



USCA
UNITED STATES CLASSIC RACING ASSOCIATION INC.

2023 RULEBOOK

Rules and Regulations for Road Racing Motorcycles and Sidecars,
Endurance Road Racing, MotoGiroUSA and Pewter Run events

www.race-usca.com

Philosophy, Objectives, and Protocols of the USCRA Rules and Regulations (“RR”)

The rules and regulations are intended to promote the following objectives:

1. The preservation and racing use of historic racing motorcycles, and racing motorcycles built after the classic period that are consistent in design and construction with racing motorcycles actually built in the applicable periods.
2. Foster close and competitive racing in a spirit of sportsmanship and camaraderie.
3. Accessibility of classic motorcycle racing to interested enthusiasts.
4. Most importantly, to have **fun**.

All specific Rules and Regulations (RR) set forth in this Rulebook are to be read and enforced in the context of the above objectives. To that end, any and all provisions of the RR may be amended or changed by the USCRA upon reasonable notice, as required to maintain the intent and reality of the objectives in the sole and exclusive discretion of the USCRA. The agreement to this provision by all competitors, entrants and owners shall be confirmed by their participation where these rules govern the event.

Current (paid) members of the USCRA are encouraged to submit rules proposals. All rule change proposals must be e-mailed or sent via postal mail to the addresses indicated below by December 1. The full list of rule proposals will be publicly posted on the USCRA website, Yahoo Group and Facebook Group by December 1 for member review, after which there will be a two week period for written comments and suggestions to be submitted to the Rules Committee (RC). The Rules Committee will review all written commentary submitted and may modify or add any proposal(s) accordingly during the rules meeting.

The following addresses should be used for rules proposals and comments /suggestion on rule proposals:

- The e-mail address is: rules_uscra@yahoo.com
- The postal address is: USCRA Rules c/o Doug Donelan
14 Linhurst Place, Rockville Centre, NY 11570

Note: The Rules Committee may add or modify any proposal(s) during the Rules Committee meeting.

Index

1	Names and Addresses	1
1.1	Rules Committee (RC)	1
1.2	Definitions of Officials	1
2	History and Types of Events	3
3	Summary of Ratified Rule Changes for 2023	4
4	Road Racing Rules	5
4.1	Rider Requirements and Conduct	4
4.1.1	Rider Infractions and Penalties	7
4.2	Rider Suspension	12
4.3	Protests	12
4.4	Machine Eligibility	13
4.5	Entries and Refunds	13
4.6	Motorcycle Safety Requirements	14
4.7	General Rules Applicable to All Road racing Classes	16
4.8	International Number Plate Color Schemes (per F.I.M)	18
4.9	Championship Points	18
4.10	Race Procedures	19
4.10.1	Flags	19
4.10.2	Standard Start	20
4.10.3	Red Flag Restart	20
4.10.4	Bump Start	21
4.10.5	Le Mans Start	21
4.10.6	Multiple Wave Start	21
5	Solo Road Racing Classes	22
5.1	Class Overview Chart	22
5.2	Class A Vintage (Board Track)	23
5.3.1	Pre 1950	25
5.3.2	Pre 1965	25
5.4	50cc Road Racing Rules	26
5.4.1	Classic 50cc GP	26
5.4.2	Supervintage 50cc	27
5.4.3	Modern 50cc	27

5.5	Period I Grand Prix Classes: 200 GP, 250 GP, 350 GP, 500 GP, OPEN GP,	28
5.5.1	Classes based upon displacement	28
5.5.2	100 GP	29
5.5.3	Rules applicable to all Period I classes	29
5.6	Period II Classes (Supervintage): Ultralight, Light, Heavyweight, Formula CB350 (F-CB350)	30
5.6.1	Ultralightweight Supervintage	30
5.6.2	Lightweight Supervintage	30
5.6.3	Heavyweight Supervintage	31
5.6.4	Formula CB350 (F-CB350)	31
5.6.5	Rules applicable to all Period II classes:	32
5.7	Period III Classes: Middleweight Production, Formula RD	32
5.7.1	Middleweight Production	32
5.7.2	Rules applicable to Middleweight Prod.	33
5.7.3	Formula RD	33
5.8	Period IV Classes: Formula 1,2,3, Open and Formula Middleweight	36
5.8.1	Formula 3	37
5.8.2	Formula 2	37
5.8.3	Formula 1	37
5.8.4	Open	37
5.8.5	Formula Middleweight	37
5.8.6	Rules applicable to all Period IV classes	38
5.9	Period 5 Classes: P5 Middleweight, P5 Heavyweight	40
5.9.1	P5 Middleweight/Heavyweight	40
5.10	Modern Classes: Formula 400, Formula Twins	44
5.10.1	Formula 400	44
5.10.2	Formula Twins	54
5.11	Special Classes	62
5.11.1	Formula Singles	62
5.11.2	Modern 125/250 GP	62
5.11.3	Euro Cup	62
5.11.4	Formula Flyweight	62
5.11.5	Masters/Super Masters	63

6	Sidecar Road Racing Classes	63
6.1	Classic Sidecar Outfits	63
6.2	Supervintage Sidecar Outfits	64
6.3	Rules Applicable to Both Classic and Supervintage Sidecar Outfits:	65
6.3.1	Technical Regulations	65
6.3.2	Additional Regulations	67
7	Endurance Road Racing Rules	68
8	MotoGiroUSA Rules	69
8.1	History	69
8.1.1	Introduction	70
8.2	Regulations	71
8.3	Starting Order	71
8.4	Time Cards and Controls	72
8.5	Check Points	73
8.6	Time Keeping	72
8.7	Ability Trials	74
8.8	Penalties	74
8.8.1	Ability Trial Penalties	74
8.8.2	Fixed Penalties	75
8.8.3	General Penalties	75
8.8.4	Exclusion from Classification	75
8.9	Finishing Positions	75
9	Pewter Run Rules	76
9.1	History	76
9.2	Machine Eligibility	76
9.3	Classes	76
9.4	Routes	77
9.5	Scoring	77
9.6	Entries	77
9.7	Regulations for Riders and Machines	78

Index (continued)

9.8	Regulations for the Meeting	79
9.9	Awards	79
9.10	Spectators	80
10	Reference Materials	83
10.1	Final Drive Gear Ratio Chart	83
10.2	Measurements and Equivalents	84
10.3	Imperial/Whitworth Conversions	85
10.4	Wheel/Tire Sizes, Equivalents and Designations	86
10.5	USCRA Road Racing Classes Bump Chart	87
10.6	Technical Inspection Form	88
11	Miscellaneous	89
11.1	2022 USCRA Class Champions	89
11.2	Disclaimer	90
12	Provisional Classes for the 2023 Season	91
11.1	Grom Prix	

1 Names and Addresses

Director:

Robert Coy
441 Athol Road
Richmond, NH 03470
Phone 413.498.4433
E-mail: raceuscra@yahoo.com

Rules Committee/Rulebook:

Doug Donelan
Phone 516.851.7508
E-mail: rules_uscra@yahoo.com

Referee:

Registration & Membership:

Eve Stein/Christina Diane Stein
5 Brook Bend Place
Oakdale, CT 06370
Phone 860.447.2001
Fax 860.447.1201
E-mail: uscra_reg@yahoo.com

Promotion, Public Relations & Social Media:

Doug Donelan
Phone 516.851.7508
E-mail: cemoto68@yahoo.com

1.1 Rules Committee (RC)

Member	Discipline	Phone	E-Mail
Bob Coy	(All)	413.498.4433	raceuscra@yahoo.com
Doug Donelan	(Chrm.)	516.851.7508	rules_uscra@yahoo.com
Frank Camillieri	(RR,Giro)	603.887.2044	frank@stonemachine.com
Pete & Denise Talabach	(RR,SC,Giro)	508.376.4446	oldbikenut@aol.com
Rick Patroliia	(RR)		rpatroliia@comcast.net
Sam Stoney	(RR)		s.stoney@gmail.com
Marcus Poisson	(SC)		marcuspoisson@yahoo.com
Jonathan Spinney	(SC, RR)	508.498.2349	jdspinney@gmail.com
Kevin Dinsmoor	(RR)	860.622.1760	kd@es-ct.com
Dave Evans	(RR)	860.228.1554	oldbikeracing@juno.com
John Gurley	(RR)		

Key: RR (Road Racing), SC (Sidecar), PR (Pewter Cup), Giro (MotoGiroUSA), Chrm. (Chairman)

1.2 Definitions of Officials

Race Official- A Race Official encompasses any/all authorized personnel, including, but not limited to: the Director, Referee, Starter, Pit Steward, Race Director(s), Scorers, Corner Marshal(s) and Race Control and Technical Inspectors.

Director- Sole executive officer of the USCRA.

Referee- Individual who ensures adherence to rules and arbitrate on matters arising from competition.

Race Director- Individual(s) responsible for all aspects of a race event.

Rules Committee (RC)- the body of individuals charged with overseeing the rules of the organization.

Registrar- Individual responsible for keeping official records.

Technical Inspector-Individual(s) responsible for inspecting all motorcycles and rider equipment at a race event.

Pit Steward- The individual responsible for allowing entry to and from the racetrack proper.

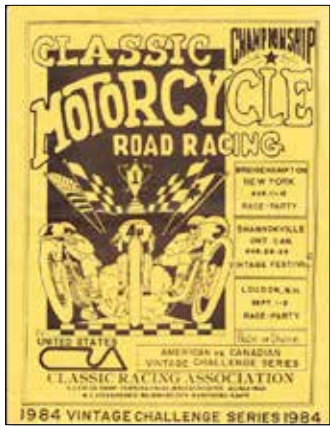
Starter- The individual responsible for displaying flags to start or end practice, qualifying and/or races.

Scorer- Individual(s) responsible for keeping a record of laps completed in a race.

Race Control- Individual responsible for management of Corner Marshals and safe operation of the race facility.

Corner Marshal- Individual(s) responsible for the safety of competitors stationed at various points around the race circuit.

2 History and Types of Events



USCRA event poster, circa 1984.

The USCRA can trace its roots back to the mid-1970's when a racer named Bob Coy who had been running the latest in road racing machinery, Yamaha TZ 350's and AMA Superbikes partnered with Rob Ianucci, who had just begun his racing collection. Together the two began to organize a few vintage races that were added to AAMRR programs run at the now defunct Bridgehampton Raceway on Long Island's east end. Bob continued to campaign his Norton Manx, entering it in many 'modern' events until the opportunity arose to organize and promote a full stand-alone vintage event. The year was 1981 and the USCRA had come of age from those early mid-70's roots as vintage became more popular.

The first stand-alone event took place at the Old Bryar Motorsports Park in Laconia, New Hampshire July 4th weekend of 1981. The event, known as the Belknap Cup Summer Vintage Festival, featured a weekend of classic racing machinery from the world of both motorcycles and automobiles. The event was successful enough to become a fixture in the Bryar schedule until the track was sold in 1990, renovated and renamed New Hampshire International Speedway. The Belknap Cup was re-named the Vintage Celebration. In 1990, NHIS took over the event and contracted the USCRA to run the motorcycle portion of the program. Within two years, the USCRA had grown that single stand-alone event into a full season of successful racing.

Staying true to the heritage of classic Grand Prix motorcycle road racing, the USCRA promoted the best of vintage racing machines including classes that were all but extinct in North America, namely Sidecars and 50cc Grand Prix. Today, from that limited mid-70's beginning, the USCRA is the oldest continually operating vintage road racing organization in the country and includes over 300 active members. All of our events are AMA sanctioned and participants must be licensed with the USCRA or another accredited racing organization.

The United States Classic Racing Association (USCRA) actively promotes four general types of events: Road racing on both proprietary built roadrace circuits and real roads courses like Gunstock and the Streets of Laconia, Observed Trials, Motogiro and Pewter Run touring events held on open public roads. In addition the club holds an annual banquet and participates in events held by other clubs primarily the VRRR (Vintage Road Racing Association), AMCRA (Atlantic Motorcycle Classic Racing Association), and WERA Vintage (Western Eastern Road racing Association). Members are welcome to participate in as many or few events as they choose, for road racing members there is a season long championship with points awarded at most events.

3 Summary of Ratified Rule Changes for 2023

- Sec. 4.1.5 (pg.6) Rider Requirements & Conduct- Modification & clarification of helmet standards
- Sec. 4.6 (pg. 4) Motorcycle Safety Requirements- Updated oil drain plugs/master link clip requirements
- Sec. 4.7.2 (pg.16) General Rules Applicable to All Road Racing Classes- Updated ruling on motard machine eligibility in 50cc and Formula Flyweight
- Sec. 4.7.8 (pg.17) Clarification of slick tire usage
- Sec. 10.1 (pg.91) Provisional Classes- Rules governing new "Grom Prix" class

USCRA SPONSORS AND SUPPORTERS



4 Road racing Rules

4.1 Rider Requirements and Conduct

NOTE: Interpretation and enforcement of all rules are subject to the discretion of the Director, the Rules Committee, the Referee and authorized technical inspectors.

1. All riders must possess a current and valid USCRA racing license to participate in USCRA road racing events. New riders are required to provide evidence of successful completion of an accredited road racing school. Returning riders are required to show proof of prior road racing experience in a recognized road racing organization and may be required to attend the USCRA Race School, at the discretion of the Director or other authorized race officials.
 - A. Participants of the USCRA Vintage Race School are required to become familiar with the rules set forth herein, and must adhere to all the rules and regulations set forth in this Rulebook.
 - B. The USCRA honors current and valid racing licenses from other recognized racing organization (including, but not limited to: AHRMA, AMA/FIMNA, CCS/ASRA, CMRA, LRRS, SRA, VRRRA and WERA). A participant with a current and valid license from any recognized racing organization may enter **one** USCRA event per season without being required to purchase a membership (license) in the USCRA.
2. All riders must provide proof of current medical insurance coverage and must be current AMA members, (CMA members participating in approved events are exempt from AMA membership requirement). All riders are required to fill out a medical information card and affix it to their helmet. Medical information cards will be made available at registration.
 - A. It is the responsibility of every competitor to notify race official of any medical condition that may be worsened by participation at that particular event. Permission to compete following such notification does not create an assumption of liability on the part of the official or sanctioning body. The Director, Referee and/or Race Director(s) reserve the right to prohibit any competitor from participating at an event as a result of a medical condition.
3. All participants must be at least 16 years old as of the day of the event.
4. Competitors must wear approved riding equipment consisting of leather gloves, leather jacket and pants that zip together or one piece leather suit and leather boots with a minimum height of 8" from the top of the sole and overlapping the pants. Back protectors are required for all riders and sidecar passengers participating in road racing events.
5. Helmets shall be full coverage with an attached face shield. Full face 'modular' or 'flip-up' helmets are prohibited. 'Tear off' or 'tear away' face shields are prohibited. Quick release helmet straps, unless original equipment, are also prohibited.

Helmets shall be full coverage with an attached face shield. Full face 'modular' or 'flip-up' helmets are prohibited. 'Tear off' or 'tear away' face shields are prohibited. Quick release helmet straps, unless original equipment, are also prohibited. Helmets must meet the certification standards as set forth in the AMA Rule Book (Sec. 32 F) with the exception that helmets only bearing DOT certification are prohibited. All helmets used in road racing must have been manufactured no more than 60 months prior to the date of the event.

All riders and sidecar passengers must display their assigned racing number in at least one place on his/her helmet. Size should be no smaller than 1" in height and be of a contrasting color to the helmet.

Any helmet that has been damaged or suffered a severe impact must be replaced and shall not be permitted for use in competition until sent to the manufacturer for inspection. The rider shall provide proof of inspection before the helmet is permitted for use in competition. It shall be the sole responsibility of the rider that the helmet is maintained in a good, safe and serviceable condition suitable for competition.

All helmets must pass technical inspection. Technical inspectors reserve the right to refuse the use of any helmet for use in competition, if in the opinion of that inspector the helmet appears to be unsafe for use in competition.

Technical inspection at the day of the event does not imply, certify or in any way warrant by the Technical Inspectors, the Director or any agent of the USCRA that the condition of the helmet is free from defects. Although the USCRA approves materials, it does not endorse nor guarantee specific products or manufacturers. Riders must rely on their own judgment in the selection of helmets and apparel for safety and durability. The purchase of these products and their use will not guarantee the prevention of serious head injury or death.

6. Sidecar passengers must meet all of the above requirements, including the successful completion of an accredited road racing school and/or receive adequate instruction from an identified, active and experienced sidecar passenger. Each passenger must be registered as the passenger of the sidecar being raced. A driver who takes a passenger onto the track who is not registered risks disqualification and/or suspension. Non-competitors are prohibited from riding on sidecars anywhere at any time within the designated event facility.
7. All events are held rain or shine unless the racing surface is impassable or unsafe as determined by race officials. Every competitor assumes responsibility and obligation to assess the safety aspects of facilities and individual conditions. And by his/her participation is accepting responsibility for all risks associated with motorcycle racing.

9. All travel on the race course will be one way, in one direction. Riders are prohibited from traveling backwards (counter-course) on the racing course, unless instructed to do so by race officials.
10. Any machine whose handlebars have touched the ground during a practice session or race may NOT continue in that practice session or race. Any machine that has crashed, must be re-teched prior to being permitted back on the race circuit for the duration of the event.
11. All riders must enter and exit the race circuit at designated areas.
12. All riders entering the race circuit must stay within the designated 'blend' area until they attain racing speed and can safely maneuver onto the racing line.
13. All riders exiting the racing circuit must signal their intentions, and pull off the racing line prior to exiting the track.
14. 'Burnouts', 'wheelies' and any other unsafe riding is prohibited on the racing circuit as well as in the paddock area.
15. The speed limit off the racing circuit is 15mph. This includes the paddock area, pit lane and access roads. This rule applies to all vehicles.
16. The use of controlled substances is strictly prohibited. The consumption of alcohol by anyone, anywhere inside the designated racing facility while the racing circuit is active is strictly prohibited.
17. Riders are responsible for the conduct of themselves and their crew. Rider's risk disqualification, suspension or other disciplinary action for any prohibited conduct. Children under 16 are prohibited on pit lane. All pets must be leashed at all times.

4.1.1 Rider infractions and Penalties

In the interest of encouraging safe and fair competition, and to set forth guidelines, the following list of potential infractions has been determined. Included are the extent of penalties that may be assessed to those who infringe these guidelines. It is the competitors responsibility to ride in a manner which does not cause danger to other participants.

NOTE:

- **A 'Race Official' includes any/all authorized personnel, included, but not limited to: the Director, Referee, Starter, Race Director(s), Scorers, Corner Marshal(s) and Race Control. Interpretation and enforcement of the following infractions are subject to the discretion of authorized Race Officials.**
- **No placing shall be recorded, nor points awarded to a participant issued a disqualification and/or suspension.**
- **Any infraction not covered in this Rulebook may be determined and enforced at the sole discretion of the Director and/or Referee.**

1. Abuse of Race Official/Volunteer

Abuse is defined as verbal cruelty with the intent to harm or frighten. Any type of verbal abuse will not be tolerated. The penalty for verbal abuse of a race official/volunteer will range from a disqualification from the race and/or other races at that event through to suspension from one or more USCRA events. A rider affected by the decision to impose a penalty has the right to appeal that decision.

2. Physical Assault

Physical assault is defined as the use of physical force with the intent to harm or frighten. Any act of physical assault will not be tolerated. The penalty is immediate disqualification from the event, ejection from the premises and possible involvement of law enforcement. Additional penalties may include, at the discretion of the Director, permanent expulsion from the USCRA. Any USCRA member affected by the decision to impose a penalty has the right to appeal that decision. Any non-USCRA member affected by the decision will be ejected from the premises and face permanent expulsion and possible involvement of law enforcement.

3. Failure to Obey a Race Official

Failure to acknowledge and/or comply with a Race Official is defined as a willful disregard of the authority and direction of a Race Official. The penalty for this infraction will range from immediate disqualification from the race, to suspension from one or more USCRA events, based on the severity of the infraction. The decision to any of this infractions is to be accepted as a statement of fact from which there is no right of protest.

4. Anticipated / 'Jump' Start

An anticipated or 'jump' start is defined as any forward movement of the motorcycle before the green flag drops to indicate the start of the race. A one-lap penalty will be added to the rider who is observed, by a Race Official, to have anticipated the start. The decision as to an anticipated start is to be accepted as a statement of fact from which there is no right of protest.

5. Crossing the Pit Out/Pit In Blend Line

A blend line infraction is defined as a rider crossing the blend line painted or otherwise indicated on the course at either Pit Out or Pit In, both on their out-lap or in-lap and at any time while on the course during practice or a race. The penalty for crossing the blend line will range from a verbal warning to a disqualification and/or suspension, depending on the circumstances of the infraction. A rider affected by the decision to impose a penalty has the right to protest that decision.

4.1.1 Rider infractions and Penalties (continued)

6. Reckless/Dangerous Riding

Failure to ride in a responsible manner such as to cause danger to other competitors is defined as reckless/dangerous behavior, included but not limited to: failure to provide adequate racing room; deliberately blocking, impeding or harassing another competitor; failure to pass safely; cutting the course; traveling counter-course or other unsportsmanlike conduct. A Race Official can report instances of reckless or dangerous riding in absence of another competitor lodging a formal protest. Reckless/dangerous riding also includes 'wheelies', 'burnouts' 'doughnuts' and 'endos' both on and off the race course. The penalty for this infraction will range from a one-lap penalty, disqualification from the race, and/or suspension from one or more US CRA events. A rider affected by the decision to impose a penalty has the right to protest that decision.

7. Cutting the Course

Defined as a rider, observed by a Race Official to deliberately cut the course by leaving the racing surface to gain advantage. If, due to circumstances, a rider is forced to cut the course to avoid contact with another rider or debris, that rider is required to relinquish any advantage of position gained. The penalty for this infraction may range from a one-lap penalty, disqualification from the race, and/or suspension from one or more US CRA events. A rider affected by the decision to impose a penalty has the right to protest that decision.

8. Passing Under a Waiving Yellow Flag

A rider, observed by a Race Official, passing another rider under a waived yellow flag, from the point of reasonable line of sight of the waiving flag until past the incident, is deemed to have passed under a waived yellow. If, due to circumstances, the overtaking rider is committed to the pass and cannot safely abandon the pass, that rider shall allow the overtaken rider to regain his original position as soon as possible after the pass. Failure to yield the position may result in a one-lap penalty added to rider concerned. Further penalties including disqualification and suspension may be imposed depending on the circumstances of the pass. A rider affected by the decision to impose a penalty has the right to protest that decision.

9. Failure to Obey a Red Flag

Defined as failure or a rider to signal, slow to a safe and controlled pace, proceed around the circuit and exit the course, when shown the red flag. The penalty for failure to obey a red flag may range from disqualification from the race, and/or suspension from one or more US CRA events. A rider affected by the decision to impose a penalty has the right to protest that decision.

4.1.1 Rider infractions and Penalties (continued)

10. Failure to Obey a Black Flag

Failure to obey a black flag is defined as failing to follow the procedures required of a rider who is shown the black flag, including signaling to other riders, slowing to a safe and controlled pace, and immediately getting off the racing line, exiting the racing surface and reporting to the nearest marshal. Failure to respond will result in immediate disqualification. Further penalties may include suspension from one or more US CRA events. The decision as to failure to obey a black flag is to be accepted as a statement of fact from which there is no right of protest.

11. Failure to Obey a 'Meatball' Flag

Failure to obey a 'Meatball' flag is defined as not reporting to the designated Race Official on the hot pit within one lap of the flag being shown. The penalty for not obeying the meatball flag is disqualification from that race. Further penalties may be imposed depending on the circumstances for the showing of the flag. The decision as to failure to obey a meatball flag is to be accepted as a statement of fact from which there is no right of protest.

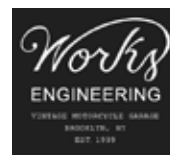
12. Ignoring a Checkered Flag

Defined as failing to acknowledge a checkered flag in a practice session or race. If a lapped rider crosses the start/finish line under a waving checkered flag, he/she must acknowledge the finish of the race or practice session, slow to a safe and controlled pace, proceed around the racing circuit and exit the course. If a rider is observed by a Race Official to have ignored a checkered flag, the penalties range from a verbal warning to disqualification from that race. Repeat offenders risk suspension from one or more US CRA events. The decision to any of these infractions is to be accepted as a statement of fact from which there is no right of protest.

13. Fueling During a Race

Deliberately adding and removing fuel during a race is prohibited, with the exception of a scheduled endurance race. The penalty for fueling during a race is disqualification from that race. The decision that a rider has deliberately added or removed fuel during a race is to be accepted as a statement of fact from which there is no right of protest.

US CRA SPONSORS AND SUPPORTERS



4.1.1 Rider infractions and Penalties (continued)

4. Failure to Re-Tech after a Crash

Defined as the failure to fulfill the requirement to have a machine pass technical inspection, as defined in the USCRA rules, after a crash. Any machine that has had a handlebar touch the ground due to incident on the course is required to re-tech before the machine is to be again taken out on the course, whether the tech sticker has been removed by the corner worker/pit-in staff or not. The penalty for failure to have a machine re-teched is disqualification from all subsequent races for the duration of that event. Further penalties may be imposed depending on the circumstances. The decision as to failure to have a machine re-teched is to be accepted as a statement of fact from which there is no right of protest.

15. Swapping Machines / Riders

All riders are required to start and finish a race on the same machinery. Swapping of machines for any reason, including a red flag delay and/or restart is prohibited. In addition, A rider (or riders in the instance of a scheduled endurance race) officially registered in a race is the only rider permitted to ride in that race. Swapping riders for a race is prohibited, unless explicitly authorized by a Race Official. The penalty for swapping machines/riders is disqualification from that race. The decision as to this infraction is to be accepted as a statement of fact from which there is no right of protest.

16. Failure to Signal Intent to Exit the Course

Defined as failure to raise an arm or extend a leg to indicate the rider intends to exit the course. The penalty for failure to signal intent will range from a verbal warning to further penalties to be determined and enforced by Race Officials, should the infraction involve putting other riders at risk, or for repeat offenders. The decision as to failure to signal intent to exit the course is to be accepted as a statement of fact from which there is no right of protest.

17. Failure to Stop for an Oil Check (when applicable)

Defined as failing to stop at either the Pit Out or Pit In oil check or proceeding onto the course or into the paddock without approval of a Race Official. This stop is mandatory if the Oil Check location is staffed, even if the rider does not intend to return to the course that day. The penalty for this infraction will range from disqualification from the race that the infraction occurs in. A rider affected by the decision to impose a penalty has the right to protest that decision.

18. Speeding on Pit Lane

While the pit lane is considered part of the racing surface, due to the presence of race Race Officials, other riders and personnel, riders on the pit lane are restricted to 15mph.

The penalty for excessive speed range from a verbal warning to disqualification and/or suspension for repeat offenders. The decision that a rider is using excess speed in the pit lane is to be accepted as a statement of fact from which there is no right of protest.

19. Speeding in the Paddock

Riders in the paddock are restricted to 15mph in the paddock, this applies to ALL VEHICLES. The penalty for excessive speed, in the judgment of a Race Official, range from a verbal warning to a disqualification and/or suspension for repeat offenders. The decision that a rider is using excess speed in the paddock is to be accepted as a statement of fact from which there is no right of protest.

20. Sidecar Specific Infractions

All sidecars must start and complete a race with both driver and passenger aboard the vehicle. Furthermore, the driver and passenger must complete the race performing the same duties at which they started. There is no contact allowed between sidecars for any reason, at any time. The penalty for any of these infractions will range from disqualification from the race to suspension from one or more USCRA events. The decision to any of these infractions is to be accepted as a statement of fact from which there is no right of protest.

4.2 Rider Suspension

Any rider not meeting the requirements of section 4.1 of the Rulebook, or found to be acting or riding in a dangerous or unsportsmanlike manner shall have his/her actions reviewed by a committee comprised of at least three of the following officials or their designees: USCRA Director, Race Director, and/or Referee Rules Director. The committee may recommend up to and including: revocation of riding privileges for a specified time, provisional riding status for up to 13 months, or other disciplinary action as deemed appropriate. A suspended rider is not entitled to a refund or credit for entries.

4.3 Protests

Protests must be in writing, clearly stating the section(s) of these RR that have been breached, and the manner in which the protestor considers them to have been violated. A protest shall be delivered by hand along with a \$100 cash fee to the Director or Referee no later than thirty (30) minutes after posted results of the specific race in which the protested machine and/or rider participated. Final written findings are not subject to appeal and shall be issued upon such protest within thirty (30) days of the event in question. If the protest is upheld, then the fee will be returned to the protesting party; if the protest is denied, then the fee (plus additional cost of parts and labor) is paid to the protested party. Protesting parties must have participated in the same race as the protested party.

4.4 Machine Eligibility

Requests for clarifications or exceptions to the RR must be in writing to the Director or the Rules Committee. A response to such requests will be provided no later than thirty (30) days from the date of receipt. Exceptions to the RR, consistent with the spirit of the RR, may be made at the sole discretion of the Director or his designee, such decisions are final and may not be appealed. Any component(s) that is visibly different and/or uses technology not available within the period must be submitted to the Director and/or the Rules Committee for approval prior to said modifications. Upon approval, the modification will be disseminated to the club at least one full scheduled event prior to approval for use. All machines must conform to regulations of the sanctioning body as well as those of the racing facility.

4.5 Entries and Refunds

Pre-entry (e.g. advanced registration) is strongly recommended. Entry deadlines will be listed on the entry forms for each event. Entries without payment will not be accepted. Pre-entries are normally offered at a lower cost than post entries. If for any reason a participant is unable to attend an event for which they are pre-entered, they may request their payment be returned or a full credit for use at any other USCRA event be issued.

4.5.1 Event Scheduling, Grid Positions and Scoring

All races are typically scheduled for 8 laps (Exception: 50cc races are typically 4 laps). Combined classes may be started in waves. Class size will determine final race order. Classes may be split or combined at the discretion of race director and/or starter. Scheduled race order is subject to change. Any/all changes to an event schedule or individual races therein will be announced at the mandatory riders meeting.

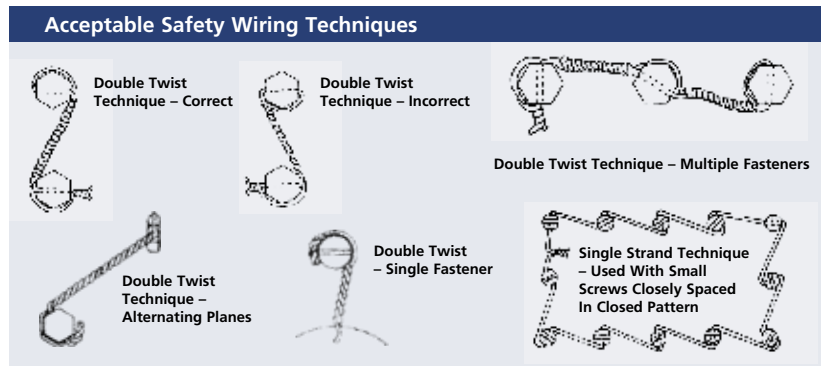
Grid positions will be determined by the registrar based on receipt of and payment for entries for each USCRA event, unless explicitly noted otherwise.

Riders are responsible for acknowledging their proper grid positions. Race results are posted with time of posting after the conclusion of each race. It is the riders responsibility to make known to race officials including, but not limited to: scoring personnel and the race director, any disputes or discrepancies regarding the posted results. Any/all issues regarding the scoring of a race must be addressed no later than one half hour after results are posted. After this time, all result will be considered final.

4.6 Motorcycle Safety Requirements

All machines must meet the safety regulations of the sanctioning body for each event. It is the competitors' responsibility to be aware of the regulations in effect, and comply with them. Safety preparation for both solo and sidecar road racing machines includes, but is not limited to:

1. Safety wiring of critical components mandatory. Wire manufactured for the purpose of lock wiring must be used. Stainless steel type with a diameter of 0.025"-0.032" recommended. .020" safety wire on large parts is prohibited.
2. Anything that holds fluid in should be lock wired, for example: oil filler, level plugs, line bore plugs, oil filter bolts and drains, external oil lines and oil drains, covers with only 2 or 3 securing screws. External oil filters (spin on types) must be clamped with a hose clamp and securely safety wired to ensure they cannot spin off. Oil Drain plugs should be wired to frame, and visible to technical inspectors. It is recommended that riders wrap colored tape or ribbon to the safety wire to aid in identification.
3. All oil coolers must be securely mounted in a protected area. Recommended cooler lines are lock wired flare (swaged) fittings or banjo bolts, if hose clamps are used they should be lock wired and checked prior to every event. Tygon plastic tubing is prohibited for use as oil line.
4. All fuel lines must be clamped or lock wired.
5. All fuel tank overflow lines and all engine and transmission breather hoses must be securely clamped or lock wired and exit into a catch tank.
6. Catch tanks: Eight-ounce-minimum must be provided for any breather hoses venting the following: Cambox 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. Catch tank must be constructed of sturdy steel, aluminum or heavy gauge plastic. No PVC, No 9.2 gm (thin) resin water bottles. Preferably clear or translucent. have a cap or sealed opening facing upward, and an additional vent line exiting into the belly pan. Liquid-cooled motorcycle engines must have a separate, six-ounce catch tank fitted. All catch bottles must be securely mounted. OEM catch bottles are exempt. **Final approval is at the discretion of technical inspectors.**
7. All fork drains must be safely wired or securely taped or sealed with silicone.
8. All machines must have two independently operated brakes. All brake stay bolts, brake torque arm bolts, brake actuating lever bolts, and caliper-mounting hardware must be lock wired or secured with a cotter pin.



9. All brake rods and cables with threaded adjusters must be wired or cotter pinned to prevent loss of adjuster nut.
10. Axle nuts must be lock wired or secured with a cotter pin.
11. Exhaust systems must be securely mounted and bolts lock wired. A secondary security system is encouraged. All exhaust systems must not have any sharp ends or parts.
12. Wire or secure all outer throttle cable housing, both ends. All throttles must snap shut without assistance at any steering position.
13. Control cables and wires must be secured with either 'zip tie' wraps or safety wire.
14. Master link clip must be installed with the open end of the clip installed pointing away from the direction of chain travel, and the clip must be lock wired, or secured by secondary means (silicone-based adhesive).
15. Foot pegs with rubber covers must be lock wired or cotter pinned.
16. Metal tire valve stem caps must be used.
17. All head lights, tail lights, turn signals, luggage racks, mirrors, and other non-essential elements including, but not limited to: brackets, braces, grab rails, center stands and side stands must be removed.
18. All machines must have an operating kill switch.
19. Steering, brakes, and controls must be properly adjusted. Steering stops must be fitted to prevent clip-ons, handlebars or controls from contacting fuel tank or fairing at full steering lock in either direction.
20. Anti-freeze is strictly prohibited, coolant must be water. Only non-glycol coolant additives (WaterWetter® and Maxima Cool-Aide®) permitted.

21. **Belly pans are required on all machines.** The belly pan should be constructed of a suitable material (i.e steel, aluminum or fiberglass) and be of a sufficient size and depth to adequately cover the surface area of the bottom plane of the motor and have the ability to contain at least 3 quarts of oil (4-stroke), and 1.5 quarts of oil (2-stroke). The belly pan must be affixed to the chassis at a minimum of three points and must contain an absorbent material created for the sole purpose of containing
22. Cameras, and/or any other onboard recording devices must be securely mounted to the machine (not to the rider) at a minimum of two points. Riders are responsible for demonstrating secure mounting of cameras at technical inspection. Penalties for cameras that come loose and/or in any way create a hazard to other riders will be assessed and enforced by the Director, and/or other authorized race officials.
23. All P4/P5/Modern machines must be equipped with front brake lever protection.
24. Hand grips be secured with at least two wraps of safety wire.

NOTE: Determination of adequate safety requirements shall be at the sole discretion of authorized Technical Inspectors as well as the Director.

4.7 General Rules Applicable to All Road Racing Classes

1. Eligibility and classification of all machines is subject to the final determination of the USCRA, consistent with the RR, and subject to the USCRA's sole and exclusive authority to amend the RR.
2. Materials and Design: Frames, swingarms, forks must be of period design and materials; any design not clearly documented as a period design must be submitted for written approval at least thirty (30) days prior to competition. Forks must be of a type, size, and style available during the period: no post-period modifications. Rear suspension units must be of a type available during the period.
 - A. Machines originally manufactured for off-road or dual purpose use must be fitted in road race trim. Clip-on or clubman bars only. Wheel size limited to 16" min., 18" max. Knobby tires, motocross handlebars, extended travel forks, high-clearance fenders, etc. are prohibited. Please consult the Rules Committee for further clarifications and guidelines on permitted modifications and eligibility. All Motards prohibited. except, subject to the Race Director's discretion, in Formula Flyweight or Modern 50cc ONLY.
3. "Like or Similar Design": Defined as motorcycles or motorcycle components produced and/or reproduced after a specified cutoff date that are essentially unchanged from those originally produced during the designated period.

No parts or replica parts are to be fitted to a machine that are visibly different and/or use technology not originally available during the period in which the machine is eligible.

Any external modifications must be in keeping with the “period look” of the rest of the machine and be consistent with safety.

When considering any modification that could be interpreted outside of the above definition of ‘like and similar design’, it is highly recommended that the Rules Committee be consulted PRIOR to such modifications.

Final machine eligibility in relation to “like and similar” design is at the sole discretion of the Director and the Rules Committee.

4. Bodywork and ancillaries including tanks, seats, fairings, fenders, handlebars, footpegs, and exhausts (silencer design excepted) must be of an applicable period style and materials. Carbon fiber components prohibited (except where explicitly noted). ‘Dustbin’ style fairings are prohibited except for sidecar classes.
5. Engine specifications and ancillaries: Alterations must be consistent with the spirit of period modifications, excepting for electronic ignitions, belt primary drives, modern roundslide and/or non-pumper carburetors eligibility. No forced induction.
6. Pump or commercially available race gas only, unless explicitly noted otherwise.
7. Noise restrictions shall be determined by the applicable noise regulations set by the race facility for that event. Competitors are urged to verify both applicable regulations and their ability to comply prior to each event.
8. Tires: Treaded tires only; no slicks, or slicks treaded after manufacture (exception: All P4 and modern classes, as indicated is Sec. 5.1 of the US CRA Rulebook. The use of tire warmers is permitted for all modern classes.
9. **Engine displacement restriction, applicable to all classes: 5% maximum displacement over class limit.**
10. Two (2) US CRA decals must be conspicuously displayed on all machines entered in competition at US CRA events.
11. Race numbers must be displayed in three locations: front and each side. Numbers must be clearly readable with the rider in position, with a minimum height of 6” and a 1” brush stroke. Numbers cannot touch each other or be outside colored background.

4.8 International Number Plate Color Schemes (per F.I.M.)

Class	Numbers Color	Background Color
50 CC Classes	Black	White
200 GP/ULSV	White	Black
250 GP/LWSV	White	Green
350 GP/MWSV	White	Blue
500 GP	Black	Yellow
Open GP/HWSV	Black	White
Classic Sidecars	Black	White
Supervintage Sidecars	Black	Yellow
All Other Classes	Black	White

Note: Other organizations may require different number color schemes, be prepared when attending their events.

4.9 Championship Points

All US CRA road racing events are points-earning events. Certain events may be designated ‘double points’ events. ‘Double points’ events will be announced prior to the beginning of the scheduled race season. The chart below gives the point schedule for events hosted by US CRA.

1. A competitor who has accrued the most points in class by the completion of the racing season shall be awarded class championship.
2. You must be a member in good standing of the US CRA to receive championship points.
3. Ties- In the event of a tie in points, the following protocol will be initiated to determine a class champion:
 - A. Quantity of top finishes in class.
 - B. Quantity of US CRA events entered and completed in class.
 - C. Age of competitor, with the decision going to the older competitor as of the date of the final event of the season.
4. By random drawing, the #1 plate is awarded to a rider from the Class Champions listing. A #1 plate is awarded for both solo road racing machines and sidecars.
3. A full listing of Championship Points Classes is listed on page 22 of this Rulebook.

Placing	Points
First	10
Second	8
Third	6
Fourth	5
Fifth	4
Sixth	3
Seventh	2
All Remaining Finishers	1

4.10 Race Procedures





4.10.1 Flags


-  **Green Flag**—Indicates the Start of the race. Also signals clear/active race course. Refer to starting procedures.
-  **Yellow**—Stationary: Indicates an incident has occurred or potentially hazardous condition exists on the racing circuit. Passing is permitted with caution. Waving: Indicates an extremely hazardous condition. Usually displayed at marshal station prior to, or at the location of incident or condition. Passing is prohibited until past the point of the incident and/or no waving yellow is present.
-  **Yellow w/red stripes**—Stationary: Indicates debris on the racing surface. Waving or pointed: Indicates slippery surface on the track. May be pointed up to indicate rain.
-  **White w/red cross**—Indicates a medical vehicle (ambulance) on the racing circuit. Riders are to use extreme caution. If displayed with a waving yellow flag, passing is prohibited.
-  **Red**—Indicates the **IMMEDIATE STOP OF RACING**. All riders should signal to riders behind them, slow to safe and controlled pace, proceed around the circuit and exit the course. **DO NOT STOP ON THE COURSE** unless the course is impassable or instructed by a marshal. In the event of a red flag, participants should line up on the hot grid and await a re-start, unless instructed otherwise by the starter.
-  **Black**—Indicates a safety violation. The black flag may be displayed waving or rolled up and pointed at the rider/machine in violation. The rider should signal to riders behind him/her, slow to a safe and controlled pace, and immediately get off the racing surface. The rider should inspect his/her machine or report to the nearest marshal. Failure to respond will result in immediate disqualification.
-  **Black w/orange circle** ('meatball' flag)—Indicates a starting/gridding infraction or safety violation. The black flag may be displayed waving or rolled up and pointed at the rider/machine in violation. The rider is to complete the lap, safely exit the course and report immediately to the starter.
-  **Blue** (optional)—Indicates faster rider(s) approaching. Rider should be aware of passing riders but 'hold their line'.
-  **White and green crossed**—Indicates half way point in race.
-  **White**—Indicates last lap of race.
-  **Checkered**—Indicates the finish of race or practice session. Riders should slow to safe and controlled pace, proceed around the racing circuit and exit the course.

4.10.2 Standard Start

5/3/2/1 Minute Board Procedure

Riders are responsible for acknowledging their proper grid position. Grids are posted at least one half hour prior to race start.

-  **Five (5) minute board**—When displayed indicates that the racers may enter the racing circuit for a warm-up lap, then proceed to assigned grid positions at start/finish.
-  **Three (3) minute board**—When displayed indicates that any racers not currently lined up on the start/finish (or completing their warm up lap) will be held on the pit lane until after the race has started and will be permitted to enter the race once the last machine has passed pit out, at the discretion of the starter. The three minute board is usually displayed once the first rider has entered the last turn of the warm-up lap.
-  **Two (2) minute board**—When displayed indicates that all racers should be in their assigned grid positions and prepared for the start of the race. Leathers are to be zipped-up and face shields closed.
-  **One (1) minute board**—When displayed in the **HORIZONTAL** position, indicates that any rider not in his/her assigned grid position may be penalized for a grid infraction. All machines must be held at a dead stop. When turned **VERTICALLY** indicates the starter may throw the green flag at any time. Any rider that suffers a mechanical problem or stalls should immediately raise their hand and wave it vigorously.

 **Green flag**—When displayed (waved) indicates the start of the race.

NOTE: All hot grid procedures will be at the sole discretion of the starter or authorized race official(s). Failure to follow the orders of the starter or authorized race official(s) will result in immediate disqualification.

4.10.3 Red Flag Restart

If a race is stopped under a red-flag after half of the total distance has been run (half-way being defined as the lead rider on the lead lap having received the half-way flags), officials may declare the race completed. In that case, riders shall be scored according to their position on the final lap that was completed by the entire field preceding the red flag. Any rider(s) not running on course at the time of the red flag, as well as the rider(s) deemed by officials to have caused the red flag will not be scored in the final results. In the event a race has been red flagged, the restarted event may be shortened at the discretion of a Race Official, typically the Starter.

4.10.4 Bump Start

A traditional starting method used until the mid-1980's in all forms of GP racing. The machines are gridded conventionally with engines off. The rider may be either astride or next to their machine during the starting procedure. Once the starter drops the green flag the rider may start the machine in any manner available (push starting being the preferred method). Those riders preferring to use electric starters must grid at the back. Neither the rider nor machine may be in motion before the drop of the green flag. Any rider requiring assistance during the push start may have an assistant standing by in the hot pit. They may not enter the track surface until all other motorcycles have started and passed the rider requiring aid.

4.10.5 Le Mans Start

The machines are lined up along the edge of the track opposite the pit wall. Riders line up against the pit wall opposite their machine. The machines are ordered consecutively from grid position 1 through the last machine on the grid. The grid marshal will check that the machines are ordered properly. The machines should be placed at roughly a 45° angle to the track direction. Assistants, remaining stationary will hold the machines upright, but cannot assist the rider in any way to start the machine. Once the starter drops the green flag the riders may run to their machines and start them. The rider must under his/her own power push start the machine. No one can assist a rider with the starting of their motorcycle until all other machines have started and passed the rider requiring assistance.

4.10.6 Multiple Wave Start

Combined classes or large individual grids may be started in multiple waves as determined by the Starter or other authorized race official. Typically races are limited to two waves. The procedure for a multiple-wave start is as follows: Once the entire grid is set on the starting line, waves will be separated by a starting official. The first wave will receive the 2-minute board, followed by the horizontal/vertical 1-minute board, and finally the green flag. During the first wave start, each rider in any additional waves should be sitting upright on his/her machine with at least one foot on the ground one hand in the air. This posture should be maintained until the starter has released the first wave. Once the Starter has determined the first wave is a safe distance from the starting line, the Starter will reset the 1-minute board to a horizontal. At this time, riders in the next wave should prepare for the imminent start of their wave.

5 Solo Road Racing Classes

5.1 Class Overview Chart

**NOTE: Provisional classes are not reflected in this chart.
Please refer to Section 3 for any/all provisional classes.**

Period	Class	Cut-off Date	Brakes	FIM Class
Pre-P1	Pre 1950	Dec.31, 1949	Drum only	No
Pre-P1	Pre 1965	Dec.31, 1964	Drum only	No
P1	50GP	Model Year 1970	Drum only	Yes (max. 4-speed)
P1	100GP	Model Year 1967	Drum only	Yes
P1	200GP	Model Year 1967	Drum only	Yes
P1	250GP	Model Year 1967	Drum only	Yes
P1	350GP	Model Year 1967	Drum only	Yes
P1	500GP	Model Year 1967	Drum only	Yes
P1	OpenGP	Model Year 1967	Drum only	Yes
P1	Classic Sidecars	Model Year 1967	Period front disc permitted	Yes
P1/P2	Form. CB350	Model Year 1974	Drum only	No
P2	Ultralightweight Supervintage	Approved air cooled machines made after 1968	Period front disc permitted	Yes
P2	Lightweight Supervintage	Model year 1972	Period front disc permitted	Yes
P2	Heavyweight Supervintage	Model year 1972	Period front disc permitted	Yes
P2	Supervintage Sidecars	Model year 1972	Period front disc permitted	Yes
P3	50cc Supervintage	Model year 1983	Period front disc permitted	Yes
P3	Middleweight Production	Model year 1976 Yamaha RD400: Formula RD legal through 1979	Period front discs permitted	Yes
P3	Formula RD	Model year 1979	Period front discs permitted	No
P3				
P4	Form. 1,2,3 & Open	Model year 1990 (unless explicitly noted otherwise)	Period discs permitted	Yes
P4	Form. Middleweight	Model year 1990 (unless explicitly noted otherwise)	Period discs permitted	Yes
Modern	50cc	N/A	Disc	No
Modern	Form. Flyweight	N/A	Disc	No
Modern	125GP / 250 GP	N/A	Disc	No
Modern	Form. Singles Period 5, Form. Twins, Form. 400	N/A	Disc	No

5.2 Class A Vintage (Board Track)

Two basic classes may be broken down further into specific displacement classes: Competition and Exhibition.

Competition Class: For “original” and reproduction Class “A” race prepared motorcycles that meet all the machine and rider eligibility qualifications as outlined in the rule book. This is a “competition” class where speed and racing are allowed

Exhibition Class: For “original” Class A and minimally modified period correct Class “A” motorcycles not wishing to run in competition or eligible for the Competition Class but rather wishing to have parade or demonstration laps on track at a controlled speed.

All rider participation and speed in this class will be strictly monitored by promoter. Clincher tires and more relaxed machine / rider standards may be permitted in this class by the promoter. ie. Helmet, leathers, gloves, boots etc. Exhibition and Completion Classes will not be on the track at the same time.

Please check with the Event Director for the specific event applicable rules and standards of conduct. The applicable rules for this class may vary slightly from event to event with track requirements.

Eligibility

Engine

Single-cylinder or V-twin air-cooled four-stroke pocket-valve (intake-over-exhaust), Indian power plus 1916 and up flat head, and overhead valve board-track and other dirt track racing engines built prior to 1930 both American and European (Example: Velocette KTT 350cc overhead cam single prior 1930).

Engine displacement classes are: 21 cubic inches, 30.5 cubic inches, 45 cubic inches, 61 cubic inches. Other foreign manufacturers, also made period correct engines used in speedway and other competition.

Brakes

Brakes are not permitted. If the motorcycle is equipped with a coaster brake – as many early racers were – the brake must be disabled in a secure manner. This may involve securing the pedal cranks to the frame to prevent brake operation and pedal rotation. All pedal rotation must be “fixed” prior to entering the track.

Engine Components

Engine: Era Correct*, original or reproduction as approved for AMA Professional Class “A” competition or granted special exception by the promoter.

Engine cases: Era Correct, original or accurate reproduction.

Cylinder: Era Correct, original or accurate reproduction.

Head: Era Correct, original or accurate reproduction.

Carburetor: Era Correct, original or reproduction. Shebler Deluxe, Linkert M Series, or barrel-type are allowed.

Clutch: Countershaft or crankshaft clutches are allowed.

Transmission: Era Correct*. True Class A motorcycles did not have transmissions, so the use of transmissions is discouraged. If the motorcycle has a transmission, it must be locked in one gear.

Exhaust: Era Correct*. Open exhaust. The exit of an open exhaust may not be cut on a diagonal. (“bologna cut”)

Ignition: Era Correct*. Original type magneto or period battery ignition with points are allowed. “Electronic ignitions” are not permitted.

Restrictors: None.

Frame and Components

Era Correct, original or accurate reproduction, rigid style only. Period style, stock style, modified stock style, full-loop short-coupled style racing frame or keystone-style racing frames are allowed. Welded tube frames are not permitted.

Forks: Era Correct, original or accurate reproduction stock style, spring-type, rigid truss-style, leaf-spring style, or Merkel type are allowed. Hydraulic shocks or hydraulic dampening are not permitted. Original period friction dampening or accurate reproduction is allowed.

Handlebars: Era Correct, original or accurate reproduction, dropped style only. No flat track bars are permitted. All handlebars must drop below the horizontal plane of the top of the triple clamps, and not exceed 35 inches in width. A dead man's throttle with lanyard to kill the engine must be mounted on the bars.

Fuel Tank: Era Correct.

Oil Tank: Era Correct.

Seat: Era Correct. No modern seats are permitted.

Rear Suspension: Rigid only.

Wheels

Front Rim: WM2, 1.85” maximum width. Wire spoke type drop-center rims only. All rims, spokes, nipples, and tires will be closely inspected for condition. CLINCHER RIMS ARE ALLOWED IN THE SPEED CONTROLLED EXHIBITION CLASS ONLY.

Rear Rim: WM2, 1.85” maximum width. Wire spoke type drop-center rims only.

NOTE: Clincher rims allowed in controlled exhibition class ONLY. No motorcycles with clincher rims will be allowed to run on paved ½ mile banked ovals.

Tires

Front Tire: 28" x 2 1/4" ribbed racing tires, 21" x 3" Avon-style ribbed Speedmaster tires. Controlled exhibition class ONLY - button tread or non-skid clincher tires permitted.

Rear Tire: 28" x 2 1/4" ribbed racing tires, 21" x 3" Avon-style ribbed 8 Speedmaster tires. Controlled exhibition class ONLY - button tread or non-skid clincher tires permitted.

Fuel

Pump gas, racing fuel, blended fuels and Methanol permitted.

5.3.1 Pre 1950

Race-prepared motorcycles manufactured before December 31, 1949. No updating beyond such date. Methanol fuel permitted for engines originally designed to burn such fuel. Frame: Design may be stock, aftermarket or fabricated. Must be of like or similar design of frames available in the period and be constructed of materials available in the period.

5.3.2 Pre 1965

Thoroughbred grand prix motorcycles, and race-prepared roadster motorcycles of comparable performance and appearance, manufactured before December 31, 1964; no updating beyond such date. Examples of eligible machines:

Aermacchi long-stroke, AJS 7R, BSA 350 and 500 Gold Star, 500 twins
Ducati narrow case, non-Desmo singles, Harley-Davidson sidevalve 750,
Honda CB72 / CB77. Matchless G50, Indian sidevalve 750, Norton 350 and 500
Manx, International, ES2, 500 twins, Triumph 500 twins, Velocette 350 and 500
Yamaha 250 and 305 YDS, Royal Enfield Bullet 350/500 (Restrictions: Post-period through 2004 only. Fuel injection prohibited.)

1. All machines subject to Grand Prix Period I rules, except as explicitly provided below.
2. Displacement: 750cc sidevalve, 500cc overhead valve, 350cc two-stroke.
3. Exhaust: Systems must be of a design and appearance actually used in the period; silencers excepted.
4. Frame: MUST be original, No reproductions or replicas. Frames may be reinforced in a period manner. Swingarms must be both original and unmodified. ONLY exception: Lister Replica frame used on Alan Taylor Special Velo.
5. Bodywork: Must be of a type actually available in the period. 'Dustbin' type fairings prohibited.
6. Forks: Maximum fork tube diameter 35mm.
7. Brakes: Drum only, of a design available in the period.

5.4 50cc Road Racing Rules

For genuine road racing 50cc machines and race prepared street based replicas. There will be four classifications of machines that will compete together but be scored separately.

The following rules apply to ALL 50cc machines regardless of OEM:

1. Ignition and Exhaust: Updating permitted.
2. Bodywork: Must be of a type actually available in the period. 'Dustbin' type fairings prohibited.
3. The 50cc classes run as a group but will be scored separately. Modern 50cc and Cosmo Cup machines will always start from the back of the grid, or if numbers allow, from a 2nd wave.
4. 50cc races are started in one of three manners: Bump start, Le Mans start or Standard (live engine) start, selected at race director's discretion.

5.4.1 Classic 50cc GP

Machines are to be prepared in the spirit of the early years of international 50cc racing. The purpose of the class is to recreate the period from the late 1950's through the mid 1960's when many small street based motorcycles were modified to compete in the 50cc class. Genuine works race machines from the period and accurate replicas of works machines from that period may fall outside the permitted modifications and engine specifications for the class.

Some machines acceptable from the period, but not limited to, are:

Benelli • Derbi • Ducati • Garelli • Harley Davidson • Honda C110, CA110
Itom • Kreidler • Minarelli • Mondial • Moto Morini • Sachs
Suzuki (Restricted: 4-speed transmission max) • Tomos • Zundapp

1. Engine: Air cooled engines only.
2. Displacement: 50cc.
3. Carburetion: Maximum carburetor size 21mm.
4. Transmission: Maximum 4-speed transmission.
5. Frames: Must be of tubular steel or pressed steel construction with steel swing arm.
6. Suspension: Twin shock suspension rear - conventional each side. Conventional telescopic or leading link front suspension.
7. Brakes: Drum brakes front and rear.
8. Wheels: Wire spoke wheels only. Rim size 17, 18 or 19"
9. Tires: Minimum 2.00"; maximum 2.75"

5.4.2 Supervintage 50cc

Machines are to be prepared in the spirit of the 50cc racing as it was specified through 1983. Machines modified or constructed for this class must use period cosmetics in their construction. Machines appearing cosmetically outside the spirit of the class will not be permitted to compete. This is a gray area where prudence should prevail. The following rules will be observed regardless of what may have been tried or used in the period.

1. Displacement: Two stroke 50cc; Four stroke 75cc
2. Wheels: Rim size -16, 17, 18, or 19"
3. Tires: Minimum 2.00"; maximum 2.75"

The following exceptions permitted:

- Yamaha RD60 (stock bore only)
- Yamaha YSR50 (Iron barrel design only)

5.4.3 Modern 50cc

This class encourages the participation of road-based machines constructed in the years from 1984 to the present. It is not intended to be a vintage class, though high standards of presentation will be expected of the entrants. OEM 16 inches wheels are permitted

1. Displacement: Two stroke-50cc; Four stroke-75cc
2. Wheels: Rim size -16, 17, 18, or 19"

NOTE: Aprilia 50cc are permitted as stock.

5.5 Period I Classes: 100 GP, Form. CB160, 200 GP, 250 GP, 350 GP, 500 GP, Open GP

Grand Prix classes are limited to thoroughbred grand prix motorcycles, and race-prepared roadster motorcycles of comparable performance and appearance, with a maximum model year of 1967, with the following exceptions permitted regardless of model year:

- Aermacchi/Harley Sprint 250 or 350 four stroke single through 1974
- BMW through /5
- BSA (all singles and twins)
- Bultaco through 1972 (PROVIDED no cylinders, crankcases or cylinder heads later than 1967 style)
- Ducati singles through 1974
- Greeves Silverstone, Cotton Villiers
- Harley-Davidson KR, ER, CR
- Honda CB/CL 450 (torsion bar valve spring type head), CB/CL 160
- Jawa 2 valve, OHV, four stroke single cylinder speedway engines through 1978. NO original style total loss lubrication, period cycle parts required.
- Kawasaki A1RA, A7R, A7RA
- Norton Atlas, Commando
- Royal Enfield (and including modern Enfields)
- Suzuki T250, T350, T500, GT500 (with drum brake), GT250 (Ram-Air removed)
- Triumph (all singles and twins)
- Velocette
- Yamaha AS1, TD1A, B, C
Later specialty frames (e.g. Seeley, Rickman, Yetman) with eligible engines

NOTE: Above "excepted" machines are still subject to the following general period I rules, irrespective of original equipment, unless explicitly noted otherwise.

5.5.1 Classes based upon displacement:

- 100 GP Up to 100cc
- Form.CB160 160cc
- 200 GP Up to 200cc
- 250 GP 201cc through 250cc
- 350 GP 251cc through 350cc
- 500 GP 351 through 500cc
- Open GP 501cc and greater



5.5.2 100 GP

Engine:

1. Crankshaft modification prohibited.
2. Connecting rod(s) must be stock.
3. Piston, cam, valves, valve spring modifications permitted.
4. Carburetor, exhaust, and porting modifications permitted.
5. Transmission modifications prohibited except final drive ratio.
6. Ignition system modifications permitted.

Chassis:

1. Stock frame and swingarm only. No geometry changes permitted.
2. Any type of brake system may be used.
3. Rear shock absorber and spring may be changed.
4. Front forks and triple clamps may be changed.
5. Wheel size limited to 18" max.
6. No dirtbike style handlebars permitted. Clip-on or clubman bars only.

5.5.3 Rules applicable to all Period I classes

(unless explicitly noted otherwise):

1. Engine: Air-cooled only (except for pre-1967 OEM). Internal updating permissible; external appearance should remain same.
2. Carburetion: round slide or period type only. Pumper carbs permitted, pumpers must be disabled.
3. Gearbox: Internal updating permissible: external appearance should remain same.
4. Forks: Maximum fork tube diameter 35mm unless machine originally equipped from the factory with larger units.
5. "Piggyback" shock absorbers prohibited.
6. Swingarms: Must be 2-sided, of round steel tubing material and or period correct rectangular, and have a shock absorber located on each side without secondary linkage (OEM excepted; e.g., Vincent and NSU).
7. Bodywork: Must be of a type actually available in the period. 'Dustbin' type fairings prohibited.
8. Brakes: Drum or authentic period correct disk brakes ONLY (e.g. Hurst/Airheart) permitted.
9. Wheels: Maximum width 2.5" (WM-4) Wire-spoked wheels, minimum 17" diameter.
10. Tires: Maximum width of 130mm (as stamped by manufacturer on tire). Treaded tires only: no slicks, or slicks treaded after manufacture.
11. Frame: Design may be stock, aftermarket or fabricated. Must be of like or similar design of frames available in the period and be constructed of materials available in the period.

5.6 Period II Classes (Supervintage): Ultralightweight, Lightweight, Heavyweight, Formula CB350

The period II classes are limited to thoroughbred grand prix motorcycles and race-prepared road based motorcycles of comparable performance and appearance, with a maximum model year of 1972. There are 3 classes (ultralightweight limited to 200cc, lightweight limited to 250cc two strokes and 360cc four strokes, and Heavyweight limited to 900cc displacement limit, 1000cc limit for Harley Davidson Sportsters).

The following exceptions permitted regardless of model year:

- BSA factory team machines (and replicas) through 1972
- BMW Early 5-speed transmissions (/6 models) permitted.
- Can-Am Bombardier through 1973 (later models of like/similar design permitted)
- Ducati bevel drive singles and twins
- Harley-Davidson KR750 and XR750
- Honda MT 125r, CB/CL/SL 350 /360, CB/CL 450, CB/CR750
- Kawasaki H1R, H2R and replicas
- Laverda SFC and replicas
- Moto Guzzi to 1980
- Moto Morini 3 1/2
- Norton Commando
- Suzuki GT500, TR500 (air-cooled only), T500, TR750
- Triumph factory team machines (and replicas) through 1972
- Yamaha TA 125, TA250, TD2, TD2B, TR2, TR2B, TD3, TR3, R5, RD 200/ 250, OEM 1973/74 TZ250/350 A&B twin shock, drum brake (air-cooled only, race trim), XS650

NOTE: Above "excepted" machines are still subject to general period II rules set forth below, irrespective of original equipment.

5.6.1 Ultralightweight Supervintage

Up to 200cc single or twin air-cooled engine with the following exceptions permitted regardless of model year:

Honda MT 125r (air/water cooled), Yamaha TA125 & RD200

5.6.2 Lightweight Supervintage

- Up to 250cc-twin cylinder 2-stroke
- Up to 360cc single cylinder 2-stroke
- Up to 360cc four-stroke

5.6.3 Heavyweight Supervintage

All other Period II Supervintage legal machines, 900cc displacement limit, 1000cc limit for Harley Davidson Sportsters.

- Harley Davidson 1000cc motors to 1985, machines must otherwise adhere to P2 rules in components and materials

5.6.4 Formula CB350

A spec class for near stock Honda CB350s and CB360 Twins.

With the creation of this class, Honda CB350's will no longer be eligible for Period 1-350GP, but are eligible in Formula CB and Lightweight Supervintage. All Formula CB races will be run with 350GP. Any modifications other than those listed below are not permitted. **Output shaft seal retainer mandatory.**

1. Model inclusion: Honda CB350, CL350, SL350, CB360, CL360, CD360, CJ360
2. Engines: Stock, the following modification are permitted:
 - a. May replace the stock cam tensioner with a slipper style cam chain tensioner.
 - b. May use aftermarket replacement pistons, teflon 'buttons' and valves of OEM size and materials. Valve guides of any material permitted. Changes to OEM valve configuration (i.e. multi-angle valve grinding) prohibited.
3. Carburetion: Must be stock, air boxes may be removed or modified. Carburetor jets may be changed. Choke plates may be removed. Carburetors from any approved model are permitted.
4. Exhaust: System may be changed.
5. Gearing: External gearing changes permitted.
6. Frame: Stock frames and swingarms only, the following modifications are allowed:
 - a. Frame tabs may be removed.
 - b. Non-structural tabs may be added to facilitate mounting of footpegs, steering damper, seat and gas tank.
 - c. Swingarm bushings may be changed to aftermarket types.
 - d. Frame seams may be welded. No bracing allowed.
 - e. Tapered bearings in steering head permitted.
 - f. Frame and/or swingarm from any approved model permitted.
8. Forks: 35mm maximum fork tube diameter.
9. Brakes: Mandatory drum brakes front and rear. Aftermarket brake shoe linings permitted.
10. Clip-on handlebars permitted.
11. All street equipment must be removed. May retain stock fenders.
12. Ignition system: Unrestricted
13. Bodywork: Fairings prohibited, aftermarket seats, fenders and gas tanks permitted.

5.6.5 Rules applicable to all Period II classes (unless explicitly noted):

1. Engine: Internal updating permissible; external appearance must remain same.
2. Carburetion: Round slide or Sand-cast "tickler" type Keihin CR carburetors.
3. Gearbox: Internal updating permissible; external appearance must remain same.
4. Forks: Maximum fork tube diameter 38mm unless machine originally equipped ex-factory with larger units.
5. Swingarms: Must be 2-sided, of period design and materials, and have a shock absorber located on each side without secondary linkage (OEM excepted; e.g., Vincent and NSU).
6. Bodywork: Must be of a design and appearance actually used in the period.
7. Brakes: Period type and make required; discs permitted - period calipers ONLY.
8. Wheels: Wire-spoked wheels, minimum 17 inch diameter, maximum width 2.5" (WM-4) front, 3.0" (WM-5) rear.
9. Tires: maximum width of 140mm (as stamped by manufacturer on tire). Treaded tires only: no slicks, or slicks treaded after manufacture.

5.7 Period III Classes: Middleweight Production, Formula RD

5.7.1 Middleweight Production

Limited to race-prepared motorcycles that were originally sold for street use, all frames must have been sold for specific street use, with a maximum model year of 1976 or like models, two- or four-stroke. Dry clutches and all alloy cylinders prohibited except where originally equipped on street model. Power exhaust valves are prohibited even when OEM.

- Up to 400cc 2-stroke (with restrictions on permissible modifications to RD400. See below)
- Up to 650cc 4-stroke singles and push-rod twins
- Up to 550cc 4-stroke multi cylinder

The following machines are permitted regardless of model year:

Honda single OHC four cylinder CB400, CB500, CB550 thru 1978 model year
Kawasaki S2 350, S3 400, KH400, **Suzuki** GT380, **Yamaha** R5, RD350/RD400 (Formula RD Spec only)

5.7.2 Rules applicable to Middleweight Production:

1. Engine: Internal updating permissible; external appearance should remain same.
2. Carburetion: Round slide or Die-cast Keihin CR carburetors permitted
3. Gearbox: Internal updating permissible; external appearance should remain same.
4. Swingarms: Must be 2-sided, of period design and materials, and have a shock absorber located on each side without secondary linkage (OEM excepted).
5. Forks: Maximum fork tube diameter 38mm unless machine originally equipped ex-factory with larger units.
6. Bodywork: Must be of a design and appearance actually used in the applicable period.
7. Brakes: Period type required; discs permitted - period calipers ONLY.
8. Wheels: Wire-spoked wheels, minimum 17-inch diameter, maximum width 2.5 inches (WM-4) front, 3.0 inches (WM-5) rear. Cast or "mag" wheels are permitted if OEM equipment. It is highly recommended that cast wheels are tested prior to race use.
9. Tires: maximum width of 140mm (as stamped by manufacturer on tire). Treaded tires only: no slicks, or slicks treaded after manufacture.
10. Shock(s): Must be of style and type used during the period.

NOTE: Period III Middleweight Production legal machines may NOT bump to Period II.

5.7.3 Formula RD

Formula RD is a "Spec" class formed in the interest of low cost road racing competition. Eligible machines include ALL air-cooled Yamaha R5, RD350, RD400 and RD400F models sold in the United States from 1970-1979. Later model RD/LC and RZ models are prohibited. Any part ever sold as OEM equipment on a 1973-1979 RD250, 350 or 400 is legal for use on any year or model RD. Updating and backdating is permitted. All modifications must be performed in a workmanlike manner and should keep within the spirit of the class. With that in mind, there will be NO titanium or carbon fiber (reed petals excepted), no quick shifters, on board lap timers, or tire warmers. The most important thing to remember is that the rules have been written in the interest of increased longevity and decreased operating expenses.

1. Air Filters: Stock airbox with filter or individual filters permitted, no open carbs or velocity stacks.
2. Battery: Unrestricted, must be securely mounted.
3. Carburetors: Stock, no overbores or polishing, jetting changes permitted.
4. Cases / Connecting Rods: Stock.
5. Charging System: May be disabled or removed.
6. Clutch: Stock, Aftermarket friction plates and springs permitted.
7. Crankshaft: Stock, may be welded, stroking or balancing prohibited.
8. Cylinders: Stock, may be ported, skimmed, may use equivalent aftermarket sleeve, pollution controls on RD400F heads may be disabled or removed.
9. Cylinder Heads: Stock, may be skimmed to increase cranking pressure, one piece RD400F heads may be cut apart for easier service, reshaping of combustion chambers permitted.
10. Expansion Chambers: Must have silencers and securely mounted at two or more points, no heat wrapping.
11. Fuel: Racing gasoline permitted.
12. Gaskets: Unrestricted.
13. Ignition: Unrestricted.
14. Oil: Unrestricted, oil injection may be disabled or discarded.
15. Pistons/Rings: Stock or equivalent aftermarket.
16. Reed Valves: Stock cases, aftermarket petals permitted.
17. Starting System: Kickstarter may be functional but lever must be removable.
18. Transmission: Stock, undercutting permitted, no quick shifters
19. Wiring Harness: Unrestricted.
20. Appearance: Bikes must be clean, painted, and externally oil free at all times.
21. Bodywork: May use stock or aftermarket tank, seat and fenders, no carbon fiber, no fairings.
22. Brake Lines: Unrestricted, but must be safely routed and secured.
23. Cables: Unrestricted.
24. Chainguard: Unrestricted, may modify, remove, or replace.

NOTE: The term stock means as sold by the manufacturer with no metal removal whatsoever unless explicitly noted otherwise.

25. Controls: No restrictions. Throttle must snap back to "off" position, may change grips, levers and master cylinder.
26. Disc Brakes: Stock, may be drilled (to help cooling) and/or machined (to eliminate warping), aftermarket pads permitted, brakes must be fully functional.
27. Drum Brakes (if applicable): Liner may be machined (to eliminate scoring), aftermarket shoes permitted, brakes must be fully functional.
28. Footpegs: Unrestricted, passenger pegs must be removed; mounting brackets may be removed or replaced (such as using rear sets).
29. Forks: Externally stock, may use aftermarket springs and valving, may use fork brace.
30. Frame: Stock, may use tapered head bearings, removal of unnecessary tabs Permitted, gusseting prohibited.
31. Gearing: Unrestricted, but must use stock size chain (530.)
32. Handlebars: Unrestricted, see component Specifications (a).
33. Hardware: Replacement hardware must be of like material, no titanium.
34. Horn: Must be disabled, may be removed.
35. Instruments: Unrestricted, speedo drive unit may be replaced by spacer, no onboard timers.
36. License Plate, mirrors, side and centerstand: Must be removed.
37. Lighting: Sealed beam unit must be removed, headlight shell and bracket may be removed, and taillight, reflectors, and turn signals must be removed.
38. Number plates: Must be visible on front and both sides with rider sitting on machine. Yellow number plates with black numbers permitted.
39. Rear Brake Stay Arm: Unrestricted, may be modified or replaced.
40. Safety Wiring: All fasteners that retain fluids, all brake caliper mounting bolts, all axles-safety wiring must be done in accordance with USCRA rulebook.
41. Shock absorbers: May be replaced, must use stock mounting points.
42. Steering Dampers; required, and must be installed in such a way as to not limit handlebar travel (i.e.) steering stops must contact before damper bottoms or tops out).

43. Swingarm: stock, may use aftermarket bushings or bearings, gusseting prohibited.
44. Tires: must be treaded: no slicks, or slicks treaded after manufacture and fitted with tubes, must safely fit wheels, tire warmers prohibited.
45. Triple Clamps: stock, must retain steering stops to prevent handlebars from contacting tank, may be built up for this purpose.
46. Wheels: stock, must use factory cast or spoked wheels, no aftermarket rims. Metal valve stem caps must be used.

NOTE: The term stock means as sold by the manufacturer with no metal removal whatsoever unless explicitly noted otherwise.

5.8 Period IV Classes: Formula 1, 2 , 3 and Formula Middleweight

This class is designed for machines built up to and including model year 1990, except as listed in the examples and exceptions section of these rules. Period IV is open to production based and GP or GP replica machine originally manufactured for road racing or machines subsequently modified for road racing. Any component that is visibly different and/or uses technology not available within the period must be submitted to the Director and/or the Rules Committee for approval. Upon approval, disseminated to the club at least one full scheduled event prior to approval for use.

'Superbikes' and/or 'Street-based' are production based machines, which are modified for racing purposes. Full bodywork is encouraged.

'GP' machines must be factory original or replica. Period correct bodywork is encouraged. Machines must have clip-on handlebars below the top yoke, rearset footpegs and single race seats.

Machines originally manufactured for on-off road and/or dirt use must be fitted in race trim (knobby tires, motocross handlebars, extended-travel forks, high-clearance fenders, etc. are prohibited). No motards.

All machines are subject to the regulations in sections 4.6 (Motorcycle Safety Requirements) and 4.7 (General Rules Applicable to All Road racing Classes) of the USCRA Rulebook, unless explicitly noted otherwise.

5.8.1 Formula 3

125cc two-stroke GP machines

500cc two-stroke singles

400cc two-stroke street based twins and triples

(must have original frames, cylinder blocks and engine casings)

400cc four-stroke; four cylinders, 650cc four-stroke twins, unlimited

four-stroke singles

5.8.2 Formula 2

250cc two-stroke GP machines

750cc four-stroke twins

860cc four-stroke twins, two valve heads, air cooled

600cc multi-cylinder (3 or more cylinders) four-strokes

5.8.3 Formula 1

500cc two-stroke two or more cylinder

1000cc four-stroke twins

750cc multi-cylinder (3 or more cylinders) four strokes

4-stroke air-cooled, steel frame unlimited displacement

(1103cc maximum)

5.8.4 Open

All multi-cylinder (water and/or oil cooled) four-stroke production sport motorcycles of unlimited displacement and two-stroke production motorcycles to 750cc, Maximum model year 1990.

Eligible machines for Period IV OPEN include:

Buell RR1200, BMW K1, K100/K100RS, Honda VF1000F Interceptor, VF1000R, Kawasaki GPZ900R Ninja, GPZ1000RX (NINJA), NINJA ZX-10 (TOMCAT), Suzuki GS1100 E/EF, GSX1100F, GSX-R 1100 (1989-90), Yamaha FJ1100/1200, FZR 1000.

5.8.5 Formula Middleweight

- 4-stroke v4 liquid-cooled 500cc max
- 4-stroke inline 4 air-cooled to 550cc max
- Modern 2-stroke, non-GP machines (no points)

Limited to the following models:

Honda VF500F Interceptor, Honda NT650 Hawk,

Kawasaki EX500, Kawasaki GPZ550, Suzuki GS500 E/F

No restrictions on model year.

Examples and Exceptions for Period IV classes: The following are examples and exceptions of machines permitted in Period IV,. If no date is listed for machines, then only those built up to and including model year 1990 are eligible.

- Aprilia 250 • Bimota DB1 750 • BMW R100, K75 • Cagiva 500 GP bike
- Ducati Paso 750 to 906, 851/888, 750 F1, SS/Sport 750 to 900, Ducati 900SL/SS (to 1997) air/oil cooled V-Twins

- Honda XL/XR 500 to 650, RS 125 to 1994, RS 250 (to 1990), CB/GB 500, NT650 Hawk (no model year restriction), 600 Hurricane and 600 F1, 750 Interceptor (to 1989), RC30
- Kawasaki EX 250, KX 500, KLR 650, EX 500 (no model year restriction), ZX6 (Ninja 600) A-D to 1993, ZX7 (Ninja750) to 1990, KTM 600
- KTM 600, 620, 640, 660 (model years 1984 through 2006 only)
- Moto Guzzi 1000 LeMans
- Suzuki RM 500, DR650, GSF400 (to 1993), GS500E (to 1996), Gamma/RG 250 to 500, Katana 600/750 to 1996, GSXR 750 (to 1990)
- Yamaha RZ 350/500, TZ250 (to 1990), TZR/TDR 250, FZR400 (to 1990), FZR600 (to 1999), FZR750 (to 1989)

5.8.6 Rules applicable to all Period IV classes:

Engine: Naturally aspirated. Castings and engine casings must be of period external appearance. Engine displacement restriction: 5% maximum displacement over class limit. All four-stroke machines must be fitted with race-type crankcase end covers, welded or braced factory covers or other acceptable crash protection. Engine management systems shall not be updated past the cut-off date for each machine allowed in the period (ignition systems omitted). OEM water-cooling permitted. Anti-freeze strictly prohibited, coolant must be water. Only non-glycol coolant additives permitted (WaterWetter® and Maxima Cool-Aide®).

Primary Drive: Is without restriction.

Gearbox and Final Drive: Are without restriction. Sprocket conversions are permitted.

Carburetor: Must be of style and type used within period including "pumper" style, flatslides and fuel injection. Fuel injection is allowed only where originally fitted by the manufacturer.

Ignition Systems: Are without restriction.

Exhausts: Must be of a racing style in use during the period. Stainless steel systems allowed. Titanium, carbon fiber and aluminum allowed for "cans" and silencers only. NOTE: Maximum allowable decible level at NHMS is 105db.

Frames: Must be of an original style and type from the period. Factory frames, or replicas can be used. Engine mounts are open.

Swingarms: Must be of an original style and type from the period. Period sub-frame braced swingarms, steel or aluminum are allowed.

Forks: Must be original style, size and type in use during the period. Maximum stanchion diameter is 43mm, unless the motorcycle was originally equipped with stanchions of a larger diameter. Aftermarket fork braces of any type and style, similar to those available in the period, are acceptable. NOTE: For 900SS Ducatis and any other makes and models listed as Period IV eligible, where the OEM forks were of a upside down (USD) type, stock forks are acceptable.

Shock(s): Must be of style and type used during the period.

Wheels: Cast or wire. Must be of a size, style and type available during the period.

Brakes: Must be of a style and type available during the period. No carbon fiber discs. Wave rotors allowed. Maximum rotor diameter is 320 mm. Calipers shall have no more than two pistons or two pairs of opposing pistons.

Tires: Must be correct fit and size for rim. Slicks and radials are permitted. The use of tire warmers is permitted for all Period IV classes.

Bodywork: To be of the style in use for GP or production bikes during the period.

Handlebars: GP bikes must have clip-on handlebars below the top yoke.

Foot Controls: GP bikes must use "rearset racing style", defined as having the footpeg mounted on or behind the centre line of the swingarm pivot.

Number Plates: All classes are black numbers on white background. Exception: Yellow number plates with black numbers permitted.

Interpretation and enforcement of all rules are subject to the discretion of the Director as well as members of the Rules Committee.



5.9. Period 5 Classes

5.9.1 Period 5 (P5) Midleweight/Heavyweight



P5 is a Supersport spec class designed for machines built up to and including model year 2000 (no machines after the cut off are eligible, and "like and similar" provision does not apply). P5 is open to production based and GP or GP replica machine originally manufactured for road racing or machines subsequently modified for road racing.

Any component that is visibly different and/or uses technology not available within the period must be submitted to the Director and/or the Rules Committee for approval. Upon approval, disseminated to the club at least one full scheduled event prior to approval for use.

2 Eligibility

P5 Middleweight- to 700cc / any configuration

P5 Heavyweight- 701+ / any configuration

Eligible machines must be sold by the manufacturer in the U.S. to the general public. The frame will determine the year and model of the motorcycle. Motorcycles must display a valid VIN number on the main frame.

Examples of eligible machines: Aprilia: RSV Mille. BMW: BMW R1100S, K1200 Ducati: 748/750/851/888/900ss/916. Honda: CBR600F4, RVF750 RC45, CBR900RR, CBR1000F. Kawasaki: ZX-6R/7R/9R/10R/11R/12R, Ninja 1000. Suzuki: GSX-R 600/750/1000, (incl. S-Rad). Yamaha: YZF600R, YZF-R6, YZF-R1.

No Supermono/Motard machines permitted. Machines originally manufactured for on-off road and/or dirt use must be fitted in race trim (knobby tires, motocross handlebars, extended-travel forks, high-clearance fenders, etc. are prohibited).

All machines are subject to the regulations in sections 4.6 (Motorcycle Safety Requirements) and 4.7 (General Rules Applicable to All Road racing Classes) of the US CRA Rulebook, unless explicitly noted otherwise.

The following are the allowable modifications for P5. ONLY the modifications listed below are permitted. No other updates, modifications or changes are allowed.

3 Engine

1. Intake system must be of style and type used within period including "pumper" style, flatslides and fuel injection. Fuel injection is allowed only where originally fitted by the manufacturer.

- a) Carburetor jets and needles may be replaced. Resizing of air-metering holes in CV carbs is allowed. Throttle slide and return springs may be replaced. Fuel lines, vent lines and fuel filters may be replaced.
- b) All components in the fuel-injection system must remain standard except the electronic control modules, which may be modified or replaced. Add-on ignition/injection modules, (i.e. Power Commanders), may be used.
2. Entire OEM airbox system must remain without modifications. Air filter may be replaced. Airbox drains must be sealed. Crankcase vent hose must remain routed to the airbox. Crankcase breathers may be modified or replaced.
3. Cam sprockets may be modified or replaced. Cam-chain tensioners may be modified or replaced.
4. Cylinder head, cylinder and crankcase gasket surface may be machined for increased compression. All other surfaces of the head, cylinder and crankcases must remain stock. Aftermarket gaskets may be used. Head and base gaskets do not have to conform to stock specifications.
5. Valves must remain stock. Multi-angle or -radius valve jobs are permitted.
6. Transmission must use stock OEM parts for that model and year. Shifter return or detent springs may be replaced.
7. Electric shift devices (quick shifters) may be used. Primary and final drive is without restriction, sprocket conversions are permitted, chains may be replaced.
8. Ignition systems are without restriction.
9. Spark plugs, clutch plates, clutch springs and oil filters may be replaced.
10. Castings and engine casings must be of period external appearance.
11. Exhausts: May be replaced. Must be of a style in use during the period. Stainless steel systems allowed. Titanium, carbon fiber and aluminum allowed for "cans" and silencers only. Insulating pipe wrap is permitted.
12. Engine displacement restriction: 5% max. displacement over class limit.

NOTE: Maximum allowable decibel level is 105db at NHMS, 98db at Canaan Motor Club.

4 Engine Protection/Guards

1. All four-stroke machines must be fitted with race-type crankcase end covers, welded or braced factory covers or other acceptable crash protection. Additionally, all Suzuki GSX-Rs must have engine case guards installed around the right and left sides of the engine, extending beyond the frame, and are subject to the Technical Inspector's approval. Yamaha YZF600 (R6) machines must have an engine case guard on the right side of the engine.
2. **Fluid containment systems and belly pans are required on all machines.**

5 Frame

1. Must remain stock except for the following: crash bumpers/frame sliders may be installed; frame brackets/spools may be added to permit the use of stands; aftermarket chain guards/"shark fins" may be added; frames may be polished, painted or powdercoated, providing the VIN remains visible and readable. Subframes may be modified. Machines equipped with an OEM bolt-on subframe may replace the subframe with an OEM or aftermarket unit in steel or aluminum only.

6 Swingarm

1. Must be of an original style and type from the period. Period sub-frame braced swingarms, steel or aluminum are allowed.
2. A chain guard must be fitted in such a way as to reduce the possibility that any part of the riders' body may become trapped between the lower chain run and the rear wheel sprocket.

7 Forks

1. Must be original style, size and type in use during the period. Maximum stanchion diameter is 43mm, unless the motorcycle was originally equipped with stanchions of a larger diameter. Aftermarket fork braces of any type and style, similar to those available in the period, are acceptable.
2. Upside down (USD) type forks are acceptable where OEM.
3. Fork oil may be changed. Fork caps may be changed. Fork internals may be modified or replaced. Fork braces may be modified or added.
4. Triple clamps may be modified or changed to alter the fork offset and/or to add a steering damper.

8 Suspension

1. Rear shock(s) may be modified or replaced. All linkage must remain stock. (Suzuki TL models are allowed to use aftermarket linkage to allow for replacing the stock rotary shock with a standard-style shock.)

9 Wheels

1. Cast or wire. Must be of a size, style and type available during the period. Captive wheels spacers may be added. Speedometer drive may be replaced with a spacer.

10 Tires

1. Tire choice is open to the competitor, DOT approved, racing slicks or commercially available wet weather tires are permitted. Competitors are responsible for evaluating the individual product and assess the suitability for the event. The use of tire warmers is permitted for P5 classes.

11 Brakes

1. Steel braided or Kevlar brake lines may be used. Brake pads may be changed. Brake rotors may be drilled. Brake rotors may be replaced but must remain the same size as OEM. No composite or carbon fiber rotors. Brake calipers must remain stock. Brake and clutch master cylinders may

be replaced. Clutch slave cylinders may be modified or replaced.

2. Wave rotors permitted. Maximum rotor diameter is 320 mm.

12 Controls

1. Steering dampers may be replaced or added.
2. GP bikes must have clip-on handlebars below the top yoke.
3. GP bikes must use "rearsset racing style", defined as having the foot peg mounted on or behind the center line of the swingarm pivot.
4. Rider foot pegs and brackets may be modified or replaced. Shift lever, rear brake lever and linkage may be modified or replaced. handlebars may be modified or replaced.
5. Instruments, instrument brackets, switches and associated cables/wiring may be removed or replaced. Unused wires may be trimmed from the wiring harness, but the original OEM harness may not be replaced.
6. **Motorcycles must be equipped with front brake lever protection.**

13 Bodywork

1. For motorcycles produced with full fairings, replica replacement bodywork may be used. If stock bodywork includes air ducting, it may be removed. If the ducting is retained, it must be stock or exact replica replacements and made of the same material as OEM.
2. Solo seat cowlings are permitted. Replacement solo tail sections are permitted providing they conform to the shape and size of the stock bodywork. OEM seats may be removed and replaced by foam padding.
3. Bodywork may be made of fiberglass, plastic, composite or carbon fiber. Bodywork may be attached with non-OEM fasteners such as Dzus.
4. For motorcycles produced without full fairings or with less than full fairings, replica replacement bodywork from any U.S.-legal production motorcycle may be used. All other rules as detailed above, apply.
5. All classes are red numbers on white background. Number must be displayed on front and both sides of the machine, plates may be added to the rear seat section.
6. Original instrument/fairing bracket may be replaced. No composite or carbon fiber brackets allowed.
7. OEM fuel tank must be retained and used in the OEM location. Fuel cap may be replaced.

14 General

1. The following items must be removed: Turn signals, mirrors, headlight and taillight lens. Taillight/brakelight must be removed or disabled. Horn must be removed. Sidestand must be removed. The following items may be removed: Grab rails, reflectors, rear fender, helmet lock, passenger footpegs and brackets, radiator fan(s) and wiring. Castings and engine casings must be of period external appearance.
2. A chain guard must be fitted in such a way as to reduce the possibility that any part of the riders' body may become trapped between the lower chain run and the rear wheel sprocket.



5.10 Modern Classes

5.10.1 Formula Twins

Formula Twins is a Supersport spec class limited to street production motorcycles.

1 Eligibility

Over 600cc up to 750cc, 2-cylinder, water cooled

Over 600cc up to 800cc, 2-cylinder, air cooled

No model year restriction

The displacement capacity bore and stroke must remain at the originally produced size. Modifying the bore and stroke to reach class limits is not allowed (except where noted). All machines must be normally aspirated.

No Supermono/Motard machines permitted. Machines originally manufactured for on-off road and/or dirt use must be fitted in race trim (knobby tires, motocross handlebars, extended-travel forks, high-clearance fenders, etc. are prohibited).

All machines are subject to the regulations in sections 4.6 (Motorcycle Safety Requirements) and 4.7 (General Rules Applicable to All Road racing Classes) of the US CRA Rulebook, unless explicitly noted otherwise.

The following are the allowable modifications for Formula Twins. ONLY the modifications listed are permitted. No other updates, modifications or changes are allowed.

2 Fuel Injection

Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices, fuel pumps and fuel pressure regulators.

1. The fuel injection system as originally produced must be used without any modification with the following exceptions:
 - a. Air funnels may be modified.
 - b. Throttle bores may be modified.
 - c. Butterfly valves may be modified to fit increased throttle size but must include the same safety features as stock.
 - d. Secondary throttle valves and shafts may be removed or fixed in the open position and the electronics may be disconnected or removed.
2. The fuel injectors must be stock and unaltered from the original specification and manufacture.
3. Variable intake tract devices cannot be added if they are not present on the originally produced motorcycle and they must remain identical and operate in the same way as the originally produced system. All parts of the variable intake tract device must remain exactly as originally produced.



4. Air and air/fuel mixture must go to the combustion chamber exclusively through the throttle body butterflies.
5. Electronically controlled throttle valves, known as 'ride-by-wire', may be only used if the originally produced model is equipped with the same system. Software may be modified but all the safety systems and procedures designed by the original manufacturer must be maintained.

3 Cylinder Head

1. Must be the originally fitted as originally produced. The following modifications are allowed:
 - a. Porting and polishing of the cylinder head normally associated with individual tuning such as gas flowing of the cylinder head, including the combustion chamber, is allowed. Welding is not allowed. No machining or modification is allowed in the cam box / valve mechanism area.
 - b. The throttle body insulators may be modified.
 - c. Modifications of the inlet and exhaust ports by taking off or adding material (welding is forbidden). Epoxy may be used to shape the ports.
 - d. Surface grinding of the cylinder head surface on the head gasket side.
 - e. Original manufactured valve guides may be replaced.
 - f. Polishing of the combustion chamber is allowed.
 - g. Original valve seats must be used, but modifications are allowed to the shape.
 - h. Compression ratio is free, but the combustion chamber may be modified only by taking material off.
 - i. It is forbidden to add any material to the cylinder head unless as described above.
 - j. Rocker arms (if any) must remain as originally produced.
 - k. The valves may be replaced but the valve face must remain the same diameter as originally produced.
 - l. Valve springs may be changed but the number must remain as originally produced.
 - m. Valve spring retainers, collets and/or spring seats may be altered or replaced.
 - n. The shim buckets / tappets must remain as originally produced.

4 Cam Shaft and Components

1. Camshafts may be modified or replace.
2. Cam sprockets may be slotted to allow the adjustment of cam timing.
3. Pressed on cam sprockets may be replaced with an adjustable boss and cam sprocket.
4. The cam chain must remain as originally produced.
3. Cam chain tensioner may be replaced.

5 Crankcase / Gearbox Housing

1. Crankcases must remain as originally produced. No modifications are allowed (including painting, polishing and lightening).
2. Bolt-on brackets and/or bracing may be added internally to the crankcase to increase strength, however welding on the crankcase and external bracing is not allowed.
3. It is not allowed to add a pump used to create a vacuum in the crankcase. Vacuum pumps installed on the originally produced motorcycle, are permitted.

6 Engine Protection / Guards

1. Lateral (side) covers may be altered, modified or replaced (excluding pump covers). If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of the same or higher specific weight and the total weight of the cover must not be less than the original one.
2. Titanium bolts may be used to fasten lateral covers.
3. Oil containing engine covers cannot be secured with aluminum bolts.
4. All lateral covers/engine cases containing oil, and which could be in contact with the ground during a crash, must be protected by a second cover made from metal such as aluminum alloy, stainless steel, steel or titanium. Each side (left and right) of the engine must have at least one (1) protective cover installed on the farthest protruding engine cover containing oil. Composite covers are not permitted. FIM approved covers will be permitted without regard of the material or dimensions.
 - a. The secondary cover must cover a minimum of 1/3 of the original cover. It must not have sharp edges that could damage the track surface. Covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcases.
 - b. Heavy duty engine case covers may be used in lieu of secondary case covers.
5. The Technical Director has the right to refuse any cover not satisfying this safety purpose.

7 Transmission / Gears

1. The stock transmission shafts and gear set only are permitted. Shimming is allowed.
2. Undercutting and surface treatments are permitted.
3. OEM shift drum detent stars may be modified or replaced.
4. Quick-shift systems are allowed (including wire and potentiometer).
5. The countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
6. The sprocket cover may be modified or eliminated.
7. The chain guard may be removed.

8 Clutch

1. The clutch system (wet or dry type) and the method of operation (by cable or hydraulic) must remain as originally produced.
2. Friction and drive discs may be changed.
3. Clutch springs may be changed.
4. The original clutch assembly (including the clutch basket) may be modified or replaced by an aftermarket unit. The clutch may include back torque limiting capabilities (slipper type).
5. No power source (i.e. hydraulic or electric) can be used for gear selection if not installed in the originally produced model for road use.

9 Oil Pumps / Oil Lines

1. The originally fitted oil pump may be modified but the oil pump housing, mounting points and oil feed points must remain as original.
2. Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of braided reinforced construction with swaged or threaded connectors.

10 Cooling System

1. The only liquid engine coolant permitted is water.
2. Protective meshes may be added in front of the oil and/or water radiator(s).
3. The cooling system hoses and catch tanks may be changed.
4. The radiator fan and wiring may be removed. Thermal switches, water temperature sensors and thermostats may be removed inside the cooling system.
5. The radiator may be changed with an aftermarket radiator or additional radiator.
6. Oil coolers may be modified. Heat exchangers (oil/water) may be replaced with an oil cooler.
7. Oil coolers must not be mounted on or above the rear fender.
8. The radiator cap is free.

5.10.11 Air Box

1. The air box design is free but must be able to allow the engine to operate in all climatic conditions at all times (i.e. rain should not stall the engine).
2. The air box drains must be sealed.
3. Ram air tubes or ducts running from the fairing to the air box may be modified, replaced or removed.
4. All motorcycles must have a closed breather system. All oil breather lines must be connected and discharge in the air box.
5. Additional heat shielding is allowed (i.e. gold or silver heat tape).

5.10.12 Ignition / Electronics / ECU

1. The engine control system (ECU) may be modified or replaced, and may be relocated.
2. Wiring harness is free.
3. Spark plugs may be replaced.
4. The battery is free.
5. The generator (ACG) must remain as originally produced; no modifications are allowed.
6. The flywheel may be modified or replaced.
7. The ACG must generate sufficiently to maintain battery charge.
8. The stator must be fitted in its original position and without offsetting.
9. The electric starter must operate normally and always be able to start the engine during the event.

5.10.13 Fuel Supply

1. Fuel pumps must remain as originally produced.
2. The fuel pressure regulator may be modified or replaced.
3. Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced and must be located in such a way that they are protected from crash damage.
4. Fuel petcocks may be altered, replaced or removed from those fitted to the originally produced motorcycle.
5. Quick connectors or dry break connectors may be used.
6. Fuel vent lines may be replaced.
7. Fuel filters may be added.

5.10.14 Exhaust

1. Exhaust pipes, catalytic converters and silencers may be altered or replaced from those fitted to the originally produced motorcycle. Catalytic converters must be removed.
2. The number of the final exhaust silencer(s) is free.
3. For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded to avoid any sharp edges.
4. Wrapping of exhaust systems is not allowed except in the area of the rider's foot or an area in contact with the fairing for protection from heat.

5.10.15 Main Frame / Sub Frame

1. The main frame must remain as originally produced by the manufacturer for use on the originally produced machine.
2. Gussets or tubes may not be added or removed; other modifications are allowed within the following section of these rules. Brackets may be welded or bolted to the main frame for the purpose of constructing a detachable front or rear sub-frame or attaching fairings. These brackets may not be used to change the rigidity of the main frame.
3. Holes may be drilled in the frame only to fix approved components (i.e. fairing brackets, steering damper mount).

4. The engine must be mounted in the originally produced position.
5. Suspension linkage mounting points on the frame must remain as originally produced.
6. If the originally produced machine has exchangeable bearing inserts/ bushings, the bushings/inserts are free to make the above adjustment and the originally produced position is considered as the position in which the production motorcycle is supplied.
7. If the originally produced motorcycle has fixed bearing positions for the steering stem:
8. Steering angle changes are permitted by fitting inserts onto the bearing seats of the original steering head. The original bearing seats may be modified (ovaed) or increased in diameter to insert special bushings. No part of these special bushings may protrude axially more than three (3) mm from the original steering head pipe location nor may the bearing be inset.
9. The front and rear sub frame may be changed, altered or removed. If the rear sub frame is integral to the main frame, additional seat brackets may be added and non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Rear sub frames that are integral to the main frame may be removed and replaced with a detachable sub-frame. Titanium or composites may not be used for the construction of the subframe. Bolt-on accessories to the rear sub-frame may be removed.

5.10.16 Front Forks / Suspension

1. The front fork in whole or part may be changed but must be the same type as the originally produced (leading link, telescopic, etc.).
2. The upper and lower fork clamps (triple clamp, fork bridges) and stem may be changed or modified.
3. A steering damper may be added or replaced with an after-market damper.
4. The steering damper cannot act as a steering lock limiting device.

5.10.17 Swingarm

1. The rear fork must be the originally fitted part with no modification allowed.
2. The rear fork pivot bolt must be the originally fitted part with no modification allowed.
3. The rear swing-arm pivot position must remain in originally fitted position (as supplied on the production bike). If the standard bike has inserts then the orientation/position of the original insert may be changed but the insert cannot be replaced or modified.
4. A chain guard must be fitted in such a way as to reduce the possibility that any part of the riders' body may become trapped between the lower chain run and the rear wheel sprocket.

5.10.18 Rear Suspension Unit (Shock)

1. The rear suspension unit may be changed but a similar system must be used (i.e. dual or mono).
2. The rear suspension linkage may be modified or replaced.
3. The original fixing points on the frame (if any) must be used to mount the shock absorber, linkage and rod assembly fulcrum (pivot points).
4. Removable top shock mounts may be replaced. If replaced, they must retain their originally produced geometry.

5.10.19 Wheels

1. Wheel rim diameter size (front and rear): 17 inches, Front wheel rim width: 3.50 inches, Rear wheel rim width: 5.25-5.5 inches.
2. Wheels may be replaced and associated parts may be altered or replaced from those fitted to the originally produced motorcycle.
3. The wheels may be overpainted, but the original finish cannot be removed.
4. The originally produced wheel and sprocket carrier assembly may be used with no modification, irrespective of material.
5. On motorcycles equipped with a double-sided swing arm (rear fork), the rear sprocket and brake rotor must remain on the rear wheel when the wheel is removed.
6. Bearings, seals, and axles may be altered or replaced from those fitted to the originally produced motorcycle. The use of titanium and light alloys is forbidden for wheel spindles (axles).

5.10.20 Tires

1. Tire choice is open to the competitor, DOT approved, racing slicks or commercially available wet weather tires are permitted. Competitors are responsible for evaluating the individual product and assess the suitability for the event. heat.

5.10.21 Brakes

1. Brake discs may be replaced by aftermarket discs which comply with the following requirements:
 - a. Brake discs must retain the same material as originally produced or be steel (max. carbon content 2.1 wt.%).
 - b. Non-floating or single piece discs may be replaced with floating discs. The disc carrier must be the same material as the originally produced carrier, steel or aluminum.
 - c. The outside and inner diameters of the brake disc must not be larger than the originally produced disc.
 - d. The fixing of the carrier on the wheel must remain the same as on the originally produced disc.

- e. The thickness of the brake disc may be increased but the disc must fit into the originally produced brake caliper without any modification. The number of floaters is free.
2. The front and rear brake calipers (mount, carrier, hanger) must be the originally fitted parts with no modification allowed.
3. In order to reduce the transfer of heat to the hydraulic fluid it is permitted to add metallic shims to the calipers, between the pads and the calipers, and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the caliper.
4. The rear brake caliper bracket may be mounted fixed on the swing-arm, but the bracket must maintain the same mounting (fixing) points for the caliper as used on the originally produced motorcycle.
5. The swing-arm may be modified for this reason to aid the location of the rear brake caliper bracket, by welding, drilling or by using Helicoils.
6. The front and rear master cylinders must be the originally fitted parts with no modification allowed.
7. Front and rear brake fluid reservoirs may be changed.
8. Front and rear hydraulic brake lines may be changed.
9. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (lower triple clamp).
10. Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.
11. Additional air scoops or ducts are not allowed.
12. If equipped the anti-lock brake system (ABS) must be removed. The ABS units electronic board may remain fitted to stop ECU errors.

5.10.22 Handlebars / Controls

1. Handlebars may be replaced.
2. Handlebars and hand controls may be relocated.
3. Throttle controls must be self-closing when not held by the hand.
4. The throttle assembly and associated cables may be modified or replaced but the connection to the throttle body and to the throttle controls must remain as on the originally produced motorcycle. Cable operated throttles (grip assembly) must be equipped with both an opening and a closing cable including when actuating a remote drive by wire grip/demand sensor.
5. Clutch and brake lever may be replaced with an after-market model. An adjuster to the brake lever is allowed.
6. Switches may be changed but the electric starter switch and engine stop switch must be located on the handlebars.
7. Motorcycles must be equipped with a functional ignition kill switch or button mounted on the right-hand handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. The button or switch must be RED.
8. **Motorcycles must be equipped with front brake lever protection.**

5.10.23 Foot Pegs / Controls

1. Foot rests, hangers/brackets and hardware may be replaced and relocated but the hangers/brackets must be mounted to their original frame mounting points.
2. Foot controls; gear shift and rear brake must remain operated manually by foot.
3. Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
4. The end of the foot rest must have at least an eight (8) mm solid spherical radius.
5. Non-folding footrests must have an end (plug) which is permanently fixed, made of aluminum, plastic, Teflon® or an equivalent type material (minimum radius 8mm). The plug surface must be designed to reach the widest possible area. The Technical Director has the right to refuse any plug not satisfying this safety aim.

5.10.24 Fuel Tank

1. The fuel tank must be the originally fitted part with no modification allowed.
2. Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250cc made of a suitable material.
3. Fuel caps may be changed. Fuel caps, when closed, must be leak proof. Additionally, they must be securely locked to prevent accidental opening at any time.
4. A rider spacer/pad may be fitted to the rear of the tank with non-permanent adhesive. It may be constructed of foam padding or composite material.
5. The tank may have a fitted cover.
6. The sides and rear of the fuel tank may be protected with a cover made of a composite material.

5.10.25 Fairing / Bodywork

1. The fairing and body work may conform in principle to the originally produced shape as originally produced by the manufacturer or replicate any full fairing type motorcycle within the following limits:
 - a. No wings or winglets
 - b. No excessive aerodynamics that may interfere with the safe operation of the motorcycle
2. The use of carbon fiber or Kevlar® materials is not allowed in fairing, fuel tank cover, seat, seat base and associated bodywork construction. Specific reinforcements in Kevlar® or carbon are allowed locally around holes and stressed areas.
3. "Naked" or fairing-less is acceptable but must have a belly pan.
4. The windscreen may be replaced or added if not originally equipped.

5. The original air ducts running between the fairing to the air box may be altered or replaced from those fitted to the originally produced motorcycle.
6. The lower fairing must be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (min. 5 liters). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.
7. The lower fairing must incorporate one hole of 25 mm in the bottom of the front lower area. This hole must remain closed in dry conditions and must be only opened in wet race conditions, as declared by the race director.
8. The front fender design and material are free but no excessive aerodynamics that may interfere with the safe operation of the motorcycle. The decision will be made by the Technical Director and is final.
9. The rear fender design and material are free, may be added or removed. No excessive aerodynamics that may interfere with the safe operation of the motorcycle. The decision will be made by the Technical Inspector and is final.
10. The seat may be altered or replaced from those fitted to the originally produced motorcycle.
11. The top portion of the rear body work around the seat may be modified to a solo seat.
12. Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
13. Material of construction of the seat may be altered or replaced from those fitted to the originally produced motorcycle.

5.10.26 General

The following items MAY be altered or replaced:

1. Any type of lubrication, brake or suspension fluid may be used.
2. Gaskets, seals and gasket materials.
3. Painted external surface finishes and decals.
4. Material for brackets connecting non-original parts (fairing, exhaust, instruments, etc.) to the frame (or engine) cannot be made from titanium or fiber reinforced composites except the exhaust silencer hanger that may be in carbon.
5. Protective covers for the frame, chain and footrests may be made in other materials like fiber composite material if these parts do not replace original parts mounted on the originally produced model.

The following items MAY BE removed:

1. Instrument, instrument bracket and associated cables
2. Tachometer
3. Speedometer and associated wheel spacers

The following items MUST BE removed:

1. Headlamp, rear lamp and turn signal indicators. Openings must be covered by suitable materials..
2. Rear-view mirrors
3. Horn
4. License plate bracket
5. Toolkit
6. The following if not welded to the frame:
 - a. Helmet hooks and luggage carrier hooks
 - b. Passenger foot rests
 - c. Passenger grab rails
7. Safety bars, center and side stands must be removed (fixed brackets must remain excepting side stand bracket).



5.10.2 Formula 400

Formula 400 is a Supersport spec class limited to street production motorcycles.



1 Eligible Machines

(no model year restriction):

Honda CBR 300/400. Kawasaki Ninja 250/300/400, KTM RC390R/Duke, Suzuki GSX 250R, Yamaha YZF-R3.

The following are the allowable modifications for Formula 400. ONLY the modifications listed are permitted. No other updates, modifications or changes are allowed.

2 Fuel Injection Systems

Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices, fuel pumps and fuel pressure regulators.

1. The original fuel injection system must be used without any modification.
2. The fuel injectors must be stock and unaltered from the original specification and manufacture.
3. Air funnels must remain as originally produced by the manufacturer.
4. Butterfly valves cannot be changed or modified.
5. Secondary throttle valves may be removed or fixed in the open position and the electronics may be disconnected or removed. Secondary throttle shafts must remain in place.
6. Variable intake tract devices cannot be added if they are not present as originally produced, and they must remain identical and operate in the same way as the original system. All the parts of the variable intake tract device must remain exactly as originally produced.

7. Air and air/fuel mixture must go to the combustion chamber exclusively through the throttle bodies.
8. Electronically controlled throttle valves, known as 'ride-by-wire', may only be used if the original model is equipped with the same system
9. Carburetor (where OEM equipment) Carburetor bodies and/or throttle bodies may not be modified, bored, or polished.

.3 Cylinder Head

1. Must be the originally fitted as originally produced with no modification allowed.
2. The exhaust air bleed system must be blocked and the external fittings on the cam cover(s) may be replaced by plates.
3. Valve spring shims maybe changed freely.

.4 Cam Shaft

1. The camshaft(s) must be the originally fitted part with no modification allowed.

.5 Cam Sprockets / Gears

1. Cam gears may be slotted or replaced with an adjustable part.
2. The cam chain must remain as originally produced.
3. Cam chain tensioning devices must remain as originally produced.

6 Cylinders

1. Must be the originally fitted parts with no modification allowed.

.7 Pistons

1. Must be the originally fitted parts with no modification allowed.

Piston Rings/Pins/Clips

1. Must be the originally fitted parts with no modification allowed.
2. All piston rings must be fitted.

8 Connecting Rods

1. Must be the originally fitted parts with no modification allowed.

.9 Crankshaft

1. Must be the originally fitted parts with no modification allowed.

10 Engine Protection / Guards

1. Oil containing engine covers must be secured with steel bolts.
2. All lateral covers/engine cases containing oil, and which could be in contact with the ground during a crash, must be protected by a second cover made from metal such as aluminum alloy, stainless steel or titanium. Each side (left and right) of the engine must have at least one (1) protective cover installed on the farthest protruding engine cover containing oil. Composite covers are not permitted. FIM approved covers will be permitted without regard of the material or dimensions.

3. The secondary cover must cover a minimum of 1/3 of the original cover. It must not have sharp edges that could damage the track surface. Covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcases.
4. Heavy duty engine case covers may be used in lieu of secondary case covers.
5. The Technical Director has the right to refuse any cover not satisfying this safety purpose.

11 Transmission/Gears

1. Must be the originally fitted parts with no modification allowed except:
2. Shimming is allowed.
3. Undercutting and surface treatments are permitted.
4. Shift star and detent may be replaced but must function as originally designed.
5. Downshift auto-blipping is not allowed.
6. The countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
7. The sprocket cover may be modified or eliminated.

12 Clutch

1. The clutch system (wet or dry type) and the method of operation (by cable or hydraulic) must remain as originally produced by the manufacturer.
2. Friction and drive discs are unrestricted.
3. Clutch springs may be changed.
4. The clutch basket (outer) must be the originally fitted part but may be reinforced.
5. The original clutch assembly may be modified or replaced by an aftermarket clutch, also may include back torque limiting capabilities (slipper type).

13 Oil Pumps / Oil Lines / Water Pump

1. The oil pump and oil lines must be the originally fitted parts with no modification allowed.
2. The water pump must be the originally fitted part.

14 Radiator / Oil cooler

1. The only liquid engine coolant permitted is water and or approved coolants
2. The cooling system hoses and catch tanks may be changed, but must meet established rules.
3. Radiator fans and wiring may be removed. Thermal switches, water temperature sensors and thermostats may be removed inside the cooling system.
4. The radiator cap is must be secured with safety wire.

15 Air Box

1. The air box must be the originally fitted part with no modification allowed.
2. The air filter element may be modified or replaced but not eliminated and must be mounted in the original position.
3. The air box drains must be sealed.
4. All motorcycles must have a closed breather system. All the oil breather lines must be connected (may pass through an oil catch tank) and exclusively discharge in the air box.
5. No heat protection may be attached to the air box.

16 Fuel Supply

1. The fuel pump and fuel pressure regulator must be the originally fitted parts with no modification allowed
2. The fuel pressure must be as originally produced by the manufacturer.
3. Fuel lines from the fuel tank up to the delivery pipe assembly (delivery pipe excluded) may be replaced and must be located in such a way that they are protected from crash damage.
4. Quick connectors or dry break connectors may be used.
5. Fuel vent lines may be replaced.
6. Fuel filters may be added.

17 Exhaust

1. Exhaust pipes and silencers may be modified or changed. Catalytic converters may be removed.
2. The number of the final exhaust silencer(s) is free.
3. For safety reasons, the exposed edges of the exhausts pipe(s) outlet must be rounded to avoid any sharp edges.
4. Wrapping of exhaust systems is not allowed except in the area of the rider's foot or an area in contact with the fairing for protection from heat.

18 Ignition / Engine Control System (ECU)

1. Unrestricted.

19 Spark Plugs/Battery

1. Unrestricted.

20 Generator / Alternator / Electric Starter

1. Must be the originally fitted part with no modification allowed.
2. The stator must be fitted in its original position and without offsetting.
3. The electric starter must operate normally and always be able to start the engine during the event.

21 Front Forks

1. Unrestricted, other than retaining originally fitted length/diameter and mounting points.
2. Steering dampers permitted.

22 Swing Arm

1. The rear fork must be the originally fitted part with no modification allowed.
2. The rear fork pivot bolt must be the originally fitted part with no modification allowed.
3. The rear swing-arm pivot position must remain in originally fitted position (as supplied on the production bike). If the standard bike has inserts then the orientation/position of the original insert may be changed but the insert cannot be replaced or modified.
4. A chain guard must be fitted in such a way as to reduce the possibility that any part of the riders' body may become trapped between the lower chain run and the rear wheel sprocket.

23 Rear Suspension

1. The rear suspension unit (shock) may be modified or replaced, but the original attachments to the frame and swing arm or linkage must be as originally fitted.
2. All the rear suspension linkage parts must be the originally fitted parts with no modification allowed.
3. Removable top shock mounts must be the originally fitted parts with no modification allowed. A nut may be made captive on the top shock mount and shim spacers may be fitted behind it to adjust ride height.
4. Rear suspension unit and spring may be changed.

24 Wheels

1. Wheels must be the originally fitted part with no modification allowed.
2. The wheels may be overpainted, but the original finish cannot be removed.
3. If the original design includes a cushion drive for the rear wheel, it must remain as originally produced.
4. Wheel axles must remain as originally produced by the manufacturer, wheel spacers may be modified or replaced.

25 Tires

1. Tire choice is open to the competitor, DOT approved, racing slicks or commercially available wet weather tires are permitted. Competitors are responsible for evaluating the individual product and assess the suitability for the event.

26 Brakes

1. Brake discs may be replaced by aftermarket discs which comply with the following requirements:

- a. Brake discs must retain the same material as originally produced or be steel (max. carbon content 2.1 wt.%).
 - b. Non-floating or single piece discs may be replaced with floating discs. The disc carrier must be the same material as the originally produced carrier, steel or aluminum.
 - c. The outside and inner diameters of the brake disc must not be larger than the originally produced disc.
 - d. The fixing of the carrier on the wheel must remain the same as on the originally produced disc.
 - e. The thickness of the brake disc may be increased but the disc must fit into the originally produced brake caliper without any modification. The number of floaters is free.
2. The front and rear brake calipers (mount, carrier, hanger) must be the originally fitted parts with no modification allowed.
 3. In order to reduce the transfer of heat to the hydraulic fluid it is permitted to add metallic shims to the calipers, between the pads and the calipers, and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the caliper.
 4. The rear brake caliper bracket may be mounted fixed on the swing-arm, but the bracket must maintain the same mounting (fixing) points for the caliper as used on the originally produced motorcycle.
 5. The swing-arm may be modified for this reason to aid the location of the rear brake caliper bracket, by welding, drilling or by using Helicoils.
 6. The front and rear master cylinders must be the originally fitted parts with no modification allowed.
 7. Front and rear brake fluid reservoirs may be changed.
 8. Front and rear hydraulic brake lines may be changed.
 9. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (lower triple clamp).
 10. "Quick" (or "dry-break") connectors in the brake lines are not allowed.
 11. Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.
 12. Additional air scoops or ducts are not allowed.
 13. If equipped the anti-lock brake system (ABS) must be removed. The ABS units electronic board may remain fitted to stop ECU errors.

27 Handlebars / Controls

1. Handlebars may be replaced (except for the brake master cylinder).
2. Handlebars and hand controls may be relocated.
3. Throttle controls must be self-closing when not held by the hand.
4. The throttle assembly and associated cables may be modified or replaced but the connection to the throttle body and to the throttle controls must remain as on the homologated motorcycle. Cable operated throttles (grip assembly) must be equipped with both an opening and a closing cable including when actuating a remote drive by wire grip/demand sensor.

5. Clutch and brake lever may be replaced with an after-market model. An adjuster to the brake lever is allowed.
6. Switches may be changed but the electric starter switch and engine stop switch must be located on the handlebars.
7. Motorcycles must be equipped with a functional ignition kill switch or button mounted on the right-hand handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. The button or switch must be RED.
8. **Motorcycles must be equipped with front brake lever protection.**

28 Foot Pegs / Controls

1. Foot rests, hangers/brackets and hardware may be replaced and relocated but the hangers/brackets must be mounted to their original frame mounting points.
2. Foot controls; gear shift and rear brake must remain operated manually by foot.
3. Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
4. The end of the foot rest must have at least an eight (8) mm solid spherical radius.
5. Non-folding footrests must have an end (plug) which is permanently fixed, made of aluminum, plastic, Teflon® or an equivalent type material (minimum radius 8mm). The plug surface must be designed to reach the widest possible area. The Technical Director has the right to refuse any plug not satisfying this safety aim.

29 Fuel Tank

1. The fuel tank must be the originally fitted part with no modification allowed.

30 Fairings / Bodywork

1. The fairing and bodywork may be replaced with exact cosmetic duplicates of the original parts but must appear to be as originally produced by the manufacturer, with slight differences due to the racing use (different pieces mix, fixing points, fairing bottom, etc.). The material may be changed.
2. The wind screen may be replaced.
3. Fairing brackets may be altered or replaced.
4. The ram-air intake must maintain the shape and dimensions as originally produced by the manufacturer.
5. The original air ducts running between the fairing and the air box may be altered or replaced. Carbon fiber composites and other exotic materials are forbidden. Particle grilles or "wire-meshes" originally installed in the openings for the air ducts may be removed.
6. The lower fairing must be constructed to hold, in case of an engine breakdown, a minimum of four (4) liters. The lower edge of all the openings in the fairing must be positioned at least 70 mm above the bottom of the fairing.

7. The front fender may be replaced with a cosmetic duplicate of the original parts and may be spaced upward for increased tire clearance.
8. The rear fender fixed on the swing arm may be modified, changed or removed.

31 Seat

1. The seat, seat base and associated bodywork may be replaced
2. The appearance from the front, rear and profile must conform to the original shape
3. The top portion of the rear bodywork around the seat may be modified to a solo seat.
4. The originally produced seat locking system may be removed.

The following items MAY be altered or replaced:

1. Any type of lubrication, brake or suspension fluid may be used.
2. Gaskets, seals and gasket materials.
3. Painted external surface finishes and decals.
4. Material for brackets connecting non-original parts (fairing, exhaust, instruments, etc.) to the frame (or engine) cannot be made from titanium or fiber reinforced composites except the exhaust silencer hanger that may be in carbon.
5. Protective covers for the frame, chain and footrests may be made in other materials like fiber composite material if these parts do not replace original parts mounted on the originally produced model.

The following items MAY BE removed:

1. Emission control items (anti-pollution) in or around the air box and engine
(O2 sensors, air injection devices).
2. Bolt-on accessories on a rear sub-frame or rear portion of the frame.

The following items MUST BE removed:

1. Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing).
2. Rear-view mirrors
3. Horn
4. License plate bracket
5. Toolkit
6. The following if not welded to the frame:
 - a. Helmet hooks and luggage carrier hooks
 - b. Passenger foot rests
 - c. Passenger grab rails
7. Safety bars, center and side stands must be removed (fixed brackets must remain excepting side stand bracket).

**FORMULA
400**

5.11 Special Classes

5.11.1 Formula Singles

Restricted to modern single cylinder road racing machines only. There are two sub-classes: Classic: air-cooled/twin rear shock, Modern: all others. No supermono/motards, all machines must be fitted in road race trim.

(For clarification, please see Sec. 4.7.2.A)

5.11.2 Modern 125/250GP

These authentic Grand Prix classes are separate, but will be run concurrently at USCRA road racing events.

125GP: all genuine road racing 125cc two, and four-stroke single GP machines (no model year restriction).

Eligible machines: Honda RS125, Yamaha TZ125, Aprilia RS125, Moriwaki MH125

250GP: All production and genuine road racing air/water-cooled 250cc two-stroke twins, and all genuine road racing 250cc four-stroke single GP machines (no model year restriction).

Eligible machines include: Aprilia RS250, Honda NSR250, RS250, NSF250R, Kawasaki KR-1, KR-1R, KR-1S (1988-92), KTM RC250R, RC250RBR, Moriwaki MD250H, Suzuki RG250, RGV250, Yamaha TZR250, TZ250

Racing slicks required.

5.11.3 Euro Cup

Any Period I, II, or III solo machine of European manufacture.

5.11.4 Formula Flyweight

Formula Flyweight is an open class for small displacement motorcycles, with allowances for custom construction. There are no model year restrictions.

Engine:

Unrestricted, except for the following:

- 72cc liquid cooled two-stroke max., 85cc air cooled two-stroke max.
 - 125cc liquid cooled four stroke max., 150cc air cooled four-stroke max.
- Any configuration

Transmission: Unrestricted

Chassis: Unrestricted, except for the following:

- Wheels: 16" minimum, 18" maximum,
- Appearance: Machines must be fitted in road race trim. Race director has the discretion to allow super motard-style motorcycles in Formula Flyweight (For further clarification, please Sec. 4.7.3.1)

Partial list of eligible machines: Aprilia RS50, Aprilia RS4 125, Derbi GPR-50R, the Aprilia RS50, Aprilia RS4 125, Kawasaki KLX125, Rieju RS-1, Rieju RR Black, Rieju Spike, Suzuki DRZ 125, Yamaha YSR 50, TTR 125

5.11.5 Masters/Super Masters

Master/Super Masters is a points class based on rider's age and is open to ANY USCRA eligible machine (except 50cc and sidecars).

Masters–Rider must be between the ages of 50-64 as of the date of the event.

Super Masters–Rider must be age 65 as of the date of the event.

6 Sidecar Road racing Classes

6.1 Classic Sidecar Outfits

Classic Outfits are limited to outfits built before 1968, and outfits constructed after such date that are consistent in design and construction with outfits actually built in the Classic period, subject to the following restrictions:

1. Engine: one or two cylinder two or four-stroke, built before 1968. Maximum 350cc two-stroke, 650cc overhead valve, 750cc sidevalve.
2. Wheel and tire sizes: Wheels: minimum 16 inch diameter front and rear, minimum 8 inch diameter on sidecar. Tires: maximum 4.50-inch section width on front and rear, 4.80-inch section width on sidecar.

Exceptions:

- Matchless G50 / Norton Manx / AJS 7R / BMW Rennsport / Vincent 1000cc twins
- BMW R50/5 and R60/5 restricted: no internal engine modifications are permitted, all internal parts are to be OEM in type and configuration, all gaskets must be in their original locations and period style 26mm carburetors.
- Honda CB/CL 450 & CB 500T restricted: no internal engine modifications are permitted, all internal parts are to be OEM in type and configuration and OEM carburetors.
- Ducati bevel drive single

6.2 Supervintage Sidecar Outfits

Supervintage Outfits are limited to outfits built before 1973, and outfits constructed after such date that are consistent in design and construction with outfits actually built in the period, subject to the following restrictions:

1. Engine: One or two cylinder air-cooled four-stroke only, built before 1973, maximum 750cc. Overhead valve or sidevalve only as explicitly provided below. One or two cylinder two-stroke to 500cc. Two-stroke engines are to use the technology of the period prior to 1973. Water-cooled Yamaha engines are not permitted. It is suggested that anyone considering the use of a two-stroke engine consult the Rules Committee for further engine clarifications and guidance on permitted modifications and eligibility.
2. All engines in this class restricted to stock valve sizes, and carb venturi diameter of 34mm maximum.
3. Ignition/generating system may be modified or replaced.
4. Wheel and tire sizes: Minimum 15-inch diameter on front and rear, minimum 8-inch diameter on sidecar. Tires: maximum 125mm / 5.00" footprint width on front, rear, and sidecar.

Exceptions:

- BMW Rennsport, 4 speed /5 models, maximum 750cc Early 5-speed transmissions (/6 models) permitted. No short stroke motors permitted. Stock stroke and allowable overbore only.
- BSA 650
- Ducati bevel drive 750
- Honda twin 450cc and 500cc
- Moto Guzzi 750
- Norton Commando 750 (and 850 sleeved to 750cc)
- Triumph 650/750 unit twins (including TR7)
- Yamaha XS 650, maximum 750cc (17 tooth front spocket restriction)
- Suzuki Titan (T500) w/stock internals, (NO TR500 components)
- Any period two-stroke, single or twin cylinder, air-cooled, maximum 500cc.
- Any period four-stroke OHC single cylinder up to 750cc.
- Harley-Davidson Ironhead Sportster 883cc (to 1970)



<http://thedailyrider.com/>

6.3 Rules applicable to both Classic and Supervintage Sidecar outfits

6.3.1 Technical Regulations

1. Design: An outfit or sidecar is a three-wheel vehicle leaving two tracks, with only the rear wheel driving, and only the front wheel steering. Driver's point of contact with steering controls must be rigidly attached to front forks or other steering assembly. Center hub steering prohibited. Swingarms must be 2-sided, of period design and materials, and have a shock absorber located on each side without secondary linkage (OEM excepted; e.g., Vincent and NSU). Both sitter and kneeler designs are eligible. Sidecar chair must be rigidly affixed to cycle portion of the outfit, by a minimum of four rigid mechanical or welded connections. Driver must be positioned generally behind engine. Steel tube frame construction only: no stressed skin or monocoque construction. Sidecar design: front exit only, e.g.: passenger must lean outside of the track of the outfit in front of the sidecar wheel. Chair may be on right or left of cycle portion of outfit. Outfit must be equipped with appropriate handholds for passenger, including but not limited to a passenger handhold on the rear outside of the outfit opposite the chair and to the back of the driver.
2. Suspension travel: Minimum 1.5" on front and rear wheels. Any sidecar wheel movement relative to platform is prohibited.
3. Oil coolers: Where fitted must be located so as to be generally visible to driver and passenger.
4. Dimensions: The two wheels forming a single track must be no more than 3" out of line, measured center-to-center. Maximum track is 44" and minimum track is 32" (center to center of tires). Maximum width of outfit 72"s. Minimum ground clearance of 3" between any part of outfit and an imaginary horizontal plane beneath the tires, with outfit ready for competition with driver, passenger, oil, fuel and coolant. Maximum fuel capacity 40L (10.56 Gal.). Maximum engine offset (measured from a point equidistant from piston-to-piston to an imaginary line drawn between the centers of the front and rear wheels) 3" No part of the outfit may extend longitudinally more than 12" from the front and rear tires. Minimum clearance front tire to outfit 1". There shall be sufficient clearance between the handlebar grips and any part of the outfit, at any time, such that the driver shall not become trapped or unable to operate the controls.
5. Bodywork: Sidecar wheel, rear wheel, and drive and primary chains must be adequately protected to preclude driver or passenger becoming entangled. Period dustbin style fairings are encouraged. All bodywork and streamlining must be strictly consistent with the applicable period. Downforce generating devices and designs are explicitly prohibited. Driver's torso and the passenger's body must be completely visible from above at all times.
6. Gearbox: Applicable period components (or functionally accurate reproductions) only.
7. Wheels and tires: Front and rear wheels must be of spoke construction. No slicks, or slicks treaded after manufacture.
8. Brakes: Working brakes on front and rear wheels mandatory; sidecar optional. Drum or disc (single or twin) permitted, provided that all disc brake components (disc rotor, caliper and master cylinders) are components (or functionally accurate reproductions) actually available in the applicable period. Friction linings and pads are unrestricted.
9. All outfits must be equipped with a functional master electrical switch mounted within reach of both the driver and the passenger. Switch must be able to stop a running engine and turn off all other electrical systems. The switch's mounting plate and an area at least one inch surrounding the switch must be painted red and clearly identified "ON" and "OFF" for identification by track safety personnel.
10. Dellorto pumper carburetors: Pumper must be disconnected and a blanking plate affixed.



6.3.2 Additional Regulations

1. In the discretion of the Director, outfits with driver and / or passenger who have participated individually in less than two USCRA sidecar events shall display a tape "X" on the back of the rider and passengers helmet.
2. The USCRA shall create a sidecar safety inspection committee consisting of up to five members and designate a sidecar safety coordinator for each event. The designated coordinator and at least two other committee members to be available to inspect each registered sidecar outfit prior to the outfit being submitted to the standard tech inspection. The focus of the safety inspection will be specifically to visually check for apparent or potential safety defects. This inspection does not relieve the requirement for the machine to pass standard tech inspection, nor is it intended to be a class eligibility inspection. It should be stressed that each team should performed their own inspection and not to rely on this safety inspection to replace their own regular preventive scrutiny. Machines should be presented for safety inspection as early as possible. If an outfit causes an incident or has a major mechanical failure on the racetrack, the team responsible must submit the machine to the safety committee as well as the normal track tech inspection to prove that the problem is corrected and won't recur. Teams must consider that the inspectors are acting on a voluntary basis, have their own race program time constraints, and in no event assume any obligation or responsibility in performing the inspection. In all cases the decision of the safety inspector shall be final.
3. If requested by a team during the safety inspection, for the first practice of the day a member of the Safety Committee will wear an orange vest and act as a Traveling Marshal to guide any new or inexperienced drivers on a low speed track tour, demonstrating a safe line around the track, on an as requested basis. Teams participating in this "tour" shall display a large red "X" on the back of their leathers (or rain suits or helmets). Teams who are practicing and are not involved in the guided tour will not interfere with this procession, passing as cleanly and discreetly as possible.
4. Any machine consistently demonstrating a significant power advantage shall be subject to restriction at the sole discretion of the Director of the USCRA.
5. The sidecar class is designed to be fun, safe, and competitive, and as such good sportsmanship, honesty and a sense of fair play should exist at all times. Driving maneuvers liable to hinder other

sidecars, such as, premature direction changes, deliberate crowding or blocking or any other abnormal change of direction are strictly prohibited and shall be penalized, according to the importance and repetition of the offenses, at the sole discretion of the Director of the USCRA. The repetition of dangerous driving, even involuntarily, shall also be subject to penalty at the sole discretion of the Director of the USCRA, penalties shall range from verbal warnings to suspension.

6. The USCRA will conduct, an inquiry into every on-track collision. Legitimate racing accidents will be handled differently from those caused by recklessness or over-aggressive riding. Inquiry should consist of interviews of the teams involved, other teams and race workers/officials who saw the incident to gather the facts. Appropriate action to be taken based on the results of the inquiry.

7 Endurance Road Racing Rules

Each season, the USCRA endeavors to run at least one vintage endurance roadrace (Big Fish, Small Pond 3ish-hour Endurance). The endurance race requires multiple riders to race a single motorcycle for a period of more than 1 hour, with 2 hours being the normal length of the race. Classes for the endurance race are determined by entries, but normally there are classes for both large and small displacement machinery. The following rules apply in addition to those listed in the Road racing section of this rulebook:



1. No one under 18 on pit lane.
2. No smoking on pit lane.
3. Mark pit area with tape ONLY, do NOT use paint. All Canopies (E-Z Up) MUST be secured.
4. All crew members must wear long pants, shirts and sturdy shoes. Any/all members on the hot pit must wear a helmet.
5. Each team will supply a scorer.
6. Each team will have a fire extinguisher with someone pointing it at the motorcycle during fueling. **Engines MUST be shut off during fueling.**
8. Fueling towers/pressure fill systems prohibits, gravity fueling only.
9. No rider may ride for a period of more then 45 consecutive minutes.
10. When entering the pit all machines must come to a complete stop. Marshal will signal to continue to pit area. All riders will use **1st gear ONLY on pit lane** from stop box to marked area.
11. No more than one rider on a machine at any time.

8 MotoGiro USA Events

8.1 History

The first AMA sanctioned vintage Motogiro USA run by the United States Classic Racing Association got off to a wet start from Plattekill Ski Resort in the Catskill Mountains of New York State as the remnants of hurricane Ivan dropped five inches of rain during the night prior to the start. With heavy rain still falling into the morning of the start, the organizers opted to run the one Sunday section on Saturday and run the two Saturday sections on Sunday. Doing this would allow an early Saturday afternoon start with hopefully improved weather conditions. As this program modification was being presented to the participants at the riders meeting, word came from the State Police that all roads in the county had been closed due to flash flooding. The start of the Motogiro was on hold.

Motogiro USA is an outgrowth of the very popular and historic Motogiro d'Italia that has been revived recently in Italy. Loosely translated from the Italian, it means a motorcycle tour. Historically in Italy, it was a race for small production motorcycles on the public roads in order to draw attention to market brands and increase motorcycle sales. The recent Italian revival of the Motogiro d'Italia is now primarily for small displacement vintage motorcycles built prior to 1957. In 1957, all motor racing on public roads in Italy ceased due to a horrific car racing accident in the auto equivalent of the Motogiro d'Italia.

Several members of the USCRA had participated in the newly revived Italian Motogiro and proposed a similar event for North America. The United States Classic Racing Association picked up on the theme of a small displacement vintage road enduro with displacement and year modifications to more closely align with the small displacement bike boom in North America.

A year of detail planning went into the event, a suitable location was selected and sections were set through the picturesque and very rural Catskill Mountains of New York State. Four displacement classes up to 250 cc and a 1968-year cutoff attracted a great variety of machines. A low average speed was set to enable the participants to have a leisurely tour on the demanding and scenic roads. Each participant had a start time and a section end time that had to be met to incur no penalty points. Meeting those section times would be relatively easy if the rider didn't get lost en-route. The real winning and losing of the event would take place in the Ability Tests, an integral part of the Motogiro that are incorporated in the sections. At the Ability Tests the participant would have to ride an electronically timed 20 meter course in a pre announced time through a slalom of cones. The set time requires slow precision riding and was timed to a 1/1000th of a second.

As the skies cleared, twenty-three hardy participants set off in rain gear on the big adventure that would create unbelievable enthusiasm and camaraderie through adversity. From the smallest machine, a Sears 50cc to the oldest with Dave Roper riding a Moto Guzzi 250 Aerone, an unbelievable seventeen different manufacturers were represented. These included Suzuki, Honda, Yamaha, Velocette, Morini, NSU, Benelli, Puch, CZ, Ducati, Bridgestone, Moto Guzzi, BSA, Gilera, Bultaco, Parilla, and Sears. The terrain and the weather tested these vintage machines to their maximum. The section done on Saturday was close to 100 miles long, and the two sections on Sunday totaled 120 miles. Road closures due to flash flooding on Saturday necessitated the riders finding alternative routes around the raging rivers. Noted road racer from the 1960's, Frank Camilleri, entered one of these flooded roads on his small Yamaha only to bury it under water and almost get swept away by the current. Dragging his machine back to high ground, the two-stroke motor was emptied of its water and restarted to eventually finish first in the 125 class. The sight of that near catastrophe deterred others from the temptation to try and ride through.

8.1.1 Introduction

MOTOGIRO USA is an AMA sanctioned road event for vintage motorcycles conducted by the USCRA. It is a non-speed event with a very low average mile per hour speed limit over a specified route.

All participants are to adhere to all local traffic laws governing the specified route for the duration of the event. The USCRA and AMA are not responsible for any liability caused or incurred at a MOTOGIRO USA event.



8.2 Regulations

The MotoGiroUSA will take place primarily on paved roads. The route will be clearly marked on your route sheet and be marked with arrows posted along to route to aid in identifying turns. Although it is assumed that directional arrows will remain as posted by the organizers, the organizers cannot be responsible for missing or redirected arrows. In areas of question, refer to your route sheet and maps for accuracy.

Note: Each person is personally liable for his/her behavior and actions during the entirety of the event.

1. Any person legally licensed to ride a motorcycle in the state of New York and entering a pre-1968 motorcycle of less than 250cc will be permitted to enter. Like design or similar design motorcycles manufactured during or after 1968, in the spirit of the event, and with PERMISSION of the event rules committee, will be permitted.
2. All participants must be current members of the American Motorcyclists Association. AMA memberships will be sold at the event and be good for one year.
3. All motorcycles must be legally registered, insured and equipped to meet the safety standards for operation on public roads in the state(s) where the event takes place. It is the sole responsibility of each entrant to comply with the motor vehicle laws of said state(s).

Note: Helmets must be worn anytime the motorcycle is ridden (including ability trials) regardless of any state motor vehicle laws to the contrary

4. Entered motorcycle will be broken into the following classes, based on displacement or type of machine.
 - 0 – 65cc
 - 66 – 125cc
 - 126 – 200cc
 - 201 – 250cc
 - 305cc
 - Sidecar
 - Scooter
5. Each participant is personally liable for his/her behavior and actions during the entirety of the event. Participants risk disqualification, suspension or other disciplinary action for any prohibited conduct.
6. Teams can hold no less than 3 riders and no more than 5. Results for each team will be based on the best 3 out of 5 scores per team.

8.3 Starting Order

The starting order may be set by the order of registration and the displacement class entered. Motorcycles will enter / depart the start box at the time indicated on their time card. Official time clocks for rider

viewing will be placed at the entrance to the start box and at the start line. Riders must enter the start box in their assigned minute. Riders should have their time cards in their "clip" and accessible for the starting official. The starting official will take the rider's time card when the rider enters the start box and record his/her start time on their card. Once the rider's time is officially recorded and card returned to the rider, the rider must depart the start box. For any entrant who is "punched in" prior to or after his/her assigned start minute, he/she will receive a penalty of one minute of up to a maximum of twenty minutes. Once this time is exceeded, the fixed penalty is applied. This penalty is carried through to the end of the section. Riders should depart on their assigned times in subsequent sections.

Note: The official "punch clock" seconds may vary slightly from the official event time. The officials know this variation and will apply or deduct that variation when tabulating scores.

8.4 Time Cards and Controls

1. At the beginning of each day, an entrant will be given a time card with the following information.
 - Entrant's number
 - Displacement Class entered
 - Entrant's specific STARTING and ENDING times for each section
 - Blank spaces for transit stamps
 - Approximate distances between check points
2. Each participant is responsible for and required to carry his own time card throughout the sections and present it to the:

"SC" Stamp Checks or "TC" Time Checks
3. The route indicated on the route sheet must be followed at all times.
4. All Stamp Checks "SC" and Time Checks "TC" must be passed through. Deviation from the assigned route or missing checks will incur the fixed penalty.
5. Any participant who is found to have altered or falsified his time card will be disqualified.
6. Any entrant that loses his time card should ask for a replacement at the next checkpoint. In that case an entrant will only be classified in that days sections if it is possible for the officials to reconstruct the entrants missing timings and stamps. Also in this case the entrant will incur a 1/10 second penalty. If it is impossible to reconstruct the entrant's timings, the fixed penalty will be assigned.

8.5 Check Points

“SC” STAMP CHECKS

“TC” TIME CHECKS

The checkpoints will be clearly marked.

STAMP CHECKS “SC” are simply a means of assuring that the participant stays on the prescribed route. Stamp checks “SC” are not timed. Participants do not have to worry about crossing the STAMP CHECK “SC” at their correct time.

TIME CHECKS “TC” and end of section arrival points are clearly marked and should be crossed at you prescribed time. On approaching a TIME CHECK “TC” or end of section point, the participant will find a white flag on the right 100 meters before the control line followed by a yellow flag 20 meters before the control line. The actual CHECK POINT will be a white line or colored stripe across the road. If a participant arrives early, he / she may wait in the transit area between the white and yellow flags. To check the official time a participant may proceed from the transit area ON FOOT to the control desk to check the official time.

8.6 Time Keeping

The time at all Check Points will be measured by the Race Officials using either manual or electronic timers. Where possible, the use of atomic time clocks will be the official time standard. The time in the Ability Trials will be measured in hundredths of a second. The time in the Time Checks “TC” will be measured to the minute.

NOTE: The judgement of the official timekeepers is final and may not be challenged.

8.7 Ability Trials

Ability trials will be set up along the way. An ability trial tests the rider’s ability to cover a prescribed distance in a predetermined amount of time. Timing will be to a 100th of a second and be automatically timed. When it is his / her turn to take the Ability Trial, the participant enters the holding area on his / her motorbike to prepare for the trial. The holding area is the area before the white flag. When indicated the participant enters the Neutral Zone – the area between the white and yellow flags. The official will then signal to the participant that he may begin the Trial. The Trial area (non-stop zone) is the area between the yellow flag and the white line across the road where the timing beam is placed. The non-stop distance must be covered in as near as possible to the set time. (for example 50m in 40 seconds) The test ends when the participant crosses the second timing beam at the end of the non-stop zone (marked by a white line). Once in the non-stop zone, it is prohibited to stop the bike, reverse direction, put the feet on the ground or touch any external object for support. Zigzagging is permitted in order to cross the finish line (break the beam) in the set time. Ability trials may be done either in a straight line or in a slalom. The slalom is marked by a number of cones depending on the length of the stretch.

8.8 Penalties

8.8.1 Ability trial penalties

- One foot on the ground - 1 second
- Both feet on the ground - 1 second
- U-turn / direction change - 10 seconds
- Stopping the bike - 10 seconds
- Using external objects for support - 10 seconds
- For every slalom cone knocked over - .10 second
- Complete avoidance of the slalom - 10 seconds
- Partial avoidance of the slalom - 5 seconds

To participate in the Ability Trials only the following are permitted: mechanical or electrical chronometers and chronographs (countdown timers prohibited). Under no circumstances will acoustic or light emitting signal devices be permitted. Devices deemed unsuitable by an official must be removed or disabled. Participants unwilling to abide by the officials requests will receive the maximum penalty points for that test.



8.8.1 Fixed penalties

The fixed penalty will be 120 minutes

8.8.2 General penalties

60 seconds – Reporting late at the starting line at the beginning of each leg. For each minute late-up to 20 minutes.

Fixed Penalty – Reporting late at starting line at beginning of each leg. More than 20 minutes late.

Fixed Penalty – Deviation from the official route with intention of taking short-cut when noted by an event official.

1/10 second – Loss of time card where reconstruction of official timings is possible.

Fixed Penalty – Alteration of the time card.

Fixed Penalty – Failure to pass a time check or stamp check point.

60 seconds – Delayed arrival at a time check for each minute over accepted margin

60 seconds – Failure to respect Highway codes witnessed by police.

8.8.3 Exclusions from classification

In the following circumstances, competitors will be excluded from daily classifications.

- One or more time stamps missing from Time Card.
- Loss of time card (unless a Race Official is able to accurately reconstruct the participants missing timings) In this case, participants may continue the Motogiro next section but with a fixed penalty applied

8.9 Finishing Positions

Overall finishing position in each class will be determined by totaling of all penalty points the rider has accumulated throughout the event. Lowest total wins.

9 Pewter Run Rules

Please Note: The following regulations are general and not comprehensive. Specific rules and event entry information for the current season can be found at the following US CRA web sites: www.race-uscra.com and www.pewterrun.com.

9.1 History

The Pewter Run is a timed, non-speed, reliability road event for motorcycles built prior to 1950. The Pewter Run is a Vintage and Veteran Motor Cycle tour dedicated to celebrating the first fifty years of motorcycling. This is an AMA sanctioned road-riding event subject to their rules and regulations. The event is organized and promoted by the US CRA and subject to the following additional Regulations:

9.2 Machine Eligibility

The event is open to all eligible AMA members, US CRA members and their invited guests, driving a motor cycle, either solo or with sidecar, autocycle, or three-wheeled cyclecar manufactured not later than December 31st 1949. Riders of out of period later machines of like design may petition the event organization and be permitted to participate in Class E at the discretion of the Event Chairperson.

9.3 Classes

Class A: **Veteran:** Machines manufactured before December 1914.

Class B: **Early Vintage:** Machines manufactured between 1915 and December 1924.

Class C: **Late Vintage:** Machines manufactured between 1925 and December 1930.

Class D: **Post Vintage:** Machines manufactured between 1930 and December 1949.

Class E: **Post 1950:** **Entries subject to approval by Event Coordinator. Please send photo if possible.



9.4 Routes

There will be several routes of varying lengths depending on class entered. All routes are over paved roads of good or reasonable surface. The A route for veteran machines will avoid steep hills to the extent possible.

Responsibility for following the correct route will rest with the rider. Refer to note in section 10.5 below. Mileage given on the route card is calculated to the nearest 1/10th mile.

9.5 Scoring

Participants will follow a designated route at a designated average speed to checkpoints that will confirm their progress. To be eligible for awards, Participants must complete the route for the entered class of machine in the prescribed time. Average speed shall be shown on route cards.

NOTE: A rider registered in an earlier period class may elect to travel one of the longer designated routes. The rider will be scored against the time for the longer route. In such a case, the rider must alert event officials prior to electing the longer route to ensure correct scoring.

9.6 Entries

- Entry fees for Riders - All entrants will pay an entry fee.
- Entry fee for passengers - All passengers participating in the event will pay an entry fee.
- Payment must be included with entry form.
- All participants are encouraged to be active AMA members. AMA and USCRA memberships will be sold at the event.
- Entry acceptance will be at the discretion of the USCRA event chairperson.
- Starting numbers will be allocated based on date of entry.
- Entrants for the Team Award (best timed performances from a team of three riders) should choose a name for their team and use this name on all three entry forms.
- Requests to share a start time will be considered by the event chairperson.
- Entry fee refunds can only be considered through written cancellation requests received by specified date.
- Changes of machine or class will only be permitted by written petition and at the discretion of the event chairperson or his designee. Last minute changes are discouraged.
- Entrants will receive their route instructions at event registration.

9.7 Regulations for Riders & Machines

1. The Machine and rider must comply with all DOT requirements for operation on the public roads of the State where the event is held, in the vehicle registration class presented i.e. Antique or regular vehicle. A valid driver's license, valid vehicle registration, and proof of vehicle liability insurance to that State standards must be presented at registration. The organizer will not be held responsible for misrepresentation or fraudulent information submitted for event entry.
2. Rider number cards will be supplied when signing in. They are to be clearly visible on the front of the machine, for the duration of the event including judging.
3. All riders must attend a mandatory rider meeting prior to event start time. Any rider not present for this meeting may be required to forfeit his entry. Appeals are at the discretion of the event Chairperson or his designee.
4. All machines must be in the designated staging area adjacent to the start area at least 30 minutes prior to event start time. After completing the route, machines must stay in the staging / display area until completion of judging.
5. Riders failing to come under Starter's orders at their allotted time may start after the last scheduled rider or at the starters discretion.
6. Riders may elect to cross the Start Line with a dead engine and start the machine on the route.
7. The same machine must be used throughout the Run.
8. Time and progress checks will be shown on the route sheet. The final time check will be at the Finish line.
9. Any entrant found to be using an accompanying pacer vehicle, electronic speedometer, GPS device or any aid other than a watch and speedometer contemporary to their class will be disqualified.
10. Any timed rider observed to be stationary at the approach to a time check will have the observed stop time recorded.
11. Any rider reported to have to have been operating his motorcycle in excess of posted speed limits or violation of motor vehicle laws in any fashion or for driving in a manner liable to cause public criticism anywhere on the route will be disqualified.

12. Failure to sign in at the finish line at the completion of the run will result in disqualification from the results and awards.
13. Riders dressed in comic attire or in any way likely to bring derision on this event will be disqualified and or excluded. Dress contemporary to the age of the machine is encouraged.
14. The consumption of alcohol prior to or during the event is grounds for disqualification, suspension and removal from current and future events.

9.8 Regulations for the Meeting

Only registered riders and registered passengers entered in the event and while taking part in this event, will be covered by the AMA sanctioned event liability insurance policy.

Parking in the staging area is for machines registered and entered in the event only, all other machines and transport vehicles must park in the designated areas.

9.9 Awards

To qualify for a Timed Award, riders must;

1. Enter the Event and cross the starting line at their designated start time.
2. The machine must have traveled the prescribed route under its own power, or the exertion of the rider and passengers. No other assistance is allowed.
3. The following awards will be presented:
 - Class Trophy – Presented to the entrant in each class whose accumulated points and time is nearest to but not faster than the overall time designated for that class.
 - Pewter Replicas – Presented to all entrants finishing within 10% of their specific class winner's time.
 - Completion Awards – Presented to all machines successfully completing their designated class route as per the rules.
 - Jack Connors Memorial Trophy – Awarded to the entrant of the oldest machine.
 - Combined age Trophy – Awarded to the entrant whose age plus that of his/her machine totals the greatest number of years.

- The Team Trophy - Awarded for the best performances from a team of three riders, registered as a team. They must ride the routes according to the age of their machines.
- Good Sport Award – For the entrant best dressed in period attire in keeping with the machine.
- The Brough Superior Award – Awarded to the entrant of the Brough Superior machine that is in the opinion of the judges in the best condition.
- Hard Luck Award – At the discretion of the organizer, hopefully will not be needed.

9.10 Spectators

Spectators are encouraged to attend. Non-registered event machines and spectators must not interfere with the progress of the registered participants. It is against the rules and spirit of this event for non-registered event machines or vehicles to assist with pacing.

USCRA SPONSORS AND SUPPORTERS



10. Reference Materials

10.1 Final Drive Gear Ratio Chart

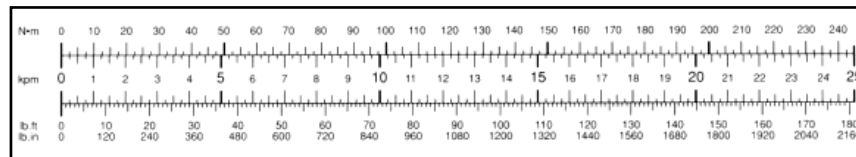
Countershaft Sprocket (teeth)

	11	12	13	14	15	16	17	18
28	2.55	2.33	2.15	2.00	1.87	1.75	1.65	1.56
29	2.64	2.42	2.23	2.07	1.93	1.81	1.71	1.61
30	2.73	2.50	2.31	2.14	2.00	1.88	1.78	1.67
31	2.82	2.58	2.38	2.21	2.07	1.94	1.82	1.72
32	2.91	2.87	2.46	2.29	2.13	2.00	1.86	1.78
33	3.00	2.75	2.54	2.36	2.20	2.06	1.94	1.83
34	3.09	2.83	2.62	2.43	2.27	2.13	2.00	1.89
35	3.18	2.92	2.69	2.50	2.33	2.19	2.06	1.94
36	3.27	3.00	2.77	2.57	2.40	2.25	2.12	2.00
37	3.36	3.08	2.85	2.64	2.47	2.31	2.18	2.06
38	3.45	3.17	2.82	2.71	2.53	2.38	2.24	2.11
39	3.55	3.25	3.00	2.79	2.60	2.44	2.29	2.17
40	3.64	3.33	3.08	2.96	2.67	2.50	2.35	2.22
41	3.73	3.42	3.15	2.93	2.73	2.56	2.41	2.28
42	3.82	3.50	3.23	3.00	2.80	2.63	2.47	2.33
43	3.91	3.58	3.31	3.07	2.87	2.69	2.53	2.39
44	4.00	3.67	3.38	3.14	2.93	2.75	2.58	2.44
45	4.09	3.75	3.46	3.21	3.00	2.81	2.55	2.50
46	4.18	3.83	3.54	3.29	3.07	2.88	2.71	2.56
47	4.27	3.92	3.62	3.36	3.13	2.94	2.76	2.61
48	4.36	4.00	3.69	3.43	3.20	3.00	2.82	2.67
49	4.45	4.08	3.77	3.50	3.27	3.06	2.88	2.72
50	4.55	4.17	3.85	3.57	3.33	3.13	2.94	2.78
51	4.64	4.25	3.92	3.64	3.40	3.18	3.00	2.83
52	4.73	4.33	4.00	3.71	3.47	3.25	3.06	2.89
53	5.82	4.42	4.08	4.79	3.53	3.31	3.12	2.94

Rear Sprocket (teeth)

10.2 Measurements and Equivalents

Torque Conversion Scale



U.S.: Length/Distance

Unit	Relation to other U.S. Units	Metric Equivalent
Inch	1/12 foot	2.54 centimeters
Foot	12 inches or 1/3 yard	.3048 meter
Yard	36 inches or 3 feet	.9144 meter
Mile	5,280 feet or 1,760 yards	1.6093 kilometers

U.S.: Volume/Capacity

Unit	Relation to other U.S. Units	Metric Equivalent
Ounce	1/16 pint	29.574 milliliters
Pint	16 ounces	.4732 liter
Quart	2 pints or 1/4 gallon	.9463 liter
Gallon	128 ounces or 8 pints	3.7853 liter

Metric/Imperial/US Conversion Chart

When you know:	Multiply by:	To find:
inches	25	millimeters
feet	30	centimeters
yards	0.9	meters
miles	1.6	kilometers
centimeters	0.393	inches
meters	1.1	yards
kilometers	0.6	miles
ounces	28	grams
pounds	0.45	kilograms
short tons	0.9	metric tons
grams	0.035	ounces
kilograms	2.2	pounds
fluid ounces	30	milliliters
pints, US	0.47	liters
pints, Imp.	.568	liters
quarts, US	0.95	liters
quarts, Imp.	1.137	liters
gallons, US	3.8	liters
gallons, Imp.	4.546	liters
milliliters	0.034	fluid ounce
liters	2.1	pints, US
liters	1.76	pints, Imp.
liters	1.06	quarts, US
liters	0.88	quarts, Imp.
liters	0.26	gallons, US
liters	0.22	gallons, Imp.

10.3 Imperial/Whitworth Conversions and Equivalents

Imperial/Whitworth to Metric Conversion

Imperial/Whitworth Size	Nearest metric Equivalent	Difference
5/32 AF	4mm	.001" larger
13/64 AF	5mm	.006" smaller
15/64 AF	6mm	.002" larger
9/32 AF	7mm	.005" smaller
5/16 AF	8mm	.003" larger
11/32 AF	9mm	.011" larger
7/16 AF	11mm	.004" smaller
1/4 BSW	11mm	.012" smaller
15/32 AF	12mm	.003" larger
1/2 AF	13mm	.012" larger
9/16 AF	14mm	.011" smaller
19/32 AF	15mm	.002" smaller
3/8 BSW	15mm	.009" smaller
5/8 AF	16mm	.005" larger
3/4 AF	19mm	.002" smaller
13/16 AF	21mm	.014" larger
1/2 BSW	21mm	.007" larger
7/8 AF	22mm	.009" smaller
15/16 AF	24mm	.007" larger
1" AF	25mm	.016" smaller
5/8 BSW	26mm	.014" larger
11/16 BSW	28mm	.002" larger
1.1/8 AF	29mm	.016" larger
1.3/16 AF	30mm	.006" smaller
3/4 BSW	31mm	.020" larger
1.1/4 AF	32mm	.009" larger
1.5/16 AF	33mm	.013" smaller
1.3/8 AF	35mm	.002" larger
1.7/16 AF	36mm	.020" smaller
1" BSW	38mm	.016" larger

British Imperial: Volume/Capacity

Unit	Relation to British Units	Equivalent to U.S. Units	Metric Equivalent
Pint	1/2 quart	1.201 pints	.5683 liter
Quart	2 pints or 1/4 gallon	1.201 quarts	1.137 liters
Gallon	8 pints or 4 quarts	1.201 gallons	4.546 liters

10.4 Wheel/Tire Sizes, Equivalents and Designations

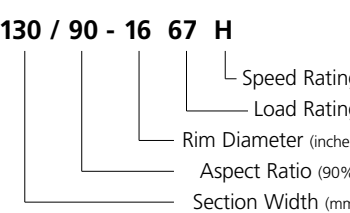
Rim Width Measurements

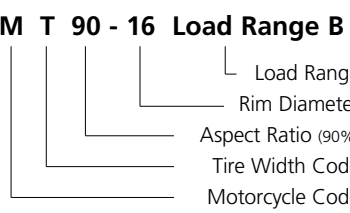
British	S.A.E
WM1	1.60"
WM2	1.85"
WM3	2.15"
WM4	2.50"
WM4.5	2.75"
WM5	3.00"
WM6	3.50"
WM9	4.25"

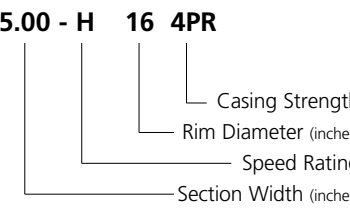
Front Tire Sizes and Equivalents

Metric	Alpha	S.A.E
180/90	MH90	2.50/2.75"
90/90	MJ90	2.75/3.00"
100/90	MM90	3.25/3.50"
120/80		4.25/4.50"
120/90	MR90	4.25/4.50"
130/90	MT90	5.00/5.10"

Tire Size Designation

Metric Designation
130 / 90 - 16 67 H


Alphabetical Designation
M T 90 - 16 Load Range B


S.A.E Designation
5.00 - H 16 4PR


Rear Tire Sizes and Equivalents

Metric	Alpha	S.A.E
110/90	MP85	4.00/4.75"
120/90	MR90	4.50/4.75"
130/80		5.00/5.10"
140/80		5.50/6.00"
140/90	MU90	5.50/6.00"
150/80	MV85	6.00/6.25"
150/90	MV85	6.00/6.25"

Speed Rating Chart

Maximum Design/Test Speed (mph)		
J Type	62	100
N Type	87	140
P Type	94	150
S Type	112	180
H Type	130	210
V Type	149	240
Z Type	149+	240+

10.5 US CRA Road Racing Classes Bump Chart

Period	Class	Cut-off date	Primary Bump Class	Secondary Bump Class	Potential Additional Bump Classes (Based on age of rider, origin of machine, etc.)
Pre-P1	Pre 1950	Dec. 31, 1949	Pre-1965		Tank Shift, Masters/Super Masters, Euro Cup
Pre-P1	Pre 1965	Dec. 31, 1964	P1 (based on displacement)	P1 (based on displacement)	Masters/Super Masters, Euro Cup
P1	50GP	Model Year 1970	100GP	N/A	N/A
P1	100GP	Model Year 1967	200 GP	ULSV	Masters/Super Masters, Euro Cup
P1	Form. CB160	Model Year 1969	200 GP	ULSV	Masters/Super Masters
P1	200GP	Model Year 1967	250 GP	ULSV	Masters/Super Masters, Euro Cup
P1	250GP	Model Year 1967	350 GP	500 GP	LWSV, Masters/Super Masters, Euro Cup
P1	350GP	Model Year 1967	500 GP	Open GP	LWSV, Masters/Super Masters, Euro Cup
P1	500GP	Model Year 1967	Open GP	N/A	Masters/Super Masters, Euro Cup
P1	OpenGP	Model Year 1967	HWSV	N/A	Masters/Super Masters, Euro Cup
P1	Classic Sidecars	Model Year 1967	N/A	N/A	N/A
P1/P2	Form. CB350	Model Year 1974	LWSV	MM Production	Per. IV, For. 3; Masters/Super Masters
P2	Ultralightweight Supervintage	Approved air cooled machines made after 1968	LWSV	HWSV	MM Prod., Masters/Super Masters, Euro Cup
P2	Lightweight Supervintage	Model year 1972	HWSV	MMV (with restrictions)	Per. IV, Form. 3; Masters/Super Masters, Euro Cup
P2	Heavyweight Supervintage	Model year 1972	Per. IV, Form. 1	Per. IV, Form. 2	Per. IV, Form. 1; Masters, Euro Cup
P2	Supervintage Sidecars	Model year 1972	N/A	N/A	N/A
P3	50cc Supervintage	Model year 1983	Formula Flyweight	N/A	N/A
P3	Middleweight Production	Model year 1976 Vinhua Motor Formula 40 legal through 1979	Period IV, Formula 3	N/A	Masters/Super Masters, Euro Cup
P3	Formula 40	Model year 1979	Period IV, Formula 3	MM Production	Masters/Super Masters, Euro Cup
P3	Formula Singles Classic	Model year 1980	Period IV, Formula 3	Period IV, Formula 2	Masters/Super Masters, Euro Cup
P4	Form. 1.2 & 3	Model year 1990 <small>(open models and intermediate)</small>	Form. 3 into Form. 2, Form. 2 into Form. 1, Form. 1 into Per. IV	Formula Singles (where applicable)	Masters/Super Masters
P4	Period IV Open form. Middleweight	Model year 1990	N/A	N/A	Masters/Super Masters
P4	Form. Middleweight	Model year 1990	Period IV, Formula 3	Period IV, Formula 2	Masters/Super Masters
Modern	50cc	N/A	Formula Flyweight	N/A	N/A
Modern	Form. Flyweight	N/A	N/A	N/A	Masters/Super Masters
Modern	125/250 GP	N/A	N/A	N/A	Masters/Super Masters
Modern	Formula Singles Modern	N/A	N/A	N/A	Masters/Super Masters

10.6 Technical Inspection Form

US CRA Pre-Race Tech Inspection Form

Riders: Please inspect your machines prior to tech inspection. Below is a checklist to assist you with safety compliance for US CRA racing. In addition, please be sure your machines are clean enough that all of the below items can be clearly seen by the tech inspectors.

Date: _____ Rider's name: _____

Rider's number: _____ Bike: _____

Safety Wiring

- | | |
|---|--|
| <input type="checkbox"/> Throttle cables | <input type="checkbox"/> Front fork pinch bolts |
| <input type="checkbox"/> Oil lines | <input type="checkbox"/> Exhaust nuts |
| <input type="checkbox"/> Brake cable, front | <input type="checkbox"/> Front axle, including nut |
| <input type="checkbox"/> Oil galley plugs | <input type="checkbox"/> Exhaust tail sections |
| <input type="checkbox"/> Brake cable or rod, rear | <input type="checkbox"/> Rear axle nut, inc. bolt |
| <input type="checkbox"/> Oil drain plug(s) | <input type="checkbox"/> Rear brake torque arm |
| <input type="checkbox"/> Brake caliper bolts | <input type="checkbox"/> Front brake torque arm |
| <input type="checkbox"/> Oil filler cap(s) | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Brake arm bolts | |
| <input type="checkbox"/> Exhaust springs | |

Component Condition

- Tires, front and rear:**
- | | |
|---|--|
| <input type="checkbox"/> tread depth | <input type="checkbox"/> Steering head bearings play |
| <input type="checkbox"/> rubber condition | <input type="checkbox"/> Swingarm bearings/bushings |
- Wheels:**
- | | |
|--|---|
| <input type="checkbox"/> Bearing play | <input type="checkbox"/> Catch bottle |
| <input type="checkbox"/> Spokes (intact and tightened) | <input type="checkbox"/> Catch pan construction and mounting |
| <input type="checkbox"/> Metal valve stem caps | <input type="checkbox"/> (min. depth of 1"; absorbent pad in place) |

- Brakes:**
- Stopping power (individually)
 - Lever free play and release
 - Shoes/pads wear

- Controls/Cables:**
- Throttle return
 - Throttle cable(s)
 - No frayed wires, operates without binding
 - Brake cable, front
 - Brake cable, rear
 - Clutch cable

General Machine Preparation

- Chassis:**
- No antifreeze in radiators
 - Sidestand removed
 - Centerstand removed
 - Kickstart pedal removed
 - Engine kill switch mounted and functioning
 - CB350 output shaft seal retainer installed
 - Engine breather tube(s) end secured in closed container
 - Camera (optional) securely mounted at two points

11 Miscellaneous

11.1 2022 US CRA Class Champions



2022 USCRA Champions by Class

Class	Champion	Runners-up
Tank Shift	Tim Joyce	Doc Batsleer, Joe Miller
Pre-50	Andrew Townsend	Tim Joyce, Scott Dell
Pre-65	Jonathan Spinney	Isaac DiGeronimo, Walter Zawacki
Classic 50cc	Larry Crowe	
Supervintage 50cc	Vanessa Matthieu	Ben Plecco
Modern 50cc	Andrew Townsend	John Gurley, Gary Jedniak
Formula Flyweight	Kevin Dinsmoor	John Gurley, Chris Spooner-Bishop
200 GP	Jack Baker	Walter Zawacki, Matt Tanner
250 GP	Vin Borbone	Matt Camillieri, Walter Zawacki
350 GP	Vin Borbone	Matt Camillieri, Jim Jowers
500 GP	Peter Booth	Andrew Townsend
Open GP	Peter Booth	Dan Messier, Jonathan Spinney
ULSV	Jack Baker	Matt Camillieri, Sam Konzen
LWSV	Bob Demetrius	Bailey Sisson, Stephen Baker
MW Production	Bob Demetrius	Stephen Baker, Bailey Sisson
HWSV	Dan Messier	Dan Coyle, Jonathan Spinney
Euro Cup	Dan Messier	Dan Coyle, Paul Hanson
Classic Singles	Dave Evans	Tim Courts, Matt Camillieri
Modern Singles	Bob Demetrius	Ed Barna, Pete Minardi
Formula CB350	Kevin Dinsmoor	Bailey Sisson, Michael Corcoran
Formula RD	Caleb French	Bryan Thorne
Formula Middleweight	Michael Aberle	Josh Gurley, Blainor McGough
P4 Formula 3	Michael Aberle	Josh Gurley, Tom Bishop
P4 Formula 2	Michael Corcoran	Caleb French, Sayre Anthony
P4 Formula 1	Tom Bishop	Mike Aberle, Alan Perry
P4 Open	Michael Corcoran	Vin Borbone, Andrew Phillips
P5 Middleweight	Rick Patroliia	Pete Minardi, Dave Katz
P5 Heavyweight	Rick Doucette	Charles Brighenti, Rick Patroliia
Modern 125 GP	Doug Donelan	Anthony Mento, Rich Demetrius
Modern 250 GP	Ed Beatty	Doug Donelan, Chris Jensen
Formula 400	Lukas Doucette	Jason Downs, Kevin Dinsmoor
Formula Twins	Billy Saine	Mark Hull, Phillip Chovnick
Supervintage Sidecars	Green/Yampolsky	Joyce/Schuelke, Carroll/Demetrius
Masters	Ed Barna	Charles Brighenti, Bart Chamberlin
Super Masters	Rick Patroliia	Tom Bishop, Mark Hull

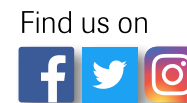


11.2 Disclaimer

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 said events. These rules shall govern the condition of all events, and by participating in these events all participants agree to comply with these rules. There is no expressed or implied warranty of safety resulting from the publication of or compliance to these rules and/or regulations. They are intended solely as a guide for the conduct of the USCRA and its events and in no way a guarantee against injury or death to a participant, spectator or official. Motorcycle racing is dangerous. Every competitor assumes, by his/her participation responsibility for all risks associated with motorcycle racing and shall hold harmless the USCRA, the Director and any/all other agents, employees and volunteers of the USCRA. Every competitor assumes, by his/her participation, responsibility and obligation to assess the safety aspects of facilities and individual conditions and must assume all risks, including injury or death.

©2022 USCRA, Inc.

Original Draft: Richard Peterson. Revisions, Design & Layout: Doug Donelan. Photography: Laurine Perry, John Stremper, John Branson, Andrew Phillips, Marvin Emerson and Doug Donelan. Special Thanks: Bob Coy, Mark Gibson, Jim Marhan, Sam Stoney, Jay Phinizy, Marcus Poisson, Karl Smolenski and all the members of the USCRA Rules Committee.
<http://www.race-uscra.com>



GROM PRIX

12.1 Grom Prix

Grom Prix is a spec class for modern, single cylinder, 125cc air-cooled 4-stroke motorcycles.

The class is restricted to the following machines only (no model year restriction):

- Honda Grom
- Kawasaki Z-125
- Benelli TNT

In addition to compliance with the rules set forth in Section 4 of the Rulebook, the following rules apply:

Wheels: 12" diameter only

Chassis: Stock OEM

Grom Prix is a probationary class for the 2023 season and will run concurrently with Formula Flyweight/200GP/350GP.

There will be no bump class for the Grom Prix class.

USCA
UNITED STATES CLASSIC RACING ASSOCIATION INC.



©2022 USCRA, Inc.

Original Draft: Richard Peterson. Revisions, Design & Layout:

Doug Donelan. Photography: Bill Gordon, Laurine Perry,

John Stempffer, John Branson, Andrew Phillips, Marvin Emerson and Doug Donelan.

Special Thanks: Bob Coy, Mark Gibson, Sam Stoney, Jim Marthan

Jay Phinizy, Marcus Poisson, Karl Smolenski and all the members of the USCRA Rules Committee.

<http://www.race-uscra.com>

Find us on

