



Bilstein Modified Lite STARS “Futures Cup” 2016 RULEBOOK

Modified Lite STARS Office
128 Bruner Ave
Somerset, PA 15501

Phone: (814) 442-1738

<http://modlitestars.org/>

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. No expressed or implied warranty of safety shall result from publications of or compliance with these rules and/or regulations. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. The race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his opinion do not alter the minimum acceptable requirements. No expressed or implied warranty of safety shall result from such alteration of specifications. Any interpretation or deviation of these rules is left to the discretion of the officials and their decisions are final.

Bilstein Modified Lite STARS “Futures Cup”

1. AGE LIMITS

- a. Must be a Mod Lite STARS member, not be older than 16 years of age.
- b. No headlining division experience permitted.
- c. Those under 16 should verify eligibility to race at each individual track.
- d. TBA event(s).

2. ALLOWABLE ENGINES MODEL YEARS 2012 AND OLDER

- GSX-R 600
- Honda CBR 600RR
- Yamaha YZF600R
- Kawasaki ZX-6R
- Kawasaki ZX-6RR

3. ENGINE

- a. Engine parts from different year engines can be swapped between engines providing they are from the same manufacture and cc displacement.
- b. No modifications to the bottom of the engine will be allowed, all bottom end components must remain in stock configuration. Charging system optional. Battery powered ignition system only. Alternator cover allowed. Factory balancer and/or balancer shaft maybe removed.
- c. No auxiliary starters.
- d. Engine must be cooled by original intent. May use extra fan or oil cooler.
- e. Engine exhaust must include muffler and exit rearward. All muffler devices must include baffles. MUFFLER MUST MEET LOCAL TRACK REGULATIONS, (IF MANDATORY)
- f. All head components must be OEM stock. After market cylinder heads and valves will not be permitted.
- g. No porting, or grinding, polishing, or changing stock configuration of intake or exhaust ports allowed.
- h. Engine must remain in its stock factory manufactured condition. Bore and stroke must remain unaltered from a factory manufactured specification. No increasing or decreasing of motor stroke in any way. No engine can be modified to be less than original stock OEM configuration specifications. Freshening of stock engine must only involve the replacement of any worn or faulty parts, with factory manufactured parts intended for use on that particular engine.
- i. No altering of pistons, rods, head components. Crank, rods and pistons must remain OEM.

- j. Header must attach directly to head in stock exhaust port location.

4. CAMS

- a. Cams must be as per original equipment manufacturer (OEM) and meet OEM specifications.
- b. Cam shafts must remain stock lift and duration and be in their original placement. (i.e. intake on intake side, and exhaust on exhaust side).

5. OIL SYSTEM

- a. Oiling system may not include a dry sump system.
- b. One piece billet, or cut down oil pans may be used.
- c. High volume oil pump gear permitted.
- d. The oil pan may be magnetic steel or aluminum.

6. FUEL SYSTEM

- a. Engines must remain with the fuel injector or carburetor that was supplied with the engine from the factory. i.e. No interchanging a carburetor on an engine that came with a fuel injector. No aftermarket fuel injection and turbo chargers.
- b. Carburetor/fuel injection boot must fasten directly to head in the stock intake port location.
- c. Factory supplied air boxes and or aftermarket air filters maybe used with OEM velocity stacks. After market air boxes, such as K & N or Kinser permitted.
- d. Fuel injection casting part lines must be visible upon inspection. Intake port area may be altered to match intake boot. Alterations not to exceed 3/8" into intake port.
- e. Only one fuel monitoring device can be used, but may not include any additional boxes, modules, or devices to alter motor function.

7. IGNITION SYSTEM

- a. OEM stock ignition system only. Oxygen sensors or components added will not be permitted. Components added to allow traction control will not be allowed. Bazzaz fuel performance devices will not be allowed.
- b. Alternator recommended but not mandatory.
- c. Wiring harnesses must be left exposed for easy inspection.

8. FUEL

- a. Any type of manufactured pumped gasoline including ethanol based fuels such as E85 will be allowed.
- b. No nitro or nitrous oxide.

9. OTHER

- a. Engine must be in production for a designated time period to determine its competitive relationship with our current motor program.
- b. Any major changes to the existing engine by the manufacturer must be reviewed by the STARS Board Officials before approval.
- c. All electronic and/or computerized wheel spin and/or ignition retardation and/or acceleration limiting and/or traction control devices of any type will not be permitted.
- d. At NO time will there be any type of ping control devices, dial a chip controls, timing controls, or any modifications to the ignition control boxes, distributors, or any other part of the Ignition System. This includes any add on component or components inside or outside the cockpit of any competitors racecar. There shall be NO driver controlled wheel spin, timing or fuel delivery control devices in the cockpit area of any racecar.

ENGINE TECH PROCEDURES

- a. Carburetors or Fuel Injection and all 4 spark plugs must be removed before checking compression.
- b. After ten (10) compression revolutions of cranking:
- c. Cylinder cranking compression- minimum 100p.s.i.
- d. Maximum 220 p.s.i. per cylinder average of 4 cylinders, no variance
- e. Compression to be taken within 15-45 minutes following feature event
- f. Measured with a Snap-On compression gauge, part number EEPV303A, with adapters EEPV304A, EEPV306A or MT26J200, EEPV305A.

10. WEIGHT

- a. All cars following “600cc Motor Program” must weigh a minimum of 1100 lbs, with driver after race.
- b. No weight outside of car body, i.e. on nerf bars.
- c. Hood will be clearly marked with cc displacement and minimum weight as outlined in Engine Specification.
- d. This weight program will be monitored for parity and competitiveness and may be changed at the discretion of MODIFIED LITE STAR’S CHAMPIONSHIP TOUR.

11. BORO & STROKE CHART

			Boro	Stroke
GSX-R 600	600cc	1997-2000	65.5	44.5
	600cc	2001-2003	65.5	44.5
	600cc	2004-2005	67.0	42.5
	600cc	2006	67.0	42.5
	599cc	2007-2014	67.0	42.5
Honda CBR 600 RR	599cc	2003-2004	67.0	42.5
	599cc	2005-2006	67.0	42.5
	599cc	2007-2008	67.0	42.5
	599cc	2009-2011	67.0	42.5
	599cc	2014	67.0	42.5
Yamaha YZF600R	599c	2001-2003	62.0	49.6
	599c	2004-2006	62.0	49.6
	599c	2007	62.0	49.6
Kawasaki ZX-6R	636cc	2003-2004	68.0	43.8
Kawasaki ZX-6R	636cc	2005-2006	68.0	43.8
Kawasaki ZX-6RR	599cc	2003-2006	68.0	43.8
Kawasaki ZX-6RR	599cc	2005-2006	67.0	42.5
Kawasaki ZX-6R	599cc	2007-2008	67.0	42.5
Kawasaki ZX-6R	599cc	2009-2010	67.0	42.5
Kawasaki ZX-6R	599cc	2011-2014	67.0	42.5

NOTES

- a. Weight allocations for all engine programs can be reviewed by the governing body, based on track performance and may be altered to suit the competitive nature of modified lite racing.
- b. All other Modified Lite STARS rules apply.