CATERPILLAR® Service Information System Shutdown SIS

Previous Screen

Product: TRUCK ENGINE
Model: 3126E TRUCK ENGINE CKM
Configuration: 3126E Truck Engine CKM00001-UP

Disassembly and Assembly
3126B and 3126E On-highway Engines

Media Number -RENR1369-15 **Publication Date -01/12/2005** **Date Updated -09/12/2005**

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Unit Injector - Remove

SMCS - 1290-011

Removal Procedure

Table 1

Required Tools			
Tool	**Part Number**	**Part Description**	**Qty**
A	1U-7587	Pry Bar	1
B (1)	4C-5027	Tap Wrench	1
	4C-6161	Tube Brush	1
	4C-6774	Vacuum Gun Kit	1
	8T-7765	Surface Reconditioning Pad	1
	1U-5512	Abrasive Material	1
	9U-6102	Reamer	1
	9U-6862	Tapered Brush	1
C (2)	4C-4057	Tube	1
	1U-5718	Vacuum Pump	1
	1U-5814	Bottle Assembly	1

(1) Tools for cleaning carbon deposits from the injector sleeve bores

(2) Tools for evacuating fuel from the cylinders

Start By:

A. Remove the valve mechanism cover. Refer to Disassembly and Assembly, "Valve Mechanism Cover - Remove and Install".

NOTICE

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

NOTICE

Care must be taken to ensure that fluids are contained during performance of inspection, maintenance, testing, adjusting and repair of the product. Be prepared to collect the fluid with suitable containers before opening any compartment or disassembling any component containing fluids.

Refer to Special Publication, NENG2500, "Caterpillar Tools and Shop Products Guide" for tools and supplies suitable to collect and contain fluids on Caterpillar products.

Dispose of all fluids according to local regulations and mandates.

Removal Of The Injector

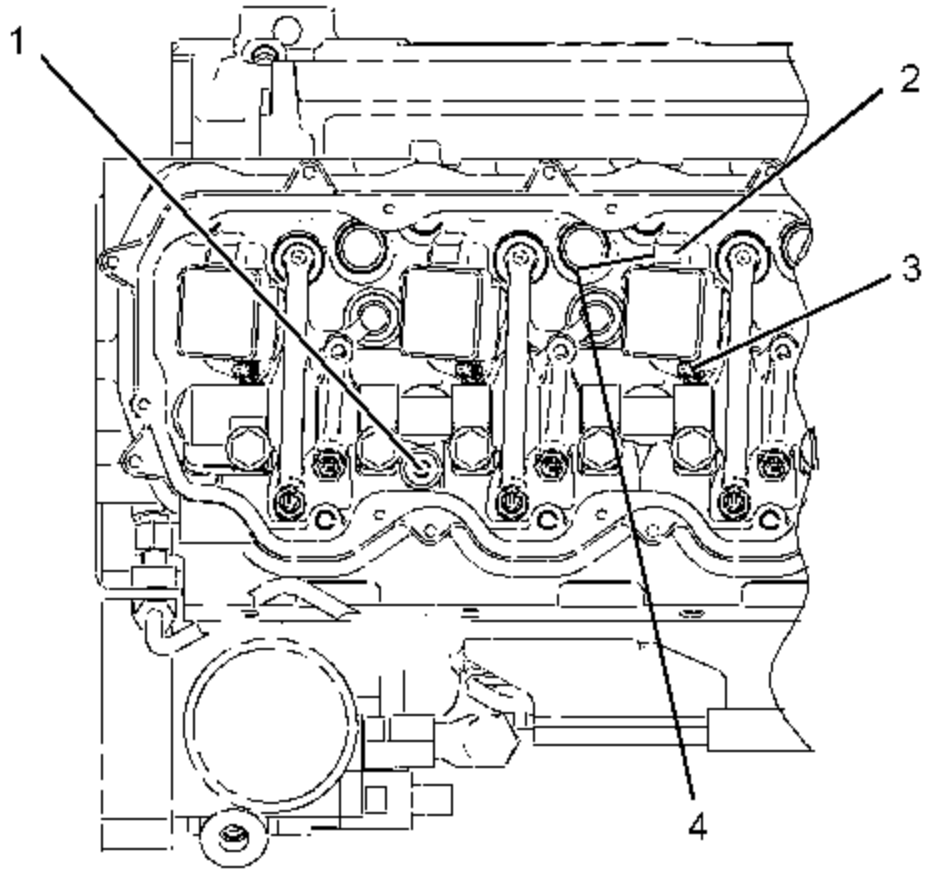

Illustration 1 g01025360

1. Remove oil drain plugs (1) at each end of the cylinder head.
2. Allow the engine oil to drain from the ports in the cylinder head before the injector is removed.
3. Disconnect harness connector (2) .

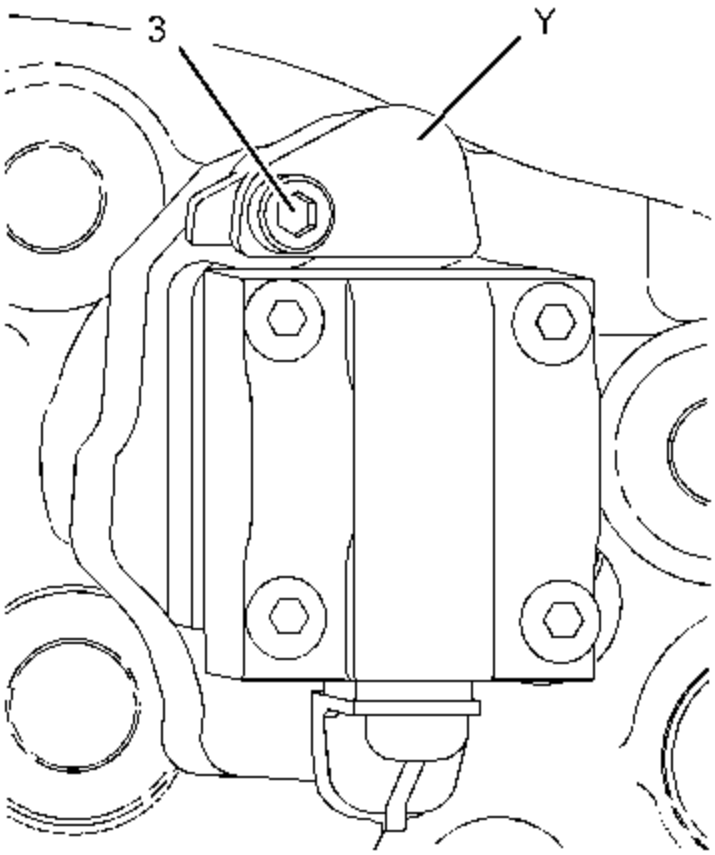

Illustration 2 g01025365

Note: Some of these engines were built without the deflector. During the installation of the unit injectors, the deflectors (Y) should be installed.

4. Remove bolt (3) .
5. Remove bolt (4) .

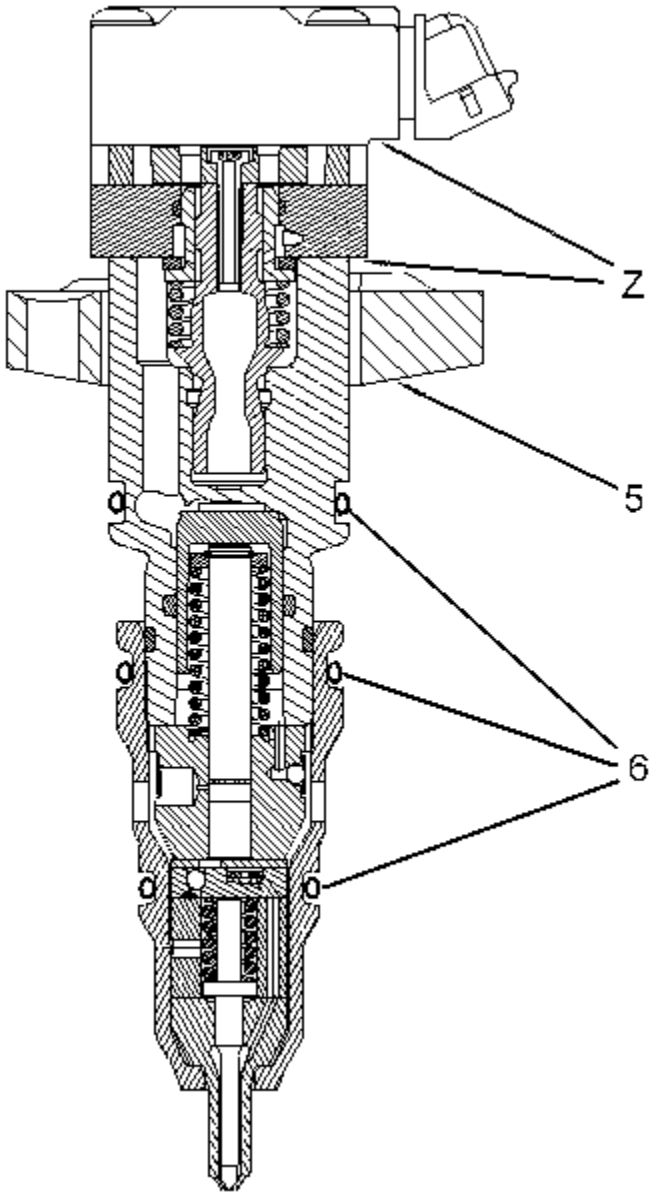

Illustration 3 g01025366

6. Place Tooling (A) under clamp (5) on the flywheel side of the injector.
7. Tooling (A) should be placed at this location in order to gently remove the injector. Use Tooling (A) to remove the injector.
8. Do not pry at location (Z) .
9. Remove the O-Ring seals (6) from the injector.
10. Repeat Step 3 through Step 9 for the remainder of the injectors.

Steps For Cleaning The Carbon Deposits

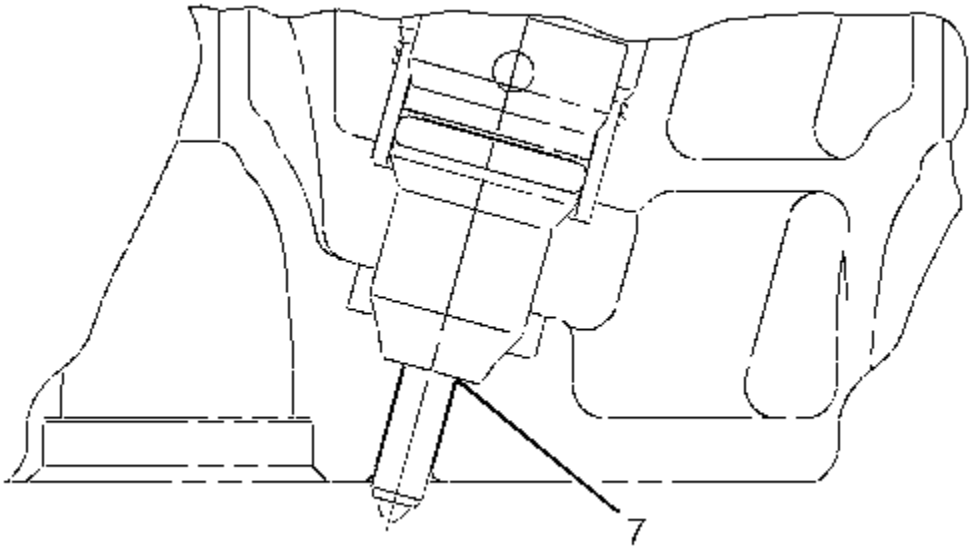

Illustration 4 g01025369

Cleanliness is very important in the area around the sleeve and the sleeve bore when you are reinstalling the injector. This injector has a metal seal (7) between the bottom of the injector's case and a seat in the cylinder head. Clean the carbon from the seat area that is inside of the cylinder head. Also clean the carbon from the end of the injector if the injector should be reinstalled.

The fine grade of the Scotch Brite material is preferred. Scotch Brite is available from the Tools And Shop Products Guide as the abrasive material and as the surface reconditioning pad.

If the sleeve of the injector has been removed from the engine, use a reamer to remove carbon deposits from the angled surface.

Note: Do not use the reamer in order to remove metal from the sleeve. Use the reamer in order to remove carbon only.

If the sleeve of the injector is installed in the engine, use the tube brush to clean the carbon deposits from the inside of the sleeve.

If you choose to clean the angled seat on the injector with a wire brush, the wire brush should not contact the tip of the injector. Failure of the tip and major engine damage may result.

Note: Using power tools in order to rotate the material should not be necessary. The carbon in the sleeve is more removable than the carbon at locations that are exposed to higher temperatures.

The following procedure is the preferred method of cleaning the sleeve bore.

1. Place a 38 mm (1.5 inch) square piece of Scotch Brite material on the end of a tapered brush.

2. Twist the tapered brush with the tap wrench against the lower surface of the sleeve bore.
3. The surface should be cleaned until the surface is smooth and shiny. The entire sleeve bore should be cleaned in order to remove any loose carbon particles.

Note: A vacuum gun kit is available in order to clean the loose material from the sleeve bore.

Evacuation Of Fuel And Oil From The Cylinder

Evacuate as much fuel and oil as possible from the cylinder before installation of the injector. Use Tooling (C) to evacuate the fuel. Several evacuations may be necessary.
