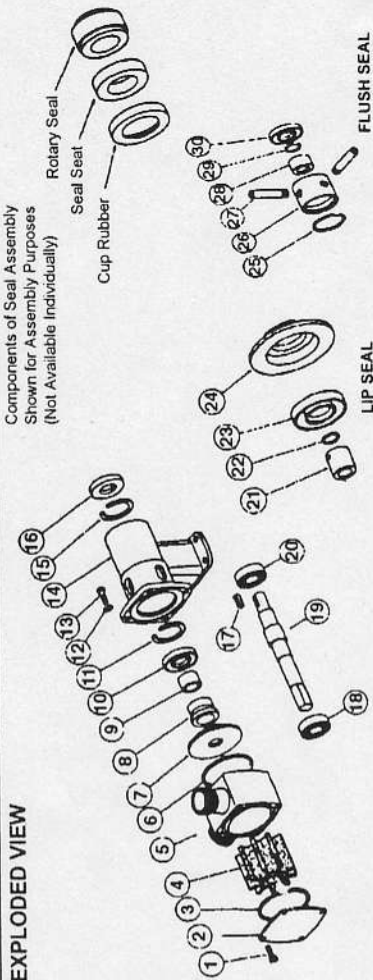


## EXPLODED VIEW



Components of Seal Assembly Shown for Assembly Purposes (Not Available Individually)

## SERVICE INSTRUCTIONS

### Dis-Assembly

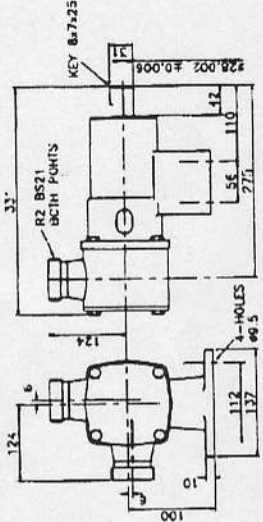
1. Remove screws (1), endcover and "O" ring. Remove screws (13). Slide off body complete with impeller and wearplate.
  2. Remove seal seal, cup rubber from the wearplate and push out impeller and "O" ring from body.
  3. Gently lever the seal spacer and seal (8) off the shaft.
  4. Prise out seal (16). Remove retaining ring (15) and carefully withdraw shaft and bearing assembly. Remove retaining ring (11) and push out seal (10).
  5. To remove bearings from shaft an arbor press is required alternatively a bearing extractor may be used. Support inner race of bearing then apply a steady pressure on shaft until bearing is free. Repeat this procedure to remove other bearing.
- PUMPS WITH LIP SEAL:-** Push out lip seal (23) from wearplate (24). Loosen set screw to remove seal spacer (21). Prise out "O" ring (22) from seal spacer.
- PUMPS WITH FLUSH SEAL:-** After pulling out rotary seal, unscrew tubes (27) and pull out seal housing (26). Remove seal spacer (28) and prise out "O" ring (29). Remove "O" ring (25) and lip seal (30) from seal housing.

### Assembly

1. To fit bearings onto shaft - Support inner race of bearing and press the shaft until bearing locates against the shoulder. Repeat procedure for other bearing.
  2. Fit retaining ring (11) and lip seal (10) ensuring that spring on seal is facing outwards.
  3. Fill the bearing with grease, and the space between bearings two thirds full. Smear grease on the shaft where lip seal locates. Push shaft and bearing assembly into bearing housing. Fit retaining ring (15) and seal (16) with spring facing outwards.
  4. To fit seal - Smear shaft with lubricating oil and slide seal spacer (9) up to the shoulder on shaft. Push rotary seal gently until it touches the spacer. Fit cup rubber and seal seal into wearplate (7). Slide wearplate assembly over the shaft.
  5. Fit impeller into lubricated body with twisting motion in the same rotation as motor. Fit "O" ring (6) into body and slide over shaft.
  6. Align wearplate and body into bearing housing and secure with screws (13) and washers (12). Do not overtighten, a gap between bearing housing and body is normal. These screws and endcover screws should be tightened to a torque of 13.5 Nm.
  7. Fit "O" ring (3) into body and place endcover over body and secure with screws (1). **PUMPS WITH LIP SEAL:-** Ensure "O" ring (22) is fitted under seal spacer (21). Smear seal spacer and shaft with lubricating oil. Slide spacer over shaft and secure with set screw to the dimension shown. Press lip seal (23) into wearplate (24) and follow on from step 5 above.
- PUMPS WITH FLUSH SEAL:-** Ensure "O" ring (29) is fitted under seal spacer (28). Smear seal spacer and shaft with lubricating oil. Slide spacer over shaft up to shoulder. Press lip seal (30) into seal housing (26) and slide into position over shaft. Fit tubes (27) sealing with PTFE tape. Rotary seal and "O" ring (25) can now be fitted. Follow on from step (5) above.

Inspect all parts for wear or damage and replace if necessary.

## INSTALLATION DRAWING



Lip Seal Spacer Position Dimension (ref 4mm)

PARTS LIST	MEDIUM PRESSURE IMPELLER		HIGH PRESSURE IMPELLER	
	Qty	Neoprene Elast.	Neoprene Elast.	Nitrile Elast.
1 Screw	4	X3001-207F	28530-2125	28530-2123
2 Endcover	1	28505-0010	28505-0010	X3001-207F
3 "O" Ring*	1	X4020-424A	X4020-424A	28505-0010
4 Impeller*	1	8963-0011B	8600-0005B	X4020-424A
5 Body	1	28504-2002	28504-2002	8600-0023B
6 "O" Ring*	1	X4020-424A	X4020-424A	28504-2002
7 Wearplate (2)	1	28536-0000	28536-0000	X4020-424A
8 Seal Assy*(2)	1	28531-0103B	28531-0103B	28536-0000
9 Seal Spacer (1)	1	28517-0000	28517-0000	28531-0103B
10 Lip Seal	1	SP2701-0912	SP2701-0912	28517-0000
11 Retaining Ring	1	SP1701-437	SP1701-437	SP2701-0912
12 Washer	4	X3080-101F	X3080-101F	SP1701-437
13 Screw	4	X3001-209F	X3001-209F	X3080-101F
14 Bearing Housing	1	28503-0000	28503-0000	X3001-209F
15 Retaining Ring	1	SP1701-437	SP1701-437	28503-0000
16 Lip Seal	1	SP2701-0912	SP2701-0912	SP1701-437
17 Key	1	X4000-487A	X4000-487A	SP2701-0912
18 Bearing	1	SP2601-23	SP2601-23	X4000-487A
19 Shaft	1	28507-0000	28507-0000	SP2601-23
20 Bearing	1	SP2601-23	SP2601-23	28507-0000
Service Kit Contains*		SK379-0111	SK379-0125	SK379-0123
Other Seal Options				
Model No. With HIF Seal		28530-2211	28530-2225	28530-2223
Model No. With Lip Seal		28530-2411	28530-2425	28530-2423
Model No. With HIF Seal Flushed		28530-2711	28530-2725	28530-2723
Model No. With Standard Seal Flushed		28530-2911	28530-2925	28530-2923
Parts For Appropriate Seal Conversion				
8 HIF Seal Assy	1	28531-0203B	28531-0203B	28531-0203B
Lip Seal Kit No. & Contains		28531-0403B	28531-0403B	28531-0403B
21 Seal Spacer	1	28565-0011	28565-0011	28565-0011
22 "O" Ring	1	X4020-229A	X4020-229A	X4020-229A
23 Lip Seal	1	SP2701-0915	SP2701-0915	SP2701-0915
24 Wearplate	1	28566-0000	28566-0000	28566-0000
Flush Seal Kit No. & Contains		28532-0000B	28532-0000B	28532-0000B
25 "O" Ring	1	X4020-269A	X4020-269A	X4020-269A
26 Seal Housing	1	28512-0000	28512-0000	28512-0000
27 Tube	2	21844	21844	21844
28 Seal Spacer	1	28517-0001	28517-0001	28517-0001
29 "O" Ring	1	X4020-229A	X4020-229A	X4020-229A
30 Seal	1	SP2701-0915	SP2701-0915	SP2701-0915

(1) Key 9 Not Required For Models With Lip Seal And Flush Seal. (2) Key 7 & 8 Not Required For Lip Seal Models