Project Updates

• I read Jim Barbarello's "Computer-Controlled Robotic Arm" (October 1988) with great interest because I have also built an interface between my computer and the Radio Shack Mobile Armatron. (Mine uses the internal battery to power the Armatron but is otherwise very similar.) I discovered an error in Fig. 1. With the base of Q6 connected through R6 to pin 9 of P1, data bit 7 controls the voltage polarity sent to the Armatron. Relays K1 through K5 are shown controlled by data bits 0 through 4, respectively. However, the Table and BASIC program listing indicate that polarity is controlled by data bit 0 and that these re-

(continued on page 62)

LETTERS...

(from page 7)

lays are controlled by data bits 1 through 5. Thus, the correct P1 pin numbering should be 3, 4, 5, 6, 7, 2 and 18, from top to bottom. Also, Radio Shack no longer carries the relay specified for K6. If necessary, two 5-volt dc spdt relays can be substituted.

Eric B. Schuyler
Snyder, NY

You're correct. Pin connections for P1 shown in Fig. 1 were for an earlier version of the project. By extension, the "To P1" numbering sequence at the bottom of Fig. 4 should read 18, 7, 6, 5, 4, 3, and 2 left to right. Digi-Key's Part No. Z105-ND is a suitable replacement for the relay specified for K6. If two Radio Shack Cat. No. 275-243 spdt relays are used for K6, connect both coils between +5 volts and the collector of Q6. Then wire the common line of K1 through K5 (was pin 4 of K6) to the toggle lug of one relay, the black-insulated conductor of the ribbon cable to the toggle lug of the other relay (was pin 13 of K6), the normally open contacts of both relays to circuit ground (was pin 8 of K6) and the normally closed contacts of both relays to +5 volts. Finally, do not *leave the Armatron powered when you start up or reboot your computer. The printer-port initialization routine that is automatically executed upon start-up or reboot will "command" the Armatron to move in unpredictable ways. Apply power only after the ARM program has begun.—J.J. Barbarello*