# STURDY-LITE

*A DIVISION OF ROADMASTER ENTERPRISES, LLC*

1900 INDUSTRIAL BLVD | BRISTOL, TENNESSEE 37620

P: 800-251-7082 | FAX: 423-968-3820


# RAMP SETUP INSTRUCTIONS

***Required components for drop-deck-compatible ramp assembly:***

- (Qty: 2) Eight-foot-long upper ramp section, as depicted in Figure 1:

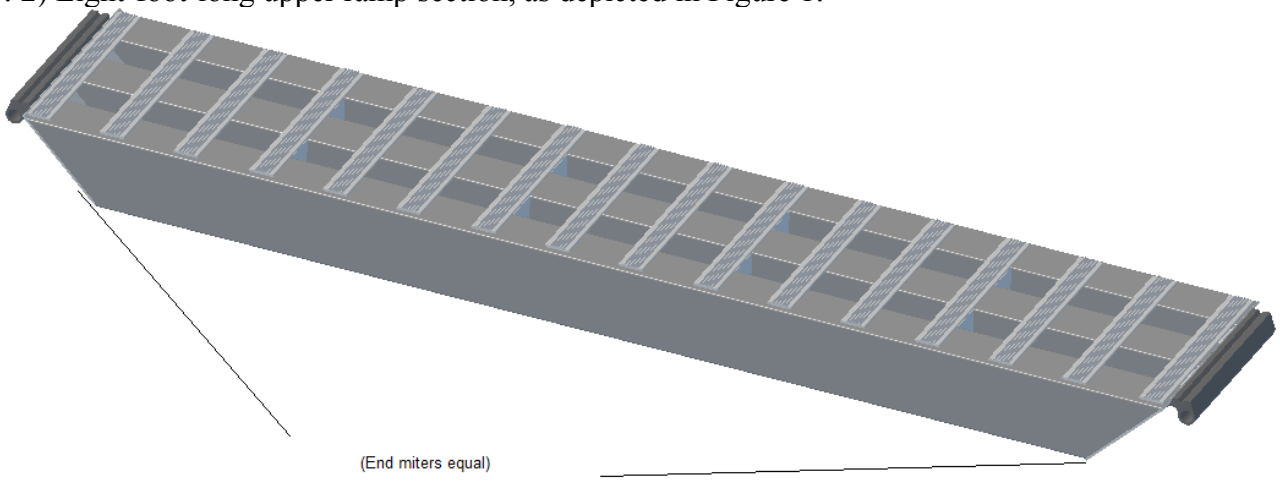


**Figure 1 – Illustrated view of a Single 8 ft Upper Ramp Section**

- (Qty: 2) Adjustable ramp stands, as depicted in Fig. 2:

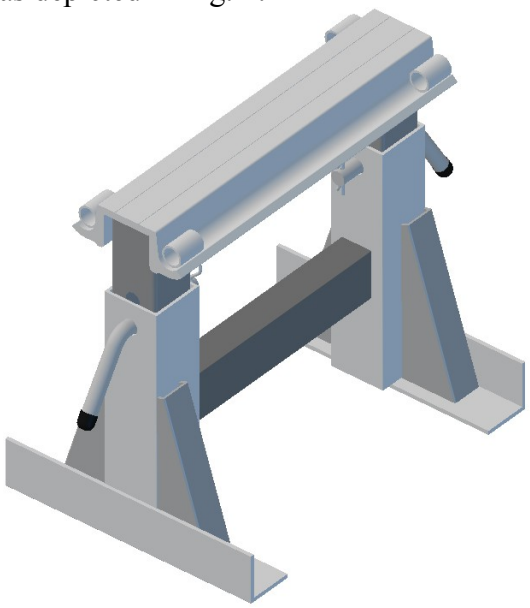

**Figure 2 – Illustrated view of Adjustable Ramp Stand, shown w/o Adjustment Pins/Rods**

- (Qty:4) 25”-long, 7/8”-dia. aluminum Retaining Rods w/ hitch pins for Ramp Stand receivers, depicted in Fig. 3:

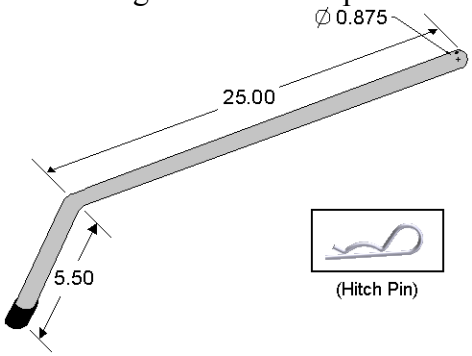


**Figure 3 – Illustrated view of Retaining Rod & Unattached Hitch Pin for Ramp Stand Receiver**

- (Qty: 4) 7/8”-dia aluminum push pin rod for ramp stand height adjustment, w/ hitch pins, depicted in Fig. 4:

**Figure 4 – Illustrated view of Push Pin Rod & Unattached Hitch Pin for Ramp Stand Height Adjustment**

- (Qty: 2) Eight-foot-long lower ramp sections w/ compound miter, depicted in Fig. 5:

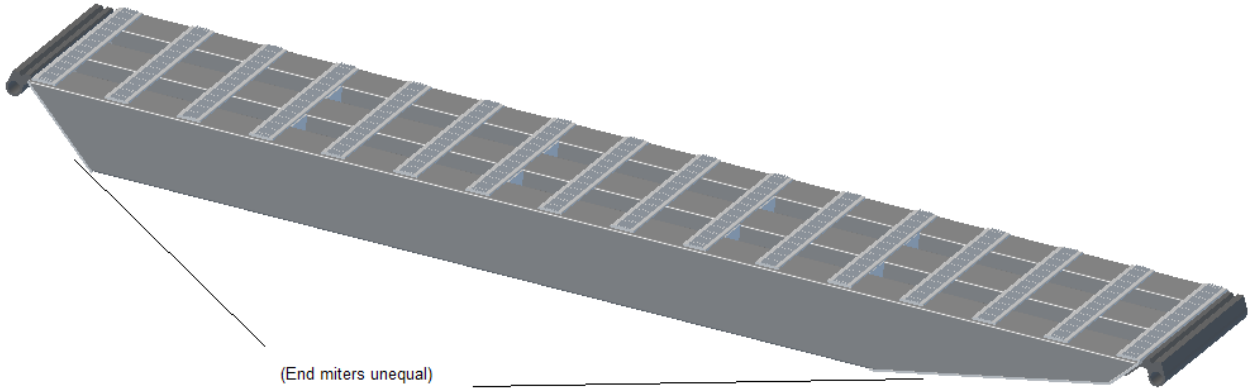


**Figure 5 – Illustrated view of a Single 8 ft Lower Ramp Section**

- (Qty: 2) 36”-long Trailer Receivers w/ 7/8”-dia. aluminum Retaining Rods for mounting over rear rub rail, depicted in Fig. 6:

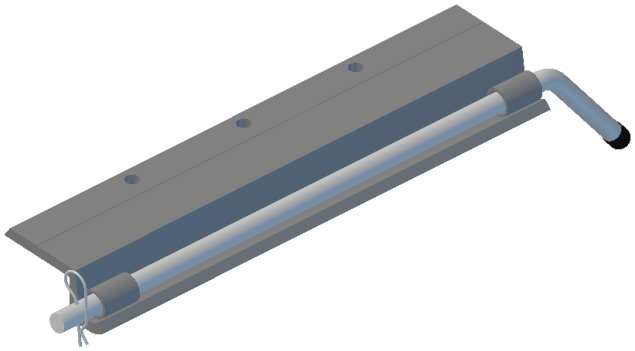

**Figure 6 – Illustrated view of 36”-long Trailer Receiver with installed 7/8”-dia. aluminum Retaining Rod**

- (Qty: 6) 5/8”-dia. SAE Grade 5 bolts w/ matching nuts & lock washers (not included) for bolting trailer receivers into the trailer’s back rail (not the rub rail), as depicted in Fig. 7:

**Figure 7 – Head View of Standard SAE Grade 5 Bolt, where the grade of ‘5’ is indicated by 3 radial lines**

---

**<u>Construction supplies needed for installation *(not included):*</u>**

- (Qty: 1) Powered drilling tool with enough torque to drill through 0.500”-thick AL6061-T6 aluminum (Rockwell B Hardness = 60), as well as the trailer’s back rail
- (Qty: 1) 11/16”-dia. (~17 mm) drill bit
- Tape measure, at least 8’ long
- Torque wrench w/ torque-measuring capability, used for securing bolts on trailer receiver
- Open-end or box-end wrench used to temporarily restrain each nut as bolt is secured

---

**If all of the aforementioned components are accounted for, assembly can proceed according to the following steps:**

1) The user must drill three (3) holes through the 4.375”-wide x 36.00”-long flat portion of each of the trailer receivers, as shown in Fig. 8:

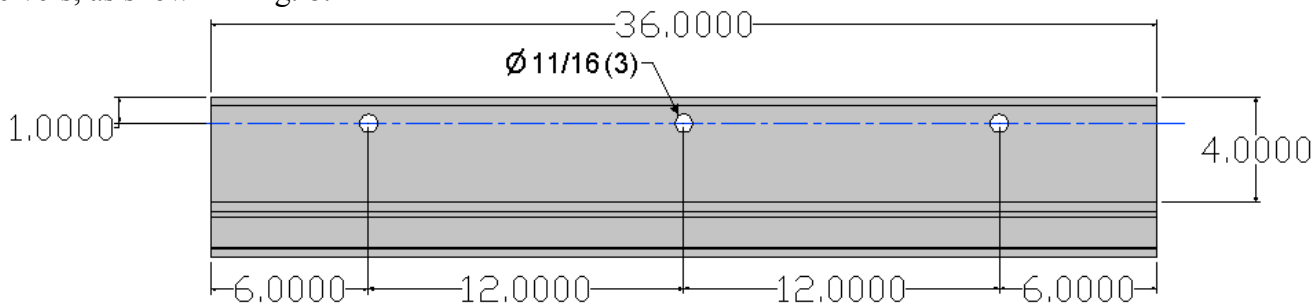


**Figure 8 – Top View of Trailer Receiver w/ hole-drilling locations shown**

2) Corresponding holes w/ matching centerline-to-centerline spacing must be drilled into the trailer’s back rail for mounting. These holes should preferably be drilled in regions near each of the trailers back-side corners so that the outward-facing side edge of each trailer receiver is coincident/flush with its respective side rail edge. Make sure not to contact the main frame or any wiring harnesses.

*Note: If the receivers have been bought from another party and holes have already been drilled, measure the existing centerline-to-centerline spacings on the receivers and drill trailer’s back rail accordingly.

3) Mount the trailer receivers onto the trailer’s back rail, line up the holes, and insert a Grade 5 bolt into each of the six (6) holes. Secure each bolt w/ a matching nut and lock washer. Torque each bolt w/ nut and lock washer to 60 lbs/ft. If the trailer floor is higher than the back rail, either cut off the receiver at the 2” etch line or shim under the receiver along the back rail.

4) Using the tape measure, traverse the tape along the ground approximately eighty-eight & 3/4 inches (88-3/4”) from the vertical boundary of the trailer’s back rub rail edge (i.e. exterior face of rear stake pockets) and set ramp stands on the ground, the near end of each ramp’s “foot” flush on the distance mark, as shown in Fig. 9:

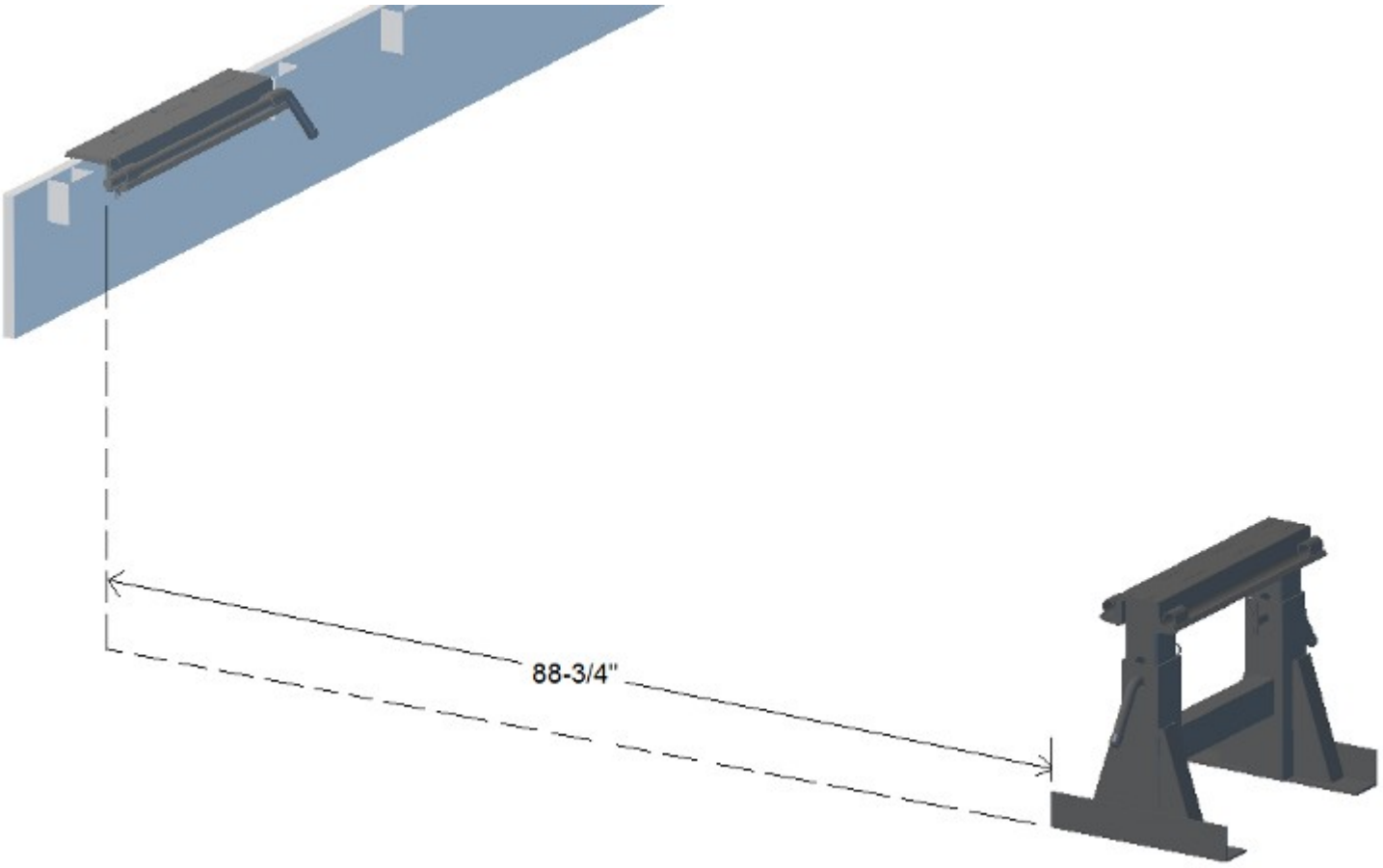


**Figure 9 – Illustrative view of Placement for Ramp Stands, relative to the trailer's back rub rail edge**

Note that Figure 9 roughly depicts the back end of a trailer with a 40" nominal deck height – the exact lateral placement of the stands may vary significantly from 88-3/4", depending on the magnitude of the height differential.

5) Place one (1) 25"-long retaining rod through the hole on the side of each ramp stand's square support column and secure the rod with a supplied key pin on the other end, using the second/middle hole selection on the inner square tube for a trailer height of 40". Note that if your trailer height is 39" or less in height (but no less than 37-1/2"), use the first/top hole on the inner square tube; likewise, if your trailer is 41" or greater (but no greater than 42-1/2"), use the third/bottom hole on the inner square tube.

6) Place either end of an 8' upper ramp section into the curved cradle receiver on a ramp stand, and the other end into the curved cradle receiver on the trailer, as shown in Fig. 10:

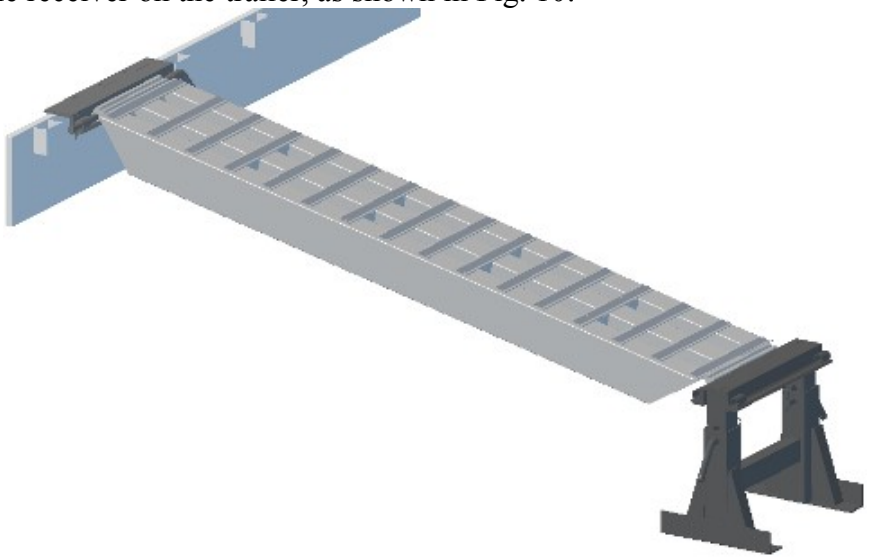

**Figure 10 – Side View of 8' Upper Ramp Section, in place between trailer receiver and ramp stand**

7) Now that the upper ramp section is in place, insert one (1) 38-1/4”-long retaining rod through the 1-1/4”-wide circular tube slot on the outside edge of each trailer receiver, and through the ramp’s adaptor attachment resting in the cradle, securing the rod’s other end with a key pin. Then, in similar fashion, take one (1) 25”-long retaining rod and insert it through the circular tube slot on the outside edge of each ramp stand receiver, again securing with a key pin.

8) Place the short-miter end of each 8’ lower ramp section into the curved cradle receiver on the other side of each ramp stand, and allow the long-miter end of each ramp to rest on the ground, as shown in Fig. 11:

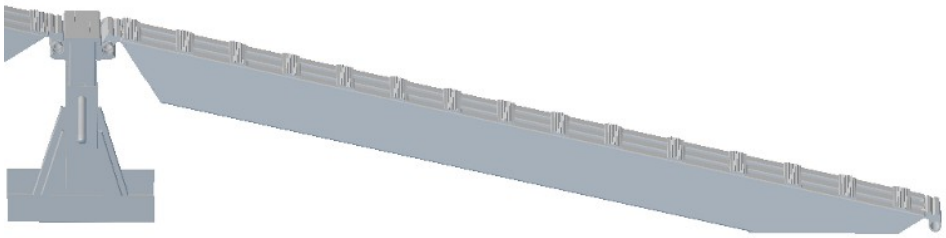

**Figure 11 – Side View of 8’ Lower Ramp Section, in place between ramp stand and ground**

9) Insert one 25”-long retaining rod through the circular tube slot on the outside edge of each ramp stand receiver, and secure the other end with a key pin.

10) The completed double ramp setup should resemble the view in Figure 12 when viewed from the driver's side:

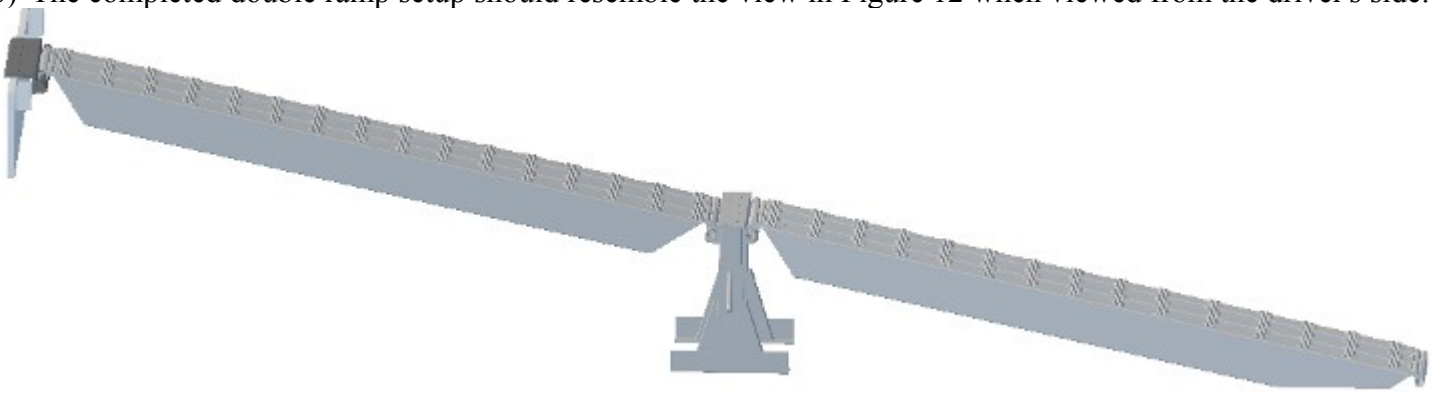

**Figure 12 – Overall Side View of Assembled Double Ramps**