Low Fuel Level Troubleshooting

Possible causes:

1. Improper fuel is being used.
2. Fuel level low <10% of Tank Capacity.
3. Fuel tank leak.
4. Fuel level wire is broken.
5. Fuel Level sensor is defective.

Check these causes in the following order:

1. Make sure you are using the proper diesel fuel

Diesel Fuel

Consult your local fuel distributor for properties of the diesel fuel available in your area.

In general, diesel fuels are blended to satisfy the low temperature requirements of the geographical area in which they are marketed.

Diesel fuels specified to EN 590 or ASTM D975 are recommended. Renewable diesel fuel produced by hydrotreating animal fats and vegetable oils is basically identical to petroleum diesel fuel. Renewable diesel that meets EN 590, ASTM D975, or EN 15940 is acceptable for use at all percentage mixture levels.

Required Fuel Properties

In all cases, the fuel shall meet the following properties:

Cetane number of 40 minimum. Cetane number greater than 47 is preferred, especially for temperatures below –20 °C (–4 °F) or elevations above 1675 m (5500 ft.).

Cloud Point should be below the expected lowest ambient temperature or **Cold Filter Plugging Point** (CFPP) should be a maximum 10°C (18°F) below the fuel cloud point.

Fuel lubricity should pass a maximum scar diameter of 0.52 mm as measured by ASTM D6079 or ISO 12156-1. A maximum scar diameter of 0.45 mm is preferred.

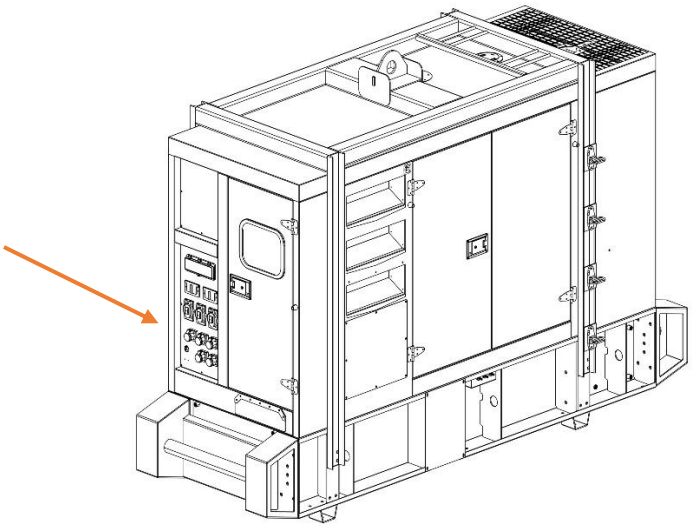
Diesel fuel quality and sulfur content must comply with all existing emissions regulations for the area in which the engine operates. DO NOT use diesel fuel with sulfur content greater than 10 000 mg/kg (10 000 ppm).

Materials such as copper, lead, zinc, tin, brass and bronze should be avoided in fuel handling, distribution and storage equipment as these metals can catalyze fuel oxidation reactions which can lead to fuel system deposits and plugged fuel filters.

2. Check if your fuel level is physically low.

Go to the fuel tank. If you have an automatic fuel pump remove it and manually add fuel. If the fuel level display in the control panel shows that your fuel level is rising, then stop adding fuel once your reach 98% capacity.

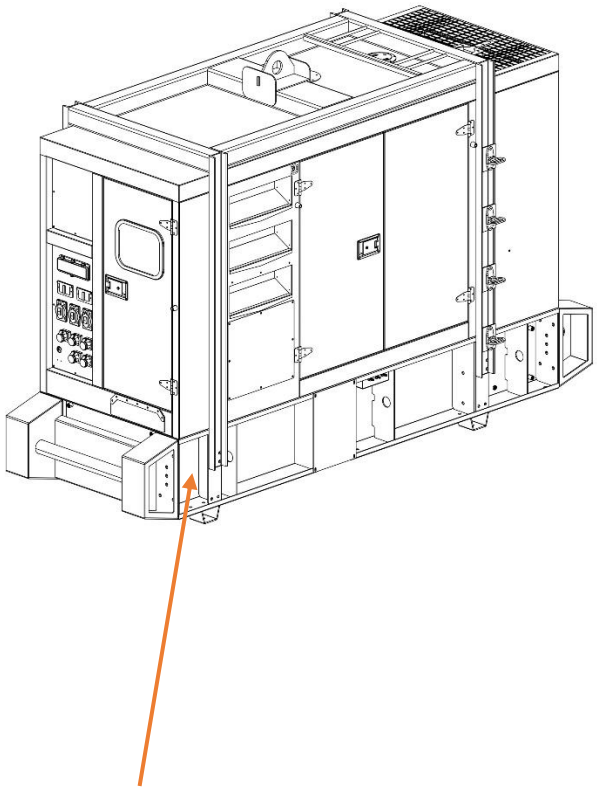
If the display does not show that the fuel level is rising, then stop adding fuel immediately and proceed to the next step.



3. **Check that the fuel tank leak detector switch is connected and undamaged**.

Check that the connection is secure and that the switch is not damaged. If it is damaged contact us and we will offer you a replacement. The leak switch should be tightly secured and have no abruptions along the line.

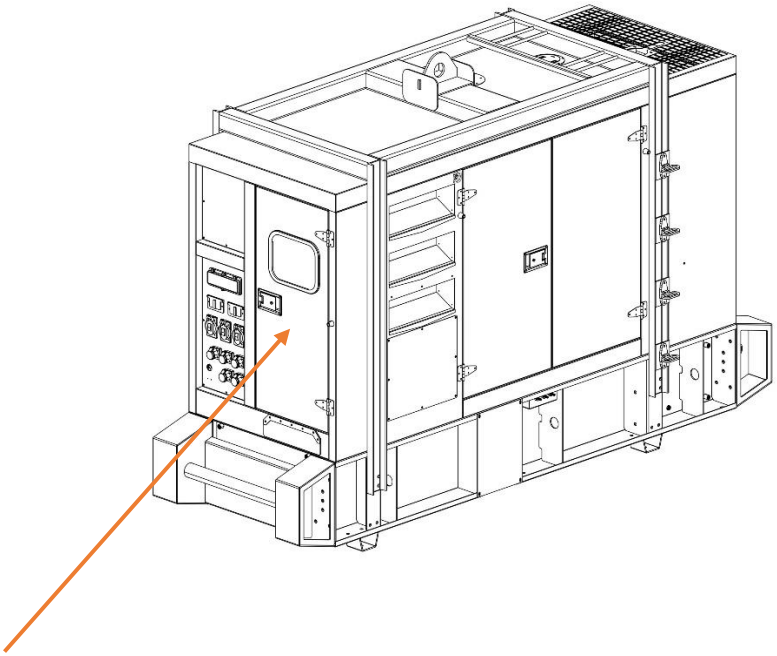
If the connection is secure and the switch is not damaged proceed to the next step.



4. **Check the wiring diagram in the control panel**

Open the control panel to see the wiring diagram inside. Check the diagram for any loose connections. Ensure that connections **14** and **16** are tightly secured and that the wires are not damaged or loose.

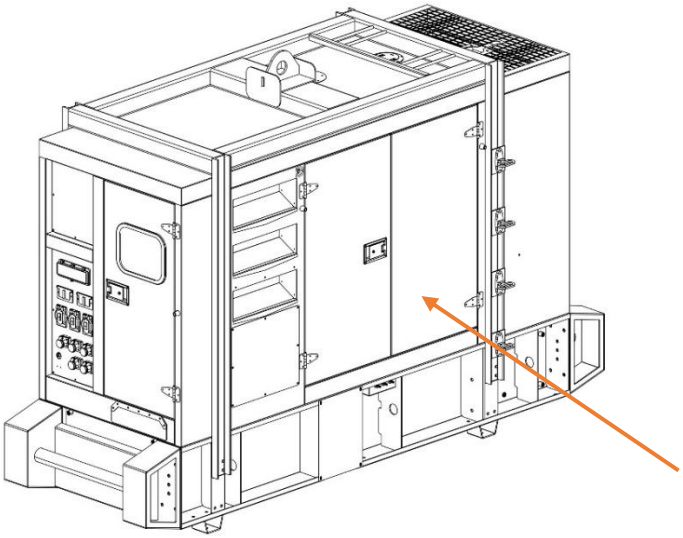
If all the wires are secure and undamaged, proceed to the next step.

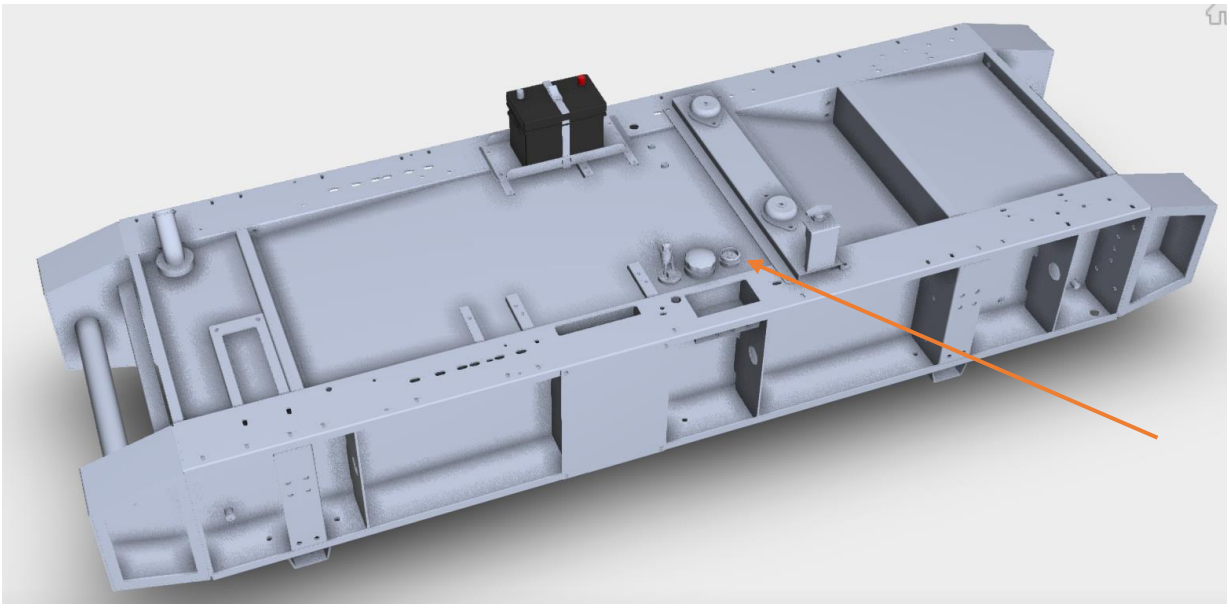


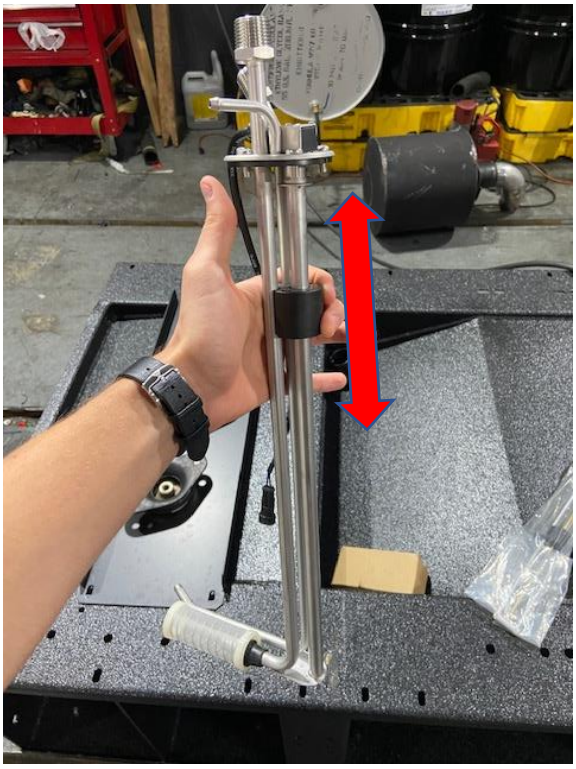
5. Open and check the fuel sensor.

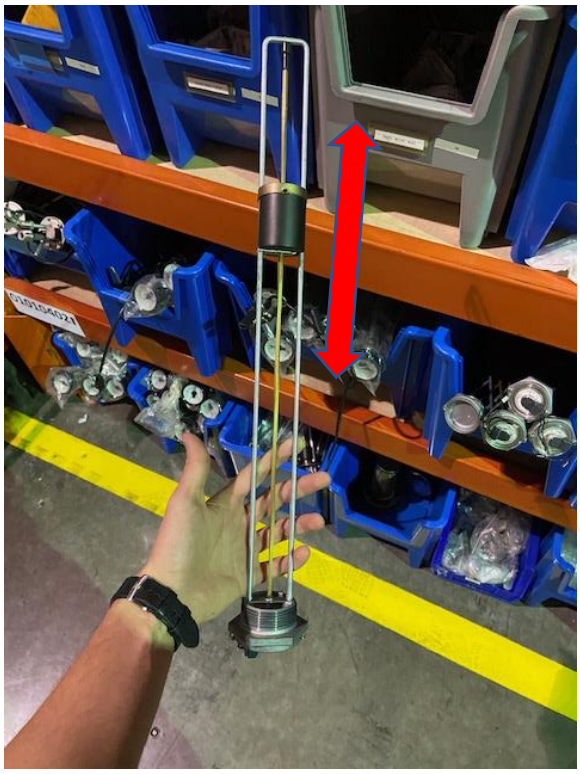
Open the cabinet doors. Locate the fuel sensor on the front posterior side of the doors. Remove the fuel sensor from the fuel sensor department. Ensure that your fuel sensor is not damaged. Move the black metal shaft up and down to ensure that the shaft has not gotten stuck. If there is excessive friction in the shaft of the sensor this means the sensor is defective.

If the back shaft can shift loosely then reconnect the fuel sensor and add fuel. You may have either one of these two different sensors:









Reconnect the fuel sensor and manually add fuel. Check if your control panel indicates that fuel level is rising. If it is, then keep manually adding fuel until you reach 98% capacity.

If you have ran the troubleshooting steps and the fuel level keeps appearing to be low while you keep adding fuel, contact our support team at support@genpowerusa.com.