

Tech Inspection

Self-tech Process And Tech Inspection Points

Last Revision June 12, 2020



Tech Inspection



An important, required step in the Southern Indiana Region's registration process is the vehicle's Tech Inspection.

Our SIR COVID-19 guidelines include a participant's "self-tech" process.

These guidelines are intended to minimize or eliminate event processes requiring person-to-person contact. The self-tech process eliminates this direct contact by others, touching items the vehicle operator will touch, and the shared use of pens and forms.

The Tech Inspection process at the event's site has always been a basic check for obvious issues. It has not been nor will be a guarantee that mechanical failures will not occur on the course. The vehicle's condition is the owner's responsibility.

If you feel that you cannot complete the self-tech process, we will make other arrangements.

Basic Tech Inspection Checklist:

- 1) Vehicle Identification per SCCA Solo Rules section 3.7
- 2) Wheels, Tires, Lug-nuts
- 3) Batteries
- 4) Fluid Levels, Leaks
- 5) Loose Objects (Trunk, Interior)
- 6) Vehicle Controls (Steering Wheel, Brake, Accelerator)
- 7) Helmet (Condition and Certification)



Tech Inspection



TIRE RACK .com SCCA National Solo TECH SHEET

Please complete this sheet and bring it with you to Tech.

Driver: _____ Class: _____ Number: _____

Car Make: _____ Model: _____ Color: _____ Year: _____

Tire Brand: _____ Helmet Certification and Year: _____

The entrant/participant is responsible for the safety of his/her vehicle. Neither the tech inspectors, the event organizers, nor the sanctioning body will be held responsible for the safety of this vehicle. Have a qualified mechanic check over your car and make certain everything is in good working order for an event such as this.

DRIVER SAFETY

- Helmet (2005 or newer: Snell M/SA, SFI, FIA)
- Current Solo Helmet tech sticker (obtained by presenting approved helmet at check in)
- Shoes must be solid, closed toe, and in reasonable condition
- Seatbelts/Harness must be in good condition
- A Proper ROLLBAR (when it is required)
- Rollbar padding
- Seats bolted securely
- Interior & trunk clear of loose items; all floor mats removed

BRAKES

- Fluid is clear, reservoir is full (DOT 4 recommended)
- Pedal is firm
- All brake lights are working
- Master cylinder/calipers are not leaking
- Rotors have no cracks or discoloration

TIRES & WHEELS

- Adequate tire tread, speed rating, good condition
- All lug nuts present & torqued to spec.
- Hubcaps removed
- Wheels - No cracks or structural damage

SUSPENSION & STEERING

- Wheel bearings - no play
- Ball joints in good condition
- No excessive steering play
- Shocks - no leaking

ENGINE & DRIVE TRAIN

- Check all fluid levels, belts, and hoses. Tighten all caps and secure all hoses.
- No fluid leaks (oil, transmission, fuel, water)
- Battery secured (no bungees)
- Positive battery terminal covered
- Overflow containers present
- Exhaust system functional (may have to meet sound restrictions)
- Throttle has quick, positive return
- Fuel cap tightened

OTHER

- No severe glass cracks
- Windshield wipers function properly (if applicable)
- Video Camera/Recording device securely mounted (if applicable)

I, _____, have inspected all of the above on my vehicle, and have read and understand Section 3 of the current SCCA Solo Rules and agree to comply.

Signature _____ Date _____



Tech Inspection



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TIRE SCCA Nations TECH SHEET

Please complete this sheet and bring it to the event.

Driver: _____ Class _____
Car/Make: _____ Model: _____
Tire Brand: _____ Helmet Certificate: _____

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3.7 VEHICLE IDENTIFICATION

- A. All vehicles must display numbers and class letters on both sides, which must be readable by Timing & Scoring, Course, and Grid workers at all times.
- B. Only one set of numbers and class letters may be visible while the vehicle is running.
- C. Class shall be represented by the upper-case abbreviated form rather than be spelled out. Ladies' classes shall be indicated by the letter "L" following the class letters. (Example: "BSPL" instead of "B Street Prepared Ladies").
- D. Numbers and class letters should be positioned next to each other. All letters and numbers must be on body panels, not on windows. All numbers and class letters must use the same typeface and the same color, and this color must provide adequate contrast to the background color (see Appendix F for examples).

2020 SCCA® NATIONAL SOLO® RULES — 41

3. VEHICLES

- E. Numbers must be a minimum of 8" (20.5 cm) high with a 1¼" (3.25 cm) stroke. Class letters must be a minimum of 4" (10.25 cm) high with a ¾" (2 cm) stroke. In all cases, the height of the class letters must be between 25% and 75% of the height of the numbers. Stroke width must be at least 10% of the height (see Appendix F.)
- F. The "1" on two-driver cars and the "L" on Ladies class cars are subject to all of the above requirements with regard to placement, color, size, and stroke.
- G. Karts may use numbers and class letters of reduced size provided that the following conditions are met:
 - 1. Numbers must be displayed on the front and rear in addition to both sides.
 - 2. Class letters must be on both sides.
 - 3. In no case may the numbers be smaller than 6" (15.25 cm) in height with ¾" (2 cm) stroke, using a high-contrast color and background.
- H. For National Championship and National Tour competition, current official SCCA® required decals must be displayed on each side and front of the vehicle in a prominent location.
For National Championship and National Tour events, one (1) official SCCA®-approved National sponsor identification logo must be displayed in an upright position, in a prominent location on each side of the vehicle. Additional sponsor and/or event specific decals may also be required; refer to event supplemental regulations. Further information is contained in Appendix F.



**Check that all lug-nuts are in place and appear secure.
Look for cracked or damaged wheels.**



Check for excessive wheel movement.



**Check for excess tire wear or damage.
(Looking for cuts, cording, or bulges).**

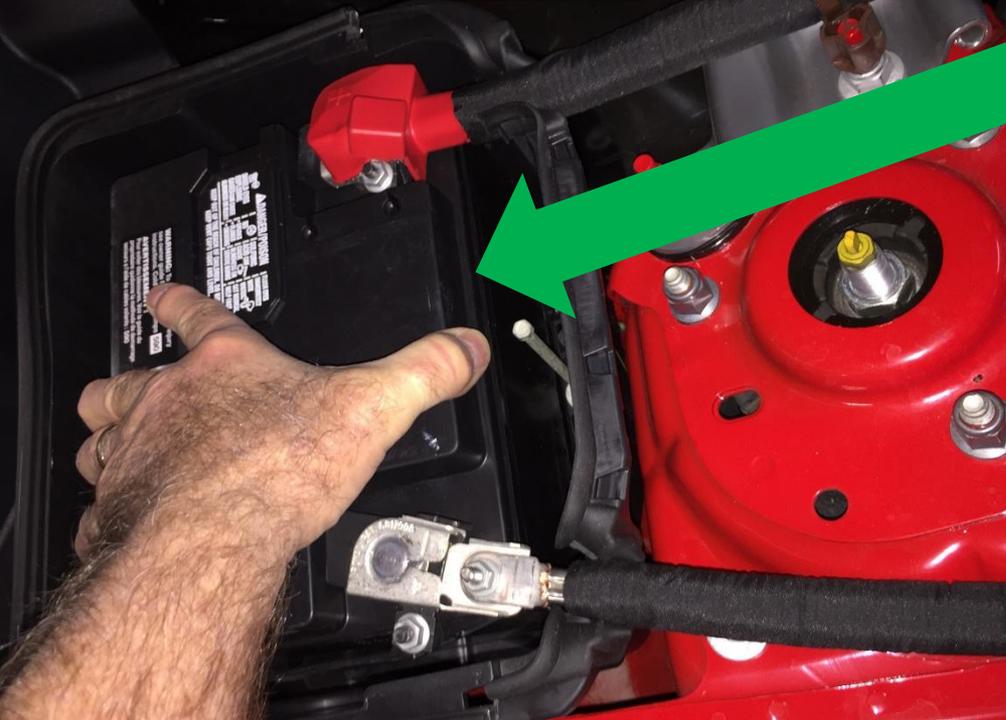


Repeat for inner side. (All four tires)





Verify the battery mount is in place.



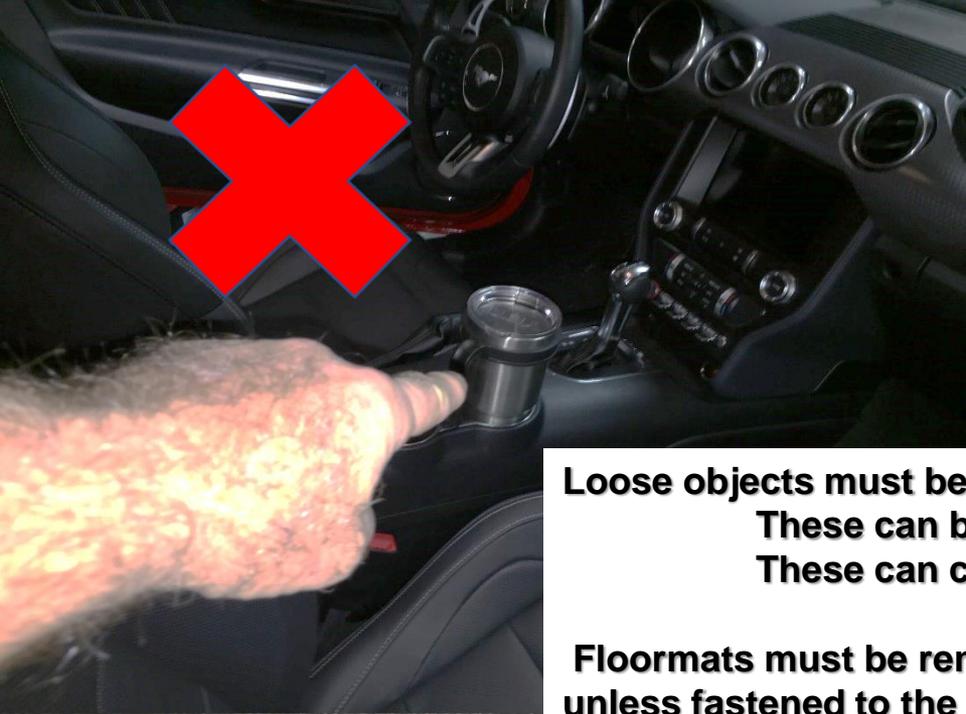
Verify the battery is secure.

Verify fluid tanks' and over-flow containers' caps are in place.

Verify there is no excessive leakage.

(That is obvious leakage that would result in fluid leaked to the paddock or course surface).





**Loose objects must be removed.
These can become distractions.
These can create safety issues.**

**Floormats must be removed
unless fastened to the vehicle.**

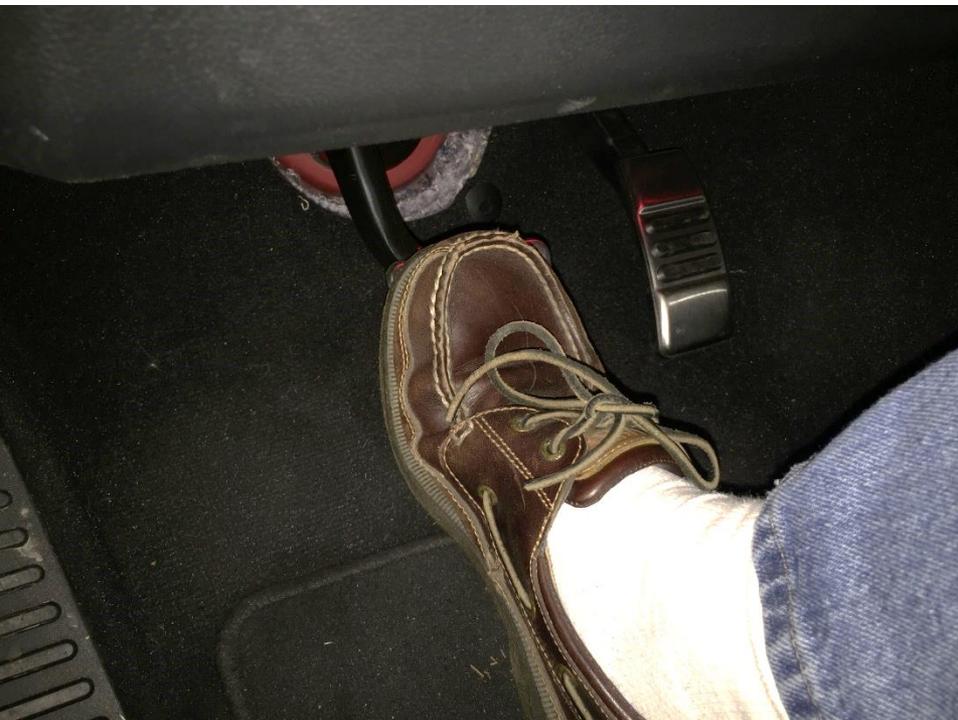


Check these three with the engine off:

Verify there is not excessive “play” in the steering controls.

Verify the accelerator pedal returns rapidly when pressure is released.

Verify brake travel is available.





Certification stickers may be easy to find.

Some are behind padding.

Some may be out of date.



4.3 DRIVER SAFETY EQUIPMENT

4.3.1 Helmets

Helmets meeting the following standards must be worn while on course:

Snell *Memorial* Foundation standards *EA 2016, SA2020, SA2015, SA2010, SAH2010, SA2005*, M2020D, M2020R, M2015, M2010, M2005*, K2020, K2015, K2010, K2005**; SFI standards *31.1/2015, 31.1/2010, 31.1/2005*, 41.1/2015, 41.1/2010, 41.1/2005**; ECE *22.05 or R22.05*; FIA standards *8860-2018, 8860-2018-ABP, 8859-2015, 8860-2010, 8860-2004*; or British spec *BS6658-85 type A** are acceptable.

Full face or modular helmets shall be worn while competing in an open-

wheel car, formula car, or kart. Face shield, goggles, or similar face protection (conventional eyeglasses are not sufficient) shall be worn while competing in any other vehicle with less than the standard-size windshield.

Formula Junior drivers must use helmets meeting the above; SFI *24.1/2020, 24.1/2015, 24.1/2010, 24.1/2005** (Youth Helmets); or Snell *CMR2016, CMR2007* (Children's Motorsports Restricted), *CMS2016, CMS2007* (Children's Motorsports Standard) specifications. Also, Formula Junior helmets must be of closed face design incorporating full face shields and chin bars.

For maximum protection, helmets must fit securely and should provide adequate peripheral vision. The chin strap must be securely fastened. Loaner helmets should be available to vehicle occupants not having their own.

** NOT VALID AFTER 12-31-2020: Snell SA2005, M2005, K2005; SFI 24.1/2005, 31.1/2005, 41.1/2005; British Standards BS6658-85 type A/FR, BS6658-85 Type A.*

DL: Many SA2015 Helmets are available now at discounted prices!

2020 Helmet Certification Labels

2020 SCCA® Solo® Rules section 4.3.1

2020 SCCA® RallyCross Rules article 3.2.P

Understanding the ECE 22.05 certification label

(United Nations Economic Commission for Europe, Regulation 22, 2005)

(Also known as ECE 22.05 or ECE R22.05)



05300140/P-010

- A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval. (*The actual number in the circle after the "E" is not relevant for safety/tech inspection purposes.*)
- The approval number (1st two digits at present "05" for the year 2005) followed by:
- A dash and symbol:
 - "J" if the helmet does not have a lower face cover (open face),
 - "P" if the helmet has a protective lower face cover (full face), or
 - "NP" if the helmet has a non-protective lower face cover.
- A dash followed by a production serial number.

This will likely be a sewn-in fabric label inside the helmet.



These are NOT certification labels:



Snell SA2020 <i>Available October 1, 2020</i>	Snell SA2005 NOT VALID AFTER 2020/12/31	Snell M2020D M2020R M2015 M2010 M2005 Snell M2005 NOT VALID AFTER 2020/12/31
Snell EA2016		Snell CMR2016 CMS2016 CMR2007 CMS2007 (Children's Motorsport)
Snell K2020 <i>TBD</i>	Snell K2005 NOT VALID AFTER 2020/12/31	
Snell K2015 K2010 K2005	Snell K2005 NOT VALID AFTER 2020/12/31	FIA 8860-2018 8860-2018-ABP 8859-2015 8860-2010 8860-2004
ECE 22.05 ECE R22.05		BSI BS6658-85 type A/FR BS6658-85 type A NOT VALID AFTER 2020/12/31
SFI 31.1/2015 31.1/2010 31.1/2005	41.1/2015 41.1/2010 41.1/2005	24.1/2020 24.1/2015 (Youth)

SFI 31.1/2005, 41.1/2005, and 24.1/2005 – NOT VALID AFTER 2020/12/31