

IMPORTANT

Replacing Bearings and Shafts

In time, due to expansion and contraction from heating, bearing race set screws will slip on a shaft. When the set screws slip, the shaft will rotate in the bearing race causing the bearing to overheat and the shaft to wear down within the race.

To avoid bearing failure and shaft damage the bearing race and shaft must be pinned together so that they cannot rotate relative to each other. This is done by drilling a hole into the shaft and replacing one of the standard bearing set screws with a long set screw penetrating into the shaft.

Thread lock liquid can be applied to set screws and lock nuts to avoid loosening from vibration; however these materials do not take the place of drilling the shaft. Thread lock will not prevent the set screw point from slipping on the shaft surface allowing the shaft to rotate within the bearing race.

Installation procedure:

1. Install the new bearings and/or shaft making sure to allow clearance on both sides of the fan wheel and to align the drive sheaves to avoid belt wear.
2. Set the standard set screws in the bearing race onto the shaft to mark the shaft.
3. Loosen the set screws and slide the bearings or shaft to expose the set screw marks on the shaft.
4. On one of the exposed set screw marks for each bearing, drill into the shaft a $\frac{1}{4}$ " deep hole slightly larger in diameter than the set screw.
5. Above the drilled hole, replace the bearing race set screw with a longer set screw and jam nut. If replacing a bearing, the long set screw and jam nut from the original bearing can be reused.
6. Set the longer set screw down into the hole and tighten the jam nut down onto the bearing race surface.
7. After 30 hours of operation, check and tighten all the bearing set screws.

