

Implanted Medical Devices and Resistance / Laser Welding

October 2017

To Whom it May Concern,

Resistance / Laser Welder Manuals contain the following safety warnings:

People with pacemakers **MUST** stay away from the Control. When the Control is operating, it generates a magnetic field, which adversely affects pacemakers. People who use a pacemaker must not approach the Control, or walk around the welding shop while the Control is operating, unless their medical doctor has deemed it safe to do so.

When the Laser is operating, it generates a magnetic field, which adversely affects pacemakers. People who use a pacemaker must *not* approach the Laser, or walk around the laser shop while the Laser is operating, *unless* their medical doctor has deemed it safe to do so.

These statements come from an abundance of caution on our part. Our laser and resistance welding equipment is extensively used by the manufacturers of pacemakers. In working with them regarding these devices and the potential for electric or magnetic fields affecting operation of implantable devices, we have not to date been able to obtain a statement of the emission levels at which it is certain there is no impact on implantable device operation. In the absence of these levels, we cannot guarantee there is no potential for an impact on their operation. That is the reason for the presence of these statements in our manuals.

The statement notes that the fields generated by the resistance welder “adversely affects” pacemaker operation, which is stronger wording than our experience supports. While we may tone down the strength of this caution in the future, it is not clear that we can eliminate it entirely.

Sincerely,

Kevin Gunning

Kevin Gunning
Director; Quality, Service and Support