

MASTER CYLINDER FIREWALL MOUNTING KIT

INSTALLATION INSTRUCTIONS

Part Number 250-13167

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.

Photographic Tip:

Important and highly recommended: Take photos of brake system before disassembly and during the disassembly process. In the event, trouble-shooting photos can be life savers. Many vehicles have undocumented variations, photos will make it much simpler for Wilwood to assist you if you have a problem.

Installation Instructions:

(numbers in parenthesis refer to the parts list and Figure 2 on the next page)

- This mounting kit is specifically designed to work in conjunction with Wilwood's Forward Mount Brake and Clutch Pedal Assemblies and Flange Mount Compact Combination Remote Master Cylinder Kit (ordering information on the last page).
- This mounting kit is intended for use only on firewalls with a flat area at least as large as the faceplate in the kit. This mount is intended for use with a firewall material thickness range of .040" - .080". When selecting a mount location, be sure to consider pedal position, pedal assembly mounting, remote reservoir mounting, and clearance for the steering column and master cylinders, etc.
- **CAUTION:** This firewall mount will **NOT** properly support the pedal assembly. The pedal assembly must also be supported using the main mount points on the pedal base (see instructions included with the pedal assembly).

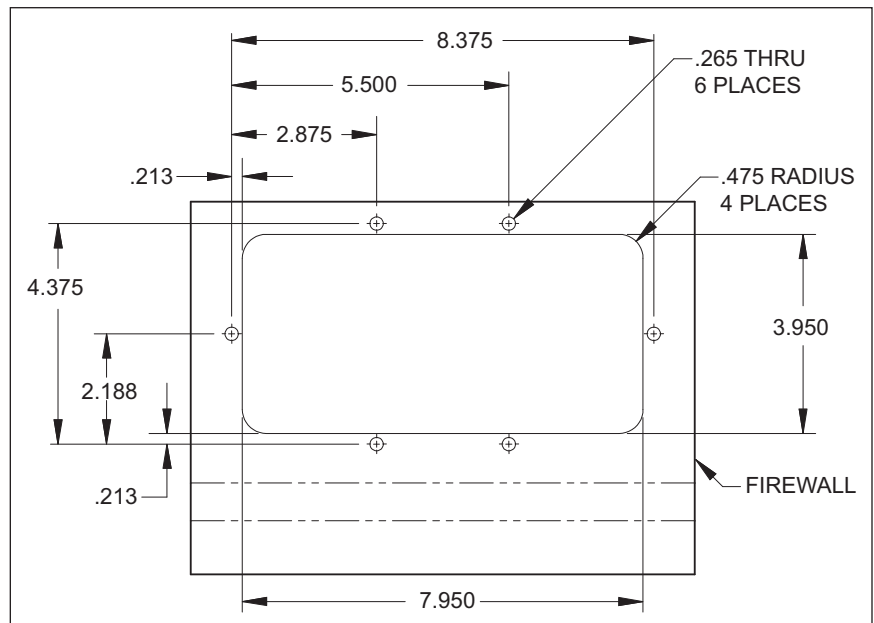


Figure 1. Faceplate Cutout Mounting Dimensions

- Using the dimensions in Figure 1, layout the cutout and six mounting hole locations on the firewall.
- Drill .265 thru mounting holes, six places and cutout the firewall per the layout.
- **NOTE:** This mounting kit can only be used with a remote reservoir. The distance between the fluid inlet of the master cylinder and the mounting flange is inadequate for mounting the reservoir directly to the master cylinder. Use either the plastic remote reservoir contained in the master cylinder kit, or our billet reservoir and braided stainless hoses. See page 3 for part numbers and information on billet reservoirs and related hardware.

WARNING

THIS COMPONENT IS DESIGNED FOR USE IN CUSTOM BRAKE SYSTEMS ON PERFORMANCE, RACING, AND OTHER SPECIAL PURPOSE BUILT OFF-ROAD VEHICLES. IT IS NOT INTENDED AS A DIRECT REPLACEMENT FOR ANY OEM APPLICATION.

- Install the faceplate (1) (engine side of firewall) to the master cylinder mounting plate (2) (interior side of firewall). Secure in place with bolts (3), and washers (4) as shown in Figure 2. Once all bolts have been installed and everything aligns correctly, remove bolts one at a time, apply red *Loctite*® 271 to threads and torque to 155 in-lb.
- Install Wilwood Forward Mount Brake and Clutch Pedal Assembly (sold separately) per those instructions.
- Install Wilwood compact master cylinders (sold separately) per those instructions. Use nuts (5) included in firewall mount kit in place of the ny-lock nuts included with the pedal assembly. Use red *Loctite*® 271 when installing nuts (5).
- Install the remote reservoirs (included with master cylinder kit) to feed the master cylinders, per those instructions.
- Plumb the master cylinders into the brake system as desired.
- Once all fluid connections have been made, the complete system must be bled and checked for leaks prior to any test of the vehicle.

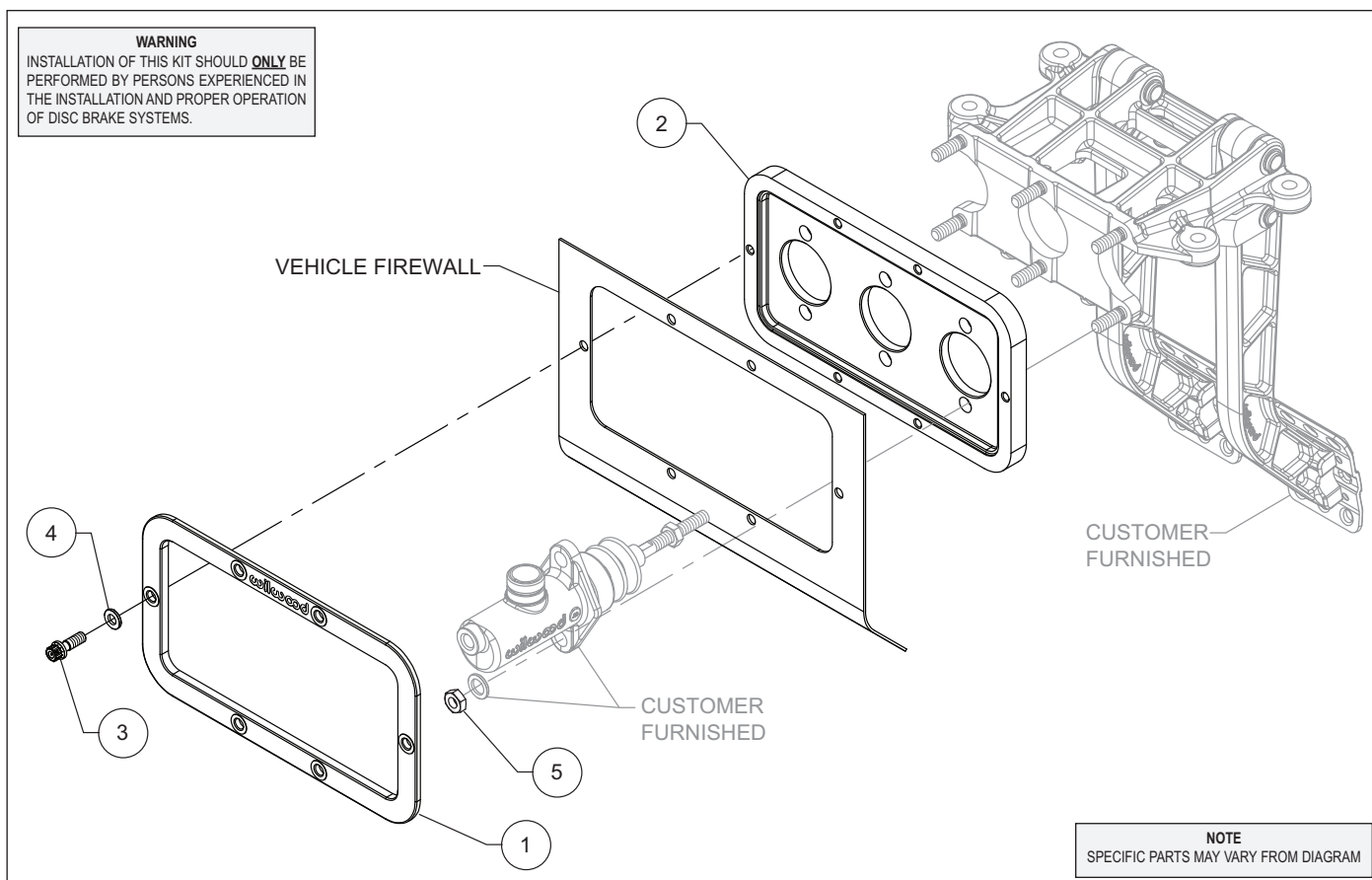


Figure 2. Master Cylinder Firewall Mounting Kit Installation

Parts List

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	250-13165	Master Cylinder Firewall Faceplate (Bezel)	1
2	250-13166	Master Cylinder Firewall Mounting Plate	1
3	230-8037	Bolt, 1/4-20 x .750 Long, 12 Point	6
4	240-11240	Washer, .265 I.D. x .500 O.D. x .063 Thick	6
5	230-1335	Nut, Hex, 5/16-24	6

Plumbing Notes and Precautions

- Use of reinforced flexible lines should be limited to the connection between the fixed chassis and the moving suspension. All other lines along the fixed chassis should be hard steel lines.
- On four wheel disc brake applications, where the fluid reservoir is mounted higher than the caliper bleed screws, a residual pressure valve is usually not required.
- On disc brake applications where the fluid reservoir is mounted lower than the caliper bleed screws may require a 2 pound residual pressure valve. This can prevent fluid drain back and excessive pedal travel on initial engagement.
- All drum brake applications require an inline 10 pound residual pressure valve.
- Use an adjustable proportioning valve to set the front to rear brake bias.

Flange Mount Compact Remote Master Cylinder Kits

<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
260-10371	5/8" Combination Master Cylinder Kit	260-10374	7/8" Combination Master Cylinder Kit
260-10372	3/4" Combination Master Cylinder Kit	260-10375	1" Combination Master Cylinder Kit
260-10373	13/16" Combination Master Cylinder Kit	260-10376	1-1/8" Combination Master Cylinder Kit

Aluminum Forward Swing Mount Triple Master Cylinder Pedal Assemblies

<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
340-11295	Adjustable Triple Master Cylinder Pedal	340-3950	Triple M/C Clutch & Brake Pedal w/Balance Bar

Components and Accessories

<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
260-1874	2 PSI Residual Pressure Valve	260-12696	Direct Mount 4 Oz Billet Aluminum Reservoir w/11/16-20 Adapter
260-1876	10 PSI Residual Pressure Valve	260-12697	Remote Mount 4 Oz Billet Aluminum Reservoir w/Mounting Bracket
260-8419	Knob Adjustable Proportioning Valve	220-12992	6.00" -3 AN Braided Flexline w/-3 to 11/16-20 Remote Inlet Adapter
260-8420	Lever Adjustable Proportioning Valve	220-12993	8.00" -3 AN Braided Flexline w/-3 to 11/16-20 Remote Inlet Adapter
260-11179	Knob Style Combination Proportioning Valve	220-13004	10.00" -3 AN Braided Flexline w/-3 to 11/16-20 Remote Inlet Adapter
290-0632	Wilwood Hi-Temp° 570 DOT 3 Brake Fluid	220-13005	12.00" -3 AN Braided Flexline w/-3 to 11/16-20 Remote Inlet Adapter
290-6209	Wilwood EXP 600 Plus Super Hi-Temp Fluid		

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.