



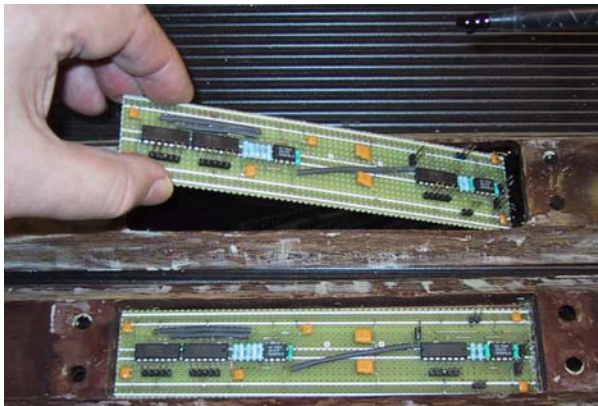
Heath & Sherwood (1964) Ltd. is offering an upgrade service to owners of older models of the Magnograph™ wire rope tester. The original analog version of the Magnograph™, and also the computerized Magnograph™ II can be upgraded to Magnograph™-USB operation.



Only the sensor heads are needed for the upgrade of older Magnograph™ units. Non-working heads can be converted to state-of-the-art Magnograph™-USB operation. The conversion process is simple. The sensor heads should be shipped to the Mississauga office of Heath & Sherwood (full address is at the end of this brochure) for estimation of conversion costs and timing. The conversion work starts after approval of the estimated costs, by the customer.

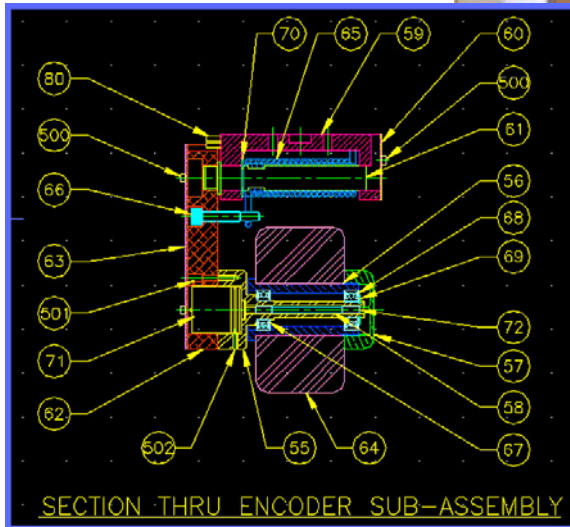
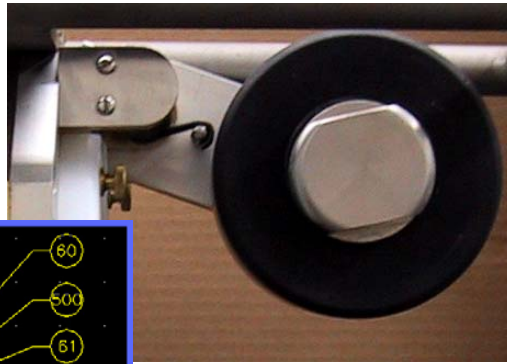
UPGRADE PROCESS OF OLD MAGNOGRAPH™ UNITS

The upgrade process starts with removal and replacement of the sensor head's preamplifier boards.



The new preamplifiers are sealed into instrument grade epoxy resin, which make them impervious to effects of moisture and grease. The original Hall-devices of the sensor head are tested with the new preamplifiers and replaced as needed. Heath & Sherwood (1964) Ltd. keeps a stock of the original models of the Hall sensors to maintain sensitivity constant even after some sensors are replaced with new ones.

A new length encoder is installed as part of the upgrade process. A precision, sealed optical encoder supplies the rope advance signal to the computer to help locating faults along the tested wire rope.



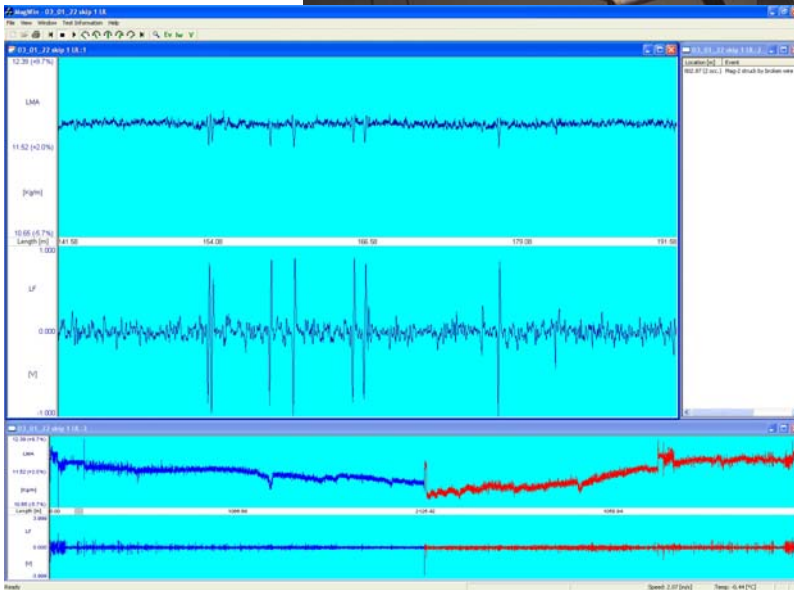
The loss of metallic area and local fault signals, along with the length encoder's two, phase shifted (quadrature) signals are processed in a special signal conditioner. A data acquisition unit, made by National Instruments, digitizes the signal conditioner's output.



Signal conditioner circuit (left) and the data acquisition unit. These are installed in a waterproof case, underneath the laptop computer.



The next step is calibration of the temperature compensation circuit. The upgraded units go through burn-in and testing routines, which are followed by calibration with ferromagnetic test rods.



The upgraded units are shipped with the latest version of the MagWin software. The upgrade process of the Magnograph™ II wire rope testers is much simpler, since only the signal conditioner, data acquisition unit, and the computer are replaced. The Magnograph™ II sensor heads can be used without modification.

Magnograph™ is a trademark of Heath and Sherwood (1964) Ltd.

Heath and Sherwood (1964) Ltd.



Mississauga Office:
259 Traders Blvd., Unit #2
Mississauga, Ontario, Canada, L4Z 2E5



E-mail <info@heathandsherwood64.com>
WEB-site: <www.heathandsherwood64.com>