TOOLMASTER

Industrial Series

ATR-10RN
AiR NUT RiVETER

INSTRUCTION MANUAL
Code: A0450

www.machineryhouse.com.au

www.machineryhouse.co.nz

Safety Air Tool Warnings

1. Read and understand this entire manual before attempting assembly or operation.
2. Read and understand all warnings posted on the tool and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace warning labels if they become obscured or removed.
4. Do not use this tool for other than its intended use. If used for other purposes, Toolmaster disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
5. Always wear approved safety glasses or face shield while using this tool. (Everyday eye glasses only have impact resistant lenses; they are not safety glasses.)
6. Wear ear protectors (plugs or muffs) if the noise exceeds safe levels.
7. Wear gloves and protective clothing if operation produces sparks or flying particles. Gloves should be tight-fitting, without frayed fingers or hanging threads. Keep hands and body away from the working area of tool.
8. Do not operate an air tool continually at full throttle without a work load on the tool.
9. The air tool must be properly lubricated before operating.
10. Never start a percussion type air tool (chipper, breaker, buster, etc.) without securing the tooling in the retainer and placing the tip against the work surface.
11. Do not operate air tool without its guards in place. Do not modify the tool.
12. Do not operate this tool while tired or under the influence of drugs, alcohol, or any medication.
13. Adopt a comfortable posture with proper balance,and maintain secure footing at all times. Non-slip footwear or anti-skid floor strips are recommended.
14. Do not wear loose clothing or jewellery. Confine long hair.
15. Excessive air pressure and too much free rotation may decrease life of the tool and may cause a hazardous situation.
16. Check air hoses for wear, and keep them away from heat and sharp edges. Repair or replace damaged air hose immediately. Do not carry tool by the air hose.
17. Air hose may cause tripping hazards; keep hose away from traffic areas.
18. Do not use this tool near flammable objects, or in potentially explosive environments. Do not use near live electrical wires.
19. Do not use power tools in damp or wet location, or expose them to rain. Keep work area well lighted.
20. Do not leave a connected tool unattended. When not in use, disconnect tool from air source.
21. Shut off air supply and discharge any residual pressure from tool before removing hose, making adjustments, changing accessories, or storing tool.
22. Make sure tool is switched off, and your finger off the trigger, before connecting to air supply. Remove adjusting keys before operating
24. Keep visitors a safe distance from the work area. Keep children away.

Safety Specific For Air Nut Riveter

1. Only use the tool for the purpose it was designed.for and within the capacity specified.
2. The Air Nut Riveter must only be used on appropriate work surfaces only. This tool must only be used on metal objects, and is not suitable for soft surfaces.
3. Proper eye protection must be worn at all times by the tool user and bystanders
4. Do not place Rivet Nuts too close to the edge of the workpiece, as it may split the work piece and cause the nut to fly free, and cause injury.
5. Always remove the tool from air supply and activate trigger to bleed air-line before making any adjustments, changing accessories, or doing any maintenance or service on the tool.

Warning: *Some dust, fumes and gases created by power sanding, sawing, grinding, drilling, welding and other construction activities contain chemicals that may cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:*

- *lead from lead based paint*
- *crystalline silica from bricks, cement and other masonry products*
- *arsenic and chromium from chemically treated timber*

Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as dust masks that are specifically designed to filter out microscopic particles

Model ATR-10RN Features

This Toolmaster Air Nut Riveter makes light work of the task at hand, effortlessly inserting rivet nuts onto thin sheet metal that's too thin for thread tapping allowing fasteners to be utilized. The set includes 6 mandrels (M3, M4, M5, M6, M8 and M10) making this fastening system ideal for a large array of applications including Automotive, Metal fabrication, Industrial machinery, Farm equipment, Electronics, Marine and many more.

Technical Specifications

Capacity (Mild Steel)	M3 - M10
Capacity (Stainless Steel)	M3 - M10
Capacity (Aluminium)	M3 - M10
Stroke Length	2 - 10mm
Air Consumption	1.5 Ltr/Stroke
Air Pressure	85 - 92 PSI
Recommended Air Hose	10mm
Inlet	1/4" BSPT
Weight	1.55 kg

Packing List

Air nut riveter gun
6 x nut rivet mandrels M3, M4, M5, M6, M8, M10.
1/4" male high-flow adaptor & mandrel spanners.

Setup

Any missing parts or damage should be reported immediately to your Toolmaster distributor. Do not use a damaged tool. Read this instruction manual thoroughly for operation, maintenance and safety instructions. The diagram below is the ideal setup position. The lubricator is optional and if not used, then a few drops of Pneumatic Tool Oil need to be added to the airline connection before operation. Add a few more drops after each hour of continual use.

Air Supply

The recommended air system is shown in Fig.1.

1. Use proper air hose size (refer to tool specifications). The hose should be just long enough to serve the working area. Excessive hose length will cause pressure drop.

WARNING! *Ensure that the air supply is clean and does not exceed 90psi. Too high an air pressure and/or unclean air will shorten the life of the air tool due to accelerated wear, and may cause damage and/or personal injury.*

2. Drain the compressor air tank daily. Water in the air line will damage the air tool.
3. Clean the compressor air inlet filter screen weekly.
4. Line pressure should be increased to compensate for unusually long air hoses (over 8 meters). The minimum hose bore should be 10mm and fittings must have the same inside dimensions.
5. Keep hoses away from heat, oil and sharp edges. Check hoses for wear, and make certain that all connections are secure.

IMPORTANT: *The leader hose is optional, but connecting a quick-change coupling directly to the tool is not recommended, as vibration may cause the connection to fail. For the best result, add a leader hose and install any quick-change couplings farther down the line.*

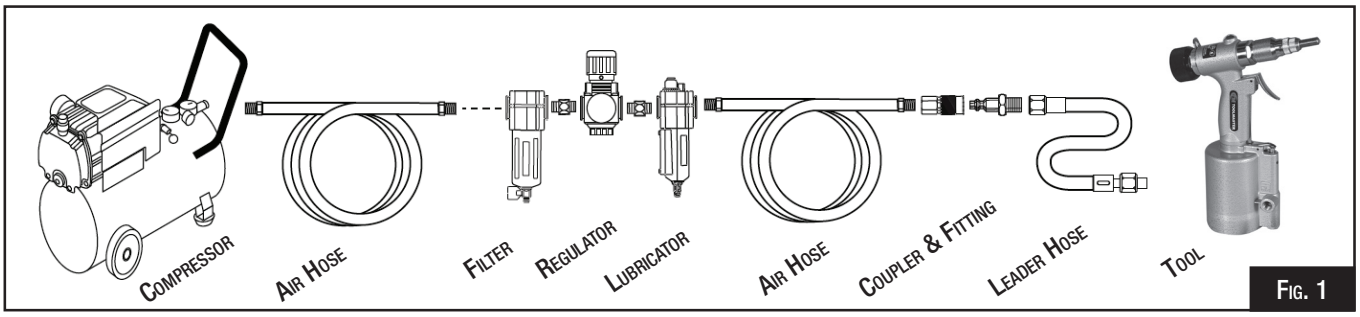


Fig. 1

WARNING: *Operating the tool at pressures over the rated capacity may cause severe damage and/or personal injury. Do not exceed 90 PSI while operating the tool. Do not use an accessory rated at a lower maximum pressure than the tool.*

Operating Instructions

1. Make sure that a filter, regulator with pressure gauge, oiler, in-line shut-off valve, and quick coupler is fitted to the air line, as shown in Fig. 1.
2. If an automatic oiler system is not used, add a 4 to 5 drops of Air Tool Oil to the air inlet before operation then add 1-2 more drops every hour of continual use.

CAUTION! *TO PREVENT INJURY FROM TOOL OR ACCESSORY FAILURE:*

Do not exceed the tool's maximum air pressure rating. If the tool still does not have sufficient force at maximum pressure and sufficient airflow, then a larger tool may be required.

3. Attach the tool lead to the quick connect fitting. This will make the operation more efficient, but is not required.

WARNING! The leader hose is optional, but connecting a quick-change coupling directly to the tool is not recommended, as vibration may cause the connection to fail. For the best result, add a leader hose and install any quick-change couplings further down the line.

4. Adjust the air compressor's regulator slowly so that the air output is at the recommended working pressure. The pressure must not exceed the tool's maximum air pressure at any time.
5. Check the air line and fittings for any leaks and repair before operating the tool.
6.. To prevent accidents, turn off the tool, detach the air supply, safely discharge any residual air pressure in the tool, and release the throttle and/or turn the switch to its off position after use. Clean external surfaces of the tool with clean, dry cloth, and apply a thin coat of tool oil, then store the tool indoors out of children's reach

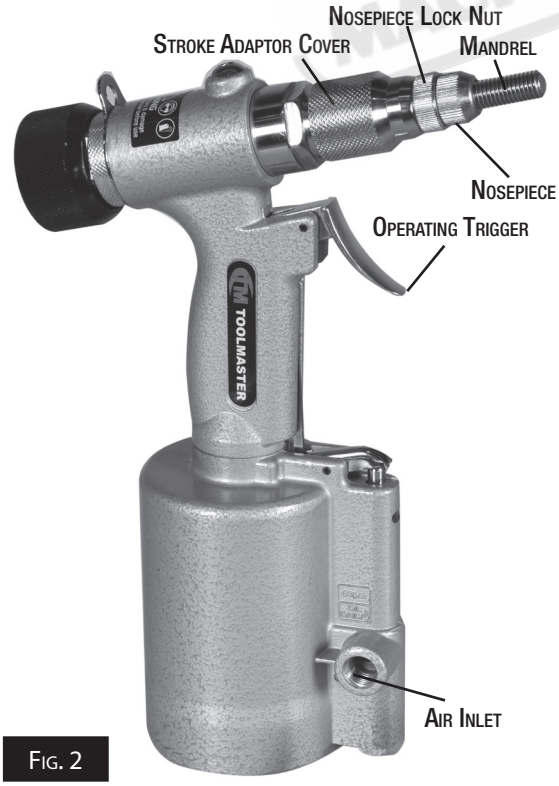
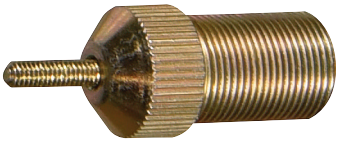


Fig. 2

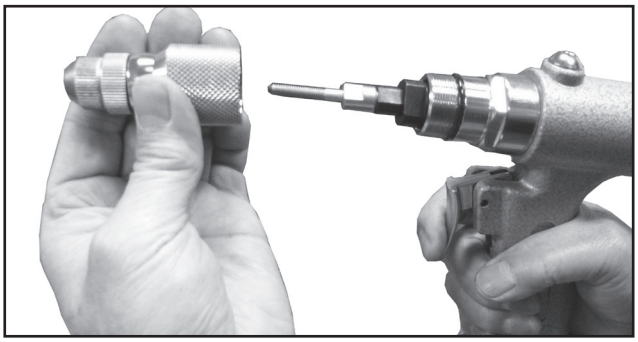
Mandrel



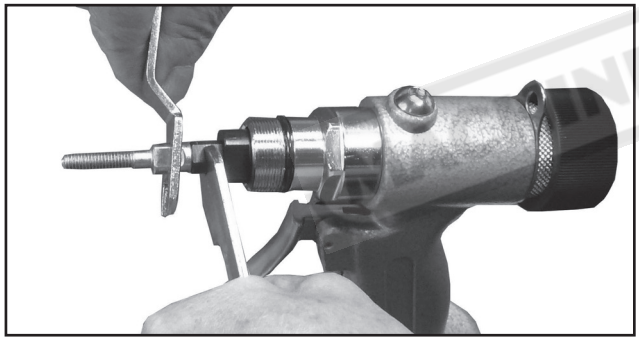
Changing Mandrels

1. Disconnect the tool from the air line, then unscrew anti-clockwise the nose piece and the nose piece locking nut and remove from the tool.

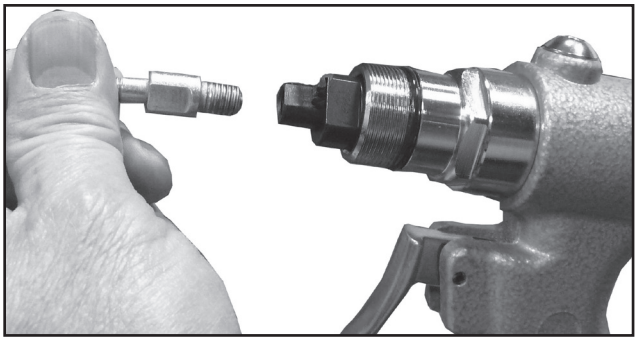
2. Remove the Stroke Adapter Cover, by turning it anti-clockwise.



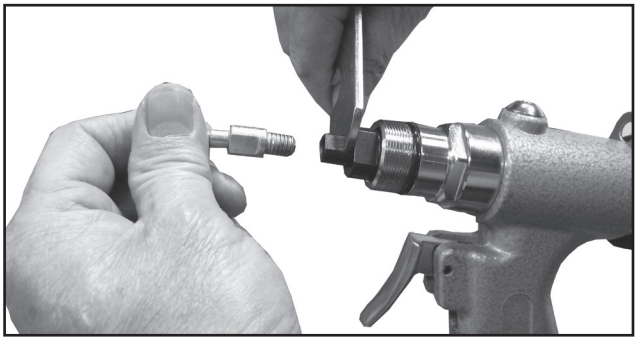
3. Hold the Rear Mandrel Housing firmly with one of the Spanners while using the other Spanner to remove the current Mandrel by turning it clockwise.



4. Place the new Mandrel required and finger tighten it into the Rear Mandrel Housing turning it anti-clockwise as the mandrel threads are left hand.

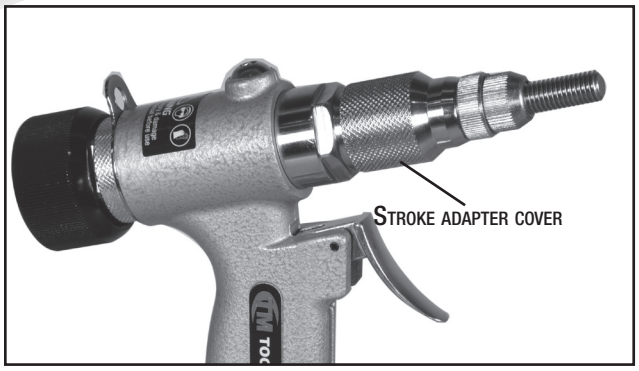


5. Tighten the new Mandrel by rotating it anti-clockwise while holding the rear housing with one of the spanners supplied and using the other spanner to tighten the mandrel.



6. Reinstall the Stroke Adapter Cover then the nose piece and the nose piece locking nut

7. Stroke adjustment is best performed with the air connected and trigger depressed. The Stroke adapter cover is the main adjustment for this tool. Use it to set the correct traction load depending upon both the size of nut rivet and thickness of the material that the rivet is to be fixed to. The zero point is when the stroke adapter cover is fully wound in. Use the table below to determine the number of turns to make.



	Material Thickness	
Rivet Size	1mm	2mm
M3	0	
M4	1	0
M5	2	1
M6	3	2
M8	4	3
M10	6	5

9. Air Nut Riveter is now ready for use.

Maintenance

1. **Daily - Air Supply Maintenance:**
   Every day, maintain the air supply according to the component manufacturers' instructions.
   Maintain the lubricator's oil level. Use Pneumatic Tool Oil (Order Code A037)
   Drain the moisture filter regularly.
   Performing routine air supply maintenance will allow the tool to operate more safely and will also reduce wear on the tool.

2. **Quarterly (every 3 months)** – Tool Disassembly, Cleaning, and Inspection:
   Have the internal mechanism cleaned, inspected, and lubricated by a qualified technician.
3. For a full service contact your local Toolmaster service agent.
4. When not in use, disconnect from air supply, clean nibbler and store in a safe and dry place.

Troubleshooting

Review the troubleshooting and procedures in this section if a problem develops with your Air Tool. If you are still unable to resolve the problem, then contact your local Toolmaster service centre. If additional help with a procedure is required, then contact you distributor.

***Note:** Make sure you have the model of the machine, serial number,and manufacture date before calling.*

Symptoms	Possible Cause	Possible Solution
Decreased output.	1. Not enough air pressure and/or air flow.	1. Check for loose connections and make sure that air supply is providing enough air flow (CFM) at required pressure (PSI) to the tool's air inlet. Do not exceed maximum air pressure.
	2. Obstructed throttle.	2. Clean around throttle to ensure free movement.
	3. Incorrect lubrication or not enough lubrication.	3. Lubricate using air tool oil and grease according to directions.
	4. Blocked air inlet screen (if equipped).	4. Clean air inlet screen of buildup.
	5. Air leaking from loose housing.	5. Make sure housing is properly assembled and tight.
	6. Mechanism contaminated.	6. Have qualified technician clean and lubricate mechanism. Install in-line filter in air supply as stated in Setup: Air Supply.
	7. Vane wear or damage.	7. Replace all vanes.
Housing heats during use	1. Incorrect lubrication or not enough lubrication.	1. Lubricate using air tool oil and grease according to directions.
	2. Worn parts.	2. Have qualified technician inspect internal mechanism and replace parts as needed.
Severe air leakage (Slight air leakage is normal, especially on older tools.	1. Cross-threaded housing components.	1. Check for incorrect alignment and uneven gaps. If cross-threaded, disassemble and replace damaged parts before use
	2. Loose housing.	2. Tighten housing assembly. If housing cannot tighten properly, internal parts may be misaligned
	3. Damaged valve or housing.	3. Replace damaged components.
	4. Dirty, worn or damaged valve.	4. Clean or replace valve assembly.