

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**

MERITOR BRAKE ADJUSTMENT

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

 **CAUTION:** You must disengage a pull pawl before rotating the manual adjusting nut, or you will damage the pawl teeth. A damaged pawl will not allow the slack adjuster to automatically adjust brake clearance. Replace damaged pawls before putting the vehicle in service.

1. Disengage a pull pawl. Use a screwdriver or equivalent tool pry the pull pawl at least 1/32-inch (0.8 mm) to disengage teeth.
2. Use a wrench to turn the adjusting nut COUNTERCLOCKWISE until the brake shoes contact the drum. Figure 6.1. Then back off the adjusting nut in the opposite direction 1/2 turn for drum brakes or 3/4 turn for disc brakes.
3. Check free play should be 1/2" to 5/8".

Gunite Slack Adjuster Settings

Gunite Tech Support 1-800-677-3786

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

- *2 5/8" Chamber face to center of large clevis pin*
Check with TEMPLATE
- *WELDED BRAKE CLEVIS(1.30) for EXTENDED Stroke. Also can be screw on.*

 Gunite uses special slack for
EXTENDED STROKE CHAMBERS pin spacing measures 1.30
Set at 2 1/4" Chamber face to center of large clevis pin
No Template Available

GUNITE BRAKE ADJUSTMENT

 **CAUTION:** Chock Wheels. Release Park Brake.
Pre-adjust the brakes by rotating the hex extension clockwise until the brake lining contacts the brake drum. Back the slack adjuster off by rotating the hex counterclockwise 1/2 turn. Backing off a new slack adjuster may require up to 50 ft lbs of torque. A ratcheting sound will be heard when backing the slack off. Check free play should be 1/2 " to 5/8".

Air Pressure Related

- *Max Governor System 120-130psi (Blue Sealed Cap Governors set @ 130psi)*
- *Low Air Warning comes on @ 60psi*
- *Park Brake pops/sets @ 30psi*
- *Tractor Protection Valve pops/sets @45-20 psi*

Air Drier Troubleshooting Heater resistance 1.0 to 2.0 ohms

- | Symptom | Remedy |
|--------------------------------|---|
| • Continually popping off | Leaking signal air line or unloader valves in comp.
Remove governor & vacuum test valves for o-ring failure. |
| • Air leaking from purge valve | Replace purge valve or check valve |



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)