IMIRR0406

# Remove and transport upright casualty vehicles

## Overview

This standard is about removing and transporting upright casualty vehicles from the roadside or similar hard, level standing.

For the purpose of this standard vehicles include light, light commercial, heavy goods and public service vehicles.

## Performance criteria

*You must be able to:*

P1 identify and wear suitable personal protective equipment throughout all vehicle removal activities
P2 carry out a daily check, in accordance with your company procedures and manufacturer's recommendations, on the vehicle and equipment being used for the recovery operation
P3 carry out a dynamic risk assessment of the casualty vehicle and its location prior to commencing recovery activities
P4 continue to assess the situation throughout the recovery and transportation process
P5 make justifiable decisions for a course of action based upon the information gained from your initial assessment of the situation
P6 conduct all recovery and transportation activities following:

P6.1 legal requirements
P6.2 workplace procedures
P6.3 industry codes of practice
P6.4 health and safety requirements
P6.5 manufacturer's operating instructions
P6.6 operator's licence compliance requirements
P6.7 the Environment Agency's hazardous waste regulations
P7 work in a way which minimises the risk of:

P7.1 further damage to the vehicle
P7.2 contact with leakage, hazardous materials/substances or high voltage components which have not been disconnected
P7.3 any potential further damage to your working environment
P7.4 injury to self and others
P8 promptly inform the relevant authorities where the condition of the vehicle presents a hazard and/or the loading manoeuvre is likely to obstruct the flow of traffic
P9 use a recovery vehicle and **recovery equipment** which:

P9.1 is suitable for the type, condition and weight of vehicle to be transported
P9.2 is suitable for the nature of the incident

P10 report viable options to your recovery controller for action promptly where the recovery vehicle and equipment prove unsuitable
P11 ensure vehicle has been made safe prior to undertaking any recovery or transportation activities
P12 position and rig the recovery vehicle and **recovery equipment** to:

P12.1 minimise the need to re-rig
P12.2 secure the best recovery advantage
P13 safely operate winching equipment
P14 ensure no **recovery equipment** or vehicle specification is overloaded
P15 ensure the recovery site is left free from debris, waste, tools, equipment and cones prior to moving off
P16 transport the casualty vehicle to the relevant destination and unload, without further damage
P17 ensure your records are accurate and complete and passed promptly to the relevant person(s)

## Knowledge and understanding

*You need to know and understand:*

**Legislative and organisational requirements and procedures**

K1 the legal requirements and industry codes of practice governing site protection and recovery operations

K2 the importance of wearing the appropriate personal protective equipment

K3 how to carry out an appropriate risk assessment and use this assessment to determine collection and transportation of vehicles

K4 the importance of informing the relevant authorities/responsible parties where recovery operations are likely to affect other traffic

K5 how to work safely and identify hazards when recovering and transporting vehicles

K6 the hazards associated with working on or near petrol and alternative fuel vehicle systems and components

K7 the limits of your authority for dealing with hazardous substances or alternative fuel vehicles

K8 the referral process for dealing with unexpected issues

K9 your organisation's operating, reporting and recording procedures

K10 the range of services and resources available within your organisation

K11 how to complete recovery records and the importance of doing so

K12 the importance of adhering to a robust, documented handover procedure

K13 company operating procedures to follow if a casualty vehicle is to be kept on-site

**Vehicle recovery equipment**

K14 the types, purpose and use of relevant vehicle **recovery equipment** *

***K15 the importance of carrying out a daily check on the recovery vehicle and equipment***

***K16 the safe working loads for** ***recovery equipment**, axle weights and stability

K17 the basic principles of manually handling **recovery equipment**

**Vehicle recovery**

K18 how to make an initial assessment of the extent of vehicle damage

K19 how to assess the most suitable recovery method for the type of incident, type of vehicle, the location and the condition of the casualty vehicle

K20 how to assess the weight of a casualty vehicle, including a load where appropriate

K21 the effect of **weather conditions** on the feasibility of recovery operations and how they are conducted

K22 how to use suitable site to base communication methods
K23 how to give clear, appropriate and informative instructions to customers
K24 the circumstances in which to call for specialist advice and assistance
K25 the operation of braking and transmission systems appropriate to the type(s) of vehicles on which you work
K26 the principles of loading and load containment
K27 on site recovery planning and control techniques
K28 how to prepare and **secure casualty vehicles for transportation**
K29 how to check for and deal with any casualty vehicle system and load leakage
K30 the dangers associated with **roadside** recovery operations and how to lessen the risks to yourself, customers and other road users
K31 how to identify vehicle type, e.g. EV, LPG etc.
K32 how to identify casualty vehicles carrying hazardous substances
K33 the importance of informing the authorities where **roadside** operations are likely to affect other traffic
K34 how to correctly position and rig recovery vehicles
K35 how to fit towing, loading and transportation equipment for the types of vehicle you deal with
K36 how to work safely at the **roadside** following industry codes of practice
K37 how to perform safety checks on casualty vehicles relevant to the types of vehicle you deal with
K38 how to clear the site prior to moving off, taking into account any environmental issues where appropriate
K39 how to use suitable warning lights
K40 how to avoid damage to casualty vehicles during transportation

**Winching techniques**

K41 the implications of working at height in relation to routine operator checks and basic maintenance, loading and unloading of vehicles
K42 the principles of winch theory, resistances to winching a casualty and stabilisation of the transporter vehicle
K43 the principles of powered winch operation and the loads to be applied, including the multiplication of forces when pulleys, snatch blocks, strops and anchor points are used
K44 the methods used to change direction of pull or to halve the load on the winch being used
K45 the function of all operating controls for a winch

K46 the safe working load of all **ancillary equipment** in various configurations
K47 the points to inspect on the rope and terminal fixings, the range and signs of possible rope damage and the limits to rope wear and tear that are acceptable for winching

## Scope/range

1. **Recovery equipment** is:

1.1. tow poles
1.2. transporters
1.3. vehicle mounted recovery systems
1.4. winches
1.5. truck mounted loaders
1.6. underlifts
1.7. trailers
1.8. spec lifts/support lifts

1. **Roadside** is:

2.1. off a live carriageway (driveway, car park)
2.2. on a live carriageway, including smart motorways and emergency refuge areas

1. **Weather conditions** are:

3.1. poor visibility
3.2. light
3.3. dark
3.4. dry
3.5. rain
3.6. snow
3.7. ice
3.8. wind
3.9. extreme temperatures

1. **Winchingoperation** includes:

4.1. pre-winching checks
4.2. identifying (and calculating) the different resistances to winching when recovering a vehicle

1. **Ancillary equipment** includes:

5.1. winch wire

5.2. continuous loops
5.3. shackles
5.4. snatch blocks
5.5. chains and brothers
5.6. strops
5.7. capstan
5.8. lighting board for casualty vehicle
5.9. skates and dolly wheels

1. *Secure casualty vehicles for transportation* *includes:

6.1. straps and ratchets
6.2. chains and ratchets

## Glossary

*This section contains examples and explanations of some of the terms used but does not form part of the standard.*

**Alternative fuel**

This is defined as any type of fuel that may be used to power an internal combustion engine (for example, LPG, bio ethanol etc. and hydrogen fuel cell systems), or electric vehicles, to include:

o Hybrid (HEV) - to include mild/micro hybrid vehicles where the voltage is considered dangerous.

o Plug-in Hybrid (PHEV)

o Extended Range Electric Vehicle (ER-EV) or Range Extended Electric Vehicle (RE-EV)

o Battery Electric Vehicle (BEV) or Pure Electric Vehicle (PEV)

o Fuel Cell Electric Vehicle (FCEV)

---

**Carriageway ***

***Examples include rural roads, urban roads and motorways, in hazardous and non- hazardous situations.***

***Industry Codes of Practice ***

***The current Code of Practice for Safe Roadside Working.***

***Instructions to customers**

To include towing instructions if applicable.

**Legal requirements ***

***Current legislation (including local by-laws and regulations) applicable to securing and protecting the recovery site and towing a vehicle.***

***Personal protective equipment ***

***Reflective safety garments, safety footwear, safety gloves and safety glasses as recommended by the current industry Code of Practice for Safe Roadside Working.***

***Pre-winching checks**

To include deploying the winch rope for a visual inspection, carrying out a practical check on all operating functions of the equipment including safety devices, winch controls and winch security as appropriate

**Recovery vehicle ***

Any vehicle fitted with recovery equipment.

*Similar hard, level standing *

Examples include driveways, forecourts and car parks.

*Vehicles *

These can be any light vehicle up to 3500kgs which could include cars, vans and multi-purpose vehicles (MPV's), or medium and heavy goods vehicles, buses and coaches of 3500kgs gross vehicle mass (GVM) and above.

IMIRR0406

# Remove and transport upright casualty vehicles

| | |
|---|---|
| **Developed by** | IMI |
| **Version Number** | 1 |
| **Date Approved** | 30 Mar 2023 |
| **Indicative Review Date** | 30 Mar 2026 |
| **Validity** | Current |
| **Status** | Original |
| **Originating Organisation** | IMI |
| **Original URN** | RR04 and RR06 |
| **Relevant Occupations** | Roadside Assistance Technician, Vehicle Recovery Operator |
| **Suite** | Roadside Assistance, Vehicle Recovery |
| **Keywords** | Remove; transport; recover; load; vehicle; |