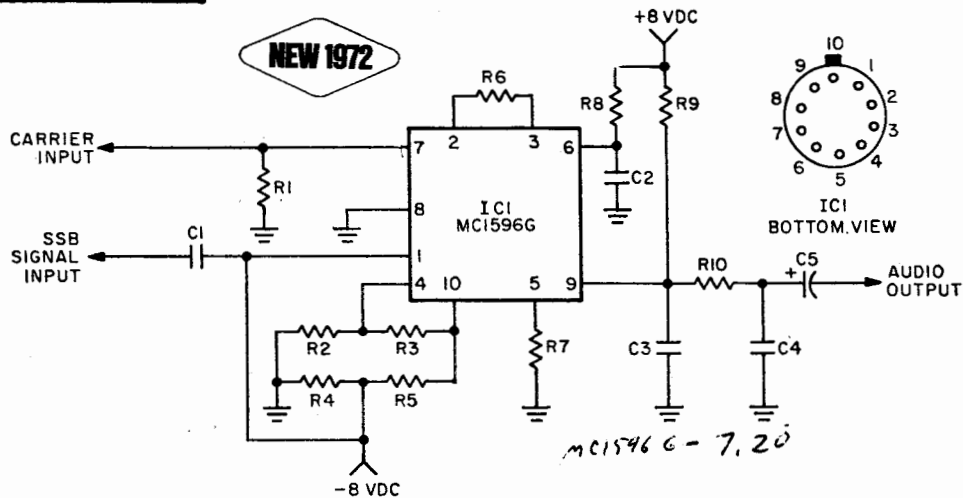


IC 18

Add-on Product Detector



Many an old receiver is still a good receiver except for SSB reception. With a product detector, your old reliable can deliver good SSB reception on a par with many modern solid-state receivers. This product detector can be easily added to most old receivers; the only critical input requirements are an SSB signal input level of 5 to 500 mV and a carrier (BFO) input level of about 300 mV. The output is the demodulated audio. Best results are obtained from a crystal-controlled carrier oscillator, rather than a variable frequency oscillator. A rigid construction is suggested, either printed circuit or on a perf-board with push-in terminal connections. The power supply is bi-polar

8 volts, though a bi-polar 9 volt power source can be substituted. Since the current requirement is less than 5 mA, ordinary transistor radio 9 volt batteries can be used as the power source.

PARTS LIST FOR THE ADD-ON PRODUCT DETECTOR

- C1**—0.47 μ F, 25 VDC Mylar capacitor
- C2, C3, C4**—0.005 μ F, 500 VDC ceramic disc capacitor
- C5**—1 μ F, 10 VDC electrolytic capacitor
- IC1**—Motorola MC1596G
- R1**—51-ohm, 1/2 watt resistor
- R2, R3, R4, R5, R6, R10**—1000-ohm, 1/2 watt resistor
- R7**—6800-ohm, 1/2 watt resistor
- R8, R9**—3900-ohm, 1/2 watt resistor