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INSTALLATION INSTRUCTIONS FOR PN: 82870 HOWE HYDRAULIC THROW-OUT BEARING FOR STOCK CLUTCHES

Part Number 82870 includes:

- | | | |
|--------------------------|-------------------------|--------------------|
| 1 - 33745 Bleeder | 1 - 82873 Shim Kit | 1 - 82872 Bearing |
| 1 - 82874 5/16" -18 Stud | 1 - 82875 3/8" -16 Stud | 1 - Hydraulic Unit |

Accessories:

- | | | |
|---------------------------|--------------------------|---------------------------------|
| 8287 - Remote Bleeder Kit | 8290 - Hydraulic Coupler | 828715 - Replacement O-ring Kit |
|---------------------------|--------------------------|---------------------------------|

WARNING!

- Use this throw-out bearing with a stock clutch only, a racing clutch will cause damage.
- Never use petroleum or mineral base fluids; only DOT 3 or equivalent non-silicone brake fluid.

1. Facing the transmission, replace the bearing retainer bolt in the 2 o'clock position with the 5/16" or 3/8" stud.
2. Install the throw-out bearing over the bearing retainer shaft making sure the newly installed stud is between the two fittings of the throw-out bearing. The bleeder fitting should rest against the stud which will allow the inlet fitting proper orientation with the clutch fork hole in the bell housing.
3. Assemble your flywheel and clutch on the crank and bolt on the bell housing.
4. Measure the distance from the bell-housing surface to the clutch fingers and write it down. Now measure from the face of the transmission to the front of the bearing. Install the necessary amount of the supplied shims until the two dimensions are equal. Each shim is .050" thick.
5. Attach a #4 flexible line to the inlet fitting.
6. Install the transmission and throw-out bearing assembly. If done properly, there should be zero clearance or slight pre-load between the bearing and the clutch fingers.
7. Bleed the system thoroughly, making sure that if there is a high spot between the bearing and master cylinder that the air is bled from the high spot.
8. Howe 82870 throw-out bearings are known to fit Saginaw 3-speed, Muncie 4-speed, T-10 and Jerico 2 & 4-speed transmissions. It will not fit T-5 transmissions (Howe PN: 82876 fits many models of the T-5 transmission with the exception of Ford versions) and will not work with a RAM coupler. The Howe bearing will work with all OEM and OEM replacement clutches. The throw-out bearing may fit other transmissions if there is adequate room between the transmission and the clutch. The throw-out bearing must also fit over the diameter of the transmission bearing retainer shaft. Refer to the critical dimensions in the drawing below. *Note: 1-3/8" is the maximum stroke of a girling type master cylinder, see table above to determine how much throw your master cylinder will provide with the throw-out bearing.*

Stroke @ Master	MASTER CYLINDER		
	3/4	7/8	1
	TRAVEL @ CLUTCH		
1/2"	.21	.44	.57
1"	.43	.58	.688*
1-3/8"	.59	.688*	.688*

*Maximum stroke of unit.

