SECTION 2

Good housekeeping

USE THIS SPACE FOR LEARNER NOTES

Learning objectives

After studying this section you should be able to:

- Identify vehicle protective equipment for a range of repair activities.
- Describe why the automotive environment should be properly cleaned and maintained.
- Describe requirements and systems which may be put in place to ensure a clean automotive environment using appropriate procedures and precautions.
- Describe procedures for starting and ending the working day which ensure effective housekeeping practices are followed.
- Describe how to minimize waste when using utilities and consumables.
- Describe the selection and use of cleaning equipment when dealing with general cleaning, spillages and leaks.
- Describe procedures for correct disposal of waste materials.

Key terms

EPA Environmental Protection Act.

Detergent Chemical used for cleaning, usually diluted with water.

Solvents Chemicals used to clean and remove oil or grease that are often highly flammable.

VPE Vehicle Protective Equipment.

COSHH Control of Substances Hazardous to Health.

VEHICLE PROTECTION

To keep the vehicle clean during servicing and repair work, several types of protection are available.

Seat covers

State why seat covers should always be used in service and repair work.

to protect the seat fabric from oil or grease that may be present on overalls or clothing





What types of seat cover are available and give advantages/disadvantages for each.

- disposable type cheap initially but cannot be used many times, causing environmental
 - issues

heavy duty durable seat cover, initially more costly but can be used many times as it does

not tear or split, can normally be washed periodically.

Give three more types of vehicle protection.

- 1 floor mats
- 2 steering wheel cover
- 3 wing cover.

State four consequences of not using appropriate vehicle protection when carrying out a major routine service.

- 1 seats soiled by oil and grease
- 2 customers getting oil or grease on their clothes
- 3 customers very unhappy with the care provided for their vehicle and may not return or may

even tell others of their bad experience

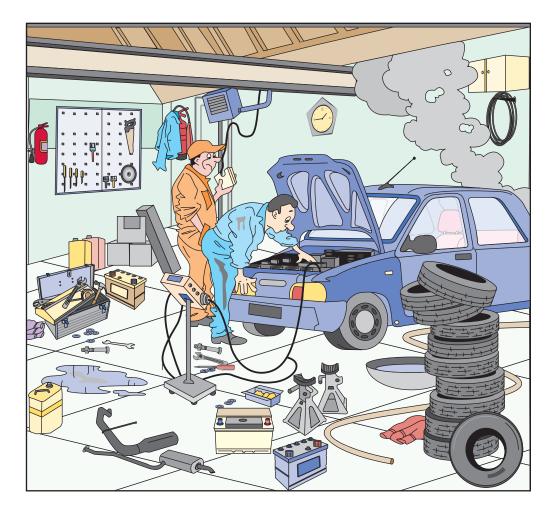
4 vehicle carpets marked with oil or grease.

GOOD HOUSEKEEPING

Maintaining a clean and tidy work area

We are all impressed when we see a clean and shiny car, even though we know it would work just as well dirty. In the same way customers will be impressed if you keep your workshop clean and tidy.

Identify ten housekeeping issues in this garage workshop scenario.



- 1 oil on the floor
- 2 air lines and cables lying about
- 3 exhaust gas extraction not used

| 4 | tools lying on the floor |
|----|---|
| 5 | general clutter boxes lying about the floor |
| 6 | batteries on the floor |
| 7 | tyres stacked high |
| 8 | old exhaust laying on the floor |
| 9 | dirty overalls |
| 10 | tool board with lots of empty spaces. |

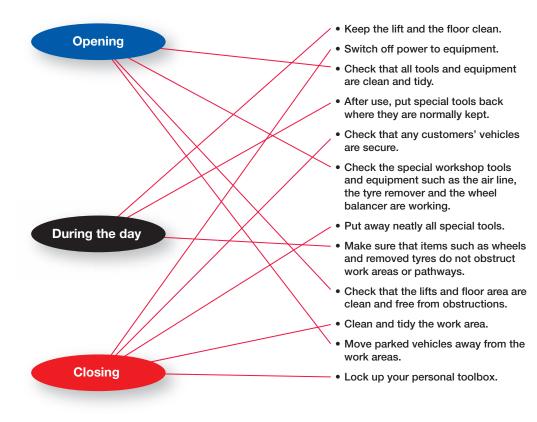
Slips, trips and falls

Poor housekeeping accounts for many of these types of accidents in garages. Which of the following scenarios are a possible cause of slips, trips and falls? Complete the true or false table.

| Garage scenario | True | False |
|---|------|-------|
| Air lines lying across the floor | 1 | |
| Using a bench grinder | | 1 |
| Using an impact gun to remove wheel nuts | | 1 |
| Oil left on the floor following a vehicle routine service | 1 | |
| Using an angle grinder with a long extension lead trailing across the floor | 1 | |
| Cleaning a trolley jack | | 1 |
| Removing a cooling system pressure cap | | 1 |
| Using a ladder to gain access to tyres on a high shelf | 1 | |
| Working near an open vehicle pit | 1 | |

Housekeeping routines

Match the list of housekeeping routines to the part of the working day when they should be completed.



Cleaning

Cleaning equipment should be kept in a separate store, as many chemicals are highly concentrated.

Always read the instructions on the labels before using them (see COSHH Regulations in Section 1). If specialized cleaning is required, your employer will provide protective clothing.

When you have finished cleaning, put the cleaning equipment and unused chemicals back in the store.



If you need to use a hazardous cleaning material, read the label on the container. This will tell you how to use it safely, and what to do if you *do* have an accident – for example, if the cleaning material touches your eyes or skin.

Different materials are used for cleaning and are usually classified as:

- solvents
- detergents.

Solvents

What are the dangers when using solvents to clean workshop equipment?

may be flammable

Detergents

These are often mixed with water to dilute before use.

Find a detergent that is used in your workshop and suggest the PPE that should be used with the product.

rubber or nitrile gloves.



Barrier cream used on your hands can reduce the risk of industrial dermatitis.

HEALTH AND SAFETY

What information does the supplier of the cleaning material have to provide when requested?

material safety data sheet (MSDS)

Why can this be useful?

it gives first aid measures and chemical composition, which should be given to any casualty of a

chemical injury, when seeking medical attention

This sign is typically found on cleaning products.



Suggest at least three items of garage equipment that require regular cleaning:

- vehicle hoists (lifts or ramps)
- trolley jacks
- wheel balancing.



While cleaning, place cones and notices to warn others. Section off areas that could be dangerous, such as slippery floors.

State a number of areas of the workshop that require regular cleaning:

- floor
- walls
- car bays.

EMERGENCY CLEANING

Breakages and spillages must be cleaned up immediately.

If this is not done, someone may be injured. The firm could also be in breach of the Health and Safety at Work Act (see Section 1 – Health and Safety). If an accident happens, the firm may be fined.



Oil spillages are best dealt with using absorbent granules that soak up the oil and can be swept away.

Give **two** dangers of leaving oil on the floor:

- 1 people may slip and fall, causing injury
- 2 moving vehicles may skid out of control, which could result in human injury or damage to

vehicles and equipment.

DISPOSING OF DANGEROUS WASTE MATERIAL

All workshops produce dangerous waste materials, which must be disposed of correctly by a licensed contractor.

Waste management is covered by the Environmental Protection Act 1990.

Items must be disposed of in different ways. Usually this is decided by the local council who pass by-laws. Refuse disposal requirements differ from place to place.

Some types of dangerous material must be kept separate. They will be collected by specialist agencies, or taken to the local refuse collection point.

State **six** products which are encountered in a service and repair workshop that have to be disposed of correctly:

| 1 | used engine oil |
|---|----------------------|
| 2 | oil and fuel filters |
| 3 | anti-freeze |
| 4 | batteries |
| 5 | tyres |
| 6 | brake fluid. |

USING RESOURCES ECONOMICALLY

How can the following resources be used economically?

Utilities

Electricity

turn off lights when they are not needed

Heating

keep workshop doors shut, to keep heat in

Water

report dripping taps and leaking hoses

Telephone

plan calls and be precise to reduce time on the telephone

Consumables

Paper towelling

use sparingly and only the required amount. Use the entire sheet before disposing

in the bin

Lubricants

use the correct amount according to manufacturer's specifications

Cleaning materials

use as directed by the manufacturer

Fasteners

return any unused nuts, bolts and washers to storage

RECYCLING WASTE MATERIALS



Vehicle manufacturers are producing vehicles that have an increasing amount of components that can be reused or recycled and are working towards the use of sustainable materials during manufacture.

What are the advantages of recycling?

reducing cost of producing new components

List six items that are designed to be recycled:

plastic bumpers
glass
batteries
engine castings
tyres
steel bodies.

Multiple choice questions

Choose the correct answer from a), b) or c) and place a tick $[\checkmark]$ after your answer.

- 1 You have been asked to collect a car from a customer's home while wearing overalls and boots. What vehicle protection must you take with you?
 - a) seat cover and wing cover []
 - b) seat cover and floor mat $[\checkmark]$
 - c) floor mat and steering wheel cover. []
- 2 How could efficiency and productivity in a vehicle workshop be improved?
 - a) ensure tools are put back straight away on a shadow board [✓]
 - b) buy extra tools in case one cannot be found []
 - c) leave any cleaning up of spills to the end of the day. []

- 3 Which of the following must be taken away by a licensed contractor?
 - a) paper air filters []
 - b) coolant hoses []
 - c) used anti-freeze. [√]
- 4 How could electricity be saved in a garage environment?
 - a) use rechargeable battery operated equipment []
 - b) remove some of the light bulbs in the workshop []
 - c) turn off lights and other electrical equipment when not required. $\left[\checkmark\right]$
- 5 What housekeeping tasks should be carried out during the working day?
 - a) remove all vehicles from the workshop []
 - b) after use, put special tools back where they are normally kept [/]
 - c) switch off power to equipment. []