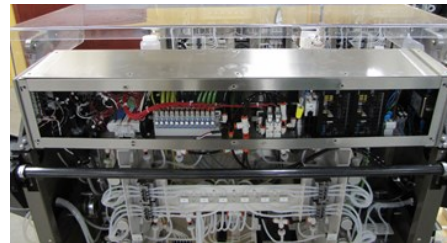


NOTE: The following items are included in a TDF98 replacement package: 1 Thermistor Assembly, 6 cable ties (Z10), 1 cable tie holder (Z461), 1 white 3-pin connector (Z207).

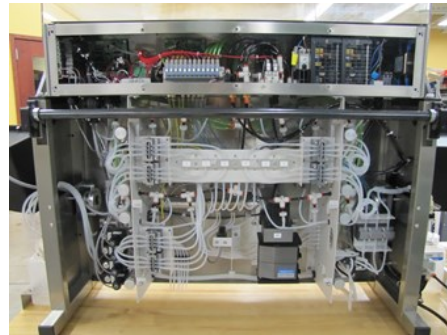
1. Turn off the instrument and unplug the power cord. Unscrew the 10 screws on the back panel and remove. Set aside the panel and screws for reattachment later.



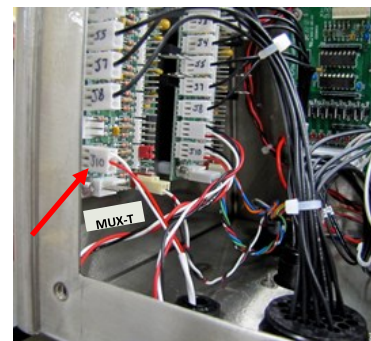
2. Unscrew the 7 screws on the top panel and remove. Set screws and panel aside for reattachment later.



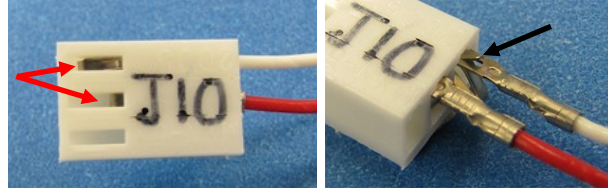
3. Unscrew the 6 acorn nuts securing the clear back plastic panel and remove. Set aside for reattachment later.



4. Detach the white 3-pin connector labeled "J10" from the MUX-T circuit board.



5. Using a dental pick or a small screwdriver, depress the tabs (Black Arrow) inside the J10 connector in order to slide the two conductor out of the terminals (Red Arrows) and discard the white connector.



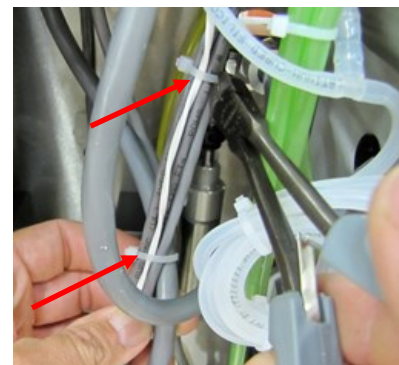
6. Loosen the black nut on the explosion proof fitting, located on the underside of the Electrical Enclosure, that the white thermistor wire runs through until the nut slides off.



7. Pull the white thermistor cable completely out of the black fitting and set aside nut for later use.



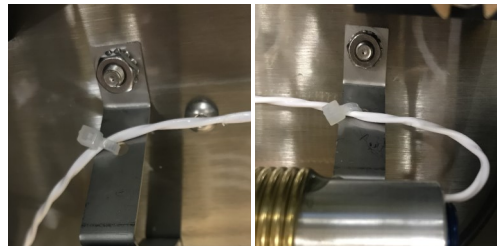
8. Carefully cut off both cable ties connecting the white thermistor cable to the gray cables on the left side of the back of the instrument **without damaging the insulation.**



9. Pull the white thermistor cable out of the large grommet in the left gusset panel when facing the back of the instrument.



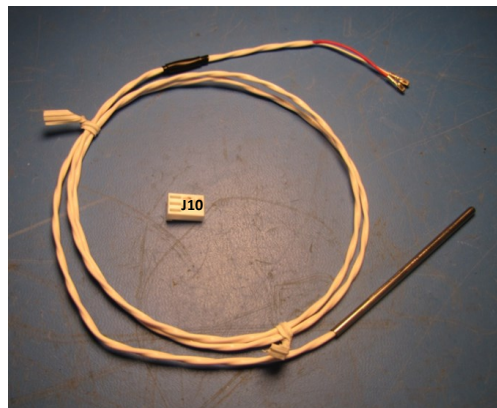
10. Using clippers, carefully cut off both cable ties that are holding the thermistor wire to the two upper brackets of the In-Line Heater. Make sure you do not damage the insulation.



11. Slide out the thermistor from the In-Line Heater. This should easily slide out. If it does not come out, you will need to loosen the threaded plug (Red Arrow).



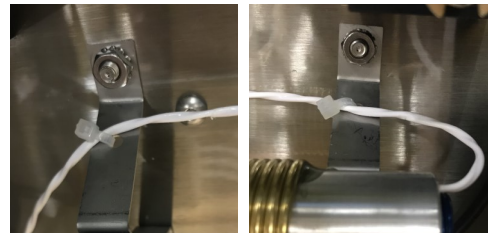
12. Obtain the new TDF98 Thermistor Assembly. The white 3-pin connector should come labeled "J10".



13. Slide the metal rod end of the Thermistor Assembly into the right side of the In-Line Heater.



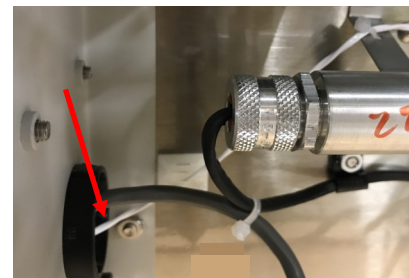
14. Use cable ties to reattach the thermistor wire to the two upper brackets of the In-Line Heater.



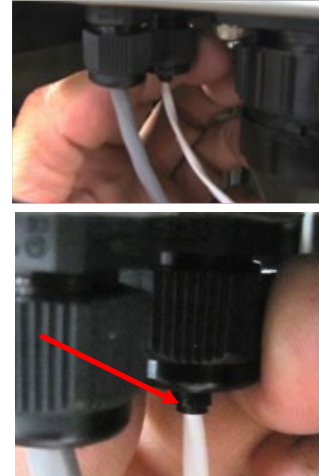
15. Use a Z461 cable tie holder to fasten the white thermistor cable to the instrument. This is to ensure that the cable does not make contact with the In-Line Heater when it heats up.



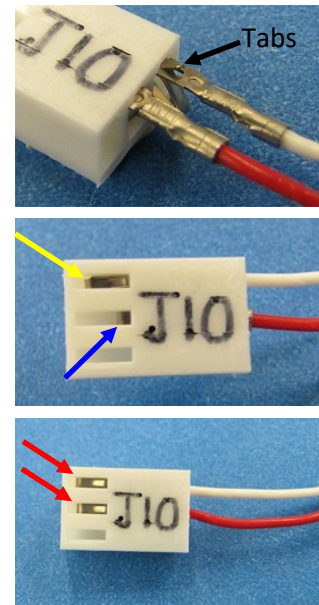
16. Feed the white thermistor cable through the large grommet on the left side gusset panel (When facing back of instrument).



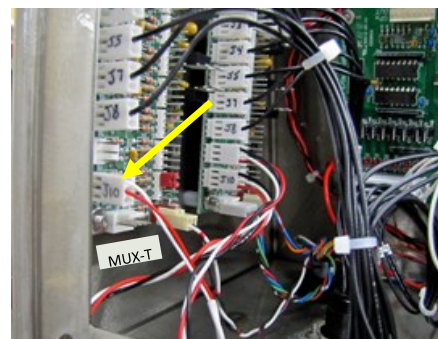
17. Put the black nut back on the white thermistor cable and insert the cable through the explosion proof fitting on the underside of the Electrical Enclosure on the left side. **BEFORE TIGHTENING:** Ensure that the black insulated section of the cable is inserted in the fitting with just a slight portion of the bottom showing through (Red Arrow). This is to ensure that the nut tightens on the black insulated section because the white thermistor cable alone is too small a diameter for the fitting to hold the wire securely. **AFTER TIGHTENING:** Perform a pull test by gently tugging on the wire to make sure that it is secure.



18. Reinsert the white and red conductors into the white 3-pin connector labeled "J10". White conductor goes into the top slot and red conductor goes into the middle slot (When reading "J10"). Make sure the tabs on the wire terminals are facing upwards. Check that the terminal pins have been fully inserted (Yellow Arrow). If the terminal pins have not been fully inserted (Blue Arrow), it will be pushed back when inserted onto the pins on the circuit board. If not fully inserted, gently reinsert them until they reach the far end of the connector, snapping in completely. Fully inserted terminal pins are shown by the Red Arrows. Once correctly inserted, perform a pull test on both the white and red conductors to ensure secure connection.



19. Reconnect the J10 connector onto the bottom left prongs on the MUX-T circuit board.



20. Fasten the white thermistor wire from the In-Line Heater to the 4 cables from the supply valves and the gray cable from the Pressure Sensor with a cable tie. There should be 6 wires altogether. Carefully cut off the excess cable tie without damaging any insulation.

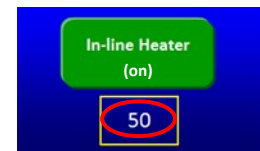
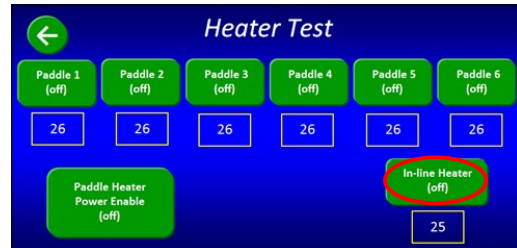
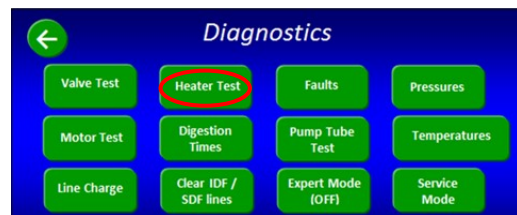
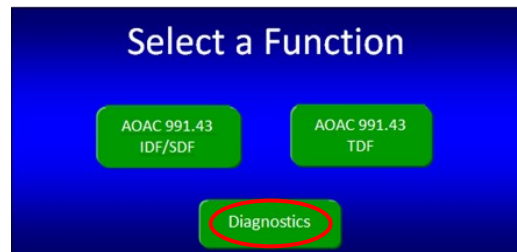


21. On the lower end of the same set of tied cables from the step above, cable tie the 6 cables to the 1 control box cable. There should be 7 cables altogether. Carefully trim excess cable tie without damaging any insulation.



22. Perform a QC test to ensure the functionality of the newly installed Thermistor Assembly.

- a. Plug in the instrument and turn the power back on.
- b. **CAUTION:** At this point the instrument is open and energized. Keep personnel away from open wires in the Electrical Enclosure.
- b. On the bottom of the “Select a Function” screen, press the “Diagnostics” button.
- c. On the “Diagnostics” screen, press the “Heater Test” button.
- d. Once in the “Heater Test” screen, check that the In-Line Heater temperature is reading at room temperature.
- e. Press the “In-Line Heater” button to turn it on. Temperature will start to rise. Once it reaches 50°C, press again to turn off. **Caution: Failure to turn the heater off at 50°C will potentially seriously damage the instrument.**



23. Use an IR Temperature gun pointed at the metal part of the In-Line Heater to confirm that it is warming up. With this verified, you are now ready to return your ANKOM^{TDF} Dietary Fiber Analyzer to service.



24. Reinstall the top electrical enclosure panels and the clear plastic back panel using the screws, nuts, and panels set aside earlier.

