



# 19MO631- AUTOTRONICS

## UNIT 5 - CHASSIS AND SAFETY SYSTEMS

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### Cruising with Control

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# Introduction to Cruise Control Systems

- ❖ Cruise control is a system that allows drivers to set and maintain a constant speed without having to keep their foot on the accelerator pedal.
- ❖ The first cruise control system was introduced by Chrysler in 1958 and was called “Auto-Pilot”. Since then, cruise control systems have



# How Cruise Control Systems Work

Cruise control systems use a combination of sensors, electronic controls, and actuators to maintain a constant speed.

When the driver sets the desired speed, the system uses sensors to monitor the vehicle's speed and adjusts the throttle and braking systems as needed to maintain the desired speed.



# Benefits of Cruise Control Systems

- ❖ Cruise control systems offer several benefits to drivers, including improved fuel efficiency, reduced driver fatigue, and increased safety.
- ❖ By maintaining a constant speed, cruise control systems can help improve fuel efficiency by reducing unnecessary acceleration and deceleration. They also allow drivers to rest their feet and reduce fatigue



# Types of Cruise Control Systems

There are two main types of cruise control systems: traditional cruise control and adaptive cruise control.

Traditional cruise control systems only maintain a constant speed and require the driver to manually adjust the speed when necessary.

Adaptive cruise control systems, on the other hand, use sensors to detect the distance between the vehicle and the vehicle in front of it and automatically adjust the speed to maintain a



# Future Developments in Cruise Control Systems

As technology continues to advance, cruise control systems are likely to become even more sophisticated and advanced.

Some potential future developments include the integration of artificial intelligence and machine learning algorithms to improve performance and safety, as well as the development of fully autonomous vehicles that do not require human input to operate.



***THANK YOU***