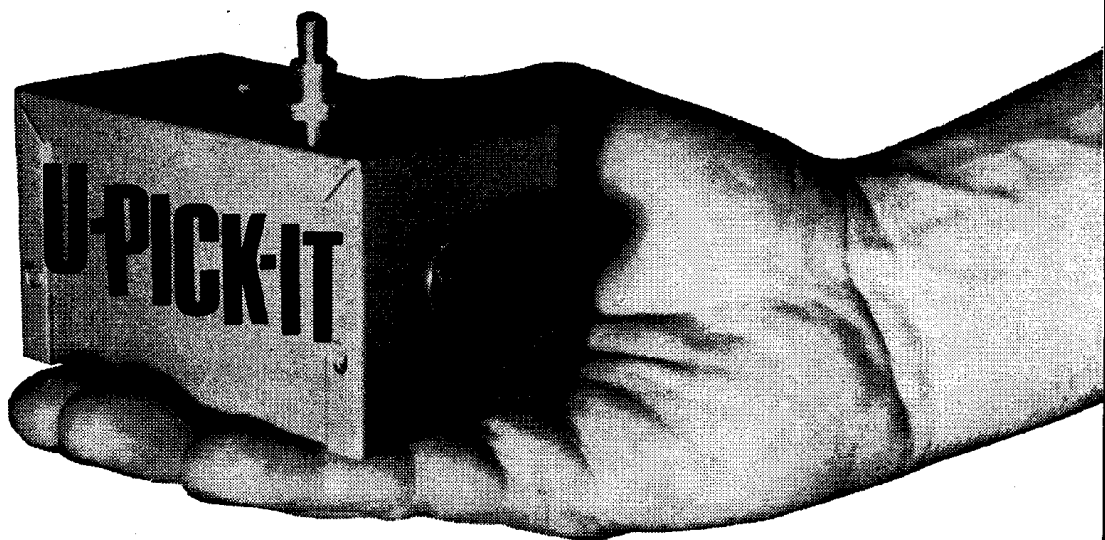


Your axe swings to a different beat
with a six buck gizmo we call . . .



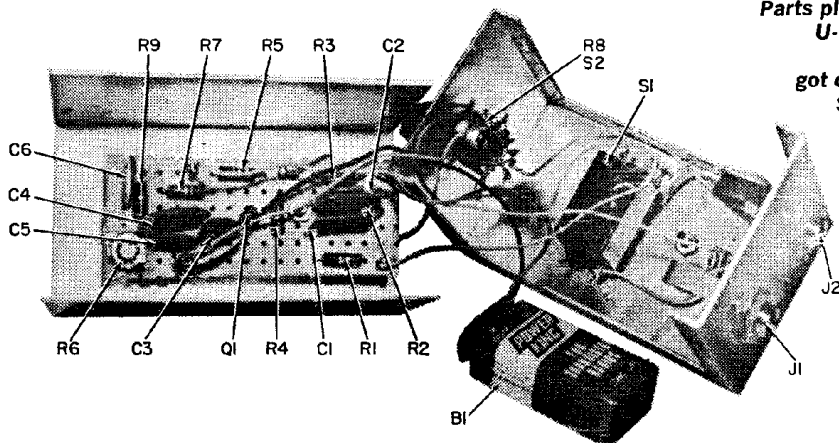
by Steve Daniels, WB2GIF

Would you spend about six bucks to tailor the sound of your guitar? Especially if you knew you'd have the great sound of that group you know is heading to the top. Or, maybe, you're not satisfied with the sounds you're getting, and want to be able to change the tone of your guitar to suit the mood of your music. We're not saying that our *U-Pick-It* will make a Segovia out of you. But it sure will make your guitar sound great, and who knows, maybe it will help you on to fame and fortune.

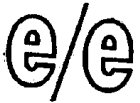
What does *U-Pick-It* do for your instrument? It gives you a choice of bass, treble or midrange boost just by turning a single knob. You can make that old guitar sound

twangy, smooth or raunchy at the twist of your wrist. Furthermore, *U-Pick-It's* bass boost will allow a regular guitar to be used as a string bass by giving those low notes an extra boost.

PSO With a Difference. Check the schematic; it will ring a bell for many of you. Basically, you'll see a phase shift oscillator with a few necessary changes. Note the network consisting of components R1, R2, and R3 isolates transistor Q1 from the loading effect of the guitar pickup. Also, potentiometer R6 is used to lower the stage gain to the point where the transistor will be amplifying rather than oscillating. The phase shift network peaks the response within a



**Parts placement within
U-Pick-It presents
no problems
got choice of switch
S1 in Parts List.**



U-PICK-IT

fairly narrow range, depending on the setting of potentiometer R8.

You Pick it's parts. We housed *U-Pick-It*, including its own self-contained battery power supply (a 9 V transistor battery) in a 4 X 2¼ X 2¼-in. Minibox. All of the components with the exception of the input and output jacks, the *IN-OUT* switch, potentiometer R8 and the battery are mounted on a 3¼ X 1¼-in. piece of perfboard. Push-in clips are used for input, output, battery + and ground terminations.

Although the transistor doesn't have the usual triangular pin orientation, if you follow our layout, it can be mounted without having to cross over any of its leads. A word of caution now: this circuit won't work with low gain transistors. So please,

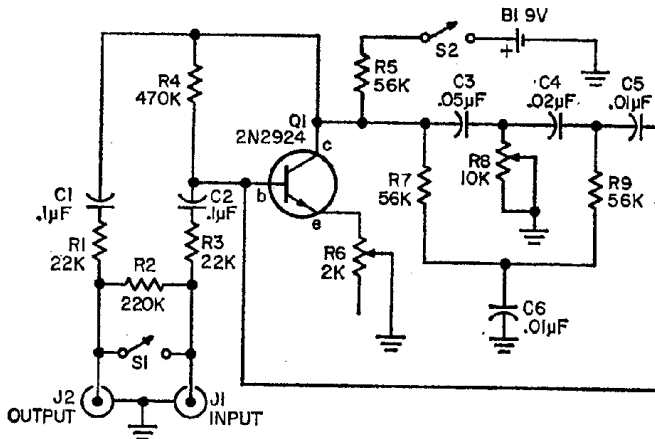
no substitutions! Besides, the one we used isn't expensive, so there really isn't a good reason to fiddle with dime-a-dozen transistors.

In the phase section, use good quality disc capacitors rated 50 VDC minimum or better. Seems we found that low voltage ones sometimes may leak too much for this application.

Drill mounting holes for the two jacks in one end of the bottom half of the Minibox. Whether you buy a commercial battery holder, or make one from a scrap of aluminum, locate the battery so that it will clear the other components when the Minibox is closed. Drill two mounting holes; one for the battery holder, and the other to support the perfboard that's raised ¼-in. off the bottom with a spacer.

IN-OUT switch S1 is located in the center of the top half of the Minibox. It's a push-

(Continued on page 102)



PARTS LIST FOR U-PICK-IT

- B1**—9 V transistor radio battery (Burgess type 2U6 or equiv.)
- C1, C2**—0.1 µF, 75 V ceramic disc capacitor (Lafayette 33F69089 or equiv.)
- C3**—0.05 µF, 75 V ceramic disc capacitor (Lafayette 33F69071 or equiv.)
- C4**—0.02 µF, 75 V ceramic disc capacitor (Lafayette 33F69063 or equiv.)
- C5, C6**—0.01 µF, 75 V ceramic disc capacitor (Lafayette 33F69055 or equiv.)
- J1, J2**—Standard open circuit phone jack (Lafayette 99F2135 or equiv.)
- Q1**—Silicon, npn, high gain transistor (GE type 2N2924 or Motorola HEP 724)
- R1, R3**—22,000-ohms, ½-watt, 10% composition resistor
- R2**—220,000-ohms, ½-watt, 10% composition resistor
- R4**—470,000-ohms, ½-watt, 10% composition resistor

- R5, R7, R9**—56,000-ohms, ½-watt, 10% composition resistor
- R6**—2,000-ohms potentiometer, ¼-watt, linear taper (Lafayette 33F16452 or equiv.)
- R8**—10,000-ohm potentiometer, 1-watt, linear taper (Lafayette 33F11255 or equiv.)
- S1**—Spst rocker switch (Lafayette 34F34164 or equiv.) See text
- 1—4 X 2¼ X 2¼-in. Minibox (Lafayette 12F83878 or equiv.)
- 1—Battery holder (Keystone #203P or equiv.)
- 1—Battery connector (Lafayette 99F-62879 or equiv.)
- 1—3¼ X 1¼-in. piece of perfboard
- Misc.** Wire, solder, bolts, nuts, spacer, knob, push-in pins, etc.