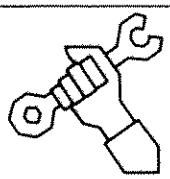
Portable Compressor

TECHNICAL SERVICE BULLETIN

INGERSOLL-RAND
CONSTRUCTION & MINING

No. PC-8-012
Date ~~Revised (05-05-99)~~
Revised (10-12)



SUBJECT: **XHP 750/825/900 (HR2) SHAFT SEAL**

The shaft seal is being changed. The new seal is 39919485 and is totally interchangeable with previous seal 36865475.

Mocksville Parts Department released newsletter PPN5-664 advising to check parts inventories and return any 36865475 seals in stock.

Service orders for 36865475 will have 39919485 shipped in its place.

Cartridge Seal 36865772 is still available for service but should be an alternate after 39919485.

Note: If replacing Cartridge Seal 36865772 with 39919485, a new Seal Cover 39860192 and O Ring 95022372 is required.

OLDER SEAL <1995
P/N 35593516 SEAL
P/N 35856467 COVER

HL600 226/163
OLD SEAL 35293893 BELLOWS
" " COVER 35815075

NEW SEAL 35593524
" " COVER 35846013

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INGERSOLL-RAND®
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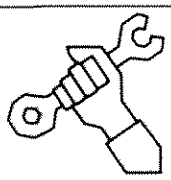
No. PC–8–012
Date August 12, 1996

OLD



SUBJECT: **ROTARY SHAFT SEAL ON HR2 AIREND**

In October 1995, the rotary shaft seal was changed in all HR2 Airends (XHP750–900 Products). The seal and seal cover are different from prior parts. The type seal can be determined by observing the seal cover of the airend. The old seal incorporated a snap ring on the stationary seal member and is visible at the seal cover. The new seal does not have a snap ring.

It is recommended to use the following parts when replacing the seals on the HR2 airends.

STP P/N 36870418 (7 oz.)

Seal ---------- 36865475

Cover Assembly ---------- 39860192 (required only when replacing old style seal with new seal)

O Ring ---------- 95022372

Note that installation of the seal requires SAE 10W, 20W or 30W to lubricate the O–Ring and STP® to lubricate shaft and seal elastomer. Application of these specific lubricants are critical to the seal installation.

Mark your parts manuals with the above new part numbers. The old seal (35593516) continues to be used in other applications and therefore, will not cross–reference to the new seal. If you want the new seal, you must order the above part numbers.

When replacing the seal, always check the driveshaft end play. This is best accomplished by situating the airend so that the driveshaft is in a vertical up position. Remove the seal cover and seal. Use a dial indicator on the shaft and check the end play by lifting the shaft with an eye bolt inserted into the end of the shaft. Shaft end play should be .003 to .006 inches. If end play must be adjusted, it requires the gear case be removed from the main housing and adding shims to reduce end play or subtract shims to increase end play. Shims are located between the driveshaft rear bearing and spacer (in the main housing).

Special Note: In applications where frequency of seal replacements has been numerous, another seal alternative is considerably more expensive, but is less sensitive to installation procedures. It incorporates a cartridge type seal enclosed in a stainless steel bellows with the seal cover included with the assembly. This seal may be ordered by part number 36865772.

Note: regardless of the seal being installed, the driveshaft end play must be within spec (.003 – .006 inches).

Cartridge Seals 2.25"

Seal 36865772 Installation Instructions:

1. Remove all oil seal parts.

2. Be sure there are no scratches or nicks on the shaft. Sand around the shaft with 100 grit paper if necessary. Wipe the shaft clean.

3. Remove seal assembly from the box immediately prior to assembly in the compressor.

4. Check to see that the gland face o–ring, is in place in the o–ring groove in the gland face, the 2 shaft sleeve o–rings, are in their grooves in the bore of the sleeve and the gland pilot o–ring, is in its groove on the gland pilot.

5. Lubricate the gland o–ring, gland pilot o–ring, and two sleeve o–rings with the same lubricant used in the compressor. (Items #5, 6, 11).

6. Lubricate the seal chamber with minimum of 10 drops of 10W or compressor oil via the drilled hole next to o–ring. (This hole is in line with cooling oil supply line shown on drawing). This oil may also be added after seal is installed via the injection fitting on top of gear case. Be sure to re–tighten supply tube prior to start–up.

7. Slide the entire assembly onto the shaft and up to the gearcase.

8. Secure the seal assembly to the gearcase by tightening the gland bolts finger–tight and continue tightening the bolts alternately until they are torqued evenly and securely. The centering bushing will maintain concentricity between gland, sleeve and shaft. The torque requirement for the gland bolts is 31 ft–lbs.

9. Tighten the cup point set screws in the shaft sleeve to secure it to the shaft and provide positive drive. The torque requirement for the set screws is 7 ft–lbs.

10. Rotate shaft by hand to check for excessive drag.

Leaking seals replaced during warranty may use either of the above seals.

This is not a campaign.