

User's Manual

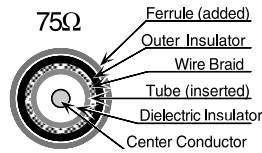


BNC Mini-High Res, 75 Ohm Termination Kit Connector Installation Guide (60-073-01)

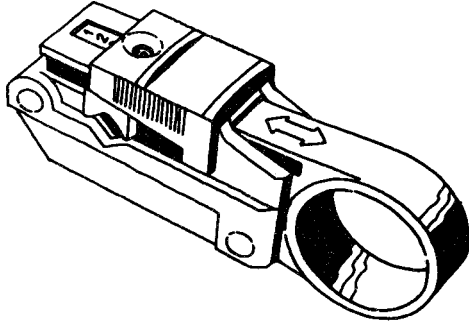
BNC Termination Kit Instructions



This document is a compilation of Extron's instructions, together with copies of AMP® Instruction booklets that are provided with each of the AMP tools included in this kit.



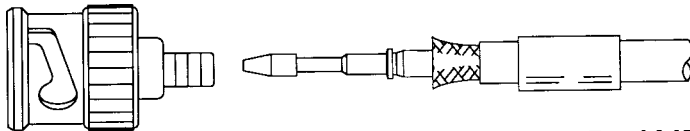
1 • Extron Mini-High-Res Cable-to-BNC Instructions



Parts included in Kit • Pre-cut Heat shrink insulation:

- Red 3/8" diameter
- Green 3/8" diameter
- Blue 3/8" diameter
- Yellow 3/8" diameter
- Black 3/8" diameter

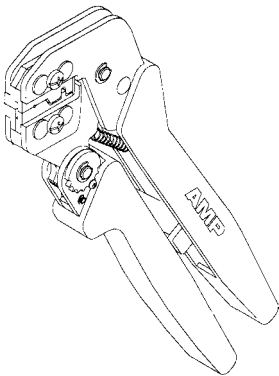
3 • AMP® Coaxial Cable Stripper Instructions (4100-0632)



5 • AMP® 75-Ohm BNC Plug Instructions (408-9088)

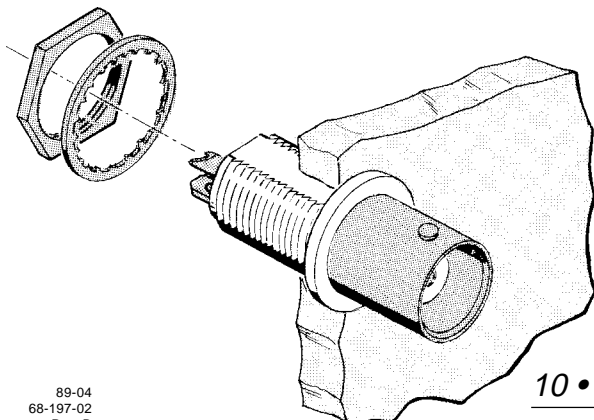
Parts included in Kit • BNC connectors for cable ends:

- Male plug bodies
- Center contacts
- Tube for insulation
- Step-down Ferrule



7 • AMP® Pro-Crimper II Hand Tool & Die Assembly Instructions (408-4218)

8 • AMP® Pro-Crimper II Hand Tool Application & Maintenance (408-9930)



10 • AMP® Series BNC Solder Receptacle Jacks (IS 2858)

Introduction

Use these instructions to install BNC connectors on Extron's 75 ohm Super High-Resolution coax cable. The kit includes the following required tools:

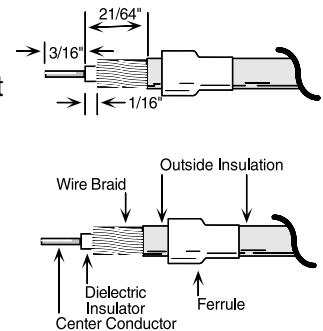
- AMP® Coaxial Cable Stripper
- AMP® Pro-Crimper (with dies to crimp both center contacts and the ferrules)
- Wire Cutters/Strippers

Before using each of the AMP tools, go to the appropriate section of this document for instructions.

Cable-Stripping Procedure

Use the AMP Coaxial Cable Stripper and the copy of the instruction sheet provided on pages 3 and 4 to make the three-step strip. One blade cuts the outer jacket, the next one cuts the jacket and wire braid and the third blade cuts the jacket, the wire braid and the insulation (dielectric). It may be necessary to try some sample cuts and adjust the tool to get the proper depth for each cut.

Use the illustration to the right to identify the cable parts and dimensions of each cut.



Installation Procedure

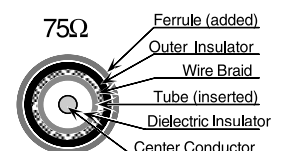
When the cable has been stripped and ready to install the BNC connector, use the illustration on the facing page and these steps as a guide for installing the connector. Additional instructions can be found on pages 5 and 6.

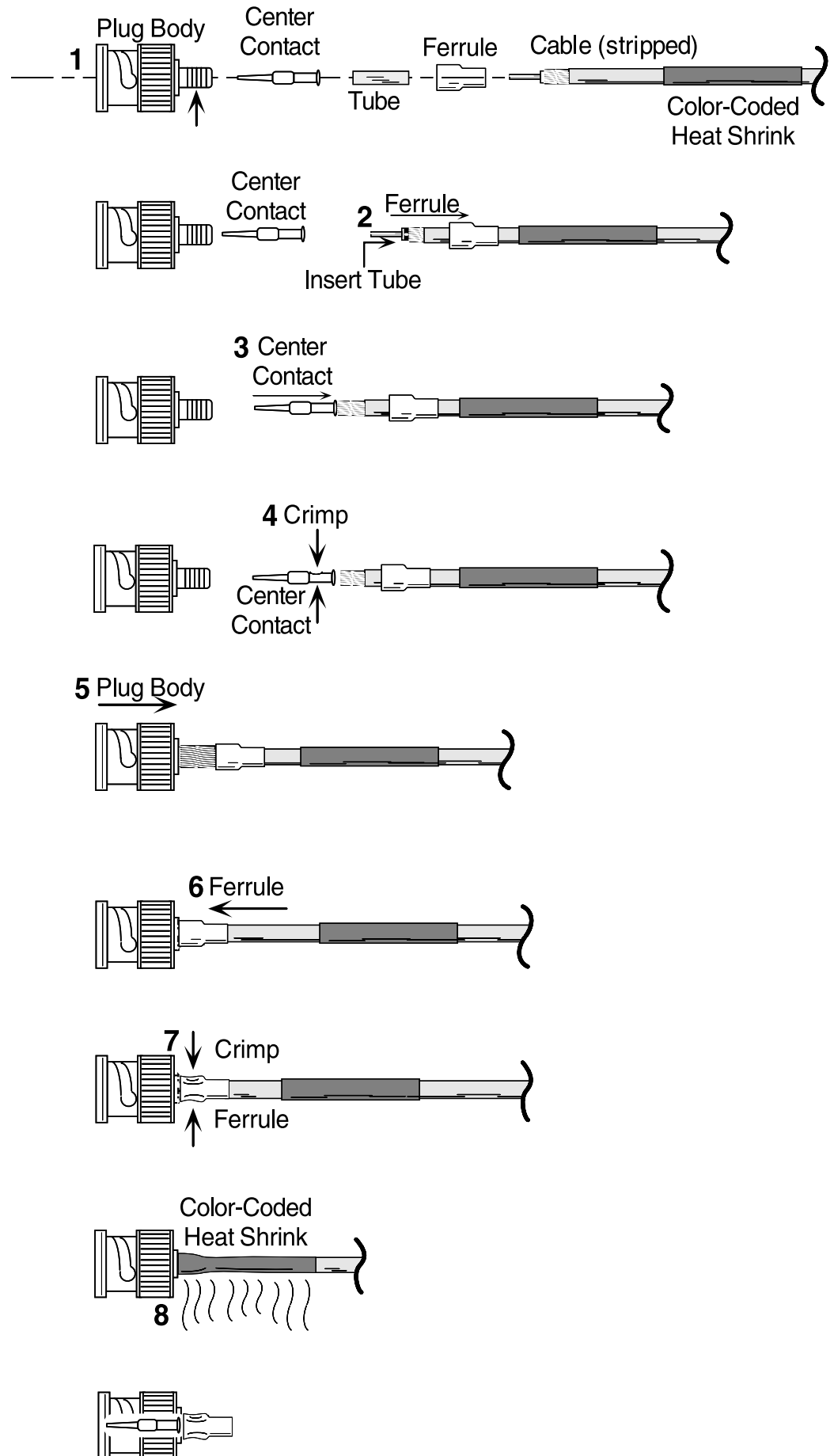
1. Identify the parts required. Cut 1.5 inches of the chosen colored heat shrink insulator and slip it over the cable far enough to be out of the way of other components.
2. Slide the small end of the ferrule over the cable, pushing it back from the end. (The large end will go toward the BNC connector.) Slide the plastic tube over the insulating dielectric, but under the wire braid. When finished, the wire braid will make contact with BNC body, but NOT with the center conductor. (The braid may appear to be bare wire strands.)
3. Push the center contact over the center conductor. When the center conductor slides all the way into the hole, it should no longer be exposed.
4. Use the AMP® Pro-Crimper tool to crimp the center contact onto the conductor. Check that the connection is secure. (Detailed instructions for using this tool are included on pages 5 and 6.)
5. Push the plug body over the center contact and over the dielectric insulator – with the plastic sleeve inside the wire braid.
6. Push the ferrule against the plug body. It should cover the exposed wire braid and part of the outside insulation.
7. Crimp the ferrule in place. Trim any exposed wire braid if necessary.
8. Slide the Color-Coded Heat Shrink sleeve toward the connector, covering the Ferrule. Use a heat source to shrink the sleeve tightly in place.

Repeat this procedure for each BNC cable connector.

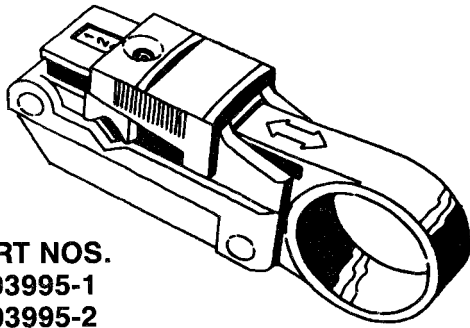
When fully inserted, the center contact should extend into the plug body, as shown at the bottom of the next page.

The illustration to the right shows the parts of the coaxial cable, with the Ferrule and Tube added.





AMP® COAXIAL CABLE STRIPPER



PART NOS.
 603995-1
 603995-2
 603995-3
 603995-5
 603995-6

**NEW INSTRUCTIONS
 PLEASE READ**

AMP INCORPORATED, HARRISBURG, PA.

404145-2

4100-0632

CABLE STRIPPER KIT NO.	CASSETTE PART NO. & COLOR	BRAID STRIP DIM. (B)	BRAID STRIP DIM		PRODUCT	CABLE DIA. RANGE
			(B)	(C)		
2 STEP	603995-1	603996-1 RED	.24" (6mm)	—	SINGLE CRIMP BNC	10"-.30"
	603995-2	603996-2 BLUE	.27" (6.8mm)	—	COMM BNC	
	603995-3	603996-3 YELLOW	.48" (12mm)	—	DHF	
3 STEP	603995-5	603996-4 BLACK	—	.22" (5.5mm)	DUAL CRIMP BNC	
	603995-6	603996-5 WHITE	—	.10" (2.5mm)	DUAL CRIMP COMM BNC	
	Mini coax					

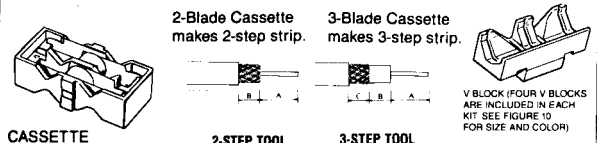


FIGURE 1

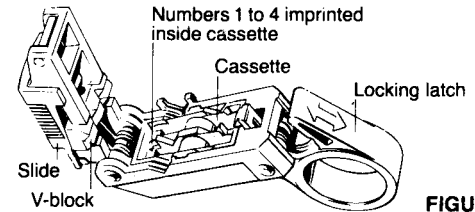


FIGURE 2

Figure 1 shows which stripper kit or cassette you should use with a given connector. Kits come in two styles: a 2-step kit for 2-step stripping, a 3-step kit for either 2-step or 3-step stripping (3-step kit will accommodate both 2-step and 3-step cassettes).

Cassettes have pre-set strip lengths. Refer to instruction material for connector in use to determine your strip requirements. Then refer to Figure 1 above to find which cassette meets your strip requirements.

Note the parts of the stripper in Figure 2.

Follow these steps when stripping with the AMP® COAXIAL CABLE STRIPPER:

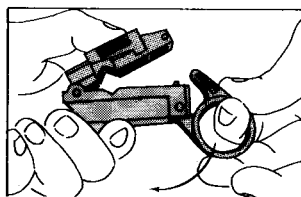


FIGURE 3

A. ADJUST SLIDE to position 4 or 5

B. OPEN TOOL by rotating locking latch downward. (Fig. 3)

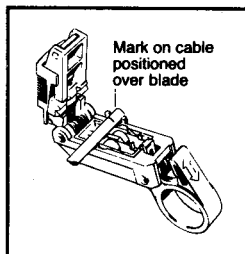


FIGURE 4

C. MARK JACKET of cable for center conductor length.

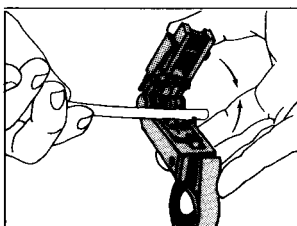


FIGURE 5

D. HOLD THE TOOL with the handle towards you and insert coax from left into the groove position. Locate mark on cable over the righthand blade, then close and latch tool. (Fig. 4 and 5)

E. PUSH SLIDE FORWARD to appropriate start position (see Fig. 6). Make sure proper V-Block is installed.

RECOMMENDED SETTINGS

Coax	V-Block	Slide Progression
RG 58	Blue	3, 2, 1
RG 59	Blue	5, 4, 3
RG 174,182	White	4, 3
RG 6	Yellow	5, 4, 3
Belden 8281	Yellow	5, 4
RG 195	Red	4, 3, 2

FIGURE 6

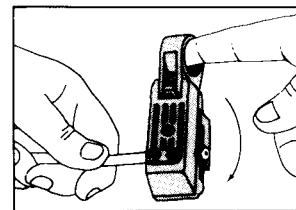


FIGURE 7

F. ROTATE TOOL around coax about 5 times (Fig. 7). Push slide forward to next position in sequence. Rotate tool again. Then push slide forward to final position and rotate tool final 5 times.

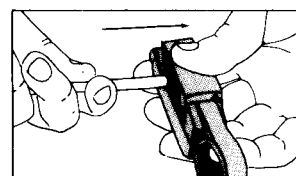


FIGURE 8

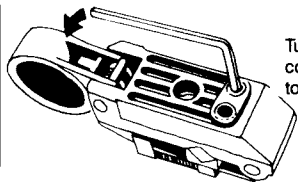
G. MOVE SLIDE BACK ONE POSITION. Then pull cable out carefully while squeezing tool (Fig. 8). If there is too much resistance or strip is imperfect, go to step "H".

ADJUSTING THE AMP® COAXIAL CABLE STRIPPER

H. INSPECT YOUR FIRST STRIP. Determine how deeply each blade has scored the cable.

I. ADJUST BLADE DEPTH to match your cable size by turning allen screws at base of tool (Fig. 9).

If setup is required, use RG174 side of the red gauge block.



Turn set screws counterclockwise to retract blades

Figure 9

TIPS:

If a blade is NEAR its proper position, turn its set screw app. ± 90°.

If a blade is a LITTLE FAR off from its proper position, turn its set screw ± 270° to 360°.

NOTE: Adjust tool so that the appropriate slide progression works (see Fig. 6). If your cable size does not appear in Fig. 6, develop your own 2- or 3- stage sliding sequence.

J. TRY STRIPPING AGAIN, following steps A through G. If strip is still not acceptable, adjust blades one more time, following instructions H and I.

SOLUTIONS TO TYPICAL PROBLEMS:

If braid is *twisting* too much, turn set screw for braid-cutting blade + 90° and turn set screw for jacket-cutting blade -90°.

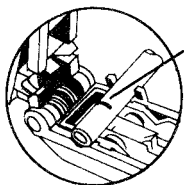
If, after repeated adjustment, most of braid will not cut properly, your blade set is probably worn out. Reverse cassette to try new blade set.

With RG 174 or other very thin cable, VERY FINE ADJUSTMENT is needed. Expect to make several adjustments (± 30°), to reach proper blade depth. Use a FRESH BLADE SET. Use only HIGH QUALITY thin cable.

3-STEP STRIP WITH 2-BLADED CASSETTE:

(This procedure is recommended only for those who own only the 2-step stripping tool. If you make 3-step strips often you should purchase the 3-step stripping tool.)

- A. Mark jacket of cable for center conductor length.
- B. Turn tool around or bring cable from opposite side of tool.



Mark on cable position over blade

- C. Lay cable in tool with mark on cable over blade, then close tool.
- D. Push slide to no. 1 position.
- E. Rotate tool around cable and remove dielectric and braid. Open and clear tool of insulation.

Stripping result after Pos. E.

- F. Mark on cable determines length of exposed dielectric

- G. Push slide to no. 3 position.
- H. Lay cable in tool as shown under B, then close tool.
- I. Rotate tool around cable approx. 5 times.
- J. Squeeze tool as cable is pulled from tool.

Stripping result after Pos. J.



Step 2 removes jacket and braid

- K. Open and clear tool of insulation.

OTHER FEATURES:

V-BLOCKS

Select proper V-block by O.D. of wire (see Fig. 10).

V-BLOCK PART NO.	CABLE		COLOR
	DIA. RANGE	RG #	
603997-1	.12"-.20"	195	Red
603997-2	.20"-.25"	58,59	Blue
603997-3	.25"-.30"	Belden 8281	Yellow
603997-4	.10"-.12"	174,182	White

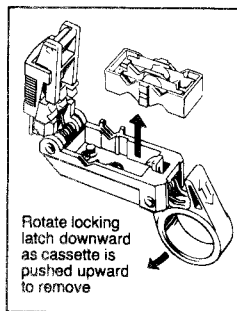
FIGURE 10

TO CHANGE V-BLOCK, pull block as far forward as possible with thumb and forefinger. Do not let spring snap back. Slip replacement block behind old block and allow springs to slip into grooves in replacement block. (With WHITE V-BLOCK, you must position springs in holes).

CASSETTES

Each cassette contains 4 sets of cutting edges. Cassette can be reversed each time a blade set wears out. Numbers 1 to 4 are printed inside cassette to determine usage. (see Fig. 2)

TO CHANGE OR REVERSE CASSETTE, move locking latch in direction of arrow, then push cassette out of tool by inserting wrench through hole in bottom of tool (Fig. 11).



Rotate locking latch downward as cassette is pushed upward to remove

FIGURE 11

NOTE: When placing a 3-blade cassette in tool, use blade sets 1 and 2 first (see imprinted numbers on cassette). When using blade sets 3 and 4 in a 3-blade cassette, the "B" and "C" dimensions of the strip (Fig. 1) will be reversed from their proper order.

The "SLIDE" is the most unique and important part of the stripper. The slide allows you to ease the blades into the cable, reducing friction on the braid and dielectric as you strip.

ALWAYS USE YOUR SLIDE WHEN YOU STRIP!

RECOMMENDED SLIDE PROGRESSIONS

Coax	V-Block	Slide Progression
RG 58	Blue	3, 2, 1
RG 59	Blue	5, 4, 3
<i>Mini Hi-Res</i> RG 174, 182	White	4, 3
RG 6	Yellow	5, 4, 3
Belden 8281	Yellow	5, 4
RG 195	Red	4, 3, 2

Adjust your tool so that the appropriate slide progression works. If your cable size does not appear in this table, develop your own 2- or 3-stage sliding sequence.

ALWAYS STEP BACK 1 POSITION ON SLIDE BEFORE PULLING CABLE OUT OF TOOL.

3-step tool is not recommended for most styles of RG 62, nor for many cable styles with cellular polyethylene or other soft dielectrics. Use 2-step tool instead.

DO NOT USE STRIPPER ON COAX CABLES WITH DRAIN WIRES.

WARNING
Use Safety Glasses
To Avoid Eye Injury

AMP**AMP* 75-Ohm BNC Plug
Dual Crimp Connectors**

Instruction Sheet

408-9088

(was IS 9088)

07 SEP 95 Rev B

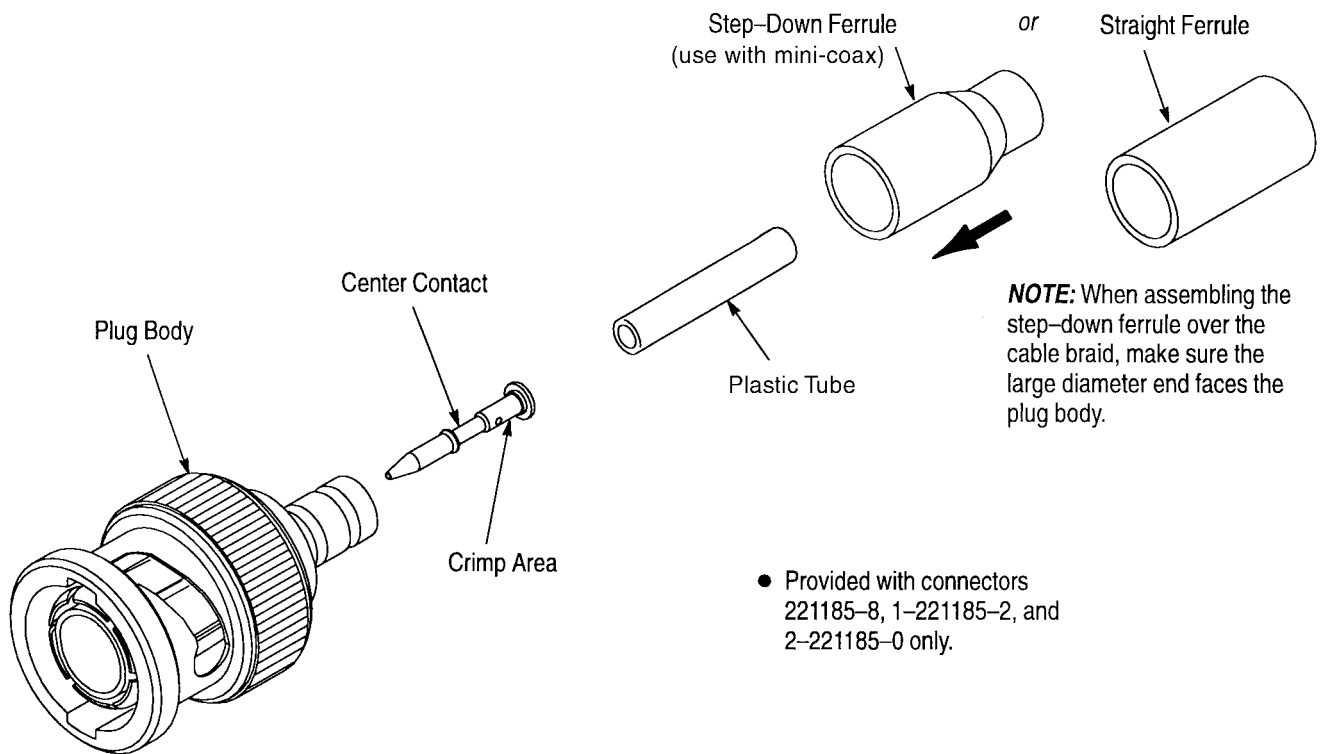


Figure 1

1. INTRODUCTION

This instruction sheet covers the assembly of AMP 75-Ohm BNC Plug Dual Crimp Connectors 221185-[]. The connectors are applied either with AMP Hand Tool 354940-1 or with AMP Pneumatic Tool 69365-3. Both tools accept interchangeable crimping dies, using different die sizes (and part numbers) according to the cable type being used with the connector. For information on die set part numbers, cable sizes, and connector part numbers, refer to AMP Catalog 82074.

NOTE

All dimensions on this sheet are in millimeters [with inch equivalents provided in brackets]. Figures and illustrations are for identification only and are not drawn to scale.

Reasons for reissue are provided in Section 4, REVISION SUMMARY.

2. DESCRIPTION (Figure 1)

Each connector features a center contact, a plug body, and a ferrule. The center contact is crimped to the cable's center conductor, and the ferrule is crimped onto the back of the connector, over the cable braid, to secure the cable to the plug body.

NOTE

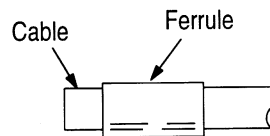
The ferrules differ with connector selection. Some connectors come with straight ferrules, while others use step-down ferrules.

Some connectors are supplied with a plastic bushing and a brass tube. The plastic bushing and brass tube are slipped over the cable dielectric before the center contact is crimped. In this use, the bushing and tube compensate for small diameter cable dielectrics.

3. ASSEMBLY PROCEDURE

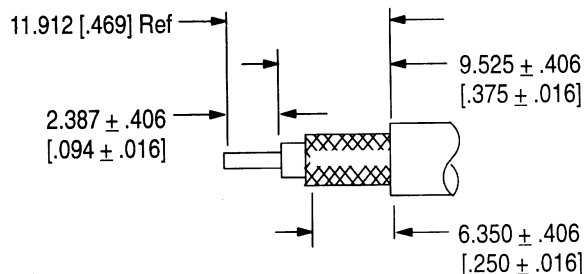
1. Determine the cable type for your application, then select an appropriate connector. Refer to AMP Catalog 82074.

2. Slide the ferrule over the cable end.



3. Strip the cable according to these dimensions:

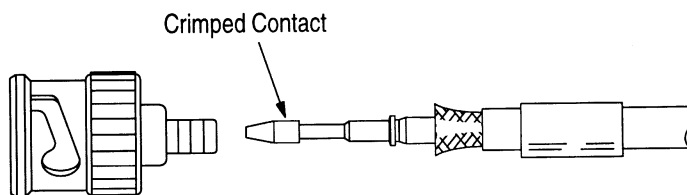
NOTE: Do not scale from illustration.



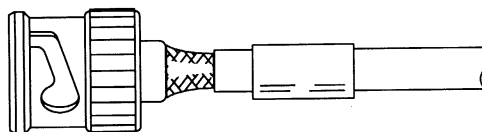
4. Crimp the center contact.

NOTE

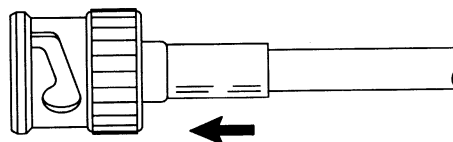
Plugs 221185-8, 1-221185-2, and 2-221185-0 come with a plastic bushing and a brass tube. The bushing and tube must be slipped over the cable dielectric (flared end first) BEFORE the center contact is crimped.



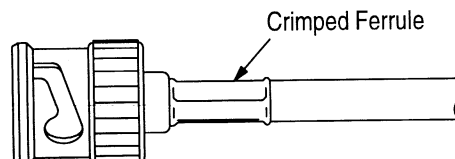
5. Insert the center contact into the plug body with the braid over the support sleeve of the plug body.



6. Slide the ferrule over the braid and support sleeve.



7. Crimp the ferrule using the appropriate tooling.



4. REVISION SUMMARY

Since the previous release of this sheet, the following changes were made:

Per EC 0220-0150-95:

- Added plastic bushing, brass tube, and step-down ferrule to Figure 1.

Per EC 0990-0734-95:

- AMP Hand Tool 220190-1 superseded by 354940-1 in Section 1, INTRODUCTION.
- Added statements clarifying plastic bushing, brass tube, and step-down ferrule to Section 2, DESCRIPTION.
- Deleted Plug 1-22184-4 in note on page 2 because it is an incorrect part number.
- Updated format.
- Changed revision level from A to B.

PROPER USE GUIDELINES

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. AMP hand tools are intended for occasional use and low volume applications. AMP offers a wide selection of powered application equipment for extended-use, production operations.

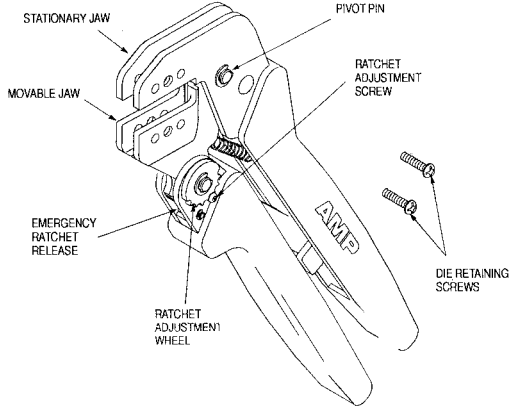


Figure 1

1. INTRODUCTION

This instruction sheet provides application and maintenance procedures for AMP PRO-CRIMPER II Hand Crimping Tool Frame Assembly 354940-1. The tool is designed to accept interchangeable crimping die assemblies for crimping various types of AMP connectors.

In most cases, the PRO-CRIMPER II tool frame assembly is provided with a specific set of dies and is considered a component part of a crimping assembly. Refer to the appropriate instruction sheet packaged with the hand tool/crimping die assembly, or with the separate die assembly, for information regarding crimping procedures, crimp height inspection, and crimping die gaging.

Read these instructions thoroughly before installing dies and using the tool.

AMP Incorporated, Harrisburg, PA 17105 TECHNICAL ASSISTANCE CENTER 1-800-722-1111 AMP FAX/PRODUCT INFO 1-800-522-6752 1 of 4
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*Trademark

NOTE The PRO-CRIMPER II Frame Assembly is designed to accept dies to crimp a variety of AMP products. Contact your local AMP representative or the Technical Assistance Center for information regarding the availability of dies for specific applications.

2. DESCRIPTION (Figure 1)

The PRO-CRIMPER II tool consists of two crimping jaws, an adjustable ratchet, spring-actuated handles, two die retaining screws, and an emergency ratchet release. The slotted design of the crimping jaws permits easy installation and removal of crimping dies. The adjustable ratchet allows handle pressure to be set for optimum crimping die performance.

3. DIE INSTALLATION AND REMOVAL

Select the desired die assembly, remove the die retention screws from the tool jaws, and proceed as follows:

2. Make certain that the pivot pins are in place and that they are secured with retaining rings.
3. All pins, pivot points, and bearing surfaces should be protected with a thin coat of any good SAE No. 20 motor oil. Do not oil excessively.
4. When the tool is not in use, keep handles closed to prevent objects from becoming lodged in the crimping jaws. Store the tool in a clean, dry area.

4.2. Periodic Inspection

Regular inspections of the tool should be performed by quality control personnel. A record of scheduled inspections should remain with the tool or be supplied to supervisory personnel responsible for the tool. Inspection frequency should be based upon amount of use, working conditions, operator training and skill, and established company standards.

1. Remove all lubrication and accumulated film by immersing the tool (handles partially closed) in a suitable commercial degreaser that will not affect paint or plastic material.
2. Make certain that all pivot pins are in place and secured with retaining rings.
3. Close tool handles until ratchet releases and then allow them to open freely. If they do not open quickly and fully, the spring is defective and must be replaced. See Paragraph 6, PARTS REPLACEMENT.
4. Inspect the tool frame for wear or damage, paying particular attention to the tool jaws and pivot points. If damage is evident, refer to Paragraph 6, PARTS REPLACEMENT. If tool is acceptable, lubricate and return to service.

NOTE This tool is recommended for R&D prototyping, networking applications, commercial/industrial maintenance, and field service repair. For other applications, please contact your AMP Sales Representative or the AMP Customer Tooling Assistance Center at 1-800-722-1111.

5. CRIMP HEIGHT ADJUSTMENT

The tool frame assembly features a ratchet mechanism and adjustment wheel with a range of settings. The ratchet mechanism ensures that the tool has completed the cycle. The adjustment wheel controls the amount of handle pressure exerted on the tool jaws and crimping dies during the crimping procedure. Although the ratchet is preset prior to shipment, it is important that you verify the crimp

height. Also, general use and subsequent wear may cause the tool to go out of adjustment. It is recommended that the crimp height be inspected — and adjusted, if necessary — on a regular basis by quality control personnel.

NOTE This is a general explanation of the procedure. For specific information, refer to the instruction sheet packaged with the die assembly.

1. Crimp a contact onto a properly-prepared wire of the correct size.
2. If the crimp height is greater than recommended, remove the ratchet wheel adjustment screw and rotate the adjustment wheel COUNTERCLOCKWISE to a higher setting. Repeat as required.
3. If the crimp height is less than recommended, remove the ratchet wheel adjustment screw and rotate the adjustment wheel CLOCKWISE to a lower setting. Repeat as required.
4. If the crimp cannot be made to conform to the dimensions provided in the appropriate product application specification, the tool and/or dies are defective and must be replaced.

6. PARTS REPLACEMENT

AMP PRO-CRIMPER II Hand Crimping Tool Frame Assembly 354940-1 is inspected prior to shipment. It is recommended that it be inspected upon arrival to ensure that it has not become damaged during shipping.

Refer to the parts list in Figure 4 to determine the part number for the item to be replaced and to identify the proper location and orientation of the part in the tool frame.

Additional tools and parts may be ordered from:

CUSTOMER SERVICE (38-35)
AMP INCORPORATED
P.O. BOX 3608
HARRISBURG, PA 17105-3608

7. REVISION SUMMARY

- Per EC 0150-3294-94:
- Changed illustrations to reflect 8-position ratchet assembly.
- Per EC 0990-0252-93:
- Incremented revision indicator to Rev A.

3.1. Shouldered Dies (Figure 2)

1. Place the upper die in the stationary jaw of the tool frame.

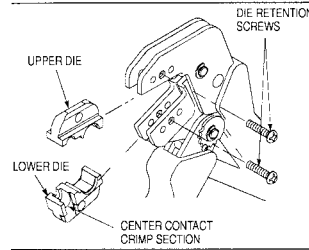


Figure 2

2. Insert a die retention screw through the jaw and die and tighten the screw so that the die is held in place, but do not tighten the screw completely at this point.

NOTE Die assemblies with center contact crimp sections should be installed with the center contact crimp section toward the front of the tool jaws as shown in Figure 2. If indicated otherwise in other instructions, follow the specific die requirements demonstrated in that document.

3. Place the lower die in the moving jaw of the tool frame. Install a die retention screw through the jaw and die and tighten the screw so that the die is held in place, but do not tighten the screw completely at this point.

NOTE The PRO-CRIMPER II tool ratchet has detents that are audible as seven "clicks" as the handles are closed. The ratchet releases on the seventh "click."

4. Slowly close the tool handles, allowing the dies to mate and/or align. Continue closing the tool handles until the ratchet makes the sixth "click," then tighten both die retention screws until snug.
5. To remove the die assembly, close the tool handles until the ratchet releases, and allow the handles to open fully. Loosen and remove the die retention screws and slide the dies out of the tool jaws.

3.2. Pinned Dies (Figure 3)

1. Install the wire and insulation anvil dies, with the chamfers facing the front of the tool, and with the

die markings facing outward, into the movable jaw of the frame assembly.

2. Insert the die retaining pins and the short die retention screw. Do not tighten the screw completely.
3. Install the wire and insulation crimper dies, with the chamfers facing the front of the tool, and with the die markings facing outward, into the stationary jaw of the frame assembly.
4. Insert the die retaining pins the long die retention screw. Do not tighten the screw completely.

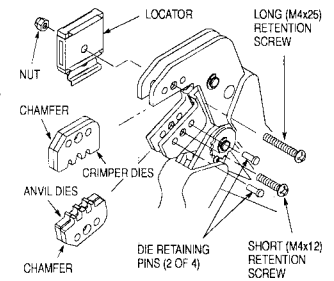


Figure 3

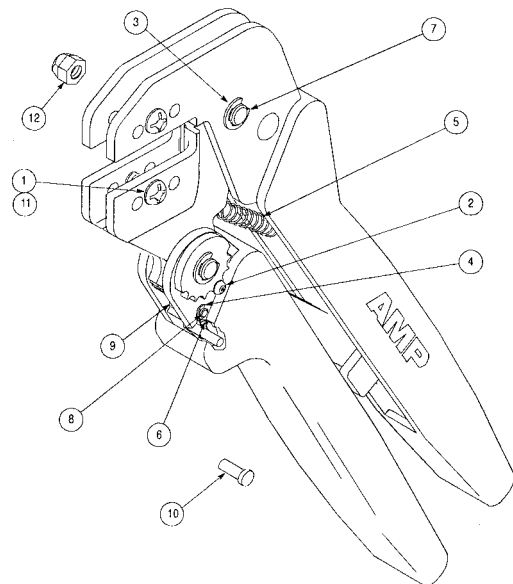
5. Slowly close the tool handles, allowing the dies to mate and/or align. Continue closing the tool handles until the ratchet makes the sixth "click," then tighten both die retention screws until snug.
6. Install the locator assembly and tighten the hex nut.
7. Reverse the procedure to remove the die assembly.

4. MAINTENANCE/INSPECTION

4.1. Daily Maintenance

AMP recommends that operators of the tool be made aware of, and responsible for, the following steps of daily maintenance:

1. Remove dust, moisture, and any other contaminants from the tool with a clean, soft brush, or a clean, soft, lint-free cloth. Do NOT use hard or abrasive objects that could damage the tool.



AMP PRO-CRIMPER REPAIR KIT 679221-1

ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY
1	SCREW, Die Retaining, M4 x 12	2	7	PIN, Pivot	3
2	SCREW, M3 x 5	1	8	PIN, Pawl	1
3	RING, Retaining	7	9	PAWL, Ratchet	1
4	RING, Retaining	2	10	PIN, Die Retaining	4
5	SPRING, Extension	1	11	SCREW, Die Retaining, M4 x 25	1
6	SPRING, Extension	1	12	NUT, M4	1

• Parts are not available individually

Figure 4



PROPER USE GUIDELINES

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. AMP hand tools are intended for occasional use and low volume applications. AMP offers a wide selection of powered application equipment for extended-use, production operations.

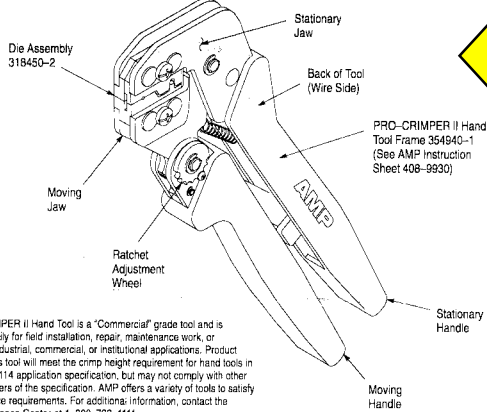


Figure 1

1. INTRODUCTION

AMP® PRO-CRIMPER II Hand Tool Assembly 318450-1 consists of Die Assembly 318450-2 and PRO-CRIMPER II Hand Tool Frame 354940-1. The hand tool assembly is used to crimp COAXICON® 50-Ohm RF Series BNC and TNC Commercial Connectors 227079-1, 414168-1, 414171-3, and 414173-1 onto various sizes of RG/U cable.

For connector assembly and cable stripping procedures, refer to the instructions packaged with the connector. For additional information on the hand tool frame, refer to 408-9930. Read these instructions thoroughly before using the hand tool assembly.

NOTE Dimensions on this sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

AMP Incorporated, Harrisburg, PA 17105 TECHNICAL ASSISTANCE CENTER 1-800-722-1111 AMP FAX/PRODUCT INFO 1-800-522-6752 1 of 5 This AMP controlled document is subject to change. For latest revision call the AMP FAX number. © Copyright 1995 by AMP Incorporated. All Rights Reserved. LOC B



Center Contact Crimp

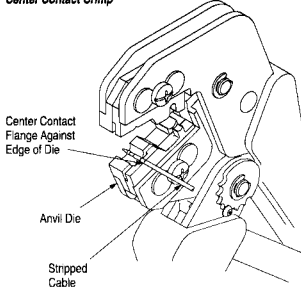


Figure 3

- Slide the ferrule forward over the braid until the ferrule is against the connector body.
- Place the ferrule in the ferrule crimping chamber on the anvil die so that the shoulder of the connector body is against the edge of the die.
- Holding the assembly in place, close the tool handles until the ratchet releases.
- Allow the handles to open fully, and remove the crimped assembly from the die assembly.

Ferrule Crimp

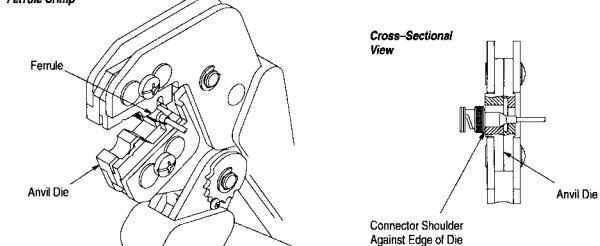


Figure 4

5. INSPECTION

5.1. Visual Inspection

The crimping dies should be inspected on a regular basis to ensure that they have not become worn or damaged. Inspect the crimping chambers for flattened, chipped, worn, or broken areas. If damage or abnormal wear is evident, the tool must be replaced. See Section 8, DIE REPLACEMENT.

5.2. Gaging the Crimping Chamber

This inspection requires the use of a plug gage conforming to the diameters in Figure 5. AMP does not manufacture or market these gages. To gage the crimping chamber, proceed as follows:

- Close the jaws until the dies have bottomed, then HOLD the frame handles in this position. Do NOT force the dies beyond initial contact.
- Align the GO element with the crimping chamber. Push the element straight into the crimping chamber without using force. The GO element must pass completely through the crimping chamber.
- Align the NO-GO element and try to insert it straight into the same crimping chamber. The NO-GO element may start entry, but must not pass completely through.
- Repeat Steps 2 and 3 for each crimping chamber listed in Figure 5.

NOTE Insert the gage element for the insulation ferrule section into the back of the crimping chamber. The GO element for this section will not pass completely through the crimping chamber.

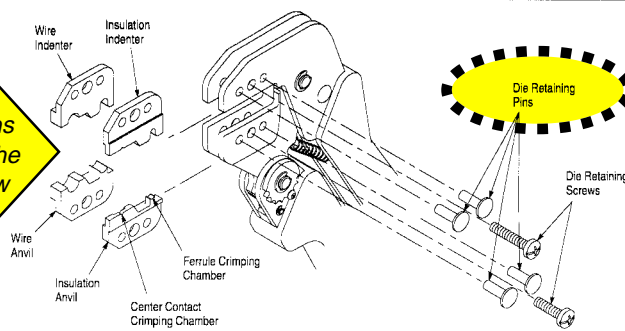
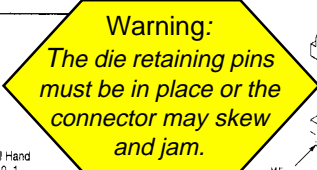


Figure 2

- Place the wire anvil and insulation anvil so that their chamfered sides and their marked surfaces face outward, when mounted in the moving jaw of the tool frame.
- Insert the two die retaining pins.
- Insert the short die retaining screw through the jaw and through both anvil dies, and tighten the screw just enough to hold the dies in place. Do not tighten the screw completely at this time.
- Place the wire indenter and insulation indenter so that their chamfered sides and their marked surfaces face outward, when mounted in the stationary jaw of the tool frame.
- Insert the two die retaining pins.
- Insert the long die retaining screw through the jaw and through both indenter dies, and tighten the screw just enough to hold the dies in place. Do not tighten the screw completely at this time.
- Carefully close the tool handles, making sure that the anvils and indenters align properly. Continue closing the tool handles until the ratchet in the tool frame has engaged sufficiently to hold the anvils and indenters in place, then tighten both die retaining screws.
- To disassemble, close the tool handles until the ratchet releases, remove the two die retaining screws and the four die retaining pins, and slide the anvils and indenters out of the tool jaws.

4. CRIMPING PROCEDURE

NOTE This tool is provided with a crimp adjustment feature. Initially, the crimp height should be verified as specified in Figure 5. Refer to Section 5, INSPECTION, and Section 6, CRIMP HEIGHT ADJUSTMENT, to verify crimp height before using the tool to crimp desired connectors and wire sizes.

Slide the ferrule onto the cable and strip the cable according to the dimensions provided in the instructions packaged with the connector. Take care not to nick or cut wire strands. Proceed as follows:

4.1. Center Contact (Figure 3)

- Slide center contact onto stripped conductor. Insert center contact assembly into the partially closed center contact crimping chamber on the anvil die. Make sure the center contact flange is against the edge of the die as shown in Figure 3.
- While holding the cable in place, crimp the center contact by closing the tool handles until the ratchet releases.
- Allow the handles to open fully, and remove the crimped center contact from the die assembly.

4.2. Ferrule (Figure 4)

- Flare the cable braid and insert the crimped center contact into the connector body until the cable dielectric is against the dielectric inside the connector body. The flared braid will then fit over the support sleeve of the connector body.



Suggested Plug Gage for Center Contact Crimping Chamber

GAGE ELEMENT DIAMETERS	
GO	NO-GO
1.029-1.036 [0405-0408]	1.181-1.189 [0465-0468]

Suggested Plug Gage for Ferrule Crimping Chamber

CRIMP SECTION	GAGE ELEMENT DIAMETERS		RADIUS (Max) "R"	WIDTH (Max) "W"
	GO	NO-GO		
Ferrule	4.191-4.199 [1650-1653]	4.442-4.445 [1749-1750]	2.03 [080]	4.06 [160]
Insulation Ferrule	2.413-2.421 [0950-0953]	2.868-2.870 [1129-1130]	1.14 [045]	2.29 [090]

Figure 5

If the crimping chambers conform to the gage inspection, the dies are considered dimensionally correct, and should be lubricated with a THIN coat of any good SAE 20 motor oil. If not, the dies must be replaced before returning the hand tool and die assembly to service (see Section 8, DIE REPLACEMENT).

For additional information regarding the use of a plug gage, refer to 408-7424.

6. CRIMP HEIGHT ADJUSTMENT (Figure 6)

The frame assembly ratchet mechanism features an adjustment wheel with numbered settings. If the crimp height is not acceptable, adjust the ratchet as follows:

- Remove the lock screw from the ratchet adjustment wheel.
- With a screwdriver, adjust the ratchet wheel from the opposite side of the frame.

- Observe the ratchet adjustment wheel. If a tighter crimp is required, rotate the adjustment wheel COUNTERCLOCKWISE to a higher-numbered setting. If a looser crimp is required, rotate the adjustment wheel CLOCKWISE to a lower-numbered setting.
- Replace the lock screw.
- Make a sample crimp and measure the crimp height. If the crimp height is acceptable, secure the lock screw. If the dimension is unacceptable, remove lock screw and continue to adjust the ratchet, and again measure a sample crimp.

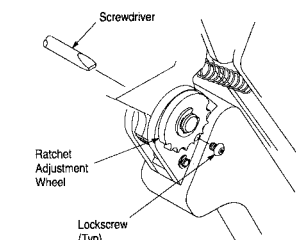


Figure 6

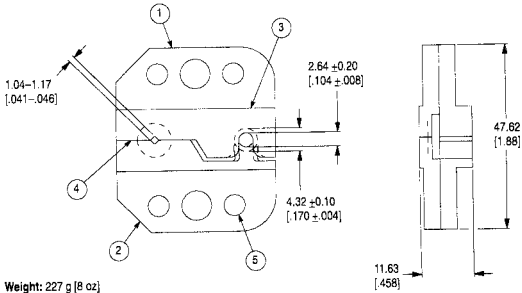
7. MAINTENANCE

Ensure that the tool and dies are clean by wiping them with a clean, soft cloth. Remove any debris with a clean, soft brush. Do not use objects that could damage the tool. When not in use, keep handles closed to prevent objects from becoming lodged in the crimping dies, and store in a clean, dry area.

8. DIE REPLACEMENT

Customer-replaceable parts are shown in Figure 7. Spare parts or the die assembly should be stocked and controlled to prevent lost time when die replacement is necessary. Order replaceable parts through your AMP representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 1-717-986-7605, or write to:

CUSTOMER SERVICE (38-35)
AMP INCORPORATED
PO BOX 3608
HARRISBURG PA 17105-3608



Weight: 227 g [8 oz]

CUSTOMER-REPLACEABLE PARTS

ITEM	PART NUMBER	DESCRIPTION	QTY PER ASSEMBLY
1	318432-1	INDENTER, Wire	1
2	318430-1	ANVIL, Wire	1
3	318431-1	INDENTER, Insulation	1
4	318429-1	ANVIL, Insulation	1
5	675231-1	PIN, Die Retaining	4

Figure 7



SERIES BNC SOLDER RECEPTACLE JACKS

IS 2858

RELEASED	5-21-
REVISED	6-5-

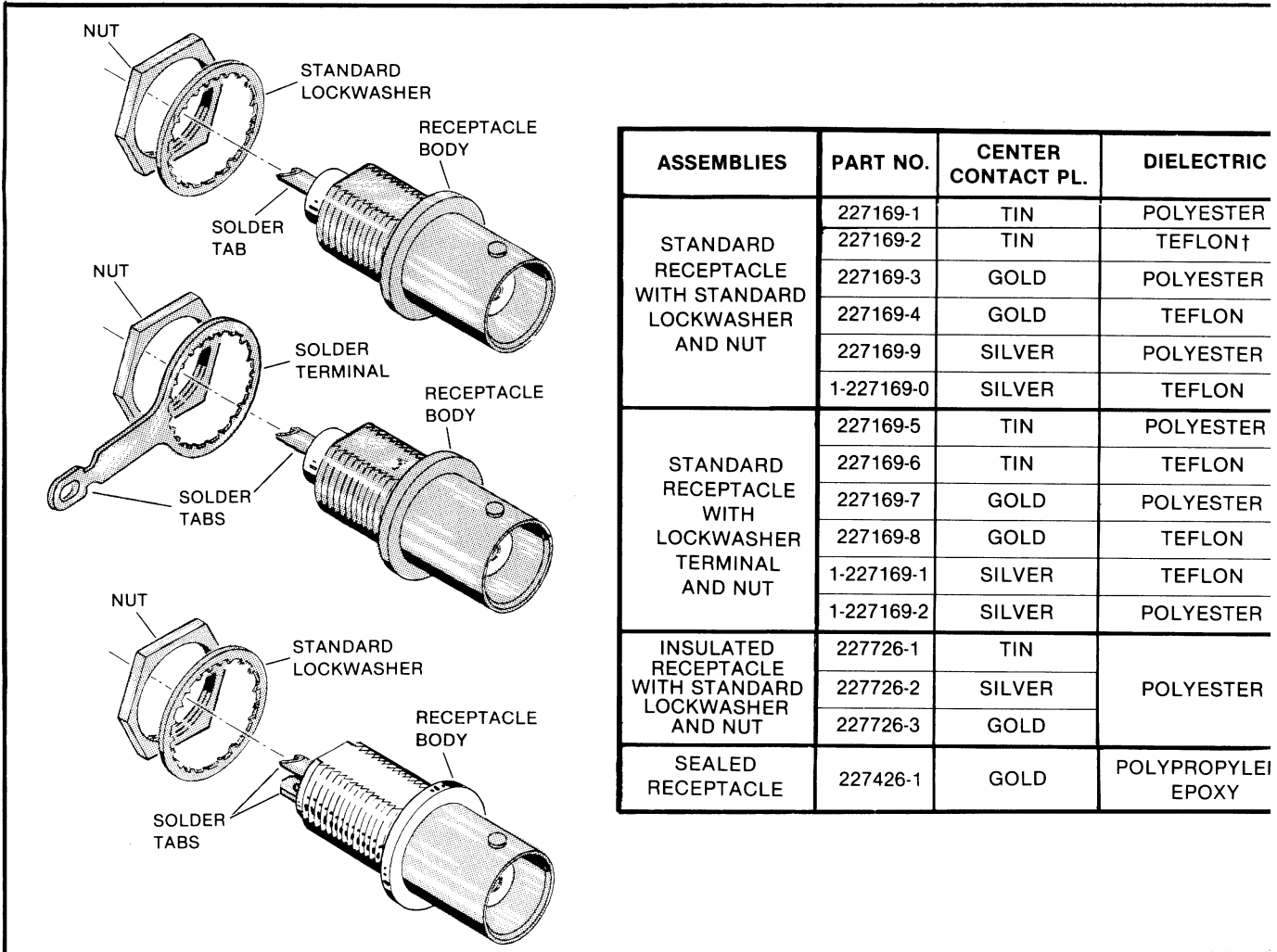


Figure 1

AMP★ Standard and Insulated Series BNC solder receptacle jacks are used in panel mount applications. They are available with the combinations of dielectric material and center contact platings shown in Figure 1.

The assemblies containing a solder tab on the lockwasher are used with coaxial cables. For installations requiring ground isolation, the use of the Insulated Receptacle is recommended. Ground isolation can also be obtained with the Standard Receptacles by use of the insulating bushings, shown in Figure 3.

Sealed BNC solder receptacle jacks are installed as described in paragraph 2 and Figure 4.

1. SOLDER RECEPTACLE JACKS LISTED IN FIGURE 1.

1.1 INSTALLATION PROCEDURE

- (a) First determine mounting requirements; panel cut out dimensions are shown in Figure 2.

- (b) Insert threaded portion of jack through cut-out.
- (c) Slip on lockwasher; thread on and tighten nut.
- (d) Solder wire to tab as required.
- (e) Terminate tab:
 1. On solder terminal (lockwasher) where this style assembly is used.
 2. On insulated receptacle when this style assembly is used.

1.2 INSTALLATION PROCEDURE USING PANEL INSULATING BUSHINGS

- (a) For installation requiring insulating bushings, panel cut-out shown in Figure 3.
- (b) Assemble one bushing on each side of panel.
- (c) Insert threaded portion of jack through bushings.
- (d) Slip on solder terminal (lockwasher); thread on and tighten nut.
- (e) Solder wire to tab.
- (f) Terminate tab on solder terminal as required.

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† TRADEMARK OF E. I. DUPONT

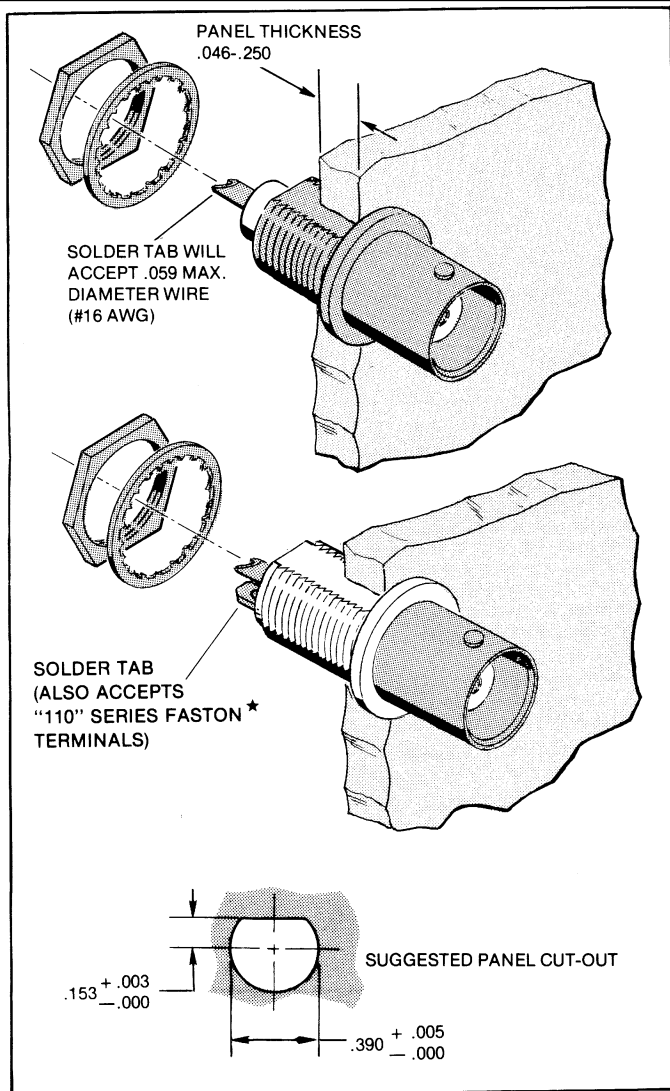


Figure 2

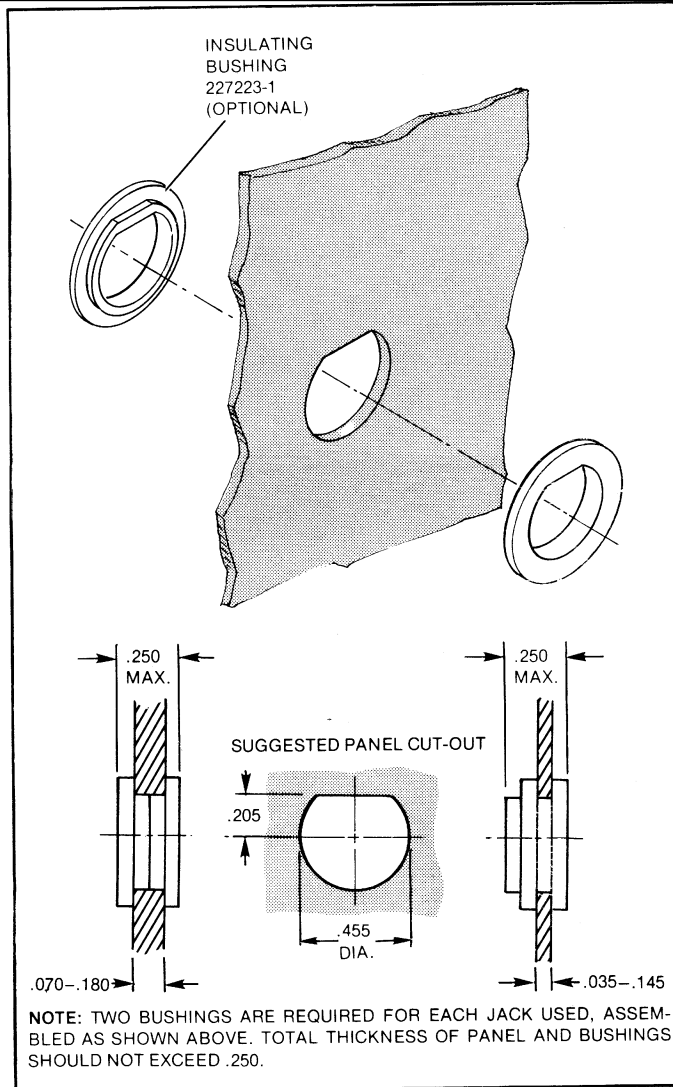


Figure 3

2. INSTALLATION PROCEDURE — SEALED BNC SOLDER RECEPTACLE JACKS

(a) First determine mounting requirements; panel cutout dimensions are shown in Figure 4.

- (b) Assemble gasket to receptacle flange.
- (c) Insert threaded portion of jack through cut-out.
- (d) Slip on lockwasher; thread on and tighten nut.
- (e) Solder wire to center contact solder cup as required.
- (f) Terminate solder tab as required.

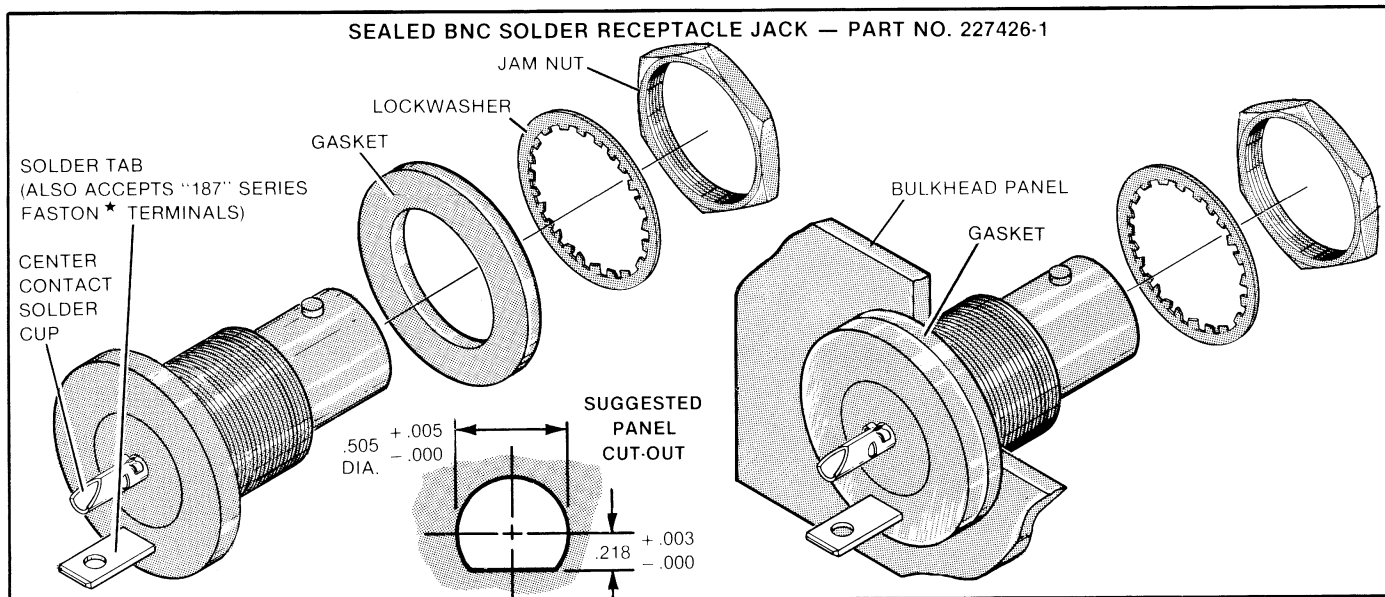


Figure 4