

Chevrolet Performance Stock

CLASS OVERVIEW

CP Stock is a naturally aspirated heads-up class designed for 1955 and newer GM (General Motors) bodied vehicles and is designed as a low cost, entry level heads-up class. CP Stock is designed around competitors using a production OEM Sealed Chevrolet Performance DR525 crate engine combined with a factory Chevrolet Performance sealed ECM and installation kit. This helps control the ever rising expenses associated with competitive heads-up drag racing and allows racers to explore other avenues to gain a performance advantage. All entries must compete on accepted suspension and at the same base weight.

CONTRACT

All entries are required to read and sign a racer's contract. The purpose of this contract is to keep class participants from tampering with and/or altering the OEM Sealed Chevrolet Performance DR525 crate engine along with the supplied tune. Any breach in this contract will result in suspension from NMCA competition for all related parties. Severity of a suspension will be determined by the NMCA Event Director and Tech Director, based on the severity of each infraction.

Note: This set of class rules is presented to all competitors under the assumption that any modifications not specifically written within these rules shall be deemed illegal, unless the competitor has the expressed written consent from the NMCA Tech Director.

RACING FORMAT

This class will be an all run heads-up field, *NHRA Pro Ladder*, Autostart, .400 Pro Tree.

ENGINE MAX CIDBASE WEIGHT

Chevrolet Performance DR525

3200 lbs

Note: All weights are with driver and rounded down to the nearest five pound increment.

REQUIREMENTS & SPECIFICATIONS

ENGINE: 1

ENGINE

OEM Sealed Chevrolet Performance DR525 is mandatory for all entries. Any internal or external engine modifications (including sensors: crank, cam, O2, etc...) are strictly prohibited.

Remanufactured engines are **prohibited**.

Chevrolet Performance Sealed Engine Technology produces the DR525 has a uniquely identifiable engine seal at each of the following locations:

2 seals on the intake manifold

1 seal on the front cover

1 seal on the oil pan

(Below are the only 2 approved engine kit part numbers, which include the engine and instruction sheets)

Chevrolet Performance Part # 19329008 or 19369327(DR525 crate engine with F-car oil Pan engine kit)

Chevrolet Performance Part # 19329009 or 19369329(DR525 crate engine with muscle car oil Pan engine kit)

BLOCK

(Below are the only 2 approved block part #s)

Chevrolet Performance Block Part # 12623967

Chevrolet Performance Block Part # 12629017.

HARMONIC BALANCER

SFI approved harmonic balancer with a minimum diameter of (7.33) inches is required.

Diameter will be measured from the top of the serpentine belt ribs located on the balancer.

ENGINE MOUNTS & LOCATION

Solid engine mounts are permitted. Engine/Motor plates are prohibited. Engine block and cylinder heads cannot be in contact with the firewall.

INTAKE MANIFOLD

Stock Chevrolet Performance OEM supplied intake manifold is the only intake permitted for all entries.

ENGINE DRIVE BELT SYSTEM

Unmodified OEM 6-rib serpentine belt drive system required.

OILING SYSTEM

Chevrolet Performance OEM supplied unmodified oiling system and oil pan required. Any external oil pumps, oil lines vacuum pump/crankcase ventilation system, or any other oil system add-on is prohibited. OEM recommended Oil Accumulators are permitted

COOLING SYSTEM

Radiator and Chevrolet Performance OEM supplied water pump is required. Water pump must be unmodified. Any OEM or production style radiator is permitted and must mount in the stock location. Any cooling fans permitted. Stock Chevrolet Performance OEM core support is required.

EXHAUST SYSTEM

Aftermarket long tube style headers are permitted with a maximum outside diameter primary tube size of 1.930 inches. Complete exhaust system with two mufflers is required. Maximum exhaust tubing diameter is 4 inches and must exit within 12 inches of the rear axle centerline.

FUEL SYSTEM

Chevrolet Performance Filter/pressure regulator Part #19239926 is recommended. Aftermarket fuel pumps along with one aftermarket fuel pressure regulator permitted. Maximum fuel pressure measured at the regulator is 65psi. All fuel lines must originate and return to one fuel cell. Any method of artificially cooling fuel is prohibited. A check valve mounted between pressure regulator and fuel rails for fuel removal is mandatory. All entries will be subjected to random fuel checks. Fuel cells are permitted and must be located in the trunk area.

EFI SYSTEM

Chevrolet Performance Racing Performance Products sealed engine Controller Part Number # **19353299 or 19354341 (19354341 is a superseded part # with no difference in the two controllers)** is mandatory and are the only approved processors for this class.

Processor must remain intact, unmodified and must be functional. Any computer "add-ons" are prohibited. Entries are required to run the spec tune provided by Chevrolet Performance or the NMCA.

All entries will be subjected to random processor recalibrations and/or exchanges to ensure a level playing field. An OEM supplied stock throttle body mounted in the stock location is required. Maximum throttle body size is **90mm**.

Any modifications performed to the OEM throttle body are prohibited. The use of aftermarket throttle bodies is prohibited.

Mass air sensor must be no closer than 4 inches to the throttle body to the sensor and no further than 12 inches away from the throttle body to the sensor. Aftermarket mass air housing permitted. Mass air sensor is required to be functional.

Eight unmodified OEM supplied fuel injectors are mandatory. Fuel injectors must remain in the stock location. Aftermarket fuel rails are prohibited.

PCV system must be installed per the Chevrolet Performance controller instructions.

AIR FILTER SYSTEM

Any automotive type aftermarket air filter system required. Recommend a Dry Media Type air filter. All incoming air entering the engine must pass through an air filter system.

FUEL

VP Racing Fuels C-10 is the only gasoline allowed. NMCA reserves the right to inspect fuel at any time during competition. Failure to pass Fuel Check is grounds for disallowance of the run during competition and disqualification from the event during eliminations.

Fuel is checked using various means. Samples given to Fuel Check Technical Inspectors are compared to data taken from known fuel samples provided by VP, adjusted for temperature, and within a tolerance determined by NMCA. Failure occurs when the sample readings fall outside those tolerances.

DRIVETRAIN: 2

CLUTCH

Clutch and Flywheel meeting SFI Spec 1.1 or 1.2 is required. Diaphragm Pressure Plate assembly is required. Single Clutch Disc with a minimum of 10 inches in diameter is required. Factory style mechanism for clutch operation is required. Clutch release must be manually operated by driver's foot. The use of electronics, pneumatics, hydraulics, or any other device is prohibited from affecting clutch system/operation. Steel flywheel shield meeting SFI Spec 6.1 is mandatory. Flywheel shield cannot be modified for clutch adjustment and/or cooling holes.

MANUAL TRANSMISSION

Only NMCA specified manual transmissions permitted. All transmissions are required to be unmodified from the manufacturer which also includes the following: helical or straight-cut gear sets, gear ratios, and counter shafts. All gear changes must occur directly from the driver. Pneumatic, hydraulic, electric, etc. shifters are prohibited. Clutch-less transmissions are prohibited. Clutch must be used to change gears in a conventional manner. Pro-shifting is permitted on all transmissions. All manual Transmission shifters must maintain an H pattern. Aftermarket shifter with a single pivot ball shifting arm that uses OEM mounting holes is required. Floor-shift conversion kits are permitted.

Permitted Manual Transmissions / Gear Sets

- G-Force –G101A, GF4A – 2.933, 1.867, 1.333, 1.000
3.000, 1.870, 1.340, 1.000
3.173, 1.960, 1.346, 1.000
3.252, 2.009, 1.380, 1.000
3.300, 2.100, 1.406, 1.000
- Jerico –DR4 -
- **Tremec T56/TR6060 -** 3.36/2.07/1.35/1.00/.80/.62
2.97/2.07/1.43/1.00/.80/.62
2.66/1.78/1.30/1.00/.74/.50
2.66/1.78/1.30/1.00/.74/.50
2.97/2.07/1.43/1.00/.84/.56
2.66/1.78/1.30/1.00/.74/.50
2.97/2.07/1.43/1.00/.84/.56

G-Force T56
2.98/1.99/1.35/1.00/0.77/0.51
2.71/1.79/1.30/1.00/0.90/0.54
2.62/1.73/1.35/1.00/0.77/0.51

- **T56 Magnum -** 2.66/1.78/1.30/1.00/.80/.63
2.97/2.10/1.46/1.00/.74/.50

- **TR6060 -** 2.97/2.10/1.46/1.00/.71/.56
2.66/1.78/1.30/1.00/.80/.63
3.01/2.07/1.43/1.00/.84/.57
2.66/1.78/1.30/1.00/.74/.50
2.97/2.07/1.43/1.00/.84/.56
2.29/1.61/1.21/1.00/.81/.67
2.29/1.61/1.21/1.00/.72/.50

- Liberty -LCS 5000 4-Speed**
- Andrews Transmission –A431 H-Pattern 4-speed**

**Contact NMCA Tech Department for permitted gear ratios

AUTOMATIC TRANSMISSION

Any GM, NON ECM/PCM “COMPUTER” controlled automatic transmission permitted. Permitted transmissions include TH200, 350, 400, Powerglide, 200R, 700R. Automatic transmission converters must be weld-up type and have steel case housing. Trans-brakes are permitted. All trans-brake switches/buttons must be NHRA approved type. The use of any “lock-up” style converter is prohibited. Pneumatic, electric, hydraulic, etc. shifters are prohibited. Manipulation of transmission or converter pressure or volume by means of electric, pneumatic, hydraulic, non-OE or aftermarket solenoids or valves is prohibited.

DRIVELINE

Any steel or aluminum driveshaft is required. Carbon fiber driveshaft is prohibited. Driveshaft safety loop is required. Titanium Driveline Components prohibited unless OEM Factory Equipped. Example: Yokes, wheel studs, Axles, Brake rotors, Calipers, Etc.

REAR END

Any OEM automotive type rear end permitted.

BRAKES, STEERING &SUSPENSION: 3

BRAKES

Front and rear hydraulic brakes are required. Carbon fiber brakes are prohibited unless factory equipped (Z06, Z/28, ZR1). Automated brakes are prohibited. The application and release of

the brakes must be a function of the driver. Dual reservoir master cylinder is required. Line-lock is permitted only on the front wheels using one line-lock button and solenoid. Any other electrical, pneumatic, hydraulic, etc. switch in braking system is prohibited. Titanium Brake Components prohibited unless OEM Factory Equipped. Example: Brake Rotors, Calipers, Etc.

STEERING

Any OEM automotive production type steering system permitted.

SHOCKS/STRUTS

Stock replacement type shocks in the rear and shocks or struts in the front are required. Coil-over struts are permitted. Shock/strut must mount in stock location. Shocks/struts must be stand-alone and cannot be adjustable during a run. Rear coil over shocks are permitted. Electronic programmable shocks/struts are prohibited. Spindle mount type struts are prohibited.

FRONT SUSPENSION

Post 1978 and Newer Vehicles: Stock, aftermarket or tubular type K-member permitted. K-member must mount in its original location. K-member may be notched for oil pan clearance. Factory strut/shock towers are required. Bolt-on type caster/camber plates are permitted. Factory or commercially available controls arms and spindles are permitted.

Pre-1978 and Older Vehicles: The use of commercially available bolt-on front suspension kits for engine fitment is permitted. Factory strut/shock towers are allowed to be modified for engine fitment and must maintain an OEM appearance.

REAR SUSPENSION

Stock rear type or ladder bar suspension permitted. Racing style 4-link suspensions are prohibited. Stock type suspension may utilize any commercially available direct bolt in shocks, springs, leaf springs or factory style 3-link/4-link suspension systems for the particular year/make/model of car being used. Leaf springs are allowed to be moved inboard. Torque arm style suspensions are only permitted on OEM equipped vehicles. Bolt-on traction devices, panhard bars and anti-roll bars are permitted. All NHRA Stock Eliminator approved suspensions. Straight axle conversion on COPO Camaro or any GM car with factory Independent Rear Suspension are permitted. Rear axle conversion style suspensions must be pre approved by NMCA Tech Dept

WHEELIE BARS

The use of wheelie bars is prohibited.

FRAME: 4

CHASSIS

All vehicles must have a chassis that meets the guidelines set by SFI for their respective speed and elapsed time. A valid NHRA serialized Chassis sticker is mandatory for any car running 9.99 (6.39 = 1/8 mile) or quicker, or 135mph or faster at a NHRA member track.

FRAME

Front and rear frame rails must remain unaltered and in the stock locations. Rear frame rails may be notched. Stock front frame rails may be removed or replaced forward of K-member, or forward of front suspension location points.

WHEELBASE

Entries must retain stock wheelbase dimensions of + or – 1 inch. Maximum wheelbase variation from left to right is 1 inch.

GROUND CLEARANCE

A minimum of 4 inches from the front of the vehicle to 12 inches behind front spindle centerline is mandatory. A minimum of 3 inches for the rest of the vehicle is mandatory (except for oil pan and exhaust headers).

TIRES & WHEELS: 5

TIRES

The use of 28.0" X 10.5" bias-ply slicks or smaller, is required. Tire tread may not extend outside of the fender.

WHEELS

Aftermarket racing wheels permitted. Spindle mount type front wheels are prohibited.

INTERIOR: 6

UPHOLSTERY

Must have full factory type upholstery, including carpet, door panels, headliner, and factory dash. Driver's and passenger's seats are required and mounted in the stock location.

Aftermarket front seats are permitted and must be upholstered. Rear seat, heater and A/C controls may be removed.

STEERING COLUMN/WHEEL

OEM or stock type steering column required. Steering column must have a factory appearance. Removable steering wheel is permitted.

PEDALS

Must Use Supplied Accelerator Pedal Assembly included in Chevrolet Performance Controller Kit. Chevrolet Performance Part # 19329003

BODY: 7

BODY

Body must retain original appearances and profiles for year, make and model being used. OEM body shell must be intact. Light weight body panels are restricted to hood, bumpers and deck-lid/truck-lid or hatch. Hood may be a lift-off style and deck-lid/trunk-lid or hatch must be hinged. Lift off style deck-lid/trunk-lid or hatch is prohibited. Alterations or aerodynamic modifications are prohibited.

HOOD SCOOPS

The use of aftermarket forward facing hood scoops is prohibited. GM OEM hood scoops are permitted and must be sealed off from fresh air. Cowl induction style hood is permitted with a maximum height of 6 inches. Cowl height will be checked from the tallest point of the hood to the fender line.

GRILLE

Grille must be full production for make, model and year being claimed. Covering in front of or behind the grille is prohibited. Fresh Air Source through Grille is permitted, but design must be preapproved by NMCA Tech Director.

BUMPERS

No body components, bumper add-ons, sill plates, chin spoilers, body kits, license plate frames, etc. are permitted to be added to the nose of the vehicle. "Outlaw" style bumpers are prohibited.

FIREWALL

Stock, unaltered firewall is required.

FENDER SPLASH PANS

Full, factory OEM or aftermarket inner fenders are required.

WINDSHIELD & WINDOWS

ALL OEM glass is required.

FLOOR

The driver's/passenger's floor, including transmission tunnel must be unaltered and in the stock location. Transmission Tunnel may be modified for Transmission Installation. Transmission Tunnel may not be removable.

WHEEL WELLS

Factory wheel wells/tubs are required. Widening/sectioning for tire fitment is permitted and must maintain an OEM appearance. Wheel well modifications are restricted to 1978 and older vehicles, 1979-newer are required to have stock wheel wells. Aftermarket style mini-tubs are permitted.

WING/SPOILERS

Rear wing/spoiler is permitted with a maximum length of 26 inches. Rear wing/spoiler will be measured from the transition point of the deck-lid/trunk-lid to the rear most portion of the wing/spoiler. Any adjustments to the wing/spoiler during a run are prohibited.

STREET EQUIPMENT

Functioning, Headlights and taillights/brake lights are required.

APPEARANCE

All cars in competition must be painted or wrapped. Advertising graphics are permitted on the body. In order to be eligible for the NMCA official contingency program, all contingency sponsors' decals must be easily visible and located on the outside of the vehicle. Failure to do so can result in the driver **forfeiting** all claimed contingencies for that particular event. The NMCA requires that all entries run the following decals:

1. NMCA Windshield Banner: Decal needs to be located on the top of the windshield or just above the windshield located on the body.
2. NMCA Drag Racing Series: Decals (2) must be located on each side of vehicle. Either on the side windows or decals can be located on the body right beside the side windows.
3. Class Sponsor: Decal must be located on the passenger's side lower portion of the windshield.
4. VP Racing Fuels: Official Fuel decals (2) required. Must be located on each side of vehicle. (In a contingency decal manner)
5. Aerospace Winners Circle: Decals (2) must be prominently displayed on each side of vehicle. Failure to do so can result in the winning driver forfeiting his/hers Winner's Trophy & Payout.
6. Class & Competition Numbers: Numbers must be easily visible/legible and located on the front, back, and both side windows.

ELECTRICAL: 8

BATTERIES/CHARGING SYSTEM

Must be a 12 Volt Battery. Battery may be relocated and must be an automotive type. Charging system must be functional and use OEM 6-rib belt that is crank driven.

IGNITION

Stock unmodified GM ignition is required. Standalone two-step rev-limiter is permitted. Two-step switches (for manual transmission) must be located on clutch pedal only and have at least one half inch clutch engagement travel to activate the two step switch. Two-step system is allowed to piggy-back with existing connector and must retain the standard functions of a two-step. Any modifications performed to the GM harness or its sensors are strictly prohibited.

MASTER CUTOFF

A master cutoff switch is mandatory on all vehicles with a battery located in the trunk.

LINE LOCK

Only one line lock button permitted and must be wired stand alone. Line lock circuit will have no other wiring spliced or attached to its function. Line lock permitted on front brakes only.

STARTER

Aftermarket starters, in stock location permitted.

WIRING HARNESS/LOOM

Chevrolet Performance Wiring Harness PN # 19166573

Chevrolet Performance Map Jumper Harness PN# 19202598

The Chevrolet Performance engine harness/computer loom are mandatory.

Any modifications to harness/loom and any electrical sensors are prohibited.

SUPPORT GROUPS: 9

COMPUTER/DATA RECORDERS

Only NMCA approved external data recorders, data loggers, are permitted. Any wide-band O2 device must be capable of only logging air/fuel ratio, and may not be run in closed loop with EFI or ignition system. Only a single O2 sensor is permitted to be installed in each header collector. Playback tachometers permitted including those that record driveshaft RPM. Laptops prohibited in vehicle during competition.

Approved Data Loggers:

- **Racepak: Sportsman Series**
- **AEM: AQ-1**
- **Port-a-Tree Data: Electronic Switch Panel**
- **Computech: Data Max**
- **RPM Performance Products: DL10**
- **Performance Trends: DataMite III**
- **Altronics: DataQuest**

INDICATOR LIGHT

A small, remote mounted, indicator light wired to the (MIL) malfunction indicator light wire which is available adjacent to the pedal control assembly. The light must be mounted in a highly visible location close to the ALDL (tech port) connector. The MIL wire provides ground path for remote indicator light.

BRACKET RACING AIDS

The use of any bracket racing aids such as optical sensors, delay boxes, shutter boxes, throttle stops, etc. are prohibited. The use of any device (electrical or mechanical) that allows a driver to ascertain the position of their vehicle to the starting line is prohibited.

TOW VEHICLES

The use of tow vehicles is limited to being towed to the staging lanes and or away from the scales. Vehicles must drive to or manually be pushed to the scales proceeding each qualifying run.

CREW MEMBERS

Each crew member must have the proper starting line credentials and must wear matching attire.

DRIVER: 10

DRIVER

The driver when in the vehicle, from the ready line until the vehicle is safely stopped on the return road, is required to have all safety restraint systems (including the helmet) on and be securely fastened in the vehicle at all times

CREDENTIALS

A Valid state or government issued driver's license beyond a learner/s permit level mandatory for cars running 10.00 or slower.

A Valid NHRA competition license is mandatory for cars running 9.99 or quicker, at an NHRA Member Track. NHRA/IHRA competition license mandatory at an IHRA Member Track.

Note: It is ultimately the competitor's responsibility to familiarize themselves with the NMCA class requirements as well as all NHRA safety requirements. The competitor agrees they bear the ultimate responsibility when it comes to safety and how it complies with the NMCA and NHRA rule books. The competitor also agrees that no one else other than the competitor is in the best position to know about how their particular race car has been constructed and how to safely operate it.