

REDSHIFT RACING INDIA- BAJA SAE INDORE, 2023 COMPETITION OVERVIEW- ALL INDIA RANK 2

Greetings from Team RedShift Racing India!

The entire team is ecstatic to inform everyone, the results of the competition- **BAJA SAE INDIA** held at NATRAX Pithampur, Indore in February 2023.



The team after Valedictory Ceremony

For the first time in its racing history, **amongst 195 teams** that participated nationwide, RedShift Racing India's **Rudraansh- 4x4 (All Wheel Drive) ATV** with a major overhaul in its transmission system has secured an **OVERALL ALL INDIA RANK-2**, the best ever finish in BAJA SAE India.



The Vehicle on the eve of Endurance Race Day



Rudraansh on Endurance Race Morning

The team has also secured numerous achievements as follows: (195 teams):

- AIR 2:** 4 Hour Endurance Race
- AIR 4:** Suspension and Traction
- AIR 4:** Overall Static Events
- AIR 4:** Design Evaluation
- AIR 5:** Virtual Dynamics
- AIR 6:** Manoeuvrability
- AIR 6:** Overall Dynamic Events
- AIR 7:** Validation Event
- AIR 8:** CAE Evaluation
- AIR 8:** Cost Evaluation



The vehicle after the 4-hour Endurance Race

This season has been the **most successful season** of RedShift Racing India in its history at the national level and we aim to achieve greater heights this season by participating at **BAJA SAE Oregon, USA in May 2023**, and look forward to everyone's support!



The 10 ft drop at Suspension and Traction Event

HEREWITH FOLLOWS THE OVERALL COMPETITION SUMMARY:

15th Feb 2023: Day 1 – Technical Inspection and CAE Finals

The vehicle was unloaded early in the morning in the allotted pit. The strategy was clear, we had to finish our technical inspection on the first day itself, which would allow us to assemble the vehicle according to requirements of various dynamic events. After a few final changes, we were in queue for the Technical Inspection (T.I). We managed to fulfil the majority of T.I checklist on the first day, with minor changes left to do on the second day. The CAE Finals presentation was also finished simultaneously.



The team at Technical Inspection

16th Feb 2023: Day 2 – Technical Inspection, Brake Test and Design Finals

The day again started early and we cleared the Technical Inspection by the afternoon. We were only the fourth team to do so. Our next target was to clear the brake test. Having attempted the T.I on first day, we had qualified for multiple brake test attempts which came in handy as we were successful in clearing the brake test by the evening. Finally, our vehicle was deemed fit to drive and we moved onto the dynamic events. We also concluded the Design Finals on this day along with the Technical Evaluation.



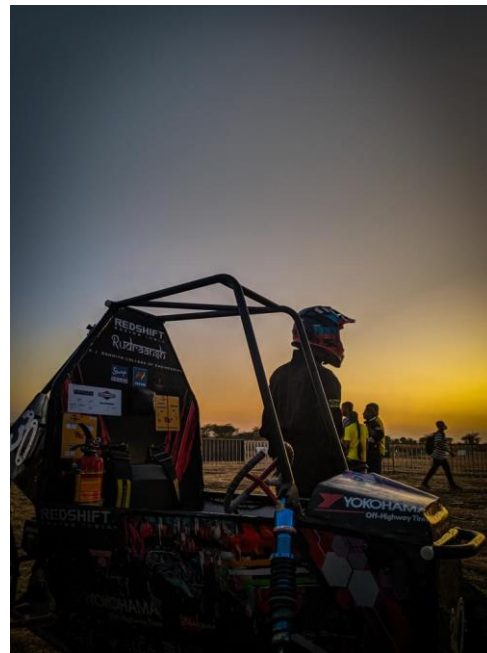
The team on clearing brake test

17th Feb 2023: Day 3 – Dynamic events and Cost Finals

We had to complete four dynamic events on one single day. Acceleration, Maneuverability, Suspension and Traction and Sled Pull. We did a prompt assembly the previous evening and the day started with the completion of the acceleration event. We then proceeded for the first attempt of Maneuverability event which sailed smoothly. Then the dynamic events had to be halted for Cost Finals presentation. Once that was wrapped, we took our second attempt in the Maneuverability event bettering our previous performance. We were also the first team to attempt the Suspension and Traction event and our second attempt was the then fastest lap overall. Unfortunately, we could not clear the last dynamic event that is the Sled pull event due to lack of time.



Suspension and Traction Event



After completing all dynamics events

18th Feb 2023: Day 4 – Four Hour Endurance Race and Valedictory Ceremony.

The final day dawned with arguably our biggest test, the four-hour long endurance race. We started at the 6th position on the grid of a rather arduous track that spanned across 3 Km. Going through bumps, drops and mud pools we sat comfortably in the top three positions for the near entirety of the race. Having the fuel tank filled on the previous evening, we ensured that our driver was aware of the depleting fuel and to halt for a fuel stop accordingly. Our

efficient four-minute pit stop where we checked through the suspension assemblies was crucial for our eventual podium finish. All in all, the endurance performance was so tremendous that various judges, volunteers and opponent team members visited the pit to congratulate the driver. The engine check for the top 10 teams followed the endurance race and lastly the valedictory ceremony was conducted.



Rudraansh in action in Endurance Race

More Images from the Competition:



Completing Manuverability Event



Design Finals Event



The team at Design Finals Event



The team at Cost Finals



The team in pits during the race



The team after Endurance Race

We would like to thank our Principal, Faculty Advisor - Dr. S.S. Bhusnoor and the entire engineering college staff for the continuous support to us.

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Regards,
RedShift Racing India
2022-23

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K. J. SOMAIYA COLLEGE OF ENGINEERING