Tolomatic™
EXCELLENCE IN MOTION

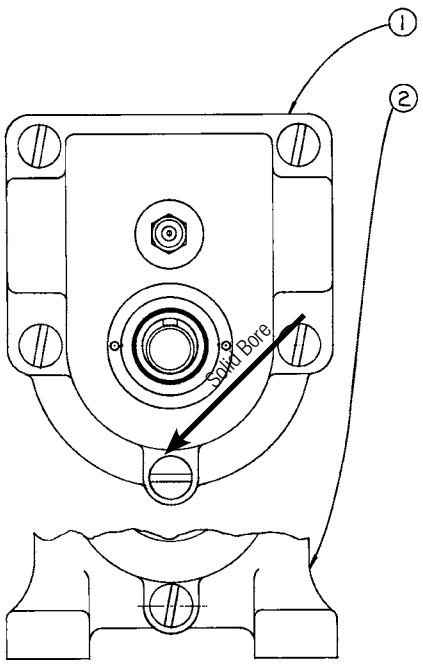
Parts Sheet

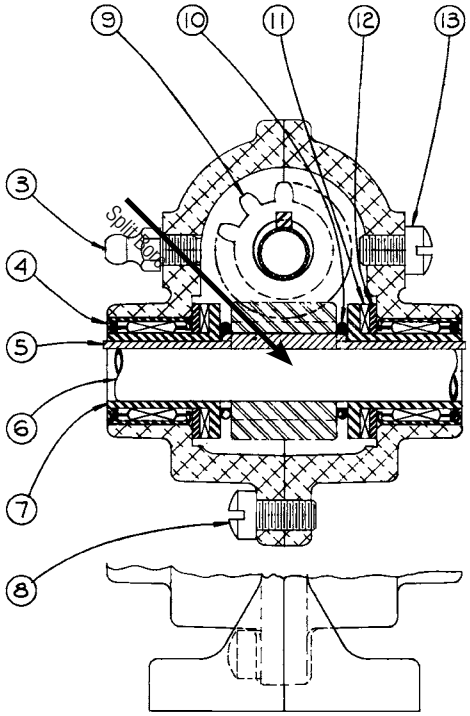
0100-0216_06

FLOAT-A-SHAFT® Compact Series – 1:1 Ratio

Standard Mount & Foot Mount - High Torque - Roller Bearing

	MODEL	R/LH	BORES
STANDARD MOUNT	0105-0100	RH	1/2" X 1/2"
	0106-0100	LH	1/2" X 1/2"
	0107-0100	RH	1/2" X 5/8"
	0108-0100	LH	1/2" X 5/8"
	0109-0100	RH	5/8" X 5/8"
	0110-0100	LH	5/8" X 5/8"
FOOT MOUNT	0111-0100	RH	1/2" X 1/2"
	0112-0100	LH	1/2" X 1/2"
	0113-0100	RH	1/2" X 5/8"
	0114-0100	LH	1/2" X 5/8"
	0115-0100	RH	5/8" X 5/8"
	0116-0100	LH	5/8" X 5/8"



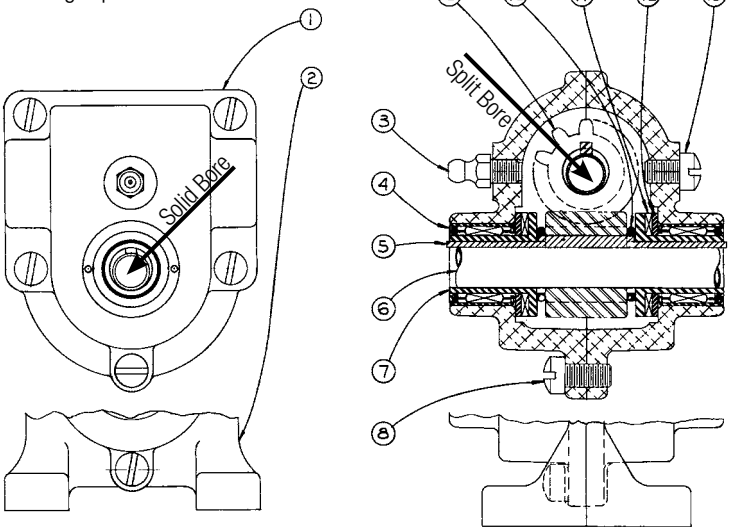


Clicking on part number will open tolomatic.com/cart and add quantity of 1 to cart. Change quantity as needed. CLICK ON BROWSER'S BACK BUTTON TO RETURN TO PARTS SHEET.

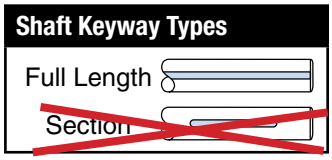
Click on Part No. to Add to Cart

ITEM	PART NO.	DESCRIPTION	QUANTITY											
			STANDARD MOUNT						FOOT MOUNT					
			0105-0100	0106-0100	0107-0100	0108-0100	0109-0100	0110-0100	0111-0100	0112-0100	0113-0100	0114-0100	0115-0100	0116-0100
1.	0110-9110	GEAR CASE HOUSING, COMPACT	1	1	1	1	1	1						
2.	0112-9112	GEAR CASE HOUSING, FOOT MOUNT, COMPACT							1	1	1	1	1	1
3.	0100-1601	ZERK GREASE FITTING, 1/4-28	1	1	1	1	1	1	1	1	1	1	1	1
4.	0100-1220	BEARING, NEEDLE, ROLLER, 3/4" BORE	4	4	4	4	4	4	4	4	4	4	4	4
5.	0200-1509	KEY, STEP, 1/8" X 1/8"	2	2	1	1			2	2	1	1		
	0200-1510	KEY, STEP, 1/8" X 7/64"			1	1	2	2			1	1	2	2
6.	0100-1708	ROD, DOWEL, PAPER	2	2	1	1			2	2	1	1		
	0100-1710	ROD, DOWEL, PLASTIC			1	1	2	2			1	1	2	2
7.	0100-3420	BUSHING, FLANGED, 1/2" BORE	4	4	2	2			4	4	2	2		
	0100-3422	BUSHING, FLANGED, 5/8" BORE			2	2	4	4			2	2	4	4
8.	0200-1810	SCREW, FILL HD, 1/4-20	5	5	5	5	5	5	5	5	5	5	5	5
9.	0100-2108	GEAR, 10 T, RH, 1/2" BORE	2		1				2		1			
	0100-1108	GEAR, 10 T, LH, 1/2" BORE		2		1				2		1		
	0100-2110	GEAR, 10 T, RH, 5/8" BORE			1		2				1		2	
	0100-1110	GEAR, 10 T, LH, 5/8" BORE				1		2				1		2
10.	0100-1006	O-RING, VITON	4	4	4	4	4	4	4	4	4	4	4	4
11.	0200-1212	BEARING, THRUST	4	4	4	4	4	4	4	4	4	4	4	4
12.	0100-1312	WASHER, THRUST	4	4	4	4	4	4	4	4	4	4	4	4
13.	0100-2604	SCREW, FILL HD, 1/4-28	1	1	1	1	1	1	1	1	1	1	1	1

Drawing repeated for reference



Installation

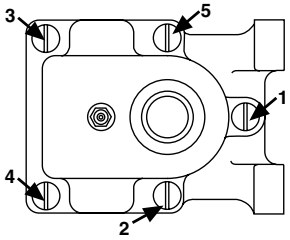


Keyway MUST extend to end of shaft. IT IS NOT POSSIBLE TO USE A SECTIONED SHAFT WITH A ROLLER BEARING FLOAT-A-SHAFT. Without removing the plastic tubes, align the Float-A-Shaft® with the shaft on which it is to be used and gently press it on. Be sure the key is properly aligned with the keyway. The plastic tubes will fall out as the shaft extends through the unit. Save the plastic tubes for removal of the Float-A-Shaft® for maintenance or repair. Be sure to reinsert the plastic tubes as the shaft is withdrawn, otherwise the internal parts will slip out of position and disassembly may be required to restore proper alignment.

Reassembly: Reference the numbering diagram on page 1 to complete the following instructions, matching the numbers with corresponding bores.

SOLID BORE REASSEMBLY: Lay Gear Case Housing (1) horizontal, with inside surface facing up. Install Roller Bearing (4) in solid bores of Gear Case Housing (1). Apply Loctite® #601 on solid bores of gear case housing before pressing in roller bearings. Press from inside to outside. Inside face of roller bearing must be flush with inside machined surface of gear case housing. Slide one end of the Gear Case Housing (1) onto the most accessible end of one shaft. Then install a Thrust Washer (12), a Thrust Bearing (11), a Flanged Bushing (7), and an O-Ring (10). The O-Ring should be temporarily positioned on the largest outside diameter of the flanged bushing at this time. Next, place the Key (5) in the keyway and slide the Gear (9) onto the shaft over the key. Position the Flanged Bushing (7) such that the key also engages the flanged bushing. On the opposite side of the gear, place an O-Ring (10) and a Flanged Bushing (7) engaging the Key (5). Temporarily position the O-Ring on the largest outside diameter of the flanged bushing. Next, continue with a Thrust Bearing (11) and a Thrust Washer (12).

SPLIT BORE REASSEMBLY: On the other shaft, which is positioned at a 90° angle, place the following parts: a loose Roller Bearing (4), a Thrust Washer (12), a Thrust Bearing (11), a Flanged Bushing (7), and an O-Ring (10). Place the O-Ring (10) on the largest outside diameter of the flanged bushing. Next, place the Key (5) in the keyway and slide the Gear (9) onto the shaft over the key. The key should engage both the Flanged Bushing (7) and Gear (9). On the opposite side of the gear, place an O-Ring (10), a Flanged Bushing (7), a Thrust Bearing (11), a Thrust Washer (12), and a Roller Bearing (4). Position the O-Ring (10) on the largest outside diameter of the flanged bushing. Apply Loctite® #601 on solid bores of gear case housing before pressing in roller bearings. Position this total assembly into the Gear Case Housing (1), making sure the teeth of the gears mesh. CAUTION: When trying to get the gears to mesh, rotate the gears to prevent possible damage to the teeth. Refer to diagram on page 1 for proper O-Ring positioning. To complete assembly, install the other half of the Gear Case Housing (1) and tighten the Screws (8) in the order shown here. In case of shaft binding, check for possible misalignment of the shafts or for oversized shaft diameters.



Shaft Requirements: Shafts should be made of power transmission steel grade 4140 or better. A tolerance of +.000/- .002 is recommended for the shaft diameters. The shaft surfaces should be 32 RMS maximum for stationary applications, and 16 RMS maximum for traversing applications. Shaft straightness should be .0015 TIR per foot.

Lubrication and Maintenance Schedule: All Float-A-Shaft® gear boxes have been lubricated at the factory with Mobilith® SHC 460. Compact Float-A-Shaft® gear boxes are initially filled with 0.34 oz. (10.1 ml) of grease to achieve 55% fill on the units. However, units require more lubrication prior to operation. Periodic re-lubrication is also necessary for optimum performance. When re-lubricating, inject Mobilith® SHC 460 (maximum operating temperature of 300˚F or higher and EP rated) into gear case, as required, via the grease zerk provided. *Mobilith® SHC 460 - 14 oz grease cartridge • P/N 0100-1605*

Lubrication and maintenance schedules are dependent on the application. General guidance is provided below and a maintenance plan can be developed based on the use case.

MAINTENANCE	USE CASE		
	Continuous/ Heavy Duty	Intermittent/ Light Duty	Minimal
Inject *1/10 oz. of Mobilith SHC460* into gear housing	1 ½ Months	3 Months	6 Months
Disassemble and purge unit. Hand lubricate all bearings and gears with *1 oz. of Mobilith SHC460*	6 Months	1 Year	1 Year

Mobilith® SHC 460 is a registered trademark of Exxon Mobil Corporation, www.mobil.com
Float-A-Shaft® is a registered trademark of Tolomatic, Inc.

Tolomatic™ EXCELLENCE IN MOTION
COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV = ISO 9001 =
3800 County Road 116, Hamel, MN 55340 USA
https://www.Tolomatic.com • Email: Help@Tolomatic.com
Phone: (763) 478-8000 • Toll Free: 1-800-328-2174

All brand and product names are trademarks or registered trademarks of their respective owners. Information in this document is believed accurate at time of printing. However, Tolomatic assumes no responsibility for its use or for any errors that may appear in this document. Tolomatic reserves the right to change the design or operation of the equipment described herein and any associated motion products without notice. Information in this document is subject to change without notice.