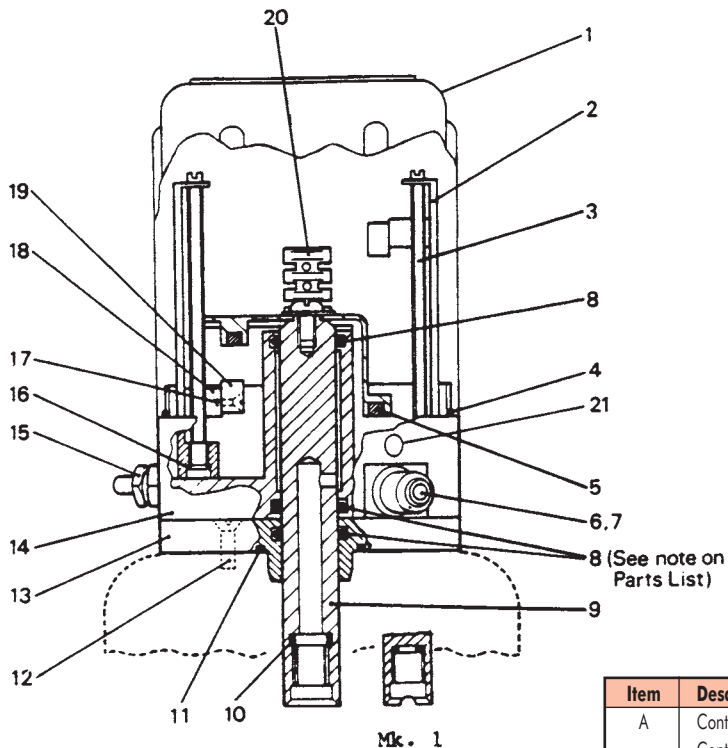
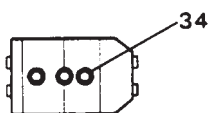
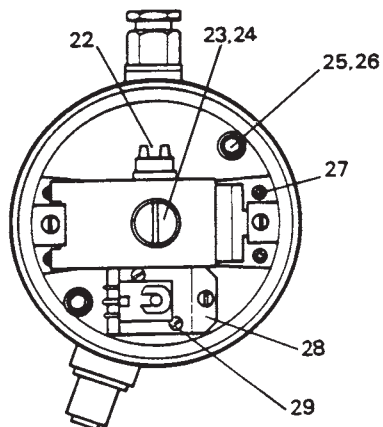




Zephyr Valve Series 4 - Control Unit



a) Sectional View

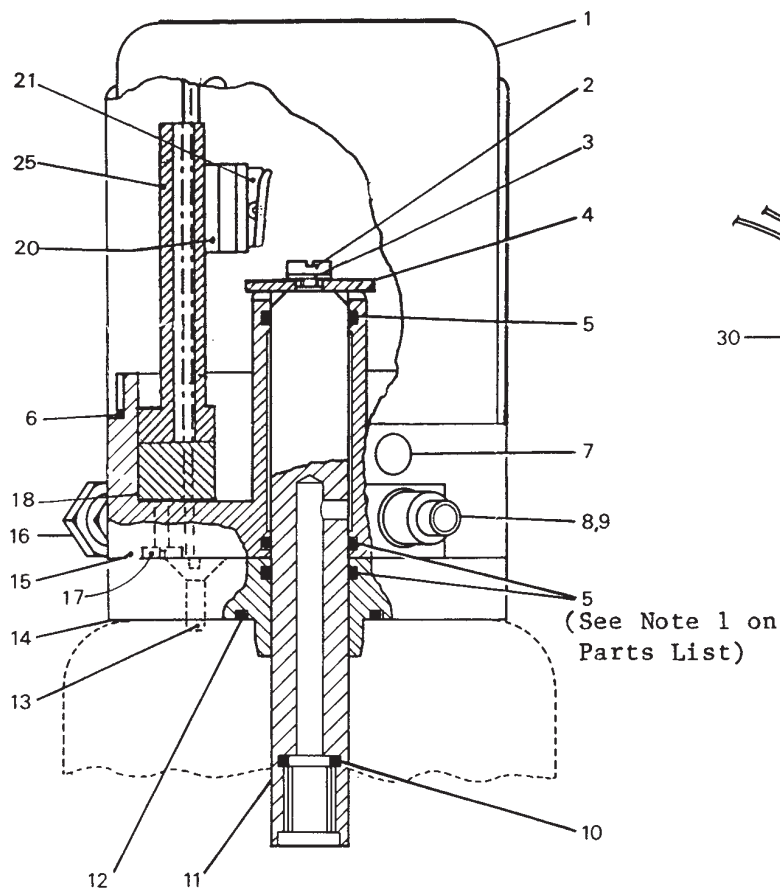


**SERIES IV
ZEPHYR VALVE**

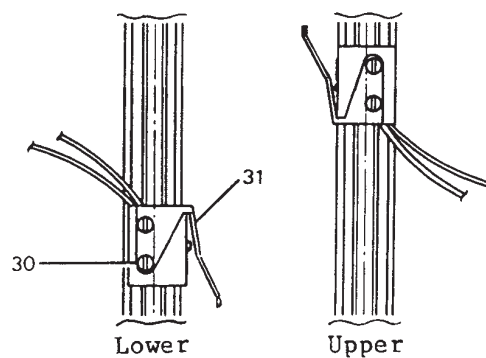
ZEPHYR VALVE SERIES 4: MK 1&2		
Item	Description	Part Number
A	Control Unit (without Solenoid Valve)	249062
	Control Unit (with 110V Solenoid Valve)	249060
1	Cover	404838
2	Slide Housing	410803
3	Adjusting Screw	434281
4	O-Ring (Cover)	427585
5	Switch (Actuator Plate)	249972
6	Air Line Coupling (Push in Type)	406320
7	Washer	459635
8	O-Ring (Shaft Seal-Nitrile)	427587
9	Actuator Shaft with Helicoil Insert (Large & Small Cylinder)	233117
	Actuator Shaft with Helicoil Insert (Small Cylinder-Mk.1)	243599
10	Joint Ring (Shaft)	413770
11	O-Ring (Adapter plate-Nitrile)	458605
12	Screw	434285
13	Adapter Plate	438750
14	Base	400607
15	Cable Gland	449403
16	O-Ring (Adjusting Screw)	427580
17	Screw	460707
18	Switch Carrier	447907
19	Reed Switch (Twin Lead)	438084
20	Terminal Block (6-Way)	402039
21	Bursting Disc	406890
22	Screw	461111
23	Screw	434284
24	Washer	460325
25	Screw	460625
26	Washer	444160
27	Screw	434311
28	Solenoid Valve (With Coil-110V A/C)	442132
	Solenoid Coil (110V A/C)	404455
29	Screw	461112
34	O-Ring (Solenoid Valve)	427592



Zephyr Valve Series 4 Control Unit (with microswitches)



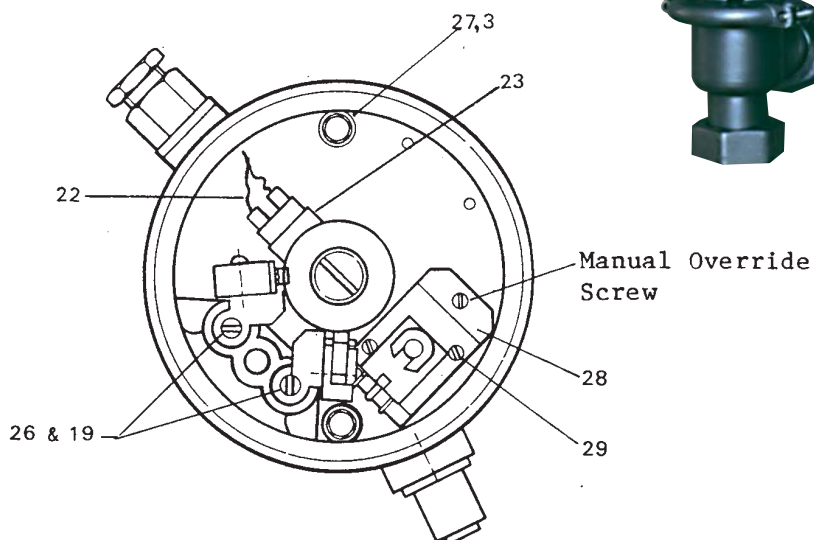
a) Sectional View
(diagrammatic only)



Orientation of Switches



SERIES IV
ZEPHYR VALVE



b) Control Unit with Solenoid
Valva Plan View



Zephyr Valve Series 4 Control Unit (with microswitches) (contd)

ZEPHYR VALVE SERIES 4: MK 1&2			
Item		Description	Part Number
1	1	Cover	404838
2	1	Screw, Cheese Head	461113
3	3	M6 Nylite Washer	444160
4	1	Switch Actuator "washer"	446219
5	2	O-Ring, Shaft Seal, (see note 1)	427587
6	1	O-Ring, Cover	427585
7	1	Bursting Disc, Self-Adhesive	406890
8	1	Air Line Stud Coupling (Push in Type)	406320
9	1	M10 Nylite Washer	459635
10	1	Joint Ring, Shaft	413770
11	1	Actuator Shaft with Helicoil Insert and Joint Ring (10)	-
	-	Small Air Cylinder (3 1/2 inch and 100mm dia.)	233121
	-	Large Air Cylinder (5 1/2 inch dia.)	233117
12*	1	O-Ring, Adapter Plate. Dowty 202-528-4470	458605
13	2 or 4	Screw, Countersunk Head	434285
14	1	Adapter Plate	438758
15	1	Base	304986
16	1	Cable Gland	449403
17	2	Screw, Pan Head, Slotted	434312
18	1	Adapter Block	438754
19	2	O-Ring Adjusting Screw	427580
20	2	Switch Carrier	447910
21	2	Micro Switch with twin lead	438059
22	2	Connector Lead to Solenoid. Orange	442014
23	1	Terminal Block 6-Way	402039
24#	2	Screw, Cheese Head, (For Item 23)	461111
25	1	Slide Housing	410801
26	2	Adjusting Screw	434281
27	2	Screw, Socket Head,	460625
28	1	Solenoid Valve with Coil	-
	-	24V DC	442133
	-	100V AC	442132
	1	#Solenoid Coil	-
	-	24V DC	404454
	-	100V AC	404455
29	2	Screw, Cheese Head	461112
30	4	Screw, Round Head	434313
31	2	Switch Actuator Leaf	446208
32#	2	Nut, hexagon	460252
33#	1	Blanking Block, if Solenoid Not Fitted	402038
34#	1	Gasket for Blanking Block	449012
35#	2	Screw for Blanking Block	434293
36#	3	O-Ring, Solenoid Valve Base	427592

* Supplied with Zephyr Valve

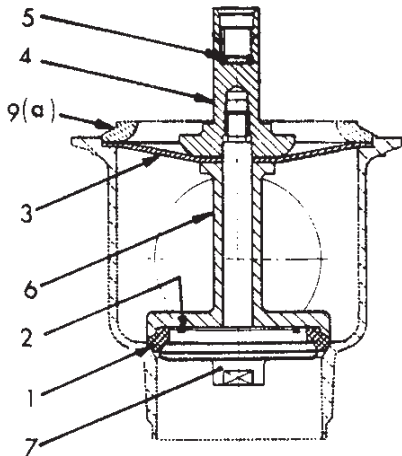
Not Illustrated

Note 1: An extra shaft seal must be transferred from existing top bearing plate to the adapter plate (14) if the Zephyr valve is Spring-below-piston type See Fig. 1(a)

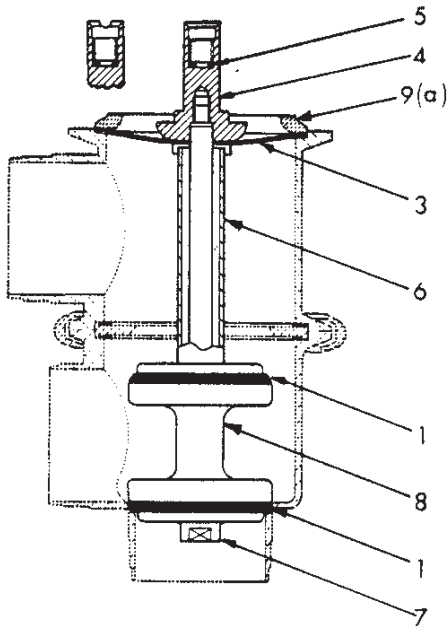
COMPLETE UNIT (COMPRISING ONE ITEM A AND ONE ITEM B):		
Item	Description	Part Number
A	Control Unit Series 4 with microswitches:	
	with 24V Solenoid	249082
	with 110V Solenoid	249083
	without Solenoid	249084
B	Installation Pack containing items 2, 3, 4, 5, 11 & 13: for Air Cylinders	249361



Zephyr Valve Series 4 Diaphragm Headseal Assembly



Type A Valve
Figure A



Type B Valve

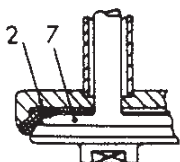


Figure B

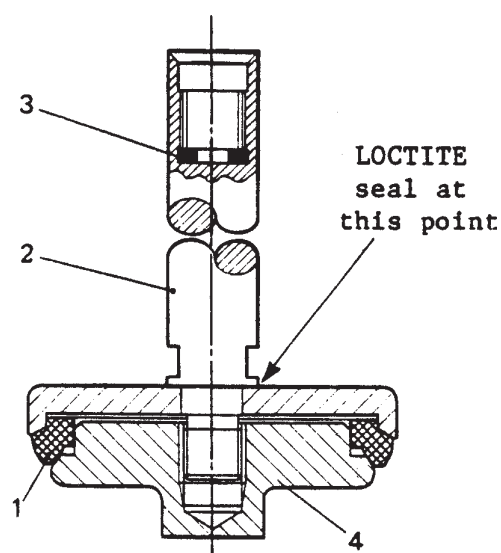
Showing Modifications
on A and B Valves

DIAPHRAGM HEADSEAL ASSY.				
Item	Valve Size	Description	Part Number	
		Headseal Assembly (Items 1-8)	Figure A	Figure B
	1½ inch 2 inch 2½ inch 3 inch	For Type A Valves	244184 232936 232937 232938	244188 244178 244179 244180
	1½ inch 2 inch 2½ inch 3 inch	For Type B Valves	244185 232932 232933 232934	244189 244181 244182 244183
1	1½ inch 2 inch 2½ inch 3 inch	PTFE Headseal Insert	459601 459602 459603 459604	459601 459602 459603 459604
2	1½ inch 2 inch 2½ inch 3 inch	O-Ring	426531 426578 426592 426571	426531 426592 426571 458607
3	1½ inch 2 inch 2½ inch 3 inch	Diaphragm Shaft Seal (PTFE)	406650 406651 406655 406657	406650 406651 406655 406657
4	1½ inch 2 inch 2½ inch 3 inch	Clamping Collar with Helicoil Insert and Joint Ring	228727 228728 228725 228726	228727 228729 228730 228731
5		Joint Ring (Shaft)	413770	413770
6	1½ inch 2 inch 2½ inch 3 inch	Shaft Guide (for Type A Valve)	322854 231317 231318 231319	322856 231324 231325 231326
	1½ inch 2 inch 2½ inch 3 inch	Shaft Guide (for Type B Valve)	322855 231321 231322 231323	322857 231327 231328 231329
7	1½ inch 2 inch 2½ inch 3 inch	Clamping Screw (for Type A Valve)	244855 244856 244857 244858	244859 347765 347766 347767
	1½ inch 2 inch 2½ inch 3 inch	Clamping Screw (for Type B Valve)	347768 244860 244861 244862	244866 244863 244864 244865
8	1½ inch 2 inch 2½ inch 3 inch	Seal Spacer (for Type B Valve Only)	347676 347673 347674 347675	347676 347673 347674 347675
9a	1½ inch 2 inch 2½ inch 3 inch	Clamp Ring (Mk.1 Valve)	343445 343446 343447 343448	343445 343446 343447 343448
9b	1½ inch 2 inch 2½ inch 3 inch	Clamp Ring (Mk.2 Valve)	343453 343454 343455 343456	343453 343454 343455 343456

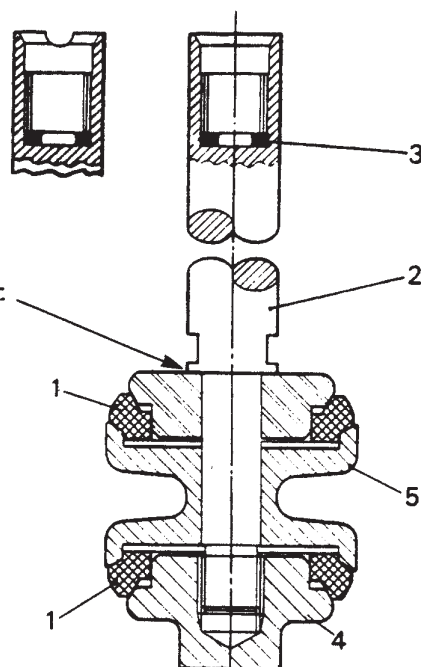


Zephyr Valve Series 4 Non-Diaphragm Headseal Assembly

Item	Valve Size	Description	NON-DIAPHRAGM HEADSEAL ASSY.	
			Part Number	
			Mk.1 Air Cylinder	Mk.2 Air Cylinder
	1½ inch	For Type A Valves	231790	244186
	2 inch		231791	244150
	2½ inch		231792	244151
	3 inch		231793	244152
	4 inch		231794	244153
	1½ inch	For Type B Valves	231795	244287
	2 inch		231796	244158
	2½ inch		231797	244159
	3 inch		231798	244160
	4 inch		231799	244161
1	1½ inch	PTFE Headseal Insert	459601	459601
	2 inch		459602	459602
	2½ inch		459603	459603
	3 inch		459604	459604
	4 inch		459619	459619
2		Shaft with Helicoil Insert and joint Ring		
	1½ inch	For Type A Valves:	243588	233120
	2 inch		243589	233105
	2½ inch		243590	233106
	3 inch		243591	233107
	4 inch		243592	233108
	1½ inch	For Type B Valves:	233100	233119
	2 inch		233101	233113
	2½ inch		233102	233114
	3 inch		233103	233115
	4 inch		233104	233116
3		Joint Ring (Shaft)	413770	413770
4	1½ inch	Clamping Nut	213527	213527
	2 inch		213528	213528
	2½ inch		213529	213529
	3 inch		213530	213530
	4 inch		213633	213533
5	1½ inch	Seal Spacer (Type B Valve Only)	347659	347659
	2 inch		347660	347660
	2½ inch		347661	347661
	3 inch		347662	347662
	4 inch		347668	347668



TYPE A



TYPE B



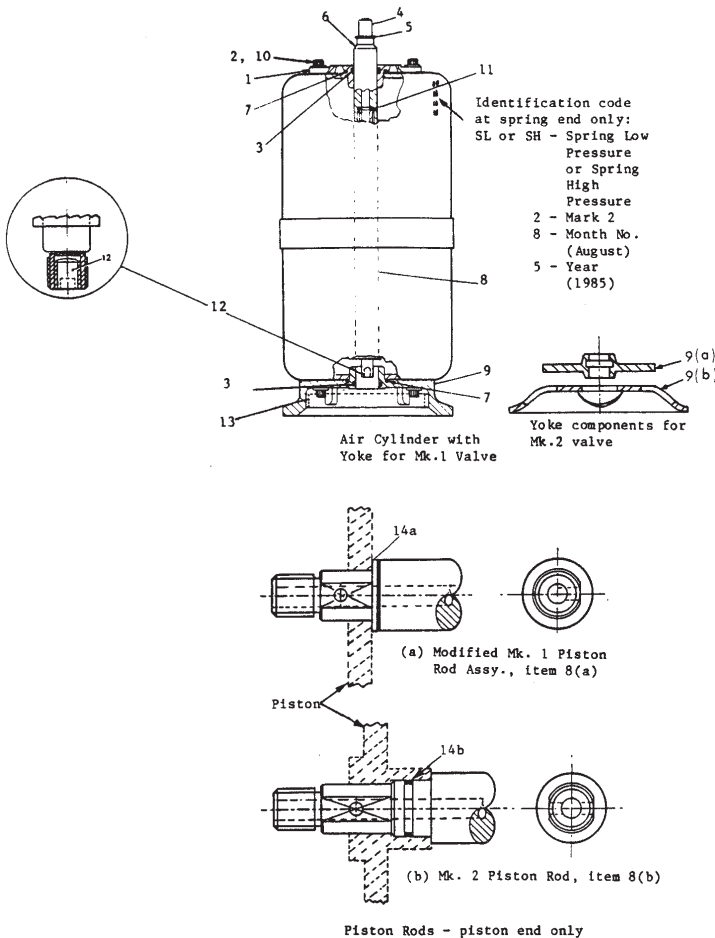
**SERIES IV
ZEPHYR VALVE**



Alternative Parts
Giving Choice & Value



Zephyr Valve Series 4 - Air Cylinder & Yoke (Mk.1&2)



AIR CYLINDER & YOKE			
Item	Description	Part Number	
1	Top bearing Plate (Small Air Cylinder)	457854	N/A
	Top bearing Plate (Large Air Cylinder)	457855	N/A
2	Screw (Socket Head)	460626	N/A
3	O-Ring (Shaft Seal-Nitrile)	427587	N/A
4	Air-Line Coupling (Push-In Type)	406320	N/A
5	Washer	459635	N/A
6	Piston Rod Extension (With Helicoil Insert)	239714	N/A
7	O-Ring (Nitrile)	458605	N/A
8a	Piston Rod Assembly Mk.1 (Small Air Cylinder)	242530	N/A
	Piston Rod Assembly Mk.1 (Large Air Cylinder)	242531	N/A
8b	Piston Rod Assembly Mk.2 (Small Air Cylinder)	343616	N/A
	Piston Rod Assembly Mk.2 (Large Air Cylinder)	343614	N/A
9	Yoke Assembly Mk. 1 (1½ inch Valve)	255100	255106
	Yoke Assembly Mk. 1 (2 inch Valve)	255102	255107
	Yoke Assembly Mk. 1 (2½ inch Valve)	255103	255108
	Yoke Assembly Mk. 1 (3 inch Valve)	255104	255109
	Yoke Assembly Mk. 1 (4 inch Valve)	255105	N/A
9a	Yoke Bearing Plate Mk.1 (Small Air Cylinder)	457873	N/A
	Yoke Bearing Plate Mk.2 (Large Air Cylinder)	457872	N/A
9b	Yoke Mk. 2 (1½ inch Valve)	355925	N/A
	Yoke Mk. 2 (2 inch Valve)	355926	N/A
	Yoke Mk. 2 (2½ inch Valve)	355927	N/A
	Yoke Mk. 2 (3 inch Valve)	355928	N/A
	Yoke Mk. 2 (4 inch Valve)	355929	N/A
10	Washer	460325	N/A
11	Joint Ring (Shaft)	413770	N/A
12	Screw (Socket Head Grub)	461203	N/A
13	Splash Shield (1½ inch Valve)	404842	N/A
	Splash Shield (2 inch Valve)	404843	N/A
	Splash Shield (2½ inch Valve)	404844	N/A
	Splash Shield (3 inch Valve)	404845	N/A
14a	Bonded Seal Mk. 1 (Piston Rod)	459699	N/A
14b	O-Ring Mk. (Piston Rod)	458606	N/A



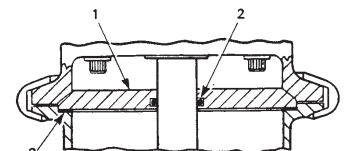
Zephyr Valve Series 4 - Shaft Seals

SHAFT SEALS FOR NON-DIAPHRAGM VALVES.				
Item	Valve Size	Description	Part Number	
			Mk.1 Valve	Mk.2 Valve
1a	1½ inch	Lipseal Plate	342575	337420
	2 inch		342576	337421
	2½ inch		342577	337422
	3 inch		342578	337423
	4 inch		342579	337424
2a	EPDM	Lipseal Rubber	223356	223356
	Nitrile		223357	223357
1b	1½ inch	O-Ring Plate	342580	337425
	2 inch		342581	337416
	2½ inch		342582	337417
	3 inch		342583	337418
	4 inch		342584	337419
2a	EPDM	O-Ring	427586	427586
	Nitrile		427587	427587
	Viton		427588	427588
3b	1½ inch	Flat Gasket (EPDM)	413977	413977
	2 inch		413978	413978
	2½ inch		413979	413979
	3 inch		413980	413980
	4 inch		413981	413981

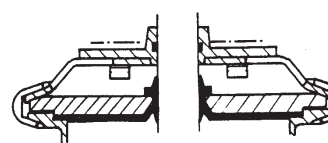
Always fit clamp with longer leg of V section over the yoke flange.



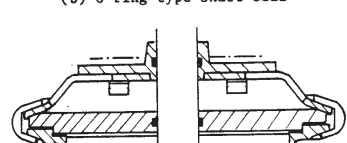
Mk1
(a) Lipseal type shaft seal



Mk1
(b) O-ring type shaft seal



Mk2
(a) Lipseal type shaft seal



Mk2
(b) O-ring type shaft seal