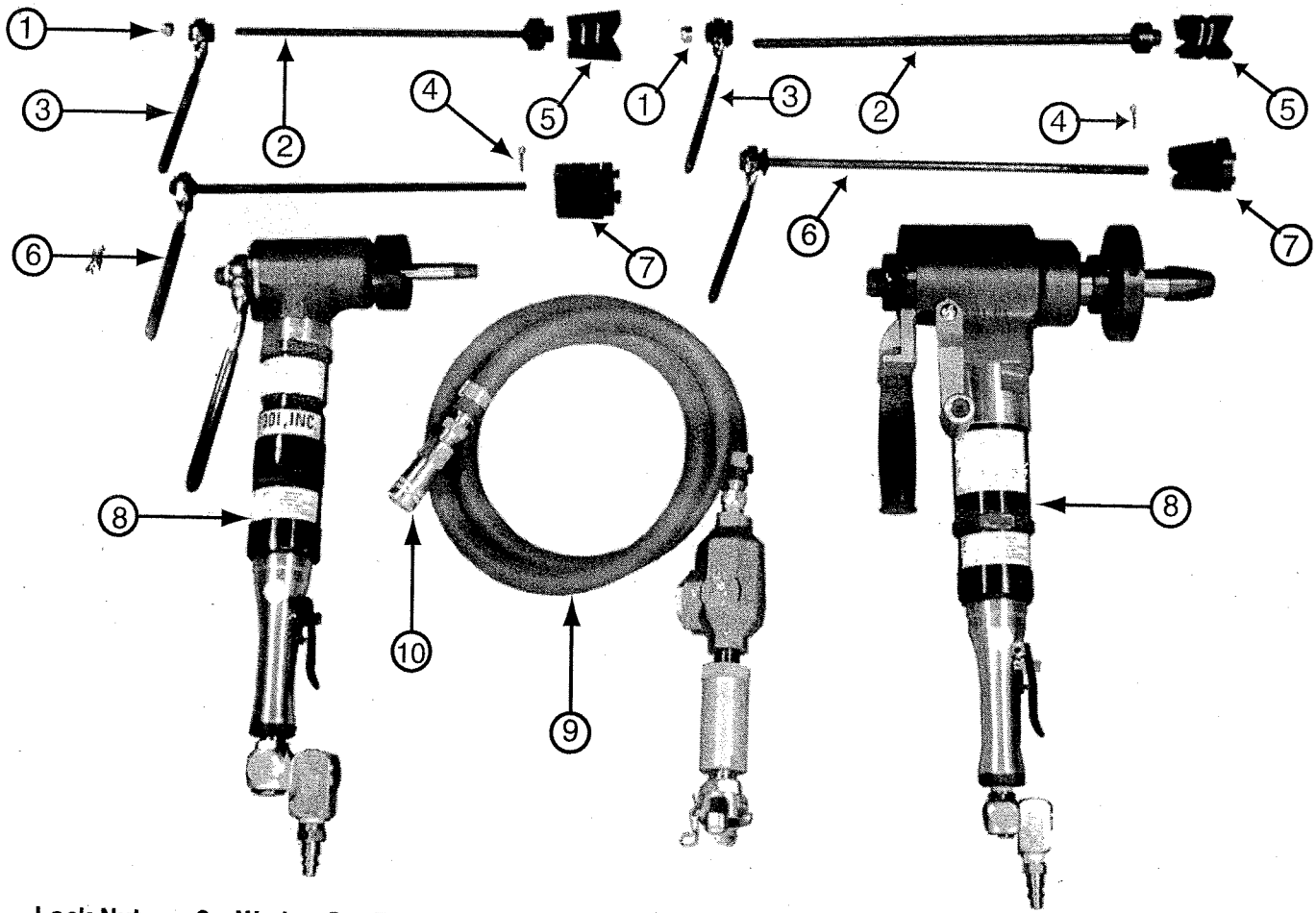
Wilson

Smarter Tools for Smarter Work

OPERATING INSTRUCTIONS BEVELLING MACHINES

MODEL 74802



1— Lock Nut **2—Wedge Set Draw Rod** **3—Locking Wrench** **4—Cotter Pin** **5—Wedge Set**
6— Locking Wrench/Rod **7—Collet** **8—Beveling Tool** **9—Hose/Oiler Assembly** **10—Quick Coupling**

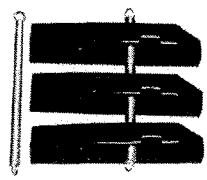
Collet/Draw Rod Assembly

Select the appropriate size of collet for the tube I.D. to be beveled. The I.D. size is stamped on the collet. Insert the collet rod through the centershaft from the rear of the tool.

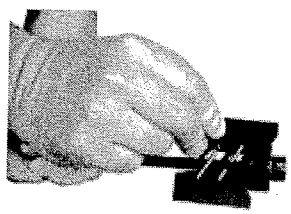
Thread the collet onto the draw rod until it touches the end of the center shaft. Insert the cotter pin into the draw rod end and open the ends. This ensures that the collet will not be threaded off the end of the rod. Some centershaft ends have machined flats. If so, the tips of the collet ends must be aligned with the machined flats of the center shaft.

Wedge Set Assembly

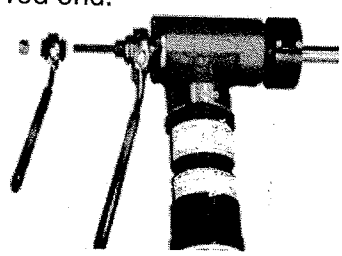
Assemble the wedge sets by laying them on the flat side with the wedge guide grooves at the same ends. Place the springs through the holes

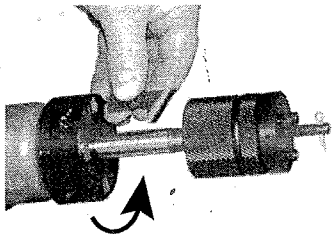


and connect the spring ends to form a circle. Once both springs are properly connected, slide



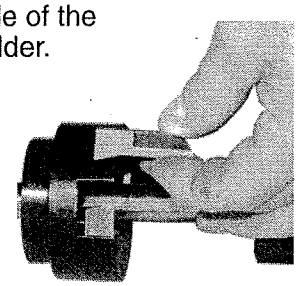
the assembly over the rod and hook the guide grooves into the cone slots. Insert the rod into the center shaft from the front. Thread on the draw nut/wrench assembly until it contacts the centershaft. The wedge ends are then aligned with the slots in the centershaft. Thread the self-locking nut onto the rod until it is flush with the rod end.





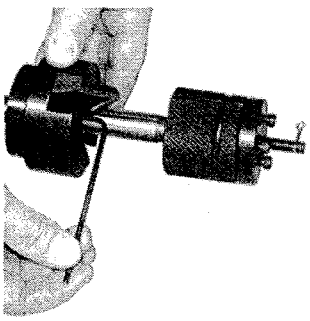
Tool Positioning, Fixed Tool Holder

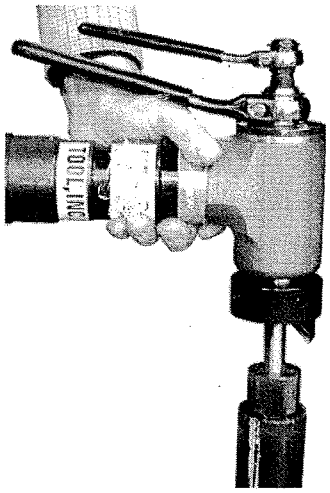
The fixed position tool holders are designed to cover a wide range of tube diameters and beveling applications. Select the proper blade for the application to be performed. Place the shank in the proper tool holder location with the shoulder against the tool holder. The ground edge of the blade must be facing in the direction of the rotation. Lock the blade in position with the set screw on the side of the holder.



Blade Positioning, Sliding Tool Holder

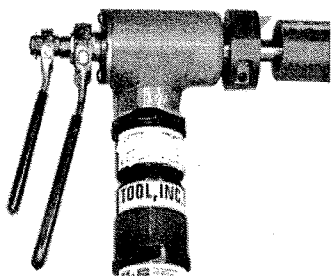
Select the appropriate blade type for the application. Align the angled base of the blade with the angle of the tool holder blade lock. Slide the blade to the proper position for the tube size, lock the blade in position with the allen wrench provided.



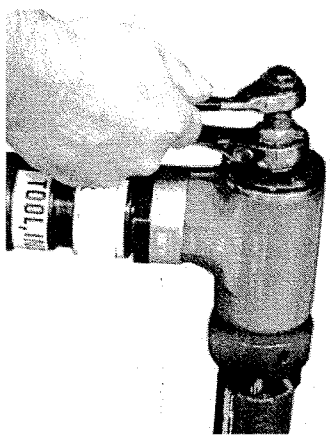


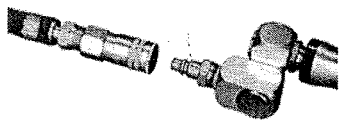
Place Into Tube

With the collet or wedge set properly assembled and the blades locked in position, make sure that the locking mechanism is retracted sufficiently to fit into the tube. Place the locking mechanism into the tube with the cutter safely away from the tube edge.



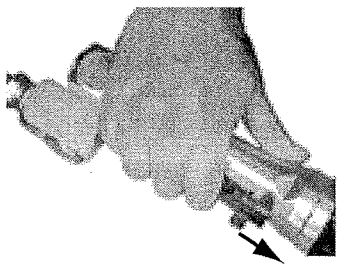
Lock the assembly in the tube with the draw rod locking wrench at the back of the tool. Tighten securely. (CAUTION: Over tightening can cause rod or locking mechanism failure!)



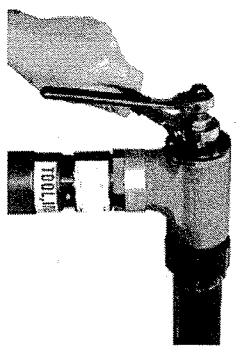


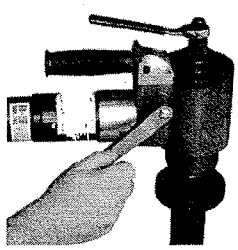
Tool Operation

Check to ensure that the wedge or collet is tightly locked in the tube and that the cutting blade is not touching the tube. Attach the air hose with the quick coupling provided.



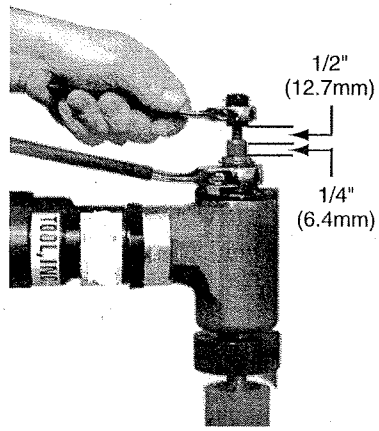
Make sure that there are no obstructions to the rotation of the head and blade, push the safety lock forward and squeeze the throttle handle.



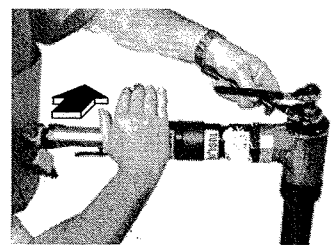


Depending upon the model being used, the blade is fed into the tube with the feed wrench or the crank feed. Once the blade engages the tube, gradually apply constant pressure until the desired bevel is achieved. If the tool stalls or RPM drops significantly, too much pressure is being applied to the blade.

Once the bevel is complete, reverse the feed wrench/crank and retract the tool to a position approximately 1/4" (6.4mm) from the end of the centershaft.



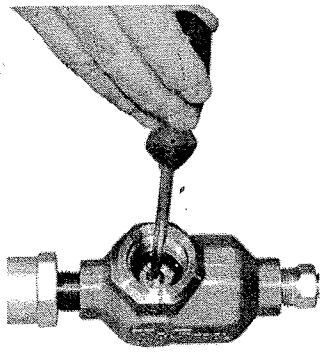
Reverse the locking wrench and loosen the draw rod until the nut is about 1/2" (12.7mm) away from the end of the centershaft.



The locking can be so secure that the tool must be jarred to release it. Use the heel of your hand to bump the tool laterally.

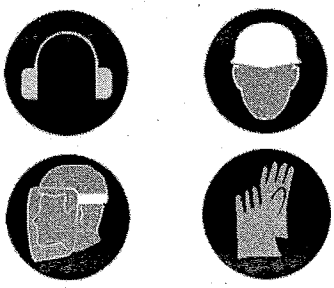
Never strike the tool holder, gear housing or air motor with a hammer or other hard object.

Safety Recommendations



Oiler Adjustment

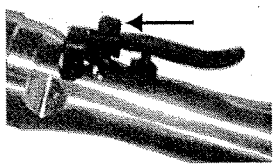
An in-line oiler is provided with each tool. To ensure proper lubrication, start the machine and hold a sheet of paper up to the exhaust ports. There should be a mist of oil on the paper. If there is enough that the oil runs on the paper, it is too much. If there is no mist, it is not enough.
To adjust it, remove the cover from the oiler body. The adjusting screw is in the center. With a straight blade screwdriver, turn the screw clockwise to reduce the amount or counter clockwise to increase the oil feed.



General Safety

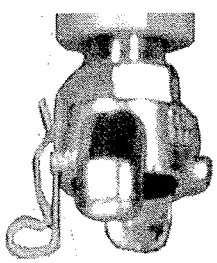
Always wear your head, eye, ear and hand protection.

! Protective clothing should be worn. Avoid loose fitting clothes and long hair that may get caught in the rotating head and blade.

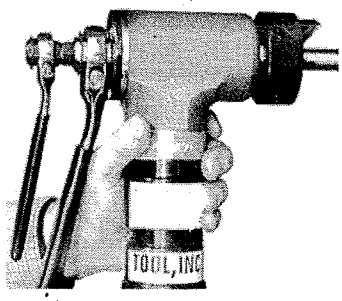


Do not operate the tool if the throttle safety lock is not functioning properly. Push the lock forward to operate the throttle.

! Never lock the throttle open. Do not put anything on the tool that will interfere with the dead-man release operation.



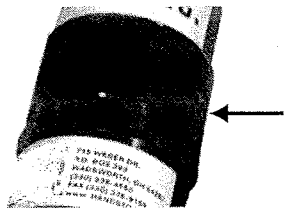
A hitch pin is provided on the coupling for the supply line. When the coupling is secure, always use this pin to lock the coupling from accidental release.



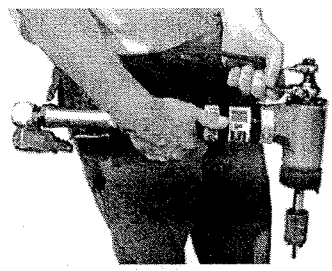
! **Injury Potential**
Keep hands, long hair and clothing away from rotating parts!

In most beveling applications, it is necessary for the cutting blades to be exposed and unguarded. The blades are sharp and can pose an injury hazard.

! **Injury Potential**
The tool can rotate in the tube if the wedge/ collet is not locked properly. Be aware of adjacent objects to avoid potential pinch points.



The exhaust ring on the air motor can be rotated 360°. Check this position prior to starting the tool to avoid spraying oil and air borne contaminants into you.



Never pickup or lower the tool by the air hose. Always grasp it firmly around the barrel of the motor.

Wilson™
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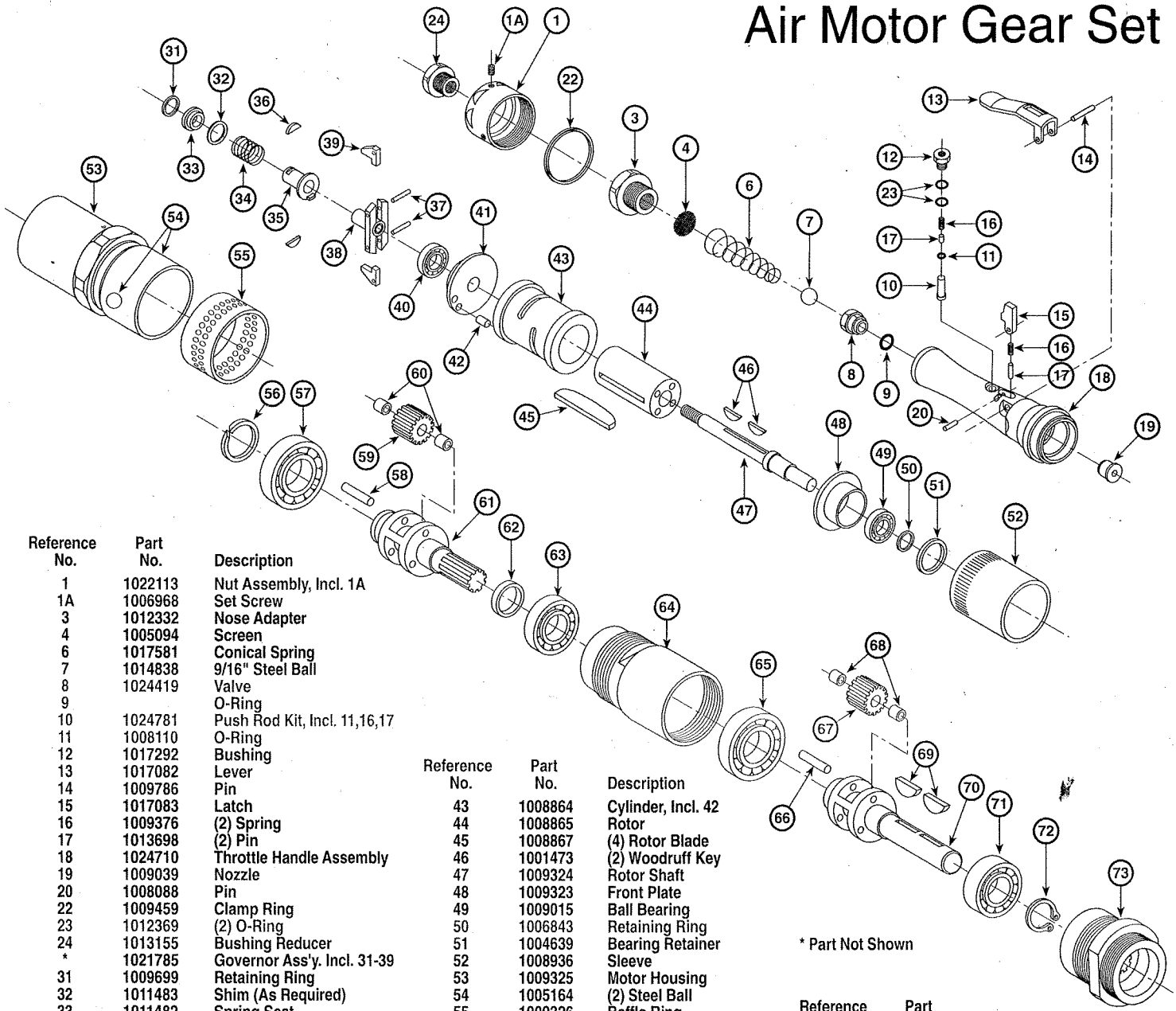
Parts List

Air Motor Gear Set



Reference No.	Part No.	Description
1	1022113	Nut Assembly, Incl. 1A
1A	1006968	Set Screw
3	1012332	Nose Adapter
4	1005094	Screen
6	1017581	Conical Spring
7	1014838	9/16" Steel Ball
8	1024419	Valve
9		O-Ring
10	1024781	Push Rod Kit, Incl. 11,16,17
11	1008110	O-Ring
12	1017292	Bushing
13	1017082	Lever
14	1009786	Pin
15	1017083	Latch
16	1009376	(2) Spring
17	1013698	(2) Pin
18	1024710	Throttle Handle Assembly
19	1009039	Nozzle
20	1008088	Pin
22	1009459	Clamp Ring
23	1012369	(2) O-Ring
24	1013155	Bushing Reducer
*	1021785	Governor Ass'y. Incl. 31-39
31	1009699	Retaining Ring
32	1011483	Shim (As Required)
33	1011482	Spring Seat
34	1009152	Spring
35	1009120	Governor Valve
36	1009099	(2) Key
37	1008839	(2) Pin
38	1009119	Hub
39	1009121	(2) Gov. Weights
*	1025023	Motor Ass'y, Incl. 40-51
40	1009017	Ball Bearing
41	1008935	Rear Plate
42	1008840	Pin

Reference No.	Part No.	Description
43	1008864	Cylinder, Incl. 42
44	1008865	Rotor
45	1008867	(4) Rotor Blade
46	1001473	(2) Woodruff Key
47	1009324	Rotor Shaft
48	1009323	Front Plate
49	1009015	Ball Bearing
50	1006843	Retaining Ring
51	1004639	Bearing Retainer
52	1008936	Sleeve
53	1009325	Motor Housing
54	1005164	(2) Steel Ball
55	1009326	Baffle Ring
56	1009530	Retaining Ring
57	1009033	Ball Bearing
58	1009331	(3) Planet Pin
59	1009332	(3) Planet Gear
60	1009303	(6) Needle Bearing
61	1009598	Planet Cage
62	1009592	Planet Cage Washer
63	1005003	Ball Bearing
64	1013858	Internal Gear
65	1009333	Ball Bearing

* Part Not Shown

Reference No.	Part No.	Description
66	1009331	(3) Planet Pin
67	1009594	(3) Planet Gear
68	1009303	(6) Needle Bearing
69	1001311	(2) Woodruff Key
70	1015643	Planet Cage, Incl.:
*	1015356	Retaining Ring
71	1010135	Ball Bearing
72	1012796	Retaining Ring
73	1015641	Internal Gear

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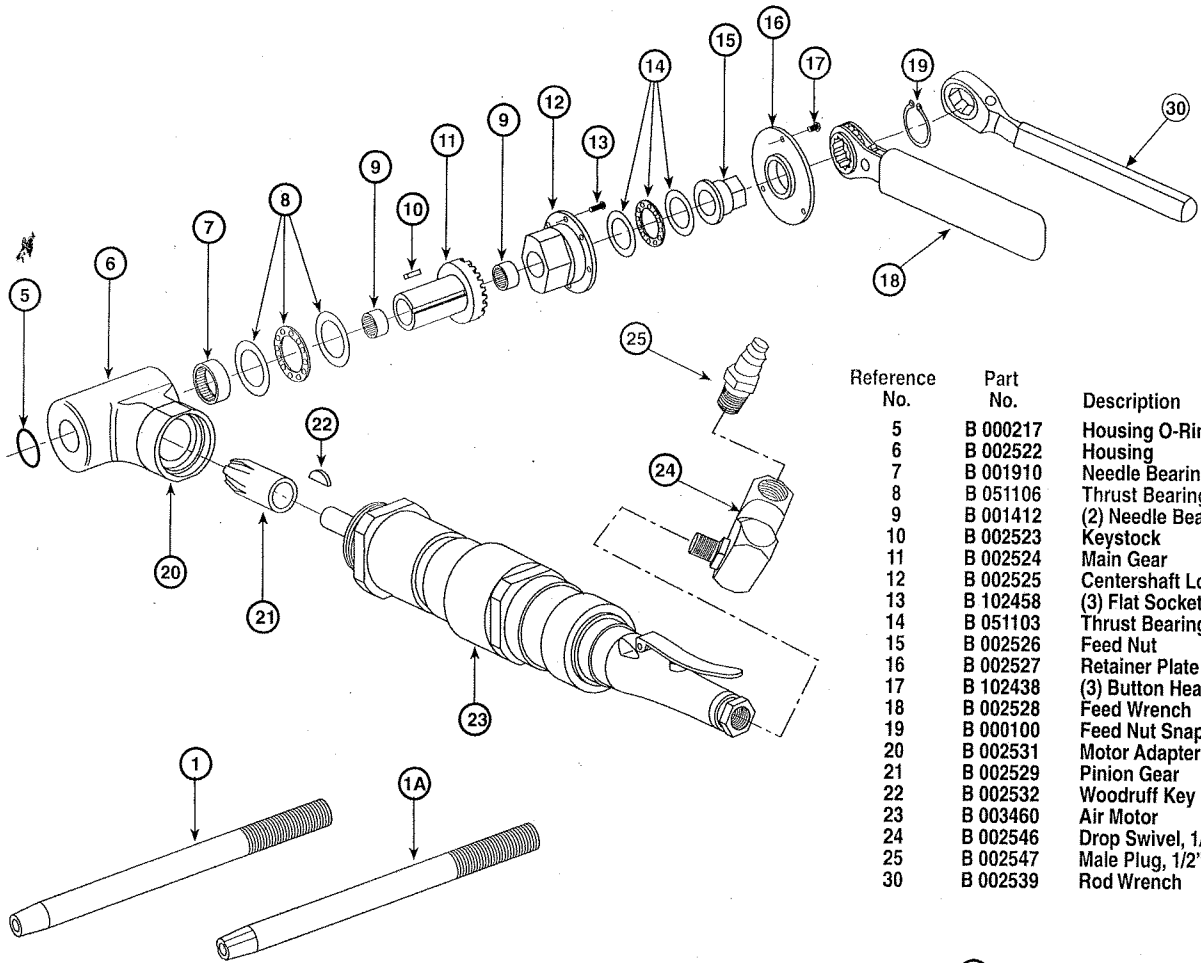
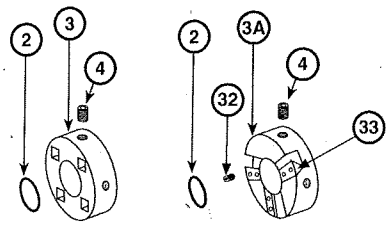
Parts List

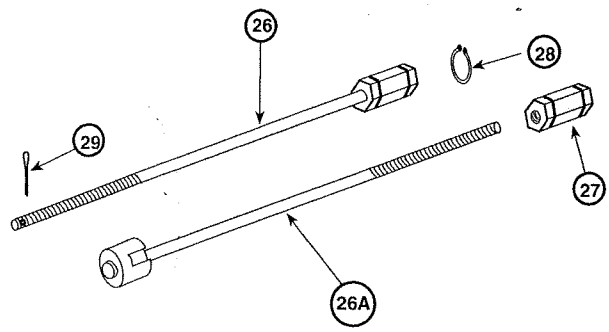


Reference No.	Part No.	Description
5	B 000217	Housing O-Ring
6	B 002522	Housing
7	B 001910	Needle Bearing
8	B 051106	Thrust Bearing
9	B 001412	(2) Needle Bearing
10	B 002523	Keystock
11	B 002524	Main Gear
12	B 002525	Centershaft Lock
13	B 102458	(3) Flat Socket Cap Screw
14	B 051103	Thrust Bearing
15	B 002526	Feed Nut
16	B 002527	Retainer Plate
17	B 102438	(3) Button Head Cap Screw
18	B 002528	Feed Wrench
19	B 000100	Feed Nut Snap Ring
20	B 002531	Motor Adapter
21	B 002529	Pinion Gear
22	B 002532	Woodruff Key
23	B 003460	Air Motor
24	B 002546	Drop Swivel, 1/2" NPT
25	B 002547	Male Plug, 1/2" NPT
30	B 002539	Rod Wrench

Reference No.	Part No.	Description
1	B 002520	Centershaft, Collet
1	B 002520L	Centershaft, Collet, Long
1A	B 002540	Centershaft, Wedge Set
1A	B 002540L	Centershaft, Wedge Set, Long



Reference No.	Part No.	Description
2	B 000114	Tool Holder O-Ring
3	B 002521	Tool Holder, Fixed
3A	B 002536	Tool Holder, Sliding
4	B 561856	Tool Holder Locking Screw
32	B 002548	(3) Differential Screws
33	B 002549	(3) Blade Lock



Reference No.	Part No.	Description
26	B 002550	Collet Rod
26	B 002550L	Collet Rod, Long
26A	B 002560	Wedge Rod, 5/8" O.D. Head
26A	B 002560L	Wedge Rod, 5/8" O.D. Head, Long
26A	B 002561	Wedge Rod, 7/8" O.D. Head
26A	B 002561L	Wedge Rod, 7/8" O.D. Head, Long
26A	B 002562	Wedge Rod, 1-1/4" O.D. Head
26A	B 002562L	Wedge Rod, 1-1/4" O.D. Head, Long
27	B 002543	Wedge Rod Nut
28	B 002544	(2) Retainer Ring
29	B 002545	Cotter Pin