

הדרמד שרותים רפואיים בע"מ

שירות לציוד רפואי אולטרסאונד ומתמרים Ultrasound & Probe Service

Probe Repair

Firstly, in order for you to better understand the term that we use in probe repair, I would like to share with you the definitions of "Acoustic Lens", "Acoustic Module", "Scan-head", "Cable", and "Connector" as described as follows:

- 1. The <u>Acoustic Lens</u> is the portion of ultrasound probe that directly contacts human body during imaging; it is usually grey, blue, orange or black in color.
- 2. The <u>Acoustic Module</u>, the most crucial component of whole ultrasound probe, actually contains the transducer/crystal elements that are covered by Acoustic Lens.
- 3. The <u>Scan-head</u> is one of three major parts that constitute an ultrasound probe (other two are Cable and Connector); it contains plastic housing, Acoustic Module, and sometimes embedded electronic PCBs (<u>Printed Circuit Boards</u>).
- 4. The Cable, with <u>bent-reliefs</u> on both sides connected to Scan-head and Connector, respectively, is a bundled collection of multiple micro-coaxial cables up to 280 in total number.
- 5. The <u>Connector</u> contains metal or plastic housing, plug of multiple contacts, and sometimes embedded electronic PCBs.

For those models listed in the Repairable Probe List, we can replace acoustic modules or scan-heads and fix embedded electronic PCBs if necessary.

The actual probe repair cost may depend on factors such as brand name, element number, array type, frequency, and technology involved etc. Generally speaking, the repair for following would cost more:

Specialty probes like endocavity or phased array 160-element, 192-element, and 256-element probes, High frequency probes , Probes with sophisticate electronic PCBs embedded inside scan-head or connector.



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You are welcome to send defective ultrasound probes to us for repair; Upon receiving defective probe(s), we'll diagnose the probe(s) non-invasively (without opening or damaging it) and issue the diagnostic report free of charge, in which the "Proposed Action of Repair" and its corresponding "Estimated Costs" are listed. We'll proceed to fix the defective probe(s) only upon receiving your authorization of repair; and, when the probe is about ready, we'll send the final report along with relevant proforma invoice to you. In the Final Report, the "Action of Repair" and its corresponding "Final Costs".

During repair, we'll do our best to keep the original scan-head plastic housing intact and reuse it. However, in case the original scan-head plastic housing cracked or was damaged, then we'll suggest using our in-house new scan-head housing to replace it. Note that the shape/appearance of our in-house new scan-head housing would be different from that of OEM (Original Equipment Manufacturer) probe; as such, the biopsy guide device for the OEM probe, if it existed, may not fit on the in-house new scan-head.

Typically, it takes 3-5 working days for diagnosing defective probes and at least 7-10 working days for replacing with new acoustic module or new scan-head, respectively.

The manufacturer warranty period for the repaired portion would be 6-month.