

NOTE: TOOLING ASSEMBLY CAN BE MOUNTED WITH SLIDE FORWARD FOR DEAD-END TERMINATIONS.

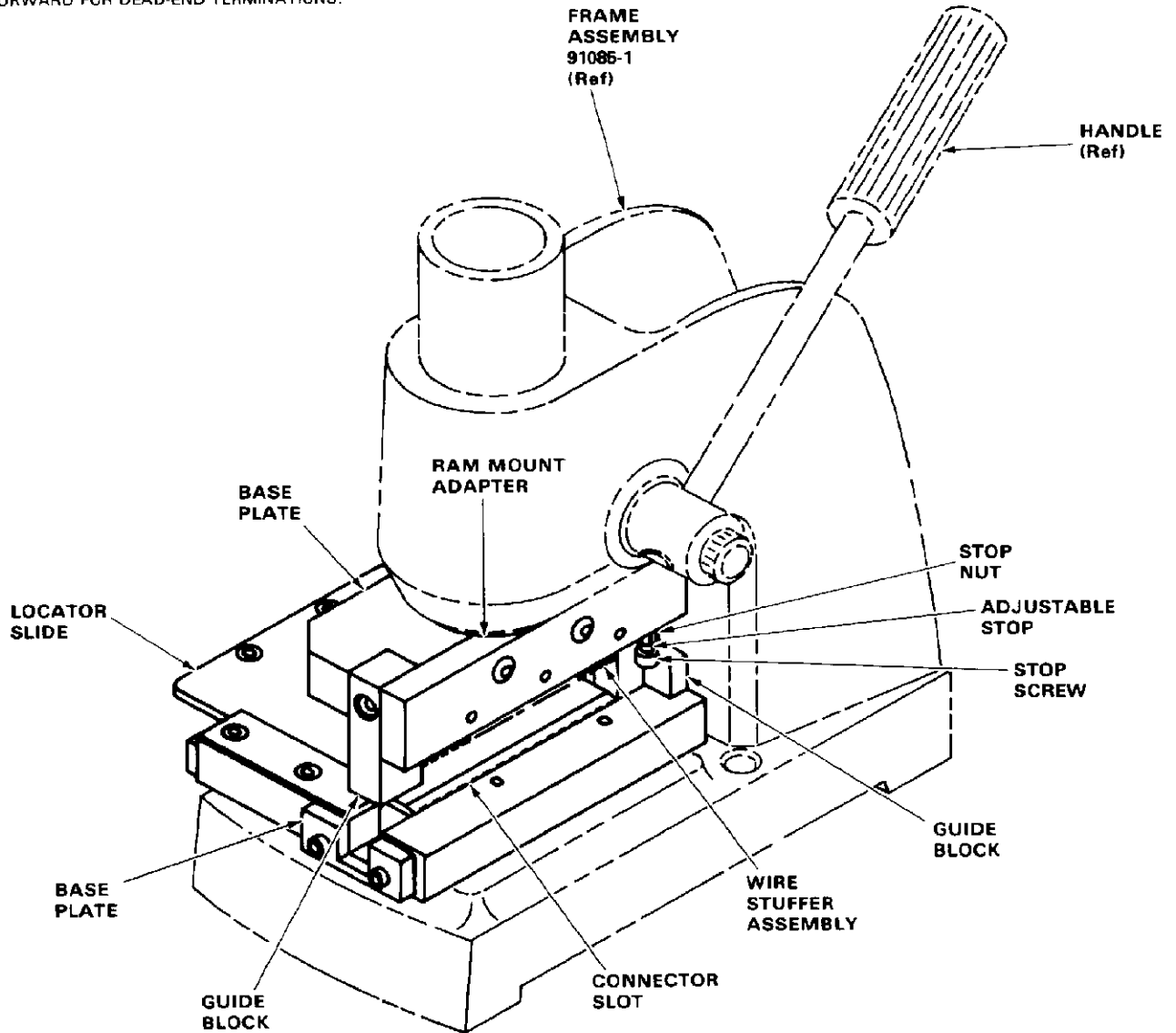


Fig. 1

## 1. INTRODUCTION

This instruction sheet (IS) covers the operation and maintenance of the AMP MTA Ribbon Tooling Assembly 59820-1 which terminates receptacle connectors with contact spacing on .156-in. centers.

Read these instructions thoroughly before starting.

NOTE

*All dimensions on this sheet are in inches.*

## 2. DESCRIPTION (Figure 1)

The tooling assembly is designed for use in the AMP

Frame Assembly 91085-1. It can also be used in the -2 frame assembly provided the base plate subassembly 126328-2 is removed.

Each tooling assembly consists of an upper and lower tooling subassembly. The upper tooling features a base plate, a ram mount adapter, a wire stuffer assembly, a guide block, and an adjustable stop. The lower tooling features a base plate, a locator slide, a connector slot, and a guide block. The function of these features will be described in the following procedures.

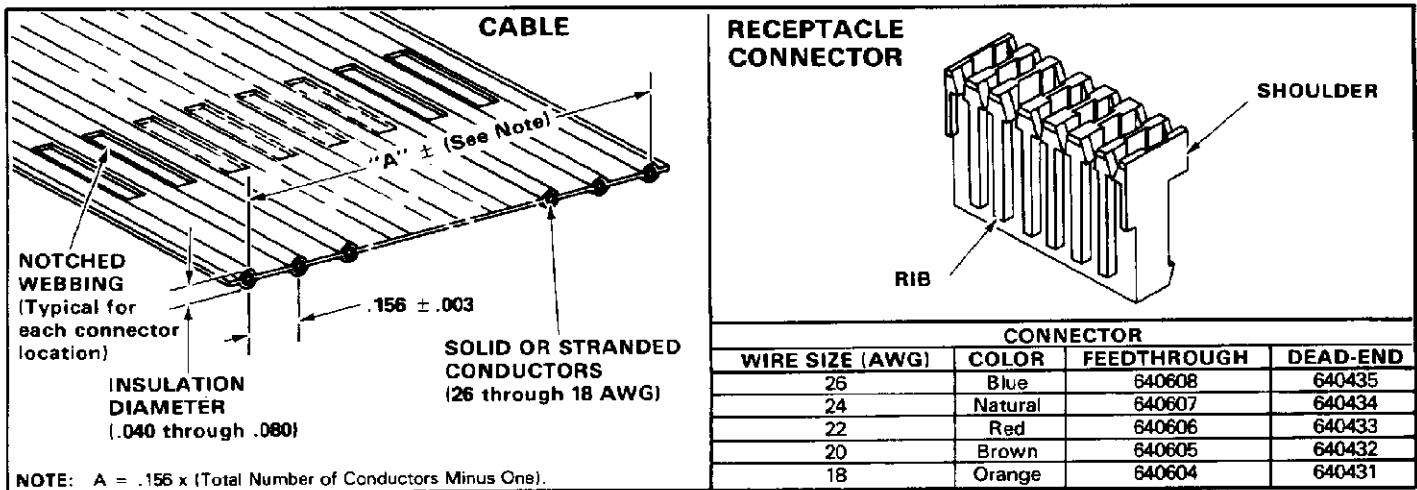


Fig. 2

### 3. CABLE REQUIREMENTS

The tooling assembly will terminate ribbon cable with No. 26 through 18 AWG solid or stranded conductors to receptacle connectors. See Figure 2 for the recommended cable dimensions and connector base part numbers.

**CAUTION**

*The cable end must be cut 90° 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

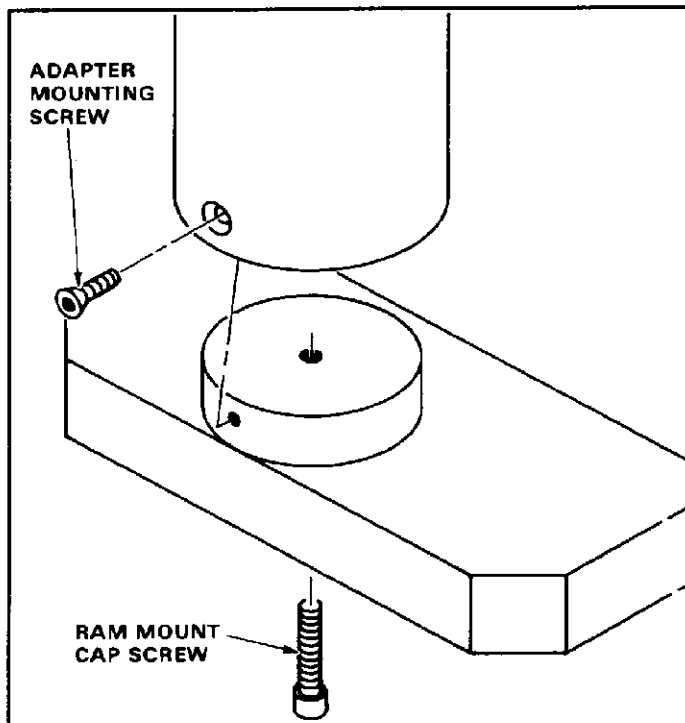


Fig. 3

### 4. SETUP PROCEDURE (Figures 3 and 4)

**NOTE**

*The tooling assembly is designed for use in the 91085-1 frame assembly. If you have the 91085-2 frame assembly, convert it to a -1 by removing the base plate subassembly 126328-2.*

1. Loosen the cap screw securing the ram mount adapter to the base plate just enough to allow the adapter to move freely.
2. Remove the two adapter mounting screws that are used to secure the adapter in the ram.
3. Remove the two lower base mounting screws from the lower tooling base plate.
4. Mate the upper and lower tooling and place it on the base plate of the frame assembly.

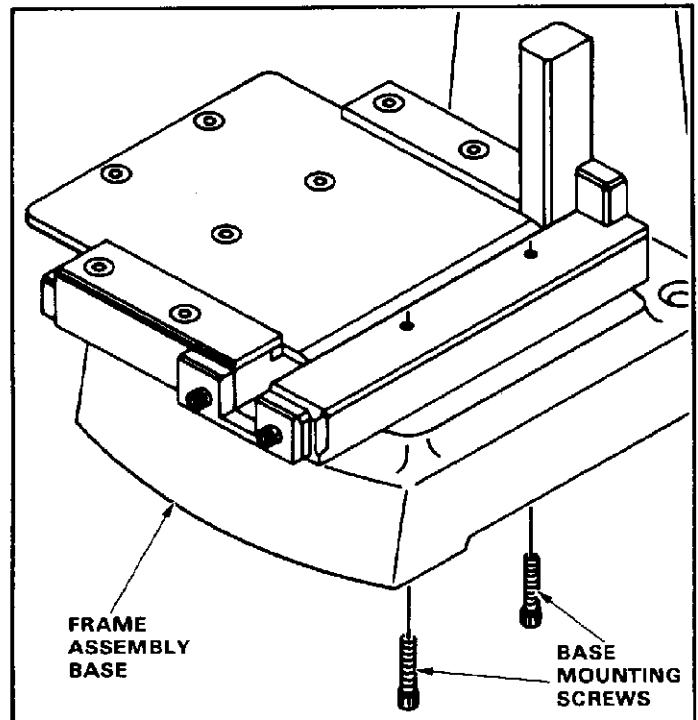


Fig. 4

5. Align the adapter mounting holes and thread the two adapter mounting screws in until secured.
6. Start, but do not tighten, the two lower base mounting screws.
7. Secure ram mount cap screw in the center of the adapter.
8. Cautiously rotate frame assembly handle forward and mate the upper tooling with the lower tooling.
9. Place the back side of the frame assembly on workbench and, with the tooling stop bottomed on the lower tooling, secure the two base plate mounting screws.
10. Operate the frame assembly handle through a complete cycle and check to be sure guides enter slots without too much drag. If excessive drag is apparent, re-adjust lower tooling.

This completes setup for termination of all connectors listed in Figure 2.

## 5. TERMINATING PROCEDURE

Go through these procedures with a sample connector and inspect termination as described in AMP MTA 156 Product Specification 114-1020. After you are satisfied with the inspection, terminate production connectors as follows.

1. Determine the number of contact positions needed for your application, then refer to Figure 2 for cable and connector requirements.

2. Cut cable leading edge 90 degrees to the cable edge.
3. Determine cable termination position and remove webbing between conductors at this position with AMP Notching Tool 59835-1. See Figure 2.
4. Pull locator slide outward and insert connector — then slowly release slide while guiding connector ribs into slide grooves. See Figure 5.
5. Position cable over connector — make sure it is properly aligned, then rotate handle forward until tool stop bottoms.
6. Return the tool handle to starting position and remove the terminated connector.

### NOTE

*If wire is inserted too deep or too shallow, loosen stop nut and readjust stop screw — turn it COUNTERCLOCKWISE to increase insertion depth and CLOCKWISE to decrease insertion depth (1/4 turn equals .008 inch).*

## 6. TOOL CERTIFICATION

The procedures described in the following text have been established to assure quality and reliability of AMP terminating tools. A brief check should be made daily, and a more detailed inspection should be scheduled by your quality control group.

### A. Daily Maintenance

Each operator should be aware of, and responsible for the following:

1. Remove dust, moisture, and other contaminants with a clean brush, or soft, lint-free cloth. Do NOT use objects that could damage the tool.

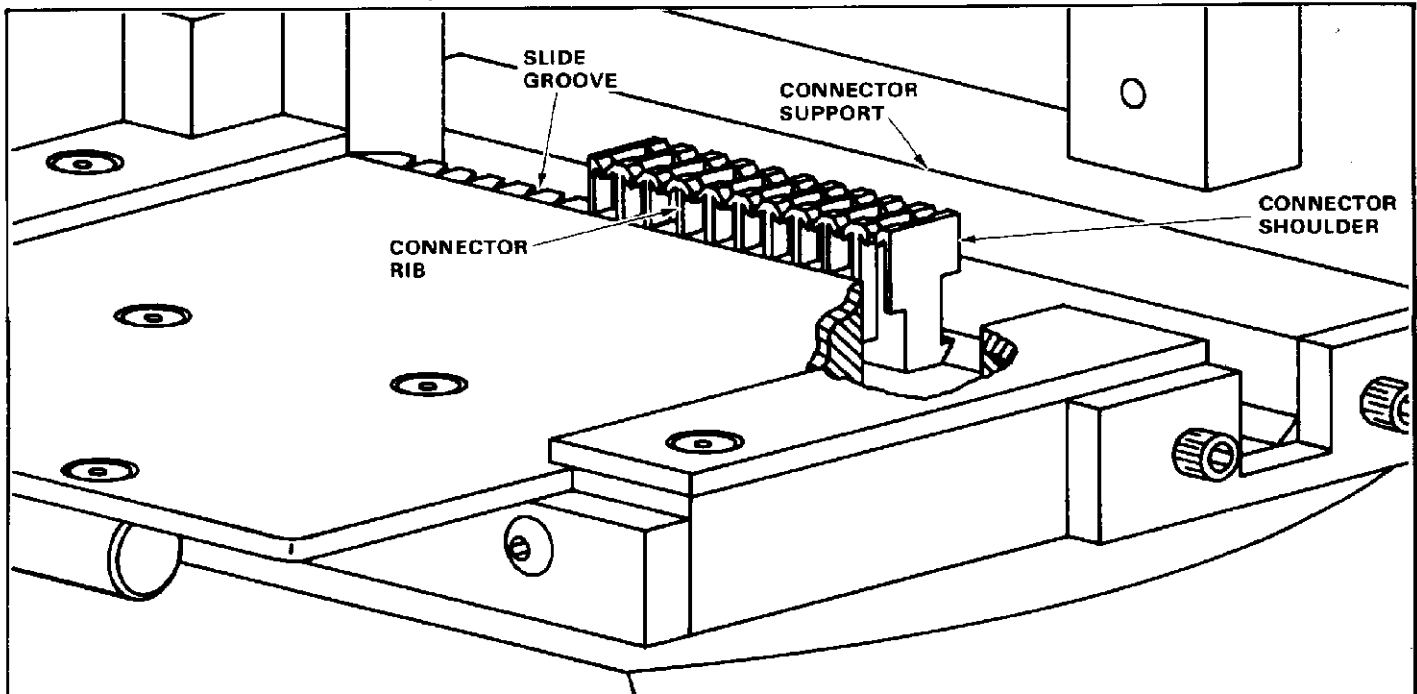


Fig. 5

2. Make sure all components are in place and properly secured. (If NOT, return the tools to your supervisor.)
3. Rotate the frame assembly handle forward to be sure ram moves smoothly.
4. Check to be sure the locator slide moves freely.
5. Check to be sure all screws are secured.

**B. Quality Control Maintenance**

Regular inspections should be performed by your quality control personnel with a record of quality control inspections remaining with the personnel responsible for the tool. We recommend one inspection a month; however, operator training and skill, amount of use, ambient working conditions, and your company's established standard are all factors in establishing inspections.

These inspections should be done in the following sequence:

1. Remove any accumulated film with a suitable cleaning agent that will NOT affect polycarbonate plastic material.

2. Make sure all components are in place and properly secured. See Figure 6.
3. Make a few test terminations and inspect them in accordance with AMP MTA 156 Product Specification 114-1020.
4. Check for chipped, cracked, worn, or broken areas. If damage is evident, repair is necessary. See Paragraph 7, REPAIR.

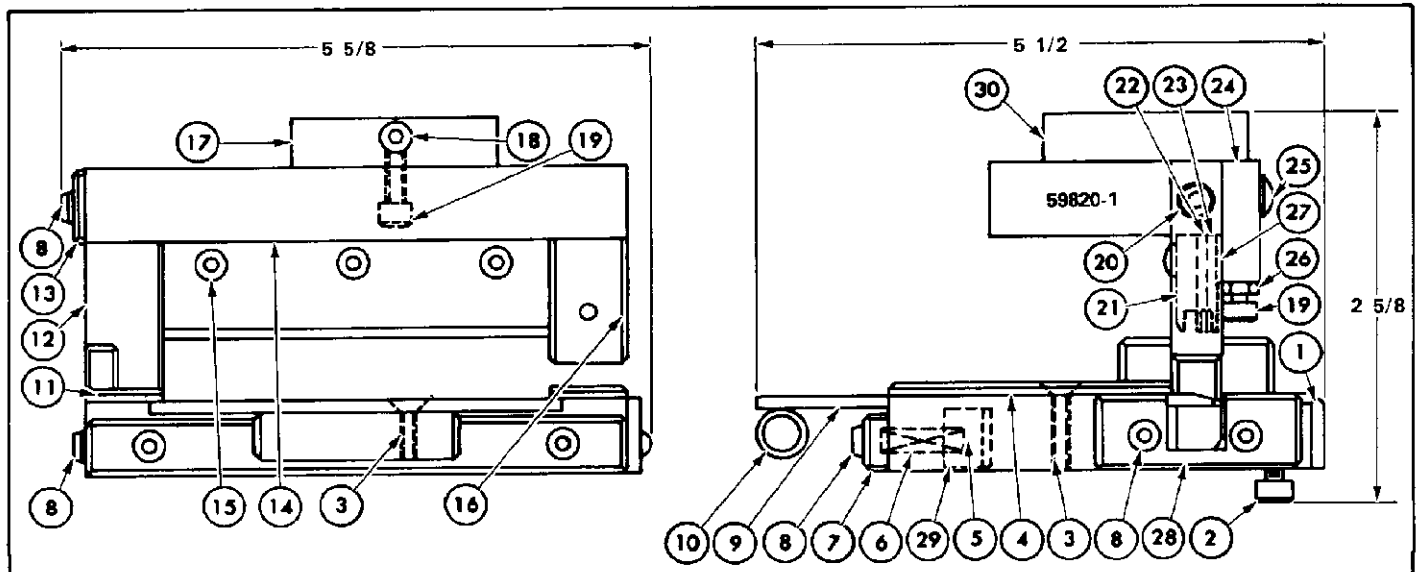
**7. REPAIR**

Customer replaceable parts are listed in Figure 6. A complete inventory should be stocked and controlled to prevent lost time when replacement is required.

Parts other than those specified in Figure 6 must be replaced by AMP to insure certification of the tool. When repair by AMP is necessary, return the tool with a written description of the problem to:

AMP Incorporated  
 Customer Repair  
 1523 North 4th Street  
 Harrisburg, Pennsylvania 17105

or a wholly owned subsidiary of AMP Incorporated.



TOOLING ASSEMBLY PART NO.	DESIGNED FOR	REPLACEMENT PARTS							
		ITEM NO.	PART NO.	DESCRIPTION	QTY	ITEM NO.	PART NO.	DESCRIPTION	QTY
59820-1	MTA 156 Ribbon Cable Connectors	1	310728-1	BASE PLATE, Lower	1	16	310716-1	POST, Guide	1
		2	2- 21000-9	SCREW, Skt Hd Cap	2	17	308468-1	ADAPTER	1
Engineering Approval	Date	3	2- 21003-4	SCREW, Skt Hd Fl	8	18	3- 21003-0	SCREW, Skt Hd Cap	2
		4	310714-1	RETAINER, Right Side	1	19	3- 21000-8	SCREW, Skt Hd Fl	2
<i>Shirley Kraft</i>	3-981	5	310723-1	RETAINER, Spring	1	20	3- 21000-0	SCREW, Skt Hd Cap	1
		6	2- 22280-1	SPRING	3	21	310475-1	STUFFER, Housing Strain Relief	1
		7	310724-1	SUPPORT, Lower Base	1	22	310476-1	STUFFER, Contact	1
		8	2- 21002-2	SCREW, Skt Hd Btn	8	23	310477-1	STUFFER, Wire Cutoff	1
		9	310727-1	LOCATOR, Sliding	1	24	310725-1	LOCATOR, Upper Base Plate	1
		10	310472-1	HANDLE	1	25	3- 21002-6	SCREW, Btn Hd Cap	2
		11	310713-1	RETAINER, Left Side	1	26	21018-7	NUT, Hex	1
		12	310715-1	POST, Guide	1	27	310730-1	SPACER	1
		13	310712-1	RETAINER, Guide Post	1	28	310728-1	PLATE, Retaining	1
		14	310726-1	BASE PLATE, Upper	1	29	310739-1	BASE, Plate Slide	1
		15	2- 21002-9	SCREW, Skt Hd Btn	3	30	26704-1	TAG, Identification	1

Fig. 6