

## TBS Installation and Maintenance Instructions

### **Installation**

Remove the drum pump and motor from its packaging and inspect for shipping damage. Remove the quality tag from the top of the pump and spin the pump coupling to verify there is no binding. Remove the black rubber coupling insert (item 1) from the attached plastic bag, and install it onto the pump coupling. Adjust the coupling so that the empty slots in the insert are at 3 and 9 o'clock with the pump discharge at 12 o'clock. Remove the 2 mounting bolts from the motor/motor mount and adjust the motor coupling so that the coupling prongs are at 3 and 9 o'clock with the handle (on electric motors), or the air supply line (on air motors) at 6 o'clock. Install the motor onto the drum pump until it seats all the way down with the couplings connecting and install the 2 mounting bolts with nuts. Attach discharge hose and install into the container.

### Maintenance disassembly –

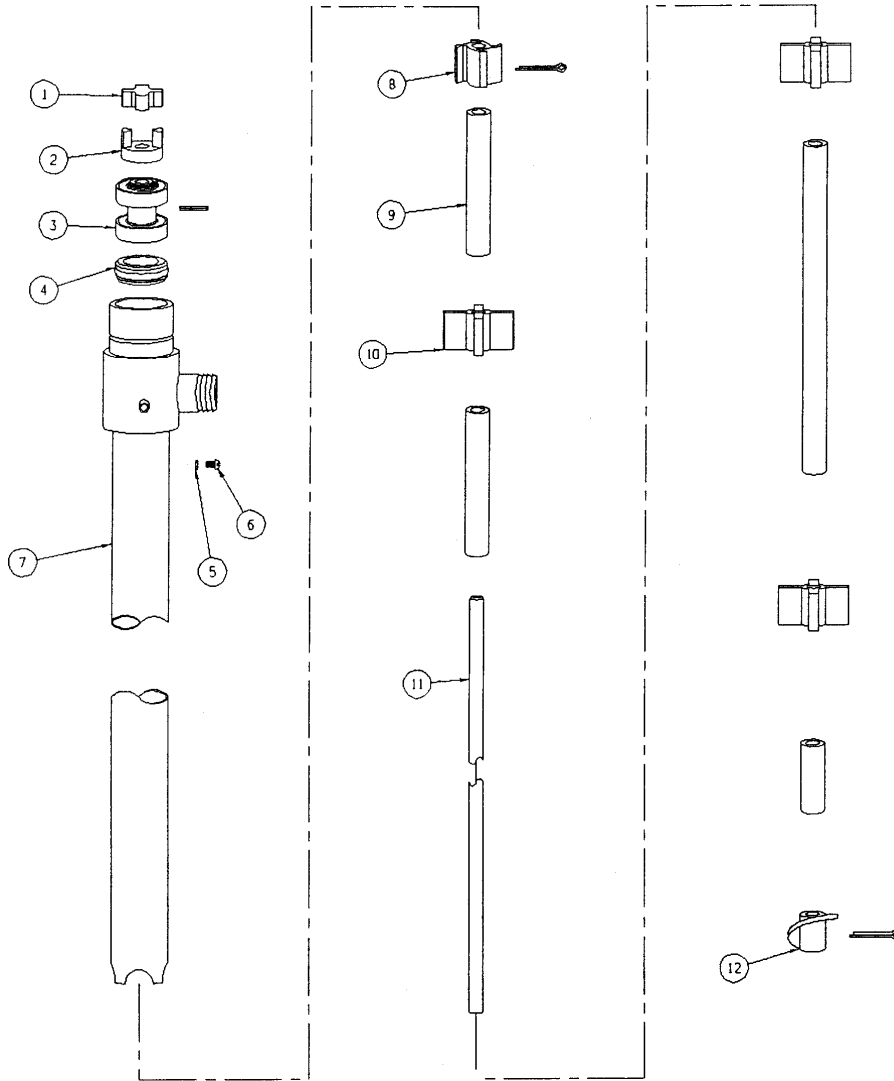
1. Loosen the setscrew and remove the half coupling (item 2) from the end of the pump shaft.
2. Gently holding the intake tube so as not to crush the tube, use a 3/8" punch and hammer to drive the bottom of the shaft (item 11) toward the top. This will drive the bearing assembly (item 3) out of the top of the pump. Stop when the bearing assembly is exposed.
3. Use a 1/8" punch and drive out the roll pin that is located in the center of the bearing assembly (item 3), and slide the bearing assembly off of the shaft.
4. Remove the pump shaft assembly by pushing it down through the intake tube (item 7) and out the bottom.
5. Remove the seal assembly (item 4) and discard. Never re-use a seal assembly.

### Inspection

1. Visually inspect the impeller assembly (item 8), the center bearings (item 10), and the compressor (item 12) for damage and replace as needed.
2. Inspect the bearing assembly for rust, corrosion, or tightness and replace as needed.
3. Inspect the pump shaft in the seal area and the center bearing areas for excessive wear. Replace the shaft if needed.

## Reassembly

1. Insert the shaft assembly up through the bottom of the tube until it sticks out the top of the pump head.
2. Warm up the seal assembly (item 4) prior to installation by using a heat lamp or socking them in hot water. This will aid in the ease of proper seal installation. Make sure there are no metal burrs on the pump shaft in the bearing hole location or the coupling half setscrew location that could “cut” the seal during installation.
3. Lubricate the end of the shaft with Vaseline to aid in the seal installation. Carefully install the seal down over the shaft with the two “slots” facing up toward the bearing assembly. The raised lip in the center of the seal (that faces the bottom of the pump) must go on straight and not buckle on one side.
4. After the seal is on the shaft correctly, install the bearing assembly (item 3) onto the shaft. Use the bearing assembly to push the seal further down the shaft until the hole in the center of the bearing assembly matches up to the hole in the shaft. Install the roll pin through the bearing assembly and shaft.
5. Line up the bearing assembly with the top of the pump head and press the bearing in. Use a block of wood and a mallet if needed.
6. Install the coupling half and tighten the setscrew into the dimple in the shaft. Spin the coupling to insure there is no binding.



Item	Description	Part Number
1	Coupling Insert	J100014
2	Half Coupling J100013	
3*	Bearing Assembly w/ Roll Pin	A101672
4*	Seal Assembly A100284	
5	#8 Brass Lock Washer	J100823
6	#8-32 x 1/4 Pan HD Brass M/S	J100822
7	TBS 40 Intake Tube Assembly	A100927-4
8	TBS Impeller Assembly w/SS Pin	A100030
9	TB 40 Spacer Set	A100031-1
10*	Center Bearing	M100039
11	TBS 40 Main Shaft	M100011-3

12\*                      TBS Compressor w/SSTL Pin                      A100033

\* Recommended Spare Parts