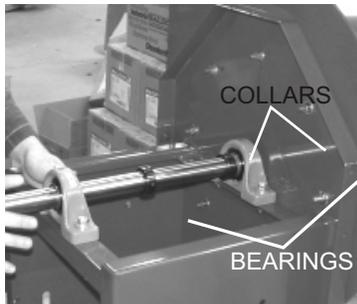


### BEARING CHANGE ON CMB SERIES FANS

1. Loosen Bolts on motor base on side of fan. After loosening, take the tension off the belts.
2. Loosen locking collars on shaft against each bearing.
3. Go to the wheel end opening of the fan and loosen and remove the set screws holding on the wheel. Lubricate freely the set screw holes on the wheel where it was held to the shaft. You will need to do this to be able to pull the wheel off of the shaft. Loosen and remove the key holding on the wheel. Now pull the wheel off the shaft.
4. After the wheel is off, knock the shaft off the bearings, using a wooden block or a piece of aluminum. Do not use a piece of steel as it can damage the shaft. It is not necessary to remove the drives from the shaft.
5. Clean shaft thoroughly, with emery cloth or fine file. Shaft must be perfectly smooth and clean before installing it into the new bearings.
6. File set screw marks off wheel and bearing collars.
7. Insert open end of shaft through first bearing, then the two collars, then finally the second bearing.
8. Insert shaft into wheel. Do not tighten. Bolt bearings to fan loosely. Adjust shaft so that the sheaves line up



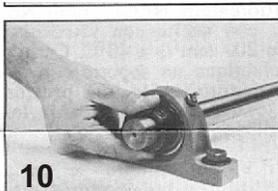
Steps 7 & 8. The locking collars will be on the inside of each bearing.



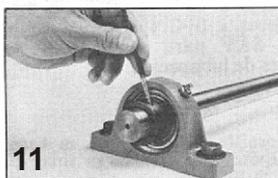
Step 8. Make sure the sheaves are aligned.



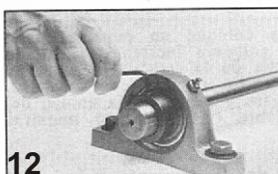
9. Make sure the shaft is properly aligned. Check measurements carefully. After alignment is properly achieved and the sheaves are lined up, then the bearings can be tightened to a snug fitting. Do not over tighten.



10. Slide the collar up to the bearing and turn it by hand in the direction of shaft rotation until it slips over the inner ring extension and engages the eccentric. Turn the collar quickly by hand in the direction of shaft rotation until the eccentric groove in the collar engages the eccentric on the inner ring and the two parts are locked together. This requires about  $\frac{1}{4}$  turn.



11. Place a punch or drift in the blind hole in the collar and strike it sharply with a hammer in the direction of shaft rotation to lock the collar and ring tightly together. This also tightens the inner ring on the shaft.



12. Tighten the collar set screw with proper hex head socket wrench until the set screw stops turning and the hex head socket wrench starts to spring. Proper tightness of set screws is necessary to assure adequate bearing service life. The set screw is an added locking device and should not be relied upon alone to lock the bearing to the shaft.

13. Tighten wheel to shaft.
14. Reattach belts to upper sheaves. Lower motor to put tension back on the belts, and tighten into place.