

CP 4180 BUSTER **PNEUMATIC 869**

FIRST EDITION
MARCH, 1994



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

Instruction and Parts Book for

PNEUMATIC SIMPLATE HEAVY BUSTER

CP 4180 BUSTER
Model "A" & "U"

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

The purchase of replacement parts for your CP tools deserves the same good judgement that resulted in the purchases 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 Rock Hill, SC 29730

P14509

INDEX

Tools covered by this instruction and parts book have catalog numbers starting with CP-4180 followed by catalog code letters such as -8, -11.

The following index indicates the options & brief features

THROTTLE HANDLE	VALVE	PISTON & CYLINDER	SLEEVES/SHANK
Description	Description	Description	Description
"D" Handle Inside Trigger Auto Shut-off if retainer removed	Simple with teasing action	11" Nominal Stroke 8" Nominal Stroke	Accepts standard "RB" shank chisels and other accessories

GENERAL INSTRUCTIONS

Air Supply

For satisfactory performance, 90 PSIG (6.2 bar) of clean, dry air is required AT THE TOOL with tool operating. Whip hose 1/2" I.D. may be used at the air inlet, but longer runs should be 3/4" hose size or larger, used with couplings or a minimum 7/16" I.D. The use of CA048360 CHICAGO PNEUMATIC Air Line Separator and Filter and a CA-048362 Air Line Pressure Regulator mounted as closely as possible to the tool is recommended.

Instructions for Safe Operation

BEFORE PLACING THIS TOOL IN OPERATION, READ THE FOLLOWING SECTIONS EXCERPTED FROM THE COMPRESSED AIR AND GAS INSTITUTE'S "SAFETY CODE FOR PORTABLE AIR TOOLS." (APRIL 1974)

- 1. EYE PROTECTION** - Eye and face protection shall be worn at all times while operating power tools.
- 2. RETAINERS** - A retainer shall be integral with or installed on a percussion tool which, without such a retainer, can eject the chisel, rivet set, punch or such equipment, when the tool is operated off a work surface.
- 3. QUICK DISCONNECT COUPLINGS** - If a quick-disconnect coupling is used on a percussive tool it shall be separated from the tool by a whip hose
- 4. OPERATOR INSTRUCTIONS** - A percussion tool shall not be operated unless the chisel, rivet set, scalling tool, or other, is in position in the tool and in contact with the work piece. Tools shall not be used in such a manner that ejection of an accessory might endanger adjacent personnel.

5. REMOVE TOOLS - When percussion tools are not in use, the dies and accessories shall be removed unless they are retained in a positive manner.

Preparing for Operation

Daily before using and after each eight hours service disconnect air hose from Chipping Hammer and blow out air line to clear it of accumulated dirt and moisture. Put about one tablespoonful of recommended oil into air inlet connect air hose and operate tool to allow oil to be carried to the interior

Lubrication

The use of synthetic oils is not recommended because of possible damage to seals, "O" rings, hose, rotor blades and polycarbonate oiler and filter bowls.

The use of a **CHICAGO PNEUMATIC** Air Line Lubricator installed as closely as possible to the tool, preferably between the air pipe and the hose leading to the tool, is recommended with all pneumatic tools to assure a constant and adequate supply of lubricant to the working parts of the tool

Recommended Lubricants

CHICAGO PNEUMATIC Airoilene Oil which contains moisture absorbent, rust inhibiting additives and will use with CP Simplex Chipping Hammers and may be purchased under the following symbols

1 gal. can ----- P-089507

5 gal. can ----- P-089508

if recommended oil is not available, use a turbine or spindle grade oil with a viscosity of 100-150 SUS at 100°F which contains a rust inhibitor

Loss of Power/Erractic Action

Loss of power and erratic action may be caused by factors outside the tool proper. Make the following checks:

1. Check Air pressure. - For rated performance 90 PSIG (6.2 bar) air pressure AT THE TOOL is required with the tool operating on the job.

A drop in air pressure may be caused by lowered compressor output, excessive drain on the air line or by the use of hose or connections of improper size or poor condition.

2. Check for wet or dirty air - Excessive moisture in the air supply tends to wash lubricant away from the working parts of the tool and rust or corrode the interior. Grit will damage the interior by scoring closely fitted parts, and impede the action of the tool. If the above are found in order, disconnect tool and pour a liberal amount of recommended oil or an SAE # 10 oil cut with an equal quantity of kerosene into the air inlet. Operate the tool to allow lubricant to flush accumulated gum and grit out the exhaust

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

If outside factors are not to blame, disassemble the tool, thoroughly clean and inspect all parts and replace those worn or broken, Coat parts with light oil and reassemble

Maintenance

Do not penalize the operator by requiring him to use a tool which is not in first class condition. Regular inspection and immediate repair of minor faults will avoid more extensive future repairs and maintain the tool at its highest efficiency.

1. Keep tool properly lubricated.
2. Provide 90 PSIG (6.2 bar) of clean, dry air AT THE TOOL.
3. Set up and maintain an inspection and repair program regularly scheduled at intervals governed by the degree of use to which the tool is subjected.

Malfunction and Repairs

This section covers the use of the repair tools listed on Page 5 and enumerates the most usual causes and corrections of malfunctions of the tool proper. It is designed to help the user make rapid and efficient repairs to the dimensions required by mating parts of the tool.

1. Throttle Valve Leakage Remove throttle valve (22) from tool and remove "O" ring (23) from valve. Slip a new "O" ring on the throttle valve and reassemble. Replace throttle valve bushing (19) if worn, ream (.280" reams) before installing throttle valve.

2. Leakage around valve case lid. If valve shut-off seat (29) or clamp ring (11) is worn or damaged, replace with new parts. Replace if valve parts are broken or damaged.

3. Inspection Standards

Check tool after disassembly for plugged air porting and for worn parts. As the parts of the tool wear, power will slowly decrease. Depending on the requirements of the particular application, tolerable wear can vary. As a guide in maintaining maximum power output, parts listed in the following table should not be worn in excess of the given dimensions.

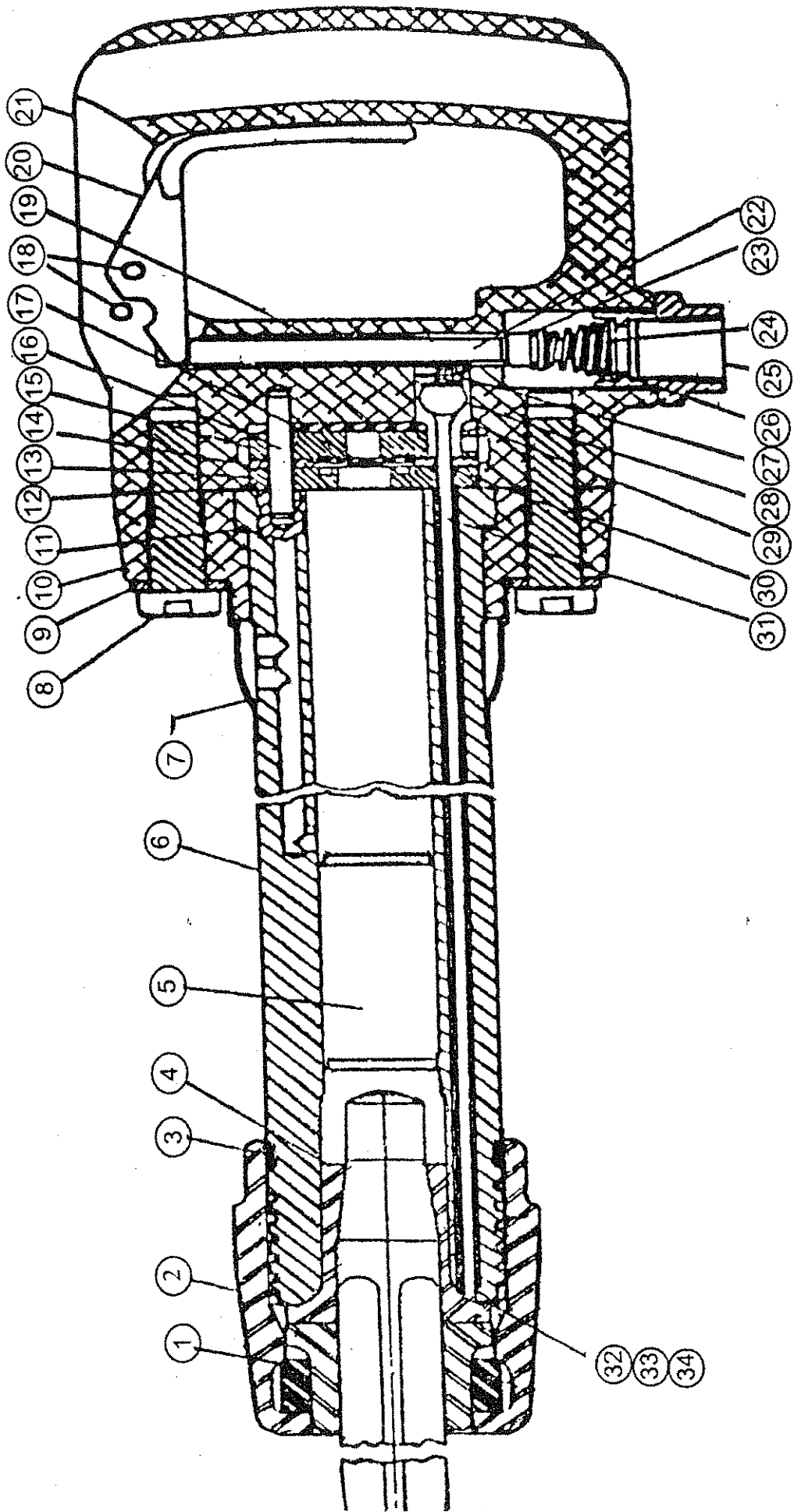
Part	Maximum ID (in)
Cylinder (6)	1.1900

Part	Minimum OD (in.)
Piston (5)	1.1843

Replace piston if cracked or worn hollow on striking end. Valve seats and edges of valve should be inspected visually for wear and pitting.

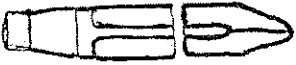


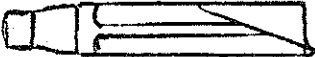


Assembly Cautions

1. Ensure that shut-off needle (31) is in the correct hole in valve parts, the small "O" ring (30) is in lower valve lid (13), the clamp ring (11), "O" ring (12) and seat shut-off (29) in their respective position, and the valve assembly doweled correctly into cylinder. With valve shut-off in the hole of the seat (29), dowel the handle into position ensuring that spring (27) is held inside the handle.
2. With lock washers (9) in place, assemble flange (10) against handle by tightening and the handle disappears. As a guide, use approx. 200 ft. lb. torque on the screws.
3. Ensure that retainer is fully screwed in place for proper operation of the tool. If retainer is partially or fully removed, a shut-off device (patent pending) cuts off air supply to the tool shutting the tool.



CP- 4180 Heavy busters Model "A" & "U"

Index No.	CP Part No.	Description	No. Reqd	Index No.	CP Part No.	Description	No. Reqd
1	3303 0051 03	Bumper	1	17	P142921	Valve-Cycling	1
2	P144719	Retainer-Chisel	1	18	P133757	Pin-Thr. Lever (2)	2
3	F035269	Ring-Retainer	1	19	P144138	Bushing-Thr. Valve	1
4A	P072333	Lower Sleeve	1	20	F815167	Lever-Throttle	1
4B	P144720	Upper Sleeve	1	21	P144481	Handle	1
5	P144721	Piston	1	22	P144202	Valve-Throttle	1
6	P144715	Cylinder, 11"	1	23	P083071	O-Ring (-011)	1
6	P144716	Cylinder, 8"	1	24	C036909	Strainer-Air	1
7	P145268	Deflector-Exhaust	1	25	C092292	Bushing-Inlet	1
8	P144717	Screw-Cap	2	26	C077054	Spring-Thr. Valve	1
9	P144783	Washer, Nord-Lock (2Per bolt, camface to camface)	4	27	P144709	Spring-Shut-Off	1
10	P144482	Flange-Cylinder	1	28	C043154	Valve-Shut-Off	1
11	P144723	Ring-Clamp	1	29	P144712	Seat-Shut-Off	1
12	C125868	O-Ring (-033)	1	30	C087316	O-Ring (-006)	1
13	P144714	Lid-Lower-Valve	1	31	P144710	Rod-Shut-Off (11")	1
14	P144722	Case-Valve	1	31	P144711	Rod-Shut-Off (8")	1
15	P144713	Lid-Upper-Valve	1	32	P145327	Spring-Push	1
16	P144147	Pin-Dowel (2)	2	33	P145328	Plunger-Push	1
				34	P145329	Plug	1

<p>ARROW TYPE JUMBO CHISELS</p>  <p>MOIL POINT P-071011 12" Long</p>	 <p>CUTTING (TIGHT RIVETS) P-071006 9 3/4" Long CUTTING (LOOSE RIVETS) P-071005 9 3/4" Long</p>	 <p>BACKING OUT PUNCHES</p>																											
 <p>RIPPER P-071010 9" Long</p>	<p>CHISEL SHANK DIMENSIONS</p> 																												
 <p>DRIFT PIN DRIVER P-098822 7 1/2" Long</p>	<table border="1"> <thead> <tr> <th>Symbol No.</th> <th>Rivet Size</th> <th>Length</th> </tr> </thead> <tbody> <tr> <td>P-071587</td> <td>1/2"</td> <td>9 3/4"</td> </tr> <tr> <td>P-071007</td> <td>5/8"</td> <td>9 3/4"</td> </tr> <tr> <td>P-071008</td> <td>3/4"</td> <td>9 1/2"</td> </tr> <tr> <td>P-080954</td> <td>3/4"</td> <td>12"</td> </tr> <tr> <td>P-071009</td> <td>7/8"</td> <td>9 1/2"</td> </tr> <tr> <td>P-080955</td> <td>7/8"</td> <td>12"</td> </tr> <tr> <td>P-072216</td> <td>1"</td> <td>9 1/2"</td> </tr> <tr> <td>P-080956</td> <td>1"</td> <td>12"</td> </tr> </tbody> </table>		Symbol No.	Rivet Size	Length	P-071587	1/2"	9 3/4"	P-071007	5/8"	9 3/4"	P-071008	3/4"	9 1/2"	P-080954	3/4"	12"	P-071009	7/8"	9 1/2"	P-080955	7/8"	12"	P-072216	1"	9 1/2"	P-080956	1"	12"
Symbol No.	Rivet Size	Length																											
P-071587	1/2"	9 3/4"																											
P-071007	5/8"	9 3/4"																											
P-071008	3/4"	9 1/2"																											
P-080954	3/4"	12"																											
P-071009	7/8"	9 1/2"																											
P-080955	7/8"	12"																											
P-072216	1"	9 1/2"																											
P-080956	1"	12"																											

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