

**INSTALLATION INSTRUCTIONS FOR THE 37-41 CHRYSLER PRODUCTS DUAL MASTER CYLINDER
CONVERSION.**

PLEASE READ THESE INSTRUCTIONS COMPLETELY BEFORE ATTEMPTING INSTALLATION!

NOTE: Installation of this conversion requires removal of the original master cylinder mounting bracket which requires removal of the clutch pedal from the pedal pivot shaft. This may require removal of the brake and clutch pedal assembly from the chassis. In addition a new hole for filling the master cylinder will require unless filled from below. A remote fill master cylinder system, using a different style master cylinder is available at additional cost.

- 1) Prior to removing any components make sure that the brake pedal return spring is holding the brake pedal in the full up position. Remove the original master cylinder from the mounting bracket and remove the dust boot from the pushrod.
- 2) If the vehicle is equipped with an automatic transmission and the clutch pedal has been previously removed, go to Step 4.
- 3) Disconnect and remove the clutch pedal from the pedal pivot shaft. Follow Step 4 below and then re-install the clutch pedal if used.
- 4) Remove the two bolts attaching the original master cylinder mounting bracket to the chassis and slide the bracket off the end of the pedal pivot shaft.
- 5) Loosen the jam nut on the brake pedal pushrod eye bolt and remove the original master cylinder pushrod from the eye bolt. **DO NOT** remove the jam nut or the eye bolt.
- 6) Assemble the 3/8"-24 L/H thread male rod end and jam nut and install them into the hex adjuster supplied in the kit, remember L/H threads. Thread this assembly onto the original pushrod eye bolt from Step 5. Be sure that there is at least a 1/2" of thread engaged in both ends of the hex adjuster. Leave the jam nuts loose for now.
- 7) Assemble the bell crank mechanism as shown in Figure 1. Be sure that the lock bolt is installed from the **top down**. Install the nylon spacer onto the threaded end first, followed by the flat washer and then the locknut.
- 8) Attach the bell crank mechanism to the chassis using the two holes that previously mounted the original master cylinder mounting bracket. The assembly should be position lat against the top of the chassis. Note that the single 5/16" long spacer supplied in the kit is installed between the bracket and the chassis at the front mounting hole. Use the two 3/8"-16 bolts and lock washers supplied to attach the bracket, the longer of the two bolts in the front hole. Tighten the bolts.
- 9) Attach the rod end on the hex adjuster, (Step 6) to the bell crank assembly as shown in Figure 1 using one of the 3/8"-24 x 1 1/2" bolts and lock nuts supplied in the kit. Tighten the bolt, but leave the jam nuts loose. Thurn the hex adjuster as required to obtain the preferred lever position as shown in Figure 2. Remember the 1/2" of thread engagement.

NOTE: The master cylinder attaches to the rear side of the frame brace that connects the inner and outer frame rails in the area to the left of the pedal assembly mount. Note that there are three existing holes in the cross brace that surround the large center hole. These holes will be used to

- attach the master cylinder mounting plate to the brace. If there are any components going through any of these holes they must be moved.
- 10) Trial fit the master cylinder mounting plate to the rear side of the brace to be sure the holes align correctly. The plate will only fit one way, and when correctly installed the master cylinder mounting holes, (slots) will be horizontal. The brace is a massed produced item so the holes may not align perfectly. Run a 3/8" drill through the holes if required. Remove the plate.
 - 11) Attach the master cylinder to the **rear** side of the mounting plate using the two 3/8"-24 x 1 1/4" bolts and lock nuts provided. The heads of the bolts must be on the **front** side of the plate. Center the master cylinder hub in the hole in the plate. Snug the bolts for now in case it needs to be moved for correct pushrod alignment in Step 14.
 - 12) Attach the master cylinder and mounting plate assembly to frame brace using the three 3/8"-24 x 1 1/4" bolts and locknuts provided. You may want to use regular hex nuts for now since the assembly will have to be removed later on the bench bleed the master cylinder. Note that the three 3/8" long spacers provided fit **between** the mounting plate and the frame brace to provide clearance for the heads of the master cylinder mounting bolts.
 - 13) Thread the 3/8"-24 R/H jam nut and 3/8" female rod end onto the master cylinder pushrod. Remember the 1/2" of thread engagement. Install the master cylinder boot onto the pushrod. Leave the jam nut loose for now.
 - 14) Make sure the brake pedal is still in the full up position. Insert the end of the pushrod into the hole in the master cylinder piston and attach the rod end to the lever on the bell crank assembly using the remaining 3/8"-24 x 1 1/2" in bolt and locknut. The pushrod should go straight into the piston without touching the sides of the hole; adjust the master cylinder as required. Insert a 9/16" open end wrench between the master cylinder adapter plate and the chassis brace and tighten the master cylinder mounting bolts.
 - 15) Adjust the length of the master cylinder pushrod so there is approximately 1/16" of pushrod free travel before it contacts the master cylinder piston at the bottom of the hole. Tighten the three jam nuts. Do not install the boot at this time.
 - 16) Depress the brake pedal and check that everything operates smoothly without binding. Make sure that the master cylinder bottoms out before the brake pedal hits floor. **THIS IS VERY IMPORTANT.** Adjust the linkage as required.
 - 17) Plumb the master cylinder and brake system as required. Remember the **LARGER** of the two outlet fittings feeds the REAR brakes. If you use adapters at the master cylinder outlet ports make sure they seat on the seat in the port, NOT on the threads or the casting.
 - 18) Remove the master cylinder and mounting plate assembly and bench bleed the master cylinder. Re-install the assembly using the locknuts supplied. Tighten the bolts and install the boot. Check that all fasteners are tight.
 - 19) Connect the brake lines to the master cylinder, bleed the system and re-fill the reservoirs. Do not fill to the top, leave about 1/4" for expansion.

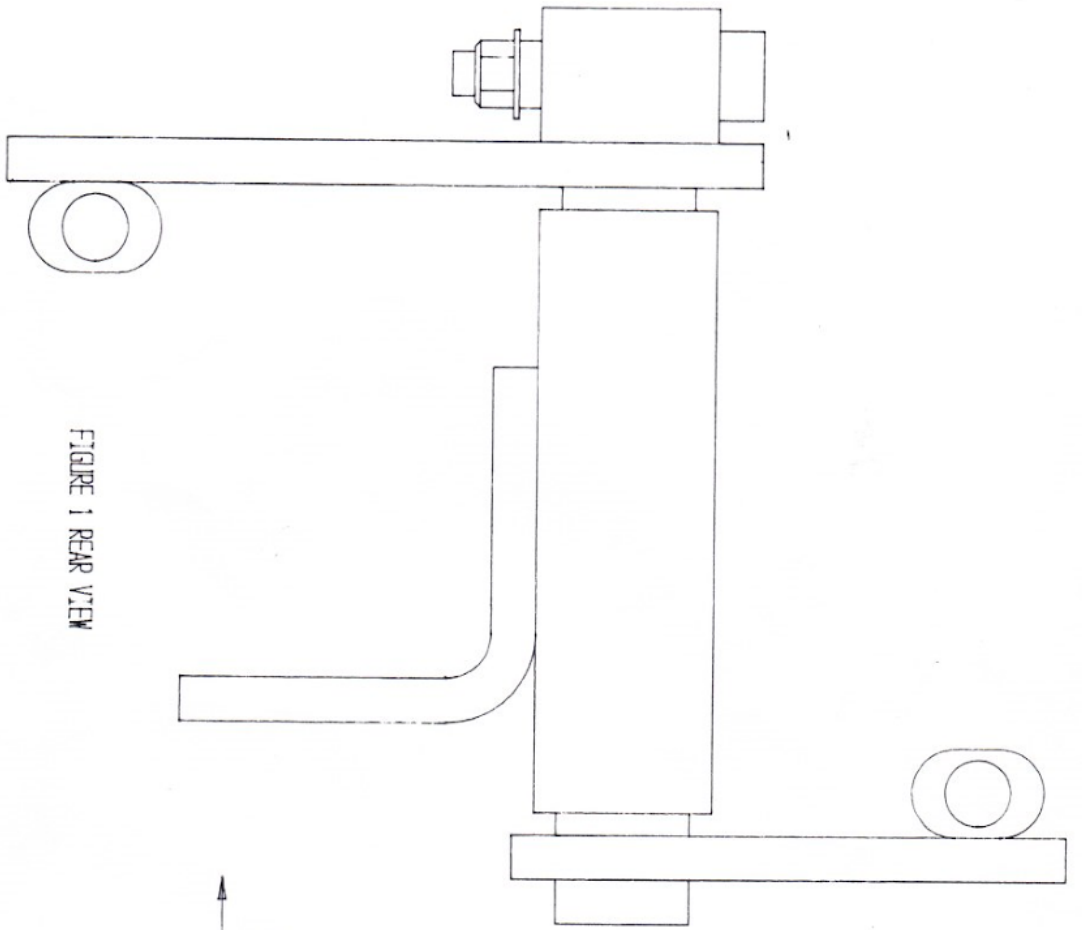


FIGURE 1 REAR VIEW

FRONT OF CAR
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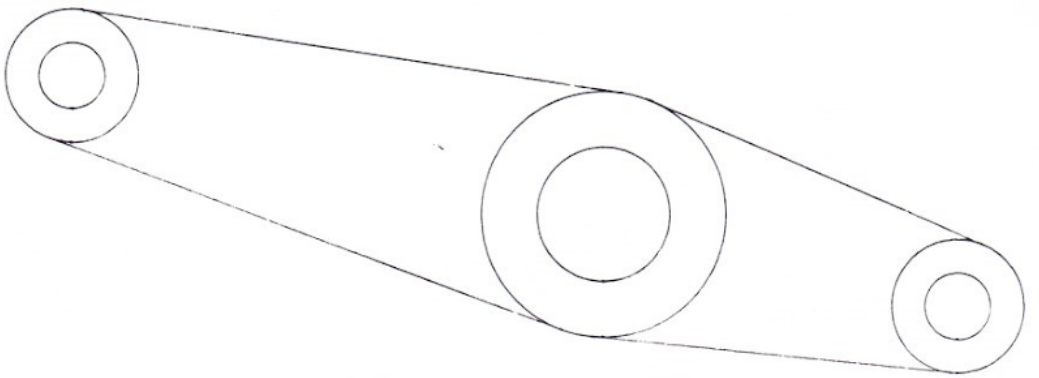


FIGURE 2 L/H SIDE

