

FORMULA STUDENT SCRUTINEERING TECH INSPECTION

PART 1 EXTERIOR

by

**Suzanne and Michael Royce
Albion Associates, LLC
with material from
Jeff Lovell**

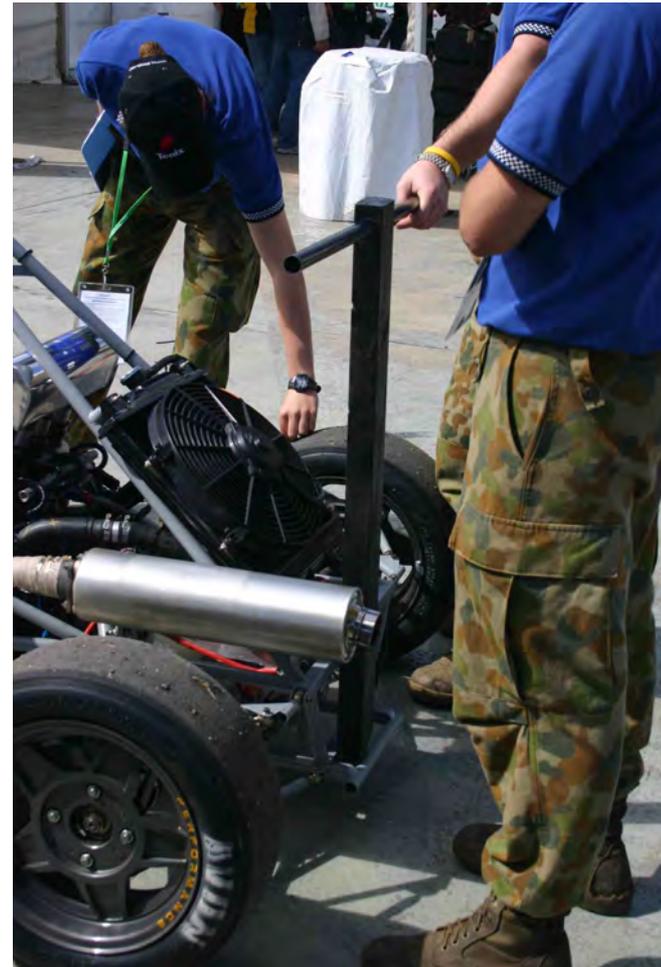
D12.2 Push Bar

Push Bar

Each car must have a removable device that attaches to the rear of the car that allows two (2) people, standing erect behind the vehicle, to push the car around the event site.

This device must also be capable of decelerating, i.e. slowing and stopping the forward motion of the vehicle and pulling it rearwards.

It must be presented with the car at Technical Inspection.



T6.6 Jacking Point

Jacking Point

- A jacking point, which is capable of supporting the car's weight and of engaging the organizers' Quick jacks, must be provided at the very rear of the car.
- The jacking point is required to be:
 - a. Visible to a person standing 1 meter (3 feet) behind the car.
 - b. Painted orange.
 - c. Oriented horizontally and perpendicular to the centerline of the car
 - d. Made from round, 25 – 29 mm (1 – 1 1/8 inch) O.D. aluminum or steel tube
 - e. A minimum of 300 mm (12 inches) long
 - f. Exposed around the lower 180 degrees of its circumference over a minimum length of 280 mm (11 in)
 - g. The height of the tube is required to be such that:
 - There is a minimum of 75 mm (3 in) clearance from the bottom of the tube to the ground measured at tech inspection.
 - With the bottom of the tube 200 mm (7.9 in) above ground, the wheels do not touch the ground when they are in full rebound.
 - h. Access from the rear of the tube must be unobstructed for at least 300mm of its length.

Presenter's Note: This last note is because of the new, long (12 ins behind rear tires) undertrays.

T13.1 Car Numbers

Car numbers must appear on the vehicle as follows:

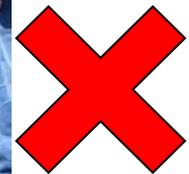
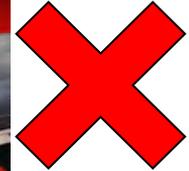
Locations: In three (3) locations: the **front and both sides**;

- a. **Height: At least 15.24 cm (6 inch) high;**
- b. Font: **Block numbers** (i.e. sans-serif characters). **Italic, outline, serif, shadow, or cursive numbers are prohibited.**
- c. **Stroke width and Spacing** between Numbers: At least 2.0 cm (**3/4 inch**).
- d. Color: Either **white numbers on a black background or black numbers on a white background**. No other color combinations will be approved. (Except if required by the event supps for electrics, etc.)
- e. Background shape: The number background must be one of the following: **round, oval, square or rectangular**. There must be at least 2.5 cm (1 inch) between the edge of the numbers and the edge of the background.
- f. Clear: The numbers **must not be obscured by parts of the car**, e.g. wheels, side pods, exhaust system, etc.

Car Numbers - OK



Car Numbers - Not OK



T13.2 School Name

Each car must clearly display the school name (or initials – if unique and generally recognized) **in Roman characters at least 5.08cm, (2 inch) high on both sides of the vehicle.**

The characters must be placed on a high contrast background in an easily visible location.

The school name may also appear in non-roman characters, but the roman character version must be uppermost on the sides.



T13.3 Formula Student Logo/Decal(s)



The Formula Student logo must be displayed on the front and/or both sides of the vehicle in a prominent location.

T13.4.Tech Sticker Space & Location



OK



Not OK

Technical inspection stickers will be placed on the upper nose of the vehicle. Cars must have a clear and unobstructed area at least 25.4cm wide x 20.3cm high (**10" x 8"**) on the upper front surface of the nose along the vehicle centerline.

Vehicles that are being entered into multiple competitions in the FSAE series must allow sufficient space along the nose centerline for all inspection stickers.

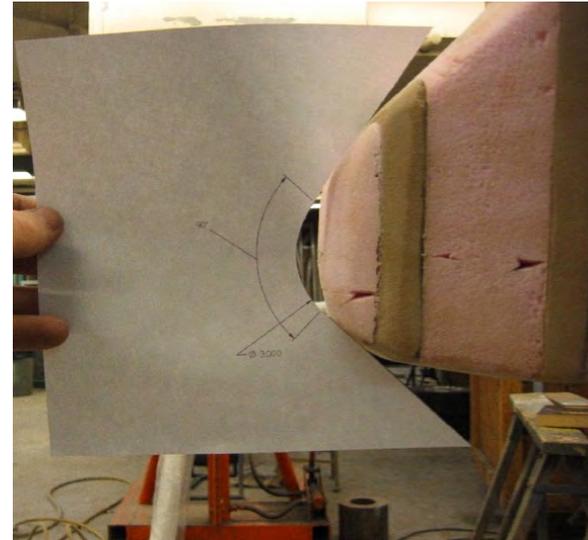
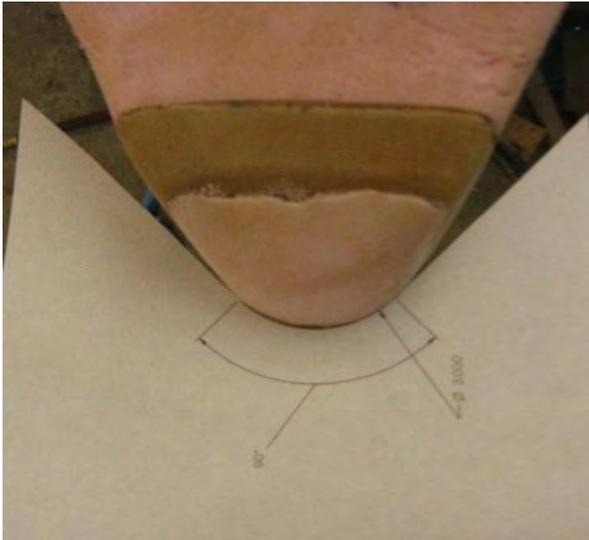
T3.23 Front Bodywork

- Sharp edges on the forward facing bodywork or other protruding components are prohibited.
- All forward facing edges on the bodywork that could impact people, e.g. the nose, **must have forward facing radii of at least 38 mm (1.5 inches).**
- This minimum radius must extend to at least 45 degrees relative to the forward direction, along the top, sides and bottom of all affected edges.

Presenter's note: Typically this requirement does NOT apply to the leading edges of any side pods because they are "behind" the front tyres.



Front Bodywork - cont' d



All forward facing edges on the bodywork that could impact people, e.g. the nose, must have forward facing radii of at least 38 mm (1.5 inches).

This minimum radius must extend to at least 45 degrees relative to the forward direction, along the top, sides and bottom of all affected edges.

T14.15 Cameras

- T14.15 Camera Mounts - The mounts for video/photographic cameras must be of a safe and secure design.
 - All camera installations must be approved at Technical Inspection.
 - **Helmet mounted cameras and helmet camera mounts are prohibited.**
 - The body of a camera or recording unit that weighs more than 0.25 kg (9 oz.) must be secured at a minimum of 2 points on different sides of the camera body. If a tether is used to restrain the camera, the tether length must be limited so that the camera cannot contact the driver.

NOTE: most GoPro cameras weigh less than 0.25kg.

Once camera mounts is inspected and confirmed as okay it must have a security seal sticker attached, these will be kept in the small office.

Presenter's comment: Make sure that the helmet is not going to hit the camera mounts (especially those for a GoPro). If the driver rolls the car - the belts WILL stretch.

Copyright © 2017 Albion Associates, LLC

All rights reserved.