

Assembling PL-259 Coaxial Connectors

UG STANDARD SOLDER TYPE WITH REDUCING ADAPTER

FOR PLUGS 83-1SP, 83-1SP-1050, 83-1SP-15RFX, 83-822, USING 83-166 83-168-RFX, OR 83-185, 83-185-RFX REDUCING ADAPTER



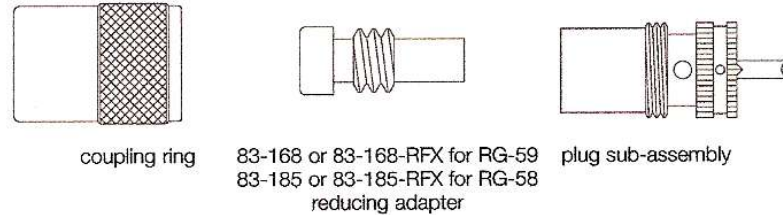
| Amphenol Number | Connector Type | Cable RG-/U (using 83-166 or 83-168-RFX) | Cable RG-/U (using 83-185 or 83-185-RFX) | Attachment Data | | Using 83-166 or 83-185 Stripping Dims, inches (mm) | | | Using 83-168-RFX or 83-185-RFX Stripping Dims, inches (mm) | | |
|-----------------|----------------|--|--|-----------------|----------|--|-----------|------------|--|------------|------------|
| | | | | Outer | Inner | a | b | c | a | b | c |
| | | | | 83-1SP | UHF Plug | 58 | 58 | Solder | Solder | .750(19.1) | .375(9.5) |
| 83-1SP-1050 | UHF Plug | 58 | 58 | Solder | Solder | .750(19.1) | .375(9.5) | .825(15.9) | .689(17.5) | .375(9.5) | .551(14.0) |
| 83-1SP-15RFX | UHF Plug | 58 | 58 | Solder | Solder | .750(19.1) | .375(9.5) | .825(15.9) | .689(17.5) | .375(9.5) | .551(14.0) |
| 83-750 | UHF Plug | 58 | 58 | Solder | Solder | .750(19.1) | .375(9.5) | .825(15.9) | .689(17.5) | .375(9.5) | .551(14.0) |
| 83-822 | UHF Plug | 58 | 58 | Solder | Solder | .750(19.1) | .375(9.5) | .825(15.9) | .689(17.5) | .375(9.5) | .551(14.0) |

Assembly

- Step 1** **Step 1** Slides coupling ring and adapter onto cable. Cut end of cable even and strip jacket to dimension shown in table.
- Step 2** **Step 2** Position adapter flush with end of cable jacket. Fan braid slightly and fold back over body of adapter as shown. Press braid down over body and trim to dimension **b**. Bare conductor to dimension **c** shown in table. Tin exposed center conductor and braid, avoiding excessive heat.
- Step 3** **Step 3** Screw plug sub-assembly onto adapter. Solder braid to shell through solder holes, making a good bond between braid and shell. Solder conductor to contact. Do not use excessive heat.
- Step 4** **Step 4** For final assembly, screw coupling ring onto plug sub-assembly.

UG STANDARD SOLDER TYPE WITH REDUCING ADAPTER

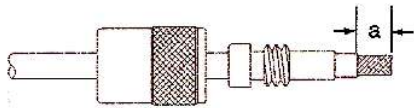
FOR PLUGS 83-1SP, 83-1SP-1050, 83-1SP-15RFX, 83-822, USING 83-168 83-168-RFX, OR 83-185, 83-185-RFX REDUCING ADAPTER



| Amphenol Number | Connector Type | Cable RG-/U (using 83-168 or 83-168-RFX) | Cable RG-/U (using 83-185 or 83-185-RFX) | Attachment Data | | Using 83-168 or 83-185 Stripping Dims, inches (mm) | | | Using 83-168-RFX or 83-185-RFX Stripping Dims, inches (mm) | | |
|-----------------|----------------|--|--|-----------------|----------|---|-----------|------------|---|------------|------------|
| | | | | | | Outer | Inner | a | b | c | a |
| | | | | 83-1SP | UHF Plug | 59 | 58 | Solder | Solder | .750(19.1) | .375(9.5) |
| 83-1SP-1050 | UHF Plug | 59 | 58 | Solder | Solder | .750(19.1) | .375(9.5) | .625(15.9) | .689(17.5) | .375(9.5) | .551(14.0) |
| 83-1SP-15RFX | UHF Plug | 59 | 58 | Solder | Solder | .750(19.1) | .375(9.5) | .625(15.9) | .689(17.5) | .375(9.5) | .551(14.0) |
| 83-750 | UHF Plug | 59 | 58 | Solder | Solder | .750(19.1) | .375(9.5) | .625(15.9) | .689(17.5) | .375(9.5) | .551(14.0) |
| 83-822 | UHF Plug | 59 | 58 | Solder | Solder | .750(19.1) | .375(9.5) | .625(15.9) | .689(17.5) | .375(9.5) | .551(14.0) |

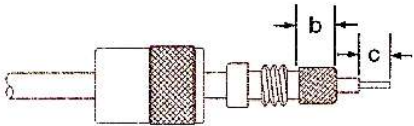
Assembly Instructions

Step 1



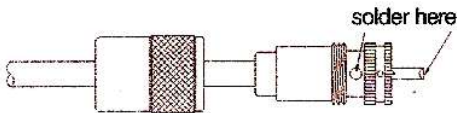
Step 1 Slide coupling ring and adapter onto cable. Cut end of cable even and strip jacket to dimension shown in table.

Step 2



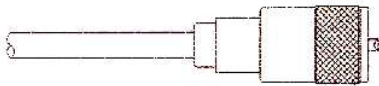
Step 2 Position adapter flush with end of cable jacket. Fan braid slightly and fold back over body of adapter as shown. Press braid down over body and trim to dimension **b**. Bare conductor to dimension **c** shown in table. Tin exposed center conductor and braid, avoiding excessive heat.

Step 3



Step 3 Screw plug sub-assembly onto adapter. Solder braid to shell through solder holes, making a good bond between braid and shell. Solder conductor to contact. Do not use excessive heat.

Step 4



Step 4 For final assembly, screw coupling ring onto plug sub-assembly.

PL-259 Parts



Silver Connectors



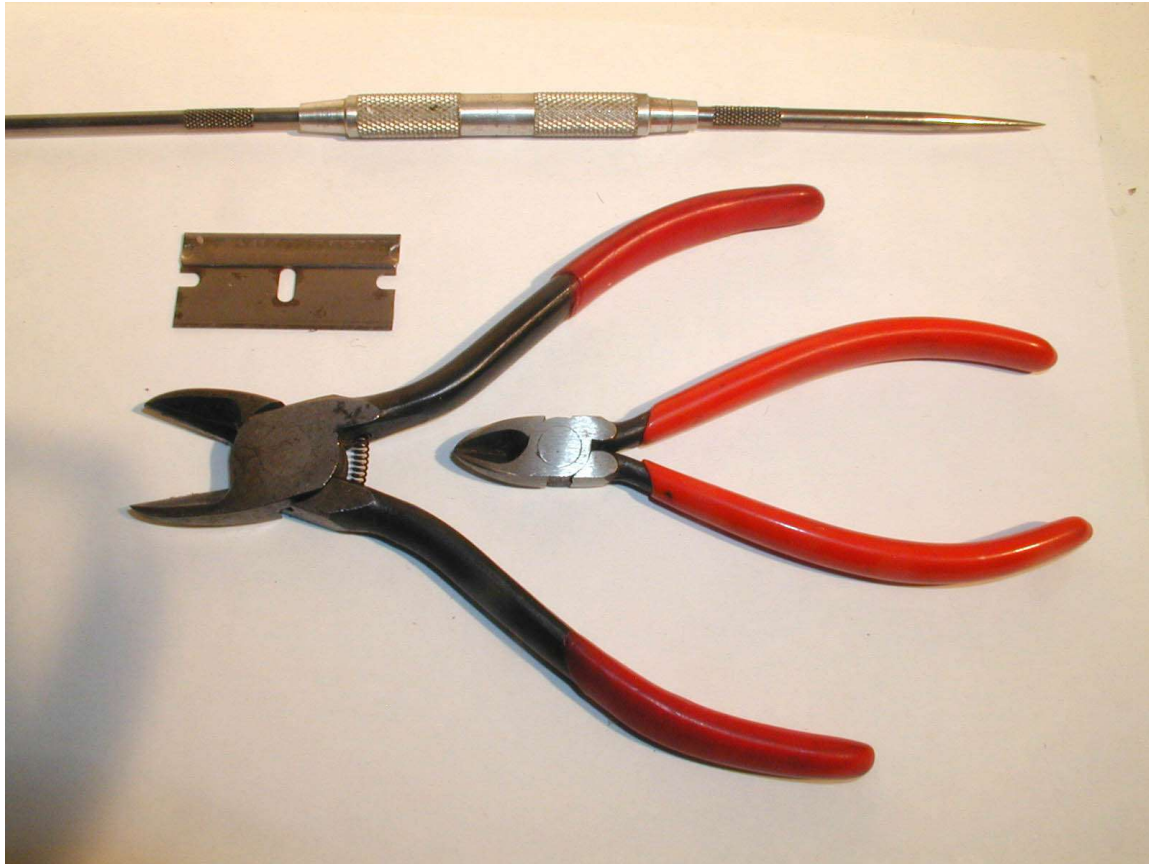
Amphenol Envelopes



Kings Envelope



Hand Tools



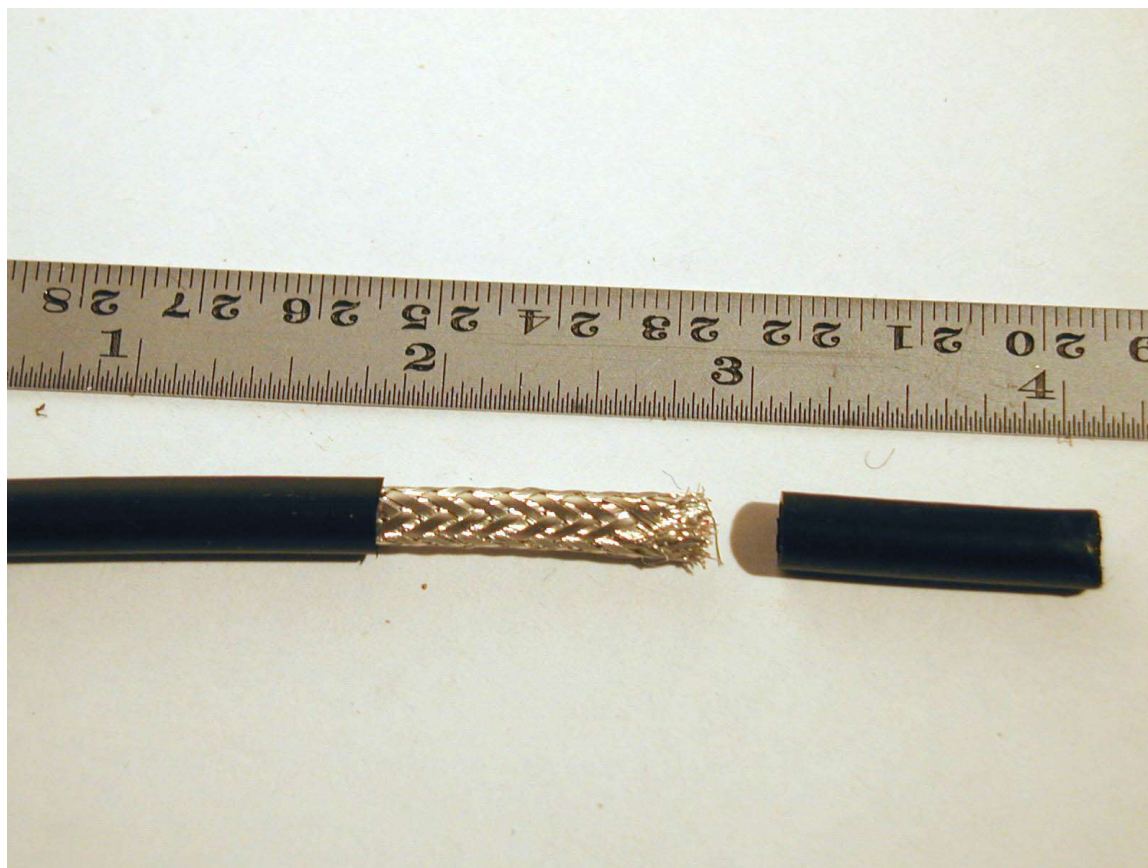
Files



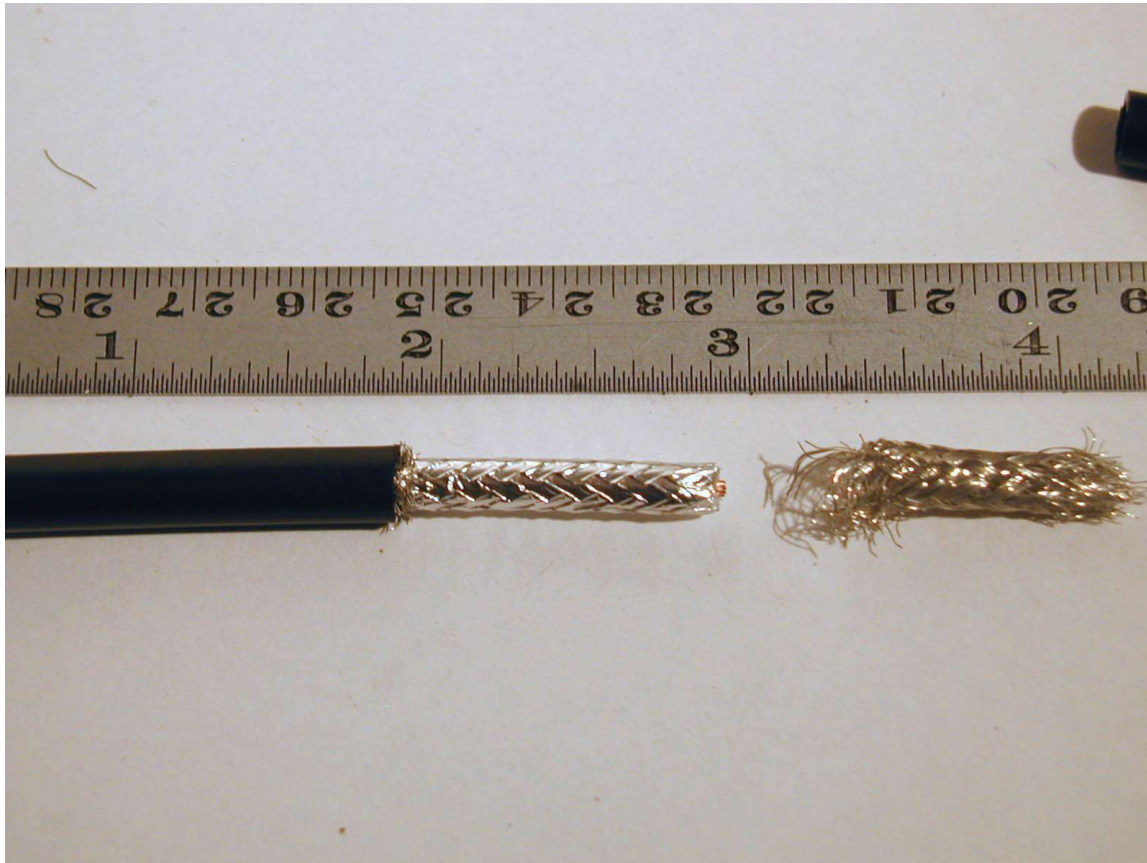
Solder & Flux



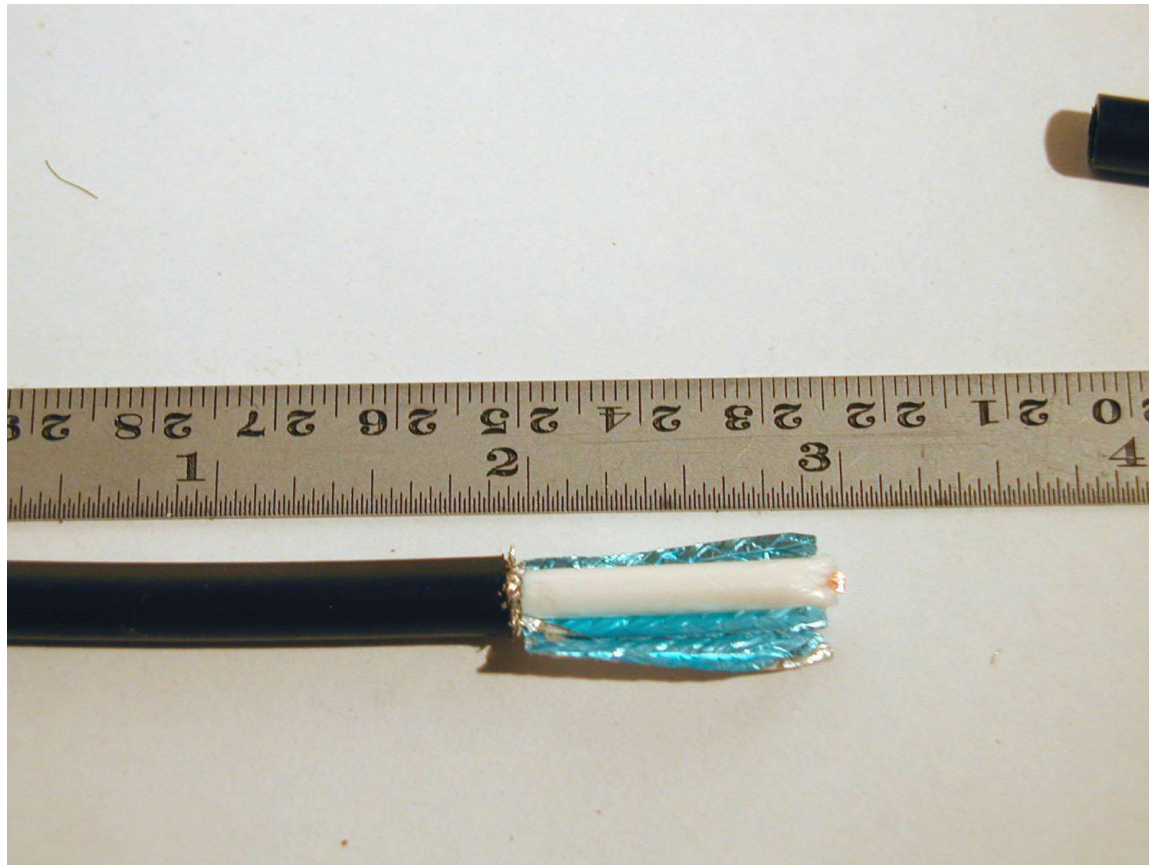
Remove Jacket



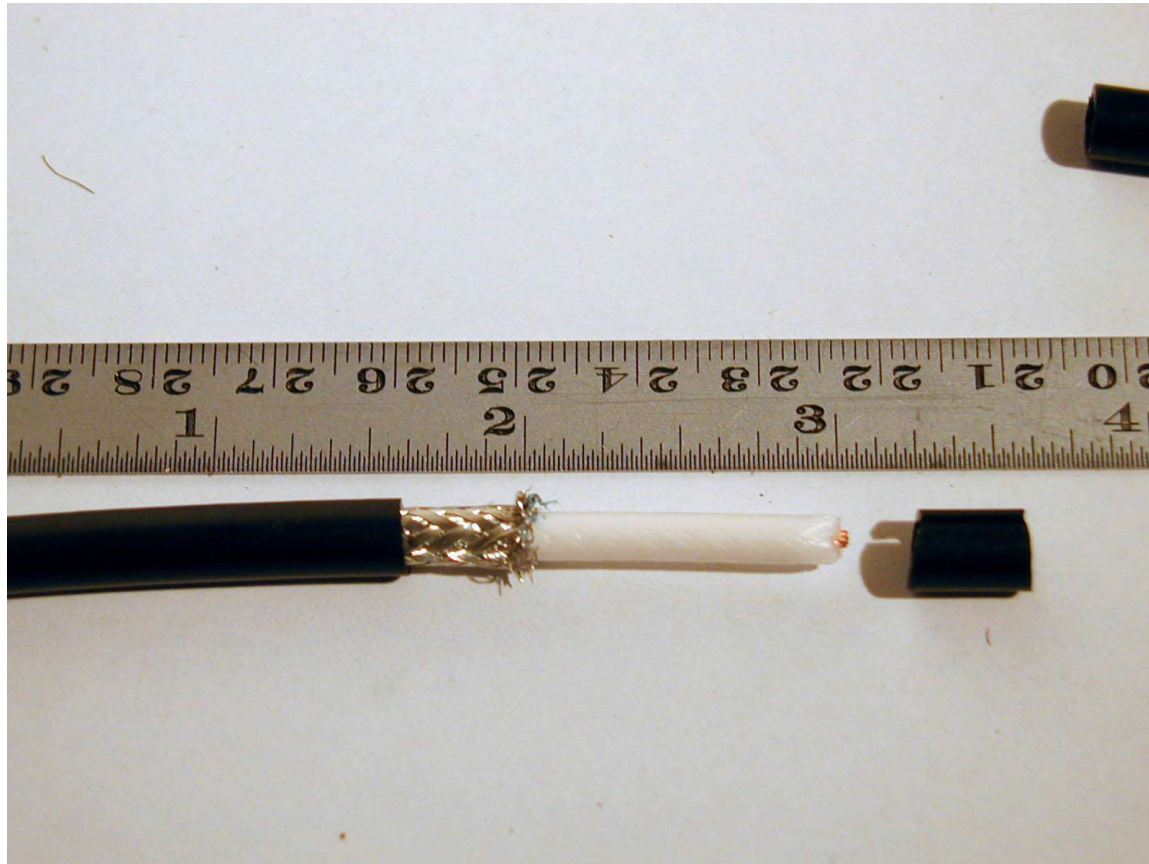
Remove Braid



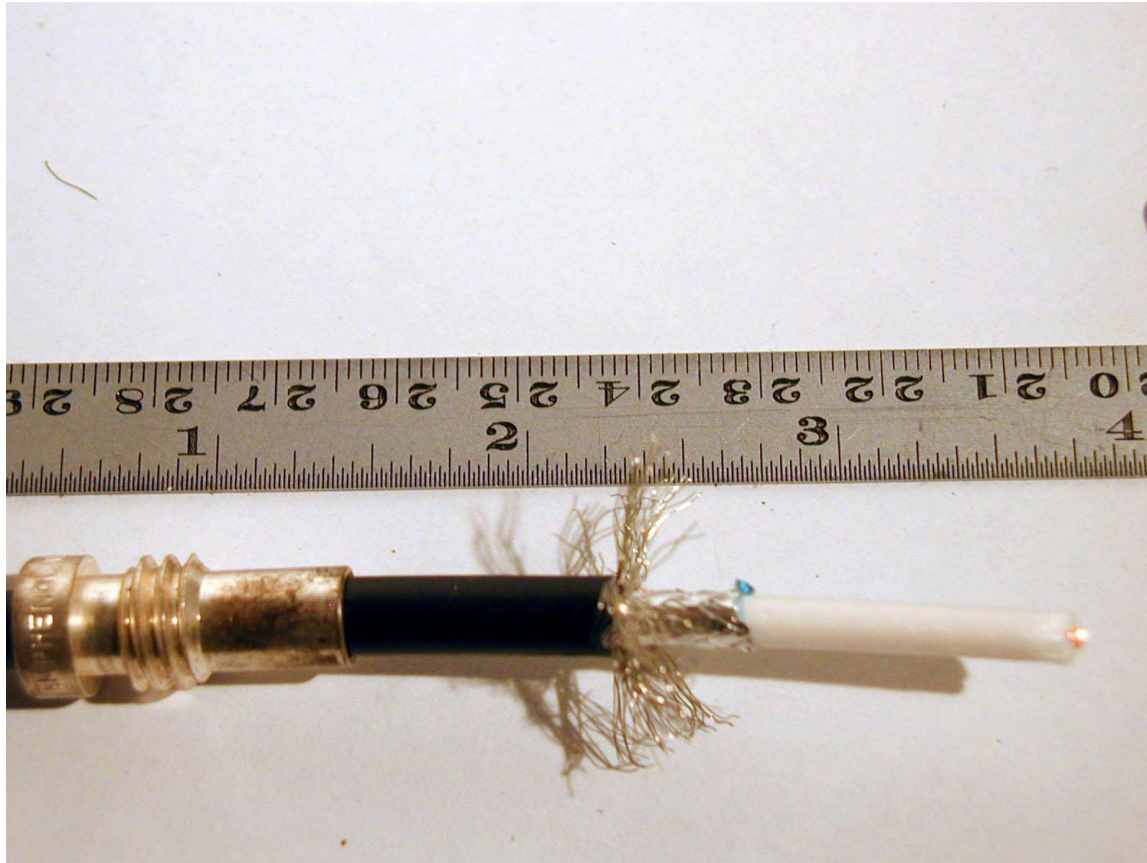
Cut Shields



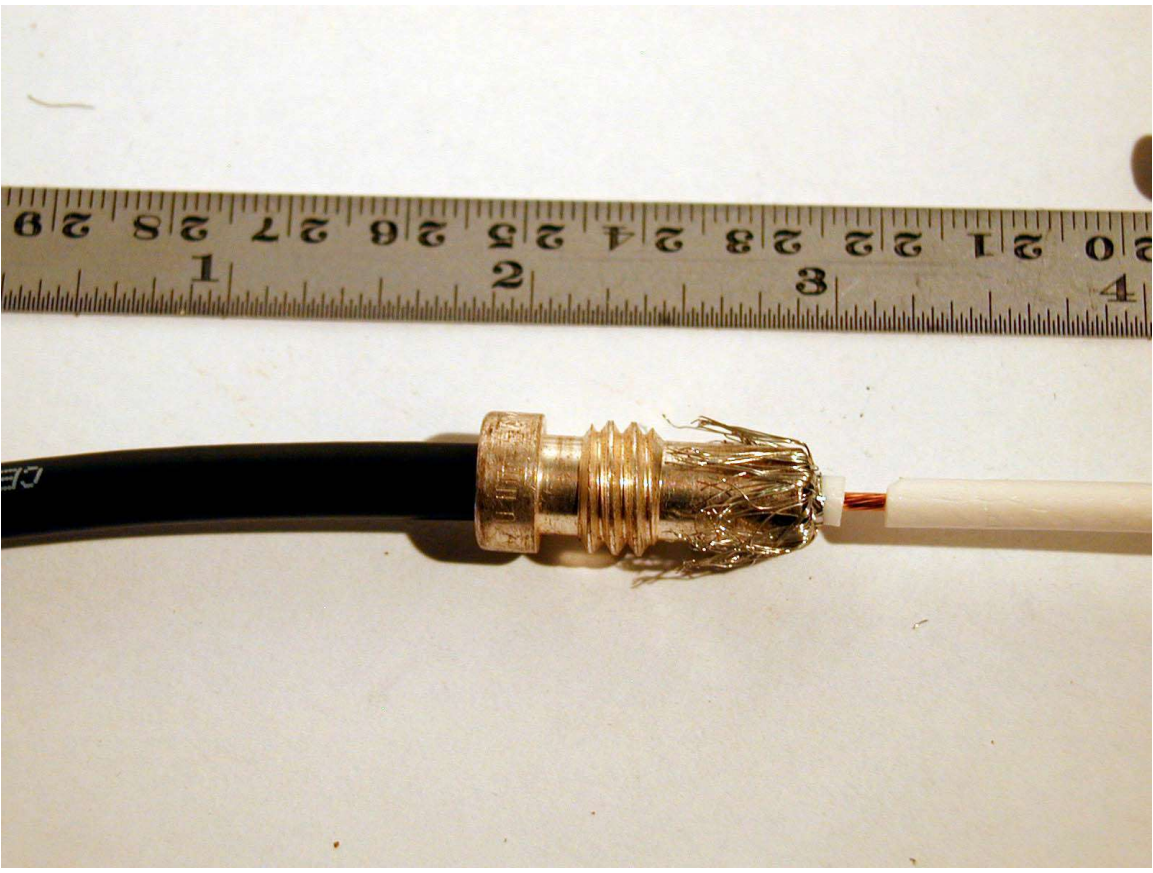
Cut More Jacket



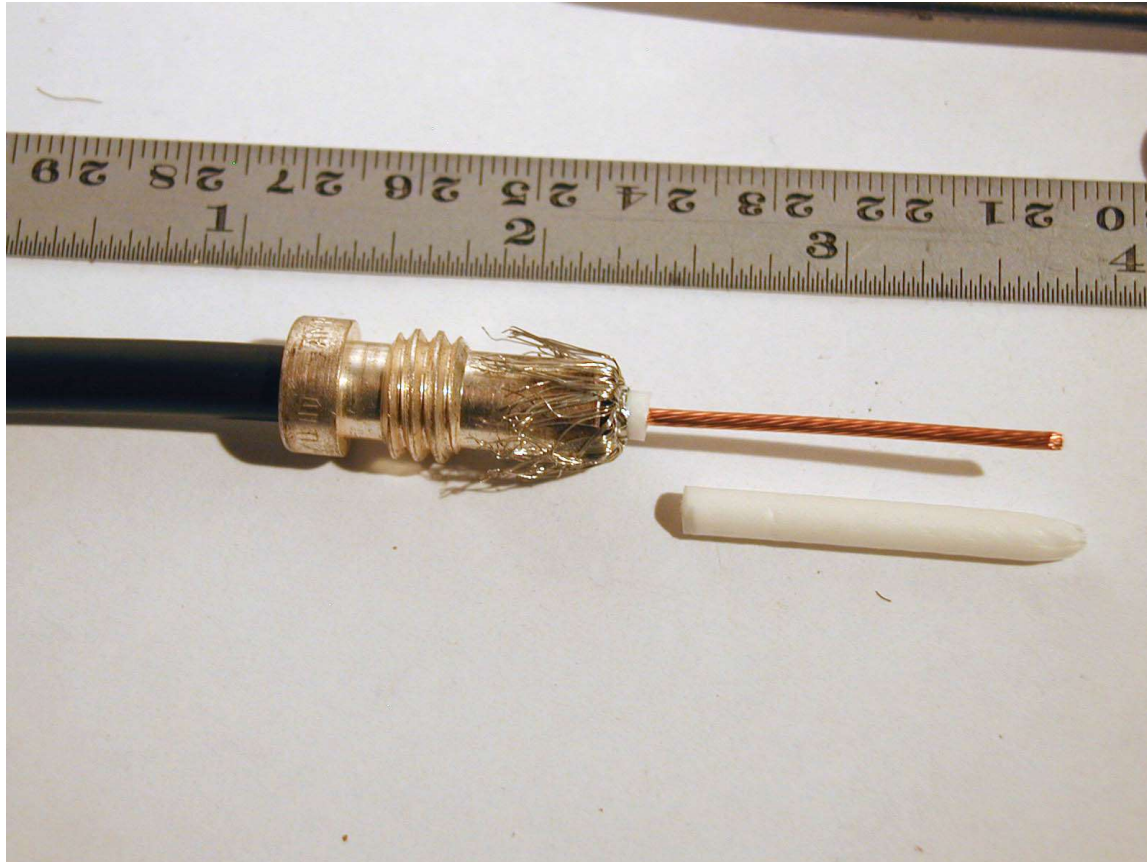
Fan Braid



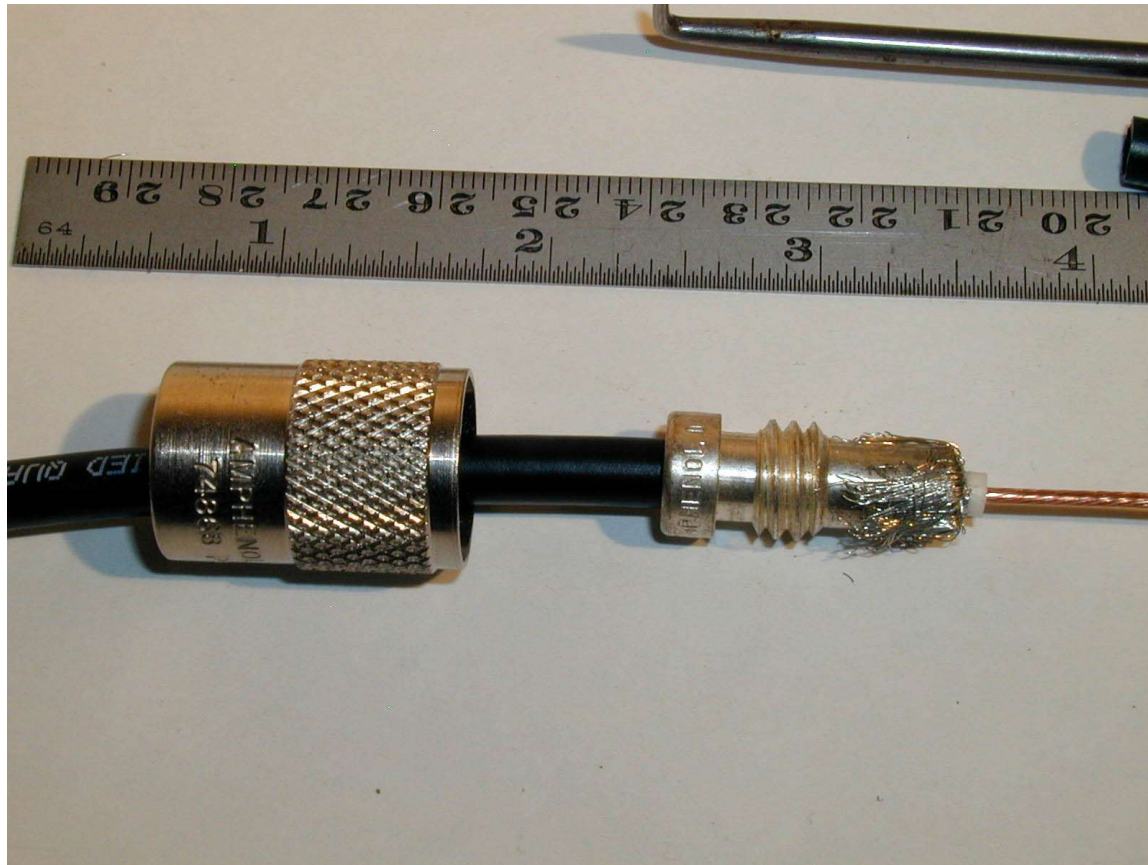
Fold Braid Cut Center Insulator



Remove Dielectric



Prepare Assembly



Shell Assembly

