



Centrifugal In Line Fans

Maintenance and Operation Manual

Disassembly/assembly of fan motorised impeller

A) Safety Procedure before dismantling any component from the fans

- a. Ensure power is cut off and isolate electrically the fan motor prior to undertaking any maintenance work.
- b. Bring down fan to a safety level
- c. Dismantle all motor wires from terminals

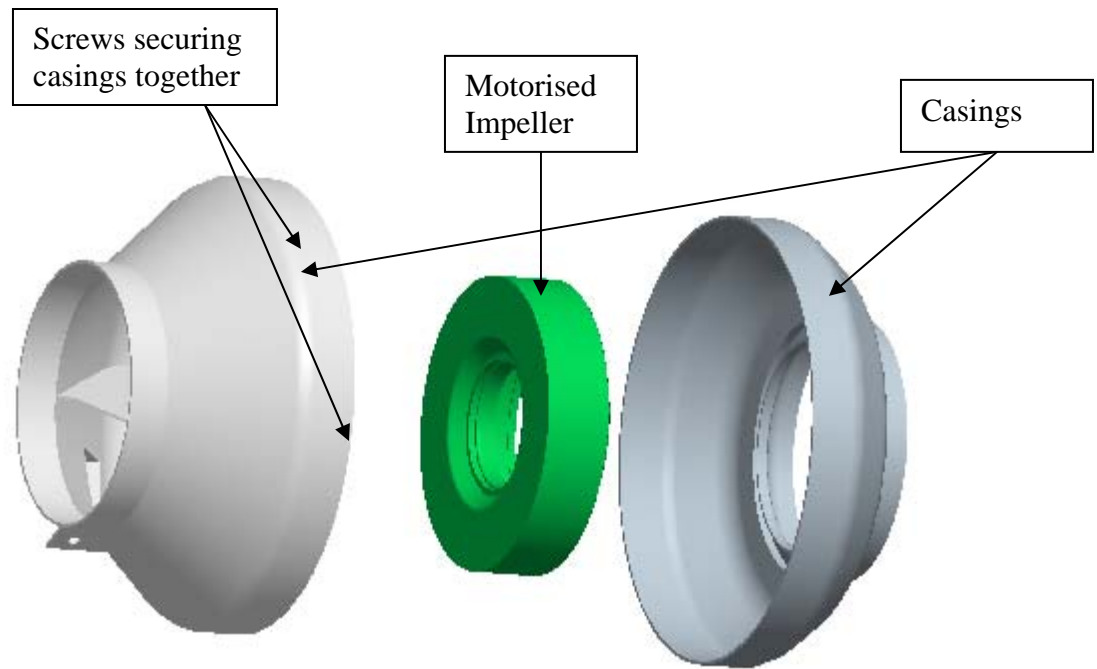
1) CIL model (Appendix 1)

a. Disassembly of motorised impeller

- a) Dismantle casing by removing screws on casing
- b) Remove motor brackets by dismantling the holding screws
- c) Dismantle the motor screws on the bracket
- d) Replace the motorised impeller where necessary

b. Assembly of motorised impeller

- a) Assemble the motorized impeller to the bracket
- b) Terminate all wiring in the junction box
- c) Put back the casing and screw back
- d) Make sure that impeller is not rubbing against the inlet cone



EXPLOSIONLIST:KCI IM



Maintenance Manual

Fault troubleshooting

Common Faults and Answers

1. What to do if fan running current is higher than specified

a) Check electrical

- Make sure supply voltage are as accordance to what is specified in the name plate
- Make sure all electrical terminals are tightened
- Make sure capacitor is correct and functioning for single phase motor
- Make sure all connection are as per our electrical diagram given

b) Check for fan vibration

- Check that fan is running smoothly and not shaken vigorously
- Check that fan blade is not rubbing against the casing

c) Make sure inlet or outlet air passage is not blocked

1) What to do if fan cannot run

a) Check that there is incoming electrical supply to the motor

- ❖ If no supply voltage across the motor
 - Check the MCB, overload, thermistor is not open circuit
 - Electrical panel circuit is functioning properly

b) Check that termination is correct at the motor

c) Check that capacitor is correct and is in working condition for single phase motor

d) Check that fan impeller is not stuck

e) Check that motor windings is OK as mentioned above

2) What to do if fan has abnormal normal noise and vibration

- a) Stop fan immediately
- b) Check that fan rotation is correct
- c) Check that fan blades are not touching casing or inlet cone
- d) Check that no foreign materials are stuck at the fan blades
- e) Check that fan blades are not broken
- f) Check that all fasteners are tightly secured
- g) Check that fan is isolated completely
- h) Check that inlet and outlet air passage is not blocked

If non of the above,

- ❖ Fan balancing is required
- ❖ Motor bearing may be faulty
- ❖ Fan may be running in unstable stage