



65-68 Full Size Chevy

Installation Instructions Power Disc Conversion



PB9021, DBMC09, PV71 & PVB71 Pictured (Booster, master cylinder & valve setups may vary by upgrades selected)

Your new disc brake conversion kit can be bolted up with standard hand tools. The only tools you may not find in your toolbox are listed below.

1. Ball joint fork or “pickle fork” (For drop spindle kits only)
2. Drum brake tool (optional)

Note: If you are interested in Power Coated Calipers or Drilled and Slotted Rotors for your car please give us a call. We have these upgrades available for exchange of non-installed components. We cannot exchange components that have been previously installed. Shipping charges will apply. Upgrades pictured.



Attention: Before modifying, painting, or powder coating any part of this kit, please trial fit all components and check rim clearance. We recommend you run 15" or larger wheels with this kit. We do not support the use of 14" wheels on this kit.

Modified, Painted, and Powder Coated parts are not returnable!

Kit Contents:

- ____ Pair of Rotors (BR02C for plain rotors, BR02ZDC rotors for drilled and slotted rotors)

- ____ Pair of calipers (BC12N/BC13N (For caliper bracket # CMB34 and drop spindle DSP5864) BC14N/BC15N (For Big Caliper upgrade caliper bracket # CMB24), if powder coated calipers were selected there will be a letter pertaining to the color of the caliper within the part number as well)

- ____ Set of caliper brackets, for standard height kits only (CMB34 (Standard Calipers) or CMB24 (Big Caliper Upgrade))

- ____ Drop Spindles, for drop spindle kits only (DSP5864)

- ____ Pair of Flex Hoses (FHK309 for CMB34 Standard Calipers and DSP5864 Drop Spindles or FHK03 for CMB24 Big Caliper Upgrade)

- ____ Wheel Bearing Kit (WBK65C)

- ____ Proportioning Valve (PVK71/72 for a combo valve or PVK68 for a factory style valve. Chrome will have a letter C after the part number.)

- ____ Master Cylinder (DBMC09/01/16/11/18 for Power Front Disc, DBMC05 for Power Four Wheel Disc or Manual Front and Manual Four Wheel Disc. Chrome upgrade will have a letter C after the part number.)

- ____ Power Booster (RPB7537/8531/9002/9016/9021, for power kits only. Chrome will have a letter C after the part number.)

- ____ Instruction Packet

***See the back page of the instruction booklet to review the “Pick Ticket” used to pull your order.**

Disclaimer:

The Right Stuff values your safety above all things. For this reason, we recommend all brake systems and components be installed by professionals. The installer of the brake parts is responsible for ensuring fitment and suitability of the parts for the vehicle it is being installed on. Brakes should be tested in a controlled open area with success before driving on the road. If you are unsure or uncomfortable with any part of your kit, please call for further instructions from our tech staff before driving.

Installation Instructions:

Lower Assembly

1. Prepare the car

Begin by securely supporting the car on jack stands. Chock the rear wheels and set the parking brake to be sure vehicle does not roll. Always work on a flat, even surface. Remove the wheels to gain access to the brake system.

2. Disconnect tie rod ends

Remove the cotter pin and castle nut that secures the tie rod to the steering arm. You will reuse the castle nuts later. Use a heavy hammer to remove the tie rod end from the steering arm. A ball joint fork or “pickle fork” may be needed to break things loose.

3. Disconnect front flex hoses

Unscrew the hard line from the flex hose, being careful not to get brake fluid on painted surfaces. Remove the flex hose retaining clip and pull the hose out of the frame mounted bracket.

4a. Remove drum brake assemblies and steering arms (Standard Height Kit)

Remove the original drum brake hardware from the spindle. You should also unbolt the steering arms at this time. Since this kit uses your existing drum brake spindles you do not need to remove the spindles from the ball joints. After the original drum brake hardware and the steering arms are removed you are ready to move to step 5.

4b. Remove drum brake assemblies and steering arms (Drop Spindle Kit)

Before removing the spindles first remove the steering arms. It is easier to remove them with the spindles still on the car, after you have removed the arms it is time to remove the spindles. Follow the steps below to remove your spindles. We highly recommend the use of a spring compression tool. Failure to handle the spring properly can result in serious injury to you and damage to the vehicle!

Preferred method:

- a. Remove the shock absorber
- b. Install the spring compressor following the directions supplied with the tool
- c. Compress the spring until all pressure is released from the control arm
- d. Remove the cotter pin and castle nut from the upper ball joint
- e. Keep the castle nut for reuse later
- f. Use a ball joint fork to release the upper ball joint from the spindle
- g. Raise the upper control arm up out of the way
- h. Repeat steps “d” and “f” to release the lower ball joint and remove the spindle assembly

Note: If you have a sway bar you may want to remove the sway bar link to allow for easier access to the ball joints and free movement of the lower control arm.

5. Inspect suspension components

Now is the time to clean up and inspect your suspension components. Check the inner and outer tie rod ends and ball joints for wear and replace if needed. Inspect the rubber boots for cracks or tears. Universal replacements are available at most automotive parts stores. Also inspect sway bar links and bushings. Complete suspension rebuild kits are available to freshen up the entire front end. Call The Right Stuff for pricing and availability.

6a. Install the new disc brake drop spindles (Drop spindle kit only)

Place the spindle on the lower ball joint and attach it with the original castle nut. Torque the nut to the specifications provided in the assembly manual.

Note: Both of your new spindles are identical. There is no left or right.

Pull the upper control arm down and insert the upper ball joint into place. Attach the upper ball joint with the original castle nut. Torque the nut to the specifications provided in the assembly manual (Most are 40-60 ft/lbs.). You are now ready to release the pressure on the coil spring. Slowly release the spring compressor and reinstall the shock absorber. Install the appropriate caliper bracket onto the spindle. Fasten everything in place with the special 5/8" bolt supplied with the kit.

Note: The opening for the caliper should face towards the rear of the car. Left is driver's side, right is passenger's side.

6b. Install the caliper brackets and steering arms (Standard Height Kit)

Install the caliper bracket onto the spindle and hold it in place with the special 5/8" bolt at the top. Do not torque this bolt down at this time.

Note: The opening for the caliper normally faces towards the rear of the car. Left is driver's side, right is passenger's side.

Install the support bracket onto the back of the steering arm and spindle. The threaded hole of the support bracket matches up with the forward steering arm hole and the "U" shape between the two bolt holes should be upside down as pictured below. Place the 1/2" spacer between the support bracket and the steering arm on the forward hole and bolt the components together using the 3" bolts included in the kit. The bolt head should be on the rotor side of the spindle, not on the support bracket side. If you would like you can use lock-tite on the threads of this bolt since there is no lock washer. Next, use the remaining 3" bolt for the rear steering arm hole. When attaching this bolt use the lock washer and nut provided in the kit to secure the bolt into place. Torque both bolts using GM's recommended torque for the steering arm bolts.



Driver's Side, Front View



Driver's Side, Side View



Passenger's Side, Rear View



Passenger's Side, Rear View Off Of Car

Join the two brackets together using the $\frac{3}{4}$ " spacers and the $2\frac{1}{2}$ " bolts provided in the kit. Tilt the main bracket up until the two holes in the lower corner match up with the two remaining holes in the support bracket. Insert the spacer between the two brackets and bolt them together using the aforementioned hardware. Torque the $\frac{5}{8}$ " main spindle bolt using GM's factory torque specs for that bolt and then torque the two bolts that join the main bracket to the support bracket to roughly 50-60 ftlbs. With your hand move the spindle back and forth simulating the wheel turning. If necessary trim the excess threads off of the back of the forward steering arm bolt (the bolt without lock washer and nut) for control arm clearance.

7. Grease the bearings and install the rotors

You are now ready to install the bearings and rotor. Start by placing the rotor face down. Races come preinstalled in the rotors. If you received additional races with your bearings, they will not be used. Apply a little bearing grease to the bearing race already in the rotor and pack the larger of the two bearings (Inner) with grease. Install the bearing into the rotor and place the grease seal on the rotor. Tap the seal into place being careful not to damage the rubber portion of the seal.



Inner Bearing Assembly



Outer Bearing Assembly

Note: Your conversion comes with two different castle nuts and two different grease seals. You only use the one set that is applicable to your car. Start by trying the black grease seal and short castle nut. If those do not work, use the other set provided.

Note: Drilled and/or slotted rotors are directional. Be sure you have the appropriate rotor for the side of the car you are working on. Left is driver's side, right is passenger's side.

Turn the rotor face up and grease the bearing race. Pack the smaller bearing (Outer) and place it in the rotor. Slide the rotor onto the spindle being careful that the outer bearing does not fall out of place. Install the keyed washer and castle nut and tighten the nut to seat the bearings. Then back the nut off until the rotor spins freely. Fix it in place with the new cotter pin supplied with your kit. Install the dust cap with a mallet and a large socket placed over the dust cap. A screwdriver can also be used along the edges.

8. Mount the calipers and flex hose

Your new calipers come fully loaded with pads, bolts, and copper washers. Start by removing the caliper pins and position the caliper in the bracket with the bleeder screw at the 12 o'clock position. If the caliper won't install in the brackets with the bleeder pointed up, you probably have the opposite side caliper. Insert the caliper pins and torque to the specifications provided in the assembly manual. Due to variations in brake pads, you may need to modify the wear sensor to clear the caliper bracket.

Note: The bleeder screws must be pointed up. If the bleeders are pointed down, the calipers will trap air and you will not get the system to bleed properly.

Remove the banjo bolt and copper washers from the caliper. Place a copper washer on top of the flex hose and insert the banjo bolt. Place the second copper washer over the banjo bolt on the bottom of the flex hose and bolt the hose onto the caliper with the specifications provided in the assembly manual.

Note: Make sure the flex hose seats square against the caliper. You may need to flip the hose over.

Insert the other end of the flex hose into your original frame brackets. You may need to file the inside of your original brackets to accommodate the new flex hose. Push on the new flex hose clip supplied with your kit. At this point the hose might seem a little tight when you turn the wheels from lock to lock. If the hose is unacceptably tight you may find it necessary to grind the lip that surrounds the hose on the caliper. Grind down the lip surrounding the banjo bolt hole so that you can rotate the hose to an angle that will allow it a more acceptable amount of slack. Make certain when grinding to not nick the rings surrounding the banjo bolt hole with the grinder, these rings are crucial to fluid not leaking from the caliper.

You have now concluded installing the wheel assembly. See the next page to start installing the firewall components.

Upper Assembly

1. Remove the old master cylinder assembly

Remove the master cylinder brake lines being careful not to get fluid on any painted surfaces. Remove the clevis from the pedal rod under the dash. If your original system was power, you should be able to remove the booster mounting nuts from the firewall and remove the booster/master assembly. If your original system was not power, simply remove the master cylinder mounting nuts from the firewall and remove the master cylinder.

2. Mount the new master cylinder and booster assembly

- a. Bolt the booster brackets to the booster, bolt on as shown below in the photograph of the back of the booster. If the bolt pattern on the back of the booster matches the bolt pattern on your firewall you can bolt the booster directly to the firewall without any booster brackets.



Bolt On Booster Brackets



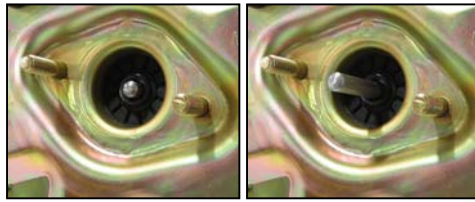
65-68 Chrome Bracket



65-68 Bracket

- b. Bolt your booster to the four studs on the firewall. The '65-'68 brackets will tilt the booster up at approximately 15 degrees.

- c. Inspect the booster rod length and master cylinder pocket depth. The booster rod should protrude from the booster face approximately the same length as the depth of the pocket in the master cylinder. Short systems use a ¼" rod and pocket. Long systems use a rod and pocket of approximately 1 ½".



Short Rod

Long Rod



Short Pocket

Long Pocket

Note: Delco style boosters come with a long and a short rod. Insert the short rod into the hole in the front of your booster if you have a short pocket master cylinder. Use the long rod if your master cylinder has a pocket over 1" deep.

- d. Place the master cylinder over the two studs of the booster and hold it in place with a nut on the passenger's side stud only.

Note: After you place the master onto the face of the booster it should sit flush up against the face without any resistance at all. If you have resistance sliding the master cylinder onto the face of the booster then either the rod in the center of the booster is too long or the plug needs to be removed from the back of the master. If you still have a ¼" or less resistance then the rod may not be seated all the way in the face of the booster (for removable rod Delco style booster) or on some fixed rod boosters there is a 1/8" knurled piece of brass that sits behind the cap nut on the tip of the booster rod. You can remove this by removing the cap nut remove the brass piece, then screw the cap nut back on so it sits flush on the tip of the rod. This will effectively shorten the booster rod an additional 1/8".

- e. Slide the combination valve bracket over the driver's side stud of the booster and loosely tighten it down with the nut.

Note: Leave the mounting nuts a little loose at this point. It makes the lines much easier to install if there is a little play in the bracket.

- f. Bolt the proportioning valve to the outside (driver's side) of the bracket with the hardware supplied in your kit. *** See the last page of the instruction packet for information on the valve's routing and port sizes.

- g. Now you're ready to install the master cylinder lines. If you purchased lines with your conversion kit, the two small lines are the master cylinder lines.

- h. Tighten up both of the mounting nuts

- i. Supply vacuum from the intake or carburetor to the booster check valve. We suggest a minimum of 14 in/mg (16 – 18 in/mg desired) of vacuum at idle for proper booster function. If you do not have this amount of vacuum your booster may not function properly.

3. Install and adjust the pedal rod

Attach the threaded rod coming off of the back of the booster to the bottom hole in your brake pedal with the clevis supplied in your kit. Do not install the cotter pin at this point. You will need to turn the clevis to adjust the pedal height later. Most boosters require a pedal rod extension to obtain the appropriate pedal height. This extension is supplied with your kit if your booster requires it. 11" Delco boosters do not require the extension.

Note: The pedal rod should not be put in a bind when attaching it to the pedal assembly. If there is only one hole in your pedal, you may need to drill a second hole about 1" lower than the original hole.

Adjust the pedal rod so there is about $\frac{1}{4}$ " – $\frac{1}{2}$ " of free travel at the top of the pedal. Be sure to tighten all jam nuts on the pedal rod to lock it in place after all your adjustments are made. If the extension rod is too long for your application it is ok to cut it down to the appropriate length.

Bleeding the system

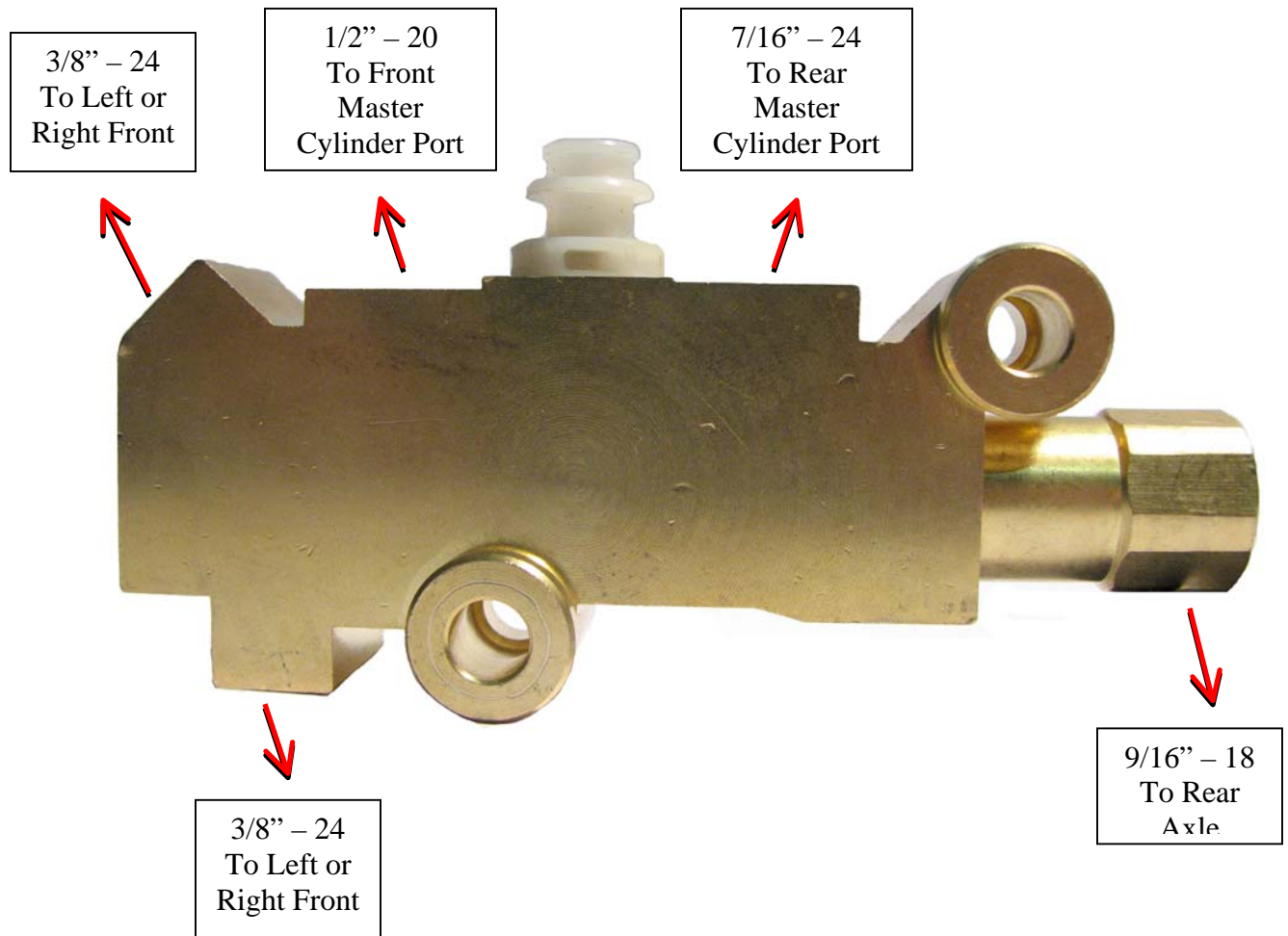
Working your way forward from the wheel farthest from the master cylinder will help insure a good bleed and a firm pedal. It is important to bleed the system in the following order:

- 1. Right Rear**
- 2. Left Rear**
- 3. Right Front**
- 4. Left Front**

If you have a spongy pedal, be sure the bleeder screws are pointed up and try re-bleeding the system.

PV71 Fixed Combination Valve Supplement

This supplement is for customers who have chosen the “fixed” combination valve with the purchase of our disc brake conversion kits. This diagram shows where each port of the valve routes. If you have any further questions or concerns, please don't hesitate to call our toll free technical support line. Thank you again for your business.



Technical Support

We want your conversion project to go smoothly. Double check that you have followed these instructions correctly and those included with any upgrade components you may have purchased. If you need additional help getting your new disc brakes to function properly, we're here for you. You can visit our website at www.GetDiscBrakes.com for Tech Tips, Tricks & Videos. If you cannot find the assistance you need from that source feel free to send us an email from the Tech support section of the website for priority service. If you are still unable to get the help you need, please feel free to give us a call at (800) 405-2000.

Thank You for Your Business!

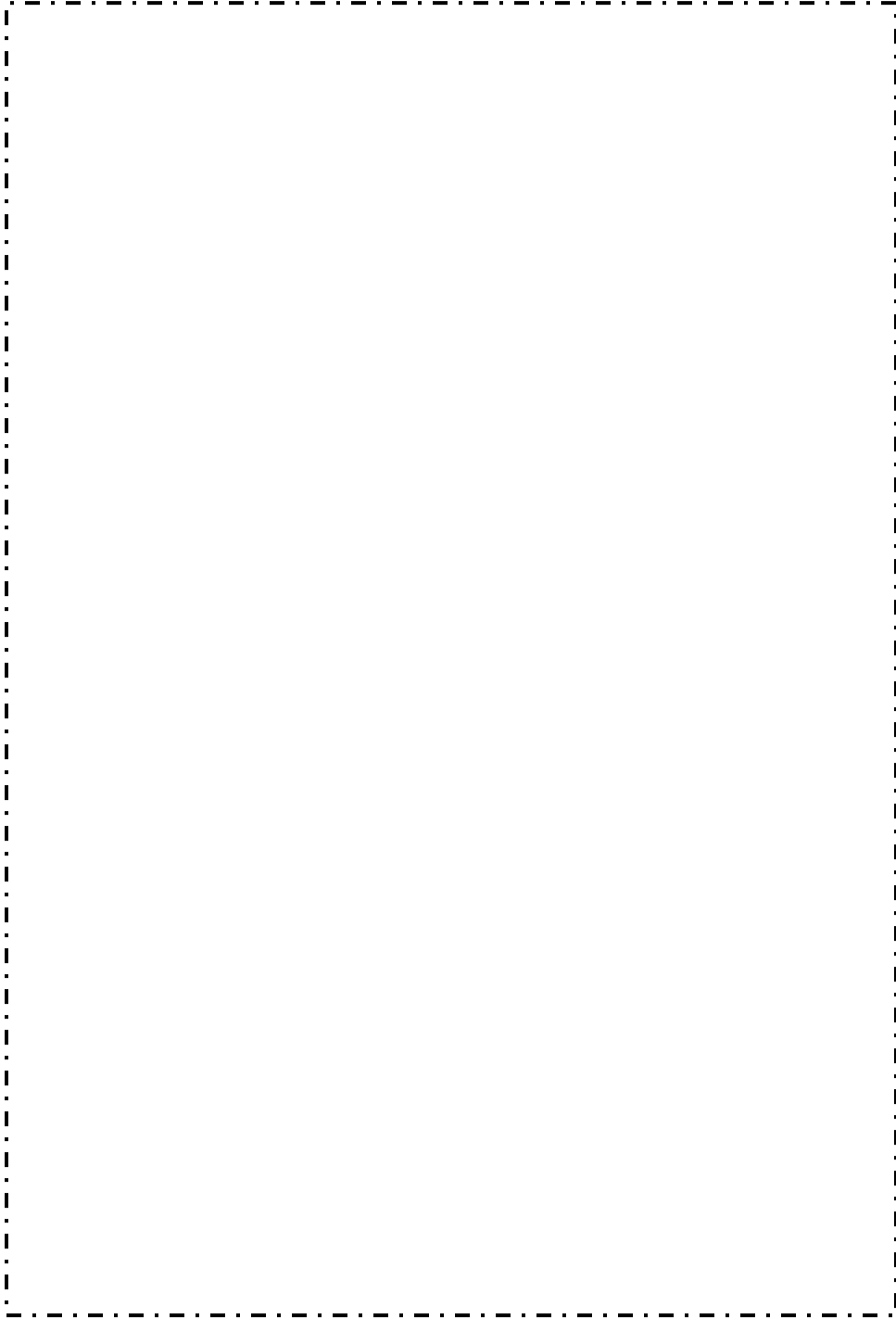


**Brake & Fuel
Line Systems**

**Disc Brake
Conversions**

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