THE

abc

APPROVED BODY CONFIGURATION

OFFICIAL RULEBOOK

VERSION 11.0

THE NATIONAL STANDARD FOR TEMPLATE BODIES

THE ABC PROGRAM

THE OFFICIAL RULEBOOK

The ABC (Approved Body Configuration) Body Program was developed to institute an industry-wide standard for the design, construction, and technical inspection of bodies utilized in offset template late models across North America. To align with the ABC program's objectives, leading body manufacturers have committed to crafting aerodynamically identical bodies, following guidelines of the ABC Body Program.

Uniform body rules across tracks nationwide will facilitate larger fields for special events, attracting cars from diverse series and tracks. This streamlined approach simplifies technical processes, reduces confusion, benefiting everyone involved!

Contained within this rulebook are program goals, comprehensive guidelines and dimensions necessary for the assembly and technical inspection of ABC bodies.

MISSION STATEMENT FOR THE ABC PROGRAM

The ABC Program is dedicated to promoting fair competition, cost efficiency, and innovation within the short track racing industry. By uniting body manufacturers under a shared commitment to aerodynamic equality, industry-standard dimensions, and balanced design principles, the program ensures a level playing field for racers while maintaining the integrity of late model racing.

GOALS OF THE ABC PROGRAM

1. **Body Design Standards**
   a. Develop and produce race car bodies that are aerodynamically equal across manufacturers, affordable, durable, and balanced, meeting the appearance and dimensional requirements of the ABC Program and short tracks nationwide.
   b. Ensure compatibility of bodies with the standard offset-style chassis commonly used in short track racing.
   c. Adhere to established industry-standard dimensions for all body designs.
   d. Implement design criteria requiring bodies to fit exclusively one way onto chassis, eliminating creative mounting techniques that could provide aerodynamic advantages.

2. **Aerodynamic Integrity**
   Identify critical areas of the body that, when altered, impact aerodynamic performance. Develop templates and inspection tools that are user-friendly and ensure precise control of these key areas.

3. **Universal Manufacturing Criteria**
   Create standardized templates, dimensions, and construction guidelines for all participating manufacturers. Enable approved manufacturers to produce and sell bodies that uphold the program's objectives of uniformity and fairness while preserving the desired appearance of race cars.

4. **Regulation and Enforcement**
   Assign responsibility to sanctioning bodies, promoters of special short track events, and local tracks to enforce ABC Program body rules consistently.
   - Maintain compliance to the ABC standards to ensure fairness and cost reduction for racers by eliminating the need for research into aerodynamic manipulation.
   - Promote an even playing field for competitors, preserving the spirit and competitiveness of late model racing.

By achieving these goals, the ABC Program champions innovation, affordability, and equality, ensuring the sustainability and growth of short track racing for all stakeholders.

BASIC REQUIREMENTS FOR PARTICIPATING MANUFACTURERS

a. Any body manufacture participating in the ABC Body Program must be capable of producing complete bodies that meet the design and construction parameters established in the ABC Program. The lack of technology or resources to produce the bodies that meet these requirements must not be an acceptable excuse to allow a manufacturer to participate.

b. It is equally important that a body manufacturer NOT design their panels to be interchangeable with other manufacturer's panels. Doing this will eliminate copying and "mix and match" body installations.

c. All new bodies must fit the established dimensions of the current approved ABC bodies. All body panels must be designed to fit together only one way to eliminate creative mounting practices in order to gain an aerodynamic advantage.

d. To be part of the ABC program, all participating body manufacturers are required to submit a pre-production full scale model of every body style for approval that has been designed to meet specific ABC dimensions and fits a series of builder's templates that control the shape of the body at all required dimensions and aerodynamically sensitive areas. Upon approval of the model, manufacturers are required to present a fully mounted, race ready production body that fits the same templates and dimensions as the pre-production full-scale model and must pass a specific aerodynamic test procedure outlined in appendix A, in order for the body to be approved by the ABC Program Committee and sold.

e. It is to be assumed that, because of the design templates, dimensions and aerodynamic testing that is required for body approval, all bodies regardless of manufacturer will be aerodynamically equal. Therefore, it will be considered a violation of ABC Program Rules for manufacturers advise aerodynamic advantages as a means of implying that their bodies are superior to other manufacturer's bodies. Honesty and integrity are expected from all body manufacturers participating in the ABC Program.

Only the following two companies offer ABC legal bodies approved for competition.

Five Star Race Car Bodies in Wisconsin (262-877-2171)
Original ABC body design and ABC Next Gen Body design

Aluminum Racing Products, Inc. (AR Bodies) in Tennessee (888-245-1468)
Original ABC body design – The AR Revolution Body is not ABC approved.

BENEFITS TO RACE ORGANIZERS: EASY TO PARTICIPATE

The ABC body program has significantly streamlined body rules, benefiting not just local race tracks but also major series nationwide that utilize this body type. This program operates with its own rulebook containing comprehensive guidelines and dimensions for body inspections. **Importantly, there is NO COST for local track promoters to participate in the ABC program.** Participating body manufacturers will offer ABC rulebooks on their company's website.

Promoters simply need to include a statement in their rulebooks directing competitors to the ABC rulebook for all body guidelines. With uniform body rules across various tracks nationwide, it becomes easier to attract larger fields for special events, drawing cars from diverse series and tracks.

Simple as ABC, More Cars, Easier Tech, Less Confusion... EVERYONE WINS!

BENEFITS TO RULE MAKERS & TECHNICAL STAFF: TECH SIMPLIFIED

Gone are the days of managing multiple sets of templates for each body style. All it takes is inserting a statement into your rulebook that directs competitors to the ABC rulebook for body guidelines. This effectively removes the promoter from the body rule-making process. Now, standardized wooden templates for each model and a dimensional inspection device called the "Referee" are readily available.

The "Referee" tech device efficiently checks various dimensions—front overhang, front tread width, roof height at 10 inches back from the windshield, wheelbase, rear tread width, quarter panel height, and rear spoiler overhang—in less than two minutes. Additionally, the centerline, side-to-side, and fender templates inspect areas not covered by the "Referee" and can be completed in about a minute. Consequently, a comprehensive body inspection can be conducted in under three minutes per car, making it feasible even for events with a high car count. These templates and the "Referee" device are available from each participating body manufacturer for a nominal fee.

THE ABC PROGRAM CONTINUED

BENEFITS TO RACERS

The ABC program provides racers with very clear directions on how to mount a body that meets the rules and requirements for any event they wish to participate in thus eliminating the need for competitors to mount expensive, event specific bodies with the hope of gaining an aerodynamic advantage.

It is strongly recommended that all racers and car builders adhere to the ABC dimensions and templates when installing their bodies. Ensuring the proper mounting of the body in line with these guidelines will prevent any potential loss of practice time resulting from the need to rectify body infractions at the track.

THE ABC NEXTGEN BODY

The Five Star ABC NextGen Body was developed to revitalize the Late Model Racing aesthetics following a 15-year tenure of the existing/original body style. In strict adherence to ABC Program guidelines and now holding complete ABC approval, this body was meticulously engineered to match the aerodynamic performance of the original ABC body. As a result, it utilizes the same "Referee" for technical evaluations and has garnered full approval for competition from all major tracks and series.

This innovative body design introduces standardized body panels featuring three distinct brand front noses: Chevrolet Camaro, Ford Mustang, and Toyota Camry. These front noses remarkably enhance brand identity compared to the original ABC front noses. Alongside, the new body incorporates numerous benefits including a wider greenhouse with fire-retardant resin, heightened fender clearance, and integration of two inches of yaw into the quarter panels and bumper covers.

The primary goal set by Five Star was to design the body in a manner that minimizes ambiguities during the mounting process. This not only simplifies the installation but also promotes uniform installation standards. These improvements were made to substantially streamline the technical inspection process, ensuring equitable competition among all cars.

RULES FOR 1998-2002 NON-ABC APPROVED BODY STYLES

The utilization of any 1998-2002 body mandates strict adherence to the original manufacturer's specifications as of December 31, 2002, during installation. Cars must conform to the respective manufacturer's guidelines, utilizing templates approved by Five Star or Aluminum Racing Products. Additional weight will be enforced for cars deviating from predetermined tolerances, while maintaining a maximum width of 78 inches on all body panels. Prohibited actions include louvers or drilling on body panels, and approval is limited to Monte Carlo, Grand Prix, Taurus, and Intrepid bodies.

Note: Participation of any 2003 or 2004 non-ABC bodies from any manufacturer, as well as parts from those bodies, is strictly prohibited from competition. **Note: Any 1998-2002 bodies will incur a 100-pound weight penalty upon assessment.**

DOWNLOAD THE OFFICIAL ABC RULEBOOK AT ABCBODYPROGRAM.COM

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HOW TO CALIBRATE THE OFFICIAL REFEREE

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ABC COMMITTEE

MARTY MELO
CHAIRPERSON
(non-voting)

COREY SCHULTZ
FIVE STAR RACE CAR BODIES
(non-voting)

DAVE KAMHOLTZ
AR BODIES
(non-voting)

DAN GARBER
NORTHWEST SUPER
LATE MODEL SERIES

KIP CHILDRESS
CARS TOUR

FREDDIE QUERY
ASA STARS NATIONAL TOUR

TODD THELEN
SLINGER SUPER SPEEDWAY

TIM BRYANT
ASA SOUTHERN SUPER SERIES

TIM HUDDLESTON
CARS TOUR WEST

BRENT ROY
EASY-KLEEN SUPER
LATE MODEL SERIES

GENERAL ABC BODY REQUIREMENTS

- Only approved body panels produced by approved manufacturers will be allowed for competition.
- Approved aluminum body panels will be a minimum of .040 inch thick.
- Carbon fiber is not allowed in any body panels.
- The entire body must be from one manufacturer. Mixing of panels from different manufacturers will not be allowed.
- All body panels must be mounted as produced by the manufacturer. Modification or alteration of panels will not be allowed.
- All body panels and windows must be mounted and properly braced on the chassis to prevent deflection under racing conditions.
- Composite and aluminum panels, plastic fenders, and plastic quarter panels must have manufacturer's identification labels that are visible in designated location and not painted over. All molded plastic parts must have molded-in part numbers and manufacturer's identification with the exception of the rocker panels *(see label location chart on page 7)*
- An aero stamp used within this rule book indicates that the dimension or tolerance mentioned is aero sensitive. Maintaining the dimensions and tolerances in these areas is important to maintain aero equality.
- Body panels must not be painted on the inside by the manufacturers.
- All cars competing in a race event must have a complete, well-appearing body. Headlight and taillight decals are recommended for brand identity.
- **The body must be mounted parallel to the centerline of the tread width front & rear with a 1 inch tolerance.**
- All dimensions and template inspections will be done with the driver out of the car.
- **It is the responsibility of all competitors to present a car that fits the templates within allowable tolerances and meets all dimensions as inspected by the "Referee."**
- All body panels are designed to fit the templates within the tolerances as indicated on the template with an engraved blue colored line. **The engraved or blue colored line equals 1/4 inch. All other areas will equal 1/2 inch.**
- The maximum tread width is 66 inches.
- A wheelbase range of 101-106 inches is allowed.

THE FOLLOWING BODY STYLES MANUFACTURED BY ABC PROGRAM APPROVED MANUFACTURERS ARE ELIGIBLE FOR COMPETITION:

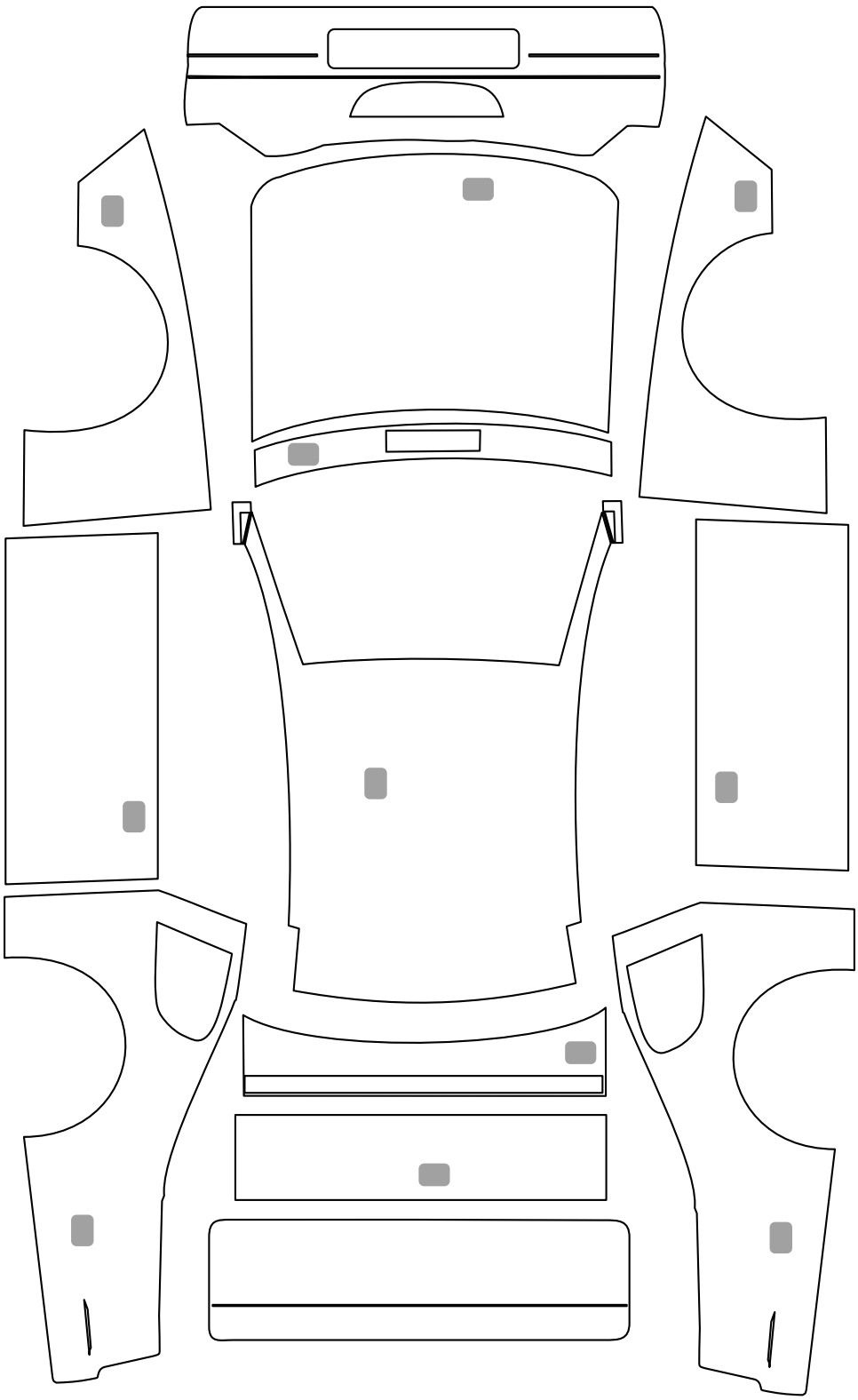
ABC APPROVED BODY STYLES

- Chevrolet SS
- Chevrolet Impala
- Chevrolet Monte Carlo
- Dodge Charger
- Ford Fusion
- Toyota Camry
- Pontiac Grand Prix

ABC NEXTGEN APPROVED BODY STYLES

- Chevrolet Camaro
- Ford Mustang
- Toyota Camry

ABC BODY LABEL LOCATION CHART



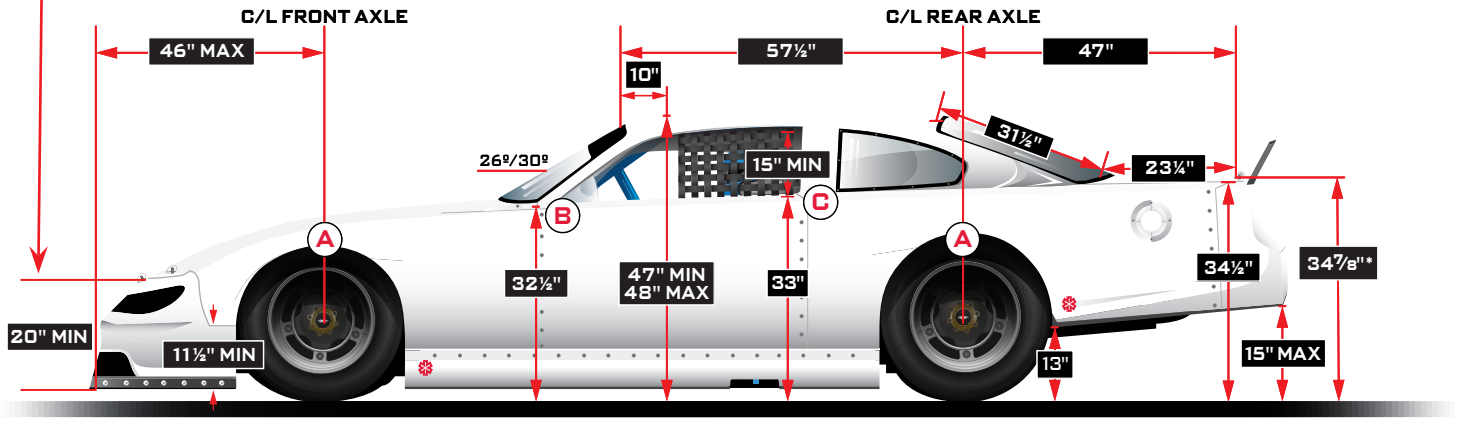
ABC BODY DIMENSIONS

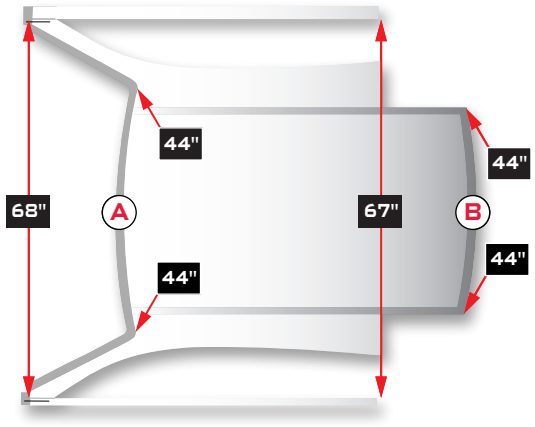
APPROVED BODY CONFIGURATION

Measured along the contour of the nose from bottom of nose to hood seam: 20" Min.

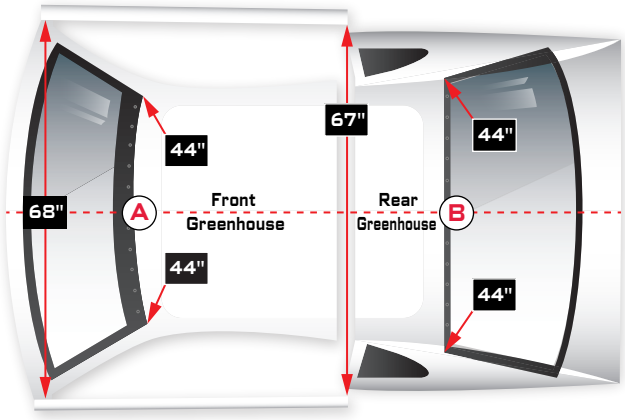
WIDTHS

A	B	C
79½ MAX"	68"	67"
Body Width: Measured at wheel wells	Door to Door Width: Measured at A-posts & inside edge of doors, measured through car	Door to Door Width: Measured at B-posts & inside edge of doors, measured through car





TRADITIONAL ROOF



GREENHOUSE

CHASSIS	ROOF HEIGHTS	TREAD WIDTH	WHEELBASE
Offset/ Straight Rail	A 47" B 45½"	66" MAX	101-106"

NOTES:

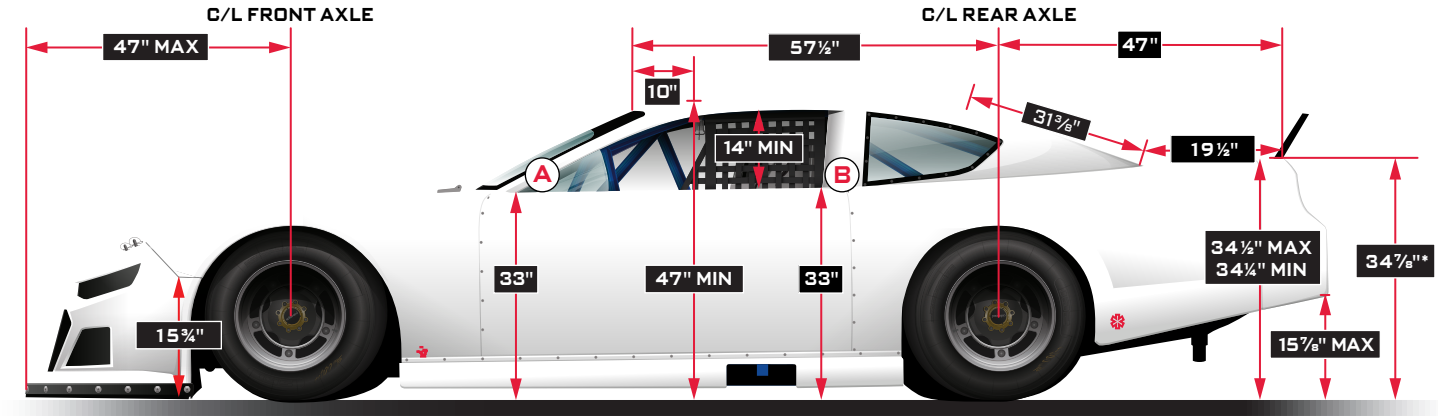
1. If the Roof Height (10" back from windshield), Door Height (rear), Quarter Panel, or Bumper Cover Height dimensions are higher than the stated minimum dimensions, all four must increase by the same amount.
2. Must fit centerline template within allowable tolerance. *Measured at the seam of bumper cover at deck lid intersection, +/- 1/4"
3. *The front edge of the Fender and Quarter Panel behind the tire can not be more than 2" inward from the outside of the sidewall of the tire on both sides of the body.

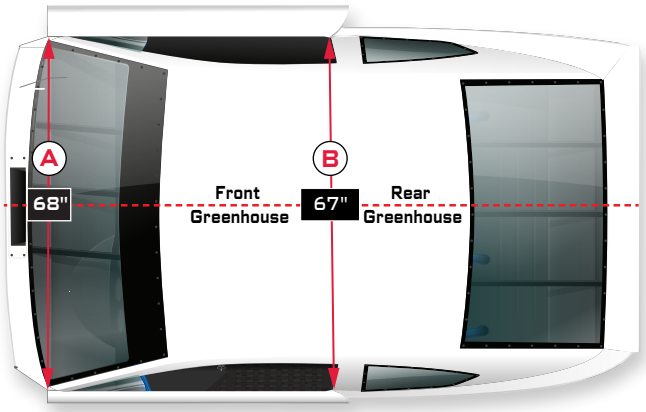
ABC NEXTGEN BODY DIMENSIONS

APPROVED BODY CONFIGURATION NEXT GEN

WIDTHS

A	B
68"	67"
Door to Door Width: Measured at A-posts & inside edge of doors, measured through car	Door to Door Width: Measured at B-posts & inside edge of doors, measured through car





CHASSIS	ROOF HEIGHT	TREAD WIDTH	WHEELBASE
Offset/ Straight Rail	47"	66" MAX	101-106"

NOTES:

1. If the Roof Height (10" back from windshield), Door Height (rear), Quarter Panel, or Bumper Cover Height dimensions are higher than the stated Minimum dimensions, all four must increase by the same amount.

2. Must fit centerline template within allowable tolerance. *Measured at the seam of bumper cover at deck lid intersection, +/- 1/4"

3. *The front edge of the Fender and Quarter Panel behind the tire can not be more than 2" inward from the outside of the sidewall of the tire on both sides of the body.

ORIGINAL ABC BODY PANEL SPECIFICATIONS

DOWNLOAD THE OFFICIAL ABC RULEBOOK AT ABCBODYPROGRAM.COM

BODY PANEL SPECIFICATIONS

FRONT NOSE

1. Only approved nose pieces manufactured by ABC approved manufacturers and visible ABC labels will be allowed for competition.

2. All nose pieces must remain as manufactured and may not be intentionally altered in any way, including the return flanges on the bottom of the nose and at the nose/fender intersection. In the event that the lower part of the nose has been worn off, a replacement valance piece may be installed on the nose. This part will be made from plastic only and must measure 2-¾ inches to 3 inches tall. The valance piece must be mounted in the same plane as the original air dam and will be subject to tech approval.

3. **When trimming the nose flap, the cut that forms the front of the wheel opening must be 90 degrees to the ground.**

4. The nose must be centered on the front tread width (measured at the racing surface).

5. The nose piece must be supported by a tubular support to the chassis. These support tubes must remain behind the nose piece and may not extend through or past the bumper.

6. The maximum front overhang from the centerline of the spindle to the leading edge of the lower air dam at the centerline is 46 inches *(photo N1)*.

7. The maximum kick out on the lower air dam from the bumper line is 3 inches.

8. The minimum ground clearance along the entire bottom edge of the nose is 4 inches with the return flange intact.

9. The nose must fit the left fender/nose template *(photo N2)*, the right fender/nose template *(photo N3)* and the vertical nose template *(photo N4)* within the allowable tolerances. For exact template location, see *(photo F1 & photo F2 on page 13)*.

10. The grill area above the bumper line cannot be cut out for any reason. All radiator cooling air must be obtained from the grill area below the bumper line.

11. Template *(Horseshoe Template, photo N5)* may be used to measure nose width & offset from centerline.


N1


N2


N3


N4

BUILDERS (HORSESHOE) TEMPLATE #4


N5

THIS TEMPLATE SHOULD BE PLACED APPROXIMATELY 1-1\4" ABOVE THE TOP OF THE NOSE SCREEN, AND PARALLEL TO THE GROUND.

HOOD

H1

1. Only approved hoods manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition. **Carbon fiber hoods will not be allowed.**
2. All hoods must remain as manufactured and may not be altered other than trimming the outer edge to fit the fenders, nose and windshield.
3. All hoods must be adequately braced so they do not deform under racing conditions.
4. The hood must fit tight to the fenders and windshield/cowl at all times.
5. The maximum allowable opening in the hood for air intake to the carburetor is 2-½ inches by 20 inches. The only other holes (other than the air intake) allowed to be drilled in the hood are for the hood pins, and only one hole is allowed per pin.
6. All hoods shall have a minimum of 5 positive locating pins across the leading edge of the hood. Each hood pin is allowed only one hole for the fastening clip.
7. The hood must fit the centerline template *(photo H1)* within the allowed tolerances **with hood pins installed.**

COWL PANEL

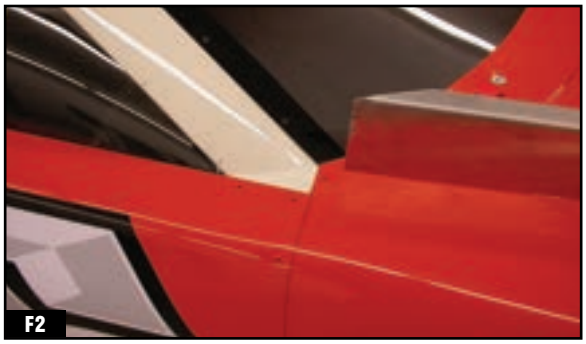
1. The cowl panel is considered an extension of the hood & must fit the centerline template.
2. Only ABC approved cowls manufactured by ABC approved manufacturers containing visible ABC labels are allowed.
3. The air intake opening must be 2-½ inches by 20 inches, plus or minus 1/16 inches.

FENDERS

1. Only approved fenders manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition. **Carbon Fiber, Kevlar®, or metal fenders will not be allowed.**
2. All fenders must be mounted as produced & may not be altered other than trimming excess material from the trailing edge of the fender at the fender/door intersection.
3. All fenders must be flange fitted to the nose.
4. Wheel openings may not be larger than 7 inches from the edge of the wheel (not the tire) on the front & rear of the wheel opening. Altering the wheel openings is prohibited.
5. The left fender must fit the left fender/nose template & the right fender must fit the right fender/nose template within the allowable tolerances *(photo F1 & photo F2)*.

F1

LEFT SIDE TEMPLATE IS LOCATED 23-7/8 INCHES FROM CENTERLINE. RIGHT SIDE TEMPLATE IS LOCATED 26 INCHES FROM CENTERLINE.

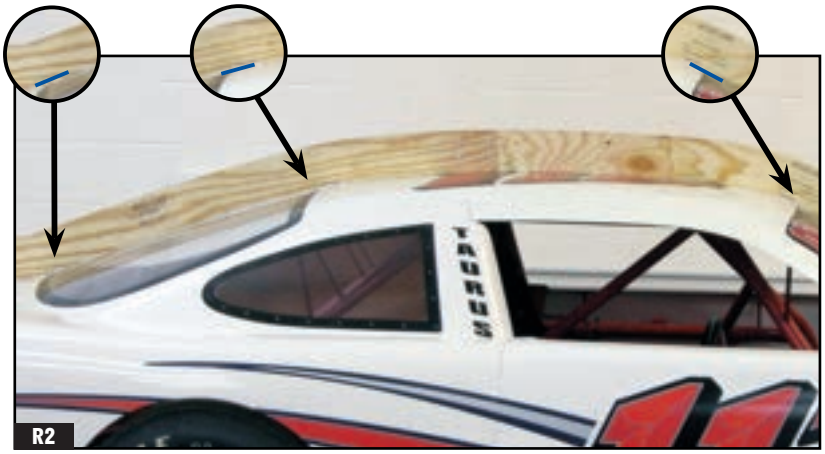

F2

BOTH FENDER TEMPLATES ARE LOCATED AT THE INSIDE OF THE WINDSHIELD POST.

ROOF PANELS


R1

1. Only approved roof panels manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition. **Carbon fiber roofs will not be allowed.**
2. All roof panels must be mounted as produced and may not be altered in any way.
3. A common roof panel will be used for all body styles.
4. The roof may be mounted a maximum of 2-½ inches left of the centerline of the chassis.
5. **The centerline of the roof must run parallel to the centerline of the tread width.**
6. Roof rails will not be permitted.
7. The minimum height of the roof is 47 inches, measured 10 inches back from the leading edge of the roof on the centerline *(photo R1)*. The maximum height at this dimension is 48 inches.
8. The minimum height at the rear of the roof is 45-½ inches on all models. This will be regulated with the centerline template *(photo R2)* and the side-to-side template *(photo R3 & photo R4)*. The roof panel must fit the templates within the allowable tolerances. These areas must maintain a 1/4 inches tolerance (as indicated by blue lines on templates).

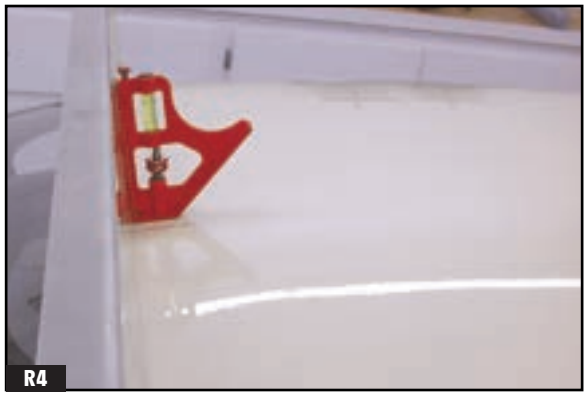


R2

9. The updated and enhanced front roof side-to-side template, *(photo R5)* may be used to determine if the A-posts have been altered or the front corners of the roof have been pulled down.


R3

THE UPDATED AND ENHANCED SIDE-TO-SIDE TEMPLATE IS LOCATED AT THE TOP OF THE REAR WINDOW AT A 90 DEGREE ANGLE TO THE ROOF.


R4

IT IS IMPORTANT TO HOLD THE TEMPLATE AT 90 DEGREES TO THE ROOF.


R5

THE UPDATED AND ENHANCED SIDE-TO-SIDE TEMPLATE IS LOCATED AT THE TOP OF THE WINDSHIELD AT A 90 DEGREE ANGLE TO THE ROOF.

DOORS

1. Only approved door panels manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition.
2. All door panels must be mounted as produced and may not be altered in any way.
3. The width of the top of the left door will be a maximum of 2 inches from the center of the roll.
4. The width of the top of the right door will be a maximum of 3 inches from the center of the roll.
5. Doors may not extend back beyond the trailing edge of B-post. The trailing edge of the door must fit into a recess that is provided in the quarter panel.
6. The height at the front of the door will be 32-½ inches minimum.
7. The height at the rear of the door will be 33 inches minimum. This height will be checked with a chain added to the "Referee" in 2007 *(photo D1)*.
8. The width between the doors immediately behind the A-posts will be 68 inches at the top, measured through the car. See dimension sheet diagram on page 9.
9. The width between the doors immediately in front of the B-posts will be 67 inches at the top, measured through the car. See dimension sheet diagram on page 9.
10. Approved aluminum body panels will be a minimum of .040 inch thick.


D1

QUARTER PANELS

1. Only approved quarter panels manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition. **Carbon Fiber, Kevlar®, or metal quarter panels will not be allowed.**
2. All quarter panels must be mounted as produced and may not be altered other than the removal of the excess material beyond the scribe lines on the trailing edge at the quarter/bumper cover intersection and at the top, at the quarter/roof intersection, to ensure proper fit.
3. The rear deck template *(photo Q1)* has been added from the original builder's template and enhanced to go down the sides of the quarter panels behind the wheel to control the original intended shape of the quarter panel and will also control the front edge of the quarter panel behind the wheel opening to be 2 inch inward from the outside of the sidewall of the tire on both sides.
4. Quarter panel windows must be cut out to scribe line and have polycarbonate windows in both the left and right sides.
5. The quarter panels must fit the new updated side-to-side template *(photo Q2)* within the allowable tolerances. For exact template location, see *(photo R3 & photo R4 on page 14)*.


Q1


Q2

QUARTER PANELS, CONT.

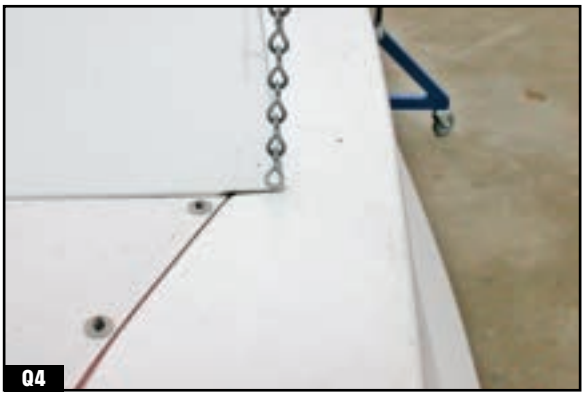
6. The height at the quarter panel/deck lid/bumper cover intersection will be 34-½ inches (minimum) on both the left & right sides *(photo Q3 & photo Q4)*.

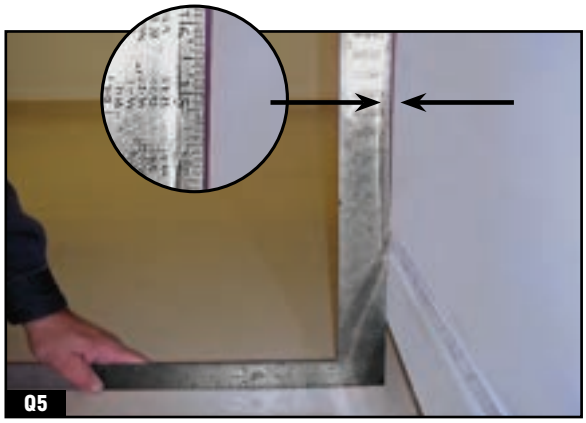
7. **The maximum gap is 3/8 inches for the first 15 inches up from ground. The measurement will be taken from the leg of the quarter panel to the framing square as indicated with the arrow *(photo Q5)*.**

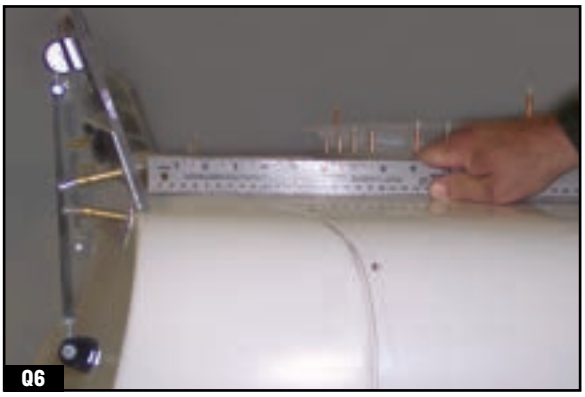
8. The quarter panels must be mounted at the same plane as the deck lid and the top of the bumper cover as shown in *(photo Q6)*.

9. Wheel openings may not be larger than 7-1/2 inches from the edge of the wheel (not the tire) on the front & rear of the wheel opening. Altering the wheel openings is prohibited.


Q3


Q4


Q5


Q6

ROCKER PANELS

1. Only approved rocker panels manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition.

2. Rocker panels must be mounted in a single plane from the front to rear & top to bottom as shown in *(photo RP1 & photo Q5)*.

3. All rocker panels must be mounted as produced & may not be altered other than notching for the jack posts and trimming to length.

4. The step in the rocker panel for rigidity may be a maximum of 1/4 inch.

5. The step out on the rocker panel must run parallel to the bottom edge of the rocker panel.

6. The minimum height of the rocker panel will be 4 inches from the racing surface.


RP1

DECK LID


DL1

1. Only approved aluminum deck lids manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition.
2. All deck lids must remain as manufactured and may not be altered in any way.
3. The deck lid must be substantial enough to prevent it from deforming under racing conditions.
4. The deck lid must be able to be opened for inspection purposes.
5. The deck lid must fit to the centerline template *(photo DL1)* within the allowable tolerance of 1/4 inches (as indicated by blue line on template).
6. Approved aluminum body panels will be a minimum of .040 inch thick.

DECK LID FILLER PANEL

1. Only approved deck lid filler panels manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition.
2. All deck lid filler panels must remain as manufactured and may not be altered in any way.
3. The deck lid filler panel must fit the centerline template #1 *(photo DL1)* within the allowable tolerances.

REAR BUMPER COVER


BC1

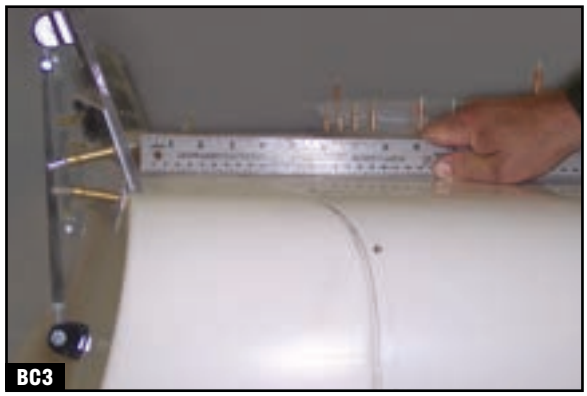
1. Only approved rear bumper covers manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition.
2. All bumper covers must remain as manufactured and may not be altered in any way.
3. The bumper cover must be designed in a manner that when the spoiler is mounted, the dimension from the centerline of the rear axle to the base of the spoiler at the centerline will not exceed 47 inches.
4. The bumper cover must be mounted on the centerline and not offset *(photo BC1)*.
5. The top of the bumper cover must be supported and securely fastened to prevent it from deforming under race conditions.
6. The bumper cover must be supported by a tubular support to the chassis. These support tubes must remain behind the bumper cover and may not extend through or past the bumper. The bumper cover must be attached to the support tubes with a minimum of 2 fasteners.

REAR BUMPER COVER, CONT.

7. The bumper cover must be mounted to fit the centerline template *(photo BC2)* for the correct rear overhang dimension and the vertical bumper cover template #3 within the allowable tolerances. **Note:** Template #3 is an optional template available to tech inspectors. It is used to confirm that the bumper cover contour is as manufactured and not altered.

8. The bumper cover must be mounted at the same plane as the deck lid and the top of the quarter panel as shown in *(photo BC2 & photo BC3)*.


BC2


BC3

SPOILER

1. Only approved spoilers manufactured by ABC approved manufacturers will be allowed for competition.

2. An approved rear spoiler must be a non-adjustable (from the driver's compartment) part of the body that controls the flow over one surface only.

3. There will be two options for the size of the polycarbonate spoiler blade, to be determined by the sanctioning body. Both size options will use the same base:

   Option #1: 6-½ inches tall by 60 inches wide.

   Option #2: 5 inches tall by 60 inches wide.

   All spoilers will have a minimum 3/16 inches thick clear polycarbonate blade. The spoiler blade must be mounted on the front side of the brackets.

4. **The maximum width of the spoiler will be measured across the rear of the spoiler.**

5. The spoiler must maintain the same contour as the bumper cover.

6. The spoiler must be centered on the bumper cover.

7. **The spoiler must have a minimum 1/2 inch to maximum 5/8 inch split in the center to accommodate the centerline template *(photo BC2)*.**

8. The base of the spoiler at the centerline may not exceed 47 inches from the centerline of the rear axle.

9. Rudders or forward mounted brackets will not be permitted. Spoiler mounts must be round or hex shaped max OD .625 inch.

10. Spoiler supports mounted from the rear side of the spoiler to the bumper cover will be permitted.

11. A minimum of the top 3-½ inches of the rear spoilers of all cars must be made of clear, flat polycarbonate.

12. Minimum spoiler angle - 55 degrees.

WINDSHIELD

1. A clear, molded polycarbonate windshield with a minimum thickness of 1/8 inch must be used in all cars. The same shape windshield will be used for all body styles. Flat, unmolded windshields are not allowed.
2. All windshields must be supported by a minimum of three internal windshield braces to prevent deflection under racing conditions.
3. The windshield braces shall be made of a minimum 1/8 inch thick and 1 inch wide aluminum.
4. The windshield braces should be spaced on a minimum of 5 inch centers and should be approximately in the center of the windshield.

REAR WINDOW

1. A clear, molded polycarbonate rear window with a minimum thickness of .090 inch must be used in all cars. The same shape rear window will be used for all body styles. Flat, unmolded rear windows are not allowed.
2. All rear windows must be supported by a minimum of two internal window braces to prevent deflection under racing conditions.
3. The window braces shall be made of a minimum 1/8 inch thick and 1 inch wide aluminum.
4. A maximum of three holes will be allowed in the rear window and the holes must lead directly to an adjuster (screw jacks and or panhard/track bar). The maximum diameter of the holes allowed will be 1 inch.

QUARTER PANEL WINDOWS

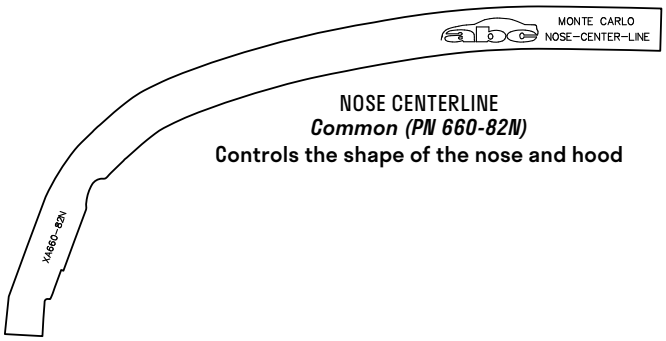
1. Clear polycarbonate quarter panel windows with a minimum thickness of .090 inch must be used in all cars.
2. The quarter panel window shape will vary for brand identification.
3. Flat or molded quarter panel windows are allowed for competition.

DOOR VENT WINDOWS

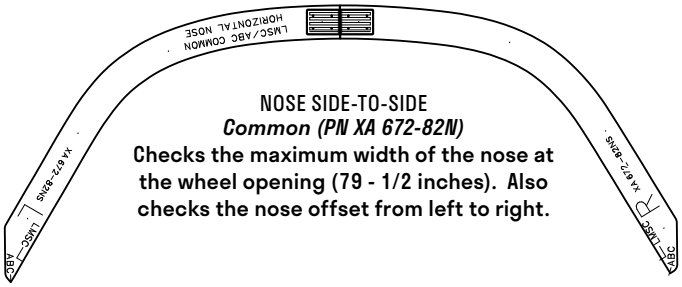
1. The dimension for the vent window along the top of the door will be 12 inches and must go 90 degrees from the top of the door up to the A-post *(photo V1)*. Maximum deflection of 1 inch.


V1

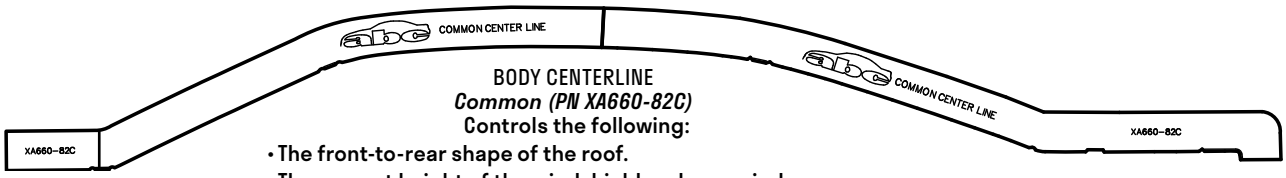
ORIGINAL ABC TEMPLATE GUIDE



NOSE CENTERLINE
Common (PN 660-82N)
Controls the shape of the nose and hood

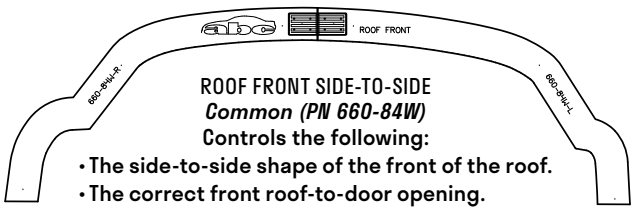


NOSE SIDE-TO-SIDE
Common (PN XA 672-82N)
Checks the maximum width of the nose at the wheel opening (79 - 1/2 inches). Also checks the nose offset from left to right.



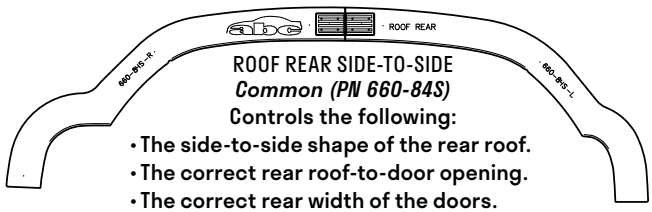
BODY CENTERLINE
Common (PN XA660-82C)
Controls the following:

- **The front-to-rear shape of the roof.**
- **The correct height of the windshield and rear window.**
- **The correct shape of the deck lid area from the base of the rear window to the spoiler.**
- **The correct shape of the cowl area and the rear of the hood.**



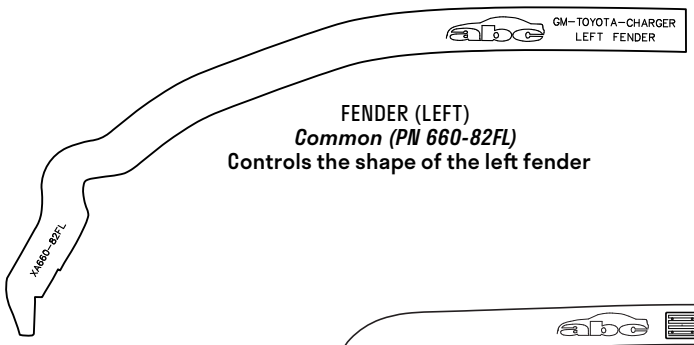
ROOF FRONT SIDE-TO-SIDE
Common (PN 660-84W)
Controls the following:

- **The side-to-side shape of the front of the roof.**
- **The correct front roof-to-door opening.**
- **The correct front width of the doors.**
- **The shape of the top of the doors.**

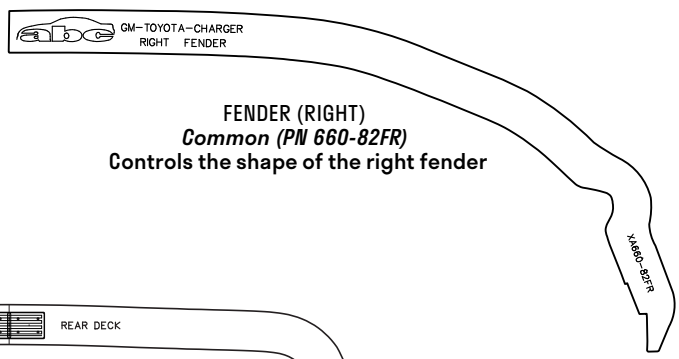


ROOF REAR SIDE-TO-SIDE
Common (PN 660-84S)
Controls the following:

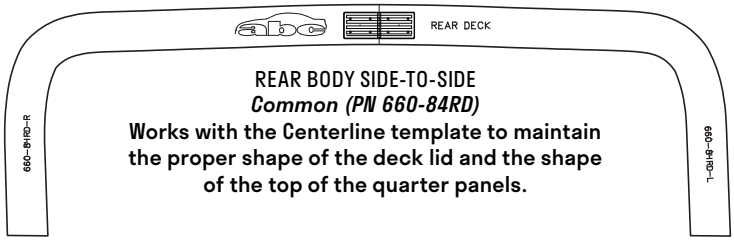
- **The side-to-side shape of the rear roof.**
- **The correct rear roof-to-door opening.**
- **The correct rear width of the doors.**
- **The shape of the top of the quarter panels**



FENDER (LEFT)
Common (PN 660-82FL)
Controls the shape of the left fender



FENDER (RIGHT)
Common (PN 660-82FR)
Controls the shape of the right fender



REAR BODY SIDE-TO-SIDE
Common (PN 660-84RD)
Works with the Centerline template to maintain the proper shape of the deck lid and the shape of the top of the quarter panels.

ORIGINAL ABC BODY INSPECTION CHECKLIST

THIS IS THE RECOMMENDED TECH INSPECTION FORM. CARBONLESS TWO-PART FORMS ARE AVAILABLE FROM FIVE STAR RACE CAR BODIES AND ALUMINUM RACING PRODUCTS. IT IS ALSO AVAILABLE AS A DOWNLOADABLE PDF FILE FROM FIVESTARBODIES.COM AND ARPBODIES.COM.

Driver Name	Date	Car #	Track

Tech Inspector (signed)	Team Representative (signed)

BODY REQUIREMENTS

		(Circle One)	Fix	Penalty
1- NOSE	Nose Side Flap Height: Minimum 11.5"	pass / fail	☐	
	Minimum from ground to bottom of nose: 4"	pass / fail	☐	
	Minimum from bottom of nose to hood seam: 20"	pass / fail	☐	
	Nose Screen- Mounted flush on lower air dam in the recess provided	pass / fail	☐	
	No holes allowed above the bumper line	pass / fail	☐	
2- COWL PANEL	Mandatory on car, ABC approved cowl panel	pass / fail	☐	
	Air intake Opening, Maximum: 2.5" x 20"	pass / fail	☐	
3- VENT WINDOWS	12" Maximum length along top of door	pass / fail	☐	
	90 Degrees from top of door to A Pillar	pass / fail	☐	
4- WINDOW BRACES	Front- 3 required 1/8" thick x 1" wide	pass / fail	☐	
	Rear- 2 required 1/8" thick x 1" wide	pass / fail	☐	
5- ROCKER PANEL HEIGHT	Minimum from ground to bottom of rocker: 4"	pass / fail	☐	
6- WHEEL OPENING	7" Max from edge of rim to front & rear of all wheel openings	pass / fail	☐	
7- MANUFACTURER TAGS	Visible on inside of each body panel	pass / fail	☐	

TEMPLATES

		(Circle One)	Fix	Penalty
8- CENTERLINE TEMPLATES	Nose/Hood Template	pass / fail	☐	
	Roof Template	pass / fail	☐	
9- FENDER TEMPLATES	Left: Measured on ground, 23 7/8" from centerline of nose	pass / fail	☐	
	Right: Measured on ground, 26 1/2" from centerline of nose	pass / fail	☐	
10- SIDE TO SIDE TEMPLATES	Rear Roof Side to Side: Placed at back of roof (90 degrees to roof)	pass / fail	☐	
	Front Roof Side to Side: Placed at leading edge of roof (90 degrees to roof)	pass / fail	☐	
	Horizontal Nose (Horseshoe): Placed approx. 1" above top of nose screen	pass / fail	☐	
	Rear Deck: Placed approx. 2" forward of the decklid hold-down recess	pass / fail	☐	

REFEREE

		(Circle One)	Fix	Penalty
12- FRONT OVERHANG	46" max. from center of nose from center of front spindles	pass / fail	☐	
13- FRONT TREAD WIDTH	Recommended Max: 66"	pass / fail	☐	
14- ROOF HEIGHT	Min Height: 47" - Max Height: 48" (at 10" back from windshield)	pass / fail	☐	
15- REAR-OF-DOOR HEIGHT	Minimum Height: 33.0"	pass / fail	☐	
16- WHEEL BASE	Stated Range: 101" - 106"	pass / fail	☐	
17- REAR TREAD WIDTH	Recommended Max: 66"	pass / fail	☐	
18- QUARTER PANEL HEIGHT	At Quarter Panel, Bumper Cover and Deck Lid intersection *Stated Height Range: 34.25" to 34.5"*	pass / fail	☐	
19- BUMPER COVER HEIGHT	Top Height- 34 7/8" Max. at base of spoiler, on centerline	pass / fail	☐	
20- REAR OVERHANG	47" max. from center of rear axle to base of spoiler at center	pass / fail	☐	

Download this form easily at www.fivestarbodies.com *Revision Date: 02/19/2024*

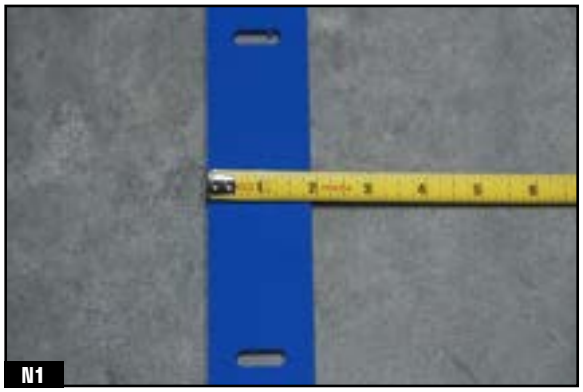
ABC NEXTGEN BODY PANEL SPECIFICATIONS

DOWNLOAD THE OFFICIAL ABC RULEBOOK AT ABCBODYPROGRAM.COM

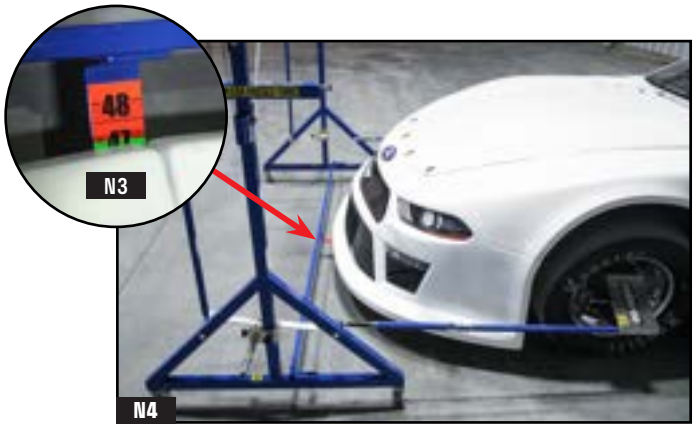
BODY PANEL SPECIFICATIONS

FRONT NOSE

1. In the event that the lower part of the nose has been worn off, a replacement wear strip may be installed on the nose. This part will be made from plastic only, and must measure a maximum of 1-7/8 inches tall *(photo N1 on page 25)*. The valance piece must be mounted in the same plane as the original air dam and will be subject to tech approval.
2. The nose is manufactured with a finished wheel opening and must not be altered in any way *(photo N2 on page 25)*.
3. The nose piece must be supported by a tubular support to the chassis. These support tubes must remain on the inside of the nose piece, and may not extend through or past the bumper.
4. The maximum front overhang from the centerline of the spindle to the leading edge of the lower air dam at the centerline is 47 inches *(photo N3 and photo N4 on page 25)*.
5. The maximum distance from the bumper line to the leading edge of the air dam is 4-1/2 inches including the wear strip. This dimension will be regulated by the **Nose Centerline template** *(photo N5 on page 25)*.
6. The nose must fit the **Nose Centerline and Fender templates** within the allowable tolerances *(photo N6 on page 25)*.
7. The maximum width of the nose at the wheel opening will be 79-1/2 inches. This dimension can be checked with the **Nose Side-to-Side template** *(photo N7 on page 25)*.
8. The shape between the **Nose Centerline** and **Fender templates** at nose/hood intersection will be controlled with the **Hood Pin Bar template** *(photo N8 on page 25)*.
9. The grill area above the bumper line cannot be cut out for any reason. All radiator cooling air must be obtained from the grill area below the bumper line.


N1

N2



N3

N4

N5


N6


N7


N8

HOOD

1. The only alterations allowed to the hood will be trimming the outer edge to fit the nose, fenders, and cowl.
2. All hoods must be adequately braced so they do not deform under racing conditions.
3. The hood must fit tight to the fenders and cowl at all times.
4. The only open holes allowed to be drilled in the hood are for the hood pins, and only one hole is allowed per pin.
5. All hoods shall have a minimum of four positive locating pins across the leading edge of the hood. Each hood pin is allowed only one hole for the fastening clip *(photo H1)*.
6. The hood must fit the **Nose Centerline** *(photo H2)* & **Body Centerline template** *(photo H3)* within the allowable tolerances **with the hood pins installed**.

H1

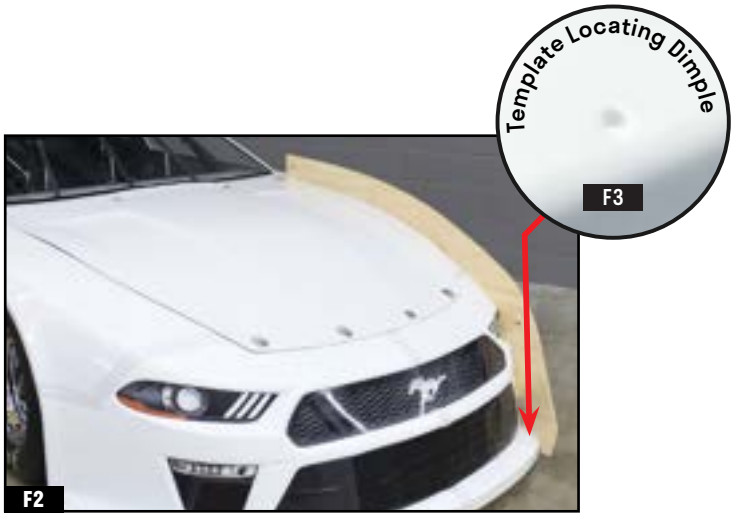

H2


H3

FENDERS

1. Only approved fiberglass or molded plastic fenders produced by approved manufacturers containing visible labels will be allowed for competition.
2. The only alterations allowed to be made will be trimming excess material from the trailing edge of the fender at the fender/door intersection to allow for wheelbase variations.
3. All fenders must be flange fitted to the nose.
4. Wheel openings may not be larger than 7 inches from the edge of the wheel (not the tire) on the front & rear of the wheel opening *(photo F1)*. **Altering the wheel openings is prohibited**.
5. The left fender must fit the **Left Fender/Nose template** *(photo F2)* and the right fender must fit the **Right Fender/Nose template** *(photo F4)* within the allowable tolerances. There are dimples on the top of the nose air dam to indicate the proper position for the fender template at the front as shown in *(photo F3)*.
6. The front edge of the fender behind the tire can not be more than 2 inches inward from the outside of the sidewall of the tire on both sides of the body.

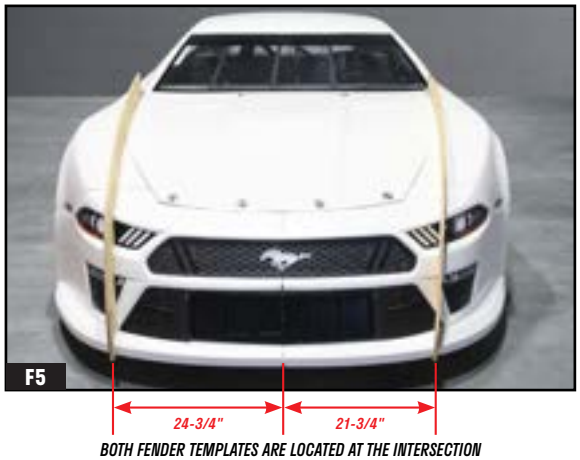

F1



LEFT SIDE TEMPLATE IS LOCATED 21-3/4 INCHES FROM CENTERLINE.


F4

RIGHT SIDE TEMPLATE IS LOCATED 24-3/4 INCHES FROM CENTERLINE.



BOTH FENDER TEMPLATES ARE LOCATED AT THE INTERSECTION OF THE FENDER AND HOOD AT THE REAR OF THE TEMPLATE.

ROOF

1. A common roof will be used for all body styles. The roof is manufactured in two sections, front & rear. The cowl is integrated into the front section of the roof. The "B" & "C" pillars as well as the deck lid filler are integrated into the rear-roof section.

2. The roof is designed to be 2-1/2 inches left of the centerline of the body.

3. Roof rails will not be permitted.

4. The roof height is measured 10 inches back from the windshield/roof intersection on the centerline. The height will be 47 inches minimum. This dimension coincides with the minimum rear door height of 33 inches and the minimum deck lid height of 34-1/4 inches. If these dimensions are higher, the roof height must increase by the same amount. This height will be checked using the "Referee" *(photo R1 on page 29)*.

5. The air intake opening must be 2-1/2 inches x 20 inches plus or minus 1/16 inch *(photo R2 & photo R3 on page 29)*. This will be regulated by the **Air Intake template** *(photo R4 on page 29)*.

6. Quarter panel window areas must be cut out to scribe line and have polycarbonate windows in both the left & right sides.

7. The shape of the roof is regulated with the **Body Centerline template** *(photo H3 on page 26)*, the **Roof Rear Side-to-Side template** *(photo R6 on page 29)*, & the **Roof Front Side-to-Side template** *(photo R8 on page 29)*.

8. The correct location for the **Body Centerline template** *(photo H3 on page 26)* is 2-3/4 inches to the right of the hashmarks at the front and rear of the roof. From the roof, the template extends down to the hood at the front and between the spoiler halves at the rear. The hashmarks are located above the windshield and above the rear window.

9. The **Roof Rear Side-to-Side template** *(photo R6 on page 29)* is located at the top corners of the rear window at a 90 degree angle to the roof *(photo R7 on page 29)*. It extends down the quarter panel across the quarter window, over the top of the quarter panel, and down to the wheel opening.

10. The **Roof Front Side-to-Side template** *(photo R8 on page 29)* is located at the top corners of the windshield and extends down to the top of the doors and part way down the side of the door. The proper placement of this template is at a 90 degree angle to the roof *(photo R7 on page 29)* and 20 inches back from the trailing edge of the "A" post where it meets the door *(photo R8 on page 29)*.


R1


R2


R3

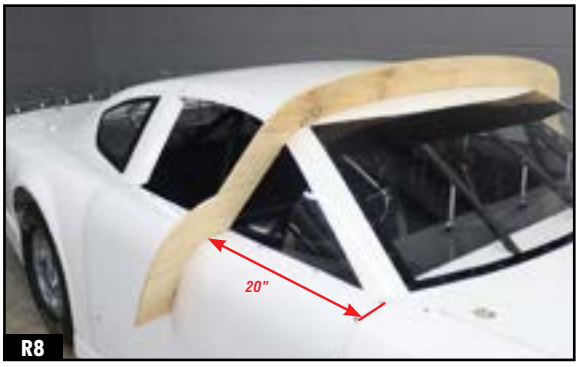

R4


R5


R6


R7

IT IS IMPORTANT TO HOLD THE TEMPLATE AT A 90° ANGLE TO THE ROOF

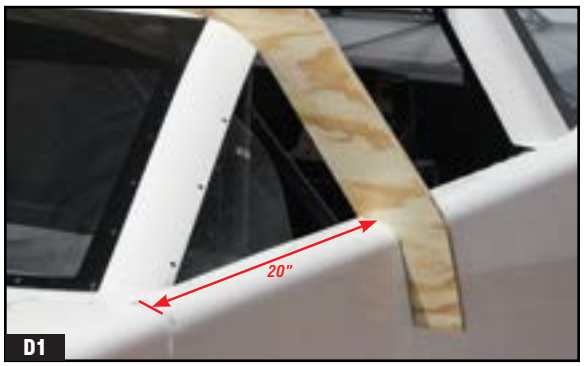


R8

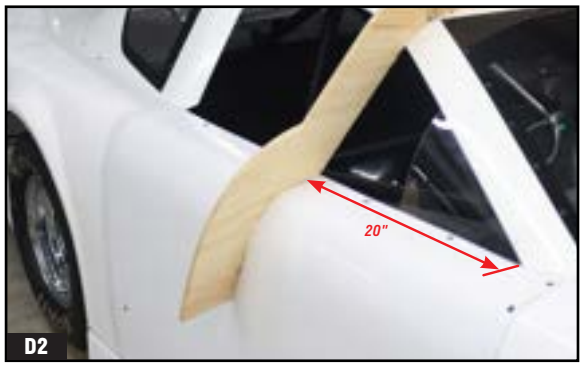
IT IS IMPORTANT TO HOLD THE TEMPLATE AT A 90° ANGLE TO THE ROOF

DOORS

1. The width of the top of the doors will be controlled by both the **Roof Front Side-to-Side** *(photo D1 & photo D2)* and the **Roof Rear Side-to-Side** *(photo R6 on page 29)* templates.



D1



D2

2. The front of the door must fit in the recess in the base of the "A" pillar *(photo D3)* and the rear of the door must fit in the recess on the quarter panel *(photo D4)*.


D3


D4

3. The height at the rear of the door will be **33 inches minimum**. This dimension coincides with the minimum roof height of 47 inches and the minimum deck lid height of 34-1/4 inches. If these dimensions are higher, the door height must increase by the same amount. This height will be checked with a chain on the "Referee" *(photo D5)*.


D5

QUARTER PANELS

1. Wheel openings may not be larger than 7 inches from the edge of the wheel (not the tire) on the front and rear of the wheel opening *(photo Q1)*. **Altering the wheel openings is prohibited**.

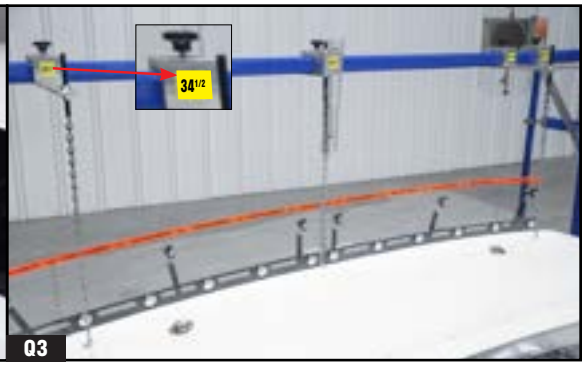
2. **All quarter panels now are manufactured with a finished rear edge that fits into the recess of the bumper cover. No trimming required as in the original ABC quarter panels.**

3. The quarter panels must fit the **Roof Rear Side-to-Side** template within the allowable tolerances *(photo Q2)*.

4. The height at the quarter panel/deck lid/bumper cover intersection will be 34-1/2 inches (34-1/4 inches minimum) on both the left and right sides *(photo Q3)*.


Q1


Q2



Q3

5. The quarter panels must be mounted at the same plane as the deck lid & the top of the bumper cover as shown *(photo Q4)*.

6. The **Rear Deck** template works with the **Body Centerline** template *(photo Q5)* to maintain the proper shape of the deck lid and the shape of the top of the quarter panels. It is approximately 2 inches forward of the deck lid hold-down recess *(photo Q5)*.

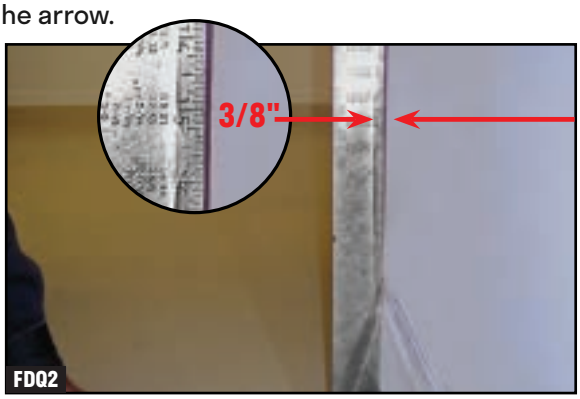
7. The **Rear Deck** template *(photo Q5)* has been added from the original builder's template and enhanced to go down the sides of the quarter panels behind the wheel to control the original intended shape of the quarter panel and will also control the front edge of the quarter panel behind the wheel opening to be 2 inches inward from the outside of the sidewall of the tire on both sides.


Q4


Q5

8. The quarter panel (in front of wheel) must be perpendicular to the ground for the first 15 inches. The maximum gap is 3/8 inch for the first 15 inches up from ground *(photo FDQ1 & photo FDQ2)*. The measurement will be taken from the leg of the quarter panel to the framing square as indicated with the arrow.

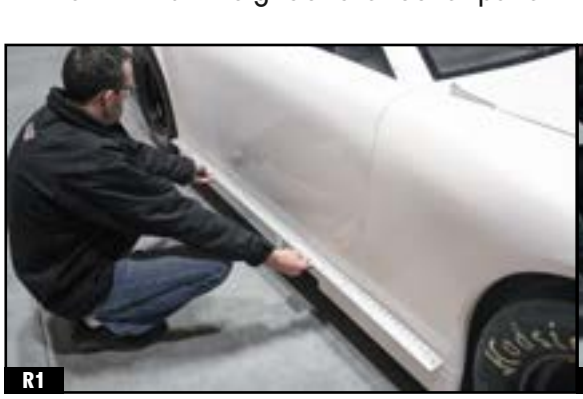

FDQ1



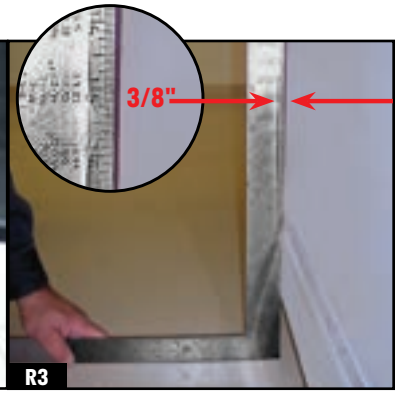
FDQ2

ROCKER PANELS

1. Only .040" minimum thickness aluminum or molded plastic approved rocker panels produced by approved manufacturers will be allowed for competition.
2. Rocker panels must be mounted in a single plane from the front to rear and top to bottom as shown *(photo R1, photo R2, & photo R3)*.
3. The only alterations allowed to be made to the rocker panels will be notching for the jack posts and trimming to length.
4. The offset in the rocker panel for rigidity must be a maximum of 1/4 inch and must run parallel to the bottom edge of the rocker panel.
5. The minimum height of the rocker panel will be 4 inches from the racing surface.


R1

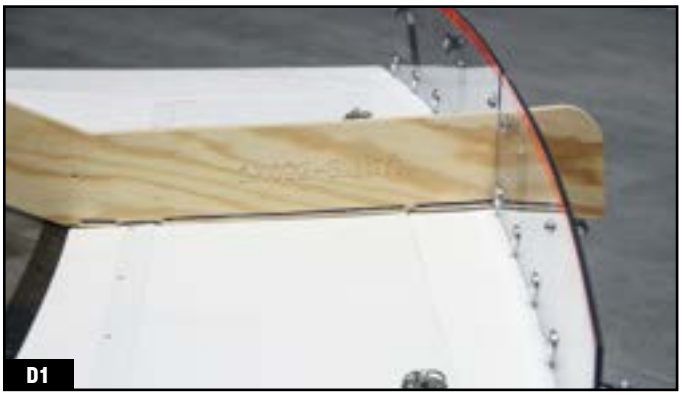

R2



R3

DECK LID

1. Only .040" minimum thickness approved aluminum deck lids produced by approved manufacturers containing visible labels will be allowed for competition.
2. The deck lid must be able to be opened for inspection purposes.
3. The deck lid must fit to the Body Centerline template within the allowable tolerance of 1/4 inch, as indicated by blue line on template *(photo D1)*.


D1

REAR BUMPER COVERS

1. The bumper cover is designed in a manner that, when the spoiler is mounted, the dimension from the centerline of the rear axle to the base of the spoiler at the centerline will not exceed 47 inches *(photo S4 and photo S5 on page 33)*.
2. The bumper cover must be supported & securely fastened to prevent it from deforming under race conditions.
3. The bumper cover must be mounted to fit the Body Centerline template *(photo D1)* for the correct rear overhang dimension.
4. The bumper cover must be mounted at the same plane as the deck lid & the top of the quarter panel as shown *(photo BC1)*.


BC1

SPOILER

1. Only approved spoilers produced by approved manufacturers will be allowed for competition.

2. An approved rear spoiler must be a non-adjustable (from the driver's compartment) part of the body that controls the flow over one surface only.

3. There will be one option for the size of the polycarbonate spoiler blade to be determined by the sanctioning body.
Both size options will use the same base:

   3.1 Only Option: 6-1/2 inches tall by 60 inches wide.

4. The maximum width of the spoiler will be measured **across the rear of the spoiler** *(photo S1)*.

5. The maximum height of the top corners of the spoiler left and right will be 41 inches for a 6-1/2 inch spoiler and 39-1/2 inches for a 5-inch spoiler with the deck lid at the correct height.

6. The polycarbonate blades must be mounted on the **front side** of the spoiler base *(photo S2)*.

7. The spoiler must maintain the same contour as the bumper cover.

8. The spoiler must be centered on the bumper cover seam.

9. The spoiler must have a minimum 1/2 inch to maximum 5/8 inch split in the center to accommodate the **Body Centerline** template *(photo S3)*. The ends of the left and right spoiler halves that create the gap for the Centerline template **must be an equal distance from the bumper cover seam.**

10. **The base of the spoiler at the centerline may not exceed 47 inches from the centerline of the rear axle** *(photo S4 & photo S5)*.

11. Rudders or forward mounted brackets will not be permitted.

12. Spoiler supports mounted from the rear side of the spoiler to the bumper cover will be permitted.

13. A minimum of the top 3-1/2 inches of the rear spoilers of all cars must be made of clear, unformed polycarbonate with a minimum thickness of 3/16 inch. It is recommended that the majority of this area remains free of visual obstructions.


S1


S2


S3


S4


S5

WINDOW DISCLAIMER

All polycarbonate windows must not be installed using rivets as it is likely to shorten the lifespan of the window. The pressure exerted on the surface of the window during rivet installation will eventually cause fracturing and/or stress cracking. Instead, machine screws with nylon lock nuts should be used.

WINDSHIELD

1. A clear, molded polycarbonate windshield with a minimum thickness of 1/8 inch must be used in all cars. The same shape windshield will be used for all body styles. Flat, unmolded windshields are not allowed.
2. All windshields must be supported by a minimum of three internal windshield braces to prevent deflection under racing conditions.
3. The windshield braces must be mounted in the recesses provided in the window bed.

REAR WINDOW

1. A clear, molded polycarbonate rear window with a minimum thickness of .093 inch must be used in all cars. The same shape rear window will be used for all body styles. Flat, unmolded rear windows are not allowed.
2. All rear windows must be supported by a minimum of three internal rear window braces to prevent deflection under racing conditions.
3. The rear window braces must be mounted in the recesses provided in the window bed.
4. A maximum of three holes will be allowed in the rear window. The holes must lead directly to an adjuster (screw jacks and/or track bar). The maximum diameter of the holes allowed will be 1 inch.

QUARTER PANEL WINDOWS

1. Clear polycarbonate quarter panel windows with a minimum thickness of .093 inch must be used in all cars.
2. Flat or molded quarter panel windows are allowed for competition.

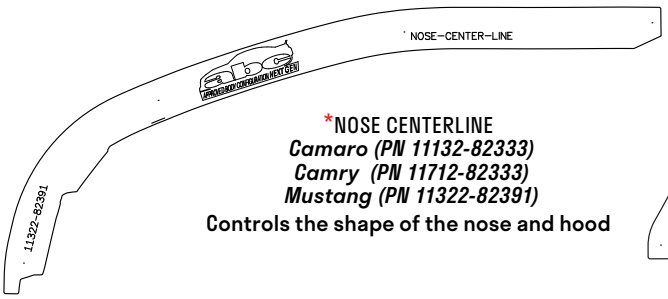
DOOR VENT WINDOWS

1. The maximum dimension for the vent window along the top of the door will be 12 inches *(photo DV1)* and must go 90° from the top of the door up to the "A" post *(photo DV2)*.

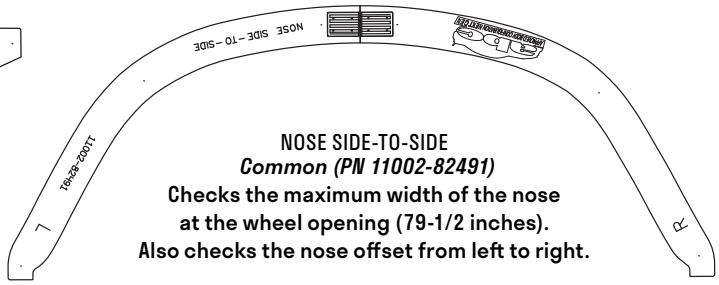

DV1


DV2

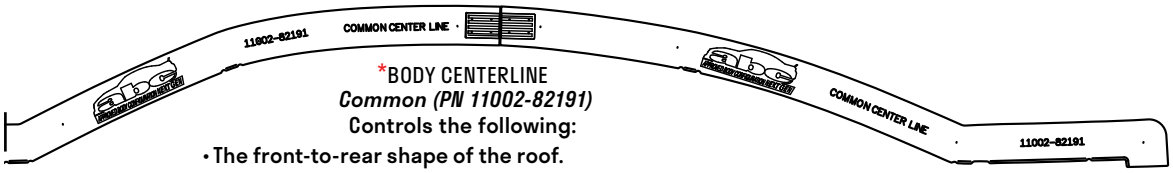
ABC NEXTGEN TEMPLATE GUIDE



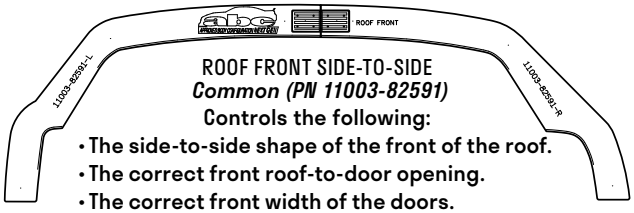
*NOSE CENTERLINE
Camaro (PN 11132-82333)
Camry (PN 11712-82333)
Mustang (PN 11322-82391)
Controls the shape of the nose and hood



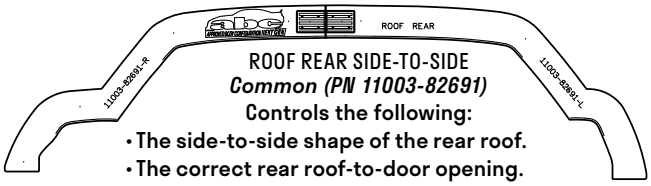
NOSE SIDE-TO-SIDE
Common (PN 11002-82491)
Checks the maximum width of the nose at the wheel opening (79-1/2 inches). Also checks the nose offset from left to right.



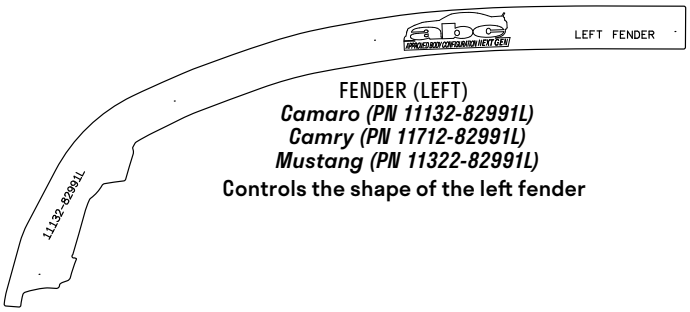
*BODY CENTERLINE
Common (PN 11002-82191)
Controls the following:
- The front-to-rear shape of the roof.
- The correct height of the windshield and rear window.
- The correct shape of the deck lid area from the base of the rear window to the spoiler.
- The correct shape of the cowl area and the rear of the hood.



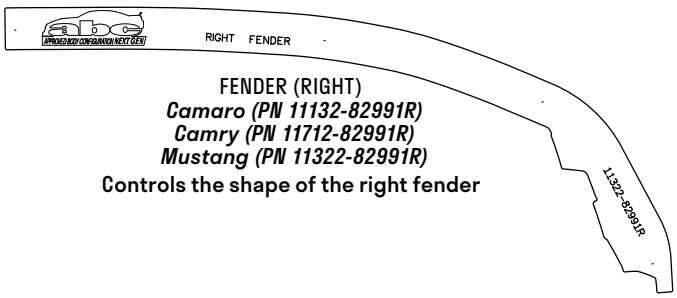
ROOF FRONT SIDE-TO-SIDE
Common (PN 11003-82591)
Controls the following:
- The side-to-side shape of the front of the roof.
- The correct front roof-to-door opening.
- The correct front width of the doors.
- The shape of the top of the doors.



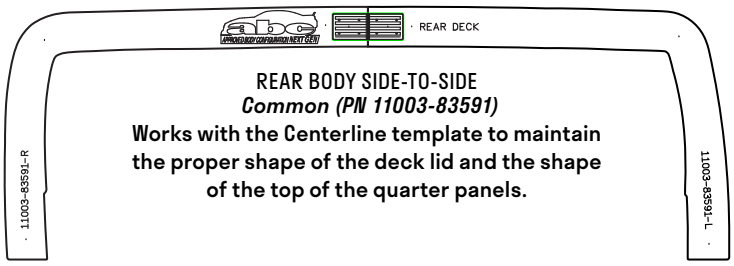
ROOF REAR SIDE-TO-SIDE
Common (PN 11003-82691)
Controls the following:
- The side-to-side shape of the rear roof.
- The correct rear roof-to-door opening.
- The correct rear width of the doors.
- The shape of the top of the quarter panels



FENDER (LEFT)
Camaro (PN 11132-82991L)
Camry (PN 11712-82991L)
Mustang (PN 11322-82991L)
Controls the shape of the left fender



FENDER (RIGHT)
Camaro (PN 11132-82991R)
Camry (PN 11712-82991R)
Mustang (PN 11322-82991R)
Controls the shape of the right fender



REAR BODY SIDE-TO-SIDE
Common (PN 11003-83591)
Works with the Centerline template to maintain the proper shape of the deck lid and the shape of the top of the quarter panels.

*The Nose Centerline and Body Centerline templates are no longer required to be connected.

ABC NEXTGEN INSPECTION CHECKLIST

Driver Name	Date	Car #	Track

Tech Inspector (signed)	Team Representative (signed)

BODY REQUIREMENTS

		(Circle One)	Fix	Penalty
1- NOSE	Nose Screen- Mounted flush on lower air dam in the recess provided	pass / fail	☐	
	Minimum height from ground: 4"	pass / fail	☐	
	No holes allowed above the bumper line	pass / fail	☐	
2- ROOF	Air intake Opening, Maximum: 2.5" x 20"	pass / fail	☐	
	Windshield Braces- Minimum 3 required	pass / fail		
	Rear Window Braces- Minimum 3 required	pass / fail	☐	
3- DOOR VENT WINDOWS	12" Maximum length along top of door	pass / fail	☐	
	90 Degrees from top of door to A Pillar	pass / fail	☐	
4- ROCKER PANEL HEIGHT	Minimum from ground to bottom of rocker: 4"	pass / fail	☐	
5- WHEEL OPENING	7" Max from edge of rim to front & rear of all wheel openings	pass / fail	☐	
6- SPOILER	*Max Width* 64 1/2" *(Measured across back of spoiler)*	pass / fail	☐	
	Height: 5" Blade -or- 6.5" Blade *(Per individual rule)*	pass / fail	☐	
	Spoiler centered on bumper cover seam	pass / fail	☐	
	Spoiler blade mounted on front side of spoiler base	pass / fail	☐	
7- MANUFACTURER TAGS	Visible on inside of body panels	pass / fail	☐	

TEMPLATES

		(Circle One)	Fix	Penalty
8- CENTERLINE TEMPLATES	Nose Centerline Template *(Nose/Hood)*	pass / fail	☐	
	Centerline Template *(Roof/Deck Area)*	pass / fail	☐	
9- FENDER TEMPLATES	Left Template: located 21 3/4" from nose centerline	pass / fail	☐	
	Right Template: located 24 3/4" from nose centerline	pass / fail	☐	
10- SIDE TO SIDE TEMPLATES	Roof Rear Side to Side Template *(placed 90 degrees to roof)*	pass / fail	☐	
	Roof Front Side to Side Template *(placed 90 degrees to roof)*	pass / fail	☐	
	Nose Width Template *(placed on top of lower air dam)*	pass / fail	☐	
	Rear Deck: Placed approx. 2" forward of the decklid hold-down recess	pass / fail	☐	
11- HOOD PIN BAR	*(Placed along front edge of hood)*	pass / fail	☐	

REFEREE

		(Circle One)	Fix	Penalty
12- FRONT OVERHANG	47" maximum from center of nose to center of front spindles	pass / fail	☐	
13- FRONT TREAD WIDTH	66" Maximum	pass / fail	☐	
14- ROOF HEIGHT	Height range: 47" minimum (measured 10" back from windshield)	pass / fail	☐	
15- REAR-OF-DOOR HEIGHT	Minimum height: 33"	pass / fail	☐	
16- WHEEL BASE	Stated range: 101" - 106"	pass / fail	☐	
17- REAR TREAD WIDTH	66" Maximum	pass / fail	☐	
18- QUARTER PANEL HEIGHT	Minimum height: 34 1/4" Maximum height: 34 1/2" *(Measured at Quarter Panel, Bumper Cover and Deck Lid intersection)*	pass / fail	☐	
19- BUMPER COVER HEIGHT	Maximum height 34 7/8" at base of spoiler, on centerline	pass / fail	☐	
20- REAR OVERHANG	47" maximum from center of rear axle to base of spoiler at center	pass / fail	☐	

Download this form easily at www.fivestarbodies.com

Revision Date: 02/19/2024

ABC BODY INSTALLATION TOOLS

DOWNLOAD THE OFFICIAL ABC RULEBOOK AT ABCBODYPROGRAM.COM

ABC BODY INSTALLATION TOOLS

HOW TO USE THE OFFICIAL REFEREE

The Official Referee is a quick and easy to use tech inspection device for checking seven major points on a race car body. It is not intended for use in body mounting. The body can easily be installed within specs by using the body dimension sheet and templates. **The Official Referee is to be used in conjunction with the centerline, side-to-side and fender templates and is not meant to replace these templates.** Part number TT-100-00.

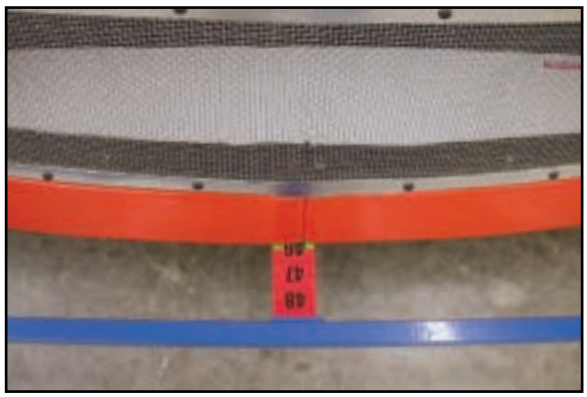
This section will explain and illustrate how to check the following dimensions:

- **Front Overhang**
- **Front Tread Width**
- **Roof Height**
- **Wheelbase**
- **Rear of Door Height**
- **Rear Tread Width**
- **Rear Overhang**
- **Quarter Panel Height**

IMPORTANT: A flat surface at least as big as the car is essential for a tech inspection area to ensure accurate measurements.

STEP 1: MEASURING FRONT OVERHANG

INSERT ARMS INTO FRONT WHEELS & LOCK INTO PLACE.



FRONT OVERHANG IS MEASURED BY VIEWING THE GAUGE AT THE BASE OF THE NOSE.

STEP 2: MEASURING FRONT TREAD WIDTH

INSERT LEFT SIDE THREAD WIDTH MEASURING ARM INTO LEFT WHEEL & LOCK INTO PLACE. REPEAT THIS PROCEDURE ON THE RIGHT SIDE.

FRONT TREAD WIDTH IS MEASURED BY VIEWING GAUGE ON RIGHT SIDE MEASURING ARM.

STEP 3: MEASURING WHEELBASE

INSERT FRONT ARM INTO THE FRONT WHEEL. REMOVE LOCKING PIN FROM REAR ARM & INSERT INTO REAR WHEEL.

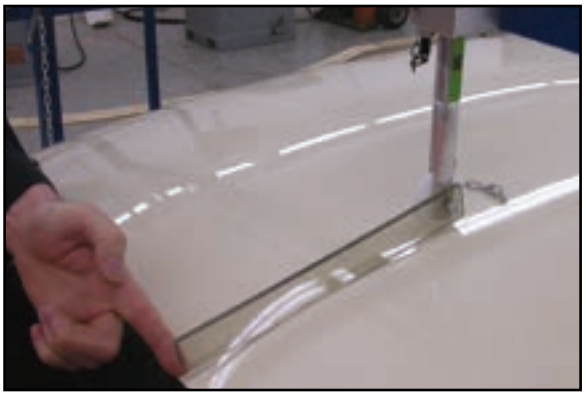
WHEELBASE IS MEASURED BY VIEWING THE CALIBRATED ARM ON THE REAR ARM.

It is acceptable to have different wheelbase measurements on each side (due to caster).

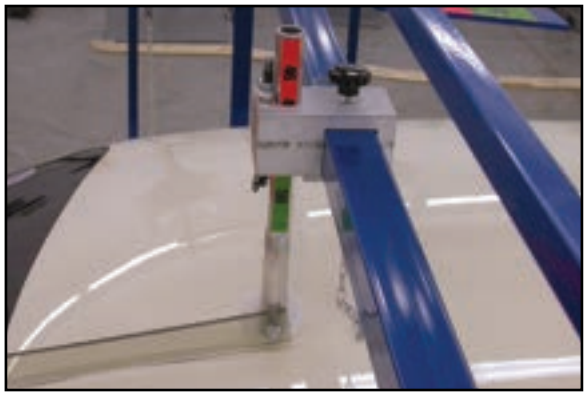
Wheelbase must be checked before and after the race to eliminate the possibility of a racer moving the rear axle forward to gain rear overhang after initial tech.

STEP 4: MEASURING ROOF HEIGHT

MOVE CAR OR REFEREE UNTIL ROLLER CONTACTS ROOF & POLYCARBONATE GAUGE IS IN LINE WITH THE TOP EDGE OF THE WINDSHIELD



ALIGN POLYCARBONATE GAUGE WITH TOP EDGE OF WINDSHIELD TO LOCATE THE CALIBRATED GAUGE AT EXACTLY 10 INCHES BACK FROM THE WINDSHIELD.



THE ROOF HEIGHT IS MEASURED BY VIEWING THE CALIBRATED ROD ATTACHED TO THE POLYCARBONATE GAUGE.

STEP 5: MEASURING REAR OF DOOR HEIGHT

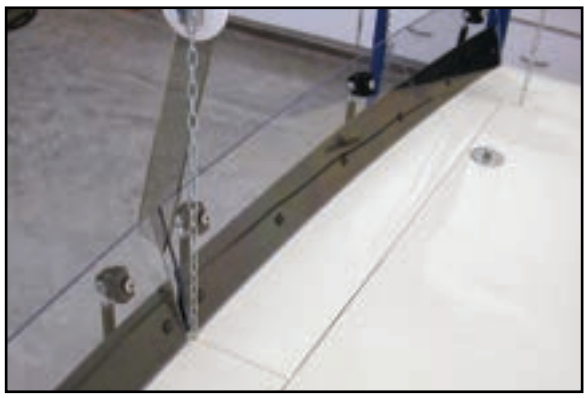
REAR OF DOOR HEIGHT IS CORRECT WHEN FREE-HANGING CHAIN JUST TOUCHES THE INTERSECTION POINT, AS SHOWN.

STEP 6: MEASURING REAR TREAD WIDTH

INSERT LEFT SIDE TREAD WIDTH MEASURING ARM INTO LEFT WHEEL & LOCK INTO PLACE. REPEAT THIS PROCEDURE ON THE RIGHT SIDE (SEE STEP 2, PAGE 38). REAR TREAD WIDTH IS MEASURED BY VIEWING GAUGE ON RIGHT SIDE MEASURING ARM.

STEP 7: MEASURING QUARTER PANEL HEIGHT & REAR OVERHANG

INSERT FRONT ARMS INTO REAR WHEELS AND LOCK INTO PLACE.



WHEN CHAIN TOUCHES BUMPER COVER AT BASE OF SPOILER ON THE CENTERLINE (AS SHOWN), REAR OVERHANG IS CORRECT.

QUARTER PANEL HEIGHT IS CORRECT WHEN FREE-HANGING CHAIN TOUCHES THE INTERSECTION POINT.

HOW TO CALIBRATE THE OFFICIAL REFEREE

The Official Referee tech device is fully calibrated at the factory. During initial assembly, **Step 1 (Width of device)** will require adjustment as the hex rod was loosened during disassembly for shipping. All other calibrations should be correct during initial assembly but should be checked for accuracy.

STEP 1: WIDTH OF THE DEVICE

CLAMP TAPE MEASURE TO OUTSIDE OF ONE SIDE OF DEVICE.

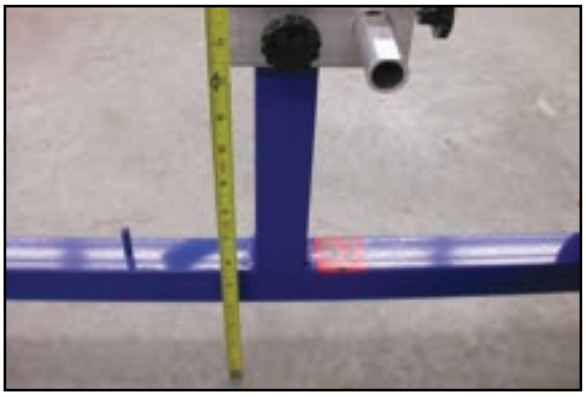
EXTEND TAPE TO OUTSIDE OF OPPOSITE SIDE OF DEVICE.

ADJUST HEX ROD TO OBTAIN 92 INCHES FROM OUTSIDE TO OUTSIDE OF DEVICE.

THE 92 INCH DIMENSION IS CRITICAL TO ENSURE TREAD WIDTH GAUGES ARE PROPERLY CALIBRATED.

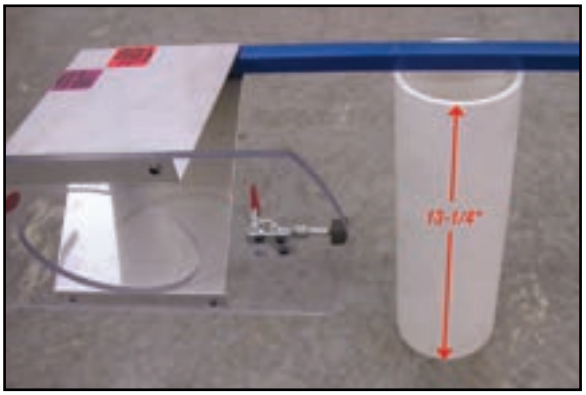
When the dimension is correct, tighten the lock nut against the hex rod.

STEP 2: TREAD WIDTH GAUGE BLOCKS

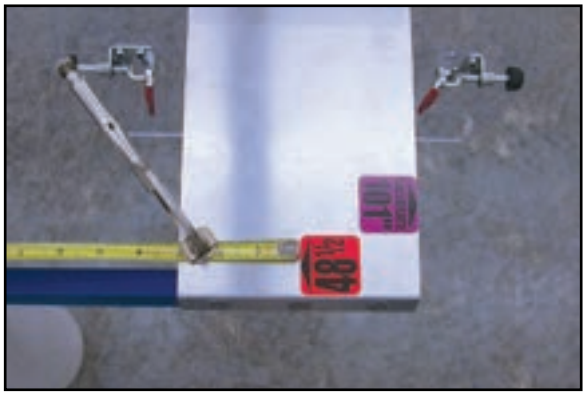


ADJUST BLOCK SO TREAD WIDTH GAUGE IS LOCATED TO CENTER OF WHEEL (APPROXIMATELY 12-½ INCHES UP FROM GROUND). THIS DIMENSION WILL VARY BASED ON TIRE SIZE.

STEP 3: CALIBRATE FRONT ARMS

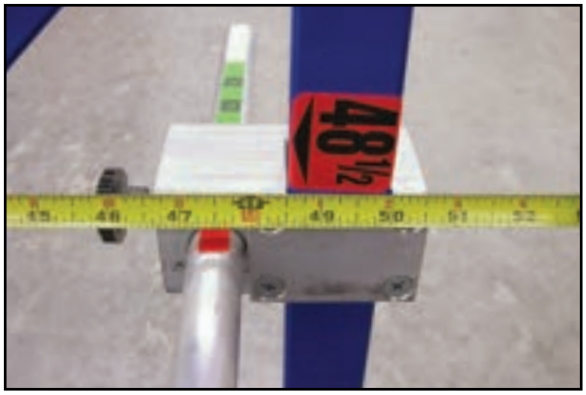


PLACE FRONT ARM IN HORIZONTAL POSITION & REST ON 13-¼ INCH BLOCK.



CLAMP TAPE MEASURE SO TAPE IS RESTING ON 48-½ INCH STICKER LOCATED ON FRONT ARM.

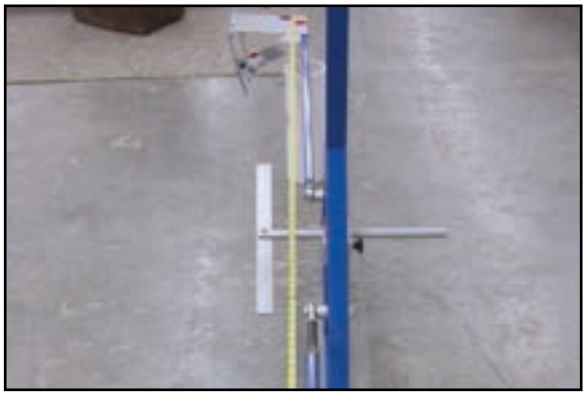
EXTEND TAPE BACK TO 48-½ INCH STICKER LOCATED ON VERTICAL POST.



ADJUST HEIM ON FORWARD ARM TO OBTAIN 48-½ INCH MEASUREMENT. REPEAT PROCESS FOR OPPOSITE ARM.

STEP 4: CALIBRATE WHEELBASE

LEAVE FORWARD ARM (THAT WAS JUST CALIBRATED) IN THE HORIZONTAL POSITION ON THE 13-¼ INCH BLOCKS. PLACE REARWARD ARMS IN HORIZONTAL POSITION ON ANOTHER 13-¼ INCH BLOCK. HOOK TAPE MEASURE ONTO FORWARD ARM ON THE 101 INCH STICKER & EXTEND TAPE TO REARWARD ARM AT 101 INCH STICKER.



ADJUST HEIM ON REARWARD ARM IF NECESSARY. REPEAT ON OPPOSITE SIDE.

STEP 5: CALIBRATE QUARTER PANEL HEIGHT CHAINS

Measure 34-½ inches from the ground up and adjust chain so bottom link is at this measurement. Repeat on other side.

STEP 6: CALIBRATE REAR OVERHANG CHAIN

Measure 34-⅞ inches from the ground up and adjust chain so bottom link is at this measurement.

STEP 7: CALIBRATE ROOF HEIGHT GAUGE

This gauge is not adjustable and is calibrated on a surface plate at the factory. The roof height gauge should show the same measure as the tape measure when properly calibrated.

OFFICIAL REFEREE QUESTIONS?

Please call Five Star Race Car Bodies at (262) 877-2171

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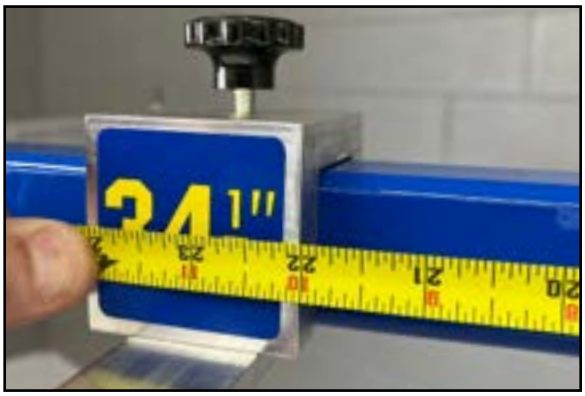
REFEREE BODY CENTERLINE DEVICE

STEP 1: CALIBRATING THE BODY CENTERLINE DEVICE [THESE NUMBERS ARE BASED OFF OF 66 INCH TREAD WIDTH]

BEGIN BY MEASURING FROM THE END OF THE REFEREE TO LEFT QUARTER HEIGHT BLOCK



SET LEFT SIDE QUARTER HEIGHT BLOCK TO 22 INCHES FROM END OF REFEREE

SET THE NEW BLOCK FOR THE CENTERLINE DEVICE TO 45-1/4 INCH FROM THE END OF THE REFEREE & ATTACH THE LONG CENTERLINE ANGLE TO THE BLOCK

ATTACH SMALL ANGLE SUPPORT TO CENTERLINE PART & LEFT SIDE QUARTER HEIGHT CHAIN

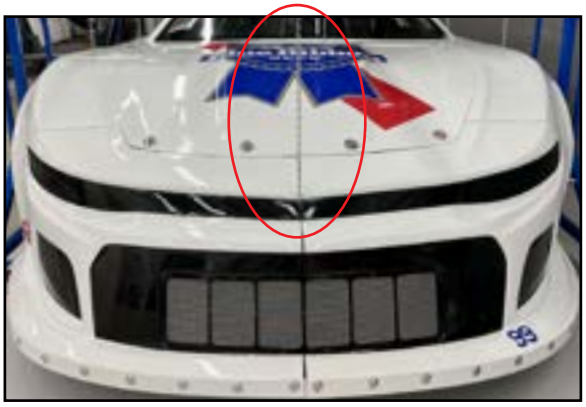
STEP 2: ENSURE THE CAR IS CENTERED UNDER THE REFEREE

LOCK THE RIGHT FRONT AT 66 INCHES

CENTER THE LEFT FRONT AS NEEDED

LOCK THE RIGHT REAR AT 66 INCHES

CENTER THE LEFT REAR AS NEEDED



THE BODY CENTERLINE CHAIN SHOULD BE ON CENTERLINE OF THE NOSE

NEXTGEN BODY REAR CENTERLINE OF BUMPER COVER IS 1 INCH TO THE RIGHT
TRADITIONAL BODY REAR CENTERLINE IS ON THE BUMPER COVER CENTERLINE

THIS IS FOR REFERENCE ONLY!

CASTER AND TREAD WIDTH WILL CHANGE THESE NUMBERS.

OFFICIAL REFEREE QUESTIONS?

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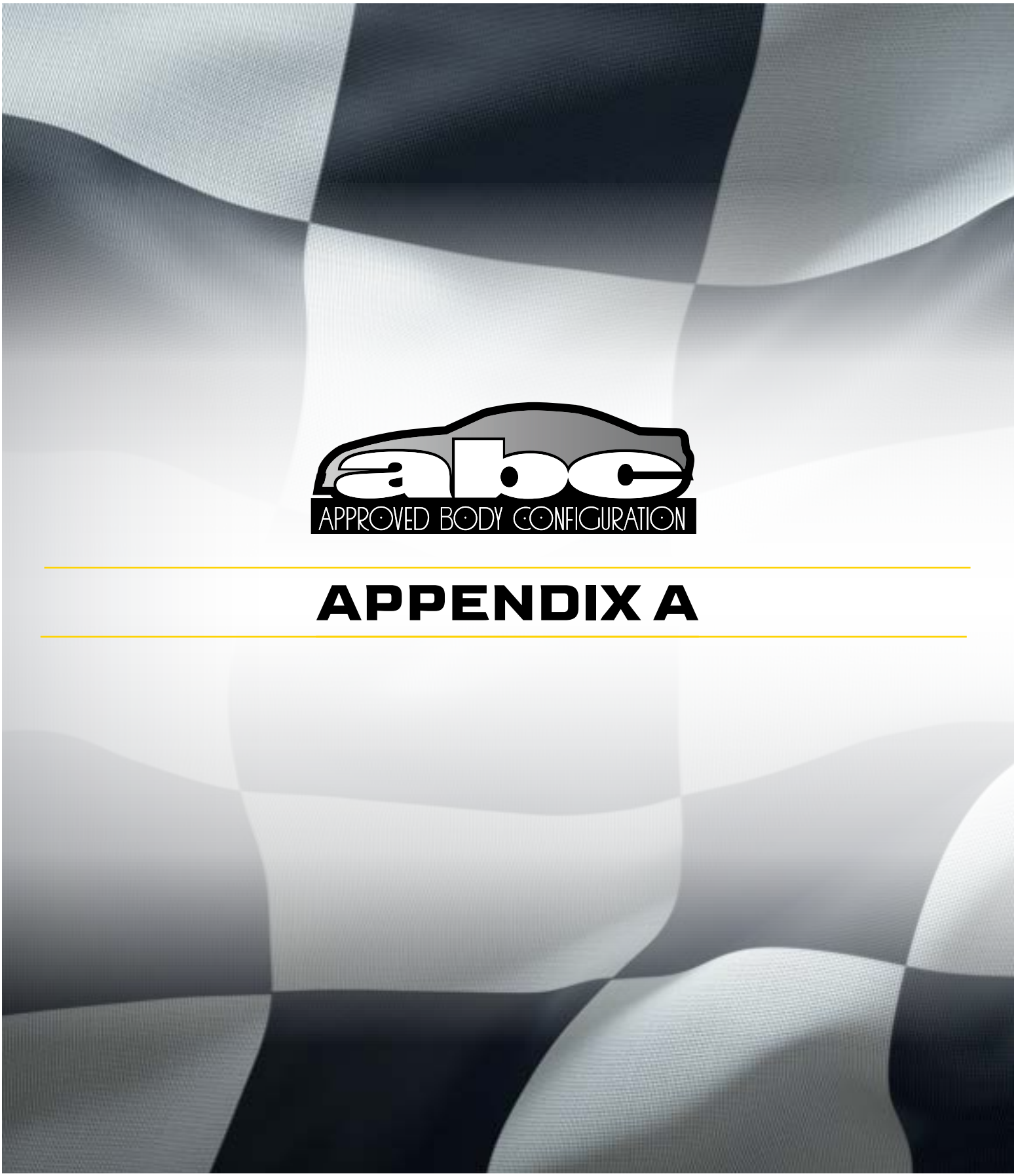

APPENDIX A

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ABC BODY APPROVAL TEST PROCESS

The goal of the ABC Body Program is to control the shape and aerodynamics of short track late model bodies to maintain an even playing field for all racers and body manufacturers. To accomplish that goal successfully, aerodynamic testing must be done by the body manufacturers to prove aerodynamic equality to within plus or minus 1 ½ % for all bodies regardless of body style or manufacturer in order to achieve ABC Program approval.

A wind tunnel parity test comparing production panels of an ABC body approved (target) body and production panels of the new proposed ABC body is required. If the new proposed body has different brand specific front fascias or other body parts, all parts must be tested at the same time and must be equal aerodynamically. This test is also required if any panels on a previously approved ABC body are updated.

The future of the ABC Program depends on an accurate way of aerodynamically testing future body designs in order to maintain equality for all approved ABC bodies.

TEST PROCEDURE AND RULES:

• The target body to be used for all test comparisons is the ABC Approved Five Star Next Gen body with the Ford front fascia and a 6 ½ inches tall x 60 inch wide spoiler mounted at 70 degrees.

• All comparison testing must be done using the ABC Committee submission chassis that has been used in all previous wind tunnel parity testing to ensure accuracy. This chassis must not be modified or changed in any way.

• The test must be conducted at the full scale Aerodyn Wind Tunnel, not the A2 tunnel, in Mooresville NC.

• The testing must be conducted by a qualified aerodynamic engineer familiar with the facility and the testing required. After testing is completed, a report stating the results of the testing must be supplied to the ABC Program Committee for final approval.

• The body manufacturer submitting a body for approval is responsible for scheduling and paying for expenses including the wind tunnel expenses.

• The ABC Committee must be represented as well as the other ABC approved body manufacturers for the test. The submitting manufacturer is responsible for informing representatives of the ABC Program Committee and other ABC approved body manufacturers of the test day and time at least 60 days prior to the wind tunnel test via electronic correspondence and or certified mail.

• The chassis must have the ability to receive both the target ABC body and the new proposed ABC body. Once the chassis is installed in the test section, it must not be removed until the test is complete. This must be a test of body comparisons only, therefore, changing the target body and the proposed new body must occur inside the wind tunnel with the chassis installed in the tunnel. Both bodies must have sufficient mounting braces to prevent deflection and maintain their original shape at wind tunnel speed. The body mounts for the proposed new body must not interfere with the mounts for the target body.

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• Both bodies must be installed using enough templates to ensure shape control on every part of the body. The body must fit the templates with no tolerance to achieve accurate results. These templates must be provided by the company submitting the new proposed body. The templates required for the test and approval must in the following locations:

1. A front nose side-to-side template at the bottom of the nose *(photo 1 on page 47)*.

2. Nose/hood template from the base of the windshield to the bottom of the nose at the body centerline *(photo 2 on page 47)*.

3. Left and right fender/nose templates that start at the base of the windshield "A" post, follow the hood/fender line and extend to the bottom of the front nose. A specific dimension from the centerline of the nose to the correct position of each template must be provided *(photo 3A & photo 3B on page 47)*.

4. A centerline template that starts at the base of the windshield and wraps around the top of the rear bumper cover on the centerline of the body *(photo 4A & photo 4B on page 47)*.

5. A side-to-side template at the front of the windshield at a 90-degree angle to the roof that extends down to the top of the door and continues down the side of each door 10" *(photo 5A, photo 5B & photo 5C on pages 47 & 48)*.

6. A side-to-side template at the rear of the roof at a 90-degree angle to the roof that extends down to the top of the rear quarter panels and extends down the side of the quarter panels to the top of the rear wheel opening *(photo 6 on page 48)*.

7. A side-side template halfway down the rear window at a 90-degree angle to the rear window that extends around the "C" posts and down the top of the rear quarter panels and ends at the wheel openings *(photo 7 on page 48)*.

8. A side-to-side template at the leading edge of the deck lid between the rear window and rear bumper cover that wraps around the quarter panels and extends down the sides to the bottom of the quarter panels *(photo 8A, photo 8B and photo 8C on page 48)*.

• All air openings must be closed including grill screen, brake duct openings, cowl intake, etc.

• The new proposed body must be tested using 6 ½" tall maximum height by 60" wide spoiler mounted at 70 degrees. Final width required to equalize the proposed body with the target body will be determined by the wind tunnel test.

The ABC Committee members present at the test reserve the right to add additional templates or any other inspection method necessary to insure shape retention and accuracy of the test. The submitting manufacturer is responsible for the installation and removal of their body panels in the tunnel.

TEST SEQUENCE

The target ABC body is tested first to establish the baseline. Afterwards, the target body is then removed and the new proposed ABC body installed. The test process sequence is as follows:

• Install submission chassis with target body in the wind tunnel and set inspection height.

• Shake down run.

• Reset inspection heights.

• Warm up. 10-12 minutes.

• Conduct two test runs and average data from both.

• Remove target body, install new proposed ABC body and set inspection heights.

• Shake down run and re-check heights.

• Warm up. 10-12 minutes.

• Conduct two test runs and average data from both.


PHOTO 1


PHOTO 2


PHOTO 3A


PHOTO 3B


PHOTO 4A

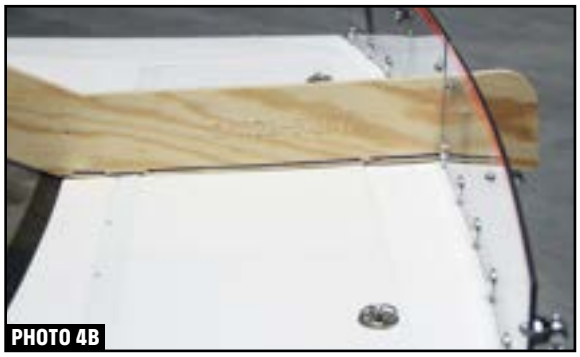
PHOTO 4B


PHOTO 5A


PHOTO 5B

PHOTO 5C

PHOTO 6

PHOTO 7

PHOTO 8A

PHOTO 8B

PHOTO 8C

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ABC BODY APPROVAL TEST PROCESS

WIND TUNNEL MAP AND SPECS

• The ride height map must be the same for both bodies.

• Bodies must be installed so that the ride height maps are measured at the same location.

• The wind tunnel speed must be 100 mph.

• Use 24.111 sq. ft. for frontal area for all tests.

• Ride Height Map:

Point	Yaw	Front Valence Gap (in)	Rear Spoiler Height (in)
1	0	1.00	42 7/16
2	0	0.25	41 11/16
3	-4	0.25	41 11/16
4	-4	0.25	42 3/16
5	-4	0.25	42 1/16

The following coefficients must be tested:

• Drag, CD

• Total downforce, CL

• Front downforce, CLF

• Rear Downforce, CLR

• Side Force, CS

All average coefficients must not vary more than 1 ½% from body to body.

After all requirements have been met and the wind tunnel testing proves that the submitted body is aerodynamically close enough to be considered equal, the ABC Program Committee will vote to approve the body for competition.

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