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## INSTALLATION INSTRUCTIONS

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Original Issue Date: 7/04

Model: **8-32EOZD and 6.5-27EFOZD**

Market: **Marine**

Subject: **Fuel/Water Separator Kit GM31994-KP1**

### Introduction

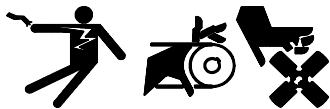
The 8-32EOZD model marine generator sets require a fuel/water separator located between the fuel tank and the electric fuel pump. The fuel/water separator kit helps to remove water and sediment from the fuel system. After the kit is installed, verify that all connections are tight.

### Safety Precautions

Observe the following safety precautions while installing the kit.

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#### ⚠ 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.

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**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.

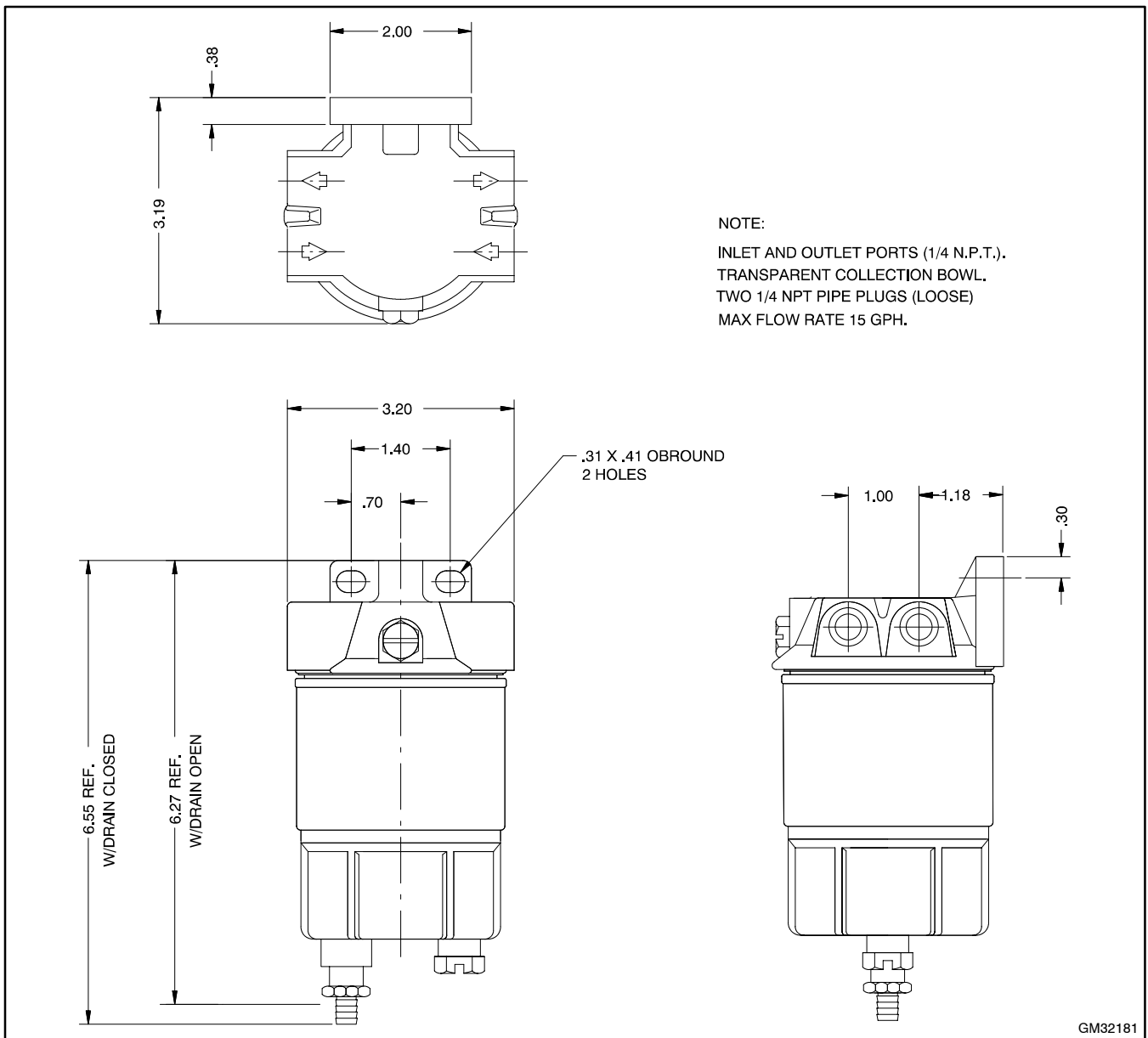
### Installation Procedure

- 1. Remove the generator set from service.**
  - 1.1 Place the generator set master switch in the OFF position.
  - 1.2 Disconnect the generator set engine starting battery(ies), negative (-) lead first.
- 2. Install the fuel/water separator.**

**Note:** Apply thread sealant to the male threaded fuel connections.

  - 2.1 Disconnect the customer-supplied fuel lines that run from the fuel tank to the generator set.
  - 2.2 Mount the fuel/water separator (GM32181) to the bulkhead.
  - 2.3 Connect a flexible fuel line from the outlet side of the fuel/water separator to the inlet side of the fuel pump. Secure the fuel line with two hose clamps, one on each end.
  - 2.4 Connect the fuel line from the fuel tank to the inlet side of the fuel/water separator. Secure the fuel line with two hose clamps, one on each end.
  - 2.5 Insert the pipe plugs (supplied with the kit) into the fuel/water separator's unused ports.
- 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.

**Note:** Bleed the fuel system according to the generator set operation manual. If air is trapped in the fuel system, the engine will be difficult to start and/or engine operation will be erratic.



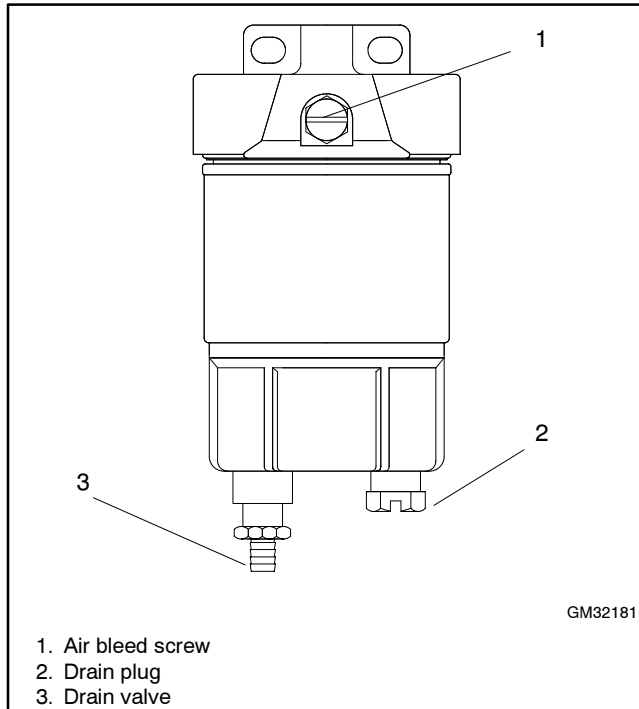
**Figure 1** Fuel/Water Separator Dimensions for Mounting

**Fuel/Water Separator Kit**

Kit: GM31994-KP1		
Qty.	Description	Part No.
1	Filter, fuel/water separator	GM32181

#### 4. Draining the water.

At the interval specified in the generator set operation manual, drain water from the fuel/water separator. Hold a suitable container beneath the fuel/water separator and push up on the drain valve. See Figure 2. Release the valve when fuel (free of water) flows from the fuel/water separator.



**Figure 2** Fuel/Water Separator

#### 5. Changing the element.

At the interval specified in the generator set operation manual, replace the water separator element using the following procedure.

- 5.1 Close the fuel valve at the nearest point to the water filter inlet or at the fuel tank.
- 5.2 Remove the water drain plug (or push up the drain valve) and allow water and fuel to flow into a suitable container.

**Note:** Depending upon the location of the fuel valve, a considerable amount of fuel may drain out.

- 5.3 Remove the water separator element from the mounting head by twisting in a counterclockwise direction.
- 5.4 Remove the bowl from the fuel/water separator element. Wipe the excess fuel from the bowl and the O-ring. Do not discard the bowl or O-ring.
- 5.5 Inspect the components for wear or damage. Replace parts as necessary.
- 5.6 Lubricate the O-ring with clean diesel fuel and replace it in the bowl.
- 5.7 Install the bowl onto a new fuel/water separator filter element.

**Note:** Kohler service replacement fuel/water separator element part number is GM32182.

- 5.8 Lubricate the bowl/element assembly with clean fuel. Install the bowl/element onto the filter mounting head.
- 5.9 Replace the water drain plug (if removed) and close the vent.
- 5.10 Remove the air bleed screw from the fuel/water separator.
- 5.11 Open the fuel supply valve.
- 5.12 After fuel fills the water separator, allow fuel to flow from the air bleed hole until all air is displaced (fuel flows free of air bubbles).
- 5.13 Replace the air bleed screw.

# Notes