

**CP-4RV BACKFILL TAMPER**

**ROCK DRILL 589**

*SECOND EDITION*

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*Instruction and Parts Book for*

**PNEUMATIC RING  
VALVE BACKFILL TAMPER**

**CP-4RV, Model "C-W"**

ROCK DRILL 589

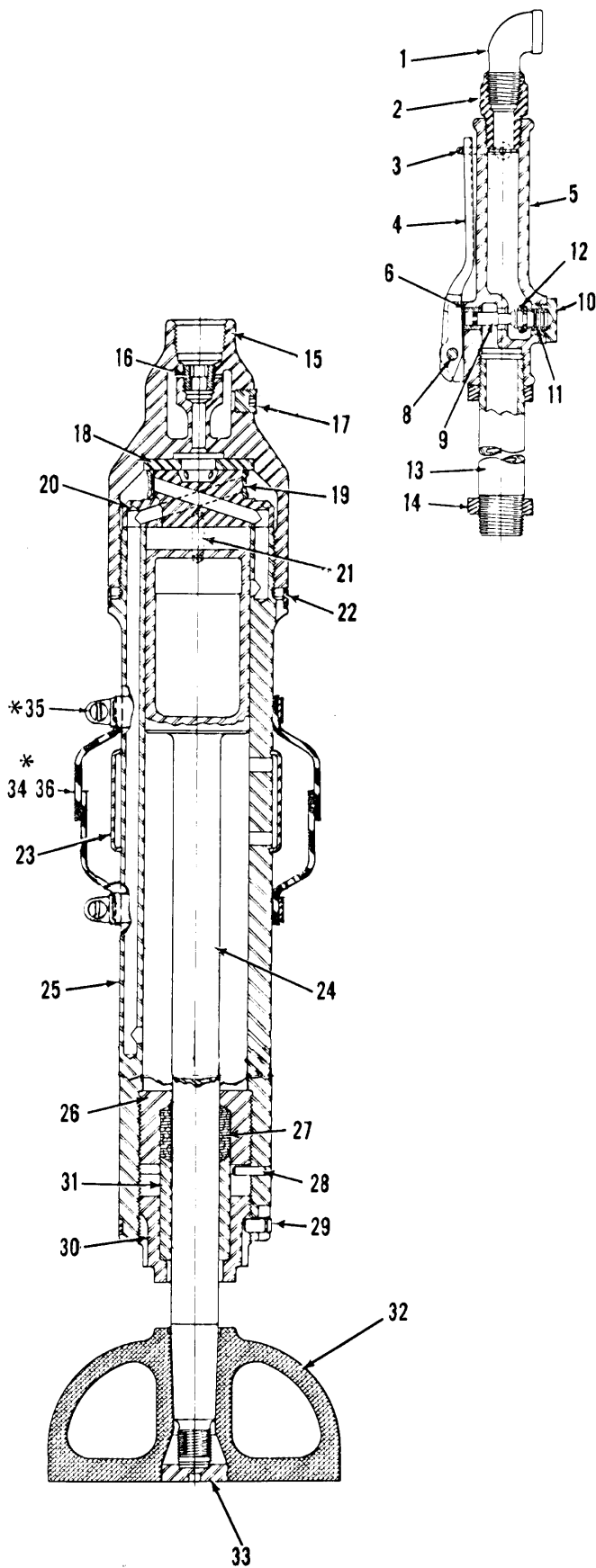


**Chicago  
Pneumatic**

Chicago Pneumatic Tool company + Rock Hill, SC29730

R-278140

CP-4RV RING VALVE BACKFILL TAMPER Model "C-W"



All Threads Are Right Hand Unless Otherwise Specified.

Index No.	CP Part No.	Description	No. Req'd.
1	R-072457	Elbow-Street (1/2"-90°)	1
2	P-001995	Strainer-Air	1
3	P-001999	Lock Ring-Lever	1
4	P-001903	Lever-Valve	1
5	P-007350	Body-Throttle Valve (Incl: Index No. 6)	1
6	P-001814	Bushing-Throttle Valve	1
7	C-079489	"O" Ring (-008)	1
8	P-001921	Pin-Lever	1
9	P-087671	Valve-Throttle (Incl: No's 6 & 12)	1
10	P-001964	Cap-Valve	1
11	P-001858	Spring-Throttle Valve	1
12	CA-088867	"O" Ring (-110)	1
13	P-071147	Pipe-Extension	1
14	F-003087	Locknut-Pipe	2
15	P-079695	Cylinder Head Assembly (Incl: Index No's. 16 & 17)	1
16	P-084132	Plug-Oil Regulating	1
	P-084363	Wrench-Allen (3/8" Hex.)	1
17	C-068799	Plug-Filler	1
18	P-009667	Lid-Valve	1
19	P-009665	Valve	1
20	P-009666	Block-Valve	1
21	A-043627	Pin-Block Dowel	2
22	P-084464	Clip-Cyl. Head Lock	1
23	P-009674	Clip-Exhaust	1
24	P-089043	Piston (Threaded End)	1
25	P-084463	Cylinder	1
26	P-074473	Bushing-Cylinder	1
27	P-089320	Packing-Piston	1
28	S-001157	Pin-Cylinder Bushing	1
29	P-084466	Clip-Lock Nut	1
30	P-084465	Nut-Piston Gland	1
31	P-009673	Sleeve-Piston Gland	1
32	P-089050	Butt-6 1/4" Dia.	1
33	P-089045	Locknut-Butt	1
		*MUFFLER-OPTIONAL	
34	P-125798	Muffler	1
35 *	P-125808	Clamp	2
36 *	P-125807	Muffler-Ass'y. (Incl: Index No's. 34 & 35)	1

**GENERAL INSTRUCTIONS****Air Supply**

For satisfactory performance, 90 psi 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 of a minimum 7/16" I.D. The use of a C-104083 CHICAGO PNEUMATIC Air Line Separator and Filter and a C-104093 Air Line Pressure Regulator mounted as closely as possible to the tool is recommended.

**Safety Cautions**

Always make sure Butt is secured to Piston before depressing Valve Lever.

Always hold Butt on work before depressing Valve Lever.

Always wear approved foot and eye protection before operating Tamper, to avoid personal injury.

**Preparing for Operation**

Daily before using and before putting tool into operation, disconnect air hose and pour about one ounce of recommended oil into tool air inlet. Blow out air line to clear if of accumulated dirt and moisture, connect tool and operate to allow oil to be carried to cylinder.

**Lubrication**

Daily before using and before putting tool into service, pour about one ounce of recommended oil into air inlet. Daily before using and after each four hours service, remove oil filler plug (17) and fill oil reservoir with recommended oil. In addition, the use of a C-015137 CHICAGO PNEUMATIC Lubricator in the hose line leading to the tool is recommended to assure a constant supply of lubricant to the cylinder.

**Recommended Lubricants**

CHICAGO PNEUMATIC Airoilene Oil which contains moisture absorbent, rust inhibiting additives and will not separate while the tool is idle, is recommended for use in the air motor 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/Erratic Action**

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

1. Check air pressure. For rated performance, 90 psi 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 the 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 the action of the piston and cause damage to piston, cylinder and rod bushing.

If above are in order:

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

2. Check mechanical parts of tool. Disassemble tool, thoroughly clean, and inspect all parts. Be sure porting in valve block (20) is open and that throttle valve "O" ring (12) is not excessively worn. Inspect U cups (31) and bushing liner (30) for wear or abrasion and replace if air leakage is present around piston.

**Disassembly/Assembly Cautions**

If packing (27) is worn, leaking air may allow the piston (24) to strike the cylinder bushing (26), damaging the tool. To replace, remove piston gland lock nut clip (29) and unscrew gland nut (30); piston gland sleeve (31) may now be removed. To replace packing (27) in Model C-W cylinder bushing, slip packing onto piston and work into bushing with piston gland sleeve (31). Thread piston gland nut (30) into cylinder and slip lock clip (29) on cylinder, inserting tang of clip in mating slots of cylinder and gland nut. Back nut out slightly if necessary.

**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 90 psi 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.

## SPARE PARTS SERVICE CHART

THIS SERVICE CHART IS PUBLISHED AS A GUIDE TO EXPECTANT LIFE OF COMPONENT PARTS. THE REPLACEMENT LEVELS ARE BASED ON AVERAGE TOOL USAGE OVER A ONE YEAR PERIOD

EXAMPLE: For 10 tools in use: 10 high wear items will be required per year, 7 medium wear items, etc.

NOTE: Quantities must be increased where tool is subjected to more severe and/or continuous usage.

### LEGEND

X—Type of wear, if no other comments apply.

L—Easily lost. Carefully reserve during disassembly.

D—Easily damaged during disassembly and assembly.

Index No.	CP Part No.	Description	No. Req'd.	100%	70%	30%	10%	Subject To External Damage
				High Wear	Medium Wear	Low Wear	Non Wear	
1	R-072457	Elbow-Street	1					X
2	P-001995	Strainer-Air	1					X
3	P-001999	Lock Ring-Lever	1			X		
4	P-001903	Lever-Valve	1		X			
5	P-007350	Body-Throttle Valve	1			X		
6	P-001814	Bushing-Throttle Valve	1		X			
7	C-079489	"O" Ring	1		X			
8	P-001921	Pin-Lever	1		X			
9	P-087671	Valve-Throttle	1			X		
10	P-001964	Cap-Valve	1					L
11	P-001858	Spring-Throttle Valve	1		L			
12	CA-088867	"O" Ring	1		L			
13	P-071147	Pipe-Extension	1					X
14	F-003087	Locknut-Pipe	2				X	
15	P-079695	Cylinder Head Assembly	1			X		
16	P-084132	Plug-Oil Regulating	1				L	
17	C-068799	Plug-Filler	1					L
18	P-009667	Lid-Valve	1				X	
19	P-009665	Valve	1			X		
20	P-009666	Block-Valve	1		D			
21	A-043627	Pin-Block Dowel	1				X	
22	P-084484	Clip-Cyl. Head Lock	1			X		
23	P-009674	Clip-Exhaust	1					X
24	P-089043	Piston	1		X			
25	P-084463	Cylinder	1		X			
26	P-074473	Bushing-Cylinder	2			L		
27	P-089320	Packing-Piston	2		X			
28	S-001157	Pin-Cylinder Bushing	1				X	
29	P-084466	Clip-Lock Nut	1			X		
30	P-084465	Nut-Piston Gland	1		X			
31	P-009678	Sleeve-Piston Gland	1		X			
32	P-089050	Butt - 6 1/4 Dia.	1	X				
33	P-089045	Locknut-Butt	1	X				
34	P-125798	Muffler	1					X
35	P-125808	Clamp	2				X	



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