



Pin	Color	Signal	Pin	Color	Signal	Pin	Color	Signal	Pin	Color	Signal	Pin	Color	Signal	Pin	Color	Signal			
1	GRN	24VDC +	1	GRN	24VDC +	1	RED	TSV HV	1	PNK	Throttle 5V	1	WHT	Brake Light	1	YEL	CAN H	1	YEL	CAN H
2	BLK	LV RTN	2	BLK	LV RTN	2	BLK	LV RTN	2	BLK	Throttle	2	BLK	Brake Light RTN	2	GRN	CAN L	2	GRN	CAN L
1	GRN	5VDC +	1	GRN	5VDC +	1	RED	TSV HV	3	BLU	Throttle RTN	3	WHT	TSAL Left	3	BARE	SHIELD	3	BARE	SHIELD
2	BLK	LV RTN	2	BLK	LV RTN	2	BLK	LV RTN	4	ORG	FWD Signal	4	BLK	TSAL Left RTN	4	GRN	CHGND	4	GRN	CHGND
3	WHT	CHGND	3	WHT	CHGND	3	WHT	CHGND	5	BRN	KSI	5	WHT	TSAL Right	5	WHT	24VDC	5	WHT	24VDC
1	GRN	BRBLS	1	GRN	BRBLS	1	RED	TSV HV	6	BLK	GIGAVAC Coil	6	BLK	TSAL Right RTN	6	BLK	24V RTN	6	BLK	24V RTN
2	BLK	BRBLS RTN	2	BLK	BRBLS RTN	2	BLK	LV RTN	7	WHT	Coil Return	7	WHT	RTDS						
1	WHT	SL1	1	WHT	SL1	1	RED	TSV HV	8	GRN	GIGAVAC Coil	8	BLK	RTDS RTN						
2	BRN	SL2	2	BRN	SL2	2	BLK	LV RTN	9	WHT/BLK	REV Signal									
3	RED	AIRs+	3	RED	AIRs+	3	WHT	CHGND	10	BLN	+12V									
4	BLK	AIRs-	4	BLK	AIRs-	4	BLK	LV RTN	11	WHT	CAN H									
1	Jumper wire	between pins 1&2	1	Jumper wire	between pins 1&2	1	BLK	ENB	12	GRN	CAN L									
3	AIRs+		3	AIRs+		2	WHT	RTN	1	RED	5V +									
4	AIRs-		4	AIRs-		2	WHT	RTN	2	BLK	GND									
1	RED	TSV HV	1	RED	TSV HV	1	BLK	ENB	3	GRN	Encoder B									
						2	WHT	RTN	4	WHT	Encoder A									
						2	WHT	RTN	5	BLU	GND									
						2	WHT	RTN	6	BRN	Motor Temp.									
						2	WHT	RTN	7	WHT/BLK	I/O Gnd									
						2	WHT	RTN	8	GRN	+12V									
						2	WHT	RTN	9	GRN	Encoder B									
						2	WHT	RTN	10	ORG/BLK	Fault LED									
						2	WHT	RTN	11	BLU/BLK	AIRs LED									
						2	WHT	RTN	12	BLK/WHT	GLV RTN									
						2	WHT	RTN	1	PNK	Select button									
						2	WHT	RTN	2	BLK	Scroll button									
						2	WHT	RTN	3	BLU	Cruise button									
						2	WHT	RTN	4	ORG	CRUISE button									
						2	WHT	RTN	5	WHT	BRB									
						2	WHT	RTN	6	GRN	CPR									
						2	WHT	RTN	7	WHT/BLK	CPR RTN									
						2	WHT	RTN	8	PNK/BLK	GLV Present LED									
						2	WHT	RTN	9	GRN/BLK	SL LED									
						2	WHT	RTN	10	ORG/BLK	Fault LED									
						2	WHT	RTN	11	BLU/BLK	AIRs LED									
						2	WHT	RTN	12	BLK/WHT	GLV RTN									

Items for Dyno only

DRAWN BY Greg Flynn		LAFAYETTE Lafayette College Easton, Pa ECE Department	
CHECKED BY			
APPROVED BY ECE		TITLE LFEV CAR ELECTRICAL SYSTEM DIAGRAM	
APPROVED BY ME		ASSIGNMENT SENIOR DESIGN II	
DATE 2017-04-26		SIZE F	REV 1.3
		DWG NO TOP LEVEL	SHEET 1 OF 1
		COURSE TOP LEVEL	