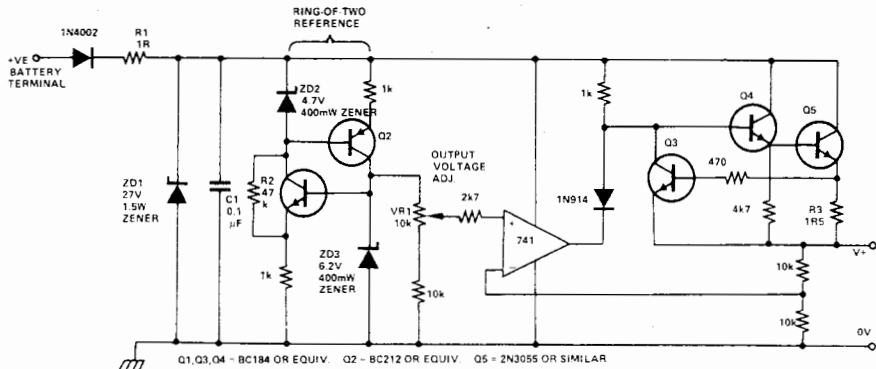


MOBILE POWER SUPPLY

R1, C1 and ZD1 provide clipping and smoothing of supply spikes, while D1 protects against reverse polarity connection. The reference voltage is provided by the ring-of-two, since in this configuration the zeners bias constant-current sources for each other, the output across ZD3 is almost totally independent of supply variations. R2 ensures the ring starts reliably.

A set fraction of the reference voltage is applied, via VR1, to the 741, which in conjunction with current amplifiers Q4, Q5 forms a negative feedback loop to maintain the output voltage constant. It may be set



between 10 and 6 volts, so, for instance, most battery cassette equipment may be driven. Short-circuit protection is provided by Q3; when the output current exceeds 400mA

sufficient voltage is dropped across R3 to turn on Q3, which shunts drive away from the base of Q4 and hence prevents the output current from rising further.