



Indenter Die Retaining Screw Hole Center Contact Crimping Chamber Anvil Die

| DIE ASSEMBLY | CONNECTOR DESCRIPTION                  |  |
|--------------|--|--|
| 91911-1      | Miniature Threaded COAXICON* Connector |  |
| 91911-2      |  |  |
| 91911-3      | Subminiature COAXICON Connector        |  |
| 91911-4      |  |  |
|              |  |  |

Figure 1

# 1. INTRODUCTION

SDE Crimping Die Assemblies 91911-[] are designed to crimp the center contact and ferrule of COAXICON connectors when used in PRO-CRIMPER\* III Frame Assembly 354940-1. Refer to Figure 1 for die assembly-to-connector cross-reference.



Dimensions in this document are in metric units [with U.S. customary units in brackets]. Figures and illustrations are for reference only and are not drawn to scale.

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

### 2. DESCRIPTION

Each die assembly consists of an indenter die and an anvil die. Each die is held in the tool frame assembly by a single screw (included with the tool frame).

When closed, the dies form two or three crimping chambers. The larger crimping chambers crimp the ferrule onto the coaxial cable, and the smaller crimping chamber crimps the center contact onto the center conductor of the coaxial cable.

### 3. DIE INSTALLATION

1. Close the tool frame handles until the ratchet releases, then allow the tool handles to open fully.

2. Install the anvil die into the movable jaw of the tool frame. Align the die with the retaining screw hole, then secure the die with the retaining screw. DO NOT fully tighten.

3. Install the indenter die into the stationary jaw of the tool frame. Slowly close the tool handles, allowing the dies to align themselves. After the anvil die has mated with the indenter die, place a  $1.57\pm0.05$ -mm [.062±.002-in.] diameter copper bus bar into the center contact crimping chamber of the die assembly. Secure the die with the retaining screw. DO NOT fully tighten.

- 4. Close the tool handles completely.
- 5. Securely tighten both retaining screws.

# 4. CRIMPING PROCEDURE

Select the appropriate size cable and connector. The wire size and insulation diameter must be within the specified range for the connector.

Initially, the crimp height should be verified before crimping the center contact or ferrule. Refer to Instruction Sheet 408-9930 included with the tool frame for crimp height adjustment.



For detailed information on cable strip lengths and proper assembly of the connector, refer to the instructions packaged with the connector. Make sure that the ferrule has been placed onto the cable, and that the cable braided shield is flared away from the cable.

Proceed as follows:

4.1. Crimping the Center Contact (See Figure 2)

1. Close the tool handles until the dies are partially closed.

2. Assemble the center contact onto the cable center conductor. Place the center contact in the smallest crimping chamber of the anvil die. Make sure the flange on the end of the center contact butts against the die.

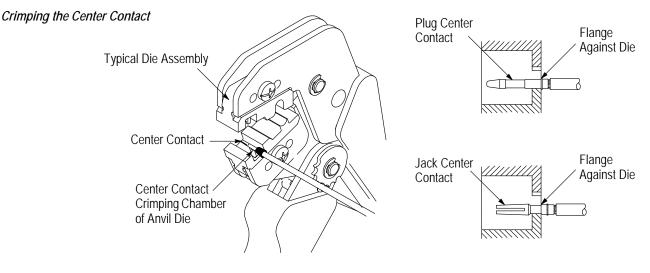
3. Holding the cable in place, close the tool handles until the ratchet releases.

4. Allow the tool handles to open fully and remove the crimped center contact from the dies.

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Upper and lower die posts <u>must</u> enter slot in contact in order to crimp wire. **If not properly aligned**, **damage to die set will occur**.

Figure 2

# 4.2. Crimping the Ferrule (See Figure 3)

1. Insert the crimped center contact into the connector body until the cable dielectric butts against the dielectric inside the connector body or until the center contact is securely positioned within the connector. Make sure that the braided shield is over the support sleeve of the connector body and that no strands from the shield enter the connector body.

2. Slide the ferrule over the braided shield and onto the connector until the ferrule butts against the shoulder on the connector body.

3. Place the ferrule in the ferrule crimping chamber of the anvil die so that the shoulder of the connector body butts against the edge of the die.



Refer to the instruction sheet packaged with the connector to determine the appropriate crimping chamber for the ferrule.

4. While holding the assembly together, close the tool handles until the dies have closed enough to hold the ferrule in place.



Make sure that both sides of the ferrule are started evenly into the crimping chamber. DO not attempt to crimp an improperly positioned ferrule.

5. Carefully close the tool handles until the ratchet releases.

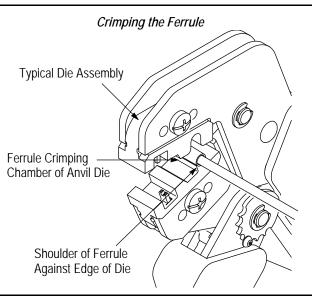


Figure 3

6. Allow the tool handles to open fully, and remove the crimped ferrule from the dies.

# 5. MAINTENANCE AND INSPECTION

The crimping die assembly is inspected before shipment; however, it is recommended that the dies be inspected immediately upon arrival at your facility to ensure that the dies have not been damaged during shipment.

The die assembly will perform correctly as long as: (1) the product specified is correct for the application, (2) the specified die assembly is used, (3) the die assembly has been measured to ensure that the die



openings are correct, and (4) the tool has been adjusted correctly.

#### 5.1. Maintenance

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

2. Make sure that the proper retaining screws are properly secured.

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

#### 5.2. Inspection

1. Remove all lubrication and accumulated film from the dies by immersing the dies in a suitable commercial degreaser.

2. Make certain that all retaining screws and die components are properly secured.

3. Inspect the crimping surfaces for flattened, chipped, worn, or cracked areas. If damage is evident, the dies must be replaced. Refer to Section 6, REPLACEMENT.

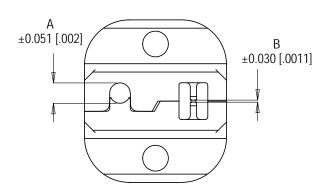
#### 5.3. Measuring the Die Opening

Measure the die opening to ensure that it meets the dimensions given in Figure 4.

## 6. REPLACEMENT

Order additional die assemblies through your representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

#### CUSTOMER SERVICE (038-035) TYCO ELECTRONICS CORPORATION PO BOX 3608 HARRISBURG PA 17105-3608



| DIE<br>ASSEMBLY | DIMENSION     |               |  |
|-----------------|---------------|---------------|--|
|                 | A             | В             |  |
| 91911-1         | 4.395 [.1730] | 0.457 [.0180] |  |
| 91911-2         | 3.580 [.1409] | 0.472 [.0186] |  |
| 91911-3         | 2.845 [.1120] | 0.510 [.0200] |  |
| 91911-4         | 2.845 [.1120] | 0.380 [.0150] |  |
| Figure 4        |               |               |  |

Figure 4

#### 7. REVISION SUMMARY

- Updated document to corporate requirements
- Added new NOTE to Figure 2