

TM TOOLMASTER

Industrial Series



ATR-48
AIR POP RIVETER

INSTRUCTION MANUAL
Code: A046

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Important: please read this manual carefully. Note the safety instructions, warnings & cautions. Use the product correctly and with care for the purpose for which it is intended. Failure to do so could cause damage or personal injury and may invalidate the warranty. PLEASE STORE THE MANUAL IN A SAFE PLACE FOR FUTURE USE.

Safety Instructions

- WARNING!** Ensure that Health & Safety, and general workshop safety regulations are adhered to when using this equipment.
- ✓ Familiarize yourself with the applications, limitations and potential hazards peculiar to the air tool being used.
- ✓ Keep the work area clean and well lighted. Cluttered benches and dark areas increase the risks of accidents and injury to persons.
- ✓ Keep bystanders, children, and visitors away while operating the tool. Distractions are able to result in the loss of control of the tool.
- ✓ Keep the air tool clean and regularly maintain the air tool to keep it in good condition
- ✓ Replace or repair damaged parts. Use genuine parts only. Unauthorized parts will validate the warranty
- WARNING!** Always wear approved eye and ear protection when operating the air tool.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Remove loose fitting clothing. Remove ties, watches, rings and other loose jewellery and contain, or tie back, long hair.
- ✓ Keep the air tool away from your body and at a safe distance from others.
- ✓ Keep children and unauthorized persons away from the work area.
- ✓ Secure unstable workpiece with a clamp, vice or other adequate holding device.
- ✓ Ensure that spent parts are disposed of correctly and do not cause a hazard.
- ✓ When not in use disconnect from the air supply and store in a safe, dry, childproof area.
- WARNING!** Disconnect the air tool from the air supply before changing accessories, servicing or performing any maintenance.
- WARNING!** Ensure that the correct air pressure is maintained and not exceeded.
- ✓ Keep air hose away from heat, oil and sharp edges. Check air hose for wear before each use and ensure that all connections are secure.
- × **DO NOT** use the air tool for any purpose other than that for which it is designed.
- × **DO NOT** operate the air tool if any parts are damaged or missing.
- × **DO NOT** allow untrained persons to operate the air tool.
- × **DO NOT** operate the air tool when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- × **DO NOT** leave the air tool running unattended.
- × **DO NOT** direct air from the air hose at yourself or others.



Technical Specifications

| | |
|---------------------------|-----------------|
| Rivet Capacity (Imperial) | 3/32" - 3/16" |
| Rivet Capacity (Metric) | 2.4 - 4.8mm |
| Traction Power | 1220kgs |
| Air Requirements | 4CFM (1131/min) |
| Maximum Air Pressure | 90 PSI |
| Recommended Air Hose | 10mm |
| Inlet | 1/4" BSPT |
| Sound Pressure | 85.5dBA |
| Length | 230mm |
| Weight | 1.5kg |

Setup



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.

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.

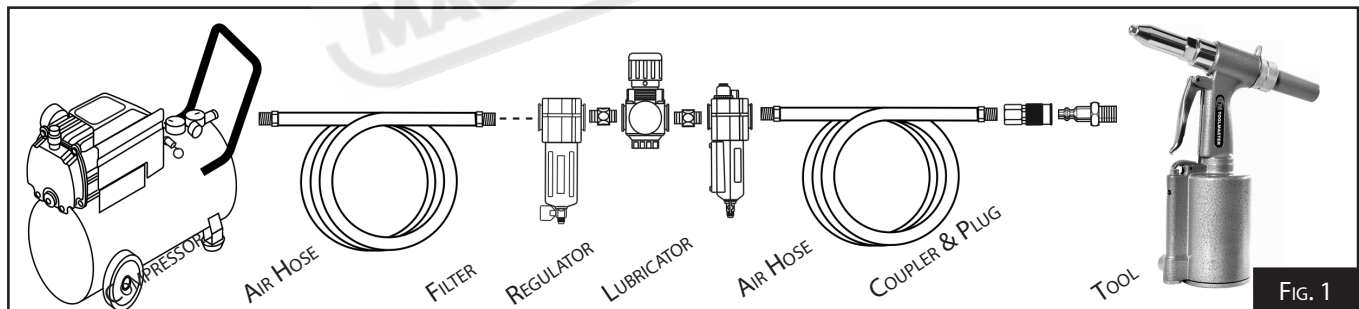


FIG. 1

Air Supply

The recommended air system is shown in Fig.1.

1. Ensure that the air pressure is set correctly (90psi).

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.

Operating instructions

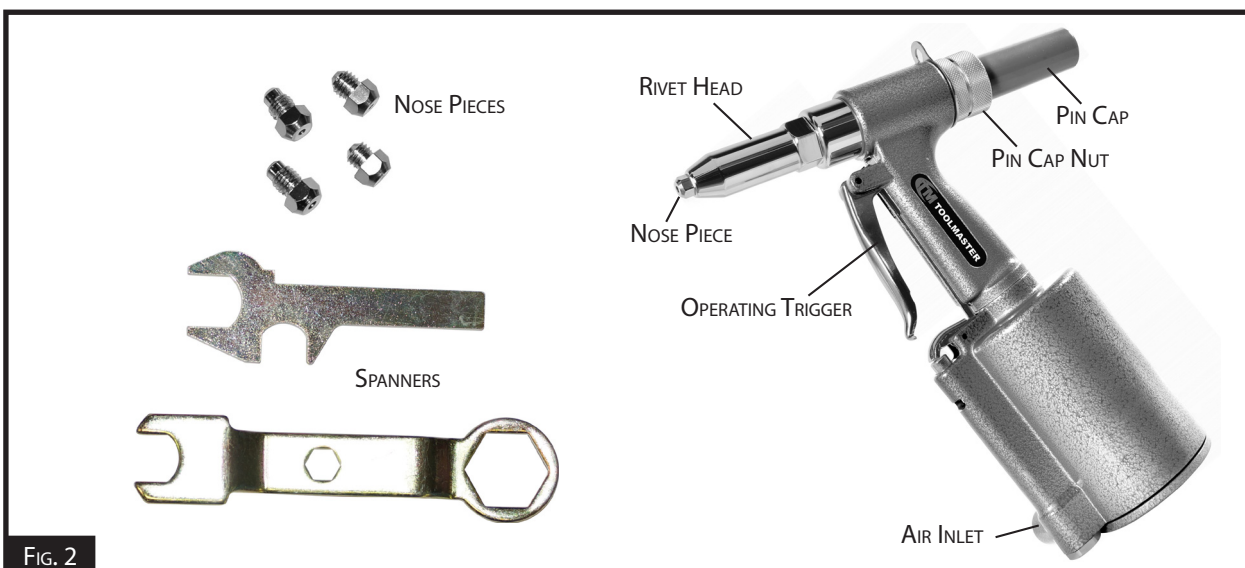
1. Disconnect the air tool from the air line.
2. Attach the Pin Cap firmly to the Air Riveter by tightening the Pin Cap Nut. When securing turn the slot in the Pin Cap upwards to avoid spilling any used rivet pins.
3. After selecting the size of the rivet's pin used, attach the corresponding Nosepiece size (3/16", 5/32", 1/8", or 3/32") with the spanner.
4. Attach the Air Riveter to the air hose, turn on the air compressor, and set its regulator to the needed pressure.



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.

5. Insert the small end of a rivet fully into the Nosepiece, making sure to keep clear of the operating trigger, then insert the rivet through the predrilled hole in the workpiece.
6. Hold the Riveter firmly with both hands, and squeeze the Operating Trigger to activate the Riveter. Repeat as necessary. Then, release pressure on the Operating Trigger.
7. Check to be sure the rivet looks solid and securely locks the workpiece together.
 - If the installed rivet is loose then, this indicates the rivet pin was not adequately pulled through the workpiece. Either the wrong size rivet was used or Riveter's Jaw Case is too loose and not gripping the rivet pin well enough to pull it fully through the workpiece
 - A concave, deformed or broken rivet head indicates the rivet pin was pulled too far into the workpiece. Either the wrong size rivet was used or Riveter's Jaw Case is too tight and not properly releasing the rivet pin during installation (**See Jaw Cleaning & Replacement**)
8. If the tool requires more force to accomplish the task, verify that the tool receives sufficient, unobstructed airflow (CFM) and increase the pressure (PSI) output of the regulator up to the maximum air pressure rating of this tool.
9. When finished, to prevent accidents, detach the air supply, safely discharge any residual air pressure in the tool, 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.



Maintenance

It is very important that regular maintenance of the equipment is carried out. The operators need to follow the daily maintenance procedures.

For optimum performance from this machine, the maintenance schedule listed below and in this section must be followed.

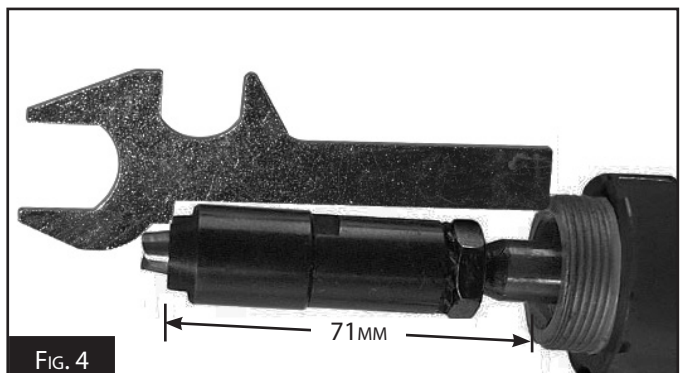
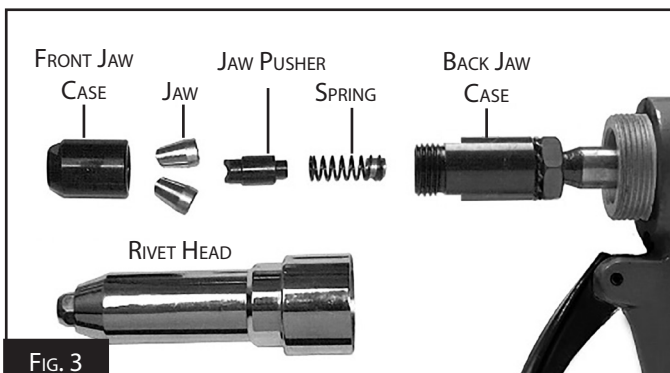
1. **BEFORE EACH USE**, inspect the general condition of the tool. Check for:
 - loose hardware or housing,
 - misalignment or binding of moving parts,
 - cracked or broken parts, and
 - any other condition that may affect its safe operation.
2. **DAILY - AIR SUPPLY MAINTENANCE:**
Every day, maintain the air supply according to the component manufacturers' instructions. 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.

3. AFTER EACH USE

When finished operating riveter, disconnect air hose. Wipe off housing with a dry cloth. Place 4 or 5 drops of air tool oil into air inlet; re-connect air and fire tool several times to distribute the oil. Disconnect air.

JAW CLEANING AND REPLACEMENT

1. Unscrew and remove the Rivet Head using the Spanner.
2. Use the Spanner to unscrew and remove the Jaw Cases. Use care as there is a Spring behind the Jaw Case which may fly out. (Fig. 3)
3. Remove the Jaws from between the Jaw Cases.
4. To clean the Jaws, use a steel brush and mild solvent. Then, apply a light coat of machine oil to the Jaws and insert them back into the Jaw Case.
5. If any part of the assembly needs replacement, replace the entire assembly at the same time, due to the possibility of additional parts being damaged when the Jaws were damaged.
6. Use the gauge spanner to check that length of the jaw assembly is correct (Fig. 4). This length ensures proper spring tension. Rotate the jaw assembly as needed until it fits the span of the gauge as shown.
7. Reinstall the rivet head.



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 your 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. | <ol style="list-style-type: none"> 1. Not enough air pressure and/or air flow. 2. Obstructed throttle. 3. Incorrect lubrication or not enough lubrication. 4. Blocked air inlet screen (if equipped). 5. Air leaking from loose housing. 6. Mechanism contaminated. 7. Vane wear or damage. | <ol style="list-style-type: none"> 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. Clean around throttle to ensure free movement. 3. Lubricate using air tool oil and grease according to directions. 4. Clean air inlet screen of buildup. 5. Make sure housing is properly assembled and tight. 6. Have qualified technician clean and lubricate mechanism. Install in-line filter in air supply as stated in Setup: Air Supply. 7. Replace all vanes. |
| Housing heats during use | <ol style="list-style-type: none"> 1. Incorrect lubrication or not enough lubrication. 2. Worn parts. | <ol style="list-style-type: none"> 1. Lubricate using air tool oil and grease according to directions. 2. Have qualified technician inspect internal mechanism and replace parts as needed. |
| Severe air leakage. (Slight air leakage is normal, especially on older tools. | <ol style="list-style-type: none"> 1. Cross-threaded housing components. 2. Loose housing. 3. Damaged valve or housing. 4. Dirty, worn or damaged valve. | <ol style="list-style-type: none"> 1. Check for incorrect alignment and uneven gaps. If cross-threaded, disassemble and replace damaged parts before use. 2. Tighten housing assembly. If housing cannot tighten properly, internal parts may be misaligned. 3. Replace damaged components. 4. Clean or replace valve assembly. |