

# Example risk assessment for a motor vehicle mechanical repair workshop

## Setting the scene

**The garage manager carried out the risk assessment. The business employed 12 mechanics, including two apprentices who carried out mechanical repairs.**

## How was the risk assessment done?

The garage manager followed the guidance in *Five steps to risk assessment* ([www.hse.gov.uk/pubns/indg163.pdf](http://www.hse.gov.uk/pubns/indg163.pdf)).

- 1 To identify the hazards, the garage manager:
    - read HSE's motor vehicle repair web pages ([www.hse.gov.uk/mvr/](http://www.hse.gov.uk/mvr/)), the *Health and safety in motor vehicle repair* booklet HSG67 ([www.hsebooks.com](http://www.hsebooks.com)) and the *Essentials of health and safety at work* publication ([www.hsebooks.com](http://www.hsebooks.com) ISBN 978 0 7176 6179 4) to learn where hazards can occur;
    - checked the manufacturers' instructions or data sheets for chemicals and equipment;
    - walked around the garage and took a note of things that they thought might pose a risk, taking into consideration what they learnt from HSE's guidance;
    - talked to staff to find out what work methods were in use, what training they had been given, and any particular requirements that the two young apprentices may have;
    - went over the arrangements for waste disposal with the licensed disposal contractor on the telephone;
  - listened to the employees' own concerns about health and safety; and
  - looked in the accident book.
- 2 The manager then wrote down who could be harmed by the hazards and how.
  - 3 For each hazard identified, the manager recorded what controls, if any, were in place to manage these. He then compared these controls to the good practice guidance laid out in motor vehicle repair web pages, the *Health and safety in motor vehicle repair* booklet, *Essentials of health and safety at work* publication and the manufacturers' instructions or data sheets. Where existing controls did not meet good practice, the manager wrote down what further actions were needed to manage the risk.
  - 4 Putting the findings of the risk assessment into practice, the manager decided and recorded who was responsible for implementing the further actions and when they should be done. When each action was completed it was ticked off and the date recorded.
  - 5 The findings of the risk assessment were discussed by the supervisors and their teams of mechanics. The manager decided that a review and update of the risk assessment would be made annually, or sooner if things changed.

### Important reminder

**This example risk assessment shows the kind of approach a small business can take. Use it as a guide to think through some of the hazards in your business and the steps you need to take to control the risks. Please note that it is not a generic risk assessment that you can just put your company name on and adopt wholesale without any thought. This would not satisfy the law – and would not be effective in protecting people.**

**Every business is different – you need to think through the hazards and controls required in your business for yourself.**

Company name: PQR Motor Vehicle Repair shop (mechanical repairs only)

Date of risk assessment: 6/3/2006

What are the hazards?	Who might be harmed and how?	What are you already doing?	What further action is necessary?	Action by who?	Action by when?	Done
<b>Hazardous substances</b> Contact with used engine oil etc during servicing	Skin contact over a long period can lead to severe dermatitis and skin cancer.	<ul style="list-style-type: none"> <li>■ Nitrile gloves (EN 374 standard) gloves supplied and used.</li> <li>■ Garage overalls supplied and used.</li> <li>■ Contract for regular cleaning of overalls.</li> </ul>	<ul style="list-style-type: none"> <li>■ Supervisor to start keeping a check that gloves are being used.</li> <li>■ Risks from dermatitis and skin cancer to be explained to workers.</li> </ul>	JB  JB	14/3/06  14/3/06	12/3/06  12/3/06
Car engine running inside, toxic exhaust fumes, eg carbon monoxide	The fumes may cause workers eye irritation and breathing difficulties.	<ul style="list-style-type: none"> <li>■ Car exhaust attached to extractor system when engine is running.</li> <li>■ Extractor system maintained and tested to prevent leaks.</li> </ul>	<ul style="list-style-type: none"> <li>■ No further action required.</li> </ul>			
<b>Fire</b> General	Building could be burnt down, workers and visitors could be trapped in burning building. Workers could suffer severe or fatal burns if petrol gets on them and is ignited.	<ul style="list-style-type: none"> <li>■ Smoking prohibited in all work areas.</li> <li>■ Fire alarms maintained and tested by manufacturer.</li> <li>■ Extinguishers provided and inspected under contract.</li> <li>■ Special fire exits not needed as all work areas have immediate access to outside.</li> </ul>	<ul style="list-style-type: none"> <li>■ Manager to arrange some training on use of extinguishers for all workers.</li> <li>■ Annual fire drill to be carried out.</li> </ul>	SP  RB	1/5/06  11/9/06	
Petrol fires		<ul style="list-style-type: none"> <li>■ Fuel retriever used to empty vehicle fuel tanks outside.</li> <li>■ Spillages cleared immediately.</li> <li>■ Component cleaning in recirculating paraffin system, <i>not</i> petrol.</li> </ul>	<ul style="list-style-type: none"> <li>■ Brief workers on safe working with petrol (from HSE's <i>Safe use of petrol in garages</i> INDG331).</li> </ul>	RB	2/5/06	
LPG fires		<ul style="list-style-type: none"> <li>■ LPG fuelled vehicles ported in safe places.</li> <li>■ Workers trained in hazards of LPG.</li> </ul>	<ul style="list-style-type: none"> <li>■ Brief workers on safe working with LPG (from HSE's <i>LPG-fuelled motor vehicles</i> INDG387).</li> </ul>	RB	2/5/06	

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<b>Battery charging</b>	Workers could suffer burns from contact with battery acid whilst charging, particularly if battery is overcharged and explodes.	<ul style="list-style-type: none"> <li>■ Proprietary charger, installed by electrician, is used in accordance with instructions.</li> <li>■ Acid-resistant gloves and goggles supplied and used.</li> </ul>	<ul style="list-style-type: none"> <li>■ No further action required.</li> </ul>			
<b>Electrical equipment</b> Fixed equipment: range of portable appliances, eg hand lamps.	All workers could suffer potentially fatal shocks or burns if they use faulty electrical equipment – portable equipment is particularly liable to damage. Faulty equipment could also start a fire.	<ul style="list-style-type: none"> <li>■ Hand lamps etc are low voltage (24 volts).</li> <li>■ A few 240 volt tools are used, all have industrial plugs and leads.</li> <li>■ Testing carried out annually on all portable 240 volt tools and users trained to carry out visual checks and report defects.</li> <li>■ Installed equipment receives regular maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>■ Manager to assess suitability of replacing 240 volt tools with air-powered or 110 volt alternatives.</li> </ul>	SP	26/4/06	
<b>Mechanical equipment</b> Eg grinding equipment	Moving parts can trap parts of the employee's body (eg fingers/hand/arm) causing crush injuries. Workers can also cut themselves on sharp edges or scald themselves on hot parts.	<ul style="list-style-type: none"> <li>■ All mechanical equipment checked before use and faults reported to supervisor.</li> <li>■ Equipment not to be left running unattended.</li> <li>■ Guarding provided.</li> <li>■ Safety goggles provided and worn.</li> <li>■ Grinding wheels changed by trained person.</li> </ul>	<ul style="list-style-type: none"> <li>■ No further action required.</li> </ul>			
<b>Falling objects</b> Car lift failure Car jack failure	Failure of a car lift or jack may cause severe crush injuries to an employee if a vehicle fell on an employee – those who work in vehicle repair are particularly at risk.	<ul style="list-style-type: none"> <li>■ Car lifts and jacks serviced by supplier and inspected by insurers.</li> <li>■ Jacks only used where ground conditions are firm, stable and level.</li> <li>■ Axle stands regularly maintained and inspected.</li> <li>■ Axle stands used after lifting vehicle with jack.</li> <li>■ Safe working loads not exceeded.</li> </ul>	<ul style="list-style-type: none"> <li>■ No further action required.</li> </ul>			

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<b>Work involving air conditioning systems</b>	Workers could suffer: <ul style="list-style-type: none"> <li>■ Frostbite – through skin or eye contact with refrigerant liquid or gas.</li> <li>■ Asphyxiation – if sufficient quantities of gas escape into confined space.</li> <li>■ Exposure to harmful gases – through thermal decomposition of refrigerant if exposed to a naked flame.</li> </ul>	<ul style="list-style-type: none"> <li>■ Workers are trained in correct procedures.</li> </ul>	<ul style="list-style-type: none"> <li>■ Brief workers on safe working with air-conditioning systems (from HSE's <i>Safe working with vehicle air-conditioning systems</i> INDG349).</li> </ul>	RB	5/7/06	
<b>Compressed air</b> Explosion of equipment tyres; injection of air in the body	All workers could suffer blast injuries if the air receiver were to explode; workers could suffer damage to internal organs if air is introduced into the body.	<ul style="list-style-type: none"> <li>■ All workers trained in safe working procedures and dangers of horseplay.</li> <li>■ Airline has deadman's handle.</li> <li>■ System inspected and serviced every year by insurers.</li> </ul>	<ul style="list-style-type: none"> <li>■ No further action required.</li> </ul>			
<b>Handling vehicle air bags</b>	Air bags could explode when not fitted, causing injury.	<ul style="list-style-type: none"> <li>■ Units are stored in suitable cabinet of their own.</li> <li>■ Workers are trained in correct handling and fitting.</li> <li>■ Faulty units are returned to supplier for disposal.</li> </ul>	<ul style="list-style-type: none"> <li>■ Brief workers on safe handling of air bags (from HSE's <i>Airbags and seatbelt pretensioners at garages and motor vehicle repair workshops</i> INDG280).</li> </ul>	RB	1/6/06	
<b>Manual handling</b> In the store; movement of components	All workers (particularly those in stores) could suffer from back pain if regularly lifting/carrying heavy or awkward objects.	<ul style="list-style-type: none"> <li>■ Forklift truck used to move material into store and take components to work shop.</li> <li>■ Manual handling still required.</li> </ul>	<ul style="list-style-type: none"> <li>■ Manager to arrange manual handling training for the workers in the store.</li> <li>■ Brief workers on handling tyres (from HSE's <i>Collection and delivery of tyres</i> guidance: <a href="http://www.hse.gov.uk/mvr/handlingtyres.pdf">www.hse.gov.uk/mvr/handlingtyres.pdf</a>).</li> <li>■ More detailed assessment to be carried out (using HSE's <i>Manual handling assessment charts</i> INDG383).</li> </ul>	SP RB JB	10/5/06 22/3/06 22/6/06	22/3/06

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<b>Operation of lift truck</b>	Injuries such as fractures can be caused by: <ul style="list-style-type: none"> <li>the driver crashing lift truck;</li> <li>workers and visitors being hit by lift truck;</li> <li>workers falling from lift truck;</li> <li>objects falling from lift truck onto workers and visitors; and</li> <li>the lift truck toppling over.</li> </ul>	<ul style="list-style-type: none"> <li>All operators trained and competent for use of the lift truck.</li> <li>Truck serviced regularly and examined every six months.</li> <li>Flooring maintained to reasonable standard.</li> <li>Stores laid out to enable truck to load and unload safely and pedestrians to pass safely.</li> </ul>	<ul style="list-style-type: none"> <li>Supervisor to assess suitability of pedestrian operated lift trucks.</li> <li>Refresher training for operators to be arranged every 3 years.</li> </ul>	JB SP	01/6/06 21/5/07	
<b>Vehicle movements</b>	Injuries such as fractures can occur if vehicles hit workers or visitors.	<ul style="list-style-type: none"> <li>Safe parking provided for customers without need for reversing.</li> <li>Marked walkways for pedestrians.</li> <li>Vehicles driven slowly in/out and around premises.</li> </ul>	<ul style="list-style-type: none"> <li>Supervisor to monitor speed of cars in/out and around premises.</li> </ul>	JB	29/3/06	31/3/06
<b>Slips and trips</b>	All workers and visitors may suffer a strain/sprain or even a fracture through slipping on oil/water spillages.	<ul style="list-style-type: none"> <li>Good housekeeping standards maintained through training and monitoring.</li> <li>Floors degreased weekly.</li> <li>Absorbent granules and sawdust put on spills as soon as possible.</li> <li>Entrances and exits maintained.</li> </ul>	<ul style="list-style-type: none"> <li>Walkways and storage areas designated by yellow lines.</li> <li>Weekly housekeeping check to be started.</li> </ul>	JB JB	12/4/06 10/3/06	10/4/06 17/3/06
<b>Falls from height</b>	Injuries such as fractures may be incurred by workers/visitors if they fall from ladders, the top of vehicles, or raised storage areas.	<ul style="list-style-type: none"> <li>Access equipment provided for work on trailers and tops of commercial vehicles.</li> <li>Handrails fitted at edges of raised storage areas and access stairway provided.</li> <li>Workers trained to use ladders safely.</li> <li>Vehicle inspection pits clearly marked and covered when not in use.</li> </ul>	<ul style="list-style-type: none"> <li>Supervisor to monitor use of portable ladders, access equipment when working on vehicles, and safety at inspection pits.</li> </ul>	JB	7/4/06	7/4/06

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<b>Hygiene and comfort</b>	All workers.	<ul style="list-style-type: none"> <li>■ Heated mess room with kitchen area provided.</li> <li>■ Toilets and sinks available, cleaned daily.</li> <li>■ Locker room for drying and storage of own clothes and work clothing/equipment provided.</li> <li>■ Portable heaters used during the winter in the workshop.</li> <li>■ Drinking water and cups provided.</li> </ul>	<ul style="list-style-type: none"> <li>■ No further action required.</li> </ul>			
<b>Public access to workshop</b>	Customers could suffer various injuries if they wander into the workshop.	<ul style="list-style-type: none"> <li>■ Signs up banning customers from the workshop, viewing window provided in reception.</li> </ul>	<ul style="list-style-type: none"> <li>■ Workers to be reminded to challenge anyone entering the workshop without permission.</li> </ul>	SP	19/5/06	

**Assessment review date: 8/1/07**