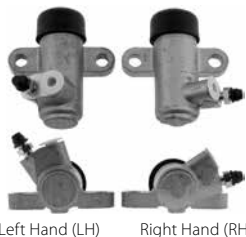
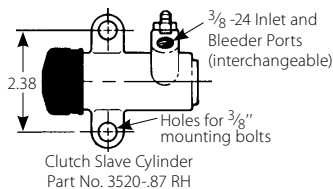


Clutch Slave Cylinders

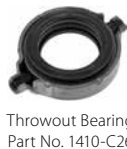
Girling External Clutch Slave Cylinders and Repair Kits



This Girling slave cylinder was original equipment on Hewland Mk-series gearboxes. We stock both right and left hand versions with the common .87 bore size. We also stock a right hand version of the less common .75 bore size. Choose the one that allows bleeding without removal, or, in the case of a vertically mounted unit, the one that provides the most direct hose routing. The port positions on the left and right versions are not mirror images of each other (see photo). The inlet and bleeder ports are interchangeable.

- Right hand - .75 inch bore (not a common size).....Part No. 3520-.75 RH . \$159.99
- Right hand - .87 inch bore, as illustrated.....Part No. 3520-.87 RH . \$134.99
- Left hand - .87 inch bore, as shown in photoPart No. 3520-.87 LH . \$134.99
- Slave Cylinder Repair Kit - .75 inch bore (not common).....Part No. 3521-.75..... \$23.99
- Slave Cylinder Repair Kit - .87 inch bore.....Part No. 3521-.87..... \$19.99

Clutch Release Bearing & Bobbins for External Slave Cylinders



These parts are used on the Mk-series gearboxes with an external slave cylinder such as the Girling units shown at left. Bobbins are available for Formula Ford 1600 with the stock Ford clutch, Formula Ford 1600 with the F3 or Tilton single-disc racing clutch, FF2000/S2000 with the stock Ford clutch, and FF2000/S2000 with the F3 or Tilton single-disc racing clutch. These bobbins are sized for use with the common 2 1/8" thick gearbox adapter plate. The hydraulic release bearings shown below do not use bobbins.

- Clutch Release (Throwout) Bearing, VW.....Part No. 1410-C26 \$49.99
- Retaining Clip for release bearing, 2 required.....Part No. 1410-C27 \$2.99
- FF Bobbin, stock Ford clutch, 1.30" long, 7/8" ID.....Part No. 1410-C28-1 ... \$169.99
- FF Bobbin, racing clutch, 1.94" long, 7/8" ID.....Part No. 1410-C28-2 .. \$169.99
- S2000 Bobbin, stock Ford clutch, 1.10" long, 1" ID.....Part No. 1410-C28-3 ... \$129.99
- S2000 Bobbin, racing clutch, 2.14" long, 1" ID.....Part No. 1410-C28-4 .. \$183.99
- Bushing for FF bobbin (use 1 for stock, 2 for racing clutch).....Part No. 1410-C44-1 \$4.99
- Bushing for S2000 bobbin, stock Ford clutch.....Part No. 1410-C44-3 \$5.99
- Bushing for S2000 bobbin, racing clutch.....Part No. 1410-C44-4 \$7.99

Hydraulic Release Bearings (Annular Slave Cylinders)

Annular Hydraulic Release Bearing Assembly for FF1600



This hydraulic release bearing is designed just for the Hewland/Webster Mk-series gearbox! We've seen the standard external slave and fork-type release mechanisms in Hewland transaxles lose as much as 50% of the input travel due to bending in the release mechanism. Now you can eliminate all lost motion. This unit is engineered to fit most Formula Ford 1600 cars with 7.25" racing clutches and the standard 2 1/8" thick transmission adapter ring without any fabrication. (Will not fit Lotus, Swift, Lola T440, or early Titan chassis.)

The adapter base bolts to the main case using three holes around the input shaft. Most Mk-series gearboxes already have these holes drilled and tapped - check your case before ordering. This kit includes the mounting adapter, annular hydraulic slave cylinder and all mounting hardware. A 4AN inlet adapter and a 3AN adapter for the bleeder port are also furnished. Inlet hose and remote bleed hoses are sold separately.

- Release Bearing Assembly for FF1600 w/ Mk 9.....Part No. 163-55..... \$439.99
- Bulkhead Mounted -3 Hose End with Bleeder Screw.....Part No. 3266-20..... \$28.99
- This hose end can be installed right on the bleeder hose. The 3/8"-24 male bulkhead mount keeps the hose safe and secure. Requires 3/8"-24 jam nut, sold separately.
- 3AN Bulkhead Mount for 3/8"-24 Bleed Screw.....Part No. 3266-25..... \$21.49
- If your bleeder hose already has a standard hose end, this fitting has a male 3AN thread for your hose and accepts a 3/8"-24 bleed screw. Bleed screw and jam nut sold separately.
- Replacement Bearing Only.....Part No. 163-61..... \$79.99
- Rebuild Seal Kit, includes base seal and piston seals.....Part No. 163-52..... \$26.99

Annular Hydraulic Release Bearing for '99 - '04 Van Diemen



The factory Van Diemen clutch release mechanism has caused a lot of headaches. In light of the difficulty in gaining service access, you'll appreciate the increased reliability of this kit which adapts the time-tested Tilton Annular Slave Cylinder to the 1999 thru 2004 Van Diemen chassis. The kit includes an aluminum base which replaces the stock release cylinder housing, supply hose, bleed hose, O-ring seals and illustrated installation instructions. Versions are available for the F2000 and FF1600 with most single-disc racing clutches, Tilton 5.5" single-disc clutch, and twin-plate clutches

- 44mm Release Bearing Assembly for Van Diemen F2000... Part No. 163-57 \$619.00
- 44mm Release Bearing Assembly for Van Diemen FF1600... Part No. 163-53 \$599.00
- 44mm fits most single-disc racing clutches, including QuarterMaster or AP 5.5" and most 7.25" racing clutches. F2000 with a twin-plate clutch should use the FF1600 version.
- 38mm Release Bearing Assembly for Van Diemen F2000... Part No. 163-58 \$569.00
- 38mm Release Bearing Assembly for Van Diemen FF1600... Part No. 163-54 \$569.00
- 38mm fits Tilton 5.5" single-disc racing clutches. F2000 with a Tilton 5.5" twin-plate clutch should use the FF1600 version.
- Replacement 44mm Contact Diameter Release Bearing.... Part No. TE 62-031 ... \$76.50
- Replacement 38mm Contact Diameter Release Bearing.... Part No. TE 62-008 .. \$72.25
- Rebuild Seal Kit for any of the above assemblies.....Part No. 163-51 \$34.00

Tilton Universal Annular Hydraulic Release Bearing Assembly

You must install a clutch pedal stop with any hydraulic release bearing! Overstroking the release will cause damage to the clutch and to the engine.



Many racing clutches require so much force to release that external clutch slave cylinders acting through a linkage require almost superhuman leg strength. Deflection in the linkage also wastes motion, in some cases enough to prevent the clutch from disengaging at all. Hydraulic release bearings eliminates all lost motion because the throwout bearing is mounted directly on the hydraulic piston. This results in the most positive and lightest release mechanism available. The better leverage also means that less pedal effort is generally required. This compact Tilton throwout bearing assembly is small enough to be adapted to almost any transmission or transaxle. Most applications require fabrication of an adapter plate. Maximum release travel is 0.70 inches. Minimum installed height is 3.00 inches. The bearing I.D. is 40mm and it has a radius-faced contact diameter of 52mm for Tilton and similar clutches with a 1 7/8" diaphragm spring hole. Remote bleed hardware and fittings are included.

- Compact Hydraulic Release Bearing (52mm contact dia.)..... Part No. TE 60-3000..... \$318.75
- Replacement Seal Kit for above Hydraulic Release Bearing..... Part No. 163-51..... \$34.00
- Replacement Release Bearing Only for above (52mm contact)..... Part No. 163-60..... \$55.25

Hydraulic Release Bearing Tester

Don't waste time installing your transaxle only to find out too late that your hydraulic release bearing is leaking! Check it first with our **Hydraulic Release Bearing Tester**. This universal tool has been tested to work on FT200, LD200, Mk-series, and Staffs gearboxes. A wide range of adjustments will allow it to fit many other applications. Simply bolt the crossbar to the front of your transmission and adjust the stop plate about 1/4" away from the release bearing using the supplied assortment of spacers. Connect your clutch hydraulic line, bleed the system, and apply moderate pressure to the clutch pedal while watching for leaks. This slick tool could pay for itself the first time you discover a leak before assembly. Black anodized aluminum, includes all necessary hardware.

Hint: This tool can also help find any lost motion in an external clutch slave application! With all parts in the linkage exposed, you will be able to see any flexing.

- Internal Hydraulic Clutch Release Bearing Tester.....Part No. 3094.... \$154.99

