



## Engine Damage After Assembly or Storage on 1997-2017 Cummins 15.0L ISX Diesel Engines

The AERA Technical Committee offers the following information on engine damage after engine assembly or storage on 1997-2017 Cummins 15.0L ISX engines. It is important that this information be considered before engine startup or engine damage may result.

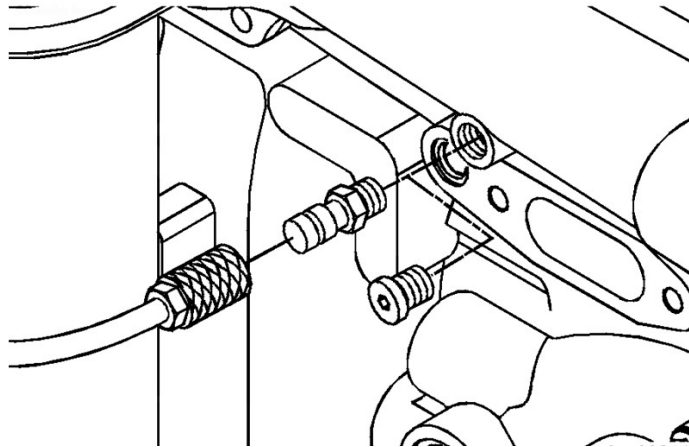
There have been numerous reports of engine damage such as cam bearing failures on these engines. After engine assembly, if the engine oiling system is not charged (primed) immediately before starting engine damage may result. Due to the extensive length and volume of this oiling system, it could take several minutes for all the cavities, filters, coolers and galleries to become filled after the engine first starts. It is important to realize that is ample time for unlubricated components to initialize potential engine damage.

Cummins provides the following information on pressurizing the oil system on these engines before startup after engine assembly has occurred.

### CAUTION:

The lubricating oil system must be primed before operating the engine after any internal engine repairs or extended engine storage (beyond 6 months) to avoid internal component damage.

- Remove the oil plug from the lubricating oil cooler housing and install fitting and hose.
- Use the coupler, Part Number 3376859, to connect the priming pump to the coupling.



**Figure 1. Oil Plug and #3376859 Connector Location**

- Connect the priming pump oil supply hose to the lubricating oil pump coupling. Use clean 15W-40 lubricating oil from a drum or a container to supply oil to the lubricating oil pump and engine.
- Turn the priming pump on.



- Allow the oil to flow until the oil pressure gauge indicates a maximum pressure of 10-20 Psi (69-138 kPa) at the main oil rifle.
- Turn the priming pump off. Remove the priming pump oil supply hose and fitting. Install the oil cooler housing plug and torque to 25 FT/LB (34 Nm).
- The engine oil level may need adjustment (add/remove oil) and then the engine is ready to start.

One may not always remember or realize the volume of oil this engine pumps to adequately lubricate critical engine components. That volume may be one only one reason the oil pan capacity is 12 gallons (45.420 liters).