



# HYDRAULIC STREET RELEASE BEARING

## INSTALLATION INSTRUCTIONS

Thank you for purchasing a Quarter Master release bearing. Please take a few minutes to read through these instructions before you install your new Quarter Master Hydraulic Street Release Bearing.

### CAUTIONS:

- WEAR EYE PROTECTION!
- DO NOT USE DOT 5 SILICONE BRAKE FLUID. DOT 5 brake fluid will damage the o-rings.
- DO NOT OVER-EXTEND THE PISTON. Maximum travel is .625".
- DO NOT WASH SEALS WITH SOLVENT. Solvent may damage the seals. Use isopropyl alcohol or soap and water.

### MOUNTING:

- The release bearing is designed to operate with a master cylinder 5/8" to 15/16" piston size.
  - The release clearance (with the piston completely compressed) should be between .18" and .25".
  - Bench bleed the master cylinder if possible (see the Bleeding section).
1. Select the correct anti-spin stud for your transmission, either 3/8-16 or 5/16-18, both of which are included in the hardware kit.
  2. Replace the 7 o'clock position (when facing the front of the transmission) bolt with the stud.
  3. Place the release bearing over the transmission snout and measure from the face of the bearing to the transmission face. Record that number as Overall Bearing Height.
  4. Bolt the bellhousing to the engine.
  5. Using a straight edge, measure the distance from the diaphragm fingers to the face of the bellhousing. Record that number as Set-up Depth.
  6. Subtract Overall Bearing Height from Set-up Depth and record that number as Shim Stack Height.
  7. Using a combination of shims to get as close to the Shim Stack Height as possible without going over, place the shims over the bearing retainer snout and slide your hydraulic release bearing into place, being careful to insure that the drive lug engages the anti-spin stud.
  8. Remove the bellhousing and install it on the transmission.
  9. Install the release bearing on the bearing retainer, making sure to place the recess (located on the backside of the main body) over the ball stud.
  10. Install the bellhousing and transmission assembly on the engine.
  11. After installing your release bearing, double check your working clearance and inspect the ball stud to insure it is not keeping the release bearing up off the bolt heads.
  12. Install the master cylinder, refer to Tables 2 & 3 for sizing recommendations.

### BLEEDING:

- Use either DOT 3 or DOT 4 compatible brake fluid.
  - Make sure that the master cylinder reservoir remains full of brake fluid during the bleeding operation.
  - The maximum master cylinder stroke is 1.0".
1. Attach hydraulic lines.
  2. Fill the reservoir with brake fluid.
  3. Bleed the master cylinder and the release bearing to ensure no air is in the lines.

**PEDAL STOP:**

- Install a pedal stop to prevent over-stroking the clutch.
  - The best place for a pedal stop is at the pedal face.
1. Install a rigid pedal stop to allow near full stroke of the pedal.
  2. Slowly apply pressure to the pedal while applying a torque to the clutch, typically by trying to rotate the driveshaft.
  3. Set the pedal stop near the point where the release is felt.
  4. Adjust the pedal stop to allow approximately 1/4” more of pedal travel at the pedal face past the initial release point.

**MAINTENANCE:**

1. Check your working clearance and adjust as necessary. As the clutch wears, you will have to decrease the amount of shims as the spring fingers come up.

**REPLACEMENT PARTS:**

- Bearing is Q.M.I. P/N 106033.
- Seal Rebuild Kit is Q.M.I. P/N 721101, which includes small and large o-ring seals, retainer o-ring seal, and AN fitting seals.

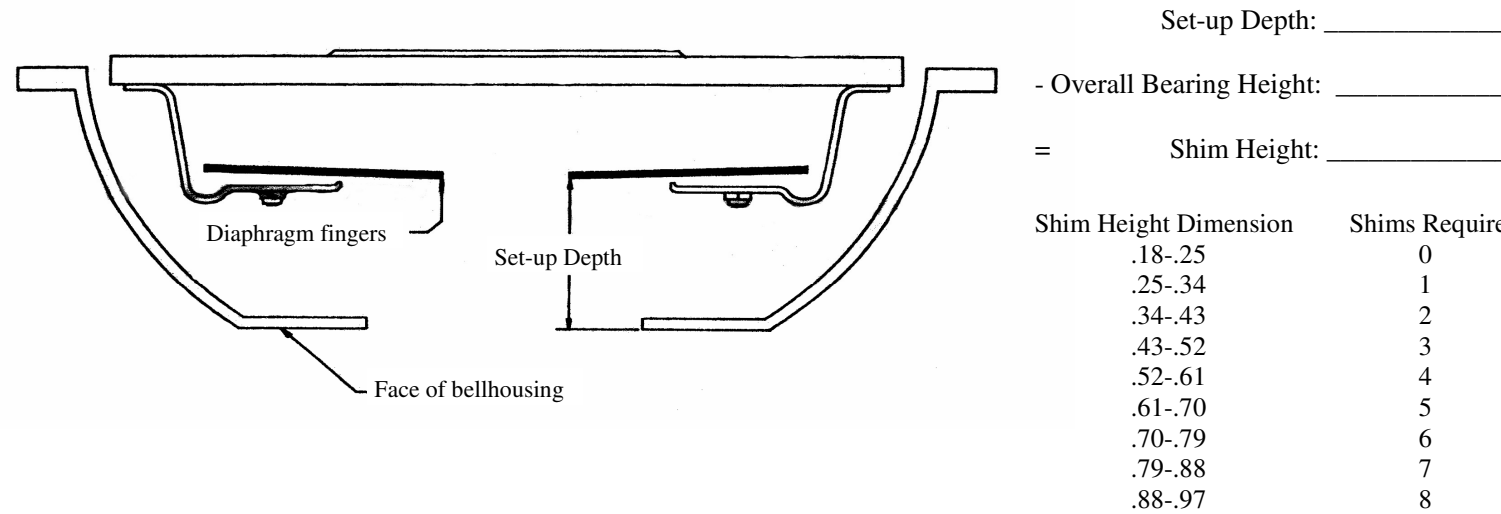


Table 1: Piston and Bearing Dimensions

Part Number Assembly / Bearing	Piston & Bearing Length	Overall Bearing Height*	Bearing Height
721100 / 106033	2.005"	"	2.040"

Table 1: Typical Release Bearing Travel

Quarter Master Clutches	Bearing Travel
4.5" Clutches	.120"
5.5" Clutches	.150"
7.25" Clutches	.140"
8.5" Clutches	.180"

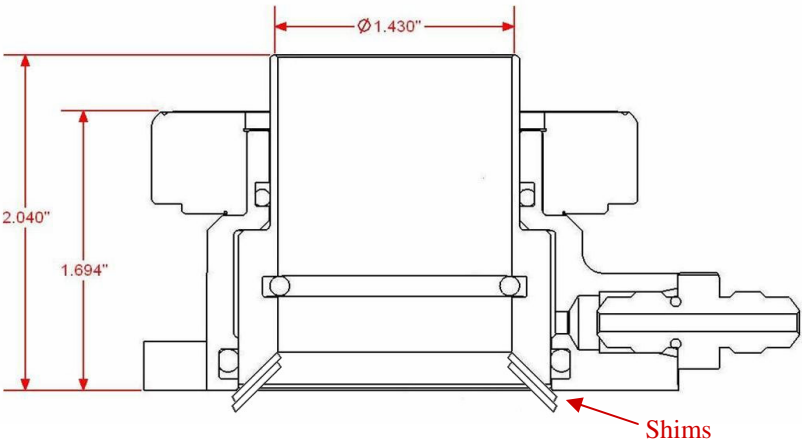


Figure 1: Side view of Street Bearing Assembly

Table 2: Equivalent Release Bearing Travel

Master Cylinder Size	Bearing Travel (assuming 1.0" of master stroke)
5/8"	.25"
7/10"	.31"
3/4" (19 mm)	.36"
13/16"	.42"
7/8"	.49"
15/16"	.56"