

**PRIOR TO INSTALLATION**

- A. Chock the vehicle wheels (Block all the wheels to prevent the vehicle from rolling and avoid injury).
- B. Check all foundation brakes. Brake adjusters cannot compensate for problems with foundation brakes. Replace any worn cam bushings, pins, rollers and brake shoes, or broken return springs.
- C. Fully Cage the spring brake by following the manufacturer's recommended procedures.

**CAUTION:** Some mechanical caging devices do not fully cage the spring brake. Motor Wheel Crewson recommends using air at 90 – 100 psi to fully cage the brake spring.

**ABA INSTALLATION**

*These Installation Instructions are for air chambers with welded clevises with a 1.3" Pin center distance.*

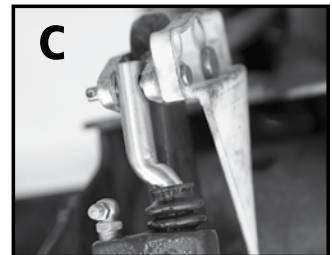
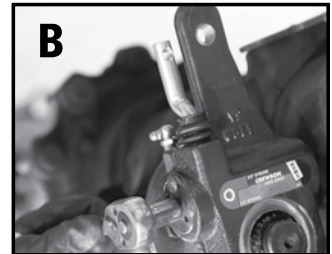
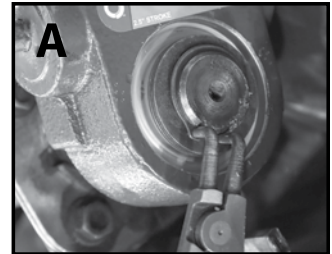
**WARNING: Do not install this ABA on the standard 1.38" Motor Wheel clevis applications. Damage will occur and will not function correctly.**

When installing the Motor Wheel Crewson on the chamber with a welded clevis an installation gauge is not necessary. The proper mounting angle has been designed into the product.

- 1. Remove the existing brake adjuster. Keep the existing mounting hardware. (SEE PHOTO A.)
- 2. Before installing the ABA, apply anti-seize on the S-cam splines. Install the ABA onto the camshaft using the original mounting hardware. Properly shim the ABA. Place other washers as needed on the end of the camshaft on the outside of the ABA. Reattach the retaining clip. (SEE PHOTO B.)
- 3. Use 7/16" wrench, manually rotate the adjuster shaft CW until the ABA arm holes align with the clevis holes.
- 4. If your slack is equipped with AUTO-CHECK® stroke indicator, do the following:
  - A. Insert the 1/2" clevis pin into the yellow AUTO-CHECK pointer hole. Be sure to use the correct set of holes in the pointer for the ABA you are installing. The clevis pin's head should face the front of AUTO-CHECK. (SEE PHOTO C.)
  - B. AUTO-CHECK pointer is non-handed and can be installed on either the right or left side of the ABA. The AUTO-CHECK pointer is designed to face the center of the vehicle.
  - C. Now insert the 1/4" clevis pin with the AUTO-CHECK pointer into the clevis and install your cotter pins.
- WARNING: Do not pull the clevis out of the chamber to install the pins; this can result in reducing the chamber stroke available.**
- 5. If your slack is not equipped with AUTO-CHECK simply install the pins
- 6. Use a 7/16" wrench, manually rotate the adjuster CW until the brake linings contact the drum. Not back off 1/2 turn CCW to set the clearance. (SEE PHOTO D.)

**WARNING: If you apply the brakes before this step, you will cause damage to the ABA.**

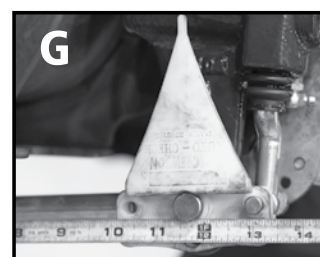
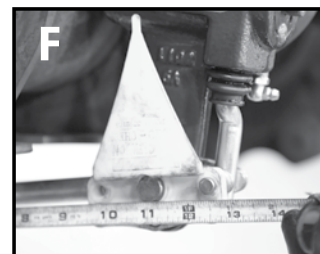
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# Welded Clevis Automatic Brake Adjuster Installation Procedures



7. Uncage the spring brake.
8. Build up the vehicle air pressure to 90 psi min.
9. Fully apply and release the brakes several times to check for adequate clearance to all the adjacent components.
10. The AUTO-CHECK® pointer will now point to the "home" location on the housing. (SEE PHOTO E.)
  - If does not point to the home position, make sure the parking brake was fully caged during installation. Also check for interference or binding now allowing the full retraction of the chamber push rod.
11. Measure the distance from the air chamber to the center of the 1/2" pin. Apply the brakes until the air reservoir gage read 90 - 100 psi, then make a full brake application and re-measure the distance to the 1/2" pin. (SEE PHOTO F.)
12. The strike (difference of these two measurements) must be less than those in the chart below. (SEE PHOTO G.)



STANDARD STROKE		LONG STROKE	
CHAMBER SIZE	ADJUSTER STROKE	CHAMBER SIZE	ADJUSTER STROKE
6	1-1/4 or less	16	2 or less
9	1-3/8 or less	20	2 or less
12	1-3/8 or less	24	2 or less
16	1-3/4 or less	(below 3" max stroke)	2 or less
20	1-3/4 or less	24	2-1/2 or less
24	1-3/4 or less	(3" max stroke version)	2-1/2 or less
30	2 or less		
36	2-1/4 or less	30	2-1/2 or less

## WARNING

Excessive pushrod stroke or tight running brakes indicates that there is a problem with the foundation brake components, the ABA installation or the ABA. The proper way of checking an ABA to see if it is working within specs is to measure the pushrod stroke. The only time the ABA should be manually adjusted is during installation or at reline. Constant manual adjustment of the ABA is a dangerous practice and may lead to reduced internal component life, or have other more serious consequences.

## MAINTENANCE

The ABA should be greased every 6 months or 50,000 miles using a quality NLGI #2 Moly EP Multi-Purpose grease as part of the regular equipment maintenance schedule.

*Actual product performance may vary depending upon vehicle configuration, operation, service and other factors.  
All applications must comply with applicable specifications from Motor Wheel and the respective vehicle manufacturer.  
Contact Motor Wheel for additional details regarding specifications, applications, capacities, and operation, service and maintenance instructions.*

Contact Motor Wheel at **855.743.3733** for additional information.



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