



Repair Shop Fire Safety

Instructor Notes: Fire is a catastrophic loss in service stations and repair garages. While serious fires can cause injury or death, even small fires can cause a loss of productivity and profits. Use this opportunity to review fire safety with your staff. Fire safety awareness will keep your employees safe and will help avoid unnecessary losses.

Statistics from a National Fire Protection Association (NFPA) study show that tools and equipment, open flame sources and heating equipment account for over half of the fire losses in service stations, repair shops and body shops. Of these fires, almost half started in the shop area, accounting for most of the property damage. Here is a series of safety tips and fire prevention suggestions to help keep you and your repair shop fire safe.

Clean Up

Housekeeping is always a concern in repair shops. Inside the shop, avoid piles of used cardboard cartons and fuel containers that would feed an accidental fire. To limit the fire potential, keep stock rooms clean and orderly. Clear aisles providing access to fire exits. Organize service bays and work benches and don't use them to store combustible materials. Outside the shop, keep trash cans and dumpsters away from the building to prevent accidental fire from spreading to the building.

Other housekeeping tips:

- Clean oil, flammable liquid and solvent spills immediately.
- Do housekeeping on a daily basis. Trash cans, combustible debris and other unneeded materials should be removed from the shop on a daily basis.

- Keep oily rags in a closed metal container until you dispose of or launder them.

- Inspect work areas periodically including areas outside the building, parking lots and outside storage areas for unnecessary items that can promote or cause fire to spread.

Store and Use Chemicals with Care

Flammable and combustible liquids should be stored in accordance with your local fire marshal. If you are not sure, ask your fire department. Flammable and combustible liquids should be kept in covered containers when not in use and disposed of properly.

Avoid Vapor Danger

Gasoline vapors can be extremely hazardous. When working on vehicles fumes from gasoline may hang lower, spread further and become heavily concentrated in the air, allowing them to spread easily to nearby sources of ignition. When mixed in the right proportion of gas to oxygen, the fumes from one cup of gasoline have the explosive power similar to five pounds of dynamite. Any heat source can be a potential ignition source for a fire caused by gasoline vapors. Common types of ignition sources are cigarettes, cutting or grinding sparks, and pilot lights on water heaters and heating appliances.

Other fire prevention safety tips:

- Enforce no smoking rules in the shop and impound/storage areas.
- Look around before welding, cutting and grinding. Work should be performed in areas free of combustible materials.
- Inspect the shop area before leaving work to ensure there are no smoldering fires.

Fire Extinguishers

Proper use of portable fire extinguishers will stop a fire before it grows, but they have their limitations as does the person using it. Fire extinguishers should be conveniently located throughout the shop and rated for the hazards in the area. Employees using a fire extinguisher should receive some sort of training; luckily, most fire departments offer it free or at a very affordable price. Either way, dialing 9-1-1 is usually your best bet if there is a fire in your shop.

OSHA in the Workplace

The Occupational Safety and Health Administration (OSHA) requires employers of over 10 people to establish a written fire prevention plan, while an employer with 10 or fewer employees may communicate the plan orally to employees. Items that must be included in a fire prevention plan include a list of all the fire hazards in the shop and their potential ignition sources, procedures to control accumulations of waste, evacuation procedures and employee training. For a detailed list review OSHA 29 CFR 1910.39 or consult with a safety professional for additional guidance.



This article is a part of TowSafe, a safety program designed for towing operators. For more information contact April at 407-706-6796.