

## EV8 - High Voltage Procedures and Tools (inspection in team garage)

This form is completed in the team's garage.

Complies		Ref	Summary
Type	FH Inspector Initials		
<i>Charging Systems</i>			
T&C		12.1.3 12.2.1	Team knows the location of the designated charging area if one is provided by the event organizers.
T&C		12.1.4 12.1.5 12.2.3	Team has appropriate insulated tools for working on the accumulator. Visible "High Voltage" sign displayed when working on the accumulator
T&C		12.2.5	Accumulator has a label prepared complying with EV12.2.5: Team name and Safety Officer phone number(s).
T&C			Review Charging Process and Safety Rules:
		12.2.2	Ensure 16AWG (min.) green wire is connected between chassis and earth ground
		12.2.8	No work is allowed on any of the car's systems during charging if the accumulators are charging inside of or connected to the car.
		12.2.9	No grinding, drilling, or any other activity that could produce either sparks or conductive debris is allowed in the charging area.
		12.2.10	At least one team member who has knowledge of the charging process must stay with the accumulator(s) / car during charging.
T&C			<b>Note to Inspector: Place "Charger Seal" on charger upon approval of the following steps</b>
		12.2.13	Charger is UL listed (or waiver approved by FHRC).
		12.2.7	All connections of the charger(s) must be isolated and covered, with intact strain relief and no fraying of wires.
		12.2.12	High Voltage wiring in an off board charger does not require conduit; however it must be a UL listed flexible cable that complies with NEC Article 400; jacketed.
<i>Accumulator Hand Cart</i>			
T&C		12.3.1	Team has accumulator hand cart for <b>REMOVABLE</b> accumulators? Yes [ ] No [ ]. If <b>Yes</b> , then:
T&C		12.3.2	Cart has dead man's switch
T&C		12.3.3	Brake capable of full stop when loaded with accumulator
T&C		12.3.4	Hand cart rated for accumulator load
<i>Required Tools</i>			
T&C		12.4	<b>Tools required:</b>
T&C			(a) Multimeter rated for CAT III use with UL approval. (Must accept shrouded banana leads.)
T&C			(b) Multimeter leads rated for CAT III use with shrouded banana leads at one end and probes at the other end. The probes must have finger guards and no more than 3 mm of exposed metal. (Heat shrink tubing may be used to cover additional exposed metal on probes.)
T&C			(c) Multimeter leads rated for CAT III use with shrouded banana plugs at both ends.
T&C			(d) Insulated tools. (I.e. screwdrivers, wrenches etc. compatible with all fasteners used inside the accumulator housing.)
T&C			(e) Face shield which meets ANSI Z87.1-2003
T&C			(f) HV insulating gloves (tested within the last 14 Months) plus protective outer gloves.
T&C			(g) HV insulating blanket(s) of sufficient size and quantity to cover the vehicle's accumulator(s).
T&C			(h) Safety glasses with side shields (ANSI Z87.1-2003 compliant) for all team members.
T&C		Appendix F	Minimum of two (2) 2.3 kg (5 lb.) dry chemical (Min. 3-A:40-B:C) Fire extinguishers)
T&C		Appendix F	Chemical Spill Absorbent & MSDS for Accumulator
T&C		Appendix F	Describe team response to an accumulator fire and to an electrolyte spill

### Notes/Actions