



SilverbackHD Air Brake Chamber

Push Rod Length: How to Determine the Correct Length

To properly determine the correct push rod length of the brake chamber to be installed, the spring brake must be **FULLY RELEASED** (caged) and the push rod on the service chamber side must be 100% completely retracted to zero stroke.

This does not apply to "Welded" yoke air chambers.
Please refer to manufacturer recommendations on welded chambers.

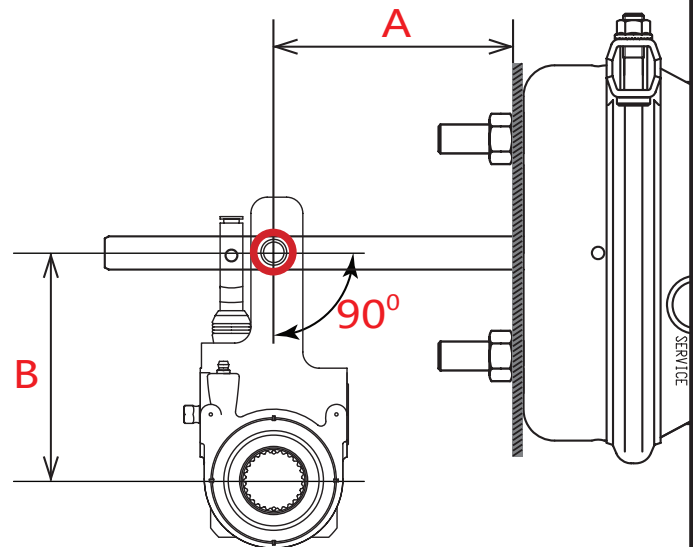
The procedure follows the next steps:

1. Block, or chock vehicle wheels to prevent movement of vehicle.
2. Place the air brake chamber in the appropriate brake assembly bracket. Tighten the holding nuts to the studs through the brackets to 100 -140 lb. ft.

3. With the slack adjuster 90 degree to the push rod as in **Figure 1**, (use a square) measure dimension "A" from the bottom of the mount base to the center-line of the hole in the slack adjuster. Measure dimension "B" the distance from the center-line of the clevis pin mounting hole in the slack adjuster to the center-line of the camshaft mounting hole in the slack adjuster.

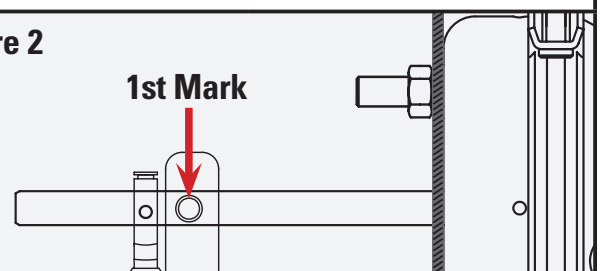
NOTE: If dimension "A" and dimension "B" are not identical, the chamber mounting bracket is bent and must be straightened or replaced, or the length of the slack adjuster may be incorrect. Make any necessary corrections before continuing to the next step.

Figure 1



4. Place the first mark on the push rod where the center-line of the slack adjuster clevis pin hole and the push rod intersect, **Figure 2**.

Figure 2





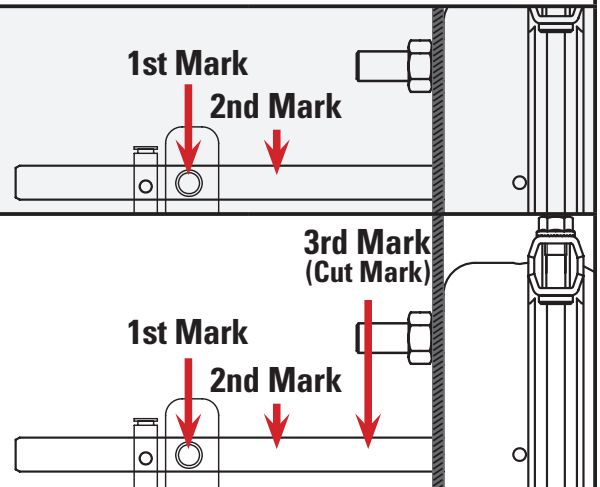
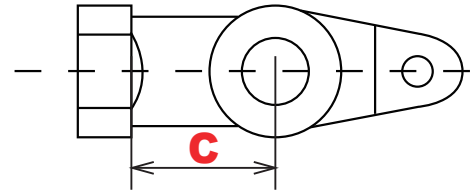
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5. Now measure the length of the clevis to be used "C" as shown in **Figure 3**. Subtract this measurement "C" from the first mark placed on the push rod and remark the push rod with a second mark.

NOTE: Measurement "C" should be taken from the center line of the main clevis pin to the bottom of the yoke throat.

Figure 3



6. Subtract the set up stroke from the second mark and remark the push rod with the third (cut) mark, see chart below column D for the brake chamber type being installed. Cut the push rod.

A	B	C	D
Chamber Type	Stroke Available	Maximum Adjustment Limit	Set Up Stroke
9	1.75"	1.38"	1.38"
12	1.75"	1.38"	1.38"
16	2.25"	1.75"	1.38"
20	2.25"	1.75"	1.38"
20LS	2.50"	2.00"	1.38"
24	2.25"	1.75"	1.38"
24LS	2.50"	2.00"	1.50"
30	2.50"	2.00"	1.50"
30LS	3.00"	2.50"	1.50"
36	3.00"	2.25"	1.50"

7. Install the jam nut and clevis assembly onto the push rod. Tighten the jam nut to the manufacturers recommended torque value. To insure the cut end of the push rod does not interfere with the slack adjuster, no more than 3/16" of an inch of thread should protrude from the yoke.