

16605883 Edition 2 May 2014

# **Air Percussive Hammer**

132

# **Maintenance Information**





#### **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 a Model 132 Air Hammer is disassembled for maintenance, repair or replacement of parts, lubricate the tool as follows:

Inject several drops of **Ingersoll Rand** No. 10 Oil into the air inlet and operate the tool for 5 seconds to coat the internal parts with oil.

#### Disassembly

#### **General Instructions**

- 1. Do not disassemble the tool any further than necessary to replace or repair damaged parts.
- Whenever grasping a tool or part in a vise, always use leathercovered 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.
- 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 Tool**

- 1. Clamp the Handle (1) in leather-covered or copper-covered vise jaws with the accessory end upward.
- 2. Remove the Tool Retainer (25 or 25A) and any accessory from the Barrel (24).
- 3. Remove the Exhaust Deflector (22) from the Barrel.
- 4. Remove the Locking Key (21) that keeps the Barrel from unscrewing from the Handle Assembly.
- 5. Carefully unscrew the Barrel from the Handle Assembly.
- 6. Remove the Piston (23) and the Valve Box Assembly.

#### Assembly

#### **General Instructions**

 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.

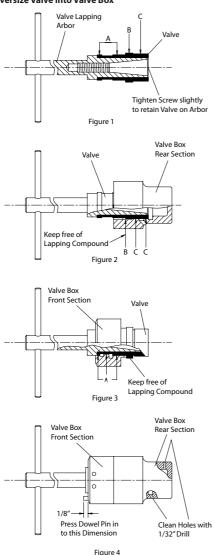
#### **Disassembly of the Throttle Mechanism**

- 1. Clamp the Handle in leather-covered or copper-covered vise jaws with the Air Inlet Bushing (17) upward.
- 2. Remove the Throttle Adjuster Body (10).
- Unscrew the Throttle Adjuster Cap Screw (16) and remove the Throttle Adjuster Knob (14), Throttle Adjuster Stop Ball (13), Throttle Adjuster Stop Spring (12), and the Throttle Adjuster Sleeve (15).
- Remove the Throttle Adjuster Screw (11), the Throttle Valve Spring (9), and the Throttle Valve Assembly (5) from the Handle.
- Remove the Air Inlet Bushing.
   Rotate the Handle in the vise to gain access to the Intermediate Lever Pin (4). Drive out the Pin.
- 7. Carefully remove the Trigger (2) and the Intermediate Lever (3).

#### **Disassembly of the Valve Box Assembly**

- Separate the two halves of the Valve Box Assembly. A small brass or plastic hammer may be needed to gently tap the Valve Box (18) apart.
- 2. Carefully remove the Dowel Pin (19) and the Valve (20).
- 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 Valve Box Assembly and Lapping Oversize Valve into Valve Box



(Dwg. TPB130)

- 1. An oversize Valve (20) must be lapped into the Valve Box (18). Use Grade 320 lapping compound and proceed as follows:
  - a. Install the Valve on the No. 29189 or No. 29407 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 compoundcoated 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 the internal diameter "B" in the Valve Box. Allow the compound to remain on the internal diameter "C".
  - d. Install the front section of the Valve Box 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.
- 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 clean, suitable solution to remove all trace of the compound.
- Apply 6 or 8 drops of light oil to the external surface of the Valve and assemble it with the Dowel Pin (19) in the Valve Box. Shake the assembly to see that the Valve moves freely in the Valve Box.

#### Assembly of the Throttle Mechanism

- 1. Clamp the Handle of the tool in leather-covered or coppercovered vise jaws with the Air Inlet Bushing (17) upward.
- With a new Throttle Valve Seal (6) on the Throttle Valve Assembly (5), place the Valve Assembly into the Handle, Seal upward.
- With the stem of the Throttle Adjusting Screw (11) going through the Throttle Valve Spring (9), install the Spring/Screw into the Handle.
- With a new Throttle Adjuster Sleeve Seal (15A) on the Throttle Adjuster Sleeve (15), place the Sleeve into the Throttle Adjuster Body (10).
- 5. Carefully place the Throttle Adjuster Stop Spring (12) and the Throttle Adjuster Stop Ball (13) in the Throttle Adjuster Body.
- 6. Secure the Spring/Ball with the Throttle Adjuster Knob (14) and the Throttle Adjuster Cap Screw (16).
- 7. Secure the Throttle Adjuster Screw with the Throttle Adjuster Body.
- 8. Reinstall the Air Inlet Bushing (17).

#### Assembly of the Tool

- 1. Clamp the Handle of the tool in leather-covered or coppercovered vise jaws with the barrel bore upward.
- 2. Place the Valve Box Assembly into the Handle, larger half of the Valve Box in first.
- 3. With the Piston (23) in the bore of the Barrel (24), screw the Barrel into the Handle.
- 4. Place the Locking Key (21) into one of the slots in the Barrel/ Handle Assembly.
- 5. Secure the Locking Key with the Exhaust Deflector (22).

#### Troubleshooting Guide

Trouble	Probable Cause	Solution
Sluggish operation	Dirt or oil gum accumulation on internal parts	In a well ventilated area, pour 3 cc of a clean, suitable, cleaning solution into the air inlet and operate for 30 seconds. After flushing, lubricate with the recommended oil.
Loss of power	Worn Valve	Replace the Valve.
Loss of efficiency	Worn Piston and/or accessory	Replace worn parts.

#### **Related Documentation**

For additional information refer to: Product Safety Information Manual 04581450. Product Information Manual 03528072. Parts Information Manual 16605875.

Manuals can be downloaded from ingersollrandproducts.com

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