

Grounding Clip Assembly 1954381-1

Grounding Clip Assemblies 1954381-2, 3, and -4

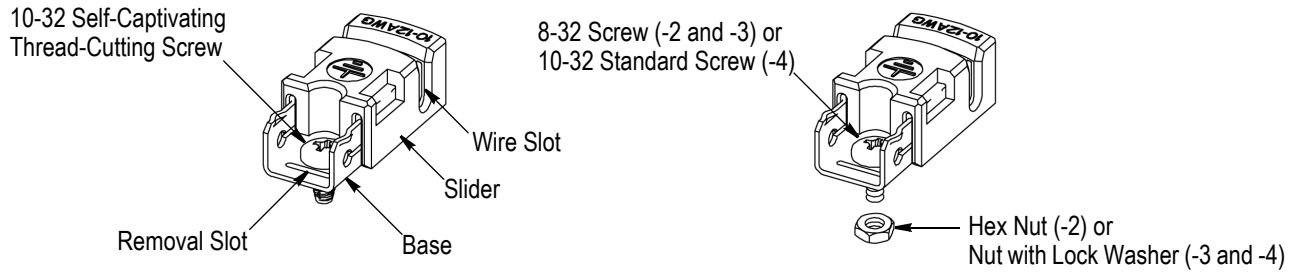


Figure 1

1. INTRODUCTION

Grounding Clip Assemblies 1954381-[] shown in Figure 1 are used with metal-framed photovoltaic (solar) panels and related products that require grounding for safety reasons.

NOTE *Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.*

Reasons for reissue of this instruction sheet are provided in Section 6, REVISION SUMMARY.

2. DESCRIPTION

The grounding clip assembly consists of a slider, base, and 10-32 self-captivating thread-cutting screw or 8-32 screw and hex nut or nut with lock washer or 10-32 standard screw and nut with lock washer (see Figure 1).

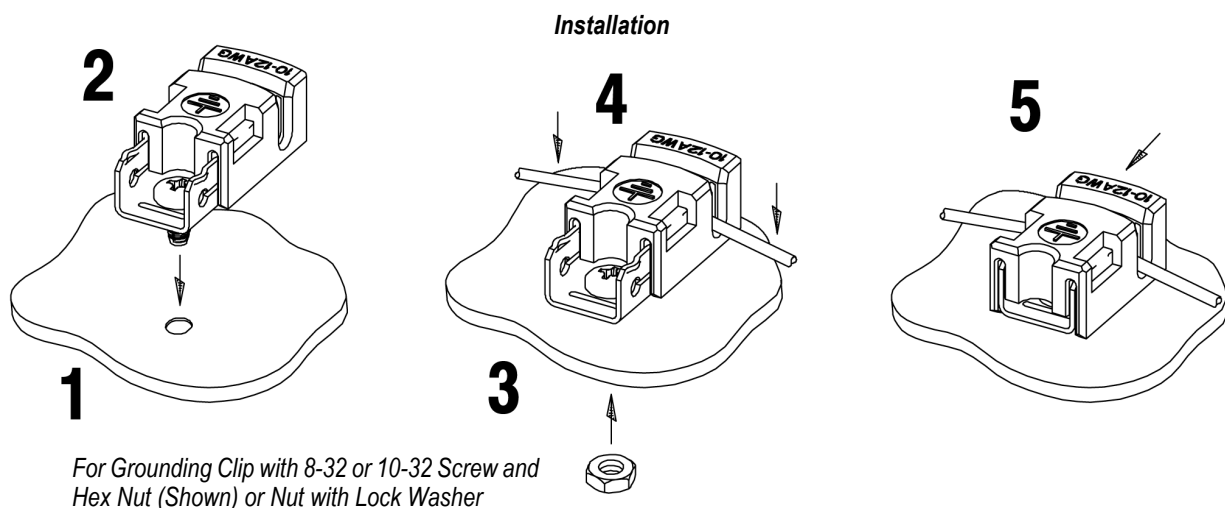
The grounding clip accepts solid uninsulated copper wire sizes 10 or 12 AWG.

3. INSTALLATION

1. Refer to Figure 2 (hole size), and drill a hole in the frame. See Figure 3 (hole position).

SCREW SIZE	FRAME		DRILL SIZE (in.)
	THICKNESS (mm [in.])	HOLE SIZE (Diameter, mm [in.])	
10-32 Thread Cutting	1.3 [.050]	4.09 [.161]	20
	2.8 [.109]	4.22 [.166]	19
	4.7 [.187]	4.37 [.172]	11/64
	6.4 [.250]	4.50 [.177]	16
10-32 Standard	10.0 [.394] Max	5.00-6.00 [.196-.236]	—
8-32	06.6 [.260] Max	4.09-4.83 [.161-.190]	—

Figure 2



For Grounding Clip with 8-32 or 10-32 Screw and Hex Nut (Shown) or Nut with Lock Washer

Figure 3

2. Place the grounding clip onto the frame, making sure that the screw straddles the drilled hole. See Figure 3. Using a No. 2 cross-recessed screwdriver, thread the screw into the hole until the head is flush with the base and the base is flush with the frame, then tighten the screw with another ¼ to ½ turn. Recommended torque is given in Figure 4.

SCREW SIZE	SCREW TIGHTENING TORQUE (Nm [in.-lbs])
10-32	2.3+0.5/-0.2 [19+4.4/-1.7]
8-32	1.7+0.5/-0.2 [15+4.4/-1.7]

Figure 4

3. For the grounding clip with the 8-32 or 10-32 screw and hex nut or nut with lock washer, thread the nut onto the end of the screw, then using a 3/8-in. wrench for the 8-32 screw or 13/32-in. wrench for the 10-32 screw, tighten the nut. See Figure 3.

4. Insert the wire into the wire slot. Press down on both ends of the wire (the wire slot will cause the wire to form a slight curve). See Figure 3.

5. Manually, or using channel lock pliers, push the slider over the base until it covers the base. This will terminate the wire. See Figure 3.

4. REMOVAL

Insert the tip of a flat-head screwdriver into the removal slot, and rotate the screwdriver so that the slider moves away from the base until the screw head is exposed. Remove the wire.

To remove the grounding clip with the thread-cutting screw from the frame, loosen the screw. To remove the grounding clip with the 8-32 or 10-32 screw and hex nut or nut with lock washer from the frame, use a 3/8-in. or 13/32-in. wrench, respectively, to remove the nut, then loosen the screw.

5. REPLACEMENT AND REPAIR

The grounding clip can be re-used up to 5 times after proper removals (the 8-32 or 10-32 screw and hex nut or nut with lock washer can be re-used; however, the 10-32 thread-cutting screw must be replaced). Do not re-use the 10-32 thread-cutting screw after removing the grounding clip from the frame. The grounding clip is not repairable. Discard and replace any defective or damaged grounding clips.

Order replacement assemblies through your representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035)
 TYCO ELECTRONICS CORPORATION
 PO BOX 3608
 HARRISBURG PA 17105-3608

6. REVISION SUMMARY

Revisions to this instruction sheet include:

- Removed SolKlip* from name of product
- Replaced Keps nut with nut with lock washer (Keps is a trademark)