Grass Valley Group

Field Modification Note

FM Number: FM2205-00C **Ref ECO:** none **Date:** November 1996

Product: VPE series editors with K3 Keyboard

Assemblies: K3 Keyboard

Purpose: Adds a new jog knob touch sensor circuit board. The new board significantly improves jog knob performance, eliminating erratic jogging and shuttling.

Parts Included:

Part Number	Description	Qty
	FM2205-00C Sticker	1
152226-00	FMN Parts Kit, VPE Jog Sensitivity K3	1

FM2205-00C

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Overview:

This modification requires the following general steps:

- Open the back of the keyboard
- Mount and connect the new Jog Touch Sensor module to the main pc board
- Reassemble the keyboard pcb and install the new rubber ring on the jog knob
- Adjust the sensitivity of the jog knob

Instructions:

1. Turn off system power, disconnect the keyboard from the editor, and place the keyboard on a static-free work surface where you can take it apart.

CAUTION: *To prevent static damage to sensitive components, use a grounded wrist strap, mat, and tools when handling components and printed circuit modules.*

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2. Turn the keyboard upside down and remove the bottom cover by removing the 6 screws around the perimeter of the cover.
3. On the small pc board inside the keyboard case, cut pin 3 of IC U16 close to the body of the IC, leaving the jumper wire connected to that pin intact. Bend the pin outward slightly to pull it away from the body of the IC, being sure the jumper remains connected. See Figure 1.
4. Mount the new 067170-00 Jog Touch Sensor module onto the main pc board as shown in Figure 1 using the screws and spacers provided. To do so, you must remove the two existing lower left screws that hold the main pc board to the case and mount the new module in place of the removed screws.

Note: *There are two versions of the Jog Touch Sensor module, a smaller -00 version and a larger -01 version. Both work equally well for the K3 keyboard.*

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5. Connect wires between the Jog Touch Sensor module and the keyboard pcb:
   - YELLOW logic wire to the side of resistor location R5 closest to connector J1.
   - GREEN ground wire to the left end of capacitor C16 near U4 pin 6.
   - RED +5 volts wire to the right end of capacitor C16 near U4 pin 1.
   - BROWN wire from the jogger shaft encoder to Jog Touch Sensor Module pad TP4. To make this connection, unsolder the brown wire from keyboard point E1 and solder it to TP4.
6. Solder a 62 pF capacitor between R29 and R30 on the Sensor module (Fig. 1).
7. Place the new rubber ring onto the jog knob.
8. Connect the keyboard to the editor and turn on power.

9. Adjust jog knob sensitivity as follows: Firmly grasp the outer ring of the jog knob but do not touch the metal center. Adjust trim pot R24 on the new Jog Touch Sensor module until the yellow LED on that module just turns off.

10. Put the bottom cover back on the keyboard using the 6 screws that were removed originally. Attach the FMN sticker to the bottom of the keyboard. This completes the modifications.

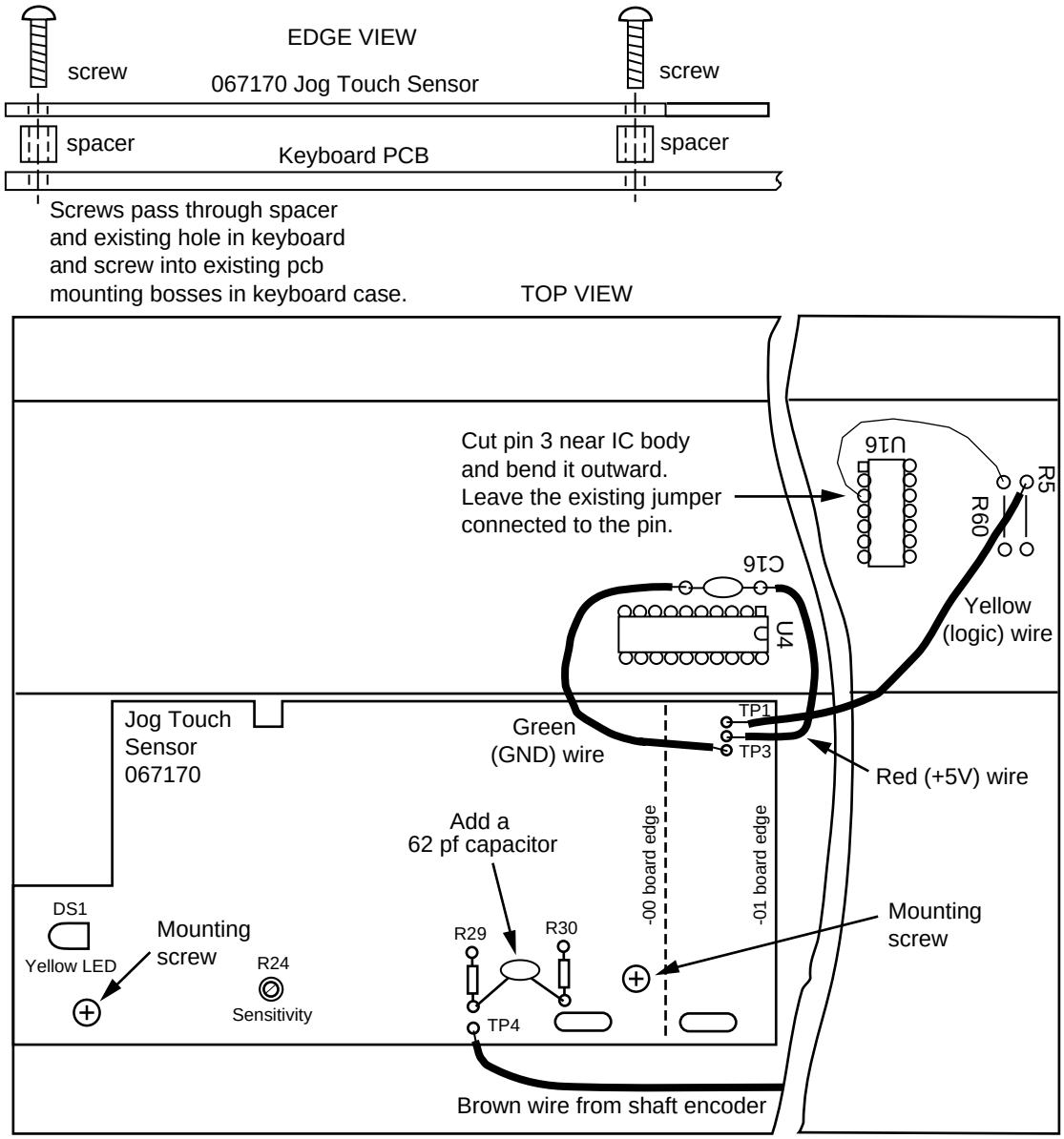

Figure 1. Locations of Modifications