

Motor trade guidance



Traditional risks like fire, occupational illnesses, theft and vandalism will always need some consideration, but technological developments in the motor trade industry, such as electric and hybrid vehicles, are introducing additional hazards into the workplace that equally need to be managed.

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Airbags and other explosive parts

Most modern vehicles have airbags and seat belt pre-tensioners which may need to be repaired or replaced over time.

Many such devices incorporate a small explosive charge/pyrotechnic ignition device and should be treated with the appropriate level of care. If you store or work on such devices, you need to be aware of the risks involved and the precautions to take.

There is specific legislation covering the manufacture, sale/supply and storage of explosives (The Explosives Regulations 2014 and The Pyrotechnic Articles (Safety) Regulations 2010) which will apply in addition to other general health and safety legislation.

The amount of explosive that can be stored and where it must be kept depends on the type of explosive and the quantity. The Net Explosive Content (NEC) is an important detail you need to consider, since it will tell you the actual amount of explosive, ignoring the weight of other components and packaging which make up the article.

Within the Explosives Regulations 2014 four hazard types (HT) for explosives are described (type 1 being the most hazardous and type 4 being the least hazardous). The explosive element of vehicle airbags and seat belt pre-tensioners is normally classed as HT 3 or 4 (these classifications mirror UN hazard divisions (HD) 1.3 and 1.4 respectively; this may be displayed on boxes or packaging in an orange box).

What about UN hazard classes 2 and 9?

Airbags and pre-tensioners with a UN hazard class 2 (gas) or 9 (miscellaneous) are not classified as explosive, so the Explosives Regulations 2014 won't apply. However, such devices should still be kept in similar conditions due to their potentially hazardous nature. Information relating to the UN hazard class/type and the NEC should be visible on the packaging or available via the supplier or the device safety data sheet.

Key actions to work safely around explosive vehicle parts

- Ensure that you are aware of and comply with your obligations under the Explosives Regulations 2014. There are 10 general principles of safety which should form part of the arrangements and working practices of anyone working with or storing explosive material.

The following is quoted from Health and Safety Executive (HSE) publication L150 which provides guidance on the Explosives Regulations 2014:

- 1) People undertaking explosives operations should be competent to carry out their particular roles.
 - 2) The particular hazards associated with the explosives should be understood.
 - 3) The sources of energy that could cause the explosives to initiate should be identified.
 - 4) Appropriate safety measures should be part of a planned and proportionate system of work to control all sources of energy that could cause an initiation.
 - 5) Particular care should be taken where an activity involves the application of energy to an explosive to ensure that this is controlled.
 - 6) So far as reasonably practicable, the quantity of explosives, extent and duration of exposure to the hazard should be minimised.
 - 7) The number of people exposed to the hazard should be limited to the minimum necessary for the activity in hand.
 - 8) Precautions should be in place to prevent an explosives event from escalating if an initiation does take place.
 - 9) Precautions should be in place to protect people if an initiation does occur.
 - 10) Robust systems should be in place to make sure that the necessary precautions are in place and remain effective.
- Take simple precautions to avoid triggering an explosion while handling items classed as HT 3 or 4, such as keeping the items away from stocks of flammable substances and sources of ignition, ensuring that the building can be effectively evacuated in an emergency and providing information on the building's contents to the emergency services.

These measures may be deemed to be adequate to control the risks they pose.

Fuel retrieval

The removal of fuel from vehicles is probably the most dangerous activity undertaken at a garage.

Whereas most significant hazards should be avoided where practicable, fuel retrieval is often needed to ensure that another job can be completed safely.

Fires and explosions that occur during the emptying of motor vehicle fuel tanks (or work on or close to them) are a major cause of death, serious injury and property damage in the trade. Rigorous safety precautions are needed wherever fuel extraction takes place.

A fire or explosion can destroy your premises physically, but, as well as this, the disruption and loss of

equipment and materials can lead the business into a financial and customer relations crisis. Ensuring that all necessary precautions are taken when fuel has to be removed from a vehicle is a vital part of preventing a fire or explosion in your premises and protecting your employees.

Key actions for safe fuel retrieval

- Consider whether fuel retrieval can safely be avoided or if it can be done another, safer, way. Ensure that a risk assessment is carried out for the task.
- Check that your fire safety and health and safety risk assessment have looked at the hazards associated with fuel retrieval.
- Make certain that employees who have to undertake this task have the right training, knowledge and experience, a safe place to do it in and suitable equipment that ensures the safety of themselves, anyone who may be nearby, and property. Provide a safe system of work (SSOW) document and record all associated training.
- Designate an area where fuel retrieval can be carried out safely with the right type of equipment readily available and in good working order.
- Plan ahead and make sure all necessary precautions that your risk assessment and regulatory requirements have identified are put in place.
- Eliminate any ignition sources before the task of fuel retrieval begins. Remember to consider unseen ignition hazards, such as a spark from a build-up of static electricity. Control of the static electricity hazard is required for compliance with the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) and includes the consideration of employees' clothing.
- Don't allow 'salvaged' fuel to be kept unnecessarily, particularly in any part of a workplace not specifically designed for such storage (in accordance with DSEAR).

Welding around vehicles

In motor trade premises it can sometimes be difficult to avoid welding close to vehicle fuel tanks and/or combustible components and materials.

The risk of a fire or explosion during welding activities can be a deadly one that can also cause extensive property damage and serious injuries, so you should be doing all that you can to reduce and manage the hazards.

Key actions when welding around vehicles

- Confirm that both your fire safety and health and safety risk assessments look at, amongst other things, all of the significant hazards that relate to your welding equipment and its use.
 - Eliminate hazards where possible and devise appropriate control measures where you can't.
- Make sure that when any vehicles are brought inside any of your buildings they are prominently

marked with their fuel type (e.g. LPG) and employees who may weld on or near to them are made aware that they are of that type.

- Take suitable precautions depending on the welding equipment used as fire and explosion risks not only stem from the activity itself (i.e. one that creates heat, sparks or flames) but also from the type of equipment used, e.g. the hazards that may arise from oxy-fuel type welding sets will be different to those stemming from electric arc welding types.
- Ensure that you always comply with the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) and additional regulations as applicable e.g. in relation to the use of oxy-fuel equipment).
- Follow the Health and Safety Executive (HSE) guidance on precautions against electric shocks when carrying out tasks that involve arc welding and arc brazing.
- Be aware that the fire service may take additional safety precautions wherever oxy/acetylene welding/cutting sets are used or stored, causing delays and disruptions. A safer, practical alternative should always be used if that is an option.
- Look for a safer alternative to acetylene gas cylinders where possible as they are highly unstable once they have been heated by a fire and can explode, causing significant damage and risking injury to anyone nearby.
 - Ensure that you are aware of the requirements of the Acetylene Safety (England and Wales and Scotland) Regulations 2014. Pay particular attention to the sections relating to the provision of pressure regulation devices, flame arrestors, gas non-return devices and quick-acting shut-off devices on connected equipment.
- Provide suitable safe system of work (SSOW) documents to cover welding activities. Ensure that these cover what needs to be done to a vehicle to make it safe before welding commences (particularly the removal or protection of combustible trim, upholstery and carpeting, fuel lines and fuel tank foam plastic filled body cavities). Include the 'dos and don'ts' for the different types of vehicles and vehicle fuelling systems employees may work with, e.g. LPG, LNG, electric, hybrid, hydrogen/fuel cell type.
- Only allow suitably trained and competent employees with prescribed personal protective equipment (PPE) to use welding equipment. Beware of the risk posed by induction heating tools to any person with a cardiac pacemaker or other kind of electronic or metal surgical implant.
- Record all training and instruction provided.
- Undertake welding in safe, suitable, clean and tidy risk assessed areas free of unnecessary combustibles and flammables.
- Don't permit the repair of a fuel tank (including a diesel tank) without first having a risk assessment completed by a competent person and a SSOW procedure put into place. Take HSE guidance into account and avoid 'hot work' where possible by considering safer options. For instance, replacing damaged components instead of repairing them, or use cold cutting or cold repair techniques.

- Make sure that you have adequate emergency procedures in place and the correct fire-fighting equipment is to hand and in working order.
- Have welding equipment regularly inspected as part of a recorded planned preventative maintenance schedule.
- Don't permit heat to be applied to containers, tanks or drums that may contain flammable residues.
- Replace hoses if they're damaged or perished – before they start to leak. Use only suitable proprietary leak detection sprays and don't allow unsuitable liquids (e.g. washing up liquid) to be used for leak detection purposes as they can actually cause a leak, risking the ignition of the gas (if flammable).
- Never carry out hot work on any wheel to which a tyre is fitted. Hot work includes welding, cutting, grinding and sawing and particularly the application of heat to free rusted on bolts. The inflation of tyres with nitrogen does not make hot work on wheels safe.
- Use local exhaust ventilation (LEV) wherever possible, and especially in confined locations or when welding stainless steel; Also when surface treatments, such as paint, paint underseal and galvanized coatings may be affected by heat from the welding or flame-cutting.
 - This LEV should be examined and tested by a competent person at least once every 14 months.
- Ask your insurance broker to make you aware of any terms or conditions (which apply under current or proposed insurances) relevant to welding or similar 'hot work'.

Securing vehicles and parts

We advise keeping theft-attractive items out of sight – although it's much harder to do for vehicles. It used to be enough to have robust key security measures. But, this issue has been complicated by keyless vehicles and devices used by criminals to defeat security systems without leaving a trace.

Criminals aren't always trying to take the vehicle itself. Instead, they'll break in to or deconstruct it to access valuable parts or loose items inside, like tools and tablets. For example, rising metal prices has led to increased incidents of catalytic converter theft and other parts containing precious metals. A growing issue is battery theft as electric and hybrid vehicles become more common.

Key actions to secure vehicles and parts

- Keep vehicles in locked garages as much as possible. Where space is limited, prioritise vehicles most likely to be targeted indoors, like light commercial vehicles and other types with high axles (since they give easier access to catalytic converters), high-value brands, and those that are more vulnerable (i.e. because there is a known fault with the security system or a window or door is damaged).
- Ensure windows are fully closed before leaving a vehicle unattended or stepping out of it briefly (for example, to refuel).
- Don't leave valuable tools, stock and equipment in vehicles while they're unattended (e.g. overnight).

- Encourage workers and customers to remove the keys and lock their vehicle (and test that it is definitely locked) – even if they're just stepping away for a moment to make a delivery, pick something up or complete a payment.
 - Put up signs to remind both employees and customers of this in car parks, pick up/drop off/delivery bays, sales forecourts, and anywhere the public could access and remove a vehicle from.
 - Consider making use of key fob signal blockers if you believe your vehicles might be at risk from criminal use of signal relay or jamming devices.
- Install robust physical security precautions and deterrents along, around and inside your perimeter, buildings and any outdoor storage containers.
- Establish good key security practices across the business. For example, emphasise the importance of not leaving keys unattended, especially in reception areas and driveable vehicles.
- Include theft prevention in driver training.
- Make employees aware of what has been installed in or around vehicles, such as intruder alarms, immobilisers, CCTV and tracking devices.
- Consider using steering wheel locks for extra security, particularly for keyless vehicles. Driving wheel clamps may also be worthwhile, if vehicles will be left unattended for extended periods.
- Don't let customers post keys through your letterbox. Only let keys be 'posted' into a secure key deposit box, fixed inside the building for the purpose.
- Train employees accompanying customers on vehicle demonstration drives not to hand over the keys when they're not in the vehicle themselves.
- See our guidance for motor trades about unaccompanied demonstrations and courtesy vehicles to find out what other precautions you could consider.