

Injector Sleeve Installation on 2004-2017 Caterpillar C7 Diesel Engines

The AERA Technical Committee offers the following information regarding injector sleeve installation on 2004-2017 Caterpillar C7 diesel engines. This information should be considered anytime the cylinder head is being worked on.

Before installing new injector sleeves, thoroughly clean the injector sleeves with the 4C-5552 large bore brush. Also, thoroughly clean the bore in the cylinder head for the injector sleeves with the same brush.

Note: Do not apply any lubricant to the new O-ring seals.

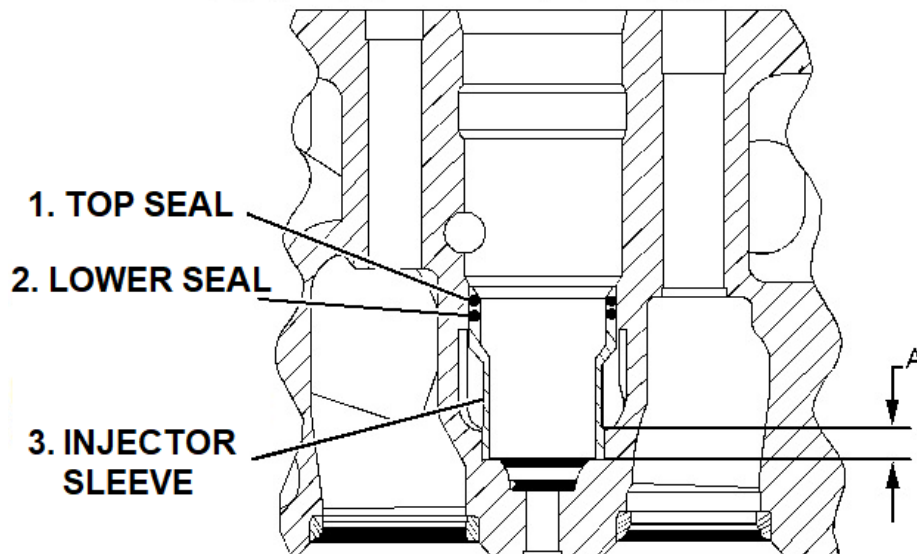


Figure 1. Injector Sleeve Sealing Detail

The following parts can be obtained from Caterpillar or many aftermarket suppliers.

- (1) 310-7255 O-Ring Seal
310-7258 O-Ring Seal for C7 with the S/N:C7S1-UP serial number prefix
- (2) 310-7257 O-Ring Seal
310-7259 O-Ring Seal for C7 with the S/N:C7S1-UP serial number prefix
- (3) 227-1200 Injector Sleeve

- Install the upper O-Ring (1) on the injector sleeve (3) Note: The upper O-Ring is dark blue.
- Install the lower O-Ring (2) on the injector sleeve (3) Note: The lower O-Ring (2) is turquoise.
- Position the injector sleeve on the 221-9777 Sleeve Installer.
- Apply a thin coat of 4C-9507 Retaining Compound around the outer circumference of area (A).



- Ensure that the retaining compound does not make contact with the O-Ring seal at any time.
- Position the injector sleeve (3) in the cylinder head by using the 221-9777 Sleeve Installer.
- Slowly push the injector sleeve into the cylinder head by gently tapping with a hammer.
- Note: Allow the 4C-9507 Retaining Compound to cure for two hours at 21 °C (70 °F) before filling the engine with coolant. Longer curing time is required for lower temperatures.