

UNIT 8 : Service of the wheels
Session 1: Importance of wheels

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Session Objectives

The student will be able to explain importance of wheel.

Able to identify different types of wheel

Introduction

Tyres have an important bearing on the performance and safety of the car. In fact, when car maintenance is the question in mind, ensuring that the tyres are in good condition, is an issue that is very important. Old and worn out tyre can easily lead to the loss of control of the vehicle and endanger your life as well as your car. We would like to help you take proper care of your car tyres. You should properly check the all important components of the car. Without an engine car may be towed, but it is not possible to move the car without the wheel and tyre, If something happens to your legs, we will be unable to walk properly. Similarly, if something happened to the wheels, it will stop at the same place. We can provide the some help and repair work.

ous requirements of an automobile wheel are given below:

To take the vehicle load, wheels with tyres gives a cushioning effect, it must cop up with steering system or it should take side thrust /cornering effects and also withstand driving thrust (able to transmit the power at specified load). It should be light in the weight so that unsprung weight is least. It should be removed easily and mount easily.

Types of wheels

Following types of wheels are used in automobile

Disc wheels

Light alloy cast or forged wheels

Alloy wheels

Disc wheels: These type of wheels consist of two parts, steel rim which is generally well-based to receive the tyre and pressed steel disc. Steel disc is welded to the rim. It is light in weight. It is used in heavy vehicle like trucks, buses etc.



Fig : Disc Wheel

Types of wheels

Light alloy cast or forged wheel: These type of wheels are used in the cars. Wheels are made of aluminum alloy which is a better conductor of heat, which disperses heat in application during driving. A wider rim improves stability on cornering. (while taking a



Fig : Alloy Wheel

Summary

In this session you have learnt about the importance of hub spacing and bearing play adjustments of a vehicle so that the vehicle's efficiency increases. Various requirements of an automobile wheel are given below:

1. To take the vehicle load, wheels with tyres give a cushioning effect, it must cooperate with the steering system or it should take side thrust/cornering effects and also withstand driving thrust (able to transmit the power at specified load).

2. It should be light in weight so that unsprung weight is least. It should be removed easily and mounted easily.

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