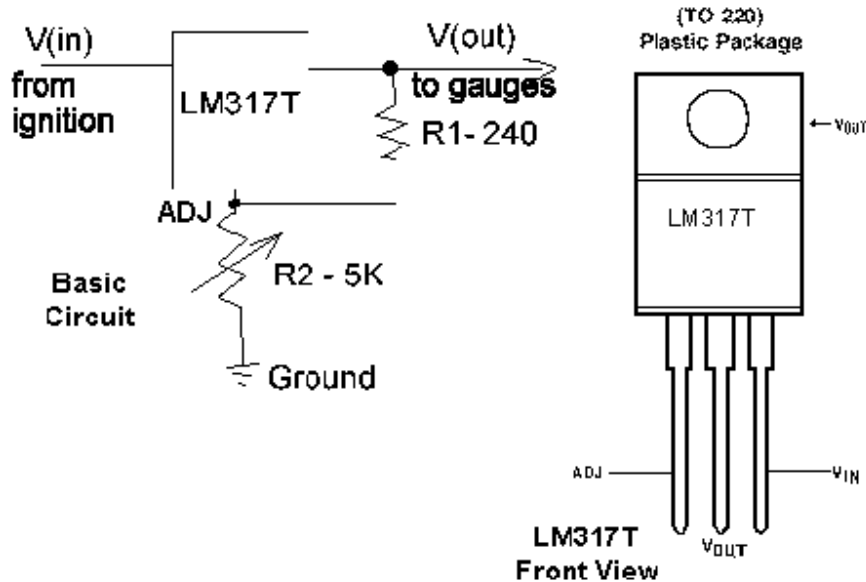


My fuel and temperature gauges peg out when I turn on the key. What's wrong and how do I fix it?

The voltage regulator that drives the gauges is failing. The gauges on a Gold Wing operate on 7 volts, but the bike itself runs at 13.8 volts (standard voltage of a fully charged battery). You need to replace the regulator. This regulator is very expensive from the dealer, over \$70 US. Here is a schematic and parts list to make your own:



Parts list--

LM317T variable voltage regulator IC, Radio Shack #276-1778

R1: 240 ohm resistor, Radio Shack #271-1111

R2: 5 K ohm variable resistor (pot), Radio Shack #271-281

All the parts are readily available at your friendly neighborhood Radio Shack. The whole thing uses 3 components. The basic schematic is on the back of the LM317T package.

Pin 1 is connected to the "hot" wire from the bike's ignition. Pin 2 is the output to the gauges. Before connecting up pin 2 to the gauges, connect 1 and 3, turn on the ignition switch, and adjust R2 until pin 2 tests 7 volts (or whatever voltage you want). Pin 3 is connected to ground

I found an error in the original paragraph above, and corrected it after I bought all the parts and built it. This regulator can be adjusted from 1.25volts to the input volts of the vehicle. The regulator is rated at 2 amps however R2 is pretty light for heavy stuff. There is plenty of power to run a walkman, CD or Tape player, I use a similar one that I built 12 years ago for my Voyager to operate my garage door opener (9V).

I would have to be kidding if I said that the parts list is very expensive, the LM317T Regulator is the most expensive part at \$1.99. I put it on a small PC Board P# ICB90 \$1.49. R2 is \$0.49, and a package of 5 resistors is \$0.49. Total cost \$4.46, not bad when you consider that a replacement for the onboard regulator would be \$70.00 or more, not only that this one can be used for any small device you want to put on your machine.

To all I do not take credit for the idea for this Regulator. If you feel that you would like to build this I take no responsibility for any problems that would arise to your machine. I can only say that if constructed properly it should give years of service.

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