

# Baja SAE® Carolina

## Welcome to the 2025 Baja SAE® Carolina Competition

The SAE® Carolina Section is proud to welcome you to the 2025 Baja SAE® Carolina Competition! We're excited to host you here in South Carolina, the birthplace of Baja SAE®.

The very first event (then called *Mini Baja East*) was held in 1976 at the University of South Carolina. That inaugural competition marked the beginning of what would become SAE International®'s Collegiate Design Series. A generation later, the University of South Carolina also hosted the 25<sup>th</sup> anniversary celebration of Baja SAE®.

This year is especially meaningful: together, we're kicking off the 50th anniversary year of Baja SAE® right here where it all began. Over five decades, Baja SAE® has grown into one of the largest and most prestigious engineering competitions in the world; an event that continues to inspire innovation, teamwork, and real-world learning.

We are honored to carry on this rich tradition with all of you. Inside this event guide, you'll find everything you need to make your experience smooth and memorable, including site access, schedules, and resources.



## Fun Facts about the Baja SAE® Competition

- Where it started: The first Baja SAE® was held in 1976 at the University of South Carolina (USC), organized by mechanical engineering professor John F. Stephens. His vision was to create a hands-on project that combined classroom theory with real-world challenges, such as manufacturability, cost, and time constraints.
- **Humble beginnings:** That first event hosted just 10 universities and 90 students, including teams from USC, Arizona State, and NC State. Today, Baja SAE® has grown to three competitions each year across the U.S., under the leadership of SAE International®.
- **Milestone moments:** The 25th anniversary was also celebrated at USC, making this year's return to South Carolina especially fitting as we begin the 50th anniversary celebration.

## Fun Facts about the state of South Carolina

- **State symbol:** The palmetto is South Carolina's state tree—even though it isn't technically a tree (its trunk is fibrous, not solid wood).
- **Tea & tradition:** The Palmetto State is home to America's first commercial tea farm and the birthplace of sweet tea, often called our "hospitality beverage." (But the official state drink is actually milk!)
- **Golf capital:** South Carolina boasts some of the world's best golf courses—and Myrtle Beach holds the title of "Mini Golf Capital of the World," with over 50 courses.
- **Natural wonders:** The Angel Oak Tree on Johns Island is believed to be the oldest living thing east of Mississippi.
- Industry power: Spartanburg is home to the largest BMW plant in the world, and South Carolina is also a top global exporter of tires, thanks to companies like Michelin, Bridgestone, and Continental.
- Peach state rivalry: South Carolina harvests more peaches than Georgia!
- Motorsports connection: Just north of the border, North Carolina is the Stock Car Racing Capital
  of the World. On your way home, don't miss the NASCAR Hall of Fame or a visit to a NASCAR
  team.
- **Team spirit:** The NFL Carolina Panthers' logo is shaped to outline both North and South Carolina, since both states share the team

## **Event Location**

#### **NXT LVL 101**

14499 SC-101 Gray Court, SC 299645 Phone: (850) 251-9698

Website: NXT LVL 101 Training Facility

Directions: Google Maps

# **Event Schedule**

Day 0 (Wednesday): Pre-Paddock Parking

Day 1 (Thursday): Registration, Engine Check, Tech Inspection Day 2 (Friday): Static Events (Design, Cost, Business Presentation)

Day 3 (Saturday): Dynamic Events (Acceleration, Maneuverability, Hill Climb, Suspension & Traction)

Day 4 (Sunday): Endurance Race & Awards

DAY 0 Wednesday	DATE: October 1. 2025	
START & END TIME	ACTIVITY	LOCATION
4:00 PM-6:00PM	PRE-PADDOCK PARKING	_
DAY 1 Thursday	DATE: October 2, 2025	
START & END TIME	ACTIVITY	LOCATION
6:30 AM	SITE OPENS FOR VOLUNTEERS/SPONSORS	
7:00 AM	VOLUNTEER REGISTRATION	Sponsors Tent
7:30 AM	SITE OPENS FOR TEAMS	
8:00 AM – 5:00 PM	TEAM REGISTRATION	Sponsors Tent
9:00 AM – 5:00 PM	ENGINE CHECK – SPONSORED BY REHLKO	
11:30 AM – 1:00 PM	LUNCH BREAK	
1:00 PM – 5:00 PM	MEET & GREET WITH SPONSORS	Sponsors Tent
1:00 PM – 4:30 PM	BUSINESS PRESENTATION FINALS	Presentation Tent
2:30 PM – 4:30 PM	TECH INSPECTION – SPONSORED BY HONDA	Tech Inspection Tent
5:00 PM – 5:30 PM	COMPETITOR MEETING - MANDATORY	Presentation Tent
5:30 PM - 6:30 PM	EMPOWERING WOMEN IN MOBILITY PANEL	Presentation Tent
7:30 PM	SITE CLOSES	
DAY 2 Friday	DATE: October 3, 2025	
START & END TIME	ACTIVITY	LOCATION
START & END TIME 6:30 AM	ACTIVITY SITE OPENS – VOLUNTEERS/SPONSORS	LOCATION
START & END TIME 6:30 AM 7:30 AM	ACTIVITY SITE OPENS – VOLUNTEERS/SPONSORS SITE OPENS – TEAMS	LOCATION
START & END TIME 6:30 AM 7:30 AM 8:00 AM – 5:00 PM	ACTIVITY SITE OPENS – VOLUNTEERS/SPONSORS SITE OPENS – TEAMS SAE® REGISTRATION	LOCATION
START & END TIME 6:30 AM 7:30 AM 8:00 AM – 5:00 PM 8:00 AM – 5:00 PM	ACTIVITY SITE OPENS – VOLUNTEERS/SPONSORS SITE OPENS – TEAMS SAE® REGISTRATION ENGINE CHECK – SPONSORED BY REHLKO	
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM	ACTIVITY SITE OPENS – VOLUNTEERS/SPONSORS SITE OPENS – TEAMS SAE® REGISTRATION ENGINE CHECK – SPONSORED BY REHLKO DESIGN JUDGING – SPONSORED BY POALRIS	Presentation Tent
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM 9:00 AM - 4:00 PM	ACTIVITY SITE OPENS – VOLUNTEERS/SPONSORS SITE OPENS – TEAMS SAE® REGISTRATION ENGINE CHECK – SPONSORED BY REHLKO DESIGN JUDGING – SPONSORED BY POALRIS COST EVALUATION	Presentation Tent Tech Inspection Tent
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM 9:00 AM - 4:00 PM 9:00 AM - 5:00 PM	ACTIVITY SITE OPENS – VOLUNTEERS/SPONSORS SITE OPENS – TEAMS SAE® REGISTRATION ENGINE CHECK – SPONSORED BY REHLKO DESIGN JUDGING – SPONSORED BY POALRIS COST EVALUATION TECH INSPECTION – SPONSORED BY HONDA	Presentation Tent
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM 9:00 AM - 4:00 PM 9:00 AM - 5:00 PM 9:00 AM - 5:00 PM	ACTIVITY SITE OPENS – VOLUNTEERS/SPONSORS SITE OPENS – TEAMS SAE® REGISTRATION ENGINE CHECK – SPONSORED BY REHLKO DESIGN JUDGING – SPONSORED BY POALRIS COST EVALUATION TECH INSPECTION – SPONSORED BY HONDA 4WD CHECK - SPONSORED BY POLARIS	Presentation Tent Tech Inspection Tent Tech Inspection Tent
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM 9:00 AM - 4:00 PM 9:00 AM - 5:00 PM 9:00 AM - 5:00 PM 10:00 AM - 5:00 PM	ACTIVITY  SITE OPENS – VOLUNTEERS/SPONSORS SITE OPENS – TEAMS SAE® REGISTRATION ENGINE CHECK – SPONSORED BY REHLKO DESIGN JUDGING – SPONSORED BY POALRIS COST EVALUATION TECH INSPECTION – SPONSORED BY HONDA 4WD CHECK - SPONSORED BY POLARIS MEET & GREET WITH SPONSORS	Presentation Tent Tech Inspection Tent
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM 9:00 AM - 4:00 PM 9:00 AM - 5:00 PM 9:00 AM - 5:00 PM 10:00 AM - 5:00 PM 11:30 AM - 12:30 PM	ACTIVITY  SITE OPENS – VOLUNTEERS/SPONSORS  SITE OPENS – TEAMS  SAE® REGISTRATION  ENGINE CHECK – SPONSORED BY REHLKO  DESIGN JUDGING – SPONSORED BY POALRIS  COST EVALUATION  TECH INSPECTION – SPONSORED BY HONDA  4WD CHECK - SPONSORED BY POLARIS  MEET & GREET WITH SPONSORS  LUNCH	Presentation Tent Tech Inspection Tent Tech Inspection Tent
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM 9:00 AM - 4:00 PM 9:00 AM - 5:00 PM 9:00 AM - 5:00 PM 10:00 AM - 5:00 PM 11:30 AM - 12:30 PM 1:00 PM - 5:30 PM	ACTIVITY  SITE OPENS – VOLUNTEERS/SPONSORS SITE OPENS – TEAMS SAE® REGISTRATION ENGINE CHECK – SPONSORED BY REHLKO DESIGN JUDGING – SPONSORED BY POALRIS COST EVALUATION TECH INSPECTION – SPONSORED BY HONDA 4WD CHECK - SPONSORED BY POLARIS MEET & GREET WITH SPONSORS LUNCH DYNAMIC BRAKE CHECK	Presentation Tent Tech Inspection Tent Tech Inspection Tent
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM 9:00 AM - 4:00 PM 9:00 AM - 5:00 PM 10:00 AM - 5:00 PM 11:30 AM - 12:30 PM 1:00 PM - 5:30 PM 2:00 PM - 5:00 PM	ACTIVITY  SITE OPENS – VOLUNTEERS/SPONSORS  SITE OPENS – TEAMS  SAE® REGISTRATION  ENGINE CHECK – SPONSORED BY REHLKO  DESIGN JUDGING – SPONSORED BY POALRIS  COST EVALUATION  TECH INSPECTION – SPONSORED BY HONDA  4WD CHECK - SPONSORED BY POLARIS  MEET & GREET WITH SPONSORS  LUNCH  DYNAMIC BRAKE CHECK  PRACTICE TRACK OPEN	Presentation Tent Tech Inspection Tent Tech Inspection Tent
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM 9:00 AM - 4:00 PM 9:00 AM - 5:00 PM 9:00 AM - 5:00 PM 10:00 AM - 5:00 PM 11:30 AM - 12:30 PM 1:00 PM - 5:30 PM 2:00 PM - 5:00 PM 5:00 PM	ACTIVITY  SITE OPENS – VOLUNTEERS/SPONSORS  SITE OPENS – TEAMS  SAE® REGISTRATION  ENGINE CHECK – SPONSORED BY REHLKO  DESIGN JUDGING – SPONSORED BY POALRIS  COST EVALUATION  TECH INSPECTION – SPONSORED BY HONDA  4WD CHECK - SPONSORED BY POLARIS  MEET & GREET WITH SPONSORS  LUNCH  DYNAMIC BRAKE CHECK  PRACTICE TRACK OPEN  DESIGN FINALS TEAMS ANNOUNCED	Presentation Tent Tech Inspection Tent Tech Inspection Tent Sponsors Tent
START & END TIME 6:30 AM 7:30 AM 8:00 AM - 5:00 PM 8:00 AM - 5:00 PM 8:00 AM - 4:30 PM 9:00 AM - 4:00 PM 9:00 AM - 5:00 PM 10:00 AM - 5:00 PM 11:30 AM - 12:30 PM 1:00 PM - 5:30 PM 2:00 PM - 5:00 PM	ACTIVITY  SITE OPENS – VOLUNTEERS/SPONSORS  SITE OPENS – TEAMS  SAE® REGISTRATION  ENGINE CHECK – SPONSORED BY REHLKO  DESIGN JUDGING – SPONSORED BY POALRIS  COST EVALUATION  TECH INSPECTION – SPONSORED BY HONDA  4WD CHECK - SPONSORED BY POLARIS  MEET & GREET WITH SPONSORS  LUNCH  DYNAMIC BRAKE CHECK  PRACTICE TRACK OPEN	Presentation Tent Tech Inspection Tent Tech Inspection Tent

DAY 3 Saturday	DATE: October 4, 2025	
START & END TIME	ACTIVITY	LOCATION
6:30 AM	SITE OPENS – VOLUNTEERS/SPONSORS	
7:00 AM – 8:00 AM	VOLUNTEER BREAKFAST	
7:00 AM	SITE OPENS – TEAMS	
7:30 AM – 8:00 AM	MANEUVERABILITY & S&T TRACK WALK	
8:00 AM – 8:30 AM	DRIVERS & TEAM CAPTAIN MEETING – MANDATORY	<b>Presentation Tent</b>
8:45 AM – 2:00 PM	PRACTICE TRACK OPEN	
8:30 AM – 4:00 PM	ACCELERATION - SPONSORED BY CUMMINS	
8:30 AM – 4:30 PM	HILL CLIMB - SPONSORED BY GENE HAAS FOUNDAT	TION
9:00 AM – 4:30 PM	MANEUVERABILITY – SPONSORED BY MAGNA	
9:30 AM – 4:30 PM	SUSPENSION & TRACTION – SPONSORED BY OSHKOSH	
8:30 AM – 5:15 PM	DYNAMIC BRAKE CHECK	
9:00 AM – 12:00 PM	4WD CHECK – APPOINTMENT ONLY	
9:00 AM – 4:45 PM	TECH INSPECTION – APPOINTMENT ONLY	Tech Inspection Tent
10:00 AM – 4:00 PM	MEET & GREET WITH SPONSORS	Sponsors Tent
11:30 AM – 1:00 PM	LUNCH	
12:30 PM – 4:00 PM	DESIGN FEEDBACK	
5:00 PM – 5:45 PM	ENDURANCE DRIVERS MEETING – MANDATORY	<b>Presentation Tent</b>
6:00 PM – 7:00 PM	ENDURANCE TRACK WALK	
7:30 PM	SITE CLOSES	
DAY 4 Sunday	DATE: October 5, 2025	
START & END TIME	ACTIVITY	LOCATION
6:30 AM	SITE OPENS – VOLUNTEERS/SPONSORS	
7:30 AM	SITE OPENS – TEAMS	
7:30 AM – 8:30 AM	BREAKFAST	
8:00 AM – 9:00 AM	FUEL PITS AREA OPEN	
8:00 AM – 8:30 AM	RECOVERY CREW/ENDURANCE VOLUNTEER MEETIN	NG

ENDURANCE EVENT - SPONSORED BY HONDA

**Presentation Tent** 

Inspection Tent

and Tech

**CAR GRIDDING** 

**BANQUET** 

**AWARDS** 

SITE CLOSES

GRIDDING CLOSED

IMPOUND & INSPECTION

8:15 AM - 9:00 AM

9:30 AM - 1:30 PM 1:30 PM - 2:00 PM

2:00 PM - 3:00 PM

3:00 PM - 4:00 PM

9:00 AM

6:00 PM



# Site Access, Arrival, and Traffic Instruction

**Arrival & Traffic Instructions:** For everyone's safety, the South Carolina Highway Patrol requires all teams to use the designated route below—even if your GPS suggests something else. Officers will be at key intersections to guide traffic, and teams using this route will get priority.

#### **Directions to Facility:**

- Take I-385 Exit 16 (SC-101).
- Follow **SC-101** for about **1.7 miles** to Gray Court.
- At the traffic light, go **straight across** and over the railroad tracks.
- Turn right onto W. Main St.
- Drive 0.4 miles to the 4-way stop and turn left back onto SC-101.
- Stay on SC-101 for 5.4 miles, then turn left into 14499 SC-101 (the facility entrance).

#### **Important:**

- **Do NOT block** the entrance before opening times
- Do NOT park outside the facility and walk in. This can lead to team disqualification
- Law enforcement will ticket vehicles parked on the roadside or "cruising" the area

#### **Parking & Paddock Rules:**

- Follow all signs and volunteer directions when unloading trailers
- Only competition vehicles (after tech inspection) and official vehicles may drive in the paddock
- No exceptions for "just dropping something off"

#### Pre-Paddock Parking (Wednesday ONLY):

- Available Wednesday, October 30, 4:00 6:00 PM local time
- **Do NOT** arrive earlier as you will be turned away. No roadside waiting allowed.
- Once your trailer is parked, your team must leave by 6:00 PM local time (overnight security will be provided).
- No one is allowed on-stie after 6:00 PM local time

#### **Trailer & Tow Vehicle Rules:**

- If your trailer and tow vehicle don't fit together, the tow vehicle must park in the General Parking area or another designated area
- Bring wheel chocks with you (keep them in the tow vehicle) for safe parking
- If you need to remove your trailer:
  - 1. This can only be done **between 6:00 and 6:30 PM local time**, and you must arrange it with **SAE®** staff in advance
  - 2. The trailer must return to the same paddock spot the next morning at 7:00 AM local time
  - 3. Once your vehicle has passed **tech inspection**, neither the trailer nor the vehicle may be removed

## **Facility Rules**

- No animals are allowed on site
- No alcohol, drugs, tobacco, or vaping anywhere at the facility
- Closed-toe shoes required no sandals, flip-flops, or similar
- Stay inside event boundaries; do not enter adjacent property
- No climbing on fences, hay bales, dirt piles, or entering ponds
- Keep paddock areas clean. Dispose of trash properly and daily
- No driving in the paddock except by certified competition vehicles or official organizer vehicles

## Food & Amenities

- Food trucks will be on site daily for food purchases at the competition. These are independent operators, and they set their own menus and costs
- Coffee truck will be on site each day. Independent operator
- Grilling area is available outside of the paddock area

## Weather

For the first week of October in Gray Court, South Carolina, expect mild and pleasant autumn weather. Average high temperatures are typically in the upper 60s to high 70s, with average lows falling to the upper 40s to mid-50s overnight. Rainfall is generally moderate for the month, so be prepared for the possibility of some showers. Be sure to check your favorite weather app as the event approaches. Late summer heat waves can sneak up on us. Stay safe by drinking plenty of water throughout the day.

## Safety & Conduct

All participants are expected to act with professionalism, show respect to others, and proudly represent their universities and/or companies. Misconduct, unsafe actions, or breaking event rules may result in penalties, disqualification, or removal from the site.

## Social Media

Share your Baja SAE® Carolina experience! Post your favorite highlights and see what other teams are up to with #BajaSAECarolina.

#### Stay connected:

- Follow @sae\_universityprograms for Baja SAE® updates and highlights
- Follow @saeintl for the latest from SAE International®

## **Vendors & Resources List**

Below is a curated list of local fabrication, hardware, and auto shops that may be useful during the 50th Anniversary Baja SAE® competition. This list is provided for your convenience only and does not represent an endorsement or recommendation. Please confirm addresses and hours before visiting, as they may change. The organizing committee and SAE® do not warrant any information, products, or services from these businesses.

#### **Hardware / Tool Stores**

Store Name	Address
Tractor Supply – Mauldin	206 New Neely Ferry Rd, Mauldin, SC
	29662 (10% off with Baja SAE® mention)
Home Depot – Simpsonville	669 Fairview Rd, Simpsonville, SC
	29680
Lowe's Greenville	1131 Woodruff Rd, Greenville, SC
	29607
Harbor Freight – Greenville	5 K-Mart Plaza Greenville, SC 29605
Ace Hardware – Clinton	107 Jacobs Hwy, Clinton, SC 29325

#### **Machine Shops & Fabrication**

•	
Shop Name	Address
JAB Engines	2955 Cowens Bridge Rd, Gray Court, SC 29645
JW Machine & Fab	819 Hillside Church Rd, Fountain Inn, SC 29644
KC's Small Engine Repair	996 Trinity Church Rd, Laurens, SC 29360
Design Quest Machining & Fabrication	10601 SC-14, Gray Court, SC 29645
Johnson Automotive Machine	5307 SC-14, Gray Court, SC 29645

#### **Auto Parts Stores**

Store Name	Address
NAPA Auto Parts	902 South St, Simpsonville, SC 29681
NAPA Auto Parts	1103 N Main St Suite F, Fountain Inn,
	SC 29644
NAPA Auto Parts	104 Hillcrest Dr, Laurens, SC 29360
O'Reilly Auto Parts	216 Hillcrest Dr, Laurens, SC 29360
O'Reilly Auto Parts	321 S Main St, Fountain Inn, SC 29644
AutoZone Auto Parts	300 Hillcrest Dr, Laurens, SC 29360
AutoZone Auto Parts	426 SE Main St, Simpsonville, SC 29681
Advance Auto Parts	912 E Main St, Laurens, SC 29360
Advance Auto Parts	600 SE Main St, Simpsonville, SC 29681

# THANK YOU to our Event Sponsors

Event Partner









Platinum Sponsor









Gold Sponsor











Silver Sponsor















Bronze

























## In Closing

We're so happy you are going to join us for the 2025 Baja SAE® Carolina Competition! Our team is here to help!! If you need assistance or have questions, stop by the **Guest Services Table** in the sponsor tent. You'll also find 2025 Baja SAE® Carolina 50<sup>th</sup> anniversary t-shirts for sale there, but get them early! Once it's gone, it's gone!

For medical needs, head to the **bright red canopy** where our EMT team will be ready to assist.

This event would not be possible without the incredible support of our **sponsors**, **volunteers**, **and SAE® staff**. Please take a moment to thank the sponsors at their tables as they make opportunities like this possible.

Most importantly, enjoy the competition! Celebrate 50 years of Baja SAE® with teamwork, innovation, and a true spirit of adventure. Experience a little Southern hospitality while you're here, and we hope you'll come back to visit our region again.

From all of us at the SAE® Carolina Section, it is an honor to host this milestone event.

Have fun, race safe, and Go Baja!

Here's to 50 years of innovation, teamwork, and competition; let's make this one unforgettable.

