



**Detroit Speed, Inc.**  
**Brake Booster and Master Cylinder Kit**  
 1967-1981 Camaro/Firebird, 1968-74 Nova, & 1964-1972 A-Body  
 P/N: 050105, 050106, 050107 & 050109

The Detroit Speed brake booster and master cylinder kit gives your brake system a late model performance pedal feel. This kit is a direct bolt-on, and is designed to work with any stock or aftermarket brake system. The kit comes with the 9" booster, master cylinder with reservoir, mounting brackets, and master cylinder fittings.



**NOTE:** For 1968-72 A-Body applications, the booster may interfere with BB Chevy tall valve covers.

Item	Description	Quantity
1	9" Dual Diaphragm Brake Booster	1
2	1" Aluminum Master Cylinder	1
3	Booster Bracket Set	1
4	Brake Booster Pushrod	1
5	Brake Master Cylinder Fitting	2
6	Brake Booster Firewall Seal	1
7	Brake Booster Firewall Seal Plate	1
8	Clevis, 3/8" x 24 Thread, Female	1
9	10-32 x 1/8" Set Screw	1
10	M10x1.5 Flange Nut	4
11	M8x1.25 Flange Nut	2
12	3/8-24 Jam Nut	1
13	7/64" diameter x 3/4" cotter pin	1
14	3/8" x 1-1/8" Clevis Pin	1
15	Instructions	1

### Installation Instructions:

1. Remove the original master cylinder and push rod from the vehicle.
2. Place the Detroit Speed brake booster and master cylinder over the firewall studs so the brake booster brackets and firewall seal plate go on at the same time. **NOTE:** Make sure the molded button in the seal is located into the firewall seal plate.
3. Using the original hardware, bolt the brake booster and master cylinder kit to the firewall at the booster bracket (Figure 1).



Figure 1 - Install Brake Booster/Master Cylinder to Firewall

4. Using the supplied hardware attach the push rod to the brake pedal and booster. Adjust the push rod length so that the brake pedal is as high as possible without preloading the brakes. Tighten all of the hardware on the push rod. **NOTE:** For 1970-81 Camaro/Firebird, you will have to remove the stud from the brake pedal. This is the where the clevis pin needs to be installed (Figure 2).



Figure 2a - Remove Pedal Stud

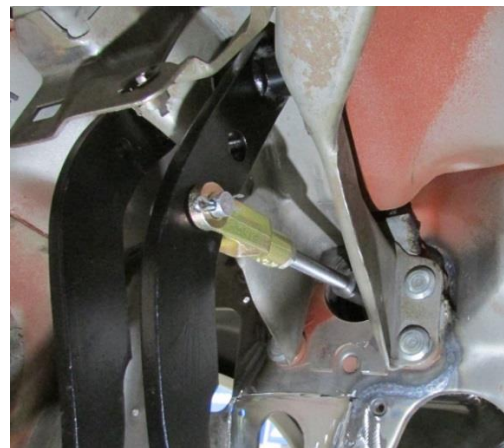


Figure 2b - Install Clevis Pin

5. Install the provided M12-1.0 - 3/16" fittings (Figure 3) onto your 3/16" brake line. Flare the brake line so it has a 37° inverted flare. Loosely connect the brake lines to the master cylinder to insure that all lines are routed as desired. **NOTE:** The front master cylinder port is for the rear brakes and the rear port is for the front brakes. Once you are satisfied with the brake system layout, remove the master cylinder.



Figure 3 - Brake Master Cylinder Fittings

6. If desired, the fluid level sensor can be removed from the fluid reservoir by depressing the tabs and pulling the sensor out of the reservoir (Figure 4).

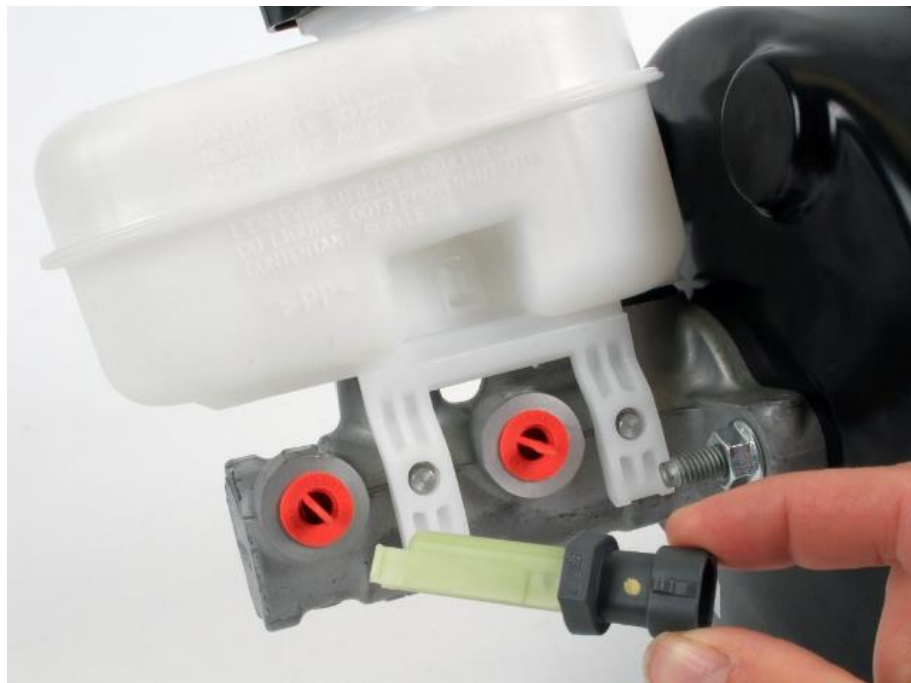


Figure 4 - Removing Sensor

7. Bench bleed the master cylinder:
  - a. Mount, hold, clamp or secure the master cylinder in a level position. A bench vise is a good way to keep the master cylinder level.
  - b. Fill the master cylinder reservoir with DOT 3 (or equivalent) brake fluid.
  - c. If you have a master cylinder bleed kit, install the fittings into the master cylinder, connect the hoses to the fittings and put the other end of the hose into the master cylinder reservoir so that the fluid will be recycled through the system.

- d. If you do not have a master cylinder bleed kit, place a container under the master cylinder to catch the fluid that comes out of the master cylinder ports. Insure that the master cylinder reservoir does not empty and re-trap air as the bleeding process progresses.
  - e. Using a screwdriver or similar tool, compress the master cylinder piston until it reaches the bottom of its travel. Release the piston so that it will return to the "at rest" position. Continue to cycle the master cylinder until no air comes out of the master cylinder ports.
8. Immediately after bench bleeding the master cylinder, reinstall it onto the vehicle and connect the brake lines. The rear port closest to the booster services the front brakes, the front port closest to the radiator services the rear brakes. Quickly reinstalling the master cylinder decreases the chances of reintroducing air into the system.
  9. Tighten all fittings and bolts, bleed the brake system, and connect a vacuum hose to the booster from a constant vacuum port before testing the system.

If you have any questions before or during the installation of this product please contact Detroit Speed at [tech@detroitsspeed.com](mailto:tech@detroitsspeed.com) or 704.662.3272

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