Pro Sprints

General Rules

1. Driver's meeting is mandatory. All drivers must attend the drivers meeting or send one member of their race team. Failure to attend the drivers meeting will result in starting all races from scratch position.
2. All cars will be allowed 1 substitute driver. Points will be awarded to the car and NOT the driver.
3. The use of raceivers is MANDATORY. All teams must purchase a receiver directly from the supplier. Any team refusing to use a receiver will not be permitted to compete.
4. Raceivers must be in working order.
5. All teams must have a working transponder.
6. Drivers' age will be a minimum of 16 years without experience. Any driver under the age of 16 will be a track decision whether or not they can compete.
7. You will be running 2 25 lap features every race event inverted based on pill draw. If there are more than 18 cars, you will be running 2 heats and one feature race.
8. If a driver instigates 2 cautions in a feature race, they will be automatically black flagged for the remainder of that race.
9. The race director may at any time deem it necessary to have single file restarts.
10. Red flags: when the track is under red flag conditions, all competitors are required to stop as quickly and safely as possible. If your car moves on a red flag it will be an automatic disqualification.
11. Black flag: if the black flag is given due to rough driving, the driver will be disqualified.
12. Ignoring the black flag will result in disqualification as well as a suspension from the next scheduled event.

Involved Cars

1. All cars involved in a caution will restart at the rear of the field.
2. If the track is blocked by an accident and the driver is forced to spin to avoid the wreck, they will be given their spot back on the restart.

3. If a driver spins another car, the caution flag will be shown and both cars will be sent to the back.
4. If you are involved in an accident and then act in retaliation, you will be disqualified automatically.

Pre Season Tech
There will be a pre season tech to ensure safety concerns are being met. Pre season tech is not mandatory, but is encouraged to save time on race day.

Post-race Tech Procedures
Following a feature event, the top 3 drivers as well as any random car that tech requests to see must report to the tech area immediately. Under no circumstances will the driver report to his pit area first. Doing so will result in a full disqualification for the night. No crew members are to touch the car before or during tech. The driver must be sitting in his seat in an upright position with hands on the steering wheel in full race equipment to obtain a proper left side percentage weight. The tech director reserves the right to do tech procedures on any car following a feature event. Any driver not compliant with the tech director will be disqualified for the night. Any car found illegal will be disqualified for the night. All teams must meet the rules to compete. If a team is found under the minimum weight of 725 lbs, they will be deemed illegal and disqualified. The scales at the track and the tech director has the final say. We don't care what your scales say at home.

Driver/Cockpit Devices
Cockpit devices such as wedge adjuster, pan hard bar adjuster, wing adjuster, brake bias, variable timing (from factory) are allowed. Maximum of 2 in car adjustments to be used while in race conditions.

Conduct Rules
1. The consumption of alcohol or the use of illegal drugs or marijuana, by any driver or crew member prior to competition of the night's event will not be tolerated. Infraction to this rule will result in an automatic disqualification as well as anyone caught consuming alcohol or using illegal drugs during an event will be fined $500 payable to Full Throttle Motor Speedway.
2. All drivers and crew members shall act responsibly at the track. No driver, car owner, mechanic or crew member shall subject any track official to abuse, ridicule, or improper use of language. Abuse of ftms officials is considered to be offensive and will result in a disqualification.
3. Fighting: if a driver or another member of your crew enters a fellow competitors pit area, or on the racing surface, or pit road, and starts a physical fight, or has a physical altercation with an official, that driver and team member will be removed from the property immediately, as well as served with a no trespass order for the duration of 1 year from the date of the offence.

4. Social media: if a driver or crew member goes on social media and is derogatory towards ftms, officials or another team, that team will be sanctioned by ftms indefinitely for their actions.
5. Any driver who demonstrates erratic or hazardous driving will start in the scratch position or when warranted be removed from competition.

Points System
Each feature winner will be awarded 50 points and there will be a 2 point spread for every subsequent position. Ex. 1st place 50 points, 2nd place 48 points, 3rd place 46 points, etc.

Technical Guidelines
It is the responsibility of the driver to read all the technical guidelines contained herein, and to comply with them. If there is any uncertainty of any of these requirements on the driver's part, he/she must request full explanations from ftms officials prior to racing. Ftms officials reserve the right to all final decisions of all technical requirements contained herein. There will on occasion be cause to change requirements as certain safety improvements or motor requirements change or improve. All drivers will be notified with sufficient time if a technical rule will be changing.
Ftms officials reserve the right to check any car at any time during the season for compliance to all the rules in this rulebook, with or without notice.
ALL NEW CONSTRUCTION CARS must be made in the downtube chassis style only. EXISTING CARS may require changes to your car to conform to technical inspection.

Chassis Specifications
Chassis including the roll cage frame can be constructed with the following: round chrome molley with a minimum of 1 ⅛" diameter with .083 wall thickness, or larger, 1 ¼ " with the same wall. Docol steel round tubing minimum 1 ⅛" diameter, .095 wall thickness or larger, 1 ¼" with the same wall. DOM steel tubing a minimum 1 1/8:" or 1 ¼" diameter .095 wall thickness. UNDER NO CIRCUMSTANCES ARE HOLES TO BE DRILLED IN ANY PART OF THE CHASSIS OR ROLL CAGE TO LIGHTEN A CAR. Crew steel is allowed to be run but no new cars shall be built using it.

SUSPENSION
1. Front axle must be one piece, and can be any of the following: 1.125" x .083" / 0.125" max wall thickness, 1.250" x .083" / 0.125" max wall thickness, 1.500" x .083" / .125" wall thickness or 1.750" x .083 / 0.125" wall thickness.
2. The front axle offset is to be plus/minus 2" left front and 3" right front compared to rear tires.
3. Rear axle must be one piece, and have no slipper hubs. 2 ⅜" aluminum micro sprint style or 1 ¼" steel. All other axles must be approved by a tech official.

4. Designs not covered by the above specifications must be approved by ftms officials prior to racing season use.
5. Panhard bars mount must be supported on top and bottom. No single post mount.

Fuel Tanks, Lines and Catch Cans

1. Pumped fuel or race fuel allowed.
2. No alcohol or nitrous additives allowed
3. Ftms officials reserve the right to randomly test fuel at any point during race season.
4. Fuel cells are mandatory. Cells may be steel or aluminum and foam filled.
5. Aluminum tanks must be a min od ⅛" thick material
6. Cells can be located in the tail section with only the bottom section being open. A fire wall is mandatory. Or fuel cells can be located behind the driver's seat with a firewall.
7. A full firewall between the tank and the driver is mandatory and can be made of steel or aluminum.
8. Fuel lines from the cell to the fuel pump must have a protective covering over them to prevent tears and cuts in areas around the chain and cvt belt.
9. Fuel line coverings must meet technical approval, and braided steel is strongly recommended.
10. All cars must have a fuel shut off valve located on the right side, so that it is easily accessible by track officials. The valve must be mounted away from the chain or belt drives, and must be clearly marked with arrows for on and off.
11. All fuel tanks must have approved cell caps with a vent ball valve, also called a rollover check valve.
12. Custom made fuel cells are allowed, and will be reviewed for safety by tech officials at tech inspection.

Side (Door) Bars

1. All sidebars must be constructed of a minimum 1" x .095 milled steel round tubing
2. Right side must have at least one side bar mounted 18 to 26 inches above the top of the lower frame rail in order to protect the driver's shoulder.
3. Left side must have 2 parallel bars. The top bar must be mounted at the same height as the right side at 18 to 26 inches above the top of the lower frame rail. The bottom bar is to be mounted parallel between 6 and 8 inches inside dimension, below the upper bar, with at least 2 vertical bars joining them together, and 2 vertical bars from lower side bar to lower frame.
4. A vertical bar must be mounted diagonally between the upper side bar and the top roll cage bar, on both sides.
5. All bars must be welded.

Steering

1. Steering shaft can be either a solid ⅝” diameter solid rod or a hollow minimum ¾” x .080” wall. MUST HAVE SLIP JOINT FOR THE PROTECTION OF THE DRIVER.
2. There must be a lock collar (bolted, pinned, tacked, or welded) on the steering shaft to prevent the steering wheel from moving in and out.
3. Steering wheels must have a quick release only.
4. Quick release steering wheels must fit snug and tight. Loose fitting wheels will not pass tech inspection and must be replaced. Also, there must not be any plastic parts on the quick release. All metal quick release systems only are acceptable.
5. All steering bolts or nuts must be drilled or codder pinned, or safety wired. Stover nuts may be used without codder pins or safety wire.
6. Any fastener of a component that would enable movement of, or adjustment of spindles, or caster and camber etc. must use codder pins, safety wire or stover nuts.
7. Spindle nuts to hold front hubs on MUST be drilled and codder pinned. Bicknell style spindle, c clip and nylock are also ok to use.
8. A rack and pinion steering box is allowed.

Clutch

1. Snowmobile drives (CVT) only.
2. CVT drive must be securely enclosed to contain debris in case of a wreck or clutch failure.

Chain Guard/Belt Guard

1. Chain and belt guards are mandatory.
2. Chain guards must be fastened at the front and the rear as a minimum.
3. The guards must consist of a plate on the drivers side of the guard and must cover the clutch retaining bolt, as a minimum.
4. Construction of the chain and/or belt guards must be at least .120” of aluminum or 1/16” steel. Absolutely no plastic chain guards allowed.
5. If your clutches are outside your car, you still need to have .120 of aluminum or 1/16” steel between you and your clutch.
6. If your clutches are inside the car, they must be completely enclosed. 25 ¼” holes will be allowed for venting. Holes for clutch bolts will also be allowed.

Brakes

1. Rear brakes are mandatory and front are allowed, and highly recommended.
2. Hydraulic brake systems only and must be in good working condition.
3. All master cylinder, calliper or rotor bolts must be either codder pinned or safety wired, or have pinch stover nuts. No nylocks, unless they are also codder pinned.

Wheels, Tires, and Hubs

1. 8” or 10” wheels and tires only.
2. No clip-on wheel weights are allowed at all (stick weights inside the rim are approved)
3. Both rear wheel hubs must be retained by a c-clip and keyway.
4. No slipper hubs
5. No SD44 tires are to be used.

Shocks and Coil Springs

1. Any small body shocks and coil springs allowed
2. They must be non-adjustable. Rebuildable are allowed.
3. No torsion bars, and no sway bars, and no bump stops. No shock should be installed intending to make it to bottom out (bump stop). No internal modifications allowed to limit the shock travel.
4. Shocks installed in newly constructed cars must be mounted in the upright position.
5. No cantilever suspensions allowed.
6. Each shock used must be readily available to the public, must not exceed an MSRP of $300 CDN before taxes, per corner.

Weight

1. The car shall weigh no less than 725 lbs including the driver with his safety gear included.
2. Any removable weight must be securely bolted in with lock nuts or keyed bolts to the mainframe structure or bolted to the left side of the seat.
3. Any removable weights must be painted white with your car number clearly indicated on the weight.
4. All additional weight must be secured on the inside of the car, bolted securely and nylock nut.
5. Any cars utilising excessive lead weights should consider the use of steel floor pans.
6. Maximum left side weight cannot exceed 57%
7. For every 5 lbs of lead, it must have one ⅜” bolt with large washers and lock nut.
8. Weights go off the scales at the track, anybody worried about weight can be weighed at the track before the race.

Bumpers

All Bumpers

1. Shall be constructed of steel tubing, minimum ¾” outside diameter, with a .063” thickness or maximum of 1” diameter with a .063” thickness.
2. All bumpers must be bolted with a ¼” bolt and lock nut.

Front Bumpers

1. Front bumpers must be flat, and not have a projected or pointed profile (arrow shaped)

2. Front bumpers must not be smaller than 12” wide and must not extend beyond frame rails.
3. The lower horizontal bars must not be any higher than a maximum of 6” off the ground.
4. Front bumpers must be constructed of 2 horizontal bars at a minimum of 4” and a maximum of 6” apart, measured centre to centre.
5. The upper hoop attached to the lower hoop must be supported by at least 2 vertical bars on the front bumper by 1” steel tubing.
6. No weights can be added to the front bumpers.
7. A 12” crush zone is mandatory between the drivers feet and the front bumper when the pedals are fully engaged.
8. The front bumper must be attached on at least 2 points with ¼” bolts. No clips are allowed.

Rear Bumpers

1. Rear bumpers must not be smaller than 12” wide at frame rails
2. The lower bar must be a maximum of 6” off the ground.
3. Rear bumpers must be constructed of 2 horizontal bars with a minimum 5” and maximum 7” apart, measured centre to centre.
4. The upper and lower hoop must be supported by at least 2 vertical bars
5. Rear bumpers must be fastened with the mainframe rail and/or back of the rollcage uprights, in at least 4 points, with a ¼” bolt. No clips allowed.
6. Rear bumpers must extend a minimum of 12” behind the fuel tank
7. Sprint style rear bumpers are mandatory and must come to a single vertical post or 12” maximum flat back

Nerf Bars

1. Nerf bars are mandatory on both sides of the car, and they are to be constructed of milled steel tubing with a minimum ¾” outside diameter with a .063” wall thickness
2. Nerf bars are to be a minimum of 24” in length measured from the back side of the nerf bar closest to the rear tire, in a straight line, to where it attaches to the front of the car.
3. The lower horizontal bar is to be a maximum of 6” off the ground.
4. Nerf bars are to have a minimum height of 5” and a maximum height of 14” at ride height
5. Nerf bars must not extend outside of the front and the rear tires. This means the bars must not exceed outside of the straight line being determined from the outside of the front tire to the outside of the rear tire.
6. Nerf bars must have a minimum of 3 mounting points

Floor Plans

1. The car shall have a floor pan under the frame rail or on top of the frame rail, covering a minimum area from the front frame rail to the front of the driver's seat. The floor pan may be constructed from aluminum or steel

2. Floor pans design and condition may be disallowed by tech.

Car Dimensions

1. Wheel base shall be a minimum of 50”, and not exceed a maximum of 60”. Measured centre to centre.
2. The maximum overall width of a car shall not exceed 60” measured from outside of the rim to outside of the rim.
3. The maximum overall length of the car shall not exceed 114”

Front Hoops

1. Any existing cars that have a front hoop must be made of a minimum 1” tubing
2. Hoop must be completely surround the drivers feet
3. 2 vertical bars must join the chassis to the loop, at the front of the car
4. Hoops must be welded
5. The front hoop must be 2” higher than the drivers feet, as measured from the bottom of the top hoop
6. ALL NEW CONSTRUCTION CARS MUST BE DOWNTUBE CARS

Roll Cage and Cockpit Specifications

1. The roll cage must have a minimum height of 40” from the top of the lower frame rail, to the top of the top rail
2. The top of the drivers helmet must be at least 4” below the top of the horizontal roll cage bars or halo
3. Halo must be approved
4. The roll cage must be welded to the chassis in at least 6 locations and cannot be bolted to the mainframe rails
5. The top of the roll cage must have gussets in all 4 corners either inside or outside of the top bars
6. No sharp edges shall be left anywhere on the roll cage or brackets on the car
7. The roll cage must have 2 vertical bars mounted behind the drivers head in an inverted v shape
8. The driver must be able to climb through the space in the top of the roll cage (by themselves in good timing)
9. A halo made from 1” tubing can be added to the top of the roll cage to provide more head clearance and must be tubing .095 thickness. The halo must run along the sides and the rear of the roll cage
10. There must be a minimum of 1” x .095 wall thickness bars out in to stop contact from the front axle hitting the seat or the fuel cell
11. There must be 2 vertical bars between the downtube and frame rail to stop contact from the front axle hitting the drivers feet or pedal assembly
12. There must be a minimum of 1” x .083 wall thickness bar to protect the drivers legs from a car entering from the top side. It is recommended as a diagonal

bar from the steering column bar to the main hoop where the front axle stop bars are located

Seats

1. The use of containment seats are highly recommended and are mandatory for anyone under the age of 18. No hand made seats will be accepted
2. Seats must be bolted in at least 4 places with a minimum of ⅜" bolts
3. Any conventional brand name seat that has head and shoulder supports added, will need to be inspected and authorised by tech before the first race

Body Design

1. The front nose section may be a wedged hood or a standard sprint car style
2. The front nose can be made of aluminum or fibreglass, or poly fibre substitute
3. Nose panels must fit the chassis
4. Body panels must be secured in place all the time, including tail and hood sections
5. All cars must be neat and clean in appearance all the time
6. All side and rear panels must be inside the bumpers and nerf bars
7. Cars must meet a traditional sprint car look and design

Numbering and Lettering

1. NO GOLD LETTERING. The tower cannot see it, and scoring becomes an issue. We recommend large numbers. All numbering must be highly visible for scoring purposes. If you are notified by a track official to change your numbers because of poor visibility, this must be completed before the next scheduled race
2. Numbers and letters must be done professionally or in a professional manner
3. Numbers and letters must be in a contrasting colour to the car scheme, and be highly visible from across a ⅓ mile track at night
4. Numbers must appear on the rear section of the car, being at least 6" in height
5. Numbers must appear on the wing of the car and be a minimum of 8" and max of 10" tall on right side panels and a minimum of 15" and maximum of 18" tall on the left side panels
6. No duplicate car numbers

Wings

1. Wing is to be a mini sprint style, full jersey wing
2. Offset sides 4" to 8"
3. All wings must have a quick release system for easy access by emergency crews or officials
4. Drivers must be able to get out without assistance
5. Side board length dimension is 35 - 44"

Mirrors

1. Are allowed. 1 on each side. Max 3” diameter
2. Mirrors must be approved before usage

Safety Belts

1. All cars must have 2” or 3”, five point safety harness style seat belts that fit the hans device correctly
2. The harness can not be cut or worn in any way
3. Belts must be mounted according to specifications
4. Belts with a manufactured date will expire after 5 years. Belts with the new SFI tag and expiry date will expire at the end of the season from the year listed on the tag.

Window Nets

1. Side window nets are required on both sides of the car
2. Front window steel mesh cages are recommended

Ignitions

1. All cars must have an ignition kill switch, and it is to be mounted on the dash at the right front downpost of chassis, where it is accessible by both driver and safety crew
2. The switch must be labelled ON and OFF clearly, for anyone in case of an emergency and the driver is unable to turn the motor off himself
3. All spark plug wires must have a tie wrap attached to them, minimum 6” long, or ring mounted

Radio Communication

1. Receiver radios must be worn by all drivers at the track that meet the speedways frequency for communication
2. 2 way communication is allowed. In this case the spotter must have the receiver
3. Radios must be in working condition when at the track
4. Penalties for not obeying receiver instructions from an official could be, but are not limited to, loss of laps, overall finishing spot, disqualification, loss of points or money
5. It is the drivers responsibility to ensure their receiver is working at all times. ALWAYS have extra batteries

Computers

1. Use of computers is allowed but cannot be wired to the CDI box
2. Tachometers and EGT gauges are also permitted

Transponders

1. All cars must have a working transponder

2. Transponders must be mounted 12” behind the centre of your front axle
3. Location must be verified by a tech official

Safety Equipment

1. Helmets must have the proper snell rating ticket inside. SA 2020 no older than SA 2015
2. Headrests are strongly recommended
3. Drivers must have and wear a full body fire retardant suit. 1 piece full body fire suits are recommended or a 2 piece as long as it's properly worn is also acceptable. Drivers must ensure there are no gaps between pants and jackets where flames can burn waistlines, or worse
4. Drivers must wear approved arm restraints
5. Drivers must wear fire retardant approved racing gloves and shoes
6. If drivers are found to be without any of the above safety items, they will not be permitted to race
7. All race competitors must have a fire extinguisher readily available to them while competing

Motor Guidelines - 440 Motor Engines

1. The track reserves the right to rule against any part that is questionable in its specification or alteration. Penalties may include loss of points or money, fines or suspensions. The track reserves the right to maintain close competitive racing, and teams to be deemed dominant may be issued a restrictor plate or throttle boot to use or a specified gear
2. If you are unsure of anything and need clarification on any motor rules, please contact directly via email stock production 440cc snowmobile motors only.
3. Fan cooled or air cooled allowed. Twin cylinder only. No limited production or limited race engines allowed. No cross of manufacturers parts allowed
4. No turbos or supercharging are allowed. No NOS allowed
5. The motor must originate from a stock 440 fan or smaller cc production snowmobile.
6. Motor stroke may not be changed or altered in any way
7. Oil injection pumps may be removed from the engine
8. The following OEM stock quantity of cylinders MUST be maintained
9. Crankcase - OEM for that manufacturer and model only
10. Crankshaft - must be OEM for that manufacturer and model and may not be altered in any way. No alloy substitutions allowed, and no de-stroking of the crankshaft is allowed
11. Cylinder - must be mounted to case as originally designed by the manufacturer for the model and for the purpose of snowmobiling. You may over-bore, but not exceed .060 thousand over the factory OEM bore diameter spec for the model
12. Cylinder heads - must be OEM for that model and manufacturer, and spark plug location must also remain OEM. spark plug quantity must remain stock.

13. Connecting rods must maintain OEM or can be aftermarket but must be exact replacement for OEM and readily available. Must also be an exact replacement for OEM and readily available. Must also be the same alloy as used by the OEM manufacturer. Rod may not be altered in any way
14. Motors must be mounted on the right side of the car, ahead of the rear wheels.
15. No de-stroked motors
16. Motors will be randomly inspected for displacement
17. Ignition - flywheel - stator - CDI must be OEM for that manufacturer and model. No open or reworked CDI boxes allowed. Flywheel cannot be altered in any way from OEM
18. Fan blades cannot be removed or altered and must be functional at all times.
19. Recoils must be complete and functional at all times, even if the electric start option is used
20. No desleeving of cylinders
21. 440 pro x and xcf engines is open to detuning or reconfiguration at any time for competition purposes
22. Timing is a non-tech area as are coils wires and spark plugs

Carburetors

1. No fuel injection
2. Carburetors only - single or twin allowed. Single must not exceed 44mm, and double must not exceed 38mm each.
3. 440 pro x and xcf engines MUST use 34mm carburetors ONLY
4. Carburetors must face the rear of the car
5. No drilling boots allowed

Exhausts

1. Single exhaust pipes only
2. Mufflers are mandatory, with a silencer
3. NO open headers
4. Exhaust must be directed in a downward position or upward position in order not to affect drivers positioned right beside the car, whether in lineups or on the track
5. A decibel rating of 96 decibels at 50 feet is required

Motor Guidelines - 550 Stock Motors

1. The track reserves the right to maintain close competitive racing, and teams deemed to dominate may be issued a restrictor plate or throttle boot to use or a specified gear

Engine

1. Only a polaris EC55PM engine is allowed on the pro 550 class as supplied by the manufacturer for the purpose of snowmobiling
2. There will be NO machining of any parts of the EC550 engine

3. There will be NO sandblasting of any kind to any parts of the EC55PM engine, externally or internally
4. There will be NO use of acid to the interior or exterior of any EC55PM engine part in order to lighten, remove material or cover up a repair
5. The only time use of acid is allowed is in the aid of repairing a cylinder wall

Exhaust Pipes

1. OPS Greenwood Motorsports pipe or stock OEM exhaust pipe at this time, or any pipe as long as it can be read at 96 decibels from 50 feet

Carburetors

1. Only 34mm vm round slide carburetors can be used per cylinder.
2. Intake boots can be OEM or aftermarket equivalent and readily available
3. Boot clamps are a non tech item but must be installed and used

Coatings

1. There will be NO coating of any parts at all, internal or external
2. No painting of any parts of the engine, internal or external
3. Any coating of any kind will be assessed penalties from track officials, this includes complete exhaust and intake systems

Balancing

1. There will be NO balancing of any rotating part listed in these rules for the PRO 550 other than what is done by the manufacturer at the time of production and assembly

Pistons and Rings

1. OEM or aftermarket replacements allowed
2. No extra machining or lightening of parts
3. Mo machining of piston pin. Must be used as supplied by the manufacturer
4. Piston pin can be OEM or aftermarket
5. Piston must be used as supplied by the manufacturer

Case Reed

1. Reed cage is OEM part only
2. Reed peddle is OEM part only or aftermarket equivalent but must remain OEM measurement specifications
3. Absolutely NO modifications are allowed to the reed cage or peddle

Electric Start

1. Electric start is allowed and recommended
2. This option may become mandatory in the future
3. Can be OEM or aftermarket equivalent

P.E.R.C. Reverse (polaris electronic reverse control)

1. PERC is allowed and recommended

Spark Plugs

1. Manufacturer of your choice / open
2. Heat range of your choice /open
3. Must have manufacturers crush seal installed and in use

Shroud and Recoil Parts

1. Must be OEM only as supplied by the manufacturer

2. No substitutions allowed
3. May not be removed if running electric start option

Exhaust Y Pipe

1. Y pipe must be OEM EC55PM only with no alterations. Can use early ball style or later doughnut style
2. Interior welds of OEM Y pipe is a non tech area at this time
3. Y pipe must be installed with only one set of cylinder gaskets only

Gaskets and Head Base

1. Base gasket material is a non tech item but must be used. With OEM nikasil cylinder the requirement has a minimum base gasket thickness of .070 and a maximum thickness of .077 of an inch. Cast iron lined cylinders are allowed with a maximum of .070 and thickness of .085 of an inch

Ignition

1. Must be OEM only and of the 4 possible OEM CDI's for EC55PM are required
2. 1999-2002 small plug CDI (know as XCF style)
3. 2002-2003 big plug CDI (known as Pro x style)
4. 2003-2007 8 plug PERC style
5. 2008-2016 6 plug PERC style
6. CDI cannot be opened or reworked in any way. This is strictly prohibited.
7. Must use OEM flywheel for each model year of CDI that is used, for now
8. Stator - no rewind stators at this time
9. Flywheel - cannot be altered in any way from OEM manufacturers design at all
10. Fan blades - cannot be removed or machined
11. Coil caps and wires are to be OEM or aftermarket equivalent and readily available

Cylinder Head/Heads

1. OEM heads with EC55PM or EC55PMA castings
2. May have a single cut in the exact centre of the head to allow for better servicing of the engine, by being split into 2 pieced head
3. No welding to gasket surface area or spark plug sealing surface area
4. Air cooling fins may be welded for the purpose of repairing damage only
5. Welding repairs must be reported to tech officials and may be subjected to having the motor checked prior to the next race
6. Cylinder head gaskets area may be machined and is a non tech item at this time
7. Head and piston squish must be measured on both sides of piston above the pin area. Both measurements are taken and divided by 2 to get an average squish
8. Cylinder head compression is set at a maximum of 146 psi using the tech gauge by the tech official
9. Minimum head cc is set at 27.0 and must use a Barrett Tool

Crankshaft Seals

1. May be OEM or exact replacement from aftermarket supplier and substitution must be readily available

Crankcase

1. 550 can use OEM EC45PM cases or EC55PM cases
2. Case sealer is open, this is not a tech item
3. Crankcase base gasket surface cannot be welded or machined
4. Cases can only be welded or machined for the purpose of repair from damage
5. Oil injection pump and gear drive may be removed, case opening sealed by a cover. The plate is a non tech item
6. Oil line brass injection nozzles may be sealed up but must NOT be removed from the cases

Crankshaft and Rod

1. Must be OEM part only. Absolutely no substitutions
2. Crankshaft bearings and connecting rods may be OEM or substituted with aftermarket parts, but must be exact replacements for OEM and be readily available and must be the same alloy used by the manufacturer as the original.
3. No rod resizing allowed, that would allow for larger or smaller bearing to be used
4. No offset crank rod pins allowed
5. Connecting rod must meet OEM specifications
6. No ceramic style ball bearings or polymer style cages
7. No coatings can be applied to the bearings or crankshaft parts at all

Cylinders

1. EC55PM cylinders only. Can be early EC55PM with cast in steel liner, or later EC55PM nikasil cylinders
2. Re-sleeving is allowed but will be inspected slightly diligently, if deemed questionable, they will not be allowed to race
3. If early cast in liner EC55PM cylinder is used it can be bored over to .040 size maximum
4. No overboring of nikasil cylinders
5. No removal of any material in any way to the intake or exhaust tract of either style of cylinder
6. No excessive chambering of stock or oversized bored cylinders allowed
7. Early EC55PM cylinders with decompressors may have opening closed off, but from exhaust opening side only

NOTE: in the spirit of equalising competition, changes may be made to these rules as required. All drivers, car owners, and/or teams will be advised of any rule change in advance.

Non-compliance with the specifications outlined herein may subject violating driver to disqualification, loss of money and points, and may subject them to suspension and/or fine.

All decisions by the track tech officials will be final. All rules are subject to the interpretation and judgement of the track officials in charge. All equipment not governed by the rules is to be submitted for approval prior to usage. No equipment will be considered approved by reason of having passed tech inspection unobserved. Rules apply to all race events.