

**FPST**

MODEL

H-15

# Hydraulic Power Systems, Inc.

1203 Ozark N. Kansas City, MO 64116  
816-221-4774

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# HYDRAULIC POWER SYSTEMS, INC.

500 Atlantic Kansas City, Missouri 64116  
[816] 221-4774

## SPECIFICATIONS H-15 3208 CAT.

Power Unit: General Arrangement Drg. D-25001 and  
Bill of Material

### Engine:

Caterpillar 3208-210 Diesel  
8 Cylinder  
3050 RPM - High Idle - NO LOAD  
210 Horsepower @ 2800 RPM - Full Load - 2300 PSI  
2800 RPM Operating Speed  
12 Volt Electric System  
Fuel Capacity - 55 Gallons

### Dimensions:

Length	96"
Width	42"
Height	75"
Weight	5500 Pounds

Hydraulic System: Drg. B-4005 Schematic

Pump Flow . . . . .	125 GPM
Maximum Operating Pressure. . . . .	2300 PSI
Reservoir Capacity. . . . .	130 Gallons

Air System: Throttle Control - Drg. B-5001 Air Schematic

Auger Drive Unit: General Arrangement Drg. B-3009  
and Bill of Material

Output Speed. . . . .	0-60 RPM
Output Torque . . . . .	14,200 Foot Pounds

### Dimensions:

Length	31"
Width	26"
Height	72"
Weight	2500 Pounds

Guide Angles for 8x21 Leads and Clip Angles for HP 14 x 102 Beam Pile

Hose Bundle: D-25001 Bill of Material Above

2 Main Power Hoses - 1-1/2" I.D., 4 Wire High Pressure  
1 Case Drain Hose - 3/4" I.D., 1 Wire Medium Pressure  
4 Air Hoses - 3/8" 250 PS.1 Teflon Rubber Covered

2/17/82

# HYDRAULIC POWER SYSTEMS, INC.

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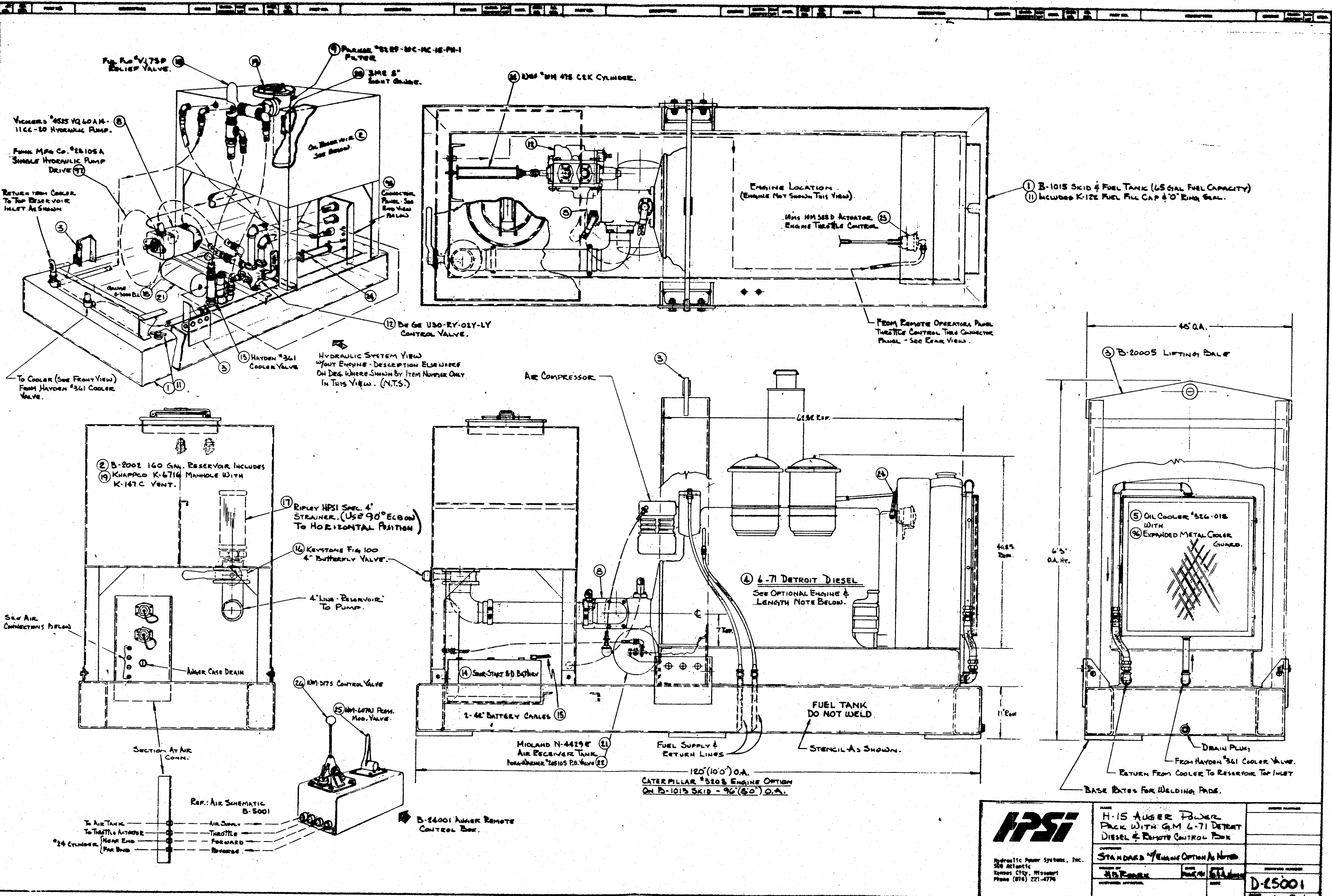
## ASSEMBLY INSTRUCTIONS

### H-15.

Assembly of the H-15 consists of locating the power unit and auger drive unit, making the hose connections between the two units and positioning the remote control panel.

1. The power unit is mounted on a structural tube skid, so it may be located on the ground near the crane or affixed to the crane.
2. Position the auger drive unit in pile driving leads or on a sufficient guide track to withstand the auger torque.
3. Connect the 3/4" I.D. case drain hose between the power unit and the auger drive unit. This line should always be connected first to prevent accidental unit operation without proper motor drainage.
4. Connect the two (2) one and one half inch (1-1/2") I.D. main power hoses between the power unit and the auger drive unit.
5. Locate the air remote control panel where it will be most accessible for the operator.
6. Connect the air lines for air pilot supply, throttle actuation and forward-reverse control. This will consist of four (4) 3/8" air hoses between the power unit and the remote control panel.

8/4/81



<b>HPSI</b>	NAME	H-15 AUGER PACK WITH GIM 6-71 DETROIT DIESEL & REMOTE CONTROL BOX	DESIGN NUMBER	
	DESCRIPTION	STANDARD REMOTE OPTION AS NOTED	REVISED NUMBER	
	DESIGNED BY	H.P. FORD	CHECKED BY	J.L. HARRIS
	CUSTOMER APPROVAL		DATE	
	Hydraulic Power Systems, Inc. 500 Atlantic Riverside City, Missouri Phone (816) 221-4774			<b>D-25001</b>

## HYDRAULIC POWER SYSTEMS, INC.

KANSAS CITY, MISSOURI

D-25001

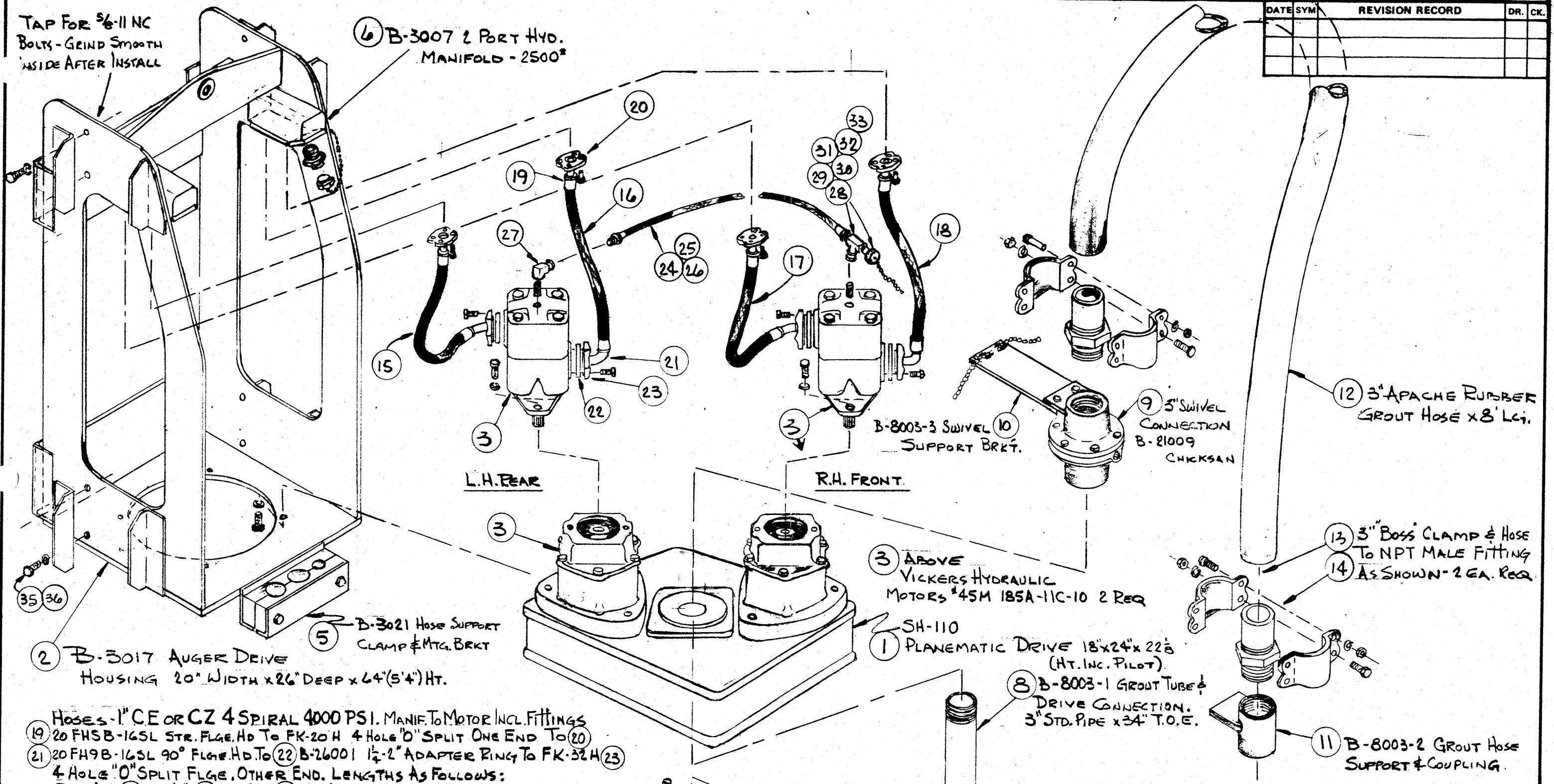
H-15 Power Unit W/ CAT 3208

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ITEM NO.	MFG. PART NUMBER	NO. REQD	MANUAL BILL OF MATERIAL ONLY NAME - DESCRIPTION	DWG. NO.
1	HPSI	1	Skid/Fuel 55 Gal. Tank On Cat.	B-1013
2	HPSI	1	Reservoir	B-2002
3	HPSI	1	Lifting Bail On Cat.	B-20002
4	Caterpillar	1	3208 - 210 Diesel	
5	Karmazin	1	326-018 Cooler ( See #96 for Guard)	
6	Cowl	1	TS25TR Silencer	
7	Cowl	1	TS25TL Silencer	
8	Vickers	1	4525VQ60A14-11CC-20 Pump	
9	Parker	1	52RF-20C-MC-15-FH-1 Filter (on tank)	
10	Ful Flo	1	VJ7SP Relief Valve	
11	KnappCo	1	K-122-Fuel Cap for Skid W/O Ring - Separate	
12	BE GE	1	U30-RY-02Y-LY Control Valve	
13	Hayden	1	K361 Cooler Valve (Thermal)	
14	Shur-Start	1	BD Battery	
15	AMP	2	42" Battery Cables	
16	Keystone	1	Fig. 100 SHut-Off Valve	
17	Ripley	1	4" Strainer (above Keystone)	
18	Wika	1	213 X 2 1/2" 0-3000 PSI Gauge	
19	KnappCo	1	K-6716/147c 16" Manhole W/147c Vent	
20	SME	1	10" Sight Gauge	
21	Midland	1	N-4429-E Air Receiver Tank	



DATE	SYM	REVISION RECORD	DR.	CK.



TAP FOR 5/8-11 NC BOLTS - GRIND SMOOTH INSIDE AFTER INSTALL

6 B-3007 2 PORT HYD. MANIFOLD - 2500\*

2 B-3017 AUGER DRIVE HOUSING 20" WIDTH X 26" DEEP X 64"(5'4") HT.

Hoses - 1" CE OR CZ 4 SPIRAL 4000 PSI. MANIF. TO MOTOR INCL. FITTINGS  
 19 20 FHSB-16SL STR. FLGE. HD TO FK-20 H 4 HOLE "D" SPLIT ONE END TO 20  
 21 20 FH9B-16SL 90° FLGE. HD TO 22 B-26001 1 1/2" 2" ADAPTER RING TO FK-32 H 23  
 4 HOLE "O" SPLIT FLGE. OTHER END. LENGTHS AS FOLLOWS:  
 15 25 1/2" 16 35 1/2" 17 30 3/4" 18 31 1/2"  
 26 27 24 CASE DRAIN HOSE 1/2" X 20" LONG, RETURN HEADER.  
 28 25 12 GROUT HOSE - 4" X 8' LONG.  
 13 14

7 OPTIONS: 4" 300# FLANGE TO:  
 1. B-8001 3" Hex Fitting  
 2. B-8002 3" API Fitting  
 3. B-8020 2 1/2" Hex Fitting  
 4. B-8021 2" A.P.I. Fitting

6 SHEAR PIN - 2 REQ  
 37 BOLTS - 3/4-10 NC X 3" - 6 REQ  
 38 LOCKWASHERS - 3/4 - 6 REQ

3 ABOVE VICKERS HYDRAULIC MOTORS #45M 185A-11C-10 2 REQ

1 SH-110 PLANEMATIC DRIVE 18"x24"x22 1/2 (HT. INC. PILOT)


8 B-8003-1 GROUT TUBE & DRIVE CONNECTION. 3" STD. PIPE X 34" T.O.E.

12 3" APACHE RUBBER GROUT HOSE X 8' L.G.

9 3" SWIVEL CONNECTION B-21009 CHICKSAN

13 3" BOSS CLAMP & HOSE TO NPT MALE FITTING  
 14 AS SHOWN - 2 EA. REQ

11 B-8003-2 GROUT HOSE SUPPORT & COUPLING.

TOLERANCES (EXCEPT AS NOTED)		 Hydraulic Power Systems, Inc. 500 Atlantic Kansas City, Missouri 64116 (816) 221-4774	
DECIMAL	±	SCALE	DRAWN BY <u>DB PARK</u>
FRACTIONAL	±	APPROVED BY	
ANGULAR	±	TITLE	H-15 AUGER DRIVE - 20" WIDE HOUSING WITH BOTH 12" BEAM PILLS & 8" LEAD GUIDES.
		DATE	OCT. 15, 1981
		DRAWING NUMBER	B-3009



# HYDRAULIC POWER SYSTEMS, INC.

KANSAS CITY, MISSOURI

H-75 AUGER DRIVE B-3009

Page 1 of 2

ITEM NO.	MFG. PART NUMBER	NO. REQD	NAME - DESCRIPTION	DWG. NO.
1	SH-110	1	Planematic Drive - 2 motor	
2		1	Auger Drive Housing	B-3017
3	Vickers 45M 185A-11C-10	2	Hydraulic Motors	
4		1	Hose Support Clamp & Mtg. Brkt.	B-3021
5		1	Hydraulic Manifold - 2 port	B-3007
6		2	Shear Pins 7/8 D. x 3" lg.	
7	Drive Connection	*	3" Hex Fitting	B-8001
	Options - Use 1 of 4 Shown *	*	3" A.P.I. Fitting	B-8002
		*	2½ Hex Fitting	B-8020
		*	2" A.P.I. Fitting	B-8021
8		1	Grout Tube & Drive Connection -3" x 34" lg	B-8003-1
9		1	"Chicksan" 3" Style 20 Swivel - Threaded	B-21009
10		1	Swivel Support Brkt	B-8003-3
11		1	Grout Hose Support & Coupling	B-8003-2
12	Apache Rubber	1	Hose 3" Grout	
13		2	Hose Clamp	
14		2	3" Hose End Fitting - 3" Hose to male NPT	
15	DAYCO CE or CZ	25½"	1" 4 Spiral Rubber Hose w/items 19 thru 23 ends	
16	"	35½"	1" 4 Spiral Rubber Hose w/items 19 thru 23 ends	
17	"	30¾"	1" 4 Spiral Rubber Hose w/items 19 thru 23 ends	
18	"	31½"	1" 4 Spiral Rubber Hose 2/items 19 thru 23 ends	

# HYDRAULIC POWER SYSTEMS, INC.

KANSAS CITY, MISSOURI

H-15 AUGER DRIVE B-3009

Page 2 of 2

ITEM NO.	MFG. PART NUMBER	NO. REQD.	NAME - DESCRIPTION	DWG. NO.
19	20 FHSB-16SL	4	1" Hose Straight Flge Head to 1½ "0" Ring Split	Flge.
20	FK-20H	4	4Hole "0" Ring Split Flange 1½"	
21	20FH 9 B-16SL	4	1" Hose 90 Flge HD.to 1½" Flange	
22		4	Adapter Ring-1½" Flge. Head to 2" Flge. Hd.	B-26001
23		4	4 Hole "0" Ring Split Flange 2"	
24	Style M.X. SAE 100R1	20"	½ Case Drain Hose with:	
25	8MS-8SA	1	Couplings ½" Hose to Male NPTF	
26	8FJ-8SA	1	Coupling ½" Hose to Fem. JIC Swivel	
27		1	Street Elbow - ½ STL	
28		1	Tee - 3/4 Stl	
29		2	Bushings - 3/4.- ½ Stl	
30	AIRWAY 2404-8-8	1	Connector ½ male - ½" male pipe	
31	AIRWAY 2404-12-12	1	Connector 3/4male - 3/4 male pipe	
32	AIRWAY 304 C-12	1	Cap 3/4 JIC	
33		1	Nipple ½ x 3" NPT	
34				
35		4	Bolts 3/4 - 10 NCx2½ Lg.(For Planematic Drive)	
36		4	Lockwashers 3/4	
37		6	Bolts 3/4 - 10 NC x 3" Lg.	
38		6	Lockwashers 3/4	

# HYDRAULIC POWER SYSTEMS, INC.

KANSAS CITY, MISSOURI

## START-UP INSTRUCTIONS

INITIAL START-UP

DAILY MAINTENANCE AND START-UP

4/28/80