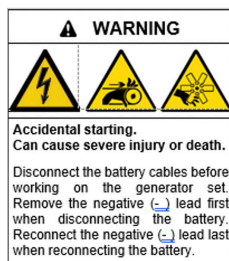


# How Do I Change Oil and Filter? 10RESV/12RESV

## OIL CHANGE PROCEDURE



**Disable the generator set. Accidental starting can cause severe injury or death.** Before working on the generator set or equipment connected to the set, disable the generator set as follows:

- Press the generator set off/reset button to shut down the generator set.
- Disconnect the power to the battery charger, if equipped.
- Remove the battery cables, negative (-) lead first. Connect the positive (+) lead first when reconnecting the battery. Follow these precautions to prevent the starting of the generator set by the remote start/stop switch.



**A flash fire can cause severe injury or death.** Do not smoke or permit flames or sparks near the carburetor, fuel line, fuel filter, fuel pump, or other potential sources of spilled fuels or fuel vapors. Catch fuels in an approved container when removing the fuel line or carburetor.

**Note:** The oil change procedure requires the use of rags, a drain tube, and a funnel. Follow the instructions and use caution to prevent oil from spilling on or into the alternator.

### 1. Drain the oil.

- Press the off button on the generator set controller.
- Disconnect the utility power to the generator set.
- Disconnect the generator set engine starting battery, negative (-) lead first.
- Remove the side panel on the exhaust side of the enclosure.
- Clean the area around the dipstick and oil fill cap.
- To prevent oil from spilling into the alternator, completely cover the alternator with rags around the areas near the oil drain valve and oil filter.
- Insert a drain tube ( $\frac{3}{8}$ " inside diameter) onto the oil drain valve and place the end of the tube into a drain pan. The tube will reduce the potential for spilled oil.
- Open the oil drain valve on the engine.
- Remove the dipstick and oil fill cap. Allow time for the engine oil to drain completely.
- Close the oil drain valve and remove the oil drain tube.
- Replace the dipstick.

### 2. Replace the oil filter.

- Clean the area around the oil filter.
- Loosen the oil filter by rotating it counterclockwise with an oil filter wrench.
- As you remove the oil filter, tilt the filter upward to prevent oil from spilling.
- Clean the gasket sealing surface of the oil filter adapter.
- Apply a light coat of clean oil to the rubber seal of the new oil filter.
- Lightly thread the new oil filter by hand until you feel Resistance. Then, tighten the filter an additional  $\frac{3}{4}$  turn with an oil filter wrench.

### 3. Fill with oil.

**Note:** When the oil is drained, some oil remains in the engine. The amount of oil needed to refill the engine may be less than the capacity shown in Figure 4-2. Use the dipstick, shown in Figure 4-1, to check the oil level during the fill. Do not fill past the full mark on the dipstick indicated by an "F" on the dipstick.

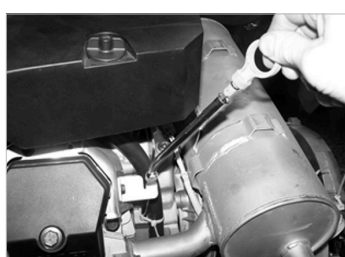


Figure 4-1

Generator Set Model	Oil Capacity
8RESV/RESVL	1.5 L (1.6 qt)
10/12RESV/RESVL	1.96 L (2.0 qt)

Figure 4-2

- Use 5W-30 API Service Class SG, SH or SJ synthetic oil.
  - See Section 4.2.3 for recommended oil type. To prevent spilling, use a funnel to add oil through the oil fill port. Use the dipstick to check the oil level before starting to add the final quart of oil. Fill the engine to the F mark on the dipstick.
  - Reinstall the dipstick and the oil fill cap.
  - Remove all rags near the alternator and oil drain valve.
  - Reconnect the generator set engine starting battery, positive (+) lead first.
  - Reconnect the utility power to the generator set.
  - Press the run button on the generator set controller. The generator set will start.
  - Run the generator set for 1 minute to allow the oil pressure to reach operating range.
  - Stop the generator set, wait 1 minute, and then recheck the oil level. Add oil to bring the level up to the F mark on the dipstick.
- ### 4. Check for leaks.
- Check for oil leaks.
  - Fix leaks and recheck the oil level.
  - Reinstall the side panel.
- ### 5. Reset the maintenance timer on the controller.