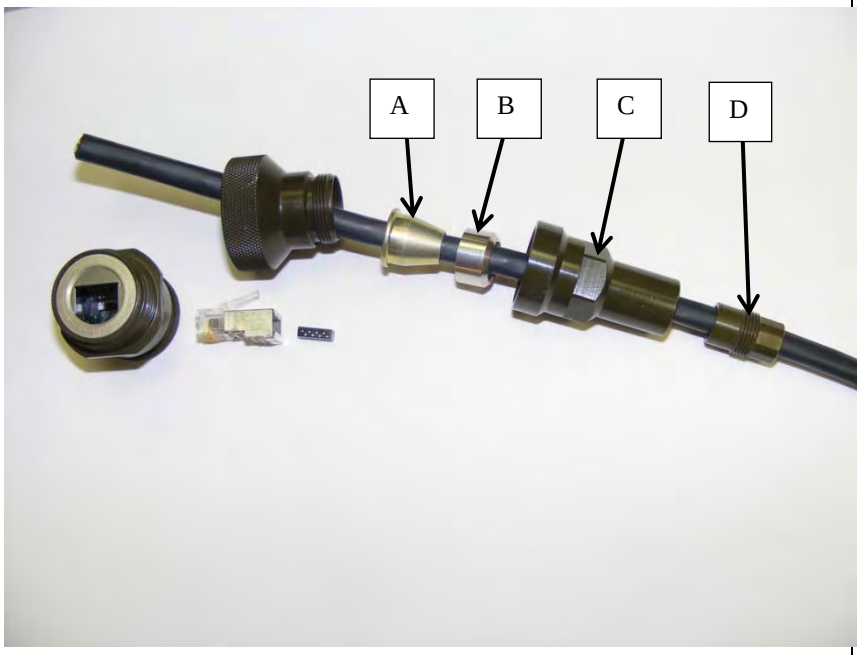
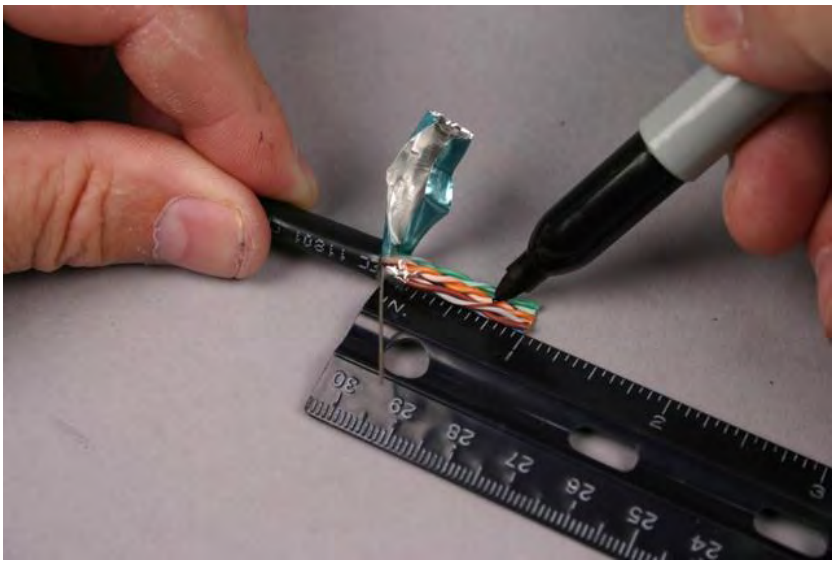
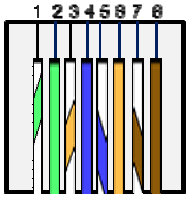
AOS ECRP IN-LINE PLUG R-JACK assembly components and their relative positions. To assemble the AOS ECRP IN-LINE Plug connector, place the following members onto the cable oriented from left to right as follows: (a) Inner Wedge (b) Outer Wedge (c) Reap Cap Sub Assembly (d) Rear Cap (part of C above) Ensure the hex nut feature on the back of the rear cap subassembly is positioned with threaded end toward Rear Cap Subassembly and flats toward the cable.	
Mark a cut location on the cable 1” from the end.	

Using a razor blade, strip the cable identical to the earlier procedure. USE care not to cut the foil surrounding the cable.	
Use a marker to mark another cut onto the copper members. Mark this at ¼" from the end of the cable. Proceed to cut these excess copper members off.	

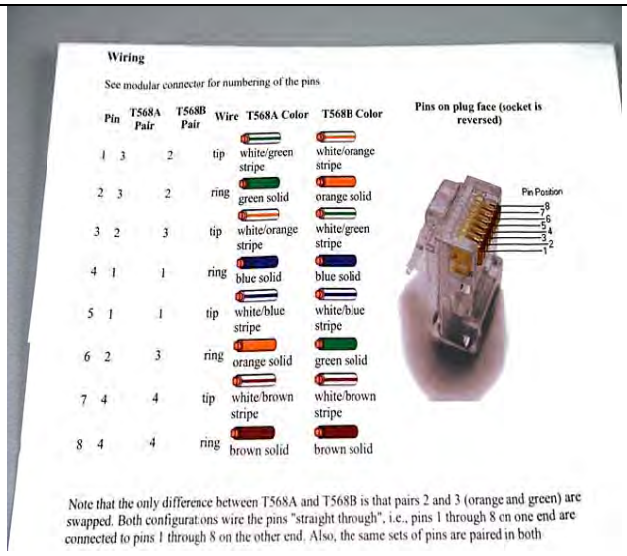
Locate the Shielded RJ45 jack. Turn the Jack upside down, exposing the copper fingers. Note that the common numbering scheme for the RJ45 jack (EIA/TIA-T568A and EIA/TIA-T568B) is 1 through 8, with the clip hook underneath.

The color code for wires and pin numbers for -T568A and -T586B are noted. For the applications of R-JACK the EIA/TIA T568A wiring scheme is used and is as follows;

EIA/TIA T568A



HOOK IS UNDERNEATH



Wiring

See modular connector for numbering of the pins

Pin	T568A Pair	T568B Pair	Wire	T568A Color	T568B Color
1	3	2	tip	white/green stripe	white/orange stripe
2	3	2	ring	green solid	orange solid
3	2	3	tip	white/orange stripe	white/green stripe
4	1	1	ring	blue solid	blue solid
5	1	1	tip	white/blue stripe	white/blue stripe
6	2	3	ring	orange solid	green solid
7	4	4	tip	white/brown stripe	white/brown stripe
8	4	4	ring	brown solid	brown solid

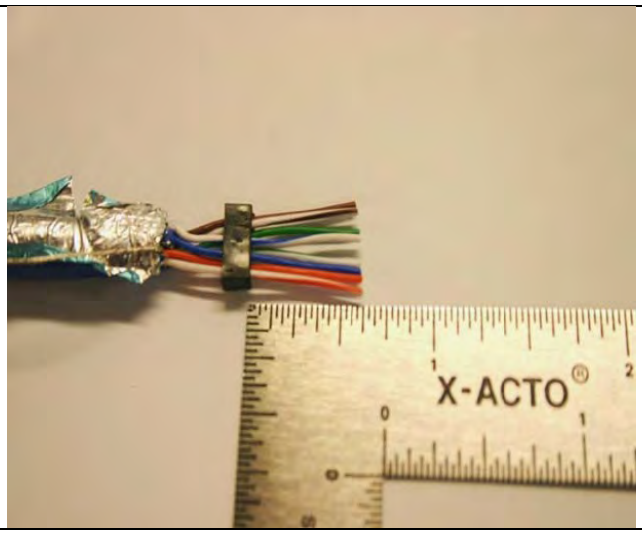
Pins on plug face (socket is reversed)

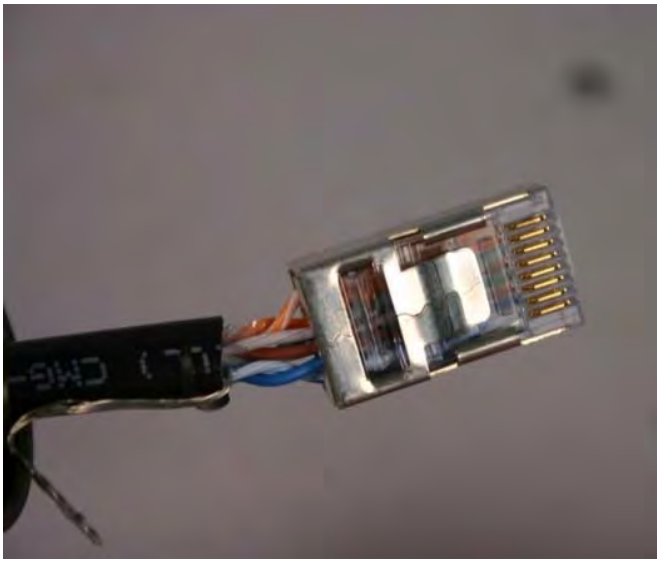
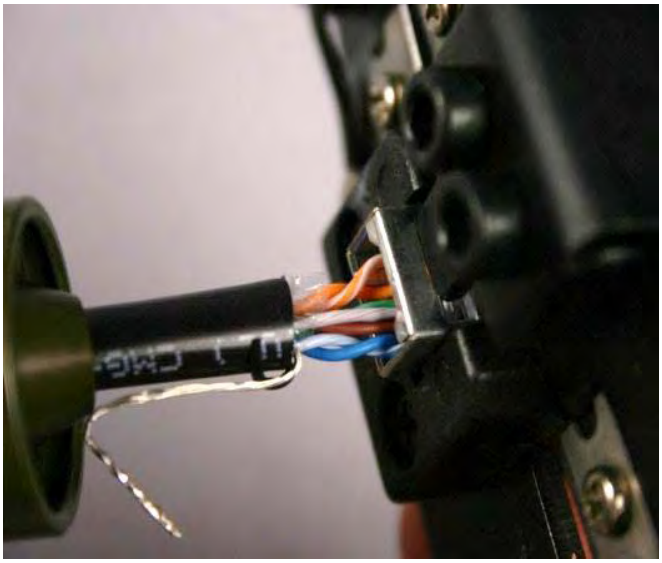
Pin Position 8 7 6 5 4 3 2 1

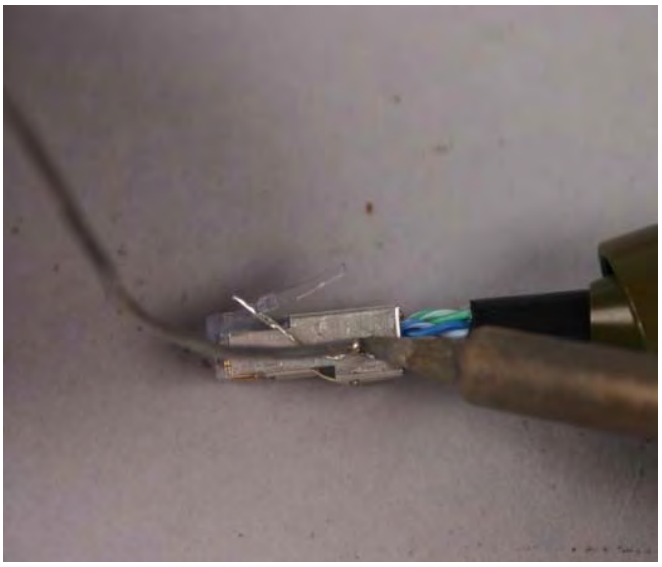
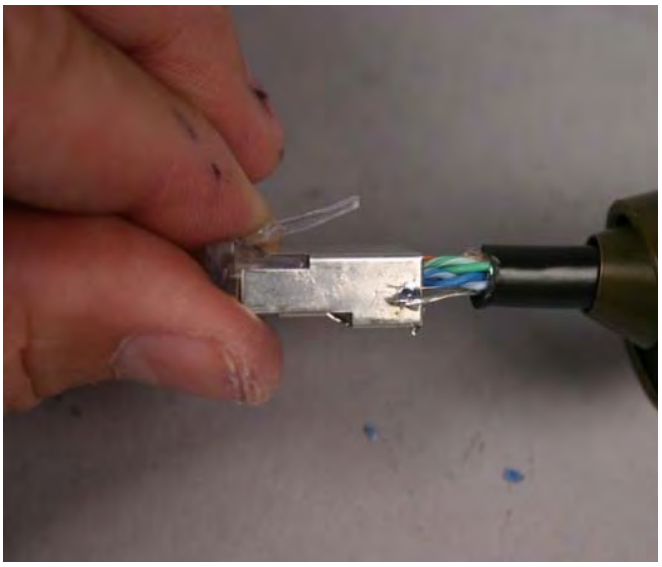
Note that the only difference between T568A and T568B is that pairs 2 and 3 (orange and green) are swapped. Both configurations wire the pins "straight through", i.e., pins 1 through 8 on one end are connected to pins 1 through 8 on the other end. Also, the same sets of pins are paired in both

Route the 8 wires in order per T586A thru the black wire loom. The wire loom makes it much easier to successfully route all the wires into the RJ-45 connector.

Trim the wire ends to 5/8 inch from the wire guide and perpendicular to the cable. This makes insertion into the RJ45 the correct length.



Route the eight copper members in sequence into the rear of the RJ-45 jack. Ensure that all eight members remain in horizontal sequence as the wires are pushed up into the jack.	
Once in place, use the RJ-45 crimp tool to completely crimp the wire members in place.	

Lay the drain conductor onto the side of the shielded RJ-45 jack and solder it to the shield. The location should be ¼" from the back of the jack.	
After completing the solder operation and allowing it to cool, cut off the excess drain lead.	

Find the rear extension cap and slide it over the RJ-45, onto the cable.	
Find the main Connector Housing with dust cap and plug the RJ-45 jack into the rear.	

Screw the rear extension cap onto the main connector housing tightly. Bring the Inner Wedge up and route the protruding foil though the cable opening	
Trim the foil but leave enough length so that the foil can be doubled over as shown in the next frame.	

Fold the foil over (double) to add both strength and conductive surface area.	
Bring the Outer Wedge up to mate with the inner wedge and “sandwich” the foil between Inner and Outer wedge.	

Bring the Rear Cap up over the back of the extension rear cap. Screw the Rear Cap on tightly.	
For the final assembly, bring the rear cap sub assembly up into the rear of the Rear Cap. Use a crescent wrench to tighten the assembly.	

The final ECRP Plug assembly is shown in the picture.	

L-COM, INC. 45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845
WWW.L-COM.COM E-MAIL: SALES@L-COM.COM PHONE: 1-800-343-1455 FAX: 1-978-689-9484