



## **Thunder Valley Speedway (TVS) 2022 Hobby Stock Rules**

### **APPROVED MODELS**

Any four-cylinder car, from model year 2012 and older. No turbocharged, supercharged, H-Series or K-Series engines permitted. Must have complete stock body, frame and suspension. Cars may be front or rear wheel drive (but not both), with a standard or an automatic transmission. No mid-engine or rotary engine cars. Drivers must supply Track Officials with the car's engine numbers, computer numbers and transmission numbers.

Not allowed: convertibles, 4 wheel/all-wheel drives, trucks, Porsche, BMW, Audi, Saab turbo or supercharged engines, rotary engines. No mid or rear engine cars.

### **DIVISIONS**

As a trial for 2022, there will be two Hobby Stock divisions. Any car with more than 140bhp will be scored in the 'B' class. The 'A' and 'B' classes will run separate qualifiers and a single feature, with a separate finishing order for each. If car counts permit, running separate features will be considered. 'B' class cars will be issued decals for front windows and rear bumpers to signify such. In the event that an 'A' car shows to be out-powering other cars in that class, that car may be moved into the 'B' class for the next race day.

### **TECHNICAL SPECIFICATIONS**

The word stock when used herein, shall mean unaltered, as factory available and produced by the OEM for the make, model and year of the car being raced. That excludes all aftermarket "High Performance" parts, and all decisions and rulings shall be based on data obtained from the Canadian Service Data Book and other OEM Specification books.

The Hobby Stock division is for the individual participating in the sport of car racing for a hobby. The rules and restrictions are designed to prevent the costs from getting out of hand, giving each individual a fair and competitive chance in this division. The Hobby Stock division approved 4 cylinder automobile having a factory listed engine no larger than 2500cc. Cars may be front or rear wheel drive.

## **BODY/BUMPERS**

All glass, headlights and taillights must be removed except windshield.

Driver's door must be welded or bolted shut. Passenger door must be welded or bolted shut. All cars must have a tow pick-up point on both front and back.

Only the stock glass windshield is permitted. It can be replaced with LEXAN if stock windshield is unavailable. Check with Track Officials for mounting requirements.

Mirrors – allowed one stock inside right of driver – must not protrude out past body of car. No exterior mirrors are allowed.

All cars must begin each race with a complete body (hood, doors, fenders, trunk, etc.) unless damaged in practice. Stock front and rear bumpers must remain or be replaced by a maximum 2" (in any direction) pipe or tubing. **MUST HAVE FRONT AND REAR BUMPERS ON AND COVERING THE TUBING AT ALL TIMES.** Tow hooks or chains are required front and rear. They must be attached to any solid structure. Three or four links of chain welded to the bumper mounts is sufficient.

## **INTERIOR**

Stock dash, gearshift, pedals must remain. Stock steering shaft and steering wheel must remain. Quick Release steering wheels will be allowed. Steering shaft must have collapsible link and steering wheel must be padded. Aftermarket oil pressure and heat gauges are allowed. Roof insulation, floor covering and other interior must be removed. Seat must be bolted to cross bar to prevent back of seat from going forward or backward. Aluminum racing seats are allowed.

## **EXHAUST**

A single stock sized exhaust pipe (Max 2" or have stock bolt bracket for resonator following stock pattern) must be attached to the stock manifold and remain the same size until it exits. Exhaust must point away from fuel tank. Exhaust must exit out the side of the car, no turned down or under the car exhaust.

## **FLOOR**

Stock floorboards must remain. All holes must be covered with stock thickness metal and follow original contour. Minimum 16 gauge steel. Must have full floor pan. Can be replacement metal.

## **GAS TANK**

Fuel cells or marine type fuel container is highly recommended. If original gas tank is ahead of the back of the rear wheels, it must remain and be used. It is mandatory that a safety chain be installed under the tank running front to back to catch the tank in case the original straps break. If original tank is located behind rear wheels must be removed and a maximum 10 gallon fuel cell be securely installed with metal straps/brackets in trunk, with filler inside trunk. Firewall or metal box is mandatory if fuel cell is in trunk.

## **ENGINE**

Engine model and serial number to be provided for verification Engine, transmission (automatic or standard), and rear end must remain stock. No interchanging parts. Motor is to be stock for make and model of car. Stock carburetor/fuel injection system for make and model only. Stock air intake systems only. No K&N (or similar) filters. Stock filter must remain but paper can be hulled.

## **DRIVETRAIN AND COMPONENTS**

All steering components, shocks, struts, etc. must remain stock for vehicle. Wheelbase must remain the same on both sides. Camber on all wheels will be no more than 2.5° (+/-) post-race. Rear wheels will be no more than 1.5° (+/-). Stock four-wheel brakes. Stock four wheel brakes in good working order are compulsory. No rear sway bar. Springs may be lowered. A minimum ride height of 6" required, with -/+1" allowance. We will allow change out of springs on struts as long as the spring diameter on top and bottom is the same as original and fits the original mounting (spring must fit securely in the mounting pockets without modification). One 1" thick spacer is allowed on any or all springs. Only 1 spring rubber will be allowed per wheel. Spring rubber to be a one coil type rubber only all others are illegal. No cutting or modification to body, frame or suspension components to make changes to camber or otherwise. Cars considered by officials to have altered components could be subject to rejection, disqualification or penalties based on the decision of officials.

## **HOOD**

Full stock hood, bracing, and hinges must remain. Only the latch may be removed and a tie-down or pins to be used. All insulation under hood must be removed. No scoops or air dams.

## **BATTERY**

The battery can be located in the engine compartment in the stock location. Any battery located in the driver compartment must be located as close as possible to the firewall and right front tire and inside a marine case. The battery must be securely fastened.

## **TRUNK**

Full stock trunk, bracing, and hinges must remain. Rear hatch must remain. And a tie-down or pins to be used. Floor must remain. Repair of floor O.K. with stock thickness metal. Must follow original contour.

## **RADIATORS**

Radiators must fit in stock radiator cradle. No antifreeze or other cooling additives allowed. Water only.

## **TIRES AND WHEELS**

No racing type tires or snow tires allowed. DOT approved radial tires maximum size 215R in 60 or 65 series, 225R in 70, 75 or 80 series tires, No V rated tires. Falken Azenis RT195/60R14 86h not allowed; Passenger car tires only. No recaps or performance tires. 7 Speed rating limited to S, T, U, and H.

Tires must be a minimum 240 UTG tread rating or better. No tires to protrude outside of body. Stock passenger wheels (unmodified) only. Wheels must be stock size (width, height, and offset) for car. All 4 wheels must be same size. Maximum wheel width is 6" on front and rear. Any tire must have tech approval prior to use.

TIRE SOAKING is NOT permitted. Tire softener, conditioner, or any other substance to treat tires is not permitted. The use of solvents to enhance is completely prohibited.

## **BRAKES**

Car must have properly working 4 wheel brakes. No brake-cooling air ducts allowed.

## **DRIVER SAFETY**

Seat belts must be worn whenever car is on the racetrack. Belts must be in good condition and not less than 1-1/2 inches wide. Manufacturer replacement time frame recommended – usually 3 years. A minimum four-point harness is mandatory. Lap belts must be bolted to original seat belt mounts. Shoulder belts must be fastened to the roll bar at shoulder height. All belts must have seat belt mounts and fasteners. No tying, riveting, or any other method other than proper attachment is acceptable. Drivers are responsible to insure all safety equipment is in good condition and securely installed.

Drivers' side window net, with quick release from top, is mandatory.

Helmets must be worn whenever car is on racetrack. Full-faced helmets are mandatory. Helmet must be Snell 2010 SA (or better) approved. Helmets must be free of cracks and must accompany car at time of inspection.

A securely mounted fire extinguisher in a steel bracket, attached to the floorboard, easily removed (quick release), is required, within easy reach of the driver. CANNOT BE SECURED WITH TIES OR BUNGIE CORDS. It must have a recharge slip dated no earlier than January first of the current year, or an unbroken seal. SFI rated fire suits are mandatory whenever car is on racetrack.

## **DOOR PROTECTION**

A driver's side doorplate is required. It will be a minimum 3/16" steel plate (at least 12" wide) if contoured (rolled, not cut and re-welded) with body, installed on the outside of the driver's door. Non-contoured plate must be minimum 3/16" thick. The center of the plate must follow an imaginary line drawn from the top edge of the front and rear bumpers. It must extend ahead and behind the door and be bolted through the doorframes ("A" and "B" pillars) with a minimum of four carriage bolts. Bottom of plate should be as close to the rocker panel as possible. Plate should follow the contour of the body and must be painted the same color as the car. If no plate must have a min of 3 bars on drivers side.

## **RUB RAILS**

Scrub rails cannot extend any further forward than the rear of the front wheel opening, and no further rearward than the front of the rear wheel opening. (No sharp edges) Maximum 1 "x 2" welded or bolted to the roll cage. If bolting on scrub rails, use carriage bolts (chrome bumper type, rounded heads), or if using hex head bolts, recess them to the inner face of the scrub rail.

### **ROLL CAGE**

A minimum of a 4 point roll bar is required securely fastened to the floor and frame of car.

### **NUMBERS**

Numbers must be 18" high on both doors and roof, and readable from the grandstands. Can be 1, 2 or 3 digits. Also require a 6" white number on the top passenger side corner of the windshield. Any numbers deemed difficult to score by the officials, the driver will be informed and expected to make necessary changes. Failure to do so could result in a refusal by Officials to honour any scoring concerns about the effected car. Anyone looking to reserve a number at TVS can do so upon registering at [www.tvsspeedway.ca](http://www.tvsspeedway.ca), when registration opens.

### **LISTENING DEVICES**

Raceceiver or Scanner is Mandatory. If using a scanner, it must be mounted in a secure location outside of driver's reach. ONLY the track frequency 454.0000 Mhz. is to be programmed. Scanners will be subject to inspection for other frequencies. Raceceiver channel is 000 (the default channel). Two-way radios will be allowed for the Sportsman series only. Frequency must be provided to officials and you must have either you or your spotter monitoring track frequency at all times during on track activities. No other electronic communication devices allowed such as cellular telephones.

### **WEIGHT**

DOHC minimum weight: 2250lb.

SOHC minimum weight: 2150lb.

Ballast weight must be securely fastened with adequate grade 8 bolts, painted white with car number on them. Maximum left side weight is 55%. Maximum rear weight is 50%. No lead weight allowed inside the car.

TVS reserves the right to add any amount of weight required to any location, alter percentages or install rev limiters on any car deemed to be too fast in order to keep this class competitive and fun. Weight to be supplied and installed by car owner.

### **MISCELLANEOUS**

TVS reserves the right to confiscate and retain any parts or components that are deemed to be non-conforming to the rules set forth in these pages. The decision of track management will be final. We endeavor to make the rules as explicit as we can. If it doesn't say you are permitted to do something, then you are not permitted to do it. Any questions regarding these rules please contact Brad Melendy at [bradandamy47@gmail.com](mailto:bradandamy47@gmail.com) or (709) 424-1467.