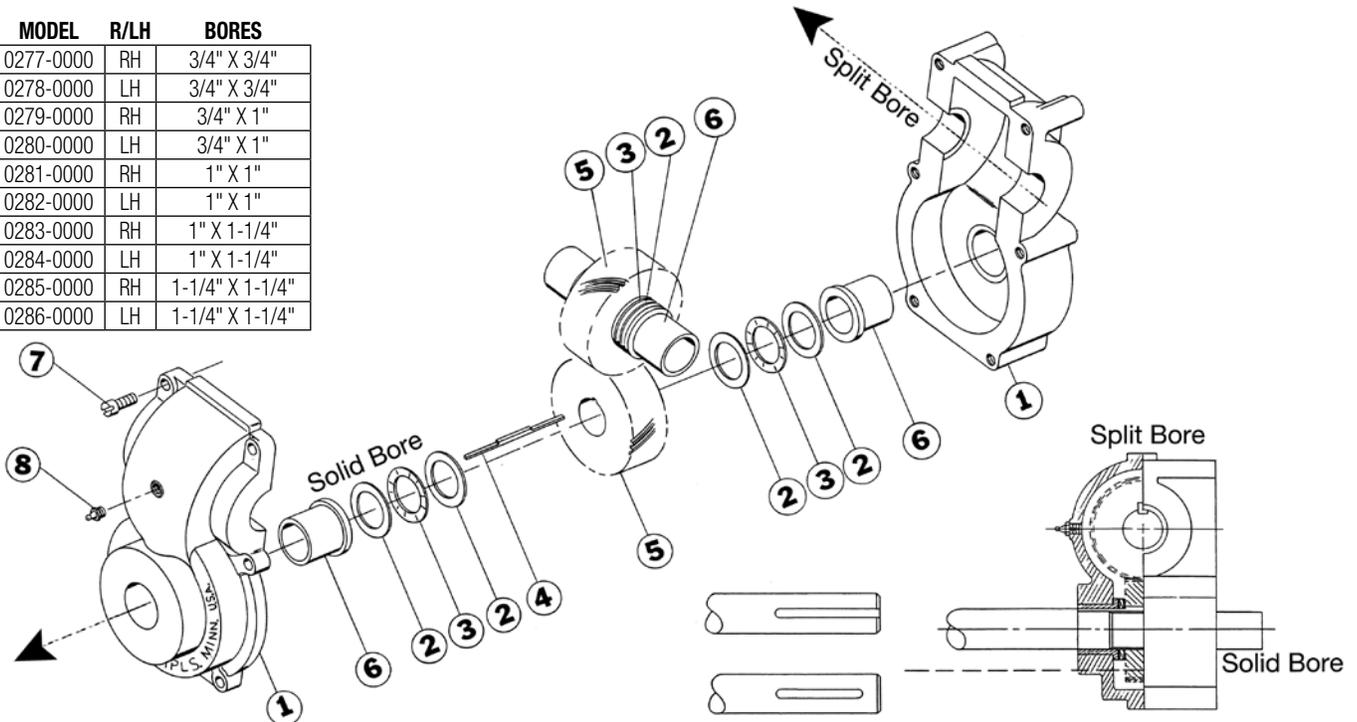


### FLOAT-A-SHAFT® Standard Series – 3:2 Ratio

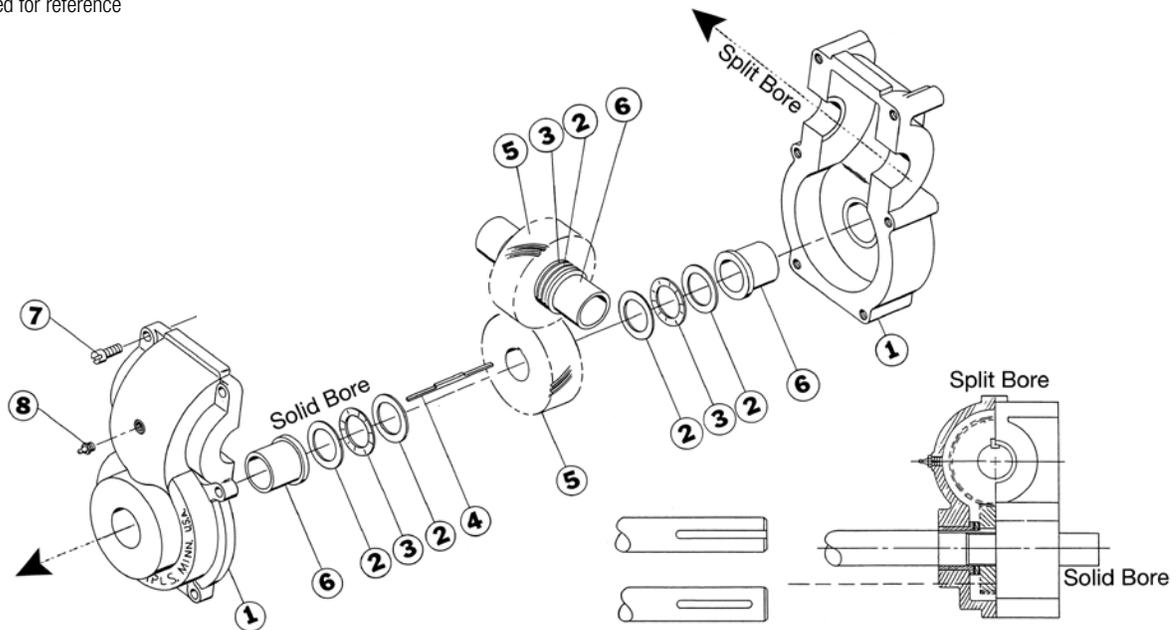
Flat Base - Low Torque - Journal Bearing

MODEL	R/LH	BORES
0277-0000	RH	3/4" X 3/4"
0278-0000	LH	3/4" X 3/4"
0279-0000	RH	3/4" X 1"
0280-0000	LH	3/4" X 1"
0281-0000	RH	1" X 1"
0282-0000	LH	1" X 1"
0283-0000	RH	1" X 1-1/4"
0284-0000	LH	1" X 1-1/4"
0285-0000	RH	1-1/4" X 1-1/4"
0286-0000	LH	1-1/4" X 1-1/4"



ITEM	PART NO.	DESCRIPTION	QUANTITY											
			0277-0000	0278-0000	0279-0000	0280-0000	0281-0000	0282-0000	0283-0000	0284-0000	0285-0000	0286-0000		
1.	0275-9500	GEAR CASE HOUSING, FLAT BASE	1	1	1	1	1	1						
	0275-9600	GEAR CASE HOUSING, FLAT BASE							1	1				
	0275-9400	GEAR CASE HOUSING, FLAT BASE									1	1		
2.	0100-1312	WASHER, THRUST, 3/4" BORE	8	8	4	4								
	0100-1334	WASHER, THRUST, 1" BORE			4	4	8	8	4	4				
	0100-1336	WASHER, THRUST, 1-1/4" BORE							4	4	8	8		
3.	0200-1212	BEARING, THRUST, 3/4" BORE	4	4	2	2								
	0200-1216	BEARING, THRUST, 1" BORE			2	2	4	4	2	2				
	0200-1220	BEARING, THRUST, 1-1/4" BORE							2	2	4	4		
4.	0200-1503	KEY, STEP, 1/8" X 7/64"	2	2	1	1	2							
	0200-1504	KEY, STEP, 1/4" X 1/4"			1	1	2	2	2	2	2	2	2	2
5.	0300-1112	GEAR, 20 T, LH, 3/4" BORE			1	1								
	0300-2112	GEAR, 20 T, RH, 3/4" BORE	1		1									
	0200-1129	GEAR, 30 T, LH, 3/4" BORE			1									
	0200-1130	GEAR, 30 T, RH, 3/4" BORE	1											
	0200-1116	GEAR, 20 T, LH, 1" BORE						1		1				
	0200-2116	GEAR, 20 T, RH, 1" BORE						1		1				
	0200-1126	GEAR, 30 T, LH, 1" BORE				1		1						
	0200-1125	GEAR, 30 T, RH, 1" BORE				1		1						
	0200-1120	GEAR, 20 T, LH, 1-1/4" BORE											1	
	0200-2120	GEAR, 20 T, RH, 1-1/4" BORE											1	
	0200-1127	GEAR, 30 T, LH, 1-1/4" BORE									1		1	
	0200-1128	GEAR, 30 T, RH, 1-1/4" BORE									1		1	
6.	0200-3512	BUSHING, BRONZE, FLANGED, 3/4" BORE	4	4	2	2								
	0200-1516	BUSHING, BRONZE, FLANGED, 1" BORE			2	2	4	4	2	2				
	0200-3520	BUSHING, BRONZE, FLANGED, 1-1/4" BORE							2	2	4	4		
7.	0200-1812	SCREW, FILL HD, 1/4-20	6	6	6	6	6	6	6	6	6	6	6	6
8.	0100-1601	ZERK GREASE FITTING, 1/4-28	1	1	1	1	1	1	1	1	1	1	1	1

Drawing repeated for reference



**Installation**

**FULL LENGTH SHAFT KEYWAY:**

Keyway extends to end of shaft. In this case, it is not necessary to disassemble the 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 oriented with the keyway. The plastic tubes will fall out as the shaft extends through the unit. The plastic tubes should be saved if removal of the Float-A-Shaft® is required. Be sure the plastic tubes are inserted as the shaft is withdrawn, otherwise the internal parts will slip out of position and disassembly may be required to restore proper alignment.

**Shaft Keyway Types**



**SECTION KEYWAY:** Keyway does not extend to end of shaft. The Float-A-Shaft® must be disassembled for installation.

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

**SOLID BORE REASSEMBLY:** Slide one end of the Gear Case Housing (1), which has the Flanged Bushing (6) already inserted onto the most accessible end of one shaft. Then install a Thrust Washer (2), a Thrust Bearing (3), and another Thrust Washer (2). Next, place the Key (4) in the keyway and slide the Gear (5) onto the shaft over the key. On the opposite side of the gear, place a Thrust Washer (2), a Thrust Bearing (3), and another Thrust Washer (2).

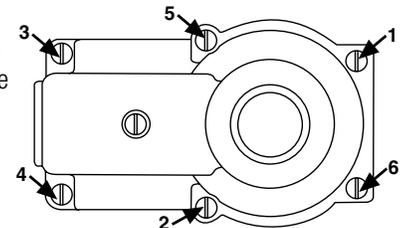
**SPLIT BORE REASSEMBLY:** Slide the following parts onto the shaft, which is positioned at a 90° angle: a Flanged Bushing (6)—Flanged end toward gear, a Thrust Washer (2), a Thrust Bearing (3), and another Thrust Washer (2). Place the Key (4) in the keyway and slide the Gear (5) onto the shaft over the key (4). On the opposite side of the Gear (5), place a Thrust Washer (2), a Thrust Bearing (3), another

Thrust Washer (2), and the other Flanged Bushing (6). Position this 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. Next, make sure the Flanged Bushings (6) are pushed all the way into the casting to allow maximum clearance between the gear and the bushings.

To complete the assembly, install the other half of the Gear Case Housing (1) with the Flanged Bushing (6) already inserted,

and tighten the Screws (7) in the order shown here. In case of shaft binding, check for possible misalignment of the shafts or for an oversized shaft diameter. Insert Zerk Grease Fitting (8).



**LUBRICATION:** All Float-A-Shaft® gear boxes have been lubricated at the factory with Mobilith® SHC 460. **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

**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.

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



COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =

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