The erasable programmable read-only memories (EPROMs) in this game contain a new program that changes the Tempest™ self-test. Refer to Figure 6, Part 2 in Tempest Upright and Cabaret Manuals, and Figure 7, Part 2 in Tempest Cocktail Manual.

To test the encoder wheel (Step 3), rotate the wheel slowly. On the lower right of the screen, a line segment rotates around one endpoint (like a hand on a clock). Slowly rotate the wheel clockwise, and the line rotates clockwise. Rotate the wheel counterclockwise, and the line rotates counterclockwise.

If the line does not rotate as described, the harness wires are loose or incorrectly connected, or the encoder wheel is bad.

A linear scale test has been added to Step 5. A rectangle appears at the display edges and shrinks smoothly to about ½ screen size. The rectangle snaps back to full size and shrinks again.

If the rectangle abruptly changes size, there is a problem in the linear-scaling circuit D9 and D10 and associated circuitry.

**Self-Test Screen**