





Table of Contents:

100 Basic Rules, Safety, Driver Info & Officials:

101 Basics:

101.1 Rule Hierarchy

101.2 Know the Rules

101.3 Responsibilities

101.4 Supplemental Rules

101.5 Drivers Meeting

101.6 Event Entrant (Driver)

101.7 Spirit and Intent

101.8 Social Media

101.9 Liability

101.10 Pit Pass

101.11 Threatening Actions

101.12 Driver Penalties

101.13 Protest

101.14 Review of Go-Pro/Video

101.15 Probation

101.16 Suspension

101.16.1 Appeal

102 Safety:

102.1 Helmet

102.1.1 Helmet Out of Compliance

102.1.2 Helmet Cameras

102.2 Neck Collar

102.2.1 Neck Collar Out of Compliance

102.3 Chest Protectors

102.3.1 Chest Protector Out of

Compliance

102.4 Driver Attire

102.5 Cameras

102.6 Pre-Practice/Race Inspection

102.6.1 Pre-Tech Sheet Penalty

102 Safety:

102.7 Weight

102.7.1 Loss of Weight on Track

102.8 Fire Extinguisher

103 Driver Information:

103.1 Basic

103.2 Minors

103.3 Competition Age

103.4 Move up Rule

103.4.1 Competitor Over Class Weight

103.4.1.1 Swift Class Competitor

103.4.1.2 Jr or Sr Class Competitor

103.4.2 Class Full Move Up

103.4.3 Competitive Driver Move Up

103.5 Relief Driver

104 Race Officials:

104.1 Race Director

104.2 Assistant Race Director

104.3 Flagman

104.4 Chief Scorer

104.5 Grid Steward

104.6 Tech Director

105 Pits and Padock

105.1 Competitors Pit Area

105.2 Paddock Courtesy

200 Chassis/Kart, Tires, Fuel & Oil:

201 Chassis/Kart:

201.1 Adjustments

201.2 Frame

201.3 Floor Pan

201.4 Steering

201.5 Axle

201.6 Brakes

Rev. 01-28-2024







201 Chassis/Kart:

201.7 Seat

201.8 Suspension

201.9 Wheel Hubs

201.10 Spindles

201.11 Wheel Bearings

201.12 Wheels

201.12.1 Wheel Weights

201.13 Throttle Pedal Spring

201.14 Fuel System

201.14.1 Fuel Line

201.15 Chain

201.15.1 Chain Guard

201.16 Bodywork Components

201.17 Front Bumper

201.17.1 Front Bumper

Support 201.18 Nose Cone

201.19 Side Pods and Nerf Bars 201.20

Driver Fairing

201.21 Rear Bumper

201.22 Numbers

201.22.1 Unreserved Number Hierarchy

201.23 Rear View Mirrors

201.24 Transponder Rental and Mounting

201.24.1 Transponder Mounting

201.24.2 Transponder Mounting Penalty:

201.25 Chassis/Kart Change

201.26 Kart Dimensions

201.26.1 Minimum & Maximum

Rear Wheel/Tire Width

202 Tires & Fuel:

202.1 Tires (Slicks)

202.2 Rain Tires

202.3 Single Final Tire Allocation

202.4 Double Final Tire Allocation

202.5 Damaged Tire Replacement

202.6 Late Registration/Non Qualifiers

202.7 Wet Weather Race Declaration

202.8 Spec Fuel

202.8.1 Fuel Temperature

202.9 Spec 2 Cycle Oil

202.10 Tire/Fuel tampering penalty

300 Race Information:

301 Flags:

301.1 Green Flag

301.2 Yellow Flag

301.3 Red Flag

301.4 Crossed Flags

301.5 Two Rolled Flags

301.6 White Flag

301.7 Checkered Flag

301.8 Waving Checkered with Red

301.9 Black Flag

301.10 Black Flag with Orange Circle

301.11 Blue/Blue with Yellow Diagonal Stripe Flag

301.12 Race Suspension/Red Flag

301.13 Lapped Karts/Blue Flag

302 From Grid to Tech:

302.1 Communication

302.2 Track Lavout

302.3 Number of Karts Allowed on Track

302.4 Quiet Grid

302.5 Pre-Grid

302.6 Controlled Grid

302.7 Grid

302.7.1 Working on the Grid

302.8 Entering the Track for Qualifying

302.9 Race Day 90 Second Rule

302.10 Driver Unable to Start

302.11 Practice

302.12 Slowing or Stopping on Track

302.13 Exiting Your Kart on Track

302.14 Re-entering the Racing Surface

302.15 Restarting Engine

302.16 No Passing Area (Waving Yellow)

302.17 Karts/Drivers Involved in Red Flag

302.18 Restarts

Rev. 01-28-2024







302 From Grid to Tech:

302.19 Loose or Missing Components 302.19.1 Losing Fluid on Track

302.20 Slick or Rain Tire Condition

302.20.1 Reducing Race Length (In wet)

302.21 Exiting the Race Track

302.22 Completed Race

302.23 Incomplete Race

302.24 Combining Classes

302.25 Event Format

302.26 Qualifying

302.26.1 Qualifying Tie Breaker 302.26.2 Qualifying Grid Spots

302.27 Heat Races

302.28 Finals

302.29 Clearing the Scale

302.29.1 Driving on the Scale 302.29.2 Drinking Fluids Before Clearing the Scales

302.30 Data Acquisition

302.31 Reporing to Tech

302.31.1 Tech Area

302.31.2 Failure to Report to Tech

302.31.3 Refusal of Tech

302.32 Impound Parts or Equipment

302.33 Race Starts

302.34 Penalties

302.35 Driver Conduct/Etiquette

303 Race Format, Scoring & Points:

303.1 Race Format

303.2 Scoring

303.2.1 Scoring Protests

303.2.2 Scoring Abbreviations

303.2.3 Penalized Starting Positions

303.2.4 Unforeseen Circumstance

303.3 Championship Points

303.3.1 THMP Points

303.3.2 Final Race Points Breakdown

303.4 Tie Breaker

303.5 Results

400 Series Class Structure:

401 THMP Class Structure:

401.1 Kid Kart

401.2 Briggs Cadet

401.3 IAME Micro Swift

401.4 IAME Mini Swift

401.5 Briggs Junior

401.6 IAME KA100 Junior

401.7 IAME X30 Junior

401.8 Briggs Senior

401.9 Briggs Heavy

401.10 IAME KA100 Senior

401.11 IAME KA100 Heavy

401.12 IAME X30 Senior

401.13 IAME X30 Heavy







500 Engine Rules:

501 General Engine Rules:

501.1 Comparison of Know Stock Part

501.2 Engine Pressure/Vacuum Testing

501.3 Carburetor Return Spring

501.4 Clutches

501.5 Engine Sealing

501.5.2 Engine Seal Penalty

501.5.3 Tampering with Engine Seal

501.6 Engine Change

501.7 Engine Components

501.7.1 Loose or Missing Engine

Components:

501.8 Briggs Engine Claiming

501.9 Cylinder Ports

501.10 Starter Batteries

501.10.1 Mounting Batteries

501.10.2 Loss of Battery on Track

501.11 Technical Tools

501.12 No Go Gauges

501.12.1 Using No Go Gauges

501.12.2 Cord Width No Go Gauges

501.13 IAME Supplied Tech Tools

501.13.1 Head & Header Profile Gauges

501.14 Piston Squish

501.14.1 Checking Piston Squish

501.15 LAD Port Gauge

501.15.1 Checking Exhaust Port Height

(LAD Tool)

501.15.2 Checking Exhaust Port Height

(Light Check)

501.15.3 Checking Inlet Port Height

501.15.4 Checking Transfer Port

Heights (Blowdown)

501.16 LAD CC Measuring Plug

501.16.1

501.16.2 Cylinder Head Volume/CC

Fluid

501.16.3 Burette

501.16.4 CC Procedure

502 Briggs Engine Rules and Regulations:

502.1 Engine

502.2 Carburetor

502.2.1 Needle Jet C-Clip

502.2.2 Throttle Cable Cap

502.2.3 Choke

502.2.4 Idle Pilot Jet

502.2.5 Idle Circuit Air Hole

502.2.6 Main Jet

502.2.7 Emulsion Tube

502.2.8 Venturi

502.2.9 Air Pick Off Hole

502.2.10 Throttle Bore

502.2.11 Venturi Idle Hole

502.2.12 O-Ring

502.2.13 Choke Bore/Air Horn

502.2.14 Carb Slide Cutaway

502.3 Air Filter

502.4 Intake Manifold

502.5 Carburetor Overflow and Valve Cover

Breather

502.6 Short Block

502.7 Cooling/Blower Shrouds and Covers

502.8 Damaged Thread Repair

502.9 Engine Ignition Switch

502.10 Oil Drain and Fill Plugs

502.11 Fuel Pump

502.11.1 Pulse

502.11.2 Pump Location

502.11.3 Brass Vent

502.11.4 Carburetor Supply Line

502.11.5 Fuel Filter

502.12 Head Gasket

502.13 Cylinder Head

502.13.1 Combustion Chamber

Dimensions

502.13.2 Valve Guides

502.13.3 Ports

502.13.3.1 Intake Port

Diameter

Rev. 01-28-2024







502 Briggs Engine Rules and Regulations

502.13.3.2 Intake Port Pocket

Bowl

502.13.3.3 Exhaust Port

Diameter

502.13.4 Valve Seats

502.13.4.1 Intake Valve Seat

Diameter

502.13.4.2 Exhaust Valve

Seat Diameter

502.14 Intake Valve

502.14.1 Weight

502.14.2 Valve Stem Diameter

502.14.3 Valve Head Diameter

502.14.4 Valve Length

502.14.5 Valve Margin

502.15 Exhaust Valve

502.15.1 Weight

502.15.2 Valve Stem Diameter

502.15.3 Valve Head Diameter

502.15.4 Valve Length

502.15.5 Valve Margin

502.16 Valve Springs

502.16.1 Wire Diameter

502.16.2 Length

502.16.3 Inside Diameter

502.17 Rocker Arms

502.17.1 Overall Length

502.17.2 Rocker Arm Studs

502.17.3 Rocker Arm Stud Plate

502.17.4 Rocker Ball Diameter

502.18 Push Rods

502.18.1 Diameter

502.18.2 Length

502.19 Camshaft Profile

502.19.1 Profile Limits

502.20 Flywheel

502.20.1 Weight

502.20.2 Key

502.20.2.1 Key Width

502.21 Ignition System

502.21.1 Coil

502.21.2 Spark Plug

502.21.3 Ignition Timing

502.22 Crankcase Cover

502.23 Starter

502.24 Exhaust

502.24.1 Header

502.24.1.1 Header Gasket

502.24.1.2 Header Fasteners

502.24.2 Silencer Pipe

502.25 Clutch

502.25.1 Kid Kart

502.25.2 All Other Classes

502.25.3 Sprocket Conversion

Drums/Kits.

502.25.4 Clutch Claim Rule

502.26 Briggs Rule Hierarchy

502.27 Sealing the Briggs LO206 Engine

503 IAME Bambino M1 Rules and Regulations:

503.1 Engine

503.1.1 Engine Shroud

503.1.2 Tape on Engine Shroud

503.2 Carburetor

503.3 Fuel Filter

503.4 Air Filter & Cover

503.5 Spark Plug

503.5.1 Spark Plug Boot

503.6 Muffler

503.6.1 Exhaust Manifold

503.7 Clutch

503.7.1 Clutch Test Procedure

503.8 Recoil/External Starter

503.9 Timing Procedure







504 IAME Swift Rules and Regulations:

504.1 Carburetor

504.1.1 Carburetor and Manifold

Gaskets

504.1.2 Carburetor Gaskets and Diaphragms:

504.2 Fuel Filter

504.3 Air Box and Filter

504.4 Spark Plug

504.4.1 Spark Plug Boot

504.5 Bearings, Seals, O-Rings and Gaskets

504.5.1 Base Gasket

504.5.2 Head Gasket

504.6 Piston and Ring

504.7 Mini Swift Exhaust Header

504.7.1 Micro Swift Exhaust Header

504.8 Exhaust Pipe

504.9 Clutch

504.9.1 Clutch Test Procedure:

504.10 IAME Swift Spec

504.11 Swift Carb Spec HW-31A

504.12 Sealing the Swift Engine

505 IAME KA100 Rules and

Regulations:

505.1 Air Box

505.2 Fuel Filter

505.3 Carburetor

505.3.1 Carburetor Gaskets and Diaphragms:

505.4 Reed Cage

505.5 Spark Plug

505.5.1 Spark Plug Boot

505.6 Cylinder Head

505.6.1 Cylinder Head O-Ring or

Gasket

505.7 Cylinder

505.7.1 Base Gaskets

505.8 Bearings, Seals, O-Rings and Gaskets

505.9 Crankcase

505.10 Crankshaft and Rod

505.11 Piston and Ring

505.12 Ignition

505.12.1 Ignition Ground Strap

505.13 Exhaust Header and Pipe

505.13.1 Junior Exhaust Header

505.14 Starter & Battery

505.15 Clutch

505.15.1 Clutch Test Procedure

505.16 Timing Procedure

505.17 IAME KA100 Spec

505.18 KA100 Carb Spec HW-33A

505.19 Sealing the KA100 Junior Engine

505.19.1 Sealing the IAME KA100

Senior and Masters Engine:







506 IAME X30 Rules and

Regulations:

506.1 Air Box

506.2 Fuel Filter

506.3 Carburetor

506.3.1 Carburetor Gaskets and

Diaphragms

506.4 Reed Cage

506.5 Spark Plug

506.5.1 Spark Plug Boot

506.6 Cylinder Head

506.6.1 Cylinder Head Gasket

506.7 Cylinder

506.7.1 Cylinder Base Gasket

506.8 Crankcase

506.9 Crankshaft and Rod

506.10 Piston and Rings

506.11 Bearings, Seals, O-Rings and Gaskets

506.12 Ignition

506.12.1 Stator

506.12.2 Ignition Rotor & Key:

506.12.3 Ignition Timing Procedure:

506.13 Exhaust Header, Connector / Flex and

Pipe

506.13.1 Junior Exhaust Header

506.14 Radiator

506.15 Water and Coolants

506.16 Clutch

506.16.1 Clutch Test Procedure:

506.17 IAME X30 Spec

506.18 X30 Carb Spec HW-27A

506.19 Sealing the X30 Junior Pro Engine

506.19.1 Sealing the IAME X30 Senior Pro

Engine:







100 Basic Rules, Safety, Driver Info & Officials:

101 Basics:

* Note: Trackhouse Motorplex reserves the right to modify any rule, at any time, to ensure program safety and fairness.

101.1 Rule Hierarchy, In Ascending Order:

- 1. Most current USPKS Sporting Regulations.
- 2. Trackhouse Motorplex 2024 Sporting Regulations (this document).
- 3. Trackhouse Motorplex 2024 Class Structure.
- 4. Driver's meeting announcements and rule clarifications (supplemental rules to any event).
- 5. Race Director's decision or clarification of any rule(s) during an event.

101.2 Know the Rules:

By participating at this track, THMP participants agree to take on the responsibility of knowing, and following, the rules set forth in this document, and agree to always hold safety, fairness, and sportsmanship in the highest regard.

101.3 Responsibilities:

The driver or guardian of each kart is responsible for the safe operation and condition of the equipment. Further, drivers and guardians are not only responsible for their actions, but also the actions of any crew member, family or friend while participating in a THMP event.

101.4 Supplemental Rules:

The Race Director can implement supplemental rules at any event. Supplemental rules will take precedence over any written rule. Any supplemental rule will be delivered to the competitors in written form, or verbal form if necessary.

101.5 Drivers Meeting:

The driver's meeting is scheduled and organized by the Race Director for all drivers registered for any given race.

- Every competitor is required to attend the drivers meeting; all minors must have a parent or adult representative in attendance also.
- 2. If a competitor does not attend the meeting, he/she loses the right to protest and will receive a two (2) position penalty added on to their qualifying spot per event. Example: if you qualify 3rd, you will be starting 5th in all races that use your qualifying position as the lineup. A roll call may or may not be called at the Race Director's discretion.
- ANY rule clarifications, announcements, or rule changes from the driver's meeting should be considered and is a supplemental regulation that takes the highest precedence over ANY other rule(s), written or otherwise.

101.6 Event (Race) Entrant, The Driver:

- 1. The entrant of the race is the driver.
- Trackhouse Motorplex reserves the right to refuse entry to any competitor or kart not conforming to regulations.
- The driver is solely responsible for the conformity of their kart and respective equipment for the duration of a given event.
- 4. No one is authorized to enter the controlled racing environment at any time for any reason unless permission is granted by the Race Director. Spectators and team personnel are expected to stay behind the fence at all times. Anyone who enters the controlled racing environment w/o permission is subject to ejection and disqualification of the competitor they represent.







101.7 Spirit and Intent:

Karting should be fun for everyone. The less that we have to officiate the better the event will become. Officials, teams, drivers, and families should treat each other with respect. Any lack of clarity within the rules does not provide the legality of an entrant. THMP has the right to prevent any competitor from participating in the event, as well as disqualify them from any sessions for not being compliant with and/or attempting to circumvent the rules or the spirit of the rules.

101.8 Social Media:

When differences of opinion arise regarding THMP rules and regulations, decisions by THMP officials, THMP policies, or between the competitors (and/or their charges), communication and discussion of these differences are best handled privately and directly between the parties involved. We ask all competitors to refrain from unsportsmanlike social media attacks, and to settle all disputes professionally and privately. Harmful and egregious social media postings may subject a competitor to discipline, including probation or suspension.

101.9 Liability:

All participants must sign a waiver/pit pass releasing THMP and officials of liability before participating in a THMP event. The signee agrees to hold THMP and officials harmless from any and all liability. This includes but is not limited to: injury to person, employees, property and/or reputation that may be sustained by signee, from all claims of injuries at present and future. This includes minors that may be at a THMP event.

101.10 Pit Pass:

All individuals intending to enter the pit area are required to purchase and wear a pit pass at all THMP events

101.11 Threatening Actions:

Competitors are prohibited from verbally threatening, physically intimidating, or otherwise insulting any fellow competitor, official, crew members, participant, or spectator, both during and outside any THMP event. Any competitor found in violation of this rule will be subject to discipline pursuant to the guidelines described herein.

101.12 Driver Penalties:

Competitors will be penalized in portion to their offense. Examples of penalties include, but are not limited to, loss of position, start at the rear of the field, disqualification, probation or suspension as described herein.

101.13 Protest:

All competitors have the right to protest a penalty called on them. Protests will be heard by the Race Director or the Event Steward.

It is THMP's intent to make every effort to resolve all protests on the track before an event concludes. All on track penalties will be decided at the event.

On-Track Officials are unavailable to review or discuss penalties until racing is completed for theparticularround. Competitors wishing to obtain more information about a penalty or file a protest should see the Race Director when available.

<u>Verbal protests will not be accepted, and Protests cannot be submitted for non-performance items.</u>

Race officials will only consider conversation relative to THE incident being questioned per review.

Only 1 protest per event, per driver.

If a driver's finishing position is adversely affected by an incident on the track, the driver cannot be reinstated to his or her previous position. However, this does not prevent the driver from filing a protest after the race to argue a position penalty given by the officials. Go-Pro/Video must be submitted within the 30-minute limit and must have a tablet or laptop available for viewing.







101.14 Review of Go-Pro/Video:

The Race director or designated official may review video to overturn or uphold a penalty. The competitor may only present their own footage and it must be available immediately on a laptop or tablet only. Officials have the right to view any footage to review an incident. A penalty called may be rescinded, but a penalty not called will not be applied. Competitors protesting a non-call are not permitted to use video to implicate another competitor. Officials have authorization to view any and all video evidence in cases where extremely dangerous driving has occured, whether a penalty was called or not. The Race Director may use their own video evidence to implicate a competitor for infractions during the race start (Jump Start, Out of Position, Tram Lanes Etc.).

101.15 Probation:

THMP officials may place a driver, participant, or spectator on probation for a set amount of time or races as determined by THMP. Probation is formal THMP designation – and any individual placed on probation will be notified in writing. Probation is reserved for serious offenses that threaten the health and safety of our drivers, participants, or spectators, or impact the fair and competitive balance of our track/series.

THMP reserves the right, in its sole discretion, to determine what offenses warrant probation. While under probation, an individual's actions are subject to stricter scrutiny. Specifically, if any individual under probation repeats the same offense, commits a similarly egregious offense, or otherwise violates THMP rules with impunity, that individual will be automatically placed under suspension pending appeal. See 101.16 Suspension.

101.16 Suspension:

THMP officials can suspend a driver, participant, or spectator for a set amount of time/races as determined by THMP. Suspension is formal THMP designation — and any individual who is suspended will be notified in writing. Suspension is reserved for repeat offenses worthy of probation under THMP Rule 101.15 Probation. In extreme circumstances, for offenses so egregious or unwarranted —an individual may be suspended without a probationary period altogether. THMP reserves the right, in its sole discretion, to place any individual on suspension for any act it deems sufficiently egregious. While under suspension, an individual is barred from attending — in any capacity — any THMP official event.

101.16.1 Appeal:

THMP ensures all its competitors a fair and just appeals process. Accordingly, all suspensions, but not probation, will be stayed for the duration of any formal appeal, not to exceed ten (10) days. To initiate a formal appeal, individuals must contact THMP at dan@trackhousemotorplex.com within forty-eight (48) hours of their formal suspension notification, and state the general basis for their appeal. At that time, THMP will make a determination of what is required to effectuate a fair and just appeal, and notify the individual accordingly. This may include, but is not limited to, an in-person hearing, a virtual hearing, a formal written letter, or a conference call with THMP officials. After appeal, THMP decisions are final, and will be posted publicly.







102 Safety:

- * Safety attire or equipment including kart can be inspected at any time.
- * Any safety violation could result in a penalty or DQ.

102.1 Helmet:

Full face helmets with shields attached are mandatory and shall meet one of the following requirements:

FIA Helmets	Expiration Date	
FIA 8859-2015	10 years from manufacture date if it is in helmet, if date is	
FIA 8860-2010		
FIA 8860-2018	not in helmet, it	
FIA 8860-2018 ABP	expires 10 years after spec	
Snell Foundation Specifications	Expiration Date	
M or SA 2015	12/31/2025	
CMR or CMS 2016 (Youth)	12/31/2026	
K, M or SA 2020	12/31/2030	
SFI Specifications	Expiration Date	
41.1/2013	12/31/2023	
24.1/2015 (Youth)	12/31/2025	
31.1 or 41.1/2015	12/31/2025	
24.1/2020 (Youth)	12/31/2030	
31.1 or 41.1/2020	12/31/2030	
24.1/2021 (Youth)	12/31/2031	

The Snell Foundation or SFI sticker must be inside of the helmet. If the manufactures date is inside the helmet, we will use that date. If the date is not in the helmet, we will use the specification sticker. The helmet will expire at the end of the year 10 years after the manufactures date.

Helmet shall be in good condition with no visible signs of damage and shall be the correct size for the driver per manufacturer's specifications, so it will not come off the driver's head or impair the vision of the driver by moving around.

Helmet can be inspected at any time if it is subjected to damage during an incident on or off the track. If driver has hair that could extend past the shoulders, they shall wear a head sock and tuck hair inside driver suit or jacket to prevent it from getting tangled in any moving parts.

102.1.1 Helmet Out of Compliance:

Any driver that is found out of compliance in a post-race inspection with the rule and specifications listed under 102.1 will receive a 10-position penalty.

102.1.2 Helmet Cameras:

Cameras <u>SHALL NOT</u> be mounted on or inside the helmet in any way, unless it is embedded in helmet during the manufacturing process.

102.2 Neck Collar:

All classes except Senior/Masters must wear a Neck Collar as manufactured and shall not be altered in any way. If a driver does not have a neck collar on, loses their neck collar or it becomes loose while on track, they will be black flagged immediately.

Senior/Master classes do <u>NOT</u> require a neck collar. Advanced neck and head support are highly recommended for drivers of all ages. Approved Advanced Neck and Head devices include:

- Leatt-Brace Moto Kart and Moto GPX
- EVS Evolution Race Collar
- Valhalla 360 Plus Device

102.2.1 Neck Collar Out of Compliance:

Any driver that is found out of compliance in a post-race inspection with rule listed above will be disqualified for that race.







102.3 Chest Protectors:

All drivers under the age of 13 years in all divisions are required to wear a chest protection device with
SFI approved specification 20.1 at all times they are on the race track. The SFI tag must be attached to the chest protector. The following chest protectors are approved and certified by SFI.

RECOMMENDED: The use of chest protection is recommended for all types and ages of kart drivers.

Group 6 3590 Pebble Beach Dr., Martinez, GA 30907 706-373-4515 www.group6gear.com 20.1/1, 20.1/2



The chest pad Shall be in place while on track.

Ribtect 102 Holly Oak Court, Victoria, TX, 77901 (310) 487-8938 www.ribtect.com 20.1/1, 20.1/2



Team Valhalla 22227 F50, Stryker, OH, 43557 (419) 682-1360 www.valhallaracing.com 20.1/1, 20.1/2



The following FIA approved chest protectors are also legal.

Bengio AB7 with chest protector



OMP KS-1 Pro with chest protector



Stilo Carbon Curva 8870 Karting Body Protection



Tillett P1 Defender with chest protector



102.3.1 Chest Protector Out of Compliance:

Any driver that is found out of compliance in a post-race inspection with rule 102.3 will be disqualified for that race.







102.4 Driver Attire:

Drivers shall wear ballistic nylon, leather, vinyl or other abrasion resistant jackets with full length pants, gloves, closed toe shoes and socks to limit the chance of abrasion. Sweatpants do not provide adequate protection. Hooded sweatshirts, bandanas or long belts that could become tangled in moving parts are not allowed.

102.5 Cameras:

Camera should not obstruct the driver's vision or block the view of the number panel in any way. Cameras may be mounted on kart as long as it will bend or break away if hit by another object such as a driver or body part. It is highly recommended that your kart number be clearly marked on your camera.

102.6 Pre-Practice/Race Inspection:

A Pre-Tech sheet can be downloaded from the website or obtained at the Front Office. This sheet shall be filled out completely with all tires to be used, engine seal number, chassis band number and initials in all applicable boxes, N/A if not applicable. The Pre-Tech form shall be submitted to the Tech official **BEFORE QUALIFYING**. Only one Pre-Tech sheet per kart, per event will need to be filled out. All karts shall be inspected by the competitor and have a chassis band attached before it will be allowed on the track for practice or racing.

102.6.1 Pre-Tech Sheet Penalty:

If a postrace inspection is performed on a competitor's kart and the Pre-Tech sheet is not found or not filled out properly the following penalties will be handed out.

1st offense = warning

2nd & 3rd offense = 1 position penalty

More than 3 issues with the tech sheet will result in a "to the rear" penalty for the next race.

102.7 Weight:

Weight that is added to the kart to achieve minimum weight for the class shall be white in color, this does not mean white tape with other colors or printing on it, package tape is not be acceptable. All weight shall have the competitor's number on the weight. Weight up to and including six (6) pounds shall be bolted on with a minimum 5/16" (8mm) diameter bolt. The bolt shall be double-nutted or have safety wire or a cotter pin inserted through a hole drilled in the bolt to prevent the nut from coming off. Weight over six (6) pounds shall have at least two 5/16" (8mm) or larger bolts, affixing the weight to the kart, this includes stacking weight on top of each other that totals more than six (6) pounds. Both bolts shall be double-nutted or have safety wire or a cotter pin inserted through a hole drilled in the bolt to prevent the nut from coming off. Mounting weight to bumpers, nerf bars, side pods or any component that is not secure shall not be allowed. Driver is not allowed to have any type of additional weight added to their safety attire or body such as exercise weight straps or weight in pockets.

102.7.1 Loss of Weight on Track:

Any competitor losing weight while on track will receive the follow penalty:

- 1) During practice, loses fastest lap of qualifying
- 2) During qualifying, Pre-Final or Final, is a DQ

102.8 Fire Extinguisher:

It is highly recommended that each entrant in the event have a minimum of one operable 1-1/2 pound dry-powder fire extinguisher (rated for use on A, B, & C type fires) in their pit area. It is recommended that they have one on the starting grid at the start of each race in the hot pit area. Carbon Dioxide type extinguishers are not acceptable substitutes for the dry-powder type.







103 Driver Information:

103.1 Basic:

Drivers must be in good standing with THMP.

Driver must not be under the influence of alcohol or controlled substance. Drivers shall be entered in the correct class for their age, as most of the classes have a minimum and/or maximum age limit (see class structure).

103.2 Minors:

It is mandatory that drivers under the age of 18 submit a minor's release form signed by the legal guardian at each event. If the parent or legal guardian is not present at the event, the minor's release MUST BE NOTARIZED. Proof of age is also required. This can be a birth certificate, passport, driver's license, or any official document verifying the minor's age. A record of the verification will be kept by THMP. THMP will not retain any copies of these documents. This proof of age is only required once a year IF THMP does not already have a record on file.

103.3 Competition Age:

The Competition Age of a driver is determined by the driver's actual age at the start of the calendar year (Jan 1st).

103.4 Move Up Rule:

Any driver meeting the minimum age requirement to move up to the next level by the end of the calendar year (December 31st) is eligible to do so anytime during the year. However, once they compete at the higher level, they may not move back to the lower level unless THMP feels it is in the best interest of the driver or THMP. EXAMPLE: If a driver is 14 on Jan 1st but will be 15 in July, he/she may stay in Junior or move up to a Senior class. Falsification of age will lead to disqualification and/ or suspension.

**THMP has the right to refuse a driver wishing to move up to the next level and also may require a driver to move back down if they feel it is for the best interest of the driver or THMP.

103.4.1 Competitor Over Class Weight:

103.4.1.1 Swift Class Competitor:

Competitors that are 10 lbs. or more over the class minimum weight, with no ballast on kart; may request permission from the Tech Director to move up to the appropriate Class providing the following:

- They must have lap times competitive for the Class that they are moving to.
- They must present the kart race ready, with the driver's safety gear in the seat, to the Tech Director to verify the weight of the kart and driver.

*They will be subject to a weigh-in at any time.

103.4.1.2 Jr or Sr Class Competitor:

Competitors that are 20 lbs. or more over the class minimum weight, with no ballast on kart; may request permission from the Tech Director to move up to the appropriate Class providing the following:

- They must have lap times competitive for the Class that they are moving to.
- They must present the kart race ready, with the driver's safety gear in the seat, to the Tech Director to verify the weight of the kart and

103.4.2 Class Full Move Up:

Any driver forced to move up to another age level due to the lower age level class being capped, may move back to the lower age level class at a future event with THMP approval.

^{*}They will be subject to a weigh-in at any time.







103.4.3 Competitive Driver Move Up:

Drivers with extensive experience that wish to move up to the next age group, may petition THMP to be considered for an exemption. Drivers must meet both requirements below to be considered, and submit an Age Waiver Form, (obtained from the THMP Administrator).

- Driver must be within 3 months of otherwise being of legal age to compete in that class. In other words, their birthday must be before the end of March, the following year.
- Driver must be a past champion or runner up in a major National or International series with at least 20 competitors in the class. USPKS, SKUSA Pro Tour, Rok Cup, Rotax,

103.5 Relief Driver:

A relief driver can be utilized after the driver qualifies the kart and becomes unable to compete (due to illness or injury during the event) in the remaining races for that day after approval by THMP. The relief driver must start at the rear of the field. The relief driver will be allowed to start the final in the spot they achieved from the Pre-Final. If the registered driver decides to race after the relief driver has run the heats, they will be required to start in the rear of the field. The use of an unapproved driver will result in disqualification and/or suspension of the driver of record by THMP.

104 Race Officials:

104.1 Race Director:

Oversees on-track activities, imposes penalties, communicates information to competitors and teams.

104.2 Assistant Race Director:

Works directly with Race Director to assist with on-track activities, determine penalties, and inform competitors of imposed penalties.

104.3 Flagman:

Works with the Race Director and Assistant Race Director to control all on-track activities and gives input on penalties.

104.4 Chief Scorer:

Responsible for timing and scoring, broadcasts to RaceMonitor or Race Hero as applicable, publishes race results to MyLaps, calculates points and posts results.

104.5 Grid Steward:

In charge of following the published schedule, checks to assure all karts and helmets have been inspected, and transponder is on the kart, as well as releasing the field to the track when track is clear and ready.

104.6 Tech Director:

In charge of pre-race and post-race inspections for both general safety and compliance with technical rules to ensure safety and fairness.

105 Pits and Paddock

105.1 Competitors Pit Area:

Must be left **CLEAN** and **NEAT** at the end of the day. Garbage cans have been provided, DO NOT leave debris on the ground. Leaving tarps, tent stakes and/or heaps of trash will result in a \$200 fine. This fine must be paid before you can enter your next race or practice day at THMP.

105.2 Paddock Courtesy

Please support a courteous setup and tear down of your pit area in the paddock by not blocking others in or putting your vehicle/equipment in a spot that diminishes another's experience.

*Bicycles, scooters, skateboards and other transportation vehicles are not permitted to be used by anyone under the age of 16 during an Event.







200 Chassis/Kart, Tires, Fuel & Oil:

201 Chassis/Kart:

- * Note: All measurements are in inches unless otherwise stated.
- * Note: CIK homologated components shall remain OEM unless specified in the specific component rule.
- * All karts must have a current Pre-Tech Chassis Band attached before Qualifying.

201.1 Adjustments:

The only adjustment a driver can make while on the track is the carburetor, brake bias or radiator louvers/shroud. Removing tape from radiator while on track is allowed. Adjustments must be made manually; mechanical adjustments are illegal.

201.2 Frame:

Main frame shall be round tubing with a minimum diameter of 1.0" and maximum diameter of 1.4". Minimum wall thickness for 1" diameter tubing is .078" and, for 1.125" or greater diameter tubing minimum wall thickness is .060". Frame tubing shall be minimum cold rolled or electric welded tubing or tubing of equivalent strength.

201.3 Floor Pan:

Floor pan is required, must not extend rear of the front seat mount/crossbar, it must be inside the frame rails and securely bolted in place. Must be made of metal, aluminum or composite, no plastic materials are allowed.

201.4 Steering:

Direct mechanical type steering is required; vertical shaft or rack and pinion steering is illegal. Steering shafts shall be attached at bottom with a minimum 5/16" fastener. Minimum diameter for solid steering shaft is 0.625" and for a hollow shaft it is 0.700". Minimum diameter for steering wheel hub bolts is 1/4" grade 5. All tie rod component bolts shall be a minimum of 5/16" grade 5 bolts. Tie rods shall swivel at both ends and be made of steel or aluminum. Steering wheel must be round in shape with a minimum of three spokes and 10" diameter. The top third of the wheel may be flat or open but they must be designed that way and cannot be altered. Shaft adapters that change the angle of the steering wheel are legal. It is highly recommended where possible that steering component bolts are drilled with safety wire/cotter pin inserted, or machined for e-clips with e-clips installed. At minimum lock nuts will be required.

201.5 Axle:

The axle must be a one-piece axle; it can be solid or tubular with a minimum diameter of 25mm, a maximum diameter of 50mm and a minimum wall thickness of 0.075". Carbon fiber or carbon fiber composite axles are not allowed. Stiffeners are allowed if they are secured with bolts that are drilled for cotter pin or safety wire or machined for spring clips or e-clips; with the above mentioned properly installed (cotter pin, safety wire, or e-clip). Snap ring grooves, or any machining other than for keyway, are not allowed anywhere in the area between the left and right wheel hubs. Axle shall not extend past the outside edge of the wheel. Maximum width of rear track at widest point is 55 1/8".

201.6 Brakes:

Kart shall have rear brakes that shall prevent the wheels from turning when adequate pressure is applied to the brake pedal. Brake pedal and master cylinder must be attached to the main frame with bolts that are drilled with safety wire/cotter pin inserted, or machined for e-clips with e-clips properly installed.







201.6 Brakes:

It is highly recommended where possible that the brake caliper be attached to the main frame with bolts that are drilled with safety wire/cotter pin inserted, or machined for e-clips with e-clips properly installed. Brake rotor must be attached to the brake hub with a minimum of three bolts that are drilled with safety wire/cotter pin inserted, or machined for e-clips with e-clips properly installed, or steel lock nuts on a minimum of three bolts; nylon lock nuts are not allowed on the brake rotor. The linkage from brake pedal to master cylinder or brake bias must be either 6mm or larger steel rod with clevis or heim joint fittings with jam nuts on each end or kart manufactured cable that is a minimum diameter of 2.5mm. NOTE: If secondary cable is used nylon locknuts may be used in place of drilling or machining bolts for actuating rod and secondary cable. Scrub or band-type brakes are not allowed. Brake components must be steel or aluminum; ceramic, carbon fiber or such materials are not allowed. Hydraulic connections must be clean and tight with no leaks and routed to prevent damage while operating kart. Hand brakes are not allowed. An exception may be requested for a driver with a disability and must be approved by THMP.

201.7 Seat:

below the frame rails.

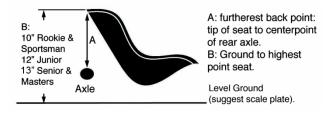
Seat shall be a molded, one-piece sprint bucket design and be the correct size for the driver so they cannot move or slide from side to side in a manner that could be unsafe or to gain an advantage from aerodynamics. Lay down type seats are illegal. Seat cannot be cut in any way to add or remove material and shall be in safe condition, e.g., the bottom is not weak or broken. Bottom of seat shall be between the frame rails and can be mounted above or

Seat shall be mounted to the kart in a minimum of four spots with front of seat being higher than the bottom. Adjustable seats that can be moved while on track are illegal.

*Lay down type seats are not allowed

See chart and following Figure for dimensions. Seat belts or other restraints are illegal.

- * Repairing the bottom of the seat from rubbing on the track is allowed.
- "A" Any part of the seat cannot be behind the axle.
- "B" These are minimum measurements.



201.8 Suspension:

Suspension components are not allowed, for example, springs, shocks or other components.

201.9 Wheel Hubs:

Wheel hubs must be made from metallic materials with wheel study having a minimum diameter of 0.3125".

201.10 Spindles:

Spindle shall not extend past the outside edge of the wheel. It is highly recommended where possible that spindle bolts are drilled with safety wire/cotter pin inserted, or machined for e-clips with e-clips installed. At minimum lock nuts will be required.

201.11 Wheel Bearings:

Split race bearings are not allowed. Bearings must be ground ball or roller bearings. Bearings must be adjusted to remove excessive play.







201.12 Wheels:

Must be 5" diameter, as manufactured (no drilling or removing material) and proven to withstand the force and strain of the racing condition. Lateral supported wheels or g-rings will not be allowed. Maximum width of rear track at widest point is 55 1/8" unless specified under class structure or supplemental rules.

201.12.1 Wheel Weights:

Wheel weights are allowed with each piece not to exceed ¼ ounce. Placing duct tape over weights to secure is suggested for extra safety.

201.13 Throttle Pedal Spring:

Positive acting throttle pedal return spring is required on all karts.

201.14 Fuel System:

One fuel tank maximum per kart. Fuel tank must be puncture resistant and leak proof when the fill cap is on. Maximum capacity is nine liters. Tank must be within the frame and under the steering shaft, mounted to either the steering uprights or floor pan. Pressurized fuel system or any fuel pumps other than a pulse pump in the carburetor is illegal.

201.14.1 Fuel Line:

All fuel line connections shall be securely attached. It is highly recommended that a cable tie, safety wire or other approved fastener is used. Fuel line shall not be in excessive length or size.

201.15 Chain:

Chain sizes allowed are #219 or #35. Chain oilers are not allowed.

201.15.1 Chain Guard:

All karts are required to have a chain guard attached before entering the racetrack. It is recommended that IAME classes use a full chain guard as pictured below.



201.16 Bodywork Components:

CIK appearing bodies, CIK homologated, and aftermarket bodywork that is made from CIK-similar material are allowed. Bodywork is defined as two side pods, nose cone and driver fairing and all pieces are required in all classes. No bodywork may extend wider than the rear tire/wheel at any time. No part of the bodywork can be used as a fuel tank. No weight or ballast can be placed inside or on the bodywork. Cutting the bodywork for the starter hole and/or radiator in a water cooled class is the only cutting that is allowed. Bodywork must be properly attached and appear neat. Any bodywork that appears loose or that may fall off while on the track could be cause for a black flag.

* Cadet bodywork including the nose shall be used on Cadet Karts and Cadet karts only.

201.17 Front Bumper:

Two steel tubes are required for the front bumper: top tube

must be a minimum diameter of 0.625" and attached to the frame at each end, bottom tube must be a minimum diameter of 0.750", both tubes shall have a minimal wall thickness of 0.065" and shall be attached to the frame at each end. Both tubes must be used to attach the nose cone to the kart. If pedals are mounted to the bottom tube it must be welded or through-bolted to the frame.

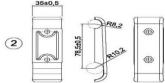






201.17.1 Front Bumper Support:

Shall be 2 pieces made of plastic and cannot be modified in any way. The measurements below are using CIK Homologation bumpers, top bar is 16mm, bottom bar 20mm. The dimensions below are in mm.



201.18 Nose Cone:

The nose cone shall be mounted with butterfly clamps. If nose cone comes off while on track before receiving checkered flag, competitor will receive the black flag. Nose cones must be used as manufactured and cannot be altered in any way. Bottom of nose shall be a minimum one-half inch (½") off the ground and top of nose shall not be above the top of the front tires. Minimum nose width is 39 3/8"; maximum width cannot be wider than the front tires. Maximum overhang from center of front axle to tip of the nose cone is 26 3/4". Measurements will be performed ith wheels straight ahead and without driver in kart.*

Cadet nose shall be used on Cadet Karts and Cadet Karts only.

201.19 Side Pods and Nerf Bars:

Side pods must be mounted with the intended manufactured nerf bar for the side pod that is being used. Side pod cannot cover any part of the driver or frame. If side pod comes off while on track, competitor will receive the black flag. Bottom shall be a minimum of ½" and maximum of 2 5/8" above the ground, rear shall be no more than 2 5/8" from rear tire, and front shall be no more than 5 7/8" from front tire. Maximum width of side pods is 55 1/8" if the rear track is set at 55 1/8". Measurements will be performed with wheels straight ahead. Nerf bars shall be steel tubing with a minimum diameter of 0.630" and attached to the frame at two (2) points.

- * Side pods shall not be wider than the rear tires at any time and shall NOT be any more than 1.5" inside either rear wheel.
- * Cadet side pods shall be used on Cadet karts and Cadet karts only.

201.20 Driver Fairing:

The driver fairing must be mounted with bendable material that is attached to the uprights, frame or floor pan and cannot expose any sharp edges that could harm the driver. No part of the fairing shall extend more than 1" above the top of the steering wheel. Minimum fairing width is 9 7/8"; maximum width is 11 13/16". Measurements will be performed with wheels straight ahead; height of fairing will be checked on scales. If an official feels that the height of the fairing is hindering the driver's vision, the fairing must be lowered. No part of the driver fairing can be behind and/or lower than the top of the nose cone that could stop the nose cone from being pushed back.

* Cadet driver fairing shall be used on Cadet Karts and Cadet karts only.

201.21 Rear Bumper:

CIK style <u>PLASTIC</u> rear bumpers are mandatory in all classes. Bumper shall be a minimum of 1" behind rear tire as raced. Adjustable width bumpers are legal. The bumper shall cover at least 50% of each rear tire and shall not extend outside of the rear wheel/tire at any time. The rear bumper must remain as an OEM part; it cannot be cut in any way to narrow or shorten. Metal rear bumpers are not allowed except in Kid Kart.

* Cadet bumpers cannot be used on standard karts.

201.22 Numbers:

All karts shall have legible numbers without tire marks or other items such as decals applied. The number must be black on a yellow background. The numbers must be at least 5 ½" tall, at least a ¾" body, and at least ½" wide yellow border around each number. The numbers must be on driver fairing, both side pods and rear bumper prior to entering the track. All karts shall use the number that was assigned to the driver at registration and numbers will consist of one to three digits only. We do not use letters for scoring, they are not acceptable.

* Anyone not having any of the above could be black flagged during any session.







201.22 Numbers:

201.22.1 Unreserved Number Hierarchy:

If two competitors register for any karting challenge event with the same unreserved number, the number will be given to the competitor who most recently competed in a Karting Challenge event with that number. If both competitors are registering for the first time, the number will go to the competitor who registered first.

201.23 Rear View Mirrors:

Rear view mirrors are not allowed on any karts.

201.24 Transponder Rental and Mounting:

If a competitor does not have their own working transponder, they must rent one on the day of the event. THMP has a limited number of rental transponders available at the Front Office. If the rented transponder is not returned at the conclusion of the event, the competitor will be charged full retail price for the cost of the unit.

201.24.1 Transponder Mounting:

The transponder shall be mounted securely and safely to the kart. The transponder must be mounted behind the kingpin using two vertical lines at minimum of 9" from center of king pin to the front edge of the transponder. One transponder per kart is allowed. Transponders are mandatory from the beginning of controlled practice through the end of the event. The competitor is responsible for mounting (and remembering to mount) his/her transponder in the proper manner for functionality.

Transponder must be mounted up and down (so you can read it) with no objects below it i.e., lead.

201.24.2 Transponder Mounting Penalty:

Starting with the qualifying round if the transponder is not mounted on the kart, the competitor will not be allowed on track.

If a Competitor does not have a transponder on during practice and they recieve no time in a qualifying session, they will recieve no time and start in the rear of the next competitive session.

201.25 Chassis/Kart Change:

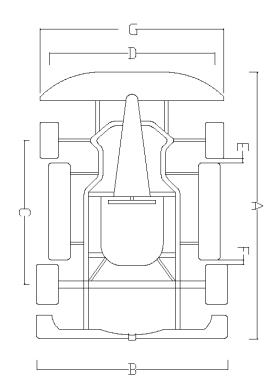
Changing an un-repairable chassis to a comparable chassis of the same manufacture is allowed after tech approval. Competitor will start in the rear of the next competitive session. Following approval of the requested chassis change from a Tech Official, a new chassis band will need to be obtained from the THMP Tech department, the Pre-Tech sheet will need to be updated with the new chassis band number.







201.26 Kart Dimensions:

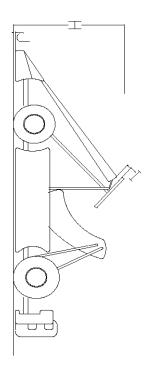


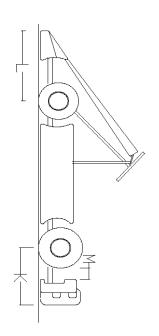
Kart Dimensions			
All Measurement Are Done with Wheels Straight Ahead and No Driver			
Letter	Description	Measurement	
^	Cadet Maximum Length	71"	
Α	Standard Maximum Length	82"	
В	Maximum Rear Wheel Outside Width	55 1/8"	
	Minimum Rear Bumper Width	Cover 50% of both tires	
	Maximum Rear Bumper Width	Bumper cannot extend past outside edge of rear tire/wheel	
	Cadet Minimum Wheel Base	35"	
С	Cadet Maximum Wheel Base	41"	
C	Standard Minimum Wheel Base	39 3/4"	
	Standard Maximum Wheel Base	43"	
D	Minimum Front Width Center to Center	28"	
Е	Maximum Between Front Tire and Side Pod	5 7/8"	
F	Maximum Between Rear Tire and Side Pod	2 5/8"	
G	Minimum Nose Cone Width	39 3/8"	
	Maximum Nose Cone Width	Cannot be wider than outside edge of front tires.	











Kart Dimensions				
All Me	All Measurement Are Done with Wheels Straight			
	Ahead and No Driver			
Letter	Description	Measurement		
Н	Maximum Height	26"		
ı	Maximum Height of Fairing Above Steering Wheel	1"		
J	Minimum Between Ground to Nose and Ground to Front of Side Pod	1/2"		
	Maximum Between Ground to Nose and Ground to Front of Side Pod	2 5/8"		

Kart Dimensions			
All Measurement Are Done with Wheels Straight Ahead and No Driver			
K	Maximum Center of Rear Axle to Back of Bumper	15 1/2"	
L	Maximum Center of Front Axle to Front of Nose	26 9/16"	
М	Minimum Between Rear Tire and Bumper	1"	

201.26.1 Minimum & Maximum Rear Wheel/Tire Width:

All Cadet Chassis Classes - Minimum 41"

Maximum 50"

2 Cycle Standard Chassis Classes – Minimum 53"

Maximum 55 1/8"

Briggs Standard Chassis Classes -- No minimum

Maximum 55 1/8"

*ALL CLASSES Side pods may NOT be wider than rear tires and shall NOT be any more than 1.5" inside either rear wheel.







202 Tires & Fuel:

202.1 Tires (Slicks):

MG spec tires shall be used; MG "SH" Reds 4.60 & 7.10 shall be CIKF/Z Option; MG "SM" Yellows 4.60 & 7.10 shall be CIKF/Z Prime; see class specifications for type and size. Tire treatments of any kind and/or tire warmers are illegal. *Tires must be at ambient temperature upon entering the grid.

202.2 Rain Tires:

MG WT and SW spec tires shall be used; see class specifications for type and size. Tire treatments of any kind and/or tire warmers are illegal. *Tires must be at ambient temperature upon entering the grid.

202.3 Single Final Tire Allocation:

For Single Final race days, all classes MUST use the same set of tires for qualifying and all competitive sessions thereafter, unless a wet weather race is declared. Whatever the scenarios for dry/wet conditions the dry and wet tires declared on the Pre-Tech sheet are the only tires allowed to be used.

202.4 Double Final Tire Allocation:

For Double Final race days ALL Swift and Briggs classes must use the same tires for dry/wet conditions ALL day just as with a Single Final race day. All KA100 and X30 classes are permitted to use a second set of dry and/or wet tires after the completion of the first final provided they are recorded on the Pre-Tech sheet. The second set of dry/wet tires must be used in both the 2nd Pre-Final and Final sessions unless one session is wet and the other is dry. Competitors that record a second set of dry/wet tires are not required to use them but may NOT switch back and forth with the first set used.

*Double Final race days will receive seperate "Wet Weather" designations for each set of races.

202.5 Damaged Tire Replacement:

If a competitor has a damaged tire the Race or Tech Director may allow it to be replaced with a tire of similar or greater wear. A tire CANNOT be replaced with a new one under any circumstances.

202.6 Late Registration/Non-Qualifiers:

Competitors that register late or do not make a qualifying attemt will be required to race on approved used tires, unless otherwise approved by the race director.

202.7 Wet Weather Race Declaration:

Once an event has been declared "Wet Weather" competitors have the choice to run either dry or wet tires but may not mix them. THMP may remove a competitor from the track if the Race Director deems their tire choice is yeilding unsafe driving. *See also Section 302.20

202.8 Spec Fuel:

All 2 cycle classes shall run the THMP Sunoco 110 fuel that is supplied at the track. All Briggs classes shall run the THMP Sunoco 87 Non-Ethanol fuel that is supplied at the track. Refusal or failure to pass the fuel test will lead to disqualification or suspension. Some fuel testing procedures being used are Digation, hydrometer and visual. Tech officials will use these and any other necessary means to declare all fuels legal.

202.8.1 Fuel Temp:

Fuel must be at or near ambient temperature when entering the track. Heating or Cooling of fuel is not permitted.

202.9 Spec 2 Cycle Oil:

Redline #40403 (2T), Motul #105884 Kart Grand Prix (2T), Maxima 927 and Elf - HTX 909 are the oils allowed for all 2 cycle classes.

Mixing ratio will be 1 liter of oil to 5 gallon of fuel.

It is very important that you rinse out your oil bottle at least two (2) times and shake your fuel/oil mixture up very well as the oil will settle to the bottom.

202.10 Tire/Fuel tampering penalty:

Competitors found to be tampering with Tires OR Fuel will receive a minimum of a 1 year ban from competition and a \$500 fine to be paid upon return.

Rev. 01-28-2024







300 Race Information: 301 Flags:

301.1 Green Flag:

A green flag lets competitors know the track is clear for practice or competition; it is also used to start or restart a race.

301.2 Yellow Flag:

A yellow flag alerts competitor of an unsafe condition in that part of the track. A waving yellow flag means there is trouble on the track. Drivers are to hold their position in these areas and shall not pass another competitor until they have passed the waving caution area. A standing yellow is an "advisory" and means there is possible danger near the racing surface. At THMP passing is **NOT** allowed when a standing yellow is displayed. When a double yellow flag is displayed by the starter it signifies a full course caution. Drivers shall proceed at a moderate pace with no passing allowed.

301.3 Red Flag:

A red flag alerts competitor of a halt to racing and to stop as soon as they can do so safely. Drivers may be directed to proceed to the front stretch or other designated area if it can be done safely. Corner workers will wave yellow and black flags to indicate a red flag situation. Any driver disobeying a red flag shall be disqualified. Participants, crew or family members are not allowed on the racing surface during a red flag. *See also Section 302.17

301.4 Crossed Flags:

A crossed white and green flag indicates the race has reached the halfway point.

301.5 Two Rolled Flags:

Two rolled flags (usually green and white) are used to let the competitors know there are two laps remaining in that race.

301.6 White Flag:

A white flag lets competitors know they are starting the last lap of the race. If the white flag has been waved the checkered flag will follow even if it is waved with another flag, i.e., red, yellow or black.

301.7 Checkered Flag:

The checkered flag indicates the race or practice session has concluded, and all competitors shall slow down to a moderate pace, and safely proceed to the scale or pit area as required to do so.

301.8 Waving Checkered with Red:

A waving checkered with a waving red is used to alert the competitors of trouble on the racing surface. Racing back to the start/finish line is not allowed. Competitors shall proceed to the finish line if it can be done safely and follow the direction of corner workers. Scoring will revert to the last completed lap.

301.9 Black Flag:

A waving black flag is used to inform a competitor they need to exit the race course and proceed to the scale or pit area due to a rule infraction; the flagman will make every attempt to display the kart number of the driver receiving the black flag. If a competitor ignores a black flag it could lead to additional penalties. A rolled black flag is a warning usually given for unsafe or unsportsmanlike driving. If the actions continue it could lead to a waving black flag and disgualification.

301.10 Black Flag with Orange Circle:

A waving black flag with orange circle is used to inform a competitor of a mechanical or tech issue. The driver should exit the race course and proceed to the scale. The flagman will make every attempt to display the kart number of the driver receiving the black flag with orange circle. If the competitor exits the race course/track prior to receiving the checkered flag, the competitor will be scored with a DNF (Did Not Finish) and be awarded points based on their position at the end of the race. If the competitor does not exit the track in a timely manner or ignores the black flag with orange circle, scoring will stop and the competitor could be DQ'ed.

301.11 Blue/Blue with Yellow Diagonal Stripe Flag:

A blue/blue with yellow diagonal stripe flag is used to alert competitor that they are about to be lapped and shall allow the lead karts the preferred racing line to complete the pass.







301 Flags:

301.12 Race Suspension/Red Flag:

In the event a race is suspended prior to the full field completing all the laps the following procedures will go into effect:

- less than two laps, the Race Director has discrection to issue a full restart within 30 minutes of the red flag being issued or the track being vacated by competitors. The original start (or lack thereof) will be considered void and the original starting grid will be used.
- 2. less than 50%, the race will be restarted once the conditions that caused the red flag have been cleared. The race will be restarted in single file order based on the last lap completed by the full field. Competitors involved in the Red Flag incident may restart the race from the rear provided their equipment has not been compromised to a point of being unsafe.
- 3. more than 50%, the race will be considered official. Competitors involved in the Red Flag incident may be scored at the rear of the field.
- * Competitors may not work on their karts during a red flag (including in kart adjustments). If asked to exit their karts, Competitors should step away from their kart so as to avoid any possible confusion with Officials.
- * See also section 302.17

301.13 Lapped Karts/Blue Flag: The Race Director may remove karts from the track during the Final that are not maintaining a race pace within 107% of the lead karts. Karts in danger of falling 2 laps down will be removed from any race session.

*Lapped karts being removed from the track will recieve a black flag.

302 From Grid to Tech:

302.1 Communication:

Driver cannot receive or send any type of radio communication.

302.2 Track Layout:

All competitors shall observe the track layout and rotation by not cutting across curbs or driving around pylons. Cutting the track or ignoring track layout can result in penalties or disqualification; this includes the cool down lap after the checkered flag has been waved.

302.3 Number of Karts Allowed on Track:

THMP has the right to control the number of karts allowed on track at a time. Formats for splitting a class(es) up may include A and B group Pre-Finals or Finals, heat races, LCQs or any other methods officials deem necessary to reduce the class to a safe size for racing. The format/decisions of officials will be communicated to the class at the (a) drivers meeting.

302.4 Quiet Grid:

Engines shall only be run in the competitor's assigned pit area or adjacent to your assigned pit area (aisle). Running the engine on your way to the grid or on the grid is not permitted. Engines may be warmed up in the designated area behind the grid.

302.5 Pre-Grid:

Any last-minute changes will be done before entering the grid area.

302.6 Controlled Grid:

No kart stands, baby strollers or pets are allowed on the grid. THMP will allow the driver and one (1) other person to enter the grid area the same time the kart enters the grid. No one else will be allowed in the grid area.







302.7 Grid:

All competitors are responsible to be on the grid on time for their class during practice and races. Their transponder shall be charged and properly mounted on the kart. No personal vehicles (motorized and non-motorized) are allowed on the grid during a race day or while the track is hot. No bikes, scooters, skateboards, segways, hoverboards, quads, motorcycles, cars, trucks etc. allowed on the grid. Competitors who approach the grid for practice have rights to the front of the grid in the order that they arrive. Competitors arriving later than others are not allowed to force their way to the front of the grid. Competitors must use the staging lanes for gridding in all sessions.

302.7.1 Working on the Grid:

Working on your kart while on grid is allowed, however there shall be NO heavy equipment or rolling toolboxes.

- *No hot pitting is permitted at any time during any event.
- * No fueling is allowed on the grid.

302.8 Entering the Track for Qualifying:

*All competitors MUST obey the Grid Steward or face penalties.

On Single Final race days (normally a Green, White, Checkered format), once the field is released from the Grid to begin qualifying, Competitors have 45 seconds to enter the track from the first kart to cross the white line.

*Cadet classes will be released one kart at a time, all other classes will be released at the same time.

On Double Final race days (normally an 8 minute session), once the field is released from the Grid to begin Qualifying, Competitors may enter the track at any time they choose.

*All classes will be released at the same time.

302.9 Race Day 90 Second Rule:

Pre_Finals and Finals, Competitors will have 90 seconds after their class is released from the grid to get their kart started and join the rest of the class on track. The driver and kart must be in their starting position and the driver seated in their kart when the class is released to go on the track for the 90 second rule to go in effect.

After the 90 seconds has expired the grid is closed and no karts may enter the racing surface. This rule cannot be used to change tires from dry to wet or wet to dry.

302.10 Driver Unable to Start:

If a driver has scratched his entry by notifying Chief Scorer or Race Director, the grid lineup will be adjusted by crossing over from the point of the scratch to the last starting position. If a driver is unable to start the race after the class leaves the grid, the line in which the driver falls out of will move forward; there will be no crossover of positions.

302.11 Practice:

Drivers will practice with their class. If a driver practices with another class without THMP approval they will be penalized.

302.12 Slowing or Stopping on Race Track:

If your kart slows from racing speed during practice or a race due to mechanical issues, or to exit the race course, the driver shall raise a hand above their head and wave to alert other drivers behind them. If a kart comes to a stop on the race track during practice or during a race, the driver shall raise a hand above their head and wave to alert other drivers. When safe to do so the driver must exit their kart and help remove it from the racing surface.

*If a driver is out of a session but still out in the track area, they must leave their helmet on, they may remove other safety gear.

302.13 Exiting Your Kart on Track:

KA100 and X30 competitors are allowed to exit their kart to untangle, or free their kart from an object, providing the engine is off before exiting the kart. Once the kart is free, the competitor must be safely seated in kart before restarting and safely rejoining the race. If you become lapped while stopped, you may not rejoin the race. (See Re-entering the Racing Surface) Swift classes are not allowed to exit their kart and then continue the race. All competitors are expected to exit their kart and help clear the track.

*If a driver is out of a session but still out in the track area, they must leave their helmet on, they may remove other safety gear.







302.14 Re-entering the Racing Surface:

Other than leaving the grid area, if a driver leaves the racing surface during practice or a race, they should reenter the racing surface at a point not in the racing groove, for example on a straightaway or other spot that can be done safely and not obstruct another driver. When reentering, the driver shall yield to drivers on the racing surface. The driver shall not advance any positions or gain any advantage during this time. Race officials will be critical of re-entry safety.

302.15 Restarting Engine:

After leaving the grid area and before the green flag, an engine may be restarted with the onboard starter and rejoin in their starting position if this can be done before reaching the commitment zone, the Flagman can choose to start the race at their discretion regardless of whether or not the late arriving driver has regained their position. If the engine is restarted after the green flag the competitor will re-enter the racing surface at a point not in the racing groove, for example on a straightaway or other spot that can be done safely and not obstruct another driver. The driver shall not advance any positions or gain any advantage during this time. Any kart that does not have an onboard starter will not be allowed to restart after leaving the grid unless it is after a red flag

302.16 No Passing Area (waving yellow flag):

If a yellow flag is displayed (waving or steady), passing is not allowed in that area.

302.17 Karts/Drivers Involved in Red Flag:

Driver's safety equipment and kart may be inspected by THMP if they are involved directly or indirectly in a red flag incident. The Race Director has the right to prohibit a driver from restarting a race if he feels it is not safe for them to do so.

Working on karts involved in a red flag is not allowed unless a complete restart has been determined by THMP officials and permission has been given (this is for karts involved in the red flag incident only). If any work or repairs are performed during a red flag stoppage, it must be approved by a THMP official and the driver will start at the back of the field. If a driver is unable to "leave" with the rest of the field during the restart procedure, there is no 90 second rule; he/she will not be allowed to continue. If a driver cannot weigh in with their kart due to medical personnel examining the driver, the Race and/or Tech Director can waive the weigh-in requirement at the scales and the driver will recieve points for their finishing position.

302.18 Restarts:

The starting order after a red flag will be determined by the running order of the last completed lap. The kart or karts causing or directly involved in the red flag will be placed at the back of the starting order. A completed lap is after all karts on the lead lap have crossed the finish line or scoring loop.

302.19 Loose or Missing Components:

All components shall be fastened and in place at the start of a race prior to the green flag; if not, a competitor could be black flagged. All karts must finish the race with all components subject to tech still intact in the manner the rule specifies. Any competitor that loses a 'spec' or 'techable' component may be black flagged. Examples include a nose, side pod, bumper or exhaust. A loose but intact exhaust may be black flagged. When leaving the grid, rear bumpers must be securely attached to the kart as designed by the manufacturer. Aftermarket bumper safety kits, or other means that keep the bumper secured in its original location are acceptable, even if the bumper itself drags on the track in the event of a broken bumper bolt while on the track.







302.19 Loose or Missing Components:

Bumpers <u>WILL NOT</u> be allowed to drag more than a few inches beyond the normal mounting location. If bumper becomes completely detached from one side of the kart, or is deemed unsafe by track officials, it will be grounds for a mechanical black flag and/or disqualification. The spirit and intent of this rule is to allow racers to continue on with a broken bumper bolt, as long as it remains safe.

302.19.1 Losing Fluid on Track:

Any kart losing fluid on track will loose there fastest lap if it happens during qualifying or, will be black flagged if during practice or a race.

302.20 Slick or Rain Tire Condition:

If a race is started in dry conditions, and rain begins causing it to become too wet or unsafe, the race can be stopped to allow competitors to change to rain tires. Pit stops are not allowed. A minimal amount of time will be allowed for that change to occur. When THMP determines wet conditions, all competitors will use the spec rain tire for their class. The first class that this affects will have a minimum of fifteen (15) minutes to change from dry to wet setup or from wet to dry setup if THMP determines wet or dry condition. If THMP determines competitor's choice, the competitor is responsible for determining if they would like to compete on spec rain tires or spec slick tires. If a race is started in dry conditions, but wet weather is imminent and competitor's choice has been declared resulting in the field being a mix of slicks and rain tires, the race will not be stopped so as to not take away the strategic decision/advantage by these competitors. An exception may occur if it is determined by THMP officials that conditions have become too unsafe for even those on rain tires. All four tires must be slicks or rains, mixing tires is not allowed.

302.20.1 Reducing Race Length (in wet):

If THMP officials declare wet conditions, all competition sessions (races) may have laps reduced by 20% for each session. The Officials will make every effort to resume published lap counts if conditions allow the return to "Competitors Choice." Officials reserve the right to adjust lap counts for extenuating circumstances.

302.21 Exiting the Race Track:

After the checkered flag has been displayed or anytime a competitor will be exiting the track, all drivers shall exit the track at the designated area. Driving recklessly or intentionally damaging another driver's kart after the checkered flag is Unsportsmanlike Conduct, and grounds for penalization up to and including ejection from the event. After each race all drivers are responsible for crossing the scales and reporting to post-race inspection if required. Any driver not crossing scales or missing post-race tech will be disqualified.

*If you think there is a remote possibility you finished in the top 3 in any session, report to tech!

302.22 Completed Race:

Every effort will be made by THMP to complete every lap of every race. If the checkered flag appears before (or after) the last scheduled lap, drivers are expected to race to the checkered flag, and the race will be deemed complete. Competitors will be scored as per normal procedures, as they crossed the line. In the event of an unexpected situation, such as an accident requiring assistance, poor weather, time limits or other extenuating circumstances, a red flag may be displayed. At that point, race officials may deem the race complete if necessary. If the race is deemed "complete" by race officials, scoring will go to the last completed lap, with any drivers causing/ contributing (Race Director's discretion) to the red flag being placed in the rear of the field. A lap is considered to be complete when all competitors on the lead lap have crossed the finish line (scoring loop).







302.23 Incomplete Race:

If the event cannot be completed due to weather or other circumstances, points and awards will be given based on the total points accumulated from qualifying results and heat races that have been completed. For any class that did not complete qualifying, entrants shall be awarded 200 points.

302.24 Combining Classes:

THMP has the right to combine classes. Lap times and experience will be taken into account in making this determination.

302.25 Event Format:

Every effort will be made to follow the timeline that will be published and distributed at registration.

302.26 Qualifying:

Qualifying will be by class for a set amount of time or laps. The Race Director will determine the time or laps allowed and the number of karts allowed on track for a qualifying session. If the class is split into two groups for qualifying it is the driver's responsibility to know what group he/she is in and what time to be on the grid. Groups will be posted on the lineup/results board.

*In the event you are not listed in a group you should meet with the Grid Steward to recieve an assignment BEFORE the first group leaves the Grid.

*No hot pitting is allowed, once a competitor exits the track their qualifying session is over.

*If a competitor cuts the course, that lap WILL be deleted.

302.26.1 Qualifying Tie Breaker:

If there is a tie during qualifying it will be broken by reverting back to the second fastest lap by each competitor and then to the third fastest lap if needed. If there is still a tie we will revert to the last round of practice.

302.26.2 Qualifying Grid Spots

In normal dry conditions, competitors should line up in grid spots according to the lap times from the practice session, fastest to slowest. In wet conditions, competitors are free to line up in any marked grid spot.

302.27 Pre-Final Races:

The grid lineup for the Pre-Final races will be determined from qualifying sessions.

302.28 Finals:

Grid lineups for the Final races will be based on Pre-Final race finishing positions.

302.29 Clearing the Scale:

All drivers must cross the scale after each official scored qualifying and race session. They must meet the minimum weight per class. Any competitor not meeting the minimum weight or failing to cross the scales will be DQ'ed unless the Race or Tech Director has waived this requirement due to injury or illness. No one but the driver is allowed to touch the kart until it has cleared the scale, unless otherwise approved by THMP.

*Only THMP officials are allowed past the scale or barriers, NO physical interaction is allowed with the competitors (including tire guages and lap timing devices.

*A competitor not making weight will may be asked to step aside and attempt to weigh in again after the rest of the class has cleared the scales. This will be the second and final attempt and therefore deemed final and official.

302.29.1 Driving on the Scale:

All karts shall come to a complete stop before entering onto the scale. Any driver that drives their kart on the scale, engine running or not, and has to use their brakes to stop on the scale could be penalized or DQ'ed.







302.29.2 Drinking Fluids Before Clearing the Scales:

Drinking water prior to clearing the scales is prohibited unless authorized by the Race and/or Tech Director beforehand. If approved a driver may drink water or sports drink from a clear plastic bottle (maximum 500ml) is allowed in scale area before weighing. However, any driver pouring water over head or driving equipment may be penalized.

302.30 Data Acquisition:

Data acquisition systems can be used to retrieve any of the following: RPM, lap times, head temperature, exhaust temperature, water temperature, speed, pedal location, brake/master cylinder pressure, GPS tracking or computer scoring. Any telemetry, other sensors or inputs shall be removed or disconnected while kart is on track during official practice or race days. Data downloading can only be done in the pit area. Only one beacon for each type of system is allowed on the track and will be placed at the THMP approved location. GPS systems are legal.

302.31 Reporting to Tech:

The top three (3) of each official scored qualifying session and race shall report to the tech area and not leave until released by one of the tech officials. The tech officials have the right to check as few or as many karts as they deem necessary.

*If you think there is a remote possibility you finished in the top 3 in any session, report to tech!

*THMP reserves the right to inspect/tech any entered kart at any time throughout the race day.

302.31.1 Tech Area:

Only the driver and one (1) tuner/mechanic are allowed in the tech area unless cleared by one of the tech officials.

302.31.2 Failure to Report to Tech: Failure to report to tech could lead to disqualification and/or suspension.

302.31.3 Refusal of Tech:

Refusal of tech could lead to disqualification and/ or suspension.

302.32 Impound Parts or Equipment:

THMP has the right to impound any parts or equipment for further inspection. If no issues were identified after further inspection, the parts or equipment will be returned to the competitor. If parts or equipment are found illegal THMP has the right to keep the parts or equipment and penalties up to and including suspension could be handed out from the result of the inspection. This includes any items found during pre-race, tech or any inspection of parts or equipment.

302.33 Race Starts:

Once released from the grid, competitors will have one full hot lap, Once the first kart passes the starting line the formation lap has begun. Competitors should reduce speed and begin to form 2 x 2 rows. At the end of the formation lap Competitors should approach the start line in the designated tram lanes at reduced speed maintaining a gap of not more than 3 feet to the kart in front. Competitors may not scrub tires in the tram lanes and may not exit the tram lanes until the green flag is waved. The starting line will be marked by 2 cones (labeled "Start Zone") on either side of the track. The Polesitter must be the first one across this line. If the starter is not satisfied with the formation the start will be aborted by waving a Yellow flag. If the starter is satisfied with the formation the Green flag will be waved and the field may now accelerate. If after multiple attempts the starter is still not satisfied penalties may be issued to those disturbing the formation. If the yellow flag is waved competitors should treat the following lap just as the first formation lap. If the Green flag is waved and there is a need to restart the race without suspending the session. the Yellow and Red flags will be waved together at all corner stations. Competitors should reduce speed and begin another formation lap in their original grid positions. Competitors may not advance their position once the field has entered the tram lanes. If the start is aborted because a Competitor is attempting to regain their position, they will be given a time penalty for delaying the start.

*If the Off-Pole sitter accelerates before the Pole-Sitter they will be subject to a jump start penalty.

*Any Competitor exiting the tram lanes before the Green flag is waved is subject to a penalty

*Any competitor laying back more than 3 feet to get a run on the kart in front will be subject to a jump start penalty.







302.34 Penalties:

Drivers may be subject to any of the infractions and their consequent repercussions listed below. Possible penalties are not limited to those listed below, and repercussions may be altered to reflect extenuating circumstances, both of these decisions are at the discretion of the officiating team.

Penalty	Possible Repercussions	Description	
Avoidable Contact	3 or 5 positions; placement behind the offended competitor	Using the front bumper to move a competitor off-line and complete a pass; not leaving sufficient space for a driver who is or is almost fully alongside on the exit of a corner	
Blocking	3 or 5 positions	Making more than one move away from the line chosen at corner exit to defend from a kart behind	
Swerving	5 or 15 positions; Unsportsmanlike DQ	Moving towards a competitor down the straight who already has their front bumper up to the rear wheel of the leading kart, if contact is made this will be 15 positions	
Retaliation	15 positions	Taking retributory and aggressive action against a driver who has wronged them	
Track Cutting	5 positions minimum	Going 4 wheels off to shorten the track (The inside edge of the curb is defined as the edge of the track)	
Tram Line Violation	3 or 5 seconds	Exiting the tram lines prior to the green flag being displayed	
Jump Start	5 Seconds	Off-pole accelerating prior to the pole sitter to the degree they gain a significant advantage	
Unsportsmanlike Conduct	DQ	Making obscene gestures, instigating an altercation in the scale line, and other actions which could be determined to be unsportsmanlike in nature	
Passing After Checkered	Severity Based	Overtaking a kart following the checkered flag that is still driving at a reasonably fast pace	
Forcing air into the air box	5 positions per instance	Placing a hand <u>behind</u> the inlet tubes in an attempt to force air into them	







302.35 Driver Conduct/Etiquette

Contact resulting in a gain of position is forbidden and subject to penalty at the Race Director's discretion. If the position is returned promptly the penalty **MAY** be waved.

Competitors being lapped are expected not to impede the Competitors lapping them once they receive the Blue Flag and should wave the faster Competitors through by pointing which side they are conceding to pass on.

Competitors in danger of being lapped during a Final/Main Event will be removed from the track with a black flag. As a general guidance, "in danger" will usually refer to a driver being within 10 seconds of the leaders.

Competitors are permitted one defensive move per straightaway.

A defensive move is defined as a change in direction that is away from the normal racing line.

Competitors are not permitted to return to the normal racing line on that straightaway (2nd move).

In a defensive move, Competitors are **NOT** permitted to force the attacking Competitor to change their direction.

Once a Competitor is established alongside another driver, neither driver may make a steering input to force the other driver off their established line and or make contact.

Competitors are not permitted to force another Competitor outside of the track limits or to cause a collision whether attacking or defending.

Retaliation and contact after the Checkered Flag is strictly prohibited and subjects a Competitor to disgualification.

Competitors that are planning to exit the track or having a mechanical issue are compelled to indicate to the Competitors around them by putting their hand in the air.

If a competitor is unable to continue during a session, they are compelled to help move their kart to a safe place away from the racing surface.

Competitors will obey corner marshal requests and will not abandon their kart on the track, except in extenuating circumstances. Abandoned karts will not be recovered until the competitor or a team representative returns to retrieve it.

If a competitor is unable to continue during any session, they must not take off their helmet until that session has come off the track. Competitors may remove any other safety equipment if they wish to do so.







303 Race Format, Scoring Results & Points:

303.1 Race Format:

Single Final raceday – One round of practice (this session may determine your qualifying group), one (1) Qualifying session, Pre-Final and Final.

Double Final raceday – One round of practice (this session may determine your qualifying group), one (1) Qualifying session, Pre-Final and Final. There will be no practice or Qualifying session for the second race. Prefinal line ups will be determined from your second fastest lap in morning qualifying

303.2 Scoring:

Scoring results are official. Data acquisition will not supersede official results. A THMP transponder that has a dead battery but was functioning during the previous on track session is the only time a different device may be used for scoring. If your transponder is not working or not present during a race session, we MAY hand score you for that race, but only as a courtesy and only when possible.

303.2.1 Scoring Protests:

Protesting of results will only be permitted within thirty (30) minutes of the results being posted on the Discord App..

303.2.2 Scoring Abbreviations:

DNS – (Did not start) A competitor who is a DNS shall be awarded last place points. If more than one competitor is a DNS, then the finishing tiebreaker shall be according to their respective qualifying or starting position.

DNF – (Did not finish) A competitor who takes the green flag but becomes a DNF shall be awarded points based on their position at the end of the race. A competitor who is a DNF but does not take the green flag shall be considered a DNS and awarded points in accordance with the DNS point rule.

DQ - No points

303.2.3 Penalized Starting Positions:

Penalized in Qualifying – Starts Pre-Final from penalized position.

DQ after Qualifying – Starts Pre-Final at the back.

Penalized in Pre-Final – Starts Final from penalized position.

DQ in Pre-Final -- Starts Final from the back. Penalized in final – Receives championship points for penalized position.

DQ in final – Receives zero (0) championship points for final.

303.2.4 Unforeseen Circumstance:

Once a race event has begun; if an official session cannot be run due to unforeseen circumstances, such as inclement weather or time constraints, all competitors will receive points based on the guidelines below. If only Qualifying was completed, with the remainder of the day canceled, competitors will receive appropriate points for Qualifying, and 200 points for the Final event. If more than 1 session is completed, then Final points will be assigned based on the result of that event. Example 1: Qualifying and Pre-Final are completed. Final points are assigned to the Pre-Final race position.

* Under no circumstances will points be awarded twice for the same competition session. In the interest of fairness to all parties, Series Officials reserve the right to modify this rule at the track, if necessary.







303.3 Championship Points:

All classes run for a single points championship. Championship points are based on finishing order in the final only.

303.3.1 THMP Points:

THMP will count ten (10) of the thirteen (13) races, three (3) drops are allowed for the season. Disqualification can be used as a drop unless the DQ is for unsportsmanlike conduct, or the use of remanufactured or counterfeit parts. If a competitor is deemed in violation of the spirit and intent rule, he or she may be disqualified netting zero points for the day in the class of the DQ without the option of dropping that race from the season points total if applicable.

Competitor must register for at least 7 of 10 scheduled race events in order to qualify for Championship Awards.

303.3.2 Final Race Points Breakdown:

Position	Points	Position	Points
1.	200	18.	40
2.	175	19.	35
3.	155	20.	30
4.	140	21.	28
5.	130	22.	26
6.	120	23.	24
7.	110	24.	22
8.	100	25.	20
9.	90	26.	18
10.	80	27.	16
11.	75	28.	14
12.	70	29.	12
13.	65	30.	10
14.	60	31.	8
15.	55	32.	6
16.	50	33.	4
17.	45	34.	2
		<u>></u> 35.	0

303.4 Tie Breaker:

If there is a tie at the finish of a race the tie will be broken by reverting back to qualifying. The person that qualified the highest will receive the higher finishing position of the tie. If a tie is still present, then they will use the finishing position of the previous race of that event. If there is a tie in the final points championship between two (2) or more drivers, each driver will receive one (1) point for each of the items listed below step by step until the tie is broken. If one (1) driver gets two (2) points and the other driver gets one (1) point in the first step, then the driver that received two (2) points would be the champion. If it is still tied the process will continue until the tie is broken.

- Step 1) Number of Final Wins
- Step 2) Number of Pre-Final Wins
- Step 3) Number of Fast Time Awards
- Step 4) Number of Final 2nd Place Finishes
- Step 5) Number of Pre-Final 2nd Place Finishes
- Step 6) Number of Final 3rd Place Finishes
- Step 7) Number of Pre-Final 3rd Place Finishes, and so on until the tie is broken.

303.5 Results

Results for all official track sessions are to be considered pending until signed off by the appropriate official and posted on the results board anr/or the Discord App, as announced by the Race Director. The posting of results does not automatically deem those results as official.







400 Series Class Structure: 401 THMP Class Structure:

401.1 Kid Kart:

Driver attained age: 5 -- 7 years old

Minimum Weight: 150 lbs. Comer & IAME Bambino/185

Lbs. Briggs

Engine(s): Comer C-51, Briggs & Stratton LO206 &

IAME Bambino

Comer engine to be used Box Stock as supplied. Briggs engine must conform to Briggs and Stratton

United States rule set.

IAME Bambino rules in Section 501

Briggs Exhaust: RLV 4110 pipe and Briggs 557045

Header Only

Briggs coil: Black coil (4100 RPM) Briggs slide: Black slide (0.310")

Gear Ratios: Comer 10/89, Briggs 17/57 Mandatory Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts &

4.60 Rears

Rains MG "WT" or "SW" 4.20 Fronts & 4.20 Rears

*Maximum rear tire circumference is 33"

Competitors must record the four slick and four rain tires they wish to use for the entire day (Single or Double Final race days) on the Pre-Tech sheet to be turned into Tech **BEFORE** Qualifying.

SFI 20.1 or other USPKS approved Chest Protectors are MANDATORY for all drivers under 13 years old (Section 102.3).

May use either Kid Kart or Cadet chassis with Briggs or IAME Bambino engine only, Comer must use Kid Kart. Must run Cadet Bodywork including the Cadet nose on Cadet chassis.

See Sections 501 & 502 and Briggs or USPKS Websites for additional Engine Rules.

401.2 Briggs Cadet:

Age: 7 -- 12 years old Minimum Weight: 255 Lbs. Engine Briggs & Stratton LO206 Carburetor Slide: Green slide (0.490")

Exhaust: RLV 4110 pipe and Briggs 557045 Header Only Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts &

4.60 Rears

Rains MG "WT" or "SW" 4.20 Fronts & 4.20 Rears

*Competitors must record the four slick and four rain tires they wish to use for the entire day (Single or Double Final race days) on the Pre-Tech sheet to be turned into Tech **BEFORE** Qualifying.

*SFI 20.1 or other USPKS approved Chest Protectors are MANDATORY for all drivers under 13 years old (Section 102.3).

*May use either Cadet or Standard chassis. Must run Cadet Bodywork including the Cadet nose on Cadet chassis

*See Section 502 and Briggs Website for additional Engine Rules.

401.3 IAME Micro Swift:

Age: 7 – 10 years old Minimum Weight: 225 lbs.

Engine: IAME Swift 60cc TAG Engine

Carburetor: Tillotson HW-31A

Exhaust: IAME OEM Swift 16mm (No-Go) Restricted

Header & Pipe

Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts &

4.60 Rears

Rains MG "WT" or "SW" 4.20 Fronts & 4.20 Rears Competitors must record the four slick and four rain tires they wish to use for the entire day (Single or Double Final race days) on the Pre-Tech sheet to be turned into Tech **BEFORE** Qualifying.

SFI 20.1 or other USPKS approved Chest Protectors are MANDATORY for all drivers under 13 years old (Section 102.3).

May use either Cadet or Standard chassis. Must run Cadet Bodywork including the Cadet nose on Cadet chassis.

See Section 504 and USPKS Website for additional Engine Rules.







401.4 IAME Mini Swift:

Age: 8 – 12 years old Minimum Weight: 245 lbs.

Engine: IAME Swift 60cc TAG Engine Carburetor:

Tillotson HW-31A

Exhaust: IAME OEM Swift Header & Pipe

Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts &

4.60 Rears

Rains MG "WT" or "SW" 4.20 Fronts & Rears Competitors must record the four slick and four rain tires they wish to use for the entire day (Single or Double Final race days) on the Pre-Tech sheet to be turned into Tech **BEFORE** Qualifying.

SFI 20.1 or other USPKS approved Chest Protectors are MANDATORY for all drivers under 13 years old (Section 102.3).

May use either Cadet or Standard chassis. Must run Cadet Bodywork including the Cadet nose on Cadet chassis.

See Section 504 and USPKS Website for additional Engine Rules.

401.5 Briggs Junior:

Age: 12 -- 15 years old Minimum Weight: 320 Lbs.

Engine: Briggs and Stratton LO206 Carburetor Slide: Gold slide (0.610")

Exhaust: RLV 4110 pipe and Briggs 557045 Header Only Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts &

7.10 Rears

Rains MG "WT" or "SW" 4.20 Fronts & 6.00 Rears Competitors must record the four slick and four rain tires they wish to use for the entire day (Single or Double Final race days) on the Pre-Tech sheet to be turned into Tech **BEFORE** Qualifying.

SFI 20.1 or other USPKS approved Chest Protectors are MANDATORY for all drivers under 13 years old (Section 102.3).

Must use Standard chassis.

See Section 502 and Briggs Website for additional Engine Rules

401.6 IAME KA100 Junior:

Age: 12 – 15 years old Minimum Weight: 330 lbs. Engine: IAME KA100 Carburetor: HW-33A

Exhaust: IAME OEM KA100 22mm (No-Go) Restricted

Header & Pipe

Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts &

7.10 Rears

Rains MG "WT" or "SW" 4.20 Fronts & 6.00 Rears Competitors must record the four slick and four rain tires they wish to use for a Single Final race day [Or eight slick and eight rain tires they wish to use for a Double Final race day] on the Pre-Tech sheet to be turned into Tech **BEFORE** Qualifying.

SFI 20.1 or other USPKS approved Chest Protectors are MANDATORY for all drivers under 13 years old (Section 102.3).

Must use Standard chassis

See Section 505and USPKSWebsite for additional Engine Rules.

401.7 IAME X30 Junior:

Age: 12 – 15 years old Minimum Weight: 320 lbs. Engine: IAME X30

Carburetor: Tillotson HW-27A

Exhaust: IAME OEM X30 22.7mm (No-Go) Restricted

Header & Pipe

Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts &

7.10 Rears

Rains MG "WT" or "SW" 4.20 Fronts & 6.00 Rears

Competitors must record the four slick and four rain tires they wish to use for a Single Final race day [Or eight slick and eight rain tires they wish to use for a Double Final race day] on the Pre-Tech sheet to be turned into Tech **BEFORE** Qualifying.

SFI 20.1 or other USPKS approved Chest Protectors are MANDATORY for all drivers under 13 years old (Section 102.3).

Must use Standard chassis

See Section 506 and USPKSWebsite for additional Engine Rules.







401.8 Briggs Senior:

Age: 15+ years old Minimum Weight: 365

Engine: Briggs and Stratton LO206

Exhaust: RLV 4110 pipe and Briggs 557045 Header Only Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts & 7.10

Rears

Rains MG "WT" or "SW" 4.20 Fronts & 6.00 Rears Competitors must record the four slick and four rain tires they wish to use for the entire day (Single or Double Final race days) on the Pre-Tech sheet to be turned into Tech BEFORE Qualifying. Must use Standard chassis.

See Section 502 and Briggs Website for additional Engine Rules

401.9 Briggs Heavy:

Age: 15+ years old Minimum Weight: 390

Engine: Briggs and Stratton LO206

Exhaust: RLV 4110 pipe and Briggs 557045 Header Only Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts & 7.10

Rears

Rains MG "WT" or "SW" 4.20 Fronts & 6.00 Rears Competitors must record the four slick and four rain tires they wish to use for the entire day (Single or Double Final race days) on the Pre-Tech sheet to be turned into Tech BEFORE Qualifying. Must use Standard chassis.

See Section 502 and Briggs Website for additional Engine Rules

401.10 IAME KA100 Senior:

Age: 15+ years old Minimum Weight: 360 lbs. Engine: IAME KA100 Carburetor: HW-33A

Exhaust: IAME OEM KA100 Header & Pipe

Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts & 7.10

Rears

Rains MG "WT" or "SW" 4.20 Fronts & 6.00 Rears Competitors must record the four slick and four rain tires they wish to use for a Single Final race day [Or eight slick and eight rain tires they wish to use for a Double Final race day] on the Pre-Tech sheet to be turned into Tech BEFORE Qualifying.

Must use Standard chassis.

See Section 505 and USPKS Website for additional Engine Rules

401.11 IAME KA100 Heavy:

Age: 30+ years old or 15+ driver weight of 180 (gear included)

Minimum Weight: 385 lbs. Engine: IAME KA100 Carburetor: HW-33A

Exhaust: IAME OEM KA100 Header & Pipe

Tires: Slicks MG "SH" Red CIKF/Z Option 4.60 Fronts & 7.10 Rears

Rains MG "WT" or "SW" 4.20 Fronts & 6.00 Rears Competitors must record the four slick and four rain tires they wish to use for a Single Final race day [Or eight slick and eight rain tires they wish to use on a Double Final race day] on the Pre-

Tech sheet to be turned into Tech BEFORE Qualifying.

Must use Standard chassis.

See Section 505 and USPKSWebsite for additional Engine Rules

401.12 IAME X30 Senior:

Age: 15+ years old

Minimum Weight: 365 lbs.

Engine: IAME X30

Carburetor: Tillotson HW-27A

Exhaust: IAME OEM X30 Header & Pipe

Tires: MG Slicks MG "SM" Yellow CIKF/Z Prime 4.60 Fronts &

7.10 Rears

Rains MG "WT" or "SW" 4.20 Fronts & 6.00 Rears

Competitors must record the four slick and four rain tires they wish to use for a Single Final race day [Or eight slick and eight rain tires they wish to use on a Double Final race day] on the Pre-Tech sheet to be turned into Tech BEFORE Qualifying.

Must use Standard chassis.

See Section 506 and USPKS Website for additional Engine Rules

401.13 IAME X30 Heavy:

Age: 15+ years old

Minimum Weight: 405 lbs.

Engine: IAME X30

Carburetor: Tillotson HW-27A

Exhaust: IAME OEM X30 Header & Pipe

Tires: MG Slicks MG "SM" Yellow CIKF/Z Prime 4.60 Fronts &

7.10 Rears

Rains MG "WT" or "SW" 4.20 Fronts & 6.00 Rears Competitors must record the four slick and four rain tires they

wish to use for a Single Final race day [Or eight slick and eight rain tires they wish to use on a Double Final race day] on the Pre-Tech sheet to be turned into Tech BEFORE Qualifying.

Must use Standard chassis.

See Section 506 and USPKS Website for additional Engine Rules







500 Engine Rules: 501 General Engine Rules:

501.1 Comparison of Known Stock Part: Any part may be compared to a known stock part for determination of legality.

501.2 Engine Pressure/Vacuum Testing:

THMP may perform a pressure or vacuum test to ensure extra air is not being pulled into the engine for any performance gain. Both pressure and vacuum tests may be performed — engine must hold 5 psi for 60 seconds and/or 5" HG of vacuum for 60 seconds.

501.3 Carburetor Return Spring:

All engines will be required to utilize an auxiliary carburetor spring; below are some examples. If a different type of spring other than one of the examples below is used, it must be approved by one of the Tech Officials. *If no spring is used you will not be allowed on track.





501.4 Clutches:

Clutches are required in all classes unless stated under class section.

501.5 Engine Sealing:

It will be each driver's or guardian's responsibility to correctly seal the engine. If the competitor removes the seal under the direction of THMP, they will receive another seal with no penalty. If there is any question as to how to correctly seal the engine, see one of the Tech officials or see pictures in each of the engine sections.

501.5.2 Engine Seal Penalty:

If engine is not sealed after qualifying there will be no penalty if sealed under direction of THMP official before leaving Tech area. If engine seal is missing after a Heat or Final the competitor will be DQ'ed for that race.

501.5.3 Tampering with Engine Seal:

Any competitor that tampers with any engine seal be disqualified from the total event receiving zero points.

501.6 Engine Change:

Changing an engine is allowed after tech approval.

Competitor will start in the rear of the next competitive session. Following approval of the requested engine change from a Tech Official, a new engine seal will need to be obtained from the THMP Tech department, the Pre-Tech sheet will need to be updated with the new engine seal number.

Engine Change Tech – The engine that is being changed or replaced will be teched and will be required to pass tech. If engine fails tech competitor will be DQ'ed for the last race.

501.7 Engine Components:

Engine components may not be changed for that day after qualifying, (i.e., carburetor or sealed exhaust) unless approved by a THMP Tech Official. If any components are changed the competitor will be required to do so under the direction of a Tech Official. Rebuilding carburetor, replacing broken reeds or a cracked (not broken) exhaust is allowed with no penalty. Rebuilding carburetor, checking or replacing reeds can be done in your pit area as long as the engine seal is not cut, if seal needs to be cut it must be done under the direction of a Tech Official.







501.7.1 Loose or Missing Engine Components:

All engine components from the air box to the pipe must be properly attached from leaving the grid to the end of the race. If an engine component comes loose after crossing the start finish line and receiving the Checkered Flag, the competitor will keep their spot.

501.8 Briggs Engine Claiming:

THMP can claim any Briggs engine if they deem it necessary. The competitor will receive a new engine in it's place.

501.9 Cylinder Ports:

Must remain as manufactured. May be compared to a known stock part. No grinding, polishing, beveling, radiusing, chamfering, rounding or any deviation from the factory presentation will be allowed. Noncompliance with stock or not as manufactured includes any visible or measurable deviations. This may also include excessive wear that can be suspect of a performance enhancement.

501.10 Starter Batteries:

Must be of a sealed or dry cell design. All batteries used must be of enough capacity to start the engine.

501.10.1 Mounting Batteries:

All batteries are to be labeled with the kart number. They are to be affixed in one of the following manners: (1) Factory IAME box and strap with one 175-lb tie wrap, or (2) Aftermarket battery box with minimum of two 175-lb tie wraps. At least one of the tie wraps shall be installed around the chassis.

501.10.2 Loss of Battery on Track:

If a competitor loses their battery while on track, they will receive the following penalty:

- During practice, loses fastest lap of qualifying
- 2) During qualifying, Pre-Final or Final, is a DQ

501.11 Technical Tools:

The Tech Official may utilize any approved THMP/USPKS tool deemed necessary to assure all engines and equipment meet the requirements outlined in the THMP rule book. This is not limited to but includes No Go Gauges, Cord Width Gauges, Micrometers, Dial Caliper, Dial Indicator, Digatron Fuel Tester and Hydrometer.

501.12 No Go Gauges:

A No Go gauge is a non-adjustable tool that is used to verify a specified opening when inserted. No Go gauges shall be made from heat treated tool steel that is ground to finish size. The gauge or the gauge handle shall be clearly marked. Plug gauges are used to measure round openings. Gauges up to a diameter of 0.361" shall be round; gauges larger than 0.361" shall be ground on each side to achieve a blade width between 1/8" - 1/4" unless it is an engine manufactured gauge (See 509.3). Tolerance on gauges up to 0.750 is +0.0001" / -0.0000" gauges larger than 0.750" +0.0003" / -0.0000". USPKS recommends that the gauges be held in aluminum handles.







501.12.1 Using No Go Gauges:

These gauges are used to check a specific round opening. If the gauge enters any part of a specific opening, the part is illegal and the competitor will be disqualified. When measuring chamfered or angled round opening, the gauge may enter the chamfer or angle area but the gauge shall not be self-supporting when part being checked is rotated to any angle. If gauge is self-supporting, competitor will be disqualified.

* Dial Caliper cannot be used for measurements if stated No Go in the USPKS rule book.

501.12.2 Cord Width No Go Gauges:

Cord width gauges shall be made from heat treated tool steel. They shall be 1/8" +/- 0.015" thick and the width tolerance is +0.0002 / -0.0000". Gauges shall be marked with the width size. These gauges are used to measure port widths.

501.13 IAME Supplied Tech Tools:

IAME Go, No Go gauges and cylinder inserts that have been furnished by IAME will be used as manufactured if available and meet the dimension listed in the PDF. If there is no gauge available by IAME or is not the correct dimension per the PDF a No Go gauge can be used as long as it meets 501.12 specs. or other tools listed in 501.11. These IAME Tech Tools can be found in the PDF's listed on the USPKS website. If these tech tools are not listed in the PDF's please contact the Tech Director for a list. These include but are not limited to, Go Gauge, Taper Gauge, No Go Gauge and Cylinder Inserts.

501.13.1 Head & Header Profile Gauges:

The IAME profile gauge must go into the head or header completely, see examples below. If the gauge will not seat as pictured below the competitor will be given the opportunity to clean the head or header with 2 (two) swipes of a rag. If the gauge will not seat completely after 2 (two) swipes with a rag it will lead to disqualification.





501.14 Piston Squish:

Squish is the smallest distance between the head and the piston. This is done with 0.0625" or 1/16" solder McMaster Carr part # 7667A32 (unless specified by manufacturer) that is inserted through the spark plug hole pointed at cylinder wall in line with the piston wrist pin.

501.14.1 Checking Piston Squish:

- Inserted solder through the spark plug hole pointed at cylinder wall in line with the piston wrist pin.
- Roll piston through top dead center one revolution on both sides of cylinder using a separate piece of solder for each side. Both sides shall be at or greater than the specific engine spec. (See specific engine for spec)
- If squish is found less than minimum spec, the squish will be checked by other Tech Official or Officials up to 3 squish tests total.

501.15 LAD Port Gauge:

The LAD port gauge is used to check the port heights on the inlet, exhaust and transfer ports.







501.15.1 Checking Exhaust Port Height (LAD Tool):

- Remove cylinder head and attach dial indicator to engine.
- Place piston at top dead center and zero dial indicator.
- Insert LAD Port Gauge (exhaust end)
 into the exhaust port hooking it in the
 port. Hold gauge tight against the
 cylinder wall. Roll piston up to make
 contact with gauge. While holding slight
 pressure against gauge, check dial
 indicator reading. This reading shall be
 at or greater than specified dimension.

501.15.2 Checking Exhaust Port Height (Light Check):

- Remove cylinder head and attach dial indicator to engine.
- Place piston at top dead center and zero dial indicator.
- Roll piston down to the spec for that engine
- Place light in cylinder or exhaust port
- No visible light shall be seen from the exhaust port or cylinder respectively

501.15.3 Checking Inlet Port Height:

- Remove cylinder head and attach dial indicator to engine.
- Place piston at top dead center and zero dial indicator.
- Insert LAD Port Gauge (inlet end) into the inlet hooking it in the cylinder against the bottom of the inlet track.
- Roll piston down to make contact with gauge with slight pressure, release pressure and check dial indicator reading. This reading shall be at or less than specified dimension.

501.15.4 Checking Transfer Port Heights (Blowdown):

- Remove cylinder head and attach dial indicator to engine.
- Insert LAD Port Gauge (exhaust end) into the transfer port hooking it into the port.
- Hold gauge tight against the cylinder wall.
- Roll piston up to make contact with gauge.
- While holding slight pressure against gauge zero dial indicator
- Remove port gauge from transfer port and place in exhaust port hooking it in the port.
- While holding the gauge against cylinder wall, roll piston up to make contact with gauge.
- Hold slight pressure against gauge.
- The dial indicator reading shall be at or greater than specified dimension.

501.16 LAD CC Measuring Plug:

The LAD CC measuring plug is the only cc plug approved by the USPKS for use at THMP for checking cylinder head volume/cc's.

501.16.2 Cylinder Head Volume/CC Fluid:

Marvel Mystery Oil is the only acceptable fluid for the head volume/cc test.

501.16.3 Burette:

Shall be Grade "A" certified or calibrated glass burette with a Teflon stopcock.

^{*} This can be done by removing spark plug and installing the dial indicator with a spark plug adaptor.







501.16.4 CC Procedure:

- This test is performed before the combustion area is altered; example head being removed.
- Engine is at or near ambient temperature, agreed to by competitor.
- Fill burette with Marvel Mystery Oil, allow time for air bubbles to escape.
- Fill the stopcock and stem area with fluid.
- Install LAD cc plug and torque to minimum of 90 inch pounds.
- Bring piston up to just before top dead center.
- Engine should be close to level.
- Set level in burette to zero.
- Verify burette is at zero with competitor.
- Remove any residual fluid from tip.
- Add the fluid through the hole in the cc plug stopping at approximately one cc short of specified amount of fluid, wait approximately 30 seconds before adding the rest of specified amount of fluid.
- Verify specified amount of fluid was added to the engine with the competitor.
- Slowly roll piston up to top dead center.
- If fluid rises above the top of the cc plug the engine is out of specification and will be DQ'ed.
- * This test shall be done on the engine as raced, cleaning of the cylinder head or piston is not allowed for this test. This test will be performed one time to get an accurate test, re-testing is not allowed whether it is the Official's mistake or the competitor asks for a re-test. If the Official made a mistake this test is over, competitor will not be DQ'ed for this test and engine tech will continue.
 - ** Comer C-51 engine requires a 0.310" washer to be used with the LAD cc plug.

502 Briggs Rules and Regulations:

*THMP will use the Briggs and Stratton LO206 United States Rule Set

*THMP will monitor the Briggs and Stratton LO206 United States Rule Set for updates as well as the CKNA website/Rule Book for any updates to remain consistent with the National Rules.

- * Note: All measurements are in inches unless otherwise stated.
- * No external modifications of any type including air scoops or heat retention additions.

502.1 Engine:

Shall remain stock as manufactured, factory security seal shall remain intact and unaltered on the short block.

502.2 Carburetor:

B&S #555658 is the only carburetor permitted, must have either the Briggs Diamond logo or Walbro cast on the body. Air may only enter the engine through the carburetor Air Horn, any engine may be spray tested.

502.2.1 Needle Jet:

B&S #555602 aluminum needle, must be stock, unaltered and marked BGB.

502.2.1.1 Needle Jet C-clip:

Needle jet C-clip must be properly installed but may be installed at any of the five factory settings on the needle jet.

502.2.2 Throttle Cable Cap:

Must be properly installed and tight, locking collar must be used in all restricted classes. THMP allows the use of two (2) gaskets for slide optimization in Briggs Junior ONLY. All other restricted classes must remove material from the throttle cable cap where the slide contacts the cap for slide optimization. See picture at #1 in the B&S United States Rule Set.







502.2.3 Choke:

Choke must be unaltered but MAY be fixed open with a spring, rubber band, wire etc.

502.2.4 Idle Pilot Jet:

Must be stock, unaltered. *0.013"No-Go.

502.2.5 Idle Circuit AirHole:

No drilling, reaming, elongating or altering of the hole allowed. Chamfer at the outer edge will be compared to known stock part. 0.1195"No-Go.

502.2.6 Main Jet:

Must be stock, unaltered. 0.0365"Go and 0.039" No-Go.

502.2.7 Emulsion Tube:

Main nozzle must be stock, unaltered. 0.101" Go and 0.104" No-Go.

Small holes 0.018" Go and 0.021"No-Go Large holes 0.026" Goand 0.029" No-Go.

502.2.8 Venturi:

Vertical Mesurement 0.792"Max. [Gauge A8]. Horizontal upper & lower wide area 0.615" Max. Horizontal "waist" area 0.602" Max. [Gauge A20].

502.2.9 Air Pick Off Hole:

0.057"Go and 0.061"No-Go [Gauge A9].

502.2.10 Throttle Bore:

Must be as cast. 0.874" Max. [Gauge A7].

502.2.11 Venturi Idle Fuel Hole:

0.039" No-Go.

502.2.12 O-Ring:

B&S #555601 is required & must be unaltered.

502.2.13 Choke Bore/Air Horn:

1.149"No-Go [Gauge A7],

0.075"No-Go[Gauge A10].

502.2.14 Carb Slide Cutaway:

502.3 Air Filter.

B&S #555729 is the only filter allowed. Filter adapters are not allowed, filter must attach directly to carburetor air horn. For wet weather races a splash shield may be attached as long as it does not create a Ram Air effect. *A hole no greater than 1/4" may be drilled in the filter end cap for attachment of the rain guard (fastener may not protrude more the 3/4" inside the filter, this hole must be plugged in dry conditions and this is the ONLY modification allowed to the air filter.

502.4 Intake Manifold:

Intake manifold flange must be flat and may be checked for flatness 0.010" No-Go

1.740" Min.length, 1.760" Max.length. 0.885" Min.bore, 0.905" Max.bore.

502.5 Carburetor Overflow & Valve Cover Breather: Both of these hoses must be run to a catch can/bottle that is then vented to the atmosphere.

502.6 Short Block:

Must be stock, unaltered. No additions or subtractions of any metal or other substance on the inside or outside of the

Pop-up -0.0035" Max., Bore -2.693" Max., Stroke - 2.204" Max.

502.7 Cooling/Blower Shrouds and Covers:

All pieces of the engine cooling shroud/blower housing and control panel must be stock as supplied and properly installed. Rewind housing and cooling shroud must remain as painted from the factory. Engine shroud may be painted any color. All bolts (except the head bolt) that are used to secure sheet metal shrouds and covers may be replaced with larger diameter bolts. *No taping, covering or restricting of air to the rewind housing is permitted. Quick release throttle cable linkages are allowed.

502.8 Damaged Thread Repair:

Shrouds, Valve Cover, Oil Drain, Oil Fill, Blower Housing and Exhaust Pipe attachment studs on the head and lower brackets are allowed to be repaired with a Heli-Coil, Timesert, Keensert or other similar thread repair inserts







502.9 Engine Ignition Switch:

The ignition switch/kill button must remain in stock location and MUST be operable. It is not permitted to alter the OEM wiring.

502.10 Oil Drain and Fill Plugs:

One magnetic drain plug may be used, oil fill caps are non tech but must be secure and air tight.

502.11 Fuel Pump:

B&S #808656 or 597338 is the only legal fuel pump. The diamond logo and number 808492 or 027013 must be present.

502.11.1 Pulse:

Pulse must come from the oil fill fitting on the engine side cover, aftermarket one piece filler/pulse fittings are permitted.

502.11.2 Pump relocation:

Pump may be relocated in a similar location that is both safe and secure. Mounting the pump upside down or vertically is prohibited.

502.11.3 Brass Vent:

The use of silicone sealant on the brass vent IS permitted and recommended, a fuel pump return line is prohibited.

502.11.4 Carburetor Supply Line:

The fuel line from the pump to the carburetor must be a single piece of flexible tubing secured at both ends. Inner Diameter of the fuel line must be uniform and continuous at 1/4" and completely free of any means to create an obstruction of flow.

502.11.5 Fuel Filter:

A fuel filter is not required but highly recommended. Only one filter may be used and it must be located between the supply tank and the fuel pump inlet.

502.12 Head Gasket:

B&S #555723 is the only gasket allowed. Minimum thickness allowed is **0.047"** using a micrometer. Four measurements will be taken per the B&S United States Rule Set diagram at #20b and three of the four must pass the minimum thickness reading.

502.13 Cylinder Head:

The only legal head is the "RT-1" casting. Cylinder head must be as cast. B&S #555690 heat disperser may be installed in the exhaust bolt boss per factory instructions.

502.13.1 Combustion Chamber Dimensions: Shallow area depth 0.031" Min. "HMZ" zone depth 0.342" Min. See B&S United States Rule Set at #19e for "HMZ" diagram. Combustion chamber at widest part 2.640"

502.13.2 Valve Guides: B&S #555645 is the only allowable replacement valve guide. Depth from head gasket surface to the intake valve guide is **1.255" Max.**

502.13.3 Ports:

Both ports AS CAST, no addition or subtraction of material in any form or matter. No de-burring, machining, honing, grinding, polishing, sanding, media blasting etc.

Transition from intake bowl to port must have factory defined machining burr.

502.13.3.1 Intake Port Diameter: 0.918" Max.

502.13.3.2 Intake Port Pocket Bowl: 0.952" No-Go

502.13.3.3 Exhaust Port Diameter: 0.980" Max.







502.13.4 Valve Seats:

Must remain factory specification with one 30 and one 45 degree angle only. Seats can and will be compared to factory stock, excessive material removal during valve maintenance is not permitted.

502.13.4.1 Intake Valve Seat Diameter: 0.972" Max.

502.13.4.2 Exhaust Valve Seat Diameter: 0.850" Max.

502.14 Intake Valve:

502.14.1 Weight: 27.8 grams

502.14.2 Valve Stem Diameter: 0.246" - 0.247"

502.14.3 Valve Head Diameter: 1.055" - 1.065"

502.14.4 Valve Length: 3.3655" Min.

502.14.5 Valve Margin: 0.057" Min.

502.15 Exhaust Valve:

502.15.1 Weight: 27.2 grams

502.15.2 Valve Stem Diameter: 0.246" - 0.247"

502.15.3 Valve Head Diameter: 0.935" - 0.945"

502.15.4 Valve Length: 3.3655" Min.

502.15.5 Valve Margin: 0.060" Min.

502.16 Valve Springs:

Single coil stock, unaltered B&S #26826. Must be identical in appearance to factory part and have 4.00 to 4.75 coils.

502.16.1 Wire Diameter: 0.103" - 0.107"

502.16.2 Length: 0.940" Max.

502.16.3 Inside Diameter: 0.615" Go and 0.635" No-Go.

502.17 Rocker Arms:

B&S #555711 or #797443 must be stock, unaltered. Mounting positions may not be altered in any manner. No thread repairs to the mounting holes are allowed. No bending of the studs.

502.17.1 Overall Length: 2.820" Min.

502.17.2 Rocker Arm Studs:

B&S #694544 or 797441 must be stock unaltered and in stock location.

*Arm #555711 must be used with Stud #694544 *Arm #797443 must be used with Stud #797441

502.17.3 Rocker Arm Stud Plate:

Must be bolted to the head with one OEM stock B&S gasket only, thickness **0.060" Max.**Rocker plate to head fastener holes

must remain stock dimension 0.289" Max.

502.17.4 Rocker Ball Diameter: 0.950" - 0.610" Max.







502.18 Push Rods:

B&S # 555531 must be stock, unaltered.

502.18.1 Diameter: 0.183" Min. - 0.190" Max.

To be check in 3 points along the length and must pass 2 planes within 360 degrees of rotation at each point.

502.18.2 Length: 5.638" Min. - 5.658" Max.

502.19 Camshaft Profile:

Maximum valve lift to be checked from the top of the retainer. Valves must be adjusted to zero lash.

0.255" Max. Intake and Exhaust.

502.19.1 Profile Limits:

	Intake Lift	Exhaust Lift
0.006"	59-51 BTDC	101-93 BBDC
0.020"	16-12 BTDC	59-55 BBDC
0.050"	0.5-4.	43-39 BBDC
0.100"	17-21 ATDC	26-22 BBDC
0.150"	33.5- 3	9-5 BBDC
0.175"	43-47 ATDC	1-5 ABDC
0.200"	54-58 ATDC	11.5-15.5 ABDC
0.225"	68-72 ATDC	25-29 ABDC
Max Lift	0.257"	0.259"
Min Lift	0.252"	0.252"
0.225"	38-34 BBDC	76-72 BTDC
0.200"	24.5- 2	62.5-58.5 BTDC
0.175"	14-10 BBDC	52-48 BTDC
0.150"	4.5 -0.	42-38 BTDC
0.100"	12-16 ABDC	25.5-21.5 BTDC
0.050"	29-33 ABDC	8.5-4.5 BTDC
0.020"	45.5-4	8-12 ATDC
0.006"	83-91 ABDC	47-55 ATDC

*A single point on each lobe may be off by a maximum of 2 degrees without issue with the exception of the 0.006" check point.

502.20 Flywheel:

B&S #555683 or #84007232 are the only flywheels allowed. Must be stock, unaltered. No modifications to the flywheel or fan allowed, no machining, glass beading, sand blasting, painting or coating is allowed.

A flywheel fan with broken fins must be replaced with B&S #692592.

502.20.1 Weight:

Flywheel, fins and four bolts.

4 Lbs. 1 Oz.

502.20.2 Key:

Key must be stock, unaltered with B&S logo. No offset keys.

502.20.2.1 Key Width: 0.1825" - 0.1875"

502.21 Ignition System:

Temperature thermocoupler is allowed as long as the spark plug sealing washer and/or the cylinder heat shield with spark plug hole are unaltered.

502.21.1 Coil:

B&S # 555718 (Green) is the only coil for all classes except Kid Kart, Kid Kart must use B&S #555725 (Black). Must be stock, unaltered, no modification of any kind allowed (including mounting bolts and holes, coil legs may not be bent in any way). Air gap is Non-Tech.

502.21.2 Spark Plug:

Autolite AR3910X is the only plug permitted. Must be unaltered in any way from the OEM. Must have "Autolite" and "AR3910X" identification on the insulator. Sealing washer must be in place and unaltered.

502.21.2.1 Plug Boot: B&S #555714 is the only boot permitted.







502.21.3 Ignition Timing:

Using a degree wheel dialed in with the positive stop method, ignition timing must not exceed 26 degrees. Timing checked in the direction of normal engine rotation. Take this reading when the back side of the leading coil leg is lined up with the leading edge of the first magnet on the flywheel. See diagram at #30f in the B&S LO206 United States Rule Set.

502.22 Crankcase Cover:

Must be B&S stock, unaltered, "as cast from factory" condition. No alterations, addition or subtraction of metal or any other substance to the crankcase cover.

502.23 Starter:

B&S #695287 must be retained as produced and intact. Recoil housing may be rotated but may not have any additions or alterations to restrict airflow.

502.24 Exhaust:

502.24.1 Header:

B&S # 557045 must be used at THMP. Header must be completely wrapped (360 degrees) with an approved non-asbestos insulation material or sleeve, starting approx. 3 inches from the exhaust flange and **MUST** extend to where the first header support bracket meets the header.

502.24.1.1 Header Gasket:

Gasket and/or silicone are allowed to seal header to the head (one gasket max.)

502.24.1.2 Header Fasteners:

Studs or bolts are permitted to fasten header to the head. **Bolts or nuts must be safety wired**.

502.24.2 Silencer Pipe:

RLV 4110 silencer pipe must be used at THMP.

502.25 Clutch:

Refer to page 21-25 of the B&S United States Rule Set for diagrams/photos of approved clutches. Clutches or sprocket conversion drums/kits must be used as shipped from the original manufacturer. Mixing of parts between clutch lines/manufacturers or removing parts (i.e.grease gaurd etc.) is prohibited. No alteration or machining of the clutch allowed except light sanding of the shoe and drum for surface mantenance.

Interchangeable drivers and driver configuration (#35 or #219), driver clip/lock, clutch key and crankshaft fastener kit are non-tech.

OEM springs and weights are racer's choice but **MUST** remain stock, unaltered.

Clutch coolers and aftermarket coatings are prohibited.

502.25.1 Kid Kart:

Must run the supplied B&S #555727 Max Torque clutch in stock unaltered form. Springs and clutch key are nontech..







502,25,2 All Other Classes:

Must run one of the following clutches; Inferno Racing by Hilliard: Fire, Flame Blaze or Fury Max Torque: Dragon Skin or SS Noram/Premier: Magnum, GE, Ultimate or Stinger (Stinger must be

502.25.3 Sprocket Conversion Drums/Kits:

converted to stamped drum).

Sprocket conversion drums/kits made by the manufacturers of the approved clutches are the only legal kits.

502.25.4 Clutch Claim Rule:

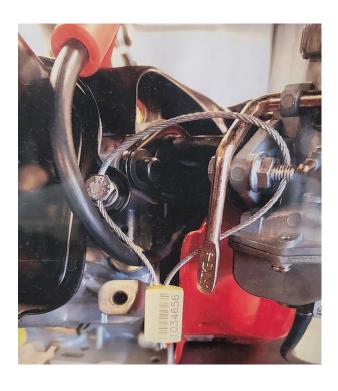
Per standard sanctioning body guidelines, claiming can be implemented, maximum of \$160.00.

502.26 Briggs Rule Hierarchy:

- Most current B&S LO206 United States Rule Set.
- 2. Most current CKNA Rule Book and website updates.
- 3. Trackhouse Motorplex 2024 Sporting Regulations (this document)
- 4. Driver's meeting announcements and rule clarifications (supplemental rules to any event).
- 5. Race Director's decision or clarification of any rule(s) during any event.

502.27 Sealing the Briggs LO206 Engine:

Seal one (1) valve cover bolt and one (1) carburetor bolt exactly like the photo.



- Recommend at least a 5/64" hole in all fasteners.
- Hole and cable must go completely though head of valve cover bolt and threaded portion of carburetor bolt.
- ➤ If cable will not go through seal push the cable back and forth a few times to release the lock inside the seal.







503 IAME Bambino M1 Rules & Regulations:

*Note: All measurements are in inches unless otherwise stated.

*Homologation Document listed on the USPKS website will be used for anything not listed below.

*No external modifications of any type including air scoops or heat retention additions.

503.1 Engine:

Shall remain stock as manufactured.

503.1.1 Engine Shroud:

Engine shroud may be placed in either direction but must not be altered in any way.

503.1.2 Tape on Engine Shroud:

Placing tape on the engine shroud is not allowed.

503.2 Carburetor:

Tillotson HS-325A Shall be as manufactured.

*Bypassing fuel or air to the motor in any way other than as manufactured is illegal.

503.3 Fuel Filter:

Any fuel filter is permitted. If utilized, it must be between the tank and carburetor.

503.4 Air Filter & Cover:

OEM air filter cover shall be used as manufactured.

503.5 Spark Plug:

Only NGK – BR8EG, BR8EIX, BR9EG, BR9EIX, BR10EG or BR10EIX can be used with the OEM washer in place. If a cylinder head temperature sensor is utilized, the OEM washer may be removed. Commonly used, stock, cylinder head temperature sensors may be used for comparison.

503.5.1 Spark Plug Boot:

OEM or NGK

503.6 Muffler:

Must use OEM muffler. Excessive leakage in any part of the exhaust system is illegal and competitor could be disqualified. Exhaust Gas Temperature sensors are illegal.

503.6.1 Exhaust Manifold:

OEM exhaust manifold must be in place, 13.5 mm maximum.

503.7 Clutch:

As factory supplied. Maximum drum ID 3.354" (85.2mm). Must be IAME 10 tooth drum without holes. Oiling the clutch is illegal. Must pass clutch test: while on the kart stand competitor will start engine and by holding the brake and applying throttle RPM must not exceed 5000.

503.7.1 Clutch Test Procedure:

- 1) Place kart on secure stand in a safe location
- 2) Verify the axel spins freely
- 3) Start the engine, apply throttle a few times to clear out engine
- 4) Apply full throttle and full brake at the same time without allowing any tire rotation (this may take a couple try's)
- 5) Have someone check your gauge for maximum RPM (cannot exceed 5000 RPM)

503.8 Recoil/External Starter:

Either the recoil or external starter is allowed. Competitor may remove the rope, plastic rope spool and recoil spring if they chose. The two rotating parts on the motor that the recoil engages in must remain in place and the recoil cover must remain place even if all internal parts are removed.

503.9 Timing Procedure:

- 1) Insert dial indicator in spark plug hole
- 2) Zero at TDC
- 3) Roll piston back to align marks
 Per M1 60cc Pull Start USA PDF Dated
 22/03/2017 (Found on Rt.66 website)
- 4) Reading must be between 0.035" (0.9mm) -0.059" (1.5mm) before TDC

Note – All ignition parts must be OEM and unaltered.

Rev. 01-28-2024







504 IAME Swift Rules and Regulations:

- * Must be USA registered engine.
- * Note: All measurements are in inches unless otherwise stated.
- * Homologation Document listed on the USPKS website will be used for anything not listed below.
- * No external modifications of any type including air scoops or heat retention additions.

504.1 Carburetor:

Tillotson HW-31A

Max. Venturi (No Go) 17.15mm Max Throttle Bore (No Go) 22.10mm

Stock butterfly screw shall be in place

*Bypassing fuel or air to the motor in any way other than as manufactured is illegal.

504.1.1 Carburetor and Manifold Gaskets:

Each of the carburetor and manifold mounting gaskets must be greater than 0.010" in thickness (0.010" No-Go-).

504.1.2 Carburetor Gaskets and Diaphragms:

The color of the gasket or diaphragm is a non-tech item. Must be OEM and withing the OEM specs.
See 504.11 for specs.

504.2 Fuel Filter:

Any fuel filter is permitted. If utilized, it must be between the tank and carburetor.

504.3 Air Box and Filter:

Blue OEM air box shall be as manufactured, one (1) 23mm tube (No Go). One (1) 0.200" drain hole is allowed. The OEM filter (IAME # 10751-1) must be used. Any external forms of air ducts forcing air inside of air box is illegal. Rain covers are legal during rain conditions as long as it does not act as a ram air device.

* Air filter is not required in competitor's choice or declared rain condition.

504.4 Spark Plug:

Must be as manufactured. Either the OEM spark plug washer, head temp sensor or indexing washer shall be used. Maximum spark plug length of 18.5mm as ran (with washer or temp sensor)

Any of the following plugs may be used: Autolite AR50, AR51, AR52 or AR53 Denso W#ESZU NGK B ## EG or BR ## EG

504.4.1 Spark Plug Boot:

OEM part PVL #10544 or NGK #8636 (TB05EMA)

504.5 Bearings, Seals, O-Rings and Gaskets:

May be replaced with aftermarket equivalent unless specified OEM. No ceramic or exotic bearings.

504.5.1 Base Gasket:

Gasket required, changing base gaskets is allowed to obtain exhaust port height. Thickness of the gasket is a non-tech item.

504.5.2 Head Gasket:

Head gasket is **NOT** required but may be used to meet the minimum squish requirement of 0.025" using 0.0625" or 1/16" solder Rule 501.13.







504.6 Piston and Ring:

Piston and ring shall be OEM as supplied from the manufacturer.

504.7 Mini Swift Exhaust Header:

IAME OEM as supplied. One (1) factory OEM gasket, no spacer or spacers allowed between cylinder and header.

504.7.1 Micro Swift Exhaust Header:

IAME OEM 16mm (0.630") maximum (No Go). Shall have a hole drilled completely through one of the header mounting nuts that will allow the engine seal wire to pass through it. Shall be no leakage at the base of the header.

504.8 Exhaust Pipe:

Shall be OEM as manufactured. Altering internal dimensions or modifications to pipe or silencer end cap is illegal. One hole for exhaust temperature sensor is allowed; if sensor is not used, hole shall be completely plugged. Excessive leakage in any part of the exhaust system is illegal and competitor could be DQ'ed.

504.9 Clutch:

As factory supplied. Maximum drum ID 3.354" (85.2mm). Must be IAME 10 or 11 tooth drum without holes. Oiling clutch is illegal. Must pass clutch test: while on the kart stand competitor will start engine and by holding the brake and applying throttle RPM must not exceed 5000.

504.9.1 Clutch Test Procedure:

- 1) Place kart on secure stand in a safe location
- 2) Verify the axle spins freely
- 3) Start the engine, apply throttle a few times to clear out engine
- Apply full throttle and full brake at the same time without allowing any tire rotation (this may take a couple try's)

 Have someone check your gauge for maximum RPM (cannot exceed 5000 RPM)

504.10 IAME Swift Spec:

Minimum Squish (See Rule 501.13)	0.025"
Minimum Exhaust Port Height (LAD Tool)	1.230"
Minimum Exhaust Port Height (Light Check)	1.095"
Inlet Port Height (LAD Tool)	0.585"
Maximum Bore (42.07mm)	1.656"
Maximum Stroke (43.15mm)	1.699"
Minimum Piston Weight W/Ring	60g
Minimum Piston Pin Weight	15.5g
Piston Pin Length (+ - 0.2mm)	35mm
Piston Pin ID (+ - 0.25mm)	8mm
Piston Pin OD (+ - 0.1mm)	12mm
Complete Crankshaft Minimum Weight	1190g
Minimum Clutch Diameter (83mm)	3.267"
Minimum Clutch Drum No/Driver	182g
Minimum Clutch Weight Type 1	460g
Minimum Clutch Weight Type 2 (10/20)	465g
Micro Swift Header (16mm No-Go)	0.630"

504.11 IAME Swift Tillotson Carburetor HW-31A Spec:

Maximum Venturi (17.15mm No-Go)	0.675"	
Maximum Bore (22.10mm No-Go)	0.870"	
Carb & Manifold Gaskets (No-Go)	0.010"	
Metering diaphragm Gasket	0.016" - 0.024"	
Metering diaphragm	0.002" - 0.008"	
Fuel Pump Gasket	0.028" - 0.035"	
Fuel Pump	0.0015" - 0.006"	
Minimum Shutter Thickness	0.030"	
Stock/OEM butterfly screw shall be in place.		







504.12 Sealing the IAME Swift Engine:

IAME Micro Swift:

Seal - One (1) or Two (2) Head Nut(s) & One (1) Header Nut





IAME Mini Swift: Seal – Two (2) Head Nuts



- > Recommend at least a 5/64" hole in all fasteners.
- Hole and cable must go completely though head of bolt.
- ➤ If cable will not go through seal push the cable back and forth a few times to release the lock inside the seal.
- ➤ It is recommended that the carburetor also be sealed for practice in competing at the national level.







505 IAME KA100 Rules and Regulations:

- * Must be USA registered engine.
- * Note: All measurements are in inches unless otherwise stated.
- * Homologation Document listed on the USPKS website will be used for anything not listed below.
- * No external modifications of any type including air scoops or heat retention additions.

505.1 Air Box:

OEM air box shall be as manufactured with two (2) 23mm tube (No Go). One (1) 0.200" drain hole is allowed. The OEM filter (IAME # 10751-1) must be used. Any external forms of air ducts forcing air inside of air box is illegal. Rain covers are legal during rainy conditions as long as it does not act as a ram air device.

* Air filter is not required in competitor's choice or declared rain condition.

505.2 Fuel Filter:

Any fuel filter is permitted. If utilized, it must be between the tank and carburetor.

505.3 Carburetor:

Tillotson HW-33A shall be OEM as manufactured. The carburetor including the finish of the venturi and bore, the arm, throttle shaft, butterfly, slide assembly for jetting and/or manifold shall be OEM and not modified. OEM needle jets are required. Engine and carburetor shall match the specs and carburetor shall be mounted as specified by manufacturer.

* Bypassing fuel or air to the motor in any way other than as manufactured is illegal.

505.3.1 Carburetor Gaskets and Diaphragms:

The color of the gasket or diaphragm is a non-tech item. Must be OEM and within the OEM specs.
See 505.18 for specs.

505.4 Reed Cage:

Only OEM fiberglass reeds are allowed with a minimum thickness of 0.012". Reeds must be OEM, sanding, cutting or removal of any material is illegal. Manifold shape and design shall remain as manufactured; grinding or polishing the reed cage or manifold is illegal. Resurfacing the flat rubber contact surface to reeds and gasket surface, deburring and minor grinding at reed attachment screws is allowed. Reed cage plates shall remain as manufactured and not be altered in any way. Reed screws are non-tech.

505.5 Spark Plug:

Must be as manufactured. Either the OEM spark plug washer, head temp sensor or indexing washer shall be used. Maximum spark plug length of 18.5mm as ran (with washer or temp sensor)

Any of the following plugs may be used: NGK B10EG, BR10EG, 6254-105, R6252K-105

505.5.1 Spark Plug Boot:

OEM part PVL #10544 or NGK #8636 (TB05EMA)







505.6 Cylinder Head:

Cylinder head shall be OEM as manufactured; head shall be the same profile as the IAME gauge. Only modification allowed is spark plug thread repair.

505.6.1 Cylinder Head O-Ring or Gasket:

The O-Ring or Head gasket is **NOT** required but may be used to meet the minimum squish requirement of 0.041" using 0.0625" or 1/16" solder Rule 501.13.

505.7 Cylinder:

Ports must remain as manufactured, known stock part may be used as a comparison. Bore and stroke shall be per manufacturer spec and will be taken as raced. Any internal modification such as adding, removing or grinding material is prohibited.

505.7.1 Cylinder Base Gaskets:

Gasket required, changing base gaskets is allowed to obtain exhaust port height. Thickness of the gasket is a non-tech item.

505.8 Bearings, Seals, O-Rings and Gaskets:

May be replaced with aftermarket equivalent unless specified OEM. No ceramic or exotic bearings.

505.9 Crankcase:

Crankcase shall be as manufactured; metal removal or polishing is not allowed except for de-burring and or repair from rod failure. Main bearing pocket repair is allowed provided the pockets are not relocated during the process. Bearings and seals must be OEM as manufactured; replacement bearings shall be a standard bearing with steel or plastic retainers with same width and diameter as stock. Dual-row, ceramic or angular contact bearings are illegal. Seals shall be as manufactured and shall not have the spring removed, trimmed or installed backwards. Any internal modification such as adding,

removing or grinding material is prohibited unless it is for minor repairs as stated above.

505.10 Crankshaft and Rod:

The crankshaft shall be OEM as supplied from the manufacturer; crank shall be the same manufacturer as the motor. Plastic or aluminum crankshaft stuffing supplied by the manufacturer is required. Removing metal, shot peening, polishing or counterweight plugging is illegal. Weights must match that of the supplied specifications. Rod must be OEM as manufactured; removing metal or modifying rod is illegal. Any rod bearing is legal.

505.11 Piston and Ring:

Piston and ring shall be OEM as supplied from the manufacturer.

505.12 Ignition:

Ignition shall be OEM as manufactured. Flywheel key must be in place and not modified.

505.12.1 Ignition Ground Strap:

A secondary ground strap is allowed from one of the ignition bolts to the case.







505.13 Exhaust Header and Pipe:

Shall be OEM as manufactured; intentional header and pipe modifications are illegal. Interchanging, plating or ceramic-coating is illegal. The system shall be intact at the start and finish of the race as manufacturer intended. One hole for EGT probe is allowed in the header. If probe is not in place hole must be plugged. Must use OEM gasket, only one is permitted (1.3mm minimum thickness). No spacer or spacers allowed between the cylinder and header. Excessive leakage in any part of the exhaust system is illegal and competitor could be DQ'ed,

505.13.1 Junior Exhaust Header

Junior header shall be 22mm (No-Go). Engine seal must go through one of the header nuts.

505.14 Starter & Battery:

Competitor is allowed to remove the starter and battery if they choose. The starter ring gear must remain in place.

505.15 Clutch:

Clutch shall be OEM as manufactured and within factory spec. Oiling clutch is illegal. Clutch cannot be adjustable and must pass clutch test: while on the kart stand competitor will start engine and by holding the brake and applying throttle RPM must not exceed 6000.

505.15.1 Clutch Test Procedure:

- 1) Place kart on secure stand in a safe location
- 2) Verify the axle spins freely
- 3) Start the engine, apply throttle a few times to clear out engine
- Apply full throttle and full brake at the same time without allowing any tire rotation (this may take a couple try's)
- 5) Have someone check your gauge for maximum RPM (cannot exceed 6000 RPM)

505.16 Timing Procedure:

- 1) Insert dial indicator in spark plug hole
- 2) Zero at TDC
- 3) Roll piston back 0.200" before TDC
- 4) Roll piston forward to align timing marks
- Dial indicator must read between 0.080" 0.106" before TDC

505.17 IAME KA100 Spec:

•	
Minimum Squish (See Rule 501.13)	0.041"
Minimum OEM Reed Thickness	0.012"
Minimum Port Height (LAD Tool)	1.420"
Minimum Port Height (Light Check)	1.295"
Rod Length	102mm
Maximum Stroke	54.05mm
Maximum Bore	48.53mm
Timing (Minimum – Maximum)	0.080" - 0.106"
Minimum Piston Weight W/Ring	95g
Minimum Piston Pin Weight	19g
Piston Pin Length (+ - 0.2mm)	39mm
Piston Pin ID (+ - 0.30mm)	10mm
Piston Pin OD (+ - 0.1mm)	14
Minimum Complete Crank Weight	1820g
Minimum Clutch Diameter (83 mm)	3.267"
Minimum Clutch Weight	375g
Minimum Clutch Drum	225g
Minimum Clutch Drum W/Gear	300g
KA100 Junior Header (No-Go)	22mm

505.18 IAME KA100 Tillotson Carburetor HW-33A Spec:

•	
Venturi 24.10mm (No-Go)	0.948"
Bore 28.10mm (No-Go)	1.106"
Metering diaphragm Gasket	0.016" - 0.024"
Metering diaphragm	0.002" - 0.008"
Fuel Pump Gasket	0.028" - 0.035"
Fuel Pump	0.0015" - 0.006"
Minimum Shutter Thickness	0.030"







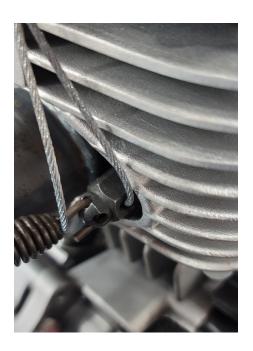
505.19 Sealing the IAME

KA100 Junior Engine:

IAME KA100 Junior:

Seal - One (1) or Two (2) Head Nuts & One (1) Header Nut





505.19.1 Sealing the IAME KA100 Senior and Heavy Engine:

IAME KA100 Senior and Heavy:

Seal – Two (2) Head Nuts



- Recommend at least a 5/64" hole in all fasteners.
- Hole and cable must go completely though head of bolt.
- If cable will not go through seal push the cable back and forth a few times to release the lock inside the seal.
- ➤ It is recommended that the carburetor also be sealed for practice in competing at the national level.







506 IAME X30 Rules and Regulations:

- * Must be USA registered engine.
- * Note: All measurements are in inches unless otherwise stated.
- * Homologation Document listed on the USPKS website will be used for anything not listed below.
- * No external modifications of any type including air scoops or heat retention additions.

506.1 Air Box:

Must use the new 2021 X30 Air Box (part # 30125740). Max inside diameter of tubes is 23mm. (0.905" No Go) The OEM filter (IAME # 10751-1) must be used. One (1) 0.200" drain hole is allowed. In rain condition any rain covers are legal as long as it does not act as a ram air device.

* Air filter is not required in competitor's choice or declared rain condition.

506.2 Fuel Filter:

Any fuel filter is permitted. If utilized, it must be between the tank and carburetor

506.3 Carburetor:

Shall be OEM as manufactured. The carburetor including the finish of the venturi and bore, the arm, throttle shaft, butterfly, slide assembly for jetting and/or manifold shall be OEM and not modified. OEM needle jets are required. Engine and carburetor shall match the specs and carburetor shall be mounted as specified by manufacturer. *Bypassing fuel or air to the motor in any way other than as manufactured is illegal.

506.3.1 Carburetor Gaskets and Diaphragms:

The color of the gasket or diaphragm is a non-tech item. Must be OEM and withing the OEM specs.
See 506.18 for specs.

506.4 Reed Cage:

Only OEM fiberglass reeds are allowed with a minimum thickness of 0.012". Reeds must be OEM, sanding, cutting or removal of any material is illegal. Manifold shape and design shall remain as manufactured; grinding or polishing the reed cage or manifold is illegal. Resurfacing the flat rubber contact surface to reeds and gasket surface, deburring and minor grinding at reed attachment screws is allowed. Reed cage plates shall remain as manufactured and not be altered in any way. Reed screws are non-tech.

506.5 Spark Plug:

Must be as manufactured. Either the OEM spark plug washer, head temp sensor or indexing washer shall be used. Maximum spark plug length of 18.5mm as ran (with washer or temp sensor)

Any of the following plugs may be used: NGK R6252K-105 or NGK R6254-105

* During rain conditions NGK-B10 EG or BR10EG may be used.

506.5.1 Spark Plug Boot:

OEM part PVL #10544 or NGK #8636 (TB05EMA)







506.6 Cylinder Head:

Cylinder head shall be OEM as manufactured; head shall be the same profile as the IAME gauge.

506.6.1 Cylinder Head Gasket:

Head gasket is **NOT** required but may be used to meet the minimum squish requirement of 0.035" using 0.0625" or 1/16" solder Rule 501.13.

506.7 Cylinder:

Ports must remain as manufactured, known stock part may be used as a comparison. Bore and stroke shall be per manufacturer spec and will be taken as raced + or – 0.008". Any internal modification such as adding, removing or grinding material is prohibited.

506.7.1 Cylinder Base Gasket:

Gasket required, changing base gaskets is allowed to obtain exhaust port height. Thickness of the gasket is a non-tech item.

506.8 Crankcase:

Crankcase shall be as manufactured; metal removal or polishing is not allowed except for de-burring and/or repair from rod failure. Main bearing pocket repair is allowed provided the pockets are not relocated during the process. Bearings and seals must be OEM as manufactured; replacement bearings shall be a standard bearing with steel or plastic retainers with same width and diameter as stock. Dual-row, ceramic or angular contact bearings are illegal. Seals shall be as manufactured and shall not have the spring removed, trimmed or installed backwards. Any internal modification such as adding, removing or grinding material is prohibited unless it is for minor repairs as stated above.

506.9 Crankshaft and Rod:

The crankshaft shall be OEM as supplied from the manufacturer; crank shall be the same manufacturer as the motor. Plastic or aluminum crankshaft stuffing supplied by the manufacturer is required. Removing metal, shot peening, polishing or counterweight plugging is illegal. Weights must match that of the supplied specifications. Rod must be OEM as manufactured; removing metal or modifying rod is illegal. Any rod bearing is legal.

506.10 Piston and Ring:

Piston and ring shall be OEM as supplied from the manufacturer.

506.11 Bearings, Seals, O-Rings and Gaskets:

May be replaced with aftermarket equivalent unless specified OEM. No ceramic or exotic bearings.







506.12 Ignition:

Ignition shall be OEM as manufactured. Timing shall be the factory setting. Flywheel key must be in place and not modified. System shall be as supplied with control box mounted with factory markings visible for inspection if applicable.

* Ignition parts shall all match for that ignition.

506.12.1 Stator:

The stator holes maybe enlarged if needed to adjust the timing but, must be in compliance with 506.12.3 Ignition Timing Procedure

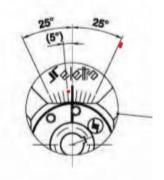


506.12.2 Ignition Rotor & Key:

Ignition key – Open, No Minimum
Ignition rotor key slot – 0.103" No-Go Maximum
Must be in compliance with 506.12.3.

506.12.3 Ignition Timing Procedure:

- 1) Install dial indicator and zero at top dead center (TDC)
- 2) Rotate engine back before TDC at least one (1) revolution of the dial indicator
- 3) Rotate engine back to TDC
- 4) The thin line on the flywheel must land somewhere on the wider molded center line on the stator, or to the right side of this line.



506.13 Exhaust Header, and Pipe:

Shall be OEM as manufactured; intentional header and pipe modifications are illegal. Interchanging, plating or ceramic-coating is illegal. The system shall be intact at the start and finish of the race as manufacturer intended. One hole for EGT probe is allowed in the header. If probe is not in place hole must be plugged. Must use OEM gasket, only one is permitted (1.3mm minimum thickness). No spacer or spacers allowed between the cylinder and header. Excessive leakage in any part of the exhaust system is illegal and competitor could be DQ'ed.

506.13.1 Junior Exhaust Header

Junior header shall be 22.7mm (No-Go). Engine seal must go through one of the header nuts.







506.14 Radiator:

Water system shall have clamps on all hose connections and a radiator catch container for overflow. Thermostats are allowed. Pressurized systems and electric pumps are illegal. Tape may be removed from radiator while on the racing surface.

506.15 Water and Coolants:

Ethylene glycol-based coolants are illegal. Water Wetter or other like surfactants (surface-active agent) can be used.

506.16 Clutch:

Clutch shall be OEM as manufactured and within factory spec. Oiling clutch is illegal. Clutch cannot be adjustable and must pass clutch test: while on the kart stand competitor will start engine and by holding the brake and applying throttle RPM must not exceed 6000.

506.16.1 Clutch Test Procedure:

- 1) Place kart on secure stand in a safe location
- 2) Verify the axle spins freely
- 3) Start the engine, apply throttle a few times to clear out engine
- 4) Apply full throttle and full brake at the same time without allowing any tire rotation (this may take a couple try's)
- Have someone check your gauge for maximum RPM (cannot exceed 6000 RPM)

506.17 IAME X30 Spec:

 	
Minimum Squish (See Rule 501.13)	0.035"
Minimum OEM Reed Thickness	0.012"
Timing	Fixed
Minimum Port Height (LAD Tool)	1.340"
Minimum Port Height (Light Check)	1.215"
Rod Length	102mm
Maximum Stroke	54mm
Maximum Bore	54.35mm
Piston Type – Single Dykes Ring	
Minimum Piston Weight W/Ring	128g
Minimum Piston Pin Weight	28g
Piston Pin ID (+ - 0.25mm)	9mm
Piston Pin OD (+ - 0.1mm)	14mm
Minimum Balance Shaft Weight	315g
Minimum Complete Crank Weight	2150g
Min. Complete Crank with Bearings	2220g
Minimum Clutch Diameter (83mm)	3.267"
Minimum Clutch Weight	375g
Minimum Clutch Drum	225g
Minimum Clutch Drum W/Gear	300g
Min. Clutch with Starter Gear	680g
Minimum Flex Length	17"
X30 Junior Header (No-Go)	22.7mm

506.18 IAME X30 Tillotson HW-27A Carburetor Spec:

Venturi 27.05mm (No-Go)	1.0649"
Bore 29.10mm (No-Go)	1.146"
Metering diaphragm Gasket	0.016" - 0.024"
Metering diaphragm	0.002" - 0.008"
Fuel Pump Gasket	0.028" - 0.035"
Fuel Pump	0.0015" - 0.006"
Minimum Shutter Thickness	0.030"







506.19 Sealing the IAME

X30 Junior Engine:

IAME X30 Junior:

Seal - One (1) or Two (2) Head Nut (s) & One Exhaust Nut





506.19.1 Sealing the IAME

X30 Senior Engine:

IAME X30 Senior:

Seal – Two (2) Head Nuts



- > Recommend at least a 5/64" hole in all fasteners.
- Hole and cable must go completely though head of bolt.
- If cable will not go through seal push the cable back and forth a few times to release the lock inside the seal.
- It is recommended that the carburetor also be sealed for practice in competing at the national level.