

European Construction Rules for European Super Twin Top Gas Bikes

1. **Motor:** Only 2 Cylinder 4 Stroke and 2 Stroke Engines allowed, no displacement limit
2. **Gasoline:** Only usual available Gasoline allowed, no NOS, Nitro Methane or Alcohol. Gasoline is defined for purposes of his rulebook as a mixture of hydrocarbons only. Non-hydrocarbons which do not increase the specific energy of the gasoline are allowed to the extent that they do not exceed 0,15% by volume and are blended in the gasoline by the refiner or fuel manufacturer. Gasoline is a good electrical insulator or dielectric, and its relative effectiveness as an insulator is represented by its Dielectric Constant. The average D.C. for the hydrocarbons which comprise gasoline is 2.025. This is defined as a reading of „0“ with the ESTTG Fuel Check metal Gasoline is tested and certified at ESTTG events through the application of various chemical analysis as considered appropriate by Fuel Check personnel. Gasoline in a vehicle may be checked before use in competition
3. **Brakes:** Motorcycles must be equipped with 2 independent brakes, working on 2 wheels. Disc Brake min diameter 175 mm, drum brake min diameter 150 mm. Motorcycles over 500 ccm must have front disc brake. Min 250x4 for single disc or 220x4 for dual disc.
4. **Wheels:** The motorcycle must be equipped with a front wheel made for motorcycles. The rear rim should not be more than 50 mm narrower than contact surface of rear tyre. The min front rim should be W 1x16“
5. **Tyres and Tubes:** Tyres should be slick type, or have a min thread depth of 2 mm. Motorcycles with top speed exceeding 200 km/h should have front tyres with at least „V“-rating, or be of natural rubber, racing type. Metal dust caps with rubber gaskets must be fitted
6. **Frames:** Stress-bearing tubes in the frame should be at least 20x1,5 mm. If a single backbone tube is used, it should be at least 50 mm. The engine should not be a stressed part of the frame. The engine should be located so that a safe weight distributing is achieved.
7. **Ground Clearance:** Min ground clearance with rider in position and proper tyre pressure is 50 mm and fork completely compressed. It must be possible to lean the motorcycle 12° to each side from the upright position, without any part of bike, except the wheels, touching the ground.
8. **Front Fork:** The front fork must be of the hydraulic type. Fork tubes may not extend more than 30 mm above the top fork crown. Min. stroke 50 mm. No part of the motorcycle, except the wheels, may touch the ground with the forks bottomed. Top fork tubes have a min. diameter of 34 mm.
9. **Streamlining:** Streamlining must be made so the rider can jump on and off bike without removing any parts of it. It must not create difficulties for the rider to control the motorcycle.
10. **Seats:** Seats must be constructed to give the rider a safe riding position, and must not be dangerously uncomfortable.
11. **Wheeliebars:** Wheeliebars are required in Top Gas Bikes.
12. **Primary Transmission:** If the clutch and/or primary transmission is exposed it must be fitted with a guard as a safety measure to protect the rider even as a result of breakage. The guard must be conceived in such a manner that under no circumstances can the rider come into accidental contact with these transmission parts. It must be designed to protect the rider from injuring fingers. Outboard mounted clutches must have a cover of at least 3mm aluminium or 1mm steel. Any suitable make or type of drive chain/belt may be installed
13. **Superchargers:** May be fitted at the owner's discretion: it is recommended that a guard be fitted over the belt drive on superchargers mounted in front of the engine. Where a supercharger is mounted behind the engine, such a guard is mandatory. Where a supercharger is chain driven, guards of 3mm thick dural or equivalent strength, are the minimum requirement, irrespective of the position of the unit. Explosion proof blankets fully surrounding the supercharger are highly recommended.
14. **Fuel Tanks:** Fuel tank must be securely mounted to the frame.

15. **Fuel Systems:** All motorcycles must have operational fuel shut-off valves. All fuel lines must be locked or wired. Pump driven fuel injection systems must have high pressure tubes as Aeroquip or similar. Bikes with an electrical fuel pump must connect the fuel pump with the main kill switch.
16. **Carburators and Fuel Injection:** All motorcycles must have throttle controlled by a hand operated twist grip incorporating a positive acting spring attached directly to the carburator or injector mechanism. The throttle must close automatically upon releasing the twist grip.
17. **Kill Switch:** The Motorcycle must be equipped with an electrical contact which disconnects all electricity to the engine if the rider should loose control of the motorcycle. This must be connected to the rider whenever the engine is started.
18. **Overflows:** All breathers must terminate in a catch can/tank of 550 ml minimum capacity or vent into the exhaust if normally aspirated. Supercharged need a catchtank with the same capacity as the oiltank.
- 19 **Safety Wiring:** All oildrain plugs and nuts and bolts that will cause an instant oil leak if they come loose, must be safety wired. The following should also be safety wired: Front Axle, Rear Axle
20. **Oil Drain Plugs and Supply Pipes:** All oil drain plugs must be tight and must be drilled and wired in position. Oil supply pipes must be adequately wired in position. External oil filters and screws or bolts that enter an oil cavity must be safety wired.
- 21 **Chains:** Chain should be of closed type without masterlink, or the masterlink should be safety-wired or saved by silicone. Chainguard must have the length till the end of sprocket. Minimum 3mm aluminium
22. **Exhaust Pipes:** Exhaust Pipes may not extend behind the rear wheel, and should be directed away from the rider, gas tank and tyres. Flexible pipes are not allowed.
23. **Gear Change:** The gear change mechanism must be constructed so it can be operated by the driver with both hands on the handlebar.
24. **Starting:** Can be started with an external starter. Rollers or push-start are not allowed.
25. **Centrifugal Clutches:** Motorcycles with engines driven centrifugal clutches may not be started in the pits unless the rear wheel is elevated off the ground on a strong, safe support stand. Throttle grip must be locked during placing back to the starting line after burnout.
26. **Car Engines:** Car engines are only allowed if the motorcycle is constructed so the weight and the weight distribution is similar to a motorcycle with a motorcycle engine.
27. **Computers:** Computers can be used for information gathering only. They are not allowed to control throttle operating, shifting, clutch actuation and braking. Throttle operating, shifting, clutch actuation and braking are to be thoughtly under the control of the rider. Computers are only allowed for engine management control (Fuel injection and ignition). Any kind of traction controlls are strickly forbidden.
28. **Data Recorders:** Data recorders may be used to record functions of a motorcycle, so long as they do not activate any function on the vehicle. Data recorders may not be activated by the throttle, clutch, brake, etc. mechanism, or by the Christmas Tree, radio transmitters, sensing of wheel speed, inertia, laser device, or transmission of track position, must be activated by seperate switch. Fifth wheel sensing devices prohibited on all vehicles (including wheeliebar).