

Specifications

MODEL	HP18
WEIGHT	46 LBS.
SIZE (LXW)	20 X 10"
IMPACT ENERGY	50 LB-FT
IMPACT RATE	1200-1500 BPM
OPERATING PRESSURE	1600 psi
REQUIRED OIL FLOW	5.5-7.0 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 MODEL HP18

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

FOLLOW ALL SAFETY
INSTRUCTIONS



1-800-843-3745

Parts List Continued

REF.NO.	PART NO.	DESCRIPTION	QUANT
41	1011-06	ADAPTER	2
42	QC03M	COUPLER (MALE)	1
43	QC03F	COUPLER (FEMALE)	1
44	MB18Z012A0	HANDLE PIPE ASSEMBLY	1
45	MB08Z012A0	SPRING STAY	1
46	QB-5/16	BEARING	1
47	BH-12X25	BOLT	1
48	BH-12X70	BOLT	1
49	WS-12	SPRING WASHER	2
50	BH-8X35	BOLT	8
51	BH-8X30	BOLT	1
52	WS-8	SPRING WASHER	10
53	SAWANE-	SPRING	1
54	WP-12	SPRING WASHER	2
55	APT1/8	GREASE NIPPLE	1
56	N1-8	NUT	1

Operation

PREPARATION FOR USE

1. Be Sure the power supply you are using provides the correct flow and pressure for the BH163D. (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!

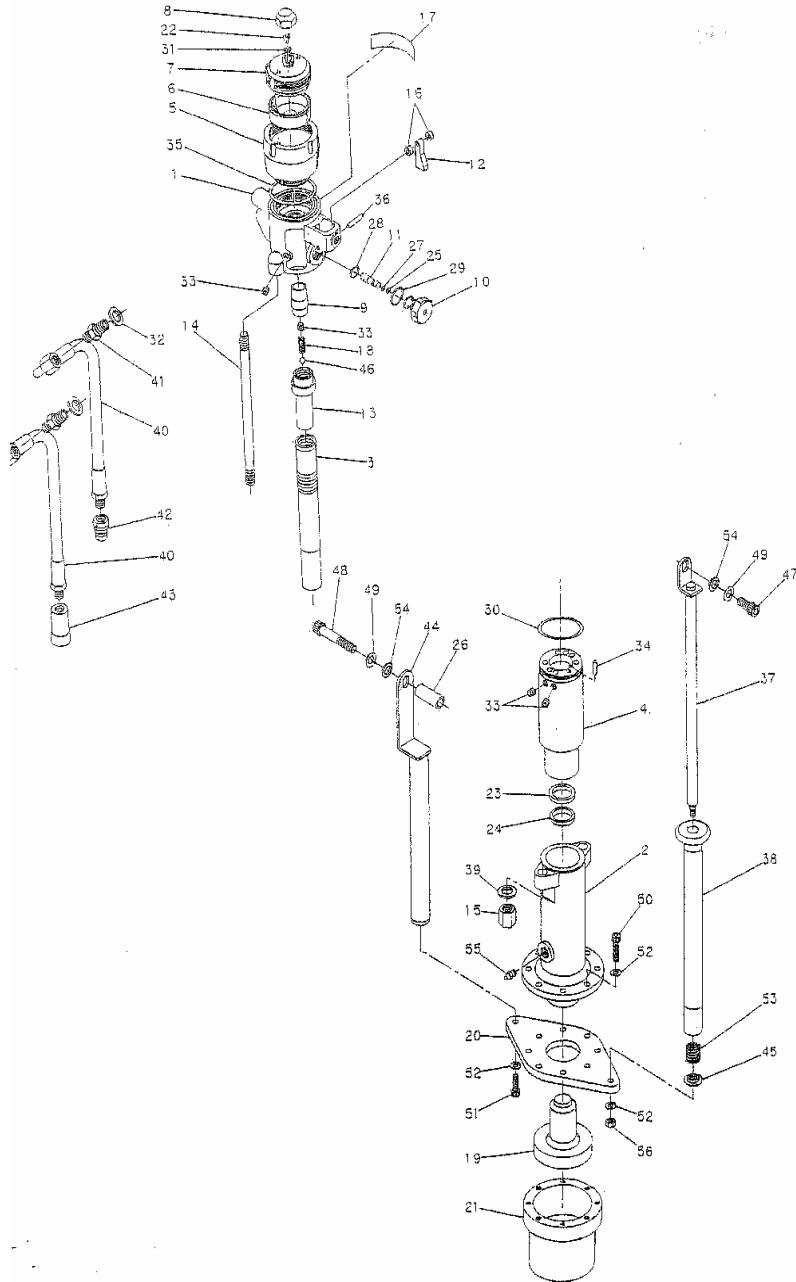
- * **ALWAYS**
Be sure your power source provides the correct pressure and flow as damage may occur, or performance may be reduced!
- * **ALWAYS**
Connect hydraulic hoses to the the tool before starting the power supply
- * **ALWAYS** be sure couplers are clean and free of debris before connecting!
- * **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.

Exploded View - Driver



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 completely 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 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. Test by allowing power supply to cool down for 15-30 minutes, then try again. If Driver operates contac 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.

<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
Low nitrogen accumulator gas pressure. **	Charge nitrogen accumulator to 50kg/cm ² . **
Broken accumulator diaphragm. **	Replace accumulator diaphragm. **
Oil temperature too high.	Stop power supply. Check/fill oil level. Contact your power supply manufacturer.

4. The Driver suddenly stops during operation.

<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
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.

<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
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.

<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
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.

<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
The nitrogen accumulator diaphragm is damaged. **	Replace diaphragm. **

8. The Driver does not stop impacting when the control handle is released.

<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
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.**

DAILY

***GREASE HAMMER END OF**

****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**

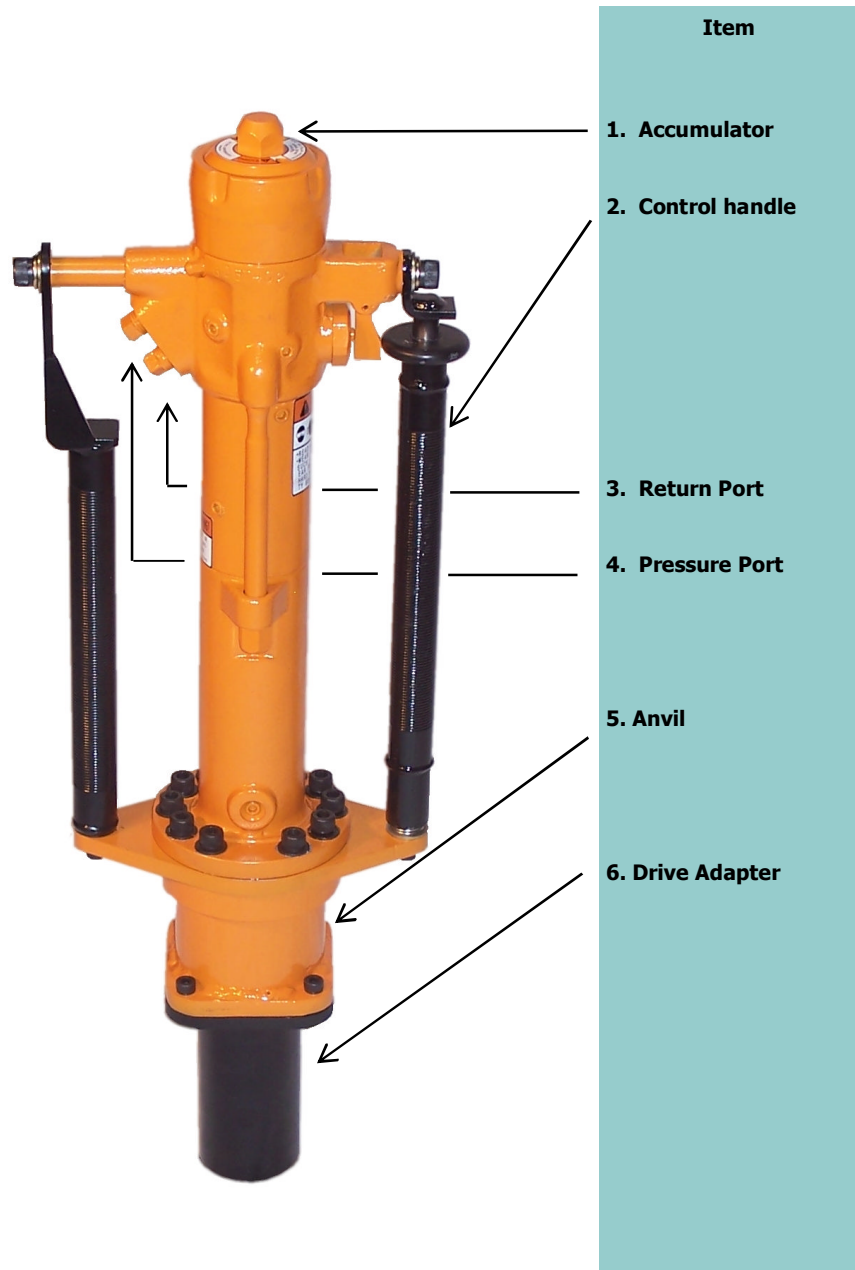
EVERY 3 YEARS

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

Parts List

<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QUANT</u>
1	MIXTC101A9	VALVE BODY	1
2	MB18X002A1	FRONT CAP	1
3	MIXTD103A7	PISTON (A)	1
4	M1XTD104B5	CYLINDER (A)	1
5	MIXTD105A3	SHELL	1
6	MB02E006A0	DIAPHRAGM	1
7	M1XTE110A2	LID	1
8	M1KTE108A3	NUT	1
9	MIXTE108A5	CONTROL VALVE	1
10	M1KTE110A4	VALVE GUIDE	1
11	MIKTE111A6	VALVE ROD	1
12	MB08Z015A0	CAM	1
13	M1XTE109A0	INNER TUBE	1
14	M1XTE111A1	THROUGH BOLT	2
15	1120-423	NUT	2
16	MB082Z014A0	SLEEVE	2
17	M1XTE117A0	STICKER	1
18	MIHTE107A1	SPRING (P)	1
19	MB18Z005A0	ANVIL FLAT	1
20	MB18Z004A0	FLANGE	1

Component Identification



Parts List Continued

REF.NO.	PART NO.	DESCRIPTION	QUANT
21	MB18Y001A0	POST ADAPTER	1
22	1120-413-C	CAP BOLT	1
23	IS130.40.6	U-CUP PACKING	1
24	LBI30.38.5.6.5	DUST SEAL	1
25	OBP-5	BACK-UP RING	1
26	MB12Z008A0	COLLER	1
27	OP-5	O-RING	1
28	OP-14	O-RING	1
29	OC-0621	O-RING	1
30	OG-60	O-RING	1
31	W06S1	SEAL WASHER	1
32	W1/2	SEAL WASHER	2
33	BPH1-PT1/8	BOLT	8
34	PR-6X20	PIN	1
35	OG-65	O-RING	1
36	PR-5X36	PIN	1
37	MB18Z006A0	HANDLE SHAFT	1
38	MB18Z011A0	HANDLE GRIP ASSEMBLY	1
39	WF-14-2L	WASHER	2
40	17091-30	HOSE	2

SAFETY FIRST

READ, UNDERSTAND AND FOLLOW SAFETY GUIDELINES AND SAFE WORK



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 OIL WHEN FILLING THE MACHINE.

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

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.

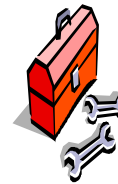


To maximize driving power, do not use more than 25' of hose from the pack to the driver.



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.



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:

NOTICE: Use a ground freight carrier . Most major carriers can deliver the machine to us and back to you.