

## **LAKE RACER**

1. Boats: Regular production open cockpit Ski or Bass boats originally configured with seating for 3 or more people. Passenger seats may be removed during competition.
2. Fuel: Must purchase and use fuel and oil sold at race site only. **No additives allowed.**
3. No nitrous or any other type bottle pressure injection. No bottles in boat, solenoids disconnected.
4. ALL ODBA general, safety and fuel/technical rules must be adhered to.

### **Minimum weights and specific motor rules for all boats**

5. With motors/rigging conforming to Super Stock rules:
  - A. A. Merc High Perf 2.5 liter 260 EFI, 26cc heads, with no spacer 1625 pounds minimum weight
  - B. Merc High Perf 2.5 liter 280 Drag with 260 EFI electronics, 37cc heads 1625 pounds minimum weight
  - C. C. Merc High Perf 2.5 liter 300 Drag EFI with 37cc heads 1675 pounds minimum weight
  - D. Merc High Perf 2.5 liter 280 EFI 1550 pounds minimum weight
  - E. Merc High Perf 2.5 liter 240 carb 1550 pounds minimum weight
  - F. Merc Pro Max/Laser 2.5 liter EFI 1550 pounds minimum weight
  - G. OMC 3.0 liter Looper carb 1550 pounds minimum weight
  - H. Yamaha 2.6 liter carb 1550 pounds minimum weight
6. With motors/rigging conforming to Super Gas rules: 1725 pounds minimum weight
  - A. A. Production short-blocks, assembled, built or manufactured by a high-performance division, group or subsidiary of current APBA marine product manufacturers will be allowed except as noted. Engines must be marketed and distributed in the U.S. Engines must be available through a normal or high-performance dealer network and offered for sale with a warranty from the original manufacturer or the original manufacturer's authorized high-performance division.
  - B. B. Short-block alterations of any kind are not allowed except as noted. No blueprinting, polishing, grinding, balancing, feathering, etc.
  - C. C. Short-blocks with steel sleeves may be decked a maximum of .010". Cylinder overbore limited to size of available OEM service parts.
  - D. D. Any modifications external to the short-block are allowed except as noted.
  - E. E. Clamp and swivel bracket must be an OEM part. Clamp and swivel bracket may be lightened, but not removed. No custom clamp or swivel brackets allowed.
  - F. F. Gearcase must be shiftable (forward, neutral, reverse) from the driver's seat. Gearcase must be an OEM part for that model motor. No small gearcases.
  - G. G. Short shaft midsections are allowed. 15" minimum length as measured from the powerhead flange to gearcase flange. Midsections shortened to 15" must use OEM parts for that model motor. No Champ-type midsections.
  - H. H. Mercury/Mariner 2.5 liter Drag/S3000 powerhead is not allowed.
7. With motors/rigging conforming to Modified Production rules:
  - A. Merc Center Horn 2.5 liter EFI 1800 pounds minimum weight
  - B. Merc Center Horn 2.4 liter EFI 1670 pounds minimum weight
  - C. Merc SVS Drag 2.5 EFI 2001 & later 1830 pounds minimum weight
  - D. Merc 2.5 liter carb 1695 pounds minimum weight
  - E. Merc 2.4 liter carb 1620 pounds minimum weight
  - F. Merc 2.5 liter Pro Max/Laser 1770 pounds minimum weight
  - G. OMC 3.0 liter carb 1745 pounds minimum weight
  - H. OMC 3.0 liter Factory EFI 1820 pounds minimum weight
  - I. Yamaha 2.6 liter carb 1720 pounds minimum weight
  - J. Yamaha 2.6 liter Factory EFI 1820 pounds minimum weight
8. With motors/rigging conforming to Pro Gas rules:
  - A. Merc & Yamaha Small Block 1900 pounds minimum weight
  - B. OMC, Yamaha & Merc Big Block 1925 pounds minimum weight

9. With OMC V8 motors/rigging conforming to Pro Gas rules: 2000 pounds minimum weight

## ***SUPER STOCK***

1. Boats: Any production hull. No true tunnels or hydroplane type hulls.
2. Fuel: Must purchase and use fuel and oil sold at race site only. No additives allowed.
3. No nitrous oxide or any other type bottle pressure injection. No bottles in boat, no solenoids on the motor allowed in this class.
4. No small gearcases.
5. No aftermarket tuners. OEM tuner and exhaust adapter plate may be modified.
6. No potentiometers, fuel by pass solenoids or any other devices to alter the fuel curve allowed. Multi fuel pump setups must not be sequentially wired or activated. Must be wired in series, one switch must start both pumps.
7. No after market spark retard/advances, electronic or mechanical allowed.
8. No metal removal or any internal cylinder block modifications allowed. No porting, polishing, feathering. No piston, rod or crank modifications. No balancing or blueprinting.
9. Pistons must be OEM or after market made to OEM specs.
10. Maximum of three over bored cylinders allowed. Maximum of .030" overbore allowed only on steel bores.
11. Minimum mid section length is 15". OEM mids and clamp brackets may be shortened. OEM clamp bracket may be shortened and after market 15" minimum housing used. Inner liners may be removed and housings drilled for exhaust relief. No Champ type mid sections allowed.
12. Gear cases must have functional forward, neutral and reverse and be shiftable from the drivers seat. After market nosecones with low water pickups allowed.
13. Pyrometers allowed.
14. After market lightweight stock configuration motor cowls allowed all motors.
15. After market composite reeds allowed all motors. OEM reed cages for like motor, no modifications to reed cages allowed.
16. Carbureted motors may remove OEM air boxes and use after market velocity stacks.
17. Oil injection and mechanical fuel pumps may be removed and blocked off. Carbureted motors may use in the boat electric fuel pump and after market adjustable fuel pressure regulators.
18. Standard 1/2" reach spark plugs only. Any heat range, style tip or brand allowed.
19. Lightweight flywheels allowed. All lightweight flywheels must be Diamond Marine.

### **Specific Motor Rules and Minimum Weights**

20. High Performance Mercury, 245 hp, 260 hp, 280 hp and 300 hp Drag:
  - A. Carbureted 245 1350 pounds minimum weight
  - B. EFI 260, 26cc heads, with no spacer 1400 pounds minimum weight
  - C. EFI 280 with 260 electronics 1400 pounds minimum weight
  - D. EFI 300 Drag, center horn 1450 pounds minimum weight
  - E. Rev limiters may be removed
  - F. EFI motors in this group may use OEM Drag ECU (A-48, A-63, A-6) and fuel pressure regulator
  - G. (1) 260 1.490" to 1.520" exhaust port height specs  
(2) 280 1.490" to 1.510" exhaust port height specs  
(3) 300 1.500" to 1.510" exhaust port height specs
  - H. Required standard head gasket on Drag Engine.
    - (1) 260 27-814658-1 0.45 to 0.50
    - (2) 300 Drag 27-822844-1 0.55 to 0.60
  - I. I. If during repair, any metal was removed from deck, thick head gaskets must be used.
    - (1) 260 27-822844-1 head gasket part number
    - (2) 300 27-840322-1 head gasket part number

- J. 2:00 or 1:87 gear ratio only.
  - K. All motors this group must use OEM 37cc minimum heads except 260.
  - L. All components must retain stock factory configuration from the adapter plate up except as noted.
  - M. 260 Mercury may use 26cc heads.
  - N. 280 Mercury may use 260 electronics.
21. High Performance Mercury, 280 hp with standard 280 electronics:
- A. Minimum weight 1325 pounds.
  - B. Rev limiter may be removed.
  - C. 2.00, 1.86, 1.75 gear ratio allowed.
  - D. Alternator belt to remain functional while in competition.
  - E. E. All components must remain in stock factory configuration from adapter plate up.
22. Pro Max or Lazer style EFI Mercury: factory production steel sleeve block only
- A. Minimum weight 1350 pounds.
  - B. Rev limiter may be removed.
  - C. OEM light weight flywheel allowed. No modifications.
  - D. High performance early style 16 amp alternator allowed.
  - E. OEM 1" thick reed manifold spacer plate is allowed.
  - F. 26cc minimum chamber OEM heads allowed.
  - G. Throttle body may be bored. No welding or other modifications to plenum.
  - H. Stock fuel injection configuration must be maintained, (injectors, fuel rail, regulator etc.)
  - I. Fuel injection ECU must remain in stock configuration inside and out.
  - J. J. All components must retain stock factory configuration from the adapter plate up except as noted.
23. OMC 3 Liter Looper:
- A. 1350 pounds minimum weight.
  - B. After market light flywheel allowed.
  - C. Early OEM small charging system may be used.
  - D. Rev limiter may be removed.
  - E. After market or cut OEM heads may be used, 36 cc minimum chamber volume.
  - F. F. OEM looper carbs only, boring not allowed, any jetting.
24. Yamaha 2.6 liter:
- A. 1350 pounds minimum weight.
  - B. After market light flywheel allowed.
  - C. Rev limiter may be removed.
  - D. Early OEM charging system and spark advance allowed.
  - E. After market or cut OEM heads, 33cc minimum chambers.
  - F. No long rod motors in this class.
  - G. OEM carbs for like motor, boring is allowed.

## ***MODIFIED PRODUCTION***

1. Boats: Any production hull. No true tunnels or hydroplane type hulls.
2. Fuel: Must purchase and use fuel and oil sold at race site only. No additives allowed.
3. No nitrous oxide or any other type bottle pressure injection. No bottles in boat, solenoids must be disconnected.
4. Engine modifications are allowed. All modifications, other than expressly noted, must utilize OEM outboard motor components from like engine manufacturer.
5. No after market ignition advance/retard mechanisms, mechanical or electronic.
6. Gear cases must have functional forward, neutral and reverse and be shiftable from the drivers seat. After market nosecones with low water pickups allowed.
7. No small gear cases.
8. No dual plug heads. Yamaha, OMC and Suzuki may use after market single plug heads.
9. No lightened crankshafts. Metal may be added to balance, but not removed.
10. No after market tuners. OEM tuners may be modified.
11. No potentiometers, fuel by pass solenoids or any other devices to alter the fuel curve allowed. Multi fuel pump setups must be wired in series and one switch must start both pumps.
12. Disconnect and remove all vacuum lines and extra wiring from under the cowls
13. No fabricated "Z" port motors.

14. No 2.5 liter Bridgeport Mercury.
15. Up to .030" overbore with no weight penalty. Overbore of .060" max all motors with a weight penalty of five (5) pounds per cubic inch calculated from standard bore.
16. Pistons must be OEM or after market made to OEM specs.
17. "Behind the liner" inlet porting allowed all motors.
18. Stuffing allowed all motors, block and front half only.
19. Pyrometers are allowed.
20. After market composite reeds allowed all motors. OEM reed cages for like motor.
21. After market "stock appearing" lightweight cowls allowed all motors.
22. After market adjustable fuel pressure regulators are allowed.
23. Carburetors may be bored. OEM air boxes removed and after market velocity stacks used.
24. Oil injection and mechanical fuel pumps may be removed. Carbureted motors may use in the boat electric fuel pump and after market adjustable fuel pressure regulators.
25. OMC, Yamaha and Suzuki may use after market lightweight flywheels.
26. All flywheels, all motors, must retain OEM magnets.
27. Minimum mid section length is 15". OEM mids and clamp brackets may be shortened. OEM clamp bracket may be shortened and after market 15" minimum housing used. Inner liners may be removed and housings drilled for exhaust relief. No Champ-type mid sections allowed.

#### **Specific Motor Rules and Minimum Weights**

28. Center air inlet High Performance EFI Mercury:
  - A. 153 cubic inches 1430 pounds minimum weight
  - B. 142.2 cubic inches 1300 pounds minimum weight
  - C. Plenum may be bored, 3.500" maximum. No welding or fabrication on plenum
  - D. Fuel system must utilize OEM ECU, injectors, fuel rail and temp sensor.
29. SVS air inlet High Performance EFI Mercury:
  - A. 153 cubic inches 1460 pounds minimum weight.
  - B. SVS must be OEM from Mercury.
30. Carbureted Mercury:
  - A. 153 cubic inches 1325 pounds minimum weight
  - B. 142.2 cubic inches 1225 pounds minimum weight
31. Laser and Pro Max EFI Mercury:
  - A. 153 cubic inches 1400 pounds minimum weight
  - B. After market air inlet cover (SVS only) may be used. Stock throttles cannot be bored.
  - C. Stock Fuel rails, injectors, fuel outlet and inlets must remain in stock location and configuration.
32. OMC Loop Charged 3.0 liter:
  - A. With OEM fuel injection 1450 pounds minimum weight
  - B. With carburetors 1375 pounds minimum weight
33. Yamaha 2.6 liter:
  - A. With OEM fuel injection 1450 pounds minimum weight
  - B. With carburetors 1350 pounds minimum weight
34. Suzuki 2.7 liter:
  - A. With OEM fuel injection 1450 pounds minimum weight
  - B. With carburetors 1375 pounds minimum weight

## ***PRO CARB***

1. Boats: Any production hull. No true tunnels or hydroplane type hulls.
2. Fuel: Must purchase and use fuel and oil sold at race site only. No additives allowed.
3. No nitrous oxide or any other type bottle pressure injection. No bottles in boat, solenoids must be disconnected.
4. Fuel injection may only be used on four cylinder configuration motors.
5. Engine modifications are allowed. All modifications, other than expressly noted, must utilize OEM outboard motor components from like engine manufacturer.
6. Gear cases must have at least forward and neutral, shiftable from the drivers seat. May use after market nosecones with low water pickups.
7. After market Dual plug cylinder heads allowed all motors.
8. No lightened crankshafts. Weight (metal) may be added to balance, but not removed.
9. Modified OEM or after market tuners allowed.
10. After market ignition allowed on all motors.
11. Pistons must be OEM or after market made to OEM specs.
12. Up to .030" overbore with no weight penalty. Overbore of .060" max all motors with a weight penalty of five (5) pounds per cubic inch calculated from std bore.
13. Cubic inches limited to 187.
14. "Behind the liner" inlet porting allowed all motors.
15. After market lightweight engine cowls allowed.
16. After market composite reeds allowed all motors, reed cages for like motor.
17. Electric fuel pump and adjustable fuel pressure regulator allowed.
18. Pyrometers are allowed.
19. Air boxes may be removed and after market velocity stacks are allowed.
20. After market lightweight flywheels are allowed.
21. Any Outboard marine carburetor allowed. Must remain in stock configuration.
22. See Fuel/Technical for after market and other parts not allowed.

### **Specific Motor Rules and Minimum Weights**

23. Mercury V6:
  - A. 153 cubic inches 1425 pounds minimum weight
  - B. 142.2 cubic inch "behind the liner" 1300 pounds minimum weight
  - C. 142.2 cubic inches 1225 pounds minimum weight
  - D. 122 cubic inch "behind the liner" 1175 pounds minimum weight
  - E. 122 cubic inch motors 1100 pounds minimum weight
24. OMC Loop Charged V6: 1450 pounds minimum weight
25. Yamaha 2.6 liter motors:
  - A. Standard length rod motors 1425 pounds minimum weight
  - B. Long length rod motors 1500 pounds minimum weight
26. Sport Racer:
  - A. V4 powered boats may run this class utilizing all Pro Class Rules.

## ***SPORT RACER***

1. Boats: Any type hull allowed.
2. Fuel & Oil: Must purchase and run gasoline and oil sold at race site.
3. No fuel additives allowed unless expressly noted. Must pass fuel check.
4. No nitrous oxide or any type bottle pressure injection.
5. Power Head: Any modifications allowed unless noted below
  - A. No lightened cranks.
  - B. No stroked cranks, standard stroke length for engine listed.
  - C. No even fire cranks on OMC cross flow.
  - D. No super charging or any forced air induction.
  - E. .065" max overbore from standard, all motors.

- F. No behind the liner V6 Mercury, OEM or fabricated.
- 6. Midsection: any midsection allowed, any length.
- 7. Gear Case: any gear case allowed.
- 8. Weights:
  - A. OMC 99 cu in Cross Flow V4      2x2 carbs, 800 pounds
  - B. Mercury 99 cu in Inline 6      3x1 carbs, 800 pounds
  - C. Yamaha 108 cu in V4      2x2 carbs, 1000 pounds
  - D. OMC 122 cu in V4      4x1 carbs, 1050 pounds
  - E. Mercury 122 cu in V6      3x2 carbs, 1200 pounds
  - F. Mercury 142 cu in V6      3x2 carbs, 1400 pounds
  - G. OMC Cross Flow 149 cu in      3x2 carbs, 1250 pounds
  - H. OMC Cross Flow 160 cu in      3x2 carbs, 1350 pounds
  - I. Any V4 with alcohol only,      1200 pounds  
No additives

Note: Add 50 pounds to above weights for any multi carb or Fuel injection set up, factory or after market.

## ***PRO GAS***

- 1. Boats: Any production hull configuration allowed.
- 2. Fuel: Must purchase and use fuel and oil sold at race site only. No additives allowed.
- 3. No nitrous oxide or any other type bottle pressure injection. No bottles in boat, solenoids must be disconnected.
- 4. Only V6 configuration motors allowed.
- 5. See Fuel/Technical for after market and other parts not allowed.
- 6. Any motor modifications allowed.

### **Specific Motor Rules and Minimum Weights**

- 7. Mercury small block motors      1350 pounds minimum weight
- 8. Mercury big block motors      1400 pounds minimum weight
- 9. Yamaha small block motors      1350 pounds minimum weight
- 10. Yamaha big block motors      1400 pounds minimum weight
- 11. OMC big block motors      1400 pounds minimum weight

## ***PRO FUEL***

- 1. Boats: Any production hull configuration allowed.
- 2. Any fuel, oil or additives allowed.
- 3. No nitrous oxide or other bottle pressure injection. Bottles must be removed and solenoids disconnected.
- 4. Any motor modifications allowed, 8 cylinders maximum.
- 5. See Fuel/Technical for after market and other parts not allowed.
- 6. Any after market exhaust allowed.
- 7. Sputter boxes allowed.
- 8. 1300 pounds minimum weight.

## ***UNLIMITED***

1. Boats: Any hull configuration allowed.
2. Any fuel, oil and any additives allowed.
3. Turbochargers or blowers may not be used in conjunction with nitrous oxide.

### **Specific Motor Rules and Minimum Weights**

4. Eight cylinders max, with nitrous oxide 1300 pounds minimum weight
5. Eight cylinders max, with turbocharger or blower 1300 pounds minimum weight
6. Eight cylinders max, no nitrous oxide or bottle pressure injection, no turbocharger or blower 1100 pounds minimum weight
7. Over eight cylinders, no nitrous oxide or bottle pressure injection, no turbocharger or blower 1300 pounds minimum weight
8. Sputter boxes allowed.

## ***DEFINITIONS***

<b>After Market:</b>	A part or component manufactured for an outboard engine other than by a major OEM (i.e., Mercury, OMC, Yamaha or Suzuki).
<b>Crew Member:</b>	Anyone in the pit area accompanying an owner/driver or anyone present with the owner/driver's consent. The decision establishing the Crew Member of a given owner/driver or team may be made by any race official.
<b>ECU:</b>	Electronic Control Unit, aka Brain, aka Brain Box.
<b>EGT:</b>	Exhaust Gas Temperature
<b>E-PROM:</b>	Erasable Programmable Read Only Memory
<b>Hydro:</b>	A boat with hydrofoils or a flat bottom designed to lift above water at high speeds.
<b>Laser Injection:</b>	Mercury Marine's standard production style fuel injection system as used on XRI and PRO-MAX series outboard engines.
<b>OEM:</b>	Original Equipment Manufacturer
<b>Quorum:</b>	Fifty percent (50%) is the minimum number of members required to be present at an assembly before it can validly proceed to transact business. Note: President and Vice President may be included to constitute a quorum.
<b>Race Entry:</b>	Every boat registered for an event.
<b>Race Official:</b>	President, Vice President, Rules Committee member or anyone appointed by the President to perform any official duty relating to any event.
<b>TPI:</b>	Throttle Position Indicator
<b>True Tunnel:</b>	A production boat designed for Formula One or Champ Boat classes. Center pod is 7/8" or more shallow than the outer sponsons. It is designed to run on the sponsons only.

