

REFRACTORY AIR RAMMER WITH 2 3/8" RUBBER BUTT

GENERAL SAFETY AND MAINTENANCE MANUAL



The Model 1300-OB Rammer is an industrial-grade tool featuring a standard 2" stroke and 2500 BPM (blows per minute). Designed for heavy-duty performance, this super-duty sand rammer delivers fast, powerful blows for various applications on the bench or floor. Intended for ramming of casting sand in cylinders, core boxes, large molds and casting pits.

Key Features:

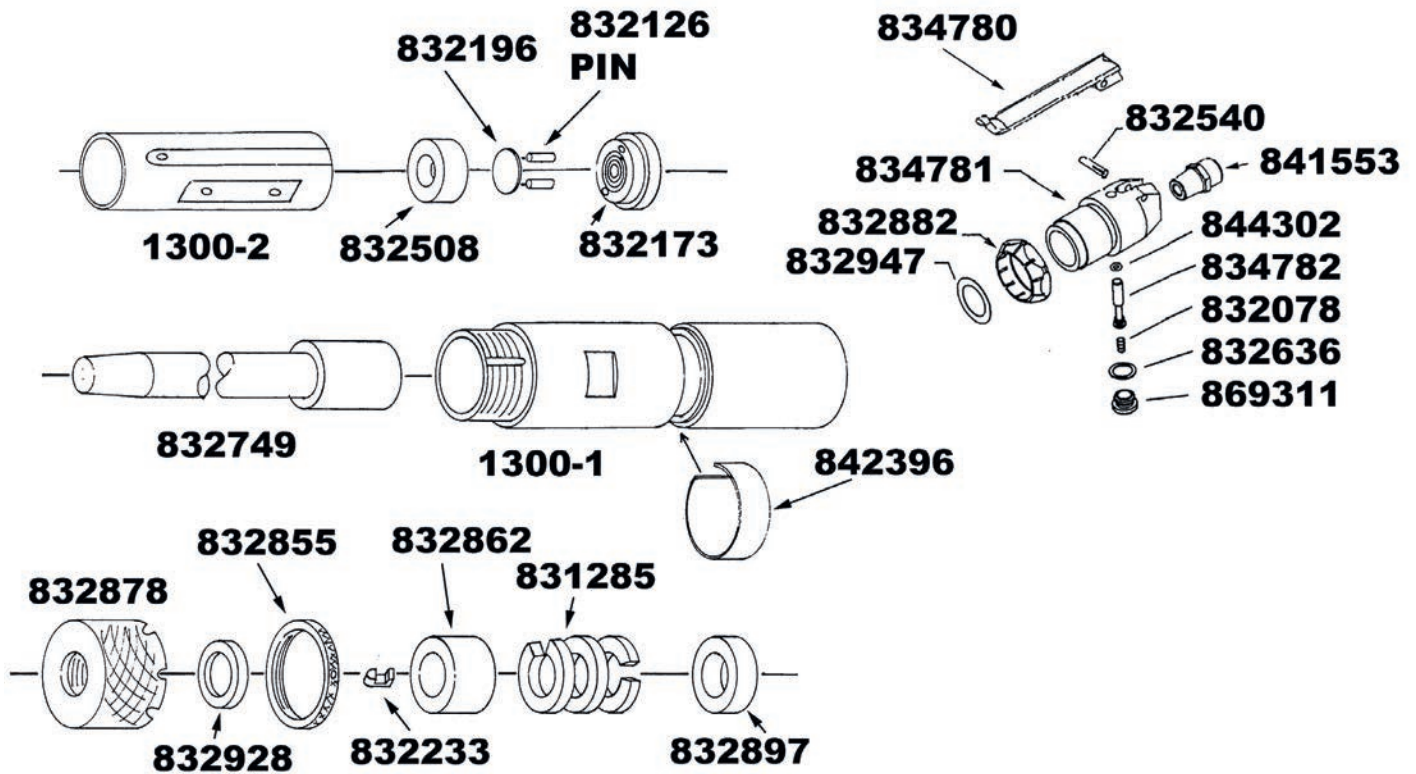
- 2" stroke with 2500 BPM for industrial-standard performance.
- Equipped with a 2 3/8" OD rubber butt for versatile ramming tasks.
- Durable and reliable construction, ideal for long-term use.

Applications:

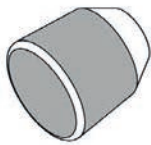
- Ramming casting sand in cylinders, core boxes, large molds, and casting pits.
- Standard tamping work and filling sand.
- Stamping of refractory furnace linings.

Model No.	Bore & Stroke	Throttle Type	Blows per Minute	Length	Dia. of Main Body	Air Consumption	Weight
RAM-001	1.0" x 2.0" (25mm x 51mm)	(L) Lever	2500	16.2" (412mm)	1.75" (43mm)	20 cfm (9.4)	6.4lb. (2.9kg)

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BUTTS



- 829558-AR (2 3/8 Alum/Rubber)**
- 829559-AR (3" Alum/Rubber)**
- 829558 (2 3/8 Rubber Butt)**
- 829559 (3" Rubber Butt)**
- 832925 (2 3/8" Steel Butt)**
- 832924 (3" Steel Butt)**

Part	Description
831285	RAMMER PACKING
832196	FLUTTER VALVE DISK
832233	KEY
832508	LOWER VALVE BLOCK
832540	THROTTLE LEVER PIN
832749	PISTON
832855	LOCK RING
832862	PACKING GLAND
832878	PACKING GLAND NUT
832882	LOCK NUT
832897	PACKING WASHER
832928	PACKING GLAND SEAL
834780	THROTTLE LEVER
834782	THROTTLE VALVE-INCLUDES 844302
844302	O-RING
1300-1	RAMMER BARREL
1300-2	CYLINDER

Part	Description
829558	2 3/8" Rubber Butt
829558-AR	2 3/8" Rubber/Alum Butt
829559-AR	3" Rubber/Alum Butt
832078	SPRING
832126	VALVE BLOCK DOWEL PIN (2 REQ.)
832173	UPPER VALVE BLOCK
832636	GASKET
832924	3" Steel Butt
832925	2 3/8" Steel Butt
832947	SHIM
834781	BACKHEAD (BARE)
841553	3/8 NPT TO 1/4 NPT BUSHING
842396	EXHAUST DEFLECTOR
ASSEMBLIES	
831109	COMPLETE VALVE BLOCK ASSY.
AA-831851	COMPLETE LEVER BACKHEAD ASSY.

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Disassembly

1. Disconnect air supply and remove butt or peins.
2. Position tool in vise vertically with output of tool oriented upward. Clamp onto the sides of the backhead (834781).
3. Use a small punch and hammer to loosen lock ring (832855). Unscrew lock ring enough so the key (832233) is fully disengaged from the packing gland nut (832878).
4. Remove packing gland nut (832878). Remove lock ring and key.
5. Grasp piston (832749) firmly and remove from tool. Remove packing gland (832862), packing (831285), and packing washer (832897) from piston. Remove from vise.
6. Clamp tool in vise with output of the tool downward. Clamp onto the flats on the side of the barrel (1300-1). Loosen the lock ring (832882). Unscrew and remove the backhead (834781). Remove lock ring (832882) if damaged. Remove from vise.
7. Turn tool over and remove valve block assembly. The valve assembly must be separated to inspect the valve.
8. The barrel liner (832702) requires a hydraulic press to remove and install. Do not replace this part since it is rarely damaged. RETURN entire tool to Henrytools to replace this part.
9. Remove seal (832928) from the packing gland nut (832878) using a small punch if the seal needs replacement.

Assembly

1. Clean all parts.
2. Install pins (832126) into the lower valve block (832508). Pins (832126) are placed into the blind holes of the lower valve block (832508) until they bottom. (The blind holes are those that are parallel to the axis of the part. The pins should bottom with a shoulder in the bottom of the holes.)
3. Place the valve (832196) into the recessed center of lower valve block (832508).
4. Place upper valve block (832173) onto valve assembly. Aligns the pins in the blind holes of the
5. upper valve block. (The blind holes are those that are parallel to the axis of the part.) firmly attached and the tool is functioning properly.

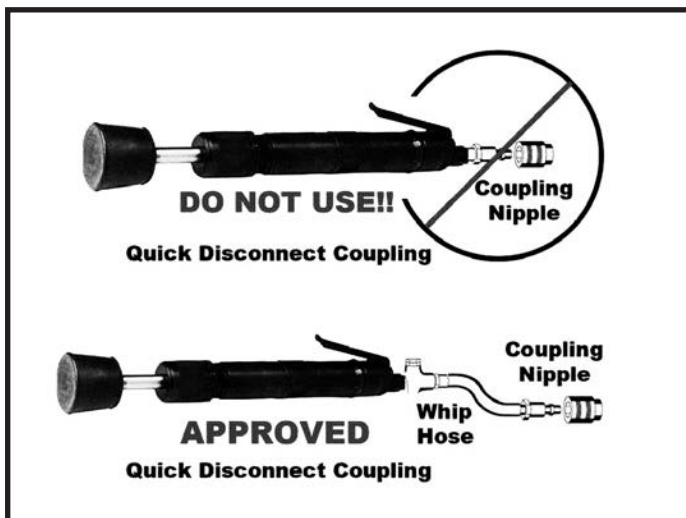
The tool is reassembled in the reverse order in which it was disassembled. Be sure that all air passages in the barrel and valve assembly are free of any dirt or foreign matter. The packing gland nut seal, No. 832928, is installed in the packing gland nut with the lip or slot toward the butt. When reassembling the packing, tighten the packing gland nut down until a drag is felt on the piston rod when the piston is moved up and down in the barrel.

After reassembly, place a few drops of 10W machine oil in inlet bushing, No. 841551, before attaching the air hose. This will insure immediate lubrication of all parts as soon as the air is applied.. The backhead should be checked after the first eight hours of operation and occasionally thereafter to make sure it is tight.

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AIR RAMMER SAFETY

For your safety, read and understand the safety recommendations before operating any percussion airtool. For additional information on eye protection, refer to Federal OSHA Regulations, 29 CFR, Section 1910.133, Eye and Face Protection, and ANSI Z87.1, Occupational and Educational Eye and Face Protection. This standard is available from the American National Standards Institute, Inc., 11 West 42nd, New York, NY 10036. Hearing protection is recommended in high noise areas (above 85 dBA). Close proximity of other tools, reflective surfaces, and resonant structures can substantially contribute to the sound level experienced by the operator. For additional information on hearing protection, refer to Federal OSHA Regulations, 29 CFR, Section 1910.95, Occupational Noise Exposure, and American National Standards Institute, ANSI S12.6, Hearing Protectors. Gloves and other protective clothing should be worn as required. Properly fitted gloves cushion vibration and protect the fingers from pinching, scuffing and scraping. Tools are designed to operate on 90 psig (6.2 bar) maximum air pressure. Excessive air pressure can damage the plunger and increase sound levels. Installation of a filter-regulator-lubricator in the air supply line ahead of the tool is highly recommended. Before the tool is connected to the air supply, check the throttle for proper operation (i.e., throttle moves freely and returns to closed position). Being careful not to hurt anyone around the operator.



Attachment of a quick-disconnect air coupling directly to the inlet threads of a percussion tool can cause wear and failure of the coupling. Should the coupling fail, severe injury can result from the hose end violently whipping about. If a quick-disconnect air coupling is used, separate the coupling from the tool with a whip hose (1.5 feet minimum). Only use a whip hose with fittings of hardened steel or other material which is at least comparably resistant to shock. Do not use hose to lift or lower the tool.

! WARNING

Impact resistant eye protection must be worn while operating or working near this tool!

CAUTION

Personal hearing protection is recommended when operating or working near this tool. If a Quick Disconnect Coupling is used separate the coupling from the tool with a whip hose (1.5 feet minimum). Only use a whip hose with fittings of hardened steel or other material which is at least comparably resistant to shock. Do not use hose to lift or lower tool!

WARNING

Compressed air hazard. Compressed air can cause loss of eyesight, bleeding or injection of foreign material into the body or blood. Never use compressed air to clean off clothing or direct it at any person.

WARNING:

Visually inspect the rammer butt or pein for damage. Discard any butt or pein that's shown any damage such as cracking or splitting.

- Explosive Hazard. Do not use this tool in an explosive or flammable environment.
 - Disconnect air before changing butts or peins.
 - Do not operate unless butt or pein is in contact with workpiece.
 - Do not point tool in direction of any person.
 - Before removing a tool from service, after completing a job, or changing chisels or other bits, make sure the air line is shut off and drained of air. This will prevent the tool from operating if the throttle is accidentally engaged.
- Use of a self relieving valve within reach of the user of the tool is highly recommended.

Repetitive work motions and/or vibration may cause injury to hands and arms. Use minimum hand grip force. Keep body and hands warm and dry. Avoid anything that inhibits blood circulation. Avoid continuous vibration exposure. Keep wrists straight. Avoid repeated bending of wrists and hands. Work gloves with vibration reducing liners and wrist supports are available from some manufacturers of industrial work gloves. Tool wraps and grips are also available from a number of different manufacturers. These gloves, wraps, and wrist supports are designed to reduce and moderate the effects of extended vibration exposure and repetitive wrist trauma. Since they vary widely in design, material, thickness, vibration reduction, and wrist support qualities, it is recommended that the glove, tool wrap, or wrist support manufacturer be consulted for items designed for your specific application. Proper fit of gloves is important. Improperly fitted gloves may restrict blood flow to the fingers and can substantially reduce grip strength.

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BUTT REMOVAL:

1. The butt or pein mounts onto the taper on the front of the piston.
 2. Removing the butt or pein involves striking the back of the butt or pein with a plastic hammer to dislodge it from the piston.
 3. Install a new butt or pein using a hammer and **FIRMLY** pound the pein onto the tapered piston.
 4. After installing a new butt or pein, run the tool for a full minute away from yourself or anyone else to insure the butt or pein is firmly attached and the tool is functioning properly.
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