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# **ASSEMBLY INSTRUCTIONS**

FOR

WILWOOD UNIVERSAL PARKING BRAKE CABLE KIT

### FOR USE WITH WILWOOD INTERNAL DRUM OR MC4 MECHANICAL CALIPER PARKING BRAKE KITS

BASE PART NUMBER

## 330-9371

## 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.



Need Additional Information? Use Your SmartPhone and Jump to Our Technical Tips Section on Our Web Site.



### 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.

Before any tear-down or disassembly begins, review the following information:

- Due to OEM production differences and other variations from vehicle to vehicle, the fastener hardware and other components in this kit may not be suitable for a specific application or vehicle.
- It is the responsibility of the purchaser and installer of this kit to verify suitability / fitment of all components and ensure all fasteners and hardware achieve complete and proper engagement. Improper or inadequate engagement can lead to component failure.
- We recommend using an anti-seize lubricant on all aluminum nuts before tightening.

#### 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.

#### **Parts List**

ITEM NO.	DESCRIPTION	QTY
	Universal Parking Brake Cable Kit, P/N 330-9371 (includes all items listed below)	1
1	Inner Cable	2
2	Cable Housing	2
3	Cable Clamp	6
4	Housing Adjuster	1
5	Cable Block Assembly	1
6	Ferrule	2
7	Clevis	2
8	Clevis Pin	1
9	Washer	1
10	Cotter Pin	1



Photo 1 (Numbered items refer to the parts list above)

#### **General Information**

• Installation of this kit should only be performed by individuals experienced in the installation and proper operation of disc brake systems. Prior to any attempt to install this kit, please check the following to ensure a trouble free installation.

• Inspect the contents of this kit against the parts list to ensure that all components and hardware are included.

• This is a universal cable kit. Cables are intentionally long to allow installer to trim to fit for most custom applications. If your application requires two different finished cable lengths, it is recommended to route the longer cable assembly first in case a measuring mistake is made, you may still be able to use it on the shorter side.

•Make a note of the OEM cable routing. Often the new cables may be routed along the same path using the OEM cable clamps.

• If you have any questions, please call our customer service department at (805) 388-1188.



Figure 1. Typical Cable Installation, Drum Parking Brake



Figure 2. Typical Cable Installation, MC4 Parking Brake Caliper

#### Installation

#### **IMPORTANT:**

- To ensure maximum performance from your parking brake system, the cables must be routed as straight as possible. Bends in the cable can significantly reduce efficiency and thus reduce pull force at the brake. Tight bends must be avoided with a minimum recommended bend radius of 6".
- Cables should be properly restrained to prevent "straightening" of bends when tension is applied. Restrain movement of cable by affixing the cable sheath to body or chassis by fitting the provided cable clamps at various points over the length of cable or by using original equipment cable attachments points. The clamping method chosen will require that cable sheath be held tightly without movement, crushing or causing interference to the internal cable.
- Cables must be initially pre-stretched by multiple applications of the brake handle, then re-adjusted to correct tension.
- Uncoil parking brake cables and lay out flat.
- Starting with one cable, remove inner cable (1) from cable housing (2). Grasp barrel end and pull cable completely out of the housing, Photo 2.
- Insert the cable end fitting into the cable stop bracket and tighten down the supplied 7/16" lock nut, Figures 1 and 2. Do not over tighten **NOTE:** It is recommended that you use antiseize lubricant on all aluminum nuts.
- Route the cable housing (2) forward from the parking brake to the hand or foot brake lever. Carefully route cable to prevent contact with exhaust or moving suspension, brake, or wheel components. It's the installer's responsibility to properly route and ensure adequate clearance and retention for parking brake cable components. Use OEM or included cable clamps (3) to secure cable to vehicle chassis.
- Mount housing adjuster (4) near the hand/foot brake lever, leaving enough room for the adjustable cable block assembly (5) between the housing adjuster and the hand/foot lever attachment point, Photo 8. **NOTE:** Be sure to verify clearance with driveshaft thru complete suspension travel.
- Trim cable housing (2) length to fit adjuster (4) location being sure to maintain enough length for housing to bottom out inside adjuster barrel, Photo 3. Then slide housing ferrule (6) into adjuster. **NOTE:** Put a little red Loctite<sup>®</sup> 271 on ferrule before inserting to help hold it in the adjuster.
- Repeat the previous steps on the other side of the vehicle. Continue with the installation after you have both cable housings routed.
- <u>Drum Parking Brake Only:</u> Insert non-barrel end of inner cable (1) through small diameter hole inside clevis (7) and pull cable until barrel is seated inside of the clevis, Photos 4 and 5.



Photo 2



Photo 3



Photo 4 (Drum Parking Brake Only)



Photo 5 (Drum Parking Brake Only)



Photo 6



Photo 7

#### Installation (Continued)

- Starting at the parking brake end, insert the inner cable (1) into the cable housing (2) and feed it all the way through, Photo 6. Repeat for other side.
- <u>Drum Parking Brake Only:</u> Attach clevis (7) to parking brake lever as shown in Figure 1. Repeat for other side.
- <u>MC4 Parking Brake Only:</u> Insert cable barrel end into MC4 actuating lever as shown in Figure 2. Repeat for other side.
- Loosen all four set screws on the adjustable cable block assembly (5) enough to allow the inner cables (1) to pass through. Slide both inner cables through cable block and temporarily tighten the set screws, Photo 7.





Photo 8

Photo 9 (Drum Parking Brake Only)

- Attach the clevis end of the adjustable cable block (5) to the brake lever using clevis pin (8), washer (9) and cotter pin (10) as shown in Photo 8. Bend cotter pin to retain it in place.
- Be sure the hand or foot brake lever is in the fully released position. Remove slack from the inner cable (1) by loosening the set screws, pulling the inner cables through the cable block (5) with pliers, and tightening the set screws. **NOTE:** When pulling on the cables to remove the slack, be sure not to actuate the parking brake lever(s) (at the wheels).
- Final adjustments are performed at the threaded portion of the cable block assembly (5). The housing adjuster (4) can also provide additional tension adjustments. **NOTE:** The parking levers (at the wheels) should remain in the fully released position when all of the cable slack is removed.
- <u>Drum Parking Brake Only</u>: Adjust the internal parking brake shoes by removing the dust cover from the inboard side of the backing plate, Photo 9. Using a brake shoe adjustment tool (available from any auto parts store), or straight screwdriver, adjust the "star" wheel while turning the rotor until a slight drag is felt.
- MC4 Parking Brake Only: Adjust caliper per instructions included with the brake kit.
- Test parking brake in a safe area, on a slight incline then on a steeper incline. If further adjustments are necessary, please repeat the above referenced procedure and test again.
- If you still are having problems with the installation, contact your Wilwood retailer where the product was purchased. Additional technical support is available by call Wilwood Sales and Technical department at (805) 388-1188 or e-mail additional assistance at: info@wilwood.com.

#### 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.

#### Parking Brake

#### WARNING • PARKING BRAKE

- Parking brake must be properly adjusted before use and must be manually readjusted for wear if parking brake handle or foot lever travel becomes excessive.
- The holding ability of the brake should be tested by stopping on a sloping surface and applying the parking brake while holding car with the hydraulic foot brake. This should be accomplished both facing up and down hill.
- Do not rely exclusively on the parking brake to hold the car; Curb wheels as recommended by the applicable diagram and put gear selector in park, or shift into first gear or reverse with a manual transmission.
- Diagram A When parking facing downhill, turn front wheels towards the curb or right shoulder. This will keep from rolling into traffic if the brakes become disengaged.
- Diagram B Turn the steering wheel to the left so the wheels are turned towards the road if you are facing uphill with a curb. The tires will catch the curb if the car rolls backward.
- Diagram C When facing uphill without a curb, turn the wheels sharply to the right. If the vehicle rolls, it will go off the road rather than into traffic.
- . When parking on a hill, always set the parking brake and move the gear selector into park, or shift into first or reverse gear if your vehicle has a manual transmission.





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