

CHAPTER 5: SAFETY AROUND THE AUTOMOBILE ACTIVITY

Automotive Safety Activity

Objective

Upon completion of this activity, you will be able to identify the location of emergency and safety equipment.

NATEF Correlations

Shop and Personal Safety

- Identify general shop safety rules and procedures.
- Identify and use proper placement of floor jacks and jack stands.
- Identify and use proper procedures for safe lift operation.
- Utilize proper ventilation procedures for working within the lab/shop area.
- Identify marked safety areas.
- Identify the location and the types of fire extinguishers and other fire safety equipment; demonstrate knowledge of the procedures for using fire extinguishers and other fire safety equipment.
- Identify the location and use of eyewash stations.
- Identify the location of the posted evacuation routes.
- Comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities.
- Identify and wear appropriate clothing for lab/shop activities.
- Secure hair and jewelry for lab/shop activities.
- Demonstrate awareness of the safety aspects of supplemental restraint systems (SRS).
- Locate and demonstrate knowledge of safety data sheets (SDSs).

Tools

None


Supplies

None







Cautions

Do not use an automotive lift unless properly supervised. Follow all procedures and safety guidelines specified by your instructor.

Directions

Check off the boxes ☐ when completed. When you see a hand  next to the task, write the information in the activity journal. If you have any questions during the duration of this activity, stop and ask the instructor for assistance.

Procedure

- ☐ Read the laboratory safety rules in Appendix A.
- ☐ Locate the shop's exhaust evacuation system and watch a demonstration from the instructor on how to use it.
-  Identify any marked safety areas in the shop.
-  Identify any posted evacuation routes in the shop.
- ☐ Locate SRS safety labels on a vehicle in the shop.
-  Locate the Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) in the shop. Answer SDS questions in your activity journal.
-  Locate fire extinguishers in the shop. Read all labels so you understand the proper procedures for using each fire extinguisher. Note the type(s) of fire extinguisher accessible in the shop.
-  If you are in a school laboratory or shop setting, locate the load capacity ratings on the automotive lift(s). Note the ratings.
- ☐ If there are automotive lifts available, locate the lift safety and caution labels. Read them.
- ☐ Identify where the closest telephone is for emergencies.
- ☐ Locate the rag waste can for combustible materials.
- ☐ If there is an eyewash station, read the instructions on how to use it.
-  If you are in a school laboratory or shop setting draw an overhead (bird's eye) view of the garage layout in the activity journal. Note the location of fire extinguishers, eyewash stations, exits, evacuation routes, safety areas, SDS sheets, exhaust evacuation controls, trash cans, rag waste can, extension lights, electrical outlets, automotive lifts, supply cabinets, tools, workbenches, and safety glasses. List as many items as possible to make yourself familiar with the shop.
- ☐ After reading the procedure in the textbook on "Jacking a Vehicle", work with a partner to safely lift a vehicle with a jack and jack stands.
- ☐ After the instructor demonstrates the use of an automotive lift, work with a partner to safely lift a vehicle on the automotive lift.

Activity Journal

1. What types of fire extinguishers are located in the shop?
2. What are the load capacities of the automotive lifts?
3. What are some safety rules when using an automotive lift?
4. What do you have to be cautious about when using an automotive lift?
5. How do you use an eyewash station?
6. Why is it important to use a shop exhaust evacuation system?
7. Why is it important to be cautious around SRS systems when working on a vehicle?
8. Why is it important to use jack stands to support a vehicle that is lifted by a jack?
9. What is an SDS sheet? Where are they located? Why are they important?
10. Sketch an overhead view of garage layout on a blank sheet of paper.