



East

West

# Technical Bulletin

Automobile Racing Club of America

P.O. Box 380 – Temperance, MI 48182 – 734-847-6726

**To: All ARCA Menards Series, ARCA Menards Series East, ARCA Menards Series West, Car Owners, Drivers, and Crew Chiefs:**

**Date:** November 11, 2024

**Effective January 1, 2025–** The following are amendments to the 2024 ARCA Menards Series Rule Book that will be incorporated into the 2025 ARCA Menards Series Rule Book:

**NOTICE:** The ARCA Menards Series Rule Book, Technical and Team information Bulletins may be accessed by visiting [www.arcaracing.com](http://www.arcaracing.com).

The 2025 ARCA Menards Series Rule Book will take precedent over the following amendments.

## NOTICE

ALL MODEL, ENGINE OR EQUIPMENT CHANGES OR MODIFICATIONS NOT SPECIFICALLY ADDRESSED IN THIS RULE BOOK BY ARCA MUST BE SUBMITTED, IN A COMPLETED FORM/ASSEMBLY, TO ARCA FOR CONSIDERATION OF APPROVAL, ON OR PRIOR TO **SEPTEMBER 3, 2025**, UNLESS OTHERWISE AUTHORIZED BY ARCA, TO BE CONSIDERED FOR COMPETITION FOR THE **2026** SEASON. THE APPLICANT WILL BE NOTIFIED OF APPROVAL OR REJECTION FROM ARCA. 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 **2025** ARCA RULE BOOK, OR IS NOT OTHERWISE APPROVED BY ARCA, MAY NOT BE USED IN ARCA COMPETITION IN **2025**. ALL SUBMITTED RACE EQUIPMENT MUST BE ACCOMPANIED BY COMPUTER-AIDED DESIGN (CAD) FILES AND/OR MECHANICAL DRAWINGS AND REQUISITE FEE AS DETERMINED BY ARCA.

### **20C - 1.2 ARCA Menards Series**

The ARCA Menards Series will compete with the rules as specified in Section 20C of the Rule Book. If authorized by ARCA, deviations to these rules may be permitted for stand-alone Events only. All combination Events will be governed by the rules as published in Section 20C of the Rule Book.

**The NASCAR-approved (Generation 5) frame and roll cage assembly consisting of main frame rails, upper left side frame rail, trailing arm crossmember assembly, rear sub-frame assembly and numbered roll bars (#1 through #19) will be permitted. The frame and roll cage assembly must be NASCAR-approved and meet the specifications and dimensions as described in sub-sections 20C-11.2 (Frame Requirements), 20C-18 (Roll Bars) and shown in Diagrams #1A through #4B in the rear pages of the Rule Book.**

**When the NASCAR-approved (Generation 5) frame and roll cage assembly is used it must meet the following specifications. Unless otherwise specified within this Rule Book all other**

components and specifications such as suspension, tread width, body location and wheelbase must meet the specifications in the [2025 ARCA Menards Series Rule Book](#).

### 20C - 1.3 APPROVED COMPETITION MANUFACTURERS AND MODELS

#### A. [2025 Racing Season](#):

The following are the only approved models for competition in the ARCA Menards Series in [2025](#):

2014 Grand National-Approved (Flange Fit) Composite Body

#### Approved Models:

Chevrolet - SS  
Ford - Fusion  
Toyota - Camry

2022 Grand National-Approved (Flange Fit) Composite Body

#### Approved Models:

Ford - Mustang

#### B. [2026 Racing Season](#):

Any new vehicle model to be considered for approval for competition in the [2026](#) season must be submitted by the manufacturer to ARCA for initial consideration not later than [June 6, 2025](#), unless otherwise authorized by ARCA. 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 ARCA on or before any dates specified by ARCA. The manufacturer must cooperate with ARCA to enable ARCA and the NASCAR Research and Development Center to complete all necessary track tests, aerodynamic tests, and other competitive analysis by [September 3, 2025](#), unless otherwise authorized by ARCA. All new vehicle models submitted to ARCA 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 this Series. All new vehicle models submitted to ARCA for approval must complete the ARCA Series OEM Body Approval Process. To begin the ARCA Series OEM Approval Process, an OEM must complete and submit the ARCA Series OEM Body Approval Initiation Request Form to the ARCA President.

### 20C - 2.2 Overall Vehicle Weight

A. through C. remains the same.

D. The driver's weight will be measured by ARCA Officials [using the scales provided by ARCA, the first time the driver competes at any Event, and then at any time and any Event at ARCA's discretion.](#)

E. remains the same.

F. Minimum Vehicle Weights:

Vehicles competing with the approved ARCA Ilmor and Legacy engines:

Driver Weight Bracket (lbs.)	Minimum Vehicle Weight w/o Driver	Minimum Right Side (Ovals)	Minimum Left Side <u>or</u> Right Side (Road Course)
250 lbs. & Above	3175 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)

225 – 249 lbs.	3200 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)
200-224 lbs.	3225 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)
175 – 199 lbs.	3250 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)
150 – 174 lbs.	3275 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)
125 – 149 lbs.	3300 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)

Vehicles competing with the approved “Spec” and Built engines:

Driver Weight Bracket (lbs.)	Minimum Vehicle Weight w/o Driver	Minimum Right Side (Ovals)	Minimum Left Side <u>or</u> Right Side (Road Course)
250 lbs. & Above	3200 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
225 – 249 lbs.	3225 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
200-224 lbs.	3250 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
175 – 199 lbs.	3275 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
150 – 174 lbs.	3300 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
125 – 149 lbs.	3325 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)

Vehicles competing at all ARCA West Series stand-alone events with the approved “Spec” and Built engines with hood/roof flaps:

Driver Weight Bracket (lbs.)	Minimum Vehicle Weight w/o Driver	Minimum Right Side (Ovals)	Minimum Left Side <u>or</u> Right Side (Road Course)
250 lbs. & Above	3175 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)

225 – 249 lbs.	3200 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)
200- 224 lbs.	3225 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)
175 – 199 lbs.	3250 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)
150 – 174 lbs.	3275 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)
125 – 149 lbs.	3300 lbs.	1584 lbs. 1559 lbs. (Gen. 5)	1617 lbs. 1592 lbs. (Gen. 5)

Vehicles competing at all ARCA West Series stand-alone events with the approved “Spec” and Built engines without hood/roof flaps:

Driver Weight Bracket (lbs.)	Minimum Vehicle Weight w/o Driver	Minimum Right Side (Ovals)	Minimum Left Side <u>or</u> Right Side (Road Course)
250 lbs. & Above	3200 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
225 – 249 lbs.	3225 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
200 – 224 lbs.	3250 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
175 – 199 lbs.	3275 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
150 - 174 lbs.	3300 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)
125 - 149 lbs.	3325 lbs.	1596 lbs. 1571 lbs. (Gen. 5)	1629 lbs. 1604 lbs. (Gen. 5)

G. through J. remains the same.

### 20C - 3.2.3 Side Window / Quarter Window

A. through F. remains the same.

G. All air vents (NACA ducts) in the quarter windows must be clear and configured for air intake only. Suction ducts will not be permitted. A maximum of three (3) inlets per quarter window. When installed the maximum angle of an air vent (NACA duct) permitted will be 45 degrees. Open air vents (NACA

ducts) (without a hose attached) must be sealed both exterior and interior. The maximum hose size is three (3) inches. All hoses must be fully functional without any restrictions. Hoses connected to an air vent (NACA duct) not used for cooling the driver, must be connected to a fan or cooler and must exhaust outside the interior. A maximum of two (2) open ended hoses for cooling the driver may be used and must exhaust forward of the horizontal shoulder bar (#7). Fans will not be permitted in the hoses cooling the driver. One standard air vent (NACA duct) with a four (4) inch high by seven (7) inch long opening with a three (3) inch outlet must be installed in the left side quarter window as far forward and as low as possible. The air vent (NACA duct) must be mounted horizontal to the door top and must remain open and unrestricted at all times. Any hoses/blowers mounted behind the required open air vent (NACA duct) must be mounted and remain a minimum of six (6) inches behind the rear of the opening. Additional intake ducts may be added at the discretion of the Series Director.

#### **20C - 4.1 General Engine Eligibility**

A. The eligible engines must be production engines as determined, selected and approved by ARCA. 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 NASCAR R&D Center on or prior to September 3, 2025, for consideration of approval and approved by ARCA. Each such part may thereafter be used until ARCA determines that such part is no longer eligible.

B. remains the same.

C. As an option, Teams may compete with the Robert Yates Racing Engines "Spec Engine". The engine will be permitted on all tracks less than 1-1/2 miles in length and road courses. If used, the "Spec Engine" may be purchased as a completely assembled engine or purchased in kit form to be assembled by the engine builder of the team's choice. "Spec Engine" kits and assembled engines are available directly from Robert Yates Racing Engines, LLC. If used, the "Spec Engine" must be completely assembled using only approved "Spec Engine" components without any modifications. Part numbers and/or identification markings must remain as supplied without modifications. Painting, coatings, polishing, the addition or removal of material of any kind will not be permitted to any engine part. All parts, pieces and components that are used in the "Spec Engine" must originate from Robert Yates Racing Engines, LLC and remain as supplied.

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

The following modifications listed below are permitted to the approved "Spec Engine":

1. Changing carburetor main jetting.
2. 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. No other modifications to the carburetor metering blocks will be permitted.
3. An additional oil scavenge line from the second stage of the oil pump to the lubrication oil reservoir tank will be permitted. The additional oil scavenge line may merge into the oil scavenge line on the first stage of the oil pump.
4. The use of the crankcase windage tray supplied by the approved supplier is optional.
5. The installation and fitting of valve guide liners will be permitted. The valve centerline and valve angle must remain the same as supplied by the approved supplier and manufacturer.

6. The combustion chamber volume must be 64cc's for compression after the valve maintenance (valve job) has been completed.
7. Valve springs must be installed at 1.800 inches with an approximate seat pressure of 130 lbs.
8. A maximum cylinder overbore size of 0.010 inch will be permitted on the approved "Spec Engine" block. The 0.010 inch overbore pistons, piston rings and wrist pins must be purchased from the approved supplier with no modifications.
9. Decking (milling) of the engine block cylinder head surface to ensure proper sealing will be permitted. The engine block cylinder head surface may be decked (milled) 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.

The following modifications listed below will not be permitted to the approved "Spec Engine":

1. Valve guide service with the exception of valve guide liner installation and valve seat replacement must only be completed by Robert Yates Racing Engines, LLC.
  - a. The following procedures and specifications must be followed when performing valve maintenance (valve job) on the "Spec Engine". No modifications or deviations from the procedures or specifications will be permitted.
  - b. There are two (2) approved methods of valve seat maintenance for the "Spec Engine".
    1. The use of a dedicated carbide cutting tool insert for the intake and exhaust valve seats is available **only through Robert Yates Racing Engines, LLC.**

INTAKE

Part number: WAR-IC-6527

EXHAUST

Part number: WAR-EC-6528

2. The programming and application of the supplied coordinates for use with the NEWEN Contour EPOC style machine using a single point cutter are available **only through Robert Yates Racing Engines, LLC.**

2. No modifications to the CAMSHAFT – CAMSHAFT TIMING must be to manufacturer's specified settings.

**The use of a camshaft degree bushing will be permitted in the camshaft timing gear to obtain the manufacturer's camshaft timing specified settings. The manufacturer's camshaft specified settings for the intake centerline must be a minimum of 105.5 degrees and a maximum of 106.25 degrees. No other modifications to the camshaft timing will be permitted.**

3. No carburetor modifications.

**With exception of changing the carburetor main jetting, all other components of the carburetor must remain as supplied by the NASCAR-approved supplier.**

**NOTE: Any reference to the approved or unapproved carburetor components refer to the carburetor display board located at the Series hauler.**

4. No header or collector modifications.
5. No ignition system modifications.

**As an option, Teams will be permitted to use the crank trigger ignition system Part # 125004, available only through Robert Yates Racing Engines. If the crank trigger ignition system is being used, triggering devices or pick-ups will not be permitted inside the distributor housing. Teams will be permitted to use distributor Part # 187008 available only through Robert Yates Racing Engines with the crank trigger ignition system only.**

**6.** No oil pan modifications.

**As an option, Teams will be permitted to use the Moroso oil pan baffle insert, part number OILP-144004, available only through Robert Yates Racing Engines.**

**The ARCA Ilmor, Robert Yates Racing Engines “Spec Engine” and the ARCA-approved Built and Legacy engines may be interchanged with any Grand National-approved (Flange Fit)**

D. Unless otherwise specified by ARCA, the same long block engine assembly (engine block, crankshaft, camshaft, connecting rods, pistons, cylinder heads, and valves) must be used for the entire Event, including practice, qualifying and the Race. An engine must not be removed from a vehicle without the approval of the Series Director. The Series Director may require any team that removes an engine to start at the rear of the field, providing the vehicle earns a starting position in the Race. The engine may be removed from a back-up vehicle, without a penalty, at the discretion of the Series Director as follows:

1. If a vehicle is wrecked beyond repair in practice before qualifying and a back-up vehicle is used, then an engine change may be permitted provided the change can be accomplished in a timely manner before qualifying.
2. If a vehicle is wrecked beyond repair during qualifying and a back-up vehicle is used, an engine change may be permitted, however, the engine change must be completed before the beginning of practice(s), if practice(s) is scheduled following qualifying.
3. If a vehicle is wrecked beyond repair after qualifying and a back-up vehicle is used, then an engine change may be permitted without an additional penalty.

If a Competitor violates this Rule, in addition to imposition of a penalty pursuant to Section 12, the Series Director may take appropriate action during the Event, including but not limited to loss of practice time and/or loss of the opportunity to qualify and/or confiscation of the engine or engine components. Such action shall be deemed an inspection decision not subject to Section 12.

**In an effort to save time during at track inspections, all built, and Legacy engines must have the forward most right side and forward most left side intake manifold bolts, and the forward most right side and forward most left side lower cylinder head bolts cross drilled for engine sealing. If cylinder head studs are used, the studs must be cross drilled above the cylinder head nut or through cylinder head nut and stud. The holes must be drilled a minimum diameter of 0.063 inch to accept the ARCA engine seal.**

**All ARCA/Ilmor engines will have seals applied by Ilmor Engineering. Competitors must not remove, alter or tamper with the engine supplier seal. If a Competitor presents an ARCA/Ilmor engine for Competition with a broken, missing or altered engine supplier seal, the engine will not be eligible for use at that Event and will be impounded by ARCA.**

All approved "Spec Engines" must have the forward most right side and forward most left side intake manifold bolts, the forward most right side and the forward most left side lower cylinder head bolts and the right side and left side (second from bottom) front timing cover bolts cross drilled for engine sealing. The holes must be drilled a minimum diameter of 0.063 inch to accept the ARCA engine seal.

The right side front carburetor/Throttle Body stud must be drilled a minimum diameter of 0.063 inch to accept the ARCA carburetor/Throttle Body seal on all engines.  
(Language removed here)

## **20C - 6.7 Accessories**

A.through Q. remains the same.

R. For all dirt Events, a dirt/hood deflector may be used. If used the deflector must not exceed a maximum height of 2-1/2 inches and a maximum length of 24 inches and may be located anyplace on the hood. The deflector must not interfere with operation of the hinged trap doors (hood flaps).

## **20C - 9.2 Exhaust Pipes**

A.through D. remains the same.

E. When exhaust inserts are required, with the exception of either an "H" pipe or "X" pipe exhaust crossover pipes may not intersect. The exhaust pipes must not exceed a maximum circumference of 13-1/4 inches and a minimum height of two (2) inches. Exhaust pipes must have a divider centered in each pipe.

F. The exhaust pipe(s) must extend outside the rocker panel but not to exceed a maximum of 1/4 inch.

G. The exhaust pipe(s) must be secured beneath the frame with a minimum of three (3) inches of ground clearance.

H. Frames, rocker and quarter panels must not be notched to accommodate exhaust pipes.

I. Exhaust pipes must be fastened to the headers in a secure manner acceptable to ARCA Officials.

J. All exhaust pipe connections must be a sealed, interference fit, and acceptable to ARCA Officials.

K. Each exhaust pipe must be secured to the vehicle with a minimum of two (2) 1/8 inch thick by a minimum of one (1) inch and a maximum of two (2) inches wide magnetic steel "U" shaped brackets.

L. Exhaust pipes must be made from magnetic steel tubing.

M. Thermal wrap will be permitted to be used on the exhaust pipe under the driver's compartment area only.

(Language removed here).

### **20C-9.2.1 Exhaust Pipe Inserts**

A. Exhaust pipe inserts must be used at designated tracks that will be noted on the Official Entry Blank for that Event. Only (SRI Performance, part number RCR-NG04-3030B) exhaust pipe inserts will be permitted.

B. Except for the addition of mounting hardware, exhaust pipe inserts must be used as supplied by the manufacturer.

C. Four (4) exhaust pipe inserts must be installed at all times during an Event, two (2) in each exhaust pipe exit. Exhaust pipe inserts must be installed a maximum of one (1) inch inboard from the shortest point of the exhaust pipe exit.

D. Exhaust pipe inserts must be mounted to the outboard wall of the exhaust pipe and must be able to be removed by ARCA at any time during an Event.

## **20C - 11.2 Frame Requirements**

All frame components must be made of magnetic steel and welded. The frame must consist of a front and a rear sub-frame connected to the main frame on which the roll cage is welded. Sub-frames must not be offset from the main frame longitudinal centerline. Holes and/or other modifications to the frame, frame supports, weight containers, front and rear sub-frames, crossmembers, or any other frame components that, in the judgment of ARCA Officials, were made with the intent of weight reduction will not be permitted.

A. through D. remains the same.

**When the NASCAR-approved (Generation 5) frame and roll cage assembly is used it must meet the following specifications. Modifications to any of the specifications or components will not be permitted.**

### **Frame Requirements**

All frame components must be made of magnetic steel and welded. The frame must consist of a front and a rear sub-frame connected to the main frame on which the roll cage is welded. Sub-frames must not be offset from the main frame's longitudinal centerline. Each of the frame's crossmembers must include a visible, permanently marked centerline reference location point that can be viewed from above and below the vehicle.

Holes and/or other modifications to the frame, frame supports, weight containers, front and rear sub-frames, crossmembers, or any other frame components that, in the judgment of ARCA Officials, were made with the intent of weight reduction will not be permitted. Frame construction materials must remain as described in this sub-section as they relate to specified sizes and specified shapes. Grinding, machining and/or other modifications to the frame components that, in the judgment of ARCA Officials, changes the components size and/or shape, as described in the ARCA Rule Book, will not be permitted. All references to the inspection surface in sub-section 20C-11.2 have been determined with the front lower edge of both main frame rails set at six (6) inches and the rear lower edge of both main frame rails set at eight (8) inches from the horizontal inspection surface.

For inspection purposes, a conical receiver for a 3/4 inch outside diameter locating ball must be welded to the bottom surface of the trailing arm crossmember. This receiver must be located on the longitudinal centerline of the chassis and centered forward and rearward on the trailing arm crossmember. The distance from the center of the conical receiver and the rear vertical surface of the trailing arm crossmember (X = zero) must be one (1) inch to provide accurate placement of all chassis components and body location in the "X" direction.

The front sway bar tube must have a 1/8 inch diameter or a 1/4 inch diameter hole on the chassis longitudinal centerline on the top of the tube.

A. Main Frame - The main frame and crossmember assembly must meet the specifications and dimensions as described in this sub-section and shown in Diagram #1A, in the rear pages of the Rule Book. The main frame must consist of two (2) side rails of magnetic steel box tubing (alloys other than mild steel will not be permitted), three (3) inches in width by four (4) inches in height with a minimum wall thickness of 0.113 inch meeting the ASTM A-500 specification with a length of 65 inches. The front and rear ends of both main frame rails must be cut square. The main frame rails must be straight. The main frame rails must be a continuous and consistent length of three (3) inches in width by four (4) inches in height, box tubing. Tapered, bent or distorted frame rails will not be permitted. The main frame rails must be parallel to each other and parallel to the chassis longitudinal centerline with a distance between the frame side rails, measured inside to inside, of 52 inches. An upper frame rail must be used in conjunction with the left side main frame rail. This upper frame rail must be constructed using

magnetic steel box tubing two (2) inches in width by five (5) inches in height with a minimum wall thickness of 0.113 inch, meeting the ASTM A-500 specification. The upper frame rail must be welded to the top of the main frame rail flush with the outside vertical wall and be welded to the main roll bar (#1) and the left front roll bar leg (#2A) (see Diagram #2B, in the rear pages of the Rule Book). This upper frame rail must be welded to and continue forward from the front of the left front roll bar leg (#2A) to the forward end of the left main frame rail. This upper rail must then angle inward to align with and be welded to the top surface of the left sub-frame rail (see Diagrams #2B & 3B, in the rear pages of the Rule Book). A trailing arm crossmember, which includes the right and left trailing arm mounting brackets and the front drive shaft hoop and tunnel plate assembly, must be constructed and located between the left and right main frame rails. The trailing arm crossmember must be constructed using two (2) inches wide by two (2) inches high square magnetic steel tubing with a wall thickness of 1/8 inch, meeting the ASTM A-500 specification. The trailing arm crossmember must be cut in half in the center of the chassis and reconnected using two (2) inch wide by one (1) inch high rectangular tubing with a minimum wall thickness of 0.113 inch, meeting the ASTM A-500 specification, and be welded beneath the left and right crossmember sections. The center connection must also include the front drive shaft hoop and tunnel plate assembly (see Diagram #1C, in the rear pages of the Rule Book). The left half of the trailing arm crossmember must be welded to the inside vertical wall of the left side main frame rail at a distance of 31 inches forward of the rear end of the left main frame rail to the back of the crossmember. A six (6) inch high by minimum four (4) inch long by two (2) inch wide triangular shaped gusset must be installed to connect the top surface of the left trailing arm crossmember to the inside vertical wall of the left upper frame rail. This gusset must be constructed of a minimum 0.113 inch thick, rectangular, magnetic steel box tubing and completely welded in place. Holes and/or other modifications that, in the judgment of ARCA Officials, were made with the intent of weight reduction will not be permitted. The right half of the trailing arm crossmember must step up to provide exhaust pipe clearance and be welded to a welded mount on top of the right side main frame rail at a distance of 31 inches forward of the rear end of the right side main frame rail to the back of the crossmember (see Diagram #1A, in the rear pages of the Rule Book).

The front trailing arm mounting brackets must be one-piece, welded using flat magnetic steel with no bends or breaks, not less than 3/16 inch thick. The front trailing arm mounting brackets must be welded or bolted to the back of the crossmember using ARCA-approved mounting brackets and must not be offset from the main frame rail longitudinal center line. The horizontal centerline of the highest trailing arm mounting bolt holes must not be higher than the top of the trailing arm crossmember (10-5/16 inches) at the location of the trailing arm mounting bracket. A left and right side diagonal brace must support the trailing arm crossmember rearward to the inside of its respective main frame rail. The diagonal braces must be constructed using two (2) inches wide by one (1) inch high rectangular magnetic steel tubing with a minimum wall thickness of 0.075 inch, and a maximum wall thickness of 0.120 inches, meeting the ASTM A-500 specification. These diagonal braces must be welded to the trailing arm crossmember near the trailing arm mounting brackets and to the inside of the main frame rails, not more than nine (9) inches from the back edge of the main frame rails. Rearward diagonal braces must be straight as viewed from all directions.

A left and right side diagonal brace must support the trailing arm crossmember forward to the respective front sub-frame side rail. The diagonal braces must be constructed using rectangular magnetic steel box tubing with a minimum wall thickness of 0.075 inch, meeting the ASTM A-500 Specification. These diagonal braces must be welded to the front of the trailing arm crossmember near the front driveshaft hoop and near the rear of the respective front sub-frame side rails. The entire right side forward diagonal brace, at the trailing arm crossmember, must be located no more than 11 inches to the right side of the chassis longitudinal centerline. Forward diagonal braces must be straight as viewed from above.

The left side jack post must be constructed from 1-1/4 inch outside diameter round magnetic steel tubing with a maximum wall thickness of 0.083 inches (nominal). The jack post main tube must extend upward and inward at an angle from the rocker panel and be welded to the anti-intrusion plate above the left side door bar (#9A-3). The jack post main tube must be supported by angular struts constructed from a maximum 3/4 inch diameter round, magnetic steel tubing with a maximum wall thickness of 0.065 inch (nominal). These angular struts must be welded to the left main frame rail either at the bottom of the rail or at the intersection with the upper main frame rail. The distance between the struts at each weld must not be less than eight (8) inches and not more than 10 inches. The struts must have a slight angular bend or radius formed into the strut near the center to initiate crush of the strut inward during impact.

The right side jack post may be constructed in a similar manner although it may be welded to the side of the right side door bar (#9B-3 or #9B-4).

B. through D. remains the same.

## **20C - 12 SUSPENSION**

All suspension systems and components must be approved by ARCA. Each such part may thereafter be used until ARCA determines that such part is no longer eligible. All suspension fasteners and mounting hardware must be made of solid magnetic steel.

### Rear Suspension

A. remains the same.

B. The front trailing arm mounting brackets must be one-piece, welded using flat magnetic steel with no bends or breaks, not less than 3/16 inch thick. The front trailing arm mounting brackets must be welded or bolted to the back of the crossmember using ARCA-approved mounting brackets and must not be offset from the main frame rail longitudinal center line. The horizontal centerline of the highest trailing arm mounting bolt holes must not be higher than the top of the trailing arm crossmember (10-5/16 inches) at the location of the trailing arm mounting bracket. Both forward trailing arms must be attached to the trailing arm mounting brackets with one (1) solid one-piece minimum 3/4 inch diameter magnetic steel bolts. An eccentric-type adjuster may be used on only one (1) forward trailing arm mounting point. If used, the adjuster must be tack welded or fastened to the trailing arm bracket in a way that is acceptable to ARCA Officials to prevent movement during competition. Trailing arm mounting slugs may be used to locate the trailing arms on the trailing arm mounting brackets. The maximum distance between the front trailing arm mounts must not exceed 12-1/2 inches, measured center to center at the trailing arm front monoball assemblies. When the trailing arms are attached to the front trailing arm mounting brackets, the horizontal centerline of each trailing arm mounting bolt must be within four (4) inches in height of the opposite trailing arm mounting bolt when measured vertically. Hydraulic or spring loaded mounting points or links will not be permitted.

(Language removed here)

C. through J. remains the same.

### **20C - 12.1 Coil Springs / Spring Mounts / Jacking Bolts**

Only coil spring suspension will be permitted. All coil springs must be constructed using solid, 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 spring. All of the coils in a spring must be active. The coil springs at all four (4) wheels must be active and permit suspension movement. All coil springs must not be colder than ambient temperature.

#### A. Front Coil Springs

1. and 2. remains the same.

3. The free height of the bare front coil springs must not be less than 7-1/2 inches and must not be more than 11 inches.
  4. through 10. remains the same.
- B. Rear Coil Springs
1. and 2. remains the same.
  3. The free height of the bare rear coil springs must not be less than 11 inches and must not be more than 16 inches.
  4. through 8. remains the same.
  9. All upper and lower rear coil spring mounts must be located between the rear sub-frame side rails. Only one (1) rear jacking bolt solid threaded mounting sleeve per side will be permitted. All rear jacking bolts and all jacking bolt sleeves must be a minimum of one (1) inch diameter thread, utilize right-hand threads and a single thread count of not less than 12 threads per inch for the entire length of the jacking bolt and mounting sleeve. Rear jacking bolts must maintain a 7/8 inch flat surface at all times and must be mounted and remain perpendicular to the ground. All rear jacking bolts must be made of magnetic steel. All jacking bolt mounting sleeves must be welded into the rear sub-frame assembly. The distance between the upper and lower rear coil spring mounts and the rear jacking bolts centerline laterally across the width of the chassis must be a minimum 34 inches and a maximum 36 inches. The measurement between the jacking bolt and rear coil spring mount centerline must be equal. The upper and lower rear coil spring mount, spring perch and jacking bolt must be on a common centerline perpendicular to the ground. Jacking bolts and the threaded sleeves must be the same thread configuration on the left and right side. Rear jacking bolts will not be permitted to extend through the frame rails. The jacking bolt crossmember must have a solid sleeve extending through the crossmember from top to bottom and be welded completely into the crossmember.
  10. through 13 remains the same.

## **20C - 12.7 Wheelbase Requirements**

- A. remains the same.
- B. All vehicles 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.

**(Language removed here)**

**Effective January 1, 2025, 105 inch wheelbase vehicles will be approved for competition at all ARCA West Series Road Course Events only.**

**Only the approved “Spec” and Built engines will be permitted for use with 105 inch wheelbase vehicles.**

**If the NASCAR-approved (Generation 5) frame and roll cage assembly is used, it must be used for 110 inch wheel base vehicles only.**

## **20C - 16.3 Fuel Cell / Fuel Cell Container Installation**

- The fuel cell and the fuel cell container must be installed in a manner acceptable to ARCA Officials.
- A. The fuel cell and the fuel cell container must be installed in a recessed well of not less than 0.031 inch thick magnetic sheet steel welded to the trunk floor. The recessed well must be a minimum of 34

inches and a maximum of 37 inches in length, when measured from the left vertical wall to the right vertical wall. The vertical corners from top to bottom and the horizontal corners from front to rear of the recessed well should be reinforced using a one (1) inch by one (1) inch, 0.062 inch thick corner reinforcement, or the complete recessed well end cap, welded to the outside of the recessed well. The vertical walls of the fuel cell recessed well must be at 90 degrees to the fuel cell recessed well floor without any offset seams to interfere with the installation of, or create a void between, the wall of the fuel cell recessed well and the fuel cell container. The fuel cell recessed well, when measured from the bottom must be a minimum height of eight (8) inches. The fuel cell recessed well height will be measured with tire air pressures set at the tire manufacturer's recommended technical inspection inflation pressures for the Event. When installed in the fuel cell recessed well, the fuel cell container must be centered in the fuel cell recessed well. When installed in the fuel cell recessed well, each end of the fuel cell container must have honeycomb aluminum spacers installed between the fuel cell container and the fuel cell recessed well. The right and left spacers must be equal in thickness. All aluminum honeycomb spacers must be constructed using a minimum of 0.023 inch thick aluminum skins sandwiching a 1/2 inch cell, 60 psi strength minimum, aluminum honeycomb core. Filler panels must be constructed of clear solid (no holes) polycarbonate sheets with a minimum of 3/16 inch thickness.

B. (Language removed here). The fuel cell container must maintain the same height on all four (4) corners. When the fuel cell container is installed in the recessed well, the top of the fuel cell container must not be lower than the top of the rear sub-frame side rails and the rear sub-frame crossmember.

C. through G. remains the same.

**When the NASCAR-approved (Generation 5) frame and roll cage assembly is used it must meet the following specifications. Modifications to any of the specifications or components will not be permitted.**

**Fuel Cell / Fuel Cell Container Installation**

The fuel cell and the fuel cell container must be installed on the frame's longitudinal centerline in a manner acceptable to ARCA Officials and in accordance with the following requirements:

A. through G. remains the same.

**20C - 17 PERSONAL SAFETY EQUIPMENT**

A. General

1. and 2. remains the same.

B. Protective Clothing

**IT IS THE RESPONSIBILITY OF THE DRIVER AND CREW MEMBER, NOT ARCA, TO ENSURE THAT HE/SHE MAINTAINS, WEARS AND PROPERLY USES PROTECTIVE CLOTHING.**

**Drivers and Crew Members** remains the same.

**FUEL HANDLER/FUELER (CREW MEMBER)** – During race conditions, any crew member involved in fueling the vehicle or handling or transporting fuel in the garage or pit area must comply with the following:

	Use Required	Use Recommended	SFI/FIA Specification (minimum)	SFI Specification (recommended)	SFI Label Visibly Displayed

Uniform	X		3.2A/5	3.4	Outside Surface of Left Sleeve
One-Piece Uniform		X		3.2A/5 or 3.4	Outside Surface of Left Sleeve
Shoes	X		3.3		X
Gloves	X		3.3		X
Apron <u>Only aluminized fabric aprons are permitted</u>	X		52.1		X
Underwear		X		3.3	X
Socks		X		3.3	X
Head Socks and/or Helmet Skirt <u>Must Cover Nose &amp; Mouth</u>	X		3.3 FIA 8856-2000 FIA 8856-2018		X
Full-face Helmet with Covering Face Shield	X Refer to Section 20C17.1A Helmets				Helmet Certification Label Affixed To Helmet At All Times

B. through E. remains the same.

## 20C - 17.1 Helmets / Head and Neck Restraint Devices / Systems

### A. Helmets

1. Drivers must wear a full-face helmet carrying at least one (1) of the following certifications:

FIA 8860-2010 (with a date of manufacture after January 1, 2016)

FIA 8859-2015 (with a date of manufacture after January 1, 2020)

FIA 8860-2018

Snell SA 2015

Snell SA 2020

Snell SA 2025

Helmet certification (label) must be affixed to the helmet at all times.

Helmets should be fitted with an ARCA-approved helmet removal system. The following systems are currently approved:

Eject™ Helmet Removal System

2. through 5. remains the same.

### B. Head and Neck Restraint Devices / Systems

1. through remains the same.

C. remains the same.

## **20C - 17.2 Seat Belt Restraint Systems**

A. IT IS THE RESPONSIBILITY OF THE DRIVER, NOT ARCA, TO ENSURE THAT HIS/HER SEAT BELT RESTRAINT SYSTEM COMPONENTS ARE SFI COMPLIANT AND LABELED, CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.

B. All seat belt restraint system anchorage points **must** attach to the seat.

C. Seat belt restraint systems **must** meet the SFI 16.6 specification and display a valid SFI 16.6 label.

D. The minimum number of system anchorage points is seven (7). Nine (9) point systems are recommended. Seat belt restraint systems must be installed and used in accordance with the manufacturer/supplier directions.

E. The maximum seat belt webbing width is three (3) inches.

F. Seat belt restraint systems must be used as a complete restraint system. Brands may not be mixed.

G. Seat belt restraint systems must not be used beyond two (2) years from the date of manufacture.

H. SFI labels must be visibly displayed. SFI labels must not be positioned under adjusting mechanisms when the driver is in the seat and has tightened the seat belt restraint system. If the SFI label is positioned under the adjusting mechanism, the SFI label must be removed and relocated in a manner that does not affect the integrity of the seat belt material. The date of manufacture must be visibly displayed on the seat belts at all times.

I. If roller adjusters are used in the seat belt restraint system, tension springs must be used in the roller adjusters.

J. Double shear mounted shoulder belts must be secured to the seat with solid, magnetic steel fasteners with a minimum diameter of 5/16 inch. A minimum 3/8 inch diameter sleeve must be used for each shoulder belt. Lap, anti-submarine, negative-G belts, and tab mounted shoulder belts (single shear) must be secured to the seat with solid, magnetic steel fasteners with a minimum diameter of 3/8 inch.

### **Lap Belts:**

a. Only tab style lap belt mounts secured to the seat will be permitted.

b. Lap belt mounts must be able to swivel without binding or interference. When secured to the latching mechanism, the lap belt webbing must travel in a straight, clear, and free path from the lap belt mount to the latching mechanism.

c. When the driver is buckled in the seat, the free end of the seat belt webbing must rest in a position clearly aligned over the lap belt webbing entering any adjustment or latching mechanism.

d. If a roller adjuster is used on the left lap belt, it must be attached to and be part of the latching mechanism directly without any webbing link. A 3-bar slider, threaded to the manufacturer's instructions, may be used for the left lap belt length adjustment, in the absence of the roller adjuster. The 3-bar slider must be positioned as close to the mounting tab as possible.

e. If a roller adjuster is used on the right lap belt, it may be located anywhere on the belt except at the mounting tab. A webbing link may be used to connect the roller adjuster to the latching mechanism. A 3-bar slider, threaded to the manufacturer's instructions, may be used for the right lap belt length adjustment, in the absence of the roller adjuster. The 3-bar slider must be positioned as close to the mounting tab as possible.

### **Shoulder Belts:**

a. Shoulder belts must be mounted to the seat.

b. Shoulder belts may use a fixed sewn loop, a tab mount, or a 3-bar slider for mounting to the seat. The 3-bar slider must be positioned as close to the seat as possible. Shoulder belts using a tab mount must use an individual mounting tab for each belt.

c. Sternum or cross belts will not be permitted.

### **Anti-Submarine Belts:**

a. Anti-submarine belts must be mounted to the seat.

- b. Anti-submarine belts may use a fixed sewn loop, pinch plates, or a 3-bar slider for mounting to the seat. The 3-bar slider must be positioned as close to the seat as possible.
- c. In-line adjusters may be used on anti-submarine belts.

**Negative – G Belt:**

- a. The negative-G belt must be mounted to the seat.
- b. The negative-G belt may use a fixed sewn loop, pinch plates, or a 3-bar slider for mounting to the seat. The 3-bar slider must be positioned as close to the seat as possible.
- c. An in-line adjuster may be used on the negative-G belt.

**20C-17.2.1 Latching Mechanism**

- a. The latching mechanism must provide a common connection and release for the lap belts, shoulder belts, anti-submarine belts, and negative-G belt.
- b. The latching must be designed with a quick and easy one-handed, glove release of all belts in all conditions.
- c. The latching mechanism must be a latch/lever or cam lock design.

**Latch/Lever Design:**

- a. The latch/lever design utilizes a lever opening away from the body in a right to left hand movement, parallel to the lap belt, with a complete release of all belts.
- b. The lever must have a provision to prevent an unintentional release.
- c. The latch/lever design latching mechanism must attach to the lap belt.

**Cam Lock Design:**

- a. The cam lock design utilizes a circular handle or raised surface that turns in both directions for a minimum of 30 degrees before completely releasing all belts.
- b. A downward facing tab or toggle may be used, provided that its length does not extend more than 1/2 inch beyond the outer diameter of the release mechanism unless a provision to prevent unintentional rotation or release is provided.
- c. The cam lock design latching mechanism must attach to the lap belt, shoulder belt, anti-submarine, or negative-G belt.

**20C - 17.3 Seats**

A. Only ARCA-approved ABTS (All Belts To Seats) will be permitted. Seats must provide integral seat belt restraint system anchorages for all seat belt restraint system mounting points.

B. IT IS THE RESPONSIBILITY OF THE DRIVER, NOT ARCA, TO ENSURE THAT HIS/HER SEAT AND ALL SEAT COMPONENTS ARE SFI COMPLIANT AND LABELED, CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.

C. Seats and headrests/head surround assemblies must meet the SFI 39.1 specification and display valid SFI 39.1 labels.

D. Seats and headrests/head surround assemblies must be installed, maintained and used in accordance with the manufacturer/supplier directions.

E. Seats and headrest/head surround assemblies must not be modified or altered.

F. Seats headrests/head surround assemblies must comply with the ARCA Seat Test Protocol.

G. Each composite seat must have a unique identifier that matches records on file with ARCA.

H. Headrests/head surround assemblies must be designed to provide rigid support around both sides of the helmet, across the back of the helmet, and the forwardmost point of the chin bar. 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.

I. Approved seats will remain approved for use until their expiration date, which is two (2) years after the DOM (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 original seat manufacturer.

J. Rib/chest supports constructed of foam, meeting the SFI 45.2 specification, will be permitted.

### **17.3.1 SEAT INSTALLATION**

A. The seat must be located as close to the Left hand side of the driveshaft tunnel as possible. The seat headrest/head surround assembly must not extend into the window opening. The seat and headrest/ surround assembly must not be in contact with the driver's side window net when in the closed position. The distance from the driver's side surface of the seat insert or padding to the center of the horizontal shoulder bar (#7) must not be more than a maximum of six (6) inches as shown in diagram 8B in the rear pages of the Rule Book.

B. An approved upper seat mounting bracket must be used. The upper seat mounting bracket must be secured to the seat back with a minimum of three (3) high quality 5/16 inch minimum magnetic steel hex head bolts. The upper seat mounting bracket must be secured to the horizontal shoulder bar (#7) with a minimum of three (3) high quality 5/16 inch minimum magnetic steel hex head bolts through the horizontal shoulder bar (#7). Upper seat mounting bracket designs must conform to and meet the requirements as shown in diagram 8A in the rear pages of the Rule Book. Holes and or other modifications to upper seat mounting brackets that, in the judgment of ARCA Officials were made with the intent of weight reduction will not be permitted.

C. The seat must be secured to the vehicle's frame/roll cage assembly with a tubular seat frame which includes the seat mounting brackets. The tubular seat frame must be constructed from ASTM A513 type 5 round magnetic steel tubing with a 1-1/4 inch outside diameter and a 0.115 inch minimum wall thickness. The tubular seat frame must be secured at each end in a double shear configuration or must be welded at each end. If welded, a gusset must be used at each end. If using tubular seat frame mounting brackets, the tubular seat frame must have welded bungs with a 3/8 inch inside diameter installed. The welded bung must use a 3/8 inch magnetic steel hex head bolt or the welded bung may be threaded the entire length and welded around the entire circumference. A 5/8 inch maximum diameter through hole may be used on main frame assembly to locate weld bung. If tubular seat frame mounting brackets are used the mounting brackets must be solid magnetic steel with a minimum thickness of 3/16 inch and a minimum bottom width of 1-1/4 inch. The seat frame mounting brackets must be completely welded to the main frame assembly and/or the horizontal tunnel bar (#6). Each mounting bracket must have a 3/8 inch seat frame mounting hole to attach the seat frame to the bracket. Slots will not be permitted in the seat frame mounting hole. The mounting hole must not be higher than 2-1/2 inches from the lower edge of the mounting bracket. The mounting bracket must have a minimum of 5/16 inch of metal from the edge of the mounting bolt to the outer edge of the bracket. All seat mounting frame configurations and specifications are shown in diagrams #8C and 8D in the rear pages of the Rule Book.

### **17.3.2 SEAT INTERIOR**

A. All seat interiors must be lined with inserts and/or padding meeting the SFI 45.2 specification and display a valid SFI 45.2 label. It is recommended that a minimum thickness of two (2) inches of SFI 45.2 insert/padding be used.

B. Any additional non-SFI 45.2 insert/padding materials used must be a maximum thickness of 1/2 inch.

C. No gaps or non-SFI 45.2 specification material(s) may be present between the seat structure and the driver's uniform in the area directly under the driver, with the exception of standard seat cover upholstery, with a maximum thickness of 1/4 inch, or a flame retardant knit material. A minimum thickness of 3/4 inch of insert/padding, meeting SFI 45.2 specification, must be used in this 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 or four (4) inches forward of the lap belt mount, whichever is greater, as well as extends five (5) inches to both the left and right of the driver's centerline. The area directly under the driver is shown in Diagram #9, in the rear pages of the Rule Book.

D. All headrests/head surround assemblies must be lined with inserts and/or padding meeting the SFI 45.2 specification. The Headrest/head surround padding must be installed per one (1) of the options in diagrams #'s 9B or 9C as shown in the rear pages of the Rule Book.

E. All seat coverings and/or upholstery should be flame retardant.

### **17.3.3 SEAT LEG EXTENSIONS**

A. All seats must have padded leg extensions on both the left and right side.

B. Leg extensions must be securely mounted to seat and vehicle structure.

C. It is recommended that the leg extension padding meet the SFI 45.2 specification and display a valid SFI 45.2 label.

D. Composite material seat leg extensions should meet the SFI 56.1 specification for flammability.

E. All leg extension coverings and/or upholstery should be flame retardant.

F. A Padded knee knocker must be used.

### **20C-17.4 Window Net**

A. and B. remains the same.

C. All window net mounts must be welded directly to the roll cage and must not attach to the door top or exterior body panel. All upper and lower window net mounts must be constructed using a minimum 3/4 inch diameter magnetic steel rod with a minimum thickness of 0.120 inch or a minimum one (1) inch wide by 1/8 inch thick flat magnetic steel and must be acceptable to ARCA Officials. The lower window net mounting bar must not extend above the door top.

D. remains the same.

### **20C - 18 Roll Bars**

A. through I. remains the same.

J. At the discretion of ARCA Officials, additional material and/or tubing may be required to be welded to any vehicle that does not conform to the January 1, 2025, roll cage or roll bar specifications as described in sub-section 20C-18.

**When the NASCAR-approved (Generation 5) frame and roll cage assembly is used it must meet the following specifications. Modifications to any of the specifications or components will not be permitted.**

### **Roll Bars**

A. through J. remains the same.