

Foreword

The Fédération Internationale des Vehicules Anciens (FIVA) is a signatory to the European Commission’s Road Safety Charter (RSC) which is a part of the Commission’s project to reduce the number of road deaths by 50% by 2010. Most signatories to the RSC are adopting measures that will make a direct contribution towards either a reduction in the number of accidents occurring or in their severity – or both. Neither is possible for FIVA because accidents involving historic vehicles are so rare. Instead, FIVA’s contribution is to do all it can to maintain the existing high levels of road safety achieved by owners of old vehicles.

This guide seeks to achieve that purpose both by encouraging the continuation of safe and sensible driving habits amongst existing drivers and by highlighting the wise techniques that those new to the use of historic vehicles should consider.

Introduction

Traffic conditions throughout Europe have changed substantially in the last quarter century, so even when the youngest “historic” vehicles were made, the roads were quieter and cruising speeds in freely moving traffic on trunk routes were generally slower. Historic vehicles were not designed for the conditions one is likely to experience on today’s roads so today’s historic vehicle drivers have to compensate accordingly.

At the same time, old vehicles are frequently the centre of attention wherever they travel: this gives drivers of such vehicles an opportunity to set an example of courteous, considerate and safe driving.

Overview

To drive an historic vehicle safely and considerately, one needs to: -

- Ensure the vehicle is properly maintained; (*section 1*)
- Know the vehicle and appreciate its limitations; (*section 2*)
- See, be seen and make one’s intentions clear; (*section 3*)
- Drive with thought for, and understanding of, other road users; (*section 4*)
- Understand that events on the road can cause problems for other road users and behave accordingly. (*section 5*)

1. Maintenance

Twenty-five years ago, servicing was required at far more frequent intervals than is necessary with today’s vehicles, and fifty years ago it was even more frequent than that. There have always been two considerations for routine maintenance – elapsed time and distance travelled. Owners of historic vehicles, especially those that are used infrequently, need to remember the importance of regular servicing even if the distance travelled since the last service is insignificant. FIVA recommends that: -

- All historic vehicles that are used should be carefully inspected at least once a year. This is especially important in countries where vehicle testing is not compulsory. The inspection should include –
 - Structural integrity
 - Wheels (particularly important with spoked wheels) and tyres
 - Wheel bearings
 - King pins
 - Steering mechanism
 - Braking system
 - Spring and shock absorber mountings
 - Lights
 - Check for any components that may have become loosened.

If any faults are found, they should be fixed before the vehicle is next used.

- Vehicles that have not been used for more than a year should be checked over particularly carefully before being returned to the road. Special attention should be given to the condition and operation of the braking system, especially if hydraulically operated. Brake fluid should be drained and replaced at least once every three years and more frequently if the storage conditions are damp.
- Fluid levels and operation of lights (where fitted) should be checked prior to each journey.
- Tyre condition and pressures should be checked prior to each journey.
- Tyres do not last indefinitely, even in storage, and especially when exposed to outside conditions. Pneumatic tyres should be replaced if there are signs that the walls are damaged or that they have become inflexible. Tyres should be replaced, whether they are worn or not, after a number of years in accordance with manufacturers’ recommendations or other appropriate guidelines.

2. Knowledge & Understanding

To drive any vehicle safely one needs to know all the controls and have a full understanding of the vehicle’s characteristics. It is especially important for drivers of historic vehicles to know their particular vehicle’s limitations and to drive within them. Someone used to modern vehicles with low profile radial tyres and anti-lock disc brakes who occasionally drives an older vehicle needs to take full account of its character – many historic cars and motorcycles are able to travel at similar speeds to modern traffic, but lack the same levels of handling, adhesion and braking.

Even the most widely experienced need a period of adjustment when encountering an unfamiliar vehicle. Drivers new to historic vehicles in general, or new to a particular vehicle, would be wise to give themselves the opportunity to discover how the vehicle behaves on quiet roads before tackling any serious journey where significant traffic may be encountered. Drivers should take time to familiarise themselves with: -

- location and feel of controls – this is **most** important for early cars with a central accelerator;
- gear-change characteristics;
- steering response;

- braking performance;
- tyre grip;
- handling in corners;
- lighting performance and effectiveness of indication system (if any).

The driver who is not fully familiar with any of the foregoing is potentially unsafe.

3. Visibility

Seeing, being seen and making intentions clear to other road users are all essential aspects of road safety that apply to all road users. Drivers need to be aware that other road users will (generally) be unaware of the design limitations of older vehicles and will expect modern standards of illumination and indication. FIVA recommends: -

See.

- Seating should be secure and adjusted to enable the driver to have a clear view of the road as well as to be able to reach all controls comfortably;
- Windscreens are maintained in good condition and clear of unnecessary obstruction in front of the driver (countries which undertake annual testing may already require this);
- Rear view mirrors are fitted that provide a clear view of following traffic. Many old cars were fitted with no more than a (small) interior mirror and many motorcycles have none. FIVA believes that modern traffic conditions over-ride the importance of keeping historic vehicles in totally authentic condition. Reproduction period style mirrors are readily available and can often be fitted in such a way as to be readily removable for those (off road) occasions when authenticity is particularly important. Cars and motorcycles should be fitted with external mirrors, preferably on both sides, but certainly on the side where overtaking traffic will pass.

Be seen.

Vehicles that are not travelling at “normal” speeds for the conditions need to stand out clearly to avoid being hit from behind. Although this is absolutely essential in conditions of reduced visibility; it is still important in good daylight, especially on trunk routes where drivers do not expect to encounter slow moving traffic. Modern lighting (generally) conforms to standard patterns of location and modern lights are far brighter than those fitted even thirty years ago, let alone thirty or sixty years before that. Vehicles with dim lamps and those located in unconventional positions thus become especially vulnerable when other road users are using lights. Such vehicles often become “hidden” by the brighter lights on surrounding traffic or they may give the impression of being significantly further away than they really are if the lamps are particularly dim or set more closely together than they would be on a modern vehicle. Consequently, FIVA recommends: -

- Motor cycle riders should wear fluorescent sashes or jackets.
- Drivers of the slower three/four (or more) wheel vehicles should consider fitting fluorescent flashes at the rear in prominent positions near the outer edges of their vehicles. Such items may be made in such a way as to be readily removable when the destination has been reached.
- Vehicles without effective electric lamps should not be driven after dark, or in conditions of poor visibility where all other road users are using headlamps, unless absolutely necessary (such as to reach a place where it is safe to stop when conditions change during a journey). Even though the law in some countries may consider acetylene or oil lamps to be adequate to pass national road-worthiness tests (where applied) such lamps are inadequate for practical purposes on today’s roads.

- Owners who are likely to use old vehicles after dark or in poor conditions should make an assessment of the quality of their lights and (if necessary) take action to modify their vehicles to bring their lights up to near modern standards. Important points to consider include:
 - Tail lamps should be bright, visible in clear conditions from at least 100 metres and (unless a motor cycle) positioned at least one each side within 200mm of the edge of the vehicle. If the rear lamps are not a pair, it is easy to mistake the vehicle for a motor cycle. If the rear lamps are too close together, such as either side of a number plate, they give following traffic the impression that the vehicle is further away than it really is, thus massively increasing the risk of rear end collision. The use of a firmly fixed, but readily de-mounted, “trailer board” is a very effective means of overcoming the weaknesses inherent in old lamp design and configuration.
 - Front marker lamps for vehicles other than motorcycles should similarly be bright and a pair. The very small “side lights” popular on many cars from the 1930s to the 1950s are inadequate for today’s roads and are likely to be un-noticed against the background of other, brighter, lights. Oncoming traffic will thus have no sense of the width of the vehicle unless the headlamps are positioned close to the sides. Thus owners of those vehicles that have these small sidelights and inboard headlamps should consider installing brighter more visible marker lamps.
 - Single-dipping lamps may be legal on older vehicles in some jurisdictions, but that does not help oncoming traffic distinguish a large car with one lamp from a motorcycle. Owners of vehicles with single dipping systems wishing to drive in conditions of poor visibility should ensure that the system is modified so that a pair of lights is illuminated on both main and dipped beam.
- Where local legislation permits, particularly slow vehicles should consider fitting a flashing amber beacon in a prominent position at the back to alert following traffic to the presence of a potential obstruction.

Make intentions clear

Drivers generally are now so conditioned to observe light clusters for indications that hand signals and semaphore indicators are easily missed. Hand signals become virtually useless at night. Drivers of older vehicles that are not fitted with flashing bulb indicators close to the corners of the vehicle need to be aware that other traffic will not immediately notice other methods of indication and they thus need to give more advance warning of their intentions than they might otherwise do. This situation is exacerbated in those vehicles which are not fitted with brake lights. FIVA recommends that: -

- Owners of three (or more) wheeled vehicles fitted with electric lights should fit flashing indicators and at least one brake light. This is particularly important if the vehicle is likely to be used at night. In some jurisdictions it is acceptable (on older vehicles) to adapt the front marker lights and rear lights to double up as indicators. Otherwise, it is necessary to fit additional lamps. This recommendation applies also to those vehicles that are fitted only with semaphore indicators.
- If a vehicle has no flashing bulb indicators or electric brake lights, drivers need to allow extra time for manual indication. Consideration should be given to fitting a warning at the rear of the vehicle stating that signalling will be by hand only.
- Hand signals should be clear, positive and unequivocal. The use of fluorescent strips on the back of driving gloves/gauntlets is recommended as a means of making signals more obvious.
- Drivers of vehicles that lack brake lights have an additional responsibility to ensure that they indicate their intentions in good time. Modern driving trends encourage traffic to follow closely and vehicles slowing up unexpectedly without brake lights showing are thus vulnerable to a collision from the rear.

4. Consideration and understanding

All road users need to be considerate to, and understanding of, other users if the roads are to be safe, and that is especially important for those doing something unexpected or out of the ordinary. On today’s busy roads, the continuity of on-coming traffic frequently makes it impossible to pass slower moving vehicles. Overtaking is known to be the most dangerous of driving manoeuvres, and preventing the frustration that leads to dangerous passing manoeuvres is one of the biggest contributions to road safety that any driver can make. FIVA recommends that: -

- Drivers of slow vehicles should ensure that any following traffic is given the opportunity to pass at frequent intervals – if necessary, by making use of suitable stopping points.
- Travelling in convoy with other historic vehicles, or with tender vehicles, should, in general, be avoided: groups of people following the same route should stagger their departure times to avoid such a convoy.
- If, however, a convoy develops, or is unavoidable, drivers should ensure they leave sufficient space between themselves and the vehicle in front to allow passing traffic to overtake one vehicle at a time. At moderate road speeds, this should be at least 70 metres.
- Drivers of older and slower historic vehicles should plan journeys to avoid commuter rush hour traffic near towns and cities and other busy roads, thus making their journeys less hazardous and more enjoyable.
- If travelling with companions, or a support team, meeting/stopping points should be agreed in advance and each vehicle crew should have route details to avoid the need for keeping other vehicles in sight. Exchanging mobile telephone numbers in advance is also recommended.

Drivers of exceptionally slow vehicles, such as steam engines, need to take additional precautions to ensure that they cause minimum disruption to regular traffic. The text that follows is written with steam driven machines in mind, such as traction engines and steam rollers, but the general advice also applies to other exceptionally slow moving machinery such as agricultural machinery and construction plant.

The handling of steam engines on the public road requires experience and a good understanding of the vehicle. It is not to be undertaken lightly. Readers are referred strongly to expert and detailed guidance such as the Code of Practice produced by the British National Traction Engine Trust’s “Driving on the Road and Conduct in Public Places”.

Particular laws may apply; construction and use, driver licences, warning signs, visibility, lighting, spark arrestors, insurance and use of trailers are examples. It is strongly recommended that two people handle engines with other crewmembers available to assist with maintaining the engine and dealing with the journey.

Routes should be chosen to avoid where possible town centres, long fast roads, single lane roads, steep hills and difficult junctions. Particular care should be taken to avoid a hazard when stopping at the roadside to take water, change gear, oil up or any other purpose as the reason may not be obvious to passing traffic. An essential duty is to give early warning to following traffic as closing speeds will be very high – the engine will appear to be stationary. The most severe accidents have been caused by rear collisions. The driver **must** avoid queues forming by pulling over to let faster vehicles pass whenever possible.

Crews should operate confidently and be capable of high concentration for long periods. Drivers must be fully skilled in reading the road ahead; managing the boiler and maintaining steam pressure at all times. The danger of sparks to people and property should be realised and the emission of dark smoke

avoided near habitation. Care should be taken to avoid damage to the road surface particularly when iron straked wheels are fitted and in hot weather. When stationary, engines must be well chocked up against the gradient.

Few steam engines on the road have any form of adequate lighting so driving after dark must be strictly avoided. Conventional direction indicators will be non-existent so the intentions of the crew must be made in plenty of time to other road users. Whistles should not be used except in emergency. While they often give pleasure and bring a smile the presence of a traction engine on the road, the sound may itself be a distraction to other road users.

5. Participation in Events

Matters change somewhat when it comes to events on the public highway. On the one hand, there is an even greater responsibility on the part of the driver of a participating vehicle to consider other road users, but on the other, those other road users will be more alert to some unusual activity. Event organisers have a responsibility to ensure that disruption to other traffic is kept to a minimum and should thus avoid the use of trunk routes wherever possible. Where a trunk route has to be used, especially by slow moving traffic, organisers should consider the use of temporary warning signs (providing local regulations allow this).

FIVA recommends that organisers should: -

- Plan their events to cause minimum disruption to other road users.
- Provide warnings to other road users in situations where slow moving traffic may be encountered on a trunk route.
- Not penalise participants for having up-graded lighting systems or high visibility markers on their vehicles during road sections of events.
- Keep a record of participants’ mobile telephone numbers.
- Ensure that participants are provided with a list of telephone numbers to call in the event of breakdown or other problem.

Drivers should: -

- Know where they are going without having to follow a vehicle in front.
- Remember they are ambassadors for the historic vehicle movement.
- Not allow competitive spirit to overcome their duty to drive with care and consideration for other road users.
- Never ignore mandatory traffic signs or signals unless instructed to do so by a uniformed police officer.