

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.

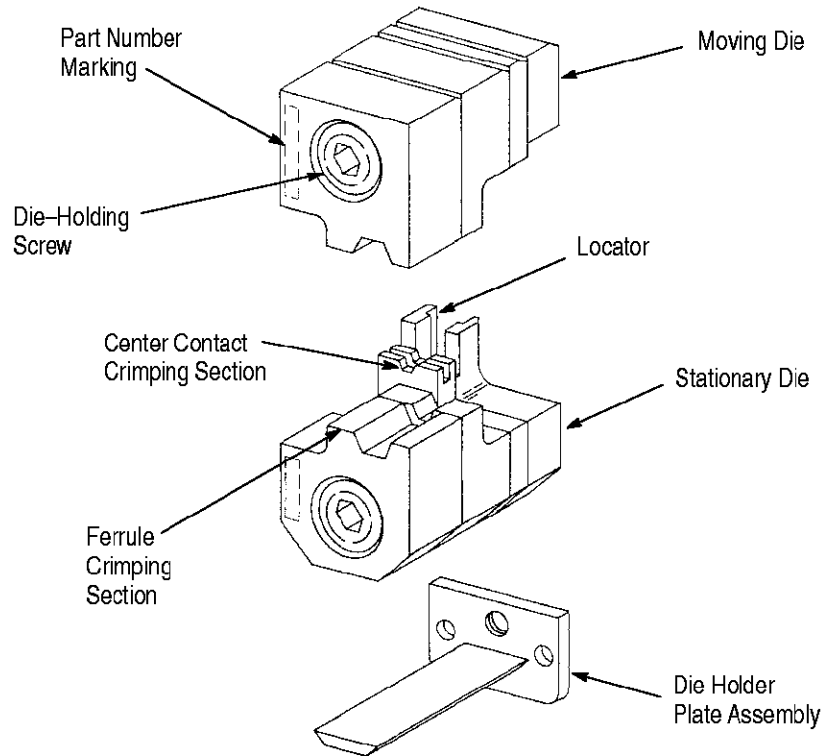


Figure 1

1. INTRODUCTION

AMP* Crimping Die Assembly 58159-1 is designed for use in AMP Pneumatic Tool 69365-3 or in AMP Hand Crimping Tool 69710-1 to crimp the AMP Miniature UHF Series Jack connectors listed in Figure 3.

Read these instructions thoroughly before installing or using the die assembly.

AMP Pneumatic Tool 69365-3 is a semi-automatic tool that is bench mounted and foot switch activated. For application and operation procedures, refer to AMP Customer Manual 409-1983, which is packaged with the tool.

NOTE

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

Reasons for reissue of this document are provided in Section 7, REVISION SUMMARY.

2. DESCRIPTION

The die assembly consists of a stationary die with a locator, a moving die, and a die holder plate assembly, which is designed to replace the die holder that is packaged with the pneumatic tool.

NOTE

The die holder plate assembly is not used when the die assembly is mounted in Hand Crimping Tool 69710-1.

When closed, the dies form two crimping sections. The smaller crimping section is used to crimp the connector's center contact onto the cable's center conductor, and the larger crimping section is used to crimp the ferrule onto the cable. The locator aids in positioning the cable and center contact during crimping.

3. INSTALLING THE DIE ASSEMBLY

NOTE

This procedure is used only when installing the die assembly into Pneumatic Tool 69365-3. For the procedure to install the die assembly into Hand Crimping Tool 69710-1, refer to the instructions packaged with the tool.

To install the die assembly in the pneumatic tool, refer to Figure 2 and proceed as follows:

1. Ensure that the air supply is OFF and that the moving die holder is retracted.
2. Remove Die Holder Plate 304400-2 (packaged with the tool) from the tool head by removing the two button head cap screws. Retain the die holder plate for use with other dies.
3. Install Die Holder Plate Assembly 312775-1 (packaged with the die assembly). Replace and tighten the two button head cap screws.
4. Install the stationary die and the moving die according to the procedures given in the instructions supplied with the pneumatic tool.

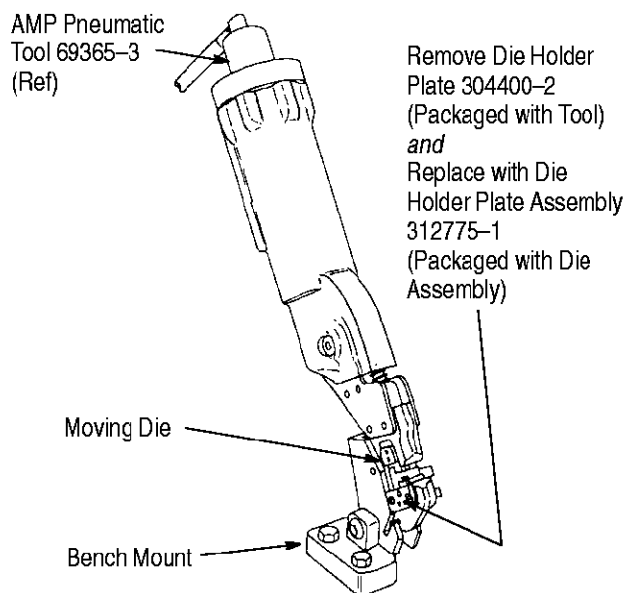


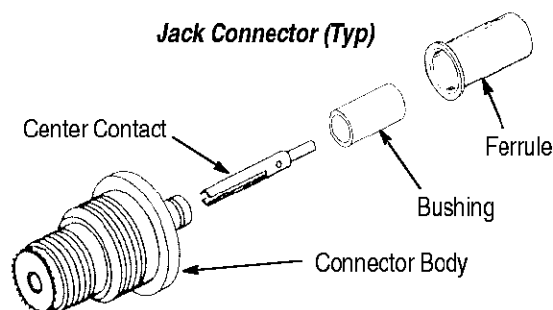
Figure 2

4. ASSEMBLY AND CRIMPING PROCEDURE

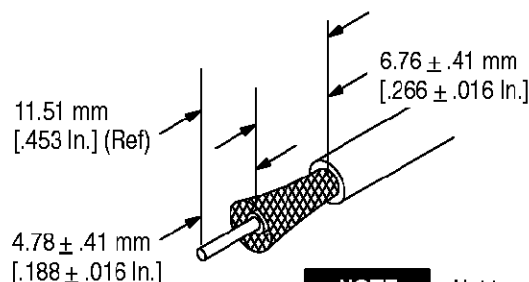
NOTE

Refer to the instruction sheet packaged with the connector for specific assembly information.

1. Refer to the table in Figure 3 and select an appropriate connector.
2. Slip the ferrule, flared end out, over the cable end.
3. Strip the cable to the dimensions provided in Figure 3.



Cable Stripping Dimensions


NOTE

Not to scale.

CONNECTOR PART NUMBER	CABLE TYPE
228665-2	
228903-2	RG-188/U
228903-4	

Figure 3

4. Slip the bushing under the braid and over the dielectric until the bushing bottoms.
5. Insert the cable's center conductor into the connector's center contact until the cable dielectric butts against the contact.
6. Open the dies and locate the center contact in the smaller crimping section of the stationary die so that the center contact rests in the die and the bushing is butted against the center contact. Refer to Figure 4.

DANGER

Keep hands clear of dies during crimping.

7. Hold the contact in place (by holding the cable) and activate the pneumatic tool (or close the hand tool) to crimp the center contact.
8. Open the dies and remove the crimped contact.
9. Insert the crimped center contact into the connector body until the cable dielectric butts against the dielectric inside the connector body.
10. Lay the braid over the connector body's support sleeve.

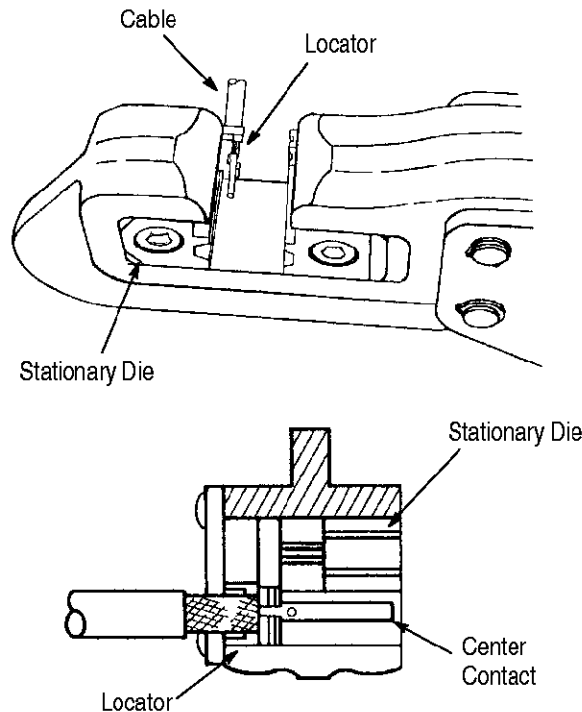


Figure 4

11. Slip the ferrule over the braid, butting the ferrule flange against the jack body.

12. Place the ferrule in the larger crimping section of the stationary die, as shown in Figure 5. Make sure that the connector body is butted against the die.

DANGER Keep hands clear of dies during crimping.

13. Activate the pneumatic tool (or close the hand tool) to crimp the ferrule. Open the dies and remove the crimped ferrule and cable.

5. MAINTENANCE AND INSPECTION

5.1. Maintenance

1. Remove dust, moisture and other contaminants with a clean brush, or a soft, lint-free cloth. Do not use objects that could damage the dies.
2. Make sure that dies are properly aligned and that die holding screws are in place and secured.
3. Make certain that all surfaces are protected with a thin coat of any good SAE 20 motor oil. Do not oil excessively.
4. When dies are not in use, store in a clean, dry area. Hand tool 69710-1 should be stored with

the handles closed to prevent objects from becoming lodged in the dies.

5.2. Inspection

Regular inspections should be performed with a record of inspections remaining with the dies and/or supervisory personnel responsible for them. AMP recommends one inspection per month; however, amount of use, working conditions, operator training and skill, and established company standards should determine frequency of inspection. The inspection should be performed in the following sequence:

1. Remove all lubrication and accumulated film by immersing the dies in a suitable commercial degreaser that will not affect paint or plastic material.
2. Make sure all die holding screws are in place and secured.
3. Check all bearing surfaces for wear. Replace worn components.
4. Inspect the crimp area for flattened, chipped, cracked, worn, or broken areas. If damage is evident, the dies must be repaired before returning them to service.

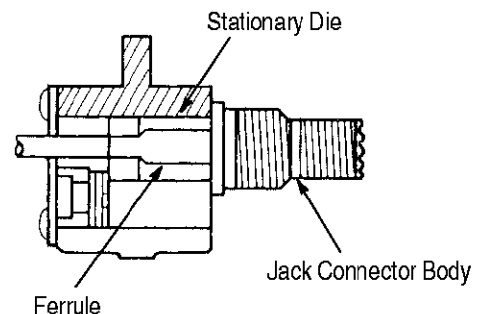
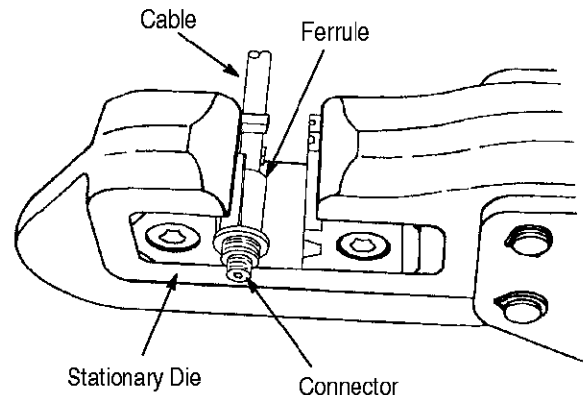


Figure 5

5.3. Crimp Height Inspection

This inspection requires the use of three plug gages. One gage, shown in Figure 6, is used to check the center contact crimping chamber. Figure 7 shows the two gages required to inspect the insulation and braid sections of the ferrule crimping chamber. AMP does not manufacture or market these gages. To gage each of the crimping sections, proceed as follows:

1. Mate the dies until it is evident that they have bottomed. Hold the dies in this position.
2. Align the GO element with the proper crimping chamber. Push the element straight into the crimping chamber. The GO element must pass completely through the crimping chamber, as shown in Figures 6 and 7.
3. Align the NO-GO element and try to insert the gage straight into the crimping chamber. The NO-GO element may start entry, but must not pass completely through, as shown in Figures 6 and 7.

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 repaired or replaced. Refer to Section 6, REPLACEMENT AND REPAIR.

For additional information concerning the use of plug gages, refer to AMP Instruction Sheet 408-7424.

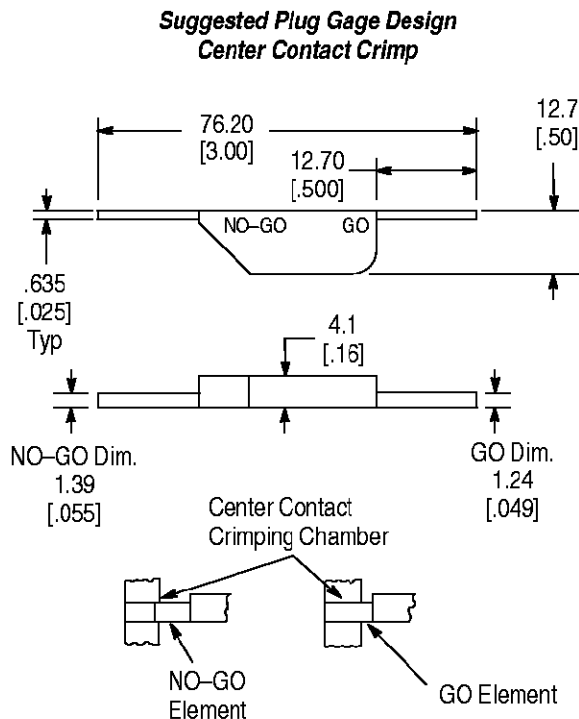
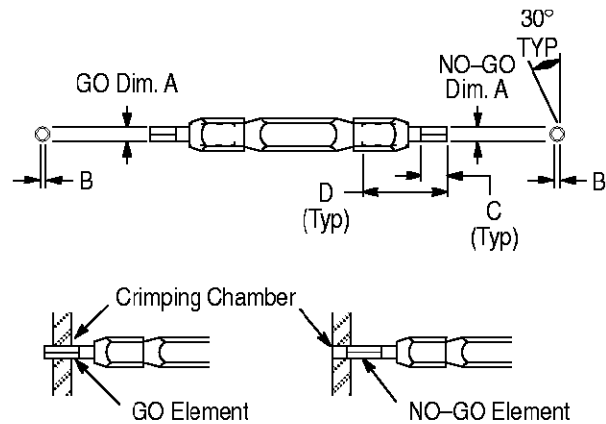


Figure 6

Suggested Plug Gage Design Ferrule Crimp



CRIMP SECTION	GAGE ELEMENT DIMENSIONS				
	A		B	C	D
	GO	NO-GO			
Insul	2.819 to 2.827 [.1110 to .1113]	2.969 to 2.971 [.1169 to .1170]	1.27 [.050]	6.35 [.250]	25.40 [1.00]
Braid	4.241 to 4.249 [.1670 to .1673]	4.391 to 4.394 [.1729 to .1730]	1.78 [.070]	6.35 [.250]	31.75 [1.25]

Figure 7

6. REPLACEMENT AND REPAIR

The parts listed in Figure 8 are customer-replaceable. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. Order replacement 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
P.O. BOX 3608
HARRISBURG, PA 17105-3608

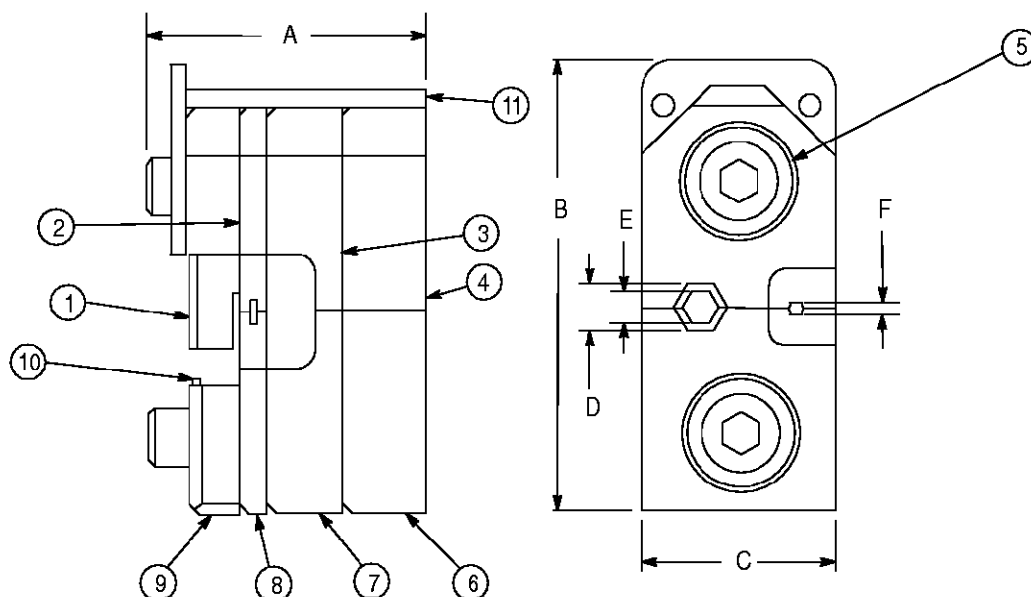
For tool repair service, please contact an AMP representative at 1-800-526-5136.

7. REVISION SUMMARY

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

Per EC 0990-1104-99

- Updated document to corporate requirements
- Changed tool repair service information in Section 6, REPLACEMENT AND REPAIR
- Changed document title



DIE ASSEMBLY SPECIFICATIONS			REPLACEMENT PARTS			
DIMENSIONS		WEIGHT	ITEM	PART NUMBER	DESCRIPTION	QTY PER DIE SET
A	23.37 [.920]	64 g [2 1/4 oz]	1	312800-1	LOCATOR	1
			2	312798-1	INSERT, Upper Ctr Cont	1
B	42.42 [1.67]		3	312795-1	INSERT, Upper Insul	1
			4	312794-2	INSERT, Upper Braid	1
C	15.82 [.623]		5	4-306131-3	SCREW, Special	2
			6	312796-2	INSERT, Lower Braid	1
D	4.32 [.170]		7	312797-1	INSERT, Lower Insul	1
			8	312799-1	INSERT, Lower Ctr Cont	1
E	2.90 [.114]		9	3-59675-2	SPACER	1
F	1.32 [.052]		10	1-21046-3	RING, Retaining	2
			11	312775-1	DIE HOLDER PLATE ASSY	1

Figure 8