Performance Engineered Driveline Components

# 1963-72 Chevrolet Chevelle Hydraulic Clutch Conversion Kit

1) Remove all of the existing factory mechanical clutch linkage components. (Clutch rod, bell crank or Z bar) from under the dash and at the bell housing area.

Figure 1

Figure 2

2) Remove the brake master cylinder and booster assembly (if equipped). (*1) Carefully remove the brake lines from the master cylinder and mark them to be certain they are reinstalled into the correct ports. Brake lines may need to be rerouted if interference occurs. Only use proper steel brake lines when rerouting the brake lines.
3) Disassemble the pedals from the pedal box. Note the order of all parts (spacers, washers, nylon washers etc.) during disassembly. The pivot rod is part of the pedal and is secured in the pedal box with a spring clip. Remove the clip and slide the Pedal with pivot rod out of the box. Install the supplied McLeod pedal, then the brake pedal along with the above mentioned spacers and washers. Reinstall the spring clip. Both pedals should now be securely mounted and travel through their complete arc. Be sure to install the rubber pedal covers at this time. See Fig 3
4) Install the mounting plate. Assemble the McLeod master cylinder to the mounting plate with supplied screws and lock washers, passing the pushrod through the firewall. Reinstall the factory brake master cylinder onto the mounting bracket. Install washers and nuts. Tighten all four fasteners securely.
5) Assemble to the push rod with the rod end attached, to the new pedal with the supplied hardware in this order- bolt, flat washer, rod end on the end of the push rod, pedal, flat washer, lock washer and nut. Tighten nut securely. Remove the heavy pedal return spring from the pedal if using a *Diaphragm*

pressure plate. Swing the pedal through its range of motion to be certain there is no interference with any component including wires and or hoses. See Figure 3.

6) Mount the master cylinder reservoir in a convenient location above the master cylinder using the supplied screws. Connect the reservoir to the master cylinder with the red hose supplied in the kit. Secure the reservoir and hose with supplied clamps (3). See Figure 2.

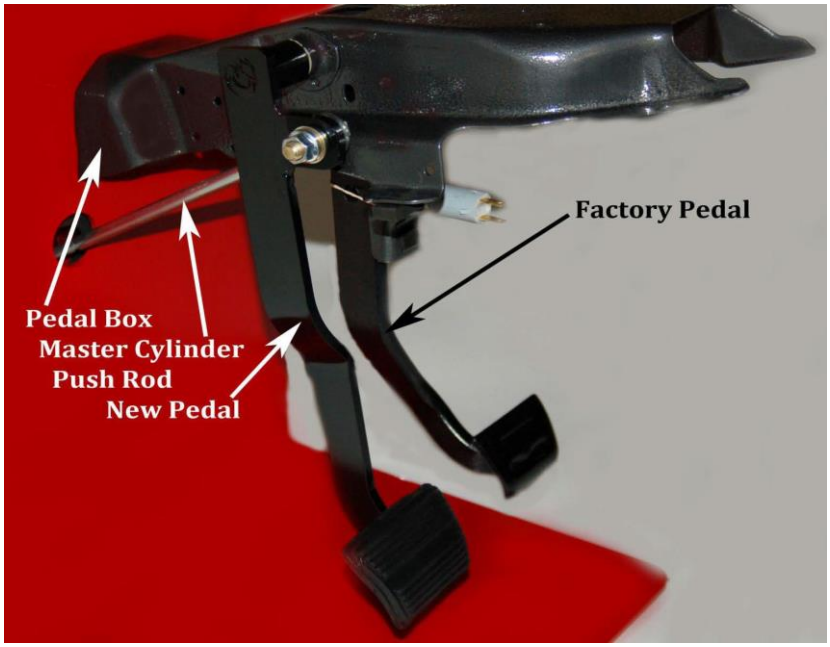



Figure 3

7) Fill the master cylinder reservoir with Dot 3 or 4 brake fluid (Do not use silicone (dot 5) brake fluid!). Before connecting the bottom of the AN4 line to the slave cylinder, bench bleed master cylinder, by returning the open end of the pressure line into the reservoir and stroke the pedal a few times, until no more bubbles appear, to bleed the upper system. Connect the McLeod master cylinder to the slave cylinder with the supplied AN4 line. Now you are ready to bleed the system. (Bleeding instructions to follow at the end of installation)

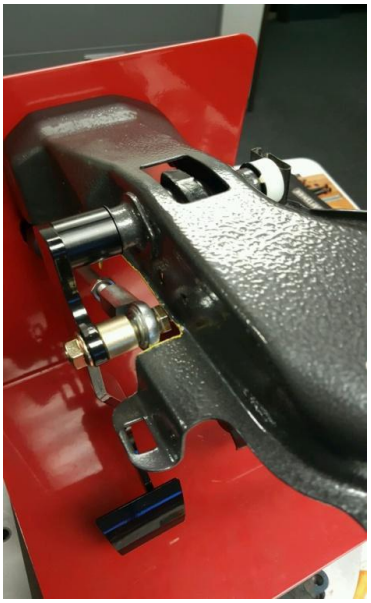
8) Adjustments to the pedal height can be made at the rod end attached to the bracket on the Clutch pedal. The pedal must travel the full range of motion to allow full clutch release before the pedal contacts the floor. The push rod must not bottom out into the clutch master cylinder. Be certain to tighten the rod end jam nut when adjustment is complete.

9) Re-install the brake lines to the brake master cylinder and pump the brake pedal 5-6 times fast and release the pedal. Do this procedure several times until pedal is solid. This will rebound the air bubble back to the master cylinder. If this doesn't work for you, you'll need to bleed the complete brakes system.

.

## 1968 & Up Chevelle Kit Update

On 1968 and up Chevelles, you will need the shorter spacer on the pedal shaft to better align the master cylinder with the clutch pedal and modify the pedal box as shown in yellow. By using the shorter spacer, the shaft will now protrude thru the other end of the pedal box about 3/8". We have included a 3/8" nylon spacer to take up that space. Refer to the photo below to see the proper position of spacers.



# How To Bleed A Hydraulic Bearing

When bleeding your hydraulic bearing, you want to first make sure your master cylinder has been bench bled. This will ensure that you don't have air trapped.

Now you're ready to bleed the bearing. Get a clear drinking cup or plastic water bottle with the top 1/3 cut off. Fill the bottle ½ full with brake fluid. Use DOT 3 or DOT4 brake fluid. **DO NOT USE SILICONE BASED FLUID or DOT 5 FLUID!!** Open the bleeder valve 2 or 3 turns and completely submerge the valve and fitting into the brake fluid. (*DO NOT use an extension hose to reach the bottle. Air will enter around the threads of the valve*). Now have someone push the pedal completely down to the floor quickly, pause for a bit, then release the pedal slowly back up and wait 5 seconds to replenish the fluid. (*As you push the pedal, air bubbles will escape and as the pedal is released, it will suck brake fluid back into the bearing.)* Repeat this until you no longer see bubbles. Now with your index finger and thumb reach into the bottle, while keeping the fitting submerged, and tighten the valve. Remove the bleeder valve from the bottle and finish tightening the valve with a wrench.

For an instructional video for this procedure, please visit the Tech Support section of our website (http://www.mcleodracing.com/content/tech-center/tips-instructions/how-to-videos/).

# Limited Warranty

McLeod Racing LLC, products are warranted to be free from defects in material and workmanship for the period of ninety (90) days, from the date of purchase. McLeod does not warrant or make any representations concerning its products when not installed and/or used strictly in accordance with the manufacturer's instructions for such; installation and operation, and in accordance with good installation and maintenance practices of the automotive industry. Products purchased used do not carry a warranty. This warranty is to the original purchaser and is non-transferable.

McLeod Racing LLC will not be held liable for the labor charges and other intangible or consequent losses that might be claimed as a result of the failure of any part, nor shall it be liable for damages or injury to persons or property resulting from the misuse or improper installation of any part subject to this warranty.

No merchandise may be returned for any reason unless prior return merchandise authorization number (RMA) has been obtained from McLeod. An RMA number may be obtained via ww.mcleodracing.com or by calling McLeod directly.

McLeod Racing LLC reserves the right to examine all parts returned for warranty claim to determine whether or not any such part has failed because of a defect in material or workmanship. McLeod's obligation under this warranty shall be limited to repairing, replacing or crediting, at its option, any part found to be defective. All products returned to McLeod for warranty inspection must be prepaid by the customer under this warranty.

In a racing environment, the type of stress placed on automotive parts can vary dramatically by the type of use, driving style, track preparation, differing tire style and other variables that are out of McLeod's control. *For this reason, any parts used in a racing environment shall be void of any warranty either expressed or implied.*

There are no other warranties, either expressed or implied including, but not limited to, warranty of merchantability, and warranty of fitness for a particular purpose which extend beyond those set forth in the preceding paragraphs. This warranty shall be interpreted and applied in accordance with California law.

For any changes or updated versions of the warrant described above, please refer to www.mcleodracing.com before installation of product.