Air Percussive Rivet Buster
Models 9001 and 11001

Maintenance Information

Save These Instructions
Product Safety Information

- Failure to observe the following warnings, and to avoid these potentially hazardous situations, could result in death or serious injury.
- Read and understand this and all other supplied manuals before installing, operating, repairing, maintaining, changing accessories on, or working near this product.
- Always wear eye protection when operating or performing maintenance on this tool. The grade of protection required should be assessed for each use and may include impact-resistant glasses with side shields, goggles, or a full face shield over those glasses.
- Always turn off the air supply, bleed the air pressure and disconnect the air supply hose when not in use, before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool or any accessory.

Note: When reading the instructions, refer to exploded diagrams in parts Information Manuals when applicable (see under Related Documentation for form numbers).

Lubrication

Each time the Model 9001 and 11001 Air Percussive 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 Valve Box Assembly

1. The Locking Spring (15) can be removed from the Barrel.
2. With the Retainer Nut and locking mechanism removed, the handle Locking Cover (16), Locking Ring (17), and the Locking Spring (15) can be removed from the Barrel after the accessory retaining mechanisms are removed.

Disassembly of the Accessory End

For Threaded Retainer No. 9001-200

1. Clamp the Barrel (20) in leather-covered or copper-covered vise jaws with the accessory end up.
2. Remove the Dowel Pin (13) from the Valve Box.
3. Remove the Barrel from the vise. Turn the Barrel over and the Piston (21) will slide out.
5. Slide the Lower Sleeve (24) off the Accessory and remove the Accessory from the Barrel.
6. With the Retainer Nut and locking mechanism removed, the handle Locking Cover (16), Locking Ring (17), and the Locking Spring (15) can be removed from the Barrel.

For Plain-Type Retainer No. 11001-18

1. To remove the accessory, clamp the Barrel (20) in leather-covered or copper-covered vise jaws with the accessory end up.
2. Unscrew the Lock Spring (31).
3. Slide the Retainer (30) off the Barrel and remove the Rubber Bumper (25) from the inside of the Retainer.
4. Slide the Lower Sleeve (24) off the accessory and remove the accessory from the Barrel.

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. Secure the Throttle Valve Face (5), Lock Washer (8), and Throttle Valve Face Cap (6) to the Throttle Valve Assembly (4) using the Throttle Face Cap Nut (7).
2. Insert the Throttle Valve Assembly (4) into the Handle, stem end first.
3. Insert the Throttle Valve Spring (9) and secure with the Throttle Valve Cap (10).
4. Screw in the Inlet Bushing (11) and tighten with a wrench.
5. Slip the Throttle Lever (2) into the slot of the Handle and align the holes.
6. Insert the Throttle Lever Pin (3) into the pin hole and, using a Pin Punch, drive the Pin until it is flush with the hole in the Handle.

**Assembly of the Valve Box**

1. Clamp the Barrel in leather-covered or copper-covered vise jaws with the handle end up.
2. Clean and check the Piston (21). 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 (14) in the Valve Box (12), large end first. If an oversize Valve is required, it must be lapped into the Valve Box.
4. Using Grade 320 lapping compound:
   a. Install the Valve (14) 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 Box 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 Box. Allow the compound to remain on internal diameter “C”.
   d. Install the front section of the Valve Box 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 Box 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 Box.
   g. Disassemble the Valve Box, clean the air ports with a 1/32” drill and wash the Valve and both sections of the Valve Box 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 Box. Shake the assembly to see that the Valve moves freely in the Valve Box.
5. Slide the front section of the Valve Box (12) onto the rear section. Be sure the dowel hole lines up with both sections.
6. Press the Dowel Pin (13) into the Valve Box so it protrudes 1/8" beyond the front face of the valve box cover.

**Assembly of the Handle Locking Mechanism**

1. Clamp the Barrel (20) of the Air Hammer in leather-covered or copper-covered vise jaws with the Handle Assembly end of the Barrel facing up.
2. Insert the Valve Box Assembly into the Barrel, aligning the Dowel Pin (13) with the dowel hole in the Barrel.
3. Screw the Handle onto the Barrel and tighten it to 300 ft-lb (407 Nm) torque.
4. Slide the Locking Spring (15) onto the Barrel.
5. Rotate the Locking Spring until one of the tangs butts against the tang on the Handle.
6. Slide the Locking Ring (17) onto the Barrel. Rotate the Locking Ring until the tang of the Locking Ring butts against the other tang of the Locking Spring.
7. Rotate the Locking Ring until one of the alignment notches in the Ring aligns with one of the notches in the Barrel.
8. Insert the Locking Pin (18).
9. Slide the Locking Spring Cover (16) over the Barrel and Locking Ring.
10. Snap the Exhaust Deflector (19) onto the Barrel so the large end butts against the Locking Ring.

**Assembly of the Accessory Retaining Mechanism**

**For Threaded Retainer No. 9001-200**

1. Clamp the Barrel (20) in leather-covered or copper-covered vise jaws with the accessory end upward.
2. Insert the Upper Sleeve (23) into the Barrel.
3. Insert the base of the Accessory (26) through the Upper Sleeve and into the Barrel.
4. Install the Lower Sleeve (24) over the Accessory, flanged end first.
5. Install the Rubber Bumper (25) through the rear of the Retainer Nut (22).
6. Screw the Retainer Nut onto the Barrel hand tight until the slot in the Retainer Nut lines up with the slot in the Barrel.
7. Snap the Lock Spring (28) into the groove of the Retainer Nut and Barrel.
8. Install the Lock Key (27) and insert the Lock Pin (29) through the hole in the Lock Key.
9. Remove the tool from the vise.

**For Plain-Type Retainer No. 11001-18**

1. Slide the Lower Sleeve (24) into the accessory and insert the accessory in the Barrel (20).
2. Insert the Rubber Bumper (25) inside the Retainer (30) and install the Retainer in the Barrel.
3. Attach the Retainer to the Barrel by aligning the slot in the Retainer with the groove in the Barrel.
4. Insert the Lock Spring (31) through the slot in the Retainer body and push the Lock Spring around the Barrel and Retainer until the Retainer is secured to the Barrel.

**Troubleshooting Guide**

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<tr>
<th>Trouble</th>
<th>Probable Cause</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Sluggish operation</td>
<td>Dirt or oil gum accumulation on internal parts</td>
<td>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.</td>
</tr>
<tr>
<td>Loss of power</td>
<td>Worn Valve</td>
<td>Replace the Valve.</td>
</tr>
<tr>
<td>Loss of efficiency</td>
<td>Worn Piston and/or accessory</td>
<td>Replace Piston and/or accessory.</td>
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**Related Documentation**

For additional information refer to:
Product Safety Information Manual 04581450.
Parts Information Manual 16605941.

Manuals can be downloaded from ingersollrandproducts.com