



Exploded view of a turbo blower case assembly. For single stage blowers, there is no stationary vane and only one impeller.

## SERVICING

Case assemblies are identical for direct connected, V-belt, and coupled drive turbo blowers. A typical two-stage blower is shown. Single stage blowers use identical inner case and impeller but omit stationary vane and one impeller, and have a shallower outer case. Three-stage blowers use two stationary vanes, three impellers, and use a peripheral spacer between stationary vanes.

## INSTRUCTIONS FOR DISASSEMBLY

1. Remove intake guard.
2. Remove case flange bolts and nuts.
3. Remove outer case being careful not to bump impeller. (Felt seal should come off with outer case.)
4. Loosen impeller hub screws and remove impeller (and bushing, if any). **CAUTION: Impellers are accurately balanced and should be handled with care. Grasp impellers by hubs only.**
5. For multi-stage blowers, drive out the two case flange pins from the motor side to remove stationary vanes (these pins support vanes so they do not drop on the impeller). Felt seal should come off with stationary vanes, and pins should remain in the vanes.
6. Remove impeller as in Step 4.
7. If necessary to remove inner case, make note of location of each shim and spacer.
8. Remove motor if required.

## INSTRUCTIONS FOR ASSEMBLY

1. Mount inner case to base.
2. Mount motor to base but do not tighten bolts.
3. Mount inner impeller on motor shaft and line up motor so flat side of impeller is  $\frac{1}{8}$ " away from inner case all around. Tighten motor bolts.
4. Tighten impeller hub screws. Use torque table on page 4 for impeller hub screws only
5. Mount stationary vanes with case flange pins and drive them snugly into inner case.
6. Mount impeller to shaft but do not tighten.
7. Mount outer case and bolt in place.
8. Slide impeller forward against inner side of outer case then back again  $\frac{1}{8}$ ". Tighten impeller hub screws. Use torque table on page 4 for impeller hub screws only.
9. Turn motor over several times by hand to check clearances.
10. Start motor and listen for clicking that would indicate misalignment of impellers. If this should occur, shut motor off immediately to prevent serious damage to impellers.
11. Check rotation of impellers according to arrow on case.
12. V-belt or coupled drive blowers must be checked after assembly for alignment of belts or couplings, to guard against excessive wear.