1. TOOLS/SUPPLIES REQUIRED

8mm Allen key tool

3mm Allen key tool

Side cutters

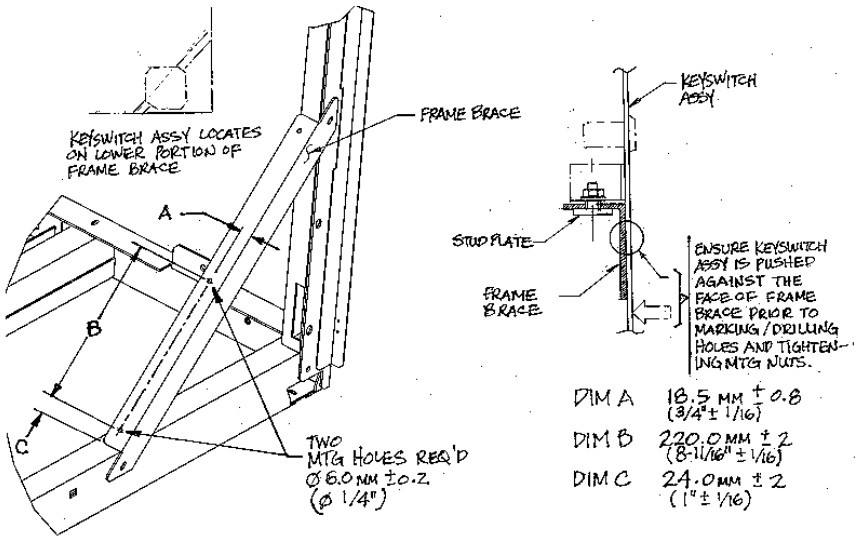
Large slotted screwdriver

Drill with a 5.5mm bit and 2mm bit

05-0048 keyswitch SIO retrofit kit

2. UPGRADE PROCEDURE

1. Ensure that the main power switch/circuit breaker is in the off position.
2. Remove the power box service access panel, the power box side panel, and the rear panels.
3. Secure the 11-0571A keyswitch assembly to the frame brace near the card cage. Use the provided mounting hardware to secure the bracket using the lower 2 holes already existing on the frame brace. Please refer to the following 2 pictures for location.





Note: On TrendsetterVLF B9 and earlier, the holes will have to be drilled in the frame brace. Use the keyswitch bracket as a template and drill two 5.5mm holes in the lower half of the frame brace. The bracket placement should be as close as possible to the back of the card cage. Please see Appendix A for a list of sites that will require drilling. Also, some additional sites may only have the lower hole pre-drilled and will require the second hole drilled for the upgrade.

4. Disconnect the 10-3538A cable from J19 on the backplane. Use one of the cables in the 10-3801A kit to connect the 10-3538A cable to J8 on the RDC board(Relay Delay Control board) mounted on the keyswitch bracket.

5. Connect the 10-3782A cable between J19 on the backplane and J7 on the RDC board.

6. 10-3784A connects between J4 on the RDC board and the unused terminals on the abort switch mounted behind the engine.

7. Replace 10-3497A (connecting J1 of the servoamp to J7 of the PDB) with 10-3497B. Route the pair of black wires to the keyswitch bracket and connect to terminals 6 and 8 on the relay.

8. Remove the AC power wire from PS3 (10-1440B), this is the power supply for the Carriage Motor Drive board and is mounted directly above the CMD board. Replace it with the AC cable included in the 10-3801A kit; route the pair of black wires to the keyswitch bracket and connect to terminals 2 and 4 on the relay.

9. Use the last cable from the 10-3801A kit to connect 10-3608A to J1 on the RDC board.

10. Replace 10-3505A (connecting J17 on the PDB to J27 on the backplane) with 10-3785A. Plug the additional 3pin molex connector into the RDC board.

11. Ensure that the cables going to the RDC board are fastened neatly to the lower rail of the card cage with cable ties and that all cable track covers are re-installed.

12. Replace the panels, turn on the main power, and verify that the carriage and drum are operating normally.

CAUTION: The following procedures are potentially dangerous. Before proceeding ensure that the write laser is firmware disabled by entering 'set head wenable 0' from the diagnostic interface.

13. Remove the power box panel and remove the key attached to the keyswitch bracket. Insert the key in the keyswitch and turn it to the upper 'Laser Hazard' position. In this position the safety interlock loop has been completely bypassed and all laser and mechanical functions are uninhibited, except for the write laser if it has been correctly firmware disabled). The 2 LEDs above the keyswitch should now be flashing continuously to warn that the laser safety interlock has been overridden.

14. Ensure that the drum and carriage are functional even when the panels are removed. Also ensure that the focus laser is still functional.

15. While the drum is turning and the carriage is moving, press the abort switch to ensure that the drum and carriage are both disabled.

16. Restore the abort switch, and turn the keyswitch to the lower 'Mechanical Hazard' position. In this position the safety interlock loop has been bypassed for mechanical hazards, but not for the write laser. The 2 LEDs should no longer be flashing.

Note: The firmware will still recognize the open door with the keyswitch in this position, so you will have to enter 'mask door creo' as usual.

17. Ensure that the drum and carriage are functional even when the panels are removed. Also ensure that the focus laser is no longer functional.

18. While the drum is turning and the carriage is moving, press the abort switch to ensure that the drum and carriage are both disabled. Restore the abort switch.

19. Rotate the keyswitch to the middle (neutral) position and remove the key. Secure the key back onto the keyswitch mounting bracket.

20. If any of the above tests fail, contact the Creo Response Center immediately for advice on how to proceed.

21. You may get a "carriage drive error" after installing the keyswitch. This is normal if a door is open and the keyswitch is not in the "laser hazards" position.

Appendix A: TrendsetterVLF Sites Requiring Drilling for SIO Upgrade

BB2 - Trend Offset

BB3 - RBW Graphics

BB4 - Trans Continental

B5 - Banta

B6 - Tukaiz

B7 - CDS

B8 - Waldorf

B9 - Rhodes