CP- 22 SINKER DRILL
ROCK DRILL 740

FIRST EDITION
MARCH, 1985

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

Instruction and Parts Book for

SINKER DRILLS

CP 22 SINKER DRILL
Model "F"

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

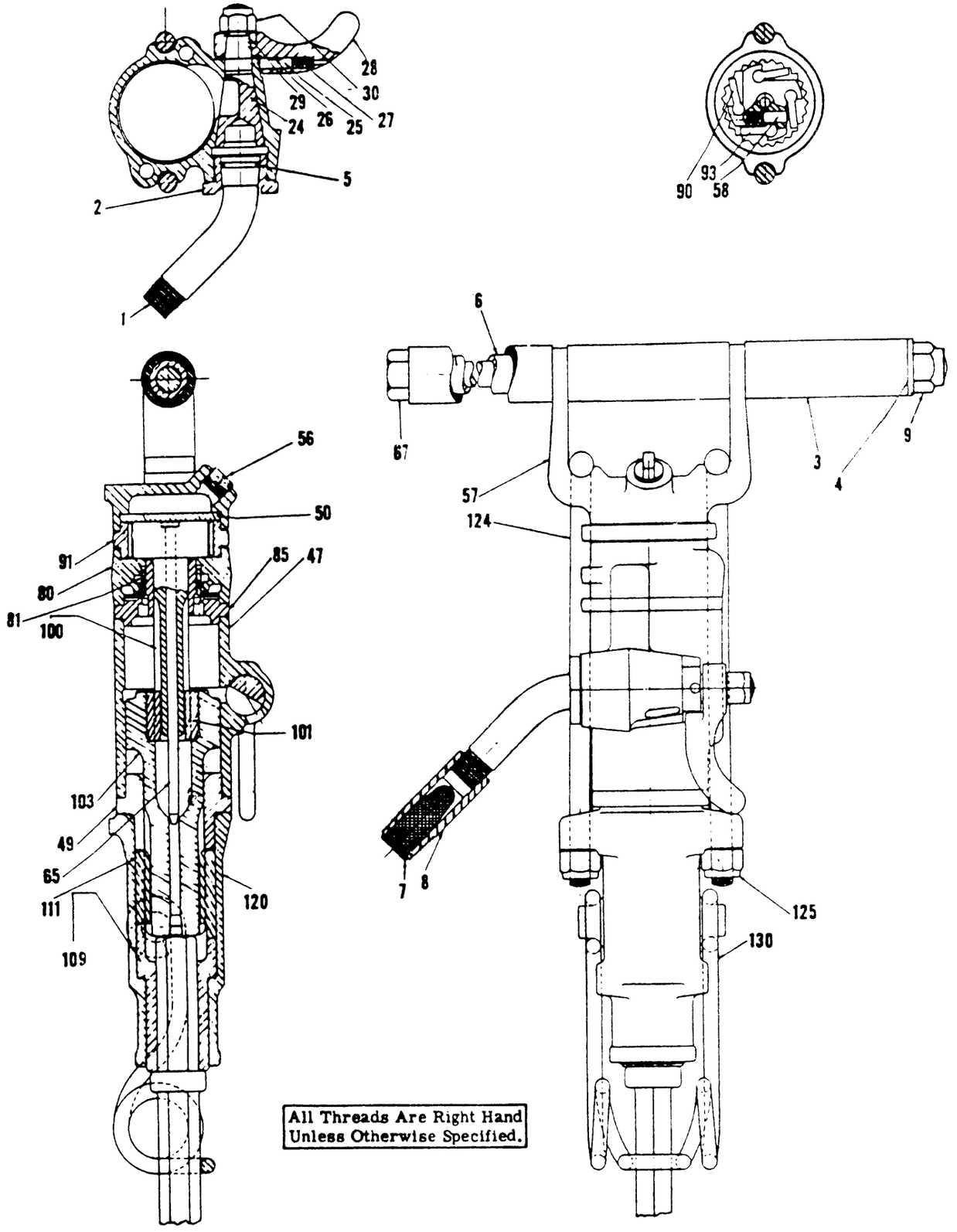
The purchase of replcement parts for your CP tools deserves the same good judgement that resulted in the purchases of the tools themselves. Each genuine CP part is made from carefully selected and inspected material subjected to sophisticated machinery and finishing processes and heat – treated to produce 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.

ROCK DRILL 740

Chicago Pneumatic

Chicago Pneumatic Tool Company Rock Hill, SC 29730 R138847

CP 22 SINKER DRILL (DRY) Model "F"



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.

Index No.	CP Part No.	Description	No Reqd	Index No.	CP Part No.	Description	No Reqd
1	F814720	Swivel - Air Inlet	1	65	R075598	Rod - Air	1
2	R075599	Nut - Aie Swivel	1	67	R075584	Bolt - Handle	1
3	R000692	Grip - Handle	3	80	R075583	Case - Valve	1
4	R000142	Washer - Bolt Key	3	81	R075581	Valve	1
5	C106884	O'Ring (-019)	1	85	R075582	Bushing - Valve Guide	1
6	R000694	Liner - Handle	3	90	R000817	Pawl	4
7	R005584	Screen - Air Inlet	1	91	R075585	Ring - Ratchet	1
8	R005744	Sleeve - Air Inlet	1	93	R000619	Spring - Pawl Plunger	4
9	R005742	Nut - Elastic Stop	1	100	R075586	Bar - Rifle	1
24	R075588	Valve - Throttle	1	101	R075587	Nut - Rifle Bar	1
25	R075590	Plunger - Throttle Handle	1	103	R000037	Piston	1
26	P089767	Pin- Throttle Valve (3/32" x 5/16")	1	109	R075596	Chuck (7/8" Hex x 3-1/4")	1
27	R000528	Spring Throttle Valve	1	111	R075597	Nut - Chuck Rotation	1
28	R075589	Handle Throttle Valve (Incl.Index No.29)		120	R075645	Fronthead (7/8 Hex)	1
29	R075592	Key - Throttle Handle	1	124	R075601	Bolt - Thru	2
30	R075593	Nut - Elastic Stop (1/2" - 20)	1	125	R085164	Nut - Through Bolt	2
47	R075577	Cylinder	1	130	R075646	Retainer (7/8" Hex x 3 1/4")	1
49	R075570	Bushing - Cylinder	1	130	R146131	Retainet (7/8" Hex x 3 1/4")	1
50	R075580	Washer - Backhead	1	131	R154915	Vib. Handle Kit	1
56	C077941	Plug - Pipe (3/8")	1			(Incl. Index No.132,133) } Not Shown	
57	F035373	Backhead (Incl :Index No.50)	1	132	R157932	Hex Nut Thin	2
58	R009224	Plunger - Pawl	4	133	R157933	Rod - Threaded	1

GENERAL INSTRUCTIONS

The modern Rock Drill is a high speed machine with a number of close-fitting, precision made parts ,but is subject to a terrific amount of punishment Therefore ,it is highly important that your drill receive reasonable care, adequate lubrication at al times and drill receive resonable care, adequate lubrication at all times and regular inspections.

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

Always wear approved safety footwear and eye protection to avoid personal injury

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

Lubrication

As it comes from the factory. the inside of the tool is coated with heavy, rust inhibiting oil After unpacking pour a small amount of kerosene into air connection and opearte tool on partial throttle to clean interior Follow immediately with a liberal amount of light,rock drill oil.During operation the use of a one pint line oiler R051776 is recommended

During operation keep oiler -filled- a one pint oiler holds an average four supply,but if a high rate of feed is required by oil characteristics or the air consumption of the tool,more frequent filling will be necessary.At least twice a shift remove oil plug (56) and fill reservoir with recommended oil.

When properly libricated,a mist of oil, enough to be visible on the bare hand,will be present in the exhaust air A slight film of oil should be visible on the drill steel.

> Proper lubrication is important. A few minutes operation without oil will wear out the rifle bar, rifle bar nut , chuck roatation nut and the pawls and will severely score the cylinder , cylinder bushing, valve and fronthead.

Recommended Lubricants

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

MENEISTERVER	Below 40°F	40°F To 90°F	Above 90°F
CP	C-139190		
Esso	Arox EP45	Arox EP65	
Mobiloil	Alme 525	Alme 527	Alme 532
Texaco	Repel Oil B R & O 1	Repel Oil PF R & O 1	Repel Oil F R & O 1
Delton	SILK OF ONE 773	Silk of one 548/T	Silk of one 881
Shell	Tonner - 27	Tonner R 41	Tonner R 72
Burmah Castrol	MAGNE SPX	CASTROL RD oil light	CASTROL Oil RD 3
BP Power Petroleum	RD 50	RD 150	RD 220
	HP 10-C	HP 20-C	HP 801 - C
Dulchem	Zero F 105	GARNET 6	GARNET 7
Sternol	MSRTIL 54	MSRTIL 71	MSRLIN 87
Petrefine	PURIFOC 32	PURIFOC 46	PURIFOC 53
Chevron	VISTSC OIL 9X	VISTSC OIL 19X	VISTSC OIL 18X
Caltex	CSL TEX - XL	CSL TEX - XM	CSL TEX - XM

Preapring For Operation

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

Daily before placing drill service blow out the air line to clear it of accumulated dirt and moisture. Check tool and make sure the air and water inlets and the exhaust ports are free from obstruction. Be sure the air strainer is clean and not torn or distorted.

Pour about one ounce of Rock Drill oil directly into the air inlet of the tool before connecting air hose to the tool. (C139190 1 gal can) Inspect drill steel shanks and make sure they are correct size and lenght for the chuck used. Shanks which are chipped, rounded, out of square or too hard on the striking end will operate inefficiently and cause premature piston failure

Inspect Bits. Dull bits willl slow down drilling speed and overstrian the drill mechanism.When changing bits be sure new bit is of the correct gauge to follow the previous bore.

Be sure compressor delivers between 80 and 90 psi air pressure at the tool.High pressure will cause rough operation and excessive breakage.Low pressure results in slow drilling speed.

Always hold the drill down to its work with the machine in line with the drill steel to ease the rotational load.

To convert a 7/8" x 3 1/4" version to a 7/8" x 4 1/4".

109	R146130	Chuck (7/8" Hex. x 4 1/4")
130	R146131	Retainer (7/8" Hex. x 4 1/4")

Maintenance

A drill in constant use should be dismantled, cleaned and inspected at least weekly. Worn parts should be replaced to maintain drilling efficiency and avoid high upkeep costs

Check the condition of the chuck. worn, bell mounted chucks hold the steel out of line spalls the fractures the striking end of the piston The splines of the rotation nuts, rifle bars rifle bar nuts and chuck rotation nuts, should be inspected for excessive wear Too much play in the parts results in lost rotational force. Worn pawls, worn ratchet rings and broken or weak pawl springs should be placed.

Reface spalld or cupped pistons to avoid uneven force on drill steel and eventual fracture of the piston.

With adequate lubrication the cylinder bushing is a long lived part.If worn,however ,it should be replaced to preserve the front cushion and avoid breakage of piston and fronthead parts.

Be sure that valve parts work freely and are clean and free from drit.Be careful in disassembling and assembling valve to avoid burning or scoring faces.

When assembling tool draw up thru bolts evenly and tightly.Rotate chuck by hand to make sure that chuck does not bind in fronthead.