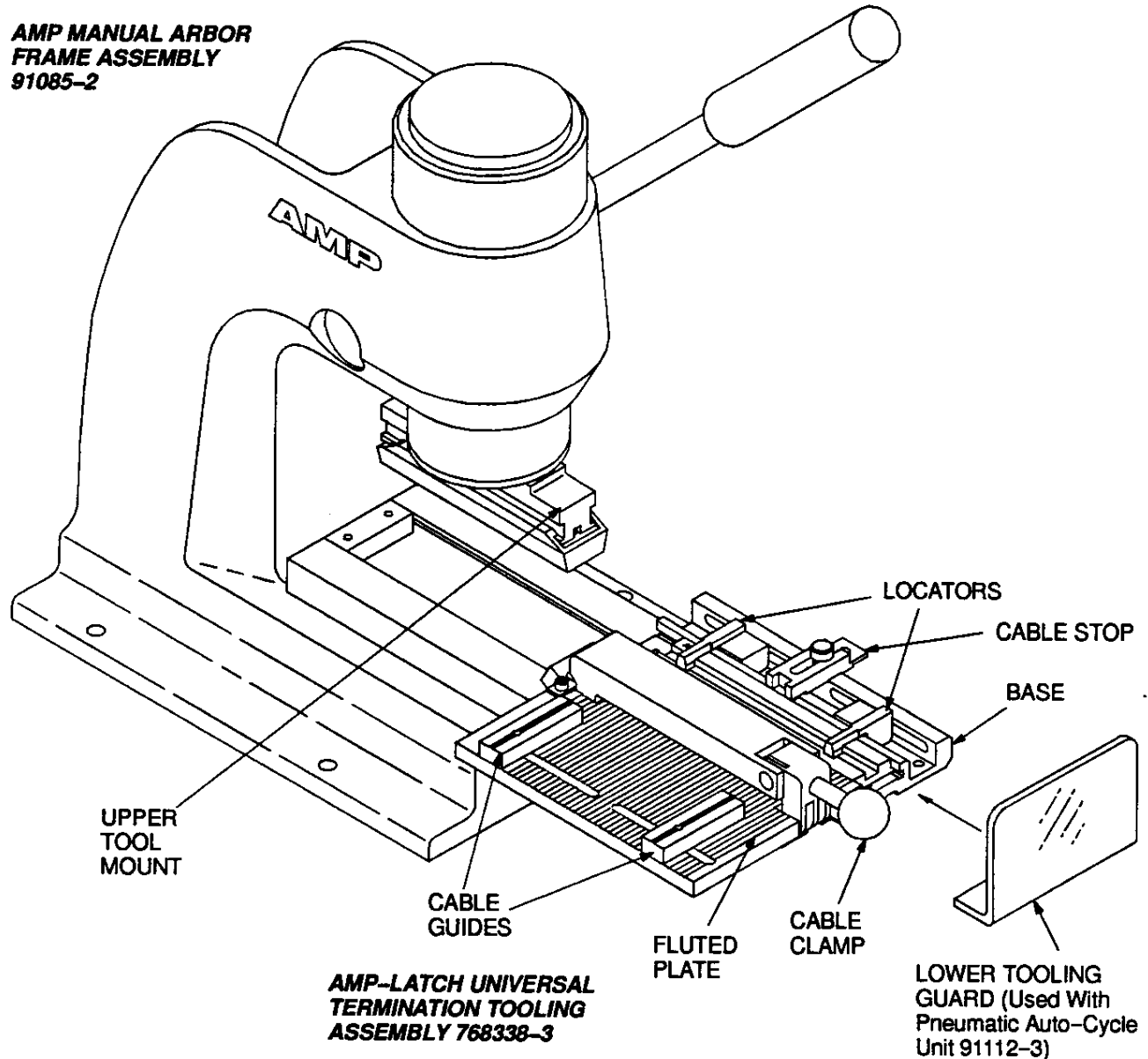


**AMP MANUAL ARBOR  
 FRAME ASSEMBLY  
 91085-2**



**AMP-LATCH UNIVERSAL  
 TERMINATION TOOLING  
 ASSEMBLY 768338-3**

Figure 1

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### 1. INTRODUCTION

These instructions cover installation, setup, and termination procedures for AMP-LATCH Universal 2 mm Termination Tooling Assembly 768338-3. The tooling assembly is used to terminate AMP-LATCH 2mm connector assemblies, in conjunction with connector-specific tooling kits, in AMP Manual Arbor Frame Assembly 91085-2 or in AMP Pneumatic Auto-Cycle Unit 91112-3.

For information regarding the use of the Manual Arbor Frame Assembly, refer to AMP Instruction Sheet IS 7777. For information regarding the Pneumatic Auto-Cycle Unit, refer to IS 6732.

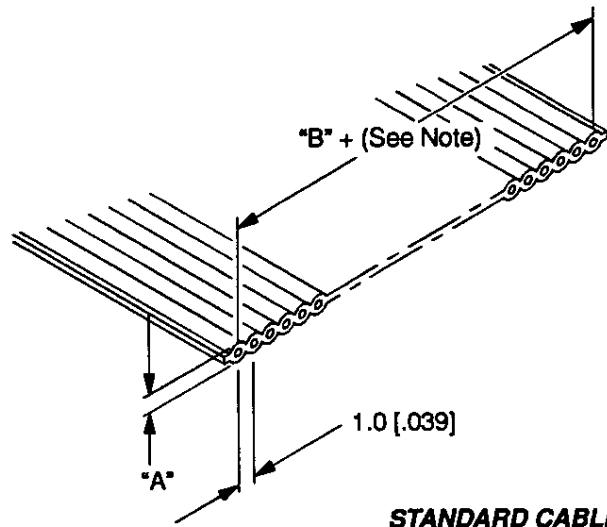
Read these and other referenced instructions thoroughly before installing the tooling and terminating any connectors.

**NOTE**

*Dimensions are in metric units [with U.S. customary units in brackets].*

**2. DESCRIPTION (Figure 1)**

The tooling assembly consists of a base, a fluted plate, two cable guides, a cable clamp, a cable stop, an upper tool mount, and two guards. The base allows the tooling to be moved into and out of the crimping area of the arbor frame assembly. The fluted plate is designed to provide proper seating of the ribbon cable. The cable guides aid in positioning the ribbon cable with the connector assembly, and the cable clamp holds the ribbon cable in position. The cable stop provides proper positioning of the ribbon cable for flush terminations. The upper tool mount provides a quick connect/disconnect for the connector-specific upper tooling insert. The guards are used with the Pneumatic Auto-Cycle Unit.



**STANDARD CABLE**

**3. CABLE REQUIREMENTS (Figure 2)**

The tooling assembly will terminate ribbon cable with 28 AWG solid or stranded conductors to all receptacle connectors. Refer to Figure 2 for the recommended cable dimensions.

**NOTE**

*The cable end must be cut 90° to the edge of the cable; otherwise an improper termination will result. AMP recommends the use of a guillotine-type cable cutter, such as the Carpenter Model 95, which may be purchased from:*

*Carpenter Manufacturing Company, Inc.  
Fairgrounds Drive  
Manlius, NY 13207*

**NOTE**

ACCUMULATIVE TOLERANCE FOR CABLE CONDUCTORS 1 THROUGH 34 IS + .254 [.010] AND THROUGH 60 IS + .38 [.015].

CONDUCTOR		DIMENSION	
SIZE (AWG)	TYPE	"A"	"B"
28	Stranded or Solid	.79 ± .18 mm [.031 ± .007 IN.]	1.0 mm [.039 IN.] X (Total No. of Conductors Minus One)

Figure 2

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**4. INSTALLATION AND SETUP (Refer to Figure 1)**

**A. Installation**

**DANGER**

*If using the Pneumatic Auto-Cycle Unit, DISCONNECT unit from main air line.*

1. Secure the upper tool mount to the ram tool mount with two screws.

**NOTE**

*The slot on the upper tool mount must face towards the FRONT of the frame assembly.*

2. Remove the tool stop from the front of the slide base.
3. Position the lower tooling assembly on the slide base of the frame assembly and slide into position.
4. Replace the tool stop and tighten to secure the lower tooling assembly.

**NOTE**

*After installing a tooling assembly, a ram height adjustment may be required. Refer to the AMP instruction sheet packaged with the frame assembly for procedures concerning ram height adjustment.*

5. If using Pneumatic Auto-Cycle Unit 91112-3, install the smaller, "L"-shaped guard on the lower tooling, and the larger "U"-shaped guard on the frame assembly with the hardware provided. See Figure 1 for location of smaller guard and Figure 3 for location of larger guard, as well as additional detail of the pneumatic unit.

**B. Setup**

1. Select the appropriate cable, connector assembly, and connector-specific tooling kit.

**DANGER**

*If using the Pneumatic Auto-Cycle Unit, DISCONNECT unit from main air line.*

2. Remove cable stop.
3. Open cable clamp.
4. Slide upper tool insert, taken from connector-specific kit, onto upper tool mount. See Figure 4.
5. Slide lower insert, taken from connector-specific tooling kit, into the base tooling. Secure in position with two setscrews. See Figure 4.

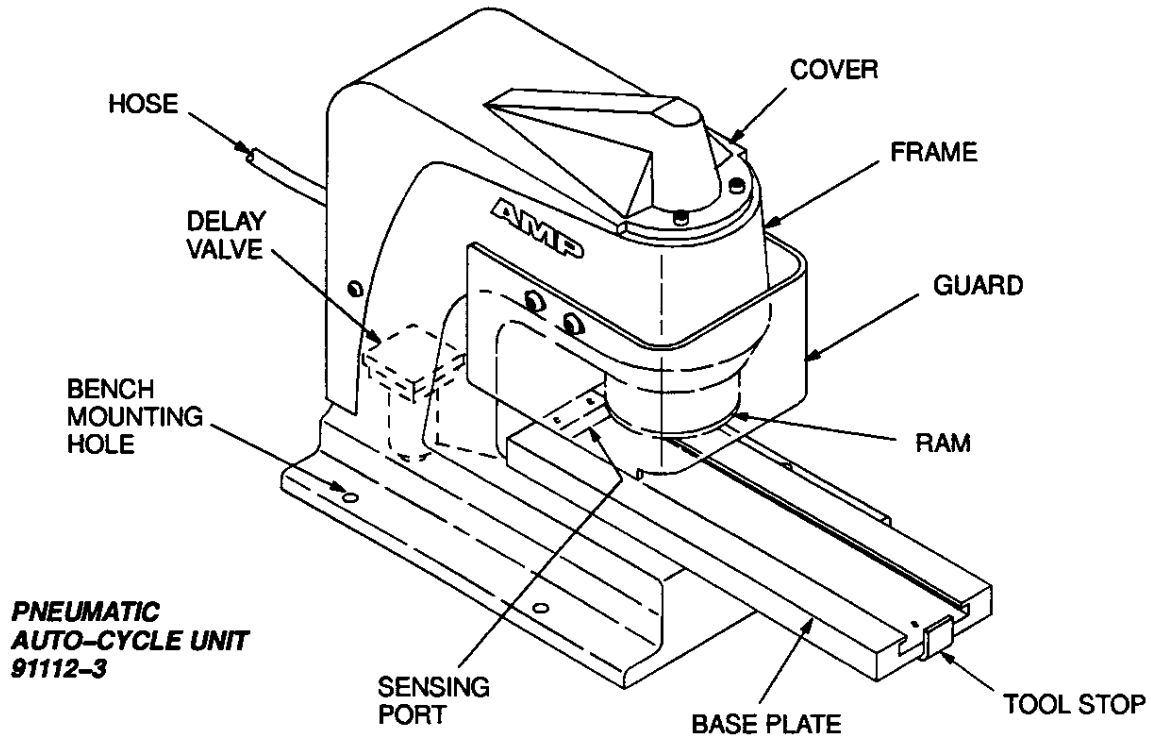


Figure 3

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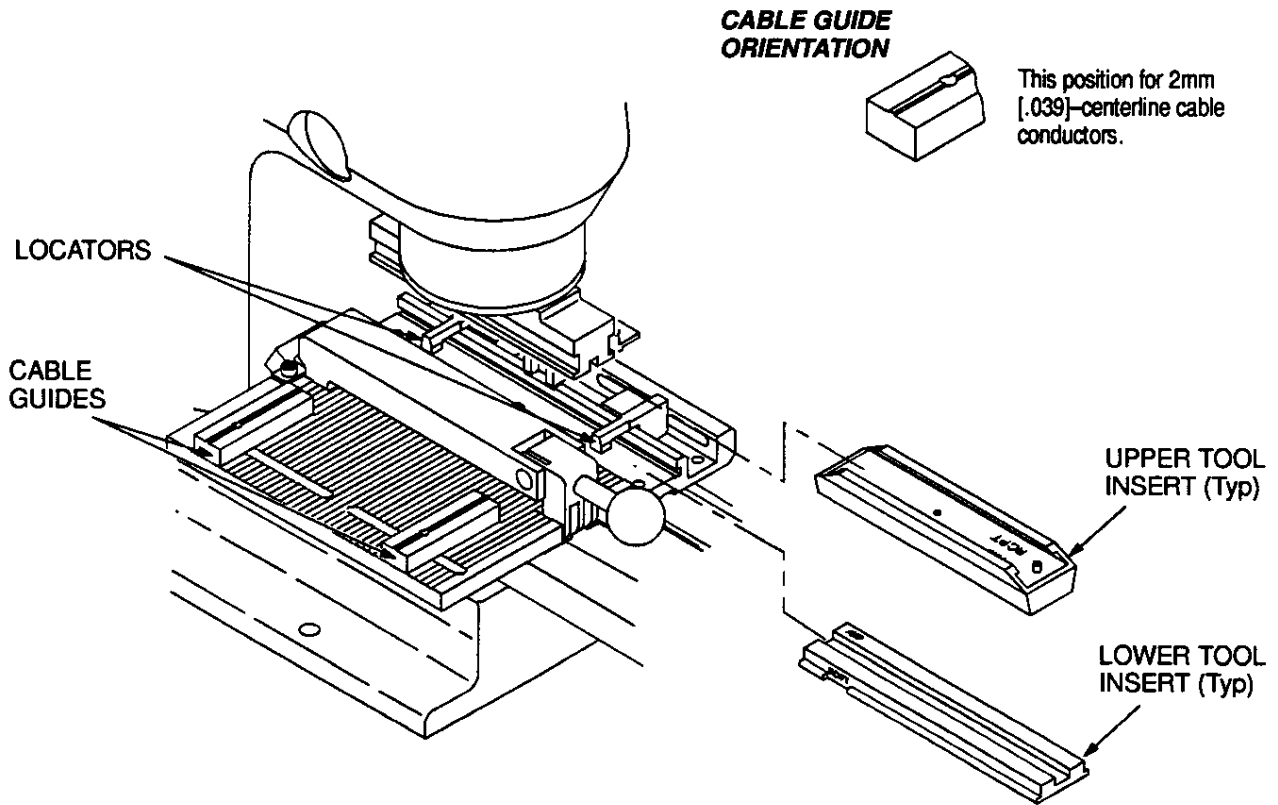


Figure 4

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- Place cable in flutes of base plate and center with cable stop slot.

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

- Seat the cable guides along each side of the cable and lock into position.

**NOTE** The cable guide must have the side with the single ridges facing **DOWN** and in the flutes of the fluted plate for its entire length. See the inset drawing of Figure 4 for detail.

- Remove cable from fluted plate.
- Place the connector assembly, cover down, into the lower insert and place the cable between the cable guides and into the flutes of the fluted plate.
- Slide the cable into the connector assembly until the cable end is flush with the far side of the connector assembly cover.
- Close cable clamp.
- Adjust connector assembly until cable is seated in all connector cover flutes.
- Seat the locators against the connector assembly and secure in position.
- Cable conductors must stay in the same flutes for the entire length of the fluted plate, and they should fill in all the flutes in the connector assembly cover.
  - For flush end terminations, replace the cable stop and adjust to desired position.
  - For daisy-chain terminations, the cable stop is not required.

This completes the cable and connector alignment setup for 2mm connector-specific tooling.

## 5. TERMINATION PROCEDURE

**DANGER** To avoid personal injury, make sure that **BOTH** guards are installed when using the pneumatic auto-cycle unit. See Figures 3 and 5 for guard mounting locations.

- Obtain the appropriate 2 mm connector-specific tooling kit and assemble it on the tooling assembly according to the instructions packaged with the kit.
- Open the cable clamp.
- Place the connector assembly, cover down, into the lower insert and between the locators.

### PNEUMATIC AUTO-CYCLE UNIT 91112-3 (IS 6732)

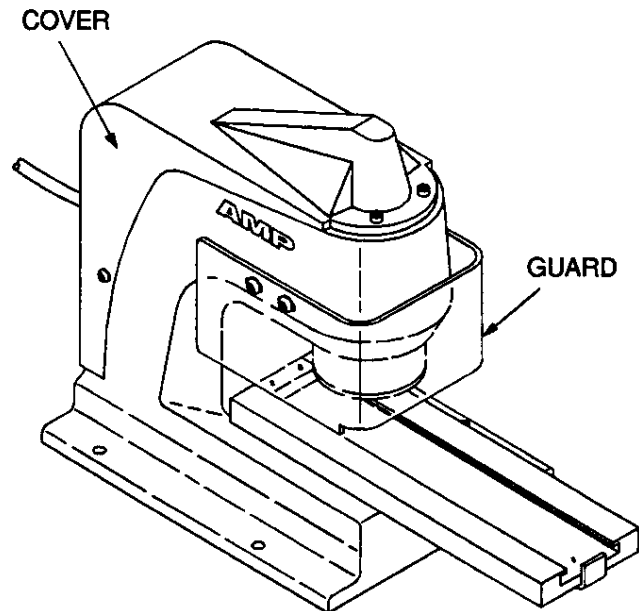


Figure 5

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- Place the cable between the cable guides and into the flutes of the fluted plate and then slide the cable into the connector assembly.
- Place the cable end in the connector as follows:
  - If making a flush termination, butt the cable end against the cable stop.
  - If making a daisy-chain termination, remove the cable stop and position the cable so that the connector is in the desired location on the cable.

**NOTE** Cable conductors must stay in the same flutes for the entire length of the fluted plate. The cable conductors should fill in all the flutes of the connector assembly cover.

- After the cable is properly positioned, close the cable clamp.
- Slide the lower tooling into the crimping area and terminate the connector.
  - If using the manual arbor frame assembly, rotate the lever.
  - If using the pneumatic auto-cycle unit, slide the lower tooling in until the sensor is activated and the machine cycles.
- Slide the lower tooling back out of the crimping area and open the cable clamp.

**6. MAINTENANCE/INSPECTION****A. Maintenance**

AMP-LATCH Universal Termination Assembly 768338-3 requires little maintenance other than to keep it clean. Remove debris and contaminants from the tooling with a clean, soft, lint-free cloth or a clean, soft brush. Do not use objects that could damage the tooling and do not use any solvents that could harm paint or plastic material. When not in use, store the tooling in a clean, dry area.

**B. Inspection**

The tooling should be inspected immediately upon arrival at your facility and at regularly-scheduled intervals thereafter to ensure that it has not been damaged. Examine the tooling for any signs of damage or excessive wear during inspections. If replacement of parts is necessary, refer to Figure 6 for the list of customer-replaceable items.

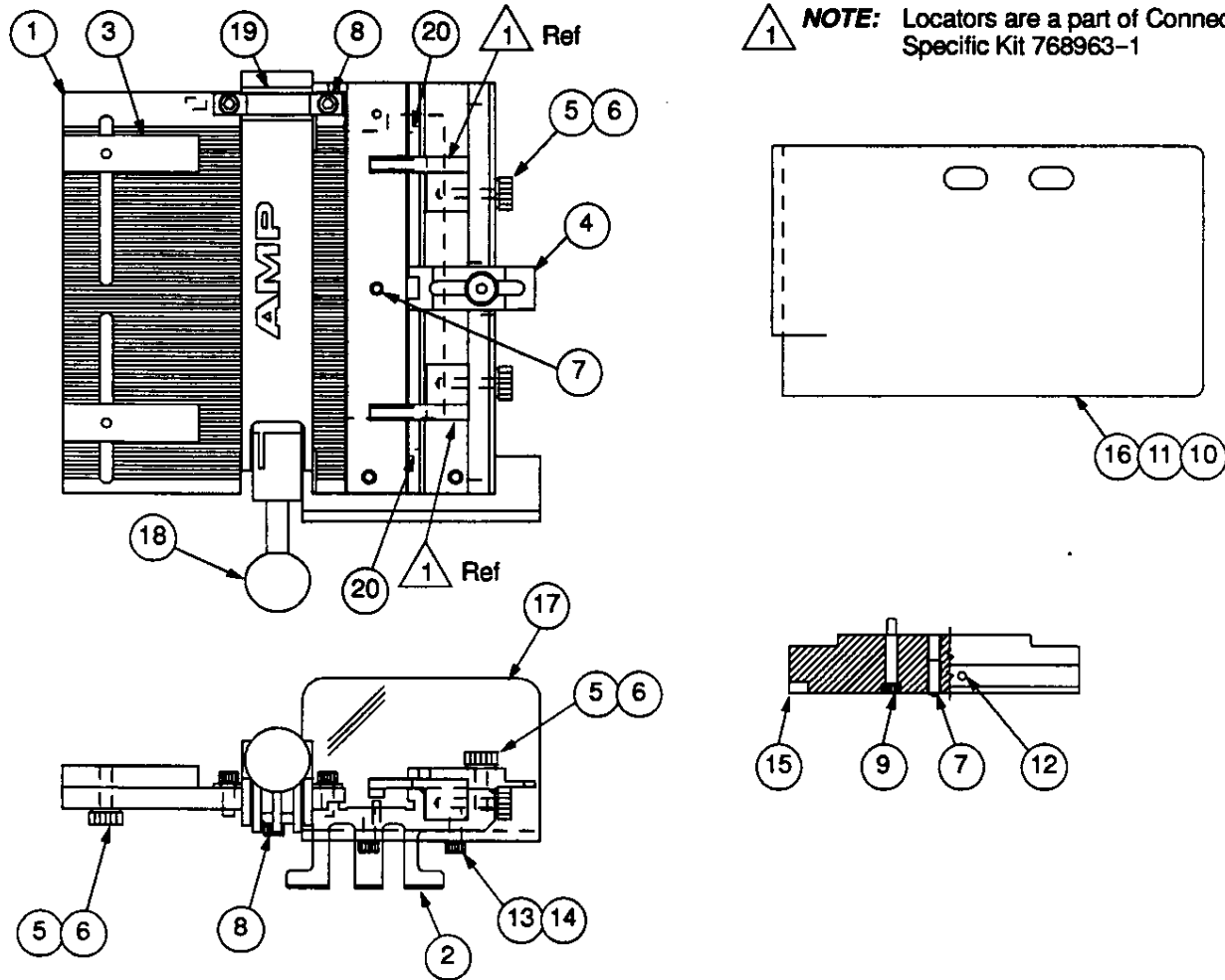
**7. REPLACEMENT/REPAIR**

Figure 6 provides a list of customer-replaceable items available for AMP-LATCH Universal 2mm Termination Tooling 768338-3. Order replacement parts through your local AMP 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)  
AMP INCORPORATED  
P.O. BOX 3608  
HARRISBURG, PA 17105-3608**

Tools may also be returned to AMP for evaluation and repair. If repairs exceed the parts available on the list of customer-replaceable parts, or evaluation is desired, send the tool with a written description of the problem to:

**CUSTOMER REPAIR (01-02)  
AMP INCORPORATED  
1523 NORTH 4TH STREET  
HARRISBURG, PA 17102-1604**



**CUSTOMER-REPLACEABLE PARTS FOR AMP-LATCH UNIVERSAL  
2mm TERMINATION TOOLING ASSEMBLY 768338-3**

ITEM	PART NUMBER	DESCRIPTION	QTY
1	768725-1	PLATE, Fluted	1
2	768599-1	BASE, Machined	1
3	768597-2	GUIDE, Cable	2
4	768613-1	STOP, Cable	1
5	27708-2	KNOB, Thumbscrew, No. 6	5
6	2-21000-0	SCREW, Skt Hd 6-32 x .50L	5
7	23057-4	PLUNGER, Ball, SST	1
8	1-21000-9	SCREW, Skt Hd 6-32 x .38L	2
9	1-21000-7	SCREW, Skt Hd 4-40 x .75L	2
10	21055-7	WASHER, Flat No. 10	3
11	21002-7	SCREW, Skt Hd 10-32 x .50L	3
12	3-21028-4	PIN, Roll .093 x .38L	1
13	1-21000-8	SCREW, Skt Hd 6-32 x .25L	2
14	21055-5	WASHER, No. 6	2
15	314823-1	UPPER TOOL MOUNT	1
16	768602-1	GUARD, Frame	1
17	768707-1	GUARD, Front	1
18	768915-1	CABLE CLAMP ASSEMBLY	1
19	768603-1	PIN, Pivot	1
20	2-21006-7	SCREW SET 6-32 x .25L	2

Figure 6

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