



UNIT 5-The Electronic Control of Automatic Transmission



Introduction

- ❖ Electronic control of automatic transmission is a technology that has revolutionized the automotive industry. It involves the use of electronic sensors and microprocessors to control the shifting of gears in an automatic transmission.
- ❖ This technology has made driving more comfortable, efficient, and safer for drivers. It has also contributed to the reduction of emissions and fuel consumption in vehicles.



How it Works

The electronic control module (ECM) is the brain behind the electronic control of automatic transmission. It receives signals from various sensors in the vehicle such as the throttle position sensor, speed sensor, and engine load sensor.



Benefits

Electronic control of automatic transmission offers several benefits over traditional mechanical transmissions. One of the main advantages is improved fuel efficiency, as the system can optimize gear ratios for better fuel economy.



Challenges

While electronic control of automatic transmission has many benefits, there are also some challenges associated with the technology. One of the main challenges is the complexity of the system, which can make it difficult to diagnose and repair if something goes wrong.



Future Developments

As technology continues to advance, we can expect to see further developments in electronic control of automatic transmission. One area of focus is improving the accuracy and speed of the sensors and microprocessors used in the system.

Another area of development is integrating the system with other advanced driver assistance technologies, such as adaptive cruise control and lane departure warning systems, to create a more seamless and intuitive driving experience.



THANK YOU