

## 400W International LT Fairing SuperFlex Solar Panel with Integrated Edge Seal Installation Instructions

**STOP! BEFORE CONTINUING:**

**SCAN THE QR CODE BELOW TO WATCH THE STEP-BY-STEP VIDEO**



[OR CLICK HERE TO WATCH THE STEP-BY-STEP VIDEO](#)

### Required Materials

To complete the installation of the 400W International LT Fairing Solar Panel Kit, you'll need the following tools and materials:

#### Cleaning Supplies:

- Isopropyl alcohol (90% or greater concentration)
- Lint-free shop rags or clean cloths

#### Measurement & Marking Tools:

- Tape measure
- Permanent marker

#### Unpacking Tools:

- Scissors, utility knife, or hook tool (for cutting stretch wrap carefully)

#### Installation Tools:

- 1–2 squeegees (for setting panels without air bubbles, included with the kit)
- Zip ties and mounting blocks (included with the kit)
- Screws for mounting the charge controller (included with the kit)
- Drill or screwdriver (for mounting the charge controller)

### Electrical Testing Tools:

- Multimeter (for verifying battery voltage and polarity)
- DC amp clamp (for measuring current from the panel)

### Additional (Optional but Recommended):

- Ladder or platform (for easier roof access)
- Protective gloves (to avoid fingerprints and cuts)
- Extra zip ties for cable management if needed

## Step 1: Clean the Truck Surface



A clean surface ensures strong adhesion that lasts the life of the panel (10+ years).

1. Spray isopropyl alcohol onto both the truck surface and your rag.
2. Wipe the fairing down thoroughly to remove dirt, oil, and grease.
3. Wipe a second time to ensure nothing is left behind.
4. It's helpful to have one person working from the top and one from below.

### Step 2: Identify and Mark the Center



1. Use consistent reference points, such as bolt holes on each side, to ensure accuracy.
2. Measure between the inside edges of both reference points.
3. Divide that number in half to find the center—mark this with your marker.
4. Note: The bottom of the International fairing comes to a natural point, making horizontal centering easier.

### Step 3: Positioning the Panel for Installation



1. Place the packaged panel on the fairing with the "This Side Up" label facing up.
2. Do not cut any stretch wrap bands yet.
3. Once the panel is flat and in position, cut the banding carefully (cut upward, not down—to avoid damaging the panel).
4. Remove the cardboard from the top and bottom.
5. Avoid lifting or sliding the panel unnecessarily—minor sliding for positioning is acceptable.

### Step 4: Deploy and Adhere the Center Panel (Driver's Side)



1. Open the panel like a book along its hinge using the support cardboard. Do not lift the unsupported side.
2. Remove plastic clips on the center section only.
3. Fan out the release liner for the center section.
4. Align the panel with your center marks, both top and bottom.
5. Lightly stretch the panel with your hands to match the fairing's curve.
6. Use the pull tab at the top to begin removing the bottom liner. Pull 1–2" of the liner to expose the adhesive.
7. Begin tacking the panel down: use the squeegee to press from the center upward and then outward.
8. Continue pulling the liner in 5–6" increments, squeegeeing as you go.
9. Once the top edge is reached, remove the liner from the lower flap and simultaneously squeegee the flap in place.

### Step 5: Adhere the Outside Panel Section (Driver's Side)



1. Remove the clips and fan out the liner for the outer section.
2. Gently pull down on the panel to conform it to the fairing.
3. Pull 1–2" of liner to expose the adhesive near the first silver bar.
4. Begin squeegeeing from that point upward through the center and outward.
5. Continue pulling liner 5–6" at a time while applying pressure with the squeegee.
6. Always pull the liner straight backward—never upward—to avoid bending the panel.
7. Once fully adhered, finish by removing the final lower flap's liner and squeegee it down.

### Step 6: Install the Passenger Side Panel



Repeat the same process as above for the passenger side panel:

1. Ensure "Passenger Side" and "This Side Up" labels are correct.
2. Cut banding once the panel is laid flat in position.
3. Slide out the cardboard carefully—avoid lifting the panel.
4. Open the hinged panel and remove the clips from the center section.
5. Align the center section top and bottom.
6. Fan out and pull the release liner in increments, tacking the panel down and squeegeeing as you go.
7. Once the center is bonded, move to the outside section.
8. Pull and squeegee gradually up and out.
9. Finish with the final bottom flap.

## Step 7: Cable Routing and Battery Connection

SCAN THE QR CODE BELOW TO WATCH THE BATTERY CONNECTION VIDEO



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If the truck has an extension on the back of the cab for improved aerodynamics, loosen bolts holding the fairing extender and run panel cabling under the fairing extension to the back of the tractor. Retighten bolts on the fairing extension.

1. Mount the charge controller securely to a mechanically sound surface (e.g., inside compartment, battery box or metal frame) using the included screws.
  - If the desired mounting location is inside a compartment in the cab
    - Use a step drill to drill an 11/16" hole in the bottom rear of the compartment for the cables to exit the cab.
    - Fasten the charge controller to the rear wall of the compartment using the provided self-drilling screws.
    - Run the battery and panel extension cables out of the hole and fit the provided grommet around the wires as they exit the compartment.
2. Remove the fuse from the wiring harness before connecting to the battery.
3. Connect the ring terminals:
  - **Red** to positive (+)

- **Black** to negative (–)
4. Use a multimeter to measure the battery voltage between the negative battery post and the charge controller side of the fuse holder, and confirm:
    - 12V system
    - Correct polarity
  5. Reinstall the fuse in the harness.
  6. Check the charge controller to ensure a light comes on, indicating that it is connected to a battery and that the fuse is in place. A green light indicates that it is connected and the battery voltage is normal. An orange light indicates the battery voltage is low.
  7. Ensure the battery cables are routed loosely so they do not rub against anything and wear out over time. Support them as needed with zip ties.
  8. Run the solar extension cables under the cab and up the back of the cab to connect to the solar panel pigtailed. When routing the cables, ensure they are not too tight and will not rub against anything that could wear a hole in the cable.
  9. Connect the extension cable to the solar panel pigtailed and secure a zip tie over the connector locks as a secondary lock. To provide additional strain relief, support each connector side with a zip tie mounting block.
    - **IMPORTANT:** Clean the areas where mounting blocks will be applied using >90% isopropyl alcohol.
  10. Use zip ties and self-adhesive zip tie mounting blocks to run cable in an orderly fashion down the back of the truck. Clean the area where the mounting blocks will be stuck with isopropyl alcohol and let it dry before sticking the block in place.
  11. Do not pull the wire tight around the corner on the bottom of the cab. Leave it a little loose so it does not rub and wear through the protective insulation.
  12. When the solar panel is exposed to sunlight:
    - Measure the battery voltage again—it should be slightly higher, based on the intensity of sunlight.
    - Check the charge controller. A second green LED light should flash, indicating the system is charging. This shows that the system is functioning properly and has been installed correctly.
  13. Use a DC current clamp around the wire with the fuse installed to measure current:
    - Current will vary between 0–30A
    - A 0 or low reading may indicate the battery is fully charged (above 14.2V) or deeply discharged (below 9.5V)

## Final Inspection and Testing

- Visually inspect all panel edges for full adhesion.
- Squeegee the entire surface again to eliminate air bubbles or wrinkles.  
Clean off any remaining labels; do not leave them on the panels.

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- Avoid placing weight (such as a knee or palm) directly on the panel during installation.
- Slight cell cracks will not significantly impact performance, but may reduce efficiency.

**You've completed the installation of the 400W International LT Fairing Solar Panel!**