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Sliding Electric Step

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>856-847-0-ZF00</td>
<td>Step 10856/550R</td>
</tr>
<tr>
<td>856-859-0-ZF00</td>
<td>Step 10856/700R</td>
</tr>
</tbody>
</table>

Other kits available based on dimension of steps
Introduction

The Innolight sliding electric step is built with 80 percent plastic parts and 20 percent steel and aluminum. The step is durable, resistant to corrosion and lightweight. The unit has a thermal breaker in case of high strain, and the footboard is constructed of anodized aluminum with anti-slip rubber.

Additional information about this product can be obtained from lippertcomponents.eu/support/ or by using the myLCI app. Replacement kits can be ordered from lippertcomponents.eu/product-catalog or by using the myLCI app.

The myLCI app is available for free on iTunes® for iPhone® and iPad® and also on Google Play™ for Android™ users. iTunes®, iPhone®, and iPad® are registered trademarks of Apple Inc.

Google Play™ and Android™ are trademarks of Google Inc.

Safety

Read and fully understand all instructions before installing or operating this product. Adhere to all safety labels. This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the LCI limited warranty.

**WARNING**

THE “WARNING” SYMBOL ABOVE IS A SIGN THAT A SAFETY RISK IS INVOLVED AND MAY CAUSE DEATH, SERIOUS PERSONAL INJURY AND/OR SEVERE PRODUCT OR PROPERTY DAMAGE IF NOT SAFELY ADHERED TO AND WITHIN THE PARAMETERS SET FORTH IN THIS MANUAL.

**CAUTION**

THE “CAUTION” SYMBOL ABOVE IS A SIGN THAT A PROCEDURE HAS A RISK INVOLVED THAT MAY CAUSE PERSONAL INJURY AND/OR PRODUCT DAMAGE IF NOT PERFORMED SAFELY AND WITHIN THE PARAMETERS SET FORTH WITHIN THIS MANUAL.

**CAUTION**

DO NOT STEP ON A RETRACTED STEP. USING A RETRACTED STEP CAN CAUSE PERSONAL INJURY AND/OR SEVERELY DAMAGE THE MOTOR. EXTEND THE STEP TO SAFELY USE THE PRODUCT AS INTENDED.

**CAUTION**

MOVING PARTS CAN PINCH, CRUSH OR CUT. KEEP CLEAR AND USE CAUTION.
### Parts List

<table>
<thead>
<tr>
<th>Letter</th>
<th>PN</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>033-08100 = UNI 5732</td>
<td>Round head square neck bolt</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>856-205-D-ZF00</td>
<td>Front bracket</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>120-63250 = DIN 7504</td>
<td>Hex head self-drilling screw</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>037-0080 = UNI 6593</td>
<td>Flat washer, large series</td>
<td>4</td>
</tr>
<tr>
<td>E</td>
<td>007-00080 = UNI 7474</td>
<td>Torque type hex lock nuts</td>
<td>4</td>
</tr>
<tr>
<td>F</td>
<td>856-129-0</td>
<td>Threaded insert</td>
<td>2</td>
</tr>
<tr>
<td>G</td>
<td>015-08020 = DIN 6921</td>
<td>Hex head flange screws</td>
<td>2</td>
</tr>
<tr>
<td>H</td>
<td>---</td>
<td>Pre-assembled aluminum channel</td>
<td>1</td>
</tr>
</tbody>
</table>

**NOTE:** Part numbers are shown for identification purposes only. Not all parts are available for individual sale. All parts with a link to the Lippert Store can be purchased.

### Resources Required

- Tool to install threaded inserts
- Cordless or electric drill or screw gun
- Appropriate drive bits
- 5 mm (7/32") drill bit
- 6.5 mm (1/4") drill bit

### Installation

Installation of the sliding electric single step can be difficult and installers should not exceed their capabilities. Do not lift the unit by the axles. The axles were not designed as a viable lift point.

**WARNING**

INCORRECT RAISING OR LOWERING OF THE UNIT COULD RESULT IN DEATH, SERIOUS INJURY AND/OR DAMAGE TO THE UNIT.
ENSURE THAT THE UNIT IS PROPERLY SUPPORTED BEFORE PERFORMING ANY MAINTENANCE OR REPAIR WORK. FOLLOW THE UNIT MANUFACTURER’S RECOMMENDATIONS FOR LIFTING AND SUPPORTING THE UNIT. USE PROPER PERSONAL PROTECTIVE EQUIPMENT.

1. Using the properly-rated floor jack, lift the trailer according to the manufacturer’s recommendation.

2. Support framework in accordance with the manufacturer’s recommendation.

**NOTE:** The holes in the step selected for attaching hardware are based on the application and the shape of the vehicle’s chassis. The step should protrude from the vehicle a desired amount. The lip on the chassis into which the screws are drilled varies in units, and this will require users to decide which step holes for attaching hardware are most appropriate. From a rigidity standpoint, the first holes in front are the best. Similarly, in the back, more stability is created the farther back the bolts are located. But the location of the attaching holes depends on the needs of the customer.

3. Loosely attach the step’s rear bolts. Insert them in the back hole of the step or another hole location depending on application (Fig.1).

4. Install the front brackets using the long bolts, washers and nuts. Insert bolts into the third hole from the front or another hole location depending on application. Tighten to 4 Nm (3 ft-lbs) (Fig.2).

5. Select rear channel fastening points at the structural parts of the vehicle for which the manufacturer guarantees the design will support the mechanical resistance to the maximum loads of the step in addition to its own weight.

6. Place an insert (Fig.3) on the special attaching tool and install in selected hole in the chassis.
7. Repeat for other insert.

8. Install the pre-assembled aluminum rear channel onto the chassis with the hex head flange screws tightened into the inserts (Fig.4).

9. Slide the rear bolts into the rear brackets on the pre-assembled channel secured to the chassis. The front of the step will hang down prior to being attached (Fig.5).

10. Route the step wiring inside the trailer and secure the step switch in a suitable position to avoid accidentally turning it on. Make sure the buzzer is filtered. See Wiring Diagram.

11. Use the front brackets to determine the locations for drilling 5 mm (7/32") pilot holes for the front bracket (Fig.6).

12. Enlarge the pilot holes with a 6.5 mm (1/4") bit (Fig.7).
13. Use the 6.3 mm x 25 mm (1/4” x 1”) hexagonal head self-threading screws to attach the front bracket to the chassis (Fig.8).

14. Tighten the rear bracket bolts to 4 Nm (3 ft-lbs) (Fig.9).

15. Verify proper installation by checking for movement of the step.
   
   A. If there is play/movement, check fasteners and through holes for tightness.
   
   B. If there is no play/movement, then the installation is complete.

1. Park the unit on level ground.
2. Press and hold the switch to extend the step. The motion will continue until the step is completely extended when it will automatically stop. Release the switch.
3. Press and hold the switch to retract the step. The motion will stop when the step is completely retracted. Release the switch.

**NOTE:** Some step models offer a safety feature which provides automatic closure of the steps when the vehicle is started.
**Innolight Sliding Electric Step**
Installation and Owner’s Manual
(For Aftermarket Applications)

**Wiring Diagram**

```
<table>
<thead>
<tr>
<th>Pin Nº</th>
<th>Description</th>
<th>Pin Nº</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Button common (+12 V)</td>
<td>1</td>
<td>(GND)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td>motor -</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>3</td>
<td>motor +</td>
</tr>
<tr>
<td>4</td>
<td>D +</td>
<td>4</td>
<td>+12 V dc</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>RETURN command</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>EXIT command</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

**Adjustment Screw**

**Command RETURN**

**Command EXIT**

**Step Open:**
Light on when the vehicle is switched on or buzzer in operation

**Caution:**
The buzzer must be filtered.
Wiring Diagram
For Automatic Opening/Closing Kit

[Diagram of wiring connections with labels for GND, +12Vdc, STEP (+), STEP (-), FC(NC) DOOR, MOTOR, 15A FUSE, 12V DC RELAY, Relay connection scheme, and 5A FUSE.]
Wiring Diagram
For Automatic Opening/Closing Kit (Continued)

STEP OPEN: Light on when the vehicle is switched on or buzzer in operation

!!!CAUTION!!!
The buzzer must be FILTERED

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Description</th>
<th>Pin No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>(-GND)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td>motor</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>3</td>
<td>motor +</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>4</td>
<td>+12 V dc</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>RETURN command</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>EXIT command</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Troubleshooting

Emergency Operation
The sliding electric single step is equipped with a manual activation option.

1. Locate the hole under the step.
2. Using a screwdriver or a special tool (PN 8560867-0-ZF00), insert it into the hole (Fig.10)
3. Push up the driving gear to disengage the electric motor.
4. Move the step to the desired position.
5. Remove the tool in order to stop the steps from moving.

Maintenance

1. Make sure unit is parked on a stable, level surface.
2. Make sure power to the unit is turned off and/or disconnected.

**CAUTION**

Prior to starting maintenance procedures, disconnect power to the step’s electrical system to prevent inadvertent use of the step.

3. After driving on roads that are salted, wash the step with fresh water.

**NOTE:** If protective panels need to be removed for service or maintenance, reinstall panels as soon as possible after service/maintenance has been completed.