

Fuel Qty

Fuel Qty A.D.

- Airframe ADs, Cessna 177/A/B/RG

70-01-02 - Fuel quantity transmitter float

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In most 177 and 177A (through s/n 177-01180), replace fuel gauge transmitters per SL SE69-25.

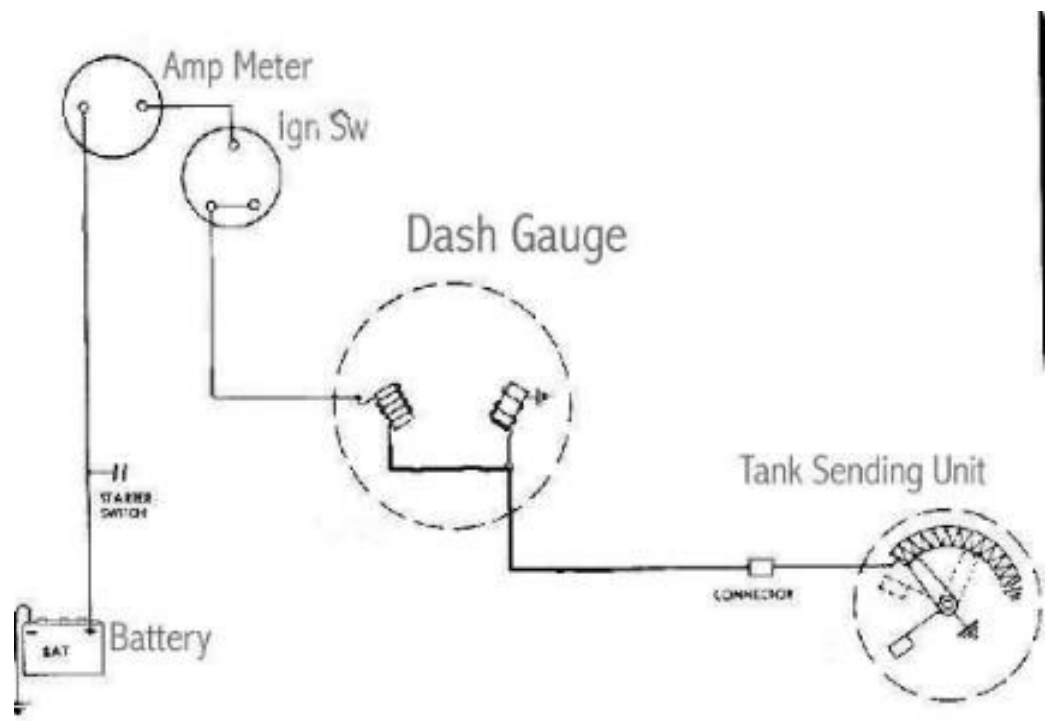


Fuel Level Sender

- 240-33.5 Ohms - adjustable from 4-1/2" to 24", right hand, standard SAE 5-hole mounting, includes mounting kit
Part No. 114876 - \$21.83

- **Answers:**

- [WC] "If you're using the donor fuel tank and sender (1987 or later) you need 4318 (2-1/16") or 4418 (2-5/8").
http://www.autometer.com/hp/99catalog/ultra_lite/51.html"
- [CE] "If you want to replace the sender, you can get one through Ford Motorsport. They have a Fuel level sender PN M-10871-A962. It's not the same as factory. It is 240 ohms empty and 33 ohms full. The best thing is that it lists at \$33.95. You would have to use Ultralite gauge 4316 with the Motorsport sender.
- Has anyone had any problems with 4318 and the stock sender. The Helm shop manual for 1989 lists the stock sender as 33 ohms empty and 158 full. Since the Autometer is 16 ohms empty and 158 full does that mean I will run out of fuel before it hits "E"? Is the difference the markings on the gauge and the stop pin (with the pin being 16 ohms)?"
- [WC] "I use 4318 w/ a stock sender. Works great as far as I can tell. I've been running around the neighborhood (testing) with the gage alot closer to "E" than I would ever let it get out on the road.
- The "E" is about 1/4" above the pin on the gage. Maybe that's the difference between 16 ohms and 33 ohms?"
- [CE] "I noticed the gauge markings are not linear - with 1/2 being a little to the right of the 1/2 mark. I've always found the factory gauges to be really poor. Once you hit the 1/2 mark on a factory gauge it seems to drop really quick to "E". Hopefully the Autolites will help."



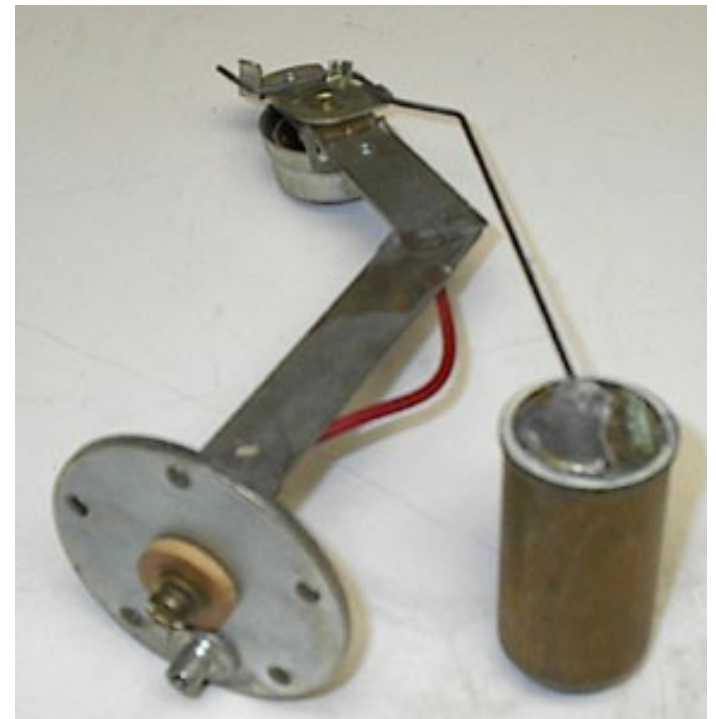
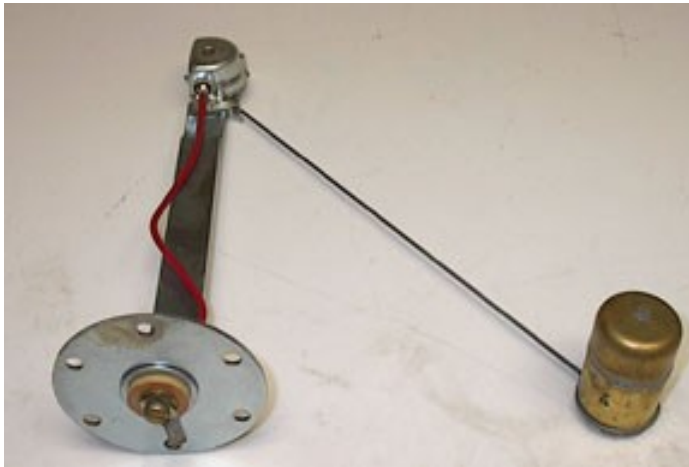
- <http://www.stewartwarner.com/Tech/faqSc.html>

- ***Frequently Asked Questions***

- **For selecting a fuel sending unit, what do I need to know before contacting a distributor or sales rep?**
- You must know the inside tank depth to obtain the proper style of adjustable sender or IntelliSensor® fuel sensor.
- You should also determine the resistance of your gauge. Fuel senders have to match the resistance range (measured in ohms) of the gauge. The following are examples of the resistance ranges of gauges and senders:
 - Stewart Warner: Full 29-33 ohms / Empty 244-250 ohms
 - General Motors: Full 91-93 ohms / Empty 0-2 ohms
 - Ford/Chrysler: Full 70-73 ohms / Empty 0-2 ohms
- (See question on [determining Ohms of a fuel sender](#) if you need guidance.)
- What type of environment will the instrument be used in (i.e. highway; off-road; stationary equipment; etc)
- Stewart Warner makes a variety of adjustable fuel tank senders for a multitude of applications. Stewart Warner also has the IntelliSensor® fuel sensor available in lengths from 11" to 26".
- NOTE: All Stewart Warner fuel senders meet the SAE standard for five bolt flange pattern.
- NOTE: Stewart Warner does not make a direct replacement fuel sender for an automotive OEM application.
- You should also provide information on the fuel gauge you will need by following the guidelines in "[Selecting a fuel gauge](#)".

SW sender

- Note: You can also call APT Instruments at **952-881-7095** about repairing your existing sending unit



INTELSENSOR® LIQUID MEASURING SYSTEMS

Fully electronic sensors with no moving parts

DESCRIPTION:

Electronic tank-level sensors for tank depths ranging from 11" to 50" • Units fit in standard SAE 5-hole flange opening • Ideal for most hydrocarbon-based liquid-sensing applications • Rugged, heavy-duty function designed especially for O.E.M. off-highway, industrial and specialty vehicle applications • Sealed SMT electronics • Self-powered, draws power from the fuel gauge • Immune to voltage variations, reverse polarity protected • Robust extruded aluminum housing with baffles eliminates potential for disruptive fuel slosh • Options include variable switch set points (for low fuel warning), lengths, flange types, integrated tubing & output signals

SPECIFICATIONS:

Standard lengths:	~ 10" to 50" (Consult with factory for other lengths)
Housing:	Extruded aluminum, reinforced, internally baffled
Flange/opening/mounting:	High-impact, chemical-resistant acetal, molded; standard SAE 5-hole flange (~42 mm) diameter; 5-#10 sealing screws for mounting; heavy duty nitrile gasket
Internal configuration:	Patented technology using a pulse-width-modulation output
Connections:	Two wires standard (flying leads), 18-gauge, color-coded: pink lead for sender ground, black lead for ground; optional blue lead for low fuel warning light
Operating voltage:	Not voltage dependant (typically works with 12 or 24 volt gauge systems)
Switch set point/rating:	Fixed @ 1/8 tank level; 0.5A DC switch current
Accuracy:	SAE J1810
Operating temperature:	-40°C to +85°C
Operating media:	Diesel fuels, hydraulic fluids, heating fuels, pure gasoline, petro
Shock & vibration:	Per SAE J1810
Salt spray:	Per SAE J1810
Water leakage:	Per SAE J1810

APPLICATIONS:

Suitability of application is the responsibility of the user. Use in "contaminated" fuels and in applications where the percentage of water-to-fuel exceeds approximately 5% may impede normal operating performance and will void warranty. Follow factory guidelines for installation to assure correct mounting of flange. Cup supports or similar devices are recommended for non-vertical mounting in tank for most units or where units exceed 24". Unit should be installed approximately .75" from bottom of tank. Set point for empty is 1/8 tank level.



SW Capacitance system

• <http://www.stewartwarner.com/Tech/faqSc.html>

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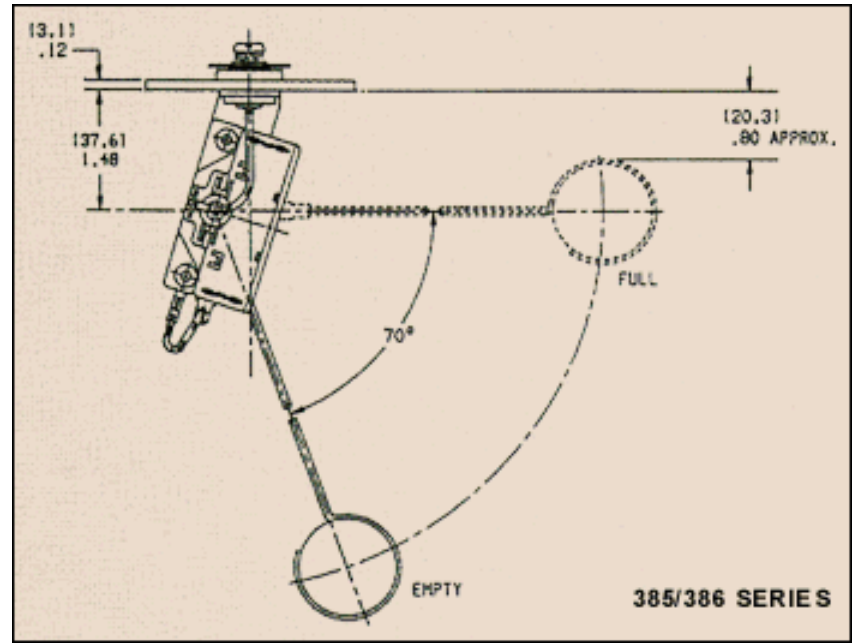
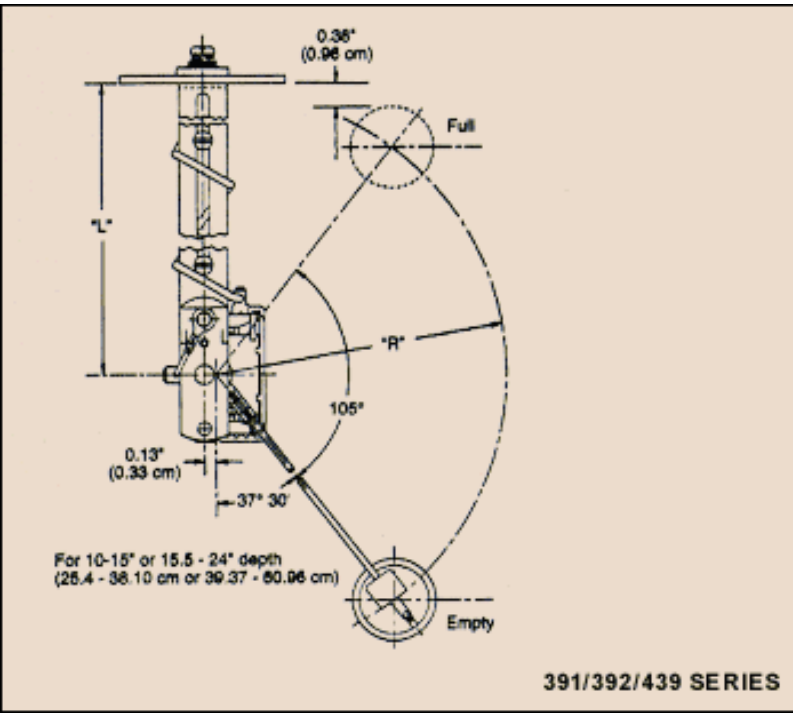
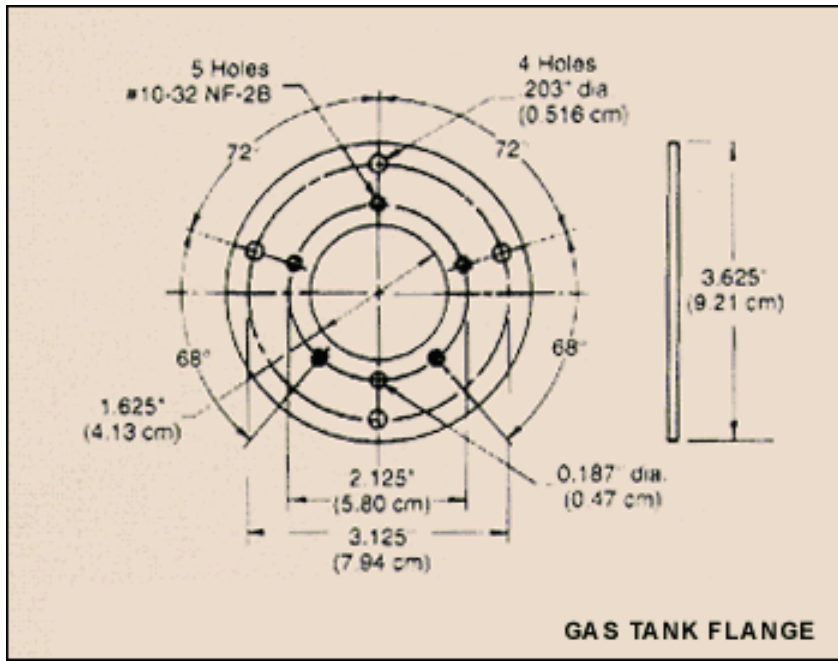
• NOTE: All Stewart Warner fuel senders meet the SAE standard for five bolt flange pattern.

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Drawings



Accessories

- **Accessories for Fuel Senders Type Kit**
 - **Description**

- Installation Kit
- 366LP-F
- Contains: flange, 1 gasket (72030), 5 washers, 5 screws
- Brass Float
- 411290
- With clip
- Brass Float
- 429354
- With shepard's crook
- Lifecell™ Float
- 836092
- With shepard's crook - Lifecell™ float will not sink!
- Replacement Gasket
- 72030
- Neoprene gasket
- Male Packard Connector Assembly
- 82891
- 20" leads
- Peterbilt Harness Assembly
- 82897
- 22" leads with ring terminals

High Performance

- <http://www.datcon.com/products/2hdsndrs.htm>



Vans

- **Fuel Sender Notice**
- To: RV builders
Date: 01/13/95 11:58:25
- Recently VAN's aircraft has been shipping a new design (better) of Stewart-Warner fuel senders under the old part #'s F-385B and F-385C.