

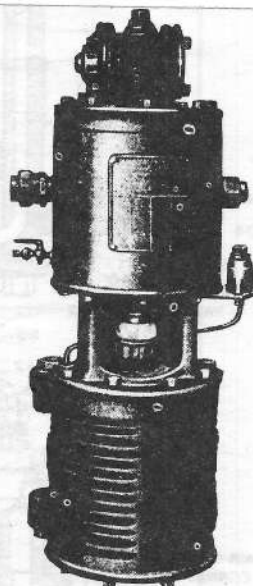


BACKSHOP ENTERPRISES

Bernie Watts

303-424-6882

5160-B PARFET ST., UNIT 1 • WHEAT RIDGE, CO 80033

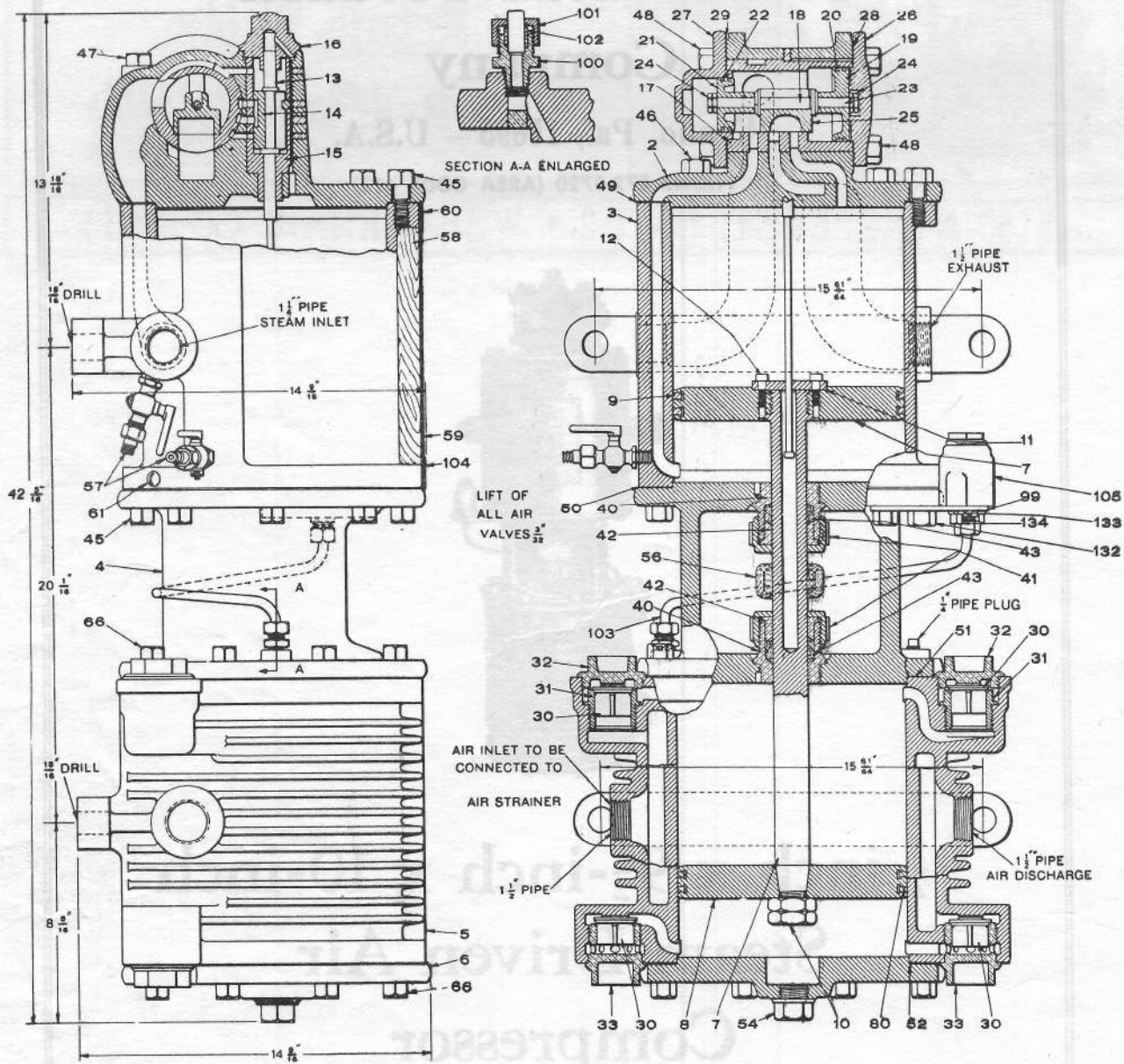


**9 $\frac{1}{2}$ -inch x 9 $\frac{1}{2}$ -inch x 10-inch
Steam Driven Air
Compressor**

Part Catalog No. 3204-3

2/15/68

9 1/2-INCH x 9 1/2-INCH x 10-INCH AIR COMPRESSOR



Net Weight, 550 lbs.

Shipping Weight, 650 lbs.

9 1/2-INCH x 9 1/2-INCH x 10-INCH AIR COMPRESSOR

(For General Data, see page 6.)

This Compressor with 9 1/2-inch Steam Cylinder, 9 1/2-inch Air Cylinder and 10-inch Stroke has a displacement of 49 cubic feet when operating at the normal speed of 120 single strokes per minute.

Piece No. 521734. 9 1/2" Air Compressor (Right and Left Hand), complete with Filter and Type B-3 Automatic Oil Cup

Piece No. 77886. 9 1/2" Air Compressor (Right and Left Hand), complete with Air Strainer and Type B-3 Automatic Oil Cup

Pc. No.	Ref. No.	No. Per Pkg.	Description
1853	2	1-2	Top Head, complete (includes 14, 15, 16, 17, 18, 25, 26, 27, 28, 29, 46 and eight of 48)
1880	3	1-3	Steam Cylinder, complete (includes 58, 59, 60, 104, Pos. 8727, 8728; three of 57 and four of 61)
1958	3	1-3	Steam Cylinder, complete (includes 58, 59, 60, 104; two of 57 and four of 61)
54179	4	1-2	Center Piece, complete (includes Pc. 1635 and two of 40, 41 and 42)
76838	5	1-3	Air Cylinder, complete (includes two of 31, 32, 33 and four of 30)
5165	6	1	Lower Head (includes 54)
98174	7	1	Steam Piston and Rod (includes 11 and two of 9, 10 and 12)
See Pages 4 and 5	8		Air Piston (includes two of 80)
	9		Steam Piston Ring (2 Req'd)
	10		Piston Rod Nut (2 Req'd)
1925	11	3	Reversing Valve Plate
12068	12		Reversing Valve Plate Bolt (2 Req'd)
1928	13	5	Reversing Valve Rod
1868	14	2-10	Reversing Valve
31253	15	3	Reversing Valve Chamber Bush
1869	16	2	Reversing Valve Chamber Cap
31251	17	2	Main Valve Bush
	18		Main Valve Piston and Stem, complete (includes 19, 21, 23 and four of 24)
	19		Large Main Valve Piston (includes two of 20)
	20		Large Main Valve Piston Ring (2 Req'd)
	21		Small Main Valve Piston (includes two of 22)
	22		Small Main Valve Piston Ring (2 Req'd)
1861	23	6	Main Valve Stem
1864	24		Main Valve Stem Nut (4 Req'd)
1867	25	6	Main Slide Valve
1873	26	2	Right Main Valve Cylinder Head
5166	27	1	Left Main Valve Cylinder Head
1876	28	25	Right Main Valve Head Gasket
1877	29	25	Left Main Valve Head Gasket
24396	30	12-36	Air Valve (4 Req'd)
8430	31	24	Air Valve Seat (2 Req'd)
505773	32	1	Air Valve Cap (2 Req'd)
46806	33	6-12	Air Valve Cage (Steel) (2 Req'd)
1912	40	2	Stuffing Box (2 Req'd)
51344	41	9	Stuffing Box Nut (2 Req'd)

Pc. No.	Ref. No.	No. Per Pkg.	Description
1913	42	1	Stuffing Box Gland (2 Req'd)
2090	43		Piston Rod Packing (Composition) (sufficient for 2 Stuffing Boxes)
1933	45		3/8"x1 1/8" Cap Screw (12 Req'd)
1879	46		3/8"x2" Cap Screw
25437	47		3/8"x6 1/4" Cap Screw
1878	48		3/8"x1 1/4" Main Valve Head Cap Screw (8 Req'd)
1929	49	25	Upper Steam Cylinder Gasket
1931	50	25	Lower Steam Cylinder Gasket
1931	51	25	Upper Air Cylinder Gasket
1931	52	25	Lower Air Cylinder Gasket
1919	54	6	Cylinder Head Plug
15038	56	150	Piston Rod Swab
33185	57		Drain Cock (2 Req'd)
1897	58		Steam Cylinder Lagging
1894	59		Steam Cylinder Jacket
1895	60	25	Upper Steam Cylinder Jacket Band
68421	61	144	.320 (No. 20)-18x 1/4" Jacket Band Screw (4 Req'd)
1933	66		3/8"x1 1/8" Cap Screw (16 Req'd)
	80		Air Piston Ring (see pages 4 and 5) (2 Req'd)
76630			Oil Cup, complete with Bracket and Oil Tube (includes 99, 100, 101, 102, 103, 105 and two of 133 and 134)
76582	99		Oil Cup Bracket
71756			1/2" Union Stud, complete (includes 100, 101 and 102)
71755	100		Stud
71748	101		Nut
71757	102		Thimble
76581	103		Oil Tube
1895	104	25	Lower Steam Cylinder Jacket Band
89042	105		Type "B-3" Auto. Air Cylinder Oil Cup complete (see page 6)
17034	132		3/8"x1 1/8" Hex. Hd. Cap Screws (2 Req'd)
17173	133		Lock Washer (2 Req'd)
24286	134		3/8"x 1/4" Cap Screws (2 Req'd)

1635			1/4" Pipe Plug
8728			1 1/4" Pipe Plug
8727			1 1/4" Pipe Plug
-79926	100		5540 1/4"
-79927	101		NUT
-81214	102		THIMBLE

81738 →
FOR NEW YORK
STYLE REV. PLATE

Prices will be quoted upon application

Orders should give PIECE NUMBER and NAME of part wanted

9 1/2-INCH x 9 1/2-INCH x 10-INCH AIR COMPRESSOR**PISTONS AND RINGS FOR RE-BORED CYLINDERS**

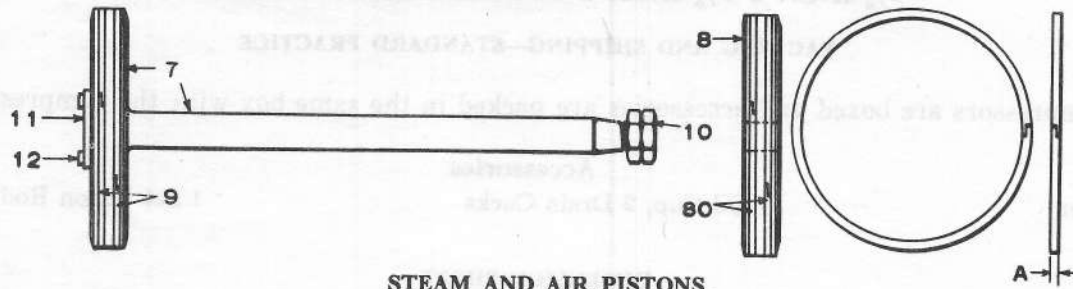
The most modern development in packing rings for steam driven air compressors is now available and involves an improved form of lap joint for the ring somewhat similar to the lap joint rings which have proven so successful in triple valves.

These Lap Joint rings are made from a special mixture of metal to give what long experience has indicated as the most desirable wearing and friction qualities in conjunction with the metal in the cylinder walls. Ring gap and its attendant leakage is eliminated through the medium of a special lap joint at the ring ends that closes the rings in a complete circle. With the ring closed in its groove this joint seals on both the cylinder wall and one wall of the ring groove, forming a double leakage barrier which prevents blow-by between cylinder wall and ring. The joint maintains the sealing function of the ring throughout its entire circumference and thereby effectively eliminates the ring gap as a chief source of blow-by losses. Very careful attention has been given in design and manufacture to provide uniform wall pressure of the proper amount, the inside diameter of the ring being left intact to preserve this characteristic pressure over a long period of service. The sides of the ring are accurately ground to the proper width, permitting a close fit in the ring groove. No filing or fitting is required.

In reconditioning air compressors, it is our recommended practice to rebores the steam and air cylinders in steps of $\frac{1}{16}$ " and the main valve cylinders in steps of $\frac{1}{32}$ "; the maximum rebored diameter not to exceed that specified in the accompanying tables. We have provided repair pistons in the above oversize and piston rings of our latest improved manufacture in corresponding oversize diameters. The indicated diameter of the rings in each case is exact (a few thousandths large to take care of normal variations in reborings) so that when the ring is installed in the cylinder it will remain a true circle, thus insuring an even bearing at all points on the circumference and a tight fit against leakage. In addition to the oversize in diameter, the steam and air piston rings can all be obtained in widths greater than standard for use in ring grooves that have become wider than standard through wear. They range in overwidths of .006", .012", .018", .025", .030" and .036".

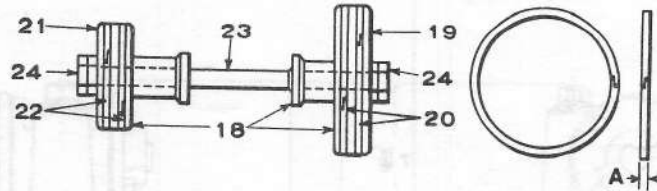
The wide variety of combinations in diameter and widths of rings should be sufficient to meet all normal repair requirements with the minimum of expense.

9 1/2-INCH x 9 1/2-INCH x 10-INCH AIR COMPRESSOR



STEAM AND AIR PISTONS

Ref. No.	No. Per Pkg.		Cylinder Diameters and Piece Numbers							
			9 1/4"	9 1/2"	9 3/4"	9 5/8"	9 1/2"	9 3/4"	9 1/2"	9 3/4"
7	1	*†Steam Piston and Rod (includes 11 and two of 9, 10 and 12).....	98174	508957	98175	98176	98177	98178	98179	98180
8	1	*†Air Piston (includes two of 80).....	98406	508953	98418	98419	98420	98421	98422	98423
9 or 80	12-25	* Piston Ring (standard width, Dimension "A", 1/4") (4 Req'd).....	97651	98959	97658	97665	97672	97679	97686	97693
9 or 80	12-25	* Piston Ring (.006" wider than standard) (4 Req'd).....	97652	98960	97659	97666	97673	97680	97687	97694
9 or 80	12-25	Piston Ring (.012" wider than standard) (4 Req'd).....	97653	98961	97660	97667	97674	97681	97688	97695
9 or 80	12-25	Piston Ring (.018" wider than standard) (4 Req'd).....	97654	504159	97661	97668	97675	97682	97689	97696
9 or 80	12-25	Piston Ring (.025" wider than standard) (4 Req'd).....	97655	504160	97662	97669	97676	97683	97690	97697
9 or 80	12-25	Piston Ring (.030" wider than standard) (4 Req'd).....	97656	504161	97663	97670	97677	97684	97691	97698
9 or 80	12-25	Piston Ring (.036" wider than standard) (4 Req'd).....	97657	504162	97664	97671	97678	97685	97692	97699



See table below showing by B and C the cylinder diameters for which pistons and rings are suitable.

*MAIN VALVE PISTONS

Ref. No.	No. Per Pkg.		Cylinder Diameters and Piece Numbers				
			B = 2 1/8" C = 3"	B = 2 1/4" C = 3 1/8"	B = 2 3/8" C = 3 1/4"	B = 2 1/2" C = 3 3/8"	B = 2 5/8" C = 3 1/2"
18	1	Main Valve Piston, complete (includes 19, 21 and 23, and four of 24).....	504601	504602	504603	504604	504605
19	1	Large Main Valve Piston (includes two of 20)...	504596	504597	504598	504599	504600
20	50	Large Main Valve Piston Ring (standard width, Dimension "A", .136") (2 Req'd).....	502559	502560	502561	502562	502563
20	50	Large Main Valve Piston Ring (.006" wider than standard) (2 Req'd).....	502564	502565	502566	502567	502568
20	50	Large Main Valve Piston Ring (.012" wider than standard) 2 Req'd).....	502569	502570	502571	502572	502573
21	2	Small Main Valve Piston (includes two of 22)...	504591	504592	504593	504594	504595
22	50	Small Main Valve Piston Ring (standard width, Dimension "A", .136") (2 Req'd).....	504571	504572	504573	504574	504575
22	50	Small Main Valve Piston Ring (.006" wider than standard) (2 Req'd).....	504576	504577	504578	504579	504580
22	50	Small Main Valve Piston Ring (.012" wider than standard) (2 Req'd).....	504581	504582	504583	504584	504585

- *NOTE A—Pistons and rings are designated by the diameter of the cylinder for which they are suitable.
- NOTE B—Above sizes of pistons and rings are carried in stock. Should orders be received for other sizes, we will substitute nearest standard size, unless specific instructions are received to the contrary.
- †NOTE C—These items include present standard piston rod having taper fit, without shoulder on the air piston end; also air pistons suitable for these rods. If air piston is desired for rod having former standard straight fit with shoulder, the order must so specify.
- NOTE D—If maximum repair size Steam Piston and Rod or Air Piston (less Rings and having ring grooves cut to standard caliper) suitable for turning to bore of cylinder, is desired, specify:
Pc. No. 69200. 9 1/4" Steam Piston and Rod.
Pc. No. 69203. 9 1/4" Air Piston.

Prices will be quoted upon application
Orders should give PIECE NUMBER and NAME of part wanted

9 1/2-INCH x 9 1/2-INCH x 10-INCH AIR COMPRESSOR

PACKING AND SHIPPING—STANDARD PRACTICE

Compressors are boxed and accessories are packed in the same box with the compressor.

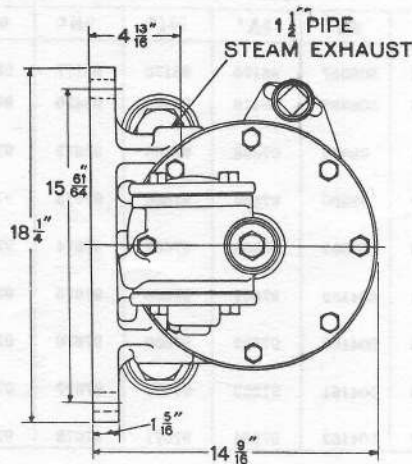
Accessories

1 Strainer

1 Oil Cup, 2 Drain Cocks

1 Set Piston Rod Packing

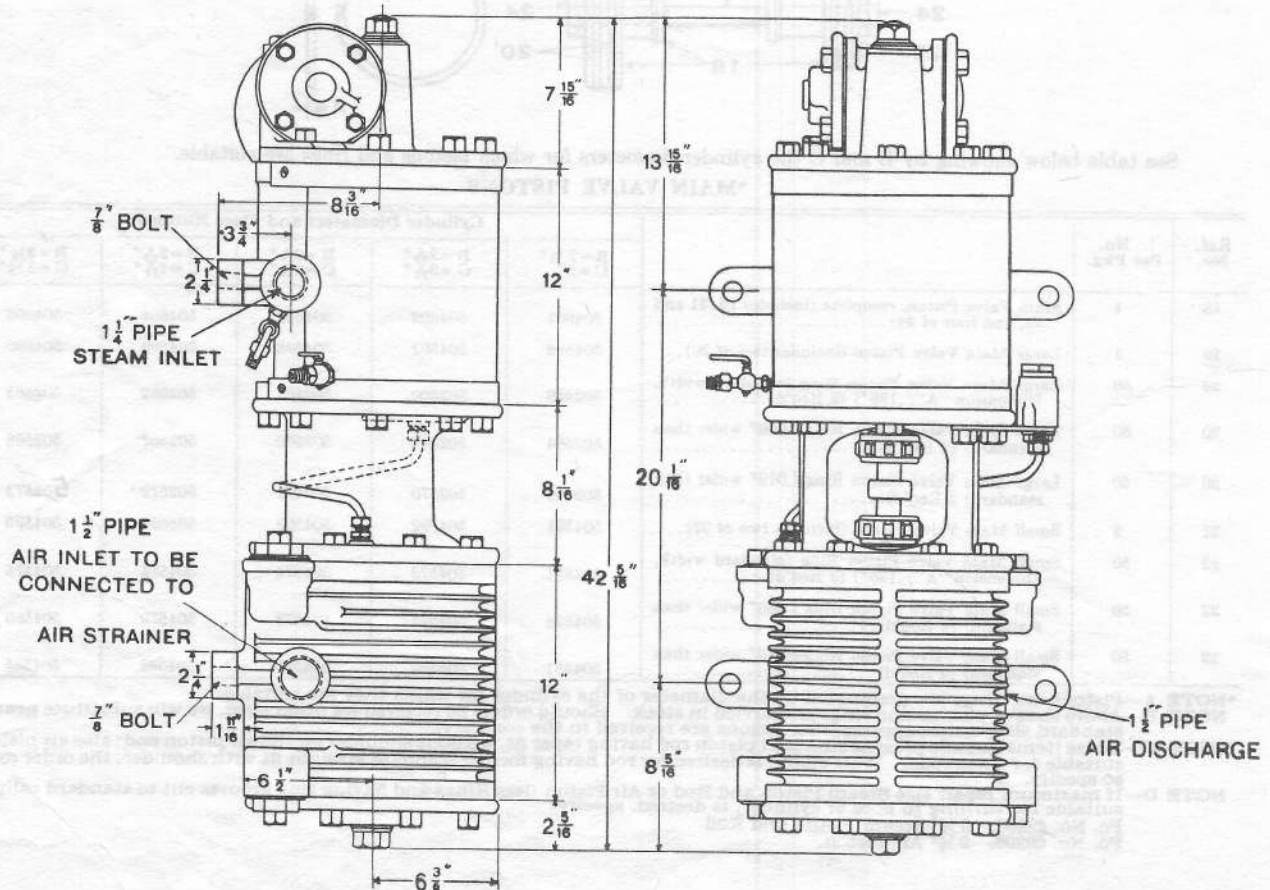
DIMENSION SHEET



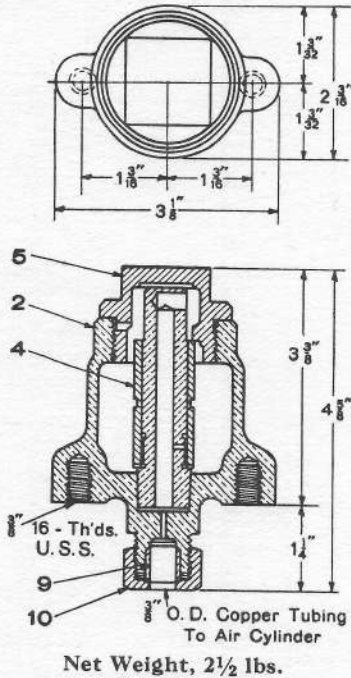
GENERAL DATA

Steam Cylinder.....9 1/2" Diameter
 Air Cylinder.....9 1/2" Diameter
 Stroke.....10"

Compressor No.	Compressor Size	Steam Supply Pipe—Size		Governor Size
		Main Pipe	Branch to each Compressor	
1	9 1/2"	1 "	..	1 "
2	9 1/2"	1 1/4"	1"	1 1/4"



TYPE "B-3" OIL CUP



Piece No. 89042. Type "B-3" Automatic Air Cylinder Oil Cup, complete less Brackets and Oil Tubes

Pc. No.	Ref. No.	Description
89043	2	Body with Valve Bushing
70883	4	Sleeve
88418	5	Cap Nut
79927	203	Union Nut
81214	204	Thimble for 3/8" O. D. Copper Tubing

Net Weight, 2 1/2 lbs.

9 1/2 INCH x 9 1/2 INCH x 10 INCH WRENCHES

Pc. No.	Description
1935	Packing — Cap Nut Wrench
1936	Air Valve Seat Wrench
1937	Air Valve Cage Wrench
1938	Cap Bolt Wrench



