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AMP* CRIMPING DIE ASSEMBLIES 90332-1 AND 90332-2

IS 7783

RELEASED
4-16-92

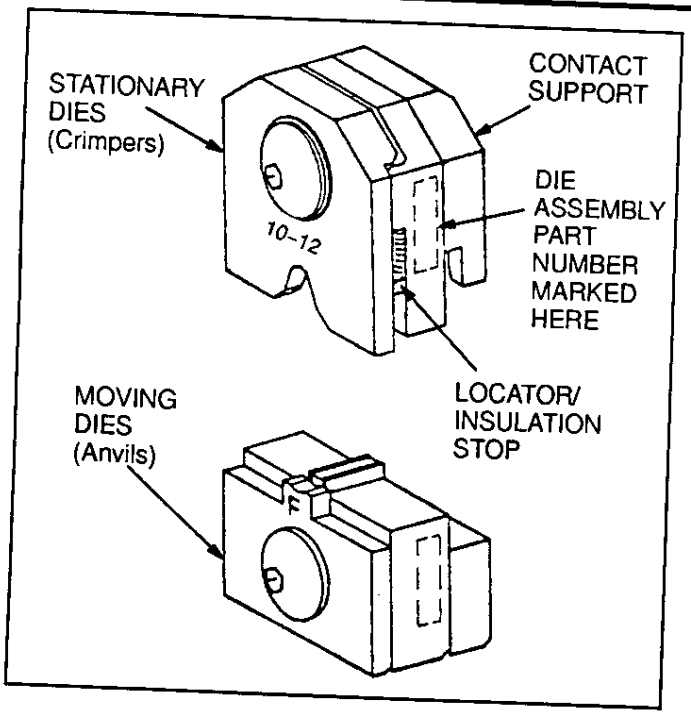
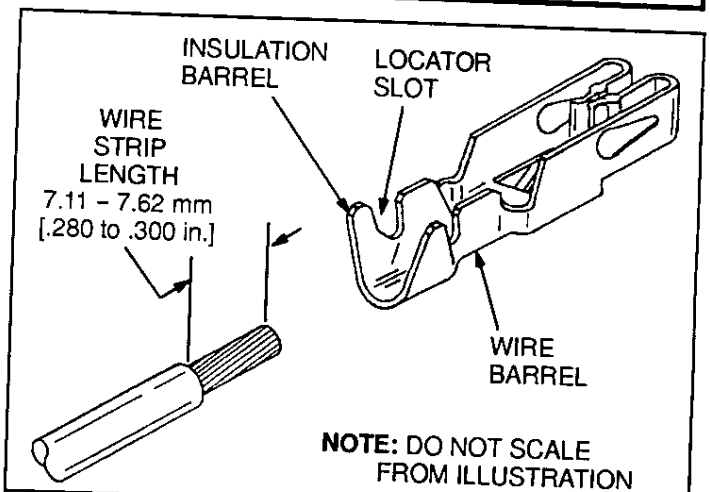


Fig. 1

45T-15A



WIRE SIZE	INSULATION DIAMETER	CONTACT NUMBER		CRIMPING DIE ASSY NUMBER
		LP	STRIP	
3-6 mm² [12-10 AWG]	4.06-5.33 mm [.160-.210 in.]	530520-1	530519-2	90332-1
		—	531519-3	90332-1
		—	531373-2	90332-2

Fig. 2

45T-16

1. INTRODUCTION

This Instruction Sheet (IS) covers the use and care of AMP Crimping Die Assemblies 90332-1 and 90332-2, which are used to crimp the Hi-Current loose-piece contacts listed in Figure 2. These die assemblies are designed to be used in the AMPORTAPOWER* Pneumatic Tool 69365 or the AMP Hand Crimping Tool 69710.

For complete instructions concerning the related tooling, refer to AMP Customer Manual (CM) 1983, packaged with the pneumatic tool, or AMP IS 2095, packaged with the hand tool. These publications will give you information concerning die insertion, maintenance, and general performance of the tools.

Read this sheet thoroughly before installing or using the die assemblies.

NOTE

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

2. DESCRIPTION

The die assemblies feature two stationary dies (crimpers), two movable dies (anvils), a locator/insulation stop, and a contact support. See Figure 1.

The stationary dies have chamfered corners and feature the wire size marked above the crimp section. The moving dies have square corners.

The locator/insulation stop has two functions. First, it positions the contact in the crimping dies, and second, it aids in locating the wire in the contact. In use, it rests in the locator slot of the contact. See Figures 2 and 3.

The contact support prevents the contact from bending during the crimping operation.

3. CRIMPING PROCEDURE

DANGER

Disconnect AMPORTAPOWER tool from air supply before maintenance, adjustment, or repair.

Install the dies according to the instructions packaged with the tool.

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Refer to the chart in Figure 2 and select the wire (stranded only) of the specified size and insulation diameter. Strip the wire to the length indicated. Do **NOT** cut or nick the wire strands.

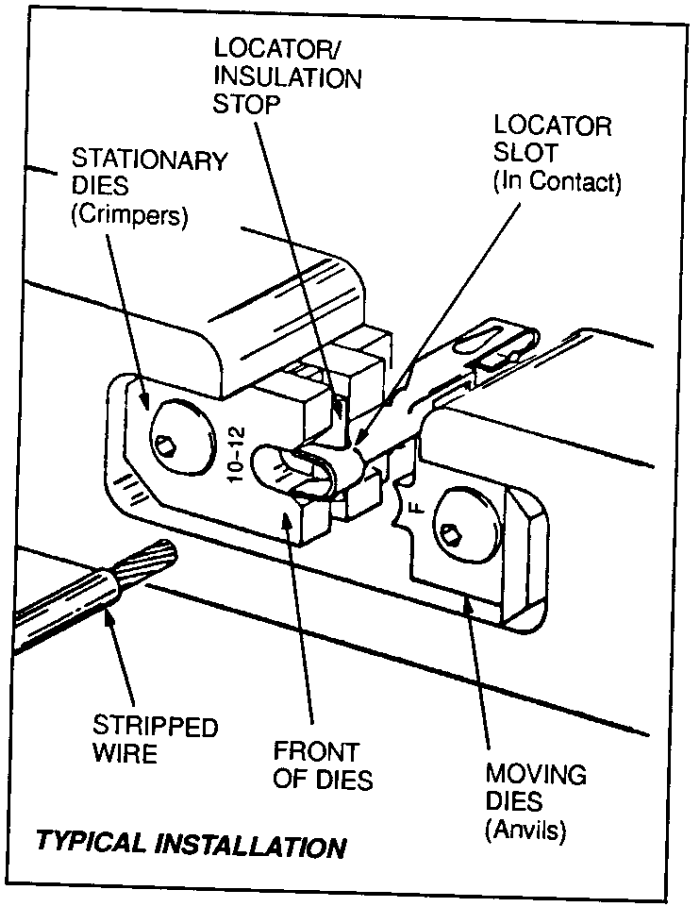


Fig. 3 45T-17

Refer to Figure 3 and proceed as follows:

1. Looking straight into the **FRONT** of the crimp section, insert the contact (insulation barrel first) into the **BACK** of the crimp section. Position the contact in the crimpers so the locator enters the locator slot in the contact.

2. Hold the contact in this position and close the dies just enough to hold the contact in place. Do **NOT** deform the insulation barrel or wire barrel.

3. Insert a properly stripped wire through the wire slot in the locator and into the wire barrel of the contact until the insulation butts against the locator/ insulation stop.

4. Holding the wire in place, actuate the tool through a complete cycle. Refer to the instructions packaged with the tool.

5. Allow the moving die to open **FULLY** and remove the crimped contact.

4. MAINTENANCE/INSPECTION

DANGER *Disconnect AMPORTAPOWER tool from air supply before maintenance, adjustment, or repair.*

4.1. Initial Die Inspection

AMP Crimping Dies 90332-[ ] are inspected before shipment. The dies should be inspected immediately upon arrival at your facility to ensure the dies have not been damaged during shipment, and that they conform to the dimensions shown in Figure 4. If the dies are damaged upon arrival, retain the shipping container, file a claim with the carrier, and notify AMP Incorporated immediately.

4.2. Daily Maintenance

It is recommended that each operator of the dies be made aware of — and responsible for — the following four steps of daily maintenance.

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

2. Check the die alignment and tighten the die holding screws regularly.

3. Make certain the dies are protected with a THIN coat of any good SAE No. 20 motor oil. Do **NOT** oil excessively.

4. When the dies are not in use, store them in a clean, dry area.

4.3. Periodic Inspection

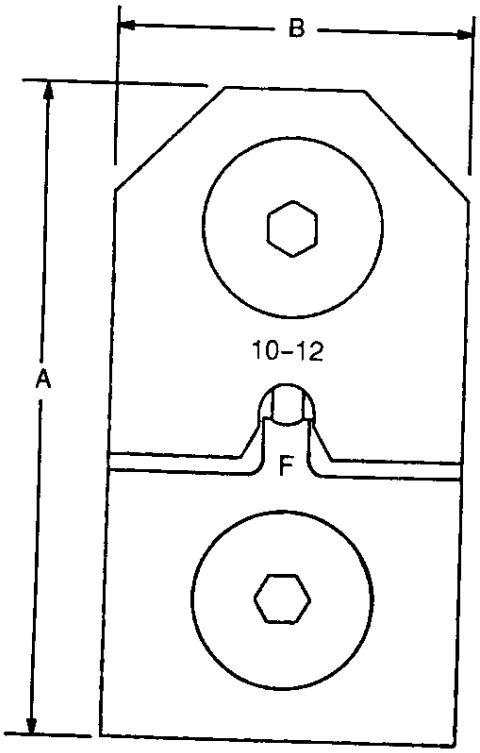
Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the dies and/or be supplied to supervisory personnel responsible for the dies. Though recommendations call for at least one inspection a month, the inspection frequency should be based on the amount of use, ambient working conditions, operator training and skill, and established company standards. These inspections should be performed in the following sequence:

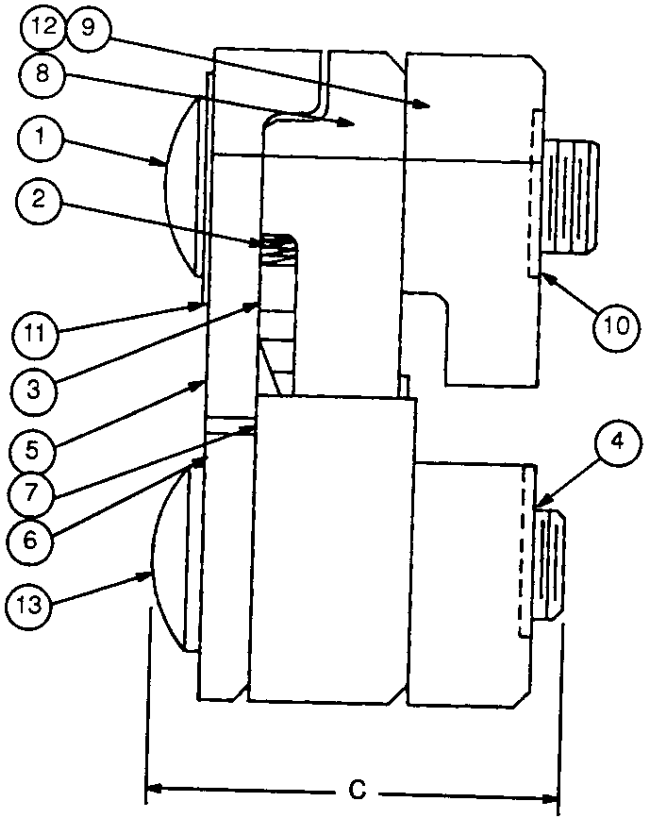
A. Visual Inspection

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, retaining rings, and die components are in place. Refer to the parts listed in Figure 4 if replacements are necessary.

3. Check all bearing surfaces for wear. Remove and replace worn components.



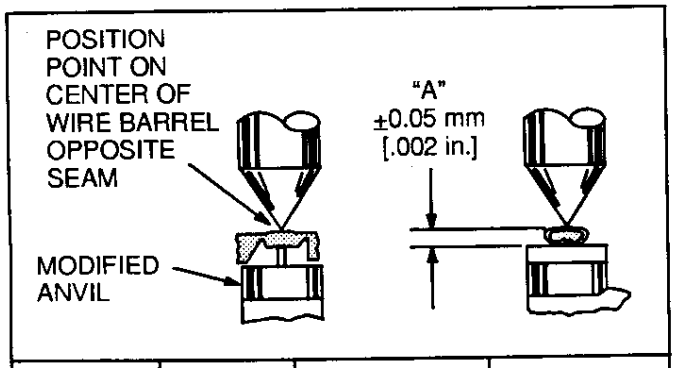


DIE SPECIFICATIONS		REPLACEMENT PARTS				
DIMENSION		ITEM	DIE 90332-1	DIE 90332-2	DESCRIPTION	QTY REQ
A	33.32 mm [1.312 in.]	1	3-306131-4	3-306131-4	SCREW, Die Holding	1
		2	305182	305182	SPRING	2
B	15.87 mm [.625 in.]	3	125455-8	125455-8	LOCATOR/INSULATION STOP	1
		4	1-125181-3	1-125181-3	SPACER	1
		5	125467-3	125467-3	CRIMPER, Insulation	1
		6	125468-7	125468-7	ANVIL, Insulation	1
C	17.55 mm [.691 in.]	7	127063-1	127063-1	ANVIL, Wire	1
		8	1-125456-1	1-125456-1	CRIMPER, Wire	1
		9	313597-1	——	SUPPORT, Contact	1
WEIGHT (Approximate)		10	1- 21046-3	1- 21046-3	RING, Retaining	2
		11	24088-7	24088-7	WASHER, Curved	1
85.05 g [3 oz.]		12	——	313597-2	SUPPORT, Contact	1
		13	2-306131-2	2-306131-2	SCREW, Special	1

Fig. 4

92-139

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 (see Paragraph 5, DIE REPLACEMENT AND REPAIR).



CONTACT NUMBER (LP)	WIRE SIZE (Max)	CRIMP SECT (Wire Size Marking)	CRIMP HEIGHT DIM. "A"
530520	6 mm^2 [10 AWG]	10-12	2.92 mm [.115 in.]

Fig. 5 200-002E

B. Crimp Height Inspection

This inspection incorporates the use of a micrometer with a modified anvil as shown in Figure 5. We recommend the modified micrometer (Crimp Height Comparator RS-1019-5LP) which can be purchased from:

York Machinery & Supply Co.
20 North Penn Street
York PA 17401-1014

or

VALCO
1410 Stonewood Drive
Bethlehem PA 18017-3527

Proceed as follows:

1. Refer to the chart in Figure 5 and select a contact and a wire (maximum size) for the dies.

2. Refer to Section 3, CRIMPING PROCEDURE, and crimp the contact accordingly.

3. Using a crimp height comparator, measure the wire barrel height as shown in Figure 5.

If the crimp height conforms to that shown in the chart, the die dimensions are considered correct and should be lubricated with a thin coat of any good SAE No. 20 motor oil. If not, the dies must be repaired before returning them to service (see Section 5, DIE REPLACEMENT AND REPAIR).

For additional information concerning the use of the crimp height comparator, refer to AMP Instruction Sheet IS 7424.

5. DIE REPLACEMENT AND REPAIR

The parts listed in Figure 4 are customer replaceable. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. Replacement parts or additional dies can be ordered by contacting:

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

The dies can also be returned to AMP Incorporated for evaluation and repair. Ship the dies with a written description of the problem to:

CUSTOMER REPAIR (01-12)
AMP INCORPORATED
1523 NORTH 4TH STREET
HARRISBURG, PA 17102-1604