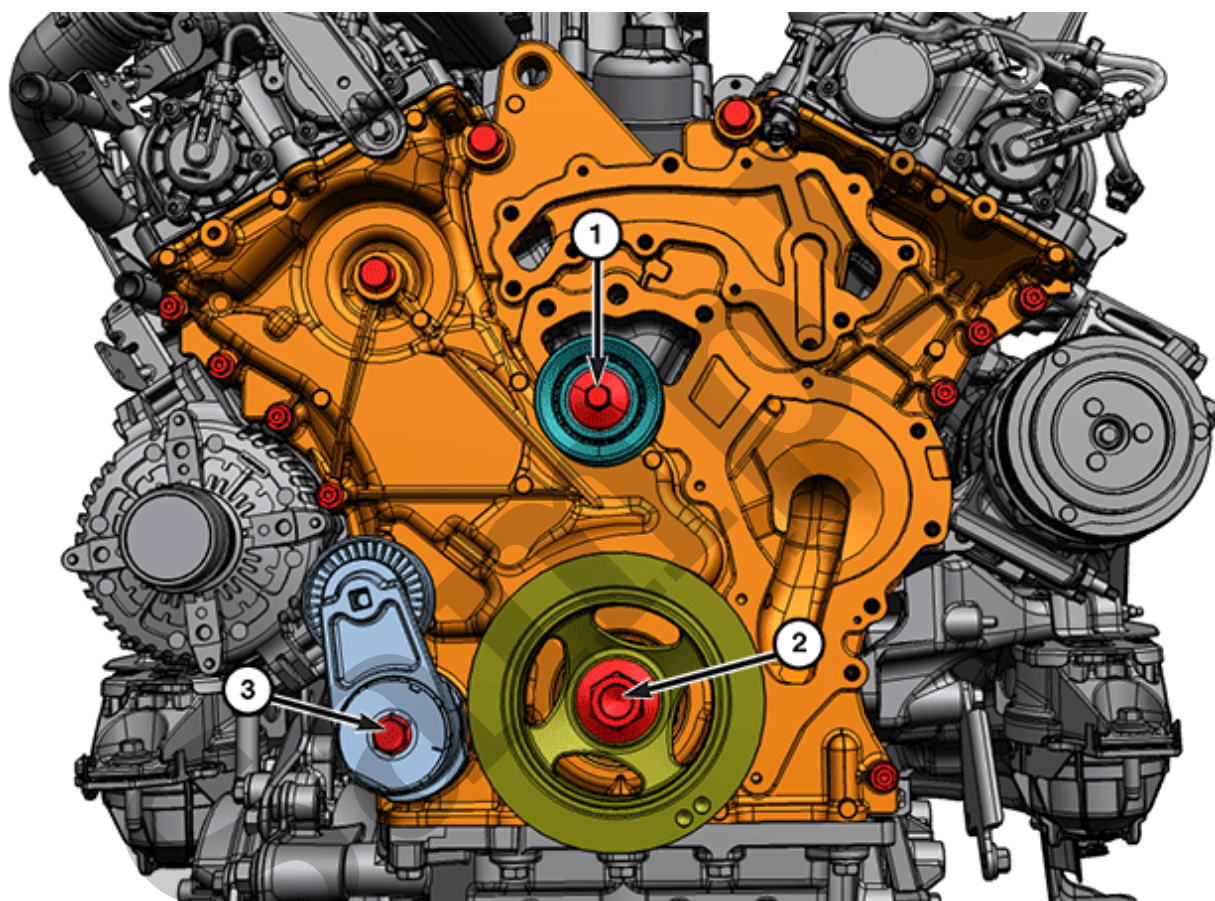
2 - Idler Pulley Bolt

2. Remove the idler pulley bolt and the idler pulley.

## INSTALLATION

Follow the removal procedure in reverse for general reassembly of the components on the vehicle.

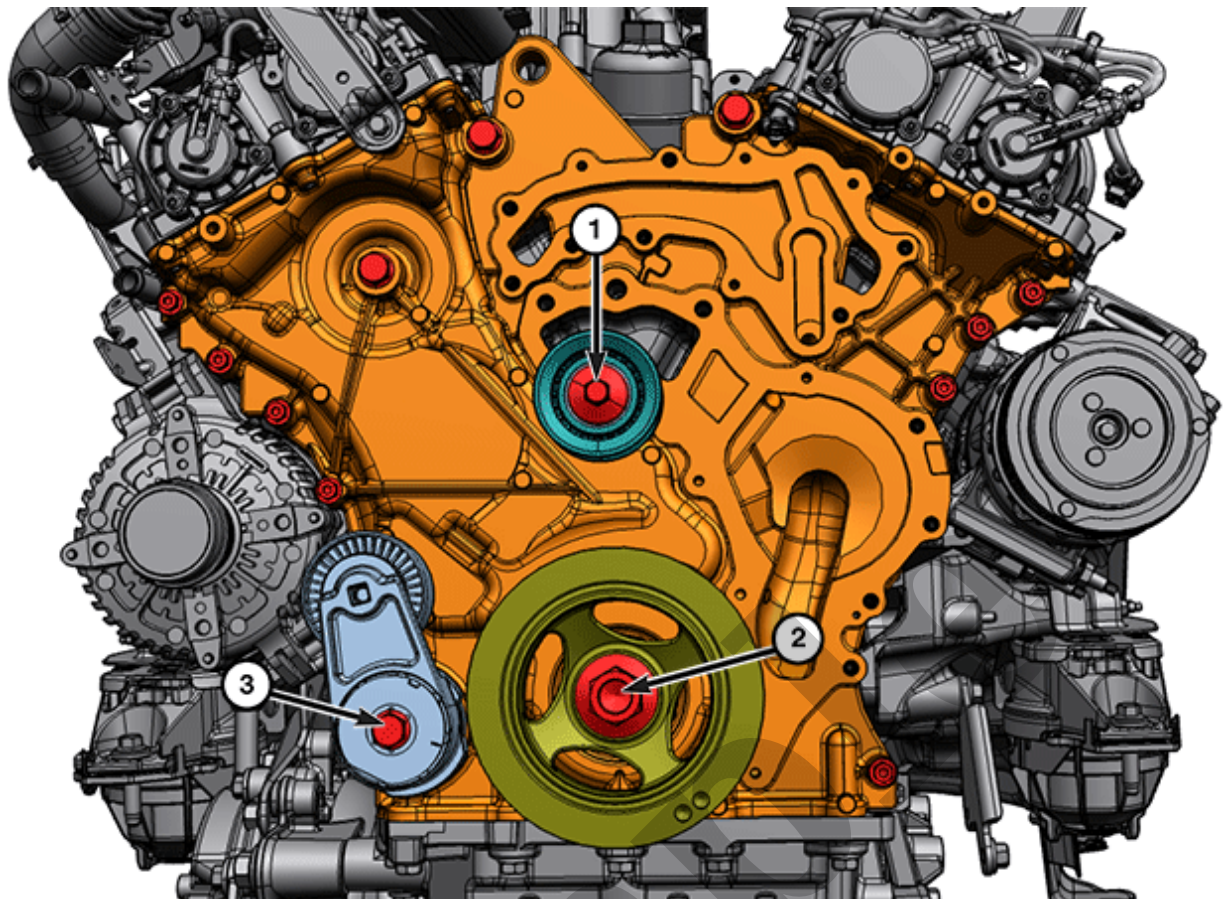
## TORQUE SPECIFICATIONS - FRONT ENGINE



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CALLOUT	DESCRIPTION	SPECIFICATION	COMMENTS
1	Idler Pulley Bolt	25 N·m (18 Ft. Lbs.)	-
2	Vibration Damper M16 Bolt	40 N·m (30 Ft. Lbs.) + 105° Turn	-
3	Belt Tensioner	50 N·m (37 Ft.	-

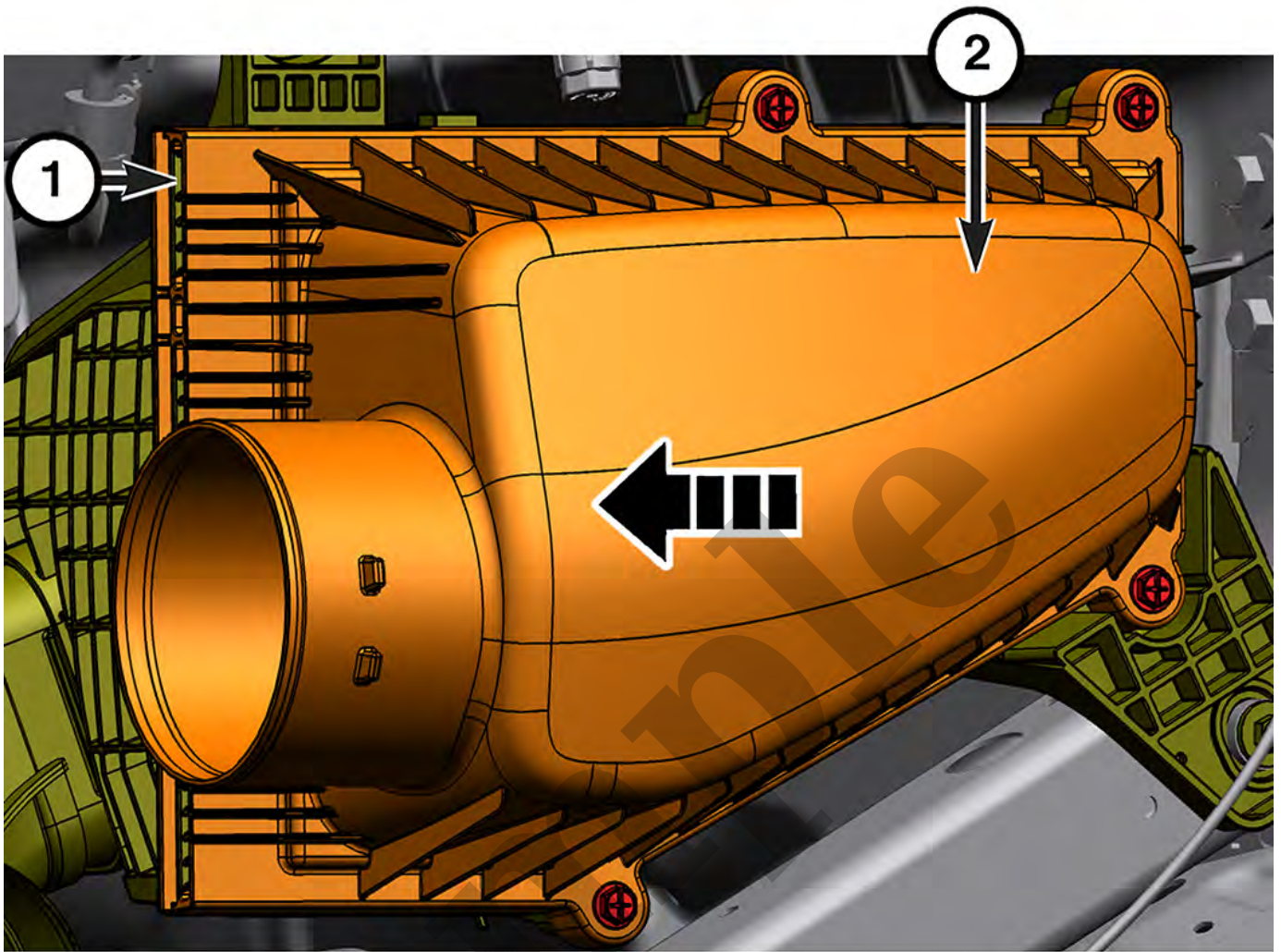




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CALLOUT	DESCRIPTION	SPECIFICATION	COMMENTS
1	Idler Pulley Bolt	25 N·m (18 Ft. Lbs.)	-
2	Vibration Damper M16 Bolt	40 N·m (30 Ft. Lbs.) + 105° Turn	-
3	Belt Tensioner Bolt	50 N·m (37 Ft. Lbs.)	-
4	Engine Timing Cover M6 Bolts Engine Timing Cover M8 Bolt Engine Timing Cover M10 Bolts	12 N·m (9 Ft. Lbs.) 25 N·m (18 Ft. Lbs.) 55 N·m (41 Ft. Lbs.)	Tighten in a criss-cross pattern



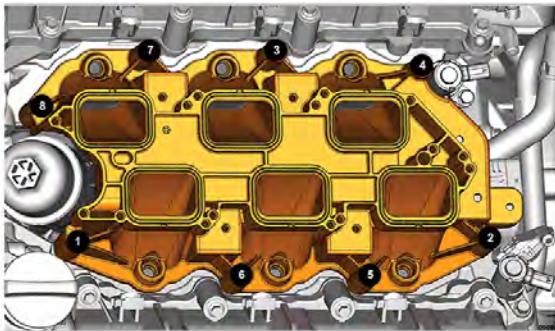


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1 - Alignment Tabs

2 - Air Cleaner Cover

3. Lift the air cleaner cover up and slide in the direction shown to release the alignment tabs and remove air cleaner cover.

4	Intake Manifold (Lower) M6 Bolts	<b>9 N·m (80 In. Lbs.)</b>	<p>Tightening Sequence</p> 	
5	Throttle Body Support Bracket Bolt	<b>12 N·m (9 Ft. Lbs.)</b>	-	
6	Throttle Body Support Bracket Stud	<b>Not Serviced</b>	-	
7	Throttle Body Support Bracket Nut	<b>8 N·m (71 In. Lbs.)</b>	-	
-	Intake Manifold Support Bracket Lower Bolt	<b>26 N·m (19 Ft. Lbs.)</b>	-	