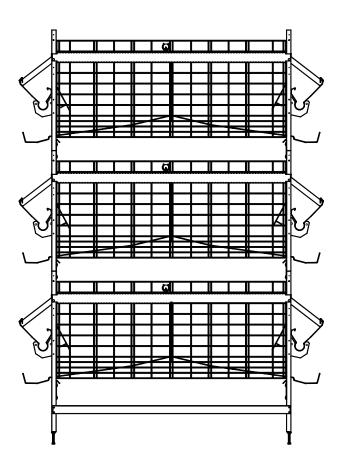


Modular Layer Manure Belt Cage Installation & Operator's Instruction Manual



October 2025 ME1921C

Chore-Time Warranty

LIMITED WARRANTY. CTB, Inc. ("Chore-Time") warrants each new CHORE-TIME Product 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. CONDI-TIONS 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

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About This Manual

The intent of this manual is to help you in two ways. One is to follow step-by-step in the order of assembly of your product. The other way is for easy reference if you have questions in a particular area.

Important! Read ALL instructions carefully before starting construction.

Important! Pay particular attention to all SAFETY information.

• Metric measurements are shown in millimeters and in brackets, unless otherwise specified. "" equals inches and "'" equals feet in English measurements.

Examples:

1" [25.4] 4' [1 219]

- Optional equipment contains necessary instructions for assembly or operation.
- Major changes from the last printing will be listed on the back cover.



- This Planning Symbol is used in areas where planning needs to take place before construction continues.
- Very small numbers near an illustration (i.e., 1257-48) are identification of the graphic, not a part number.

Safety 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.

Using the equipment for purposes other than specified in this manual may cause personal injury and/or damage to the equipment.



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.

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Safety Information

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

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.

With the exception of motor overload protection, electrical disconnects and over current protection are not supplied with the equipment.



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Cage Layout

Placement of Drive Unit

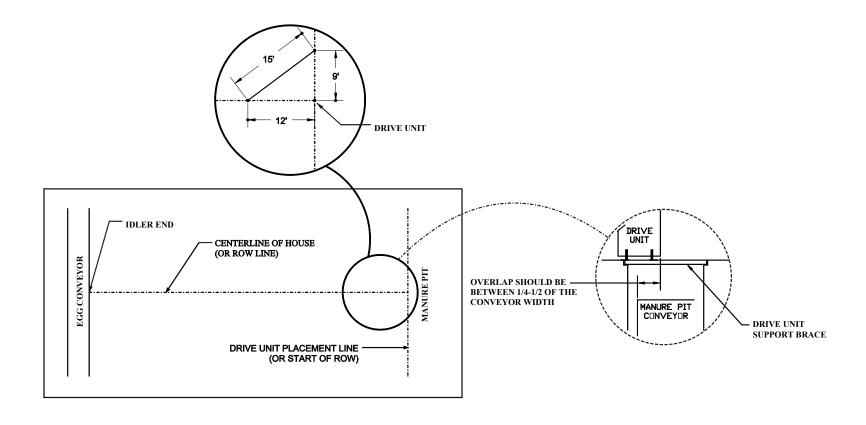
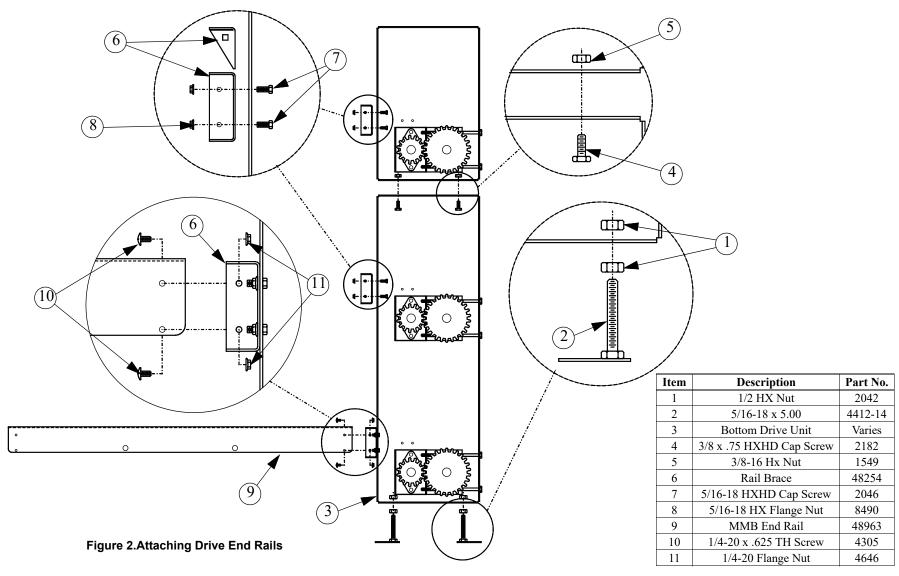


Figure 1.Drive Unit Placement

Attaching End Rails

Thread a 1/2 HX Nut (Item 1, Figure 2) onto a 5/16-18 x 5.00 HH Bolt (Item 2) and attach it to the bottom of the Bottom Drive Unit (Item 3) as shown. Attach each of the Drive Units together with 3/8 x .75 Cap Screws (Item 4) and 3/8-16 Hex Nuts (Item 5). Attach a Rail Brace (Item 6) to the Bottom Drive Unit with 5/16-16 Cap Screws (Item 7) and Flange Nuts (Items 8). Attach the MMB Drive End Rail (Item 9) to the Bottom Rail Brace with 1/4-20 Hardware as shown.



Fasten Bolt Braces (Item 1, Figure 3) to each of the Bottom Manure Belt Legs (Item 2) using 1/4-20 TH Screws (Item 3) and 1/4-20 Flange Nuts (Item 4) as shown. Thread 5/16" Flange Nuts (Item 5) onto each 5/16-18 x 5.00 HH Bolt (Item 6). Insert the Bolts into each of the Bolt Braces and secure with 5/16-18 Square Nuts (Item 7) as shown. These Bolts will be used to level the Cage Row. Attach a Leg to each end of a Partition (Item 8) by inserting the partition wires into the Legs and bending the wires down as shown.

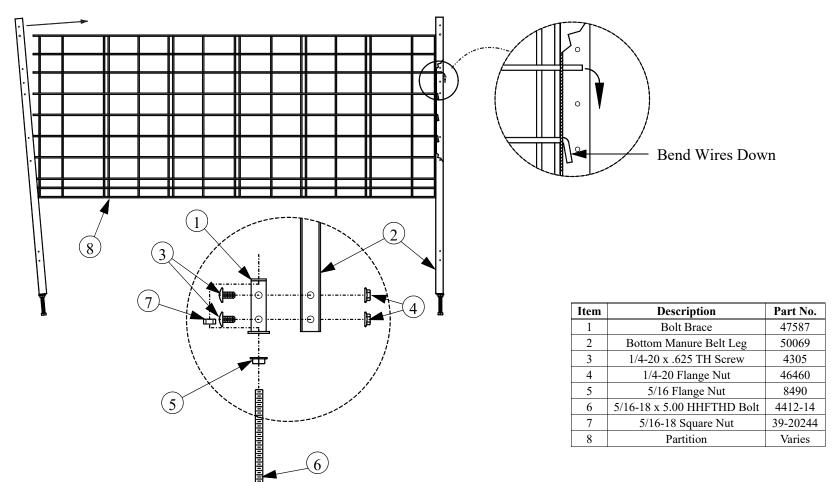
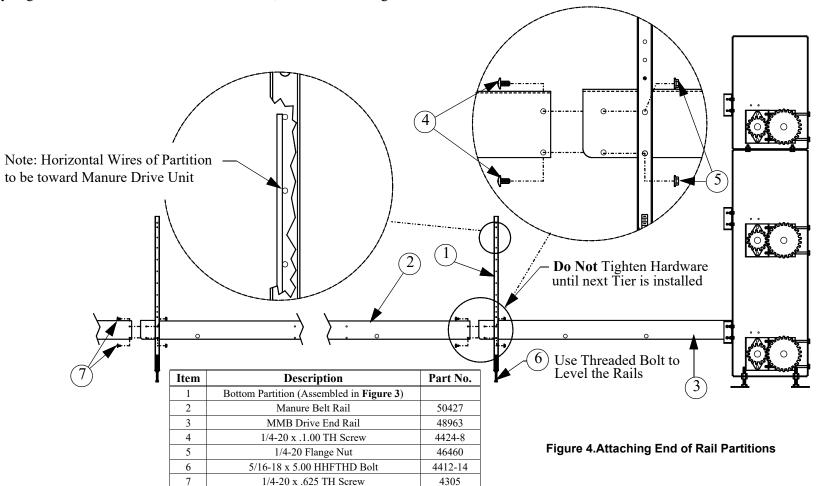


Figure 3.Bottom Partition Assembly

Assembling the Bottom Tier

Attaching Partitions at the end of Each Manure Belt Rail

Orient a Bottom Partition (Item 1, Figure 4) with the Horizontal wires toward the Drive Unit (See Figure). Obtain a Manure Belt Rail (Item 2) and line up the holes in the end of it with the holes in the End Rail (Item 3) making sure to keep the Manure Belt Rail toward the inside of the End Rail as shown. Line up the holes in the Leg of a Partition with the same holes, and while keeping the Leg *outside* of the End Rail, Fasten them all together with 1/4-20x 1.00 Screws and 1/4-20 Flange Nuts; **Do not tighten down hardware at this time.** (See Figure). Only the End Rail is attached with 1.00" Screws. The remaining Partitions are attached using shorter 1/4-20 x .625 Screws (Item 7) and 1/4-20 Nuts. Attach only the Partitions at the end of each Manure Belt Rail at this time. The Mid Rail Partitions will be added in the next step. Use the 5/16-18 x 5.00 Threaded Bolts (Item 4) in the Legs to level the Rails. as you go. Once the 2nd Tier has been assembled, come back and tighten all of the hardware on the bottom Tier.



d Mid Rail Partitions

Once a Partition is attached at the end of a Rail, use 1/4-20x .625 Screws and 1/4-20 Flange Nuts to attach the remaining Partitions to that Rail every 24" as shown below. Adjust each Leg adjustment bolt until it makes full contact with the floor to assure proper leveling. In order to get the exact Cage Row length that you need, it may be necessary to cut the last Manure Belt Rail. See Figure 6 (on page 11)

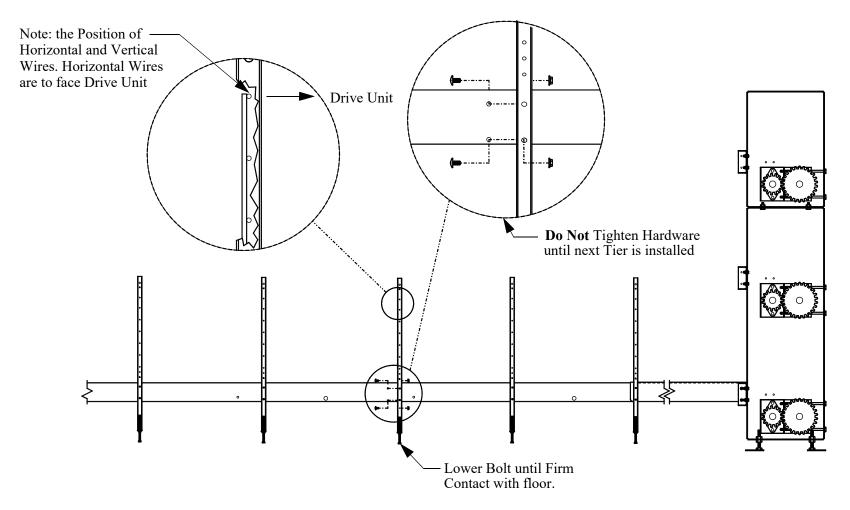
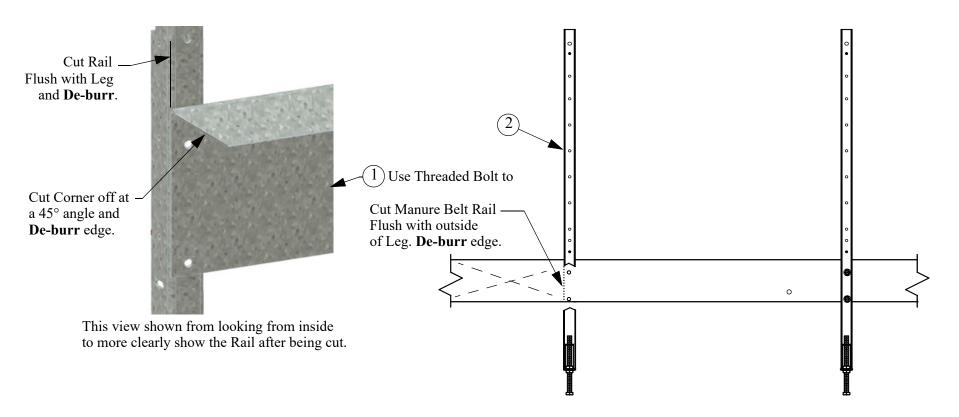


Figure 5.Attaching Mid-Rail Partitions

Cutting Rails at Idler end

Once the last Partition is installed, cut the last Manure Belt Rail (Item 1, Figure 6) Flush with the Bottom Leg (Item 2) as shown. De-burr the Rail edge because it could come in contact with the belt. Cut the sharp corner off of the end of the Manure Belt Rail. De-burr the cut edge to avoid cutting the Belt when it is installed. Repeat this procedure for each Manure Belt Rail on the other Tiers as they are assembled.



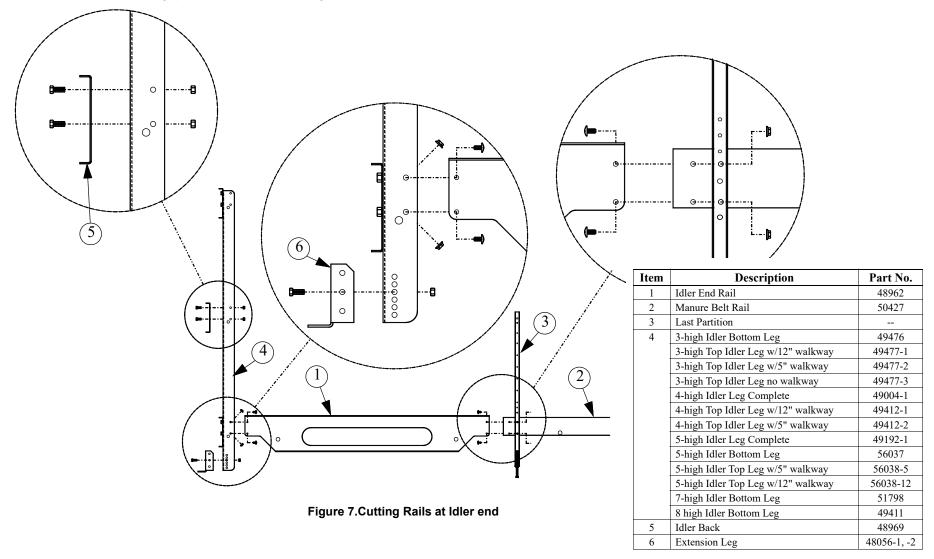
Item	Description	Part No.
1	Manure Belt Rail	50427
2	Manure Belt Bottom Leg	50069

Figure 6.Cutting Rails at Idler end

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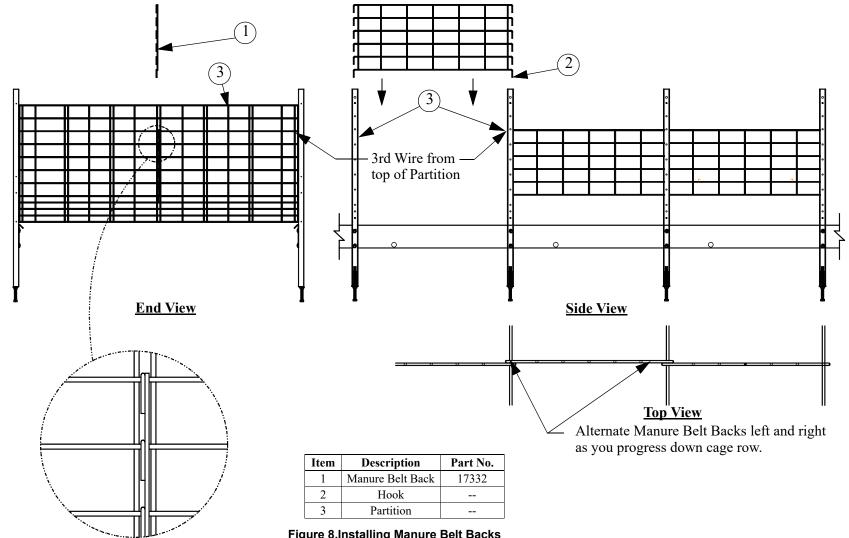
Attaching the Idler

Use 1/4-20 hardware to attach the Idler End Rail (Item 1, Figure 7) to the last Manure Belt Rail (Item 2) and the last Partition as shown. Note that the Bolt Heads are toward the center of the Cage so when the Belt is installed it does not get caught up in the long end of the Bolts. Repeat the same steps to attach the Idler End Rail on the other side. Choose the set of holes in the Idler Leg (Item 4) that best levels the Idler End Rail and attach it to the Idler End Rail with 1/4-20 Hardware. Repeat for the other Cage side. The Idler Legs used will vary per the number of Tiers in Cage system (See in parts list). Attach the Idler Back (Item 5) and Extension Leg (Item 6) to each Idler Leg with 5/16-18 Hardware as shown.

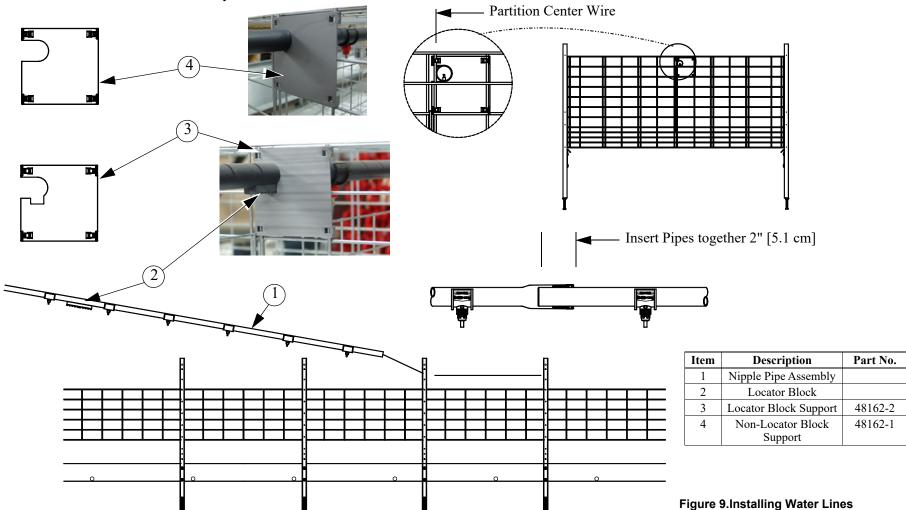


Installing Manure Belt Backs

Obtain a Manure Belt Back (Item 1, Figure 8) and, using the hooks (Item 2) at both ends, hang it at the exact center of two Partitions (Item 3) with the top most wire resting on the third wire from the top of the Partitions (See Figure). Install the remaining Manure Belt Backs alternating the way in which they overlap from left and right as shown.

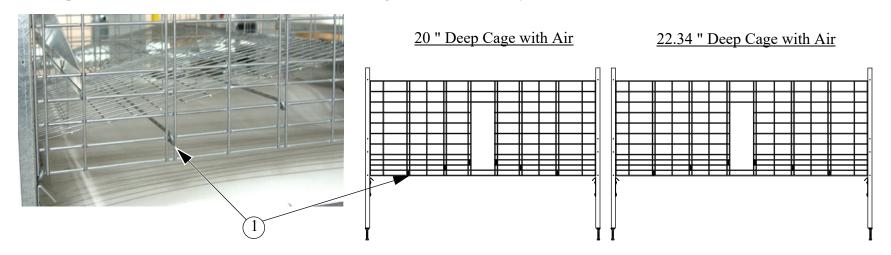


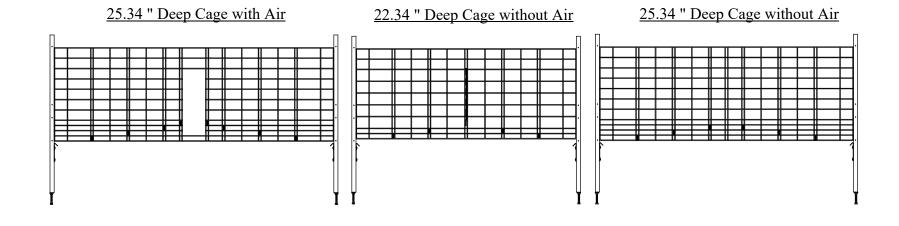
Feed a Nipple Pipe Assembly (Item 1, Figure 9) through the wire square that is one right of the center wire, and at the top of each Partition (See Figure). The Locator Block (Item 2) on the Nipple Pipe must be located such that it will lie on a horizontal Partition wire. Obtain a Locator Block Support (Item 3) and snap the Locator Block into it. All Locator Blocks need to be centered on the Block Supports (Item 2). With the Locator Block snapped in place, attach it onto the Partition wire. Attach the pipe to all of the remaining Partitions with Non-Locator Block Supports (Item 4) (See Figure). Feed a second Nipple Pipe Assembly through the Partitions and insert it into the 1st Nipple Pipe atleast 2". Attach it to the Partitions just as you did the 1st pipe. Continue with Pipe as needed to the end of the cage row. Be sure to completely assemble all of the Pipe in a Tier before starting to assemble the next Tier. It is difficult to feed Pipe through the Partitions if the Tier above is in the way.



Installing Floor Supports

The location of the Floor Supports (Item 1, Figure 10) depends on the Cage type. The correct locations of the Floor Supports for each Cage type is **shown** below. Insert the Floor Supports into the proper Partition square, slide it through to the corresponding square on the second Partition, and hook the end on the horizontal partition wire as shown. *The Floor is shown in the Figure, but is not actually installed at this time*.





Item

Figure 10.Installing Floor Supports

Part No. P4037-122

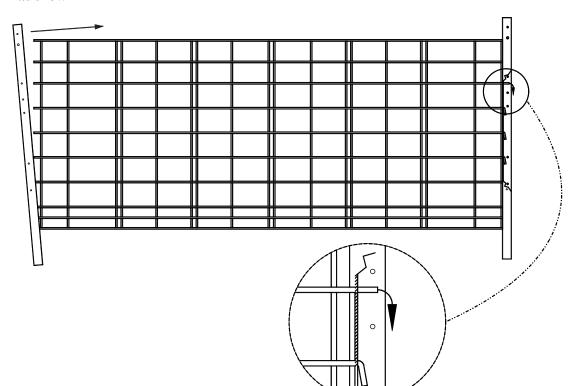
Description

Floor Support

ದ Assembling Even numbered Tiers (2,4,6,etc.)

Assembling upper Partitions (Tier 2 and above)

Attach a Manure Belt Top Leg (Item 1, Figure 11) to both ends of a Partition (Item 2) by inserting the partition wires into the Legs and bending the them down as shown.



Item	Description	Part No.
1	Manure Belt Top Leg	50068
2	Partition	Varies

Figure 11. Upper Partition Assembly

Installing Even Tier Manure Belt Rails

Attach the 2nd Tier End Rail (Item 1, Figure 12) to the Drive Unit just like you did on the 1st Tier. In order to maintain a level cage row, the ends of the Manure Belt Rails need to be staggered between each Tier. To achieve this, cut 47.9" [121.7cm] off the end of the 1st Manure Belt Rail (Item 2) on all of the even numbered Tiers (Tier 2,4,6, etc.). Attach the newly cut Manure Belt Rail and a Manure Belt Top Leg (Item 3) to the End Rail using a Leg Splice (Item 4) and 1/4-20 x 1.00 Screws (Item 7) and 1/4-20 Flange Nuts (Item 6) as shown. Attach the remaining Manure Belt Rails with 1/4-20 x .625 Screws (Item 5) and 1/4-20 Flange Nuts (Item 6). Do not tighten the hardware at this time; once the tier that you are working on is completed, tighten the hardware on the tier directly under it. Note: Manure Belt Rail must be toward the inside of the End Rail (See Figure).

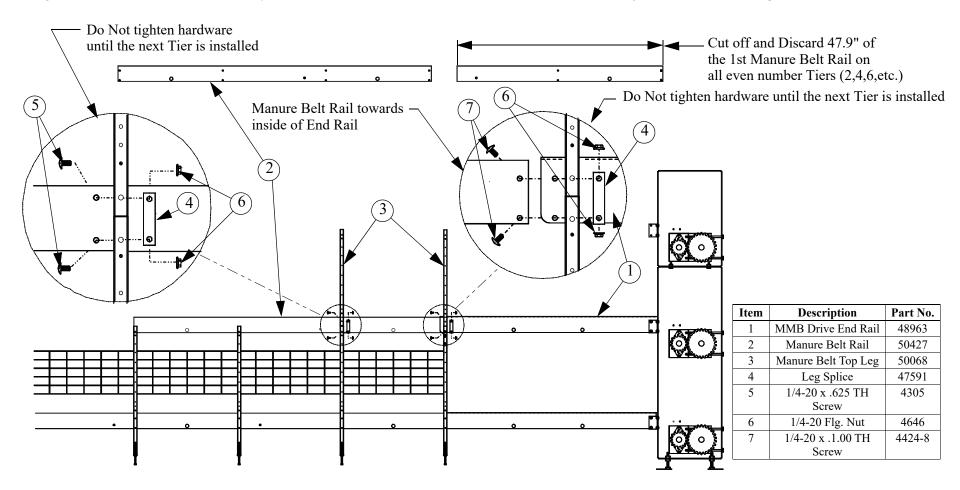


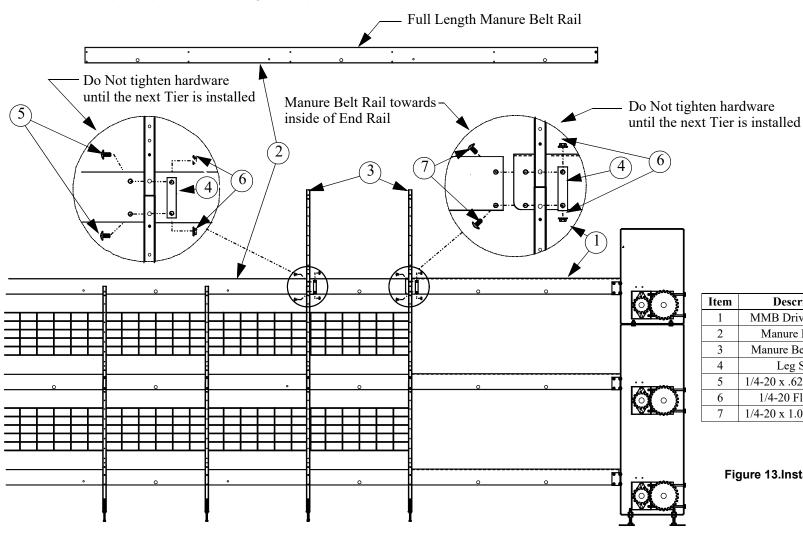
Figure 12.Installing Even Tiers

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⇒ Assembling Odd numbered Tiers (3,5,7,etc.)

Installing Odd Tier Manure Belt Rails

Attach the odd tier End Rails (Tier 3,5,7,etc.) (Item 1, Figure 13) to the Drive Unit just like you did the other tiers. Attach a Manure Belt Rail (Item 2) and a Manure Belt Top Leg (Item 3) to the End Rail using a Leg Splice (Item 4) and 1/4-20 x 1.00 Screws (Item 7) and Flange Nuts (Item 6) as shown. Do not tighten the hardware at this time; once the tier that you are working on is completed, tighten the hardware on the tier directly under it. *Note: Manure Belt Rail must be toward the inside of the End Rail (See Figure)*. Attach loosely the remaining Manure Belt Rails and Legs using leg splices and 1/4-20 x .625 Screws (Item 5) and 1/4-20 Flange Nuts (Item 6) as shown.



Item	Description	Part No.
1	MMB Drive End Rail	48963
2	Manure Belt Rail	50427
3	Manure Belt Top Leg	50068
4	Leg Splice	47591
5	1/4-20 x .625 TH Screw	4305
6	1/4-20 Flange Nut	4646
7	1/4-20 x 1.00 TH Screw	4428-8

Figure 13.Installing Odd Tiers

Installing Floor

Insert Floor Bottoms (Item 1, Figure 14) from each side of the Cage on top of the Floor Supports as shown. Attach the two Floor Bottoms together at the middle using a ring gun and Wire Rings (Item 2). Capture the end wires of the Floor Bottoms (Item 3) as well as the bottom wire of the Cage Back (Item 4). Use 9 rings per Partition; one on every 3rd wire section of the Floor Bottoms. Install Edge Guard (Item 5) onto Cage Bottoms using Wire Rings as shown.

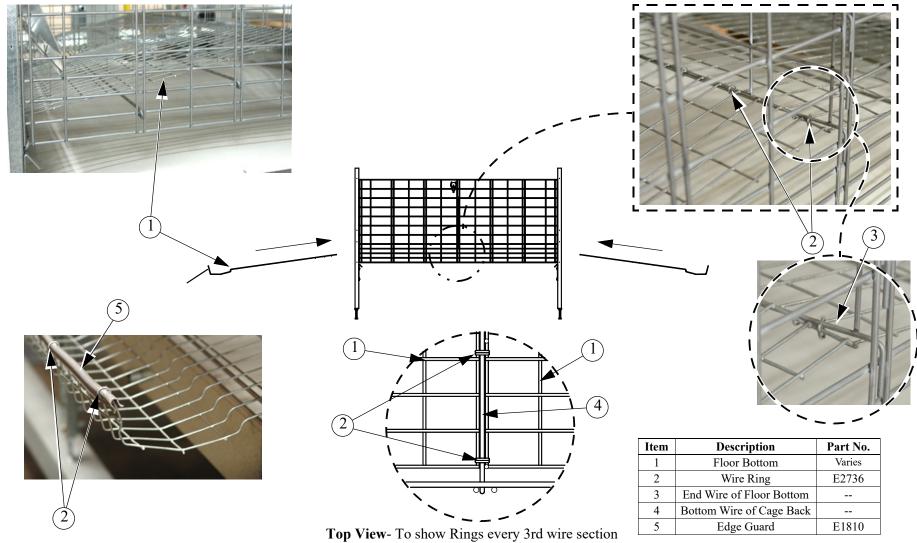
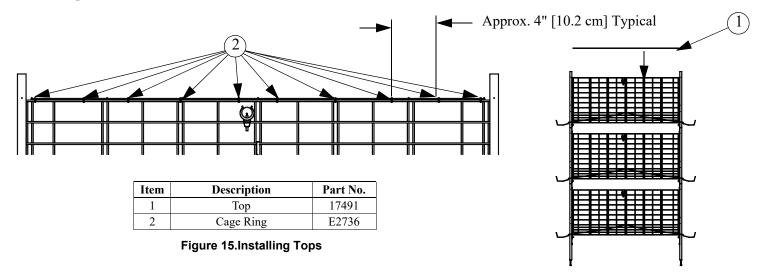


Figure 14.Installing Floor

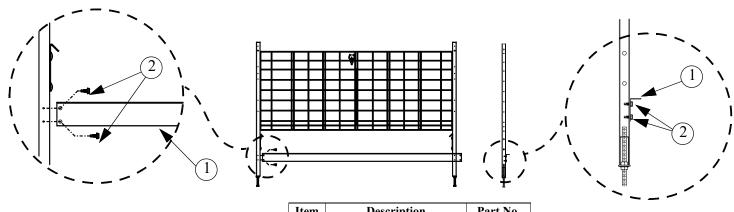
Installing the Cage Tops

On the Top Tier use a ring gun and Cage Rings to attach a Top (Item 1, Figure 15) per cage section. Use 10 Cage Rings (Item 2) per Partition approximately 4" [10.2 cm] apart.



Installing Idler end Return Cross Brace

At the Idler end of the cage row attach a Return Cross Brace (Item 1, Figure 16) to the Bottom Manure Belt Legs (Item 2) with #10 Self Drilling Screws (Item 3) as shown

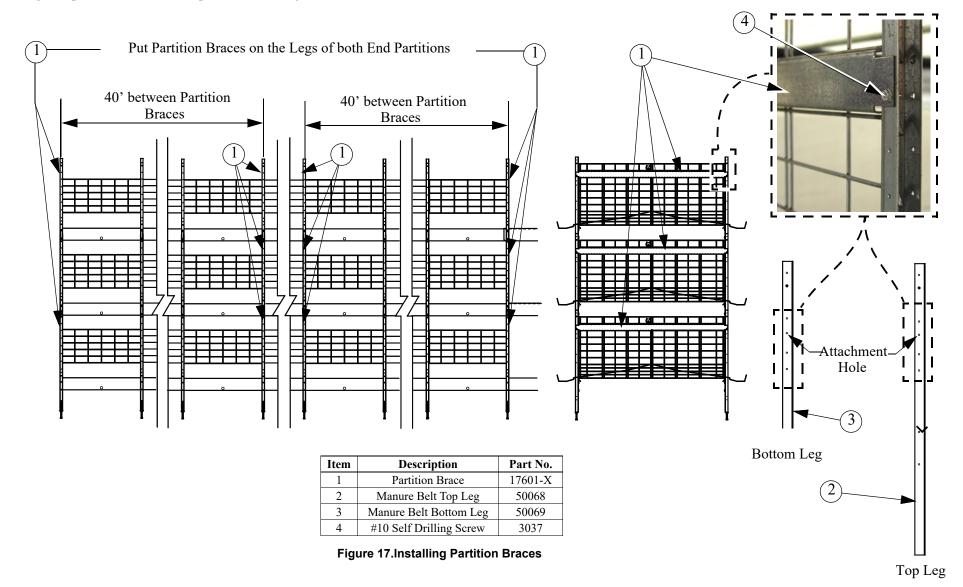


ItemDescriptionPart No.1Return Cross Brace47670-X2#10 Self Drilling Screw3037

Figure 16.Installing Return Cross Brace

Installing the Partition Braces

Partition Braces (Item 1, Figure 17) are installed on both End Partitions, and on Partitions every 40' throughout the cage row (See Figure). Attach each Partition Brace to the Top (Item 2) and Bottom (Item 3) Legs with #10 Self-Drilling Screws (Item 4) using the 2nd hole from the top of four holes (See Figure) pre-drilled near the top of the each Leg.



B Installing Cable for Doors

The Doors Cage Doors hang from a Cable (Item 1, Figure 18) stretched from end to end of the cage row and kept tight by a Turnbuckle (Item 2). Thread the Cable through the holes immediately below the Leg Splices (Item 3) the entire length of the Cage Row. Use a Cable Clamp (Item 4) to secure the Cable at one end. The Turnbuckle must be located such that it is between the same two Partitions as the Ultra-Flow Motor (Item 5). Thread the Cable through the Turnbuckle as shown Allowing some extra Cable for later adjustment. (See Figure 18.) Use a Cable Clamp to secure the Cable at the end of the Cage Row.

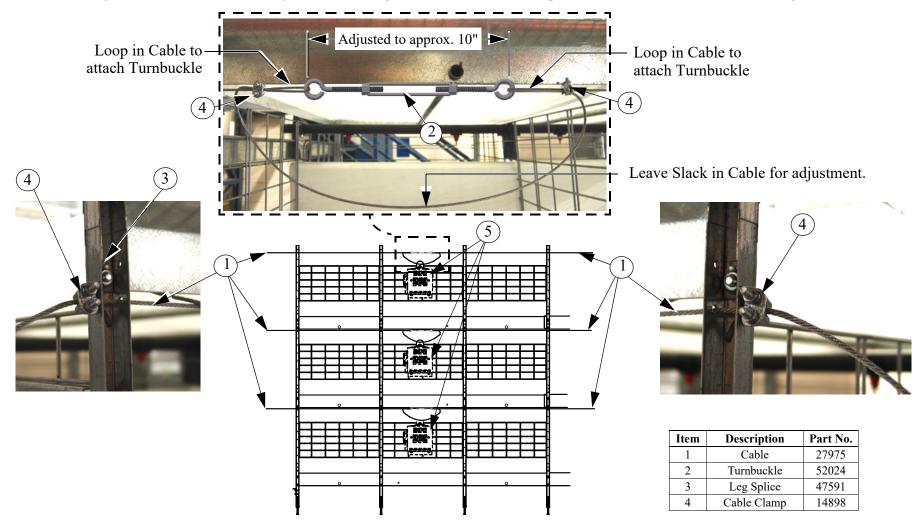


Figure 18.Installing Cable for Doors

Installing the Litter Shield

When looking at the side of a cage row, install Litter Shields (Item 1, Figure 19) starting at the left end. The Litter Shields are designed to lock into the Partition wire (Item 2) and the backside of the Legs (Item 3). Snap the Litter Shields into the 4th space from the bottom of each Partition (See Figure). Each Litter Shield should lap to the outside of the one preceding it working from left to right as shown.

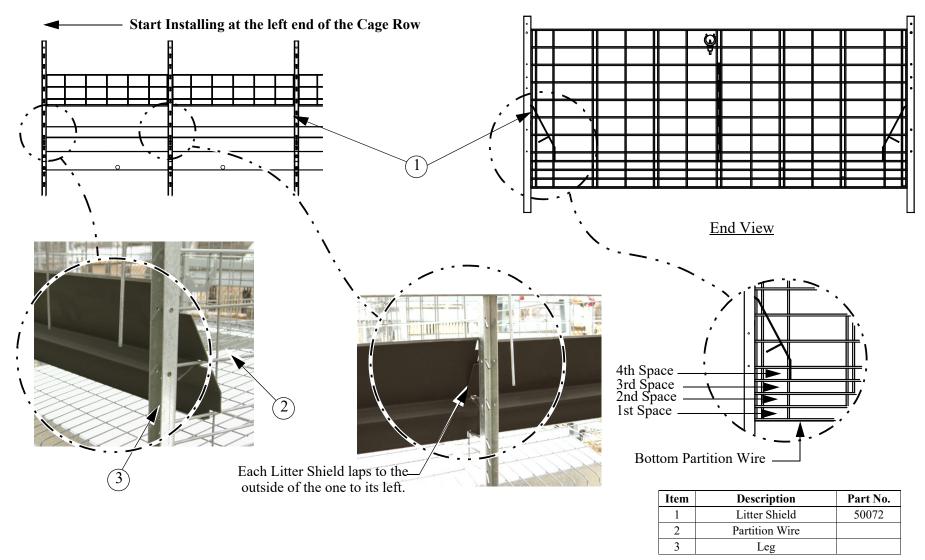


Figure 19.Installing Litter Shield

When installing the Doors (Item 1, Figure 20) start on any Tier at the left end of the cage row. Hang the 1st Door on the Cable (Item 2) with the Hooks on the *right* side of the Legs (Item 3) as shown. Crimp the hooks on the Doors closed. The Door should be able to slide along the Cable. Attach a Door Lock (Item 4) to the left Leg with a #10 Self-Drilling Screw (Item 5) as shown. Hang the Second Door (Item 6) on the Cable with the hooks on the *left* side of the 2nd and 3rd legs as shown. The Second Door should lap to the outside of the 1st as shown. The Door to the right should always lap to the outside of the Door to its left. Crimp the hooks on the Second Door closed. The Second Door should slide along the Cable. Attach a Door Lock to the 3rd Leg with a #10 Self-Drilling Screw. Install the next Door on the Cable with the hooks on the right side of the 3rd and 4th Legs. Repeat the previous to the end of the cage row.

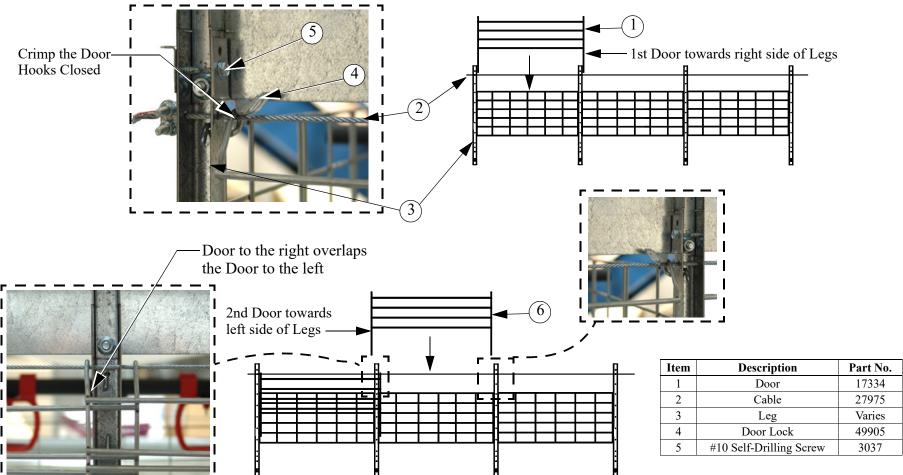
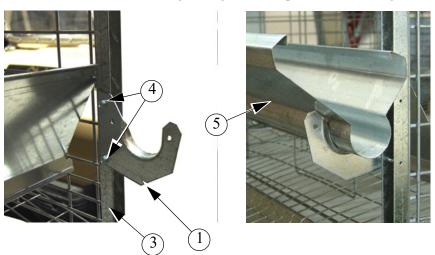
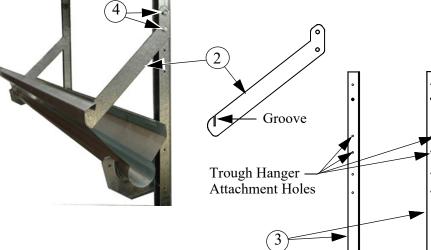


Figure 20.Installing Doors

Installing Trough

The number of Tiers and wether or not your style of Cage has walkways determines how many Trough Hanger Supports (Item 1, Figure 21) and Trough Hangers (Item 2) are required. See the Chart below for quantity used and frequency. Attach Trough Hangers to the Legs (Item 3), using the top two of four holes located towards the top of the Legs as shown in the figure with #10 Self Drilling Screws (Item 4). Set the Trough (Item 5) on the Trough Supports. Locate the Groove in the Trough Hangers and slip it onto the Trough. Fasten the Trough Hangers to the Legs with #10 Screws (See Figure).

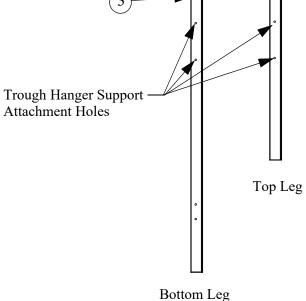


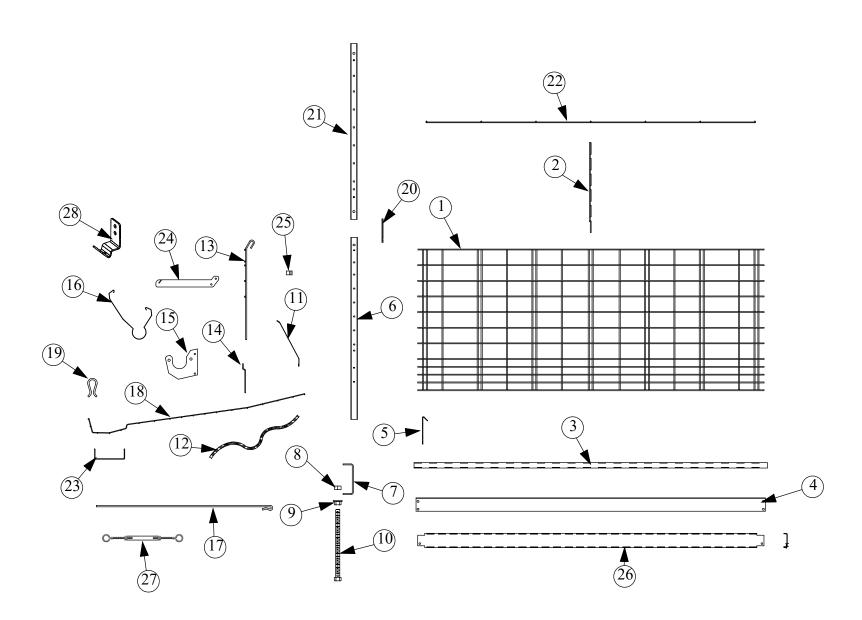


Type of Cage	Hangers and Supports every 2' on Tiers	Hangers and Supports every 4' on Tiers
3-High	1	2 and 3
4-High	1, and 2	3 and 4
5-High	1, 2, and 3	4 and 5
6-High	1,2,3, and 4	5 and 6
6-High with Walkway	1 and 4	2, 3, 5, and 6
8-High with Walkway	1,2,5, and 6	3, 4, 7, and 8

Item	Description	Part No.
1	Trough Hanger Support	47654
2	Trough Hanger	50456
3	Leg	Varies
4	#10 Self-drilling Screw	3037
5	Ultra-Flow Trough	44511-10

Figure 21.Installing Trough





Itemized Parts

Cage Type Part Number Item Description 25.34 w/air 25.34 w/o air 22.34 w/air 22.34 w/o air 20 w/air 17726 17706 17679 17812 Partition 17663 2 Back 17332 17332 --3 Belt Support Tube 50313-4 50313-3 50313-2 50313-1 50313-1 4 Return Cross Brace 47670-3 47670-2 47670-4 47670-1 47670-1 5 Manure Belt Rail 50427 50427 50427 50427 50427 Bottom Manure Belt Leg 50069 50069 50069 50069 50069 6 47587 47587 47587 47587 47587 **Bolt Brace** 8 5/16-18 Square Nut 39-20244 39-20244 39-20244 39-20244 39-20244 9 5/16-18 Hx. Fl. Nut 8490 8490 8490 8490 8490 10 5/16-18 x 5 Hx. Fl. Nut 4412-14 4412-14 4412-14 4412-14 4412-14 11 Litter MMB Shield 50072 50072 50072 50072 50072 12 1/8 Galv. Cable 27975 27975 27975 27975 27975 13 Door 17334 17334 17334 17334 17334 14 Manure Belt 49533-XX 49534-XX 49542-XX 48037-XX 48037-XX 15 Trough Hanger Support 47654 47654 47654 47654 47654 16 10' Ultra-Flow Trough 44511-10 44511-10 44511-10 44511-10 44511-10 17 Floor Support Wires P4037-122 P4037-122 P4037-122 P4037-122 P4037-122 18 Bottom W/Egg Tray 17488GF 17662 17488GF 17660 17337GF 19 Edgeguard E1810 E1810 E1810 E1810 E1810 20 Leg Splice 47591 47591 47591 47591 47591 21 Top Manure Belt Leg 50068 50068 50068 50068 50068 17599 22 Cage Top 10' 17491 17613 17362 17362 23 Belt Return Clip 29455 29455 29455 29455 29455 24 Trough Hanger 50456 50456 50456 50456 50456 25 Cable Clamp 14898 14898 14898 14898 14898 26 Partition Brace 17601-3 17601-2 17601-4 17601-1 17601-1 27 Turnbuckle 52024 52024 52024 52024 52024 28 Door Lock 49905 49905 49905 49905 49905



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Revisions to this Manual

Page No.	Description of Change	ECO
27	Various bom updates	41006
12	Added more Leg variations	

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CTB, Inc.
PO Box 2000
Milford, Indiana 46542-2000 USA
Phone (574) 658-4101
Email: choretime@choretime.com

Internet: www.choretime.com