

VSO Technical Team

CARNIVAL HANDBOOK

Revision 2024

An essential guide **for mounted entries (and similar)**
participating in the Southwest Carnivals

Originally Produced by:

Somerset County Guy Fawkes Carnivals Association, updated and revised by VSO
Technical Team.

Whilst every effort has been made to ensure that the information and advice within this **document** is accurate, it has been produced as a guide only, and the authors cannot be held liable or responsible for its contents. Adherence to this document is likely to demonstrate what is considered to be best practice in the eyes of all regulatory authorities including but not limited to HM Constabulary, DVSA, VCA.

CONTENTS

Page 1.	Front Cover
Page 2.	Contents
Page 3.	Introduction / History
Page 5.	Definitions
Page 6.	Vehicle Special Order (VSO)
Page 9.	VSO, Categories and Vehicles
Page 10.	VSO, Vehicles and Drivers
Page 11.	VSO, Trailers and Braking
Page 12.	Heights, Width, Length and Travelling
Page 13	Health and Safety
Page 13	Risk assessment
Page 14	Fire assessment
Page 15	Insurance Information
Page 17	Useful Contact Information

Pages 19 to 25 VSO Check List and Standard Guidance Notes

Pages 27 to 29 Construction and Use Regulations (Guide for non-VSO entry)

Note:

For clarity, parts of this document which have been revised from the previous edition have been **highlighted in red.**

Individuals and clubs should ensure that they are aware of new information so indicated.

Preface:

This document, originally created by Somerset County Guy Fawkes Carnival Association (County), is designed to assist participants in Carnivals relating to matters dealing with Vehicle Special Orders, Insurance, Health and Safety, Fire and recording of Data.

INTRODUCTION:-

The Aim

The aim of **this document** is to assist every club to be totally confident that their entry conforms to the VSO requirements and is compliant with other safety issues when participating in the South West Carnivals.

This document is applicable to all Carnival Circuits including Wessex, County, South Somerset and Devon. The relevant local enforcing authority may or may not currently enforce the body of this document however it is considered only a matter of time before they do. In any case this document is written with the best of intentions, to demonstrate good practice and aims to protect all those involved within Carnival.

Why has this been brought about?

In the early 1990's a "Code of Conduct" was drawn up by Avon and Somerset Police in relation to Carnival Carts. By the end of the 1990's clubs participating over a certain size were required to obtain a Vehicle Special Order (VSO). Although at this time this typically only affected Carts Entering within the Somerset Circuits

Since the advent of the VSO the Police have given an annual report or meeting voicing their concerns relating to the safety of the vehicles in certain instances.

In 2005 whilst carrying out inspections the Police questioned the overall weight of certain entries in relation to the VSO regulations, this resulted in one club withdrawing from a Carnival. After further investigation it was found that the club had not broken any rules, it created a great deal of uncertainty and became an issue for many other participants.

Further meetings took place between the Police, Towns and other interested parties including members of County, where the Police raised the following concerns from the 2005 season:-

- An increase in defects which had led to a reduction in safety standards
- A lack of understanding regarding regulations
- A disregard of the regulations

In addition they warned that the following would happen in the 2006 season:-

- Weighing of Floats
- Brake Testing
- Enforcement of regulations where necessary

This placed the carnival organisers in a compromising position and it was agreed by the Somerset County Guy Fawkes Carnival Association to do the following:

"Act as a mediator and administrator between clubs and the relevant authorities, in relation to the VSO regulations for the benefit and safety of Carnival and its participants".

By taking this lead it was felt a better working relationship and understanding could be established between the authorities and the participants.

A subcommittee within County was formed to act in this mediator role called the VSO Subcommittee. Significant success was had by this committee not only as the intermediary between concerned parties but by also providing resources and support to clubs in the way of weigh bridges and brake meters.

The early part of the 2010 decade saw an ever growing presence by DVSA with respect to the inspections and enforcements of our carts. Whilst standards had improved by the close of the 2012 season both the Police and DVSA were at pains to point out that the standards were not where they needed to be.

Enforcing authorities also raised their game, and were less willing to overlook potential indiscretions and (rightly or wrongly) treating us primarily as any other vehicle on the road, enforcing what they could from the Construction and Use Regulations that the VSO system did not exempt us from.

In 2013, the VSO Subcommittee was disbanded, and replaced with the VSO Technical Team. This new body was formed to be independent, but yet to have representation from all interested parties across all circuits. The role of the Technical Team is not dissimilar to the previous Subcommittee in many ways except that in addition to its mediatory role, there is now the availability of technical advice and guidance of how participants can best comply with the ever increasing complexities of what is expected.

The Technical Team, has made significant progress, creating new documentation, running training workshops and generally supporting clubs including implementing the 3rd Inspection program. The latest revision of this Handbook is yet another task undertaken by the Tech Team and will be revised and reissued on an on-going basis as necessary.

From the 2018 season a noticeable improvement was seen generally, with single figure concerns raised by the enforcing authorities in any one year. This was seen as a mile stone moment in the evolution the VSO system and the safety of Carnival as a whole.

Covid, of course, had a large impact on Carnival activities. Indeed, entries were not permitted to participate in the normal fashion for a period of two years. Carnival returned in 2022. Generally the core standard and competence of the entries was where it needed to be. The VSO Technical Team and Carnival as a whole, need to maintain these standards moving forward with the correct checks and balances thereby continuing to ensure a safe and successful series of events.

Definitions

County :	Somerset Guy Fawkes County Carnivals Association.
County Towns:	Bridgwater, North Petherton, Burnham and Highbridge, Shepton Mallet, Wells, Glastonbury and Weston Super Mare.
Participants:	Entries taking part in the Carnival Procession
Carts:	The vehicles on which the entry is made.
VSO:	Vehicle Special Order
DVSA:	Driver and Vehicle Standards Agency. On site inspection and enforcement of VSO and Construction & Use Regulations.
VCA:	Vehicle Certification Agency. Administration and Issue of VSO
POLICE:	Ensure clubs comply with VSO and or Construction & Use Regulations.
VSO Technical Team:	Independent team of Carnival members liaising between Carnival Clubs, Police, DVSA, VCA and others. Key role: Technical matters and documentation to enable easier participation in carnival for all
Competent Person:	A person who holds a relevant qualification ie. HGV MOT Inspector, NVQ qualifies mechanic, University degree graduate, City and Guilds qualified apprenticeship.

Detailed Terms:

Carnival Circuits: Throughout the south west there are numerous Carnival Circuits these are made up of a collection of towns who organise Carnivals.

These include:-

- County Circuit
- Wessex Circuit
- South Somerset
- Devon Circuit

In addition many smaller towns organise individual carnivals, the rules and regulations apply nationwide.

It is at the discretion of the local enforcing authority as to how rigorously the rules are enforced.

VEHICLE SPECIAL ORDER.

Carnival Vehicles should always aim to fully comply with current Construction and Use Regulations. If because of certain conditions this is not possible a VSO must be applied for.

Examples areas where compliance with C&U cannot be achieved:

- Weight, Length, and Width.
- Not holding a current MOT or Test certificate and for mechanical reasons not able to get one.
- Carrying passengers for Hire or Reward on a vehicle not designed to do so.
- Towing more than one trailer.

The VSO permits the use of such vehicles (as listed) on the public highway. A special order needs to be obtained from the VCA and is granted for a defined period. This is provided the applicant supplies documentation to establish that the vehicles meet the VSO requirements.

VSO's are usually granted to one off special vehicles to enable tests and trials, abnormal load movements. A copy of the application form can be obtained from the VSO Tech Team via email: vsotechteam@gmail.com

Background:

All vehicles used on public roads in Great Britain must be taxed, licensed and registered with the DVLA. They must also comply with construction regulations and primarily, these are The Road Vehicles (Construction and Use) **(Amendment) Regulations 2022** (C&U) and the Road Vehicles Lighting Regulations 1989 (as amended).

The Secretary of State for Transport may by order (under Section 44 of the Road Traffic Act 1988) authorize, subject to restrictions and conditions that are specified on the order, the use on roads of Special Vehicles not complying with regulations made under Section 41 of the (Road Traffic) Act. This means that if a VSO is granted, the vehicles specified on the order are permitted to be used on the public highway even though they do not comply with the usual construction requirements that would ordinarily apply provided the terms and conditions which are specified on the order are complied with.

Who issues a VSO?

They are issued by officials at the VCA on behalf of the Secretary of State. The Carnival Vehicles used in the South West are merely one of a number of different categories of vehicles being operated on the public highway by means of a VSO. VSO's have been issued for many years - long before they were issued to Carnival Vehicles.

Do I need a VSO?

If you are a walking entry then you do not need a VSO

If you are a walking entry with wheeled props (ie you are pushing the props) then you do not need a VSO.

If you are using a motorised vehicle or a trailer wishing to participate in the Carnival, then you will require a VSO **if** your vehicle or trailer is designed or constructed in such a

way that it does not comply with the Road Vehicles (Construction and Use) Regulations 1986.

If you are using a motorised vehicle and carrying passenger for Hire or Reward you will need a VSO.

However you do not need a VSO for-
Single vehicle collection floats (ie. a Transit Van) Or Undecorated single vehicle (ie Transit Van carrying sound equipment).

AT THE REAR OF THIS BOOK ARE SOME EXAMPLES OF WHICH VEHICLES REQUIRE A VSO. ADDITIONAL INFORMATION CAN ALSO BE FOUND ON THE AVON AND SOMERSET POLICE WEB SITE UNDER VSO

VSO Application Form:

If you require a VSO then you must complete and submit an Application form, (we recommend you photocopy the form and then you will always have a master copy for future years).

Can anyone fill the VSO Application Form?

Someone in authority from the club can fill in the information however only a “Competent person” can endorse the form by signing it. The definition of a competent person is found in the Terms and Conditions section of this booklet.

What if I do not bother to fill out an application form?

Failure to complete a form or if your form is rejected and you still proceed to take part in a parade, would be classed as gross negligence and is a criminal offence. The officers of the club or its members could be prosecuted. This could be likened to driving a car without an MOT. In addition failure to have a VSO could invalidate any Insurance you have in place in the event of any accident. In addition it may also contravene the conditions of entry for the Carnival Town.

What if we do not have anyone in the Club who is a Competent person?

Many clubs face this problem, however there are many people who are qualified to complete the form, this may involve the club obtaining outside help which may incur a charge. If you experience difficulties contact the VSO Technical Team via email: VSOtechteam@gmail.com and they can arrange for someone to speak with you and point you in the right direction for help and advice.

VSO Requirements:

Part of the VSO application requirement is that all towing vehicles and carts are weighed and brake tested. This can be done by using equipment held by the VSO Technical Team or at an independent facility. The VSO application requires vehicle weights and braking efficiency.

Current Years weights and braking figures are to be forwarded to VCA before or post first procession but prior to second procession. Failure to do this may see the clubs VSO revoked.

When do we carry out a VSO Inspection?

It is a requirement of the VSO that the Competent person carries out a full and thorough inspection of the carnival train to determine its safety. This typically includes at least two visits followed by a third from an independent CP.

The initial inspection should ideally take place when the vehicle and trailers are stripped to allow access to the braking systems and general construction. To assist we have **exemplar** safety check forms available from VSOtechteam@gmail.com. Please photocopy the forms complete and sign and then store them with your other documents in the form of an operations and maintenance manual. These forms together with maintenance operations are then available at any time should information be required.

When and where do we send the completed VSO Forms?

The forms are currently returned to the VCA who will then accept or reject. Please allow as much time as possible for applications to be processed and in any case, a minimum of two weeks should be allowed.

If our VSO is rejected what do I do next?

If your form is rejected you will be given the reason for the rejection, in most cases this is due to filling in the form incorrectly (please refer to our section dealing with completing a VSO form). Once completed correctly then resubmit the VSO at your earliest opportunity.

If our VSO is accepted what else do I need to do?

If a vehicle is issued with a VSO it does not necessarily mean that the vehicle is roadworthy. The VSO merely provides an exemption from certain aspects of the Construction and Use Regulations- it allows vehicles to be, for example longer/wider and heavier than permitted.

In terms of whether the vehicles are roadworthy i.e. they are correctly maintained and comply with the conditions imposed on the VSO itself- this is the club's responsibility.

Once I have a VSO am I exempt from other legislation?

No, VSO's do not provide exemption from other legislation such as driver licensing, insurance etc and do not establish whether the vehicles are safely constructed. They allow the use of vehicles on the public highway which do not comply with the everyday construction requirements set out in the C&U regulations.

For example the maximum width which of a vehicle is (apart from certain exceptions), limited to 2.55m by C&U. Vehicles used in the South West Carnivals are permitted up to 3.5m wide when operating under the terms and conditions of the VSO.

Who enforces the VSO?

The VSO along with other legislation such as driver licensing, Insurance and roadworthiness is enforced by either DVSA or / and HM Constabulary.

If vehicles used in Carnivals comply with the C&U regulations a VSO will obviously not be required- since there is nothing for the vehicle or vehicle combination to need exemption from (see Appendix 3 pages 1-3).

VSO Categories

All entries requiring a VSO must conform to one of the categories as follows, there are eight in total and are based on weight. Ensure that you select the correct category as your VSO would be invalid if you were found to be overweight for the category you have applied.

- Category 1 Any single vehicle
- Category 2 Combination of Motor Vehicle and ONE Trailer with a gross train weight up to 24,390Kg.
- Category 3 Combination of Motor Vehicle and TWO Trailers with a gross train weight up to 24,390Kg.
- Category 4 Combination of Motor Vehicle and ONE Trailer with a gross train weight more than 24,390Kg, but not exceeding 38,000Kg.
- Category 5 Combination of Motor Vehicle and TWO Trailers with a gross train weight more than 24,390Kg but not exceeding 38,000Kg.
- Category 6 Combination of Motor Vehicle and ONE Trailer with a gross train weight more than 38,000Kg, but not exceeding 50,000Kg.
- Category 7 Combination of Motor Vehicle and TWO Trailers with a gross train weight more than 38,000Kg, but not exceeding 50,000Kg.
- Category 8 Any other Vehicle or combination of Vehicles.

All weights must include mounted personnel and in the UK Construction and Use regulations a figure of 65Kg is used as the weight for an average person.

NOTE: Gross weight will include fuel and personnel.

VEHICLES

All vehicles used on public roads in Great Britain must comply with the current Road Traffic regulations, which includes the Road Vehicles (Construction and Use) (Amended) Regulations 2022 (C&U)

In the event of vehicles used for the construction of a Carnival Cart an individual VSO will be required. This is renewed annually.

In some cases an Agricultural Tractor is used however Locomotives are now common place. Vehicles must be so constructed or adapted that they are considered fit for purpose.

Locomotive

It is possible to convert a commercial tractor unit into a locomotive by removing its fifth wheel coupling and imposing weight in the form of ballast to stop it from carrying a load.

For the purposes of the Road Vehicles (Construction and Use) (Amended) regulations 2022 (SI1986 and No 1078) as amended: a locomotive is defined as “*a mechanically propelled vehicle which is not constructed itself to carry a load other than the following articles, that is to say, water, fuel, accumulators and other equipment used for the purpose of propulsion, loose tools and loose equipment, and the weight of which unladen exceeds 7370Kg*”.

The regulations state that the maximum permitted laden weight of a locomotive, which is equipped with suitable and sufficient springs between each wheel and the vehicle’s frame, and with a pneumatic tyre or a tyre of soft elastic material fitted to each wheel:-

- A. if having less than 6 wheels (2 axles) 22,360Kg
- B. if having 6 wheels (3 axles) 26,420Kg
- C. if having more than 6 wheels (4 axles) 30,490Kg

The VCA has allowed for the purposes of Carnival, the heaviest vehicle combination to be restricted to 50,000Kg, irrespective of whether or not the towing vehicle is a locomotive.

A locomotive does NOT require plating or testing but must comply with the conditions attached to the VSO.

DRIVER

The driver of an agricultural tractor will need to ensure their driving licence permits such vehicles. The vehicle will need to be taxed accordingly, dependent on its registration with DVLA.

The driver of a Locomotive will require a C+E Light goods vehicle driving license. The Locomotive will have to be taxed accordingly, dependent on its gross weight.

All vehicles will need to be insured for use on the public highway.

Clubs should confirm the competence of those individuals with responsibility for driving. Individuals should be physically fit to carry out this important task and not fatigued of ill health or similar.

All drivers participating in carnival activities will need to undertake a short course at Bridgwater College as a condition of entry. (Somerset Carnival Circuits Only)

TRAILERS

These are the units being towed by the Locomotive or Tractor and are decorated. Many entries use two trailers one for the main decoration and the second for carrying the Generator.

All trailers must be individually identifiable for the purposes of the VSO and must be fit for the purpose of use.

NOTE: A maximum of two trailers can be used – and then only during procession.

BRAKING.

Braking is dependent on the category selected in the VSO, listed below are the requirements:-

Construction and Use Regulations require that the service brake in the tow vehicle must operate via a single method of operation to all of the service brakes fitted to itself and all trailers. This is normally the foot brake system.

Vehicle combinations with a gross weight up to 24,390Kg

This means that both the towing vehicle and each Trailer (when one or more trailers are being towed in procession) only requires brakes on half the number of wheels. In situations where one of the trailers has three axles, two should be braked.

The overall braking performance of the combination shall be a **minimum** of 25%

Vehicle combinations with a gross weight over 24,390Kg and up to 38,000Kg

All wheel braking is required on both the towing vehicle and each trailer (when more than one trailer is being towed in procession). Four wheel drive tractor means a tractor, which brakes through its transmission, or through each wheel.

The overall braking performance of the combination shall be a **minimum** of 25%

Vehicle Combinations with a gross weight over 38,000Kg and up to 50,000Kg

All wheeled braking is required on both the towing vehicle and each trailer. Four wheel drive tractor means a tractor, which brakes through its transmission, or through each wheel. The overall braking performance of the combination shall be a **minimum** of 50%

The above requirements should always be regarded as the minimum requirement and in particular we would advise that all wheel braking would be preferable.

Emergency / Parking Brake: each trailer should be fitted with an emergency / parking brake that can be easily and readily applied by a person or persons on the ground or on the trailer and must be clearly identifiable and the instructions on the use must be positioned close by and clearly marked.

HEIGHT, WIDTH, LENGTH and TRAVELLING.

Height is not included in a VSO document however height is restricted due to power and telecommunication cabling across our highways.

National Grid Distribution (Formally Western Power Distribution) confirmed their minimum power cable height is 5.5 metres.

British Telecom Openreach confirmed their minimum telephone cable height is 5.9 metres.

It is therefore recommended that the **height is restricted to 5.0 metres.**

Carnival Procession route:-

This is a route agreed by the Police and procession organisers between two points defined as the “designated assembly point” and the “designated dispersal point”.

Listed below are the restrictions during the procession route:-

Width:

The maximum **width must not exceed: 3.5metres**

Length:-

The maximum overall length of the train **must not exceed: 30.5metres**

Note 1: Always check the conditions of entry for the individual Carnival.

Note 2: Previous comments including the wording ‘instantly retractable’ have now been removed. Dimensions quoted shall be considered as absolute. Carnival Carts shall only operate within the maximum limits as defined by VSO documentation of a virtual 30.5m x 3.5m x 5m box.

Note 3: Movement during procession and to dispersal route, at procession length will be at an advisory (less than) 10mph. Dispersal routes should be reasonable.

Personal on Cart

There is currently no requirement for personal on cart to be tethered to it whilst on route. Consideration of tethering is recommended when personal are positioned at or above 1 meter in height. Ultimately decision is at the discretion of the individual club and should be subject to their health and safety policy / risk assessment.

It should be noted that personal on cart should not be positioned with their feet above 10’ or 2.6 metres. This is a requirement of both BT and Western Power Distribution. The requirement is to ensure that outstretched hands / limbs do not exceed beyond the limits of height. Other methods of ensuring this restriction are not precluded.

Outside of Carnival Procession route:-

This is a route taken on the highway outside of the designated arrival, procession or dispersal route.

NOTE 4: Between towns movement will be within current VSO rules of maximum length, one trailer and maximum of 20mph.

Width:-

The maximum width must not exceed: 3.5metres

Length:-

The overall length of the vehicle combination shall not exceed **24.5** metres

To enable adequate inspections of the mechanical and structural parts of each entry by both clubs and outside agencies it is recommended that all carts, decorated vehicles and generator trailers have a minimum skirt height of 200mm from the road surface at all times.

HEALTH & SAFETY.

Health and Safety plays a very important part in everyday life. Clubs have a responsibility to ensure the health, safety and welfare of individual club members involved in the activity of the club, any visitor and helper, plus the general public who may otherwise be injured as a result of the clubs activities.

Should a club have the misfortune of being taken to court by an individual who alleges they were injured as a direct result of negligence by a club, it would be essential that the club is able to demonstrate that they have taken all reasonable and practical steps to access and control the risks that may harm or injure an individual.

Currently clubs are not legally obliged to produce a written Health and Safety Policy Document (unless involved with catering or stewarding activities), although this may only be a matter of time.

If clubs have not undertaken Risk assessments it is difficult to see how they would be able to defend themselves in such a court case.

Risk Assessment

A club should risk assess it's activities. As a guide it is suggested that clubs cover the following areas:-

Slipping/Tripping, Fire, Moving Parts, Chemicals, Working at Height, Electricity, Dust (e.g. grinding), Fumes (welding), Manual Handling, Noise.

Who might be harmed:-

Club Members, Helpers, Visitors, General Public.

How will risk be controlled:-

By adequate information, instruction, training, adequate systems and procedures, adequate guarding around moving parts (during construction and in procession), provide necessary protective clothing and equipment.

Are the risks controlled:-

Meet legal requirements, represent good practices, reduce risk as far as reasonably practical.

Review:-

Risk Assessments need to be reviewed and updated whenever there is a change in the activity to make sure the system is effective.

Information on the steps for Risk Assessment can be found in the Helpline section within the Guidebook.

ISA Individual Safety Assessment

At the beginning of the 2016 season and following construction failures occurring during the 2015 season the VSO TT developed a set of documentation entitled an ISA (Individual Safety Assessment).

It was advised that clubs falling under VSO requirements additionally undertook an ISA in order to prove the structural integrity of their entry to include all items other than those already covered by the existing VSO. This would include metal and timber work, speakers, lamps and other items **that** are structurally fixed but which could cause harm if they became detached.

The completion of ISA documentation was considered mandatory from the 2017 season forward and the existence (but not quality) of such a document will need to be confirmed at the third inspection by the independent CP.

The VSO TT holds sample documentation to aid clubs in their endeavours of completing an ISA

FIRE SAFETY.

Due to the nature of the Carnival bringing together electricity, water, heat, combustible materials it is recommended that clubs have a Fire **Safety** Policy.

The policy should involve the construction site where the cart is being built, plus when the cart is travelling to and taking part in a Carnival.

Fire Extinguishers:-

Part of your VSO includes the provision of Fire Extinguishers, you will need to risk assess and provide the appropriate number and type of extinguisher. Failure to do so will result in your VSO being invalid.

Fire Extinguishers must be carried on each part of your carnival train and must be within easy access.

An ideal location for extinguishers is at the rear of each unit and mounted on both sides, this will give ground crews easy access in the event of a fire.

Simply carrying a fire extinguisher 'somewhere' within the entry is not acceptable.

It is essential that the ground crew are trained and familiar with the position and use of the extinguishers.

Always ensure that adequate fire fighting equipment of the correct type is available at all times where appropriate.

Extinguishers should be checked to be in working order and serviced periodically.

In the event of a Fire:-

The fire procedure should be known by all members of your club, especially the members of the ground crew and personnel when on a cart. Remember the safe evacuation of your personnel and other persons who may be in danger is of paramount importance along with the safety of the spectators in the area.

Fire Procedure.

It is recommended the Fire Procedure should cover the following:-

- Ground Crew briefed on what to do in case of fire.
- There is a safe evacuation procedure from the cart in the case of fire.
- Personnel on the cart held on with harness or protected by guard rails are briefed on a safe and quick method of evacuation off the cart in the case of fire.
- A common assembly point is known by all club members whether fire is on a cart or in the construction shed.

- A nominated member of the ground crew should be responsible for coordinating the fire fighting in the event of a fire on a cart.
- A nominated person should be responsible for taking a role call in the event of a fire, be it in the construction shed or whether the cart is on the road, to ensure all persons are safe and accounted for.

FIRST AID.

Clubs need to ensure that a First Aid Box is provided both on site of the cart construction and on the cart during travelling and in procession.

The contents should be checked and replenished regularly to ensure the contents are suitable and sufficient.

Clubs need to assess what level of First Aid cover they require. It would be useful to find out what First Aid training club members or helpers may have as part of their normal employment. The training they have received may give the cover you require.

Information on First Aid and Courses can be obtained from St Johns Ambulance Service. For further information visit: www.sja.org.uk

Courses on General Safety practises.

Bridgwater College: C/O Anne Midleton. middletona@btc.ac.uk 01278 428220
Bridgwater college have available a number courses specifically relating to carnival, including:-
Safety Practices for Road Crews
Event Marshalling
Carnival Drivers Awareness (Compulsory for all Carnival Drivers)

These courses enable clubs to demonstrate that their members have the level of competence necessary to undertake carnival activities.

INSURANCE.

It is essential that clubs have adequate insurance. It is a compulsory requirement by carnival committees that clubs have the necessary Public Liability Insurance. Listed below are the compulsory Insurances that you must have in place and a brief description of other cover you may wish to obtain for your club / members.

REMEMBER: Failure to comply with your VSO will invalidate any Insurance.

NOTE: We recommend that you consult a professional insurance company or broker to clarify your insurance needs.

COMPULSORY INSURANCE

1. Public Liability Insurance:-

This is compulsory for all participants either walking or mounted. Always use a reputable company or broker.

When obtaining Public Liability **confirm** the following:-

1. Minimum cover should be £5 million for mounted entries – **walkers will need to assess the level of cover necessary dependant on the risk or level of harm possible.**
2. Check that your policy excess figure is realistic, some Insurance companies will quote a very low premium and you will find you have a high excess.
3. Check you have a member to member cover within the policy, this ensures that your members are covered by the policy, otherwise your members may not be covered.

2. Towing Vehicle Insurance:-

This is compulsory for all entries, again always use a reputable company or broker, listed below are examples of items you may wish to check as they could be considered essential points included in such a policy:-

1. Check that your insurance company is aware the vehicle is being used to take part in a Carnival (a standard agricultural tractor policy does not cover use in a carnival).
2. Check that your insurance company is aware of any modifications you have made to the towing vehicle, eg. Moving the driver on a Tractor.
3. Check your vehicle is insured for towing Trailers
4. Check the Trailers are in turn covered for third party claims.
5. Inform your Insurer the maximum number of persons being conveyed on the vehicle.

OPTIONAL INSURANCE.

Officers/ Employees Indemnity Insurance:-

This is an optional insurance which covers officers of the club if your Public Liability Insurance fails, this cover will then become active if a member is found to be criminally negligent.

Personnel Insurance:-

This is an optional insurance which some clubs hold which will cover their members if they became injured during carnival activities (fundraising or participation) and were off work for a period of time, a claim can be made to help cover their loss of earnings. The cover can also provide a capital sum benefit in the event of accidental death or permanent disablement.

Hired Equipment Insurance:-

Many clubs hire equipment from generators to sound and lighting equipment. Always check with your hirer that you have some form of insurance in place in the event of fire, theft or other accidental damage and whether there are any specific security requirements when the property is left unattended. Always check the terms and condition of the hire.

HELPLINE NUMBERS.

VSO Technical Team: VSOtechteam@gmail.com

Avon and Somerset Constabulary: www.avonandsomersetconstabulary.uk/carnivalvso

VCA Website: <http://www.vca.gov.uk>

Health & Safety Information: <http://www.hse.gov.uk>

THIS SECTION CONTAINS

Appendix

1. Page 18-24 VSO Check List and Standard Guidance Notes
2. Page 25 VSO Application Form
3. Page 26-28 Construction and Use Regulations
4. Page 29-32 Draft of VSO Order (certification)

VSO CHECK LIST and STANDARDS GUIDANCE NOTES

Where Construction & Use Regulations apply consult the
Road Vehicle (Construction & Use) Regulations 1986
for further detailed information

1 Road Wheels and Hubs

All wheels must be suitable for their intended use. Free from damage or cracks. All stud holes must be round and fit their accompanying studs. Hubs must be free from damage, correctly fitted containing the correct number and size of studs. All studs must be in good condition with corresponding nuts. All studs / nuts must be tight.

All wheels on the entry must have a quickly accessible inspection/adjustment hatch or be un-covered. This will facilitate inspection efficiency and also allow drivers / clubs and outside agencies to quickly and regularly inspect wheels and tyres.

- Option 1 to leave the wheel front exposed.
- Option 2 where using hatches they should be sufficient and adequate to enable inspection when the vehicle is stationary . The minimum recommended hatch size is 230mm diameter and centred on the wheel hub.

There is a further recommendation of fitting all wheel retaining nuts/bolts with luminous wheel nut flags, or similar, to better identify wheel nuts have remained tight.

2 Tyres – size, ply and rating

Tyres must be suitable for their intended use, of correct size, type and condition. Tyres on each vehicle and axle must match in size and construction. *See Construction & Use Regulations.*

3 Tyres - condition

Tyres must be correctly fitted. Tread, depth, coverage and pressure must be correct. Side wall contact is not acceptable. There must be no bulges in side walls and no cuts where inner cord is exposed. Tyres will perish and split, excessive splits on the side walls are not allowed. Minimum tread depth 1mm over $\frac{3}{4}$ width of tyre. No flat spots and recutting only allowed on tyres over 16 inch diameter.

Tyres in excess of 10 years old should not be used on front steered axels.

4a Trailer Drawbar

The trailer drawbar should be designed and constructed in a manner and of material that will adequately withstand the loads imposed upon it. Bracing and bolts should be considered where necessary and welding of joints alone is not always satisfactory. In the case of an adjustable drawbar the following points should be observed:

1. The fit between the inner and outer bar should be such that the clearance tolerated is minimal
2. When the drawbar is extended, 50% of the inner bar must still be inside the outer.
3. Two locking pins of suitable size must be fitted in the vertical plane with lock nuts or other sealing devices on the underside. These pins must be of a fit in the drawbar to a minimal tolerance.
4. The size of the pin must be adequate to withstand the full weight of the train.

4b Drawbar Eye

The drawbar eye should be of a type that can accommodate the loadings imposed upon it. It should not be worn, bent or twisted. The drawbar eye assembly should be welded and bolted to the drawbar to a standard that can withstand the loadings imposed upon it.

The drawbar eye and pin should have minimal clearance in order that a snatch load does not cause a malfunction either in the pin or the drawbar eye. The size of the eye and the pin should be of a size that can withstand the load imposed upon it. Where the pin is smaller than the eye, adaptor bushes must be fitted to eliminate undue slackness and maintain an acceptable tolerance. Bent or worn pins should be replaced.

4c Tow Vehicle Hitch

The tow vehicle hitch must be securely fitted to the towing vehicle. The pin or hook or other device must be capable of withstanding the load imposed upon it. The securing mechanism must have some device to eliminate any possibility of the hitch parting company with the trailer eye.

4d Turntable and Fixings

The turntable must be free from wear and suitable for the load imposed upon it. It must contain a form of locking device that restricts its removal from the trailer. The fixing of the turntable to the trailer must be achieved by using suitable numbers, size & quality of bolts with locknuts. These bolts must be fitted head uppermost. Welding can also be employed but not solely. All moving parts should be lubricated. Careful inspection is required to identify stress fractures which must be repaired or replaced.

4e Safety Chains

Every trailer to be equipped with a SECONDARY SAFETY DEVICE, ideally this will be a safety chain capable of withstanding the load of all trailers coupled to the towing vehicle in the event of failure of the towing hitch. The flexible brake connections must be such that they will not break through over extension when the chain is in use **or** the braking system must be such that the brakes will be applied automatically in the event of separation of the trailer from the drawing vehicle.

Note: where used, connections between chains and the cart assembly must be fit for purpose.

Anchorage points for chains or straps must not be anchored to the same point utilised by the drawbar.

5 Cab Floor & Steps

The steps and floor of any towing vehicle must be made from materials that can withstand the weight of the operator. It should be free from debris, insecurities, sharp or obstructive edges and where appropriate, slip resistant cover should be applied. It must cover all areas that pose risk and 'no load areas' should be identified and marked.

6 Security of all major fixings to chassis, including structural supports

The fixing of the display material in particular the major supports must be so designed and constructed as to eliminate any fracture or collapse in the event of an emergency stop having to be executed within the speed imposed by the VSO. Again, welding alone may not be sufficient and other forms of fixing should accompany it. (See ISA Pg 13)

7 Mirrors

Refer to *Construction & Use Regs (33/4)*

Deviation: Mirrors may be removed from the decorated towing vehicle whilst in procession but have to be reinstated for moving between towns, however it is recommended that mirrors are fitted at all times.

8, 9, 10, 11 Lights

Refer to *Construction & Use Regulations* for lighting requirements. All lights that are fitted to the Carnival train must be operational.

All lights shall be shown working to the CP at the third (independent) inspection.

12 Chassis

Chassis, if joined must be plated, bolted and welded to a standard of construction that minimizes deflection on any plane whilst carrying the load imposed upon it. The chassis should be free from excessive rust, especially within 500mm of suspension or load bearing points. Any fracture, cracks, failed welds or excessive distortion is not acceptable. Cross members and braces should be sufficient to withstand deflection imposed by the load placed upon it.

13a Brakes

All brake units should be secure and efficient in operation. Free from fouling, rust, leaks and excessive wear. They must be balanced in operation across axles and able to obtain the minimum braking efficiency required. The service brake must be one system of operation to all vehicles when connected, ie. Must be operated by a single operation.

13b Ancillary Brakes

Ancillary braking equipment should be serviceable, secure, free from leaks and fit for purpose, and easily accessible and identifiable.

13c Emergency Stop

As from the 2018 season, it has been a requirement to install emergency stop buttons to the cart assembly. These are for use by the ground crew and should be active during arrival, procession and dispersal. Operation should cause a minimum of 1 (ideally multiple) red lights to be illuminated where the driver can easily view it / them.

Such an indication should cause the driver to perform an immediate emergency stop.

From the 2019 season stop buttons should be positioned to cover all draw bar positions. This can be achieved by placing them either side of the entry on the rear of towing units

or front of trailers or combinations thereof. They must be positioned within 300mm from the outside edges of the entry.

Clubs need to consider how operation would be effected through the loss of one or more vehicles / replacement towing vehicle and take the necessary precautions.

Installation of a stop button system does not remove the need for existing communication methods currently employed by clubs including both hand signals and radio contact.

14 Routing & Security of Brake Pipes and Lines

They should be adequately secured and free from obstruction or chaffing. The most direct line is generally best. The longer any cable or pipe work the more time it takes for any operation. Also effort will be lost. This is vital on larger carts operating hydraulic systems.

15 Air/Vacuum Warning

Any warning devices fitted must present the driver with means of identifying a dangerous situation.

16 Brake Wheel Units

All wheel units must be secure and operate freely. There must be no leaks in particular with hydraulic fluid. Air in the system can cause a total loss of brake effort and contamination of brake pads will also seriously reduce retardation. All fixing nuts and locking devices should be tight.

17 Braking Ancillary Equipment

Deleted by issue No. 4

18 Suspension

Spring pins, bushes and hangars if fitted should have minimal wear, should be secure and have freedom of movement. They should be of a size and type that is capable of withstanding the loads imposed upon them. All securing devices should be of a recognised type.

19 Axles, Subframes & Suspension Units

These should be assembled and installed using methods of plating and bolting to a standard that is fit for purpose and capable of withstanding the loads likely to be imposed upon them. Special consideration must be given to shock loading, vibration, axial movement on unsuspended arrangements, especially welded constructions.

20 Shock Absorbers

If shock absorbers are fitted ensure that they are free from rust or leaks, and that they are secured by means of suitable locking devices.

21 Steering

All axles stub axles and wheel bearings should be of a size and design suitable for their use. They should be free from seizure, wear or fracture. Suitable locking mechanism should be used to enable all units to operate safely. Minimal wear in steering components is acceptable. All steering gaiters should be complete to prevent the ingress of water and grit.

22 Steering Linkage

All steering linkage should be of a design and construction that makes it fit for purpose.

It should be free from seizure, rust, wear or fracture and suitable locking mechanism should be used to enable all units to operate safely. Only minimal component wear would be considered acceptable.

23 Steering Box

Where steering boxes are used, ensure freedom of movement, minimal free play and no obstructions to associated rods or arms. Check security of fixings and condition of universal joints and ball joints.

24 Power Steering

Power steering, as above but also check for fluid leaks from seals and flexible or solid pipes and containers.

25 Vision

Between Towns

The driver must have a view of no less than 180° when sat in his / her normal driving position. The driver must be able to identify the position of the vehicle (and train) by the use of mirrors or similar. Within the 180°, the only permissible objects (other than mirrors) are Qty 2, 150mm diameter **or** Qty 2 125x125mm box section structural supports for roof or similar. These shall be placed outside a radius of 1 meter from the driving position and at least 45° from straight ahead. The vertical opening of view will be at least 400mm. **The use of cameras can substitute or enhance the use of rear view mirrors.**

During procession

No relaxation is made when compared to 'between towns' other than the driver must now have a view of no less than **140°**

26 Audible Warning

An audible warning (horn) is not required unless the vehicle is being driven at more than 20mph, although it is considered a useful asset. Note: Borrowed tractors are likely to be driven in excess of 20mph when not used for carnival duties. Please remember it is a condition of the VSO that the maximum speed of a carnival cart when operating under a VSO is 20mph.

27 Driving Controls

The driving controls fitted to the vehicle are in a position that provides the driver with safe and immediate control of the vehicle. There must be no debris to obstruct free operation.

28 Steering Wheel

The steering wheel must be intact, have minimal wear between wheel and box, be secure and have minimal axial movement and lift.

29 Emergency Mechanical / Air Handbrake

All mechanical handbrakes shall be so constructed that they are fit for purpose and are sited in such a position that they do not place the operator in danger during the operation. Ideally they will not be sited between carts. Cables should be securely routed with consideration to the most direct line of operation. Identification and operation of such devices should be **clearly** labelled

30 Service Brake Pedal

The pedal should be fit for purpose, free from seizure and situated in such a position that immediate and safe operation is assured. It MUST be the single means of operation for the service brakes on all vehicles and trailers

31 Hand operated Air/Vacuum Controls

Deleted by issue No.4

32 Transmission

Transmission shafts, flanges, UJ's and bearings should have minimal wear, be free from distortion and fracture and be fit for purpose.

33 Engine Mountings

Engine mountings should be intact, secure and free from oil contamination.

34 Oil & Fluid Leaks

Oil and fluid leaks should only be minimal and not to a point where they are likely to contaminate other components and make them unserviceable. Any oil or fuel leak which deposits onto the road is not acceptable, and could present a danger to other road users

35 Exhaust

The exhaust system should be so designed and installed as to carry away safely toxic gasses. It should be secure and free from leaks, dents and obstructions in its path.

36 Chocks & Scotches

They should be of a size that is adequate for their purpose, they should be easily identifiable and to hand for use in an emergency.

37 No Entry Signs – Between Trailers

The 2018 season saw an increase in standard for no entry signs. This requirement is now for a physical flexible barrier which actively prevents persons from entering the draw bar area when in procession. They should be of a size, number and legible to provide notice to all, so that when installed, it becomes a clearly marked 'No Go' area.

Typically clubs have adopted retractable crowd barriers to achieve this requirement.

38 Fire Extinguishers

They should be of a size, type and number to be suitable for the task at hand, bearing in mind the type of materials being used by the exhibit.

39 First Aid Kit

Sufficient first aid equipment taking into consideration the number of persons involved on the entry and type of injuries likely to be sustained should be provided, readily accessible and clearly labelled as to its location.

40 Side Markers and Vehicle Lighting

They should be in good operational condition. They should be installed in compliance with the Construction and Use Regulations.

41 Hazard Amber Beacons

They should be in good condition and of a size that presents suitable hazard identification to other road users. They should be mounted to provide 360 degree visibility

42 Wide Load Signs / Long Vehicle Signs

They should be in good condition and of suitable size in order to be effective. Their position shall be decided by driver/ground crew captain.

43 Electrical Routing and Security

All cabling should be secured and free from obstructing any other mechanical devices and free from the likelihood of chaffing or stretching.

44/45 Brake Tests

Brake tests to be carried out on a registered brake roller or by using the brake test equipment owned and maintained by the VSO Technical Team. Test results are required on the VSO application and may be checked at Carnival against the vehicle weight.

Current Years weights and braking figures are to be forwarded to VCA before or post first procession but prior to second procession. Failure to do this may see the clubs VSO revoked.

46 Emergency Lighting

As from the 2018 season emergency lighting has been specified to be present and operational under instances of power failure able to illuminate draw bar and hand brake / park brake positions. The lighting levels need to be sufficient. The power source for the emergency lighting system should be separate to any source from either the towing vehicle or generator.

Typically clubs have adopted self-contained mains powered, battery back-up systems which are both commercially and readily available.

VSO Documentation (the following to be available on Carnival Day)

- Evidence of Vehicle Excise Duty having been paid (Tax disc)
- Vehicle Insurance certificate
- MOT (If applicable)
- Driver's licenses
- Weight ticket
- Brake test figures,
- Mechanical Inspection / Check sheet
- Engineers Reports (If applicable)
- Cart identification plates (Fixed to rear offside of each vehicle)
- ISA (Individual Safety Assessment)

Vehicle Special Order VSO application forms are available to download together with additional information from....

<https://www.avonandsomerset.police.uk/advice/vehicles-roads/vehicle-special-order-for-carnivals/>

CONSTRUCTION AND USE REGULATIONS

For vehicles being used in carnival not requiring a VSO.

GUIDANCE NOTE FOR VEHICLES BEING USED FOR CARNIVAL:

If your vehicle complies with the items listed below then you do not require a VSO

Complying with the Construction and Use Regulations

All motor vehicles and trailers used on our roads must comply with the Road Vehicles (Construction and Use) Regulations 1986 (SI 1986/1078) (C&U): as amended and the Road Vehicles Lighting Regulations 1989 (SI 1989/1796): also as amended. These regulations set the overall technical specifications such as weights, dimensions, braking systems, tyres, lights etc, for all vehicles.

Maximum Length of motor vehicle and trailer; REGULATION 7

Motor Vehicle

a wheeled motor vehicle, **12 metres**

Trailers

a trailer with at least 4 wheels which is drawn by a motor vehicle having a maximum gross weight exceeding 3,500 kgs, **12 metres**

a trailer drawn by a motor vehicle having a maximum gross weight under 3,500 kg, **7 metres**

Vehicle Combinations

a motor vehicle towing one trailer **18 metres**

Maximum Width of a motor vehicle and trailer; REGULATION 8

.....
5 Maximum Gross Weight is the lower of the maximum weight permitted by C&U or that declared by the manufacturer of the vehicle. In the case of smaller vehicles, such as vans or 4 wheel drives, it will usually be displayed on the manufacturer's plate, the vehicle's handbook or be available from the manufacturer of the vehicle.

Motor Vehicle

a motor vehicle **2.55 metres**

Trailers

a trailer drawn by a motor vehicle having a maximum gross weight exceeding 3,500 kg,

2.55 metres

a trailer drawn by a motor vehicle having a maximum gross weight under 3,500 kg,

2.30 metres

Braking requirements for trailers; REGULATION 15

- gross weight less than or equal to **750 kg** no requirement
- greater than **750 kg** but less than or equal to **3,500 kg** at least overrun brakes required
- greater than **3,500 kg** continuous or semi-continuous brakes, ie brakes that are operated with those of the towing vehicle

Springs and resilient material; REGULATION 22

Suspension of springs or resilient material is required to be fitted to both the towing vehicle and trailers if the combination is to exceed a travelling speed of more than 20 m.p.h.

Maximum permitted axle weight on a trailer; REGULATION 78

- Where the axle is fitted with tyres with a width not less than 300 mm or with twin tyres with centres of contact with the road no less than 300 mm **10,170 kg**
- In any other case **9,200 kg**

Maximum permitted laden weight of a motor vehicle; REGULATION 75

- A four wheel drive, car or transit van, the gross weight of these vehicles are governed by the manufacturer - see footnote to Maximum Gross Weight.
- A 2 axle Lorry **17,000 kg** -provided the distance between the two axles is at least 3.0 metres. If the distance between the axles is less than 3.0 m, lower limits apply.
- A 2 axle, wheeled agricultural motor vehicle
 - Where the distance between the axles is less than 2.65 m, **14 230 kg**
 - Where the distance between the axles is at least 2.65 m, **16 260 kg**

(Vehicles with more than 2 axles are subject to higher limits)

Maximum permitted laden weight of a trailer; REGULATION 75

The maximum permitted weight of the trailer can be limited by one of two requirements.

- The maximum permitted on the trailer itself, which, in the case of a conventional 2 axle trailer, is **14,230 kg** or any lower weight specified by the trailer manufacturer.

The maximum permitted for the combination (the maximum train weight specified in **REGULATION 76**) which, in the case of a two axle tractor and two axle trailer, is **24,390 kg** or any lower towing weight specified by the towing vehicle manufacturer.

Where necessary the maximum trailer weight can be calculated by subtracting the weight of the towing vehicle from the maximum train weight given for the vehicle.

Note that the lower figure from either the C&U regulations or the vehicle manufacturer is always the one that applies.

Number of trailers drawn by towing vehicle; REGULATION 83

a wheeled motor vehicle **1 trailer**

This is the normal requirement. In order to tow two trailers in carnival, a special order will be required, even if, individually, the vehicles and trailers meet the above conditions.

If your vehicle combination complies fully with the regulations outlined above and has neither been modified or extended beyond the original manufacturers limits, you do not need to apply for a Vehicle Special Order. However, if your vehicle combination does not comply with any one of the above regulations or has been modified or extended beyond the original manufacturers limits, you will need to apply for a Vehicle Special Order. The information required is outlined in the information pack issued by Avon & Somerset Police.

In cases of doubt, consultation should be sought. The most appropriate initial advise can be found from the VSO Technical Team

Carriage of Passengers for Hire or Reward

If any person carried on your vehicle or trailer has paid subs to be a member of your club under legislation this is deemed to be Hire or Reward. In these circumstances regardless of the fact that your cart might well fully comply with Construction & Use Regulations and where applicable hold a current MOT

YOU WILL REQUIRE A V.S.O.