

MASTER REBUILD

How to rebuild a Wilwood single master cylinder

Wilwood makes a wide variety of master cylinders for racecars, street rods, street machines and off-road vehicles. The master cylinders are available in several bore sizes to work seamlessly with all of the Wilwood calipers. The small and extremely lightweight master cylinder being worked on is available in bore sizes ranging from 5/8-inch to 1 1/8-inch. When you combine the small aluminum body with the lightweight plastic reservoir that can be mounted to the master cylinder assembly or used remotely, this unit is a favorite of racecar builders. The other nice feature about this master cylinder is the ease of keeping it working perfectly and in this story we will show you how easy it is to rebuild the master cylinder assembly when it is necessary, and we can assure you that it is seldom necessary.

In this story a 3/4-inch bore size master cylinder is being rebuilt, so a 260-10514 rebuild kit was ordered. The rebuild kit comes with the piston assembly ready to install, so if you have a smaller or larger bore size master cylinder, the correct part number for that application should be ordered. The rebuild kits are listed as follows:

5/8-inch Combination Rebuild Kit is P/N 260-10513

3/4-inch Combination Rebuild Kit is P/N 260-10514

13/16-inch Combination Rebuild Kit is P/N 260-10515

7/8-inch Combination Rebuild Kit is P/N 260-10516

1-inch Combination Rebuild Kit is 260-10517

1 1/8-inch Combination Rebuild Kit is 260-10518

This master cylinder rebuild can be done in less than an hour and the only tools required include a screwdriver and curved or straight jaw snap ring pliers. It would also be handy to have a bench vise to hold the unit when some of the work is being done. When the master cylinder rebuild is complete the unit can be installed in the car and then the system will require bleeding to remove any air in the master cylinder and lines.



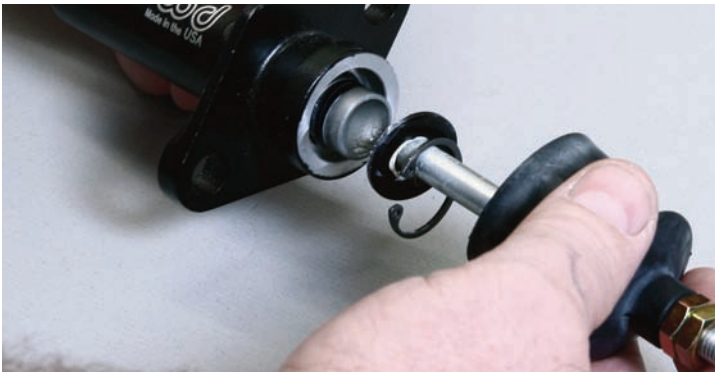
The small and very lightweight master cylinder is a favorite with racecar builders. The rebuild kit makes rebuilding fast and easy, because the kit comes complete with a new spring, a piston assembly that's ready to install, a push rod and a new rubber boot.



The hose clamp connection was loosened with a screwdriver and then the plastic reservoir was carefully removed from the master cylinder. Notice the O-ring seal that keeps this connection leak free.



The rubber boot was disconnected from the back of the master cylinder far enough to access the snap ring that holds the piston inside of the bore.



After the snap ring was disconnected from the unit, the pushrod, the snap ring and the washer were removed from the assembly.



Even with pressure from the spring, the piston assembly will have to be pulled out of the master cylinder.



Using a small light, the bore was inspected for scratches and other imperfections that would prevent the unit from working properly. In this case the bore was in good condition and was perfect for a rebuild. If you do find a major problem it would be a good idea to purchase a new unit.



A few drops of Wilwood lubricant was placed inside of the piston bore and then it was distributed evenly inside of the bore. This can be done with finger power.



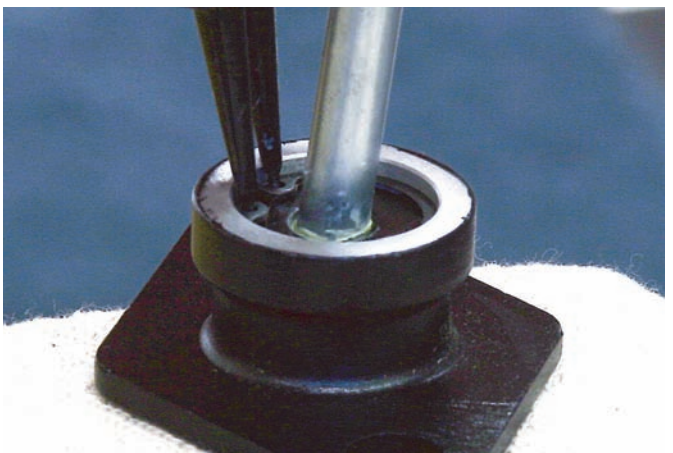
The rubber piston cup seals were coated with lubricant to make it easier to install the piston inside of the master cylinder bore.



The piston assembly was carefully installed back into the master cylinder bore making sure it slides in easily.



The end of the push rod that rests against the piston assembly was coated with white grease.



The pushrod was installed into the piston far enough to make room for the snap ring to be installed. It is important for the snap ring to sit inside of the groove.



The rubber boot has to be connected to the master cylinder body and the plastic reservoir was installed on the top of the unit making sure the O-ring was used.



Using a flat blade screwdriver, the hose clamp connection was tightened to insure a good seal.



Here is the finished assembly rebuilt and ready to be re-installed in the car.

If your piston bore is beyond repair and you want to purchase a new master cylinder, the part numbers are as follows:

- 5/8-inch Combination Master Cylinder Kit (1.12 Stroke) P/N 260-10371
- 3/4-inch Combination Master Cylinder Kit (1.12 Stroke) P/N 260-10372
- 13/16-inch Combination Master Cylinder Kit (1.12 Stroke) P/N 260-10373
- 7/8-inch Combination Master Cylinder Kit (1.12 Stroke) P/N 260-10374
- 1-inch Combination Master Cylinder Kit (1.12 Stroke) P/N 260-10375
- 1 1/8-inch Combination Master Cylinder Kit (1.12 Stroke) P/N 260-10376