



Product Type: Autoscope®

Reference: AN2098
Date: 10 June 2008

Correct Installation of EasyLock Connectors

Purpose

Autoscope® Solo Terra and some AIS cameras use a new EasyLock power connector, which supplies power to the camera through a weather-proof connector, installed in the field.

This Application Note gives the procedure for the correct installation of this connector in the field. Use this procedure to make sure that the connection is weather-proof and reliable.

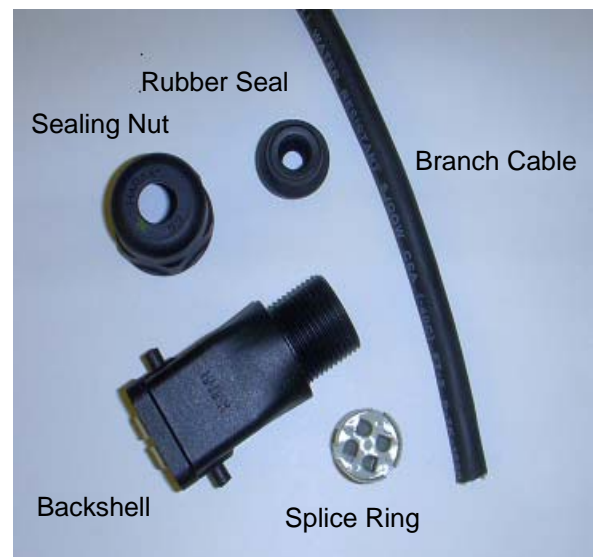
Cable Check

Before you start the installation, make sure that the branch cable is correct. The cables listed below are OK:

- 1175-006, 1175-10 or 1175-11 cable, supplied by Econolite.
- An equivalent cable with specifications that meet or exceed those for an Econolite branch cable used with Solo Terra cameras and the EasyLock connector.

Procedure

1. Examine the contents of the package included with the camera and make sure that you have all four (4) necessary parts, as shown below.
2. Take the parts to the Branch Cable to which you will install the EasyLock connector.





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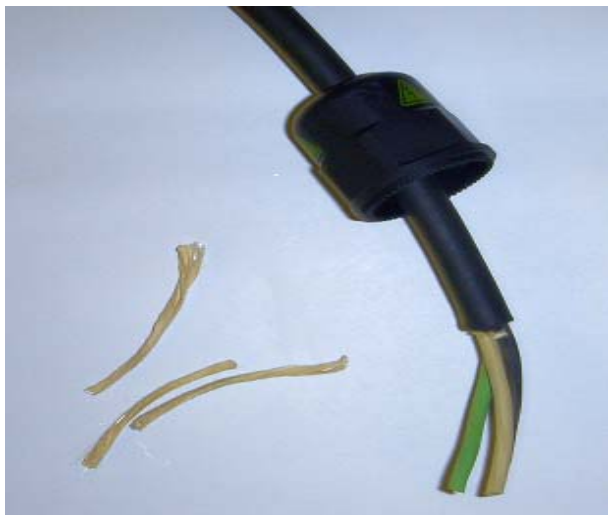
3. Slide the Sealing Nut on the Branch Cable.



4. Strip about 1½ inches of the outer insulation.

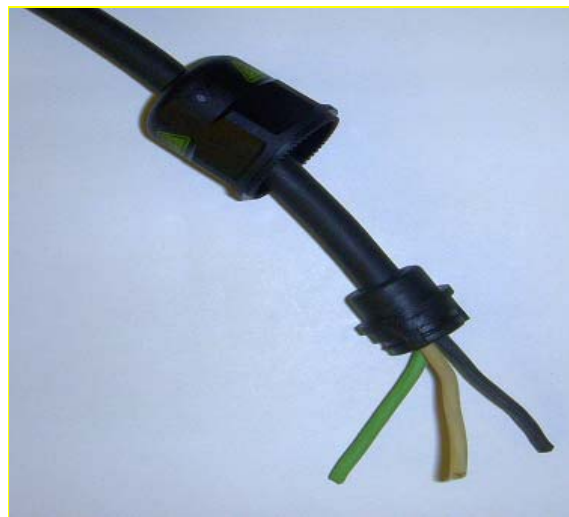


5. Strip the excess filler even with the outer insulation.



6. Put the striped end of the Cable through the Rubber Seal, oriented as shown.

NOTE: Be sure to push the Cable until the outer insulation is *completely* seated into the Rubber Seal.

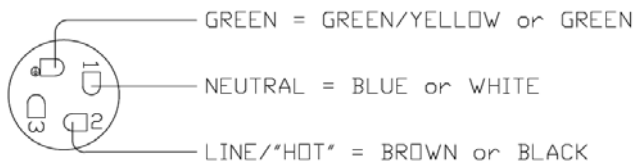




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7. Put the wires through the Splice Ring, with each wire in its related numbered hole, as shown in the drawing below.

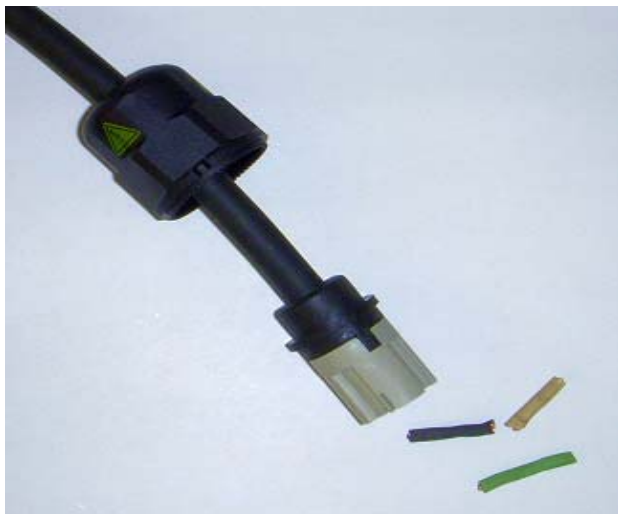


8. Align the slots and notches, and push the Splice Ring into the Rubber Seal until it is *completely* seated.

NOTE: On the other side of the Rubber Seal, make sure that the Cable is still also *completely* seated into the Rubber Seal.



9. Cut the wires flush with the Splice Ring.



10. Align the slots and notches, and push the Splice Ring with Rubber Seal into the Backshell (not shown).

11. Screw the Sealing Nut onto the Backshell.





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12. Completely tighten the Sealing Nut until it touches the Backshell. This completes the installation.

NOTE: In this photograph, the Sealing Nut touches the Backshell and the installation is complete. In the photograph of Step 11, however, the installation is NOT complete because there is a space between the Sealing Nut and the Backshell.



NOTES

- As you complete the installation, you will hear a click when the Sealing Nut touches the Backshell.
- Make sure the outside insulation of the cable is inside the connector.
- As you screw the Sealing Nut onto the the Backshell, blades cut through the insulation of the wires and make contact.
- The Rubber Seal is compressed by the Sealing Nut, which seals it against the Cable.
- When you connect it to the camera, this EasyLock Connector makes a weather-tight seal.

The photograph below shows a connector that was NOT correctly installed in the field.

NOTE: The Cable is not inserted into the Rubber Seal. The Sealing Nut does not touch the Backshell. Water entered and damaged this unit.



The photograph below shows water on the inside of the window of an *Autoscope* camera. The water entered the camera through a connector that was not sealed because of an incorrect installation.

If you obey the instructions in this Application Note, this will NOT happen to you.

