

Place the connector members of the AOS ECRA Plug connector 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 is positioned toward the other end of the cable and the threaded end is pointed to the connector.

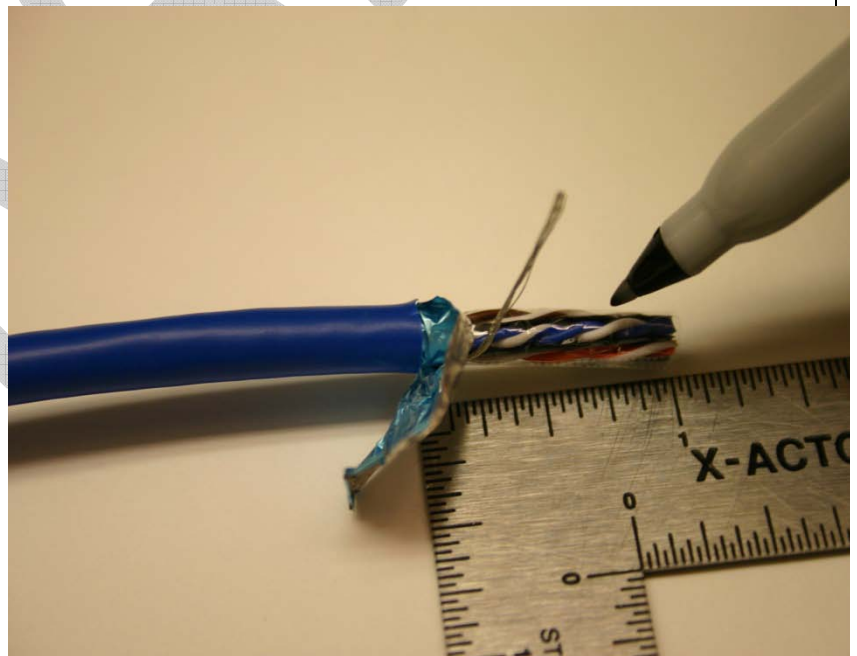
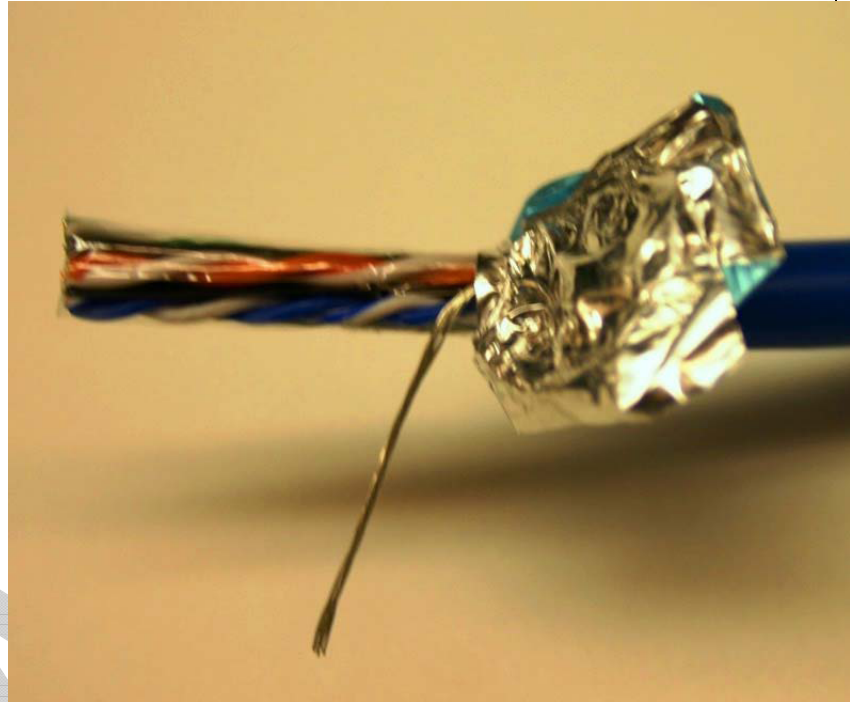


Mark a cut location on the cable $1 \frac{1}{4}$ from the end.

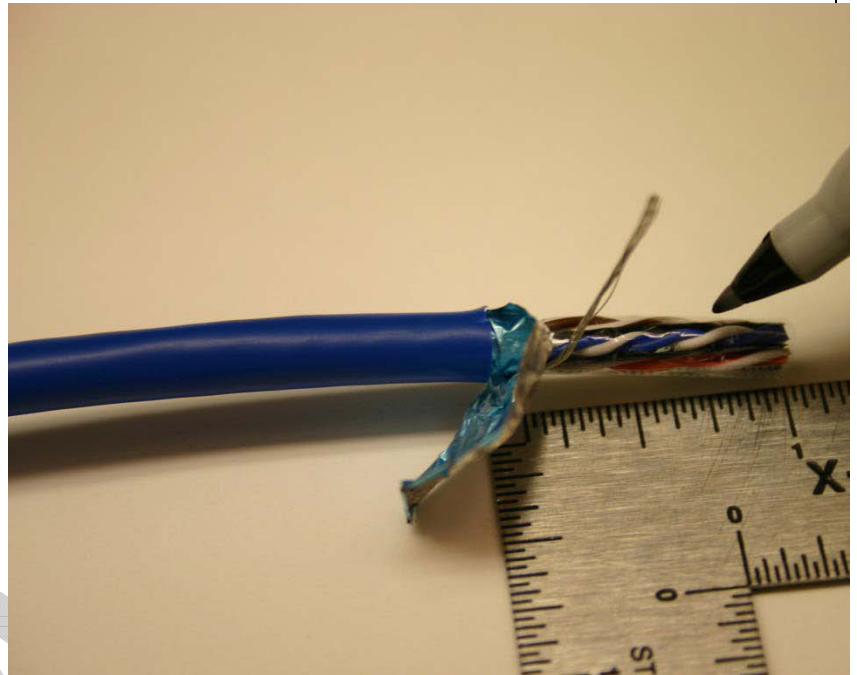
Trim the cable jacket with a utility knife or blade, being careful not to cut the inner shield foil.



Once the outer jacket is removed, peel back the foil shield and the Drain wire. The copper wires are wrapped in two sections with clear plastic. Remove the clear plastic back to the cable jacket.



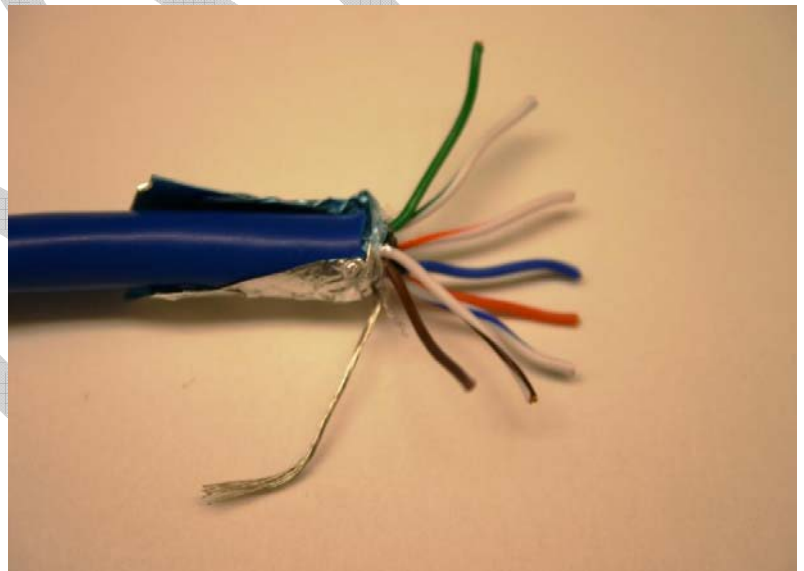
Mark the copper wires ¼" from the end. Use a pair of wire cutters and cut the ends off square (perpendicular) to the cable.



Separate the eight copper members and arrange to the specific color code per (EIA/TIA-T568A), in a horizontal format.

Starting from top to bottom the color code is as follows:

WHITE/GREEN STRIPE
GREEN
WHITE/ORANGE STRIPE
BLUE
WHITE/BLUE STRIPE
ORANGE
WHITE/BROWN STRIPE
BROWN



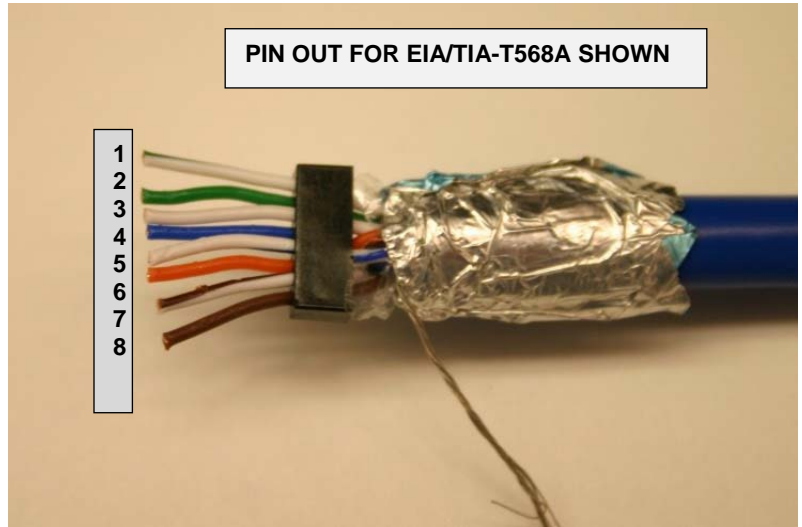
Insert the wire guide over the wires according to the EIA/TIA-T568A or –T568B color coded wiring;

EIA/TIA-T568A

WHITE/GREEN STRIPE
GREEN
WHITE/ORANGE STRIPE
BLUE
WHITE/BLUE STRIPE
ORANGE
WHITE/BROWN STRIPE
BROWN

EIA/TIA-T568B

WHITE/ORANGE STRIPE
ORANGE
WHITE/GREEN STRIPE
BLUE
WHITE/BLUE STRIPE
GREEN
WHITE/BROWN STRIPE
BROWN

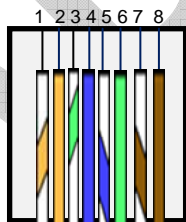


Locate the Shielded RJ-45 jack. Turn the Jack upside down, exposing the copper fingers. Note that the common numbering scheme for the RJ-45 jack (EIA/TIA-T568A/B) is 1 through 8, with the clip on the down side.

Therefore the color coded wires and pin numbers for T568A and T586B are;

EIA/TIA T568A

EIA/TIA T568B



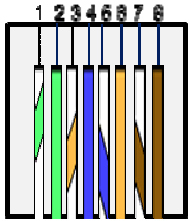
HOOK IS UNDERNEATH

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)

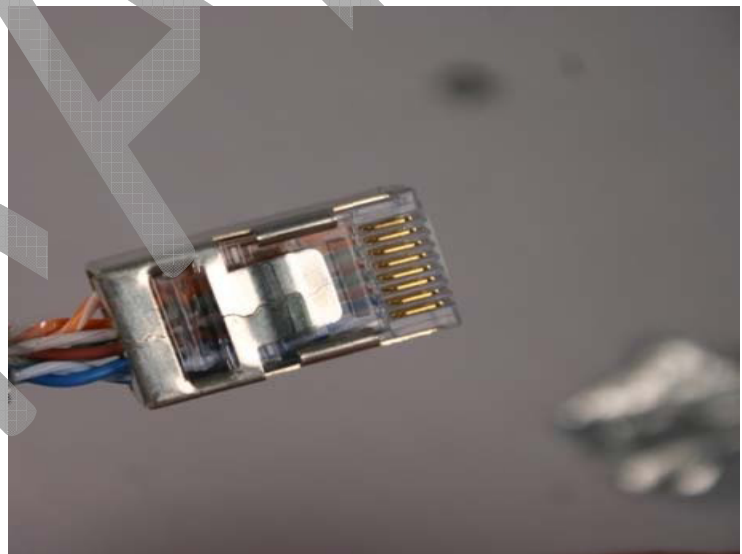
Note that the only difference between T568A and T568B is that pairs 2 and 3 (orange and green) are swapped. Both configurations wire the pins "straight through", i.e., pins 1 through 8 on one end are connected to pins 1 through 8 on the other end. Also, the same sets of pins are paired in both



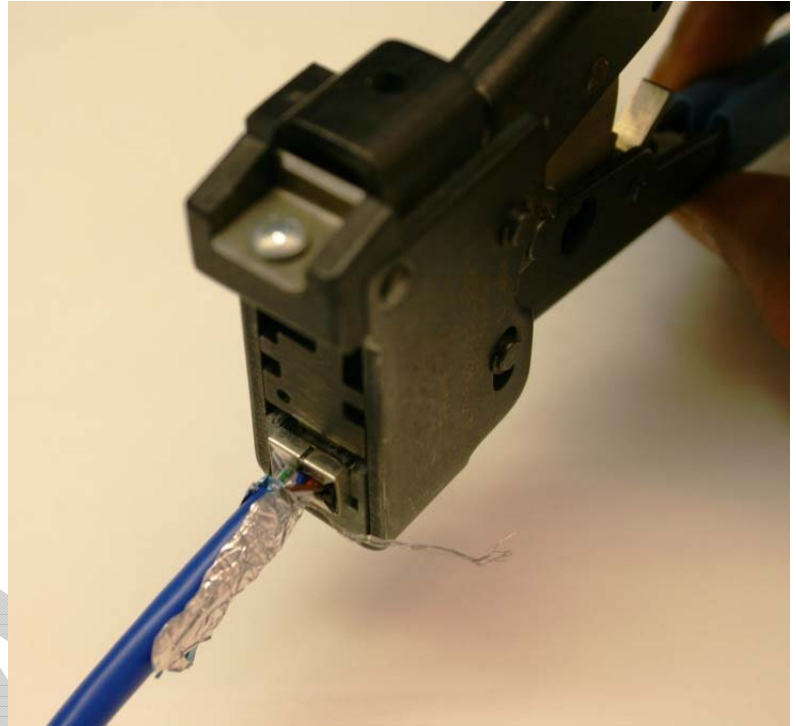
HOOK IS UNDERNEATH

Route the eight copper wires in color coded 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.

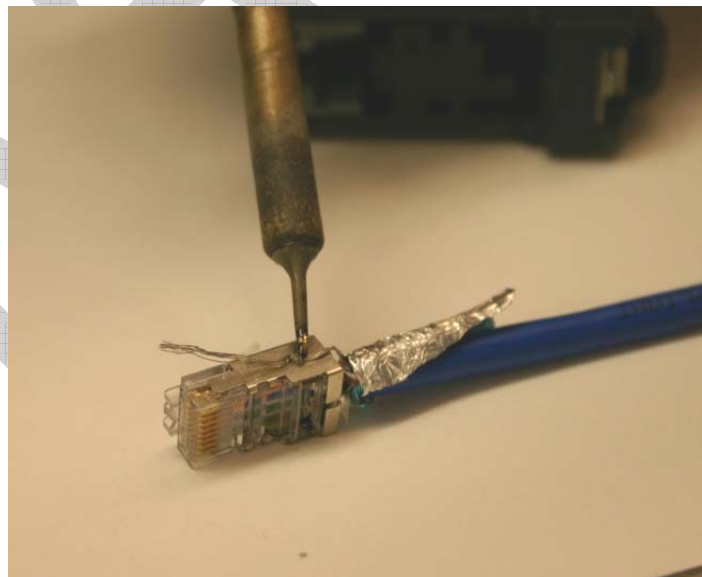
Note that the wires must extend to the pin fingers as seen thru the plastic R-J 45 clear plastic body.



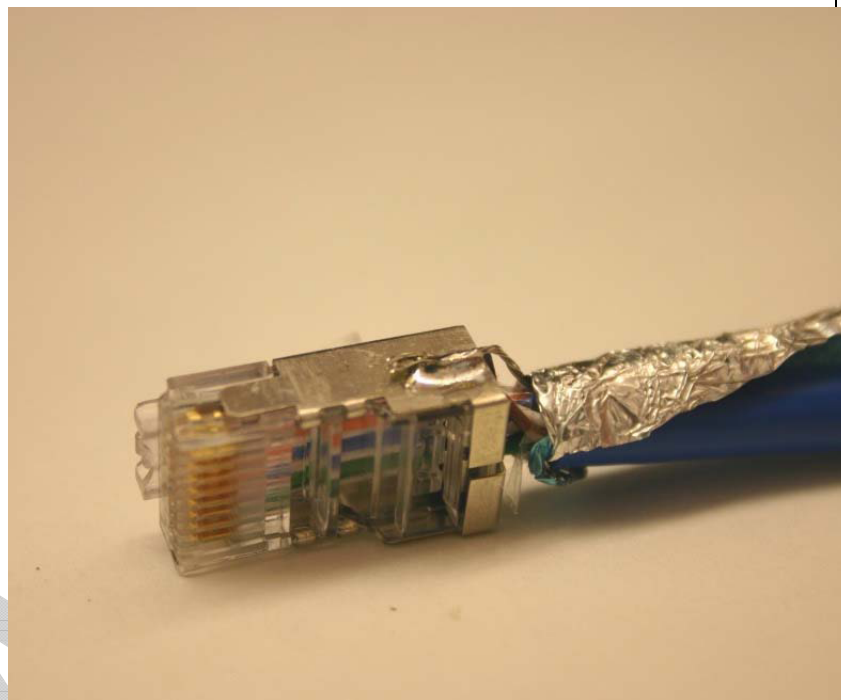
Once in place, push the RJ-45 connector assembly firmly into the RJ-45 crimp tool and compress the crimp handle to completely crimp the wire members in place.



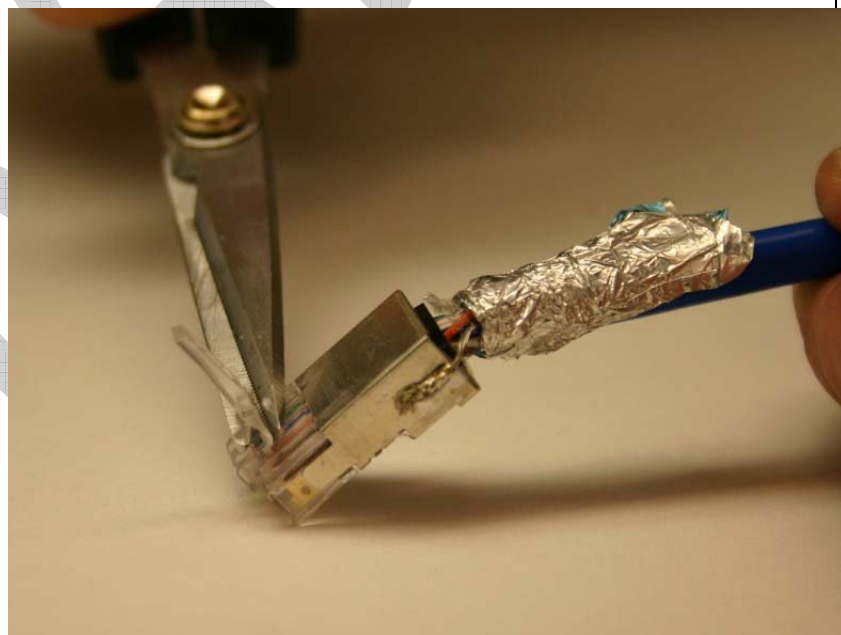
Lay the drain conductor onto the side of the shielded RJ-45 jack as shown and solder it to the shield. The location should be $\frac{1}{4}$ " from the back of the jack.



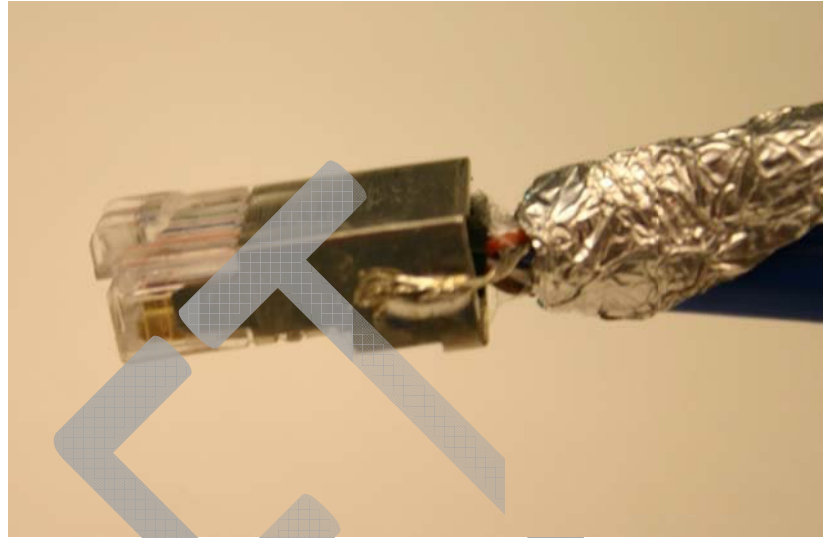
After completing the solder operation and allowing it to cool, cut off the excess drain lead.



After removal of the drain wire, cut off the plastic clip on the RJ-45 plug body.



The RJ-45 plug body should look like this with the drain wire soldered and excess wire removed. The plastic clip should look like this as well.



Bring the inner wedge up and route the foil shield through the wedge opening and bend foil over the outside edge of the inner wedge. Slide up the outer wedge up to mate with the inner wedge and "sandwich" the foil between the inner and outer wedge.



Find the main Connector Housing with dust cap and lanyard. Place lanyard loop over RJ-45 plastic plug and wedge assembly. Slide the RJ-45 jack into the rear of the Rear Extension Cap.



Use an RJ-45 Receptacle and slide the RJ-45 jack Assembly into the receptacle. Tighten the coupling nut.



The receptacle will allow the RJ-45 plastic assembly to be held in place while the Rear Cap Subassembly is screwed onto the Rear Extension Cap.

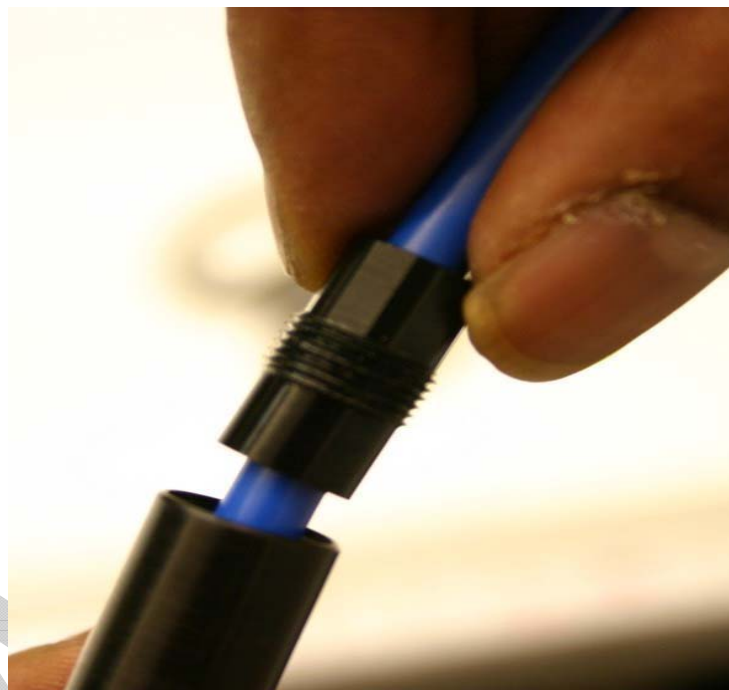
Note: it is important that the RJ-45 plastic assembly not be allowed to rotate.



Screw the Rear Extension Cap onto the Main Connector Housing and tighten with a 9/16" wrench.



Bring the Rear Cap up to the back of the Rear Cap Subassembly. Screw the Rear Cap into the Rear Cap Sub Assembly finger tight.



For final assembly, bring the Rear Cap Sub-assembly up and into the rear of the Rear Cap. Use a 3/8" wrench to tighten the Rear Cap assembly.



The final ECRA Plug assembly is shown in the picture.



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