



Title: 17 DK/DM/DR CARBON SEAL REPLACEMENT

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Supersedes: NEW

Date:

Models Affected: 17DK/DM/DR COMPRESSORS

### PURPOSE

This bulletin provides information on the replacement of the "Double Carbon Shaft Seal".

### BACKGROUND

The outboard carbon of this assembly seals between atmosphere and the refrigerant and oil systems. The inner carbon keeps the seal housing flooded. The seal should be inspected on a scheduled basis like the compressor bearings or sooner if the seal housing isn't maintaining an oil level during shutdown or if the flow to the seal leakage pot is excessive. Replace the seal and contact surfaces if they show wear.

NOTE: Cleanliness is critical when working on any carbon seal. Do not touch the carbon or metal contact surfaces.

### PROCEDURE

#### REMOVE MOTOR AND COUPLING

1. Use an A-frame to support motor.
2. Unbolt coupling from compressor end.
3. Unbolt wobble foot bolts and dowels.
4. Unbolt motor flange and pull motor back.
5. Remove compressor end tapered coupling hub using a puller and heat.

#### REMOVE CARBON SEAL

6. Take off cover seal (windage baffle) and gland plate.
7. Use a thin blade (feeler gage) to loosen bellows grip on shaft.
8. Pull both seals off shaft and remove mating ring.
9. Clean shaft.

#### INSTALL SEAL ASSEMBLY

1. A new seal assembly.

#### Contains:

1. mating ring with o-ring
2. two carbon rings
3. two bellows
4. spring

FILING INSTRUCTIONS: COMPRESSOR - MOTOR ASSEMBLY

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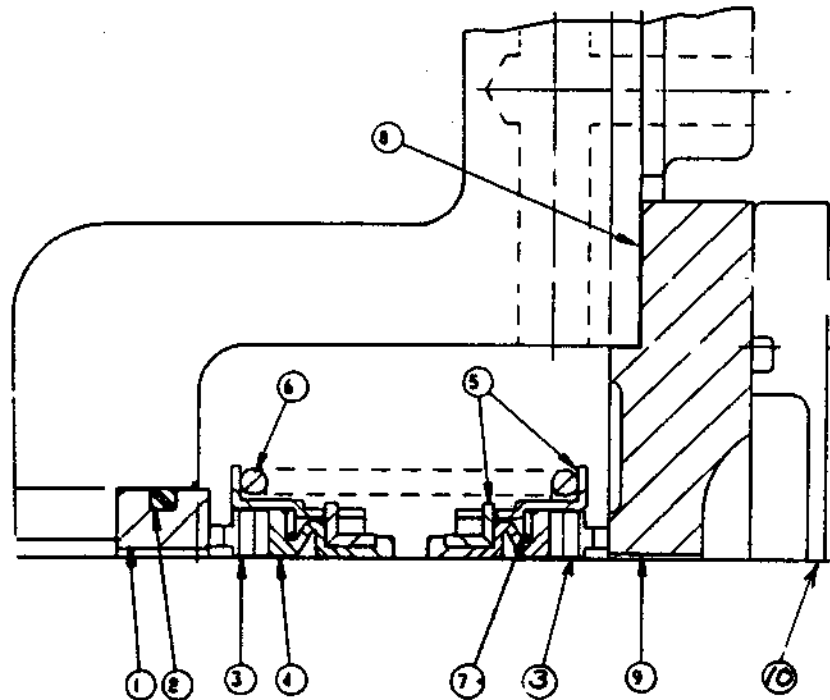
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2. Lightly oil shaft.
3. Slide mating ring onto shaft being careful NOT to touch mating ring's lapped surface.
4. Oil inside ends of bellows.
5. Slide carbon ring, bellows, and spring onto shaft without touching the contact surface of the carbon ring.\*
6. Slide second bellows and carbon ring onto shaft and into spring.
7. Install a new gland plate along with the original cover seal.

**INSTALL COUPLING AND MOTOR**

8. Install the coupling as instructed in the 17DK/DM/DR Coupling Maintenance Bulletin.
9. Carefully align and fasten the motor adaptor and wobble foot into place and reconnect the seal lubrication tubing.

\* NOTE: Because the bellows will bond to the shaft in approximately 15 minutes, steps 5 through 7 must be performed without delay between steps.



**FIGURE 1 DOUBLE CARBON SHAFT SEAL**

<u>ITEM</u>	<u>PART NAME</u>
1	Mating Ring
2	"O" Ring
3	Carbon Ring
4	Bellows
5	Retainer Assy
6	Spring
7	Disc
8	Gasket
9	Gland Plate
10	Cover Seal