Ventilatoren Lti

LRE/D CABINET FAN
O&M Manual

LRE/LRD model

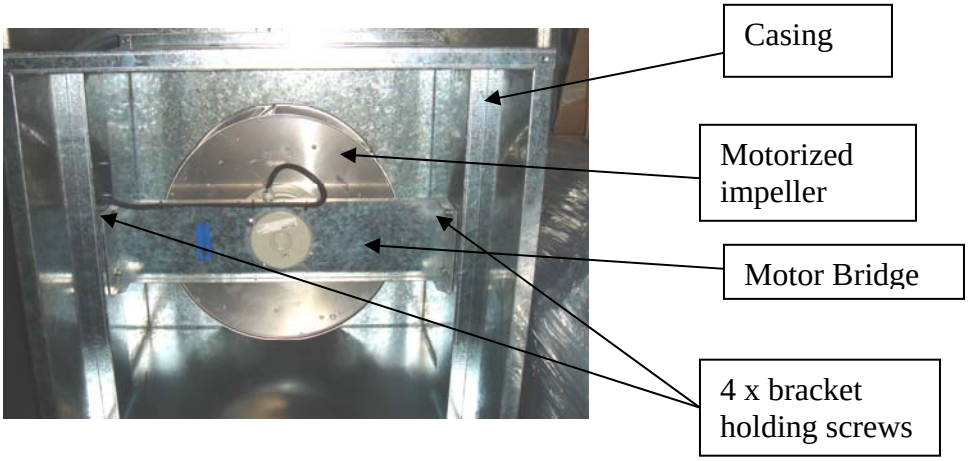
1) Disassembly of the motorized impeller

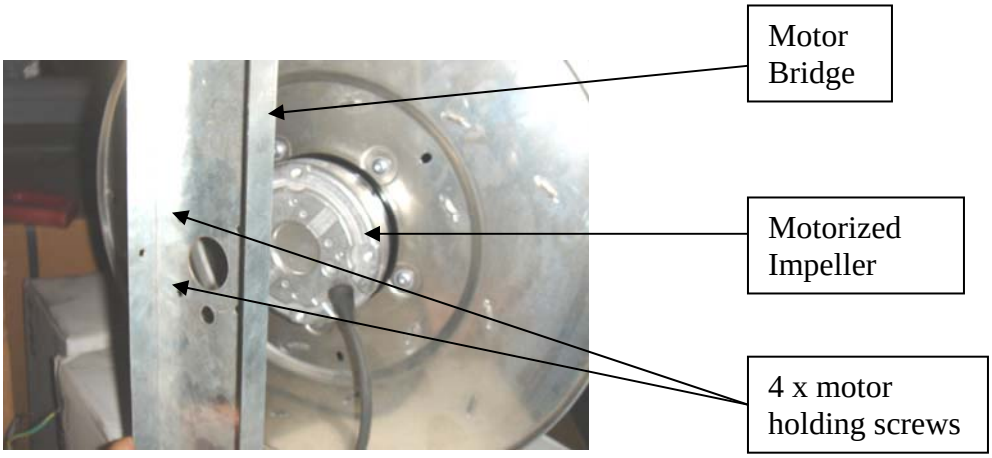
a) Dismantle the holding screws of the motor bridge from the casing
b) Remove the motorized impeller together with the motor bridge
c) Remove the holding screws of the motor
d) Replace the motorized impeller where necessary

2) Assembly of the motorized impeller

a) Tighten the motorized impeller to the motor bridge
b) Assemble the bridge together with the motorized impeller to the casing
c) Adjust the bridge and make sure impeller is not rubbing the inlet cone

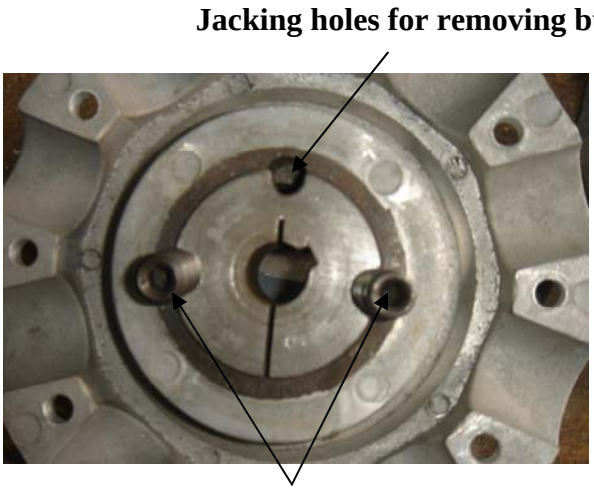
LDE/D model (External Rotor Motorised Impeller)





Dismantle the motorised impeller from the bracket

Dismantling of Taper Lock Bush (Induction Motor Type)



Removal of taper lock bush

a) Using a hexagon allen key, slacken and remove both the locking set screws
b) Use one of the set screw and screw to the jacking holes
c) Tighten screws until taper lock bush is loosened in hub and free on the shaft.
d) Remove the bush and then the impeller

Installing the taper lock bush

a) Clean, polish and grease the motor shaft before putting on the key
b) Put the impeller on the motor shaft
c) Insert the taper lock bush and tap lightly till it seat squarely on the shaft and impeller hub
d) Align the holes of the screw and tighten the two locking screws till the hub is in firm position

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 impeller is running in the correct rotation
--Make sure all electrical phases have constant supply for 3 phase motor
--Make sure all electrical terminals are tightened
--Make sure capacitor is correct and functioning for single phase motor
--Make sure resistance of motor winding is constant [measure (U1,U2), (V1,V2), (W1,W2)] for 3 phase motor
--Make sure all connection are as per our electrical diagram given

c) Check for fan vibration

--Check that fan is running smoothly and not shaking vigorously
--Check that centrifugal impeller is not rubbing against the casing or inlet cone

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

2) 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 smooth turning
e) Check that motor windings is OK as mentioned above

3) 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