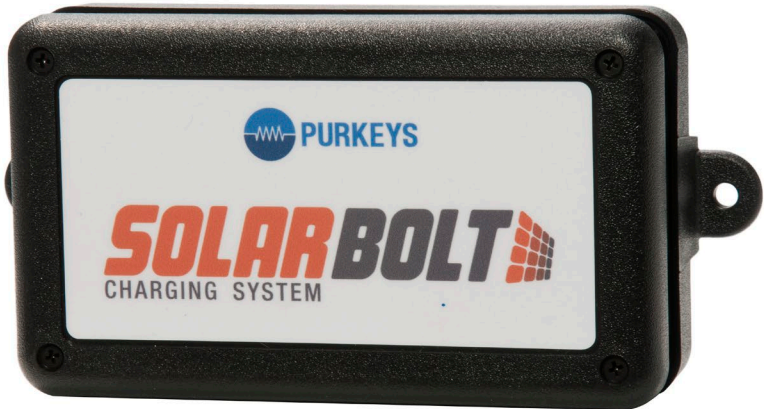


PURKEYS

SOLAR BOLT CHARGING SYSTEM

INSTALLATION GUIDE



MAXON #: 299240-500



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GENERAL INFORMATION

The Solar Bolt™ Charging System is a Pulse Width Modulated (PWM) charge controller with automatic temperature compensation for up to 360 watt solar application. The Solar Bolt charge controller utilizes patent-pending technology that is designed to work in conjunction with the electrical system on a vehicle or trailer. The Solar Bolt provides three-stage charging for the batteries when the vehicle's primary charging system is not active. It senses when the primary charging system is active and matches the charge voltage. This enables the solar panel to deliver up to its full output capability to the batteries when the vehicle is running. The module's technology allows the Solar Bolt to provide power to the electrical system of the vehicle, which reduces the electrical load on the alternator and, in turn, reduces the mechanical load on the engine, thereby realizing fuel savings.

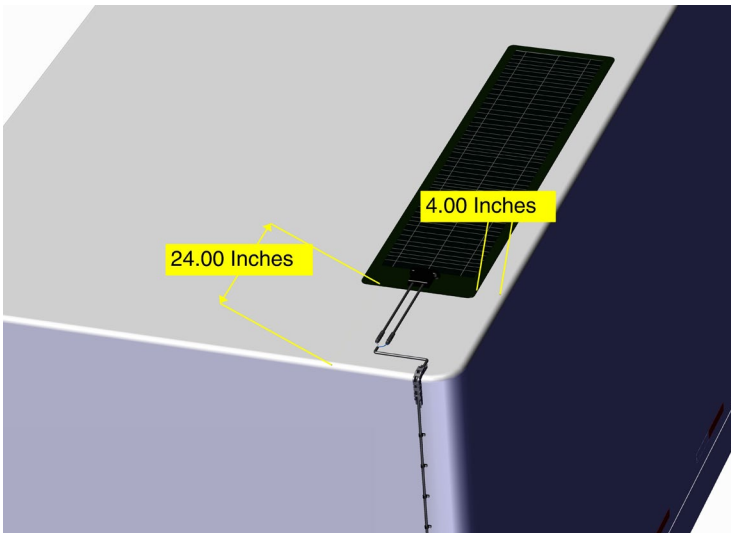
SOLAR BOLT INSTALLATION GUIDE

SOLAR PANEL INSTALLATION

90 WATT PANEL INSTALLATION

Step 1: Start by cleaning the trailer roof so the solar panel can properly adhere to the trailer.

Step 2: Place the solar panel 4 inches from the side edge of the trailer and 24 inches from the front edge of the trailer. This will leave sufficient room so that more panels can be added in the future (see the Solar Panel Configurations section for instructions on mounting more than one panel).

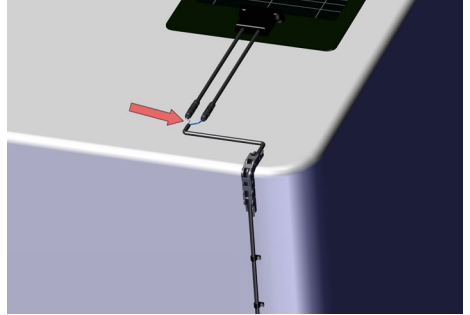


Step 3: Peel the adhesive lining off the back of the panel and press firmly on the panel to ensure it adheres to the trailer. Applying heat to the trailer top is recommended to help the adhesive stick.

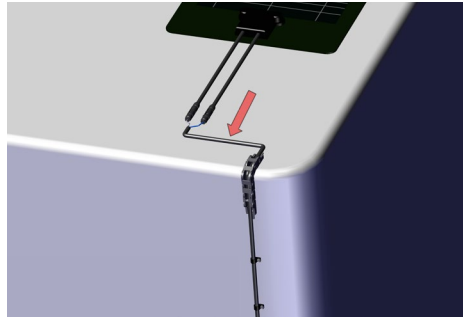
Installation Complete

SOLAR BOLT MAIN HARNESS INSTALLATION

Step 1: Connect the Solar Bolt main harness to the 90 watt solar panel. The solar connectors on the main harness are already installed and ready to attach to the solar panel positive and negative wires.

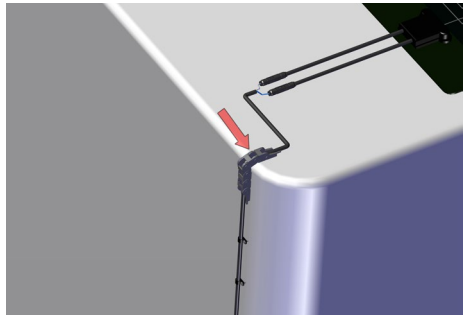


Step 2: Route the main harness along the front edge of the trailer and over to the right side of the trailer. Secure the harness by using the supplied nylon clamps and #12 x 3/4" hex tek screws.



Important: Do not screw into the roof of the trailer. Make sure to screw into the framing of the trailer to prevent water intrusion.

Step 3: Route the main harness over the front of the trailer and use the supplied E chain to protect the cable. Secure the harness by using the supplied rubber washers and #12 x 1" roofing screws.



Important: Do not screw into the roof of the trailer. Make sure to screw into the framing of the trailer to prevent water intrusion.

SOLAR BOLT INSTALLATION GUIDE

Step 4: Route the main harness down the trailer wall and secure it using the supplied nylon clamps and #12 x 1/2" hex tek screws.

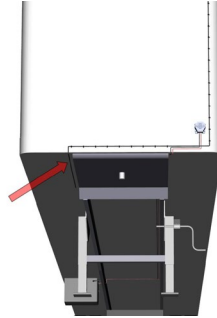


Important: Place the supplied cable clamps along the 2-conductor jacketed main harness every 6 inches to ensure proper support for the cable. Avoid sharp edges and possible chaffing points.

Installation Complete

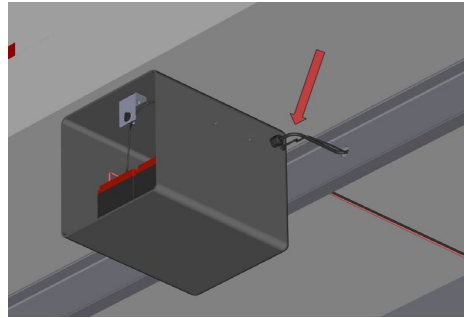
CABLE ROUTING

Step 1: Route main harness back toward the liftgate batteries. Secure with wire ties or cable clamps as you go.



Important: Place the supplied cable clamps along the 2-conductor jacketed cable every 18 inches to ensure proper support for the cable. Avoid sharp edges and possible chaffing points.

Step 2: Once the cable is routed to the battery box, feed the Solar Bolt main harness into the battery box through a dome nut or a grommet. **DO NOT** cut the harness until the mounting location for the Solar Bolt controller is determined.

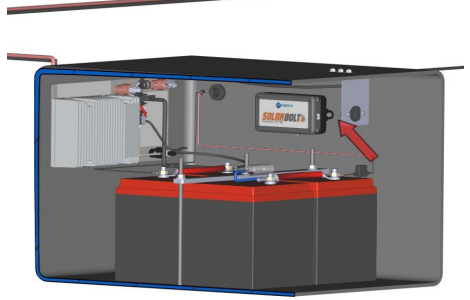


Installation Complete

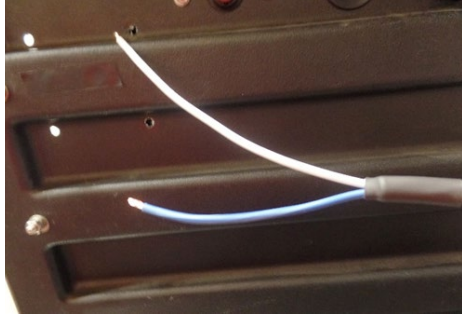
SOLAR BOLT INSTALLATION GUIDE

SOLAR BOLT CONTROLLER INSTALLATION

Step 1: Mount the Solar Bolt controller to the liftgate battery box by using the supplied #12 3/4" hex tek screws.



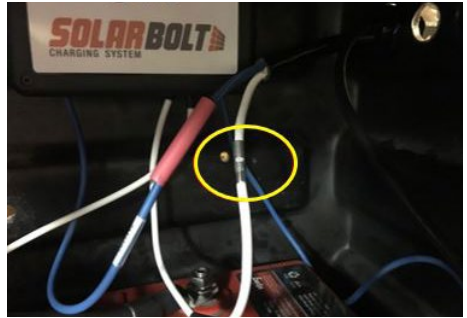
Step 2: Determine the appropriate amount of cable needed to make the connections to the Solar Bolt controller, then cut excess cable. Strip off jacketed insulation from the Solar Bolt main harness to approximately 2 inches. Strip the insulation on both wires.



Step 3: Connect the blue wire from the Solar Bolt main harness to the wire on the Solar Bolt controller labeled SOLAR POSITIVE. Solder and heat shrink.



Step 4: Connect the white wire from the Solar Bolt main harness to the white wire located on the Solar Bolt controller. Solder and heat shrink.



Step 5: Connect the ground wire from the Solar Bolt controller to the liftgate battery negative terminal.



Step 6: Connect the positive wire from the Solar Bolt controller to the liftgate battery positive terminal.



Installation Complete

SOLAR BOLT INSTALLATION GUIDE

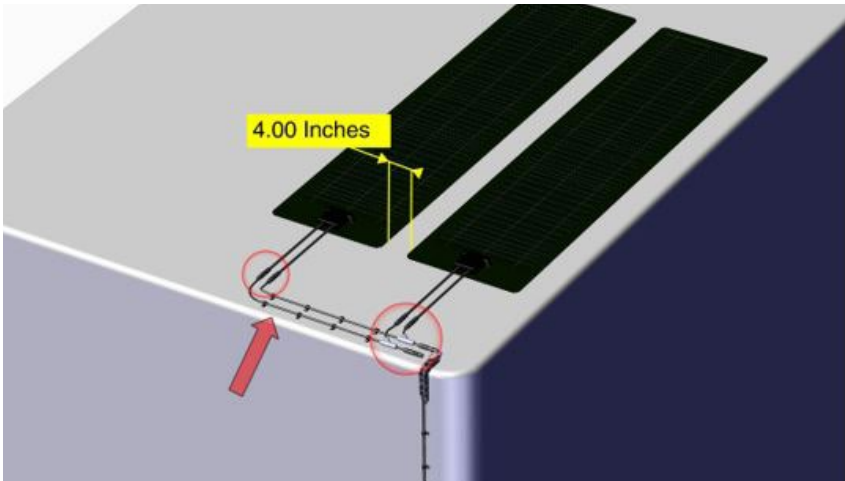
SOLAR PANEL CONFIGURATIONS

When adding additional panels, follow the following configuration instructions:

The first Solar Panel (90 Watt) should have been placed 4 inches from the edge of the trailer (see the Solar Panel Installation section for details on installing the first panel).

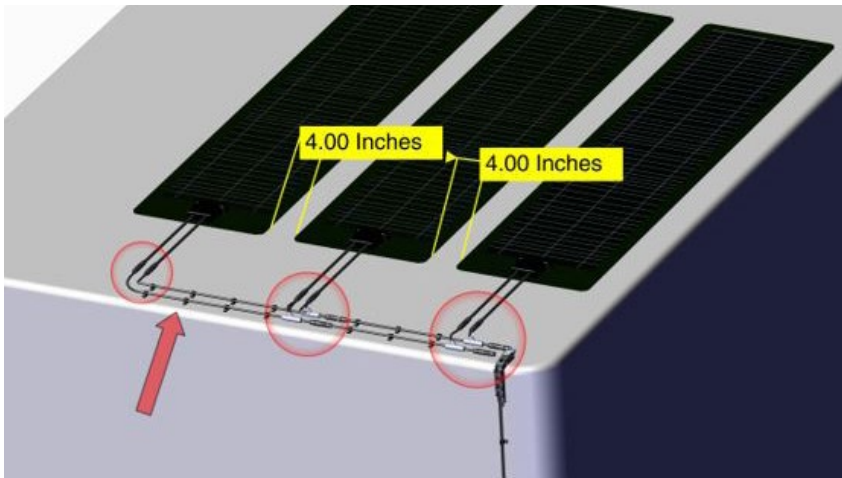
180 Watt (2 Solar Panels)

1. Place the second solar panel no more than 4 inches away from the first solar panel.
2. Connect the supplied Solar Bolt Y Splitter input side to the Solar Bolt main harness (Positive-Positive, Negative-Negative).
3. Connect the Solar Bolt Y Splitter outputs to the two solar panels (Positive-Positive, Negative-Negative).
4. Clamp the Solar Bolt Y Splitter to the edge of the trailer.



270 Watt (3 Solar Panels)

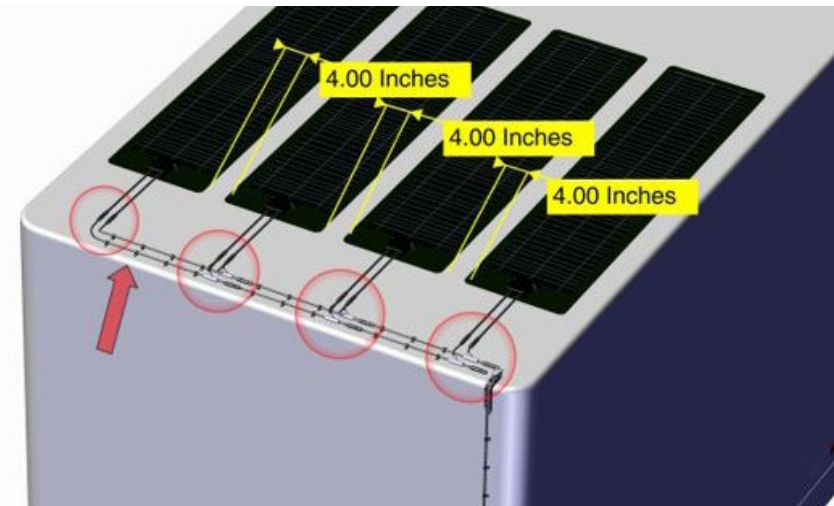
1. Place the third panel no more than four inches away from the second solar panel.
2. Connect the second Solar Bolt Y Splitter input side to the longest output from the first Solar Bolt Y Splitter (Positive-Positive, Negative-Negative).
3. Connect the outputs of the second Solar Bolt Y Splitter to the second and third solar panels.
4. Clamp the Solar Bolt Y Splitter to the edge of the trailer.



SOLAR BOLT INSTALLATION GUIDE

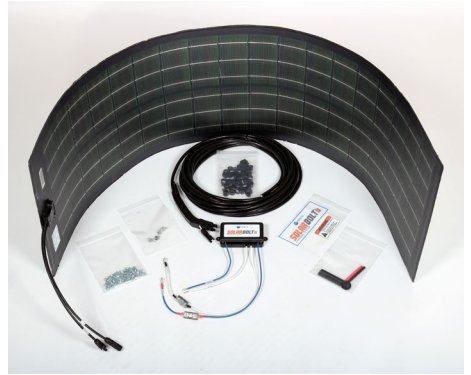
360 Watt (4 Solar Panels)

1. Place the fourth panel no more than four inches away from the third solar panel.
2. Connect the third Solar Bolt Y Splitter input side to the longest output of the second splitter (Positive-Positive, Negative-Negative).
3. Connect the outputs of the third Solar Bolt Y Splitter to the third and fourth solar panels.
4. Clamp the Solar Bolt Y Splitter to the edge of the trailer.



PART LIST

PART#: SLRBOLT-01-WI
MAXON#: 299240-90
SOLAR BOLT CHARGING
SYSTEM 90 W (SINGLE
PANEL), NO INDICATOR



PART#: SLRBOLT-02-WI
MAXON#: 299240-180
SOLAR BOLT CHARGING
SYSTEM 180 W (TWO
PANELS), NO INDICATOR



PART#: SLRBOLT-03-WI
MAXON#: 299240-270
SOLAR BOLT CHARGING
SYSTEM 270 W (THREE
PANELS), NO INDICATOR



SOLAR BOLT INSTALLATION GUIDE

PART#: SLRBOLT-04-WI
MAXON#: 299240-360
SOLAR BOLT CHARGING
SYSTEM 360 W (FOUR
PANELS), NO INDICATOR



PART#: MOD00083-K
MAXON#: 299241-01
SOLAR BOLT CONTROLLER
ASSEMBLY



PART#: MOD00083
MAXON#: 299242-01
SOLAR BOLT CONTROLLER



PART# CHR9-006
MAXON#: 299243-90
SOLAR PANEL, FLEXIBLE,
90 W WATT SOLAR PANEL



PART# H-00383
MAXON#: 907421-50
HARNESS, SOLAR MAIN 50'



PART# H-00382
MAXON#: 907422-01
HARNESS, SOLAR BOLT Y
SPLITTER

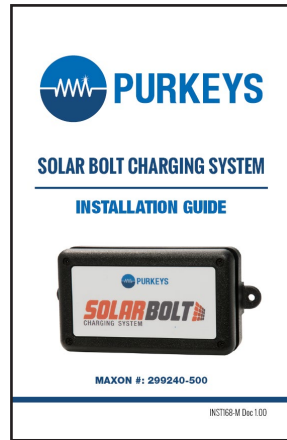


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PART# BK-1062
MAXON#: 299244-01
BAG KIT, SOLAR BOLT
HARDWARE



PART# INST168-M
MAXON#: 299240-500
GUIDE, INSTALLATION
SOLAR BOLT WITHOUT
INDICATE FOR MAXON





LIMITED COMMERCIAL WARRANTY POLICY

Purkeys Fleet Electric, Inc. (hereafter "Purkeys"), warrants each product to be free of defects in material or workmanship under normal use and service. This warranty is for the benefit of Original Equipment Manufacturers, Dealers, Warehouse Distributors, Fleets, or other End Users (hereafter "Customers") and covers products manufactured by Purkeys and sold new to Customers either directly by Purkeys or by its authorized dealers, distributors, or agents. The length of the Warranty Period is 24 months.

The warranty period commences on the in-service or install date and is not transferable. Failure to provide the in-service or install date on the warranty claim form will cause the warranty period to begin on the date the part was manufactured or date of sale recorded on the original sales invoice, whichever is earlier.

A completed warranty claim form should accompany all parts submitted to Purkeys for consideration for repair or replacement under warranty. The submitted claim form should contain all of the information required. Lack of a properly or fully completed claim form will result in delay or denial of warranty claim. Claims must be submitted no later than 30 days after part is removed.

This warranty does not apply if, in sole judgement of Purkeys, the product has been damaged or subjected to accident, faulty repair, improper adjustment, improper installation or wiring, neglect, misuse, or alteration or if the product failure is caused by defects in peripheral vehicle components or components attached to the Product or failure of a part not manufactured by Purkeys.

This warranty shall not apply if any Purkeys product is used for a purpose for which it is not designed or is in any way altered without the specific prior written consent of Purkeys. ANY Product alleged by a Customer to be defective must be inspected by Purkeys as a part of the warranty claims process in order to confirm that the part has failed as a result of a defect in material or workmanship.

Transportation for products and parts submitted to Purkeys for warranty consideration must be prepaid by Customer. Repaired or replaced products and or components will be returned to Customer pre-paid by Customer or "freight collect" to the address provided by Customer in the warranty claim form. No charge will be made for labor or material in effecting such repairs.

The Warranty provided by Purkeys hereunder is specifically limited to repair or replacement of the Product as Purkeys deems most appropriate in its sole discretion. Purkeys neither assumes nor authorizes any other person to assume on its behalf any other warranty or liabilities in connection with Purkeys products. The Warranty does not apply to fuses or other "consumable" or maintenance items which are or may be a part of any Purkeys product.

THIS WARRANTY DOES NOT APPLY TO LOSS OF VEHICLE OR EQUIPMENT, LOSS OF TIME, INCONVENIENCE, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. PURKEYS SPECIFICALLY DISCLAIMS AND SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES arising out of or from the use of Purkeys products by the Customer.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, INCLUDING COMMON LAW WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, AND ANY OTHER EXPRESS OR IMPLIED WARRANTIES. ALL OTHER SUCH WARRANTIES ARE SPECIFICALLY DISCLAIMED.

This Limited Commercial Warranty supersedes all previous Warranty Policies issued by Purkeys and any of its suppliers.

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WATT Keeps You Trucking