

PURKEYS

A MISSION CRITICAL ELECTRONICS BRAND

SOLAR DART

INSTALLATION GUIDE





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INSTALLATION

Step 1: Turn off the refrigeration or heater unit.

Step 2: Disconnect the refrigeration/heater unit from any and all shore power (land- based grid power).

Step 3: Disconnect the positive battery cable.

Panel Installation Preparation for Adhesive

If the bond surface is wet or dirty, the solar panel may not completely bond. We do not recommend solar panel installations in weather below 40 degrees Fahrenheit or where there is moisture on the bond surface. Any installs completed during the winter should be done in a heated shop where the bonding surface is warm and dry. Purkeys is not responsible for failures caused from installs completed in non-recommended conditions.

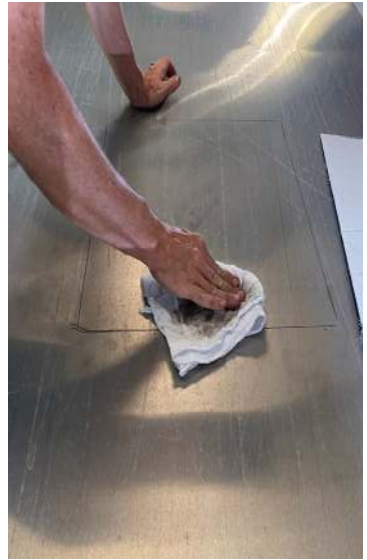
Step 4: Remove all loose material and clean the area where you are preparing to place the solar panel(s).

Step 5: Abrade the surface with Scotch-Brite to remove surface impurities.

Step 6: Set the panel(s) in the desired location and use a permanent marker to mark the location of each panel.

Step 7: Clean the area by applying isopropyl alcohol to the surface and wiping clean. Repeat this process until the area is clean and no additional residue is found on the rag or on the bonding surface.

Step 8: Let the area dry completely before bonding (10-15 minutes).



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Step 9: Position the solar panel on top of the trailer so the sun will strike the panel (see example 1 and 2). Mounting hardware must be provided by the installer and is not included in this kit.



Example 1



Example 2

Step 10: Connect the Solar Dash power and ground harness assembly to the solar panel (see Figure 1).



Figure 1

Step 11: Route the Solar Dart power and ground harness to the refrigeration or heater unit.

Step 12: Install the Solar Dart controller in a suitable location in the refrigeration or Heater unit.

NOTE: We recommended ALWAYS mounting the controller as close to the refrigeration unit/heater unit battery as possible.



Step 13: Route the Solar Dart controller and harness assembly to the starter so the controller is visible for diagnostic purposes.

Connect the negative cable to the ground stud (see Figure 2) and the positive cable to the starter BAT terminal (see Figure 3).

Important! Be sure to route the harness so it will not contact sharp metal edges or fuel lines.



Figure 2



Figure 3

Step 12: Secure harness, using clamps or wire ties, to prevent chaffing and damage.

Installation Complete

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LED OPERATION AND TROUBLESHOOTING



Charging Status LED	Condition	Action Needed
Green Solid	Good Voltage (Charging)	None
Green Fast Flashing	Over Voltage	Test vehicle or reefer/ heater battery.
No LED	Open circuit from battery positive and the Solar controller or disconnected ground	Repair circuit by repairing the wire or replacing the fuse.
Green Solid	Good Voltage (Charging)	None
Green Slow Flashing	Battery is at a full state of charge	None
Orange Solid	Low Voltage (battery below 12.4 volts) - Charging	Check position of Solar Panel. Ensure sunlight is striking panel.
Red Solid	Over Discharge- Not Charging	Check position of Solar Panel. Ensure sunlight is striking panel.

NOTES

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NOTES

LIMITED COMMERCIAL WARRANTY POLICY

MCE Purkeys FE, LLC (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 and/or branded 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 36 months. Products from other manufacturers, that are branded by said manufacturer, will carry the manufacturer’s original stated warranty.

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. An RMA# should be requested prior to returning any product for warranty consideration. Please contact the Purkeys’ Warranty Department to request an RMA# at warranty@purkeys.net and to provide your warranty claim information.

This warranty does not apply if, in sole judgment 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 Policy supersedes all previous Warranty Policies issued by Purkeys.

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WATT Keeps You Trucking