ATLAS RF Assist Arm for Atlas & Coseng Tire Changers

Assembly Guide

CONGRATULATIONS!

You have just made the first step toward making your tire changing chores much easier! This DAA Assist Arm assembly guide will help you to assemble and install your new DAA Assist Arm on your Coseng or Atlas rim clamp tire changer. If you have not completed the main assembly of your tire changer; STOP here. Follow the steps provided in your Tire Changer Assembly Guide before returning to this manual. You must assemble the main unit BEFORE attempting to install this assist arm.

You WILL need at least one, two, or three able bodied people to help assemble and install this accessory. The use of a forklift, cherry picker, or hydraulic lift table may be needed. (Column weighs about 275 lbs.)

PLEASE NOTE: Your tire changer may vary in color or features from the tire changer shown in this manual. All assembly steps are the same for all tire changer models……so go ahead…..you can do it!

INDIANA

GREG SMITH EQUIPMENT SALES INC.
5800 MASSACHUSETTS AVE.
INDIANAPOLIS, IN 46218

PHONE: (800) 262-1950
FAX: (317) 542-1448

DELAWARE

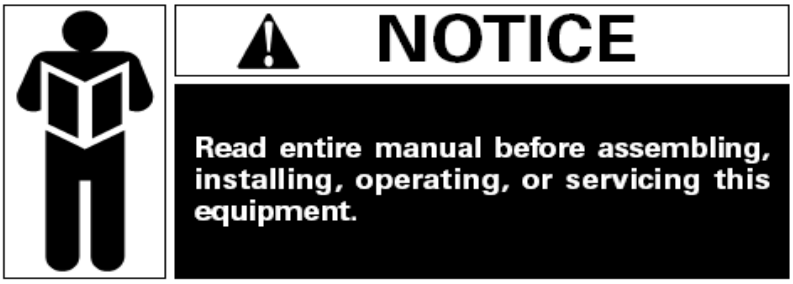
GREG SMITH EQUIPMENT, INC.
250 EXECUTIVE DRIVE, SUITE 1
NEWARK, DE 19702

PHONE: (800) 715-1950
FAX: (302) 894-9136

GEORGIA

GREG SMITH EQUIPMENT SALES INC.
5405 BUFORD HWY.
NORCROSS, GA 30071

PHONE: (800) 768-4104
FAX: (678) 781-0149



OPERATOR PROTECTIVE EQUIPMENT

Personal protective equipment helps make tire servicing safer. However, safety equipment does not take the place of safe operating practices. Always wear durable work clothing during tire service activity. Loose fitting clothing should be avoided. Tight fitting leather gloves are recommended to protect operator's hands when handling worn tires and wheels. Sturdy leather work shoes with steel toes and oil resistant soles should be used by tire service personnel to help prevent injury in typical shop activities. Eye protection is essential during tire service activity. Safety glasses with side shields, goggles, or face shields are strongly recommended.

Owner's Responsibility

Failure to follow danger, warning, and caution instructions may lead to serious personal injury or death to operator or bystander or damage to property. Do not asemble or operate this machine until you read and understand all the dangers, warnings and cautions in this manual.

To maintain machine and user safety, the responsibility of the owner is to read and follow these instructions:

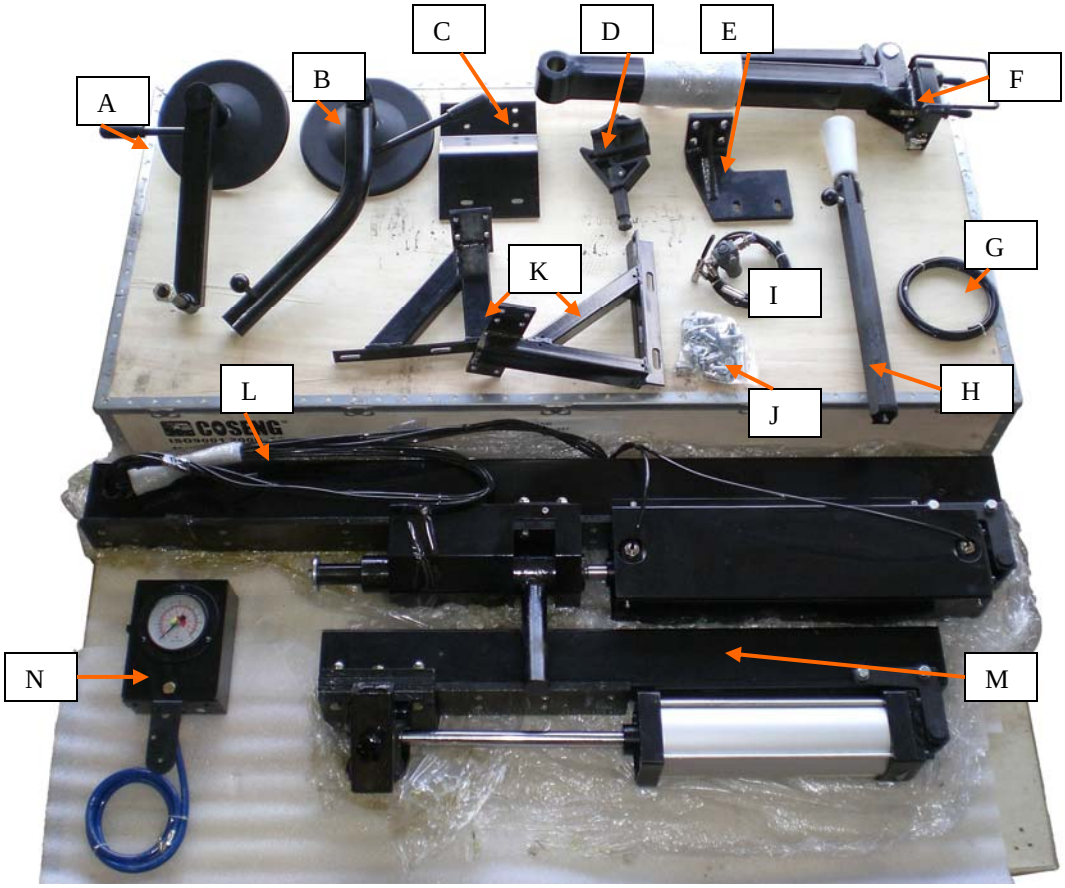
- Follow all assembly and installation instructions completely.
- Make sure the installation conforms to all applicable Local, State, and Federal Codes, Rules, and Regulations; such as State and Federal OSHA Regulations and Electrical Codes.
- Carefully check the unit before each use.
- Read and follow the assembly and operating instructions. Keep them readily available for quick reference.
- Make certain all operators are properly trained, know how to safely and correctly operate the equipment, and are properly supervised.
- Allow the equipment to be operated only with all parts in place and operating correctly.
- Carefully inspect the unit on a regular basis and perform all maintenance as required.
- Service and maintain the unit only with authorized or approved replacement parts.
- Keep all instructions permanently with the unit and all decals/labels/notices on the unit clean and visible.
- Do not override safety features.

GENERAL SAFETY WARNINGS AND PRECAUTIONS

- **KEEP WORK AREA CLEAN AND DRY.**
  Cluttered, damp, or wet work areas invite injuries.
- **KEEP CHILDREN AWAY FROM WORK AREA.**
  Do not allow children to handle this product.
- **STORE IDLE EQUIPMENT.**
  When not in use, tools and equipment should be stored in a dry location to inhibit rust. Always lock up tools and equipment, and keep out of reach of children.
- **DO NOT USE THIS PRODUCT IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.**
  Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to use this product.
- **USE EYE PROTECTION.**
  Wear ANSI approved safety impact eyeglasses when assembling and using this product.
- **DRESS SAFELY.**
  Do not wear loose clothing or jewelry, as they can become caught in moving parts. Wear a protective hair covering to prevent long hair from becoming caught in moving parts. If wearing a long-sleeve shirt, roll sleeves up above elbows.
- **DO NOT OVERREACH.**
  Keep proper footing and balance at all times to prevent injury.
- **INDUSTRIAL APPLICATIONS MUST FOLLOW OSHA REQUIREMENTS.**
- **STAY ALERT.**
  Watch what you are doing at all times. Use common sense. Do not assemble or use this product when you are tired or distracted from the job at hand.
- **CHECK FOR DAMAGED PARTS.**
  Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace or repair damaged or worn parts immediately.
- **REPLACEMENT PARTS AND ACCESSORIES:**
  When servicing, use only identical replacement parts. Only use accessories intended for use with this product. Approved accessories are available from Greg Smith Equipment Sales.
- **MAINTAIN THIS PRODUCT WITH CARE.**
  Keep this product clean and dry for better and safer performance.
- **MAINTENANCE:**
  For your safety, service and maintenance should be performed regularly by a qualified technician or other competent person.
- **USE THE RIGHT TOOL FOR THE JOB.**
  Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool, and do not use this tool for a purpose for which it was not intended.

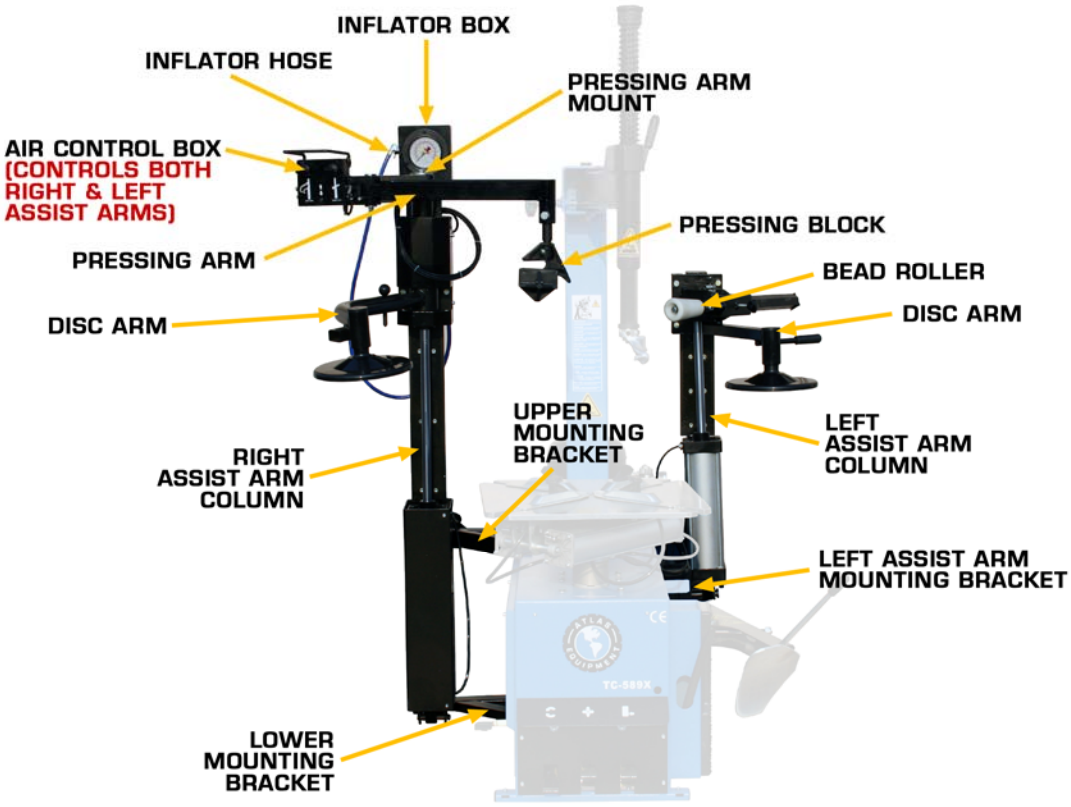
WARNING: The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors, which cannot be built into this product, but must be supplied by the operator.

Once you have completed the assembly of your tire changer, you may proceed with the following steps to complete the DAA Assist Arm assembly and installation. The Assist Arm column is extremely heavy (**approx. 275 lbs.**). It will take at least two people (or mechanical equipment) to lift the Assist Arm column out of the shipping container (**shipping weight approx. 450 lbs.**).
You may need a cherry picker or forklift for this operation. Be careful not to set Assist Arm column on any air lines or fittings (this will damage them).



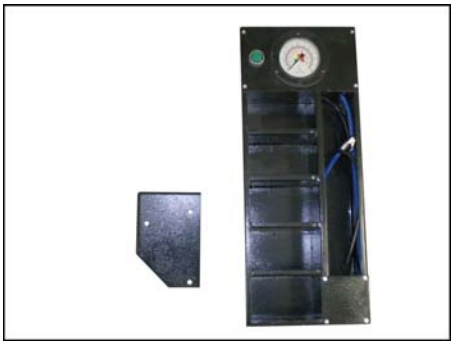
STEP 1: Unwrap and verify that all of the components are present and undamaged:

A. Right Disk Arm
B. Left Disk Arm
C. Right Arm Support Bracket
D. Press Block
E. Right Arm Mounting Bracket
F. Pressing Arm (with Control Box)
G. (2) 6mm Air Lines
H. Roller Arm
I. Hose Tee Assembly, Regulator Assembly (See the regulator installation guide, machines already equipped with this regulator will not use this part provided in the kit)
J. Hardware Kit
K. Left Arm Upper and Lower Brackets
L. Left Assist Arm Column
M. Right Assist Arm Column
N. Inflator Box

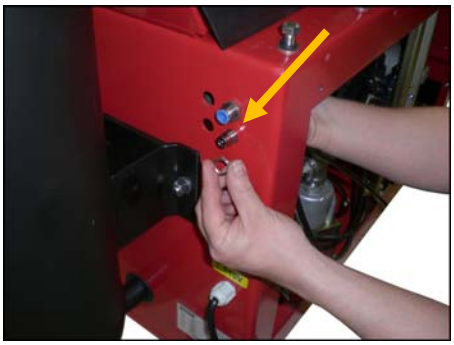


STEP 2: Remove the side cover

STEP 3: If your machine has an Inflator Box Assembly already installed, remove it and set it aside. (This applies to tire changers now in use)

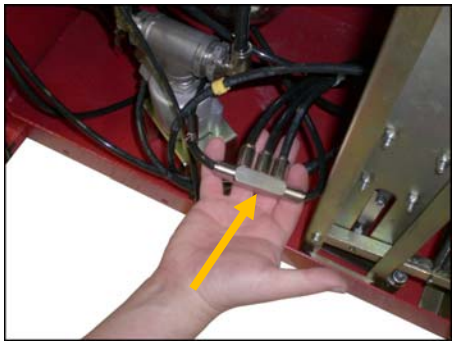


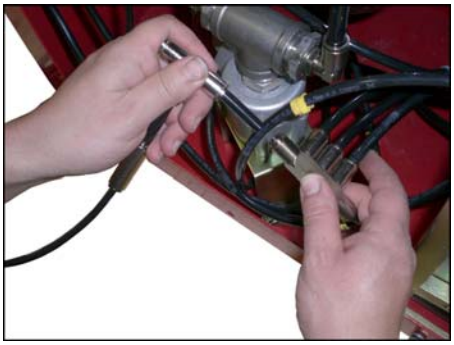
STEP 4: Locate the Hose Tee Assembly. Remove the nut from the small fitting on the Tee, and insert the fitting through the hole located below the Air Regulator fitting (see arrow). Install and tighten the fitting.



NOTE: If you have a Coseng TC633 follow Steps 5 and 6.
For Atlas TC589, TC589X, and TC421 Tire Changers follow Steps 7 through 9.

STEP 5: Locate the 5-way union located inside the machine. Disconnect the air line indicated by the arrow. Press the short hose on the Hose Tee Assembly into the 5-way air union.

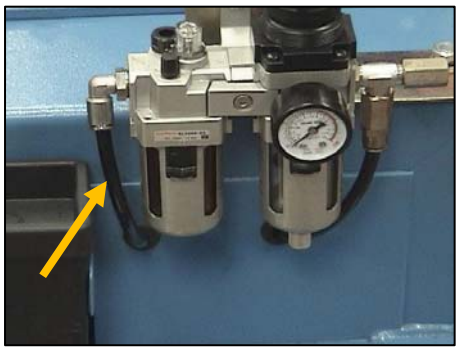




STEP 6: Press the line that was disconnected in step 5 into the opposite side of the Hose Tee Assembly's three way air union.

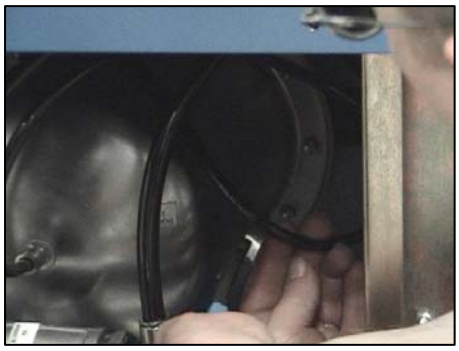
For TC589, TC589X, and TC421 Tire Changers:

STEP 7: Locate the 8mm air line connected to the lubricator (arrow). This line is the main air supply for the changer. Follow the line into the chassis. Have a helper "wiggle" the line so that you may easily locate it inside the chassis.

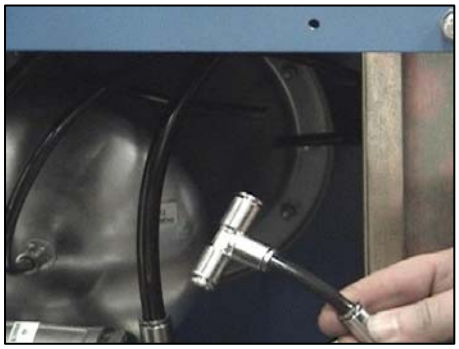


WARNING: Do not use the air line connected behind the regulator / filter assembly! This line supplies the bead blast system. Connecting to this line will cause damage to your Assist Arm and its controls. **Be certain** that you are using the correct air line before you continue.

STEP 8: Cut the air line where it is easy to access. Make sure your cut is straight (not at an angle) and smooth. Cut the line only once.

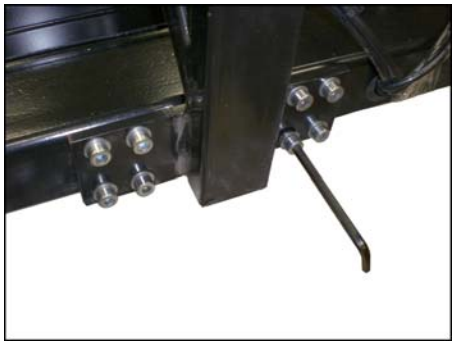


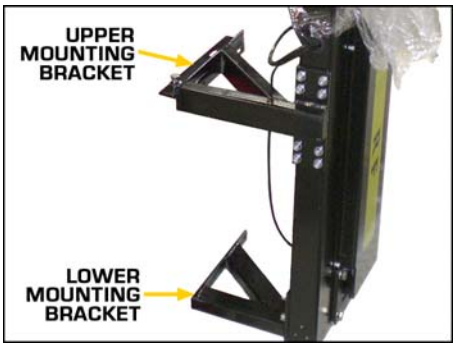
STEP 9: Locate the Hose Tee Assembly included with the Assist Arm. Connect the cut ends of the air supply line into the Hose Tee as shown. Press the hoses into the press lock fittings completely make certain they are tight.



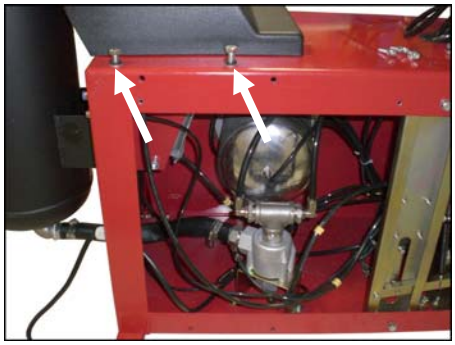
STEP 10: Bolt the Upper and Lower Arm Brackets to the Left Assist Arm Column as shown, using the 12 small Allen head screws and washers supplied in the hardware kit. Tighten with a 5mm Allen wrench.

CAUTION: The Left Assist Arm Column Assembly weights approx. 275 lbs.

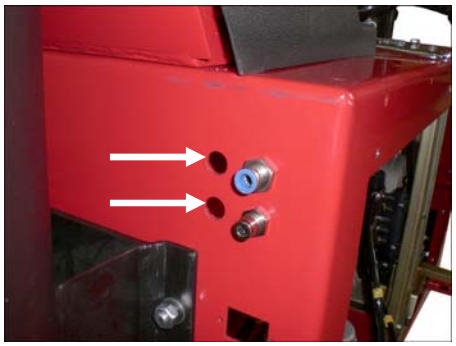




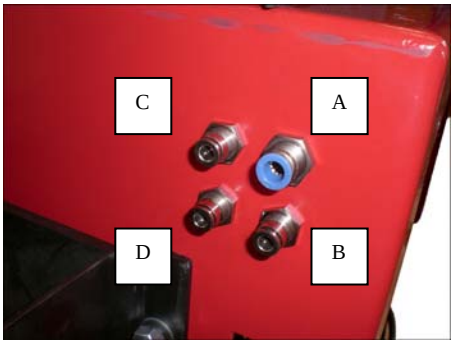
STEP 11: The Assist Arm will attach to the Tire Changer chassis as shown below. Remove the two hex bolts supplied with the machine (arrows). With another person's help, tip the Assist Arm Column upright, so that the brackets line up with the mounting holes. Be careful not to break the plastic air lines. Use the two hex head bolts and washers removed at the beginning of this step, and four matching bolts and washers from the hardware kit. Tighten all six bolts securely with a 16mm wrench.



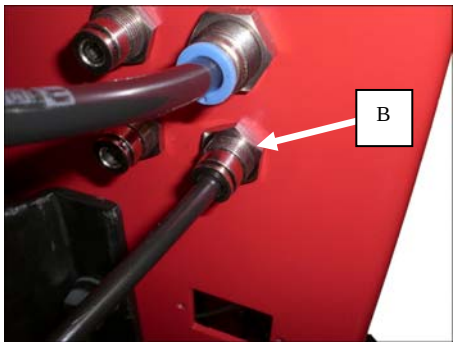
STEP 12: Locate the two air fitting holes in the rear of the Main Chassis (arrows). Remove the two bulkhead fittings from the Hardware Kit (bottom photo). Remove one nut from each fitting and install them as shown in the right photo. Reinstall the nuts onto the fittings to hold them firmly in place.

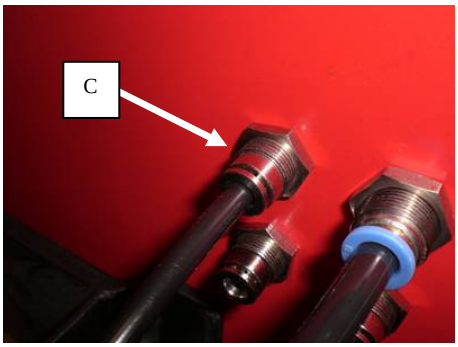


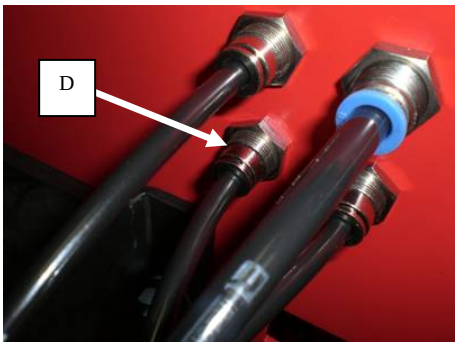
STEP 13: Locate the four plastic air lines that exit near the bottom of the Left Assist Column (arrows). Each line will be labeled with a letter. The labels will read: A, B, C, and D. The middle photo shows the correct fitting location for each hose. It is recommended that you label each fitting (with a sticker or a Sharpie) according to this photo, so that identifying the correct connection will be easier. To begin connecting the hoses, press the hose marked “A” into the upper right fitting.



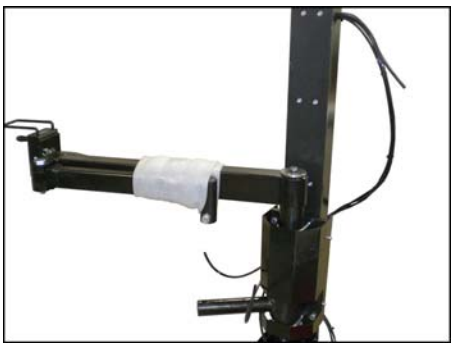
STEP 14: Press the hose marked “B” into the lower right fitting (top left photo). Press the hose marked “C” into the upper left fitting (top right photo). Press the hose marked “D” into the lower left fitting (bottom photo). Make sure all of the hoses are pushed fully into each fitting. This will ensure a good seal.





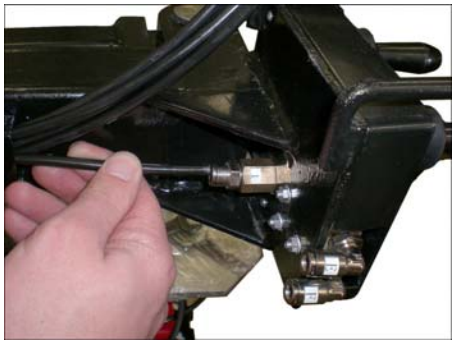


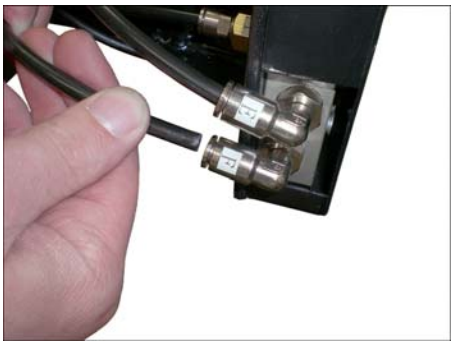
STEP 15: Remove the bolt and washer from the Pressing Arm mount located on the front of the Assist Arm Column. Place the Pressing Arm onto the mount and re-install the bolt and washer. Tighten the bolt securely.



STEP 16: Locate the loose air lines coming out near the top of the Assist Arm Column. Route the five longest lines (labeled 1, 2, 3, E, and F) through the square tube on the back of the Pressing Arm as shown above.

STEP 17: Press each of the five marked lines into the matching numbered port on the Assist Arm control box.

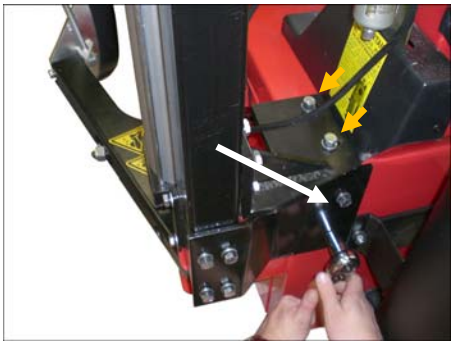




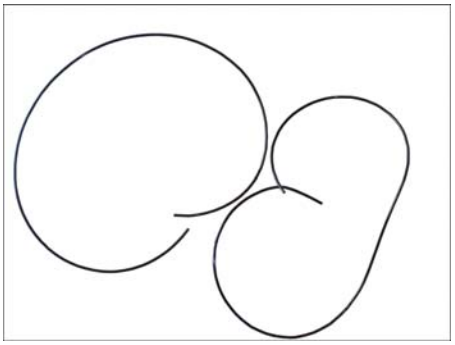
STEP 18: Locate the Right Assist Column (left photo) and the Right Assist Arm Mounting Bracket. Attach the Mounting Bracket to the Arm with four hex-head bolts from the Hardware Kit (right photo).

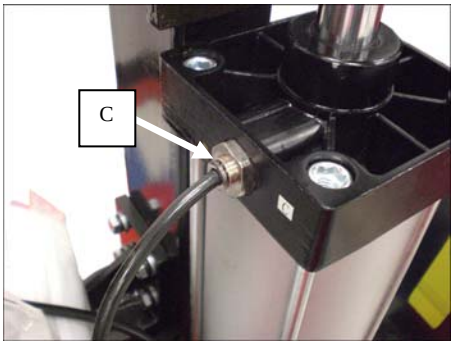
STEP 19: With an able bodied person's help or machine assistance, lift the Right Assist Column (**approx. 100 lbs.**) into the upright position at the right rear corner of the Main Chassis (shown in left photo) and secure the Mounting Bracket to the Main Chassis with two hex head bolts from the Hardware Kit (arrows). Locate the Right Arm Support Bracket (right photo), and install it as shown with six additional hex head bolts from the Hardware Kit. Tighten all eight bolts securely with a 16mm wrench.

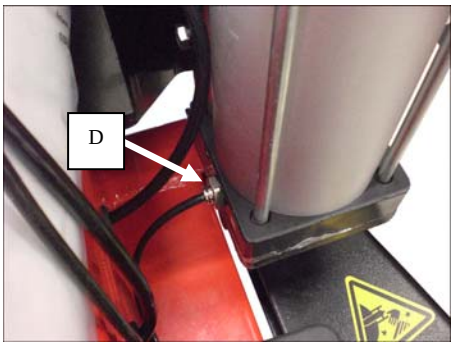
CAUTION: The Left Assist Arm Column Assembly weights approx. 100 lbs.



STEP 20: Locate the two loose 6mm air lines. They will be labeled "C" and "D". Press the air line marked "C" into the fitting located at the top of the Right Assist Arm cylinder (top right photo). Press the line marked "D" into the fitting located at the bottom of the cylinder (bottom photo).

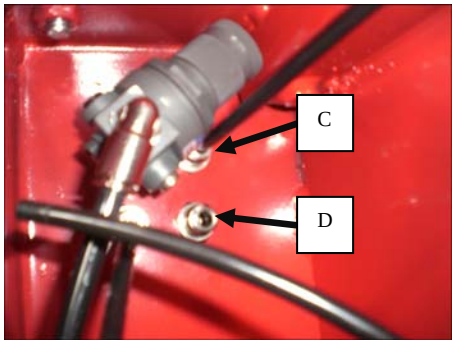






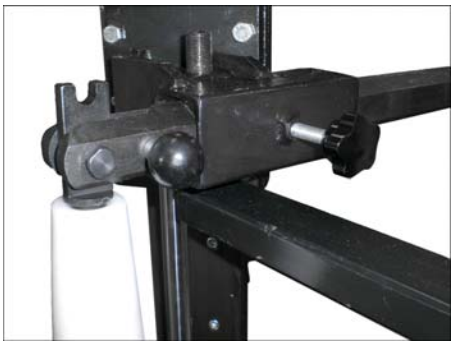
STEP 21: Guide the two air lines from the Right Assist Arm through the bead breaker opening on the right side of the Main Chassis. Position these lines carefully. Do not allow them to hang or rest in a position that will allow them to become kinked, broken, or interfere with the operation of the machine. If needed, you may use a wire tie (not supplied) to hold the lines in a safe location.

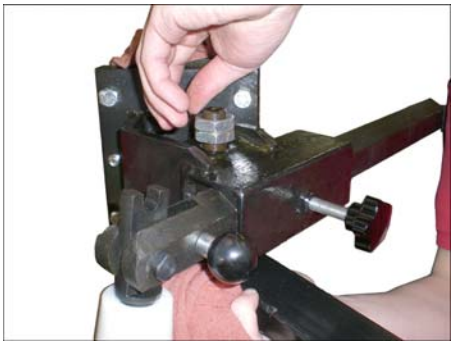
STEP 22: Find the two lines from **STEP 18** inside the machine. Press the line marked "C" into the upper right fitting (located at the left rear, inside the machine, next to the regulator) as viewed from inside the Chassis. Press the line marked "D" into the lower right fitting. These connections will match the lines installed on the outside of the machine in **STEP 11**.



STEP 23: Remove the stop bracket and Allen screw from the end of the Roller Arm (left photo). Slide the Roller arm through the mounting bracket as shown in the right photo. Reinstall the stop bracket and Allen screw.

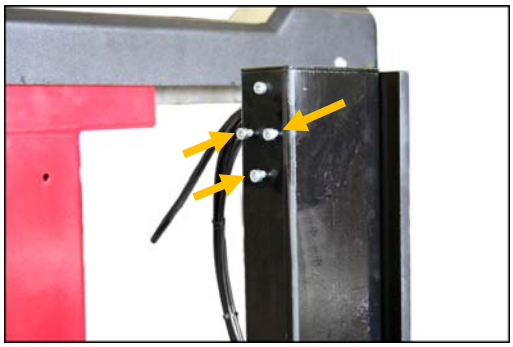
STEP 24: Remove the two nuts from the Right Disk Arm (top left photo). If desired, apply a light coat of grease to the Right Disk Arm shaft before installing. Insert the shaft on the arm into the mounting bracket from the bottom up (top right photo). The hole is located to the left of the Roller Arm. Reinstall the two nuts onto the shaft. Tighten the nuts against each other, allowing enough free play for the arm to swing freely.

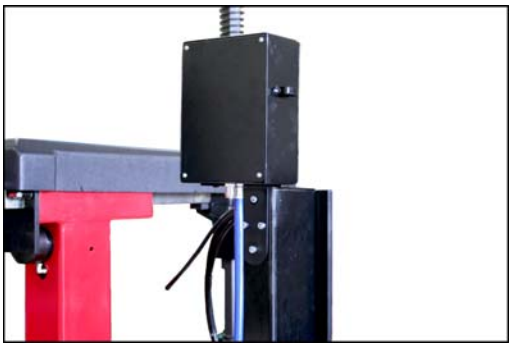


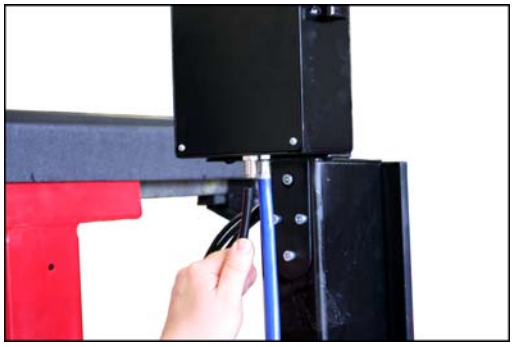


STEP 25: Locate the Pressing Block and insert it into the end of the Pressing Arm. Tighten the mounting bolt (arrow) against the lock nut to hold the block into place. The Pressing Block should turn freely once mounted.

STEP 26: Remove the three Allen head mounting screws at the top of the Left Assist Arm Column (top left photo) and set them aside. Position the Inflator Box as shown and re-install the screws. Tighten the screws with a 5mm Allen wrench (top right photo). Find the unused 8mm line coming from near the top of the Column, and press it into the fitting on the bottom of the Inflator Box (bottom photo). Re-install the side access cover.







STEP 27: Remove the locking pin located on the round tube at the front side of the Assist Arm Column (arrow). Position the Disk Arm as shown and re-install the locking pin. Re-install the machine side cover.

STEP 28: Congratulations! Your Tire Changer Assist Arm is complete. Remember to check all bolts and screws for tightness. Connect air and electrical service to the machine. Set the air regulator between 100 and 116psi.and check thoroughly for air leaks. Test each function and control on the machine as described in the owner's manual BEFORE attempting to change tires.
THE TIRE MACHINE SHOULD BE OFF OF THE SKID
BEFORE OPERATING.

For more information on the use of this machine, refer to the owner's manual.