Trouble Shooting Reference

Trained Service Personal ONLY
Observe ALL safety Procedures in the service manual

Table of Contents

1. Timer Switch Doesn’t Come On_____________________________________________1

2. No Display (Yet, Time Switch Comes On)_____________________________________1

3. No X-Ray Emission or Error E23____________________________________________2

4. Wiring Instructions________________________________________________________2

5. Disabling the ‘Ready’ light________________________________________________3
1) **Timer Switch Doesn’t Come On**

- **Check if voltage is present and that it matches the voltage set-up configuration**
  
  - **Voltage is Present and Accurate**
    - Check the voltage between X6 and X7 pins on the board
      
      - **Good voltage**
        - Check fuses F2 and F4
          - Fuses good
            - Check the flexible ribbon cable (connected to X1 on both boards)
              - Connection is good
                - Replace the boards
                  - P/N: 6261301800
                  - P/N: 6261308400
              - Connection is bad
                - Connect them properly
          - Fuses bad
            - Replace the main switch
              - P/N 4291415900
      
      - **No voltage**
        - Call Electrician
  
  - **No Voltage**
    - Call Electrician

- **Check if voltage is present and that it matches the voltage set-up configuration**

- **Fuses good**
  - Replace the fuse
    - F2 P/N: 230097440
    - F4 P/N: 2300974400
  - Replace the boards
    - P/N: 6261301800
    - P/N: 6261308400

- **Fuse(s) are bad**
  - Replace the fuse
    - F2 P/N: 230097440
    - F4 P/N: 2300974400

2) **No Display (Yet, Time Switch Comes On)**

- **Check Led H1 on the Logic Board (next to fuse F4)**
  
  - **On**
    - Check Fuse F4
      - Fuse is Good
        - Check flexible cable connection (Connected to X1 on both boards)
          - Good Connection
            - Replace Boards
              - P/N: 6261301800
              - P/N: 6261308400
          - Bad Connection
            - Replace flexible cable
              - P/N: 6261305100
      - Fuse is Bad
        - Replace Fuse F4
          - P/N: 2300974400
  
  - **Off**
    - Replace Fuse F2
      - P/N: 230097440
3) **No X-Ray Emission or Error E23.**

**Check Fuses F2 & F4**

- **Fuse/s are Good**
  - Make sure cables X3 & X4 are connected correctly as well as the rest of the wiring (See Below)
  - Disconnect X3 & X4 from the Logic Board

- **Fuse/s are Bad**
  - Replace Fuse/s
    - F2 P/N: 230097440
    - F4 P/N: 230093800
  - Make sure to connect them to the Logic Board according to their labels.

**Check the resistances of the tube head Cable (It should be 1.1-1.4Ω)**

- **Good Resistance**
  - Replace the Boards.
    - P/N: 6261308500
    - P/N: 6261308400

- **Bad Resistance**
  - Check the resistances of the tube head (It should be 1.1-1.4Ω)
    - **Good Resistance**
      - Replace the Arm
        - P/N: 8161200602
    - **Bad Resistance**
      - Replace Tube Head
        - P/N: 8461406602

**Wiring Instructions**

- X3 (Black wire) goes into L2 of the white plug next to the On/Off switch (First from the bottom).
- X4 (Blue wire) goes into N1 of the white plug next to the On/Off switch (Second from the bottom).
- Green wire goes into ground of the white plug next to the On/Off switch (Third from the bottom).

- X6 (Black wire) goes into the black plug of the On/Off switch. It is inserted into slot # 5 on the side closer to the machine.
- X7 (Black wire) goes into the black plug of the On/Off switch. It is inserted into slot # 2 on the side closer to the operator.

- X16/X17: Remote X-Ray button device
- X2/X11: The wires are labeled and are connected to the PC board of the timer.
INSTRUCTION FOR DISABLING THE ‘READY’ BUTTON:

1. Turn On the machine by pressing the main switch (I/O) on the lower part of the timer and wait for the display (number 18) to show the software version (For instance: 4.00). Once it shows the software version, simultaneously press the ‘increase’ and ‘decrease’ keys (numbers 16 and 17, respectively) for about 5 seconds.

2. The word ‘Pr0’ would appear on the display (number 18) for two seconds, and then would be replaced with ‘P01’.

3. Go from ‘P01’ to ‘P17’ by pressing the Exposure Enabling key (number 3).

4. Once you are at ‘P17’ press the ‘Increase’ key (number 16). The display will show ‘A=1’, which means that the ‘Ready’ button is enabled. Since you want to disable the ‘Ready’ button, press the ‘Decrease’ key (number 17). The display will now show ‘A=0’ and the ‘Ready’ button is disabled.

5. Press the Exposure Enabling ‘Ready’ key (number 3) to save this configuration. The display now shows ‘P18’.

6. Press the Exposure Enabling ‘Ready’ key (number 3) again to enter User Operation mode.

7. Check that the Green ‘Ready for X-ray’ LED is constantly On (number 2).

---

1. X-ray presence luminous indicator
2. Green ‘Ready for X-ray’ LED
3. Exposure enabling ‘Ready’
4. Selection key ‘Size’
5. ‘Large Size’ LED
6. ‘Medium Size’ LED
7. ‘Small size’ LED
8. ‘Tooth anatomic’ selection key
9. LED ‘Bite-Wing’
10. LED ‘Upper Molar’
11. LED ‘Lower Molar’
12. LED ‘Premolars’
13. LED ‘Incisors / Canines’
14. ‘Videography’ selection key
15. ‘Videography’ LED
16. Increase key.
17. Decrease key.
18. Three figure display.