



Legend					
Title: Penn State Eco-Marathon 2015 Design Schematic for Urban Concept Car Drawn By: Bryan Dickens Revised: 4/7/2015		REVISIONS			
		REV	DESCRIPTION	DATE	APPROVED
		2	Added Connectors, fixed Motor Controller, Updated legend	3/31/2015	Gary Neal
	1	Define and label fuses, wires	3/26/2015	Gary Neal	
Wires: Positive W0 – W8 : 12 AWG 1569-12-65T-9 R LW1 – LW2: 16 AWG 1816T1569 Negative W9 – W13: 12 AWG 1569-12-65T-9 R LW3-LW10: 16 AWG 1816T1569 Motor Controller Connections Red, Green, Blue, Black, Yellow: 16 AWG 1816T1569	Connectors and Diodes: A1 – A2: Anderson Connectors 12AWG Ring Connectors: 12 AWG 2-36161-3, 16 AWG 19073-0088 Spade Connectors: 12 AWG 4-520447-2, 16 AWG 90F3736 Battery Pack: LifePO 36V 15AH V5 Ping Batteries LFP3601505001 DC/DC: SD-50A-12, 36V to 12V drop Relay: AEV16012, 12VDC Motor: Brushless Motor Corporation, 16150-3T, 48VDC, 1000W	Kill-Switches and Fuses: KS1: Internal Kill-Switch KS2: External Kill-Switch F1: Thermal Fuse Senasys 2511L003-155 Open 140F Close 125F F2: Circuit Fuse 20A LELZXX1-36690 Comments: All high volt/high amp connections are using 12 gauge wire, and all the electronics section will be using 16 gauge wire. See attached spec sheets for each specific part	High Voltage Wires Low Voltage Wires Connection Wires Kill-Switch Fuse Diode Anderson Connector Ring Connector Spade Connector		