

EV Challenge STEM Cycle Electrical Inspection

Vehicle # _____ School Name _____

| # | Inspection Item | Specification Reference | Circle | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------|----------|
| | | | Yes | No / N/A |
| 1 | Motor is DC | E1.1 | Yes | No |
| 2 | Motor rated at 750 Watts (1 hp) or less | E1.2 | Yes | No |
| 3 | All drive components (motor, chain, etc.) guarded or shielded | E1.3 | Yes | No |
| 4 | Battery has a maximum capacity of 1000 Wh | E2.1 | Yes | No |
| 56 | Battery rated at no more than 48 Volt nominal (60 Volt maximum under charge) | E2.2 | Yes | No |
| 7 | Battery not a flooded lead acid | E2.3 | Yes | No |
| 8 | Battery shall be in a proper enclosure and secured to the vehicle E2.5 | E2.4 | Yes | No |
| 9 | Base of the battery enclosure shall be less than 10 cm (3.9 inches) from the ground | E2.5 | Yes | No |
| 10 | Documentation of battery specifications and safety provided during technical inspection | E2.6 | Yes | No |
| 11 | communication devices are prohibited powered from the main traction battery or from a separate power source | E3.1 | Yes | No |
| 12 | Accelerator mechanism is a spring loaded to return to zero current position when released | E3.2 | Yes | No |
| 13 | Vehicle has no cruise control | E3.3 | Yes | No |
| 14 | Controller operable solely by the driver (no remote control allowed) vehicle | E3.4 | Yes | No |
| 15 | Vehicle is equipped with a clearly labeled mechanical electrical disconnect on a main battery cable | E4.1 | Yes | No |
| 16 | Disconnect accessible to a belted driver without reaching outside of the vehicle, and accessible from outside the vehicle without reaching inside the vehicle | E4.2 | Yes | No |

Notes and Explanations for Any “No” Circled Above or Additional Concerns
