BST WARRIOR DIVISION / I-76 BOMBER DIVISION
2027 RULES
Final 10/26/2026

1. GENERAL INTENT

- Budget-minded crossover class intended to let IMCA Hobby Stock, CNS Super Stock, CNS Pure Stock, I-76 Thunderstock, current Enduros, Crown Vic-type and similar cars compete without major rebuilding expenses.
- If these rules do not specifically permit something, it is not allowed. Warriors/host-track officials have final determination on rule interpretation and safety.
- Host-track safety requirements may be enforced when they are more restrictive than these class rules.
- Bringing old cars back to life with the intent of having larger car counts!

2. CONVENTIONAL CARBURETED ENGINE ($2,500 claim including intake to pan or $500 & swap)

- Maximum displacement: 360 cubic inches. 602 crates are permitted.
- Maximum compression ratio: 9.5:1.
- Maximum valve lift: .540 inch measured at the valve.
- Maximum engine RPM: 6,500.
- Naturally aspirated only. No turbocharger, supercharger, nitrous or dry-sump oiling.
- Flat-top pistons only; valve reliefs permitted. No domed pistons.
- No H-beam connecting rods. I-beam rods permitted. Steel crankshaft permitted. No titanium rods or exotic rotating components.

Engine Placement

- Engine must be mounted in a stock-style longitudinal position.
- Engine location will be measured using the fuel pump rod as the reference point.
- The center of the fuel pump rod must be a minimum of 1-3/4 inches in front of the front crossmember.
- Engine may be located farther forward but may not be positioned farther rearward than the 1-3/4-inch minimum.

Cylinder Heads

- Cast-iron cylinder heads only on conventional carbureted engines.
- OEM production cast-iron cylinder heads are permitted.
- The only aftermarket cylinder heads permitted are IMCA-approved/spec cylinder heads.
- No angle-plug cylinder heads.
- No aluminum cylinder heads.
- No raised-runner, spread-port or purpose-built racing cylinder heads.
- No porting, polishing, CNC porting, acid porting, extrude honing, grinding or other modification intended to increase airflow.
- Intake and exhaust ports must remain as manufactured. No port matching.
- No titanium valves.
- Normal valve jobs and cylinder-head resurfacing are permitted provided the cylinder head remains otherwise legal.

Camshaft / Valvetrain

- Hydraulic or solid flat-tappet camshafts and flat-tappet lifters are permitted.
- Maximum valve lift: .540 inch measured at the valve.
- No roller camshafts or roller lifters.
- Roller-tip or full roller rocker arms permitted.
- No shaft-mounted rocker system unless OEM for the engine.

Intake / Carburetor ($500 claim)

- Intake manifold must be an Edelbrock Performer 2701 or an IMCA-approved aluminum intake manifold.
- No high-rise, Victor Jr., Super Victor, tunnel-ram, sheet-metal or fabricated racing intake manifolds.
- No porting, polishing, port matching or internal modification of the intake manifold.
- Maximum carburetor: one Holley 4412 500 CFM two-barrel or approved equivalent 500 CFM two-barrel.
- Carburetor may be jetted/tuned and the choke horn may be removed.
- No carburetor modification intended to increase air flow beyond the intent of the 500 CFM rule.
- One carburetor spacer permitted, maximum 1-inch thickness.
- No stacked spacers or adapters used to circumvent the 1-inch maximum spacer rule.

3. GEN III 4.8L / 5.3L LS ENGINE RULES ($2,500 claim including intake to pan or $500 & swap)

1. Engine / Short Block

- Engine must be an OEM GM Gen III iron-block 4.8L or 5.3L LS-based production engine.
- Bottom end must remain OEM stock and unmodified. OEM crankshaft, connecting rods, pistons and wrist pins must be retained. No aftermarket, forged, lightweight, stroker or performance rotating components permitted.
- Stock bore and stroke configuration must be maintained: 4.8L - 3.780-inch bore x 3.267-inch stroke; 5.3L - 3.780-inch bore x 3.622-inch stroke.
- No boring, stroking or decking of the block permitted. Stock-type replacement piston rings and rod/main bearings permitted.
- OEM-style replacement head gaskets only. Head gaskets must be stock-type replacement gaskets intended for the applicable 4.8L/5.3L engine. Thin, shim-style or specialty head gaskets intended to increase compression are prohibited.
- Maximum engine speed is 6,500 RPM. A functional rev limiter must be used and may be inspected by track officials.

2. Cylinder Heads

- OEM GM 706 or 862 casting cylinder heads only.
- No porting, polishing, grinding, acid porting, welding, epoxy or other modification of the intake ports, exhaust ports or combustion chambers.
- Conventional valve jobs permitted. Stock valve diameter and factory valve locations must be maintained. Aftermarket replacement valves, including stainless-steel valves, permitted provided factory dimensions are maintained.
- Normal resurfacing solely to restore a flat gasket-sealing surface is permitted. Performance milling or decking is prohibited.
- Minimum combustion-chamber volume: 60.0 cc.

3. Camshaft / Valvetrain

- Hydraulic roller camshaft only.
- Maximum valve lift: .585 inch, measured at the valve.
- OEM GM 4.8L/5.3L 1.7:1 ratio rocker arms only. Rocker arms may not be modified to alter ratio or geometry. Aftermarket trunnion upgrades, including CHE, BTR or equivalent, permitted.
- Pushrods must maintain the OEM 7.400-inch length. Aftermarket/chromoly pushrods permitted.
- OEM-style hydraulic roller lifters required. Aftermarket stock-style replacement hydraulic roller lifters permitted. No solid or solid-roller lifters.
- Valve springs unrestricted. Single, beehive, conical or dual springs permitted.
- Aftermarket retainers, locks, spring seats and valve seals permitted.
- OEM-style timing chain and gear arrangement required. Stock replacement timing sets permitted. No adjustable timing sets, belt drives or gear drives.

4. EFI Induction

- When using electronic fuel injection, an OEM GM Gen III 4.8L/5.3L production intake manifold must be used.
- Intake manifold must remain stock and unmodified. No porting, polishing, grinding, extrude honing, epoxy or other internal modification permitted.
- OEM GM Gen III 4.8L/5.3L fuel injectors only. Injectors must remain in stock and unmodified.
- OEM GM Gen III drive-by-cable (DBC) or drive-by-wire (DBW) throttle body only. Throttle body must remain completely stock and unmodified. No boring, porting, polishing, machining or throttle-blade modification permitted.
- Any air filter, air-cleaner assembly and intake tubing permitted.

5. EFI Computer / Ignition

- Any engine utilizing electronic fuel injection must use an OEM GM Gen III ECM/PCM for engine management.
- OEM GM ECM/PCM may be tuned. Fuel and ignition calibration may be modified as necessary.
- Aftermarket or standalone engine-management systems are prohibited on EFI-equipped engines. Holley Terminator, Holley HP/Dominator, FuelTech, FAST, Haltech, MegaSquirt or similar aftermarket/standalone EFI or ignition-management systems are prohibited.
- Factory-style GM coil-on-plug ignition must be retained when utilizing the OEM ECM/PCM ignition system.

6. Carbureted Induction

- Carburetion may be used in place of EFI.
- Aftermarket aluminum single-plane or dual-plane intake manifold designed for cathedral-port LS cylinder heads permitted. Intake manifold must remain as manufactured. No porting, polishing, grinding, welding, epoxy, extrude honing or other internal modifications permitted.
- One two-barrel carburetor, maximum 500 CFM permitted. No four-barrel carburetors.

- Normal carburetor tuning including jets, power valves, accelerator-pump components and air-bleed adjustments permitted. Carburetor may not be bored or otherwise enlarged to increase airflow.
- Maximum 1-inch combined carburetor spacer/adapter thickness.
- Any air cleaner or air-filter assembly permitted.

7. Carbureted Ignition

- Carbureted engines may use either: A. OEM GM Gen III ECM/PCM with factory-style coil-on-plug ignition; or B. Front-drive distributor conversion.
- When using a front-drive distributor, distributor, ignition box, coil and spark-plug wires are unrestricted.
- All configurations must comply with the 6,500 RPM limit.

8. Fuel

- Pump gasoline or E85 only.
- No methanol, racing alcohol, nitromethane, nitrous oxide, oxygen-enhancing additives or other performance-enhancing fuels permitted.
- Mechanical or electric fuel pumps and fuel-pressure regulators are permitted.

9. Oiling

- Any internal wet-sump oil pump permitted.
- OEM or aftermarket wet-sump oil pan permitted. Oil pan may be changed or modified for chassis/crossmember clearance.
- Dry-sump oiling systems and external vacuum pumps prohibited.

10. Cooling / Accessories

- Any radiator permitted.
- Mechanical or electric cooling fans permitted.
- OEM-style or aftermarket mechanical or electric water pumps permitted.
- Alternator and power-steering pump optional. Accessory-drive configuration may be modified as necessary for chassis installation.

11. General

- Engine must remain naturally aspirated.
- No turbochargers, superchargers, nitrous oxide, water/methanol injection or other power adders permitted.
- Engine mounts and accessory brackets may be modified or replaced as necessary for installation.
- Track officials may inspect engine components and verify casting numbers, bore, stroke, combustion-chamber volume, valve lift, rocker-arm ratio, pushrod length, carburetor, induction components, ECM/PCM and RPM limiter at any time.

4. CROWN VICTORIA 4.6L OPTION

- Approved stock Crown Victoria/Grand Marquis/Town Car-style 4.6L package may retain factory fuel injection, factory-style automatic transmission and required OEM distributorless ignition.
- Factory-style stock computer/ECM required and must be readily accessible.
- No standalone, piggyback, traction-control or hidden tuning device. Maximum engine speed: 6,500 RPM.
- Aftermarket cams allowed maximum .550” Lift. Valve springs unrestricted. Single, beehive, conical or dual springs permitted.
- No weight jacks permitted, front or rear. Front and rear springs must remain in stock-style spring locations without weight-jack adjusters.

5. IGNITION & REV LIMITER

- Conventional carbureted engines: HEI-type distributor only.
- No MSD or other external ignition box except a device used solely for the approved rev-limiting function.
- Digital or chip/pill-style rev limiters permitted.
- Maximum RPM: 6,500. Rev limiter must be accessible to officials. No bypass wiring or device.
- Approved LS and Crown Victoria packages may retain their required OEM distributorless ignition and ECM controls.

6. TRANSMISSION, CLUTCH & DRIVESHAFT

- Automatic or manual transmission permitted; must have a functional forward gear and reverse.
- Powerglide permitted only with a dummy converter installed in the normal converter location. No direct-drive Powerglide without a dummy converter.
- Internal circle-track Powerglide modifications permitted.
- OEM-style manual transmissions such as Saginaw, Muncie and similar units permitted.
- Manual clutch: conventional single-disc automotive clutch, minimum 10-inch diameter. No small-diameter or multi-disc racing clutch.
- Conventional steel flywheel required; no aluminum flywheel.

- Approved Crown Victoria and LS combinations may use an approved OEM-style automatic transmission.
- No in-and-out box, quick-change transmission, sequential purpose-built racing transmission or traction-control device.
- Steel driveshaft required and painted white. No aluminum or carbon-fiber driveshaft.
- Exception – OEM Crown Victoria aluminum driveshaft allowed
- At least one securely mounted 360-degree driveshaft safety hoop/loop must completely surround the driveshaft.

7. REAR END & REAR SUSPENSION

- OEM-style rear axle or Ford 9-inch permitted. Full floater permitted.
- Differential may be welded, locked or use a spool. No quick-change rear end.
- Coil-spring cars: stock/OEM-style trailing arms only, stock length. No Heim-joint, adjustable-length, tubular fabricated racing or turnbuckle trailing arms.
- Stock-style rubber or approved stock-replacement trailing-arm bushings.
- Rear-end housing lower trailing-arm bracket must maintain OEM location. Lower trailing arm mounting point must be 2-1/2 inches from the bottom of the axle housing to the center of the mounting bolt with maximum 1 inch tolerance, on both sides.
- Frame-side trailing-arm mounting points must remain stock/OEM location with no multi-hole, slotted or adjustable mounts.
- Coil springs remain in stock-style location. If rear weight jacks are present, adjusters must be freely extended to the top. Recommend welding with no more than 1 inch tolerance from left to right. Just like the front.
- Rear shocks MUST remain in stock/OEM location. One shock per wheel. No coil-over.
- No restriction on rear percentage, left-side percentage or cross weight as long as the car meets all other rules.

Leaf-Spring Cars

- Leaf-spring rear suspension cars are permitted.
- Conventional multi-leaf spring assemblies are permitted.
- No mono-leaf spring used in combination with coil-over springs or auxiliary coil springs.
- No coil-over conversion may replace or assist the conventional leaf-spring suspension.
- Lowering blocks are permitted but must be solid and non-adjustable.
- No adjustable, sliding, screw-type, hydraulic or movable lowering blocks.
- Lowering blocks and rear axle must be securely mounted with appropriate U-bolts and hardware.
- No cockpit-adjustable rear suspension devices.

8. FRONT SUSPENSION

- Stock/OEM-style lower control arms required and must mount in stock/OEM frame locations. No fabricated racing lower control arms.
- Tubular or OEM upper control arms permitted.
- Normal shimming/adjustment for caster and camber is permitted.
- Any-height upper or lower ball joint permitted, but ball joints must be conventional automotive-style non-rebuildable units.
- No rebuildable racing ball joints or monoball/spherical-bearing substitutes.
- Stock/OEM-style or 3-piece spindles allowed.
- Conventional steel coil springs only; any spring rate and any spring height/length. No coil-over.
- Front weight jacks permitted only if adjusters are extended all the way out and recommend welding. Cannot have any more than 1 inch tolerance from left to right adjustments.
- Crown Victoria exception: no front weight jacks permitted.
- Front shocks may be relocated to clear the welded front weight-jack setup. One shock per wheel; mounts must remain fixed during competition.

9. SHOCKS ($100 per shock claim)

- Any brand or valving permitted as long as the shock is non-adjustable.
- Internally rebuildable/revalvable shocks permitted if there is no external adjustment mechanism.
- No externally adjustable compression/rebound, electronic, cockpit or driver-adjustable shock.
- One shock per wheel. No coil-over. Rear shocks remain stock location; front shocks may be relocated as allowed above.

10. FRAME HEIGHT

- Minimum frame height: 6 inches. Maximum frame height: 10 inches.
- Measured at the bottom of the main frame rail directly behind the front tire and directly in front of the rear tire. Either or both sides may be checked.
- Crossmembers, body mounts, suspension brackets, exhaust and other components are not the frame-height measurement point.
- Measured with driver seated, car race-ready and tires at normal racing pressure on a level tech surface.

11. WEIGHT & BALLAST

- Minimum weight: 2,700 pounds with driver in race-finished condition.
- No adding fuel, fluids or ballast before post-race scaling.
- Cars maximum 200 pounds added lead ballast. Trucks can add 300 pounds.
- All added lead ballast must be in the trunk area and painted white.
- Each ballast assembly must be securely mounted with a minimum of two 1/2-inch diameter bolts with suitable washers and locking nuts.
- No added lead in driver compartment, engine compartment, suspension or rear-end housing.

12. TIRES

- DOT/OEM street radial tires permitted, maximum size 275/60-series.
- Crown Victoria exception: 50-series or 55-series DOT tires are permitted to allow stagger.
- G60 racing tires permitted but must be previously scuffed/used. No new G60 tires.
- Used/scuffed asphalt racing takeoffs permitted and may be grooved for dirt. No new asphalt racing tires.
- G60 and asphalt takeoffs: maximum 8-inch tread width.
- Scuffed/used means visibly previously run across the tread surface.
- Grooving and siping G60 tires permitted.
- No chemical soaking, softening or treatment unless permitted by the host track.

13. WHEELS

- Maximum wheel width: 8 inches. Steel racing or OEM-style steel wheels only.
- Crown Victoria exception: factory Ford OEM 17-inch wheels are permitted. Steel or aluminum.
- No aluminum, magnesium or carbon-fiber wheels.
- Wheel offset is open up to a maximum 1-inch offset.
- Wheel spacers permitted; however, a 1-inch-offset wheel may not be used with a wheel spacer. Wheel/spacer combinations may not circumvent the 1-inch maximum.
- ONE beadlock permitted, RIGHT REAR only.

14. BRAKES

- Functional brakes required on all four wheels.
- Stock/OEM-style cast-iron brake calipers only. No aluminum/lightweight racing calipers.
- Rear disc or drum brakes permitted; four-wheel disc permitted.
- Stock pedal assembly or aftermarket racing pedal/master-cylinder assembly permitted. Dual master cylinders permitted.
- No in car brake bias allowed or right brake front shut off.

15. STEERING

- Steering linkage/components must be stock/OEM-style parts.
- Option 1: stock/OEM steering box with quick steer permitted.
- Option 2: aftermarket 12:1 steering box permitted, but NO quick steer. The two options may not be combined.
- Power steering permitted. Stock or aftermarket racing power-steering pump, remote reservoir and cooler permitted.
- Collapsible racing steering shaft and quick-release steering wheel permitted.
- No electronically controlled steering-ratio or assist adjustment while racing.

16. BODY & SPOILER

- Any OEM steel automotive body permitted, or a fabricated body made from steel/aluminon sheet metal.
- Aluminum hoods and trunks are permitted.
- Only fiberglass body component permitted is the roof (no roof is allowed more than 3 inches of rake).
- No fiberglass fenders, quarters, doors, hood, trunk or other body panels.
- Rub rails permitted if securely mounted with no sharp, pointed or hooking ends.
- One rear spoiler only, maximum 5 inches high, mounted on trunk/rear deck and stationary/non-adjustable.

- No additional wings, roof spoilers, sideboards or additional spoiler elements.

17. WHEELBASE & FRAME

- Minimum wheelbase: 108 inches. NO maximum wheelbase.
- Stock/OEM production automotive frames only. No fabricated racing frame or purpose-built tube chassis.
- Main OEM frame rails must be retained. Safety/cage modifications permitted.
- Frame must comply with the 6-inch minimum / 10-inch maximum frame-height rule.

18. FLOOR, FIREWALL & REAR FLOOR

- Stock floor/firewall may remain. Fabricated floor pan and firewall permitted using steel.
- Fabricated floor pan and firewall must be minimum 18-gauge steel. No aluminum floor/firewall.
- Firewall must completely separate driver from engine compartment. No enclosed cockpit.
- Rear floor underneath the fuel cell may be no thicker than 18-gauge steel.
- Area over the rear-end housing must remain OPEN. No completely enclosed/sealed rear suspension or rear-end compartment.

19. ROLL CAGE & DOOR BARS

- Minimum four-post roll cage required.
- Main four-post cage tubing: minimum 1-3/4-inch outside diameter x .095-inch wall steel tubing.
- Driver-side door bars: minimum 1-3/4-inch outside diameter x .095-inch wall steel tubing.
- Driver-side door bars must be plated with minimum 18-gauge steel.
- If a passenger rides during an approved event, passenger-side door bars must also be plated with minimum 18-gauge steel.
- Cage and door bars must be securely welded/attached and subject to safety approval.

20. SEAT & SAFETY EQUIPMENT

- At least an aluminum racing seat is mandatory. Full-containment seat recommended but not mandatory unless host track requires it.
- Seat must be securely mounted to cage/chassis with minimum four 3/8-inch diameter bolts. No stock OEM seat.
- Helmet: Snell SA2015 or newer.
- Drivers and passengers must wear SFI-rated fire suit, racing gloves and racing shoes.
- Head-and-neck restraint strongly recommended; racing foam neck brace is acceptable. One or the other must be worn.
- Driver window net mandatory. Passenger window net mandatory when a passenger rides.
- Racing harness/seat belts may not be more than three years old and must be replaced sooner if damaged.
- Passengers are allowed only during track-approved ride/passenger events and must meet the same basic safety-equipment requirements.

21. FUEL CELL & FUEL SYSTEM

- Approved racing-style fuel cell must be securely mounted in the trunk/rear compartment.
- Crown Victoria exception: OEM fuel tank may remain if mounted in the stock location. Steel tank only; plastic tanks are not permitted.
- Minimum 2-inch-wide steel flat strap must secure the fuel cell across the top and underneath.
- Fuel-cell mounting straps must use minimum 3/8-inch diameter bolts.
- No bungee cords, ratchet straps, wire or temporary mounting methods.
- A manual fuel shutoff valve at or near the fuel cell is strongly recommended.
- Fuel cell, filler, vent and fuel lines must be installed so fuel cannot easily enter the driver's compartment in a leak or rollover.

22. BATTERY (12-volt system)

- Battery may be mounted in any safe location and may be moved to different locations for weight distribution.
- Battery must be securely mounted in a steel battery box or steel mounting structure using minimum 3/8-inch all-thread or bolts.
- Battery terminals must be covered with rubber or another approved insulating material.
- If mounted in the driver's compartment, the battery must additionally be completely covered/enclosed by a plastic battery box or approved non-conductive cover.

23. FUEL

- Pump gasoline or E85 only.
- Pump gasoline maximum: 91 octane.
- E85 must be commercially available automotive E85.
- No methanol, nitromethane, nitrous oxide, oxygenated racing fuel or performance-enhancing fuel additives.

24. COOLING SYSTEM

- Aluminum or brass/copper radiator permitted.
- Radiator must be securely mounted in front of the engine/front portion of vehicle. No rear-mounted radiator.
- Mechanical cooling fans permitted. Electric cooling fans are optional and permitted.
- Cooling system must be safely installed and protect the driver from hot coolant.

25. EXHAUST (to include LS and Crown Vic)

- Headers permitted but must be stock/OEM-type headers or IMCA Hobby Stock-type headers.
- X-pipe exhaust configuration permitted.
- No purpose-built Stock Car-style racing headers, exotic stepped headers, 180-degree headers or adjustable-length header systems.
- Exhaust must be securely mounted and routed away from driver and fuel system.
- Mufflers required when required by the host track.

26. BUMPERS

- OEM bumpers or fabricated steel bumpers permitted.
- Fabricated bumpers must be securely attached to frame/chassis and must be reinforced within reason.
- No sharp edges, pointed tubing, hooking features or excessive projection.
- Bumpers should remain reasonably within the body profile.

27. TECHNICAL INSPECTION

- Officials may inspect displacement, compression, valve lift, heads, intake, carburetor, RPM limiter, ECM, suspension, tires, weight, safety equipment and other regulated components at any time.
- Fuel may be sampled/tested.
- Competitor is responsible for proving legality of any questioned component, including IMCA-approved/spec heads or intake.
- Any component or modification not specifically permitted is prohibited unless approved by Warriors/host-track officials.

28. COMPLETE CAR CLAIM - $7,500

- Only drivers eligible to make a claim must make the race and stay within one lap of leader. Promoters have option to make a claim.
- Claimed car has option to swap cars with claimee plus keep $1,000.
- If anyone refuses a claim, they will have $1,000 fine and 30-day suspension from any BST sanctioned event.