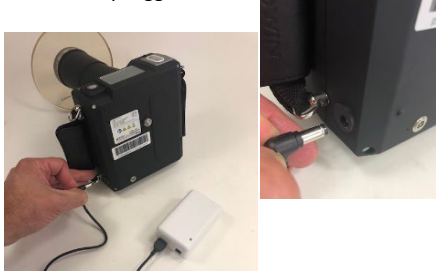


## MaxRay is Frozen

**Symptom:** Unit was working fine then it just froze. The unit will not turn off/on or fire, we can change the exposure time. But cant take X-rays!



**Diagnosis:** The good news is there is nothing “wrong” with your machine! The MaxRay has a safety feature that will freeze the machine if the exposure button is pressed too long (past exposure) or too soon (before “READY”) or if both the buttons are depressed simultaneously. This feature protects the machine from continuously firing radiation if a button was to get stuck or inadvertently triggered.



**Prescription:** To “reset” the machine find your external back-up battery and plug it into the back up battery port below the handle on lower left-hand side of the machine. Count to 5 and unplug the back-up battery. This flips the power supply from the internal battery to the external battery and back to the internal battery, thus resetting the machine. (note the external battery must be charged for this procedure to work).

## HARD RESET – Removable Battery Type

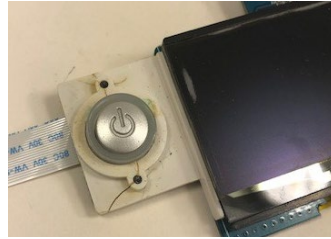
**For Units with removable battery:** remove the battery and press and hold the power on/off button for 5 seconds – this dumps the charge in the capacitors and resets the machine.

**There is no need to send in your machine for service.**

## MaxRay Won’t Turn On

**Symptom:** Unit will not turn on! Batteries say they are fully charged (light turns green when on the charger) but there is no response when the batteries are installed.

**Diagnosis:** The most likely cause of this issue is not the battery. If the batteries are fully charged even a partially failed battery should to turn on the machine. The most likely cause is a failed main control board. Over time surface disinfectant can work its way down through the main power button onto the control board causing a short. The same disinfectant or dirt can cause the button to stick which again, will damage the control board.



**Prescription:** There is nothing that can be done in the office. The machine will need to be sent in to have the control board replaced.

**Cost/Warranty:** This will be covered under the warranty. (units sold prior to Jan 1 2019 – 1 year, units sold after Jan 1 2019 – 2 year.).

Units with the additional extended warranty part and labor is covered less graduated deductible.

The retail price of the board is \$ 600.00 there is a \$ 55.00 installation fee.

**Machine must be sent in for service.**



**NOTE:** We developed a silicon cap to mitigate issues with disinfectant, liquid and dirt penetrating the button and damaging the main control / power board.

This will be installed at time of service. Extra caps can be purchased from your dealer.

## Battery is Swollen

**Symptom:** One or both of my batteries have become swollen making it difficult to get them in or out of the machine or have popped the cover off and I can see the battery control board.

**Diagnosis:** Lithium batteries have a permeable membrane that allows chemical reaction, current and ions to pass through from one side of the battery to the other creating a charge. Over time this membrane will breakdown and cause the battery to swell and expand.



**Prescription:** This swelling is to be expected toward the end of the life of your battery. If your battery is swelling it is most likely time to replace your battery.

**Causes of premature failure:** Obviously use is the biggest factor. Both the number of x-rays taken per day, length of exposure time required, and number of charges and discharges per week will all affect the life of the battery. Additional factors are environmental. Hotter climates and/or at higher altitude will affect the life of the membrane (this is why you can’t take lithium batteries on the plane).

*Double check you are using the correct Dexcowin power adapter with your charging base. The incorrect charger will damage your battery.*



**Cost/Warranty:** Batteries have a 2 year warranty and will be replaced free of charge during that period. Retail price of replacement batteries are \$ 300.00 each.

**Order a replacement battery from your dealer.**

## Battery Door is Broken

**Symptom:** Battery door has cracked and broken off or will not stay closed due to damage to the door or housing.

**Diagnosis:** **IT IS VERY IMPORTANT THAT THIS BE REPAIRED AS SOON AS POSSIBLE!** While it may seem like a minor thing and (you may be using tape to hold the door closed.) **THIS IS A BAD IDEA!**



*As the power tank is drawing voltage from your battery if the battery is disconnected and reconnected a power surge can occur damaging your main power tank. (The main power tank contains your power supply board and X-ray tube this is a \$ 1,900.00 part)!*

**Causes:** Surface disinfectant which is phenol based and/or high alcohol content will “de-plasticize” the plastic making it brittle and cause it to crack and break easily.

**Prescription:** Depending on the amount of damage there are 3 solutions to the broken door issue:

- 1) Replace battery door assembly. If the door is the only part that is broken, and the hinge pin is still in place a new door will do the trick. (\$ 90.00 includes installation)
- 2) Battery door hinge pin epoxy. If the housing is damaged where the door hinge pin inserts into the housing, we can repair the housing with 2 part epoxy without replacing the housing. (\$ 55.00 service fee)
- 3) Replace front, rear or both plastic housing and door. This is the most extensive repair (complete housing \$ 450.00 includes service)

**Machine must be sent in for service.**