



# 2018 ASE Unmilted Bangers Rulebook

drivers are compulsory to read this rulebook.

## Common Rules:

- a. All flag signals have to be obeyed immediately:

**Red:** Raced is stopped so Stop immediately, and wait for instructions

**Black&white:** start/ finishflag: raced is finished but doesn't stop until red flags.

**Blue flag:** turning round allowed. (only in dd)

**Black flag:** driver who gets the black flag has to stop immediately.

b. It's forbidden to use alcohol or drugs for drivers during race days. Drivers are not allowed to use any. So zero tolerance. All drivers have to contribute to a breath test when asked for.

c. Drivers are not allowed to take passenger in/on the car. (only during presentation lap) Not on track but not in the pits either.

d. Banger racing is a full contact sport. Drivers race for the victory or try to enjoy themselves to eliminate their opponents. During all races it's forbidden to turn round and drive on oppo. It's only allowed to return on track, safely. Blocking is only allowed from outside to the inside in driving direction. Any other form of blocking is NOT allowed.

e. Not allowed to make hit between the wheels on drivers side of the car.

f. No T-bones on a car against or close to the wall. (Think twice about your speed)

g. In Emmen it's not allowed to get out of your car during the race. Even when you park your car on the infield you have to stay put and strapped in. Only allowed to get out after a red flag. Getting out during race or asking for an unnecessary red flag will cause an immediate load up. All our officials are allowed to stop the race. Make contact to an official when it's unsafe and you have to leave your car. When you have left your car you have to go to the safety area on the infield a.s.a.p.

h. Drivers can be held responsible for his mechanics and the behaviour of their supporters.

i. It's the drivers responsibility to leave his pit space as he found it at the beginning of the day.

j. People are only allowed to drive at walking speed (except on track) No test drives in the pits.

k. At Scrutineering are only the scrutineers and the driver allowed. No mechanics or other supporters. Car needs to be ready to race at scrutineering. Including racing overalls, helmet, neckbrace and racing gloves. When racers get caught adding "illegal" pieces to their car after scrutineering they receive an immediate load up.

l. Organisation is allowed to re-inspect/ scrutineer every car at any time.

m. When a driver is suspended at another organisation or formula for heavy violations we are allowed to refuse him.

n. Every drivers needs to at least 17 years old having a driver's license. He the only one who allowed to race his car.

o. It's forbidden to let a mechanic or someone else race your car on the day. So No car/ driver swaps for dd either. A driver/car swap will result in a 1 year ORCi ban for both drivers involved!!

p. Fireproof/ resistant overalls and gloves are compulsory.

q. A decent neckbrace is compulsory. Not allowed to drive without.



r. Because of our license its compulsory to have tarpaulin under your car in the pits. This will be checked by the authorities, so we're very strict in this.

s. When pulling/ straightening/ loading or unloading cars please think about safety, not just your own safety but the safety of the spectators/ crowd around you as well.

t. the organisation is authorized to hand out sanctions at any time for events on- and of the track.

u. **Restarts are usually from start finish line. At a red flag all cars have stop immediately. However unnecessary waiting is not allowed. Every driver has to follow instructions of our officials straight away. When they don't they get blacked flagged.**

v. At the start of the 2018 season Transponders are compulsory to race for the points. Drivers are responsible for their own transponders. **Only the orange amb or the orange mylaps MX/X2 motorcross transponders work on the Emmen track.** Off course it is still possible to race without a transponder just for fun. However racers without transponders get no points.

**The race starts when the green flag is being given. This can be in turn 3, turn 4 or on start/finish and it differs . So racers have to concentrate on our officials around the track. All have green and red flags. With a red Flag stop immediately. Restarts are in turn 2 normally, but not until the green flag is being waved.**

**Sometimes we have to re-arrange things on and off track and therefore things are not automatically the same as normally. Therefor racers have to follow the instructions of our officials at all times.**

**Stupid and/or excessive behaviour on and off track and in the pits leads to an immediate load up and an eventual ban.**

**We don't tolerate any verbal or physical violence towards officials, scrutineers, rescuers, spectators or fellow racers. Violence will lead to a ban for life.**

**As mentioned before the racetrack is no place for alcohol and drugs. When racers are found guilty of being under the influence on track they will receive an immediate 1 year ban!!! This also means racers are not allowed to have a drink on track after the dd. They will have to wait until they're of track.**



## Build Rules

### 1) Type of car:

- a. Rear wheel drive only
- b. Minimum size Volvo 240, Ford Granada etc.
- c. If in doubt, check with promotor.
- d. 4x4, convertible, vans, MPV's not allowed.

### 2) Stripping the car:

- a. Remove all glass, mirrors, plastics and interior (including dashboard). Make sure car is completely glass free. So check the doors etc etc.
- b. Remove all parts from drivers door.
- c. Remove towing bar and all ancillaries.
- d. Remove brackets/blanking plates for sparewheel
- e. Remove petroltank
- f. Only original bumpers. Remove plastic bumpers. Gas shockers between bumper and chassis have to be removed (excluding yanks). All Ally Volvo rear bumpers have to be removed. The Ally front bumpers have to be secured firmly by bolting them straight to the chassis. Yanks should empty the shockers and weld shut. No chains or strips between the chassislegs allowed.
- g. **It's advised to use seatbelts (twisted) between the chassislegs. When racing without a bumper.**

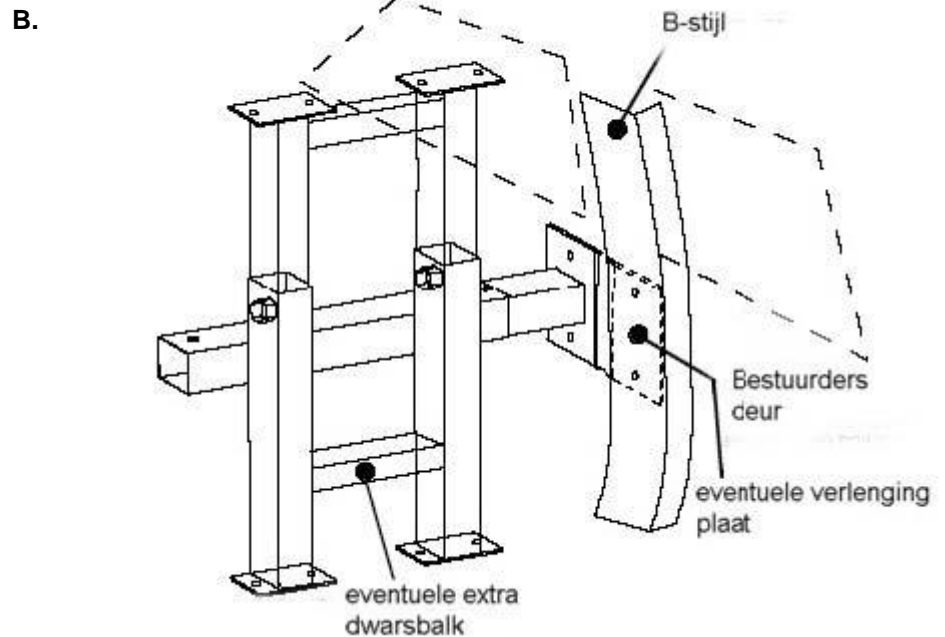
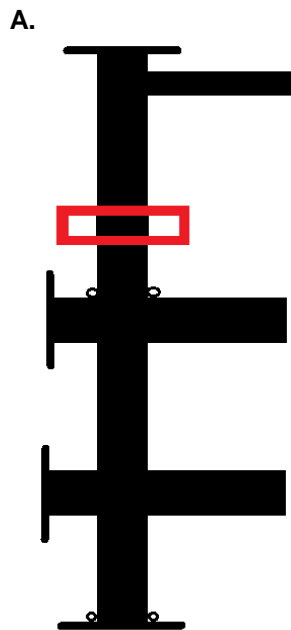
### 3) H-frame:

- a. Single roll bar, minimum rollbar size 80mm x 80mm, minimum thickness 3mm. (no buildingsite supports of 40mm x 40mm). Attached to the roll bar are a Battery tray with the batteries fixed securely, covered with rot proof material. No connection between the battery tray and floorplate allowed. Next to a batterytray theres a Fueltank including non-return valve fitted. No ally fueltanks permitted. Fueltank should not have any sharp parts or other parts facing the driver and should be mounted as low as possible in the car.

H-frame should have smooth surfaced harness supports/slots, to keep harness in its position. The harness support on the cage is compulsory to be closed. So the seatbelt can move freely without risking to slip off or to be damaged by sharp edges. (for an example see point H) We're advising to mount the shoulderbelts to the cage as high as possible to reduce the stretch. And mount the hipbelts as low as possible in a 45 degree angle ideally.

- b. Each support (uprights) should be secured by minimum of 2 bolts M12 with matching support plates, or large washers (minimum size 5 cm) through floors and roof.
- c. Uprights should have supports of minimum 125mm x 125 mm (square)  
The footplate at passengers side is not allowed to extend more than 5cm from the upright. No additional struts or brackets allowed at the back of cage/ footplate of the cage.
- d. Crossmember should be welded to uprights. Can be secured to B- pillar drivers'side.
- e. Drivers seat should be fixed to rollbar at shoulder height.
- f. **Topbar in H frame between the uprights is compulsory min. 40mm x 40mm, max. 10cm off the roof.**
- g. H-frame/ Rollbar has to be straight. Angulated rollbars are not allowed. Not allowed to bolt in H-frames leaning backwards. They have to be bolted in straight up.

h. example shown below



#### **4) Doorplate, floorplate, roofplate:**

a. Doorplate is compulsory. Should extend minimum of 10 cm, maximum 25cm from A and B pillar. Minimum height 40 cm, minimum thickness 10 mm. Should be secured with a minimum of 6 bolts (M12).

b. Compulsory to have 2 bolts each through A and B pillar (minimum M12 bolts). Shuttering bolts and centreplates not allowed. It's compulsory to use nuts and bolts to secure the doorplate. 2 doored cars without B pillars should have the doorplate fixed to the rollbar. Space inbetween should be filled with a box section to cover the bolts.

c. Screen bars (box section running from roof to bonnet), or full width sunvisors not allowed.

d. Roofplate is compulsory to replace the sunroof. Should be made of metal. Allowed to either weld or bolt this plate in place. Measurements should not exceed 10cm overlap of original sunroof. **Roofplate can be fixed to rollbar**

e. Floorplate compulsory. This should cover the complete area where feet are positioned. Should be secured with a minimum of 4 bolts, minimal M10 bolts and washers.



## **5) Strengthening:**

- a. Drivers door allowed to weld shut. Topbar in door should be welded securely. (NO topbar in front passengerside door). Topbar might be welded in the door behind drivers door, max 25cm long.
- b. Other doors allowed to bolt shut. Maximum of 5 bolts per door. Allowed to use plates not larger than 10 cm (round or square). NO welding. **It's allowed to weld/ connect the b pillar to the roof with a strip of max 15cm long and 5cm wide. This counts for one bolt. So when the strip is on both doors it will count for half a bolt in each door.**
- c. If one uses plates, max. of 5 bolts per plate, maximum measurements of plate 30cm x 30 cm.
- d. Pillars might be secured using safetybelt webbing over a length of 25 cm.
- e. Tri-angular plates to secure bonnets are compulsory. Can be secured by welding or bolting in. It's allowed to use strips, maximum length 40cm overlap. Window gussets only allowed at drivers side max 10x10cm. At volvo 7 and 9 series fully welded corner plates are compulsory. (40cm) Plates at drivers side. We strongly advise to weld a plate on top of DRIVERS SIDE a pillar to connect frontwing, driversdoor and roofpillar.
- f. Bonnet should be securely fixed, max. 4 bolts or centrepens. Bonnet should be in its original position, no positioning this further forward and/or fold over. Shuttering bolts/centre pens should not protrude further than 5 cm above the bolt. Compulsory to use tape or tie wraps on the treaded part to ensure they do not come loose.
- g. Using crashtubes is allowed. **Should be a piece of loose tube around the bolts/twirlybars. No fixed plates allowed to these tubes (so plates can't be welded or bolted.)**
- h. Washers/plates to secure bonnets no larger than 15cm x 15cm. It's allowed to weld small pieces of box section to the chassis. Not larger than 3cm x 3cm, length a maximum of 5cm.
- i. Boot can be secured using a maximum of 4 bolts (or using 4 welds over a length of 5cm maximum). No centerpens/spanners or crashtubes allowed.
- j. Frontwings can be secured using 2 bolts maximum per wing (plates or metal strips not allowed).
- k. Wheelarch secured by a maximum of 3 bolts.
- l. Steering rack supports are allowed, however no box section/building site supports inbetween the A pillars.
- m. Gearbox may be secured with ONE support, this support has a maximum Length off 30cm and no wider than the distance between the (inner) chassislegs.
- n. max of 2 Tunnels strips are allowed, not larger than 50cm x10cm. **No extra brackets allowed (to connect the 2).**
- o. Original steering arms and wishbones might be strengthened , by welding extra material to these parts. **NO homemade ones allowed.**
- p. **Subframes of all cars can be welded to the chassis with only 2 (5cm wide) plates at each side maximum so only 4 on one subframe/ front axle. Preferably around the original bolts, maximum of 5 cm. (frontaxle should not be welded completely).**
- q. Innerwings should not have an extra fixing to the chassis. Top wishbone Jaguar is allowed to be secured to innerwing using 1 (one) bolt.
- r. American cars are allowed to have the bodywork and chassis secured to each other by either welding or bolting up. Should only cover passenger compartment (NOT in engine bay or boot area) Securing the boot , see point 5g.



- s. It's not allowed to use any kind of foam, wood or concrete in the car.
- t. Its allowed to connect the Innerwheelarches of f.e. Granada of Volvo to the floorpanel (inside) OR to the chassis (outside) by welding a plate of 5x10 cm (or 2 plates of 5x5cm). 2mm thick on each side. With yanks you're allowed to weld chassis to the body right above the backaxle using 5x10cm plate again. (2mm)
- u. No further strengthening in any way allowed. People are allowed to repara the rot spots with 1,5mm sheetmetal.

## **6) Fuel system**

- a. **Mechanicel fuel pumps might be replaced by electric pumps. Please be aware that the fuellines of injection cars are fixed solid under the bonnet AND inside the car and are fixed on a secure place. When possible fixed double with hose clamps of the right size. This in case off the high pressure modern injection pumps supply.**
- b. The original tank should be removed completely (including filler hose). Should be replaced by a welded metal fuel tank, fixed to the rollbar.. Maximum capacity 15 litres. Fueltank should not have any sharp parts or other parts facing the driver and should be mounted as low as possible in the car.Tanks should not leak. Tank should have a metal screw cap.
- c. All connections on fueltank should be at the top (topfeed). Breather pipe should end underneath the car. A non-return valve is compulsory.
- d. All fuel lines should be of original spec. and in good condition. No metal embraided lines, or garden hoses. All fuel lines should be fixed securely.
- e. A manual fueltap in the fuel line should be fitted within reach of the driver.
- f. **The fuel tank has to be protected and is advised to be mounted at the front of the H-frame and as low as possible. Protected by a 10mm steel plate or decent frame (between tank and passengers door) from the cage to the front. To protect the tank for (side) impact. When the tank is mounted at the back of the cage it has to be protected by a steel plate as well. To prevent the tank being pierced when the cars gets jacked.**

## **7) Electrical system**

- a. Batteries should be securely fixed in a tray/bracket with a decent lashing belt or treathed rods and a metal strip over the battery. The battery terminals need to be firmly covered to prevent short circuits. Should be covered with rotproof material completely (including battery terminals). Battery trays to be fixed to rollbar only. No other positions within the car on the floor.
- b. Wiring should be fully insulated, and be connected in a correct way. No provisonal fixing by using tape etc.
- c. Ignition and starting by means of a switch, in a way that the driver can interrupt this. Sparkfree starting from season 2014 onwards compulsory !
- d. Master kill switch compulsory. This should be fixed to the rollbar, passengerside front. A driver (or a safety marshall from outside) should be able to use it. To be fitted at a clearly visible spot.



## **8) Cooling system**

- a. All watertanks to be positioned under the bonnet. Bonnet should keep its original shape. U-shaped tanks NOT allowed. L- shaped tanks only to be fitted next to the engine and behind the carb. Should not protrude further than 5 cm behind the front of block (Front of block excludes waterpump, and ancillaries like pulleys/fanbelts etc). This should be clearly visible. It's allowed to secure the watertank to one strut only.
- b. Watertanks should be secured by nuts and bolts only. NO welding allowed.
- c. There's no solid connection (bolt or weld) allowed between watertank and the chassis.
- d. Watertanks should not protrude bulkheads. All original holes should be covered.
- e. Every watertank should be fitted with a pressure relief system, this should be located underneath the bonnet and should end under the car. With a bonnet in closed position, no waterhoses should be visible. Otherwise you will fail scrutineering. **The top of the watertank of Volvo 7 and 9 series needs to be covered in case of the heat. (with rubber mat or carpet or so)**
- f. Making alterations to bonnets to fit watertanks is not allowed. Only a small refill opening of 15cm,x 15cm is allowed.
- g. Wateroutlets may be modified , but not strengthened.

## **9) Engines and gearboxes**

- a. Engine and gearbox exchanging allowed. Engine/ gearbox mounts might be modified, but should be fixed at original points. Should be fixed a minimum of 5cm from chassis. Engine mounts only on front crossmember. Additional cradles and brackets not allowed. A regular gear knob is compulsory.
- b. Injection allowed. Turbo's, superchargers or any other means of pressurized systems NOT allowed.
- c. Engine exchange should be able to leave bulkhead original. Only a small cut-out for the ignition allowed.
- d. A plate in front of engine is allowed (both 4 and 6 cylinder cars). This should not exceed the original distribution housing. No enormous frames allowed to secure these.
- e. Any other form of tuning allowed.

## **10) Carburettors and inletmanifolds.**

- a. Injection engines may be modified to carb. Use of brand, type, size free. Inletmanifolds can be manufactured or altered and made of metal. Under no circumstances should these leak fuel.
- b. The fuel line should be securely fixed at the carburettor by means of 2 jubilee clips.

## **11) Tyres, suspension, brakes, axles, differential and exhausts.**

- a. Tyres and wheels should be adequate and fit properly. The original amount of studs and nuts as standard to the car should be fitted. Wheel weights to be removed. NO noble tyres or tractor tyres allowed. The use of new and cut tyres is allowed. No additional use of belts or rope allowed to fit to tyres. Inner tubes and tyre gaitors are allowed.
- b. Springs should be fitted in a secure way, so they will not break loose from car under any circumstances. Volvo springs to be secured with seatbelt webbing or brackets.



- c. Brakes should be in working condition. Not only for your own safety, but also others (especially in the pits).
- d. Rear axles interchanging allowed, using original method of fixing. NO other ways, brackets/frames allowed. Rearbumper height should stay original. (Rear end of cars should not be higher than 1 metre).
- e. Frontaxle might be interchanged, maximum of 4cm x 5cm welds. When in doubt, please check with promotor.
- f. Differentials allowed to change. Locked diff allowed. NO extra brackets or frames.
- g. Exhaust systems should be fitted in an adequate way. Should end underneath the car. Silencers compulsory. Max noise 96dB (measured from 4 metres distance behind car)

## **12) Safety**

- a. use of 5 point harness compulsory. No damage to webbing. Should be fitted securely to rollbar or floorplate.
- b. A headrest should be fitted to seat or rollbar. Seats to be securely fixed to rollbar. Seat should under no circumstance break loose during racing.
- c. The drivers seat should be a standard production seat. NO competition racing seats/bucket seats allowed.
- d. Helmets compulsory, should be in a clean good condition (not damaged). Padding inside of helmet should not be torn or dried out. Safety standard to E2205 according to european norm. Goggles or visor strongly recommended (racing surface).
- e. Wearing a neckbrace is compulsory, HANS systems allowed.
- f. It's compulsory to wear overalls and gloves made of a fire retardent fabric (Nomex/Proban/EN531).
- g. No extra flags, billboards or any other material to be fitted to the car. No obscene texts/ signwork.
- h. Rollbar should have shoulder strap supports at shoulder height (smooth surfaced). Harness straps should be as short as possible to prevent from stretching. The angle of the lap belt should be between 45 and 55 degrees. Lap belt should run across the hips, not across the stomach or legs. At 45 degrees the belt will go across at the joint of leg support and back support of the seat. The angle of the should strap should be between 5 degrees going down, or 30 degrees going up. Shoulder straps should be fitted in such a way that these will not move away from shoulders.

**See example underneath**

## **13) Finplates**

- a. A finplate is compulsory, height 35cm. minimum width of numbers 15cm. Black numbers on white background. Maximum thickness of plate 3mm, should not be used as strengthening.
- b. Numbers should be clearly visible from both sides. Should be securely fixed by a minimum of 2 bolts (M8). Selftappers not allowed.





#### **14. Transponders:**

- a. All racers who want to race for the championship need to race with a transponder from this year on. Without a transponder people get no points. Of course it's still possible to race without one. You just don't get any points for final or championship.
- b. At Emmen speedway the only transponders which suit the track are the Orange AMB transponders or the Orange Mylaps MX/X2 (motorcross) transponders. Any other transponder does not work!!
- c. The transponder needs to be mounted securely inside the car. When necessary a hole can be cut in the passenger's footwell. Around the hole people are allowed to make a bracket to make sure the hole doesn't influence the strength of the car. However it should be clear that the bracket's main purpose isn't to armour the car. If so it needs to be removed. The transponder needs to be placed in driving direction to provide an optimal signal.
- d. The driver is responsible for his transponder and the way it works. Please make sure you check your number, signal and battery upfront.
- e. Every driver is advised to race with their own transponder number. To borrow one from a mate causes a lot of changes. The more changes the higher the chance on any faults. In case of an emergency we can work something out normally on the day. BUT ITS DEFFO NOT ADVISED!!

#### **Scrutineers or racemarshalls have the final decision at all times.**

**Please refrain from unnecessary discussions/ banter during scrutineering.**

**If you should have questions, please ask them before the meeting at [bangersemmen@hotmail.com](mailto:bangersemmen@hotmail.com) , Do not leave this until raceday at scrutineering.**

# **RACING IS AT OWN RISK!!!**