

## Practicing Shop Safety A Technician's Life May Depend on It

Having been involved in the automotive field for the past 54 years, I have experienced firsthand how minor negligence can lead to a catastrophic event. Many technicians fall into a pattern that results in the technician taking some steps that could result in personal injury or damage to the customer's vehicle. It is human nature to get relaxed and careless in our environment and that's when unnecessary chances are taken, and accidents occur. While there are too many safety precautions to list all in this writing, let us consider a few that generate major concerns.

### Batteries

Batteries contain sulfuric acid and produce explosive gases. Precautions must be taken to prevent sparks from occurring at the battery and igniting those gases, resulting in a catastrophic event. Take safety precautions when jump starting or charging the battery. Never disconnect a battery charger lead from the battery until the charger has been turned off. When jump starting, attach the negative lead to a good engine ground instead of the negative post of the battery.

### Fuel

Never disconnect a fuel line or fuel system component until the system pressure has been relieved. The system is still under high pressure, even with the engine off. Flammable mixtures are present, and things can go south when subjected to an arc, spark or flame. Do not carry or operate electronic devices when servicing fuel related components or fueling the vehicle.

### Airbags

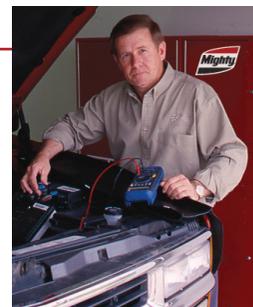
When servicing the electrical system or adding an electrical device, take special precautions to prevent accidental airbag deployment. When handling these devices, point the trim or cover away from you when transporting the component. Never place an airbag on the bench or floor with the trim cover or tear seam facing down, as an accidental deployment can propel the assembly like a rocket. Keep in mind that memory saving devices can keep the system active with the vehicle's battery disconnected. An airbag deployment can rearrange your day, your face, have you smelling funny for days, and it is loud enough to damage your hearing.

### Keyless Ignition

The transition from a key to an electronic code (Keyless Push Button Start) comes with some safety measures that must be

considered to prevent injury to the technician. Imagine making repairs in the engine compartment from beneath the vehicle with the hood closed. Suddenly the vehicle starts.

Hopefully, the technician's hands are clear from pulleys and belts. GM advises two scenarios that could promote a sudden start: 1) The vehicle owner mistakenly starts their vehicle using the remote start feature of the OnStar mobile app. 2) Due to a mix-up of key fobs in the service department a technician accidentally remote starts the wrong vehicle. GM cautions that the hood should be fully opened, or opened to the second latch when performing any repairs in the engine compartment or under the vehicle, as this will disable the remote start feature via the key fob or OnStar mobile app. Make certain that you are familiar with the safety procedures of the vehicle being serviced.



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HEY, JOEY, IT SEZ HERE, "CAUTION: MEMORY SAVER TOOL CAN KEEP AIR BAG ACTIVE."

### Safety Items

Wear safety glasses to protect the eyes from rust, debris and liquids. Gloves should be worn to protect the skin from nicks, scratches and chemicals. Wear earplugs when operating noisy tools such as impacts and cutting tools.

### Lift Safety

According to the law of gravity...if it goes up it must come down. The primary objective is for the vehicle to achieve this motion in a controlled manner and not come crashing to the shop floor. Lift accidents usually are the result of misuse or negligence when positioning the lift arms. Never exceed the capacity of the lift. The center of gravity must be determined for equal weight distribution prior to lifting the vehicle. Be aware of a truck that may contain heavy objects in the bed, as that weight must be considered for proper lift arm placement. Be aware of any service that may cause a sudden change in the center of gravity, such as the removal of the transmission, etc. Once the vehicle is a foot off the floor, shake it to determine if it is positioned safely on the lift arms. Always make certain the vehicle is resting on the safety locks prior to getting beneath the vehicle. When lowering a lift, make certain all objects such as tool boxes, oil drain containers, etc. have been cleared. Always reference the lift manufacturer's safety manual and service recommendations for lift safety.

**PAY ATTENTION TO DETAIL...BE ALERT...YOUR LIFE DEPENDS ON IT.**