



Induction Motor

Program: Electrician Technician

Course: EL170 – Motor and Industrial Controls

Objectives: Under the supervision of your instructor, you should be able to do the following:

- Identify all major components of the motor and their functions.
- Use approved methods for proper alignment on the assembly.
- Disassemble the motor as per department's instructions.
- Properly reassemble the motor.
- Test the motor for proper functionality.

Lab Equipment:

- 1 – 3-phase motor
- 2 – Contactors

Required Tools:

- 1 – Phillips screwdriver
- 1 – Flathead screwdriver
- 1 – Pair of diagonal cutters
- 1 – Pair of wire strippers
- 1 – Digital multimeter

Materials:

- N/A

Safety (PPE):

- Safety glasses/goggles

Resources: N/A

Required Time : 180 Minutes

Shop Maintenance:

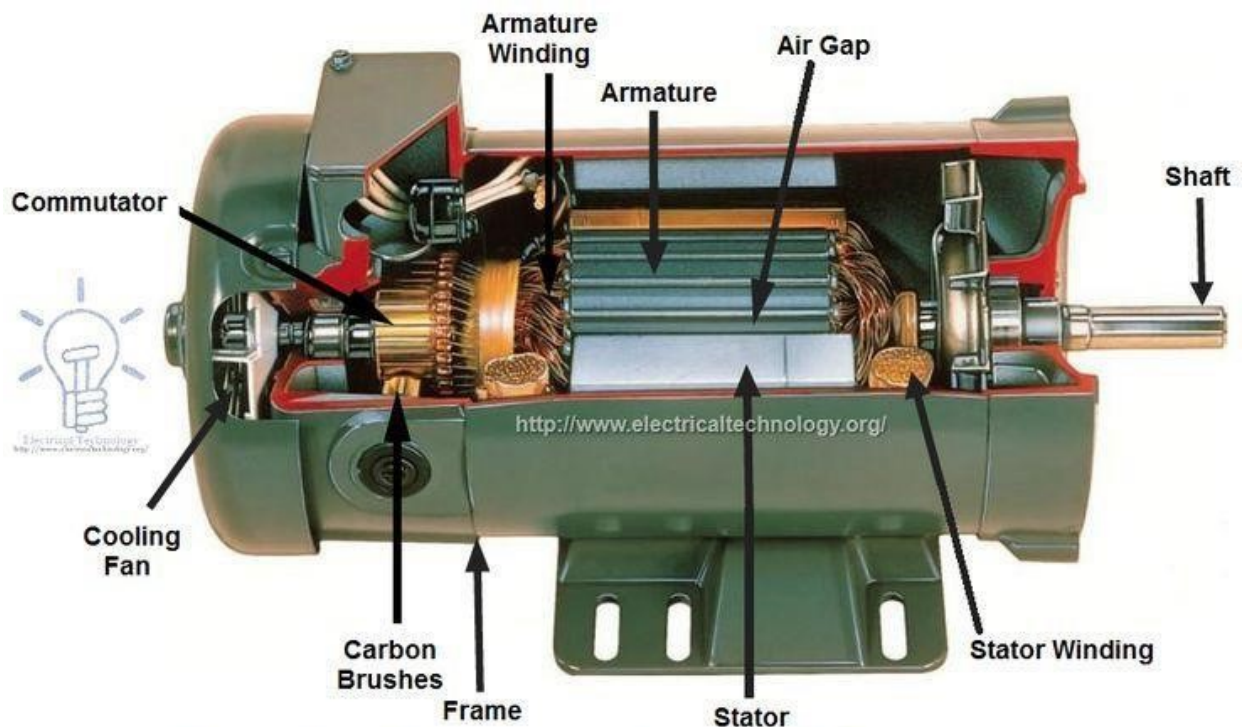
- All work will cease 20 minutes prior to the end of class.
- All work areas must be cleaned.
- Tools and equipment must be cleaned and returned to the designated areas (cage, tool room, cabinets etc.)
- Any broken or missing tools must be reported immediately.
- Tools and equipment are student's responsibility

Procedure:

- Split the casing apart and remove the front-end cap.
- Remove the rear end, the wiring and the rotor.
- Remove and clean up the switch contact board.
- Check the operation of the centrifugal weights.



- Check electrical resistance readings.
- Clean up and reverse the steps.



Basic Parts of the Motor

What is Motor Efficiency & How to improve it?

