

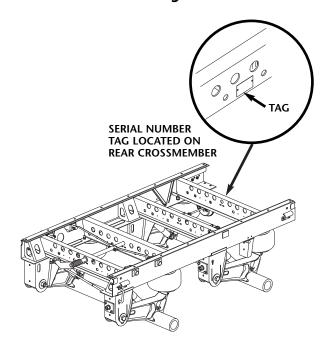
# CB400/4000 HEIGHT CONTROL VALVE (HCV) ADJUSTMENT

## **Verification of Ride Height**

1. Verify ride height by checking serial number tag located on rear crossmember (*FIGURE 1*).

**NOTE:** Example: CBT-400-4816; last two digits represent 16" ride height.

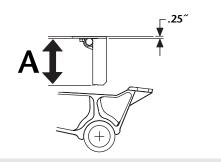
### Serial Number Tag Location



### Verification of PosiLok Flipper Plate Length

**NOTE:** This procedure is for trailers equipped with the PosiLok<sup>™</sup> system. Skip this step if the PosiLok system is not installed on your trailer.

### FIGURE 2 Flipper Plate Length



**NOTE:** "A" dimension does not include mounting plate.

TABLE 1. RIDE HEIGHT AND FLIPPER PLATE HEIGHT

Model No.	Ride Height	"A" Flipper Plate Height
CB 400-15.5	15.5" (394mm)	7.5″ (191mm)
CB 400-16	16.0" (406mm)	8.0" (203mm)
CB 400-16.5	16.5" (419mm)	8.5" (216mm)
CB 400-17	17.0″ (432mm)	9.0" (229mm)
CB 400-18	18.0" (457mm)	10.0" (254mm)

**NOTE:** Flipper plate height does not include mounting plate.

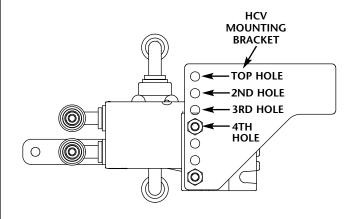
# Verification of Proper Height Control Valve Location

 Verify the hole location where the top mounting stud of the Height Control Valve (HCV) is bolted to the mounting bracket (FIGURE 3).

TABLE 2. RIDE HEIGHT VERSUS MOUNTING BRACKET HOLE

RIDE HEIGHT	HOLE LOCATION IN BRACKET RECEIVES UPPER HCV MOUNTING STUD	
15.5″	Top hole location	
16″	2nd hole location	
16.5″	3rd hole location	
17" and 18"	4th hole location	

# FIGURE 3 HCV Mounting Bracket



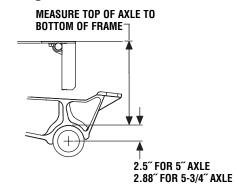
2. Verify length of looped linkage. The 15.5'', 16.0'', 16.5'' and 17.0'' ride heights have a link length of 15.0''. The 18.0'' ride height has a link length of 16.0''.

# **Height Control Valve Adjustment**

**IMPORTANT:** Slider box must be completely installed on trailer before height control valve (HCV) can be adjusted. Air must be applied to the emergency brake line before checking ride height.

- 1. Verify ride height on serial number tag (FIGURE 1).
- 2. Measure from top of axle to bottom of frame (*FIGURE 4*). For 5" round axle, add 2.50" to this dimension to establish ride height; for 5-3/4" round axle, add 2.88".

### FIGURE 4 **Ride Height**



**NOTE:** Be sure to measure to bottom of frame and not the PosiLok mounting plate.

3. If the ride height dimension is incorrect, loosen the adjustment nut on the HCV arm (*FIGURE 5*). If the ride height is too low, raise the arm until the dimension is correct (air should be sent to the air springs to raise the bottom of the slider frame). If the dimension is too high, lower the arm until the dimension is correct (air should exhaust from the air springs to lower the bottom of the slider frame). Tighten adjustment nut, if loosened.

NOTE: If the suspension is aired up (it was below ride height before air was applied to the emergency brake line), it is normal to have the ride height dimension approximately 1/4" too low. If the suspension was aired down (it was above ride height and air was exhausting from air springs, it is normal to have the ride height dimension approximately 1/4" too high. This is due to the "dead zone" in the HCV, which is approximately ±1/4". The dead zone is defined as the range of arm motion in which the valve arm can be raised or lowered and no air flow will occur in the valve (FIGURE 6).

### FIGURE 5 HCV Adjustment Arm

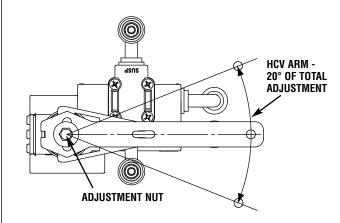


FIGURE 6 HCV Dead Zone

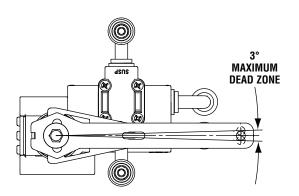
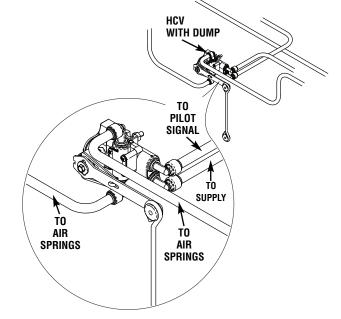


FIGURE 7 HCV Line Connections



**NOTE:** For HCV adjustment and maintenance procedures, refer to the CB400/4000 Maintenance Manual (XL-AR368).

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