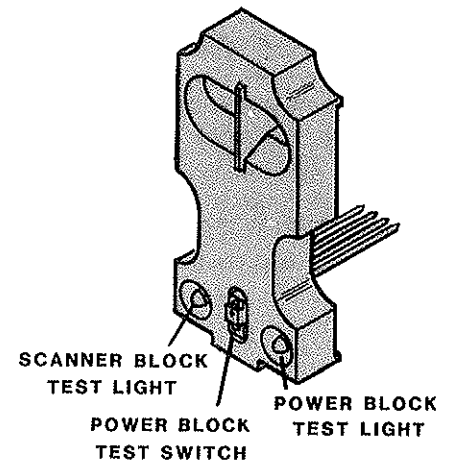


DESCRIPTION

LMT is a plug-in Test Logic Module for use when troubleshooting Multi-Beam scanners. It contains LED indicator lights in place of the timing potentiometers and a miniature switch in place of the LIGHT/DARK operate jumper (see adjacent illustration). The indicator lights display the operation of the Scanner Block and Power Block to verify proper functioning. The switch permits manual operation of the load to verify the output switching circuit.

The step-by-step troubleshooting procedure included on this sheet will allow a Multi-Beam to be completely tested without removing it from the installation; and if there is a faulty Scanner Block, Power Block, or Logic Module, the LMT will identify it. The LMT may also be used with all 2-wire Multi-Beams.



TROUBLESHOOTING PROCEDURE

To follow are separate troubleshooting procedures for 3- and 4-wire scanners and 2-wire scanners respectively.

3- AND 4-WIRE SCANNERS

1. Replace the Logic Module with the model LMT Test Logic Module.
2. The Power Block test light should be "on", (verifying correct internal power supply level). If it is "off", then check incoming supply voltage to make sure that it is correct for the Power Block being used; if incoming voltage is correct and the light is still "off", then replace the Power Block.
3. The Scanner Block test light should follow the action of the indicator LED at the top of the Scanner Block (i.e., it should be "on" when the light is being received by the Scanner Block, and "off" when no light is being received). If it is always "on" or always "off", or if it does not follow the action of the indicator LED at the top of the Scanner Block, then replace the Scanner Block.
4. The Power Block test switch permits direct actuation of the Power Block output circuit, independent of the light or dark condition of the Scanner Block. When + is pressed (down), the output device should energize; when + is released (up), the output device should de-energize. If the output does not follow the action of the switch, then replace the Power Block.
5. If all tests prove satisfactory, remove the LMT and replace with original Logic Module. If the scanner fails to operate properly, then the Logic Module is faulty and should be replaced.

(over)

2-WIRE SCANNERS

1. Replace the Logic Module with the model LMT Test Logic Module.
2. The Power Block test light should be "on", (verifying correct internal power supply level). If it is "off", check incoming supply voltage to make sure that it is correct for the Power Block being used; if incoming voltage is correct and the light is still "off", then replace the Power Block.
3. The Scanner Block test light should operate in opposite fashion to the indicator LED at the top of the scanner block (i.e., it should be "off" when light is being received by the Scanner Block, and "on" when no light is being received). If it is always "on" or always "off", or if it does not operate opposite to the indicator LED at the top of the Scanner Block, then replace the Scanner Block.
4. The Power Block test switch permits direct actuation of the Power Block output circuit, independent of the light or dark condition of the Scanner Block. When + is released (up), the output device should energize; when + is pressed (down), the output device should de-energize. If the output does not follow the action of the switch, then replace the Power Block.
5. If all tests prove satisfactory, remove the LMT and replace with original Logic Module. If the scanner fails to operate properly, then the Logic Module is faulty and should be replaced.

WARRANTY

Banner Engineering Corporation warrants its products to be free of defects for one year. Banner Engineering Corporation will repair, or replace, without charge, any product of its manufacture found to be defective at the time it is returned to the factory during the warranty period. This warranty does not cover damage or liability for improper application of Banner Products. This warranty is in lieu of any other warranty either expressed or implied.



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Printed in USA