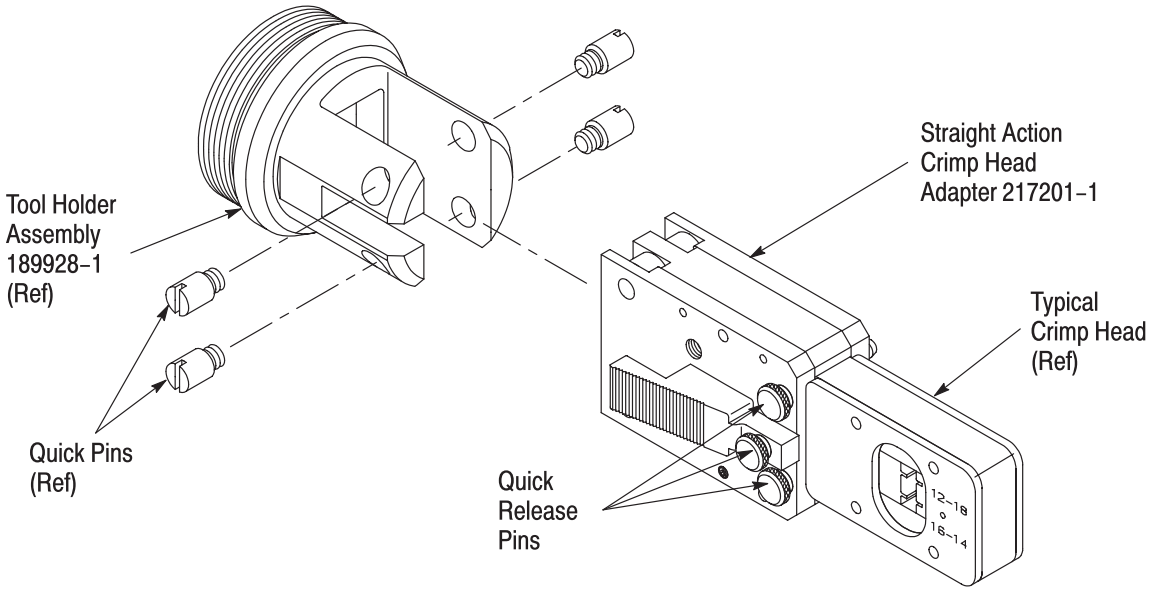


Figure 1

1. INTRODUCTION

Straight Action Crimp Head Adapter 217201–1 is designed to accept the crimp head from any Straight Action Hand Tool to adapt the crimp head for use with 626 Pneumatic Tooling Assemblies. Straight Action Hand Tools are sold separately and are available from Tyco Electronics. For information concerning the setup and operation of the pneumatic tools, refer to customer manual 409–5862.

This instruction sheet provides:

- Recommended procedures for crimp head removal from the hand tool.
- Crimp head installation into the adapter.
- Installation and removal of the adapter from the tool holder assembly of the pneumatic tool.
- Maintenance, inspection, and repair information for the adapter.

For crimp head information concerning wire preparation, crimping procedures, maintenance, inspection, and repair, refer to the associated instruction sheet for the appropriate hand tool.

Read these instructions thoroughly before proceeding.

NOTE

Measurements are in metric units [followed by U.S. customary units in brackets].

Reasons for reissue are provided in Section 8, REVISION SUMMARY.

2. DESCRIPTION (Figure 1)

The adapter facilitates the connection of a straight action crimp head (typical crimp head shown in Figure 1) to the tool holder assembly of the pneumatic tool and provides the necessary straight line motion of the movable crimp head die when the pneumatic tool is actuated. When the tool is actuated, a cam extends through the tool holder into the adapter, contacting an internal spring–loaded die holder mechanism. The other end of this mechanism is directly connected to the movable die and, as the cam pushes against the mechanism, the movable die moves in a straight line and bottoms against the stationary die. When the cam of the pneumatic tool retracts, the force is removed from the movable die and the spring–loaded mechanism returns to its starting position.

The die may also be opened and closed manually by use of the plastic slide switch which is coupled to the movable die and the spring–loaded mechanism via the center quick release pin. The slide switch therefore permits opening and closing of the dies for insertion and removal of the terminals or splices. The outer quick release pins secure the crimp head body to the adapter.

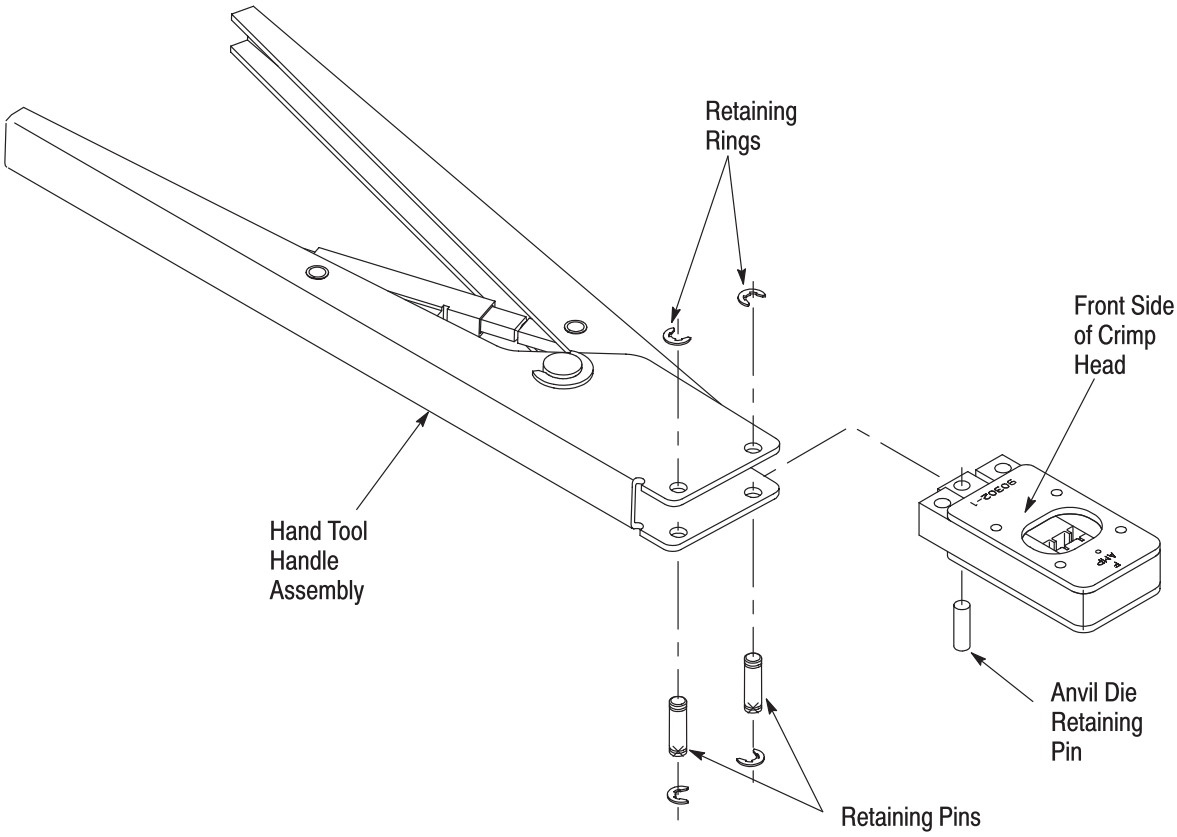


Figure 2

3. CRIMP HEAD REMOVAL FROM HAND TOOL (Figure 2)

Orient the hand tool (as shown in Figure 2) so that the front of the crimp head is facing upward (front side of crimp head has part number marked on it). Then proceed to remove the crimp head, as follows:

1. Remove the top two retaining rings from the hand tool body and push the retaining pins through the opposite side.

2. Slide the crimp head to the right and out of the tool body. The retaining pin in the movable anvil die should fall out of the die when the crimp head is removed. If not, remove the retaining pin.

4. CRIMP HEAD INSTALLATION INTO ADAPTER (Figure 3)

As supplied, the adapter has three quick release pins installed. The two outer pins will be used to secure the two outer housing tabs of the crimp head (exposed portion of crimp head) to the adapter, and the center pin will be used to secure the movable die of the crimp head to the internal spring–loaded mechanism and the plastic switch of the adapter. Therefore, these release quick pins must be removed prior to installing the crimp head.

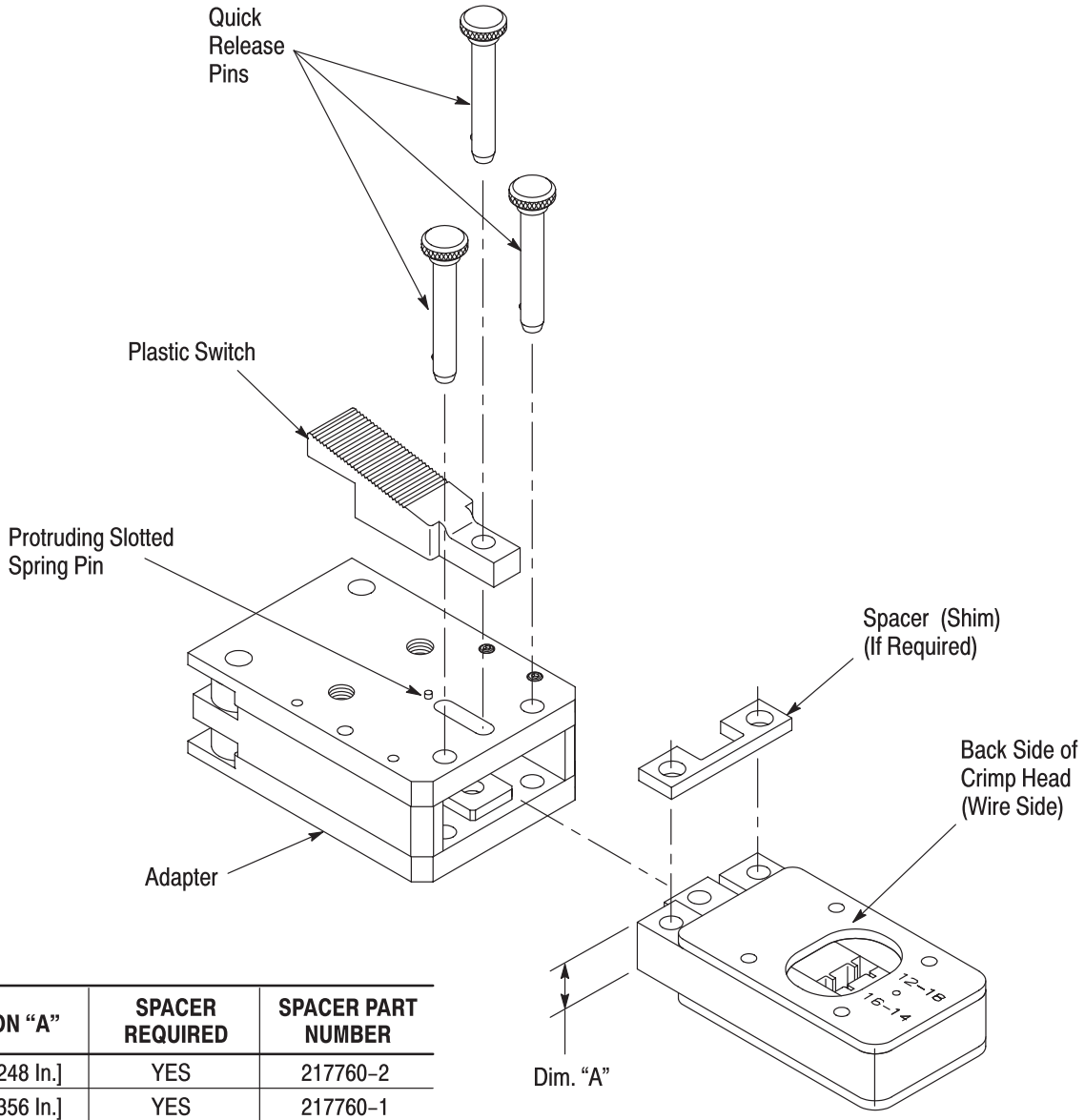
A spacer may be required to prevent the crimp head from moving when it is installed in the adapter. Therefore, before installation, measure the width of the exposed portion of the crimp head (the portion of the crimp head which will be inserted into the adapter), shown as dimension “A” in Figure 3. Use the table in Figure 3 to determine if a spacer is required. There are two spacers supplied with the adapter (217760–1 and 217760–2). If a spacer is required, place the appropriate spacer over the exposed portion of the crimp head (as shown in Figure 3) and proceed as follows:

NOTE

The adapter and crimp head must be oriented so that the back side of the crimp head (side with wire size markings) and the switch side of the adapter (side with protruding slotted spring pin) are facing upward.

1. Insert exposed portion of crimp head into adapter cavity (with spacer, if required).

2. Insert the two outer quick release pins through the two holes in the top plate of the adapter, through the holes in the spacer (if required), through the holes in the two outer housing tabs of the crimp head, and through the two holes in the bottom plate of the adapter. The quick release pins will snap into position when properly inserted.



DIMENSION "A"	SPACER REQUIRED	SPACER PART NUMBER
6.30 mm [.248 In.]	YES	217760–2
9.04 mm [.356 In.]	YES	217760–1
11.79 mm [.464 In.]	NO	——

Figure 3

3. Position the plastic switch so that the protruding slotted spring pin fits into the groove on the bottom side of the switch. Then slide the switch to align its mounting hole with the holes in the spring–loaded die holder and the movable die of the crimp head.

4. Insert the center quick release pin through the hole in the plastic switch and through the holes in the die holder and movable die until it snaps into position.

5. ADAPTER INSTALLATION AND REMOVAL (Figure 1)

After the crimp head has been installed onto the adapter, the adapter is ready for installation onto the tool holder assembly of the pneumatic tool. Refer to customer manual 409–5862 for instructions on installing the appropriate tool holder assembly (including cam) on the pneumatic tool. After the appropriate tool holder assembly has been installed, proceed as follows:

NOTE

Removal is the reverse of installation.

DANGER

To prevent personal injury, ALWAYS disconnect the main air supply and electrical supply (if applicable) of the pneumatic tool before installing or removing adapter.

DANGER

DO NOT operate pneumatic tool without the proper adapter and crimp head installed. After adapter is installed, make sure that the quick pins are FULLY tightened to avoid personal injury and damage to the tool.

1. Remove quick pins from tool holder assembly. Refer to Figure 1.

2. Insert adapter into tool holder assembly as shown in Figure 1.

3. After adapter is properly aligned, insert and tighten quick pins provided with the tool holder assembly. Refer to Figure 1.

NOTE

Tyco Electronics recommends using LOCTITE† No. 243 Removable Threadlocker, or equivalent, to prevent the quick pins from loosening.

4. Connect pneumatic tool to an adequate air supply between 620–690 kPa [90–100 psi]. For specific information on air line requirements and air hose installation, refer to customer manual 409–5862.

6. MAINTENANCE AND INSPECTION

Tyco Electronics recommends that a maintenance and inspection program be performed periodically to ensure dependable and uniform terminations.

DANGER

To avoid personal injury, ALWAYS disconnect the main air supply and electrical supply (if applicable) of the pneumatic tool before performing maintenance or inspection.

6.1. Daily Maintenance

Tyco Electronics recommends that each operator be responsible for the following steps of daily maintenance:

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

2. Make sure that all pins, rings and other components are in place and secure.

3. Make certain all surfaces are protected with a thin coat of any good SAE 20 motor oil. DO NOT oil excessively.

4. When the adapter is not in use, store it in a clean, dry area.

6.2. Periodic Inspection

Regular inspections should be performed by quality–control personnel. A record of scheduled inspections should remain with the adapter or be supplied to supervisory personnel responsible for the for the adapter. Though recommendations call for at least one inspection a month, the frequency should be based on amount of use, working conditions, operator training and skill, and your established company policies. These inspections should include a visual inspection as described in Paragraph 6.3.

6.3. Visual Inspection

1. Remove all lubrication and accumulated film by immersing the adapter in a suitable commercial degreaser that will not affect paint or plastic.

2. Make certain all components are in place. If replacements are necessary, refer to Section 7, REPLACEMENT AND REPAIR.

3. Check all bearing surfaces for wear. Replace worn parts.

6.4. Lubrication

Lubricate all pins, pivot points, and bearing surfaces with a high quality grease. Tyco Electronics recommends the use of MOLYKOTE‡ paste, which is a commercially available lubricant. Lubricate according to the following schedule:

Adapter used in daily production – lubricate daily
Adapter used daily (occasional) – lubricate weekly
Adapter used weekly – lubricate monthly

7. REPLACEMENT AND REPAIR

Replacement parts and recommended spares are listed in Figure 4. The recommended spares should be stocked for immediate replacement. Parts should be replaced by Tyco Electronics to ensure quality and reliability of the adapter. Order replacement parts through your Tyco Electronics representative, or call 1–800–526–5142, or send a facsimile of your purchase order to 1–717–986–7605, or write to:

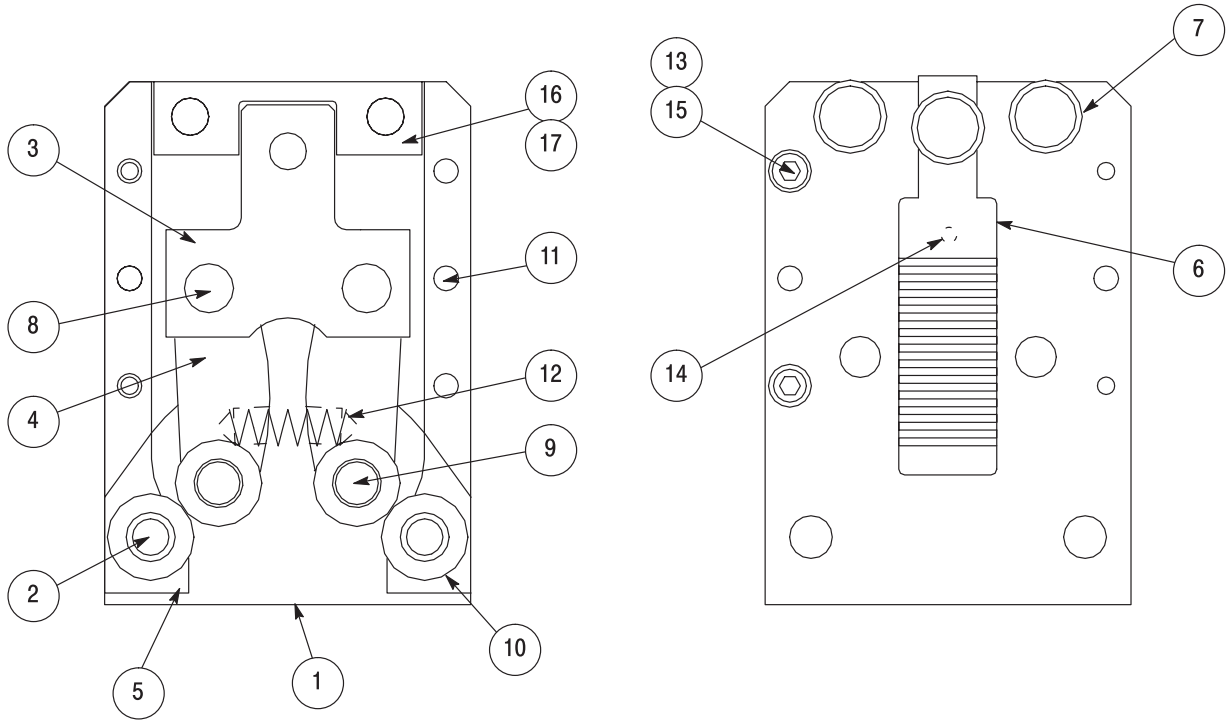
CUSTOMER SERVICE (38–35)
TYCO ELECTRONICS
P.O. BOX 3608
HARRISBURG, PA 17105–3608

For adapter repair service, please contact a Tyco Electronics representative at 1–800–526–5136.

8. REVISION SUMMARY

Since the previous release of this sheet, the Tyco Electronics logo was changed.

†Trademark of Henkel Corporation
‡Trademark of Dow Corning Corporation



REPLACEMENT PARTS

ITEM	PART NUMBER	DESCRIPTION	QTY PER ASSEMBLY
1	217349–1	HOUSING	2
2■	217347–1	PIN, Fixed	2
3	217346–1	HOLDER, S.A.H.T. Die	1
4	217343–1	LINK	2
5	217342–1	HOUSING, Center	2
6	217340–1	SWITCH, Plastic	1
7	217873–1	PIN, Quick Release	3
8	679495–1	PIN	2
9■	217348–1	PIN	2
10■	314479–4	ROLLER	8
11	4–21028–4	PIN, Slotted Spring	2
12■	3–22279–8	SPRING	1
13	6–21000–8	SCREW, 4–40 UNC x .875 SHCS	4
14	21028–1	PIN, Slotted Spring	1
15	21024–2	WASHER, Spring	4
16	217760–1	SPACER (as required)	1
17	217760–2	SPACER (as required)	1

■ Recommended Customer Spares

Figure 4