Specifications

MODEL	**HB24**
WEIGHT	**56.3 LBS.**
SIZE (LXW)	**29.4X17.0X5.4**
IMPACT ENERGY	**82 LB-FT**
IMPACT RATE	**1200-1800 BPM**
OPERATING PRESSURE	**1200-1500 psi**
REQUIRED OIL FLOW4.	**5.5-7 GPM**
MAX PRESSURE	**1600 PSI**
HOSE SIZE	**3/8" -1/2" DIA.**

THIS MANUAL IS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT SERIAL NUMBER

_____

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

SKIDRIL

OPERATION & PARTS MANUAL

ANTI-VIBE HYDRAULIC BREAKER/DRIVER TAMPER MODEL HB24

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

FOLLOW ALL SAFETY INSTRUCTIONS

1-800-843-3745

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Service Notes

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Parts List Continued

NO.	CODE	DESCRIPTION	Q'TY	NO.	CODE	DESCRIPTION	Q'TY
43	BH – 12 x 60	BOLT	1	64	OP – 14	O RING	1
44		HIGH PRESSURE HOSE	1	65	OBP – 5	O RING	1
45		LOW PRESSURE HOSE	1	66	OP – 5	O RING	1
46	QC – 03M	QUICK COUPLER (MAILE)	1	67	OP – 12.5 1B	O RING	1
47	QC – 03F	QUICK COUPLER (FEMALE)	1	68	PR – 6 x 30	SPRING PIN	2
48	BH – 12 x 50	BOLT	1	69	PR – 5 x 26	SPRING PIN	1
49	WF – 12 – 2L	WASHER	2	70	AWSC-E-D12-V6.5-T6	METAL WASHER	1
50	WF – 14 2L JIS B1252	WASHER	2	71	BH – 8 x 16	BOLT	8
51	QB – 5/16"	STEEL BALL	1	72	BH – 6 x 12	BOLT (SUS)	2
52	FNGLCH – V6.5 – D14 – L19	METAL COLLAR	1	73	BH – 5 x 15	BOLT	4
53	SH – 6 x 20	HEX. STOPPER	1	74	WS – 8	WASHER	8
54	OS – 22.4	O RING	1	75	WS – 6	WASHER	2
55	CO 06134	O RING	1	76	WS – 5	WASHER	4
56	MB800 – 040	EXPANDAR	3	77	OG – 70	O RING	1
57	MB29Z002A	CAM	1	78	MB29Z008A	SPACER 2	2
58	MB29Z006A	PLATE	1	79	NO5551	SPRING	2
59	FWSSB – D21 – V8 – T3	METAL WASHER	4	80	SH - 6 x 6	STOPPER	1
60	DUB 14 x 12	DU BUSH	8				
61	NO.7132	SPRING	1				
62	NO.5525	SPRING	2				
63	OBP – 14	O RING	1				

Operation

PREPARATION FOR USE

1. Be Sure the power supply you are using provides the correct flow and pressure for the HB20E. (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. Insert a driver tool or chisel point in the machine but pushing the tool holder (item 4 Pg. 1) down. Once inserted fully lock tool in place by lifting up on the tool holder.

4. Connect the driver to the hoses from the power supply (pressure goes into top hose on driver (SEE COMPONENT IDENTIFICATION SECTION).

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

6. By squeezing the safety-control-lock (item 5 Pg. 1) and then depressing the control-handle (item 4 Pg. 1) handle the breaker/ driver will begin to impact.

7. Release the control handle to stop the machine.

NOTICE!

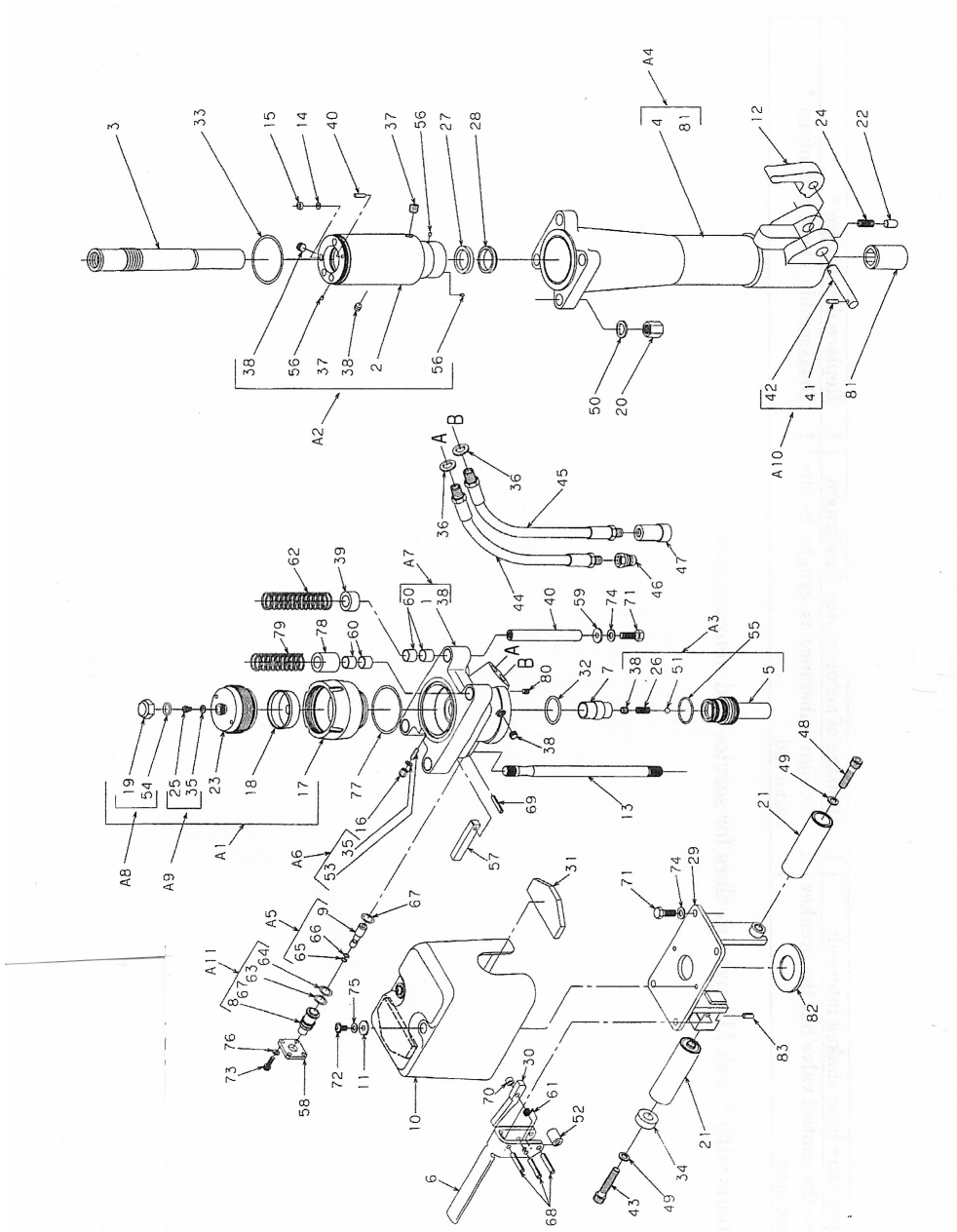
** **ALWAYS** Be sure your power source provides the correct pressure and flow as damage may occur, or performance may be reduced!*
** **ALWAYS** Connect hydraulic hoses to the the tool before starting the power supply*
** **ALWAYS** be sure couplers are clean and free of debris before connecting!*
**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

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



Troubleshooting

1. The Tool 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 Tool. Clean all debris from valve body. Reassemble.
****Broken control valve.**	Replace control valve.

2. The Tool 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 Tool and clean 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. 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. Tool 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 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 Tool.

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 Tool 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 TOOL, CHISEL POINT OR FASTENERS AND HAVE REPAIRED OR REPLACED BEFORE USING FURTHER.	
**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 2 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

NO.	CODE	DESCRIPTION	Q'TY	NO.	CODE	DESCRIPTION	Q'TY
1	MB29X010A	VALVE BODY	1	22	M1KTE173A	LOCK PIN	1
2	MB20Y002A	CYLINDER	1	23	MB03E105A	LID (H)	1
3	MB20Y019A	PISTON	1	24	MB20Z108A	LOCK SPRING	1
4	MB20X012A	FRONT END	1	25	1120 – 413	CAP BOLT	1
5	MB20Y005A	INNER TUBE	1	26	M1HTE107A	SPRING (P)	1
6	MB29Z003A	CONTROL LEVER	1	27	IUI335.5, 45,6	U CUP PACKING	1
7	MB24Z008A	CONTROL VALVE	1	28	LBI35.5, 43.5,5,6.5	DUST SEAL	1
8	M2LTE108A	VALVE GUIDE	1	29	MB29Y014A	HANDLE STAY	1
9	M1KTE111A	VALVE ROD	1	30	MB19Z025A	LEVER	1
10	MB29Y016A	COVER	1	31	MB29Z024A	RUBBER	1
11	MB19Z047A	COLLAR	2	32	OP – 38	O RING	1
12	MB20Z017A	LATCH	1	33	OG – 75	O RING	1
13	MB29Z009A	DRAW BOLT	4	34	MB29Z007	COLLAR H	1
14	MB20Z014A	ORIFICE (4.5)	1	35	W6 – S1	SEAL WASHER	2
15	MB20Z015A	SPACER	1	36	W18 – S1	SEAL WASHER	2
16	MB24Z035A	CAP NUT	1	37	BPH1 – PT1/4	PLUG	1
17	M1KTD105A	SHELL	1	38	BPH1 – PT1/8	PLUG	8
18	M1KTE106A	DIAPHRAGM	1	39	MB29Z005A	SPACER	2
19	M2LTE115A	CAP	1	40	MB29Z001A	SUPPORT	4
20	120 – 423A	NUT	4	41	PG – 6 x 25	PIN	2
21	M1KTE119A	HANDLE GRIP	2	42	MB20Z031A	PIN	1

Component Identification

item

1. Accumulator
2. Pressure inlet
3. Return hose inlet
4. Control handle
5. Safety control lock
6. Tool latch

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 MISSING PARTS.

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.