



# TIP SHEET

## Hydraulic Leveling Float Switch or Fluid Sensor ID Chart

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#82-L0512, Rev. 0B 2/12

Visual ID chart for float switches, or fluid sensors, used in hydraulic pump systems with spring return jacks.

### WARNING

Low fluid in tank can cause intermittent "Jacks Down" warning to be activated, especially when traveling, since the fluid moves in the tank when low. On some controls, it only takes three seconds with the switch closed (down) for the circuit to be activated.

### NOTE

#### CONNECTOR STYLES:

Packard



Trailer



1/4" Spade



### Instructions

Float switches (also called fluid sensors), are used in hydraulic tanks to determine fluid level. In most Power Gear systems, it will also activate the "jacks down" indication on the touchpad when the jacks are lowered, or when the fluid level in the tank is low. Although function is similar, the differences in style and shape are dependent on whether the float switches are used for horizontal or vertical tanks, and the type of connectors used. Horizontal tanks (and some older vertical tanks) use a float switch that has a "bobber" style float (Figure 1), while vertical tanks typically use a "flapper" style float (Figure 2).

Fig. 1 Bobber Float



Fig.2 Flapper Float



Some older systems with vertical tanks used a right angle bobber style (Figure 3).

Fig. 3 Right Angle Bobber Float



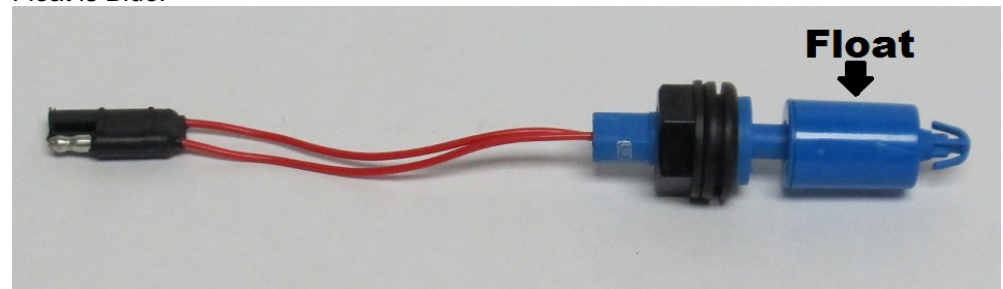
Refer to Tip Sheet 82-L0511 for testing procedures on horizontal float switches, and Tip Sheet 82-L0509 and 82-L0510 for testing procedures on vertical float switches. These can be found at [www.powergearus.com](http://www.powergearus.com).

### Horizontal float switches:

#### Part #140-1146 – Trailer connector

Used in metal tanks – With internal 1,000 ohm resistor

Float is Blue.



# ! NOTE

## CONNECTOR STYLES:

Packard



Trailer

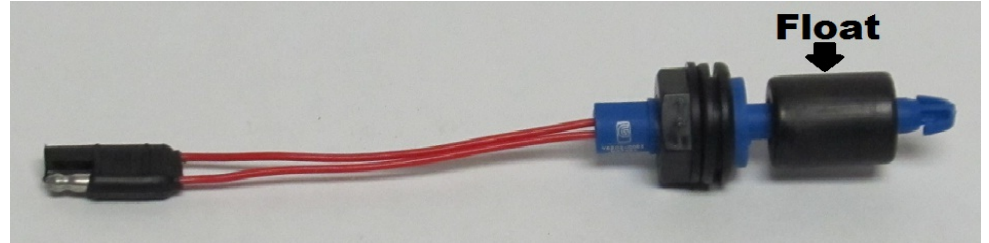


1/4" Spade



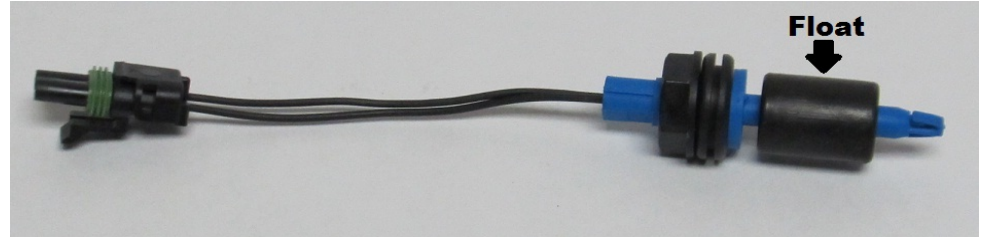
### Part #151000030 – Trailer connector

Used in plastic tanks – With internal 1,000 ohm resistor  
Float is Black



### Part #151000070 – Packard connector

Used in plastic tanks – With internal 1,000 ohm resistor  
Float is Black



## Vertical Float switches:

### Part #14-1101 – Trailer connector

Used in metal tanks

Kit #500118: Includes this float switch, connector adapter 14-1103, float switch shield 500354, and Tip Sheet #54

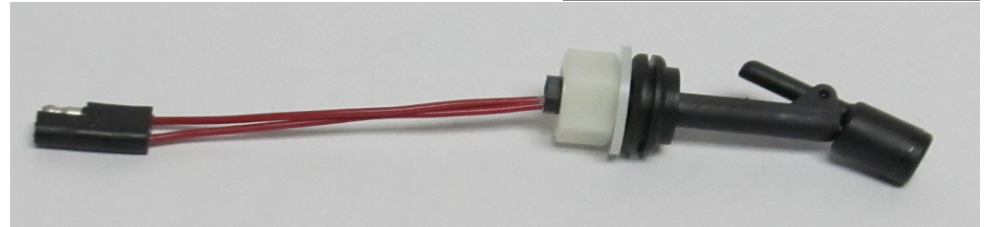


### Part #14-1136 – Trailer connector

Used in metal tanks

– With internal 1,000 ohm resistor

Kit #500199: Includes this float switch, connector adapter 14-1103, float switch shield 500354, and Tip Sheet #81.

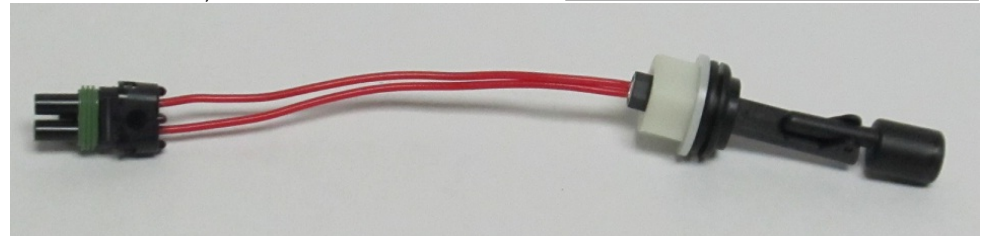


### Part #14-1137 – Packard connector

Used in metal tanks

– With internal 1,000 ohm resistor

Kit #500450: Includes this float switch and Tip Sheet #81



**NOTE**

CONNECTOR STYLES:

Packard



Trailer

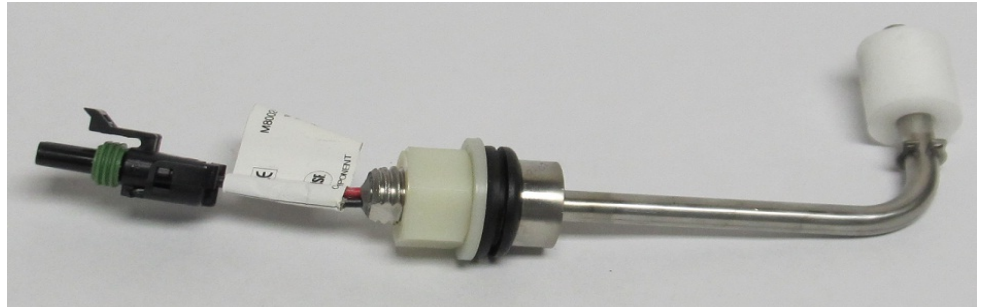


1/4" Spade



**14-1085 – Packard connector**  
**Used on metal tanks**  
Right Angle “bobber” style float switch

Kit #500299: Includes this float switch and Tip Sheet #54



**14-1106 – Trailer connector**  
**Used on metal tanks**  
Right Angle “bobber” style float switch

Kit 500119: Includes this float switch, connector adapter #14-1103, and Tip Sheet #54



**Accessories:**

Part #14-1103 -Trailer to spade adapter



Part #500354 – Float switch shield

