



## **Tools**

Tools are a part of everyday life whether it consists of maintaining our lawns or gardens, snow blowing the driveway, or simply using a cordless drill. For those of you who are considered a “handyman,” there is no limit to the number of tools you may use. Tools and equipment that use electricity and magnets have electromagnetic fields around them. The good news is that pacemakers and defibrillators have built-in features that protect them from many types of electrical effects.

Some home power tools and machine shop equipment have the potential to affect the function of your heart device. Using the following guidelines will greatly reduce the effect operating certain tools have on your heart device. Higher-powered industrial or commercial tools may call for additional safety margins. (Great Lakes Heart and Vascular can contact the representative for your device should you need further information on these types of tools.)

### ***Safety Guideline Tips***

For line-powered electric tools (tools that plug into a wall outlet in your house or garage) such as saws, drills, sanders, hedge clippers, etc.:

- Maintain a 6 inch distance between the motor of the tools and your heart device implant site

For general safety precautions:

- Be certain the tools are properly grounded and in good working condition
- Avoid using the power tool in the “locked on” position
- A ground-fault-interrupt (GFI) outlet is a good safety measure to prevent a sustained electrical shock

For gasoline-powered tools and gasoline-powered yard equipment such as lawn mowers/tractors, snow blowers, leaf blowers, weed eaters, etc.:

- Maintain a 12 inch distance between the components of the ignition system and your heart device implant site when operating the machinery
- Do not work on the engine while it is running
- Do not touch the coil, distributor, or spark plug cables of a running engine

**Note:** The use of a gas-powered chain saw is not recommended because your hands and body come into close contact with the electric spark-generating components.

### ***Result of a heart device coming too close to a tool***

If you have a pacemaker, it could continuously pace your heart if it detected the energy radiating from the tool. If your heart is beating on its own, this could result in an irregular heart rate during the time your heart device is affected. If you have a defibrillator and it was to detect the energy radiating from the tool, it could cause it to deliver a shock. Taking the tool away from your heart device will stop either of these actions and restore your heart device to its normal function.

The use of tools will not cause any permanent damage or re-programming to your pacemaker or implantable defibrillator. If you experience dizziness or a feeling of rapid or irregular heartbeats (palpitations), or a shock caused by the effect of the equipment or tool, move farther away from the tool or equipment. Any potential effects will end when the tool is stopped or moved from your heart device implant site.