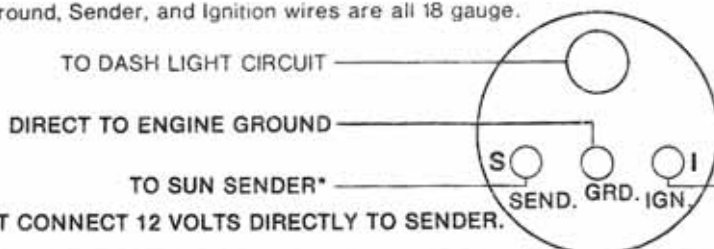


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CAUTION — DISCONNECT BATTERY GROUND CABLE WHEN MAKING ELECTRICAL CONNECTIONS TO METER AS SHOWN IN WIRING DIAGRAMS (SEE ASSEMBLY PROCEDURE).

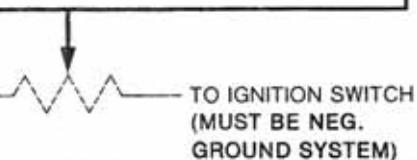
NOTE: Ground, Sender, and Ignition wires are all 18 gauge.



ILLUMINATED ELECTRICAL TWO-INCH GAUGES

SEG-1001 FUEL LEVEL GAUGE
SEG-1002 WATER TEMP. (60-240°)
SEG-1003 WATER TEMP. (100-280°)
SEG-1004 OIL TEMP. (100-340°)
SEG-1005 OIL PRESSURE (0-100 PSI)

NOTE: IF VEHICLE IS NOT A 12 VOLT SYSTEM, A DROPPING RESISTOR MUST BE PLACED IN THE CIRCUIT AT THIS POINT (SEE ASSEMBLY PROCEDURE).



PART NO.	DESCRIPTION	GAUGE MODEL NO.				
		1001	1002	1003	1004	1005
SGA-10	Triple Gauge Mounting Panel	•	•	•	•	•
SGA-11	Double Gauge Mounting Panel	•	•	•	•	•
SGA-12	Single Gauge Mounting Panel	•	•	•	•	•
SGA-15	Adapter Bushings For SGA-25-1		•	•	•	
SGA-20	Tee Adapter Kit					•
SGA-22	Replacement Light Kit	•	•	•	•	•
SGA-25-1	Water/Oil Temperature Sender		•	•	•	
SGA-26	Oil Pressure Sender					•
SGA-27	Fuel Level Transmitter — Depth 17-27"	•				
SGA-28	Fuel Level Transmitter — Depth 10-16"	•				
SGA-29	Fuel Level Transmitter — Depth 5-12"	•				
SGA-30	Replacement Fuel Level Transmitter Gasket Kit	•				
SGA-31	Oil Pan Temperature Sender				•	
SGA-328	Metric Adapter — 1/8 NPT to M14 x 1.5 mm.		•	•	•	•
SGA-329	Metric Adapter — 1/8 NPT to M16 x 1.5 mm.		•	•	•	•
SGA-331	Metric Adapter — 1/8 NPT to M10 x 1 mm.		•	•		•
SGA-332	Metric Adapter — 1/8 NPT to M12 x 1 mm.					•
SGA-334	Adapter — 1/8 NPT to 28 BSP					•
SGA-582	Dropping Resistor — 24/32 Volt to 12 Volt	•	•	•		
SGA-583	Dropping Resistor — 24/32 Volt to 12 Volt				•	•

ASSEMBLY PROCEDURE FOR SEG-1001-1005 (FOR DETAILED INSTALLATION INSTRUCTIONS ON FUEL LEVEL TRANSMITTERS — SEE PAGE 2.)

- 1.0 WHEN INSTALLING GAUGES PLEASE REFER TO THE TABLE ABOVE FOR SENDER MODEL AND OTHER NECESSARY ACCESSORIES.
- 2.0 ALL GAUGES LISTED ABOVE REQUIRE 2 1/16" DIA. MOUNTING HOLE IN DASHBOARD OR OTHER DESIRED LOCATION (UNLESS OPTIONAL MOUNTING PANEL IS USED.)
- 3.0 USE 18 GAUGE WIRE TO CONNECT GROUND, SENDER AND IGNITION WIRES AS SHOWN ON CIRCUIT DIAGRAM.

CAUTION: DISCONNECT BATTERY GROUND CABLE TO AVOID ACCIDENTAL GROUNDING OF ELECTRICAL SYSTEM WHILE MAKING ELECTRICAL CONNECTIONS TO THE GAUGE.

- 4.0 IF THE VEHICLE IS NOT A 12 VOLT SYSTEM, A DROPPING RESISTOR MUST BE PLACED IN THE CIRCUIT BETWEEN THE IGNITION SWITCH AND APPROPRIATE TERMINAL POST. (SEE LISTING ABOVE)
- 5.0 REMOVE ORIGINAL OIL PRESSURE AND/OR WATER TEMPERATURE SENDERS AND REPLACE WITH APPROPRIATE SUN ELECTRIC SENDERS.
NOTE: SGA-15 ADAPTER KIT IS REQUIRED TO ADAPT WATER TEMPERATURE SENDER TO PROPER THREAD SIZE OF ENGINE BLOCK SENDER HOLE (IF OTHER THAN 1/8-27 N. P. THREAD).
- 6.0 THE SENDING UNIT MAY BE INSTALLED IN THE SAME HOLE FROM WHICH THE WARNING LIGHT SENDER IS REMOVED.
6.1 THE SGA-20 TEE ADAPTER KIT WILL STILL ALLOW OPERATION OF THE WARNING LIGHT.

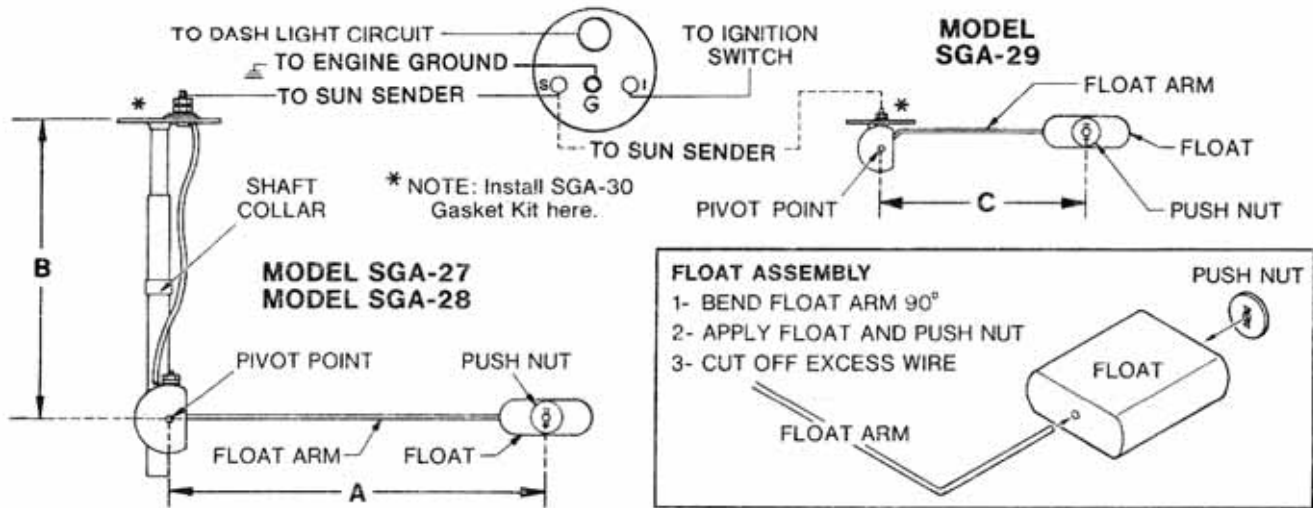
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FUEL TRANSMITTERS

SGA-27, 28, AND 29



COMPLETE INSTALLATION OF THE FUEL LEVEL GAUGE REQUIRES THE USE OF A SUN FUEL TRANSMITTER. FIND CORRECT FUEL TANK DEPTH IN THE FOLLOWING TABLES, AND INSTALL CORRESPONDING FUEL TRANSMITTER MODEL BY USING THE DETAILED ASSEMBLY PROCEDURE BELOW.

FUEL TRANSMITTER	TANK DEPTH "	LGTH." C	FUEL TRANSMITTER	LENGTH "		FUEL TRANSMITTER	TANK DEPTH "	LENGTH "		
				A	B			A	B	
MODEL SGA-29	5	3 3/8	MODEL SGA-28	10	6 1/16	5 1/8	MODEL SGA-27	17	11	8 3/8
	5 1/2	3 3/8		10 1/2	6 1/2	5 3/8		17 1/2	11 1/16	8 7/8
	6	4 3/8		11	6 5/8	5 5/8		18	11 11/16	9 1/8
	6 1/2	4 7/8		11 1/2	7 1/8	5 5/8		18 1/2	12	9 3/8
	7	5 3/8		12	7 1/4	6 3/8		19	12 3/8	9 3/8
	7 1/2	5 3/8		12 1/2	7 3/8	6 3/8		19 1/2	12 11/16	9 3/8
	8	6 3/8		13	8 1/8	6 3/8		20	13 1/16	10 1/8
	8 1/2	6 3/8		13 1/2	8 1/4	6 7/8		20 1/2	13 3/8	10 3/8
	9	7 3/8		14	8 1/2	7 3/8		21	13 3/4	10 3/8
	9 1/2	7 3/8		14 1/2	9 1/4	7 3/8		21 1/2	14 1/16	10 3/8
	10	8 3/8		15	9 3/8	7 3/8		22	14 7/16	11 1/8
	10 1/2	8 3/8		15 1/2	9 5/8	7 7/8		22 1/2	14 3/4	11 3/8
11	9 3/8	16	10 1/8	8 3/8	23	15 1/8	11 3/8			
11 1/2	9 3/8	16 1/2	10 3/8	8 3/8	23 1/2	15 1/16	11 3/8			
12	10 3/8				24	15 1/2	12 1/8			
					24 1/2	16 1/16	12 3/8			
					25	16 1/2	12 3/8			
					25 1/2	16 3/16	12 3/8			
					26	17 3/16	13 1/8			
					26 1/2	17 1/2	13 3/8			
					27	17 11/16	13 3/8			

CAUTION—HANDLE FUEL TANK CAREFULLY WHEN DRAINING TO REPLACE FUEL TRANSMITTER. DANGEROUS GASOLINE FUMES ARE PRESENT. WORK IN WELL VENTILATED AREA, AVOID SLIDING OR DRAGGING TANK, AND KEEP CIGARETTES AND OTHER HOT MATERIALS AWAY.

ASSEMBLY PROCEDURE:

TO INSTALL FUEL TRANSMITTER FOR FUEL LEVEL GAUGE SEG-1001 PROCEED AS FOLLOWS:

- 1.0 AFTER DETERMINING WHICH TRANSMITTER IS SUITABLE FOR INSTALLATION, DRAIN FUEL TANK AND REMOVE FROM VEHICLE.
- 2.0 IF REQUIRED, DISASSEMBLE AND REMOVE OLD FUEL LEVEL GAUGE AND TRANSMITTER ASSEMBLY.
- 3.0 NEW TRANSMITTER MUST BE ADJUSTED TO FIT FUEL TANK. ADJUST LENGTHS "A" AND "B" FOR TRANSMITTERS SGA-27 AND SGA-28, AND LENGTH "C" FOR TRANSMITTER SGA-29.
 - 3.1 ADJUSTMENT OF LENGTH "A" OR "C": BEND FLOAT ARM TO 90° ANGLE AT SPECIFIED DISTANCES FROM PIVOT POINT—SEE TABLES.
 - 3.2 ADJUSTMENT OF LENGTH "B": LOOSEN SHAFT COLLAR AND ADJUST SHAFT TO SPECIFIED LENGTH BEFORE TIGHTENING COLLAR. ROTATE PIVOT ASSEMBLY TO ALLOW FOR FREE MOVEMENT OF FLOAT ARM WHEN PLACED IN TANK. IF TANK FLANGE IS USED BETWEEN TANK AND UNIT, ADD THAT THICKNESS TO MEASUREMENT "B"—SEE TABLES.
- 4.0 AFTER ADJUSTING, INSTALL NEW TRANSMITTER IN FUEL TANK. ALSO INSTALL SGA-30 GASKET KIT AT MOUNTING HOLE IN FUEL TANK, TIGHTEN ALL FASTENERS AND CONNECT FUEL TRANSMITTER SENDER TO PROPER FUEL GAUGE TERMINAL.