



Lack of Power - SPN 157 Code

Product: Groundsmaster® 5900 & 5910

September 5, 2012

Affected Units:

Models:

Serial Numbers:

31598

280000001 AND UP

31599

280000001 AND UP

Situation:

The machine has little engine power or reduced engine power and/or has an error code of SPN157 in the Info Center display screen.

Instructions:

This low power condition and/or the SPN157 Code are a result of low fuel pressure which could be caused by a restriction in the fuel system or a lack of fuel. Prior to contacting Cummins inspect the below items for these issues:

1. Condition of fuel in fuel tank.

Inspect the fuel for contamination such as grass, dirt or other foreign material. Any contamination should be removed by draining the tank and cleaning it out thoroughly. Figure 1 below shows a glass jar with a fuel sample taken from a fuel tank. Notice the grass and other debris found in this small sample. Figure 2 shows a piece of plastic found in the fuel tank.



Figure 1



Figure 2

2. Fuel tank pickup tube screen damaged / restricted.

Inspect the screen at the end of the fuel tank pickup tube for any restriction or damage. If the screen has debris built up on it, clean it off and inspect it for damage. Figure 3 (on page 2) shows a screen portion of the pickup tube collapsed and damaged due to a restricted screen. If the screen is damaged or collapsed so that it may restrict fuel flow, replace the Pipe – Stand, Fuel (119-7748).



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Figure 3

3. Fuel tank pickup tube location.

Inspect the pickup tube [Pipe – Stand, Fuel (119-7748)] to be sure it is in the correct location at the bottom of the sump (Figure 4). If it is in the wrong position, orientate it so it is at the bottom of the sump.

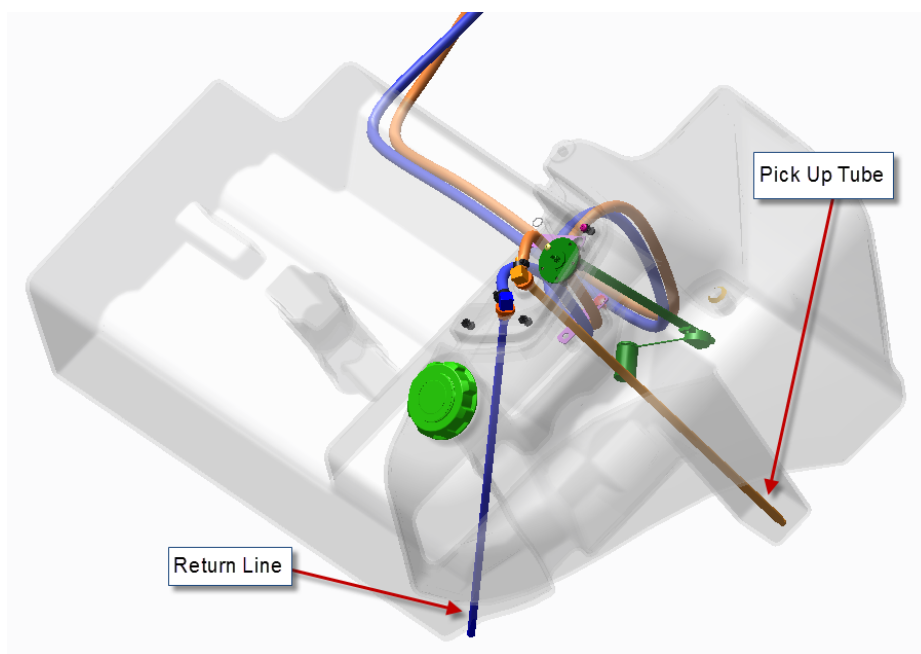


Figure 4



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4. Fuel line routing (from Bulletin Rotaries #05-15).

Verify that the fuel line from the fuel / water Separator is routed to the pickup tube nearest the fuel gauge sender at the fuel tank (Figure 5). Then verify that the return line from the engine is routed to the return pipe at the fuel tank (furthest away from the fuel sender) (Figure 5). Switch hoses if found incorrect.

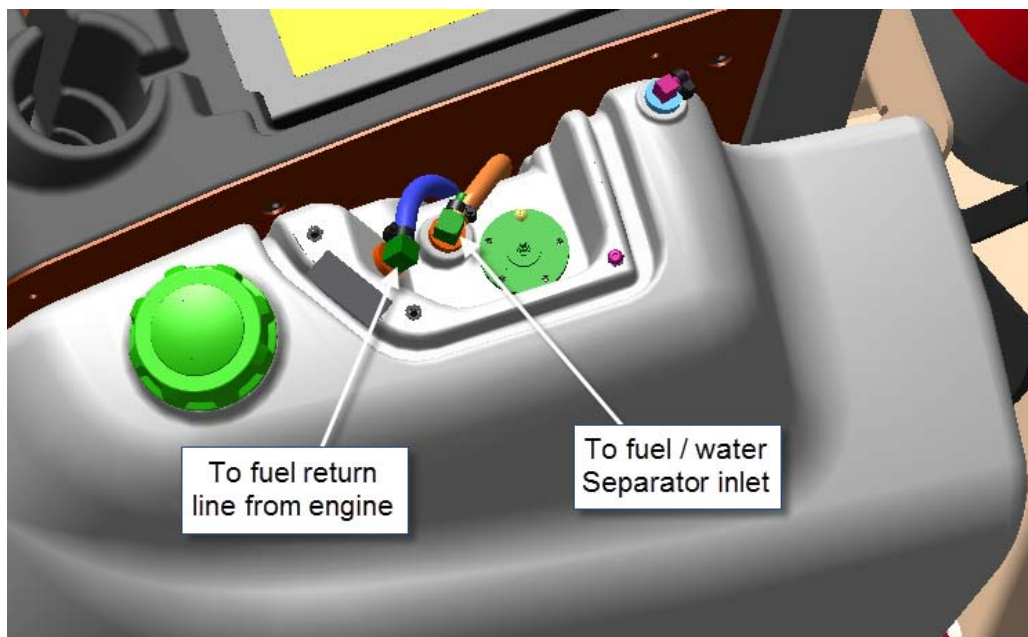


Figure 5

5. Fuel line restrictions.

Inspect the fuel lines to make sure they are not pinched or damaged (Figure 6 Page 4 shows a pinched hose). If pinched or damaged hose is found, either replace it or repair it. Remove the line from the fuel / water Separator fitting at the fuel tank and the line at the fuel / water Separator fitting and blow air back through it to remove any restrictions.



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Figure 6

6. Fuel Filter contamination.

Remove the Filter – Fuel and drain some of the fuel into a clean container to inspect for contamination such as grass, dirt or other foreign material (See Figure 1 on page 1). If no contamination is seen and the Filter-Fuel is not due to be changed, reinstall it. If there is contamination found or if the Filter-Fuel (117-2792) is due for service, replace it as needed.

7. If after the issues above have been checked and cleaned and the issue continues, contact your local TORO distributor.