SECTION

G

Replacing The Keyboard

The Mirage keyboard is mounted in the case using nine mounting screws through the case into two special mounting rails on the underside of the keyboard. Since there are no pre-drilled mounting screw locations in these rails, it is important for you to make sure that the keyboard is aligned properly before final installation. Failure to do so may result in faulty keyboard performance.

1. Remove all cables connected to the Mirage, including the power cable.
2. Remove the five screws which fasten the Mirage control panel and raise the panel.
3. Tilt the Mirage up on its back to expose the nine keyboard mounting screws on the bottom of the unit. Supporting the keyboard with one hand, carefully remove the mounting screws.
4. Slowly lift the keyboard, from the disk drive end, until the keyboard connector on the underside of the keyboard can be seen. Carefully remove the connector, noting that the two blank terminals of the connector face the center of the keyboard.

IMPORTANT!

5. To install the new keyboard, lay the right side of the keyboard into the case and carefully plug the connector into the keyboard. Note that the keyboard cable is pre-formed into several bends. Refer to Figure 5 to make sure the cable is properly routed. Then, lower the left side of the keyboard into the case, making sure that the flat cable is not in danger of being pinched by the keyboard mounting rails.

IMPORTANT!

6. Since the Mirage keyboard uses mounting rails, it is important to align the keyboard properly before installing any of the mounting screws. The keyboard should be positioned so that there is equal clearance between the end key and case on both ends of the keyboard. It may be helpful to use thin cardboard shims to help maintain this clearance during installation.
7. Once the keyboard is aligned, tilt the Mirage up on its back, while supporting the keyboard with one hand. Insert the first mounting screw in the center-front mounting hole, and visually locate the screw into the mounting rail channel. Fasten the screw but do not secure it.

IMPORTANT!

8. Recheck the alignment, and install the remaining mounting screws, occasionally rechecking the keyboard alignment. Remove any shims. To avoid placing any warping stresses on the keyboard or case, tighten the screws from the center of the keyboard outwards.
9. Test the operation of the keys, particularly the end keys. Close the panel and test the unit.

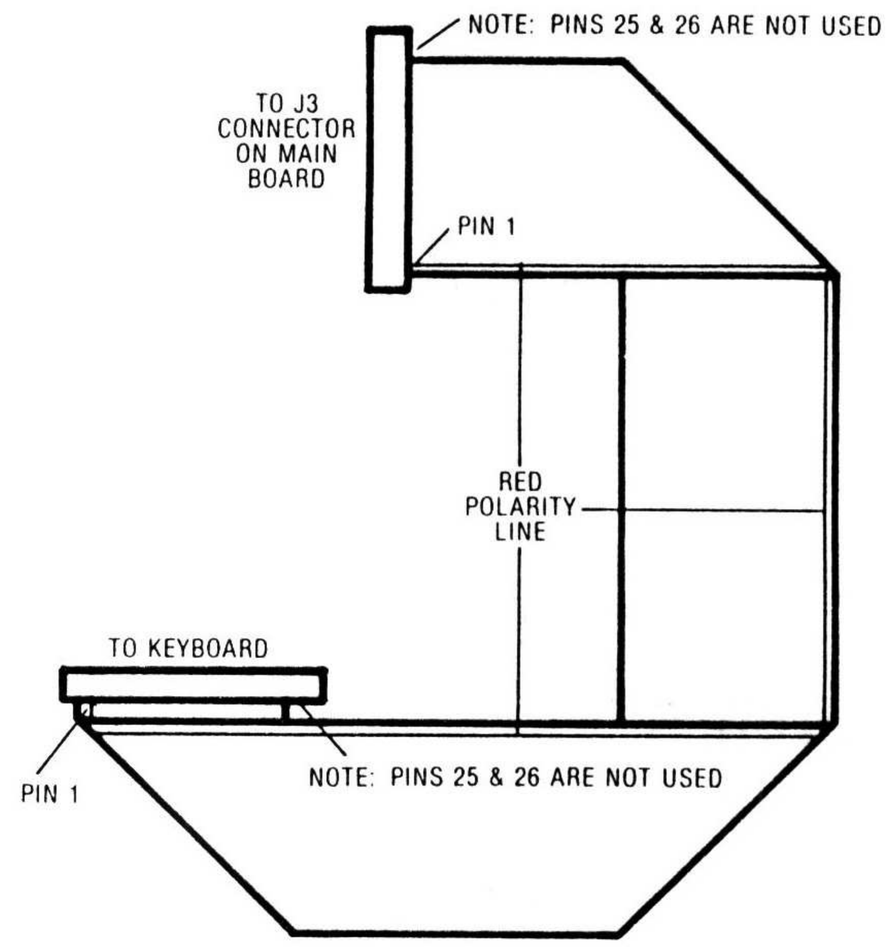

FIGURE 5 - KEYBOARD CABLE

SECTION

H

Replacing Individual Keys & Cleaning The Velocity Switches

Problems with velocity sensitivity are usually caused by dirt in the velocity sensitivity switching circuit. The circuit and switchpads are located underneath the keys and you will have to remove the keys individually to perform the service.

The flexible switchpads are installed in five sections. The first four sections contain 24 pads (12 keys), while the section on the far right end of the keyboard contains 26 pads (13 keys). In order to properly clean the switchpads, an entire section must be removed. White keys must be removed before black keys can be removed.

1. Remove all cables connected to the Mirage, including the power cable.
2. Remove the five screws which fasten the Mirage control panel and raise the panel.
3. To remove an individual key, pull forward on the key spring and lift the back of the key straight up. Then pull the key forward and out. You will now see two of the gray rubber switchpads under the key.
4. Repeat this procedure until an entire switchpad segment is exposed. Remove the segment by popping it off the circuit board.
5. Clean the switchpad segment and circuit board thoroughly with an electrical contact cleaner (isopropyl alcohol is safe).
6. Pop the switchpad into the circuit board. Install the keys by sliding each key into place, making sure it fits onto the locating peg. Place the rear of the key over the spring. Pull the key slightly forward while pressing down at the rear. The spring should be locked in place at the rear of the key.
7. After all keys are replaced, close the front panel and test the unit.