Flush cut snips produce very clean end snips without damaging nearby wire shielding or insulation.

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Common paint removing heat gun can be used as a heat shrink gun but one designed for the purpose would be better. If you have one available to you it is recommended to use a heat shrink gun. However this paint remover will work as long as extreme care is taken to ensure you do not get the wires too hot to the point that the insulation breaks down.

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This is an Environmental Sleeve. It is used to seal the ends of the shielded pairs but can be used for numerous other uses. The clear plastic outer sleeve is just clear heat shrink but the clear and yellow bands at the ends are a heat activated glue which seals the ends. I normally cut them in half to make twice as many sealing ends.

This is a solder sleeve pigtail for terminating the shielded ends of twisted pairs and grounding the shield to shut any induction based charges to ground. This is what you use to terminate the shielded pair wiring (normally at the signal origination end) but with a central computer it may be more suitable to terminate all shields at the computer end. Shields should be terminated to ground at one end only. This prevents what is called a grounding loop. If there is a loop then the induction signals may not end up shunted to ground because of both ends being "Like Charged"

This is how you expose the shielding and twisted wiring. I call this technique walking the blade. I walk the blade around the outer casing without using any sawing action or hard pressure. I use just enough pressure to cut partially through the teflon jacket. If you do go completely through the teflon then you chance cutting through the shielding and nicking one of the twisted wires within. If this happens you can end up with a shorted wire to ground at the termination. And these kinds of shorts are extremely hard to locate in a very complex wiring harness. So extreme care should be taken to not nick the twisted wiring.

After the wire has been cut partially through completely around then you bend the cabling to cause the cuts to rip open. You might need to walk the blade again in parts to get complete separation all the way around. After you have complete separation then you pull off the portion of the outer teflon jacket to expose the shielding and wires.

This is what the shielding looks like after the outer teflon casing has been removed. Now you need to trim the shielding to length for the desired termination.



Now you bunch up the shielding as shown so that you can cut it without cutting the wires within.

Use the flush cut snips to cut the bunched section as shown just a little above the outer jacket to leave a little bit of shielding for the solder sleeve pigtail. You may have to do this more than once to get all the way around the shielding. Here is the trimmed shielding. Now you must fold the shielding back over the outer teflon jacket and twist them together in a bunch around the jacket. This protects the twisted signal wires from getting too hot during the heat shrinking/solder melting process. The teflon casing provides a bit of heat dissipation.

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This picture is a bit blurry but it shows the shielding bunched together over the outer teflon casing at the end. Now you are ready to install the solder sleeve pigtail.

Here is the solder sleeve installed but not shrunk yet. I normally put the ground pigtail pointing back away from the signal ends because it makes installing in a tightly confined type plug a bit easier and then when you go to terminate the shield grounds at a grounding terminal it is easy to gather them up behind the plug rather than up in front where the plug is.

Shrinking the sleeve!

Poor quality photo but this is the finished ground termination of the shielding.

Here is how I normally cut the environmental sleeves in half to make more for the money. These items are a bit on the expensive so cutting them in half cuts your cost in half. I just use the glue bands at the ends to seal the open ends of the cabling. Bunched end again to prepare a non-grounded end termination.

Use the flush cuts to snip the shielding flush with the end of the jacket for a non-grounded end termination type.

Cut Shielding for non-grounded termination.

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Environmental sleeve in place and ready to be heated for shrinking. The end of the casing in this photo is right in the center of the yellow glue band. This way when it is heated some of the glue will flow into the open end of the jacket/shielding and the rest of it will flow around the outside of the jacket. This makes a very good moisture proof seal for a non-grounded termination. Without this kind of preparation moisture could get into the jacket which would eventually cause corrosion and eventual failing of this type of cabling.

No. of Concession, Name

