

CP - 9BS HANDRILL

PNEUMATIC M & C 746

**FIRST EDITION
MARCH 1995**



WARNING — TO REDUCE RISK OF INJURY,
READ AND UNDERSTAND THIS INSTRUCTION
MANUAL BEFORE OPERATING TOOL.

Instruction and Parts Book for

PNEUMATIC HANDRILL

CP 9BS HANDRILL

WITH ROTATION RELEASE
(RIGHT HAND ROTATION)

**PROTECT YOUR INVESTMENT
IN THE WORLD'S FINEST AIR TOOLS
USE GENUINE CP REPLACEMENT PARTS**

The purchase of replacement parts of your CP tools deserves the same good judgment that resulted in the purchase of the tools themselves. Each genuine CP part is made from carefully selected and inspected material, subjected to sophisticated machinery and finishing processes

and heat-treated to produce just the right combination of hardness, ductility and impact resistance for its intended use. Each part is identical to, and made concurrently with, parts used in production tools. The use of parts other than genuine CP replacement parts can lead to sub-standard performance, early failure, possible damage of other parts and, in some instances, unsafe conditions.



**Chicago
Pneumatic**

Chicago Pneumatic Tool Company ★ 1800 Overview Drive ★ Rock Hill, SC 29730

R138067

GENERAL INSTRUCTIONS

WARNING: "ALWAYS CHECK FOR DAMAGED OR LOOSE HOSES AND FITTINGS BEFORE OPERATION WHIPPING HOSES CAN CAUSE SERIOUS INJURY".

For satisfactory performance, 80-90 psig (5.6 - 6.2 bar) of clean, dry air is required AT THE TOOL with tool operating. Hose should be 1/2" hose size or larger, used with couplings of a minimum 7/16" I.D. The use of a CA048360 CHICAGO PNEUMATIC Air Line Separator and Air Line Filter and a CA048362 CHICAGO PNEUMATIC Air Line Pressure Regulator mounted as closely as possible to the tool is recommended.

WARNING: "PROLONGED USE OF VIBRATING TOOLS BY CERTAIN USERS MAY BE HARMFUL TO HANDS AND ARMS."

Air Supply

Daily before using and before putting tool into operation, disconnect air hose and pour a small quantity of recommended oil into tool air inlet. Blow out air line to clear it of accumulated dirt and moisture, connect tool and operate on reduced throttle to allow oil to be carried to valve and cylinder.

CAUTION: Never use higher air pressure to increase the output of the tool. Overloading will drastically shorten the life of all internal parts.

WARNING: "DO NOT MOUNT AIR HOSE QUICK COUPLERS ON THE TOOL VIBRATION CAN CAUSE BREAKAGE RESULTING IN SERIOUS INJURY FROM WHIPPING AIR HOSES. USE A SHORT LEADER HOSE."

Lubrication

Daily before using and before putting tool into service, pour a small quantity of recommended oil into air inlet. Daily before using and after each four hours of service, remove pipe plug (33) and fill oil reservoir with recommended oil. In addition, use of a C132200 CHICAGO PNEUMATIC Air Line Lubricator installed at the end of each air pipe leading to this pneumatic tool is recommended to assure a constant and adequate supply of lubricant.

Indications of proper lubrication are the presence of an oil mist in the exhaust air and of slight traces of oil on drill or adapter shank. If these are not apparent, check oil reservoir, and make sure port leading from oil chamber to air passage is unobstructed.

Recommended Lubricants

CHICAGO PNEUMATIC Rock Drill Oil is recommended for use with Handrill and may be purchased under the following symbol :

1 pint can-----R087975

If recommended oil is not available, use a good grade SAE #10 rock drill oil.

AIOLENE OILS:

1 pt. can -----P137646

1 pt. can -----P137145

1 gal. can -----P089507

5 gal. can -----P089508

The use of synthetic oils is NOT RECOMMENDED due to possible damage to seals, "O" rings, hoses, blades and polycarbonate oiler / filter bowls.

Loss of Power / Erratic Action

Drill failure, loss of power or erratic action may be caused by factors outside the tool. Make the following checks.

When ordering spare parts, give Name, Speed or Size, Model and Serial Number of the tool and Part Number and Descriptions of each part desired.

1. Check air pressure. For rated performance, 80 - 90 psig (5.6 - 6.2 bar) air pressure is required AT THE TOOL with tool operating. A drop in air pressure may be caused by lowered compressor output, excessive drain on the air line or by use of hose or connections of improper size or in poor condition.

2. Check for wet or dirty air. Wet air tends to wash lubricant away from cylinder and to rust and corrode the tool. Dirt and foreign matter in the air supply will impede valve action and cause damage to the tool.

If above are in order:

1. Check cylinder and valve lubrication. Disconnect tool and pour a liberal quantity of recommended oil cut with an equal amount of kerosene into tool air inlet. Operate tool on reduced throttle to flush out gum and foreign matter.

CAUTION: When operating tool to flush out gum and foreign matter direct tool exhaust away from operator and co-workers.

2. Check mechanical parts of tool. Disassemble tool, thoroughly clean and inspect all parts. Replace worn or broken parts, relubricate and reassemble tool.

Assembly Cautions

Position Shifter Plunger (82) of Rotation Release Hand Drill in fronthead (79) BEFORE assembling Chuck Sleeve (78).

Be sure straight spline on piston (61) engages straight spline on chuck sleeve and that spiral spline on piston engages spiral spline of ratchet ring.

Assemble Ratchet Ring (51) in fronthead so that flat of ratchet teeth engage ends of Pawls (49).

If burrs are raised around four ball slots in shank of drill steel, file down smooth to permit easy entry and removal of drill steel and efficient operation of the chuck.

Tighten thru bolts 12-14 lb ft. torque. After tightening, rotate chuck by hand to make sure rotation is free.

Operating Caution

Drilling into Concealed Electric Line can cause electric shock injury. Make sure the area to be drilled is free of electric lines and conduits.

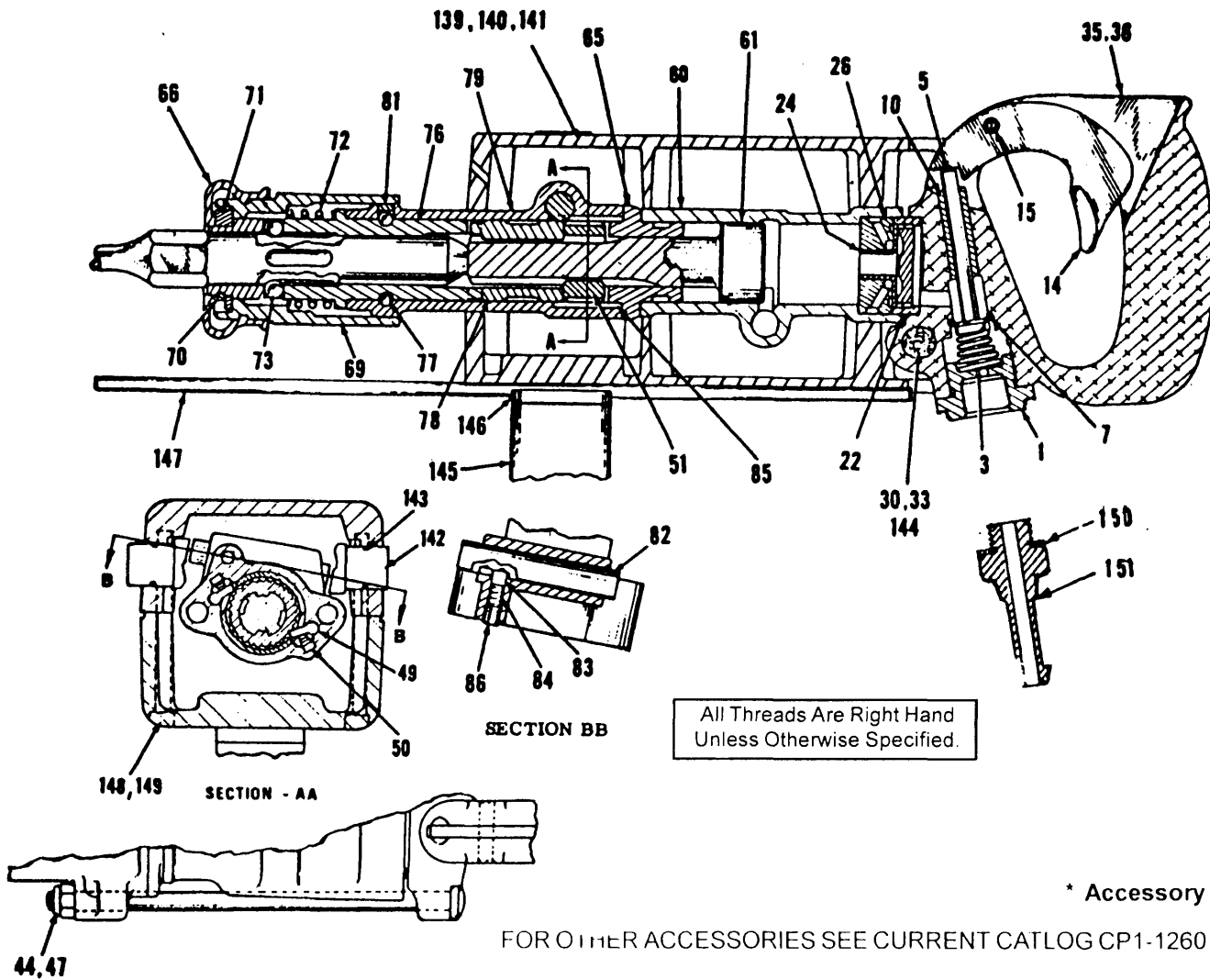
Maintenance

Do not penalize the operator by requiring him to use a tool which is not in first class condition. A regularly scheduled inspection and repair program will correct minor faults, avoid later, extensive repairs and maintain the tool at its highest efficiency.

1. Keep tool properly lubricated.
2. Provide 80 - 90 PSIG (5.6 - 6.2 bar) of clean, dry air AT THE TOOL.
3. Use hose and connections of proper size and in good condition.
4. Set up and maintain a repair and replacement program scheduled at regular intervals.

If rotation release buttons (142) have been removed from muffler, when reassembling ensure buttons are placed in muffler as shown on section A-A on page 2.

CP9BS HANDRILL



INDEX NO.	CP PART NO.	DESCRIPTION	NO. REQ'D	INDEX NO.	CP PART NO.	DESCRIPTION	NO. REQ'D
1	F064697	Bushing - Air Inlet	1	71	F826683	Plate - Retainer	1
3	R085596	Spring - Throttle Valve	1	72	R086605	Spring - Sleeve Retainer	1
5	R086329	Valve - Throttle	1	73	F035621	Ball - Steel (5/16" Dia.)	8
7	R086098	Seat - Throttle Valve	1	76	F826892	Chuck	1
10	F815426	Bushing - Throttle Valve	1	C	R076262	Oil Regulating Plug	1
14	F027853	Lever - Throttle	1	77	S013112	Ball - Chuck Retainer	17
15	R075404	Pin - Throttle Lever	1	78	R085900	Sleeve - Chuck	1
22	R085896	Seat - Rear Valve	1	79	F816120	Fronthead	1
24	R085897	Valve	1	81	F061888	Plug - Ball Retainer	1
26	R085698	Seat - Frnt Valve	1	82	R051351	Plunger - Shifter	1
30	R085895	Felt - Oil Chamber	1	83	R051352	Plunger - Shifter Detent	1
33	C077941	Plug - Pipe (3/8")	1	84	R051353	Spring - Plunger	1
35	F034495	Handle (Incl. Index No's 7 & 10)	1	85	F816124	Sleeve - Shifter	1
36	R278018	Handle Complete (Incl. Index No's 1, 3, 5, 14, 15, 30, 33 & 35)	1	86	C102507	Plug - Pipe (1/16" NPTF)	1
44	F034249	Bolt - Thru	2	*139	F815350	Muffler Complete (Incl. Index No's 140, 145, 146 & 147)	1
47	S013073	Nut - Thru Bolt	2	*140	F815448	Muffler Assy (Incl. Index No's 142, 144, 148 & 149)	1
49	R051355	Pawl	2	*142	F815447	Rotation Release	2
50	R085890	Spring - Pawl	2			Button Assy (Incl. Index No 143)	
51	F816123	Ring - Ratchet	1	*143	C045689	O'Ring (-016)	2
60	R085886	Cylinder	1	*144	F815446	Muffler Plug Assembly	1
61	F816122	Piston	1	*145	R132714	Dead Handle	1
65	R051356	Bushing - Cylinder	1	*146	R132715	Clamping Washer	1
66	F815343	Excluder - Dust	1	*147	R132716	Depth Gauge	1
69	F815566	Sleeve - Retainer	1	*148	R132717	Screw - Cap (1/4" - 28 x 2)	6
70	F826893	Ring - Retainer	1	*149	R132718	Washer	6
A	875766	Plug	1	150	F064696	Gasket - Hose Tail	1
B	R051357	Plug	1	151	F064695	Hose tail	1

Note:-Parts Indicated By A,B,C.... Are Not Illustrated.