



Division 02 Apparatus and Equipment

Chapter 26 – Procedure for Checking Proper Air Brake Adjustment and Slide Pin Measurement

February 2009

POLICY

There shall be a policy that governs the proper brake adjustment and slide pin measurement on those units equipped with air disc brakes.

DEFINITIONS

N/A

PROCEDURES

The maximum brake stroke and slide pin shall be measured on each disc brake weekly.

1. Prior to measuring each brake chamber stroke:

- Ensure the transmission is in neutral.
- Ensure wheel chocks are in place and holding the vehicle.
- Release maxi-brake (spring brake).
- Build air pressure to 100 p.s.i.
- Identify the size (square inches) of each chamber, which should be stamped on the chamber housing, or by measuring the outside. (See attached Air Brake Adjustment Reference Sheet.)
- Make several hard applications to the brake pedal, on vehicles equipped with automatic slack adjusters, and rebuild air pressure to 100 p.s.i.

2. Measure the chamber stroke as follows:

- Measure the distance from the bottom of the air chamber to the center of the large clevis pin.
- Another person must apply and hold the service brakes with 100 p.s.i. in the air tanks.
- Measure the distance from the air chamber to the center of the large clevis pin while the brakes are applied.
- The difference between the measurements is the chamber stroke. The chamber stroke **MUST BE LESS THAN OR EQUAL TO** the amount shown in the attached chart.

3. Measure the slide pin on disc brakes as follows:

- Locate the slide pin at the top and bottom of each brake caliper on the inboard boss.
- Measure the distance from the caliper inboard boss to the end of the slide pin.
- Note this measurement on P.G.C. Form #4627 in the appropriate location.

4. Results and Required Actions:

- A brake found at the adjustment limit is not a violation.
- If a brake chamber stroke exceeds the brake adjustment limit on the chart, notify Apparatus Maintenance to have corrective actions taken.
- If the brake chamber strokes per axle are uneven (greater than 1/4")



difference), notify Apparatus Maintenance to have corrective actions taken.

- If the unit is equipped with wedge brakes, it shall have the brake adjustment checked every six months. This shall be coordinated with the annual brake inspection and be performed by a County vendor.
- If slide pin measurement falls at 1/8" or less, contact Apparatus Maintenance to schedule a brake inspection appointment.

REFERENCES

N/A

FORMS/ATTACHMENTS

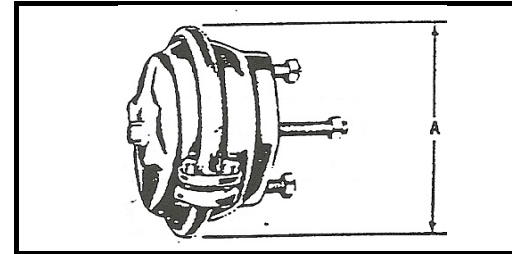
P.G.C. Form #4627, Daily/Weekly/Monthly Apparatus Maintenance Check Sheet

Air Brake Adjustment Reference Sheet

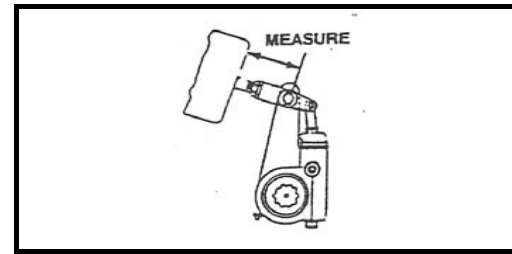
Slide Pin Measurement Reference Sheet

AIR BRAKE ADJUSTMENT REFERENCE SHEET

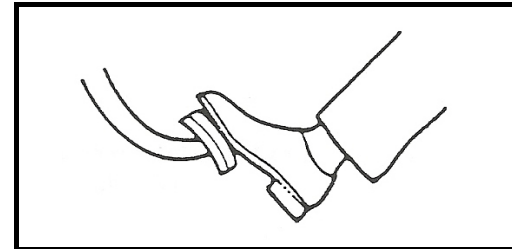
Identify the size (square inches) of each chamber, which should be stamped on the chamber housing, or by measuring the outside diameter.



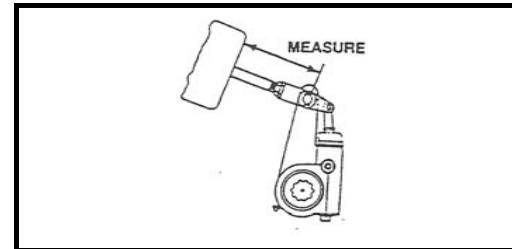
Measure the distance from the bottom of the air chamber to the center of the large clevis pin.



Another person must apply and hold the service brakes with at least 100 p.s.i. in the air tanks.

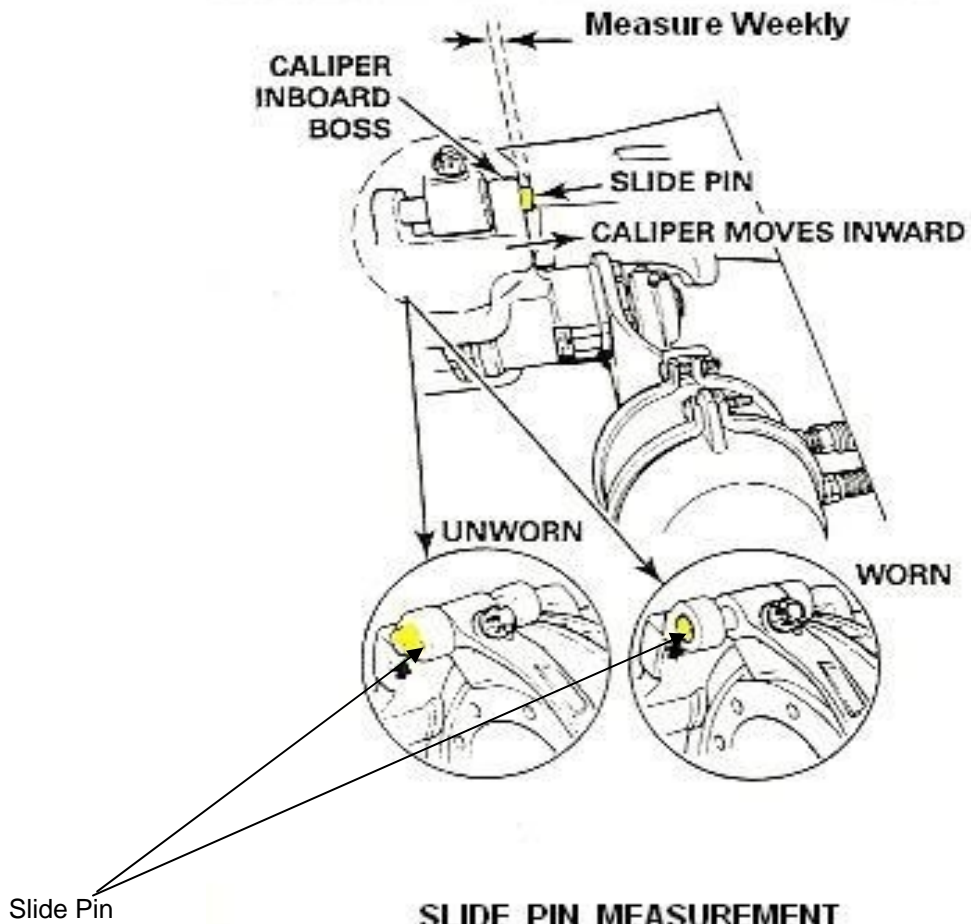


Measure the distance from the air chamber to the center of the large clevis pin while the brakes are applied.



REFERENCE CHART

SIZE OF CHAMBER (Square Inches)	OVERALL DIAMETER (A) (Inches)	BRAKE ADJUSTMENT LIMIT (Inches)
9	5-1/4	1-3/8
12	5-5/8	1-3/8
16	6-1/2	1-3/4
20	6-3/4	1-3/4
24	7-3/8	1-3/4
30	8-1/4	2
36	9-1/16	2-1/4



SLIDE PIN MEASUREMENT

When measurement is at 1/4"
 When measurement is at 1/8", contact
 Apparatus Maintenance to schedule brake
 inspection.