

Bucket Elevator

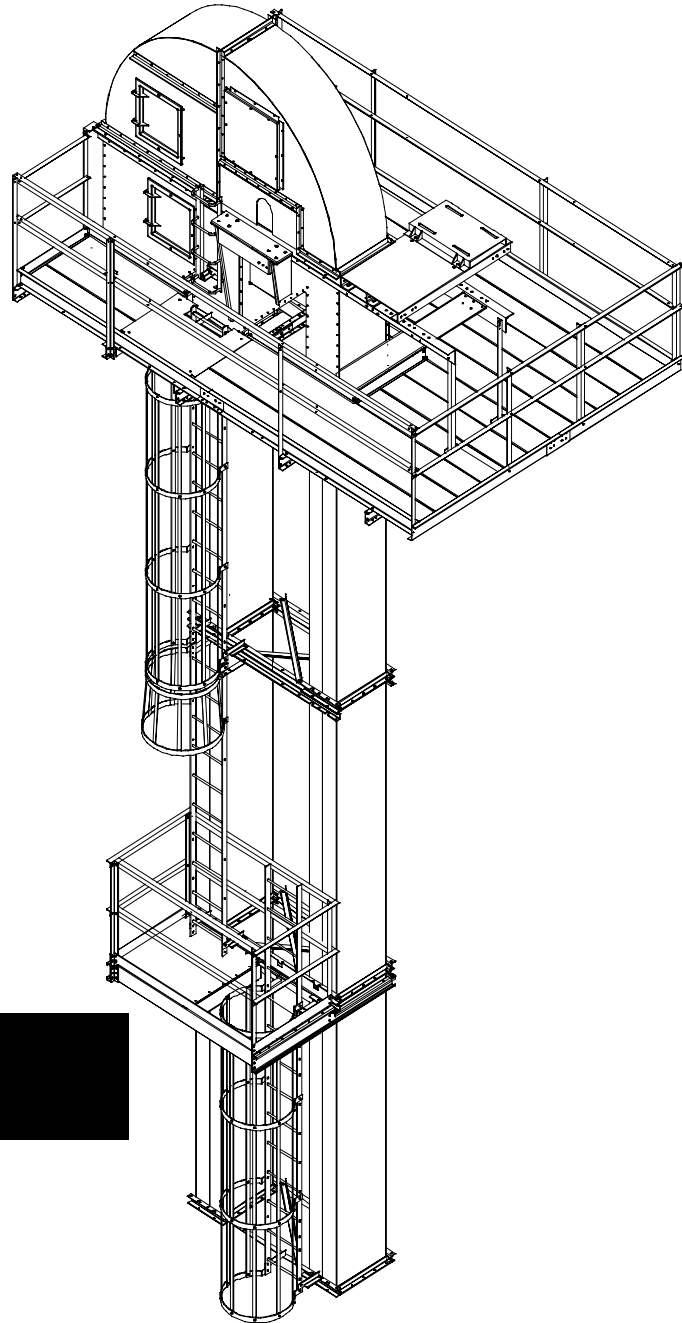
Platform Assembly

Series **2**

Installation Manual

PNEG-739

Rev. 3 6/05/01



PNEG-739

SAFETY GUIDELINES

This manual contains information that is important for you, the owner/operator, to know and understand. This information relates to protecting **personal safety** and **preventing equipment problems**. It is the responsibility of the owner/operator to inform anyone operating or working in the area of this equipment of these safety guidelines. To help you recognize this information, we use the symbols that are defined below.

Please read the manual and pay attention to these sections. Failure to read this manual and it's safety instructions is a misuse of the equipment and may lead to serious injury or death.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



NOTE indicates information about the equipment that you should pay special attention to.

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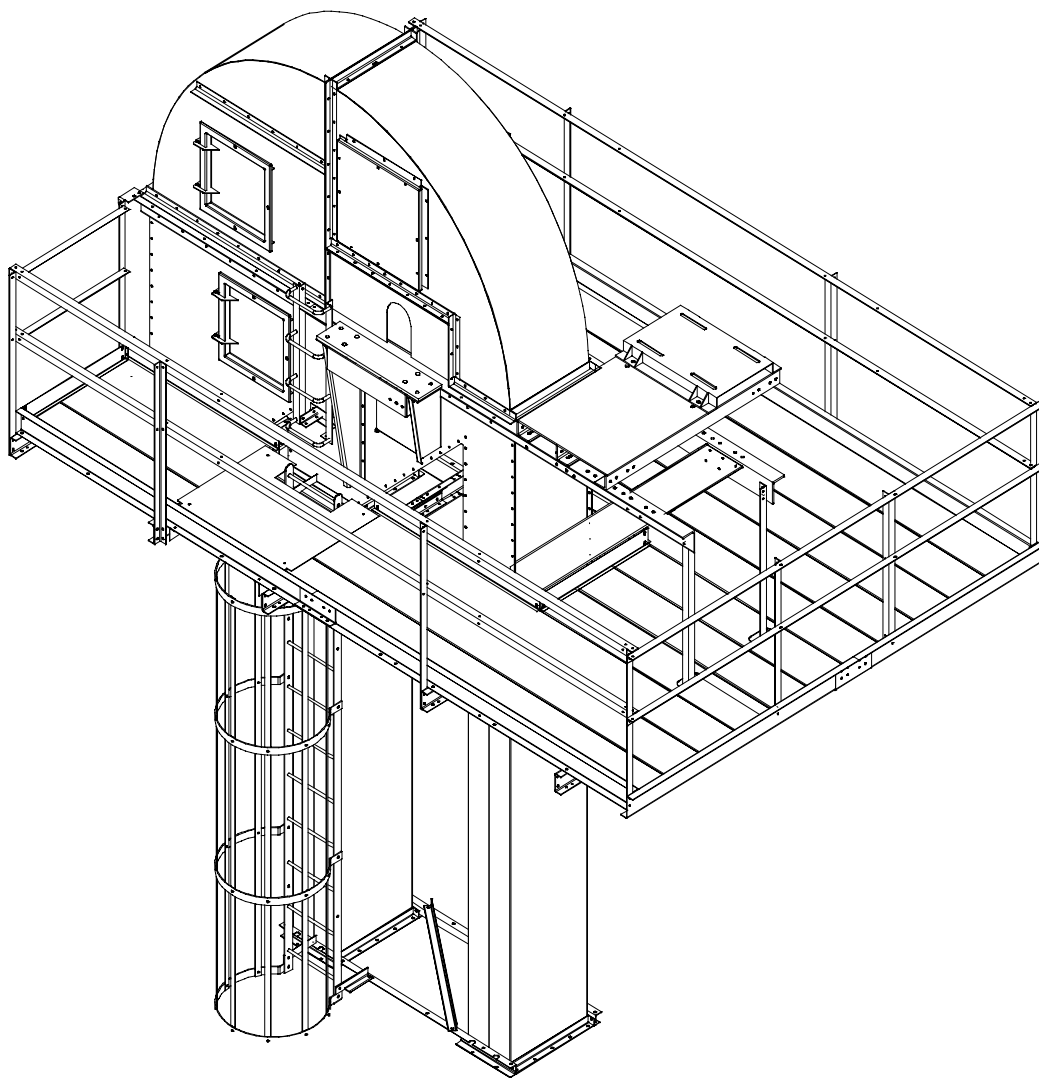
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WARNING !

ALL SERVICE ACCESSORIES ARE INTENDED FOR THE PROPER USE IN WHICH THEY WERE DESIGNED. ANY MISUSE OF THE EQUIPMENT OR ACCESSORIES WILL VOID THE WARRANTY. MISUSE CAN CAUSE FAILURE, SEVERE INJURY OR DEATH TO THE USER. THE MANUFACTURER CANNOT BE RESPONSIBLE FOR THE ERECTION OR USE OF THE BUCKET ELEVATOR AND IT'S ACCESSORIES.

When laying out the ladder, safety cage, and platforms be sure and always start from the head service platform and work your way down the leg. Keep in mind a rest platform needs to be located at every 30' of vertical descent (OSHA Standards).



30" – 36" HEAD SERVICE PLATFORM ASSEMBLY

Take time now and review all instructions and drawings before attempting to assemble the platforms. Layout all parts for easy identification. Determine if your equipment is left or right hand shaft. Once determining that, the long side of the support channels must extend to the shaft side of the head. Start the head service platform assembly by attaching two support channels to the head platform clips. Attach the two vertical support angles to the rear of the head angles and attach the remaining support channel to the vertical angles. See Figure 1.

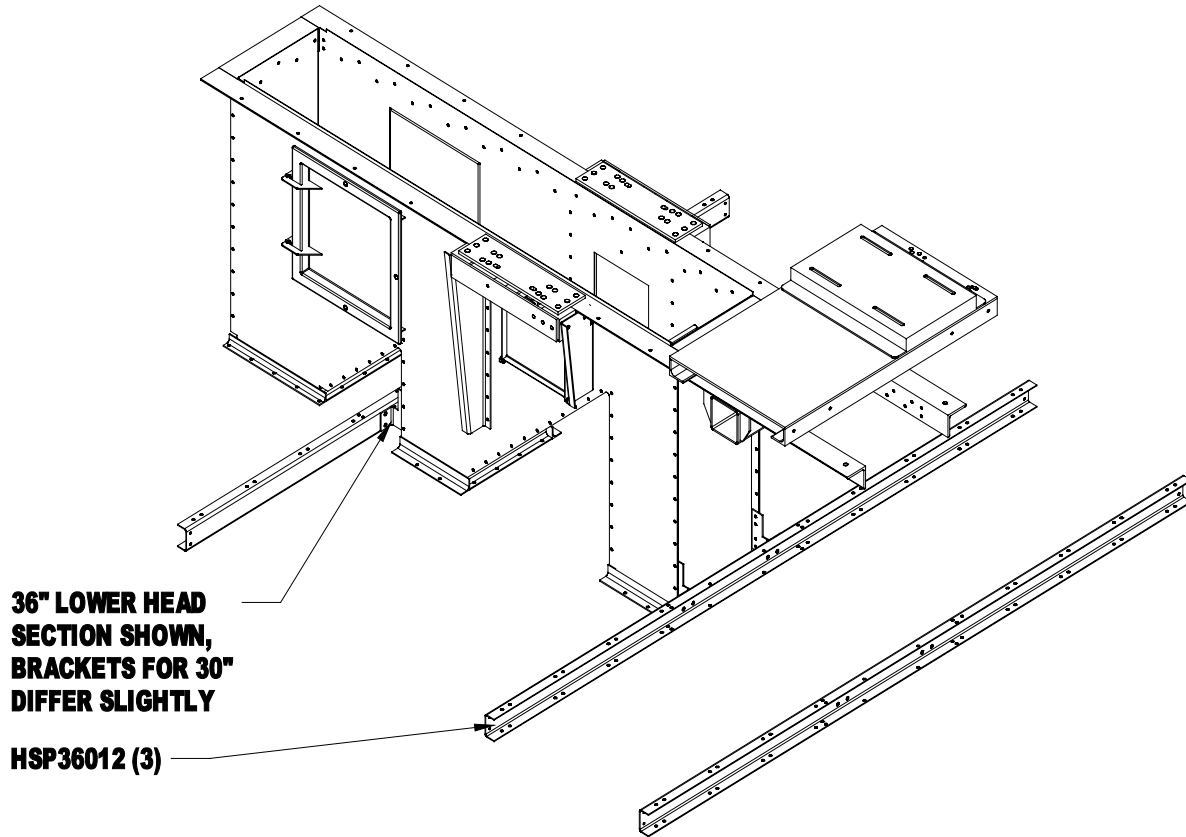


FIGURE 1

Place the side toeboards next to the head assembly on top of the support channels as shown in Figure 2. The end toeboard must be placed between the two side toeboards. Attach the toeboards to the support channels with the hardware supplied. Tighten all hardware in this assembly.

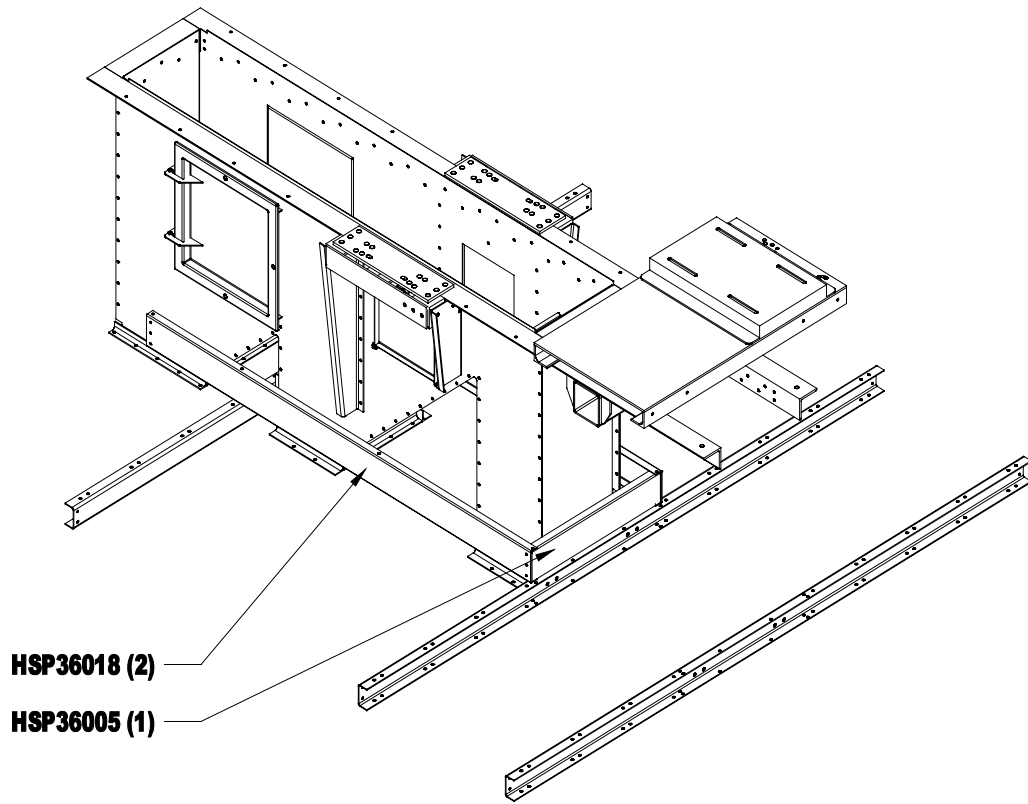


FIGURE 2

Layout all floor deck panels according to position on platform. Remember to layout for right hand (standard) or left hand shaft. Attach floor panels to support channels using 5/16" bolts and nuts. Double panels are to be bolted together prior attaching to support channels.

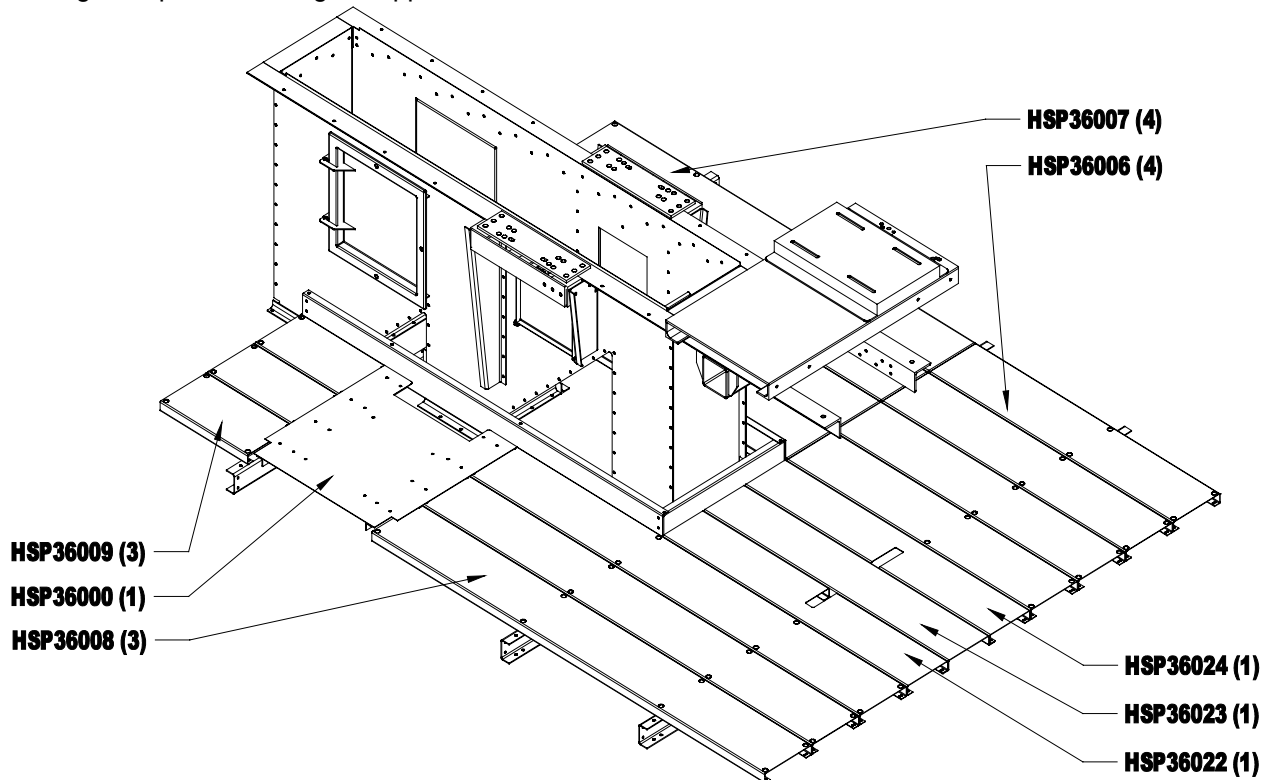


FIGURE 3

NOTE: This layout is for a RIGHT hand drive setup.

Attach support channel to underside of floor panels at the hatch opening. Small floor panels may be left off until the outside toeboards are attached. Again use the 5/16" hardware during this assembly.

Attach vertical support angles, HSP36014, to the rear of the head angles and to the support channel through the holes provided in the center decking.

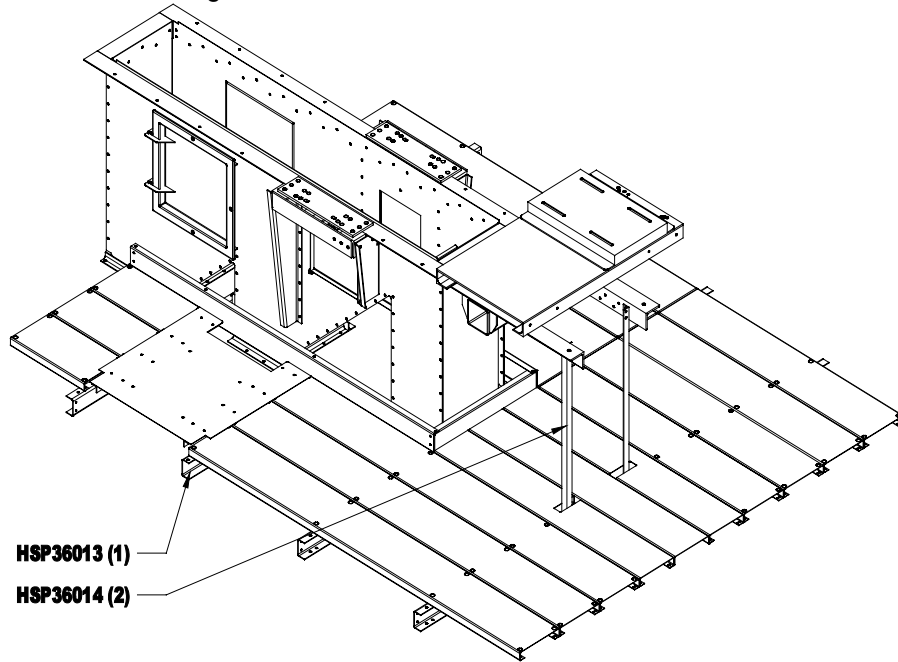


FIGURE 4

Attach toeboards to the ends of the deck panels and to the support channels as shown. Be sure and use splice channel on side toe boards. Tighten all hardware.

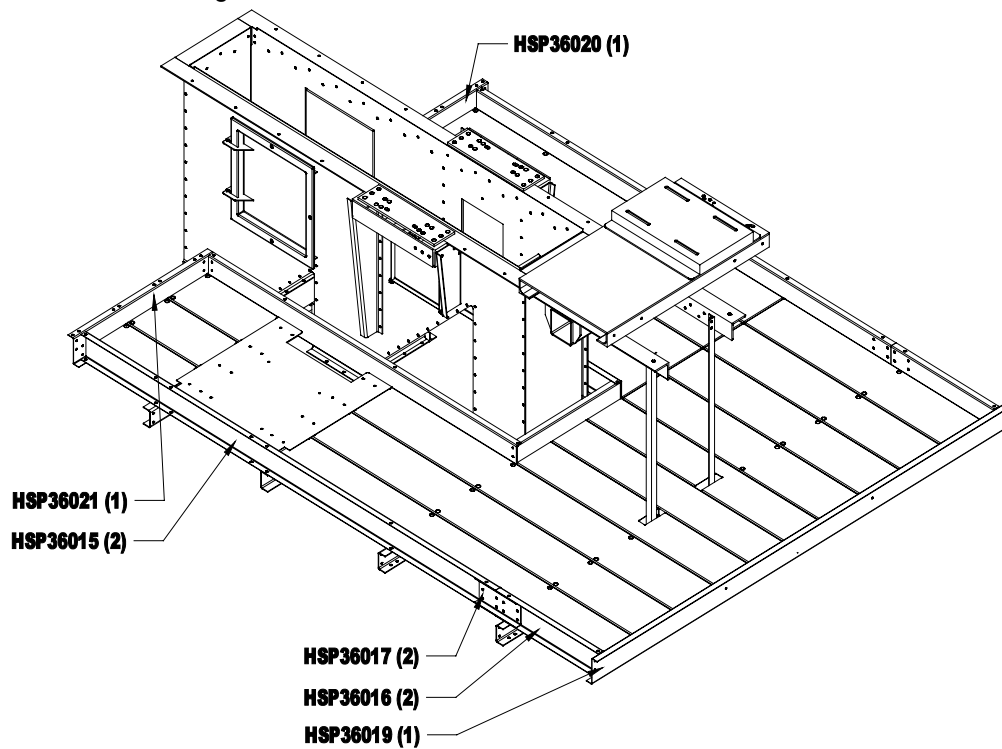


FIGURE 5

Attach short handrail posts to toeboards using the 3/8" hardware. There are 2 different lengths of handrail posts be sure and use the shorter 41 3/4" posts in this assembly.

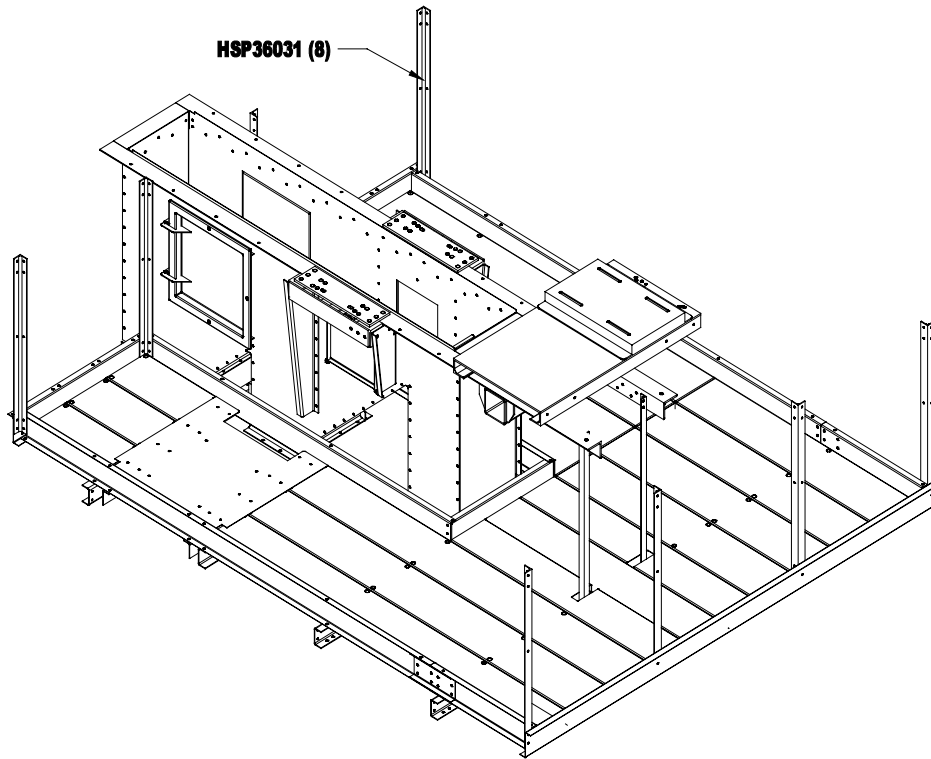


FIGURE 6

Attach long handrail posts to the support channels using the 3/8" hardware. Be sure and use the longer 47 3/8" handrail posts for this assembly.

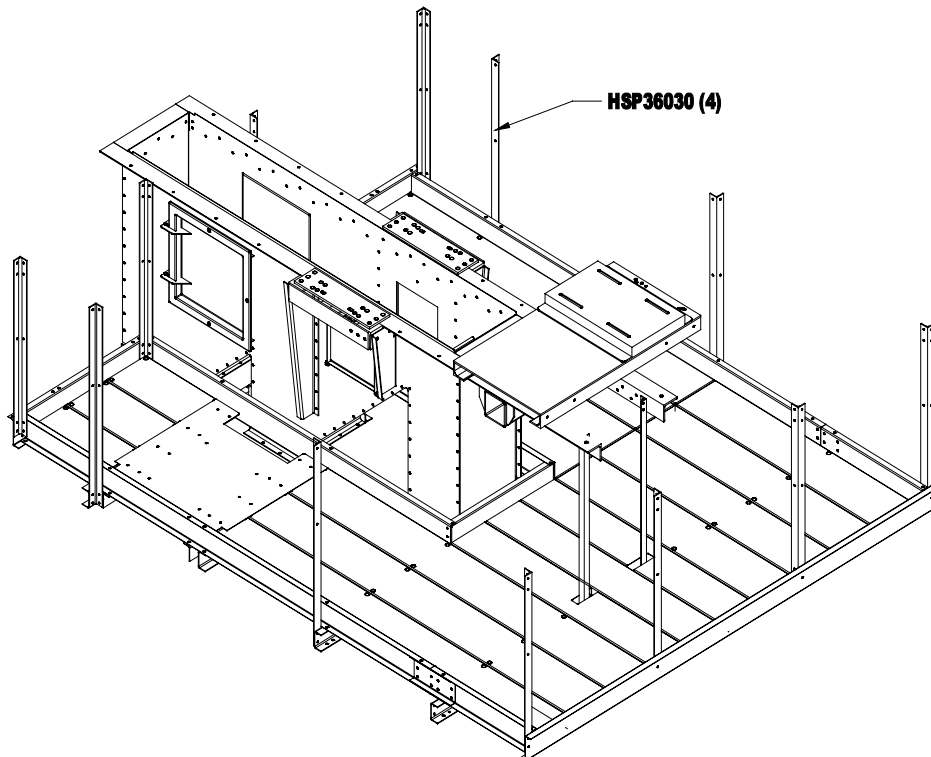


FIGURE 7

Locate all handrail angles and attach to the handrail posts, as shown in Figure 8, using the 3/8" hardware.

Attach platform hatch latch assembly, GSB30120, to handrail as shown, see Figure 6a in 48" Head Service Platform Assembly section.

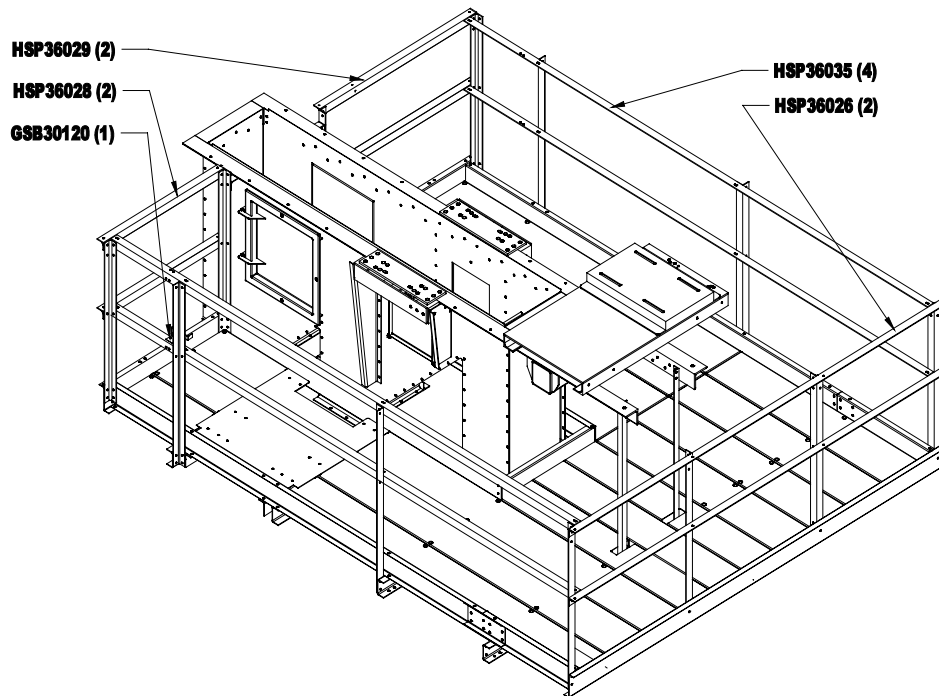


FIGURE 8

Attach the two HSP36027 handrail support clips to the handrail uprights next to the head bearing angle on the discharge end of head. Field drill the hole in the head bearing angle and attach using the 3/8" hardware supplied.

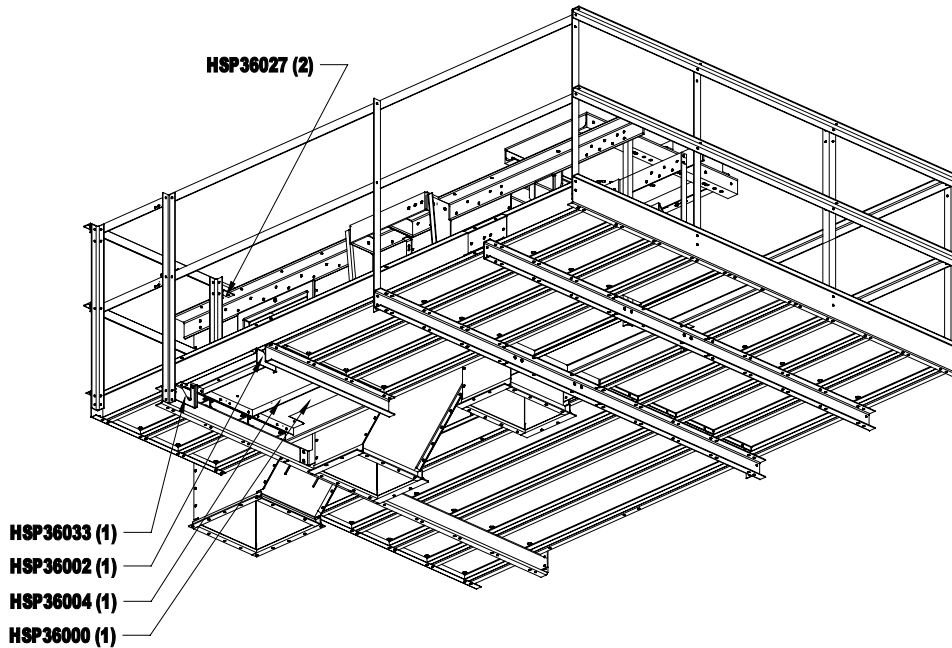


FIGURE 9

Assemble the deck hatch access door by attaching the left and right hand hinges to bottom side of the outside toeboard, leave hardware loose until the assembly is complete. Attach the hinges to the angle frame weldment and double nut the hinge bolts, do not overtighten.

42" HEAD SERVICE PLATFORM ASSEMBLY

Take time now and review all instructions and drawings before attempting to assemble the platform. Layout all parts for easy identification. Determine if your equipment is left or right hand shaft. Once determining that, the long side of the support channels must extend to the shaft side of the head. Start the head service platform assembly by attaching two support channels to the head platform clips, See Figure 1.

NOTE: For entire platform assembly, use carriage bolts at slot-to-hole connections and hex head cap screws at hole-to-hole connections.

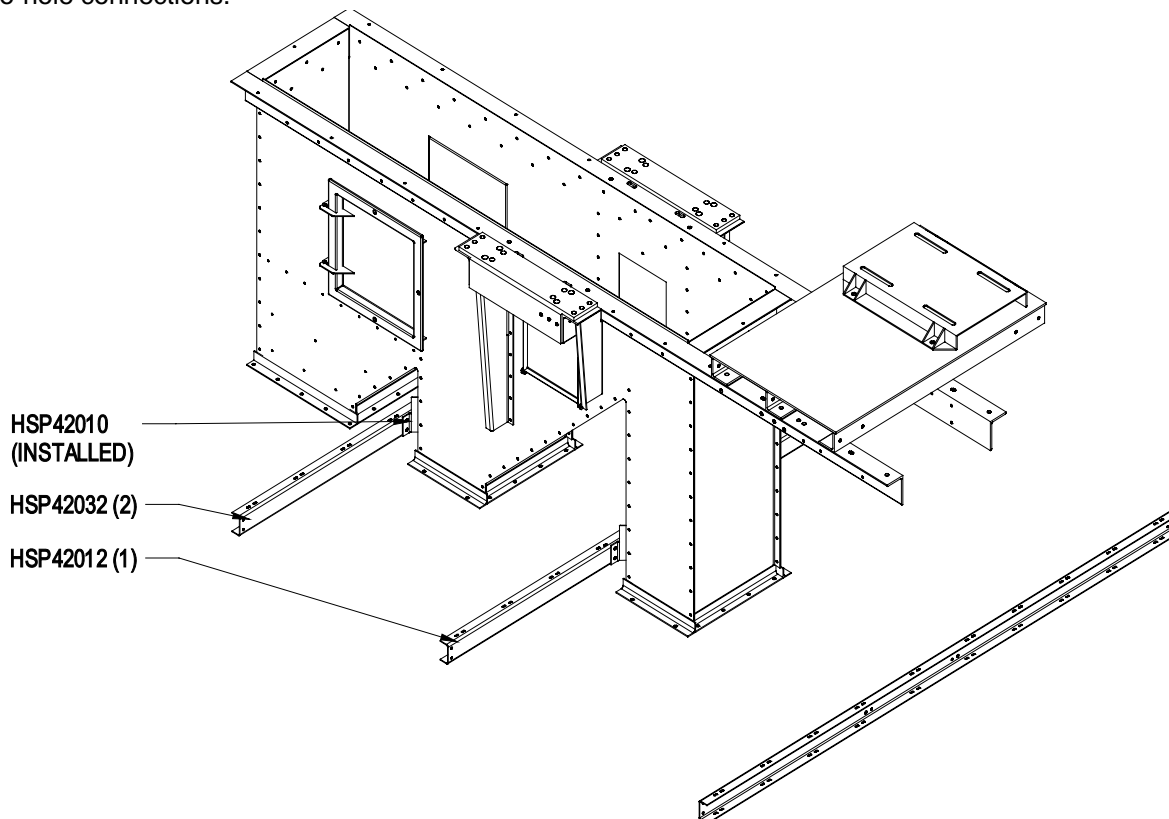


FIGURE 1

Place the side toeboards next to the head assembly on top of the support channels as shown in Figure 2. The end toeboard must be placed below the two side toeboards. Attach the toeboards to the support channels with the hardware supplied. Tighten all hardware in this assembly.

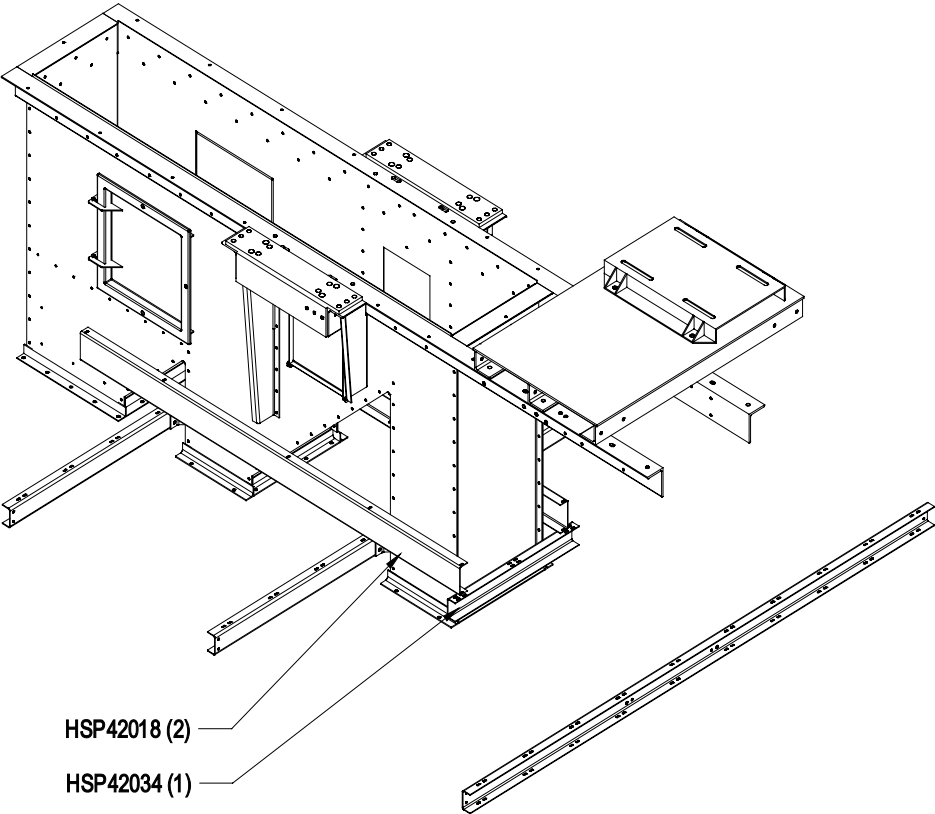


FIGURE 2

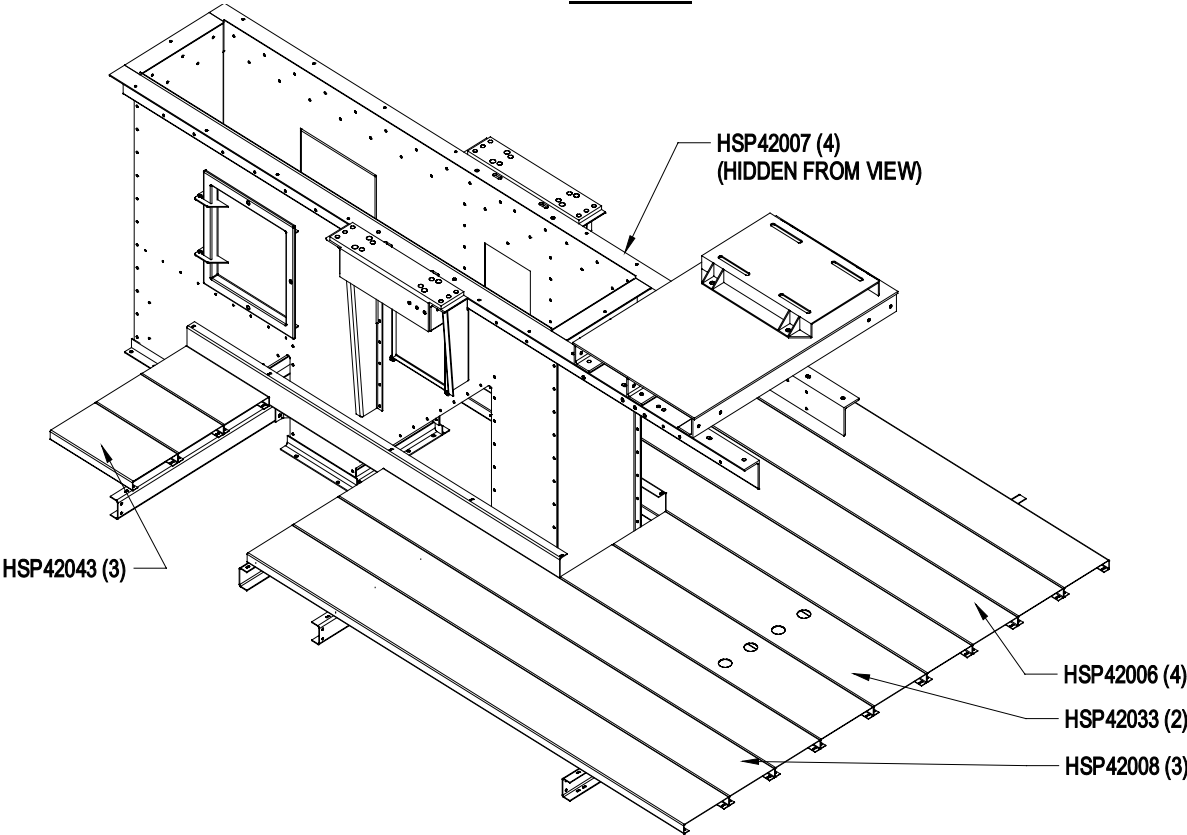


FIGURE 3

NOTE: This layout is for a RIGHT hand drive setup.

Layout all floor deck panels according to position on platform (Figure 3). Remember to layout for right hand (standard) or left hand shaft. Attach floor panels to support channels (as shown in Figure 3) using 5/16" bolts and nuts.

Attach support channel, HSP42042, to underside of floor panels at the hatch opening (Figure 4). Small floor panels may be left off until the outside toeboards are attached. Again use the 5/16" hardware during this assembly.

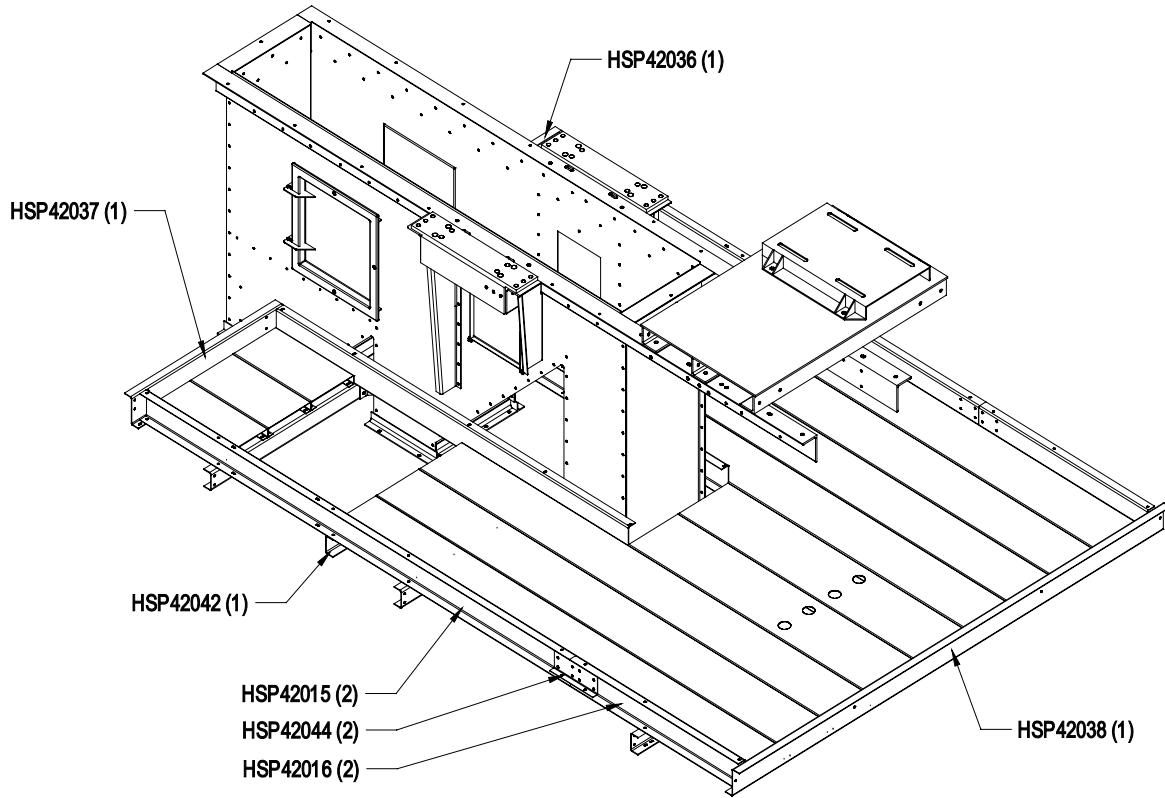


FIGURE 4

Attach toeboards to the ends of the deck panels and to the support channels as shown (Figure 4). Be sure and use splice channel on side toe boards. Tighten all hardware.

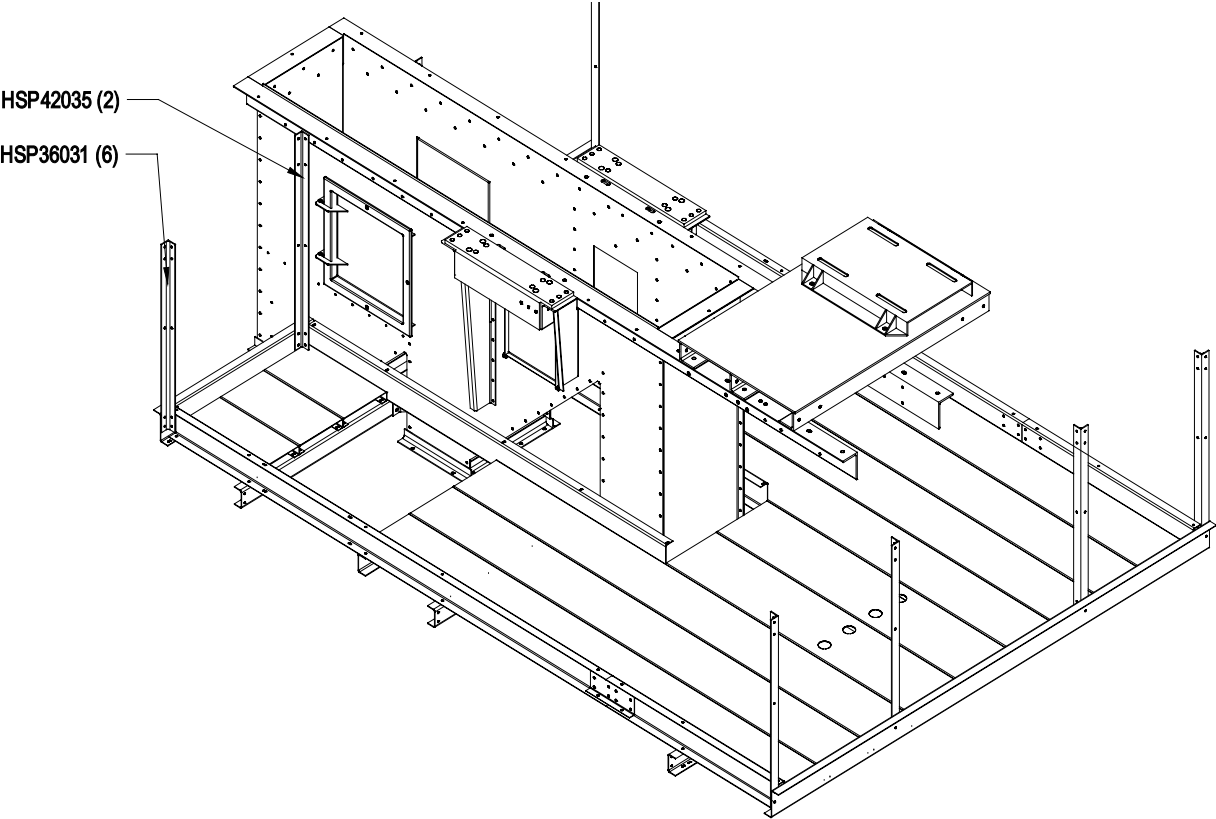


FIGURE 5

Attach short handrail posts to toeboards using the 5/16" hardware (Figure 5). There are different lengths of handrail posts, so be sure and use the 41 3/4" length shown in Figure 5.

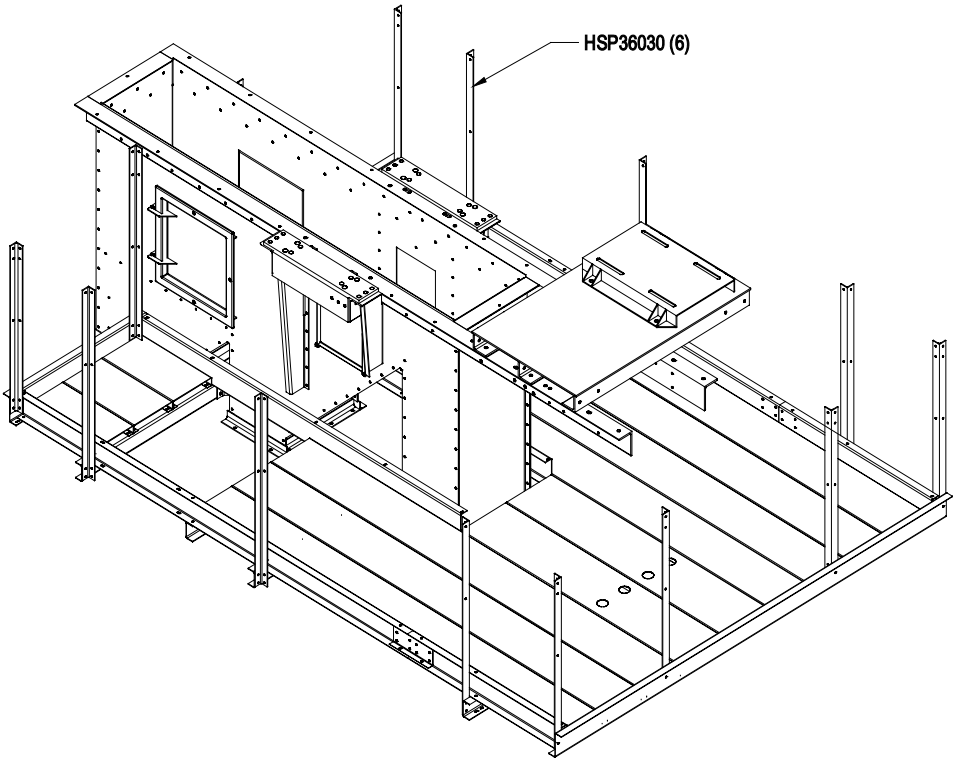


FIGURE 6

SERIES 2 BUCKET ELEVATOR HEAD SERVICE AND DISTRIBUTOR PLATFORM ASSEMBLY MANUAL

Attach long handrail posts to the support channels using the 5/16" hardware (Figure 6). Be sure and use the longer 47 3/8" handrail posts for this assembly.

Attach platform hatch latch assembly, GSB30120, to handrail as shown, see Figure 6a in 48" Head Service Platform Assembly section.

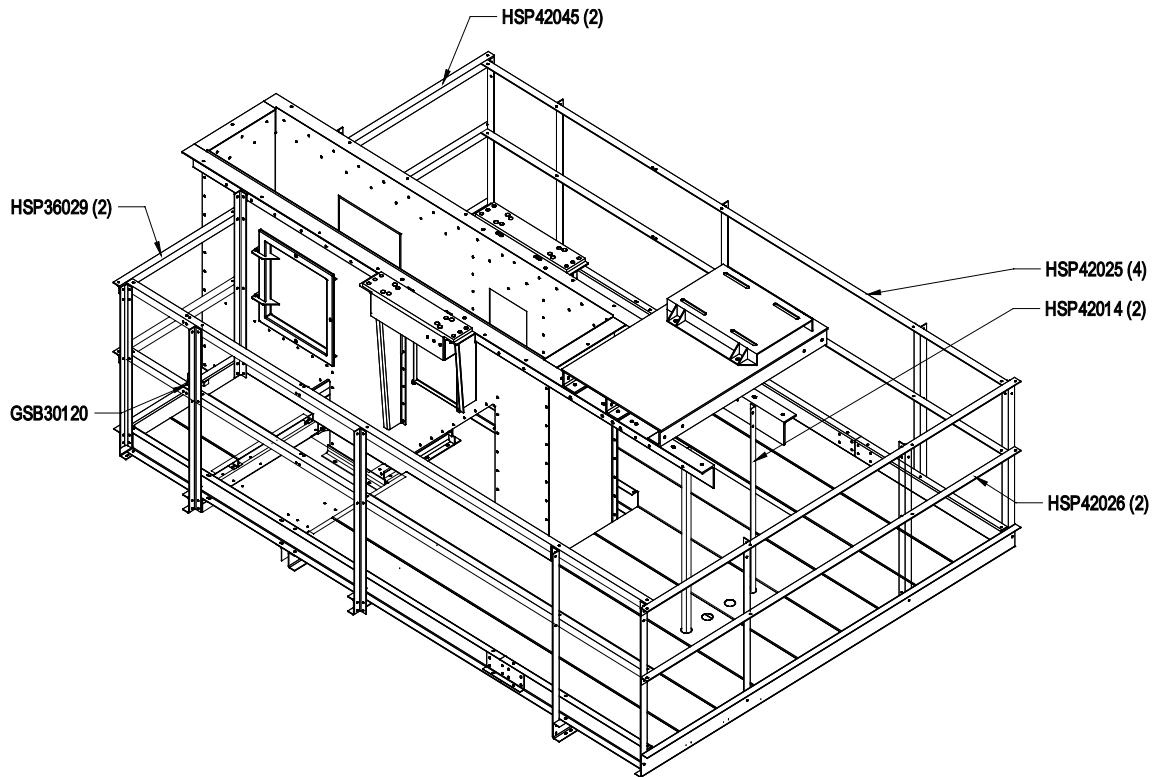


FIGURE 7

Locate all handrail angles and attach to the handrail posts, as shown in Figure 7, using the 5/16" hardware. Attach the two vertical support angles, HSP42014, to the rear of the head angles and to the support channel through the holes provided in the center decking.

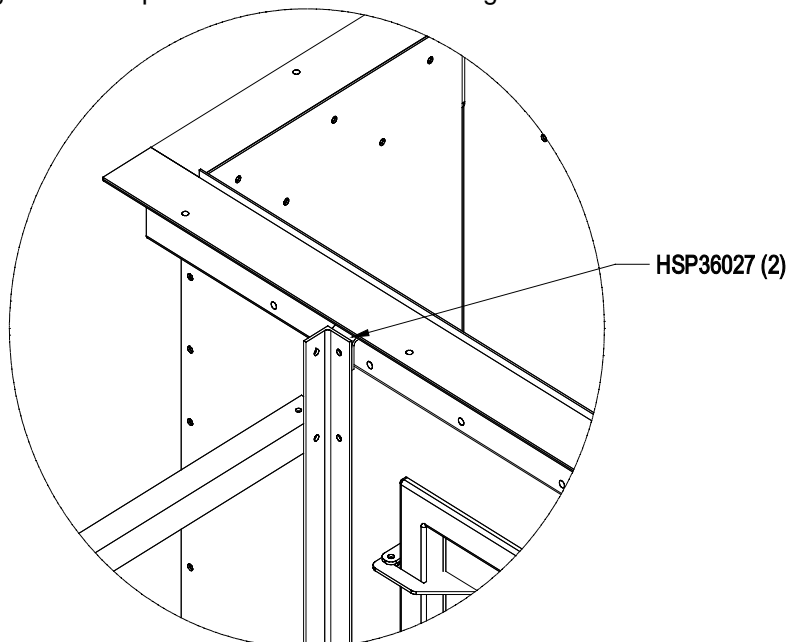


FIGURE 8

Attach the two HSP36027 handrail support clips to the handrail uprights next to the head bearing angle on the discharge end of head (Figure 8). Field drill the hole in each head bearing angle and attach using the 5/16" hardware supplied.

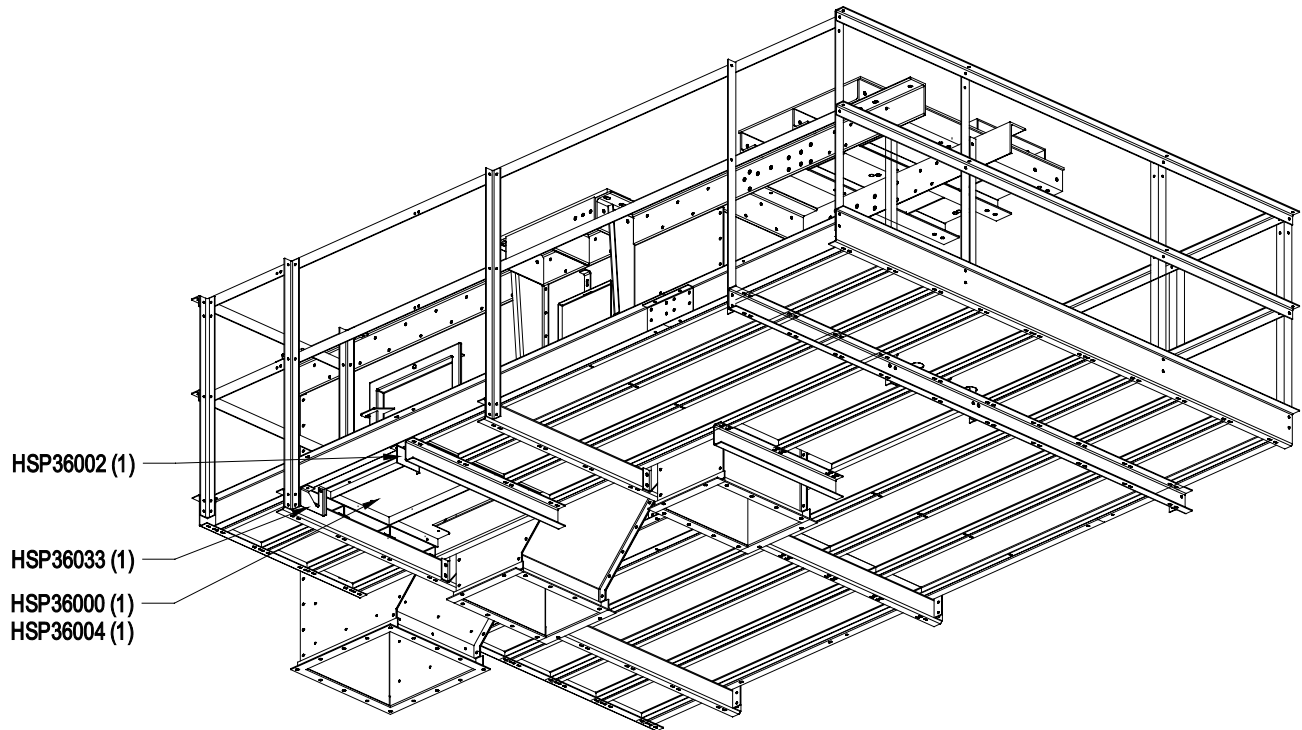


FIGURE 9

Underneath View of Hatch Access Door

Assemble the deck hatch access door by attaching the left and right hand hinges to bottom side of the outside toeboard, leave hardware loose until the assembly is complete. Attach the hinges & hatch decking to the angle frame weldment and double nut the hinge bolts - do not overtighten.

48" HEAD SERVICE PLATFORM ASSEMBLY

Before attempting any assembly of the platform read following directions and lay out all parts associated with the assembly. Due to the assembly of the head service platform the lower head assembly may need to be blocked up under the head and discharge flanges approximately 12" to provide clearance for assembly. Look at head assembly to determine the drive side which will be the wide side of platform. Attach the cross members to the mainframe with the long end of channels extending towards the drive side, use the ½" hardware supplied.

NOTE: The middle cross member HSP48x106 has a double hole pattern. Be sure to orientate the cross members according to Figure 1. **Right Drive platform layout shown in all figures.**

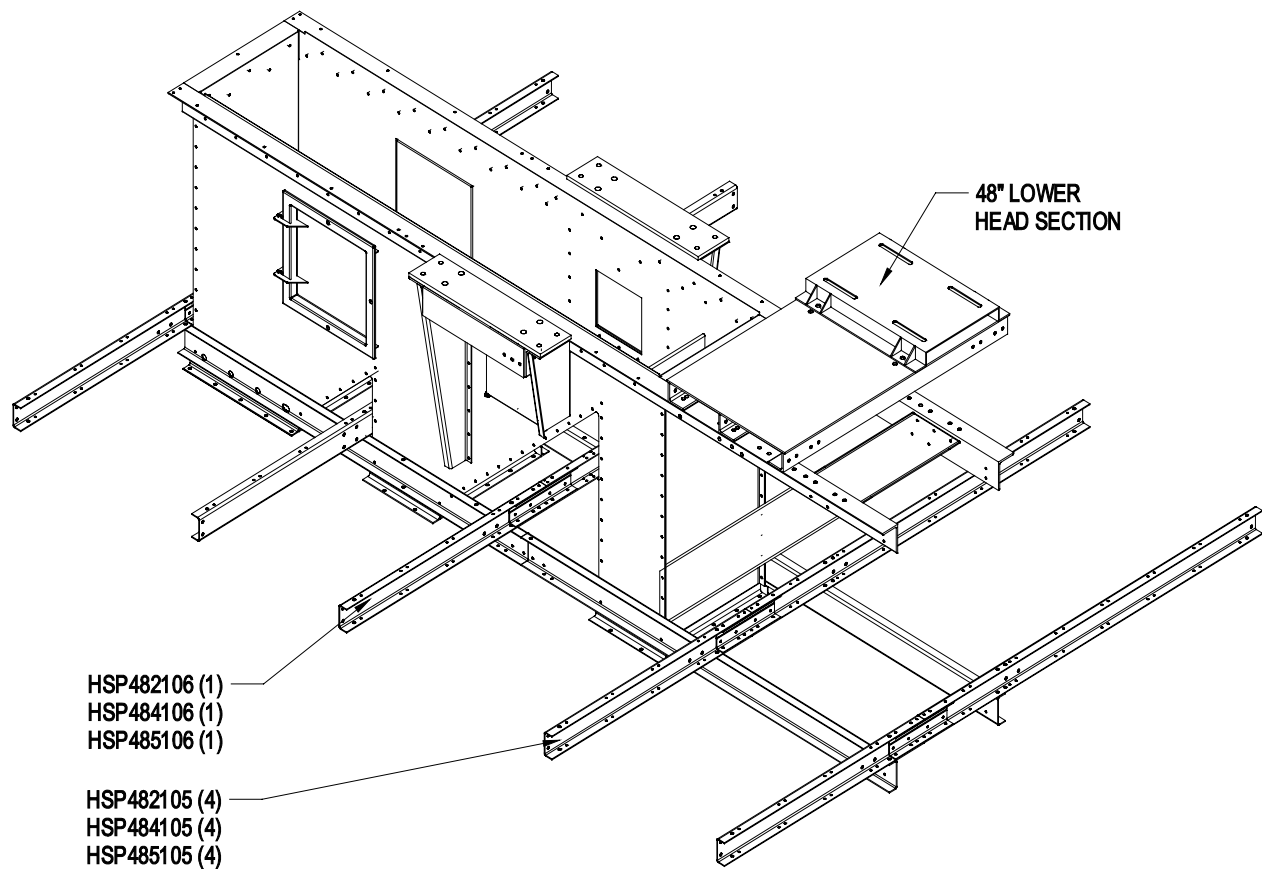


FIGURE 1

Some parts may have been eliminated for clarity of assembly

NOTE: When items with more than one part# are shown you will only use the one relevant to your service platform. Example: HSP482xxx single row 48" elevator, HSP484xxx double row 38"- 42" wide 48" elevator, HSP485xxx double row 50" wide 48" elevator.

Now that cross members are attached to head assembly, the toe board channel assemblies (HSP484117) can be attached to the ends of the cross members. After both toe board channels are in place the Z-board channel (HSP48x121) can be placed on end of the toe board channels and bolted in place. Now tighten all hardware. Attach the toe board mounting angle (HSP484024) to the cross members then attach the inner toe boards to the angles. The inboard mounting for toe board HSP484036 – HSP484037 will be done when the hand rail post are assembled. See figure below.

NOTE: The lower head assembly has been removed from figure below to help clarify the assembly process.

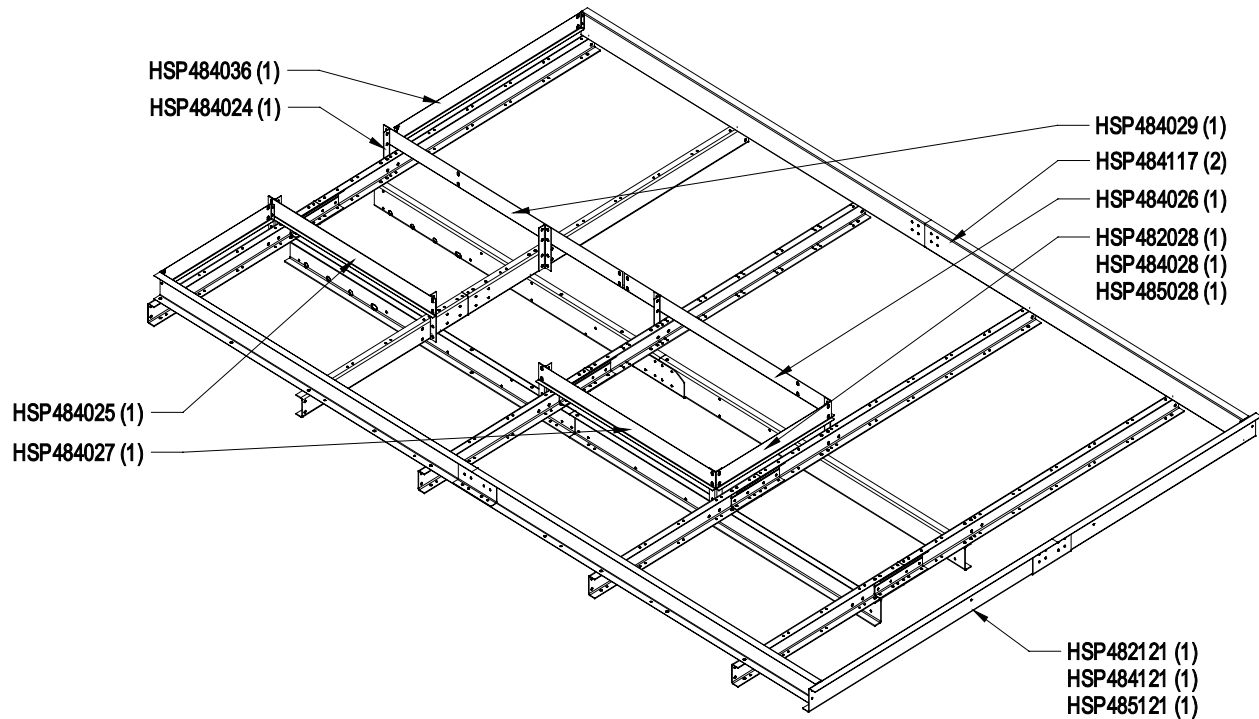


FIGURE 2

Some parts may have been eliminated for clarity of assembly

With all support channels in place and hardware tightened, locate all floor deck panels. Position the floor deck panels onto the support channels as shown below. Use the 5/16" hardware to attach ends of the deck panels to the support channels. Again, the head assembly has been omitted from drawing for clarity for assembly.

NOTE: The quantity of HSP484013 will be determined by the width of the service platform. SP-4826 = 1, SP-483842 = 2, SP-4850 = 3.

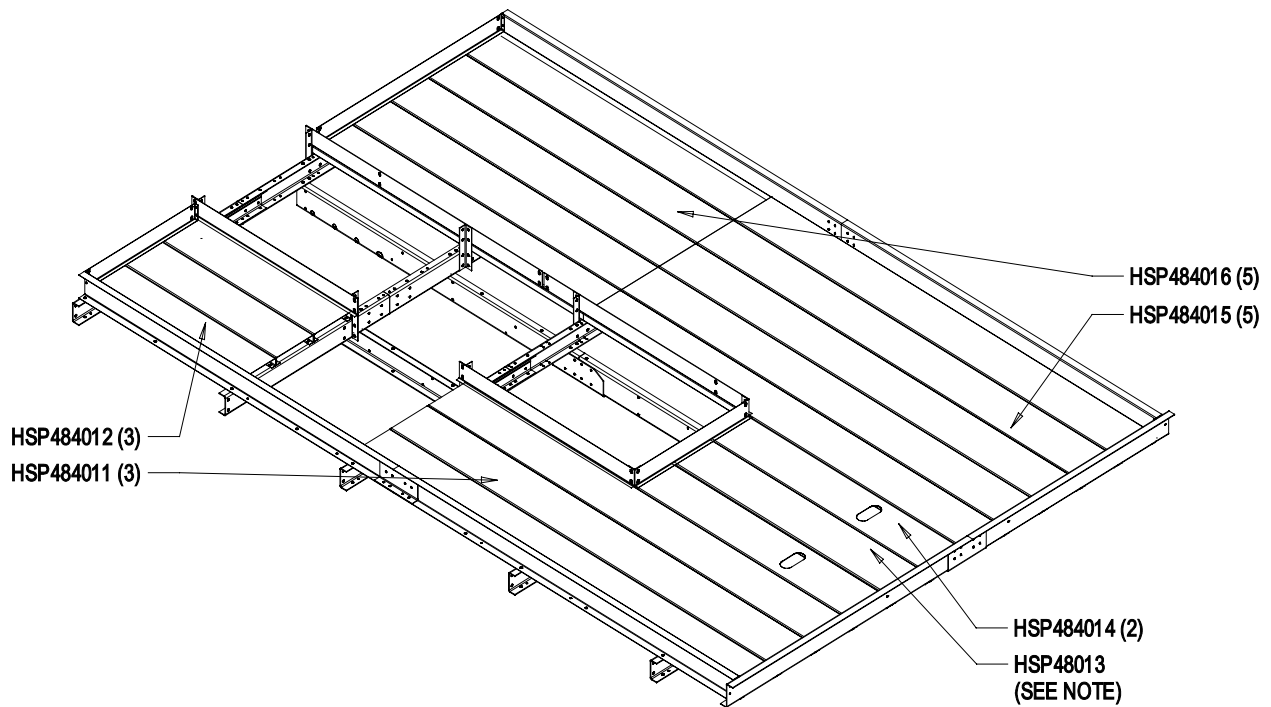


FIGURE 3

Some parts may have been eliminated for clarity of assembly

Bolt all handrail posts to the cross members and Z board channel. Post that attach to cross members will use ½" hardware, post that attach to the Z board will use 5/16" hardware. Leave all hardware loose until all posts and handrails are in place. With all post in place attach hand rails with 5/16" hardware. Review Figure 4 for proper placement of post and handrails. HSP 484040 posts are attached to Z-board channel only.

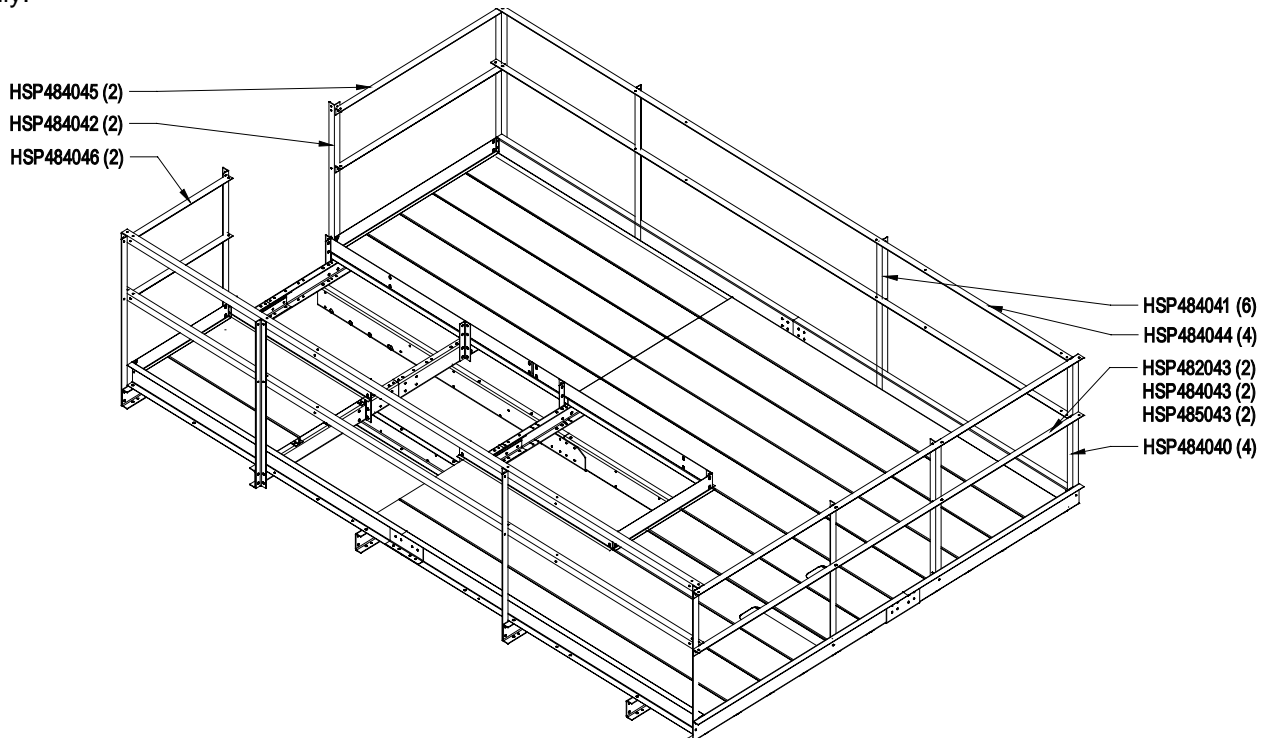


FIGURE 4

Some parts may have been eliminated for clarity of assembly

Attach HSP484047 and HSP484048 handrail attachment angles to the post next to the head bearing angle on the discharge end of the lower head (Figure5) Field drill the hole in each head bearing angle and use 5/16" hardware supplied.

Attach the two vertical support angles, HSP484038, to rear of head angles and to the support channel through the holes provided in the center decking.

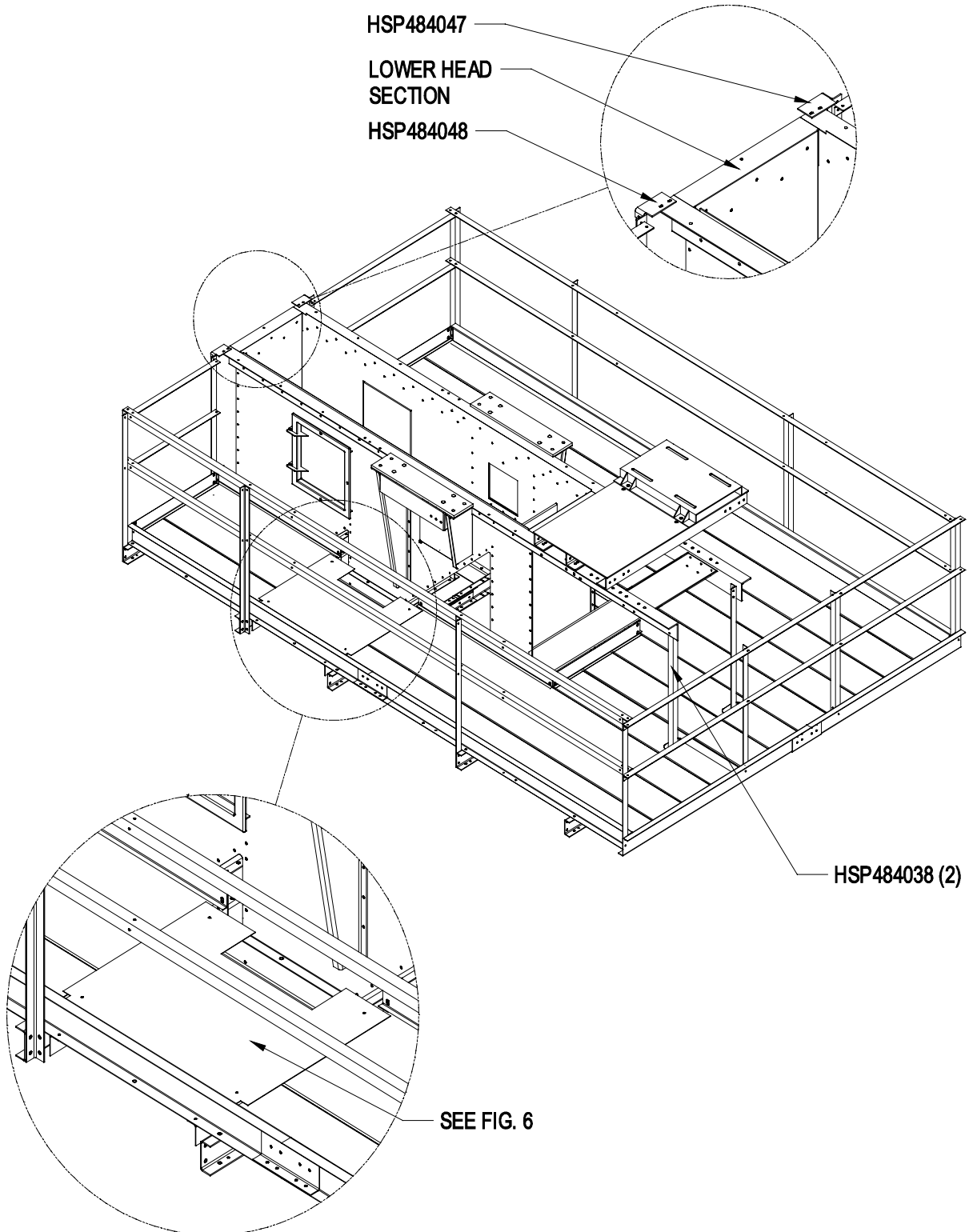


FIGURE 5

Assemble the deck hatch access door by attaching the left and right hand hinges to bottom side of the outside toeboard (HSP484117), leave hardware loose until the assembly is complete. Attach hatch assembly (HSP484055) to the hinges and double nut the hinge bolts. Do not over tighten.

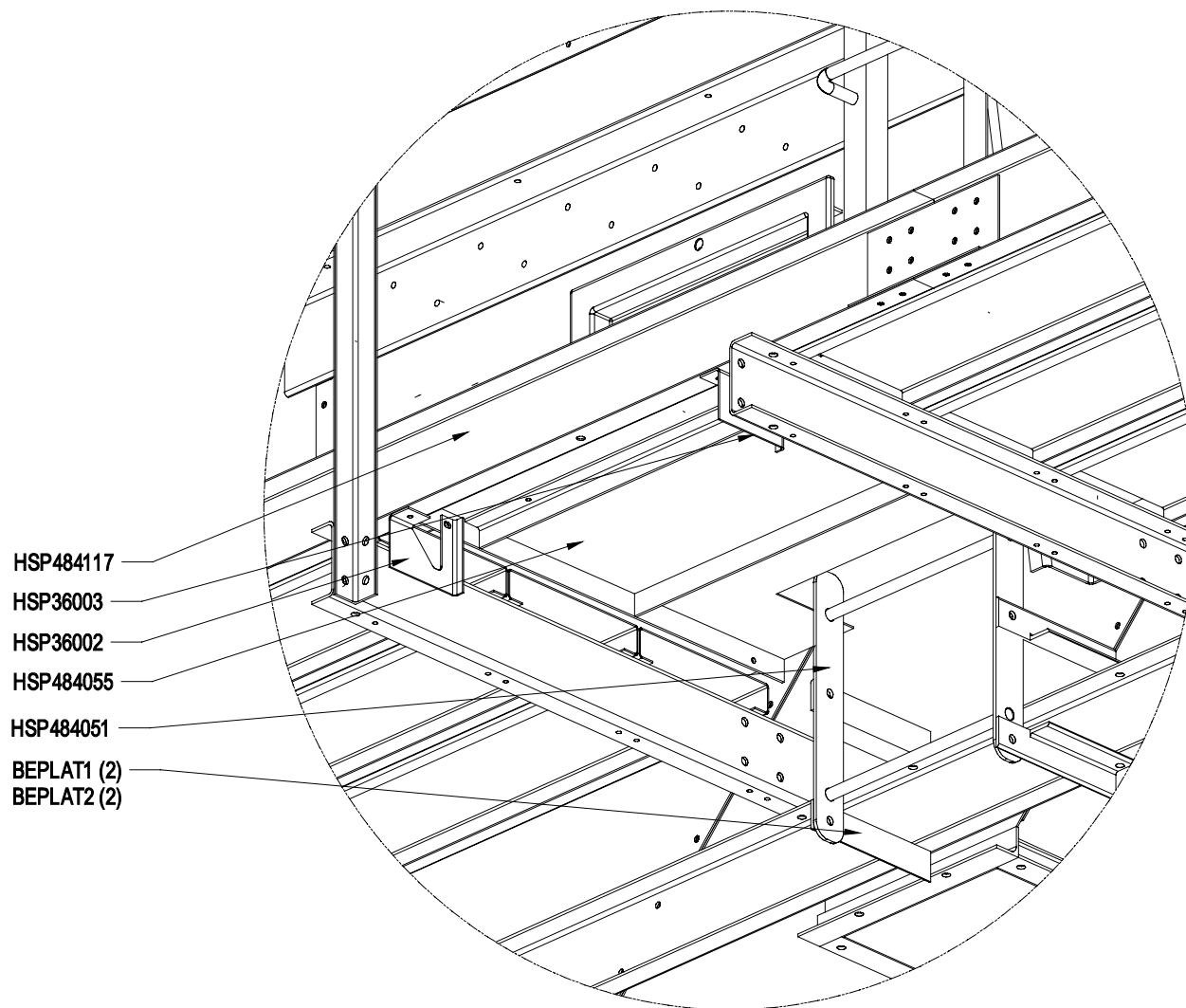


FIGURE 6

View perspective from underneath platform

Attach 2 rung ladder section to the main frame just below the grab bar. Use the 4 ladder standoff angles to attach ladder to main frame. The top rung of the ladder should be even with the top of the decking when installed. Use ½" hardware to mount ladder.

Attach platform hatch latch, GSB30120, to handrail as shown.

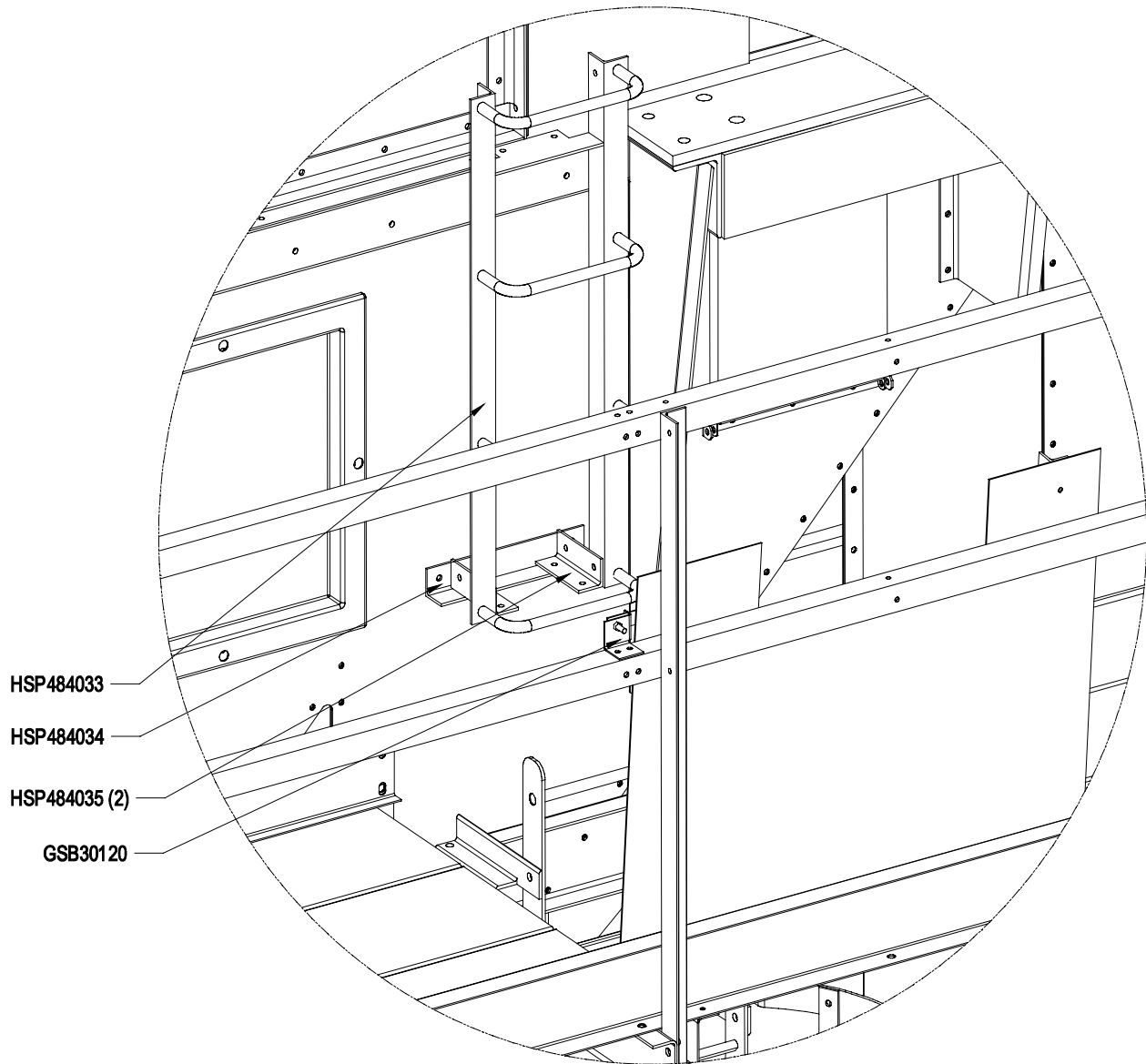


FIGURE 6A

DISTRIBUTOR PLATFORM ASSEMBLY

This assembly is designed to be located at any elevation on trunking that's needed to provide access to other equipment. Determine elevation of platform surface and work from there. Locate all parts required for assembly by using the charts shown in the following figures.

Locate all clamp halves, clamp brackets, threaded rods, and hardware to assemble clamps onto the trunking. Measure the distance between the clamps to assure proper location for support channels and knee brace attachment. See clamp detail for hardware orientation. Place 5/8" nuts and lock washers on a threaded rod (one from each end). Place a clamp half on each end of the rod and thread another nut and lock washer to hold clamp in place. Now place that assembly around trunk and place a clamp bracket onto the opposite end of the clamp assembly and use 1/2" hardware to fasten parts together. Adjust the position of the inside nuts of the rod assembly to allow the clamps to be tightened onto the trunking.

NOTE: TIGHTEN CLAMPS ONTO TRUNKING, DO NOT OVERTIGHTEN AND COLLAPSE THE TRUNKING. Position inside nuts back to the clamp and tighten.

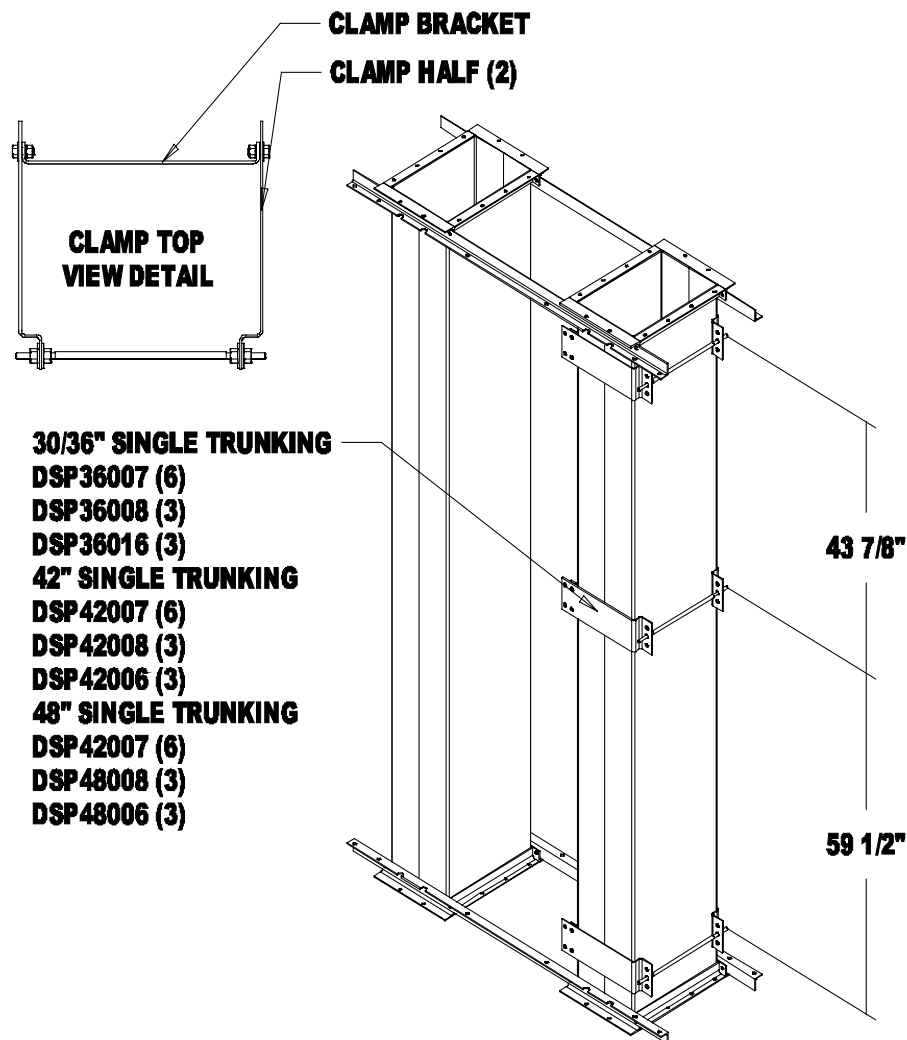


FIGURE 1

With clamps fastened securely to the trunk, attach the platform support channels to the middle clamp, use 1/2" hardware with this assembly. The knee braces will attach in the upper set of holes on side of support channel and to the lower clamp. Before tightening hardware the support channels must be perpendicular to the trunk, now tighten all hardware.

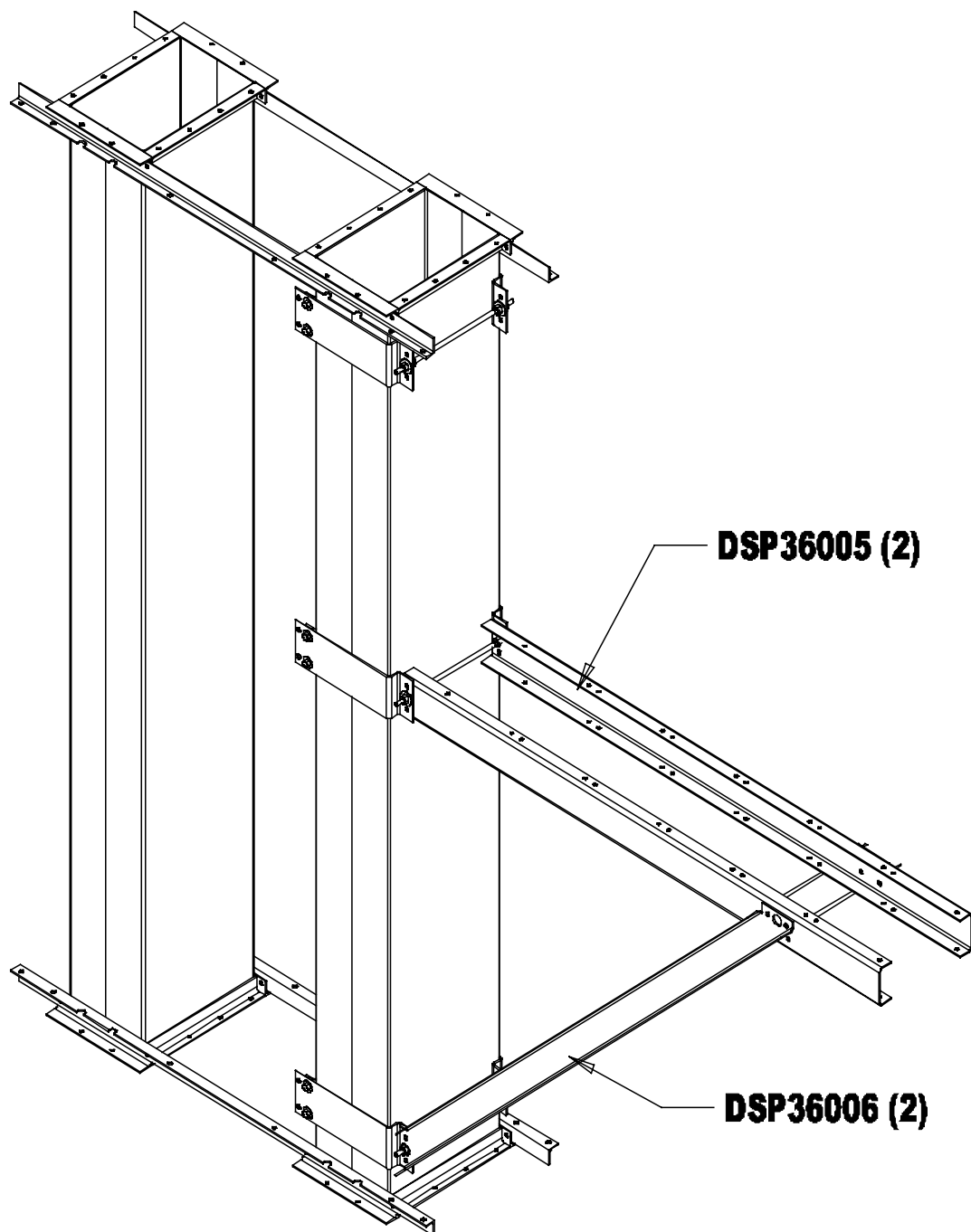


FIGURE 2

The toeboards will not be centered on trunking but should be offset to the ladder side. Platform is designed to work for either side of trunking access.

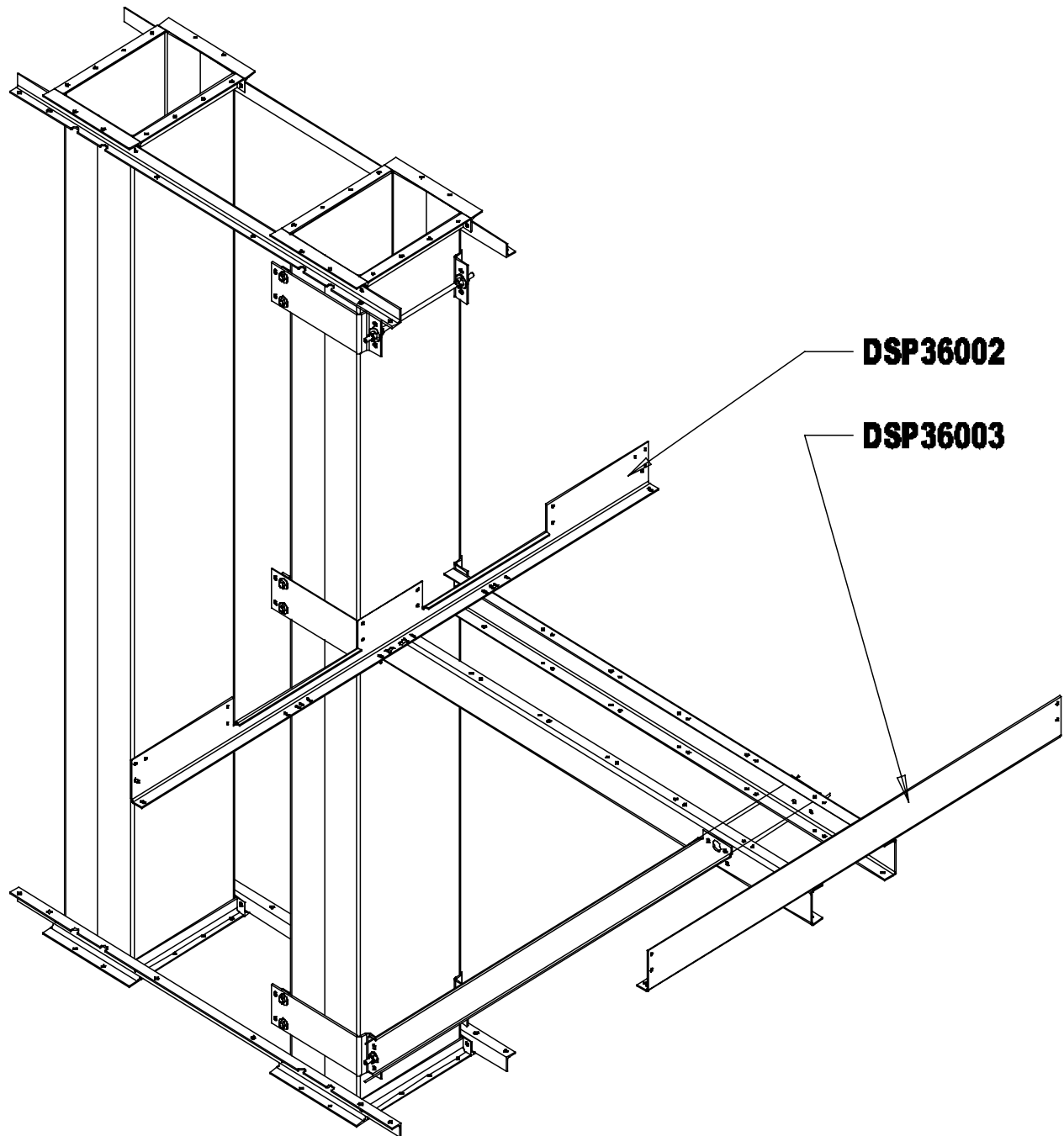


FIGURE 3

With support assembly attached to trunk and hardware tightened, proceed by attaching the notched toe board and unnotched toeboard to the top of the support channel using the 5/16" hardware provided. (Leave hardware loose). See Figure 3. Attach the floor deck panels to the support channels then attach to end toe boards with the 5/16" hardware provided. After all pieces have been attached, tighten all hardware.

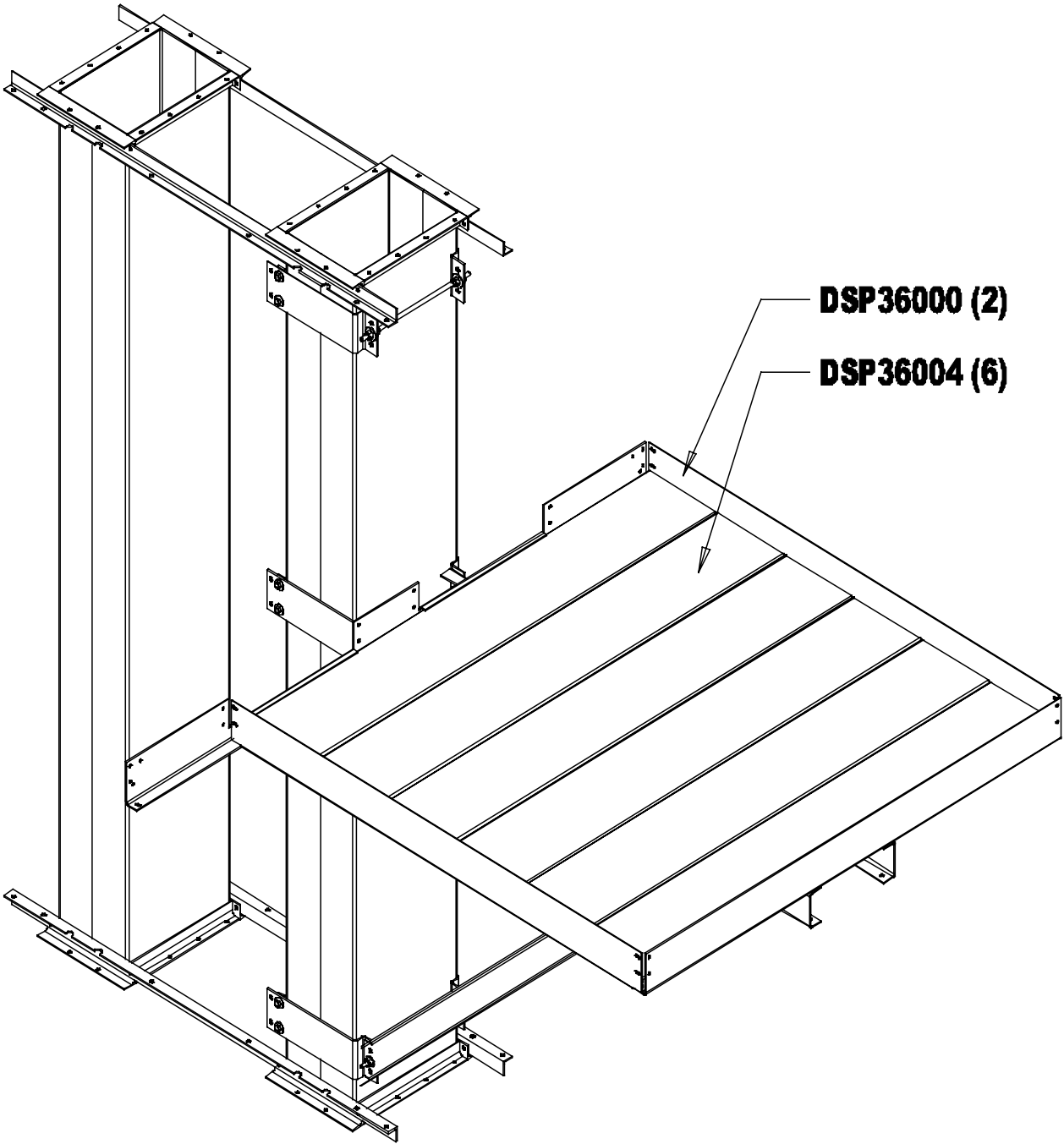


FIGURE 4

Locate the toe board cover plate (DSP36001) and bolt over the unused notched toe board area. Attach handrail posts to the toe boards as shown using the 5/16" hardware provided. (Leave hardware loose until all handrails are in place.) Attach all handrail angles and brace angle. See Figure 5. After all pieces have been attached go back and tighten all hardware. See Chart below for part numbers and lengths of all handrails.

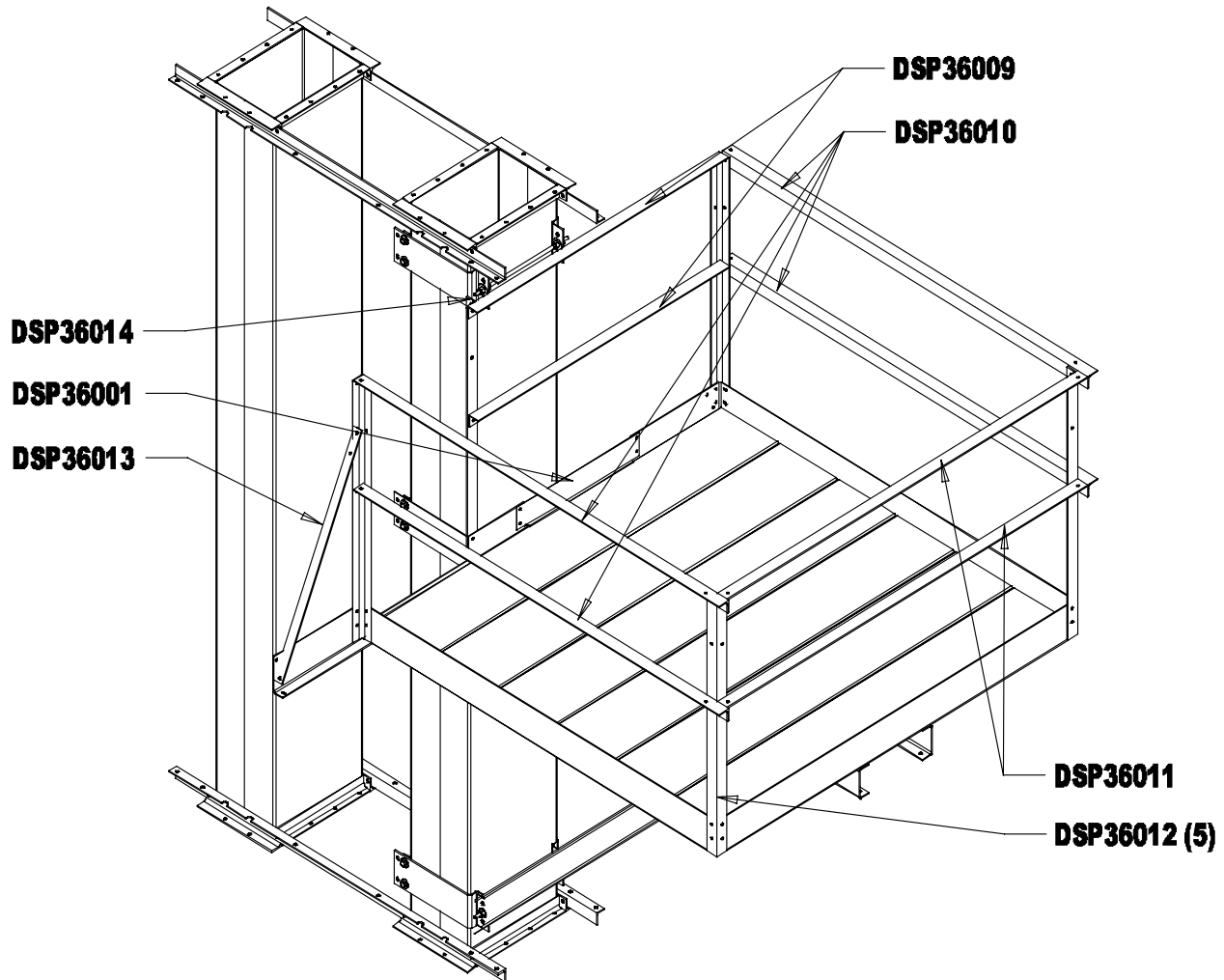


FIGURE 5

Model Size	
Handrail	DSP36009 - 51.1/2"
Handrail	DSP36010 - 74.7/8"
Handrail	DSP36011 - 74"
Post	DSP36012 - 43.1/2"
Brace	DSP36013 - 37.3/4"

Attach knee brace diagonals to bottom side of the knee braces, this will add extra stability to the distributor platform. See Figure 6.

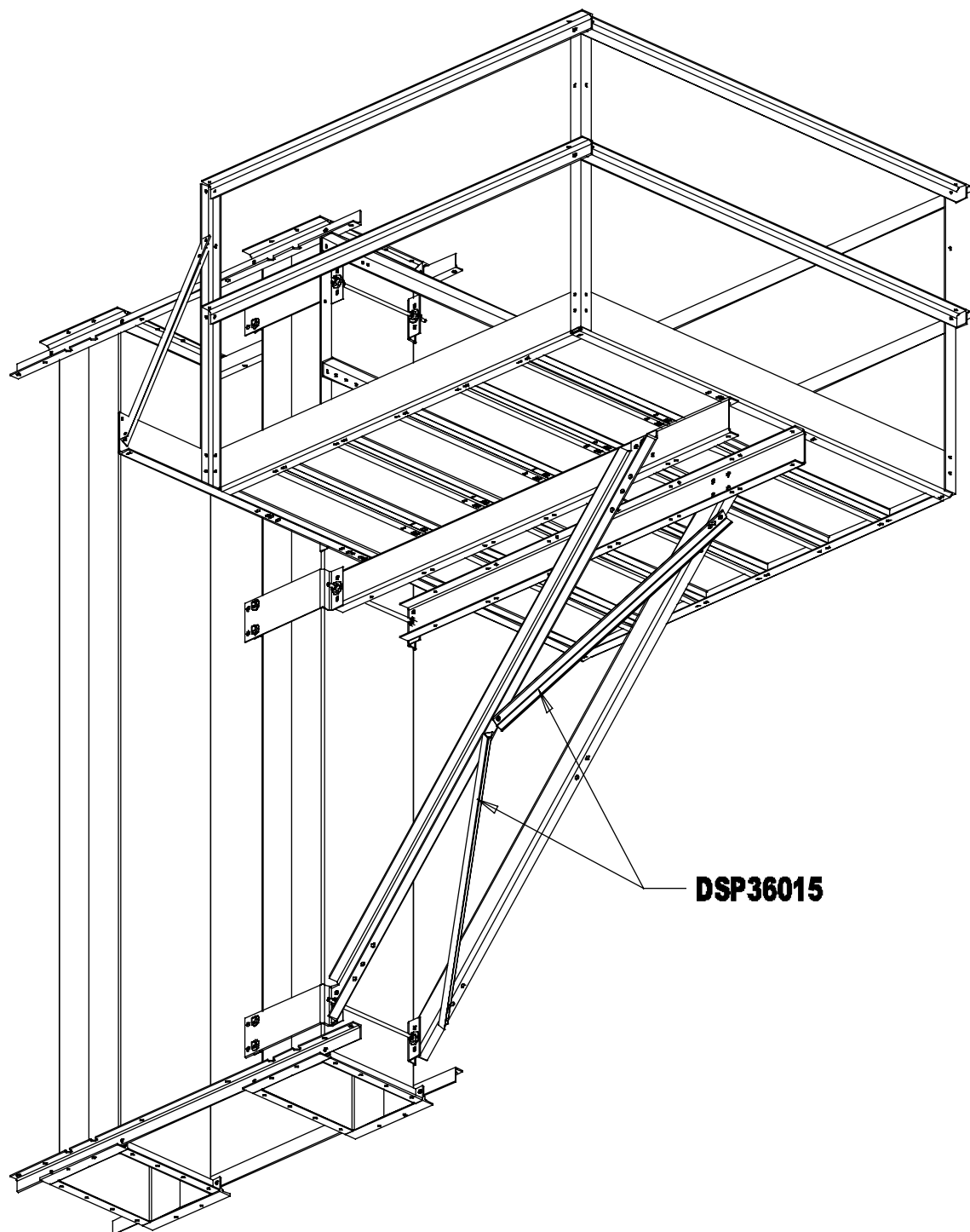


FIGURE 6

SERIES 2 BUCKET ELEVATOR HEAD SERVICE AND DISTRIBUTOR PLATFORM ASSEMBLY MANUAL

THE COMPANY AS THE MANUFACTURER WARRANTS ALL PRODUCTS MANUFACTURED BY THE COMPANY TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP UNDER NORMAL USAGE AND CONDITIONS FOR A PERIOD OF TWENTY-FOUR MONTHS AFTER RETAIL SALE TO THE ORIGINAL END USER OF SUCH PRODUCTS. THE COMPANY'S ONLY OBLIGATION IS, AND PURCHASER'S SOLE REMEDY SHALL BE FOR THE COMPANY, TO REPAIR OR REPLACE, AT IT'S OPTION AND EXPENSE, PRODUCTS THAT, IN IT'S SOLE JUDGMENT, CONTAIN A MATERIAL DEFECT DUE TO MATERIALS OR WORKMANSHIP. ALL DELIVERY AND SHIPMENT CHARGES TO AND FROM THE COMPANY'S FACTORY WILL BE PURCHASER'S RESPONSIBILITY. EXPENSES INCURRED BY OR ON BEHALF OF THE PURCHASER WITHOUT PRIOR WRITTEN AUTHORIZATION FROM AN AUTHORIZED EMPLOYEE OF THE COMPANY SHALL BE THE SOLE RESPONSIBILITY OF THE PURCHASER. EXCEPT FOR THE ABOVE STATED EXPRESS LIMITED WARRANTIES, THE COMPANY MAKES NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE IN CONNECTION WITH (i) PRODUCT MANUFACTURED OR SOLD BY THE COMPANY OR (ii) ANY ADVICE, INSTRUCTION, RECOMMENDATION OR SUGGESTION PROVIDED BY AN AGENT, REPRESENTATIVE OR EMPLOYEE OF THE COMPANY REGARDING OR RELATED TO THE CONFIGURATION, INSTALLATION, LAYOUT, SUITABILITY FOR A PARTICULAR PURPOSE, OR DESIGN OF SUCH PRODUCT OR PRODUCTS.

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THE COMPANY ASSUMES NO RESPONSIBILITY FOR FIELD MODIFICATIONS OR ERECTION DEFECTS WHICH CREATE STRUCTURAL OR STORAGE QUALITY PROBLEMS. MODIFICATIONS TO THE PRODUCT NOT SPECIFICALLY COVERED BY THE CONTENTS OF THIS MANUAL WILL NULLIFY ANY PRODUCT WARRANTY THAT MIGHT HAVE BEEN OTHERWISE AVAILABLE.

THE FOREGOING WARRANTY SHALL NOT COVER PRODUCTS OR PARTS WHICH HAVE BEEN DAMAGED BY NEGLIGENT USE, MISUSE, ALTERATION OR ACCIDENT. THIS WARRANTY COVERS ONLY PRODUCTS MANUFACTURED BY THE COMPANY. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. THE COMPANY RESERVES THE RIGHT TO MAKE DESIGN OR SPECIFICATION CHANGES AT ANY TIME.

PRIOR TO INSTALLATION, PURCHASER HAS THE RESPONSIBILITY TO RESEARCH AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL CODES WHICH MAY APPLY TO THE LOCATION AND INSTALLATION

Employer/Employee Training Sign Off Sheet

The company is making every effort to warn, guard, and educate the consumer when using the various kinds of equipment that we manufacture. GSI has included this sign off sheet for you and your staff to use in the training process on installation and operation of the equipment described in this manual. Read the entire manual, sign off, and date on chart below.

T H E G S I G R O U P

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