

**2019 Cove View Predator Rules - Only the Predator 6.5 HP (212 cc) HORIZONTAL SHAFT OVERHEAD VALVE GAS ENGINE FROM HARBOR FREIGHT IS ALLOWED! The Hemi or non-Hemi are both allowed. Model #'s 60363 and 69730 only. This class (only) will have 2 heats and a feature.**

**The Engine Basics**

Simply put... If you take a new Predator, install clutch, remove or disconnect low oil sensor and install approved chain guard, you will be legal. Any tampering inside the engine is not allowed.

- No modifications to the motor other than addition of chain guard.
- Stock fuel tank MUST be as installed by the factory. Fuel pump and non-factory fuel tank is prohibited.
- Stock air box only. No modifications whatsoever to air cleaner (filter) or the air box itself. No add ons.
- Stock exhaust only with NO modifications •Exhaust studs may be replaced with bolts. If so, bolts must be safety wired.
- The Governor may NOT be disconnected. Governor must be installed as new out of the box.
- Must have chain guard made of metal and deemed safe by track officials.
- Shoe/drum type clutch only. Max of 4 shoes. (No disc clutches)
- Carb may not be modified. Must be stock carburetor as installed by the factory.
- Must run factory jets in the carburetor. Changing jet size is prohibited.
- Low oil shutoff sensor may be (and should be) disconnected or removed.
- Fuel is 87 Octane gasoline only. Must be purchased from any Sheetz. NO ADDITIVES
- Any machining whatsoever is prohibited
- ENGINE MUST PASS GOVERNOR TEST ON THE STAND AS PART OF TECH INSPECTION. ENGINE CAN NOT EXCEED 5500 MAX RPM'S.

**Age/Weight**

Age 13 & up.

Minimum weight is 375 lbs after the race with driver in kart.

**Tires/Wheels/Body**

- Standard modern race kart tires and wheel widths permitted per WKA rules.
- Open tire rule. Meaning you may run any brand racing slick (Vega, Maxxis, Burris, Hoosier, etc)

**Body**

- Bodies are optional. If used, body must meet WKA rules.
- 4 standard number panels with highly visible, easy to read 6" high numbers. Anything other than a standard number panel must get approval by a track official.
- No metal floor pans or number plates.

Kart/chassis rules can be found in the general rules. As a reminder: Lead weight must be painted white with YOUR kart number on each piece of lead. Double nuts or single lock nut and cotter pin are REQUIRED. We RECOMMEND bolts to be 3/8 in size and be grade 5 or grade 8 bolts.

**The Technical Stuff – All new, untampered engines will comply with the following rules. To dumb it down there is no grey area this is black and white... pull it out the box, install clutch, remove or disconnect low oil sensor, install approved chain guard, adjust governor screw to under 5500 and race. The following rules are written in the unfortunate event we need to tech an engine further than our rpm governor check.**

ENGINE: Predator 212cc engines (model 60363 or 69730 only). Some rules and specifications are specific to each engine model. There will be no exchange or mixing of parts between different model engines.

CARBURETOR: Stock Predator carburetor only. (No Honda carbs allowed). No interchange of parts between carburetor models allowed. Carburetor to intake sealer is gasket only no other sealer allowed. Choke must be as supplied from factory, but may be fixed to stay in open position. Choke area must remain as cast. Venturi .615" NO-GO. No polishing of venturi permitted. Venturi must retain defined edges as stock... no radiusing/rounding /chamfering of edges allowed. ... Rear throttle bore .751" NO-GO. No polishing or alteration of throttle bore allowed. Factory jet required. Stock emulsion tube must be used and unaltered, .066" max ID (.066" NO-GO ... cannot enter from either end of tube). Side holes in emulsion tube .036" NO-GO. 2 or 4 holes in bottom section and 20 holes in top section. Minimum emulsion tube length 1.092". Throttle shaft - .115" minimum (.112" minimum on SP carb only). Butterfly - .037" minimum. No alterations allowed to throttle shaft/butterfly/screw assembly. Air may only enter the engine through the air box. Only one carb and intake gasket allowed. Black Phenolic spacer must be flat across entire gasket mating surface with a minimum thickness on gasket surface of .265". Center hole in phenolic spacer must retain factory configuration and finish.

AIR BOX/FILTER: (Model 69730 - Old Style Engines) Must run stock plastic air box and stock foam filter. No alterations of any kind allowed to air box, this includes de-burring, bead blasting, etc. Foam filter must remain firmly seated in original position in air box and sealed by upper portion of air box assembly.

(Model 60363 - New Style Engines) Must run stock plastic air box with stock paper filter and stock foam cover. No alterations of any kind allowed to filter or air box, this includes de-burring, bead blasting, etc. Foam cover must be in stock position, fully covering pleated area of filter. Filter must be tightly attached to air box by wing nut.

CYLINDER HEAD: Must be OEM Predator type casting only. Intake and exhaust ports must remain as factory produced, porting or de-burring not permitted. Transition edge from port runner to bowl area must retain defined factory edge. Head gasket surface may NOT be machined ... no angle cutting of gasket surface allowed. Head gasket must be stock, ONCE again! Head gasket must be stock to your type of engine. No mixing of parts from one engine type to the other. .

VALVES:

- Stock Valve springs only, this is a tech item
- Stock valve and valve seat angles only.
- Replacing worn valve spring is not considered tampering as long as they are replaced EXACTLY as stock.
- Valve Springs may be replaced with stock style springs only- Maximum 10.8 pounds at .815" height no shimming. They will be checked just as clones are, with 10.8 and 18 lb dead weight check.

- No grinding, refacing, or resizing of valves allowed, no polishing of valves allowed.  
(Model 69730 - Old Style Engines)... Intake valve diameter - 0.979" minimum ... Exhaust valve diameter - 0.938" minimum  
(Model 60363 - New Style Engines)... Intake valve diameter - 1.058" Minimum ... Exhaust valve diameter - 0.979" minimum.

CAMSHAFT: Stock camshaft only

TIMING: Stock predator timing only, no additional modified timing keys are allowed.

- With degree wheel at perfect TDC
- Cam timing will be checked at the end of the intake push rod when the push rod lifts .050 • The wheel must read between 8 to 12 degrees for Hemi and between 10 and 14 degrees for non-hemi.

Ignition Timing

- With Degree wheel at perfect TDC
- Ignition timing will be checked by aligning leading edge of magnet with trailing edge of coil • Degree wheel reading must not exceed 16 degrees
- Flywheel must be stock-unaltered WITH keyway as installed by factory. No modifying or lightening of any kind • Minimum flywheel weight is 5lbs - 0 ounces no exceptions.

BLOCK/SIDE COVER: Block/side cover/cylinder assembly must remain stock as factory produced including all internal parts. Up to two side cover gaskets allowed, sealer may be used in conjunction with gasket to assist seal. The use of Aftermarket FLANGED bolts of similar OEM design (head size, diameter, length and thread length/pitch) allowed as replacement for side cover bolts ... no studs allowed ... lock or star washers allowed

Low oil sensor may be disabled or removed. All governor components must be installed and functioning to a max of 5500 rpm.

PISTON: Stock OEM Predator Piston, with no alterations allowed. No honing of wrist pin bore allowed. Piston skirt must retain stock defined edges.... No de-burring/chamfering/radiusing allowed. Arrow on top of piston must point toward lifter gallery.

RINGS: Stock OEM predator rings only, with no alterations

ROD: Stock OEM Predator rod, with no alterations allowed. No honing of wrist pin or crank bore journals allowed. Bearing journals must remain flat with stock defined edges ... no breaking/chamfering/radiusing of edges allowed.

CRANKSHAFT: Stock OEM Predator crankshaft.

BEARINGS: Stock OEM type construction with steel balls and steel retainer cage. No ceramic bearings allowed. Bearings must retain press fit in block/side cover.

RECOIL/STARTER: Stock OEM recoil and starter cup with no alterations. Recoil may be rotated for better angle to facilitate starting engine.

EXHAUST: Exhaust system must be factory

FUEL TANK/FUEL PUMP: Factory fuel tank must be used as factory installed.

APPEARANCE: Engine must outwardly appear as it did when it came out of the box this includes color. No aftermarket advertising or engine builder stickers, markings or other identifiers allowed on any engine component (blower housing, tank, chain guard, top plate, etc.). All engine components must retain any original stampings/numbering ... no additional stampings/numbering/engravings allowed. No tape allowed on motor ... no taping of recoil or blower housing allowed.

ENGINE TECH: All engines are subject to tech at any time regardless of finishing position. All engines are subject to impound at any time. All engines will be teched as raced, based on the engine as presented at scales for post-race weight check.

Pull start only