



# TECH TIPS



## Replacing Oil-Cooled Turbocharger Center Housing Rotating Assemblies (CHRA)



When installing a replacement turbocharger CHRA, keep in mind the main reason for initial failure. In most cases it is caused by a clogged oil inlet line, which results in improper oil flow to the center section, an overheated turbo assembly and ultimately to bearing failure.

So always remember to replace this inlet oil feed line - not just clean, but replace. Then inspect and thoroughly clean the return line. Both of these operations must be done before installation on the engine.

Remove any foreign objects that may have been left in the turbo air inlet or exhaust pipes. When all is cleared, align the end housings to the new center section and torque to specification. Prime the center bearing of the new center section with clean engine oil through the oil feed inlet. Always change the inlet air filter as well as the engine oil and filter when replacing a

turbo and use only turbo grade engine oil.

Next, crank the engine for approximately one minute with the ignition and fuel system disabled in order to have sufficient lubrication on the first start. Crank for 10 seconds at a time so as not to overheat the starter.

Be aware that it is normal for some oil smoke to be present in the exhaust gas for a short time. In fact, it may take up to 30 minutes before the exhaust gas clears.

Make sure the oxygen sensor is functioning properly. It may also have to be replaced due to oil contamination from the previous failed turbocharger.

Finally, verify that all engine systems are functioning properly.

**Always check to make sure that the ground straps are in place and complete connections are made.**

