

Connector Specific Kit 679176-1 for AMP-LATCH\* Systems 50 Paddleboard Connectors

Connector-Specific Kit 679176-1



Figure 1

### 1. INTRODUCTION

This instruction sheet covers the installation and setup procedures for Connector–Specific Kit 679176–1. 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 Paddleboard 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.



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

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

#### 2. DESCRIPTION

The connector–specific kit consists of an upper tool and a lower insert. The upper tool is secured to the upper tool mount and applies an even force over the length of the connector during termination. The lower insert is designed with alignment holes which properly align the connector for termination. Each kit component part is identified with the part number and 0.64 [.025] Paddleboard.

### 3. CABLE REQUIREMENTS

The connector-specific kit will terminate .064 {.025] centerline ribbon cable with solid or stranded 30 AWG or stranded (7/40) 32 AWG cable conductors to AMP–LATCH System 50 Paddleboard Connectors. Refer to Figure 2 for the recommended cable dimensions.



The cable must be cut 90 ° (refer to Application Specification 114–25040 for tolerance on initial cable preparation) to the edge of the cable; otherwise an improper termination will result. We suggest you use a guillotine–type cable cutter.

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TOOLING ASSISTANCE CENTER 1-800-722-1111 PRODUCT INFORMATION 1-800-522-6752

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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 Paddleboard Connectors are available in various sizes from 20–position to 100– position. If you wish to assemble your own cable assemblies using these connectors, we recommend using a cable of equal or superior guality.

## 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 onto the frame assembly, as described in 408–9875.



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 the slot of the lower tooling assembly until it is positioned against the pin (located in the slot). Secure the lower insert with the two setscrews. See Figure 3

## 4.2. Setup

1. Open cable clamp assembly.

2. Slide cable through the connector; then insert connector (cover up) into the lower insert, making sure that the first contact is aligned with the first locating hole in the lower insert. See Figure 3.



The first locating hole in the lower insert is used to align the connector in the lower insert. ALWAYS locate the first contact with the first locating hole in the lower insert. The connector is properly positioned if the rest of the contacts are aligned with the remaining locating holes. See Figure 4..



Number of Conductors "N"	Dimension "A"		Dimension "B"	
	Millimeters	Inches	Millimeters	Inches
10–60	[(N–1) x 0.64]±0.18	[(N–1) x .025]±.007		
61–72	[(N–1) x 0.64]±0.20	[(N–1) x .025]±.008	(N X 0.64)±0.13	(N X .025)±.005
73–100	[(N–1) x 0.64]±0.23	[(N–1) x .025]±.009		







3. Move the lower insert until the cable conductors are positioned in the flutes of the fluted plate. When the cable is properly positioned, secure the lower insert with the two setscrews.



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

4. 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. Figure 3.



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

5. 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 114–25040 for termination height dimensions.

## 5. CONNECTOR-SPECIFIC KIT INSPECTION

Connector–Specific Kit 679176–1 has been inspected and should be verified with the information provided in Figure 5. Tyco Electronics recommends that the kit be inspected immediately upon its arrival at your facility (and at regularly scheduled intervals) to ensure that the kit components have not been damaged during transit.

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

### 6. REVISION SUMMARY

Since the previous release of this document, the TE logo has been applied and the format has been updated.



Item Number	Part Number	Description	Qty Per Kit
1	679100-3	Upper Tool	1
2	679073-1	Insert, Lower	1