

# Air Brake Quick Reference

## Gene's Truck Service

### Automatic Slack Adjusters

1/2" to 5/8" free play with pry bar for checking brake adjustment

*Note: (All Slacks must be the same brand & length)*

#### Bendix Slack Adjuster Settings

Bendix Tech Support 1-800-247-2725

- *2 5/8" Chamber face to center of large clevis pin*
- *Trailers w/ Intrax 6 1/2" Chamber face to center of large clevis pin*

**Note: Chambers must be caged to set up distance!!!!**

#### **BRAKE ADJUSTMENT**



**CAUTION: Chock Wheels. Release Park Brake.**

Rotate the manual adjustment hex clockwise until the linings are snug against the drum. Turn the adjustment hex counterclockwise 1/4 turn. Pull the actuator push rod to confirm that approximately 1/2 inch of push rod free stroke exists. Apply 85 psi and check that the push rod stroke is below the readjustment Limit. If the stroke exceeds the readjustment limit, check the condition of the foundation brake.

#### Meritor Slack Adjuster Settings

Meritor Tech Support 1-800-535-5560

Check brake clevis center to center spacing of large to small clevis pins.

**Welded Clevis EXTENDED STROKE brake chambers pin spacing is 1.300**

Use Meritor handed Slacks for clearance With clevis# R810021 (1.300) 5/8-18

*Set at 2 1/4" Chamber face to center of large clevis pin*

Template not available!

**Note: Chambers must be caged to set up distance!!!!**

- **If measures 1.380 Clevis is for STANDARD stroke brake chamber**

*Set at 2 3/4" Chamber face to center of large clevis pin*

**Part# R810019 (1.380) 5/8-18 thrd**

- **If measures 1.30 Clevis is for EXTENDED stroke brake chamber may be welded .**



**Need to use R&L handed slacks for housing clearance.**

*Set at 2 1/4" Chamber face to center of large clevis pin*

**Part# R R810021 (1.300) 5/8-18 thrd**

Exception:

- **If 1.380 and 6 1/2" Slack Set at 2 5/8" Chamber face to center of large clevis pin**





## DOT Out of Service Criteria

### Dot Regulations for STANDARD Stroke chambers

. Use 90-100 psi apply pressure.

<u>Type</u>	<u>OD</u>	<u>DOT Max Stroke</u>	<u>Max Stroke of Chamber</u>
16	6 3/8	1 3/4"	2 1/4"
20	6 25/32	1 3/4"	2 1/4"
24	7 7/32	1 3/4"	2 1/4"
30	8 3/32	2"	2 1/2"
36	9	2 1/4"	3"

### Dot Regulations for LONG Stroke chambers

. Use 90-100 psi apply pressure.

<u>Type</u>	<u>OD</u>	<u>DOT Max Stroke</u>	<u>Max Stroke of Chamber</u>
16	6 3/8	2"	2 1/2"
20	6 25/32	2"	2 1/2"
24	7 7/32	2"	2 1/2"
24*	7 7/32	2 1/2"	*3"
30	8 3/32	2 1/2"	3"

\* 24Extra Long Stroke Only)  
Fitting Ports have Square Bosses

### Meritor General Info

- 1/2" to 5/8" free play with pry bar for checking brake adjustment
- Q Cam head 1 3/8" (4515 shoes)
- Q-Plus cam head 1 3/16" (4707 shoes)

### General Math Examples

30 square inches X psi application pressure = force

Examples: 30 X 90psi = 2700 lbs

90psi X 180(ALF) = 16,200 lbs force or

2700 lbs X 6" slack = 16,200 lbs Force

- Park Brake Spring Force = 1500 psi Ex. 1500 x 6 = 9,000 lbs Force

### Slack Adjuster AL Factor

- Arm Length Ratio = Center to center length X Chamber type square inches  
Example: 6" X 30(type) = 180 AL Factor (arm length ratio 6 to 1 ratio)