Injector Sleeve Installation on 1998-2016 Caterpillar C16 & C18 Diesel Engines

The AERA Technical Committee offers the following information regarding injector sleeve installation for 1998-2016 Caterpillar C16 & C18 diesel engines. This information should be considered anytime the cylinder heads are being serviced.

These engines use a Stainless-Steel injector sleeve and although Caterpillar indicates those individual sleeves (unless damaged) may be reusable. Most shops however, replace those sleeves (available in the aftermarket) anytime the cylinder head is being remanufactured. Follow the procedure listed below to install the injector sleeves after assuring the cylinder head bore and electronic unit injector sleeve are completely free of dirt, oil, and sealant debris.

NOTE: Keep all components clean from any contaminants as it will cause rapid wear and shortened life.

1. Install two NEW "O" ring seals on electronic unit injector sleeve.
2. Use retaining compound to contact surface of electronic unit injector sleeve on surface having Marked "X" in Figure 1. (4C-9507, 185-3988 or Loctite 620).
3. Use clean engine oil to lubricate "O" ring seals.
4. Install puller stud (221-9778) into threads of electronic unit injector sleeve.
5. Place puller stud and electronic unit injector sleeve in cylinder head. Do Not damage "O" ring seals on electronic unit injector sleeve.
6. To install electronic unit injector sleeve in cylinder head, use a hammer and Driver Cap (9U-7258).
7. Remove driver cap and puller stud. Remove excess retaining compound with a clean towel.
8. Install electronic unit injector.

NOTE: Use only approved retaining compound 4C-9507, 185-3988 or Loctite 620 on electronic unit injector sleeve only and never apply compound to cylinder head surfaces.

NOTE: Seat electronic unit injector sleeve properly in cylinder head. "RING" sound will be caused by tooling if electronic unit injector sleeve is fully seated in bore of cylinder head.
Figure 1. Injector Sleeve Cylinder head 1, “O” Rings 2, X Retaining Compound Area