



AMP-LATCH* Hand Tool Kit 768340-1
for Connector-Specific Kits

PROPER USE GUIDELINES

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. AMP hand tools are intended for occasional use and low volume applications. AMP offers a wide selection of powered application equipment for extended-use, production operations.


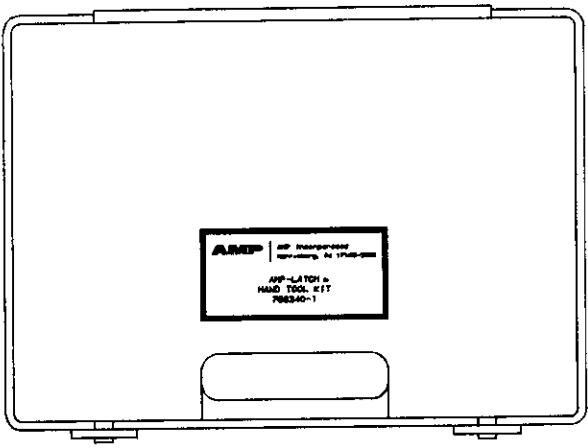
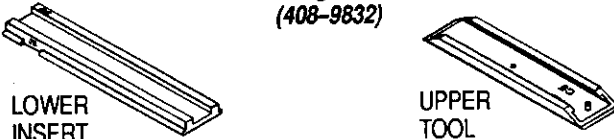
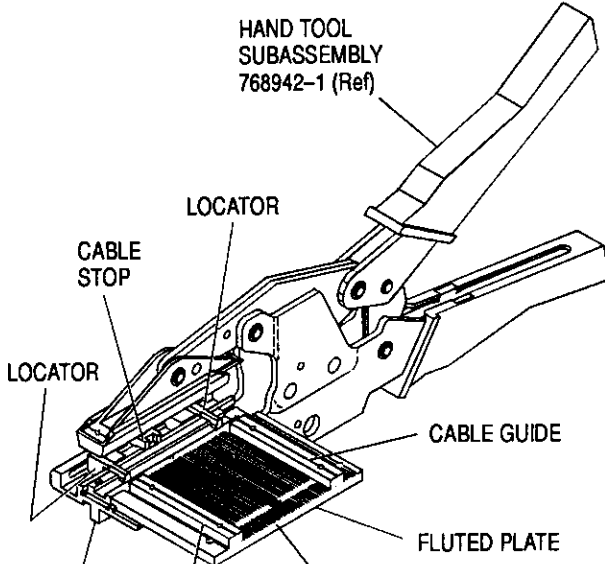
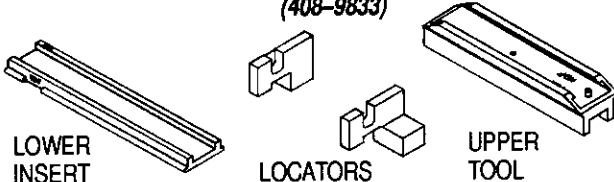
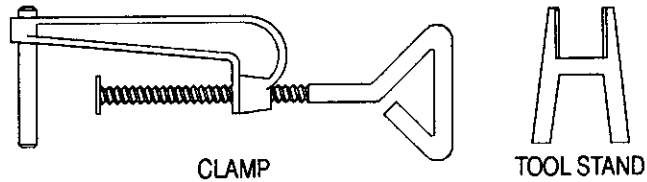
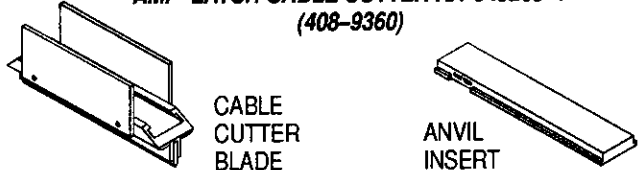
<p>CONNECTOR-SPECIFIC KIT 768341-1 <i>For Standard and Novo Receptacle Connectors</i> (408-9831)</p>  <p>LOWER INSERT UPPER TOOL</p>	<p>CARRYING CASE</p> 																
<p>CONNECTOR-SPECIFIC KIT 768346-1 <i>For Card Edge Connectors</i> (408-9832)</p>  <p>LOWER INSERT UPPER TOOL</p>	<p>AMP-LATCH HAND TOOL KIT 768340-1</p> 																
<p>CONNECTOR-SPECIFIC KIT 768349-1 <i>For HDF Low-Profile Connectors</i> (408-9833)</p>  <p>LOWER INSERT LOCATORS UPPER TOOL</p>	<table border="1"> <thead> <tr> <th data-bbox="164 1574 487 1659">OTHER CONNECTOR TYPES</th> <th data-bbox="487 1574 852 1659">CONNECTOR-SPECIFIC KITS</th> </tr> </thead> <tbody> <tr> <td>DIP</td> <td>768347-1 (408-9837)</td> </tr> <tr> <td>Stackable Receptacle</td> <td>768342-1 (408-9841)</td> </tr> <tr> <td>CHAMP* Latch Low-Profile</td> <td>768351-1 (408-9839)</td> </tr> <tr> <td>50-Position HDF</td> <td>768350-1 (408-9834)</td> </tr> <tr> <td>EUROLATCH*</td> <td>768352-1 (408-9840)</td> </tr> <tr> <td>Pre-Assembled Paddleboard</td> <td>768348-1 (408-9838)</td> </tr> <tr> <td>Universal I/O Pin Connector</td> <td>768344-1 (408-9836)</td> </tr> </tbody> </table>	OTHER CONNECTOR TYPES	CONNECTOR-SPECIFIC KITS	DIP	768347-1 (408-9837)	Stackable Receptacle	768342-1 (408-9841)	CHAMP* Latch Low-Profile	768351-1 (408-9839)	50-Position HDF	768350-1 (408-9834)	EUROLATCH*	768352-1 (408-9840)	Pre-Assembled Paddleboard	768348-1 (408-9838)	Universal I/O Pin Connector	768344-1 (408-9836)
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<p>BENCH MOUNT KIT 543264-1</p>  <p>CLAMP TOOL STAND</p>																	
<p>AMP-LATCH CABLE CUTTER KIT 543263-1 (408-9360)</p>  <p>CABLE CUTTER BLADE ANVIL INSERT</p>																	

Figure 1

1. INTRODUCTION

These instructions cover the use of AMP-LATCH Hand Tool Kit 768340-1, which is used to terminate 10- through 50-position AMP-LATCH and CHAMP Latch Low-Profile Connectors having 1.27 mm [.050 in.] centerline spacing in Figure 1. The kit provides three connector-specific kits to terminate AMP-LATCH Receptacle, Card Edge, and HDF Low-Profile Connectors. See Figure 1. To terminate other AMP-LATCH and CHAMP Latch Low-Profile Connectors, refer to the table in Figure 1 for connector-specific kit part numbers.

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

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

2. DESCRIPTION (Figure 1)

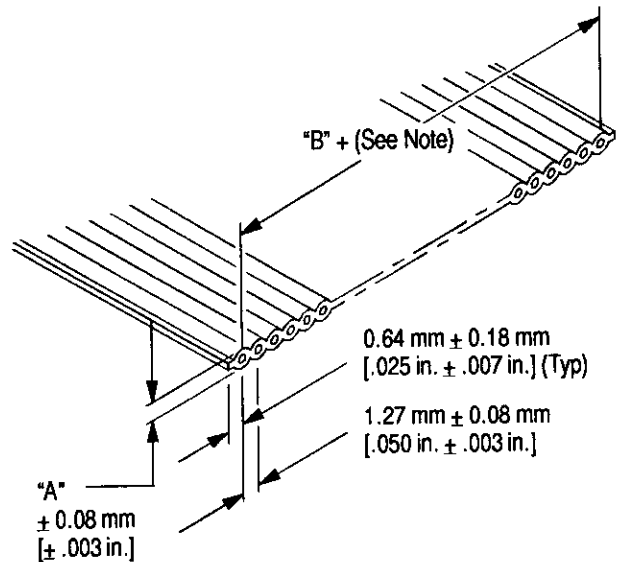
The hand tool kit consists of Hand Tool Subassembly 768942-1, Base Assembly Universal Hand Tool 768339-1, a bench mount kit, a cable cutter kit, and Connector-Specific Kits 768341-1 (for Standard and Novo Receptacle Connectors), 768346-1 (for Card Edge Connectors), and 768349-1 (for HDF Low-Profile Connectors). The connector-specific kit components are marked according to the type of connector with which they are used.

The hand tool and termination tooling are designed for interchangeability of product lines. The fluted plate of the tooling assembly ensures proper seating of the ribbon cable. The cable guides aid in keeping the ribbon cable positioned in the fluted plate. The locators provide proper positioning of the connector assembly with the ribbon cable. The cable stop provides proper positioning of the ribbon cable for flush terminations. The upper tool mount provides a quick connect/disconnect for the upper termination tooling.

The connector-specific kits each contain an upper tool, which is inserted into the upper tool mount of the hand tool and applies an even force over the connector during termination, and a lower insert, which is inserted into the base of the hand tool to position the connector under the upper tooling. Connector-Specific Kit 768349-1 contains a pair of locators for properly situating HDF Low-Profile Connectors in the lower insert.

3. CABLE REQUIREMENTS (Figure 2)

The hand tool kit will terminate ribbon cable with 26 AWG solid or stranded conductors, 28 AWG solid or stranded conductors, or 30 AWG solid conductors to the connectors listed in Figure 1.



NOTE: Accumulative Tolerance For Cable Conductors 1 Through 34 is +0.25 mm [.010 in.] and Through 60 is +0.38 mm [.015 in.].

CONDUCTOR		DIMENSION	
SIZE (AWG)	TYPE	A	B
26	Stranded or Solid	0.889 mm [.035 in.]	1.27 mm [.050 in.] X (Total No. of Conductors Minus One)
28	Stranded or Solid		
30	Solid		

Figure 2

Use the cable cutter kit according to the instructions in 408-9360 to cut the ribbon cable to the recommended dimensions shown in Figure 2.

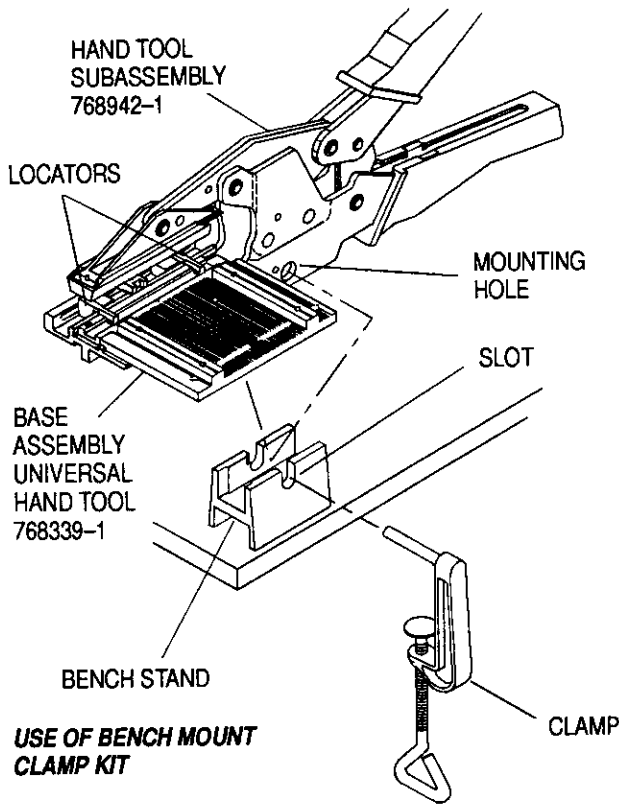
NOTE Mount the hand tool onto a suitable work surface, whenever possible, before cutting the ribbon cable. Refer to Section 4, BENCH MOUNT CLAMP PROCEDURE.

4. BENCH MOUNT CLAMP PROCEDURE (Figure 3)

1. Choose a flat surface at the edge of a 50 mm [2 in.]-thick (maximum) bench.
2. Place the bench stand at the edge of the bench.
3. Position the hand tool in the bench stand and align the hand tool mounting hole with the slot in the top of the bench stand.
4. Place the clamp post through the bench stand and hand tool; then tighten the clamp.

5. CONNECTOR-SPECIFIC KIT INSTALLATION (Figure 4)

1. Select the appropriate cable, connector, and connector-specific kit.
2. Slide upper tool insert (from connector-specific kit) onto the upper tool mount.



USE OF BENCH MOUNT CLAMP KIT

Figure 3

3. Slide the lower insert (from connector-specific kit) into base.
4. Place cable in the flutes of the fluted plate and center with the cable stop slot.

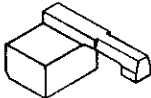
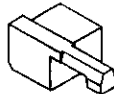
NOTE Cable conductors must stay in the same flutes for the entire length of the fluted plate.

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

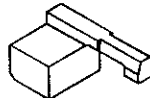
NOTE Cable guide key should be in the same flute for its entire length.

6. Remove cable from fluted plate.
7. Place the connector, cover down, into the lower insert and place the cable between the cable guides and into the flutes of the fluted plate.
8. Slide the cable into the connector until the cable end is flush with the far side of the connector cover.
9. Adjust connector until cable is seated in all the cover flutes.
10. Seat the locators against the connector and secure in position.

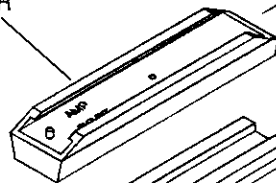
Locators positioned like this in base for smaller connectors.



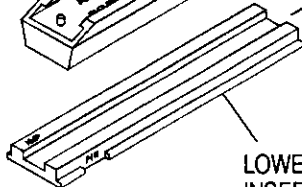
Locators positioned like this in base for larger connectors.



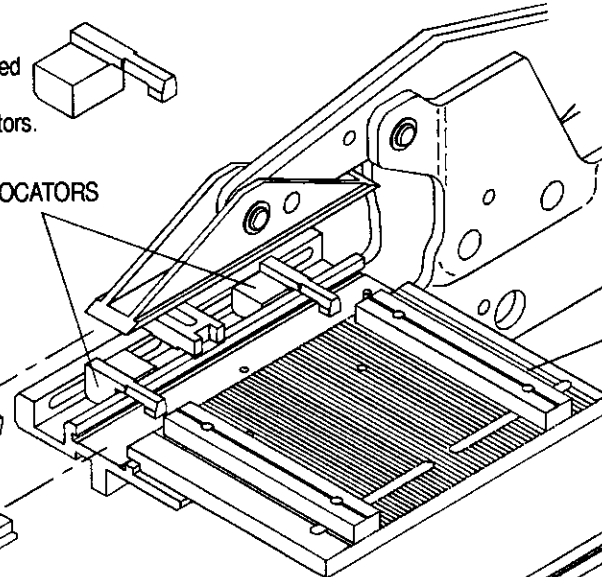
UPPER TOOL



LOWER INSERT



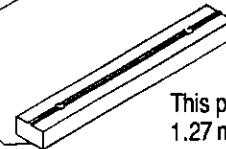
LOCATORS



CABLE GUIDE

CABLE GUIDE ORIENTATION

KEY



This position for 1.27 mm [.050 in.] centerline cable conductors.

Figure 4

NOTE

Depending on the number of contact positions in the connector, the locators should be oriented as shown in Figure 4 to accommodate the length of the connector.

NOTE

Cable conductors must be in the same flutes for the entire length of the fluted plate and the cable conductors should fill in all the flutes of the connector cover.

11. Arrange the cable stop as follows:

- a. For flush end terminations, adjust the cable stop to the desired position.
- b. For daisy-chain (feed-through) terminations, remove the cable stop.

6. TERMINATION PROCEDURE (Figure 5)

NOTE

Mount the hand tool onto a suitable work surface, whenever possible, before terminating connectors. Refer to Section 4, BENCH MOUNT CLAMP PROCEDURE.

1. Position the connector (cover down) into the lower insert, and between the locators.

NOTE

In some instances the tool opening restricts the connector from gaining entrance into the lower insert when using two locators. The front locator can be removed to gain entry into the lower insert, or the upper tool may be removed and replaced for each termination.

CAUTION

For Pin and 50-position HDF Plug Connectors, make sure that the adaptor (included with the connector-specific kit) is placed in the connector **before** starting termination procedures. Refer to the instructions packaged with the connector-specific kit.

2. Place the cable stop against the connector for flush terminations, or remove the cable stop for daisy-chain applications.
3. Position the ribbon cable between the cable guides and press down to seat the conductors into the flutes in the fluted plate.
4. Slide the ribbon cable through the connector and against the cable stop.

NOTE

For daisy-chain terminations, remove the cable stop, mark cable where connectors will be terminated, and slide the cable to the appropriate mark.

5. Close the tool handles until the ratchet releases, and allow them to open fully before removing the terminated connector.

7. TOOL MAINTENANCE/INSPECTION (Figure 6)

Keep the tool kit components clean with a clean, soft, lint-free cloth or a clean, soft brush. When not in use, keep the hand tool kit in the carrying case and store it in a clean, dry area.

AMP recommends that the hand tool kit be inspected immediately upon arrival and at regularly-scheduled intervals thereafter to ensure that the hand tool kit components have not been damaged during handling or use.

TYPICAL TERMINATION OF AN AMP-LATCH CARD-EDGE CONNECTOR

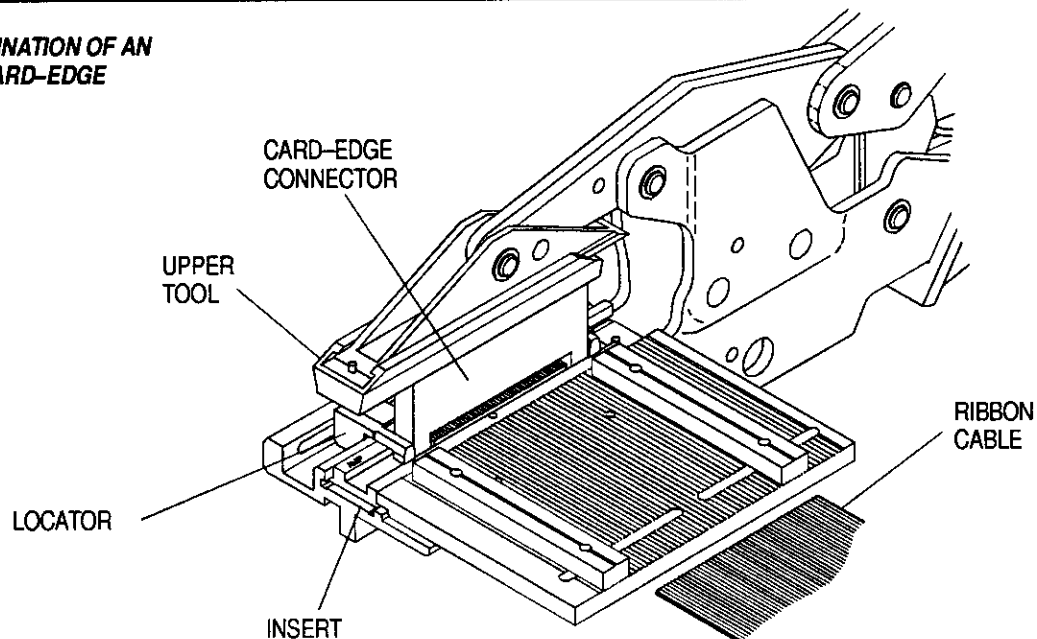
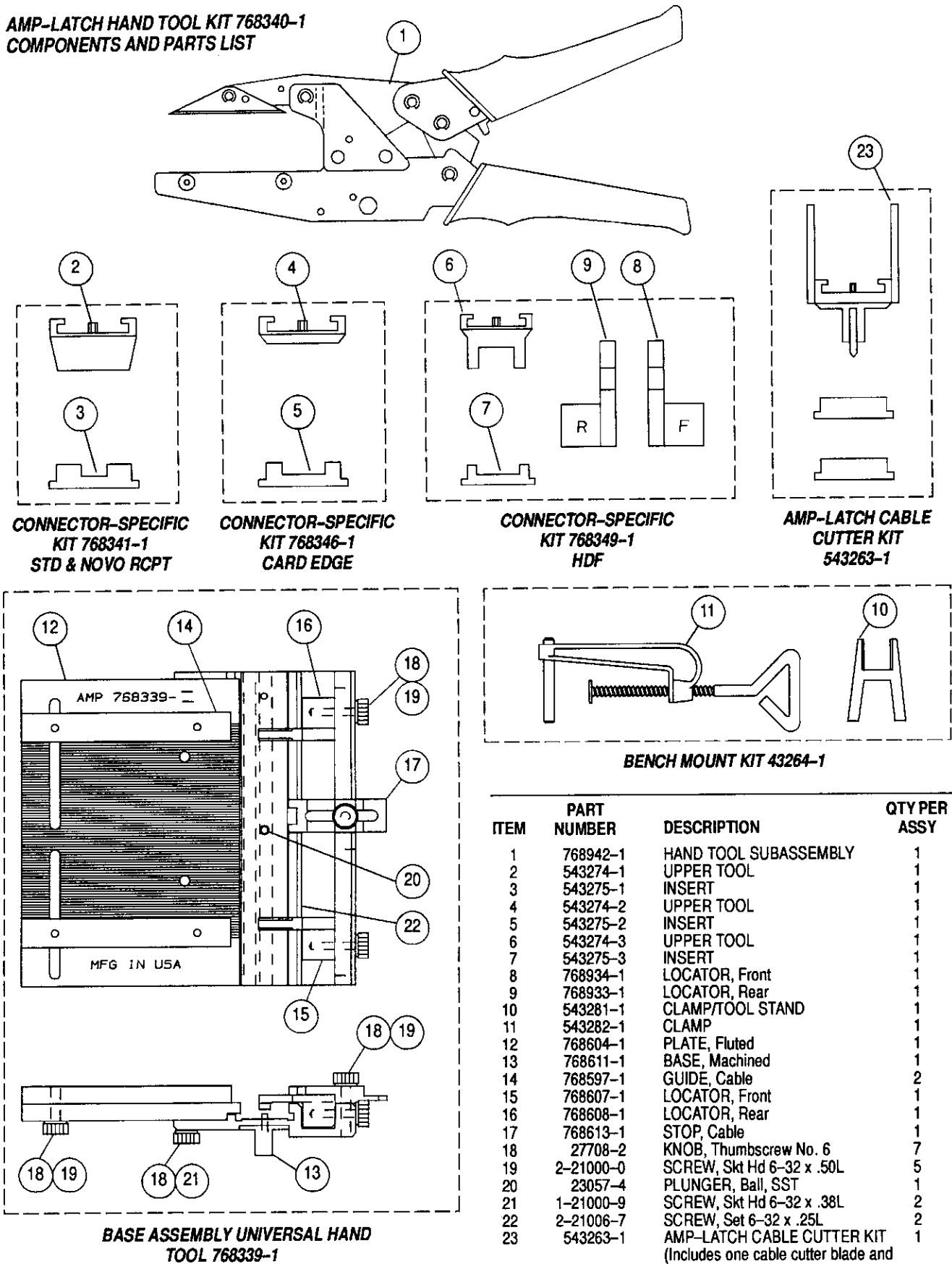


Figure 5

AMP-LATCH HAND TOOL KIT 768340-1 COMPONENTS AND PARTS LIST



ITEM	PART NUMBER	DESCRIPTION	QTY PER ASSY
1	768942-1	HAND TOOL SUBASSEMBLY	1
2	543274-1	UPPER TOOL	1
3	543275-1	INSERT	1
4	543274-2	UPPER TOOL	1
5	543275-2	INSERT	1
6	543274-3	UPPER TOOL	1
7	543275-3	INSERT	1
8	768934-1	LOCATOR, Front	1
9	768933-1	LOCATOR, Rear	1
10	543281-1	CLAMP/TOOL STAND	1
11	543282-1	CLAMP	1
12	768604-1	PLATE, Fluted	1
13	768611-1	BASE, Machined	1
14	768597-1	GUIDE, Cable	2
15	768607-1	LOCATOR, Front	1
16	768608-1	LOCATOR, Rear	1
17	768613-1	STOP, Cable	1
18	27708-2	KNOB, Thumbscrew No. 6	7
19	2-21000-0	SCREW, Skt Hd 6-32 x .50L	5
20	23057-4	PLUNGER, Ball, SST	1
21	1-21000-9	SCREW, Skt Hd 6-32 x .38L	2
22	2-21006-7	SCREW, Set 6-32 x .25L	2
23	543263-1	AMP-LATCH CABLE CUTTER KIT (Includes one cable cutter blade and two anvil inserts)	1

Figure 6

Order additional hand tool kits and replaceable parts through your 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

8. REVISION SUMMARY

Revisions to this document include:

Per EC 0150-3309-94:

- Added AMP-LATCH Cable Cutter Kit 543263-1
- Added information to Section 3
- Changed quantity for Item 18 in Figure 6
- Replaced Receptacle 768792-1 (408-9835) with Connector 768344-1 (408-9836) in Figure 1

Per EC 0990-0252-93:

- Updated format