

PURKEYS

A MISSION CRITICAL ELECTRONICS BRAND

BYPASS KIT

INSTALLATION GUIDE





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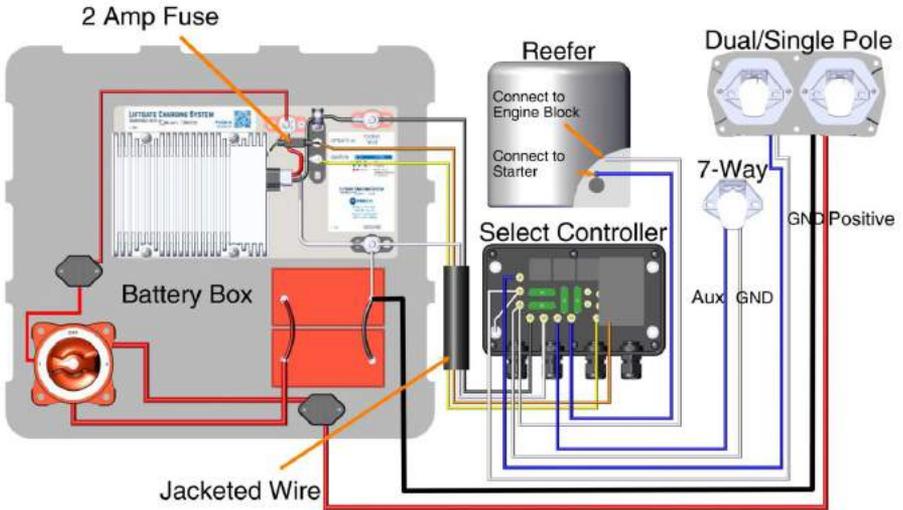
GENERAL INFORMATION

SELECT™ and DIRECT™ Bypass System

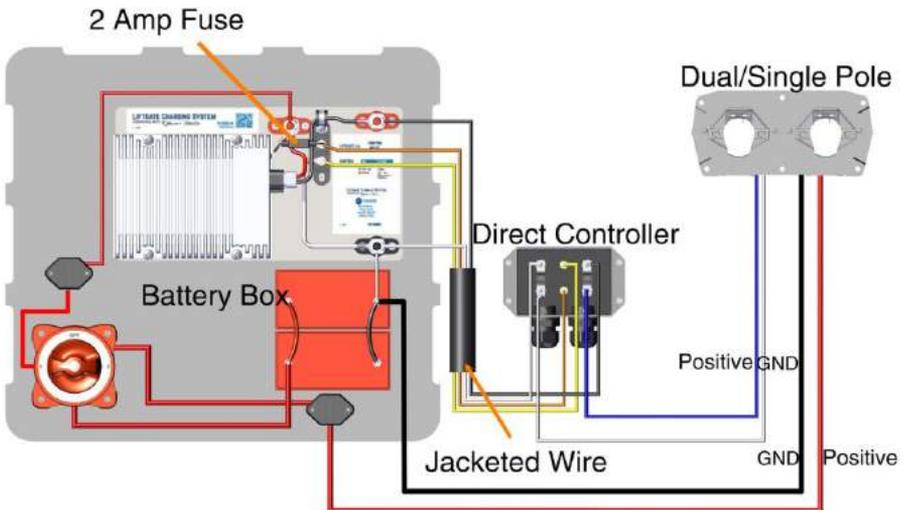
If issues occur with either the DC/DC converter or the liftgate batteries, the manual switch may be changed to position 2, which changes the liftgate charging system back to a standard dual pole charging system. All LEDs will be off on the Select or Direct controller if in position 2. If the switch is in position 1, the liftgate batteries will be charged via the Select or Direct. If the switch is in the OFF position, the liftgate batteries will not be charged from either system, and all LEDs on the Select and Direct controller will be off.

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BPS-40 FOR SELECT DIAGRAM



BPS-40 FOR DIRECT DIAGRAM



BYPASS SYSTEM INSTALLATION

Step 1: Mount the 1-2 Switch to the inside of the liftgate battery box using the existing pre-drilled holes.



Note: If the 1-2 Switch mounting holes do not exist, use the 1-2 Switch as a template to drill these holes.

Step 2: Install flat washers on 2 inch bolts before pushing the bolts through the plastic or metal wall of the battery box.



Step 3: Mount the 1-2 Switch using the provided hardware.



Step 4: Push the bolts through the battery box.



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Step 5: Add flat washers, lock washers, and nuts to the bolts and tighten.



Step 6: Connect the short red 4-gauge cable marked “right side circuit breaker” from the 1-2 Switch to the right side of the circuit breaker (toward door), install the nut, and tighten.



Note: If there is an existing cable from the breaker to the positive post on the battery, remove it, as it is not needed and could hinder proper operation of the system.

Note: Make sure to slide the red boot over this connection to protect it from a short.

Step 7: Disconnect the existing output wire that is connected to the 30 amp resettable circuit breaker from the liftgate battery positive post.



Step 8: Remove two of the 30 amp resettable circuit breaker mounting bolts so that the bracket can be turned to access the back side. Remove the output wire from the 30 amp resettable circuit breaker and discard wire.



Step 9: Connect the wire marked “30 amp circuit breaker” to the 30 amp resettable circuit breaker and tighten nut. Turn the bracket back to its original position, and re-install the mounting hardware.



Step 10: Connect the 4-gauge red wire from the 1-2 Switch marked “Liftgate Battery (+)” to the liftgate battery positive post. Install nut and tighten.



Step 11: Remove the dual pole receptacle from the nose of the trailer so that the connections on the inside of the box can be accessed. Remove the bolts connecting the positive and negative wires to the dual pole receptacle.



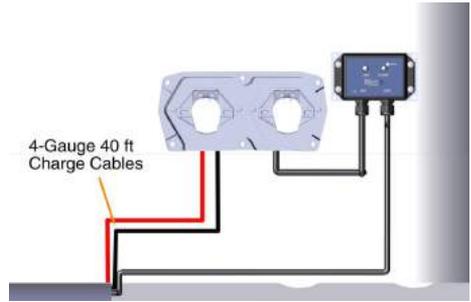
Step 12: Route the 4-gauge 40 ft red and black cables into the dual pole nosebox. Connect the 4-gauge black cable and the Select or Direct ground wire to the negative side of the dual pole receptacle. Connect the



4-gauge red cable and the Select or Direct dual pole positive wires to the positive side of the dual pole receptacle. Tighten bolts, and re-install dual pole nosebox on the trailer.

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Step 13: Route the 4-gauge red and black cables behind the front cover, then under the header plate through the air/electrical tube to the center channel.



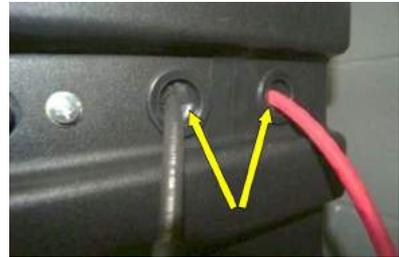
Important: Avoid sharp edges and possible chaffing points.

Step 14: Route the red and black 4-gauge cable toward the back of the trailer via the center channel. Secure with wire ties as you go.



Important: Avoid sharp edges and possible chaffing points.

Step 15: When near the liftgate battery box, route the two 4-gauge red and black cables to the liftgate battery box. Again, secure the cables with wire ties as you go.



Step 16: Mark how much excess will need to be cut off of the 4-gauge 40 ft red and black cables so that the 4-gauge red cable will reach the left side of the 150 amp circuit breaker and the 4-gauge black cable will reach the liftgate battery negative post.



Step 17: Pull the 4-gauge red and black cables back out of the battery box so it is easier to work on them. Cut off the excess.



Step 18: Strip 1/2 inch of the insulation off the 4-gauge red and black cables.



Step 19: Install the 1/4 inch ring terminal on the 4-gauge red cable and the 3/8 inch ring terminal on the black cable. Crimp the connections.



Step 20: Install the red heat shrink to the crimp area of the red cable and the black heat shrink to the crimp area of the black cable. Apply heat to both pieces to seal the connection.



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Step 21: Route the two 4-gauge red and black cables back into the liftgate battery box. Connect the 4-gauge black cable to the liftgate battery negative post.



Step 22: Slide the supplied red rubber boot over the 4-gauge red cable and connect this cable to the left side of the 150 amp circuit breaker.



Note: Using the supplied rivets, mount the included decal in an appropriate location inside the liftgate battery box.


PURKEYS

CONTROL MODULE LED INDICATIONS



LED OPERATION FOR POSITION #1 SWITCH

- **Fashing Green**
Charging system is off, liftgate batteries are above 12.4 V
- **Fashing Orange**
Charging system is off, liftgate batteries are below 12.4 V

SELECT Only:

- ● **Charging system is on, system is running off 7-way power**

DIRECT Only: Both LEDs Green
Charging system is on, liftgate batteries are being charged via the dual pole, single pole, or aux.

- ● **LEDs Alternate Green and Orange**
Excessive voltage drop from the source when the charging system attempts to turn on. Turn switch to position 2 and observe if batteries begin to charge.

LED OPERATION FOR POSITION #2 SWITCH

- ● **Both LEDs Off**
DIRECT or SELECT is not on. Use this position only for liftgate battery problems in Position #1
Report to Maintenance Department if this occurs

Installation Complete.

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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 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.

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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