

## TMX OB installation instructions.

### Important...

You will be working with, and touching electronic components which are sensitive to static electricity. It is very important that you work in an environment with the least potential to generate static electricity. If possible this installation should be performed in an Electro-Static Discharge safe area (ESD safe).

In order to minimize the risk of ESD damage if you are not able to perform this upgrade in a true ESD safe area you should follow the following guidelines...

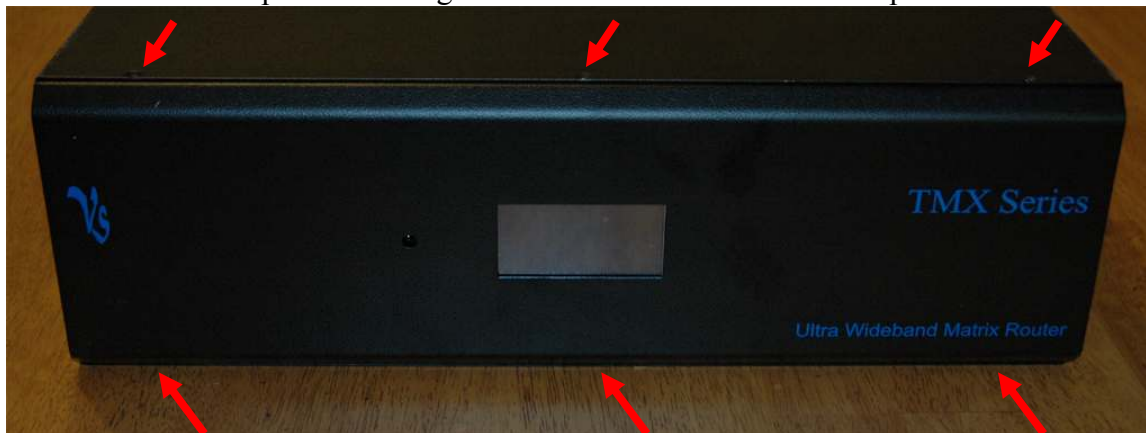
- 1) Ensure your work area is clean and free of dust, dirt etc...
- 2) Do not wear static generating clothes such as wool, polyester etc...
- 3) Discharge your body and work area prior to working by touching the metal enclosure of a grounded piece of equipment such as a PC computer.
- 4) Do not perform the upgrade if the humidity level is very low. Dry weather conditions tend to increase static build up.
- 5) Do not perform the upgrade if the weather conditions are stormy. Storms can increase the amount of ionized air, causing more static build up.

Do not attempt to make any modifications with the power connected to the TMX. Remove all power connections completely before removing any screws at all.

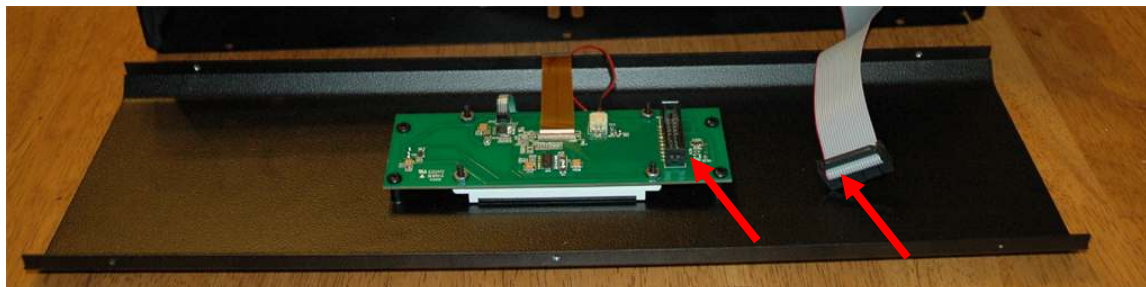
When removing the screws make sure that you note which type of screw came from which location. There are 3 types of screw which will be being removed. The two types are...

- i) Flat head under-cut
- ii) Round head
- iii) Self tapping

- a) Remove the 6 front panel retaining under-cut screws located at the top and bottom of the front panel.



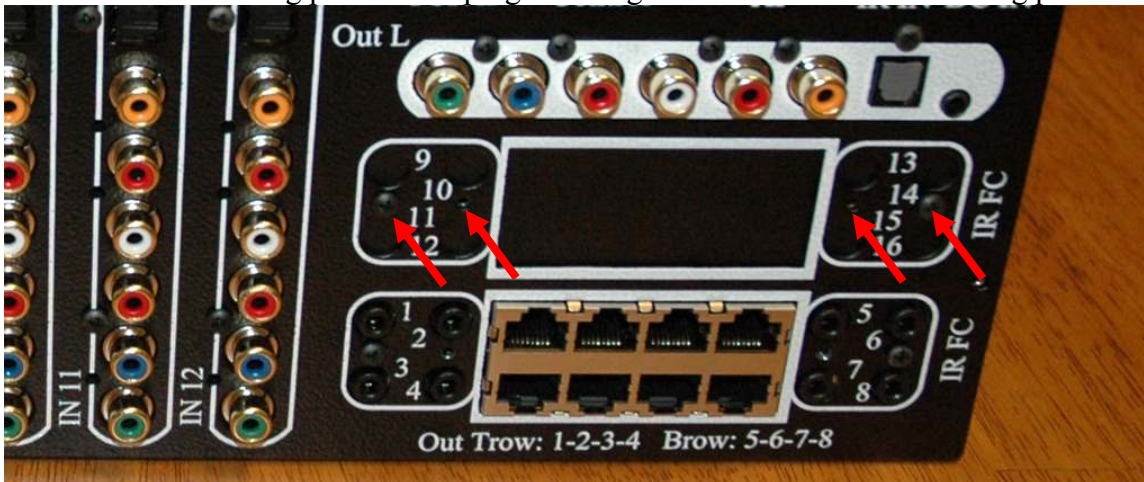
- b) Gently remove the front panel and disconnect the LCD cable. Once removed, set the front panel aside in a safe location.



c) Remove the 3 rear round head retaining screws.



d) Remove the 4 blanking panel self-taping retaining screws. Remove the blanking panel.

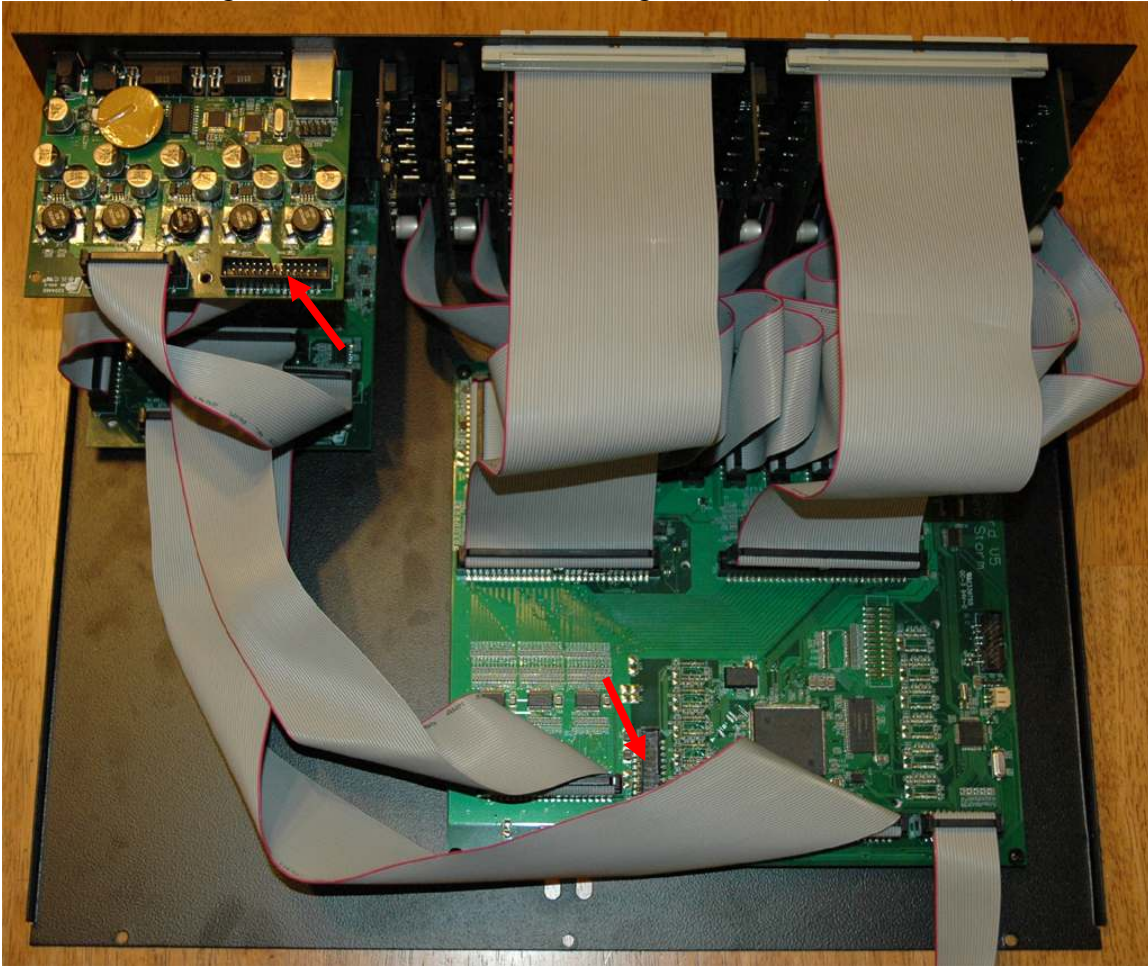


e) Remove the 2 side under-cut screws from each side of the enclosure.



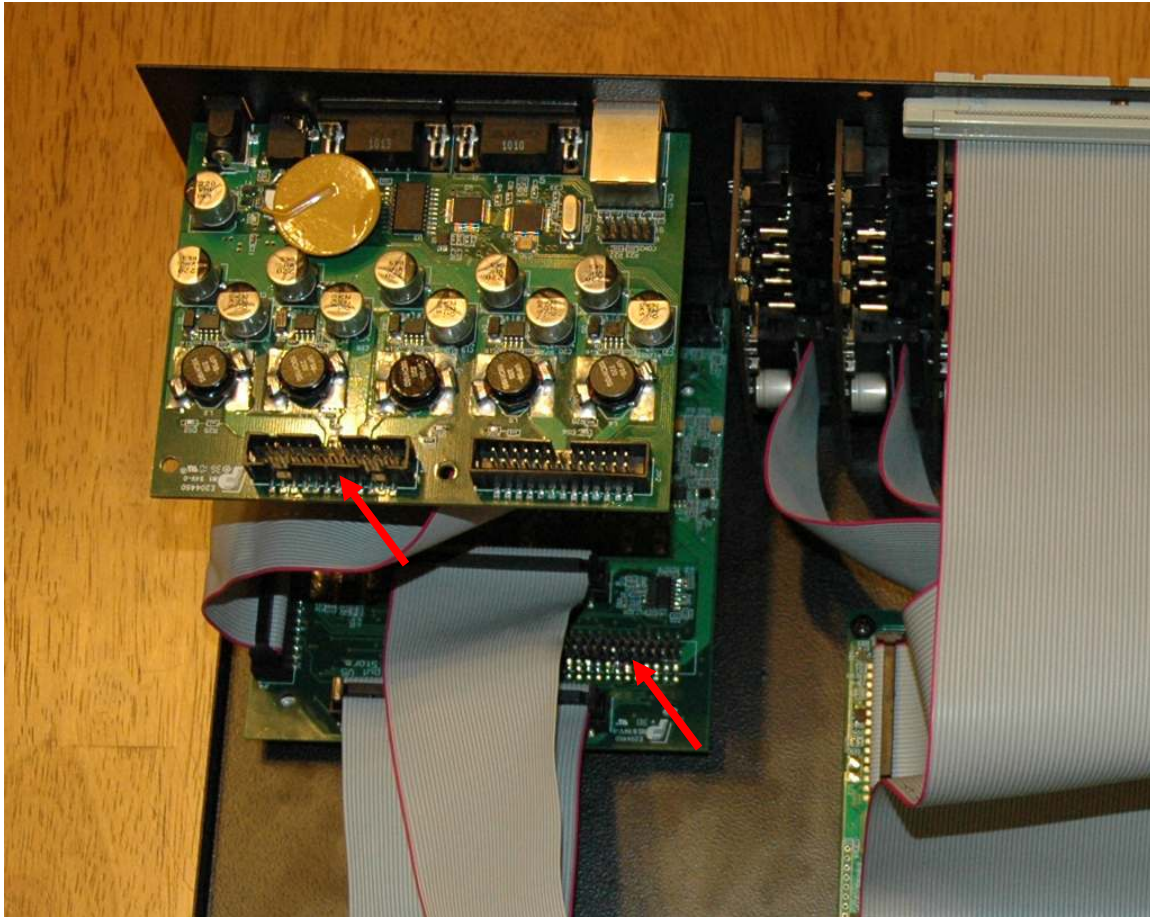
f) Gently remove the top cover and lay aside.

- g) Remove the main board power cable by disconnecting at the two locations indicated below. Discard this cable, it is no longer needed. You will be attaching a new cable (connection 'E') to the main board later.

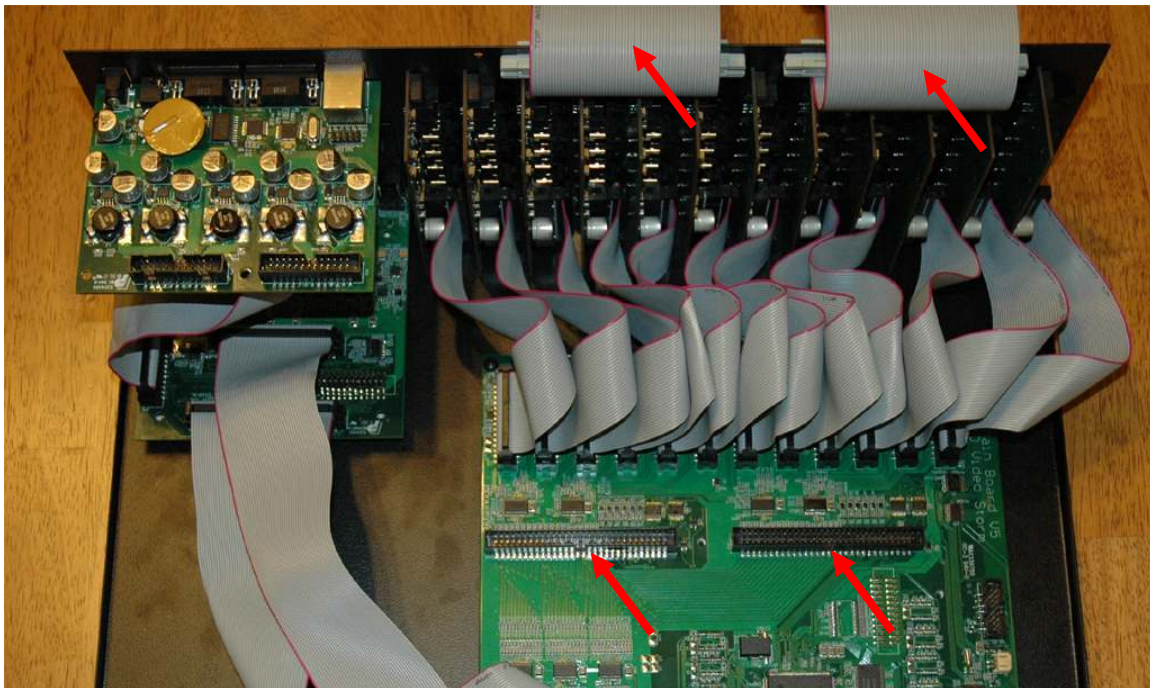


- h) Remove the output board power cable by disconnecting at the two locations indicated below. Discard this cable, it is no longer needed. You will be attaching a new cable (connection 'F') to the bottom board

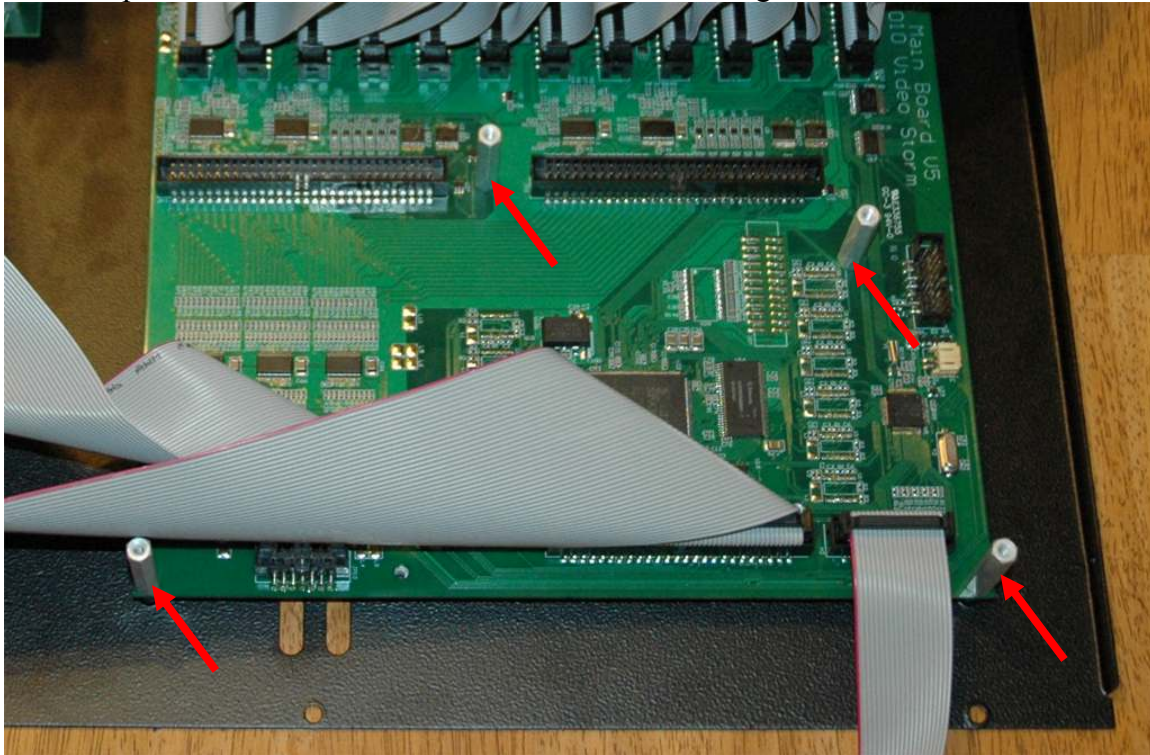
later.



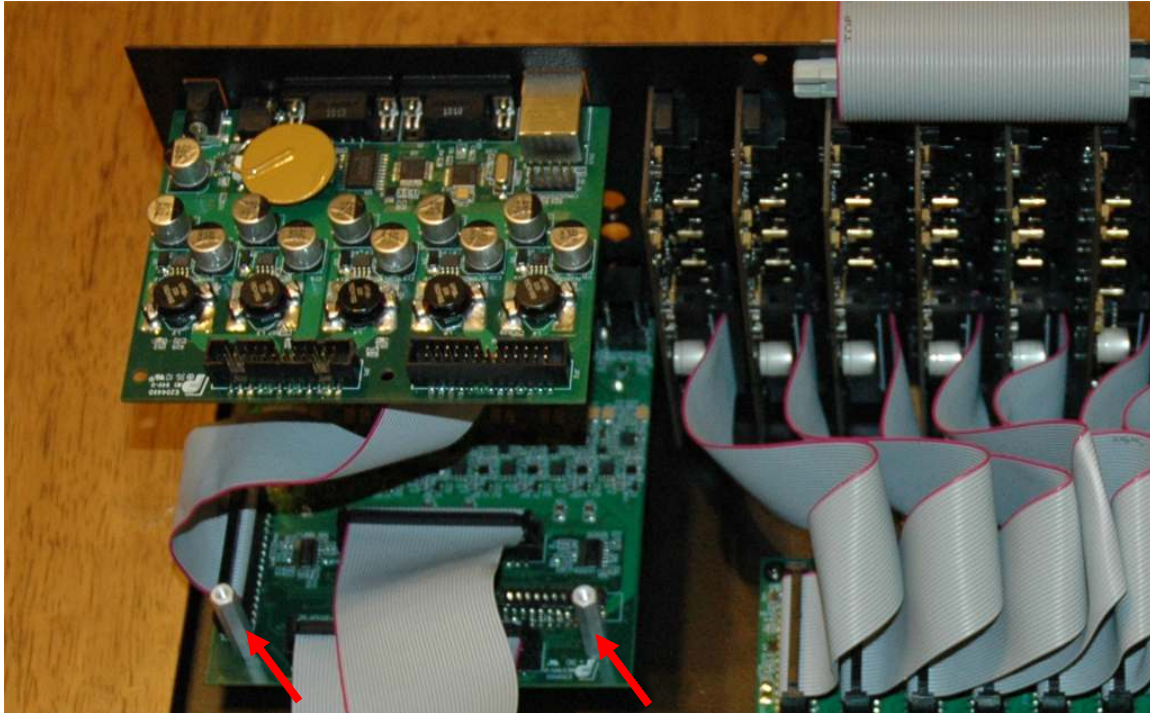
- i) Very carefully disconnect the 2 inter-box connection cables from the main board. These cables will be very difficult to remove. Be patient with them and gently alternate pulling from each side of the connector.



j) In turn replace each of the 4 indicated main board mounting round head screws with a hex spacer.

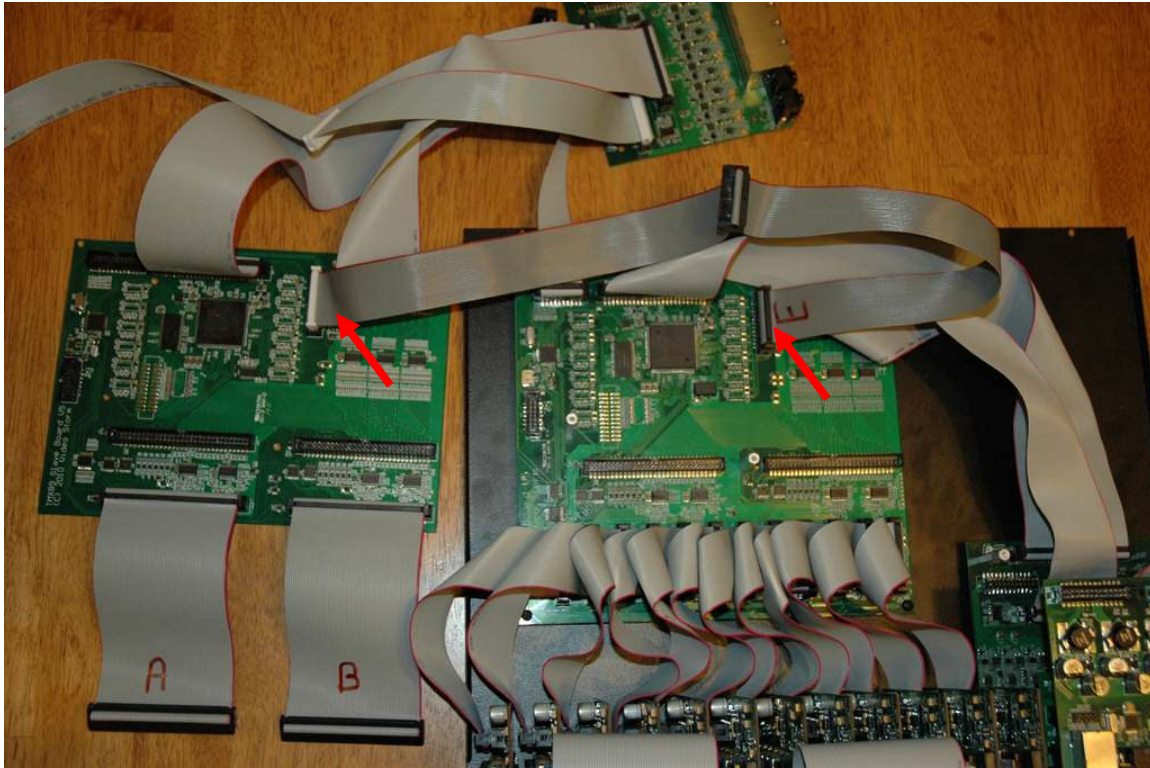


k) In turn replace each of the 2 indicated output board mounting round head screws with a hex spacer.

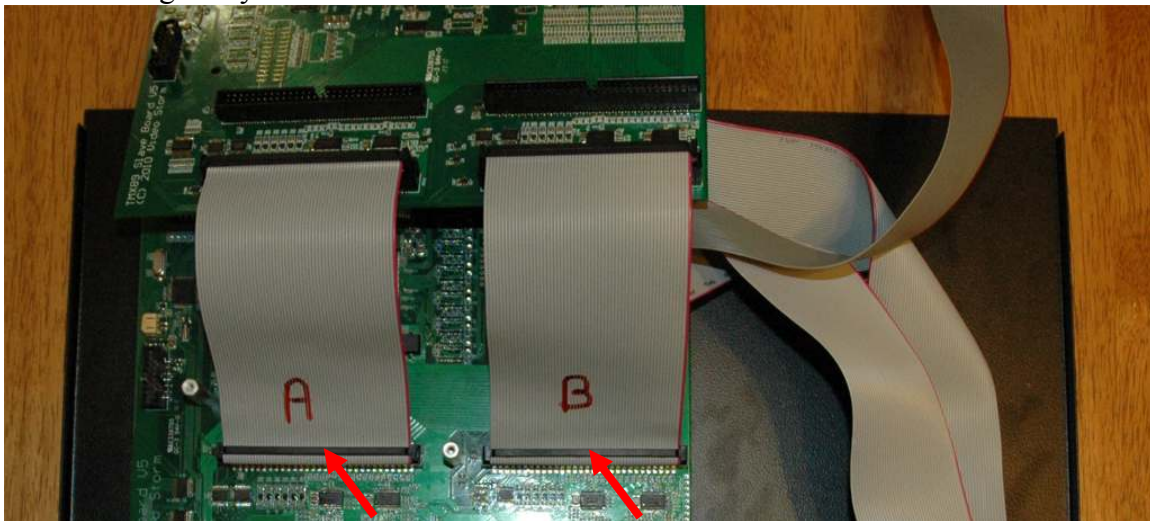


l) Place the slave board to the left of the main system and connect the power supply cable labeled 'E' into the main board power supply connection. Make sure that the cable is flat and does not have any twists in

it.

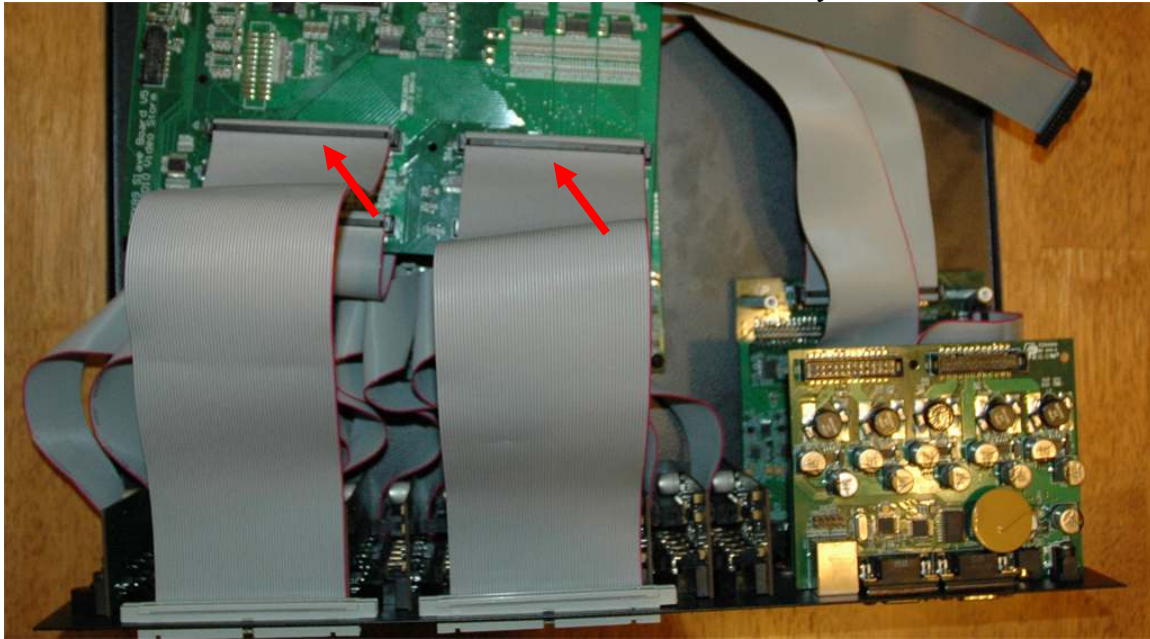


- m) Carefully connect the master-slave communication cables as shown below. Be firm, but do not apply too much pressure. These connectors will be difficult to insert, so be patient. It is important that the 2 connectors are seated fully, but you must ensure that you do not stress the main board by applying too much pressure. For the right hand connector (labeled 'B') make sure that you place your fingers under the right hand edge of the main board and push the connector in using your finger and thumb together, thus ensuring that you do not bend the main board down towards the enclosure case.

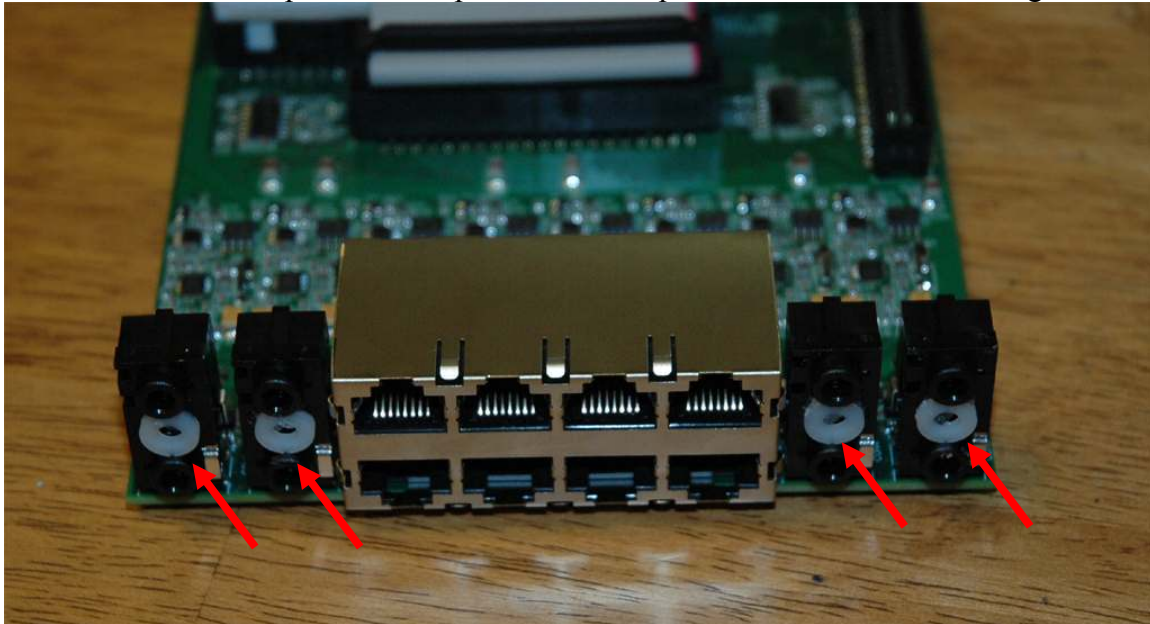


- n) Carefully insert the back panel inter-box connection cables into the slave board output connectors. Place your hand on the back side of the slave board when inserting the cable connector to ensure that you do

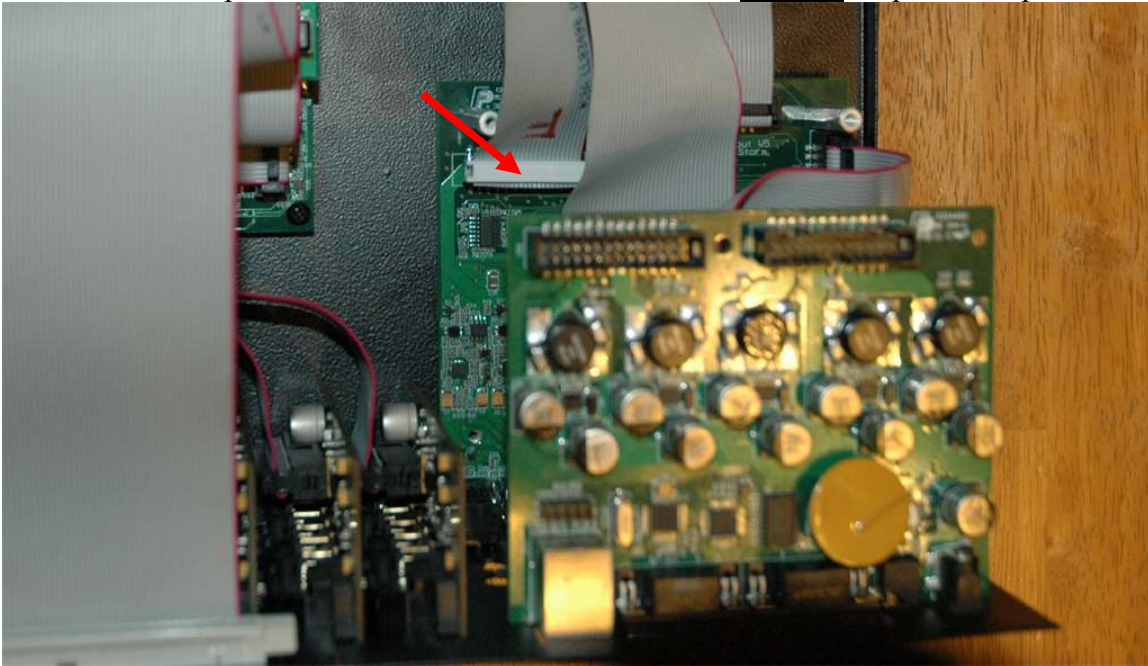
not bend the slave board. Make sure that the connectors are fully seated.



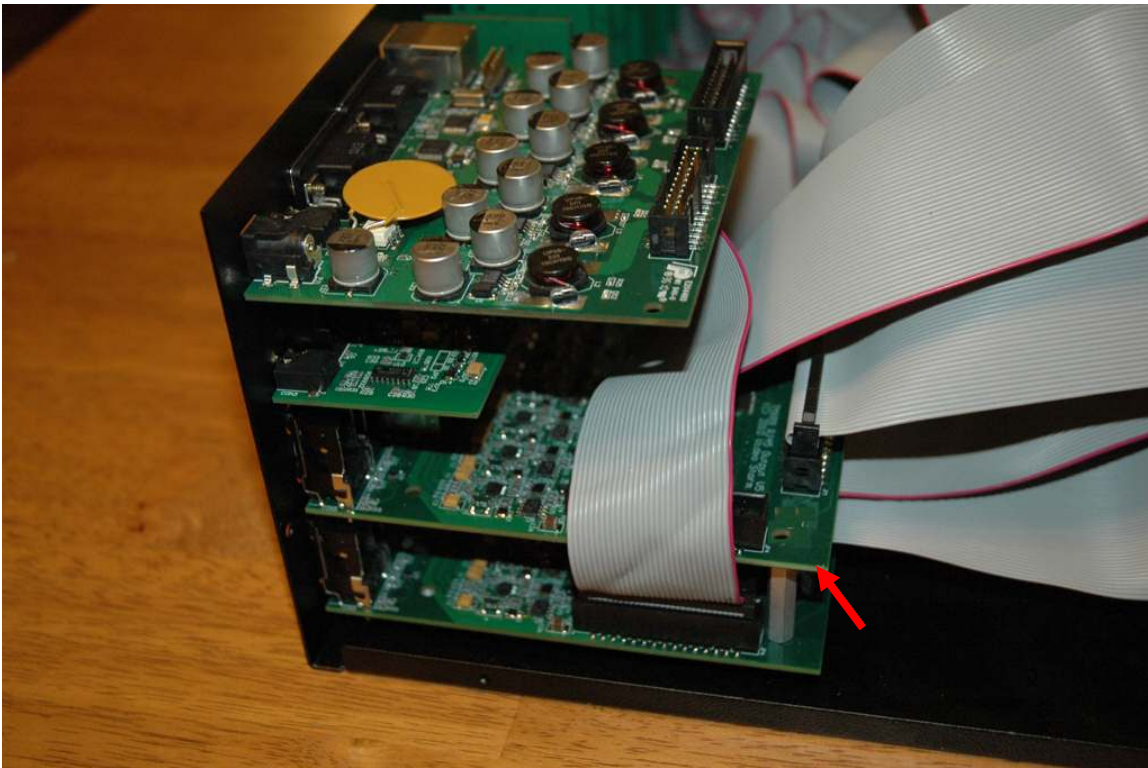
o) Make sure that the 4 spacers are in place on the output board before commencing with the installation.



- p) Connect the new power cable connector labeled 'F' to the existing output board power connector.

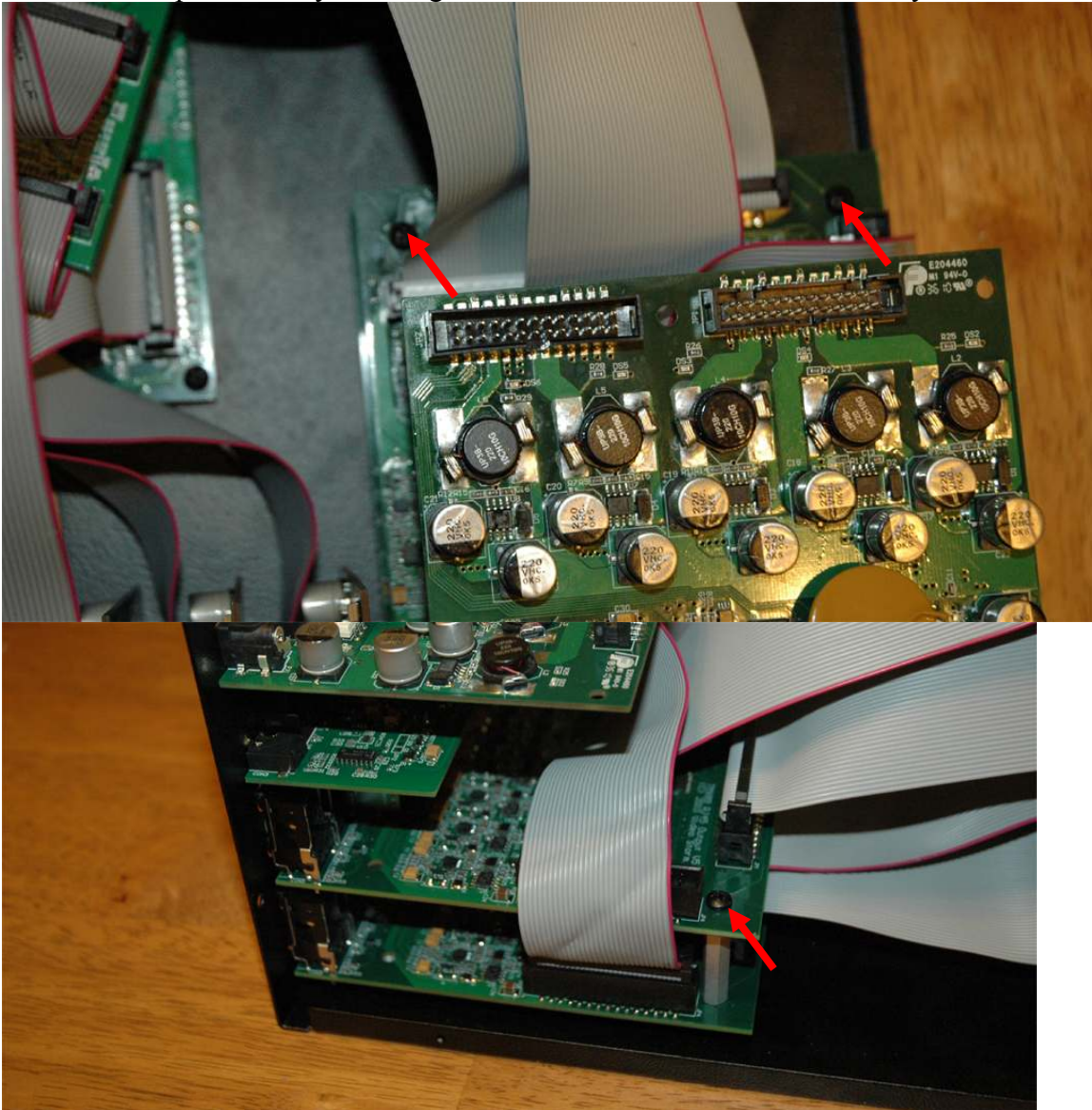


- q) Carefully slide the new output board into place, ensuring that the back panel connectors align correctly with their corresponding openings. Make sure that there are no cables trapped between the printed circuit board and the stand-offs.





- r) Secure the output board by inserting 2 of the round head screws so that they are attached to the spacers.

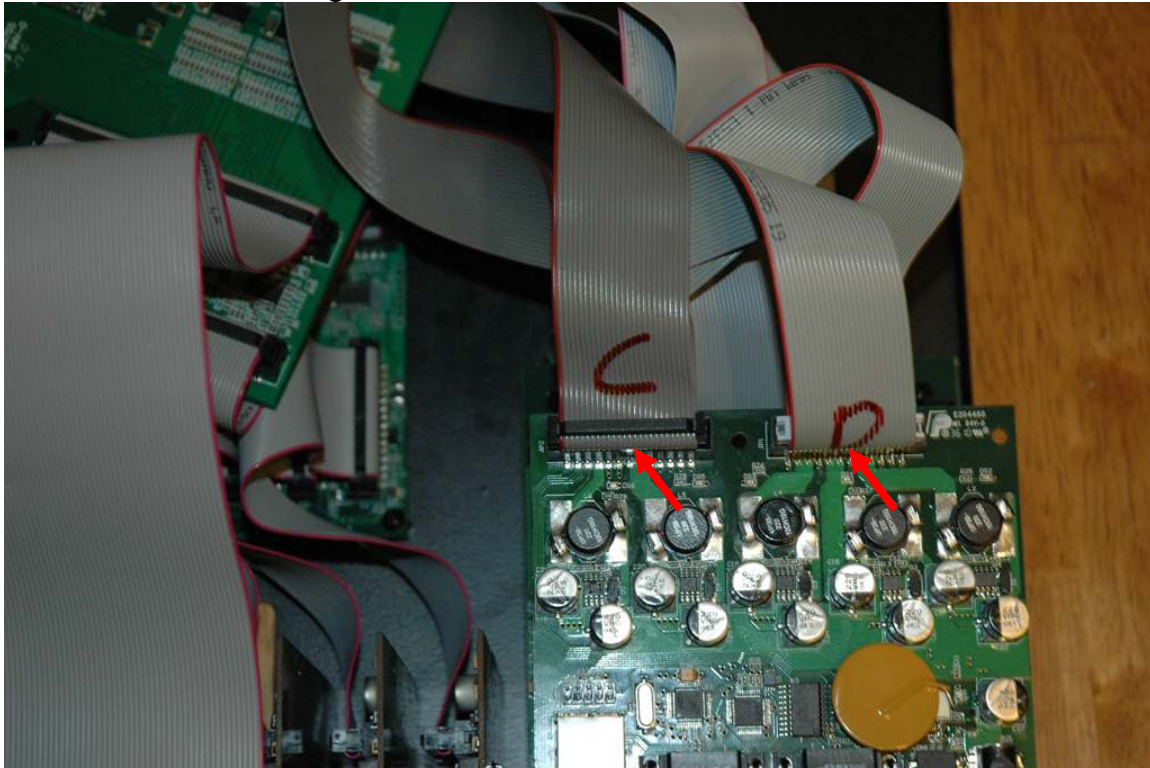


- s) Using the 4 self tapping screws secure the output board to the back panel.

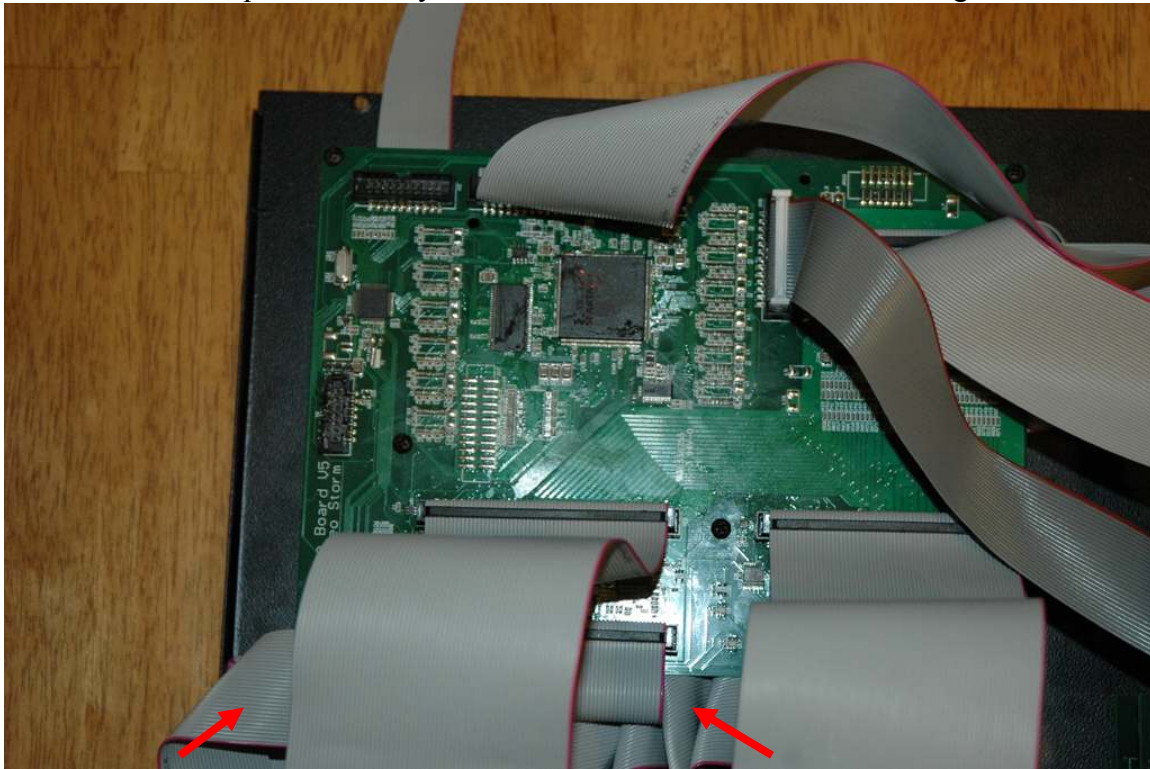


- t) Insert the connectors labeled 'C' and 'D' as shown below. Take care to ensure that the red stripe on the cable is to the left side. These connectors are 'keyed' so can only be inserted one way. Do not force the

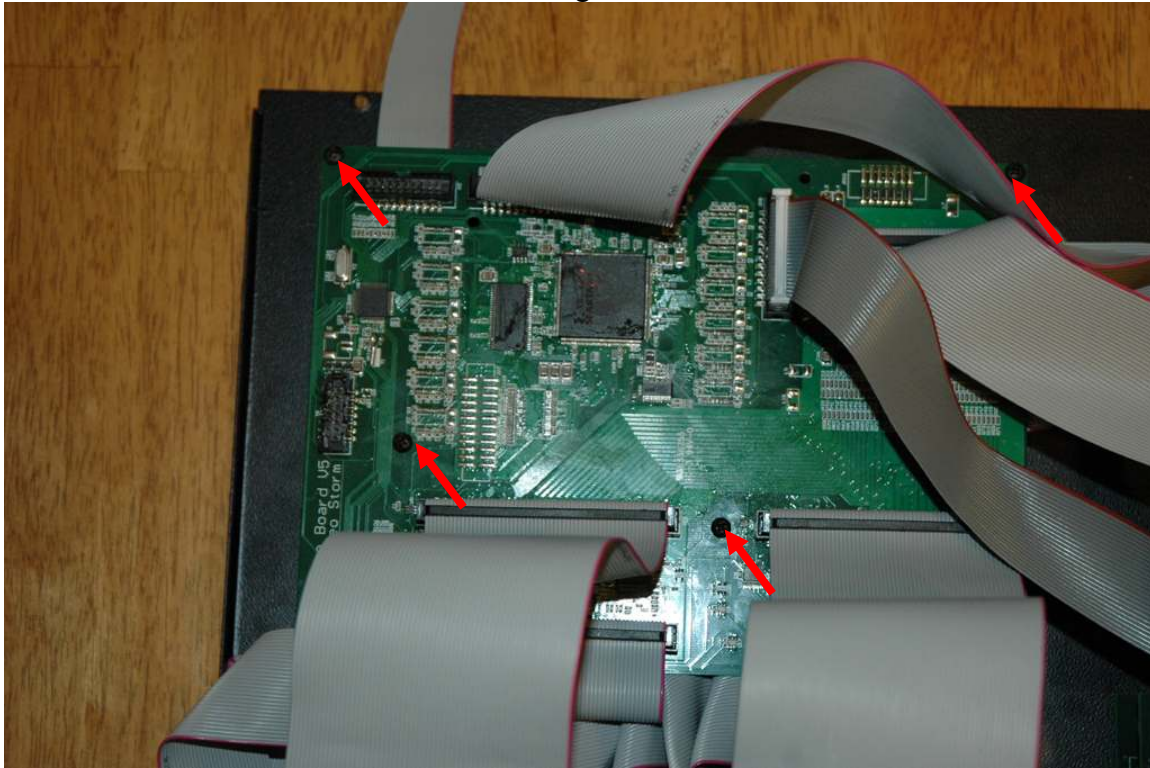
connectors with the wrong orientation.



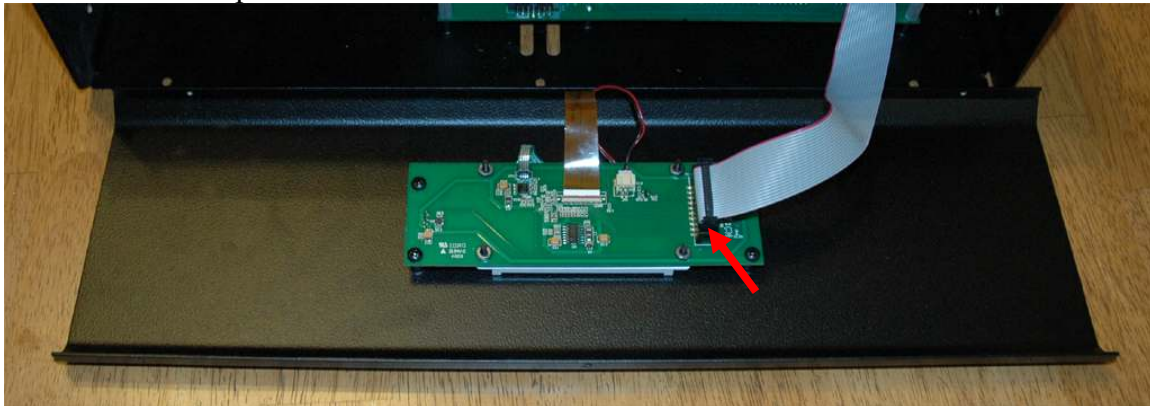
- u) Carefully flatten all the input board connection cables so that the new slave control board is able to be seated onto the previously installed spacers. These cables will tend to push up on the slave control board. This is acceptable but may make it difficult to install the 4 mounting screws.



- v) Install the 4 slave board round head mounting screws.



- w) Carefully place the top cover back over the TMX taking great care to ensure that you do not trap any cables. Once the top is in place loosely insert 2 under cut screws to attach the left and right enclosure sides. Do not tighten the screws just yet since there will be some slight movement required when the remaining screws are inserted. Loosely insert the 3 back panel round head screws.
- x) Connect the front panel LCD cable back into the front LCD connector socket.



- y) Carefully replace the front panel into the TMX enclosure ensuring that the 6 top/bottom screw holes align correctly. Loosely insert the 3 top and 3 bottom under cut screws.
- z) Finally, tighten all the screws completely now.
- 3 back panel round head
  - 2 left under-cut
  - 2 right under-cut
  - 3 front top under-cut
  - 3 front bottom under-cut