## **2024 Four Cylinder Pro Stocks – FINAL**

The 4-Cylinder Pro Stock division (FCPS) continues to be an exciting division of Saturday night racing at Wiscasset Speedway! This highly competitive class is proving to be a great "feeder" division, grooming the talents of many young up & coming drivers. The following rules are a continued effort by division participants working together for division growth with respect to providing an affordable level of racing with integrity and parity for which these cars were designed. While we understand these rules may not perfect, we request they not be interpreted as opportunities to cheat and/or discover loopholes to gain an advantage. We shall always welcome and work to accommodate all who respectfully meet the spirit of the rules and desire to race with us. Be warned, this division is not for the faint-hearted, as the focus of improving oneself is often a formidable task. Should you choose this division, we believe you will find plenty of speed, challenge, satisfaction, and lots of fun racing at Wiscasset Speedway!

Since it would be both impractical and nearly impossible to list within the confines of any rulebook, all the modification, adaption and infractions that could and would be illegal, it shall be understood for the purpose of rule enforcement that only those items that are specified in this book are allowable and permissible. In addition, The Wiscasset Speedway management reserves the right to penalize anyone who violates these rules.

1 Body: Body must be securely attached to frame with rivets with a minimum diameter of three sixteenths (3/16) inch. All body panels must be fiberglass with the exception of fenders which may be aluminum; must remain stock appearing and meet template measurements.

- **1.1 Air Flow Devises:** No devises permitted.
- 1.2 Appearance:
- 1.3 "B" Pillar:
- **1.4 Construction:** May use plastic. aluminum or fiberglass. Must maintain the same contour of original body
- **1.5 Height:** All measurements are without driver.
  - **1.5.1 Body:** Can be no less than four and one eighth (4-1/8) inches from the ground.
  - **1.5.2 Nose:** Nose must be a minimum of 2.5 inches from bottom edge of nose to the ground. Must run stock fiberglass nose. Must maintain stock appearance
  - **1.5.3 Roof:** Measuring point shall be ten (10) inches back from top of front windshield seam in center of roof. Must be forty-two and three quarter  $(42\frac{3}{4})$  inches, plus or minus one half  $(\frac{1}{2})$  inch from the ground.
  - **1.5.4 Tail:** Minimum of eleven-point five (11.5) inches plus or minus one half ( $\frac{1}{2}$ ) inch from the ground.
- **1.6 Numbers:** All car numbers must be registered with Wiscasset Speedway. Car numbers must be a minimum of eighteen (18) inches high and three (3) inches wide.
  - **1.6.1** Numbers shall be painted in contrasting colors to the car on both doors and the roof. Reflective chrome, gold or prism numbers are not permitted.
  - **1.6.2** Roof numbers should be visible as read from the grandstand side of the car.
  - **1.6.3** The car number must appear in six (6) inch high numbers in the uppermost right corner of the windshield and on the right rear tail piece.
- **1.7 Panels:** No body modifications permitted.
  - **1.7.1 Door:** A seven (7) inch by one point five (7.5) inch notch can be made in the bottom center of both door panels for jacking purposes.
  - 1.7.2 Engine Compartment:
  - **1.7.3 Fillers:** Body fillers may be used for repair over any damaged areas.
  - **1.7.4 Grill:** Opening cut outs must be centered left to right plus or minus one half ( $\frac{1}{2}$ ) inch on nose. A single lower grill cut out with a minimum of twenty (20) inches wide and a maximum of twenty-two (22) inches wide by a minimum of three (3) inches high and a maximum of six (6) inches high. The grill openings may use an aluminum border plate around the screen. Tape may be used over nose and grill opening cut out screen to regulate the amount of air entering grill opening.
  - **1.7.5 Hoods:** Must be fastened with four (4) three eighths (3/8) inch diameter hood pins, each using steel clips to secure. Hood must fit firmly on to front window, with no gaps, openings, or holes.

- 1.7.6 Interior: All interior sheet metal can be no less than .040 thick aluminum.
- **1.7.7 Nose:** Nose piece must be attached to front bumper. A one point five (1.5) inch aluminum strip with a maximum thickness of an eighth (1/8) inch thick may be attached to the lower portion of the front nose. The strip can be attached to the entire front portion of the nose up to the bottom front portion of the front fender. The strip must be flush with the bottom of the front nose and fender and must have a minimum height clearance of 2.5 inches from the bottom edge of the front nose to the ground.
  - **1.7.7.1 Nose Height:** 2 1/2" minimum from ground to bottom of front.
- 1.7.8 Quarters: Must be as manufactured.
  - **1.7.8.1 Quarter Panel Height:** (measured at seam, left side) 29 1/2" plus or minus 1/2" off ground.
  - **1.7.8.2 Roof:** As manufactured.
  - **1.7.8.3 Roof Height:** (10" back from top of front windshield seam in center of roof) 42 3/4" plus or minus 1/2" from ground.
- 1.7.9 Right Rear Quarter:
- **1.7.10 Rear Deck:** Must be fastened with four (4) three eighths (3/8) inch diameter hood pins, each using steel clips to secure. Lid must fit firmly on to rear window, with no gaps, openings, or holes.
- 1.7.11 Sail panels:
- **1.7.12 Tail:** Must be attached to rear bumper.
  - **1.7.12.1 Bottom of Tail Piece:** (measured at left side corner) 11 1/2" plus or minus 1/2" off ground.
- **1.8 Spoiler:** Material to be aluminum only.
  - **1.8.1** Angle: Must be between fifty-five (55) and seventy (70) degrees and will be checked with an appropriate angle measuring device on the front side of the spoiler.
  - **1.8.2 Bracing:** Absolutely no braces forward or backward of any type are permitted on spoiler.
  - 1.8.3 Height: N/A
  - **1.8.4 Size:** Must be three and half (3 1/2") inches tall and forty-eight (48) inches wide. Thickness .063" to .080".
- **1.9 Tail Piece:** Must be as manufactured.
- **1.10 Windows:** Front windshield must be attached to lower window bed using three sixteenths (3/16) inch poprivets.
  - **1.10.1 Side:** Not permitted.
  - 1.10.2 Quarter: Stock.
  - **1.10.3 Tinting:** the only tinting allowed on any window is: front windshield top, full width x 5" down from top of windshield. All cars must have a Six (6) inch high car number on the top right corner of the front windshield (this is for scoring purposes). \*No other decals can exceed five (5) inch from the top of the windshield.
  - **1.10.4 Rear:** No decals allowed on back window.
- **2 Chassis:** Must be a tube type chassis.
  - **2.1 Bumpers:** Front and Rear bumpers must remain in stock material, wall thickness, dimensions and location. No reinforcements of any kind will be permitted.
  - 2.2 Design:
  - 2.3 Door Plate:
  - 2.4 Drivers Box:
  - 2.5 Fire Walls:
  - **2.6 Frame:** Bottom of main frame rails must maintain a minimum height of three and one half (3½) inches from ground with the driver.
  - 2.7 Front Clip:
  - 2.8 Fuel cell:
  - 2.9 Height:
  - 2.10 Interior: Main Hoop:
  - 2.11 Nerf bars:

- 2.12 Pipe:
- 2.13 Rear Clip:
- 2.14 Seat:
- 2.15 Seat Belts:
- 2.16 Steering Column:
- **2.17 Track Width:** Total width outside to outside of bottom of either the front tires or the rear tires cannot exceed sixty (60) inches.
- **2.18 Windows:** Front, rear and quarter panel windows must remain stock and attached in stock location with three sixteenths (3/16) pop rivets at all times.
  - **2.18.1 Window Braces**: Cars must have a minimum of three (3) braces for front window and a minimum of two (2) braces for rear window. Braces must be a minimum of one (1) inch x one quarter (1/4) inch .063 aluminum.
- **2.19 Welds:** All welds are to be of high quality and must completely surround the joint. Absolutely no butt welds or sharp edges anywhere.
- **2.20 Wheelbase:** Wheelbase cannot exceed eighty and one sixteenth (80 1/16) inches on either side and can be no less than seventy-nine and three quarters (79 ¾) inches on either side.
- **3 Drive Train:** The assembly will consist of the engine long block and all components bolted to it including the intake manifold, carburetor and its adapters, distributor assembly, flywheel, clutch and pressure plate.
  - **3.1 Drive Shaft:** Drive shaft must remain stock and in the stock location. Absolutely no aluminum drive shafts permitted.
    - **3.1.1 Loop:** Safety loop at front of drive shaft recommended.
  - **3.2 Engine:** The only engine package allowed is the Mazda B2200.
    - **3.2.1 Air Cleaner:** Only the Weber Part #9921 7331 air cleaner is permitted. The air cleaner base, element, and top must remain stock and must remain in stock location. Absolutely no ducts, hoses, or other devices directed to or attached to air cleaner will be permitted.
    - 3.2.2 Block:
    - 3.2.3 Camshaft:
    - **3.2.4 Carburetor:** Only the Weber 32 36 16 5L DGV5A carburetor is permitted. The carburetor, all parts of the carburetor, and the adapter plate must remain stock and in the stock location. The air jets, main fuel jets and low speed idle jets may be changed but must be stock jets. No other changes or modifications are permitted on the carburetor.
    - 3.2.5 Compression:
    - 3.2.6 Crankshaft:
    - 3.2.7 Cylinder Heads:
    - 3.2.8 Displacement: Height:
    - **3.2.9 Lifters:**
    - 3.2.10 Manifolds:
    - **3.2.10.1 Exhaust:** All parts of header and exhaust pipe must remain stock and in the stock location. Engine exhaust system may be painted, coated, or wrapped with a high temperature coating. Right side tailpipe turn out (part #Allison 2041) is Mandatory for ALL CompCar of NC, Inc. sanctioned events for the Allison Legacy Race Series (National and Regional events).
      - 3.2.10.2 Intake:
    - 3.2.11 Mounts:
    - 3.2.12 Oil Pan:
    - 3.2.13 Pistons/Rods:
    - 3.2.14 Rocker Arms:
    - **3.2.15 Seals:** The engine serial number must be registered with Wiscasset Speedway.
    - 3.2.16 Valve Train:
      - 3.2.16.1 Stud girdles:
      - 3.2.16.2 Springs:
      - 3.2.16.3 Valves:

- 3.3 Exhaust:
- 3.4 Headers:
- 3.5 Location:
  - 3.5.1 Front to rear:
  - 3.5.2 Height:
- 3.6 Muffler:
- **3.7 Radiator:** All parts of the engine cooling system must remain stock and in the stock location. Only the designated Allison Legacy aluminum radiator is permitted. Radiator overflow hose is permitted. Radiator hold down must remain stock.
- 3.8 Rear ends: Only the stock Speedway Engineering midget six (6) spline quick change rear end.
  - **3.8.1 Axles:** Axles must remain stock. No alterations or lightening permitted in any form.
  - **3.8.2 Tubes:** The Speedway Engineering 7803-10-1 Street Rod Axle Tube with the Currie Enterprise CE-1002 rear axles may be used.
  - 3.8.3 Camber:
  - **3.8.4 Carrier:** Aluminum spool only.
  - **3.8.5 Gears:** 4.11 ring gear and pinion is permitted. Gears must remain stock. No polishing or machining of gear is permitted.
  - **3.8.6 Materials:** The Speedway Engineering 5310A-10 Rear Hub, 8103-2 Mod Lite/Mini Stock axle tube and 790-R28 Mini Stock axle may be used.
- **3.9 Transmissions:** Only the stock Mazda B2200 5 speed transmission is permitted. The transmission and all parts of the transmission must remain stock and in the stock location. The only part in, on, or attached to the transmission that may be altered is the shift lever. No alterations of any other kind permitted.
  - 3.9.1 Case: Unaltered.3.9.2 Clutch: Stock
  - **3.9.3 Fly Wheel:** Stock. Resurfacing not permitted.
  - **3.9.4 Gears:** All five (5) forward gears & reverse must be operational at all times.

### 4 Electrical: 12-volt systems only.

- **4.1 Battery:** Battery must be a Group 26 12Volt automotive top post battery. Battery must remain in the designated battery location in the stock form. Battery hold down must be one (1) inch by one (1) inch by eighth (1/8) inch thick steel angle fastened with a minimum of two (2) five sixteenths (5/16) inch diameter steel rods and nuts.
- 4.2 Coil:
- 4.3 Distributor:
- **4.4 Fans:** Only one (1) twelve (12) volt electric fan is permitted. Maximum twelve (12) inches in diameter. The fan must be securely fastened to the radiator core. No other fans will be permitted on car.
- **4.5 Gauges:** Gauges and gauge panel must remain stock.
- 4.6 Ignition System:
- **4.7 Pumps:**
- 4.8 Starter:
- **4.9 Transponders:** Must be installed on left side eleven inches (11") centerline from rear end. Refer to Transponder diagram under General Rules.

### 5 Fuel:

- **5.1** Air Filter: Only the Weber Part #99217331 air cleaner is permitted. The air cleaner base, element, and top must remain stock and must remain in stock location. Ducts, hoses, or other devices directed to or attached to air cleaner will not be permitted.
- **5.2** Anti-Siphon: Mandatory Oberg Fuel Safety Check Valve SV0828 or similar.
- 5.3 Carburetor: Only the Webber 32/36 dgv5a,dgev carburetor is permitted. The carburetor, all parts of the carburetor, and the adapter plate must remain stock and in stock location. The air jets, main fuel jets and low speed idle jets may be changed but must remain stock jets. No other changes or modifications are permitted to the carburetor

- **5.4 Cells:** Approved and manufactured for racing.
  - **5.4.1 Canisters:** A Fuel Safe fuel cell with bladder and aluminum can or a Fuel Safe standard fuel cell is the only type of fuel cell permitted. These fuel cells are manufactured for the Allison Legacy car and no part of cell can be altered in any way. Fuel cell location and fastening items must remain stock.
  - **5.4.2 Filler Tube:** The fuel cell must be filled from behind the firewall.
  - **5.4.3 Height:** Stock.
  - **5.5 Filters:** Any canister type fuel filter can be used. No glass filters permitted.
  - **5.6 Lines:** Automotive or Aircraft grade fuel line no larger than 5/16" inside diameter must be used. Pickup and return line between fuel cell and fuel pump must pass through steel fuel line tube, which must be in stock location.
  - 5.7 Pumps:
  - 5.8 Spacers:

### 6 Safety:

- **6.1 Battery:** Must be in a sealed battery box and properly secured.
- **6.2 Fire Extinguisher:** Minimum three (3) pound fire extinguisher mounted with quick release metal bracket within reach of driver when belted in. Extinguisher must be operational with full gauge reading.
  - **6.3 Fluids**: Car must not have fluid leaks of any kind.
    - **6.3.1** Must have a minimum one (1) quart capacity sealed overflow container.
    - **6.3.2** Water and a cooling additive only. No antifreeze allowed.
  - **6.4 Padding:** Any bar within the drivers reach must be padded with an approved fire-resistant product. Pipe insulation is not acceptable.
  - **6.5 PPE:** Personnel Protective Equipment.
    - **6.5.1** One- or two-piece long sleeve SFI approved fire-resistant suit in good condition and free of rips, tears or holes. Fire resistant shoes and gloves.
    - **6.5.2 Helmet:** Full face must meet or exceed the Snell 2015 standard. Must have face shield. Glasses, goggles, or open face helmets are not permitted.
    - **6.5.3 Head and Neck:** Support/restraint safety device highly recommended.
    - 6.5.4 Under Garments: We encourage the use of fire-resistant underwear, socks, and head stocking.
  - **6.6 Radios:** Two-way communications shall be allowed; however, Wiscasset Speedway Management will require frequency registration.
  - **6.7 RaceCeivers:** Are mandatory equipment. Frequency 454.000.
  - **6.8 Scatter Shield:** Fly-wheel scatter shield must be used with single disc clutch when using a full flywheel.
  - **6.9 Seats:** Aluminum containment racing seat with right and left head supports. Seat must be mounted and attached securely to the cage. A support brace must be installed at the rear of the seat.
  - **6.10 Seat Belts:** Five-point quick release harness system in good condition mounted with three eighths (3/8) inch bolts minimum Grade 8 washers and locking nuts. These must be attached at two (2) separate points on the frame, equal distance from the seat back and not less than twelve (12) inches apart. (See manufacturer instructions for details). Sternum belts are highly recommended.
  - **6.11 Steering Wheel:** All steering wheels must have a center pad.
  - **6.12 Towing:** Towing identifiers are required. Two toe hook areas must be marked in the engine compartment and two in the aft section. This will be where tow hooks/straps are applied.
  - **6.13 Window Net:** Racing regulation window net with quick release attachment required to be securely installed on driver side window. Window nets must be securely fastened at all times when car is on racing surface.

# 7 Suspension:

- 7.1 Adjusters:
- 7.2 Ball joints: The K772 type ball joint or any similar racing type ball joint (must be same height as the K772 ball joint). No adjustable ball joints allowed.
- **7.3 Control Arms:** Upper and lower control arms, steering arms, spindles must remain stock type construction. No modifications will be allowed.
  - 7.3.1 Bushings:

7.3.2 Lower:

7.3.3 Upper:

#### 7.4 Materials:

**7.4.1** Exception:

**7.5 Steering:** The Stiletto rack & pinion spec steering box is the only steering box permitted. The steering rack must remain stock and in the stock location.

**7.5.1 Steering Box:** The Allison Legacy rack & pinion spec steering box is the only steering box permitted. The steering rack must remain stock and in the stock location.

7.5.2 Pitman Arm: Stock.

**7.5.3 Shaft:** Only a three quarter (¾) inch steel shaft may be used. Steering shaft must remain between rack and firewall. Steering shaft may be raised, lowered, shortened, or lengthened from firewall back but not changed in material.

7.6 Shocks: Non-adjustable stock steel SB-64 series Pro-Formance shocks (AFCO 1564), QA1 #7064 will be allowed (must be purchased though Wiscasset Speedway only. Cannot be taken apart and all repairs must be done through Wiscasset Speedway (3/1/22). One shock only permitted per wheel. The only adjustable device allowed on the shock is the spring adjusting nut.

7.6.1 Claim:

7.6.2 Mounts: May be welded to the axle tube or may be welded to two (2) inch wide tube clamps.

**7.6.3** Titanium parts are not allowed.

### 7.7 Spindles:

**7.8 Springs:** Only one and seven eighths (1 7/8) inch inside diameter ten (10) inch long steel coil over springs permitted. The spring must be mounted in coil over form over the shock.

7.8.1 Front:

7.8.2 Rear:

7.8.3 Weight Jacks:

**7.9 Sway Bars:** Woodward Mini Pro Stock Sway Bar System as the only allowable sway bar system allowed.

7.10 Third Link:

**7.11 Tie Rods:** Tie rods cannot be changed in material or mounting form. The only other type of tie rod ends permitted other than stock will be steel or stainless steel heim joints.

**7.12 Tread Width:** Total width outside to outside of either the front tires or the rear tires shall not exceed sixty (60) inches.

**7.13 Traction Control:** No traction control of any kind. 7.14 Trailing arms: May be welded to the axle tube or may be welded to two (2) inch wide tube clamps.

8 Weights: Will be with driver. Total Car Weight minimum is 1685 lbs.

**8.1 Weights:** Cars are weighed race ready, full of fuel and with driver in the seat.

**8.1.1 Left Side:** Left side percentage is 56% maximum.

**8.1.2 Ballast:** The designated weight areas are inside the 2" x 2" x 52" outside main frame rails, inside the stock 3" x 4" x 19" lead box on the tail section and mounted on back side of center main cross member in driver compartment (opposite sub belt mount). Maximum weight allowed in driver compartment is forty (4) pounds. No lead or ballast weight of any type can be placed anywhere on car other than in designated weight areas. Only lead in solid block form is permitted in designated weight areas. No lead shot or any other type of ballast weight will be permitted.

# 9 Wheels/Tires/Brakes:

#### 9.1 Bleeders:

**9.2 Brakes:** All brakes must remain operational at all times. All brake pads must be stock.

**9.2.1 Calipers:** A one point seven five (1.75) inch piston three point seven five (3.75) inch mounted caliper is permitted. Allowable models will be: Outlaw model #1000 or Wilwood 120-4060 or Wilwood 120-9690. The rear mounts may be welded to the axle tube or may be welded to one (1) inch tube clamps. Calipers must be mounted in the stock location. Calipers may be shimmed for pad clearance. All brake caliper brackets must remain stock in material and form and in location.

- **9.2.2 Ducts:** Only one (1) brake duct hose allowed per wheel. All duct hoses must be securely fastened in place on both ends. No blowers, fans or mechanical devices allowed to cool brakes. No manufactured, fabricated or any type of ducts allowed on opposite end of any hose from inlet. Brake hoses must be securely fastened on brake caliper end and pointed directly at brake rotor. Duct hoses may not exceed three (3) inches diameter.
- **9.2.3 Master:** The Wilwood 260-10375 or any M32900 Ford type master cylinder may be used. The only modification allowed is removal of the residual pressure valve inside the M32900 master cylinder. The master cylinder must have a "T" fitting which connects both front brake calipers.
- **9.2.4 Gauge:** Bias gauge may be added but can only be installed on the front dash.
- **9.2.5 Hubs:** Speedway Engineering 5307-2 Front hub with six (6) inch by five and one half (5½) inch. Brake rotor adapters or the 5307B produced by \*\*\*\*\*\*\*\* are required when using the \*\*\*\*\*\*160-3544 Rotors.
- **9.2.6 Proportioning Valve:** Is permitted between the front and rear brake calipers. It is not to be used for adjusting left to right braking on the calipers.

#### 9.2.7 Rotors:

- **9.2.7.1 Front:** Brake rotor must be solid steel and have a nine and three quarter (9¾) inch outside diameter. Rotors can have a maximum thickness of three eighths (3/8) inch and a minimum thickness of 0.300". Brake rotors may be modified to include drilling, cutting, grooving or grinding.
- **9.2.7.2 Rear:** Shall have a single line from the master cylinder to the rear of the race car with a "T" fitting for the left and right rear calipers. Brake rotors must be solid steel and remain stock. Rotors must have a ten and one half  $(10\frac{1}{2})$  inch outside diameter and six and one quarter  $(6\frac{1}{4})$  inch inside diameter. The outer surface of the brake hat must have a six and five eighths  $(6\frac{5}{8})$  inch outside diameter and a two and five eighths  $(2\frac{5}{8})$  inch inside diameter. Rotors can have a maximum thickness of three eighths  $(3\frac{1}{8})$  inch and a minimum thickness of 0.300". The distance from the outer surface of the brake hat to the center of the rotor must be two and one half  $(2\frac{1}{2})$  inches. Rear brake rotors may not be modified to include drilling, cutting, grooving or grinding.
- **9.3 Tire:** Wiscasset Speedway Official Track Tire: Hoosier.

Hoosier Compound Ribbed 800, 23.0/7.0/13. Hoosier Compound Ribbed 800, 23.5/7.0/13. Either tire can be run any corner of car.

- 9.3.1 Conditioner: may NOT be used in the 4-Cyl Pro division (new or used tires).
- **9.3.2 Durometer**: All tires are subject to random testing. Testing may be conducted at any time.
- 9.3.3 Penalties:

<u>Heats</u>: Forfeiture of heat finish and points. Must start feature at rear of the field. <u>Features</u>: Disqualification (Last place finish), assigned 62 lineup points, must start rear of heat and feature next appearance

- **9.3.4 Replacement:** Should a tire be damaged during the race event; it shall be the responsibility of the race team to present the damaged tire that day and within a timely manner for inspection. All tire replacements must have a written record from Tech regarding inspection and approval for replacement. Only tires with 50% or more tread will be eligible for replacement. Replacement of damaged tires will be limited to three (3) for the season.
- **9.4 Wheels:** Only thirteen (13) inch diameter by seven (7) inch wide with three and one half (3½) inch offset and one standard valve stem are permitted. Wheels must remain stock and may not be altered or tampered with in any way.
- **9.5 Spacers:** A three eighths (3/8) inch thick six and one half (6½) inch outside diameter and two and one half (2½) inch inside diameter wheel spacer must be used when running Bassett wheels with three-point five (3.5) inch back space. When running Diamond wheels with a double wall center flange, a one quarter (1/4) inch thick wheel spacer must be used. One-wheel spacer is mandatory on each side.

All race car components, including sealed engines, may be subject to teardown/dismantle inspection at any time. Refer to General Rules, Tech Information Section.

The definition of OEM for the purpose of rule interpretation is a part specified by the manufacturer as being for a specific make, year, model of an automobile or commonly available thru a replacement parts supplier i.e.: NAPA, O'Reilly, Car Quest. This does not include GM Bowtie or Ford SVO.

DISCLAIMER: Motorsports at all levels pose a risk to your well-being. Following the rules set forth by Wiscasset Speedway in no way guarantees or suggests your safety.

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