TOOLMASTER

Industrial Series

ATS-520A

AIR BELT SANDER

ARTICULATED ARM

INSTRUCTION MANUAL

Code: A068

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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 Belt Sander

1. When the operator is not familiar with the proper and safe operation of a air belt sander, do not use the tool until proper training and knowledge have been obtained.
2. Appropriate footwear must be worn. Shoes must be fully enclosed. No open-toed shoes.
3. Put on all required personal protective equipment and proper eye protection must be worn at all times by tool user and bystanders.
4. Secure the workpiece with clamps or vise; do not hold workpiece by hand.
5. Inspect abrasive belt before operating. Do not use a damaged belt.
6. Only use accessories that are intended for use with this air belt sander.
7. Use both hands when operating the sander
8. 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

Technical Specifications

Belt Size	20 x 520mm
Free Speed Maximum	16,000rpm
Speed Range in 5 Steps	15,300 to 18,000
Air Requirements	4CFM (113L/min)
Maximum Air Pressure	90 PSI
Recommended Air Hose	10mm
Inlet	1/4” BSPT
Sound Pressure	88 dBA
Length	390mm
Weight	1.4kg

Environmental Protection.
Recycle unwanted materials instead of disposing of them as waste.
All tools, accessories and packaging should be sorted, taken to a recycle centre and disposed of in a manner which is compatible with the environment.

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.*

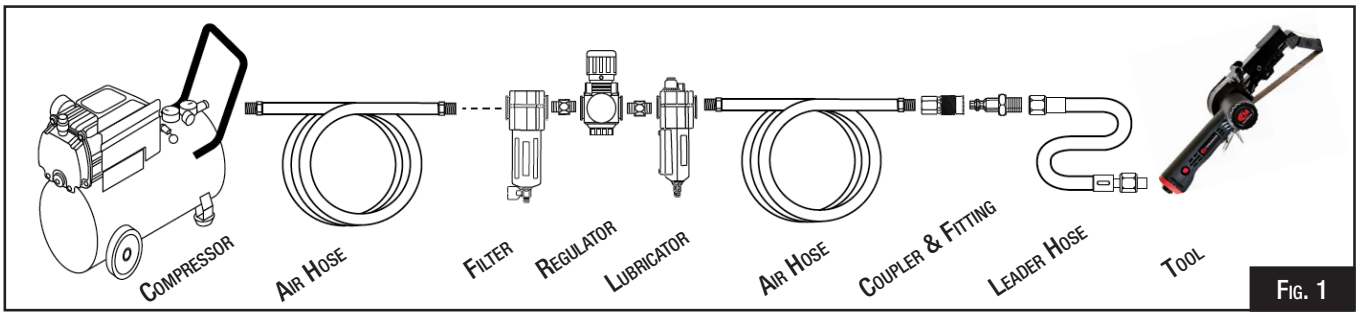


Fig. 1

***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. Disconnect the air tool from the air line.
2. Adjust arms to desired angles and tighten hex socket cap screws (Figure 2), with supplied hex wrench. Always tighten the hex socket cap screws firmly after adjustment, or the head could move or rotate, causing loss of control.
3. If an automatic oiler is not used, add a few drops of Pneumatic Tool Oil to the airline connection before use. Add a few drops more after each hour of continual use.
4. Make sure the material to be ground is held securely in a vice or is clamped before any operation takes place.
5. Adjust the speed control to a maximum of 16,000 rpm. (Fig. 3)
6. Connect the air line to the tool.
7. Grip the Air Belt Sander firmly, and depress the operating Lever to begin grinding.(See Fig. 2)
8. Place sanding belt on workpiece and move the tool back and forth with light pressure. Do not apply excessive pressure, as it may damage the workpiece and hasten wear on sanding belt.
9. 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.

***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.

10. 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

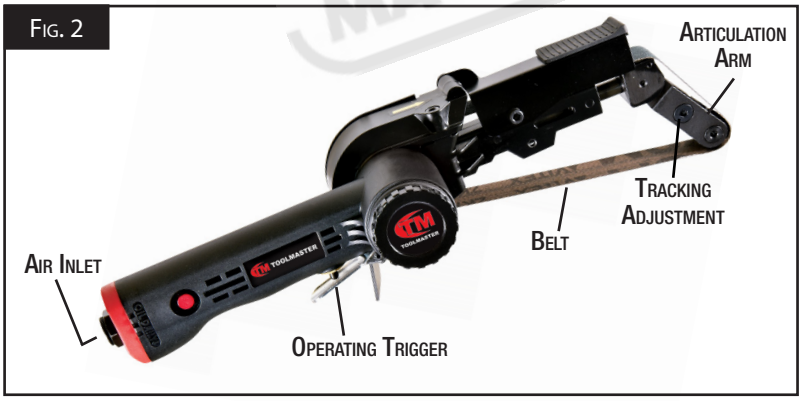
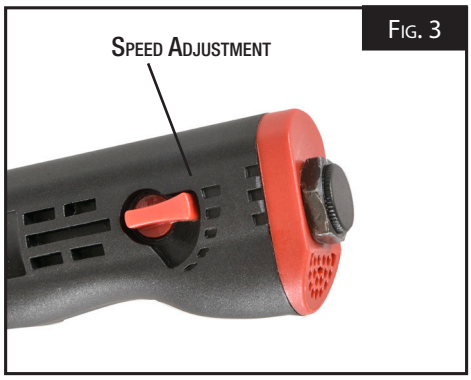


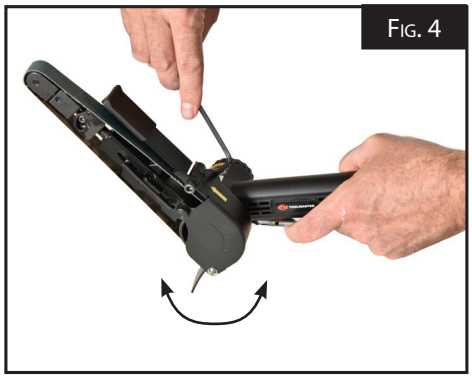
Fig. 3



Adjusting Sanding Arm Angle

Disconnect air supply from the tool to prevent accidental starting and potential injury while adjusting the Abrasive Belt Arm Angle. Using the included Hex Key, loosen the Angle Adjusting Screw located on the upper side of the Abrasive Arm Assembly (Fig 4), rotate the Arm to desired position then tighten screw securely.

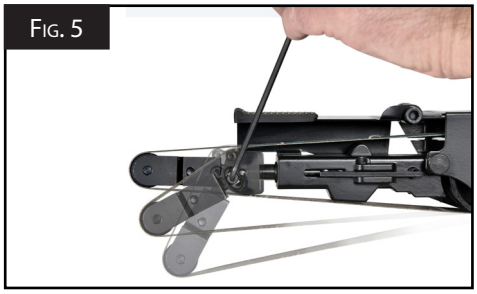
Fig. 4



Adjusting Articulation Arm Angle

Disconnect air supply from the tool to prevent accidental starting and potential injury while adjusting the Articulation Arm Angle. Using the included 3mm Hex Key, loosen the screw slightly and the outer 60mm of the arm will drop and the locking screw head will slide in the curved slot allowing up to 50° of articulation. (Fig. 5) Once the desired angle is set, re-tighen the screw.
NOTE: Spring tension in the Arm must be maintained against the belt to retain it in place or it will fall off.

Fig. 5



Changing The Belt

The Abrasive Belts are quickly and easily changed. No tools are required.

The following steps describe how to do this:

1. Disconnect the air tool from the air line.
2. The end of the Abrasive Belt Arm is spring loaded to keep the proper tension on the Abrasive Belts. While holding the tool firmly, push inward on the end of the Abrasive Belt Arm until the latch on the side of the arm locks the arm holding it in the retracted position while the Abrasive Belt is changed (Fig 6).
3. Remove the old Abrasive Belt free of the drive Drum and discard. (Fig 7)
4. Slide the replacement Abrasive Belt over the drive Drum and Idle Roller at the end of the Abrasive Belt Arm.
5. Depress the Thumb-Lever Latch to release the lock restoring the full spring pressure. (Fig. 8)

Fig. 6

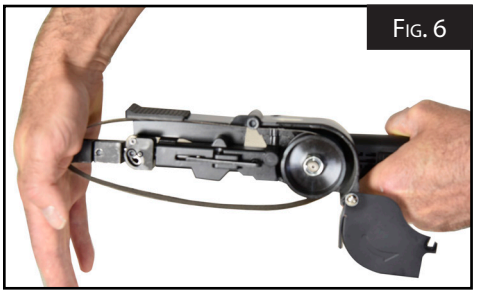


Fig. 7

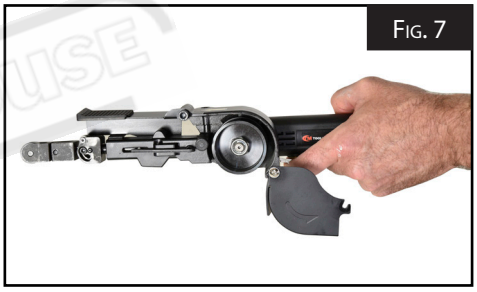
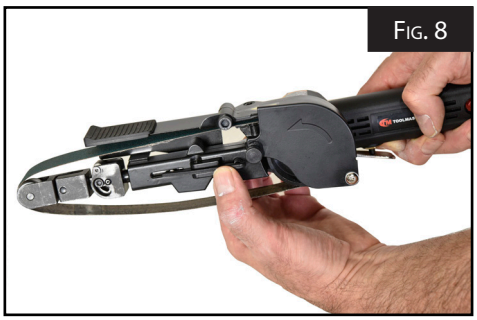


Fig. 8

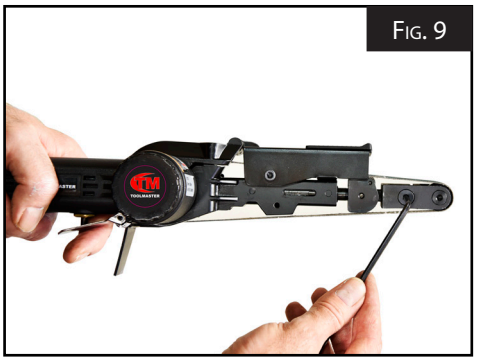


Adjusting Belt Tracking

Once the new belt has been fitted the tracking of the belt may need to be adjusted to keep the belt in the middle of the roller.

1. Disconnect air supply from the tool to prevent accidental starting and potential injury while adjusting the Abrasive Belt Tracking.
2. The Tracking Adjustment Screw is located at the outer right side of the Abrasive Arm Assembly (Fig. 9).
3. Using the Hex Key supplied, turn the screw clockwise (as viewed from the right side) will cause the belt to track left while turning the screw counter-clockwise will cause the belt to track right. Connect to the air supply.

Fig. 9



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 sander 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.