



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

DEPARTMENT OF AUTOMOBILE ENGINEERING

COURSE NAME : 19AUB204 – AUTOMOTIVE ELECTRICAL AND ELECTRONICS ENGINEERING

II YEAR / IV SEMESTER

Unit 2 – Starting and Ignition System

Topic : Introduction to Starting System



STARTING SYSTEM



- ❖ The starting system in an automobile is responsible for initiating the operation of the engine.
- ❖ It typically consists of several components working together to turn the engine's crankshaft until combustion can occur.
- ❖ In an automobile, the starting process typically involves the use of a starter motor, often referred to simply as the starter



KICK STARTING





ROPE STARTING





SELF STARTING





STARTING IN RICKSHAW





CONDITION AT STARTING



- ❖ The ignition key is turned to the "start" position, completing the circuit that activates the starter motor.
- ❖ Sufficient electrical power must be available from the battery to engage the starter motor.
- ❖ Adequate fuel supply must be available to facilitate combustion.
- ❖ The engine components should be in good mechanical condition to ensure smooth starting.



BEHAVIOUR OF STARTER DURING STARTING



- ❖ When the ignition key is turned to the "start" position, a signal is sent to the starter motor to begin operation.
- ❖ The starter motor's pinion gear meshes with the engine's flywheel or flexplate, which is connected to the crankshaft.
- ❖ The starter motor rotates, causing the engine's crankshaft to turn.
- ❖ As the crankshaft turns, the engine's pistons move, compressing air and fuel mixture in the combustion chambers.



BEHAVIOUR OF STARTER DURING STARTING



- ❖ Once compression reaches a sufficient level, the spark plugs ignite the air-fuel mixture, initiating the combustion process.
- ❖ With the combustion process underway, the engine starts running under its own power.
- ❖ Once the engine is running smoothly, the starter motor disengages automatically from the flywheel/flexplate to prevent damage and unnecessary wear.



THANK YOU !!!