

#### SNS COLLEGE OF TECHNOLOGY



Coimbatore-35
An Autonomous Institution

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

#### **AUTOMOTIVE SAFETY & INFOTRONICS**

UNIT 3 – SAFETY EQUIPMENTS AND COMFORT SYSTEM

**TOPIC 10: CENTRAL LOCKING SYSTEM** 



# PRESENTATION OUTLINE



- Central Locking System
- Central Control
- Speed Control
- Separate Control
- Central Car Locking Remote Control Principle
- Advantages
- Disadvantages





## CENTRAL LOCKING SYSTEM





- The full name of central locking system is central control door lock system
- To improve convenience and traffic safety of car use, more and more modern cars installs the central locking



# CENTRAL LOCKING SYSTEM



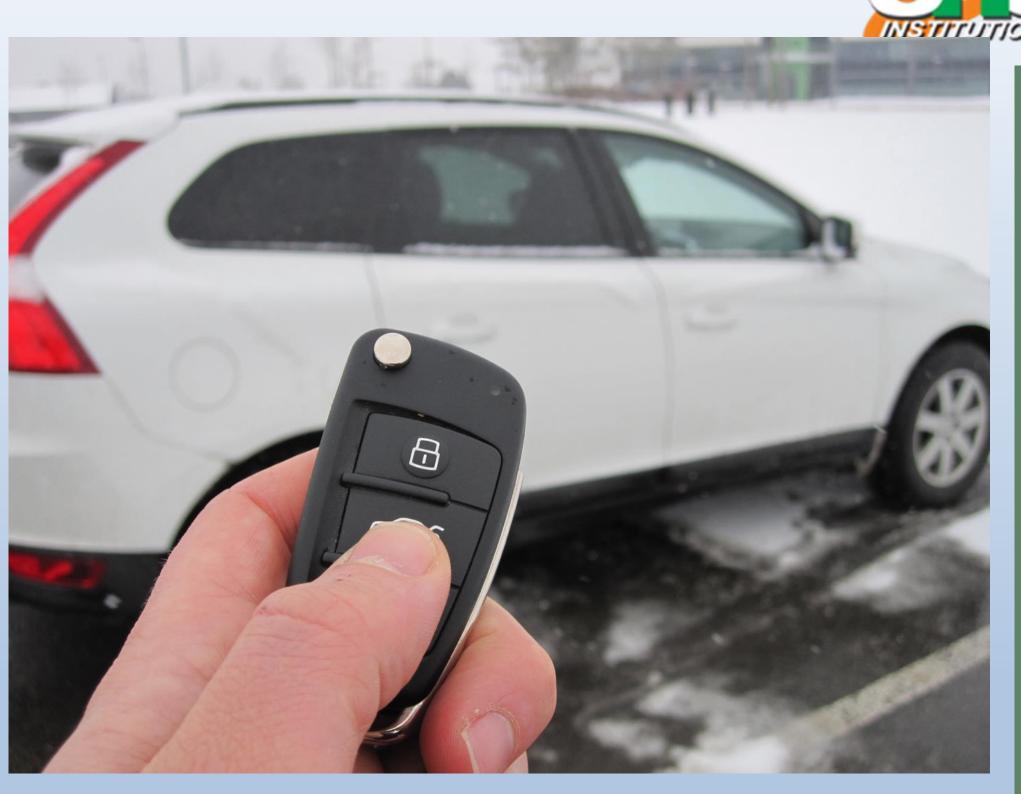


- Car central locking means the switch that is located next to the driver's seat; it's a control apparatus which can simultaneously control the open and close of the whole car door
- The car central locking system has been fitted in the early 1970's
- After 20 years its common in the all cars
- Car central locking switch is usually installed in the door or on the center console



# CENTRAL CONTROL

 When the driver lock the car door next to him, the other door is locked, the driver can open each door at the same time or open a door alone by door lock switch





# SPEED CONTROL



 When traffic reaches certain speed, individual door lock independently, to prevent occupant misuse door handles and make the door open





# SEPARATE CONTROL



• In addition to the door by the driver's side, there is also separate spring lock switch for other doors dispose, which independently control the opening and lock of a car door





# CENTRAL CAR LOCKING REMOTE CONTROL PRINCIPLE





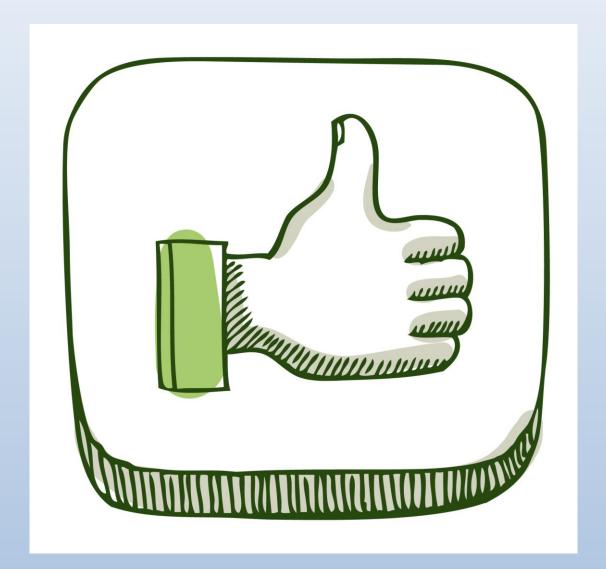
- Central locking wireless remote control function is to remote open the door and lock the door with not insert the key into the keyhole, you can easily unlock and lock the door at distance
- The basic principle of the remote locking: send weak radio waves from owners side, the car antenna receives the radio signals, the electronic controller ECU identifies the signal code and then actuator executes the lock/unlock action



#### **ADVANTAGES**



- For private car owner its totally boon for its first level of safety benefits
- When you have a family, which has the kids one should surely want to lock all the doors while driving in or outside the city
- There are multiple occasions when you need to travel unknown area where parking is unorganized





# DISADVANTAGES



- There are chances of mishandling
- For a private car owner, technology can fail to recognize the code which could lead to locking inside or outside the door





# **SUMMARY**



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### REFERENCES



• Richard Bishop, "Intelligent Vehicle Technology and Trends" Artech House, 2005

Thank you