



# PROTEST FORM

## REFER TO SEPARATE INSTRUCTIONS SHEET

This Protest Form **with Protest Fee** must be submitted to Registration within **30 minutes** of the posting time printed on the results for the class protested. Protest Fee will be returned if the protest is **UPHELD**.

**CMRA staff is prohibited from assisting in the preparation of a protest.**

Track: Hallett Date: 9-14-2019 Class Protested: 500SS End Race # from Event Schedule: 9

Name of Rider or Team Filing the Protest: Redline Racing Bike / Team #: 82

Name of Rider or Team Being Protested: FellonKnee Racing Bike / Team #: 52

### TYPE OF PROTEST and FEE (Check One Box Only):

☐ Rule Section 3.12 Scoring Protest - \$25 Protest Fee

What is wrong with the posted results? \_\_\_\_\_

☒ Class Suitability - Fee per Rule Section 8.1 Protest Fee: \$ 500 (To Be Filled In By CMRA Official)

What rule was violated? Rule Section: 6.5 Rule Book Page #: 31

Describe rule violation: Bike dln meet 500 Superstock Sprint Rules  
Medium Eligibility

Inspect Cam lift, bore + stroke, pistons, head for porting

**SIGNATURE of PROTESTING PARTY:** IRR

Sprint Protests must be signed by Racer or designated representative; Endurance Protests must be signed by Team Owner or Captain

### REGISTRATION OFFICIAL TO COMPLETE THIS SECTION

Time Signed Protest Form With Fee Received: 7:00 Posting Time Printed on Race Results: 7:09

Registration Official Signature: Kathleen Phillips Date: 9/14/19

### DIRECTOR OF COMPETITION TO COMPLETE THIS SECTION

☒ Protest UPHELD ☐ Protest DENIED

#### PROTEST FEE DISPOSITION:

☒ Returned to Protesting Party ☐ Transferred to Protested Party ☐ Retained by CMRA

Official Comments: Airbox + Throttle ~~bodies~~ Bodies  
are inconsistent with OEM components:

Velocity stack on left has been replaced with Right side short stack  
2) Throttle bodies have been bored. (See attached Rule Book Pages)

Director of Competition Signature: \_\_\_\_\_ Date: 10/2/19

Protested Party Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### CMRA USE ONLY

Cash \$: <u>500</u>	Check \$:	CC \$:	Entered in Accounting System:
Clerk Initials: <u>KP</u>	Check #:	CC Trans. #:	Entered in Timing & Scoring System:

Inspect valve size, milling of head

OEM Airbox inspection

Valve porting

stock displacement + compression ratios



Side number plate/backgrounds must be behind the rider on the machine tail or on the machine side fairings. The side number plate/background must be large enough to allow at least 1" of unobstructed number plate/background border to be visible with number installed. Side number plate/background and numbers on the machine tail may not wrap around onto the top or bottom of the tail when viewed from the side. Number plate/backgrounds installed on the machine side fairings must be positioned so that they are not obstructed by any part of the rider's body and must be clearly visible when the machine is in a vertical position.

Riders and Teams may run any stylized number font and color(s) deemed to meet minimum standards of legibility as judged by the Chief Technical Inspector. Numbers should be at least 6" high and allow visibility of the underlying background plate color. Numbers should be outlined or contrasting sufficient to distinguish them clearly from the background plate color. Riders are strongly encouraged to submit number plate/number design art to the Director of Competition for approval prior to having decals printed (or numbers painted on bodywork).

The final decision for number plate conformity and legibility rests with Event Officials. Riders not providing legible numbers will be required to modify the number plate/background, or numbers themselves.

## SECTION 6 - COMPETITION CATEGORIES AND CLASSES

### 6.1 Definitions

Competition machines will be classified according to actual displacement, degree of modification and performance index. For the purpose of better interpreting the rules, the following definitions are listed:

**Sprint Race** refers to a race for individual riders, usually between six and eight laps depending on track length and layout.

**Endurance Race** refers to a long-distance timed event for multiple riders sharing the same motorcycle, with pit stops to add fuel as well as change riders and tires. Events generally range from four to eight hours in length for the Championship Endurance Series, two to eight hours for the Ultra Lightweight Endurance Series.

**Category** refers to the general type of motorcycle in terms of the base machine and level of modification.

**Class** generally refers to a grouping based on engine size or performance within a category.

**Change** means the addition of aftermarket or "optional" parts or accessories designed to increase safety, performance, and reliability or reduce costs.

**Altered or Modified** means cutting, grinding, milling, porting, boring, drilling, bending, welding, brazing or soldering other than normally accepted maintenance and repair procedures.

**In reference to engines:** single, twin, triple and multi refer to 1, 2, 3 and 4 cylinders respectively.

**OEM** is defined as Original Equipment from the Manufacturer. OEM type is defined as aftermarket equipment manufactured to original specifications.

**Removed** is defined as unbolted - not cut off.

**Performance Index** occurs when a motorcycle is demonstrably faster or slower than others in its displacement group, and may, at the discretion of the Director of Competition, be assigned to another class.

All machines must conform to the Technical Inspection Requirements of Section 5.3.

### 6.2 Sprint Series Categories

**Formula 1, Formula 2 and GP** (or any subsection of a class that specifies "Formula Rules" or "GP Rules")

Machines that have no restriction other than displacement and configuration as outlined. **Must be based on US Production Machine where noted.**

#### Superbike

Machines intended for use on public roads in their origins with more than 1000 units available worldwide may be changed or modified, to any degree, with the following restrictions:

a) In Superbike the original combination of frame and motor must be maintained except in the case of similar models with directly interchangeable engines. Single cylinder machines may use any engine, frame, and fairing combination.

b) Grand Prix 2-stroke machines will only be allowed in A & B Superbike.



c) No reduction in OEM displacement is allowed for the purpose of meeting the displacement limits of a lower class.

d) **250 Superbike** machine engine modifications are limited to raising compression, use of any cams and use of any aftermarket carburetors.

### **Superstock**

There must be at least 1000 motorcycles available to riders, worldwide, per year and the machine must be generally available on the U.S. market with full EPA and DOT approval to qualify a machine for the Superstock categories. Canadian models, unless exactly the same as U.S. models, must run Superbike class.

Superstock machines are defined as original motorcycle manufacturers' equipment intended for use on public roads which are allowed to use an aftermarket or racing exhaust system instead of the stock exhaust system and other modifications as listed below.

Proof of eligibility must be provided by the rider or sponsor. The decision regarding the legality of any machine entered in a Superstock class is the responsibility of the Director of Competition with the assistance of the Technical Advisory Committee. The rider or sponsor of any machine is responsible for producing a service or owner's manual with all part numbers, specifications and other material required to prove its legality. Legality will be determined based upon manufacturers' specifications (or comparison of similar OEM parts) for the year, model and make of the machine entered.

Following is a list of the only things which should or may be done to a Superstock machine:  
Miscellaneous

- a) Grab rails, horns, reflectors and outer rear fender, and helmet locks may be removed.
- b) Turn signals, cruiser pegs, and luggage racks must be removed.
- c) Headlight and tail/brake light housings may be removed.
- d) Cooling fan assemblies may be disconnected and/or removed on water-cooled machines. Disconnection must be made at stock connectors.
- e) Aftermarket or kit wire harnesses are allowed.
- f) Passenger foot pegs and brackets may be removed.
- g) Rider foot pegs and brackets may be changed or modified.
- h) Handlebars may be changed or altered.
- i) Instruments, instrument brackets, switches, and associated cables may be removed and/or replaced by aftermarket parts. Original combination instrument/ front fairing brackets may be replaced with aftermarket parts. Original rear subframe may be replaced with aftermarket rear subframe of aluminum or other metal. No composite materials are allowed for subframes.
- j) Helmet and bungee hooks may be removed from the sub frame. Holes may be drilled in the sub frame to act as a weak point in the event of a crash but the relief holes must be drilled behind where the rider sits and the metal removed must be replaced by a bolt. The frame and/or swing arm may be polished.
- k) Stand studs or hooks may be added to the swing arm, stand studs that do not require welding (or gluing etc.) or cutting may be added to the front forks.

#### **Tires**

- l) Tires must be DOT legal or road racing slicks; DOT-approved tires must have an S or higher speed rating. Rain tires can only be used if the event is declared wet by the Director of Competition. All tires must be used as provided by the manufacturer with no modification of their original molded tread pattern; grooving or altering any tire in any manner is prohibited.

#### **Bodywork and Fuel Tank**

- m) Bodywork must be used which is identical in shape or only varies slightly from original design. The tail section should be similar to the original but the profile may differ. A "superbike seat" is allowed (i.e., the seat base is molded into the tail section). Machines not originally equipped with bodywork may use any bodywork.

- n) Alternative bodywork fasteners may be used (e.g., DZUS fasteners).

- o) OEM fuel tank must be used. OEM fuel caps may be modified to eliminate the key; hinges may be trimmed to allow cap to remain open and not interfere with fueling. Aftermarket screw off type gas caps are allowed so long as they do not increase the orifice size compared to the stock cap. Baffles may be removed from filler necks provided external filler is not modified in any way.

#### **Suspension, Geometry, Wheel Spacers and Wheels**

- p) Rear shocks may be changed or modified. Fork springs may be replaced with aftermarket springs, and fork oil may be changed. Stock internal parts of forks may be changed to alter damping characteristics. Aftermarket or OEM fork tubes from another make and model may be used as long as they are the same dimensions as stock. The original fork sliders must be used. To



allow external adjustment of fork springs, fork caps may be changed. Suzuki TL models are allowed to use aftermarket linkages that allow for mounting of a standard style rear shock replacing the stock rotary damper setup.

q) The triple clamp may be replaced with an aftermarket one provided it does not alter the geometry of the machine and is nonadjustable.

r) Captive wheel spacers are allowed as is replacement of the speedometer drive with a spacer.

s) SV650 may use a 17" x 5.5" OEM rear wheel from any other Superstock make and model.

#### Brakes

t) Master cylinders may be replaced with any OEM master cylinder regardless of type from any make or model. Aftermarket master cylinders are allowed but are restricted to same type and as close as possible to the OEM bore and stroke. Thumb operated rear brake systems are allowed.

u) Steel braided or Kevlar brake lines may be used. Brake pads may be changed. Brake pads may be beveled. Brake rotors may be changed to "wave" or "petal" type rotors of the same material and maximum diameter as the OEM rotors. Whether OEM or aftermarket, rotor edges may not be modified. Rear brake rotors may be modified (with the exception of edges) so long as modifications leave the rear brake functioning. No carbon fiber, cast iron or other exotic materials are permitted for brake rotors unless stock. No oversized rotors.

#### Intake and Carburetor

v) The OEM air box must be used and an OEM type filter must be properly installed (a K&N style direct replacement filter is an acceptable OEM type). The only modification allowed is the sealing of air box drains. If the filter acts as part of the air box housing the replacement filter must not have a larger opening than stock.

w) If the crankcase ventilation hose is relocated from the air box it must be routed to a catch can and the stock air box hole must be plugged.

x) The OEM carburetor must be used. Carburetor jets and needles may be changed. Aftermarket jet kits may be used. Resizing of air metering holes in CV carburetor slides is allowed. Aftermarket carburetor heat shields are not allowed.

#### Ignition and ECU

y) Spark plugs may be changed to aftermarket parts.

z) Electric ignition cutout shift devices are allowed, however they may not physically move any portion of the shift mechanism.

aa) 49-state model ignition components may replace those same components on California-only model machines of same brand, year, and model.

bb) The ECU/Black Box may be replaced with any aftermarket unit or modify to any extent the stock unit.

cc) Ignition timing may be altered by slotting the ignition trigger mounting plate or by replacing the stock ignition rotor with an aftermarket rotor.

#### Exhaust

dd) The exhaust system may be replaced with an aftermarket system. Pipe wrap is allowed.

#### Clutch and Drivetrain

ee) Clutch plates and clutch springs may be changed to aftermarket parts.

ff) Chain and/or sprockets may be changed. Chain size may be changed. Shaft drive machines may change gear ratios. The chain guard may be removed. Machines originally equipped with a drive belt may change to a chain drive system.

#### Engine and Transmission

gg) OEM Spec cams must be used. Cam timing is allowed via the slotting of cam sprockets. Press-on cam sprockets may be changed to OEM spec bolt style. Manual cam chain tensioners are allowed.

hh) 1mm Over bores are not allowed on any machine manufactured after 1995 (this means model year 1996 and up) unless offered by the manufacturer as a maintenance item. Aftermarket non-OEM valve seats are not allowed. Head and/or base gaskets may be replaced with aftermarket parts and do not need to be to stock spec. Aftermarket gaskets may be utilized on other engine parts. Multi-angle or radius valve jobs are allowed as normal maintenance as long as machining is confined to the actual valve seat insert and does not extend into the port or combustion chamber. Valve seat to port blending is not allowed. Valves must meet OEM specifications. For 2016 model year and later machines, no material may be added to or removed from the cylinder head or cylinders.

ii) No bead blasting (or blasting using any other medium) is allowed on any internal engine part except gasket surfaces.



jj) Machining of gasket surfaces of cylinder heads, cylinders, and engine cases is allowed. All internal and external engine parts must remain stock without modifications, no addition or removal of metal is allowed, except as mentioned in this section. No surface treatments are allowed. Engine must remain at stock displacement and compression ratios except as outlined above. The allowances in this paragraph should be used for maintenance only. These allowances should not be used for performance enhancement. For 2016 model year and later machines, no material may be added to or removed from the cylinder head or cylinders.

kk) The transmission must use the stock OEM parts for that model. Shifter return or detent springs may be replaced with aftermarket springs.

ll) 49-state model engine components may replace those same components on California-only model machines of same brand, year, and model.

#### Endurance Modifications

mm) Endurance Modifications, if allowed per Section 6.5, will be allowed on machines also used for Superstock sprint competition as long as those modifications do not, as determined by the Director of Competition with the assistance of the Technical Advisory Committee, create a performance advantage.

#### Entirety of Superstock Allowances

The items above constitute the entire realm of deviation from showroom stock for Superstock classes. If it does not mention you CAN do it, then you CAN NOT.

### Modern Classic

Motor and frame must be 2008 model year or older; newer machines that are identical to 2008 model year or older machines are eligible.

Machines must use the original combination of frame and motor.

The use of components and/or modifications that were not available in 2008 is prohibited.

Fluid retaining lower per CMRA rules required.

Modern classic machines are not allowed to ride down a class.

The entrant is responsible for proving machine eligibility for Modern Classic.

The Director of Competition, with the assistance of the Technical Advisory Committee, will make the final determination on machine eligibility for Modern Classic.

**Note – the year-cutoff for Modern Classic will be reevaluated each year by the Technical Advisory Committee.**

### Classic

Motor and frame must be 1998 model year or older; newer machines that are identical to 1998 model year or older machines are eligible.

Machines must use the original combination of frame and motor, with the following noted exceptions: A larger displacement motor from the same series may be installed. (e.g., GSX-R1100 motor in GSX-R750 frame).

The use of components and/or modifications that were not available in 1998 is prohibited.

Any bodywork allowed.

Standard maintenance over-bores allowed up to 2mm.

1998 or older 125 Grand Prix machines are eligible for Classic. No updating of GP machinery beyond 1998 specifications is allowed. This includes suspension and motor updates.

Fluid retaining lower per CMRA rules required.

**Note - the year cutoffs above for Classic will be reevaluated each year by the Technical Advisory Committee.**

1998 and older machines eligible for Classic and meeting Superstock or Superbike regulations may participate in the next Superstock or Superbike class down, with the exception of D Superstock, 250 Superstock and 250 Superbike, based on the displacement limits of the specific class. For example, a 1998 or older Superstock legal Suzuki GSX-R750, may run in C Superstock.

**Note – the year cutoff for Classic machines eligible to run down-class will be reevaluated each year by the Technical Advisory Committee.**

The Director of Competition, with the assistance of the Technical Advisory Committee, will make the final determination on machine eligibility for Classic.

### Motard

Machines may be single or twin cylinder based in Motard. The original machine must have been intended for at least partial use off-road, in a manner often described as “Dirt Bike”, “Dual Purpose” or “SuperMoto”. The machine cannot be a vehicle designed for full time street use. Examples of eligible machinery are Yamaha YZF250, Honda CRF450, Suzuki RM250.



Team Fellonknee - 2018 Kawasaki Ninja 400 protest tear down.

All seal paint marks were undisturbed prior to disassembly. Remove and investigate air box. Air box velocity stacks are equal length. According to FIM page E1-3 one velocity stack has been modified.





After removal of bottom air box half we investigated the throttle bodies. Although there is no FIM spec for throttle body bore the throttle bodies were modified compared to stock. The modified throttle bodies are 2.5 millimeters larger than the stock standard.





Remove engine to gain access to the cylinder head and components. Remove valve cover and side engine cover. Setup valve timing equipment and check lift and duration of camshafts. Camshaft lift difference is negligible compared to FIM spec page E6-1. Although there is no FIM spec for duration listed the camshaft duration difference is negligible compared to none stock standard.

Valve and valve angles are unchanged. No intake nor exhaust port modifications detected. There does not appear to be any cylinder or cylinder head gasket surface modifications.











No modifications detected for bore and stroke according to FIM page E4-4, E9-1 and E11-1. Pistons appear to be stock. Head gasket is modified.



Summary- the only modifications we can find that are questionable are the air box velocity stacks and the bored throttle bodies.