

SPECIFICATIONS

MODEL	180
WEIGHT	54 LB.
ENGINE	
TYPE	SINGLE CYLINDER, AIR COOLED.
DISPLACEMENT	187 cc
CARBURATION	DIAPHRAGM (floatless) W/NEEDLE
AIR CLEANER	WASHABLE
STARTER	RECOIL
IGNITION	ELECTRONIC
SPARK PLUG	NGK BPM4A
FUEL TANK SIZE	0.30 US GALLON
FUEL MIX RATIO	16:1
FUEL MIX OIL TYPE	SAE 30 OR 40
FUEL TYPE	REGULAR NO LEAD
IMPACT RATE	2400-3000 BPM

IMPACT/DRILL SECTION

LUBRICATIONBY FUEL MIX	
SHANK SIZE	4-1/4"X7/8" HEX
DRILL DEPTH	10 FEET
MAX DRILL RATE	12"/MIN
MAX DRILL RPM	250
ANGLE OF USE	360 DEGREES

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

DRILL/BREAKER MODEL 180

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

FOLLOW ALL SAFETY
INSTRUCTIONS

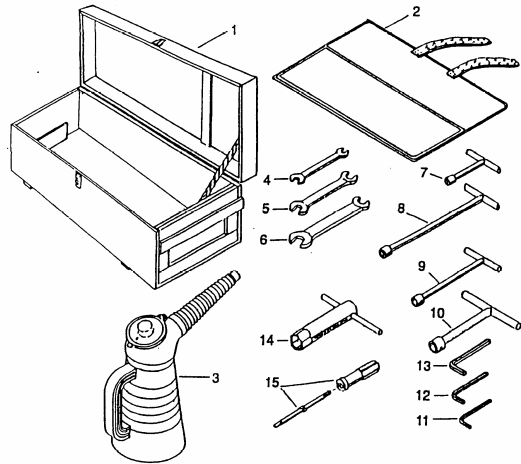


1-800-843-3745

PARTS LIST CONTINUED

Group 9 Accessories & Tools

No.	Part No.	Description	Q'ty	Remark (No. 4-15)
A1	1044-091	Repair tool kit	1	
1	1044-901	Container box	1	
2	1044-902	Tool bag	1	
3	1044-903	Fuel mixing can	1	
4	YS-5507	Double-ended wrench 5.5x7	1	
5	YS-1013	Double-ended wrench 10x13	1	
6	YS-1922	Double-ended wrench 19x22	1	
7	YB-08	Socket wrench 8	1	
8	YB-10	Socket wrench 10	1	
9	YB-13	Socket wrench 13	1	
10	YB-19	Socket wrench 19	1	
11	YL-02	Allen wrench 2	1	
12	YL-04	Allen wrench 4	1	
13	YL-05	Allen wrench 5	1	
14	YZ-001	Sparkplug socket wrench	1	
15	YK-1	Double use screwdriver	1	



CONTENTS



CONTROL IDENTIFICATION 4



OPERATION 5



TROUBLE SHOOTING 9



MAINTENANCE 12



EXPLODED VIEW/PARTS 14



HINTS/WARRANTY/SERVICE 23

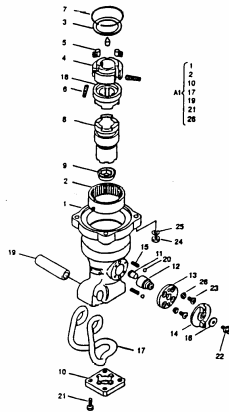


SPECIFICATIONS 24

PARTS LIST CONTINUED

Group 7 Front End

No.	Part No.	Description	Q'ty	Remark
A1	1044-072	Front end assembly	1	(1044-730, 702, 711, 719 SP-2085, BC-0814, BT-0615, SW-06)
1	1044-730	Front end	1	
2	1034-702	Ratchet gear	1	
3	1034-704	Thrust washer	1	
4	1034-705	Ratchet wheel	1	
5	1034-706	Ratchet trigger	3	
6	1034-707	Trigger spring	3	
7	1034-708	Ratchet snap ring	1	
8	1044-709-01	Internal shaft	1	
9	1034-710	Air seal	1	
10	1044-711-01	End plate	1	
11	1034-712	Selector pin	1	
12	1014-713-02	Rotor	1	
13	1014-714-02	Stopper plate	1	
14	1014-715-02	Mode selector	1	
15	1014-716-01	Pressure spring	2	
16	1014-717	Retaining plate	1	
17	1044-719	Tool holder	1	
18	1024-720	Clutch wheel	1	
19	SP-2085	Spring pin ø20x85	1	
20	SB-1/4	Steel ball ø1/4	2	
21	BC-0814	Hex socket bolt M8x14	4	
22	GT-0615	Hex socket bolt M6x15	1	
23	CS-0614	Counter sunk hex socket bolt M6x14	4	
24	NU-08	U-nut M8	4	
25	SW-08	Spring washer 8	4	
26	LW-C06	Washer w/teeth 6	4	



PREPARATION FOR USE

1. Fueling:

- A. MIX **16 TO 1** REGULAR NO-LEAD GASOLINE WITH **SAE 30 OR 40** ENGINE OIL IN AN APPROVED 1 GALLON CONTAINER.
 B. REMOVE FUEL CAP (**ITEM 7, P4**)
 C. FILL TANK, 2/3. TANK WILL HOLD APPROX. 1/3 GALLON
 D. ALWAYS BE SURE TO SHAKE THE CAN **BEFORE FUELING!**

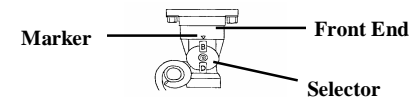
2. Before operation:

BEFORE OPERATION PERFORM DAILY INSPECTION PER MAINTENANCE SECTION (P 12) OF THIS MANUAL.

- A. FILL FUEL TANK (**ITEM 4, P4**).
 B. ATTACH A TOOL FOR THE REQUIRED JOB (CHISEL, DRILL ROD.) BY FIRST OPENING THE TOOL LATCH (**ITEM 14, P4 & SKETCH BELOW**), BY PUSHING FORWARD WITH YOUR FOOT.



- C. INSERT TOOL AND CLOSE LATCH BY PUSHING DOWNWARDS WITH YOUR FOOT.
 D. SELECT APPROPRIATE OPERATING MODE (DRILL OR BREAK) BY TURNING THE TOOL AND SELECTOR (**ITEM 14, P4 & SKETCH BELOW**) AT THE SAME TIME.
 E. THE MACHINE IS SET IN THE CORRECT MODE WITH THE SELECTOR IN THE UPRIGHT AND VERTICAL POSITION.

**Notice:**

- * **Do not:** Use 2 cycle oils or other than 30 or 40 weight.
- * **Do not:** Fill above 2/3 level (SKIDRIL logo), on fuel tank.
- * **Do not:** Mix fuel in machine as damage may occur!
- * **Failure** to shake the fuel can may result in damage to the machine!

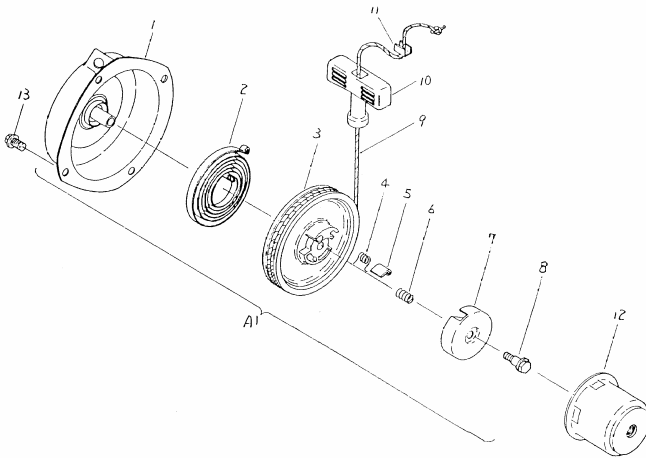
**Warning:**

- * **Do not:** Fuel a hot machine!
- * **Do not:** Smoke While Fueling!
- * **Do not:** Operate the machine without reading and understanding the safety section of this manual!
- * **Do not:** Use the machine without first contacting the Utilities for a 'Locate'!
- * **Do not:** Use the machine without reading and understanding the safety section of this manual!
- * **Do not:** Start without solid, safe footing!

PARTS LIST CONTINUED

Group 5 Starter

No.	Parts No.	Parts Name	Qty	Remarks
A1	1044-051	Starter ass'y	1	1044-501-511
1	-501	Case, Starter	1	
2	-502	Spring, rope Recoil	1	
3	-503	Pulley Starter	1	
4	-504	Spring, dog	1	
5	-505	Dog	1	
6	-506	Spring, retainer	1	
7	-507	Retainer	1	
8	-508	Center bolt	1	
9	-509	Rope, starting	1	
10	-510	Grip, starting	1	
11	-511	Stopper, starter rope	1	
12	-512	Pulley crank	1	
13	BF-0612	Bolt, hex w/flange m6x12	4	

OPERATION CONTINUED6. Drilling notes:

- A. ATTACH A DRILL ROD BY OPENING THE TOOL HOLDER (ITEM 14, P4 & SKETCH P5).
- B. INSERT DRILL ROD.
- C. CLOSE TOOL HOLDER.
- D. SELECT DRILL MODE BY TURNING THE SELECTOR AND TOOL AT THE SAME TIME.
- E. LOCK SELECTOR WITH "D" IN UPRIGHT AND VERTICAL POSITION.
- F. START THE MACHINE PER INSTRUCTIONS ON PAGE 6.
- G. ANGLE THE MACHINE WHILE DEPRESSING THE THROTTLE TO SLOW THE ENGINE, IN ORDER TO CUT A CRESCENT IN THE ROCK / CONCRETE.
- H. AS THE BIT BEGINS TO PENETRATE THE MATERIAL GRADUALLY INCREASE THE SPEED OF THE MACHINE BY RELEASING THE THROTTLE, WHILE BRINGING THE MACHINE TO THE VERTICAL POSITION.
- I. APPLY MINIMAL PRESSURE WHILE DRILLING TO ACHIEVE MAXIMUM PERFORMANCE.
- J. TO STOP THE MACHINE, TURN THE NEEDLE (ITEM 1, P4 & SKETCH P6) CLOCKWISE (TO THE RIGHT).

7. Breaking notes:

- A. ATTACH A CHISEL BY OPENING THE TOOL HOLDER (ITEM 14, P4 & SKETCH P5).
- B. CLOSE THE TOOL HOLDER.
- C. SELECT BREAKER MODE BY TURNING THE SELECTOR KNOB AND TOOL AT THE SAME TIME.
- D. LOCK THE SELECTOR WITH "B" IN THE UPRIGHT AND VERTICAL POSITION.
- E. START THE MACHINE PER INSTRUCTIONS ON PAGE 6.
- F. APPLY ENOUGH DOWN PRESSURE TO PREVENT THE MACHINE FROM BOUNCING.
- G. TO STOP THE MACHINE TURN THE NEEDLE (ITEM 1, P4 & SKETCH P6) CLOCKWISE (TO THE RIGHT).

Notice:

*The machine is intended to drill rock or concrete only.
*If the bit sticks in the hole the machine may rotate slightly, then stop drilling.

First stop the machine then free the drill rod with water or by pulling upwards while rotating the machine.

*Note: As the bit penetrates the material, you may need to lift the machine while drilling to clear the hole.

*Note: When using larger bits (3"+) you may have to raise the machine then drop it back in the hole to clear the drill cuttings.

Warning:

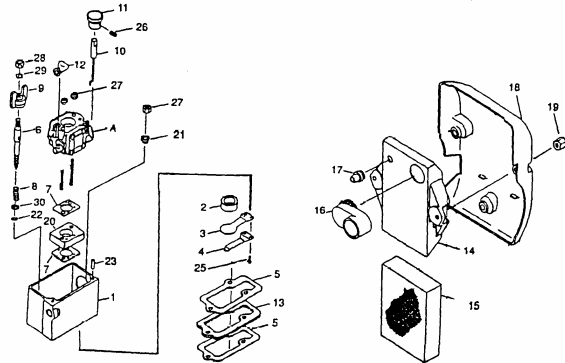
*Do not: Touch drill rod/ chisel while machine is operating!

*Do not: Use more than one person to start the drill hole!

PARTS LIST CONTINUED

Group 3 Carburetor & Cleaner

No.	Part No.	Description	Q'ty	Remark
A1	1044-031	Carburetor assembly	1	
1	1044-301-03	Carburetor box	1	
2	1044-302	Valve seat	1	
3	1044-303	Reed valve	1	
4	1044-304	Retainer	1	
5	1044-305-01	Carburetor box gasket	2	
6	1044-306	Needle screw	1	
7	1044-307	Carburetor gasket	2	
8	1044-308	Needle screw spring	1	
9	1044-309	Fuel knob	1	
10	1044-310-02	Throttle rod	1	
11	1044-311	Throttle rod	1	
12	1044-312	Pipe joint	1	
13	1044-313	Bakelite plate	1	
14	1044-315	Air cleaner element case	1	
15	1044-316	Air cleaner element	1	
16	1044-317	Pipe suction	1	
17	1044-318	Air joint	1	
18	1044-319	Air cleaner cover	1	
19	1044-320	Nut w/groove	3	
20	1044-322-01	Bakelite, spacer	1	
21	1044-323	Bakelite, collar	3	
22	OR-P5	O-ring P5	1	
23	PN-04138	Knock pin $\phi 4 \times 13.8$	2	
24	BS-05540912(SUS)	Stud, M5x54 t=9 s=12	2	
25	MS-0308	Phillips screw w/spring washer M3x8	2	
26	NH-0406	Hex socket screw M4x6	1	
27	NN-05	Lock nut w/flange M5	5	
28	NT-05	Hex nut M5	1	
29	SW-05	Spring washer 5	1	
30	KW-05	Washer 5	6	



TROUBLE SHOOTING STARTING

STEP 1:
FOLLOW PROCEDURES FOR STARTING A FLOODED MACHINE ([PAGE 8, ITEM 8](#)).

STEP 2:
CHECK FUEL LEVEL IS ABOVE 1/4 TANK. USE NORMAL STARTING PROCEDURES ([PAGE 6](#)).

STEP 3:
REMOVE SPARK PLUG AND CLEAN IF REQUIRED. USE NORMAL STARTING PROCEDURES ([PAGE 6](#)).

STEP 4:
PLACE SPARK PLUG IN PLUG CAP AND TOUCH TO SPARK PLUG OPENING IN LOWER COVER, PULL CORD (SHIELD PLUG FROM DIRECT SUNLIGHT), LOOK FOR A SPARK. REPLACE IF REQUIRED. **REGAP NEW OR CLEANED PLUG TO 45/1000 OF AN INCH USE ONLY BPM4A BY NGK!**

USE NORMAL STARTING PROCEDURES ([PAGE 6](#)).

STEP 5:
INSPECT SPARK PLUG WIRE FOR DAMAGE, REPLACE IF REQUIRED. USE NORMAL STARTING PROCEDURES ([PAGE 6](#)).

STEP 6:
VIEW FUEL SIGHT ON SIDE OF TANK, LOOKING FOR AIR BUBBLES. IF AIR BUBBLES ARE PRESENT FUEL LINE MAY BE DAMAGED. INSPECT AND REPLACE IF REQUIRED. USE NORMAL STARTING PROCEDURES ([PAGE 6](#)).

STEP 7:
INSPECT AND CLEAN AIR FILTER. USE NORMAL STARTING PROCEDURES ([PAGE 6](#)).

STEP 8:
[CONTACT SKIDRIL AT 1-800-843-3745](tel:1-800-843-3745)

Notice:

***Do not:** Attempt repairs beyond what is indicated in this manual as damage may result and warranty could be voided.

***Do not:** Use any plug other than **NGK# BPM4A!**

Warning:

*Repairs beyond what is indicated in this manual should not be made, as injury to personnel could occur!

*Repairs should be made only by an authorized service center or SKIDRIL.

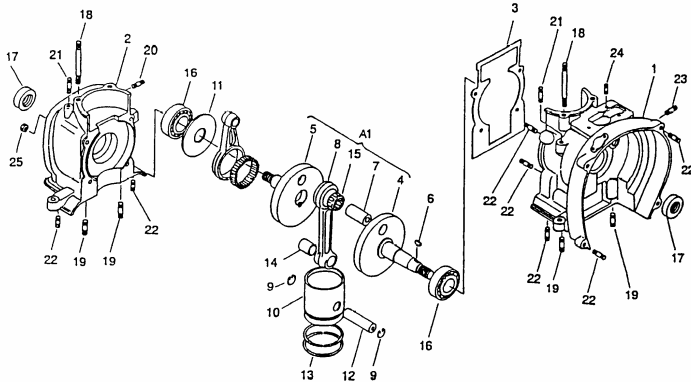
***Do Not:** Operate the machine with missing or damaged parts!

PARTS LIST EXP. VIEW

PARTS LIST

Group 1 Crankcase

No.	Parts No.	Parts Name	Q'ty	Remark
A1	1044-011-01	Crankshaft assembly	1	(1044-106,107, 110, 111, 118, KT-182412EG)
1	1044-102-01	Crankcase, magneto side	1	
2	1044-103	Crankcase, starter side	1	
3	1044-104	Gasket, crankcase	1	
4	1044-106	Crankshaft, magneto side	1	
5	1044-107	Crankshaft, starter side	1	
6	1014-108	Key, wood ruff	1	
7	1044-110	Crank pin	1	
8	1044-111	Connecting rod, engine	1	
9	1044-112	Snap ring	2	
10	1044-113	Piston, engine	1	
11	1044-115	Washer, thrust	1	
12	1044-116	Pin, engine piston	1	
13	1044-117	Ring, engine piston	2	
14	1044-118	Bushing, engine piston pin	1	
15	KT-182412EG	Needle cage	1	
16	BR-6304C4	Ball bearing	2	
17	OS-AC1013AQ	Oil seal	2	
18	BS-08781212	Stud bolt, M8x78 t=12 s=12	4	
19	BS-08201514	Stud bolt, M8x20 t=15 s=14	4	
20	BS-06251212	Stud bolt, M6x25 t=12 s=12	2	
21	BS-06221014	Stud bolt, M6x22 t=10 s=14	2	
22	BS-06161212	Stud bolt, M6x16 t=12 s=12	12	
23	BS-06161012	Stud bolt, M6x16 t=10 s=12	1	
24	BS-05200912(SUS)	Stud bolt, M5x20 t=9 s=12	3	
25	NL-06	Nut, lock M6	4	



TROUBLE SHOOTING BREAKING

PROBLEM 1:

THE MACHINE RUNS BUT DOES NOT BREAK.

A. CHECK IF MIX IS CORRECT (SHOULD BE 1:16 SAE 30 OR 40 WEIGHT OIL AND REGULAR GASOLINE).

B. CHECK TOOL SHANK LENGTH (SHOULD BE 4-1/4" LONG MEASURED FROM COLLAR). REPLACE IF REQUIRED.

PROBLEM 2:

THE MACHINE BREAKS BUT WHEN DOWN PRESSURE IS RELEASED IT STOPS RUNNING.

A. MACHINE MAY REQUIRE SERVICE, CALL SKIDRIL AT 1-800-843-3745

PROBLEM 3:

THE MACHINE BREAKS NORMALLY UNTIL WARM

A. FUEL MIXTURE MAY BE INCORRECT CHECK AND REPLACE.

PROBLEM 4:

THE MACHINE BREAKS ONLY WHEN THROTTLE IS DEPRESSED (MACHINE IS SLOWED) OR WARM.

A. AS THIS LOWER SECTION (IMPACT END) OF THE MACHINE IS LUBRICATED LAST IT MAY BE NORMAL TO WARM THE MACHINE UP IN ORDER TO ACHIEVE NORMAL BREAKING ACTION.

B. FUEL MIXTURE MAY BE INCORRECT CHECK AND REPLACE.

Notice

***Do Not:** Use 2 cycle or multi grade oils!

Use of the incorrect mixture could damage the machine and void the warranty!

*Discontinue use of the machine until repairs can be made!



MAINTENANCE

1. Daily inspection:

- A. LOOK FOR LOOSE OR MISSING NUTS, BOLTS OR SCREWS.
- B. CHECK THE STARTER ROPE FOR WEAR AND REPLACE IF REQUIRED. SEE SKETCH M1, P13 & ITEM 3, P4).
- C. INSPECT THE TOOL/BIT AND SHANK FOR LENGTH OR CRACKS AND DISCARD IF REQUIRED.
- D. CHECK THE AIR FILTER AND CLEAN IF REQUIRED, SEE SKETCH M3, P13 & ITEM 9, P4).

2. Scheduled service:

ITEM	TIME (HRS)
CLEANING EXTERIOR	DAILY
CLEAN DIRT FROM FUEL TANK	DAILY
CLEAN/REPLACE SPARK PLUG (SEE SKETCH M2, P13 & ITEM 11, P4)	25
CLEAN AIR FILTER (SEE SKETCH M3, P13 & ITEM 11, P4)	20

3. Extended storage:

- A. REMOVE FUEL FROM TANK AND BURN EXCESS IN MACHINE.
- B. PLACE A FEW DROPS OF OIL IN ENGINE THROUGH SPARK PLUG OPENING.
- C. CLEAN AND KEEP DRY.



Warning:

***Do not:** Perform any service work without protective eye wear. Extra caution should be used when inspecting or repairing the starter rope!

***Do not:** Operate a machine with missing, damaged or loose parts.

Notice:

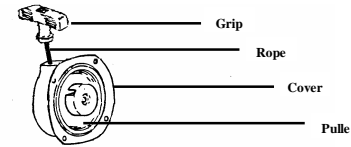
*Failure to follow this schedule may result in damage to the machine, and could void the warranty.

*Service beyond what is indicated here should not be performed by untrained persons, and could void the warranty.



MAINTENANCE CONT.

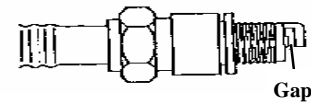
M1: Starter Rope (see p4, item 3)



To install a new Rope:
Check the pulley for spring tension by turning to the left. Tie knot in rope and feed through grip. Feed other end through cover and into pulley. Tie a knot on pulley end of rope.

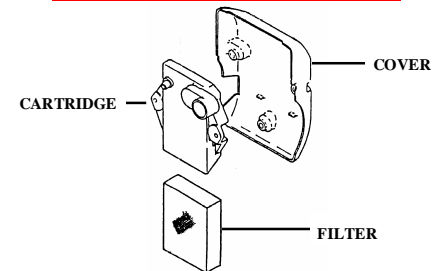
Pull slack in rope through case, rotate pulley 4 or 5 turns to the left. Pull cord out while holding pulley stationary. Release pulley, test

M2: Plug (see P4, item 11)



To Check Plug Gap: First remove and clean carbon or dirt using a wire brush. Using a feeler gauge check and adjust the plug gap to .040-0.45" Test for spark and replace if required.

M3: Air Filter (see P4, item 9)



To Check or Clean Air Filter: First unscrew 3 - 10mm fasteners. clean cover in and out. Check all fittings for cracks, clean or replace. clean air filter and cartridge. Replace cartridge ensure fittings are engaged fully.



Warning!

***Do Not: Attempt any repairs to the starter without using eye protection as injury can occur!**

***Do Not: Attempt any repairs to the starter if the spring is broken, this should be done only by authorized/trained SKIDRIL personnel!**

Notice:

*Be sure to apply sufficient torque to the spark plug, to eliminate unwanted loosening.
*Always install plug first by hand then tighten as damage may result!
***Do Not:** Use any plug other than **NGK# BPMA!** Reliability will be severely reduced and damage may occur!

Notice:

*Never operate the machine with a missing / damaged filter, or fittings.



TROUBLE SHOOTING DRILLING

PROBLEM 1:

THE MACHINE RUNS BUT DOES NOT DRILL.

A. CHECK THAT THE AIR HOLES IN BIT AND ROD ARE NOT PLUGGED, CLEAR IF REQUIRED.

B. CHECK IF FUEL MIX IS CORRECT (**SHOULD BE 1:16 SAE 30 OR 40 WEIGHT OIL AND REGULAR GASOLINE**).

C. CHECK TOOL SHANK LENGTH (4-1/4" LONG MEASURED FROM COLLAR). REPLACE IF REQUIRED.

D. CHECK BIT, IF WORN, REPLACE.

E. MACHINE MAY REQUIRE SERVICE. CALL SKIDRIL AT 1-800-843-3745

PROBLEM 2:

THE MACHINE DRILLS NORMALLY UNTIL WARM

A. FUEL MIXTURE MAY BE INCORRECT CHECK AND REPLACE IF REQUIRED.

B. MACHINE MAY REQUIRE SERVICE. CALL SKIDRIL AT 1-800-843-3745

PROBLEM 3:

THE MACHINE DRILLS NORMALLY UNTIL SEVERAL INCHES IN THE DRILL HOLE

A. LARGER BITS (3"+) REQUIRE PUMPING THE BIT IN THE HOLE TO HELP CUTTINGS REMOVAL. YOU MAY HAVE TO LIFT THE MACHINE AND DROP IT BACK IN THE HOLE TO PUMP CUTTINGS OUT.

B. THE MACHINE IS DESIGNED TO DRILL ROCK OR CONCRETE ONLY, CLEAR HOLE OF DIRT OR CHIPS.

C. THE DRILL HOLE DIRECTION CANNOT BE CHANGED ONCE STARTED AS THIS MAY CAUSE THE BIT TO STOP ROTATING. STRAIGHTEN IN HOLE AND DEPRESS THROTTLE TO START ROTATION, THEN RELEASE AS MORE SPEED IS REQUIRED.

Notice:

***Do Not:** Use 2 cycle or multi grade oils!

Use of the incorrect mixture could damage the machine and void the warranty!

Note:

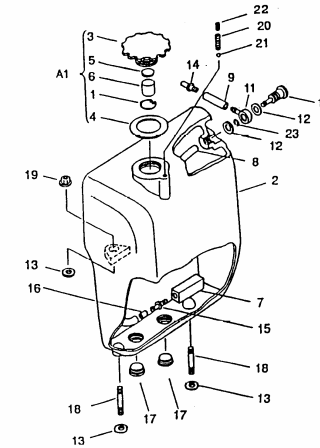
*You can use water (be sure to use enough) to clear large/deep holes, by pouring it in the hole.

*Do not attempt to drill dirt or asphalt as drilling will stop and bit may become plugged.

*If the direction of the bit is changed during drilling or the drill stops due to cuttings or dirt binding in the hole, lift up on the machine and depress the throttle to start drilling action. Then slowly lower the machine back into the hole. **This may also occur with Rebar!**

PARTS LIST CONTINUED

No.	Parts No.	Parts Name	Q'ty	Remark
A1	1044-021	Tank cap assembly	1	(1014-112,203, 204, 205, 1044-202)
	1014-112	Snap ring	1	
2	1044-201	Tank, fuel	1	
3	1044-202	Cap, filler	1	
4	1014-203	Gasket, filler cap	1	
5	1014-204	Gasket, filler cap valve	1	
6	1014-205	Filter, filler cap	1	
7	1044-208	Gasoline filter	1	
8	1044-209	Pipe, fuel (A)	1	
9	1044-210	Pipe, fuel (B)	1	
10	1044-211	Boil, joint	1	
11	1044-212	Joint, M10	1	
12	1044-213	Packing (A)	2	
13	1044-214	Packing (B)	4	
14	1044-215	Joint, hose	1	
15	1014-217	Fitting	1	
16	84-558	Check valve	1	
17	PT-1/2	Taper plug, hex socket PT 1/2	2	
18	BS-06151011	Stud bolt, M6x15 t=10 s=11	2	
19	NN-06	Nut, lock M6 w/flange	4	
20	98-389	Coil spring	1	
21	SB-1/4	Steel ball	1	
22	NH-0406	Screw	1	



... page 13.



OTHER STARTING METHODS

8. Starting a flooded machine:

MACHINE CAN BECOME FLOODED WHEN:

- A. PULLING THE STARTER SLOWLY, AS ELECTRONIC IGNITION WILL NOT GENERATE A SPARK, BUT WILL PUMP FUEL.
- B. A HOT MACHINE IS CHOKED DURING STARTING.
- C. THE MACHINE IS TRANSPORTED WITH FUEL IN THE TANK.
- D. THE MACHINE IS NOT STARTED IMMEDIATELY AFTER OPENING THE NEEDLE.
- E. THE FUEL TANK IS FILLED PAST THE 2/3 LEVEL (TOP OF SKIDRIL LOGO).

To deflood a machine:

- A. TURN NEEDLE (ITEM 1, P4& SKETCH P6) ALL THE WAY CLOCKWISE (TO THE RIGHT) OR OFF POSITION.
- C. **DO NOT DEPRESS THE THROTTLE!**
- B. PULL THE STARTER SEVERAL TIMES (10-15 IN SEVERE CASES), UNTIL THE MACHINE RUNS.
- C. ALLOW THE MACHINE TO RUN UNTIL IT STOPS.
- D. OPEN THE NEEDLE 2/3 COUNTER CLOCKWISE (TO THE LEFT), AND PULL THE CORD IMMEDIATELY.
- E. AFTER A FEW SECONDS TURN NEEDLE CLOCKWISE (TO THE RIGHT), TO FIND THE HIGHEST (LEANEST MIX) SPEED WITHOUT BACKFIRING.
- F. PROCEED WITH WORK PER NORMAL CONDITIONS.

10. Starting a hot (warmed up) machine:

1. FOLLOW ALL STARTING PROCEDURES (PER PAGE 6 OF THIS MANUAL, EXCEPT:

*ITEM 1

TURN NEEDLE 1/8 TURN FURTHER COUNTER CLOCKWISE (TO THE LEFT) FROM THE POSITION AT WHICH MACHINE WAS LAST RUNNING.

*ITEM 2.

DO NOT PUSH DOWN THROTTLE AS THE MACHINE DOES NOT REQUIRE PRIMING, AND FLOODING MAY OCCUR.

Note:

*You can determine if a machine is flooded when you smell fuel or see fuel coming from the exhaust pipe.

Note:

Be sure to pull the starter immediately following opening the needle as flooding may occur.

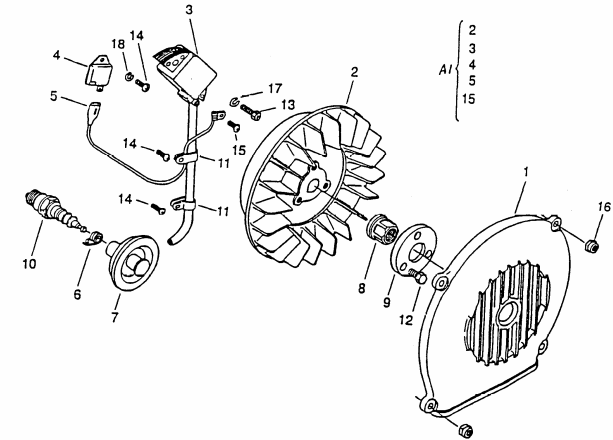
Note:

Be sure to pull the starter immediately following opening the needle as flooding may occur.

PARTS LIST CONTINUED

Group 4 Magneto (TCI) & Cooling Fan

No.	Parts No.	Parts Name	Q'ty	Remark
A1	1044-041	Magneto assembly	1	(1044-402, 1014-406, 1024-407, 411, MS-0305)
1	1044-401-01	Cover, magneto	1	
2	1044-402	Magneto, flywheel	1	
3	1014-406	Ignition coil	1	
4	1024-407	TCI unit	1	
5	1024-411	Connecting cord, TCI unit	1	
6	1014-413	Grip, plug head	1	
7	1024-414	Cap, spark plug	1	
8	1034-415	Nut, hex flywheel	1	
9	1034-416	Plate	1	
10	B-4H	Sparkplug B4H	1	
11	NK-5N	Nylon clamp 5	2	
12	BT-0615	Bolt, hex M6x15	3	
13	NS-0530	Screw, cross-recess-pan-hd M5x30	2	
14	NS-0406	Screw, cross-recess-pan-hd M4x6	3	
15	MS-0305	Screw w/spring washer, cross-recess-pan-hd M3x5	1	
16	NL-06	Nut, lock M6	4	
17	SW-05	Spring washer 5	2	
19	SW-04	Spring washer 4	3	



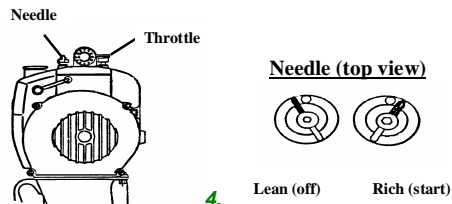


OPERATION CONTINUED

3. Starting (cold non flooded) machine:

- A. OPEN NEEDLE (ITEM 1, P4 & SKETCH BELOW) ALL THE WAY COUNTER CLOCKWISE (TO THE LEFT).
- B. PUSH DOWN AND HOLD THROTTLE (ITEM 6, P6), THIS WILL PRIME THE MACHINE.
- C. PULL THE STARTER GRIP (ITEM 3, P4), UNTIL THE MACHINE FIRES.
- D. RESTART MACHINE BY PULLING STARTER WHILE ONLY PARTIALLY DEPRESSING THROTTLE BUTTON.
- E. SLOWLY RELEASE THE THROTTLE AS THE MACHINE WARMS.
- F. GRADUALLY TURN THE NEEDLE (ITEM 1, P4 & SKETCH BELOW) CLOCKWISE (TO THE RIGHT) TO FIND THE HIGHEST SPEED WITHOUT BACKFIRING (LEANEST SETTING POSSIBLE).

**IF THIS TECHNIQUE FAILS
SEE PAGE 8. FOR STARTING A HOT OR FLOODED
ENGINE**



4. Stopping the machine:

TURN THE NEEDLE (ITEM 1, P4 & SKETCH ABOVE) ALL THE WAY CLOCKWISE (TO THE RIGHT) TO KILL THE MACHINE.

IF THE NEEDLE FAILS TO STOP THE ENGINE YOU CAN KILL THE MACHINE BY REMOVING THE SPARK PLUG CAP (ITEM 11, P4).

6. General Operating Info:

- A. BY PRESSING THE THROTTLE BUTTON (WHILE THE MACHINE IS RUNNING) THE MACHINE SPEED AND IMPACT FORCE IS **REDUCED**.
- B. **YOU NEED NOT APPLY EXCESSIVE PRESSURE** ON THE MACHINE DURING OPERATION, ESPECIALLY DURING DRILLING OPERATIONS AS SPEED/PERFORMANCE, MAY BE REDUCED. **ONLY APPLY ENOUGH DOWN PRESSURE TO PREVENT THE MACHINE FROM BOUNCING.**



Warning:

***Note:** Machine starts at full speed, be sure to be prepared to depress the throttle after/during starting, to slow the machine!

***Do not:** Switch from one mode of operation to another with the machine running!

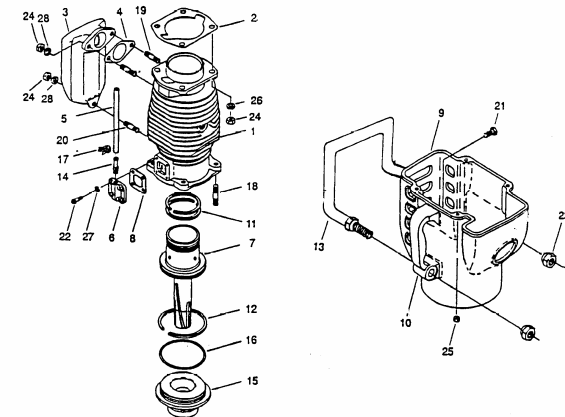
***Do not:** Start the machine without knowing which mode it is set in!

***Discontinue use of the machine until repairs can be made!**

PARTS LIST CONTINUED

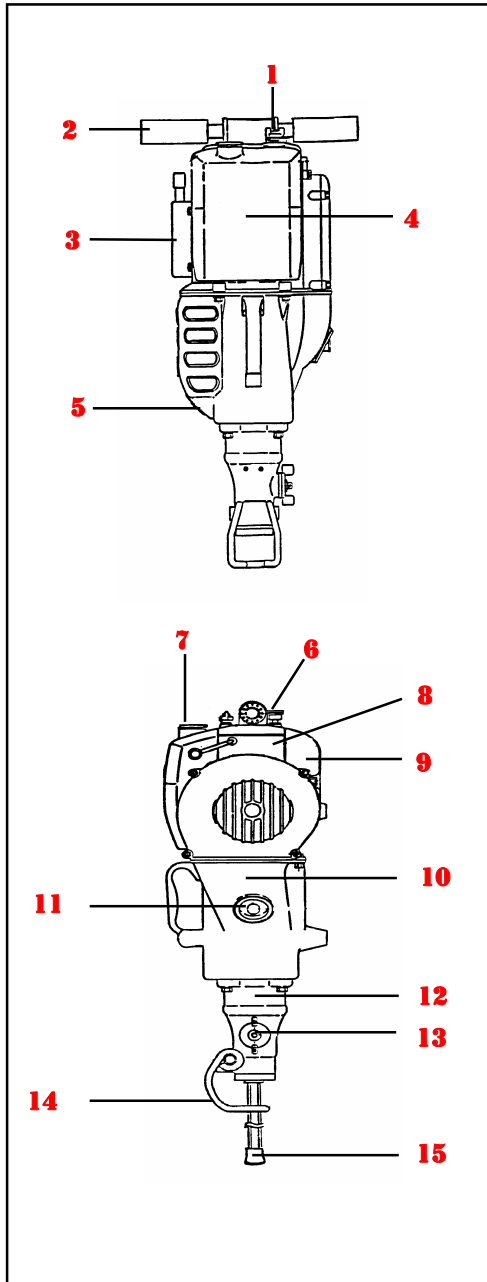
Group 6 Cylinder

No.	Part No.	Description	Q'ty	Remark
1	1044-601	Engine cylinder	1	
2	1044-602	Cylinder gasket	1	
3	1044-603	Exhaust pipe	1	
4	1044-606	Exhaust pipe gasket	1	
5	1044-607	Air hose	1	
6	1044-608-01	Air guide	1	
7	1044-609	Hammer piston	1	
8	1044-611	Air guide gasket	1	
9	1044-612-01	Cylinder cover	1	
10	1044-613	Lift handle	1	
11	1044-615	Small hammer piston ring	2	
12	1044-616	Large hammer piston ring	1	
13	1044-617	Side handle	1	
14	1044-618-01	Hose joint	1	
15	1044-653	Distance piece w/bushing	1	
16	4DG-80	O-ring G80	1	
17	TS-0730600	Hose clip	2	
18	BS-08211012	Stud, M8x21 t=10 s=12	4	
19	BS-08221514	Stud, M8x22 t=15 s=14	2	
20	BS-08190914	Stud, M8x19 t=9 s=14	1	
21	BT-0812	Hex head bolt M8x12	2	
22	BT-0515	Hex head bolt M5x15	4	
23	NF-14	Lock nut M14	2	
24	NU-08	U-nut M8	7	
25	NL-06	Lock nut M6	4	
26	SW-08	Spring washer 8	4	
27	SW-05	Spring washer 5	4	
28	SW-08(SUS)	Spring washer 8	3	





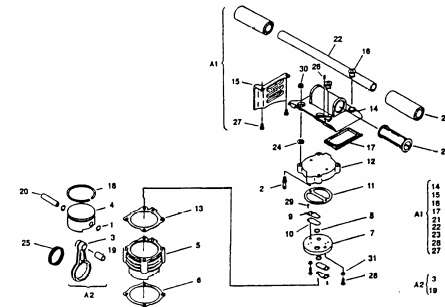
CONTROLS



ITEM
1. FUEL NEEDLE
2. TOP HANDLE
3. STARTER
4. FUEL TANK
5. EXHAUST PIPE
6. THROTTLE
7. FUEL CAP
8. CARB BOX
9. AIR FILTER
10. CYL. COVER
11. SPARK PLUG
12. FRONT END
13. MODE SELECTOR
14. TOOL HOLDER
15. TOOL

PARTS LIST CONTINUED

Group 8 Compressor				
No.	Part No.	Description	Q'ty	Remark
A1	1044-081	Handle assembly	1	(1044-812-815, 1044-819-821, PN-04138, BC-0510) (1044-801, 1044-817)
A2	1044-082	Connecting rod assembly	1	
1	1014-112	Snap ring	2	
2	1044-618-01	Hose joint	1	
3	1044-801	Compressor connecting rod	1	
4	1044-802	Compressor piston	1	
5	1044-803	Compressor cylinder	1	
6	1044-804	Cylinder gasket	1	
7	1044-805	Compressor valve body	1	
8	1044-806	Valve seat	2	
9	1044-807	Retainer	2	
10	1044-808	Reed valve	2	
11	1044-809	Valve body gasket	1	
12	1044-810-01	Cylinder head	1	
13	1044-811	Cylinder head gasket	1	
14	1044-812	Handle boss	1	
15	1044-813	Side cover	1	
16	1044-814	Rubber seal	2	
17	1044-815	Rubber packing	1	
18	1044-816	Compressor piston ring	1	
19	1034-817	Compressor piston pin bushing	1	
20	1044-818	Piston pin	1	
21	1044-819	Handle bushing	1	
22	1044-820	Handle pipe	1	
23	1044-821	Handle grip	2	
24	1044-822	Handle gasket	4	
25	SK-0398	Roller needle ø3x9.8	51	
26	PN-04138	Knock pin ø4x13.8	1	
27	BC-0510	Hex socket bolt M5x10	2	
28	SS-0618	Phillips screw M6x18	2	
29	MS-0308	Phillips screw w/washer M3x8	4	
30	NU-08	U-nut M8	4	
31	LW-CD6	Washer w/teeth 6	2	



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 THIS EQUIPMENT.

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

DO NOT: REFUEL A HOT OR RUNNING MACHINE.

DO NOT: SPILL FUEL WHEN FUELING THE MACHINE.

DO NOT: SMOKE WHILE FUELING OR OPERATING THE MACHINE.

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: OPERATE THE MACHINE INDOORS OR IN AN AREA WHERE EXHAUST GASES MAY COLLECT., OR WHERE VENTILATION IS NOT ADEQUATE.

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.

HELPFUL TIPS & SERVICE



IF the SPARK PLUG HAS TO BE FREQUENTLY REMOVED DUE TO FOULING...

***CHECK THAT OIL/FUEL MIX IS CORRECT**

***BE SURE THAT THE NEEDLE (PAGE 4, ITEM 1) IS BEING TURNED TO LEANEST (CLOCKWISE, TO THE RIGHT) POSITION AFTER STARTING/WARMING UP AS THE MACHINE REQUIRES A LEANER MIXTURE (LESS FUEL) THE HOTTER IT GETS.**



IF the STARTER ROPE BREAKS IN THE FIELD...

***TIE A KNOT ON THE FREE END, REMOVE STARTER AND WRAP CORD AROUND CRANK PULLEY (SEE PART 1044-512 PG 18, ITEM 12)**



IF YOU NEED AN EASY WAY TO OBTAIN THE CORRECT FUEL MIX RATIO (1:16 OIL TO GASOLINE)...

***mix 1/4 quart to 1 gallon of gasoline or 1/2 quart to 2 gallons**



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, NC 27317. Call us for a Repair Order Number prior to shipping.