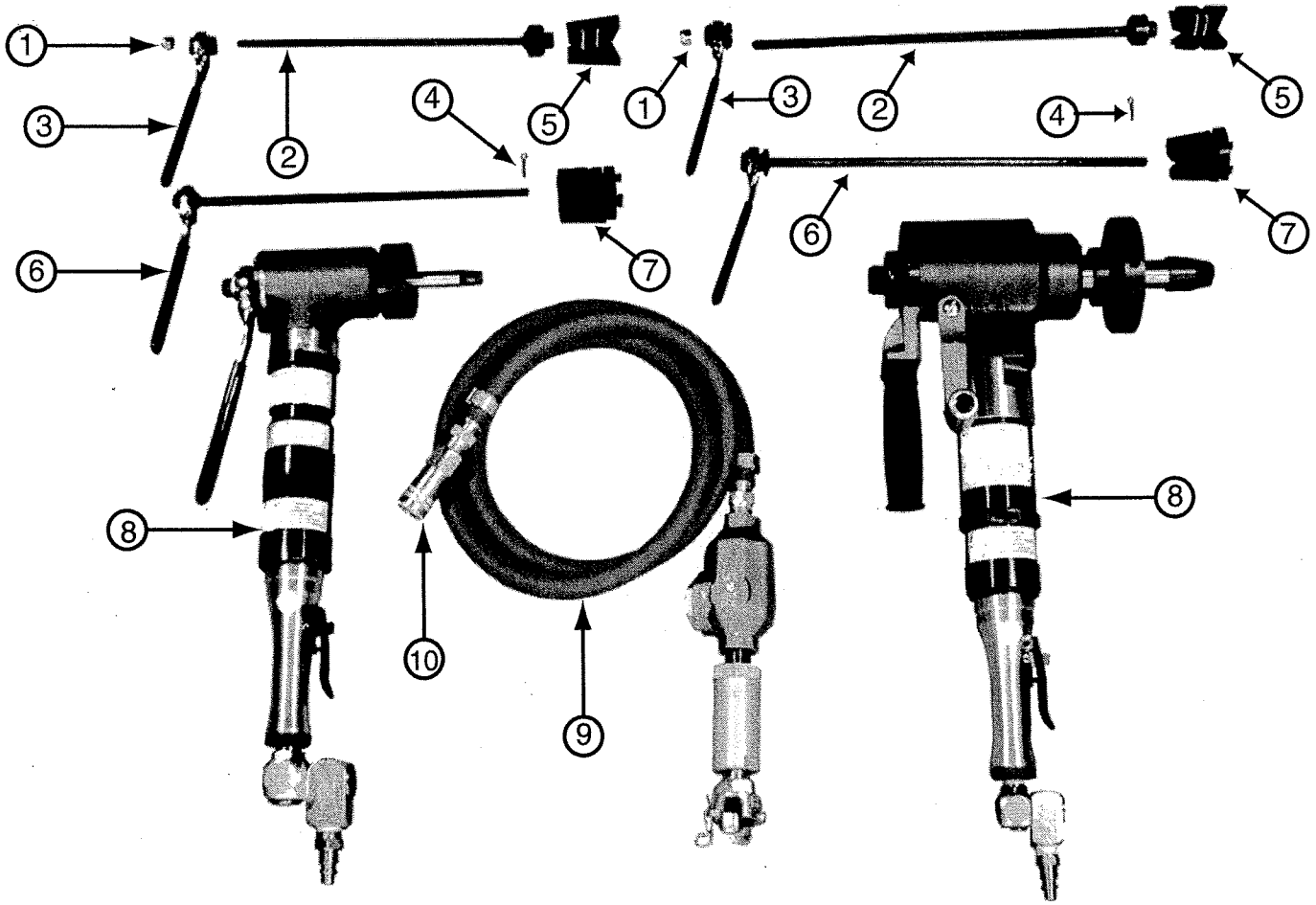
Wilson

Smarter Tools for Smarter Work

OPERATING INSTRUCTIONS BEVELLING MACHINES

MODEL 74805



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**

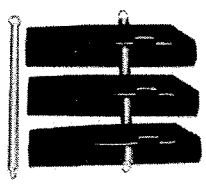
Collet/Draw Rod Assembly

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.

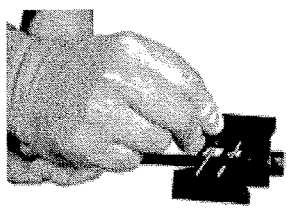
Thread the collet onto the draw rod until it touches the end of the center shaft. Insert the cotter pin into the draw rod end and open the ends. This ensures that the collet will not be threaded off the end of the rod. Some centershaft ends have machined flats. If so, the tips of the collet ends must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

Wedge Set Assembly

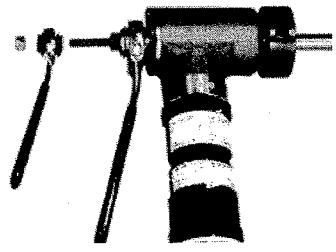
Assemble the wedge sets by laying them on the flat side with the wedge guide grooves at the same ends. Place the springs through the holes

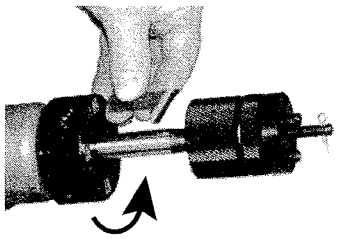


and connect the spring ends to form a circle. Once both springs are properly connected, slide



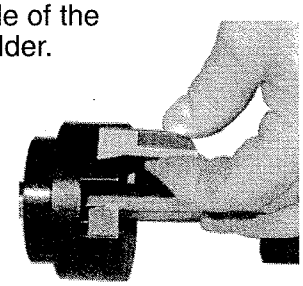
the assembly over the rod and hook the guide grooves into the cone slots. Insert the rod into the center shaft from the front. Thread on the draw nut/wrench assembly until it contacts the centershaft. The wedge ends are then aligned with the slots in the centershaft. Thread the self-locking nut onto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





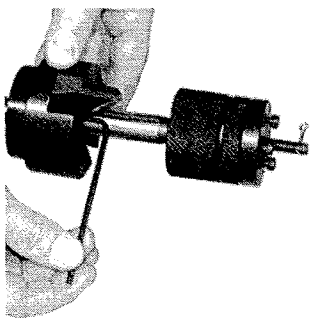
Tool Positioning, Fixed Tool Holder

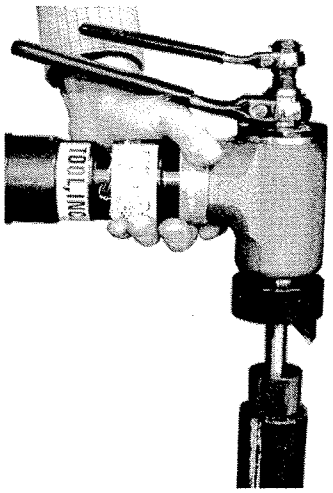
The fixed position tool holders are designed to cover a wide range of tube diameters and beveling applications. Select the proper blade for the application to be performed. Place the shank in the proper tool holder location with the shoulder against the tool holder. The ground edge of the blade must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

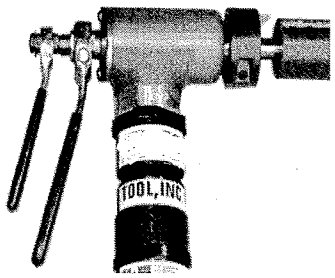
Select the appropriate blade type for the application. Align the angled base of the blade with the angle of the tool holder blade lock. Slide the blade to the proper position for the tube size, lock the blade in position with the allen wrench provided.



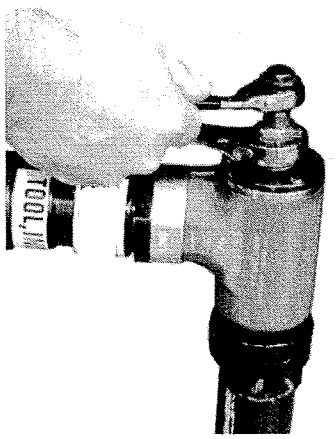


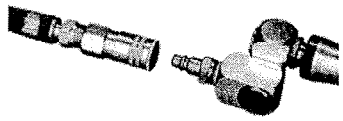
Place Into Tube

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.



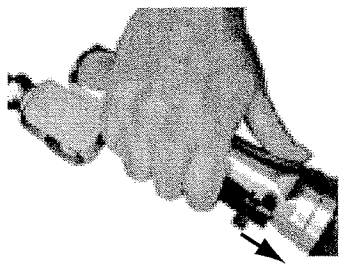
Lock the assembly in the tube with the draw rod locking wrench at the back of the tool. Tighten securely. (CAUTION: Over tightening can cause rod or locking mechanism failure!)



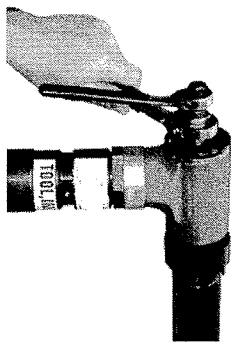


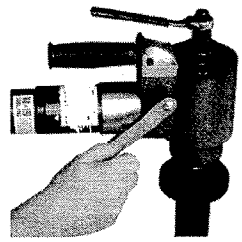
Tool Operation

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.



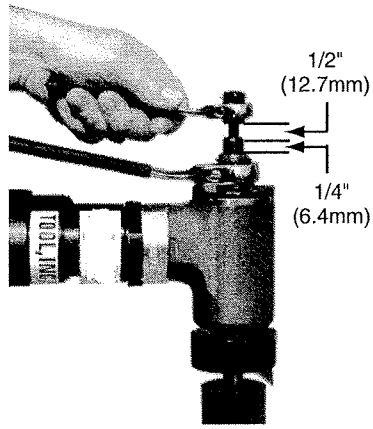
Make sure that there are no obstructions to the rotation of the head and blade, push the safety lock forward and squeeze the throttle handle.



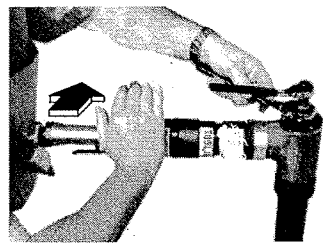


Depending upon the model being used, the blade is fed into the tube with the feed wrench or the crank feed. Once the blade engages the tube, gradually apply constant pressure until the desired bevel is achieved. If the tool stalls or RPM drops significantly, too much pressure is being applied to the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

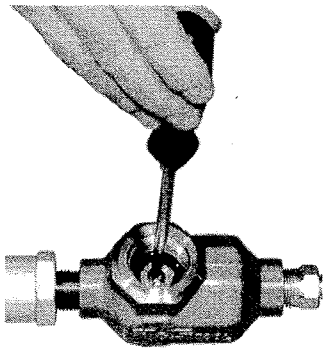


Reverse the locking wrench and loosen the draw rod until the nut is about 1/2" (12.7mm) away from the end of the centershaft.



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.

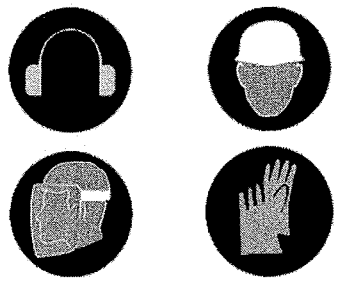
Never strike the tool holder, gear housing or air motor with a hammer or other hard object.



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.

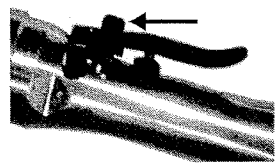
Safety Recommendations



General Safety

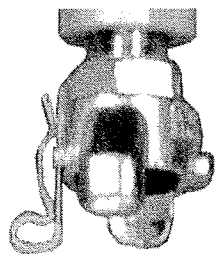
Always wear your head, eye, ear and hand protection.

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

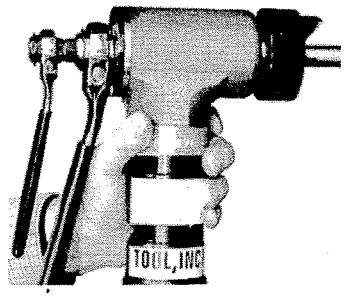


Do not operate the tool if the throttle safety lock is not functioning properly. Push the lock forward to operate the throttle.

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



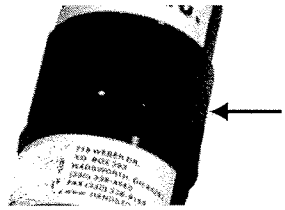
A hitch pin is provided on the coupling for the supply line. When the coupling is secure, always use this pin to lock the coupling from accidental release.



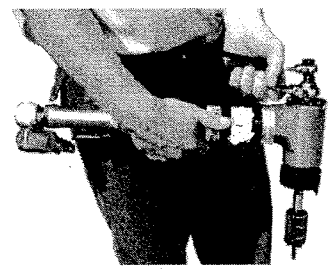
! Injury Potential
Keep hands, long hair and clothing away from rotating parts!

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.

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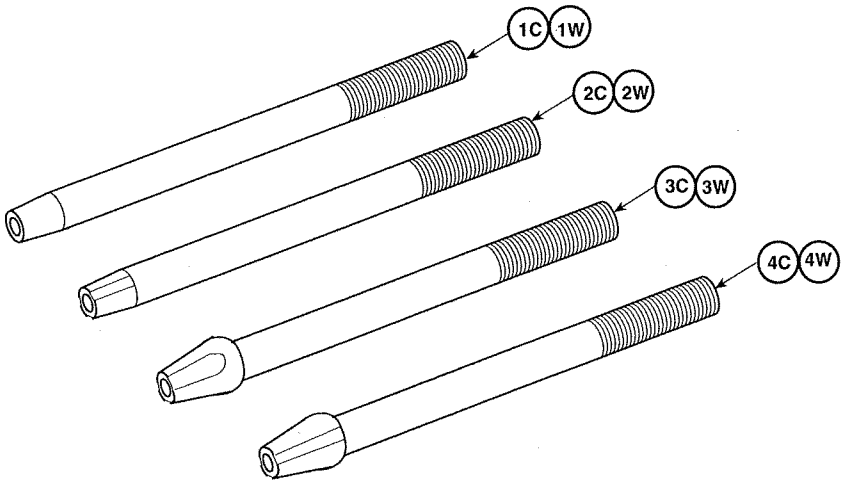
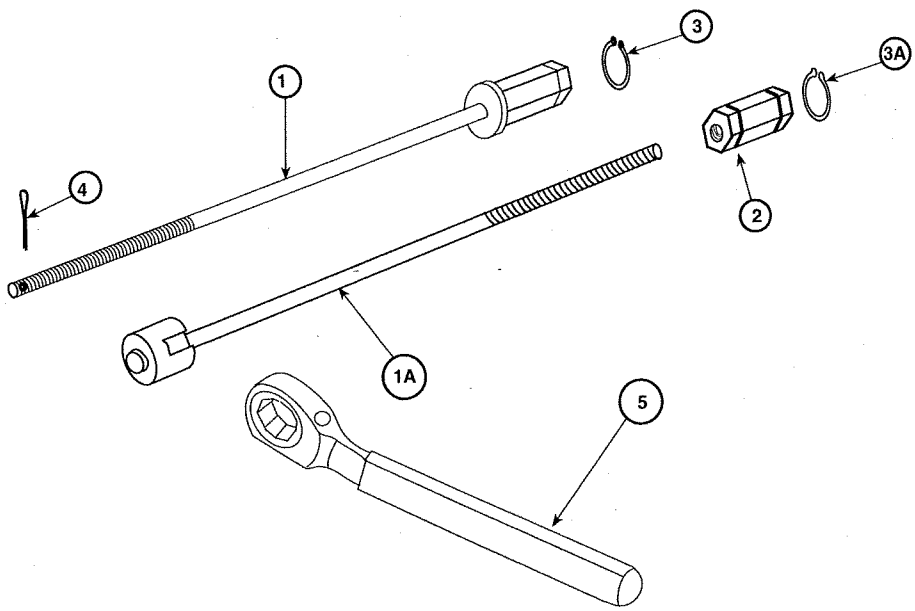
Center Shafts



Reference No.	Part No.	Description
1C	MB 003545	Crank Feed 7° Centershaft, Collet
1W	MB 003546	Wrench Feed 7° Centershaft, Collet
2C	MB 003547	Crank Feed 7/8" Centershaft, Wedge
2W	MB 003548	Wrench Feed 7/8" Centershaft, Wedge
3C	MB 003549	Crank Feed 10° Centershaft, Collet
3W	MB 003550	Wrench Feed 10° Centershaft, Collet
4C	MB 003551	Crank Feed 1-1/4" Centershaft, Wedge
4W	MB 003552	Wrench Feed 1-1/4" Centershaft, Wedge

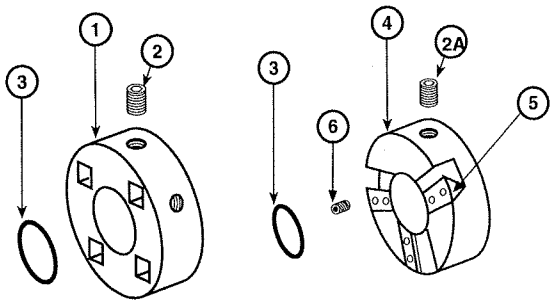
C = Crank Feed Model
W = Wrench Feed Model

Wedge and Collet Locking Rods



No.	Reference Part No.	Description
1	MB 003560	Collet Rod
1A	MB 003561	Wedge Rod, 7/8" O.D. Head
1A	MB 003562	Wedge Rod, 1-1/4" O.D. Head
2	MB 003563	Wedge Rod Nut
3	MB 003564	Retainer Ring, Collet
3A	MB003564	(2) Retainer Ring, Wedge
4	MB 003565	Cotter Pin, Collet
5	MB 003566	Rod Wrench

Standard Tool Holders



Reference No.	Part No.	Description
1	MB 003570	3" Tool Holder, Fixed
2	MB 003571	(5) Tool Holder Set Screw, Fixed
2A	MB 003571	Tool Holder Set Screw, Sliding
3	MB 003572	O-Ring, Tool Holder
4	MB 003573	3" Tool Holder, Sliding
5	MB 003574	(3) Blade Lock, Sliding
6	MB 003575	(3) Differential Screw

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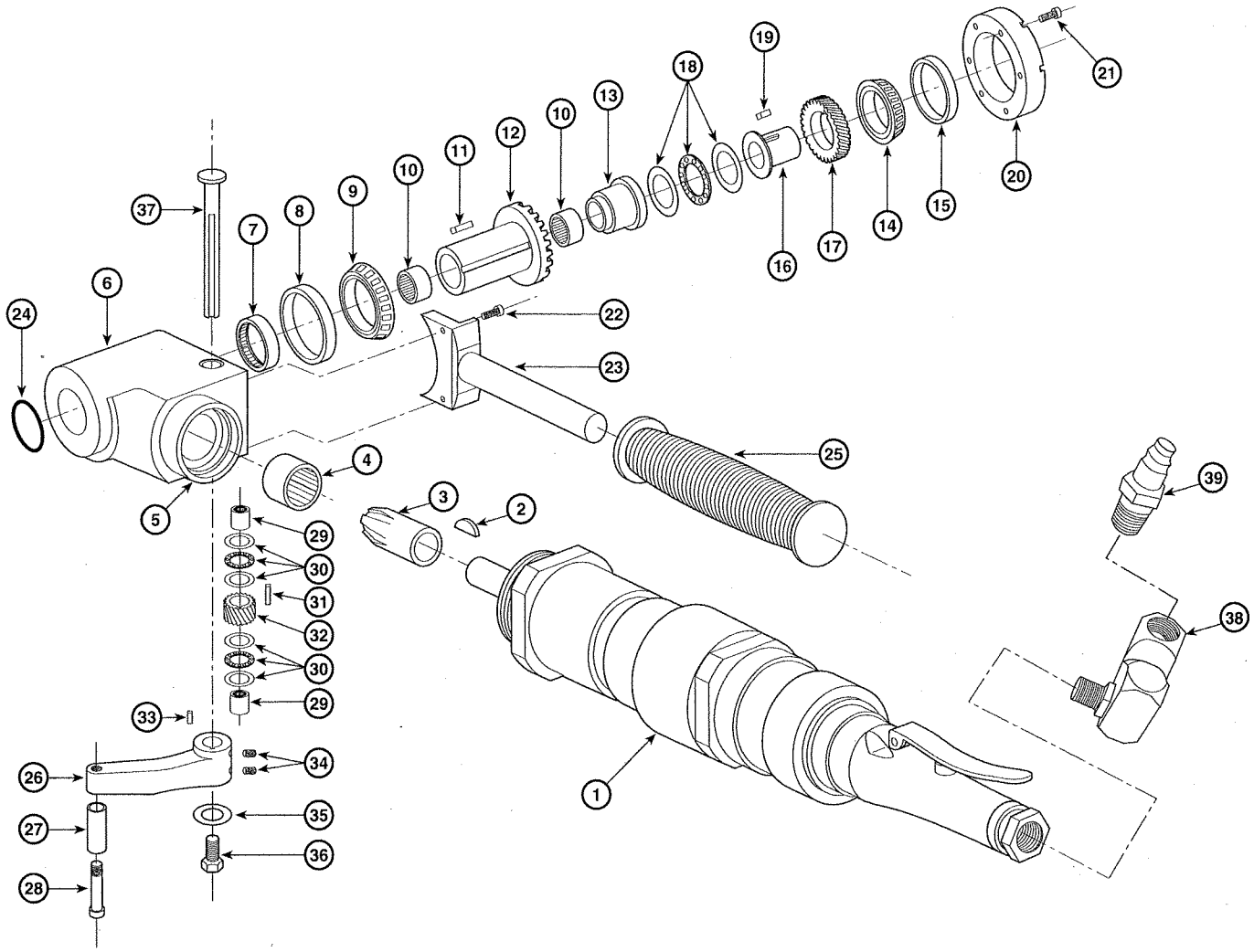
Parts List

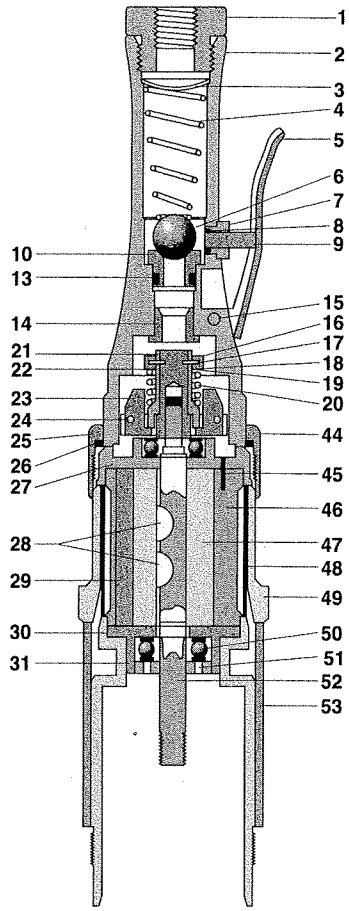


Reference No.	Part No.	Description
1	MB 003488	Air Motor
2	MB 003489	Woodruff Key
3	MB 003490	Pinion Gear
4	MB 001816	Needle Bearing
5	MB 003491	Adapter
6	MB 003520	Housing
7	MB 000228	Needle Bearing
8	MB 078310	Bearing Cup
9	MB 078349	Tapered Roller Bearing
10	MB 001412	(2) Needle Bearing
11	MB 003494	Keystock
12	MB 003495	Main Gear
13	MB 003521	Centerpiece

Reference No.	Part No.	Description
14	MB 067045	Tapered Roller Bearing
15	MB 067010	Bearing Cup
16	MB 003523	Feed Nut
17	MB 003524	Helical Gear
18	MB 000078	Thrust Bearing
19	MB 003522	Keystock
20	MB 003525	Centershaft Lock
21	MB 102410	(6) Socket Head Cap Screw
22	MB 142034	(2) Button Head Cap Screw
23	MB 003526	Handle
24	MB 000220	O-Ring
25	MB 078414	Rubber Grip
26	MB 003527	Feed Handle

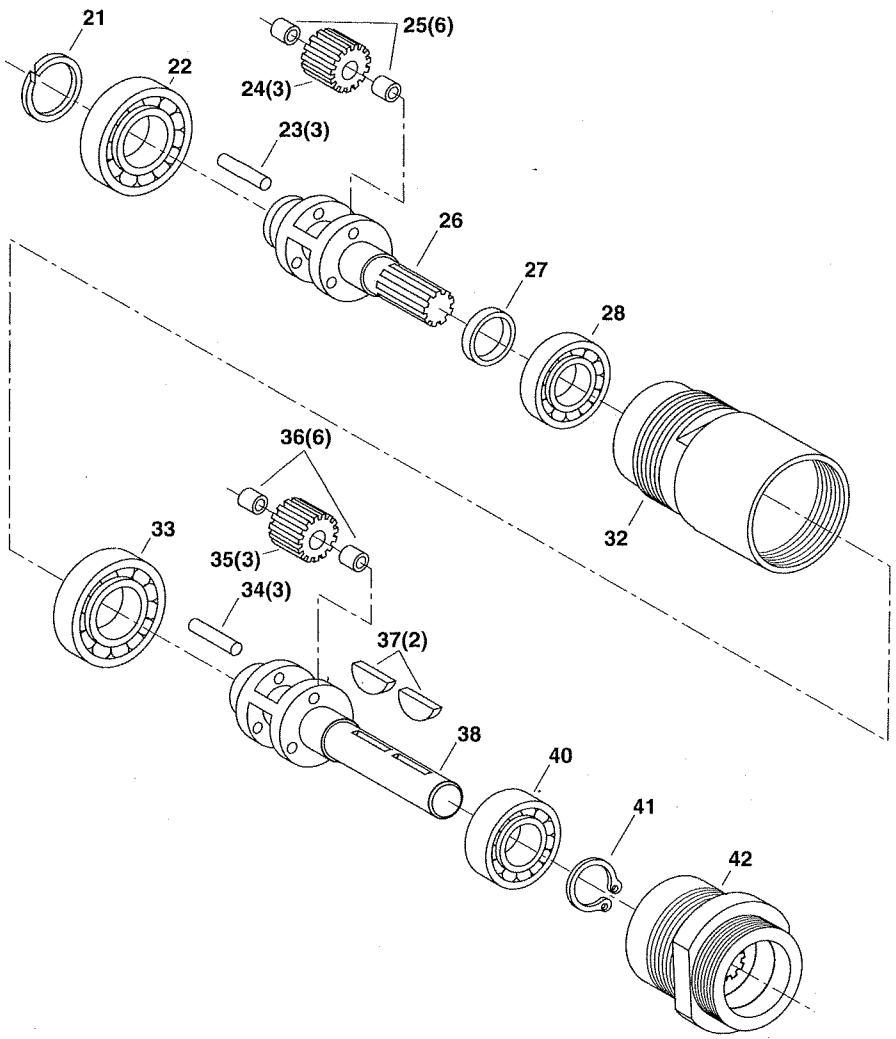
Reference No.	Part No.	Description
27	MB 003528	Feed Handle Knob
28	MB 038100	Shoulder Bolt
29	MB 000068	(2) Needle Bearing
30	MB 000010	(2) Thrust Bearing
31	MB 003529	Keystock
32	MB 003530	Helical Gear
33	MB 003531	Keystock
34	MB 142014	(2) Socket Head Set Screw
35	MB 003533	Washer
36	MB 083212	Socket Head Cap Screw
37	MB 003532	Crank Shaft
38	MB 003535	Drop Swivel, 1/2 NPT
39	MB 003536	Male Plug, 1/2 NPT

PARTS LIST
Air Motor



THROTTLE, GOVERNOR & MOTOR ASSEMBLIES

Reference No.	Part No.	Description
1	1014645	Hose Adapter
2	1032011	Throttle Body
3	1005094	Screen
4	1014687	Spring
5	1017082	Lever
6	1014838	Steel Ball (9/16" Dia.)
7	1017292	Bushing
8	1008110	O-Ring
9	1024781	Push Rod
10	1024419	Valve
13	1009371	O-Ring
14	1009039	Nozzle
15	1009786	Pin
16	1011482	Spring Seat
17	1009699	Retaining Ring
18	1009099	Key (2)
19	1011483	Shim (as required)
20	1009024	Spring
21	1009120	Governor Valve
22	1009121	Governor Hub
23	1009118	Governor Weight (2)
24	1008839	Pin (2)
25	1022113	Nut Assembly (Incl: #1012329 Set Screw)
26	1009459	Clamp Ring
27	1008935	Rear Plate
28	1001473	Key (2)
29	1008867	Rotor Blade (4)
30	1009323	Front Plate
31	1006843	Retaining Ring
44	1009017	Ball Bearing
45	1008840	Pin
46	1008864	Cylinder (Incl: #45)
47	1008865	Rotor
48	1008936	Sleeve
49	1009325	Motor Housing
50	1009015	Ball Bearing
51	1004639	Bearing Retainer
52	1009324	Rotor Shaft
53	1009326	Baffle Ring



PLANETARY GEARING

Reference No.	Part No.	Description
21	1009530	Retaining Ring
22	1009333	Ball Bearing
23	1009331	Planet Pin (3)
24	1009332	Planet Gear (3)
25	1009303	Needle Bearing (6)
26	1009599	Planet Cage
27	1009592	Planet Cage Washer
28	1005003	Ball Bearing
32	1013858	Internal Gear
33	1009333	Ball Bearing
34	1009331	Planet Pin (3)
35	1009332	Planet Gear (3)
36	1009303	Needle Bearing (6)
37	1001311	Woodruff Key (2)
38	1015644	Planet Cage (Incl: #1015357 Retaining Ring)
41	1012796	Retaining Ring
42	1015641	Internal Gear

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