

**TBR SERIES – ADJUSTABLE CENTER DISTANCE or  
FIXED CENTER DISTANCE DRIVEN PULLEYS**  
**30TBR, 40TBR, 50TBR, 57-20TBR, 57TBR, 66TBR, 86TBR**

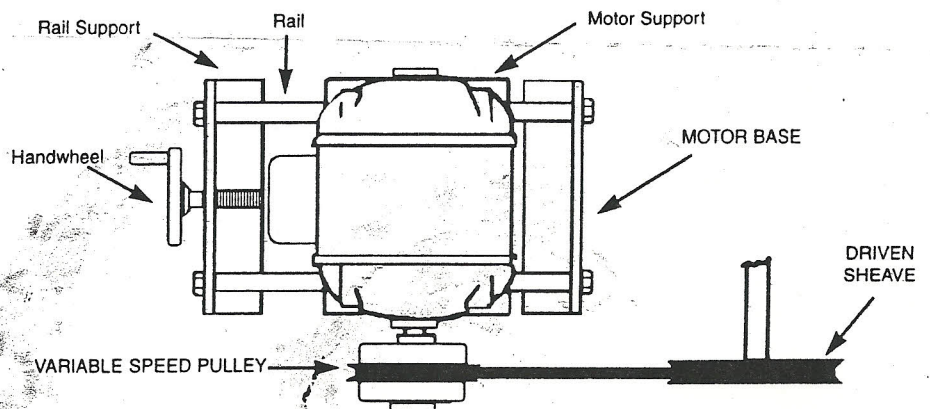
**SINGLE DISC MOVABLE – A, B SECTION V-BELTS**

**GENERAL DESCRIPTION**

The TBR Series of Hi-Lo Variable Speed Pulleys are single disc movement units using "A" and "B" section V-Belts or Variable Speed Belts. They are used on either adjustable center distance or fixed center distance drives. They have a Thru-bore construction with set screws at both ends for reverse mounting.

**INSTALLATION**

The following installation procedure covers adjustable center distance drives. The procedure for fixed center drives is covered in a separate pamphlet.



1. Bolt the motor to the adjustable base motor support brackets. Make sure that the support brackets are perpendicular to the rails before tightening the bolts.
2. Slide the pulley on the motor shaft and tighten the set screws. If the pulley does not slide on the shaft easily, examine the shaft and pulley bore for burrs. Also check the motor shaft diameter, it should be nominal to minus .0005 of an inch. If the pulley has a collet bushing, simply tighten the bushing draw bolt to specified torque, securing the pulley firmly on the shaft.

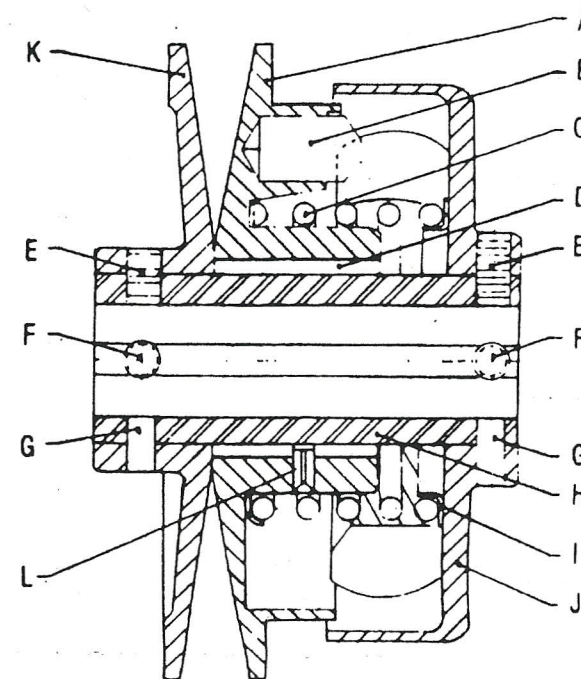
*Directions continued on back page*

Sub-Assembly or Part Name	Sub-Assembly or Part Number						
	30TBR	40TBR	50TBR	Models 57-20TBR	57TBR	66TBR	86TBR
*Shaft Assembly H, J, K (specify bore size)	2504/ 2502A	2504/ 3302-2A	2954/ 3102-2A	2954/ 8052A	4054/ 4052-2A	4054/ 3852-2A	4054/ 3652A
Slide Disc Assembly A, B, D, L	2501A	3301-2A	3101-2A	8051A	4051-2A	3851-2A	3651A
Cam Followers B	2515	2515	1365-4	1365-4	1365-4	1365-4	2215
Bushings D	2507	2507	2557-2	2557-2	4057	4057	4057
Springs C	3311	3311	1111-3	1111-3	1211-6	1211-6	1211-5

The shaft sub-assemblies listed are furnished complete with set screws and spring pins (parts E, F, & G) in place.

When ordering parts, give Model Number and Assembly Number or Part Number.  
If part needed is a shaft assembly, specify the bore size.

Examples: Model 66TBR Shaft Assembly - Number 4054/3852-2A x 7/8" bore  
Model 66TBR Spring - Number 1211-6



**DISASSEMBLY:**

- Remove set screws (E & F) and spring pins (G) attaching the fixed face (K) to the shaft (I).
- Scribe a line on the bore end between the fixed face and the shaft for a reassembly reference.
- Place a set of parallel bars under the outside rim of the slide face (A) and with an arbor press, press the shaft (I) off of the fixed disc (K).

**REASSEMBLY:**

- Reassemble all the parts on the pulley shaft in the reverse sequence in which they were removed (before the parts are removed, they should be line marked so they can be reassembled in the same position) and place them under the arbor press.
- Press the cam flange back on the shaft and line-up the scribe line between the shaft and the cam flange. Re-insert the spring pins.
- BALANCE:** It is possible that field replacement of parts will affect the balance of the pulley and cause vibration while running. If this happens, the pulley should be rebalanced before equipment is damaged.



3. Move the motor by turning the handwheel, to its maximum forward position less one inch. Position it for mooring by placing the belt over the variable speed pulley and the driven sheave and sight align them. Make sure that the motor shaft and the driven shaft are parallel. Secure the adjustable base to its mounting surface.
4. For permanent belt alignment turn the adjustable base handwheel to move the motor away from the driven shaft until the belt is seated halfway down the groove in the variable speed pulley. Place a straight edge along the outside rim of the driven sheave and slide the sheave on its shaft until the straight edge and the belt are parallel. Tighten the sheave on its shaft.
5. Start the drive and set the stop collars on the motor base rails so the belt does not run out of the variable speed pulley groove at its maximum speed position or bottom out on the shaft at its minimum speed position.

#### **MAINTENANCE**

1. **LUBRICATION:** The TBR Series of Hi-Lo Pulleys have oil impregnated bronze bushings in the sliding discs, which under normal operating conditions will provide lubrication for the life of the pulley. In case of wear the bushings are replaceable.
2. **OPERATION:** Allowing the pulley to operate for extended periods at a set position can cause isolated wear spots and the possibility of the sliding discs freezing in that position. It is recommended that pulleys be operated through their speed range about every 40 hours of operation.
3. **CLEANING:** Foreign matter may collect in the moving parts of the pulley causing them to stick or freeze. If this occurs, disassemble the pulley (see paragraph on disassembly) and clean the slide disc bushing and shaft thoroughly with a solvent. After cleaning, relubricate the pulley by wiping a film of grease on all bearing surfaces.

---

30149 Stacy Ponds Drive, Suite 100 • Stacy, MN 55079

PHONE 651/462-4580 • FAX 651/462-3353

Web site: [www.hi-lo.com](http://www.hi-lo.com) • E-Mail: [sales@hi-lo.com](mailto:sales@hi-lo.com)

---