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Topic: Brake Stroke Measurement II

During recent audits, it we have discovered that there is still a lack of uniformity in the way we are measuring brake stroke. It is the purpose of this document to provide guidance to all parties in the way brake stroke must be measured at all times when working on CCM chassis. These same guidelines should be used whenever measuring brake stroke regardless of the IEP.

Preparation

CCM prefers air pressure is set to 100PSI, though normal range is between 90PSI and 115PSI. Measurement of the brake stroke with air pressure outside these parameters will produce false readings.

Partially due to the amount of time that equipment can sit unused between loadings, there is an increased possibility of the rust formation on moving parts and hardening of lubricants from lack of use. In some cases, this will limit the movement of some parts temporarily. In order to ensure that a full range of motion is reached when checking brake stroke it is essential that the brake system be fully cycled no less than 5 times from the service side prior to the beginning of any stroke measurement operation. This will also have the added benefit of checking the slack adjusters to ensure they are working properly. Five hard applications of the brake stroke will ensure the slack adjuster self-adjusts to within its acceptable range. If the slack is out of adjustment once the brakes stroke measurements are checked, the chances are the slack adjuster is not working properly and must be evaluated and replaced if necessary.

Set Up

Accurate stroke measurements demand that we be consistent with the markings made to the pushrods. In order to ensure consistency marks are to be made using both:

- A straight edge - placed across the booster mount bracket to provide a uniform marking point for all measurements
- A sharpened soapstone – to produce a narrow line no more than 1/16th inch thick. **DO NOT** use paint stick or chalk for marking pushrods. These cannot produce a narrow enough line to ensure an accurate measurement

First Mark

Use a straight edge to slide down the mounting bracket and make your first mark with the brakes released



Measurement

Measure between the straight edge and the first line for your brake stroke measurement.(brakes Applied)



NOTE: It is also acceptable to measure from the straight edge in the brake-applied position to the brake released line.

Mark axle with measurement next to each chamber.

Please ensure that the above procedure is followed in all instances where a brake stroke measurement is required.

Please direct any further questions on this matter to the CCM Technical Services Manager or the CCM Director of Maintenance.

As information, the brake stroke measurement for a 3030 brake chamber, short stroke is 2 inches or less when brakes are applied. For a 3030 long stroke brake chamber, which is currently on some new build chassis, the brake stroke has to measure 2.5 inches or less. That is 2 1/2 " or less.