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# GENERAL SET-UP GUIDE

This document contains;



**IMPORTANT SAFETY INFORMATION**

**INSTALLATION INSTRUCTIONS**

**MAINTENANCE**



## THANK YOU FOR CHOOSING ETA ARMS

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## **WARNING**

**READ THIS GUIDE CAREFULLY PRIOR TO INSTALLATION  
AND OPERATION OF THIS TOOL ARM!**

**FAILURE TO UNDERSTAND AND OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.**



THIS ARM REQUIRES COMPRESSED AIR TO FLOAT WEIGHTLESS. DO NOT RAISE THE TOOL ARM AND LET GO OR DROP A RAISED ARM UNTIL AIR IS SUPPLIED AND **TOOLING LOAD IS BALANCED BY ADJUSTING REGULATOR**. Failure to do so could injure someone and/or break the rear spindle (Shoulder Pin).



HEARING PROTECTION may be required depending on the noise level of the power tool used with this tool arm or the surrounding work environment.



Always wear EYE PROTECTION when installing, operating or performing maintenance on this tool arm and the power tool used on it.



Use CAUTION – PINCH POINTS exist during installation, use and maintenance of this tool arm.



Operate at assembly tool manufacturer's maximum operating pressure or 125 psi (8.6 bar), whichever is lower. Never operate at higher than maximum pressure.



Do not carry arm by air hose or manipulate arm using the air hose as a handle. Replace damaged or deteriorated air hoses and fittings immediately.



Disconnect air supply and lower tool arm to lowest position before changing driver bits, tool inserts or cutters, etc.



Become familiar with torque and weight limits for your specific tool arm model and do not exceed these limits (see label on Forearm or following pages of this manual) .



Do not remove any labels – replace any warn or damaged labels that list maximum specifications.



ETA is not responsible for customer modification of this tool arm and resultant safety concerns.



It is the responsibility of the employer to place the information in this manual in the hands of the operator and to make sure they understand how to safely operate this tool arm and any components added to it.

## INSTALLATION INSTRUCTIONS

- 1) Remove contents from shipping cartons and inspect for damage.
- 2) Determine base location.
- 3) Place Base and Post where you want to mount it and mark hole locations.
- 4) Drill thru holes in work bench or other ridged surface if possible. Otherwise anchor securely using appropriate lag bolts, concrete anchors, etc. For thru holes use 3/8" bolts, grade 5 or higher. Be sure any anchors used have sufficient length to secure the base safely. The pipe/post can be removed for convenience while mounting base is being installed. Leave bolts or anchors hand tight temporarily. If optional B250 Base is used use 1/2" bolts instead of 3/8".
- 5) Screw tool arm onto post by hand and then **TIGHTEN POST CAP (2" HEX) to 100 Nm (74 ft-lbs) MINIMUM. THIS IS VERY CRITICAL IF YOUR ARM IS A Smart Arm with ENCODERS.**
- 6) *This next step is easier if 2 people are involved.* Rotate arm slowly and see if it swings on its own once you let go of it. Using the set screws in the base plate, adjust or level the arm until it stays wherever you position it. Whenever you need to raise the base using the set screw, loosen mounting bolts on either side of that set screw slightly as you turn set screw in. Repeat this process until arm stays wherever you place it. Tighten the 3 bolts securely and recheck level. *It is not necessary to use a level to accomplish this task; you can level the base strictly by observing tool arm behavior.*
- 7) If you prefer the arm have a natural tendency to stay back out of the way when not in use or between rundowns, pitch the arm slightly out of level towards the back using the leveling screws.
- 8) Tool arm pivot joints are preset during manufacture to pivot freely for ease of movement about the work zone. If it is desirable in your application that the tool arm not articulate as freely, then a slight drag can be added to the 2 horizontal pivot points by tightening the 1/2" nylon locknut on the rear pivot and the 3/8" nylon locknut on the center pivot. You will need a 3/4" and 9/16" wrench respectively. Care should be taken to tighten these in increments of a few degrees and no more than necessary, as accelerated wear to bearings will result if over tightened. Do not adjust these pivot points unless it is necessary for your application.
- 9) Mount your assembly tool on the front of the arm. Use thread sealant for air connections. When mounting tool onto arm via air inlet or into one of our tool holder be mindful of start lever and reverse button, handle position etc. to make the tool position as ergonomic as possible. If you are mounting driver in an ETA Tool Holder, do not over tighten so as to damage your tool. You can always tighten further if the tool spins in the holder during initial testing. Caution should be taken to clamp tool in an

appropriate part of the tool body that can withstand the clamping force. Consult the tool manufacturer for more info on where to clamp the tool. If appropriate clamping force is not sufficient to keep the tool from spinning, then a thin sheet of adhesive backed rubber can be purchased elsewhere and the clamp jaws can be lined with it to increase friction to avoid over clamping thin walled tool bodies. Most industrial tools however, have an area near the spindle end of the tool where the clamping pressure can be supplied sufficiently to withstand the tool's torque.

- 10) **DO NOT RAISE THE TOOL ARM AND LET GO OR DROP ARM WITHOUT AIR SUPPLIED AND TOOLING LOAD BALANCED BY ADJUSTING REGULATOR.** This could injure someone and/or break the rear spindle (Shoulder Pin).
- 11) Supply a flexible air hose to the 3/8" NPT female inlet in the rear block of the tool arm. Use 3/8" ID hose minimum for PA-Series Models and 1/4" Tubing for EL-Series models and no more than 1 quick connect coupling in the supply line to the tool arm. Air supply should be dry and filtered just before it is fed to the arm air inlet and lubricated only if required by power tool manufacturer. The ETA arm requires no air line lubrication for its components. **\*\*\*Be sure to allow enough slack in the supply hose so you do not inhibit arm rotation\*\*\*. Installation of a Lock-out/Tag-out Valve in the air line supplying the tool arm is required in some circumstances. Consult those responsible for work safety in your organization regarding the necessity for a Lock-out/Tag-out Valve.** If air tool lubrication is required, use only high quality air tool lubricants. Do not use general purpose oils in any air system. This will void the warranty and deteriorate the seal components.
- 12) Turn air supply on and check your connections for air leaks.
- 13) **Adjust the small air regulator supplying the float cylinder until the arm and tool are balanced and easily float with little resistance.** Tool arm should now be ready to work for you and once the arm is floating it is safe to move the arm up and down and side to side.

### TOOL ARM MAINTENANCE & FACTORY SERVICE

Unless problems arise due to worn parts or weakened or compromised pneumatic hoses or seals, there is no maintenance required on Ergonomic Tool Arms. Inspect for worn or compromised parts periodically and repair as necessary. See warranty for maintenance issues within the first 5 years.

Repair parts can be purchased from ETA through your Industrial Distributor or ETA will perform repairs at our location at a nominal cost, based on a written estimate after inspection of returned product. An RMA # is required to return product to ETA.