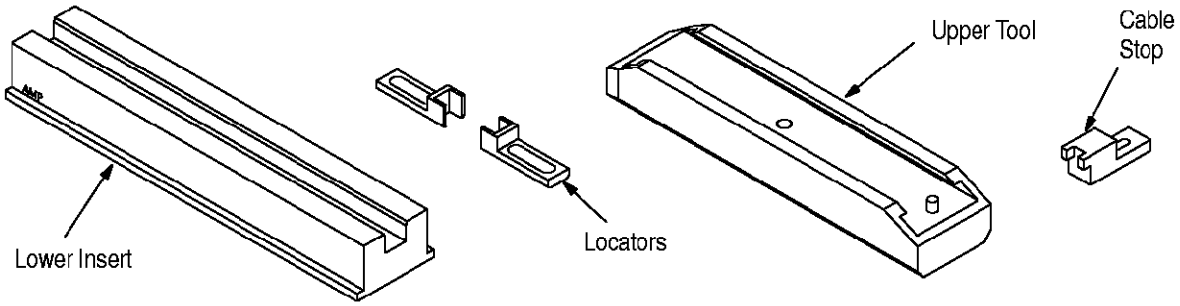
Connector–Specific Kit 679167–1 for AMP–LATCH* System 50 Receptacle Connector

Instruction Sheet
408–9872
03 JAN 02 Rev B

Connector–Specific Kit 679167–1



Typical Application

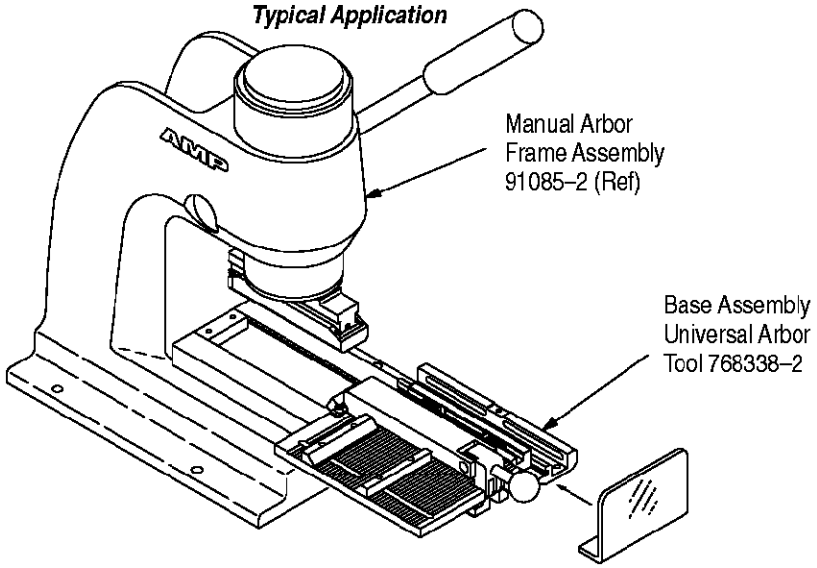


Figure 1

1. INTRODUCTION

This instruction sheet covers the installation and setup procedures for Connector–Specific Kit 679167–1. The connector–specific kit is used in conjunction with Base Assembly Universal Arbor Tool 768338–2 and Manual Arbor Frame Assembly 91085–2 (see Figure 1), or Pneumatic Auto–Cycle Unit 91112–3 to terminate AMP–LATCH System 50 Receptacle Connectors to 0.64 [.025] centerline ribbon cable.

Refer to instruction sheets 408–7777 (supplied with Manual Arbor Frame Assembly) and 408–6732 (supplied with Pneumatic Auto–Cycle Unit) for tooling information. Installation and termination procedures for the Base Assembly Universal Arbor Tool are available in 408–9875. For information on AMP–LATCH connectors, contact the Product Information Center whose number is listed at the bottom of this page.

Revisions to this document are provided in Section 6, REVISION SUMMARY.

NOTE *Dimensions are in millimeters [followed by inch equivalents in brackets].*

2. DESCRIPTION (Figure 1)

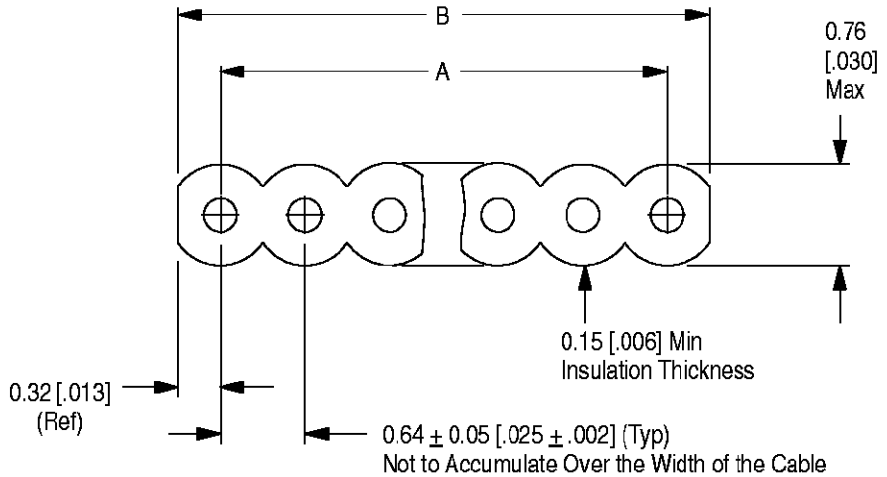
The connector–specific kit consists of an upper tool, a lower insert, two locators, and a cable stop. The upper tool is secured to the upper tool mount and applies an even force over the length of the connector during termination. The locators and the lower insert properly align the connector for termination.

3. CABLE REQUIREMENTS

The connector–specific kit will terminate 0.64 [.025] centerline ribbon cable with solid or stranded 30 AWG or stranded (7/40) 32 AWG cable conductors to AMP–LATCH System 50 Receptacle Connectors. Refer to Figure 2 for the recommended cable dimensions.

TOOLING ASSISTANCE CENTER 1–800–722–1111
AMP FAX/PRODUCT INFO 1–800–522–6752
For Regional Customer Service, visit our website at www.tycoelectronics.com

NOTE: Not to Scale



NUMBER OF CONDUCTORS "N"	DIMENSION "A"		DIMENSION "B"	
	mm	Inches	mm	Inches
10–60	[(N–1) x 0.64] ±0.18	[(N–1) x .025] ±.007	(N X 0.64) ±0.13	(N X .025) ±.005
61–72	[(N–1) x 0.64] ±0.20	[(N–1) x .025] ±.008		
73–100	[(N–1) x 0.64] ±0.23	[(N–1) x .025] ±.009		

Figure 2

CAUTION *The cable must be cut 90° (refer to Application Specification 114–25029 for tolerance) to the edge of the cable; otherwise an improper termination will result. We suggest you use a guillotine–type cable cutter, such as the Carpenter Model 95 which can be purchased from:*

Carpenter Manufacturing Co., Inc.
Fairgrounds Drive
Manlius, NY 13207

NOTE *Cable assemblies manufactured by Tyco Electronics contain ribbon cable meeting the requirements of Tyco Electronics Engineering Drawing Nos. 57013 (30 AWG solid conductors) or 57131 (30 AWG stranded conductors). AMP–LATCH System 50 Receptacle Connectors are available in various sizes from 20 to 100–positions. If you choose to assemble your own cable assemblies using these connectors, we recommend using a cable of equal or superior quality.*

4. INSTALLATION AND SETUP OF CONNECTOR–SPECIFIC KIT

4.1. Installation

These procedures are typical for the Manual Arbor Frame Assembly and the Pneumatic Auto–Cycle Unit. Before installing the connector–specific kit, install the Base Assembly Universal Arbor Tool 768338–2 onto the frame assembly, as described in 408–9875.

DANGER *When using the Pneumatic Auto–Cycle Unit, DISCONNECT air from main air valve.*

1. Slide upper tool onto upper tool mount, as shown in Figure 3.

2. Slide lower insert into slot of lower tooling assembly and secure it with the two setscrews. See Figure 3.

3. Install locators onto lower insert, as shown in Figure 3. Secure locators with the socket head cap screws, just enough to hold them in place.

4. Install cable stop (supplied with the connector–specific kit) onto the lower tooling assembly, as shown in Figure 3. Secure the cable stop with the thumbscrew, after it is properly positioned.

4.2. Setup

1. Open cable clamp assembly.

2. Slide cable through the connector; then insert connector (cover up) into the lower insert and between the locators. See Figure 4.

3. Position cable so that the cable end is positioned against the cable stop and the cable conductors are positioned in the flutes of the fluted plate.

NOTE *The cable conductors must stay in the same flutes for the entire length of the fluted plate.*

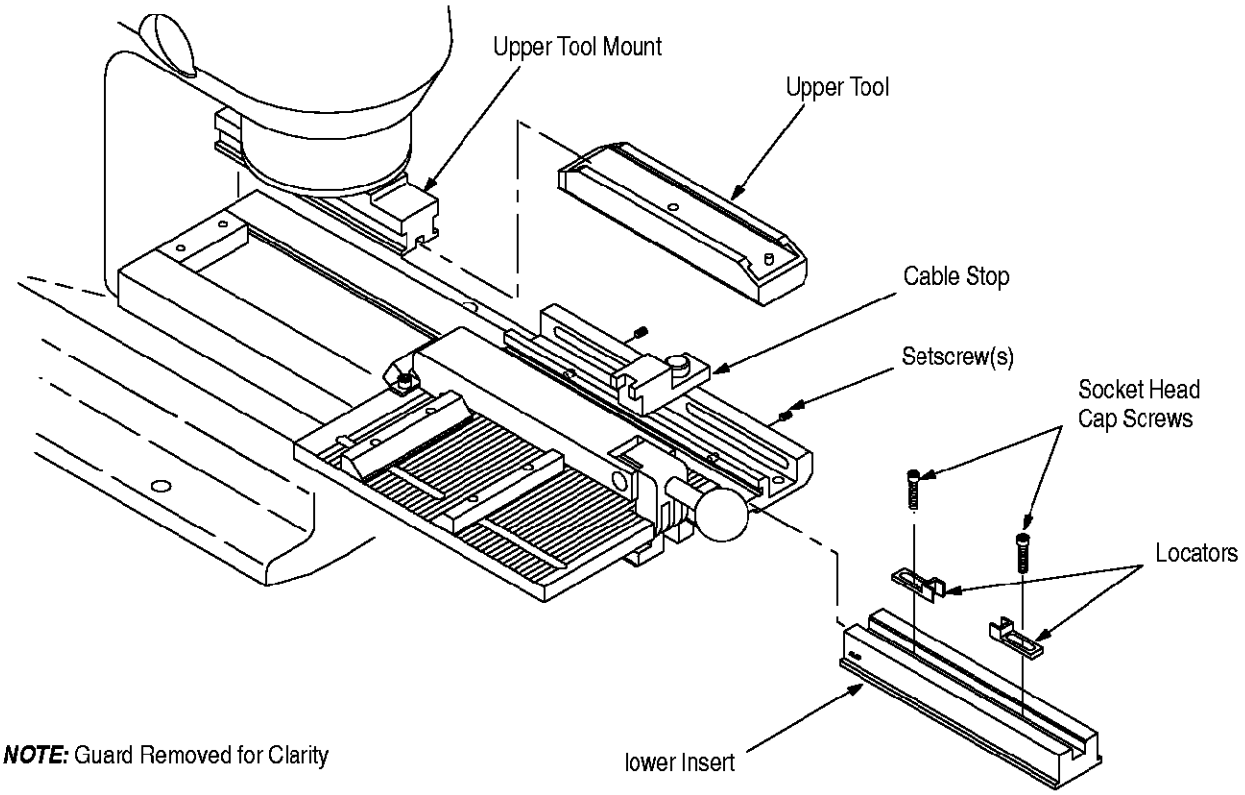


Figure 3

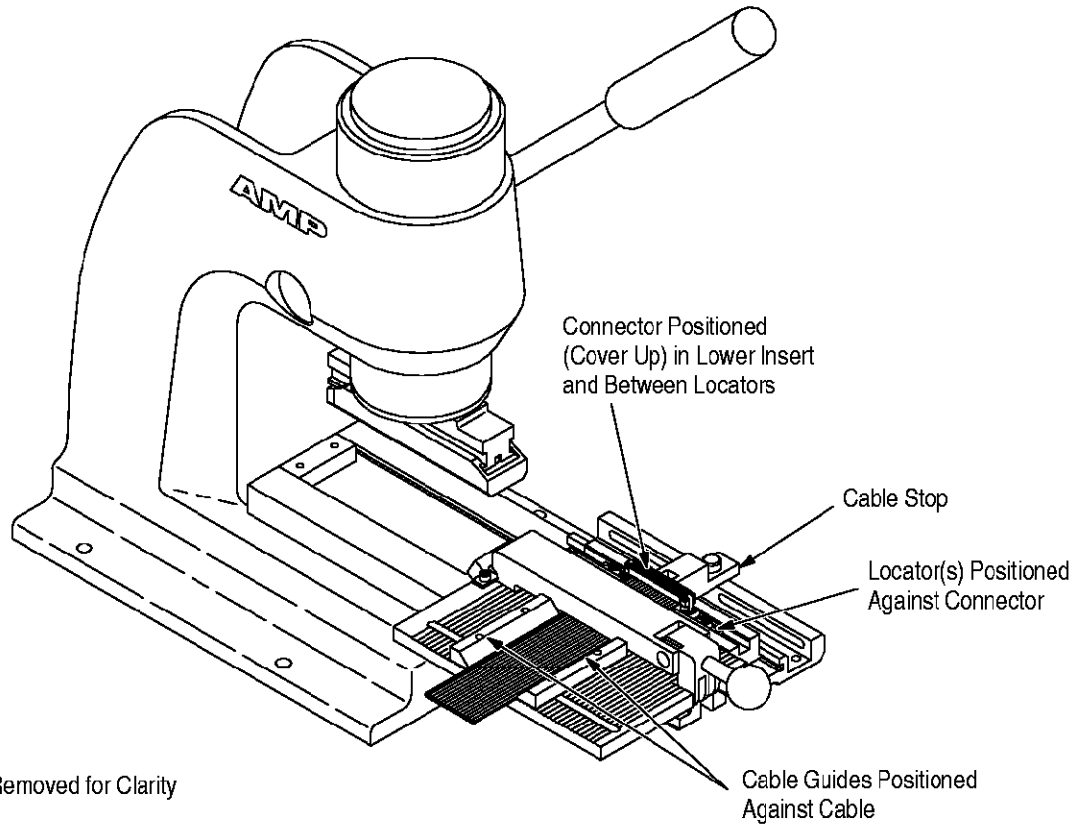


Figure 4

4. Slide locators against the connector; then secure the locators with the socket head cap screws. The connector must fit securely between the locators, as shown in Figure 4.

5. Slide the cable guide (located on the side of the cable with the registration mark) against the cable and secure it with the thumbscrew. Slide the other cable guide against the cable and secure it with the thumbscrew. See Figure 4.

DANGER *Before terminating any connectors, re–install the front guard on the frame assembly. When using the Pneumatic Auto–Cycle Unit, reconnect the air supply to the main air valve.*

6. Perform a test termination and inspect the connector to ensure that the cable conductors are properly aligned with the contacts. If available, use a tester to inspect the termination, or remove the connector cover and inspect the termination with a microscope. Refer to 408–9875 for termination procedures and 114–25029 for termination height dimensions.

5. CONNECTOR–SPECIFIC KIT INSPECTION

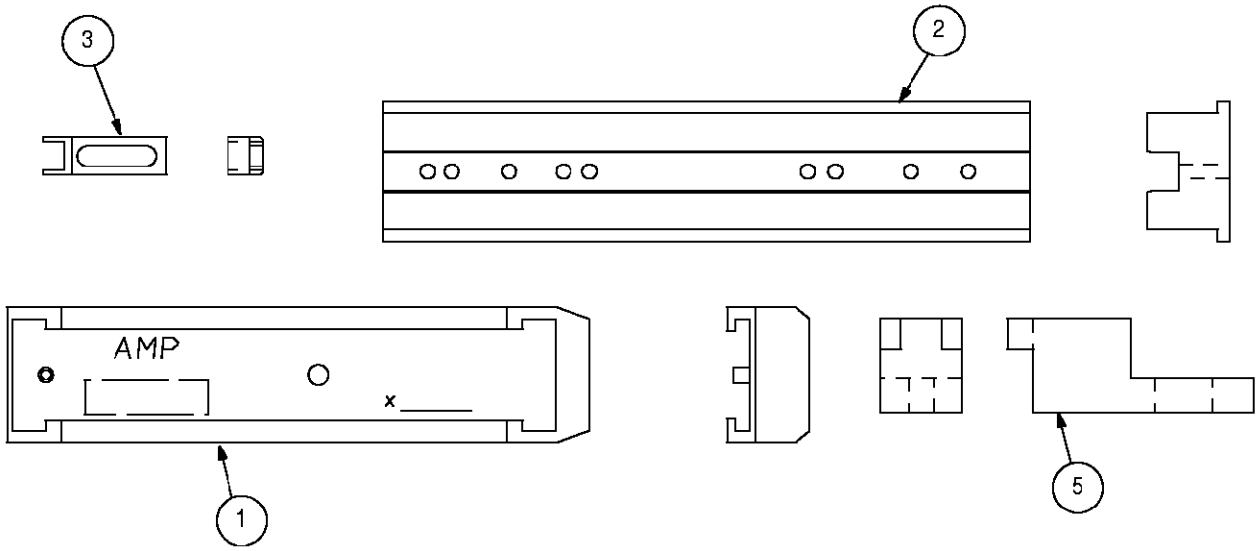
The parts listed in Figure 5 are customer–replaceable. To purchase additional kits or replacement parts, contact your local Tyco Electronics representative, or call 1–800–526–5142, or send a facsimile of your order to 1–717–986–7605, or write to:

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

6. REVISION SUMMARY

Revisions made per EC 0990–1514–01

- Updated document to corporate requirements
- Added term “or stranded” in first paragraph of Section 3
- Deleted obsolete catalog in Section 1
- Changed tolerance in dimension “B” in Figure 2
- Added new number 57131 to note is Section 3 and obsolete number 57038



CONNECTOR–SPECIFIC KIT 679167–1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY PER KIT
1	679100–2	UPPER TOOL	1
2	679074–1	INSERT., LOWER	1
3	679075–1	LOCATOR	2
4 (Not Shown)	1–21000–4	SOCKET HEAD CAP SCREWS (4–40 x .380 LONG)	2
5	679069–3	STOP, CABLE	1

Figure 5