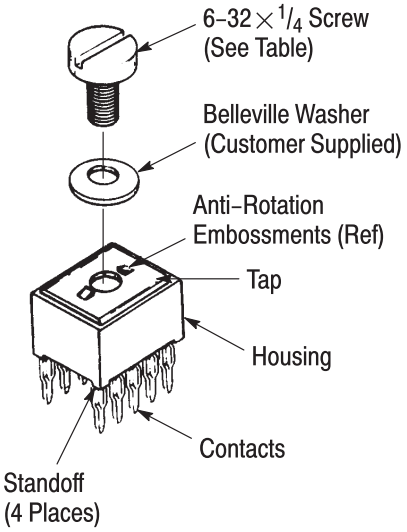
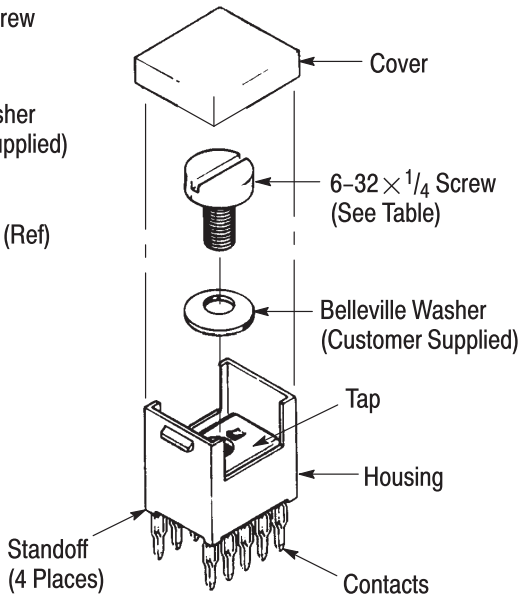
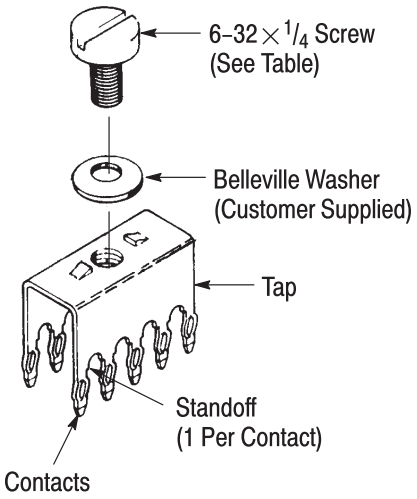
Low-Profile Insulated Tap Assembly



High-Profile Insulated Tap Assembly



Low-Profile Uninsulated Tap Assembly



PROFILE	PART NUMBER▪	NUMBER OF POSITIONS (Contacts)	SCREW SUPPLIED	CENTERLINE SPACING
Low (Insulated)	55556-4	10	Yes	2.54 × 7.62 mm [.100 × .300 in.]
	55673-2	10	Yes	
High (Insulated)	55557-3	10	No	2.54 × 7.62 mm [.100 × .300 in.]
	55557-4	10	Yes	
Low (Uninsulated)	55323-5	6	No	3.18 × 6.35 mm [.125 × .250 in.]
	55323-6	10	No	
	55323-9	6	Yes	
	1-55323-0	10	Yes	
	55558-3	10	No	2.54 × 7.62 mm [.100 × .300 in.]
	55558-4	10	Yes	

▪ For part numbers not listed, refer to Catalog 1307767.

Figure 1

1. INTRODUCTION

The power distribution tap assemblies listed in Figure 1 are designed to be mounted onto a printed circuit (pc) board to provide high current to the pc board. The taps can also be connected to a bus bar or terminal. Read these instructions thoroughly before installing any tap assemblies.

NOTE

Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

Reasons for reissue are provided in Section 7, REVISION SUMMARY.

2. DESCRIPTION (Figure 1)

Each tap assembly features a tap with six or ten ACTION PIN contacts and anti-rotation embossments (low-profile insulated taps are also available without embossments). A screw is included with some tap assemblies for use with a bus bar or terminal. It is recommended installing a Belleville washer (customer

supplied) between a terminal and screw to provide additional locking.

Insulated tap assemblies include a housing and, in addition, high–profile tap assemblies include a cover for protection from other components on the pc board.

The tap or housing has standoffs that are used for inspection of proper seating on the pc board.

3. TOOLING REQUIREMENTS

Power Distribution Block Assembly Power Unit 59903–1 fitted with Support Block 311855–1 and Locating Block 311854–1, or suitable commercial tooling, is required for seating the taps. Arbor Frame 58024–1 (without tooling) can be used as the power unit. For instructions on operating the arbor frame, refer to 408–6923.

NOTE

Make sure that the front and the sides of the support block are parallel when installed in power unit.

Power for seating taps must be provided by application tooling capable of supplying a downward force of 1780 Newtons (N) [400 lb]. The power unit must have sufficient throat depth to accommodate various positions on the pc board. In addition, the power unit must have provision for ram adjustment to prevent under– or over–insertion. The tooling may be fabricated using the dimensions provided in Figure 2.

Extraction Tool 68380–1 must be used to remove taps from the pc board.

4. INSTALLATION

4.1. Seating Tap onto PC Board

1. Design the pc board using the specifications described in Application Specification 114–11000 or, if applicable, DISCONNECT the pc board from the power supply and make sure that the pc board meets the specifications described in 114–11000.

2. If applicable, disassemble the tap assembly. Refer to Figure 1. Inspect the tap assembly to make sure that the contacts are straight and there is no damage or defect to any component.

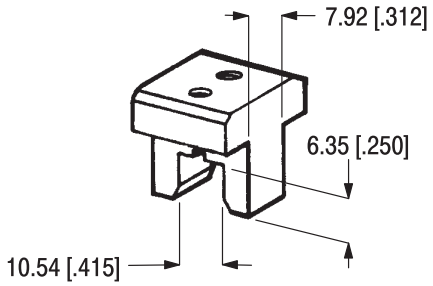
3. If applicable, install the tap onto the housing.

4. Partially insert the contacts of the tap into the appropriate holes in the pc board.

5. Center the tap under the locating block as shown in Figure 3. Actuate the power unit to seat the tap onto the pc board. If desired, solder the tap to the pc board following locally approved soldering guidelines.

6. Inspect the mounted tap according to Figure 4.

Locating Block 311854–1



Support Block 311855–1

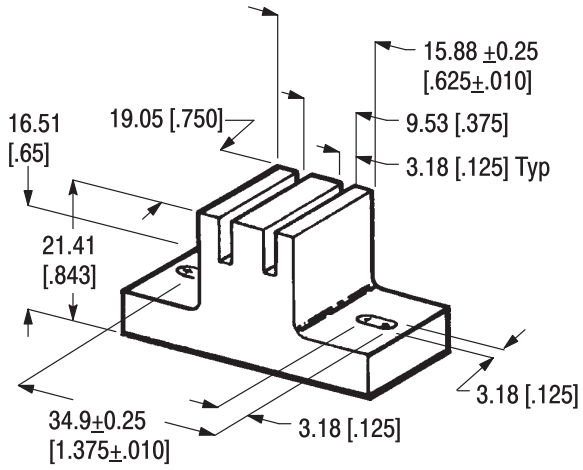


Figure 2

Seating Tap

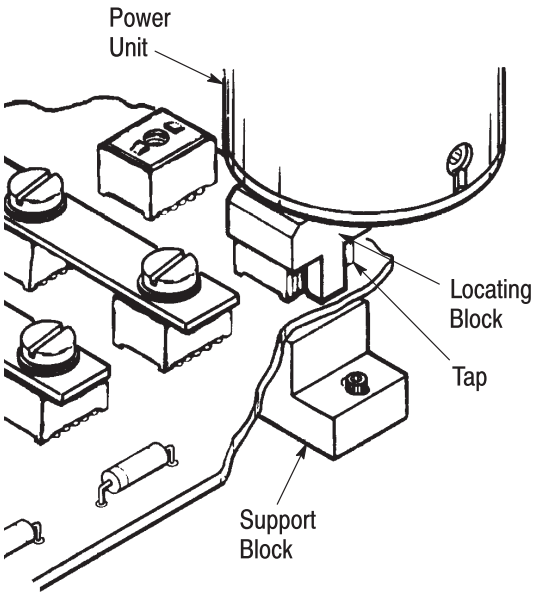
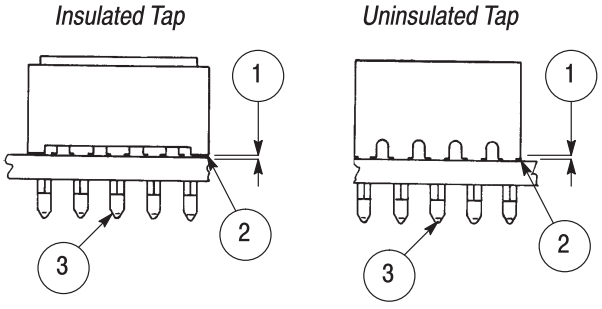


Figure 3

Inspecting Mounted Tap



1 0.00–0.20 [.000–.008] Standoffs Seated on PC Board

2 Standoffs Are Not Deformed

3 Contacts Are Straight

Figure 4

4.2. Connecting Terminal or Bus Bar to Tap

After the tap has been properly mounted onto the pc board, proceed as follows:

CAUTION

DO NOT exceed tap current rating of 2.5 A per contact.

1. Align the No. 6 stud hole in the bus bar or the terminal with the hole in the tap. If connecting a terminal, install a Belleville washer onto the screw.

2. Insert the screw into the holes, and tighten to a maximum torque of 1.02 N•m [9 in.–lbs].

5. REMOVING TAP ASSEMBLY

1. DISCONNECT the tap assembly from the power supply. Remove the cover (if applicable), screw, and washer.

CAUTION

If tap is soldered to pc board, remove solder using standard methods.

2. Using the appropriate extraction tool, remove the tap as described in 408–9049.

6. REPLACEMENT AND REPAIR

The components of the tap assembly are not repairable. Discard and replace any defective or damaged components.

DO NOT re–use a tap assembly after it has been removed from the pc board.

7. REVISION SUMMARY

Since the last revision of this document, the following changes have been made:

- Updated document to corporate requirements