

Crankshaft Adapter Hub Installation on Cummins ISX & QSX 15 Diesel Engines

The AERA Technical Committee offers the following information regarding the installation of the crankshaft adapter hub on Cummins ISX and QSX 15 diesel engines.

This information should be considered anytime the hub has been removed from the front of the crankshaft.

This adapter hub is retained onto the crankshaft snout by interference fit and the proper way to install a new adapter is to heat the adapter in an oven for 6 hours at 260°C [500°F]. It is important to do this before attempting the installation or improper installation may occur. Follow the steps listed below to install a new crankshaft adapter hub.

NOTE: During the installation of the crankshaft adapter, the pin located on the backside of the crankshaft adapter must align with the slot on the front surface of the tone wheel as shown in Figure 1.

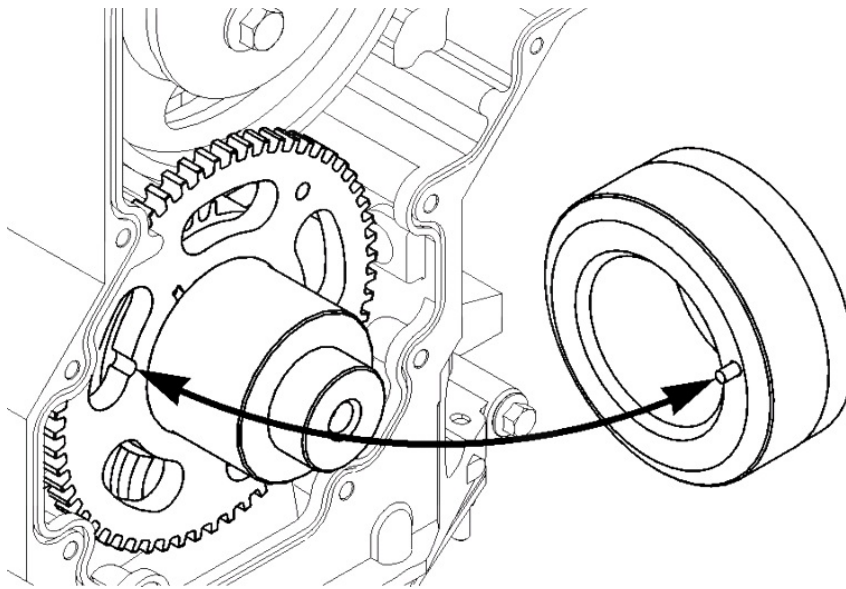


Figure 1. Align Slotted Adapter and Tone Wheel

1. Clean and dry the crankshaft area, do not lubricate the crankshaft prior to installing the crankshaft adapter.
2. Heat the crankshaft adapter for 6 hours at 500°F (260°C) before attempting the installation.
NOTE: The crankshaft adapter must be installed within 15 seconds after being removed from the oven.
3. Install the crankshaft adapter aligning the pin, use a twisting motion until the pin is aligned in the slot on the tone wheel. Use welding gloves to hold the adapter back against the tone wheel.
4. Hold the crankshaft adapter against the tone wheel for approximately 30 seconds.

5. To check the installation, attempt to insert a .010" (.250 mm) feeler gauge between the crankshaft adapter and the tone wheel at four locations approximately 90° apart as shown in Figure 2.
6. If the feeler gauge can be inserted, the tone wheel must be removed and replaced and the process started over.

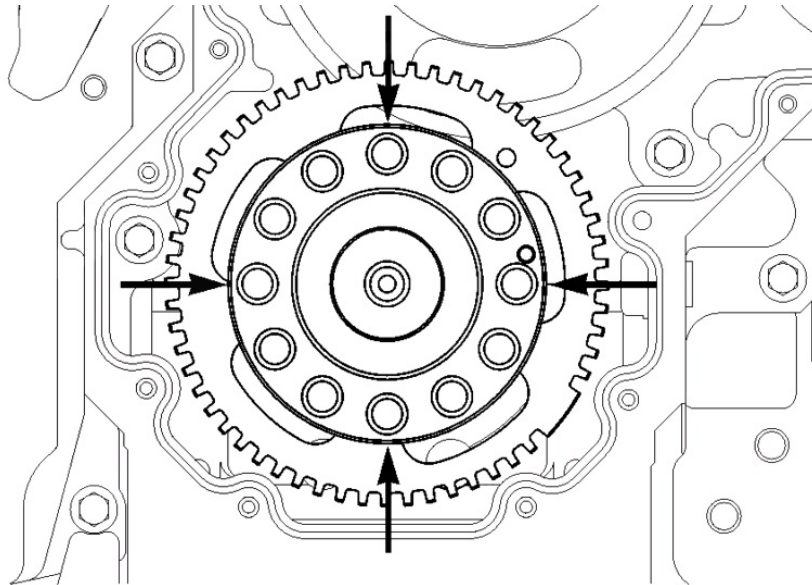


Figure 2. Tone Wheel Feeler Gauge Measure Points