

# AMP

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## AMP\* TOOLING ASSEMBLY 128000-1 FOR TERMINATING RIBBON CABLE AND CR RECEPTACLE MODULES (26 AND 40 POSITIONS)

# IS 6699

RELEASED  
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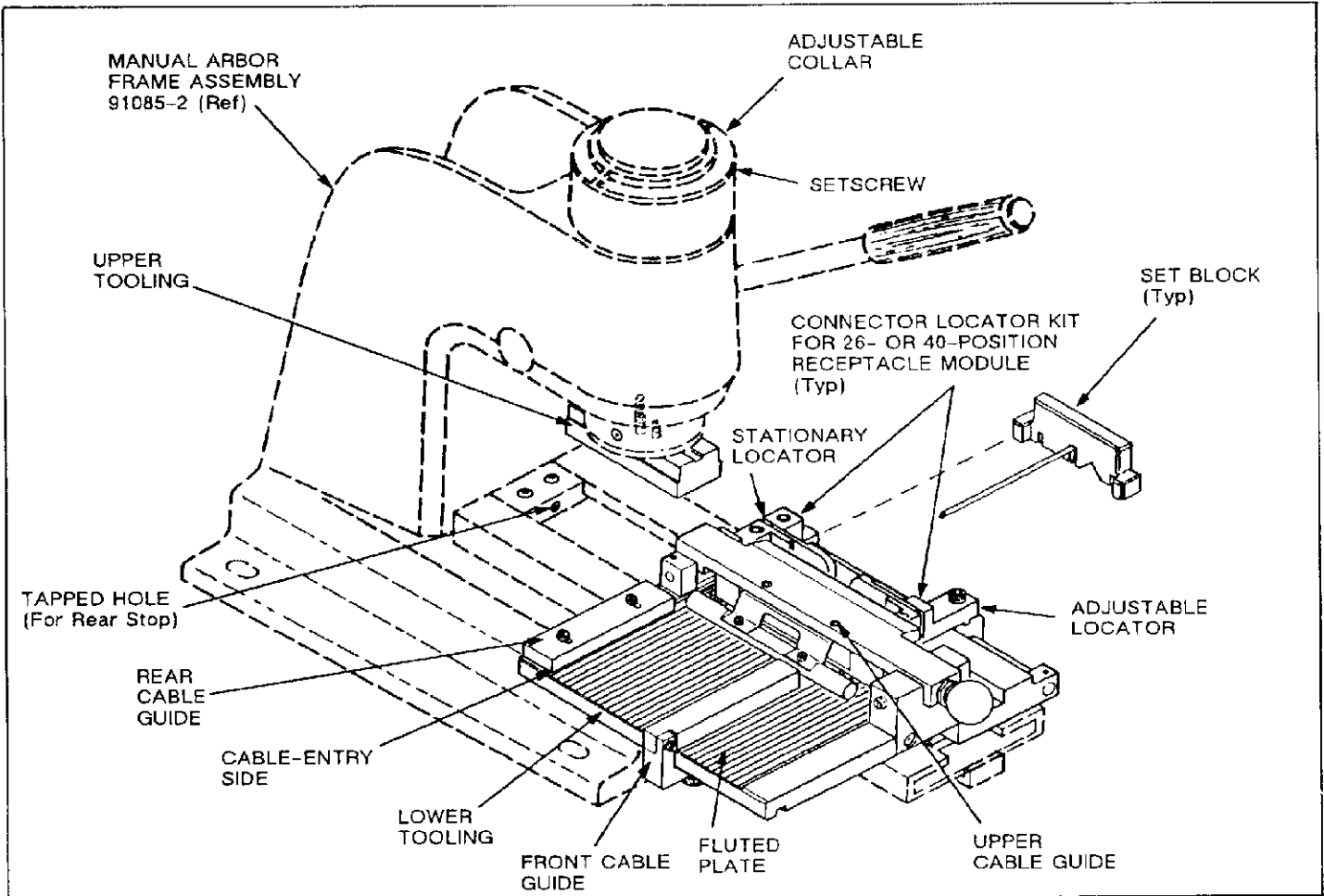


Fig. 1

## 1. INTRODUCTION

This instruction sheet (IS) covers the application and use of AMP Tooling Assembly 128000-1 shown in Figure 1. The assembly is used to terminate round ribbon cable to AMP Cammed Rectangular (CR) 26- and 40-position **receptacle** modules. Figure 1 shows the tooling assembly installed in AMP Manual Applicator Frame Assembly 91085-2, which must be ordered separately.

### NOTE

*Make sure that the applicator frame assembly includes an adjustable collar for ram-height adjustment and tapped hole for rear stop.*

Read these instructions carefully before using Tooling Assembly 128000-1. Refer to IS 7777 for information on the manual applicator frame assembly.

### NOTE

*All dimensions on this sheet are in inches.*

## 2. DESCRIPTION

The tooling assembly consists of two subassemblies (upper and lower tooling), two locator and set block kits (one for 26-position and the other for 40-position modules), and a rear stop with locknuts.

The upper tooling subassembly is attached to the ram mount to provide even pressure on the housing assembly during the termination cycle. The lower tooling aligns the cable, the preloaded housing, and cover during assembly.

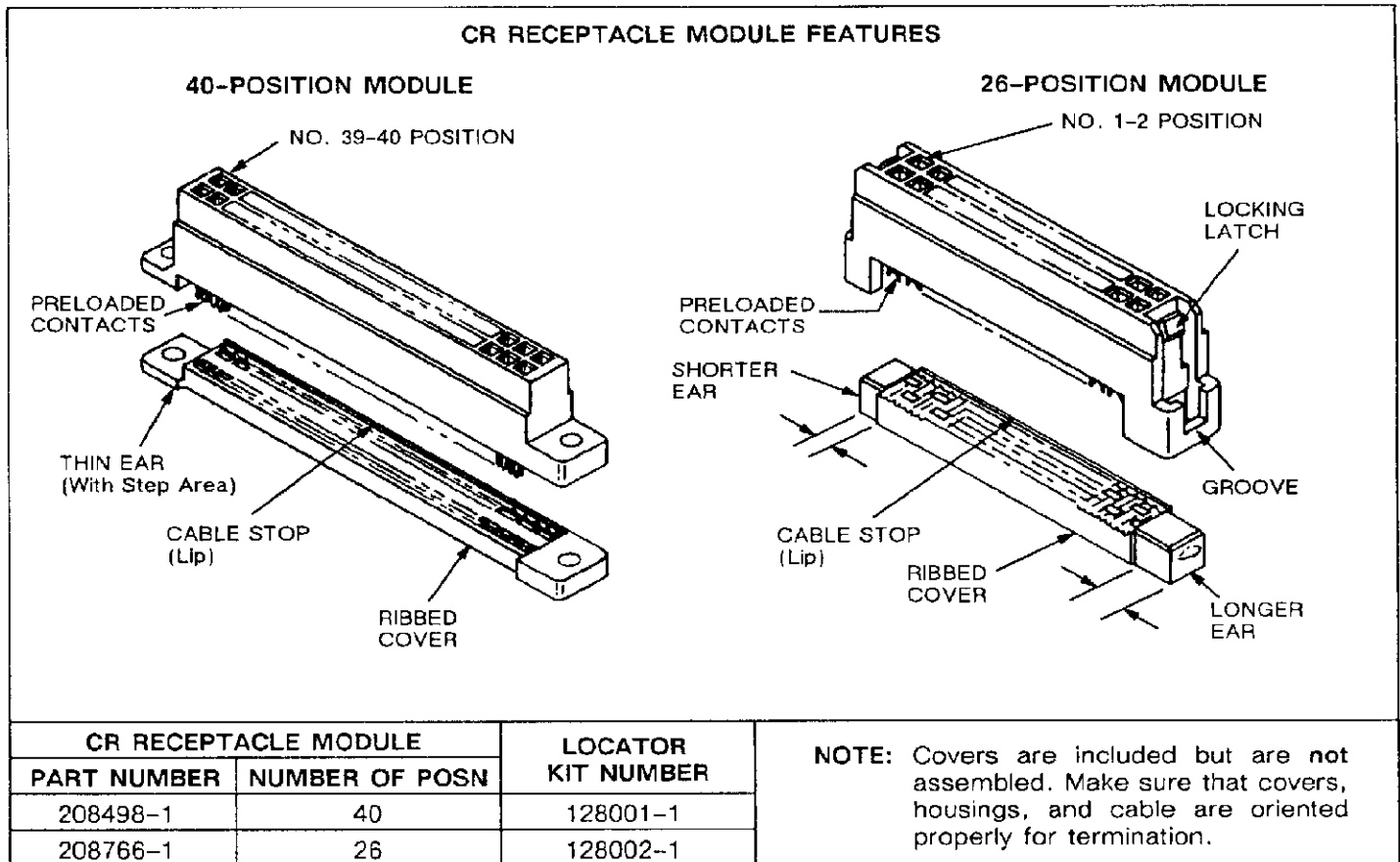


Fig. 2

The lower tooling subassembly features an upper cable guide, front and rear cable guides, a fluted plate, a cable stabilizer bar, and a locator kit (26 or 40 position). Each kit includes an adjustable and a stationary locator and locator cable stops. Set blocks are used to position the locators for either 26- or 40-position assemblies, as well as to align the upper tooling assembly.

CR receptacle modules for ribbon cable include housings, preloaded with staggered slotted contacts, and ribbed covers. Figure 2 shows the 26- and 40-position modules and their design differences. For termination of the 40-position module, make sure the thin ears with step areas (on both housing and cover) are oriented together. To orient the 26-position module correctly, make sure that ears on the cover are polarized properly with grooves in the housing.

**3. CABLE REQUIREMENTS**

The tooling assembly will terminate standard and shielded ribbon cable on .050-in. centerline spacing with No. 26 to 30 AWG solid or No. 28 stranded (7 strands, max) conductors. Make sure that: (a) cable dimensions fall within the tolerances shown in Figure 3, (b) the cable end is cut 90 degrees to the edge of the

cable, and (c) shielding materials on jacketed ribbon cable are removed to provide access to termination areas. Refer to Figure 3.

**CAUTION** If the cable end is not cut 90° to the edge of the cable, improper terminations will result. AMP recommends a guillotine-type cutter such as Carpenter Model 95 from Carpenter Manufacturing Company, Fairgrounds Drive, Manlius, NY 13207—or others.

**4. TOOLING INSTALLATION**

To install upper and lower tooling subassemblies, refer to Figure 1 and IS 7777 and proceed as follows:

1. Position upper tooling assembly on the two ram tool mount pins. Secure the assembly by tightening the socket head setscrew in the upper tooling with a 1/16-in. hex wrench. See Figure 1.
2. To install lower tooling, remove socket head cap screw and tool stop from slide base. Slide lower tooling assembly into tracks on slide base assembly. Make sure that the fluted plate is

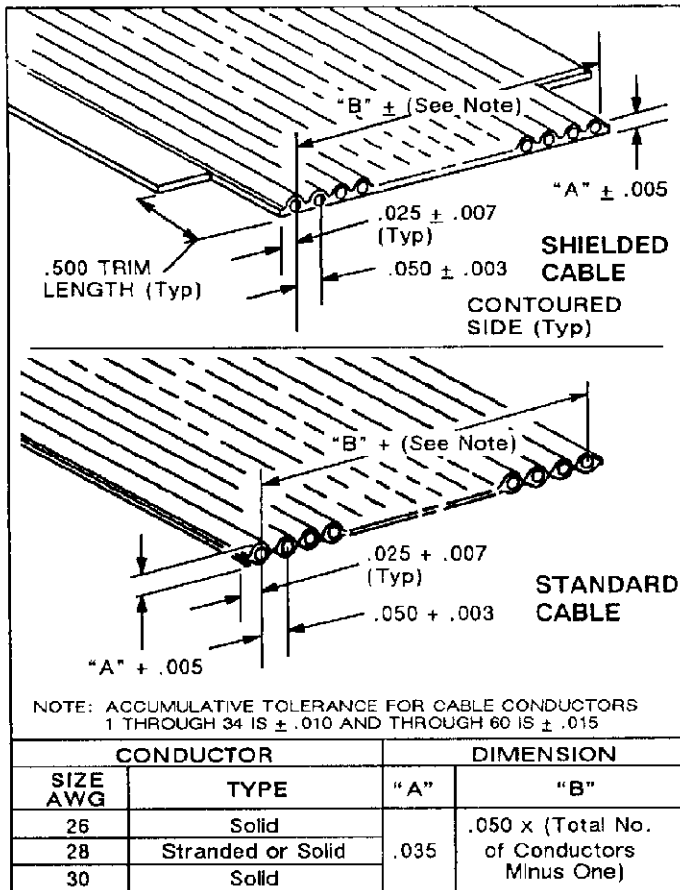


Fig. 3

oriented on the left side of the slide base. Install tool stop and socket head cap screw.

3. Slide lower tooling subassembly away from frame and attach rear stop with locknut into tapped hole of slide base. Refer to Figure 1.

**5. SETUP/TERMINATING PROCEDURES**

**A. Setup Procedure (Figure 4)**

Determine module size (26 or 40 positions) for termination and proceed as follows:

- Slide lower tooling away from frame to install appropriate locator kit (No. 128001-1 for 40-position or 128002-1 for 26-position modules).
- Insert appropriate 26- or 40-position set block in connector slot between adjustable and stationary locators. Make sure that extending pins of set blocks are aligned with grooves on the fluted plate.
- Make sure stationary locator is flush with set block. Tighten screw. Move adjustable locator flush against other end of set block and tighten screws.
- Close the upper cable guide and locator cable stops before sliding the lower tooling toward the rear stop.
- Adjust locknut on rear stop so that set block is centered under upper tooling.

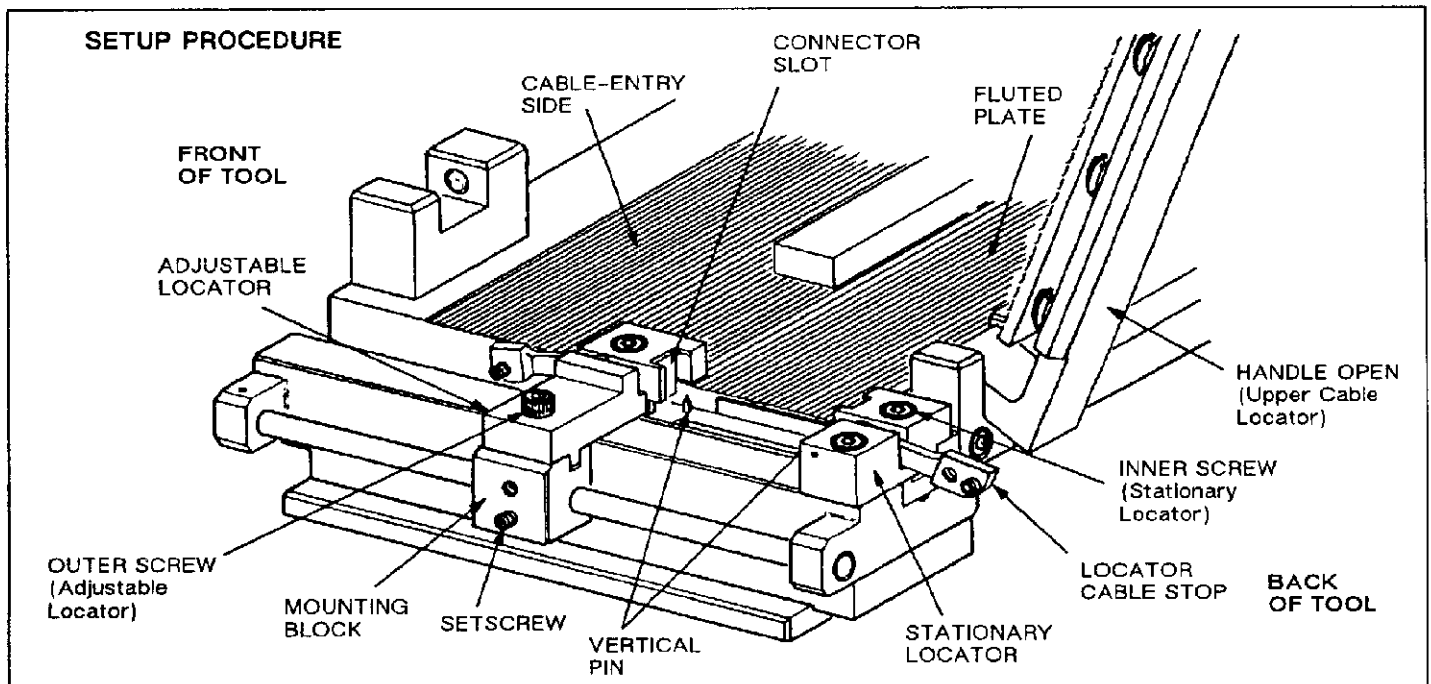


Fig. 4

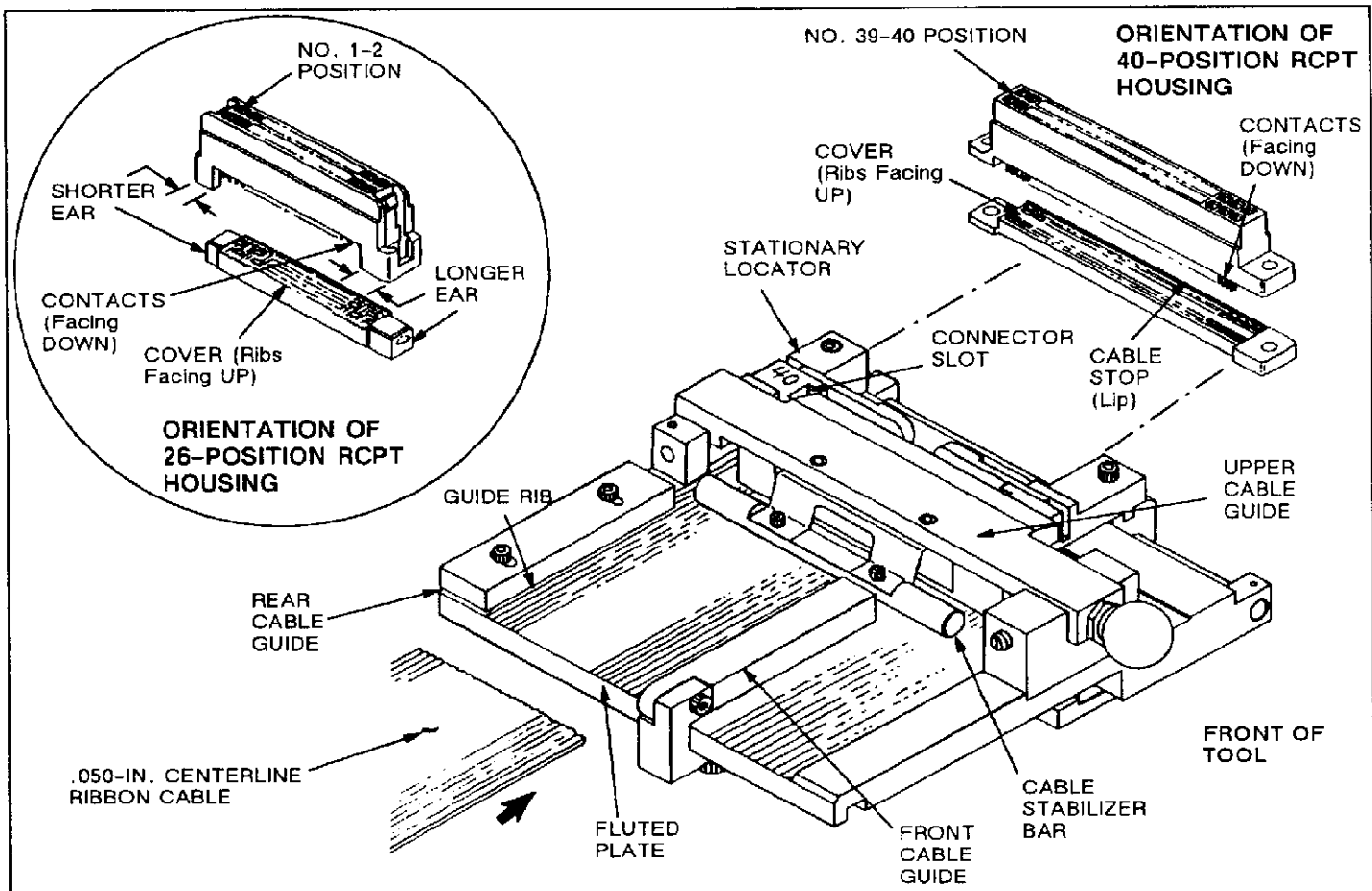


Fig. 5

6. Lower the upper tooling until it rests on set block or bottoms. Adjust ram height by loosening setscrew on adjustable collar. Turn collar **CLOCKWISE** to increase ram height or **COUNTERCLOCKWISE** to decrease ram height. When proper adjustment is made, retighten setscrew.

7. Make sure that upper tooling is properly aligned with and bottoms on the set block. Remove set block.

8. The tooling is set up to terminate appropriate receptacle modules.

## B. Terminating Procedure (Figure 5)

Prepare ribbon cable with correct number of positions (same as module). Open the upper cable guide and the two locator cable stops. Proceed as follows:

1. Place appropriate module cover (26 or 40 positions, depending on setup) in connector slot between locators. Make sure that ribbed side of cover faces **UP** and that cable stop (lip) is on the **RIGHT** (away from the fluted plate). Two vertical pins (26 position only) also provide polarization

so that the cover fits between the slots only one way.

2. Position prepared cable (26 or 40 conductors) on the fluted plate so that square end of cable butts against the cable stop of cover. Close upper cable guide. Adjust front and rear cable guides so they butt against sides of cable and keep it aligned.

3. Place appropriate housing assembly over cable and cover in connector slot. Make sure that housing is oriented correctly and that contacts are facing **DOWN**, as shown in Figure 5.

4. Slide lower tooling toward frame until it butts against tool stop.

5. Cycle applicator to bottom the upper tooling on housing assembly and to terminate the module.

6. Slide lower tooling away from frame, open cable guide, and remove terminated module. **MAKE SURE** that housing assembly is bottomed on cover. This completes the termination procedure.

**6. TOOLING INSPECTION**

AMP Tooling Assembly 128000-1 has been inspected before shipment and should be inspected upon arrival at your facility and at regularly scheduled intervals to make sure it has not been damaged through handling and use. For evaluation and repairs, send the tooling with a written description of the problem to:

AMP Incorporated  
 Customer Repair  
 1523 North 4th Street  
 Harrisburg, PA 17102-1604

Additional tooling assemblies and customer-replaceable parts shown in Figure 6 can be purchased from:

AMP Incorporated  
 P.O. Box 3608  
 Harrisburg, PA 17105-3608

or a wholly-owned subsidiary of AMP Incorporated.

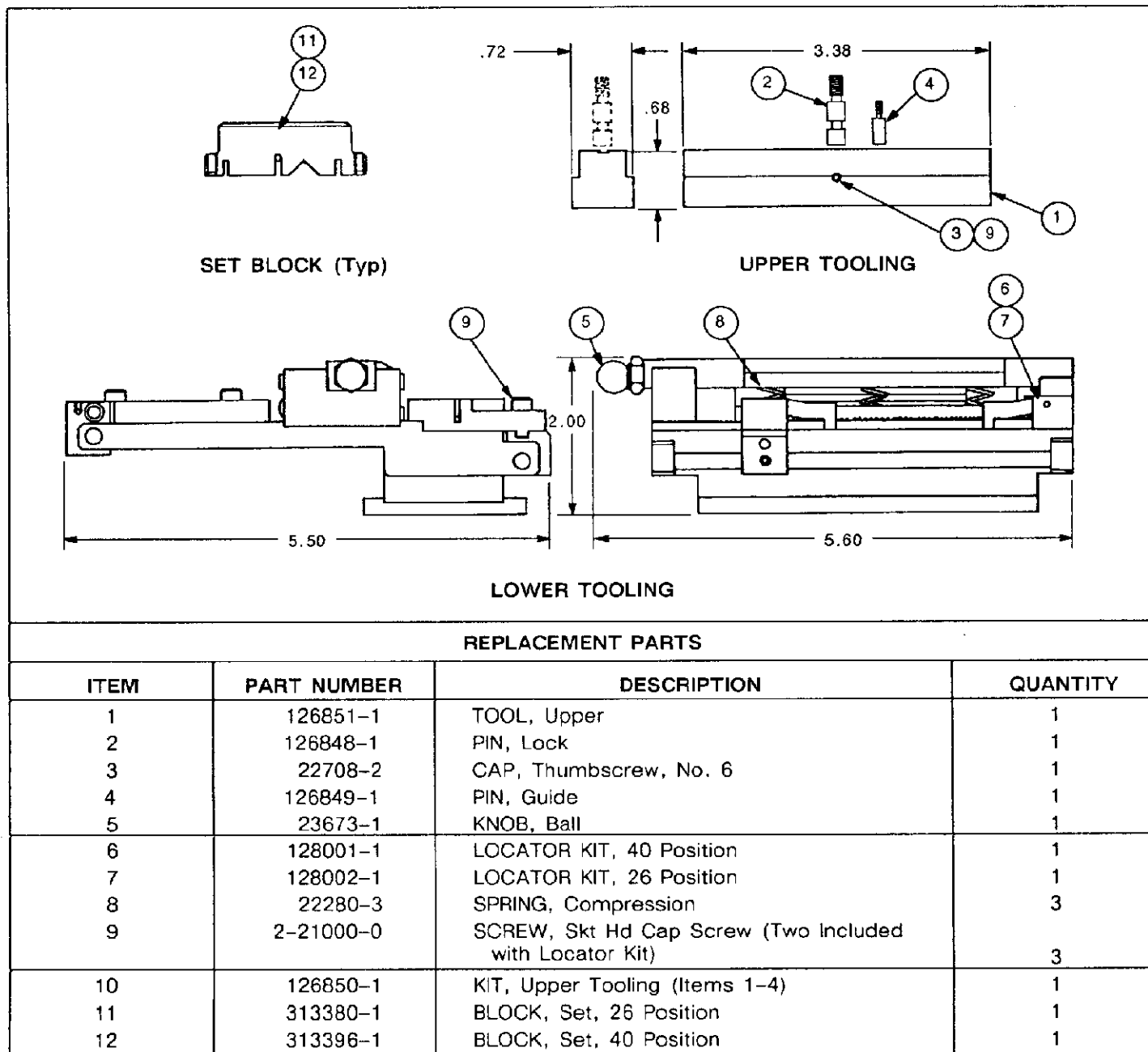


Fig. 6