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IFCA-C-001

23004513HT & 23004514HT
#1 Bearing Carbon Seal & Mating Ring

For Warranty & Model Eligibility, Please visit us at www.hyetechllc.com

Subject: Removal, inspection, rework and installation procedures for 23004513HT & 23004514HT compressor front bearing oil seal & mating ring.

Compliance: Any time during repair or overhaul when the compressor front bearing oil seal & mating ring are removed.

Technical aspects are FAA approved

Notes: Refer to OEM's published engine operation data.

1.0 Removal:

1.1 Remove and disassemble compressor module in accordance with the manufacturer's instructions until the #1 compressor bearing is removed.

1.2 Remove the seal mating ring using the 23005023 puller.

1.3 Remove preformed packing and oil seal from the first-stage compressor wheel shaft.

2.0 Cleaning

2.1 Clean Mating Ring with petroleum solvent, P-D-680, Type 2, or equivalent, and a soft bristle brush. Exercise extreme caution in cleaning seal to avoid damage to the lapped mating face.

2.2 Clean Carbon Seal with denatured alcohol, AMS 3002; O-E-760, Type 3 or equivalent. Exercise extreme caution in cleaning to avoid damage to the carbon seal face.

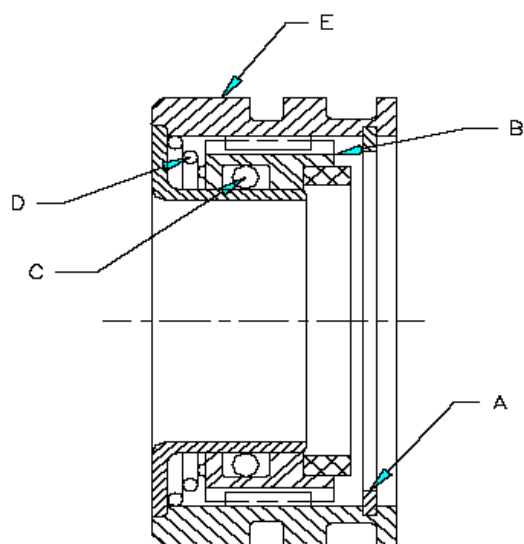
3.0 Inspection

3.1 Inspect and repair or replace mating ring and seal per Table 1:

Table 1

Condition	Service Limit	Repair Limit	Corrective Action
Seal Flatness	6 Helium light bands	Thickness diameter under .209 inch or scratches or cracks on the mating ring seal surface.	Lap within 3 helium light bands or replace seal assembly and/or mating ring. Refer to Figure 2.
Carbon Face		Cracks, scratches or chips extending more than 10% of lapped carbon face.	Optional to repair seal assembly per Figure 1.

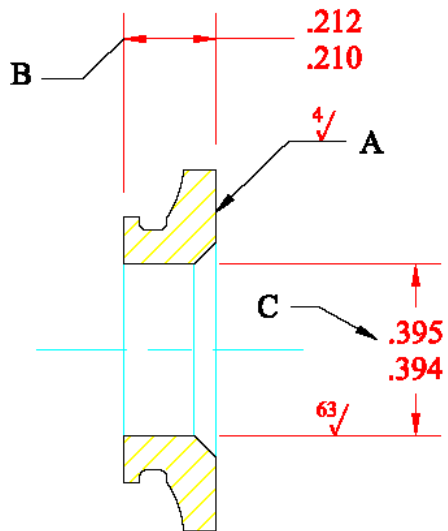
FIGURE 1



Replace seal assembly, packing and spring as follows:

- (1) Remove retaining ring (a).
- (2) Remove seal ring assembly (b), packing (c), and spring (d) from the seal housing (e).
- (3) Clean the seal housing and retaining ring using mineral spirits and a soft bristle brush.
- (4) Install the replacement spring in the seal housing.
- (5) Place the new packing in the replacement seal ring.
- (6) Install the seal ring assembly in the seal housing.
- (7) Secure with the retaining ring, and then measure the ID of the retaining ring to 0.856 inch min. This will assure that the retaining ring has not yielded in assembly or disassembly.

FIGURE 2



Repair mating ring as follows:

Lap surface A with engine oil using crocus cloth or 600 - grit paper within 3 helium light bands while maintaining Dimension B.

4.0 Installation:

- 4.1 Assemble compressor module in accordance with the manufacturer's instructions until the installed position of the damper has been measured.
- 4.2 Lubricate and install preformed packing on seal OD. Install seal, seal mating ring, compressor front bearing (wire clip forward) and nut on the compressor rotor. Tighten the nut to 70 - 80 in-lbs while holding the compressor rotor with 6795588 wrench or equivalent.