

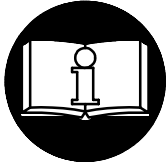
OPERATION AND MAINTENANCE MANUAL FOR MODELS 8001A RIVET BUSTER

NOTICE

Model 8001A Rivet Buster is designed for breaking concrete and other demolition work in construction applications.

Ingersoll-Rand is not responsible for customer modification of tools for applications on which Ingersoll-Rand was not consulted.

⚠ WARNING



**IMPORTANT SAFETY INFORMATION ENCLOSED.
READ THIS MANUAL BEFORE OPERATING TOOL.**

**IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PLACE THE INFORMATION
IN THIS MANUAL INTO THE HANDS OF THE OPERATOR.**

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

PLACING TOOL IN SERVICE

- Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code for Portable Air Tools (ANSI B186.1).
- For safety, top performance, and maximum durability of parts, operate this tool at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet with 1/2" (13 mm) inside diameter air supply hose.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.
- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Be sure all hoses and fittings are the correct size and are tightly secured. See Dwg. TPD905-1 for a typical piping arrangement.
- Always use clean, dry air at 90 psig maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.

USING THE TOOL

- Always wear eye protection when operating or performing maintenance on this tool.
- Always wear hearing protection when operating this tool.
- Keep hands, loose clothing and long hair away from impacting end of tool.
- Keep body stance balanced and firm. Do not overreach when operating this tool. Anticipate and be alert for sudden changes in motion, reaction torques, or forces during start-up and operation.
- Tool accessory may continue to impact briefly after throttle is released.
- Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.
- Use accessories recommended by Ingersoll-Rand.
- Never operate a Percussion Tool unless an accessory is properly installed and the tool is held firmly against the work.
- Always use a retainer in addition to proper barriers to protect persons in surrounding or lower areas from possible ejected accessories.

NOTICE

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased tool performance, and increased maintenance, and may invalidate all warranties.

Repairs should be made only by authorized trained personnel. Consult your nearest Ingersoll-Rand Authorized Servicerenter.

Refer All Communications to the Nearest
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⚠ WARNING

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.


WARNING LABEL IDENTIFICATION


	<p>⚠ WARNING</p> <p>Always wear eye protection when operating or performing maintenance on this tool.</p>
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	<p>⚠ WARNING</p> <p>Always wear hearing protection when operating this tool.</p>
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	<p>⚠ WARNING</p> <p>Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.</p>
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	<p>⚠ WARNING</p> <p>Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.</p>
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	<p>⚠ WARNING</p> <p>Do not carry the tool by the hose.</p>
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	<p>⚠ WARNING</p> <p>Do not use damaged, frayed or deteriorated air hoses and fittings.</p>
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	<p>⚠ WARNING</p> <p>Keep body stance balanced and firm. Do not overreach when operating this tool.</p>
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	<p>⚠ WARNING</p> <p>Operate at 90 psig (6.2 bar/ 620 kPa) Maximum air pressure.</p>
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⚠ WARNING

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PERCUSSIVE TOOL SPECIFIC WARNINGS

- When wearing gloves and operating models with inside trigger, always be sure that the gloves will not prevent the trigger from being released.
- Wear safety shoes, hard hat, safety goggles, gloves, dustmask and any other appropriate protective clothing while operating the tool.
- Do not indulge in horseplay. Distraction can cause accidents.
- Keep hands and fingers away from the throttle lever until it is time to operate the tool.
- Never rest the tool or chisel on your foot.
- Never point the tool at anyone.
- Compressed air is dangerous. Never point an air hose at yourself or co-workers.
- Never blow clothes free of dust with compressed air.
- Keep clear of whipping air hoses. Shut off the compressed air before approaching a whipping air hose.
- Never disconnect a pressurized air hose. Always turn off the air supply and bleed the tool before disconnecting a hose.
- The operator must keep limbs and body clear of the chisel. If a chisel breaks, the tool with the broken chisel projecting from the tool will suddenly surge forward.
- Do not ride the tool with one leg over the handle. Injury can result if the chisel breaks while riding the tool.
- Know what is underneath the material being worked. Be alert for hidden water, gas, sewer, telephone or electric lines.
- Use only proper cleaning solvents to clean parts. Use only cleaning solvents which meet current safety and health standards. Use cleaning solvents in a well ventilated area.
- Do not flush the tool or clean any parts with diesel fuel. Diesel fuel residue will ignite in the tool when the tool is operated, causing damage to internal parts.
- When using models with outside triggers or throttle levers, take care when setting the tool down to prevent accidental operation.
- Do not operate the tool with broken or damaged parts.
- Never start the tool when it is lying on the ground.
- This tool is not designed for working in explosive atmospheres.
- This tool is not insulated against electric shock.

ADJUSTMENTS

Accessory Installation



Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool or before performing any maintenance on this tool.

1. The Upper Sleeve should be replaced each time a bit is replaced.
2. Replace the Lower Sleeve at the first indication of wear. Wear is indicated by a "rounding out" of the square opening in the Lower Sleeve.

3. Replace the Rubber Bumper when the Lower Sleeve extends out of the Retainer Nut more than 1/8".
4. To remove the accessory, clamp the Barrel (16) in leather-covered or copper-covered vise jaws with the accessory end up.
5. Remove the Lock Spring (26).
6. Slide the Retainer (25) off the Barrel and remove the Rubber Bumper (24) from the inside of the Retainer.
7. Slide the Lower Sleeve (23) off the accessory and remove the accessory from the Barrel.
8. Remove the Upper Sleeve (22) from the barrel.
9. To install the accessory, reverse the above procedure.

PLACING TOOL IN SERVICE

LUBRICATION



Ingersoll-Rand No. 10

Always use an air line lubricator. We recommend the following Filter-Lubricator-Regulator Unit:

For USA - No. 3LUB8

Install the air line lubricator as close to the tool as possible.

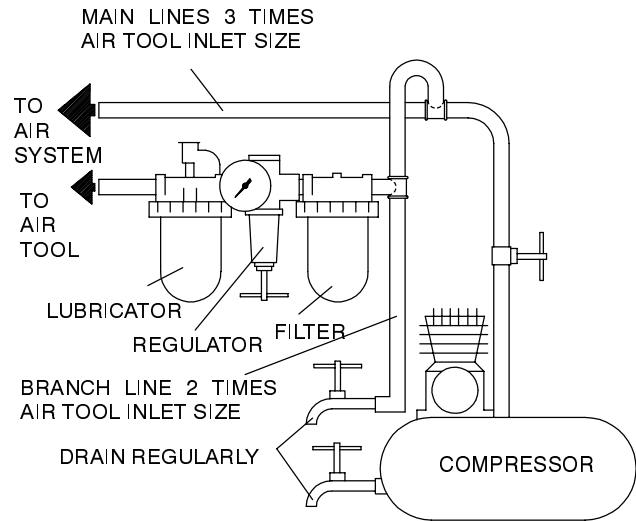
Before attaching the air hose, place several drops of Ingersoll-Rand No. 10 Oil into the air inlet. This should be done each day even when an air line lubricator is used. During the working day, check the tool to ensure that the retainer components are lubricated.

After each two or three hours of operation, unless an air line lubricator is used, place several drops of Ingersoll-Rand No. 10 Oil into the air inlet.

Before storing Air Hammer or if the tool is to be idle for a period exceeding 24 hours, pour about 3 cc of oil into the air inlet and operate the tool for 5 seconds. This will coat the internal parts with oil and prevent rusting while the tool is idle.

Never use a heavy oil or an oil that forms gum. Either will clog the small parts, restrict valve motion and cause loss of efficiency.

If the operation of the Air Hammer becomes sluggish, pour 3 cc of a clean, suitable, cleaning solution into the air inlet and operate the tool for 30 seconds. Lubricate in the regular manner immediately after flushing.

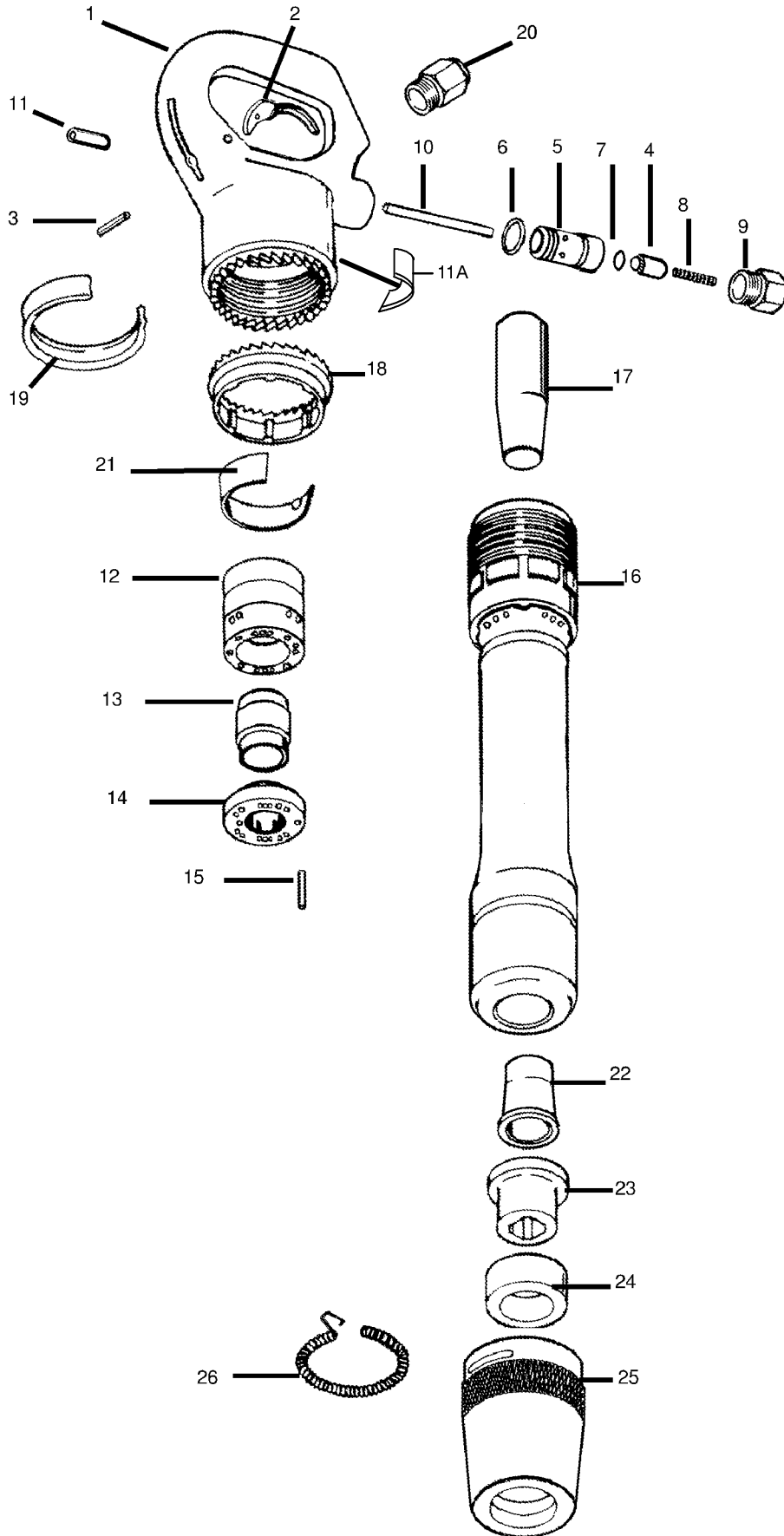


(Dwg. TPD905-1)

SPECIFICATIONS

GRIP HANDLE with OUTSIDE THROTTLE

Model	Impacts/min.	Piston Stroke	
		in	mm
8001A	1140	8	203



(TPA1832-1)



PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

	Handle Assembly	89938997		• 13	Valve	89938898
1	Handle	89938989		• 14	Valve Cover Front	89938872
• 2	Throttle Lever	89938971		15	Valve Dowel Pin	89938856
• 3	Throttle Lever Pin	89938963		16	Barrel	89938849
• 4	Throttle Valve	89938955		• 17	Piston	89938831
• 5	Throttle Valve Bushing	89938948		18	Handle Lock Ring	89938823
• 6	Bushing O-ring	89941413		• 19	Handle Lock Spring	89938815
• 7	Valve O-ring	89941421		20	Inlet Bushing	89938807
8	Valve Spring	89938930		21	Muffler	89938799
9	Throttle Valve Plug	89938922		• 22	Upper Sleeve Bushing	89938781
10	Push Pin	89938914		• 23	Lower Sleeve Bushing	89938773
11	Push Pin Bushing	89938906		• 24	Urethane Bumper	89938765
11A	Warning Label	WARNING-6-99		• 25	Retainer	89938443
	Valve Chest Assembly	89938864		• 26	Retainer Spring	89938450
12	Valve Chest	89938880				

* Not illustrated.

- To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

MAINTENANCE SECTION

WARNING

Always wear eye protection when operating or performing maintenance on this tool.

Always turn off air supply and disconnect air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.

LUBRICATION

Each time the Model 8001A Rivet Buster is disassembled for maintenance, repair or replacement of parts, lubricate the tool as follows:

Place approximately 3 cc of Ingersoll-Rand No. 10 Oil into the air inlet and operate the Tool briefly to coat the internal parts with the oil.

DISASSEMBLY

General Instructions

1. Do not disassemble the tool any further than necessary to replace or repair damaged parts.
2. Whenever grasping a tool or part in a vise, always use leather-covered or copper-covered vise jaws to protect the surface of the part and help prevent distortion. This is particularly true of threaded members and housings.
3. Do not remove any part which is a press fit in or on a subassembly unless the removal of that part is necessary for repairs or replacement.
4. Do not disassemble the tool unless you have a complete set of new gaskets and O-rings for replacement.

Disassembly of the Throttle Assembly

1. Clamp the Barrel (16) in leather-covered vise jaws with the handle end up.
2. Using a pin-punch, carefully drive the Throttle Lever Pin (3) from the Handle Assembly (1). Remove the Throttle Lever (2).
3. Unscrew the Throttle Valve Plug (9). Remove the Throttle Valve Spring (8).
4. To remove the Throttle Valve (4) from the Handle, push on the Push Pin (10) from the Throttle Lever end.
5. Remove the Throttle Valve and the Throttle Valve O-rings (6) and (7).

Disassembly of the Locking Mechanism

1. Remove the Muffler (21) from the Barrel.
2. Using two flat-head screw drivers, pry the Handle Lock Spring (19) from its seat.

WARNING

This is a large Spring. Make sure that you wear appropriate safety attire and that no one else is in the area.

3. Slide the Handle Lock Ring (18) toward the accessory end of the barrel.
4. The Locking Ring can be removed from the Barrel after the accessory retaining mechanism is removed.

Disassembly of the Valve Chest Assembly

1. Clamp the Barrel in leather-covered or copper-covered vise jaws with the Handle Assembly up. To unscrew the Handle, slide a five-foot length of strong pipe diagonally through the center of the Handle Loop and unscrew the Handle.
2. Remove the Valve Chest Assembly (12).

CAUTION

Do not attempt to pry apart the two sections of the Valve Chest. Grasp the front section in one hand and with the other hand insert a rod that will pass through the Valve (13) and contact the rear section. Lightly strike the rod until the two sections separate. Keep the front and rear sections of the Valve Chest as a unit; they are factory matched and must not be mismatched.

3. Remove the Valve Dowel Pin (15) from the Valve Chest.
4. Remove the Barrel from the vise. Turn the Barrel over and the Piston (17) will slide out.

Disassembly of the Accessory End

1. Clamp the Barrel in leather-covered or copper-covered vise jaws with the accessory end up.
2. Using a heavy screwdriver, insert the blade into the loop of the Retainer Spring (26). Twist the Retainer (25) in one direction while pulling on the Spring in the other direction with the screwdriver.
3. Remove the Retainer and remove the Urethane Bumper (24) from inside the Retainer.
4. With the Retainer removed, the Handle Lock Ring (18) can be removed from the Barrel.

MAINTENANCE SECTION

ASSEMBLY

General Instructions

1. Whenever grasping a tool or part in a vise, always use leather-covered or copper-covered vise jaws. Take extra care with threaded parts and housings.
2. Always clean every part and wipe every part with a thin film of oil before installation.
3. Apply a film of O-ring lubricant to all O-rings before final assembly.

Assembly of the Throttle Handle

1. Install the Bushing O-ring (6) on the Throttle Valve Bushing (5) and install the Throttle Valve O-Ring (7) on the Throttle Valve (4).
2. Install the Throttle Valve Bushing in the Handle (1).
3. Position the Throttle Lever (2) in the slot in the Handle and hold it in place with a drift or nail.
4. Install the Throttle Lever Pin (3) in the hole and using a pin punch, drive in the Pin until it is flush with the Handle.
5. Insert the Push Pin (10) into the Handle.
6. Install the Throttle Valve in the Throttle Valve Bushing making sure that it does not bind in the Throttle Valve Bushing.
7. Insert the Throttle Valve Spring (8) and secure with the Throttle Valve Cap (9).

Assembly of the Valve Chest

1. Clamp the Barrel in leather-covered or copper-covered vise jaws with the handle end up.
2. Clean and check the Piston (17). Replace it if it is badly worn. Apply a few drops of Ingersoll-Rand No. 10 Oil on the Piston before inserting it into the Barrel, tapered end first.
3. Place the Valve (13) in the Valve Chest (12), large end first. If an oversize Valve is required, it must be lapped into the Valve Chest.
4. Using Grade 320 lapping compound;
 - a. Install the Valve on the No. 29870 Valve Lapping Arbor as shown in Figure 1.
 - b. Apply lapping compound to diameter "C" only; keep diameter "B" free of compound at all times. Insert the compound-coated end of the Valve into the rear section of the Valve Chest as shown in Figure 2 and lap until a free fit is obtained.
 - c. Wipe all compound from the Valve and from internal diameter "B" in the Valve Chest. Allow the compound to remain on internal diameter "C".
 - d. Install the front section of the Valve Chest and Valve on the Arbor as shown in Figure 3.
 - e. Apply compound to Valve diameter "A" and lap the small end of the Valve to a free fit in the front section.

- f. Slide the rear section of the Valve Chest over the Valve and assemble it on the front section as shown in Figure 4. Lap the Valve until it fits freely in the assembled Valve Chest.

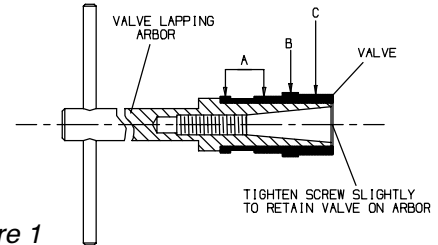


Figure 1

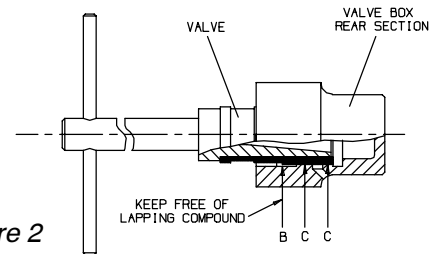


Figure 2

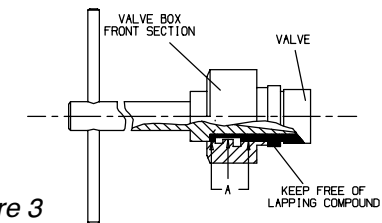


Figure 3

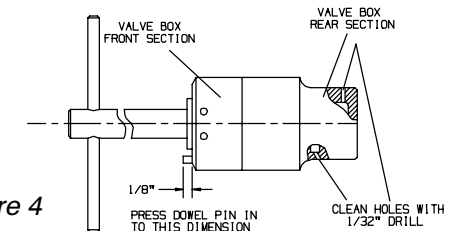


Figure 4

(Dwg. TPB130)

MAINTENANCE SECTION

- g. Disassemble the Valve Chest, clean the air ports with a 1/32" drill and wash the Valve and both sections of the Valve Chest in a suitable solvent to remove all trace of the compound.
 - h. Apply 6 or 8 drops of Ingersoll-Rand No. 10 Oil to the external surface of the Valve and assemble it in the Valve Chest. Shake the assembly to see that the Valve moves freely in the Valve Chest.
5. Slide the front section of the Valve Chest (12) onto the rear section. Be sure the dowel hole lines up with both sections.
 6. Press the Dowel Pin (15) into the Valve Chest so it protrudes 1/8" beyond the front face of the Valve Chest Cover.

Assembly of the Handle Locking Mechanism

1. Clamp the Barrel in leather-covered or copper-covered vise jaws with the Handle of the Barrel facing up.
2. Insert the Valve Assembly into the Barrel aligning the Dowel Pin (15) with the locator mark on the top edge of the Barrel and carefully guide the Dowel Pin into the hole.
3. Screw the Handle onto the Barrel and tighten it to 300 ft-lb (407 Nm) torque.
4. Remove the tool from the vise and place it on a table so that the accessory end is facing up. Slide the

Handle Lock Ring (18) onto the Barrel and rotate the Ring until all teeth on the Ring positively engage the teeth on the Handle.

5. Install the Handle Lock Spring (19) into the mating grooves of the Locking Ring. Make sure that the Spring is properly seated.
6. Snap the Muffler (21) on to the Barrel so that the large end is just below the Locking Ring. The notch on the Muffler must match the dimple on the barrel.

Assembly of the Accessory Retaining Mechanism

1. Clamp the Barrel (16) in leather-covered or copper-covered vise jaws with the accessory end upward.
2. Insert the Upper Sleeve Bushing (22) into the Barrel.
3. Insert the base of the accessory through the Upper Sleeve Bushing and into the Barrel.
4. Install the Lower Sleeve Bushing (23) over the Accessory, flanged end first.
5. Press the Urethane Bumper (24) on to the Lower Sleeve Bushing (23) making sure that the chamfer on the Bumper matches the chamfer on the Lower Sleeve Bushing.
6. Slide the Retainer (25) onto the Barrel until the slot in the Retainer lines up with the slot in the Barrel.
7. Install the Retainer Spring (26) into the groove of the Retainer.

MAINTENANCE SECTION

TROUBLESHOOTING GUIDE

Trouble	Probable Cause	Solution
Sluggish operation	Dirt or oil gum accumulation on internal parts	Pour about 3 cc of a clean, suitable, cleaning solution into the air inlet and operate for 30 seconds. After flushing, pour about 3 cc of oil into the air inlet and operate the tool for 5 seconds to coat the internal parts with oil.
Loss of power	Worn Valve	Replace the Valve.
Loss of efficiency	Worn Piston and/or accessory	Replace Piston and/or accessory.

NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.