

2024 F1PC SERIES RULE BOOK



F1POWERBOATCHAMPIONSHIP.COM

Race Management

The F1 Powerboat Championship series incorporates four classes of powerboat racing: Formula 1, Formula Lights, Tri-Hull, and J-Hydro. Depending on each events requirements classes will vary to meet race site needs. F1 Powerboat Championships Race Director John Schubert and the S.P.O.R.T staff with over three decades of experience will be conducting and managing the racing activities at all events in 2024.

Sanctioning Authority

American Powerboat Association (APBA) Established in 1903 remains the oldest governing body of racing in the United States. It is the United States sanctioning authority for the Union Internationale Motonautique (UIM), the world governing body for powerboat racing. The APBA will provide sanction and liability insurance for all our events. Specific provisions are as follows:

- 1) These classes shall be referred to as F1 (F1 Sport) and Tri-Hull or whatever other name SPORT designates including, but not limited to Formula One, Formula 1, F One, F1. They shall be listed in APBA & OPC category references as F1 Sport and Tri-Hull.
- 2) The 2 classes, F1 and Tri-Hull, are subject to all APBA general safety rules.
- 3) SPORT can run more specific rules but not less than GSR. The F1 and Tri-Hull racing and technical rules shall be posted on the APBA website and any other websites designated by SPORT. Engine rules may be adjusted race to race to achieve parity to the base SST 200 engine.
- 4) SPORT will allow any competitor to protest another competitor's engine for a non-refundable fee of \$2500 payable to APBA. The appeal shall be limited to the legality of carburetors, intake, cylinder block, piston assembly, rods, crank, tuner, lower unit, and ignition system as well as all specs on the 200XS Optimax and 200APX as homologated. APBA and SPORT mutually agrees that in the event of a protest the OPC technical chairman shall chair the inspection committee. The inspection committee shall be a minimum of 3 people. After the inspection is complete a full report of all items inspected and the process of inspection shall be presented to SPORT, APBA, and the competitor who paid for the protest. The competitor's engine must be returned with ample time to reassemble before the next event.
- 5) F1 and Tri-Hull shall be eligible for APBA national high point championships and national championships held in conjunction with annual OPC national championship regattas.
- 6) The 2 classes contracted to SPORT, F1 and Tri Hull, shall be eligible for Hall of Champions consideration in OPC only if approved by the OPC commission; otherwise, they would be eligible for the "at large" spots if that criteria is met.
- 7) SPORT will join APBA as a club.
- 8) SPORT may run F1 and Tri-Hull at all races that their club conducts. Other APBA clubs may run F1 and/or Tri-Hull with written permission from SPORT. An email from SPORT shall be considered written permission. Should SPORT grant permission all rules as submitted and published will be followed for F1 and Tri-Hull. No monetary value will be assessed by SPORT to those requesting to run either or both classes.

- 9) In addition to F1 and Tri-Hull, SPORT may run other APBA classes at their events. When classes other than F1 and/or Tri-Hull are run at SPORT events, these classes will be run in compliance with all APBA OPC rules.
- 10) This is a 6 sanction event minimum agreement. Events are defined as 6 APBA sanctioned events with full points towards the championship. Failure to produce 6 events will void the agreement and the ability to get the following year's agreement. Both APBA and SPORT understand that events canceled due to force majeure will not be grounds to nullify contract.
- 11) APBA agrees to sanction SPORT power boat racing events for the current rate per event. APBA will publish any articles provided by SPORT to the Propeller for said year as well as any other APBA avenues when requested. APBA reserves the right to use any media collected at the events for promotional purposes.
- 12) APBA requires that sanctions be submitted to APBA Headquarters a minimum of 45 days prior to the event, late fees will be assessed based on the number of days closer than 45.
- 13) This agreement may not be transferred to any third party by either APBA or SPORT.
- 14) This agreement shall remain in effect from November 1,2022 to November 1, 2024.

PROMOTIONAL RIDES IN TWO SEAT BOATS

It is recognized that promotion of F1 Powerboat Championship and inclusion of future participants benefits from providing rides at F1 Powerboat Championship events. The Referee at any such event will apply the following rules to these rides:

- 1. All passengers (riders) must be members of APBA.
- 2. All participants, including passengers (riders) must sign an APBA Insurance Waiver and Release Form.
- 3. All drivers of F1 Powerboat Championship Classes shall be approved, experienced drivers who have previously held an APBA competition license or participated in an APBA event in the current or previous year. All riders and drivers must specifically be approved by the Referee at the event.
- 4. The minimum age for all passengers or riders must be at least 16 years of age, verified with proper identification.
- 5. Drivers and passengers/riders younger than 18 years of age shall sign he the Minor Waiver and Release. A parent of the minor participant must also sign this waiver; a guardian's signature is not acceptable.
- 6. No boat shall be allowed to carry a passenger (rider) that does not have a designated seat for the passenger.
- 7. All passengers/riders shall receive basic training on the safety gear worn and what to expect in the event of an incident.
- 8. The number of passenger rides given during an event shall be predetermined in advance between the Referee and Regatta chairman.
- 9. All Promotional rides will be separate and distinct from regular regatta participation and will not run with any class other than promotional rides.
- 10. The Referee will discuss top speed with the drivers based on weather conditions, driver's experience and the course layout.

Live Streaming Coverage

Live streamed racing video coverage throughout each event will include the F1 catagory along with support classes. Included within our live coverage will be a short program at the conclusion of each event with our podium finishers giving our fans insight directly from the driver's seat. Driver interviews, educational pieces, along with entertaining clips to inhanse our program. Live timing will be incorporated in classes using the TSCM System.

Onboard Video Camera Footage

We are asking for all teams in all classes to assist us with your on-board video footage this season to streamline the collection of the footage that will provide excellent content for use on our shows. Your provided footage will give you the opportunity for it to be considered for use in the shows. The simple procedure is as follows;

- *Any HD video cameras/systems are acceptable with the following standards
- *1080p minimum recording resolution
- *All cameras should be marked with the boat number in case of detachment
- *3 sufficient memory cards of 16GB or higher per boat marked with identifying information of Boat #, Class, T (testing), Q (qualifying), F (final)
- *Before each on course session the properly designated memory card should have any previous files deleted and then installed in the camera
- *Following the on course session each team has 1 hour to turn in the card at the series support trailer. Cards can be downloaded by the teams prior to turning in the cards. Cards will be downloaded and returned, returning of the cards may not be until the next day or event.
- *A locked box will be provided at the series support truck for the card deposit

Driver Media Data Sheet

Want more coverage for your team and sponsors on the Live Stream Shows? It's as simple as filling out the below form and returning it as soon as possible, go online to www.f1powerboatchampionship.com under Drivers, Driver Info Form (http://f1powerboatchampionship.com/driver-info/). Help us promote you!

Driver Media Data Sheet

Due Date As Soon As Possible

Name	Age	Hometown_	
Team Name			
Current sponsors			
Hopes for the season			
Best ever finish			
Number of wins			
Favourite racetrack and why?			
First ever race?			
Favourite race?			
Pre-race warm-up song			
Pre-race rituals?			
Favourite food & drink?			
Who is your hero & why?			
What car do you drive day-to-day?			
Do you ride a motorbike at home?			
Favourite hobby outside of racing?			
Something about you nobody knows			

Send to: timseebold@hotmail.com

Additional Support

Getting the word out to bring in the fans, through our assistance program with top professionals working hand in hand with local event promoters and media. Not only will we be hands on to assist the promoter but we will also use our live streaming coverage and our F1 and 2 Seat Boat to leverage additional local media coverage. Focusing every aspect of our media plan, social media, print, videos, website, live streaming, pre and post press releases, articles published through traditional media outlets as well as Motorsports outlets, on and off premise promotions into a precise vision. Please assist us in our efforts to promote you, your team and sponsors along with the series. Our goal is to greatly increase our series coverage on different media platforms increase our fan base! One way to capture the attention of potential fans is to introduce details about our fabulous racers to the global audience.

Lease Program

The intent of this program is to assist someone that has not previously competed in the F1 class a cost effective and seamless way to experience the class without the initial investment. Additionally, if a competitor has a problem at a race with their own equipment and doesn't have any spares this will give them the opportunity to lease equipment to participate in that event. Both of the above scenarios are temporary to assist in building participation numbers. The program is not intended for the series to own all, most, or even a portion of the equipment on the course. The bottom line is that we don't foresee a racer leasing an engine or gearcase more than a few times in a season. Must be pre-booked 2 weeks in advance if possible.

Powerhead Pricing \$1,075.00 per race, includes a fuel pump (if needed). Prepay

Not allowed to change anything on the engine including timing and jetting. Damage will be assessed per occurrence to determined responsibility.

Support Truck

We will again have a support truck at each event to assist drivers with the goal of keeping everyone on the water.

Race Format

*may be changed or modified to accommodate each race site.

Timing sessions

The total number of participants will be sub divided into smaller 4-7 boat timing groups. All participants will line up on the starting dock in their respective timing session groups awaiting their timing session. All boats in their respective timing session group when signaled by the referee will enter the course. The timing session will begin when the first boat crosses the start/finish line for the first time, this will be confirmed by the waving of the green flag. The timing sessions lengths are as follows.

Formula 1: 4 minutes plus one lap F Lights: 3 minutes plus one lap

Tri Hull: draw

The timing session will conclude with a checkered flag, all boats can complete the lap they are on when the session ends by the lead boat crossing the finish line. Immediately following your timing groups session all participants in that group will proceed directly back to the end of the starting dock. Once all timing groups have completed their timing session all participants of that class will be call to their trailers. Combined timing sessions will determine the first qualifying heats starting order for the class based on the fastest (shortest elapse time) receiving the most advantageous starting position to the slowest (longest elapse time) receiving the least advantageous starting position. Timing session final combined results are for starting position in the first Qualifying heat only and will not receive any points. At the end of all timing sessions the officiating staff will post the results in the pits.

Qualifying Heat Races

The first qualifying heat race starting lineup will be based on the combined timing session results. Series points system will determine the starting order for any subsequent qualifying heats following the first, see points system section for further details. Qualifying heat race lengths are as follows.

Formula 1: 6 minutes plus 1 lap F Light: 6 minutes plus 1 lap

Tri Hull: 7 laps

Final Races

The finals starting lineup will be based on qualifying heat races points totals, see points system section for further details. Final race lengths are as follows.

Formula 1: 17 minutes plus 1 lap F Light: 15 minutes plus 1 lap

Tri Hull: 20 laps

Awards Presentation

The awards presentation for all participating classes will be immediately following the Formula 1 final event as the designated podium area. Drivers are required to wear their driving suit.

Points System

Series - Point will be awarded for the finishing order in heat races and finals based on the below points table in all classes. This system will be used in determining qualifying heat racing starting orders after the completion of the first heat. Any boat that lines up for the start under its own power will receive points for that heat. Any boat starting any heat other than the first heat with 0 accumulated points will start in the least advantages starting position. Starting positions for all qualifying heats after the initial qualifying heat and before the final event shall be determined by the reverse order of the sum of the points accumulated in the qualifying heats. The first heats starting position will be based off qualifying results.

APBA High Point- will be awarded on the finals finishing order only and will be based on the APBA points system.

Points Table

Final		Hea	ats
1	150	1	50
2	138	2	46
3	129	3	43
4	120	4	40
5	111	5	37
6	102	6	34
7	96	7	32
8	90	8	30
9	84	9	28
10	78	10	26
11	72	11	24
12	69	12	23
13	66	13	22
14	63	14	21
15	60	15	20
16	57	16	19
17	54	17	18
18	51	18	17
19	48	19	16
20	45	20	15
21	42	21	14
22	39	22	13
23	36	23	12
24	33	24	11
25	30	25	10
26	27	26	9
27	24	27	8
28	21	28	7
29	18	29	6
30	15	30	5

Prize Money Payout

Race Payout Detail- Minimum payout per event, All Events. Double Header events 2 entry fees = 2 prize purses.

F1 \$300.00 entry fee.

Formula Lights \$200.00 entry fee.

Tri hull \$100.00 entry fee.

Fo	rmula 1		Formula Lights		Tri H ull
1 9	\$1,050.00		\$700.00		\$700.00
2	\$950.00		\$600.00		\$600.00
3	\$750.00		\$500.00		\$500.00
4	\$650.00		\$450.00		\$450.00
5	\$600.00		\$400.00		\$400.00
6	\$500.00		\$300.00		\$300.00
7	\$475.00		\$300.00		\$300.00
8	\$475.00		\$300.00		\$300.00
9	\$475.00		\$250.00		\$250.00
10	\$450.00		\$200.00		\$100.00
11	\$450.00		\$200.00		\$100.00
12	\$450.00		\$200.00		\$100.00
13	\$450.00		\$200.00		\$100.00
14	\$450.00		\$200.00		\$100.00
15	\$400.00		\$200.00		\$100.00
16	\$400.00				
17	\$400.00		\$5,000.00	Totals	\$4,400.00
18	\$350.00		4 2 , 2 2 2 2 2		. ,
19	\$350.00				
20	\$350.00				
\$1	0,425.00	Total			
21+	- \$300.00				

Disciplinary Code

Yellow / Red Cards

Series management and/or race officials may issue yellow or red cards for violation of any rules or directives from officials or series management. Yellow/red cards may also be issued for un-sportsmanship like conduct, rough or dangerous driving, and/or any activities deemed unsafe to participants, officials, or spectators. All team members including owners, drivers, and crew (family) are subject to these rules governing the issuance of yellow/red cards.

Yellow cards will be issued for less severe violation of the above and are at the discretion of the series management and/or race officials. Protests and appeals are not allowed for the issuance of yellow cards un-less suspension is involved. Yellow cards will remain viable for a period of six months after the card is issued. Yellow cards will be withdrawn after the expiration of the period stated above. Anytime a second yellow card is issued to a particular person within a six-month period, a red card shall be issued and the mandatory suspension period of twelve months shall begin at that time.

Red cards will be issued for severe violations of the above and are at the discretion of the series management and/or race officials. Red cards shall result in a mandatory suspension of twelve months. Written appeals for the issuance of red cards may be directed to the series management within twenty-four hours of the persons notification of issuance of a red card. When a red card is issued, the mandatory suspension period shall begin immediately and can at series managements discretion include the owner, driver, and all participating crew members, and family of the team.

Disciplinary Authority

S.P.O.R.T. and it's officials are the sole governing body at all times prior, during, and after any of their racing events. This includes all Technical and Racing rules and activities to include but not limited to on course racing, technical inspections, technical rules and their interpretations, points, scoring, appeals and their decisions, code of conduct, professionalism, disciplinary actions, and penalties.

Professional Code of Conduct

By participating in any S.P.O.R.T events all participants acknowledge and agree to abide by the rules and procedures. Including those related to release and waiver of liabilities and claims. In additional, the participants are responsible for the actions of their families, crew members, sponsors, and anyone deemed associated with their team. All parties involved in a S.P.O.R.T. event are expected to conduct themselves in a responsible manner, respecting at all times the rights of other both on and off the water. All participants understand that violation of the rules and procedures can lead to forfeiture of their competition privileges. Anyone whose appearance, conduct, actions, associations or affiliations, at or away from a S.P.O.R.T. event, which is deemed not conducive to the best interest of the organization or who exhibits conduct which is inappropriate, offensive, abrasive or in bad taste may be penalized monetarily, points, combination of the two, and or suspended from competition. The professional code of conduct does include social media in all forms. A zero-tolerance policy means that no previous warning is necessary for a penalty to be incurred. The above list is provided as guidance to competitors but does not restrict the series from invoking penalties for other actions detrimental to the sport, series, or its sponsors that are not specifically contained herein.

Team Appearance- all teams in all classs

All podium finishers must wear their driving suit with no other garments over the top of the driving suit on the podium.

Drivers must wear a 1 pc. Driving Suit that displays the Series patch on the right hand chest.

Drivers Lifevest must display the Series patch on the right hand chest.

Crew members must wear matching shirts on all official event days.

Boats must have all parts painted to a scheme, no bare repairs. Additionally all boats must display all series and required sponsor decals as indicated on the Sponsor Logo Sticker and Patch Placement diagram.



Sponsor Logo Sticker and Patch Placement



Driver's Suit Crew Uniforms Life Jacket













Boat Sponsor Logo Placement No Series Sponsor Decals on flat Deck!



Safety

Our #1 Priority for the F1 Powerboat Championship, Participants, Race Committee, and all of our Officiating Staff is Safety both on and off the water! This Pledge is not taken lightly in our effort to protect our most valued assets, our family of drivers, along with their crews, and all of our fans. The F1 Powerboat Championship series races approaching it is the goal of your inspector and the series race committee, not to eliminate drivers do to safety issues. Safety inspections during the past have brought our attention to numerous areas needing improvement. With our first event approaching, there is ample time for everyone to be ready for their first safety inspection. Included is the official Safety Inspection Sheet to be used prior to your first race eliminating unwanted race site equipment updates.

Series Chief Inspector Ken Scoville's Message to the Teams and Drivers

With the 2024 season fast approaching it's my goal, as OPC Chief Inspector, to keep you informed of the changing safety requirements. There is ample time for everyone to be ready for their first safety inspection. Also included is a copy of Safety Inspection Sheet used at each event. Use this sheet to go over your rig to make repairs and replace outdated safety equipment.

- The legal helmet for the 2024 season must have the 2015 SNELL certification sticker, or newer, attached to the inner shell of the helmet. If your helmet has an older SNELL certification (Snell 2010 or older), or no sticker, you will not be allowed to participate until it's replaced. When purchasing a new helmet look for the latest certification (2015 or newer)
- a. The majority of your helmet must contain a minimum of 50% florescent Orange, Yellow or Green.
- b. Helmet restraints are mandatory. Helmet supports (donut type) are not allowed unless restraint straps are attached.
- c. The use of an air system is required in all reinforced cockpit and driver restraint boats.
- Life jacket must be in compliance with rule 3, B, 1) "B" of the 2019 APBA General Safety Rules. Colors are exempt with "B" and "C" Life Jackets.
- A form-fitted seat with lumbar support is required for all driver restrained boats. Refer to OPC rules (revised 2/26/2018), rule 9., P.
- 4 2" minimum head clearance is required. This will be checked with the driver suited up and strapped in. Refer to OPC rules (revised 2/26/2018) rule 9., I. 2

- Seat belts are required to have minimum 5 point configuration, an attached label showing the expiration date. This label must be attached to the PORT shoulder, lap, and crouch belts and must be readable. If the labels are not readable, or not there, the belts must be replaced. Keep in mind that seatbelts now expire in two (2) years from the build date. The newest labels show the expiration date in large numbers.
- a. Seat belt attachments will be carefully inspected. Refer to OPC rules (revised 2/26/2018) on the last 3 pages. Figure "A" "B" "C" and Fastening details. Alternate "U" channel shoulder strap mounting should be considered to improve belt anchoring points.
- Audio communication (radio, etc.) from shore to driver is mandatory for all boats with a reinforced cockpit (capsule boats). Refer APBA GSR 13A
- a. A spotter or spotters in audio contact with the driver(s) shall be stationed in immediate proximity to the referee or his/her designee to facilitate direct communication with the driver(s) as directed by the referee or his/her designee.
- 7 Driver Cockpit Padding. Refer APBA OPC 91.3,91.5

I3,I5. Minimum 1/2" (9 lb.) Ethofoam support behind driver's helmet is suggested to prevent helmet slapping rear of cockpit. It is recommended that head surround padding shall comply with SFI 45.1. Energy absorbing foam padding to be strategically placed inside capsule (in areas where knees, hands, etc. might impact). Foam padding that will touch the helmet should be covered with Teflon tape (3M or equivalent) to reduce friction.

8 AIR SYSTEMS: Onboard air system usage is recommended or required for all drivers in reinforced cockpits (capsule boats). APBA 2021 GSR 4

OPC: recommended; 30 cu. ft. air tank capacity recommended.

The driver's mask must cover the driver's nose and mouth and be designed to be watertight.

The mask must be attached in such a way as to prevent its being dislodged or removed inadvertently. An ambient air valve is allowed; an ambient air valve is required when air tank capacity is less than 30 cu. ft. The mask shall be worn by the driver anytime the boat is under racing or testing conditions.

Air tank: All tanks regardless of size shall be designed for the delivery of breathing air. The tank shall be stamped to verify inspection and certification of the tank to meet D.O.T. (US Department of Transportation) or T.C. (Transportation Canada) standards. The air tank shall be securely mounted to the boat; a commercially made driver worn holster is acceptable only for appropriately sized tanks.

All components of the air system shall be rated for use with compressed air and with the pressures utilized. All connections in the air system shall meet diving industry standards(SCUBA type), including high pressure, crimped hose ends. Hose clamps, push-lock or similar low-pressure connections are not allowed.

A quick release pressure sealing coupler shall be used to connect the air supply hose from the tank (first stage regulator) to the driver mask hose (second stage regulator); the driver mask hose length shall be 10 inches (min) to 36 inches (max) to the connection; the air supply hose from the tank to the driver mask hose connection shall be ten (10) to fifteen 15) feet long (Inboard) or of sufficient length to move driver clear of farthest side or front of hull (OPC/PRO) measured from the center of the steering wheel. The female coupler fitting shall be attached to the air supply hose from the tank; the male coupler fitting shall be mattached to the driver mask hose. A tee block with two male coupler fittings, attached to the driver mask hose, is allowed. Parker part number SH1-62 / SH1-63 (or other manufacturer interchange) is the accepted design sealed coupler assembly; stainless steel material is highly recommended; brass is an acceptable alternative.

Find Additional Information at APBA.org

APBA General Safety Rules: https://apba.org/documents/1032983813-06282021-2021%20GSR-GRR%206.1.2021.pdf
APBA OPC Safety Rules: https://apba.org/documents/1326660023-07282021-2021%20OPC%20Rules%20rewrite%207.23.21.pdf

Post Race Inspection Area

An individual tented post race inspection area will be designated for each boat and team summoned to inspection after the completion of the events finals. A maximum of two team members and no one else will be allowed into their respected areas. At no time will another team member or driver be allowed into an opposing teams area. Violation of this proceeding will result in disqualification from the weekends events including but not limited to all points and prize money earned.

I am looking forward to a competitive 2024 season. If you have questions, or comments, please feel free to contact me.

My goal is to help you get on the water, safely.

720-841-4987 cell/text kenscoville604@gmail.com

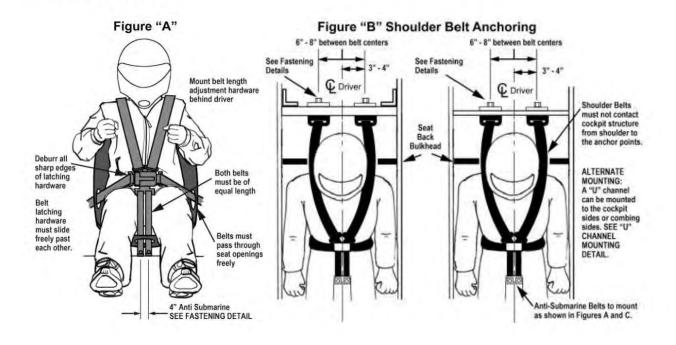
All Boats in All Classes

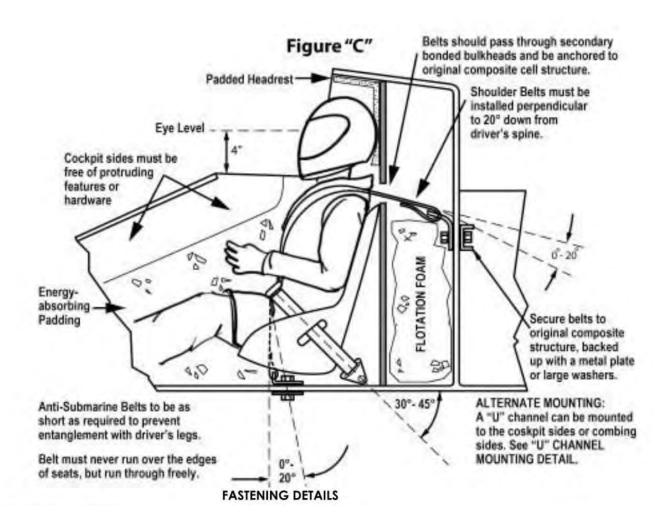
At the discretion of the chief Inspector

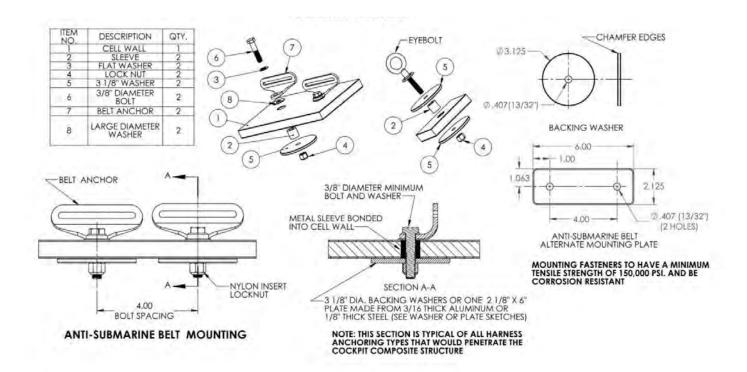
Any part of a competing boat my be confiscated at anytime during an event.

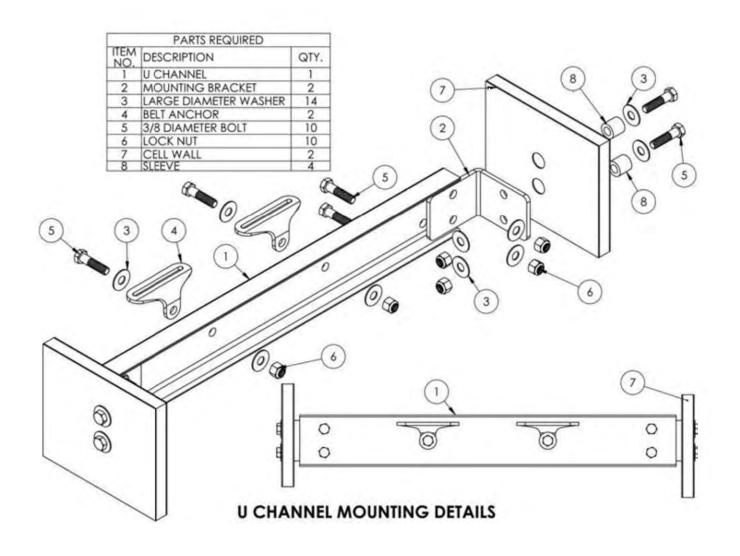
A recording devise may be placed in any competing boat at anytime during an event.

A maximum of 2 quantity 12 volt batteries in a competing boat at any one time during competition, excluding safety systems.









2024 Pre Race Equipment Checklist

Driver:			воат	L #:	
Class:	Date:	Lo	cation:		
	ning renewal date im le Training completio	•	•	card. If no date on card, then tes).	must show
			•	"APBA Driver Helmets Accept id after 2022). Must have Sne	
[] Head Clearan	ce between Helmet	and Reinford	ced Cockpit r	must be a minimum of 2".	
Make:		Model:			
[] 50%	must be yellow, orar	nge, red or li	me green		
[] Checl	k Condition [] Str	aps			
[] Driver Helme	t Restraint System u	sed [] Yes	[] No	
Make:		Model:		[] Type	
[] Jacket: See Al	PBA GSR-3(B) and OF	PC GSR-2			
Make:		Model:			
[] Label	that indicates type	of category;	B or C.		
[] Checl	k Condition				
	See OPC GRR-3(8): W [] Check Condition __			or 1" nylon strap, closed sna _l Year Mfg:	o hooks or
numbers on the		river's seat.		- Assigned number must be ite background, white on blac	
	s: See OPC GRR-22: e 1/2" contrasting or			e on black background or blac me color as boat.	k on white
	lius is 4.0". Telescop	-		minimum tip radius is 2.5". A minimum tip radius of 1.0" ar	_

[] TSCM (Timing/Scoring/Course Management System	
[] Operation [] FR Antenna [] GPS Antenna, 40" from front pickle tips	
[] Engine Stop; Inside Cockpit	
[] Roll Over Switch, Make sure weight is free to move for switch activation	
[] Capsule Outside Engine/Fuel Pump Shut Off Switch	
[] Main Battery Switch	
[] Battery(s) mounting	
[] Wiring Inspected	
[] Fuel System: [] Tank Mounting [] Tank Ground [] Check for leaks	
[] All accessories securely fastened: See OPC GSR-7 (Pre-race seaworthiness and OPC GRR-21(3) Minimum weights.)	
[] Engine properly bolted: - See OPC GSR-5.	
[] Power Trim : [] Check trim In & out operation [] Check power trim up & down operation	
[] Check swivel pin and trim ram for free play and trail out. [] Mounting of the in & out pump	
[] Mounting of the up & down pump	
[] Form fitting seat with Lumbar support Type:	
[] Driver Restraint Harness SFI 16.1/16.5 (Be aware RASTP belts SFI 16.1 sold by RASTuning Parts are counterfeit)	
[] 5 Point [] 6 Point Make: Year:	
[] Cockpit Padding	
[] Head Area [] Sides [] Minimum Head/Helmet clearance 2"	
[] Driver's Air System used [] Yes [] No Make: Model:	
[] Radios check operation between driver and crew	
[] Steering Operation [] Electric System [] Inspect cable & mounting fasteners	
[] Foot Throttle Operation [] Return at Engine to close	
[] Canopy [] Hinge pin removal at closed [] Latches [] Windshield [] Mirrors	
Drivers Signature:	
Date:	

The below Tri Hull rules will be amended, to include the Mercury 115. To be completed by February 29, 2024

TRI HULL Class TECHNICAL SPECIFICATIONS

Boat Standards

1. Driver Restraint System

- A. All Trihull boats must be equipped with a driver restraint system consisting of a minimum 5-point mounting design. The restraint system shall consist of not less than two lap, two shoulder, and one or two crotch straps, hooked together in a central release system. This release mechanism must remain released/open once it is activated and until it is reset.
- B. All belts shall be at least 2" wide, entirely constructed of polyester material, SFI 16.1 certified; and either replaced or recertified within three years after the date of manufacture indicated on the SFI tag. The conformance label is a "punch out" patch. One patch shall be sewn onto the left strap of the lap belt assembly, one onto the left strap of the shoulder harness assembly and one onto the anti-submarine strap. The patch shall have the month and year of manufacture punched out and easily identified. Belt systems must be mounted following manufacturer's recommendations.

2. Roll Cage

- A. All Trihull boats must have reinforced roll cage The roll cage must be constructed so as to protect the driver from frontal, side, rear, and top impact.
- B. The entire roll cage is required to be constructed of either mild steel 1.5/8" round tubing with minimum 0.118 wall thickness or 4130 chromoly 1.5/8" round tubing with minimum 0.083 wall thickness. The only exception to this will be the bottom seat mounting brackets, which are 2" x 2" angle iron.
- C. All joints must be welded.
- D. Roll cage must be welded by a certified welder.
- E. The roll cage must be mounted to the floor or bottom of the boat and attached in such a manner to prevent it from being dislodged in case of an impact.
- F. All roll cages must be "U" bolted to a structural brace. The structural brace will be required from one side to the other behind the driver's seat inside the boat. Its purpose is to provide support for the gunnels and the driver's cockpit in the event of a side collision.
- G. Roll cage must have no evidence of rust, corrosion, or damage of any kind. Tubing ends must be capped and there shall be no holes of any kind so as to prevent water from becoming trapped in the roll cage. Referee may deem any roll cage unfit for use at his/her discretion. H. See following page for acceptable roll cage dimensions.

3. Steering

A. Steering will be either rack and pinion or rotary cable. No power steering or electric assist will be permitted. The steering must be in the original dash location front to rear.

4. Hulls

- A. The only new Trihull hulls allowed shall only be a product of the molds owned and manufactured by Richmond Boat Works Inc.
- B. Boats must remain intact. Any material on the inside of the gunnels may be removed, with the exception of dash and splash well. The bottom of the boat may be reworked.

5. Weight

A. Combined boat, driver, and equipment weight, along with series provided sling, must be a minimum of 1675lbs following heats.

6. Motor Standards

- 1. Engine(s) must not exceed a total of 100 cubic inches in displacement as originally manufactured. A tolerance of 3ci will be allowed for overbore.
- 2. Gear cases may be modified; however, low water pickups are not allowed, and the original location of the water pickup must be maintained. Gearcases must have a skeg and be shiftable from the driver's seat.
- 3. All engine exhaust must travel into the downhousing; no open exhaust stacks are allowed.
- 4. Flywheels may not be modified in any way.

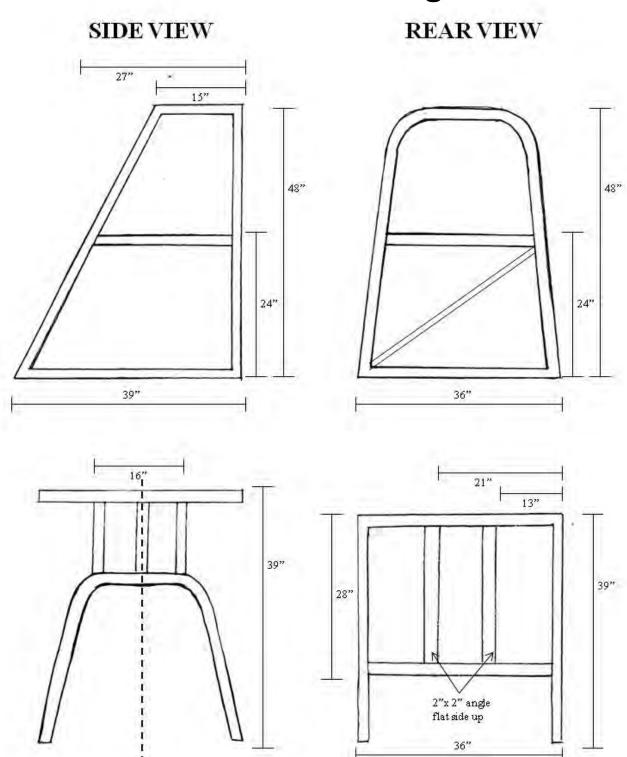
7. Claiming Rule

- A. A \$3000 "Claiming Rule" is enforced for all officially entered engines. This claiming rule includes the engine, trim system, mounting bracket (jack plate) and propeller exactly as raced. This claim must be made in cash. Claims may be made between the final heat and the awards ceremony, or one hour after the final heat, whichever comes first.
- B. Only drivers who have competed for a full calendar year and participated in the event on the day of the final shall be allowed to claim an engine.
- C. Any one driver's engine can only be claimed twice in a racing season.
- D. Any driver can claim only one motor in a racing season.
- E. In the event that a driver's engine is claimed and he/she does not surrender it, then that driver is disqualified from that event and is suspended from all tri-hull racing for one calendar year.

8. Management

A. The series owners reserve the right to alter or amend these rules at any point.

Tri Hull Roll Cage



TOPVIEW

BOTTOM VIEW

Formula 1 Engine

The spirit and intent of these technical rules is to provide for a fair and equitable competition. The level of competition, money involved and TV exposure leave no room for anyone that wants to operate outside of the intent herein. The race committee reserves the right to interpret the intention of anyone that violates these rules and impose appropriate penalties.

These rules are subject to change at anytime by approval of the Technical Committee.

	Merc 2.0L	Merc 2.5L	Merc 2.5L	Yamaha	OMC 3.0L	Merc APEX 200	Merc APEX 250
	Carb	Carb	Optimax	2.6 Carb	Carb	4 Stroke	4 Stroke
RPM Limiter	none	none	stock	none	none	6,800	6,800
Gearcase	Mercury	Mercury	Mercury	Mercury	OMC	Mercury	Mercury
Total Weight, lbs.	1100	1175	1200	1200	1200	1,225	1,265
Boat Min. Length	16	16	16	16'	16	16'	16'

Motor Fuels

F1- VP Racing Fuel MS98L (2 strokes) & C9 (4 strokes) is the series class spec fuels and the only legal fuels for the class, It must be purchased at registration at each event. It may be mixed with Petroleum based or Synthetic Oil complying with Series Standards.

All Classes other than F1

Only motor fuel consisting of non-oxygenated standard pump and racing gasoline, shall be used. Petroleum based and/or synthetic oils may be added to the fuel. Fuel samples may be taken before launching and during inspections for on site and off site analysis. On site testing will be in accordance with OPC specifications and procedures (Digatron meter zero reading, or below, at ambient temperature). Fuel cooling will not be allowed. Fuel testing will be made available to all contestants prior to testing and racing. It is the race team's responsibility to ensure that the fuel meets aforementioned requirements regardless of where the fuel is purchased.

At each regatta the inspector may purchase samples of local gasolines, mix it with TCW-3 oil at a ratio of 20 to 1 and test it according to OPC procedures. If the test fuel exceeds the OPC testing thresholds, the new thresholds will become the maximum limit of the day. The source and grade of gasoline must be announced when registration opens. The "Fuel of the Day" rule is not applicable at straightaway or competition record races. A contestant appealing a fuel disqualification must bear the expense of the fuel analysis and handling.

APBA General Safety Rule 27: The use of the following substances greater than that allowed in commercial gasoline by the current EPA upper limits are forbidden to be present in gasoline during any APBA event: Acrylonitrile, Aminodipheryl, Aniline, Benzene, Benedine, Beryllium compounds, Bromine compounds, Chromoethylether, Chlorine compounds, Ethylene oxide, Hydrazine compounds, Manganese compounds, Nitrobenzene, Nitrochlorobenzene, Nitrogen compounds, Nitrodipheryl, Propylene oxide and Tert Butyl toluene. The penalty for a first violation will be disqualification from the race and a two-year suspension. A second offense will result in a lifetime suspension.

Formula 1 Mercury 2.5 Carb

Engine block is a 5 petal front half 2.5L 200hp painted block. No Pro Max blocks, no O'Ring head blocks. The intent is to treat this motor on the same basis as the SST 120 motor, if you can't change the 120 motor you can't change this

motor. All parts will be as homologated on the SST 120 with the exception of block, crank, rods, pistons, carburetor plate(s), heads, and Flywheel. It is also designed so that you can put all SST 120 components (dressing) on the 2.5L short block.

- Please note there are 2 possible exhaust chests; the small exhaust chest dimensions are as follows:
 1.03 inches (width) 2.50 inches (height) max. The large exhaust chest dimensions are as follows:
 1.10 inches (width) 3.09 at the runner depth max. Absolutely no grinding or blending in the exhaust chest area.
- 2. Must use top guided rods either stock fishing motor rods or Mercury Racing 280 rod or F1 rod. No modifying or grinding It is recommended if you use fishing motor rod that you use rod bolt # 10-848475.
- 3. The only legal pistons are listed below. Piston must be run as supplied with two rings, no grinding or modifying.

	·		.010/.015/.020	.010/.015/.020	•	•
	Std. Port	Std. Star	Port	Star	.030 Port	.030 Star
Mercury	785-9737T9	785-9738T9	785-9737T10	785-9738T10	N/A	N/A
Wiseco	3137PS	3137SS	3137P2	3137S2	3137P3	3137S3
Pro Marine	2500PV	2500SV	2515PV	2515SV	2530PV	2530SV
Vertex	V2500P	V2500S	V2515P	V2515S	V2530P	V2530S
WSM	100-20PK	100-20SK	100-20-04PK	100-20-04SK	100-20-06PK	100-20-06SK
			100-20-045PK	100-20-04SK		
			100-20-05PK	100-20-05SK		

- 4. Any Mercury production crank is allowed, with the exception of a Mercury crank with heavy metal welded into it (no late model race cranks). No grinding or modifying.
- 5. The recommended replacement sleeve is the cast iron Advanced Sleeve #1041. No grinding ports.
- 6. The V-6 crankshaft centerline to crankcase/intake manifold surface to be 4.42 +/- 0.01 inches.
- 7. Intake manifold thickness is 2.0000 +/- .015 (between carb and reed block). No grinding
- 8. Cylinders bored to +0.030 inches oversized must have port heights that measure .015 lower than standard bore.
- 9. Reed blocks are 10 port = 1.10x.056 or 8 port = 1.05x0.63 reed blocks are allowed with no modifications or grinding. 10 port are tear drop shaped port.
- 10. Any reed material is accepted.
- 11. The only legal carbs are cast or stamped with WH, carb must have slosh tubes and baffles no other modifications. Carburetors may be confiscated by the inspector at any time during the racing weekend. They will be held for inspection and testing.
- 12. The recommended cylinder Head is part # 18787 17 Champ 2.5L head 36cc but you may cut a stock head as well and machine the pockets. No O'Ring heads are allowed. Cylinder head combustion chamber volume must not be less than 36.0 cc. The only allowable cylinder heads are manufactured by Mercury Marine using the lost foam method. A head must maintain stock combustion chamber configuration and appearance. Bottom radius must be .250".

The minimum distance from the head parting surface to the piston is .040 inches. A micrometer or Vernier caliper will be used to determine the thickness of the head gasket just removed from the inspecting engine. A bridge tool will be used to measure the piston protrusion from the block. The piston protrusion is subtracted from the gasket thickness. An average of all 6 cylinders will be calculated to determine the final dimension. Final dimension must be .040 or greater to be considered legal. Head combustion volume (36cc) is measured using the flat-plate method with the standard BUHW spark plug installed.

13. The SSM #6 and #4 are ONLY allowed gearcases. Gearcases must run gear ratios as manufactured. Gear cases must run both shafts as manufactured. Gear Cases must meet all SST-120 Race Class dimensions.

- 14. No grinding or blending on the blocks! No blending ports or passages! If the factory didn't touch it, it shouldn't be touched.
- 15. Must use stock 120 style exhaust chest cover
- 16. Crankcase drain lines may or may not be utilized.
- 17. Power Performance Carb intake plates are a legal replacement for the OEM intake, any color.
- 18. Aftermarket Flywheel must meet the OEM design intent, configuration and minimum weight as the SST120 class rules. Is intended for racing purposes only; Is produced by a manufacturing supplier in the business of manufacturing flywheels; Is readily available and produced in minimum quantities of 20 units. Power Performance Engineering Flywheel has met this requirement.

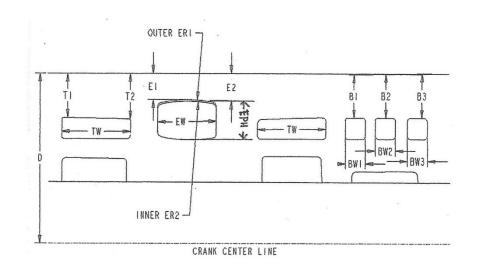
Tuner: SST120 or Optimax 2.5L

Tuner must be as produced with no changes to the exhaust area with the following modifications allowed.

A. Optimax 2.5L tuner when used on a Carb 2.5L engine is allowed to block off the water dump area from the poppet valve.

B. Early SST120 tuner with a $\frac{1}{2}$ " water supply passage may be increased to $\frac{3}{4}$ " water supply passage to mimic later tuners.

C. Either tuner may have the water dump holes modified to "dry" stack" the tuner.



B1 2.1 Min. BW1 0.7 Max.

B2 2.1 Min. BW2 0.94 Max.

B3 2.1 Min. BW3 0.7 Max.

Rod Length

+/- .006

5.500

Flywheel Min. lbs.

6.6lbs.

Centerline of wrist pin to deck of piston 1.490 +/- .010

E1 1.470 Min.

E2 1.560 Min.

EW 2.37 Max.

EPH .950 Min.

Mercury 200hp

T1 2.140 Min

T2 2.180 Min

TW 1.75 Max.

Class Displacement 153.0

Venturi 1.312 +/- 0.015 Carburetor Bore 1.562 +/- 0.015 Quantity per Engine 3 duplex

Cylinder Bore +/- .003 3.501 Piston Stroke +/- .011 2.650

OMC/BRP engine

Cylinder and crankcase:

Will be based on any closed deck casting produced after 1993 for carbureted engines with like OEM carbureted style front half. Port specs are based on "HO" blocks with sleeves identified by a "notch" in the bottom of the exhaust ports and a functional .125 exhaust relief hole. Exhaust Relief Port of .187 located above exhaust port. When checking cylinders 5 and 6, inspection pin will not pass thru, but will bottom out on exhaust passage. Replacement advanced sleeve part number 1112, no modifications allowed. No grinding or blending on the blocks allowed. Removal of the "glue line" at the exit of the finger port is allowed, the original casting texture must remain on each side of the glue line. Ports have hand deburred port edges of a maximum dimension of .090x.030 deep. Any cooling modification is allowed.

Crankshaft:

Any production factory 3.0L crankshaft produced after 1987. No 1986 style crankshafts are allowed. No metal removal or addition is allowed.

Connecting Rods:

Any connecting rod manufactured by OMC/BRP for production use. No modification allowed, use of aftermarket bolts is permitted.

Piston:

All piston dimensions will be based on/compared to OEM parts for this engine. Any aftermarket piston must mirror all specs of this piston. Standard bore dimension of 3.685 with a maximum over bore of .030. Any OEM 3.0 liter wrist pin allowed, no modification of wrist pin allowed.

Cylinder Heads:

Cylinder heads will be based on those used on closed deck carbureted engines. Any Cylinder head is allowed that meets the Minimum Volume of 48cc's and matches the drawing attached. Head combustion volume is measured using the flat plate method with the standard BUHW spark plug installed.

Intake Manifold and Reeds:

Late style OEM production carburetor, intakes with "diamond" shape flange. Reed cages will be stock OMC/BRP 6 petal rubber coated. Any reed material is allowed, with or without stops. Reed Block: Length x Width (Size of ports) 1.165 x .52; number of ports; 12

Intake manifold may have blended or flat area between carburetor and reed box. Surface must be as cast. Crankcase and intake manifold may have hand deburred surfaces. Maximum Deburr .040x45 degree. Any intake "Air Horn" is legal.

Carburetor:

Any "medium bore" OEM production V6 Carburetor and throttle plate assy. is allowed. "Filling" of the upper carburetor body to prevent sloshing is allowed as well as stuffers if available. Carb intake 1.875, carb venturi 1.438. Carburetor venturi must be as molded, Tolerance: +/- 0.045.

Ignition:

All ignitions will be based on OMC/BRP Carbureted 3.0L V6 engines built between 1986 and 2000. Single or dual pack systems are allowed. CDI "digital" replacement look alike systems are allowed. Any production OMC/BRP 10 amp flywheel may be used, ring gear may be changed. No other modifications to a production flywheel allowed. Production OMC racing flex plate flywheels (PN 568535) is also allowed. Production flywheel min weight 11.5lbs, flex plate flywheel 9.8lbs.

Center section:

All OMC factory racing sections are allowed, F1 V8, SST 3000, SST 100, as well as earlier Carbureted F1 V8. Exhaust tuner/adaptor plate will be and/or dimensionally mirror an SST-3000 part.

Gearcase:

Any OMC production racing gearcase (SST3000, F1 V8, SST100) either .88 or .90 ratio.

Cowling, Pan & Graphics:

Any Cowling, Pan & Graphics allowed.

Sleeve Diagram Specs: All dimensions are +/- .025

- A) 1.157 Exhaust Port Height
- B) 0.125 open Diameter of Relief Hole
- C) 2.230 From Deck to top of Transfer Port
- D) 0.750 Transfer Port Height
- E) 1.785 Transfer Port Width
- F) 2.270 From Deck to top of Finger Port
- G) 0.500 Width of Finger Port
- H) 1.025 chamfer to chamfer Height of Finger Port
- I) 2.320 From Deck to top of Boost Port
- J) 0.800 Height of Boost Port
- K) 1.200 Width of Boost Port
- L) 4.750 Deck to top of Entry Window
- M) 2.350 Inside window Width of Exhaust Port
- N) 1.725 Plus chamfer see note Deck to top of Exhaust Port

Stroke 2.858







Yamaha

Powerhead

Engine Block is a Yamaha 2.6 L (model P200 & V6 Excel) with 6G5 / 6K7 casting number. Block has an exhaust relief slot at the top of the exhaust port. Both intake and exhaust ports are chamfered by hand. No other grinding or blending of the block, bead blasting is allowed. Any cooling modification is allowed.

Crankshaft:

Any OEM V6 Yamaha Crankshaft. No metal removal or addition is allowed.

Connecting Rod:

2.6 Yamaha, marked 6E5-01, production connecting rod. No grinding or other modification allowed.

Piston

All piston dimensions will be based on or compared to OEM Piston for this engine. Any aftermarket piston must mirror all specs of the OEM piston. Any OEM wrist pin is allowed, no modification of wrist pin allowed.

Cylinder Heads:

The only legal Cylinder Head is 6K7 OEM 2.6 heads, pockets are AS-CAST. See diagram below. No modification of Cylinder Head is allowed. V-6 (64E casting mark) Cylinder head combustion chambers will vary in diameter from top to bottom. Cylinder head pockets are "as cast" with the typical Yamaha casting sealer. Flat Plate volumes are 47cc Top, 48cc Center and 50cc Bottom. Head combustion volume is measured using the flat plate method with the standard BUHW spark plug installed.

Intake Manifold and Reeds:

Intake is original OEM for Block described above. No modification, grinding or blending of the intake is allowed. Reed cages must be stock OEM for the block described above. No modification is allowed. Size of the openings are 1.2" length x .7 width. Number of ports 8. Any reed material is allowed, with or without stops.

Carburetor:

The only legal carbs are stamped with WH, carb must have slosh tubes and baffles, no other modifications. Mercury carburetors have slotted flanges with ½" adaptor plates to fit the Yamaha Manifold. Venturi 1.312 +/- .015 Carburetor Bore 1.562 +/- .015, quantity per Engine 3 duplex. Carburetors may be confiscated by the inspector at any time during the racing weekend. They will be held for inspection and testing.

Ignition: Any ignition system allowed.

Standard Mercury left hand starter with handmade brackets to adapt to the Yamaha engine and Yamaha flywheel.

Center Section, Adaptor & Tuner:

12" Yamaha mid section with SSM#4 bolt pattern.

Gearcase:

The Mercury SSM #4 and #6 are only allowed gearcases. Gearcases must run gear ratios as manufactured. Gear Cases must run both shafts as manufactured. Gear Cases must meet all OEM race class dimensions.

Specifications:

Bore			3.543 +005 (Max oversize .035)
Stroke			2.677 +011
Rod Length			5.591 +006
Piston Length			2.835 +030
Piston Port Height			.866 +030
Exhaust Port	.050 chamfer		2.70 +035 (Deck to bottom of opening)
Exhaust Port	u	Cyl's 1-2	1.595 +035 (closing edge to deck)
		Cyl's 3-6	1.683 +035 (closing edge to deck)
Exhaust Port width			2.280 max
Transfer Ports (2)	.050 Chamfer		2.180 +035 (closing edge to deck)
Transfer port width			1.680 +035
Boost Port (1)	.050 Chamfer		2.185 +035 (closing edge to deck)
Boost Port width			2.135 +035
Deck height			8.504 +012

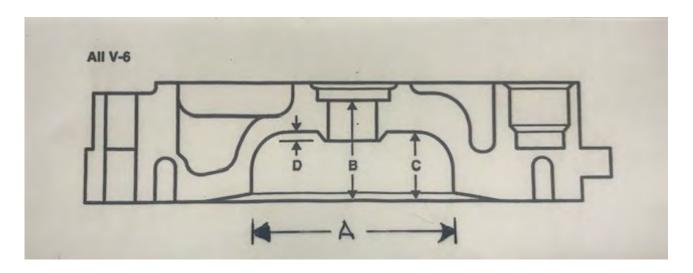
V-6 Center main bearing radius is 1.496 . "K" measurement from the center main bearing surface is 7.008" +/- .010

Crushed cylinder head gasket

.044 Min.

OEM Flywheel, no modifications allowed Minimum weight 11lb.

Cylinder Head Profile:



Cylinder Head Minimum Pocket Dimensions:

A Upper 2.160 Center 2.190 Lower 2.310

B 1.204 C .820 D .078











Formula 1 SST-120

- 1. SST 120 head may be cut to minimum head pocket depth of 0.405 all other measurements will stay the same. No fully Machined pockets.
- 2. May run any tuner.
- 3. May run any piston, as long as it meets OEM dimensions.
- 4. May run a light weight flywheel.
- 5. All other rules for SST 120 apply.

NOTE- THE TIGHT HEADS ARE 23CC, IT IS RECOMMENDED TO RUN SHORT REACH PLUGS WITH THIS SET UP.

Formula 1 SST-200

SST 200 TECHNICAL STANDARDS. SST 200 Engine Standards are outlined in the SST 200 APBA Tech Specs.

SST 200 Boat Standards (see also Rule 21 - Below) 1) Any design of boat including bottom, deck, cockpit openings and seating arrangements is permissible so far as boat meets minimum length.

Power trim and/or adjustable spoilers shall be allowed in Super Stock.

SST 200 Motor Standards (see also Rule 23, 25 and 26 - Below) **SST 200 Engine Standards are outlined in the SST 200 APBA Tech Specs with the exception of boat weight and below exceptions.**

- 1) Engine Cowling and pan must retain the OEM shape and remain black in color with Mercury designation. Cowling, pan, and hardware can be aftermarket.
- 2) The SST 200 class can not change engine wiring and starting, must remain as manufactured 12-volt starting system.
- 3) The SST 200 class gear cases may have their outside surfaces refinished; however, they must meet the requirements of OPC Engine Specification sheets and original design.
- 4) PCM to remain completely stock including fuel map, ignition map and RPM limiter. At the referees discretion a"Lottery" may be used at any given time from the series Mercury PCM's. In the event of the PCM lottery the teams will receive and install the PCM prior to entering the water, removing the PCM once the boat is back on the trailer prior to returning to their pit area. Teams agree to only run the inspector designated PCM, any other PCM will be deemed illegal. In the event said PCM is damaged or gotten wet the team will be billed dealer cost to replace. In the event the team needs to plug into the data port of the PCM, the inspector must be present and only the series data tool will be allowed. The inspector reserves the right to reset the run history at any time.
- 5) All OEM sensors must be fully functional at all times, Inspector reserves the right to test by any means for validation of any associated OEM parameters.
- 6) Exhaust tuner must run as originally manufactured and designed, no drying, water removal, or altering of any kind.
- 7) During competition no smart craft or data port connections to the engine will be allowed. A inductive tachometer wire connected to a single spark plug lead will be allowed.

The rules below are included because they are referenced in the Formula 1 SST-200 Rules above.

RULE 21 • BOAT STANDARDS

- 1. The length is to be measured parallel with the fore and aft centerline from the rear of the transom at the point of engine attachment, to the foremost part of the bow. A tolerance of two inches will be allowed in measuring overall boat length dimensions.
- 2. No add-on extensions to the hull will be permitted to achieve class length. Fins are not included in measurement of boat length (see Figure L).

weights, other than the engine and its controls, may be fastened in locations external to the hull where they may constitute a hazard upon impact with another object.

- 3. The minimum weights assigned to a specific class shall include motors, steering systems, motor controls, hardware, instruments, and all securely attached cushions, fuel tanks and brackets, batteries and boxes, fire extinguishers, etc. Any fuel remaining in the tanks at the end of the race will be included in the boat weight. Driver's weight will be included with life jacket and helmet and clothing as raced. No water will constitute any part of the total class weight. All weights other than the driver, engine and its controls, and fire extinguishers, must be fastened in such a manner that their centers of gravity cannot be moved during the race. Except in races of longer than one-half hour duration per heat, only one fuel tank will be allowed. No weights, other than the engine and its controls, may be fastened in locations external to the hull where they may constitute a hazard upon impact with another object.
- 4. In questionable cases, acceptability of a given hull shall be the responsibility of the Referee and his decision shall be final.
- 5. All boats constructed with false floors, seat box compartment or air filled flotation tanks must be fitted with inspection holes of at least 7/8" diameter such that no point inside said tank is more than 24 inches from inspection hole. These holes may be plugged during competition but must be open for weighing and inspection.
- 6. There shall be no devices or arrangements specifically to take advantage of external air pressure to produce or assist planing.

RULE 23 • OUTBOARD MOTOR STANDARDS

- 1. An outboard motor is defined as a complete internal combustion power and propulsion unit that can be attached to a boat and which can be lifted bodily from the hull as one unit. Batteries used for ignition and starting, tachometer, throttle control and steering arrangement are excepted.
- 2. A manufacturer of outboard motors for Outboard Performance Craft Racing is one who filed specifications and is responsible for the original design and manufacture of the following: crankshaft, connecting rod, cylinder head, cylinder, crankcase, gears and valving arrangement, and who complied with such other requirements as provided by these rules. Manufacturers may be of either foreign or USA (domestic) origin, and motors must be or have been available in the USA through dealer networks.
- A. Motors must be the product of a recognized manufacturer engaged in the production of outboard motors offered for sale to the general public.
- B. There shall be no alterations of parts with the exception of spark plugs, carburetor jets, and propellers, or specific parts approved by the Technical Committee and approved by the Commission. The intention is to race the engine exactly as manufactured and without special performance boosting accessories. The gearcases on motors raced in Stock classes must be raced with either the same surface coating or paint as supplied by the manufacturer, or with no surface coating or paint over part or all of the surface of the gearcase casting, but the smoothness of the metal surface must under no circumstances be better than that supplied by the manufacturer.
- C. No special parts or interchange of parts will be allowed, unless approved by the Commission.
- D. In all classes the trim tab, thrust and locking washers may be altered or removed from the lower unit to permit the use of any propeller, thrust washer or nut.
- E. Cylinder head and power head attaching studs may be substituted for bolts.
- F. Electronic engine RPM limiting devices may be eliminated.

- 3. Stock Engines (Outboard) as referred to in these rules shall be defined as outboard models that:
 - A. All engines in Stock classes must be capable of shifting from the driver's seat, with one hand on the steering wheel, by electric or mechanical methods; and be capable of forward and reverse shifting at all times.
 - B. Are manufactured in annual or model year quantities of greater than 250 units.
 - C. Are intended for sale to and to be used by the general public.
 - D. Are advertised through the same media, in the same publications and given the same prominence as the manufacturer's other engines.
 - E. Are distributed through the manufacturer's normal channels.
 - F. Are not equipped with an accessory or high-speed gearcase.
 - G. Are equipped with standard under-cavitation plate or through-prop exhaust. 22
- 4. Super Stock Engines (Outboard) as referred to in these rules shall be defined as outboard models that:
 - A. Are manufactured in annual or model year quantities of more than 25 units.
 - B. Are not necessarily intended for sale and to be used by the general non-racing public.
 - C. Are not necessarily advertised through the same media, in the same publications and given the same prominence as the manufacturer's other engines.
 - D. Are not necessarily distributed through the manufacturer's normal channels.
- E. Accessory gearcases, as submitted by the manufacturer, may be used in these engines provided that they are built in a total quantity of no less than 25.
 - F. Exhaust stacks not contained in the driveshaft housing will not be permitted.
 - G. Standard factory production models may run in Super Stock classes.
 - H. Only one manufacturer's engine should be approved per class.
- I. No Stock or Super Stock motor shall be eligible for Outboard Performance Craft (OPC) racing until such time as the model has been approved by the OPC Racing Commission.
- 5. Engines run in Stock and Super Stock classes may only be run in the configuration that they were homologated in by the Technical Committee.

RULE 25 • REPLACEMENT PARTS

- Only such parts shall be permitted as are standard production OEM parts used on the motor
 as the purchaser may obtain it from the dealer as a stock item or electrical or electronic
 products as approved by the OPC Technical Committee and the OPC Commission, and
 published in Propeller and available to the general public through dealers. These products
 cannot provide any performance advantage over original OEM parts.
 - A. No replacement part for current production motors (motors currently being produced by the original manufacturer) shall be considered standard production until this part appears on current production motors which can be purchased from the dealers.
 - B. Engine components are of two categories: primary and secondary parts.
 - 1) Primary components are: Block and crank case assembly; cylinder head; crankshaft; connecting rods; pistons; wrist pins; induction system; reeds (SST 45 & SST 60); cooling system (must retain original cooling concept); midsection; exhaust; and gear case assembly. No alterations of these components are allowed unless specifically specified in the class rules. Primary parts must be OEM for the model.
- 2) Secondary components are: Bearings; seals; impellers; cylinder sleeves; gaskets (must be same design and thickness); fuel lines and fitting; ignition wires (high tension) and caps or boots. Secondary parts may be of any manufacture and must be of same design intent and configuration as the OEM parts.
- C. Any replacement part for non-current motors (motors no longer being produced by the original manufacturer) shall be approved only after the part being replaced is no longer available for the motor model from the manufacturer or is specifically approved by the Commission.
- D. Final approval of non-OEM electrical or electronic parts approved for use in OPC racing shall not be given until the Chairman of the OPC Racing Commission has advised the Executive Administrator that he is satisfied that all provisions of the rule have been complied with, and until such time as the manufacturers have built at least 250 units of the part submitted for homologation.

- E. For non-OEM electrical or electronic parts, the manufacturer must follow the same rules as specified for motor manufacturer registration with respect to submission of specifications to the Chairman of the Technical Committee and the time period for which the parts are approved.
- F. The OPC Technical Committee reserves the right to retain all submitted electrical or electronic parts for a one year period.

RULE 26 • MOTOR MODIFICATIONS Stock and Super Stock classes:

- 1. There shall be no modifications whatsoever to the motor as furnished by the manufacturer other than:
 - A. Any carburetor jets, spark plugs or propellers may be used, provided other parts are not altered to accommodate them with the exception of the trim tab.
 - B. Only such parts shall be permitted as are used by the motor manufacturer on the particular model as built on the production line (see Rule 23). Modifications covered by a manufacturer's service or engineering bulletins are legal seven days after the date of any such bulletin and approval by the OPC Technical Committee, provided all direct purchasers of affected engines are notified by mail as well as all OPC inspectors, followed by printing in Propeller at the next opportunity. In the event the manufacturer is unwilling or unable to meet these criteria, modifications covered in such bulletins will be legal after printing in Propeller.
 - C. Oversize pistons furnished by the manufacturer of an outboard motor may be used in the model for which they are furnished. The bore of the engine may be enlarged by the amount that the oversize pistons differ from the standard size pistons. An additional total 0.005 inch enlargement of the bore will be allowed for bore enlargement due to wear or rematching errors, or measuring tolerance. Under no circumstances may the bore be enlarged more than 0.035 inch over the original dimension. It is not permissible to chromium plate cylinder walls unless the motor manufacturer uses chrome plating of cylinder walls as standard production procedure on that particular model.
 - D. Tachometer, fuel and water pressure, and temperature gauges may be installed if desired.
 - E. The attachment of a steering bar or its equivalent may be accomplished at any point or points on an engine. Any cowlings or plates removed may be cut, and must be replaced. Any openings created by this operation must be sealed to prevent the engines from pulling in air. Studs or bolts may be exchanged to secure steering bar.
 - F. Throttle return springs will be allowed on engines; however, no drilling of holes or other modifications to the engine will be permitted to install same. Mounting links may be attached with present fasteners. G. Isolation Mounts: Only those supplied by the engine manufacturer as original equipment or through the service group are acceptable.
 - G. Any adjustments of mixture control, throttle and shift linkage will be allowed. Any mechanical adjustments of spark advance will be allowed provided no modifications are made either to the spark advance system or the engine as manufactured.
 - H. Safety tilt switches and safety starting switches may be disconnected or bypassed. 24
 - Fuel pumps, filters, heat exchangers or auxiliary tanks may be installed, provided their use entails
 no modification to the engine and fuel lines used to connect to the fuel connector provided with
 the engine.
 - J. The attachment of a power trim system may be accomplished at any point or points on an engine. Only those parts of the production motor interfering with the attachment and function of the trim system may be altered or removed.
 - K. Bead blasting will be allowed at the block and crankcase interface only. No other internal parts may be bead-blasted.

Mercury Racing APEX 200

UIM Homologation Specifications Document link: https://www.uim.sport/Documents/ Homologation/EngineClass/65-00540_Mercury_Racing_200APX.pdf

Minimum Weight (boat, driver, equipment as raced)	1,225 lbs
RPM Limiter	6,800
Gearcase, Mercury IV SSM w/Overdrive	15:17
Overdrive Ratio (only legal ratio)	.818 (22:18)
Final Drive Ratio	0.927
Minimum Boat Length	16'

Engine must retain factory powerhead seal at all times.

Engine must have series powerhead seal at all times.

The Only Authorized Rebuild Center- Mercury Racing Exchange program.

No performance enhancements through 12/31/2026.

Engine Cowling must remain stock with stock OEM graphics.

No Modifications from homologation specifications data.

Mercury Racing APEX 250

APBA Homologation Specifications Document Link:

Minimum Weight (boat, driver, equipment as raced)	1,265 lbs
RPM Limiter	6,800
Gearcase, Mercury IV SSM w/Overdrive	15:17
Overdrive Ratio (only legal ratio)	.818 (22:18)
Final Drive Ratio	0.927
Minimum Boat Length	16'

Engine must retain factory powerhead seal at all times.
Engine must have series powerhead seal at all times.
The Only Authorized Rebuild Center- Mercury Racing Exchange program.
No Modifications from homologation specifications data.



Engine Cowling

Cowling may be replaced or repaired by a facsimile of identical size and dimension. Finish must be black or exposed carbon fiber. Front air inlet and rear air exhaust vents must remain, with identical location and cross-sectional area. No additional air inlets, scoops, deflectors, or wings are to be added.