

Safety in the Auto Shop

[[YELLOW BAR (DESCRIPTION OF SESSION)]]

Explorers will be introduced to the auto technology work environment and will learn about the importance of establishing and following safety procedures.

CATEGORY

- Auto Technology

OBJECTIVES

By the end of this session, participants will be able to:

- Identify the areas in the shop which pose the greatest risk of injury or damage.
- List three pieces of essential personal safety equipment or clothing.
- Explain at least one operating procedure which improves the level of safety in the shop environment.

SUPPLIES

- Activity 1 Supplies
 - 1 bolt, washer and nut for each group of three within the post
 - 2 tables (optional)
 - 1 blindfold for each team of three (optional)
- Activity 2 Supplies
 - Eye protection for each Explorer
 - Ear protection for each Explorer
 - Copy of local shop “rules” for each Explorer

ADVISOR NOTE: Text in italics should be read aloud to participants. As you engage your post in activities each week, please include comments, discussions, and feedback to the group relating to **Character, Leadership, and Ethics**. These are important attributes that make a difference in the success of youth in the workplace and in life.

ACTIVITY 1

Assembly Line Game

Play “Assembly Line.” This activity is not only an opening activity to get your Explorers moving and engaged, but it is also intended as a lead-in to the main event. The game is described in the attached resource sheet.

The format of this activity will in large part depend upon a guided discovery through open-ended questions and discussion. Be prepared with questions that may be specific to your company or environment.

In a safe room, such as a conference or meeting room that is free of obstacles, divide the post into smaller teams of three. Adult Advisors may be needed to fill out the teams. Identify a field of play by setting a starting line and a finish line. Ideally these would be marked by a

table at each end. The distance between the starting line and the finish line should be no less than 12 feet but no more than 20 feet.

The object of the game is to assemble a small combination of parts, transport it from the start to the finish, and “inspect it.” The team that completes all of these tasks first is the winner.

On each team there will be three distinct roles/positions. They are:

- The Assembler
 - The assembler’s job is to pick up a single machine bolt, slip a washer over it and secure it with a nut. The nut must be secured far enough down so as to expose the shaft of the bolt above the outer edge of the nut.
- The Transporter
 - It is the transporter’s job to move the bolt assembly from the starting line to the finish line.
- The Inspector
 - The inspector’s job is to make sure that all three components of the finished bolt assembly have arrived at the finish line by removing the nut and the washer from the bolt, and placing all three in an area no greater than 6 inches in diameter.

Once the teams are ready to begin, explain that;

- The assembler must keep both eyes closed at all times (or use a blindfold).
- The transporter must only use one of their feet (left or right) to transport the assembly. (The other must remain off the ground at all times during the transporting process.)
- The Inspector may only use one hand to complete their “inspection.” It may be desirable to have the Inspector place their non-used hand in their pocket.

LET THE GAME BEGIN!

ACTIVITY 2

Main Event

To begin the main event, ask the members of the post questions such as:

- *How did you feel about the opening activity?*
- *Was it easy? If not, why not?*
- *How would you feel about it if you had to repeat the game over and over?*

Try to guide the discussion toward the conclusion that each task was made far more challenging when the Explorers were asked to perform it with a limitation. Since the job of an automotive technician is physical in nature, making sure your body stays healthy and functioning without injury is particularly important. Following proper safety practices isn’t just a good idea; it helps ensure a long and successful career.

Before entering your shop area, lead a guided discussion about proper attire for the auto shop. Ask questions about clothing, footwear, and eye, ear, and skin protection. Use a

company poster, if available, or your own personal attire as talking points for this discussion. Make sure each Explorer is properly fitted before entering the shop.

Make a plan to move through the shop in such a manner as to visit about half of the work stations or equipment settings.

Allow the Explorers to actually experience the work done at each station (i.e., rinse a part at the wash station, raise/lower a lift, attach a pneumatic wrench to a compressed air line, etc.). At each of the stations, ask questions such as:

- *Are there safety reasons that this is located in this particular spot?*
- *What risks are there to the employee working in this area? (Be sure to draw out less obvious hazards such as muscle strain and fatigue as well as potential risks to eyes, hearing, cuts, etc.)*
- *Is the safety of this area affected by people crowding around it?*
- *Do you see any warnings for others such as tape on the floor or posted signs?*

Finish each stop by sharing some of the rules that have been established by your shop for that area.

Move to one of the remaining work stations that you have not already visited. Explain the function of that area or machine and then ask an Explorer to identify a potential safety hazard of that area. Open up the floor for the others to suggest possible solutions that would keep the technician safe or free from injury. Move around the remaining stations in order to allow each Explorer to identify at least one hazard, and contribute at least one solution.

Share a copy of the shop's safety rules, and have each member commit to following them in the future.

REFLECTION

Focusing Questions

- *What did you learn about working in auto technology?*
- *What did you learn about the training required?*
- *Which tool or job was the most difficult?*

Analysis Questions

- *Why do you think safety problems happen in an auto shop?*
- *How can auto technicians prevent accidents?*

Generalization Questions

- *What aspects of auto technology would you like to learn more about?*
- *What subjects in school do you believe you will need in order to pursue a career in auto technology?*

ADVISOR'S PARTING THOUGHT

Share the following quote by Thomas Edison:

"The reason a lot of people do not recognize opportunity is because it usually goes around wearing overalls looking like hard work."

—Thomas A. Edison

Close by sharing that having a successful career in fields such as auto technology takes hard work and effort, but the road to success just happens to start right where they are.

[[WELD: This section was requested by Janice to be added to all modules. Please confirm new format.]]

ADVISOR AND OFFICER REVIEW

After the meeting, address the following:

- Identify what was successful from the meeting.
- Identify what needed improvement.
- Schedule an officer and Advisor planning meeting to prepare for next the post meeting or activity.