



FILE INFORMATION:
DIVISION TAB-TRANE REFRIGERATION
PRODUCTS
PRODUCT TAB-RECIPROCATING COM-
PRESSOR-CONDENSER
UNITS
MODEL TAB-HERMETIC E-F
LITERATURE ITEM-GENERAL SERVICE
BULLETIN

LITERATURE FILE NO.

HCOM-SB-56

**GENERAL
SERVICE BULLETIN**

Since the Trane Company has a policy of continuous product improvement, it reserves the right to change specifications and design without notice. The installation and servicing of the equipment referred to in this booklet should be done by qualified, experienced technicians.

7/1/81
SUPERSEDES G-50

**SUBJECT: MODEL E OPEN AND HERMETIC COMPRESSOR OIL PRESSURE SENSING MODIFICATION
AND KIT**

INTRODUCTION

The purpose of this bulletin is to discuss a 1970 Model E Compressor design change that changed the oil pressure sensing location for the Model E. This bulletin also announced the availability of a kit to update the sensing location for the older Model E and outline the procedure for installing the kit.

DISCUSSION

On early (pre 1970) production Model E open and hermetic compressors, the oil pressure safety control sensed oil pressure at the oil pump discharge port, before entering the internal oil lines. If an internal line developed a leak, there was a possibility that the oil pressure control would not sense the decrease in oil pressure because of the proximity of the sensor to the oil pump discharge port.

CORRECTIVE ACTION

In 1970, the sensing location for the oil pressure control was changed to the compressor handhole cover on Model E, open and hermetic compressors.

A conversion kit (KIT-454) was also made available to update the oil pressure sensing location of compressors in the field. The kit consisted of instructions to increase the oil pressure control cutout point from 17 to 30 pounds and included fittings to relocate the control sensing line from the oil pump discharge to the handhole cover. See sample installation instruction starting on page 2.

NEW PRODUCTION

All hermetic Model E compressors with a design sequence letter of "H" or above and all open Model E compressors with a design sequence letter of "F" or above use the redesigned sensing location and an oil pressure cutout point of 30 pounds.

SAMPLE INSTALLATION INSTRUCTIONS

INSTALLATION:

1. De-energize the temperature control system causing the system to pump down.
2. Front seat the compressor suction service valve.
3. Open the disconnect switch to assure system will not cycle on, and front seat the compressor discharge service valve.
4. Slowly bleed the charge from the compressor by loosening the suction gauge service port cap located at the rear of the suction service valve. (See Figure 1).

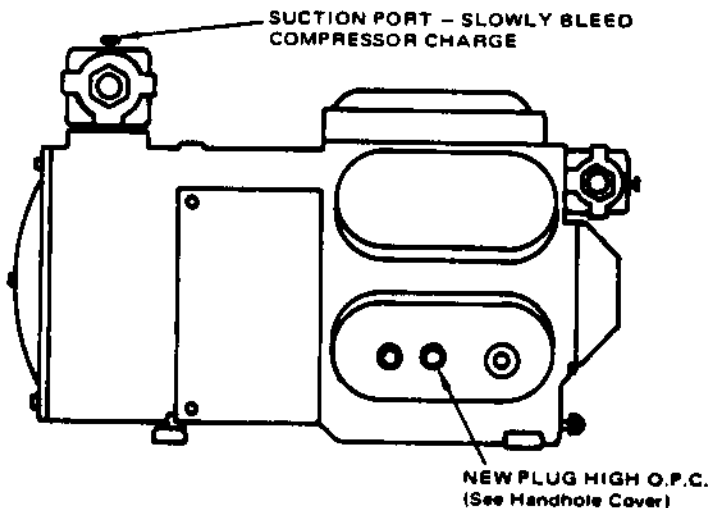


FIGURE 1

5. The suction service port cap should be sealed to assure a small positive charge will remain in the compressor. Upon completion of final installation this will avoid evacuation of the compressor.
6. Remove the plug located on the compressor hand hole cover. (See Figures 1 & 2)

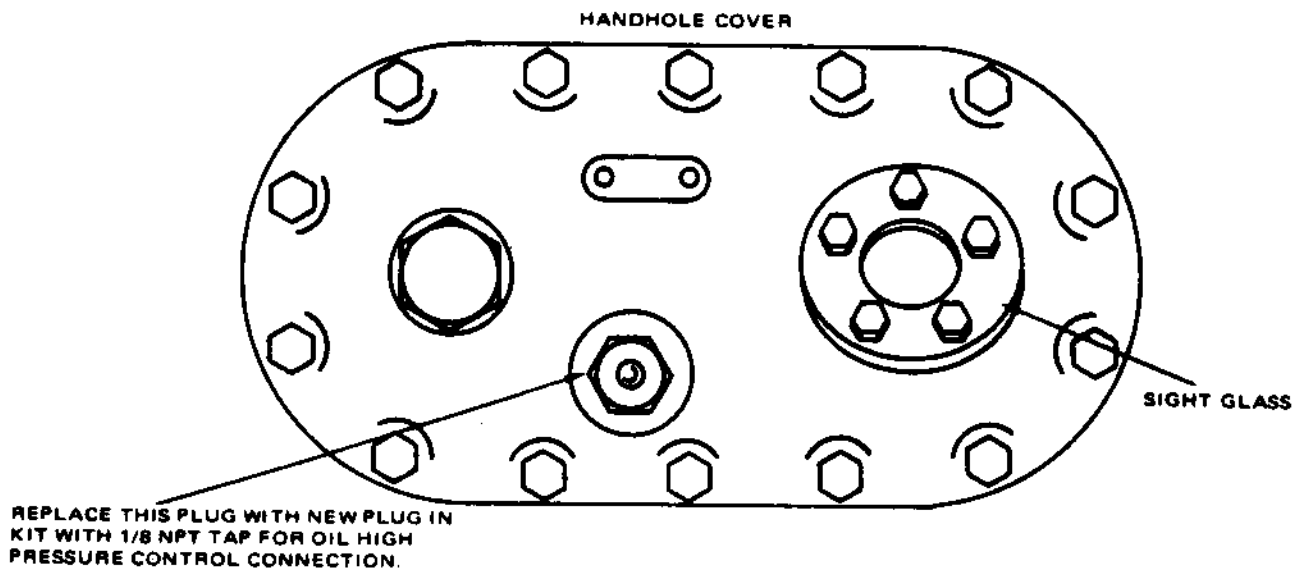


FIGURE 2

7. Replace with new plug and then add the 1/8 x 1/4 flare adapter to the plug, cap the flare adapter to avoid losing all the positive pressure. Note: Threads must be sealed with "leak-lock" or "glptol".
8. Remove the oil pressure control line from the compressor connection and remove the flare adapter fitting from the compressor (See Figure 3).

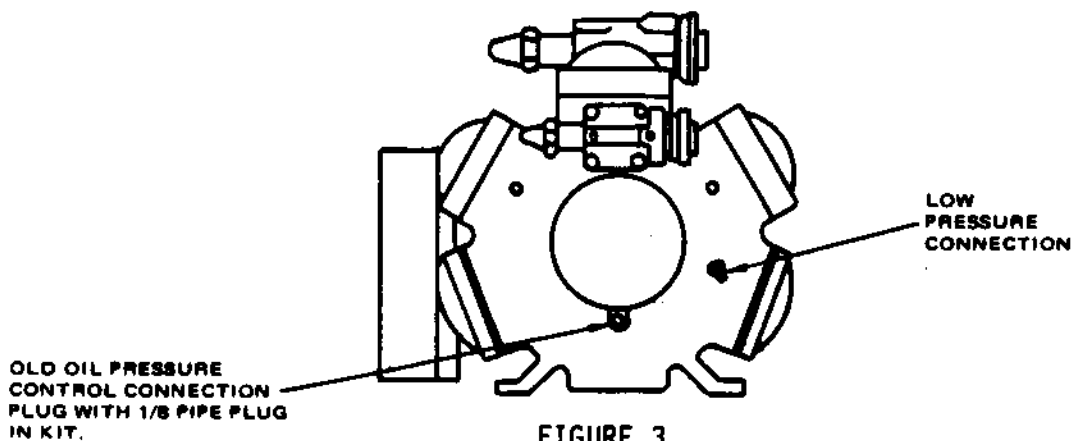


FIGURE 3

9. Plug the port by using the 1/8 pipe plug provided. (See Figure 3) Note: Threads must be sealed with "leak-lock" or "glptol".

READJUSTMENT OF THE OIL PRESSURE CONTROL

Units prior to November, 1968 have the control shown in Figure 4, factory adjusted for a cut out point of 17 lbs. To adjust the control to 30 lb. cut out point follow these steps.

UNITS HAVE THIS CONTROL
PRIOR TO NOVEMBER 1968

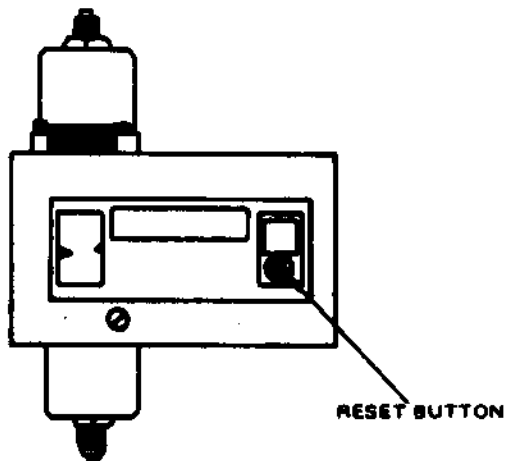


FIGURE 4

1. Remove low pressure sensing line from the compressor and cap the connection.
2. Connect the oil pressure line of the control to a drum of dry nitrogen through an appropriate regulator.

3. Leave the low pressure line exposed to the atmosphere.
4. Disconnect control wires from control. Attach an ohmmeter to the controls terminals '2' and '120' (See Figure 5). Select the scale that has the highest deflection.

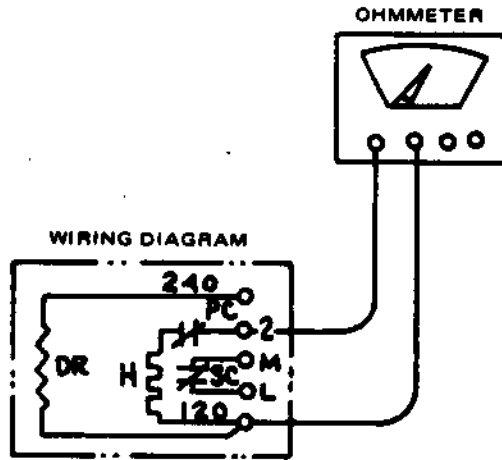


FIGURE 5

5. Apply pressure to the control, the contacts will open at approximately 17 lbs. Turn adjusting wheel (Figure 4) clockwise a half turn, reset the control and slowly increase the pressure until the contacts open again. Repeat this operation until the contacts open at 30 lbs. pressure. The control is now adjusted properly.
6. Units with the control shown in Figure 6 require a special wrench for adjustment which is included with this kit.

Adjustment sequence is the same for this control as outlined in step 5.

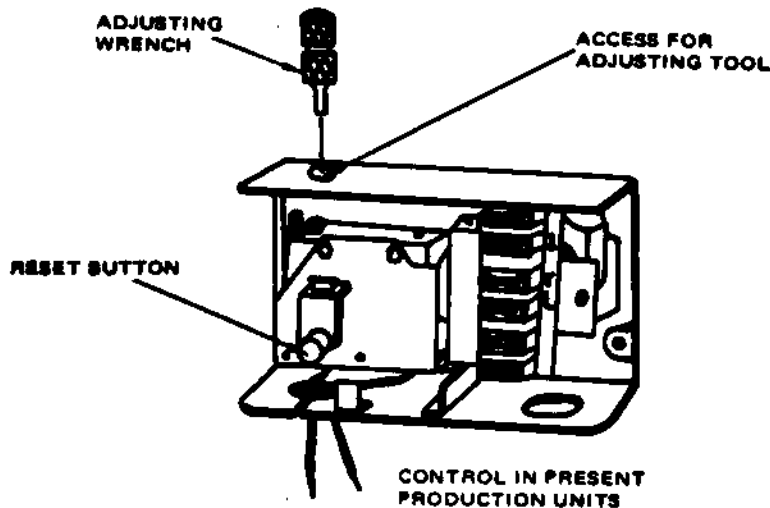


FIGURE 6

7. Remove ohmmeter, reconnect wires, and reset control. Disconnect control from pressure source.