

## **CHAPTER 4 : SPECIFIC TECHNICAL REGULATIONS- SUPER SPORT INDIAN**

This chapter describes the specific technical regulations and permitted modifications as applicable to different groups for two wheelers as defined in Chapter 1. - Whatever modifications have been carried out, the rider must at all times have easy access to all controls without having to remove his hands and feet from the handlebar and footrest respectively.

**NOTE- A MAXIMUM WEIGHT REDUCTION OF 40% +/-2%, UNDER THE HOMOLOGATED WEIGHT IS ALLOWED.**

### **4.1 List of free items for Group : SUPER SPORT INDIAN**

1. Controls and Control cables
2. Mudguards, Handlebars and mounting points.
3. Foot rests, mountings and Pedals.
4. Fasteners and Hoses.
5. Spark plugs, holders, ignition cables, batteries, rectifiers, CDI,ECU, wiring harness and all sensors . All types of ignitions systems (including coils, contact - breakers, magnetos, alternators, electronic ignitions, capacitor discharge & transistorized ignitions) may be used in original or modified form. Magneto flywheel assemblies may be lightened and balanced.
6. All bearings, bushings, all springs and spacers
7. All instruments, Tachometers (Rev-counters), Engine gauges etc.
8. All gaskets, oil seals
9. Fuel filters, petrol cocks
10. All manifolds, Exhaust system and Resonators
11. Seats- SHOULD BE MADE UP OF A RIGID MATERIAL, WITH A STOPBOX BEHIND THE RIDER. THE SEAT SHOULD HAVE A NON SLIP PADDING WHERE THE RIDER SITS ON.
12. Streamlining
13. Fuel Tanks: As long as they are made out of metal. And positioned between the handle bar and the riders seat. The Technical Delegate/Scrutineer shall check the safety and welds and will not compromise on safety, when the fuel tank is not an OE fuel tank. Vehicles with fuel tanks that are not considered safe will not be allowed to start.
14. Throttle Body, Injectors and Carburettor
15. Wheels, hubs, axles, Chains and chain adjusters
16. Shock absorbers, all dampers, includes steering
17. Crank shaft assemblies (includes crankshaft, connecting rod/s, crank pins). Piston/s, Pin/s, Lock/s, Ring/s.
18. Components of the braking system (includes brake pads, brake linings, shoes, master cylinders, rotors, callipers)
19. Gears and gear ratios are FREE. The maximum number of speeds shall be six (6).
20. Secondary drive sprockets- Free

21. Valves, number of valves, valve springs, retainers, locks, rocker arms, push-rods, cam-shaft/s, timing gear and drive sprockets.
22. The components of the primary drive (crank pinion gears or sprockets and ratios). The method of drive shall not be altered from chain to gear or belt or vice versa.
23. The components of the clutch system (includes clutch basket, pressure and friction plates). The type of clutch shall not be altered from wet to dry or vice versa).
24. Radiator. Method of cooling is free and may be altered from air cooling to liquid cooling.
25. Oil coolers-Free

#### **4.2 Permitted additional engine modifications for SUPER SPORT INDIAN**

1. For Two Strokes: The shapes and sizes of the ports are FREE. The bridge separating the bridged ports shall not be removed. Booster ports are permitted. The disc valves and inlet ports may be modified. Reed valves are free.
2. For Four strokes: The shapes and sizes of the ports are FREE. The number of valves must be as homologated. The shape of the valve may be altered by removal of material only.
3. The material and castings of the cylinder/s and cylinder head/s are FREE. Additional studs on the cylinder/s cylinder head/s are permitted. The PCD of the crank case may be altered.
4. Crankcase / gearbox shell: Material may be added by welding or removed by machining only. For 2 strokes, primary compression ratio may be altered.
5. The bore & stroke of the engine may be altered.
6. For 2 strokes: It is permitted to match the entry points from the crankcase to the transfer ports by removal of material only. Dowell pins to locate the cylinder to the crankcase is permitted.
7. Supercharging / turbo charging is forbidden.
8. Modification to the Cam chain tensioner and its components is permitted.
9. Fuel pump, and sensors: Any Indian component in original or modified form, NO additional fuel pump is permitted
10. *Auto* lube equipment / battery may be removed.

#### **4.3 Permitted modification to Chassis / Suspension / Brakes** **Group : SUPER SPORT INDIAN**

##### **1. Front suspension**

Any Indian component fork/triple clamp assembly may be used in original or modified form. Fork travel / damping may be altered. Piston rod bolt is FREE. In case of Earls suspension, the length of the swinging arm may be altered, the shock absorber

mounting points may be altered. All shock absorbers shall be Indian components in original or modified form. T-Stem and Triple clamp may be freely modified.

NOTE-THE FRONT AND REAR SUSPENSION SHOULD HAVE A MINIMUM TRAVEL OF 15MM, WHEN THE VEHICLE IS PRESSED DOWN BY HAND

## 2. **Rear suspension**

The swinging arm may be strengthened by addition of material only. The length of the swinging arm may be altered. The shock absorber mounting points may be altered. The pivot point of the swinging arm with respect to the frame shall not be altered. All shock absorbers shall be Indian components in original or modified form.

## 3. **Brake**

Front Brake: The fitment of disc brakes is permitted and highly recommended for non OEM motorcycles. Any combination disc brake assembly may be used in original or modified form. Disc brake assemblies are FREE.

Rear Brake: Any combination of Indian component brake assembly may be used in original or modified form. It is permitted to change from disc brake to drum brake or vice versa.

## 4. **Wheels / Tyres-**

Only Indian component wheels, rims, hubs and spokes may be used in original or modified form. The size and type of the wheels are free.. The size of the tyres are free. PROVIDED THE WIDTH OF THE TYRES IS NOT LESS THAN 2.5 inches. They must also conform to Art.3.2.18-Tyres

Only Indian component tyres that are manufactured in India are permitted.

Where the manufacturer has used imported tyres as OE in a certain class of motorcycle, the same (Brand, Size, Tread pattern and Compound) may be used for that class of Motorcycles only.

## 5. **Frame/ Chassis**

Chassis - Indian Component only. The onus of proof lies with the competitor & TEAM.

Struts, clamps for attachment of components such as air filters, tool boxes, mudguards battery carriers etc. which as a result of strip down to racing trim, having become totally unloaded and stress free, may be removed. Reinforcement with aluminium alloy of the frame, ONLY by the addition of extra frame members will be permitted without compromising its basic structural design and rigidity / integrity. Additional members required for fitment of different seat / fuel tank are allowed subject to the above.

NOTE- ALL ORIGINAL MEMBERS OF THE FRAME MUST BE AS OE SUPPLIED. REMOVABLE MEMBERS OF THE FRAME MAY BE REMOVED AND REPLACED WITH A METAL MEMBER HAVING ATLEAST THE SAME STRENGTH AS THE OE PART.

6. Any component of chassis, suspension, - and bodywork deemed to be unnecessary for drag racing / competition and eligibility may be freely removed, provided that the removal of such component/s does not endanger the safety of the two wheeler or the rider.
7. Drilling of holes on any part of the front wheel, brake, drum, hub or its component parts is permitted provided such modifications do not compromise the structural integrity of the components.

Drilling of holes in other parts of the motorcycle's structural components (Frame, swing arms etc.) is prohibited.

#### **4.4 Specific regulations for two wheelers Group SUPER SPORT**

Provided it complies with regulations listed under Classification of two wheelers and common technical regulations, there is no restriction on the make, design or type of two wheeler that may be driven in competition held under these regulations, save as may be provided in the supplementary regulations.