## INSTALLATION INSTRUCTIONS FOR INLINE DUAL CYLINDER CUTTING BRAKE ASSEMBLY

PART NUMBER

340-14744 • 11.00:1 Ratio

# DISC BRAKES SHOULD ONLY BE INSTALLED BY SOMEONE EXPERIENCED AND COMPETENT IN THE INSTALLATION AND MAINTENANCE OF DISC BRAKES READ ALL WARNINGS

#### **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.







#### **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

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.

#### **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.

#### **General Information and Installation Instructions**

Installation of this component should **ONLY** be performed by persons experienced in the installation and proper operation of disc brake systems. Before assembly begins, familiarize yourself with the following procedure to ensure a trouble-free installation.

#### Features:

- •All-aluminum design with reduced weight over steel lever models.
- •High-leverage, forged aluminum lever with full-length ergonomic grip.
- •Full and balanced function of both calipers when handle is neutral.
- •Easy installation of the one-piece body with integral mounting.
- •3/4" bore cylinders deliver instant high pressure with minimal effort.
- •Wilwood's own durable E-coat finish resists weathering and oxidation.

#### **Mounting the Cutting Brake Assembly:**

- •The cutting brake assembly requires level mounting to a rigidly reinforced element in the vehicle. Using floor board sheet metal alone for mounting will not be adequate. With the system bled and firm pressure being applied to the hand brake lever, there should be no detectable deflection at the mounting base.
- •Position the handbrake lever within comfortable reach of the driver in a location that allows full stroke of the lever, forward and backward, without interference to other items in the driver's cockpit.

#### Plumbing:

•There is one inlet and two outlets on the cutting brake assembly. Each port uses 1/8"-27 NPT male adapter fittings. Connect the brake line from the foot pedal master cylinder to the common inlet at the front of the cutting brake cylinder assembly below the bleed screw. Connect one cylinder outlet to the right hand caliper feed line, and one cylinder outlet to the left hand caliper feed line.

#### **Manual Bleeding:**

- •Before connecting the feed line from the foot brake master cylinder to the cutting brake inlet, be sure the foot brake master cylinder has been properly bench bled and purged of all internal air.
- •With all lines attached and the foot brake master cylinder filled with clean fresh fluid, depress the foot pedal, then open the bleeder on the top front of the cutting brake assembly. Close the bleed screw before releasing the pedal. Repeat this step until the line between the foot brake master cylinder and the cutting brake assembly has been purged of all air.
- •Next, depress the foot brake pedal then open the bleed on the right side caliper. Use the handbrake lever to then compress the cylinder feeding the right side circuit and hold. Close the bleed screw, release the foot pedal, then release the hand lever. Repeat these steps for both sides until all air has been purged from both circuits. Recheck the bleed at the inlet front of the cutting brake assembly for any accumulated air.

#### Pressure Bleeding:

•Use pressure to purge all air from the circuits and calipers. Remove the pressure adapter and actuate the system manually. If evidence of air still exists, repeat the process until all air is purged and both calipers function equally.

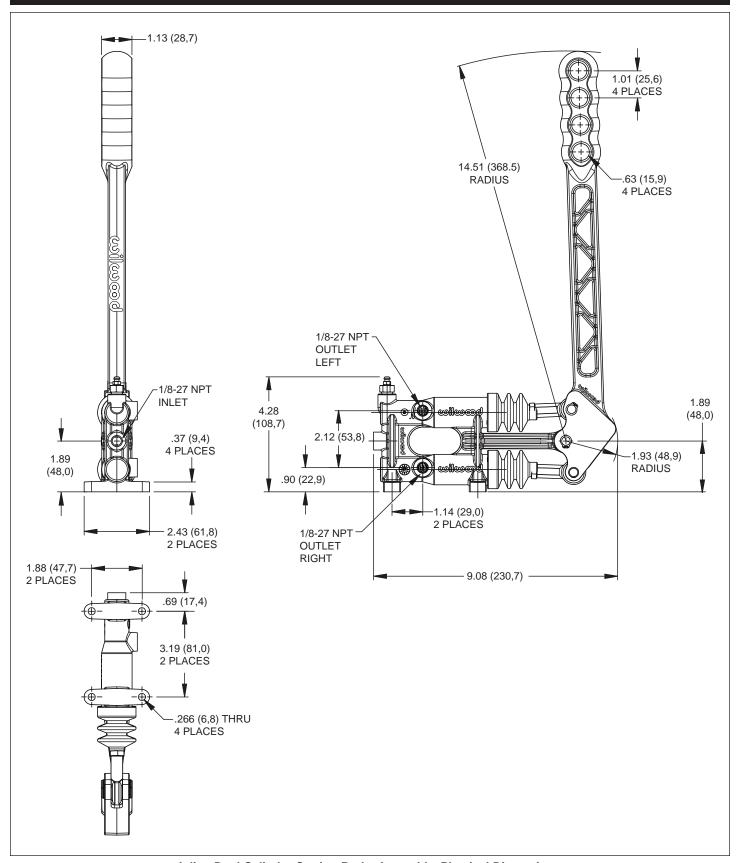
#### Operation:

•When the hand lever is in the neutral position, both calipers receive equal pressure from the foot brake pedal. When only the hand lever is actuated, only the caliper connected to the cylinder being compressed is actuated.



Inline Dual Cylinder Cutting Brake Assembly

#### **Installation Instructions (Continued)**



Inline Dual Cylinder Cutting Brake Assembly, Physical Dimensions

#### **Additional Information and Recommendations**

#### **Additional Information and Recommendations:**

- •Wilwood Hi-Temp° 570 Racing Brake Fluid (6 pack P/N 290-2210) is recommended for race cars and high performance vehicles where brake temperatures exceed normal operating conditions, or use Wilwood EXP 600 Plus Super Hi-Temp (6 pack P/N 290-8478) for extreme conditions. *NOTE:* Silicone DOT 5 brake fluid is *NOT* recommended for racing or performance driving.
- •If after following the instructions, you still have difficulty in assembling your Wilwood Inline Dual Cylinder Cutting Brake Assembly, consult your local chassis builder, or retailer where the component was purchased for further assistance.

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#### **Brake Testing**

## 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.

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