

## SERVICE BULLETIN NO. SRC930079-2

25 October 1993

**SUBJECT:** Procedure for changing of E. compressor to new COPELAND on TNE 405/406.

**TO:** All Sabroe Reefer Cool Service Points/Customers

**NOTE:** There are two different types of compressors. One with unload solenoid valve, part No. 360-53677-00 and one without unload solenoid valve, part No. 360-53676-00. Both will be delivered completely with new clamping device, which corresponds to the old fastening holes and with piping which fits into the old suction and discharge service valves, when compressor E has been removed. Together with compressor the refrigerant has to be changed from R12 to 134a. The compressor will be delivered filled up with ester oil.

### REPLACING PROCEDURE:

1. Use a recovery or reclaim system to recover refrigerant from the existing refrigeration system.
2. Replace the compressor with new Copeland compressor. (See new electrical diagram on compressor connection box cover).
3. Replace the drier. (Replace the moisture indicator, if necessary).
4. Adjust the superheat on the expansion valve (System 1: External adjustment screw, turn clockwise 3-5 times. System 2: Internal adjustment screw, turn the spring length from 2,25 mm to 3,25 mm. (See service manual section 7).
5. Evacuate the system.
6. Charge the system with refrigerant R134a 3,5 kg. (Install on label "charged with 134a").
7. Run the unit for min. 1 hour. (Follow the oil level in sight glass, if the refrigerant system has lot of old mineral oil in the condenser/evaporator, the oil level will raise over the max. level 4/5 in the sight glass).
8. Check oil level in compressor sight glass: max. 4/5, min. 1/2.
9. Carry out an acid test. (Test equipment purchase locally). If the oil sample indicates acid, drain the compressor for oil, and refill with new ester oil (4 liter).
10. Check oil for too high percentage of mineral oil. (Test equipment purchase locally). If the oil sample indicates too high (max. 5%) drain the compressor for oil, and refill with new ester oil. (4 liter).

### Material for replacing both compressor.

Qty	Part no.	Description
1	360-53676-00	Compressor with unload
1	360-53677-00	Compressor without unload
8	K11-52003-02	Ester oil 1 L Can
2	360-56638-00	Filter drier
2	K35-52035-00	Label 134a

Service Department  
SABROE REEFER COOL A/S