

Product Name	Description	Subsystem	Part Number	Manufacturer	Qty	Price (each)	Item Totals
Rotary Encoder	The product is an absolute rotary incoder with a 6.5 ft output cable.	Steering	TRD-NA1024NWD	Koyo	1	\$352.00	\$352.00
Mount	This is the right angle mounting bracket for the TRD-NA1024NWD	Steering	JT-035D	Koyo	1	\$13.00	\$13.00
100k Ohm Resistor	These are the 100k Ohm resistors that will be used for voltage dividers	Steering	CFR25SJT-52-100K	Yageo	25	\$0.05	\$1.25
Arduino Uno	MCU for reading Rotary encoder, reading shifter,	Steering, Shifter, Speedometer, Pedals	Arduino UNO Rev3	Arduino	4	\$27.60	\$110.40
Zener Diode	5.1 V Zener Diode	Shifter	BZX79-C5V1	Nexperia USA Inc	10	\$0.16	\$1.60
100 Ω Resistor	100 Ω Resistor	Shifter	LR1F	TE Connectivity Passive Product	10	\$0.14	\$1.40
LCD Display	LCD Compatible with Arduino Uno	Speedometer	Treedix 3.5 inch TFT LCD Display	Treedix	1	\$18.99	\$18.99
Toggle Switch	12 V Toggle Switch	Power	TD1-1A-DC-3-R	Switch Components	1	\$5.08	\$5.08
Standard Diode	Diode (Different fom signoff due to original being out of stock, higher ratings meet requirements)	Power	S-19TQ015-M3	Vishay General Semiconductor - Diodes Division	1	\$1.61	\$1.61
18 gauge wire	Wiring terminated to connect to Arduino	Power	10-02493	Tensility International Corp	4	\$7.51	\$30.04
100 mA Fuse	100 mA fuses to protect Arduinos	Power	5ST 100-R	Bel Fuse Inc	6	\$0.63	\$3.78

Fuse Holder	Hold 100 mA fuses	Power	4628	Keystone Electronics	4	\$0.73	\$2.92
CAN-BUS Shield V2	Arduino board to help capture CAN Bus messages	CAN	CAN-BUS Shield V2	Seeed	1	\$32.10	\$32.10
OBDII to DB9 Cable	Cable to connect the Arduino Board to the OBDII port of the Nissan Leaf	CAN	CAB-10087	SparkFun Electronics	1	\$10.95	\$10.95
Mega 2560 Rev3	Microcontroller for the Master Microcontroller System	Master MCU	Mega 2560 Rev3 (Barcode: 7630049200067)	Arduino	1	\$41.14	\$41.14
USB 2.0 Cable	USB cable for Arduino Mega 2560	Master MCU	USB 2.0 Cable Type A/B	Arduino	1	\$7.60	\$7.60
Optoisolator	OPTOISOLATR 5KV TRANSISTOR 4-DIP	OEM Lights	160-1366-5-ND	Lite-On Inc	10	\$0.24	\$2.40
250 Ohm Resistor	RES 250 OHM 5% 5W AXIAL	OEM Lights	55J250E-ND	Ohmite	5	\$1.06	\$5.30
125 Ohm Resistor	RES 125 OHM 1/4W 1% AXIAL	OEM Lights	RN60D1250FB14-ND	Vishay Dale	5	\$0.70	\$3.50
40 mA Fuse	FUSE GLASS 40MA 250VAC 5X20MM	OEM Lights	486-1876-ND	Schurter Inc	6	\$2.67	\$16.02
Fuse Holder	FUSE HOLDER CART 250V 6.3A PCB	OEM Lights	RPC3981-ND	Essentra Components	5	\$0.94	\$4.70
Wire Splices	Solderless wire splice connectors (package)	Pedals	B09539VNBK	XGTECH	1	\$7.99	\$7.99
22 AWG	22AWG wire 2 color 100ft	Pedals	B089D211KX	Fermerry	1	\$15.49	\$15.49
				Total Items	105	Total Price	\$689.26