

# **Maintenance Bulletin (MB-0041)**

# **Bottom Plate Replacement of the 4UFC .. 6NFC Compressors**

Version 1, June 2017

#### **Purpose**

This document provides instructions for retrofitting, in the field, the compressor bottom plate with the 3 hole version that allows the crankcase heater option. Because there is no means of changing the bottom plate when the compressor is mounted to the system, the compressor must be removed and the oil drained out.

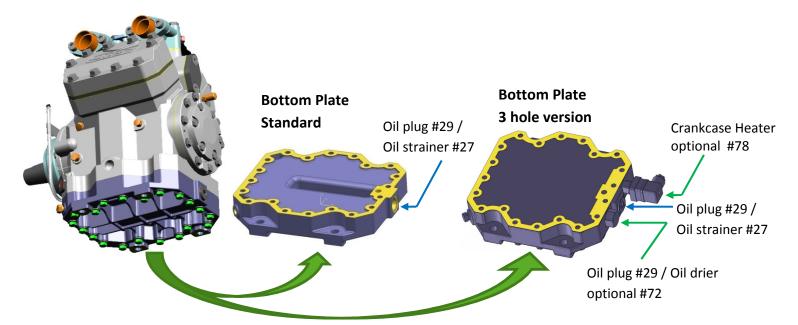


Figure 1 – Detail of the compressor bottom plates

### Warning!

The compressor will be under pressure with a refrigerant charge above atmospheric pressure. Incorrect handling may cause injury to skin and eyes. Wear safety glasses while working on the compressor. Pump down process is required to remove the refrigerant from the compressor. Avoid releasing refrigerant into the atmosphere. If necessary, a refrigerant recovery machine must be used to extract refrigerant from the compressor. After that, remove the compressor from the system and place it in a proper place to starting the bottom plate retrofit procedure.

## **Required Tools**

- Manifold Gauges
- Vacuum Pump
- Refrigerant Recovery Machine
- Hand-Operated Oil Pump
- Service Valve Wrench
- Allen Key (10mm)
- Socket Wrench (13 mm)
- 1" (25.4mm) Adjustable Wrench
- Torque Wrench

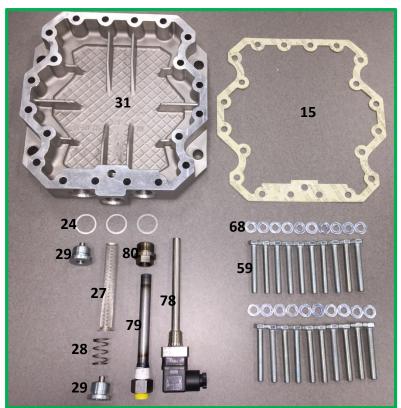
#### Remove the existing bottom plate

Once the compressor has been relieved of refrigerant, remove the oil plug (29) from the compressor bottom plate drain the oil out. Dispose of waste oil properly. Also clean the oil strainer (27) and the magnetic plug (29), if needed. Remove the M8 screws (20x) and remove the bottom plate and check the compressor housing for any gasket material and clean the surface.

#### Mounting a new bottom plate with 3 holes version

- 1- Using a new gasket (24), oil both sides and mount 3 hole bottom plate. (20x) M8 screws (tightening torque 30 lbf-ft).
- 2- Using new gasket rings (24) install the oil strainer, pressure springer and oil plugs (tightening torque 30 lbf-ft).
- 3- Install the screwed nipple (80) (tightening torque 60 lbf-ft), the heater sleeve (79) (tightening torque 40 lbf-ft), and the crankcase heater (78) (tightening until snug).
- 4- After the new bottom plate is mounted a new oil charge is required. Use only new oil drums in their original unopened state. The oil charge can be performed either by using a hand-operated oil pump or vacuum process. Any penetration of air into the system and oil drum must be avoided under all circumstances. The recommended oil type should be added to the compressor through the oil service port until the oil level is at ½ sight glass.
- 5- Install the compressor in the system and wire the crankcase heater properly.
- 6- Evacuate the compressor suction and discharge pressure sides to using the vacuum pump maintaining a 1.5 mbar or lower.
- 7- Open the shut-off valves.
- 8- The compressor is now ready to be operated again.

## Parts required for 3 hole Bottom Plate Kit



Item	Description	Part #
31	Bottom plate w/ 3 hole version	322409-01
15	Gasket	372434-01
24	Gasket ring (3x)	382403-05
68	Washer (20x)	38201-52
59	M8 screws (20x)	380155-53
29	Oil plug/ magnetic	366124-51
27	Oil strainer	36200302
28	Pressure spring	325000-01
80	Screwed nipple	365235-01
79	Heater sleeve	345903-01
78	Crankcase heater (70W,24VDC)	343208-21
78	Crankcase heater (70W,12VDC)	343208-14

# Observe also the following Technical Information:

KT-150-7 – Crankcase Heater