



TANDEM MASTER CYLINDER REBUILD KIT

This package contains the following:

**1-1/16" Bore Size Master Cylinder Rebuild Kit,
P/N 260-4896**

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:

Before installation of the Wilwood tandem master cylinder rebuild kit, double check the following items to ensure a trouble-free installation:

Make sure this is the correct kit that corresponds to the size bore of your master cylinder.

Read the instructions and study the diagrams on the front as well as the reverse side of this sheet to familiarize yourself with the procedure before you begin.

When rebuilding master cylinders, take care not to damage piston seals. Use Wilwood Hi-Temp[®] 570 brake fluid as a lubricant when assembling.

Inspect the package contents against the parts list to ensure that all components are included.

ITEM NO.	DESCRIPTION	QTY
1	Dust Boot	1
2	Retaining Ring	1
3	Pushrod Retainer	1
4	Primary Piston / Seal Assembly	1
5	Secondary Piston / Seal Assembly	1

Installation Instructions:

Numbers in parenthesis refer to the parts depicted in Figure 1. Refer to Figure 1 as necessary during the rebuilding procedure.

Install the secondary piston / seal assembly (5) into the master cylinder body followed by the primary piston / seal assembly (4). Slip the pushrod retainer (3) onto the existing push rod then slide the pushrod into the piston and secure piston using the retaining ring (2). Cover with the new dust boot (1).

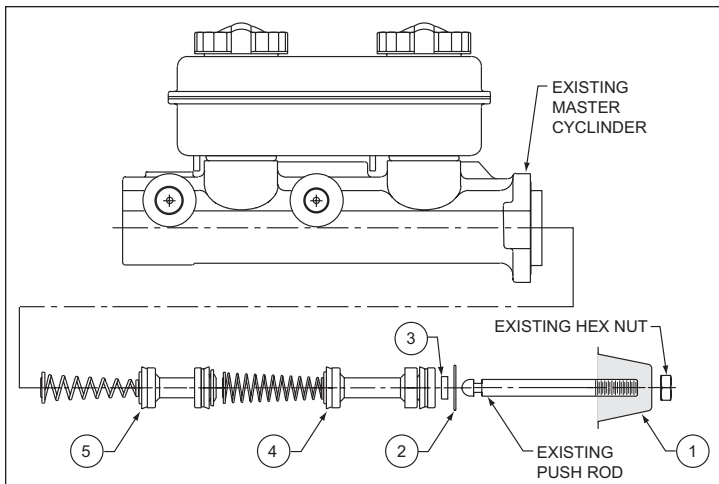


Figure 1. Tandem Master Cylinder Rebuilding Assembly Diagram

Reinstalling Master Cylinder:

Install cylinder into vehicle, connect brake lines and brake pedal, if required. Be sure there is free play of at least 3/8" when pedal is in the off position. Check for free pedal movement. Sticky pedal shaft, rubber pedal parts, etc may interfere. Bypass ports (very small holes) must be open when pedal is in the off position. Be sure main cup does not cover hole (Figure 2). If hole is blocked, brakes will lock and may cause substantial damage.

WARNING:

DO NOT NICK OR CUT CUPS while passing them by feed and bypass ports in the cylinder bore (Figure 2). Care and patience must be exercised. Do not use excessive force. Coat bore and cups heavily with brake fluid. Always use new fluid from a closed container. Bad fluid will swell cups and may create additional damage.

Bleeding Instructions:

Master cylinders should be bled while mounted to the brake pedal assembly.

NOTE: Connect all brake lines after the master cylinder is installed, but prior to bleeding.

Review the following steps:

- Wilwood Hi-Temp[®] 570 Racing 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.

- Fill reservoir with Racing Brake Fluid.

- Gently depress brake pedal.

- 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.

- 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.

Test:

When the job is complete (with cover off) look for an upward surge of fluid in the reservoir tank, when the brake is first applied (Figure 3). If after piston is returned, a heavy surge or upward stream is noticed (Figure 4), this indicates air is in the system and it will be necessary to bleed the system again.

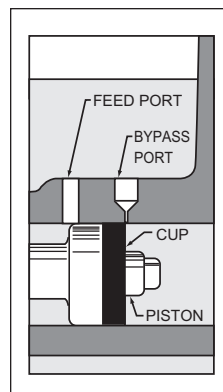


Figure 2

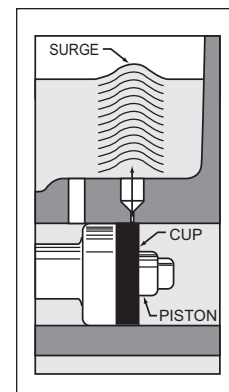


Figure 3

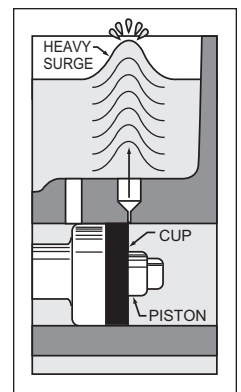


Figure 4

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

FOR OFF ROAD USE ONLY

BEFORE OPERATING VEHICLE, TEST THE BRAKES UNDER CONTROLLED CONDITIONS. MAKE SEVERAL STOPS IN A SAFE AREA FROM LOW SPEEDS AND ONLY GRADUALLY WORK UP TO HIGHER SPEEDS. **DO NOT RACE ON UNTESTED BRAKES! ALWAYS UTILIZE SAFETY RESTRAINT SYSTEMS WHILE OPERATING VEHICLE.**



TANDEM MASTER CYLINDER REBUILD KIT

This package contains the following:

**1-1/16" Bore Size Master Cylinder Rebuild Kit,
P/N 260-4896**

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:

Before installation of the Wilwood tandem master cylinder rebuild kit, double check the following items to ensure a trouble-free installation:

Make sure this is the correct kit that corresponds to the size bore of your master cylinder.

Read the instructions and study the diagrams on the front as well as the reverse side of this sheet to familiarize yourself with the procedure before you begin.

When rebuilding master cylinders, take care not to damage piston seals. Use Wilwood Hi-Temp[®] 570 brake fluid as a lubricant when assembling.

Inspect the package contents against the parts list to ensure that all components are included.

ITEM NO.	DESCRIPTION	QTY
1	Dust Boot	1
2	Retaining Ring	1
3	Pushrod Retainer	1
4	Primary Piston / Seal Assembly	1
5	Secondary Piston / Seal Assembly	1

Installation Instructions:

Numbers in parenthesis refer to the parts depicted in Figure 1. Refer to Figure 1 as necessary during the rebuilding procedure.

Install the secondary piston / seal assembly (5) into the master cylinder body followed by the primary piston / seal assembly (4). Slip the pushrod retainer (3) onto the existing push rod then slide the pushrod into the piston and secure piston using the retaining ring (2). Cover with the new dust boot (1).

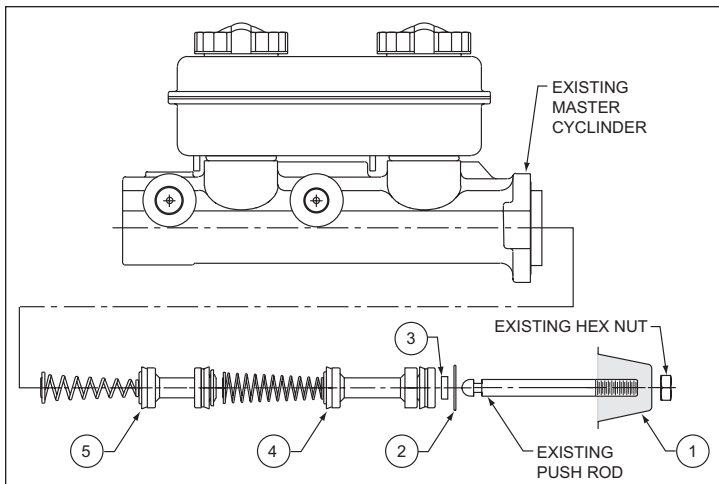


Figure 1. Tandem Master Cylinder Rebuilding Assembly Diagram

Reinstalling Master Cylinder:

Install cylinder into vehicle, connect brake lines and brake pedal, if required. Be sure there is free play of at least 3/8" when pedal is in the off position. Check for free pedal movement. Sticky pedal shaft, rubber pedal parts, etc may interfere. Bypass ports (very small holes) must be open when pedal is in the off position. Be sure main cup does not cover hole (Figure 2). If hole is blocked, brakes will lock and may cause substantial damage.

WARNING:

DO NOT NICK OR CUT CUPS while passing them by feed and bypass ports in the cylinder bore (Figure 2). Care and patience must be exercised. Do not use excessive force. Coat bore and cups heavily with brake fluid. Always use new fluid from a closed container. Bad fluid will swell cups and may create additional damage.

Bleeding Instructions:

Master cylinders should be bled while mounted to the brake pedal assembly.

NOTE: Connect all brake lines after the master cylinder is installed, but prior to bleeding.

Review the following steps:

- Wilwood Hi-Temp[®] 570 Racing 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.

- Fill reservoir with Racing Brake Fluid.

- Gently depress brake pedal.

- 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.

- 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.

Test:

When the job is complete (with cover off) look for an upward surge of fluid in the reservoir tank, when the brake is first applied (Figure 3). If after piston is returned, a heavy surge or upward stream is noticed (Figure 4), this indicates air is in the system and it will be necessary to bleed the system again.

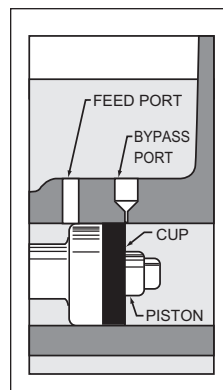


Figure 2

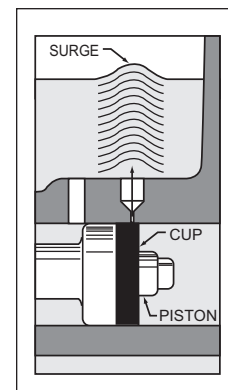


Figure 3

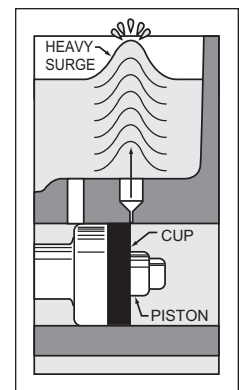


Figure 4

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

FOR OFF ROAD USE ONLY

BEFORE OPERATING VEHICLE, TEST THE BRAKES UNDER CONTROLLED CONDITIONS. MAKE SEVERAL STOPS IN A SAFE AREA FROM LOW SPEEDS AND ONLY GRADUALLY WORK UP TO HIGHER SPEEDS. **DO NOT RACE ON UNTESTED BRAKES! ALWAYS UTILIZE SAFETY RESTRAINT SYSTEMS WHILE OPERATING VEHICLE.**