Image: Model: DSR XL TRACK-TYPE TRACTOR
Model: DSR XL TRACK-TYPE TRACTOR D5X
Configuration: DSR XL, LGP Differential Steering, Electrohydraulic Implement TRACK-TYPE TRACTOR D5X00001-UP (MACHINE) POWERED BY C6.6 Engine

### Disassembly and Assembly

C6.6 Engines for Caterpillar Built Machines
Media Number -KENR6081-15 Publication Date -01/03/2014

Date Updated -04/03/2014

i03083621

# **Fuel Injection Pump - Remove**

SMCS - 1251-011

## **Removal Procedure**

Required Tools			
Tool	Part Number	Part Description	Qty
A <sup>(1)</sup>	9U-6198	Crankshaft Turning Tool	1
	9U-7336	Housing	1
A	5P-7305	Engine Turning Tool	1
В	230-6284	Timing Pin (Camshaft)	1
С	136-4632	Timing Pin (Crankshaft)	1
	268-1966	Adapter	1
D	278-4138	Cap Kit	1

<sup>(1)</sup> Install Tooling to the front pulley.

<sup>(2)</sup> Install Tooling into the aperture for the electric starting motor.

#### **Start By:**

a. Remove the front cover. Refer to Disassembly and Assembly, "Front Cover - Remove and Install".

Note: Either Tooling (A) can be used. Use the Tooling that is most suitable.



Ensure that all adjustments and repairs that are carried out to the fuel system are performed by authorised personnel that have the correct training.

Before begining ANY work on the fuel system, refer to Operation and Maintenance Manual, "General Hazard Information and High Pressure Fuel Lines" for safety information.

Refer to Systems Operation, Testing and Adjusting Manual, "Cleanliness of Fuel System Components" for detailed information on the standards of cleanliness that must be observed during ALL work on the fuel system.

#### 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.

Dispose of all fluids according to local regulations and mandates.

**Note:** Put identification marks on all hoses, on all hose assemblies, on wires and on all tube assemblies for installation purposes. Plug all hose assemblies and tube assemblies. This helps to prevent fluid loss and this helps to keep contaminants from entering the system.

- 1. Turn the fuel supply to the OFF position.
- 2. Turn the battery disconnect switch to the OFF position.
- 3. If necessary, remove the fuel filter base. Refer to Disassembly and Assembly, "Fuel Filter Base Remove and Install".
- 4. If necessary, remove the fuel priming pump. Refer to Disassembly and Assembly, "Fuel Priming Pump Remove".
- 5. Use Tooling (A) in order to rotate the crankshaft so that number one piston is at top dead center on the compression stroke. Refer to System Operation, Testing and Adjusting, "Finding Top Centre Position for No.1 Piston".
- 6. Use Tooling (B) in order to lock the camshaft in the correct position. Use Tooling (C) in order to lock the crankshaft in the correct position. Refer to Disassembly and Assembly, "Gear Group (Front) Remove" for the correct procedure.
- 7. Remove the backlash from the fuel pump gear. Lock the fuel injection pump in the correct position and remove the fuel pump gear. Refer to Disassembly and Assembly, "Fuel Pump Gear Remove and Install" for the correct procedure.



Illustration 1 Typical example g01563275



Typical example

- 8. Disconnect plastic tube assembly (2) from fuel injection pump (1).
- 9. Disconnect harness assembly (6) from solenoid (3). Slide the locking tab into the unlocked position and disconnect harness assembly (6) from position sensor (7).

Note: The harness assembly should be positioned in order to avoid an obstruction to the fuel injection pump.

- 10. Disconnect plastic tube assembly (10) from fuel injection pump (1).
- 11. Disconnect plastic tube assembly (9) from fuel injection pump (1).
- 12. Disconnect tube assembly (4) from fuel injection pump (1).
- 13. Remove banjo bolt (13) and remove sealing washers (12). Remove tube assembly (11).

**Note:** In order to drain the fuel from the cylinder head, first disconnect tube assembly (11) at the fuel injection pump.

14. Plug or cap all open ports and tube assemblies immediately with new plugs or caps.

Note: Ensure that quick fit connections are clean before the tube assemblies are plugged.

- Remove fuel injection line (5). Refer to Disassembly and Assembly, "Fuel Injection Lines Remove". Use Tooling (D) in order to plug the open ports in the fuel injection pump and in the fuel manifold. Discard the fuel injection line.
- 16. Remove tube assembly (8) for the engine oil supply to the fuel injection pump. Remove the banjo bolt and the sealing washers from the tube assembly.



Illustration 3 Typical example g01563333

17. Remove bolts (15) and remove bolts (16). Remove support bracket (14).



Illustration 4 Typical example g01563853

18. Remove bolts (18) and remove sealing washers (19).

Note: The fuel injection pump should be supported by hand as the bolts are removed.

- 19. Carefully remove fuel injection pump (1) from front housing (20). Ensure that bore (X) in the front housing is not damaged as the fuel injection pump is removed.
- 20. Remove O-ring seal (17) from fuel injection pump (1).

Image: Model: DSR XL TRACK-TYPE TRACTOR
Model: DSR XL TRACK-TYPE TRACTOR D5X
Configuration: DSR XL, LGP Differential Steering, Electrohydraulic Implement TRACK-TYPE TRACTOR D5X00001-UP (MACHINE) POWERED BY C6.6 Engine

### Disassembly and Assembly

C6.6 Engines for Caterpillar Built Machines
Media Number -KENR6081-15 Publication Date -01/03/2014

Date Updated -04/03/2014

i04994249

## **Fuel Injection Pump - Install**

SMCS - 1251-012

### **Installation Procedure**

Table 1			
Required Tools			
Tool	Part Number	Part Description	Qty
A (1)	9U-6198	Crankshaft Turning Tool	1
A (2)	9U-7336	Housing As	1
	5P-7305	Engine Turning Tool	1
В	230-6284	Timing Pin (Camshaft)	1
С	136-4632	Timing Pin (Crankshaft)	1
	268-1966	Adapter	1
Е	338-1054	Timing Tool (Fuel Injection Pump)	1
F	1U-6396	O-Ring Assembly Compound	-

<sup>(1)</sup> Install Tooling to the front pulley.

<sup>(2)</sup> Install Tooling into the aperture for the electric starting motor.

Note: Either Tooling (A) can be used. Use the Tooling that is most suitable.

### NOTICE

Ensure that all adjustments and repairs that are carried out to the fuel system are performed by authorized personnel that have the correct training.

Before beginning ANY work on the fuel system, refer to Operation and Maintenance Manual, "General Hazard Information and High Pressure Fuel Lines" for safety information.

Refer to System Operation, Testing and Adjusting, "Cleanliness of Fuel System Components" for detailed information on the standards of cleanliness that must be observed during ALL work on the fuel system.



Typical example

# Note: A new fuel injection pump is supplied, locked in the correct position. Do not unlock the fuel injection pump before installation.

- 1. If the fuel injection pump timing has been lost, it is possible to reset the fuel injection pump timing. Follow Step 1.a through Step 1.e in order to reset the fuel injection pump timing.
  - a. Loosen locking screw (22) and slide spacer (21) to Position (AA). Tighten locking screw (22) to a torque of 9 N·m (80 lb in). Placing the spacer into Position (AA) will prevent the locking screw from tightening against the shaft of the fuel injection pump.

The fuel injection pump is now unlocked.

b. Position Tooling (E) onto the shaft of fuel injection pump (1). Align the lever of Tooling (E) with Keyway (Y) and engage the lever into the keyway.

**Note:** The lever of Tooling (E) should be a close fit in the keyway. If the lever is a loose fit in the keyway, It is not possible to reset the fuel injection pump timing.

c. Rotate the shaft of the fuel injection pump and engage the pin of Tooling (E) into Hole (Z).

The fuel injection pump timing is now set in the correct position.

d. Loosen locking screw (22) and slide spacer (21) to Position (BB). Tighten locking screw (22) to a torque of 9 N⋅m (80 lb in). The locking screw is now tightened against the shaft of the fuel injection pump.

The fuel injection pump is now locked.

e. Remove Tooling (E).



g03172736

- Inspect Bore (X) in front housing (20) for damage. If the bore is damaged, replace the front housing. Refer to Disassembly and Assembly, "Housing (Front) - Remove" and Disassembly and Assembly, "Housing (Front) -Install".
- 3. Use Tooling (F) to lubricate a new O-ring seal (17). Install the O-ring seal onto fuel injection pump (1).
- 4. Align fuel injection pump (1) with front housing (20). Carefully install the fuel injection pump to the front housing.

Note: The fuel injection pump should be supported by hand until the bolts are installed.

5. Install bolts (18) and new sealing washers (19). Tighten the bolts to a torque of 25 N  $\cdot$  m (18 lb ft).

Note: One sealing washers should be installed to each bolt.

- 6. If necessary, use Tooling (A) in order to rotate the crankshaft so that number one piston is at top dead center on the compression stroke. Refer to System Operation, Testing and Adjusting, "Finding Top Center Position for No.1 Piston".
- 7. Use Tooling (B) in order to lock the camshaft in the correct position. Use Tooling (C) in order to lock the crankshaft in the correct position. Refer to Disassembly and Assembly, "Gear Group (Front) Remove" for the correct procedure.
- 8. Install the fuel injection pump gear to the fuel injection pump. Refer to Disassembly and Assembly, "Fuel Injection Pump Gear Install" and refer to Disassembly and Assembly, "Gear Group (Front) Install".

Note: Ensure that the fuel injection pump is unlocked after the installation of fuel injection pump gear is completed.

9. Install the front cover. Refer to Disassembly and Assembly, "Front Cover - Remove and Install".



g01563333

Typical example

- 10. Position support bracket (14) onto the fuel injection pump. Install bolts (15) finger tight. Install bolts (16) finger tight.
- 11. Tighten bolts (15) to a torque of 22 N·m (16 lb ft). Tighten bolts (16) to a torque of 22 N·m (16 lb ft).

If the support bracket is secured by an M10 bolt, tighten the bolt to a torque of 44 N  $\cdot$  m (32.5 lb ft).

Note: Ensure that the fuel injection pump is not stressed as the bolts are tightened.



g01563276

Typical example



Typical example

- 12. Install the banjo bolt and new sealing washers to tube assembly (8). Install tube assembly (8) for the oil feed to the fuel injection pump. Tighten the banjo bolt and the nut to a torque of 15 N·m (11 lb ft).
- 13. Install a new fuel injection line (5). Refer to Disassembly and Assembly, "Fuel Injection Lines Install".
- 14. Install new sealing washers (12) and banjo bolt (13) to tube assembly (11) . Install tube assembly (11) . Tighten the banjo bolt to a torque of 21 N·m (15 lb ft).
- 15. Connect tube assembly (4) to fuel injection pump (1).
- 16. Connect plastic tube assembly (9) to fuel injection pump (1).
- 17. Connect plastic tube assembly (10) from fuel injection pump (1).
- 18. Connect harness assembly (6) to solenoid (3). Connect harness assembly (6) to position sensor (7). Slide the locking tab into the locked position.
- 19. Connect plastic tube assembly (2) to fuel injection pump (1).
- 20. If necessary, install the fuel priming pump. Refer to Disassembly and Assembly, "Fuel Priming Pump Remove and Install".
- 21. If necessary, install the fuel filter base. Refer to Disassembly and Assembly, "Fuel Filter Base Remove and Install".
- 22. Turn the battery disconnect switch to the ON position.
- 23. Turn the fuel supply to the ON position.
- 24. Remove the air from the fuel system. Refer to Operation and Maintenance Manual, "Fuel System Prime" for more information.

Image: Model: DSR XL TRACK-TYPE TRACTOR
Model: DSR XL TRACK-TYPE TRACTOR D5X
Configuration: DSR XL, LGP Differential Steering, Electrohydraulic Implement TRACK-TYPE TRACTOR D5X00001-UP (MACHINE) POWERED BY C6.6 Engine

### Disassembly and Assembly

C6.6 Engines for Caterpillar Built Machines
Media Number -KENR6081-15 Publication Date -01/03/2014

Date Updated -04/03/2014

i02786669

## **Fuel Injection Pump Gear - Remove**

SMCS - 1251-011

### **Removal Procedure**

Table 1			
Required Tools			
Tool	Part Number	Part Description	Qty
A <sup>(1)</sup>	9U-6198	Crankshaft Turning Tool	1
A <sup>(2)</sup>	9U-7336	Housing	1
	5P-7305	Engine Turning Tool	1
В	230-6284	Timing Pin (Camshaft)	1
С	136-4632	Timing Pin (Crankshaft)	1
	268-1966	Adapter	1
D	-	Puller (Three Leg)	2

<sup>(1)</sup> The Crankshaft Turning Tool is used on the front pulley.

<sup>(2)</sup> This Tool is used in the aperture for the electric starting motor.

#### **Start By:**

a. Remove the front cover. Refer to Disassembly and Assembly, "Front Cover - Remove and Install".

Note: Either Tooling (A) can be used. Use the Tooling that is most suitable.

### 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.

#### Dispose of all fluids according to local regulations and mandates.

**Note:** Care must be taken in order to ensure that the fuel injection pump timing is not lost during the removal of the fuel pump gear. Carefully follow the procedure in order to remove the fuel pump gear.

1. Use Tooling (A) in order to rotate the crankshaft so that number one piston is at top dead center on the compression stroke. Refer to System Operation, Testing and Adjusting, "Finding Top Centre Position for No.1 Piston".



Illustration 1

g01335379

2. Install Tooling (B) through hole (X) in camshaft gear (1) into the front housing. Use Tooling (B) in order to lock the camshaft in the correct position.



3. Remove plug (4) from the cylinder block. Install Tooling (C) into hole (Y) in the cylinder block. Use Tooling (C) in order to lock the crankshaft in the correct position.

**Note:** Do not use excessive force to install Tooling (C). Do not use Tooling (C) to hold the crankshaft during repairs.



4. Apply sufficient pressure to fuel injection pump gear (3) in a counterclockwise direction in order to remove the backlash. Lock fuel injection pump (5) in this position.

In order to lock fuel injection pump (5), loosen locking screw (6) in the fuel injection pump. Slide spacer (7) into position (Z2). Tighten locking screw (6) against the shaft of the fuel injection pump to a torque of  $9 \text{ N} \cdot \text{m}$  (80 lb in).



5. Mark gears (1), (2) and (3) in order to show alignment. Refer to Illustration 4.

Note: Identification will ensure that the gears can be installed in the original alignment.

- 6. Loosen nut (8) for fuel pump gear (3).
- 7. Install Tooling (D) through three holes in fuel pump gear (3). Tighten Tooling (D) until fuel pump gear (3) is released.
- 8. Remove Tooling (D) from fuel pump gear (3).
- 9. Remove nut (8) and the washer from fuel pump gear (3). Remove the fuel pump gear.

Product: TRACK-TYPE TRACTOR
 Model: D5R XL TRACK-TYPE TRACTOR D5X
 Configuration: D5R XL, LGP Differential Steering, Electrohydraulic Implement TRACK-TYPE TRACTOR D5X00001-UP (MACHINE) POWERED BY C6.6 Engine

### Disassembly and Assembly

C6.6 Engines for Caterpillar Built Machines
Media Number -KENR6081-15 Publication Date -01/03/2014

Date Updated -04/03/2014

i06622574

# **Fuel Injection Pump Gear - Install**

SMCS - 1251-012

## **Installation Procedure**

Required Tools			
Tool	Part Number	Part Description	Qty
В	230-6284	Timing Pin (Camshaft)	1
С	136-4632	Timing Pin (Crankshaft)	1
	268-1966	Adapter	1

### NOTICE

### Keep all parts clean from contaminants.

### Contaminants may cause rapid wear and shortened component life.

Note: The fuel injection pump must remain locked until the procedure instructs you to unlock the fuel injection pump.

1. Ensure that number one piston is at top dead center on the compression stroke. Refer to System Operation, Testing and Adjusting, "Finding Top Center for No. 1 Piston" for the correct procedure.



2. Ensure that Tooling (C) is installed in Hole (Y) in the cylinder block. Use Tooling (C) to lock the crankshaft in the correct position.



#### Illustration 2

g01335394

- 3. Ensure that Tooling (B) is installed into Hole (X) in camshaft gear (1).
- 4. Ensure that shaft (9) of the fuel injection pump is clean and free from damage.
- 5. Ensure that the fuel injection pump is locked in the correct position. Refer to Disassembly and Assembly, "Fuel Injection Pump Install" for the correct procedure.
- 6. Ensure that the fuel pump gear is clean and free from wear of damage. If necessary, replace the fuel pump gear.



Illustration 3 Alignment of timing marks g01335384



Illustration 4 Typical example g01335395



Illustration 5 Typical example g01335382

- 7. Follow Step 7.a through Step 7.f to install injection pump gear (3) to the fuel injection pump.
  - a. Ensure that the tapers on fuel injection pump shaft (9) and the fuel injection pump gear (3) are clean and dry.
  - b. Install fuel pump gear (3) to shaft (9) of fuel injection pump (5). Ensure that the timing marks on gear (2) and gear (3) are in alignment and that the mesh of the gears is correct.
  - c. Install a new spring washer (10) and install nut (8) to shaft (9) of the fuel injection pump. Apply sufficient pressure to fuel injection pump gear (3) in a counterclockwise direction to remove the backlash.
  - d. Tighten nut (8) to a torque of 25 N·m (221 lb in).
  - e. Unlock the fuel injection pump (5). To unlock fuel injection pump (5), loosen the locking bolt (6) in the fuel injection pump. Slide spacer (7) into Position (Z1). Tighten locking bolt (6) against the spacer to a torque of

 $9 \text{ N} \cdot \text{m}$  (80 lb in). Locking the locking bolt against the spacer will prevent the locking bolt from contacting the shaft of the fuel injection pump.

- f. Tighten nut (8) to a torque of 90 N $\cdot$ m (66 lb ft).
- 8. Remove Tooling (B) and Tooling (C). Install plug (4) into Hole (Y) in the cylinder block. Refer to Illustration 1.



- 9. Ensure the backlash for gear (1), gear (2), and gear (3) are within specified values. Refer to the Specifications, "Gear Group (Front)" for further information.
- 10. Lubricate the teeth of gear (1), gear (2), and gear (3) with clean engine oil.

#### End By:

a. Install the front cover. Refer to Disassembly and Assembly, "Front Cover - Remove and Install" for the correct procedure.

Image: Model: DSR XL TRACK-TYPE TRACTOR
Model: DSR XL TRACK-TYPE TRACTOR D5X
Configuration: DSR XL, LGP Differential Steering, Electrohydraulic Implement TRACK-TYPE TRACTOR D5X00001-UP (MACHINE) POWERED BY C6.6 Engine

### Disassembly and Assembly

C6.6 Engines for Caterpillar Built Machines
Media Number -KENR6081-15 Publication Date -01/03/2014

Date Updated -04/03/2014

i05735213

# **Electronic Unit Injector - Remove**

SMCS - 1290-011

# **Removal Procedure**

Required Tools				
Tool	Part Number	Part Description	Qty	
A <sup>(1)</sup>	9U-6198	Crankshaft Turning Tool	1	
A <sup>(2)</sup>	9U-7336	Housing	1	
	5P-7305	Engine Turning Tool	1	
В	298-5564	T40 Torx Socket	1	
C	5F-4764	Pry Bar	1	

<sup>(1)</sup> The Crankshaft Turning Tool is used on the front pulley.

 $^{\left(2\right)}$  This Tool is used in the aperture for the electric starting motor.

#### Start By:

a. Remove the valve mechanism cover. Refer to Disassembly and Assembly, "Valve Mechanism Cover - Remove and Install" for the correct procedure.

Note: Either Tooling (A) can be used. Use the Tooling that is most suitable.



Ensure that all adjustments and repairs that are carried out to the fuel system are performed by authorised personnel that have the correct training.

Before begining ANY work on the fuel system, refer to Operation and Maintenance Manual, "General Hazard Information and High Pressure Fuel Lines" for safety information.

Refer to Systems Operation, Testing and Adjusting Manual, "Cleanliness of Fuel System Components" for detailed information on the standards of cleanliness that must be observed during ALL work on the fuel system.

### 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.

Dispose of all fluids according to local regulations and mandates.

#### NOTICE

Use a deep socket in order to remove the electrical connections from the electronic unit injectors. Use of incorrect tooling will result in damage to the electronic unit injectors.

**Note:** Put identification marks on all hoses, on all hose assemblies, on wires and on all tube assemblies for installation purposes. Plug all hose assemblies and tube assemblies. Plugging all hose assemblies and tube assemblies helps to prevent fluid loss and helps to keep contaminants from entering the system.

- 1. Turn the fuel supply to the OFF position.
- 2. Turn the battery disconnect switch to the OFF position.



Illustration 1 Typical Example g01416992

- 3. Use Tooling (A) in order to rotate the crankshaft until rocker arms (1) for the appropriate cylinder are in the correct position in order to adjust the valve lash. Refer to Systems Operation, Testing and Adjusting, "Engine Valve Lash Inspect/Adjust" for the correct procedure.
- 4. Follow Step 4.a through Step 4.d in order to gain access to the electronic unit injector.
  - a. Make a temporary mark on valve bridges (5) (not shown) in order to show the location and orientation.

**Note:** Identification will ensure that the valve bridges can be reinstalled in the original location and the original orientation.

- b. Loosen nuts (3) for the appropriate cylinder. Unscrew adjusters (2) for the appropriate cylinder until pushrods (4) can be withdrawn from the balls of the adjusters.
- c. Withdraw the cups of pushrods (4) from the balls of adjusters (2).
- d. Remove valve bridges (5) (not shown) from the cylinder head.

Note: Do not interchange the location or the orientation of used valve bridges.



Illustration 2 Typical example g01247489

5. Loosen banjo bolt (7) sufficiently in order to allow the fuel to drain from tube assembly (6).





- The rocker shaft is not shown for clarity.
- 6. Remove the fuel injection line and remove seal (8) from the appropriate electronic unit injector (11). Refer to Disassembly and Assembly, "Fuel Injection Lines Remove" for the correct procedure.

Note: Cap all open ports immediately with new caps.

- 7. Use a deep socket to remove connections (10) from electronic unit injector (11).
- 8. Slide rocker arms (1) to one side in order to gain access to torx screw (12). Use Tooling (B) in order to remove the torx screw from clamp (13).

#### Note: Tooling (B) must be used to ensure no damage to the rocker arms.

9. Place a temporary identification mark on the original electronic unit injector. The electronic unit injector must be reinstalled in the original location in the cylinder head.



The rocker shaft is not shown for clarity.

- 10. Use Tooling (C) to pry beneath clamp (13) and free electronic unit injector (11) from the cylinder head.
- 11. Remove electronic unit injector (11) and clamp (13) from the cylinder head.

Note: Always handle electronic unit injectors with care.



12. Remove sealing washer (14). Ensure that the sealing washer is removed from the cylinder head. Remove O-ring seal (15) from the electronic unit injector.

## **Alternative Removal Procedure**

Table 2
Required Tools

Tool	Part Number	Part Description	Qty
В	298-5564	T40 Torx Socket	1
C	5F-4764	Pry Bar	1

#### **Start By:**

- a. Remove the rocker shaft assembly. Refer to Disassembly and Assembly, "Rocker Shaft Remove" for the correct procedure.
- b. Remove the fuel injection lines. Refer to Disassembly and Assembly, "Fuel Injection Lines Remove" for the correct procedure.

**Note:** This is an optional procedure to remove the electronic unit injectors. The method should ONLY be used when all electronic unit injectors are removed and when the engine is removed from the application.



Contact with high pressure fuel may cause fluid penetration and burn hazards. High pressure fuel spray may cause a fire hazard. Failure to follow these inspection, maintenance and service instructions may cause personal injury or death.

### NOTICE

Ensure that all adjustments and repairs that are carried out to the fuel system are performed by authorised personnel that have the correct training.

Before begining ANY work on the fuel system, refer to Operation and Maintenance Manual, "General Hazard Information and High Pressure Fuel Lines" for safety information.

Refer to Systems Operation, Testing and Adjusting Manual, "Cleanliness of Fuel System Components" for detailed information on the standards of cleanliness that must be observed during ALL work on the fuel system.

### 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.

Dispose of all fluids according to local regulations and mandates.

#### Use a deep socket in order to remove the electrical connections from the electronic unit injectors. Use of incorrect tooling will result in damage to the electronic unit injectors.

**Note:** Put identification marks on all hoses, on all hose assemblies, on wires and on all tube assemblies for installation purposes. Plug all hose assemblies and tube assemblies. Plugging all hose assemblies and tube assemblies helps to prevent fluid loss and helps to keep contaminants from entering the system.

- 1. Turn the fuel supply to the OFF position.
- 2. Turn the battery disconnect switch to the OFF position.



3. Loosen banjo bolt (7) sufficiently in order to allow the fuel to drain from tube assembly (6).



- 4. Place a temporary identification mark on connections (10) for harness assembly (9).
- 5. Use a deep socket to remove connections (10) from electronic unit injector (11).
- 6. Use Tooling (B) in order to remove torx screw (12) from clamp (13).
- 7. Place a temporary identification mark on the original electronic unit injector. The electronic unit injector must be reinstalled in the original location in the cylinder head.



g01255700

- 8. Use Tooling (C) to pry beneath clamp (13) and free electronic unit injector (11) from the cylinder head.
- 9. Remove electronic unit injector (11) and clamp (13) from the cylinder head.

Note: Always handle electronic unit injectors with care.



Thank you so much for reading. Please click the "Buy Now!" button below to download the complete manual.



After you pay.

You can download the most perfect and complete manual in the world immediately.

Our support email:

ebooklibonline@outlook.com