



# How to check-out your own GMC electrics

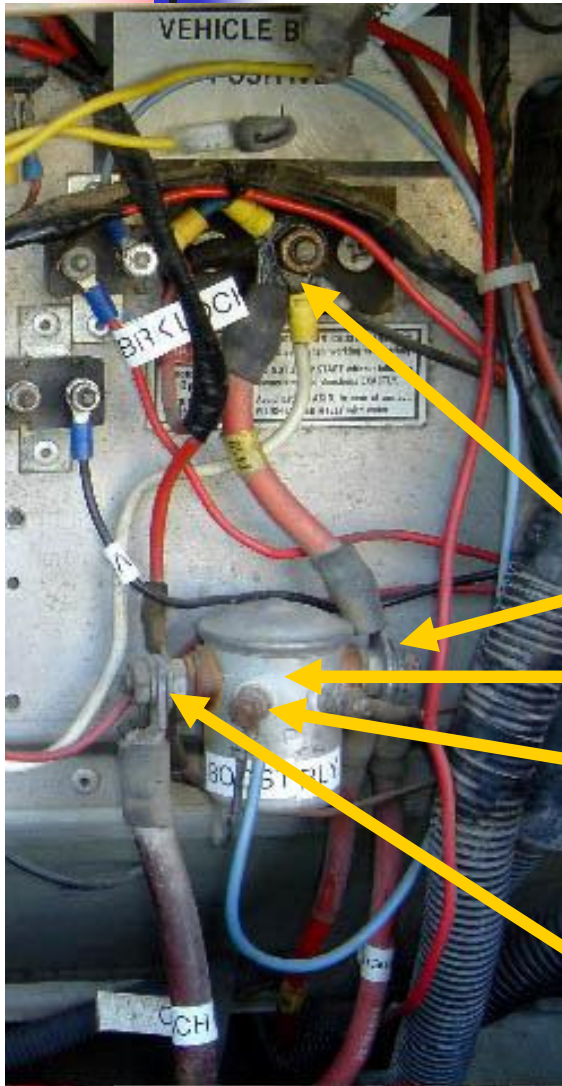
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- how to get your own voltmeter
- where to take readings
- test your alternator
- batteries - are they good?
- boost switch
- house charger
- what is good , and what is bad
- what is a "combiner" and how to make it work

THIS IS YOUR CHANCE TO LEARN HOW TO DO YOUR OWN TESTING

# BOOST RELAY

## where to find connections

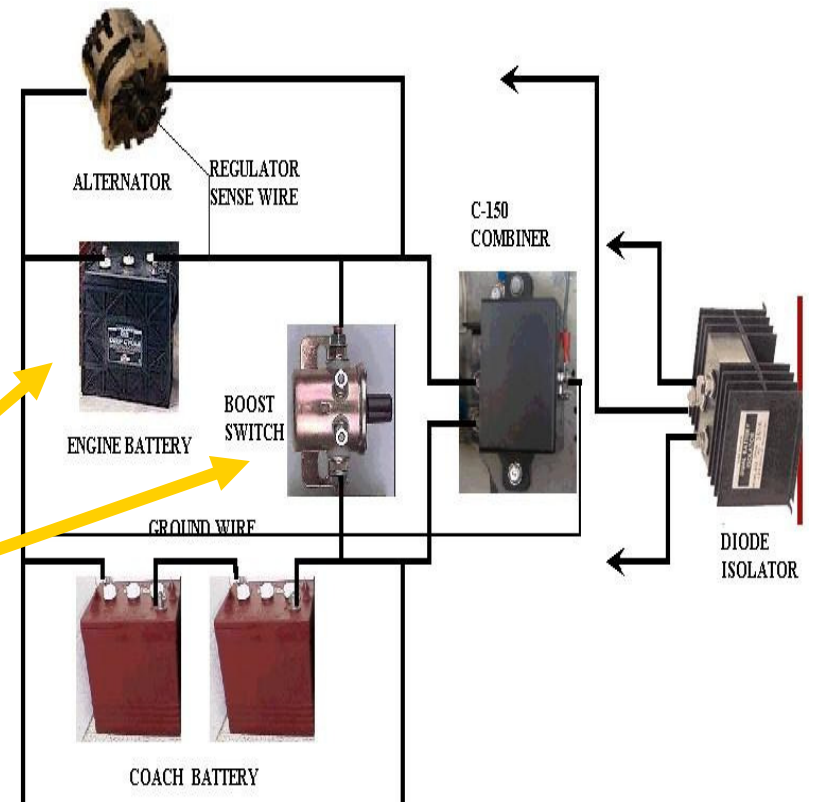


ENGINE BATTERY

BOOST RELAY

GROUND

HOUSE BATTERY



# Battery's ARE THEY GOOD ?



- 3 ½ digit digital volt meter (FREE / \$3)
- let battery sit overnight with no load
- measure the voltage (12 volts is ½ charge)
- normal voltage (12.565 volts)

<http://gmcmotorhome.info/instr.html#CHARGE>

PERCENT STATE OF CHARGE	VOLTAGE READING BY TEMPRATURE IN DEGREES FAHRENHEIT									
	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
100%	11.974	12.058	12.142	12.226	12.310	12.394	12.478	12.562	12.646	12.730
90%	11.864	11.948	12.032	12.116	12.200	12.284	12.368	12.452	12.536	12.620
80%	11.744	11.828	11.912	11.996	12.080	12.164	12.248	12.332	12.416	12.500
70%	11.614	11.698	11.782	11.866	11.950	12.034	12.118	12.202	12.286	12.370
60%	11.484	11.568	11.652	11.736	11.820	11.904	11.988	12.072	12.156	12.240
50%	11.344	11.428	11.512	11.596	11.680	11.764	11.848	11.932	12.016	12.100
40%	11.204	11.288	11.372	11.456	11.540	11.624	11.708	11.792	11.876	11.960
30%	11.054	11.138	11.222	11.306	11.390	11.474	11.558	11.642	11.726	11.810
20%	10.904	10.988	11.072	11.156	11.240	11.324	11.408	11.492	11.576	11.660
10%	10.754	10.838	10.922	11.006	11.090	11.174	11.258	11.342	11.426	11.510

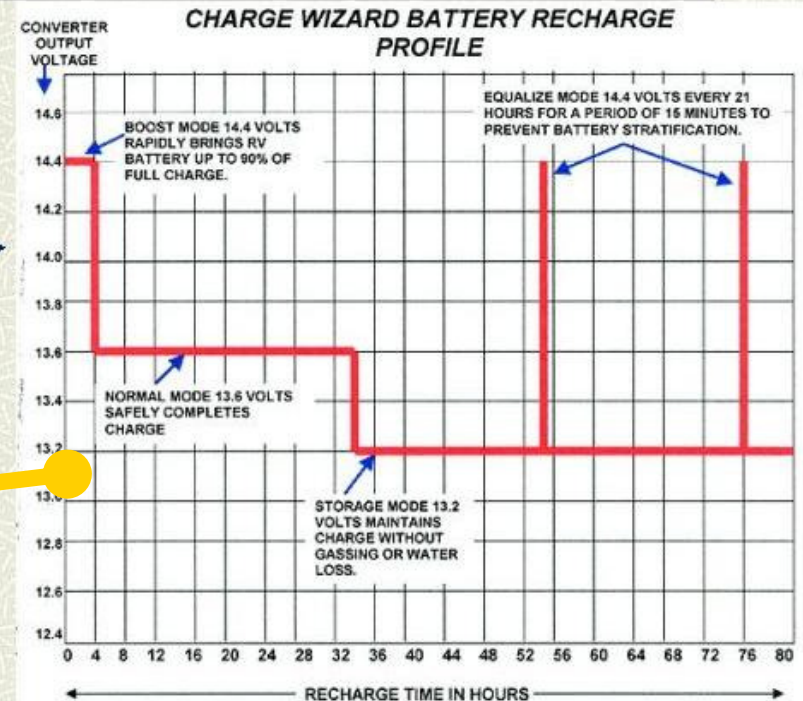
# HOUSE CHARGER

## modern charger modes



Buzz Box sets here at Trickle charge

This will boil the water out of the batteries over time



- \* With combiners , charges all batteries
- \* old buzz box will boil batteries

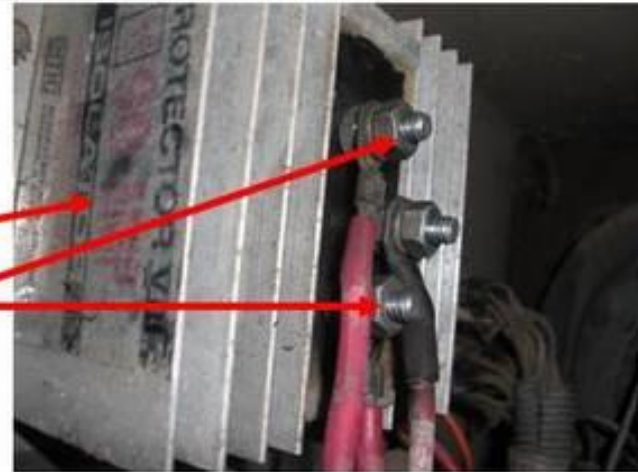
# 10 Minute Combiner Install



Combiner

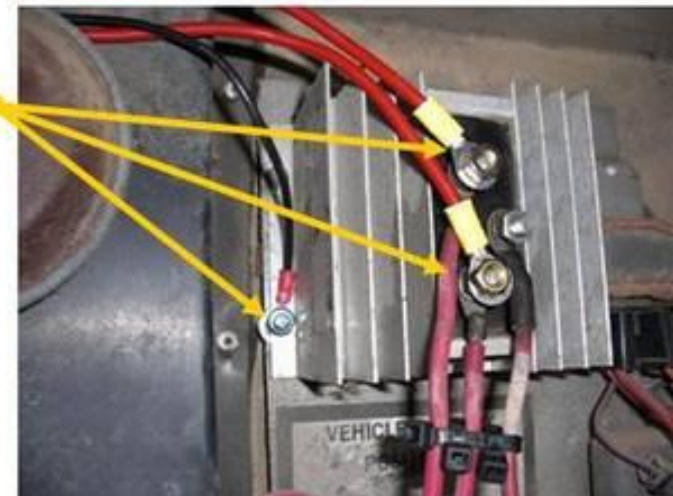
Isolator

Extra room on bolts

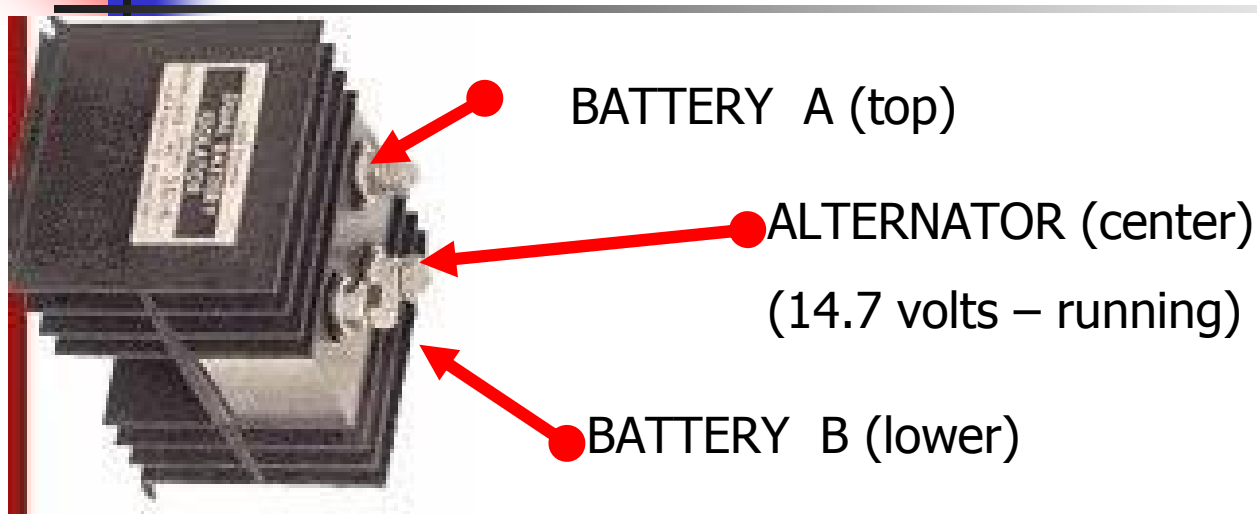


Add extra nuts

**DONE !**



# ISOLATOR TESTING



In a normal coach

- engine running
- combiner off ( ground green wire to shut off)
- the isolator center terminal should be 14.7 volts or a little higher.
- The readings at the upper and lower terminals should be 14.0 volts or a little higher.