

## 1" TANDEM MASTER CYLINDER WITH REMOTE RESERVOIRS PART NUMBER: 260-7563



### 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](http://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.

**NOTE:** Some cleaners may stain or remove the finish on brake system components. Test the cleaner on a hidden portion of the component before general use.

### Installation Notes and Precautions

#### • WARNING:

**The master cylinder push rod must bottom out in the bore before the pedal stops against the floorboard.** The inherent safety feature of tandem master cylinders is the ability to still build pressure in one circuit if the other fails. In the event of a circuit failure, the push rod (and pedal) may travel 50% - 80% of the total stroke before starting to build pressure in the other circuit, allowing emergency braking to stop the vehicle.

To take advantage of this safety feature, before adding brake fluid to the system, assure that the push rod will travel its full stroke (1.10") before the pedal stops against the floorboard or any other stop point. If not, adjustments need to be made to the pushrod, pedal, and/or pedal mount to allow full push rod travel.

This master cylinder may not work in all applications and it is the installer's responsibility to determine suitability and assure full push rod travel.

### 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**

Before installation of the Wilwood remote tandem master cylinder, read this document carefully to familiarize yourself with the procedure before beginning. Also, for your reference (on the reverse side) is a master cylinder dimensional and remote setup diagram.

### **Reservoir Selection:**

The reservoirs will mount directly on the master cylinder body, or in a remote location using the remote mounting brackets (connected by the hoses included with the kit). Always use the clamps provided with the reservoirs and remote inlet adapters. Do not over tighten.

### **Mounting Location:**

Master cylinder should be firmly mounted to appropriate pedal assembly and kept away from heat sources. Use tie straps, or small hose clamps to secure hose when remote reservoirs are used. Check to verify that the full stroke of pushrod is unimpeded when depressing brake pedal and that pushrod is allowed to fully retract when brake pedal is released.

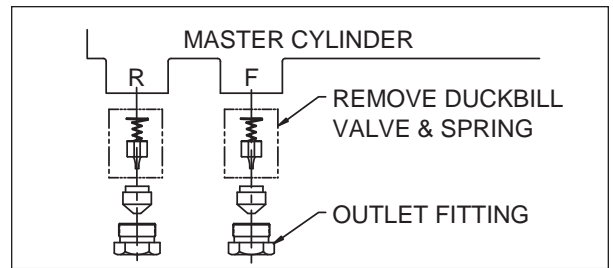
### **Residual Pressure Valves:**

This master cylinder contains internal residual pressure valves for drum brake use only which should be removed and not used in disc brake applications. Removal is accomplished by unscrewing port outlet fittings, removing taper seat with spring and rubber seal underneath. Reinstall taper seat (without spring and rubber seal) with cone facing out and reinstall port outlet fittings (see figure 1). Torque fittings to 144 - 168 inch pounds. If the master cylinder is mounted lower than the disc brake calipers, some fluid flowback to the master cylinder reservoir may occur, thus creating a vacuum effect that retracts the caliper pistons into the housing. This will cause the pedal to go to the floor on the first stroke until it has "pumped up" and has moved all the pistons out against the pad again. A Wilwood in-line two pound residual pressure valve, installed near the master cylinder will stop the fluid flowback and keep the pedal firm and responsive.

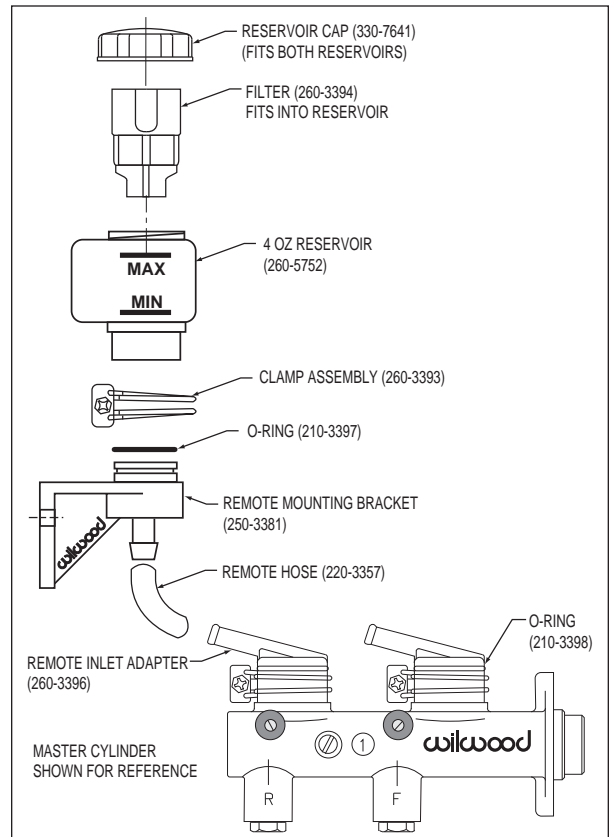
### **Bleeding Instructions:**

Master cylinders should be bled while mounted to the brake pedal assembly. Pedal must allow full travel (stroke) of master cylinder piston for complete bleeding. Connect all brake lines after the master cylinder is installed, but prior to bleeding. Review the following steps:

- Connect a clear bleed hose with catch bottle to master cylinder bleed screw.
  - Wilwood Hi-Temp° 570 Racing Brake Fluid, or EXP 600 Plus for extreme performance conditions (or alternate high temperature DOT 3, DOT 4 or DOT 5.1 brake fluid) is highly recommended for race cars and high performance vehicles where brake temperatures exceed normal operating conditions. **NOTE: Silicone DOT 5 brake fluid is NOT recommended for racing or performance driving.**
  - Fill reservoir with Racing Brake Fluid.
  - Open master cylinder bleed screw.
  - Gently depress brake pedal.
  - Close master cylinder bleed screw and gently release brake pedal.
  - Repeat the above steps until fluid from master cylinder is free of air. Close master cylinder bleed screw.
  - Repeat steps for second bleed screw after topping off reservoir.
  - To properly bleed the brake system, begin with the caliper farthest from the master cylinder. Bleed the outboard bleed screw first, then the inboard. Repeat the procedure until all calipers in the system are bled, ending with the caliper closest to the master cylinder.
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- Test the brake pedal. It should be firm, not spongy and stop at least 1 inch from the floor under heavy load.
    - If the brake pedal is spongy, bleed the system again.
  - If the brake pedal is initially firm, but then sinks to the floor, check the system for fluid leaks. Correct the leaks (if applicable) and then bleed the system again.



**Figure 1. Residual Pressure Valve Removal**



**Figure 2. Reservoir Remote Setup (2 Required)**

If the brake pedal goes to the floor and continued bleeding of the system does not correct the problem, a master cylinder with increased capacity (larger bore diameter) may be required.

**Maintenance:**

Master cylinders should be rebuilt, or replaced periodically. Always inspect master cylinders before and after every race for damage or leakage. When rebuilding master cylinders, take care not to damage piston seals. Test master cylinder before usage. Use Wilwood Hi-Temp<sup>o</sup> 570 brake fluid as a lubricant when assembling.

If after following the instructions, you still have difficulty in installing or bleeding your Wilwood master cylinder, consult your local chassis builder, or retailer where the kit was purchased for further assistance.

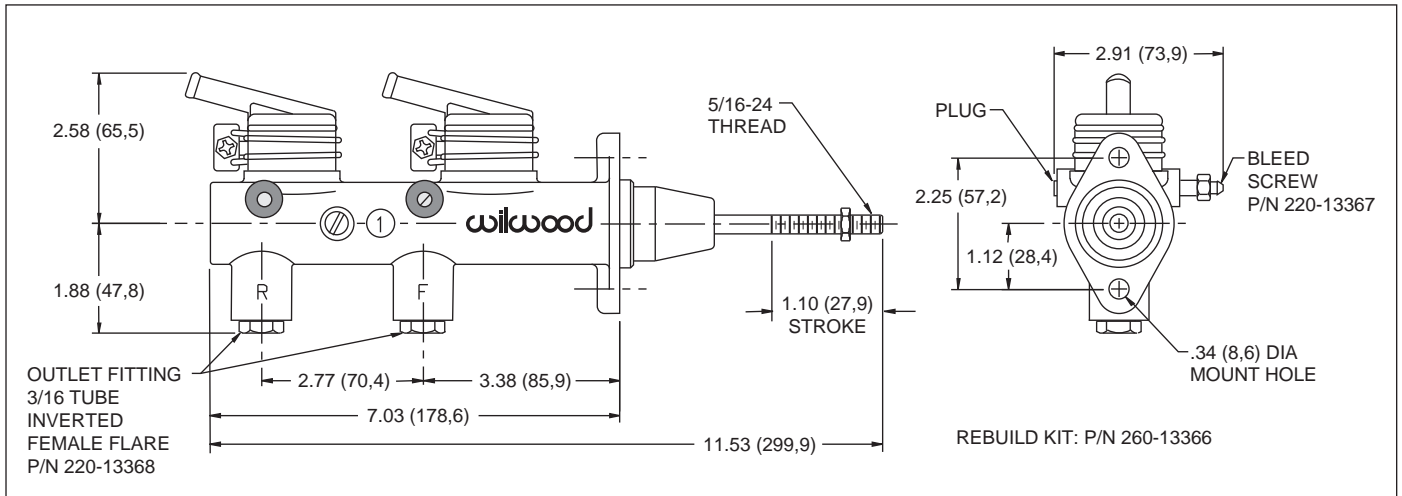


Figure 3. Wilwood 1" Tandem Master Cylinder, Mounting Dimensions

**WARNING • DO NOT DRIVE ON UNTESTED BRAKES  
BRAKES MUST BE TESTED AFTER INSTALLATION OR MAINTENANCE  
MINIMUM TEST PROCEDURE**

- 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.