Cylinder Liner Assembly Removal on 2002-2006 Detroit Diesel 60 Series 12.7 + 14.0L EGR Diesel Engines

The AERA Technical Committee offers the following information on cylinder liner assembly removal for 2002-2006 Detroit Diesel 12.7 & 14.0L EGR diesel engines. This information should be considered anytime cylinder liners or pistons are removed from the above engines.

These liner assemblies are different from other Detroit Diesel engines as they’re required to be removed as a complete assembly, liner, piston and connecting rod all at the same time. The lower end (big end) of the connecting rod is larger than the cylinder bore size, so the rod cannot be removed in a conventional manner. Re-assembly of the piston/rings assembly is accomplished by installation from the liner bottom. **Note:** In-chassis does not allow for piston removal from the bottom.

Detroit Diesel supplies a tool Part #J45876 as shown in Figure 1 to use for all in-chassis work for these engines.

![Figure 1. Detroit Diesel J45876 Tool](image)

Aftermarket suppliers also supply similar tools as shown in Figure 2. The tools use a rubberized expanding mandrel to grab the liner inside diameter to allow the it to be pulled from the cylinder block. Rotating the crankshaft with the tool installed will supplement liner assembly removal as the piston crown pushes against the tool.
Figure 2. Aftermarket Liner Assembly Tool