

And

DON'T drain fuel over or close to a pit or drain because of the risk of flammable vapour accumulating to create an explosive atmosphere

DON'T allow work which can produce a source of ignition, such as welding, electrical or other hot work, to be carried out while removing petrol

DON'T use any electrical equipment on or near the vehicle while fuel draining is in progress. This includes the use of inspection lamps, cordless phone handsets, mobile phones and pagers

DON'T allow smoking in the area

DON'T work on a fuel tank or remove a sender unit before removing the fuel

DON'T drain fuel into open-topped containers such as buckets and watering cans

DON'T drain fuel into a waste oil 'Dalek'

DON'T drain fuel into plastic containers except for quantities less than ten litres

DON'T store drained or contaminated fuel in the workplace unless it is to be returned to the vehicle immediately

DON'T add drained fuel to the waste-oil tank

DON'T wear clothing on which petrol has been spilt - stop work and change into uncontaminated clothing before continuing to work



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This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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Safe use of **PETROL** in garages



Fires and explosions caused by careless handling of petrol during vehicle maintenance continue to occur throughout the country. Even small leaks and spills of petrol have the potential to escalate into a major incident. Petrol fires are always serious and often result in fatal or major injuries, either to the person doing the maintenance work or to other employees and even customers who may be nearby. Invariably there is also major property damage as well.

With an increasing number of fuel types on the forecourt, incorrect filling of diesel vehicles with petrol, and vice versa, is now a major problem. It is estimated that there are 120 000 misfuelling operations each year, most of which require fuel replacement.

Petrol is a highly flammable liquid and any spillage will evaporate to form a flammable, heavier-than-air vapour which is easily ignited. Common ignition sources are smoking and lighted matches, welding and cutting equipment, heaters, and all types of electrical equipment, unless these are designed as suitable for use in a flammable atmosphere. Even low-voltage inspection lamps, if damaged, can ignite petrol vapour. As well as this, the action of draining petrol into a container can generate static electricity which, if not controlled, can result in a spark.

It is important to drain any petrol into a suitable container large enough to hold the contents of the fuel tank, with a top that is securely closed at all times. Except for quantities of less than ten litres, which can be drained into suitable plastic carry-cans, containers should be made of metal and be stable or held within a stable framework so that they are not easily knocked over (a large petrol spillage can be ignited a long way from the site of the spillage).

Unless petrol is to be returned to the vehicle immediately, it should be stored in a designated lockable, well-ventilated area, preferably outside the workshop. Under no circumstances should drained petrol be added to the waste-oil tank. Any contaminated petrol or petrol/diesel mixtures should be consigned to waste, giving a clear description of the nature of the material.

The use of a proprietary fuel retriever solves most of the hazards of fuel removal by:

- providing a suitable container;
- providing the means to eliminate static electricity; and
- in some cases capturing any petrol vapour displaced.

But it is still important to follow the manufacturer's instructions, paying particular attention to the correct use of vapour recovery pipework and earthing straps. Fuel removal should only be carried out by a competent person who has been shown how to use the equipment and understands the hazards of the operation.

Even when using a fuel retriever, petrol removal should only be carried out in a well-ventilated area, from which all ignition sources have been removed, preferably in the open air and well away from pits or other openings in the ground.

Normally it will be possible to remove the fuel through the filler cap but in some vehicles anti-theft and rollover safety devices may prevent this or make it very difficult. By using specific adaptors available from vehicle manufacturers, fuel removal from the fuel lines is usually still possible. In such cases repairers should follow the instructions given in the vehicle manufacturer's workshop manual, using whatever adaptors are recommended.

Most of the hazards can be overcome by following the DOs and DON'Ts below. In particular:

- DO** use a fuel retriever wherever possible, following the manufacturer's instructions on vapour recovery and use of earthing straps
- DO** drain fuel outdoors or in a well-ventilated area
- DO** warn others verbally and/or by warning signs that fuel draining is in progress
- DO** disconnect the vehicle battery before draining fuel
- DO** remove all combustible materials from the work area
- DO** keep a foam or dry powder extinguisher nearby
- DO** remove petrol via the filler tube where possible
- DO** use adaptors provided by vehicle manufacturers when removing fuel from the fuel lines
- DO** use metal containers with secure caps for holding drained fuel
- DO** ensure that the containers cannot easily be knocked over during filling
- DO** use containers large enough to hold the contents of the fuel tank
- DO** soak up any spills immediately using absorbent granules or similar material
- DO** mark fuel containers with hazard labels to show their contents
- DO** use earthing straps between the vehicle chassis and the metal container to eliminate static electricity
- DO** keep any fuel containers in a well-ventilated, lockable store, preferably outside the work area
- DO** follow the same precautions when transferring fuel from the retriever back to the vehicle or into any other container

***Remember* – careless handling of petrol can cause fires and explosions**