

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Mail Stop 3030

February 22, 2010

Via Facsimile and U.S. Mail

Mr. Richard A. Packer Chief Executive Officer ZOLL Medical Corporation 269 Mill Road Chelmsford, MA 01824

Re: ZOLL Medical Corporation

Form 10-K for fiscal year ended September 27, 2009

Filed December 10, 2009

File No. 0-20225

Dear Mr. Packer:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-K for fiscal year ended September 27, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 44

Critical Accounting Estimates, page 53

- Goodwill, page 58

- 1. Please revise your disclosure here to clearly indicate the number of reporting units identified in connection with your goodwill impairment testing. In order to provide investors with greater insight into the probability of a future material impairment charge, please also revise your disclosures here in future filings to address the following for any of your reporting units with material amounts of goodwill that are at risk of failing step one:
 - Disclose the percentage by which the fair value exceeded carrying value as of the date of the most recent test;
 - Disclose the amount of goodwill allocated to the reporting unit.
 - Describe the methods and key assumptions used and how the key assumptions were determined.
 - Discuss the degree of uncertainty associated with the key assumptions. In this regard, describe potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions.
 - To the extent the valuation assumptions and methodologies used for valuing goodwill
 change in future periods, disclose the reasons for the changes and the impact of the
 changes.

Note O – Segment and Geographic Information, page 95

2. We note your disclosure of revenues by geographic segment. If revenues from customers attributed to any individual country are material, please revise future filings to disclose those revenues separately. Refer to paragraph 280-10-50-41 of the FASB Accounting Standards Codification.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities and Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- The company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact David Burton, Staff Accountant, at (202) 551-3626 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3671.

Sincerely,

Kevin L. Vaughn Accounting Branch Chief