§ 870.3545 Ventricular bypass (assist) device.

(a) Identification. A ventricular bypass (assist) device is a device that assists the left or right ventricle in maintaining circulatory blood flow. The device is either totally or partially implanted in the body.

(b) Classification. Class III (premarket approval).

(c) Date PMA or notice of completion of PDP is required. A PMA or notice of completion of a PDP is required to be filed with the Food and Drug Administration on or before November 21, 2011, for any ventricular bypass (assist) device that was in commercial distribution before May 28, 1976, or that has, on or before November 21, 2011, been found to be substantially equivalent to any ventricular bypass (assist) device that was in commercial distribution before May 28, 1976. Any other ventricular bypass (assist) device shall have an approved PMA or declared completed PDP in effect before being placed in commercial distribution.


§ 870.3600 External pacemaker pulse generator.

(a) Identification. An external pacemaker pulse generator is a device that has a power supply and electronic circuits that produce a periodic electrical pulse to stimulate the heart. This device, which is used outside the body, is used as a temporary substitute for the heart’s intrinsic pacing system until a permanent pacemaker can be implanted, or to control irregular heartbeats in patients following cardiac surgery or a myocardial infarction. The device may have adjustments for impulse strength, duration, R-wave sensitivity, and other pacing variables.

(b) Classification. Class III (premarket approval).

(c) Date PMA or notice of completion of PDP is required. No effective date has been established of the requirement for premarket approval. See §870.3.


§ 870.3610 Implantable pacemaker pulse generator.

(a) Identification. An implantable pacemaker pulse generator is a device that has a power supply and electronic circuits that produce a periodic electrical pulse to stimulate the heart. This device is used as a substitute for the heart’s intrinsic pacing system to correct both intermittent and continuous cardiac rhythm disorders. This device includes triggered, inhibited, and asynchronous devices implanted in the human body.

(b) Classification. Class III (premarket approval).

(c) Date PMA or notice of completion of PDP is required. No effective date has been established of the requirement for premarket approval. See §870.3.


§ 870.3620 Pacemaker lead adaptor.

(a) Identification. A pacemaker lead adaptor is a device used to adapt a pacemaker lead so that it can be connected to a pacemaker pulse generator produced by a different manufacturer.

(b) Classification. Class II (special controls). The special control for this device is the FDA guidance document entitled “Guidance for the Submission of Research and Marketing Applications for Permanent Pacemaker Leads and for Pacemaker Lead Adaptor 510(k) Submissions.”


§ 870.3630 Pacemaker generator function analyzer.

(a) Identification. A pacemaker generator function analyzer is a device that is connected to a pacemaker pulse generator to test any or all of the generator’s parameters, including pulse duration, pulse amplitude, pulse rate, and sensing threshold.

(b) Classification. Class II (performance standards).

§ 870.3640 Indirect pacemaker generator function analyzer.

(a) Identification. An indirect pacemaker generator function analyzer is an electrically powered device that is