

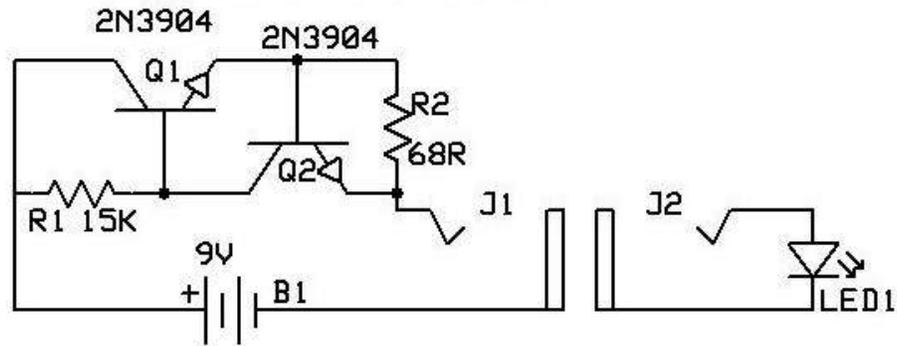
# Guitar Cable Tester

Here is a device that musicians will find highly useful. It will detect breaks or shorts in a guitar or monitor cable. Much more elaborate cable testers are available at music stores, but they are fairly complex and are mostly useful to road crews and technicians. The musician doesn't really care what is wrong with the cable, only whether it's good or not. You can't beat this tester for simplicity and ease of use. It is also extremely compact and can be easily stored in a gig bag.

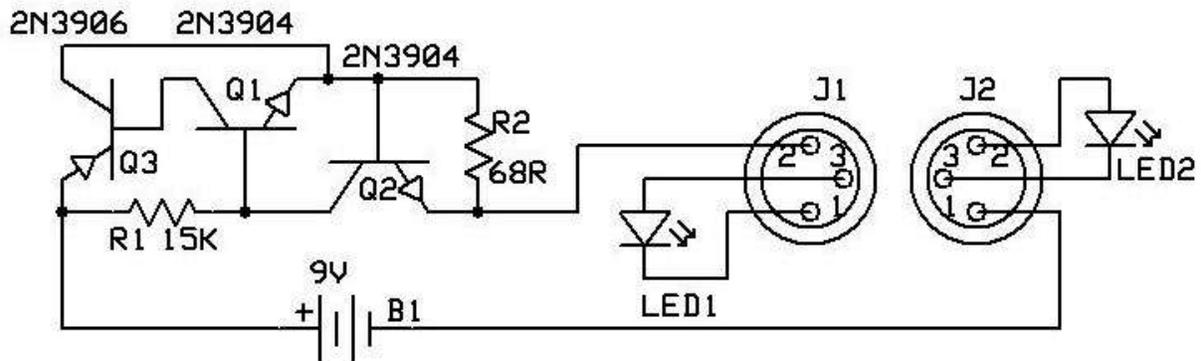
A two-transistor current regulator circuit is used instead of a resistor to maximize battery life. Any general-purpose silicon transistors can be used. The enclosure is Radio Shack P/N 270-1802. The ¼ inch phone jacks (Radio Shack P/N 274-252 or Switchcraft P/N 11) are mounted as far apart as possible to make room for the 9-volt battery. The tip contacts on the jacks are rotated inward to prevent the battery from interfering with plug insertion. Electrical tape is put over the back of the tip contacts to prevent them from touching the battery. The regulator circuit is built on a tiny piece of perfboard tucked into a corner near the J1 connector (the one on the left). Epoxy is poured around the connectors and the circuit board and over the back of the LED to keep them in place. Foam padding is used to keep the battery from moving inside the box.



### GUITAR CABLE TESTER



### MIKE CABLE TESTER



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The drawing shows both a guitar and a mike version. Both can be combined in one box if desired, sharing the battery and current regulator. An additional transistor (Q3) can be added to the current regulator if desired to add about 1.2 volts to the battery headroom.

The guitar cable is OK if LED1 is lit. For the mike cable, both LED1 and LED2 must be lit. In the case of the mike cable tester, one XLR connector will be male and the other one female. High-efficiency LEDs are recommended.