



Electric Vehicle Components and Systems

20330 Rancho Villa Road
Ramona, CA 92065 USA
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877 GO KTA EV
877.465.8238
760.787.0896
Fax: 760.787.9437

Vehicle Description: Mid-sized electric vehicle (e.g. Ford Ranger, Chevy S-10)
HP Output: 28.5 HP Continuously, 100 HP Peak at 144 VDC

DC Motor, Transmission-Adapter Plate & Motor Clamp

Item	Quantity	Unit Cost (USD)	Total Cost (USD)
FB1-4001 DC Motor ¹	1	1550.00	1550.00
Motor Clamp, 9.1"	1	150.00	150.00
Motor Adapter & Coupler ²	1	825.00	825.00

DC Motor Controller & Throttle

Curtis 1231C-8601 ³	1	1495.00	1495.00
Curtis PB-6	1	80.00	80.00

Contactors & Relays

Albright Contactor SW200B	2	130.00	130.00
NTE DPDT Relay	1	18.25	18.25
Resistor, 750 Ohm/25W ⁴	1	3.50	3.50

Circuit Breakers, Fuses and Safety Switches

Airpax Circuit Breaker	1	175.00	175.00
Ferraz Fuse, 500A/300V	1	56.00	56.00
Inertia Switch (Accident Safety Device)	1	55.00	55.00

Battery Charger & Converter

PFC 3000 Charger ⁵	1	1099.00	1099.00
Zivan DC-DC Converter ⁶	1	525.00	525.00

¹ The FB1-4001 motor is a single shaft motor. The [FB1-4001\(A\)](#) is a double-shaft motor and the auxiliary shaft can be used to run an air conditioning motor.

² Most adapter plates cost \$825.00. Some vehicles require an installation kit and a special motor mount. Please contact KTA Services, Inc. if you have a question regarding the adapter plate for your vehicle.

³ The Curtis 1231C-8601 is rated to 144 VDC and 500 Amps. If you are interested in a controller with a higher voltage rating or current rating, please visit our [DC Motor Controllers & Programmers](#) page and check-out the Raptor and Zilla.

⁴ This resistor serves as a pre-charge resistor in systems that use Curtis controllers. The purpose of the pre-charge resistor is to reduce the inrush of current and extend the life of the contactor.

⁵ Other chargers are available. Please visit the [Battery Chargers](#) page.

⁶ KTA Services, Inc. sells several DC-DC converters that vary in current and voltage output. The converter listed on this page has a voltage input of 100-200 and we recommend it if the KTA Vacuum System is in use.



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Climate Control & Battery Heaters

PTC Ceramic Heater Core 96-144 VDC/1540 W	1	80.00	80.00
KTA Auxiliary Switch Kit	1	57.47	57.47
KTA Battery Heater Control⁷	1	211.40	211.40
Battery Heater Pads	24	15.00	360.00

Heavy-Duty Cable, Lugs, Heat Shrink, Connectors and Assembly Tools

Welding Cable (#2/0 AWG)	66	3.25	214.50
Straight Welding Cable Lugs (#2/0 AWG Cable, 5/16" Hole)	3	2.50	7.50
Straight Welding Cable Lugs (#2/0 AWG Cable, 3/8" Hole)	15	2.50	37.50
Clamp Terminals (#2/0 AWG- Positive and Negative)	48	3.00	144.00
Terminal Clamp Covers (#2/0 AWG- Positive and Negative)	48	1.60	76.80
Heat Shrink (#2/0 AWG- Positive and Negative)	68	0.60	40.80
QuickCable Tool Kit	1	70.00	70.00

Meters, Gauges & Instrumentation

Westberg Ammeter⁸	1	61.00	61.00
Westberg Voltmeter	1	55.00	55.00
Deltec Shunt, 500A=50mV	1	22.50	22.50
Deltec Shunt, 50A=50mV	1	17.50	17.50

Power Brake Restoration

KTA Vacuum System⁹	1	395.00	395.00
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⁷ KTA Services, Inc. recommends the Battery Heater Control and Battery Heater Pads for cold climates. Maintaining the temperature of the batteries can prevent range reduction due to cold temperatures.

⁸ The meters listed in this document are analog meters. For digital options, please visit the [Meters, Gauges and Instrumentation](#) page and read about the PakTrakr.

⁹ The KTA Vacuum System is used to restore vacuum to power brakes.



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Miscellaneous Mounts & Switches

Stud Block Insulator- 3/8" (To mount fuse)	2	5.00	10.00
Glastic Standoff Insulator (To mount circuit breaker)	2	5.00	10.00
DPDT Toggle Switch (Switch between shunts)	1	5.00	5.00
Westberg 2-Hole Gauge Holder	1	7.90	7.90
Waytek 10-Position Strip ¹⁰	1	10.00	10.00

Total Cost (excluding shipping, sales tax (if applicable) and applicable discounts)

\$8055.62

¹⁰ The 10-position strip is used to organize the general wiring in the vehicle.