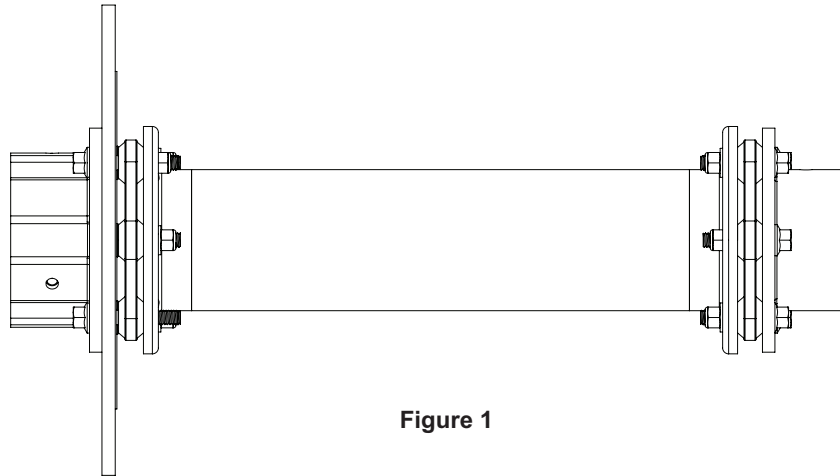


⚠ WARNING!

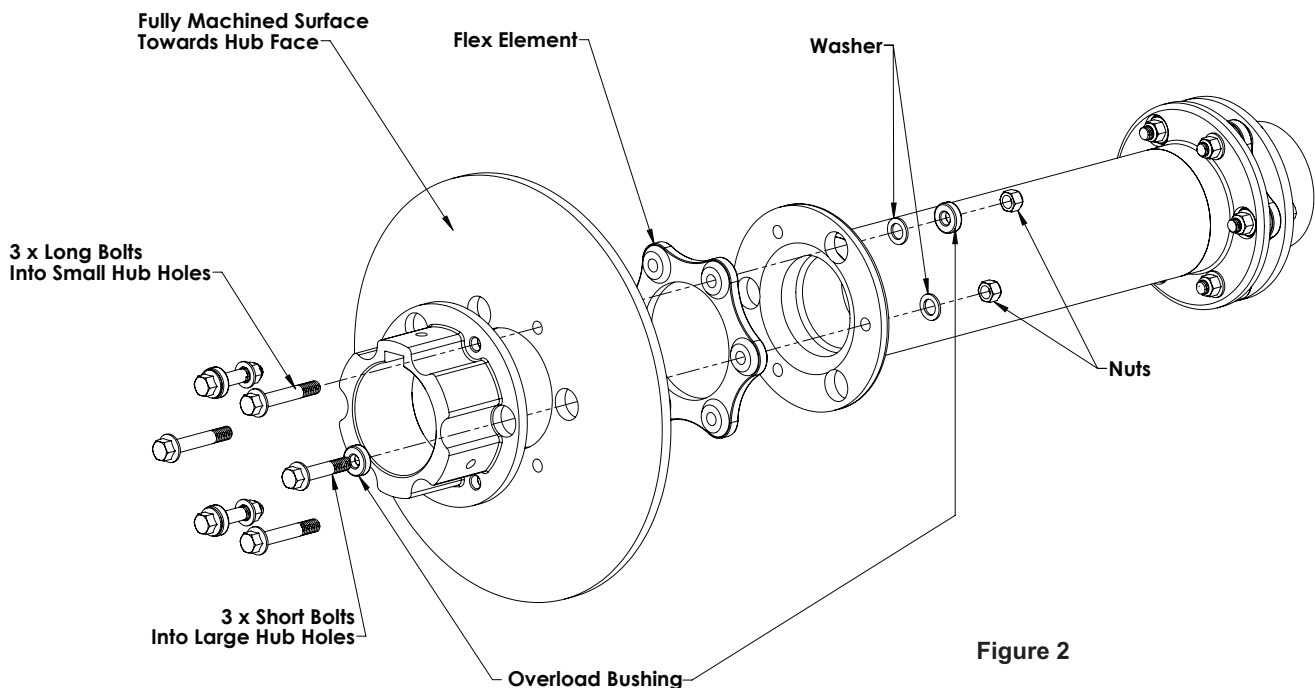
- Because of the possible danger to person(s) or property from accidents that may result from improper use or installation of products, it is extremely important to follow the proper selection, installation, maintenance and operational procedures.
- All rotating power transmission products are potentially dangerous and can cause serious injury. They must be properly guarded in compliance with OSHA, ANSI and any other local standards for the speeds and applications in which they are used. It is the responsibility of the user to provide proper guarding.

1. Sandwiched Brake Disc Installation**Figure 1**

- 1.1. Figure 1 shows the brake disc installed between the hub and the flex element on the motor end.

CAUTION – Do not install the disc between the flex element and the spacer drive shaft flange.

- 1.2. Reference Addax® drive shaft Installation Instructions for end opposite the brake disc and a complete description of the components.

**Figure 2**

2. Installation Procedure

- 2.1. Loosen set screws and move hub back on shaft towards the motor shaft bearing by ½ inch (12.5mm).
- 2.2. Position the disc with the fully machined surface against the hub face. Unmachined disc surface must be on the flex element side.
- 2.3. Install the 3 long bolts through the bolt hole of the hub, the bolt hole of the disc, through the element and clearance hole of the flange (Figure 2).
- 2.4. Install the 3 shorter bolts through the clearance holes of the hub, through the element and through the bolt hole of the flange. Overload bushings and washers are installed as shown in Figure 2.
- 2.5. Torque lock nuts and set screws according to Addax drive shaft Installation Instructions.
- 2.6. Check alignment according to Addax drive shaft Installation Instructions.

3. Caliper Installation and Service Instructions

The Addax Cooling Tower Brake can be mounted in the 3 or 9 o'clock position, as well as, the 6 o'clock position (Figure 3).

- 3.1. A mounting surface and bracket will need to be constructed in order to support brake assembly.

- a. Recommend using ½" thick plate steel.
 - b. Machine, at minimum, four (4) holes; two (2) on top and two (2) on bottom at Ø.66 for 5/8-18 bolt. (Figure 3)
 - Note:** Do NOT use two (2) consecutive holes per row.
 - c. Verify mounting fixture assures proper height of brake in relation to motor shaft (Figure 3). Bottom of brake pads should be aligned to bottom of rotor.
 - d. Mount brake to mounting fixture with minimum of four (4) 5/8-18 bolts with lock washers and nuts.
 - e. The bracket design should have slotted holes in the base to allow for flexibility when mounting on the tower.
- 3.2. Center rotor between brake pads (Figure 4). A 0.020" feeler gauge should move freely between the rotor and both brake pads through one full rotation (Rotor run-out shall be less than 0.02" relative to mounting bracket).
 - Note:** The ½" thick brake rotor centered within brake pads will have a .56" nominal total clearance. One side may have a greater clearance.
 - 3.3. Permanently mount brake assembly.
 - 3.4. Modify cover/shield as necessary for proper brake actuation handle clearance.

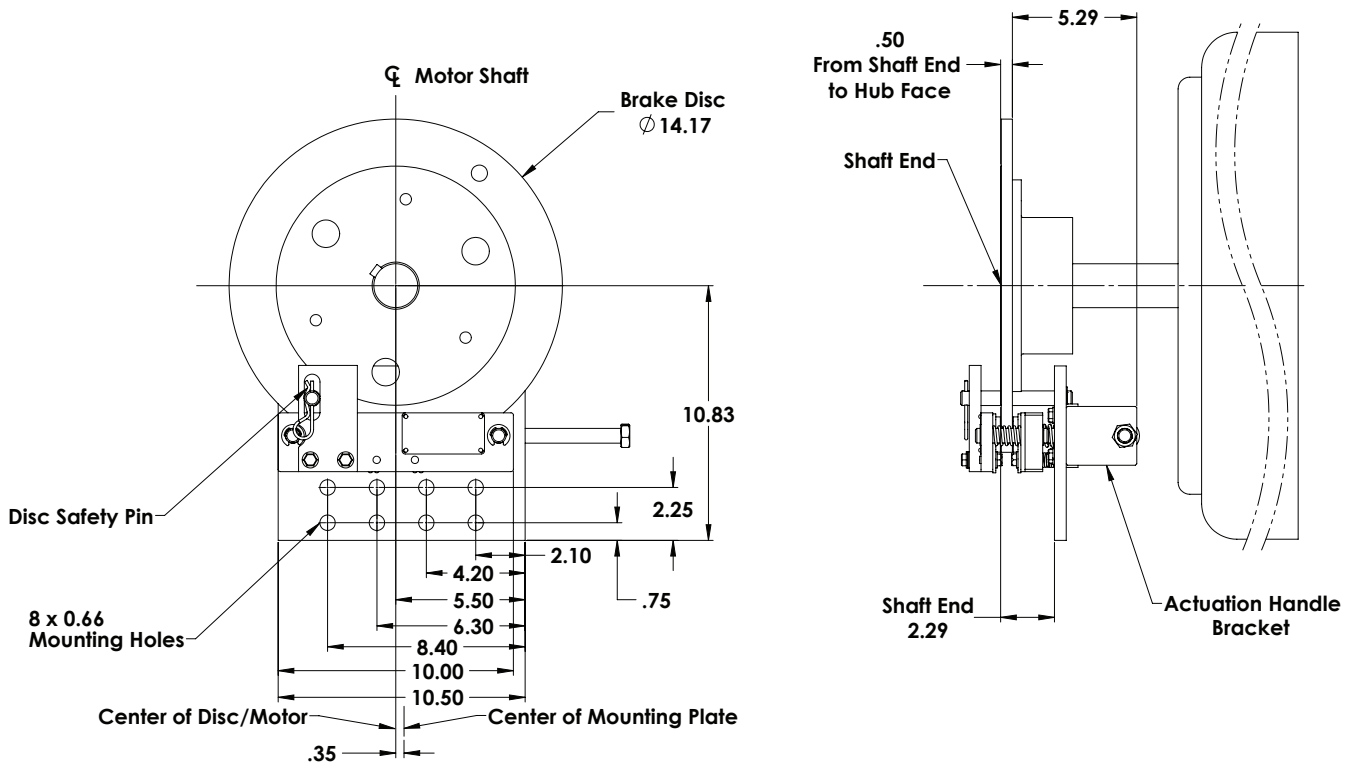


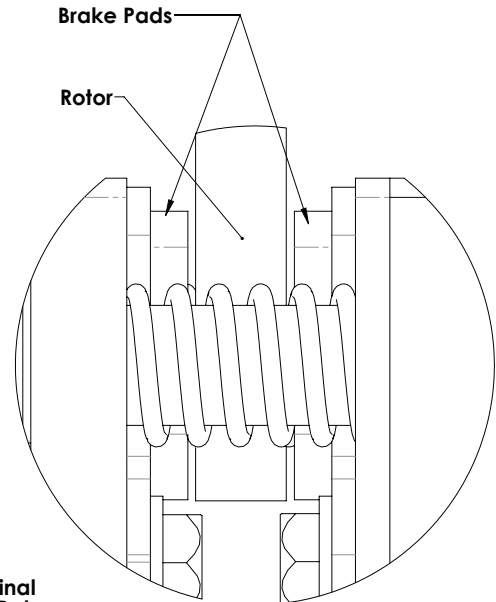
Figure 3

4. Actuating the Addax Cooling Tower Brake

- 4.1. Verify power to motor is off and locked out.
- 4.2. Use a 15/16" socket or wrench and turn clockwise to engage brake or counter-clockwise to disengage.
- 4.3. To fully engage the brake and assure proper braking torque, turn clockwise until you hit the set mechanical stop (≈ 50 lb-in). Do not over-tighten.
- 4.4. To fully disengage the brake, turn counterclockwise until you hit the release mechanical stop.

Note: Verify brake is fully disengaged before starting motor/fan or undue wear on brake pads will result, as well as, undue stress on the motor.

- 4.5. For added safety, it is recommended to use the rotor safety pin attached by a chain.
 - a. To align rotor safety pin, fully engage brake so that rotor stops rotating.
 - b. If necessary, disengage the brake until you can rotate the disc by hand to align safety pin holes.
 - c. Set rotor safety pin in place securing with cotter pin.
 - d. Engage the brake to full torque.



0.56 Nominal Distance Between Brake Pads

Figure 4

5. Maintenance

- 5.1. The Addax Cooling Tower Brake is manufactured with 316 stainless steel components. Brake pads should last the lifetime of the cooling tower if used properly.
- 5.2. Recommend actuating brake once per year to verify brake moves freely.
- 5.3. Visually inspect brake for any unusual damage.
- 5.4. Check brake pad clearance as described in installation instructions.
- 5.5. Lubrication – Annual PM – Apply some grease to the threads on the actuator bolt using a high temperature grease with Teflon.