INSTALLATION INSTRUCTIONS (Veethree)

ADJUSTABLE FUEL LEVEL SENDER KIT

Part No. - 310906 - (HC Cargo part No. 160873 / 160872 / 160701)

CAUTION: Read these instructions thoroughly before making installation. Do not deviate from assembly or wiring instructions. Always disconnect positive battery lead before making any electrical connections.

FUEL LEVEL SENDER INSTALLATION

The Fuel Level Sender has a resistance rating of 10 ohms when the tank is empty and 180 ohms when full. Refer to the Veethree catalog for matching fuel gauge. The unit can be adjusted to read accurately in tanks from 7" to 24" deep. For sender adjustment, refer to Table 1 and Fig. 2.

I. Measure depth of the fuel tank. Locate this dimension in Column ``B" then shows the length from the underside of the sender flange to the center of the float pivot. Column ``C" shows distance from the center of the float pivot to the center of the float ball. For example a tank 12" deep would need a measurement of 6" from the flange to the pivot and 7.8" from the pivot to the float.

II. For tank depths up to 15-1/2" it will be necessary to eliminate a part of the assembly. (See Fig.1) proceed as follows:

- 1. Remove nut ``a" washer ``b", and ring terminal ``c" from the underside of the mounting flange.
- 2. Remove two screws ``d" and discard.
- 3. Remove two screws``e" from the plastic housing and reserve for later us.
- 4. Carefully remove bracket ``f " from the plastic housing and discard. Replace with bracket ``g" in the housing and loosely re-install the two-screw``e" into housing.
- 5. Slide housing up or down until the proper dimension from Table 1 is reached, then tighten screws securely.
- 6. Replace ring terminal and hardware.

<u>CAUTION:</u> Do not over tighten hardware, to avoid damage to the threads.



<u>CAUTION</u>: When installing the float arm into the sender body, make sure the float ball is to the right side when you face the unit, as shown in Fig.1. If installed to the left, the fuel gauge will read``full'' when the tank is empty.

III. For tank depths of 16" to 24" no disassembly of the sender bracket is necessary.

- 1. Remove ring terminal as instructed in section II, above.
- 2. Loosen two screws ``d" and adjust the plastic housing up or down until the proper dimension from Table 1 is obtained, then retighten screws securely.
- 3. Re-install ring terminal and hardware, and tighten all hardware securely, avoiding over tightening.

IV. To install the float assembly, loosen screw ``h", remove the short piece of rod, and discard. Insert the float rod until the proper length ``c" from Table 1 is met, then tighten the screw securely. Carefully cut off any excess rod with bolt cutter or similar tool, taking care not to damage the assembly.

NOTE: Make sure the float is installed as shown in Fig.1. If installed backwards, the fuel gauge will indicate ``full" when the tank is empty, and ``empty" when the tank is full.

SAFETY PRECAUTION: When making modifications to fuel tanks, it is essential that the tank be removed from the vehicle, and that it is empty, clean, and dry. After drilling, make sure all chips and other foreign matter have been removed the tank.

V. Refer to fig. 3 installation of the fuel sender assembly into the tank. The sender flange is designed to fit a standard SAE hole pattern.

<u>CAUTION</u>: Before drilling any holes into tank, place the sender assembly on the tank to judge proper hole placement allowing float arm clearance inside of tank.

If no holes exist in the fuel tank (see CAUTION above):

1. Cut a 1.697" (43mm) hole in the top of the tank.

2. with the gasket in place below the flange, carefully feed the float arm and sender body into the 1.697" (43mm) hole in the tank. Make certain the float arm has free motion within the tank. Using the sender flange as a template, locate the position of the five mounting holes. Depending on the thickness of the tank, either self-tapping screws or #8-32 machine screws may be used, drilling and tapping accordingly. If threaded holes already exist, check the thread size and use the appropriate hardware.



TABLE 1(dimension in inches)									
Α	В	С	Α	В	С	Α	В	С	
7.0	3.5	4.2	13.0	6.5	8.5	19.0	9.5	12.6	
7.5	3.75	4.5	13.5	6.75	8.9	19.5	9.75	12.9	
8.0	4.0	4.9	14.0	7.0	9.3	20.0	10.0	13.4	
8.5	4.25	5.3	14.5	7.25	9.6	20.5	10.25	13.8	
9.0	4.5	5.6	15.0	7.5	10.0	21.0	10.5	14.2	
9.5	4.75	6.0	15.5	7.75	10.4	21.5	10.75	14.6	
10.0	5.0	6.4	16.0	8.0	10.7	22.0	11.0	15.0	
10.5	5.25	6.7	16.5	8.25	11.0	22.5	11.25	15.4	
11.0	5.5	7.1	17.0	8.5	11.4	23.0	11.5	15.7	
11.5	5.75	7.4	17.5	8.75	11.8	23.5	11.75	16.1	
12.0	6.0	7.8	18.0	9.0	12.0	24.0	12.0	16.5	
12.5	6.25	8.1	18.5	9.25	12.3				



3. Insert fuel sender assembly into tank, align holes and thread in ½" mounting screws, through holes in sender flange and tank. Check that all screws are secure to complete assembly. AVOID OVERTIGHTENING.



PARTS INCLUDED IN THE KIT (where provided)						
S.NO.	PART DESCRIPTION	QTY				
01.	STEEL PLATE	01.				
02.	RUBBER GASKET	01.				
03.	RUBBER GASKET	01.				
04.	SCREW M5X17	04.				
05.	SCREW M5X28	01.				
06.	WASHER	05.				

Installation kit includes flange, gasket, and necessary mounting hardware. Required on all fuel tank where sender-mounting hole are not provided in the tank.