

TECHNICAL NOTE # 203A

RE: Dielectric Grease
Date: September 11, 1998

The MicroPoint cable can be damaged by water over time. Water in the keyways of the cable will cause a loss of detection and sensitivity.

One source of water getting into the keyways is through the open ends of the cable. During the day when the cable is heated the air in the keyways expands and is forced out the ends of the cable. When the cable cools at night, air is drawn back in. This cooler air also contains some moisture that is condensing inside the cable.

We have seen this happen at modules and units where the first three feet of cable is soaked in both directions from the terminal connection. Note that there was no dielectric grease applied to the cable in these instances.

IT IS VERY IMPORTANT THAT THE GREASE BE APPLIED TO THE ENTIRE STRIPPED END, INCLUDING THE BRAID. USING A GENEROUS AMOUNT, WORK THE GREASE INTO THE KEYWAYS AND OVER THE BRAID.

The purpose of the grease is to prevent humid air from entering the keyways of the cable. It is expected that the grease will be drawn into the keyways as the cable cools. If the braid is not covered, moisture can wick into the cable along the braid, causing the same type of damage. Be sure to grease the braid as well the keyways.

When commissioning a site, be sure to **INSPECT FOR THE PROPER USE OF GREASE**. If it is not applied properly, correct the problem or have the installing company correct it. Note this in any reports you may need to generate. Remind the customer and installing company that warranty of the cable is void if the dielectric grease has not been properly applied.