

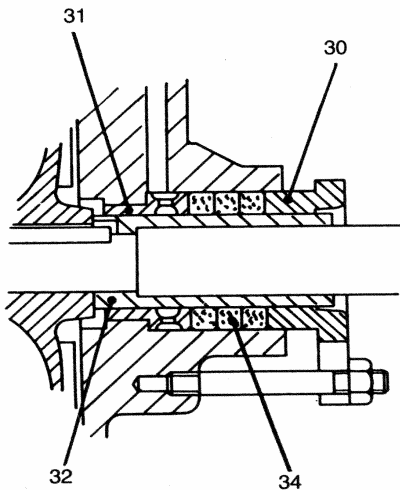
### **Mechanical Seal A20 (04) Conversion Kits**

The kit is suitable for conversion of standard packed gland pumps to mechanical seal pumps. It is also suitable for converting E range A20 (04) - mechanical seal pumps to the current arrangement. The kit comprises of mechanical seal, spring sleeve, seal plate, 'O' ring seal and nameplate, and Nameplate Drive screws.

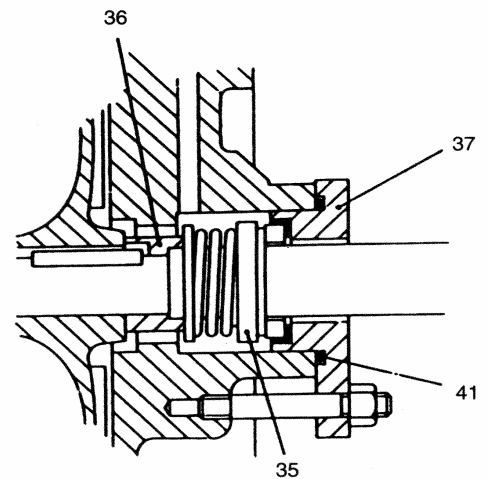
**Elite Standard Stuffing Box Arrangement**

PUMP MODEL: 32-13\*, 32-16, 32-20, 32-26, 40-13\*, 40-16, 40-20, 40-26, 50-13, 50-16, 50-20, 50-26, 65-13, 65-16, 65-20, 65-26, 80-16, 80-20, 80-26, 100-16, 100-20, 100-26, 125-20, 125-26

\* no Expeller Vanes

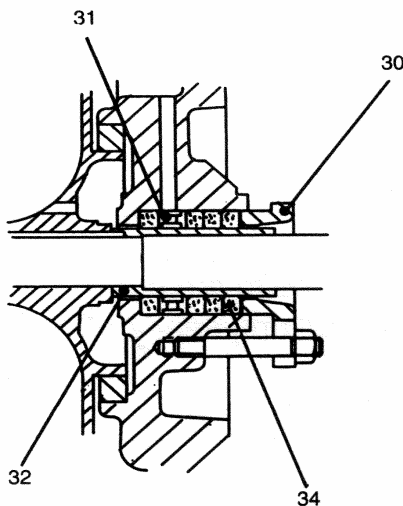


**PACKED GLAND**

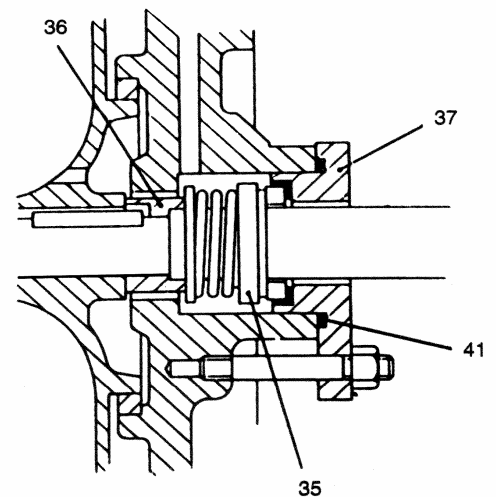


**MECHANICAL SEAL**

PUMP MODEL: 40-32, 50-32, 65-32, 80-32, 80-40, 100-32, 100-40, 125-32, 125-40, 150-20, 150-26, 150-32, 150-40, 200-26, 200-32, 200-40, 250-32, 250-40



**PACKED GLAND**



**MECHANICAL SEAL**

ITEM	DESCRIPTION
30	Gland
31	Lantern Ring
32	Shaft Sleeve
34	Gland Packing

ITEM	DESCRIPTION
35	Mechanical Seal
36	Spring Sleeve
37	Seal Plate
41	O Ring

## Elite Mechanical Seal Conversion

### Instructions for converting from packed gland Series 07 (AXO-) to the upgraded KSB choice mechanical seal, Series 04 (A20-)

#### The Conversion Kit consists of the following:

*Mechanical Seal, Spring Sleeve, Seal Plate, 'O' Ring, Nameplate and Nameplate Drive screws.*

**Note:** The mechanical seal is a precision seal (lapped sealing faces) and must be treated as such.

#### Steps:

- 1 Remove the bearing housing complete with back cover, and impeller assembly from pump casing.
  - 2 Remove impeller nut and tab washer, impeller, impeller key, back cover (complete with gland packing, gland and shaft sleeve) and lantern ring.
  - 3 Thoroughly cleanse the stuffing box/seal chamber bore and the face where the new seal plate 'O' ring (41), seals.
- Check that the seal plate (37) fits into the stuffing box-seal chamber in the back cover, ie Flange of seal plate must register against the face (end) of the chamber. If not, ease seal plate as required. Remove and proceed.
- 4 Make sure there is a 0.8mm (1/32") radius on the shaft shoulder over which the seal must pass. Remove all burrs, sharp edges on keyway, thread, etc.
  - 5 Clean and oil polish the shaft surface where seal is to be fitted (use liquid detergent). Check shaft end movement and, if necessary shim at coupling bearing to give maximum movement of 0.4mm (1/64").
  - 6 Ensure the cavity in the seal plate (37), to take the stationary seat, is thoroughly clean and free from burrs, sharp edges, etc.
  - 7 Apply a light smear of thin oil (not grease) to the outside diameter of the neoprene/nitrile ring containing the ceramic seat. Gently press, with fingers this assembly into the seal plate cavity, seating it firmly and squarely.

**Note:** The pressure must be applied evenly to the lapped seat face. Ensure that the ceramic seat face is not damaged – cracked, scratched or chipped.

Clean the lapped seat face with a soft, clean non-abrasive cloth.

8 Fit the 'O' ring (41) to the seal plate (37) ensuring it is not twisted or damaged.

9 Slide the seal plate (37) with seat and 'O' ring (41) fitted, along the shaft towards the bearing. The ceramic seat should face away from the bearing. Care must be taken not to chip, crack or disturb the seat.

10 To locate the seal on the shaft, scribe/mark a thin line at a distance from the shoulder appropriate to the following shaft diameters.

i.e. 24mm dia shaft.....33mm  
 32mm dia shaft.....40mm  
 44mm dia shaft.....39mm  
 55mm dia shaft.....64mm

11 Clean the lapped carbon seal face with a soft, clean non-abrasive cloth, and smear lightly with thin oil – not grease.

12 Slide the carbon seal face (less the spring and spring holder) along the shaft, with the carbon face towards the bearing, until the lapped carbon face is level with the line in Step 10.

**Note:** Press only on neoprene/nitrile section (driving band) of the seal.

13 Fit spring and spring holder (ensuring the spring is centred in the spring holder), new spring sleeve (36) and impeller key.

14 Re-assemble back cover, impeller, impeller tab washer and nut. Refer maintenance instructions supplied with the pump.

15 Carefully position and fit the seal plate (37) into the back cover. Tighten stud nuts evenly and alternatively until metal to metal contact is achieved between chamber face and seal plate.

16 Re-fit this assembly to casing as per Maintenance instructions supplied with the pump.

17 Replace nameplate on bearing housing.

**Note:** To ensure the supply of all the appropriate spare parts in the future, transfer all data on the old nameplate to the new nameplate. However the series should now read 04 instead of 07.

**Important:** Do not use old seal plate, mechanical seal or spring sleeve.

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