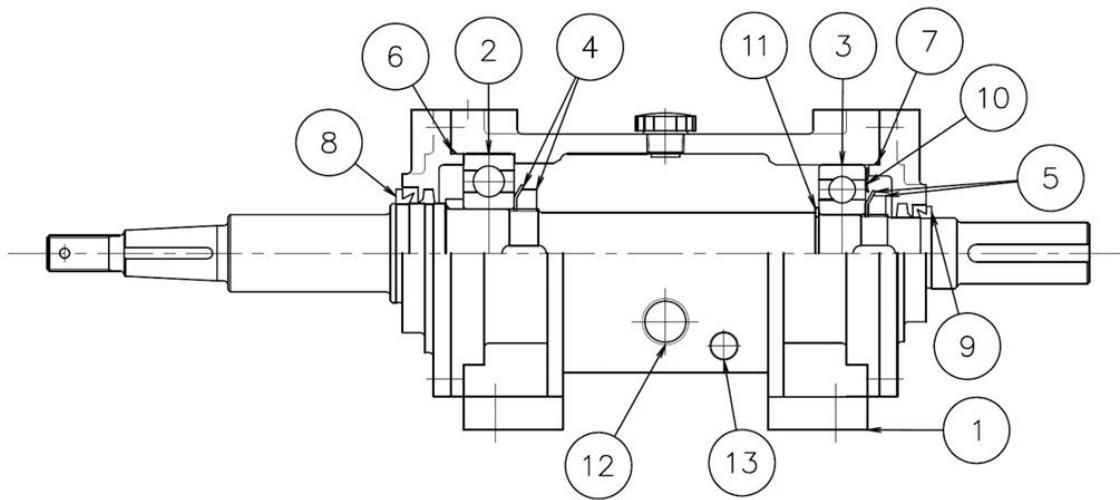


**INSTALLATION, OPERATION AND MAINTENANCE MANUAL**

Please read and save these instructions. Read carefully before attempting to assemble, install, and operate or maintain the product described. Failure to comply with instructions could result in personal injury and / or property damage.

The bearings for the TEXEL oil lubricated bearings are carefully selected to provide the best operating conditions and minimize any bearing problems. Refer to the following processes and manufacturer instruction manual or it will cause a breakdown and possible failure of the bearing.

**BEARING BOX**



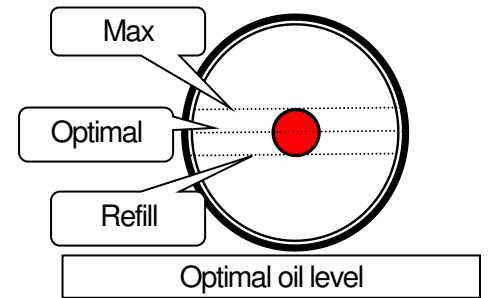
No.	Item	FTF	153	203 253	303	403	503 603	703 803	903
		FTB	202	251/252 301	302/351 352/401	-	402/403/ 501	601/701	-
1	Bearing box	Be3	Be4	Be5	Be6	Be8	Be10	Be12	
2	Bearing / Fan	6306	6308	6310	6312	6315	6320	6324	
3	Bearing / Sheave	6305	6307	6308	6310	6313	6318	6320	
4	Bearing nut / washer Impeller side	AN06	AN08	AN10	AN12	AN15	AN20	AN24	
		AW06	AW08	AW10	AW12	AW15	AW20	AW24	
5	Bearing nut / washer Sheave side	AN05	AN07	AN08	AN10	AN13	AN18	AN20	
		AW05	AW07	AW08	AW10	AW13	AW18	AW20	
6	Bearing cover / O ring Impeller side	S70	S90	S110	S130	S150	G240	G280	
7	Bearing cover / O ring Sheave side	S60	S80	S90	S110	S140	G220	G240	
8	Bearing cover / V ring Impeller side	V-35A	V-45A	V-55A	V-65A	V-80A	V-110A	V-130A	
9	Bearing cover / V ring Sheave side	V-22A	V-32A	V-35A	V-45A	V-60A	V-85A	V-95A	
10	Wave washer	BWW6305	BWW6307	BWW6308	BWW6310	BWW6313	-	-	
11	Retaining ring	#25		-	-	-	-	-	
12	Oil gauge	MG-1/2		MG-3/4	MG-1				
13	Oil cap	KRM-1A		KRM-2A	KRM-3A		KRM-4A		
	OIL Shell Tellus 32	2.37 Oz	4.57 Oz	6.77 Oz	11.84 Oz	28.58 Oz	87.58 Oz	101.45 Oz	

## OIL LUBRICATED BEARING BOX

### 1. Daily Inspection

Please check the followings on a daily basis.

- 1). Abnormal sound or vibration
- 2). Abnormal heat
- 3). Oil leak
- 4). Oil condition



### 2. Routine Maintenance

Once the unit has been put into operation, a routine maintenance schedule should be set up to accomplish the following.

- 1). Replace the oil in the bearing box once every half year.
- 2). Maintain the amount of oil in the bearing box in reference to the picture of Optimal oil level.
- 3). Make sure to use the same oil brand, type and viscosity when the oil replaced.

### 3. Assembly and disassembly

The bearings in the bearing box can be replaced without removing the shaft, impeller, or casing from the fan unit. The followings are procedures of how to assemble and disassemble the oil lubricated bearing bath unit.

#### a. Bearing box disassembly

- 1). Take off the belt cover.
- 2). Loosen the fasters on the sheave mounted on the fan shaft and pull the sheave with a grip puller.



## OIL LUBRICATED BEARING BOX

3). Remove the oil pen the drain pipe to drain the oil out of the bearing box.



4). Unfasten the fasteners on the grand and seal plate.

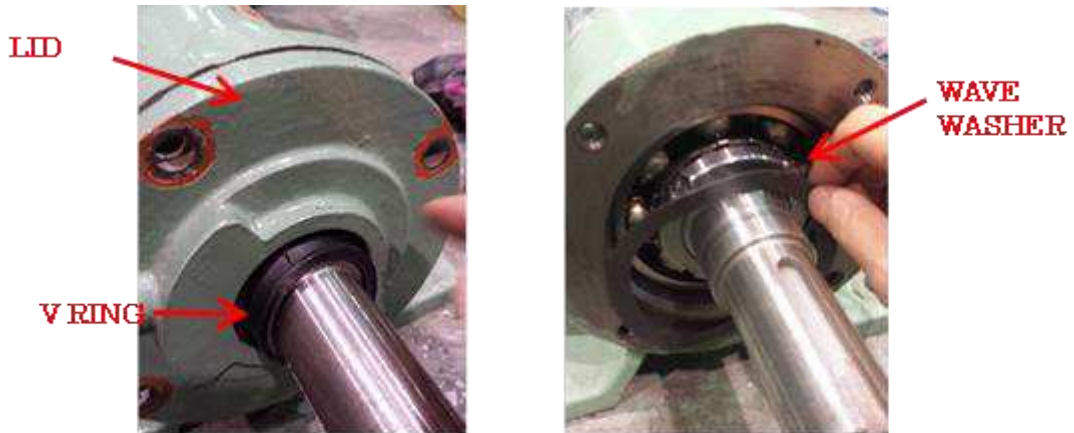


5). Impeller side -- Pull the v-ring( No. 8) toward the impeller and remove the lid of the bearing box.

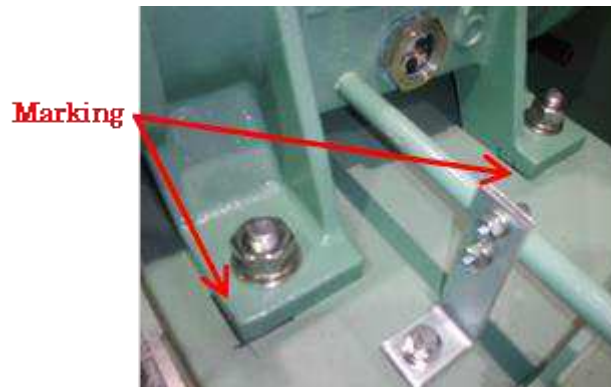


## OIL LUBRICATED BEARING BOX

6). Sheave side -- Remove the v-ring (No.9) and the lid of the bearing. Remove the wave washer placed inside of the lid.



7). Before moving the bearing box, do the marking at the following position. This procedure will make it easier to put the bearing box back to its original position when assembled.



8). Remove the fasteners fixing the bearing box.



## OIL LUBRICATED BEARING BOX

9). Tap the edge of the bearing with a wood or plastic hammer to move the bearing box and then pull it toward the sheave side. At this process, place a wood or something to prevent the impeller from hitting the inside of casing.



10). Remove the bearing washer and nut – No.5 and the bearing – No.3 by using a grip puller. Make sure to prevent the shaft from being damaged during this process. The bearing – No.2 can now be removed. By using the extension bar shown in the following picture, it will be easier to reach to the bearing.



b. Assembly

Assembly can be done by the procedures in the reverse order of the disassembly.

- 1). Use a bearing heater for heating the inner ring of the bearing to expand the diameter. The moderate temperature is 220F.
- 2). Install the bearing nut washer after the bearings cool down.
- 3). Wipe the shaft with a clean cloth.
- 4). Replace the V rings and O rings when the bearings are replaced.
- 5). The integrated bearing box will eliminate the process of alignment.
- 6). Make sure the oil return hole in the bearing box lid to be placed lower.
- 7). The hold in the oil cap – No.13 is for air ventilation. Check if there is dust or particulate clogging the hole.



8). After the bearing box assembled, turn the shaft by hand to check if the shaft rotates smoothly.

9). Put the V-ring into the shaft hold of the bearing box lid. Place the V-ring on the ditch as shown in the following picture

