Specifications

MODEL	**HP16**
WEIGHT	**22 LBS.**
SIZE (LXW)	**18" X 6**
IMPACT ENERGY	**40 LB-FT**
IMPACT RATE	**1200-2000 BPM**
OPERATING PRESSURE	**1200-1500 psi**
REQUIRED OIL FLOW4.	**4.5-6 GPM**
MAX PRESSURE	**1700 PSI**
HOSE SIZE	**3/8" DIA.**

UNIT SERIAL NUMBER

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

SKIDRIL

OPERATION & PARTS MANUAL

HYDRAULIC POST DRIVER/ CHIPPING HAMMER MODEL HP12

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

REF.NO.	PART NO.	DESCRIPTION	QUANT
33	BH-8 X 80	BOLT	4
34	BH-8 X 15	BOLT	6
35	BH-10 X 50	BOLT	1
36	PR-16 X 50	PIN	1
37	PR-10 X 50	PIN	1
38	PR-6 X 20	PIN	1
39	MIKTE173	NEEDLE ROLLER	1
40	HH-0630	HOSE	1
41	LH-0645	HOSE	1
42	QC-03F	COUPLER FEMALE	1
43	QC-03M	COUPLER MALE	1
44	BPH1-PT1/8	PLUG	10
45	1120-414	HANDLE GRIP	1
46	M2LTZ162A	HANDLE FEAME (LS)	1
47	M2LTE114A	HANDLE FRAME (PS)	1
48	M2LTE114A	BUSH ROD	1
49	M2LTE113A	CONTROL LEVER	1
50	1120-422	HANDLE PIPE	1
51	BH-6 X 15	BOLT	4
52	BH-8 X 15	BOLT	2
53	PR-5 X 22	PIN	1
54	M1XTE117A	MAR SEAL	1
55	MB02E031A	SIDE HANDLE ASSY	1
55-1	MB02E023B	HANDLE FRAME	1
55-2	MB02E024B	HALF	1
55-3	1120-422	CENTER CORE	1
55-4	1120-414	HANDLE GRIP	1
55-5	B-8 X 16	BOLT	2
55-6	WS-8	WASHER	3
55-7	BH-8 X 35	BOLT	1
55-8	PR-8 X 30	PIN	1
56	OS-22.4	O RING	1
*	OPTIONAL	CHIPPPING HAMMER FRONT	

Operation

PREPARATION FOR USE

1. Be Sure the power supply you are using provides the correct flow and pressure for the Hp12. (SEE SPECIFICATIONS).

2. Be sure your hydraulic power supply has the correct type and amount of hydraulic oil.

*** Use *ONLY* Hydraulic oil ISO VG-32 or equivalent.**

3. Connect the driver to the hoses from the power supply (pressure 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 pulling down on the control handle the driver will begin to pound the post.

6. Release the control handle when the post is driven the correct distance.

7. Shut down power supply and continue to next post. Repeat steps 1-6 for the next post installation.

NOTICE!

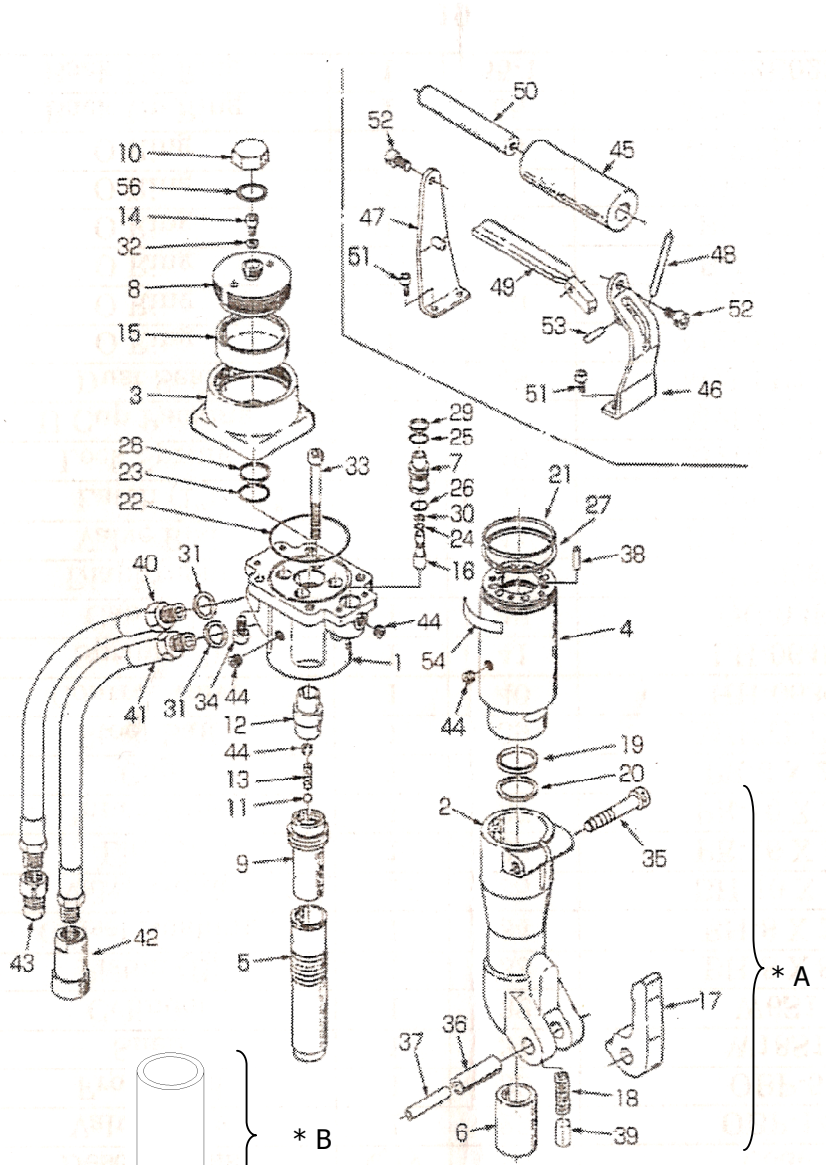
** **ALWAYS** Be sure your power source provides the correct pressure and flow as damage may occur, or performance may be reduced!*
** **ALWAYS** Connect hydraulic hoses to the the tool before starting the power supply*
** **ALWAYS** be sure couplers are clean and free of debris before connecting!*
** **ALWAYS** use the driver on a power unit with proper cooling and*

WARNING!

** **DO NOT** operate the driver with damaged hoses, fittings or fasteners.*
** **DO NOT** substitute hoses for another make/type.*
** **DO NOT** use with driver over your head.*

****DO** be sure that the driver adapter (see component identification) snugly fits the post you are driving!*
****DO** check for overhead wires or utilities.*
****DO** call for a locate of underground utilities. BEFORE using!*

Exploded View - Driver



Note: Front head configuration 'A' is reflected in parts listing. For configuration 'B' p/n BHD12-TP.

Troubleshooting

1. The Driver does not operate when the control handle is actuated.

POSSIBLE CAUSE	SOLUTION
Power supply is not operating.	Start power pack per manufacturers instruction manual.
Disconnected hose.	Stop power supply. 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. force is weak.

POSSIBLE CAUSE	SOLUTION
Low hydraulic fluid flow rate.	Check with power supply manufacturer to confirm correct pressure/flow for the driver (see driver specifications)
****Relief valve setting too low.**	Adjust relief valve setting.
Oil temperature too hot.	Confrim your power supply has sufficient oil volume and cooling capability.
****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
****Broken control valve.**	Replace control valve.

5. Oil is leaking from the control handle mechanism.

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.	Replace U-cup packing.
****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 does not stop impacting when the control handle is released.

POSSIBLE CAUSE	SOLUTION
****Debris is causing the control valve rod to stick open.**	Disassemble and remove debris from valve assembly. Reassemble.

*** 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

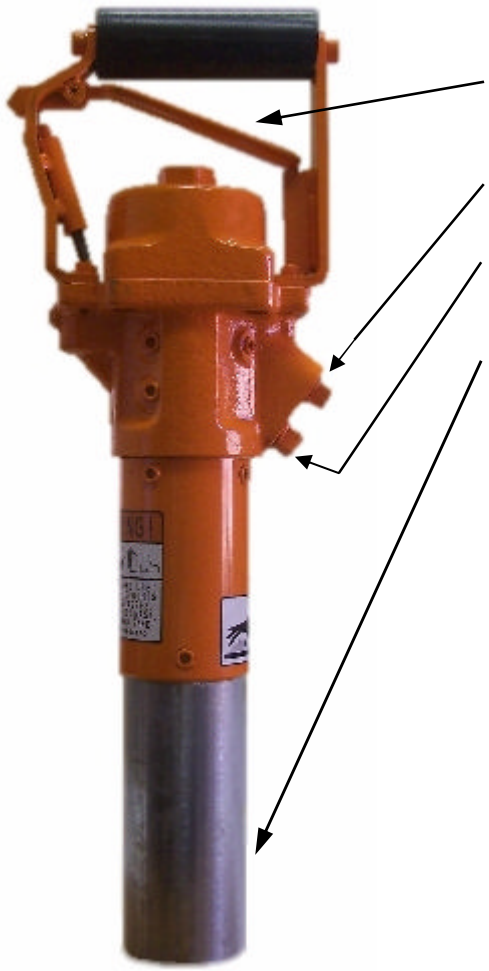
***CHECK FOR LOOSE MISSING OR DAMAGED HOSES, DRIVE ADAPTER OR FASTENERS AND HAVE REPAIRED OR REPLACED BEFORE USING FURTHER.** ***GREASE HAMMER END OF DRIVER**	**DAILY**
****RECHARGE OF ACCUMULATOR**	**300 HOURS OR AT LEAST EVERY YEAR**
****REPLACE ACCUMULATOR DIAPHRAGM**	**500 HOURS OR AT LEAST EVERY TWO YEARS**
****REPLACE VALVE ROD O-RING**	**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**

*** 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 .*

Parts List

REF.NO.	PART NO.	DESCRIPTION	QUANT
1	M2LTC101A	VALVE BODY	1
2	M2LTC102A	* FRONT END	1
3	M2LTD103A	SHELL	1
4	M2LTD104B	CYLINDER	1
5	M2LTD125A	PISTON (B)	1
6	M2LTE106A	CHISEL BUSHING	1
7	MB26X012A	* VALVE BODY	1
8	M2LTE109A	LID (S)	1
9	M2LTE124A	INNER TUBE	1
10	M2LTE115A	CAP	1
11	QB-5/16	STEEL BALL	1
12	M1XTE108A	CONTROL VALVE	1
13	MIHTE107A	SPRING (P)	1
14	1120-413-D	CAP BOLT	1
15	MB02E006A	DIAPHRAGM	1
16	M1KTE111A	VALVE ROD	1
17	1120-419-F	* LATCH (1")	1
18	1110-410-01	LOCK SPRING	1
19	IUIS30,40,6	U CUP PACKING	1
20	LBI30,38,5,6.6	DUST SEAL	1
21	OG-60	O RING	1
22	OS-70	O RING	1
23	OP-22	O RING	1
24	OP-5	O RING	1
25	OP-14	O RING	1
26	OP-12.5	O RING	1
27	OBG-60	BACK UP RING	1
28	OBP-22	BACK UP RING	1
29	OBP-14	BACK UP RING	1
30	OBP-5	BACK UP RING	1
31	W18S1	SEAL WASHER	2
32	W6S1	SEAL WASHER	1

Component Identification



item

1. Control lever
2. Pressure hose inlet
3. Return hose inlet
4. Drive adapter

Notes

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 APPLICATIONS FOR WHICH IT IS NOT INTENDED.

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: OPERATE THE MACHINE WITHOUT SOLID FOOTING OR WITH THE MACHINE ELEVATED ABOVE YOUR HEAD.

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

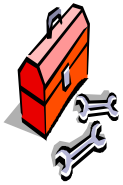
Helpful Tips & Service

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 100' of hose from the pack to the driver.

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.



As well if you have your *SKIDRIL* serviced annually you will continue to enjoy the security of a limited life time warranty.

Where to obtain service:

***SKIDRIL* services the products it sells so send it to:**

SKIDRIL INC., 235 LABRADOR DRIVE, RANDLEMAN, NC, 27317 U.S.A.

How to ship:

NOTICE: Do not ship gasoline-powered equipment by airfreight, even after emptying all fluids, as this is in violation of FAA regulations. Use a ground freight carrier instead.

PACKAGING:

Be certain to effectively pack the machine so as to pre vent damage or loss.