

# LAND-SPEED RACING RULES



**REVISED NOVEMBER 26<sup>th</sup> 2010**

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## **I. APPLICABILITY**

These Rules will be strictly enforced. Racers are responsible for familiarizing themselves with these Rules, and communicating relevant portions thereof to their Pit Crew and entourage. Any material breach of these Rules may be grounds for disqualification /exclusion from an entered event, or suspension or revocation of a competition license.

## **II. DEFINITIONS**

### **(A) Traditional Scooters**

Motor-scooters are defined as a two-wheel motorized vehicle with step-through frame and a flat floorboard for the rider's feet. The scooter engine and drive system are attached to the rear axle. In contrast to a frame mounted motorcycle engine, this front-hinged arrangement allows the engine to swing vertically in conjunction with the motion of the rear wheel. Older Vespas and Lambrettas, most vintage scooters, and some newer retro models have axle mounted engines with a manual transmission with the gear shift and clutch controls built into the left handlebar. Current generation scooters use a Continuously Variable Transmission (CVT). Scooters generally feature bodywork, including a front leg shield and body that conceals all or most of the mechanicals. There is often some integral storage space, either under the seat, built into the front leg shield, or both. Most modern motor scooters have smaller wheels than motorcycles, between eight (8) and fourteen (14) inches in diameter. Scooters generally have smaller engines than motorcycles (between 50cc and 500cc), and a single cylinder, though a few larger models have twin-cylinder engines to 650cc.

### **(B) Non-Step-Through “Hybrid” Scooters**

Non-Step-Through “Hybrid” scooters are defined as two-wheel motorized vehicles that resemble miniature motorcycles. They may be fitted with solid, mag-type, or spoked aluminum or steel motor-scooter type wheels not exceeding 14". These “Hybrids” have a frame-mounted engine featuring a manual transmission with a foot-operated gear shift and clutch lever mounted on the left handlebar. Engine displacement is limited to 500cc. Non-Step-Through “Hybrid” Scooters shall compete in established displacement classes, but with an “H/1” designation for Non-Step-Through “Hybrid”, and shall compete separately from traditional step-through motor-scooters. Examples of Non-Step-Through “Hybrid” Scooters include Cushman Hawk/Eagle, Mustang, California Scooter Company

Mustang replicas, Yamaha YSR50, and most any motorized cycle with wheels measuring 14" or less.

### **(C) Step-Through “Hybrid” Scooters**

Step-Through “Hybrid” scooters are defined as two-wheel motorized vehicles fitted with solid, spoked, or mag-type aluminum or steel motor-scooter type wheels not exceeding 14". These “Hybrids” have a frame-mounted motorcycle engine, with chain or belt final drive, featuring a manual transmission with a foot-operated gear shift and clutch lever mounted on the left handlebar. Engine displacement for Step-Through “Hybrid” Scooters is limited to 500cc. These “Hybrids” shall compete in established displacement classes, but with an “H/2” designation for Step-Through “Hybrid”, and shall compete separately from traditional step-through motor-scooters.

### **(D) Traditional Step-Through Scooters with 15” or 16” Wheels**

Notwithstanding fitment of OEM 15” or 16" wheels, scooters (such as the SYM model HD200) fitting the criteria of a motor-scooter in all other respects, may compete in-class per actual displacement. The final decision re eligibility of a motor-scooter fitted with wheels larger than fourteen (14) inches rests with the Course Marshal and the Chief Tech Inspector.

### **(E) Vintage Scooters**

Any scooter manufactured before 1990 shall be designated by the letter “V” as a “Vintage” scooter, and shall compete separately from scooters manufactured from 1990 to present.

### **(F) Streamlining and Streamliners**

Scooters utilizing fairings (full or partial), dustbin fairings and/or streamlining shall be designated by the letter “S” as a “Streamliner”, and shall compete separately from non-streamlined scooters.

### **III. ENGINES**

#### **(A) Type**

A single 2-Stroke or 4-Stroke engine is allowed. 4-Stroke engines may be single or double overhead cam. Engines shall be capable of being further categorized as follows:

2-Stroke Aspirated/Injected  
2-Stroke Turbo  
4-Stroke Aspirated/Injected  
4-Stroke Turbo

#### **(B) Tuross**

All turbo-equipped engines shall be so designated by the letter “T”, in addition to any other designation that may apply, and shall compete separately from normally aspirated engines.

#### **(C) Displacement**

Displacement classes for Land-Speed Records are limited to the following:

50cc  
70cc  
100cc  
125cc  
150cc  
175cc  
200cc  
250cc  
300cc  
400cc  
500cc  
650cc  
Sidecar Class to 250cc  
Sidecar Class 251cc to 650cc

### **(D) Verification**

All record-setting scooters are subject to impound and tear-down by the Chief Tech Inspector in the presence of the Course Marshal and Scootermeister. Any engine determined to be in non-conformity with the displacement class in which it is entered may subject the rider to disqualification and/or suspension or revocation of said rider's competition license.

## **IV. TRANSMISSIONS**

### **(A) Drive-Train**

Motor-scooters with handlebar gear shifts shall be known as "shifters"; those with CV transmissions shall be known as "CVs". "Shifters" shall compete separately from "CVs", regardless of year of manufacture.

## **V. FUEL**

### **(A) Gasoline**

Gasoline may not exceed 110 Octane.

### **(B) Additives**

The only permissible additives to the gasoline are commercially available octane booster, and oil lubricants.

### **(C) NOX**

Nitrous Oxide is strictly prohibited.

### **(D) Testing**

All gasoline used in record setting scooters is subject to laboratory testing. Gasoline found to exceed 110 Octane may subject the rider to disqualification and/or suspension or revocation of said rider's competition license.

## **VI. CHASSIS**

### **(A) Wheels**

Except as otherwise stated in these Rules, front and rear wheel size is restricted to fourteen inches (14") maximum diameter.

### **(B) Steering**

Steering must be effected by rider-steered handlebars. Steering shall be by front wheel only.

#### **(B.1) Steering Damper**

A steering-damper may be fitted. A steering-damper should be fitted to any scooter capable of exceeding speeds of 125 mph.

### **(C) Bodywork**

Traditional non-streamlined motor-scooter body-work, front leg shield and floorboards may be removed. Body-work that conceals all or most of the mechanicals may be removed, or modified. The rider's entire body (hands included), in the racing position, must be visible from either side of the scooter.

### **(D) Valve Stems**

Metal valve stems are highly recommended, but not required. All rubber valve stems, whether straight or 90-degree, must be in excellent condition. Weather-cracked valve-stems will not be permitted on the race course! All valve stems must be securely fitted with metal or plastic valve stem caps. The decision of the Course Marshal/Race Director as regards valve-stems is final.

### **(E) Tires**

High performance scooter tires such as Michelin, Metzler, Pirelli, Dunlop or Continental are highly recommended, but not required. OEM or comparable tires are permitted. Weather-cracked or worn tires will not be permitted on the race course! The decision of the Course Marshal/Race Director as regards tires is final.

## **VII. RACERS**

### **(A) Age**

Racers must be at least 18 years of age, and must possess a valid State driver's license.

### **(B) Racing License**

Racers must apply for, and be issued, a MSILSF Competition License. Licenses shall be designated "Restricted" or "Unrestricted" depending upon riding and/or racing experience. MSILSF reserves the right to re-classify its issued competition licenses at any time.

### **(C) Apparel**

Riders are encouraged, but not required, to wear racing apparel including, but not limited to, full coverage Snell-approved helmet, full leathers with body armor, leather high-top boots, and padded gloves. **Riders are required to wear at least:** (a) jeans or Levis of sufficient leg-length to cover the tops of their shoes or boots; (b) high-top athletic shoes or boots; (c) a pull-over long-sleeve shirt, such as a Moto-Cross (MX) Jersey or sweatshirt; (d) DOT approved helmet; (e) racing goggles if wearing a shorty, half-pot, MX or open-face helmet, and (f) full-finger leather gloves.

### **(D) Personal Conduct**

Any entrant or pit crew member exhibiting signs of intoxication, engaging in unsafe vehicle operation, or engaging in verbal and/or physical violence may, in the discretion of the Course Marshal and Chief of Security, be disqualified from further participation in an entered event.

### **(E) Crew/Entourage Conduct**

Entrants are responsible for their personal conduct and actions of their entourage (pit crew and spectators) at the venue.

### **(F) Mandatory Attendance at Pre-Race Rider's Meeting**

All racers shall attend the Pre-Race Rider's Meeting as a condition of being permitted to compete. Racers shall familiarize themselves with peculiarities

concerning the race course, and the procedure they are expected to follow while staging, racing, finishing, returning to the pits, and fueling/re-fueling.

**(G) Tech Inspection.**

Before being permitted to race, racers shall submit themselves and their scooter(s) to Technical Inspection in the Tech Inspection Area. Racers shall bring their racing apparel, including helmet, goggles, boots and gloves. Scooters will be inspected for compliance with these Rules. Racers and scooters passing Tech Inspection will receive a Tech Sticker that will be placed on the scooter by a Tech Inspector. The decision of the Chief Technical Inspector as regards compliance with these Rules is final.

**(H) Switching Riders**

Riders may not, under any circumstances, substitute another rider to race their entered scooter. Any rider switch may subject both the officially entered rider and the substituted rider to disqualification from the meet, and suspension or revocation of their competition licenses. Under no circumstances will credit be given for a run made by a substituted rider. Any speed-ticket obtained by a substituted rider is *prima facie* null and void *ab initio*, and shall not be used to establish a land-speed record.

**(I) End of the Meet.**

Racing will conclude approximately one hour before sunset. At the conclusion of racing all Racers, their Pit Crew and entourage are requested to muster in the pits or other designated place for a trophy presentation.

**(J) Clean-Up.**

Racers shall remain at the venue until all trash and debris, if any, is picked up off the ground in and about their pit area, and deposited in dumpsters.

**VIII. RESERVATION OF RIGHTS**

**(A) Rule Changes/Modifications**

We reserve the right to change, modify or alter these Rules at any time; to open/close entries at any time; and to limit the number of entries based on safety considerations.

