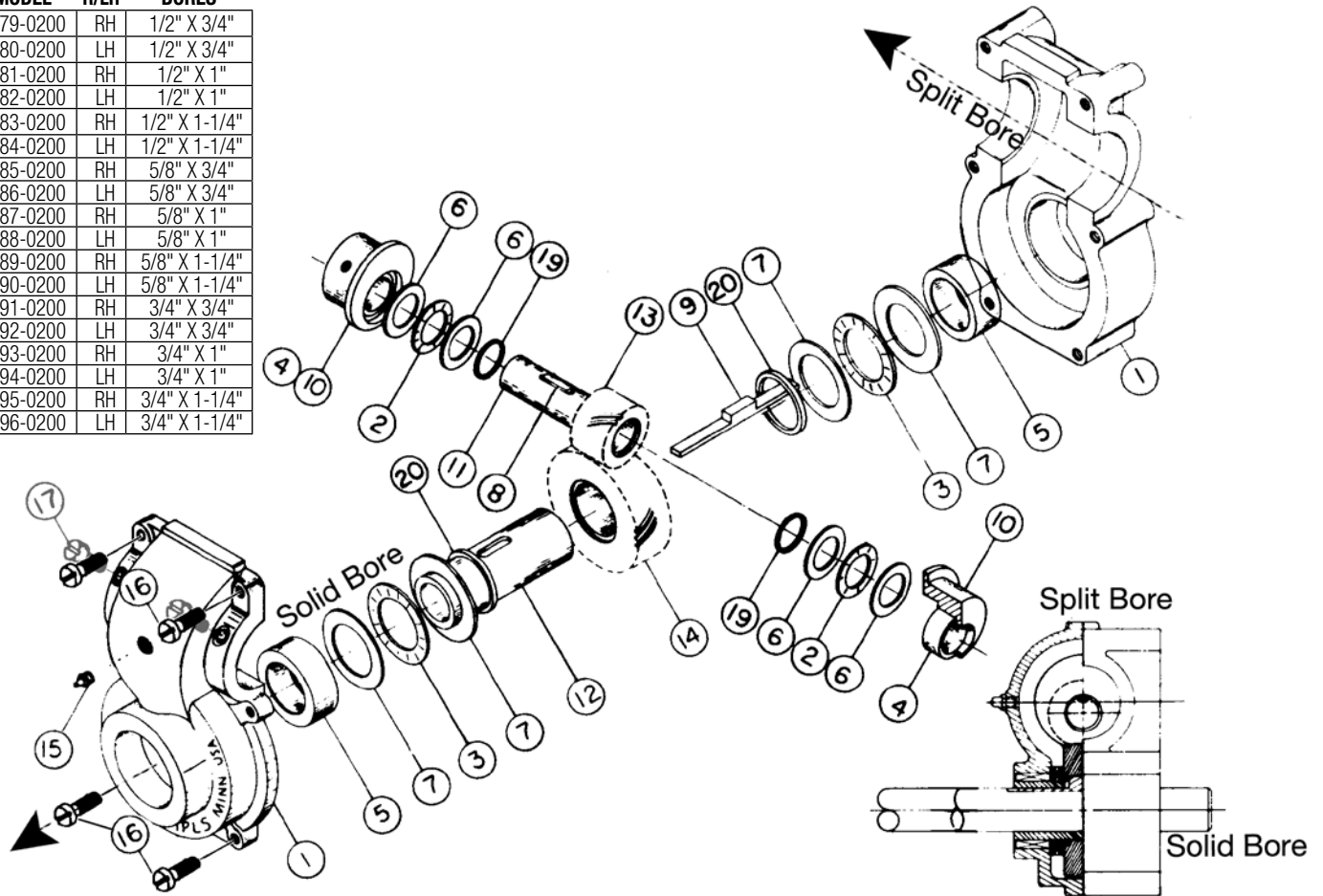


### FLOAT-A-SHAFT® Standard Series – 2:1 Ratio

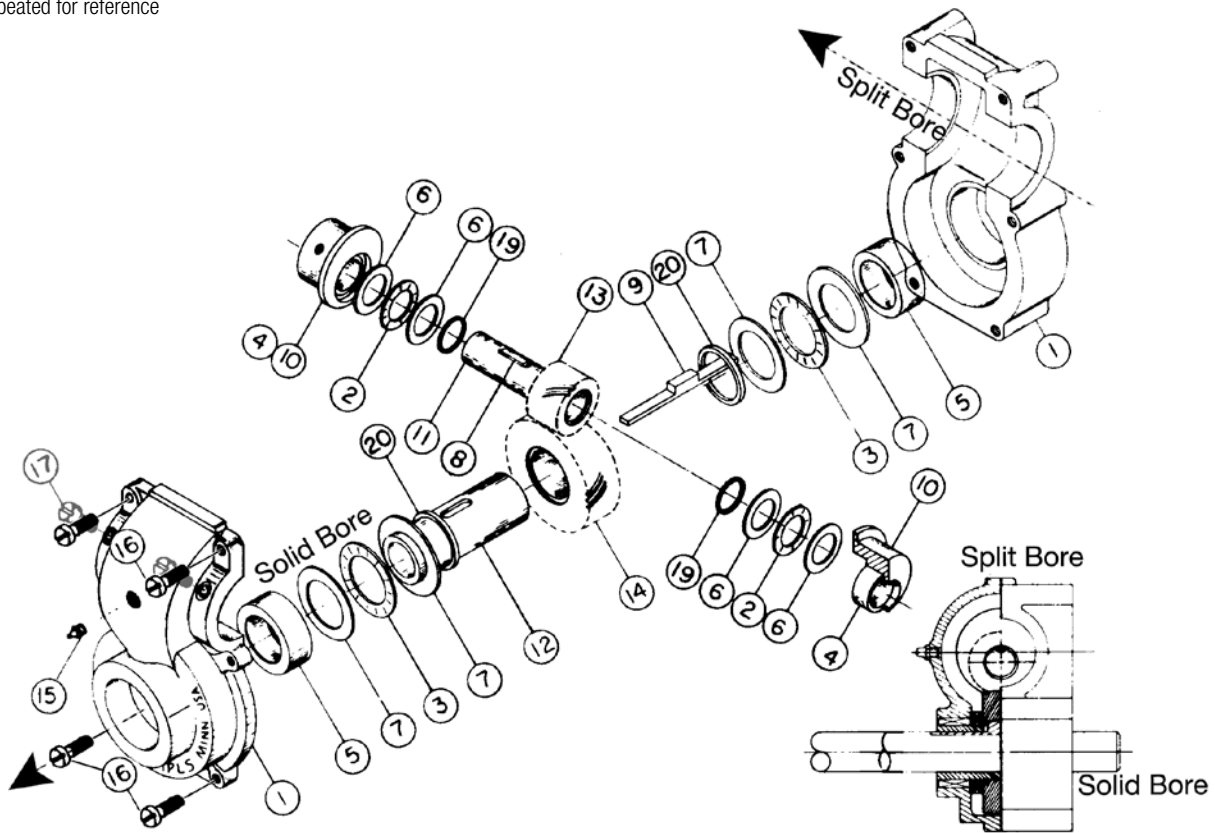
Flat Base - High Torque - Roller Bearing

MODEL	R/LH	BORES
0279-0200	RH	1/2" X 3/4"
0280-0200	LH	1/2" X 3/4"
0281-0200	RH	1/2" X 1"
0282-0200	LH	1/2" X 1"
0283-0200	RH	1/2" X 1-1/4"
0284-0200	LH	1/2" X 1-1/4"
0285-0200	RH	5/8" X 3/4"
0286-0200	LH	5/8" X 3/4"
0287-0200	RH	5/8" X 1"
0288-0200	LH	5/8" X 1"
0289-0200	RH	5/8" X 1-1/4"
0290-0200	LH	5/8" X 1-1/4"
0291-0200	RH	3/4" X 3/4"
0292-0200	LH	3/4" X 3/4"
0293-0200	RH	3/4" X 1"
0294-0200	LH	3/4" X 1"
0295-0200	RH	3/4" X 1-1/4"
0296-0200	LH	3/4" X 1-1/4"



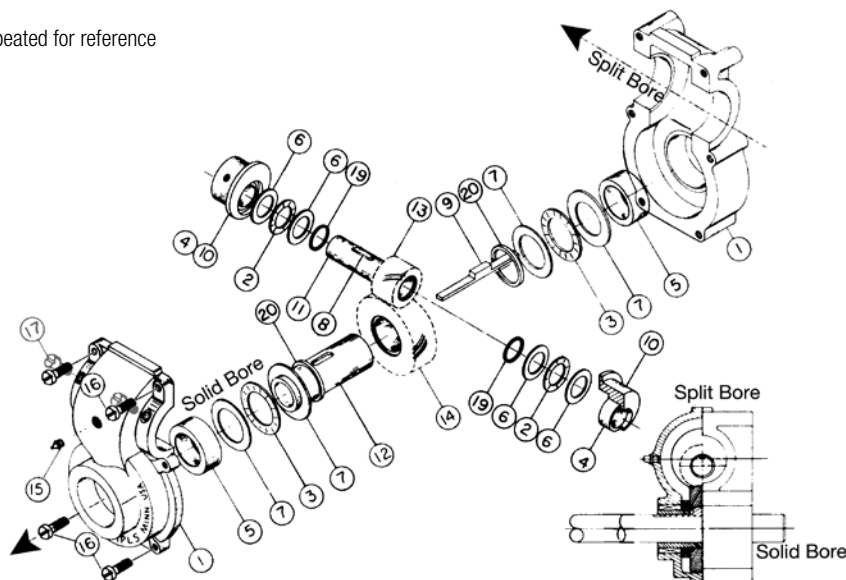
ITEM	PART NO.	DESCRIPTION	QUANTITY																	
			0279-0200	0280-0200	0281-0200	0282-0200	0283-0200	0284-0200	0285-0200	0286-0200	0287-0200	0288-0200	0289-0200	0290-0200	0291-0200	0292-0200	0293-0200	0294-0200	0295-0200	0296-0200
1	0241-9004	GEAR CASE HOUSING, FLAT BASE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2	0200-1214	BEARING, THRUST, 7/8" BORE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
3	0200-1222	BEARING, THRUST, 1-3/8" BORE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
4	0200-1527	BEARING, NEEDLE, ROLLER, 7/8" BORE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
5	0200-1526	BEARING, NEEDLE, ROLLER, 1-3/8" BORE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
6	0200-1317	WASHER, THRUST, 7/8" BORE	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
7	0200-1326	WASHER, THRUST, 1-3/8" BORE	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
8	0200-1513	KEY, STEP, 3/16" X 1/2"														1	1	1	1	
	0200-1515	KEY, STEP, 1/4" X 1/4"							1	1	1	1	1							
	0200-1517	KEY, STEP, 1/8" X 5/16"	1	1	1	1	1	1												
9	0200-1500	KEY, STEP, 1/4" X 5/16"					1	1					1	1					1	1
	0200-1501	KEY, STEP, 1/4" X 7/16"				1	1					1	1				1	1		
	0200-1502	KEY, STEP, 3/16" X 1/4"	1	1						1	1				1	1				
10	0275-7709	BUSHING, STEEL, ECCENTRIC	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	

Drawing repeated for reference



ITEM	PART NO.	DESCRIPTION	QUANTITY																	
			0279-0200	0280-0200	0281-0200	0282-0200	0283-0200	0284-0200	0285-0200	0286-0200	0287-0200	0288-0200	0289-0200	0290-0200	0291-0200	0292-0200	0293-0200	0294-0200	0295-0200	0296-0200
11	0200-3539	BUSHING, STEEL, 1/2" BORE	1	1	1	1	1	1												
	0200-3540	BUSHING, STEEL, 5/8" BORE							1	1	1	1	1	1						
	0200-3541	BUSHING, STEEL, 3/4" BORE													1	1	1	1	1	1
12	0200-3525	BUSHING, SLEEVE, STEEL, 3/4" BORE	1	1					1	1					1	1				
	0200-3526	BUSHING, SLEEVE, STEEL, 1" BORE			1	1					1	1					1	1		
	0200-3519	BUSHING, SLEEVE, STEEL, 1-1/4" BORE					1	1					1	1					1	1
13	0200-1106	GEAR, 15 T, LH, 7/8" BORE		1		1		1		1		1		1						
	0200-2106	GEAR, 15 T, RH, 7/8" BORE	1		1		1		1		1		1							
	0200-1104	GEAR, 15 T, LH, 7/8" BORE														1		1		1
	0200-2104	GEAR, 15 T, RH, 7/8" BORE													1		1		1	
14	0200-1121	GEAR, 30 T, LH, 1-3/8" BORE		1						1						1				
	0200-2121	GEAR, 30 T, RH, 1-3/8" BORE	1							1					1					
	0200-1137	GEAR, 30 T, LH, 1-3/8" BORE				1		1				1		1				1		1
	0200-2137	GEAR, 30 T, RH, 1-3/8" BORE			1		1				1		1				1		1	
15	0100-1601	ZERK GREASE FITTING, 1/4-28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	0200-1812	SCREW, FILL HD, 1/4-20	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
17	0200-1557	SCREW, FILL HD, 1/4-20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
18	0100-2604	SCREW, FILL HD, 1/4-28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	0200-1331	SPACER, PL, NYLON RING, .09" THICK	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20	0200-1332	SPACER, PL, CELCON RING, .09" THICK	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Drawing repeated for reference



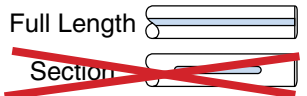
## Installation

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.

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

### Shaft Keyway Types

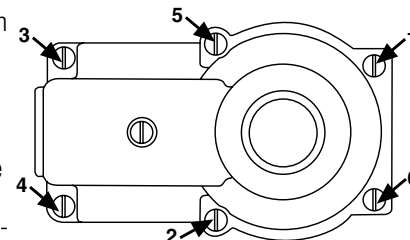


**Reassembly:** Reference the numbering diagram on page 1 to complete the following instructions, matching the numbers with corresponding bores.

**Solid Bore Reassembly:** Lay Gear Case Housing (1) horizontal, with inside surface facing up. Install Roller Bearing (5) in solid bores of Gear Case Housing (1). Press from inside to outside. Inside face of roller bearing must be flush with inside machined surface of gear case housing. Next, insert Key (9) into slot of Sleeve Bushing (12) and insert the plastic tube to hold it in place. Install Gear (14) over the Sleeve Bushing (12) positioning it over Key (9). Install Plastic Spacer (20) on both sides of gear. Lubricate Roller Bearing (5), Thrust Bearing (3), and Gear (14) manually (See "Lubrication"). Install a Thrust Washer (7), Thrust Bearing (3), and Thrust Washer (7) on each side of gear. Lay the Gear Case Housing (1) horizontal, with the solid bore vertical and inside surface facing up. Install gear, sleeve and bearing assembly into the solid bore.

**Split Bore Reassembly:** Insert Key (8) into slot of Sleeve Bushing (11) and insert the plastic tube to hold it in place. Install Gear (13) over the

Sleeve Bushing (11) positioning it over Key (8). Install Plastic Spacer (19) on both sides of gear. Lubricate all bearings and the gear manually (See "Lubrication"). Install a Thrust Washer (6), Thrust Bearing (2), and Thrust Washer (6) on each side of gear. Insert a Roller Bearing (4) into the Eccentric Bushing (10) and install on each side of gear. Lay the completed assembly into the split bore of 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, cover gears and bearings with approximately 3 oz. of lubricant. To complete assembly, install the other half of the Gear Case Housing (1) and tighten the Screws (16) in the order shown here. In case of shaft binding, check for possible misalignment of the shafts or for oversized shaft diameters.



**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  $\pm .000/- .002$  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.

**Tolomatic**<sup>™</sup>  
EXCELLENCE IN MOTION

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