

YOU CAN DO IT EASY UPGRADES

by Randy Irwin

1955-57 HYDRAULIC CLUTCH SYSTEM ARM UPDATE



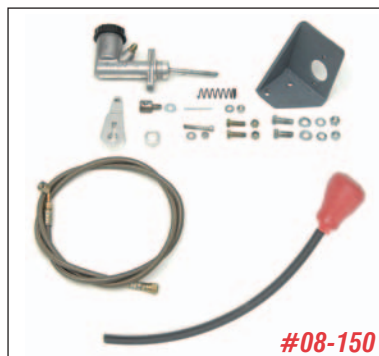
Randy Irwin - Technical Writer

Randy has been involved in the Chevy parts business for over 25 years. He is a wizard at creating, making and modifying custom parts for Chevys.

Not everything on your 1955-57 is still within factory tolerances after 50 years. When installing the aluminum clutch master cylinder arm for the new hydraulic system, the clutch pedal shaft must be in pretty good shape; many times it is not. The first design aluminum arm for the hydraulic clutch system considered that the shaft was "as new". The shaft has a bolt that uses the flat on the clutch shaft to keep the arm from rotating when the pedal is depressed. If either the shaft or the flat are in poor shape, the arm will move on the shaft and the clutch master cylinder will not operate properly. The anchoring design of the new clutch arm has been changed so that it can be used on a shaft that is in perfect shape or one that is not so perfect!



#08-500



#08-150

Parts List:

- 08-500 Hydraulic Clutch System (Muncie)
- 08-501 Hydraulic Clutch System (Saginaw)
- 08-502 Hydraulic Clutch System (T-10 & Richmond)
- 08-503 Hydraulic Clutch System (T-5)
- 08-505 Hydraulic Clutch System (Tremec)
- 08-150 Hydraulic Master Cylinder Kit

Tools Needed:

Drill & 3/16" Drill Bit

Time Frame:

4 hours



1a



1b

Photos 1a & 1b: The original clutch linkage arm for the mechanical clutch linkage was held to the clutch pedal shaft with a squeeze bolt. The bolt passes over a flat in the clutch pedal shaft and when tightened will squeeze the arm tight on the shaft.



2a



2b

Photos 2a & 2b: The clutch linkage arm is notorious for coming loose and rotating on the shaft. When this happens, it rounds out the flat on the

shaft and damages the splines on the arm. Here you can see where someone was so desperate to keep there arm in place they welded the arm to the shaft.

Photo 3: The aluminum clutch arm used in the first design hydraulic clutch system uses a through-bolt that passes over the flat of the shaft to lock the arm to the shaft. The flat must be in good condition to keep the arm from rotating and as you can see, that is not always true.



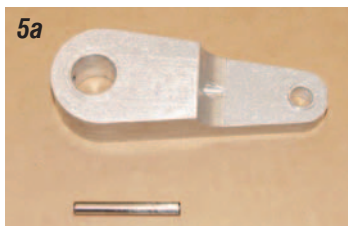
4a



4b

Photos 4a & 4b: With a bad flat on the shaft, the arm can rotate up to 10-degrees. With this much movement in the

arm, the pushrod from the clutch master cylinder to the arm cannot be adjusted properly.

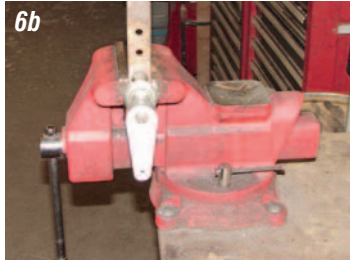
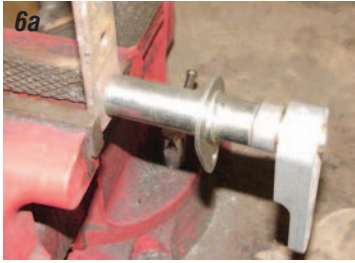


5a



5b

Photos 5a & 5b: The through-bolt on the aluminum clutch arm has now been replaced with a 3/16" dowel pin to lock the clutch arm to the shaft. A 3/16" hole will be drilled through the clutch pedal shaft and a 3/16" +.001" dowel pin is installed to anchor the arm to the clutch shaft.



Photos 6a & 6b: Install the clutch pedal pivot sleeve and the spacer that is supplied with the hydraulic clutch system onto the clutch shaft. Next, install the arm onto the clutch shaft. The clutch shaft will protrude through the arm about 1/16". The arm installs so it is parallel with the clutch pedal arm.



Photos 7a & 7b: The arm can be used as a guide to drill the required 3/16" hole. With the clutch arm in place, drill a 3/16" hole all the way through the clutch shaft.



Photos 8a & 8b: The 3/16" dowel pin is oversize by .001" for a tight fit. When installing the dowel pin for the final time, use a small amount of "RED" thread locker. The pin should be driven in flush with the bottom of the arm.



Photo 9: The 3/16" hole in the arm is drilled all the way through. If the dowel pin ever needs to be removed, a long punch can be used to drive the pin out from the top. Good Luck! 