

Valego® RDE-49 & RDE-58 Nest with Peaked Roof Instruction Manual



Installation and Operators Manual

Installation and Operators Manual

For additional parts and information, contact your nearest Chore-Time distributor or representative.
Find your nearest distributor at: www.choretime.com/contacts

Contents

Topic	Page
Limited Warranty	4
Safety and General Information	5
Follow Safety Instructions	5
Decal Descriptions	5
DANGER: Rotating Parts	5
DANGER: Electrical Hazard	5
Planning the System	6
Section Dimensions and Expulsion Unit Location	6
Systems 50 Sections or less	6
Systems longer than 50 Sections	6
Walkover Sections	6
Installation	7
Adjustable Leg Assembly	7
Framework	8
Undercarriage	8
Egg Belt Installation	10
Return Egg Belt	10
Egg Belt Supports	10
Bottom Rails/Expulsion Plates	11
Egg Belt Dividers (Two Belt System)	11
Egg Belt Dividers	12
Egg Belt Divider Tubes	12
Rack Plate/Side Panel Installation	13
At Expulsion Unit	15
Egg Curtains	16
Entrance Board Installation	17
Floor Pipe Installation	18
Nest Bottom Installation	19
Nest Pad Installation	20
Back Wall Installation	21
Nest Wall Brackets & Walkover/End Panels	21
Back Wall	23
Expulsion Unit	24
Expeller Tube Support & Crosses	24
Expeller Pipes	25
Motor Installation	26
Expulsion Tube Installation	27
Expulsion Shafts	29
Connections	29
Expulsion Shafts/Caps	30
Tightening down Toothed Wheels on Expulsion Shafts	33
Expulsion Unit Cover	33
Side Braces	33
Front Cover	34
Walk Over Section	35
Full Section Walkover	35
Half Section Walkover	37
Expeller Installation	38
Expeller Panel Assembly	38
Expeller Panel Installation	39
Curtain Assembly & Installation	40

Contents - continued

Topic	Page
Roof Installation	41
Roof Plate Assembly	41
Roof Installation	43
Roof Channels Installation	44
Anti-Roost Plate Installation	44
Balcony Installation	45
Valego® RDE Nest Control (601150)	47
Part Numbers	48
RDE 49 & 58 Peaked Roof Kit Part Numbers	48
Standard Nest Section Parts Continued.....	49
Part Numbers.....	50
Walkover Kits RDE 49 (57910-X) & RDE 58 (57947-X).....	51
Expulsion Unit RDE 49 (57185) & RDE 58 (57186).....	52
Leg & Rail Kits Regular Duty (57823-X), & Heavy Duty (57826-X).....	53
Balcony Kit (58007-X)	54
Balcony Kit (58307, 58307-1)	55
Balcony Kit (58307-2)	56
Miscellaneous Parts	57

Limited Warranty

LIMITED WARRANTY

CTB, Inc. (“Chore-Time”) warrants the new CHORE-TIME Valego® 49 & 58 Nests manufactured by Chore-Time to be free from defects in material or workmanship under normal usage and conditions, for One (1) year from the date of installation by the original purchaser (“Warranty”). Chore-Time provides for an extension of the aforementioned Warranty period (“Extended Warranty Period”) with respect to certain Product parts. If such a defect is determined by Chore-Time to exist within the applicable period, Chore-Time will, at its option, (a) repair the Product or Component Part free of charge, F.O.B. the factory of manufacture or (b) replace the Product or Component Part free of charge, F.O.B. the factory of manufacture. This Warranty is not transferable, and applies only to the original purchaser of the Product.

CONDITIONS AND LIMITATIONS

THIS WARRANTY CONSTITUTES CHORE-TIME’S ENTIRE AND SOLE WARRANTY AND CHORE-TIME EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES. CHORE-TIME shall not be liable for any direct, indirect, incidental, consequential or special damages which any purchaser may suffer or claim to suffer as a result of any defect in the Product. Consequential or Special Damages as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs, and operational inefficiencies. *Some jurisdictions prohibit limitations on implied warranties and/or the exclusion or limitation of such damages, so these limitations and exclusions may not apply to you. This warranty gives the original purchaser specific legal rights. You may also have other rights based upon your specific jurisdiction.*

Compliance with federal, state and local rules which apply to the location, installation and use of the Product are the responsibility of the original purchaser, and CHORE-TIME shall not be liable for any damages which may result from non-compliance with such rules.

The following circumstances shall render this Warranty void:

- Modifications made to the Product not specifically delineated in the Product manual.
- Product not installed and/or operated in accordance with the instructions published by the CHORE-TIME.
- All components of the Product are not original equipment supplied by CHORE-TIME.
- Product was not purchased from and/or installed by a CHORE-TIME authorized distributor or certified representative.
- Product experienced malfunction or failure resulting from misuse, abuse, mismanagement, negligence, alteration, accident, or lack of proper maintenance, or from lightning strikes, electrical power surges or interruption of electricity.
- Product experienced corrosion, material deterioration and/or equipment malfunction caused by or consistent with the application of chemicals, minerals, sediments or other foreign elements.
- Product was used for any purpose other than for the care of poultry and livestock.

The Warranty and Extended Warranty may only be modified in writing by an officer of CHORE-TIME. CHORE-TIME shall have no obligation or responsibility for any representations or warranties made by or on behalf of any distributor, dealer, agent or certified representative.

Effective: April 2014

Safety and General Information

Caution, Warning and Danger Decals have been placed on the equipment to warn of potentially dangerous situations. Care should be taken to keep this information intact and easy to read at all times. Replace missing or damaged safety decals immediately.

Safety–Alert Symbol



This is a safety–alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury. This equipment is designed to be installed and operated as safely as possible...however, hazards do exist.

Understanding Signal Words

Signal words are used in conjunction with the safety–alert symbol to identify the severity of the warning.



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 hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

Follow Safety Instructions

Carefully read all safety messages in this manual and on your equipment safety signs. Follow recommended precautions and safe operating practices.

Keep safety signs in good condition. Replace missing or damaged safety signs.

Decal Descriptions

DANGER: Rotating Parts

Disconnect electrical power before working on system, equipment may start automatically. Otherwise personal injury will result.

Severe personal injury will result if the equipment is operated without covers properly installed.



DANGER: Electrical Hazard

Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

Ground all non-current carrying metal parts to guard against electrical shock.

Electrical disconnects and over current protection are not supplied with the equipment.



Planning the System

Section Dimensions and Expulsion Unit Location

Dimensions for each Section and for Expulsion Units shown below.

Systems 50 Sections or less

If the number of sections in the house are 50 Sections or less; only one Expulsion Unit is required and is centered as shown in **Figure 1**.

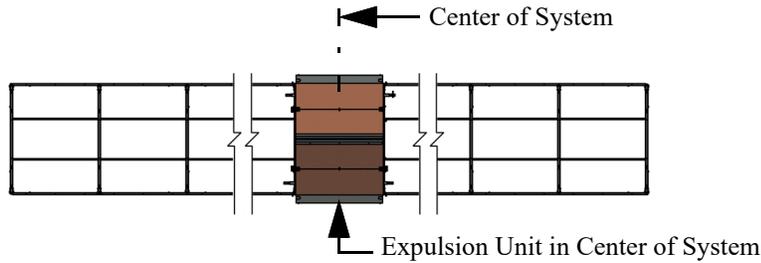


Figure 1. Systems less than 50 sections long

Systems longer than 50 Sections

If the number of sections in the house are more than 50; two Expulsion Units are required and it is recommended to be spaced as shown in **Figure 2**.

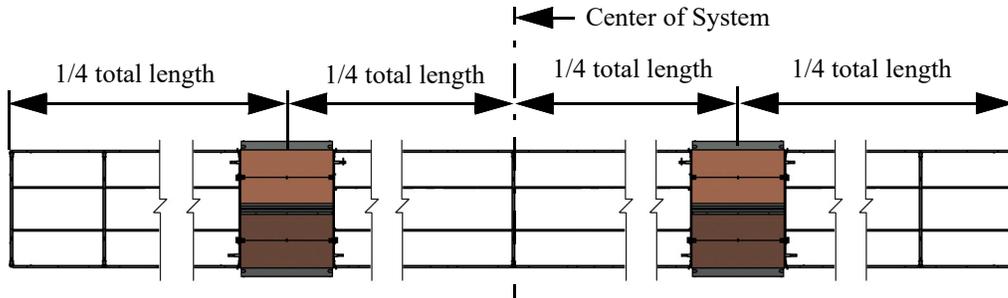


Figure 2. Systems 50 Sections and longer

Walkover Sections

A Walkover may be desired for long Spans to allow passage back and forth. If using two Expulsion units Chore-Time recommends centering the Walkover between Expulsion Units so there will not be any Expulsion Tubes to walk over. (See below). A half Section Walkover is also available. See **“Walk Over Section” on page 35**

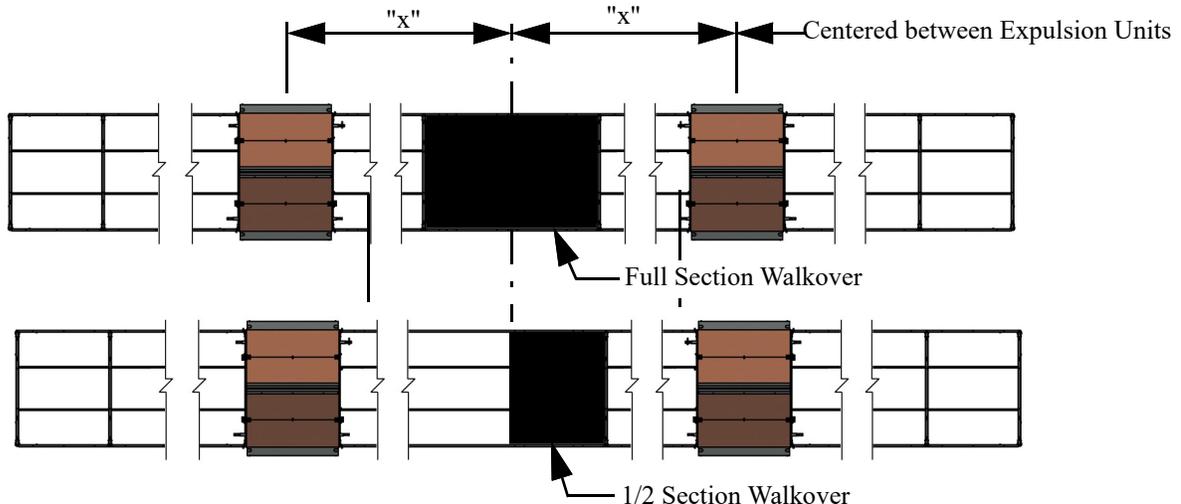


Figure 3. Walkover Sections

Installation

Adjustable Leg Assembly

The Legs are adjustable. Use the appropriate Holes in the Leg Assemblies to achieve desired height.

1. Determine the desired height of the Legs and Assemble **as shown**.

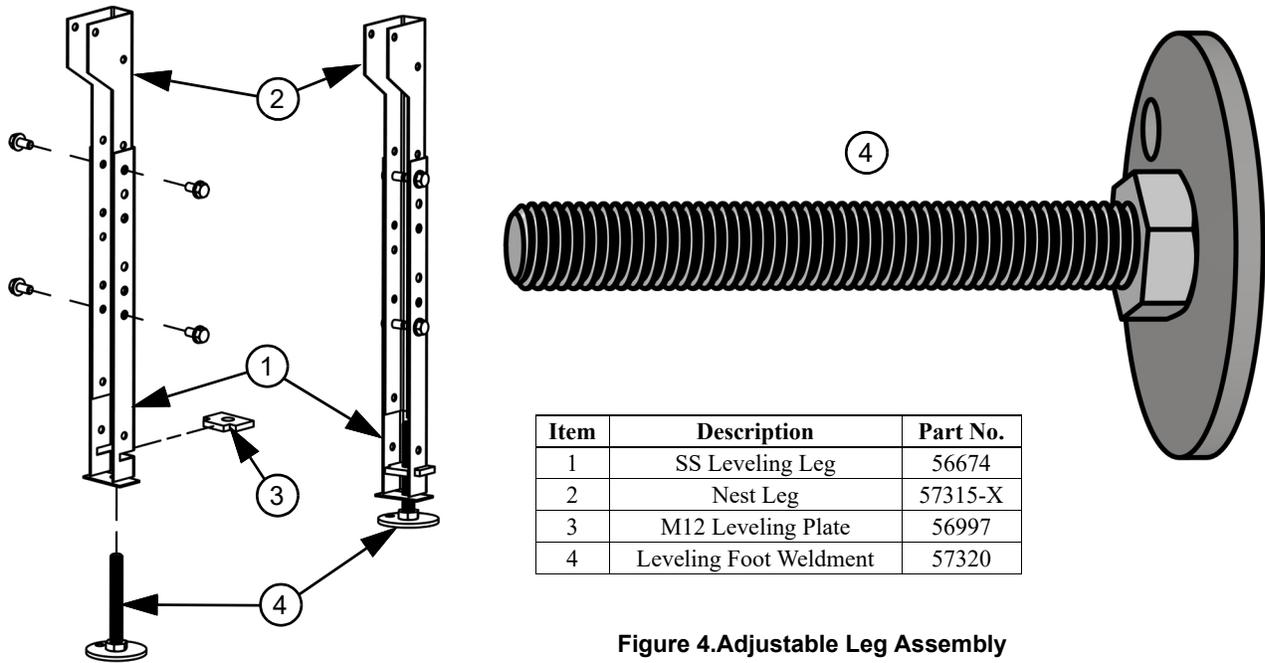


Figure 4.Adjustable Leg Assembly

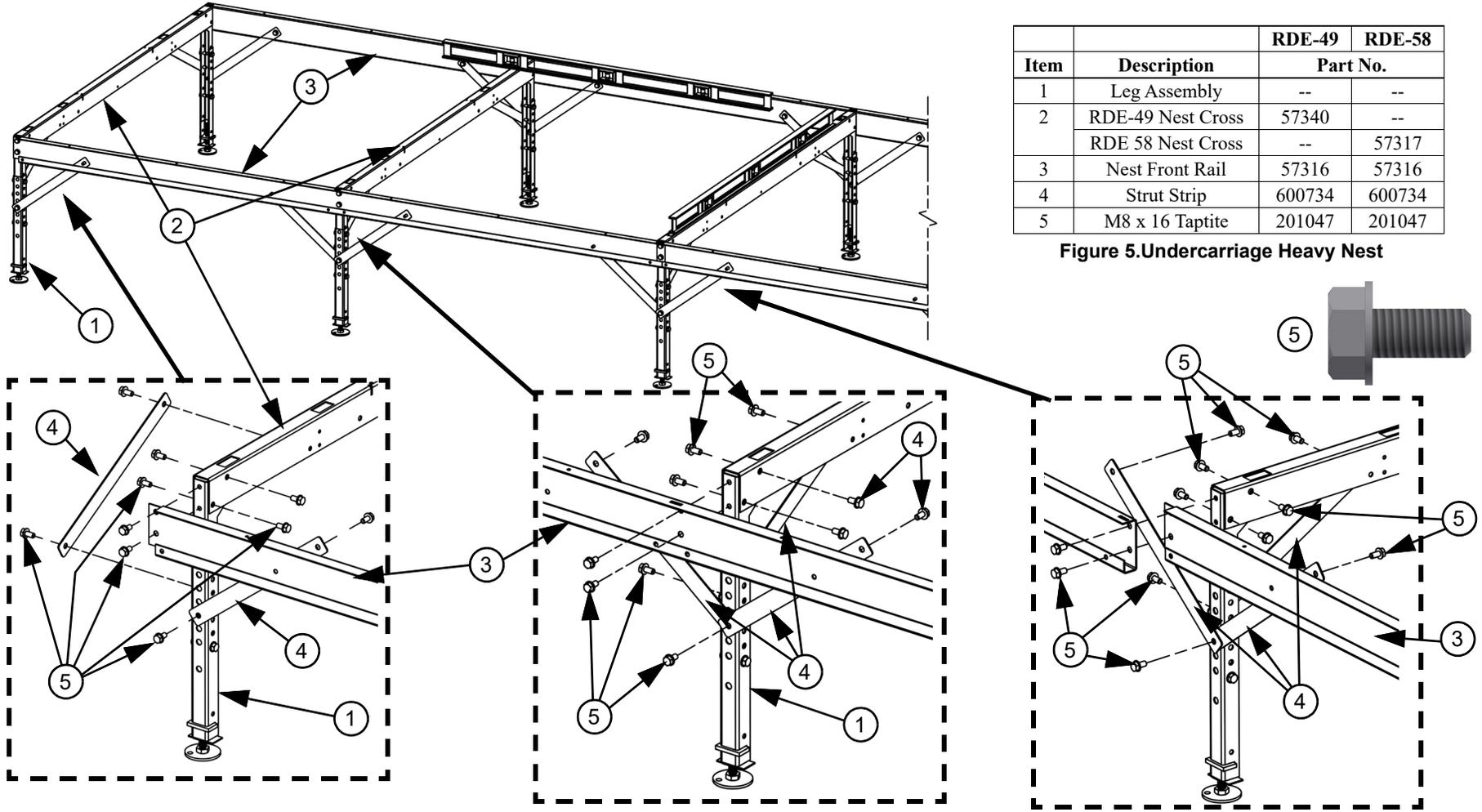
Framework Undercarriage

Heavy Duty Nest System (Legs spaced every 47-1/4" [120 cm])

1. At the end of the Framework, Fasten Leg Assemblies (**Item 1**) to Nest Crosses (**Item 2**) and Front Rails (**Item 3**) using Strut Strips (**Item 4**) with M8 Taptites (**Item 5**) as shown.

2. Attach a Nest Cross (**Item 2**), Leg Assemblies (**Item 1**) and Strut Strips (**Item 4**) at the Center of each Front Rail with M8 Taptites (**Item 5**).

Important! Make sure that Undercarriage is **square and level** before continuing with system.



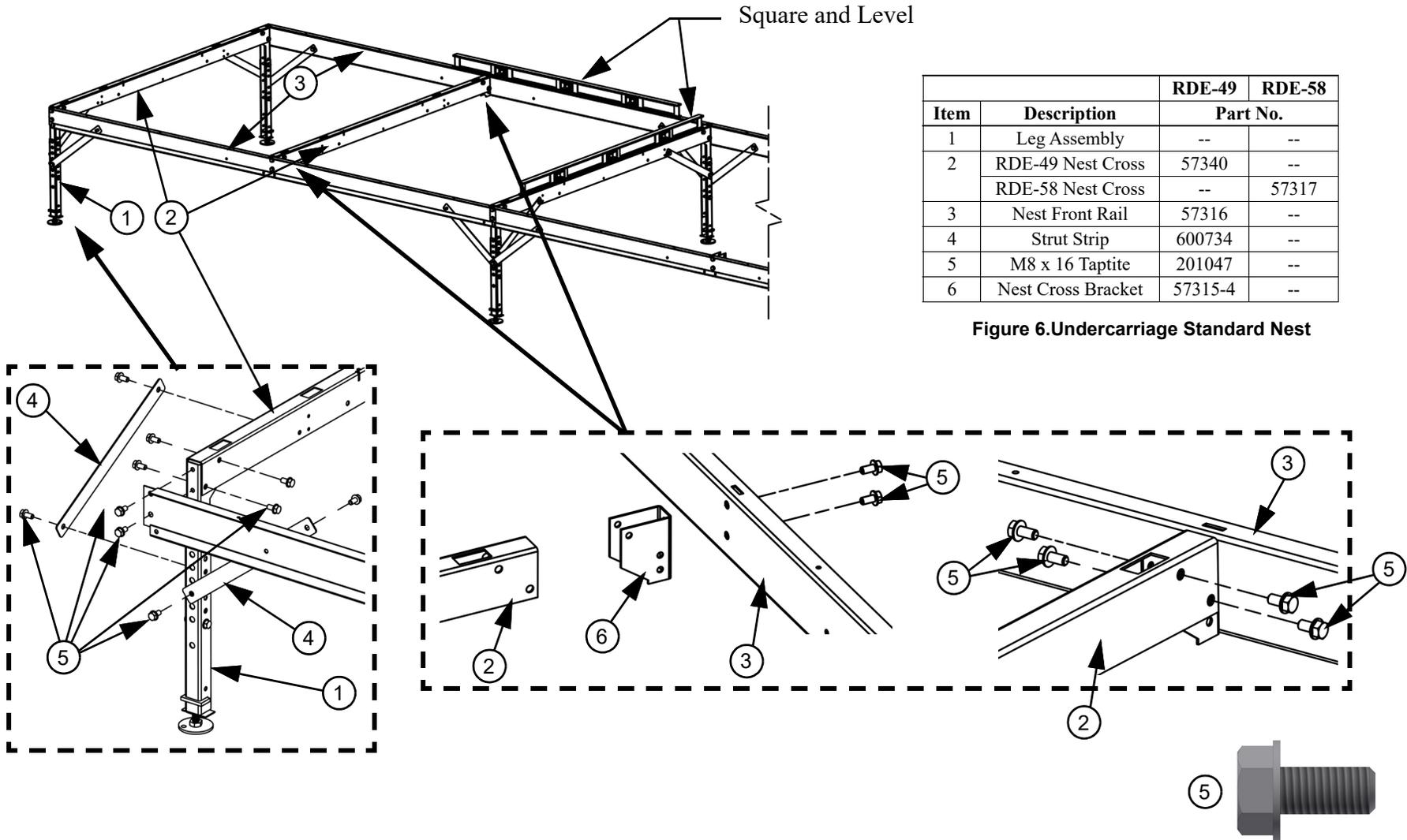
Item	Description	RDE-49	RDE-58
		Part No.	
1	Leg Assembly	--	--
2	RDE-49 Nest Cross	57340	--
	RDE 58 Nest Cross	--	57317
3	Nest Front Rail	57316	57316
4	Strut Strip	600734	600734
5	M8 x 16 Taptite	201047	201047

Figure 5. Undercarriage Heavy Nest

Regular Duty Nest System (Legs spaced every 94-1/2" [240 cm])

1. At the end of the Framework, Fasten Leg Assemblies (**Item 1**) to Nest Crosses (**Item 2**) and Front Rails (**Item 3**) using Strut Strips (**Item 4**) with M8 Taptites (**Item 5**) as shown.
2. Attach Nest Cross Brackets (**Item 6**) at the Center of each Front Rail with M8 Taptites (**Item 5**).
3. Fasten a Nest Cross (**Item 2**) to the Nest Cross Brackets with M8 Taptites (**Item 5**).

Important! Make sure that Undercarriage is **square and level** before continuing with system.



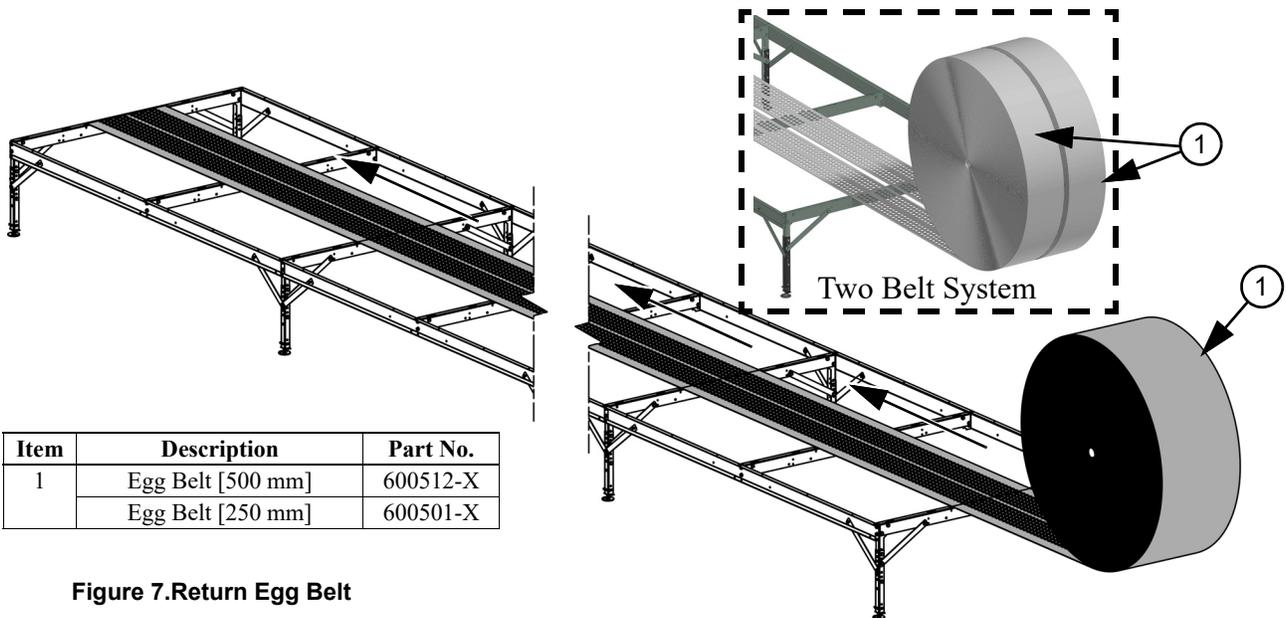
Item	Description	RDE-49	RDE-58
		Part No.	
1	Leg Assembly	--	--
2	RDE-49 Nest Cross	57340	--
	RDE-58 Nest Cross	--	57317
3	Nest Front Rail	57316	--
4	Strut Strip	600734	--
5	M8 x 16 Taptite	201047	--
6	Nest Cross Bracket	57315-4	--

Figure 6. Undercarriage Standard Nest

Egg Belt Installation

Return Egg Belt

1. Install the Egg Belt Drive Unit and Egg Belt Return Unit.
2. Start with the Egg Belt Roll/Rolls (**Item 1**) at the Belt Drive end and pull the Belt to the other end as shown.

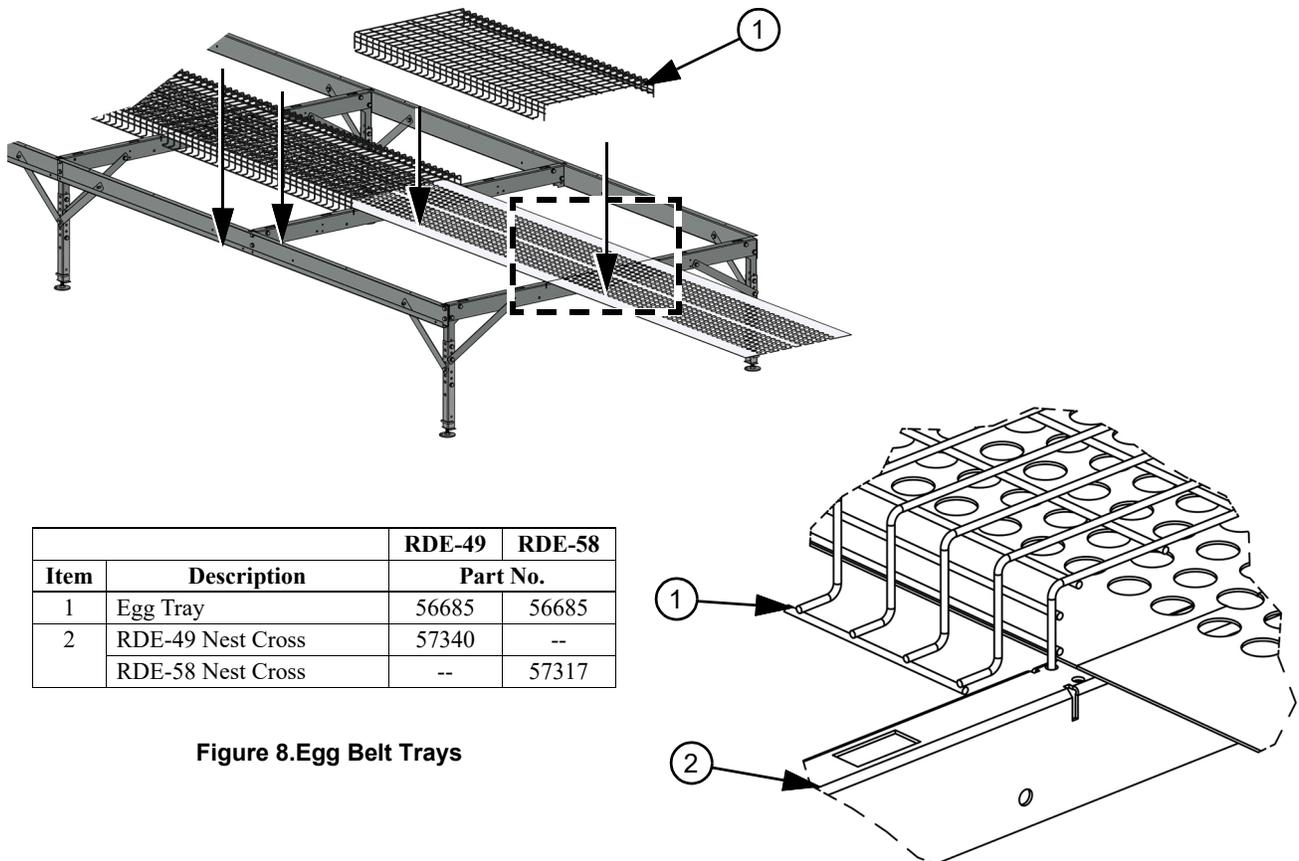


Item	Description	Part No.
1	Egg Belt [500 mm]	600512-X
	Egg Belt [250 mm]	600501-X

Figure 7.Return Egg Belt

Egg Belt Supports

1. Install Egg Belt Trays (**Item 1**) by inserting the wires into the holes in the Nest Crosses (**Item 2**) as shown.



Item	Description	RDE-49	RDE-58
		Part No.	
1	Egg Tray	56685	56685
2	RDE-49 Nest Cross	57340	--
	RDE-58 Nest Cross	--	57317

Figure 8.Egg Belt Trays

Bottom Rails/Expulsion Plates

1. Install Nest Bottom Rails (**Item 1**) in the slots in the Nest Front Rails (**Item 2**) from the front all the way to the back of the system **as shown**.
2. At Expulsion Units Install Egg Expulsion Plates (**Item 3**) **as shown**.

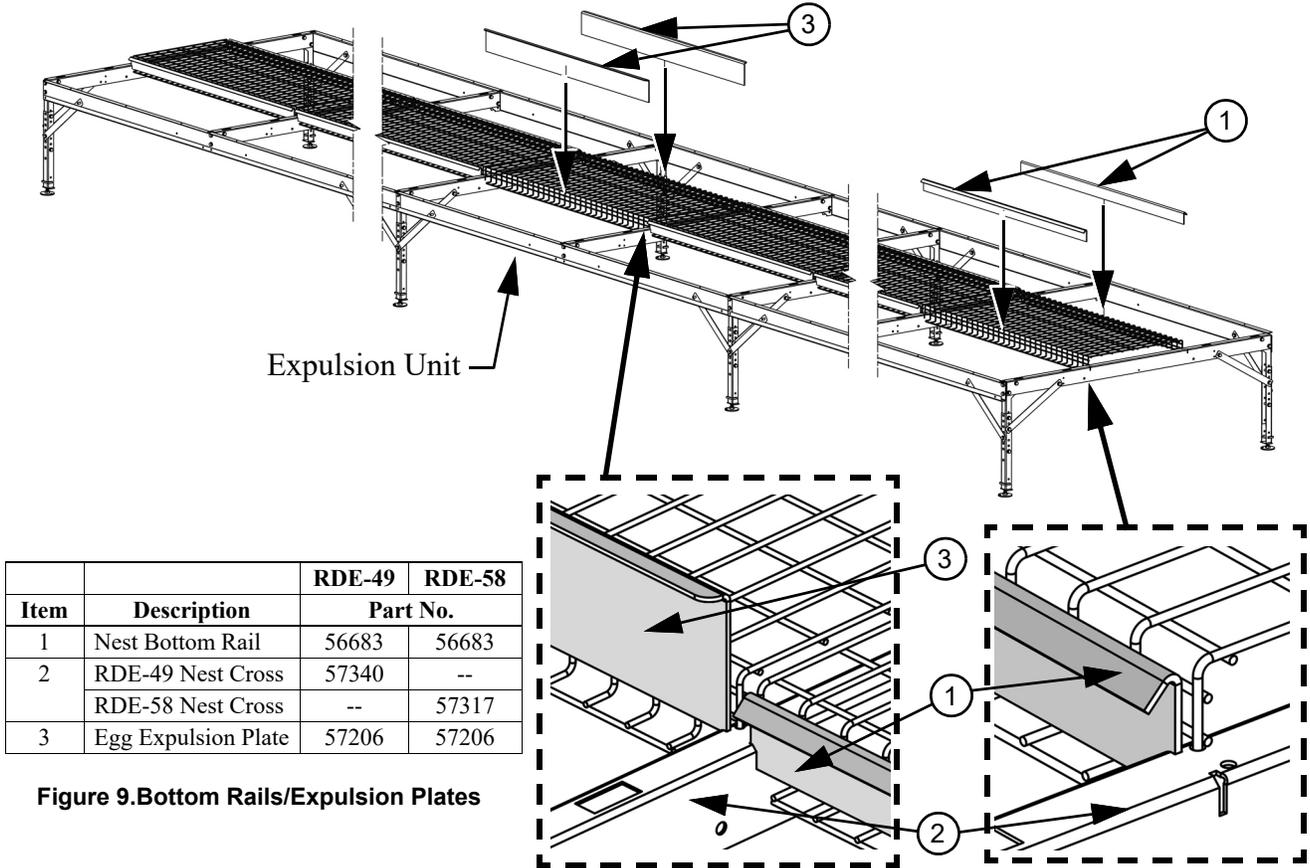


Figure 9. Bottom Rails/Expulsion Plates

Egg Belt Dividers (Two Belt System)

1. Snap Egg Belt Dividers (**Item 1**) onto the end of the Egg Trays (**Item 2**) every 47-1/2" [120.7cm] **as shown**.

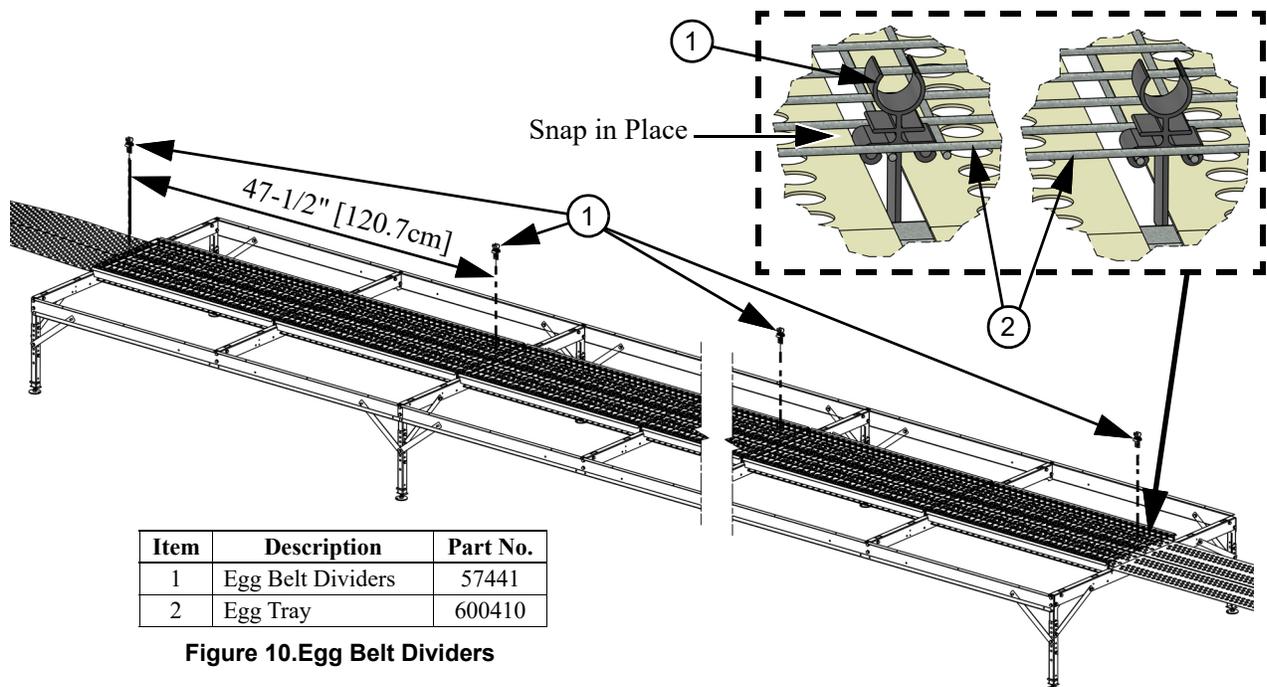


Figure 10. Egg Belt Dividers

Egg Belt Dividers

1. Feed the Egg Belt through the Return Unit (Not Shown) and pull the Belt back to the Drive Unit.
2. For Two Belt Systems, make sure that the Belt is under the Tabs of the Egg Belt Dividers (Item 1) as shown.

Lay Egg Belt on top of Egg Belt Supports and route back to Drive Unit.

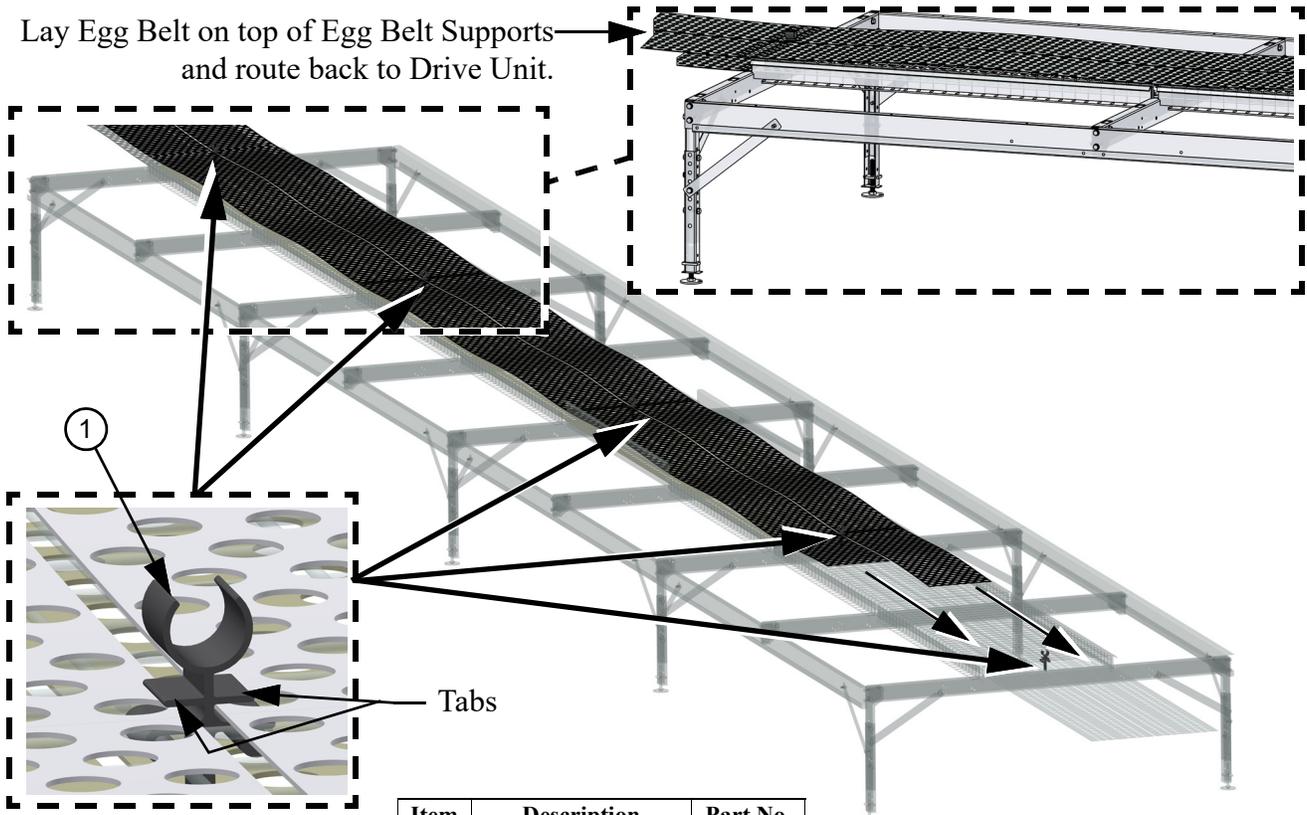


Figure 11. Egg Belt Dividers

Egg Belt Divider Tubes

1. Install 1/2" PVC Pipe (Not Included) in the Egg Belt Dividers (Item 1) as shown.

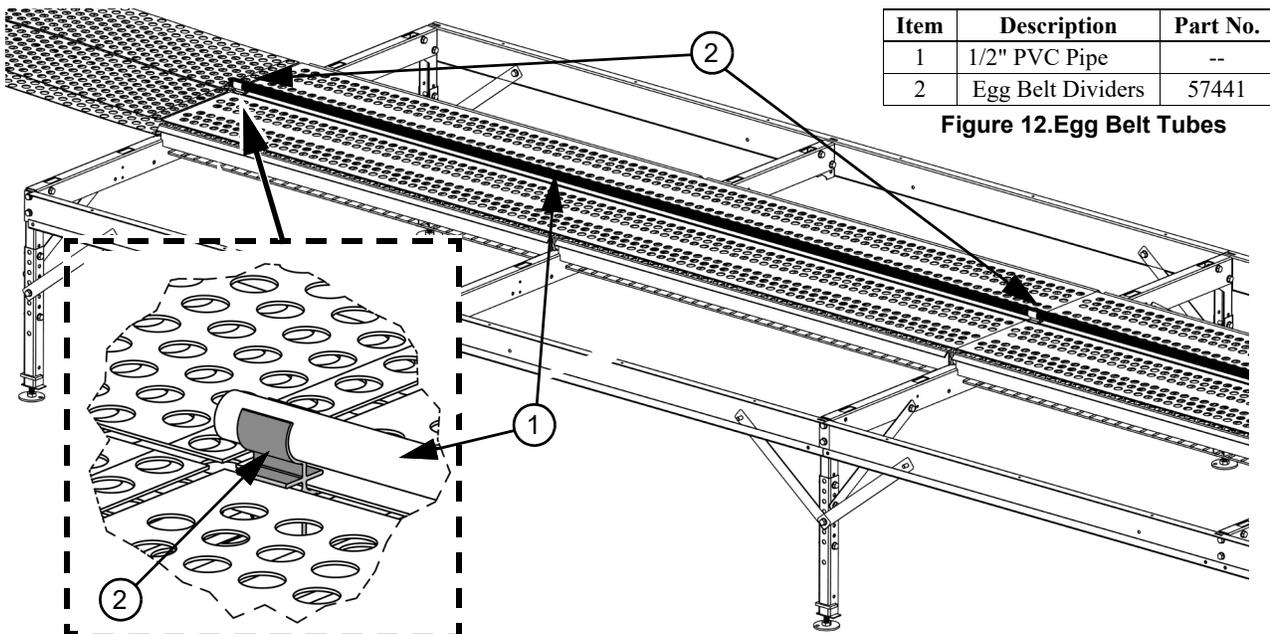
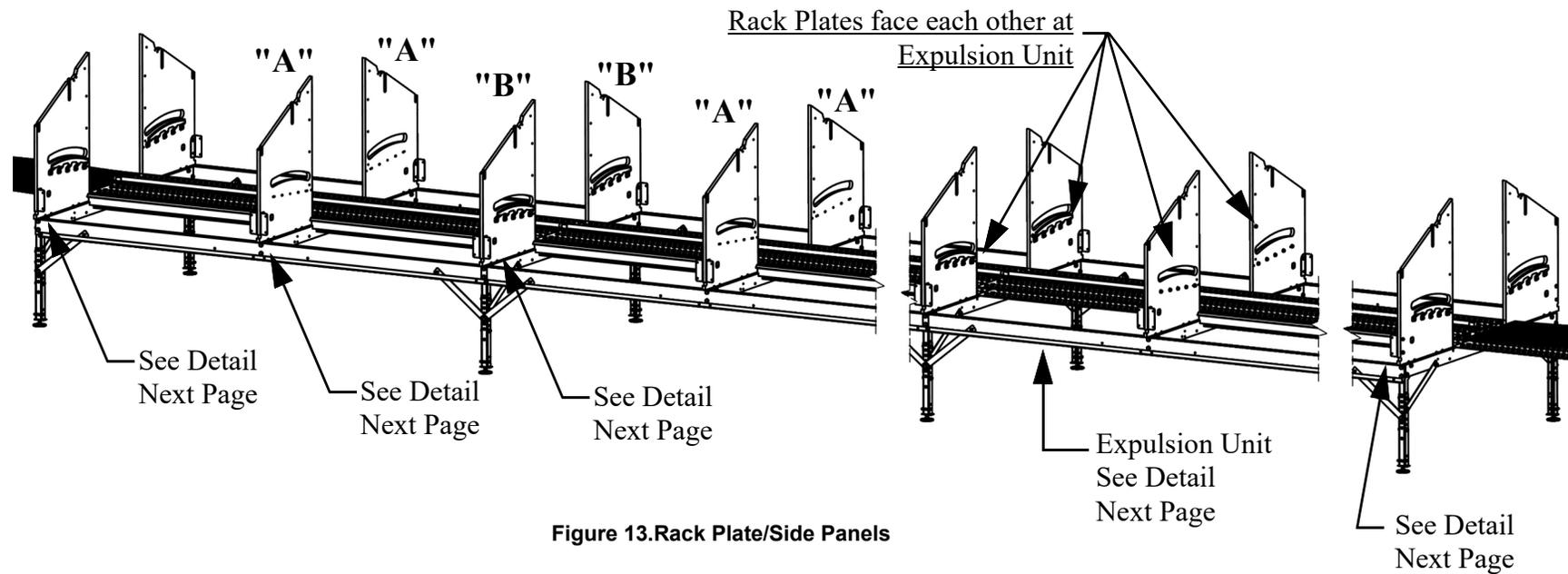


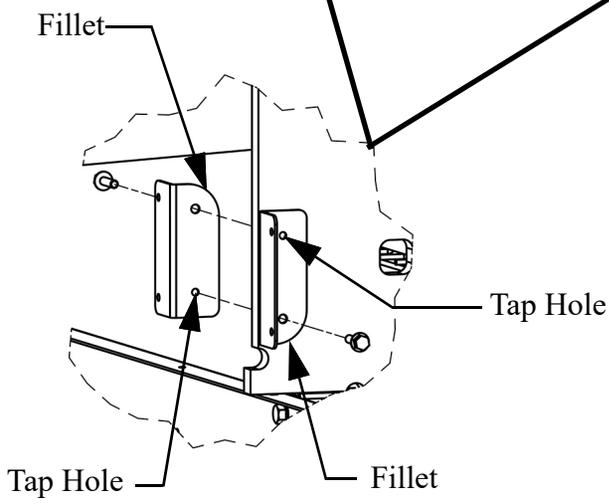
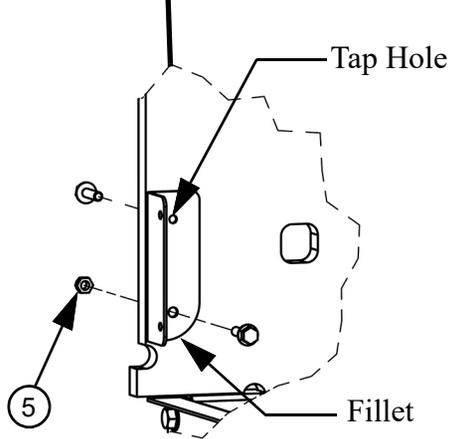
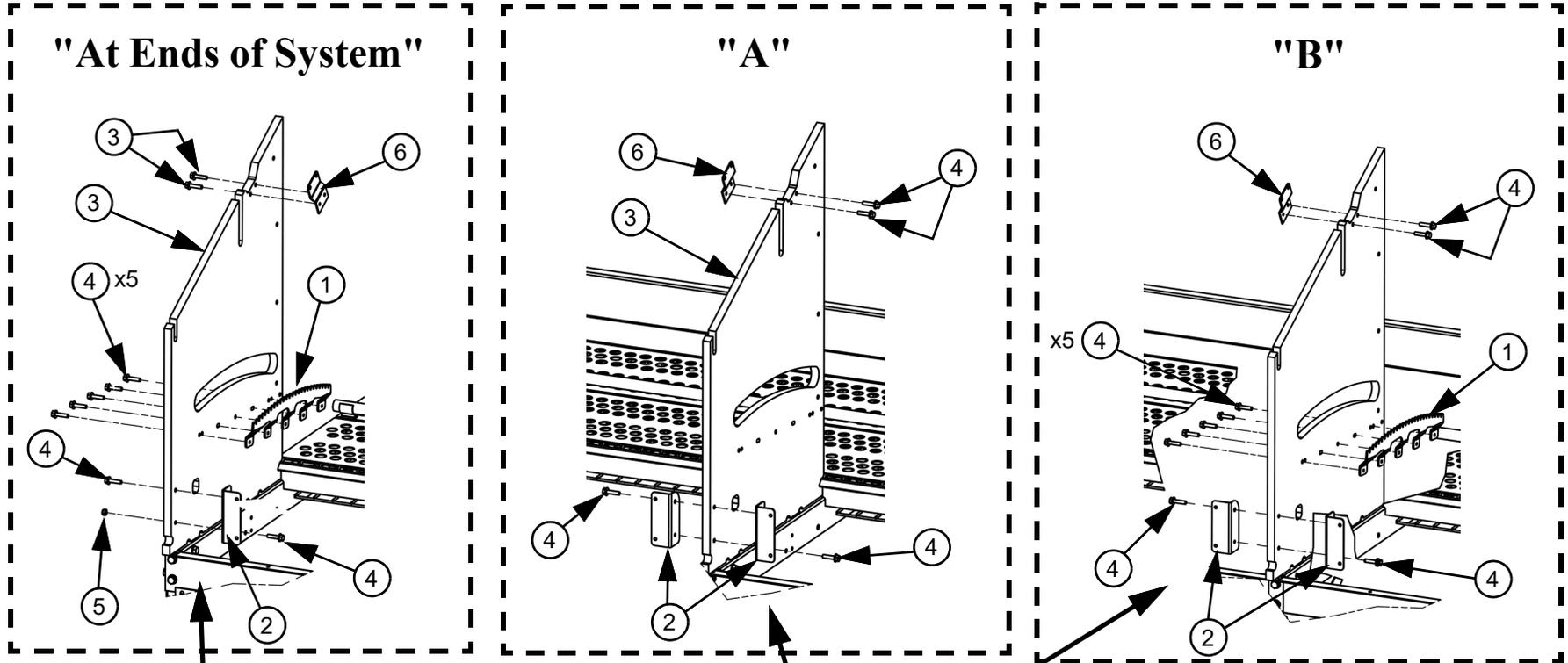
Figure 12. Egg Belt Tubes

Rack Plate/Side Panel Installation

- Attach Toothed Rack Plates (**Item 1**) and Corner Brackets (**Item 2**) to the Side Panels (**Item 3**) as shown.
 - Side Panels at end of System** get one Rack Plate and one Corner Bracket. Use Two M6 Taptites (**Item 4**) and one M6 Nut (**Item 5**).
 - "A" location Side Panels do not** get Rack Plates. Fasten two Corner Brackets with M6 Taptites using the smaller holes in the Brackets.
 - "B" location Side Panels** get a Rack Plate and two Corner Brackets
 - Side Panels at Expulsion Unit location-** Toothed Rack Plates both face each other (**towards Inside**) of the Expulsion Unit as shown.
- Continue installing Rack Plates, to the end of the system. The End Side Panels get one Corner Bracket (**See Detail**).

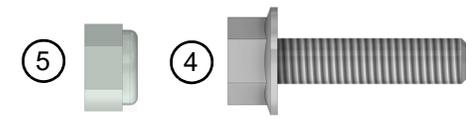
See next page for Details



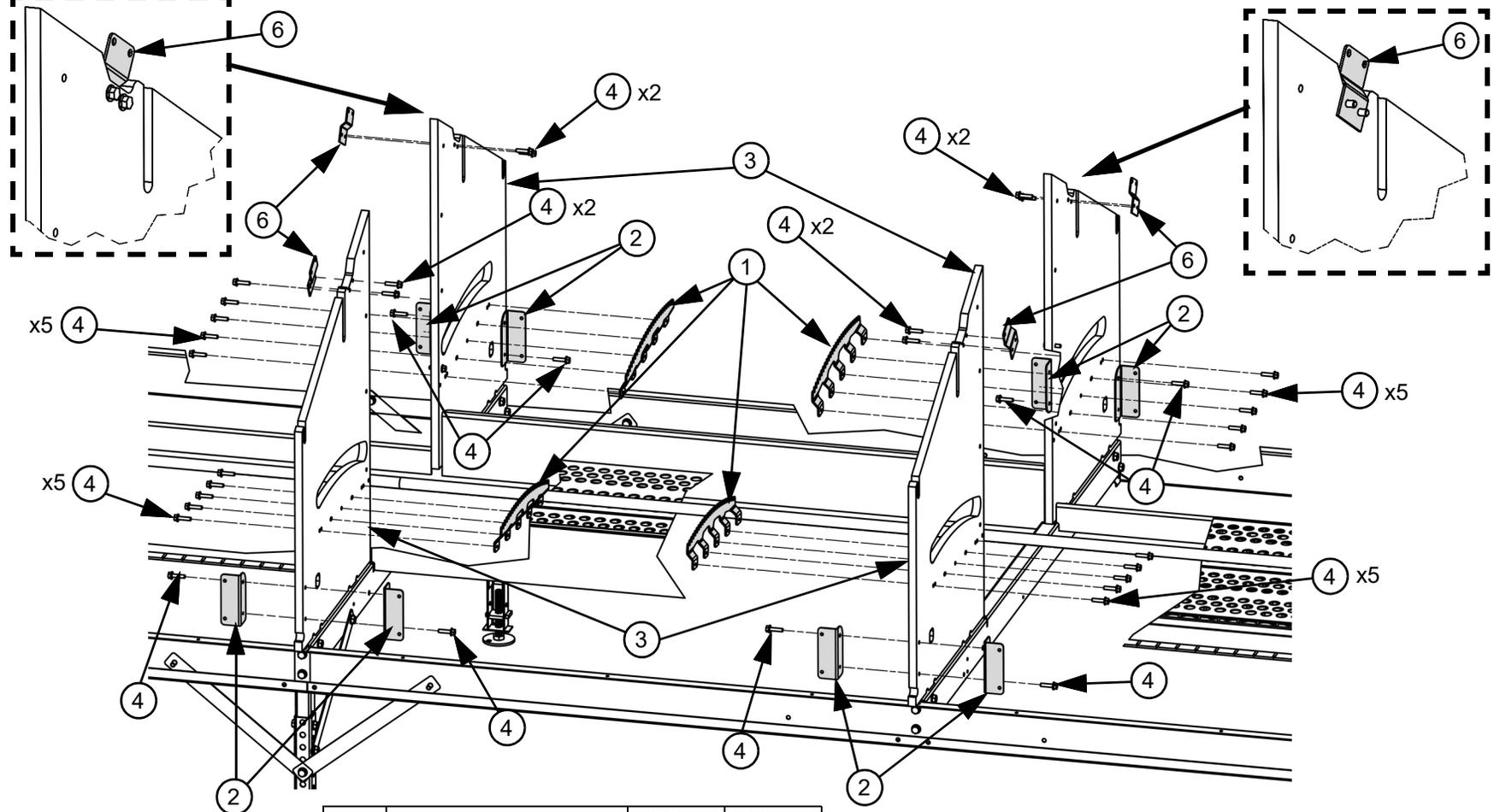


Item	Description	RDE-49	RDE-58
		Part No.	
1	RDE-49 Toothed Rack Plate	600602	--
	RDE-58 Toothed Rack Plate	--	56993
2	Corner Bracket	56692	56692
3	RDE-49 Side Panel	57335	--
	RDE-58 Side Panel	--	57333
4	M6 x 25 DIN7500-D Taptite	201067	201067
5	M6 DIN985 Lock Nut	201037	201037
6	Double Hinged Roof Z-Part	201167	201167

Figure 14. Rack Plate/Side Panels



At Expulsion Unit



Item	Description	RDE-49	RDE-58
		Part No.	
1	RDE-49 Toothed Rack Plate	600602	--
	RDE-58 Toothed Rack Plate	--	56993
2	Corner Bracket	56692	56692
3	RDE-49 Side Panel	57335	--
	RDE-58 Side Panel	--	57333
4	M6 x 25 DIN7500-D Taptite	201067	201067
5	M6 DIN985 Lock Nut	201037	201037
6	Double Hinged Roof Z-Part	201167	201167

Figure 15. Rack Plate/Side Panels

"At Expulsion Unit"

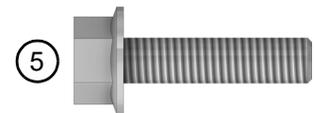
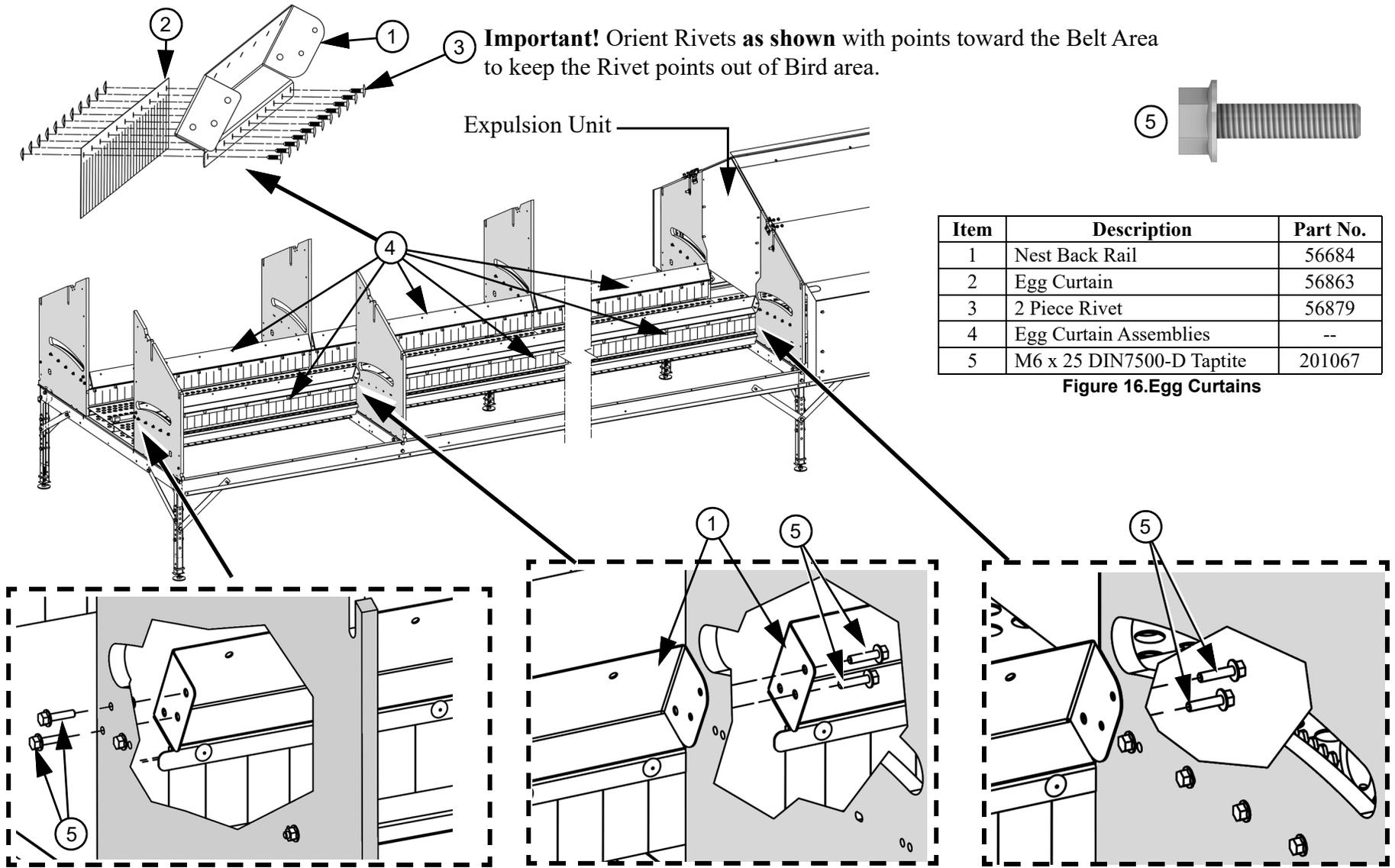


Egg Curtains

Important! Orient Rivets **as shown** with Heads toward the Belt area to keep points of Rivets are away from the bird area.

1. Assemble Nest Back Rails (**Item 1**) to Egg Curtains (**Item 2**) with 2 Piece Rivets (**Item 3**) **as shown**.
2. Attach the Egg Curtain Assemblies (**Item 4**) you just assembled to the Side Panels with M6 Taptites (**Item 5**).

Important! Orient Rivets **as shown** with points toward the Belt Area to keep the Rivet points out of Bird area.



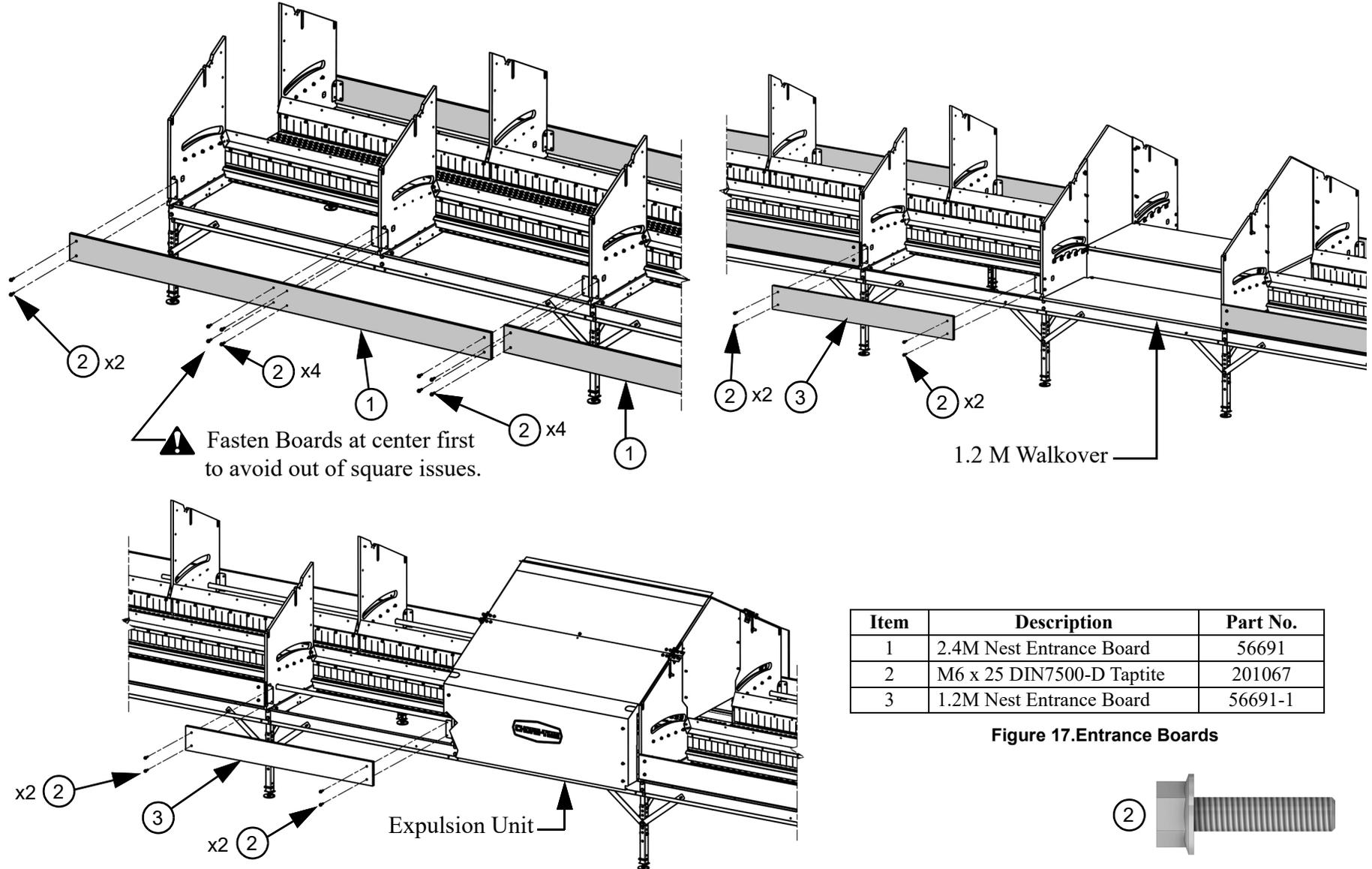
Item	Description	Part No.
1	Nest Back Rail	56684
2	Egg Curtain	56863
3	2 Piece Rivet	56879
4	Egg Curtain Assemblies	--
5	M6 x 25 DIN7500-D Taptite	201067

Figure 16.Egg Curtains

Entrance Board Installation

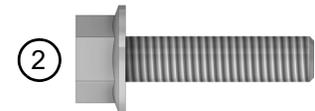
Important! When fastening Entrance Boards install Screws in center of Board first to avoid out of square issues.

1. Attach Entrance Boards (**Item 1**) to the Corner Brackets with M6 Taptites (**Item 2**) as shown.
2. At 1.2 M Walkovers and Expulsion Units use 1.2M Nest Entrance Boards (**Item 3**).



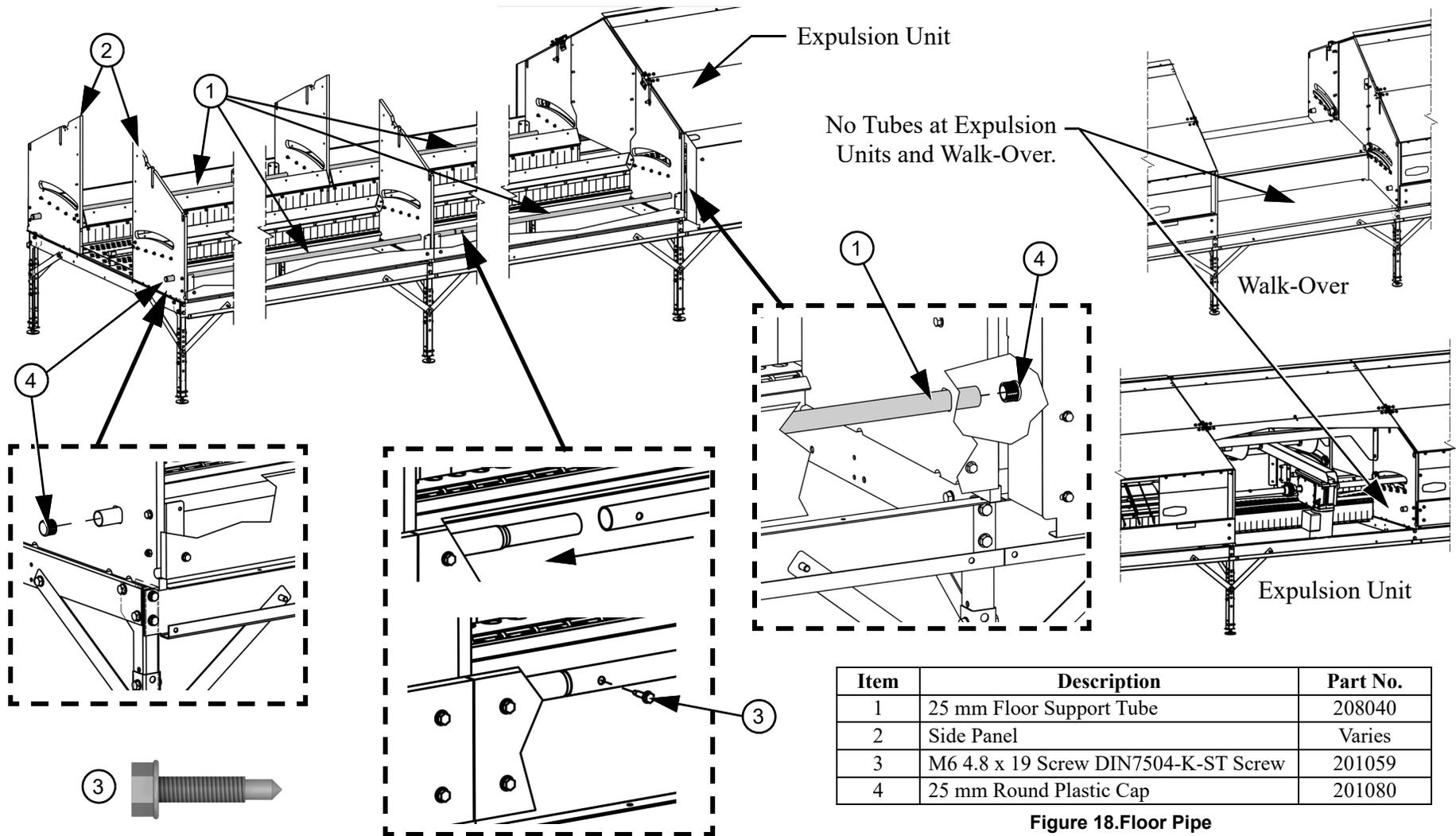
Item	Description	Part No.
1	2.4M Nest Entrance Board	56691
2	M6 x 25 DIN7500-D Taptite	201067
3	1.2M Nest Entrance Board	56691-1

Figure 17. Entrance Boards



Floor Pipe Installation

1. Install a Support Tube (**Item 1**) by inserting it into the square holes in the Side Panels (**Item 2**) as shown. Let the Tubes extend approximately 1-1/2" [3.81 cm] at the end of the system.
2. Attach Tubes together using M6 Screws (**Item 3**) in the holes provided in the Tubes.
3. Tubes need to be cut off at the Expulsion Unit and at Walkways. Cut pipes leaving 1-1/2" [3.81 cm].
4. Install Plastic Caps (**Item 4**) in the ends of all of the Floor Support Tubes.



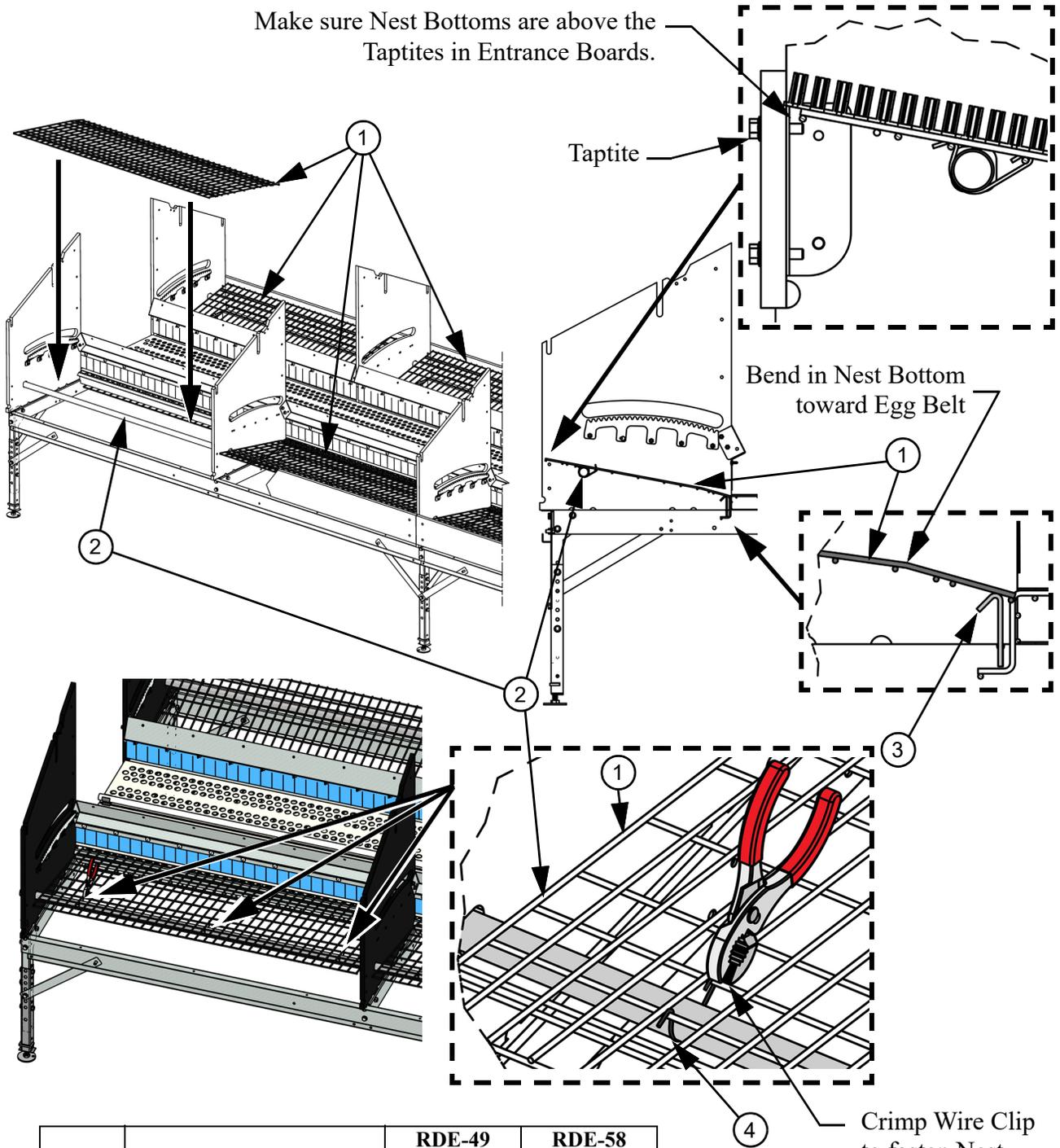
Item	Description	Part No.
1	25 mm Floor Support Tube	208040
2	Side Panel	Varies
3	M6 4.8 x 19 Screw DIN7504-K-ST Screw	201059
4	25 mm Round Plastic Cap	201080

Figure 18.Floor Pipe

Nest Bottom Installation

1. Install Nest Bottoms (**Item 1**) by centering them in each Nest section and resting them on the Floor Support Tubes (**Item 2**) and Nest Rail Bottoms **as shown**. **Note** the direction of Bend in Nest Bottom.
2. Fasten each Nest Bottom to the Floor Support Tubes by crimping on three Nest Floor Wire Clips (**Item 4**)

Make sure Nest Bottoms are above the Taptites in Entrance Boards.



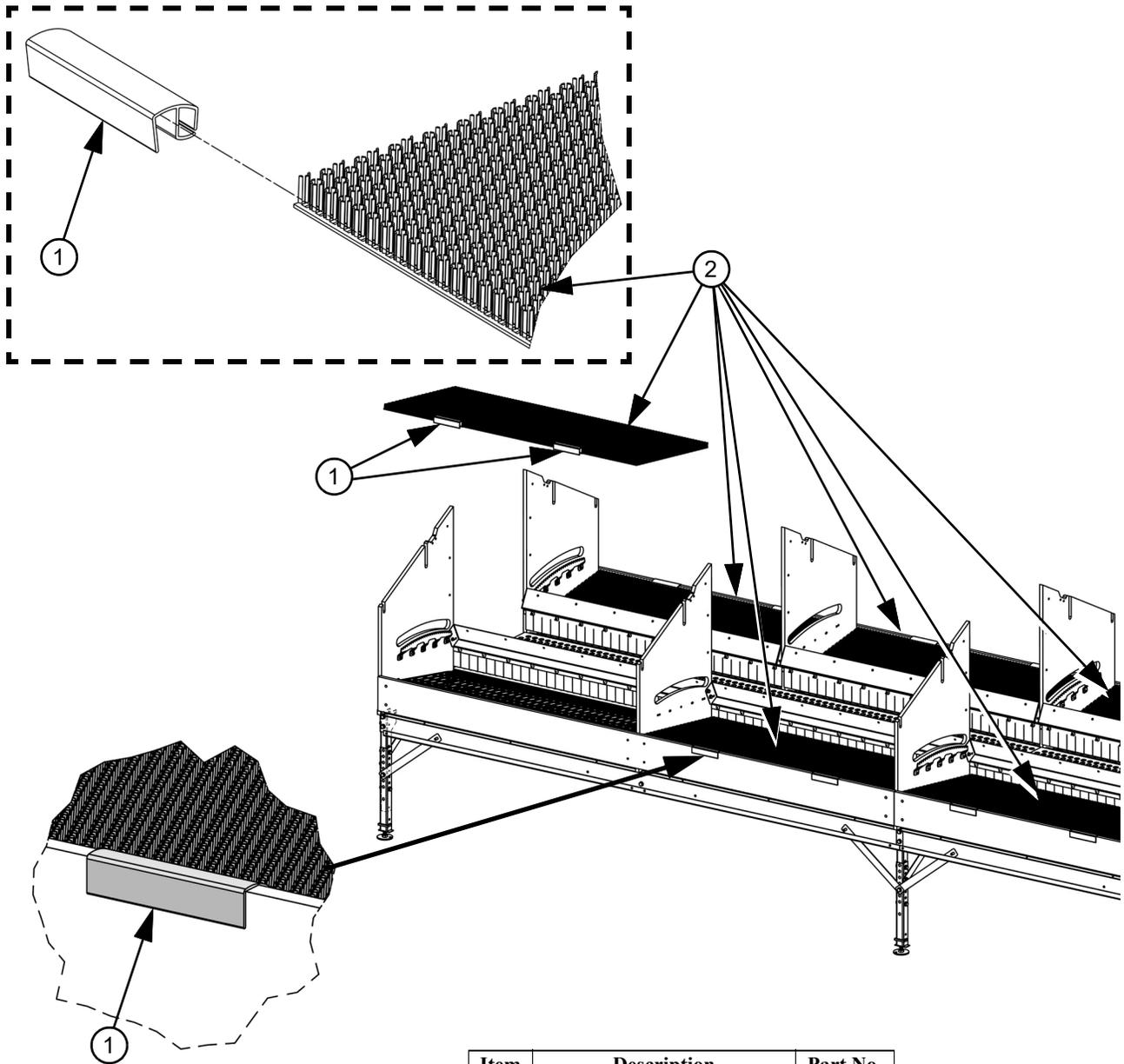
Crimp Wire Clip to fasten Nest Bottom to Floor Support Tube.

Item	Description	RDE-49	RDE-58
		Part No.	
1	RDE-49 Nest Bottom	57128	--
	RDE-58 Nest Bottom	--	57296
2	25 mm Floor Support Tube	208040	208040
3	Nest Bottom Rail	56683	56683
4	Nest Floor Wire Clip	57004	57004

Figure 19. Nest Bottom

Nest Pad Installation

1. Slide two Nest Pad Clips (Item 1) onto each nest Pad (Item 2) as shown.
2. Place the Nest Pads on the Nest Bottoms while snapping the Nest Pad Clips onto the Nest Entrance Boards.



Item	Description	Part No.
1	Nest Pad Clip	201223
2	Nest Pad	600355

Figure 20.Nest Pad Installation

Back Wall Installation

Nest Wall Brackets & Walkover/End Panels

1. Starting at the End of the System, install a Nest Wall Bracket (**Item 1**), while also attaching a Wall Start Bracket (**Item 2**), and a Walkover Panel (**Item 3**) to the RDE Side Panels with M6 Taptites (**Item 4**) as shown.
2. Continue installing Nest Wall Brackets attaching them to each other and Side Panels until reaching Expulsion Units or Walkways. See “At Expulsion Units and Walkways.” on page 22.

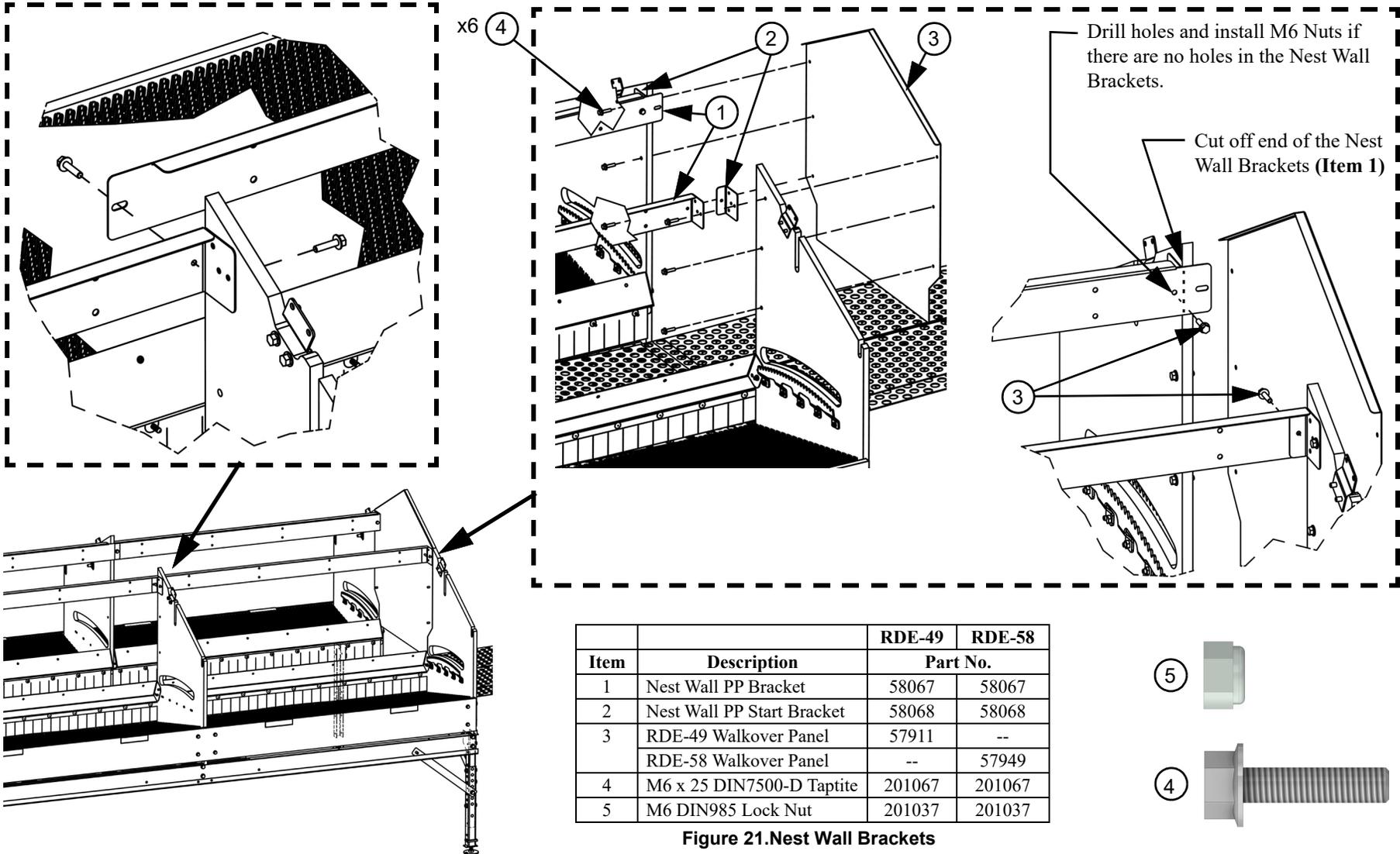
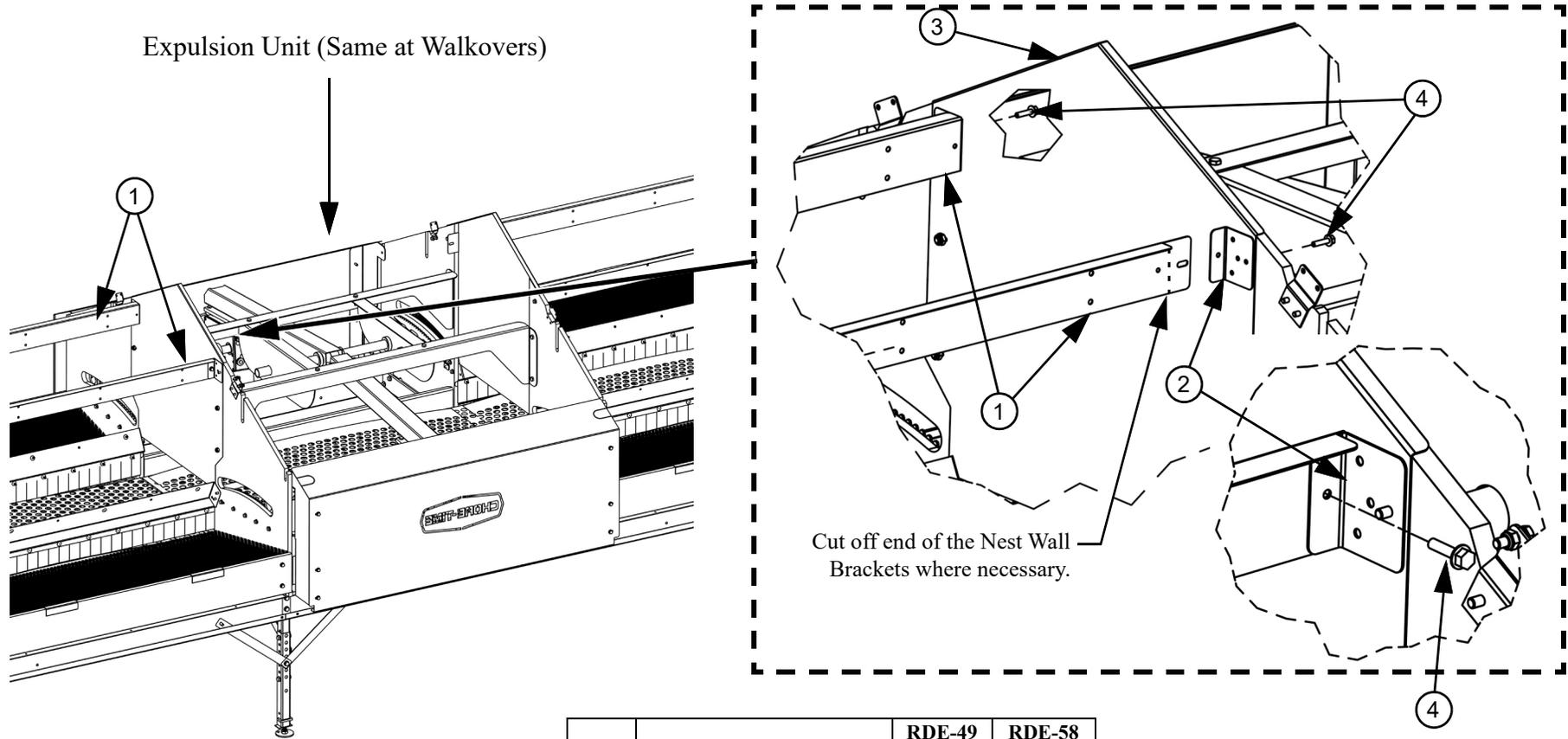


Figure 21.Nest Wall Brackets

At Expulsion Units and Walkways.

Assemblies shown with Expulsion Unit already assembled. See “Expulsion Unit” on page 24.

1. At Expulsion Units and Walkways, Cut off the ends of Nest Wall Brackets (**Item 1**) when necessary.
2. Attach Nest Wall Start Brackets (**Item 2**) to the Walkover Panels using M6 Taptites (**Item 4**).
3. Attach the Nest Wall Brackets to the Nest Wall Start Brackets or the Walkover Panels directly with M6 Taptites as shown.



Item	Description	RDE-49	RDE-58
		Part No.	
1	Nest Wall PP Bracket	58067	58067
2	Nest Wall PP Start Bracket	58068	58068
3	RDE-49 Walkover Panel	58014	--
	RDE-58 Walkover Panel	--	57640
4	M6 x 25 DIN7500-D Taptite	201067	201067

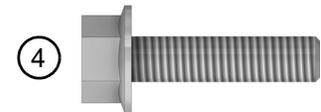
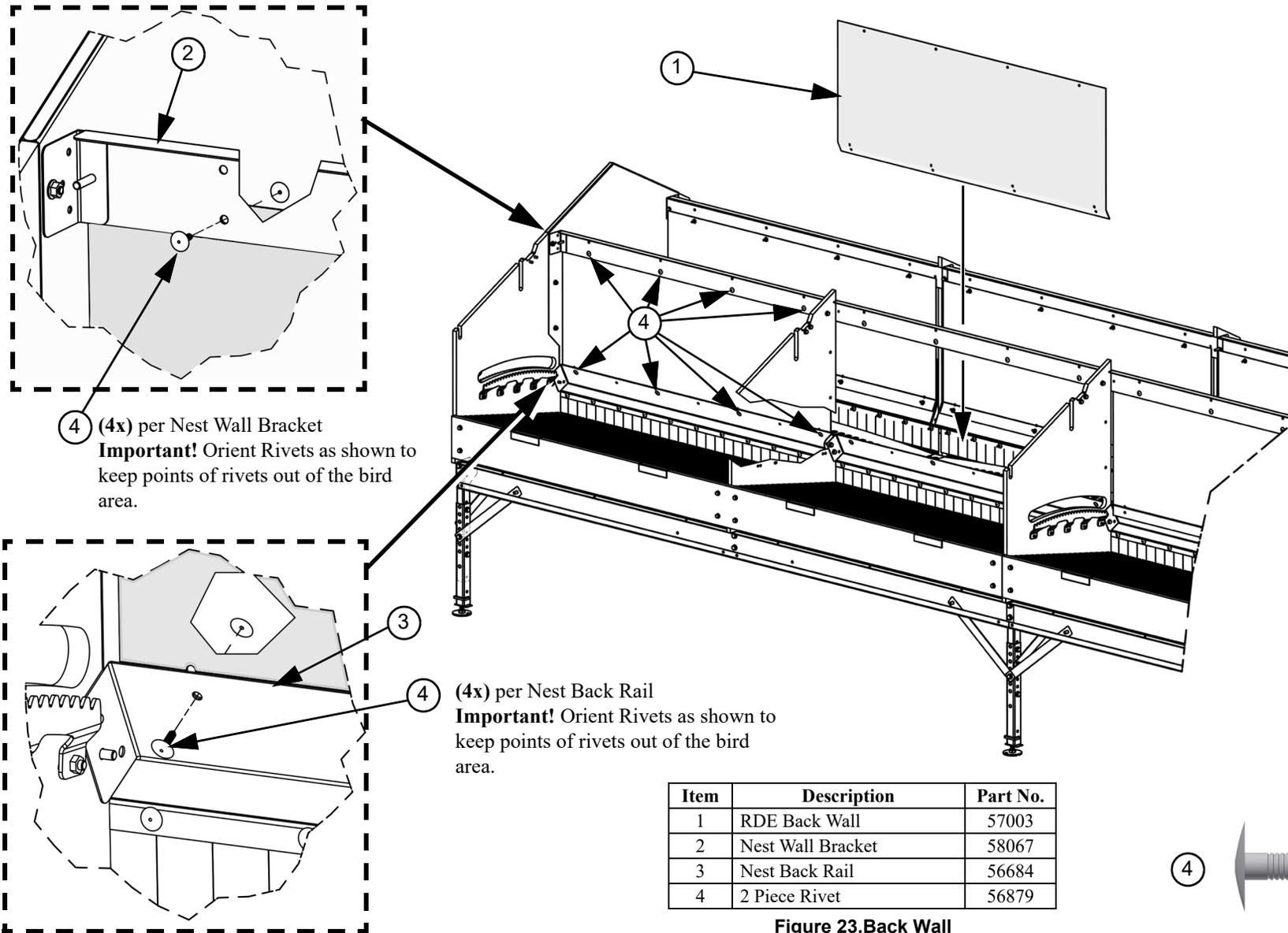


Figure 22. Nest Wall Brackets (Expulsion Units & Walkways)

Back Wall

Important! Orient Rivets as shown with Heads toward the Belt area to keep points of Rivets away from the bird area.
 1. Attach Back Walls (Item 1) to the Nest Wall Brackets (Item 2) and Nest Back Rails (Item 3) with Rivets (Item 4) as shown.



4 (4x) per Nest Wall Bracket
Important! Orient Rivets as shown to keep points of rivets out of the bird area.

4 (4x) per Nest Back Rail
Important! Orient Rivets as shown to keep points of rivets out of the bird area.

Item	Description	Part No.
1	RDE Back Wall	57003
2	Nest Wall Bracket	58067
3	Nest Back Rail	56684
4	2 Piece Rivet	56879

Figure 23.Back Wall

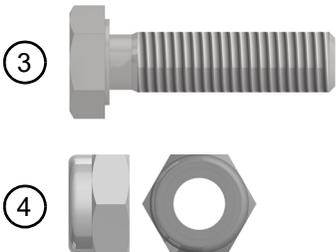
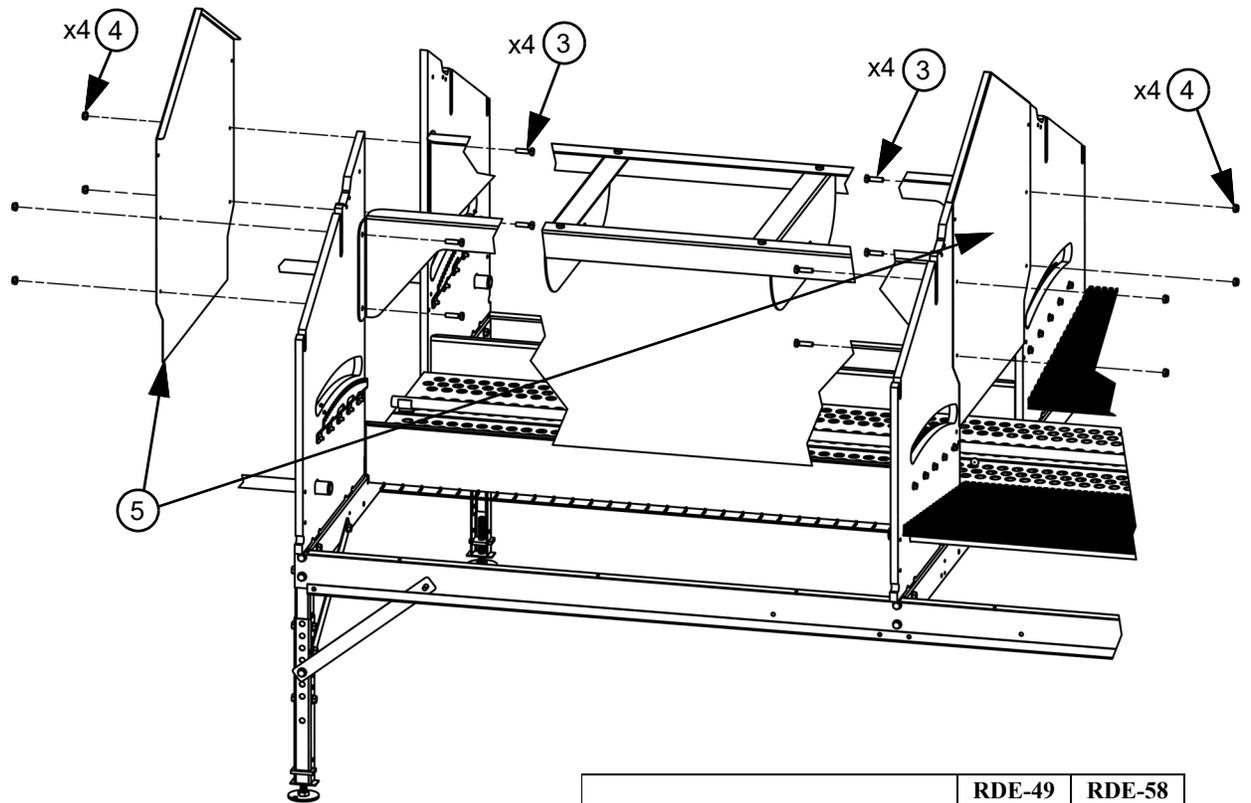
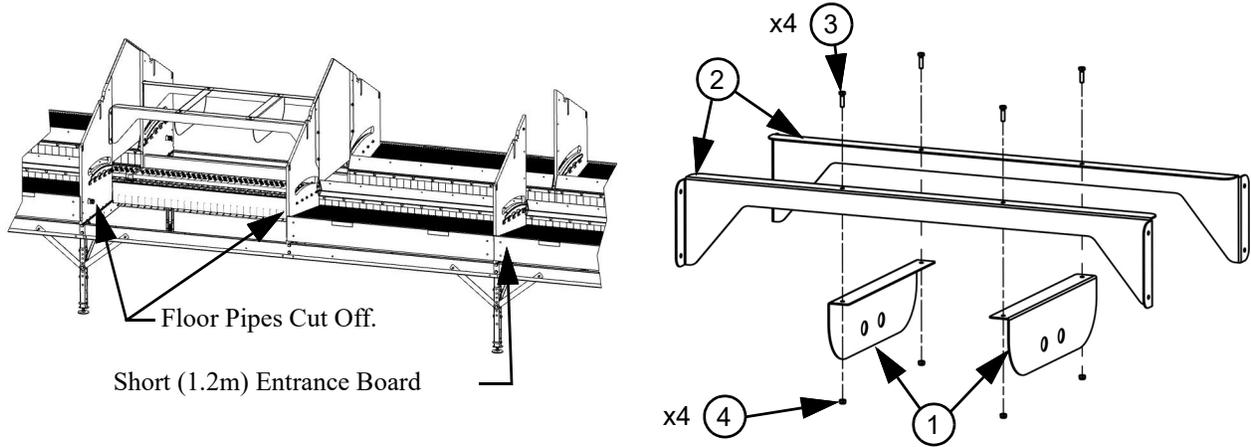
Expulsion Unit

Expeller Tube Support & Crosses

1. Fasten Expeller Tube Supports (Item 1) to Expeller Mount Crosses (Item 2) with M8 Hardware as shown.
2. Put Walkover Panels in place and use the same Hardware to fasten the Expeller Mount Crosses to the Side Panels.

Note: 1) No Floor Pipe or Nest Pad at Expulsion Unit. See “Floor Pipe Installation” on page 18.

- 2) Use short Entrance Boards at Expulsion Units. See “Entrance Board Installation” on page 17.

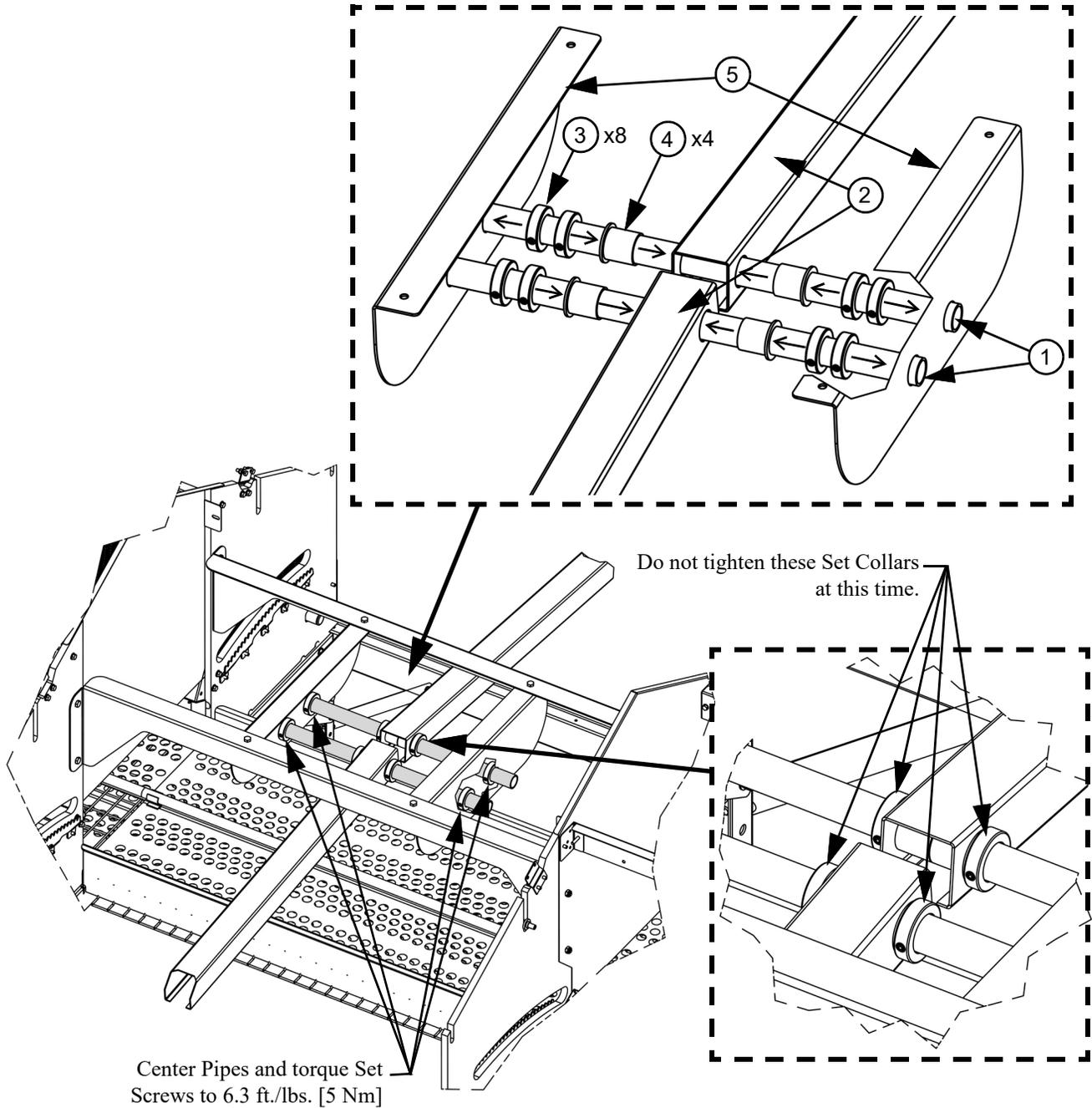


Item	Description	RDE-49	RDE-58
		Part No.	
1	Expeller Tube Support	57188	57188
2	Expeller Mount Cross	57187	57187
3	M8 x 30 DIN933 Hex Bolt	201007	201007
4	M8 DIN985 Lock Nut	201003	201003
5	Walkover Panel	57911	57949

Figure 24. Expeller Tube Support & Crosses

Expeller Pipes

1. Insert Expeller Pipes (**Item 1**) into the Expeller Mounting Profiles (**Item 2**).
 2. Slide Set Collars (**Item 3**) and Slide Bearings (**Item 4**) onto the Pipe and Insert the Pipe into the Expeller Tube Supports (**Item 5**) as shown.
 3. Center the Pipes in the Tube Supports and torque the Outside Set Collars to 6.3 ft./lbs. [5 Nm].
- Important!** Do not torque the inside Set Collars at this time (See Figure).

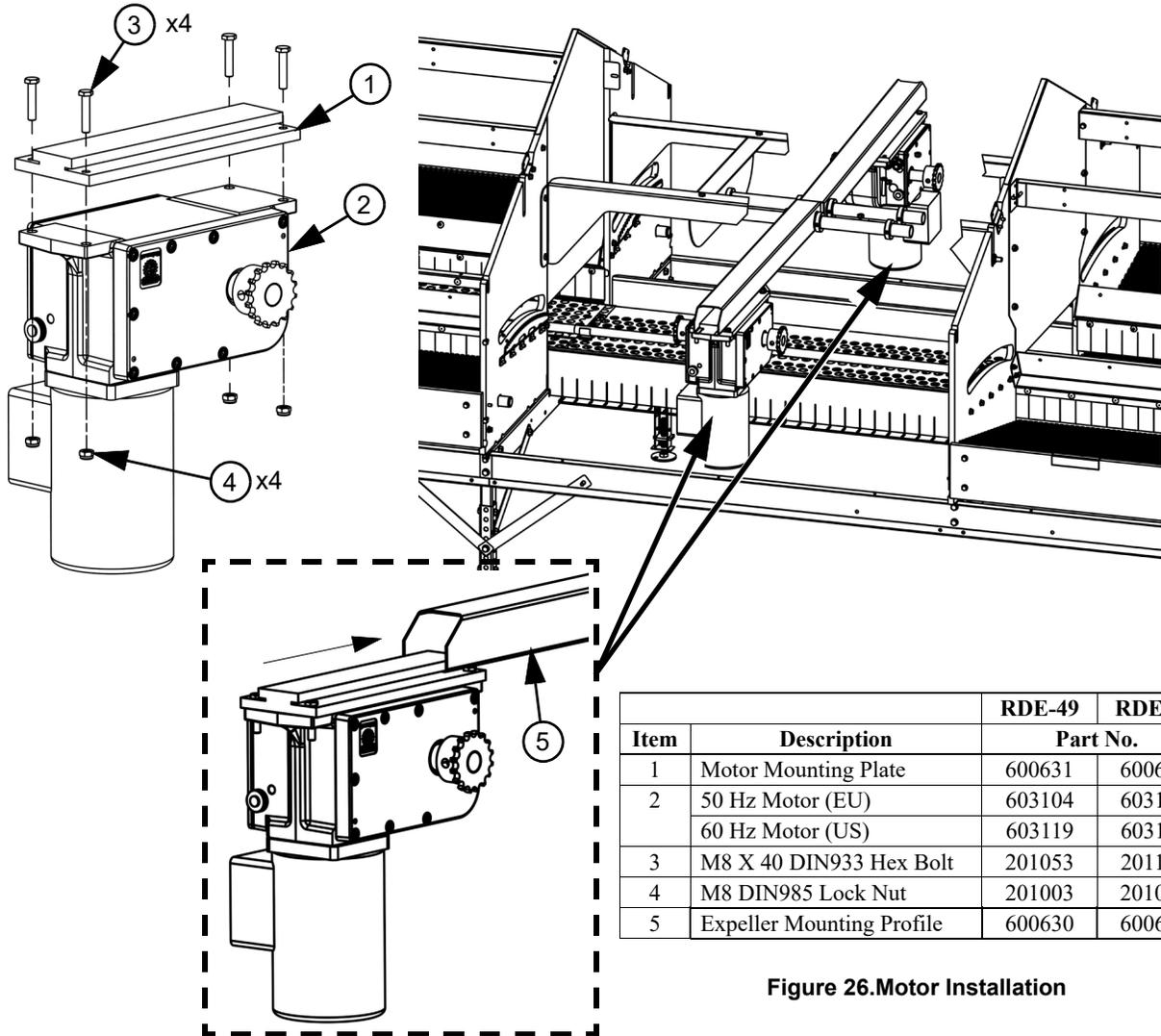


Item	Description	RDE-49	RDE-58
		Part No.	
1	500 MM RDE Mounting Profile Expeller Pipe	600638	600638
2	Expeller Mounting Profile	600630	600646
3	32 MM DIN705A Set Collar	201140	201140
4	30x34x26MM Plastic Axle Slide Bearing	201139	201139
5	Expeller Tube Support	57188	57188

Figure 25.Expeller Pipes

Motor Installation

1. Fasten Motor Mounting Plates (**Item 1**) to the Motors (**Item 2**) with M8 Hardware as shown.
2. Slide the Motors onto the Expeller Channels (**Item 5**) as shown.



Item	Description	RDE-49	RDE-58
		Part No.	
1	Motor Mounting Plate	600631	600631
2	50 Hz Motor (EU)	603104	603104
	60 Hz Motor (US)	603119	603119
3	M8 X 40 DIN933 Hex Bolt	201053	201140
4	M8 DIN985 Lock Nut	201003	201067
5	Expeller Mounting Profile	600630	600646

Figure 26.Motor Installation

Expulsion Tube Installation

1. Fasten Expulsion Shaft Couplings (**Item 1**) to the Motor Shaft Couplings using Chain and Shackle Duplex's (**Item 2**) as shown.
2. Insert Expulsion Shafts (**Item 3**) in the Slots in the Side Panels and slide on Toothed Wheels (**Item 4**) oriented with Teeth in the direction **shown**.
3. Insert the Expulsion Shafts (**Item 3**) into the Expulsion Shaft Couplings and Fasten with M8 Hardware.
4. **Do Not** tighten Set Screws on the Toothed Wheels at this time.

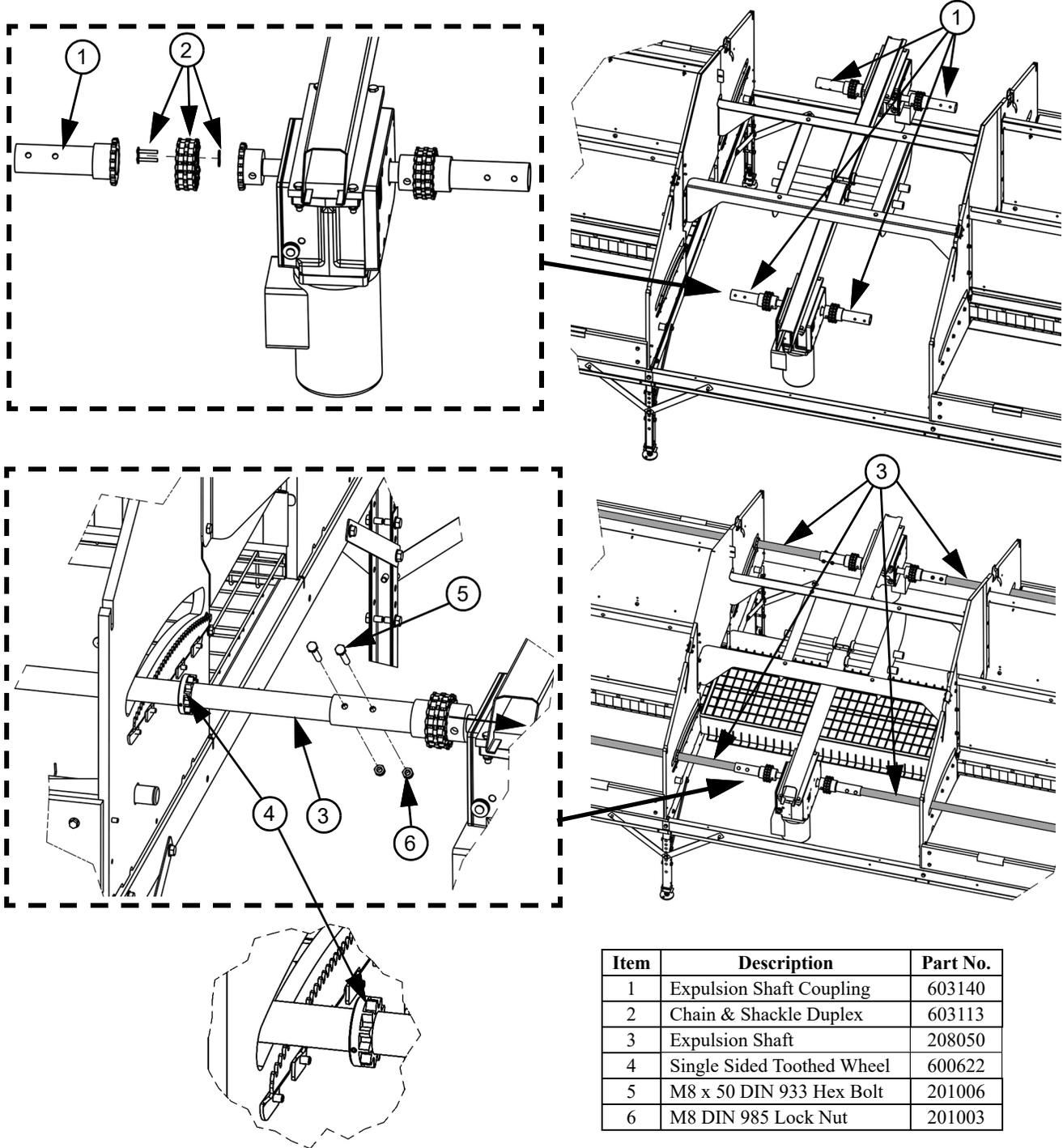
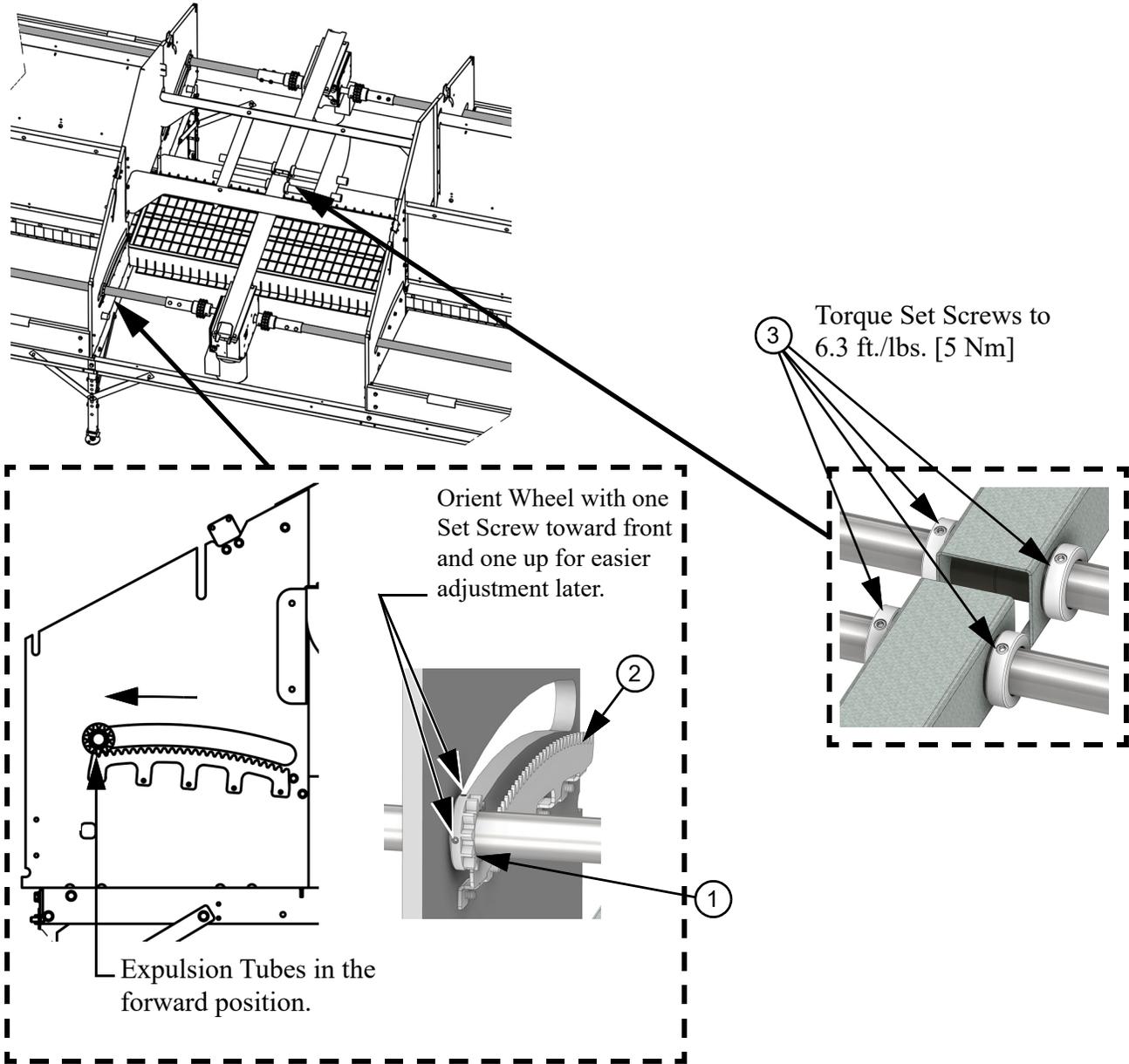


Figure 27. Expulsion Tube Installation



5. Move the Expulsion Shafts all the way toward the front of the Nest **as shown**.
6. Line up the Teeth in the Toothed Wheels (**Item 1**) with the Teeth on the Toothed Rack Plates (**Item 2**). Orient Toothed Wheels with one Set Screw toward the front of Nest and the other up **as shown**. This will make adjustment easier later! **Do Not** tighten Set Screws on Toothed Wheels at this time.
7. Tighten the four Set Collars on the Mounting Profile Expeller Pipes (**Item 3**) to 6.3 ft./lbs. [5 Nm].
8. **Do not** tighten Set Screws on Toothed wheels at this time.



Item	Description	RDE-49	RDE-58
		Part No.	
1	Single Sided Toothed Wheel	600622	600622
2	RDE-49 Toothed Rack Plate	600602	--
	RDE-58 Toothed Rack Plate	--	56993
3	32 MM DIN705A Set Collar	201140	201140

Figure 28. Expulsion Tube Installation continued

Expulsion Shafts

Connections

There is a Single Sided Toothed Wheel at every Side Panel that has a Toothed Rack Plate.

1. **Important!** Make Sure that the Expulsion Shafts are in the forward position.
2. Set a Single Sided Toothed Wheel (**Item 1**) on every Toothed Rack Plate (**Item 2**) orienting them with the Set Screws facing toward front and top of nest **as shown. Do not** Tighten Set Screws at this time.
3. Slide the Expulsion Tubes (**Item 3**) through the Toothed Wheels and connect them together with M8 x 50 Bolts (**Item 4**) and M8 Locking Nuts (**Item 5**).
4. Continue connecting Expulsion Tubes until you reach a Walkover, Expulsion Unit, or the end of the system. **Do Not** tighten set screws on Toothed wheels at this time.

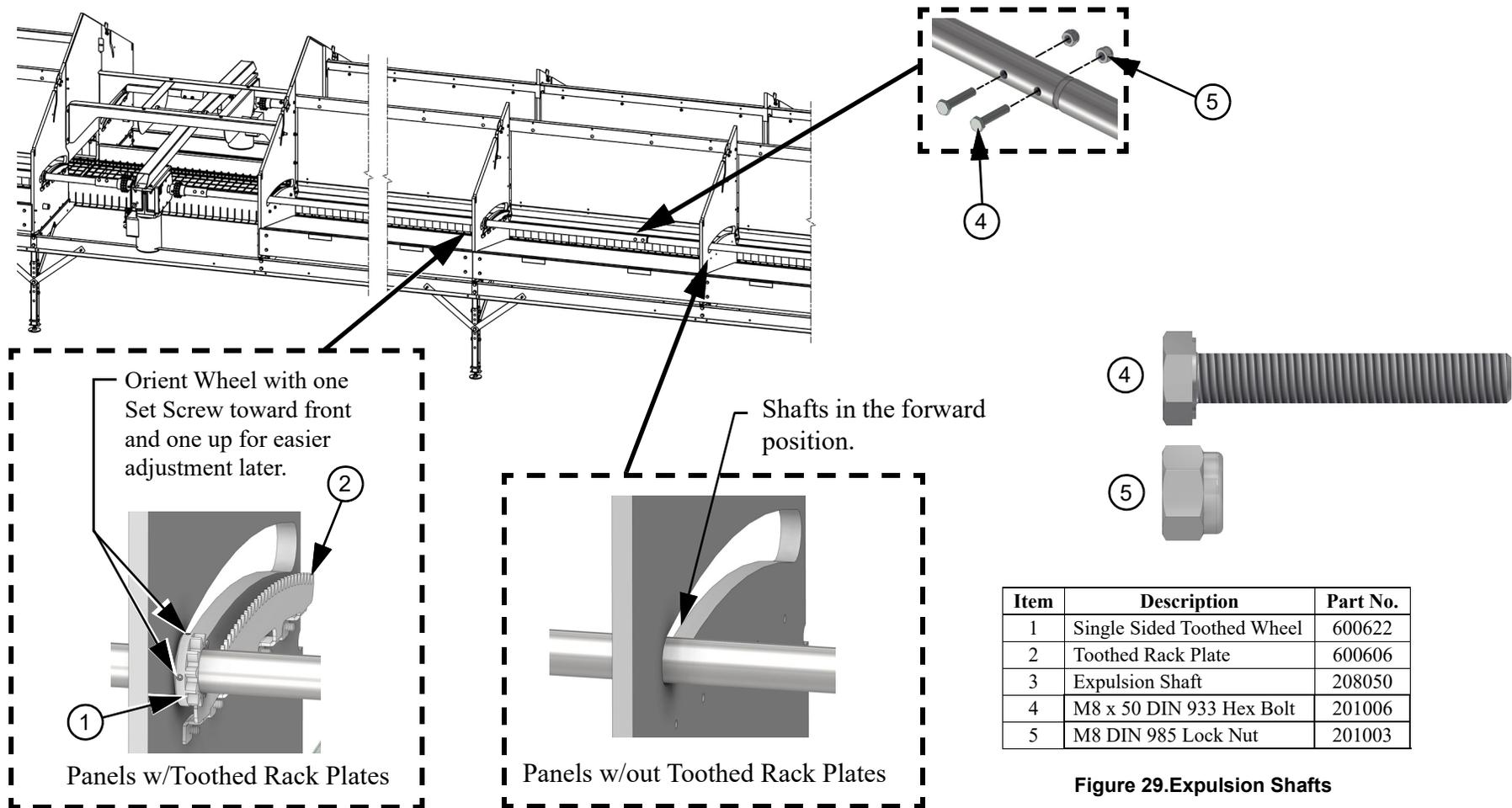


Figure 29. Expulsion Shafts

Expulsion Shafts/Caps

Ends of System, Walkovers, Expulsion Units

1. Continue Connecting Expulsion Shafts (Item 1) together (See Figure) until you reach a Walkover, Expulsion Unit, or the end of the system.
2. Cut Shafts off at Walkovers and the End of the System and Install Expulsion Shaft Caps (Item 2) as shown.
3. **Important!** Do not tighten the Toothed Wheels at this time. They will be tightened in the next step.

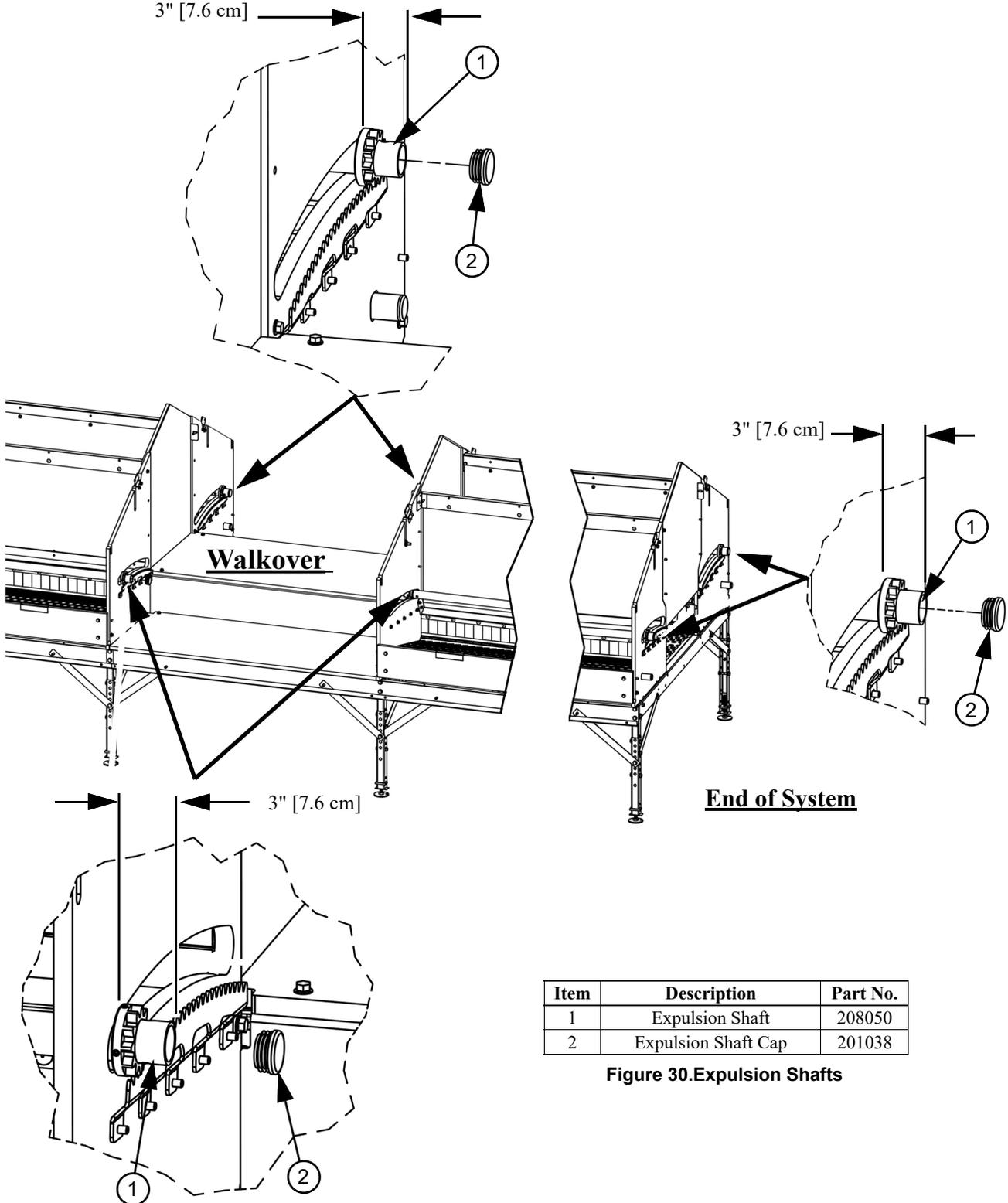
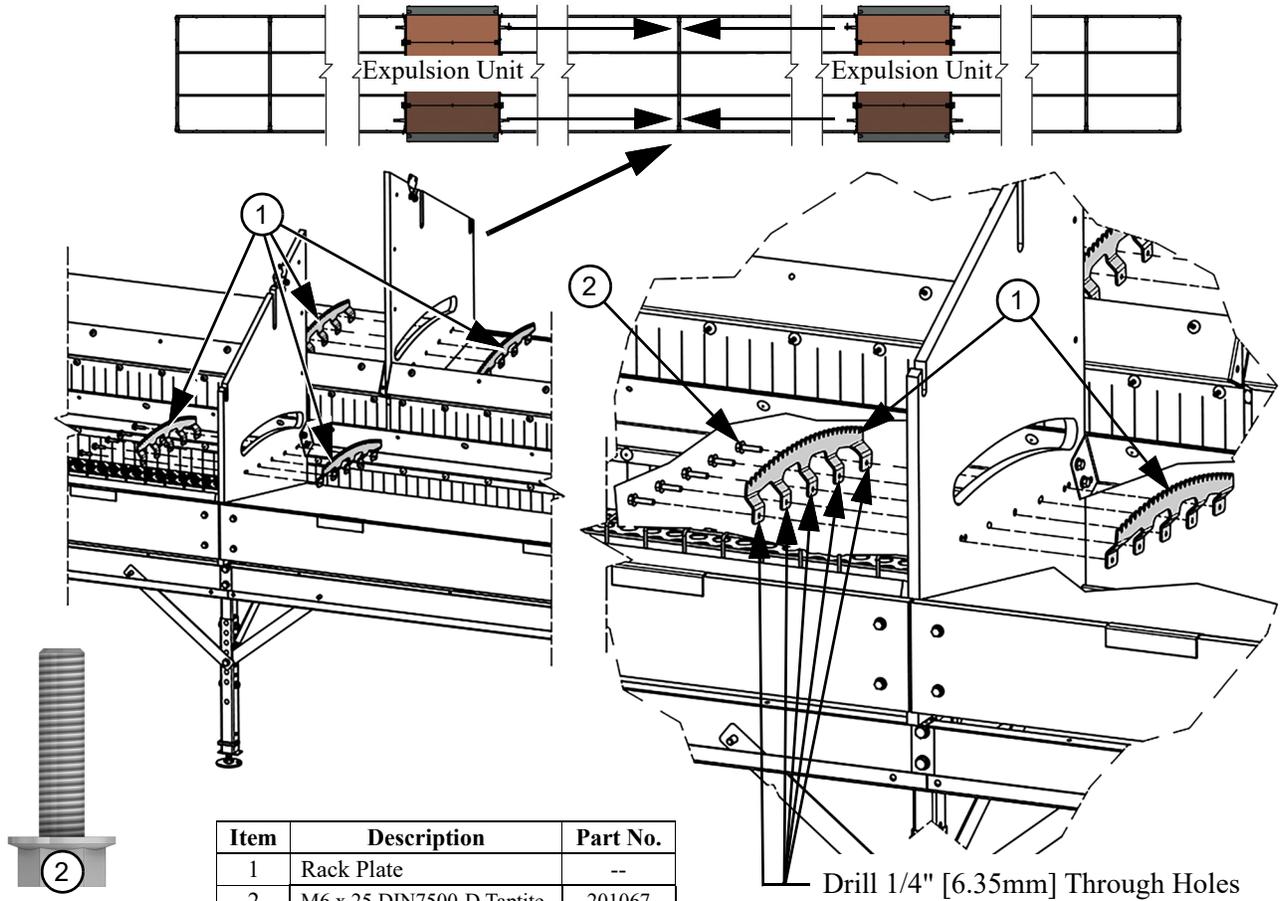


Figure 30. Expulsion Shafts

Center of System (Systems more than 50 sections with two Expulsion Units)

Expulsion Shafts need to be cut and separated at the center between Expulsion Units so Rack Plates and Toothed Wheels are required at the end of each of the Tubes.

1. Drill the five holes out to 1/4" [6.35mm] in two Rack Plates (**Item 1**).
2. Use M6 Taptites (**Item 2**) in those through holes to attach Rack Plates to Panels **as shown**.



Item	Description	Part No.
1	Rack Plate	--
2	M6 x 25 DIN7500-D Taptite	201067

Figure 31. Expulsion Shafts (More than 50 sections)

3. Cut off both Expulsion Shaft (Item 1) Flush with the RDE Panel as shown.
4. Install Expulsion Shaft Caps (Item 2) in the end of the Shafts.
5. Install Single Sided Toothed Wheels (Item 2), as shown. Do not tighten Set Screws at this time.

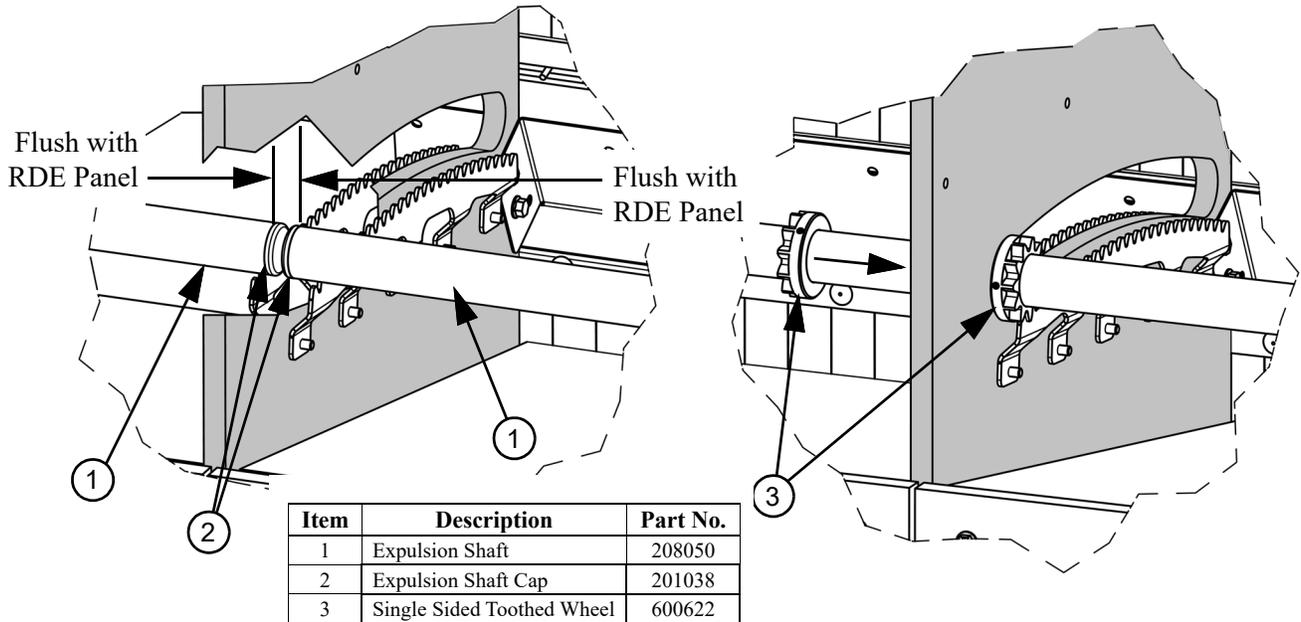


Figure 32. Expulsion Shafts (Caps)

6. Temporarily Set a spare Toothed Wheel on the Rack Plates (Item 1) to use as a guide to position the Tube Hold Downs (Items 2 & 3) as shown. Make sure Notches are oriented toward Belt area. Leave a 1/16" [1.6mm] Gap between the top of the Toothed Wheels and the RDE Tube Hold Downs.
7. Drill three 1/4" [6.35mm] holes in each RDE Side Panels using the holes as guides as shown.
8. Fasten the RDE Tube Hold Downs to the Side Panels with M6 hardware.

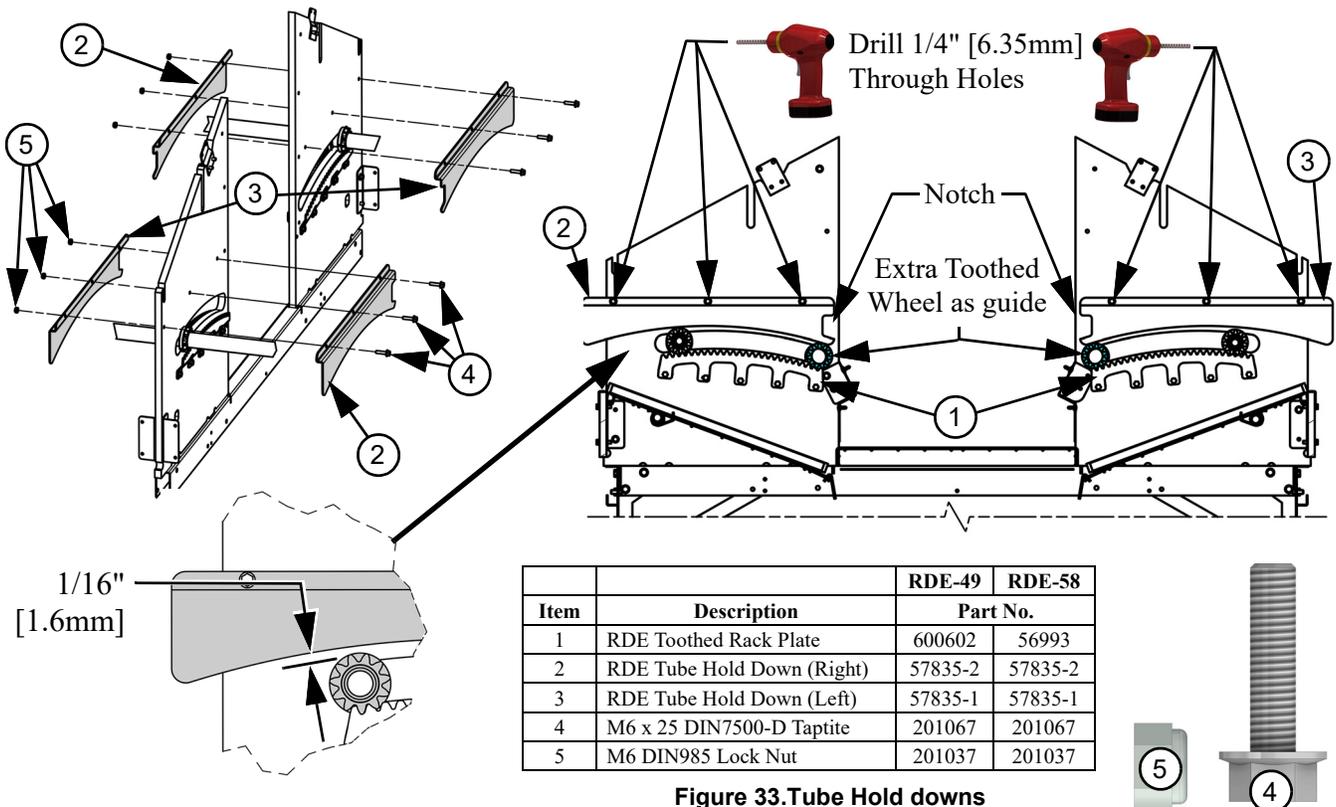


Figure 33. Tube Hold downs

Tightening down Toothed Wheels on Expulsion Shafts

1. Make sure the Expulsion Tubes are all toward the front of the nest as **shown**.
2. **Important!** Rotate the Toothed Wheels so the Set Screws are toward the front and top of the nest and torque all of the Set Screws to 6.3 ft./lbs. [5 Nm]. Proper orientation of the Set Screws allows for easy adjustment later.

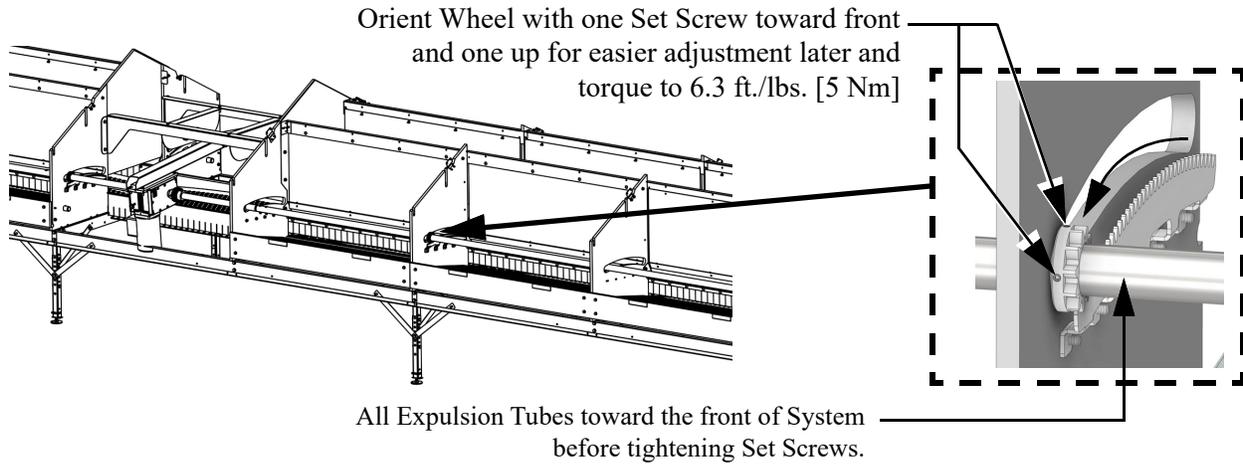


Figure 34. Tightening Down Toothed Wheels to Expulsion Shafts

Expulsion Unit Cover

Side Braces

1. Fasten Cover Side Braces (Items 1 & 2) with M6 x 16 Bolts (Item 3) as shown.

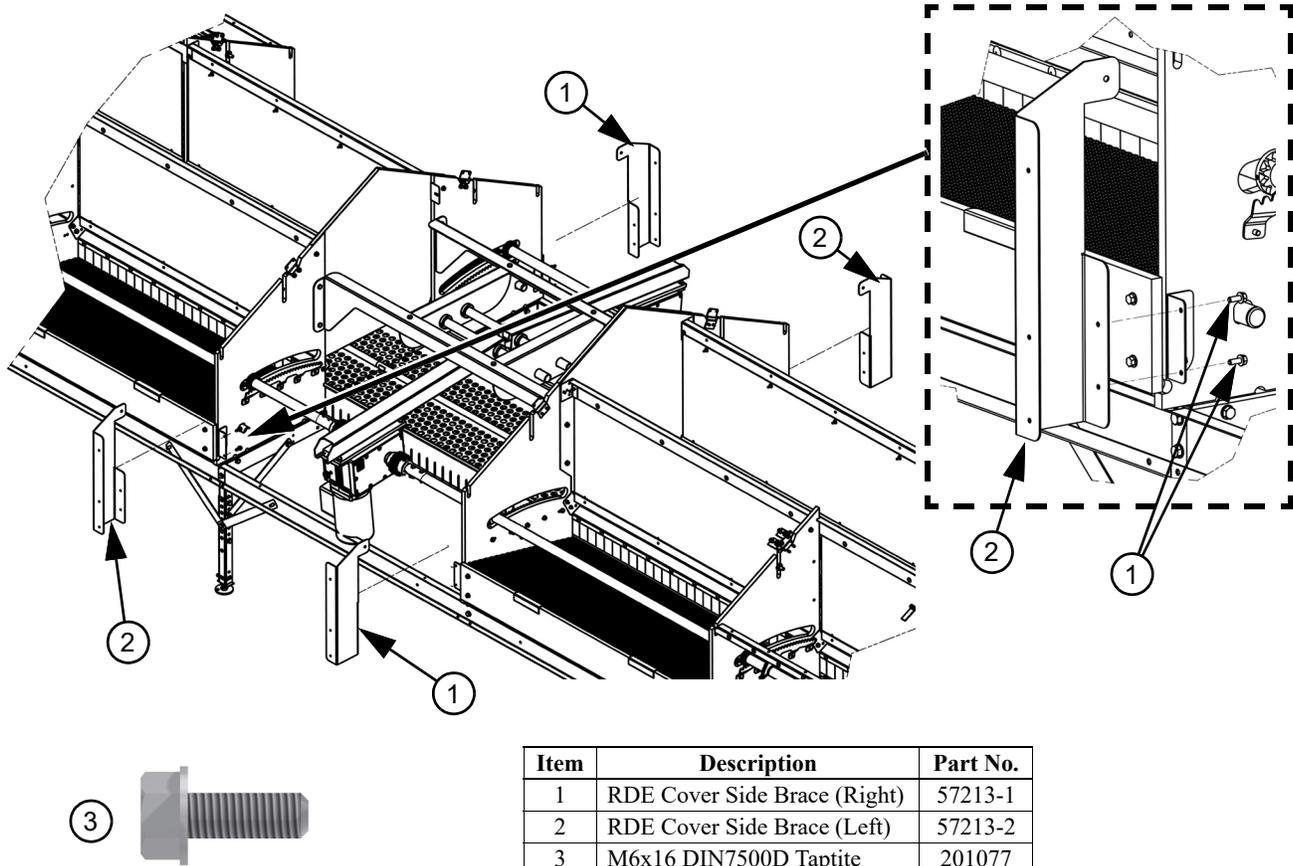
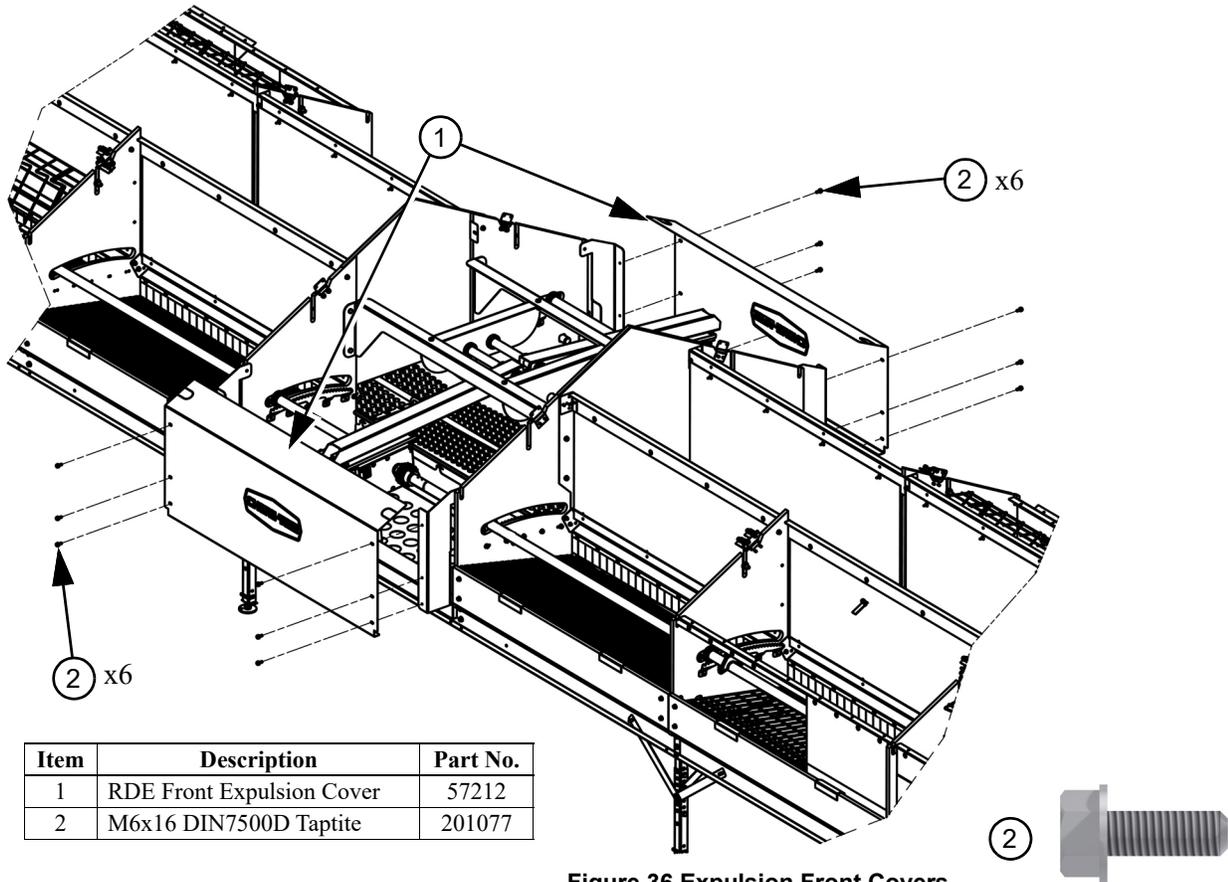


Figure 35. Expulsion Cover Side Braces

Front Cover

1. Fasten the Front Covers (Item 1) with M6 Taptites (Item 2) as shown.



Item	Description	Part No.
1	RDE Front Expulsion Cover	57212
2	M6x16 DIN7500D Taptite	201077

Figure 36. Expulsion Front Covers

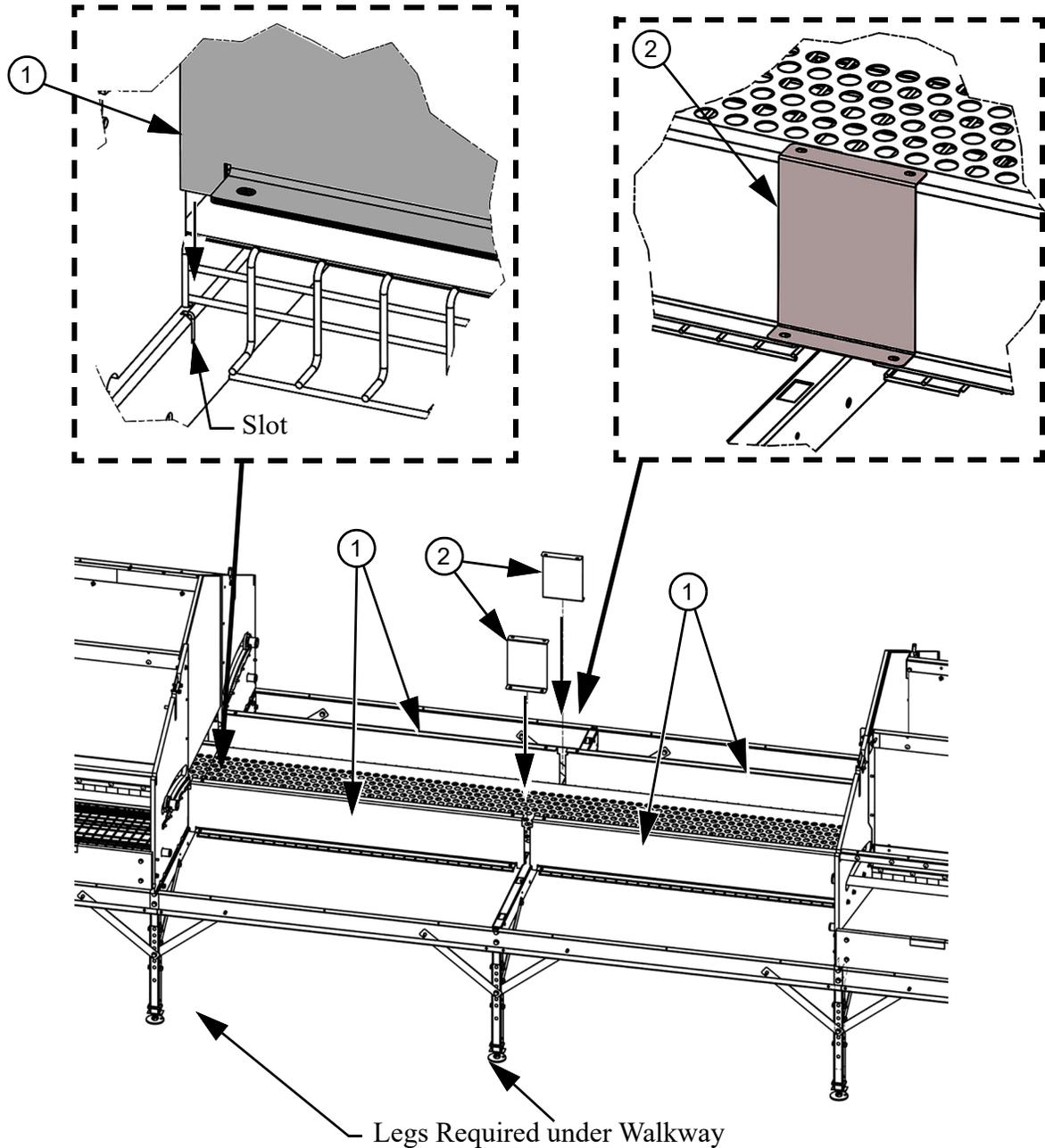
Walk Over Section

Full Section Walkover

Walkover Rails, Gap Cover & Extra Legs

Important! Legs are required every 47-1/4" [120 cm] at walkovers to support the extra weight of persons walking over. See “Framework” on page 8. for Leg Installation.

1. Install Walkover Rails (**Item 1**) by sliding them into the slots in Nest Crosses as shown.
2. Set Walkover Gap Covers (**Item 1**) in place lining up the slots with the holes in the Walkover Rails.

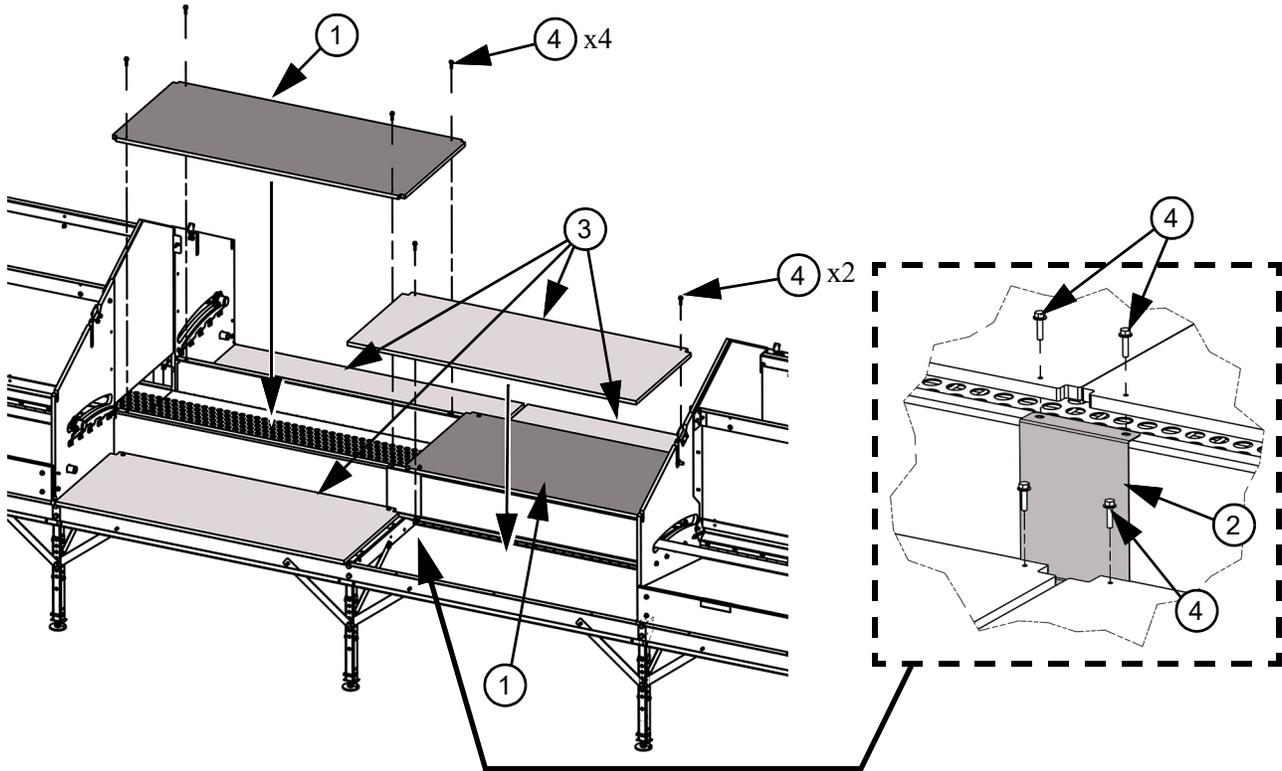


Item	Description	Part No.
1	RDE Walkover Rail	57627
2	Walkover Gap Cover	58011

Figure 37. Walkover Rails/Gap Covers

Walkover Platforms (Full Section)

1. Attach Center Walkover Platforms (**Item 1**), Walkover Gap Covers (**Item 2**), and Walkover Platforms (**Item 3**) to the Walkover Rails and Nest Front Rails with M6 Taptites. (**Item 4**).



Item	Description	RDE-49	RDE-58
		Part No.	
1	Center Walkover Platform	57628	57628
2	Walkover Gap Cover	58011	58011
3	Walkover Platform	57913	57629
4	M6 x 25 DIN7500-D Taptite	201067	201067

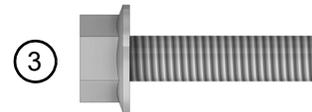


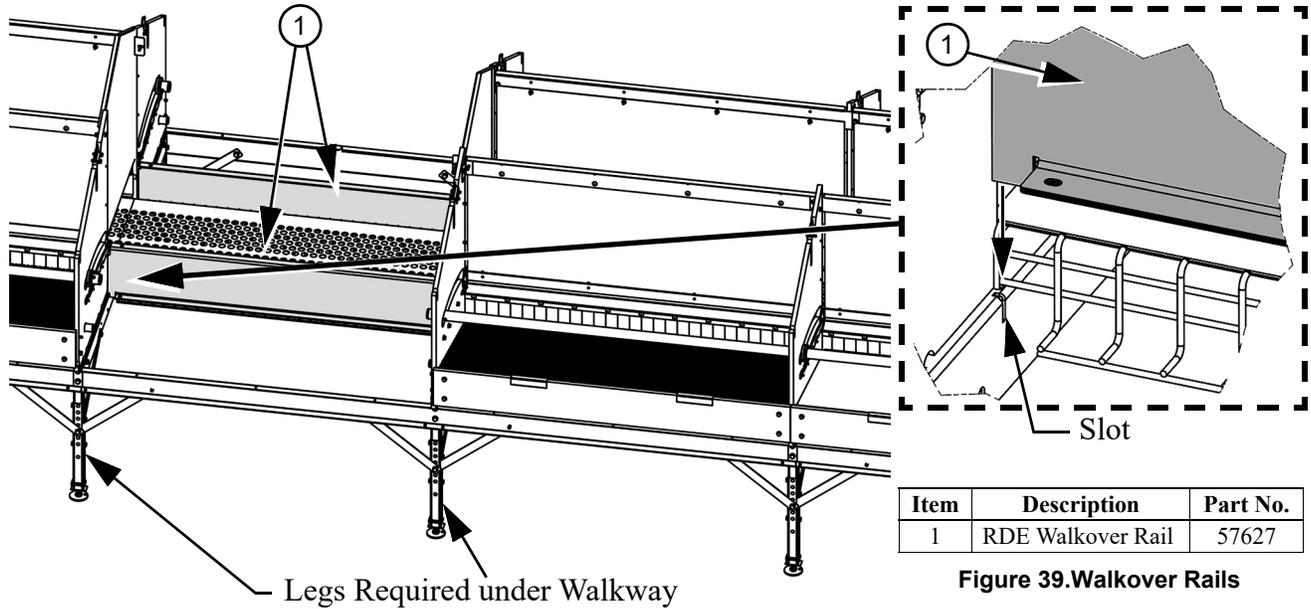
Figure 38. Walkover Platforms

Half Section Walkover

Walkover Rails & Extra Legs

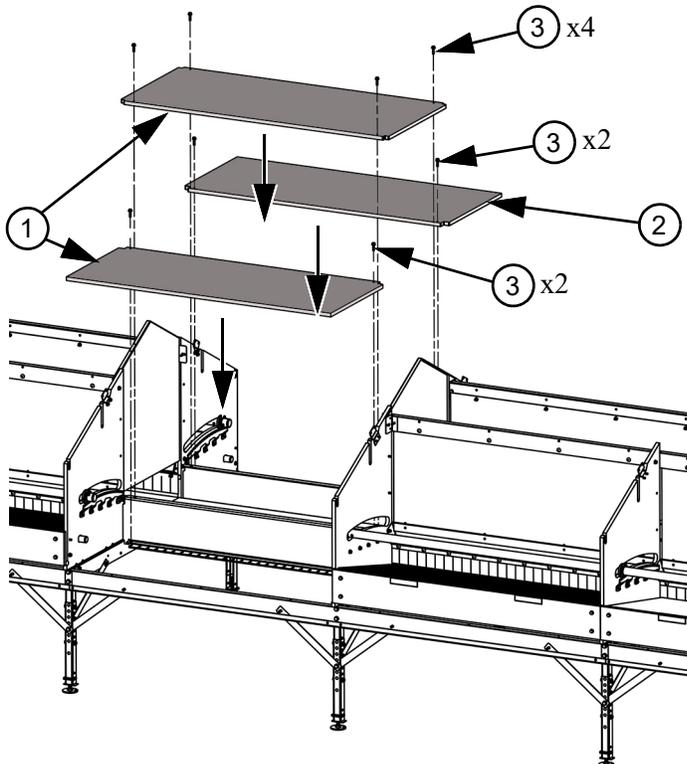
Important! Legs are required every 47-1/4" [120 cm] at walkovers to support the extra weight of persons walking over. See "Framework" on page 8. for Leg Installation.

1. Install Walkover Rails (Item 1) by sliding them into the slots in Nest Crosses as shown.



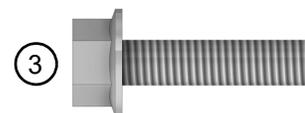
Walkover Platforms (Half Section)

1. Attach Walkover Platforms (Item 1) to the Walkover Rails and Nest Front Rails with M6 Tapites. (Item 3).



Item	Description	RDE-49	RDE-58
		Part No.	
1	Center Walkover Platform	57628	57628
2	Walkover Platform	57913	57629
3	M6 x 25 DIN7500-D Tapite	201067	201067

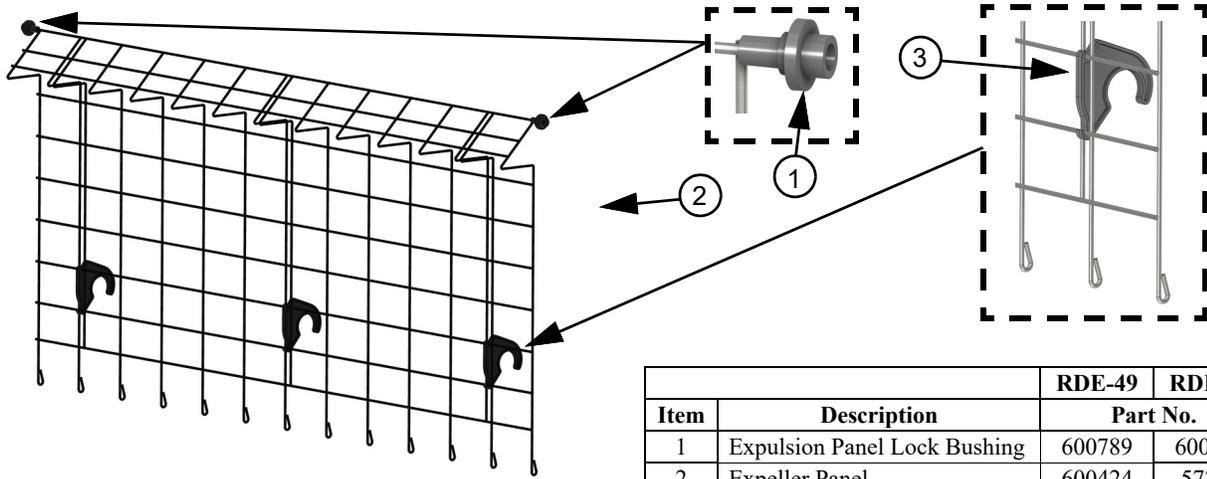
Figure 40. Walkover Platform (Half Section)



Expeller Installation

Expeller Panel Assembly

1. Install two Panel Lock Bushings (**Item 1**) per Expeller Panel (**Item 2**).
2. Attach three Panel Clamps (**Item 3**) per Panel in the locations shown.



Item	Description	RDE-49	RDE-58
		Part No.	
1	Expulsion Panel Lock Bushing	600789	600789
2	Expeller Panel	600424	57277
3	Expulsion Panel Clamp	600795	600795

Figure 41. Assembling Expeller Panel

Expeller Panel Installation

1. Insert the Panel Lock Bushings (**Item 1**) of the Expeller Panel Assembly (**Item 2**) into the Slots of the Side Panels and snap the Panel Clamps (**Item 3**) onto the Expulsion Shafts as shown.

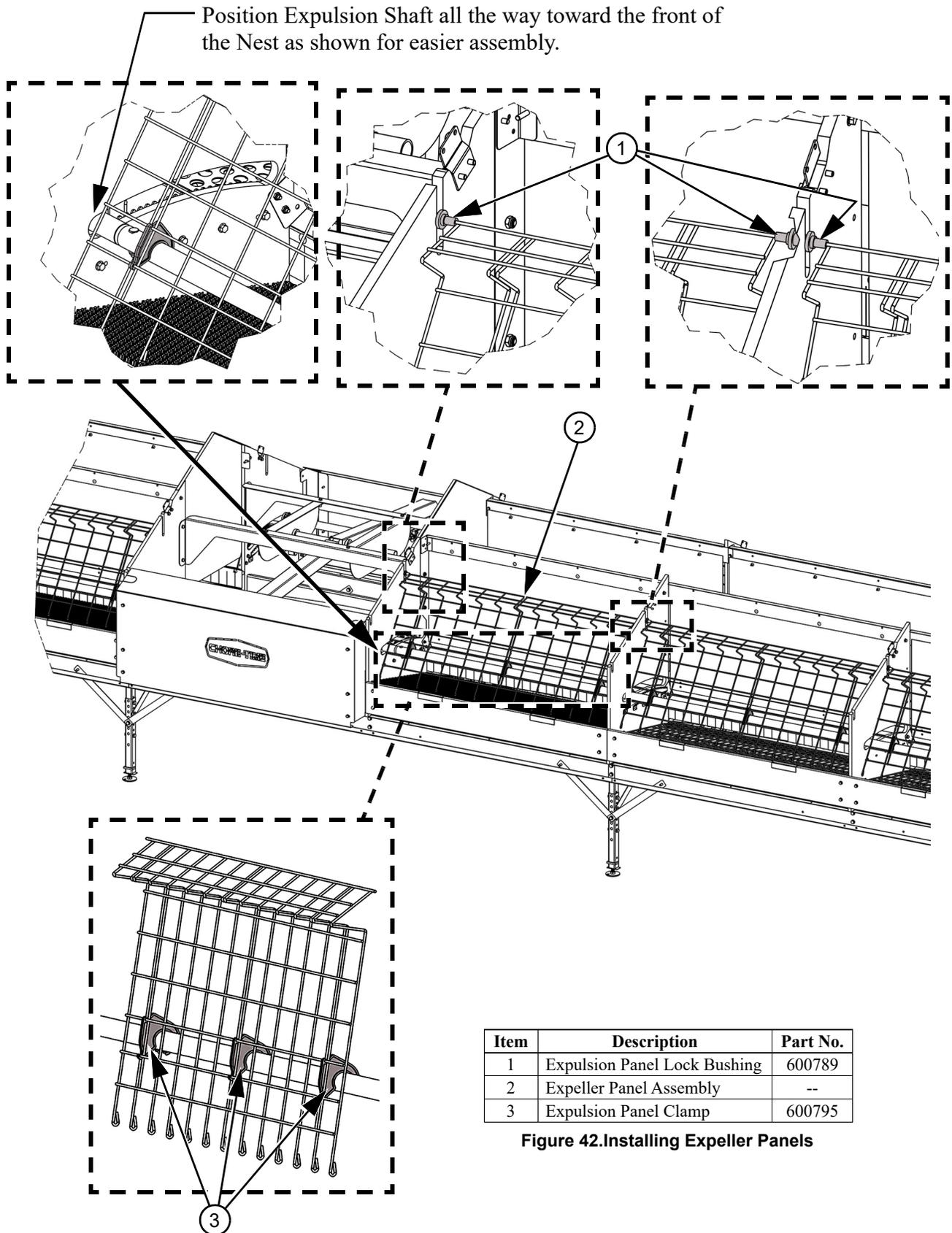
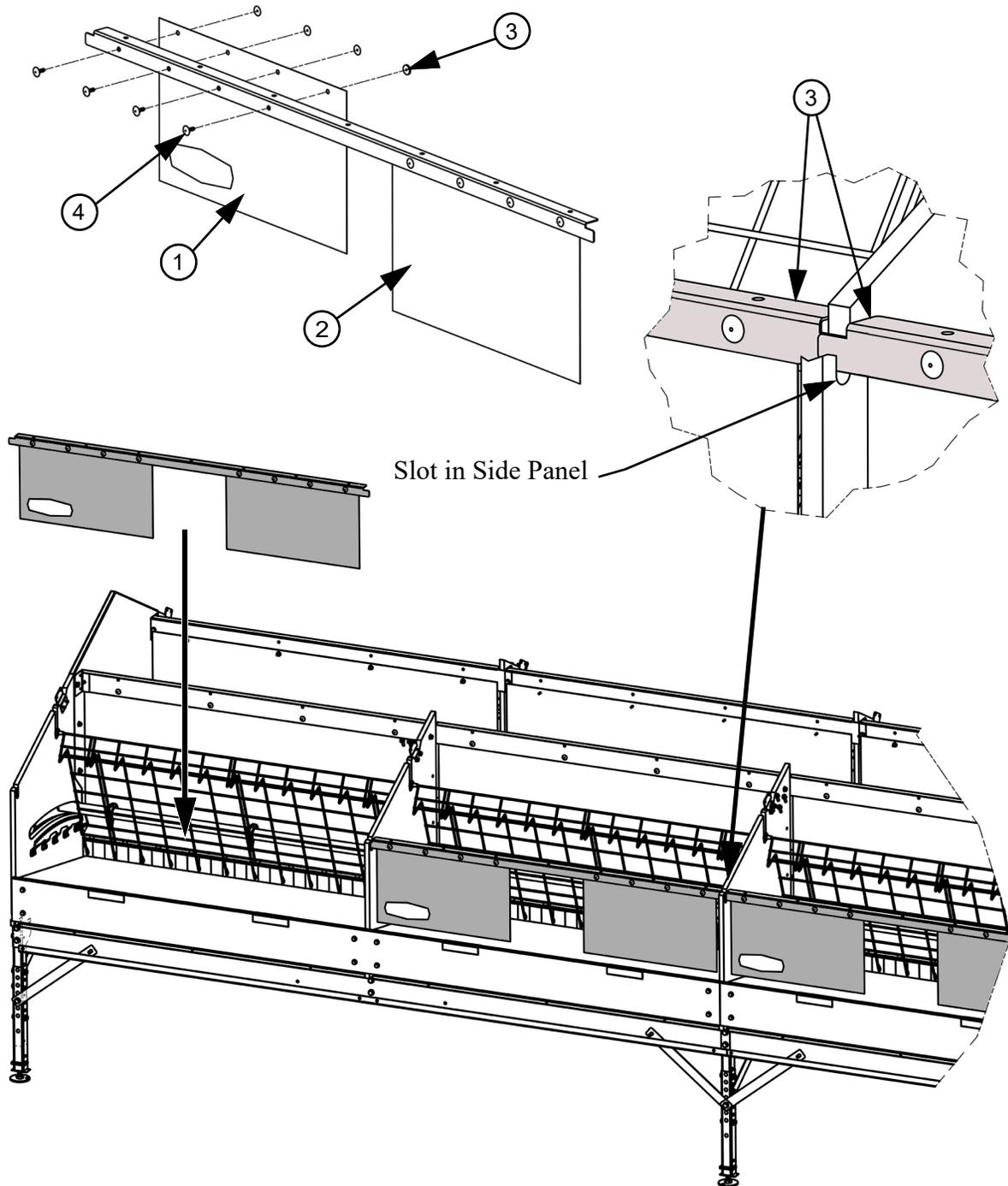


Figure 42.Installing Expeller Panels

Curtain Assembly & Installation

1. Fasten Nest Front Curtains (**Items 1 & 2**) to Curtain Support Brackets (**Item 3**) with Two Piece Rivets (**Item 4**) as shown.
2. Install the Nest Front Curtain Assemblies by inserting them into the slots in the Side Panels as shown.



Item	Description	Part No.
1	Nest Front Curtain with Logo	57887
2	Nest Front Curtain	57886
3	Upper Back Curtain Support Bracket	56853
4	Two Piece Rivet	56879

Figure 43.Curtain Assembly Installation

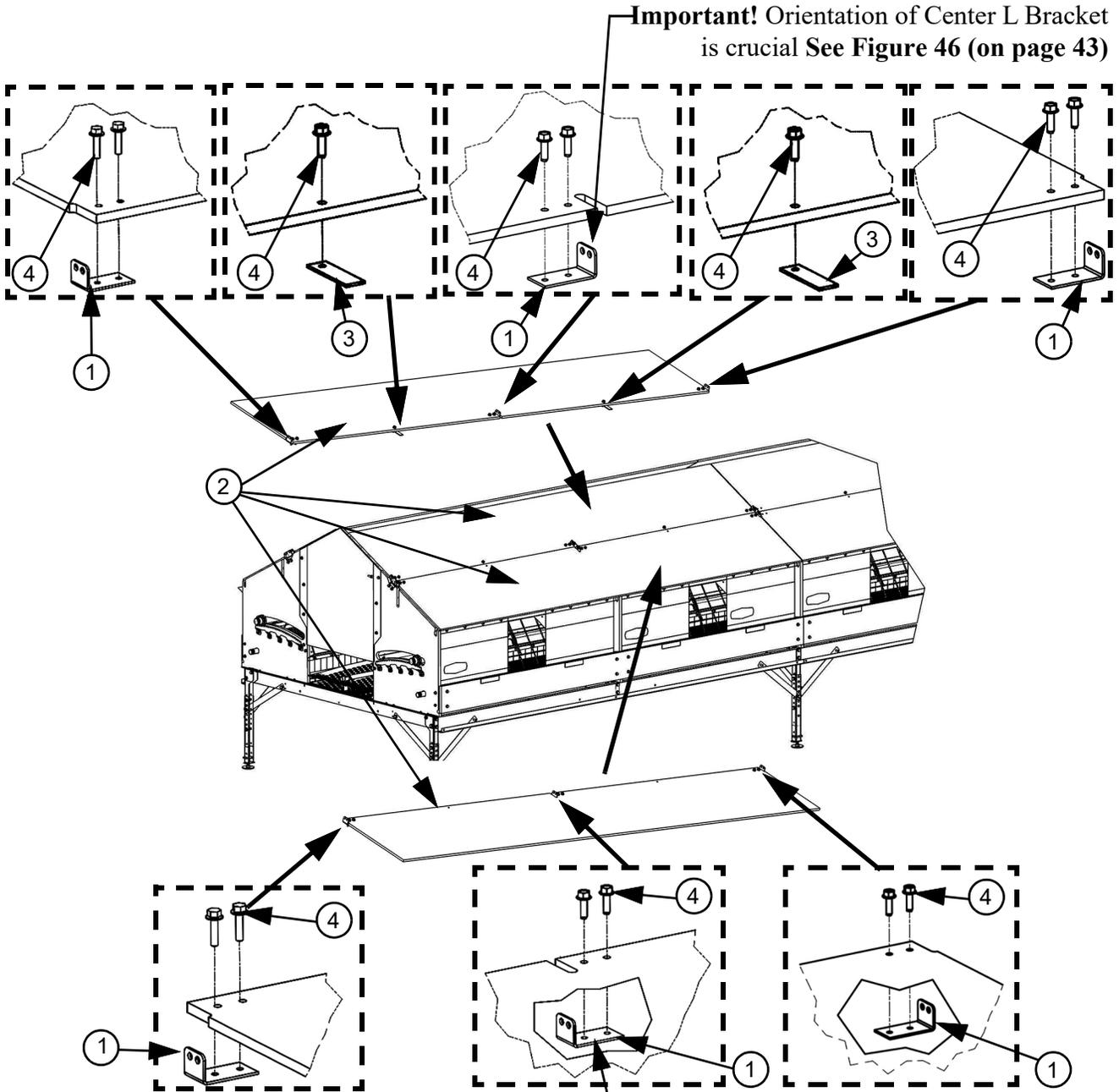
Roof Installation

Roof Plate Assembly

RDE 49 Roof Plates

RDE 49 Nests use all the same Roof Plates (**Item 2**) but only half of the Roof Plates (**The Top Ones**) require Roof Leveling Plates (**Item 3**) as shown. Orient Roof Leveling Plates exactly as shown.

1. Install Roof L Brackets (**Item 1**) on the Top and Bottom Roof Plates with M6 Taptites (**Item 4**) as shown.
2. Install Roof Leveling Plates (**Item 4**) on all Lower Roof Plates with M6 Taptites (**Item 4**) as shown.



Item	Description	RDE-49 Part No.
1	Double Hinged Roof L Bracket	201168
2	Double Hinged Roof Plate	600936
3	Roof Leveling Plate	201166
4	M6 x 25 DIN7500-D Taptite	201067

Figure 44. Assembling Roof Plates

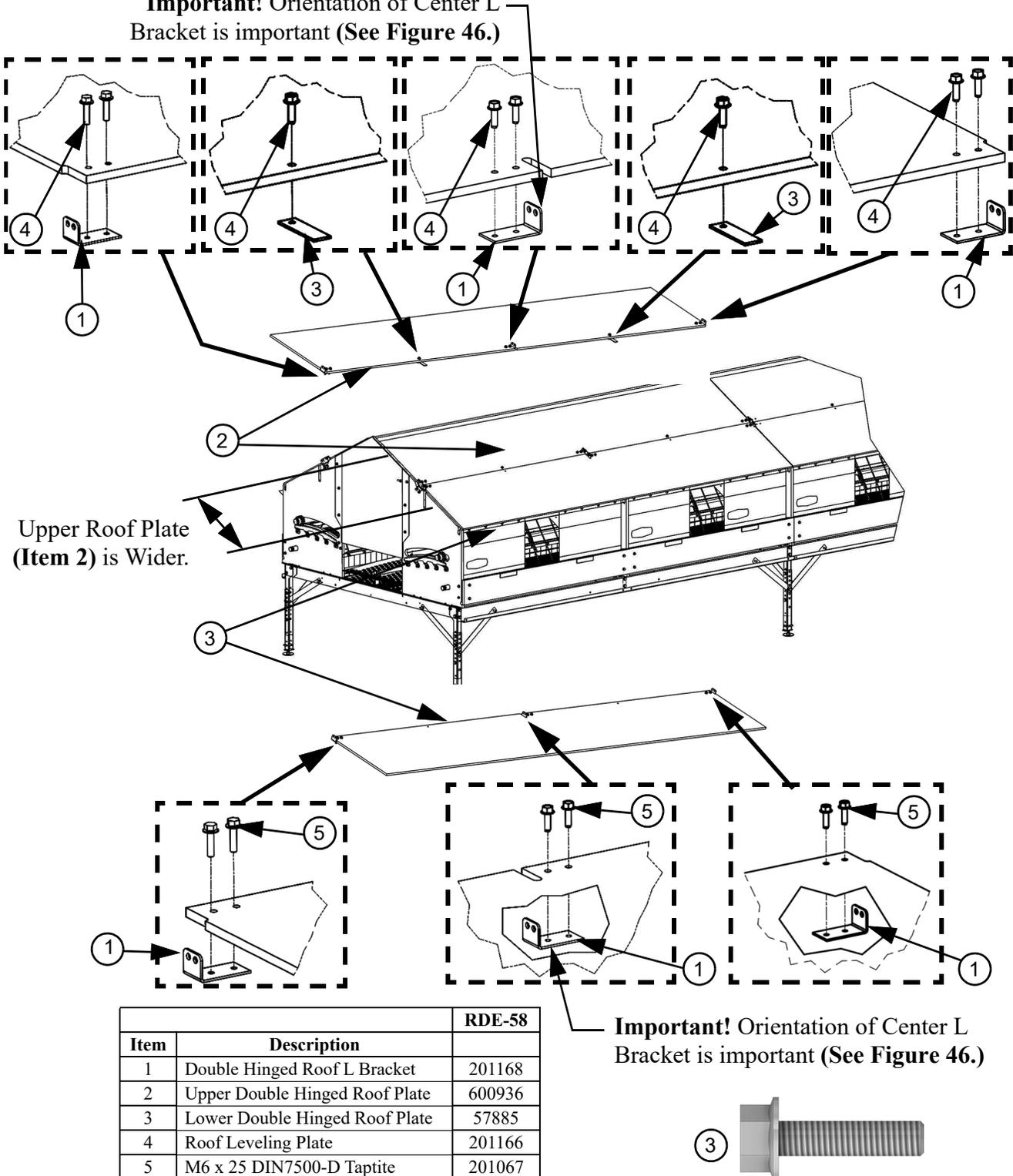


RDE 58 Roof Plates

Important! RDE 58 Nests use Two different Roof Plates; an Upper Roof Plate (**Item 2**) and a Lower Roof Plate (**Item 3**). The Upper Roof Plate is wider than the Lower Roof Plate.

1. Install Double Hinged Roof L Brackets (**Item 1**) on Top and Bottom Roof Plates (**Items 2&3**) with M6 Tap-tites (**Item 5**) as shown.
2. Install Roof Leveling Plates (**Item 4**) on all Top Roof Plates with M6 Tap-tites (**Item 5**) as shown.

Important! Orientation of Center L Bracket is important (See Figure 46.)



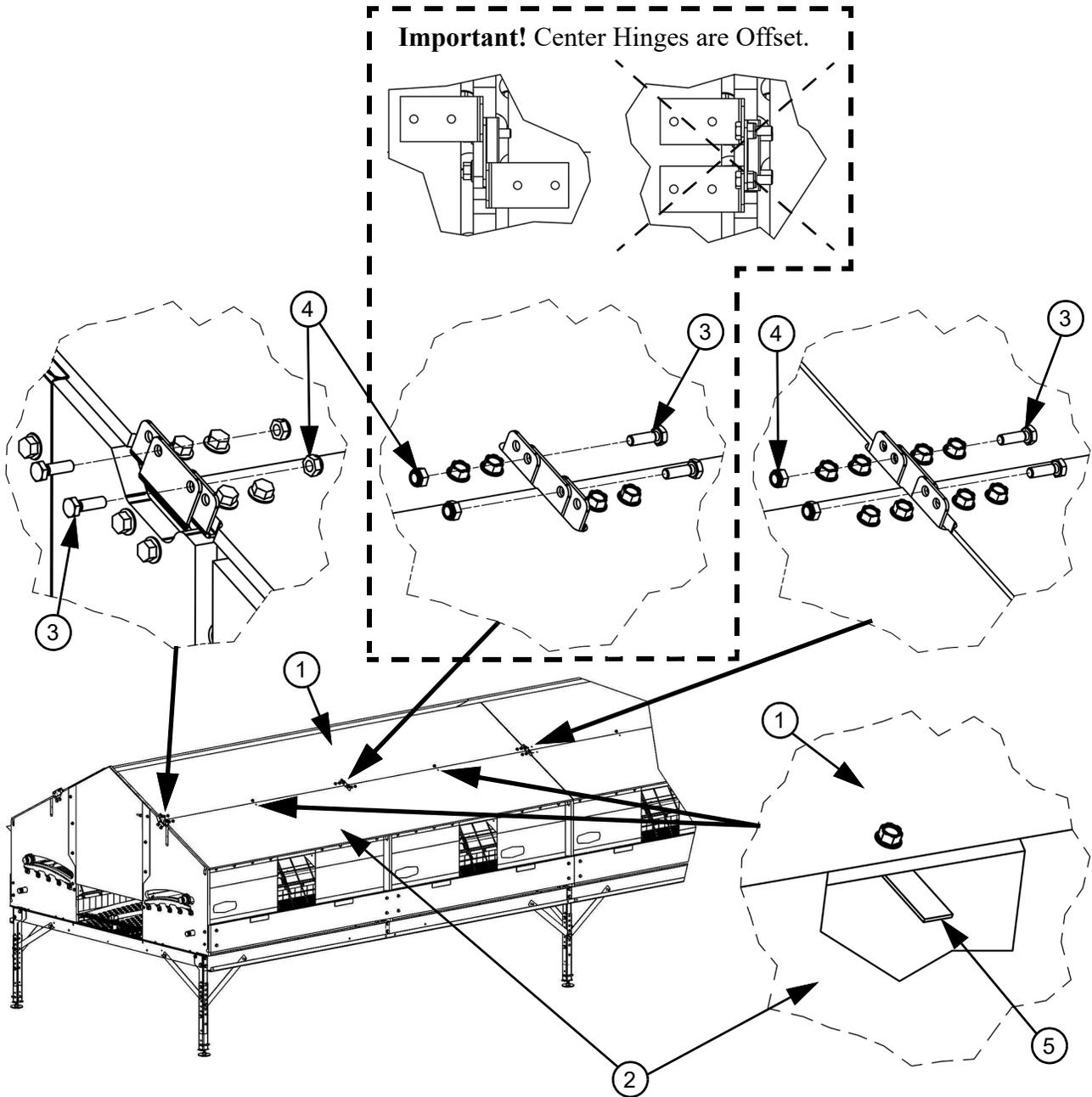
Item	Description	RDE-58
1	Double Hinged Roof L Bracket	201168
2	Upper Double Hinged Roof Plate	600936
3	Lower Double Hinged Roof Plate	57885
4	Roof Leveling Plate	201166
5	M6 x 25 DIN7500-D Tap-tite	201067

Figure 45. Assembling Roof Plates

Roof Installation

1. Install Top Roof Plate Assemblies (**Item 1**) and Bottom Roof Plate Assemblies (**Item 2**) using M6 Hex Bolts (**Item 3**) and M6 Lock Nuts (**Item 4**) as shown.

Important! Top Roof Plate Assemblies have Roof Leveling Plates (**Item 5**).



Item	Description	RDE-49	RDE-58
		Part No.	
1	Top Hinged Roof Plate Assembly	--	--
2	Bottom Hinged Roof Plate Assembly	--	--
3	M6 x 20 DIN933 Hex Bolt	201034	201034
4	M6 DIN985 Lock Nut	201037	201037
5	Roof Leveling Plate	201166	201166

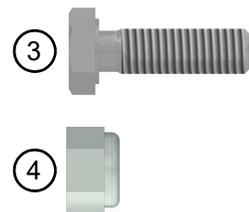


Figure 46. Roof Plate Installation

Roof Channels Installation

1. Attach Roof Channels (Item 1) to the Upper Roof Plate Assemblies using M4 Flathead Screws (Item 2) as shown.
2. Cut off Roof Channels at Expulsion Units and Walkovers where necessary.

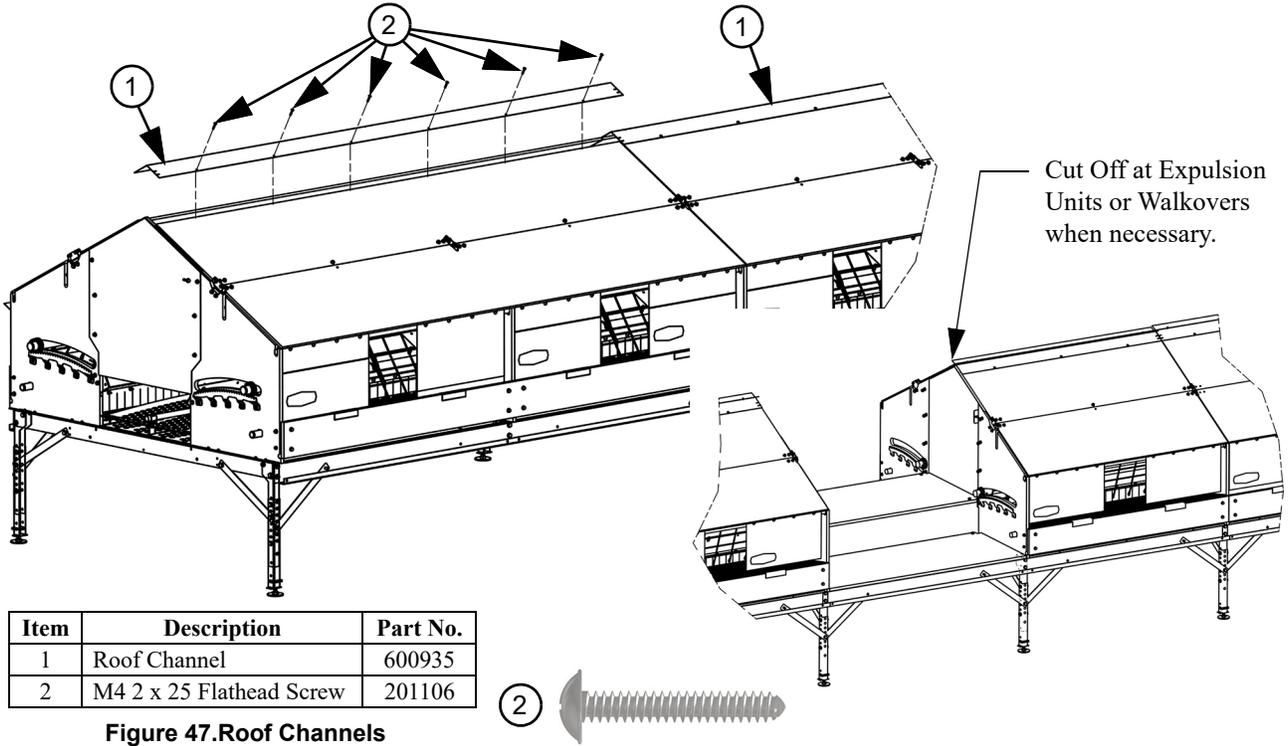


Figure 47. Roof Channels

Anti-Roost Plate Installation

1. Attach Anti-Roost Plates (Item 1) to the Roof Channels using Spit Pins (Item 2) as shown.

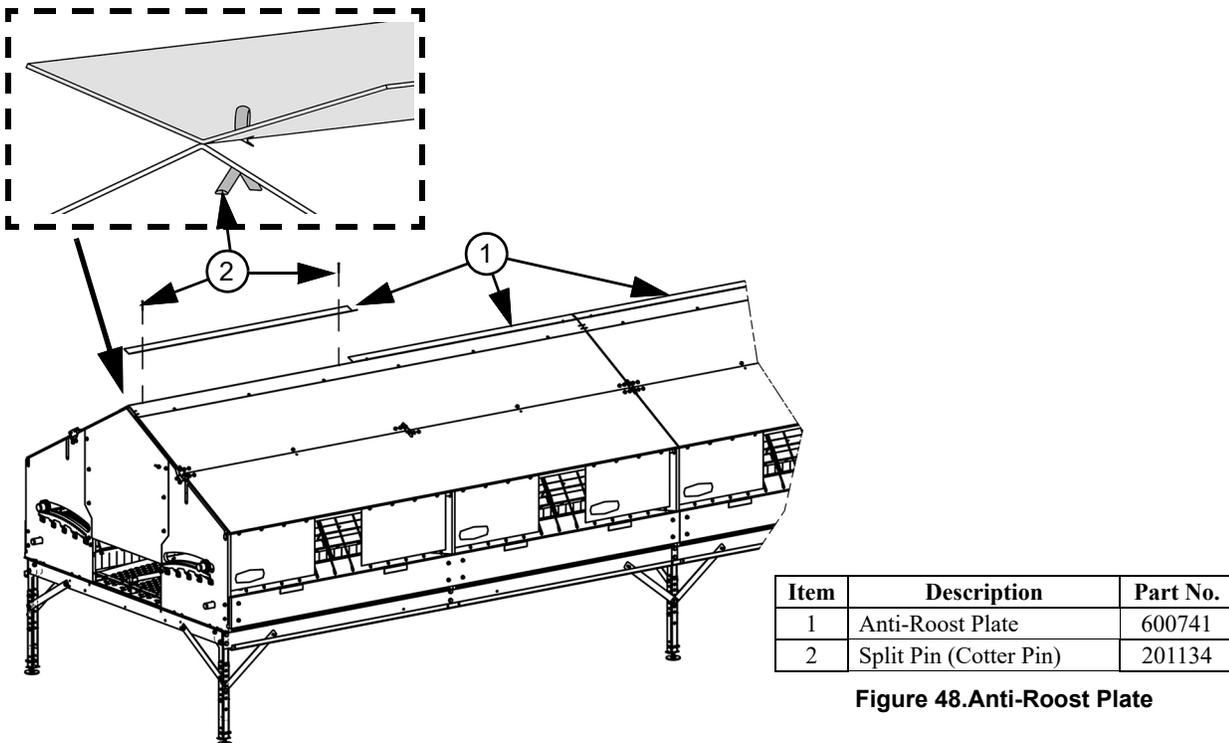
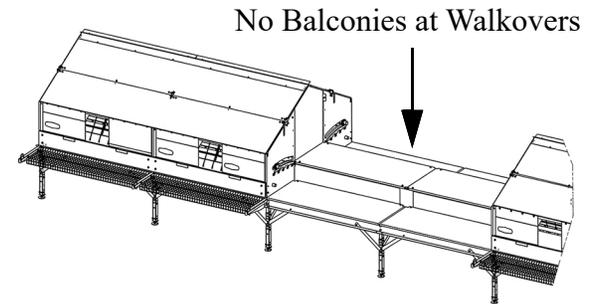
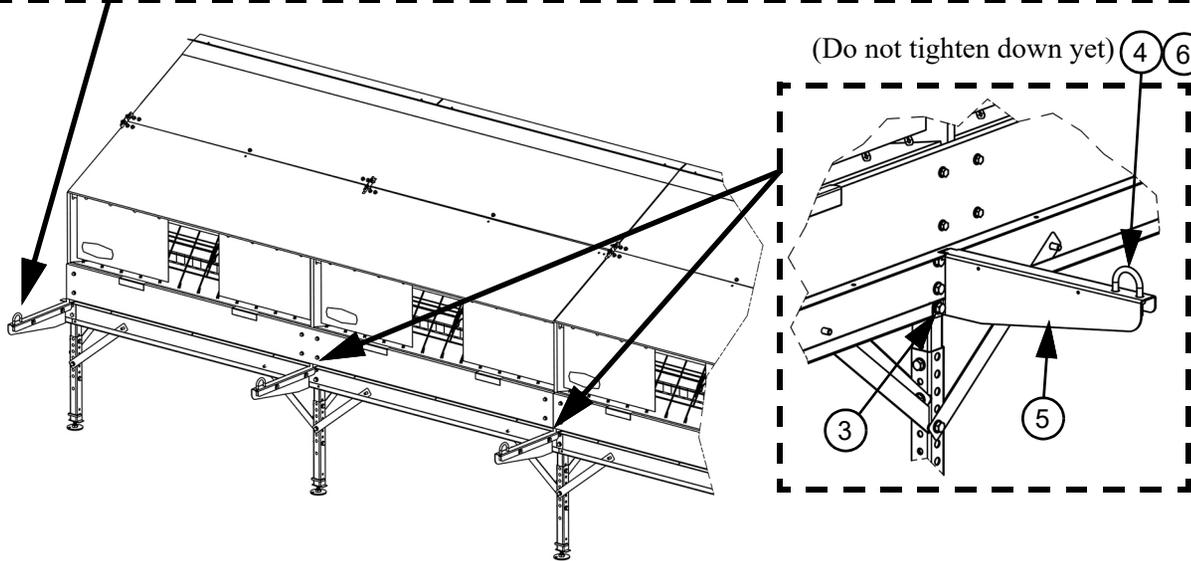
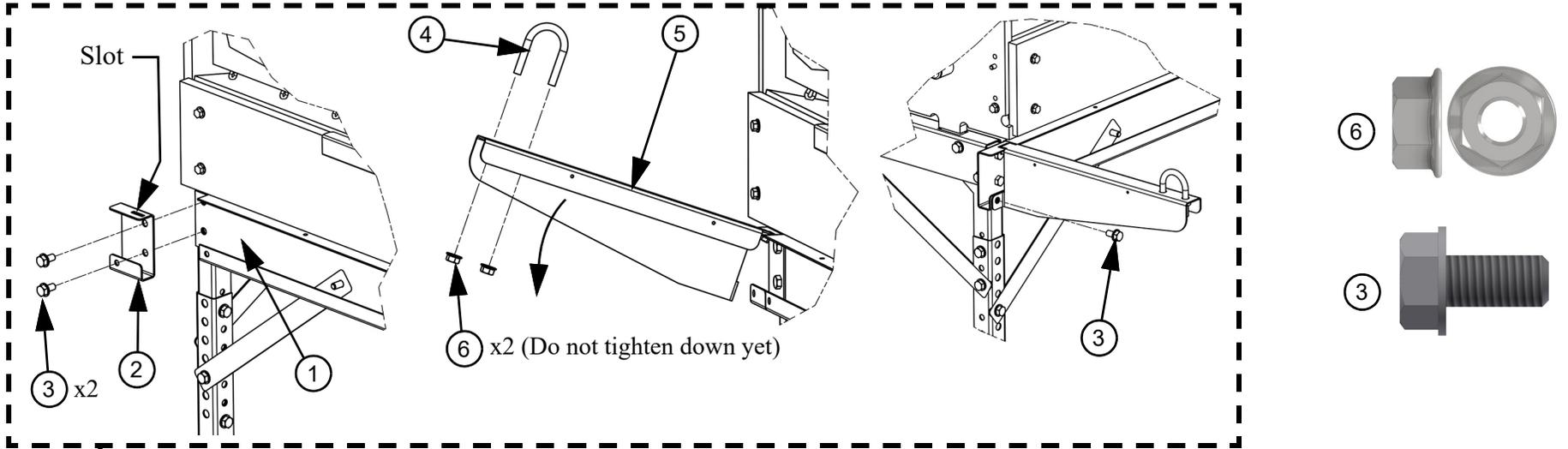


Figure 48. Anti-Roost Plate

Balcony Installation

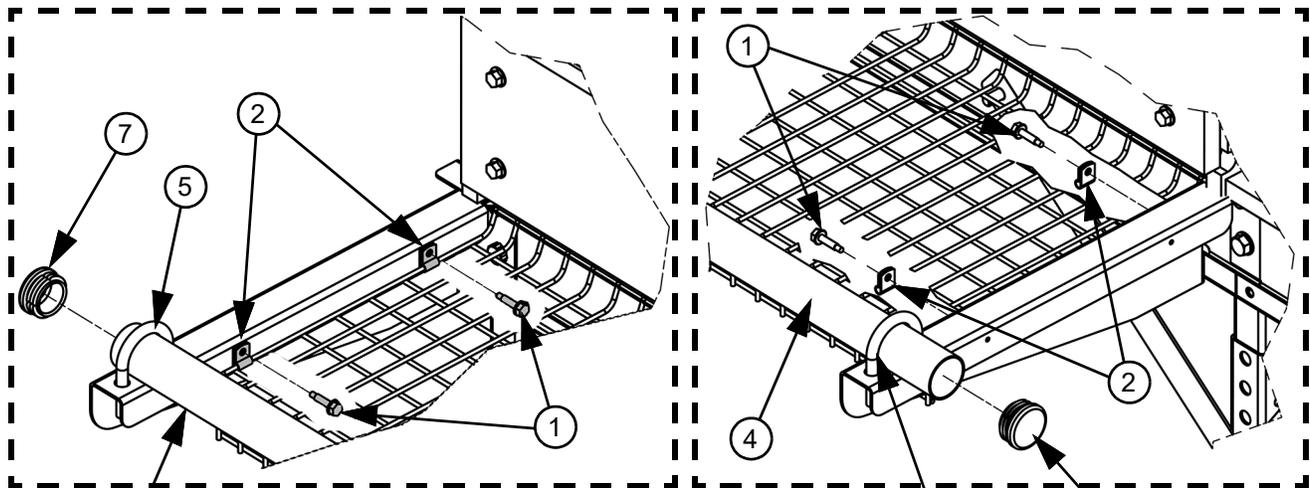
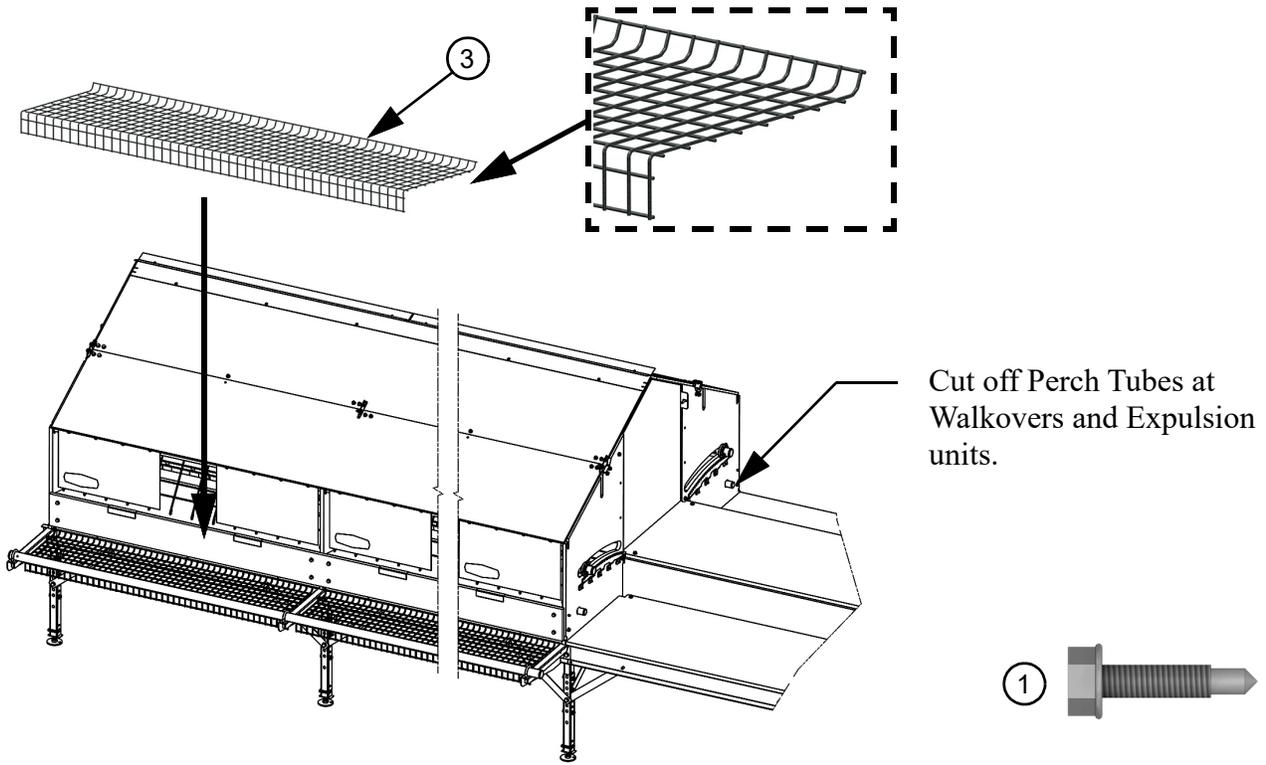
1. If there is not a Slot in the top of the 1st Nest Front Rail (**Item 1**), install a Balcony Starter Bracket (**Item 2**) using M8 Taptites (**Item 3**) as shown.
2. Install M8 U-Bolts (**Item 4**) in all Balcony Arms (**Item 5**) with M8 Flange Nuts (**Item 6**) but *do not tighten down at this time*.
3. Install all Balcony Arms in the Slots in the Nest Front Rails and attach with one M8 Taptite (**Item 6**).



Item	Description	RDE-49 Part No.
1	Nest Front Rail	--
2	Balcony Starter Bracket	58207
3	M8 x 16 Taptite	201047
4	M8-1.25 x 1.676 U Bolt	201048
5	Balcony Arm	58009
6	M8-1.25 DIN6923 Flange Nut	201001

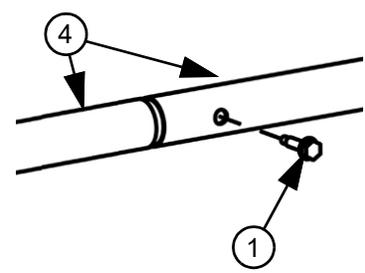
Figure 49. Balcony Installation

4. Use four M6 Screws (**Item 1**) and 3/16 Loop Clamps (**Item 2**) to attach each Approach (**Item 3**) as shown.
5. Install Perch Tubes (**Item 4**) as shown, tightening down the U-Bolts (**Item 5**) as you go. Slide Perch Tubes together and attach with M6 Screws (**Item 1**).
6. Cut off Perch Tubes at Walkovers and Expulsion Units and Install Tube Plugs (**Item 6**).



Item	Description	RDE-49 Part No.
1	M6 4.8 x 19 HXWH Ser. Screw	201059
2	3/16" Loop Clamp	57001
3	Approach	57002
4	6 m Perch Tube	208000
5	M8-1.25 x 1.676 U Bolt	201048
6	33.4 mm Tube Plug	201038

Figure 50. Balcony Installation continued....

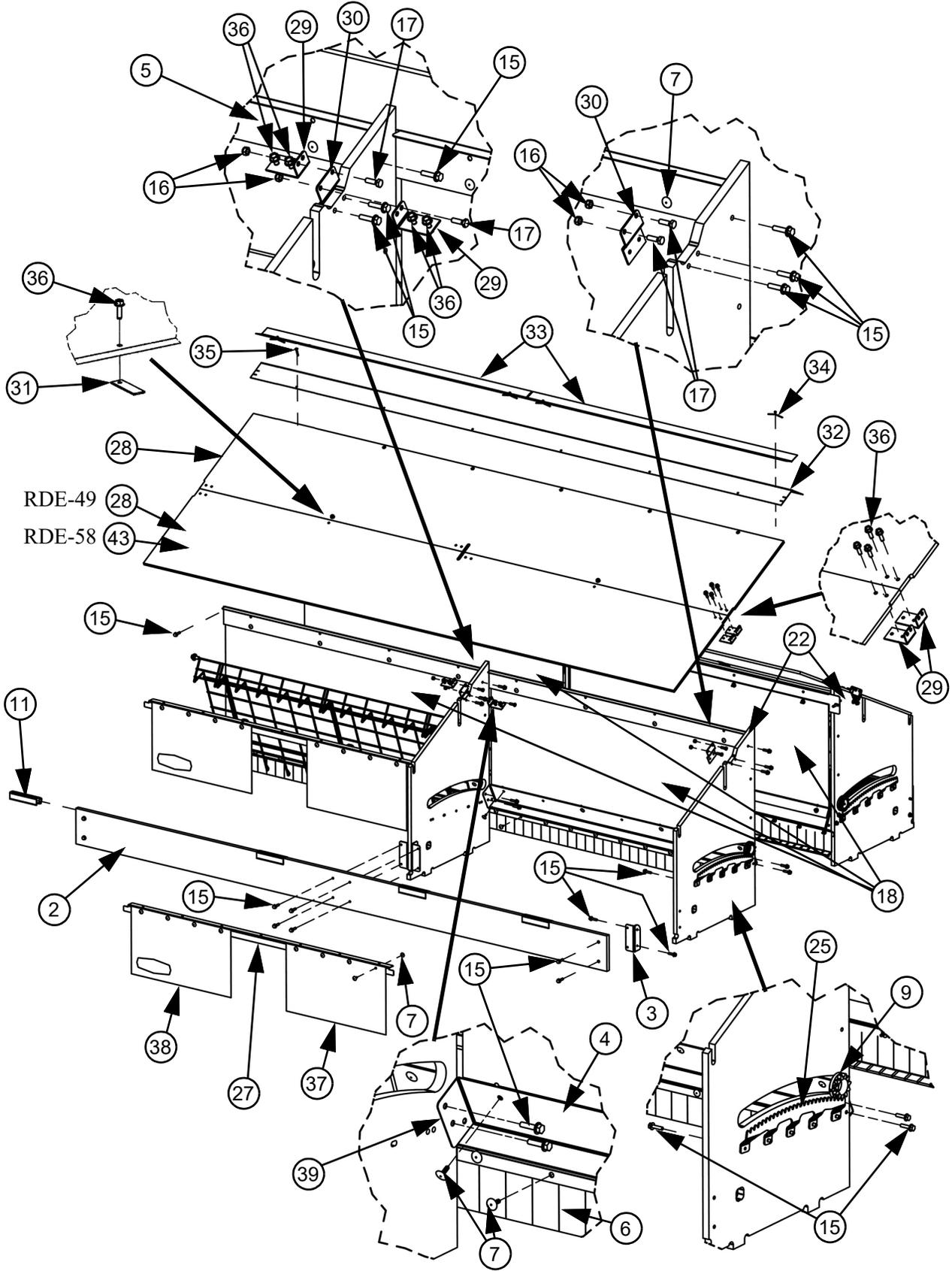


Valego® RDE Nest Control (601150)

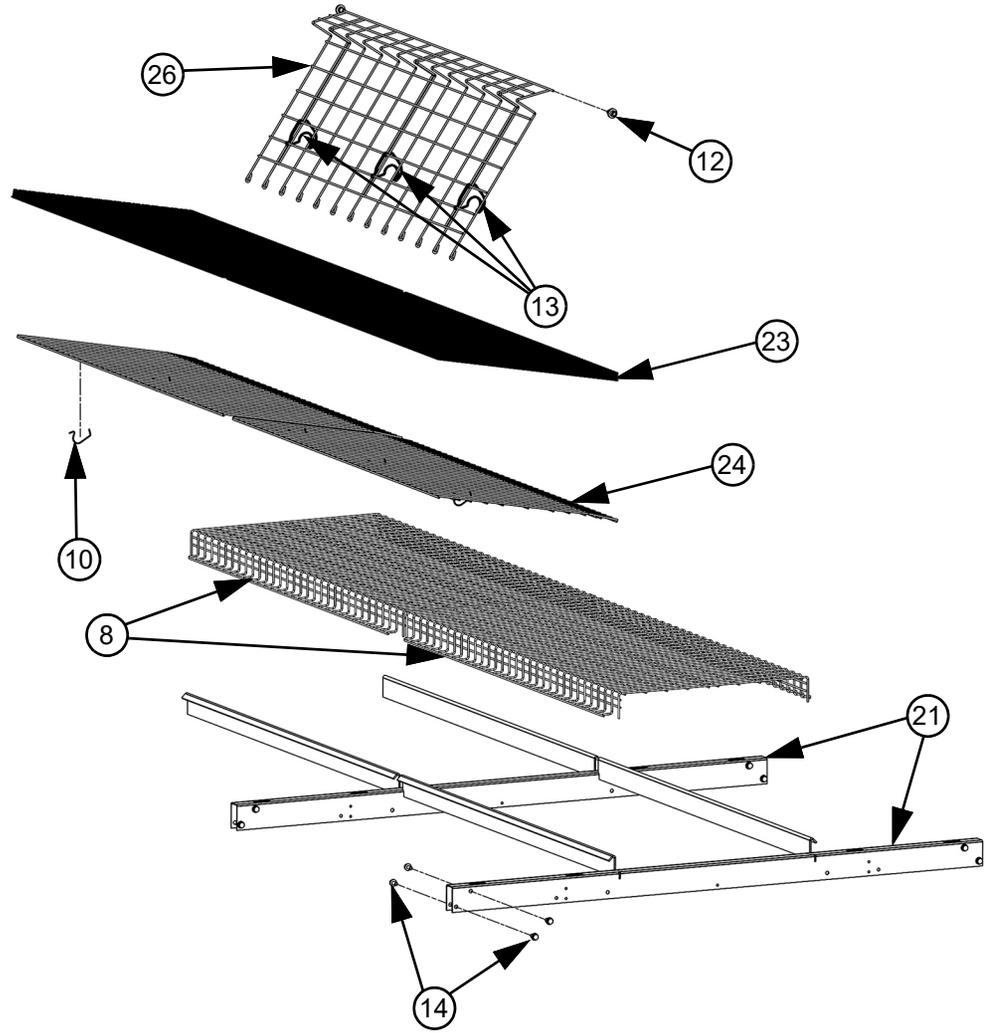
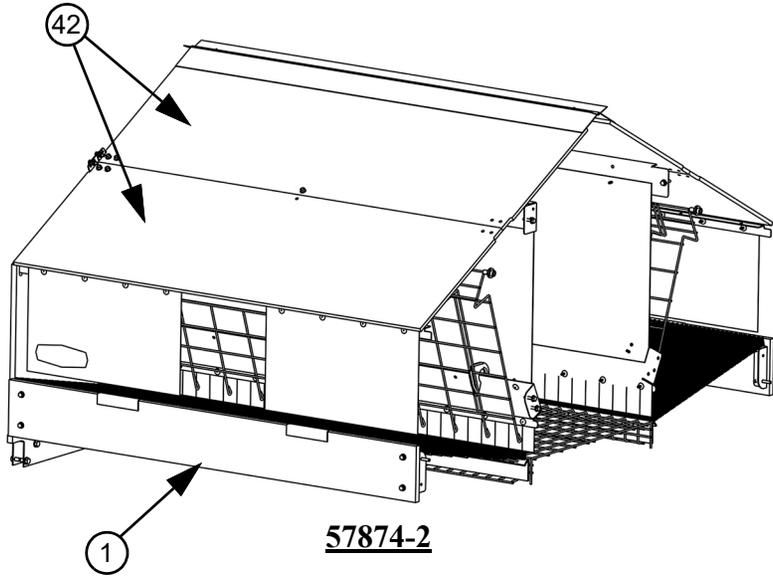
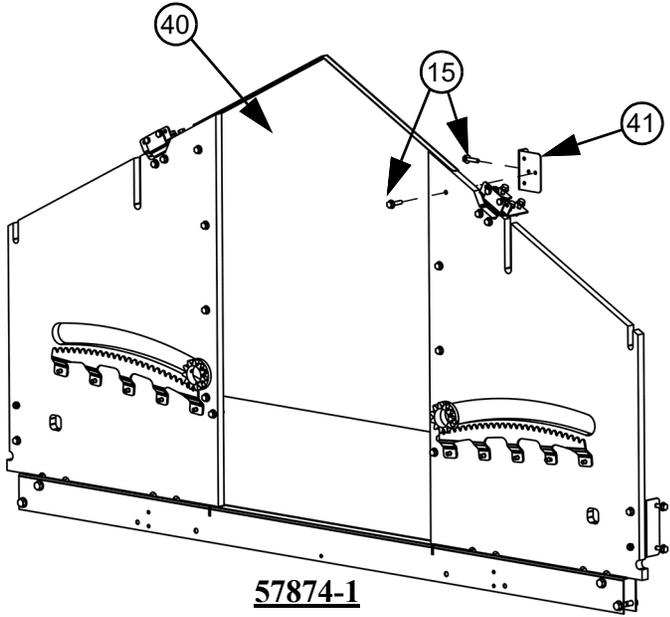
1. See the installation manual included with the 601150 Control for Installation and operation instructions.

Part Numbers

RDE 49 & 58 Peaked Roof Kit Part Numbers



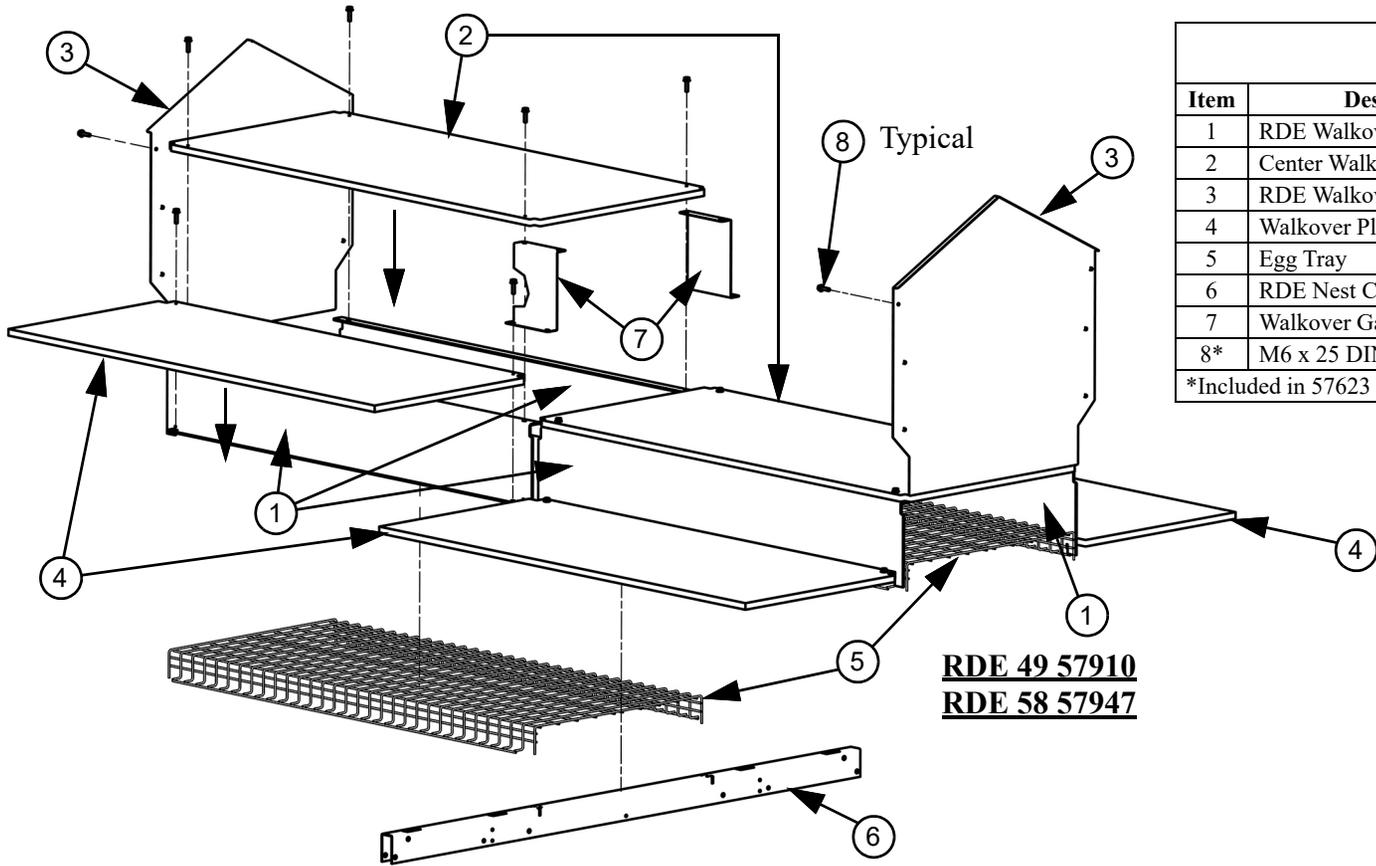
Standard Nest Section Parts Continued.....



Part Numbers.....

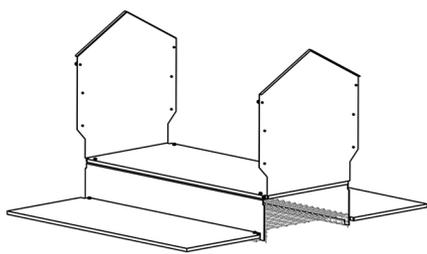
Item	Description	RDE-49			RDE-58		
		57874	57874-1	57874-2	57884	57884-1	57884-2
		Part No.					
1	Nest Entrance Board (1.2 m)	--	--	56691-1	--	--	56691-1
2	Nest Entrance Board (2.4 m)	56691	--	--	56691	--	--
3	Corner Bracket	56692	56692	56692	56692	56692	56692
4	Nest Bottom Rail	56683	--	56683	56683	--	56683
5	Nest Back Rail	56684	--	56684	56684	--	56684
6	Egg Curtain	56863	--	56863	56863	--	56863
7	2 Piece Rivet	56879	--	56879	56879	--	56879
8	Egg Tray	56685	--	56685	56685	--	56685
9	Toothed Single Sided Wheel	600622	600622	600622	600622	600622	600622
10	Nest Floor Wire Clip	57004	--	57004	57004	--	57004
11	Nest Pad Clip	201223	--	201223	201223	--	201223
12	Expulsion Panel Lock Bushing	600789	--	600789	600789	--	600789
13	Expulsion Panel Clamp	600795	--	600795	600795	--	600795
14	M8 x 16 DIN7500 Taptite	201047	201047	201047	201047	201047	201047
15	M6 x 25 DIN7500-D Taptite	201067	201067	201067	201067	201067	201067
16	M6 DIN985 Lock Nut	201037	201037	201037	201037	201037	201037
17	M6 x 20 DIN933 Hex Bolt	201034	201034	201034	201034	201034	201034
18	RDE Back Wall	57003	--	57003	57003	--	57003
21	RDE-49 Nest Cross	57340	57340	57340	--	--	--
	RDE-58 Nest Cross	--	--	--	57317	57317	57317
22	RDE-49 Side Panel	57335	57335	57335	--	--	--
	RDE-58 Side Panel	--	--	--	57333	57333	57333
23	Nest Pad	600355	--	600355	600357	--	600357
24	RDE-49 Nest Bottom	57128	--	57128	--	--	--
	RDE-58 Nest Bottom	--	--	--	57296	--	57296
25	Toothed Rack Plate	600602	600602	600602	56993	56993	56993
26	Expeller Panel	600421	--	600421	57277	--	57277
27	Upper Back Curtain Support Brkt.	56853	--	56853	56853	--	56853
28	RDE 49 (2.4 m) Double Hinged Roof Plate	600936	--	--	600936	--	--
29	Roof Hinge	201168	201168	201168	201168	201168	201168
30	Double Hinged Roof Z-Part	201167	201167	201167	201167	201167	201167
31	Roof Leveling Plate	201166	--	201166	201166	--	201166
32	Roof Channel	600935	--	600935	600935	--	600935
33	Anti-Roost Plate	600741	--	600741	600741	--	600741
34	Split Pin (Cotter Pin)	201134	--	201134	201134	--	201134
35	M4 2 x 25 Flathead Screw	201106	--	201106	201106	--	201106
36	M6 x 20 DIN7500-D Taptite	201148	--	201148	201148	201148	201148
37	Nest Front Curtain	57886	--	57886	57886	--	57886
38	Nest Front Curtain with Logo	57887	--	57887	57887	--	57887
39	Nest Wall PP Bracket	58067	--	58067	58067	--	58067
40	RDE Walkover Panel	--	57911	--	--	57949	--
41	Nest Wall Start Bracket	--	58068	--	--	58068	--
42	RDE 49 (1.2 m) Double Hinged Roof Plate	--	--	600937	--	--	600937
43	RDE 58 Peaked Roof Lower Plate	--	--	--	57885	--	57885-1

Walkover Kits RDE 49 (57910-X) & RDE 58 (57947-X)

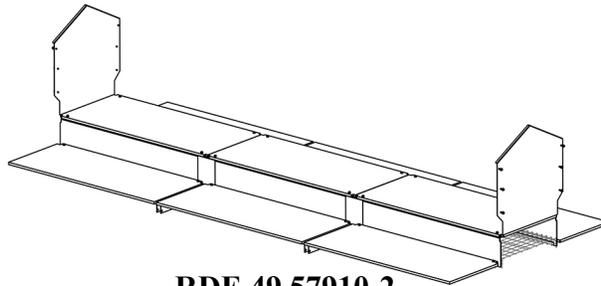


		RDE-49 57910-X	RDE-58 57947-X
Item	Description	Part No.	
1	RDE Walkover Rail	57627	57627
2	Center Walkover Platform	57628	57628
3	RDE Walkover Panel	57911	57949
4	Walkover Platform	57913	57629
5	Egg Tray	56685	56685
6	RDE Nest Cross	57340	57317
7	Walkover Gap Cover	58011	58011
8*	M6 x 25 DIN7500-D Taptite	201067	201067
*Included in 57623 and 58102 Parts Packages			

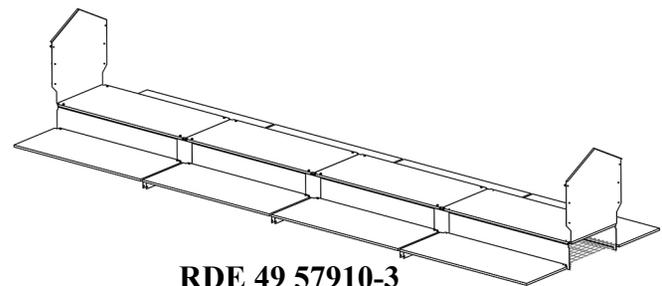
RDE 49 57910
RDE 58 57947



RDE 49 57910-1
RDE 58 57947-1

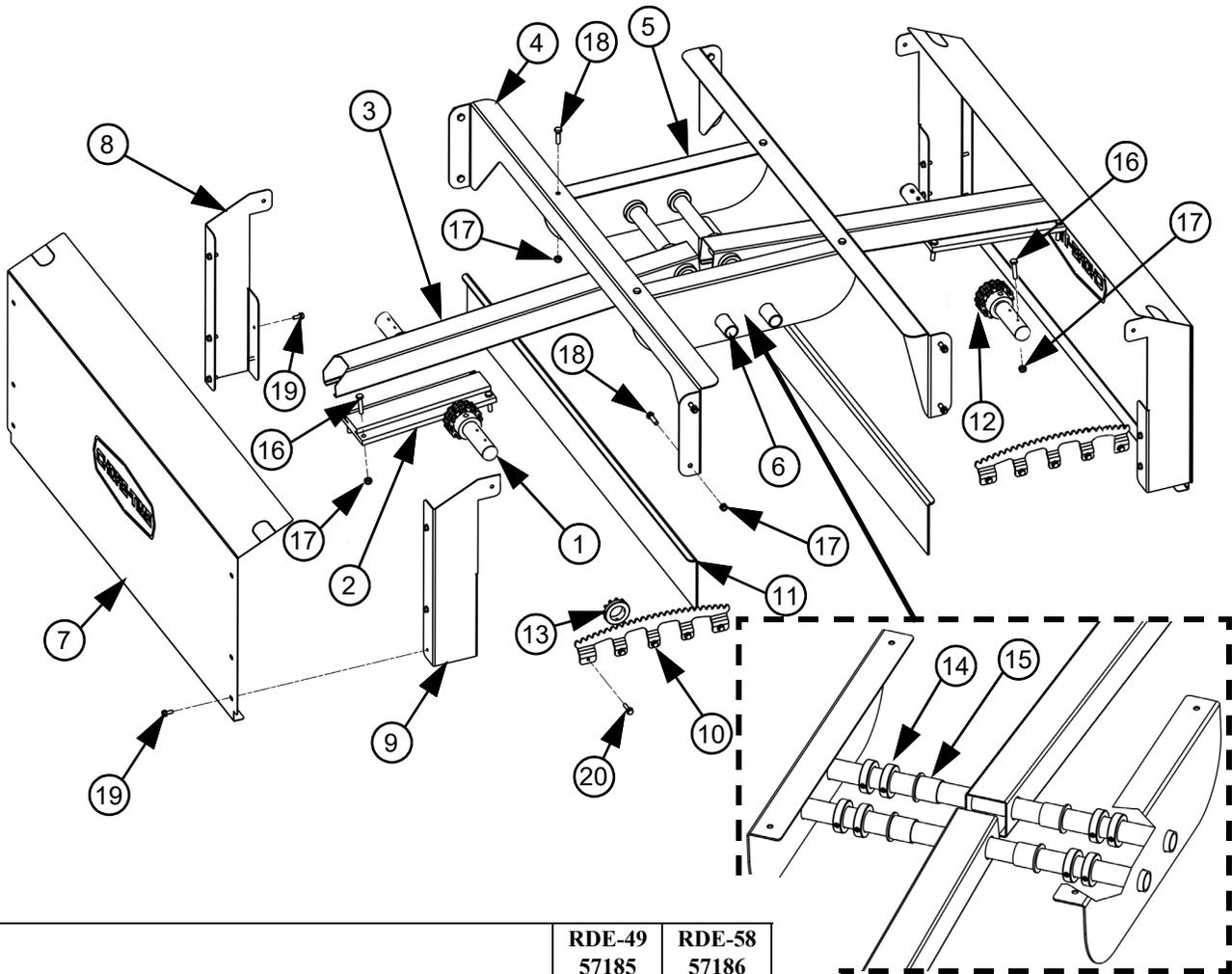


RDE 49 57910-2
RDE 58 57947-2



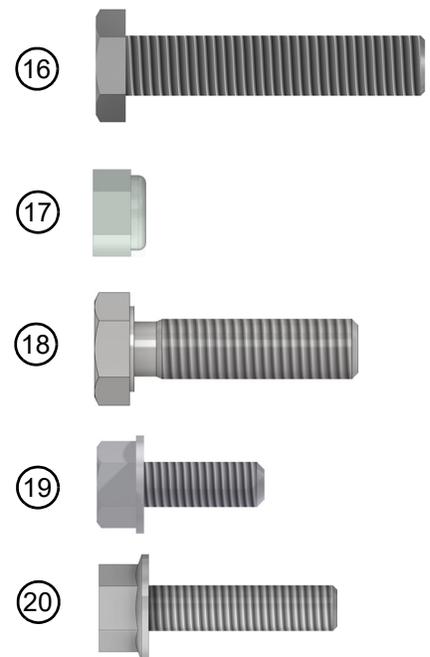
RDE 49 57910-3
RDE 58 57947-3

Expulsion Unit RDE 49 (57185) & RDE 58 (57186)

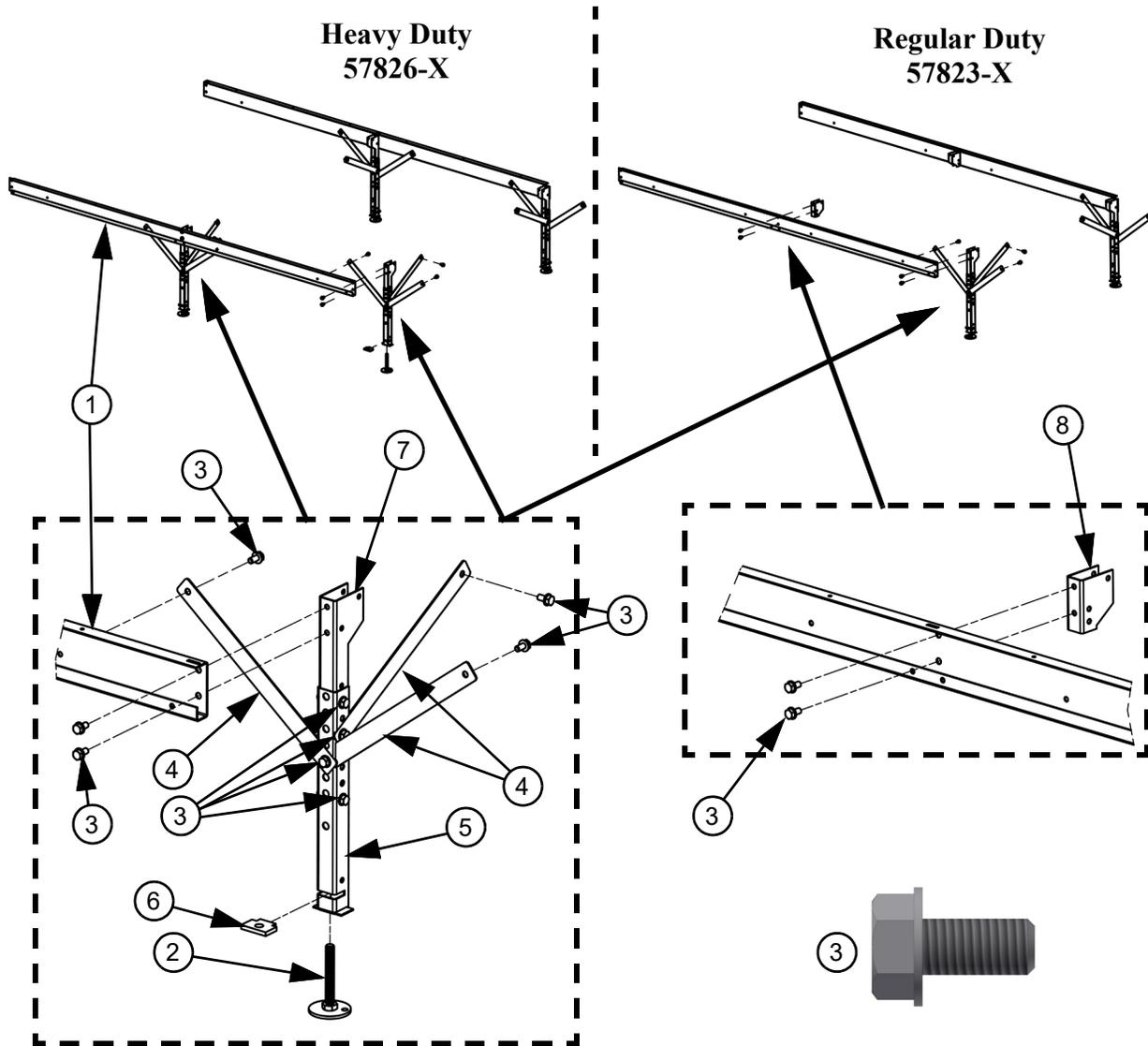


Item	Description	RDE-49	RDE-58
		57185	57186
1	Expulsion Shaft Coupling	603140	603140
2	Motor Mounting Plate	600631	600631
3	2 x 250MM Expeller Mounting Profile	600630	600646
4	Expeller Mount Cross	57187	57187
5	Expeller Tube Support	57188	57188
6	500 MM RDE Mounting Profile Expeller Pipe	600638	600638
7	RDE Front Expulsion Cover	57212	57212
8	RDE Cover Side Brace (Left)	57213-2	57213-2
9	RDE Cover Side Brace (Right)	57213-1	57213-1
10	RDE Rack Plate	56680	56993
11	Egg Expulsion Plate	57206	57206
12*	Duplex Chain & Shackle	603113	603113
13*	Toothed Single Sided Wheel	600622	600622
14*	32 mm DIN 705A Set Collar	201140	201140
15*	34.2x30.1x35mm Flanged Sleeve Bearing	201139	201139
16*	M8 X 40 DIN933 Hex Bolt	201006	201006
17*	M8 DIN985 Lock Nut	201003	201003
18*	M8 x 30 DIN933 Bolt	201007	201007
19*	M6x16 DIN7500D Taptite	201077	201077
20*	M6 x 25 DIN7500-D Taptite	201067	201067

*Included in 57891 Hardware Package.



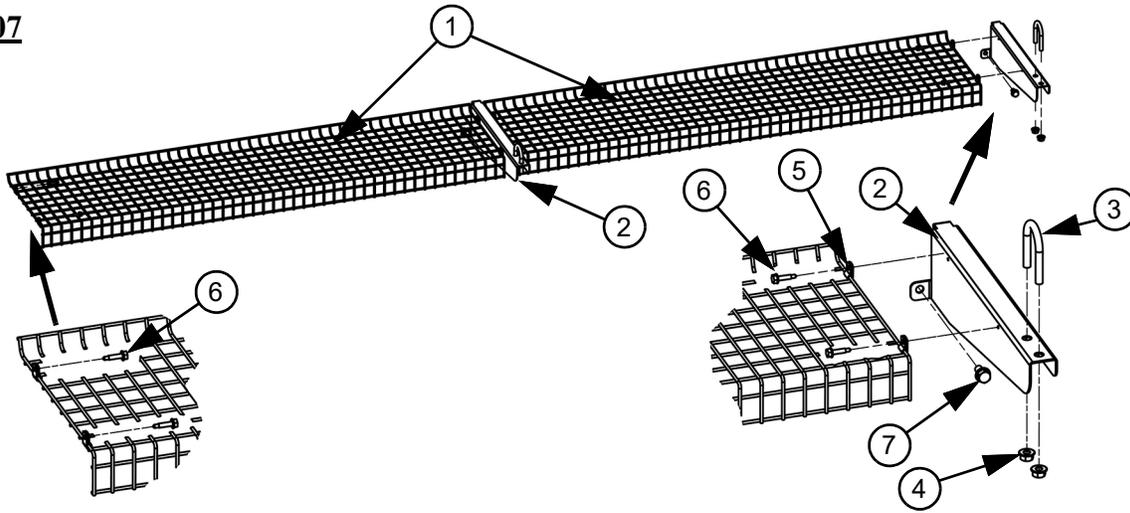
Leg & Rail Kits Regular Duty (57823-X), & Heavy Duty (57826-X)



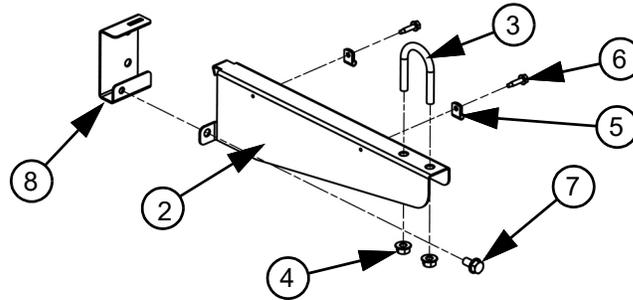
Item	Description	Regular Duty			Heavy Duty		
		57823-1	57823-2	57823-3	57826-1	57826-2	57826-3
		Part No.					
1	Nest Front Rail	57316	57316	57316	57316	57316	57316
2	Leveling Foot Weldment	57320	57320	57320	57320	57320	57320
3	M8 x 16 Taptite	201047	201047	201047	201047	201047	201047
4	Strut Strip	600734	600734	600734	600734	600734	600734
5	Leveling Leg	56674	56674	56674	56674	56674	56674
6	M12 Leveling Plate	56997	56997	56997	56997	56997	56997
7	Nest Leg (15.75" [400mm])	57315-1	--	--	57315-1	--	--
	Nest Leg (24.6" [625mm])	--	57315-2	----	--	57315-2	--
	Nest Leg (33.5" [850mm])	--	--	57315-3	--	--	57315-3
8	Nest Leg (3.15 [80mm])	57315-4	57315-4	57315-4	--	--	--

Balcony Kit (58007-X)

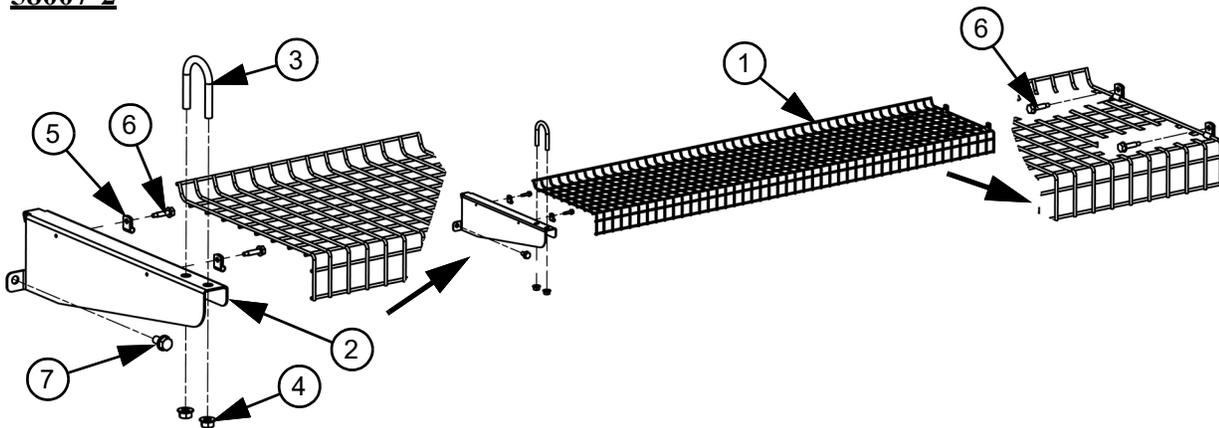
58007



58007-1

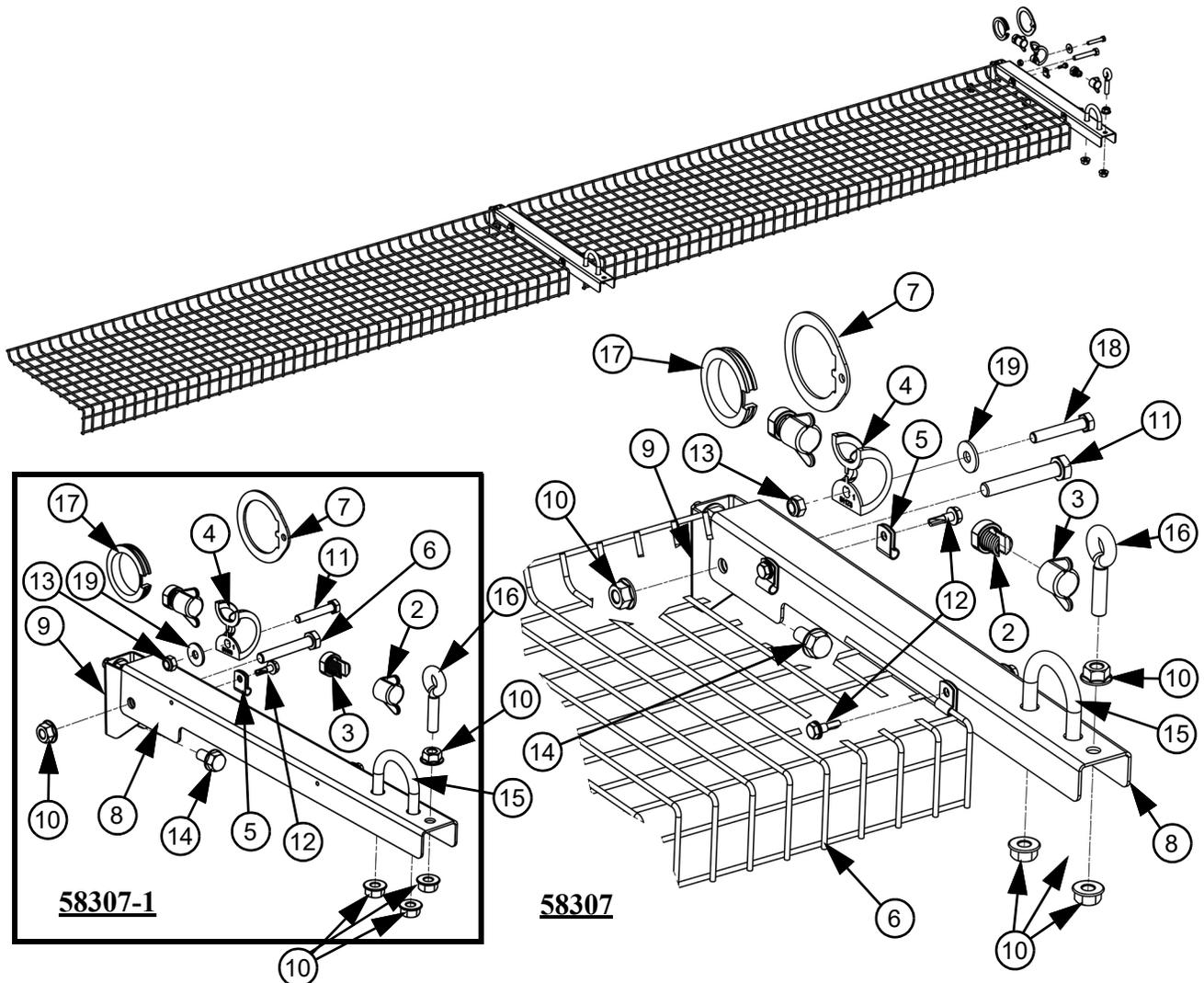


58007-2



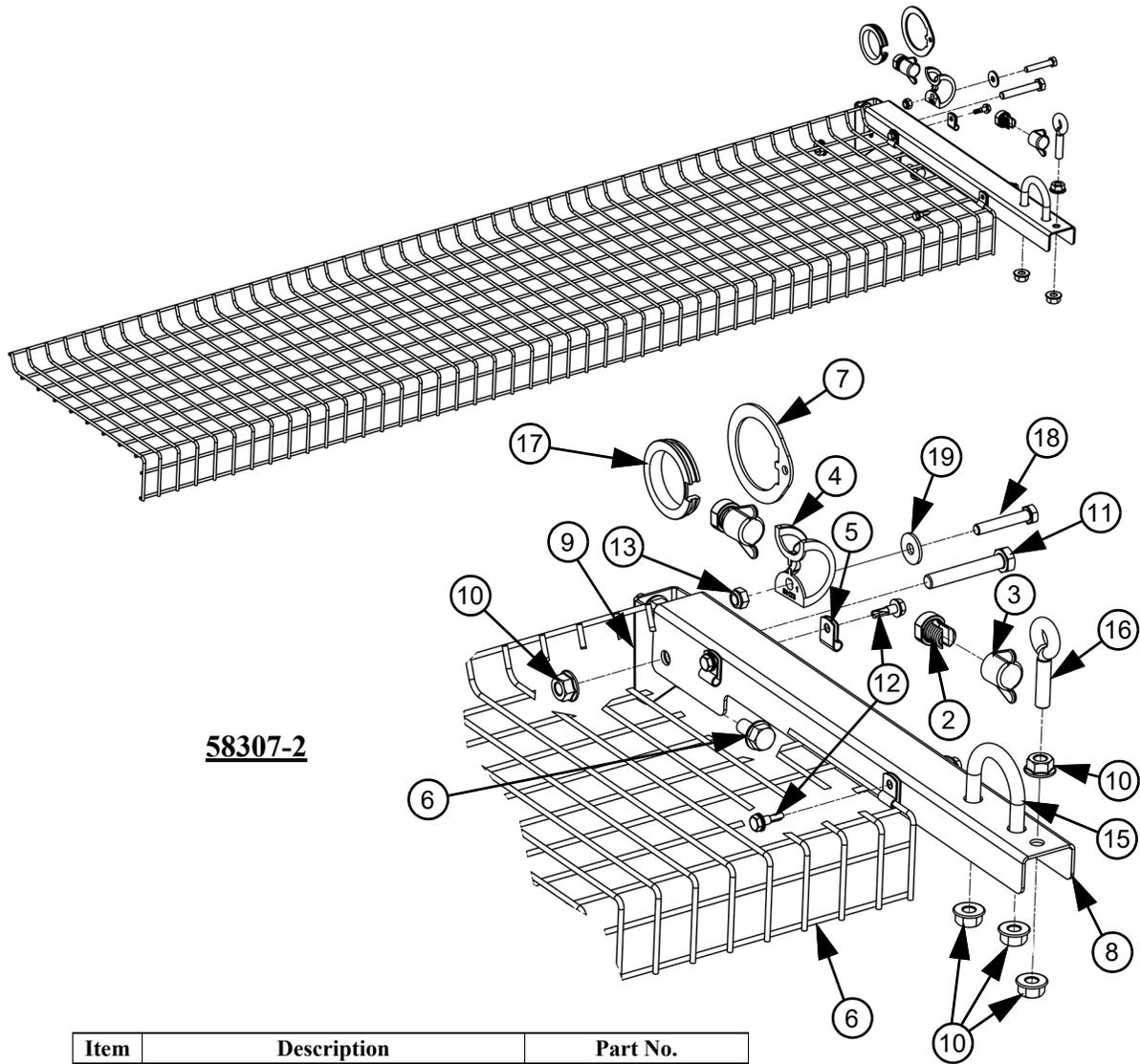
Item	Description	58007	58007-1	58007-2
		Part No.		
1	Approach	57002	--	57002
2	Valego Balcony Arm	58009	58009	58009
3	M8-1.25 x 1.676 U Bolt	201048	201048	201048
4	M8-1.25 DIN 6923 Flange Nut	201001	201001	201001
5	3/16" Loop Clamp	57001	57001	57001
6	M6 4.8 x 19 HXWH Ser. Screw	201059	201059	201059
7	M8 x 16 Taptite	201047	201047	201047
8	Valego Balcony Bracket	--	58207	--

Balcony Kit (58307, 58307-1)



Item	Description	58307	58307-1
		Part No.	
1	3/16 Nylon Braid Rope (Not Shown)	5-37173	5-37173
2	.500-13UNCX Split Bolt	40787	40787
3	Split Bolt Cap	40788	40788
4	Rope Guide	51173	51173
5	3/16" Loop Clamp	57001	57001
6	Nest Approach	57002	--
7	Expulsion Bracket	58296	58296
8	FP Balcony Bracket	58297	58297
9	Pivot Bracket	58298	58298
10	M8-1.25 DIN 6923 Flange Nut	201001	201001
11	M8 X 40 DIN933 Hex Bolt	201006	201006
12	4.8 x 16mm DIN7504K HXWH Screw	201028	201028
13	M6 DIN985 Lock Nut	201037	201037
14	M8 x 16 Taptite	201047	201047
15	M8-1.25 x 1.676 U Bolt	201048	201048
16	M8 x 30 Eye Bolt	201084	201084
17	33.5 mm Plastic Bearing	201089	201089
18	M6 x 35 DIN 931 Hex Bolt	201179	201179
19	M6 DIN 9021 Washer	BEV 049021EV06	BEV 049021EV06

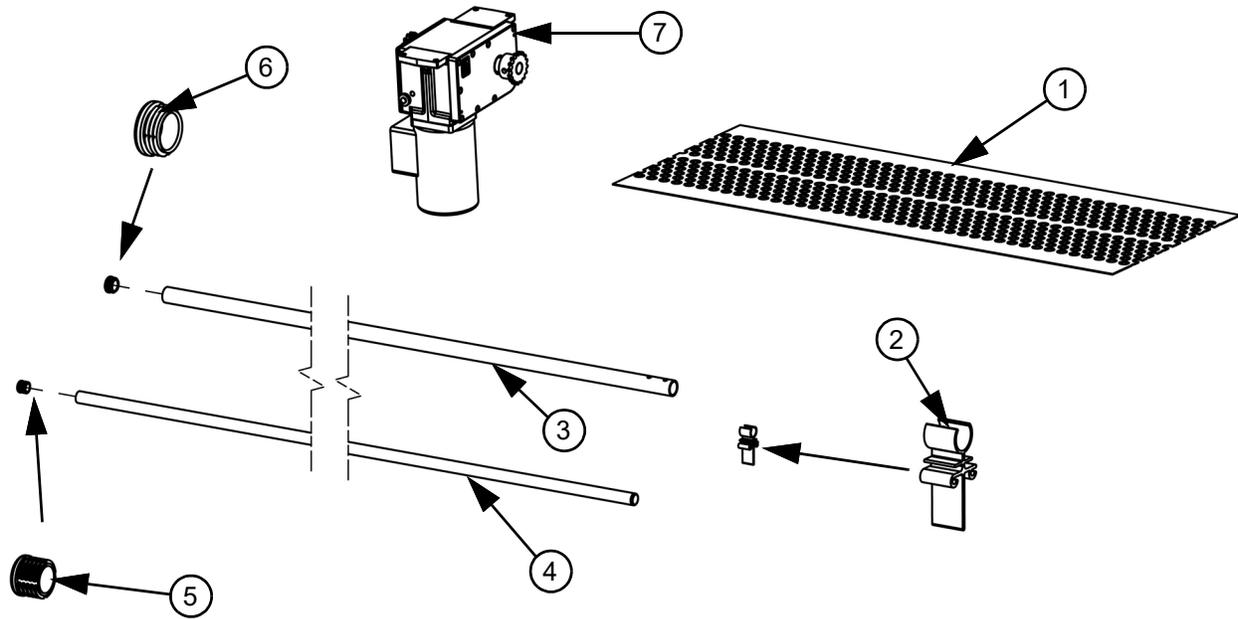
Balcony Kit (58307-2)



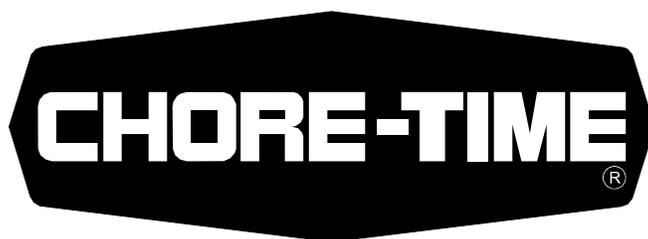
58307-2

Item	Description	Part No.
1	3/16 Nylon Braid Rope (Not Shown)	5-37173
2	.500-13UNCX Split Bolt	40787
3	Split Bolt Cap	40788
4	Rope Guide	51173
5	3/16" Loop Clamp	57001
6	Nest Approach	57002
7	Expulsion Bracket	58296
8	FP Balcony Bracket	58297
9	Pivot Bracket	58298
10	M8-1.25 DIN 6923 Flange Nut	201001
11	M8 X 40 DIN933 Hex Bolt	201006
12	4.8 x 16mm DIN7504K HXWH Screw	201028
13	M6 DIN985 Lock Nut	201037
14	M8 x 16 Taptite	201047
15	M8-1.25 x 1.676 U Bolt	201048
16	M8 x 30 Eye Bolt	201084
17	33.5 mm Plastic Bearing	201089
18	M6 DIN 9021 Washer	201179
19	M6 4.8 x 19 HXWH Ser. Screw	BEV 049021EV06

Miscellaneous Parts



Item	Description	Part No.
1	Egg Belt [500 mm]	600512-X
	Egg Belt [250 mm]	600501-X
2	Egg Belt Dividers	57441
3	Expulsion Shaft	208050
4	25 mm Floor Support Tube	208040
5	25 mm Round Plastic Cap	201080
6	33.4 mm Tube Plug	201038
7	50 Hz Motor (EU)	603104
	60 Hz Motor (US)	603119



**MADE TO WORK.
BUILT TO LAST.®**

Revisions to this Manual

Page No.	Description of Change	ECO
10	56685 was 600410	
31,32	Added Expulsion Tubes/Caps center of System Information	41011

**For additional parts and information, contact your nearest Chore-Time distributor or representative.
Find your nearest distributor at: www.choretime.com/contacts**

CTB, Inc.
PO Box 2000
Milford, Indiana 46542-2000 USA
Phone (574) 658-4101 Fax (877) 730-8825
Email: choretime@choretime.com
Internet: www.choretime.com