

**NXB III - US Center Belt Nest
W/Plastic Egg Belt**

Manual No. 86-01-4323 08-21

Notes, Warnings, and Cautions



This manual contains **Notes, Warnings and Cautions** in addition to the assembly instructions.

Notes: Provide additional comments to help with installation and set up.



CAUTIONS: Provide notification of situations that can cause damage to machinery and tools.



WARNINGS! Provide alerts to situations that can cause personal injury or death.

Please take the time to read and understand this manual before beginning assembly. **CAREFULLY FOLLOW THE SAFETY AND OPERATING INSTRUCTIONS** in this manual.

Observe the following precautions when working on or near the machinery:

- Understand the limitations and hazards associated with operating this equipment before using.
- Wear appropriate eye protection when assembling and using this equipment .
- Do not wear loose clothing, jewelry, etc.
- Keep sleeves rolled above the elbows.
- Confine long hair.
- Always wear approved protective footwear.

MAKE SURE ALL PERSONNEL UNDERSTAND THE POTENTIAL DANGER of someone getting too close or trying to make repairs or adjustments while the machine is running. This equipment has several **AREAS WHERE INJURIES COULD OCCUR IF GUARDS OR COVERS ARE REMOVED. KEEP ALL COVERS AND GUARDS IN PLACE WHILE EQUIPMENT IS IN OPERATION.**

Observe the following precautions when servicing the machinery:

- Do not remove guards except when performing maintenance.
- Do not operate the machine with guards or covers removed.
- When performing maintenance or repairs make sure the local control switch is **OFF** and the main power control panel is **OFF** and tagged “**DO NOT OPERATE.**”
- Make all adjustments with the power **OFF**.
- **NEVER** reach into the machine while the system is operating, keep hands out of the machine chain and belt areas. Keep all guards and covers in place when power is on.
- Work carefully and give the work you are doing your undivided attention. Do not look away, talk or play around. Careless acts can cause **SERIOUS INJURY.**

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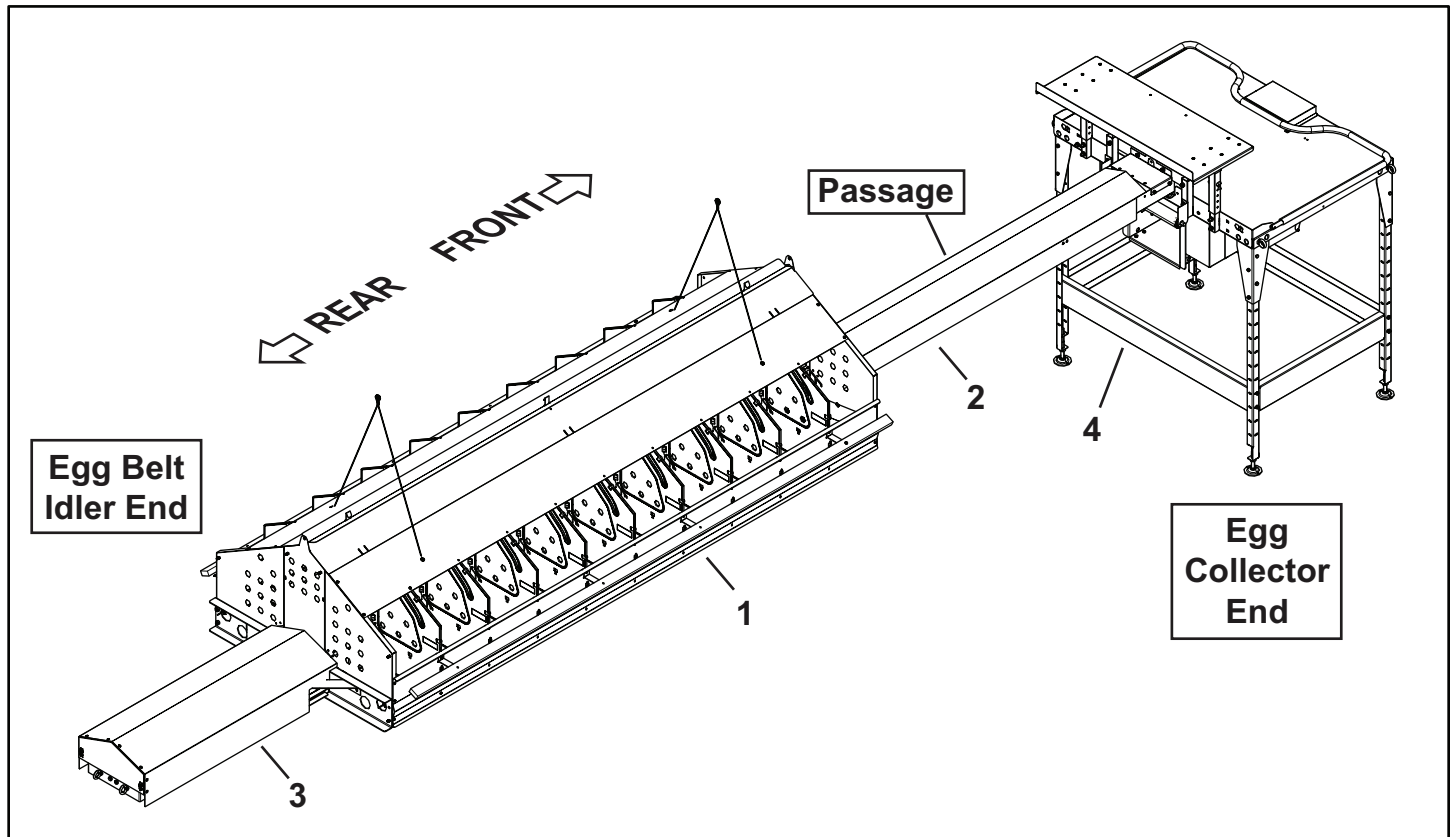
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1 Major Nest System Components

For reference purposes, listed below are the Major Components of the **Big Dutchman NXB 1000 Center Belt Nest System Assembly**.

	<p>The Egg Collection End of the system is referred to as the FRONT END of the system.</p> <p>The Egg Belt Idler End of the System is referred to as the REAR END of the system.</p>
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Chapter 1. Overview of the NXB III Center Belt Nest System Components.

	<p>This instruction shows the assembly for the Passageways, Egg Belt Idler, Egg Collection Table and Nest.</p>
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1.1 Nest

Item	Part No.	Description
1	86-01-4035	NEST NXB-3 US 1020P 2438MM [95.98"] CB 8" F/PLASTIC BELT

1.2 Passageways

Item	Part No.	Description
2	86-01-4025	PASSAGE 18" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
	86-01-4026	PASSAGE 24" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
	86-01-4027	PASSAGE 30" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
	86-01-4028	PASSAGE 36" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
	86-01-4029	PASSAGE 48" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
	86-01-4030	PASSAGE 60" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
	86-01-4031	PASSAGE 72" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
	86-01-4110	PASSAGE 96" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT

1.3 Idler / Table Connection

Item	Part No.	Description
3	86-01-4032	IDLER & 72" CONNECTION SET KIT NXB-3 US 10xx, CB, F/8" BELT
	86-01-9065	IDLER & 96" CONNECTION SET KIT NXB-3 US 10xx, CB, F/8" BELT

1.4 Collector Table

Item	Part No.	Description
4	86-00-1570	Table Drive Unit NXB II-Us CB, F/8" (Woven Or Plastic) Belt, W/Wiring

1.5 Belts

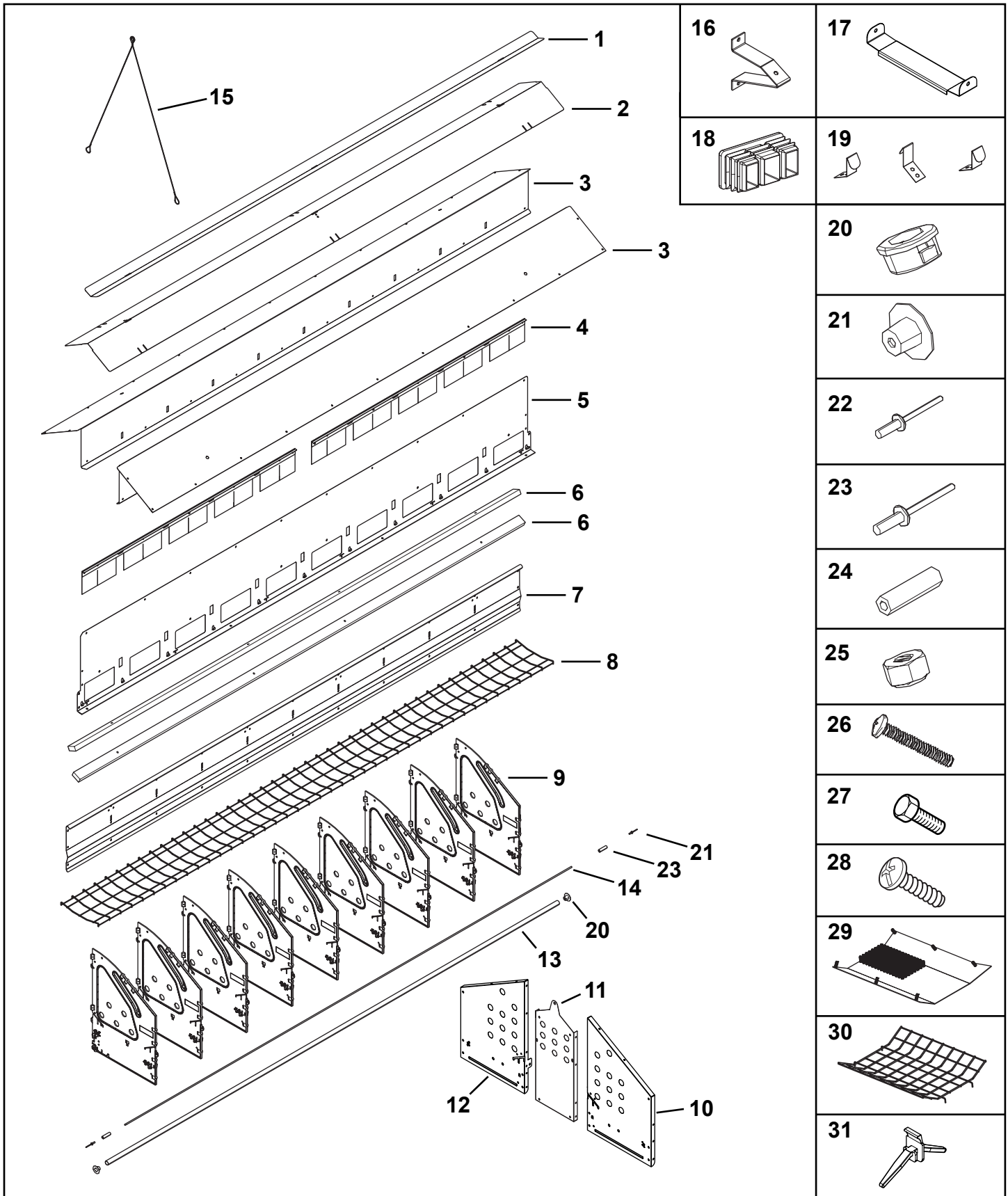
Pos.	Part No.	Description
5	86-01-0885	Belt Plastic, 8 W 820'L BLACK (196mm)
	86-01-0886	Belt Plastic, 8 W 1020'L BLACK (196mm)
	86-01-0887	Belt Plastic, 8 W 1220'L BLACK (196mm)

1.6 Additional Accessories

Pos.	Part No.	Description
6	99-98-3896	Welder ultrasonic US-HSK 230/240V 50/60HZ cpl
7	99-98-3897	Welder ultrasonic US-HSK 110V 50/60HZ cpl
8	86-01-1683	LIGHT 12" NXB TABLE W/8FT CORD

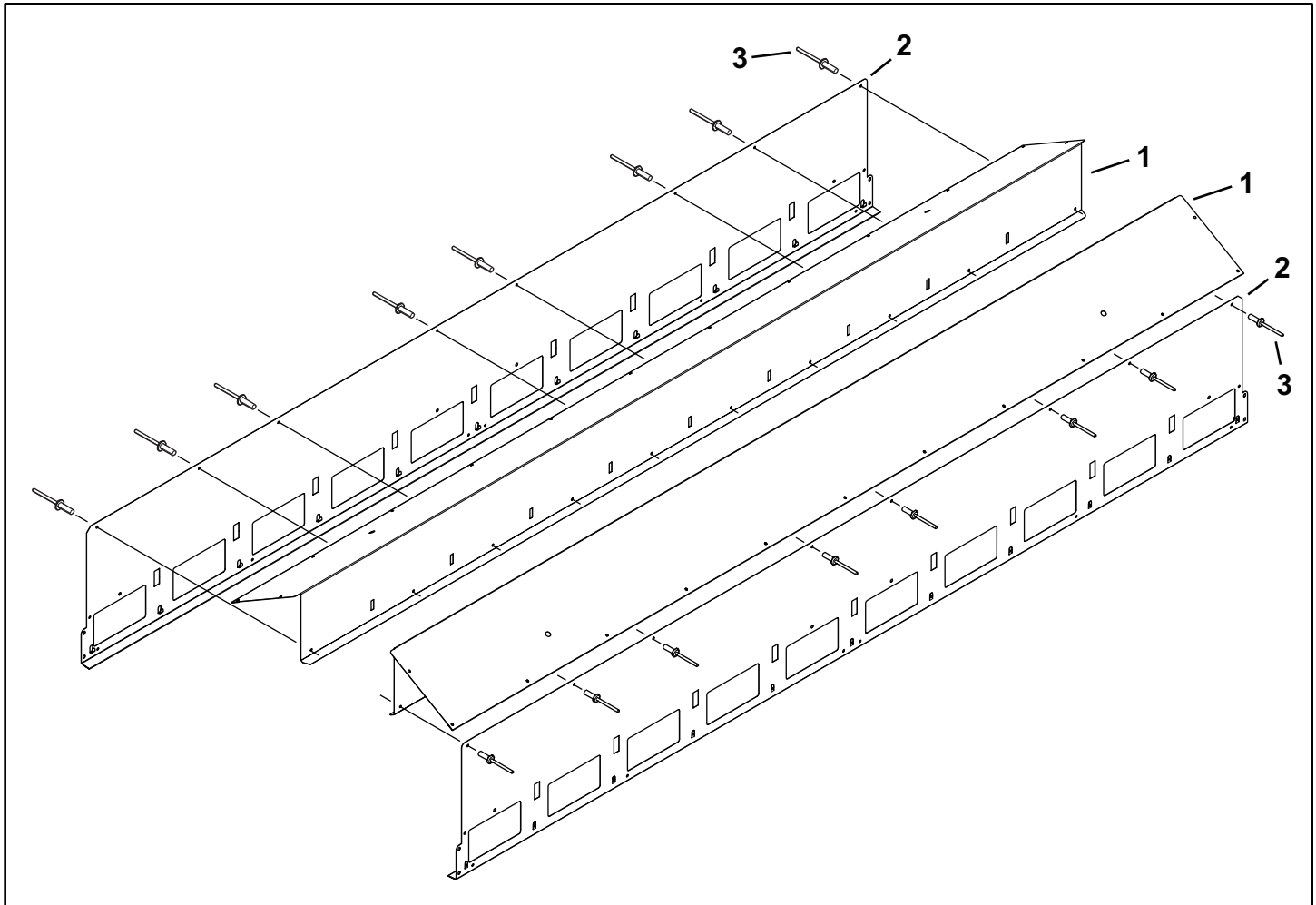
1.7 Nest Section Components - Overview

These pages show individual parts for the Big Dutchman NXB 1000 Center Belt Nest. Refer to the following Chapters for details for installation of the parts shown.



Item	Part No.	Description
1	86-01-4117	ANTI ROOST ROCKER SYM NXB-3 WIDE
2	86-01-2691	ROOF CAP NXB-3 1000
3	86-01-2686	COVER NXB-3 1020
4	86-01-2678	NEST CURTAIN ASSEMBLY NXB
5	86-01-4056	BACK WALL, LOWER, NXB-3 1020
6	86-01-0676	PERCH,UNIVERSAL,NXB II,94"
	83-14-2776	Perch 40x20-2400 PVC NXB-II-20xxW
7	86-01-2685	SIDE RAIL ENTRANCE NXB-3 1020
8	83-04-8735	Wire grille f/egg channel ZnAl-A
9	86-01-4037	PARTITION NXB II UNIV W/11 DEG ROLLOUT
10	86-01-4054	PARTITION, LH, NXB-3 1000 GALV.
11	86-01-2688	METAL PARTITION CONNECTOR NXB-3 1000
12	86-01-4053	PARTITION, RH, NXB-3 1000 GALV.
13	86-01-2675	TUBE,FLO COAT 0.706"OD X 95.25",19GA GALV.
14	86-01-2672	ROD,94.3 x .197 INCH DIA GALV.
15	83-09-3797	Traction rope nest blocker for NXB
16	86-01-0674	PERCH BRACKET NXB,CB
17	86-01-4055	EGG BELT RETURN GUIDE NXB-3 1000
18	83-16-7123	Lamellar plug with fins f/perch 40x20mm NXB-II
19	86-01-2684	ANTI-ROOST CLIP NXB-3 1000
20	83-05-3092	Opening for rope NXB
21	83-13-7506	Plug universal protection GPN 620 U 13 B black
22	99-10-1271	Blind rivet alu/steel flat round head 4.8x10 / 4.0-6.0mm
23	86-01-3528	BLIND RIVET 3/16"DIA X 0.575"
24	86-01-2674	BUTTON STOP 3/16 x1.5" ALUMINUM (.220 I.D., .435 O.D. X 1.5)
25	99-20-1043	Self-locking counter nut M 6 galv DIN985-6
26	86-01-5349	SCREW,M6X30 PAN HEAD PHILLIP GALV
27	99-10-1100	Hexagon head screw M 6x 12 DIN 933 8.8 galv
28	99-10-1064	Plastofast screw for plastic material 4.0x16
29	86-01-2663	NEST PAD, DIRECTIONAL,NXB, F/WIRE BOTTOM, 9.6"X13.17"
30	83-04-8934	Wire mesh nest insert (ZnAl-A) NXB 20h
31	83-05-0715	Binder for nest insert NXB

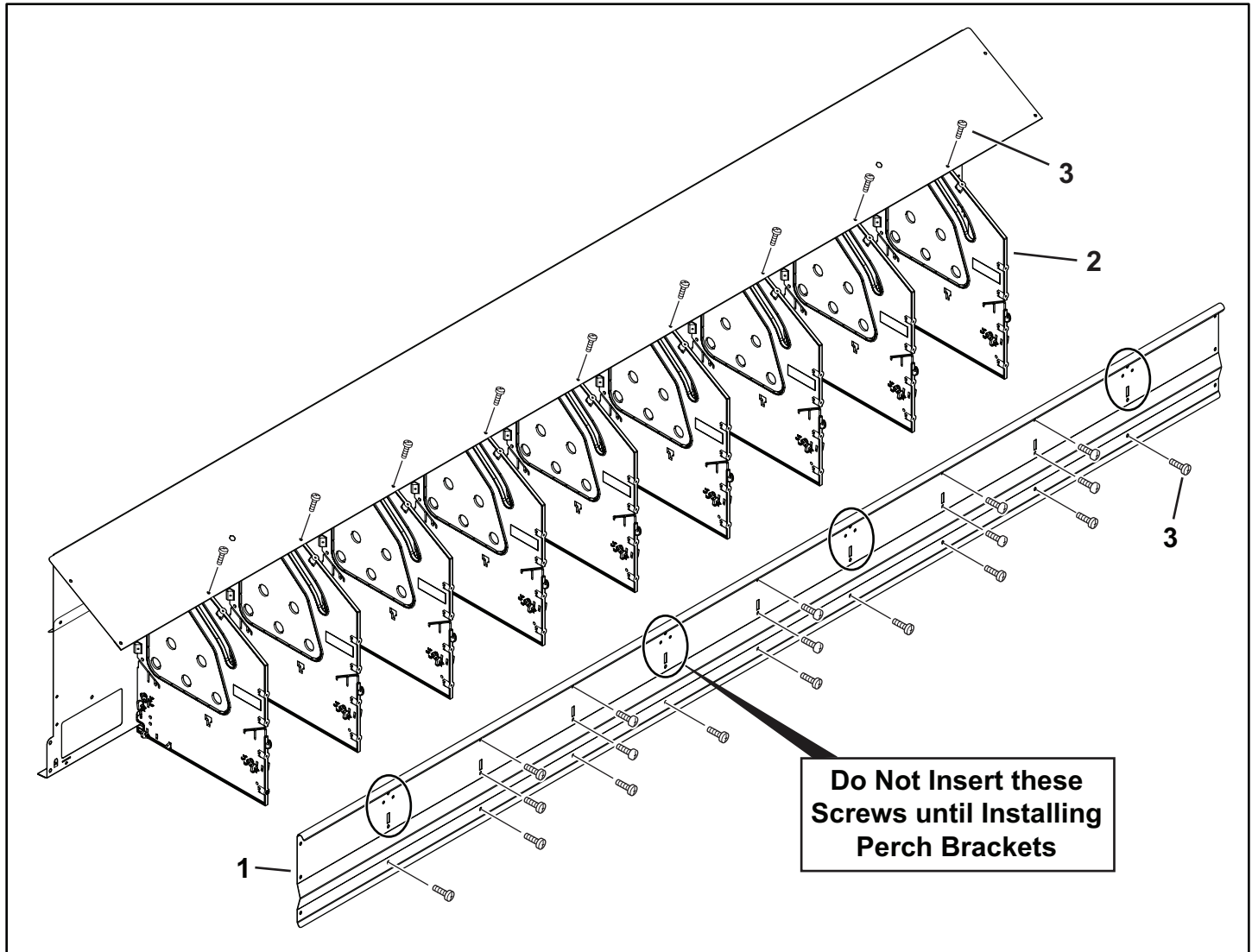
2 Rivet Cover to Back Wall



Ch. 2. Install Rivets as shown above.

Item	Part No.	Description
1	86-01-2686	COVER NXB-3 1020
2	86-01-4086	BACK WALL, LOWER, NXB-3 1020
3	99-10-1271	Blind rivet alu/steel flat round head 4.8x10 / 4.0-6.0mm

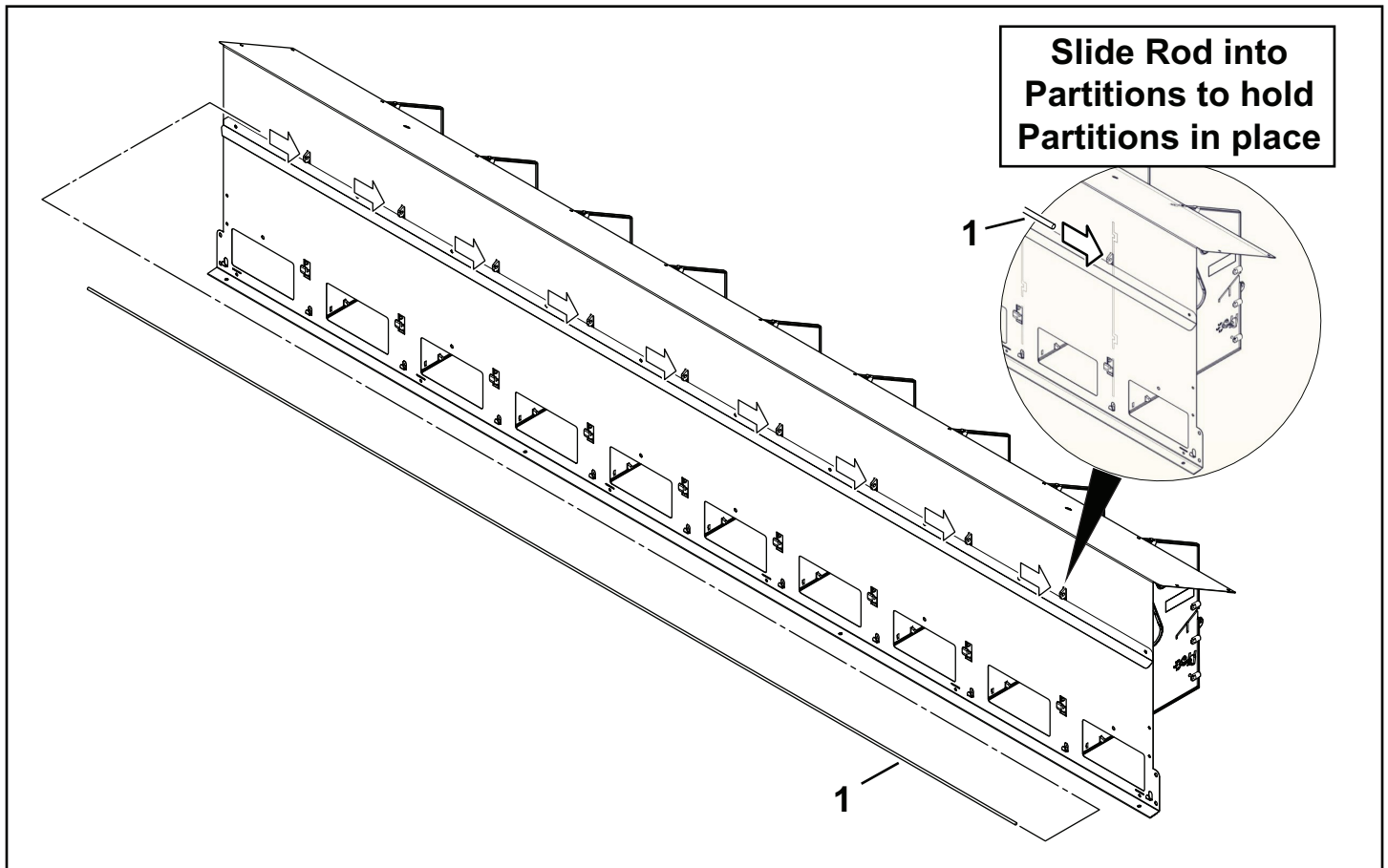
3 Install Partitions and Front Panel



Ch. 3. Install Screws as shown above. Do not install screws where the Perch Brackets are installed.

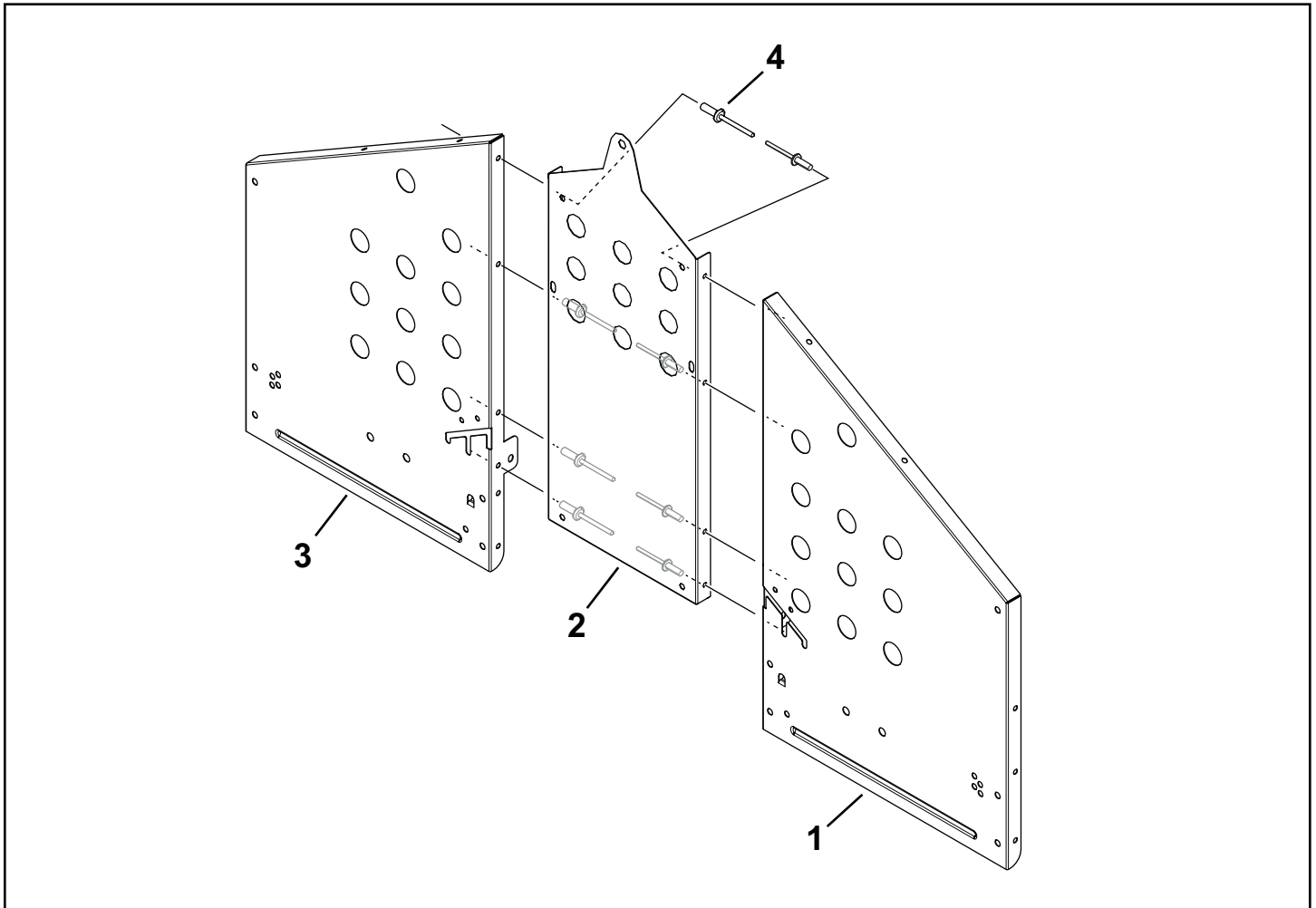
Item	Part No.	Description
1	86-01-2685	SIDE RAIL ENTRANCE NXB-3 1020
2	86-01-4037	PARTITION NXB II UNIV W/11 DEG ROLLOUT
3	99-10-1064	Plastofast screw for plastic material 4.0x16

4 Install Rods into Partitions to hold Partitions in place



Item	Part No.	Description
1	86-01-2672	ROD,94.3 x .197 INCH DIA GALV.

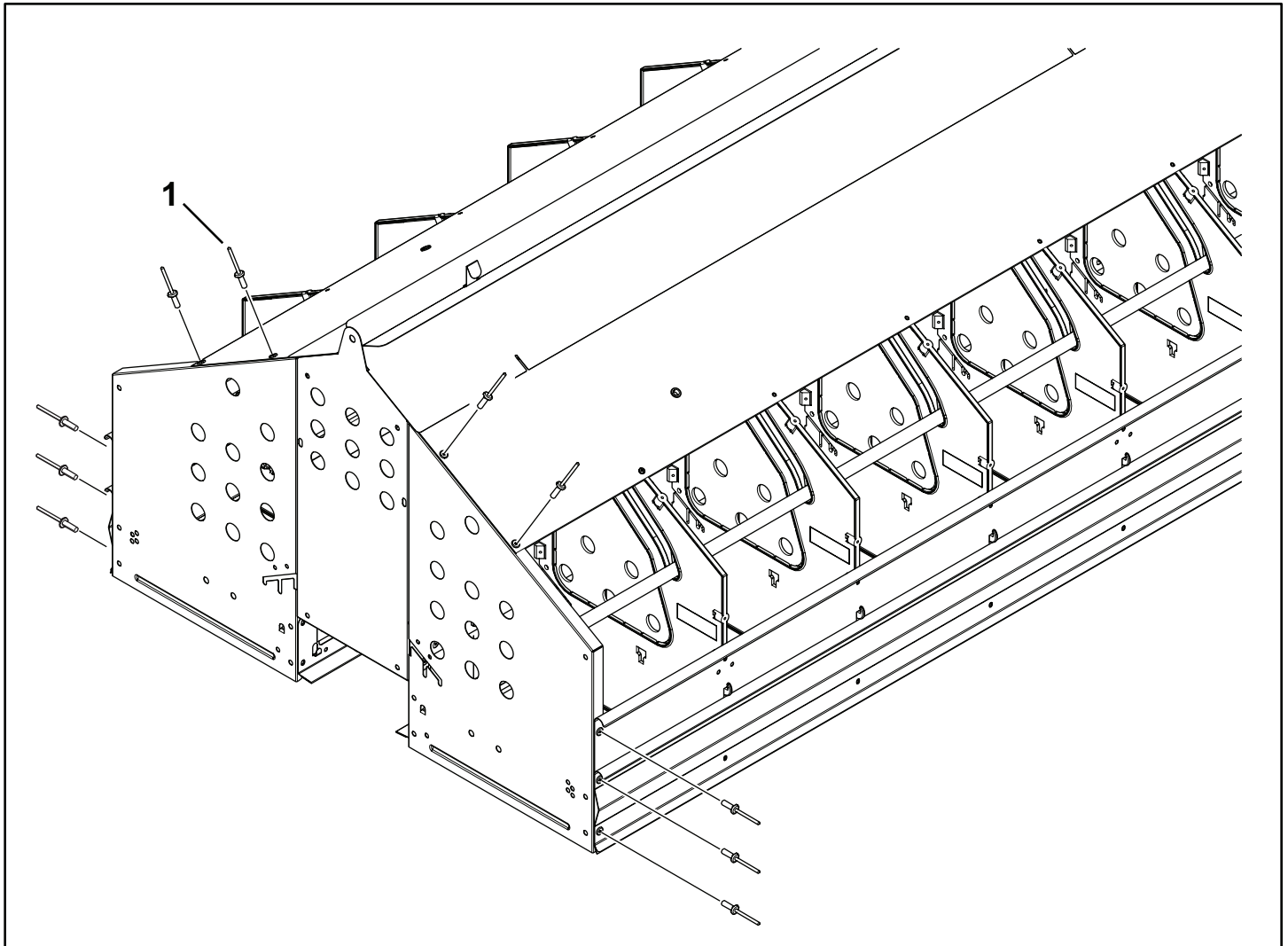
5 Rivet Metal Partitions and Gable Plates



Ch. 5. Install Rivets (8) places as shown above.

Item	Part No.	Description
1	86-01-4054	PARTITION,LH,NXB-3 1000 GALV.
2	86-01-2688	METAL PARTITION CONNECTOR NXB-3 1000
3	86-01-4053	PARTITION,RH,NXB-3 1000 GALV.
4	99-10-1271	Blind rivet alu/steel flat round head 4.8x 10.0

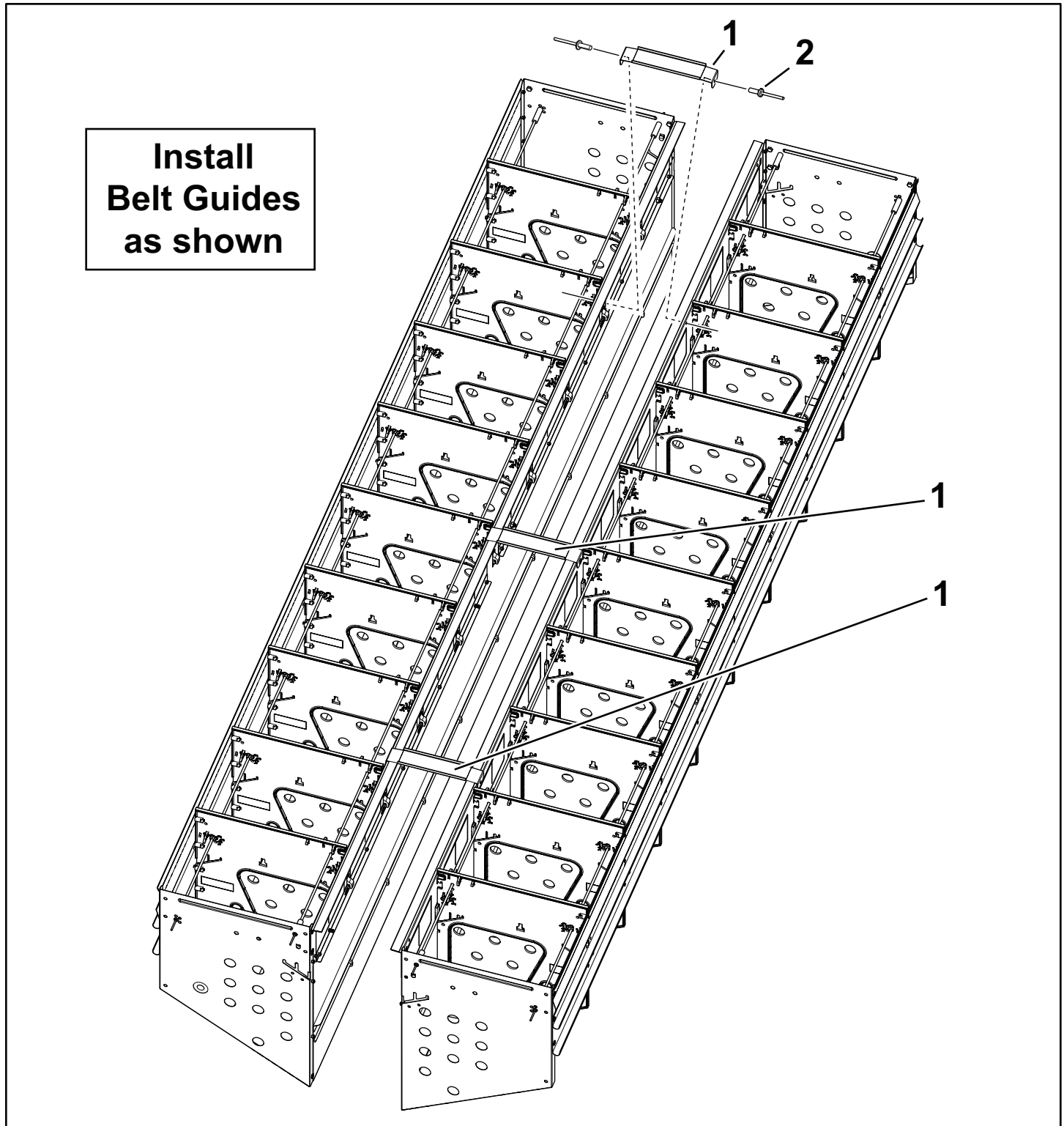
6 Rivet Metal End panels to the Nest hole bank



Ch. 6. Install Rivets (10) places as shown above.

Item	Part No.	Description
1	99-10-1271	Blind rivet alu/steel flat round head 4.8x10 / 4.0-6.0mm

7 Install Belt Guides



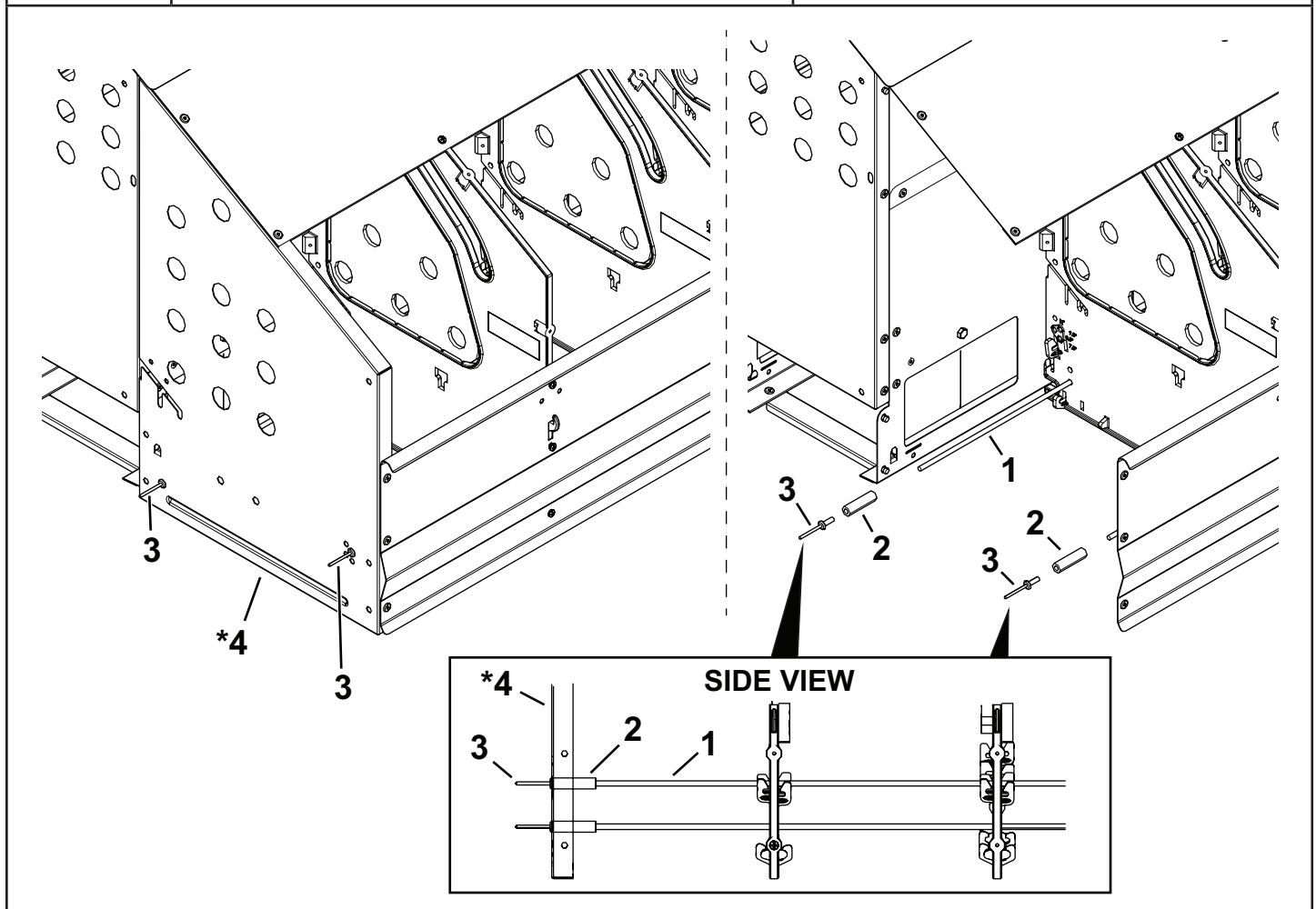
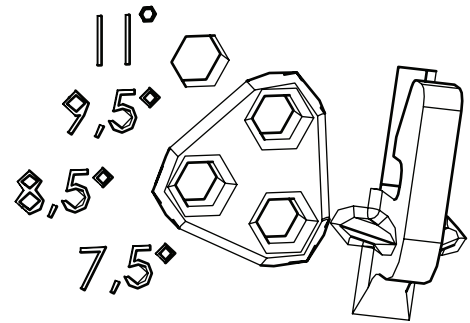
Ch. 7. Install Belt Guides (3) places as shown above. Bottom view of nest is shown.

Item	Part No.	Description
1	86-01-4055	EGG BELT RETURN GUIDE NXB-3 1000
2	99-10-1271	Blind rivet alu/steel flat round head 4.8x10 / 4.0-6.0mm

8 Support Rods for Nest Bottoms and Locking Tubes



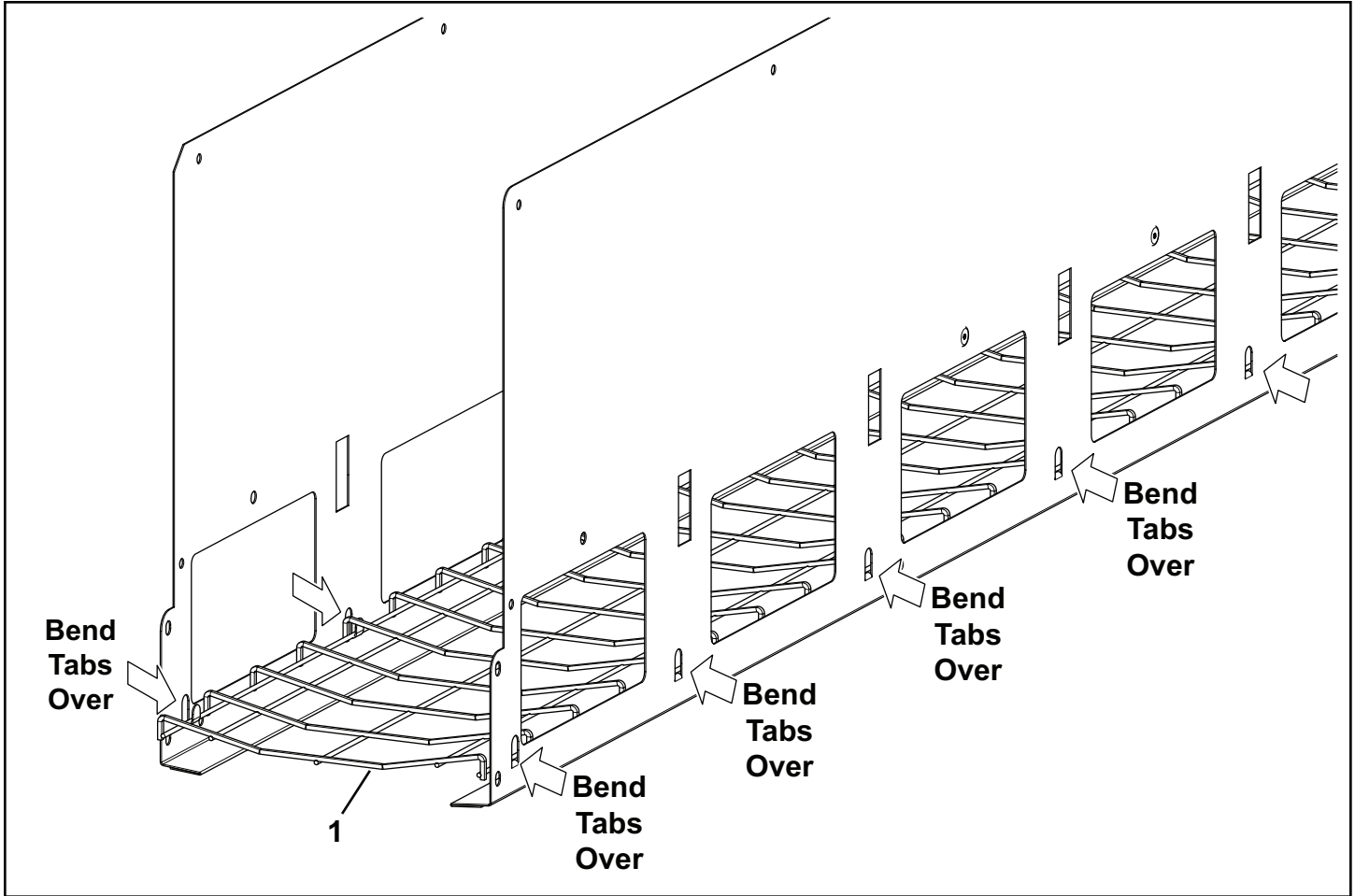
NOTE: a setting of 9.5 is recommended.
 Using a setting of 7.5 or 8.5 will provide a slower roll-out of the eggs. A setting of 11° will provide faster rollout. Different nest pads may require a different slope to help eggs roll out.



Ch. 8. Install the Support Rods for Nest Bottoms. Install the Rivet as shown to secure the Stop Button.

Item	Part No.	Description
1	86-01-2672	ROD,94.3 x .197 INCH DIA GALV.
2	86-01-2674	BUTTON STOP 3/16 x1.5" ALUMINUM (.220 I.D., .435 O.D. X 1.5)
3	86-01-3528	BLIND RIVET 3/16"DIA X 0.575"L HEAD DIA.0.394"
*4	Metal End Partitions	

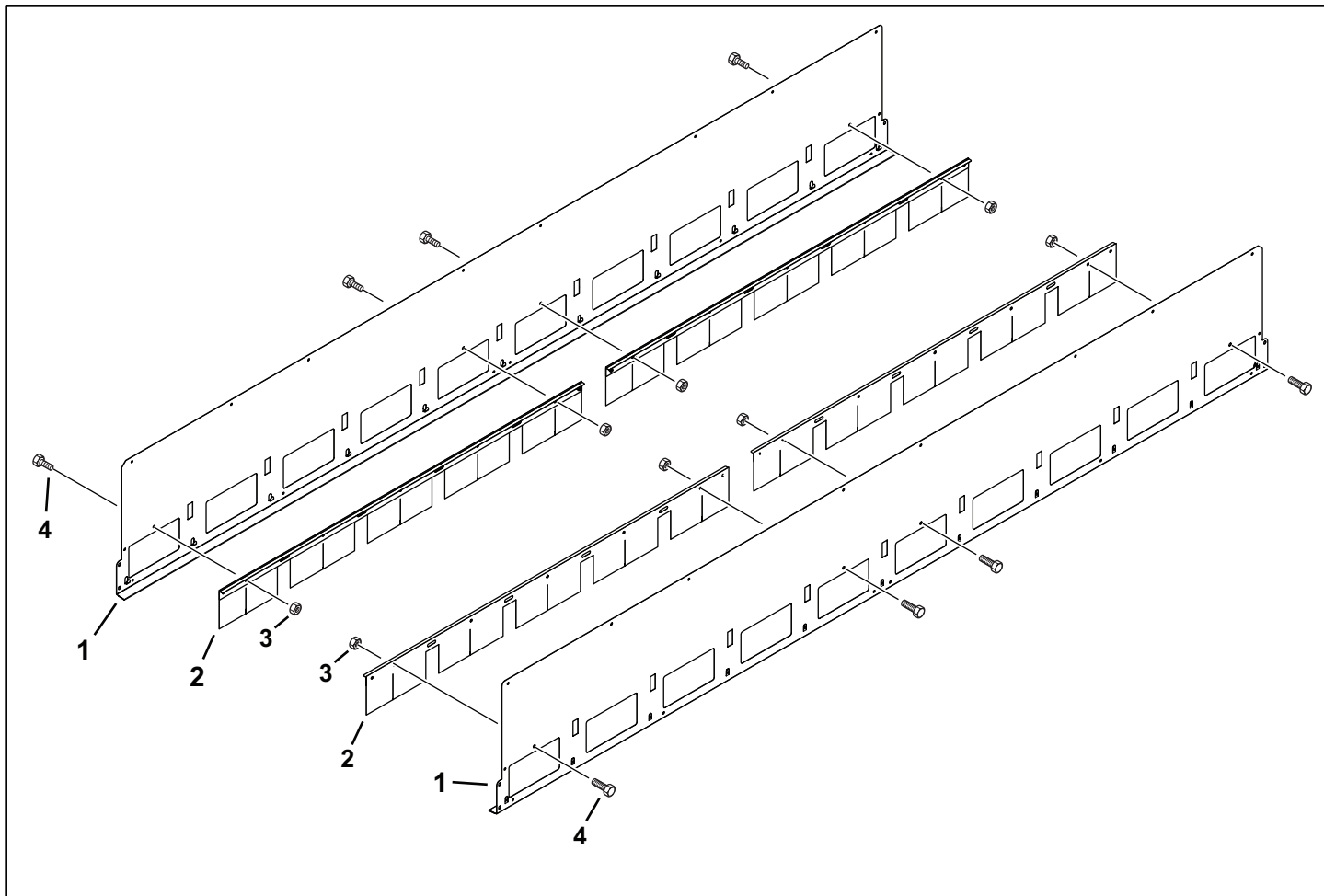
9 Install Wire Mesh



Ch. 9. Install the Wire Grill for Egg Channel. Bend Tabs over as shown.

Item	Part No.	Description
1	83-04-8735	Wire grille f/egg channel ZnAl-A

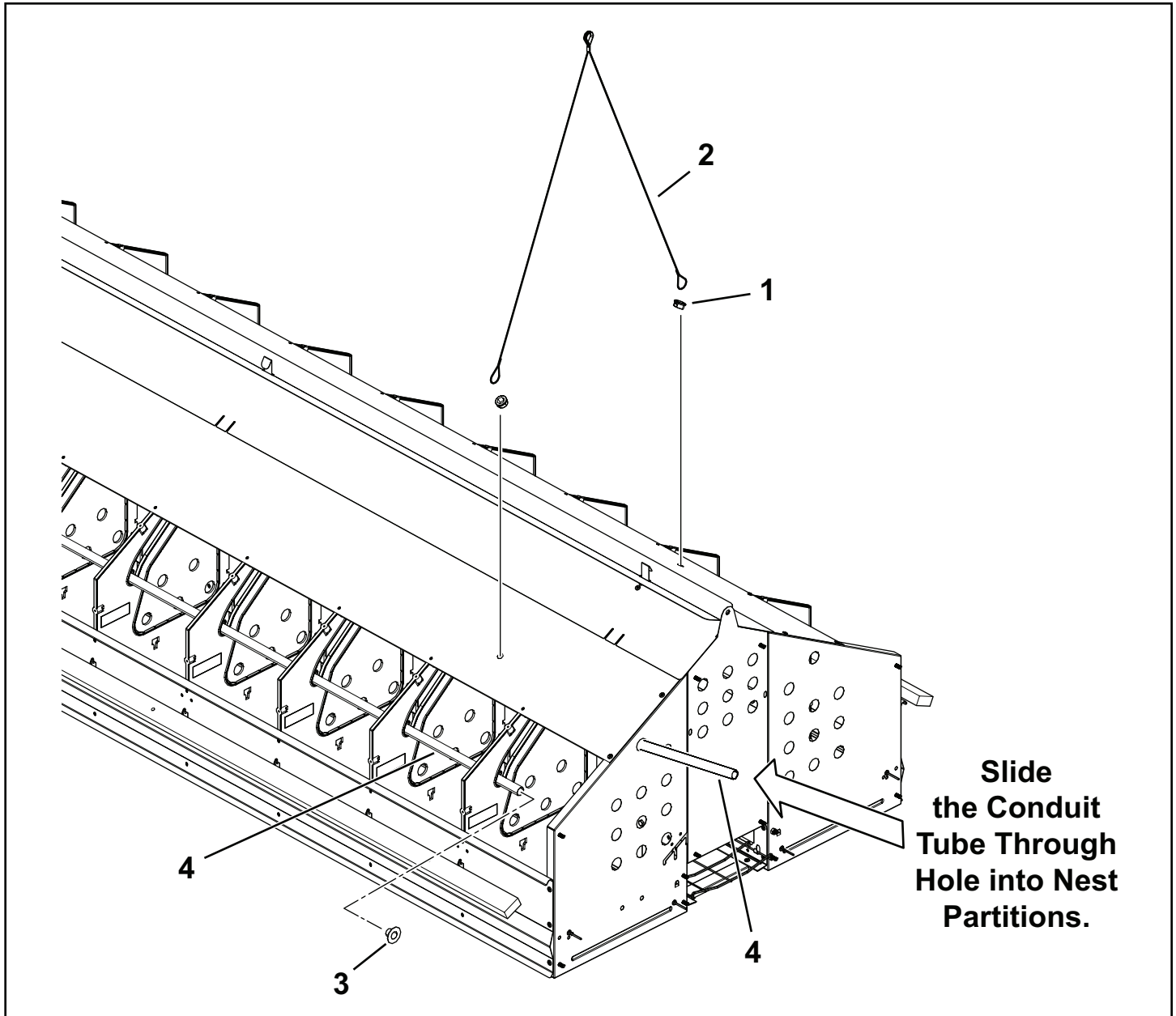
10 Install Curtain Assemblies



Ch. 10. Install the Nest Curtain Assemblies to the Side Rail Entrances as shown above.

Item	Part No.	Description
1	86-01-4056	BACK WALL NXB-3 1020
2	86-01-2678	NEST CURTAIN ASSEMBLY NXB
3	99-20-1043	Self-locking counter nut M 6 galv DIN985-6
4	99-10-1100	Hexagon head screw M 6x 12 DIN 933 8.8 galv

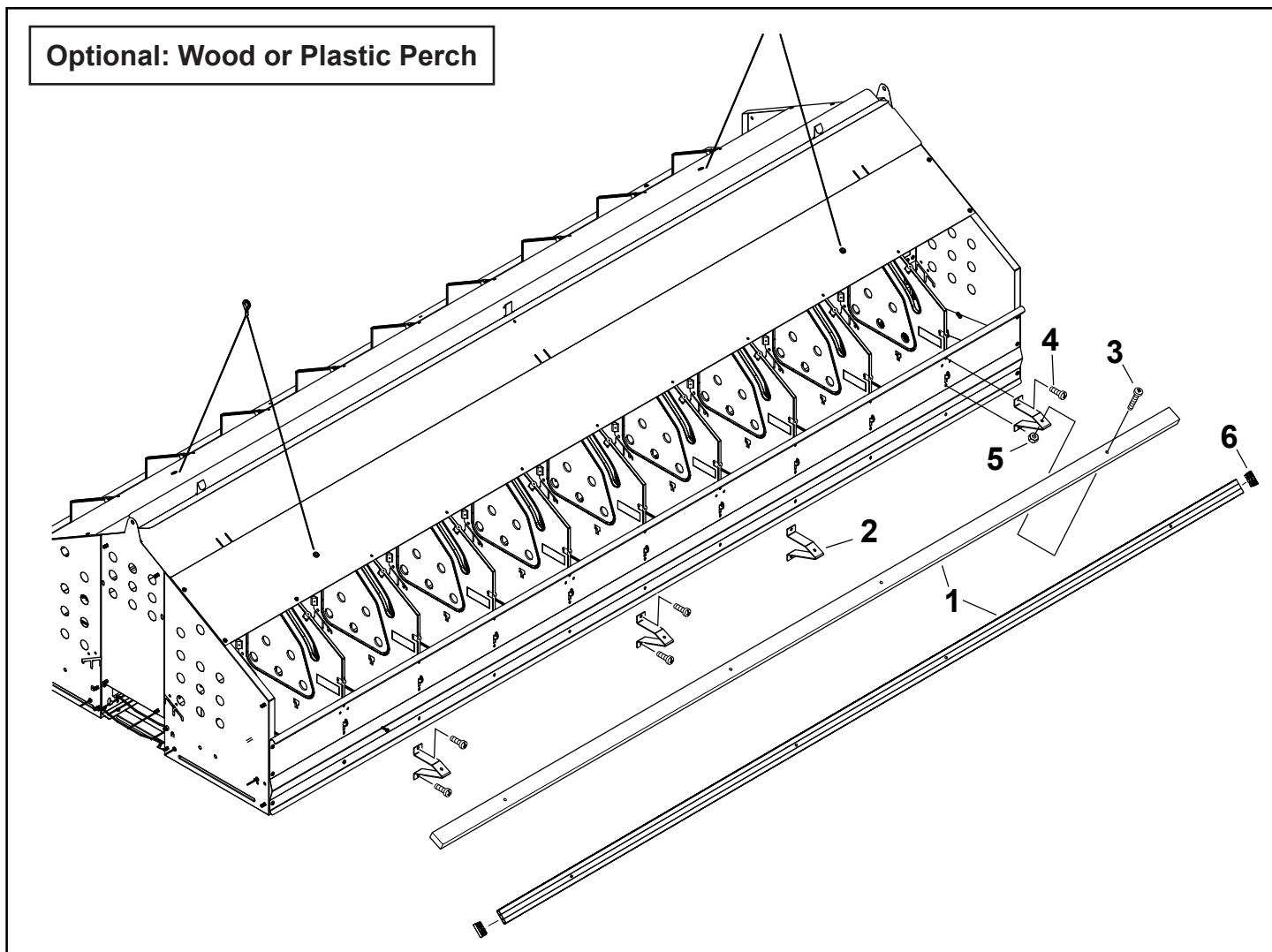
11 Install Conduit Tubes and Traction Ropes



Ch. 11. Install the Tubes as shown above and attach the Plugs. Install the Opening for rope NXB and the Traction Rope.

Item	Part No.	Description
1	83-05-3092	Opening for rope NXB
2	83-09-3797	Traction rope nest blocker for NXB
3	83-13-7506	Plug universal protection GPN 620 U 13 B black
4	86-01-2675	TUBE,FLO COAT 0.706"OD X 95.25",19GA GALV.

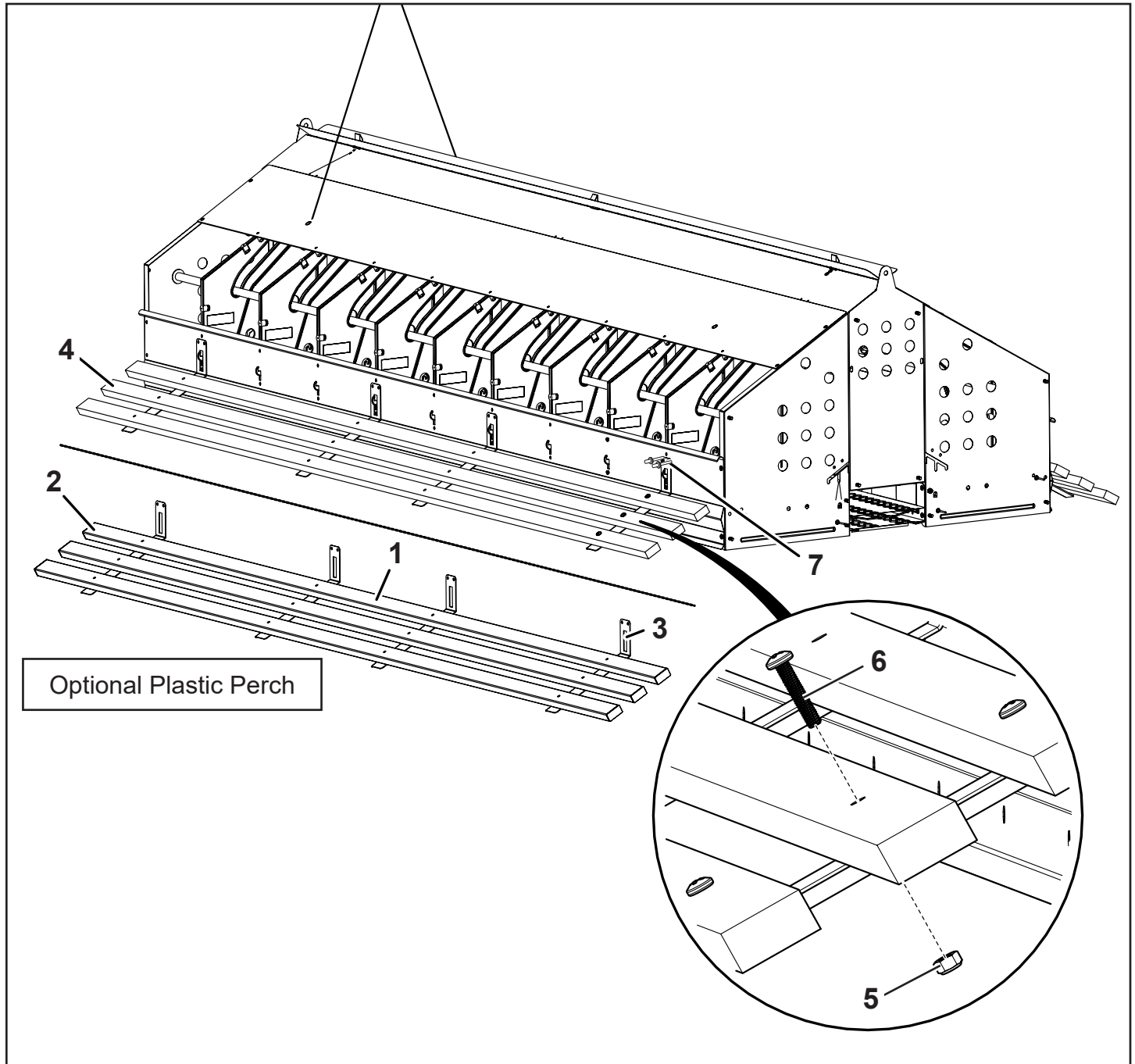
12 Install the Perch Kits



Ch. 12. Install the Perch Kits as shown.

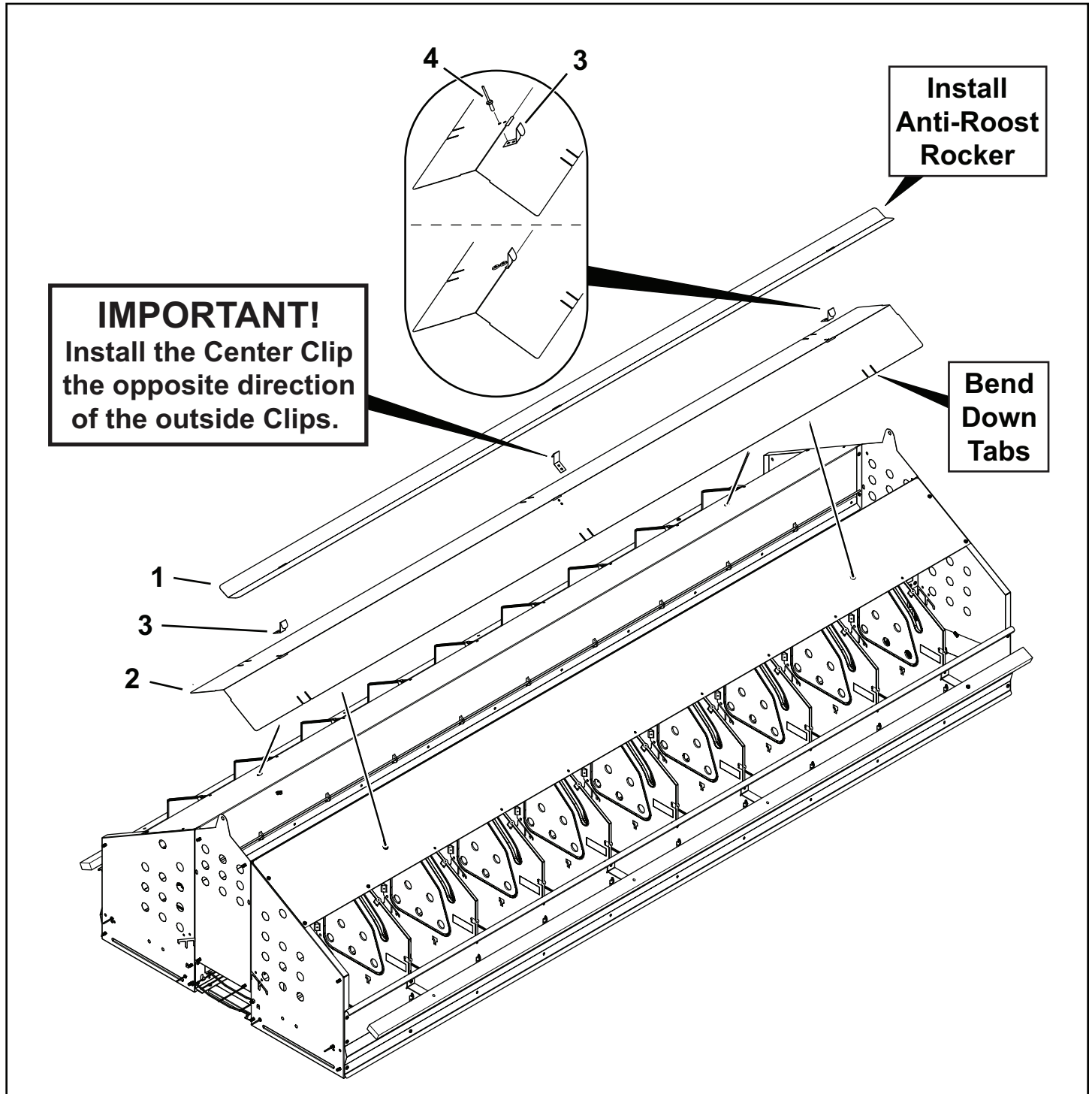
Item	Part No.	Description
1	86-01-0676	PERCH,UNIVERSAL,NXB II,94"
	83-14-2776	Perch 40x20-2400 PVC NXB-II-20xxW
2	86-01-0674	PERCH BRACKET NXB,CB
3	86-01-5349	SCREW,M6X30 PAN HEAD PHILLIP GALV
4	99-10-1064	Plastofast screw for plastic material 4.0x16
5	99-20-1043	Self-locking counter nut M 6 galv DIN985-6
6	83-16-7123	Lamellar plug with fins f/perch 40x20mm NXB-II

12.1 Optional Ramp Kits



Item	Part No.	Description
1	83-14-2776	Perch 40x20-2400 PVC NXB-II-20xxW
2	83-16-7123	Lamellar plug with fins f/perch 40x20mm NXB-II
3	86-01-4086	RAMP BRACKET ON RAISED 1x4 NXB-3 10xx
4	86-01-0676	PERCH,WOOD,UNIVERSAL,NXB II,94" (20 PCS/BUNDLE)
5	86-01-5349	SCREW,M6X30 PAN HEAD PHILLIP GALV
6	99-20-1043	Self-locking counter nut M 6 galv DIN985-6
7	99-10-1271	Blind rivet alu/steel flat round head 4.8x10 / 4.0-6.0mm

13 Install the Roof Caps, Anti-Roost Clips and Anti-Roost Rockers



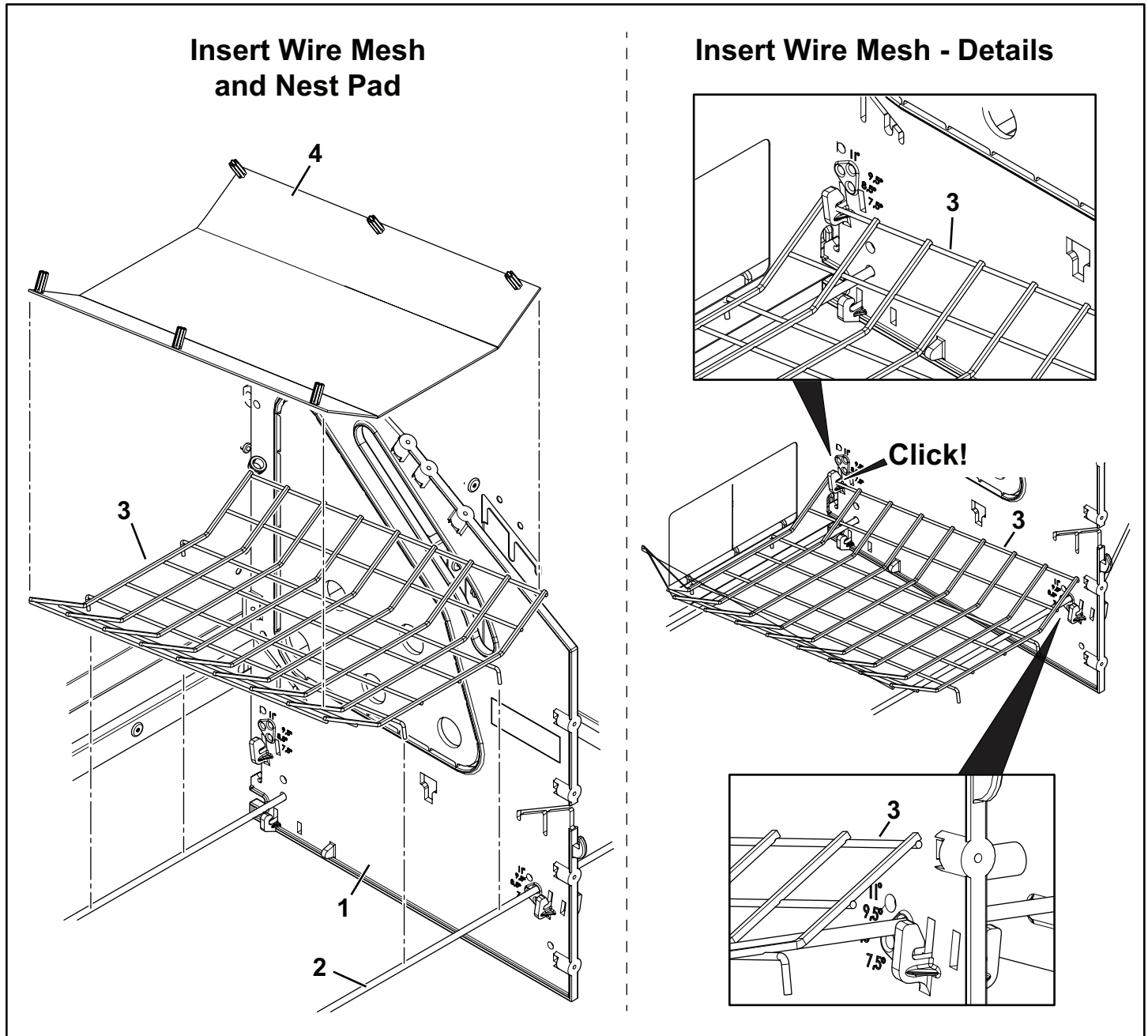
Ch. 13. Install the Roof Caps, Anti-Roost Clips and Anti-Roost Rockers. Bend down Tabs as shown.

Item	Part No.	Description
1	86-01-4117	ANTI ROOST ROCKER SYM NXB-3 WIDE
2	86-01-2691	ROOF CAP NXB-3 1000
3	86-01-2684	ANTI-ROOST CLIP NXB-3 1000
4	99-10-1271	Blind rivet alu/steel flat round head 4.8x10 / 4.0-6.0mm

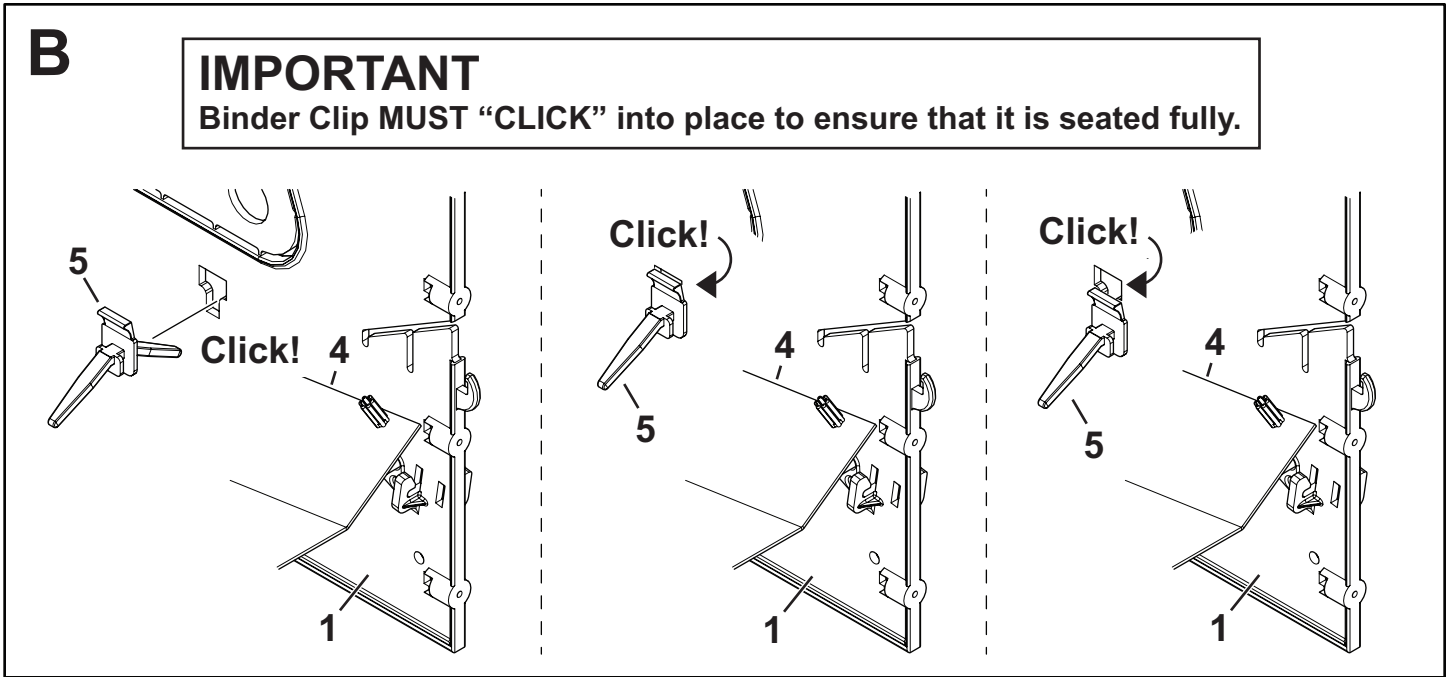
14 Inserting the Wire Nest Inserts and Nest Pads

Follow these steps for installation of the Nest Inserts (Details A) and Nest Pads (Details B).

14.1 Inserting the Nest Inserts - (Details A)



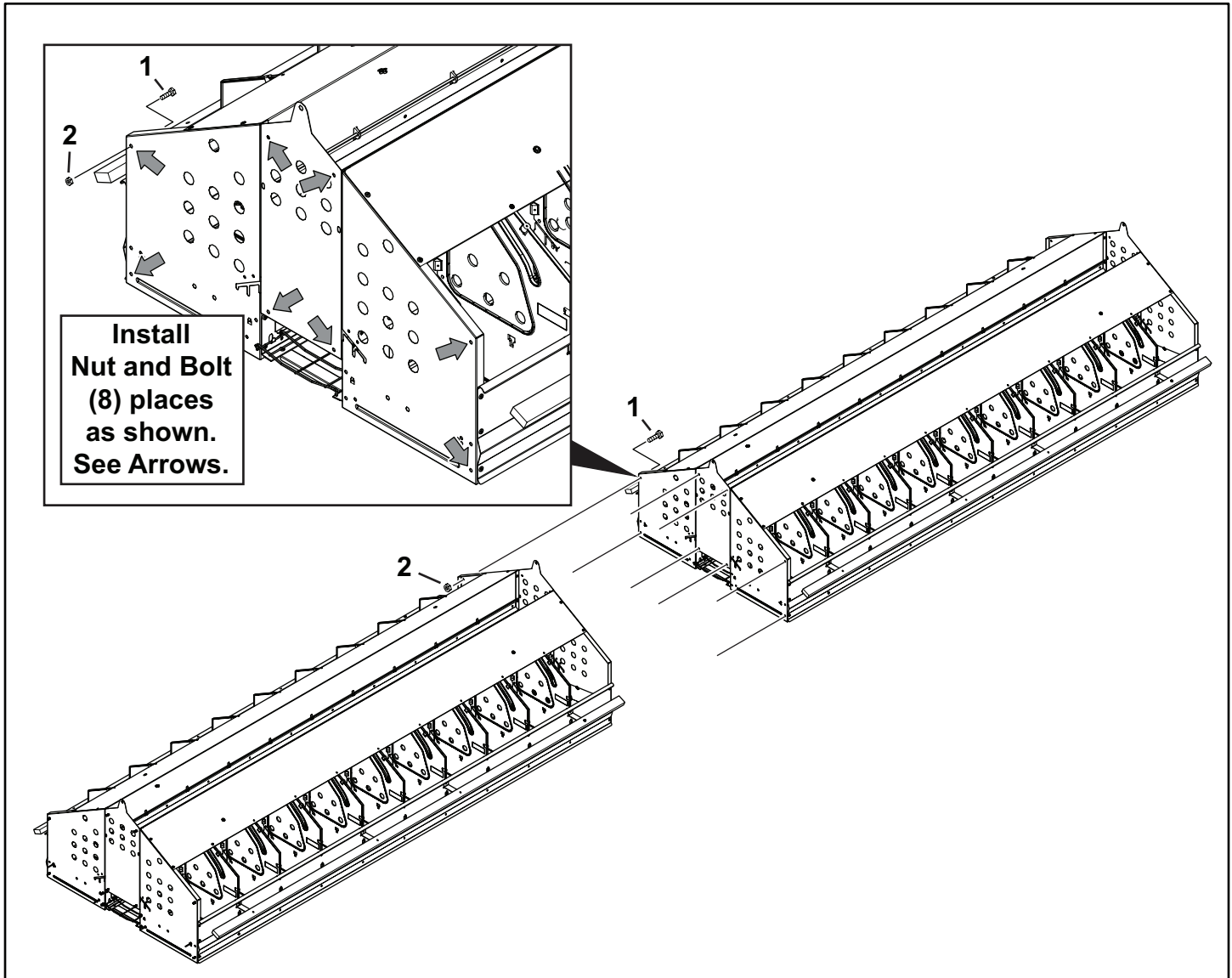
14.2 Inserting the Nest Pads - (Details B)



Ch. 14.2. Insert the Nest Pads (Detail B).

Item	Part No.	Description
1	86-01-4037	PARTITION NXB II UNIV W/11 DEG ROLLOUT
2	86-01-2673	ROD,190.5 x .197 INCH DIA
3	83-04-8934	Wire mesh nest insert (ZnAl) Gather eze+ 20h
4	86-01-2663	NEST PAD, DIRECTIONAL,NXB, F/WIRE BOTTOM, 9.6”X13.17”
5	83-05-0715	Binder for nest insert NXB

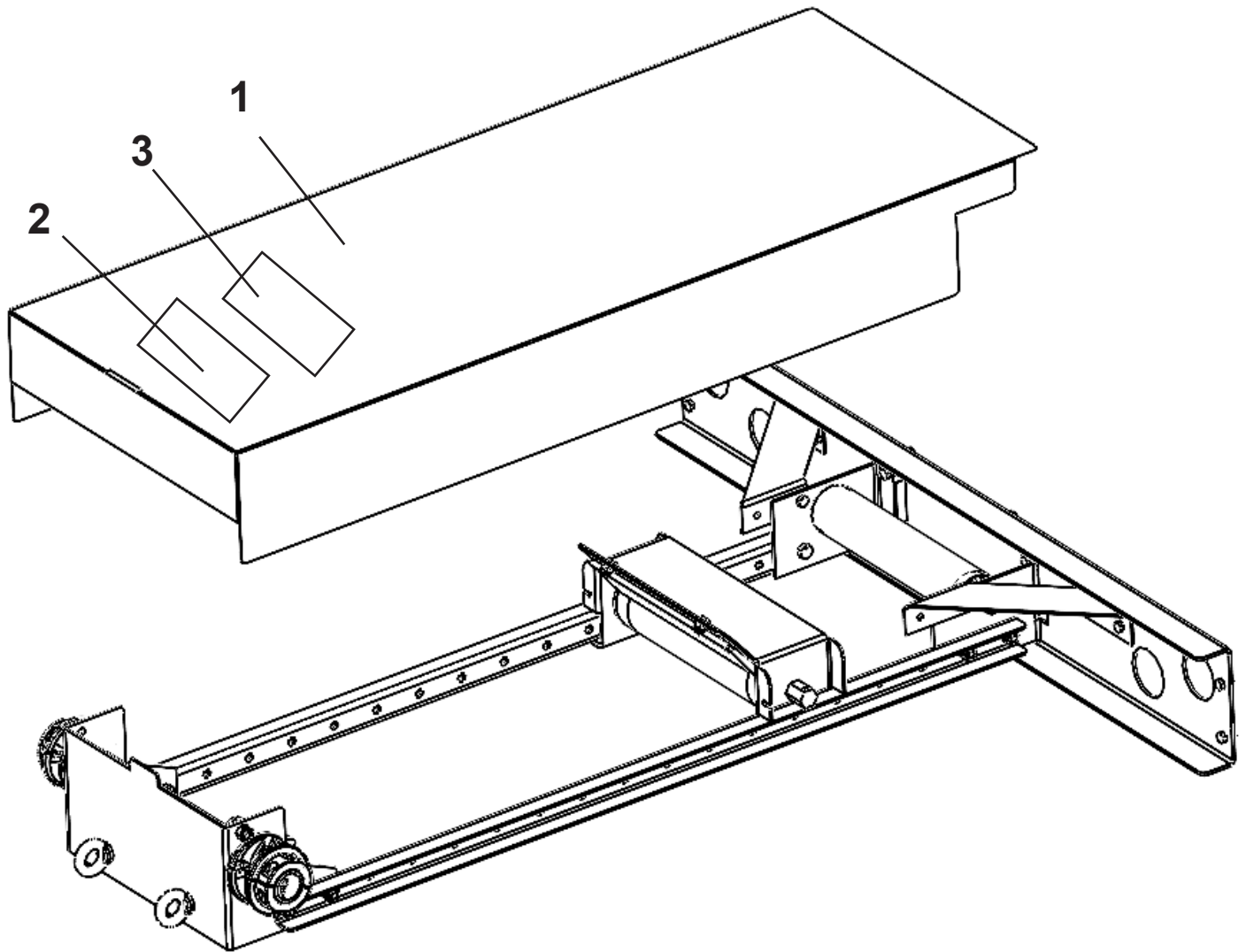
15 Connect the Nests



Ch. 15. Connect the Nests together using the Nuts and Bolts (8) places as shown.

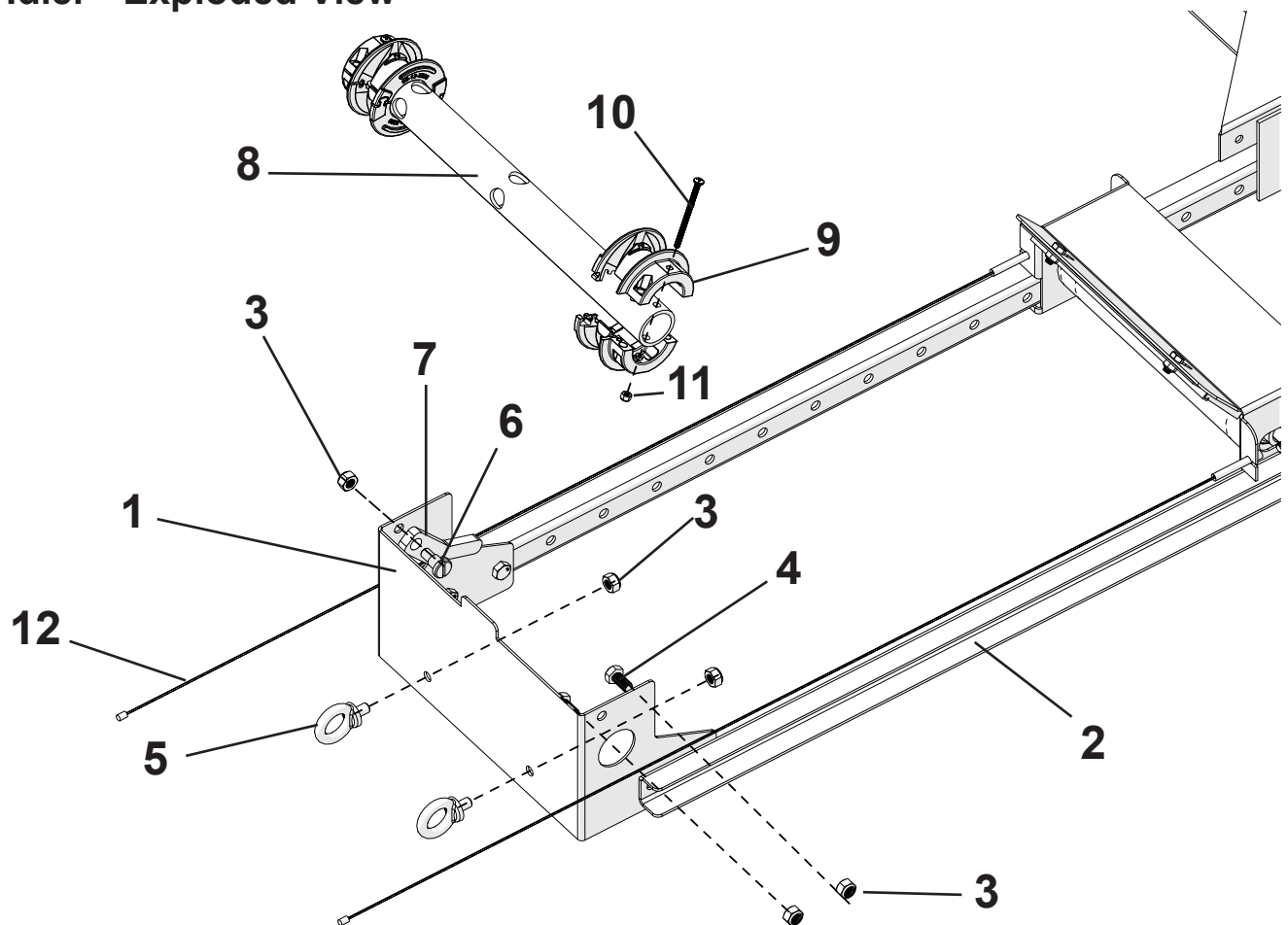
Item	Part No.	Description
1	99-10-1100	Hexagon head screw M 6x 12 DIN 933 8.8 galv
2	99-20-1043	Self-locking counter nut M 6 galv DIN985-6

16 Idler

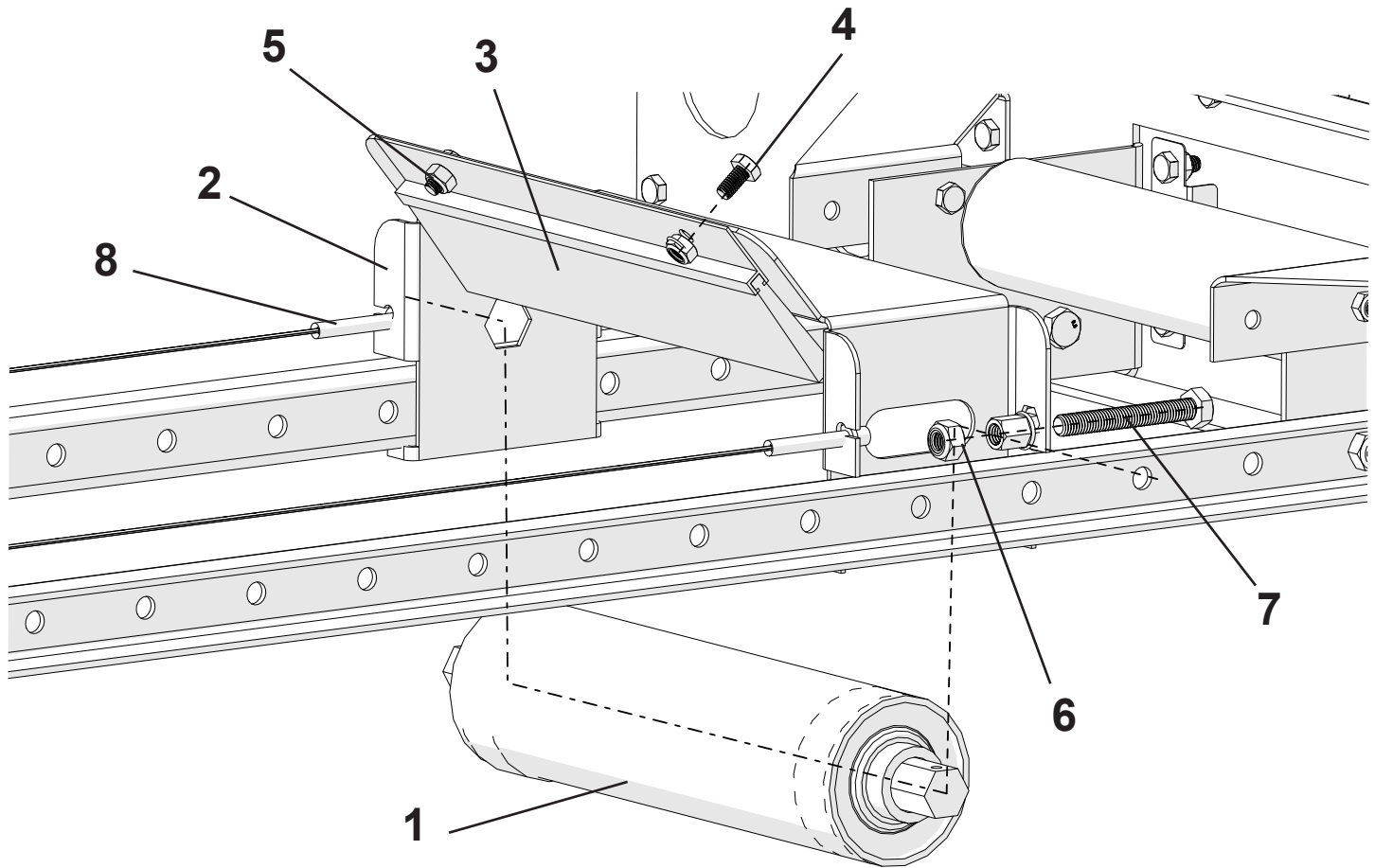


Item	Part No.	Description
1	86-01-5422	COVER IDLER V19 NXB-3 10XX
2	00-00-1186	Pictograph Before Maintenance work mainswitch OFF
3	00-00-1187	Pictograph Crushing Danger Protection Device

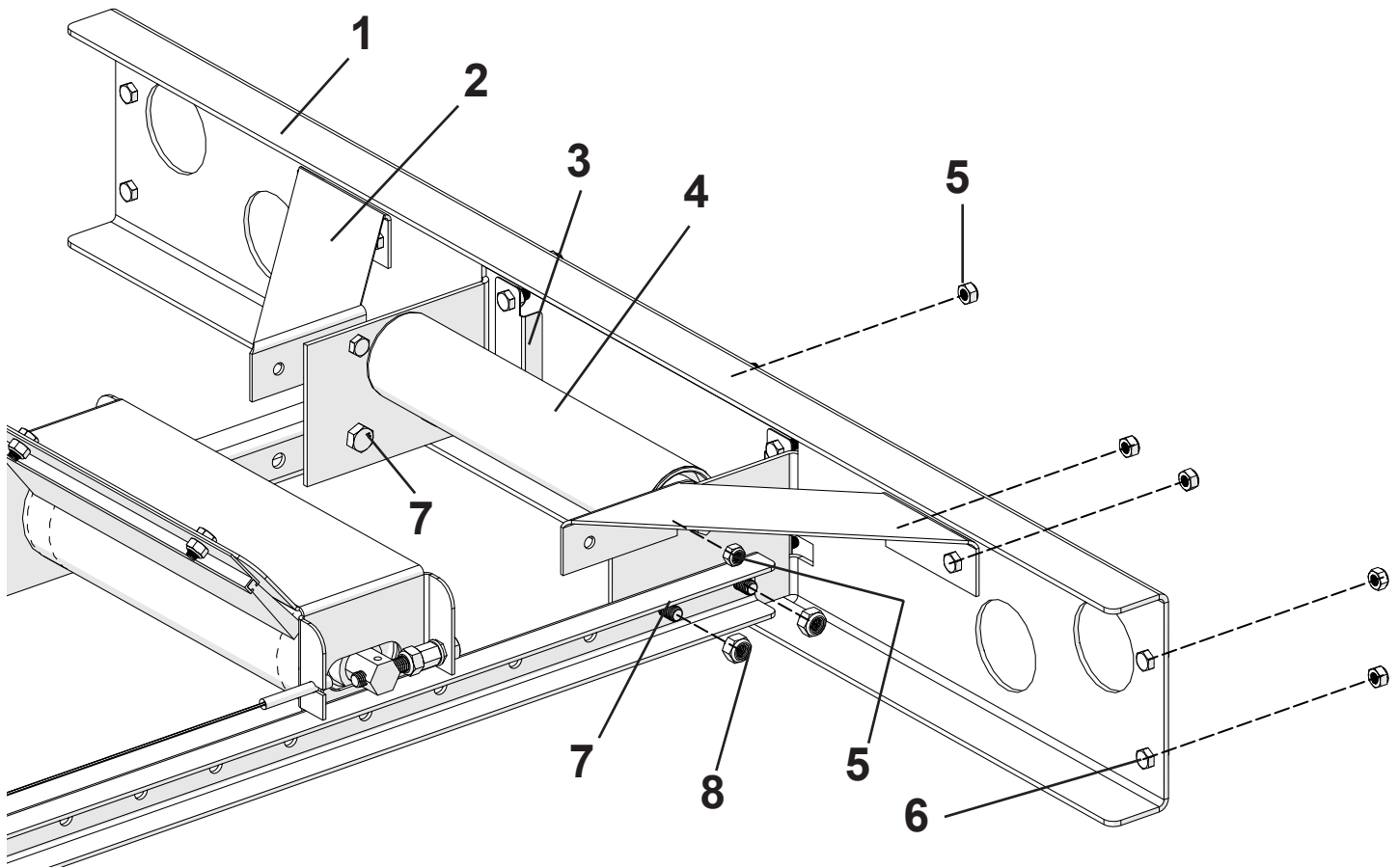
16.1 Idler - Exploded View



Item	Part No.	Description
1	86-01-5424	IDLER REAR BRACKET WIRE ADJUSTABLE V19 NXB-3 10XX
2	83-05-5578	Guide Rail for idler EB196
3	99-20-1064	Self locking counter nut M 8 galv. DIN985-6
4	99-10-1046	Hexagon Head Screw M 8x 16 DIN 933 8.8 galv
5	99-10-1314	Lifting Eye Bolt M 8 DIN 580 Galv.
6	99-10-3919	Slotted Pan Head Screw M8 x 10 DIN923
7	83-03-1714	Detent pawl for MB/LB idler roller with chain
8	86-01-5347	PIPE, TENSIONER IDLER NXB-3 10xx
9	83-13-3236	Half Shell PA for traction rope/belt BD-Colony 2+
10	86-02-4504	SCREW MACHINE M4x60MM PAN HEAD PHILLIPS GALV
11	99-20-1123	Self-locking Counter Nut M4 DIN 980-8
12	83-11-3993	Traction Rope 1.50x850 SST with 2 tappet

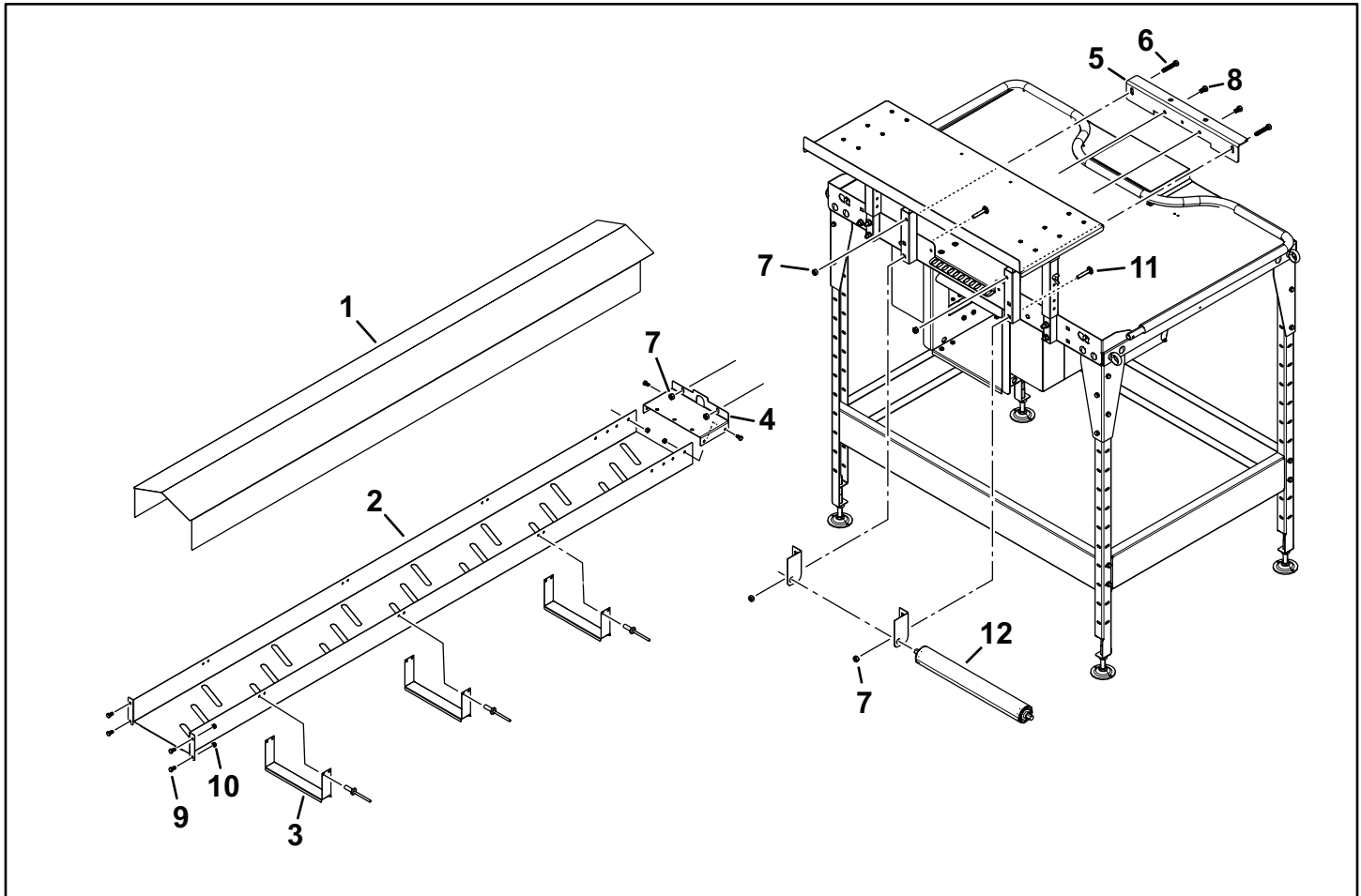


Item	Part No.	Description
1	86-01-5441	IDLER ROLLER ASSEMBLY D2.5" NXB-3 10XX
2	86-01-5421	IDLER ROLLER ADJUSTABLE FRAME W/NUTSERT NXB-3 10XX
3	86-01-2610	Conveyor Brush Assembly NXB-3-10XX
4	99-10-1100	Hexagon head screw M 6x 12 DIN 933 8.8 galv
5	99-20-1043	Self-locking counter nut M 6 galv DIN985-6
6	99-20-1064	Self-locking counter nut M 8 galv DIN985-6
7	99-10-1278	Hexagon Head Screw M8 x 60 DIN 933 8.8 galv.
8	83-10-5722	Sleeve for traction rope



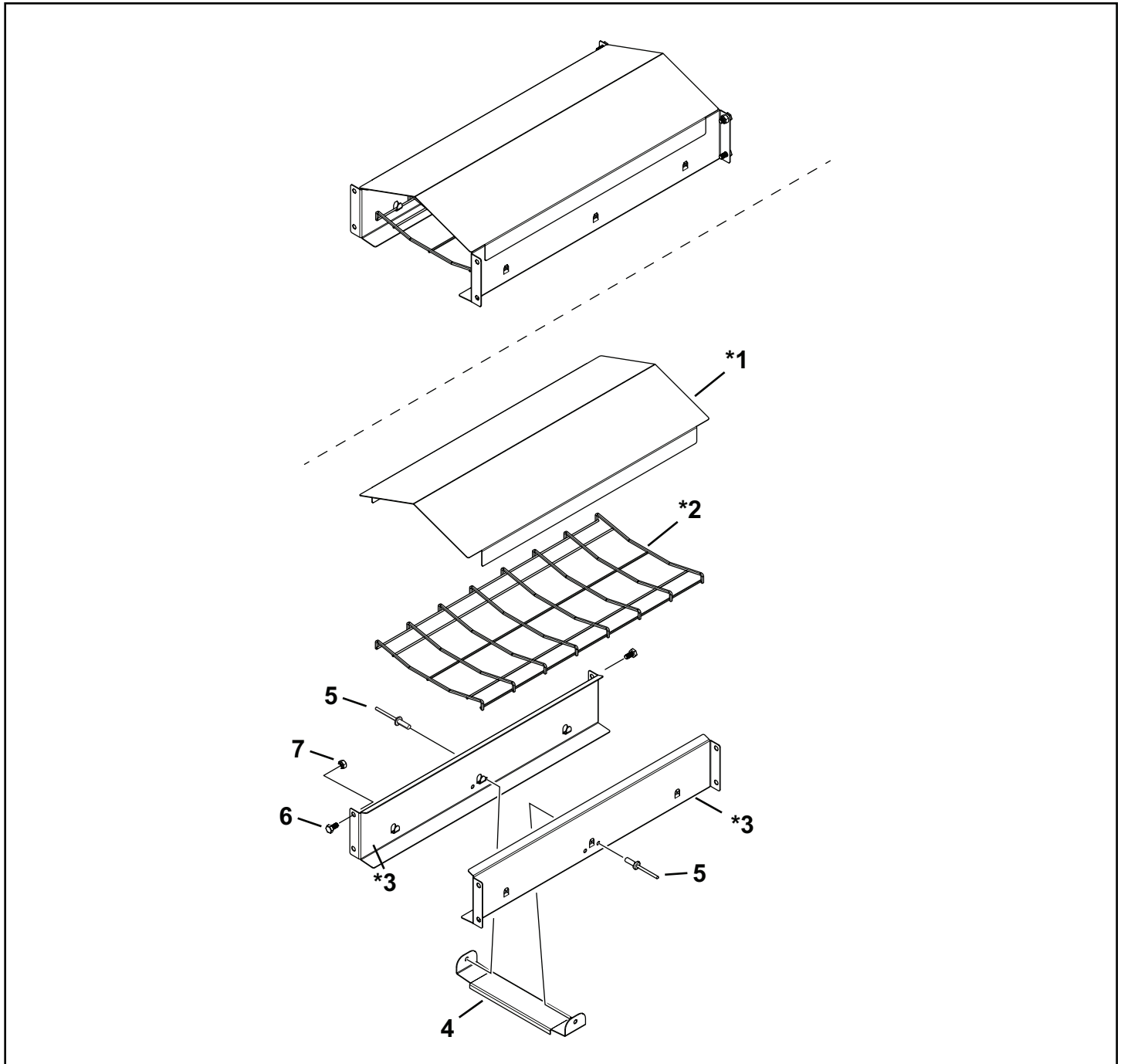
Item	Part No.	Description
1	83-01-5423	IDLER MAIN BRACKET SUPPORT V19 NXB-3 10XX
2	86-02-4507	Stiffening Bracket Idler NXB-3 V20
3	86-02-4506	Egg Belt Guard Idler NXB-3 V20
4	86-01-4003	Idler Roller Assembly d48mm NXB-3-10XX
5	99-20-1043	Self-locking counter nut M 6 galv DIN985-6
6	99-10-1100	Hexagon head screw M 6x 12 DIN 933 8.8 galv
7	99-10-1046	Hexagon head screw M 8x 16 DIN 933 8.8 galv
8	99-20-1064	Self-locking counter nut M 8 galv DIN985-6

17 Connection to Egg Collector



Item	Part No.	Description
1	86-01-2699	Cover 72 Inch Table Connect SST NXB-3
2	86-01-2697	Passage Tray 72 Inch Table Connect NXB-3
3	86-01-2698	Egg Belt Return Guide Table Connect NXB-3
4	86-01-2694	Bracket Passage to Table NXB-3
5	86-01-2696	Angle Bracket Table Connect NXB-3
6	99-10-1207	Hexagon head screw M 8x 45 DIN 933 8.8 galv
7	99-20-1064	Self-locking counter nut M 8 galv DIN985-6
8	99-10-1046	Hexagon head screw M 8x 16 DIN 933 8.8 galv
9	99-10-1100	Hexagon head screw M 6x 12 DIN 933 8.8 galv
10	99-20-1043	Self-locking counter nut M 6 galv DIN985-6
11	99-10-1207	Hexagon head screw M 8x 45 DIN 933 8.8galv
12	86-01-2640	IDLER ROLLER ASSEMBLY,Ø1.9" ROLLER WITH ROLLER BEARINGS,15.2

18 Passageways - 18 inch shown



Ch. 18. For illustration purposes an 18 inch Passageway is shown above. Refer to the Table on the facing page for 18 - 72 inch Passageway Part Numbers.

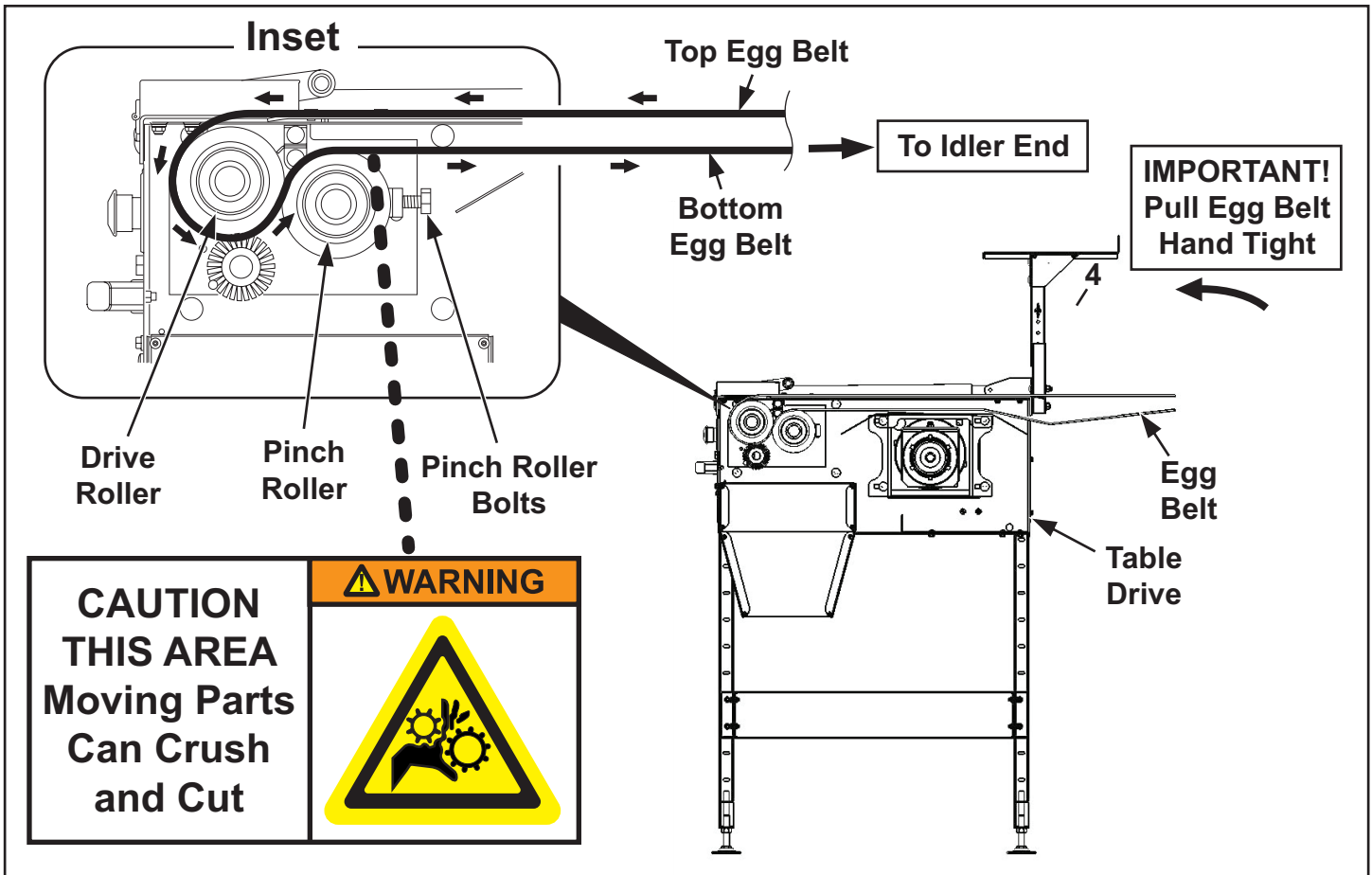
18.1 Passageways

Passageway Part Number	18 - 96 inch Passageway Descriptions
86-01-4025	PASSAGE 18" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
86-01-4026	PASSAGE 24" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
86-01-4027	PASSAGE 30" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
86-01-4028	PASSAGE 36" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
86-01-4029	PASSAGE 48" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
86-01-4030	PASSAGE 60" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
86-01-4031	PASSAGE 72" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
86-01-4110	PASSAGE 96" NXB-3 US CB, W/SST COVERS, F/8" PLASTIC BELT
NOTE: 18 - 96 inch Passageway Part Numbers are listed in the table below:	

Item	Part No.	Description
*1	86-01-4012	PASSAGEWAY COVER 18" SST NXB-3
	86-01-4014	PASSAGEWAY COVER 24" SST NXB-3
	86-01-4016	PASSAGEWAY COVER 30" SST NXB-3
	86-01-4018	PASSAGEWAY COVER 36" SST NXB-3
	86-01-4020	PASSAGEWAY COVER 48" SST NXB-3
	86-01-4022	PASSAGEWAY COVER 60" SST NXB-3
	86-01-4024	PASSAGEWAY COVER 72" SST NXB-3
	86-01-4108	PASSAGEWAY COVER 96" SST NXB-3
*2	86-00-8666	WIRE GRILLE FOR EGG CHANNEL,16.49" F/PASSAGE 18" NXB CB
	83-06-3075	WIRE GRILL FOR EGG CHANNEL ZNAL-A F/PASSAGE NXB CB
	86-00-8668	WIRE GRILLE FOR EGG CHANNEL,28.19" F/PASSAGE 30" NXB CB
	86-00-8669	WIRE GRILLE FOR EGG CHANNEL,35.21" F/PASSAGE 36" NXB CB
	86-00-8670	WIRE GRILLE FOR EGG CHANNEL,46.92" F/PASSAGE 48" NXB CB
	86-00-8671	WIRE GRILLE FOR EGG CHANNEL,58.62" F/PASSAGE 60" NXB CB
	86-00-8672	WIRE GRILLE FOR EGG CHANNEL,70.33" F/PASSAGE 72" NXB CB
	86-01-4107	WIRE GRILLE FOR EGG CHANNEL 93.6" NXB-3 10xx
*3	86-01-4057	PASSAGEWAY SIDE 18" NXB-3
	86-01-4058	PASSAGEWAY SIDE 24" NXB-3
	86-01-4059	PASSAGEWAY SIDE 30" NXB-3
	86-01-4060	PASSAGEWAY SIDE 36" NXB-3
	86-01-4061	PASSAGEWAY SIDE 48" NXB-3
	86-01-4062	PASSAGEWAY SIDE 60" NXB-3
	86-01-4063	PASSAGEWAY SIDE 72" NXB-3
	86-01-4109	PASSAGEWAY SIDE 96" NXB-3
4	86-01-4055	Belt Return Guide NXB-3 1000
5	99-10-1271	Blind rivet alu/steel flat round head 4.8x10 / 4.0-6.0mm
6	99-10-1100	M6x12 Hex Head GALV
7	99-20-1043	M6 Hex Nylock

19 Installing the Egg Belt

19.1 Threading in the egg belt



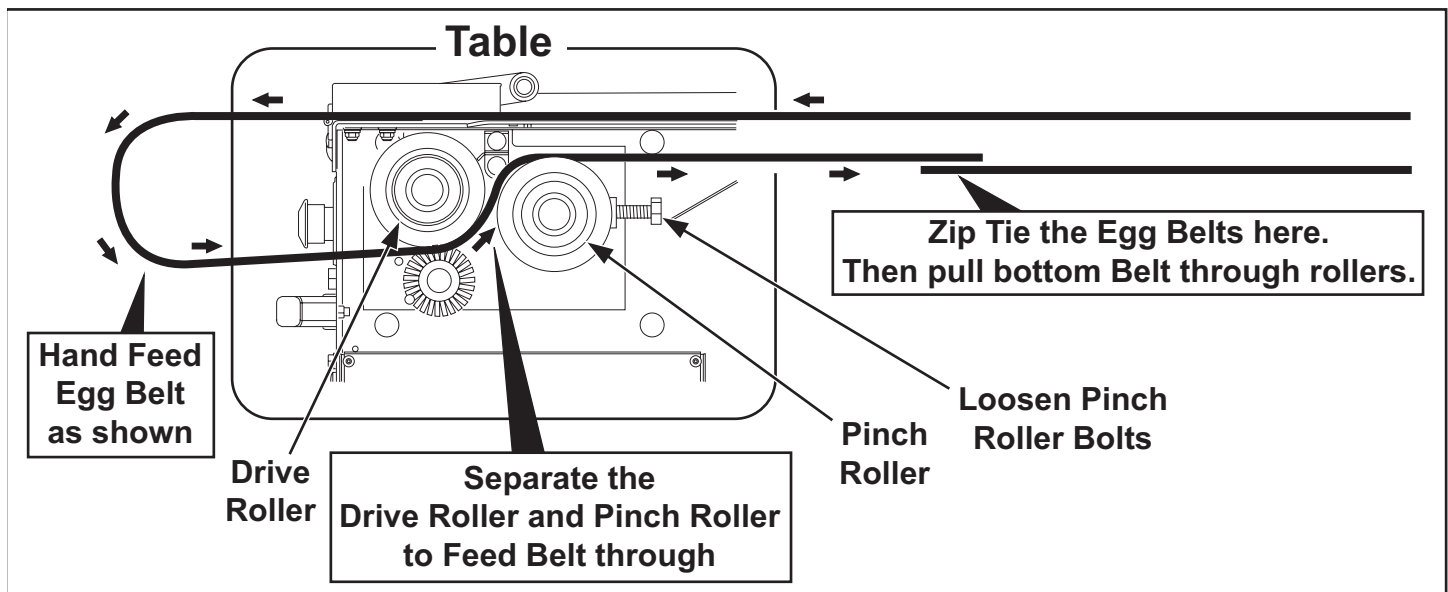
Chapter 19.1. Installing the Egg Belt Side View.

Pinch Roller Bolts - Troubleshooting

- The purpose for the pinch roller is to assist in pulling the egg belt. The pinch roller must be pushed against the drive roller to function. Check and tighten pinch roller bolts when servicing table drive.
- If your table is running and the belt is not moving or it is slipping around the drive roller **making the belt tighter by adjusting the idler end will not help.**
- **The likely cause of a poor running belt is the pinch roller not being correctly adjusted.**
- **The egg belt doesn't need to be pulled extremely tight and stretched in order to run correctly.** Doing this will likely cause damage to your nest and put the egg belt under unnecessary stress causing premature failure.


Directions for installing the PP (polypropylene) plastic egg belt.

- STEP 1** Run the plastic belt through all the nests and idler. The belt is tightened and welded at the table drive end. DO NOT stretch the belt! It only needs to have the slack pulled out. The belt can be made tighter afterwards by adjusting at the idler end.
- STEP 2** Make sure the idler roller end is all the way forward, toward the nest, before tightening the egg belt. This gives you maximum adjustment if you need to tighten the belt.
- STEP 3** Loosen and remove the two pinch roller bolts (shown below). Push pinch roller away from the drive roller. **This will allow you to push the belt between the drive and pinch roller without running the electric motor and running the risk of injury.**

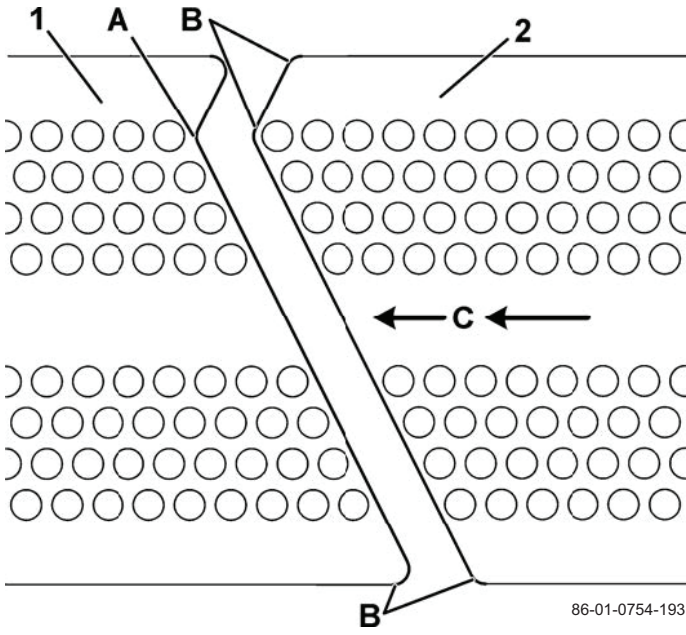
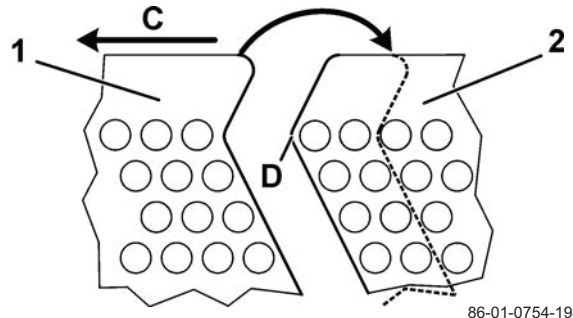
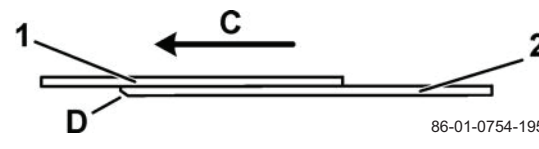



- STEP 4:** The belt needs to be pushed in from the front of the table between the cleaning brush and drive roller and then you can push the belt between the drive and pinch roller. Keep feeding the belt until it comes out the backside of the table. **NOTE: It is only possible to push the belt through by hand from the front side of the table to get through the drive and pinch roller.**
- STEP 5:** Zip tie the belt together (see above drawing). **Now pull the belt on the bottom through the drive and pinch rollers.** You should now have both sides of the belt on the front side of the table. Cut off zip ties and finish running belt around drive rollers as shown on the previous page
- STEP 6** Pull the belt hand tight and then clamp top belt to passageway or table top. Use C-clamps or similar clamping method with a 2x4 to protect the belt to hold the top belt in place.
- STEP 7** Now run the drive in reverse to tighten the belt. IMPORTANT, you should only need to pull 3 to 6 inches. This is just enough to pull all the slack out of the belt.
- STEP 6** Weld the belt as shown in the next section on the table top.

19.2 Cutting and Welding of the Plastic Egg Belt

	<p>The below described processing method is used for all perforated PP egg belts of any width.</p>
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Egg belts of perforated PP (polypropylene) have to be cut in V-shape and welded.

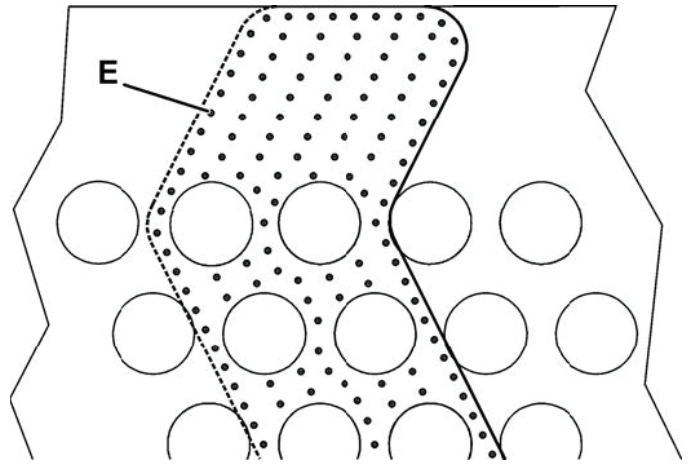
<p>Top view Position the cutting edge next to the row of perforations in such a way that a maximum bridge remains between the hole and the cutting edge. => Holes must not be cut! The V-angle (pos. "A") has to lie at the outer row of holes. The cutting edges have to be straight! Round off all corners (A, B) of the cutting edges!</p>	
<p>Observe the running direction "C"! Part "1" has to be placed on part "2" with an overlap of 2 rows of holes. => The holes must be exactly on top of one another!</p>	 

	<p>Make sure that the egg belts are exactly aligned on top of one another before starting to weld; they cannot be subsequently adjusted.</p>
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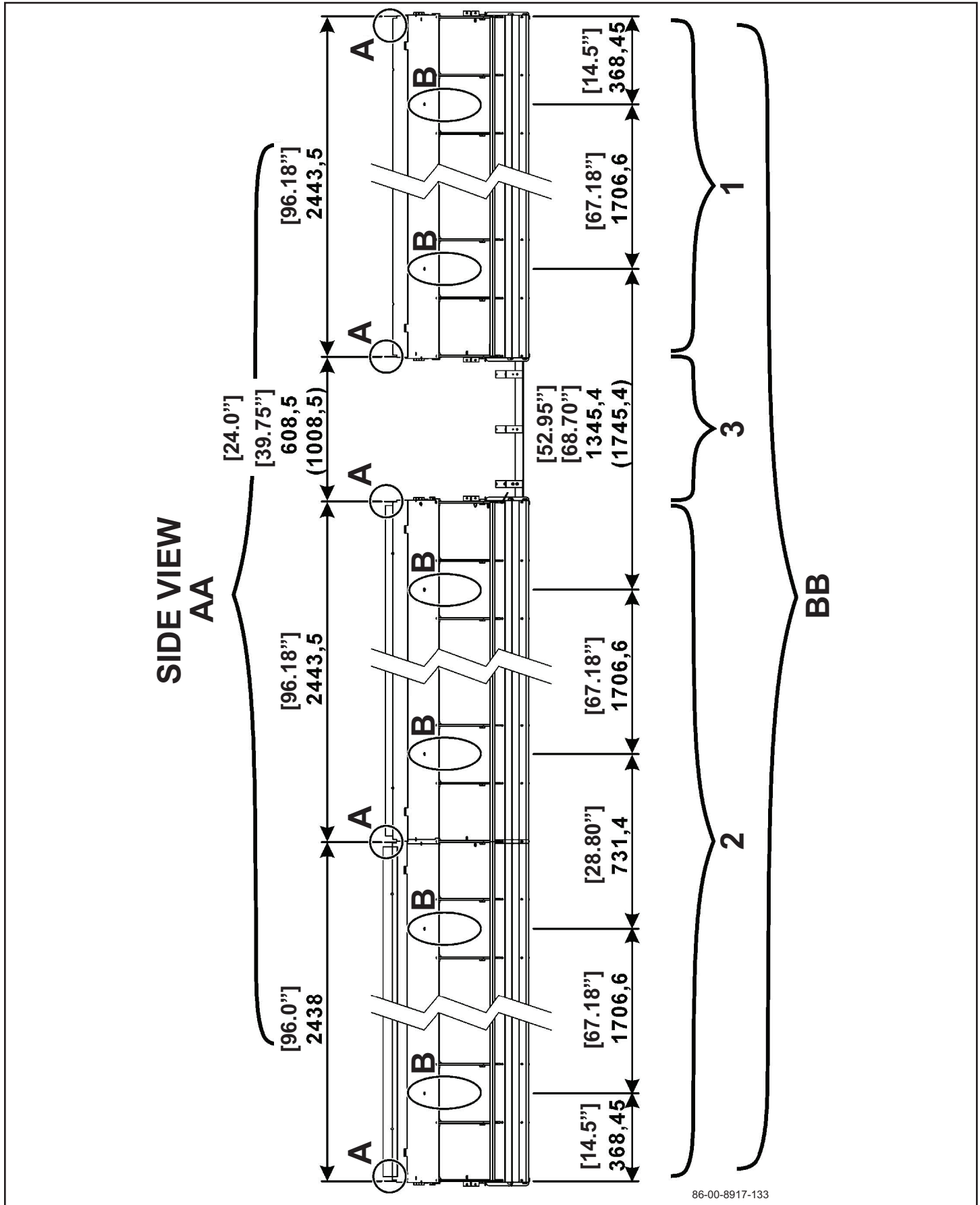


The lower edge at position "D" must not stick out!
=> weld carefully in this area
=> bevel the edge with a file.

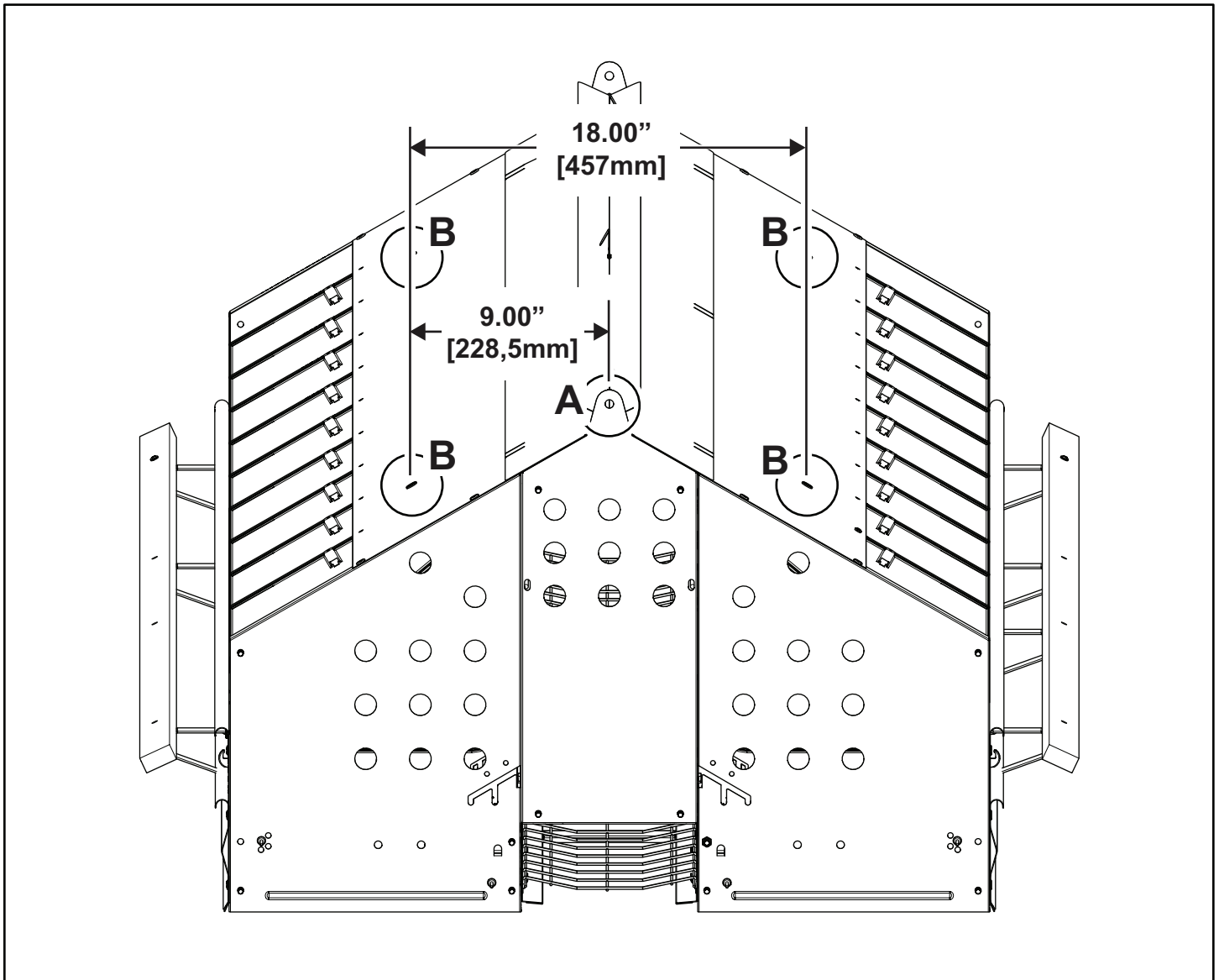
Place the weld points (E)
evenly, approx. 1 point per cm².
Important note: place one weld
point every 1 cm along the
cutting surfaces.



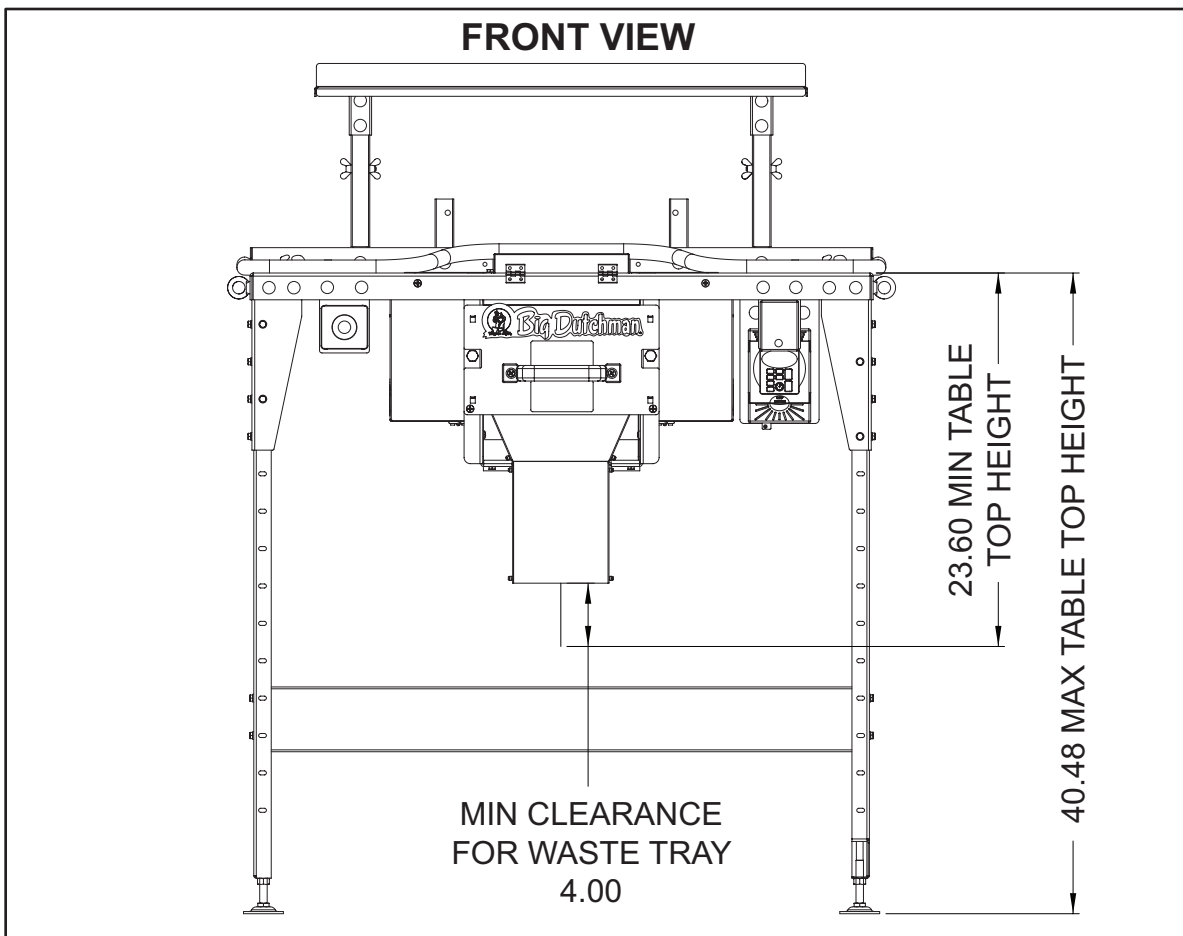
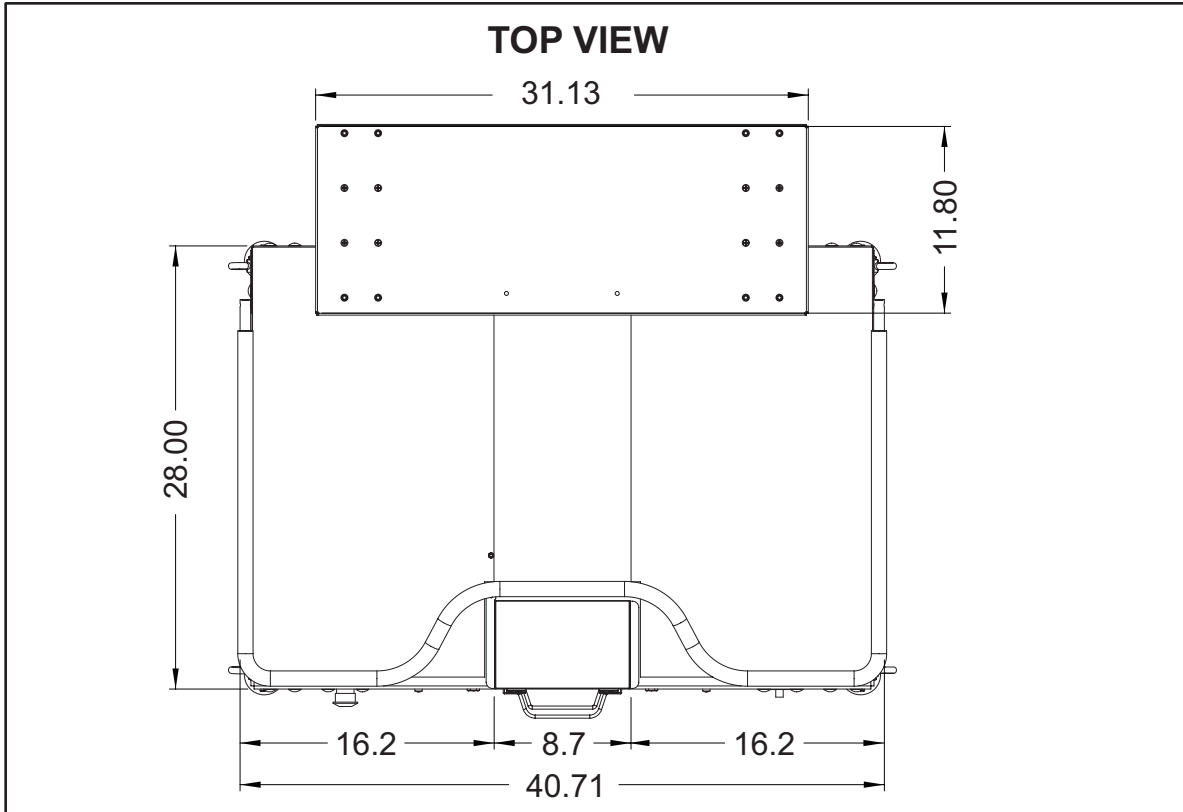
19.3 Sizes for the ceiling fastening



Item	Description
1	Nest as single section
2	Nest as double section
3	Passage 18, 24, 30, 36 and 48
A	A = Suspension of the nest row at the gable plate
AA	AA = Sizes for the suspension of the new row
B	B = Suspension of the locking tube for nest
BB	BB = Sizes for the suspension of the locking tube



20 NXB Side Belt Table Top Dimensions - Top View and Front View



86-01-0754-222

21 Notes for nest-management

21.1 Operation of the table drive

The egg belts in the system can be run by means of a speed control unit with such an operating speed that the eggs can always be comfortably placed in the egg packs. At the end of the day, the Various Speed control can increase the speed so that the remaining eggs can be collected more rapidly.

It is recommended to run the egg belt, controlled by means of a timer, before the hens start laying. For this, the egg belt runs a complete circuit every morning to remove rejects, dust or manure that might be lying on the belts. Make sure that the last egg collection takes place late in the evening so that the egg gathering table can hold all remaining eggs the next morning during the cleaning-run.

21.2 Further suggestions to further reduce the number of floor eggs

- The most important measure for avoiding mislaid eggs is constant gathering of eggs and the resulting agitation in the house which in turn reduces the occurrence of further mislaid eggs.
- Hence, it is very important that the persons looking after the hens walk around in the scratching areas.



This should be done at least once per hour in the morning starting at the point when the hens start laying and every 2 hours in the afternoon. On the whole 6 to 7 times a day.

- Always walk along the outside walls so that the birds are driven in the direction of the laying nests. This is particularly important in the morning during the main laying phase. Collect floor eggs and place them in the centre of the next laying nest. This will further encourage the hens to access the nests. Always walk up and down the passages so that the birds flee from you once to the end of the house and once to the front end.
- Collect eggs at least 4 to 5 times a day during the entire laying-period and at the beginning of the laying period as early as possible in the morning.
- The recommended house temperature is 18°C. A warm house without draught is important to reduce the share of eggs.

- Hens will avoid certain areas of the house if ventilated inappropriately. Birds like fresh house air. Check the ventilation system regularly and seek immediate repair or adjustment of ventilation if required.

21.3 Cleanliness of the nest system

Cleanliness is the key to a productive and smoothly operating nest and egg collection system. Dirty nest inserts and egg-belts increase the number of dirty eggs and lead to spreading diseases. Dust and rejects in the egg collection system can also have a negative influence on egg quality and might also damage the system if they are not removed on a regular basis. It is important to draw up a cleaning programme and to insist on it being carried out every day.

The egg collecting system has to be thoroughly cleaned every day after the eggs have been gathered. **The following groups have to be cleaned every day:**

- the brush in the longitudinal belt drive above the dirt collecting box
- the egg belt idler unit
- Empty the dirt collecting box and clean it with water and detergents
- Clean the egg gathering table and other surfaces with water and detergent.



Do not use any flammable chemicals for cleaning!

Carry out the following cleaning and maintenance work for the egg collecting system every week

- Clean the egg belt guide at the longitudinal drive.
Vacuum or blow motor and drive units to prevent accumulation of dust and feathers on the motor ventilation system.
- Keep the chain well-lubricated with light oil.
- Check the egg belt for dirt accumulation at the point where it is **running back** into the nest.

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