

9.3 TECHNICAL INSPECTION

- a) All turn signals, luggage racks and mirrors must be removed. Non-essential brackets, braces, grab rails, and chain guards may be removed. Center and side stands must be removed.
- b) Parts of the motorcycle that have sharp edges or corners and that present a cutting hazard must be smoothed or covered with at least 1/8 inch of rubber or other approved padding. These parts include, but are not limited to, foot controls and side stand lugs.
- c) The motorcycle seat or fender must extend rearward beyond the line drawn vertically through the rear axle.
- d) If used, oil coolers must be securely mounted in a protected area. Manufacturer-approved oil lines or properly installed aftermarket lines and fittings must be used.
- e) An unbreakable catch tank or reservoir of at least 6-oz. capacity must be provided for **any** breather hoses venting the following: cam box or top end, crankcase, primary, gearbox, oil tank, and radiator or coolant tanks. Catch tanks must be situated so they will not normally overflow unless more than two-thirds full. Liquid-cooled machines must use **only water** or "WaterWetter" as a coolant, and a separate 6-oz. catch tank must be provided.
- f) **Oil containment.** Oil containment systems are required on all roadracing machines. Oil containment pans on wet-sump engines must be designed to hold the capacity of the engine sump with nominal reserve. Material used must be durable, fastened safely and removable for inspection if required. The pan must have a retaining dam at the rear. Two-stroke and dry-sump machines must use a pan with a minimum capacity of one quart, or approved oil-absorbing material with a screen backing and fastened securely. Oil-absorbing material, securely retained in the bottom of the pan, is **strongly recommended**. All oil containment systems are subject to approval by technical inspection.
- g) Kickstarters may not be retained on roadracers, except in Class C and Pre-1940 on handshift machines only. The kickstarter may be retained on supermotard type machines, provided the lever is equipped with a secondary restraint, such as an elastic band.

9.4 LOCKWIRE REQUIREMENTS

Because historic racing motorcycles have unique characteristics of construction, AHRMA has developed specific lockwiring requirements for roadracers. As a general rule of thumb, "If in doubt, lockwire it." **Note: Only stainless steel lockwire may be used. The following regulations apply in addition to those listed above.**

- a) Primary case filler, drain and level-check plugs must be lockwired.
- b) Crankcase filler, drain and level plugs must be lockwired.
- c) Transmission filler, drain and level-check plugs must be lockwired.
- d) Any primary case, crankcase or transmission inspection plug must be lockwired.
- e) Any primary case, crankcase or transmission overflow or vent hoses must be lockwired.
- f) Oil filter nuts and oil filter plugs must be lockwired.
- g) Fuel tank overflow lines must be secured and have a catch bottle or one-way valve provided.
- h) Lockwiring of carburetor drain plugs, or securing with a fuel-proof sealant, is encouraged.
- i) All flexible oil lines must be a reinforced oil and gas resistant hose, and must be secured by lockwire as secondary security, in addition to a swaged fitting or hose clamp. **Total-loss oiling systems must be equipped with unbreakable catch bottles and/or a "select pad" diaper system.**
- j) All fuel and oil lines must be securely clamped or secured by other acceptable means, and will be pull-tested during tech inspection.

- k) All fork drains must be safety wired or securely taped.
- l) Exhaust systems must be securely mounted and bolts lockwired. A secondary security system is encouraged and may be required at the Tech Inspector's discretion.
- m) Brake torque arm bolt lockwiring is required.
- n) If not lockwired, axle nuts must be secured with a cotter pin or other acceptable means.
- o) Foot brake pedal pivot bolts and nuts must be lockwired.
- p) All brake rods and cables with threaded adjusters must be wired or cotter-pinned to prevent the loss of the adjuster nut.
- q) All throttle cables must be secured to the throttle housing by lockwire.

9.7.2 ENGINES

- a) Engines of **any** type falling into the classes listed may compete.
- b) Engines must be naturally aspirated (no turbos). Superchargers are allowed only on Pre-1940 GP machines if original equipment.
- c) Allowable overbore is a class's maximum displacement plus the following limits, or the specific machine displacement, as in the performance-indexed classes (such as 200 Grand Prix and Classic Sixties 650): Cylinders may be bored to a **maximum** of .080", singles; .060", twins; .040", triples; and .020", fours. To determine displacement limits, .080", .060", .040" and .020", as appropriate, shall be subtracted from the actual bore prior to calculation. Note: These limits **do not** apply to Class C and Pre-'40 classes, which have a maximum overbore of .080". BOT is allowed a maximum overbore of .040" (1 mm), SOS .060" (1.5 mm).
- d) The formula for calculating engine displacement in any class is: Bore x bore x .7854 x stroke x number of cylinders.
- e) A 6-oz. **minimum** catch tank or reservoir must be provided for any breather hoses venting the following: cam box or top end, crankcase, primary, transmission, oil tanks, and radiator or coolant tanks. Such catch tanks must be situated so that they will not normally overflow.
- f) Total loss primary chain oilers **must be equipped with a system to prevent spillage onto the track.**
- g) All fluid plugs and fittings with oil or coolant behind them **must be securely fastened or safety wired.**
- h) Liquid-cooled motorcycle engines **must use only water** or "WaterWetter" as a coolant, and a separate 6-oz. catch tank must be fitted.
- i) Machines with chain-driven primary must have a chain guard.
- j) Conversion to toothed-belt primary drive is encouraged as a safety measure.
- k) Hydraulically assisted clutches are prohibited.

9.7.4 TANKS

- a) All tanks, whether for fuel, oil or coolant, **must be leak-free and securely mounted.**
- b) Fuel tanks **must be fitted** with readily accessible shut-off valves in working order.
- c) Positive clamping is **mandatory** on all oil, fuel and coolant line connections. Slip fits are not permitted.

9.7.5 TIRES & RIMS

- a) Roadracing tires must be of modern racing compound only (DOT type permitted), no slicks, soft rain tires or hand cut slicks are permitted in vintage classes. Tires must be treaded and not excessively worn. SOS, BOT and Sound of Thunder entries may use slicks, DOT tires or rain tires. If the class or particular motorcycle is required to run under Supersport rules, only DOT tires or rain tires may be used. Riders should refer to their specific class rules to determine the type of tires legal for

that class.

- b) Wheels must be wire spoke type in Classic, Grand Prix and Sportsman categories. Spokes must be in good condition. Formula classes may use period cast wheels. Astralite (stamped) type wheels are prohibited.
- c) Tire warmers are prohibited on vintage motorcycles with treaded tires.

9.7.7 BRAKES

- a) Efficient front and rear brakes are required.
- b) Disc brakes, where allowed, must be of the period; steel, rigid-mounted type; maximum diameter 12 inches. Caliper must be the two-piston period type. Discs permitted only in Sportsman and Formula categories—single front disc or drum in Sportsman 750, Historic Production and Formula 250; dual front discs or drum in Formula 500 and Formula 750. All GP and Classic classes must use front drum brakes.
- c) Any type of period drum brake is acceptable. Hydraulically operated drum brakes are prohibited. Refer to Class C, Pre-1940 and Classic Sixties rules for restrictions.
- d) Rear discs are permitted, provided they are period equipment. Rear discs are not permitted in Classic Sixties, Class C and Pre-1940 classes.
- e) Air scoops, if fitted, must have screens and be clear of all working parts.

9.7.8 HANDLEBARS & CONTROLS

- a) Handlebars must have a minimum width of 18 inches and a maximum width of 32 inches (except Class C and Pre-1940).
- b) Handlebars, levers and the rider's hands must have at least 1 inch clearance between the fuel tank or enclosed-type fairings, and at least 2 inches with cut-out type fairings.
- c) Handlebars shall permit the front wheel to be turned at least 20 degrees to each side from a straight-ahead position.
- d) Hand control levers must have ball ends at least 1/2-inch in diameter.
- e) All controls must operate effectively and reliably.
- f) All foot controls must be free from sharp or ragged edges.
- g) Steering dampers may be added or changed.
- h) All motorcycles must be equipped with a functional handlebar mounted kill switch. If the motorcycle is equipped with a magneto where an operational kill switch cannot be fitted, then the carburetor settings must be such that a running engine shuts off when the throttle is fully closed.
- i) Throttles must be self-closing. All motorcycles that do not have a self-closing throttle, or machines on which a self-closing throttle cannot be used, must be equipped with a deadman switch mounted on the handlebar and attached to the rider.

9.7.9 FOOTRESTS

- a) Footrests must be positioned for ready access to applicable controls.
- b) Footrests may fold up and rearward at a 45-degree angle, but must be prevented from folding accidentally.
- c) Only one pair of footrests may be fitted per machine.
- d) Footrests must be free of sharp or cutting edges.

9.7.10 FAIRINGS

- a) Fairings, if used, must be mounted at no fewer than three points.
- b) Fairings must not extend forward of a vertical line drawn through the forward-most part of the front tire. The front wheel must be visible from the side and it must be possible to see the rider completely, in the normal riding position, from either side and from above with the exception of the forearms.
- c) No streamlining may be attached to the rider or the helmet. Leathers with "aero humps" are permitted.
- d) Dustbin fairings are permitted only on pre-1957 GP-class roadracers.

e) Period fairings only. No fairings in Sportsman classes.

9.7.11 **FUEL**

- a) Gasoline only; maximum 115 octane [using formula $(R+M)/2$].
- b) Race gas available to all competitors at each event will be used as a standard for testing. Street gas with boosters or additives will be illegal if it exceeds the standard.
- c) No fuel may be carried on a motorcycle except in tanks securely mounted for that purpose.

9.7.12 **EXHAUST NOISE**

- a) Sound testing will take place at all AHRMA national events. This will be a pass-by test at a section of the circuit where machines are under full throttle. As dB(a) levels differ from circuit to circuit due to background and distance, only the worst offenders will be notified. Failure to meet track-imposed noise limits may result in disqualification from the day's event and no refund of entry fees. These results will be posted and published in Vintage Views. At tracks where noise limits are in effect, AHRMA will adhere to the track's policy.
- b) All two-stroke machines must compete with effective silencers.
- c) Exceptions may be granted for exhibition purposes only.

9.7.13 **EXHAUST SYSTEMS**

- a) Period style exhaust systems are encouraged.
- b) All exhaust systems must exit toward the rear of the motorcycle.

9.7.14 **CARBURETORS**

- a) Flat-slide or Lectron type and injection type carburetors are not permitted. "Power jet" and "pumper" type carburetors are not permitted unless such mechanisms are disconnected or removed. Fuel injection is not permitted. Period carburetors are encouraged. Smooth bore carburetors with concentric float bowls are not permitted, except where they were fitted as original equipment or supplied as factory kits on that model motorcycle. Modern replacement smooth bore carburetors are not permitted.
- b) A restrictor plate may be used where a maximum carburetor size is specified. A restrictor plate must be 1/8 inch thick ($\pm .010$ inch) and the bore no larger than the required maximum diameter.

9.7.15 **IGNITION**

- a) Conversion to solid-state (pointless) ignition is permitted (e.g., Lucas Rita). Electronic engine-management systems are not permitted. Any system that provides dynamic (vehicle in motion) electronic adjustments via rider selection or any other means is illegal.