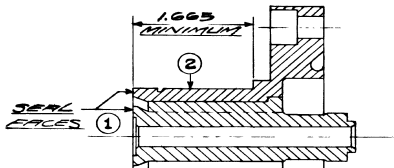


When assembling the Model 1500-194 Deublin Union, cleanliness is an important factor. All parts must be free of dirt and chips. The parts may be cleaned with chloroethene, carbon tetra-chloride, alcohol or any good cleaning solvent.

Before assembly, the 1500-113 rotor seal face must be relapped or surface ground smooth to a 15 R.M.S. finish. If the dimension between the ball bearing stop and seal face is under 1.665 inch, the rotor must be replaced. Surface (1) must be square to (2) within .001 inch total indicator reading.



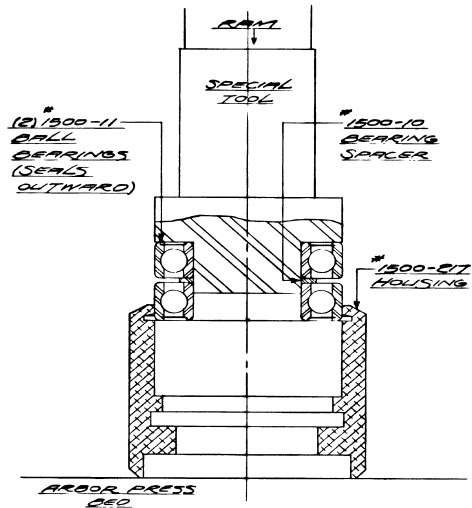
After grinding, the rotor seal face should be polished. This is done by placing a sheet of 4/0 polishing paper on a sheet of glass, and then placing the rotor (seal face down) on the polishing paper, moving it in a figure eight several times.

If possible, the polishing procedure should be replaced by machine lapping to 2 light bands flatness, or better.

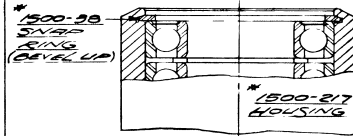
MODEL 1500-194 REPAIR KIT

- (1) #1500-177 Floating Seal
- (2) #1500-11 Ball Bearings
- (1) #1500-12 O-Ring
- (1) #1500-16 Snap Ring
- (1) #1500-18 O-Ring
- (1) #1500-19 Nose Gasket
- (1) #1500-34 Wave Spring
- (1) #1500-189 Floating Seal
- (1) #1500-73 Coil Spring
- (1) #1105-170 Block "V" Seal
- (1) #1500-186 felt Oiler
- (1) #1500-187 Coil Spring
- (1) #1500-188 Spring Retainer

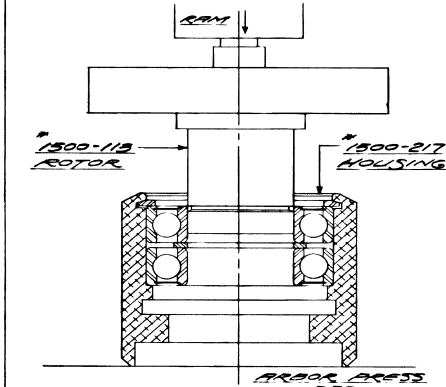
1 ASSEMBLE (2) #1500-11 BALL BEARINGS AND #1500-10 BEARING SPACERS.



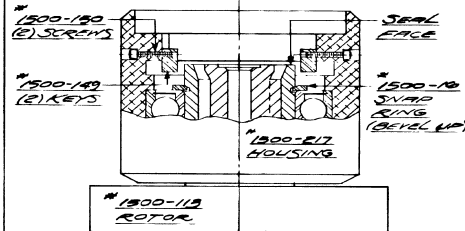
2 ASSEMBLE #1500-30 SNAP RING.



3 ASSEMBLE #1500-113 ROTOR.
NOTE - ROTOR WILL SLIP IN UP TO THE SNAP RING GROOVE. IT MUST PRESS IN FROM THERE.



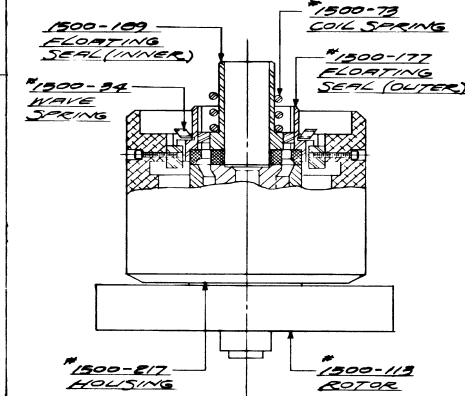
4 ASSEMBLE #1500-16 SNAP RING.
(THIS IS A DIFFICULT OPERATION AND CARE MUST BE TAKEN NOT TO NICK THE SEAL FACE DURING INSTALLATION) ASSEMBLE (2) #1500-189 KEYS WITH LONG SECTION DOWN.



5 CLEAN SEAL FACES.
(SEAL FACES MUST BE FREE OF ALL DIRT AND OIL.)
#1500-113 ROTOR
#1500-189 FLOATING SEAL (INNER)
#1500-177 FLOATING SEAL (OUTER)

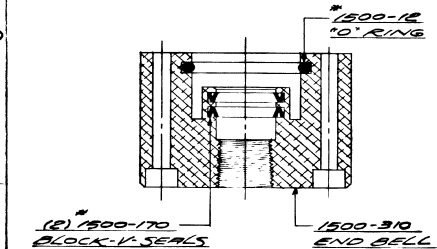
OIL ENTIRE #1500-113 ROTOR SEAL FACES (LIGHT VISCOSITY OIL)

6 INSTALL #1500-177 FLOATING SEAL (OUTER), #1500-189 FLOATING SEAL (INNER), #1500-73 COIL SPRING & #1500-34 WAVE SPRING.

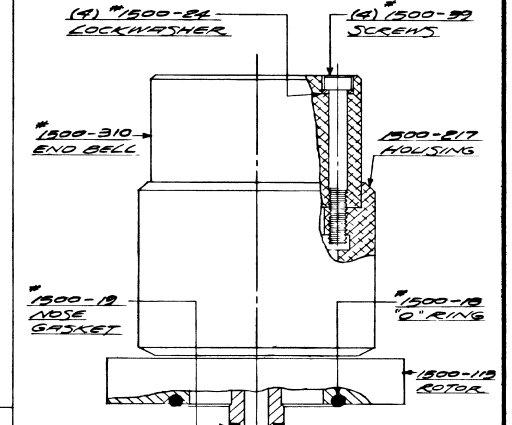


7 OMIT STEP #7 (SEE REVISIONS 'A', 'B' & 'C')

8 INSTALL #1500-12 "O" RING & (2) #1500-170 BLOCK-V SEALS AS SHOWN.



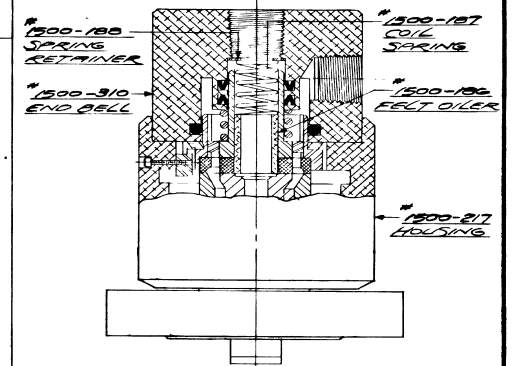
9 ASSEMBLE #1500-310 END BELL (HOLD DOWN WHILE TIGHTENING SCREWS.) POSITION ENTRANCE PORT AS ILLUSTRATED IN #1500-194 CROSS SECTION DRAWING.



INSTALL #1500-18 "O" RING & RUBBER CEMENT #1500-19 NOSE GASKET IN PLACE.

10 ASSEMBLE #1500-186 FELT OILER, #1500-187 COIL SPRING AND #1500-188 SPRING RETAINER. SPRING RETAINER IS SPLIT FOR ASSEMBLY PURPOSES AND WILL EXPAND AFTER INSTALLATION INTO CAVITY.

NOTE - TEST UNION WITH AIR PRESSURE BEFORE PERMANENT INSTALLATION.



| F | E | D | C | B | A | LET. | REVISION | DATE | SIGN | MATERIAL |
|---|---|---|---|---|---|------|----------|------|------|--|
| | | | | | | | | | | REMOVE BURRS AND BREAK ALL SHARP CORNERS 010R OR AS SPECIFIED REMOVE GREASE OR MACHINING OILS. |

| SCALE | DRAWN | DATE | LAY D | DATE | ISSUED | TOLERANCES | FRACTIONS | DECIMALS | PART NO |
|----------|--------|------|-------|------|--------|------------|--------------|----------|---------|
| 3/4 = 1" | V.S.S. | | | | | ± .010 | AS SPECIFIED | | DA-17 |

DEUBLIN COMPANY
NORTHBROOK ILLINOIS
MODEL 1500-194 UNION
ASSEMBLY PROCEDURE