



Building an EV

TOPIC #6

How Much Will It Cost?

<http://www.evalbum.com>

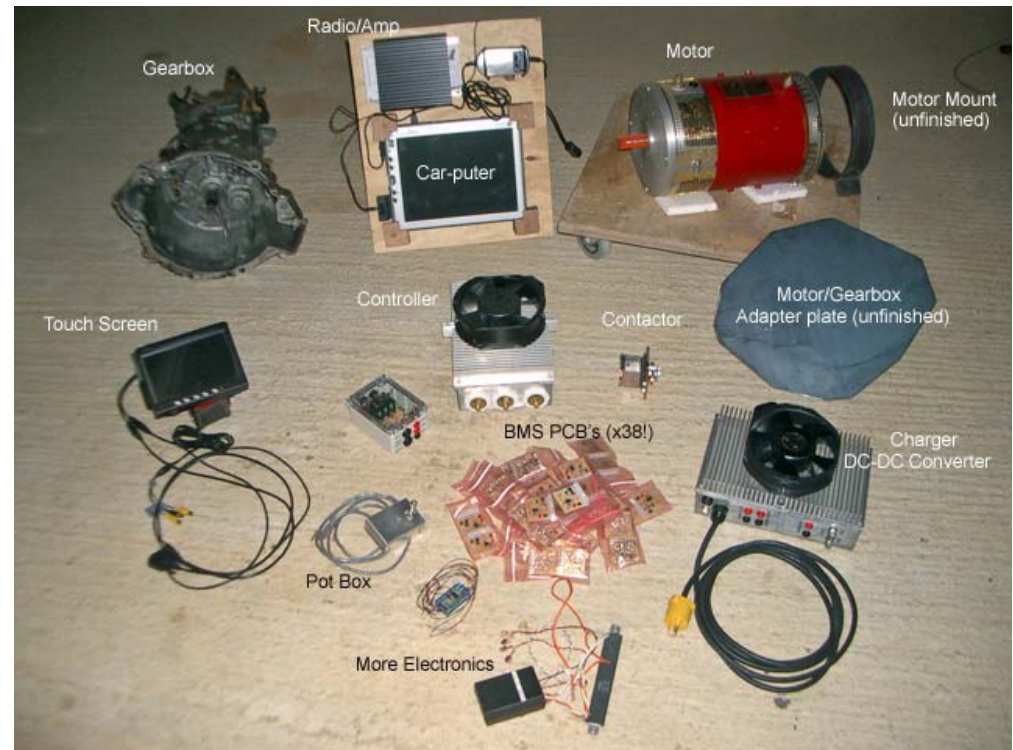
<http://www.diyelectriccar.com>

Topics

- What is the best car to convert?
- What kind of motor should I use?
- What kind of batteries do I use?
- What are controllers?
- Where can I buy the parts?
- Are there any books on how to do a conversion?
- How far can I go on a charge?
- How fast will it go?
- *How much will it cost?*
- *How to make battery cables?*
- How do I charge the batteries?
- How to add power brakes and power steering?
- How to add safety?
- How to add air conditioning?
- How about solar panels?
- Is there anyway to make it recharge itself while driving?
- How about adding a generator?
- How about EV kits?

How Much Will It Cost?

- Conversion cost: \$8,000 - \$15,000, including batteries, donor car, & components.



How Much Will It Cost?

- On the low end, you can build a car with quality new components if you are willing to do a lot of design and fabrication yourself. This will mean designing and building battery racks and boxes, motor mounts, component mounts, wiring looms/harnesses, etc. In the midrange, you can build our own conversion using a custom kit for about \$9,000 - \$10,500 and save a lot of time, since everything comes prefabricated.

How Much Will It Cost?

- If you have someone do a conversion for you, the price may run between \$15,000- up, depending on the car and kit used. Usually the price of a converter building you an conversion EV is twice the price of a kit and you do the work because converters usually use kits.

**GREEN
MOTORS**

ELECTRIC BLUE

How Much Will It Cost?

Advanced DC 8" motor	\$ 1,320.00	Vacuum brake system	\$ 205.00						
Adaptor plate and hub	\$ 650.00	Heating system	\$ 395.00						
Motor mount	\$ 137.50	Electric wire and connectors	\$ 170.00						
Curtis-PMC1221B motor controller	\$ 750.00	16 6-volt batteries, US Battery @ \$42.00 each	\$ 672.00						
Throttle controller	\$ 60.00	Goodyear Invicta low rolling resistance tires @ \$60.00 each	\$ 240.00						
Main contactor	\$ 130.00	New wheels	\$ 250.00						
Main circuit breaker	\$ 110.00	New clutch	\$ 63.00						
DC/DC Converter	\$ 420.00	Air shocks	\$ 65.00						
Voltmeter	\$ 48.00	"Convert It" Manual	\$ 25.00						
Ammeter	\$ 48.00	Hardware	\$ 300.00						
Onboard battery charger	\$ 550.00	Battery box plywood	\$ 30.00						
Charger interlock relay	\$ 15.00	Tools and supplies	\$ 200.00						
50 ft 2/0 welding cable	\$ 180.00	Paint and supplies	\$ 120.00						
Cable lugs	\$ 144.00	Angle iron	\$ 40.00						
Shrink tubing	\$ 19.00	Welding services	\$ 350.00						
120 volt battery box fan	\$ 20.00	Flywheel resurfacing	\$ 55.00						
Wiring diagrams	\$ 20.00	Total	\$ 7,926.00						



How Much Will It Cost?

- AC Motor & Controller Assembly
- \$4,250.00



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\$10,106.00

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- Battery Pack Replacement: \$1,000 - \$1,200 for a 18 wet cell battery pack. The battery replacement price varies depending on the number, and type of batteries used.



How Much Will It Cost?

- Electricity: \$0.05/mile (depending on the cost of electricity where you live and the efficiency. of the conversion).



Sources:

- <http://www.evalbum.com/build.html>
- <http://www.diyelectriccar.com/forums/showthread.php?t=669>