FACTORY SUPER CARS

CLASS OVERVIEW
Factory Supercars is an eliminator designed for the Detroit-based OEM companies to compete heads-up with the modern factory drag racing cars dubbed Chevrolet COPO Camaro, Dodge Challenger Drag Pak, and Ford Cobra Jet Mustang. The cars will adhere to the "stock" type limitations, run heads-up with no breakout, and launch off a Pro-tree start. It is the rebirth of factory muscle car drag racing on the quarter-mile dragstrip.

CLASS RULES
2008 and Newer - Chevrolet COPO, Ford Cobra Jet and Dodge Drag Pak. Different year engine configurations may be transplanted into different year bodies as long as they are the same make and model. Example: 2017 Copo engine may be transplanted into a 2008 Camaro. Cross breeding of brands is strictly prohibited.

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 Style Ladder, on a .500 Pro Tree, Autostart.

CLASS DESIGNATION = FS

ENGINE	POWER ADDER	BASE WEIGHT
Ford 330 (2008 – 2012)	2.3L TVS / Eaton	3275
Ford 302 (2010 – 2016)	2.9L Whipple	3525
Ford 327 (2019)	3.0L Whipple	3575
Ford 351 (2019)	2.9L Whipple	3575
GM 327 (2012)	2.9L Whipple	3275
GM 350 (2014 - 2018)	2.9L Whipple	3525
GM 350 (2019)	2.65L Magnuson	3575
Mopar 354 (2015)	2.9L Whipple	3575

Note:
All above listed engine combinations will be based off of the NHRA's Stock Eliminator engine specifications chart. Factory built cars or ''clones'' are permitted.

REQUIREMENTS & SPECIFICATIONS

ENGINE: 1

BLOCK

Any Factory OEM or NMCA approved direct replacement engine block is permitted. Maximum cylinder bore over stock is .080-iches. Bores will be measured at the top of the cylinder where ring wear is not evident. Cylinder blocks may be sleeved.

HARMONIC BALANCER
SFI Spec 18.1 balancer is required.

ENGINE MOUNTS & LOCATION
Engine/motor plates and mid-plates are permitted. Engine must be in the stock location. Engine block and cylinder heads may not be in contact with the engine firewall.

CRANKSHAFT
Stock or NMCA accepted aftermarket crankshafts are permitted. Aftermarket crankshaft must retain OEM configuration (i.e., billets, knife edging, etc. prohibited). Stroke tolerance is +/- .015-inch. Lightning of crankshaft (other than normal balancing) is prohibited.

CONNECTING RODS
Stock or NMCA accepted aftermarket connecting rods are permitted. Length must be stock +/- .025-inch center to center. The use of connecting rod and crank spacer bearing is prohibited. The combined weight of the piston, pin, rings and connecting must be equal to or greater than the NHRA stock replacement minimum assembly weight.

PISTONS & PINS
Stock or NMCA accepted aftermarket pistons and pins are permitted. Aftermarket pistons may be forged or cast and must retain as-cast or as-forged head configuration. Piston must the same overall design with the same dome and/or dish configuration as the factory OEM piston. The pistons must retain the correct number, location, depth and width of ring groves. Any steel wrist pin of OEM diameter permitted. Any modifications to the piston and/or pin are prohibited.

PISTONS RINGS
Stock or NMCA accepted aftermarket piston rings are permitted. Aftermarket piston rings must retain factory OEM dimensions.

TIMING CHAINS
Aftermarket timing covers are permitted as long as factory OEM type timing gears and chains are used. Aftermarket gear drives and/or belts are prohibited.

CAMSHAFT

Camshaft must maintain stock lift for year, make and model of car being used. Aftermarket or factory lifters are permitted.

LIFTERS/LASH ADJUSTERS

Aftermarket or factory lifters/lash adjusters are permitted.

VALVE SPRINGS

Any valve springs are permitted.

CYLINDER HEADS

All cylinders heads must be unmodified and meet all dimensions for year, make and model being claimed. This includes intake port runners, exhaust port runners and combustion chambers. Regardless of poured volumes any modifications to the cylinder heads are strictly prohibited.

INTAKE MANIFOLD

Intake manifold must be the factory OEM manifold for the year, make and model of engine claimed. Any alterations and/or modifications to the intake manifold are prohibited.

SUPERCHARGER

Whipple 3.0L and 2.9L, Eaton/TVS 2.3L and Magnuson 2.65L are the only superchargers permitted. Throttle bodies must remain in the stock location for year, make and model of engine being claimed. Modifying the supercharger is prohibited. Supercharger and Rotor measurements must meet NHRA specifications for each claimed combination. If you are unsure of the size of your supercharger rotor, please contact Whipple Superchargers for confirmation.

Supercharger permitted pulley chart

YEAR BRAND	***CID/HP***	***SUPERCHARGER***	***UPPER***	***LOWER***
2014-2015 Camaro COPO 350	530 HP	2.9L Whipple	3.250	8.000
2016-2018 Camaro COPO 350	580 HP	2.9L Whipple	3.250	8.000
2017-2018 Camaro COPO 350	590 HP	2.9L Whipple	3.125	8.000
2019 Camaro COPO 350	630 HP	2.65L Magnuson 34J/32R	3.5803.500	8.000
2015 Challenger Drag Pak 354	530 HP	2.9L Whipple	3.125	7.950
	540 HP	2.9L Whipple	3.125	7.950
2008 Mustang Cobra Jet 330	425 HP	2.3L Eaton	2.911	8.125
2010 Mustang Cobra Jet 330	435 HP	2.3L Eaton	2.754	8.125
	500 HP	2.9L Whipple	3.970	8.125
2012 Mustang Cobra Jet 330	450 HP	2.3L Eaton	2.911	8.125
	510 HP	2.9L Whipple	3.970	8.125

2013 Mustang Cobra Jet 302	500 HP	2.9L Whipple	3.500	8.000
2014 Mustang Cobra Jet 302	525 HP	2.9L Whipple	3.375	8.000
	560 HP	2.9L Whipple	3.000	8.000
2016 Mustang Cobra Jet 302	565 HP	2.9L Whipple	3.250	8.000
	575 HP	2.9L Whipple	3.250	8.000
2019 Mustang Cobra Jet 327	610 HP	3.0L Whipple	3.750~~3.500~~	8.000
2019 Mustang Cobra Jet 351	570 HP	2.9L Whipple	3.500~~3.250~~	8.000

INTERCOOLING

Factory OEM intercoolers and intercooler tanks must be retain for year, make and model being claimed.

OILING SYSTEM

Any oil pan permitted. Stock or aftermarket OEM type oil pump is permitted. Oil pump location, oil pump drive, and complete oiling system must remain as originally produced. The use of an accumulator is permitted. All entries are encouraged to have a properly fitting lower engine oil containment device. (This will be mandatory in 2020)

COOLING SYSTEM

Full size stock type radiator for year, make and model being claimed is required. Aluminum radiators are permitted. Any cooling fans are permitted. Any aftermarket factory OEM type water pump is permitted. Water pump must bolt onto the factory location without any modifications.

EXHAUST SYSTEM

Any tubular headers are permitted.

FUEL SYSTEM

Any electric fuel pump permitted. Electric fuel pump must shut off with vehicle's ignition switch or master cut-off switch. Fuel lines may be changed to any size line with in-line fuel filters and fuel regulators permitted. Factory gas tanks and aftermarket fuel cells are permitted. When using a fuel cell, a rear firewall of a minimum .032 inch aluminum or .024 inch steel must be installed to totally seal driver compartment from fuel cell.

EFI SYSTEM

OEM or any commercially available mass-produced OEM type aftermarket fuel-injection system permitted. Any size/type of fuel injector permitted with a maximum of 8 injectors located in the stock location.

THROTTLE BODY

Throttle body must be the correct size for year, make, make and model of engine being claimed.

AIR INTAKE/BOX

Air Intake/Box must be correct for year, make and model of engine being claimed or have prior approval from NMCA Tech department.

THROTTLE LINKAGE

Throttle control must be operated by the driver's foot

FUEL

Gasoline is the only acceptable fuel 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 must read no greater than "0" on the Kavlico Model FT-K01 Fuel Check meter. No oxygenated fuels permitted.

DRIVETRAIN: 2

CLUTCH

Clutch and flywheel meeting SFI Spec 1.1 or 1.2 (2-disc maximum) is mandatory. Steel flywheel shield meeting SFI Spec 6.1 or 9.1 mandatory. Flywheel shield cannot be modified for clutch adjustment and/or cooling.

MANUAL TRANSMISSION

OEM or NMCA accepted aftermarket transmissions having same number of forward speeds as original and reverse may be used. All gear changes must be a direct action from the driver. Pneumatic, electric, hydraulic, etc. shifters are prohibited. Floor shift conversions kits are permitted. Clutch-less transmissions are prohibited. Clutch must be used to change gears in a conventional manner.

AUTOMATIC TRANSMISSION

Any model transmission, same make as car, with a maximum of three forward speeds (unless OEM equipped with more forward speeds) permitted. Any gear change must occur as a result of an internal function of the transmission or from a direct action of the driver. Pneumatic, electric, hydraulic, etc. shifters are prohibited. All vehicles running quicker than 9.99 or faster than 135 mph using an automatic transmission must be equipped with a transmission shield meeting SFI Sec 4.1, a flexplate meeting SFI Spec 29.1, and covered by a flexplate shield meeting SFI Spec 30.1.

Lockup Torque Convertor's prohibited. Transbrake's prohibited.

DRIVELINE

Any steel or aluminum driveshaft is required. Carbon fiber driveshaft is prohibited. Driveshaft safety loop is required.

REAR END

Any OEM automotive type rear end permitted.

BRAKES, STEERING & SUSPENSION: 3

BRAKES

Front and rear hydraulic brakes are required. Carbon brakes are prohibited. 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.

SHOCKS/STRUTS

No pneumatic or electronic shocks permitted unless such items are Factory OEM equipped. No additional reservoirs permitted.

FRONT SUSPENSION

Complete stock front suspension systems as produced by manufacturer for year, make, model being used. Aftermarket tie rod ends with Heim joints are permitted.

REAR SUSPENSION

Factory OEM rear suspension for year, make and model being used is mandatory. Aftermarket Lower unit must be non-adjustable and have bushed ends (no heims). Cars equipped with coils may be relocated. Sway bars are permitted.

WHEELIE BARS

Wheelie bars are permitted and cannot be longer than 48-inches or to the rear bumper, whichever is greater.

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 for tire clearance only. Notching rear frame rails for rear end clearance/ride height purposes is prohibited. Sub frame connectors are permitted.

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 30-inches tall by 9-inches wide or smaller slicks is required. Rear tires may not exceed 10-inches wide regardless of wear. Tire tread may not extend outside of the fender.

WHEELS

Aftermarket racing wheels permitted.

INTERIOR: 6

UPHOLSTERY

Must have full factory type upholstery, including carpet, door panels, headliner, and factory dash. Driver's seat is 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 & PEDAL LOCATION

Stock type pedals and linkage in the factory location are required.

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. Factory OEM hood scoops are permitted.

COWL AREA

Complete OEM cowl is required.

GRILLE

Grille must be full production for make, model and year being claimed. Covering in front of or behind the grille is prohibited.

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.

FIREWALL

Stock, unaltered firewall is required. Any holes in firewall must be sealed to separate the engine bay from interior.

FENDER SPLASH PANS

Full, factory OEM or aftermarket inner fenders are required.

WINDSHIELD & WINDOWS

All Factory OEM glass is required and must be operational.

FLOOR

Complete stock floor, in the stock location is mandatory. Any holes in floor and/or transmission tunnel must be sealed.

WHEEL WELLS

Factory wheel wells/tubs are required.

WING/SPOILERS

Factory OEM rear wing/spoiler are permitted. Any adjustments to the wing/spoiler during a run are prohibited.

STREET EQUIPMENT

Headlights and operational 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 NMRA does require all entries to 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

Battery may be relocated and must be an automotive type

DISTRIBUTOR

Any battery operated, stock type ignition is permitted. Crank trigger systems prohibited unless OEM distributor-less ignition. Distributor-less ignition must retain OEM number of coils.

IGNITION

Two-step permitted. Two-step must be foot-activated through brake pedal, clutch pedal, or pressure switch. Hand release is prohibited. All wiring associated with the ignition system must be fully visible and traceable.

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

STARTER
Aftermarket starters, in stock location permitted.

SUPPORT GROUPS: 9

COMPUTER/DATA RECORDERS
Original OEM computer may be replaced with an aftermarket computer. Data recorders are permitted.

BRACKET RACING AIDS
The use of any bracket racings 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 permitted.

CREW MEMBERS
Each crew member must have the proper starting line credentials and must were 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 is mandatory for cars running 10.00 or slower. A valid NHRA competition license is mandatory for cars running 9.99 or quicker, at a NHRA Member Track. A valid NHRA or an IHRA competition license is 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.