

# INSTRUCTIONS

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## 910-31358 - Adjustable Proportioning Block

### Mounting:

1. Select a suitable mounting location for the block assembly. In general, the necessary line connections will be simpler with the block located near the master cylinder. If vehicle has a factory combination block bracket, the prop block can be mounted to that, otherwise the block can be mounted to an inner fender or frame rail.
2. Secure the block using 5/16" hardware of the appropriate length for your specific application.

### Line Connections:

1. All of the in and out connections on the block are 3/8"-24 thread with an SAE flare for a standard 3/16" brake line. The supplied tube nuts can be flared onto any 3/16" brake line. However, it is not necessary to use these as long as the lines you are using have a 3/8"-24 fitting already flared on.
2. Connect the front brake outlet of the master cylinder to the port marked "F I" on the top of the prop block. The outlet of the master cylinder for the front brakes will typically be the one for the larger reservoir. If reservoirs are the same size, a good rule of thumb is that the front reservoir feeds the front brakes on GM mastercylinders, while the rear reservoir feeds the front brakes on Ford and Mopar master cylinders.
3. Next, connect the two ports marked "F O" on the front and bottom of the prop block to the lines feeding the front brakes of the vehicle. Most vehicles will have two separate brake lines: one feeding the left (driver) front wheel and one feeding the right (passenger) front. If your vehicle uses only one front brake line to feed both wheels, it is acceptable to plug the remaining front outlet port of the prop block.
4. Connect the rear brake outlet port of the master cylinder to the port marked "R I" on the top of the prop block.

5. Connect the port marked "R O" on the back of the prop block to the line feeding the rear brakes. If your vehicle is equipped with a 1/4" rear brake line, use the supplied adapter fitting to connect the line to the outlet of the prop block. Speedway Motors has supplied the 1/4" adapter for the most popular sizes. In the event that this fitting will not fit your line, you will need to locate a fitting from your local parts store.
6. Tighten all fittings using a tube wrench and be sure to check for any leaks after the brake system is bled.

### Switch Connections:

1. The switch supplied with the prop block is a pressure switch designed to activate the brake lights on vehicle (and not the brake warning light on your dash). If your vehicle is equipped with a brake light switch on the brake pedal, the switch in the prop block will not be used. If your vehicle has no other brake light switch, then this switch must be properly connected for the brake lights to function.
2. Your brake lights should already be connected to a chassis ground, The switch supplied will be used to send power to the brake lights when pressure is applied to the brake system.
3. Connect the orange wire of the supplied pig tail to a fused constant 12V power supply. A 15-amp circuit should be appropriate for most vehicles.
4. If your vehicle has separate circuits for the brake lights and turn signals, then the white wire of the pigtail can be extended to the back of the vehicle and used to power the brake light pigtails in the taillights. If your vehicle uses the same circuit for brake lights and turn signals, the the white wire will be run to your turn signal switch, Refer to the wiring diagram for your specific turn signal switch for the proper connections.

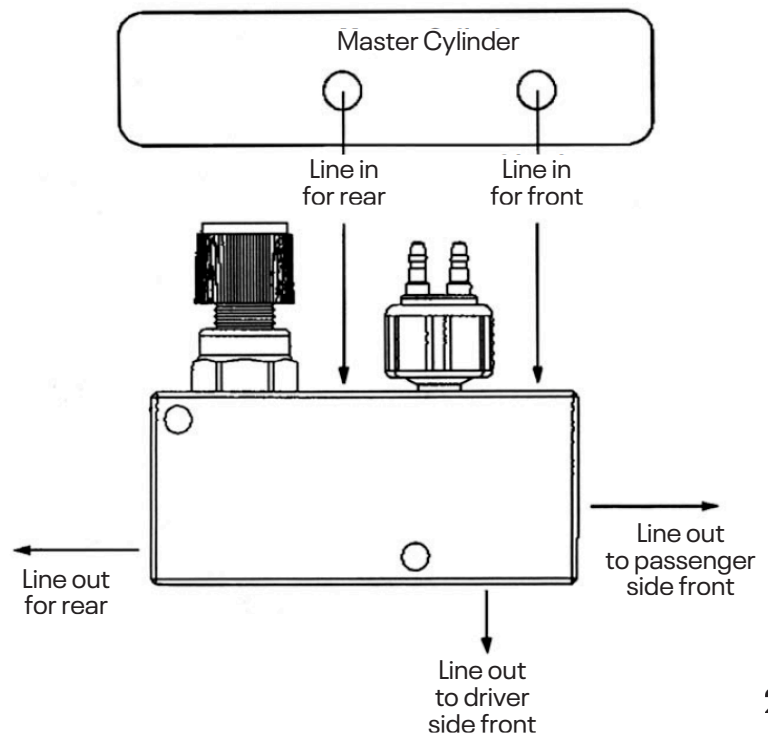
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### Brake Bleeding:

1. After the installation of the prop block is complete, it will be necessary to bleed the brake system.
2. If the master cylinder is new or went dry at any time during the installation, begin by bench bleeding the master cylinder.
3. Continue the bleeding process by gravity bleeding the caliper or wheel cylinder at each wheel until no air bubbles are seen in the escaping brake fluid. Start with the wheel farthest from the master cylinder and work your way closer bleeding each wheel. Never let the master cylinder go dry at any time during this process.
4. With all the bleeding complete, a firm consistent pedal feel should be achieved. If the vehicle already had a functioning brake system prior to the installation of the prop block, there should be no significant change in the pedal feel.
5. With all bleeding complete, check all the fittings for leaks and tighten as necessary.

### Proportioning Valve Adjustment

1. The proportioning valve in the prop block will be used to adjust the rear brake pressure of the vehicle. The objective is to balance the pressure of the rear brakes to the front so that under hard braking, the rear brakes do not lock up before the fronts.
2. Start with the valve in the full increase position by turning the knob all the way in, in a clockwise rotation.
3. Find a safe open area such as a parking lot and make several hard stops from 30 mph observing the function of the rear brakes. If the rear brakes lock up well before the front, begin to decrease the rear brake pressure by turning the knob in a counter clockwise rotation. Continue these adjustments until the proper balance is found.
4. When you have found the proper adjustment for your vehicle, try the test again at 50 mph and make further adjustments as necessary.



# IMPORTANT

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