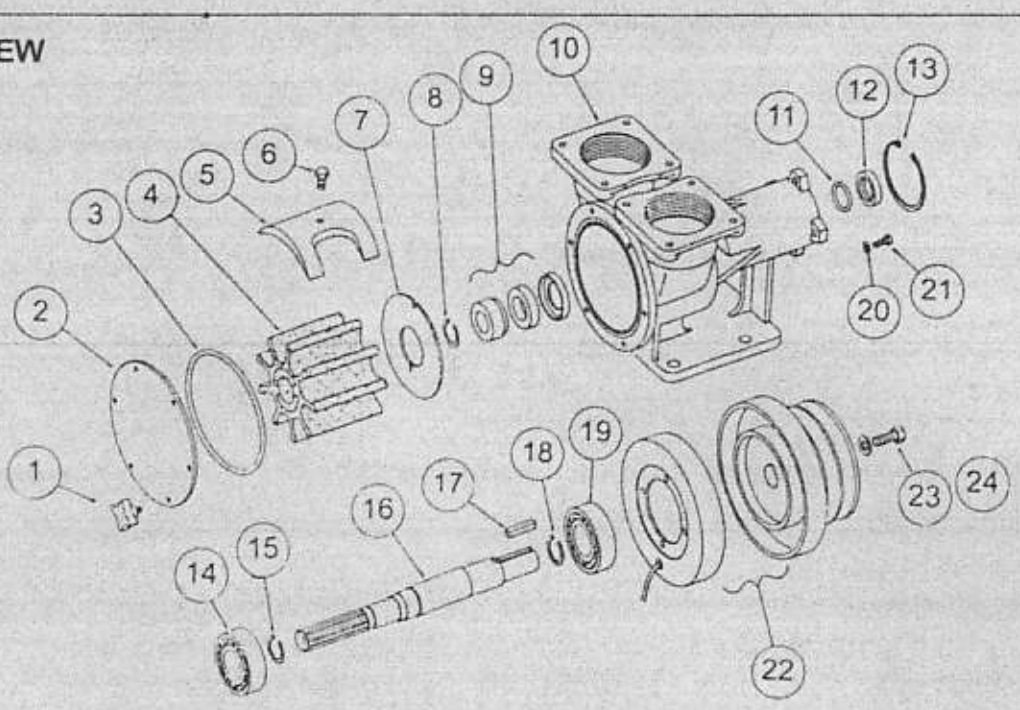
29870-2001 (12v dc Clutch)
29870-2101 (24v dc Clutch)

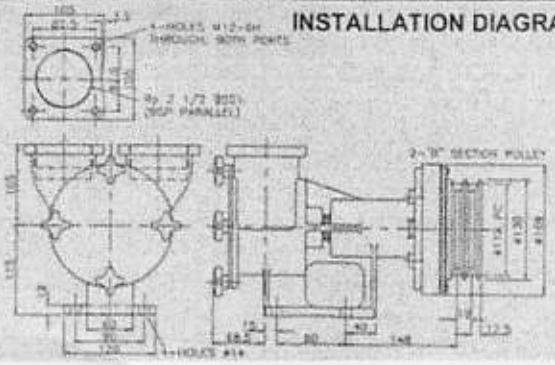
EXPLODED VIEW



PARTS LIST

KEY	DESCRIPTION	QTY	Part No.
1	End Cover Screws	4	X5255-002
2	End Cover	1	29865-0000
3	'O'-Ring*	1	X4020-424A
4	Neoprene Impeller*	1	17240-0001B
5	Cam	1	29863-0100
6	Cam Screw	1	X3001-207F
7	Wearplate	1	29866-0000
8	Retaining Ring	1	SP1700-3015
9	Seal Assembly*	1	21849
10	Body	1	29864-2000
11	Slinger	1	X4020-324A
12	Outer Bearing Seal	1	SP2701-54
13	Retaining Ring	1	SP1701-244
14	Bearing	1	SP2601-0458
15	Retaining Ring	1	SP1700-3014
16	Shaft	1	29867-0000
17	Key	1	X5271-002
18	Retaining Ring	1	SP1700-3014
19	Bearing	1	SP2601-0458
20	Washer	4	X3081-091F
21	Bolt	4	X3001-160F
22	Clutch Assembly 12V	1	X5274-001
22	Clutch Assembly 24V	1	X5274-002
23	Spring Washer	1	X3081-111F
24	Screw	1	X3001-242F
Service Kit contains items marked *			SK412-0001

INSTALLATION DIAGRAM



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

DIS-ASSEMBLY

1. Remove end cover screws, end cover and O-ring.
2. Remove impeller.
3. Loosen cam screw and remove cam.
4. Remove wearplate.
5. Remove screw from end of shaft. Screw $^{3}/_{8}$ UNC screw into the hub of the pulley assembly in order to draw the pulley from the pump shaft.
6. Remove 4 bolts and washers holding the field coil onto the housing adaptor.
7. Remove field coil.
8. Remove seal retaining ring from shaft.
9. Remove seal assembly from body and slinger.
10. Remove retaining ring from body.
11. Press shaft on impeller drive end to remove shaft and bearings from bearing housing.
12. Press shaft out of bearings supporting inner race of bearing. Remove retaining rings from shaft if necessary.
13. Remove pump inner bearing seal if it needs replacing.

ASSEMBLY

1. If removed press inner bearing 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 bearings.
4. Fit retaining ring.
5. Fit field coil to adaptor using 4 bolts and washers.
6. Wipe pump shaft to remove any particles and check location of key. Slide pulley assembly onto shaft, lining with key and secure with retaining bolt.
7. Place slinger on shaft.
8. Take new seal seat (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.
9. Slide mechanical seal sub assembly over shaft until it engages against ceramic face of stationary seal.
10. Fit retaining ring.
11. Fit wearplate.
12. Coat cam screw threads, top side and back of cam, with non setting jointing compound and fit into body, securing with cam screw.
13. Lightly grease impeller bore and fit impeller.
14. Fit O-ring and end cover and secure with screws.