



COMMUNITY NEST FLAT-TOP INSTALLATION INSTRUCTIONS

990147
SHEET 1

FOR A NEW VAL-CO FLAT-TOP COMMUNITY NEST INSTALLATION USE THESE INSTRUCTIONS AS A SUPPLEMENT TO THE 990004 COMMUNITY NEST MANUAL, WITH THESE INSTRUCTIONS REPLACING THE FOLLOWING SECTIONS IN THE MANUAL:

- 2.8 SUB-ASSEMBLY - NEST SUB-ASSEMBLIES**
- 3.16 EXPELLER DRIVE UNIT CONTACTOR PLATE ASSEMBLY**
- 3.17 EXPELLER DRIVE UNIT CONTACTOR BOX CONTROLS**
- 3.18 EXPELLER DRIVE UNIT DIVIDER WALL AND REAR PANEL ASSEMBLY**
- 3.20 EXPELLER DRIVE UNIT FRONT PANEL ASSEMBLY**
- 4.3 NEST ASSEMBLY - RIDGE CAP SUPPORT RAIL/RIDGE CAP/ANTI-PERCH FLAT BAR**
- 4.7 NEST ASSEMBLY - TOP**
- 5.2 WALL PANEL ASSEMBLIES**

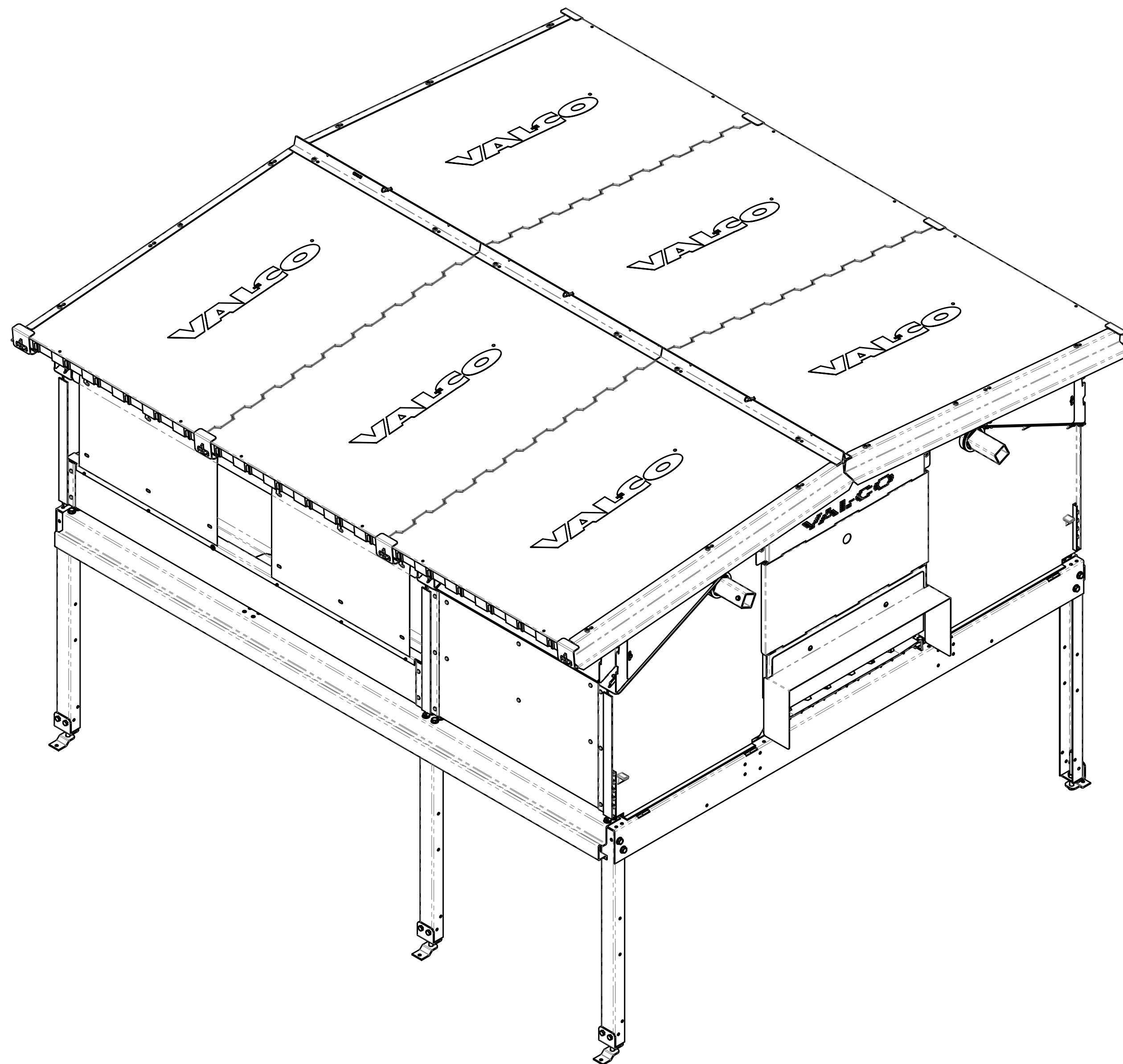
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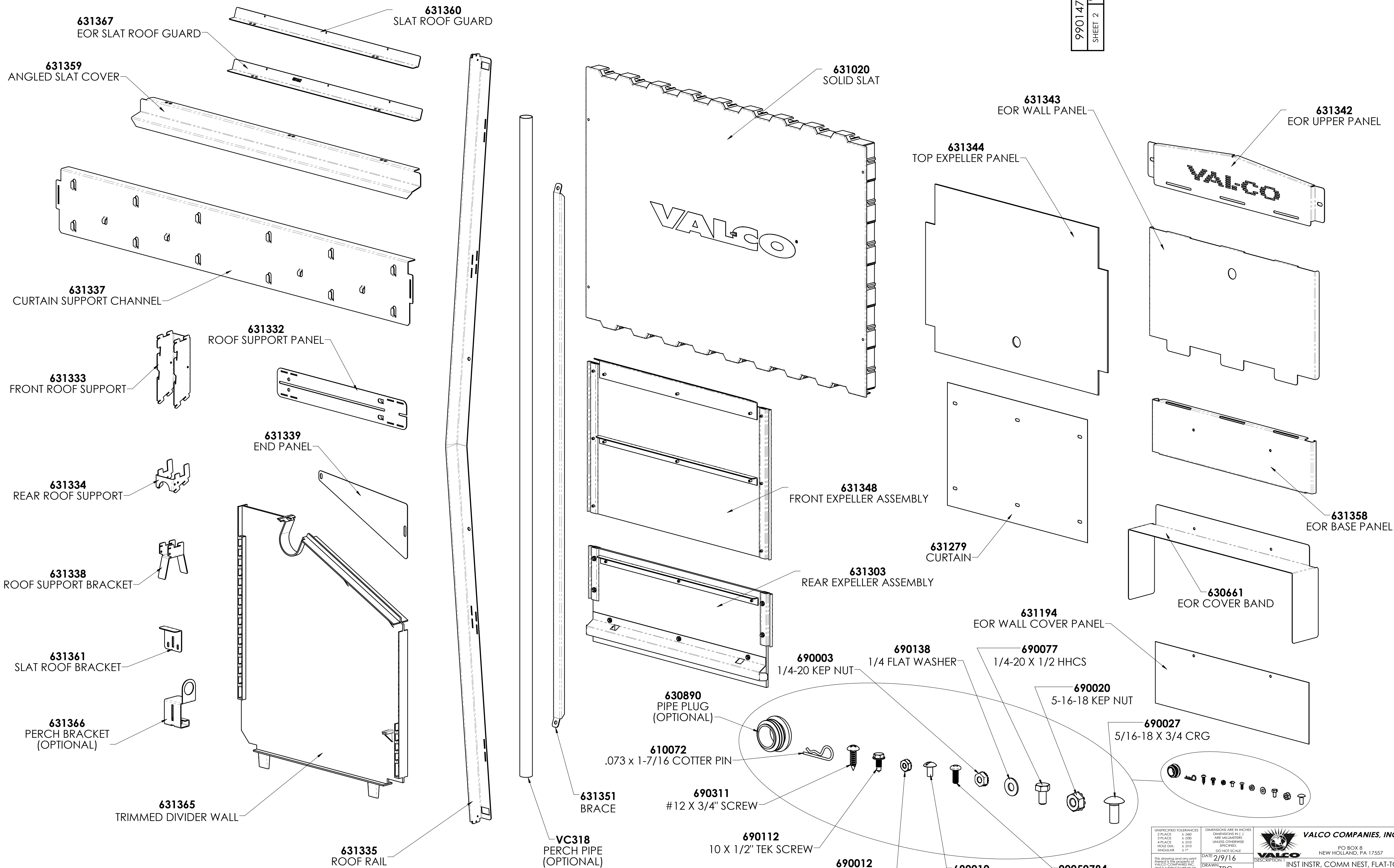
TO RETROFIT AN EXISTING VAL-CO COMMUNITY NEST WITH FLAT-TOP PARTS, REMOVE THE FOLLOWING PARTS:

- NEST TOPS**
- RIDGE CAPS**
- RIDGE CAP SUPPORTS & HARDWARE**
- NEST TOP ANGLE SUPPORT BRACKETS & HARDWARE**
- END OF ROW WALL PANELS**
- EXPELLER WIRES & TUBES**
- NEST PARTITIONS**

INDEX:

PARTS AND HARDWARE REFERENCE	SHEET 2
EXPELLER COMPARTMENT ASSEMBLY	SHEET 3
NEST ROOF SUPPORT PANEL ASSEMBLY	SHEET 4
ROOF FRAME SUPPORT ASSEMBLY	SHEET 5
ROOF PANEL ASSEMBLY AND END OF ROW	SHEET 6
END OF ROW AND INTERMEDIATE SECTION PANELS	SHEET 7
CROSS-BRACING ASSEMBLY	SHEET 8
OPTIONAL PERCH ASSEMBLY	SHEET 9





THE INSTRUCTIONS BELOW (FIG.1) REPLACE THE FOLLOWING SECTIONS IN THE MANUAL:

3.18 EXPELLER DRIVE UNIT DIVIDER WALL AND REAR PANEL ASSEMBLY
3.20 EXPELLER DRIVE UNIT FRONT PANEL ASSEMBLY

631348 FRONT & 631303 REAR EXPELLER ASSEMBLIES ARE SUPPLIED FULLY ASSEMBLED.

INSERT EACH ASSEMBLY INTO THE "L" CHANNEL SLOTS OF 631365. THE DIVIDER WALLS THE SAME WAY THAT THE NEST BOX FRONTS AND BACKS ARE ASSEMBLED.

BE SURE TO INSERT THE REAR EXPELLER ASSEMBLY BEFORE ATTACHING THE EXPELLER DRIVE UNIT TO THE FRAME. IF THE EXPELLER DRIVE UNIT IS ATTACHED TO THE FRAME BEFORE THE REAR EXPELLER ASSEMBLY IS INSERTED INTO THE DIVIDER WALLS, THEN THE "L" CHANNELS WILL HAVE TO BE DISASSEMBLED FROM THE PLASTIC PANELS IN ORDER TO FIT THE FULL EXPELLER ASSEMBLY IN UNDER THE EXPELLER DRIVE UNIT.

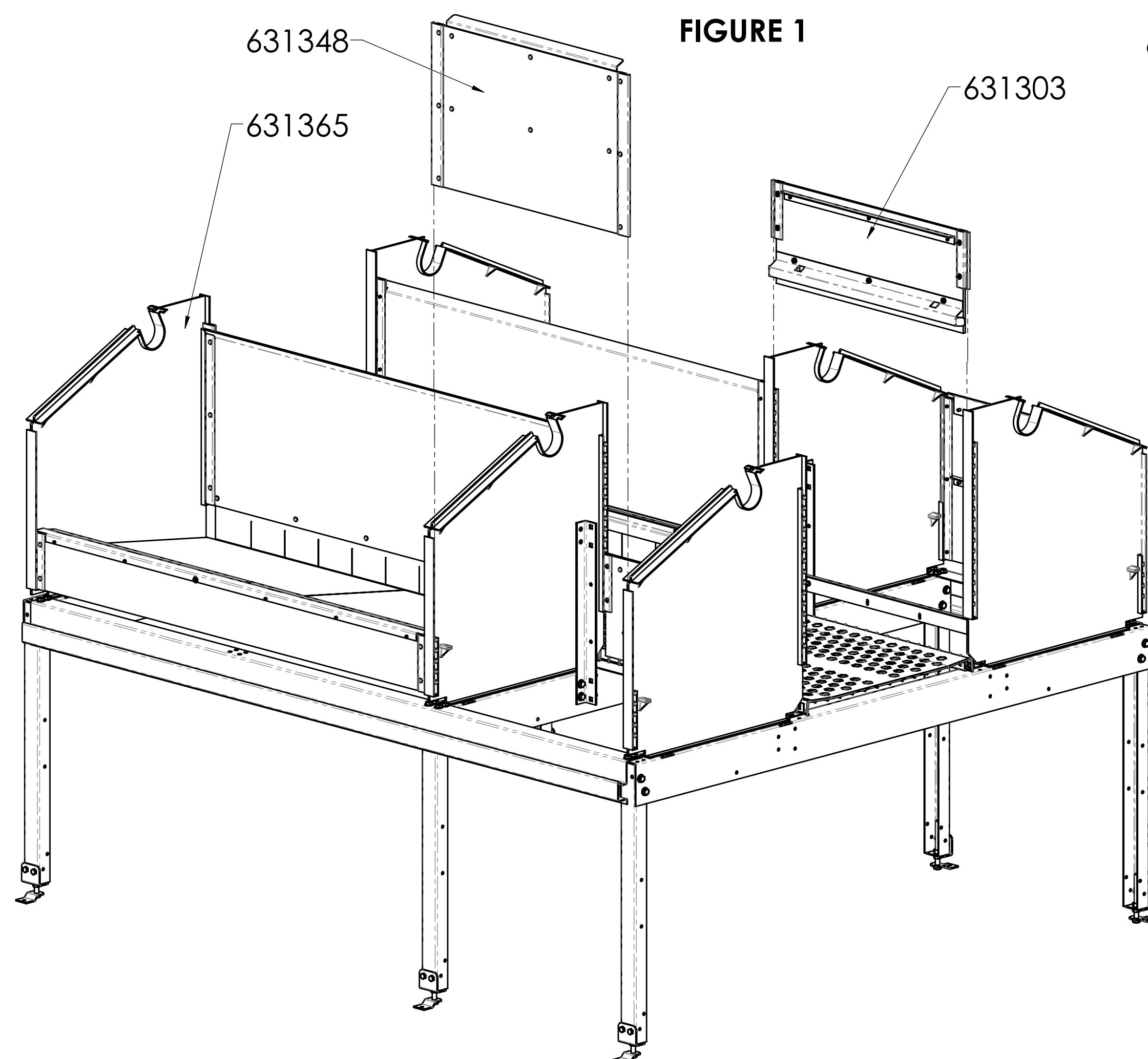


FIGURE 1

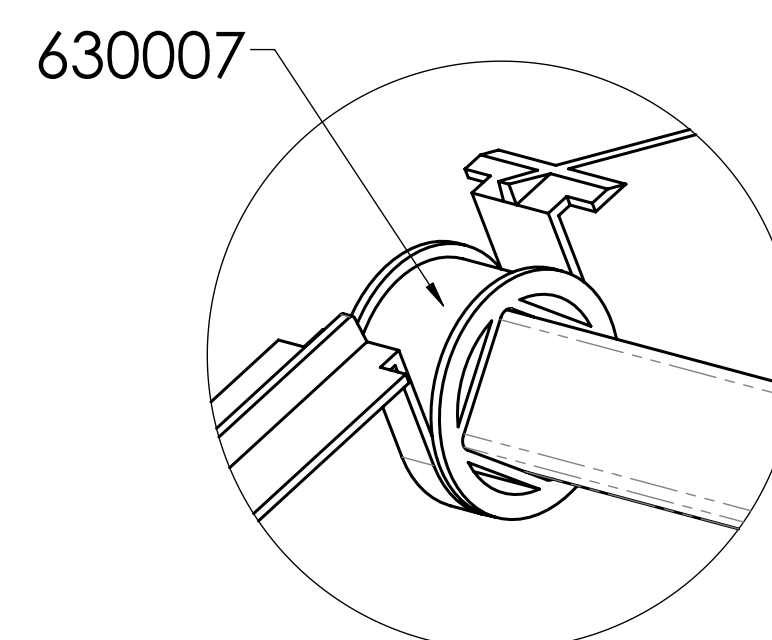


FIGURE 2A

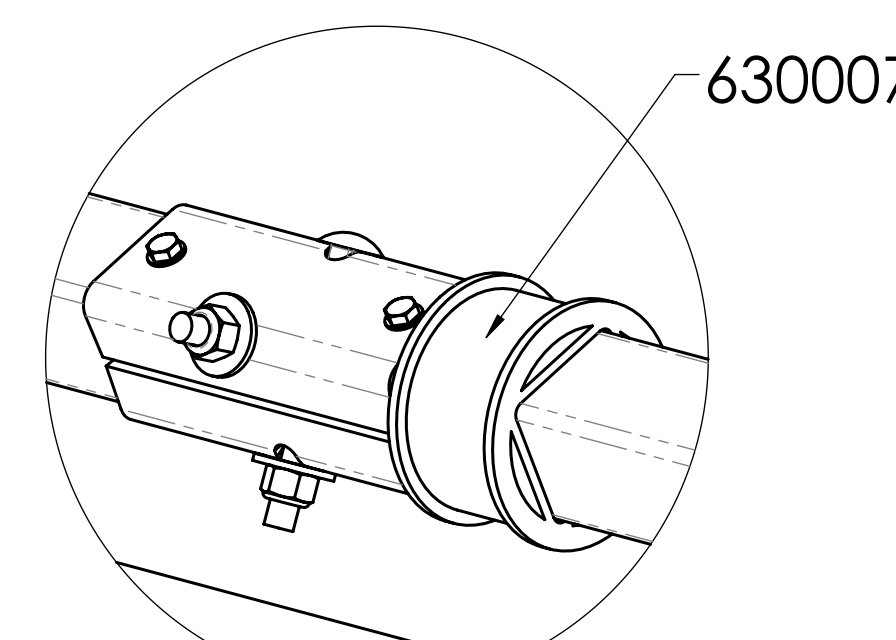


FIGURE 2B

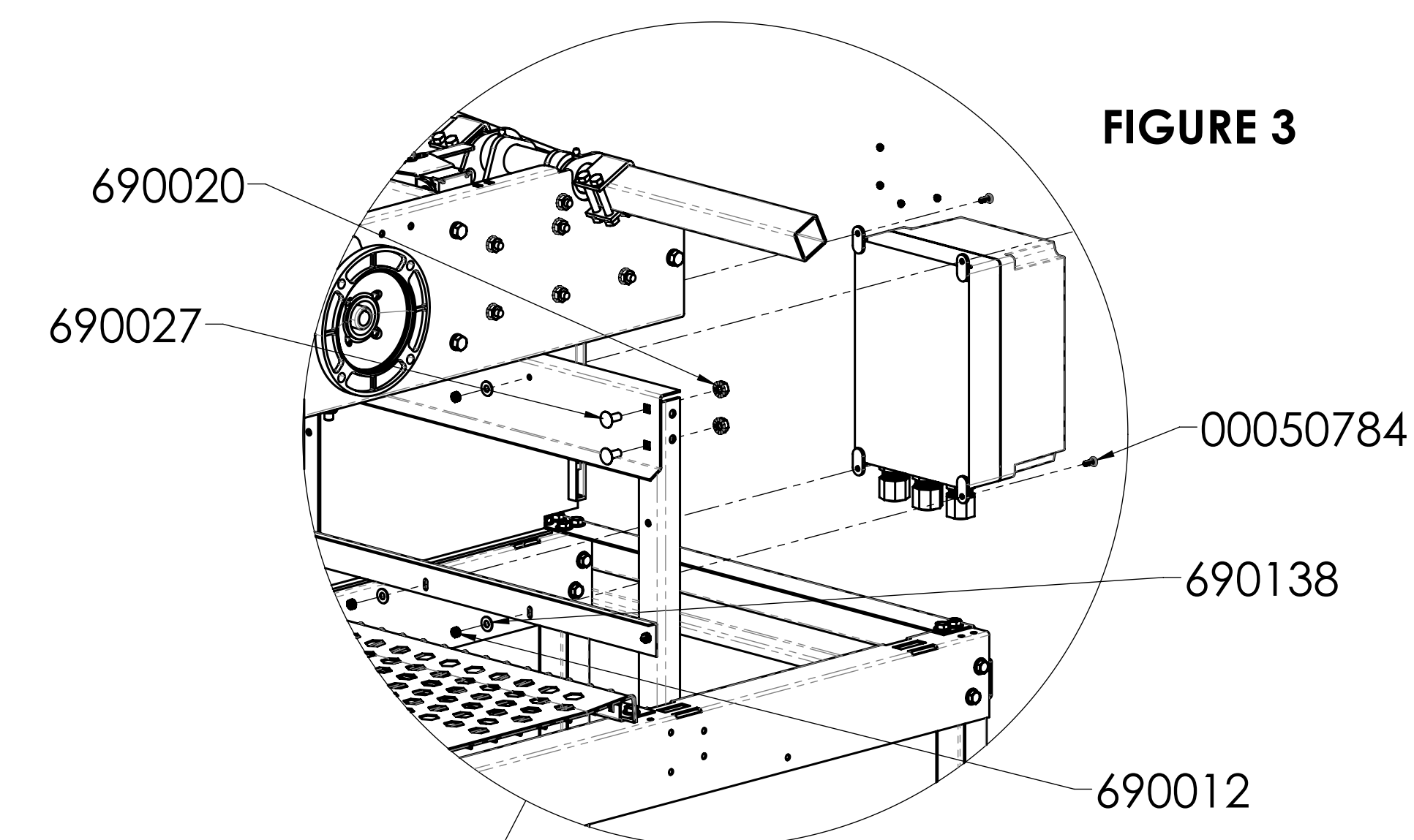


FIGURE 3

THE INSTRUCTIONS BELOW (FIG.2 & 3) REPLACE THE FOLLOWING SECTIONS IN THE MANUAL:

3.16 EXPELLER DRIVE UNIT CONTACTOR PLATE ASSEMBLY
3.17 EXPELLER DRIVE UNIT CONTACTOR BOX CONTROLS

ATTACH THE CONTACTOR BOX TO THE TWO CHANNELS SHOWN BELOW IN FIGURE 3 USING FOUR 00050784 SCREWS, 690138 WASHERS & 690012 NUTS.

ATTACH THE EXPELLER DRIVE UNIT TO THE VERTICAL CHANNELS SUPPLIED WITH THE FRAME COMPONENTS USING EIGHT 6900027 SCREWS & 690020 NUTS.

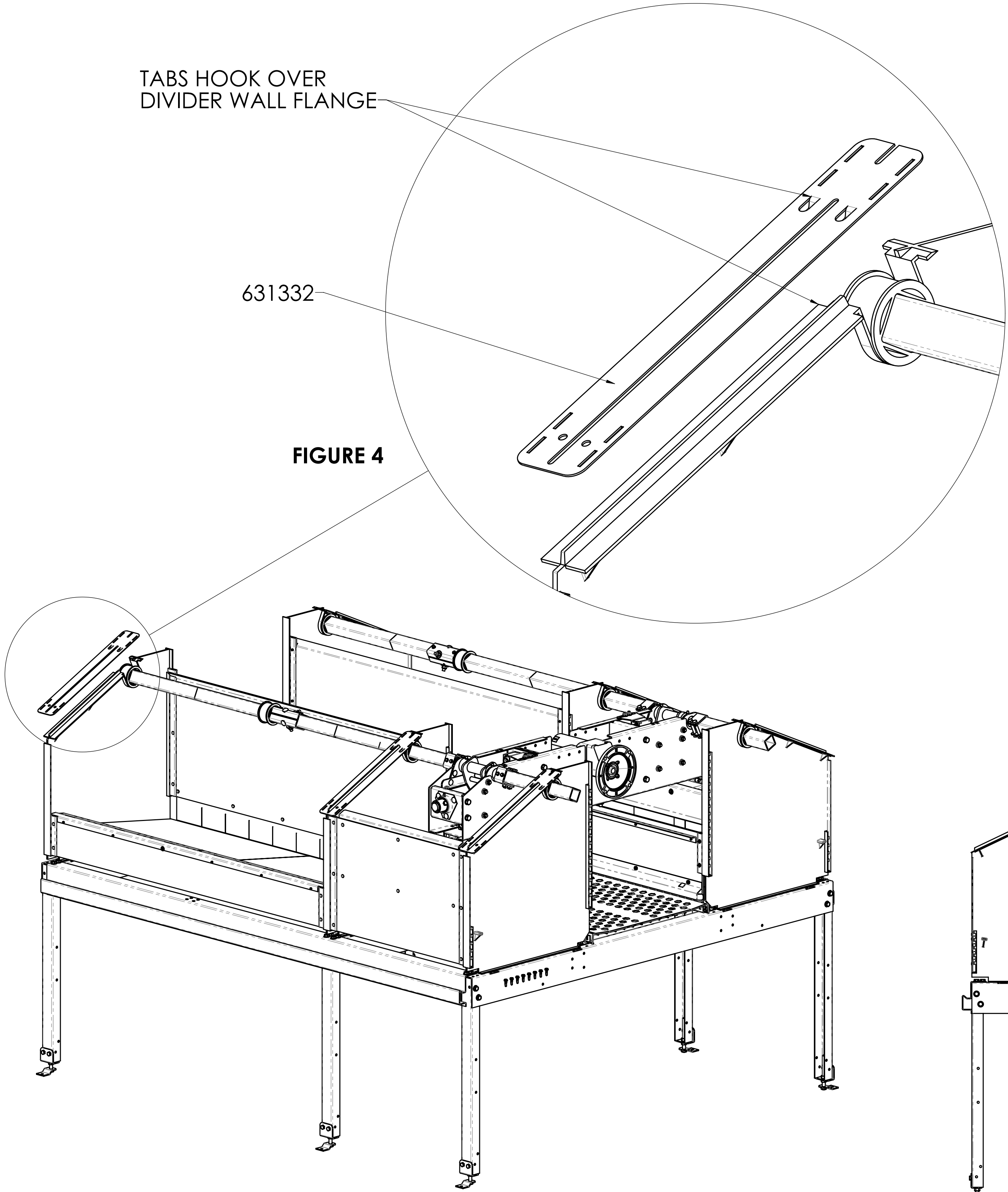
FOLLOW **4.4 NEST ASSEMBLY - EXPELLER** INSTRUCTIONS IN MANUAL TO INSTALL EXPELLER TUBES AND GROMMETS, AS SHOWN IN FIGURES 2A & 2B, BUT WAIT TO INSTALL EXPELLER WIRES & HARDWARE UNTIL AFTER ROOF FRAMEWORK IS INSTALLED. ONE GROMMET IS INSTALLED BETWEEN EACH PAIR OF PARTITIONS, AS SHOWN IN FIGURE 2B.

NOTE:

DIVIDER WALL AND FRONT & REAR EXPELLER ASSEMBLIES ARE HIDDEN FROM ONE SIDE OF VIEW IN FIGURE 3 TO SHOW HOW CONTACTOR BOX AND EXPELLER DRIVE UNIT ARE ATTACHED TO THE FRAME.

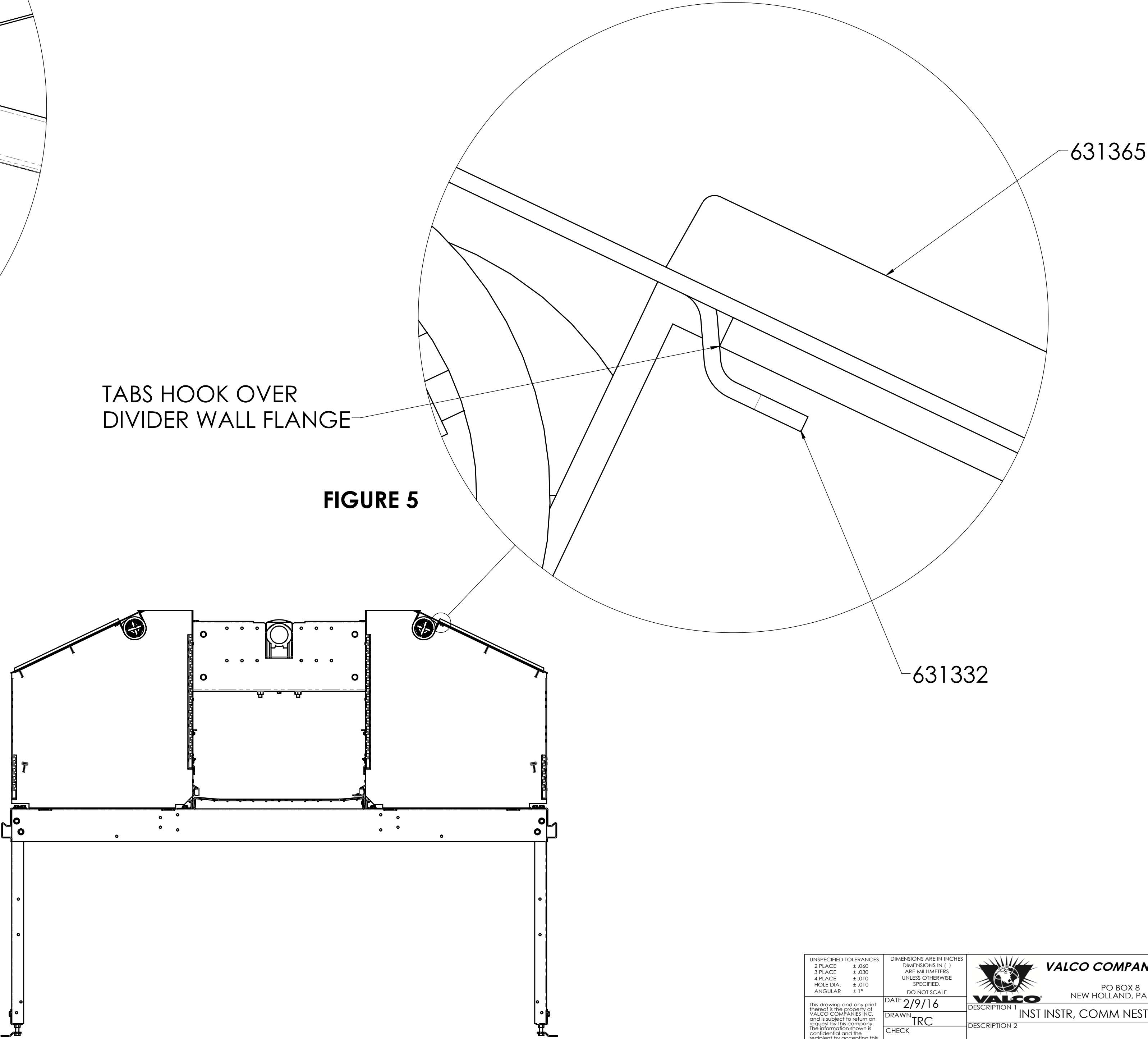
THE INSTRUCTIONS BELOW (FIG.4 & 5) REPLACE THE FOLLOWING SECTION IN THE MANUAL:

4.3 NEST ASSEMBLY - RIDGE CAP SUPPORT RAIL/RIDGE CAP/ANTI-PERCH FLAT BAR



ATTACH ONE 631332 ROOF SUPPORT PANEL TO EACH DIVIDER WALL. ALIGN CENTER SLOT IN ROOF SUPPORT PANEL OVER DIVIDER WALL RIDGE WITH TABS FACING DOWN TOWARDS DIVIDER WALL AS SHOWN IN FIGURE 4.

FLEX SHEET METAL UP SLIGHTLY TO ALLOW INTERFERENCE FIT WITH TOP OF DIVIDER WALL AND SNAP TWO TABS DOWN OVER EXPOSED DIVIDER WALL FLANGES AS SHOWN IN FIGURE 5.



THE INSTRUCTIONS BELOW (FIG. 6-9) REPLACE THE FOLLOWING SECTION IN THE MANUAL:

4.3 NEST ASSEMBLY - RIDGE CAP SUPPORT RAIL/RIDGE CAP/ANTI-PERCH FLAT BAR

631333 & 631334 FRONT & REAR ROOF SUPPORTS CAN BE ATTACHED TO THE ROOF FRAMEWORK ONCE THE 631332 ROOF SUPPORT PANELS ARE IN PLACE.

THE BOTTOM TABS OF THE FRONT & REAR ROOF SUPPORTS FIT INTO EXTENDED SLOTS IN THE ROOF SUPPORT PANELS, AS SHOWN IN FIGURES 6 & 7. THE DASHED LINES ON EXPLODED VIEWS REPRESENT ENGAGEMENT OF TAB NOTCHES INTO ENDS OF SLOTS.

EACH SET OF PARTITIONS SUPPORTS A 631335 ROOF RAIL THAT ATTACHES TO THE PREVIOUSLY ASSEMBLED 631333 FRONT ROOF SUPPORTS USING NOTCHED TABS, WHILE SIMULTANEOUSLY RESTING ON THE EXTENDED TABS IN THE PREVIOUSLY ASSEMBLED PAIR OF 631334 REAR ROOF SUPPORTS, ALIGNING THE RAIL ACROSS TWO PARTITIONS, AS SHOWN IN FIGURE 8.

EACH 631335 ROOF RAIL THAT IS INSTALLED BETWEEN A PAIR OF PARTITIONS ATTACHES TO A PAIR OF 631388 ROOF SUPPORT BRACKETS USING NOTCHED TABS, WHICH REST ON A PAIR OF 630007 GROMMETS, AS SHOWN IN FIGURE 9.

ONCE THE ROOF RAILS ARE SECURED, A 631337 CURTAIN SUPPORT CHANNEL IS ATTACHED TO A PAIR OF FRONT ROOF SUPPORTS USING THE SAME TAB DESIGN, AS SHOWN IN FIGURE 8.

FIGURE 6

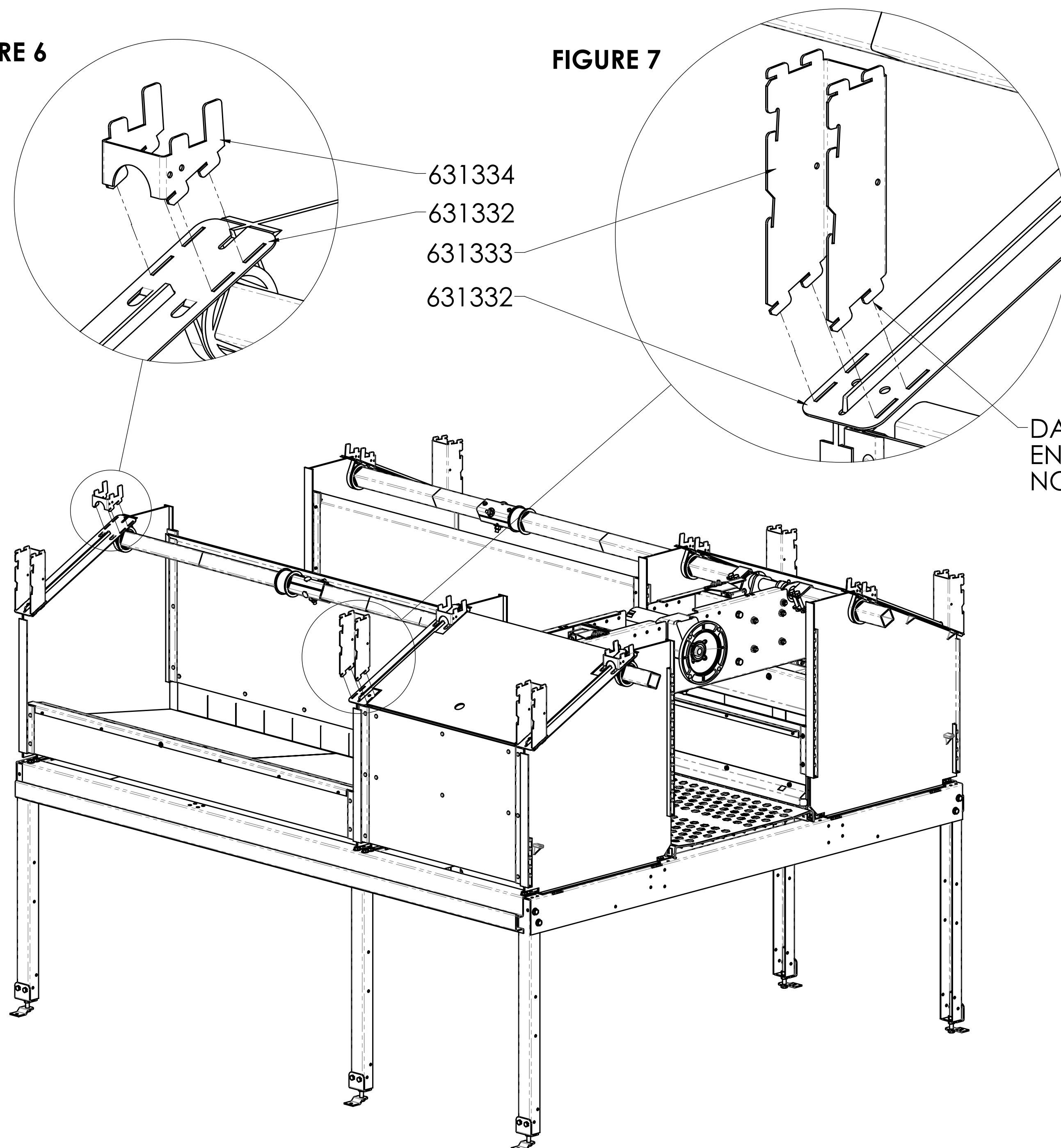
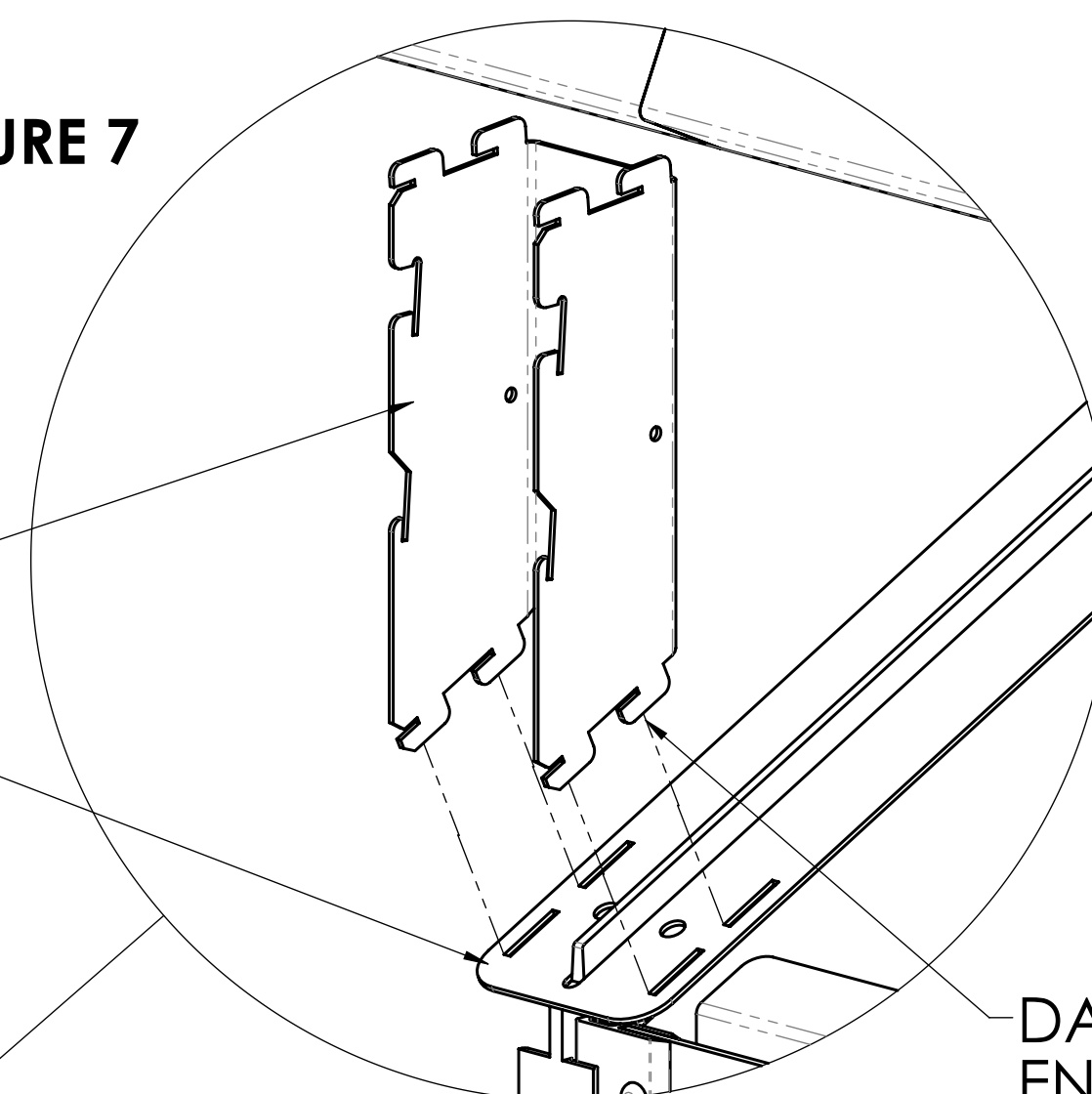
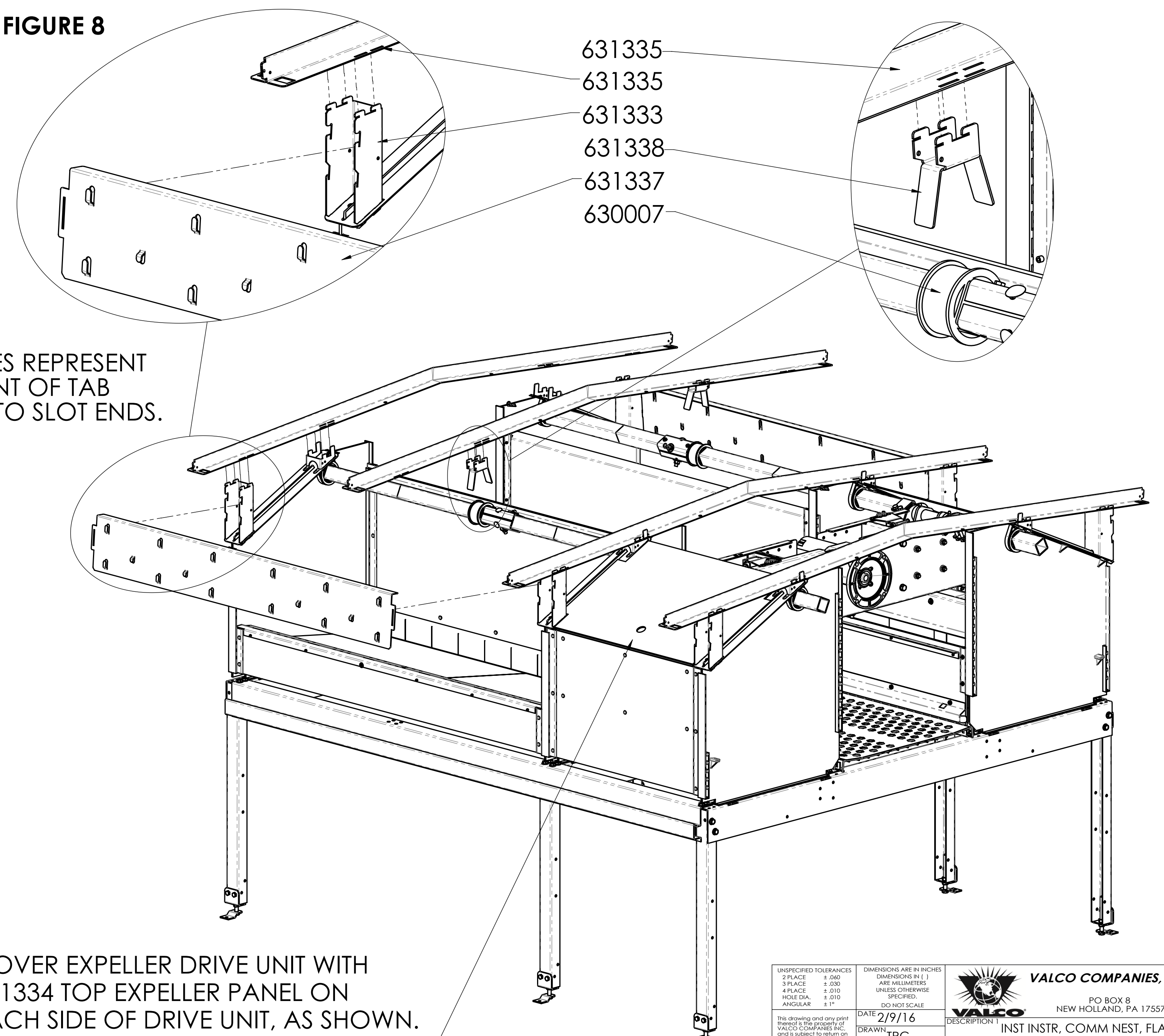


FIGURE 7



DASHED LINES REPRESENT
ENGAGEMENT OF TAB
NOTCHES INTO SLOT ENDS.

FIGURE 8



COVER EXPELLER DRIVE UNIT WITH
631334 TOP EXPELLER PANEL ON
EACH SIDE OF DRIVE UNIT, AS SHOWN.
FLEX PANEL TO FIT BETWEEN SUPPORTS.

THE INSTRUCTIONS BELOW (FIG. 10-16) REPLACE THE FOLLOWING SECTIONS IN THE MANUAL:

4.7 NEST ASSEMBLY - TOP

CONTINUE TO FOLLOW **4.4 NEST ASSEMBLY - EXPELLER** INSTRUCTIONS IN MANUAL TO FINISH INSTALLING EXPELLER WIRES & HARDWARE ONCE ROOF FRAMEWORK IS INSTALLED. EXPELLER WIRES ARE NOTCHED AT THE CORNER TO ALLOW INSERTION INTO THE NEST AT AN ANGLE UNDER THE CURTAIN SUPPORT CHANNEL, AS SHOWN IN FIGURE 10.

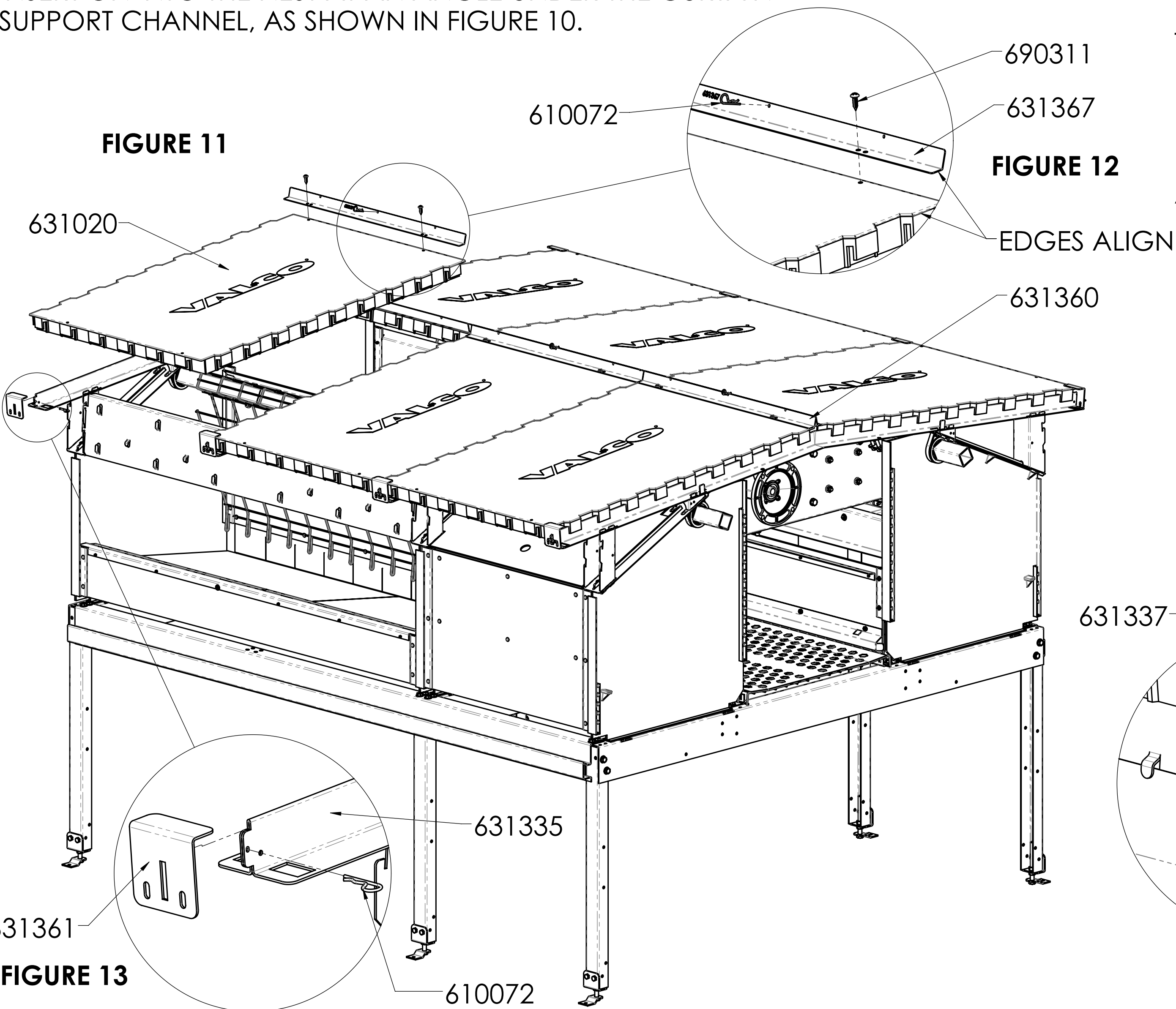


FIGURE 11

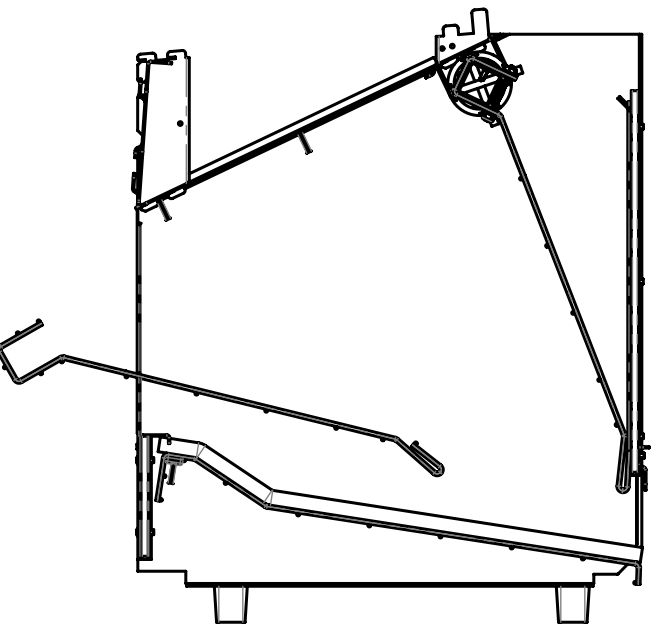
FIGURE 12

NOTE: IF OPTIONAL PERCH IS USED, DO NOT ASSEMBLE SOLID SLATS AT THIS STAGE: REFER TO PAGE 9 FOR ALTERNATE INSTRUCTIONS, USING THESE TO COMPLETE THE INSTALLATION OF THE SOLID SLATS AFTERWARDS.

631020 SOLID SLATS ATTACH TO THE VERTICAL FORMS OF THE ROOF RAILS IN ONE DIRECTION ONLY, (VAL-CO LOGO WILL RUN THE SAME DIRECTION FOR THE WHOLE ROW/SECTION) AS SHOWN IN FIGURE 11. EACH SLAT GETS A 631360 ROOF GUARD ATTACHED AT THE ROOF PEAK USING TWO 690311 SCREWS, AS SHOWN IN FIGURE 12. THE ROOF GUARD ALIGNS WITH BOTH THE PRE-DRILLED HOLES AND EDGES OF THE SLAT, WITHOUT OVER HANGING EITHER SIDE. AT THE EOR, ONE 631360 IS REPLACED BY A 631367 TO COVER THE GAP BETWEEN THE SLATS AT THE EOR, AS SHOWN IN FIGURE 16.

ONCE THE SLATS ARE INSTALLED, 631361 SLAT ROOF BRACKETS ARE ATTACHED TO THE END TABS OF EACH ROOF RAIL, USING NOTCHED ENDS AND A 610072 COTTER PIN THROUGH THE BRACKETS' SLOTS, AS SHOWN IN FIGURE 13.

FIGURE 10



TWO 631279 CURTAINS ARE HUNG ON EACH 631337 CURTAIN SUPPORT CHANNEL AS SHOWN IN FIGURE 14.

THERE ARE TWO ROWS OF THREE SLOTS IN EACH CURTAIN. THE SLOT ROWS ARE SYMMETRICAL: THERE IS NO TOP OR BOTTOM ORIENTATION TO HOW THE CURTAINS ARE HUNG.

THREE SLOTS IN EACH CURTAIN ALIGN WITH THREE TABS IN EACH CHANNEL. THERE IS ALSO A ROW OF FOUR REVERSED TABS ON THE CHANNEL, LOCATED JUST ABOVE THE TOP EDGE OF THE CURTAIN, THAT ARE USED TO SECURE THE CURTAIN IN PLACE, AS SHOWN IN FIGURE 14.

631339 END PANELS ARE SCREWED INTO THE FRONT & REAR ROOF SUPPORTS AT THE OPEN END OF EVERY END OF ROW/CROSSOVER USING TWO 690112 TEK SCREWS, AS SHOWN IN FIGURE 15.

VAL-CO LOGO RUNS SAME DIRECTION

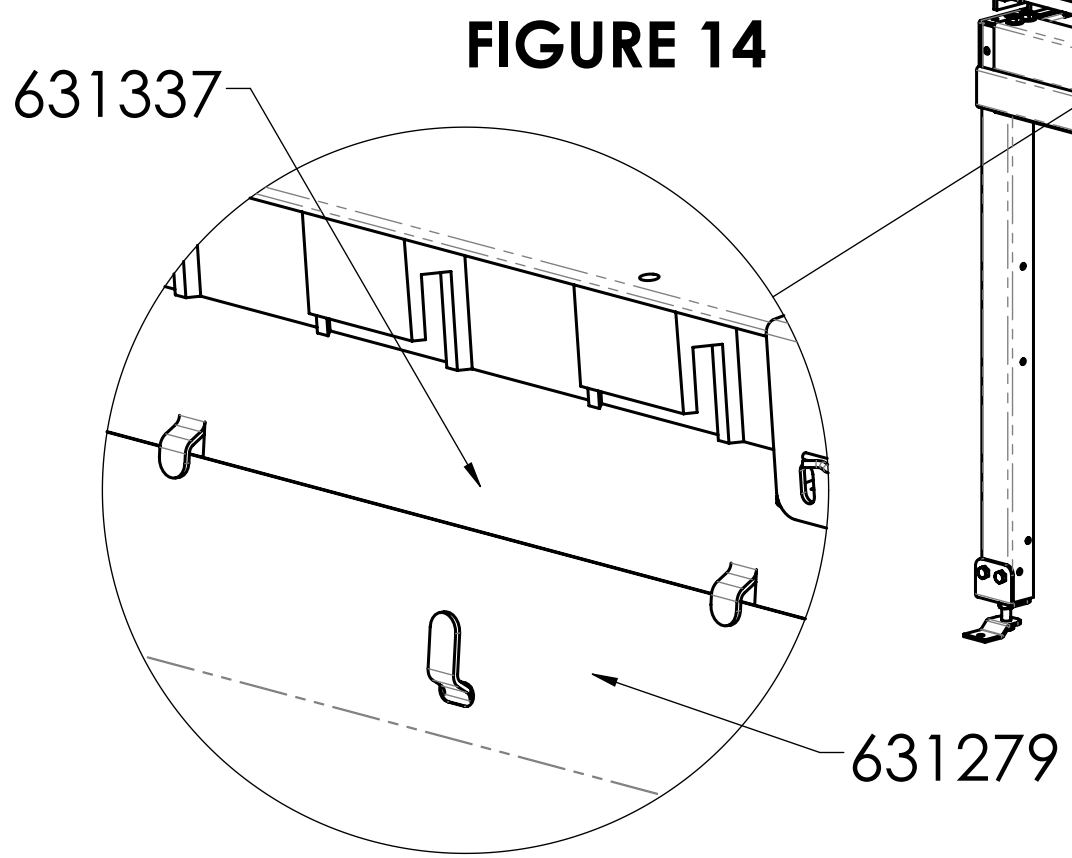


FIGURE 14

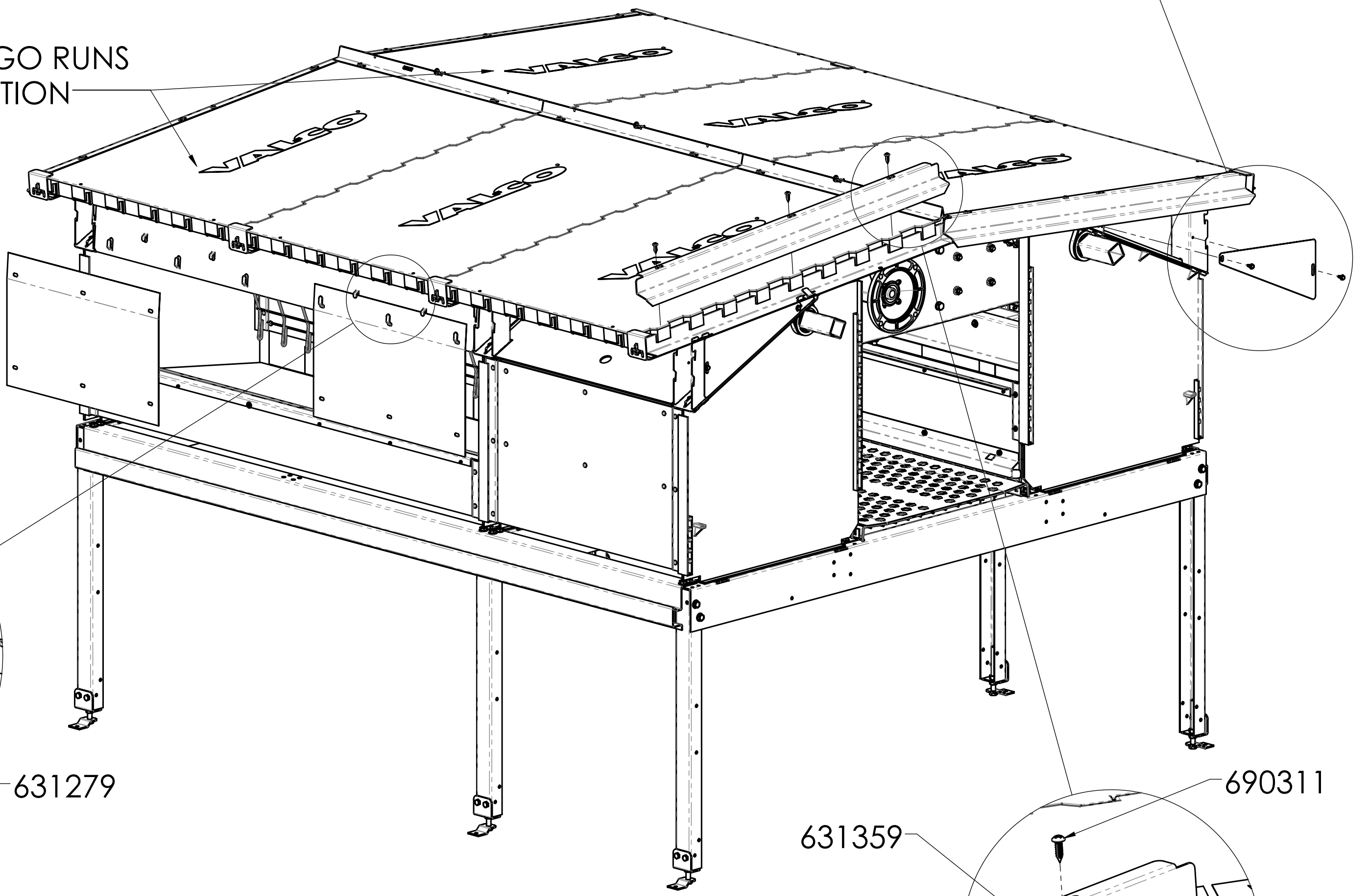


FIGURE 15

631359 ANGLED SLAT COVERS ARE ATTACHED TO SOLID SLATS USING 690311 SCREWS AT THE OPEN END OF EVERY END OF ROW, AS SHOWN IN FIGURE 16. 3 OF 6 SLOTS IN 631359 WILL ALIGN WITH EACH SLAT, AS SHOWN IN FIGURE 16, WHEN SLAT COVERS ARE ATTACHED TO THE SLATS IN THE PROPER ORIENTATION, AS SHOWN IN FIGURE 16.

FIGURE 16

UNSPECIFIED TOLERANCES		DIMENSIONS ARE IN INCHES		VALCO COMPANIES, INC.	
2 PLACE	±.060	ARE MILLIMETERS	DO NOT SCALE	PO BOX 8	NEW HOLLAND, PA 17557
3 PLACE	±.020	UNLESS OTHERWISE SPECIFIED		INST INSTR, COMM NEST, FLAT-TOP	
4 PLACE	±.010			DESCRIPTION 2	
HOLE DIA	±.010			SHEET 6 OF 9	
ANGULAR	±1°			990147	
This drawing and any part thereof is the property of VALCO COMPANIES INC. and is subject to return or request by this company. The information herein is confidential and the recipient by accepting this drawing agrees not to use any information contained herein in any manner which will be detrimental to VALCO COMPANIES INC.		DATE	2/9/16	WEIGHT	412.240
		DRAWN	TRC	SCALE	1:8
		CHECK		REV.	

THE INSTRUCTIONS BELOW (FIG.17-20) REPLACE THE FOLLOWING SECTION IN THE MANUAL:

5.2 WALL PANEL ASSEMBLIES

END PANEL SUB-ASSEMBLY:

THE 631358 EOR BASE PANEL HAS HOLES IN IT FOR THE 630661 COVER BAND TO BE ATTACHED USING A PAIR OF 690010 SCREWS AND 690012 NUTS, AS SHOWN IN FIGURE 18. THE EOR BASE PANEL HAS FORMED FLANGES ON THE SIDES THAT SLIDE DOWN INTO THE "L" CHANNEL ON THE SIDES OF THE DIVIDER WALLS.

THE 631342 EOR UPPER PANEL ATTACHES TO THE OUTER FACE OF THE END DIVIDER WALLS AND IS SECURED BY A PAIR OF 690077 SCREWS AND 690003 NUTS, AS SHOWN IN FIGURE 17. THE PANEL RESTS ON TOP OF THE DIVIDER WALL CHANNELS AND CENTERS BETWEEN THEM; HOLES MUST BE FIELD DRILLED IN DIVIDER WALL TO MOUNT THE PANEL USING A .281 [7MM] DRILL BIT. THE SCREW HEADS SHOULD BE PLACED INSIDE THE PANEL, WITH THE NUTS TIGHTENING AGAINST THE STEEL BODY OF THE UPPER PANEL.

THE 631343 EOR WALL PANEL HAS STRAIGHT TABS AT THE BOTTOM THAT FIT INTO SLOTS IN THE UPPER BEND OF THE EOR BASE PANEL AND FORMED TABS AT THE TOP THAT HOOK DOWN INTO SLOTS CUT INTO THE BOTTOM FLANGE OF THE EOR UPPER PANEL, AS DETAILED IN FIGURES 17 & 18.

THE 631194 EOR WALL COVER PANEL IS ATTACHED TO THE END OF THE ROW AT THE OPPOSITE END FROM THE EGG COLLECTOR, TO PREVENT EGGS FROM ROLLING BACKWARDS INTO THE IDLER ASSEMBLY, AS SHOWN IN FIGURE 18. IT HAS HOLES THAT ALLOW IT TO BE ATTACHED TO THE BASE PANEL.

THERE IS NO HARDWARE TO LOCK THE 631343 EOR WALL PANEL INTO PLACE, WHICH ALLOWS IT TO BE REMOVED EASILY WHEN DOING GENERAL MAINTENANCE.

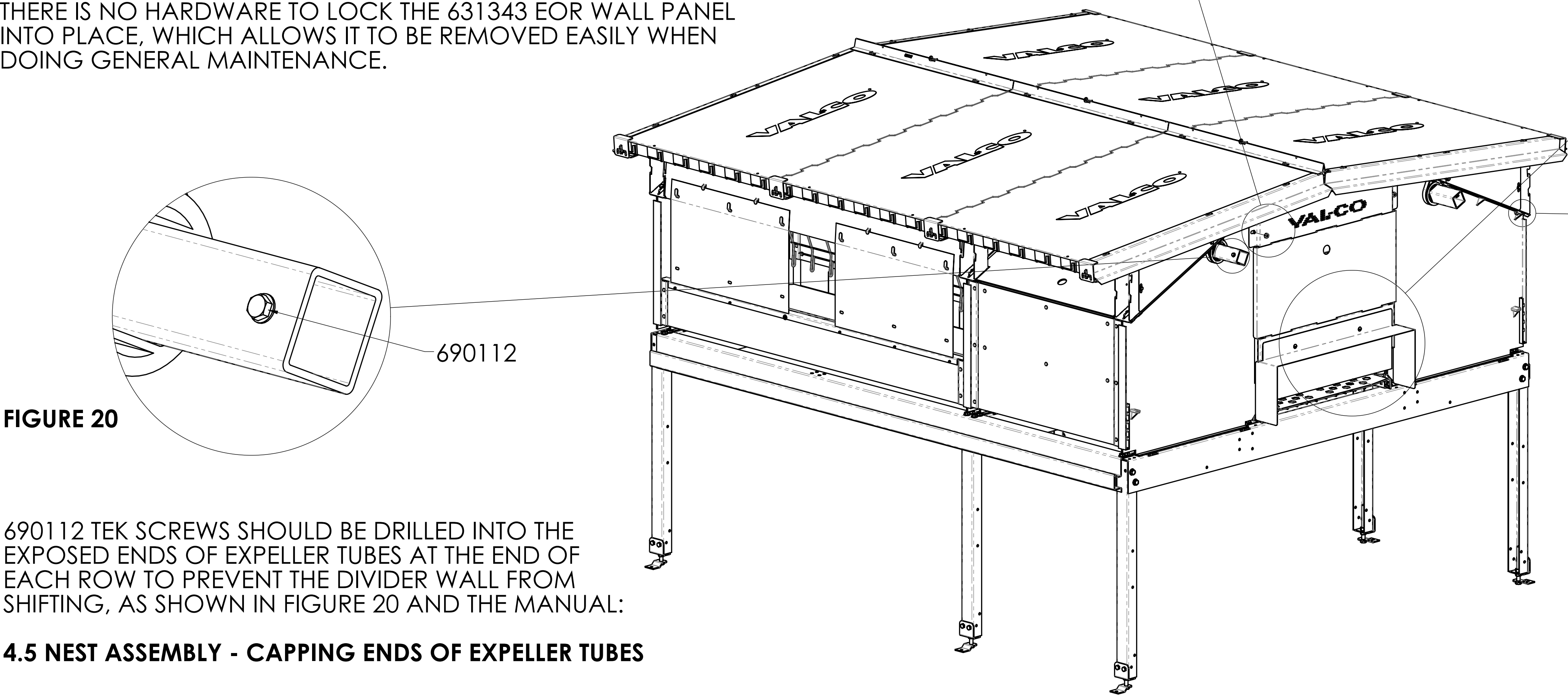


FIGURE 20

690112 TEK SCREWS SHOULD BE DRILLED INTO THE EXPOSED ENDS OF EXPELLER TUBES AT THE END OF EACH ROW TO PREVENT THE DIVIDER WALL FROM SHIFTING, AS SHOWN IN FIGURE 20 AND THE MANUAL:

4.5 NEST ASSEMBLY - CAPPING ENDS OF EXPELLER TUBES

FIGURE 17

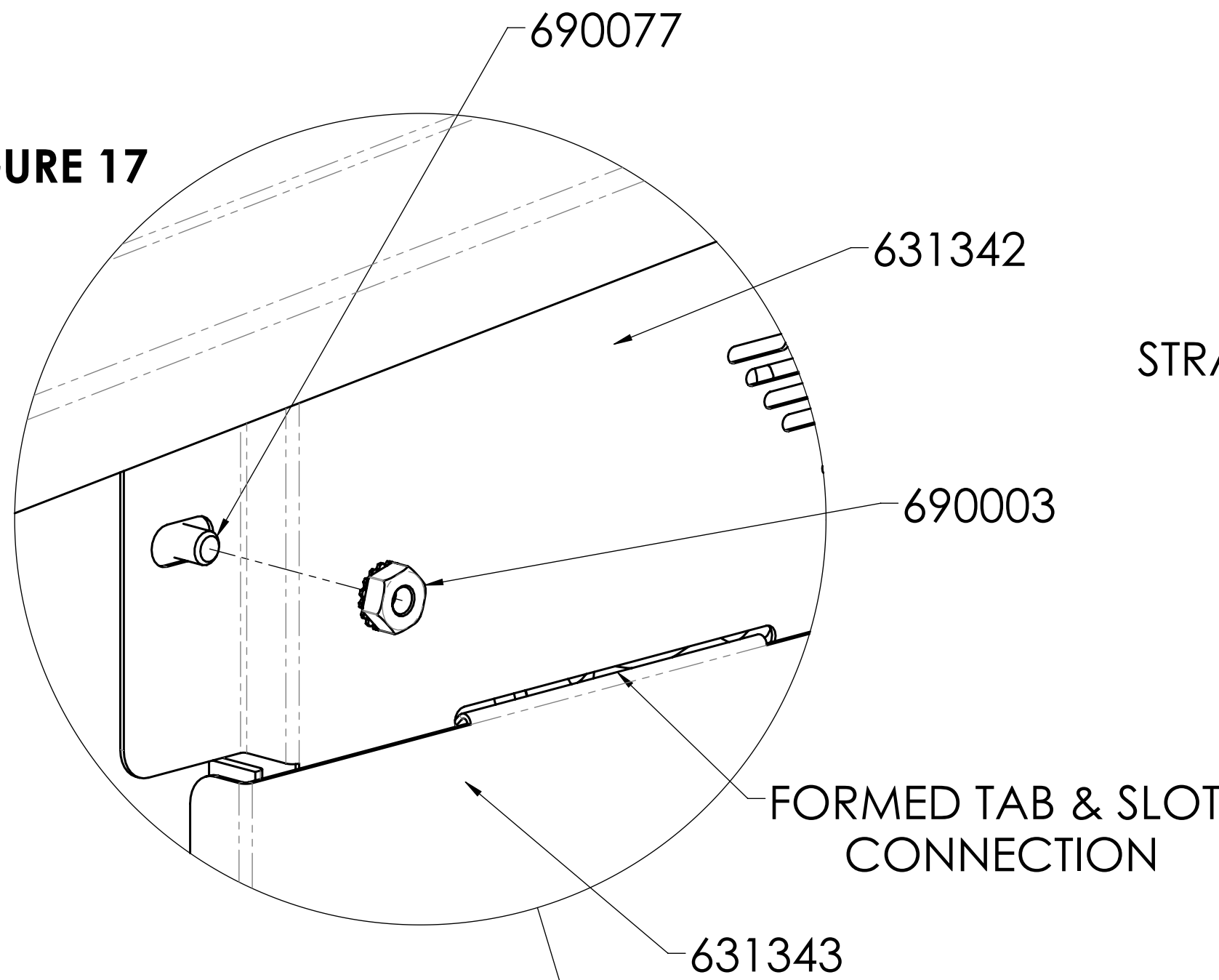


FIGURE 18

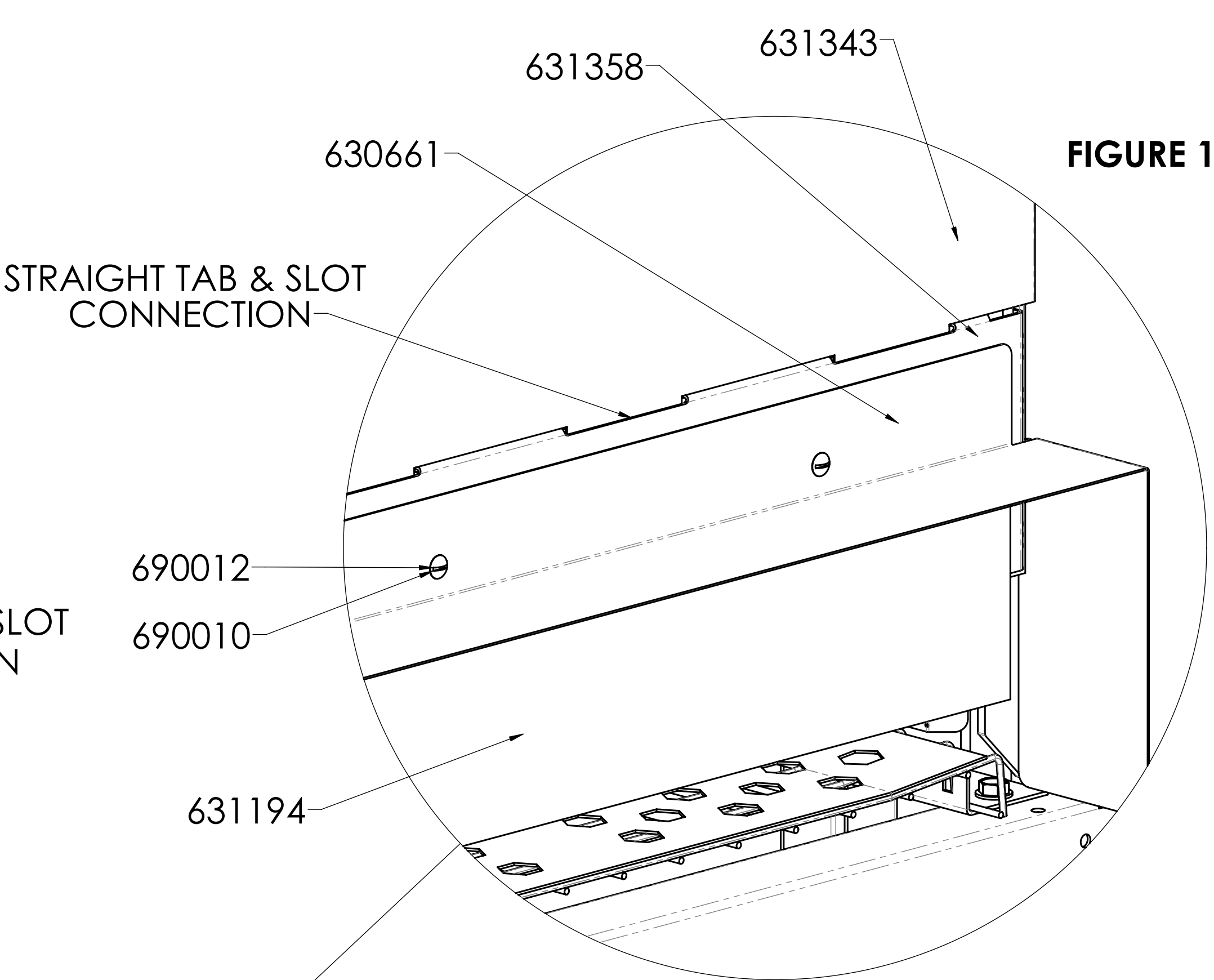
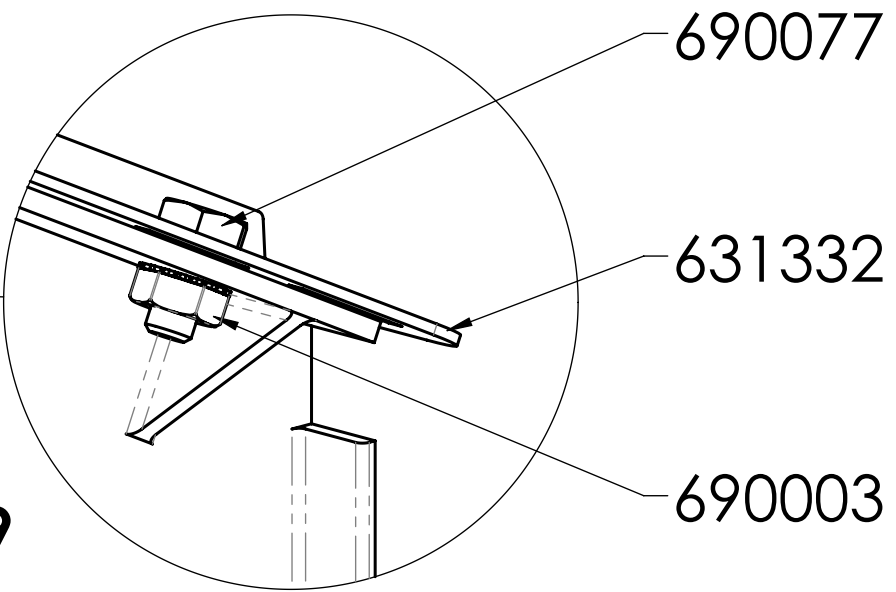


FIGURE 19



AT EACH CROSS-OVER AND END OF ROW, A 690003 NUT AND 690077 BOLT SHOULD BE USED TO LOCK THE 631332 ROOF SUPPORT PANEL TO THE END DIVIDER WALL, AS SHOWN IN FIGURE 19. THERE IS A LOCATING HOLE IN EACH ROOF SUPPORT PANEL FOR THIS PURPOSE. A HOLE WILL NEED TO BE FIELD DRILLED INTO THE DIVIDER WALL USING A .281IN [7MM] DRILL BIT.

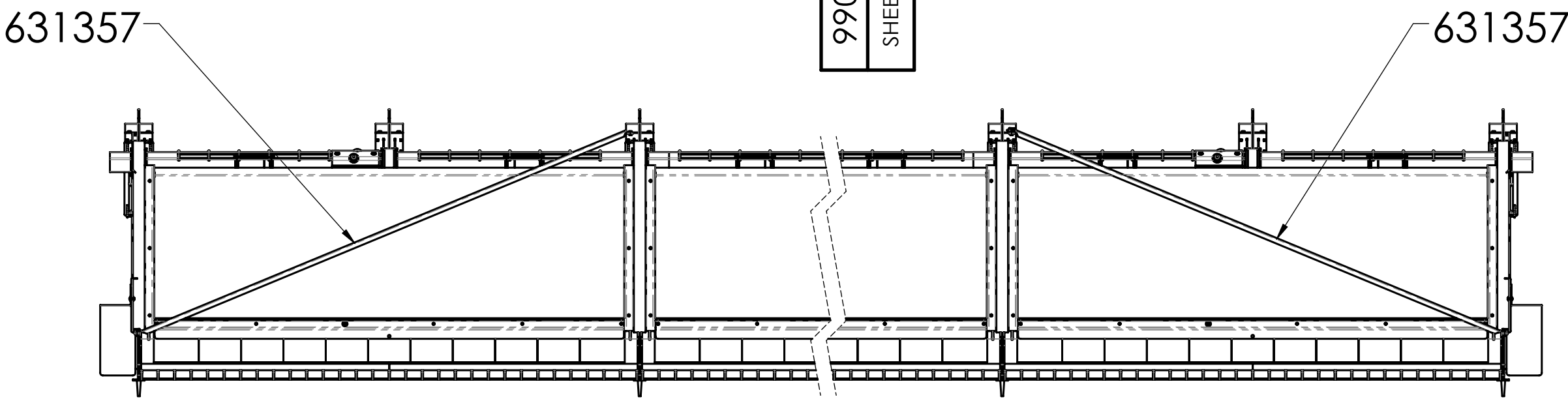
THE INSTRUCTIONS BELOW (FIG. 21-22) ADD TO THE NEST INSTALLATION MANUAL AND ARE UNIQUE TO THE FLAT-TOP.

CROSS-BRACING HAS BEEN DESIGNED TO BE USED WITH THE FLAT-TOP NEST TO STABILIZE AND MAINTAIN SQUARENESS OF THE NEST ROW.

ONE OF THESE BRACES ARE TO BE INSTALLED AT BOTH ENDS OF EACH NEST ROW AND ON EACH SIDE OF EVERY CROSS-OVER.

EACH BRACE IS DESIGNED TO OPPOSE EACH OTHER, WITH ONE END INSTALLED BOTTOM UP AND IT'S MATE IN THE OPPOSITE DIRECTION AT THE OTHER END OF THE NEST ROW / CROSS OVER.

THE 631357 BRACES HAVE END TABS BENT TO MATCH THE ANGLE OF THE SURFACES THEY ARE INTENDED TO MATE TO; SEE FIGURES 21 & 22 TO SEE THE PROPER ALIGNMENT.



SIDE VIEW OF NEST ROW SHOWING ORIENTATION OF BRACES ASSEMBLED IN OPPOSITION, FROM ONE END TO THE OTHER.

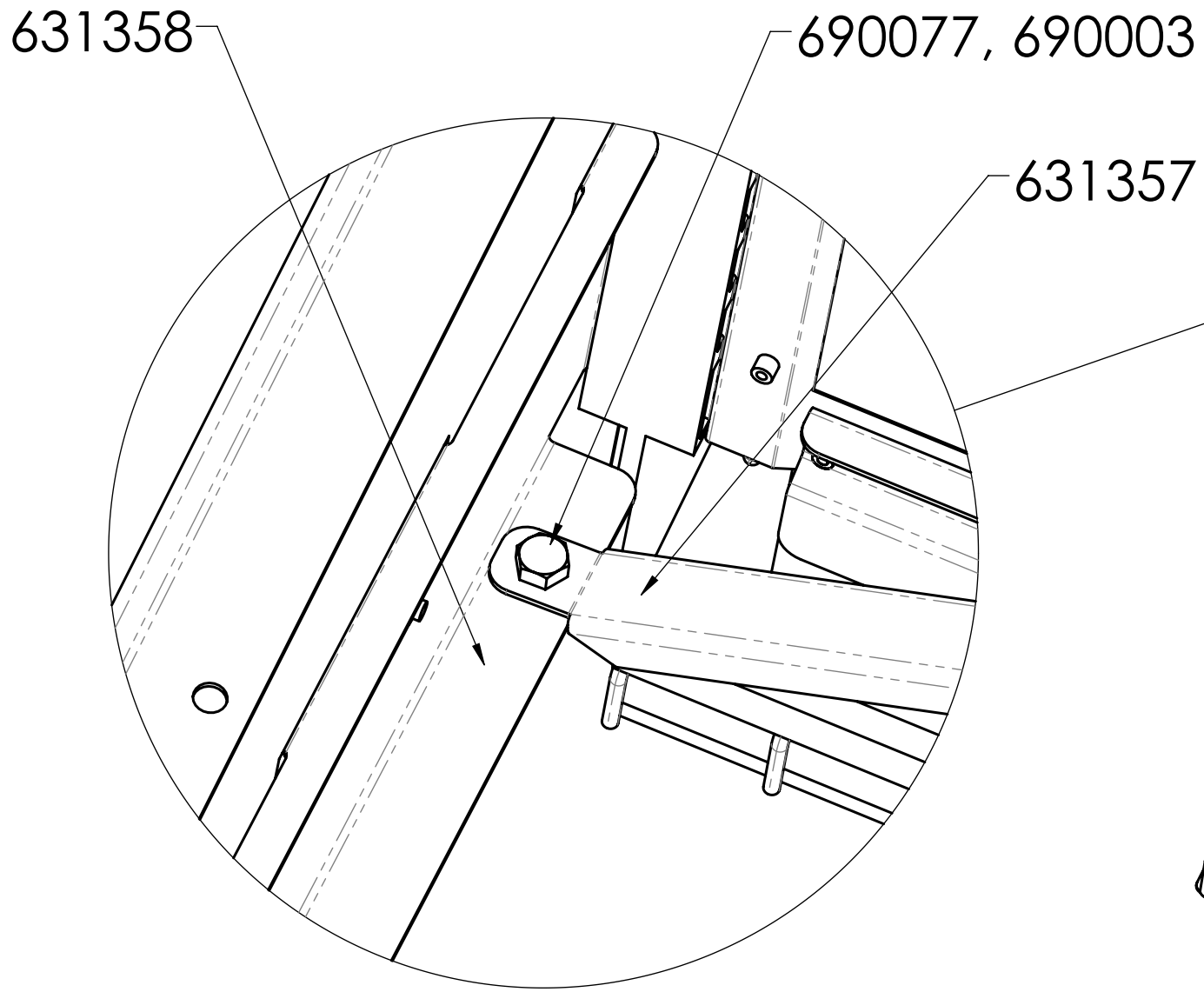


FIGURE 21

USE ONE 690077 SCREW AND ONE 690003 NUT TO ATTACH A 631357 BRACE TO THE INSIDE FLANGE OF THE 631358 EOR BASE PANEL, USING THE PRE-PUNCHED HOLE PROVIDED IN THE PANEL'S LOWER FLANGE, AS SHOWN IN FIGURE 21.

LEAVE THE HARDWARE LOOSE, BUT SNUG; DO NOT TIGHTEN UNTIL THE OTHER END OF THE BRACE HAS BEEN ATTACHED AT THE OTHER END, AS SHOWN IN FIGURE 22.

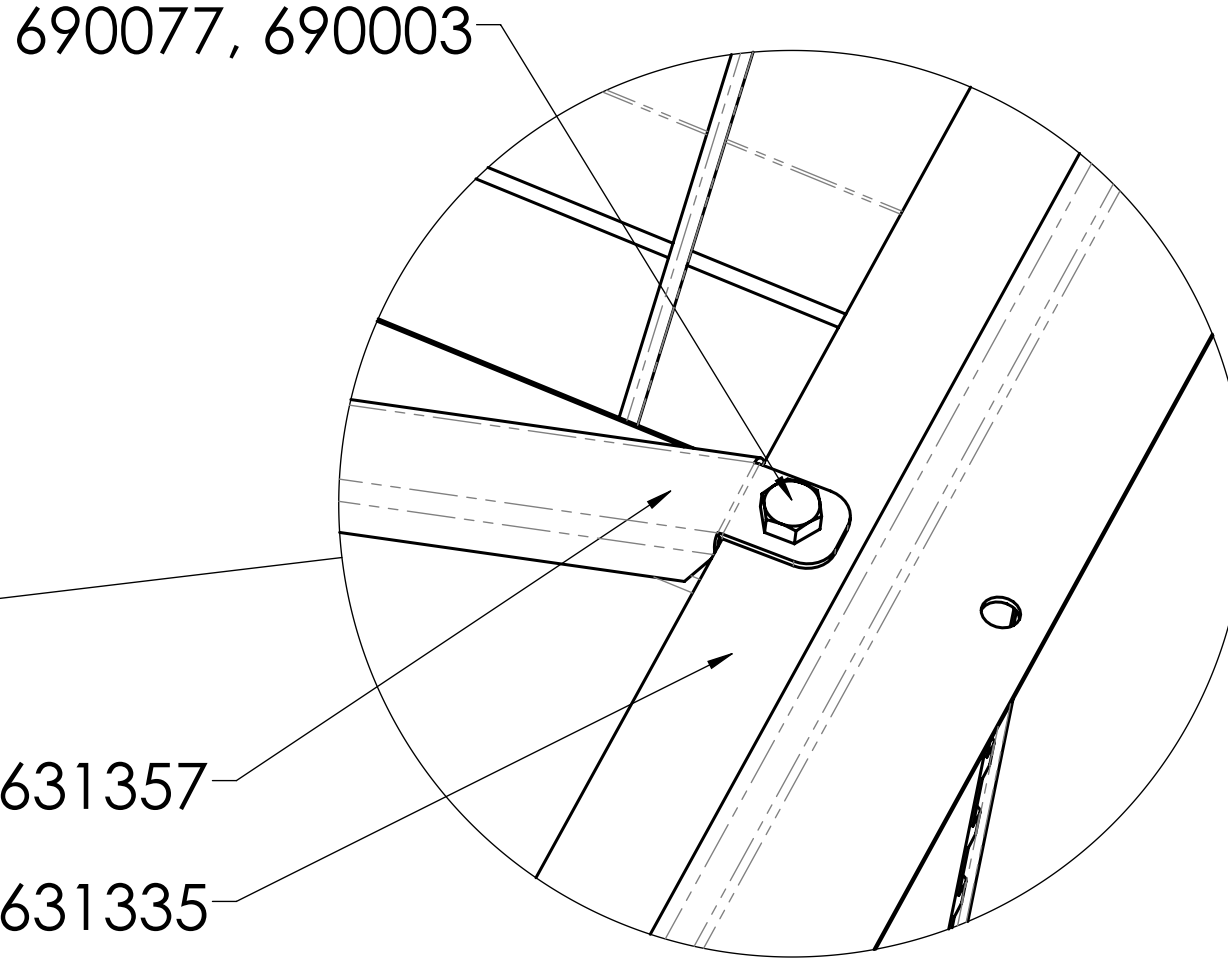


FIGURE 22

ONCE THE BRACE IS LOOSELY ATTACHED TO THE EOR BASE PANEL, LIFT THE BRACE AND ATTACH IT TO THE NEAREST 631335 ROOF RAIL THAT IS ATTACHED TO A PAIR OF 631365 DIVIDER WALLS, LOCATING THE TAB ABOVE THE ROOF RAIL FLANGE, AS SHOWN IN FIGURE 22, LOCATING IT IN-LINE WITH THE PRE-PUNCHED HOLE IN THE ROOF RAIL.

ATTACH THE BRACE TO THE ROOF RAIL USING THE SAME SCREW AND NUT COMBINATION AS WAS USED WITH THE BASE PANEL ON THE OPPOSITE END.

ONCE EACH END OF THE BRACE IS ATTACHED, TIGHTEN THE HARDWARE AND CHECK THAT THE ENDS OF THE NEST ROW / SECTION ARE SECURE.

OPTIONAL PERCH ASSEMBLY INSTRUCTIONS:

WHEN ADDING A PERCH ASSEMBLY, 631361 ROOF BRACKETS ARE NOT USED. 690313 COTTER PINS ARE RETAINED FOR USE WITH THE PERCH BRACKET.

WITH ROOF SLATS UNASSEMBLED, ATTACH ONE 631366 PERCH BRACKET TO THE END OF EACH 631355 ROOF RAIL, INSERTING THE BOTTOM TABS OF THE BRACKETS UP THROUGH THE RECTANGULAR SLOTS IN THE ROOF RAILS, AS SHOWN IN FIGURE 23.

ONCE PERCH BRACKETS ARE ATTACHED TO THE ROOF RAILS, ROTATE THE BRACKETS SO THAT THEY ARE UPSIDE DOWN, AS SHOWN IN FIGURE 24, AND OUT OF THE WAY OF THE ROOF SLATS WHEN THEY ARE ASSEMBLED.

ASSEMBLE ROOF SLATS ONCE PERCH BRACKETS ARE INSTALLED AS PER INSTRUCTIONS ON PAGE 6 AND THEN ROTATE PERCH BRACKETS BACK UP INTO POSITION OVER ROOF SLATS, AS SHOWN IN FIGURE 25.

INSERT 690313 COTTER PINS TO SECURE PERCH BRACKETS IN PLACE AND SLIDE VC138 PERCH PIPES THROUGH BRACKETS, AS SHOWN IN FIGURE 25.

CLOSE OFF OPEN ENDS OF PERCH PIPES WITH 630890 PIPE PLUGS, AS SHOWN IN FIGURE 25.

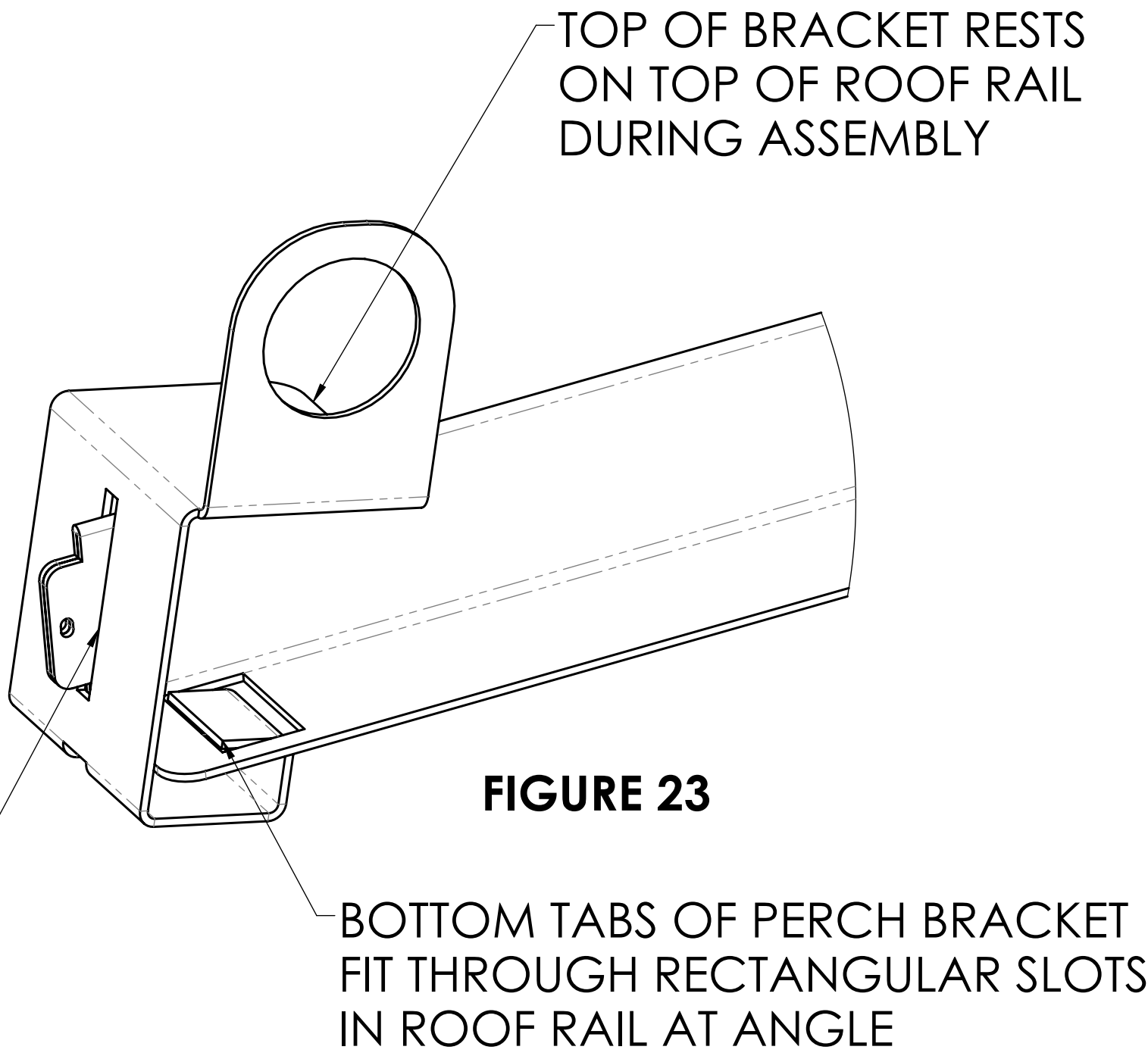


FIGURE 23

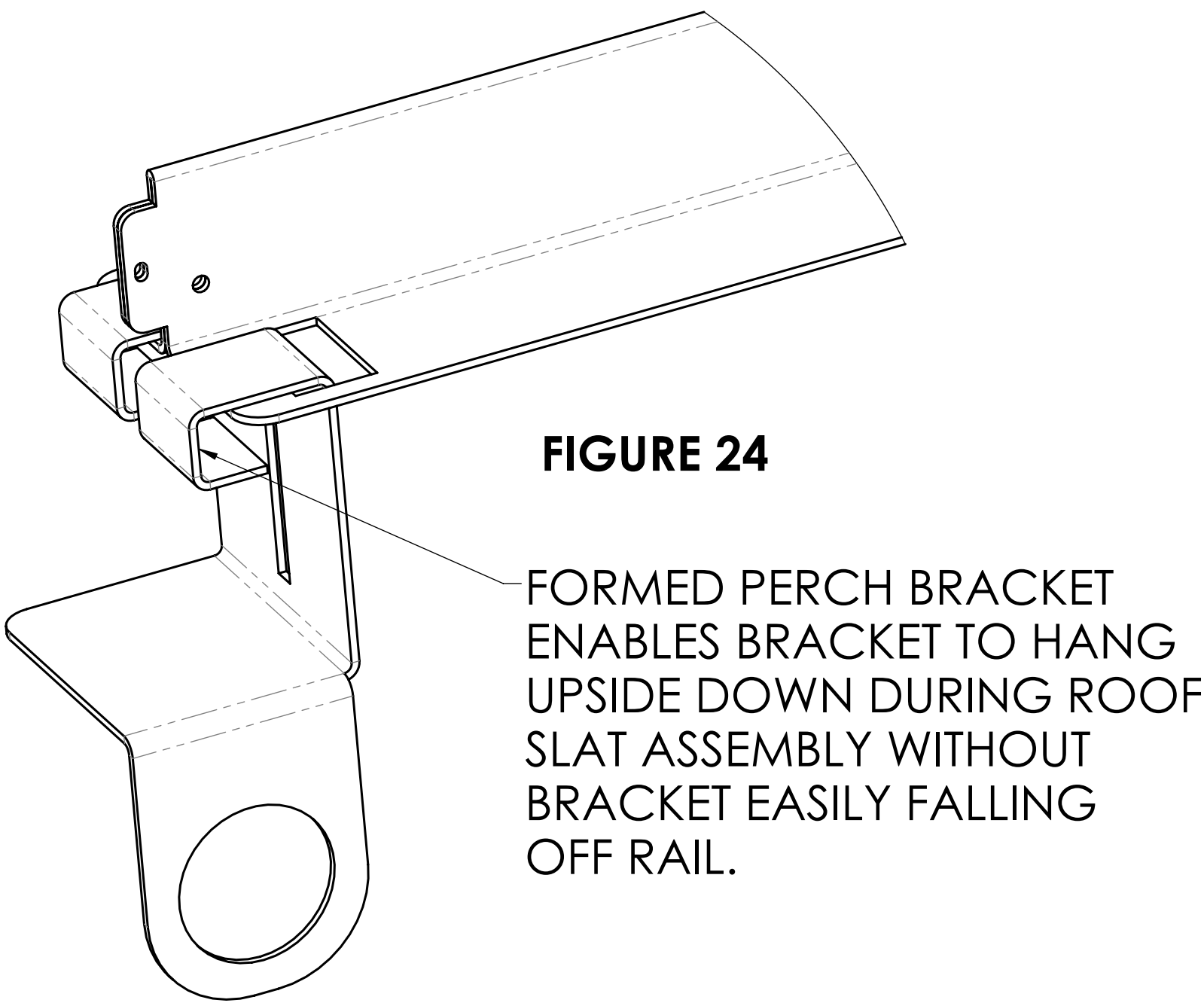


FIGURE 24

EXTENDED SLOT ALLOWS PERCH BRACKET TO ROTATE PAST TAB IN ROOF RAIL DURING ASSEMBLY

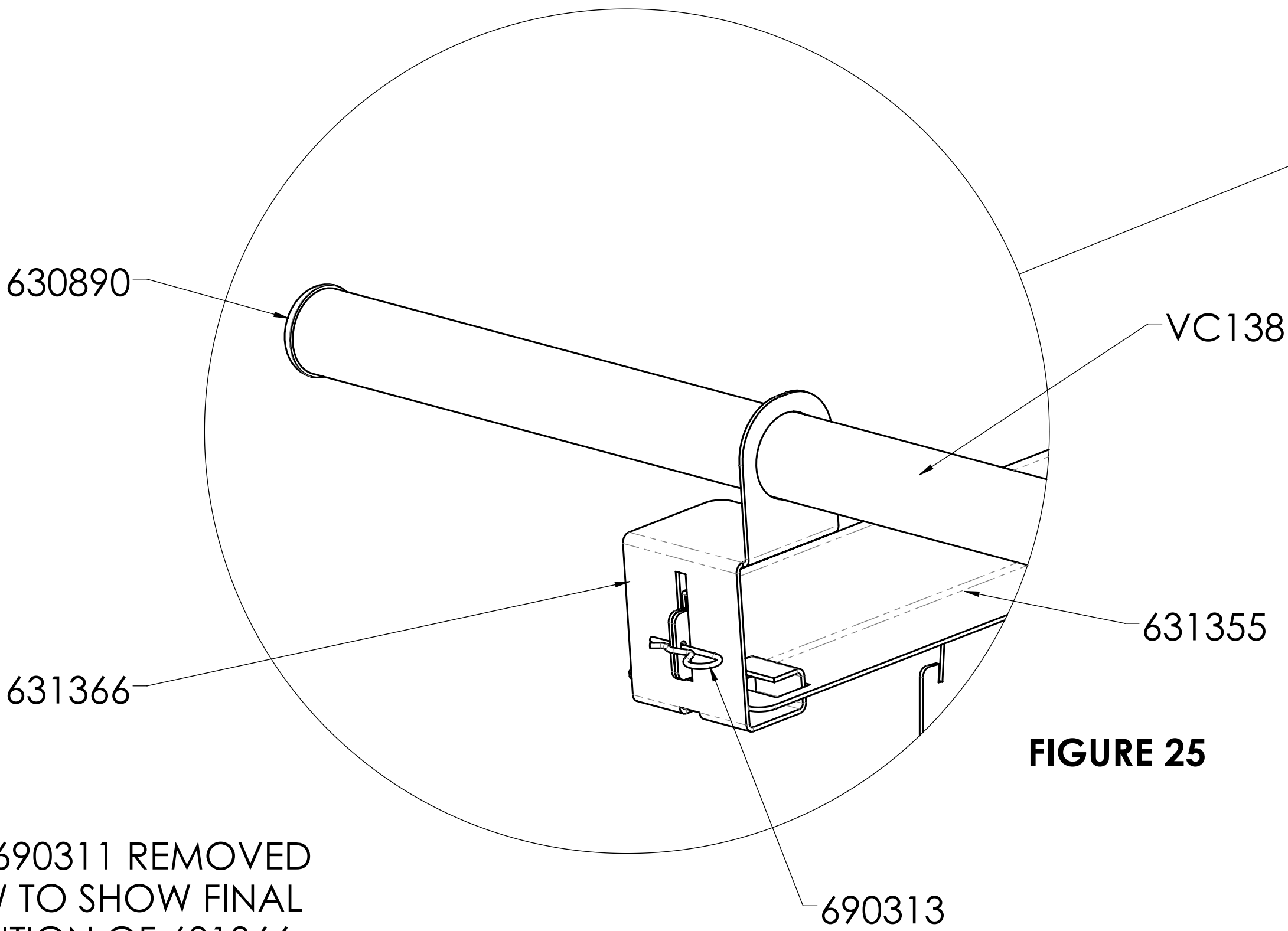
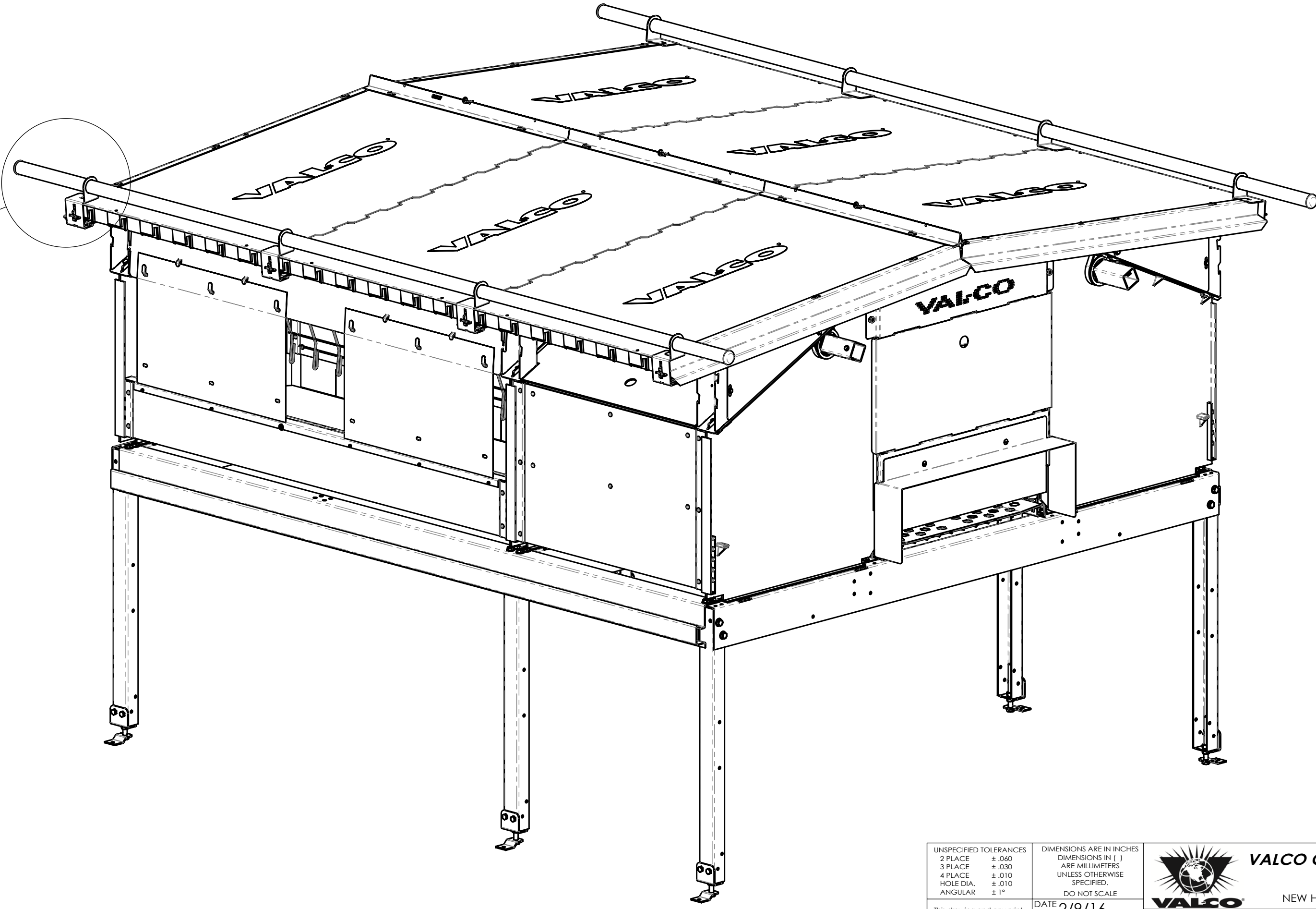


FIGURE 25



631020, 631359 & 690311 REMOVED FROM DETAIL VIEW TO SHOW FINAL INSTALLATION POSITION OF 631366