

INSTRUCTIONS

* 99TA516069B *

Instruction Sheet Number: **99TA516069B**

99TA516069B (for RCD use only)

Description: 05T Shaft Seal Replacement Procedure

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Part Number: 05TA660001

Parts List:

1.	Shaft Seal Assembly	8TA0833D	1
2.	Seal Plate O-ring	8TA0389B	1
3.	Mating Ring O-ring	8TA0388B	1

Note: The Seal puller tool, O-Ring insertion tool and seal insertion tool referenced in this document can be obtained by ordering Shaft Seal Tool Kit part number 05TA660002.

Safety Instructions:

Service or Maintenance must be performed only by trained certified technicians and according to service instructions.

WARNING: Failure to follow these instructions could result in property damage or serious personal injury.

- 1A. Follow recognized safety practices and wear protective goggles.
- 1B. Disconnect and lockout all electrical power.
- 1C. Isolate the compressor from the system. Reclaim all refrigerant in the compressor. Do not disassemble bolts, plugs, fittings, etc. unless all pressure has been relieved from the compressor.
- 1D. Do not apply power to the compressor unless all service valves are open.

NOTE: Valves may be sealing off refrigerant from the rest of the system. Do not open isolation valves while servicing the compressor.

2. Unbolt motor from mounting base.
3. Unbolt C Flange from compressor (ensure compressor is supported).
4. Separate compressor from motor by moving motor away from compressor.
5. Orient the drive shaft such that the keyway in shaft is at the 3 o'clock position.
6. Remove compressor half of drive coupling.
7. Remove four bolts from seal plate assembly.
8. Remove seal plate assembly from compressor.
9. Use the seal puller tool to remove seal from compressor shaft. Seal has two notches for tool to grip seal. (Notches are located at the 3 o'clock and 9 o'clock positions on the seal.)



10. Remove O-ring from compressor shaft with a long thin tool to "pick" the O-ring from the groove. This tool must be field supplied or fabricated and has its end bent at a 90 degree angle.

11. Install new O-ring as follows:
 - *Slide O-ring tool over shaft with V-notch at seal drive pin as shown (12 o'clock position). This will allow O-ring to pass over the drive pin. (See Drawing - item #1.) *Apply refrigeration POE oil to new O-ring to allow new O-ring to allow new seal to slide over O-ring easily. (see Drawing item #4.)



Seal Installation Tool

12. Install new seal as follows:
 - * Avoid touching the seal surfaces on the seal and bellows assembly with fingers as the oil may contaminate the seal.
 - * Place new seal into seal insertion tool with seal face into tool. In order to ensure proper engagement of drive pin to mating notch in seal, add pencil mark on both ends of the seal insertion tool indicating location of the seal drive notch. (See Fig. 2 for drive pin and notch location.)

* Place alignment mark on top center of casting and align seal drive pin with mark as shown. Keyway should be at 3 o'clock position and mark on insertion tool should align with mark on casting at 12 o'clock.



* Slide new seal over shaft, O-ring and drive pin with seal tool. Use alignment marks to guide seal during installation. Seal will slide snugly over O-ring. (Practice installing with old seal prior to actually installing new seal.)

13. Once the new seal is in place, install new O-ring (see Drawing item #2) in seal plate and bellows assembly (see Drawing item #3). Oil O-ring and sealing face prior to installing new seal plate. Note: **DO NOT** oil surfaces with fingers. Use spray to avoid seal contamination.
14. Reinstall seal plate bolts and torque to 20 - 25 ft.-lbs.
15. Leak check seal assembly, remove pressure and evacuate compressor.
16. Reinstall C flange to compressor.
17. Bolt motor down to mounting base.
18. Open refrigerant and oil lines to compressor.

Compressor is now ready to re-start.

05T High Speed Shaft Seal Assembly

