

Component Procedures: Harmonic Balancer - Crankshaft Pulley

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Parts and Labor (itype_189)

Parts

Qualifier	Part #	Name	Price	Note
Vibration Damper	12615141	30 - Vibration Damper	112.84	

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Crankshaft & Bearings > Vibration Damper, R&R	B	1.3	0.9

Crankshaft Balancer Replacement (Article 12164)

Special Tools

- EN 38416-2 - Crankshaft Button
- EN 41816 - Crankshaft Balancer Remover
- EN 46106 - Flywheel Holding Tool
- EN 41998-B - Crankshaft Balancer Installer

For equivalent regional tools, refer to Special Tools .

Removal Procedure

- Remove the drive belt . Refer to Drive Belt Replacement .
- Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle .
- Remove the starter motor. Refer to Starter Replacement .
- Install the EN 46106 - tool (1) through the starter mounting hole. Click for full-size image
- Lower the vehicle.
- Remove and discard the crankshaft balancer to crankshaft retaining bolt (1) and washer (2). Click for full-size image
- Install the EN 38416-2 button (2) in the nose of the crankshaft. Click for full-size image
- Install the EN 41816 remover (3) in order to remove the crankshaft balancer (1).
- Tighten the center bolt of the EN 41816 remover in order to pull the crankshaft balancer off of the crankshaft.
- Remove the EN 41816 remover from the crankshaft balancer.

Installation Procedure

- Apply lubricant to the inside of the crankshaft balancer hub bore. Click for full-size image
- Place the crankshaft balancer (2) in position on the crankshaft (3). Click for full-size image
- Thread the EN 41998-B - installer (1) in the crankshaft. Ensure you engage at least 10 threads of the EN 41998-B - installer before pressing the crankshaft balancer in place.
- Push the crankshaft balancer into position by tightening the nut on the J 41998-B - installer until the large washer bottoms out on the crankshaft end.
- Remove the EN 41998-B - installer .
- Install the NEW crankshaft balancer bolt (1) and washer. Click for full-size image
- Tighten the crankshaft balancer bolt.
- Tighten the crankshaft balancer bolt to 100 Nm (74 lb ft) .
- Tighten the crankshaft balancer bolt an additional 150 degrees using the EN 45059 - meter .
- Raise the vehicle.
- Remove the EN 46106 - tool . Click for full-size image
- Install the starter motor. Refer to Starter Replacement .
- Install the drive belt. Refer to Drive Belt Replacement .