TECHNICAL BULLETIN

/// NASCAR

NAAPWS23-2-12/05/23

TO: <u>ALL NASCAR ADVANCE AUTO PARTS WEEKLY SERIES LATE MODEL STOCK CAR OWNERS,</u> <u>CREW_CHIEFS AND DRIVERS:</u>

Effective January 1, 2024 – The following are amendments to the 2023 NASCAR Advance Auto Parts Weekly Series Rule Book that will be incorporated into the 2024 NASCAR Advance Auto Parts Weekly Series Rule Book:

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

SECTION 20F LATE MODEL STOCK CAR DIVISION

Open to NASCAR approved automobile manufacturers provided they comply with, and adhere to, specifications as outlined for this Division. Engines may be interchanged within any approved corporate body manufacturers line.

NOTICE

ALL MODEL. ENGINE OR EQUIPMENT CHANGES OR MODIFICATIONS NOT SPECIFICALLY ADDRESSED IN THIS RULE BOOK BY NASCAR MUST BE SUBMITTED TO NASCAR, IN A COMPLETED FORM/ASSEMBLY FOR CONSIDERATION OF APPROVAL, ON OR PRIOR TO SEPTEMBER 3, 2024, UNLESS OTHERWISE AUTHORIZED BY NASCAR TO BE CONSIDERED FOR COMPETITION FOR THE 2025 SEASON. ALL EQUIPMENT IS SUBJECT TO THE APPROVAL OF TRACK OFFICIALS. TRACK OFFICIALS MAY ASSESS WEIGHT PENALTIES FOR RACE EQUIPMENT DEEMED AS NOT IN COMPLIANCE WITH THESE RULES. 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 2024 NASCAR RULE BOOK, OR IS NOT OTHERWISE APPROVED BY NASCAR, MAY NOT BE USED IN COMPETITION IN 2024. PRIOR TO PRODUCTION, ANY NEW RACE EQUIPMENT TO BE CONSIDERED FOR APPROVAL FOR COMPETITION MUST BE SUBMITTED TO NASCAR FOR APPROVAL. AT THE MANUFACTURERS EXPENSE, THE MANUFACTURER MUST PROVIDE ALL INFORMATION, MATERIALS, ELECTRONIC FILES, RACE EQUIPMENT AND FULL SCALE RACE VERSION VEHICLE(S) AS REQUESTED BY NASCAR. MANUFACTURER MUST ALSO PROVIDE TO NASCAR ANY RACE EQUIPMENT TO BE USED AS COMPARISON ITEMS FOR INSPECTION PURPOSES ALONG WITH ANY REQUIRED MANUFACTURER TEMPLATES.

20F - 1.3 Approved Competition Models

The following are the only approved composite body models eligible for competition in <u>2024</u>:

YEAR	MAKE	MODEL
2007 - 2008	Chevrolet	Monte Carlo SS
2008 - 2018	Chevrolet	Impala SS
2007 - 2019	Dodge	Charger
2007 - 2018	Ford	Fusion
2009 - 2019	Toyota	Camry
2008 - 2018 2007 - 2019 2007 - 2018	Chevrolet Dodge Ford	Impala SS Charger Fusion

FIVE STAR RACE CAR BODIES:

YEAR	MAKE	MODEL
2020	Chevrolet	Camaro
2020	Ford	Mustang
2020	Toyota	Camry

All Steel bodied models are no longer be eligible for competition.

20F - 2.3 Added Vehicle Weight

A. remains the same.

B. Added weight must be securely bolted in place inside a 1/8 inch minimum thickness rectangular or square tubular type magnetic steel weight container in a manner acceptable to Track Officials. (Language removed here) Weight trays will not be permitted. Added weight may not be added to the outside of the frame rails, below the bottom of the frame rails, ahead of the front spindles, to any suspension parts, behind the rear axle or inside the driver's compartment. Added weight containers may be attached to the inside of the main frame rails and must not be lower than the bottom of the frame rails. Center mounted added weight containers will be permitted but must be securely welded in place and be acceptable to Track Officials. For inspection purposes, all weight containers must have on one (1) end, a metal cap with a weight retention through bolt of not less than 3/8 inch diameter (installed from the top or side of the added weight container) to permit removal of the added weight.

C. Added weight inside an approved weight container, following the guidelines above, may be bolted or welded to the front sub-frame lower suspension mounting crossmember but must be behind the front spindles. D. Added weight inside an approved weight container, following the guidelines above, may be bolted or welded to the rear suspension crossmember.

<u>E.</u> Added weight will not be permitted inside any crossmember, roll bars or any inaccessible welded chassis component. Electrical, pneumatic, hydraulic, remote control, or any other weight shifting devices will not be permitted at any time.

20F - 3.1.1 Front Air Dam

(Language removed here)

<u>A</u>. All support brackets must be mounted to the rear of the air dam. Brackets and mounts must not be used or installed as air directional devices.

<u>B</u>. On all approved 2007 through 2019 models the leading edge of the air dam must not extend more than three (3) inches forward of the bumper measured at any point across the bumper.

On all approved 2020 models the leading edge of the air dam must not extend more than 4-3/4 inches forward of the bumper measured at the centerline of the front bumper cover.

<u>C</u>. On all approved 2007 through 2019 models, the leading edge of the air dam, when measured from the centerline of the right front spindle must not exceed 46 inches.

On all approved 2020 models the leading edge of the air dam, when measured from the centerline of the right front spindle must not exceed 47 inches.

<u>D</u>. Front air dam extensions, made of flexible plastic type material, will be permitted to be attached to the bottom of the front air dam (bumper cover). It must be flush mounted, stationary, securely fastened, single layer, not exceeding a maximum of 3/16 inch thick (Language removed here) and must be mounted parallel to the bumper cover. The air dam extension must be secured in a manner that will prevent movement of the air dam extension while in competition. (Language removed here)

20F - 3.1.2 Rear Spoilers

A. through D. remains the same.

E. All spoiler heights and angles will be measured with the driver in the vehicle.

F. The spoiler must be slotted 5/8 inch in the center to fit the NASCAR overall template for each make of vehicle 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 mounted with a minimum of six (6), 1/4 inch diameter or larger bolts evenly spaced across the back of the deck lid. Non-adjustable rear spoiler supports will be permitted inside the trunk area. 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 with a maximum of three (3) spoiler braces per spoiler half with the spoiler braces located 4-1/2 inches inboard from the end of each spoiler half and 4-1/2 inches to the left and right of each spoiler braces on each spoiler half. Each spoiler braces 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 below the bottom of the spoiler. Each spoiler braces must not exceed a maximum one (1) inch width, including all mounting brackets and hardware. All spoiler braces, when used, must be acceptable to Track Officials.

(Language removed here)

20F - 3.5 Doors

A. The maximum outside width of the door panels must not exceed 77-1/2 inches. When measured the width at the top and bottom of the door panels must be the same. The approved door panel must be a one-piece design only, maintaining the dimensions for the approved model vehicle and be acceptable to Track Officials. The approved composite body aluminum door panels must be a minimum of .040 inch thick and be used as manufactured. All door panels must be securely fastened to the front fender and the rear quarter panel in a manner acceptable to Track Officials.

B. remains the same.

C. Race equipment, such as driver cool boxes, <u>OBFSS cylinders</u>, electrical switches, etc. (with the exception of the driver's radio equipment) will not be permitted in the left side door area.

20F - 3.8 Hoods / Roof

The hood and roof must remain as manufactured and be from the approved manufacturer and be acceptable to Track Officials. The manufacturers label must remain visible and unaltered. The hood and roof meet the following requirements:

A. through D. remains the same.

E. Only composite roofs will be permitted. The roof panel must be of a design which will include the windshield bed and "A" posts, and the rear window bed, the "B" and "C" posts and side window(s). The windshield bottom bed, "B" post, "C" post and side windows and the rear window bed may be separate pieces and must be flange-mounted and remain as manufactured. These body panels must conform to the NASCAR-approved body and component specifications. The roof must be securely attached to the roll cage at each corner according to the manufacturers specification. The interior side of the roof at the rear above the rear window mounting bed must be supported by a metal brace(s) The inside metal brace(s) may be adjustable but must be secured in place and prevent movement of the roof.

F. remains the same.

20F - 4.1 General Engine Eligibility

The eligible engines must be production engines as determined, selected, and approved by NASCAR. All major components (engine blocks, heads, etc.) must be produced by the manufacturer for sale to the public 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 Technical Coordinator, Touring Series on or prior to <u>September 3, 2024</u> for consideration of approval and approved by NASCAR. Each such part may thereafter be used until it is determined that such part is no longer eligible.

A. through C. remains the same.

20F - 6.1 Ignition System

A. remains the same.

(Language removed here)

B. Magnetos will not be permitted.

C. Crank trigger systems will not be permitted.

<u>D.</u> Computerized, multi coil or dual electronic firing module ignition boxes will not be permitted.

<u>E.</u> Adjustable timing controls will not be permitted.

F. Retard or ignition delay devices will not be permitted.

<u>G.</u> Ignition amplifier boxes and RPM limiters that are **analog** only which do not contain programmable, computerized, or memory circuits will be permitted in standard ignition systems.

<u>H.</u> Only one (1) ignition amplifier box will be permitted (if used), and it must be mounted on the right hand side on the front of the dash panel not more than 18 inches from the front roll bar leg (#2B) or on an ignition system mounting panel as described in sub-section 20F-3.3B.

<u>I.</u> Modifications to ignition amplifier boxes will not be permitted. Track Officials may use ignition amplifier boxes provided by the respective manufacturer as a guide in determining whether or not modifications have been made.

<u>J.</u> The ignition amplifier must have a six (6) pin female connector attached to its output leads of the Packard Electric type (MSD part #8170) to facilitate manual operation and testing of the ignition components during inspection. The wiring sequence must be the same as the General Motors or Ford ignition amplifier.

K. Only one (1) ignition coil will be permitted and it must be mounted on the engine side of the firewall or inside the vehicle on the ignition system mounting plate.

<u>L.</u> External RPM limiters will not be permitted unless an ignition amplifier box is not used. If used, the external RPM limiter must be analog only.

<u>M.</u> All ignition wiring harnesses, switches, and connectors must be acceptable to Track Officials. All wiring must be point-to-point and each wiring connection must be easily traceable and removable from the vehicle for inspection purposes. Splices, bare and punctured wires will not be permitted in the ignition system. Ignition system wiring should remain visible and accessible. Taping wires together, heat shrink wrap, and/or banded wire looms should not be used. Terminated wiring must be sealed to prevent connection.

<u>N.</u> A heavy red wire (positive to the battery) and a heavy black wire (negative to the ground) will be permitted. Any other wires will not be permitted to enter or exit the amplifier box.

O. Accessories to regulate the power supply will not be permitted.

<u>P.</u> Track Officials may at their discretion inspect, test, and/or destructively test ignition system components including ignition amplifier boxes, tachometers, distributors, etc.

Q. All connectors must allow for the application of a sealing device applied by Track Officials.

20F - 6.5 Battery

A. Only one (1) battery with a maximum nominal voltage of 12 volts will be permitted. Accessories to regulate the power supply will not be permitted. Each battery must be of the gel cell or absorption glass mat design. (Language removed here)

B. remains the same.

20F - 12.1 Coil Springs / Spring Mounts / Jacking Bolts

Only coil spring suspension will be permitted. All coil springs must be constructed using round magnetic steel wire, wound in a clockwise direction. Ovate and flat wire will not be permitted. The coil spring wire diameter must be the same size from the top to the bottom of the springs. All of the coils in a spring must be active. The coil springs in all four (4) wheels must be active in any and all suspension movement.

Coil spring suspension will be limited to either conventional type coil springs or coil over springs. The use of either type of spring on both the front and rear suspension, such as coil springs on the front and coil over springs on the rear, will be permitted. The use of a combination of spring types on both the front and rear suspension, such as a conventional coil spring on one side and a coil over spring on the opposite side, will not be permitted.

A. Coil-Over Springs

1. through 7. remains the same.

8. Spring Pre-loaders will not be permitted.

B. and C. remains the same.

20F - 12.2 Sway Bars (Anti-Roll Bars)

Sway bars, when used must be used for the purpose of anti-roll only. The front sway bar must freely rotate in their mounts. The movement of the front sway bar arms must not be prevented or restricted beyond that of normal use as an anti-roll bar.

A. remains the same.

B. The sway bar arms must be constructed of metal and may be splined for attaching to the main body. Only two (2) one-piece sway bar arms, one (1) per side, may be used on the front sway bar. Fabricated sway bar arms will be permitted. Sway bar arms must be acceptable to Track Officials. The minimum length of the sway bar arms will be 11 inches and the maximum length of the sway bar arms will be 16 inches. The sway bar arms must be the same length and configuration on each side. The sway bar arms must not extend rearward of the mounting location on the front edge of the lower A-frame. Heim joints (spherical rod ends) may be used for attaching the sway bar arms to the lower A-frames. Quick release pins will not be permitted.

C. remains the same.

20F - 12.3 Shock Absorbers

Shock absorbers and components must be from an approved manufacturer. The approved shock absorbers will be of the revalvable, rebuildable, gas pressurized, mono-tube, deflective disc valve type with an integral gas reservoir. Shock absorbers must provide a resultant force dependent upon piston velocity and must be acceptable to Track Officials. Shock absorbers and components must be used as supplied by the manufacturer and all components must be used in only their respective manufacturers shock absorber. Modifications or changes to the shock absorber and internal components will not be permitted. Shock absorbers and components must be available to all Competitors and must meet the following requirements.

As per local Track Rules, oil type shock absorbers will be permitted. Specifications and rules for these oil type shock absorbers will be developed, implemented, governed and enforced by the individual Track Rules.

The approved shock absorbers and **pistons** are as follows:

MANUFACTUER Advanced Racing Suspensions 4000 Series	<u>PART NUMBER</u> 40094 (Linear) 40098 (Digressive) 40099 (High Flow)
Bilstein AS2 Series	<u>Non-Adjustable</u> E4-B46-20SNCT (Linear) E4-AK1-Z033A00 (Digressive) E4-MWP-0846A01 (High Flow)
	<u>Single-Adjustable</u> E4-B46-20SNDT (Linear) E4-AK1-Z024A01 (Digressive) E4-MWP-1246A03 (High Flow)
JRI ST/08 Series	JRI13109439 (Linear) JRI13109698 (Linear)

Penske 7500 Series PI-11005-4032 (Linear) PI-DL005-1DG (Digressive) PI-HF14005 (High Flow)

A. through Y. remains the same.

20F - 12.8.1 Body Height Requirements

A. remains the same.

B. Competitors presenting vehicles for inspection of the minimum body height and the minimum ground clearance will be measured using a four (4) inch block under the main frame rail(s). (Language removed here) This will apply to pre-qualifying, Pre-Race, and post-race inspection. (Language removed here) When the vehicle is setting on the four (4) inch blocks the weight of the vehicle including the driver will determine the body heights. The pushing down or lifting up of the vehicle to meet the body heights will not be permitted.

C. remains the same.

20F - 17 Personal Safety Equipment Recommendations - Refer to sub-section 6-3 of the Rule Book.

- A. remains the same.
- B. Protective Clothing

IT IS THE RESPONSIBILITY OF THE DRIVER AND CREW MEMBER, NOT NASCAR, TRACK OFFICIALS OR THE PROMOTER, TO ENSURE THAT HE/SHE MAINTAINS, WEARS AND PROPERLY USES PROTECTIVE CLOTHING.

DRIVERS – It is highly recommended that every driver wear the following:

	Use Recommended	SFI <mark>/FIA</mark> Specification (minimum)	SFI/FIA Specification (recommended)	SFI Label Visibly Displayed
Uniform	х	3.2A/5	3.4	Outside Surface of Left Sleeve
Shoes	х	3.3		х
Gloves	х	3.3		х
Head Sock and/or Helmet Skirt	Х	3.3 FIA 8856-2000 FIA 8856-2018	3.3 FIA 8856-2000 FIA 8856-2018	X
Underwear/ Socks	x	3.3 FIA 8856-2000 FIA 8856-2018	3.3 FIA 8856-2000 FIA 8856-2018	X
Helmet	X See Helmet Recommendations In Rule Book Section 6-3-1A1			Helmet Certification Label Affixed To Helmet At All Times

CREW MEMBERS – It is highly recommended that, during race conditions, any crew member who steps into the vehicle servicing area should wear the following:

	Use Recommended	SFI/FIA Specification (minimum)	SFI/FIA Specification (recommended)	SFI Label Visibly Displayed
Uniform	х	3.2A/1	3.2A/5 or 3.4	Outside Surface of Left Sleeve
Shoes	х	3.3		Х
Gloves	х	3.3		х
Head Sock and/or Helmet Skirt	Х	3.3 FIA 8856-2000 FIA 8856-2018	3.3 FIA 8856-2000 FIA 8856-2018	Х
Underwear/ Socks	Х	3.3 FIA 8856-2000 FIA 8856-2018	3.3 FIA 8856-2000 FIA 8856-2018	X
Helmet	X See Helmet Recommendations In Rule Book Section 6-3-1A3			

FUEL HANDLER (CREW MEMBER) – It is highly recommended that, during race conditions, any crew member involved in fueling the vehicle or handling or transporting fuel in the garage or pit area should wear the following:

	Use Recommended	SFI <mark>/FIA</mark> Specification (minimum)	SFI/FIA Specification (recommended)	SFI Label Visibly Displayed
One-Piece Uniform	Х	3.2A/5	3.4	Outside Surface of Left Sleeve
Shoes	Х	3.3		х
Gloves	Х	3.3		х
Apron	Х	52.1		х

Underwear/ Socks	X	3.3 FIA 8856-2000 FIA 8856-2018	3.3 FIA 8856-2000 FIA 8856-2018	x
Head Sock Helmet Skirt	X	3.3 FIA 8856-2000 FIA 8856-2018	3.3 FIA 8856-2000 FIA 8856-2018	x
Full-face Helmet with Face Shield	X See Helmet Recommendations In Rule Book Section 6-3-1A4			Helmet Certification Label Affixed To Helmet At All Times

C. Onboard Fire Suppresion

- It is recommended that each vehicle have a fully charged Onboard Fire Suppression System (OBFSS) servicing the driver (cockpit) area. The OBFSS should be installed, maintained and used in accordance with the manufacturer's/suppliers directions.
- 2. The drivers compartment OBFSS cylinder should contain a minimum of five (5) pounds of agent. Nozzle(s) should be designed for the 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 manufacturers recommendation. If engine compartment nozzle is used with this cylinder, the OBFSS cylinder size should be increased to a minimum of 10 pounds of agent. When the engine compartment line is used, it should remain in the passenger compartment and only breech the front firewall once. The discharge nozzle should be secured with metallic hardware.
- 3. It is recommended that each vehicle have an additional OBFSS cylinder solely dedicated to extinguish the fuel cell area (trunk). This cylinder should contain a minimum of 10 pounds of agent. This cylinder should be a thermally activated discharge nozzle appropriate for the agent and installed per the manufacturer's instructions. This automatic system may have a manual and/or pneumatic override from the driver-activated system. As an option, this OBFSS cylinder may also be directed to the engine compartment with the use of a T-type fitting. If the engine compartment discharge option is used, then an additional automatic, thermally activated discharge nozzle should be located under the hood forward of the firewall. When routing pressurized fire extinguisher lines (thermally activated) either to the trunk area or the engine compartment, the lines should pass through the firewall near the longitudinal centerline of the vehicle. These lines should not pass through floorboards, wheel wells or crush panels.
- <u>4</u>. The OBFSS system(s) should meet the SFI 17.1 specification and display a valid SFI 17.1 label. This OBFSS cylinder(s) should be certified by the manufacturer every two (2) years. An additional manufacturers label with a visible date code should be located directly below the pressure gauge on the surface of the cylinder(s). The OBFSS cylinder(s) should have a visible operating pressure gauge, compatible with the agent and be charged with DuPont FE-36, 3M NOVEC 1230 or equivalent agent. The use of Halon 1211 and Halon 1301 will not be permitted. The cylinders should have a pressure gauge and manufacturers label readily visible for inspection purposes.
- 5. The OBFSS cylinder(s) should be DOT-approved and constructed of steel or aluminum. Carbon fiber or composite cylinders should not be permitted.
- 6. Shut off valves are not permitted within the onboard fire suppression system(s).
- 7. It is recommended that each vehicle have a manually controlled push/pull nozzle activation knob which activates the OBFSS system should be used (thermally activated discharge nozzle is recommended). The manually controlled activation system should only use the OBFSS manufacturer's supplied push/pull cable, push knob or other manual activation device. The activation device should be mounted within the drivers reach. While on track, the lock pin should be removed from the manually controlled push/pull activation device. A red tag with white lettering stating, "REMOVE BEFORE ON TRACK" should be attached to the lock pin.
- 8. All discharge lines and fittings should be steel or steel reinforced hose. The OBFSS nozzles may be aluminum. The discharge nozzles should be secured with clamps constructed of metal. Placement and orientation of the discharge nozzle are the responsibility of the team according to their installations and OBFSS manufacturer instructions.
- 9. The OBFSS cylinder(s) should be securely mounted beyond the right side or to the rear of the driver's seat in the driver's compartment. The OBFSS cylinder(s) and their mounts should not be beyond the inside

edge of the right side main frame rail. The mounting systems should secure both ends of the cylinder(s) for their full circumference to the structure of the vehicle and be acceptable to Track Officials. Hose clamps, worm drive clamps or cable ties should not be used. A device(s) should be installed to keep the cylinder(s) from sliding out of the mounting systems. Clamp style or "figure eight" mounts should completely encircle the circumference of the 1-3/4 inch outside diameter of the roll bar.

<u>10</u>. All entrants should have in their garage or pit area, if any, as part of their equipment, at all times, a fully charged minimum 10 pound Class B fire extinguisher with a visible, operating pressure gauge.
 D. remains the same.

20F - 18 Roll Bars

A. through G. remains the same.
H. At the discretion of Track Officials, additional material and/or tubing may be required to be welded to any vehicle that does not conform to the <u>January 1, 2024</u> roll cage or roll bar specifications as described in subsection 20F-18.