

Limora Zentrallager

Industriepark Nord 21
 D - 53567 Buchholz
 Tel: +49 (0) 26 83 - 97 99 0
 E-Mail: Limora@Limora.com
 Internet: www.Limora.com

Filialen:

- Aachen • Berlin • Bielefeld
- Düsseldorf • Hamburg
- Köln • Stuttgart

Instructions

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:

- This release bearing does not require shims or adjustments.
- The release clearance (with the piston completely compressed) should be between .100" and .250". Refer to your clutch instructions for specific information.
- Bench bleed the master cylinder if possible (see the Bleeding section).

1. Check the clearance between the bearing retainer bolts and the legs of the release bearing.
2. Check the release bearing clearance. If the clearance is not within the limits, contact your local Quarter Master distributor for a longer or shorter replacement piston. Refer to Figure 1 and Table 3.
3. Install the release bearing in the bellhousing using the (3) #10-24 x 5/8 flathead screws provided.
4. Install the bellhousing and transmission.
5. Install the master cylinder, refer to Tables 1 & 2 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 stroke of most racing master cylinders is about 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 underneath the pedal pad.

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:

- Parts can be lubed with brake fluid or water soluble rubber grease. DO NOT USE PETROLEUM GREASE, LITHIUM GREASE OR MINERAL SPIRITS.
- All rebuild parts are available separately.

1. Check the bearing by spinning it by hand. It should spin smoothly.
2. Check the fittings for leaks.
3. Check for leaks around the piston.
4. Remove the piston and check for dirt, debris or burrs.



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- Seal Rebuild Kit is Q.M.I. P/N 730101, which includes the major seal, wiper seal and AN fitting seals.

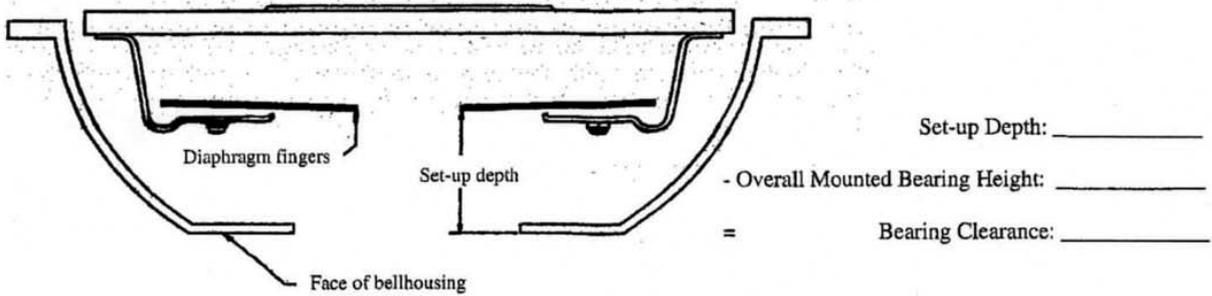


Figure 1: Set-up Depth Measurement

Table 1: Typical Release Travel

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

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"

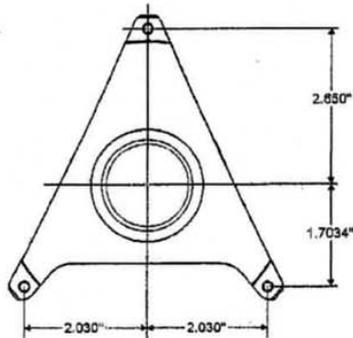


Figure 2: Bolt pattern of the Tri-Lite assembly

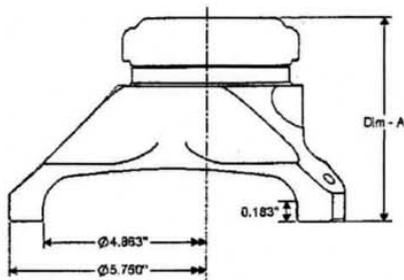


Figure 3: Side-view of Tri-Lite assembly

Table 3: Piston and Bearing Dimensions

Part Number Assy / Piston & Brg	Piston & Bearing Length	Dimension -A-
730165 / 731165	1.650"	2.800"
730175 / 731175	1.750"	2.900"
730185 / 731185	1.850"	3.000"
730195 / 731195	1.950"	3.100"
730200 / 731200	2.000"	3.150"
730205 / 731205	2.050"	3.200"
730215 / 731215	2.150"	3.300"
730220 / 731220	2.200"	3.350"
730225 / 731225	2.250"	3.400"
730235 / 731235	2.350"	3.500"
730245 / 731245	2.450"	3.600"
730255 / 731255	2.550"	3.700"
730265 / 731265	2.650"	3.800"
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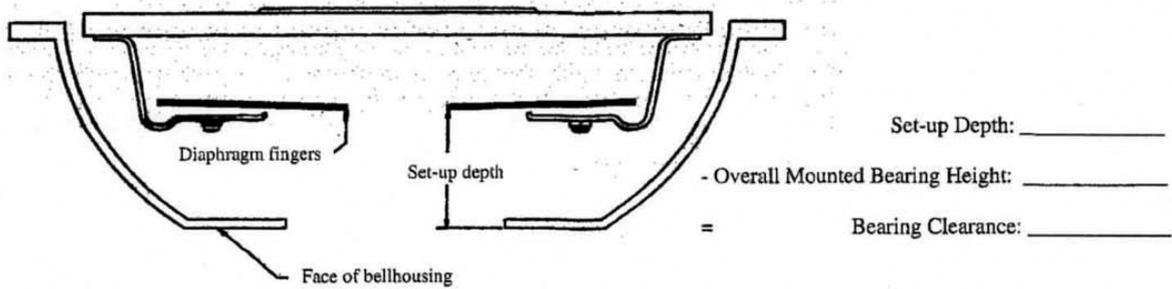


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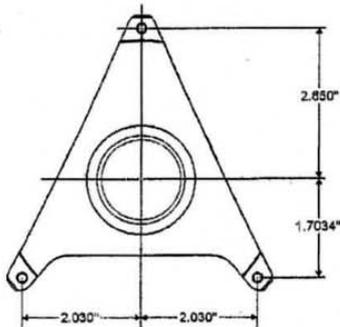


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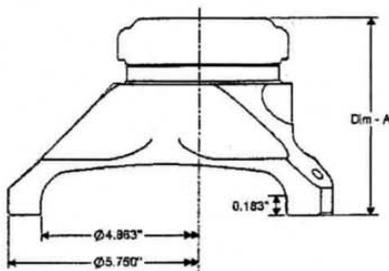


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INSTALLATION INSTRUCTIONS

SAFETY PERCAUTIONS:

- WEAR APPROPRIATE PROTECTION! Dust masks and eye protection should be used when disassembling and cleaning clutch and components, especially if using compressed air.

NOTES:

- Pro Series Clutch Packs should be assembled on the flywheel with the housing already placed on the flywheel.
- V-Drive, Extreme-V and Optimum-V Clutch Packs should be assembled in the cover, and then placed on the flywheel.
- Some 7.25 V-Drive clutches have a two-piece pressure plate, where an aluminum pressure plate mates with a floater plate. If this is the case, assemble the two pieces before placing the pressure plate assembly into the cover.
- Always support the transmission during installation.
- The friction discs always alternate with the pressure/floater plates. Refer to Figures 7 & 8.
- Hub combinations other than those shown here can be used, be sure that the hubs DO NOT contact anything other than the input shaft. Damage or accelerated wear may result from unintended contact.

THINGS TO CHECK BEFORE YOU BEGIN:

- Inspect the input shaft splines of your transmission for any signs of twisting, damage or other deformation which can cause release or engagement problems.
- Make sure that the clutch disc splines are the same as the input shaft splines, then check that the clutch disc(s) slides all the way on the input shaft without binding. The disc(s) should slide easily but still have a snug fit. DO NOT USE ANTI-SEIZE OR ANY OTHER TYPE OF LUBRICANTS ON THE SPLINES OF THE INPUT SHAFT.
- Ensure that all mating surfaces are free from burrs gouges etc.
- Make sure that the pilot bearing is new or in good condition.
- Check that the transmission mounting face of the bellhousing is parallel to the crankshaft face within .006" total indicated run-out.
 Clean block mounting surface, making sure that it is free from nicks, burrs, paint, etc. If the measurement is not within specification, have your bellhousing machined flat to bring the mounting surfaces back to parallel.

- The transmission mounting hole of the bellhousing should be concentric to the crankshaft within .006" total indicated run-out. The closer, the better. If the measurement is not within specification, you will need to relocate the dowel pins in the engine block.

CAUTIONS:

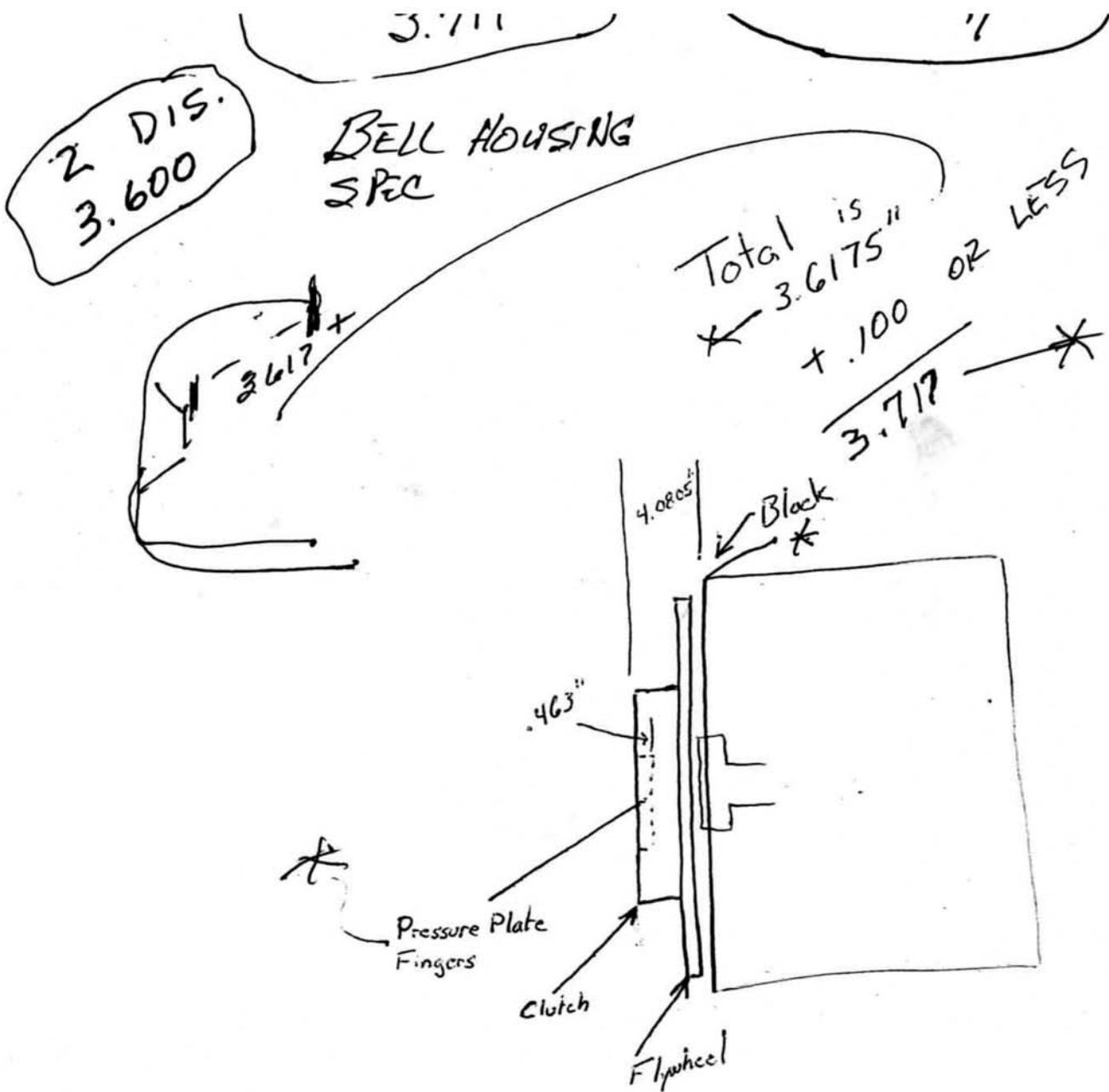
- Do not bend the discs. Inspect the discs with a straight-edge and a feeler gage to ensure that the discs are flat.
- Do not modify clutch discs, hubs or rivets.
- Clutch discs should only be used with clean, flat steel surfaces (flywheel, pressure plate, floater plates).
- Use an alignment tool to make sure that the discs are centered and aligned. You can also use a spare input shaft.
- The transmission must slide in and must NOT be drawn in by tightening the bolts.
- Ensure full spline engagement by measuring before the transmission installation.
- If your hubs or discs are cracked, please contact your local Quarter Master distributor.
- For any other problems contact Quarter Master.

MAINTENANCE:

- The TOTAL MAXIMUM Clutch Pack wear is .030". TOTAL WEAR INCLUDES DISCS, FLYWHEEL, PRESSURE PLATE AND FLOATER PLATES. Refer to Table I for a guideline of specifications on disc thickness and thicknesses of discs when new.
- Check the pressure plate, floater plates and clutch discs for flatness with a straight edge and a feeler gauge. Replace any part that is more than .006" out of flat on the wear surface.
- Check for signs of excessive heat. Look for discolorations of the pressure plate and floater plates. If the diaphragm springs remain flat or are loose when the clutch is removed, the unit has been overheated. Contact Quarter Master for refurbishment if the clutch has been overheated.
- Clean all clutch components with brake cleaner and blow dust out of the cover before reassembly. Take note of any assembly marks.

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HT. OF HOUSING
 3 DIS - 1.260
 2 DIS - 1.000