



Collegiate Design Series News

Volume 3, Issue 3 December 2005

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Mini Baja TRANSPONDERS!!

As stated in the rules 25.2 Transponder Requirement, all vehicles must be equipped with at least one AMB MX Rechargeable transponder. See www.amb-it.com for more details.

The timing system is capable of recording two transponder identifications per vehicle; therefore, teams may, at their option mount a second transponder as a backup in case the primary is damaged, knocked off the car or loses power.

Transponders will be used as part of the primary timing system for all dynamic events run closed loop courses at competitions in the United States and Canada. The use of transponders at competitions outside the United States and Canada is the organizer's option. Check the individual event website prior to the competition.

It is each team's responsibility to have a functional, properly mounted and fully charged transponder of the specified type on their vehicle. Vehicles without a specified transponder will not be allowed to compete in any event for which a transponder is used for timing.

To purchase transponder directly, contact: Balton Aulls, AMB at 678-816-4000, ext 313. Balton is our contact and will assist all teams with the purchase of your transponder.

Competition Information

Clean Snowmobile Challenge: 9 registered teams
Houghton, MI (3/13 - 3/18)
Registration deadline: January 16, 2005

Mini Baja East: 45 registered teams
Auburn, AL (4/12 - 4/15)
Registration/Engine order deadline:
December 29, 2005

Aero Design East: 7 registered teams
Marietta, GA (4/21 - 4/23)
Registration deadline: December 29, 2005

Mini Baja West: 46 registered teams
Portland, OR (5/11 - 5/13)
Registration/Engine order deadline:
December 29, 2005

Formula SAE: 140 registered teams
Romeo, MI (5/17 - 5/21)
Event capped

Mini Baja Midwest: 140 registered teams
Milwaukee, WI (5/24 - 5/27)
Event capped

Aero Design West: 4 registered teams
Encino, CA (6/1 - 6/3)
Registration deadline: December 29, 2005

Supermileage: 11 registered teams
Marshall, MI (6/8 - 6/10)
Registration/Engine order deadline:
December 29, 2005

FSAE West: 70 registered teams
Fontana, CA (6/14 - 6/17)
Event capped

FORMULA SAE RULES – POSSIBLE RESTRICTOR LOCATION CHANGE

COMMENTS REQUESTED

As many of you know the Formula SAE Rules Committee is considering revising the rules governing the restrictor location. The proposed text of the change was released in the 2006 Formula SAE Rules and was reviewed at the competitions earlier this year.

The Committee will vote on this proposal in January and we want your input before making a decision. Please send us your comments or even just tell us whether you think the proposal is a good idea, a bad idea or irrelevant to your team.

Send your comments to Steve Daum by January 1, 2006 daum@sae.org

Here's the change notification from FSAE Rules Section 6:

In order to give teams more design options the Committee is considering a major revision of the air intake system rules. This change would permit the restrictor to be located upstream of the throttle.

Since a change to the restrictor sequence would be highly significant, before it is adopted the Rules Committee needs to fully understand all the potential ramifications and how it might, or might not, affect the teams. Therefore the Committee wants all teams, faculty advisors and other interested parties to have the opportunity to submit comments. Please submit your comments to Steve Daum at daum@sae.org no later than January 1st 2006.

3.5.4.3 Intake System Restrictor

In order to limit the power capability from the engine, a single circular restrictor must be placed in the intake system, upstream of the engine. All engine airflow must pass through the restrictor.

The maximum restrictor diameters are:

Gasoline fueled cars - 20.0 mm (0.7874 inch)

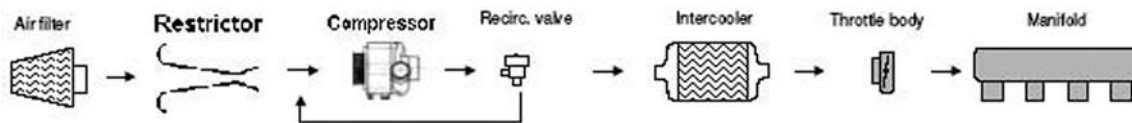
E-85Fueled cars – 19.0 mm (0.7480 inch)

The restrictor must be located to facilitate measurement during the inspection process. The circular restricting cross section may NOT be movable or flexible in any way, e.g. the restrictor may not be part of the movable portion of a barrel throttle body.

If more than one engine is used, the intake air for all engines must pass through the one restrictor.

3.5.4.4 Turbochargers & Superchargers

Turbochargers or superchargers are allowed if the competition team designs the application. Engines that have been designed for and originally come equipped with a turbocharger are not allowed to compete with the turbo installed. The restrictor must be placed upstream of the compressor, Engines equipped with an anti-surge valve must discharge all re-circulated air into the inlet of the compressor, downstream of the restrictor. Only ambient air may be used to cool an intercooler. Thus an allowable order of system components with a pressure relief valve would be as follows:



3.5.4.5 Restrictor Compliance Procedure

This test ensures that all airflow entering the engine passes through the restrictor. Restrictor compliance will be completed immediately preceding sound level testing. Teams will be required to unplug any intake pressure sensors from an ECU and/or data logger during this test. Any pressure relief valves in the system must be connected and in normal operating condition during the test. With the engine idling, a plug will be placed over the restrictor inlet. This test must stall the engine immediately. Any engines that continue to idle will be required to seal any leaks that exist.

FSAE

2006 Rules Interpretations & Clarifications

The Rules Committee has now opened a section on the official SAE website giving "Frequently Asked Questions" and their answers. It can be found at:

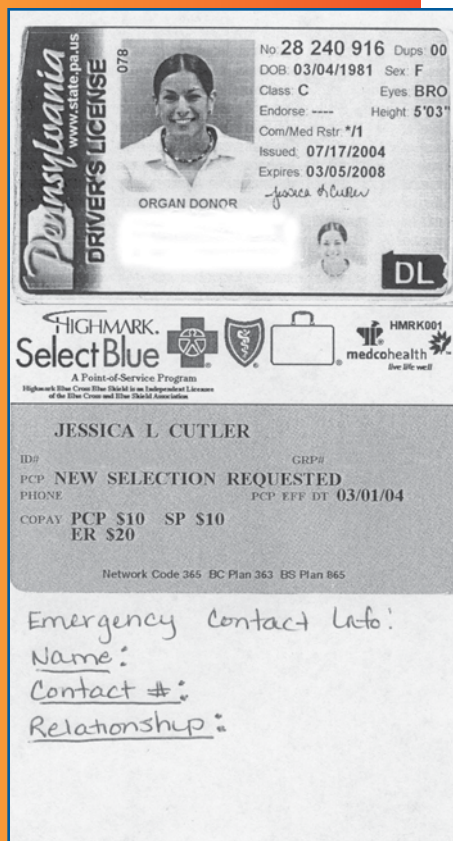
<http://www.formulasae.org/forums/formula/dispatch.cgi/rules/folderFrame/100066/0/def/4874964>

At present, there are over a dozen clarifications and interpretations of the 2006 FSAE Rules. The following are currently included, and more will be added at intervals.

- Guide for Structural Equivalency Requirements
- 3.3.3 Tubing Wall Thickness-Alloy Steel
- 3.3.6 Front Impact Protection-Driver's Foot Protection
- 3.3.6.2 Front Bulkhead Support
- 3.3.6.4 Impact Attenuator Data Submission
- 3.5.3.8.C Intake Manifold Attachment
- 3.5.3.9 Air Intake System Side Impact System
- 3.5.4 Throttle Body for Traction Control
- 3.5.4.2 Electronic Throttle Control
- 3.5.4.2 Throttle Kickers/Blippers
- 3.5.4.3 Velocity Gates
- 3.7.1.1 Aero devices-Splitters
- 3.7.2.2 Wheel Nuts

So that teams do not come to the events only to find that they have significant corrections to make to their cars, we strongly suggest that they check in on this location on a regular basis.

Michael Royce,
Chairman,
FSAE Rules Committee.



Reminders:

- All team members (for all CDS competitions) must be paid SAE members
All team members must have medical/health insurance
Drivers must have a valid (up to date) driver's license
- Cost and design reports can be uploaded by clicking "Update Team Info" then selecting your team, the next screen will have two options to select "add a new team member" (please remember to attach team members using this link!) and "upload document" (to upload reports)
- Engines will only be shipped within the United States and Canada. The deadline for engine orders is December 29, engines will be shipped after the new year.
- Documents needed for registration:
Photocopies of all team member's photo ID and health insurance
Emergency contact information (please include this on the photocopy)
Liability waiver signed by all team members and faculty advisors
Membership number

Competition Public Forums:

Forums are available for the following Collegiate Design Series competitions:

Aero Design - http://forums.sae.org/access/dispatch.cgi/aerodesign_pf

Clean Snowmobile
http://forums.sae.org/access/dispatch.cgi/CLEAN_SNOWMOBILE

Formula SAE - <http://www.formulasae.org/forums/formula/dispatch.cgi>

Mini Baja - http://forums.sae.org/access/dispatch.cgi/minibaja_pf

Supermileage - http://forums.sae.org/access/dispatch.cgi/supermileage_pf

Organizers will post official announcements. Students and Faculty Advisors are encouraged to post questions, comments, and general information about the events.

Don't forget to:

- Renew your membership
- Update your contact information in MySAE
- Read the newsletter
- Utilize the SAE competition forums