Specifications

MODEL	**HP1000**
WEIGHT (UNIT ONLY)	**243 LBS**
WEIGHT (6" TOOL, PLATE)	**496 LBS**
SIZE (NO TOOL OR PLATE)	**40 X 18 X 12"**
IMPACT ENERGY	**350 LB-FT**
IMPACT RATE	**500-950 BPM**
OPERATING PRESSURE	**1400-2100 PSI**
MAX PRESSURE	**3988 PSI**
REQUIRED OIL FLOW	**5.5-7.0 GPM**
MAX PRESSURE	**1700 PSI**
HOSE SIZE	**3/8" - 1/2" DIA.**
RECCOMENDED OIL	**ISO VG32 OR ISO VG46**

UNIT SERIAL NUMBER

_____

SKIDRIL
P.O. BOX 8041
GREENSBORO, NC 27419
TEL: 800-843-3745

SKIDRIL

OPERATION & PARTS MANUAL

HYDRAULIC POST DRIVER MODEL HP1000

ANY PERSON OPERATING THIS MACHINE SHOULD READ AND UNDERSTAND THIS MANUAL FIRST!

FOLLOW ALL SAFETY INSTRUCTIONS

1-800-843-3745

Service Notes

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Parts List Continued

No.	Code	Description	Q'ty
51	M8FTX046A	Bracket B	1
52	B-20*200(10.9t)	Bolt	3
53	Wf-20(1-L)	Spring Washer	6
54	N1-20	Nut	3
55	WP-8	Spring Washer	4
56	BH-8*18	Bolt	4
57	M8FTZ028A	Wire	1
58	21091 - 1-50--	Hose	2
59	C-30B	Line Grip	1
60	N-2072-06	Adaptor	1
61	M8FTZ028A	Base	1
62	HB-5	Cap Nut	2
63	N-2093-06	Adaptor	2

No.	Code	Descriptions	Q'ty	No.	Code	Descriptions	Q'ty
				64	B-5*40	Bolt	2
				65	WS-6	Spring Washer	2
				66	HV-03-No2	Selector Valve Assy	2
				67	M8FTZ005A	Rod	1
				68	M8FTY031A	Driving Tool	1
					M8FTZ033A	Spring Washer A	1
					M8FTZ035A	Hook Wire	1
					M8FTZ034A	Spring Washer B	1
					B-12*25	Bolt	1
					T6007	Push Rod Jig for Retainer Pin	1

Assembly Parts

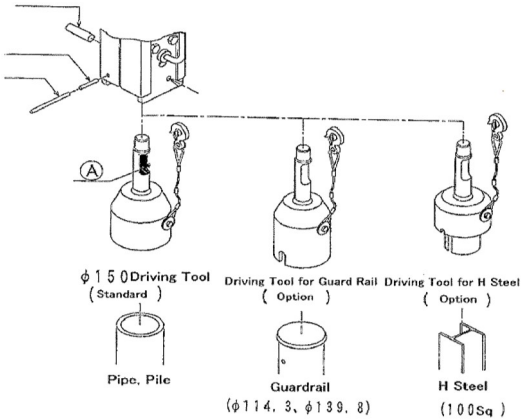
No	Code	Descriptions	Q'ty	Content
A1	MB24Z508A	Cap Nut Ass'y	1	1,2
A2	MB24Z509A	Cap Bolt Ass'y	1	3,4
A3	MB13Z501A	Accumulator Assy	1	1,2,3,4,5,6
A4	MB13Z505A	Valve Body Assy	1	11,12(2),13,14
A5	MB13Z503A	Inner Tube Assy	1	16,17,18,19
A6	MB13Z502A	Cylinder Assy	1	16(2),26,27,28(3),30(2)
A7	MB13Z504A	Front End Assy	1	33,38,39,40
A8	MB13Z039A	Seal Kit Assy	1	2,4,9,10,26,31,32

Operation

PREPARATION FOR USE

1. Be sure to always idle your Skid loader or tractor and set the flow control to position 5-6 (SEE SPECIFICATIONS FOR FLOW).

2. Insert the correct tool after greasing shank (A) and attach safety wire to driver.



3. Connect the driver to the auxiliary on your loader, pressure-flow goes into top hose on driver (SEE COMPONENT IDENTIFICATION SECTION).

4. Inspect all hoses, connections, fittings and fasteners on the post driver for damage before each use.

5. By activating the auxiliary valve in your loader or tractor the driver will begin to hammer. Note that pressure must be sent to the top port on the driver.

6. Apply enough down force on the driver to prevent bouncing while impacting.

NOTICE!

* ALWAYS Be sure the flow control is set to the correct flow and your loader or tractor is idling when driving a post as damage may occur, or performance may be reduced!

* ALWAYS Connect hydraulic hoses to the the tool before starting the loader or tractor.

* ALWAYS be sure couplers are clean and free of debris before connecting!

⚠ WARNING!

* DO NOT operate the driver with damaged or missing hoses, fittings or fasteners.

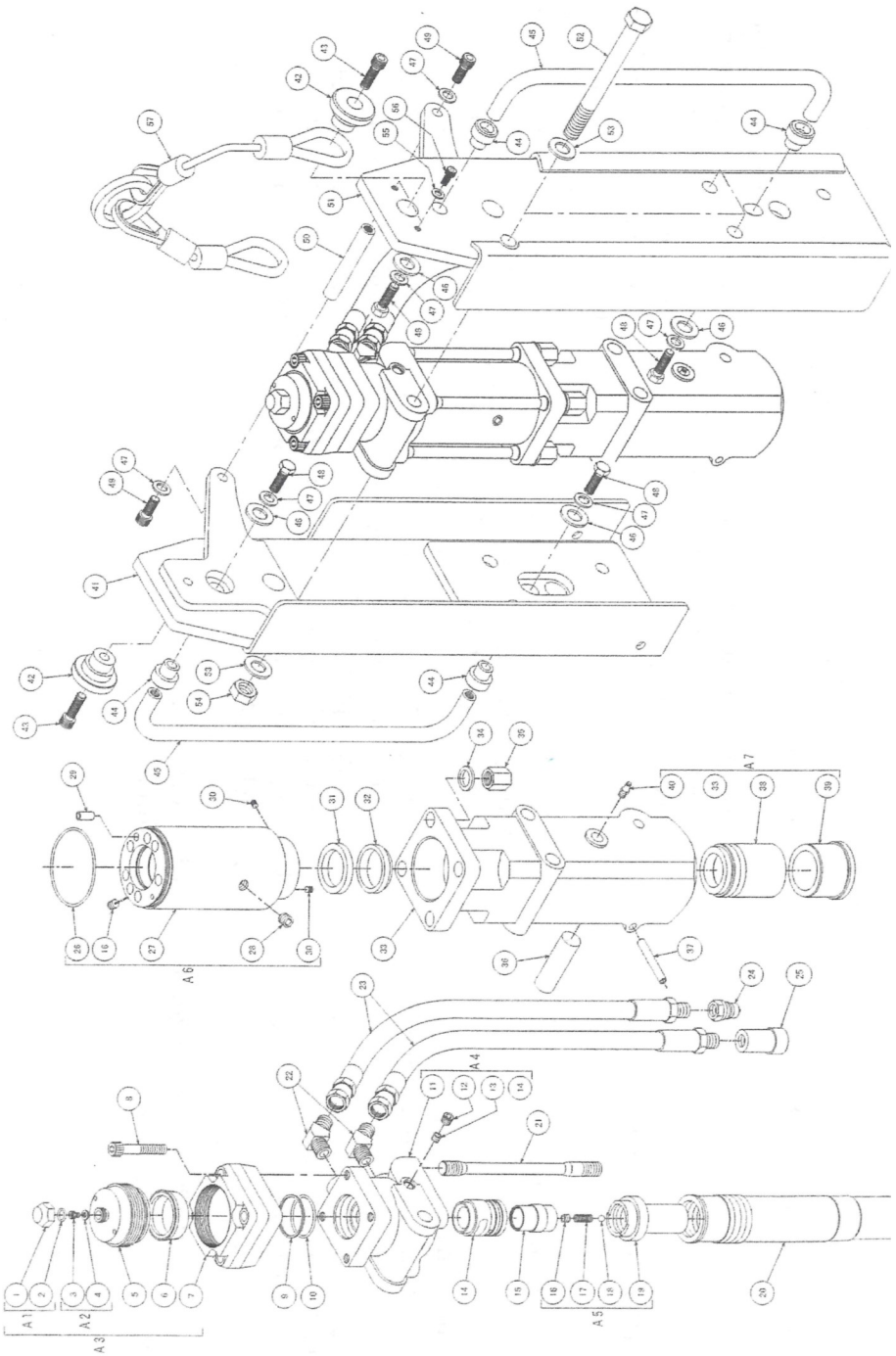
* DO NOT substitute hoses for another make/type.

* DO NOT use with driver with anyone under or near it.

*DO be sure that the driver adapter (see component identification) has the safety wire attached to the loader or tractor.

*DO check for overhead and underground wires or utilities before using.

Exploded View - Driver



Troubleshooting

1. The Driver does not operate when the oil flow is started.

POSSIBLE CAUSE	SOLUTION
Operating flow or hoses are reversed.	Reverse position of the auxiliary valve in the loader or tractor.
Disconnected hose.	Stop loader. Connect the hoses.
Incompletely connected couplings.	Stop power supply. Check each coupling to ensure they are competely engaged.
Control valve malfunction. **	Disassemble driver. Clean all debris from valve body. Reassemble. **
Broken control valve. **	Replace control valve. **

2. The Driver operates, but the impact rate is low.

POSSIBLE CAUSE	SOLUTION
Low hydraulic fluid flow rate.	Check flow control to confirm correct pressure/flow for the driver (see driver specifications)
Oil temperature too hot.	Confrim your power supply has sufficient oil volume and cooling capability. Test by allowing power supply to cool down for 15-30 minutes, then try again. If Driver operates contact power suply manufacturer.
Control valve malfunction. **	Disassemble driver and clean all from valve body. Reassemble.**
Hydraulic oil level too low.	Add hydraulic oil to your power supply (contact manufacturer).

***** WARNING! To avoid risk of injury or death, troubleshooting solutions marked with a red double-asterisk (**) should only be performed by an authorized service center or trained professional .***

Troubleshooting Continued

3. Driver striking rate is normal, but impact force is weak.

POSSIBLE CAUSE	SOLUTION
Low nitrogen accumulator gas pressure. **	Charge nitrogen accumulator to 50kg/ cm2. **
Broken accumulator diaphragm. **	Replace accumulator diaphragm. **
Oil temperature too high.	Stop power supply. Check/fill oil level. Contact you power supply manufacturer.

4. The Driver suddenly stops during operation.

POSSIBLE CAUSE	SOLUTION
Disconnected quick-coupling.	Stop power supply. Re-connect quick coupling. Check all other hose connections.
Broken control valve.	Replace control valve.**

5. Oil is leaking from the main body.

POSSIBLE CAUSE	SOLUTION
Worn or hardened O-ring. **	Replace O-ring. **

*** WARNING! To avoid risk of injury or death, troubleshooting solutions marked with a red double-asterisk (**) should only be performed* by an authorized SKIDRIL service center or trained professional .

Troubleshooting Continued

6. Oil is leaking from the front end of the driver.

POSSIBLE CAUSE	SOLUTION
Worn U-cup packing on driver. Note: Grease may appear on front en of driver as this is used to lubricate the tool shank.	Replace U-cup packing. Or clean up excess grease.
U-cup packing damaged by scored piston rod.	Smooth out scored areas on piston rod with oilstone, and then replace the U-cup Packing.

7. The high pressure hose vibrates intensely.

POSSIBLE CAUSE	SOLUTION
The nitrogen accumulator diaphragm is damaged. **	Replace diaphragm. **

8. The Driver impacts a slow rate and bounces.

POSSIBLE CAUSE	SOLUTION
If running on a skid loader down force may be too low	Increase down pressure from loader

** WARNING! To avoid risk of injury or death, troubleshooting solutions marked with a red double-asterisk (**) should only be performed by an authorized SKIDRIL service center or trained professional .

PERIODIC MAINTENANCE

CHECK FOR LOOSE MISSING OR DAMAGED HOSES, DRIVE ADAPTER OR FASTENERS AND HAVE REPAIRED OR REPLACED BEFORE USING FURTHER.	**DAILY**
****RECHARGE ACCUMULATOR**	**300 HOURS OR AT LEAST EVERY YEAR**
****REPLACE ACCUMULATOR DIAPHRAGM**	**500 HOURS OR AT LEAST EVERY TWO YEARS**
****REPLACE U-CUP PACKING**	**500 HOURS OR AT LEAST EVERY TWO YEARS**
****REPLACEMENT OF ALL O-RINGS**	**EVERY 3 YEARS**
GREASE FRONT END	**EVERY 50 HOURS**

NOTE ALL ITEMS IN RED SHOULD BE PERFORMED BY AND AUTHORIZED SKIDRIL SERVICE CENTER!

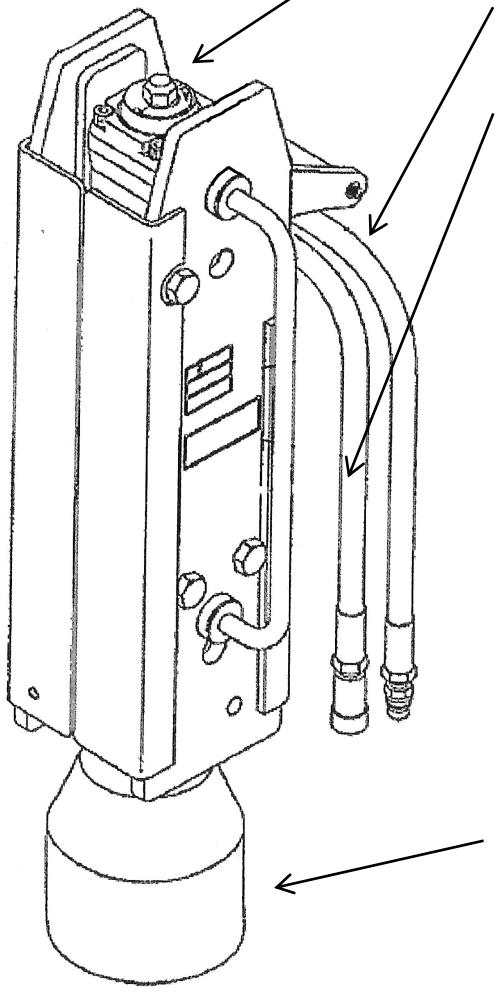
Parts List

PARTS LIST (I)

* only can be supplied as assembly parts

No.	Code	Descriptions	Q'ty
*1	MIKTE108A	Cap Nut	1
2	OS-22.4	O-Ring	1
3	1120-413-D	Cap Nut	1
4	WS-06<<<<<<<BH	Seal Washer	1
5	MB13Z009A	Lid	1
6	1110-421	Diaphragm	1
7	1110-31-01	Shell	1
8	BH-12*70	Bolt, Hex Socket	4
9	OBG-50	Back Up Ring	1
10	OG-50	O-Ring	1
*11	MB13X001A	Valve Body	1
12	BPH1-PT1/8	Taper Plug	2
13	MB06E007A, MB13Z018A	Orifice Plug (Φ3.6, Φ4.0)	1
*14	MB13Z006A	Valve Bush	1
15	MB13Z008A	Control Valve	1
16	BPH1-PT1/8	Taper Plug	3
17	M1HTE107A		1
18	QB-5/16	Steel Ball	1
*19	MB13Z007A	Inner Tube	1
20	MB13Y005A	Piston	1
21	MB13Z010A	Stud Bolt	4
22	AJ-1036-08	Adapter	2
23	21122 - 6-110SX	Hose	2
24	QC-03M	Coupler (Male)	3
25	QC-03F	Coupler (Female)	1
26	OG-95	O-Ring	1
*27	MB13Z004A	Cylinder	1
28	BPH1-PT3/8	Taper Plug	3
29	PR-10*25	Spring Pin	1
30	MB850-040	Expander	2
31	IUIS-50-60-6	U-Cap Packing	1
32	DS-5058565	Dust Seal	1
*33	MB13X002A	Front End	1
34	WF-18-2L(JIS B 1252)	Washer	4
35	MIKTE115A	Nut	4
36	MB13Z013A	Retainer Pin	1
37	PR-8*50	Spring Pin	1
*38	MB13Z011A	Bush (A)	1
*39	MB13Z012A	Bush (C)	1
40	A-PT1/8H	Grease Nipple	1
41	M8FTX047A	Bracket A	1
42	M8FTZ044A	Boss A	2
43	BH-12*40	Bolt, Hex Socket	2
44	M8FTZ045A	Boss B	4
45	M8FTZ043A	Handle	2
46	M8FTZ017A	Spring Washer	4
47	WF-12H (JIS B2760)	Washer	6
48	B-12X40(10.9T)	Bolt	4
49	BH-12*30	Bolt, Hex Socket	2
50	M8FTZ014A	Guide	1

Component Identification



Item

1. **Accumulator**
2. **Pressure Port**
3. **Return Port**

4. **Grease Nipple**
5. **Drive Adapter**

SAFETY FIRST

READ, UNDERSTAND AND FOLLOW SAFETY GUIDELINES AND SAFE WORK PRACTICES.

TAKE NOTE OF **WARNINGS** IN THIS MANUAL AS THEY IDENTIFY INSTRUCTIONS INTENDED TO PREVENT INJURY TO YOU OR OTHERS.

NOTICE: **NOTICES:**, ARE INTENDED TO PREVENT DAMAGE TO THE MACHINE OR PROPERTY.

WARNING!

DO NOT: USE EQUIPMENT IN AN UNINTENDED MANNER.

DO NOT: USE IMPROPERLY TRAINED OR UNQUALIFIED PERSONNEL TO OPERATE OR PERFORM REPAIRS ON THIS EQUIPMENT.

DO NOT: LEAVE MACHINE RUNNING UNATTENDED OR WHEN NOT IN USE.

DO NOT: REFUEL OR ADD HYDRAULIC OIL TO A HOT OR RUNNING MACHINE.

DO NOT: SPILL FUEL OR HYDRAULIC OILWHEN FILLING THE MACHINE.

DO NOT: ATTACH OR DETACH THE DRIVER HOSES WHILE THE POWER SUPPLY IS ON OR RUNIING.

DO NOT: REFUEL NEAR AN OPEN FLAME OR SPARK.

DO NOT: OPERATE THE MACHINE WITHOUT PROPER SAFETY PROTECTION SUCH AS PROTECTIVE EYEWEAR, SAFETY BOOTS, EAR PROTECTION, HARD HAT, GLOVES ETC.

DO NOT: MODIFY THE MACHINE IN ANY WAY OR USE WITH NON SKIDRIL PARTS.

DO NOT: DO NOT STAND UNDER OR NEAR DRIVER WHEN RUNNING

DO NOT: STORE THE MACHINE IN A PLACE OR POSITION THAT IT MAY FALL , DROP OR SLIDE FROM WHEN NOT IN USE.

DO NOT: OPERATE THE MACHINE WITH LOOSE, DAMAGED OR MISSING PARTS.

DO NOT: DISASSEMBLE THE MACHINE IT CONTAINS HIGH PRES-SURE GAS WHICH CAN RESULT IN SERIOUS INJURY.

Helpful Tips & Service

When using the Driver to drive posts, use drive adapters which are correctly matched to the post your installing. Call ***SKIDRIL*** if you have any questions about drive adapters or tools.

To maximize driving power, do not use more than 50' of hose.

To prevent dirt from entering the quick-connect couplings, and possibly damaging the driver or power supply, be sure to clip couplings together after disconnecting driver.

Your ***SKIDRIL*** requires regular service (at least annually) to maintain it in good running order, and ensure long life.

Where to obtain service:

SKIDRIL services the products it sells so send it to SKIDRIL INC., 235 Labrador Drive, Randleman, NC USA 27317

How to ship:

Most major carriers can deliver the machine to us and back.