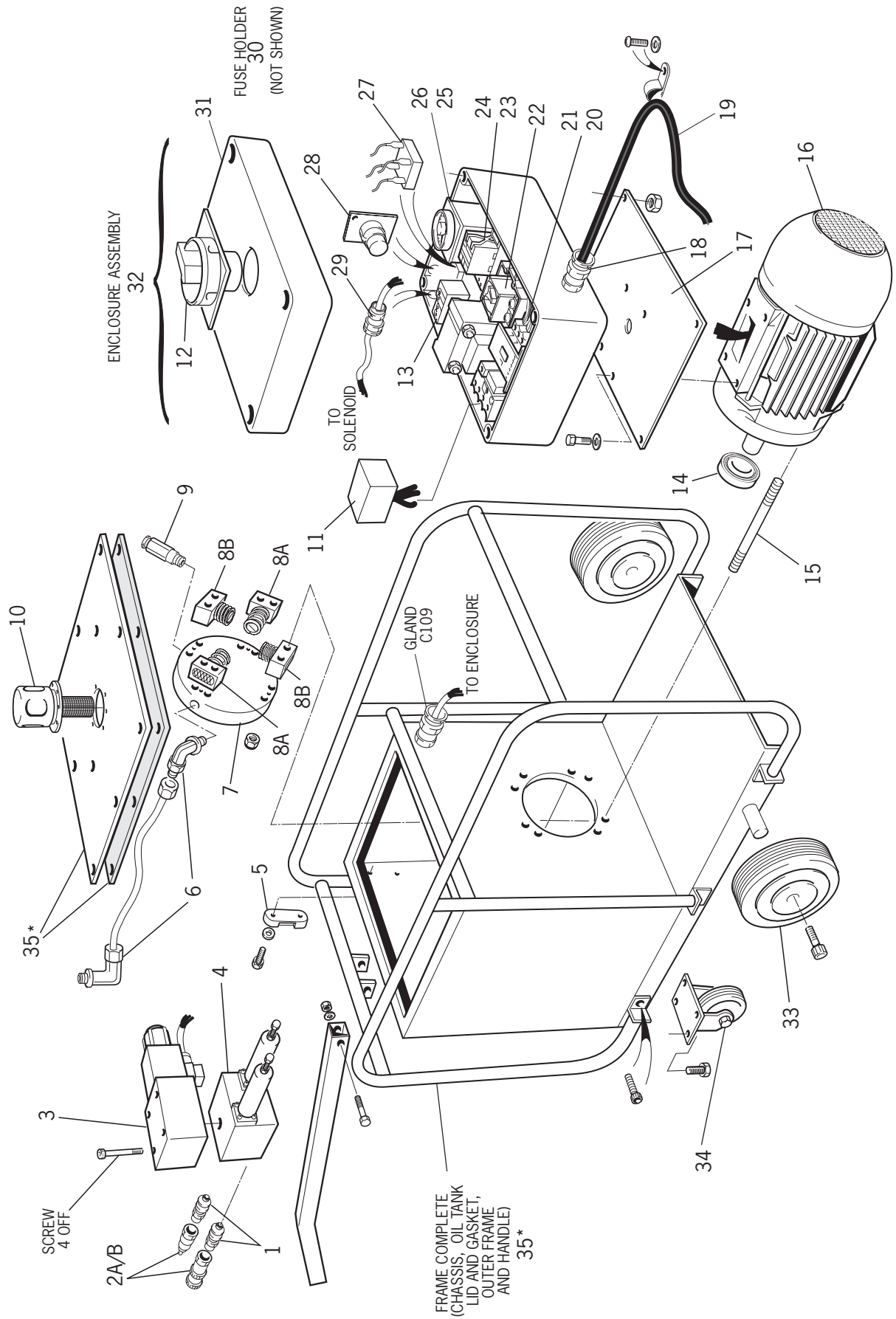


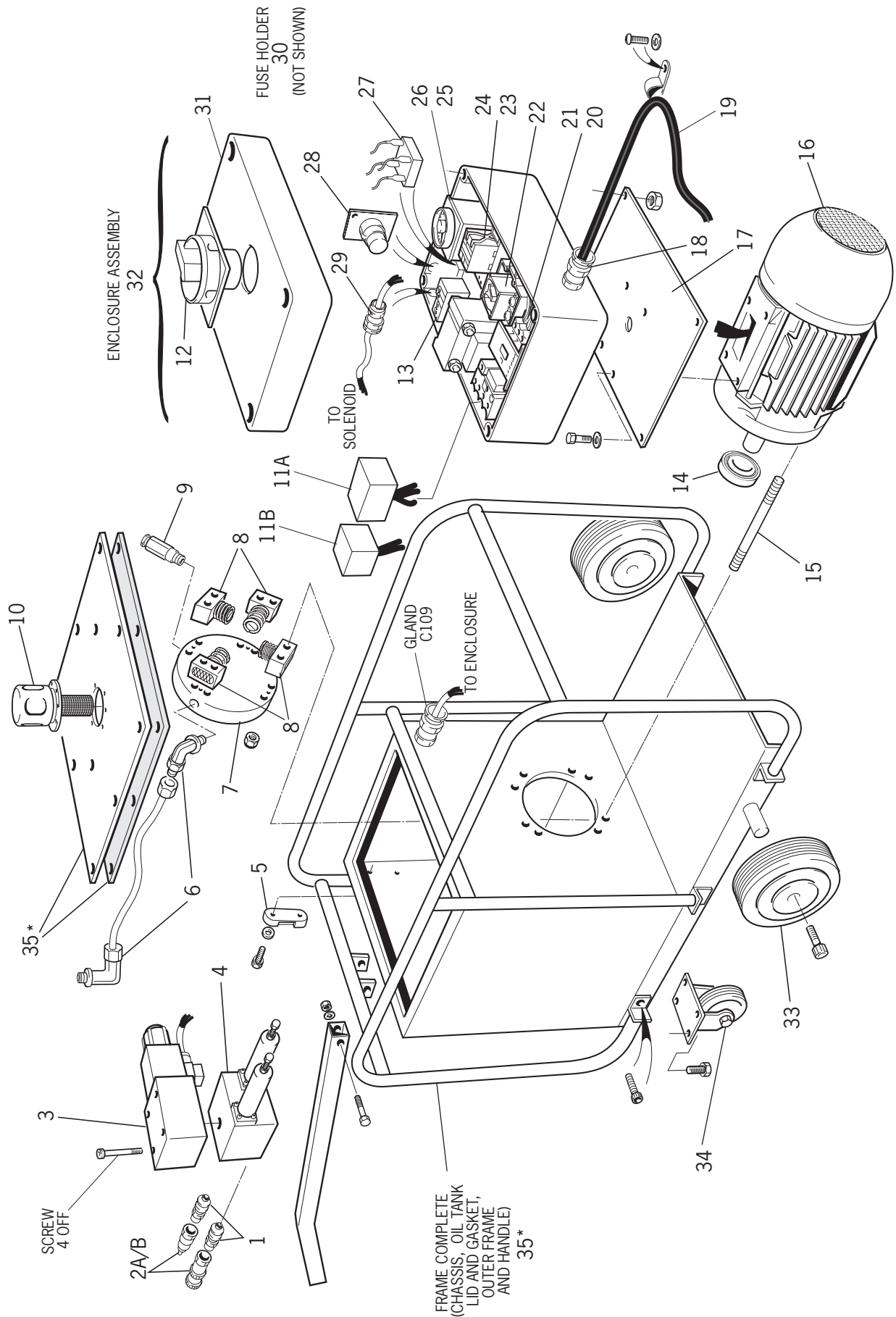
General Assembly of HP21 HydraPac



Parts List for HP21 HydraPac

HYDRAPAC HP21 VALVE PARTS LIST									
ITEM	PART N°	DESCRIPTION	QTY	ITEM	PART N°	DESCRIPTION	QTY		
1	C028	BULK HEAD ADAPTOR	2	19	C093	TRAILING CABLE	1		
2A/B	HS01	HYDRAULIC QUICK COUPLER (MALE/FEMALE)	2	20	C051	THERMAL OVERLOAD	1		
3	C166	DIRECTIONAL VALVE	1	21	C050	CONTACTOR	1		
4	C027	COMBINATION VALVE	1	22	C030	ISOLATOR	1		
5	C116	OIL LEVEL INDICATOR	1	23	C080	BASE (RELAY)	1		
6	C086	ELBOW	2	24	C079	RELAY	1		
7	C036	MANIFOLD FLANGE	1	25	C124	BASE (TIMER)	1		
8A	PE8	PUMP ELEMENTS	2	26	C132	TIMER	1		
8B	PE10	PUMP ELEMENTS	2	27	C097	BRIDGE RECTIFIER	1		
9	C231	RELIEF VALVE	1	28	C111	CANNON FLUSH PLUG	1		
10	C117	OIL FILLER BREATHER	1	29	C109	GLAND	1		
11	C095	SURGE ARRESTOR	1	30	C107	FUSE HOLDER (NOT SHOWN)	1		
12	C030	ISOLATOR	1	31	C105	ENCLOSURE LID	1		
13	C081	TRANSFORMER 220V	1	32	C090	ENCLOSURE ASSEMBLY	1		
14	C035	ECCENTRIC SHAFT BEARING	1	33	C119	WHEEL	2		
15	C034	STUD	8	34	C077	CASTOR WHEEL	1		
16	C022	MOTOR	1	35	C020	FRAME COMPLETE (CHASSIS, OIL TANK, LID & GASKET, OUTER FRAME & HANDLE)	1		
17	C089	MOUNTING PLATE	1						
18	C104	GLAND	1						

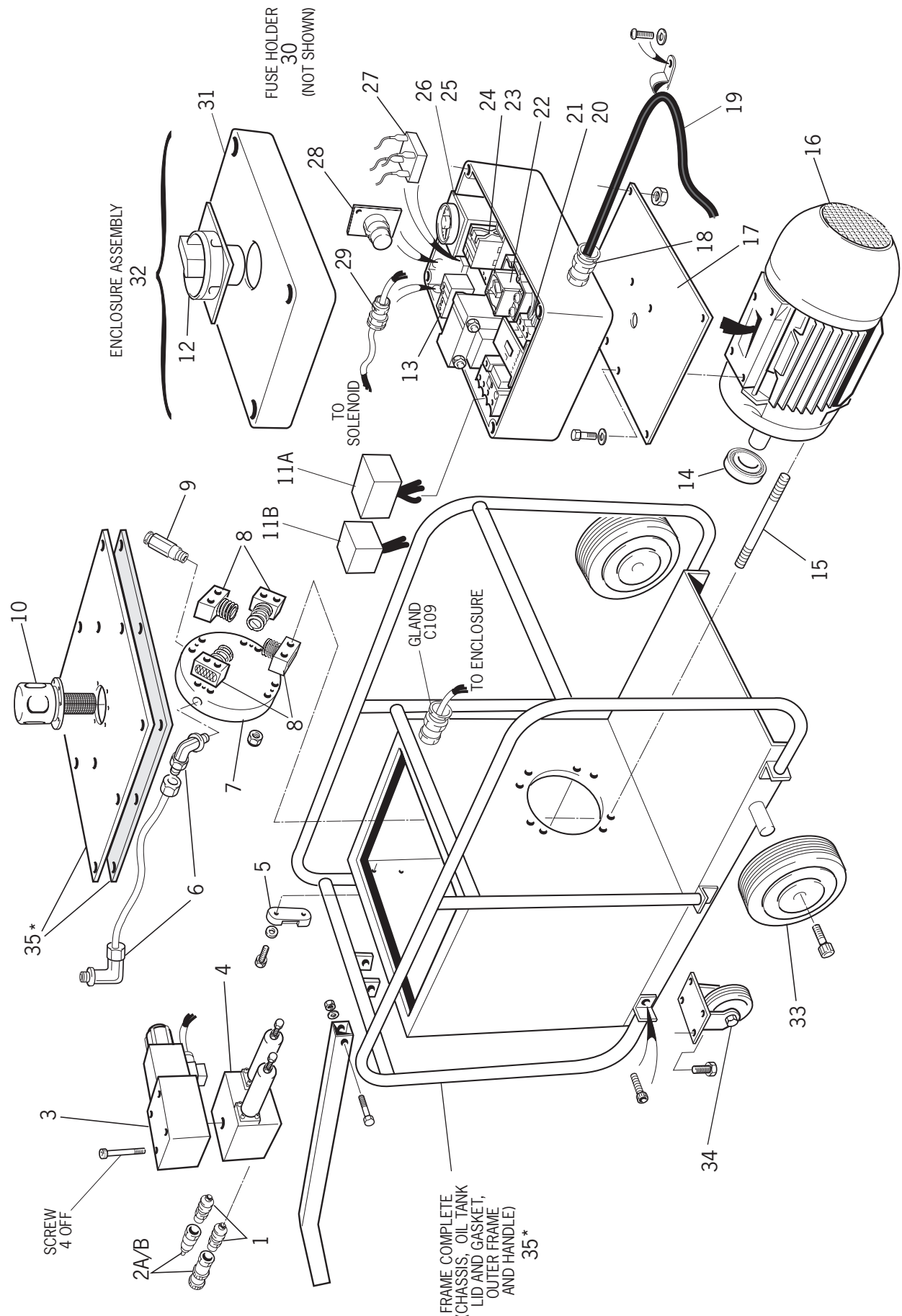
General Assembly of HP41 HydraPac



Parts List for HP41 HydraPac

HYDRAPAC HP41 VALVE PARTS LIST									
ITEM	PART N°	DESCRIPTION	QTY	ITEM	PART N°	DESCRIPTION	QTY		
1	C028	BULK HEAD ADAPTOR	2	19	C094	TRAILING CABLE	1		
2A/B	HS01	HYDRAULIC QUICK COUPLER (MALE/FEMALE)	2	20	C052	THERMAL OVERLOAD	1		
3	C166	DIRECTIONAL VALVE	1	21	C050	CONTACTOR	1		
4	C027	COMBINATION VALVE	1	22	C030	ISOLATOR	1		
5	C116	OIL LEVEL INDICATOR	1	23	C080	BASE (RELAY)	1		
6	C086	ELBOW	2	24	C079	RELAY	1		
7	C036	MANIFOLD FLANGE	1	25	C124	BASE (TIMER)	1		
8	PE10	PUMP ELEMENTS	4	26	C132	TIMER	1		
9	C231	RELIEF VALVE	1	27	C097	BRIDGE RECTIFIER	1		
10	C117	OIL FILLER BREATHER	1	28	C111	CANNON FLUSH PLUG	1		
11A	C095	SURGE ARRESTOR	1	29	C109	GLAND	1		
11B	C096	SURGE ARRESTOR	1	30	C107	FUSE HOLDER (NOT SHOWN)	1		
12	C030	ISOLATOR	1	31	C105	ENCLOSURE LID	1		
13	C082	TRANSFORMER	1	32	C155	ENCLOSURE ASSEMBLY	1		
14	C035	ECCENTRIC SHAFT BEARING	1	33	C119	WHEEL	2		
15	C034	STUD	8	34	C077	CASTOR WHEEL	1		
16	C023	MOTOR	1	35	C020	FRAME COMPLETE (CHASSIS, OIL TANK, LID & GASKET, OUTER FRAME & HANDLE)	1		
17	C089	MOUNTING PLATE	1						
18	C104	GLAND	1						

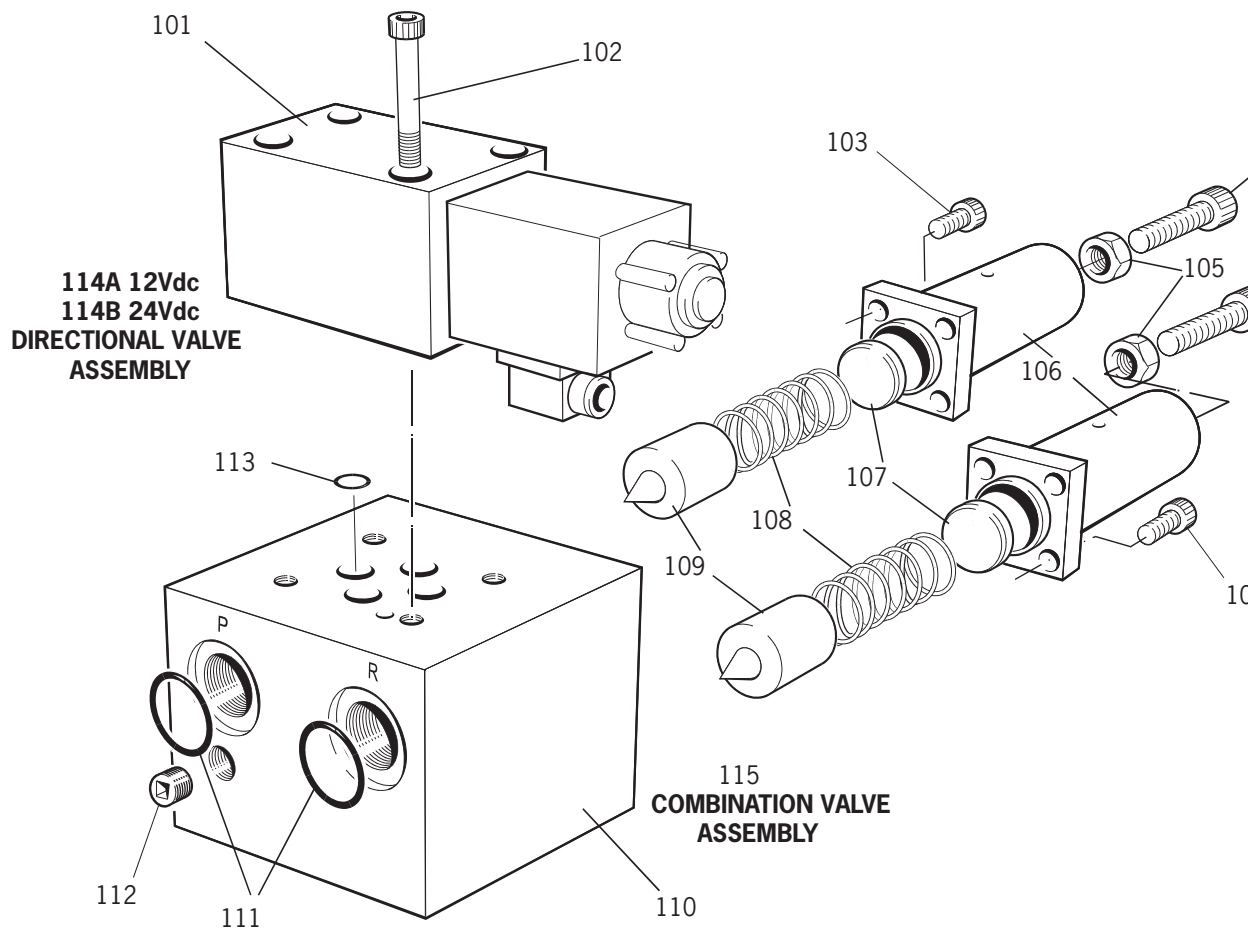
General Assembly of HP51 HydraPac



Parts List for HP51 HydraPac

HYDRAPAC HP51 VALVE PARTS LIST									
ITEM	PART N°	DESCRIPTION	QTY	ITEM	PART N°	DESCRIPTION	QTY		
1	C028	BULK HEAD ADAPTOR	2	19	C094	TRAILING CABLE	1		
2A/B	HS01	HYDRAULIC QUICK COUPLER (MALE/FEMALE)	2	20	C052	THERMAL OVERLOAD	1		
3	C166	DIRECTIONAL VALVE	1	21	C050	CONTACTOR	1		
4	C027	COMBINATION VALVE	1	22	C030	ISOLATOR	1		
5	C116	OIL LEVEL INDICATOR	1	23	C080	BASE (RELAY)	1		
6	C086	ELBOW	2	24	C079	RELAY	1		
7	C036	MANIFOLD FLANGE	1	25	C124	BASE (TIMER)	1		
8	PE10	PUMP ELEMENTS	4	26	C132	TIMER	1		
9	C231	RELIEF VALVE	1	27	C097	BRIDGE RECTIFIER	1		
10	C117	OIL FILLER BREATHER	1	28	C111	CANNON FLUSH PLUG	1		
11A	C095	SURGE ARRESTOR	1	29	C109	GLAND	1		
11B	C096	SURGE ARRESTOR	1	30	C107	FUSE HOLDER (NOT SHOWN)	1		
12	C030	ISOLATOR	1	31	C105	ENCLOSURE LID	1		
13	C150	TRANSFORMER	1	32	C106	ENCLOSURE LID	1		
14	C035	ECCENTRIC SHAFT BEARING	1	33	C153	ELECTRIC ENCLOSURE ASSEMBLY	1		
15	C034	STUD	8	34	C119	WHEEL	2		
16	C024	MOTOR	1	35	C077	CASTOR WHEEL	1		
17	C089	MOUNTING PLATE	1	36	C020	FRAME COMPLETE (CHASSIS, OIL TANK, LID & GASKET, OUTER FRAME & HANDLE)	1		
18	C104	GLAND	1	37	-	M10 NYLOC NUTS	8		

General Assembly and Parts List for Combination Valve



COMBINATION VALVE PARTS LIST			
ITEM	PART N°	DESCRIPTION	QTY
101	C116	DIRECTIONAL VALVE	1
102	CS26	SOCKET HEAD CAP SCREW	4
103	CS12	SOCKET HEAD CAP SCREW	8
104	CS34	SOCKET HEAD CAP SCREW	2
105	XN014	HEXAN NUT	2
106	CO41	SPRING DOME	2
107	CO42	BEARING PAD	2
108	CO40	SPRING	2
109	CO44	PLUNGER	2
110	CO43	VALVE BODY & SEAT	1
111	R210	'O' RING	2
112	MS01	PLUG	1
113	R	'O' RING	4
114A	CO26	DIRECTIONAL VALVE ASSEMBLY 12V DC	1
114B	CO25	DIRECTIONAL VALVE ASSEMBLY 24V DC	1
115	CO27	VALVE COMBINATION ASSEMBLY	1

Electrical Maintenance

Minor Maintenance

- To replace the fuse unscrew the Fuse Holder Cap **30** by hand and remove the fuse.
- To replace the 'Plug-in' Components, ie. Timer **26** and Relay **24**, loosen the four corner screws found on top of the Electric Enclosure **31** with a flat screwdriver and remove the cover. The Timer **26** and Relay **24** can now be re moved by simply 'unplugging'. For identification of these items, see the wiring diagrams on pages 18-20 and the general assemblies and parts lists on pages 10-16.
- To reset the Thermal Overload **20** on the Contactor **21**, remove the cover as above and depress the blue button located on the contactor assembly.

Major Maintenance

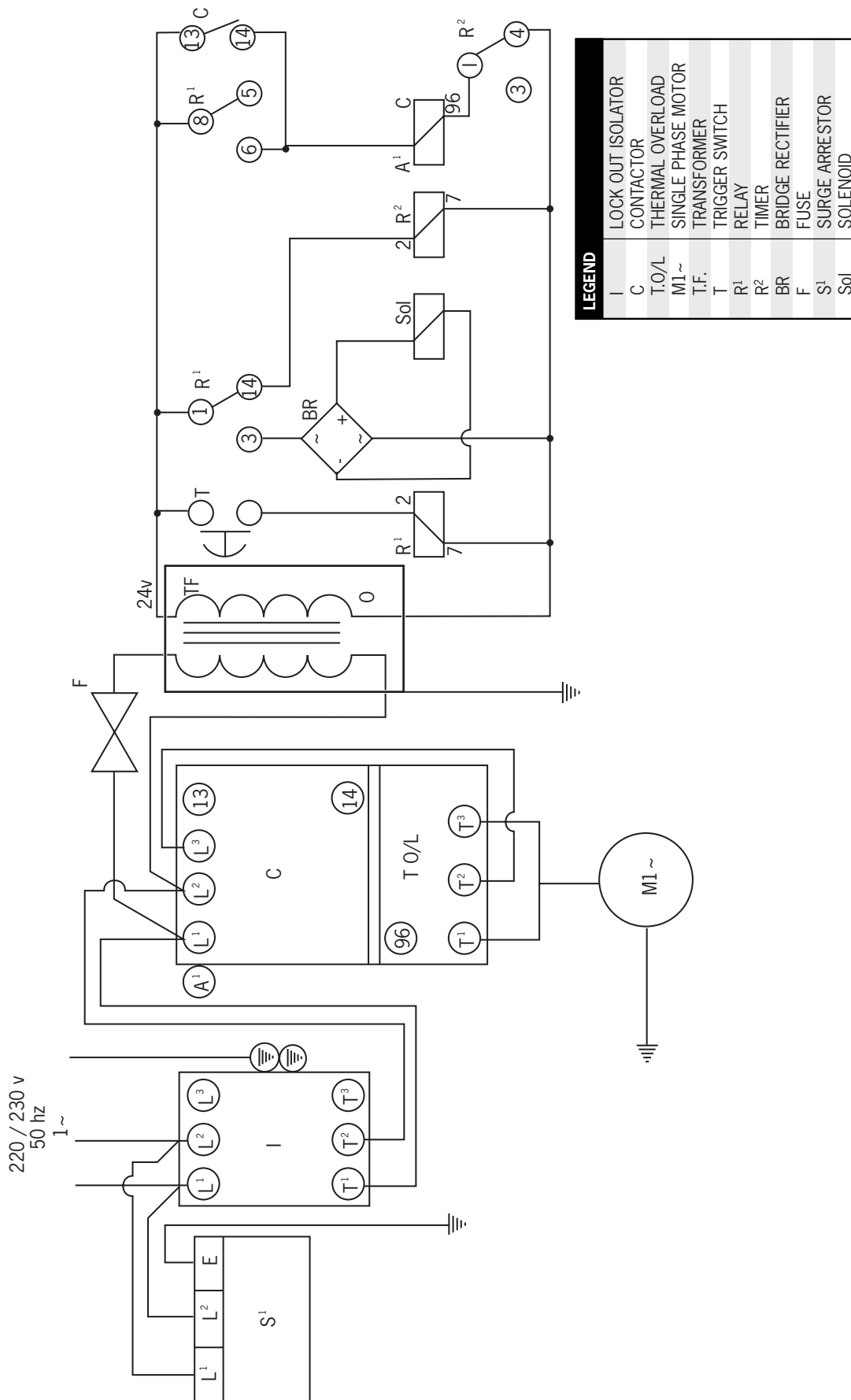
- Remove the Enclosure Lid **31** as above.
- Pull the two wires leading to the solenoid off the Bridge Rectifier **27** and feed them through the Gland **18** in the Enclosure **32**.
- Loosen the motor connections at the Contactor **21** and the motor earth wire from the Isolator **22** and free the wires.
- Separate the Enclosure **32** from the Mounting Plate **17** by loosening and removing the four screws found in the four corners at the bottom of the Enclosure using a flat screwdriver and a 7 mm spanner
- All the major components ie. Contactor **21**, Transformer **13** and the Bridge Rectifier **27** can now be removed and replaced using a flat screwdriver and a 7 mm spanner.
- If it becomes necessary to effect major maintenance on the motor, the Enclosure Adaptor Plate can be removed by loosening and removing the four screws securing it to the motor. Ensure that its relative position to the motor is noted.

Assembly

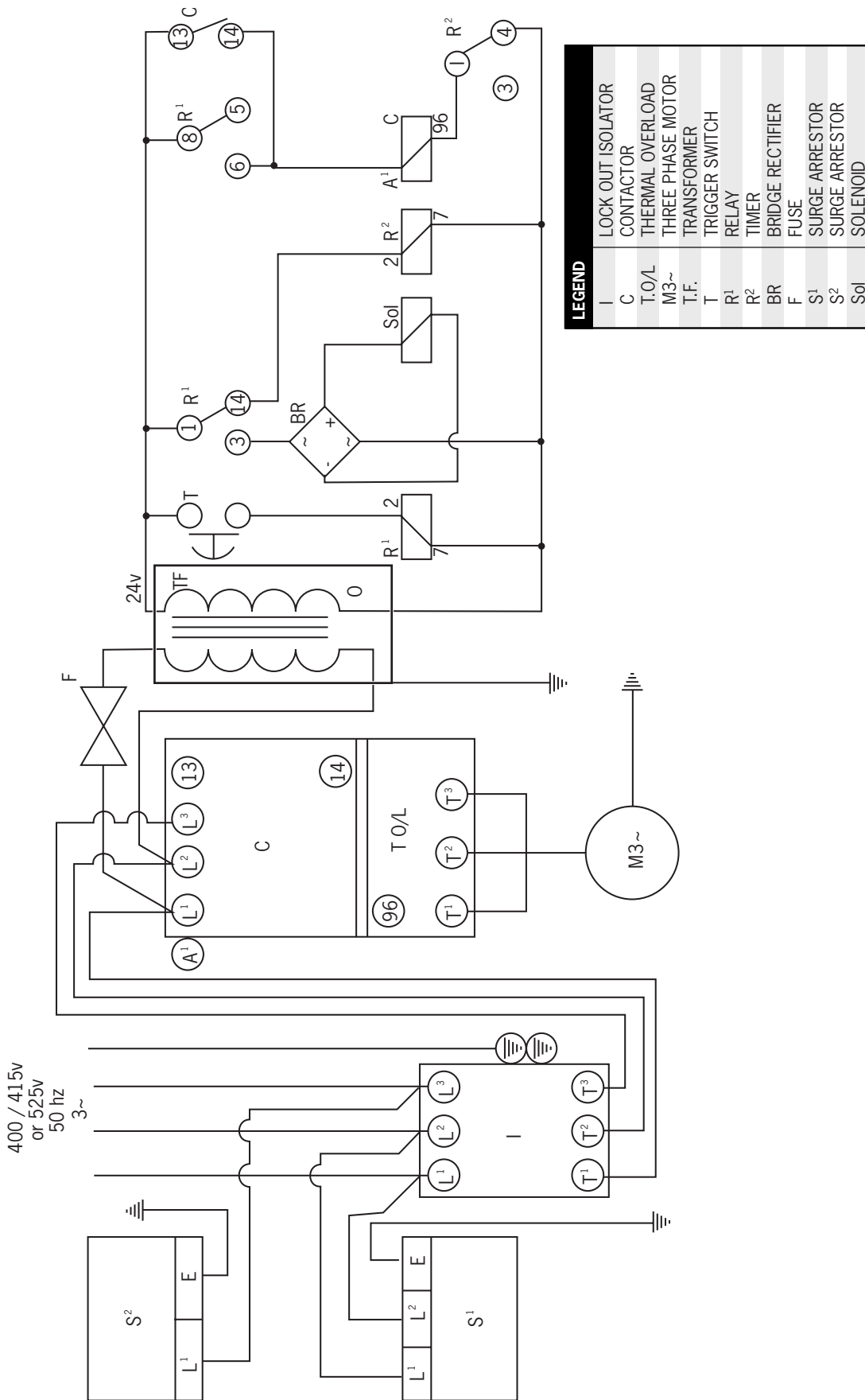
- If the Mounting Plate **17** has been removed from the motor, replace and secure with the four screws using a flat screwdriver and a 7 mm spanner.
- Feed the motor wires through the base of the Enclosure **32** and re-mount it on the Mounting Plate **17** and secure with the four screws using a flat screwdriver and a 7 mm spanner.
- Re-connect the motor wires as given in the wiring diagrams on pages 18-20 using a 4 mm flat screwdriver.
Note: 3 phase motors are not direction sensitive.
- Replace and tighten all panel wires using a flat screwdriver.
- Feed the solenoid wire through the Gland **29** and connect to the Bridge Rectifier **27** and tighten the gland using a 20 mm spanner.
- Replace the Enclosure Lid **31** and secure using a flat screwdriver.
Note: Replacement of the valve solenoid has been detailed in the Mechanical Maintenance Section on page 7.
- Connect to the power supply, switch 'On' and test for the function of the Directional Valve Solenoid and the Sleep Mode

With these basic Functions in Operation, the HydraPac is ready for use.

Wiring Diagram for HP21 HydraPac



Wiring Diagram for HP41 HydraPac



Wiring Diagram for HP51 HydraPac

