



19M0631-AUTOTRONICS UNIT 5 -CHASSIS AND SAFETY SYSTEMS

Climate control of cars. Keyless entry

> YAGAVA.A [20CEMO15] MECHANICAL&MECHATRONICS [ADDITIVE MANUFACTURING]

**G COMPONENTS** 











### Introduction

Climate control in cars has come a long way since its inception. It is no longer just about keeping the temperature comfortable inside the car, but also about reducing energy consumption and increasing efficiency.
Keyless entry is another technological advancement that has made driving more convenient and secure. With keyless entry, drivers can easily unlock and start their cars without having to fumble with keys.





# **Climate Control**

Modern cars are equipped with sophisticated climate control systems that use sensors and algorithms to maintain optimal temperature and humidity levels inside the car. These systems not only keep passengers comfortable, but also improve fuel efficiency by reducing the load on the engine.

Some high-end cars even offer individual climate zones for different passengers, allowing each person to customize their own temperature settings. This level of personalization ensures maximum comfort for everyone in the car.





# Energy Efficiency

One of the primary goals of modern climate control systems is to reduce energy consumption and increase efficiency. This is achieved through a variety of techniques, such as using low-energy LED lights instead of traditional bulbs, optimizing airflow to reduce drag, and using advanced insulation materials to minimize heat loss.

Some cars even have solar panels on their roofs that can power the climate control system and other electrical components, further reducing reliance on fossil fuels.





# Keyless Entry

Keyless entry is a convenient and secure way to access your car without having to use physical keys. Instead, drivers can simply carry a small fob with them that communicates with the car's computer system.

This system not only makes it easier to unlock and start the car, but also provides enhanced security features such as automatic locking and alarm systems.





#### Conclusion

Climate control and keyless entry are two essential components of modern cars that have greatly improved the driving experience. With advanced sensors, algorithms, and materials, climate control systems are more efficient than ever, while keyless entry provides convenience, security, and integration with other smart technologies.

As technology continues to advance, we can expect even more exciting developments in these areas, making driving safer, more comfortable, and more sustainable than ever before.





# THANK YOU