

JOB ROLE – AUTOMOTIVE SERVICE TECHNICIAN

Sector: Automotive
(Qualification Pack Code : ASC/Q1401)



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Unit – 6: Introduction to Vehicle Maintenance and Servicing

Session 1 : Importance of Vehicle Maintenance and Servicing

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Session Objectives

1. The student will be Able to list the tips of servicing of a vehicle.
2. Make the list the servicing point of a vehicle.

Introduction

Automobiles need Maintenance from time to time. Like we need to wash, bathe similarly our automobiles also need to be kept clean. Automobiles have to run on dirty roads and in polluted environment. Automobiles also run on uneven roads with pot holes and other obstructions. Automobiles and its parts are subjected to loads as described above. This makes them either damaged or in poor working condition. Therefore there is need for regular maintenance and servicing of automobiles. Maintenance of an Automobile is usually done in a place called Auto Workshop or Auto Service Station.

Importance to Vehicle Maintenance and Servicing

- Every new vehicle comes with a vehicle maintenance manual. Vehicle owner should read and use this manual. This manual helps user for vehicle maintenance tips during driving. People after getting a car or vehicle often care little about regular car maintenance.
- The Vehicle Maintenance and Servicing is carried out when the vehicle completes certain kilometer on its normal running and when the vehicle does not give proper performance. Some of checks are given her for users.

Daily Inspection (DI)

It is the responsibility of a driver or owner of a vehicle to carry out the following inspection/checks daily before the starting of engine to avoid any type of breakdown on the road.

- Check all the tyre pressure visually or hitting the tyre wall with the help of a stone piece and judging the sound.
- Check radiator coolant level.
- Check the fan belts for looseness.
- Check the level of engine oil.
- Check the wind screen, rear view mirror and rear window glass for their cleanliness.

Maintenance Check-up

We should read vehicle maintenance manual for more clarification. Some of important checkups is to be done for better maintenance.

1. Topping of oil level
2. Proper tension of Belt
3. Battery for cleanliness and level of electrolyte
(Addonly distilled water for topping of electrolyte water)
4. Brakes

Maintenance Check-up

5. Topping up of Coolant if required in the coolant reservoir
6. Check the Serviceability of cooling system Hoses
7. Proper tyre inflation pressure
8. Air-conditioning



Some of important Maintenance checkup are

Check/Top up all vehicles' oil levels: Service mechanic with the help of measuring stick check the engine oil, coolant, brake oil, and water.



Some of important Maintenance checkup are

Belt Checkup: Checking of belt is very important. If it is loose or broken then it will be replaced immediately.

Battery: Battery is very important component of a vehicle. It should be checked up regularly. Battery electrolyte (distilled water) is checked by removing the battery caps and looking inside.

Some of important Maintenance checkup are

Battery: If level is low, it will be topped up by distilled water. Now-a-day's battery are maintenance free batteries.



Cont...

Some of important Maintenance checkup are

Brakes: Service mechanic checkup the break also by pushing the pedal. If he feels that there is need of servicing, he will inform to the customer.



Cont...

Some of important Maintenance checkup are

Cooling System: Technician checks the cooling system by topping up the coolant. The cooling system should be refilled with the correct coolant. Don't refill with just straight water.



Cont...

Some of important Maintenance checkup are

Air-conditioning: Service mechanic will check the cooling and heating by checking the airflow is coming from all appropriate vents.



Cont...

Some of important Maintenance checkup are

Tyres : Mechanic will check the tyre by checking correct tyre pressures. He will also see also external damage also if any.



The Safety Rules during servicing of vehicle to be followed:

These safety rules are:

- Always select right tools for specific job. The wrong tool could damage the part being worked on and could cause you to get hurt.
- Keep your tools and equipments under control.
- Wipe excess oil and grease off your hands and tools so that you can get a good grip on tools or parts.
- Work quietly and give full attention on your job.
- Keep jack handles out of the way. Stand the creeper against the wall when it is not in use.

Cont...

The Safety Rules during servicing of vehicle to be followed:

These safety rules are:

- Do not put sharp objects, such as screw drivers, in your pocket. You could cut yourself or get stabbed, you could damage the seat.
- Make sure that technician cloths are right for the job and he should wear full leather safety shoes.
- If oil, grease, or any liquid spill on the floor, clean it up so that no one will slip and fall.
- Always wear eye protection when using a grinding wheel or welding equipment or working with chemicals such as solvents.

Cont...

The Safety Rules during servicing of vehicle to be followed:

- While using jack, place it properly to avoid slip.
- Never run an engine in a closed garage that does not have proper ventilation system. The exhaust gases contain carbon monoxide.



Cont...

Summary

In this session you have learnt a following , The Vehicle Maintenance and Servicing is carried out when the vehicle completes certain kilometer on its normal running and when the vehicle does not give proper performance.

- Daily Inspection (DI)
- Maintenance Check-up

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