



REN9722-01
SEN9967-03
SEN9968-02

Service Manual

C6.6 Industrial Engine

S/N – 6661 Up

Specifications -

Disassembly and Assembly -

Systems Operation -

Testing and Adjusting -

C6.6 Industrial Engine

REN9722-01

Disassembly and Assembly

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Fuel Priming Pump - Remove and Install - Mechanical Priming Pump

Removal Procedure

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 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.

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.

1. Turn the fuel supply to the OFF position.
2. Make a temporary identification mark on plastic tube assemblies (1) in order to show the correct position of the tube assemblies.
3. Place a suitable container below the fuel priming pump in order to catch any fuel that might be spilled. Drain primary filter (7). Refer to Operation and Maintenance Manual, "Fuel System Primary Filter (Water Separator) Element - Replace".

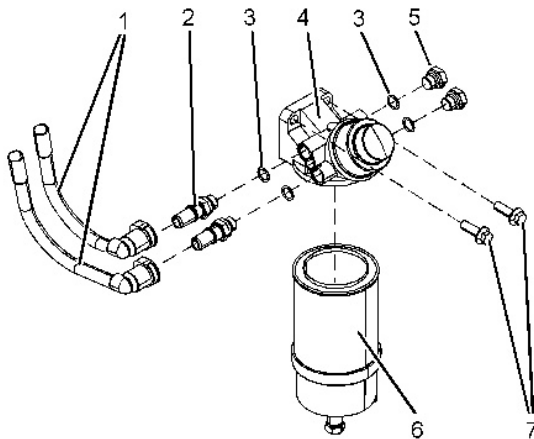


Illustration 1

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Typical example

4. Disconnect plastic tube assemblies (1). Plug the tube assemblies with new plugs. Cap open connectors (2) on the fuel priming pump with new caps.
5. Remove primary filter (6) from fuel priming pump (4). Refer to Operation and Maintenance, "Fuel System Primary Filter (Water Separator) Element - Replace".
6. Remove bolts (7) from fuel priming pump (4). Remove fuel priming pump (4) from the mounting bracket.
7. If necessary, follow Steps 7.a through 7.c in order to disassemble fuel priming pump (4) .
 - a. Remove connectors (2) from fuel priming pump (4) .
 - b. Remove plugs (5) from fuel priming pump (4) .
 - c. Remove O-ring seals (3) from connectors (2) and plugs (5) .

Installation Procedure (Mechanical Priming Pump)

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 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.

1. Ensure that fuel priming pump (4) is clean and free from wear or damage. If necessary, replace the fuel priming pump.

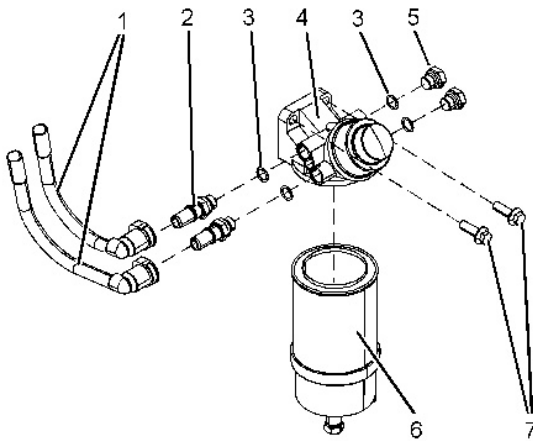


Illustration 2

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Typical example

2. If necessary, follow Steps 2.a through 2.d in order to assemble fuel priming pump (4) .
 - a. Install new O-ring seals (3) to connectors (2) and to plugs (5) .
 - b. Install connectors (2) to fuel priming pump (4).
 - c. Install plugs (5) to fuel priming pump (4) .
 - d. Tighten the plugs and the connectors to a torque of 20 N·m (14 lb ft).

3. Position fuel priming pump (4) on the mounting bracket. Install bolts (7) to the fuel priming pump. Tighten the bolts to a torque of 44 N·m (32 lb ft).
 4. Remove the plugs from the plastic tube assemblies. Remove the caps from the connectors.
 5. Connect plastic tube assemblies (1) to connectors (2) .
Note: Ensure that the plastic tube assemblies are installed in the original positions.
 6. Install a new primary filter (6) to fuel priming pump (4). Refer to Operation and Maintenance Manual, "Fuel System Primary Filter (Water Separator) Element - Replace".
 7. Turn the fuel supply to the ON position.
 8. Prime the fuel system. Refer to Operation and Maintenance Manual, "Fuel System - Prime".
-

Fuel Priming Pump - Remove and Install - Electric Fuel Priming Pump

Removal Procedure

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 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.

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.

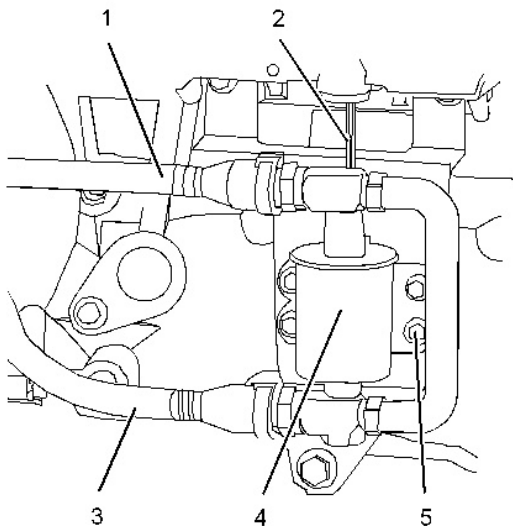


Illustration 1

g01334857

Typical example

1. Turn the fuel supply to the OFF position.
2. Turn the battery disconnect switch to the OFF position.
3. Disconnect harness assembly (2) for electric priming pump (4) .

4. Make a temporary identification mark on plastic tube assemblies (1) and (3) in order to show the correct position of the tube assemblies.
5. Disconnect plastic tube assemblies (1) and (3). Plug the tube assemblies with new plugs. Cap the ports in fuel priming pump (4) with new caps.
6. Remove bolts (5) from electric priming pump (4) .
7. Remove electric priming pump (4) from the mounting bracket.

Installation Procedure (Electric Fuel Priming Pump)

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 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.

1. Ensure that electric priming pump (4) is clean and free from wear or damage. If necessary, replace the electric priming pump.

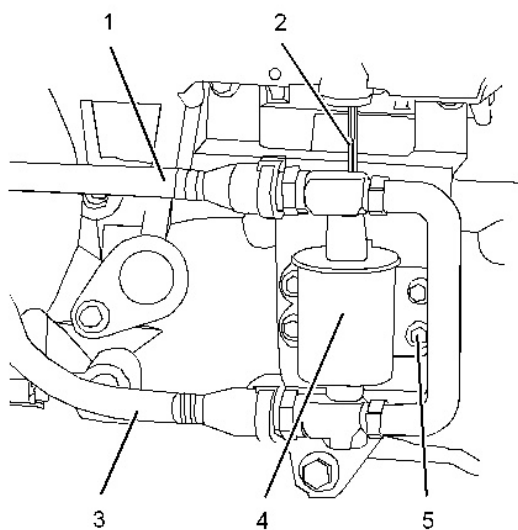


Illustration 2

g01334857

Typical example

2. Position electric priming pump (4) on the mounting bracket. Install bolts (5) to electric priming pump (4) .
3. Tighten bolts (5) to a torque of 9 N·m (79 lb in).
4. Remove the plugs from the plastic tube assemblies. Remove the caps from the electric priming pump.
5. Connect plastic tube assemblies (1) and (3) to electric priming pump (4) .
Note: Ensure that the plastic tube assemblies are installed in the original positions.
6. Connect harness assembly (2) for electric priming pump (4) .
7. Turn the fuel supply to the ON position.
8. Turn the battery disconnect switch to the ON position.
9. Prime the fuel system. Refer to Operation and Maintenance Manual, "Fuel System - Prime".

Fuel Filter Base - Remove and Install - Secondary Fuel Filter

Removal Procedure

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 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.

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.

1. Turn the fuel supply to the OFF position.

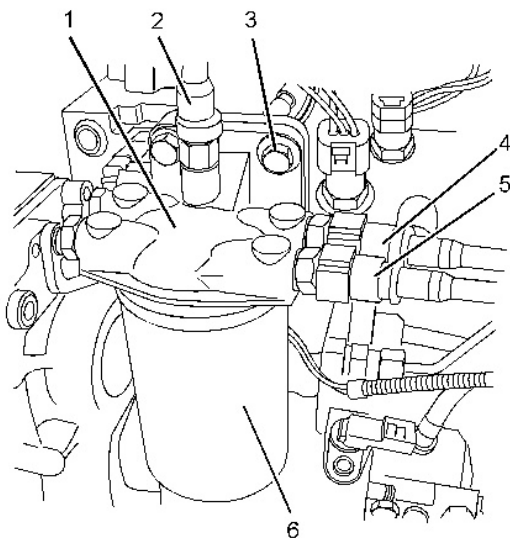


Illustration 1

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Typical example

2. Make temporary identification marks on plastic tube assemblies (2), (4) and (5) in order to show the correct position of the tube assemblies.
3. Place a suitable container below the fuel filter base in order to catch any fuel that might be spilled.

4. Disconnect plastic tube assemblies (2), (4) and (5) from fuel filter base (1). Plug the plastic tube assemblies with new plugs. Cap the ports in the fuel filter base with new caps.
5. Remove fuel filter (6). Refer to Operation and Maintenance Manual, "Fuel System Secondary Filter - Replace".
6. Remove bolts (3) from fuel filter base (1). Remove the fuel filter base from the mounting bracket.

Note: Do not disassemble the fuel filter base.

Installation Procedure

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 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.

1. Ensure that fuel filter base (1) is clean and free from damage. If necessary, replace the complete fuel filter base and filter assembly.

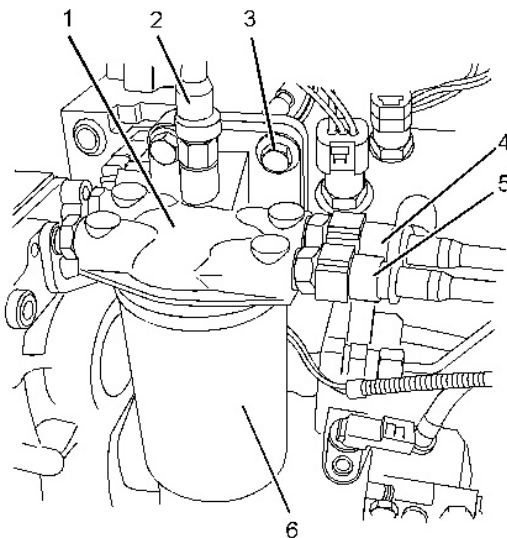


Illustration 2

g01334883

Typical example

2. Position fuel filter base (1) on the mounting bracket. Install bolts (3). Tighten the bolts to a torque of 44 N·m (32 lb ft).
3. Remove the plugs from the plastic tube assemblies. Remove the caps from the ports in the fuel filter base.

NOTICE

Ensure that the plastic tube assemblies are installed in the original positions. Failure to connect the plastic tube assemblies to the correct ports will allow contamination to enter the fuel system. Contaminated fuel will cause serious damage to the engine.