



# TMC Australia Pty Ltd

## Automatic Slack Adjuster Installation Procedure – rev a

### Note:

1. All vehicle wheels must be blocked to prevent the vehicle from rolling and causing injury.
2. Check and replace all worn brake components such as cam bushing, pins, rollers and brake shoes or broken brake return springs.
3. Fully cage the spring brakes by following the manufacturer's recommended procedures.

### **BRUNNER Automatic Slack Adjuster**

#### **Clevis assembly procedure**

1. Remove the existing slack adjuster and clevis. Keep the existing mounting hardware. Do not remove the existing clevis jam nut.
2. Thread the new TMC clevis onto the push rod and install the ½" clevis pin into the clevis. Do not tighten jam nut (See Photo A).

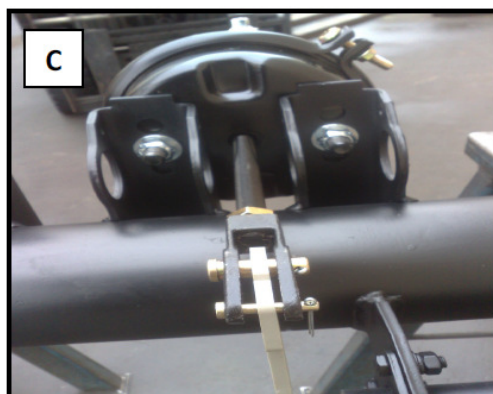
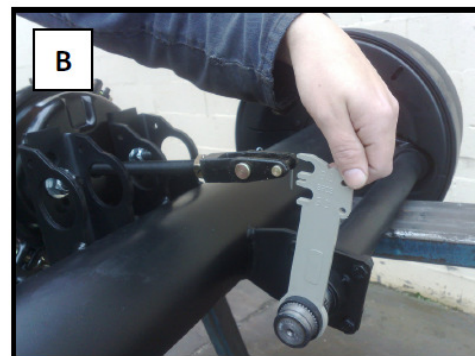
***USE ONLY THE SUPPLIED TMC CLEVIS AND TEMPLATE PROVIDED IN THE KIT. DO NOT USE OLD OR COMPETITOR'S CLEVIS OR TEMPLATES.***

3. Slide the installation template over the S-cam spline and swing it into the clevis until the correct slot totally engages on the ½" clevis pin (See Photo B).
4. Install the ¼" clevis pin. If the ¼" clevis pin does not slide freely into the clevis and template, remove the template and perform the following:
  - a. If the ¼" template hole sits below the ¼" clevis hole, rotate the clevis clockwise until the holes align.
  - b. If the ¼" template hole sits above the ¼" clevis hole, rotate the clevis clockwise until the holes align.

5. If the push rod thread extends through the clevis more than 1/16", remove clevis and cut the push rod to length.

Note: A minimum of ½" of push rod engagement in the clevis body is required. Change the brake chamber if there is insufficient thread engagement.

6. Remove template and both clevis pins.





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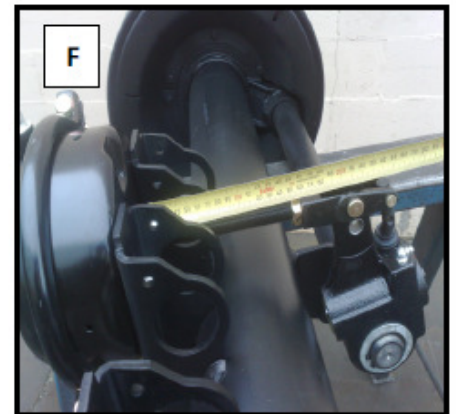
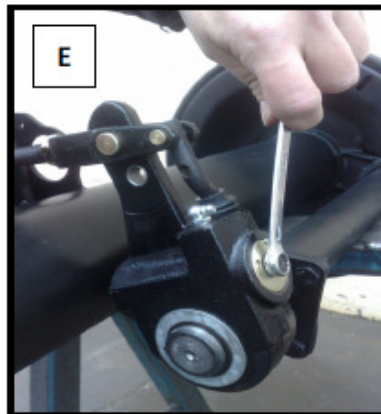
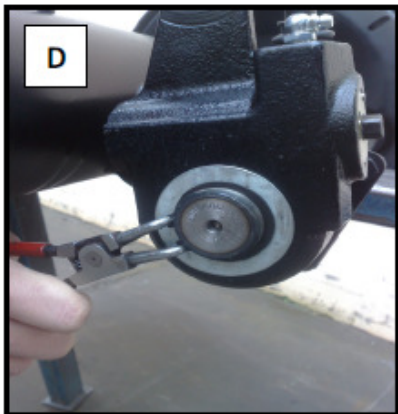
## Automatic Slack Adjuster Installation Procedure – rev a

### Automatic slack adjuster assembly procedure

1. Apply anti-seize on the S-cam splines and install the automatic slack adjuster. Place washers as needed on the end of the camshaft on the outside of the slack adjuster followed by the retaining circlip (See Photo D).
2. Tighten the jam nut to 50ft-lbs (68Nm) torque minimum.
3. Use an 11mm wrench, manually rotate the adjuster shaft clockwise until the slack adjuster holes align with the clevis holes. Install pins.
4. Use an 11mm wrench, manually rotate the adjuster clockwise until the brake shoes contact the drum. Then back off half turn counter-clockwise to set the clearance (See Photo E).

**DO NOT APPLY THE BRAKES BEFORE THIS STEP AS THIS WILL CAUSE DAMAGE TO THE AUTO SLACK.**

5. Uncage the spring brakes.
6. Built up the vehicle air pressure to 90psi (620kPa) min.
7. Fully apply and release the brakes several times to check for adequate clearance to all the adjacent components.
8. Measure the distance from the air chamber to the centre of the ½" pin. Apply the brakes with 80-90 psi (550-620kPa) air pressure and re-measure the distance to the ½" pin (See Photo F).



9. The stroke must be less than those in the chart below.

<u>CHAMBER SIZE</u>	<u>ADJUSTER STROKE</u>
20	2" (50mm) OR LESS
24 (BELOW 3" MAX STROKE)	2" (50mm) OR LESS
24 (3" MAX STROKE VERSION)	2 ½" (64mm) OR LESS
30	2 ½" (64mm) OR LESS

**Excessive pushrod stroke or tight running brakes indicates that there is a problem with the foundation brake components, the automatic slack adjuster installation or the slack adjuster itself. The automatic slack adjuster should only be manually adjusted during installation or at brake reline.**



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## Automatic Slack Adjuster Installation Procedure – rev a

### HALDEX Automatic Slack Adjuster

#### Automatic slack adjuster installation procedure

1. Ensure that the system tank pressure is above 100 psi (689kPa). Check that the push rod is fully retracted. Apply air to release spring brake or manually cage back if air is not available.
2. Install anchor bracket loosely (See Photo A).
3. Note the proper mounting location as determined by the length of adjuster arm:
  - a. 5" and 5 ½" adjuster arm lengths utilize the shorter hole location.
  - b. 6" and 6 ½" adjuster arm lengths utilize the longer hole location.
4. Apply "Anti-Seize" to camshaft splines and install the brake adjuster onto the camshaft **with the adjusting hex pointing away from the brake chamber** (See Photo B).
5. Use at least one inner washer and outer washers as needed to allow no more than 0.06" (1.5mm) movement of adjuster on camshaft.

**NOTE: DO NOT PULL PUSH ROD OUT TO MEET THE BRAKE ADJUSTER.**

6. Rotate the 7/16" adjusting hex nut clockwise until the clevis hole lines up with the brake adjuster arm hole. Apply anti-seize to clevis pin. Install and secure with cotter pin.
7. Rotate the control arm away from the adjusting hex towards the air chamber until it comes to a definite internal stop. Ensure that the "Installation Indicator" falls within the proper installation slot with brakes fully released. **Incorrect positioning will cause tight brakes.** (See Photo C & Figure 1)
8. Tighten all anchor bracket fasteners without moving the control arm from its position.
9. Rotate the adjusting hex clockwise until the lining lightly contacts the drum then back-off half a turn.
10. A minimum of 13 ft-lbs (18Nm) is necessary to overcome the internal clutch. A ratcheting sound will be present.

**NOTE: DO NOT USE AN IMPACT WRENCH TO PREVENT INTERNAL DAMAGE.**

11. With full service brake application, assure that the spring brakes are released and check that the "Installation Indicator" is within the slotted area.