

**1. RESCUE UNITS**

**1.1.** All Licensed Rescue Units are required to carry the appropriate equipment listed in the tables on pages 9 to 12.

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

**1.1.2.** 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.

**1.1.3.** It is imperative that, at all times, Rescue Units are kept clean, tidy and in a hygienic condition.

**TYPES OF UNIT**

**1.2** Rescue Unit

**1.3** Deleted

**1.4** Stage Safety Unit

**1.5** See 1.6.

**1.6** Rally/Off-Road Recovery Unit.

**1.2. RESCUE UNIT**

**1.2. Purpose:** To transport licensed crew and equipment to 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. To provide medical and extrication facilities. Additional licensed vehicles will be specified on the Track Licence if deemed necessary to ensure response times are maintained.

**1.2.2. Type of Vehicle:** It should be of the type that is safe and appropriate to drive on a competition course while competition is in progress. A suitably modified van or estate car capable of carrying crew and equipment in safety at speeds of 70–80 mph is appropriate for sealed surface courses. For non-sealed surface courses a lower speed requirement is permitted but with the ability to maintain traction over such terrain is required.

**1.2.3. Identification:** Clearly marked “RESCUE” and “AMBULANCE” as required and carrying Blue Flashing Beacons.

**1.2.4. Crew:** The crew will include one Doctor, or MSA registered Paramedic (4.1.1, 4.1.2) and a minimum of three fully licensed crew members. (For SPEED Events only: the minimum requirement is for two fully licensed crew members with a Doctor or MSA registered Paramedic in attendance at the incident. For RALLY Events the minimum requirement is two fully licensed crew members. The Doctor or MSA registered Paramedic may attend independently).

At no time may there be more than two Trainees on a Licensed Rescue Unit.

**1.3.** Deleted.

**1.4. STAGE SAFETY UNIT**

**1.4.1. Purpose:** To 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.

**1.4.2. Type of Vehicle:** It should be a car, estate car or car derived van with suitable tyres and underbody protection.

**1.4.3. Identification:** Clearly marked “STAGE SAFETY UNIT”.

**1.4.4. Crew:** The crew will consist of a minimum of two fully licensed crew members, one of which may be replaced by a Doctor or MSA registered Paramedic (i.e. 2 crew or 1 crew plus Doctor/Paramedic).

**1.5.** See 1.6

**1.6. RALLY/OFF-ROAD RECOVERY UNIT**

**1.6.1. Purpose:** To provide for the recovery of vehicles only.

**1.6.2. Types of vehicle:**

(a) Light recovery, four wheel drive, 2 ton winch.

(b) Heavy recovery, four wheel drive, rear jib, 2 ton capacity.

**1.6.3. Identification:** Clearly marked “RECOVERY” and carrying Yellow Flashing Beacons.

**1.6.4. Crew:** The crew will consist of a minimum of two licensed operators at least one of whom must hold a full licence.

**1.7. ACTIONS AT AN INCIDENT**

Once the risk of Fire has been covered, where Rescue Units or Stage Safety Units are involved, Medical control will be established by the Doctor or MSA Registered Paramedic who will co-ordinate the extrication of the casualty/casualties without causing further harm or injury.

It is important that the crew are fully familiar with the medical equipment carried on the Units. They should be able to identify and assemble apparatus to assist the Doctor or MSA registered Paramedic.

Crew members must be familiar with and know the location of all other equipment carried on the Rescue Units; they must be capable of operating, maintaining and servicing it.

**1.8. SUITABILITY FOR PURPOSE**

It is important that equipment from one Rescue Unit be compatible, as far as possible, with that on others.

At major incidents where extra equipment is required, interchangeability is essential.

## 2.1. CREW REQUIREMENTS

Systems of acceptance and upgrading:

- Acceptance for Trainees
- Trainee acceptance for full licence assessment
- Acceptance for full licence assessment
- Maintaining of full licence.

(See table on page 8)

## 2.2. EMERGENCY VEHICLE LICENSING

All Emergency vehicles are licensed based upon their suitability for the particular tasks required of them and the equipment carried as detailed in the appropriate sections.

These vehicles, when licensed, are only acceptable at Events when crewed by appropriately licensed crew members.

## 2.3. TRAINING

All Emergency Vehicle Crew members should attend at least two training sessions per annum; also they should attend several MSA permitted events to maintain their efficiency and status.

Licensed Crew Members will not be automatically relicensed on the basis of attending Assessment days only.

Training sessions are organised from time to time by Clubs and the MSA, and these may be accepted as counting towards the number of signatures required.

There are a number of appointed MSA Regional Trainers and they may be contacted, via the MSA, if required.

## 2.4. DOCUMENTATION AND INFORMATION

**2.4.1.** Application Forms for Trainee and Full Licences together with signature record cards, can be obtained from the MSA.

**2.4.2.** Details of Approved Training and Licence Assessment will be notified to licence holders.

## 3. MEDICAL

### 3.1. Race Medical Centre

#### General considerations

The circuit medical committee should ensure that the medical centre is properly equipped and maintained. It is essential that proper patient records are kept in an appropriate manner.

Procedures for the safe and proper disposal of potentially hazardous waste material, dressings, contaminated clothing, syringes, needles and sharps must be in place. The prevention of cross infection must be identified (e.g. gloves, aprons and goggles).

It is advised that disposable equipment be used where possible and sterility must be ensured.

Records must be kept for drugs and fluids (quantities and expiry dates) and equipment (maintenance and service schedules).

The following list of equipment, fluids, drugs and dressings etc. is considered to be the basic and minimum requirement. However due to regulations it is essential that individual doctors equip themselves with the drugs/equipment that he/she deems necessary in pursuance of his/her duties.

There should be sufficient equipment, and drugs for the immediate resuscitation of a minimum of 2 patients.

## Equipment and Drugs

### Resuscitation

Oropharyngeal airways (8 assorted sizes 2, 3 and 4).

Pocket mask or similar device with non rebreathing valve and O<sub>2</sub> inlet.

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 O<sub>2</sub> reservoir.

O<sub>2</sub> supply (min size F1360 litres) and spare with reducing valves, flowmeters as necessary. O<sub>2</sub> 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 (6 assorted sizes 1.0 to 2.0mm).

IV administration sets x 6.

Hartmanns Solution

1000ml x 6

Haemacel or equivalent

500ml x 8

Pressure infusor.

Syringes and needles assorted.

} Under the direction of a Medical Officer.

### 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.

### 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.

### 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.

### Surgical

Chest drainage kit.

Cricothyrotomy kit.

Minor op sterile pack with needle holder, scissors, artery forceps, scalpel and blades.

Suture materials.

Skin Antiseptic.

Small autoclave (recommended).

### Miscellaneous

Scoop stretcher.

Casualty immobiliser (vacuum mattress).

Stretcher for ambulance.

All equipment must be checked, serviced and stored according to the manufacturer's recommendations.

### 3.2. Chief Medical Officer (Race Meetings)

The following are the minimum requirements to be provided in an appropriately assembled portable kit for the Chief Medical Officer. At his/her discretion it may be placed in a designated vehicle or Fast Doctor's Car in which there must always be a Doctor.

Oropharyngeal airways x4.

Pocket mask or similar device with non rebreathing valve and O<sub>2</sub> inlet.

Portable suction apparatus (Battery, manual or foot operated capable of 300mm Hg vacuum) with a selection of catheters and wide bore suction.

Self inflating manual resuscitator with facemask with O<sub>2</sub> reservoir.

Laryngoscope with spare batteries and bulb. Endotracheal tubes cuffed (6.0mm x 2, 7.0mm x 2, 8.0mm x 2).

Nasopharyngeal tubes (6.0mm and 7.0mm). A cylinder with oxygen with reducing valves and flowmeter (equivalent to size F in volume). O<sub>2</sub> tubing and facemask.

Entonox with demand valve apparatus.

Hartmanns Solution

500ml x 2

Haemaccel or equivalent

500ml x 4

IV cannulae (1.7mm and 2.0mm x 2). IV

administration sets x 4.

Adhesive tape.

Needles and syringes assorted.

Disposable sharps container and plastic bag (for clinical waste).

Rigid cervical collar x 1.

KED/RED extrication splint.

Limb splints.

Large field dressings x 10, burn dressings and sterile plastic bags.

Sterile wound dressings non absorbent.

Heavy duty scissors.

Minor op sterile pack with suture material.

Chest drain kit.

Cricothyrotomy kit.

Sphygmomanometer aneroid.

Stethoscope.

Frusemide ampoules 50mg x 4.

Dexamethasone for injection.

Other necessary 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 manufacturers recommendations.

### 3.3. Basic first aid kit – Rally Doctors

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

Oropharyngeal airways x 3.

Pocket mask or similar device with non rebreathing valve and O<sub>2</sub> inlet.

Suction apparatus (foot or manual operated) with a selection of catheters.

Hartmanns Solution

1000ml x 2

Haemaccel or equivalent

500ml x 4

IV cannulae x 6 (1.4mm to 2.0mm).

IV administration sets x 2.

Cervical collars (stiff) x 2.

Non absorbent wound dressings x 5.

Burns dressings x 3 (large, leg and arm size).

Large field dressings x 5.

Lignocaine 1% plain 20ml.

Sterile sutures with needles.

Sterile eyewash 2 sachets.

Antiseptic solution 2 sachets.

Clean water 5 litres.

Heavy duty scissors.

Assorted syringes and needles.

Stethoscope.

Sphygmomanometer aneroid.

Disposable sharps container.

Heavy duty plastic bag (disposal clinical waste).

Surgical gloves x 5.

Protective goggles.

Survival blanket x 2.

Woollen blanket x 2.

A comprehensive list of drugs is not listed, however the individual Doctor is expected to carry those drugs that he/she feels are

} Under the direction of a Medical Officer.

necessary and a supply of analgesic drugs for parenteral and oral administration.

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

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

In addition a flashing green beacon, identifying tabard, appropriate protective clothing, incident report forms (x10) and a powerful torch are considered necessary.

### **3.4. Duties of the Chief Medical Officer (All Events)** The Chief Medical Officer will:

**3.4.1.** Prepare a duty roster in liaison with the Chief Incident Officer and the Clerk of the Course, deploying his force so that principal danger areas are under supervision, and particularly ensuring that at least one doctor is always on call in the pit or paddock area.

**3.4.2.** Allocate duties to all available doctors after satisfying himself that each is adequately equipped with oropharyngeal airway, large field dressings or the equivalent, and is familiar with the venue, the means of access to all points in the area under his charge, and the method of summoning assistance and of disposing of casualties. Each doctor should make a point of introducing himself to marshals in his area, and in particular to those through whom Race Control will be informed of ambulance movements.

**3.4.3.** Ascertain from the Clerk of the Course the locations specified for ambulances at the venue in question.

**3.4.4.** Settle with the leader of the first-aid personnel the disposal of his contingent, and the arrangements for their relief.

**3.4.5.** Satisfy himself that all first-aid posts and ambulances are adequately equipped.

**3.4.6.** Ensure that all first-aid personnel are aware of the method of calling aid and of disposing of casualties, and that an ambulance may depart from the meeting only on the instructions of the CMO in consultation with the Clerk of the Course.

**3.4.7.** Make sure that the drivers of ambulances and rescue units are fully aware of the need at all times to preserve free access for their vehicles to the track and/or internal roads; that the latter should always be preferred except in dire emergency; that an ambulance may not cross or proceed on to the track until instructed to do so by a doctor with the approval of the Clerk of the Course. When on the track an ambulance must always obey marshals' signals and travel only in the direction in which the event is being run; and that the ambulance drivers know the appropriate route to the hospital chosen for that meeting (drivers should be instructed to

return to the circuit as quickly as possible after delivering a casualty).

**3.4.8.** Assure himself in conjunction with the Clerk of the Course that at points where ambulances may have to cross the track all personnel concerned are prepared to handle such a situation safely and expeditiously.

**3.4.9.** If appropriate, see that the Medical HQ is open and staffed as a casualty station.

**3.4.10.** Ascertain the location of a Telecom phone, provide himself with the necessary coinage or charge card, and note telephone numbers of the hospital in use and of the ambulance pool if known.

**3.4.11.** Report to the Clerk of the Course when the above points have received attention and he is satisfied that the medical organisation is adequate for practice or competition to begin.

**3.5.** In the event of an accident involving injury to a competitor the Chief Medical Officer in consultation with the Clerk of the Course must enter on the competitor's Licence/Medical Certificate details of injuries suffered, and either clear the driver for further racing, or retain the Licence/Certificate and then return it to the MSA to hold until such time as the driver has been cleared medically.

**3.6.** Medical examinations leading to the issue of a MSA Medical Certificate are not permitted at an event [E 2.9.1].

**3.7.** The appropriate local hospital authorities must be notified by the organisers of the meeting as to the time and date of the meeting, including practice.

**3.8. "AMBULANCE" Specification.** Where regulations call for an "Ambulance" the vehicle should be of internal dimensions that allow the Doctor/MSA Registered Paramedic/Trained Crew Members to operate the equipment without restriction of movement. (Low roofed vehicles should be avoided).

**3.9.** Chief Medical Officer (Speed and Kart Race Events). Taking guidance from the above, CMOs should satisfy themselves that they have available adequate equipment and consumables to enable them to carry out duties within their training and experience.

## **4. ELIGIBLE PARAMEDICS**

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

**4.1.1.** A Paramedic, registered with the Health Professions Council (hpc), formerly the Council for Professions Supplementary to Medicine (CPSM), attending a motor sport meeting as a result of a commercial contract between the meeting organisers and his/her employers, will be considered as being an MSA registered Paramedic for the duration of that specific meeting.

**4.1.2.** To be MSA registered, applicants must be currently certified by the Health Professions Council (hpc), formerly the Council for Professions Supplementary to Medicine

(CPSM) as being a paramedic and be in possession of adequate valid malpractice insurance.

**4.1.3.** Anyone who ceases to be certified as a paramedic with the Health Profession's Council (hpc) will be removed from the register.

**4.2.** All registered Paramedics must carry a malpractice insurance.

**4.3.** Paramedics must 'sign-on' and where appropriate [4.1.2.] produce their MSA Paramedic Registration card at any event at which they are officiating. They shall remain under the control of the Clerk of the Course at all times.

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

**2.1. CREW REQUIREMENTS – SYSTEMS OF ACCEPTANCE AND UPGRADING**

Discipline	Acceptance for Training	Trainee Period & Requirements	Licence Acceptance	Maintenance of Licence
<p><b>2.1.1. RESCUE</b></p>	<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> <ul style="list-style-type: none"> <li>8 Race, Rally or Speed Events with at least 3 from each of two of these disciplines</li> <li>2 Training Days</li> </ul> <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 Crew Chief that Training attendances and updates have been completed between assessments</p>
<p><b>2.1.3. RALLY/OFF/ROAD RECOVERY</b></p>	<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 18</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>Attend and pass 3 yearly Assessments. Satisfy Crew Chief that Training attendances and updates have been completed between assessments</p>

# RESCUE UNITS AND EQUIPMENT

Rescue  
Stage Safety Unit  
Rally Recovery

## GENERAL

	Rescue	Stage Safety Unit	Rally Recovery
Beacons	B		Y
Radio Race 169.3375MHz FM Rally 81.575MHz AM (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 20lb (9kg) dry powder extinguishers	*	*	*
1 x 2 gallon (9 litre) light water/AFFF fire extinguishers	*	*	*
2 survival blankets	*	*	*
1 Warning triangle	*	*	*
Vehicle powered portable lighting and torches	*	*	*
Suitable cutters for harness, straps, etc	*	*	*
1 gallon (5 litre) clean, fresh tap water	*	*	*
<b>TOOLS</b>			
1 pair side cutters	*		
1 pair pliers	*	*	
2 hacksaws and supply of blades	*	*	*
1 small bow saw			*
1 small axe	*		*
1 pair tin snips	*		
1 1m crowbar	*	*	*
1 pair bolt croppers	*	*	*
1 pair mole grips	*	*	*
1 set AF spanners open ended and ring or set of AF combination spanners	*		
1 set metric spanners open ended and ring or set of metric combination spanners	*		*

Rescue	Stage Safety Unit	Rally Recovery
1 set AF socket spanners	*	
1 set metric socket spanners	*	
1 set AF allen keys & 1 set Metric allen keys	*	
1 Glass breaker (ie, Spring Centre Punch)	*	*
1 set Torx drivers	*	*
2 hammers, large and small	*	*
Selection of flat, Phillips and Pozidrive screwdrivers	*	*
3 ropes (min. 4m 1500kg SWL)	*	*
1 spade	*	*
Cold chisels/Bolster chisels	*	*
Selection of coupling hardware	*	*
Equipment suitable for securing/stabilising and towing vehicles	*	*
<b>POWERED TOOLS</b>		
1 powered metal cutting saw with an adequate selection of spare blades	*	
1 helmet cutting saw, oscillating	*	
1 pedal cutter 3cm minimum jaw opening	*	
1 large spreader 750kg (may be combined with large shear)	*	
1 large shear (may be combined with large spreader)	*	
1 wedge (small spreader) 750kg, 9cm maximum opening	*	
1 crash rescue kit (expansion) 8/10 ton capacity/powered hydraulic equipment	*	
1 trolley jack 1015kg or High lift jack or airbag system. If power source is compressed air this shall be a portable carrying frame fitted with	*	*
with two hp cylinders with a minimum of 1980 psi (139 bar) c/w regulator to reduce to 100 psi (7 bar) working pressure and appropriate high pressure hoses of adequate length		

**Note:** 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.

	Rescue	Stage Safety Unit	Rally Recovery
<b>MEDICAL</b>			
1 Resuscitator with Oxygen Reservoir and Mask	*	*	*
4 oropharyngeal airways to include nos. 2, 3, 4	*	*	*
<b>Note:</b> 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 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 yankeurs	*	*	*
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 15l/min	*	*	*
Supply of non re-breathing masks	*	*	*
2 adult sets of extrication collars or 2 adult adjustable extrication collars	*	*	*
2 Spinal Immobilisers (eg. KED, RED, TED)	*	*	*
1 chest drain kit	*	*	*
1 pair heavy duty scissors	*	*	*
Scalpels, blades and artery forceps	*	*	*
Cricothyrotomy kit	*	*	*
1 sphygmomanometer	*	*	*
1 stethoscope	*	*	*
6 intravenous giving sets	*	*	*
9 intravenous cannulae (three each 14, 16, 18)	*	*	*
12 x 500ml Hartmann's solution 6 x 500ml (SSU)	*	*	*
An adequate supply of dressings including 4 ambulance field dressings, bandages and splints	*	*	*
A supply of burn dressings (including 'watergel' type dressings) which should include unused clean plastic bags	*	*	*
A sterile solution for eye irrigation	*	*	*
Selection of splints	*	*	*

	Rescue	Stage Safety Unit	Rally Recovery
1 stretcher (York cot type)	*		
1 Long Board c/w head immobilisation system and straps	*		
Disposable surgical gloves	*	*	*
Disposable sharps container and plastic bag for clinical waste	*		
Report cards	*	*	*

#### **BASIC FIRST AID KIT**

First Aid Kit in compliance with requirements for 1–20 employees as detailed by HSE code of practice (ACOP 1997)