



Steering, Brake & Suspension Specialists

# #MCPV1 - Master Cylinder Adjustment Procedure

## Variable factors:

The brake balance between the front and rear is affected by many factors:

- Size of the rotors or drums
- Size of the caliper or wheel cylinder pistons
- Type of friction material
- Weight on each axle
- Wheel base
- Height of center of gravity
- Tire size
- Weight of the tire and wheel
- Tire tread and compound

The brake balance of all vehicles should be balanced to the front for safety. Most vehicles are "naturally" balanced to the front.

**CAUTION: Do not over-tighten the adjustment screws. These small screws DO NOT need to be tightened. These are for ADJUSTMENT only!**

1. Make sure the MCPV1 is properly installed and the brakes are bled.
2. Adjust the maximum pressure to the highest setting. Using the small end of the supplied plastic wrench (1/8" allen wrench) turn the pressure screw (the small screw) counter clockwise until the screw stops.
3. Using the large end of the supplied plastic wrench (1/4" allen wrench) turn the balance screw (the large screw) counter clockwise until the screw stops. Check that the maximum pressure screw has remained all the way out. Warning: if the maximum pressure screw (small inner screw) can not be turned clockwise there will be no rear brake pressure.
4. Check the "natural" brake balance. Start at a very slow speed and make sure the brakes are working. All of the testing should be in an area that has enough space to safely stop the vehicle while skidding. Perform a full force stop checking if the rear brakes can lock up. (A full force stop is where the brakes are applied as hard as possible.)
  - a. If the rear brakes did not lock up the vehicle is naturally balanced to the front and there is no need to make any other adjustments.
  - b. If the rear brakes locked up after the front brakes locked up, the vehicle is naturally balanced to the front, but the maximum pressure adjustment can control the rear lock up.
  - c. If the rear wheels locked up first, the vehicle is naturally balanced to the rear. The balance and pressure adjustments need to be performed.
5. Adjusting the maximum rear pressure: Be sure the balance screw (the larger screw) is all the way out, counter clockwise. Turn the pressure screw (the smaller screw) so that it is adjusted to the middle of its range. At this point the pressure will be limited to about one half of the starting pressure. Perform a full force stop. If the rear still locks

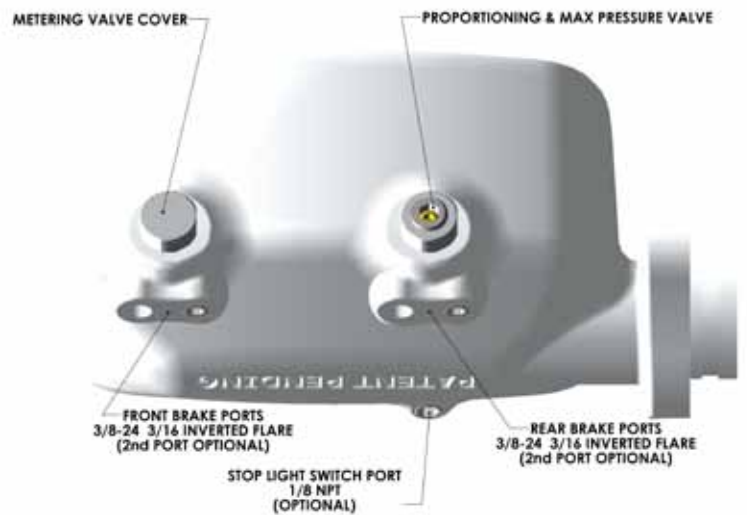
up, continue reducing the pressure (turning the small pressure screw clockwise), and performing a full force stop until the rear lock up is eliminated. If the rear will not lock up, raise the pressure turning the small pressure screw counter clockwise, and perform a full force stop. Continue raising the rear pressure until the rear can lock up. Then reduce the pressure by 1/4 turn to prevent the rear from locking up. The maximum pressure is now safely adjusted.

6. Count the number of turns required for the small pressure screw to go to a zero pressure adjustment by counting the number of clockwise turns the pressure screw can be turned before it stops. Write this number down for future reference.



7. Turn the small pressure screw out, counter clock wise, as far it will go. Now turn the large balance screw in, clock wise, 1/2 turn less than the pressure screw was adjusted to in step 6. (Subtract 1/2 turn from the number of turns counted in step 6.) Turn the small pressure screw in, clockwise, until it stops. Then turn the screw out counter clockwise 1/2 turn. The MCPV1 is now adjusted.

*Example: The maximum pressure screw moves 3 turns clockwise in step 6. Turn the balance screw 2 1/2 turns clockwise. Turn the pressure screw all the way in clockwise, then set the pressure screw 1/2 turn out.*



For technical help call Classic Performance Products Monday thru Friday 8:30am to 5:00pm at (714) 522-2000

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