

INSTALLATION INSTRUCTION SHEET FOR SOLAR MODULE GROUNDING LUG



Catalog Number:

SBC-414.....SOLAR MODULE GROUNDING LUG.

READ ALL INSTRUCTIONS AND WARNINGS CAREFULLY BEFORE PROCEEDING!




WARNING



CAUTION


RISK OF SHOCK, DISCONNECT THE ELECTRICAL CIRCUIT SUPPLYING POWER TO THE OUTLET PRIOR TO INSTALLATION.

TO PREVENT INJURY, THE LUG MUST BE SECURELY INSTALLED IN ACCORDANCE WITH THESE INSTRUCTIONS BEFORE MOUNTING THE ALUMINUM FRAME.

AFTER INSTALLATION OF LUG TO FRAME, BE SURE TO FOLLOW ALL MOUNTING INSTRUCTIONS WITH THE COPPER CONDUCTOR.

EXCLUSIVE FEATURES

1. Suitable for use with # 14 to # 4 AWG copper conductor, solid and stranded.
2. Suitable for mounting aluminum frame thickness from 0.060" (Minimum) to 0.110" (Maximum).
3. Uses knurled set screw to secure to frame and cut through anodizing.
4. For bonding up to maximum over-current protection level of 150 Amps.
5. Rated maximum system over-current protection level.
(See Table for Protection Level)

MAXIMUM PROTECTION LEVEL	CONDUCTOR SIZE
15 A	14 AWG
20 A	12 AWG
40 A	10 AWG
90 A	8 AWG
150 A	6 AWG / 4AWG

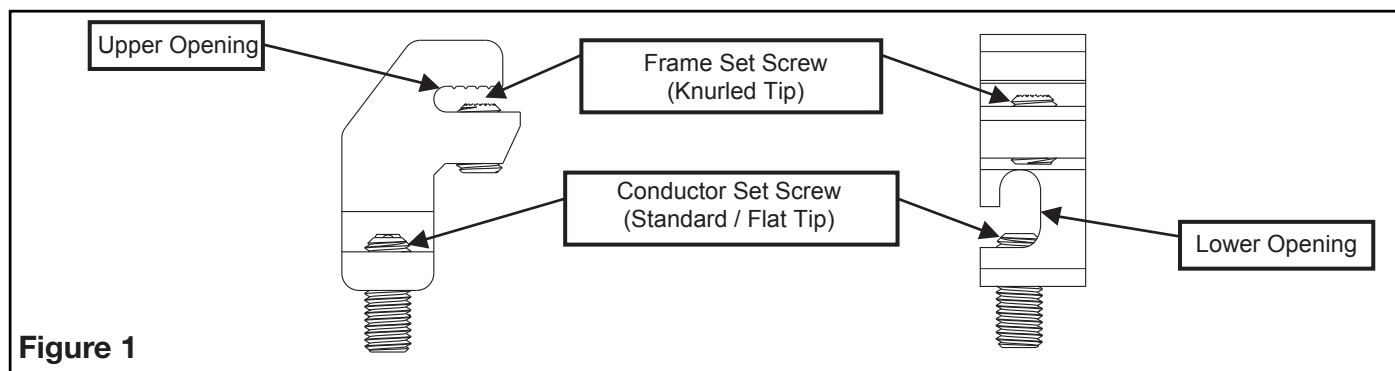


Figure 1

SPECIFICATION

For use with Solar Module Grounding Lug or Listed mounting systems where described in Solar Module Grounding Lug or Listed Mounting System Installation Instructions.

For sizing of an Equipment Grounding Conductor (EGC), the rating of the Overcurrent Protection Device (OCPD) in circuit ahead of the Equipment shall not exceed the values in NEC Table 250.122 where the EGC is only required to be larger than the circuit conductors supplying the equipment.

For use with a Grounding Electrode Conductor (GEC), the size of the conductor shall comply with NEC Articles 250.66 for AC systems and 250.166 for DC systems

UL listed for grounding & bonding per UL 467, Tenth Edition, dated March 22, 2013 and CAN/CSA C22.2 No. 41-13, Sixth Edition, dated March 22, 2013 under (KDER3/9: File E3060, Vol. 14, Sec. 1, issued 2014-06-30).

INSTALLATION INSTRUCTIONS

1. Mount Lug onto Solar Panel Frame

- 1). Slide Upper opening onto aluminum frame.
- 2). Torque 'Frame Mount Set Screw' to 45 lb-in using a 1/8" allen key or hex driver (See Figure 2).

2. Mount Conductor Inside Lower Lug Opening

- 1). Strip conductor insulation back at least 1/2" and insert into lower opening of clip.
- 2). Secure conductor: Torque 'Conductor Mount Set Screw' using a 1/8" allen key or hex driver (See Figure 3).

(See Table for Torque Values)

CONDUCTOR TORQUE VALUES	
14 AWG (SOLID)	30 lb-in
14 AWG (STRANDED)	35 lb-in
12 AWG (SOLID)	35 lb-in
12 AWG (STRANDED)	35 lb-in
10 AWG (SOLID)	35 lb-in
10 AWG (STRANDED)	35 lb-in
8 AWG (SOLID)	40 lb-in
8 AWG (STRANDED)	40 lb-in
6 AWG (SOLID)	45 lb-in
6 AWG (STRANDED)	45 lb-in
4 AWG (SOLID)	45 lb-in
4 AWG (STRANDED)	45 lb-in

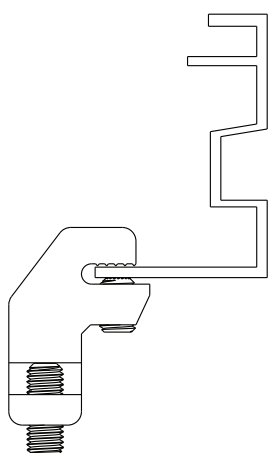


FIGURE 2

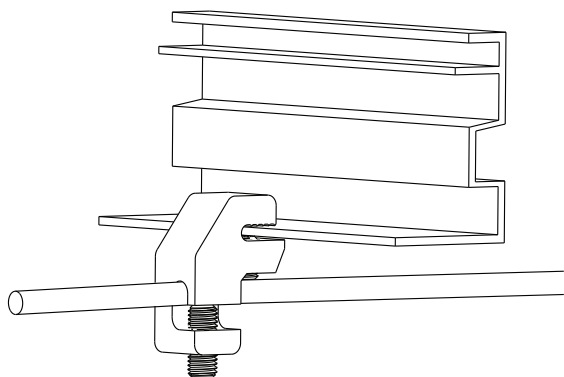


FIGURE 3

WARRANTY: Thomas & Betts sells this product with the understanding that the user will perform all necessary tests to determine the suitability of this product for the user's intended application. Thomas & Betts warrants that this product will be free from defects in materials or workmanship for a period of two (2) years following the date of purchase. Upon prompt notification of any warranted defect, Thomas & Betts will, at its option, repair or replace the defective product. Misuse, misapplication or modification of Thomas & Betts Products immediately voids all warranties.

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