

## Cam Clutch Installation and Maintenance Instruction


### BSEU Series


#### BSEU25, BSEU40, BSEU70, BSEU90

- Thank you for choosing Tsubaki E&M products.
- Before installing or working on the product, confirm it is the correct size by checking its label and make sure you have the complete set of parts. If any part is missing, contact your distributor immediately.
- This manual should be considered an essential part of the unit and remain with the unit when redistributed.

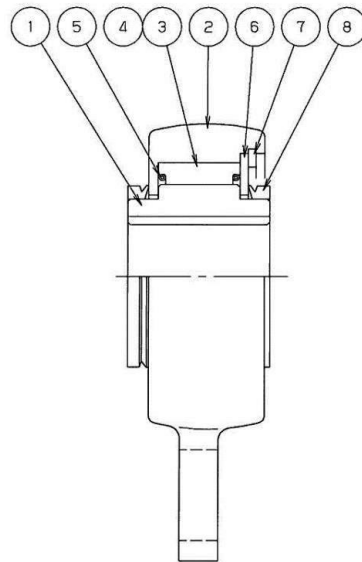
### SAFETY

- Your Cam Clutch is a high quality, sophisticated unit which should be handled by experienced engineers only.
- For safety purposes, make sure this manual is easily accessible by the user at all times.
- To ensure safety and optimal performance, carefully read this instruction manual in its entirety.

	<p><b>WARNING</b></p> <p>Death or serious injury may result from misuse, improper installation and/or improper maintenance of this product. Please refer to the detailed instructions provided in this manual for installation and maintenance specifications.</p>
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 <h2 style="margin: 0;">WARNING</h2>
<p><b>USE CARE TO PREVENT INJURY          COMPLY WITH THE FOLLOWING TO          AVOID SERIOUS PERSONAL INJURY:</b></p> <ol style="list-style-type: none"> <li>1. Guards must be provided on all chain and sprocket installations in accordance with provisions of ANSI/ASME B15.1 - 2000 "Safety Standards for Mechanical Power Transmission Apparatus," and ANSI/ASME B20.1 - 2012 "Safety Standards for Conveyors and Related Equipment," or other applicable safety standards. When revisions of these standards are published, the updated edition shall apply.</li> <li>2. Always lock out the power switch before installing, removing, lubricating or servicing a system which uses PTUC product.</li> <li>3. When connecting or disconnecting PTUC products, eye protection is required. Wear safety glasses, protective clothing, gloves and safety shoes.</li> <li>4. Improper installation or mounting, as well as operating conditions and maintenance, can affect the performance of a cam clutch. The cam clutch should be inspected regularly.</li> </ol> <p>"PTUC is used by U.S. Tsubaki to designate "Power Transmission Unit Components." PTUC products include Cam Clutch DISCO, POWER-LOCK<sup>®</sup>, Shock Relay, Gearmotor, HF Drive, Shock Damper, Power cylinder<sup>™</sup>, Couplings, SCR variable speed motor and other like products manufactured by/for Tsubaki.</p>

■ **Construction**



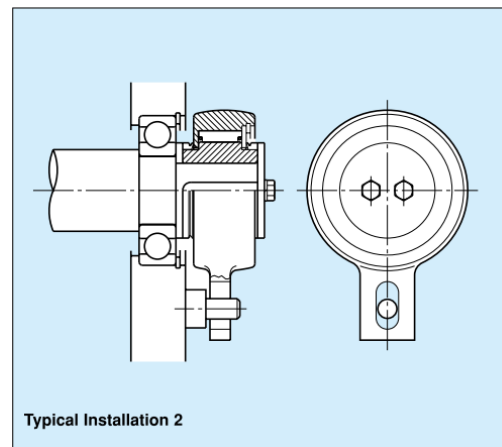
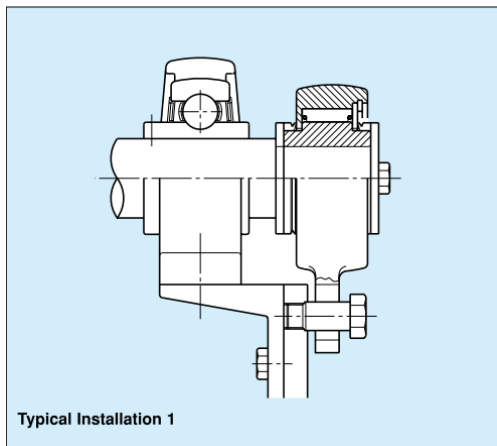
- ① Inner race
- ② Outer race
- ③ Cam
- ④ Roller
- ⑤ Spring
- ⑥ Plate
- ⑦ Snap ring
- ⑧ V-ring

■ **Installation**

1. Recommended shaft tolerance is shown below.

Clutch Bore	Shaft Fit Guide
0 to 1.20 inches dia. 0 to 30mm dia.	Line fit to .0008 inches loose (0.020mm)
1.20 to 2.00 inches dia. 30mm to 50mm dia.	Line fit to .0010 inches loose (0.025mm)
2.00 to 3.15 inches dia. 50mm to 80mm dia.	Line fit to .0012 inches loose (0.030mm)
3.15 to 4.70 inches dia. 80mm to 120mm dia.	Line fit to .0014 inches loose (0.036mm)

2. ISO R773 (DIN6885.1) keyway is standard.
3. Before installation, verify that the direction of rotation of inner race of the Cam Clutch (shown by the arrow on the inner race) is the same as the direction of rotation of the conveyor.
4. When inserting the Cam Clutch on the shaft, apply pressure only on the surface of the inner race with a soft hammer. Never strike the Cam Clutch with a steel hammer or apply unnecessary impact loads.
5. Always use a parallel key for installation onto the shaft and then fix the Cam Clutch to the shaft with the end plate. Never use tapered key which give the damage to Cam Clutch.
6. Use the frame or pin to eliminate outer race rotation.
7. Set 0.5 mm clearance between the torque arm and flame (torque arm stopper) or long slit in the torque arm and the pin. If the torque arm is rigidly mounted, it will apply a load to Cam Clutch which may eventually damage it.
8. The Cam Clutch is pre-lubricated with low temperature grease before shipment and is ready for installation and operation. No lubrication maintenance is required. The ambient operational temperature range is -40°F to +122°F (-40° C to 50° C). However, the maximum temperature should be determined depending on the rotating speed of the inner race. Further, if the rotating speed is low, a higher ambient operational temperature is allowable. Please consult Tsubaki for more detail.



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