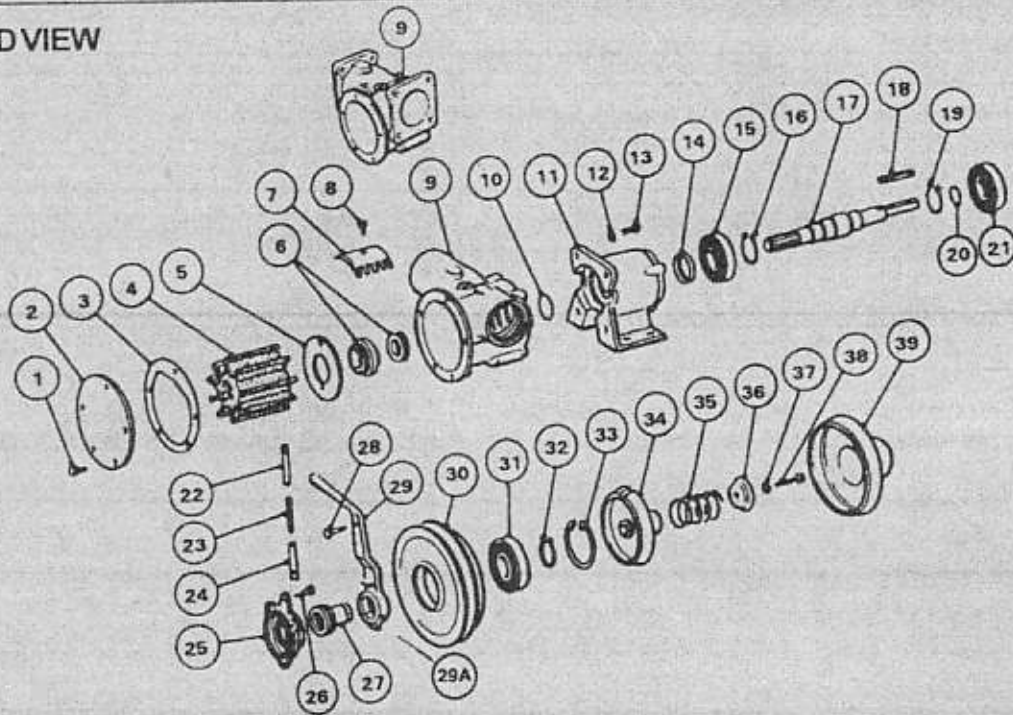




# 51220:51270 SERIES

## EXPLODED VIEW



## PARTSLIST

KEY	DESCRIPTION	QTY	Model 51220- Part No.	Model 51270-0 Part No.	Model 51270-2 Part No.
1	Endcover Screws*	5	SP1095-0640	SP1095-0640	X3001-176F
2	Endcover	1	8336	8336	8336
3	Gasket *	1	816	816	816
4	Neoprene Impeller *	1	17935-0001	21676-0001 or 17936-0001	21676-0001 or 17936-0001
	Nitrile Impeller **	1	636-0003	21676-0003 or 6760-0003	21676-0003 or 6760-0003
5	Wearplate	1	2574	2574	2574
6	Seal Assembly*	1	21849	21849	21849
7	Cam	1	834	8988	8988
8	Cam Screw	1	SP1005-04	SP1005-04	SP1005-04
9	Body	1	10634 (Flange)	10494 (Flange)	50274-0000 (BSP)
10	Slinger	1	X4020-324A	X4020-324A	X4020-324A
11	Bearing Housing	1	50273-0000	50273-0000	50273-0000
12	Washer	4	SP1802-13	SP1802-13	X3081-101C
13	Bolt	4	SP1095-28	SP1095-28	X3001-209C
14	Inner Bearing Seal	1	SP2701-54	SP2701-54	SP2701-54
15	Bearing	1	SP2601-0458	SP2601-0458	SP2601-0458
16	Retaining Ring	1	Y5026-06	Y5026-06	Y5026-06
17	Shaft	1	51227-0000	51277-0000	51277-0000
18	Key	1	X4000-270A	X4000-270A	X4000-270A
19	Retaining Ring	1	Y5026-06	Y5026-06	Y5026-06
20	Shim	1	51211-0000	51211-0000	51211-0000
21	Bearing	1	SP2601-0458	SP2601-0458	SP2601-0458
22	Guide Tube Outer	1	51089-0000	51089-0000	51089-0000
23	Spring	1	51213-0000	51213-0000	51213-0000
24	Guide Tube Inner	1	51048-0000	51088-0000	51088-0000
25	Engaging Mech / Housing	1	51201-0000	51201-0000	51201-0000
26	Screw	3	X3001-180F	X3001-180F	X3001-180F
27	Engaging Mech/Sleeve	1	51202-0000	51202-0000	51202-0000
28	Retaining Bolt	1	51094-0000	51094-0000	51094-0000
29	Handle	1	51203-0000	51203-0000	51203-0000
29A	Grub Screw (not shown)	2	X3009-172F	X3009-172F	X3009-172F
30	Pulley	1	51204-0000	51204-0000	51204-0000
31	Bearing	1	SP2800-09	SP2800-09	SP2800-09
32	Retaining Ring	1	SP1700-137	SP1700-137	SP1700-137
33	Retaining Ring	1	SP1700-283	SP1700-283	SP1700-283
34	Clutch Cone	1	51205-0000	51205-0000	51205-0000
35	Spring	1	X5293-002	X5293-002	X5293-002
36	Spring Retainer	1	51206-0000	51206-0000	51206-0000
37	Spring Washer	1	X3081-101C	X3081-101C	X3081-101C
38	Screw	1	X3001-213F	X3001-213F	X3001-213F
39	Cover	1	51212-0000	51212-0000	51212-0000

### 51220 - SERIES

Service Kit SK407-0011  
Service Kit SK407-0003

### 51270 - SERIES

Service Kit SK408-0011  
Service Kit SK408-0013

All Service Kits contain parts marked\*, plus \*\* in place of Neoprene Impeller

### Port Adaptors (Optional Extra)

Series	Kit No	Description
51220	K1-01	2" I/D Hose
	K1-200	1-1/2" BSP
	K1	1-1/2" NPT

### Port Adaptors (Optional Extra)

Series	Kit No	Description
51270	K2-01	2-1/2" I/D Hose
	K2-200	2" BSP
	K2	2" NPT

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

#### DIS-ASSEMBLY-CLUTCH

1. Remove snap-on cover.
2. Unscrew spring retaining bolt at end of shaft. Remove retainer, spring and clutch cone.  
Note: Bolt is assembled with Loctite.
3. Remove one retaining bolt from guide tube assembly.
4. Unscrew bolts holding engaging mechanism housing to body. Remove complete clutch assembly handle, pulley and engaging mechanism from pump.
5. Remove key and shim from shaft.
6. To break down handle, pulley and engaging mechanism assembly remove small retaining ring at bearing, support pulley and press engaging sleeve through bearing. Loosen screws in handle and remove handle from engaging mechanism.
7. If pulley bearing requires renewing, remove retaining ring from pulley and push out bearing.

#### DIS-ASSEMBLY-PUMP

1. Remove end cover screw, end cover and gasket.
2. Remove impeller.
3. Loosen cam screw and remove cam.
4. Remove wearplate.
5. Remove bolts from bearing housing to body. Remove pump from bearing housing.
6. Remove seal assembly from body.
7. Press shaft on impeller drive end to remove shaft and bearing from pump.
8. Press shaft out of bearing supporting bearing inner race.
9. Remove inner bearing seal if it needs replacing.

#### ASSEMBLY-PUMP

1. Press new seal into bearing housing with lip facing away from bearing bore.
2. Fit retaining rings onto shaft and press on bearings.
3. Grease seal area of shaft, push bearings and shaft into bearing housing by pressing on outer race of bearing.
4. Place slinger on shaft.
5. Fit pump body to bearing housing securing with 4 bolts.
6. Take new seal (cup rubber and seal seat), lightly grease the outside edge of cup rubber and press into cavity in pump body with ceramic facing towards impeller bore. Slide mechanical seal sub assembly over shaft until it engages against ceramic face of stationary seal.
7. Fit wearplate.
8. Coat cam screw thread, top side and back of cam, with non setting jointing compound and fit into body, securing with the cam screw.
9. Lightly grease impeller bore and fit impeller.
10. Fit end cover and gasket and secure with screws.

#### ASSEMBLY - CLUTCH

1. Screw engaging mech/sleeve into housing approximately 1 turn. Fit handle over sleeve and set 0.5mm clearance between housing and handle, when in the dis-engaged position, by screwing sleeve in or out as required. Lock handle on sleeve with grub screws.  
Note: Lubricate threads with ANTI-SCUFFING PASTE.
2. Re-fit bearing and retaining ring into pulley. While supporting clutch mech/sleeve press pulley bearing assembly onto sleeve hard up against handle.
3. Fit pulley/handle/engaging mech assembly to pump with 3 bolts.
4. Fit guide tube mechanism to handle and to engaging mech housing.
5. Fit shim and key onto shaft.
6. Fit clutch cone, spring and spring retainer and secure with bolt. Tighten bolt until retainer is clamped against shaft.  
Notes: Lubricate between shaft and clutch cone with ANTI-SCUFFING PASTE. Assemble screw with Loctite (nut lock).
7. Re-fit snap on cover.

#### ADJUSTMENT-CLUTCH

When new, the clutch will begin to engage approx. half way between the 'OFF' and 'ON' position i.e. when handle is near to the vertical position. As wear takes place the engaging position will move towards the 'ON' position. When there is little movement left between the engaging point and the 'ON' stop, the clutch can be adjusted as follows:

1. With handle in the 'OFF' position remove snap on cover.
2. Unscrew spring retaining bolt at end of shaft. Remove retainer, spring, clutch cone and key.  
Note: Bolt is assembled with Loctite (nut lock).
3. Remove shim and re-assemble key, clutch cone, spring, retainer, screw and cover.  
Note: Removal of shim will restore engaging point to its original position. Once shim has been removed no further adjustment is possible, and clutch cone, and possibly pulley will need to be replaced.

Refer to Operating Instructions on page 17.