

230V 50 Hz - 1Ph, TWO STAGE, ELECTRIC DRIVEN, HIGH FLOW PUMP C/W SOLENOID OPERATED VALVE

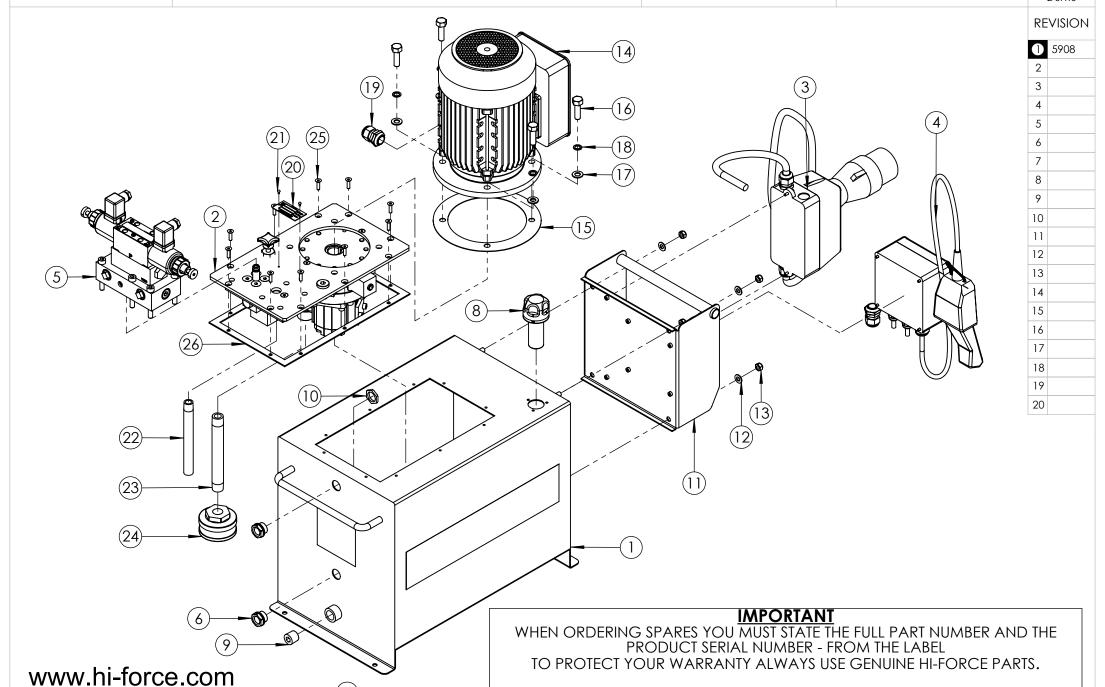
SERIAL NUMBERS

FROM BR 6179

PRODUCT NO.

HEP410442S

SHT 1 OF 2 SHTS





230V 50 Hz - 1Ph, TWO STAGE, ELECTRIC DRIVEN, HIGH FLOW PUMP C/W SOLENOID OPERATED VALVE

SERIAL NUMBERS

FROM BR 6179

PRODUCT NO. HEP410442S

SHT 2 OF 2 SHTS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	SPARE PARTS	SERVICE PARTS
1	TAC040AS004	40 L TANK	1		
2	TYPE300-24	300 SERIES PUMP UNIT	1		
3	EMA230UE001	motor starter assembly 230V	1		
4	EMA024TB001	POWER SUPPLY ASSY	1		
5	PMV4SD	4 WAY, ELECTRICALLY OPERATED, PUMP MOUNTED DIRECTIONAL CONTROL VALVE	1		
6	BLC021YT010	SIGHT GLASS HGF.13 BLACK OIL LEVEL INDICATOR	2		
7	DCSF00328	DOUBLE SIDED MAGNET	1		
8	FFC028PZ001	FILLER/BREATHER	1		
9	FPC013PC001	1/2" BSP PLUG - HEX SOCKET	1		
10	NUC021-B000	1/2" BSP LOCK NUT	2		
11	TAC000FS002	MODULAR ELECTRIC TRAY	1		
12	WAC008AB000	M8 PLAIN WASHER	4		
13	NUC008KC000	M8 NYLOC NUT	4		
14	EM230-1.5-4LAF	ELECTRIC MOTOR 1.5KW 230VAC	1		
15	SEC001KT003	GASKET	1		✓
16	BLC010LB035	M10 x 35 mm HEX HEAD BOLT, ZINC PLATED	4		
17	WAC010AB000	M10 ZINC PLATED FLAT WASHER	4		
18	WAC010BZ000	M10 SPRING WASHER	4		
19	NUC020LS002	GLAND 6-12MM	1		
20	AAN000UP001	60 x 30 mm UNIVERSAL NAME PLATE	1	X	
21	FAS002HZ001	NO.4 x 3/16 HAMMER DRIVE SCREW	2		
22	TAC000PA001	160 mm LONG SUCTION PIPE	1		
23	FPC013AC002	FEED PIPE	1		
24	FFC045MZ001	FILTER	1		
25	BLC005HF020	M5 x 20 mm HEX SOCKET COUNTERSUNK SCREW	10		
26	15482	TANK GASKET	1		1
*	SFC065FA002	BLANKING PLATE	1		
	•				

NOTE:

- ALL PARTS ARE AVAILABLE TO BE ORDERED AS SPARE PARTS (UNLESS MARKED WITH \mathbf{x}).
- ONLY PARTS MARKED WITH ✓ARE AVAILABLE AS BOTH SPARE PARTS OR SERVICEABLE PARTS, FROM **HEP-SK1 PUMP SERVICE KIT.** (REFER TO HEP-SK1: PUMP SERVICE KIT EVD FOR FULL PARTS LIST)
- FOR SUB ASSEMBLIES (ITEM NO.S 2, 3, 4 & 5) REFER TO THEIR INDUVIDUAL EVD's.

IMPORTANT

WHEN ORDERING SPARES YOU MUST STATE THE FULL PART NUMBER AND THE PRODUCT SERIAL NUMBER - FROM THE LABEL TO PROTECT YOUR WARRANTY ALWAYS USE GENUINE HI-FORCE PARTS.

www.hi-force.com

20

 $^{\uparrow}_{\Box}$

SERIAL NUMBERS

PRODUCT NO. TYPE300-24

SHT 1 OF 2 SHTS



1 5817

2 5939

3

4

5

7

9

10

11

13

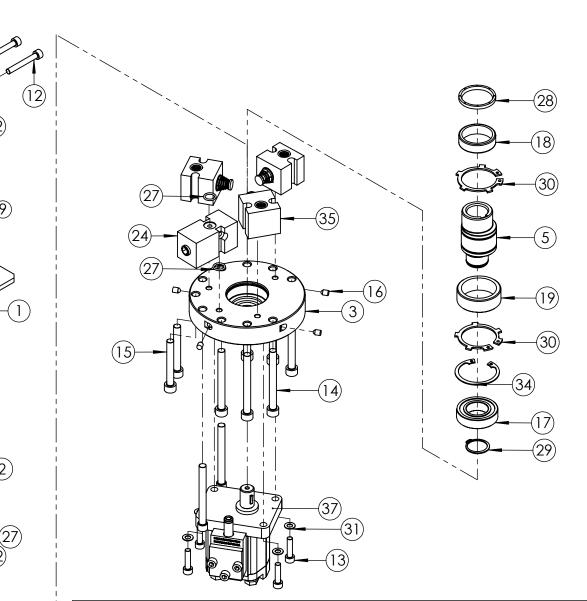
14

16

17

19

20



<u>IMPORTANT</u>

WHEN ORDERING SPARES YOU MUST STATE THE FULL PART NUMBER AND THE PRODUCT SERIAL NUMBER - FROM THE LABEL TO PROTECT YOUR WARRANTY ALWAYS USE GENUINE HI-FORCE PARTS.

www.hi-force.com



300 SERIES PUMP UNIT

SERIAL NUMBERS PRODUCT NO.

TYPE300-24

SHT 2 OF 2 SHTS

> 18 19

20

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	SPARE PARTS	SERVICE PARTS
1	TAC000BA003	COVER PLATE	1		
2	PMC000UM001	UPPER PLATE	1		
3	PMC000LF001	LOWER PLATE	1		
4	15503	CONNECTOR PIPE	1		
5	15505	24mm DRIVE SHAFT	1		
6	17587	transfer block	1		
7	17588	VALVE PLATE	1		
8	BAC008\$N000	Ø8 mm STEEL BALL GRADE 100	5		
9	BLC005HF016	M5 x 16 mm HEX SOCKET COUNTERSUNK SCREW	2		
10	BLC006JE016	M6 x 16 mm HEX SOCKET COUNTERSUNK SCREW	1		
11	BLC008KF035	M8 x 35 mm HEX SOCKET COUNTERSUNK SCREW	4		
12	BLC006JC045	M6 x 45 mm HEX SOCKET CAP HEAD SCREW	2		
13	BLC006JD025	M6 x 25 mm HEX SOCKET CAP HEAD SCREW	4		
14	BLC008KC080	M8 x 80 mm HEX SOCKET CAP HEAD SCREW	6		
15	BLC008KC060	M8 x 60 mm HEX SOCKET CAP HEAD SCREW	2		
16	BPC006RS001	SEALING PLUG	4		
17	BSC025MC001	LOWER PLATE BEARING	1		
18	BSC035NC001	UPPER PLATE BEARING	1		
19	BSC040ND001	ECCENTRIC BEARING	1		
20	FAS006GJ010	1/4" BSP HEX HEAD BLANKING PLUG	1		
21	FAS010MA010	M10 X 10 CUP POINT GRUB SCREW	5		
22	FFC012MA001	SUCTION FILTER	1		
23	HPRV1	HIGH PRESSURE R/VALVE	1		
24	LPRV1	LOW PRESSURE R/VALVE	1		
25	SEC013BA001	BACK-UP RING - PTFE, SOLID SPLIT	2		√
26	SEC013RA001	O-RING - I.D. 9.25mm, C.S. 1.78mm, NITRILE 90	2		1
27	SEC014RF001	O-RING - I.D. 10.82 mm, C.S. 1.78 mm, NITRILE 90	4		1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	SPARE PARTS	SERVICE PARTS	RE	VISION
28	SEC035WE001	UPPER PLATE OIL SEAL	1			1	5817
29	STC025AA001	EXTERNAL CIRCLIP - 25 x 1.2 mm D1400/025	1			2	5939
30	STC040AA001	EXTERNAL CIRCLIP - 40 x 1.75 mm D2100/0400	2			3	
31	WAC006AF000	M6 ZINC WASHER	4			5	
32	WAC006BC001	M6 SPRING ZINC WASHER (SQUARE SECTION)	2			6	
33	WAC007HD000	1/4" BSP SELF CENTERING BONDED WASHER	1			7	
34	STC047BA001	INTERNAL CIRCLIP - 47 x 1.75 mm D1300/0470	1			9	
35	15494-A	PISTON BLOCK ASSEMBLY	3			10	
36	FPC010PB001	3/8" BSP BLANKING PLUG	1			11	
37	PMA060GZ001	GP60 GEAR PUMP ASSEMBLY	1			12	
			•			13	

NOTE:

- ALL PARTS ARE AVAILABLE TO BE ORDERED AS SPARE PARTS (UNLESS MARKED WITH X).
- ONLY PARTS MARKED WITH ✓ARE AVAILABLE AS BOTH SPARE PARTS OR SERVICEABLE PARTS FROM **HEP-SK1 PUMP SERVICE KIT.** (REFER TO HEP-SK1: PUMP SERVICE KIT EVD FOR FULL PARTS LIST)
- IF ITEM NO. 24 (LPRV1) IS ORDERED AS A SPARE PART, THIS ALREADY COMES WITH 2 OFF ITEM NO.27 (SEC014RF001). THEREFORE THESE ARE NOT REQUIRED TO BE ORDERED SEPERATELY.
- FOR SUB ASSEMBLIES ITEM NO. 35 (15494-A) & ITEM NO. 37 (PMA060GZ001) REFER TO THEIR INDUVIDUAL EVD's.

IMPORTANT



PISTON BLOCK ASSEMBLY

SERIAL NUMBERS

PRODUCT NO.

VERSION

13

14 15

16

17 18

19

20

15494-A

01 SHT 1 OF 1 SHTS

	7 4 6 8 3 6 4 9
www.hi-force.com	7

							1 31113
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	SPARE PARTS	SERVICE PARTS	RE	VISION
1	15494	PISTON BLOCK	1	X		1	5717
2	15495	PISTON	1	X		2	5866
3	15496	VALVE SEAT	1	X		3	
4	15509	SUCTION/DELIVERY SPRING	2	X		4	
5	15508	PUMP SPRING	1	X		5	
6	BAC005\$N000	Ø5 mm STEEL BALL GRADE 100	2	X		6	
7	SEC014RF001	O-RING - I.D. 10.82 mm, C.S. 1.78 mm, NITRILE 90	2		1	8	
8	SEC010RA001	O-RING - I.D. 6.35 mm, C.S. 1.78 mm, NITRILE 70	1	X		9	
9	STC008SA001	N1305-0031 SELF LOCKING RING	1	X		11	
	•	-				12	

NOTE:

- ALL PARTS ARE AVAILABLE TO BE ORDERED AS SPARE PARTS (UNLESS MARKED WITH X).
- ONLY PARTS MARKED WITH **\(\sigma** ARE AVAILABLE AS BOTH SPARE PARTS OR SERVICEABLE PARTS, FROM HEP-SK1 PUMP SERVICE KIT. (REFER TO HEP-SK1: PUMP SERVICE KIT EVD FOR FULL PARTS LIST).

IMPORTANT

SERIAL NUMBERS

PRODUCT NO.

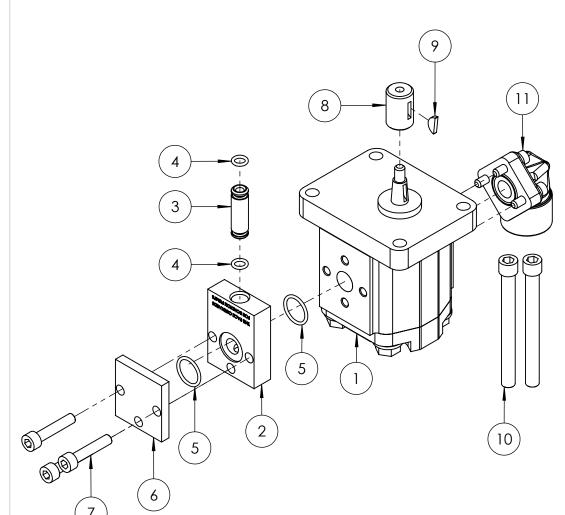
PMA060GZ001

SHT 1 OF 3 SHTS

17

18 19

20



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	SPARE PARTS	SERVICE PARTS	REVISION
1	GP60	GEAR PUMP	1			1 5939
2	PMC000TM001	TRANSFER PLATE	1			2
3	15510C	CONNECTOR TUBE	1			3
4	SEC010RA001	O-RING - I.D. 6.35 mm, C.S. 1.78 mm, NITRILE 70	2		✓	5
5	SEC019RF002	O-RING - I.D. 15.60, C.S. 1.78mm, NITRILE 90	2		✓	6
6	PMC000XM001	SEALING PLATE	1			7
7	BLC006JD030	M6 x 30 mm HEX SOCKET CAP HEAD SCREW	3			9
8	15507	ADAPTOR	1			10
9	PCC002WC001	KEY TO FIT 200/300 PUMPS	1			11
10	F.4.00000D000	M8 X 80 HEX SOCKET				12
10	FAS008SP080	REDUCED CAP HEAD SCREW (FULLY THREADED)	2			13
11	FPA013DC001	GEAR PUMP ELBOW (INC	1	х		14
	117.0100001	WITH GEAR PUMP)				15
						16

NOTE:

- ALL PARTS ARE AVAILABLE TO BE ORDERED AS SPARE PARTS (UNLESS MARKED WITH $\emph{\textbf{x}}$)
- ONLY PARTS MARKED WITH ✓ARE AVAILABLE AS BOTH SPARE PARTS OR SERVICEABLE PARTS, FROM HEP-SK1 PUMP SERVICE KIT. (REFER TO HEP-SK1: PUMP SERVICE KIT EVD FOR FULL PARTS LIST)
- THE ORIENTATION OF ITEM NO. 2 (PMC000TM001) IS DETERMINED BY THE BRAND OF THE GP60 GEAR PUMP SUPPLIED (REFER TO SHEET 2 FOR FURTHER DETAILS)
- ITEM NO. 10 (FAS008SP080) ARE TO REPLACE TWO SCREWS (BLC008KC080)ON THE TYPE300-24, PRIOR TO FITTING PMA060GZ001 (REFER TO SHEET 3 FOR FURTHER DETAILS)
- INDIVIDUAL ITEMS ARE NOT AVAILABLE AS SPARE PARTS FOR HEP PUMPS WITH SERIAL NUMBERS EARLIER THAN **BR9070**. GP60 GEAR PUMP ASSEMBLY (PMA060GZ001) WILL NEED TO BE ORDERED. INDIVIDUAL ITEMS APART FROM ITEM NO. 11 ARE AVAILABLE AS SPARE PARTS FOR HEP PUMPS WITH SERIAL NUMBERS ABOVE **BR9070**

IMPORTANT

WHEN ORDERING SPARES YOU MUST STATE THE FULL PART NUMBER AND THE PRODUCT SERIAL NUMBER - FROM THE LABEL TO PROTECT YOUR WARRANTY ALWAYS USE GENUINE HI-FORCE PARTS.

www.hi-force.com

SERIAL NUMBERS

PRODUCT NO.

PMA060GZ001

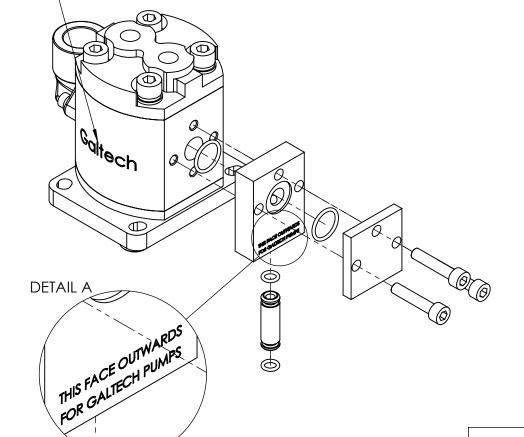
SHT 2 OF 3 SHTS

REVISION

1) 5939

ORIENTATION OF TRANSFER PLATE

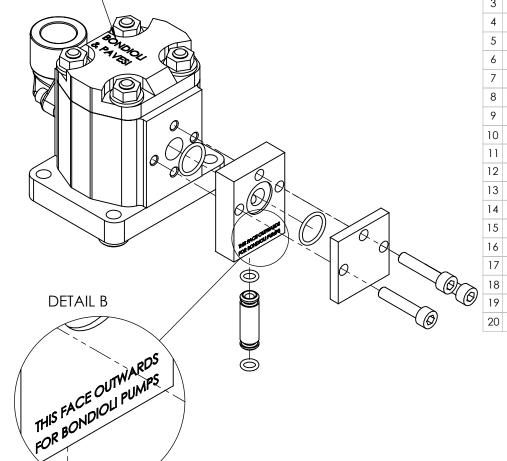
FOR GALTECH GEAR PUMPS, LOOK FOR "GALTECH" USUALLY FOUND ON THE SIDE OF THE BODY



FOR BONDIOLI GEAR PUMPS, LOOK FOR

"BONDIOLI & PAVESI" USUALLY FOUND

ON THE BOTTOM OF THE BODY



IMPORTANT

WHEN ORDERING SPARES YOU MUST STATE THE FULL PART NUMBER AND THE PRODUCT SERIAL NUMBER - FROM THE LABEL TO PROTECT YOUR WARRANTY ALWAYS USE GENUINE HI-FORCE PARTS.

www.hi-force.com

PRODUCT NO.

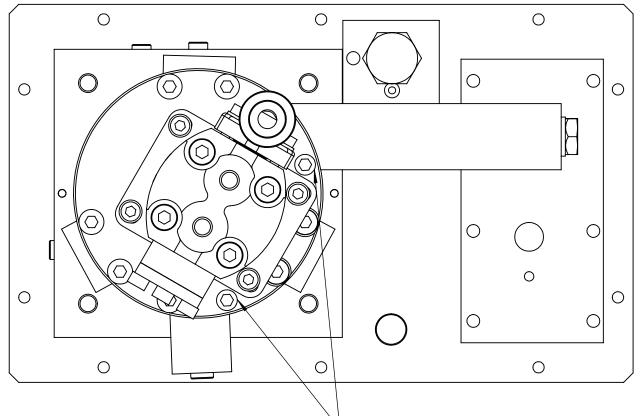
PMA060GZ001

SHT 3 OF 3 SHTS

REVISION

0	5939
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

TYPE300-24: BOTTOM VIEW



REMOVE THE TWO CURRENT SCREWS FROM THESE TWO POSITIONS AND REPLACE WITH ITEM NO. 10 (FAS008SP080)

<u>IMPORTANT</u>



MOTOR STARTER ASSEMBLY 230V

SERIAL NUMBERS

PRODUCT NO.

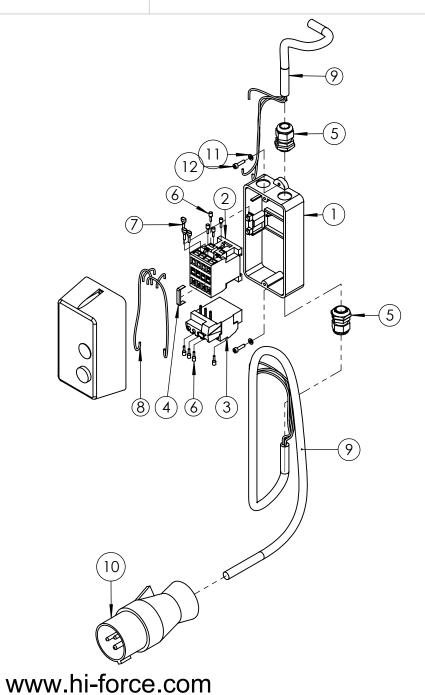
VERSION

19

20

EMA230UE001	
LIVI/ \2000L001	

MA230UE001	01	SHT 1 O 1 SHTS
------------	----	-------------------



						1 SHTS
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	SPARE PARTS	SERVICE PARTS	REVISION
1	EMC000EF001	ENCLOSURE WITH PUSH BUTTONS P1MT	1			1) 5717 2
2	EMC230KE001	CONTACTOR 230 VOLT	1			3
3	EMC230RE001	OVERLOAD RELAY 8-11 AM	PS 1			4
4	EMC110XF001	BRIDGING BAR	1			5
5	NUC020LS002	GLAND 6-12MM	2			6
6	CEC250\$X001	BOOTLACE FERRULE (INSULATED) 2.5mm GREY	. 8			7
7	CEC250\$X002	TWIN BOOTLACE FERRULE 2 mm²	.5 3			9
8	CEC250AC00	SINGLE CORE TR-RATED CAE 2.5 mm2	BLE 1			10
9	CEC250CC00	3 CORE CABLE 2.5mm^2 H07RN-F3G 2.5	2			12
10	MCC240EP002	2 240V 16 Amp PLUG	1			14
11	WAC004YB000	M4 WASHER ST	2			15
12	BLC004JD016	M4 X 16 HEX SOCKET, CAF HEAD SCREW	2			16
			1	_1	1	17
						18

NOTE:

- ALL PARTS ARE AVAILABLE TO BE ORDERED AS SPARE PARTS (UNLESS MARKED WITH X).

IMPORTANT



www.hi-force.com

POWER SUPPLY ASSY

	ITEM NO.	PART
	1	EMC
	2	EMC
	3	EMC
	4	EMC
	5	EMC
	6	NUC
	7	NUC
	8	EMC
	9	BLCC
(5)	10	WAC
	11	FASC
	12	CEC1
	13	CEC1
	14	CECC
	NC	OTE:
		LL PAF ARTS (
	7	
13		

SERIAL NUMBERS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	SPARE PARTS	RE	VISION
1	EMC000XZ001	DIN RAIL	1		0	5717
2	EMC024TB001	POWER SUPPLY 24 V DC	1		2	
3	EMC000NZ001	TERMINAL BLOCK	5		3	
4	EMC000NZ002	EARTH TERMINAL BLOCK	1		4	
5	EMC024EB002	DRILLED ENCLOSURE	1		5	
6	NUC016LS001	M16 CABLE GLAND	3		6 7	
7	NUC020LS002	GLAND 6-12MM	2		8	
8	EMC000VZ002	HAND PENDANT (PENDANT ONLY, NO CABLE)	1		9	
9	BLC004JD016	M4 x 16 mm HEX SOCKET CAP HEAD SCREW	4		10	
10	WAC004YB000	M4 WASHER ST	4		12	
11	FAS003TV001	M3 x 5 FORM SCREW	2		13	
		4 CORE CABLE 1.5 mm2			14	
12	CEC150DC000	H07RN-F 4G1.5	1		15	
13	CEC150CC000	2 CODE 1 5mm CADIE	1		16	
13	CEC150CC000	3 CORE 1.5mm CABLE				
14	CEC075CC000	3 CORE 0.75mm CABLE	2		18	
					17	

PRODUCT NO.

EMA024TB001

VERSION

SHT 1 OF 1 SHTS

20

01

- ALL PARTS ARE AVAILABLE TO BE ORDERED AS SPARE PARTS (UNLESS MARKED WITH $\pmb{\varkappa}$).

<u>IMPORTANT</u>

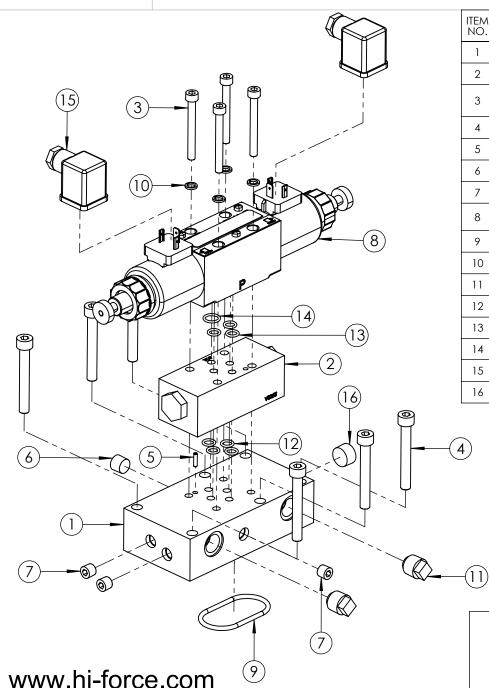


4 WAY, ELECTRICALLY OPERATED, PUMP MOUNTED DIRECTIONAL CONTROL VALVE

SERIAL NUMBERS

PRODUCT NO. PMV4SD

SHT 1 OF 1 SHTS



						_		
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	SPARE PARTS	SERVIC E PARTS	RE	VISION	
1	VFC010BT003	VALVE BASE	1			1	5717	
2	V-8255	CHECK VALVE	1			2	6165	
3	BLC006FC055	1/4" x 2 1/4" UNC HEX SOCKET CAP HEAD SCREW	4			3		
4	BLC008KC060	M8 x 60 mm HEX SOCKET CAP HEAD SCREW	6			5		
5	PCC003RB006	Ø3 x 12 mm SELLOCK PIN	1			6		
6	FPC006PN002	1/4 NPT x 7/8 TAPER PLUG	1			7		
7	FPC003PN001	1/8" x 3/4" NPT TAPER DRY SEAL PRESS PLUG	3			8		
8	VFA000CE005	DIRECTIONAL CONTROL VALVE - TANDEM CENTRE 24V DC	1			10		
9	SEC057RA001	O-RING - I.D. 50.39 mm, C.S. 3.53 mm	1		1	11		
10	WAC006BC001	m6 Spring zinc washer (Square Section)	4			12		
11	BPC010SP004	3/8 NPT PLASTIC BLANKING PLUG (RED)	2			13		
12	SEC011RF001	O-RING, I.D. 7.66 mm, C.S. 1.78 mm, NITRILE 90	4		1	14		
13	SEC011RF002	O-RING - I.D. 7.66 mm, C.S. 1.78 mm, VITON 90 (BROWN)	3		1	16		
14	SEC014RF002	O-RING - I.D. 10.82 mm C.S. 1.78 mm, VITON 90 (BROWN)	1		1	17		
15	EMC240NE001	BLACK RECTANGULAR POWER CONNECTOR	2			18		
16	FPC010PN002	3/8" X 7/8" NPT SOCKET PLUG	1			19		
			1			20		

NOTE:

- ALL PARTS ARE AVAILABLE TO BE ORDERED AS SPARE PARTS (UNLESS MARKED WITH X).
- ONLY PARTS MARKED WITH ✓ARE AVAILABLE AS BOTH SPARE PARTS OR SERVICEABLE PARTS, FROM DCV-S1: SERVICE KIT (SOLENOID VALVE) (REFER TO DCV-S1 EVD FOR FULL PARTS LIST).
- IF ITEM NO. 2 IS ORDERED AS A SPARE PART, THIS ALREADY COMES WITH ITEM NO. 12. THEREFORE THESE ARE NOT REQUIRED TO BE ORDERED SEPERATELY.
- IF ITEM NO. 8 IS ORDERED AS A SPARE PART, THIS ALREADY COMES WITH ITEM NO.S 13 & 14. THEREFORE THESE ARE NOT REQUIRED TO BE ORDERED SEPERATELY.

IMPORTANT



PUMP SERVICE KIT

(6)

(4)

(5)

SERIAL NUMBERS	

PRODUCT NO. HEP-SK1

SHT 1 OF 1 SHTS

2

2 9

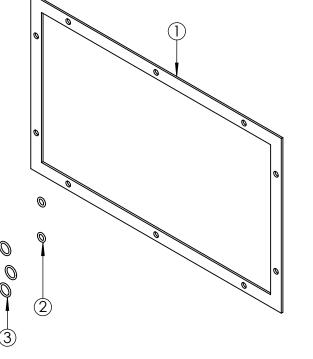
10

NO.	PART NUMBER	DESCRIPTION	QTY.	REVISION		
1	15482	TANK GASKET O-RING - I.D. 6.35 mm, C.S. 1.78 mm, NITRILE 70 O-RING - I.D. 10.82 mm, C.S. 1.78 mm, NITRILE 90		1	5717	
2	SEC010RA001	O-RING - I.D. 6.35 mm, C.S. 1.78 mm, NITRILE 70	2	3	5939	
3	SEC014RF001		10	4		
4	SEC013RA001	O-RING - I.D. 9.25mm, C.S. 1.78mm, NITRILE 90	2	5		
5	\$EC010PE003	O-RING - I.D. 15.60, C.S.	2	7		

1.78mm, NITRILE 90 BACK-UP RING - PTFE,

SOLID SPLIT

GASKET



19 20

IMPORTANT

SEC019RF002

SEC013BA001

SEC001KT003

Hi-Force	SERVICE KIT (SOLENOID VAL	./E\		SERIAL NU	MBERS	PRODUCT NO.	VERSIC	N	
HYDRAULIC TOOLS	SERVICE KII (SOLENOID VAL	V []				DCV-\$1	01		SHT 1 OF 1 SHTS
			ITEM NO.	PART NUMBER	DES	CRIPTION		QTY.	REVISIO
			1	SEC014RF002	O-RING - I.D. 10.82 m	nm C.S. 1.78 mm, VITO ROWN)	N 90	1	 5717 2
			2	SEC011RF002	O-RING - I.D. 7.66 mr	m, C.S. 1.78 mm, VITO ROWN)		3	3 4
		(5)	3	SEC011RF001	`	n, C.S. 1.78 mm, NITRIL	E 90	4	5
		Ĭ	4	SEC006RA002	O-RING - I.D. 2.9 mn	n, C.S. 1.78mm, NITRIL	E 70	1	6
			5	SEC057RA001	O-RING - I.D. 50	.39 mm, C.S. 3.53 mm		1	7
									8
									9
			$\sqrt{}$	_					11
									12
									13
	(2)			\ \					14
))					15
			\nearrow	<i>//</i>					17
									18
(3									19
		(1)							20
))								
(\bigcirc)									