

FORMULA HYBRID ELECTRICAL INSPECTION CHECK SHEET 2008 Rev B

Team	Team #		Note	
Tester	Date		Time	
Title	Rule Ref	Complies	Test	Notes
Physical Examination				
No Exposed Connections	FH-2.2			
Wire	FH-2.3			Wire marked & rated for voltage and temperature
HV Insulation	FH-2.3			Rated for temperature, documented
Conductor Sizing	FH-2.3			
Strain Reliefs	FH-2.3			
Sharp Edges	FH-2.3			
Conduit	FH-2.3			Orange LNMP or equivalent
Conduit	FH-2.3			Orange LNMP or equivalent
Grounded Exposed Heat Sinks	FH-2.3			Test with Ohm Meter
		Complies	Test	
Brake Overtravel Switch	3.2.5.2			Check installation and (multiple) operation
		Complies	Test	
Master Switches:	3.4.9			Three required - 60mm diameter, latching type
Left Side				Check installation and operation
Right Side				(both engine and electric)
Instrument Panel				Check Driver Accessibility in Harness
		Complies		

Title	Rule Ref	Complies	Test	Notes
Maximum Voltage	FH-2			600V ac rms or dc maximum, any two points, operating or not
Max. Operating Voltage			Volts	High Voltage is defined as >30V
Running in Rain	5.2.1/FH-2.1	Complies	Test	
Physical Protection				Review all high voltage areas
30 second water spray				Top, front, sides, 30 seconds each. Not a stream.
High Voltage Isolation	FH-2.1	Complies		
Physical Segregation				Check segregation of HV and control circuits
				Examine PCB creepage distances if non-commercial
Ground Fault Detector	FH-2.1.1	Complies	Test	
Bender 486				Must be this model or approved alternate
Test OK	FH-2.1.2			Test multiple points to ground with 40K resistor box

Comments

Title	Rule Ref	Complies	Test	Notes
Accumulator		Complies	Test	
Approved Type	FH-2.5			Must be battery or capacitor
Manufacturer				
Part Number				
Official FH Capacity				
Quantity				
Total Capacity				W-Hrs
Manufacturer				
Part Number				
Official FH Capacity				
Quantity				
Total Capacity				W-Hrs
Normally Open Relays	FH-2.6			No voltage outside box when energized.
	Rating		V / A	
Fuse or Circuit Breaker	FH-2.6			Not Required per box (not as clear as it could be)
Multiple Containers	FH-2.6			Two relays OK if connected by conduit
Leakage Test Port	FH-2.6			
LED or analog meter	FH-2.6			
Voltage Decay	FH-2.6.4			Must decay to < 30V within 10 seconds
Mechanical Robustness	FH-2.7			
Fireproof Material	FH-2.7			Between driver and ESU
Live Part Insulation	FH-2.7			Nomex between live parts and conductive parts of container
High Voltage Label	FH-2.7			Required on each container
Hydrogen Venting	FH-2.7			Required if Accumulator vents H2 under normal charge

Title	Rule Ref	Complies	Test	Notes
Warning Strobe		Complies	Test	
Indicates vehicle is energized	FH-2.8			Mounted to highest point on roll bar
Low Voltage Circuits		Complies	Test	
Grounded to frame	FH-2.9			Visual or voltmeter
Properly Fused	FH-2.9			
Segregated and Isolated	FH-2.9			
Charging Equipment		Complies		
Safety Inspection	FH-2.10			No open connections
HV Stickers	FH-2.10			
Safety Equipment		Complies		
Cable Cutters	FH-3			
Gloves	FH-3			
Accumulator MSDS	FH-3			
Special Equipment	FH-3			If called for in MSDS
Safety Glasses	FH-3			
SAE-Required Fire Extinguishers	FH-3			Qty 2, 2 lb or 1.75 Liter (AFFF) 10BC or 1A 10BC, w/ pressure or charge gauge
Special Fire Extinguishers	FH-3			If identified. Two required
Chemical Spill Cleanup Kit	FH-3			Must have absorbent available
Comments				
Overall Acceptance		Signature		
OK to Run in Rain or on Wet Track		Signature		