2021 I94 Speedway Limited Late Model Rules

Afco Shocks are available at Lou Fegers Racing Equipment in Elk River-1-800-328-3618.

For rules clarifications call Scott at 320-699-9051.

THE RULES AND/OR REGULATIONS SET FORTH HEREIN ARE DESIGNED TO PROVIDE FOR THE ORDERLY CONDUCT OF RACING EVENTS AND TO ESTABLISH MINIMUM ACCEPTABLE REQUIREMENTS FOR SUCH EVENTS. THESE RULES SHALL GOVERN THE CONDITION OF SPEEDWAY EVENTS AND, BY PARTICIPATING IN THESE EVENTS, ALL RACEWAY COMPETITORS ARE DEEMED TO HAVE COMPLIED WITH THESE RULES. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF, OR COMPLIANCE WITH THESE RULES AND REGULATIONS. THEY ARE INTENDED AS A GUIDE FOR THE CONDUCT OF THE SPORT AND IN NO WAY ARE A GUARANTEE AGAINST INJURY OR DEATH TO PARTICIPANTS, SPECTATORS OR OTHERS.

References are made throughout these regulations requiring and/or recommending that particular products meet certain specifications. These products are manufactured to meet or exceed certain criteria and are labeled as such upon satisfying those criteria. Any change to these products voids that certification. Under no circumstances may any certified product be altered from the "as manufactured" condition or such certification is voided.

TABLE OF CONTENTS

Article 1: Definitions Article 2: General Rules Article 3: Points System Article 4: Body Article 5: Roll Cages Article 6: Chassis Article 7: Cockpit Article 8: Suspension Article 9: Electrical System Article 10: Fuel System Article 11: Tires & Wheels Article 12: Braking System Article 13: Drive Train Article 14: Engine Article 15: Weight Article 16: Safety Article 17: Ford Crate rules Amendments

ARTICLE 1: DEFINITIONS

1.1 Racecar: An automobile designed solely for competition on oval racetracks, controlled from within by a driver.

1.2 Automobile: A vehicle which carries its own motor and operates on four non-aligned complete wheels, of which two are used for steering and two for propulsion.

1.3 Vehicle: A man-made locomotive device propelled by constantly taking real support on the earth's surface whereas the propulsion and steering are under the control of a driver aboard the vehicle.

1.4 Driver: The person controlling the operation of the racecar. The driver is expected to understand how to operate the mechanisms which control the speed, direction and braking of the racecar.

1.5 Participant: A person directly involved in the mechanical operation and/or management of a racecar, including, but not limited to, drivers, crew members, racecar owners, sponsors and their family members.

1.6 Event: A sanctioned competition between two or more drivers and their racecars. An event shall consist of practice (hot laps) and actual racing contests.

1.7 Official: An official shall be any person participating in the exercise of authority for enforcing or interpreting these rules. The official may also make judgments concerning the conduct of participants and declare penalties for breaches of these rules, as well as perform technical inspections on any racecar. The combination of officials may vary from week to week and from one racetrack to another.
1.8 Promoter: An entrepreneur who oversees the operations of the racetrack, either as a tenant or owner of the facility. Furthermore, the promoter is the person responsible for the implementation of rules, hiring staff and financial compensation to participants.

1.9 Cockpit: The volume of the racecar which accommodates the driver.

1.10 OEM: An original equipment manufacturer (OEM) manufactures products or components that are purchased by another company and retailed under that purchasing company's brand name. OEM refers to the company that originally manufactured the product. OEM replacement parts are those which have been manufactured by another company to the same specifications as the OEM parts.

1.11 EIRI: Except in rare instances.

ARTICLE 2: GENERAL RULES

2.1 All participants are subject to the rules of the I94 Speedway Limited Late Models and are expected to know the rules.

2.2 Approval of any racecar by an I94 Speedway official shall mean that the racecar is approved for participation in the event and shall not be construed in any way to mean that the inspected vehicle is guaranteed to be mechanically sound or safe. Be it further declared that officials shall not be liable for any mechanical failure, nor for any losses, injuries or death resulting from the same.

2.3 Conduct:

2.3.1 Participants will conduct themselves as professionals. Any unsportsmanlike conduct by a participant shall be grounds for disqualification and/or fine. This will be strictly enforced.

2.3.2 Drivers are responsible for the conduct and actions of their car owners, crew members, sponsors and family members.

2.3.3 Absolutely no alcoholic beverage or other illegal chemical substance may be consumed by a driver prior to, or during, an event. The duration of the event shall also include all support class events run as a part of the overall program. The use, sale or distribution of illegal drugs at any time shall be cause for immediate and indefinite suspension.

2.3.4 Any participant who defies or violates the intent or spirit of the I94 Limited Late Model rules shall be considered to have engaged in unsportsmanlike conduct and shall be dealt with accordingly and swiftly by track officials.

2.4 All drivers must be at least sixteen (16) years of age (proof of age required). Drivers under eighteen (18) years of age are required to have a signed Parental Consent Form. The Parental Consent Form must

be signed by a parent or legal guardian, and must be received by an I94 Official prior to participation of the driver in any event.

2.5 I94 Speedway may require any driver to undergo a physical examination by a licensed health care provider prior to being allowed to participate in any event.

2.6 No equipment or racecar will be considered as having been approved by reason of having passed through inspection unobserved.

2.7 All racecars must be able to join the race lineup on demand and unassisted or must go to the rear of the lineup for the start of the race.

2.8 I94 Speedway reserves the right to add to, delete, supersede or modify any rule, exhibit or drawing that the Speedway deems necessary for the conduct of events and/or safety of participants. All amendments are effective on the date of publication by I94 Speedway regardless of when a person subject to the rules receives actual notice of the amendment.

2.9 Every driver must inspect the racing surface and the track area to learn of any obstructions or other defects which, in the driver's opinion, presents an unsafe condition for competition. The driver shall report any unsafe condition in writing to an official. Any driver that competes in an event is considered to have inspected the track surface and surrounding perimeter to determine that all conditions are satisfactory. If the driver does not feel that the conditions are satisfactory, the driver should not compete in the event. The driver further acknowledges that he or she is aware that auto racing involves risk, and that by competing in an event, the driver assumes these risks with full awareness and responsibility.

2.10 All drivers are responsible for registering their racecar for each event in order to ensure their respective starting position in each event.

2.11 I94 Speedway reserves the right to refuse to accept the entry of any racecar or participant. Furthermore, I94 Speedway reserves the right to revoke or cancel any entry, or any participants claimed right to be on the racetrack's premises, if it is determined that a participant's presence or conduct is not in the best interest of the sport of auto racing, other participants, spectators, track management and/or employees of the track.

2.12 Raceceivers and Transponders are mandatory at I94 Speedway. Transponders are available for rent at the track.

2.13 No computers allowed on the racecar, including, but not limited to, electronic traction control devices. Any driver found to be using traction control will be subject to a minimum fine of five thousand dollars (\$5,000) and up to a lifetime suspension from all events.

2.14 Technical Inspections:

2.14.1 For all classes at all events, the top five (5) finishers in the heat and main event and any other racecars as instructed by officials, are required to report to a designated area after the completion of the heat and main event where mandatory and varied post-race technical inspections will be required to take place.

2.15.2 At the discretion of the official(s) overseeing an event, any participant may be disqualified by the official(s) for violation of any rule and/or equipment or action(s) deemed to be hazardous to other participants or officials.

2.15.3 All racecars are subject to inspection by an official at any time. Any driver whom refuses to allow any inspection by an official, or terminates an inspection in progress, shall be subject to a fine of Five hundred dollars (\$500), loss of all points earned to-date for the current season and forfeiture of all cash and/or awards earned at the event.

2.15.4 Any illegal part discovered through inspection any time after the driver signs in to compete in that event can be confiscated by an official and forfeited by the driver. For first infraction, driver discovered to be using illegal parts of any kind shall be subject to a fine of up to Five dollars (\$500), loss of all points for the night and forfeiture of all cash and/or awards earned for the night. For second infraction, driver shall be subject to a fine of up to one thousand dollars (\$1,000), loss of all points earned for 2 nights and forfeiture of all cash and/or awards earned for the night. Confiscated parts will be sent to manufacturer for inspection. Failure by the driver to surrender any illegal part for confiscation shall result in a separate penalty, in addition to other applicable penalties under this rule.

2.15.5 All measurements must be made while the racecar is stationary on a flat horizontal surface.

ARTICLE 3: POINTS SYSTEM

3.1 Drivers competing in an event are eligible to earn track points at the racetrack.

3.2 Track points will be awarded to each driver in the races as follows:

General

Points go to the driver. The driver will receive feature points only, or B-feature points if unable to qualify for the feature. All drivers that fail to start or qualify for the main event are awarded 45 points. If you do not compete in a heat or B feature you will not receive the 45 points.

Heat Races

No points for heat races

Consolation Races

All drivers who fail to qualify for the feature event will receive 45 points.

Feature Races

Pos. Points

1st 100	7th 78	13th 66	19th 54
2nd 95	8th 76	14th 64	20th 52
3rd 91	9th 74	15th 62	21st 51
4th 87	10th 72	16th 60	22nd 50
5th 84	11th 70	17th 58	23rd 49 6th

81 12th 68 18th 56 24th 48

If starting more than 24 cars: 25th: 47 pts, 26th: 46 pts, 27th Back: 45 pts

3.3 Show Points All drivers in each class participating in the race events at a track will receive show points based upon the number of cars participating in that class, as follows:

1 to 9 cars participating, ten (10) show points.

10 to 15 cars participating, eleven (11) show points.

16 or more cars participating, twelve (12) show points.

Participating means that a car must take a green flag at some time during the racing program, including hot laps.

DNF (did not finish). Points awarded to DNF cars based on the order in which they were lined up at the start of the race (1st lap) or number of laps completed. Any car judged to be at fault for restart/accident will be scored behind any others who completed the same number of laps or were involved in the same incident.

ARTICLE 4: BODY

(See body diagram for measurements)

4.1.1 1980 through current-year model American-manufactured stock car bodies (Toyota Camry body is legal).

4.1.2 Standard dirt-style bodies are required. Roof posts/rear sail panels may have a maximum of a two (2) inches outward bow from top to bottom. Roof posts/sail panels may have two (2) inches of maximum height at center and taper down to 0 inches at top and bottom. Front of sail panels/roof posts can go no further forward than the back of driver's seat at shoulder height. Plastic manufactured molded roofs and rear roof posts/sail panels are permitted but must meet the dimensions for roof, rear roof post/sail panels.

4.1.3 Must have a minimum one (1) inch roll at the top of the fenders, doors and quarter panels; a sharp edge will not be allowed. Body roll must go from sides over upper body, and not upper body over sides. A single strip attached to the edge of the body, and riveted, both on the side and the top, will not be allowed. The body line must be a smooth even line from front to rear.

4.1.4 No part of deck lid may extend beyond the quarter panels at the rear. Maximum height of body, fenders, doors, deck lid, etc., at any point, from the ground, shall be thirty-eight (38) inches measured at the center of the deck from left to right.

4.1.5 Lips are not allowed anywhere on the nose, body or roof. Wedge-style bodies are not allowed. Roof spoilers and/or wings are not allowed. Bead roll for rigidity is permitted.

4.1.6 Must have a complete body. Leading edge of quarter panels must have same measurement from top to bottom as door panels; however, quarter panel may be tapered toward the rear of the car up to three (3) inches from front to back.

4.2 Stock appearing nose must be made of molded-type material. No Carbon Fiber, no steel.

4.2.1 Nose side extensions must be flexible and may not extend outside front tires with wheels straight ahead. Nose side extensions may not flare out or up. Nose sides may not alter the original shape of nosepiece and must be braced with collapsible supports.

4.2.2 Fender flares may not extend up more than four (4) inches above fenders. Maximum width permitted at fender flares is ninety (90) inches. Nosepiece flares must be made of flexible material and may not extend more than four (4) inches past the front tires on either side.

4.2.3 Nosepiece may extend to a maximum of fifty-two (52) inches from center of front hub furthest point forward. Bottom of nosepiece must be mounted parallel to the ground (not tilted back in any way). Tow hooks are recommended.

4.3.1 Front fender and hoods must be level and flat from left side to right side of car, and at least as far back as the engine plate. Fenders may not angle up from rear to front of car. No part of fenders or hood may be lower than the outside bodyline. No Carbon fiber hoods.

4.4.1 Roofs must be a minimum of forty-four (44) inches long and forty-eight (48) inches wide. Maximum size of roof may be fifty-four (54) inches long and fifty-two (52) inches wide. Oddly-shaped, partial or tilted roofs are not allowed.

4.4.2 Roof must be stock appearing and level with deck lid from side to side at outer edge, and must run parallel to body/outer deck lid edge. Roof posts/supports are mandatory. All posts must go from roof edge to outside edge of body on both sides.

4.4.3 Front posts must be flat and the same width from top to bottom, and may be two (2) inches maximum width with a one (1) inch break at top and bottom.

4.4.4 Rear roof supports must be of the same size and shape. Lips on rear edge for roof supports are not allowed. If a break is required for roof support, it may be no larger than One (1) inch and must be turned

toward the interior of the car. Rear roof supports must be attached to the body and roof at the same point on both sides of the car. Rear roof posts/rear sail panels may have a maximum of two (2) inches outward bow from top to bottom.

4.4.5 Lips of any kind on front, rear or sides of roof or roof posts are not allowed. Bead roll is permitted. **4.4.6** Maximum of one and one-half (1.5) inches roll turned under is permitted along the front and rear edge of the roof for additional support.

4.5.1 Glare-preventing shields may be a maximum of four (4) inches and must be hinged for safety.4.5.2 Window openings in the rear roof supports may be filled with clear Lexan or remain open. Both sides must be the same.

4.6.1 Both door sides may be no higher than thirty-eight (38) inches from ground, when measured at the steering wheel, with a maximum length of thirty-five (35) inches including any skirts or extensions.

4.6.2 Concave doors are not allowed. Doors may not angle in toward center of chassis at any point.

4.7.1 Tire clearance from doors and quarter panels must be a minimum of two (2) inches. Tire must be fully visible from the side of the car.

4.7.2 Offset rear quarter panels front to back are not allowed. Rear quarter panel taper-in must start at center of rear wheel hub.

4.7.3 Dishing and/or lips running vertical on rear edges of quarter panel are not allowed. Quarter panel may not angle in toward center of chassis at any point.

4.8.1 Spoilers must be made of aluminum or Lexan and must be securely attached to top edge at rear of deck.

4.8.2 Bolt-together spoilers must be assembled so that pieces are at the same angle.

4.8.3 Spoilers may have a maximum height of eight (8) and maximum width of seventy-two (72) inches. Spoilers will be measured according to total length and width of material, in any shape. If aluminum angle is used to brace edge of spoiler it may not add to spoiler height or length.

4.8.4 Maximum of three (3) spoiler supports are permitted. Spoiler may be hinged to allow for adjustment to angle.

4.9 Interior body work of the car may be dropped to a maximum of three (3) inches below the top of the doors, and must be a minimum eleven (11) inches below the roll cage.

4.9.1 If utilizing a dropped interior, interior panel must fasten flush at the top of the doors and taper gradually toward the center of the car without creating any lips. The minimum taper permitted shall be eight (8) inches.

4.9.2 If utilizing a dropped interior, interior must taper up in a straight line to the quarter-panel height, and be flat and level for a minimum of thirty-two (32) inches to the end of the rear deck lid/quarter panel/spoiler. Dropped interior may begin no further forward than the firewall, which in turn may be no further forward than the engine plate. At the firewall, across the center of the car, the vertical drop to the interior of the car may be a maximum of three (3) inches.

4.9.3 If interior is flat throughout car, it must maintain a minimum clearance of eleven (11) inches from the roll cage to allow for easy exit.

4.9.4 If interior is flat, the panel must run in a straight line from immediately behind the driver's seat to the base of the spoiler/rear of deck lid.

4.9.5 All race cars with interior panels may be no more than three (3) inches in height at any point in the car. The portion of the panel running beside the driver must taper to zero.

4.9.6 Officials reserve the right, in the public image of the sport, to assign, approve or disapprove any advertising, sponsorship or similar agreement in connection with any event. All cars must be neat

appearing and are subject to approval of officials to compete. By competing in an event, all drivers agree to comply with the decisions of officials in this regard.

ARTICLE 5: ROLL CAGES

5.1 Round steel tubing, seamless roll-over bars are required for the basic roll cage, and must be acceptable to officials. Acceptable tubing is as follows: minimum 1.500" O.D (.095) for mild steel and DOM tubing or (.062) chrome moly tubing. Aluminum and/or other soft metals are not allowed. Roll bar connections must be properly welded.

5.2 Installation and workmanship must be acceptable to officials.

5.3 With helmet on and driver securely strapped into the racing seat, top of driver's head must not protrude above the roll cage.

5.4 Must have a protective screen or bars in front window opening in front of driver's face.

5.5 A minimum of three (3) driver side door bars must be parallel to ground and located perpendicular to the driver so as to provide maximum protection for the driver, but without causing undue difficulty in getting in or out of the racecar. Side bars must be welded to the front and the rear of the roll cage members. Door bars and uprights must be at least one and one-half (1.5) inches in diameter at a minimum of eighty-three one-thousandths (0.083) of an inch thickness and be gusseted in place. The door bars must have four (4) vertical studs per side and must be equally spaced.

ARTICLE 6: CHASSIS

6.1 Wheel base must be a minimum of 103 inches with no tolerance. Measurement will be taken from the center of the front hub to the center of the rear hub on the right side of the car.

6.2 No in-cockpit weight adjustment of any kind. No weight adjustments allowed within driver's reach. **ARTICLE 7: COCKPIT**

7.1 Loose objects and/or weights are not allowed.

7.2 Air bags are not allowed.

7.3 Rear view mirrors are not allowed.

7.4 Floor and firewall must be complete in the driver's compartment. Interior sheet metal cannot be higher than or enclose a standard window opening. Sheet metal in the driver's compartment must be horizontal from the top of the driver shaft tunnel to the right side door bars or angle from the top of the drive shaft tunnel upwards to the top of the right side door bars. Driver must be able to exit the racecar from both sides.

7.5 Rack and pinion steering allowed. Rear mounted Power steering pumps allowed.

7.6 Quick-release coupling on steering wheel is mandatory. Plastic couplings are not allowed.

7.7 Factory-manufactured racing seats are mandatory, and must be acceptable to officials.

7.8 Homemade aluminum, plastic or fiberglass seats are not allowed.

7.9 High-back aluminum seats only. Full containment racing seats are strongly recommended. Must be properly installed.

ARTICLE 8: SUSPENSION

8. **0-**No bumps, or any other device to limit shock travel on the front of the car.

8.1 4-Bar and Z-Link rear suspensions allowed. One shock per wheel/ one spring per wheel. No progressive springs, standard springs only. **8.1.2** Limited to one spring rubber per spring.

8.2 Shocks- Integra PT#'s #310 42174-8, #310 42175, #310 42194, #310 42198-2, #310-

42174-12 Due to the unavailablilty of the Integra Shocks we will be adding the Afco series 10 shock. Left front- #5 or a #5-3, Right front-

#4-10 or a #4-12. Left rear- #8-2. Right rear- #3-5 or #4. Coil over kit

allowed. Only one shock per wheel. Absolutely no modification to shocks will be allowed. 8.3.1 Left rear shock option: shock must be steel, nonadjustable, no remote or external canister type shock allowed. Shock can have multi-piece steel body-no bulb top allowed. Eyelet must be fixed to body.

No Schrader or Bladder style valves allowed.

8.3.2 Track retains the right to exchange a single shock or all 4 shocks with any driver finishing the feature in the top 5. Track can have exchanged shock/shocks tested to verify legality and return/exchange shock back with driver. Any driver found to have illegal shock/shocks will lose points and winning for that night's events. 2nd offense will result in same as first offense with \$500.00 fine ,3rd offense will result in \$1000.00 fine and loss of all points and winnings. **No shock covers in Tech/scale Area.**

8.3.3 No limited slip quick change rearends of any kind.

ARTICLE 9: ELECTRICAL SYSTEM

9.1 Battery: Must be securely mounted inside frame rails and covered with a flap over the battery top.

9.1.1 One (1) 12-volt battery only (no 16-volt batteries).

9.1.2 Voltage converters are not allowed.

9.1.3 All battery posts must be securely covered.

9.2 Ignition: MSD or HEI ignition will be allowed. No magnetos.

9.2.1 Only one ignition box allowed.

9.3 Kill switch required within easy reach of the driver. The switch must be clearly marked "OFF" and "ON". Crank trigger ignitions are not allowed.

9.4 Digital gauges are not allowed. Digital tachometers are permitted.

9.5 Wiring elements must be accessible for technical inspection. Any racecar advancing spots and missing will be subject to disqualification.

9.6 All cars must have rev limiter to meet RPM limit rule as specified for engine being utilized. This must be out of reach of the driver but easily accessible for inspection at all times.

ARTICLE 10: FUEL SYSTEM

10.1 Fuel: Automotive gasoline with racing gas blend only! No E85 or E98 allowed. No oxygenated fuels allowed. Additives of any kind are not allowed. Penalty for illegal fuel is loss of points, cash and awards earned for that event.

10.1.1 Upper cylinder lubricants are not allowed.

10.1.2 Electric fuel pumps are not allowed. Belt driven pumps are allowed.

10.1.3 Must be naturally aspirated.

10.1.4 Fuel injection is not allowed.

10.1.5 One carburetor spacer is permitted. Spacer opening must be perpendicular to the base of the carburetor.

10.2 Fuel Cell must be commercially manufactured and must be mounted utilizing at least two (2) steel straps. Straps must be two (2) inches wide at all measuring points.

10.2.1 Must be enclosed in a steel container and must be protected in rear of axle by roll cage tubing mounted securely.

10.2.2 No part may be lower than protective tubing. Protective tubing must be no wider than six (6) inches on both sides. Fuel cell may be no lower than ten (10) inches from the ground.

10.2.3 Must have check valves. A ball-type, flapper or spring or filler rollover valve is mandatory for fuel cells without a positive seal filler neck/cap system.

10.2.4 Limited to a maximum capacity of thirty-two (32) gallons. ARTICLE

11: TIRES & WHEELS

11.1 Tires- **Used** Hoosier Late Model tires- W30 Tread depth will be 6/32 or more is illegal. Siping and/or grooving and/or grinding is allowed on all tires. W70-W55 can be new.

11.2 Wheels- Any approved racing wheel allowed. Rim width must not exceed 14 inches. No knock-off hubs or wheels. Any hard surface wheel disc when used must be mounted under a bead lock or bolted to wheel by at least three (3) bolts. No other hard surface wheel disc may be used.

- **11.2.1** Carbon fiber wheels not allowed.
- 11.2.2 Stickers are not required.

11.2.3 Bleeder Valves are not allowed.

ARTICLE 12: BRAKING SYSTEM

12.1 Braking - Must be operating during inspection.

12.2 Must have caliper and rotor on all four wheels.

12.3 Brake shut-offs are allowed.

12.4 Front-to-rear brake bias is permitted.

12.5 Brake floaters are allowed.

12.6 Brake lines must be visible.

ARTICLE 13: DRIVE TRAIN

13.1 Drive Train- Steel, Aluminum, and carbon Fiber drive shafts are allowed.

13.2 Transmission and working clutch required. Must be able to shift to forward and reverse with engine running. No direct drives allowed.

13.3 Quick change rear ends allowed.

ARTICLE 14: ENGINE

14.1 Option #1-9.5:1 Compression Engine All engines used in competition must be able to be used in conventional passenger cars.

14.1.1No Pontiac, Buick, Oldsmobile, AMC, or other engines allowed. Castings and fittings must not be changed.

No machine work on outside of engine or on front or rear of cam. No aftermarket blocks allowed. No Bowtie, SVO or any special production blocks allowed. No splayed or aftermarket main caps allowed. No turning a block that was not produced as a 4 bolt main into a 4 bolt main block. No grinding or polishing of any kind allowed to the block. The two rear oil return holes in lifter galley can have the flashing ground out of the hole only. Lifter galley vent tubes are not allowed. Grinding for clearance for cam gear is allowed on front of block.

14.1.2 Chevrolet 305, 307, & Ford 302 w/aluminum intake: (max. overbore .060")

Chrysler 318 w/aluminum intake: (maximum overbore .040")

Chevrolet 327, 350; Chevrolet Edelbrock part # 5001with an ignition chip of 6800. Chrysler 340; Ford 351's: (maximum overbore .060")

Chrysler 360: (maximum overbore .040")

No Chevrolet 302 engine components allowed

14.1.3All engines must not exceed 9.5 to 1 compression ratio. No intermarriage of rods or crankshafts to block allowed.

Example: 305 Chevy must run 305 rods & crankshaft

318 Chrysler must run 318 rods & crankshaft

350 Chevy must run 350 rods & crankshaft

351C Ford must run 351C rods & crankshaft

14.1.4Crankshaft must be stock production with I.D. numbers intact or aftermarket crankshaft with approved part number only. Aftermarket crankshaft and connecting rods allowed are:

Chevrolet:

Eagle Rod SIR5700BBLW • Eagle Rod SIR5700BPLW

Eagle Crank 103503480 • Eagle Crank 103503480CM • Eagle Crank 103523480

Scat Crank Short P/N# 910442 • Scat Crank Short P/N# 910526

Scat Rod P/N# 35700P • Scat Rod P/N# 25700P, Scat Rod P/N 25700 and

Scat Rod P/N 35700 Ford 302:

Eagle Rod SIR5090FB • Eagle Rod SIR5090FP Eagle

Crank 103023000 • Eagle Crank 103023000-50 Ford

351W:

Eagle Rod SIR5956FP • Eagle Rod SIR5956FB Chrysler

360:

Eagle Rod SIR6123CB • Eagle Rod SIR6123CP

Eagle Crank 103603580 Chrysler 318:

Eagle Rod SIR6123CB

Eagle Crank CRS103403310

If using stock connecting rods and crankshafts, they must be O.E.M. to block. No lightening, grinding, knife edging or polishing of any type on any connecting rod or crankshaft, whether stock or aftermarket. Stroke must match block. No altered cranks.

No lightening, grinding, knife edging or polishing of any type allowed. Balancing allowed, material removal by drilling only. No heavy metal allowed. No fluid balancers allowed (OEM balancers only). Balancer may be degreed but must meet measurements specified below. No hubs only allowed. Minimum diameter 283-307 and small journal 327, 6 1/8 x 3/4 inch thick. 305-350 and large journal 327 minimum diameter 6 3/4 x 1 3/16 thick. Resizing journals is allowed up to .030 under size.

14.1.5GM (OEM) powdered metal rods allowed, must remain 5.7" length. Aftermarket rods

allowed only if using approved part number. Rod length must match block. No grinding, polishing, sanding of rods allowed other than balancing rod ends. Maximum 3/8" bolts. No cap screws allowed on stock rods. A minimum of 3/4 inch (1" recommended) inspection hole in side of oil pan 2-1/2-inch down from pan rail in line with a journal. Inspection hole must be easily accessible to inspector; if not, the inspector may require removal of oil pan. Floating wrist pins allowed.

14.1.6Cylinder Heads must be stock cast iron production or one of the following specified aftermarket cylinder heads: Engine Quest EQ-CH3501 (Chevrolet) or EQ-CH318B (Chrysler) or Ford World Products Windsor Jr. p/n 5303. 1987-1995 Chevrolet "Swirl port" heads allowed. Ford "302" GTP heads may be used on both the 302 & 351W. Any evidence of sanding, polishing, relieving, grinding, porting, chemical treatment or addition of material (chemical or otherwise) to the cylinder head ports or combustion chamber will cause the head to be declared illegal. Cylinder heads with multiple angle valve grinds permitted. **1**. The following heads will NOT be allowed. No angle plug, bowtie, SVO, W-2, Magnum, Vortec or any other aftermarket heads allowed at any time. Some of the Chevrolet casting numbers NOT allowed include: 186, 187, 291, 414, 492, 461, 461X, 462, 432, 040, 041, 370, 10239906, 14011083, 14096217, 1012532, 10208890, or 12554290. No Gen. II heads allowed.

2. No external sanding, grinding or removal of ID numbers.

- **3.** Any relief cuts made below the valve seat must be made using a carbide cutter (no stones) and may not exceed more than 1/4-inch below the top of the valve seat. No porting, polishing, grinding or port matching allowed at any time.
- **4.** Stock production valve spring diameter only. No bee hive or tapered valve springs allowed. No dual valve springs allowed on Chevrolet engines.
- **5.** Screw-in studs & guide plates allowed. Pinning of press in studs allowed. Valley pan allowed.
- **6.** Stock type stamped steel rocker arms. Or PEP Rocker Arms-RR350A 1.5 3/8 stud, RR350 BSR 1.5 7/16 stud. Elgin Rockers SSR-840 RS 1.5 3/8 stud, SSR-1840 RS 1.5 7/16 stud.
- **7.** No stud girdles allowed. Maximum valve sizes will not be specified. No polishing, grinding, adding of foreign material or cutting allowed to combustion chamber.
- **8.** Deburring is allowed on engine blocks, heads and intake on the outside machined edges only, not to exceed .040 inches.
- **9.** The following valve sizes apply for aftermarket heads: For EQ-CH3501, 1.94 intake valves and 1.50 exhaust. Valve sizes cannot be changed. Heads cannot be angle milled.
- **10.** Chrysler engines are allowed to run the Engine Quest head EQ-CH318B with the following valve sizes: intake valve 1.920" and exhaust valve 1.624" or intake valve 1.94" and exhaust valve 1.60". These are the only valve sizes allowed on this cylinder head. No angle milling allowed.
- **11.** Ford engines are allowed to run the Ford World Products Windsor Jr. head, valve size 1.94 intake, 1.60 exhaust, no angle milling allowed.

14.1.7Intake Manifold:

Chevrolet 305, 307 cid: Weiand #7547, 7546 or 7547-1 aluminum intake only.

Chrysler 318 cid: Edelbrock #5076 or Weiand 7545 aluminum intake allowed. (Note: The marketing division of Holley has replaced the Weiand brand name of some products to

Team G. Be certain that you refer to the product number instead. Additional

information can be found on the Holley website at www.holley.com.

Chevrolet 327, 350, Weiand #7547, #7546, #7547-1-intake only.

Chrysler 318-340-360 - #5076 Edelbrock or Weiand #7545 Ford

Weiand #7515 1-4 barrel gas carburetor only.

14.1.8 No roller cams and lifters. No mushroom lifters. No bushing of lifter bores

allowed. Lifters must match block being used. No gear drives allowed. No coating,

painting or any other work to inside of intake manifolds, heads and block lifter galley

allowed. Must be made of magnetic material and be free to

rotate. Maximum of three lifter bores may be bushed.

14.1.9Flat top or dished pistons only; no domed pistons.

Refer to rule 14.4 on page 14 for Headers, Radiator, Exhaust.

14.2 Option #2 – Engine

14.2.1 No high-performance parts. Aftermarket crankshaft and connecting rods allowed are: Chevrolet:

Eagle Rod SIR5700BBLW • Eagle Rod SIR5700BPLW

Eagle Crank 103503480 • Eagle Crank 103503480CM • Eagle Crank 103523480

Scat Crank Short P/N# 910442 • Scat Crank Short P/N# 910526

Scat Rod P/N# 35700P • Scat Rod P/N# 25700P, Scat Rod P/N 25700 and

Scat Rod P/N 35700 Ford 302:

Eagle Rod SIR5090FB • Eagle Rod SIR5090FP Eagle

Crank 103023000 • Eagle Crank 103023000-50 Ford

351W:

Eagle Rod SIR5956FP • Eagle Rod SIR5956FB Chrysler

360:

Eagle Rod SIR6123CB • Eagle Rod SIR6123CP

Eagle Crank 103603580 Chrysler 318:

Eagle Rod SIR6123CB

Eagle Crank CRS103403310

If using stock connecting rods and crankshafts, they must be O.E.M. to block. No lightening, grinding, knife edging or polishing of any type on any connecting rod or crankshaft, no coating of any crankshaft or rods, whether stock or aftermarket. No marine parts. Absolutely no strokers. Balancing is allowed. No rod cap screws allowed on stock rods. Wrist pins may float. Journals may be resized .030 max.

14.2.2 Maximum overbore – 360 Chrysler will be 0.40. Ford, Chevrolet, and 340 Chrysler will be 0.60.

14.2.3 Stock cast iron 2 or 4 barrel intake manifolds only. No after market, marine or propane intake manifolds. No fuel injected intake manifolds. Absolutely no reworked intake manifolds including No coating, painting, grinding, port matching, polishing or acid porting work on the inside of the intake manifold. A maximum of 2 external cooling lines from the back of the intake manifold running along the top side of the valve covers and entering the thermostat housing or spacer is allowed. Cooling lines cannot go to the water pump, side of the block or any other part of the assembly. Surge tank hose can enter into water pump. Surge tank cannot hold more than one half gallon of coolant and must be located in engine compartment.

14.2.4 No aluminum heads, intake manifolds or blocks allowed. No Bowtie or SVO blocks, cylinder heads or intake manifolds allowed. No other after market blocks. Heads or intake manifolds allowed unless allowed by a specific rule oulined in this rule book. Grinding in the lifter gallery is allowed. No splayed main caps or after market main caps allowed. Lifter galley vent tubes are not allowed.

14.2.5 Maximum cubic inch – Chevrolet 360.4 c.i.d, Ford 362 c.i.d. and 360 Chrysler engine will be permitted a maximum displacement of 367 c.i.d. Any flat-top pistons allowed. Stock bore and stroke. Rods must match block. Chevy rod length 5.7, Ford Cleveland rod length 5.78, Ford Windsor rod length 5.965, Chrysler 318-340 and 360 must use

6.123 length rods. GM (OEM) powered metal rods allowed, must be 5.7 in length. NO dome pistons. Stock block may be decked. Pistons may not protrude out of block on top dead center. Must be even or below block on ALL MAKES.

14.2.6 G.M. may use any production head with a maximum intake valve diameter of 1.94; maximum exhaust valve diameter will be 1.60. No angle-plug heads allowed on Chevrolet.

The only aftermarket heads allowed on G.M. are the World Products S/R, no.s 4351,

4361; 1.94 intake and 1.50 exhaust, the Dart SS#10024361 with 1.94 intake and

1.50 exhaust, and the Engine Quest EQ-CH3501, 1.94 intake valves and 1.50 exhaust.

Valve sizes cannot be changed. No "bowtie" or Vortec heads allowed. Vortec cast no.

10239906. Other casting numbers not allowed are 14011083 and 14096217, 10239906,

1012532, 10208890 and 12554290. No magnum head. Chrysler may use a 340 head on a

360 block. No W-2 heads allowed on Chrysler. Chrysler aftermarket EQ-CH318B with

valve size 1.920 intake and 1.624 exhaust or 1.94 intake and 1.60 exhaust is allowed. For

Ford, Windsor heads must match a Windsor block and Cleveland heads must match the

Cleveland block. The only GT40 head castings allowed are FIZEAA and F3ZEAA. No

A.R.D. heads allowed. The only aftermarket head allowed for Ford is the World Products Windsor Jr., part no. 5303, with 1.94 intake and 1.60 exhaust [casting no. 1-056].

Screw-in studs allowed. Pinning studs allowed. No roller-type or roller-tip rockers allowed. O.E.M.-type stamped steel rockers only. No roller cam. No modifications of any kind allowed on rockers except oil hole may be deburred. Rocker arm oil sprayers are not allowed. Guide plates are allowed.

No stud girdles allowed. Lifter valley pan and rocker poly locks allowed. Stock diameter valve springs only.

14.2.7 Any flat tappet cam allowed. No mushroom cam or lifters allowed. Lifter bores may be bushed. Lifter size must match block bead used. Lifters must be steel or iron and must be free to rotate. Oil deflector is allowed.

14.2.8 No grinding or polishing of any kind allowed on heads and intake manifolds. Valve seats may be ground no further than 1/4-inch below top of seat. Head may be milled.

Push rod holes may be opened up. Block may be decked.

14.2.9 Any fan, water pump, or oil pump allowed; any type pulley allowed.

14.2.10 No dry sumps allowed. No gear drives allowed. No oil accumulators.

14.2.11 No after-market harmonic balancers allowed. O.E.M. stock balancers only. Balancer may be degreed but must meet size requirements below. No modifications of any kind allowed. No 283, 307 or 327 balancers allowed on any engine other than a 283, 307 or a small journal 327. Minimum size 283-307 and small journal 327 is 6-1/8 by 3/4 inch thick. 305-350 and large journal 327 minimum size is 6-3/4 by 1-3/16 inches thick.

No fluid balancers. No hubs only - balancer must be two piece.

14.2.12 No titanium parts or exotic materials of any kind allowed.

14.2.13 Minimum 3/4-inch inspection hole in side of oil pan 2-1/2 inches down from pan rail in line with a journal. Inspection hole must be easily accessible to inspector.

14.2.14 Valve timing configuration and firing order must match engine used.

Example: Chevy 18436572.

14.2.15 No vacuum pump/air pump allowed.

14.2.16 Floating wrist pins are allowed.

14.2.17 No bee hive-conical type valve springs allowed. No dual valve springs allowed on Chevrolet engines.

14.2.18 Main girdle not allowed. Crank scraper not allowed. Pan scraper is allowed.

14.2.19 Deburring is allowed on engine blocks, heads and intake on the outside machined edges only, not to exceed .040 inches.

14.2.20 You are allowed to clearance front of block under timing cover for timing chain clearance.
14.2.21 All heads, including stock and aftermarket heads in all options, can have guide plates installed. Push tube area of heads can be opened up. Valve guide seals can be installed. You are allowed to replace valve guides but must follow stock geometry. Can use valve spring buckets/valve spring locators. Valve spring shims are allowed. Heads can be milled according to class rules and specific milling rules.

14.2.22 ASPIRATION - FUEL

Carburetor: must use stock 4412 carburetor body only. Adjustable/changeable air bleeds are allowed. No after market or billet metering blocks allowed. No floatless carburetors allowed. Carburetor must be mounted with float bowl facing forward. Carburetion will be limited to one (1) stock Holley 500 CFM 2-barrel, part number 4412, with a 1-11/16-inch maximum throttle bore. No grinding or polishing of any kind allowed. All carburetor components MUST be for a 500 Holley. No milling or grinding of throttle shaft allowed; shaft must stay round. Addition of foreign material to the carburetor is not allowed for any reason. Examples include but are not limited to glue, epoxy, silicone, etc. Linkage may be welded to the end of the throttle shaft. The choke and air horn may be removed: this is the ONLY re-working allowed; must have stock measurements. Adapter plate: maximum thickness between carburetor and intake manifold with gaskets and adapter will be one-and-three-eighths (1-3/8) inches.

No devices can be added to the inside of the intake to increase or redirect the airflow

14.3 Option #3 –Engine

14.3.1-604 Crate unsealed

Must utilize soft-touch rev control box with a 6800 RPM Chip. This must be out of reach of the driver, but easily accessible for inspection.

14.3.2-Bore 3.991"-4.060" block casting-no 10243880. Deck height 9.025"+/-.001" crankshaft forged steel P.N. 14088532 piston-flat top, 4 reliefs, 533 grams, connecting rod 5.7 length. 604.15 grams rod upper end 180.3, rod lower end 424.1 gram camshaft hyd roller cam lift .474/.510 at valve. Duration at .50 208/221 cam lobe centerline 112 degrees roller rocker 1.5 ratio, cylinder head casting #12367712, valve size 2.00/1,55. Combustion chamber ccs 62, intake port ccs 205, exhaust port ccs 77, compression ratio 10.5, no tolerances.

14.3.3- All crate specs have to meet all configurations and factory specs.

Any 4 barrel engine will have a 6800 chip.

14.4-Headers, Radiator, Exhausts

14.4.1- Engines overflow tubes must be directed toward the ground and inside the frame rails.

14.4.2-Radiators must be mounted in front of the engine.

14.4.3- Exhaust & Mufflers: 1 Round tube headers only. Tri-Y headers are not allowed. All primary tubes must enter one collector at the same point. No stainless steel headers. Step headers allowed.

14.4.4- Exhaust system and/or mufflers must be mounted in such a way as to direct spent gases away from the cockpit and away from areas of possible fuel spillage.

14.4.5- Mufflers may be required at track's discretion.

14.4.6- Exhaust sensors, merge collectors, dividing collectors and/or extension cones are not allowed.
Collector extension or muffler and turn down may not exceed twenty-four (24) inches.
14.4.7- Zoomies, Crossovers and/or 180's are not allowed.

14.5- No Dry Sump systems allowed, no external oil engine pumps allowed on any engine option.

14.6-Steel head motor setback 29.5" from the center of bottom ball joint to front of engine plate/engine bellhousing flange. Aluminum head motors 25.5"

ARTICLE 15: WEIGHT

15.1 The overall weight of the racecar shall be measured at the conclusion of an event with the driver in the cockpit, wearing complete racing apparel. 2300 lbs.

15.2 Ballast: May not be mounted in cockpit, or outside of body or hood area.

15.3 Must be securely mounted, painted white and clearly marked with the car number.

15.4 Must be attached with at least two (2) one-half (0.5) inch bolts.

15.5 May not be attached to rear bumper.

ARTICLE 16: SAFETY

16.1 It is recommended that each racecar have built-in fire extinguishing equipment, but cannot be of the dry powder type (must be Halon 1211 or equivalent).

16.2 Drivers should have in their pit area as part of their equipment, at all times, a fully charged dry chemical, Halon (or its equivalent) fire extinguisher. Ten- or thirteen-pound fire extinguishers are recommended.

16.3 Driver must wear required helmet, fire suit and five-point safety harness whenever the racecar is on the racetrack. This includes during track packing, warm ups, hot laps and races.

16.4 Helmets are mandatory and must be certified SNELL SA2010 or newer.

16.5 Helmet must accompany driver and racecar at time of inspection.

16.6 Complete one- or two-piece fire suits of a flame retardant nature are mandatory.

16.7 Fire-resistant gloves and shoes are mandatory. Fire-resistant socks are recommended.

16.8 The use of a five- six- or seven-point driver restraint system (safety belts, sub-belt and shoulder harness) is required. Factory-type shoulder belts or straps are not allowed. The use of a seven-point driver restraint system is recommended.

16.9 Metal to metal buckles are required on shoulder and seat belts.

16.10 Shoulder harness must be mounted securely to the main roll cage.

16.11 Where the belt passes through the seat edges, a grommet must be installed, rolled and/or padded to prevent cutting of the belt.

16.12 Driver restraint system must be less than three (3) years of age past the date of manufacture. It is recommended that the driver restraint system be no more than two (2) years of age past the date of manufacture.

16.13 Full-size window net mounted in the left side driver's window opening is required. Window net mounts must be welded to the roll cage. All bars around the driver must have approved roll bar padding. Approved racing arm restraints are recommended.

16.14 Fire-resistant safety neck collars are mandatory.

16.15 Absolutely no plastic except from edge of firewall to body skin and inner wheel tub to body skin **16.16** No aluminum bumpers

17.0 Ford Crate Rules

Hp9009 or hp9008 head or the ford crate head, no port work no cutting / grinding below seat. valve spring 130# at seat Block can be bored to .040 over

Pistons weight and ring pac has to be the same as crate pistons 411/132 grams no custom pistons Same cam specs as crate .528 intake and exhaust duration at .050 is 226

No porting on intake 2921 edelbrock this is the same intake ford puts there # on for the crate Stock block or aftermarket block ok no lightening, recommended running main girdle with stock block Steel oil pan same configuration as crate Cast iron Oil pump in pan 3.4 stroke Crankshaft no less 46# 5.4 rods no less then 600 grams No shaft rockers no stud girdles, same as crate but can be aftermarket Timing chain no belt drive No titanium parts in/on motor

This is whats in the crate motor:

The Ford Racing D347SR7 engine has the power to win - right out of the crate. With lightweight 7MM valves, the D347SR7 features all of the latest developments and improvements from Ford Racing testing along with feedback from racers and engine builders coast to coast. These include parts to let the engine run at higher RPM for long periods without power loss. Improvements in machining minimize the power gains from blueprinting. The D347SR7 includes the following parts and machining improvements vs. the standard D347SR: 7mm lightweight intake and exhaust valves Hardened Steel Lifter pushrod cups Block honed with deck plates D347SR7 Features 347 cubic inches - 4.030" bore - 3.400" stroke BOSS 302 race block – M-6010-BOSS302 415 hp @ 6000 rpm 400 lb-ft @ 4900 rpm (with headers, and a 650 CFM Holley carburetor not included) 10:1 Compression ratio (nominal) SCAT forged crankshaft SCAT forged steel cap screw connecting rods Mahle forged pistons with floating pins Hydraulic roller camshaft M6250-F303, .528" lift intake and exhaust, duration at .050" is 226 degrees intake and exhaust PAC 1218 ovate beehive valve springs Double roller timing chain set M-6268-A302 High-performance 7 quart rear sump circle track oil pan Ford Racing aluminum "Z" cylinder heads M-6049-Z304DA7 with 2.02" intake valves and 1.60" exhaust valves 1.65:1 ratio roller rocker arms Edelbrock Victor Jr. intake manifold M9424-D302 Edelbrock Water Pump SFI approved vibration damper • MSD billet distributor ARP Head Studs Ford Racing polished aluminum Circle Track valve covers M-6582-CT High volume oil pump Engine is sealed for circle track competition where rules allow Engine weight as equipped is 431 lbs. (includes 7 quarts of oil) Additional technical information can be found at www. fordracingparts.com/circletrack Competes directly with the GMPP "604" crate engine. Engine is internally balanced, zero balance flywheel required Depending on your application, a different timing cover, water pump, performance oil pan and pickup may be required. See installation notes Fuel pump

eccentric M-6287-B302 installed, allows use of mechanical fuel pump A standard rotation water pump is

installed on the engine. Other applications may require different water pumps and timing chain covers Firing order 1-3-7-2-6-5-4-8 (5.0L HO and 351W order). Built with current available parts. For rules clarifications call Scott at 320-699-9051.