

SECTION 3.6 HILLCLIMB MEETS

A. Hillclimb

- A. A hillclimb is a series of trials against time or distance on a specially prepared hill.
- B. Riders compete one at a time, receiving a score for their elapsed time if they make it to the finish line, or for their footage to the front axle of their machine if they do not make it to the finish line.
- C. It is incumbent upon the rider to make sure that they report to the starting line in a timely manner when their class (or name) is called. Riders who do not make their attempts in a timely manner, within the timeframe otherwise used for their class, will forfeit that attempt.
- D. Riders have a maximum of 2 minutes to make their attempt upon entering the starting area, or when directed to do so by the referee. The club may decrease the amount of time available at their discretion.
- E. If an issue arises at the line that would prevent the rider from making an attempt on the hill, the rider will be asked to move their machine back into the staging area and make repairs within a timely manner and return to the starting line. If the rider is not able to make their attempt within a timely manner, that attempt is forfeited.
- F. Riders may be accompanied by one pit crew member in the starting area to prepare their line or provide other assistance. Additional pit crew may be allowed at the club's discretion.
- G. Blocks/stands/etc. may be used for the rider to put his/her feet on while at the line, as long as they are removed by their pit crew after that rider's attempt.
- H. Riders/pit crew must take care not to trigger the starting line timing sensor while staging. If the timer starts, that is considered your ride - whether or not the referee/club wishes to allow leniency in this matter is at their discretion.
- I. If the hill has a dual-lane configuration, the rider must comply with any lane restrictions or else receive footage at the point at which a lane boundary was crossed.
- J. If out-of-bounds are marked on the hill, the rider will receive footage at the point at which they crossed that boundary.
- K. The machine's tether switch must be attached to the rider - such as by looping around the wrist, or clipping to the chest protector.
- L. The rider must have at least one hand on one handlebar when crossing the finish line, at the point at which the timer was stopped, in order to receive a time. Otherwise, footage

will be given to the point at which the rider dismounted the machine.

- M. Pushing/paddling with your feet is not allowed.
- N. Footage is given to the point at which forward progress initially stopped - you cannot come to a complete stop and then begin moving forward again.
- O. A machine may be ridden in more than one class, by one or more riders, granted that it is only ridden by one rider in any given class.
- P. The rider must be physically capable and mature enough to control his/her machine at all times, and to ride it safely. This includes stopping, starting, standing still, mounting, dismounting, and putting one or both feet on the ground. The referee has the authority to disqualify a rider who can't safely control his/her machine. Training wheels are not allowed.
- Q. Event results are calculated based on each rider's best attempt in each class. In the event that 2 or more riders have the same best attempt score, the tie will be broken based on their second-best attempt. If the involved riders have identical best and second-best scores, a one run run-off will be held to break the tie.
- R. Riders and pit crew are expected to conduct themselves in a manner respectful to the club, the sport, and the environment. Actions such as dumping oil, fuel, or antifreeze on the ground may result in your ejection from the event and/or being reported to the appropriate authorities.
- S. Riders are expected to comply with any and all club rules, and any direction from club members and/or the event referee while present on the event grounds.
- T. If the timer starts the clock, but does not correctly stop the clock, or if the clock does not start and the rider reaches the finish line, the rider can choose to take full footage for the hill or ride again. If the clock does not start and the rider does not reach the finish line, footage is recorded and no re-ride is offered.
- U. In the event that timing systems have to be changed during an event, any classes that are currently in progress for that round must be re-run in their entirety for that round.
- V. AMA Pro Racing Hillclimb Pro Sport-licensed riders can race at the AMA Hillclimb Grand Championship.
- W. The hill must be:
 - a. Well-marked, and with the timing sensors visible and/or marked so that riders can easily see where the start and finish lines are. Left and right boundary lines are not required, but if not obviously marked the referee must clearly describe the out-of-bounds rules for the event at

the riders meeting (even if there is no out-of-bounds).

- (1) Boundaries cannot be marked with stakes.
 - b. Free of any obviously unreasonably dangerous obstacles – for example, there should not be tree stumps in the competition area of the hill. Hillclimb, like all motorsports, is inherently dangerous, but reasonable care should be taken to avoid having any unreasonably dangerous obstacles on the hill.
 - c. At least 20 feet wide at all points.
- X. The starting area should provide a log or other backstop such that the rear wheel of the machine is no less than 20 feet from the starting line, and no more than 30 feet. The distance of the log/backstop from the starting line must be uniform across the width of the hill.
- a. Dual-lane starting areas are encouraged, granted that there is at least 40 feet of width in which to accommodate 2 20 foot lanes.
 - (1) When using dual-lane starting areas, all rides from each class must be held in the same lane – changing a class's lane from one side to the other during an event is prohibited.
- Y. The finish line must be at least 20 feet from the effective crest of the hill.
- a. Finish line must be visibly marked.
- Z. Riders must be at least 16 years old to compete in ATV classes (or older if required by state/local laws/ordinances).
- AA. Riders cannot enter more than 4 classes at any given event. Exhibition classes do not count towards the 4 class limitation except at the Grand Championship.
1. Youth class riders may enter no more than 3 classes.
- BB. AMA national numbers are valid from the day after an AMA Hillclimb Grand Championship until the conclusion of the following championship. AMA national numbers are designated by an "N" following the number 1-10. Riders with a top ten national number have the right to display that number only in the class in which it was earned, and only within the appropriate time period as noted. Riders improperly displaying an AMA national number may be subject to disqualification.
- CC. Hillclimb Classes: These classes are required to be offered at the AMA Grand Championship event, and are recommended for inclusion at all AMA-sanctioned amateur meets.
1. Youth classes:

Class Name	Class Definition
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Micro Mini	Riders 4-8 years old, 0-50cc, maximum 12" wheels, automatic transmission.
65cc	Riders 6-11 years old, 0-65cc 2-stroke and 0-90cc 4-stroke, maximum 14" wheels.
Mini Junior	Riders 7-11 years old, 52-85cc 2-stroke and 52-125cc 4-stroke, maximum 16" rear and 19" front wheels.
Mini Senior	Riders 12-15 years old, 66-85cc 2-stroke and 75-125cc 4-stroke, maximum 16" rear and 19" front wheels.

Note that in the Micro Mini class, if the machine has a manual transmission, it is acceptable to place the machine in gear at the starting line and remove the shift lever so that it can't be shifted on the hill.

2. Amateur classes:

Class Name	Class Definition
125	86-125cc motorcycles
200	126-200cc 2-stroke and 126-250cc 4-stroke motorcycles
250	201-250cc motorcycles
450	251-450cc motorcycles
600	451-600cc motorcycles
750	601-750cc motorcycles
Open	Motorcycles 751cc and larger
Senior	Riders at least 40 years old, any size motorcycle
Women	Female riders at least 12 years old on any motorcycle or minicycle with an engine displacing at least 86cc.

3. ATV classes:

Class Name	Class Definition
ATV 450	ATVs with engines up to 450cc
ATV Open	ATVs with engines 451cc and larger
ATV Senior	Riders at least 40 years old on any ATV

- (1) Recommended Additional Classes:
Recommended additional classes are suggested for inclusion at any AMA Grand

Championship – note also that the club hosting the Grand Championship may also elect to offer additional exhibition classes as well.

Class Name	Class Definition
Mini Girls	Female riders 4-15 years old, 0-85cc 2-stroke or 0-125cc 4-stroke, maximum 16" rear and 19" front wheels.
Super Mini	Riders 12-15 years old, 99-112cc 2-stroke and 99-150cc 4-stroke, minicycles with 16" rear and 19" front wheels.
Super Senior	Riders at least 50 years old, any size motorcycle
Four-Stroke	0-600cc four-stroke motorcycles
400 Stock	Motorcycles 86-400cc with engines in matching frames and stock wheelbase.
Open Stock	Motorcycles 401cc and larger with engines in matching frames and stock wheelbase.

4. KOTH (King of the Hill) Class

The top ten fastest times of the event, inclusive of ATV classes and exclusive of youth classes, will compete in a one-run class at the end of the program or event for the 80-Open/King of the Hill Championship, for which only one award maybe provided. There is no additional entry fee for this class. Classes subject to eligibility by lane assignment as determined by the event referee – class eligibility will be announced at the end of the event.

5. Exhibition Classes: Clubs always have the right to offer/run any exhibition classes as they see fit, whether to maximize rider entries or for any other reason. While the AMA will not dictate what exhibition classes a club can or cannot offer, it is required that any such classes be in accordance with the event insurance policy's requirements, it is advised that any exhibition classes comply with the AMA rider and machine eligibility rules.

B. Equipment Standards

1. General
 - a. Motorcycles are defined as full-size 2-wheeled machines designed and intended for adult use.
 - b. Minicycles are defined as less than full-size 2-wheeled machines designed and intended for use by minors.
 - c. Minicycles may compete only in Youth classes and the Women's class.
2. ATVs are defined as 4-wheeled machines designed to be operated by a single rider with motorcycle-style seating. No side-by-side or multi-passenger vehicles of any kind are allowed.
 - a. ATVs must be no wider than 52 inches at all points.
3. All machines must conform to the following general standards:
 - a. All machines must be built and maintained in a safe and professional manner.
 - b. All machines must be equipped with a tethered kill switch, which must be attached to the rider (such as looped around a wrist, or clipped to the chest protector, etc.) and function in such a way as to kill the motor(s) of the machine if the rider loses control of the machine and is separated from it. The tether can be no longer than 36 inches. A cord connecting the rider to the spark plug cap or wire is not considered an appropriate tether switch.
 - c. All machines must have functional rear fenders. Front fenders are not required.
 - d. Tires cannot be filled with fluid. Foam inserts are allowed.
 - e. Tires must be industry-standard off-road tires originally intended for motorcycle use (or for ATV use in the case of ATVs), from which material may be removed if desired but no material can be added. Retread tires are not allowed.
 - f. Paddle tires are not allowed in amateur/youth/ATV classes - a tire is considered a "paddle" tire if any paddle/knob stretches across the primary width of the tire continuously without any breaks. Manual modifications to the paddles, such as cutting slots in them, do not make them legal for these classes. Any tire originally manufactured/remanufactured or marketed as a paddle tire will be considered as such regardless of its current state at any given event.
 - g. No metal traction devices of any kind (screws, chains, bolts, etc.) are allowed in AMA amateur or AA competitions.

- h. Inside rim tire mounting width can be no wider than 5".
- i. There is no requirement for any component of a motorcycle or ATV to be an OEM part. All parts of a machine may be aftermarket or custom-made, so long as the part has been constructed in a professional manner and does not appear unsafe to the event referee.
- j. All machines in displacement-limited classes are allowed up to a 2mm (or .080") overbore from stock, and will remain eligible to compete in that class even if the result of the overbore is a displacement larger than listed in the class definition. The same displacement increase as would result from a 2mm overbore can also be claimed via stroking the motor, or a combination of boring and stroking.
- k. Machines with more than one engine are eligible to compete in whatever class would be applicable for the total displacement of all their engines.
- l. Piston displacement may be measured using either of the following formulas:
 - (1) $V = 3.1416 * b^2h$; b is one-half bore, h is measured stroke. $V = 3.1416 * (\text{one-half bore} * \text{one-half bore}) * \text{measured stroke} * \text{number of cylinders}$
 - (2) $V = B^2 * 0.7854 * h$; B is bore, h is measured stroke. $V = \text{bore} * \text{bore} * 0.7854 * \text{measured stroke} * \text{number of cylinders}$

Note: If bore and stroke is in millimeters, divide the end product by 1,000 to convert to cubic centimeters (cc). If bore and stroke is in inches, multiply the end product by 16.387 to convert to cubic centimeters (cc).
- m. All engines must be naturally aspirated. No forced induction of any kind.
- n. There are no limitations on transmissions, gearboxes, or gearing.
- o. Air/electric shifters may be used in any class.
- p. All machines must have at least one functional braking device that affects at least the front wheel (both front wheels for ATVs).
- q. Motors do not need to be sourced from a similar original application...motorcycles are not limited to motorcycle engines and ATVs are not limited to ATV engines. Any engine may be used so long as any such custom work is done in a professional manner and the resulting machine does not appear unsafe to the event referee.
- r. All machines must have self-closing throttles.

- s. Handlebar-mounted clutch and brake levers must have a ball-end as per original manufacture, or a 1/2" or larger ball added to the end (such as by tape, epoxy, etc.).
 - t. Exhaust systems may not extend past the rear axle, and must be constructed in such a manner as to not present any safety issue to the rider or hill crew.
 - u. All machines must have a functional fuel shutoff valve/petcock, or a fuel pump with automatic shutoff.
 - v. Fuel pumps are allowed, whether OEM or aftermarket.
3. The event referee has the right to inspect any machine at any time for any reason.
 4. Riders who refuse to submit their machines for inspection upon request by the event referee will be disqualified for that event, and notice of the refusal will be given to the AMA and the district organization.
 5. Only gasoline and gasoline/ethanol blends as available in normal retail locations are permitted for fuel. Pure gasoline in any form, either as pump gas or race gas, is acceptable, provided that the fuel is mass-produced and readily available to all competitors. Ethanol blends, whether pump fuel or race fuel, must consist of no more than 10% ethanol. No alcohol other than ethanol is allowed. Oxygenated fuels, whether pump or race gas, are allowed so long as the ethanol content is no more than 10%, provided that the fuel is mass-produced and readily available to all competitors.
 6. Off-the-shelf octane boosters and fuel stabilizers are permitted when used in accordance with the manufacturer's labeling.
 7. No other fuels or fuel additives are allowed, including (but not limited to) methanol, nitro methane, propylene oxide, and nitrous oxide.
 8. All fuel must be stored in approved containers.

AA Events and Classes

AA classes:

Class Name	Class Definition
450 AA	Motorcycles displacing between 251 and 450cc, regardless of engine configuration
600 AA	Motorcycles displacing between 451 and 600cc, regardless of engine configuration
800 AA	Motorcycles displacing between 601 and 800cc, regardless of engine configuration
Open AA	Motorcycles displacing at least 801cc, regardless of engine configuration

AA rules:

1. The following rules apply to all AA classes:
 - a. AA machines are allowed to run rubber paddle tires, either as originally manufactured or retread/remanufactured. No tire chains, bolts, screws, or any other metal traction devices are allowed.
 - b. AA machines are allowed to run the following fuels (including premix or injected 2-stroke oil as appropriate):
 - (1) Gasoline
 - (2) Gasoline/alcohol blends (whether originally offered for sale in that blend, such as E85, or blended after sale)
 - (3) Pure alcohol
 - c. No other types of fuels or fuel additives/supplements are to be allowed, including but not limited to nitrous oxide, propylene oxide, or nitro methane.
 - d. No forced induction is allowed – only naturally-aspirated carburetion or fuel injection.
 - e. Fuel pumps are allowed, whether OEM or aftermarket.
 - f. All AA classes are eligible to compete for cash prizes in lieu of/in addition to non-cash awards such as trophies.
 - (1) The payback rate for all AA classes must be at least 50% of class entry fees.
 - (2) Additional funds, such as from event sponsors, may be added to the cash purse.
 - (3) The payback schedule and any guaranteed amounts must be advertised by the club/promoter and adhered to on race day.
 - g. AA riders must be at least 14 years old on race day.
 - h. AA classes may be run at the same event as amateur/youth/ATV classes, or at dedicated events, at the club/promoter's discretion. Clubs/promoters must advertise their events appropriately, designating whether or not AA classes will be offered/run.
 - i. Because AA classes are a separate designation from amateur, youth, and ATV classes, they are not compulsory for inclusion in the AMA Hillclimb

Grand Championship. The hosting club/promoter may choose whether or not they wish to offer/run AA classes at the national/grand championship and advertise the event appropriately.

- j. Clubs have the right to offer/run additional classes as exhibition as they see fit. As noted in the amateur section, it is strongly advised to keep such classes in general conformation with the general AMA AA rules and with your event insurance policy.
- k. If the total purse to be paid out is more than \$3,000, a Pro-Am sanction must be used.

Riders competing in AA classes incur no change in eligibility to compete in amateur or ATV classes.

Hill Drags Events and Classes

Hill drags are events in which riders compete 2 at a time, head-to-head in a bracketed drag race format, in either single or double elimination. In the simplest sense, it is a drag race...on a hill.

1. Riders competing in hill drags must wear MX-style goggles.
2. The hill must be at least 40 feet wide at all points.
3. An appropriate electronic timing system must be used that provides automated functionality for staging, lighting the start light, red-lighting early starts, and determining the first rider to cross the finish line.
 - a. A full "pro tree" is not required, but may be used if desired.
 - b. Overall and/or per-lane elapsed times are not required, but may be used if desired.
4. Double elimination is recommended for all classes (besides Top Eliminator), although single elimination may be used at the club's discretion.
5. Top Eliminator is a single elimination class.
6. Hill drags are cash purse events. Payback must be at least 50% of class entries. Additional funds may be added to the purse at the club's discretion, such as from event sponsors.
7. Each rider must cross the finish line in the same lane they started in.
8. The club may delineate lanes on a portion (or all) of the hill. Riders who cross the lane boundary will be disqualified, with the win automatically being awarded to the other rider.
9. Riders who cause a crash will be disqualified. The determination of who caused a crash will be made by the acting referee, whose judgment is final.
10. No contact is allowed in lane-marked areas, even if the tires of the machine do not cross boundary lines. The

rider causing contact in a lane-marked area will be disqualified (note that both riders can be disqualified if the blame is equal).

11. In the event that both riders are disqualified (for example, if at some point both riders crossed lane boundaries) then that match will be re-run once. If on the re-run both riders are disqualified again, the rider who made the furthest distance up the hill before being disqualified will be declared the winner.
12. Riders must be at least 16 years of age to compete in a hill drags event.
13. Machine eligibility will be in accordance with the amateur rules section.
14. The rider who wins the loser's bracket must defeat the winner of the winner's bracket twice in order to win the class if the format is double-elimination.
15. Brackets must be posted in the staging area and updated match-by-match.
16. By-runs are not compulsory, a rider may opt not to ride a by-run, and will advance normally.

Hill Drags classes:

The club is free to define whatever classes they like based on general conformity with the amateur rules, although here are suggested classes for a 6-class event (plus Top Eliminator):

Class Name	Class Definition
250	Motorcycles displacing up to 250cc, regardless of engine configuration
450	Motorcycles displacing between 251 and 450cc, regardless of engine configuration
600	Motorcycles displacing between 451 and 600cc, regardless of engine configuration
800	Motorcycles displacing between 601 and 800cc, regardless of engine configuration
Open	Motorcycles displacing at least 801cc, regardless of engine configuration
ATV	Any 4-wheeled ATV
Top Eliminator	The top 2 riders from each class (except ATV) will compete for Top Eliminator in single elimination. Starting matches will be assigned by random draw.

Suggested classes for a 4-class event (plus Top Eliminator):

Class Name	Class Definition
250	Motorcycles displacing up to 250cc, regardless of engine configuration
450	Motorcycles displacing between 251 and 450cc, regardless of engine configuration
600	Motorcycles displacing between 451 and 600cc, regardless of engine configuration
Open	Motorcycles displacing at least 601cc, regardless of engine configuration
Top Eliminator	The top 2 riders from each class will compete for Top Eliminator in single elimination. Starting matches will be assigned by random draw.

C. European Hillclimb

European Hillclimb is a series of trials against time and/or distance, or a series of match races against time and/or distance on a paved or graded road surface ascending a hill.