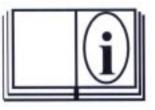


# Hydrostatic Power Unit Model HPU-15 (14-000-20)



Mod. HPU 15	Ser.No.
E.I	H. WACHS COMPANIES
100 5	hepard St. Wheeling II. 60090
	Patent Pending

Part Number:

**Revision No:** 

1

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### SECTION I

## SAFETY INSTRUCTIONS

The E. H. Wachs Company takes great pride in manufacturing safe, quality products with user safety a priority.

The E.H. Wachs Company recommends that all users comply with the following safety rules and instructions when operating our equipment.



## Read the Following thoroughly before proceeding.

- Before attempting to operate machine, thoroughly read the Operating Manual.
- Always wear safety glasses when operating machinery.
- Always wear hearing protection when operating any air powered machinery.
- Never wear loose fitting clothing when operating machinery.
- Make sure personnel and objects are clear of machine before operating.
- Always disconnect power source to machine when machine is not in operation for extended times.
- Do not attempt to operate machine beyond its stated capacity.

For your safety and the safety of others, read and understand these safety recommendations and operating instructions before operating.

#### ALWAYS WEAR PROTECTIVE EQUIPMENT:



## WARNING

Impact resistant eye protection must be worn while operating or working near this tool.

For additional information on eye and face protection, refer to federal OSHA regulations, 29 Code of Federal Regulations, Section 1910.133., Eye and Face Protection and American National Standards Institute, ANSI 287.1, Occupational and Educational Eye and Face Protection. 287.1 is available from the American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.



### CAUTION

Personal hearing protection is recommended when operating or working near this tool.

Hearing protectors are required in high noise areas, 85 dBA or greater. The operation of other tools and equipment in the area, reflective surfaces, process noises and resonant structures can substantially contribute to and increase the noise level in the area. For additional information on hearing protection, refer to federal OSHA regulations, 29 Code of Federal Regulations, Section 1910.95, Occupational Noise Exposure and ANSI S12.6 Hearing Protectors.



### CAUTION

Protect yourself from electric shock. When working with electric power tools, avoid body contact with earthed parts (e.g. pipes, radiators, hobs, refrigera-

tors). Do not expose this power unit to moisture, or use in wet locations.

### SECTION II

## MACHINE SPECIFICATIONS

### HYDROSTATIC POWER UNIT MODEL HPU-15 14-000-20 440 VOLT ONLY

### SPECIFICATIONS:

Electrical System:	Electric: RPM - 3480, HP 15 440 Volt @ 23.5 Amps
Control Panel:	Start/Stop, push button oil flow increase/decrease selec- tor, panel/remote selector, remote pendant receptacle, 24 Volt control voltage.
Remote Pendant:	Start/Stop, push button oil flow, slow/fast push button.

#### Hydraulic System:

Pressure:	2000 PSI Max
Capacity:	Variable 0-15 GPM
Number of	One
Type:	Open Center
Pump:	Hydrostatic piston, variable displacement
Flow Control:	24 Volt motor actuated
Reservoir:	5 gallon with low level shut-down switch
Suction Filter:	30 micron
Return Filter:	10 micron
Line Size:	3/4"
Relief Valve:	Variable, pre-set at 1800 PSI
Instruments:	System pressure, flow meter, oil level and
	temperature
Oil Cooler:	Cools oil for continuous use

### Unit Weight:

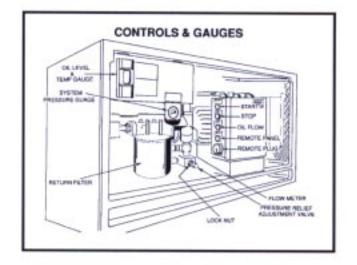
Dry: 250 Lbs.

Unit Dimension:

30" High X 21" Wide X 40" Long Portable on caster frame

### SECTION III

### **OPERATING INSTRUCTIONS**



## START-UP

- Fill reservoir through filler cap with a good quality hydraulic oil to top of sight gauge.
- Check motor rotation prior to operating power unit. (Remove top panel cover for clear view of motor.) At initial start-up, start and stop motor briefly while checking rotation of motor output shaft. It should rotate in the direction of the arrow decal on motor body. Failure to do so will cause pump failure.
- Connect one end of the hose set to power unit, connect other ends together to form a loop. Turn panel/remote selector to panel position. Turn system on and increase oil flow to 5 GPM on flow meter. This will direct oil from pump back to reservoir filling hose set and will remove any air in system. Check oil level in reservoir and top oft if necessary.

NOTE: If unit shuts down during this operation, the oil in the reservoir exceeded low limit. Fill reservoir and continue. Run unit 5 minutes. Unit is now operational.

NOTE: Check rotation every time cord is plugged into another receptacle.

### SECTION III

## **OPERATING INSTRUCTIONS (cont.)**

- 4. Hydraulic oil pressure and flow are fully adjustable. The flow can be controlled from unit control panel or remote pendant. The pressure may be set at the pressure relief valve. System pressure and flow is indicated on unit pressure gauge and flow meter. Maximum flow and pressure settings should not exceed recommended specifications for tool being operated. When operating unit from control panel, turn panel/remote selector switch to panel position. Turn to remote position when using remote. This allows operator to control unit from one or the other, but not both. As a safety feature, in the OFF position, the unit will not be operable from either the panel or remote location.
- To set pressure relief, before connecting hoses to unit and with unit running, loosen lock nut on pressure relief adjustment valve. Turn in (clockwise) to increase pressure relief and out (counter clockwise) to decrease according to system pressure gauge. Re-tighten lock nut. Do not exceed 2000 PSI. HPU Power Unit has been factory set at 1800 PSI.

### SECTION IV

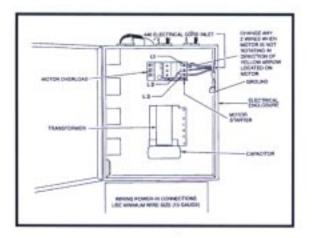
### MAINTENANCE

### WHEN SHIPPING UNIT

Remove unit from caster frame base and place base, caster wheels up, on top of unit to insure secure and safe shipment.

### MAINTENANCE

- A. Change oil and clean reservoir after the first 100 hours of operation. Change oil every 1000-2000 hours or sooner, depending on environment.
- B. Change filter at every oil change or sooner depending on environment.
- C. Lubricate motor as required per motor manufacturer.



SECTION V

PARTS LISTS AND SCHEMATIC DRAWINGS

## **BILL OF MATERIAL**

14-000-20 HPU-15 440 VOLT ONLY

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TEM NO.	PART NO.	QTY.	DESCRIPTION
015	14-020-00	1	MOTOR, ELECTRIC-IS HP
016	14-102-00	1	TANK
017	14-103-00	1	WELDMENT, FRAME
020	14-021-00	1	COOLER
030	14-023-00	1	PUMP-SUNSTRAND
035	14-024-00	1	ADAPTER, PUMP
040	14-025-00	1	COUPLING, PUMP
045	14-026-00	1	COUPLING, PUMP
050	14-027-00	1	INSERT
060	14-029-00	1	GUAGE, PRESSURE
065	14-030-00	1	FLOW METER, HEADLAND
070	14-031-00	1	FILTER
075	14-032-00	1	FILTER
080	14-033-00	1	FAN, 2" BORE
085	14-034-00	1	RELIEF VALVE, SUN
090	14-035-00	i 1	CHECK VALVE
100	14-036-00	1	FILLER, ASSM.
105	14-037-00	i	BREATHER, ARO
110	14-038-00	-	SWITCH, LEVEL
115	14-039-00	2	CASTERS
120	14-040-00	2	CASTERS
125	14-041-00	1	MAG START
130	14-042-00	1	CAPASITOR-MALLORY
135	14-043-00	1	BRACKET, CAPASITOR
140	14-044-00	1	CAP, CAPASITOR
145	14-045-00	1	TRANSFORMER-ACME
150	14-046-00	1	PENDANT
155	14-047-00	1	CONTACT BLOCK Nb
160	14-048-00	4	CONTACT BLOCK N/C
165	14-049-00	3	CONTACT BLCK Nb-N/C
170	14-050-00	2	SWITCH, PUSH BUTTON
180	14-052-00	1	SWITCH, SELECTOR SQ. D
185	14-053-00		SWITCH, SELECTOR SQ. D
200	14-056-00		FUSE, 5-AMP
205	14-057-00	1	RECEPTICAL
210	14-058-00		PLUG
215	14-059-00	7	INSERT, MALE
220	14-060-00	7	INSERT, FEMALE
225	14-061-00	4	REMOTE CORD, 16 GUAGE (75 FT LG)
230	14-062-00	1	GEAR MOTOR, 24 VOLT
235	14-063-00		LEGEND, "START"
240	14-064-00		LEGEND, START
245	14-065-00	1	LEGEND, "OIL FLOW"
245	14-065-00	1	LEGEND, "REMOTE OFF"
255	14-067-00	4	ADAPTER, LEVEL SWITCH
260	14-068-00	4	HANDLE
265	14-069-00	1	CAM
205	14-071-00	1	PLATE, CONTROL MOUNT
210	140/100	- 12	TEALE, CONTROL WOUNT

## **BILL OF MATERIAL**

14-000-20 HPU-15 440 VOLT ONLY

ITEM NO.	PART NO.	QTY.	DESCRIPTION
285	14-075-00	1	SHAFT, FAN EXTEND
290	14-076-00	2	SPACER, MOTOR
300	14-084-00	1	COVER, ACTUATOR MOTOR
305	14-085-00	1	CASING, ENCLOSURE
314	05-080-00	4	GRIP, HAND
320	14-087-00	1	LEVER
325	14-089-00	i	PLATE, COVER
400	14-096-00		BEARING
405	14-097-00		SPRING, 1/2" DIA.
410	14-098-00	- i	GRIP, PENDANT
415	14-099-00	4	FUSE HOLDER
420	14-100-00	4	PROTECTIVE CAP
425	14-101-00		FAN SHROUD
430	90-218-56	4	ELBOW, MALE 3/490
435	90-208-51	2	ADAPTER, 5/8 X 5/8 JIC-90
440	90-218-53	2	ST. EL., 3/4-90 HP
445	90-059-62		
450		1	PLUG, NPT 1/4
	90-218-75	3	EL,3/4NPTX3/4J1C90
455	90-218-76	2	TEE, 3/4 NPT - SERVICE
460	90-218-77	1	TEE, 3/4 MALE RUN, JIC
465	90-218-84	1	3/4 NPT HEX PLUG
470	90-078-72	1	ADAPTER, MALE -3/8 X 1/2
475	90-218-66	1	HEX NIPPLE, 3/4 NPT
480	90-098-68	1	3/8-1/2 NPT HEX NIP
485	90-501-18	48	SEALTITE, 3/8"
490	90-218-68	1	ADAPTER, 5/8 STR-3/4 NPT
495	90-058-73	1	ADAPTER, SWIVEL 1/4 F
500	90-218-00	2	BUSHING, RED 3/4 X 1-1/4
505	90-501-16	1	CONN 3/8 STR SEALTITE
510	90-501-21	3	CONN 3/8 X 90 SEALTITE
515	90-501-22	1	CONN 1/2 X 90 SEALTITE
520	90-501-23	1	CONN 1/2 X 45 SEALTITE
525	90-098-61	2	ADAPTER, ST 1/2 NPT X 1/2 JC
530	90-501-30	24	1/2 SEALTITE
535	90-218-56	1	ELBOW, MALE 3/490
540	90-218-70	1	COUPLING, 3/4 NPT
545	90-208-58	1	5/8 JIC-3/4 NPTI X 90
550	14-167-00	1	NAME PLATE
555	90-098-80	1	ADAPTER 1/2 STR X 1/2 JIC
560	90-218-87	2	3/4-1/2 RED BUSH
565	90-098-63	2	EL, 1/2 NPT X 1/2 JIC-45
570	07-075-00	1	HOSE, L. F. MOTOR
575	90-218-86	1	3/4TUBE TEE
580	90-079-36	4	STUD, 3/8-16 X 2-1/2
585	14-168-01	1	HOSE ASSY, HYD
590	15-169-01	1	HOSE ASSY, HYD
595	14-138-02	1	HOSE ASSY, HYD
600	14-170-01	1	HOSE ASSY, HYD
605	14-172-01	1	HOSE ASSY, HYD
610	02-214-03	1	HOSE ASSY, HYD

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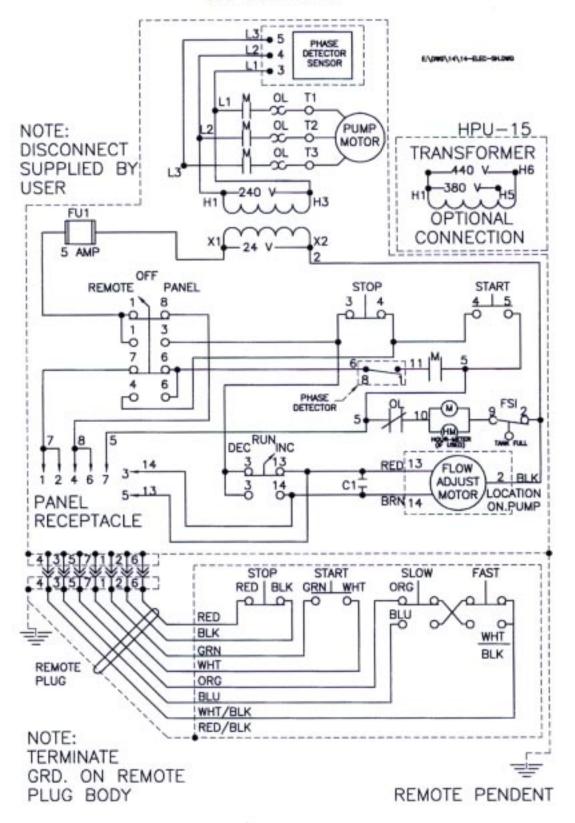
## **BILL OF MATERIAL**

14-000-20 HPU-15 440 VOLT ONLY

TEM NO.	PART NO.	QTY.	DESCRIPTION
615	14-172-02	1	HOSE ASSY, HYD
620	14-175-01	1	HOSE ASSY, HYD
625	14-176-01	1	HOSE ASSY, HYD
630	90-900-06	7	RECEPTICAL, FASTENER
635	90-900-07	6	STUD, 1/4 TURN SLOTED
640	90-900-08	1	STUD, 1/4 TURN RING
645	90-900-09	7	RETAINER
650	14-177-00	1	DECAL, MOTOR DIRECTION
655	90-218-88	1	ADAPTER, MALE 3/4 NPT-JIC
660	90-501-34	2	3/4-1/2 REDCE WASHER
665	90-218-89	4	HOSE CLAMP
670	90-059-02	32	RHMS, 1/4-20 X 3/8
675	90-051-07	2	HHCS, 1/4-20 X 3/4
680	90-051-05	4	HHCS, 1/4-20 X 1/2
685	90-055-53	4	WASHER, FLAT 1/4
690	90-050-07	3	SHCS, 1/4-20 X 3/4
695	90-055-52	5	LOCKWASHER, SPT RNG 1/4
700	90-020-15	4	SHCS, 8-32 X 1-1/4
705	90-009-02	8	RHMS, 6-32 XS/16
710	90-044-51	1	SSS, 10-32X3/16FTPT
715	90-040-53	3	SHCS, 10-32 X 3/8
720	90-049-03	2	RHMS, 10-32 X 1/2
725	90-043-53	6	FHCS, 10-32 X 3/8
730	90-061-10	16	HHCS, 5/16-18 X 1
735	90-065-52	32	WASHER, 5/16 FLAT
740	90-065-51	16	LOCKWASHER, 5/16 SPLT RG
745	90-071-07	4	HHCS, 3/8-16 X 3/4
750	90-071-06	8	HHCS, 3/8-16 X 5/8
755	90-071-52	1	3/8-24 X 1 HHCS
760	90-075-53	9	WASHER, FLAT 3/8
765	90-075-52	11	RING, LOCKWASHER SPL 3/8
770	90-600-09	4	8 MM X 1.25 X22 MM HHCS
775	90-091-10	2	HHCS, 1/2-13 X 1
780	90-095-52	2	WASHER, 1/2 FLAT
785	90-095-58	2	1/2 LOCKWASHER

## ELECTRICAL SCHEMATIC

14-000-20 HPU-15 440 VOLT ONLY



## **ORDERING INFORMATION**

To place an order or to get more detailed information on any E.H. Wachs products, call us at: 1-800-323-8185.

#### **ORDERING REPLACEMENT PARTS**

Please use parts lists provided in manual. Have part description and part number of required replacement part or parts to help expedite order and ensure proper parts are being ordered.

#### **REPAIR INFORMATION**

Please call E.H. Wachs Company prior to returning any equipment for repair. We will advise you of shipping and handling. Please enclose with equipment to be repaired your name, address, phone number and a brief description of problem or work to be done or estimated.

All repair work done at our plant will be estimated and the customer advised of cost and time required to complete repair.

#### WARRANTY INFORMATION

Enclosed with the manual is a warranty card. Please fill out the registration card and return to E.H. Wachs. Retain the owners registration record and warranty card for your information.

#### **RETURN GOODS ADDRESS**

E.H. Wachs Company 600 Knightsbridge Parkway Lincolnshire, Illinois 60069

Call or Write:

E.H. Wachs Company 600 Knightsbridge Parkway Lincolnshire, Illinois 60069

847-537-8800

FAX: 847-520-1147 • 847-520-1168

Toll-Free: 1-800-323-8185

WACHS PIPE	E & VALVE	
MAIN		
Machine Serial No.		
Enter Your Machine's Serial Number Here For Proper Record Keeping and Ordering Reference.		