

# **HOBBY TRUCK SERIES RULES**

Kings Park Speedway – Hobby Truck Rules

Publish date: 2000

Revision: C

Updated: January 7, 2021

**See added updates: January 19, 2023**

## **1) OVERVIEW**

1.1) By registering as an owner or driver you agree to be knowledgeable and bound by the contents found herein and in the General Rules.

### 1.2) Objective

1.2.1) The Truck division are late model North American production trucks, stock in appearance and construction and designed for the amateur individual participating in racing trucks for a hobby.

1.2.2) The rules and restrictions are designed to prevent the cost of competing from getting out of hand, and give each individual a fair and competitive chance.

## **2) DEFINITIONS**

### 2.1) Stock

2.1.1) Parts available from your local dealer through ordinary parts catalogs may be accepted as OEM stock. (original equipment manufacturer)

2.1.2) Parts ordered through dealer performance catalogs will not necessarily be considered legal.

2.1.3) No marine parts will be allowed.

### 2.2) Requirements

2.2.1) Items they will be allowed and are required.

### 2.3) Restrictions

2.3.1) Items that are not allowed. The list of restrictions should not be considered complete.

2.3.2) If in doubt talk to the executive before you do it.

## **3) SPECIFICATIONS**

### 3.1) Air Cleaner

#### 3.1.1) Requirements

3.1.1.1) No Cold, No Ram. (updated January 7, 2021)

3.1.1.2) Stock Base OEM Type paper air cleaner to act as a flame arrestor.

#### 3.1.2) Optional

3.1.2.1) K&N Filters.

#### 3.1.3) Restrictions

3.1.3.1) No high velocity or stack type air cleaners.

3.1.3.2) No cowl induction system.

3.1.3.3) No ram air tubing or ducting.

### 3.2) Battery (updated: Feb 28, 2020)

#### 3.2.1) Requirements

3.2.1.1) Battery box is required if battery is located inside the cab (Permitted only with extended cab models). Must be located behind the driver seat. (updated: Feb 28, 2020)

3.2.1.2) If the battery is located outside of frame rails a horizontal cage is required around the battery. (updated: Feb 28, 2020)

### 3.2.2) Restrictions

3.2.2.1) One automotive Battery.

### 3.3) Body Appearance (updated January 7, 2021)

#### 3.3.1) Requirements

3.3.1.1) Must be presentable in all race events.

3.3.1.2) Panels must be painted.

3.3.1.3) Straight, sound, stock appearing and in stock position on frame.

3.3.1.4) 100% of body panels must be attached each race day.

3.3.1.5) Floorboard and firewall factory.

### 3.4) Body Style (updated January 7, 2021)

#### 3.4.1) Requirements

3.4.1.1) GMC, Chevrolet, Dodge, and Ford full size half ton trucks from 1967 to present inclusive with a minimum wheel base of 127 inches.

3.4.1.2) Standard cabs and straight side 8-foot boxes, or extended cabs 6-foot boxes.

3.4.1.3) Square bodies can move the diff 1 1/2" forward.

#### 3.4.2) Restrictions

3.4.2.1) No step side or short boxes.

3.4.2.2) No front wheel drive or four-wheel drives.

3.4.2.3) No 3/4 ton or larger chassis.

### 3.5) Body

#### 3.5.1) Requirements

3.5.1.1) Body and box must be steel and strictly stock.

3.5.1.2) Box, body and chassis must be of the same make and model and model year.

3.5.1.3) Character lines must retain alignment.

3.5.1.4) Box floor ribs may be notched to allow character line alignment.

3.5.1.5) Body and box must be securely fastened to frame.

3.5.1.6) Door and hood seams must stay original.

3.5.1.7) 22-gauge sheet metal must cover entire top of box and must be securely fastened.

3.5.1.8) Access panels must be secured with hinges and hood pins.

3.5.1.9) Chrome moldings, ornaments, door handles, glass or plastic must be removed, except the front windshield.

3.5.1.10) Original tailgate outer skin or a 22-gauge sheet metal conforming to the original shape may be used and must be welded or riveted shut.

3.5.1.11) Body repair or replacement panels must be made of steel minimum 22-gauge thickness.

#### 3.5.2) Optional (updated: Feb 28, 2020)

3.5.2.1) Door Handle, tail lamp and head lamp openings may be filled in with aluminum or steel sheet metal.

3.5.2.2) Body mount insulators may be removed.

3.5.2.3) Front inner fender may be removed.

3.5.2.4) Front spoiler and/or side skirting optional and must be a minimum of 5" from ground.

3.5.2.5) Rear spoiler optional and must be single plain sheet metal, maximum 6" high, no wider than tail gate.

3.5.2.6) Inner box liner panels may be removed.

3.5.2.7) Floor of box bed and rear wheel tubs may be removed.

3.5.2.8) Floor and wheel tubs must be extended to outer body panel.

3.5.2.9) May use aftermarket nose pieces.

- 3.5.3) Restrictions
- 3.5.3.1) No wood floors.
- 3.5.3.4) No sheet metal screws.

### 3.6) Brakes

- 3.6.1) Requirements
- 3.6.1.1) Four Wheel hydraulic brakes.
- 3.6.1.2) All four brakes must be factory original and be working at all the times.  
(subject to spot-check)
- 3.6.1.3) Dual line braking systems.

### **(3.6.2) Restrictions**

- 3.6.2.1) No lightening of backing plates, brake drums, and/or shoes by cutting or trimming metal.
- 3.6.2.2) No drilling of cooling holes in drums or rotors.
- 3.6.2.3) No adjustable proportioning valves or residual pressure check valves
- 3.6.2.4) No modifications to mounting points.
- 3.6.2.5) No rear disc brakes.

### 3.7) Bumpers

- 3.7.1) Requirements (updated: Feb 28, 2020)
- 3.7.1.1) Front and rear bumpers.
- 3.7.1.2) Mounted in Stock location.
- 3.7.1.3) Stamped steel OEM front bumper may be used on the rear.
- 3.7.1.4) Center height of bumpers must be between 16" and 19".

### 3.7.2) Optional

- 3.7.2.1) Tube rear bumper maximum 100 wall pipe, enclosed and flush with outside of skins.
- 3.7.2.2) Metal guards extending from bumper to body panel, riveted in place may be used to prevent bumper gouging.
- 3.7.2.3) Width of bumper may be shortened to conform with body.

### 3.7.3) Restrictions (updated: Feb 28, 2020)

- 3.7.3.1) Step bumpers must be plated across the step. (updated: Feb 28, 2020)
- 3.7.3.2) No reinforcing of bumpers.
- 3.7.3.3) Bumpers to be capped or bent in. (updated January 7, 2021)

### 3.8) Doors

- 3.8.1) Requirements
- 3.8.1.1) Securely bolted or welded front and back using three 2" welds top, center, and bottom.

### 3.8.2) Optional

- 3.8.2.1) Inner panels may be removed.

### 3.9) Drive line

- 3.9.1) Requirements
- 3.9.1.1) Drive shaft and universal joints must be stock steel standard production type.
- 3.9.1.2) Front and rear drive shaft retaining hoops must be 360 degree and made from minimum 1 1/2" x 1/4" steel.
- 3.9.1.3) Front and rear hope to be within 12" of respective U-joint.
- 3.9.1.4) Drive shaft to be painted white with truck number displayed.

### 3.10) Exhaust System (updated: Feb 28, 2020)

- 3.10.1) Requirements
- 3.10.1.1) Stock OEM cast iron manifolds.

- 3.10.1.2) Must consist of two exhaust pipes maximum 2 1/2" O.D. To muffler(s) and maximum 2 1/2" O.D. To exit.
- 3.10.1.3) Muffler's mandatory.
- 3.10.1.4) Exhaust must exit below and behind driver. (updated: Feb 28, 2020)

### 3.10.2) Optional

- 3.10.2.1) One balance pipe is allowed, maximum 2 1/2" O.D.

### 3.10.3) Restrictions

- 3.10.3.1) No manifold modifications. (example: grinding, porting, etc.)
- 3.10.3.2) No inverting manifolds.

### 3.11) Firewalls

#### 3.11.1) Requirements

- 3.11.1.1) Front fire wall must be original and in stock location.
- 3.11.1.2) All holes in fire wall to be covered by using 20-gauge sheet metal, riveted or welded.

#### 3.11.2) Restrictions

- 3.11.2.1) Do not use duct tape to seal holes in firewall.

### 3.12) Fire Extinguishers

#### **3.12.1 Optional**

- 3.12.2) All extinguishers and systems must be securely and mechanically fastened, and be fully functional and operational.
- 3.12.3) Fire extinguishers are mandatory in each pit stall. (updated January 7, 2021)

### 3.13) Floor

#### 3.13.1) Requirements

- 3.13.1.1) Stock complete and in original position from front firewall to rear of cab.
- 3.13.1.2) Holes must be covered by 20-gauge sheet metal, riveted or welded.

- 3.13.2) Restrictions 3.13.2.1) No Sub floors.

### 3.14) Frame

#### 3.14.1) Requirements

- 3.14.1.1) Full stock frame original to make.

#### 3.14.2) Optional

- 3.14.2.1) May be x-braced.

#### 3.14.3) Restrictions

- 3.14.3.1) No altering or channeling of the frame with the exception of cage construction.

### 3.15) Fuel

- 3.15.1) Pump Gas only.

### 3.16) Fuel Line

#### 3.16.1) Requirements

- 3.16.1.1) A steel line must be used, securely fastened under vehicle inside frame rail. (updated January 7, 2021)
- 3.16.1.2) Must use gear type clamps.

### 3.16.2) Restrictions

- 3.16.2.1) No more than 12" of rubber fuel line in entire system for adapting lines to fuel system components.
- 3.16.2.2) No plastic or glass fuel filters.
- 3.16.2.3) No copper lines.

### 3.17) Fuel Pumps

#### 3.17.1) Requirements

- 3.17.1.1) Stock OEM mechanical fuel pump. Any mechanical fuel pump. (updated January 7, 2021)

#### 3.17.2) Restrictions

- 3.17.2.1) No electric fuel Pumps.

### 3.18) Fuel Tanks

#### 3.18.1) Requirements

- 3.18.1.1) Stock gas tanks must be removed.
- 3.18.1.2) Approved fuel cell must be in metal container made of minimum 20-gauge sheet metal and securely fastened with four straps of steel minimum 1/8"x2".
- 3.18.1.3) Fuel cell capacity maximum 12 imperial gallons.
- 3.18.1.4) Fuel cell must be centered between the rear frame rails no further back than the differential. Optional 10" back from the diff and 12" off the ground. (updated January 7, 2021)
- 3.18.1.5) Fuel cell must have a roll over valve and vent must extend through box bed cover to outside.

### 3.19) Hood

#### 3.19.1) Requirements

- 3.19.1.1) Full stock hood.
- 3.19.1.2) Securely fastened with two hood pins.

#### 3.19.2) Optional

- 3.19.2.1) Bracing may be removed.
- 3.19.2.2) Removable hood requires four hood pins.

#### 3.19.3) Restrictions

- 3.19.3.1) No hood openings or hood scoops, non-functioning Ram allowed. (updated January 7, 2021)

### 3.20) Instruments

#### 3.20.1) Requirements

- 3.20.1.1) Oil pressure and water temp gauges.

### 3.21) Interior

#### 3.21.1) Requirements

- 3.21.1.1) Full width dash panel made of sheet metal.
- 3.21.1.2) Flammable material must be removed.
- 3.21.1.3) No cockpit style interiors.

### 3.22) Lights

#### 3.22.1) Requirements

- 3.22.1.1) Lights are required for night racing.
- 3.22.1.2) 2 red tail lights mounted on top and rear of box behind spoiler.
- 3.22.1.3) Max 2" amber lights must visible. (updated January 7, 2021)

### 3.23) Mirrors

#### 3.23.1) Requirements

3.23.1.1) Mirrors are optional.

3.23.1.2) If used one mounted in center, stock location.

3.23.1.3) Maximum size 3"x12".

### 3.24) Pedal Assembly

#### 3.24.1) Requirements

3.24.1.1) Stock and in stock location.

### 3.25) Radiators

#### 3.25.1) Requirements

3.25.1.1) Must be in stock location.

3.25.1.2) Radiator must include overflow container minimum of one litre mounted ahead of engine fire wall.

3.25.1.3) Hoses must have gear type hose clamps.

#### 3.25.2) Optional

3.25.2.1) Large radiators are permissible if they are safely installed in a radiator cradle.

3.25.2.2) Electric Fans.

3.25.2.3) Aluminum radiators.

### 3.26) Rear End

#### 3.26.1) Requirements

3.26.1.1) Stock passenger car or light truck type differential must be in family line.

#### 3.26.2) Optional

3.26.2.1) Rear end may be locked by welding or by using a locking device.

#### 3.26.3) Restrictions

3.26.3.1) No floater axles.

### 3.27) Ride Height (updated January 7, 2021)

#### 3.27.1) Requirements

3.27.1.1) Bottom of front cross member (under motor) to ground to be measured at 5.5". To be measured when coming off track after race.

3.27.1.2) Trucks must retain a level appearance within one inch as measured on the top of the box rail or 8-foot length.

### 3.28) Roll Cage

#### 3.28.1) Requirements

3.28.1.1) Six-point mild steel roll cage constructed of no less than 1-3/4" O.D. X .095 wall tubing must be securely welded to the frame.

3.28.1.2) Welds must be 360 degrees.

3.28.1.3) Gussets must be present on all adjoining pipes on the main cage.

3.28.1.4) Bends must be smooth and flowing, not crimped.

3.28.1.5) Cage must have a dash bar.

3.28.1.6) Main hoop behind driver must have a cross bar and a diagonal bar that is straight in line with the main hoop.

3.28.1.7) Frame brackets constructed from 1/4" steel mini mum may be added and gusseted to the outside of the frame rails to provide vertical mounts for the roll cage upright tubes.

3.28.1.8) Four door bars on the driver's side must be extended into the door within 1" of the outer door skin. Mandatory 1/8" plate on drivers' side with two rows of vertical connecting bars

extending to the frame or rocker panel.

3.28.1.9) Rear support bars extending through the rear window may not extend further back than the center line of the rear axle and must be mounted to the frame rails.

3.28.1.10) Additional bar added to the roof halo (anti-intrusion).

3.28.1.11) Roll bars in drivers' area must be padded with roll bar padding.

3.28.2) Optional

3.28.2.1) Front hoop with maximum 3 bars per side.

3.28.2.2) One foot protection bar extending through the front firewall will be allowed for safety purposes.

3.28.2.3) Approve kit cages are strongly recommended.

(Note: not all kit cages are approved for this class)

3.28.2.4) Kit cage manufacturers have multiple configurations and only configurations conforming to these rules will be permitted.

3.28.3) Restrictions

3.28.3.1) No chrome moly tubing.

3.28.3.2) No threaded pipe, pipe fittings, lap welded pipe, magnesium, or aluminum.

3.28.3.3) No square tubing, channel or angle iron will be permitted in the construction of the roll cage or bracing.

3.28.3.4) No flush grinding of welds.

3.28.3.5) No Exterior bars.

3.29) Seat

3.29.1) Requirements

3.29.1.1) A racing bucket seat securely bolted to the roll cage.

3.29.1.2) Approve head restraint made from energy absorbing material.

3.29.1.3) Seats must be positioned completely left of center line of truck.

3.30) Seat Belts

3.30.1) Requirements

3.30.1.1) Seat belts are 5 years from first Tech. (updated January 7, 2021)

3.31) Skid Plates

3.31.1) Requirements

3.31.1.1) On all four corners with no square edges down.

3.31.1.2) Must be the lowest point of the truck.

(example: All tires and rims removed; truck must sit on skid plates)

3.31.2) Restrictions

3.31.2.1) No brake shoes allowed as skid plates.

3.32) Steering Wheel

3.32.1) Requirements

3.32.1.1) Minimum 2" thick steering wheel pad.

3.32.1.2) Stock collapsible steering wheel.

3.32.2) Optional

3.32.2.1) Removable racing steering wheel with quick release metal hub is strongly recommended.

3.33) Suspension – General

3.33.1) Requirements

3.33.1.1) Suspension and steering parts are to be stock OEM with no modifications and no rear adjustable. (updated January 7, 2021)

3.33.2) Optional (updated: Feb 28, 2020)

3.33.2.1) Front adjustable spring pockets.

3.33.2.2) Coil springs and sway bars may be interchanged, providing they fit original mounting.

3.33.2.3) Hubs may be drilled for larger wheel studs.

3.33.2.4) Adjustable sway bars (seam joint) as long as mounted in factory location. (ONLY pre-1989 GM) (updated: Feb 28, 2020)

3.33.2.5) Allowed to relocate only upper shock mounts to top of frame. (+/-1") (updated: Feb 28, 2020)

3.33.3) Restrictions

3.33.3.1) No re-positioning of lower shocks or upper and lower control arms. (updated January 7, 2021)

3.33.3.2) No racing shocks; lumber or chains or relocating lower shock mounts.

3.33.3.3) No weight jacks.

3.33.3.4) No spring dampeners between the coils.

3.34) Suspension – rear leaf spring type

3.34.1) Requirements

3.34.1.1) Spring Perches must remain on stock frame rails. No adding to stock frame. Square bodies can move it to maintain wheelbase. Must be legal mount. (updated January 7, 2021)

3.34.2) Optional

3.34.2.1) 4-hole shackle is allowed.

3.34.2.2) Rear axle spring perches may be changed to allow under slung to be come over slung and vice versa. Left to right measurements must remain the same.

3.34.2.3) Swapping and inverting of rear spring shackles side for side.

3.34.2.4) Rear perches can be positioned to obtain ride height and level of box.

3.35) Suspension – Rear coil spring type

3.35.1) Requirements

3.35.1.1) Trailing arms and bushings must be stock OEM, non-adjustable using stock mounting points.

3.35.1.2) Stock spring pockets.

3.35.2) Optional

3.35.2.1) Steel spacers between rear axle perches and trailing arms for adjustment of level of box and pinion angle only.

3.35.2.2) Spacer thickness to remain the same from left to right.

3.35.2.3) Stock standard rod may be reversed from push to pull position.

3.35.2.4) Length is nonadjustable.

3.35.2.5) Fabricated mounts are non-adjustable.

3.35.2.6) Standard rod angle must be same as stock.

3.35.3) Restrictions

3.35.3.1) U-bolt must not be lower than the skid plates and must be trimmed to nut.

3.37) Transmission (automatic)

3.37.1) Requirements

3.37.1.1) Stock functioning torque converter must be retained.

3.37.1.2) Approved shifter. (no rods)

3.37.1.3) 180-degree scatter shield made of 1/4" plate the width of the bell housing.

- 3.37.1.4) All forward gears must be working as originally produced.
- 3.37.1.5) Operating reverse gear.
- 3.37.2) Optional
  - 3.37.2.1) May use heavy-duty parts.
  - 3.72.2.2) Shift kits allowed provided full shift pattern is retained.
  - 3.37.2.3) Transmission cooler is highly recommended and not allowed behind the front firewall.

### 3.38) Transmission (manual)

- 3.38.1) Requirements
  - 3.38.1.1) OEM 3 speed or 4 speed.
  - 3.38.1.2) All forward gears must be working as originally produced.
  - 3.38.1.3) Reverse gear.
  - 3.38.1.4) Must retain brass synchronizer rings.

### 3.38.2) Restrictions

- 3.38.2.1) No adaptor plates.

### 3.39) Transmission Clutch and Flywheel

- 3.39.1) Requirements
  - 3.39.1.1) Stock OEM type single friction disc steel clutch units only.
  - 3.39.1.2) Minimum clutch disc diameter 10" Flywheel weight, no less than 13 lbs.

### 3.39.2) Restrictions

- 3.39.2.1) No coupler type, multi disc clutches or modified stock units.
- 3.39.2.2) No aluminum clutch parts.

### 3.40) Tires

- 3.40.1) Requirements
  - 3.40.1.1) The shortest sidewall allowed is 60 series.
  - 3.40.1.2) OEM passenger car type tires.
  - 3.40.1.3) Tires are subject to approval of the Official in charge.
  - 3.40.1.4) After-market racing rims allowed. Steel wheels or aftermarket wheels with a 3/16" center minimum, welded 360 degrees. Mandatory on passenger side. Maximum 8" width. No less than 2" back spacing - measured from back of rim to back of mounting surface. 3.40.1.5) Tire rule to meet hobby stock rule. (updated January 7, 2021)

### 3.40.2) Restrictions

- 3.40.2.1) No studded, ground grip or recap tires.
- 3.40.2.2) No "V" or higher speed rated tires.
- 3.40.2.3) No altering of tires by treatment. (softeners etc.)
- 3.40.2.3) Durometer and/or other methods will be used to check tires.

### 3.41) Water Pump

- 3.41.1) Requirements
  - 3.41.1.1) OEM cast iron water pump for GM and Ford engines.
  - 3.41.1.2) Chrysler engines may use OEM aluminum pumps.
  - 3.41.1.3) Standard production no electric water pumps. (updated January 7, 2021)

### 3.42) Windshield and Windows

- 3.42.1) Requirements
  - 3.42.1.1) Window glass must be removed with the exception of the front windshield.

3.42.1.2) Windshield clips must be a minimum of 1"x6"x1/8" steel and positioned two at the bottom, two at the top and riveted or bolted to the body.

3.42.1.3) Windshields must have a minimum of 3 interior supports, following the contour of the windshield. No more than 1" away, spaced a minimum of 10" apart. Supports must be made of 1/2" steel rods or 3/8" schedule 40 black pipe.

3.42.2) Optional

3.42.2.1) Lexan windshields are allowed and must be 1/8" minimum thickness, full width, and pop riveted with 1/2" heads maximum 8" apart.

3.42.2.2) Lexan rear window.

3.42.3) Restrictions

3.42.3.1) Advertising decal or sun shade on top edge of front windshield may not exceed 8" in height.

3.43) Weight

3.43.1) Requirements (updated: Feb 28, 2020)

3.43.1.1) Trucks must weigh 3750 lbs. with the driver. (updated: Aug 15, 2020)

3.43.1.2) Total left side weight 55% maximum.

3.43.1.3) Total rear weight 45% maximum.

3.43.1.4) Refer to general rules for regulation added weight.

3.43.2) Restrictions

3.43.2.1) No topping up fuel tank to meet minimum weight.

3.44) Wheels

3.44.1) Requirements

3.44.1.1) 14" or 15" diameter stock type steel wheels with a maximum of 8" measured from bead seat to bead seat.

3.44.1.2) 3/16" center minimum thickness. 125" wheels must have the center welded 360 degrees to outer shell.

3.44.1.3) Maximum offset is 2". Wheel stud threads must protrude through the wheel nut.

3.44.1.4) 1" wheel nuts on all four wheels.

3.44.2) Optional

3.44.2.1) 1/2" or 5/8" diameter wheel studs.

3.44.3) Restrictions (updated: Feb 28, 2020)

3.44.3.1) No homemade, aluminum or mag style wheels.

3.45) Wheel base

3.45.1) Requirements

3.45.1.1) Must retain the stock wheel base for the body used, as per Manufacturers specifications.

3.45.1.2) Minimum 130 inches.

3.45.1.3) Wheel base variance may not exceed specifications by 1" overall.

3.46) Window net

3.46.1) Requirements

3.46.1.1) A web style window net, minimum 16 x 18 inches is mandatory. It must be a quick release type accessible from the exterior. No chicken wire nets, or plastic snow fence allow. Window net rods must be a minimum 3/8" steel rod fastened at the bottom and with release at the top.

#### 4) Engine Specifications

##### 4.1) Engine – General

###### 4.1.1) Requirements

4.1.1.1) The following engines are allowed to a maximum stock engine displacement.

4.1.1.2) GM and Chev 350 CID.

4.1.1.3) Dodge 360 CID.

4.1.1.4) Ford 351W CID. (no M or C engines)

4.1.1.5) GM 602 Sealed Crate with 2-barrel carb allowed Rochester 500CFM.

(To be watched. If motor out preforms the other trucks, action will be taken by class) (updated January 7, 2021)

4.1.1.6) **LS Engine - see Section 5 – 2023 is a test year for LS engines. (To be watched. If motor out preforms the other trucks, action will be taken by class). (No points will be awarded for those running LS engines). (Added January 19, 2023)**

###### 4.1.2) Restrictions

4.1.2.1) No interchange of engines between manufacturers.

##### 4.2) Block Assembly

###### 4.2.1) Requirements (updated: Feb 28,2020)

4.2.1.1) Must be production with standard external measurements in all respects with the exception of the permissible overbore of .080". (Updated: Feb 28, 2020) 4.2.1.2) Minimum piston to head clearance .045" with gasket.

4.2.1.3) Pistons Cast or hypereutectic.

4.2.1.4) Stock production lifter bore must be maintained.

4.2.1.5) Pistons, rods, crank, and 4.2.1.7) Crankshaft must weigh within 5% of stock. block must be original manufacturers Combination.

4.2.1.6) Crankshaft and harmonic balancers must be stock OEM.

4.2.1.8) Rotating assembly: (updated January 7, 2021)

1-piece rear seal Eagle B13202L03068 Scat SCA-1-92300 BIE

2-piece rear seal Eagle B13202E03068 Scat SCA-1-92200BIE

###### 4.2.2) Optional

4.2.2.1) Deburring of block and related parts.

4.2.2.2) Balancing.

###### 4.2.3) Restrictions

4.2.3.1) No stroking or de-stroking.

4.2.3.2) No major removal of metal.

4.2.3.3) No aftermarket connecting rods only after market rods with rotating assembly. (updated January 7, 2021)

##### 4.3) Camshaft

###### 4.3.1) Requirements

4.3.1.1) Hydraulic flat tappet.

4.3.1.2) Stock OEM type rocker arms and push rods.

###### 4.3.2) Restrictions

4.3.2.1) No roller cams.

4.3.2.2) No roller lifter assemblies or mushroom type tappets.

4.3.2.3) No "rev kits" or any type of mechanical assistance exerting a force to assist in closing the lifter and/or push rod.

4.3.2.4) No roller or roller tip rocker arms.

4.3.2.5) No gear drives.

4.3.2.6) No more than 500 lift hydraulic, all other components must remain stock.

#### 4.4) Carburetor

##### 4.4.1) Requirements

4.4.1.1) Holley 4412 or Rochester 500 CFM.

4.4.1.2) Two throttle return springs.

4.4.1.3) One stock gasket between carburetor and intake.

4.4.1.4) Carburetor must retain model/serial number.

##### 4.4.2) Optional

4.4.2.1) Removal of choke parts and changing carburetor jets allowed, no other alterations or modifications.

4.4.2.2) One inch maximum adaptor plate including gaskets may be used between a two barrel carburetor and four-barrel intake manifold.

4.4.2.3) 4-barrel carburetor is optional a factory Rochester for manufacturer.

#### 4.5) Connecting Rods 4.5.1) Requirements

4.5.1.1) OEM standard productions rods are permitted and must retain stock identification.

4.5.1.2) Connecting rod must retain manufacturer's nominal center to center distance.  
(example: 350 Chevy 5.700")

##### 4.5.2) Optional

4.5.2.1) No polishing of the rod bearings.

4.5.2.2) High performance rod bolts.

4.5.2.3) Conversion to full floating.

##### 4.5.3) Restrictions

4.5.3.1) No "pink" or "bow-tie" connecting rods for Chevrolet.

4.5.3.2) No Ford motorsport or Chrysler direct connection connecting rods.

#### 4.6) Cylinder Heads

##### 4.6.1) Requirements

4.6.1.1) 73 cc OEM cast iron with 1.94 intake valves and 1.5 exhaust valves.

4.6.1.2) Stock location of rocker studs must be retained.

4.6.1.3) Intake gasket maximum 0.135" thickness per side.

4.6.1.4) Three angle valve jobs are permitted, however, you may not enter the bowl area of more than .500" from top of valve seat.

4.6.1.5) No dual springs. (updated January 7, 2021)

##### 4.6.2) Optional

4.6.2.1) Pinning or screw in studs with guide plates.

4.6.2.2) Locking rocker arm adjusters.

##### 4.6.3) Restrictions

4.6.3.1) No deburring, grinding or polishing of intake or exhaust ports.

4.6.3.2) No modifications to intake or exhaust manifolds bolt location. 4.6.3.3) No Angle plug heads. (Chevrolet)

4.6.3.4) No gasket matching.

#### 4.7) Engine Location

##### 4.7.1) Requirements

4.7.1.1) Engine must be mounted in stock location (+/-) 1 ½" from stock location or to firewall whichever comes first. (updated January 7, 2021) 4.7.1.2) Stock location on stock OEM engine mounts.

4.7.1.3) Chained down to frame rails on both sides from the cylinder head or exhaust manifolds at front.

##### 4.7.2) Restrictions

4.7.2.1) No lowering or moving engine back.

#### 4.8) Ignition

##### 4.8.1) Requirements (updated: Feb 28, 2020)

4.8.1.1) OEM ignitions. All ignition systems must be strictly stock or direct stock.

##### 4.8.2) Restrictions

4.8.2.1) No multiple spark, CD type.

4.8.2.2) No After-market type ignition systems.

4.8.2.3) No dual point type distributor.

##### 4.8.3) Note

4.8.3.1) See safety rules for specification of master kill switch, starter safety switch and ignition switch.

#### 4.9) Intake Manifold

##### 4.9.1) Requirements

4.9.1.1) Cast iron stock OEM production two barrel or four-barrel intakes.

##### 4.9.2) Restrictions

4.9.2.1) No grinding, polishing, or coating of any type, internally or externally.

#### 4.10) Oil Pan

##### 4.10.1) Requirements

4.10.1.1) Oil filter must attach directly to block.

##### 4.10.2) Optional

4.10.2.1) Wind-age tray.

##### 4.10.3) Restrictions

4.10.3.1) No external modifications to oil pan.

4.10.3.2) No crankshaft scrapers.

#### 4.11) Oil Pump

4.11.1) Requirements 4.11.1.1) Internal oil pump.

#### 4.12) Pistons

##### 4.12.1) Requirements

4.12.1.1) Maximum flat top piston.

##### 4.12.2) Optional

4.12.2.1) May be press fit or full float type.

**(All these were added January 19, 2023)**

5) LS Engine

5.1) GM years 1999-2007

5.1.2) 5.3 iron block with OEM dish pistons or 4.8 iron block with OEM flat top pistons

5.1.3) Bottom end must remain stock

5.1.3.1) Maximum compression of 9.5:1

5.1.4) Camshaft

5.1.4.1) Must be stock OEM truck camshaft

5.1.4.2) Stock duration @ .050

Intake - 1.91

Exhaust - 1.90

5.1.4.3) Valve lift

Intake – 0.457

Exhaust – 0.466

5.1.4.4) Separation angle of 144°

5.1.5) Cylinder Heads

5.1.5.1) 862/706 Stock OEM aluminium truck heads

5.1.5.2) No porting or polishing

5.1.5.3) No gasket matching

5.1.5.4) Rocker Arms – Stock 1.7 ratio

5.1.5.5) Valve Springs – Stock OEM or stock replacement

5.1.6) Intake Manifold – Dual plane intake manifold for carburetor swap

5.1.7) Ignition

5.1.7.1) 6014ct MSD (no MAP sensors or timing advancers)

5.1.4.2) Coils – Factory replacement (square or round)

5.1.7.3) (Tech will have tool to test RPM limit and timing curve (limits will be set))

5.1.8) Carburetor

5.1.8.1) 2-barrel Rochester (Jet) 500 CFM

5.1.8.2) Maximum of 1" tall adapter plate, including gaskets (No tapered adapters)

5.1.8.3) Restrictor plate may be added if required if motor out performs.

5.1.9) Exhaust

5.1.9.1) Stock OEM truck manifold (collectors may be replaced with pipe)

5.1.9.2) No inside porting or gasket matching. Exterior brackets may be removed.

5.1.9.3) Must consist of two exhaust pipes maximum 2 1/2" O.D. To muffler(s) and maximum 2 1/2" O.D. To exit.

5.1.9.4) Exhaust must exit below and behind driver.

5.1.10) Fuel Pump – Electric fuel pump - 9 maximum PSI connected to oil pressure or inertia switch.

5.1.11) Water Pump – Stock replacement

5.1.12) Oil Pan – See 4.10

5.1.13) Oil Pump – See 4.11

5.1.14) Engine Location – See 4.7

5.1.15) Transmissions (automatic) – See Section 3.37

5.1.16 ) Transmission (manual)

5.1.16.1) OEM 3 speed or 4 speed.

5.1.16.2) All forward gears must be working as originally produced.

5.1.16.3) Reverse gear.

5.1.16.4) Must retain brass synchronizer rings.

5.1.16.5) No adaptor plates.

5.1.17) Transmission Clutch and Flywheel

5.1.17.1) Flywheel – Stock 168 tooth flywheel (no lightening)

5.1.17.2) Stock OEM type single friction disc steel clutch units only.

5.1.17.3) Minimum clutch disc diameter 11” and Flywheel weight, no less than 13 lbs.

5.1.17.4) No coupler type, multi disc clutches or modified stock units.

5.1.17.5) No aluminum clutch parts.