

Automotive Service – Pit Safety

Loss Control Bulletin

Before the development of automotive lifts, mechanics climbed into service pits, using narrow ladders anchored to the sides of the pits, to gain access to the underside of vehicles for service and repairs. The early pits were generally dark, damp, cramped spaces, often poorly lit, and covered with oil and grease residue. With the advent of OSHA regulations, service pits were redesigned to incorporate important safety requirements that have significantly improved working conditions for auto service technicians.

The growth of quick lube and oil service shops has resulted in a substantial increase in the number of service pit installations throughout the country. These new service pits incorporate several new safety features designed to address the inherent safety hazards to workers. Some of the new designs can include:

- Powered ventilation/exhaust equipment
- Explosion-proof lighting and wiring Improved lighting fixtures
- Easy to clean, light colored floor, walls, and stairs
- Easily retractable pit hard cover sections or netting
- Easily erected guard rail systems
- Easy access stairs located at opposite ends of the pit
- Low depth, countersunk pits with optional lifts
- Easyglide mechanics creeperset on fixed tracks

Older service pits can and should be retrofitted with some of the above safety features in order to bring them into compliance with current safety regulations.

Hazards of Service Pits

Because of limited access and possibilities for accumulation of flammable gases and displacement of oxygen, most service pits are subject to special regulations applicable to confined spaces. In addition to being a confined space, a service pit is also considered an unguarded floor opening subject to guarding requirements for exposed areas.

Hazards associated with working in service pits can include:

- Oxygen deficiency in the pit
- Presence of combustible, flammable gases accumulating inside the pit
- Slip and fall hazards from grease, oil, water, or ice drippings
- Possibility of injury by tools and materials falling into the pit Possibility of entrapment should the vehicle move
- Eye injuries from falling debris



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Safe Operating Procedures

When working in a service pit, it is important for employees to follow basic safety precautions. These include:

- Never drain a fuel tank from a pit.
- Never service a liquefied petroleum gas powered vehicle from a pit or adjacent to a pit.
- Never use welding or oxygen cutting equipment in a service pit unless the pit has been completely purged of any combustible or flammable liquids or gases.
- Do not enter a pit located in an area where a vehicle engine is running and is not properly exhausted, until the pit ventilation equipment has been running for several minutes and the atmosphere within the pit has been tested for presence of combustible gases and oxygen content.
- Post hazard warnings on pit edges to provide a visual warning of the hazard presented to workers.
- Keep an ABC type dry chemical extinguisher in each service pit.
- Turn on pit ventilating equipment for several minutes prior to entering.
- Use only explosion-proof wiring, lighting, and power tools when working in a service pit.
- Maintain all pits free of oil and grease; use special oil absorbing materials as needed.
- Use barricades or substantial hardwood boards to protect or cover open pits or sections of pits not in use.
- Maintain work areas near pits free and clear of tools, parts, and debris Wear safety glasses or goggles when working under a vehicle.
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The guidelines provided in this bulletin are only intended to provide an overview of some of the more important steps that can be taken by management to establish a safe workplace. The guidelines are not considered exhaustive of all measures and controls that can be implemented by management to address all potential loss or injury producing causes. Ultimately it is the responsibility of management to take the necessary steps to provide for employee and customer safety. It is not intended as an offer to write insurance for such conditions or exposures. The liability of Republic Indemnity Company of America and its affiliated insurers is limited to the terms, limits and conditions of the insurance policies underwritten by any of them. © 2022 Republic Indemnity of America, 4500 Park Granada, Suite 300, Calabasas, CA 91302.