AimStar®

Solar Aiming System

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Date: 1-20-16

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I. Revision Information

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<th>Date</th>
<th>Author</th>
<th>Description</th>
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<td>A</td>
<td>7-7-2008</td>
<td>Price R. Potter</td>
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<td>B</td>
<td>11-9-2011</td>
<td>Price R. Potter</td>
<td>Change TM to R behind AimStar</td>
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<td>C</td>
<td>1-19-16</td>
<td>Price R. Potter</td>
<td>Revise Latch Holddown design</td>
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1.0 Introduction

The information contained in this manual describes the AimStar® Solar Aiming System operation procedures used with the American Signal Company Portable Variable Message Signs (VMS). This Option can be installed on the model 33x and 33xC Trailers, as well as the model 432 and 465 Advantage Series Trailers. In addition, each of these configurations can be fitted with either two 80W Solar Panels or with two 130W Solar Panels. The Option P/Ns for these models are:

<table>
<thead>
<tr>
<th>Option P/N</th>
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<tr>
<td><strong>For 33x Trailers:</strong></td>
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<tr>
<td>OPT30065098</td>
<td>AimStar® Solar Assy, 130W (2x) 331/332</td>
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<td>OPT30065098-2</td>
<td>AimStar® Solar Assy, 130W (2x) 333</td>
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<td>OPT30065098-3</td>
<td>AimStar® Solar Assy, 80W (2x) 331/332</td>
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<td>OPT30065098-4</td>
<td>AimStar® Solar Assy, 80W (2x) 333</td>
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<td>OPT30065098-8</td>
<td>AimStar® Solar Assy, 80W (2x) 33xC</td>
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<td><strong>For x32 Advantage Trailers:</strong></td>
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<tr>
<td>OPT30065098-1</td>
<td>AimStar® Solar Assy, 130W (2x) Adv</td>
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<tr>
<td>OPT30065098-5</td>
<td>AimStar® Solar Assy, 80W (2x) Adv</td>
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</table>
2.0 Travel/Storage Position

1. Place Jack Handle in downward position.
2. Ensure Solar Lift Tube Bar is mostly perpendicular to Sign Case (oriented toward Fender).
3. Align Slots in Solar Rack Angle with Mast Adjustable Draw Latch, insert hook into slot and clamp Latch down (see Figure 2). After pulling Latch down, insure locking tab has been engaged. Repeat same latching procedure on other side of Solar Rack Assembly.

BOTH RH & LH LATCHES MUST BE SECURED & LOCKING TAB ENGAGED BEFORE TOWING THE TRAILER.

4. Insert Solar Lock Pin in any hole in Lower Standoff Plate (see Figure 4).

Figure 1. – Travel Position
Figure 2. – Travel Hold down components (RH side shown)

- Slot in Solar Rack Latching Angle
- Adj. Draw Latch (CLA-186)
- Locking Tab
3.0 Operating Position

3.1 Raising AimStar® Solar Panels

1. Unlock and unlatch RH & LH Adjustable Draw Latches and remove hook from slots.
2. Insert Panel Rotation Handle into any of four horizontal holes in Aiming Collar (see Figure 3 & Figure 4).
3. Crank Jack Handle up while holding Panel Rotation Handle to hold Solar Panels in position.

   HOLD PANEL ROTATION HANDLE STEADY DURING RAISING OPERATION.

4. Raise Solar Panels until Aiming Plate is almost contacting Lower Standoff Plate (see Figure 4).
6. Align hole in Aiming Plate with corresponding hole in Lower Standoff Plate, raise until Plates contact and insert Solar Aiming Lock Pin.
7. Remove Panel Rotation Handle and store in Pedestal.
Figure 4. – AimStar® components
3.2 Orienting/Realigning AimStar® Solar Panels

1. Remove Solar Aiming Lock Pin.
2. Insert Panel Rotation Handle into any of four horizontal holes in Aiming Collar.
4. Align hole in Aiming Plate with corresponding hole in Lower Standoff Plate and insert Solar Aiming Lock Pin.
5. Remove Panel Rotation Handle and store in Pedestal.

3.3 Lowering/Securing AimStar® Solar Panels

1. Remove Solar Aiming Lock Pin.
2. Ensure Solar Lift Tube Bar is perpendicular to Sign Case (oriented toward Fender).
3. Crank Jack Handle down while holding Panel Rotation Handle to hold Solar Panels in position.

**HOLD PANEL ROTATION HANDLE STEADY DURING LOWERING OPERATION.**

4. Remove Panel Rotation Handle and store in Pedestal.
5. Put AimStar® System in Travel/Storage position (see Section 2.0)
4.0 Mechanical Assembly Drawings

The AimStar® assembly for both the 80W & 130W 33x Advantage Trailers consists of a Solar Rack Assembly coupled with a specific Solar Panel. The Solar Rack Assembly drawings for these models are:

- AMS30125065  Solar Rack Assembly, AimStar® Long 33x
  - NOTE: Not shown in this Manual
- AMS30125066  Solar Rack Assembly, AimStar® 80W 33x

(See Section 5.0 for P/Ns of Solar Panels)
4.1 Solar Rack Assembly, AimStar® Long 33x (30125066, pg 2)
4.1 Solar Rack Assembly, AimStar® Long x32 Adv (30125066, page 3)
4.1 Solar Rack Assembly, AimStar® Long x32 Adv (30125066, pg 4)
5.0 Spare Parts List

<table>
<thead>
<tr>
<th>AmSig P/N</th>
<th>Description</th>
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<tbody>
<tr>
<td>CEL-101</td>
<td>Cell, Solar 130W @ 17.2V</td>
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<tr>
<td>CEL-120</td>
<td>Cell, Solar 80W @ 17.2V</td>
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<tr>
<td>AMS30120363</td>
<td>Handle, Panel Rotate</td>
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<tr>
<td>COV00000245</td>
<td>Cover, Handle Grip Vinyl</td>
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<tr>
<td>AMS30120347</td>
<td>Pin, Aiming</td>
</tr>
<tr>
<td>CLA00000186</td>
<td>Clamp, Toggle Adj J Pull Dbl Lock</td>
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(See drawings in Section 4.0 for P/Ns of miscellaneous mechanical components)