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

Flat Base - High Torque - Roller Bearing

| MODEL	R/LH	BORES
0245-0200	RH	3/4" X 3/4"
0246-0200	LH	3/4" X 3/4"
0247-0200	RH	3/4" X 1"
0248-0200	LH	3/4" X 1"
0249-0200	RH	3/4" X 1-1/4"
0250-0200	LH	3/4" X 1-1/4"
0251-0200	RH	1" X 1"
0252-0200	LH	1" X 1"
0253-0200	RH	1" X 1-1/4"
0254-0200	LH	1" X 1-1/4"
0255-0200	RH	1-1/4" X 1-1/4"
0256-0200	LH	1-1/4" X 1-1/4"
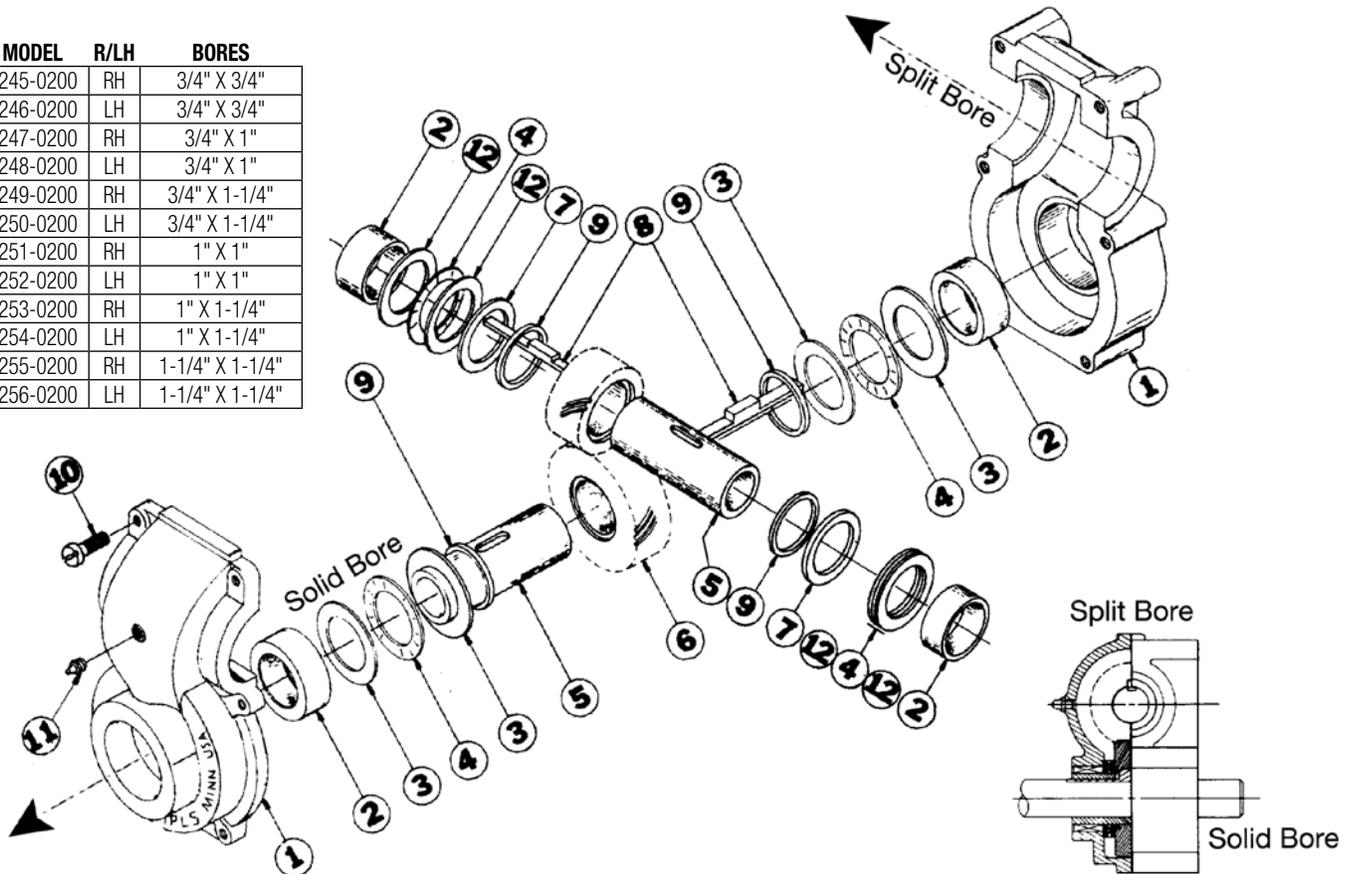
ITEM	PART NO.	DESCRIPTION	0245-0200	0246-0200	0247-0200	0248-0200	0249-0200	0250-0200	0251-0200	0252-0200	0253-0200	0254-0200	0255-0200	0256-0200
1	0275-9204	GEAR CASE HOUSING, FLAT BASE	1	1	1	1	1	1	1	1	1	1	1	1
2	0200-1526	BEARING, NEEDLE, ROLLER, 1-3/8" BORE	4	4	4	4	4	4	4	4	4	4	4	4
3	0200-1326	WASHER, THRUST, 1-3/8" BORE	4	4	4	4	4	4	4	4	4	4	4	4
4	0200-1222	BEARING, THRUST, 1-3/8" BORE	4	4	4	4	4	4	4	4	4	4	4	4
5	0200-3525	BUSHING, SLEEVE, STEEL, 3/4" BORE	2	2	1	1	1	1						
	0200-3526	BUSHING, SLEEVE, STEEL, 1" BORE			1	1			2	2	1	1		
	0200-3519	BUSHING, SLEEVE, STEEL, 1-1/4" BORE					1	1			1	1	2	2
6	0200-1121	GEAR, 30 T, LH, 1-3/8" BORE		1										
	0200-2121	GEAR, 30 T, RH, 1-3/8" BORE	1											
	0200-1137	GEAR, 30 T, LH, 1-3/8" BORE				1		1		1		1		1
	0200-2137	GEAR, 30 T, RH, 1-3/8" BORE			1		1		1		1		1	
	0300-1114	GEAR, 20 T, LH, 1-3/8" BORE		1		1		1						
	0300-2114	GEAR, 20 T, RH, 1-3/8" BORE	1		1		1							
	0300-1113	GEAR, 20 T, LH, 1-3/8" BORE								1		1		1
	0300-2113	GEAR, 20 T, RH, 1-3/8" BORE							1		1		1	
7	0200-1330	SPACER, PL, NYLON RING, .126" THICK	2	2	2	2	2	2	2	2	2	2	2	2
8	0200-1500	KEY, STEP, 1/4" X 5/16"					1	1			1	1	2	2
	0200-1501	KEY, STEP, 1/4" X 7/16"			1	1			2	2	1	1		
	0200-1502	KEY, STEP, 3/16" X 1/2"	2	2	1	1	1	1						
9	0200-1332	SPACER, PL, CELCON RING, .09" THICK	4	4	4	4	4	4	4	4	4	4	4	4
10	0200-1812	SCREW, FILL HD, 1/4-20	6	6	6	6	6	6	6	6	6	6	6	6
11	0100-1601	ZERK GREASE FITTING, 1/4-28	1	1	1	1	1	1	1	1	1	1	1	1
12	0200-1225	WASHER, THRUST, 1-3/8" BORE	4	4	4	4	4	4	4	4	4	4	4	4

Drawing repeated for reference
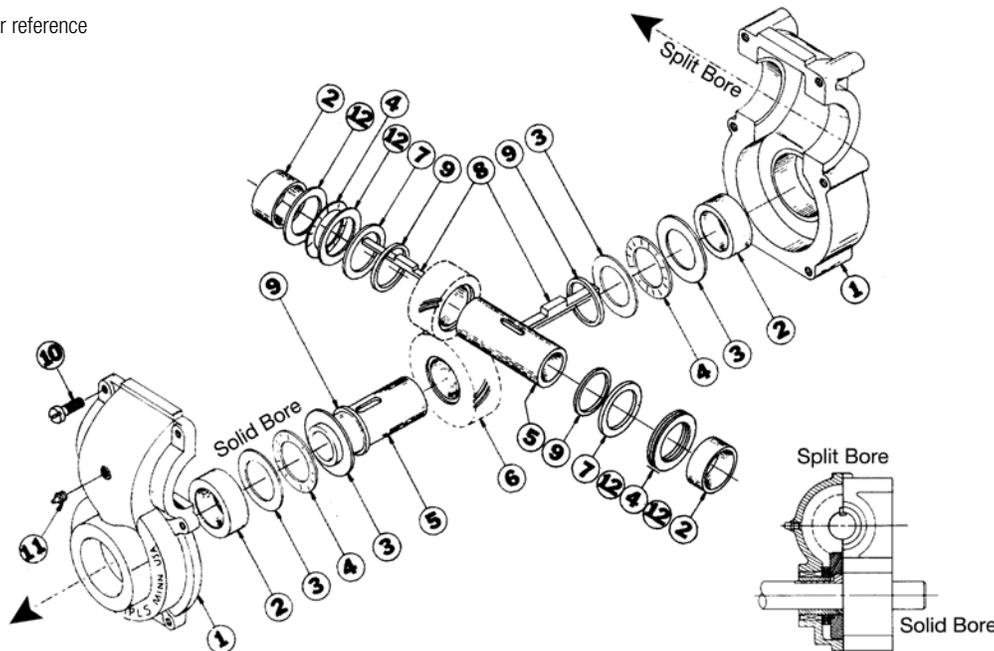
Installation

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 Keyway Types

Full Length

Section ~~(crossed out)~~

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 (2) 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 (1). Next, Insert Key (8) into slot of Sleeve Bushing (5) and insert the plastic tube to hold it in place. Install Gear (6) over the Sleeve Bushing (5) positioning it over Key (8). Install Plastic Spacer (9) on both sides of Gear (6). Lubricate Roller Bearing (2), Thrust Bearing (4), and Gear (6) manually (See "Lubrication"). Install a Thrust Washer (3), Thrust Bearing (4), and Thrust Washer (3) 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 (5) and insert the plastic tube to hold it in place. Install
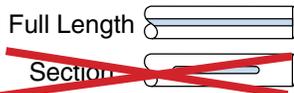
Gear (6) over the Sleeve Bushing (5) positioning it over Key (8). Install Plastic Spacer (9) on both sides of Gear (6). Lubricate all bearings and the gear manually (See "Lubrication"). Install a Nylon Spacer (7) on each side of the Gear (6). Install a Thrust Washer (12), Thrust Bearing (4), and Thrust Washer (12) on each side of gear. Insert a Roller Bearing (2) on each side of Gear(6). 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 (10) in the order shown here. In case of shaft binding, check for possible misalignment of the shafts or for oversized shaft diameters. Insert Zerk Grease Fitting (11).
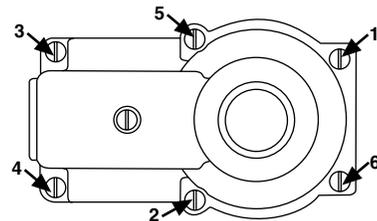
Lubrication: All Float-A-Shaft® gear boxes have been lubricated at the factory with Mobilith® SHC 460. However, units require more lubrication prior to operation. Periodic re-lubrication is also necessary for optimum performance. When re-lubricating, inject Mobilith® SHC 460 (maximum operating temperature 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.