

# CP 1150 CONCRETE VIBRATOR

UTICA PNEUMATIC 930

FIRST EDITION  
MARCH, 1995



*Instruction and Parts Book for*  
**PNEUMATIC  
CONCRETE VIBRATOR**

**CP 1150 CONCRETE VIBRATOR**

**Model "A"**



**Chicago  
Pneumatic**

Chicago Pneumatic Tool Company • 2200 Bleecker Street • Utica NY 13501 • 315-792-2600 • FAX 315-792-2651

R-147759

CROWDER SUPPLY CO. INC. - 8495 ROSLYN ST. - COMMERCE CITY, CO 80022 - TOLL FREE 888-883-5144 - www.crowdersupply.com



# CP 1150 Vibrator Model 'A' Parts List

Item No.	Part No.	Description	No. Req'd.
1	F35600	End Plug	1
2	F35614	Oil Pump	1
3	P147760	'O' Ring	1
4	S14838	Ball Bearing	1
5	F35815	Eccentric Weight	1
6	F826795	Spacer	1
7	F826794	Outer Tube	1
8	F35608	Drive Coupling	1
	S260558	Ball Bearing	1
	F35604	Ball Bearing Spacer	2
11	F35598	Lower End Plate	1
12	F35616	Rotor Blade	1
13	F35603	Inlet Hose Connection	4
14	F35611	Retaining Nut	1
15	F35617	Hose Connection	1
16	F35595	Hose Clamp	1
17	P147761	Exhaust Hose Std.	1
18	F36458	Exhaust Hose Comp. (Incl.Nos.15,16,17,37,38 & 44)	1
19	C087833	Circlip	1
20	P147765	Roll Pin Dowel	1
21	F35597	Cylinder Liner	1
22	F35596	Rotor	1
23	F36457	Motor Complete (Incl.Nos.9,11,12,19,20,21,22,24,25, 26 & 27)	1
24	F35599	Upper End Plate	1
25	P147766	Roll Pin Dowel	1
26	S13107	Ball Bearing	1
	S092840	Circlip	1
	R009429	Hose Wire	1
29	F61375	Handle Inlet	2
30	F61376	Throttle Control	1
31	F61373	Body	1
32	F61380	Live Air Handle Comp. (Incl.Nos.29,30,31,33,34,40,41, 42 & 43)	1
33	F61377	Air Strainer	1
34	F61374	Nipple	1
141	C015137	Oiler(Incl:Index nos 216 thru 219)	1
36	F35610	Inner Hose Connection	1
37	F35607	Outer Hose Connection	1
38	P147767	Jubilee Clip	1
39	P147768	Live Air Hose	1
40	CA083354	'O' Ring	2
216	C015155	Plug-oiler body	1
217	C015156	Washer-plug1	1
218	C077841	Plug-pipe(3/8")	1
219	C068799	Plug-pipe(1/4")	1
	F026884	Live air hose-Extra	1

# CP II50 Vibrator Model 'A' General Instructions

3. Do not submerge the Vibrator exhaust in concrete nor allow concrete, water or foreign material to enter the exhaust.
4. Never use the Vibrator to vibrate concrete buckets where there is solid metal to metal contact.
5. Check oiler frequently. Under average conditions it will require refilling twice in eight hours.
6. If the Vibrator does not start when the air is turned on, start the tool by jarring the nose of the Vibrator on a block of wood to alter the blade position and enable the tool to start. Do not risk damage to the shell by striking it with a hammer or other object.

## Spare Parts

All replacements and spare parts should be ordered through your CP Equipment Local Dealer. When requesting these items, please state Tool Name, Model letter and Serial Number in addition to the individual Part Number and Description of the parts.

## Disassembly/Assembly Instructions

To disassemble the Vibrator, first unscrew live air handle (32) and lubricator (141). Remove locating screw (44) from outer hose connection (37). Lightly grip Vibrator in shaped blocks in vice and unscrew end plug (1) and exhaust hose complete (18) DO NOT remove Hose Connection (15) from exhaust hose. Unscrew retaining nut (14) using retaining nut spanner (46). Inlet hose connection (13) with live air hose (39) can now be withdrawn from outer tube (7). Motor complete (23), and eccentric assembly can now be gently bumped out, care being taken not to loose dowel pin (25).

To disassemble the Motor, first remove circlips (19) and (27) and ball bearings (9) and (26). Care again being taken not to loose dowel pins (25) and (20).

Before reassembling Vibrator all parts should be thoroughly cleaned and checked for wear, also check condition of all hor and hose clamps, replace any worn or damaged parts.

To re-assemble Vibrator lightly grip intake hose connection (13), with live air hose (39) assembled, in vice with hose tail part pointing downwards. Place motor assembly (23) on intake hose connection (13) ensuring that dowel (25) is located in intake hose connection. Assemble drive coupling (8) into slot in rotor (22), place ball bearing spacer (10) on top of ball bearing (9), and place eccentric assembly and oil pump on top of ball bearing spacer (10) ensuring that tang of drive coupling (8) engages slot in eccentric weight (5). Note, if oil pump (2) has been removed, apply a few drops of loctite or similar adhesive to threads before replacing. Screw end plug (1) into outer tube (7) and lightly tighten against face of tube, slip outer tube (7) over eccentric and motor assemblies until it bottoms on end plug (1). Carefully right Vibrator in vice, apply a few drops of loctite or similar adhesive to threads in outer tube (7), screw in retaining nut (14) using retaining nut spanner (46) and screw in exhaust hose complete (18). Align hole in inner hose connection (36) with tapped hole

# CP 1150 Vibrator Model 'A' Parts List

Item No.	Part No.	Description	No. Reqd.
41	C106884	'O' Ring	1
42	F61378	Valve Seat	1
43	F61379	Dowel Pin	1
44	P147775	Locating Screw	1
45	P002079	Hose Tail	1
		<b>REPAIR TOOLS</b>	
46	F61503	Retaining Nut Spanner	1

## General Instructions

### Air Supply

For a satisfactory performance, 90 p.s.i. of clean, dry air is required at the tool when it is in operation. The air supply hose, between the Vibrator and compressor should be a minimum hose size of 1/2" or larger, connected with the couplings of a minimum 3/8" I.D. Small portable compressors without aftercoolers should be blown down in hot humid weather.

### Preparation for Operation

Daily and prior to connecting the Vibrator to the air hose, blow down the air line to clear it of accumulated dirt and moisture. Pour approximately one tablespoonful of recommended oil into the air inlet. Reconnect and operate the tool to enable the oil to reach the Air Motor.

### Lubrication

Daily, prior to operating the Vibrator and after each eight hours of service, pour approximately one ounce of recommended oil into the air inlet and operate the tool to allow oil to reach the moving parts.

After every four hours of operation, fill lubricator with recommended oil, see "Recommended Lubricants". Each time the Vibrator is disassembled the end plug (1) must be filled with 1/2 fluid oz. of SAE 30 oil.

### Loss of Power or Erratic Action

Motor failure, loss of power or erratic action may be caused by factors outside the tool construction.

1. Check air pressure. For rated performance 90 p.s.i. air pressure is required AT THE VIBRATOR while it is in operation. A drop in air pressure may result from reduced compressor output, excessive drain on the air line or the use of piping and connections of improper size and condition.
2. Check for wet or dirty air. Wet air tends to wash the lubricant from the moving parts and rust and corrode the tool interior. Dirt and foreign matter in the air supply will impede the action of the blades and eccentric weight and cause damage to the tool. If the air is arriving at the Vibrator at a correct pressure and quality the operator should proceed to inspect the tool itself.

If these two checks prove negative:-

# CP 1150 Vibrator Model 'A' General Instructions

1. Check air strainer (33). Thoroughly clean and inspect, replace if broken or distorted.
2. Check lubrication. Pour a liberal quantity of recommended oil mixed with an equal amount of paraffin into the tool air inlet. Reconnect the Vibrator and operate slowly to flush out any gum or foreign matter. Bump the Vibrator nose on a block of wood to start if necessary.
3. Check the mechanical parts of Vibrator. Disassemble tool and thoroughly clean and inspect all parts. Replace the blades (12) if worn or distorted.
4. Check condition of hoses for swelling or damage. Ensure that live air hose (39) is not twisted inside exhaust hose (17). This can be caused by locating screw (44) not in position or motor insufficiently clamped, thereby allowing the motor to revolve in outer tube (7).

## Operating Cautions

Do not use the Vibrator to vibrate concrete buckets or similar steel vessels where there is solid metal to metal contact.

Do not use the Vibrator as an instrument to open gates of concrete buckets. Ensure that hose connections are securely locked prior to admitting live air to the Vibrator.

## Cleaning, Flushing & Storage Recommendations

1. Daily, after use, remove the Vibrator to a clean-up area where compressed air is available.
2. Clean concrete, excess oil and dirt off the exterior of the Vibrator. DO NOT submerge exhaust in water when cleaning.
3. Check strainer (33) and clean if necessary.
4. Pour approximately eight ounces of diesel fuel, paraffin or commercial solvent into the air inlet of the tool. Attach air supply hose and operate the Vibrator until flushing solvent is exhausted.
5. Refill oiler.
6. Visually check external parts.
7. Store Vibrator by hanging on a rack with exhaust ports facing down to drain any moisture or condensation away from the motor.

## Maintenance & Operation Recommendations

The CP 1½" Vibrator is constructed of precision built parts designed to operate at close clearances and in perfect alignment. Economic operation can only be achieved if the tool is in perfect running condition. A regularly scheduled inspection period and repair programme should be adhered to. The correction of minor faults will prevent extensive repairs at a later date and maintain the tool at its highest efficiency.

1. Check air pressure. 90 p.s.i. of clean, dry air is required at the tool for the rated performance.
2. Check oil flow by holding a hand in front of the exhaust holes. If there is sufficient oil in the air line, oil will be felt on the hand.

# CP II50 Vibrator Model 'A' General Instructions

In outer hose connection (37), apply a few drops of loctite or similar adhesive to threads and replace locating screw (44). Replace oiler (141) and live air handle (32).

Grip Vibrator in blocks, end plug (1) pointing upwards so as to prevent eccentric and motor assemblies falling out, and remove end plug (1), pour ½ fluid ounce of SAE 30 oil into Vibrator, apply a few drops of loctite or similar adhesive to threads of end plug (1) and screw back into outer tube (7).

## Recommended Lubricants

Manufacturer	Lubricant
CP	Airolene Tool Oil
Esso	Nuto H40
Gulf	Harmony 40 AW
Mobiloil	Velocite No. 10
Texaso	Spintex 100
Dalton	P101/P
Shell	Tellus 23
Burmah Castrol	Hyspin AWS22
BP Power Petroleum	BP Energol CS40
Duckham	Zeroflo 4
Sternol	Albatross 21
Petrofina	Hydran 31
Chevron	Vistac Oil 9X
Century Oil	P313