

770MAX Firmware Upgrade Instructions for Kit 91007

This firmware upgrade provides operational enhancements to the 770MAX Multiparameter Analyzer/Transmitter and adds TOC as a measuring parameter.

Note: This upgrade kit should only be used for upgrades from firmware version 3.0 and above.

Note: Upgrade is best done using two kits (P/N 91007 and 91006). If you are upgrading using only this kit (P/N 91007), all 770MAX setup parameters, calibration and electronically store serial number will be lost.

91007 Upgrade components - one kit required per 770MAX unit

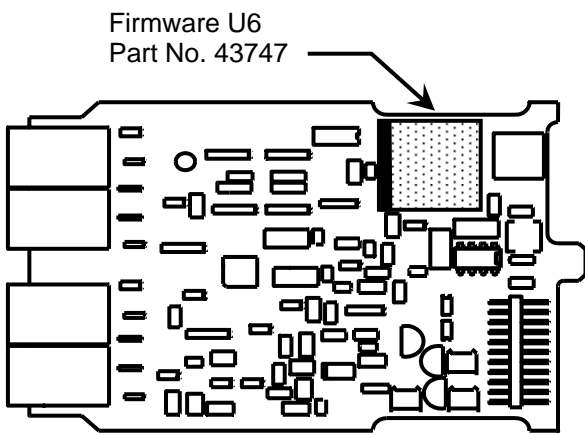
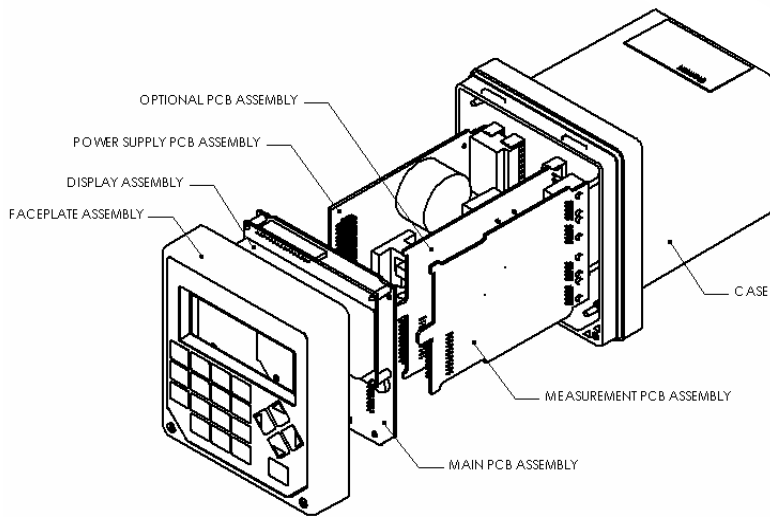
- 43747 Measurement firmware, ver. 4.1
- 43714 Main firmware, ver. 4.0
- 87010 IC Extraction tool
- Instructions

CAUTION: This instrument and associated electronic parts are static sensitive. Personnel replacing static sensitive devices should be properly grounded to avoid component damage.

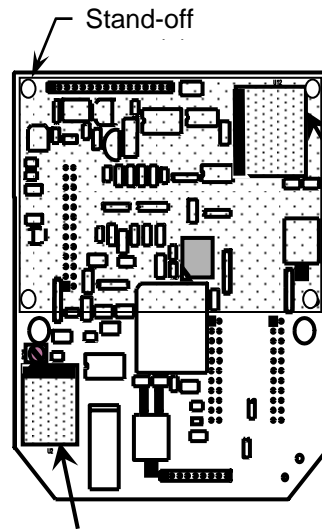
Upgrade Procedure using only this kit (P/N 91007)

1. Remove the power to the 770MAX.
2. Disconnect and tag all cables from the back of the 770MAX so they can later be identified and replaced in the same locations.
3. Loosen the two front screws from the 770MAX face plate assembly and remove it from the case.
4. Unplug the ribbon cable to separate the face plate assembly from the case.
5. Disconnect all boards from the Main circuit board (See the diagram on sheet 2).
6. Observe the orientation of the sloped side of Measurement Firmware U6 and remove it from the Measurement board by gently inserting the integrated circuit (PLCC) extractor into the two corners of the socket and squeezing the extractor.
7. Observing U6's orientation, replace it with Measurement Firmware 43747 version 4.1.
8. Observe the orientation of the sloped side of Main Firmware U2 and remove it by gently inserting the integrated circuit (PLCC) extractor into the two corners of the socket and squeezing the extractor.
9. Observing U2's orientation, replace it with Main Firmware 43714 version 4.0.
10. Reconnect all boards to Main circuit board and reinstall the assembly back into the case. The circuit boards are keyed for proper installation (See the diagram on sheet 2 as a reference).
11. Reattach the ribbon cable to the Main circuit board connector.
12. Replace the face plate assembly onto the case and tighten the two front screws.
13. Reattach all cables to the back of the 770MAX.
14. Restore power to the 770MAX.
15. Reprogram the unit with its original parameters.

Note: It is recommended that the 770MAX be recalibrated per the end user's standard calibration procedure. The Thornton Model 1875 Calibrator is available for this purpose.



Measurement Board



Main Board