

NASCAR Technical Bulletin

**National Association for Stock Car Auto Racing, Inc.
P.O. Box 2875 • Daytona Beach, FL 32120-2875 • (386) 253-0611**

NKNPS13 – 7 – 12/4/13

TO: ALL NASCAR K & N PRO SERIES EAST/WEST CAR OWNERS, CREW CHIEFS AND DRIVERS:

Effective January 1, 2014 – The following are amendments to the 2013 NASCAR K & N Pro Series Rule Book and will be incorporated into the 2014 NASCAR Rule Book:

NOTICE: All NASCAR Rule Books and Technical Bulletins may be accessed by any licensed NASCAR Member by visiting www.NASCARmembers.com.

SECTION 20C NASCAR K & N PRO SERIES EAST / WEST

NOTICE

ALL MODEL, ENGINE OR EQUIPMENT CHANGES OR MODIFICATIONS NOT SPECIFICALLY ADDRESSED IN THIS RULE BOOK BY NASCAR MUST BE SUBMITTED, IN A COMPLETED FORM/ASSEMBLY, TO NASCAR FOR CONSIDERATION OF APPROVAL, ON OR PRIOR TO **SEPTEMBER 2, 2014**, UNLESS OTHERWISE AUTHORIZED BY NASCAR, TO BE CONSIDERED FOR COMPETITION FOR THE **2015** SEASON. THE APPLICANT WILL BE NOTIFIED OF APPROVAL OR REJECTION FROM NASCAR. RACE EQUIPMENT WILL NOT BE CONSIDERED AS HAVING BEEN APPROVED BY REASON OF HAVING PASSED THROUGH INSPECTION AT ANY TIME OR ANY NUMBER OF TIMES UNOBSERVED OR UNDETECTED. ANY RACE EQUIPMENT WHICH DOES NOT CONFORM TO SPECIFICATIONS OR TOLERANCES CONTAINED IN THE **2014** NASCAR RULE BOOK, OR IS NOT OTHERWISE APPROVED BY NASCAR, MAY NOT BE USED IN NASCAR COMPETITION IN **2014**. ALL SUBMITTED RACE EQUIPMENT MUST BE ACCOMPANIED BY COMPUTER-AIDED DESIGN (CAD) FILES AND/OR MECHANICAL DRAWINGS AND REQUISITE FEE AS DETERMINED BY NASCAR.

20C - 1.1 NASCAR K & N Pro Series Races

NASCAR K & N Pro Series, Races are open to eligible 2004 through **2014 approved** models of steel bodied and Grand National-Approved Composite Body passenger car production sedans.

20C - 1.3 APPROVED COMPETITION MANUFACTURERS AND MODELS

A. 2014 Racing Season:

The following are the only approved models for competition in the NASCAR K & N Pro Series in 2014:

<u>YEAR</u>	<u>MANUFACTURER</u>	<u>MODEL</u>
2009 – <u>2014</u>	Chevrolet	Impala SS
2006 – 2008	Chevrolet	Monte Carlo SS
2004 – 2005	Chevrolet	Monte Carlo
2005 – <u>2014</u>	Dodge	Charger
2004	Dodge	Intrepid
2006 – <u>2014</u>	Ford	Fusion
2004 – 2005	Ford	Taurus
2007 – <u>2014</u>	Toyota	Camry
2006 – 2010	Grand National Composite Body Part # AFC 1000	
2010 – <u>2014</u>	Grand National Composite Body Part # AFC 1000-K	

NOTE: All 2003 and older approved models are deleted for 2014 competition.

NOTE: The NASCAR-approved “Spec Engine” is the only eligible engine for use with the Toyota Camry model car.

B. 2015 Racing Season:

Any new car model to be considered for approval for competition in the 2015 season must be submitted by the manufacturer to NASCAR for initial consideration not later than June 20, 2014 unless otherwise authorized by NASCAR. At the manufacturer's expense, the manufacturer must provide all information, materials, electronic files, benchmark production vehicle(s) and race-version vehicle(s) as requested by NASCAR on or before any dates specified by NASCAR. The manufacturer must cooperate with NASCAR to enable NASCAR to complete all necessary track tests, aerodynamic tests, and other competitive analysis by September 2, 2014 unless otherwise authorized by NASCAR. All new car models submitted to NASCAR for approval by the manufacturer must conform to the same body configuration and meet the spirit and intent of competitive racing as currently evidenced in these Series.

20C - 2.1 Car Bodies

The car body must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. The 2004 through 2014 eligible bodies will be volume production models as selected and approved by NASCAR (See sub-section 20C-1.3).

B. remains the same.

C. Cars must be neat appearing. The interior and exterior of all floors, firewalls, roll cage and frame assemblies and the interior of the body panels must be painted using only light / bright colors. Painting of the interior of the front and rear bumper covers is optional. The type of paint used, whether it be flat, satin or high gloss finish, must provide a smooth surface. The paint or vinyl must not be textured. Vinyl may only be used on the exterior of the body panels. Thermal barrier coatings applied to the immediate driver's area may be used. The location of thermal coatings must be acceptable to NASCAR Officials.

D. through P. remains the same.

20C -3.1.1 Rear Spoilers

A. remains the same.

B. A solid non-adjustable spoiler must be attached to the rear deck lid. The spoiler must be slotted 1/4 inch to fit the NASCAR A (Center Overall Longitudinal) template in the center for each make of car and must maintain the same contour as the production deck lid and quarter panels as viewed from above and behind. The spoiler must be mounted in such a way as not to flex or bend under pressure and must be fastened with a minimum of six (6), 1/4 inch diameter or larger bolts across the back of the deck lid. Reinforcement of the inside of the deck lid, acceptable to NASCAR Officials, will be permitted. The spoiler mounting flange must not extend beyond the lower edge of the rear deck lid. The spoiler flange must not extend beyond the outer edge of the spoiler. Spoiler braces, if used, must be mounted on the back of the spoiler and there must be a maximum of three (3) spoiler braces per spoiler half with the spoiler braces located 4-1/2 inches inboard from the outer end of each spoiler half and 4-1/2 inches to the left and right of each spoiler half at the center split. The remaining spoiler braces must be spaced equally between the side and center spoiler braces on each spoiler half. Each spoiler brace must bolt to the top of the spoiler not more than 1/2 inch down from the top and must bolt to the deck lid. Each spoiler brace must be made of aluminum and not exceed a maximum of one (1) inch width, including all mounting brackets and hardware. All spoiler braces, when used, must be acceptable to NASCAR Officials. At Events on tracks 1-1/8 miles and more in length, excluding road courses, where a pre-determined spoiler angle is specified, spoiler braces as described above must be used.

C. through F. remains the same.

20C - 3.2.1 Windshield / Windshield Braces

A. remains the same.

B. The windshields must be clear or have a maximum of six (6) inches of tint from the top down. Additional windshield tint or tape may be added for adverse sunlight conditions. Unless otherwise authorized by NASCAR Officials, the addition of tint or tape must be confined to the driver's side of the windshield. Additional tint to the right side of the center windshield bar (#4A) will not be permitted. The windshield must be installed and completely sealed in a standard windshield opening. The windshield must be sealed using sealers and/or adhesives that must allow the easy removal of the windshield. The windshield must be bolted in the corners and along the bottom of the windshield using 1/4 inch diameter button head allen screws. The windshield must be secured flush across the top at the roof and along the "A" posts using the metal clips as described below with 1/4 inch diameter button head allen screws. All screws must be able to be removed using a 5/32 inch allen wrench. All nuts must be permanently secured. The manufacturers' approved part number must be clearly visible and unaltered in the windshield. The windshield must be from an approved manufacturer and approved by NASCAR. Once approved, the windshields may be used on all approved models.

The following is a list of NASCAR-approved windshields:

<u>YEAR</u>	<u>MODEL</u>	<u>PART NUMBER</u>
2009 – <u>2014</u>	Chevrolet Impala SS	88958641
2006 – 2008	Chevrolet Monte Carlo SS	88958641
2004 – 2005	Monte Carlo	88958641
2005 – <u>2014</u>	Dodge Charger	05063020AA
2004	Dodge Intrepid	05063020AA
2006 – <u>2014</u>	Ford Fusion	M-54310-AA
2004 – 2005	Ford Taurus	M-54310-AA
2007 – <u>2014</u>	Toyota Camry	00644-53902-00
Grand National-Approved Composite Body	Five Star Stock Car Bodies	564-6345-CB

C. through F. remains the same.

20C - 3.2.4 Headlights / Parking Lights

A. remains the same.

B. The Grand National-Approved Composite Body must use the front and rear body graphics (headlights, tail lights, upper grilles, etc.) for brand identity. The body graphics must be from an approved manufacturer and must be acceptable to NASCAR Officials. The following are the only approved body graphics.

Grand National-Approved Composite Body Graphics:

Chevrolet Monte Carlo SS, Impala SS, SS

Dodge Charger

Ford Fusion

Toyota Camry

20C - 3.7 Grilles

A. through C. remains the same.

D. The upper grille opening for the Grand National-Approved Composite Body if used must be the same shape as the model chosen (Chevrolet Monte Carlo SS, Impala SS, SS, Dodge Charger, Ford Fusion & Toyota Camry) and must maintain the size and shape of the Grand National-Approved Composite Body grille opening template. The use of an approved factory production grille opening insert will be permitted. The upper grille must be in the center of the front bumper cover using the centerline of the body. The top center of the grille opening must be located below the hood seam at the center using the following measurements:

<u>MODEL</u>	<u>MEASUREMENT</u>
Chevrolet Monte Carlo SS, Impala SS, <u>SS</u>	5 inches
Dodge Charger	2-1/2 inches
	8 inches with grille insert
Ford Fusion	5 inches
Toyota Camry	6 inches

D. remains the same.

20C - 3.10 Bumper Covers

A. through D. remains the same.

E. The following is a list of approved front bumper covers for steel bodied models:

<u>YEAR</u>	<u>MODEL</u>	<u>PART NUMBER</u>
2009 - <u>2014</u>	Chevrolet Impala SS	CCS0700
2006 - 2008	Chevrolet Monte Carlo SS	CCS0700
2004 - 2005	Chevrolet Monte Carlo	88958624
2007 - <u>2014</u>	Dodge Charger	04666257AA
2005 - 2006	Dodge Charger	04593635AA
2004	Dodge Intrepid	05063022AB
2006 - <u>2014</u>	Ford Fusion	M-20826-AA
2004 - 2005	Ford Taurus	M-17626-CA
2007 - <u>2014</u>	Toyota Camry	00644-52119-00

F. The following is a list of approved rear bumper covers for steel bodied models:

<u>YEAR</u>	<u>MODEL</u>	<u>PART NUMBER</u>
2009 - <u>2014</u>	Chevrolet Impala SS	CCS0701
2006 - 2008	Chevrolet Monte Carlo SS	CCS0701
2004 - 2005	Chevrolet Monte Carlo	88958625
2005 - <u>2014</u>	Dodge Charger	04593637AA
2004	Dodge Intrepid	05045129AA
2006 - <u>2014</u>	Ford Fusion	M-21118-AA
2004 - 2005	Ford Taurus	M-17835-CA
2007 - <u>2014</u>	Toyota Camry	00644-52159

G. remains the same.

20C - 3.11 Identification / Marking

A. remains the same.

B. Decals / Advertising

(1) NASCAR may, in its sole discretion, refuse to permit for any reason, or it may restrict or assign the size or placement of, decals, identification, and advertising of any kind including but not limited to the car, equipment, personnel, uniforms, garage and pit areas, promotional materials, and/or support vehicles. All NASCAR Members agree to accept NASCAR's decision in this regard.

(2) through (12) remains the same.

20C - 4.1 General Engine Eligibility

A. The eligible engines must be production engines as determined, selected and approved by NASCAR. All major components (engine block, heads, etc.) must be produced by the manufacturer for sale in a regular product offering. Prior to being used in competition, all major engine and component parts must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator on or prior to September 2, 2014, for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

B. As an option, Teams may compete in the NASCAR K & N Pro Series with a NASCAR-approved "Spec Engine". If used, the "Spec Engine" must be completely assembled using only NASCAR-approved "Spec Engine" components without any modifications. All parts, pieces and components that are used in the "Spec Engine" must originate from an approved NASCAR supplier. If used, the "Spec Engine" may be purchased in kit form to be assembled by the engine builder of the team's choice, or may be purchased as a completely assembled engine. NASCAR-approved "Spec Engine" kits and assembled engines are available directly from Robert Yates Racing Engines, LLC. Weight adjustments (if any) will be made through NASCAR Technical Bulletins and/or announcements.

Robert Yates Racing Engines, LLC
159 Bevan Drive
 Mooresville, North Carolina 28115
Phone: 704-660-7015
Email: dlewis@ryr.com

C. Modifications Permitted

(1) through (12) remains the same.

(13) Milling of the engine block cylinder head surface (decking) to ensure proper sealing will be permitted. The engine block cylinder head surface may be milled (decked) up to a maximum of 0.005 inch. When installed the top of any piston must not be more than 0.015 inch at any point above the engine block cylinder head surface.

D. Modifications Not Permitted

(1) remains the same.

(2) Any and all machine work done to the engine block with the exception of the engine overbore and milling (decking) of the cylinder head surface **must be performed by Robert Yates Racing Engines, LLC only.**

(3) through (13) remains the same.

(14) No machining of the cylinder heads.

(15) through (33) remains the same.

E. remains the same.

20C - 5.5.1 Eligibility

A. and B. remains the same.

C. Engine blocks must use individual magnetic steel crankshaft main bearing caps. The main bearing bore size must be the same for all main bearings.

D. remains the same.

20C - 5.10.1 Eligibility

A. remains the same.

B. Holley 4150HP Series, list number 80507 rework guidelines are as follows:

(1) through (6) remains the same.

(7) Carburetor Metering Blocks

Only Holley metering blocks will be permitted. Surfacing of the metering blocks for improved gasket seal will be permitted. A bonding agent (epoxy) may be used to assist in adhering the emulsion tube plugs to the carburetor metering blocks, if needed to help prevent fuel leakage only.

(8) through (10) remains the same.

20C - 5.10.3 Carburetor Restrictor

A. remains the same.

B. For Events where a carburetor restrictor is required:

(1) All model cars will be required to use a 1/8 inch thick aluminum restrictor plate with four (4) holes or a one (1) inch thick, four (4) hole aluminum tapered bore spacer, as specified on the Official Entry Blank, using a maximum 0.065 inch thick gasket.

(2) A restrictor plate, a four-hole spacer, one (1) inch thick, or a one (1) inch thick, four (4) hole aluminum tapered bore spacer and necessary sealing gaskets will be issued by NASCAR for competition. Spacer(s) between the restrictor plate or tapered bore spacer and the intake manifold or above the NASCAR-issued four-hole spacer or tapered bore spacer will not be permitted.

(3) Restrictor plates and spacers or tapered bore spacers used for testing must be furnished by the Competitors, unless otherwise authorized by the Series Director.

(4) Competitors must use the restrictor plate or tapered bored spacer as designated on the Official Entry Blank to prepare for the Event. A final restrictor plate or tapered bored spacer size will be determined after the completion of the final practice prior to the Race. Any attempts to, and/or actions that result in, pulling air from sources other than normal approved

methods through the air filter and carburetor venturis, such as, but not limited to, drilling of holes or altering of carburetor restrictor(s) or gaskets will not be permitted.

(5) When the NASCAR-approved "Spec Engine" is used taller carburetor studs will be required to allow for proper installation of the carburetor and carburetor restrictor.

20C - 6.1.1 Ignition System Wiring

A. remains the same.

B. With the exception of the distributor pickup wire pairs and coil wire pairs, each ignition system wire must remain separate and inaccessible during competition.

C. through J. remains the same.

20C - 6.7 Accessories

A. remains the same.

B. For broadcasting and media related purposes, NASCAR may allow or require selected cars to compete with broadcast telemetry or other positioning and informational systems. Unless otherwise authorized or required by NASCAR, the broadcast telemetry signal from these systems will be limited to the following parameters:

(1) through (7) remains the same.

(8) Upon request of NASCAR Officials, Competitors must install the required camera(s) and broadcast system(s) in a manner and location acceptable to NASCAR Officials.

C. through E. remains the same.

F. Unapproved remote lap timing or speed sensing devices will not be permitted.

G. through L. remains the same.

20C-6.8 In-Car Radio Communications

A. The in-car radio must be analog only and must not be capable of transmitting or receiving in a digitized, encrypted or scrambled format as determined by NASCAR. Keypad style and/or password protected radios will not be permitted. Scanning and/or channel hopping transmissions to or from the in-car radio will not be permitted. All transmissions to and from the in-car radio must be in the 450.000MHz-470.000MHz range, and all in-car radio transmitting and receiving frequencies including squelch codes should be registered annually in the NASCAR Radio Data Base <http://freqcoordination.nascar.com>. All frequency changes must be updated prior to being used during an Event and confirmed by NASCAR's Official Radio Supplier. The in-car radio is not permitted to transmit or receive any type of telemetry (data) signal or information other than audio communications and must remain independent from any electronic system in the car. Teams will not be permitted to rebroadcast transmissions to or from the in-car radio at any time during an Event. It is strongly recommended that all in car radio frequencies be licensed for use by the Federal Communications Commission (FCC) and meet all applicable regulations and guidelines.

B. Only one (1) NASCAR-approved, two-way radio and one (1) radio push to talk button will be permitted. It is not permitted to have any frequency of any Competitor installed in the radio at any time. The car is permitted only one (1), approved radio wiring harness system.

C. Other than antennas that are approved for broadcasting and media related purposes only, a single, NASCAR-approved, radio antenna, must be mounted on the exterior of the body, positioned not more than two (2) inches to the right or left of the roof centerline and in the center of the length measurement of the roof, will be permitted.

D. At all times during practice(s), qualifying and the Race the spotter must have radio communications with the driver and must monitor the NASCAR frequency. Spotters must be in the designated spotter location at all times during competition. The radio frequency being used will be made available by NASCAR Officials.

E. Driver to driver radio communications will not be permitted.

20C - 9.2 Exhaust Pipes

A. through L. remains the same.

M. Sound level requirements may be specified at designated tracks and will be noted on the Official Entry Blank for that Event.

20C - 10.8.4 Tire Usage Rules

A. through M. remains the same.

N. Competitors presenting cars for inspection must have their tires inflated to the recommended technical inspection inflation pressures as specified by the participating tire manufacturer for the Event. If tire pressure(s) are not at the recommended technical inspection inflation pressures after competition, tires will be adjusted to the recommended technical inspection inflation pressures as specified by the participating tire manufacturer for the Event.

20C - 12 SUSPENSION

All suspension systems and components must be approved by NASCAR. Prior to being used in competition, all suspension systems and components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible. All suspension fasteners and mounting hardware must be made of solid magnetic steel.

Rear Suspension

A. through D. remains the same.

E. All truck trailing arms must be attached to the rear axle housing using solid, round 3/4 inch outside diameter U-bolts over the rear axle housing and through the truck trailing arms with nuts securing the truck trailing arms to the rear axle housing. Each U-bolt threaded end must have only one (1) standard 3/4 inch hex nut and only one (1), SAE flat washer. Jam (double) nuts and beveled washers will not be permitted on the U-bolts. Truck trailing arm U-bolt retainers must be adequately tightened as defined by industry standard torque recommendations for a 3/4 inch diameter fine threaded fastener. Any spacers used between the rear axle housing and the truck trailing arms must be made of a solid metal block. Any device(s) that will permit movement or rotation of the rear end housing will not be permitted.

F. through H. remains the same.

20C - 12.7 Wheelbase Requirements

A. remains the same.

B. All cars competing with a 105 inch wheelbase must measure the wheelbase as follows; one side measurement must be 105 inches. The opposite side wheelbase must measure a minimum of 104-1/2 inches and a maximum of 105-1/2 inches. Any device or procedure which has the ability to dynamically change the wheelbase beyond normal travel parameters will not be permitted.

20C - 16.4.2 Fuel Cell Vent

The fuel cell must be vented as follows:

A. A single, one (1) inch minimum up to a 1-1/4 inch maximum inside diameter vent to the outside of the body must be installed at and sealed to the left rear corner in the taillight area only. The vent must have a self-closing flap type valve that can only be opened by inserting a wire or flat metal strip to allow refueling. The vent tube must not extend more than two (2) inches outside the car's bodywork. The vent tube must remain perpendicular to the taillight.

B. through D. remains the same.

20C - 17 PERSONAL SAFETY EQUIPMENT

A. and B. remains the same.

C. Other Safety Devices

- (1) It is required that each car have, within the driver's reach, a manually controlled push or pull knob which activates a built-in, fully charged fire extinguishing pressurized cylinder with a visible, operating pressure gauge. It is recommended that an automatic thermally activated discharge nozzle be used in addition to the manually controlled push or pull knob. This extinguisher system must meet the SFI 17.1 specification and display a valid SFI 17.1 label. This extinguisher must be certified by the manufacturer every two (2) years. An additional manufacturer's label with a visible date code must be located directly below the pressure gauge on the surface of the cylinder. This fire extinguisher cylinder must be securely mounted to the right of the driver's seat. The fire extinguisher cylinder and its mount(s) must not be beyond the inside edge of the right side main frame rail. The mounting system must secure both ends of the cylinder for its full circumference to the structure of the car and be acceptable to NASCAR Officials. Hose clamps, worm drive clamps or cable ties will not be permitted. A device(s) must be installed to keep the cylinder from sliding out of the mounting system. Clamp style or "figure eight" mounts must completely encircle the circumference of the 1-3/4 inch outside diameter of the roll bar. This cylinder must contain a minimum of five (5) pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36, 3M NOVEC 1230 or equivalent type agent. The primary purpose of this system is to protect the driver. Nozzle(s) must be designed for the extinguishing agent used and should not be pointed directly at the driver, but should be mounted to provide flooding of the driver's compartment to the manufacturer's recommendation. If engine compartment nozzle(s) are used with this cylinder, the fire extinguishing cylinder size must be increased to a minimum of 10 pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36, 3M NOVEC 1230 or equivalent type agent to be used for this system. All discharge lines and fittings must be steel or steel reinforced hose although nozzles may be aluminum. Cylinders for all agents must be DOT-approved steel or aluminum. Carbon fiber or composite cylinders will not be permitted.
- (2) It is required that each car have an additional fire extinguishing cylinder solely dedicated to extinguish the fuel cell area (trunk) and as an option, the same fire extinguishing cylinder may also be directed to the engine compartment with the use of a T-type fitting and thermally activated discharge nozzles. This extinguisher must meet the SFI 17.1 specification and display a valid SFI 17.1 label. This extinguisher must be certified by the manufacturer every two (2) years. An additional manufacturer's label with a visible date code must be located directly below the pressure gauge on the surface of the cylinder. This fire extinguisher cylinder must be mounted in the driver's compartment to the right of the driver's seat. The fire extinguisher cylinder and its mount(s) must not be beyond the inside edge of the right side main frame rail. The mounting system must secure both ends of the cylinder for its full circumference to the structure of the car and be acceptable to NASCAR Officials. Hose clamps, worm drive clamps or cable ties must not be used to mount this cylinder. A device(s) must be installed to keep the cylinder from sliding out of the mounting system. Clamp style or "figure eight" mounts must completely encircle the circumference of the 1-3/4 inch outside diameter of the roll bar. This cylinder must contain a minimum of 10 pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36, 3M NOVEC 1230 or equivalent type agent. This cylinder must be activated by an automatic, thermally activated discharge nozzle(s) recommended by the manufacturer for this application. This automatic system may have a manual and/or pneumatic override from the driver-activated system. If the engine compartment discharge option is used, then an additional automatic, thermally activated discharge nozzle must be located under the hood forward of the firewall. All discharge lines and fittings must be steel or steel reinforced hose although nozzles may be

aluminum. When routing pressurized fire extinguisher lines (thermally activated) either to the trunk area or the engine compartment, the lines will only be permitted to pass through the firewall near the longitudinal centerline of the vehicle. These lines must not pass through floorboards, wheel wells, or crush panels. All cylinders must have an indicator gauge and identifying label readily visible for inspection purposes. The gauge must be compatible with the agent used in the cylinder. Cylinders for all agents must be DOT-approved steel or aluminum. Carbon fiber or composite cylinders will not be permitted.

(3) remains the same.

D. remains the same.

20C - 17.3 Seats

A. remains the same.

B. Each car must be equipped with an SFI 39.1 approved seat and headrest/head surround assembly displaying valid SFI 39.1 labels and be acceptable to NASCAR. Custom-manufactured aluminum seats constructed from solid aluminum sheet material from the seat bottom to above the driver's shoulders, acceptable to NASCAR, will be permitted. NASCAR-approved composite material seats will be permitted. Composite material seats and/or seats which incorporate lap and/or shoulder belt anchorages are subject to additional testing with documentation supplied to NASCAR. Each composite seat must have a unique, identifier that matches records on file with NASCAR. Seats constructed of multiple materials, including composite materials, must be SFI 39.1-approved and must be acceptable to NASCAR. The SFI 39.1-approved seat and headrest/head surround assembly will remain approved for use in competition until their expiration date which is two (2) years after the date of manufacture. Once a seat and headrest/head surround assembly has reached the expiration date, the seat and headrest/head surround assembly must be inspected and recertified by the seat manufacturer. All seat interiors must be lined with inserts and/or padding. It is recommended that a minimum thickness of two (2) inches of SFI 45.2 insert/padding be used. It is recommended that the padding meet the SFI 45.2 specification and display a valid SFI 45.2 label. All non-SFI 45.2 insert/padding materials must be 1/2 inch thick or less. No gaps or non-SFI 45.2 specification approved material(s) may be present between the seat structure and driver's uniform in the area directly under the driver. The area directly under the driver extends from the driver's waist (belt line) forward to the front edge of the sub-strap pass through holes, as well as extends five (5) inches to both the left and right of the driver's centerline. It is recommended, a minimum thickness of 3/4 inches of insert/padding meeting the SFI 45.2 specification be used in this area directly under the driver. The area directly under the driver is shown in Diagram #13, in the rear pages of the Rule Book. A 3/8 inch diameter inspection through-hole must be located on the driver's centerline between the leading edge of the lap belt pass through holes as shown in Diagram #13, in the rear pages of the Rule Book. All seat coverings and/or upholstery should be flame retardant.

C. Seats manufactured or recertified after January 1, 2014, must use the insert/padding meeting the SFI 45.2 specification and display a valid SFI 45.2 label. All non-SFI 45.2 insert/padding materials must be 1/2 inch thick or less. No gaps or non-SFI 45.2 specification approved material(s) may be present between the seat structure and driver's uniform in the area directly under the driver. The area directly under the driver extends from the driver's waist (belt line) forward to the front edge of the sub-strap pass through holes, as well as extends five (5) inches to both the left and right of the driver's centerline. A minimum thickness of 3/4 inches of insert/padding meeting the SFI 45.2 specification must be used in this area directly under the driver. The area directly under the driver is shown in Diagram #13, in the rear pages of the Rule Book. A 3/8 inch diameter inspection through-hole must be located on the driver's centerline between the leading edge of the lap belt pass through holes as shown in Diagram #13, in the rear pages of the Rule Book. All seat coverings and/or upholstery should be flame retardant.

D. The seat and headrest/head surround assembly must be installed in accordance with the directions provided by the system supplier and/or manufacturer. SFI 39.1 seats and headrest/head surround assemblies must not be modified or altered. The back of the seat, at the shoulder level, must be positioned as close to the horizontal shoulder bar (#7) as possible.

E. All seats must have padded seat leg extensions on the left side and the right side. Leg extensions must be securely mounted to the seat and car structure. Leg extensions must be padded. It is recommended that the padding meet the SFI 45.2 specification and display a valid SFI 45.2 label. Composite material seat leg extensions should meet the SFI 56.1 specification for flammability. All leg extension coverings and/or upholstery should be flame retardant.

F. Headrests/head surround assemblies must be designed to provide rigid support around both sides of the helmet and across the back and from the forward most point of the helmet chin bar in addition to allowing extra length for forward head motion during impact. The left side of the headrest/head surround assembly may be shortened to permit egress of the driver but must not be shortened to a location rearward of the helmet chin bar. Foam, tape or other non-original coverings may not be added to the headrest without the approval of the seat manufacturer and must be acceptable to NASCAR Officials. The headrest/head surround assembly must be rigidly bolted to the top of the seat using a minimum of 5/16 inch diameter bolts, except for the NASCAR-accepted composite seats. Steel brackets welded to the roll cage must be a minimum 1/8 inch thick and aluminum brackets welded to the headrest/head surround assembly should be a minimum 3/16 inch thick. All bolts must have a minimum of 3/4 inch of metal from the center of the mounting bolt to the edge of the bracket. In addition, it is recommended that the headrest/head surround assembly be bolted to the shoulder supports with a minimum 3/16 inch thick brackets and a minimum 5/16 inch diameter bolts. The headrest/head surround assembly must not extend into the window opening beyond the area defined by the upper roll cage. All headrests must be fabricated in a rigid construction and of materials which provide adequate support in an impact. The headrest/head surround assembly must be padded with flat impact absorbent material, a minimum of four (4) inches thick on the right side and a minimum of 2-1/2 inches thick on the left side, meeting the SFI 45.2 specification. At road course Events only, as an option to the preceding impact absorbent material requirements, the arrangement of the impact absorbent material in the headrest/head surround assembly may be changed to a minimum of three (3) inches thick on both the right side and left side. The headrest/head surround must be padded with flat impact absorbent material, meeting the SFI 45.2 specification.

G. Optional strap-type headrest supports or nets must be equipped with a quick release fastener accessible by the driver.

H. The upper seat back must be secured to horizontal shoulder bar (#7) or to a bracket that is secured to horizontal shoulder bar (#7) with a minimum of three (3) high quality 5/16 inch minimum diameter bolts through the horizontal shoulder bar (#7). For aluminum seats, if a seat bracket is used to attach the seat to the horizontal shoulder bar (#7), the bracket must be constructed using a minimum of 3/16 inch thick metal plate, and it must have a minimum of 3/4 inch of metal from the center of the mounting bolt to the edge of the bracket or the bracket may utilize the composite seat bracket design. For composite seats, the seat bracket must attach the seat to the horizontal shoulder bar (#7) and must be constructed from magnetic steel.

Minimum upper seat bracket thicknesses:

Hendrick; 0.090 inch

Sabelt: 3/16 inch

The magnetic steel seat bracket to be used with a composite seat must be constructed according to the manufacturer's instructions, including all required gussets and reinforcements (see Diagrams # 12A and 12B, in the rear pages of the Rule Book). All gussets must be solid and must run from the centerline of the seat mounting hole to the centerline of the roll cage mounting hole. The outer diagonal gusset edge must be straight unless the gusset is relieved to make room for the horizontal

shoulder bar (#7). Holes and or other modifications that, in the judgment of NASCAR Officials, were made with the intent of weight reduction will not be permitted.

The seat bracket must be fastened to the seat with a minimum of four (4) high quality 5/16 inch minimum diameter bolts for aluminum seats, and two (2) high quality 5/16 inch minimum diameter bolts for composite seats.

I. The seat bottom must be secured to the car's frame/roll cage assembly with a tubular seat frame in a symmetrical fashion with a minimum of two (2) high quality 5/16 inch minimum diameter bolts per side. Seat mount brackets and/or mounting systems must be a minimum of 1/4 inch thick. All mounting brackets must have a minimum of 1/2 inch of metal from the center of the mounting bolt to the edge of the bracket. All seat mounting brackets, welded to the frame rail, frame crossmembers, floors, roll bars, or removable seat mounting frame assemblies, must be made of a minimum of 1/4 inch magnetic steel if single shear or a minimum of 3/16 inch if the double shear configuration is used. If a slotted mount is used to mount the seat to the seat frame, the seat must be bolted to the seat frame bracket using an additional bolt to prevent sliding. When mounting through aluminum seats or brackets, large diameter washers must be used.

J. The seat shoulder support angle should not exceed 25 degrees from vertical when measured where the driver's shoulder contacts the seat with the seat installed in the car. Additional angle may be added to the bottom of the shoulder support for driver arm clearance, if necessary. The interior shoulder support surface should be positioned perpendicular to the seat back in a plan view.

K. Rib/chest support structures, if used, should not interfere with the natural ingress and egress of the driver from the seat. Rib/chest support structures, if used, should provide full coverage from the seat back to the front of the driver's chest. Partial rib/chest supports constructed of foam, meeting the SFI 45.2 specification, will be permitted. Rib/chest support structures should not continue forward past the front of the driver's chest and should not curve or wrap around the front of the driver's chest. Rib/chest support foam, meeting the SFI 45.2 specification will be permitted to curve or wrap around the front of the driver's chest.

20C - 18 Roll Bars

A. remains the same.

B. Basic NASCAR Roll Cage Structure

(1) through (3) remains the same.

(4) The centerline roof bar (#4) **must be a continuous length of tubing**, extending from the main roll bar (#1) forward to the roof bar (#3) near the car's centerline. The center windshield bar (#4A) must extend forward from the roof bar (#3) near the car's centerline and bend downward following the back of the windshield with minimum clearance. The center windshield bar (#4A) must pass through the top of the dash panel and attach to a support bar under the dash panel at the firewall.

(5) remains the same.

(6) Two (2) horizontal bars (#6 & #7) **must each be a continuous length of tubing** and must be welded, with no bends, inside the vertical legs of the main roll bar (#1) with the horizontal tunnel bar (#6) welded just above the drive shaft tunnel and the horizontal shoulder bar (#7) at a minimum height of 21-1/4 inches above the main frame rails. An additional shoulder belt bar (#7B) **must be a continuous length of tubing** and may be added above the horizontal shoulder bar (#7) to facilitate shoulder harness mounting height. The shoulder belt bar (#7B) must be welded to the main roll bar (#1) and the main roll bar diagonal bar (#5) or it may be a bent tube constructed of 1-3/4 inches by 0.090 inch minimum wall thickness steel, round tubing, meeting the ASTM A-519 specification, welded at each end to the horizontal shoulder bar (#7) to form a loop above the horizontal shoulder bar (#7). The shoulder belt bar (#7B) must not be forward of the plane of main roll bar (#1).

(7) remains the same.

- (8) The dash panel bar (#8) must be a continuous length of tubing, with no bends, welded beneath the dash panel between the two (2) front roll bar legs (#2 A & B) at a minimum height of 21-1/4 inches above the main frame rail.
- (9) (a) The door bars (#9 A & B), on both the left and right sides, must have a minimum of four (4) bars equally spaced from top to bottom that must be welded horizontally between the vertical uprights of the main roll bar (#1) and the front roll bar legs (#2 A & B). All door bars must each be a continuous length of tubing. The top door bar on each side must maintain a minimum vertical height of 21-1/4 inches from the top of the main frame rails to its centerline and match up with the intersection of the dash panel bar (#8) at the roll bar legs (#2A & B) at the front and the intersection of the of the horizontal shoulder bar (#7) at the main roll bar (#1) at the rear. All door bars must be convex in shape. The door bars (#9 A & B) must have a minimum of six (6) vertical supports per side with two (2) equally spaced between each door bar. These supports must be made from a minimum of 1-3/4 inches by 0.090 inch wall thickness magnetic steel seamless round tubing (not numbered but shown in the left side view of Diagrams #3, #4 and #5, in the rear pages of the Rule Book).
- (b) All cars must have a 13 gage (0.0897 inch thick) magnetic steel anti-intrusion plate(s) must be securely welded to the outside of the left side door bars. The anti-intrusion plate(s) must fill the area between the horizontal centerlines of the top and bottom door bars, and the vertical centerlines of the main roll bar (#1) and the left front roll bar leg (#2A). The plate(s) must be formed to match the curvature of the door bars. Individual plates welded in the openings between each door bar will not be permitted to be inset more than 1/4 inch from the tangent or outside surface of the door bar. Plate(s) welded between the vertical upright bars should be as large as possible. All plate(s) must have the corners welded with one (1) inch of weld followed by a maximum of three (3) inches of surface not welded and followed again by a minimum one (1) inch weld.
- To facilitate emergency removal of the left side door bars (#9A), the anti-intrusion plate must have six (6), 2-1/2 inch diameter holes cut in the anti-intrusion plate, with three (3) holes near each end of the plate in the following locations:
- The upper two (2) holes must be centered vertically between the left side door bars (#9A-1&2), at an on-center distance of three (3) inches from the center of the left front roll bar leg (#2A) and the main roll bar (#1).
- The middle two (2) holes must be centered vertically between the left side door bars (#9A-2&3), at an on-center distance of three (3) inches from the center of the left front roll bar leg (#2A) and the main roll bar (#1).
- The lower two (2) holes must be centered vertically between the left side door bars (#9A-3&4), at an on-center distance of five (5) inches from the center of the front roll bar leg (#2A) and the main roll bar (#1) (Refer to (Diagram #9) at the rear of the Rule Book).
- (10) The vertical vent window bars (#10 A & B) must each be a continuous length of tubing, welded from the upper surface of the top door bars on the right side and left side to the front roll bar legs (#2 A & B). The vertical vent window bars (#10 A & B) must be perpendicular to the top door bars (#9 A & B).
- (11) through (13) remains the same.
- (14) The trunk reinforcement bar (#14) must be a continuous length of tubing forming a loop directly above the rear sub-frame side rails and the rear-most crossmember and be welded to the rear support bars (#13 A & B). The trunk reinforcement bar (#14) must maintain a minimum height of five (5) inches from the top of the rear crossmember to the trunk reinforcement bar (#14's) center. The trunk reinforcement bar (#14) must remain parallel to the rear sub-frame rear side rails and rear crossmember.
- (15) remains the same.

(16) The two (2) front sub-frame bars (#16 A & B) must each be a continuous length of tubing a minimum 1-3/4 inch diameter by 0.090 inch wall thickness magnetic steel seamless round tubing. They must be welded to the right side and the left side of the front roll bar legs (#2 A & B) at a minimum height of 21-1/4 inches. The front sub-frame bars (#16 A & B) must extend forward through the firewall, turn down, and must be welded to the front sub-frame rails forward of the spring buckets near the radiator mount.

C. through G. remains the same.

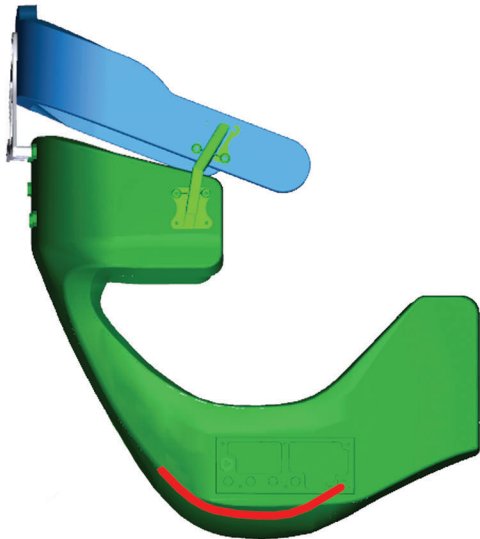
H. At the discretion of NASCAR Officials, additional material and/or tubing may be required to be welded to any car that does not conform to the January 1, 2014 roll cage or roll bar specifications as described in sub-section 20C-18.

DIAGRAM 13 - SEAT PADDING

TOP VIEW



SIDE VIEW



FRONT VIEW

