

Race Day Inspection Checklist

DRIVER INSPECTION	 <p>The logo for the Kansas Electro Rally features the word "KANSAS" in a green, arched font at the top. Below it is a stylized blue and green winged figure, possibly representing an electric vehicle or a racer, with a green circular element in the center. At the bottom, the words "ELECTRO RALLY" are written in a blue, blocky font with horizontal lines through the letters.</p>	
Helmet: Motorcycle (DOT approved)		
Eye Protection (Full face shield okay)		
Gloves (Optional for enclosed vehicles)		
Long Pants & shirt		
Shoes		
Signed liability release		
Driver's license		
Driver's weight + ballast = 180# Min.		
BASIC VEHICLE INSPECTION		
Vehicle dimensions (Max 12' L x 4' W)		
Vehicle number 6" Min. (Both Sides)		
Ground clearance > tire sidewall height		
Pneumatic Tire (Inflatable)		
Tire wear and condition within limits	ELECTRICAL INSPECTION	
Good visibility and field of vision	Battery type approved (See back sheet)	
Rear view mirrors present & effective	Battery weight does not exceed 67#	
Good structural integrity	Battery voltage =	
Fasteners & fittings, secure & adequate	Battery enclosed & mounted securely	
Design gives side protection for driver	Battery Clear and tight	
Body stops driver contact w/another car	Battery connector clear of driver	
No exposed sharp edges / components	Battery caps secure	

5 pt. Seat belt harness system	Cable gauge (#4 Min=12V,#6Min=24V)
Roll Bar height Check ≥ 2 " above helmet	Wiring neat, secure, and well insulated
Roll bar braced at bar top and to frame	System is ungrounded
Roll bar padding (Min. $\frac{1}{2}$ " thick)	Circuit breaker or fuse inside vehicle
Canopy securely attached (if applicable)	Proper rating for above item
Min. Axle dia. $\frac{3}{8}$ " (supported both ends)	Outside Kill switch
Cantilevered Axle dia. $\geq \frac{1}{2}$ "	Proper rating for above item
Cantilevered Axle nuts secured with wire or pins	4" Red triangle around outside kill switch
Steering /suspension=strong, adequate	
Chain Guard (if needed)	
Motor, controller & drive mounts secure	
Automatic throttle shutoff	
VISION TEST (driver must be able to discern to number of fingers behind vehicle at a distance of 10 feet)	SCHOOL NAME
SAFETY BELT TEST (belts must be able to support vehicles weight)	VEHICLE NUMBER
EXIT TEST (driver must exit vehicle with canopy in place in 20 seconds or less)	DRIVER'S NAME
BRAKE TEST (Two wheels on same axle must lock with one control)	Inspector's signature

NOTE: A team may race the same car twice (in a different class) as long as the car is re-inspected before the second race.

Approved Battery Types

Vendor	Model
Optima	SC25A SC35A SC75/35
Odyssey Genesis	G42 (VP, VPX, EP, EPX)
MK40	
Exide	Orbital Model 75/35
Champion	Vortex 75/35

All other lead acid battery systems must be weighed no more than 67 pounds.

Wire size (AWG)	Max Fuse or Breaker Size
20	5.5 Amps
18	9 Amps
16	12 Amps
14	15 Amps
12	20 Amps
10	30 Amps
8	80 Amps
6	105 Amps
4	140 Amps
2	200 Amps
1	250 Amps