



April 22, 2026

Technical Service Bulletin – 55

Mustang DHR Clutch Slave Cylinder Spacer Shims

Purpose: Provide robust slave cylinder function.

Action: Adding **(2) FR-7505-DHR Spacer Shims** and replacing clutch slave cylinder bolts with **(2) 45-20630 M6x1.0x30 Class 10.9 Flange Bolts**.

New Components Required:



Figure 1 - (Qty 2) - 45-20630 - M6x1.0x30 Class 10.9 Flange Bolt



Figure 2 - (Qty 2) - FR-7505-DHR - Spacer Shims

Removal Process:

1. Remove the transmission (*refer to Ford 308-03A Manual Transmission – 6-Speed Manual Transmission – 3160, Removal*).
2. Remove the clutch slave cylinder bolts. Pull the clutch slave cylinder outward and release the tube from the retaining clip.



3. Inspect the clutch slave cylinder for a damaged boot, leaking fluid or a worn or damaged release bearing or other visual concerns. Rotate the release bearing while applying pressure. If the bearing rotation is rough or any other issues are noted, install a new clutch slave cylinder.

Installation Process:

1. Adjust the clutch slave cylinder hardline away from the mounting flange of the clutch slave cylinder approximately .200" to accommodate the additional offset induced by the shims. See Figure 3 below:



Figure 3 - Hardline Tweak



Figure 4 - Slave Cylinder Stack

2. Install the first **FR-7505-DHR shim** around the input shaft with the tab facing the lower left passenger side.
3. Install the slave cylinder spacer onto the transmission while maintaining the shim tab orientation. The shim will fit inside of the slave cylinder spacer while locating onto the transmission register. See [Figure 5](#) below:

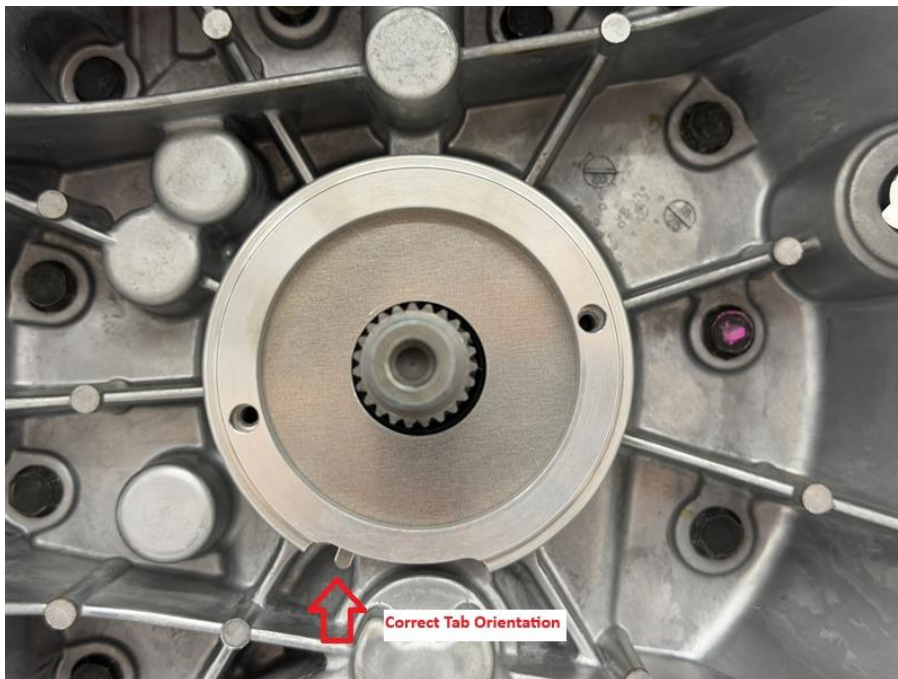


Figure 5 - Slave Spacer Tab Orientation



RACING

4. Install the second **FR-7505-DHR shim** around the input shaft in front of the slave cylinder spacer with the tab facing the lower left passenger side. The tabs will be oriented such that the front tab will be to the left of the back tab of the first shim. See *Figure 6* below:

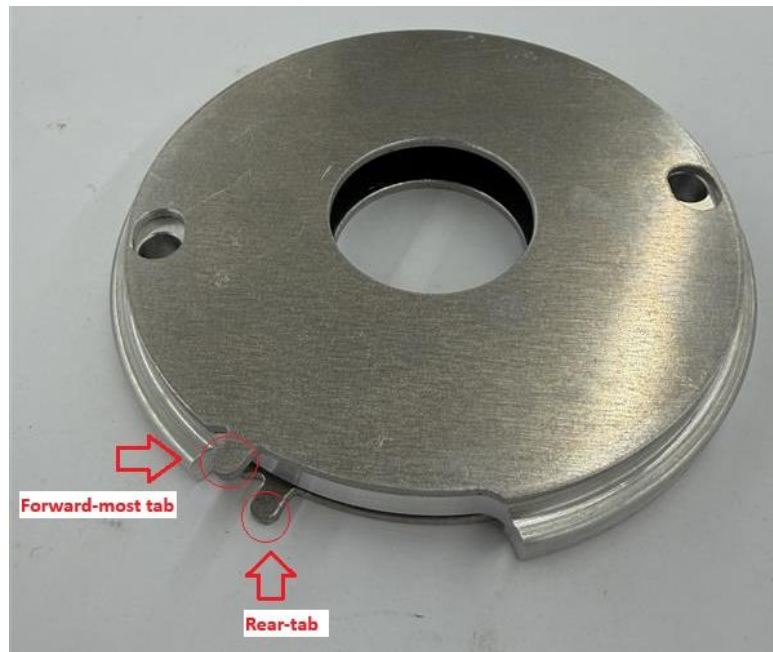


Figure 6 - Tab Orientation

5. Position the clutch slave cylinder on the transmission, inserting the adjusted quick connection hardline through the transmission retaining clip. Install the new **45-20630 M6 slave cylinder bolts** with blue Loctite 242 so the bolts are hand-tight.
6. Verify the correct orientation of the clutch slave cylinder by checking the positioning of the **FR-7505-DHR shim tabs** and verifying that the clutch slave cylinder sits on the transmission register correctly. Both tabs should be visible, with the left-most tab being the second installed shim. The clutch slave cylinder will sit flat to the transmission housing and stay centered (concentric) to the input shaft. See *Figure 7* below:

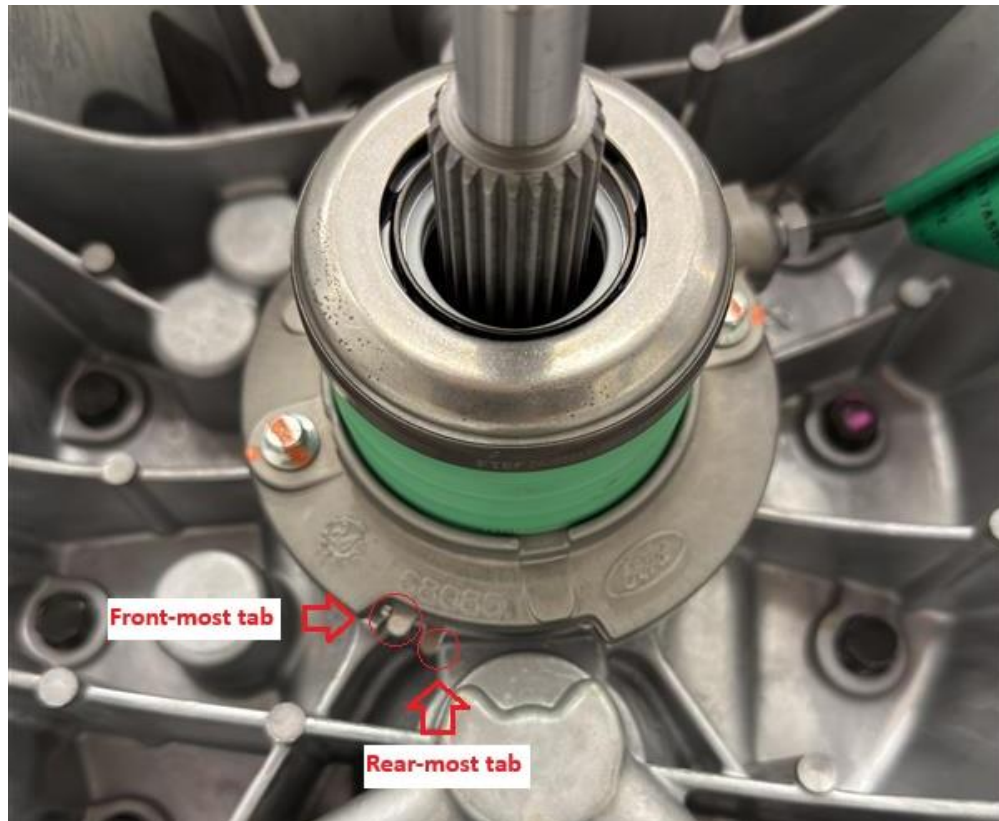


Figure 7 - Installed Slave Cylinder with correct tab orientation

7. Verify the clutch line quick-connect protrudes out of the transmission and that the plastic adapter can be installed with the retaining clip. If the adapter does not seat correctly, remove the slave cylinder and repeat Step 1. See Figure 8 below:



Figure 8 - Clutch Quick Connect Verification



8. Final torque the new **45-20630 M6 slave cylinder bolts** to **97 in-lbs (11 Nm)**
9. Install the transmission (*refer to Ford 308-03A Manual Transmission – 6-Speed Manual Transmission – 3160, Installation*)

TSB Complete