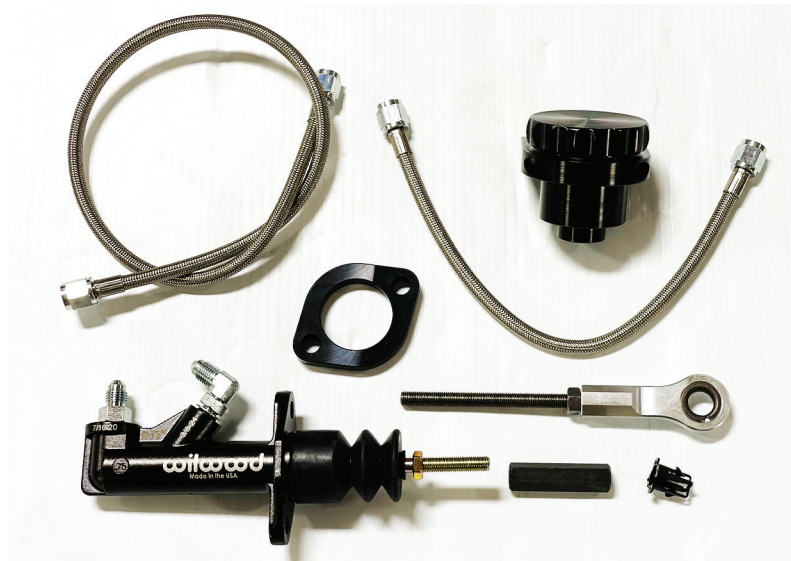




10885 May Chapel Rd. Lawrenceville, IL 62439
Ph. 618-943-4856 email: info@bowlertransmissions.com

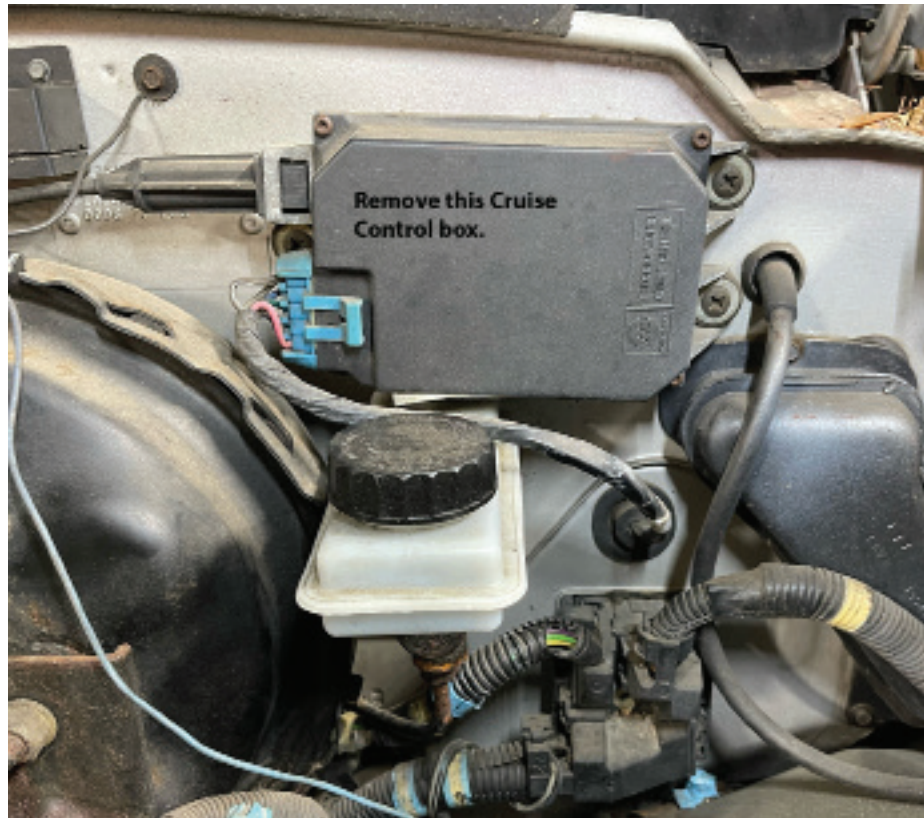
1988-95 C1500 Hydraulic Master Cylinder kit with Billet reservoir

Part# 4788953



If you are starting this process with a truck that is an automatic skip to Step 4 of this section, but if your truck is currently equipped with a factory clutch master cylinder the first step is to disconnect the line from the master cylinder to the slave cylinder and drain all fluid from the system.

Special Note For trucks equipped with factory cruise control -disconnect the wire harness from the module box then use a large Phillips screwdriver to remove the 3 screws that hold the cruise control module to the firewall, then swing it out of the way.



Step 2 - Next go under the dash and use a small flat screw driver to release the clip that secures the master cylinder push rod to the clutch pedal and slip the push rod off the pedal pin.



Step 3 - Use a 1/2" wrench to remove the 2 nuts that secure the master cylinder to the firewall and gently pull the master cylinder assembly out from the firewall and set aside.



Step 4 - With the old master cylinder removed, assemble the new master cylinder assembly and ready it for installation. The new push rod uses a right and left hand threaded adjuster. For most trucks setting the distance from the center of the rod end to the master cylinder flange at 7 3/4" will achieve the correct pedal travel, but some adjustment may be necessary for your application.



Step 5 - Install the small plastic pedal pin clip into the rod end.



Step 6 - If your truck was an automatic truck you should have dimples in the firewall where the cuts for the master cylinder and attachment studs will need to go. At this point you will need to create those openings before moving forward. Use this photo as a reference to where those openings will need to be made.



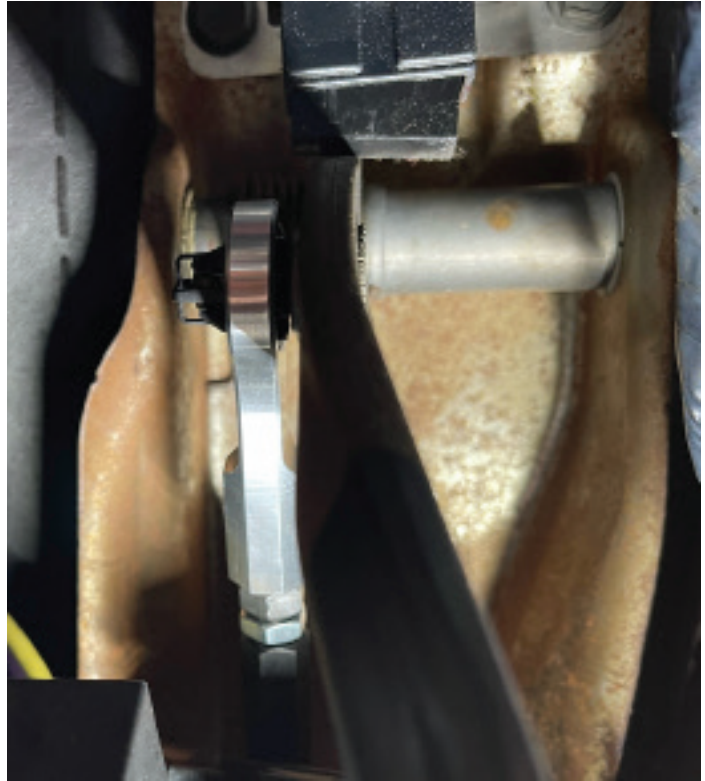
Step 7 - Slip the black anodized aluminum master cylinder spacer over the top of the studs



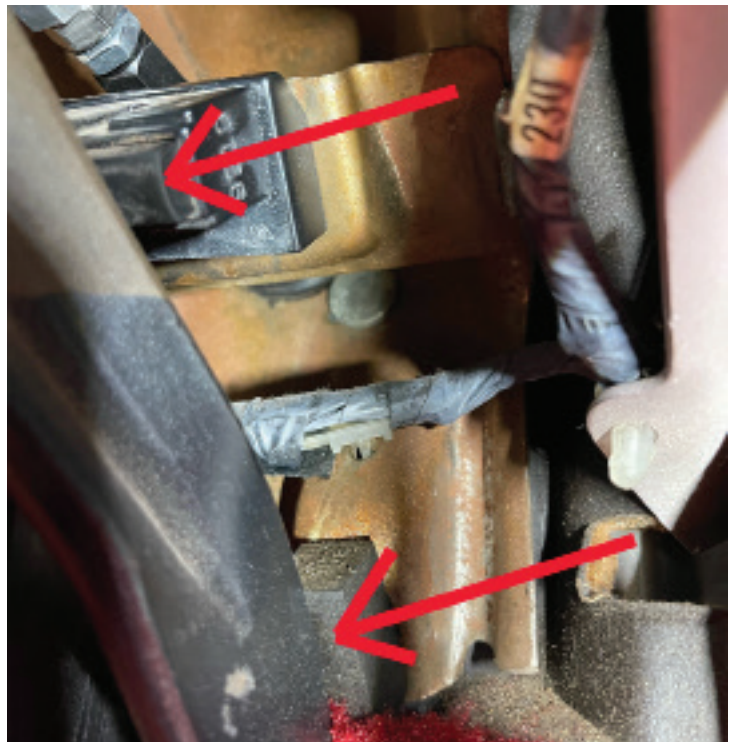
Step 8 - Slide the assembled master cylinder with push rod into the firewall opening. It will be somewhat of a tight fit, but a little extra pressure and side to side movement will get it seated enough to re-install the nuts onto the studs. Go ahead and tighten the nuts with the 1/2" wrench until snug.



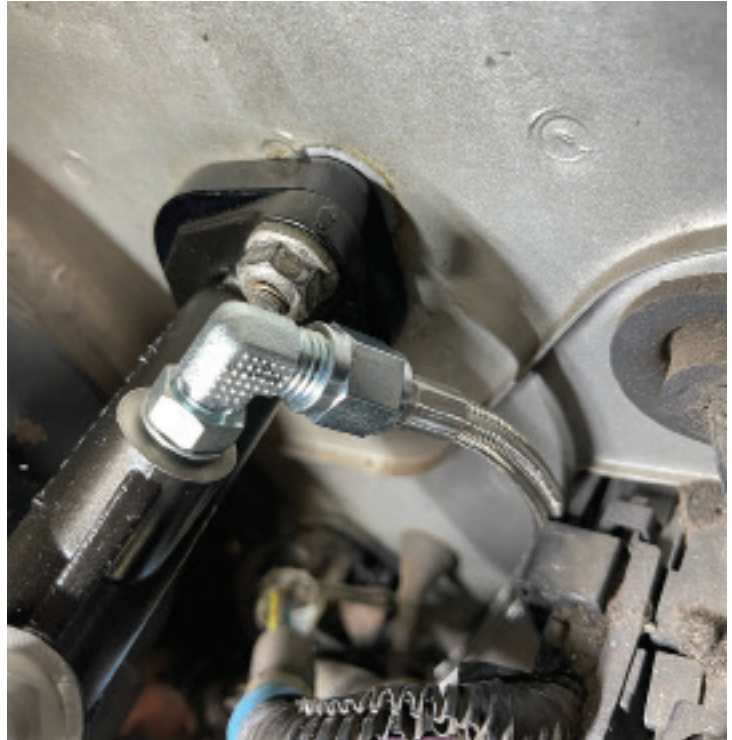
Step 9 - Once the new master cylinder has been secured to the firewall, go back under the dash and slip the rod end onto the clutch pedal pin. The plastic clip should secure it by snapping into place. At this point it will be easiest to check and make sure the push rod length adjustment is set correctly.



Step 10- To check for correct push rod length depress the clutch pedal by hand and check to ensure that the clutch pedal is contacting the OE rubber pedal stop and also depressing the clutch safety switch. (as indicated by the arrows in the image to the right) If it is not touching the rubber pedal stop, use the push rod adjuster sleeve to shorten the push rod length until you are getting pedal stop engagement. Failure to do so will result in a damaged master cylinder that is not covered by warranty. The master cylinder cannot be used as a pedal stop.



Step 11 - After the push rod length is set correctly and the clutch pedal can freely move in and out, move onto connecting the lines and fittings. It will be easiest to make the connection from the master cylinder output to the release bearing first. Using the 30" braided stainless line, thread it onto the fitting closest to the firewall and route the line down near the seam where the inner fender meets the firewall. Using fasteners of your choice to secure it along the way. We've also included a -4 AN male to male union to connect to the release bearing. If your bearing uses a -3 AN line connection give us a call to get a different size union.



Step 12 - Next up will be mounting the fluid reservoir. The location will be your choice with the only requirement being that it has to be above the height of the master cylinder. The ideal location would be on the firewall right above the master cylinder. If you're using the OE cruise control module it will require you mounting it somewhere else. Example would be the inner fender.



Once you have the reservoir mounted and the line connected from the reservoir to the master cylinder and also the line from the master cylinder to the bearing you are ready to fill with DOT 3 brake fluid and bleed the system. Please refer to the instructions that came with your release bearing for the proper bleeding procedure.

Special note If you will be retaining the OE cruise control your truck will likely be equipped with a cruise control cancel switch that is located above the clutch pedal. When the pedal is in the Up position it depresses this switch and when the clutch pedal is pressed down, it will release this switch to cancel the cruise control when cruise control is active. In some trucks, depending on how the master cylinder push rod is adjusted, it may be necessary to add a spacer to the clutch pedal so that it fully depresses this switch when the pedal is in the Up position. You can check the continuity of the switch connection after installation to determine if a spacer is needed. The photo below illustrates the cruise control cancel switch and how the pedal interfaces with it.

