

M.O.A.B. Adjustable Proportioning Valve

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WARNING THE RESPONSIBILITY OF THE PERSON INSTALLING ANY BRAKE COMPONENT IS TO DETERMINE THE SUITABILITY OF THE COMPONENT/S FOR THE PARTICULAR APPLICATION. IF YOU ARE NOT SURE HOW TO SAFELY USE THIS BRAKE PART, YOU SHOULD NOT INSTALL OR USE IT. DO NOT ASSUME ANYTHING. IMPROPERLY INSTALLED BRAKES ARE DANGEROUS. IF YOU ARE NOT SURE, GET HELP FROM A BRAKE PROFESSIONAL. USE OF WILD HORSES TECHNICAL SUPPORT DOES NOT GUARANTEE PROPER INSTALLATION. THE PERSON WHO DOES THE INSTALLATION MUST KNOW HOW TO PROPERLY USE THIS PRODUCT. IT IS NOT POSSIBLE OVER THE PHONE TO UNDERSTAND OR FORESEE ALL THE ISSUES THAT MIGHT ARISE IN YOUR INSTALLATION.

BASIC INFORMATION:

*Simplifies mounting, fluid circuit plumbing, and brake bias adjustments on modified, custom built, or competition vehicles equipped with brake system upgrades.

*Maintains separation between the front and rear fluid circuits when used with tandem outlet or dual mount master cylinder assemblies.

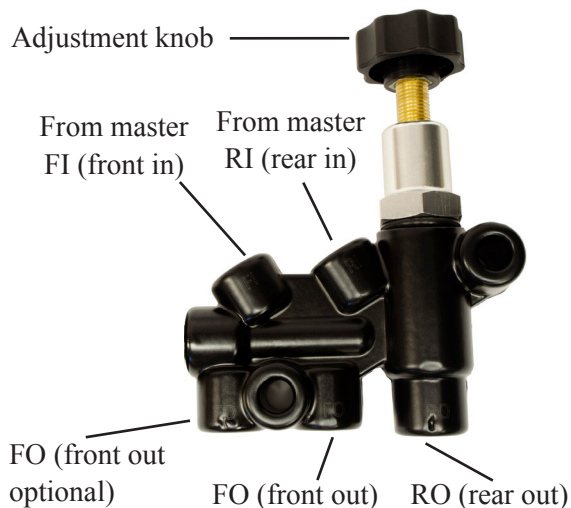
*Bias proportioning adjustment is provided in the rear fluid circuit.

*The front circuit has a single inlet and two outlets for optional line routing.

NOTE: Although the combination valve may mount in some OEM locations, it is not a direct replacement for any OEM unit and may require modifications to the brake lines/hoses.

Line Connections: The line connections on the M.O.A.B. combination valve are 3/8-24 with an SAE inverted flare for standard 3/16"(-3) brake line. The supplied tube nuts can be double flared onto any 3/16" brake line. However, if your lines are already flared with 3/8-24 fittings, then the tube nuts are not necessary.

1. The line from the master cylinder for the front brakes connects to the port marked "FI", (front in), on the top of the valve, see pic 1.
2. The two ports on the bottom of the valve marked "FO", (front out), will be the supply lines to the front brakes. These ports can be used to run individual lines to each caliper. Or if preferred, one port can be blocked, and a single line run from either "FO" port to a "T" plumbed downstream, splitting the lines to feed each front caliper. The function of the valve will not change.
3. The line from the master cylinder for the rear brakes connects to the port marked "RI", (rear in), on the top of the valve.
4. The single port marked "RO", (rear out), connects to the line going to the back of the car to feed the rear brakes.



MOAB valve shown with LEFT drop bracket. Spacers are used for Wilwood master cylinders only.

Fluid: The M.O.A.B. proportioning valve block is fully compatible with all types of brake fluid including DOT 3, 4, 5, and 5.1 fluids. DOT 3, 4 and 5.1 fluids are fully miscible, but DOT 5 silicone fluid should never be mixed with any other fluids. Always follow the vehicle manufacturers fluid recommendations for any vehicle. A complete flush and fill with fresh fluid is recommended for all installations.

Bleeding: To properly bleed the brake system, begin with the caliper farthest from the master cylinder. For fixed mount calipers with two bleed screws on top, bleed the outboard bleed screw first, then bleed the inboard screw. Repeat this procedure until all calipers have been bled, ending with the caliper closest to the master cylinder. Once the system has been bled, the pedal should maintain a consistent, firm feel. If the pedal returns to a spongy feel after it has rested from the bleeding process, this is an indication that air still exists in the system. If this occurs, repeat the bleeding process until all air has been purged and the pedal retains a firm feel.

NOTE: When installing a new master cylinder, it is important to follow proper bench bleeding procedures. Follow the installation instructions provided with the new master cylinder. If a firm pedal can not be achieved after bleeding the system, the master cylinder may not be properly sized for the brake system.

Proportioning Valve Adjustment: The proportioning valve is used to adjust the rate of increase in rear brake line pressure, relative and proportionate to the increase in front brake line pressure. For safety and performance, the rear brakes should never lock before the front brakes. Otherwise, an out of control situation could occur.

1. Begin with the valve in the full proportioned (least pressure) position by turning the knob all the way out (counter-clockwise rotation).
2. In a safe location, make several hard stops from 30 MPH observing the function of the rear brakes. If the rear brakes do not lock up before the front, gradually increase the rear line pressure by rotating the valve clockwise (two turns each time).
3. Continue these adjustments until the maximum amount of rear brake pressure can be achieved, and no wheel rear lock is observed.
4. Test the vehicle again at 50 MPH and make any additional adjustments as needed.

Help: If after following the instructions, you still have difficulty with installing, bleeding, or adjusting your M.O.A.B. Combination Proportioning Valve, consult your chassis builder, the retailer where the valve was purchased, a qualified brake technician, or WILD HORSES Customer Service at (209) 400-7200