Electronic Lock Indicator
Harness Replacement Instructions

RK-10903-U
2-Sensor Harness Replacement Kit for
Yard Spotter
Fifth Wheel Top Plates
SAFETY INFORMATION

This manual contains retrofit procedures for installing an Electronic Lock Indicator (ELI) on yard spotter fifth wheels. Before rebuilding, verify that you have the correct rebuild kit for the fifth wheel top plate you are attempting to rebuild. The fifth wheel part number tag is located on the side of the fifth wheel “pick-up” ramp (see FIGURE at right).

**IMPORTANT:** The electronic lock indicator is a tractor/trailer fifth wheel coupling aid and is intended as an additional safety check to assure the driver of a safe and complete coupling. It does not eliminate the requirement for a visual inspection of the fifth wheel.

**WARNING**

ALWAYS GET OUT OF THE TRACTOR CAB AND VISUALLY INSPECT THE FIFTH WHEEL COUPLING! Failure to verify a proper couple can result in tractor and trailer separation, causing death or serious injury to you or others.

**IMPORTANT SAFETY INFORMATION**

Before attempting ELI retrofit installation, you must read and understand the following:

- **DO NOT** attempt to install ELI on any XA-351-UB fifth wheel without following the instructions contained in this manual.
- **DO NOT** modify, change, weld, or add to the product. Use only genuine Holland parts. Use only the components supplied in the kit.
- Perform all procedures in a lighted area clear of obstacles and other personnel.
- **DO NOT** strike any part of the product with a steel hammer, except where instructed to do so.
- Always wear safety goggles during removal, installation, or service procedures.
- Observe standard precautions when lifting.

U.S. PATENT #5861802, D442971, 6285278, and other patents pending.

Use RK-10903-U to retrofit the ELI on the following Fifth Wheel Part Numbers

- XA-351-03505 and (-2, -3, 4)
- FW35-03344 and (-1, -2, -3, -4, -5, -6, -7, -8, -9, -10)

XA-351-UB is used on the following fifth wheel assemblies:

- FW67-16B (-2, -3, -6)
- FW68-16 (-2)
- FW69-12B
PARTS BREAKDOWN

NOTE
The item numbers in this parts breakdown, and in the chart below, correspond to the item numbers referenced throughout this manual.

REQUIRED TOOLS AND SUPPLIES
- Torque Wrench (ft.-lbs.)
- 3/8˝ Wrench
- 3/4˝ Wrench (2)
- Scissors/knife
- Hammer or mallet

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>NO.</th>
<th>PART NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>XA-10845</td>
<td>1</td>
<td>Harness subassembly, 2-sensor</td>
</tr>
<tr>
<td>2</td>
<td>XB-01961</td>
<td>7</td>
<td>Tie, nylon cable</td>
</tr>
<tr>
<td>3</td>
<td>XB-10775</td>
<td>2</td>
<td>Screw, 1/4˝-20 x 5/8˝, zinc with patch</td>
</tr>
<tr>
<td>4</td>
<td>XB-21-S-5M-22M</td>
<td>1</td>
<td>Pin, roll 5mm dia. x 22mm large</td>
</tr>
<tr>
<td>5</td>
<td>XB-09976</td>
<td>5</td>
<td>Clip, spring</td>
</tr>
<tr>
<td>6</td>
<td>XB-08559</td>
<td>1</td>
<td>Washer (1-3/4˝ O.D. x 9/16˝ I.D.)</td>
</tr>
<tr>
<td>7*</td>
<td>XA-1029</td>
<td>1</td>
<td>Roller (1/2˝ I.D.)</td>
</tr>
<tr>
<td>8**</td>
<td>XB-10068</td>
<td>1</td>
<td>Hex head cap screw (1/2˝-20 x 2˝)</td>
</tr>
<tr>
<td>9**</td>
<td>XB-T-69-A</td>
<td>1</td>
<td>Locknut (1/2˝-20)</td>
</tr>
<tr>
<td>10**</td>
<td>XB-PW-1732-1-116</td>
<td>1</td>
<td>Washer (1-1/16˝ O.D. x 17/32˝ I.D.)</td>
</tr>
</tbody>
</table>

* Not included in this kit. Items are listed only for reference.
** Included in this kit but not shown in this drawing.

COMPLETED VIEW SHOWN
(UNDERSIDE)
Fifth Wheel Top Plate Preparation

1. Remove the fifth wheel top plate from the tractor.
2. Place top plate upside down on a flat working surface.

**NOTE:** Before proceeding, make sure the top plate and work areas are free of chips and burrs.

3. Remove the cam bolt and air cylinder bolts and rotate the cam away from lug “A”. Discard washer “B” (see **FIGURE 1**). Remove and discard cam sensor.

**FIGURE 1**

4. Install the roll pin (**ITEM 4**) into the drilled hole, flush with the top of the lug.

**FIGURE 2**

**NOTE:** Before installing the sensors and harness, make sure the top plate and work areas are free of chips and burrs.
Harness Installation

Cam Sensor Bracket Installation

1. Clean and lubricate the cam plate. Install cam sensor bracket under LUG “A”. Position HOLE “B” onto the bottom of the roll pin (ITEM 4).

   ![Figure 3](image)

   **NOTE:** When installing the washers (ITEM 6), the rounded edge of the washers must always face the cam plate.

2. Once the cam sensor bracket is attached to the roll pin, line up HOLE “C” (see **Figure 3**) with the cam bolt hole. Replace the washer (ITEM 6) over the cam bolt hole, and rotate the cam plate back into position (see **Figure 4**). Re-install the roller (ITEM 7), then the old washer. Finally, guide the hex head cap screw (ITEM 8) through the washer, roller, cam plate, washer lug, the cam sensor bracket and washer (ITEM 10). Screw the new locknut (ITEM 9) onto the hex head cap screw and tighten securely. Clean, lube, and check the cam operation for free movement. Clean away excess grease.

   ![Figure 4](image)

   **NOTE:** The bolts should be inserted so that the bolt heads face the fifth wheel casting and the nuts face outward.

3. Reconnect the air cylinder clevis to the cam (see **Figure 5**). Place bolt through clevis and the cam and tighten down the nut.

   ![Figure 5](image)
**Kingpin Sensor Removal**

1. Remove the two screws (see FIGURE 6, ITEM 3). Remove and discard old sensor harness.

   ![Figure 6](image)

2. Assemble the cable ties (ITEM 2) and spring clips (ITEM 5) — as shown in FIGURE 8 — together before pressing the clips onto the casting.

   ![Figure 8](image)

3. Route the harness on the fifth wheel as shown in FIGURE 9. Use clips (ITEM 5), and cable ties (ITEM 2) to fasten the harness to the fifth wheel ribs in the locations shown.

   ![Figure 9](image)

4. Re-install the fifth wheel top plate onto the tractor.

**Kingpin Sensor Bracket Installation**

1. Mount the kingpin sensor bracket to the fifth wheel (see FIGURE 7) with the supplied screws (ITEM 3). Torque screws to 12 foot-lbs. Do not overtighten the screws. Do not use air or impact tools.

   ![Figure 7](image)

2. Connect the 25’ extension cable to the wire harness on the fifth wheel (see FIGURE 10).

   ![Figure 10](image)

3. Check the operation of the fifth wheel and the Electronic Lock Indicator using lock adjustment tool TF-TLN-5001.

   For operating instructions, see SAF-HOLLAND publication XL-FW389-XX.