

## SERVICE BULLETIN

Original Issue Date: 7/03

Model: **30-60 kW (GM 4.3 L, 5.0 L, and 5.7 L Engines)**

Market: **Industrial**

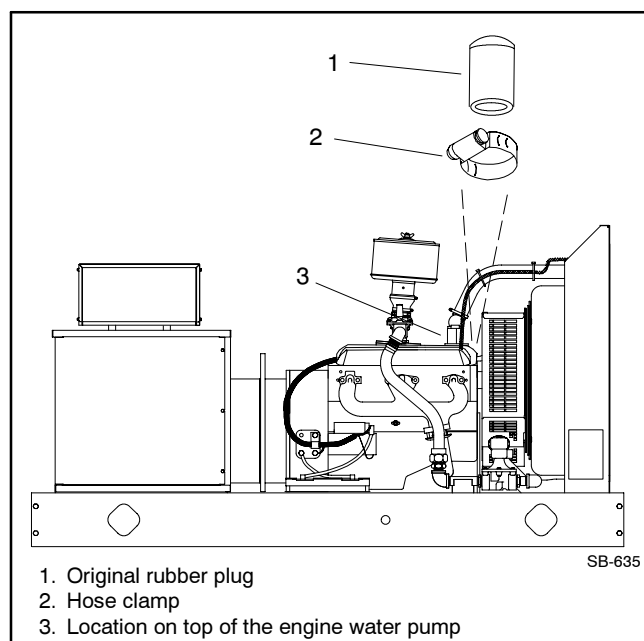
Subject: **Engine Water Pump Rubber Plug Replacement**

All 30-60 kW GM-powered generator sets with serial numbers before 0750000 require an engine water pump rubber plug replacement. The original plug material degrades over time when exposed to UV light, engine oil, or heat.

The original rubber plug mounts on an unused engine water pump pipe fitting and is secured with a hose clamp. See Figure 1 for the rubber plug location.

**The replacement kit for the rubber plug is part number GM16140.** The replacement kit consists of the following components:

- Pipe cap
- Hose connector
- Hose clamps (qty. 2)
- Rubber hose



**Figure 1** Original Rubber Plug on Engine Water Pump (50 kW Generator Set shown)

**Order the replacement kit GM16140 from the Aftermarket Parts Dept.** and use the following procedure to replace the rubber plug. The replacement procedure should be done during a routine maintenance visit.

### Safety Precautions

Observe the following safety precautions while installing the kit.

#### ⚠ WARNING

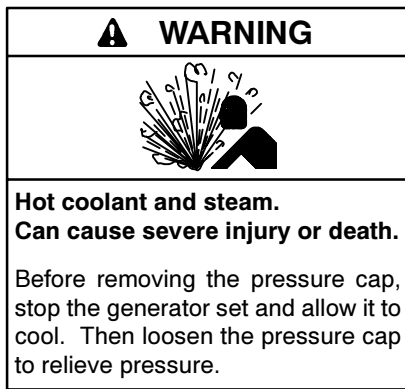


**Accidental starting.**  
**Can cause severe injury or death.**

Disconnect the battery cables before working on the generator set. Remove the negative (-) lead first when disconnecting the battery. Reconnect the negative (-) lead last when reconnecting the battery.

**Disabling the generator set. Accidental starting can cause severe injury or death.** Before working on the generator set or connected equipment, disable the generator set as follows: (1) Move the generator set master switch to the OFF position. (2) Disconnect the power to the battery charger. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent starting of the generator set by an automatic transfer switch, remote start/stop switch, or engine start command from a remote computer.

Routing	Service Manager	Sales Manager	Parts Manager	Technician No. 1	Technician No. 2	Technician No. 3	Return This to
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**Checking the coolant level. Hot coolant can cause severe injury or death.** Allow the engine to cool. Release pressure from the cooling system before removing the pressure cap. To release pressure, cover the pressure cap with a thick cloth and then slowly turn the cap counterclockwise to the first stop. Remove the cap after pressure has been completely released and the engine has cooled. Check the coolant level at the tank if the generator set has a coolant recovery tank.

## Installation Procedure

### 1. Remove the generator set from service.

- 1.1 Place the generator set master switch in the OFF position.
- 1.2 Disconnect the power to the battery charger, if equipped.
- 1.3 Disconnect the generator set engine starting battery(ies), negative (-) lead first.

### 2. Replace the rubber plug.

- 2.1 Place a suitable container under the radiator and loosen the radiator drain plug. Allow the engine to cool, if required. Remove the radiator cap to help the draining process. Drain sufficient coolant so the level is below the engine water pump.
- 2.2 Close the radiator drain plug.
- 2.3 Remove the hose clamp from the rubber plug. See Figure 1 for location of the rubber plug.
- 2.4 Remove and discard the original rubber plug and hose clamp.
- 2.5 Install replacement kit components. See Figure 2.
  - 2.5.1 Install the rubber hose on the water pump pipe fitting. If installation is difficult, apply a small amount of coolant to inside surface of the rubber hose.
  - 2.5.2 Place the two hose clamps over the rubber hose. Do not final tighten at this time.

2.5.3 Install the hose connector in the rubber hose.

2.5.4 Position and tighten each hose clamp.

2.5.5 Apply pipe sealant to the threads of the pipe connector and install the pipe cap.

2.6 Add coolant to the radiator and fill to just below the radiator overflow tube.

2.7 Replace the radiator pressure cap.

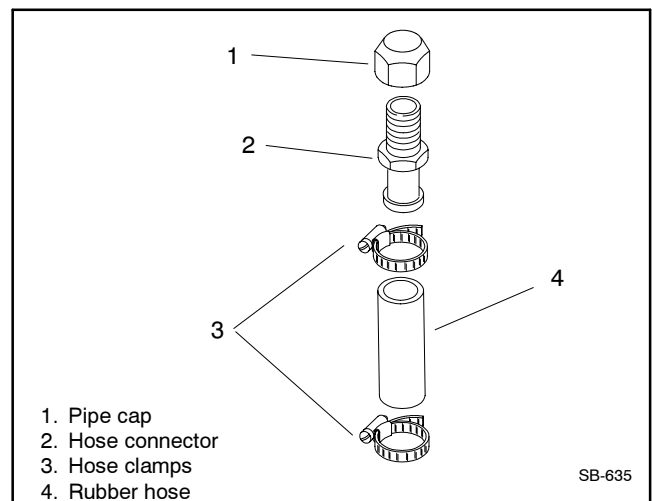
2.8 Wipe up any spilled coolant.

### 3. Restore the generator set to service.

- 3.1 Check that the generator set master switch is in the OFF position.
- 3.2 Reconnect the generator set engine starting battery, negative (-) lead last.
- 3.3 Reconnect power to the battery charger, if equipped.

### 4. Test the generator set.

- 4.1 Place the generator set master switch to RUN position.
- 4.2 Allow the generator set to reach operating temperature.
- 4.3 Check for any coolant leaks.
- 4.4 Place the generator set master switch in the OFF/RESET position.
- 4.5 Allow the engine to cool.
- 4.6 Check the cooling system level and add coolant as necessary.



**Figure 2** Replacement Kit Components