



STOCK ELIMINATOR

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IHRA Stock Class Designations

Manual Transmission Classes (preceded by car number):

- FS/AAA, FS/AA, FS/A, FS/B, FS/C, FS/D, FS/E, FS/F, FS/G
- FS/H, FS/I, FS/J, FS/K, FS/L
- AAA/S, AA/S, A/S, B/S, C/S, D/S, E/S, F/S, G/S
- H/S, I/S, J/S, K/S, L/S, M/S, N/S, O/S, P/S, Q/S
- R/S, T/S, U/S, V/S, W/S

Automatic Transmission Classes (preceded by car number):

- AAA/SA, AA/SA, A/SA, B/SA, C/SA, D/SA, E/SA
- F/SA, G/SA, H/SA, I/SA, J/SA, K/SA, L/SA
- M/SA, N/SA, O/SA, P/SA, Q/SA, R/SA, T/SA, U/SA, V/SA, W/SA

Front-Wheel Drive Classes (preceded by car number):

- AAF/S, AF/S, BF/S, CF/S, DF/S, EF/S

IHRA STOCK CLASS ELIGIBILITY & GUIDELINES

Reserved for:

- 1955 or newer model-year factory-production automobiles and some sports cars.

Classification:

- Based on IHRA performance rating listed in the Official IHRA Stock Car Classification Guide.
- Only vehicles listed in the official guide are eligible for competition.

Vehicle Requirements:

- Must be factory-production assembled.
- Must be available in showrooms and sold to the general public.

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- Minimum of 500 units of a particular body style must be produced for general eligibility.

Special Production Runs:

- OEMs may apply for inclusion of special production runs in the IHRA guide.
- Special runs must:
 - Include at least 50 units of an already accepted body style.
 - Do not need to be showroom available.
 - Applications evaluated individually.
 - Acceptance does not set a precedent for future inclusion.

ENGINE

Air Cleaners

- Optional; must retain OEM automotive configuration.
- Base may be trimmed but not fabricated (no welding, bolting, etc.).
- No ram tubes, velocity stacks, or non-stock base plates.
- Must be affixed to carburetor per OEM if extending through hood.

Blueprinting

- Permitted per IHRA Specifications.
- OEM components (e.g., heads, rods, crankshaft) must be retained and unaltered unless otherwise specified.

Camshaft/Lifters

- Must retain stock lift per IHRA Tech Bulletins.
- Max lift for FWD and trucks: .430 inch or OEM, whichever is greater.
- Aftermarket lifters OK; solid lifters may replace hydraulic.
- Roller lifters not allowed if originally flat tappet.
- No aftermarket gear drives/belts.
- Adjustable pushrods or rocker arms (not both) allowed; must match or exceed OEM weight.

Carburetor

- Must match engine's correct year, make, and model.
- Limited internal mods (e.g., resizing passages, drilling idle holes).
- No external modifications like sandblasting or coating.
- Replacement carbs must match OEM spec.
- Computer carbs replaced with non-computer versions OK.

Connecting Rods

- OEM or IHRA-accepted aftermarket rods allowed.
- Must meet minimum assembly weight.
- Polishing and grinding beams allowed; shot-peening OK.
- Length tolerance $\pm .025$ inch.
- Spacer bearings not allowed.

Cylinder Heads

- Must match year and HP claim per IHRA Tech Bulletins.
- No porting, welding, epoxy, or combustion chamber mods.
- Must retain OEM-size valves at OEM angles ($\pm 1^\circ$).
- Aftermarket steel valves OK; titanium only if OEM.
- OEM appearance and volume required; external mods prohibited.

Engine

- Must be same year/make as car.
- No special equipment kits or crossbreeding parts.
- Max overbore: .080 inch.
- OEM or IHRA-accepted aftermarket crankshaft mandatory.
- Billet cranks prohibited unless OEM; normal balance job only.
- Lifter bores may be re-machined; sleeving allowed.
- SFI Spec 18.1 balancer required in specified classes.

Superseded/Replacement Parts

- Limited to heads, intake, crank, block, transmission.
- Must be manufacturer-listed and IHRA-accepted.

Exhaust System

- Optional.
- No adapter, port, or header plates.
- Turbo must stay in engine bay.
- Mufflers may be required by local ordinance.

Fan, Generator, Water Pump

- Belt-driven alternator/generator required.
- Electric fans/water pumps OK.
- No smog pump crankcase evacuation.

Fuel

- IHRA-accepted racing gasoline only.
- No propylene oxide or nitrous.

Fuel Injection

- OEM throttle body, plenum, manifold required.
- Larger injectors OK if manifold unmodified.
- Drive-by-wire may convert to mechanical linkage with proper EFI.

Fuel System

- One mechanical and one electric fuel pump allowed.

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- Electric pump must shut off with ignition.
- Max 12 inches rubber fuel line; all other lines metallic.
- Cool can allowed; components must be ahead of firewall.

Gaskets

- Any replacement gasket allowed.
- Deck clearance must compensate for gasket thickness changes.
- No heat-insulator carb gaskets; max two stock-type gaskets.

Gas Tank

- Must match car's year/make/model; in stock location.
- Fuel cell (max 16 gal) OK with firewall and OEM tank removal.

Intake Manifold

- Must retain stock, unaltered form matching year/HP.
- No internal or external modifications or coatings.

Intercooler

- Intercooler tanks must be in engine compartment.

Oil Pan

- OEM or IHRA-accepted aftermarket allowed.
- Modifications not allowed, but crossmember may be altered for removal.

Oil Pump

- OEM or OEM-type only; location and system must remain OEM.
- Dry sump prohibited; accumulator allowed.

Pistons

- Must retain OEM head configuration and be IHRA-accepted.
- No machining or modifications; visible part number required.
- No gas porting or top coatings (skirt coatings OK).
- Must meet assembly weight requirements.

Radiator

- Full-size stock radiator mandatory; aluminum OK.
- Must match stock dimensions; no cutting/denting allowed.

Rocker Arms

- OEM or aftermarket allowed.
- Roller tips/pivots allowed.
- Must match original mount type.
- Stud girdles not allowed.

Spark Plugs

- Any type for automotive use OK.

Throttle Body

- Must match correct year/make/model.
- No modifications.
- Replacement throttle bodies must match OEM specs.

Throttle Linkage

- Any progressive or positive-action linkage permitted.

Torque Strap

- Permitted on one engine side only.

Turbochargers

- Size limited by housing bore at leading edge of impeller.
- Max bore: 2 mm over allowed size.

Valve Covers

- Aftermarket allowed.

Valve Springs

- Any spring allowed; no cylinder head modifications.
- Steel retainers mandatory; spring cups OK only if no head mods.

DRIVETRAIN

Clutch, Flywheel, Flywheel Shield

- Clutch and flywheel must meet SFI Spec 1.1 or 1.2 (max two-disc).
- Steel flywheel shield meeting SFI Spec 6.1 mandatory for all V-8 cars with clutch.
- No modification of flywheel shield for clutch adjustment or cooling holes.

Driveline

- Aluminum driveshafts prohibited except OEM.
- Carbon fiber driveshafts prohibited.
- Driveline loop required on all RWD cars.

Rear End

- Rear end may be replaced with one from same manufacturer; truck rear ends prohibited.
- Aluminum center sections allowed if originally equipped.
- No change to distance between backing plates.
- Any gear ratio allowed if it fits third-member case/housing.
- Limited-slip and ratchet-type rear ends permitted.
- Spools only with aftermarket axles.
- Aftermarket axles not required for FWD vehicles.
- Larger brakes and reinforced spring perches permitted.
- Rear ends can be narrowed or widened to match original width.
- Rear-end housing bracing allowed.
- Swing axle differential can be replaced; 9-inch housing allowed (2008+ vehicles).
- Must retain stock trailing arms; Panhard bar mandatory.

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- Frame notching for driveshaft clearance permitted.
- Coil-over shocks and four-link setups prohibited.

Automatic Transmission

- Any same-make model with up to three forward speeds (unless OEM has more).
- Overdrive not required; reverse gear mandatory.
- Case must be OEM or IHRA-accepted aftermarket meeting SFI Spec 4.1.
- IHRA-accepted adapter plates allowed.
- Shifting pattern mods allowed if full pattern retained (must include park and reverse).
- Gear changes must occur internally or via direct driver action.
- Lockup converter allowed only if OEM-equipped and OEM transmission used.
- Lockup converters otherwise prohibited.
- Electronic shift controls allowed only in computer-controlled vehicles and must shift via valve body by RPM/time only.
- Prohibited: shifting by line lock, wheel/driveshaft speed, GPS; air/electric shifters in non-computer EFI vehicles.
- As of Jan 1, 2026: RPM-activated pneumatic/electric shifters permitted.
- Deepened oil pans permitted.
- Drilling of case or engine block for adapter prohibited.
- Functional neutral safety switch required.
- Transmission brake prohibited.
- Tailshaft mods for bushing or IHRA-accepted replacements permitted.
- Cars quicker than 10.99 must have SFI 4.1 transmission shield.
- SFI 29.1 flexplate mandatory for V-8s; cars quicker than 9.99 also require SFI 30.1 flexplate shield.

Manual Transmission

- OEM or IHRA-accepted aftermarket with same number of forward gears (O.D. not required), plus reverse.
- Gear changes must result from direct driver action.
- Pneumatic, hydraulic, electric shifters prohibited.
- Floor-shift conversion kits allowed.
- Clutchless transmissions prohibited; clutch must be used conventionally.
- Three-speed-only combinations may use any four-speed.

Brakes

- Must use stock 4-wheel hydraulic or aftermarket discs with:
 - Minimum 3.5 in² piston area per wheel.
 - Minimum rotor size: 10.25 in x 5/16 in thick.

- Dual-reservoir master cylinder required with modified system.
- Dual rear calipers allowed; one hydraulic line max.
- Rear-wheel line-loc prohibited; front-wheel line-loc permitted.
- Parking brake optional.
- Carbon-fiber and titanium rotors prohibited.
- All line-locs must be spring-loaded/self-returning.

Power Steering

- May be removed or converted to manual.

Shocks

- No pneumatic or electric shocks unless OEM.
- No additional reservoirs.
- OEM coil-over vehicles may use manually adjustable coil-over springs.

Front Suspension

- Must retain complete OEM front suspension.
- Aftermarket tie rods with Heim joints allowed.
- Lower control arm may be machined for larger shocks.
- Lift kits/travel limiters prohibited.
- Sway bar optional.

Rear Suspension

- Must remain as produced, with exceptions:
 - Leaf springs can be added/removed if length/mounting points retained.
 - Coils can be clamped/spaced if stock mounts used.
 - Solid bushings allowed.
 - Coil spring vehicles may relocate rear-end upper control arm.
 - Rear trailing arms may be replaced with IHRA-accepted OEM-style units.
 - Aftermarket lowers must be non-adjustable with bushings.
 - Aftermarket uppers may be adjustable with Heim joints.
 - Torque arms only if OEM-equipped; OEM attachment points must be retained.
 - Sway bars optional.

Traction Bars

- Traction bars or pinion snubbers allowed.
- Stock shocks/springs may not be moved for traction bars unless new spring perch used.

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- Bolt-on devices allowed if front mount matches OEM spring eye/control arm position.
- Device must install under spring and bolt to its rear attachment point.
- Bars/brackets can't be lower than lowest point of rear-wheel rim.
- Weld-on bars, ladder bars, wheelie bars prohibited (except AF through EF).

Wheelie Bars

- Permitted.
- Brackets may be welded to axle housing.
- Must be stand-alone, not connected to suspension.
- Max length: 48 in or to rear bumper, whichever is longer.
- Trunk floor may be notched to accommodate.

IHRA STOCK CLASS

Frame & Chassis

- **Ballast**
 - Weight box allowed; max 100 lbs removable (2 boxes max, 50 lbs each).
 - Must be attached to frame or crossmember with two 1/2" bolts minimum.
 - Cannot be attached to roll cage or bar.
 - Additional ballast must be permanently secured (two 1/2" bolts per 100 lbs; nut welded to bolt).
- **Bumpers**
 - Full stock bumpers, guards, braces (front and rear) mandatory as per make/model/year.
 - Rear bumper optional for stock trucks.
 - No removal of energy-absorbing structures.
 - Rear bumper cover may be notched/slot-cut for wheelie bar clearance only.
 - Complete removal or full-width trimming of bumper cover not allowed.
- **Frame**
 - Must be stock frame/subframe for body used.
 - Subframes on unibody cars may be joined.
 - Max allowed material size: 2"x3"x1/8".
 - Round tubing permitted to tie subframes in a straight line through the floor (floor must be fully welded to structure).

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- **Ground Clearance**
 - Minimum 3" from car front to 12" past front axle centerline.
 - 2" minimum for remainder of vehicle (except oil pan and headers).
- **Motor Mounts**
 - Steel replacements allowed (rubber-elimination design).
 - Engine must remain in stock location (height, setback).
 - Motor plates and mid mounts not permitted.
- **Parachute**
 - Required on vehicles reaching 150+ mph.

Roll Bars & Roll Cages

- **Roll Bar**
 - Mandatory in:
 - All AA/S through M/S, AA/SA through M/SA, FS/AA through FS/L classes
 - Convertibles
 - Any car running 11.49 seconds or quicker
 - Six-point attachments allowed; front braces may not extend past firewall.
- **Roll Cage**
 - Required in any car running 9.99 or quicker.
 - SFI 25.5 cage required for Stock cars running 8.49 or quicker.
- **Roll-Cage Padding**
 - SFI 45.1 padding mandatory for vehicles running 9.99 or quicker.
 - Must be used wherever helmet could contact cage.

Weight & Wheelbase

- **Weight**
 - Must meet class minimum weight; cannot exceed the next heavier class minimum.
 - Weight additions must be securely fastened (see Ballast).
 - Weight determined without driver; 170 lbs added for driver for total.
 - Cars weighed with driver onboard.
- **Wheelbase**
 - Must retain stock wheelbase $\pm 3/4"$ of factory spec.
 - Max variation left to right: 1".
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- Altering wheelbase, overhangs, or axle locations prohibited.

TIRES & WHEELS

Tires

- Must be street-type or drag slicks; max 9" tread width.
- Max size: 9" wide x 30" diameter (94" circumference).
- Wear limit: 10" maximum width.
- Front tires must have full street tread; minimum 4.5" width on ground.
- Tread may not extend beyond fenders; max 3" clearance from sidewall to body.
- Slicks allowed on FWD; treaded tires required on AWD front.
- No retreaded/recapped tires.

Wheels

- Aftermarket racing wheels allowed.
- Wire or motorcycle wheels prohibited.
- Wheel/tire combo must not require wheelwell mods.
- Minimum diameter: 14" unless factory-equipped with smaller wheels.

INTERIOR

Steering Wheel

- Aftermarket allowed; minimum 11" diameter.
- Removable wheels allowed.
- No lengthening of steering column.
- OEM column length must be maintained.

Upholstery

- Full factory-type interior required (mats, carpet, door panels, headliner, front & rear seats).
- No gutting permitted.
- Driver seat may be bolted; rear seat may be removed for roll bar (area must be finished per OEM).
- Aftermarket or OEM full-size front seats allowed (must match).
- If aftermarket driver seat used, passenger seat must be full-size and match.

Window Net

- Mandatory: Ribbon-type or SFI 27.1 mesh-type.

IHRA STOCK CLASS – BODY & CHASSIS REGULATIONS

Body Modifications

- No alterations or customizations allowed, except for paint.
- Convertibles must run with the top up.
- Sedan deliveries, Rancheros, El Caminos, etc., allowed only if properly classified and meet all class rules.
- Front or rear suspension height changes are prohibited; vehicle must maintain a level stance unless it has a forward rake.
- Rocker panel bottom must not be higher than rear axle centerline.
- Solid body mounts allowed if same size as original; no lightweight substitutions.
- OEM front/rear spoilers/air dams allowed on FWD vehicles.

Fenders

- May be trimmed for tire clearance (max 2 inches).

Fender Splash Pans

- Mandatory.
- May be trimmed for up to 2 inches of header clearance.

Firewall

- No alterations unless explicitly allowed.
- Firewall coverings not permitted.
- Heater/AC removal must be covered with minimum .024" steel or .032" aluminum.
- C5/C6 Corvette may have minor firewall mods for transmission installation.
- Roll cage tubing can run over/along fender well/strut tower to frame horn.

Floor

- Complete stock floor in original location required.

Grille

- Must be original for claimed make/model/year.
- No covers allowed in front of or behind grille.

Hood

- Must retain full stock configuration (latches, hinges, springs, etc.).
- Aftermarket or non-OEM scoops/hood openings prohibited.
- OEM openings must retain original parts.
- Nonfunctional scoops permitted on FWD vehicles if OEM-available.

Street Equipment

- Not required: wipers, heater/AC components (controls must stay in dash).
- One working headlight and one taillight required.
- Turn signals not required to be functional.

Windows & Windshields

- Must be clear and in good condition (OEM tinted safety glass allowed).
- Must be operable but remain closed during runs.
- Truck rear glass may be replaced with 1/8" shatterproof material to accommodate roll bar/cage.

IHRA STOCK CLASS – ELECTRICAL RULES

Batteries

- Must remain in stock location.
- Must reliably start vehicle.
- Second battery allowed in trunk if securely mounted.
- Both batteries must be same type, size, and weight.

Delay Boxes/Devices

- Strictly prohibited.

Distributor

- Any battery-operated stock-type ignition allowed.
- Crank trigger systems prohibited unless OEM-equipped.
- Distributorless ignitions must retain OEM number of coils.

Ignition Control

- Two-step systems allowed if foot-activated (brake, clutch, or pressure switch).
- Hand release activation not allowed.
- All ignition wiring must be visible, labeled, and traceable.

Dashboard & Instruments

- Full OEM dashboard must be retained, including instruments and controls.
- Heater/AC units may be removed, but dashboard controls must remain.
- Additional gauges (tach, pressure, etc.) optional.

Master Cutoff Switch

- Required for cars with a trunk-mounted battery.

Starters

- Aftermarket starters permitted if mounted in stock location.

Support Group

- Computer/Data Recorders:

- Original OEM computer may be replaced with aftermarket computer.
- Data recorders are permitted.
- Non-OEM or non-OEM replacement computers are prohibited.
- Tow Vehicles:
 - Use of tow vehicles is prohibited.

DRIVER: 10

- Credentials:
 - Valid IHRA Stock license mandatory for cars running 9.99 seconds (6.39*) or quicker.
- Driver Location:
 - Driver must be in the stock location; no part of the head may be behind the "B" post.
 - Seat location may not be revised.
- Driver Restraint System:
 - SFI Spec 16.1 driver restraint system (including crotch strap) required in:
 - Classes AA/S through M/S
 - Classes AA/SA through M/SA
 - Classes FS/AA through FS/L
 - All convertibles
 - Any car running 11.49 seconds or quicker
 - Restraint system must be updated every two years from the date of manufacture.
- Driver Weight:
 - All cars are weighed with driver.
 - Add 170 pounds to classification weight for the driver to determine minimum weight.
- Helmet Requirements:
 - For 10.00 seconds and slower:
 - Open-face or full-face helmet mandatory.
 - Acceptable standards: Snell M2015, M2020, SA2015, SA2020; FIA 8860-2010, 8859-2015, 8859-2024, 8860-2018.
 - Modifications reducing vision are prohibited.
 - Max 1-inch visor strip from top allowed.
 - For 9.99 seconds and quicker:
 - Full-face helmet mandatory.
 - Same standards and rules as above apply.

- **Protective Equipment:**
 - **Mandatory:** full-length pants, short- or long-sleeved shirt, closed shoes, and socks.
 - **Prohibited:** shorts, tank tops, open-toe/open-heel shoes, sandals.
 - Synthetic clothing is not recommended.
 - SFI Spec 3.2A/1 jacket and pants required in:
 - Classes AA/S through M/S
 - Classes AA/SA through M/SA
 - Classes FS/AA through FS/L
 - Any vehicle running 11.49 seconds or quicker
 - SFI Spec 3.2A/5 or 3.4/5 jacket and pants and SFI Spec 3.3/1 gloves required in any vehicle running 9.99 seconds or quicker.
- **Neck Collar:**
 - SFI Spec 3.3 neck collar mandatory in any vehicle running 9.99 seconds (6.39*) or quicker or exceeding 135 mph.
 - Head and neck restraint system may be used instead of collar.