Operating Instructions Manual

Read through this owner's manual carefully before using the product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.

84-003 1/2" MINI IMPACT GUN

Specifications:

Model	Speed +/- 10% (RPM)	Working Torque +/- 10% (ft/lbs)	Max. Torque (ft/lbs)	Air Inlet NPT (in.)	Required Pressure (psi)	Weight (lbs)
84-003	10,000	375	500	1/4	90*	3.42

**(Note: Dynamic Pressure, which is the pressure while the tool is in operation.)*

General Safety Information

This manual contains information that is very important to know and understand. This information is provided for SAFETY and to PREVENT EQUIPMENT PROBLEMS. To help recognize this information, observe the following symbols.

⚠ CAUTION ***Caution indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.***

⚠WARNING ***Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.***

⚠ DANGER ***Danger indicates and imminently hazardous situation which, if not avoided, will result in death or serious injury***

Entanglement Hazards

Keep away from rotating drive.

⚠ CAUTION ***Do not wear jewelry or loose clothing.***

Choking can occur if neckwear is not kept away from the tool and accessories.
Scalping can occur if hair is not kept away from the tool and accessories.
Avoid direct contact with accessories during use.
Use only proper accessories designed for use with pneumatic screwdrivers, nut runners, impacts, ratchets, grinders, drills, and pulse tools.

Projectile Hazards

Always wear impact-resistant eye and face protection when involved with or near the operation, repair or maintenance of the tool or changing accessories on the tool.
Be sure all others in the area are wearing impact-resistant eye and face protection.

⚠ DANGER ***Even small projectiles can injure eyes and cause blindness.***

Workplace Hazards

⚠WARNING ***Slip/Trip/Fall is a major cause of serious injury or death. Beware of excess hose left on the walking or work surface.***

High sound levels can cause permanent hearing loss.
Maintain a balanced body position and secure footing.
Repetitive work motions, awkward positions and exposure to vibration can be harmful to hands and arms.
Operators and maintenance personnel must be physically able to handle the bulk, weight and power of this tool.

Installation

Designed to operate on 90 PSI, lower pressure (below 90 PSI) will reduce performance of the tool while higher air pressure (over 90 PSI) raises the performance of the tool beyond its rated capacity and could cause serious damage to tool and user.

⚠WARNING ***Always use clean dry air. Excessive moisture and dirt will greatly reduce the life of any air motor.***

We recommend the installation of an inline filter-regulator-lubricator as close to the tool as possible.

Operation

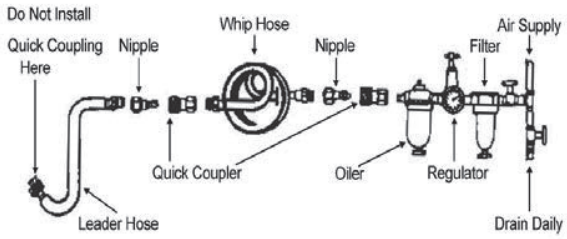
Supply tool with 90 P.S.I. of clean, dry air. Higher pressure drastically reduces tool life. However, line pressure should be increased to compensate for unusually long hoses (over 25ft).
Tools should be run maintaining 90 p.s.i. operating pressure (Dynamic) while the tool is in use.
Minimum hose size should be 1/4" in diameter with fittings having the same inner diameters.

Air Supply and Connection Hazards

Air under pressure can cause severe injury.
Always shut off air supply, drain hose of air pressure and disconnect tool from air supply when not in use, before changing accessories or when making repairs.
Never direct air at yourself or anyone else.
Whenever universal twist couplings are used, lock pins must be installed.

⚠ CAUTION **Do not exceed maximum air pressure of 90 PSI (Dynamic Operating Pressure).**

Water in the airline will cause damage to the tool.
Drain air tank daily. Clean the air inlet filter screen on a weekly basis. The recommended hook up procedure is below:



Lubrication

Use an airline lubricator, two drops per minute. If an air line lubricator cannot be used, add air motor oil to the inlet once a day, or more frequently for extended use.

Air Tool Maintenance and Repair

This tool contains multiple parts that are "normal wear items". These parts can all be serviced/replaced by the user, or the tool may be sent to the Service Center. Tools returned to the Service Center for normal wear parts will incur service charges. Some of the critical common wear items include:

1) Air Motor Rotor Blades
2) Hammer and Anvil
3) Socket Retainer and O-Ring

1) Air Motor Rotor Blades

Maintenance– Using filtered, compressed air with either automatic airline lubrication or frequent manual lubrication will extend the service life of the Air Motor Rotor Blades.

Repair – When the free speed of the tool becomes slower, or the tool begins to vent air without rotating, the Rotor Blades may be worn or contaminated with sludge and other debris. Use a 4mm hex key to remove the 4 socket head cap screws to take off the back cover of the tool and inspect the Air Motor Rotor Blades. If the Rotor Blades do not slide freely in and out of the slots on the Air Motor Rotor, they should be replaced. The **General Maintenance Kit (84-0031*)** contains new Rotor Blades and several other related common replacement components. The Rotor Blades can be easily removed and replaced by hand. Use a high-quality air tool conditioning oil to clean the Air Motor Rotor when installing new Rotor Blades.

2) Hammer and Anvil

Maintenance– The rotating action of the Hammer as it impacts the Anvil allows the tool to apply force to fasteners. These components are greased from the factory. However, this grease will gradually lose its lubricating capability over time, causing metal-on-metal wear. Use a 4mm hex key to remove the 4 socket head cap screws to take off the front cover of the tool. Clean out and replace the old grease with fresh, high-quality impact grease.

Repair – When the tool begins to skip and/or lose power during use, it is likely that the Hammer and/or Anvil have become worn. Remove the 4 socket head cap screws and the front cover to replace and re-grease the Hammer and Anvil. If the Hammer and Anvil have been re-greased and the problem persists, these items should be replaced. These components easily slide out of the tool by hand. Ideally, the Hammer and Anvil should be replaced as a set; however, replacing either one or the other may restore performance to the tool. The **Hammer Repair Kit (84-0032*)** contains a new Hammer and hammer assembly components. The **Anvil Repair Kit (84-0033*)** contains a new Anvil.

3) Socket Retainer and O-Ring

Maintenance– The Socket Retainer and O-Ring are located at the very tip of the Anvil (square drive) of the tool. The Socket Retainer is a round C-clip, and its underlying O-Ring allows the clip to expand and contract to securely hold impact sockets and other square drive accessories onto the tool. They do not require maintenance, but they can become worn after frequent use.

Repair – When impact sockets and other square drive accessories can no longer be securely attached to the tool without easily falling off, it is time to replace the Socket Retainer and O-Ring. Use a small metal pick to pry off the old Socket Retainer and the underlying O-Ring. The **Anvil Repair Kit (84-0033*)** contains a new Socket Retainer and O-Ring (along with a replacement Anvil).

(Please refer to the Exploded Parts Diagram in this manual for the complete contents of each repair kit.)

Manufacturer's Limited Warranty

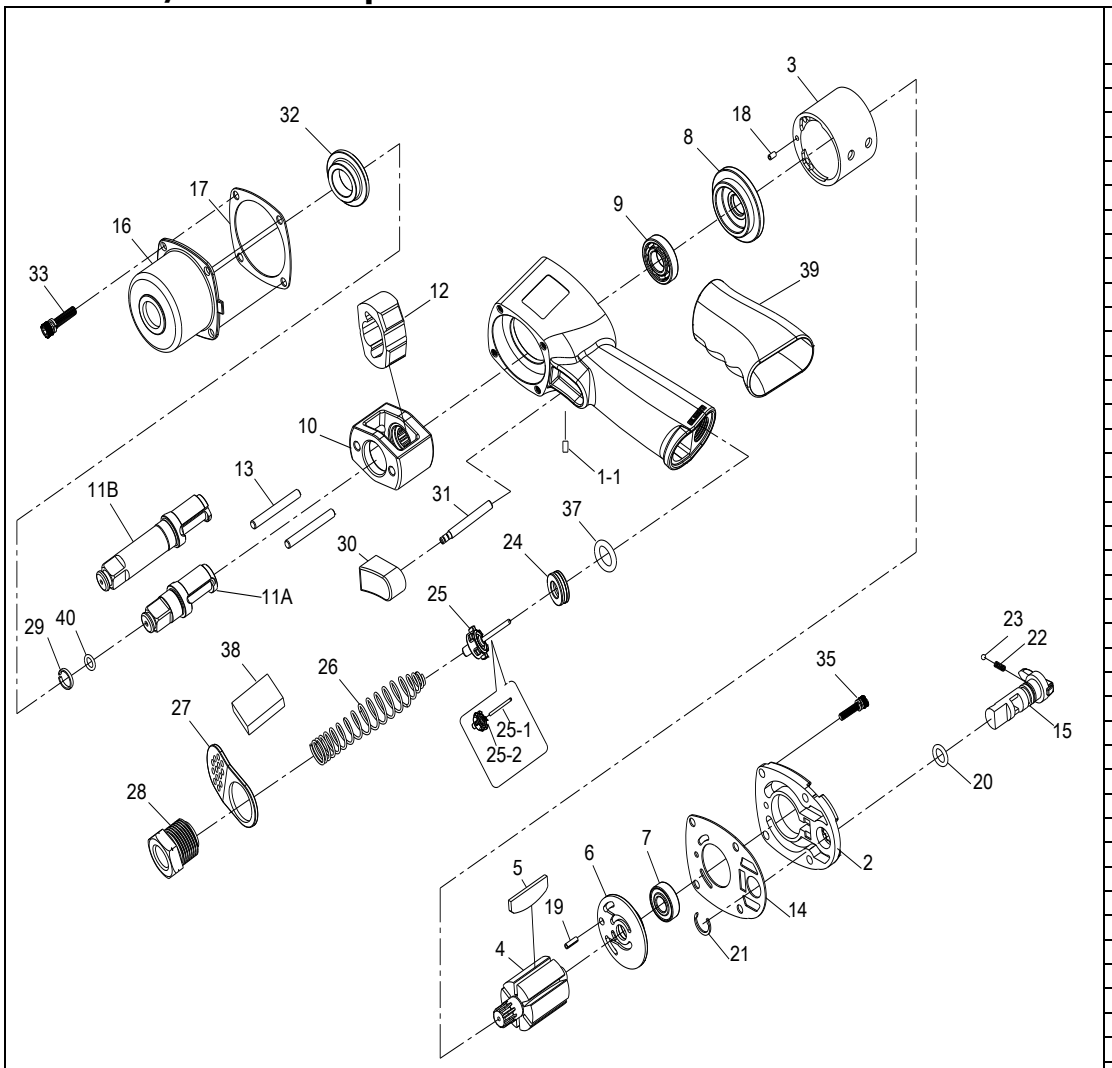
This Kimball Midwest product is warranted to be free from defects in material and workmanship for one year from the date of purchase. This Warranty applies only to products purchased new from Kimball Midwest. This Warranty does not apply to normal wear and tear or to products which have been abused, misused, modified, or repaired by someone other than Kimball Midwest's Authorized Service Center. If this Kimball Midwest product proves defective in material or workmanship within one year after purchase, return it to the Kimball Midwest Authorized Service Center, transportation prepaid, enclosing your name and address, proof of date of purchase, and a short description of the defect. Kimball Midwest will, at its option, repair or replace the defective product free of charge. Repairs or replacements are warranted as described above for the remainder of the original warranty period. Kimball Midwest's sole liability and your exclusive remedy under this Warranty is limited to repair or replacement of the defective product. **(There Are No Other Warranties Expressed Or Implied And Kimball Midwest Shall Not Be Liable For Incidental, Consequential, Or Special Damages, Or Any Other Damages, Costs Or Expenses Excepting Only The Cost Or Expense Of Repair Or Replacement As Described Above.)**

Normal wear items are not manufacturer's defects. Some of the common normal wear items are contained in the following repair kits: 84-0031, 84-0032 and 84-0033.

Kimball Midwest Authorized Service Center:

Power Tool Repair
371 West Ave.
Tallmadge, OH 44278
(330) 630-0022
www.powertoolrepairohio.com

84003 1/2” Mini Impact Gun



No.	Parts Description	Q'ty
1	Housing Assembly (incl. 1-1)	1
1-1	Screw	1
2	Backhead	1
3	Cylinder	1
4	Rotor	1
5	Rotor Blade	6
6	Rear End Plate	1
7	Ball Bearing	1
8	Front End Plate	1
9	Ball Bearing	1
10	Hammer Frame	1
11A	Standard Anvil	1
11B	2" Extended Anvil	1
12	Hammer	1
13	Hammer Pin	2
14	Gasket	1
15	Reverse Valve	1
16	Hammer Case	1
17	Gasket	1
18	Spring Pin	1
19	Spring Pin	1
20	O-Ring	1
21	Retainer	1
22	Spring	1
23	Steel Ball	1
24	Throttle Valve Seat	1
25	Throttle Valve Assembly (incl. 25-1.25-2)	1
25-1	Throttle Valve Pin	1
25-2	Throttle Valve	1
26	Spring	1
27	Exhaust Deflector	1
28	Air Inlet	1
29	Socket Retainer	1
30	Trigger	1
31	Trigger Pin	1
32	Bushing	1
33	Screw Assembly	4
35	Screw Assembly	4
37	O-Ring	1
38	Muffler Element	1
39	Rubber Grip	1
40	O-Ring	1

KM No. 840031 General Maintenance Kit

No.	Parts Description	Q'ty
5	Rotor Blade	6
14	Gasket	1
17	Gasket	1
20	O-Ring	1
21	Retainer	1
22	Spring	1
23	Steel Ball	1
26	Spring	1
29	Socket Retainer	1
37	O-Ring	1
38	Muffler Element	1
40	O-Ring	1

KM No. 840032 Hammer Repair Kit

No.	Parts Description	Q'ty
10	Hammer Frame	1
12	Hammer	1
13	Hammer Pin	2

KM No. 840033 Anvil Repair Kit

No.	Parts Description	Q'ty
11A	Standard Anvil	1
29	Socket Retainer	1
40	O-Ring	1

(NOTE: Items not available in the repair kits can be purchased from the service center.)