



HAZARD ID

HID 2

Fire Hazard from Filling Portable Gas Cans in Pickup Trucks and Cars

Description of HAZARD

In recent incidents reported to the National Institute for Occupational Safety and Health (NIOSH), fires spontaneously ignited when workers or others attempted to fill portable gasoline containers (gas cans) in the backs of pickup trucks equipped with plastic bed liners or in cars with carpeted surfaces. Serious skin burns and other injuries resulted. Similar incidents in the last few years have resulted in warning bulletins from several private and government organizations.

These fires result from the buildup of static electricity. The insulating effect of the bed liner or carpet prevents the static charge generated by gasoline flowing into the container or other sources from grounding. The discharge of this buildup to the grounded gasoline dispenser nozzle may cause a spark and ignite the gasoline. Both ungrounded metal (most hazardous) and plastic gas containers have been involved in these incidents.



Fire Hazard: Filling gas can in pickup truck with plastic bed liner.
Safe Practice: Always place gas can on ground before refueling.
Touch can with gas dispenser nozzle before removing can lid.
Keep gas dispenser nozzle in contact with can inlet when filling.



Recommendations For Prevention

Construction workers and others in small businesses who often work with gasoline-powered equipment commonly use portable gasoline containers. Homeowners use gasoline cans for their lawnmowers and other equipment.

- **Avoid the hazardous practice of leaving the portable gasoline containers in pickup trucks or cars when refueling!**
- **Before filling, always remove the containers from the vehicle and place them on the ground at a safe distance from the vehicle (provides path to dissipate static charge to ground).**
- **Touch the container with the gas dispenser nozzle before removing the container lid (provides another path to dissipate static charge to ground).**
- **Keep the nozzle in contact with the container inlet when filling (to dissipate static charge buildup from flow of gasoline).**

Additional measures for prevention include the following:

- **Manufacturers or retailers:** Place a hazard label on all plastic liners being sold warning workers not to fill portable gas containers in the bed liner of the truck but always to place the containers on the ground before filling.
- **Gas stations:** Display a warning notice near gas pumps to place all portable gas containers on the ground before filling.
- **States:** Provide a warning notification to owners and users when new vehicles are licensed or when license plates are renewed.
- **Manufacturers:** Build bed liners that can be grounded to the metal truck bed, thereby dissipating potential electrostatic charge.

For More Information

To obtain more free information about this hazard or for information about other occupational health and safety issues:

- call NIOSH at 1-800-35-NIOSH (1-800-356-4674), or
- visit the NIOSH Home Page on the World Wide Web at
<http://www.cdc.gov/niosh/homepage.html>

Acknowledgments

The principal contributors to this publication are: Jerome P. Flesch, Elaine Mann, G. Kent Hatfield, Heinz Ahlers, Richard Carlson, and Rosmarie T. Hagedorn, NIOSH; Richard Yallits, City of Winnipeg, Canada Fire Department; William Rowe, U.S. Consumer Product Safety Commission.

July 1998

DHHS (NIOSH) Publication No. 98-111