

## 2015 Hobby-Modified (pure/strictly stock/charger) 2/24/15



All cars must have wrecker hookup. All cars should have fire extinguishers in reach of drivers, 5 lb. minimum. Window nets are recommended for all cars. No radios, mirrors communication equipment permitted, including pit boards.

All parts specified as OEM/stock manufactured must be standard option parts or equivalent aftermarket parts and must be readily available from car dealer or any auto parts store. Casting numbers must remain on all OEM/stock parts.

Cars receiving weight breaks must meet all specifications listed with the designated weight.

### Weight Category Summary

Car must meet all specific rules for the weight category plus all general car rules. Rules cannot be mixed between weight categories.

3,250 – Stock 305 (rules 1-26 & 27-32)

3,350 – Standard 350/351/360 (rules 1-26 & 33-38)

3,300 – Stock 350/351/360 (rules 1-26 & 27-32)

3,400 – Modified 350/351/360 (rules 1-26 & 39-45)

3,200 – 602 Crate (rules 1-26 & 46-51)

### ALL CARS

Rules 1-24 apply to ALL CARS!

OIP #1

#### 1. MODEL CARS

ALL CARS—1955 to current year passenger cars. No type of truck, station wagon, front-wheel or 4-wheel drive. No convertibles, t-tops or open sunroofs.

#### 2. MOTOR

Weight limits may be adjusted during the season for competition.

ALL CARS—Motor must be stock appearing and must match manufacturer of frame and body. 1 spark plug and 2 valves per cylinder. No fuel injection, turbo chargers or blowers. No dry sump systems on any car. No 400 motors.

#### 3. BODY

ALL CARS—All glass, chrome, and flammable materials should be removed. Airbags should be removed. Mirrors must be removed. Dashboard may remain intact. Doors should be welded or bolted closed. Trunk lid must remain on car. No cutting of exterior body panels except for wheel area for tire clearance and hood. Body may be hulled. All holes in firewall should be covered with metal. Full metal roof. Sunroof opening should be sealed with sheet metal.

Aftermarket aluminum body panels permitted but must maintain reasonable stock appearance and must meet all specifications listed in diagram! All body panels must be solid and must be made of metal or plastic—no holes, gaps, slots, perforated materials etc. Aluminum or steel body panels—OK. Body and deck must have a flowing line from front to rear. 45" maximum deck height at all points. 2" maximum deck height increase from center of front wheels to rear of car. 2" maximum roof slope. 45" maximum rear quarterpanel length measured from center of rear wheel including bumper. 4" minimum ground clearance. 2" minimum clearance around wheels. No ridges, fins or raised edges on body except roof bead rolls.

Fenders must be level from side to side. Quarterpanels must be same length and cannot extend higher than rear deck. Rear deck must extend between quarterpanels and may not extend past quarterpanel. Skirting may not extend behind quarterpanel. Quarterpanels and doors may not dish inward.

76" maximum body width at all points. All fenders, doors and quarterpanels should roll inward ½" to 1" at top, with sides over upper body. No sharp or jagged edges, fasteners, etc. No wings or tunnels permitted under body or chassis. Unapproved bodies may be assessed a weight penalty!

#### 4. NOSEPIECE, HOOD AND BUMPER CAP

Aftermarket stock appearing nosepiece and bumper cap permitted, but cannot be wider than fenders and must be mounted cleanly in stock position. No late model-type nosepieces! No fender flares! Bumper must be stock appearing, in stock location and should have smooth edges. Bumper and nosepiece must be mounted level. 45" maximum nosepiece extension including front bumper measured from center of front hub with wheels turned straight. 4" minimum ground clearance. Unapproved nosepieces may be assessed a weight penalty! 80" maximum nosepiece width.

Hood should be secured by 3 hood pins. Rear of car must be completely enclosed from deck to top of bumper with sheet metal or molded rear bumper cap, 12" minimum height. Rear panel/cap must extend from quarterpanel to quarterpanel and must be solid with no gaps, holes, etc.

#### 5. ROOF

ALL CARS—Minimum 44" long x 48" wide. Maximum 60" long x 60" wide. 45" minimum height from ground. Roof must be mounted near center of car, parallel to deck and level. Roofline and side panel window contours should be stock appearing and match nosepiece. Roofline should be rounded—no, wedge, bellied or hollow roofs. Flat roofs may have 2" maximum height variance from front to rear. Rounded roofs may drop 5" at the front and 2" at the rear from the break point.

Rear roof and front roof supports mandatory. Rear roof supports may extend 42" from rear of driver's side window. Rear roof supports may extend 18" maximum behind center of axle. Rear roof supports must taper downward evenly both to the rear and side with a 2" maximum outward bow. 15" maximum at top of rear roof support. 10" high x 15" long minimum rear support window is optional and recommended for appearance. Rear support window may be filled with clear lexan. 2" minimum front roof post width, 4" maximum. Front roof post braces may extend 7" vertical and horizontal.

12" minimum door window opening height measured from deck to roof. 1.5" maximum roll down permitted along front and rear edge of roof. ½" maximum bead rolls permitted on roof running from front to rear in direction. 4 maximum including edge bead rolls.

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### 6. SPOILERS

ALL CARS—No spoilers. Stock spoilers must be removed.

### 7. FUEL

ALL CARS—Gasoline only. No alcohol, nitrous oxide, nitro-methane, propylene oxide or additives. Fuel lines should not pass through driver's compartment. Fuel pump should be any mechanical type.

### 8. CARBURETOR

ALL CARS—Maximum 1" carburetor spacer. No fuel injection turbo chargers or blowers. OEM stock 2 barrel carburetor or Holley #4412 500 cfm maximum 2 barrel carburetor. Holley Ultra XP #4412HBX is NOT permitted. Single feed only. No modifications may be made to carburetors except choke plate may be removed.

### 9. DISTRIBUTOR

ALL CARS—Distributor must be stock or stock-type HEI. No magnetos or MSD boxes.

### 10. TIRES

ALL CARS—Any American Racer or Hoosier 26.5 / 8.0-15 or 27.5 / 8.0-15 tire permitted in medium or hard compounds. Hoosier 500 27.0 / 8.0-15, H500 27.0 / 8.0-15 and American Racer 70 / 205-15 Hard permitted. No soft compounds. 60 to 70 series street tires permitted. E-mod type tires permitted in hard or medium compound only. No tire grooving, siping, treating or modifications of any kind.

### 11. WHEELS

ALL CARS at all events—Maximum 15" diameter x 8" wide steel wheels only. All wheels should be reinforced with double nuts and washers. Bead locks permitted and highly recommended on passenger side wheels. Any offset permitted on all cars. Foam wheel plugs are recommended if wheel plugs/covers are used.

### 12. FRAME

ALL CARS—Complete OEM stock frame or [www.johnsonchassis.com](http://www.johnsonchassis.com) XYG aftermarket production, metric OEM-copy frame to center of rear axle required. Frame rails may not be modified. Cross member may be modified for clearance only. Tubing frame replacement permitted behind center of rear axle. Unibody frames must have full stock snout and rear subframe to center of rear axle. Unibody frames should be connected from the back of the snout to the front of the rear subframe with rectangular tubing connectors. Unibody frame may be shortened in the tub area. All frame tubing and connectors should be constructed of minimum 2" wide x 3" high rectangular steel tubing, with .120" minimum material thickness in front of rear axle and .095" minimum material thickness behind rear axle. All other chassis tubing should be 1 1/2" to 1 3/4" outside diameter and minimum .083" thickness. No holes may be cut in frame or connectors.

Car should have horizontal safety bar constructed from same steel tubing as frame, mounted behind fuel cell and securely welded to frame. Rear bumper should be at least 4" behind fuel cell. Center of rear bumper and safety bar should be at rear deck center height, approximately 19" from the ground and should be at least as wide as frame. Tubing should also extend downward to form a horizontal bar at the bottom height of the fuel cell, with additional vertical and diagonal tubing bracing the lower tubing to the rear bumper and the safety bar. Lower tubing should be at least as wide as fuel cell. No part of the fuel cell should be below the protective tubing. Any bumper that extends more than 8" from the rear of frame should be rounded and directed toward the front of car. Loop-style rear bumpers—OK. Bumper should not have any sharp edges. No external rub rails.

### 13. STEERING

ALL CARS—Steering column must be in stock location.

### 14. BRAKES

ALL CARS—All cars must have 4 wheel braking system. All brake components must be OEM stock except aftermarket brake pedals—OK. Calipers and rotors must be OEM steel. No drilling or lightening of brake components. No driver-adjustable brake systems. OEM 4-wheel disc brakes permitted on any car. OEM front disc brakes permitted on all wheels.

### 15. TRACTION CONTROL

ALL CARS—All traction control devices using wheel sensors are NOT permitted. Adjustable ping control devices, dial a chip controls, timing controls or automated throttle controls are NOT allowed in the cockpit or any other location accessible by driver. Any remote control components or data acquisition equipment are NOT permitted.

### 16. REAR AXLE

ALL CARS—Locked rear end—OK. No quick changes.

### 17. SUSPENSION

ALL CARS—One shock on each wheel. Non-adjustable steel racing shocks and racing springs permitted in stock location. No weight jacks. Adjustable spacers are allowed on all cars. All other suspension components must be stock and in stock location with no modifications except tubular, non-adjustable front upper A-arms permitted. Lower A-arms must be OEM!

### 18. TRANSMISSION & CLUTCH

ALL CARS—Transmission must be OEM stock. Automatics must have working OEM torque converter. No quick change or racing transmissions. Transmission should have explosion-proof bell housing or 360 degree 1/2" steel scatter shield securely mounted to car. No in and out boxes. Transmission should be bolted to the motor and must have working reverse gear. Only one drive shaft permitted. All drive shafts should be painted white and should be surrounded by two 3" steel safety loops or sling mounted to frame. Open transmission must have operational clutch and should have scatter shield

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### 19. EXHAUST

ALL CARS—Exhaust pipes may NOT point towards ground. Exhaust system should be mounted in such a way as to direct gases away from the cockpit of the vehicle.

### 20. STARTER AND BATTERY

ALL CARS—All cars must be self starting. Battery must be in stock position or should be located in a safe area and covered with a metal fireproof box. Battery should not be in driver compartment. Battery disconnect kill switch to shut down motor and fuel pump highly recommended mounted in reach of driver and should be clearly labeled for safety crew.

### 21. ROLL CAGE

ALL CARS—4 post, box-type roll cage should be constructed with 1 ½" minimum outside diameter and .095 minimum steel tubing material thickness. Should have at least 3 horizontal bars at driver's side door and 2 horizontal bars at passenger side door, extended outward into door panels. 2 vertical bars between each horizontal bar as additional support are recommended. Roll cage should extend forward on driver's side to protect foot area completely. Roll cage should be securely welded to subframe and unibody in at least 4 places and welded together 360 degrees at all intersecting points. 6-point roll cage is highly recommended with diagonal bars bracing roll cage at rear, and should run from frame to top of roll cage. Top of roll cage should be at least 2" above top of driver's helmet. Head rest recommended. Front windshield opening should have bars or wire mesh and driver's side window should have quick-release net certified to SFI spec 27.1. All roll cage bars within reach of driver should be covered with non-flammable foam padding certified to SFI spec 45.1. Other than padding, roll cage must remain exposed with no aerodynamic effects.

### 22. GAS TANK/FUEL CELL

ALL CARS—Racing-approved fuel cell should have maximum capacity of 32 gallons and should be mounted in square tubing frame securely mounted to car frame and in the trunk area. Fuel cell should be mounted inside a 20 gauge steel or .060" aluminum metal box and secured to frame with a minimum of two 2" x 1/8" thick steel straps around entire fuel cell. Minimum 7/16" bolts should be used to mount the fuel cell. Trunk interior may be cut for fuel cell mounting. Fuel cell should have 12" minimum ground clearance. No part of the fuel cell should be lower than the rear end housing. The fuel pick up should be on the top or right side of the fuel cell, be constructed of steel and should have a check valve in case of roll over.

### 23. FIREWALLS AND INTERIOR

ALL CARS—Floorboard must be stock appearing and in stock location. A full metal firewall constructed from 18 gauge steel or 1-1/8" thick aluminum should be joined to seal off driver compartment at front, rear, sides and floorboard. Full metal floorboard. Top of interior to top of doors should be 3" maximum. Interior should be mounted flush with outside body panels. 12" minimum interior clearance below roll cage at all points for easy exit. Onboard fire suppression system recommended. Interior may be boxed. All tunnels must be sealed off so no air can flow through. Full firewall required.

### 24. SEAT AND SAFETY BELT

ALL CARS—Full containment, metal racing-approved seat with padded headrest should be securely attached to frame. 3", 5, 6 or 7-point, quick release racing belt with double harness certified to SFI spec 16.1. 7-point system is highly recommended. Seat and belts should be mounted to the chassis with grade 5 or better hardware. Mounts should run in the same direction to secure the belt. Belt should not come in contact with sharp edges. Safety belts should be replaced if 2 years old, and all worn or damaged safety belts should be replaced. Quick-release, racing-type steering should be used.

### 25. FIRE SUIT AND HELMET

ALL CARS—Drivers should have flame retardant firesuit certified to SFI spec 3.2A/5 and racing approved full-face helmet with face shield certified to Snell SA2000, SA2005 or SA2010 standard or SFI spec 31.1A, 31.1/2005 or 31.1/2010. Gloves certified to SFI spec 3.5/5 highly recommended. Nomex shoes, socks, and hood highly recommended. Head and neck restraint system certified to SFI spec 38.1 and arm restraints are highly recommended.

### 26. WEIGHT

*Weight limits may be adjusted during the season for competition.*

ALL CARS—Weight limit includes driver after the race. No tolerance. All weights should be solid material, entirely painted white or a bright color and marked with car number. Each weight should be 50 pound maximum. Weights should be bolted to frame with two ½" Grade 5 bolts on two weight clamps or secured with steel plate. No weights should be attached to rear bumper or in driver's area. Weights should not be lead pellets or liquid. Each weight should be bolted to the frame individually and should not be stacked on another weight.

**RULEBOOK DISCLAIMER:** The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and, by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OR SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. The race director shall be empowered to permit reasonable and appropriate deviations from any of the specifications herein or impose any further restrictions that in his opinion do not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS. Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.

## 2015 Hobby-Modified

**Stock 3,300 or 3,250**

**Rules 1-26 and 27-32 apply to Stock 3,250 or 3,300 weight cars!**



### 27. MOTOR (all specifications in rule 2 apply)

**Stock 3,300 or 3,250 weight**—Motor must be in stock position. OEM cast iron block. Hydraulic cam only. No roller cams. Stock steel crankshaft or Eagle #103503480 or Scat #910442 for Chevrolet or Scat #935W10 for Ford with stock stroke. Stock steel connecting rods or Eagle #5700BBLW or Scat #35700 for Chevrolet or Eagle #5956 or Scat #25955912 for Ford. Flat top or inverted pistons only with zero deck clearance. Racing oil pan permitted.

OEM cast iron heads or World Products #43610-1 or #43610. 60cc minimum combustion chamber for OEM heads. 63cc minimum combustion chamber, 1.94" maximum intake and 1.6" maximum exhaust for World heads. No Vortec or any other aftermarket heads. Any OEM cast iron intake except no Bowtie intakes permitted. No porting, polishing, grinding, welding, acid etching or machine work of any kind to heads or intakes. Stock or stock-type stamped steel rocker arms only.

**Stock 3,300 weight**—Maximum cubic inch limit is 350 for Chevrolet, 351 for Ford and 360 for Chrysler. .060 overbore allowed.

**Stock 3,250 weight**—305 maximum cubic inch limit. .060 overbore allowed.

### 28. FRAME (all specifications in rule 12 apply)

**Stock 3,300 or 3,250 weight**—105" minimum wheelbase.

### 29. REAR AXLE (all specifications in rule 16 apply)

**Stock 3,300 or 3,250 weight**—Rear end must be OEM for make and model. No floaters or 9" rear ends.

### 30. TRANSMISSION & CLUTCH (all specifications in rule 18 apply)

**Stock 3,300 or 3,250 weight**—OEM stock, single-disc, steel clutch in stock location. OEM stock steel flywheel and pressure plate. No dog-type or triple disc clutch. No lightweight clutch assemblies.

### 31. EXHAUST (all specifications in rule 19 apply)

**Stock 3,300 or 3,250 weight**—OEM exhaust only. No ram horn, center dump-type manifolds. No headers.

### 32. WEIGHT (all specifications in rule 26 apply)

**3,300 pounds** for cars meeting all **Stock 350** cubic inch motor and suspension specifications.

**3,250 pounds** for cars meeting all **Stock 305** cubic inch motor and suspension specifications.

## 2015 Hobby-Modified

**Standard 3,350**

**Rules 1-26 and 33-38 apply to Standard 3,350 weight cars!**

### 33. MOTOR (all specifications in rule 2 apply)

**Standard 3,350 weight**—Motor may be set back maximum #1 spark plug in line with upper ball joint. Maximum cubic inch limit is 350 for Chevrolet, 351 for Ford and 360 for Chrysler. .040 overbore allowed on all makes. Hydraulic camshafts only. No solid cams or roller cams. .320 maximum cam lift measured at the cam. No roller or anit-pump lifters. No roller rockers. Stamped 1.5 rockers only. OEM stock stroke crank shaft only. OEM length connecting rods only. Flat top or dish pistons only. Racing oil pan permitted.

No aluminum blocks or heads. No angle plug heads. No 1995 or newer vortec engines or heads. Double pump heads—OK. World Products #4361 or #4360—OK. OEM cast iron, EGR-type, 4-barrel intake manifold only. EGR may be removed and plate installed.

### 34. FRAME (all specifications in rule 12 apply)

**Standard 3,350 weight**—101" minimum wheelbase.

### 35. TRANSMISSION & CLUTCH (all specifications in rule 18 apply)

**Standard 3,350 weight**—Minimum 10" single disc clutch. No dog-type or triple disc clutch.

### 36. REAR AXLE (all specifications in rule 16 apply)

**Standard 3,350 weight**—Any type stock production rear end. Floater and 9" rear ends—OK.

### 37. EXHAUST (all specifications in rule 19 apply)

**Standard 3,350 weight**—OEM cast iron exhaust manifold only. No headers.

### 38. WEIGHT (all specifications in rule 26 apply)

**3,350 pound minimum weight** with driver after race for cars meeting all **Standard** motor and suspension specifications

## 2015 Hobby-Modified

### Modified 3,400

Rules 1-26 and 39-45 apply to Modified 3,400 weight cars!



#### 39. MOTOR (all specifications in rule 2 apply)

Modified 3,400 weight—Motor may be set back maximum #1 spark plug in line with upper ball joint. Maximum cubic inch limit is 350 for Chevrolet, 351 for Ford and 360 for Chrysler. .060 overbore allowed on all makes. Stock appearing OEM cast iron block. .525 maximum cam lift measured at the valve. No roller cams. Solid lifters and roller rockers—OK. 1.5 or 1.6 ratio rocker arms only. Any flat top or dish pistons only with 0 deck clearance. Steel or cast iron crankshaft must maintain stock stroke for block—no stroker motors. Racing oil pan permitted.

Any cast iron head with no modifications. Maximum 2.02 intake and 1.6 exhaust valves. Any dual plane intake allowed. No porting polishing, machine work, welding, or acid etching permitted on intake or heads!

#### 41. FRAME (all specifications in rule 12 apply)

Modified 3,400 weight—105" minimum wheelbase.

#### 42. TRANSMISSION & CLUTCH (all specifications in rule 18 apply)

Modified 3,400 weight—(ALL CARS rules apply to this category). No dog-type or triple disc clutch.

#### 43. REAR AXLE (all specifications in rule 16 apply)

Modified 3,400 weight—Any type stock production rear end. Floater and 9" rear ends—OK.

#### 44. EXHAUST (all specifications in rule 19 apply)

Modified 3,400 weight—Headers permitted.

#### 45. WEIGHT (all specifications in rule 26 apply)

3,400 pound minimum weight with driver after race for cars meeting all Modified motor and suspension specifications.

## 2015 Hobby-Modified

### 602 Crate 3,200

Rules 1-26 and 46-51 apply to 602 Crate 3,200 weight cars!

#### 46. MOTOR (all specifications in rule 2 apply)

602 Crate 3,200 weight—GM 602 CT350 crate motor part #19258602 or #88958602. Motor must meet all specifications in the GM spec document for that motor. 1" maximum motor setback measured from left front spark plug to center of ball joint. Wet sump only. No external oil pumps. No vacuum pumps. Motor must be purchased from an authorized dealer and MUST remain sealed at all times. GM factory encrypted bolts cannot be altered, removed or changed. Absolutely no modification of any internal engine part. All motor parts included with the motor as shipped from GM must remain OEM and may NOT be modified including but not limited to: valve springs, push rods, harmonic balancers, rocker arms, valve covers etc. No upgrades are allowed that may produce power via performance enhancing methods including breather system modifications. No machine work permitted. Any motor modification will result in one year suspension and loss of all points and winnings. Any GM bolts that have been copied is considered trademark infringement and will be reported to the manufacturer for legal proceedings. By using a crate motor in competition, the race team acknowledges all responsibility for the legality of the motor upon inspection at any event regardless of any previous motor verification.

GM 602 crate motors in this category may NOT be unsealed, may NOT be rebuilt and must have GM original factory sealing bolts. GM 602 crate motors with original factory seals may not be protested. GM 602 motors may be claimed for the amount listed in the procedure rules as it came in the crate, not including any bolt-on items. Refusal to accept claim will result in disqualification, fine and suspension. A car must compete in the feature to have its motor claimed. Claims must be submitted in writing within 15 minutes of completion of feature. Any rebuilt GM 602 motor may compete in another weight category as long as that motor complies to all specifications of that category.

Shimming permitted to meet the correct valve spring install heights listed below:

#### New Valve Spring Specifications

Description		#88958602 #19258602
Valve Spring P/N		10212811
Valve Spring P/N -set of 16		n/a
Diameter (+/- .010")	(A)	1.250"
Free Height (+/- .015")	(B)	2.021"
Installed Height (Ok to shim to proper height)	(C)	1.70"
Pressure @ Installed Height (+/- 5 lbs)	(D)	80 lbs.
Open Height	(E)	1.270"
Open Pressure (+/- 10 lbs)	(F)	195 lbs
Coil Bind	(G)	1.20"
Wire Diameter		.177"

## **2015 Hobby-Modified**

### **602 Crate 3,200**

**Rules 1-26 and 46-51 apply to 602 Crate 3,200 weight cars!**



**47. FRAME** (all specifications in rule 12 apply)

**602 Crate 3,200 weight—105" minimum wheelbase.**

**48. TRANSMISSION & CLUTCH** (all specifications in rule 18 apply)

**602 Crate 3,200 weight—(ALL CARS rules apply to this category). No dog-type or triple disc clutch.**

**49. REAR AXLE** (all specifications in rule 16 apply)

**602 Crate 3,200 weight—Any type stock production rear end. Floater and 9" rear ends—OK.**

**50. EXHAUST** (all specifications in rule 19 apply)

**602 Crate 3,200 weight—Headers permitted.**

**51. WEIGHT** (all specifications in rule 26 apply)

**3,200 pound minimum weight with driver after race for cars meeting all GM 602 CT 350 Crate motor and suspension specifications.**