

# Combination Proportioning Valve P/N 260-11322

#### WARNING

IT IS THE RESPONSIBILITY OF THE PERSON INSTALLING ANY BRAKE COMPONENT OR KIT TO DETERMINE THE SUITABILITY OF THE COMPONENT OR KIT FOR THAT PARTICULAR APPLICATION. IF YOU ARE NOT SURE HOW TO SAFELY USE THIS BRAKE COMPONENT OR KIT, YOU SHOULD NOT INSTALL OR USE IT. DO NOT ASSUME ANYTHING. IMPROPERLY INSTALLED OR MAINTAINED BRAKES ARE DANGEROUS. IF YOU ARE NOT SURE, GET HELP OR RETURN THE PRODUCT. YOU MAY OBTAIN ADDITIONAL INFORMATION AND TECHNICAL SUPPORT BY CALLING WILWOOD AT (805) 388-1188, OR VISIT OUR WEB SITE AT WWW.WILWOOD.COM. USE OF WILWOOD TECHNICAL SUPPORT DOES NOT GUARANTEE PROPER INSTALLATION. YOU, OR 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.

RACING EQUIPMENT AND BRAKES MUST BE MAINTAINED AND SHOULD BE CHECKED REGULARLY FOR FATIGUE, DAMAGE, AND WEAR.

#### GENERAL INFORMATION:

- 63% pressure reduction (rear) after 350 PSI knee point.
- 30 PSI delay rear-to-front circuit.
- Circuit failure sender activation at 50 ± 10 PSI.
- Recommended maximum operating pressure:
- 2000 PSI.
- Auto-fill pressure requirement: 120 PSI max.
- -50°F to 160°F operating temperature range.

#### VALVE HIGHLIGHTS:

**Circuit failure indicator:** This function completes circuit through switch when either front or rear brake circuit experiences pressure loss or differential.

Proportioning function: Non-adjustable front-to-rear proportioning (knee point, rate, etc.).

Anti-dive or metering delay valve: Enables rear brake pressure to build momentarily before front brake pressure builds.

#### Why is Wilwood's valve better than other OE replacement valves?

- Each unit is tested at the factory for all functions prior to shipment
- Each unit is pressure leak tested
- · Valve is manufactured from high quality aluminum and coated with a durable black anodized finish

#### INSTALLATION INSTRUCTIONS:

**Mounting:** Proportioning valve is a direct replacement for 1978 and newer General Motors vehicles equiped with front disc / rear drum brakes. However, valve must be mounted such that it has ground contact with the vehicle's chassis for circuit failure function to operate. This is usually accomplished using a steel bracket mounted to the firewall.

Line Connections: If proportioning valve is mounted in the OE location, the original lines should be able to connect directly to the valve. If mounted in a different location, fluid lines make have to be modified.

## WARNING DO NOT OPERATE ANY VEHICLE ON UNTESTED BRAKES! SEE MINIMUM TEST PROCEDURE WITHIN

ALWAYS UTILIZE SAFETY RESTRAINT SYSTEMS AND ALL OTHER AVAILABLE SAFETY EQUIPMENT WHILE OPERATING THE VEHICLE

#### IMPORTANT • READ THE DISCLAIMER OF WARRANTY INCLUDED IN THE KIT

**Fluid:** The Wilwood proportioning valve 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. For best performance, use Wilwood Hi-Temp 570, EXP 600 Plus, or Wilwood FIVE DOT 5 high performance fluids.

**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.



Figure 1. Combination Proportioning Valve, Mounting Dimensions

**Proportioning Valve Adjustment:** The proportioning valve is non-adjustable by the user and functions automatically. **NOTE:** For safety and performance, the rear brakes should never lock before the front brakes. Otherwise, an out of control situation could occur.

**Help:** If after following the instructions, you still have difficulty with installing, or bleeding the system please consult your chassis builder, the retailer where the valve was purchased, a qualified brake technician, or Wilwood Customer Service at (805) 388-1188.

### WARNING • DO NOT DRIVE ON UNTESTED BRAKES BRAKES MUST BE TESTED AFTER INSTALLATION OR MAINTENANCE <u>MINIMUM TEST PROCEDURE</u>

- Make sure pedal is firm: Hold firm pressure on pedal for several minutes, it should remain in position without sinking. If pedal sinks toward floor, check system for fluid leaks. DO NOT drive vehicle if pedal does not stay firm or can be pushed to the floor with normal pressure.
- At very low speed (2-5 mph) apply brakes hard several times while turning steering from full left to full right, repeat several times. Remove the wheels and check that components are not touching, rubbing, or leaking.
- Carefully examine all brake components, brake lines, and fittings for leaks and interference.
- Make sure there is no interference with wheels or suspension components.
- Drive vehicle at low speed (15-20 mph) making moderate and hard stops. Brakes should feel normal and positive. Again check for leaks and interference.
- Always test vehicle in a safe place where there is no danger to (or from) other people or vehicles.
- Always wear seat belts and make use of all safety equipment.