

ROCHESTER GAUGES, INC.  
OF TEXAS

PREPARED BY:

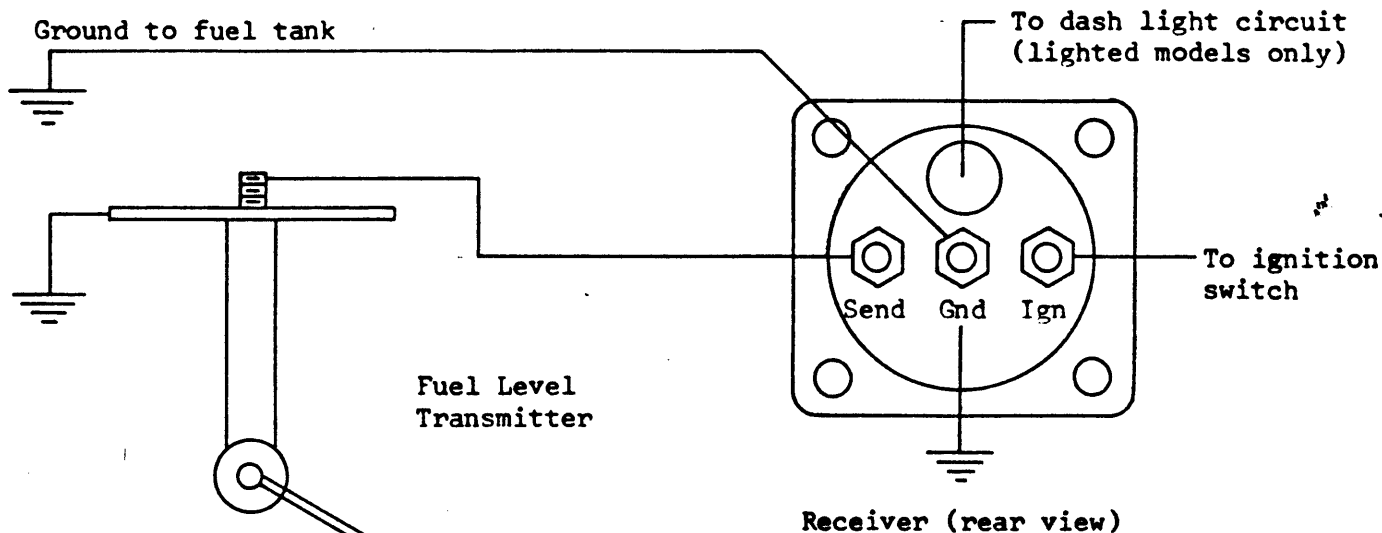
B. Roads

ORIGINAL

DATE

3-31-81

GAUGE INSTALLATION INSTRUCTIONS  
3090 SERIES FUEL LEVEL & LIQUID LEVEL GAUGES



THE USE OF THIS PRODUCT IN AIRCRAFT IS LIMITED TO EXPERIMENTAL AIRCRAFT APPLICATIONS ONLY. ROCHESTER GAUGES INC. TAKES NO POSITION AS TO THE SUITABILITY OF THIS DEVICE FOR ANY PARTICULAR APPLICATION INCLUDING ANY SPECIFIC AIRCRAFT APPLICATION. THE CUSTOMER IS SOLELY RESPONSIBLE FOR THE APPLICATION AND USE OF THIS PRODUCT."

INSTALLATION INSTRUCTIONS

1. Disconnect battery cable.
2. When the sender has been installed in the tank, it is automatically grounded to the tank and the tank is usually grounded to the framework that connects to the ground side of the battery. If this is not true, proper ground connections should be made. If necessary, a wire can be used for the ground path.
3. The receiver requires a 2 1/4" diameter hole in the instrument panel, and is mounted with screws through four holes provided.
4. Use a good grade of primary ignition wire, well insulated and connect the Terminal Post on the sender to the Left Hand Terminal Post on the receiver.
5. Connect a wire from the ground terminal of the receiver (center stud) to the battery ground.
6. Connect a wire from the ignition switch to the Right Hand Terminal Post on the receiver. CAUTION: Do not touch ignition wire to the Left Hand Terminal Post on the receiver or the sender will be damaged.
7. Reconnect battery cable.

SENDER P/N	OHMS	MOUNTING
7740-00153	0-90	Top

PART NO.		OHMS	VOLTS	APPLICATION	STYLE
3090-00106		0-90	14	Fuel	Sq. Bezel
REV.	ER#	DATE	DESCRIPTION OF CHANGE		
A	4088	12-11-96	EXPERIMENTAL A/C APPL'N. NOTE ADDED		PAGE 1 OF 2 PAGES

**STEP ONE: (This usually solves problem)**

Before you do anything else, first check for defective wiring or grounds as this is the most common cause of gauge failures. Inspect all wiring and terminals. Also look for corrosion on fuel tank ground connection. (Check tightness of gauge mounting screws.)

**STEP TWO:**

If pointer in receiver does not move when ignition switch is turned on, check to see that current is actually being carried from the ignition switch to the Right Hand Terminal on the receiver. Also, check to see that paint or corrosion does not prevent proper ground. If pointer still does not move, receiver is defective and must be replaced.

**STEP THREE:**

If receiving meter is not accurate with sender capsule, check the receiver to be sure it is the correct OHM and VOLTAGE.

**QUICK-CHECK TROUBLE LOCATOR**

GAUGE SHOWS	LOOK FOR THIS TROUBLE
NO INDICATION	<ol style="list-style-type: none"> <li>1. Empty fuel tank.</li> <li>2. No current to ignition terminal because of broken or disconnected lead.</li> <li>3. Grounded wire between sender and receiver.</li> <li>4. Receiver not grounded.</li> <li>5. Sender defective.</li> </ol>
EXCESSIVE POINTER FLUCTUATION	<ol style="list-style-type: none"> <li>1. Loose wire connections.</li> <li>2. Defective sender.</li> </ol>
'FULL' SCALE READING AT ALL TIMES	<ol style="list-style-type: none"> <li>1. Wire to sender broken.</li> <li>2. Sender not properly grounded.</li> <li>3. Defective sender.</li> </ol>
INDICATES INACCURATELY	<ol style="list-style-type: none"> <li>1. Incorrect sender.</li> <li>2. Defective sender.</li> <li>3. Low voltage at receiver terminals.</li> </ol>
POINTER FLUCTUATES WHEN HEAD LIGHTS ARE TURNED ON	<ol style="list-style-type: none"> <li>1. Engine not properly grounded.</li> </ol>

**WARNING:** Fuel quantity indicating should be tested thoroughly for accuracy and repeatability. Inaccurate fuel systems can contribute to engine failure.

**NOTE:** These instructions are supplementary only and are not intended to cover all possibilities or to be used for design and construction purposes. Instrument replacement or installation must be supervised by qualified personnel.