

(F) Emergency and Medical Services

Common Regulations for

Emergency and Medical Services (Units and Equipment)

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General

1.1. All emergency vehicles are licensed based on their suitability for the particular tasks required of them and the equipment carried being as detailed in the appropriate section of the tables on pages 101 to 104. All units and equipment are at all times to be of appropriate specification and kept serviceable, clean, tidy and in a hygienic condition. Where appropriate, test certificates and time expired consumables are to be 'in date', with good quality copies of current certificates carried on-board the vehicle.

1.1.1. These vehicles, when licensed, are only acceptable at Events when crewed by appropriately licensed crew members in accordance with the requirements detailed in these regulations.

1.2. Rescue, Stage Safety and Recovery Units are licensed yearly by the MSA. All MSA registered Units must be inspected by an appropriate MSA Rescue or Recovery Assessor on application for their first MSA registration and at least once in every three year period thereafter.

1.3. Organisers using Emergency Vehicles should satisfy themselves that they operate with Licensed Vehicles and crews that are correct for the type and status of their events.

Rescue Units

2.1. All Licensed Rescue Units are required to carry the appropriate equipment listed in the tables on pages 100 to 103.

Note: Throughout these sections an asterisk(*) indicates a requirement for additional information to be printed in the Supplementary Regulations (SRs).

Text shown in Italics indicate a Regulation which may be amended in the SRs.

2.1.1. Where possible or practicable, the recommended positioning of Emergency Vehicles will be indicated on the Track/Venue Licence or in the Event Regulations.

2.1.2. Deleted.

Purpose

2.2. Rescue Units are required to transport licensed crew and equipment and provide medical and extrication facilities at the scene of an accident within approximately 90 seconds of leaving the stand-by location when operating at a licensed venue (and as appropriate at other venues).

2.2.1. Additional licensed vehicles can be specified on the Track Licence if deemed necessary.

Type of Vehicle

2.3. The vehicle should be of a type that is safe and appropriate to drive on the competition course being used for the event whilst competition is in progress.

2.3.1. A suitable vehicle capable of carrying crew and equipment in safety at speeds appropriate for the surface of the competition course.

2.3.2. For non-sealed surface courses the ability for the vehicle to maintain traction over such terrain is required.

Identification

2.4. Vehicles should be clearly marked "RESCUE" and "AMBULANCE" as required and carry blue flashing beacons.

Crew

2.5. The Minimum crew requirements are:

2.5.1. Race and Rallycross events. Three fully licensed rescue crew members and a Doctor or MSA Registered Paramedic.

2.5.2. Rally and Speed Events only. Two fully licensed rescue crew members and a Doctor or MSA Registered Paramedic.

2.5.3. For Rally and Speed Events the Doctor or MSA Registered Paramedic may attend independently.

2.5.4. At no time, at any event, may the crew of a Licensed Rescue Unit include more than two trainees.

Stage Safety Unit

Purpose

3.1. Stage Safety Units transport licensed crew and equipment to an incident to render the scene safe and to render First Aid and spinal immobilisation until the Rescue Unit arrives, if required.

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Type of Vehicle

3.2. The vehicle should be a car, an estate car or a car derived van with suitable tyres and underbody protection.

Identification

3.3. The vehicle should be clearly marked "STAGE SAFETY UNIT".

Crew

3.4. The crew will consist of a minimum of two fully licensed crew members, one of whom may be replaced by a Doctor or MSA Registered Paramedic (i.e. two crew or one crew plus Doctor/Paramedic).

An additional person may be carried but if that person is a trainee rescue licence holder they may use no more than two SSU duty signatures for the purpose of upgrading their licence.

Rally Recovery Unit

Purpose

3.5. These units provide for the recovery of vehicles.

Types of vehicle

3.6. For light recovery, a four wheel drive vehicle is recommended with a two tonne winch.

3.6.1. For heavy recovery, a four wheel drive equipped with a two tonne or higher capacity winch, that has the capability by vehicle mounted or towed equipment to execute the suspended towing of a vehicle. Or a rear wheel drive vehicle, equipped with dual rear wheels and a rear mounted spectacle lift and a two tonne or higher capacity winch. It is strongly recommended that such vehicles are equipped with a limited slip or locking rear differential.

Identification

3.7. The vehicle should be clearly marked "RECOVERY" and carry yellow flashing beacons.

Crew

3.8. The crew must consist of a minimum of two licensed operators, at least one of whom must hold a full licence.

Actions at an Incident

4.1. Where Rescue Units or Stage Safety Units are involved, once the risk of fire has been covered, medical control will be established by the Doctor or MSA-Registered Paramedic who will co-ordinate the extrication of any casualties without causing further harm or injury.

4.1.1. Crew should be fully familiar with, know the location of and be capable of assembling, operating, servicing and maintaining all equipment carried. Rescue crew to be able to assist the Doctor or Paramedic in the preparation and use of medical equipment.

4.1.2. Recovery units and crew should be prepared to support the Rescue and/or Stage Safety Unit at an incident.

Crew Requirements

5.1. Licence applicant, upgrading and maintenance criteria are detailed in Table 5.

Training

5.2. All Emergency Vehicle Crew members should attend at least two training sessions a year, at least one of which must be facilitated by an appropriate MSA registered Rescue or Recovery Trainer, as well as several MSA-permitted events to maintain their efficiency and status.

5.2.1. Licensed Crew Members will not be automatically re-licensed on the basis of attending assessment days only.

5.2.2. Training sessions provided by an appropriate MSA registered Rescue or Recovery Trainer may be used as licence signatures. Regional Rescue or Recovery Trainers can be contacted via the MSA.

Documentation and Information

5.3. Application Forms for Trainee and Full Licences, together with signature record cards, can be obtained from the MSA. Details of Approved Training and Licence Assessment will be notified to licence holders.

Medical

Race Medical Centre

6.1. The circuit Medical Committee should ensure that the Medical Centre is properly equipped and maintained.

6.1.1. It is essential that proper patient records are kept and that procedures for the safe disposal of potentially hazardous waste material, including dressings, contaminated clothing, syringes, needles and sharps, are in place.

6.1.2. The risk of cross-infection must be addressed (e.g. by wearing gloves, aprons and goggles). Disposable equipment should be used where possible and sterility ensured at all times.

6.2. Records must be kept of the use of all drugs and fluids (including quantities and expiry dates) and equipment maintained according to appropriate service schedules.

6.3. The following list of equipment, fluids, drugs, dressings etc. is considered to be the minimum requirement for a Medical centre. However it is essential that individual doctors equip themselves with the drugs and equipment they judge necessary. All equipment must be checked, serviced and stored according to the manufacturer's recommendations. There should be sufficient equipment and drugs for the immediate resuscitation of a minimum of two patients.

Equipment and Drugs

6.3.1. Resuscitation

- Oropharyngeal airways (eight assorted sizes 2, 3 and 4)
- Pocket mask or similar device with non re-breathing valve and O2 inlet

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- Suction apparatus mains, battery, hand or foot operated capable of 300mm Hg suction with reservoir not less than 350ml or overflow system with catheters and wide bore suction
- Self-inflating manual resuscitator with facemask and O2 reservoir
- O2 supply (min size F1360 litres) and spare with reducing valves, flowmeters as necessary
- O2 tubing and masks
- Laryngoscopes x 2 with spare batteries and bulbs
- Endotracheal tubes cuffed x 6 (sizes 6.0mm to 9.0mm)
- Nasopharyngeal tubes x 3 (assorted sizes)
- Entonox with appropriate on demand delivery system (NB storage regulations)
- IV cannulae (six assorted sizes 1.0 to 2.0mm)
- IV administration sets x 6
- Hartmanns Solution (or equivalent) (1000ml x 6): under the direction of a Medical Officer
- Haemaccel or equivalent (500ml x 8): under the direction of a Medical Officer
- Pressure infusor
- Assorted syringes and needles.

6.3.2. Monitoring and diagnostic

- Sphygmomanometer aneroid/mercury (for latter consider regulations re Hg spillage)
- Non-invasive Blood Pressure Monitor
- Pulse oximeter
- Defibrillator with leads, electrodes pads/gel
- ECG
- Thermometer
- Blood glucose estimation kit.

6.3.3. Splints and Dressings

- Large field dressings x 10
- Bandages and adhesive tape in assorted sizes
- Sterile non-adhesive and adhesive wound dressings
- Burn dressings and supply of sterile transparent bags assorted sizes
- Semi rigid cervical collars (assorted x 4)
- Splints.

6.3.4. Drugs: it is mandatory that the following be available as a minimum requirement.

- Cardiac arrest drugs according to the European and UK Resuscitation Council Guidelines (1992)
- A supply of parenteral analgesics.

6.3.5. Surgical

- Chest drainage kit
- Cricothyrotomy/Cricothyroidotomy kit
- Minor op sterile pack with needle holder, scissors, artery forceps, scalpel and blades
- Suture materials
- Skin Antiseptic
- Small autoclave (recommended).

6.3.6. Miscellaneous

- Scoop stretcher
- Casualty immobiliser (vacuum mattress)
- Stretcher for ambulance.

Kart Circuit Medical Centre

6.4. This must comprise a room large enough to accommodate a single bed for the observation and treatment of a single casualty. As a minimum it must be equipped with first aid equipment as required under HSE Code of Practice ACOP 1997 for organisations of 21 to 50 people, including an eye wash station with 2 x 500ml of sterile saline solution, a set of stiff neck extraction collars, including paediatric sizes, and portable resuscitation equipment.

Medical Response Unit (Race Meetings)

6.4.1. A suitable saloon or estate car identified both sides with 'Medical Response Unit' and equipped with roof mounted flashing blue light(s) equipped as follows:

- Beacons, to be visible 360° (with low mounted units if appropriate)
- Spring centre punch or similar
- Oropharyngeal airways (2 x size 4, 1 x 3, 1 x size 2)
- Pocket mask or similar device with non-breathing valve and O2 inlet
- Portable suction apparatus (battery, manual of foot operated capable of 300 Hg vacuum) with a selection of catheters and wide bore suction
- Self inflating manual resuscitator with facemask with O2 reservoir
- Laryngoscope with spare battery and bulb
- Endotracheal tube cuffed (7.0mm x 1, 8.0mm x 1)
- Nasopharyngeal tubes (6.0mm and 7.0mm)
- A cylinder with oxygen with reducing valves and flowmeter (equivalent to size D in volume)
- O2 tubing and facemask
- Entonox with demand valve apparatus
- Hartmanns Solution (or equivalent) (500ml x 2)
- IV cannulae (1.4mm, 1.7mm and 2.0mm x 2)
- IV administration sets x 2
- Adhesive tape
- Needles and syringes assorted
- Disposable sharps container and plastic bag (for clinical waste)
- Rigid cervical collar, adjustable x 2
- Burns dressings x 3 (large, leg and arm size). Large field dressings x 5. Non absorbent wound dressings x 5
- Heavy duty scissors
- Chest drain kit
- Sphygmomanometer aneroid
- Stethoscope
- Surgical gloves.

6.4.2. Drugs are not listed, however it is essential that resuscitation drugs conforming to Resuscitation Council Guidelines and a supply of parenteral analgesics be available. Any further drugs and equipment that may be deemed appropriate by way of a specialist expertise is the responsibility of the individual doctor.

- All equipment must be regularly checked, serviced as necessary and stored according to the manufacturer's recommendations

6.4.3. Minimum Crew Requirements: One Doctor, plus either, one paramedic, or one fully licensed Resue Crew member, or a second Doctor.

Basic first aid kit – Rally Doctors

6.5. The following items are recommended to be carried by Rally Doctors in an appropriately assembled portable kit:

6.5.1. As listed in 6.4.1 excluding chest drain kit and the following additional items:

- Sterile eyewash 2 sachets
- Protective goggles
- Survival blanket x 2
- Woollen blanket x 2
- In addition a flashing green beacon, identifying tabard, appropriate protective clothing, incident report forms (x10) and a powerful torch are considered necessary.

6.5.2. A comprehensive list of drugs is not listed, however the individual Doctor is expected to carry those drugs that they feel are necessary and a supply of analgesic drugs for parenteral and oral administration.

6.5.3. Any further drugs and equipment that may be deemed to be appropriate by way of specialist expertise are the responsibility of the individual Doctor.

6.5.4. It is recommended that any doctor regularly involved in Rally medicine should seriously consider acquiring an MSA frequency radio set.

Duties of the Chief Medical Officer

7.1. Chief Medical Officers at all events will:

7.1.1. Deploy their team, in conjunction with the Chief Incident Officer/Safety Officer and the Clerk of the Course, to ensure adequate cover for the event and that the medical centre, if present, has medical cover.

7.1.2. Allocate duties to each member of the team, appropriate to their skills and qualifications. Ensure each team member is familiar with the venue, facilities, equipment, the means of summoning assistance and casualty evacuation and removal.

7.1.3. Ensure each team member introduces themselves to the personnel they are stationed with, confirms and checks the means of communication and with event control.

7.1.4. Identify with the Clerk of the Course and Chief incident/Safety Officer the locations for Medical Intervention/Rescue Unit and ambulances vehicles at the venue unless such is detailed on the relevant MSA Track Licence.

7.1.5. Deleted.

7.1.6. Ensure that all medical vehicles and the Medical Centre (if applicable) are equipped to the MSA minimum specified level.

7.1.7. Ensure that medical staff have reliable communication with event control and the public telephone service, either by radio, mobile phone or a nearby landline. Ascertain the telephone numbers for

the designated hospitals and if possible the relevant NHS Ambulance Control.

7.1.8. Ensure that drivers of emergency vehicles are aware of the need to preserve free access for their vehicles to the track and that they know the evacuation routes for the venue and the route(s) to the designated hospital(s). Ensure that all emergency vehicle drivers are aware that they must not enter the track without explicit permission from Race or Rally Control. They should proceed only in the direction in which the event is being run, unless explicitly otherwise instructed.

7.1.9. Deleted.

7.1.10. Assure themselves in conjunction with the Clerk of the Course that any personnel located on evacuation routes are briefed as to their role in assisting casualty evacuation.

7.1.11. Deleted.

7.1.12. Deleted.

7.1.13. Report to the Clerk of the Course, via event control, when they are satisfied that the medical facilities are appropriate for the event, raising any regulatory detail with the Clerk of Course and MSA Steward.

7.2.1. If a competitor is injured in an accident or presents with other medical conditions, such that it is considered inappropriate for them to continue to compete, then, the Chief Medical Officer, will request the Clerk of the Course to withdraw the competitor's licence upon medical grounds. The Chief Medical Officer should pass a report to the MSA (via the MSA Steward) detailing the nature of the injuries/medical condition. The MSA will hold such a suspended licence until the holder is medically cleared.

7.2.2. Medical examinations leading to the issue of a MSA medical certificate are not permitted at an event (H10).

7.2.3. The appropriate local hospitals must be notified by the event organisers of venue, date and times of the meeting.

7.2.4. Ambulance vehicles should be large enough to permit medical attendants to work without restriction.

7.2.5. The Chief Medical Officer shall assist the MSA Steward in the completion of the MSA Medical Statistics Form in order that the MSA is able to collect data as part of the MSA risk Management Programme.

Eligible Paramedics

7.3. Eligible Paramedics, may be used as detailed in the Specific Regulations.

7.3.1. Any Paramedic registered with the Health Professions Council (HPC) attending a motor sport meeting as a result of a commercial contract between the meeting Organisers and their employers, will be considered as being an MSA Registered Paramedic for the duration of that specific meeting.

7.3.2. To be MSA registered, applicants must be currently certified by the Health Profession's Council (HPC) as being a paramedic and be in possession of adequate valid malpractice insurance.

7.3.3. Anyone who ceases to be certified as a paramedic with the HPC will be removed from the register.

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7.4. All registered Paramedics must carry a malpractice insurance.

7.4.1. They must 'sign-on' and where appropriate (7.3.2) produce their MSA Paramedic Registration card at any event at which they are officiating.

7.4.2. They shall remain under the control of the Clerk of the Course at all times.

7.5. An MSA accident form must be completed for each and every incident treated.

Motor Sports House

OPEN

Monday–Thursday
9.30–5.30

Friday
9.30–5.00
(phone enquiries
10.00–5.00 please)

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Table 5 – Crew Requirements – Systems of acceptance and upgrading

Discipline	Acceptance for Training	Trainee Period & Requirements	Licence Acceptance	Maintenance of Licence
2.1 - 2.5.4 Rescue	<p>Race/Trackside/Stage Rally experience</p> <p>Attend one approved Marshal training day including fire training and radio procedure training</p> <p>Possession of a valid First Aid Certificate is recommended</p> <p>Gain endorsement of Crew Chief on existing Rescue Unit</p> <p>Minimum age 18</p>	<p>Hold a Trainee Licence, complete modular training programme detailed on the training record card, with signatures</p> <p>Collect 10 signatures from an Instructor or Crew Chief for attendance at:</p> <p>8 Race, Rally or Speed Events with at least 3 from each of two of these disciplines</p> <p>2 Training Days</p> <p>all 10 within 2 years</p>	<p>Attend Approved MSA Rescue Licence Assessment. Demonstrate to assessors full familiarity and competence in the operation of all equipment also identification and preparation of medical equipment</p>	<p>Attend and pass 3 yearly Assessments. Satisfy MSA registered assessor that training attendances as per 5.2 have been completed between assessments</p>
3.5 - 3.8 Rally/Cross Country Recovery	<p>Gain endorsement of Crew Chief on existing Recovery Unit</p> <p>Attend one approved Rally Training day including radio procedure and fire training within two years of application</p> <p>Minimum age 17</p>	<p>Hold a Trainee Licence</p> <p>Collect 6 signatures from Crew Chief or Rally Official and attend two approved recovery training days, all within 2 years</p>	<p>Attend Approved MSA Recovery Licence Assessment. Demonstrate to assessors full familiarity and competence in the operation of all equipment</p> <p>Minimum age 18</p>	<p>Attend and pass 3 yearly Assessments. Satisfy MSA registered assessor that training attendances as per 5.2 have been completed between assessments</p>

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Rescue, Stage Safety and Rally Recovery Units and Equipment

	Rescue	Stage Safety Unit	Rally Recovery
General			
Beacons (to be visible 360° with low mounted high-intensity units at the rear)	B	A	A
Radio Race 169.3375MHz FM Rally 81.575MHz FM Rally 81.5375MHz FM (the supply of equipment using alternative radio frequencies is the responsibility of the organising club)	*	*	*
Personal protective equipment for each crew member	*	*	*
Fire resistant blanket (1m x 1m minimum)	*	*	
1 x 6kg dry powder extinguisher	*	*	*
1 x 6 litre light water/AFFF fire extinguisher	*	*	*
2 survival blankets	*	*	*
1 Warning triangle	*	*	*
Vehicle powered lighting and torches	*	*	*
Suitable cutters for harness, straps, etc	*	*	*
Recommended: Steering wheel airbag protection cover	*		
1 gallon (5 litre) clean, fresh tap water	*	*	*
Environmental Spill Kit - Medium	*	*	*
Tools			
2 hacksaws (1 for Recovery) and supply of blades	*	*	*
1 small bow saw	*	*	*
1 small axe	*		*
1 pair tin snips	*		
1 1m crowbar	*	*	*
1 pair bolt croppers (minimum 18in)	*		*
1 pair mole grips	*	*	
1 general tool kit to include AF and metric spanners, sockets, allen keys, "Torx" and other drivers etc to aid access to vehicle.	*	*	*

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	Rescue	Stage Safety Unit	Rally Recovery
1 glass breaker (eg, Spring Centre Punch)	*	*	
2 hammers, large and small	*	*	*
Selection of flat, Phillips and Pozidrive screwdrivers	*	*	
3 suitable ropes or strops (1500kg SWL)			*
1 spade			*
Cold chisels/Bolster chisels	*		*
Selection of coupling hardware			*
Equipment suitable for securing/stabilising and towing vehicles	*	*	*
1 opaque sheet suitable for covering vehicle	*	*	*
Powered Tools			
1 powered metal cutting saw with an adequate selection of blades	*		
1 cutting saw, oscillating (electric, air or hydraulic)	*		
1 pedal cutter 3cm minimum jaw opening	*		
1 large spreader (may be combined with large shear)	*		
1 large shear to cut A, B, C pillars (may be combined with large spreader)	*		
Powered hydraulic equipment	*		
Hydraulic ram and extensions	*		
1 trolley jack 1015kg or air jack system.	*	*	
1 trolley jack, minimum capacity 2000kg, or high lift jack, or air jack system.			*

Note: For all categories of unit there should be adequate compressed air supply (bottled or from compressor) and hydraulic power supply for powering the range of equipment carried on the vehicle. Where equipment power source is electrical battery an adequate supply of charged batteries to be available.

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	Rescue	Stage Safety Unit	Rally Recovery
Medical			
1 Automated external defibrillator with monitoring capability	*		
1 Resuscitator with Oxygen Reservoir and Mask	*	*	
4 oropharyngeal airways to include nos. 2, 3, 4	*	*	
Note: it is strongly recommended that some device is carried which allows the operator to perform resuscitation whilst isolated from the casualty's oral secretions	*	*	
1 Pulse Oximeter	*		
1 laryngoscope plus spare batteries and bulb	*	*	
6 cuffed endotracheal tubes (2 x 7.0, 2 x 8.0, 2 x 9.0) with syringes to inflate	*	*	
1 portable suction machine (able to obtain 300mm Mercury vacuum)	*	*	
Full selection of suction catheters including Yankauers	*	*	
'i-gel' Supraglottic airways (in sizes 3, 4 & 5)	*		
1 portable entonox set (1 spare entonox cylinder)	*		
1 portable oxygen set (900 litres in not more than 3 cylinders). Regulator to be capable of delivering 15 litres/min	*	*	
Supply of non re-breathing masks	*	*	
2 sets of extrication collars or 2 adjustable extrication collars, including paediatric sizes	*	*	
2 Spinal Immobilisers (eg, KED, RED, TED)	*		
1 chest drain kit	*		
1 pair heavy duty scissors	*	*	
Scalpels, blades and artery forceps	*		
Cricothyrotomy/Cricothyroidotomy kit (or "mini trach")	*		
1 sphygmomanometer	*		
1 stethoscope	*	*	
4 intravenous giving sets	*	*	
12 intravenous cannulae (three each 14, 16, 18, 20) and suitable fixation	*	*	
4 x 500ml 0.9% Sodium Chloride or equivalent	*	*	
1 Combat Application Tourniquet (CAT)	*		
A comprehensive selection of dressings including large sizes (eg 20cm x 40cm) and bandages	*	*	
A supply of burn dressings (for example 'watergel' or 'burn shield'), cling film and unused clean plastic bags	*	*	*
A sterile solution for eye irrigation	*	*	*
Selection of splints	*	*	
Pelvic sling	*		
1 stretcher (ambulance cot type)	*		
1 scoop stretcher	*		
1 Long Board c/w head immobilisation system and straps	*		
Disposable surgical gloves	*	*	
Disposable sharps container and plastic bag for clinical waste	*	*	
Report cards	*	*	*
1 Vacuum Mattress	*		
BASIC FIRST AID KIT			
First Aid Kit in compliance with requirements for less than 25 employees (small) as defined by BS58599 - 1:2011	*	*	*