Tools and Materials Needed

1. Model 101 P7/107/122 Replacement Laser Tape Assembly, Includes:
   - Jumper Cable (New Tape - 3 Pin to 2 Pin) (#110508)
   - 3 Pin Molex Connector Housing
   - Grommet
2. Phillips or Robertson Screwdriver
3. Wire Cutters
4. Pliers (if required)

Instructions

1. Place the reel on a flat workbench with the faceplate up. Undo the three screws from the faceplate, and slowly remove it from the reel.

2. For the Mk2 Model 107 TLC Meter, Model 122 Interface Meter, and Mk1 Model 101 P7 Water Level Meter, disconnect the old Tape Molex Connector from the Faceplate Molex Connector.

3. For the Mk3 107 and Mk2 101 P7, press down on the white terminals of the push-release fittings on the circuit board to remove the tape leads. **Remember which lead is removed from each terminal – this is important when reconnecting.**

4. Undo the two screws from the black plastic bridge holding the tape inside the reel hub, and remove the top piece of the bridge.

5. For the Mk2 107, 122, and Mk1 101 P7, use the wire cutters to cut the old Tape Molex Connector from the old tape. Remove the ground wire from the 122 Tape Molex connector by pushing out the pin. Pull the old tape through the grommet and remove it from the reel.

6. For the Mk3 107 and Mk2 101 P7, simply pull the old tape through the grommet and remove it from the reel.

7. Feed the new laser tape through the grommet into the reel hub.

   **Note:** The replacement tape comes with a new grommet. The old grommet may be replaced with the new one, or left in if not damaged.

8. For the Mk2 107, 122, and Mk1 101 P7, by hand, insert the connector pins into the new Tape Molex Connector housing. The negative connector pin is inserted into the terminal on the pointed side of the Tape Molex Connector housing and the positive pin into the middle terminal. The negative pin is above the numbers on the tape (see diagram below). The third terminal is left open for the 107 and 101 P7, the ground wire is inserted for the 122.
9. For the Mk3 107 and Mk2 101 P7 (circuit board has push-release fittings for tape connection), cut the pins on the tape leads at the point shown in the photo below. Use pliers to flatten the pins against the tape leads, so they fit into the terminals on the circuit board (see Step 12).

![Mk3 107 Tape Connection]

10. Position the tape inside the reel hub with black plastic bridge over top and refasten the two screws to secure the tape to the reel.

11. For the Mk2 107, 122, and Mk1 101 P7, connect the Tape Molex Connector to the Faceplate Molex Connector.

Note: If you are connecting the Laser Tape to an older style Model 101 that previously used polyethylene tape, you will need to use the Jumper Cable. Attach the 3 pin connection to the Tape Molex Connector, and the 2 pin connection to the Faceplate Molex Connector.

![Connect to Faceplate Molex Connector](Connect to Tape Molex Connector)

Jumper Cable (New Tape - 3 Pin to 2 Pin) (#110508)

12. For the Mk3 107 and Mk2 101 P7, press down on the white terminals on the circuit board and insert the tape leads. Release the terminals and the leads should be secured. For the Mk3 107, the lead on the bottom of the tape (numbers facing up) is inserted into the terminal labelled BOT on the circuit board. For the Mk2 101 P7, the lead on the bottom of the tape (numbers facing up) is inserted into the terminal with a square etched below it on the circuit board. See following images.

![Pin inserted into terminal labelled BOT](Pin inserted into terminal labelled BOT or with a white square below it on the circuit board)

13. Attach the probe to the tape seal (existing or replacement probe).

See separate probe replacement instructions.

Notes: The Model 107 probe comes factory calibrated, so there is no need to conduct a user calibration. If with time, recalibration is required, please refer to the Model 107 TLC Meter Operating Instructions.

14. 101 P7/107: With the probe in a glass of tap water, turn the Meter 'ON'. If the buzzer or light do not activate, or the Model 107 LCD does not show temperature or conductivity, check the probe and tape connections.

122: With the Probe in a glass of tap water and product, turn the Interface Meter to the 'ON' position. A steady tone and light indicates a product, while an intermittent tone indicates water. If the buzzer or light do not activate, check the probe and tape connections.

15. Replace the faceplate on the reel and re-secure the three screws.

16. Slowly wind the tape onto the reel, holding to ensure no slack.