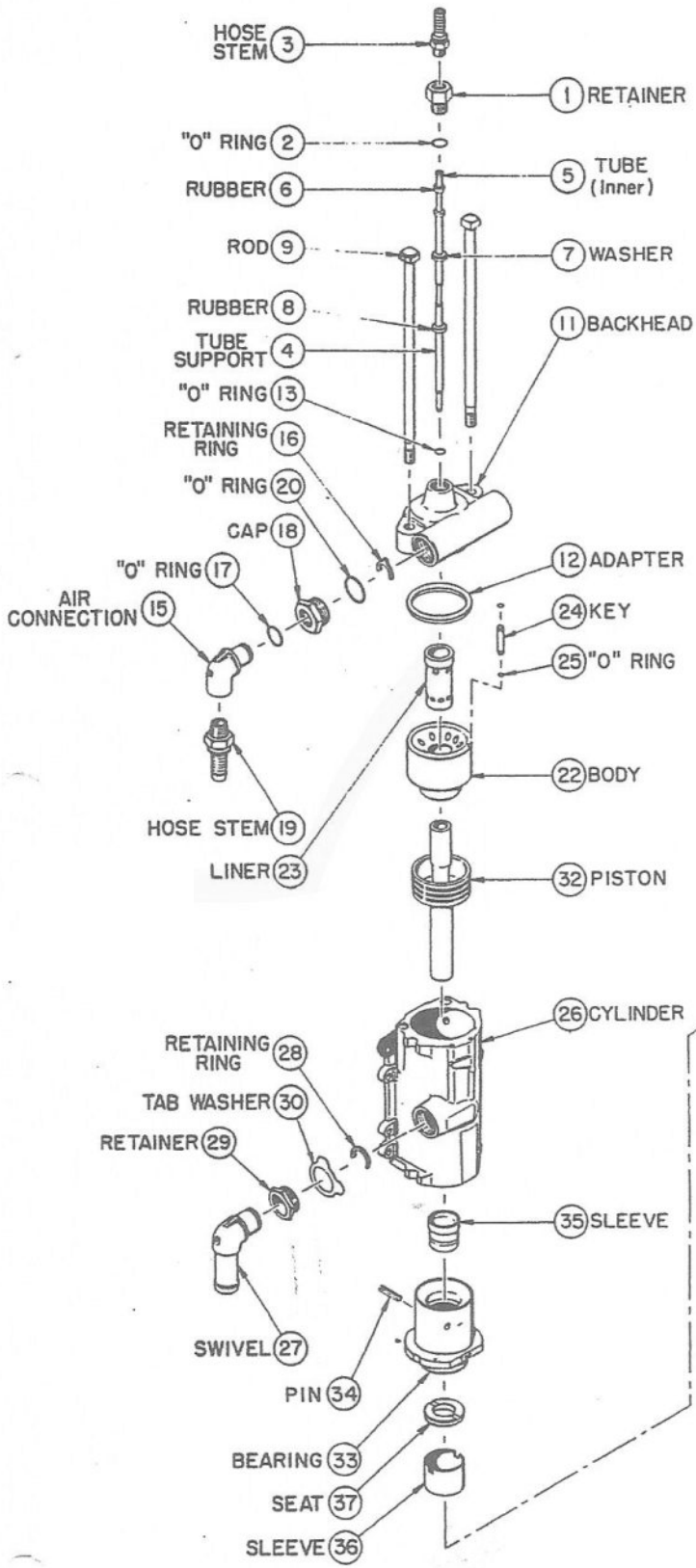
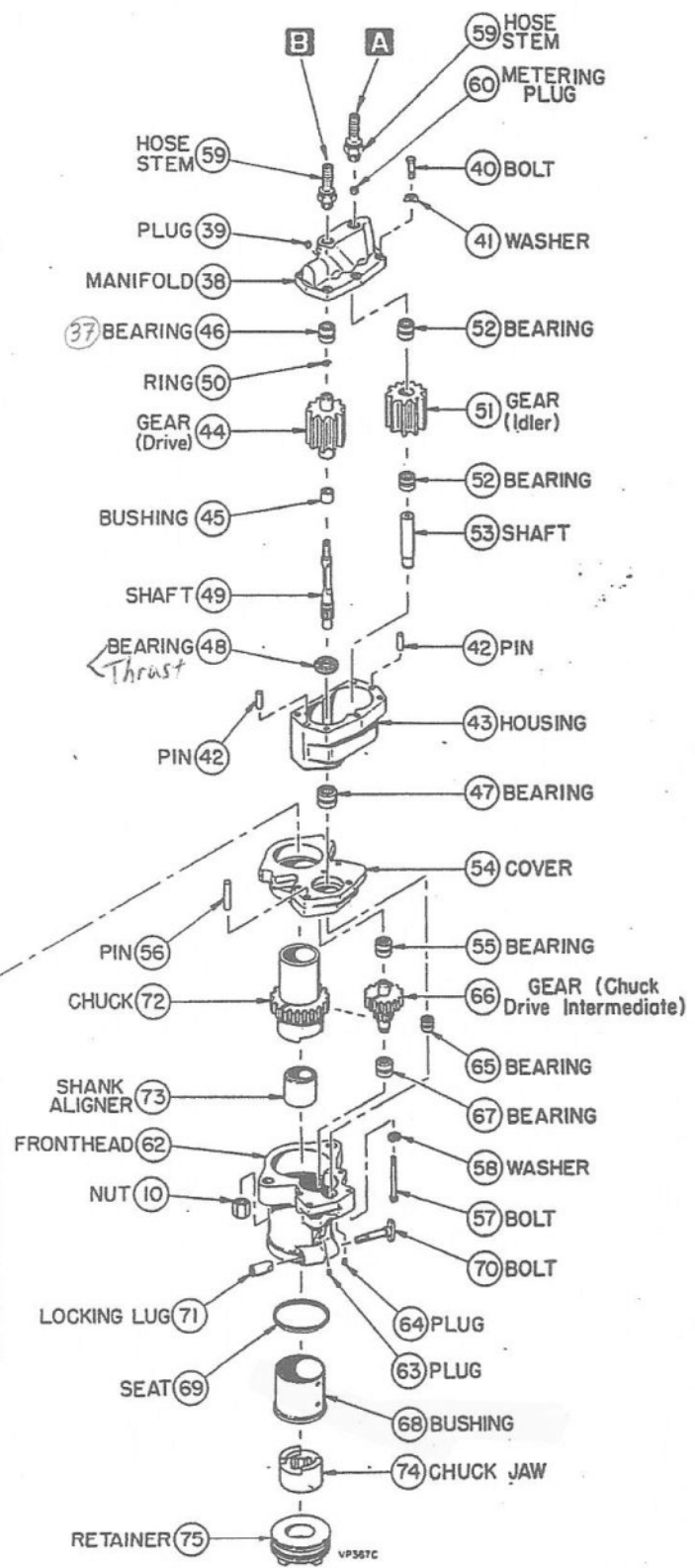


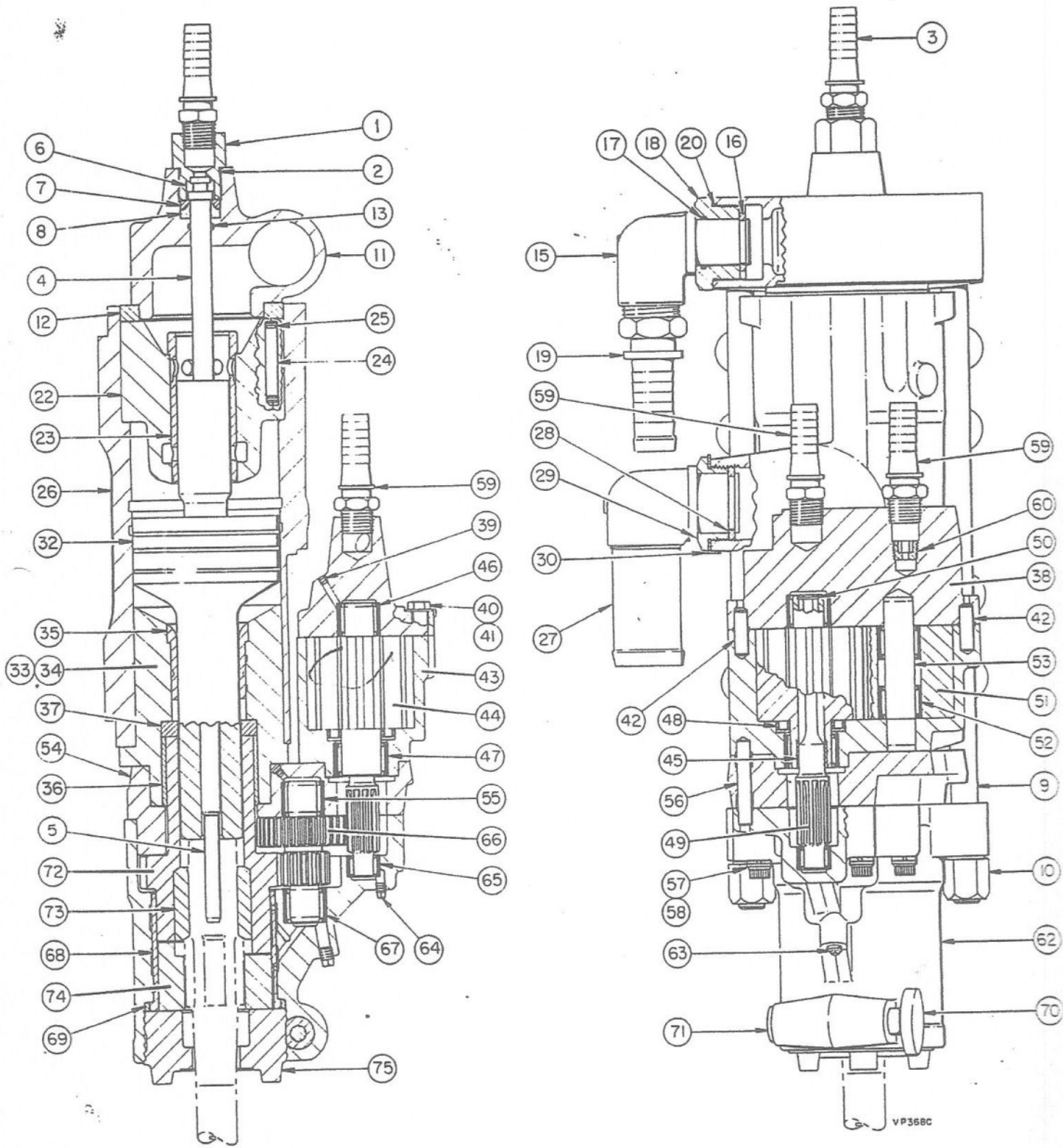
**VL140**  
**INDEPENDENT ROTATION DRILL**  
 (Air Powered Rotation Motor)

Sheet 1  
 October 1, 1976  
 Cancels PS-5400.80 Sh. 1,  
 dated Aug. 1, 1975.



**A** Forward (Left-Hand) Rot. (1" NPT)  
**B** Reverse (Right-Hand) Rot. (1" NPT)





VL140 INDEPENDENT ROTATION DRILL

When ordering spares, please give (1) the NAME of the part as listed, (2) the PART NO. as listed and stamped on the part, and (3) the I-R STOCK NO.  
 DO NOT use illustration numbers when ordering spare parts. To save time send all orders for parts to the nearest branch office or agent.  
 WHEN NECESSARY TO SEND ANY PART OF THIS MACHINE TO THE FACTORY, INQUIRE AT OUR NEAREST BRANCH OFFICE FOR SPECIAL INSTRUCTIONS.

*Recommended Spares* →

LUS. NO.	PART NO.	I-R STOCK NO.	NAME OF PART Parts indented under an item are included with that item	CLASS		
				1 Min.	2 Av.	3 Max.
<b>TUBE RETAINER AND PARTS</b>						
1	A228URD550	5036 4413	TUBE RETAINER .....	-	-	1
†12	20A11CM220	◇ 9501 8172	"O" RING, tube retainer .....	1	2	3
3	L1160	5005 7215	HOSE STEM, blower hose			
<b>BLOWER/WATER TUBE AND PARTS</b>						
4	C229URD550	5036 4405	TUBE SUPPORT (outer tube) .....	2	2	2
5	◇ 5064 6967	X	TUBE (inner) .....	2	2	4
6	A226URD550	5036 4421	RUBBER, inner tube			
7	262URD550	5020 2985	WASHER, tube support			
8	226URD550	5020 2936	RUBBER, tube support			
<b>ASSEMBLY RODS AND PARTS</b>						
9	68URD550	5020 2688	ASSEMBLY ROD (2) .....	2	4	6
10	69URD475	5001 9330	NUT, assembly rod (2) .....	2	2	2
<b>BACKHEAD AND PARTS</b>						
11	◇ 5077 5055	X	BACKHEAD ASSEMBLY			
12	◇ 5077 4975	X	:BACKHEAD			
†13	260URD550	5020 2704	:ADAPTER RING, backhead			
†13	20A11CM210	◇ 9508 6526	"O" RING .....	-	-	1
<b>MAIN AIR INLET AND PARTS</b>						
15	19D475	5001 5833	AIR CONNECTION			
16	5049 4830	X	RETAINING RING, air connection			
†17	20A11CM224	◇ 9508 6559	"O" RING, air connection .....	-	-	1
18	5049 4483	X	CAP, air connection			
19	31RDC150	5002 3886	HOSE STEM			
†20	20A11CM231	◇ 9501 8719	"O" RING			
<b>AIR DISTRIBUTOR AND PARTS</b>						
22	5053 2712	X	AIR DISTRIBUTOR BODY ASSEMBLY			
23	5051 0528	X	:BODY, air distributor			
24	5050 9249	X	:LINER, air distributor body			
†25	278URD550	5020 2621	KEY, air distributor			
†25	20A11CM011	◇ 9509 7648	"O" RING, air distributor (2) .....	2	4	6
<b>CYLINDER</b>						
26	5053 9618	X	CYLINDER			
<b>SWIVEL EXHAUST</b>						
27	5047 5128	X	SWIVEL EXHAUST (tube) .....	-	-	1
28	5047 5193	X	RETAINING RING, swivel exhaust .....	-	-	1
29	5049 4822	X	RETAINER, swivel exhaust			
30	5047 3818	X	TAB WASHER, retainer .....	-	-	1
<b>PISTON AND PARTS</b>						
32	5051 0536	X	PISTON .....	-	1	1
33	◇ 5078 0311	X	PISTON STEM BEARING ASSEMBLY			
†34	25A13C336	◇ 9503 4062	:ROLL PIN <i>50090554</i>			
35	5053 2860	X	:SLEEVE, piston stem .....	1	2	3
36	◇ 5064 3642	X	:WEAR SLEEVE, chuck .....	1	2	3
37	◇ 5078 0329	X	:SEAT, chuck .....	1	2	3
<b>ROTATION PARTS</b>						
38	5053 7489	X	MANIFOLD, air motor .....	-	-	1
39	34A7A1	◇ 9503 3346	PIPE PLUG			
40	35A21J222N	◇ 9521 4953	BOLT, motor manifold (5) .....	-	-	2
41	17A5S2	◇ 9509 6962	TAB WASHER (5)			
42	D524URD475	5021 0491	LOCATING PIN, motor manifold (2) .....	-	-	2
43	453URD550	5029 7464	HOUSING, motor gear .....	-	-	1
44	A454URD550	5036 5253	DRIVE GEAR, motor .....	-	-	1
45	1047URD550	5025 1594	:BUSHING, drive gear			
46	1BRG2389H	5021 4873	BEARING, drive gear (SJ-7215-RBC)			
47	1BRG2389J	5010 4611	BEARING, drive gear (SJ-7275-RBC)			

(continued)

NOTE:— The "X" indicates that the Part No. and Stock No. are identical.  
 †NOTE:— This part is commercially available. Refer to table on Page 5 for a complete description of this part.  
 ◇ Part number change only.  
 ◆ Changed or added over previous printing.

PART NO.	STOCK NO.	NAME OF PART Parts indented under an item are included with that item	CLASS		
			1 Min.	2 Av.	3 Max.
1BRG2389R	5029 7035	THRUST BEARING, drive gear			
B146URD550	5036 5220	SHAFT, motor drive gear	1	1	1
1RNG1661C	5036 5766	RETAINING RING			
B455URD475	5021 0517	IDLER GEAR, motor	—	—	1
1BRG2389H	5021 4873	BEARING, idler gear (2) (SJ-7215-RBC)	2	2	4
456URD475	5021 0509	SHAFT, motor idler gear			
5049 0135	X	COVER ASSEMBLY, drive gear			
1BRG2389H	5021 4873	BEARING, chuck drive intermediate gear			
E524URD475	5021 0483	LOCATING PIN, motor gear housing			
◆ 5071 1084	X	BOLT, drive gear cover (3)			
15A5C120	◇ 9521 0415	LOCKWASHER (3) ← 8822.5			
LI160	5005 7215	HOSE STEM (2)			
5053 7406	X	METERING PLUG, forward rotation port			
<b>FRONTHEAD AND PARTS</b>					
5044 5352	X	FRONTHEAD			
30A7S3	◇ 9503 3593	:PIPE PLUG			
30A7S2	◇ 9503 3585	:PIPE PLUG			
1BRG2389P	5029 5633	BEARING, motor drive gear shaft (SJ-7153-RBC)			
5040 6867	X	INTERMEDIATE GEAR, chuck drive	1	1	2
1BRG2389H	5021-4873	BEARING, chuck drive intermediate gear (SJ-7215-RBC)			
379URD475	5001 9447	BUSHING, fronthead	1	1	1
◆ 5078 0337	X	SEAT, chuck jaw retainer	—	—	1
1060URD550	5036 8786	BOLT, chuck jaw retainer locking lug	1	1	2
A597URD475	5020 8644	LOCKING LUG, chuck jaw retainer	1	1	2
<b>CHUCK AND PARTS</b> (For 4-spline, 1 3/4 in. [44.5 mm] dia. shank)					
5040 6875	X	CHUCK	1	1	1
A53URD475	5020 2993	SHANK ALIGNER	1	2	3
B51URD475	5020 7877	CHUCK JAW	1	2	3
B265URD475	5021 9963	RETAINER, chuck jaw			