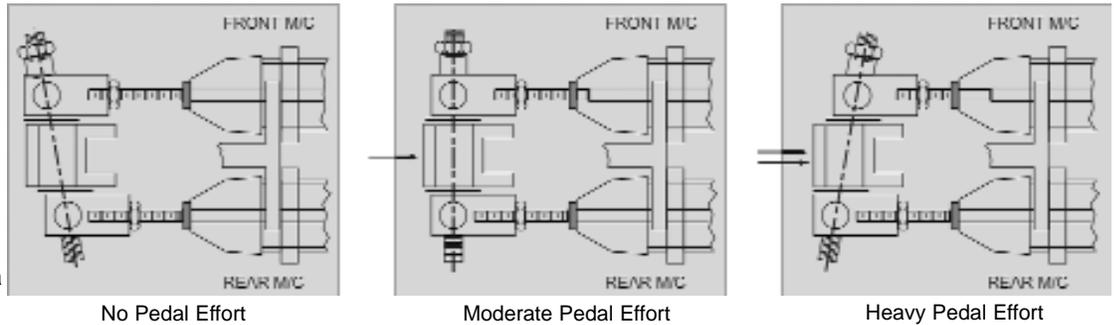


## BALANCE BAR ADJUSTING

The balance bar is an adjustable lever (usually a threaded rod), that pivots on a spherical bearing and uses two separate master cylinders for the front and rear brakes. Most balance bars are part of a pedal assembly that also provides a mounting for the master cylinders. When the balance bar is centered, it pushes equally on both master cylinders creating equal pressure, given that the master cylinders are the same size bore. When adjusted as far as possible toward one master cylinder it will push approximately twice as hard on that cylinder as the other.

To set up the balance bar, thread the master cylinder pushrods through their respective clevises to obtain the desired position. Threading one pushrod into its respective clevis means threading the other one out the same amount. Sometimes this will lead to a "cocked" balance bar when the pedal is in the relaxed position, see Figure 1, "no pedal effort". This is

acceptable as long as each master cylinder pushrod is completely free of pressure when the pedal is relaxed.



Note: The pushrod adjustment in this figure is representative of a typical asphalt application that is, large pistons in front, and small pistons in the rear

Figure 1. Balance bar lever adjustment

It is important that the operation of the balance bar functions without interference by over adjustment. This can occur when a clevis jams against the side of the pedal or the lever (bolt) hits the pedal bore during any point of pedal travel, Figure 2. Lever movement should be unimpeded throughout pedal travel. In the neutral position, clevises should have between .20" - .25" total clearance between the side of the pedal. The large washers between the pedal and clevis should remain loose. Make sure that the master cylinder pushrods remain true in relationship to the cylinder during entire pedal travel; pushrods should not be pushing master cylinder pistons at an angle. See Figure 3.

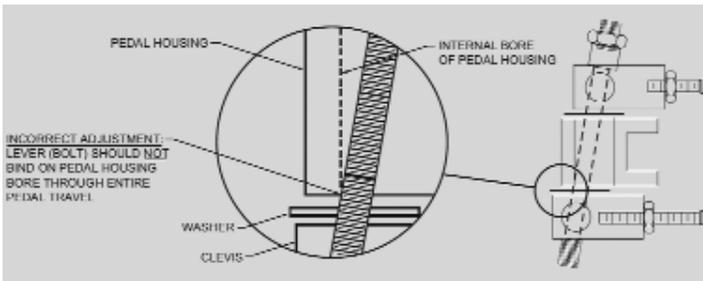


Figure 2. Example of lever interference

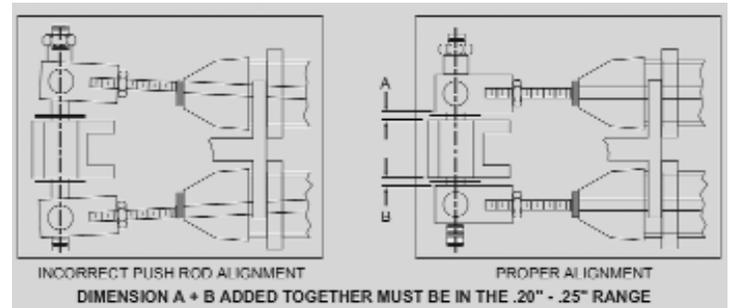


Figure 3. Example of pushrod alignment

Note: In its non-depressed position, the pedal and balance bar should allow the pushrod of the master cylinders to fully return. This can be checked by feeling pushrods for very slight movement, not loose movement. Master, cylinder pistons should be against the retaining