

EWN Exp. ③

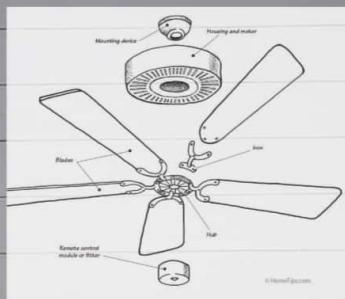
Aim - To study the repair of household appliances & etc.

Apparatus - Sushires, multimeters, ceiling fan

Theory -

i) Ceiling fan :-

It is a mechanical fan mounted on ceiling usually electrically powered that uses hub mounted rotating blades to cool air. Fan increases the temp. by releasing the heat from itself.



② Testing - It can be done by two ways one with the help of multimeter & one with series lamp with this two techniques.

i) With the help of series lamp we can check the common wire fault here we have which are from motor which are rotating winding wire. turn winding wire & common while connecting the series lamp +ve & -ve terminal we can check that common wire when the bulb glows we can also check which winding is having fault as the capicitor is having fault very easily.

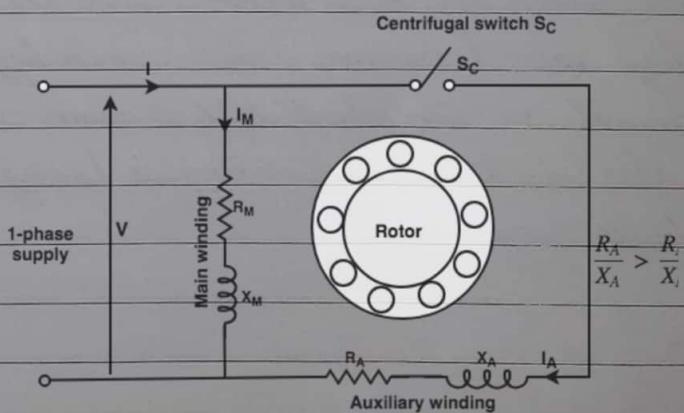




- ③ Fault Detection - There are 4 common fault,
 load noise, low speed, not working, getting stuck
 by load noises Because of broken or stuck
 Because of no proper lubrication
 Because of air gap in rotor & stator
 by low speed Because of damage of capacitors
 Because of voltage is low.
 ④ Not working Because of wire break
 Because of No power supply
 Because of faulty.
 ⑤ Getting stuck Because of No proper alignment
 Because of faulty.

④ Repair :

- After find fault we repair it
- After finding it we change capacitor if it is damage
- After repairing the fault assemble the fan & test if it works in progressive order



Conclusion - Thus, with the following steps we have learnt how to repair the household appliances with FAN.