

# SILENT SENTINEL

## TRUCK MOUNTED ADVANCE WARNING ARROW PANELS

Installation, Operation, & Maintenance  
(P/N 550-125-100)



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*Harness the Power of the Sun*

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## INSTALLATION

Install unit over-cab, on rail mounts, on deck or in bed of truck.

**NOTE:** Unit must be securely bolted to the truck or tied down with load binders or straps.

Route control cable from cab of truck to connector on arrow panel frame. Insert control cable connector into mating connector being careful to properly align keys on connector housings. Cable connector should slip easily into mating connector on arrow panel frame as the locking ring is rotated clockwise.

Secure the control cable to the unit frame using the supplied cable ties and cable tie anchors. Be certain to allow enough cable slack to allow arrow panel to raise and lower without placing any undo stress on the cable or connector.

The power cable (red & black 2-conductor cable and connector) should be connected to a 12-Volt DC fused circuit. A fuse rating of 10 to 20 Amperes is acceptable.

Install the desired connector or terminals on the control module power cable (red & black 2-conductor cable). A cigarette lighter plug may be used to allow the unit to be powered by the cigarette lighter circuit and to accommodate easy connect and disconnect. The red conductor must be connected to plus 12 Volts (center terminal of cigarette lighter plug) and the black conductor must be connected to Ground. Observe correct polarity!

After electrical connections have been made place the control module in the desired location and install the power cable and control cable into the mating connectors on the rear of the control module. Check arrow board functions by setting the **PATTERN SELECT** control switch to the various lamp patterns. The control module will take approximately 20 seconds to initialize the first time it is powered up. After that the arrow panel lamps will start flashing as soon as the **PATTERN SELECT** switch is set to the desired pattern. The **LAMP INTENSITY** control will automatically be set to the **AUTO TRACK** position for normal day-night operation.

## OPERATION

The arrow panel should be placed in the down position for high speed travel from one work area to another.

To place the arrow panel in the operating position, pull the locking detent ring pins from the holes in the frame and push the arrow panel into the up position. While holding the arrow panel up, insert the locking detent ring pins securely in to the frame upright holes and through the arrow panel support arm holes to lock the arrow panel in the up or operating position. If the unit is equipped with the optional winch and cable operating mechanism, raise the arrow panel by

turning the winch handle in a clockwise direction. Install the locking pins to secure the arrow panel in the raised position. During extended periods of operation, periodically check to make sure that the locking pins are still securely in place.

A fully charged vehicle battery, depending on the capacity and condition, should be capable of operating the arrow panel for at least four to eight hours with the engine off and still be able to start the vehicle's engine. The status of the battery system in the vehicle can be checked at any time by observing the **BATTERY LEVEL** indicators on the control module panel. If the battery status display indicates **RECHARGE**, the vehicle battery should be recharged before attempting to start the engine.

To return the arrow panel to the down or travel position, simply reverse the above procedure. On units equipped with the winch and cable mechanism, the arrow panel may require a slight push to help it maintain tension in the winch cable and safely return to the down position as the winch handle is turned counter-clockwise. Make sure that the **SIGNAL PATTERN** control is in the **OFF** position when the arrow panel is in the down or travel position

## MAINTENANCE

The only maintenance required for truck mounted arrow boards is to periodically clean the arrow panel, the lamp lenses, lamp shrouds, and the photocell light sensor, located on the bottom of the arrow panel frame near the control cable connector, as needed. Tie downs, load binders, and mounting hardware should be inspected periodically to insure safety, particularly in applications where the vehicle is moving with the arrow panel in the raised position.

**NOTE:** **SOLAR TECHNOLOGY** has taken every precaution to ensure that the **SILENT SENTINEL** is a safe and effective piece of traffic safety equipment. **SOLAR TECHNOLOGY**, however, cannot be held responsible for any injuries, accidents, or other mishaps resulting from the use, misuse, or abuse of the **SILENT SENTINEL** or any other **SOLAR TECH** product. It is the user's sole responsibility to ensure that the manner in which the **SILENT SENTINEL** is used is consistent with safe practices and that the user understand that he/she is the only liable party.

# MAINTENANCE CHART

## PERIODICALLY AS REQUIRED:

Clean solar panels

Clean photocell lens

Clean lamp lenses and shrouds

## EVERY ONE TO THREE MONTHS:

Check and replenish battery water

## ONCE EACH YEAR:

Check and lubricate winch or lift jack

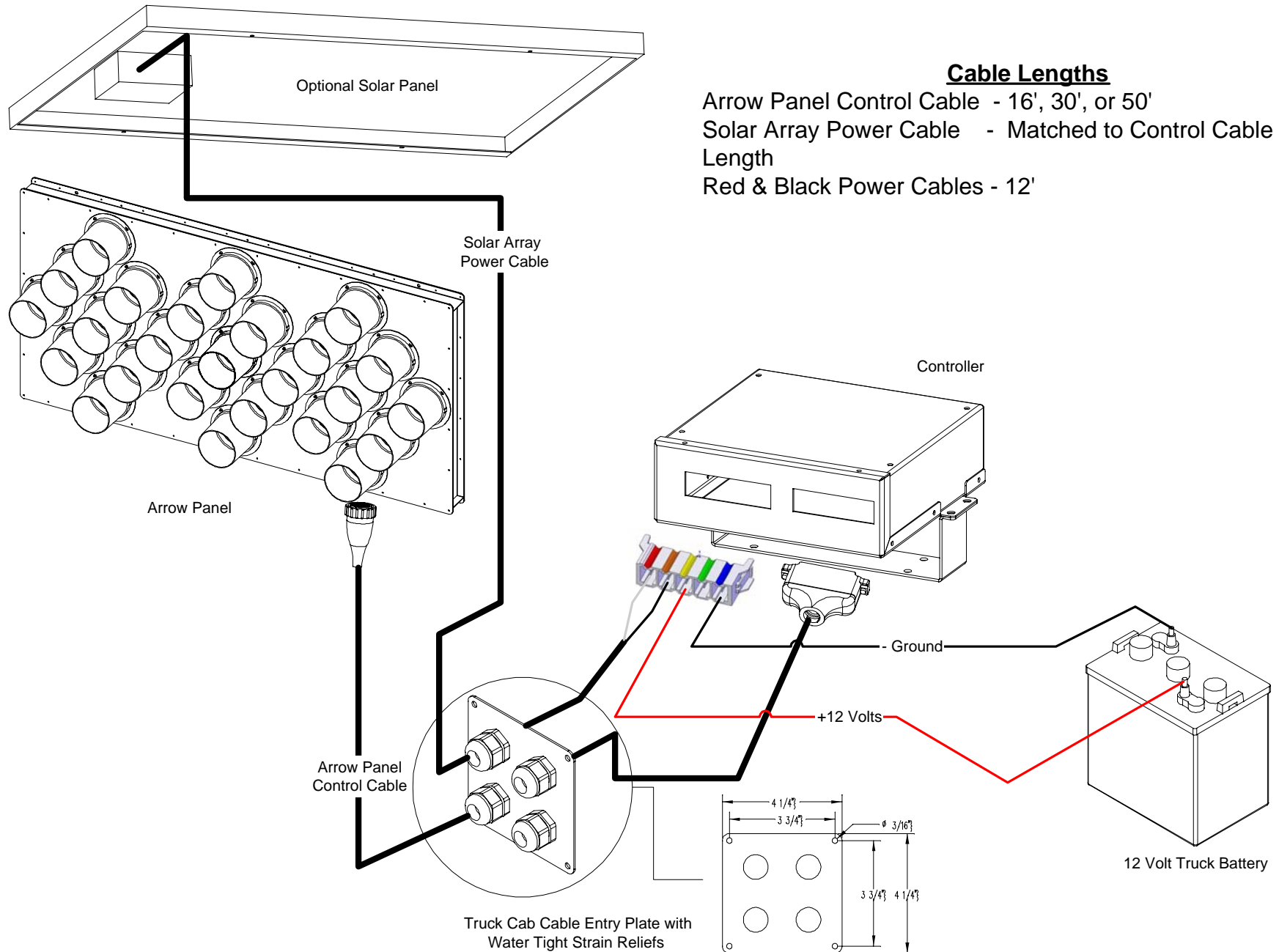
Check and lubricate pivot points

Check fasteners and locking pins

Check wires, cables, clamps & supports

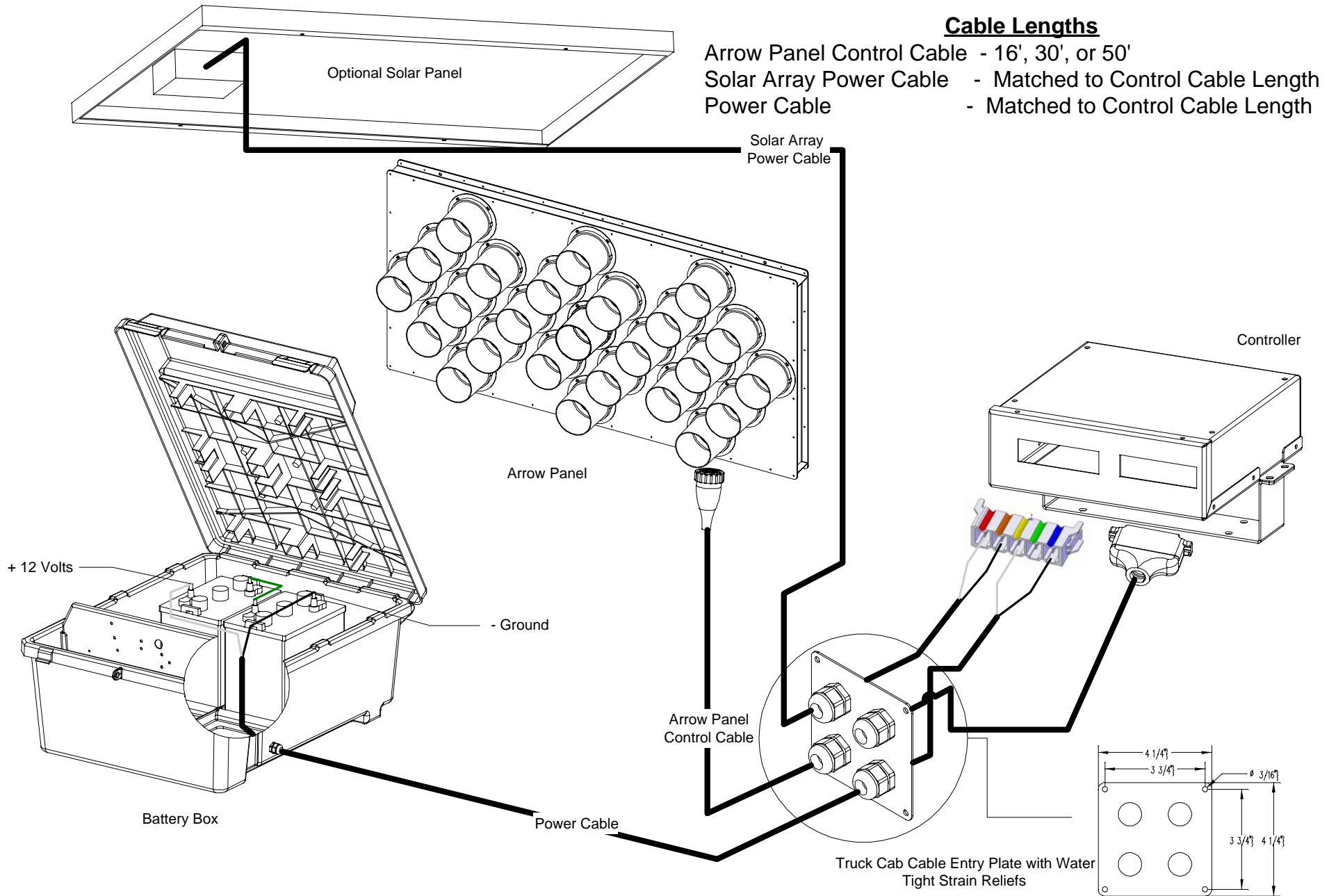
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## Cable Diagram: Vehicle Mount Arrow Board, In Cab Mount without Battery Pack



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## Cable Diagram: Vehicle Mount Arrow Board, In Cab Mount With Battery Pack



### Cable Lengths

- Arrow Panel Control Cable - 16', 30', or 50'
- Solar Array Power Cable - Matched to Control Cable Length
- Power Cable - Matched to Control Cable Length

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## Cable Diagram: Vehicle Mount Power Lift

