

Touch Screen & Main Controller Board Replacement TDF

Service Procedure **TS023**Revised: 8-19-2022 RJC

IMPORTANT: Use a grounded wrist strap and anti-static mat to avoid electrostatic damage to the circuit board when performing this repair.

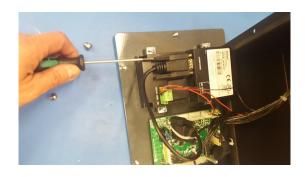
To perform this procedure you will need a TDF106 (Step 2) Programmed Touch Screen Display and / or a TDF108 Programmed Main Controller Circuit Board (Step 10).

1. Turn power off to the ANKOM^{TDF} instrument. Remove the Control Panel from the instrument. There are three nuts attaching it to the right support leg. Unplug the 25-pin connector from the back of the controller (These steps are not shown). Unscrew the six acorn nuts from the back of the enclosure, as shown.



TDF106 TOUCH SCREEN DISPLAY REPLACEMENT STEPS 2 - 9

2. Unscrew the serial port connector from the back of the touch screen display. When this is done simply pull the serial port connector out.



 Unscrew the two outer screws holding the light green power connector in the socket on the back of the touch screen display. Do <u>not</u> loosen the middle screws holding the wires in the connector.



4. Pull the light green connector from the socket.





Touch Screen & Main Controller Board Replacement TDF

Service Procedure **TS023**Revised: 8-19-2022 RJC

5. Unscrew the four retaining clips that hold the touch screen display in place.



6. Push the broken touch screen display out from the rear. Slide the new one back in place and be sure the front flange sits flat against the front of the controller front panel.

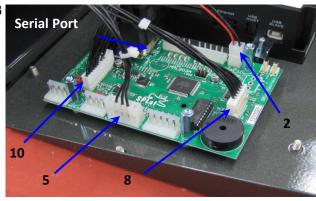


- 7. Resecure the four retaining clips to hold the front panel in place.
- 8. Plug the black serial port connector into the back of the touch screen. Tighten the screws.
- 9. Plug the light green power connector into the green socket. Tighten the screws. For touch screen only replacements, skip forward to step 14.



TDF108 MAIN CONTROLLER BOARD REPLACEMENT STEPS 10 - 13

10. Disconnect the 5 connectors from the Main Controller Circuit Board. Do **NOT** pull on the wires, pull from the white connector. There are 10, 8, 5 and 2 socket connectors in addition to the main Serial Port connector coming from the Touch Screen. You will have to cut a cable tie that secures the Serial Port connector to the board. Note how this was done to replace it when finished.

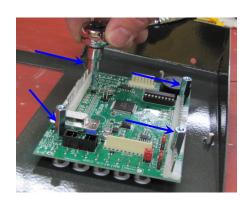




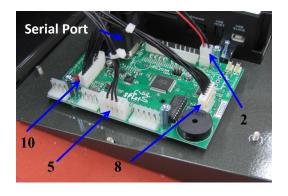
Touch Screen & Main Controller Board Replacement TDF

Service Procedure **TS023**Revised: 8-19-2022 RJC

11. Use a ¼" nut driver or wrench to remove the four hex stand-offs that secure the circuit board to the frame of the Control Panel. Install the new circuit board and secure it with the four original hex stand-offs. Be sure the white spacers are positioned on the threaded rods behind the circuit board. As needed, tighten or loosen the two stand-offs near the micro-switches on the circuit board to obtain the appropriate sensitivity of the push-button micro-switch through the front decal.



12. Reconnect the five connectors to the circuit board. These are the 10, 8, 5, and 2 socket connectors as well as the Serial Port connector as identified by the blue arrows.



13. Use an 8" cable tie to secure the Serial Port connector to the flange of the Serial port plug on the circuit board. Snip off any excess cable.



- 14. Replace the back cover and tighten the six acorn nuts.
- 15. Reattach the control panel onto the TDF instrument and plug in the 25pin connector into the back.
- 16. Turn the power back onto the instrument and confirm normal operation.

