

## PROCEDURE TO TEST THE TRAVEL OF YOUR RAM HYDRAULIC RELEASE BEARING

If you are having difficulty getting your RAM hydraulic release bearing to operate properly with your clutch system, it may be necessary to test the actual travel that your master cylinder is providing to the bearing. RAM recommends a minimum  $\frac{3}{4}$ " bore master cylinder with a minimum of 1.1" of stroke to operate the bearing to approximately .500" of movement.

To test the bearing travel, slide the transmission back from the bellhousing or engine, slide the bearing off the front of the collar or retainer tube while maintain the line connections. If it is necessary to disconnect the feed line, you will need to re-bleed the bearing prior to doing this test.

With the bearing assembly hanging under the car, manually push the bearing back on the inner sleeve until it is full retracted.

Measure how far out the rear of the bearing housing the piston is protruding. This may be flush on some models, or protruding on others at the fully compressed position.



**Bearing retracted**



**Bearing extended**

Now have an assistant stroke the clutch pedal one full push.

Measure how far the piston pushes out the rear of the housing. The difference of these two measurements is the amount of travel you are getting from your master cylinder.

IF THE TRAVEL IS NOT AT **LEAST** .450"

- Your bleed may not be complete and there could be air still in the system

You can re-bleed the bearing in this hanging position by manually retracting the bearing and having an assistant work the clutch pedal to make sure this is not the issue. Also make sure you have the bleeder line on the uppermost fitting in the hydraulic bearing when it is in the same clock position as installed on the transmission as this allows for the easiest bleeding.

- Your master cylinder may not be of sufficient size, stroke, or volume to operate the bearing

Check to make sure your master cylinder is of sufficient size. Inspect to see if the push rod is adjustable and if it is possible to increase the stroke length, which would in turn move more fluid.

If you are still having problems after performing these tests, use the E-Tech form located at <http://ramclutches.com/hydraulic-bearing-troubleshooting-form> to provide us with further details.