

C6 Category - Bobcar

In case of dispute only the French version is valid.

1. Definition

The Bobcar is an automobile type of vehicle, with no engine, with twin axle and four wheels and whose crew of two is constituted of a pilot and a co-pilot. Steering with an integral steering wheel, hand bar forbidden. Suspensions of any type are authorized.

2. Dimensions

Over all dimensions:

Maximum length	2500 mm (body work included) 2700 mm with ROPS (body work included)
Maximum width	1200 mm (body work and wheels included)
Maximum height	650 mm (from the ground, roll bar not included)
Minimum wheel-track	650 mm (between inflated tyres, measured on ground level)

3. Weight

The maximum weight of the Bobcar, crew on board with their complete outfit, is specified in the general regulation.

4. Car frame

The frame must accommodate two people without any element covering the crew, except the pilot's and copilot's legs. The frame construction is left to the choice of the builder. The elements like the roll bar, the ballast, the seats, the axles, the eventual suspension systems, the steering mechanism and the pedal must be attached to the frame in a strong and appropriate way to guarantee the crew's safety. All assembly techniques are permitted under the condition that their integrity is guaranteed under running stress. It is acceptable to interpose rubber or plastic elements in the points of assembly, provided that they are secured in parallel with a metallic link to limit the movement in case of rupture of the elastic element.

5. Car body

The body may cover the entire Bobcar, leaving a central aperture, in order to accommodate safely the pilot and the co-pilot. The rear wheels must be entirely contained inside the body to ensure the co-pilot safety. The rear part of the Bobcar body may be open or closed – see figure 13.)

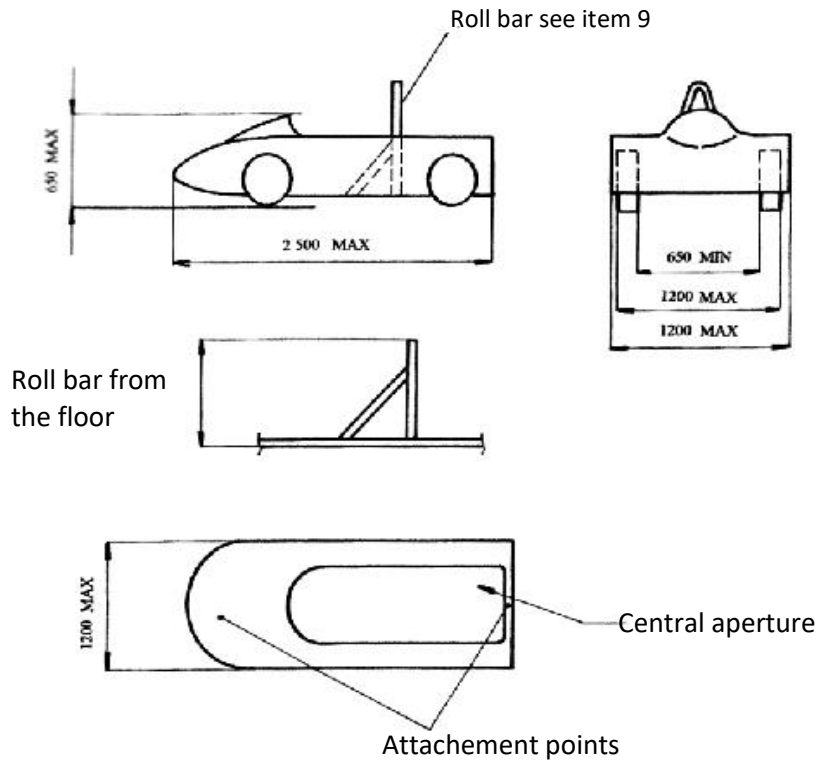


Figure 13

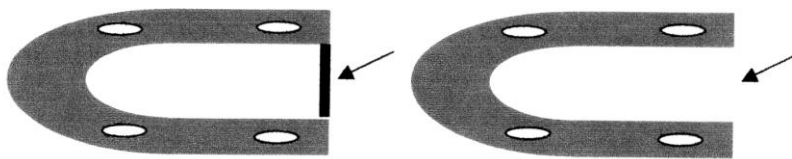


Figure 14

6. Axles

For the front and rear axles, the minimum diameters recommended are 17 mm for the inside section (more strain) and 12 mm for the outside section (less strain) – see figure 15.

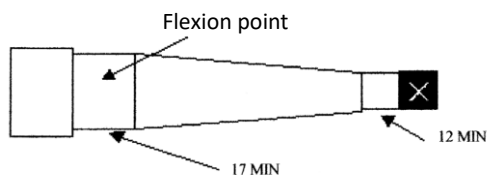


Figure 15



7. Wheels

The wheels, with their tyres inflated, cannot exceed 450 mm in diameter and 150 mm in width. They must have a car type valve. The width is measured at the widest point of the tyres when inflated at the limit of pressure (See FISD Technical Regulation, chapter III A, item 10). The tyres must be of the commercial type. The wear must not expose the tyre weft thread. Slick tyres are forbidden. There are no restrictions in terms of tyre profile, however, no modification, except the normal wear, can be made to the original profile.

8. Brakes

The brakes are mandatory on all four wheels and must be actuated by the pilot's foot. No brakes by friction on the ground. A safety handbrake actuated by the co-pilot is permitted. (See FISD Technical Regulation, chapter III A, item 7).

9. ROPS Roll Over Protection System and security belts

The construction of a ROPS between the pilot and the co-pilot is accepted on condition that it is not possible in any way to be caught into it.

Due to the diversity of bob constructions, it also follows a large number of ROPS variants. The following representations are applicable for the achievement of ROPS. **Red** coloured values must be respected. The other values are recommended values.

In summary it should be noted that any type of variant chosen must respect the following criteria:

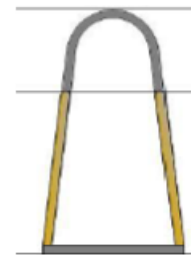
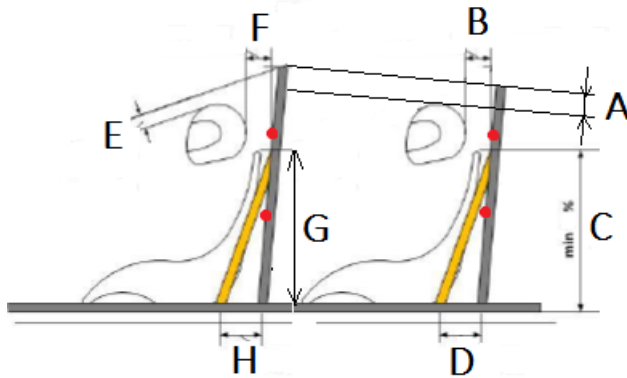
- The ROPS must be made of steel tube, 25 mm minimum in diameter, and a minimum wall thickness of 2 mm.
- The minimum height between the tube and the helmet of the pilot must be 50 mm and for the co-pilot 30 mm
- 4-point belts mandatory for driver and co-driver. Belts must be guided by a cross bar located at 65% of the height of the roll bar and fixed to the chassis (minimum M8).
- Obligation to apply head support to the roll bar for the pilot and the co-pilot.

The enforcement of roll bars and seat belts is defined as follows:

- **Until the end of 2017: Introductory phase (without obligation)**
- **From 2018: All new bobs will have to be equipped with ROPS and safety belts**
- **From 2020: ROPS and safety belts compulsory for all bobs**

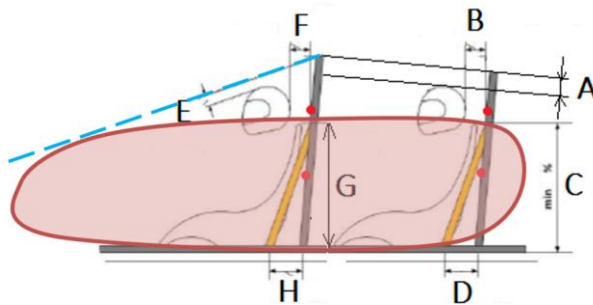


- Variant #1**
- | | |
|----------------------|----------------------|
| E [50 mm] min | A [30 mm] min |
| F [150 mm] max | B [150 mm] max |
| G [65 %] min | C [65 %] min |
| H [80 mm] min | D [80 mm] min |

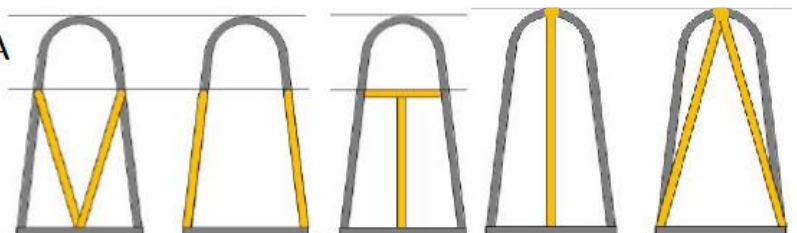
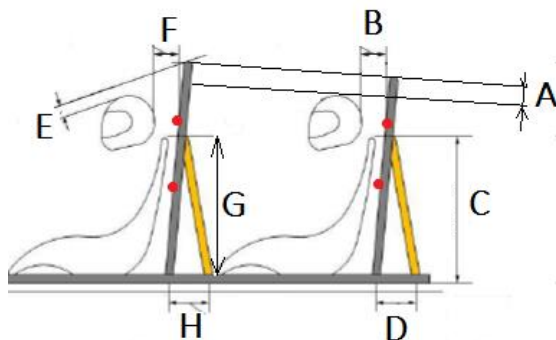


Definition of measure "E"

Distance between the top of the pilot's helmet and the virtual line formed between the top of the rollbar and the body surface at the front of the vehicle

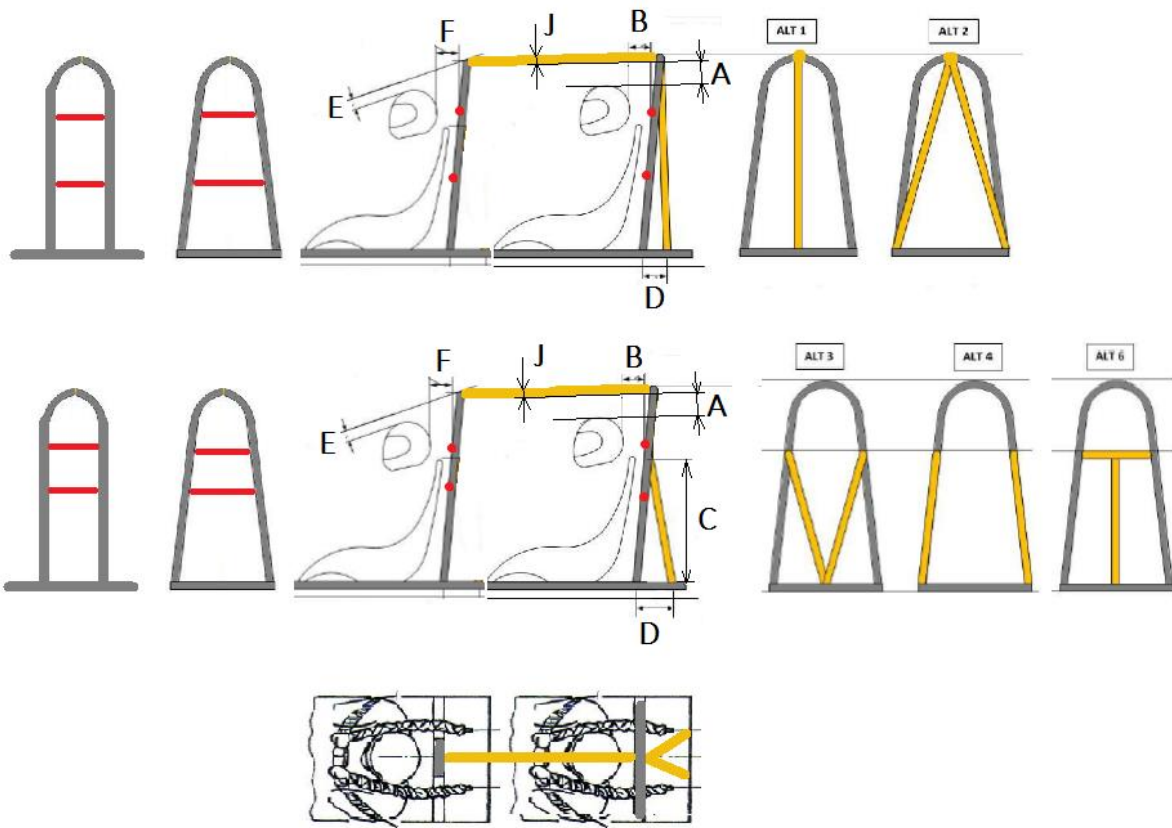


- Variant #2**
- | | |
|----------------------|----------------------|
| E [50 mm] min | A [30 mm] min |
| F [150 mm] max | B [150 mm] max |
| G [65 %] min | C [65 %] min |
| H [80 mm] min | D [80 mm] min |



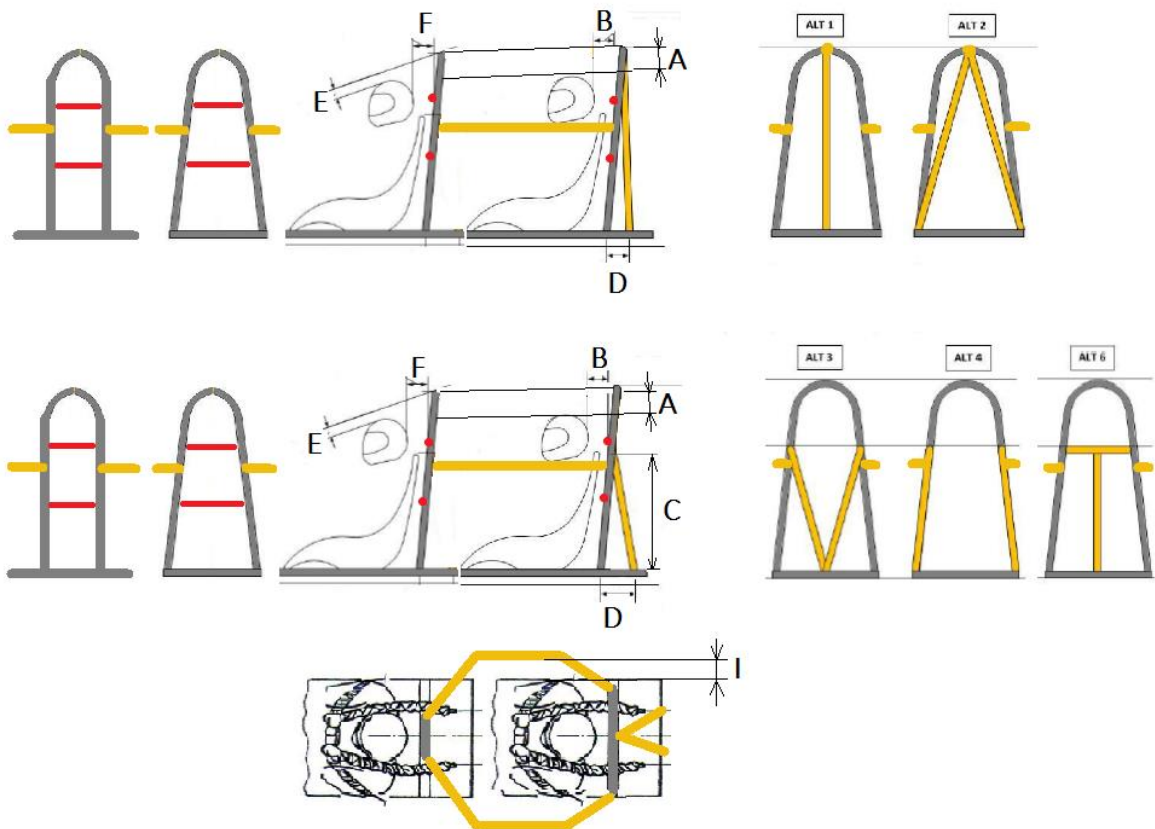


- Variant #3**
- E [50 mm] min**
 - F [150 mm] max
 - J [Ø 25mm] min
 - A [30 mm] min**
 - B [150 mm] max
 - C [65 %] min**
 - D [80 mm] min



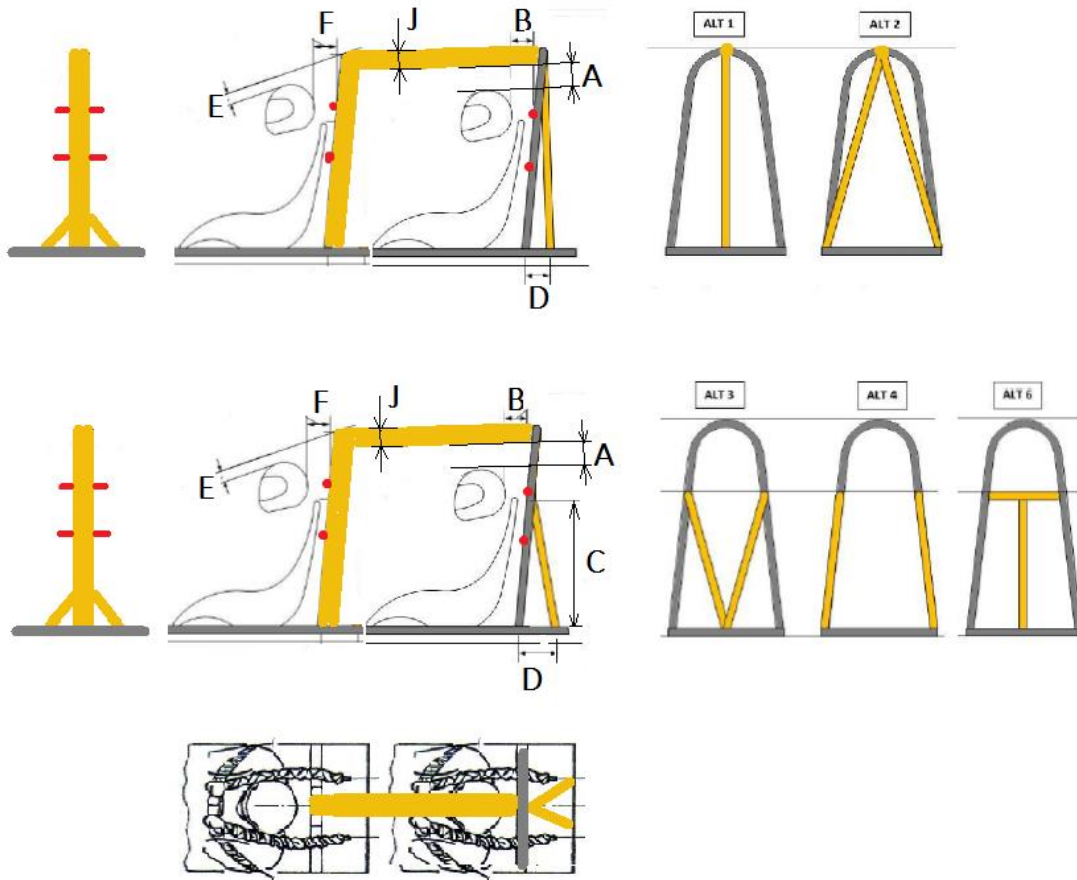


- Variant #4**
- | | |
|----------------------|----------------------|
| E [50 mm] min | A [30 mm] min |
| F [150 mm] max | B [150 mm] max |
| I [50 mm] min | C [65 %] min |
| | D [80 mm] min |



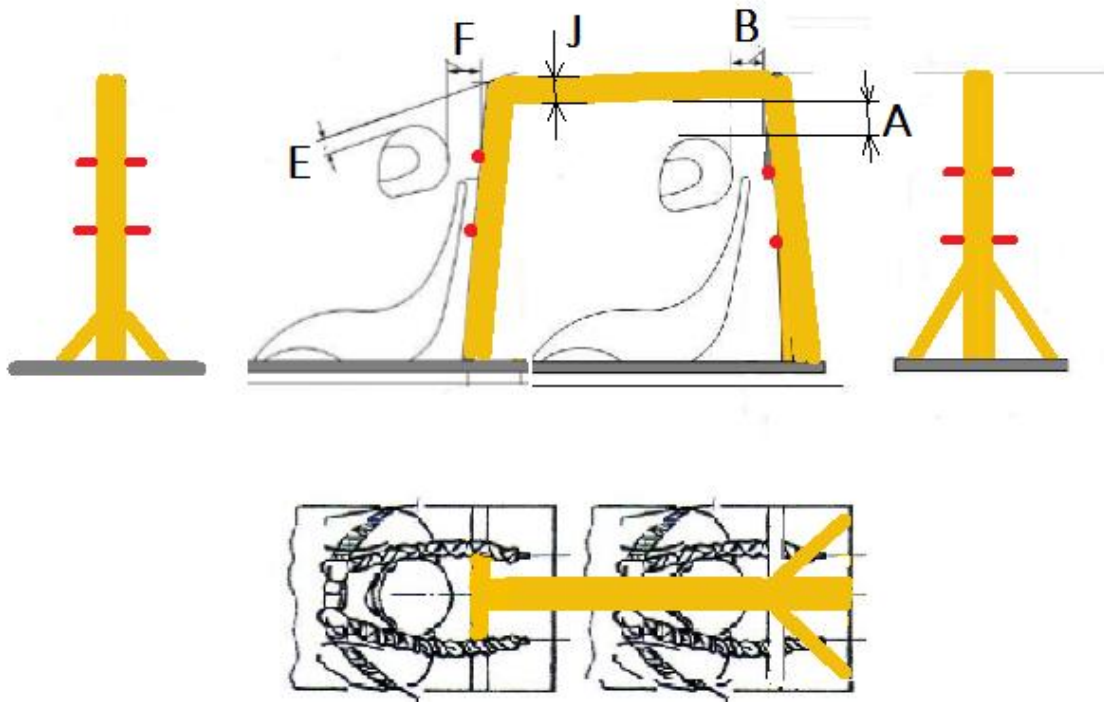


- Variant #5**
- E** [50 mm] min
 - F** [150 mm] max
 - A** [30 mm] min
 - B** [150 mm] max
 - C** [65 %] min
 - D** [80 mm] min
 - J** [∅ 50 mm or 40/40mm] min



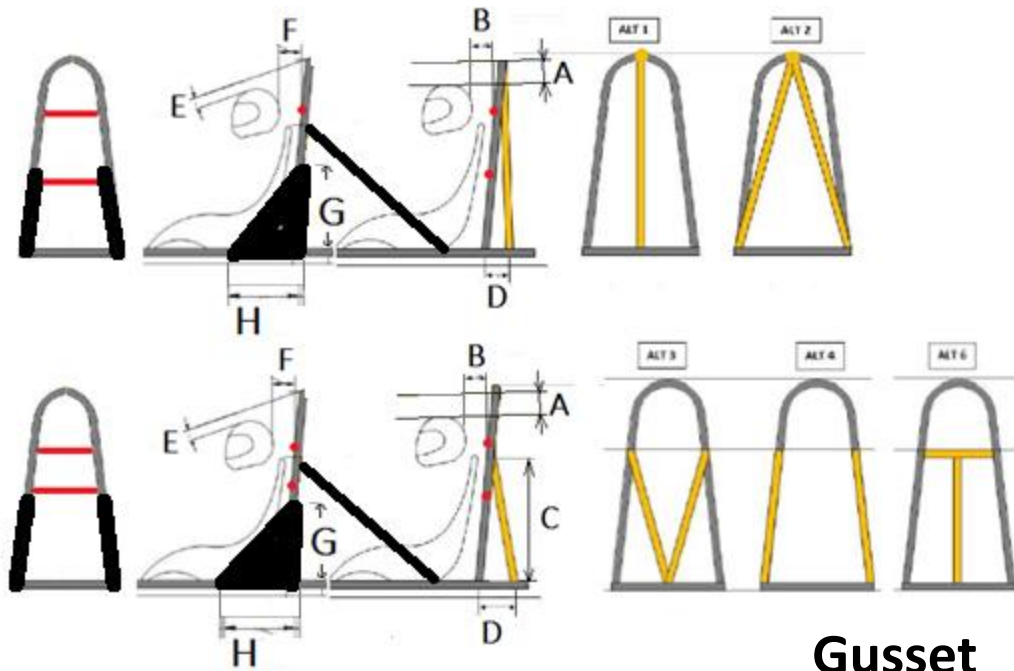


Variant #6 **E [50 mm] min** **A [30 mm] min**
F [150 mm] max B [150 mm] max
J [Ø 50 mm or 40/40mm] min

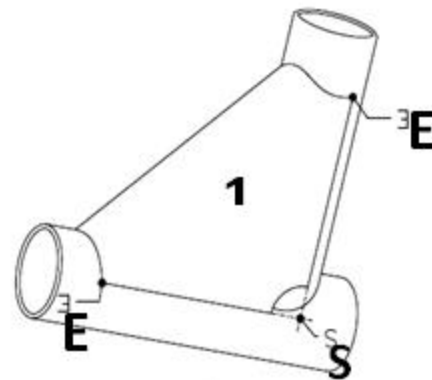
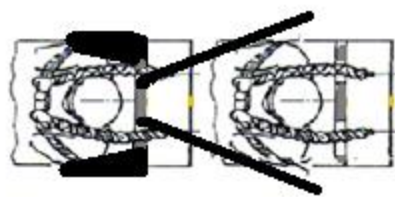




- Variant #7**
- | | |
|-----------------------|----------------------|
| E [50 mm] min | A [30 mm] min |
| F [150 mm] max | B [150 mm] max |
| G [150 mm] min | C [65 %] min |
| H [150 mm] min | D [80 mm] min |



Gusset

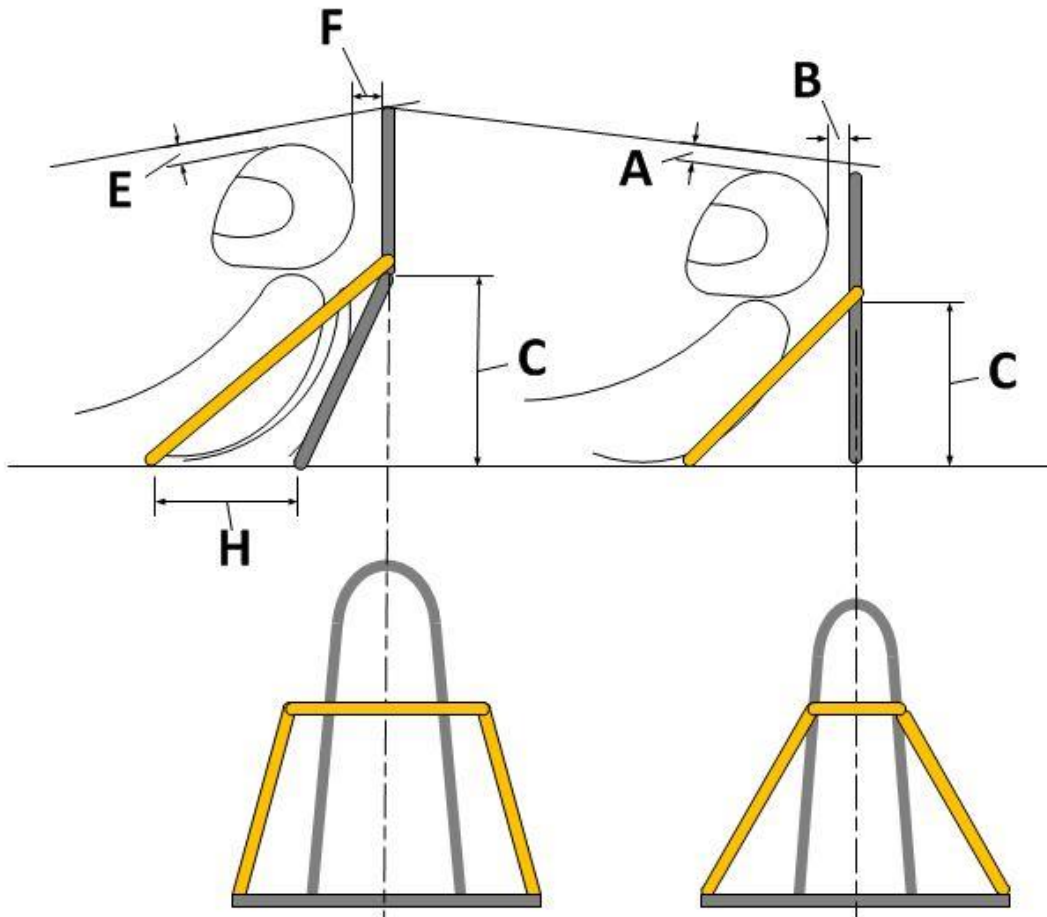


Reinforcement for a bend or junction, steel plates folded into a U shape, the thickness should be at least 1.0mm.

The ends of the gusset (point E) must be located at a distance of between 6 and 8 times the outside diameter of the largest tubes joined to the base of the angle (point S). A cut out is permitted on the top of angle, but its radius (R) should not be larger than 1.5 times the outer diameter of the smallest joint tubes. (The tubes must be welded). The cross pipe is welded to 2/3 of the vertical tube of the roll bar at the rear of the driver, which allows welding the lower part to the frame and allow passage for the co-pilot's legs.



Variant #8	E [50 mm] min	A [30 mm] min
	F [150 mm] max	B [150 mm] max
	C [65 %] min	H [20 % of the total height] min



10. Crew

The crew consists of two people, the first one (pilot) sitting or lying in the front and the second one (co-pilot) sitting or lying with the legs in front in the back of the car. Running "head first" is not authorized. Neither the pilot nor the co-pilot may lean out of the bobcar outline during the entire run. At the departure, the pilot and the co-pilot can help the bobcar to start running with a swinging movement of their body.

11. Race Numbers

According to the "FISD Technical Regulation", Chapter II – Item I. The Race Number(s) will be supplied by the Organizer who will also define their positioning.

12. Penalties

Failure to comply with the present regulation will lead to the exclusion of the competition without any exemption in case of a FISD race.



13. Modifications history

CECCAS is replaced by FISD on 11.12. 2010

Modifications approved at the GA in Predappio on 11.5.2011:

- Item 1: New definition of the suspensions
- Item 4: New definition of the Frame Body
- Item 11: Definition of the Race Number adapted to the General Regulation.

Modifications approved at the GA in Wittinsburg on 11.11.2012:

- Item 7: No more modifications accepted to the tyres

Modifications approved at the GA in Oberwiesenthal on 25.10.2014:

- Item 10: Correction of the position of the co-pilot

Modifications approved at the GA in Stoumont on 7.11.2015:

- Item 2: Now length for vehicles with security belts and ROPS
- Item 3: Definition of the weight in the general regulation
- Item 9: Introduction of ROPS variants

Modifications approved at the GA in Viu on 13.11.2016:

- Item 9: Implementation of ROPS and seat belts

Modifications approved at the GA in On on 05.11.2017:

- Item 9: Illustration of the measure "E"