

OSHA Training Toolbox Talk: OSHA's Lockout/Tagout Standard – What About Motor Vehicles?

[Reference 1910.147(d)(1) & (2)]

One area where the OSHA lockout/tagout standard is commonly thought not to apply is when we work on our cars, trucks, and other vehicles powered by internal combustion engines. But to overlook these types of equipment would be wrong, as it could lead to an injury, or even death!

Employees performing service or maintenance on vehicles powered by internal combustion engines are exposed to a variety of hazardous energy sources. Obviously, if someone were to inadvertently start the engine of a vehicle while another person is working underneath the vehicle or beneath the hood, that person could suffer injuries from turning belts and pulleys, fans, or other moving parts. And in some cases, just bumping the ignition of a vehicle equipped with a manual transmission could cause the vehicle to lurch forward and crush a person.

One obvious step we can take to help protect ourselves from hazards such as these is for the employee performing the work on the motor vehicle to remove the ignition key from the ignition switch (and any other keys that might be available) and place it in their pocket. You may even be able to lock the doors of the vehicle to prevent anyone from entering the interior of the vehicle and accessing the controls. But these steps alone may not suffice to prevent the engine from being started. In some cases the engine can be started if the worker accidentally shorts out the ignition circuit. So disconnecting battery cables may also be necessary.

We must also recognize other sources of hazardous energy associated with motor vehicles, such as, but not limited to, thermal energy (hot water in the radiator, usually under high pressure if the engine has been running for a while), and gravity, which could cause the vehicle to roll if it is parked on a slope. And some vehicles, such as dump trucks and forklifts, are equipped with hydraulic cylinders that raise and lower the dump bed, mast, or other heavy components, and those could come crashing down if the hydraulic pressure were to be released.

Therefore, it may be necessary to let the engine cool down for a sufficient amount of time to let the heat and subsequent pressure dissipate. We may also need to lower or block up elevated components such as dump beds and forklift masts that are held up by hydraulic pressure. And it may be necessary to chock or block wheels to prevent vehicles from rolling.

As you can see, we have these, as possibly other, hazardous energy sources associated with motor vehicles. So always refer to our company's equipment specific lockout/tagout procedures to make sure you are familiar with all the various types of hazardous energy to which you are exposed and the procedures we have established to address these types of hazardous energy.

Does anybody have a question or comment about the application of OSHA's lockout/tagout standard to motor vehicles? Please be sure to sign your name to the training certification form so you get credit for attending this training session.