AMP INCORPORATED
HARRISBURG, PA 17105

CUSTOMER HOTLINE
1 800 722-1111

APPLICATION AND MAINTENANCE FOR AMP* SHIELDED DATA LINK (SDL) HAND TOOL KIT 91290-1 FOR TERMINATING AMP SDL CONNECTORS

IS 9682

RELEASED
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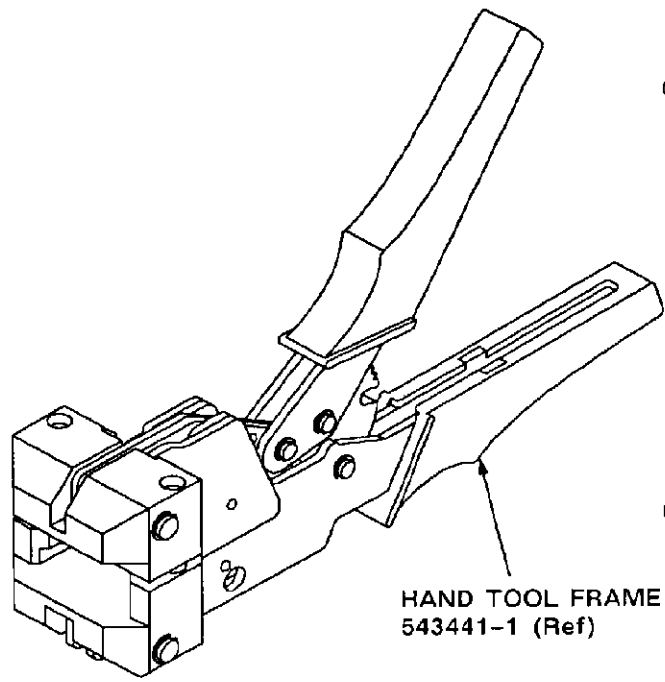
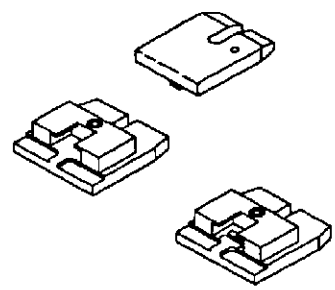
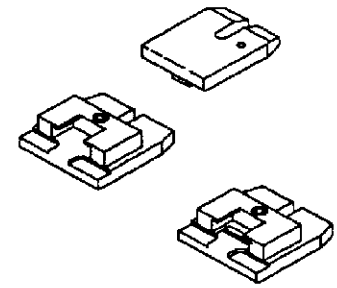
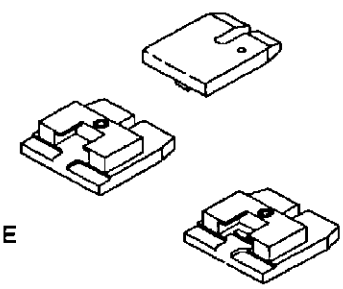




DIE SET — 4 POSITION
(P/N 543448-1)



DIE SET — 8 POSITION
(P/N 543448-3)



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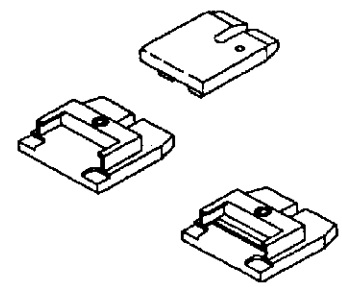

DIE SET — 16 POSITION
(P/N 543448-6)

HAND TOOL FRAME	PLUG CONNECTOR POSITIONS	CABLE TYPE†	LOWER DIE COMPONENTS††	UPPER DIE COMPONENTS††	DIE COLOR MARKING	DIE SET
543441-1	4	Round	543447-1	543445-1	Red	543448-1
	6		543447-2	543445-2	Green	543448-2
	8		543447-3	543445-3	Yellow	543448-3
	16		543447-6	543445-6	Blue	543448-6
	4	Flat	543446-1	543445-1	Red	543448-1
	6		543446-2	543445-2	Green	543448-2
	8		543446-3	543445-3	Yellow	543448-3
	16		543446-6	543445-6	Blue	543448-6

† See Cable Specification Drawings provided in AMP Catalog 82101 for applicable cable sizes and restrictions on cable jacket and conductor insulation materials.

†† Die components not available separately.

Fig. 1

1. INTRODUCTION

This instruction sheet (IS) covers the use of AMP SDL Hand Tool Kit 91290-1 which is designed to terminate 4-, 6-, 8-, and 16-position AMP SDL plug connectors. The plug connectors are compatible with round or flat shielded cables that use 28 to 24 AWG 7-strand conductors.

For information concerning the assembly of SDL plug connectors, refer to IS 9072. Product specifications, connector selection, cable requirements, and intended applications are available in AMP Application Specifications 114-02086, 114-02090, and AMP Catalog 82101.

NOTE

All dimensions on this instruction sheet are in inches.

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2. DESCRIPTION (Figure 1)

The hand tool kit consists of the following: a hand tool frame (p/n 543441-1), four die sets (each with an upper die, and two lower dies for flat or round cable), a bench clamp kit (see Figure 2), and a carrying case (see Figure 5).

The hand tool frame is designed to provide a predetermined shut height to ensure proper termination of each connector. The die sets are used to terminate the plug connectors, applying force to contacts, primary strain relief, and secondary strain relief. Each die set is appropriately marked and color coded to ensure connector, cable, and upper and lower die compatibility. The lower dies position the connector under the upper die for applicable connector size and cable style.

The bench clamp kit, consisting of a bench stand and a tool clamp, enables the operator to use the hand tool mounted on an appropriate work bench.

3. BENCH CLAMP PROCEDURE (Figure 2)

1. Choose a flat surface at the end of a 2-in.-thick (maximum) bench.

2. Place the bench stand at the edge of the bench.

3. Position hand tool in the bench stand and align the mounting hole with the slot in the bench stand. Place the tool clamp through the bench stand and hand tool; then tighten the clamp.

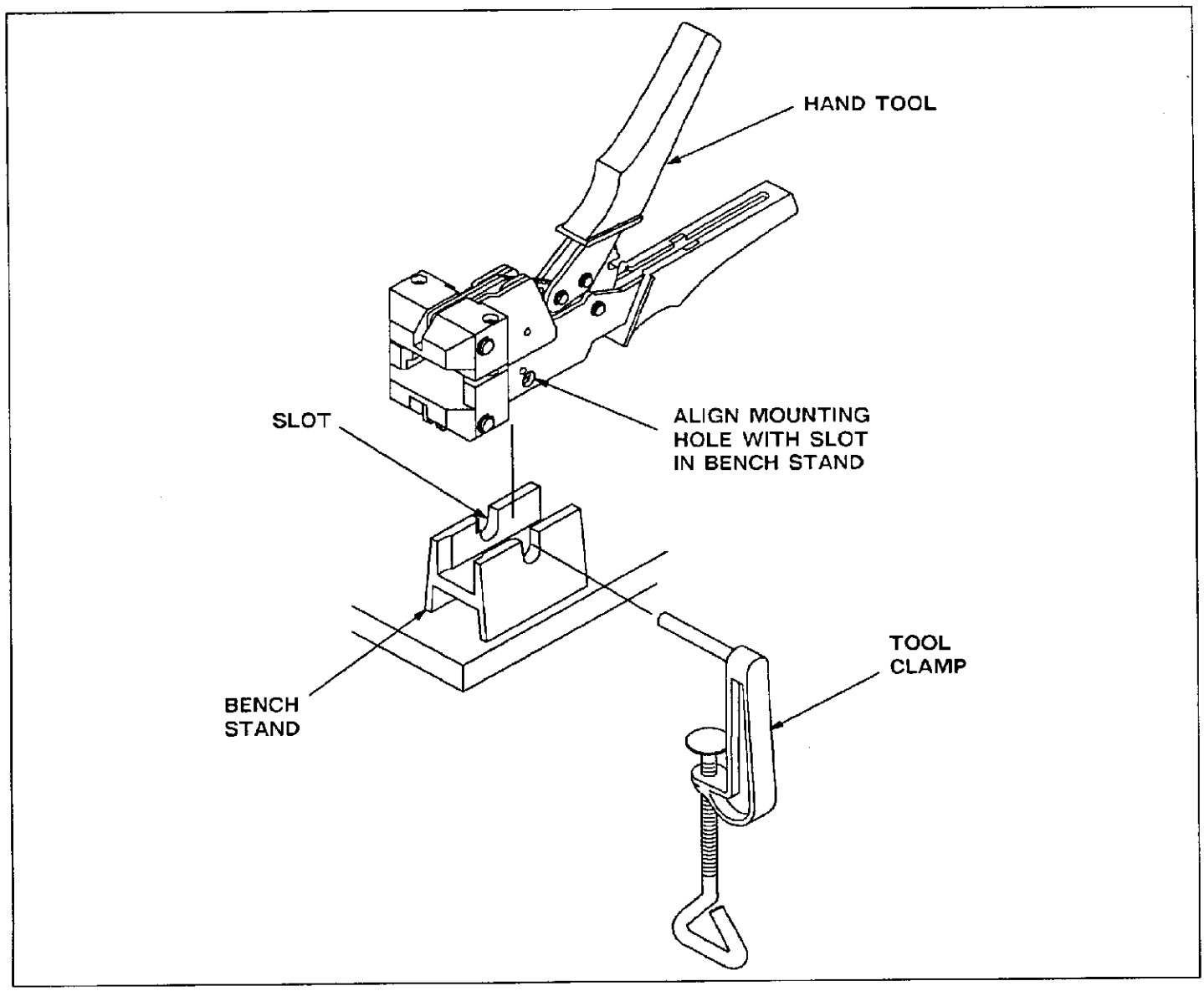


Fig. 2

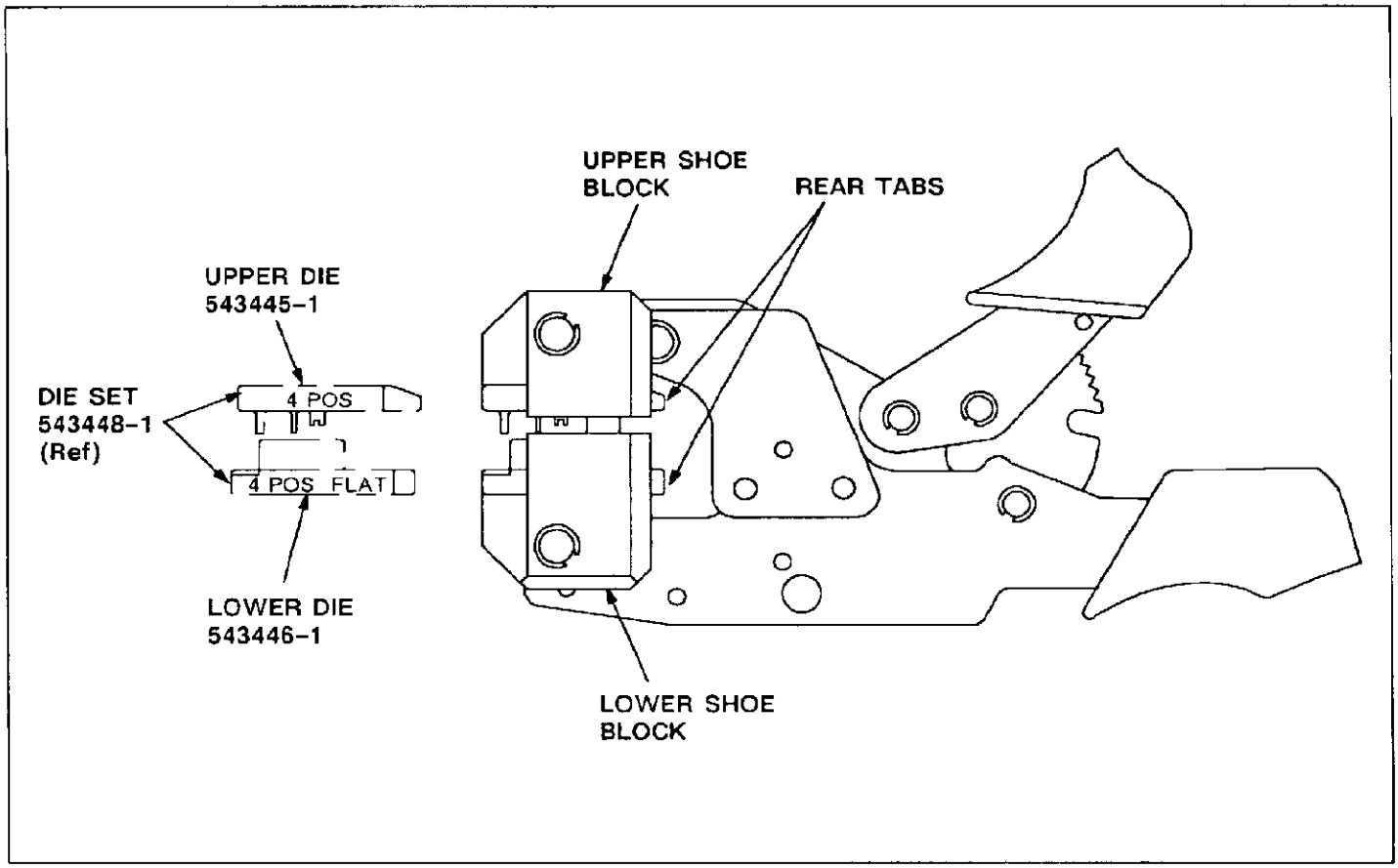


Fig. 3

4. DIE INSTALLATION AND REMOVAL (Figure 3)

Determine specific size and style of connector and cable to be terminated (refer to AMP Catalog 82101); then select the appropriate die set components in the tool case (see Figure 5) and proceed as follows:

1. Slide the upper die into the upper shoe block of the hand tool until it snaps into place. See Figure 3.

NOTE

The upper die is used for both flat or round cable applications.

2. Slide the lower die ("RND" for round cable applications; "FLAT" for flat cable applications) into the lower shoe block of the hand tool until it snaps into place. See Figure 3.

This completes the die installation procedure.

3. To remove the upper or lower die, push on the rear tab of either die, releasing it from the shoe block of the hand tool. Remove the die(s) from the front of the hand tool.

5. TERMINATION PROCEDURE (Figure 4)

NOTE

Mount hand tool onto a flat surface whenever possible before terminating any connectors. Refer to Section 3, BENCH CLAMP PROCEDURE.

1. Prepare cable according to the procedures provided in AMP Application Specifications 114-02086 and 114-02090.

NOTE

For round cable applications, make sure that the cable you use contains the same number of conductors as there are cavities in the plug connector. If there are NOT enough conductors, the blank cavity(ies) ***must be filled*** *with "dummy" wires having the same conductor insulation diameter as the conductors in your cable.*

2. Slide connector (with cable in place) into lower die of hand tool, as shown in Figure 4.

3. Close tool handles until ratchet releases to complete the crimp.

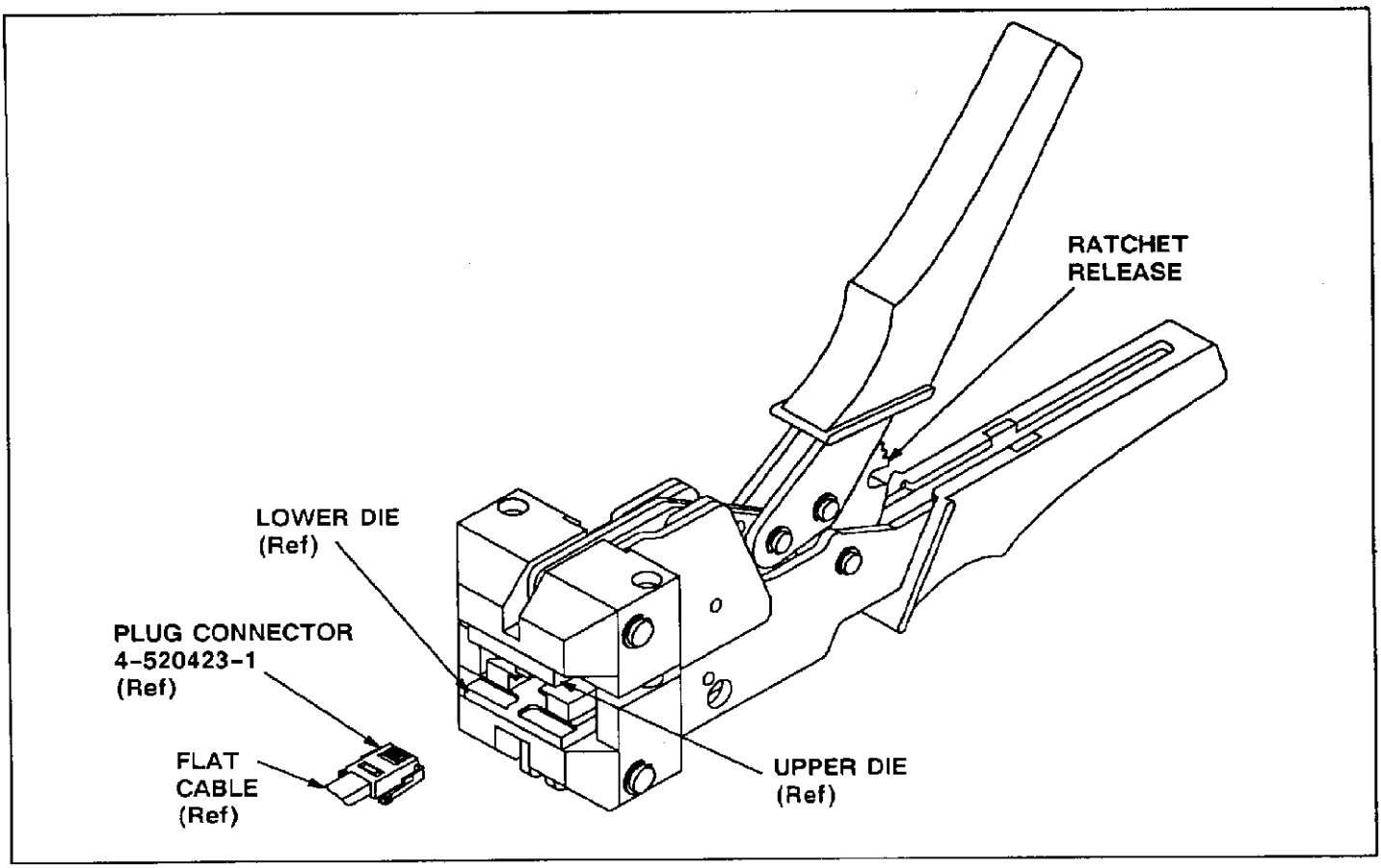


Fig. 4

NOTE

Once ratchet is engaged, handles will not open until they are FULLY closed. This tool feature ensures a proper crimp.

NOTE

If connector or die inserts were not properly selected, remove and discard the damaged product by squeezing the tool handles slightly to open the tool handles; then push forward on the ratchet release. See Figure 4.

4. Inspect the connector with the crimp height requirements provided in AMP Application Specification 114-02086 or 114-02090.

6. DAILY MAINTENANCE

AMP recommends that each operator be made aware of — and responsible for — the daily maintenance of the tool.

1. Remove all foreign particles with a clean, soft brush, or a clean, soft, lint-free cloth.

2. Make sure all debris is removed from the bottom surfaces of the upper and lower shoe blocks.

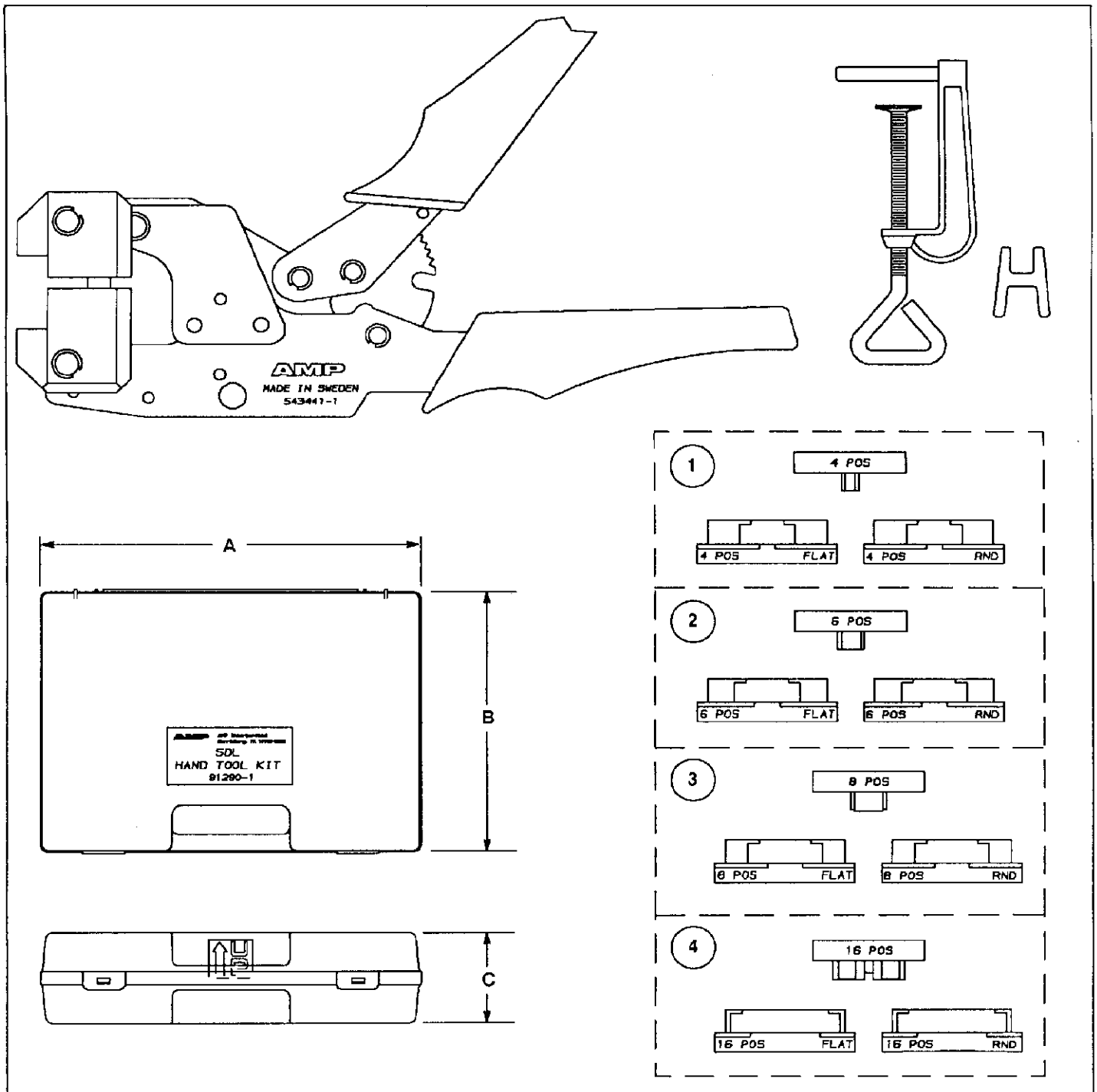
7. TOOL INSPECTION/REPLACEMENT

AMP recommends that the hand tool kit be inspected immediately upon its arrival at your facility to ensure that the tool kit has not been damaged during transit.

Customer-replaceable parts are listed in Figure 5. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. When parts are needed, order by part number and description to:

CUSTOMER SERVICE (38-35)
AMP INCORPORATED
P.O. BOX 3608
HARRISBURG, PA 17105-3608

or a wholly owned subsidiary of AMP Incorporated.



HAND TOOL KIT					
CASE SPECIFICATIONS			ITEM	DIE DESCRIPTION	PART NUMBER
DIMENSIONS (IN.)		WEIGHT	1	Die Set, Rnd and Flat, 4 Position	543448-1
A	14	3 LB	2	Die Set, Rnd and Flat, 6 Position	543448-2
B	10		3	Die Set, Rnd and Flat, 8 Position	543448-3
C	3 1/2		4	Die Set, Rnd and Flat, 16 Position	543448-6

Fig. 5

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity:

91290-1