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ASSEMBLY INSTRUCTIONS FOR 8' SIDE BELT NEST (16 & 20 Hole)

This guide will address the assembly of and parts identification for the revised side belt nest of common partition design. This guide will also include attachment of and parts identification for the passageways.

Installation of the collection table, variable speed control and egg belt as well as system operation will be covered in a separate document.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

L'installation déplacée, l'ajustement, le changement, le service ou l'entretien peuvent causer les dommages de propriété, la blessure ou la mort. Lire l'installation, fonctionnant et les instructions d'entretien à fond avant d'installer ou entretenir cet équipement.

La instalación impropia, ajuste, modificación, servicio o mantenimiento puede causar dañado propiedad, herida o muerte. Lea la instalación, trabajar y mantenimiento instrucciones completamente antes de instalar o poner en funcionamiento equipo.

DANGER

Take necessary precautions when working with sheet metal, edges may be SHARP!

Faites attention quand travaillant avec feuillet, les bords peuvent être AIGUISÉ !

¡Tome las precauciones necesarias al trabajar con metal laminado, las orillas pueden ser AGUDAS!

Read assembly guide completely before beginning setup. For most efficient assembly, two people should work together on nests.

Lire assemblée guide avant que commencer. Deux gens devoir travailler ensemble sur les nids.

Lea la asamblea guía completamente antes de empezar montaje. Para la más asambleas eficientes, dos personas deben trabajar juntos en nidos.

SIDE BELT NEST BODY ASSEMBLY AND INSTALLATION INSTRUCTIONS



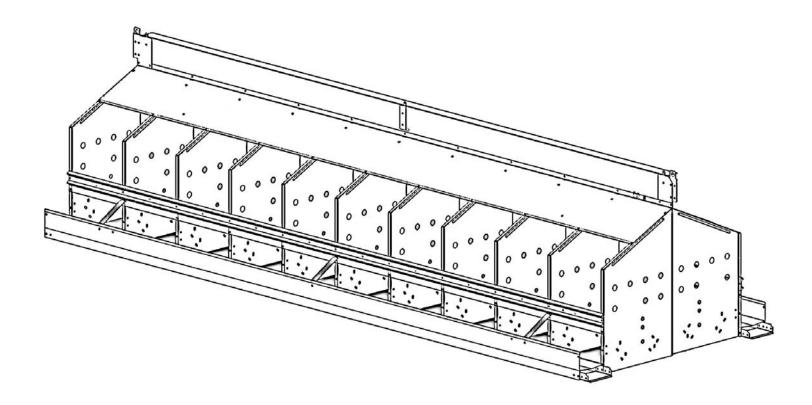
A WARNING

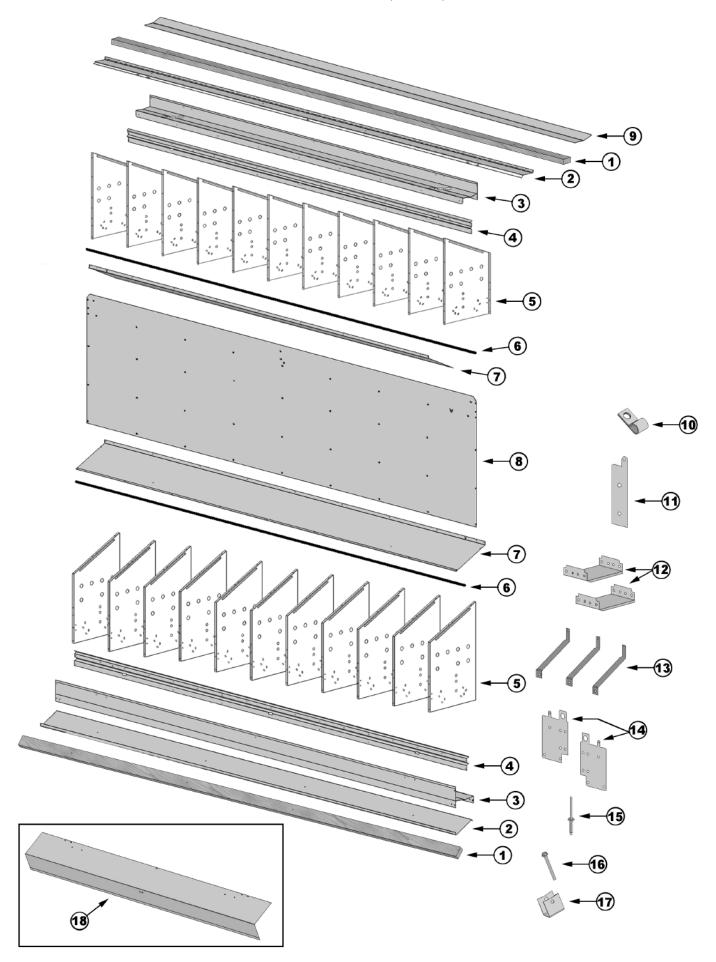
Failure to read and understand operator's manual and all safety signs could result in serious injury. Manual must remain with owner / operator.

A WARNING



To prevent serious injury or death, GUARDS, INTERLOCKS, and SAFETY DEVICES should be restored to correct operation when installing parts or making repairs.





20HOLE NEST (narrow)

1	16-34533	PERCH: 95" - DRILLED	2
2	16500017	TOP: 9.6" HOLE UNIV. NEST	2
3	16560012	TRAY ASM: 20 HOLE SIDE BELT	2
4	16560008	STRINGER: 20 HOLE NEST UNIV.	2
5	16500166	PARTITION:NEST UNIV-RTNR HOLES	22
6	16060026	WIRE:BTM SUPPRT GLV #5 95.125"	4
7	16500010	TOP: 9.6" HOLE UNIV. NEST	2
8	16560040	BACK: 20 HOLE CHORE-TIME	1
9	16-30190	FLIPPER, 8FT NEST UNIV.	1
10	16-8904	CLAMP: HINGE SS 3/8 WIDE	6
11	16-34790	BRACKET, S.BELT CENTER FLIPPER	1
12	16560017	BRACKET:EGG TRAY CHANNEL CONN.	2
13	16560004	BRACE, EGG TRAY SIDE BELT	6
14	16560016	BRACKET, NEST SUSP. & JOINT	2
15	16-34096	RIVET: POP 3/16" AL AD62ABS SH	150
16	16-90078	SCREW:10-24 x 2-1/4 HX HD WHSR	8
17	16500006	BRKT: PERCH / ROD SUPPORT UNIV	16

OPTIONAL EQUIPMENT

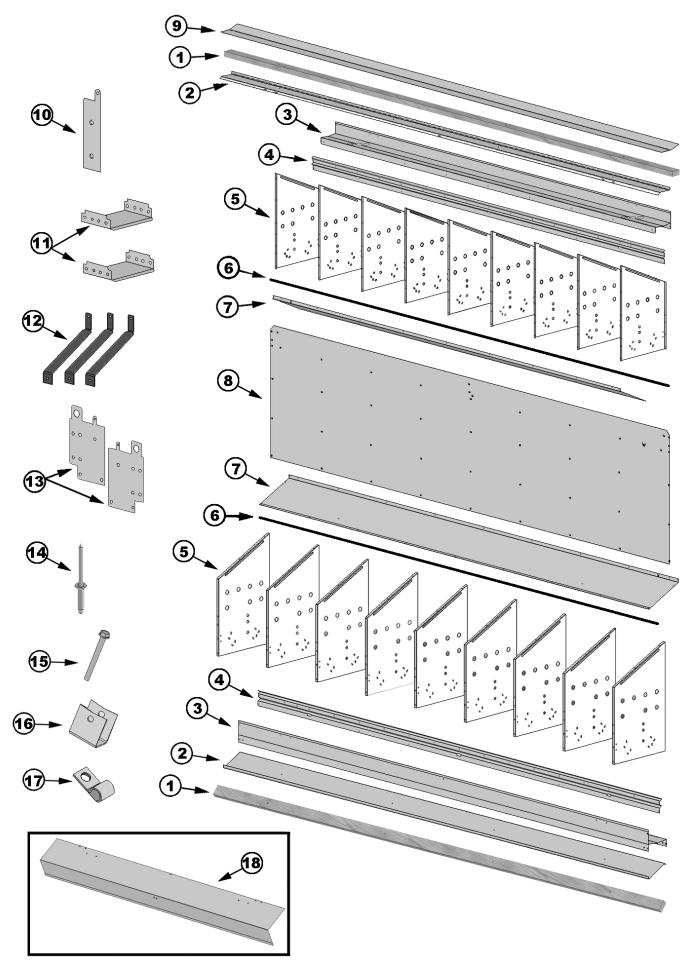
12	16500016	LID: SIDEBELT CLOSEOUT UNIV.	2
	ADDITIONAL	. 6 HINGE CLAMPS REQUIRED FOR CLOSEOUT LIDS	

PARTS NOT SHOWN IN ILLUSTRATION

16-12500	PIN: COTTER STEEL 1/8" X 3/4"	3
16560036	RIVET PACK, NEST FRONT & HINGE	1
16-90076	NUT, HEX 10-24 W/NYLON INSERT	20
16-90077	SCREW,HX HD MACH 10-24 x 1/2	12

NEST KIT PART NUMBERS

61911201	20 HOLE WITH LIDS
61911101	20 HOLE WITHOUT LIDS



1	16-34533	PERCH: 95" - DRILLED	2
2	16500017	COVER, EGG TRAY SIDEBELT NEST	2
3	16560013	TRAY ASM: 16 HOLE SIDE BELT	2
4	16560007	STRINGER: 16 HOLE NEST UNIV.	2
5	16500166	PARTITION:NEST UNIV-RTNR HOLES	18
6	16060026	WIRE:BTM SUPPRT GLV #5 95.125"	4
7	16500009	TOP: 12" HOLE UNIV. NEST	2
8	16560039	BACK: 16 HOLE CHORE-TIME	1
9	16-30190	FLIPPER, 8FT NEST UNIV.	1
10	16-34790	BRACKET, S.BELT CENTER FLIPPER	1
11	16560017	BRACKET: EGG TRAY CHANNEL CONN.	2
12	16560004	BRACE, EGG TRAY SIDE BELT	6
13	16560016	BRACKET, NEST SUSP. & JOINT	2
14	16-34096	RIVET: POP 3/16" AL AD62ABS SH	125
15	16-90077	SCREW, HX HD MACH 10-24 x 1/2	8
16	16500006	BRKT: PERCH / ROD SUPPORT UNIV	16
17	16-8904	CLAMP: HINGE SS 3/8 WIDE	6

OPTIONAL EQUIPMENT

18	16500016	LID: SIDEBELT CLOSEOUT UNIV.	2
	ADDITIONAL	L 6 HINGE CLAMPS REQUIRED FOR CLOSEOUT LIDS	

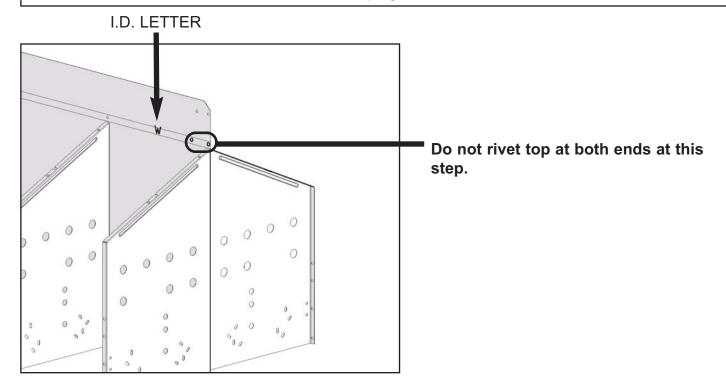
PARTS NOT SHOWN IN ILLUSTRATION

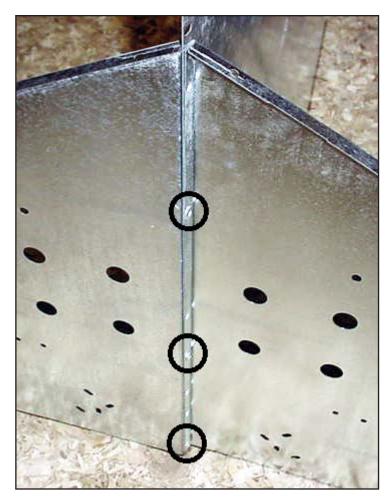
16-12500	PIN: COTTER STEEL 1/8" X 3/4"	3
16560036	RIVET PACK, NEST FRONT & HINGE	1
16-90076	NUT, HEX 10-24 W/NYLON INSERT	20
16-90077	SCREW,HX HD MACH 10-24 x 1/2	12

NEST KIT PART NUMBERS

61921201	16 HOLE WITH LIDS
61921101	16 HOLE WITHOUT LIDS

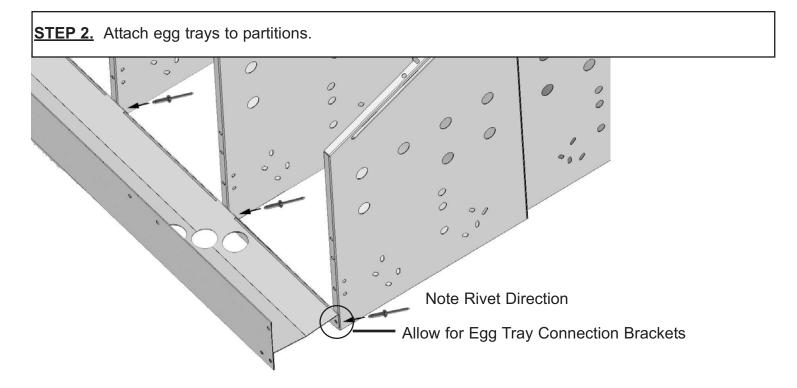
STEP 1. Attach **Partitions** to the **Back** as shown. The rivet should capture both partition flanges and the back. Orientation of the "N" or "W" I.D. stamping on the **Back** is not critical.



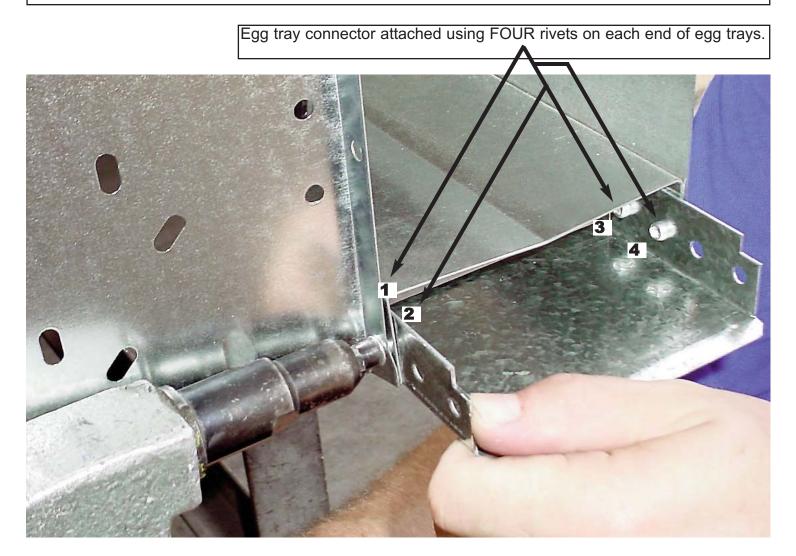




Fasten two partitions to back using THREE rivets.



Attach connection brackets to one end (2 places) or both ends (4 places) of nest body depending on single, double or triple nest grouping in house.



NOTE. For nests not using plastic fronts, skip to Step 4. See picture for example.



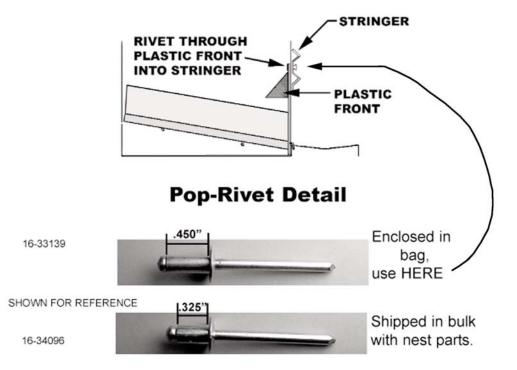
Nest <u>NOT</u> using plastic fronts.



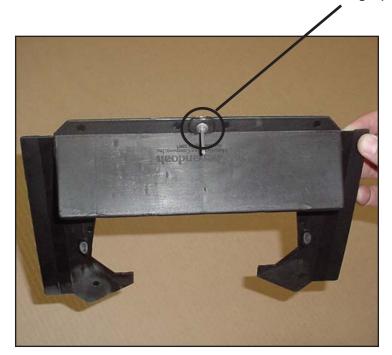
NOTE: For Nests Using Plastic Fronts:

ATTENTION A USE LONG RIVETS FOR:

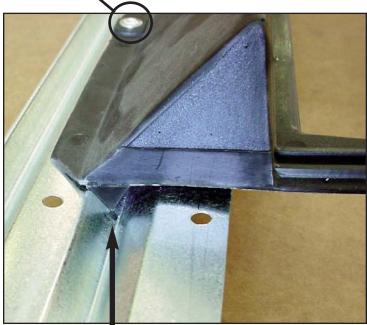
Plastic Nest Front Attachment



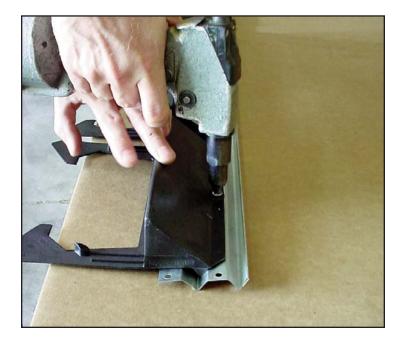
STEP 3. For nests using plastic fronts, attach fronts to stringer as shown. Insert **Rivet** through plastic front into **Stringer**.



Rivet through plastic into stringer.



Triangle shaped tabs on Fronts should lock into stringers as shown.

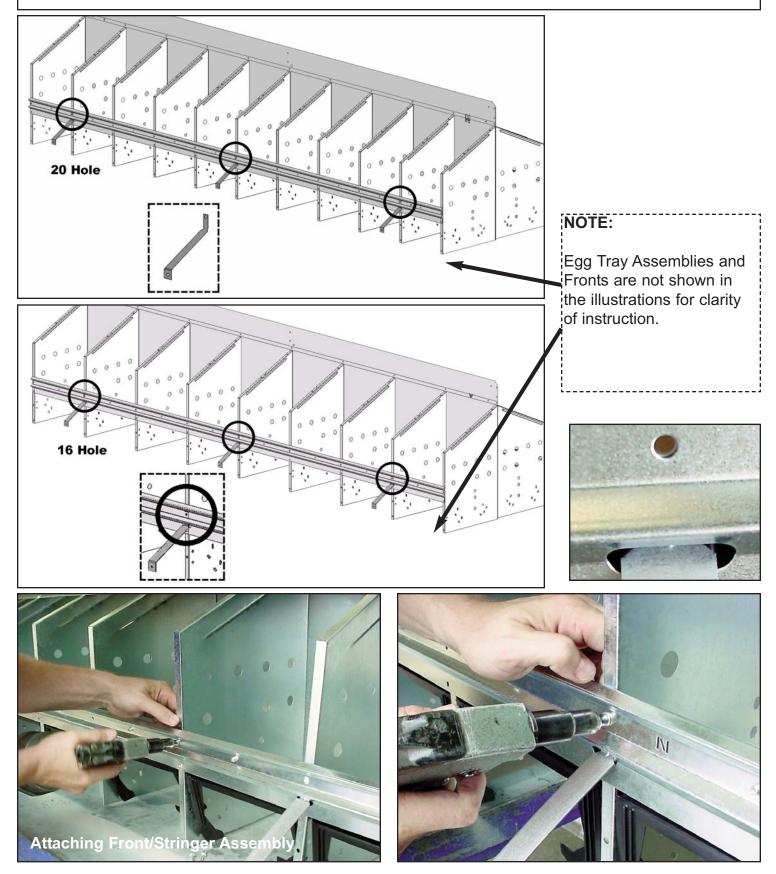




<u>STEP 4.</u> Attach Front/Stringer Assembly as shown. Attach **Egg Tray Braces** (narrow end) between the **Stringer** and the **Partitions** at the following positions:

- a. 20-Hole nests : Partitions #2, #6 and #10.
- b. 16-Hole Nests : Partitions #2, #5 and #8.

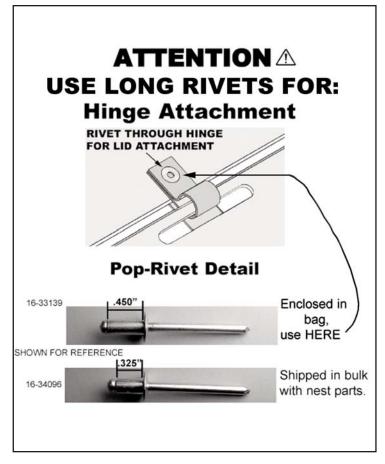
Step 5 shows how to attach the wide end of the bracket to the Egg Tray Assembly.



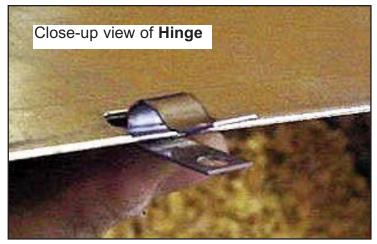
STEP 5. Attach the **Egg Tray Covers** as follows:

- a. Compress **Hinge Clamp** with pliers or guide nail and align with middle **Egg Tray Brace**. Fasten with <u>long</u> rivet from RIVET PACK through **Hinge**, **Egg Tray** and **Tray Brace**.
- b. Insert Hinge Clamp into middle slot on Tray Cover flange.
- c. Repeat for Cover/Hinge/Egg Tray/ Bracket connection on each end of cover.

Covers should 'latch' closed beneath **Stringer** when hinges are installed properly. Open covers again for Step 6.



CLAMP PLIERS LONG RIVET FROM RIVET PACKAGE



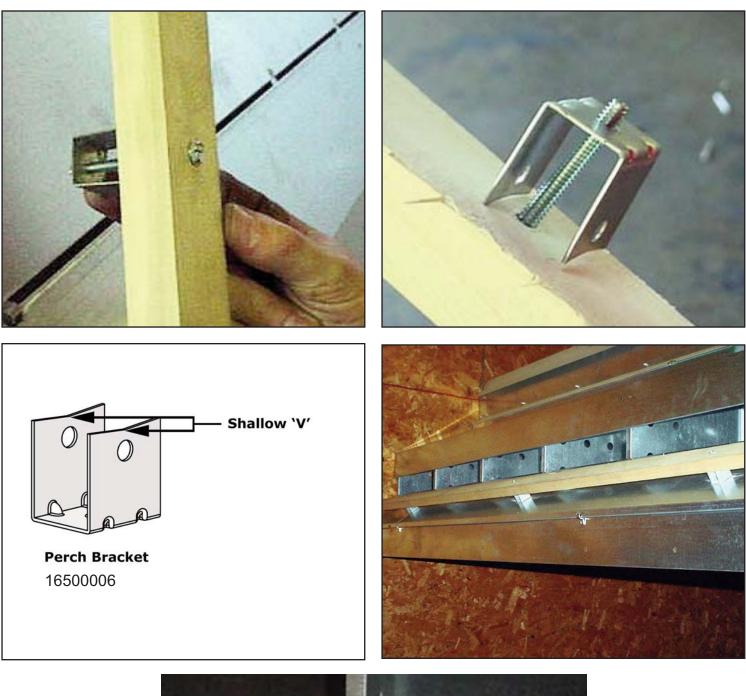
View of rivet through **Hinge**, **Egg Tray** and **Bracket**.



Close-up view of Rivet installed

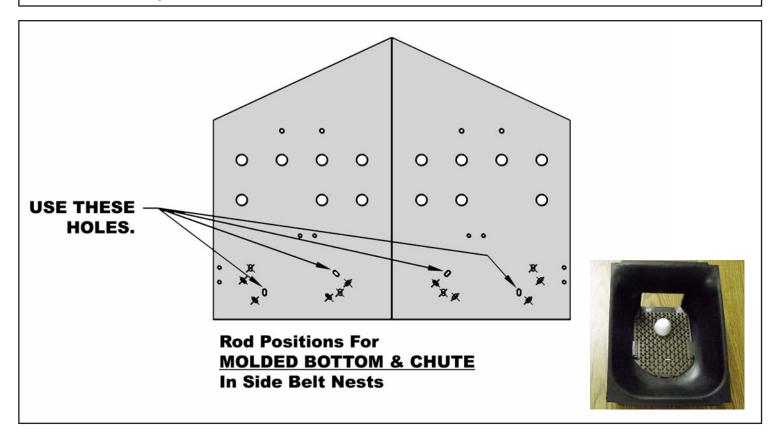


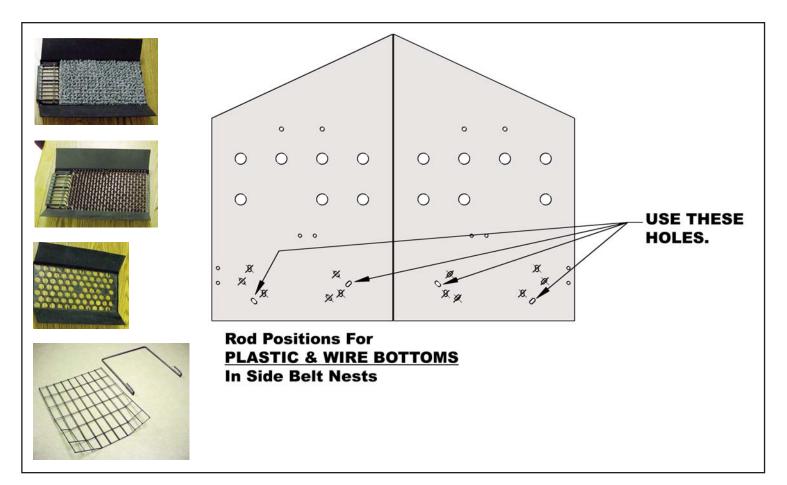
<u>STEP 6.</u> Install **Perch Brackets** and wooden **Perch** to **Egg Tray Covers** as shown. The shallow 'V' in the ends of the bracket legs should install toward the wooden **Perch**.



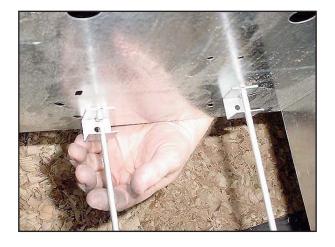


STEP 7-A. Slide **Support Rods** through the appropriate positioning slots in the end partition. See Diagrams below.

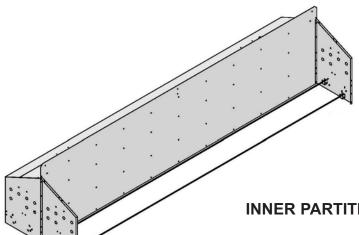




STEP 7-B. Install Support Rod/Perch Brackets with rivets on End Partitions only.

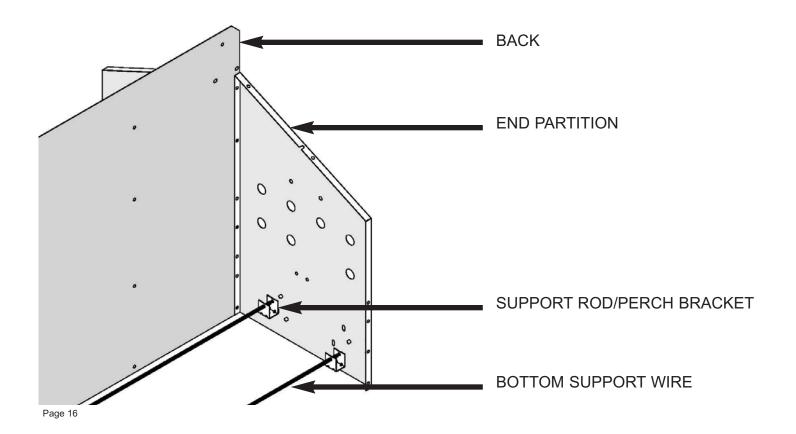






Support Rod installation and Rod Support Bracket locations.

INNER PARTITIONS NOT SHOWN FOR CLARITY



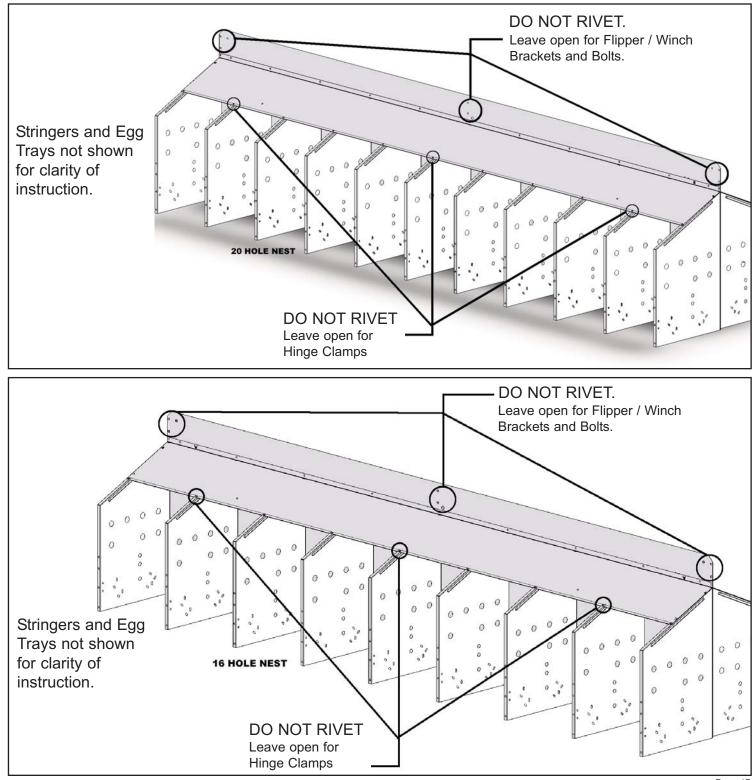
IF CLOSE OUT LIDS ARE USED:

<u>STEP 8.</u> Attach **Tops** as shown. **DO NOT** apply rivets in the following positions at this time.

- a. First and last holes (both ends of Top) on flange to Back.
- b. 20-Hole Nests: Partition #2, #6 and #10 (Both Sides)
- c. 16-Hole Nests: Partitions #2, #5 and #8 (Both Sides)

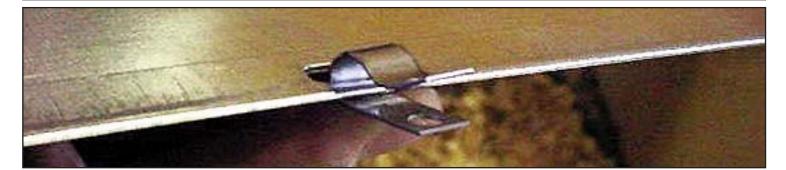
The nest lid Hinge Clamps will attach here and are installed later.

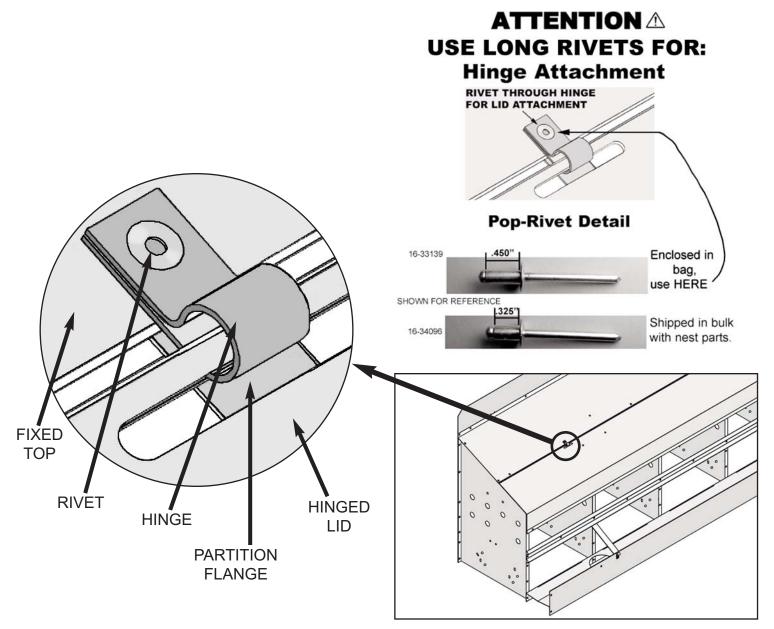
IF CLOSE OUT LIDS ARE NOT USED, ATTACH ALL HOLES WITH RIVETS, Go on to step #10.



IF CLOSE OUT LIDS ARE INCLUDED:

- **STEP 9.** Attach the **Nest Lid** as follows:
 - a. Compress **Hinge Clamp** with pliers or guide nail and align with middle hole on **Top** and **Partition**. Fasten with <u>Long</u> rivet from RIVET PACK through **Hinge** and **Top** into **Partition**.
 - b. Insert Hinge Clamp into middle slot on Nest Lid.
 - c. Repeat for Lid/Hinge/Partition connection on each end of Lid.





STEP 10-A.

Install **Universal Flipper Bracket** using #10-24 hardware as shown. Align holes on **Flipper** with **Universal Bracket** to determine correct Bracket mounting.



<u>STEP 10-B.</u>

Install **Flipper** over stems on **Winch** and **Universal Center Brackets** and insert **Cotter Pins** through bracket stem holes. Secure by curling pin ends.



STEP 10-C. Install **Winch Brackets** on top corners of back with the #10-24 hardware supplied. **DO NOT USE RIVETS.**





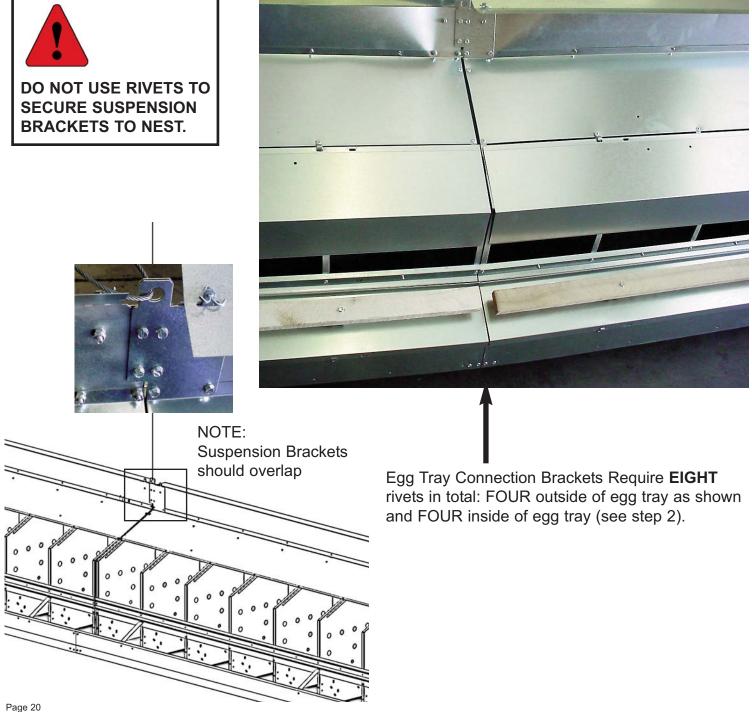
STEP 11. CONNECTING NESTS TOGETHER AND TO WINCHING SYSTEM.

Select winches that will safely support the system. An 8' section weighs approximately 128-130 pounds.

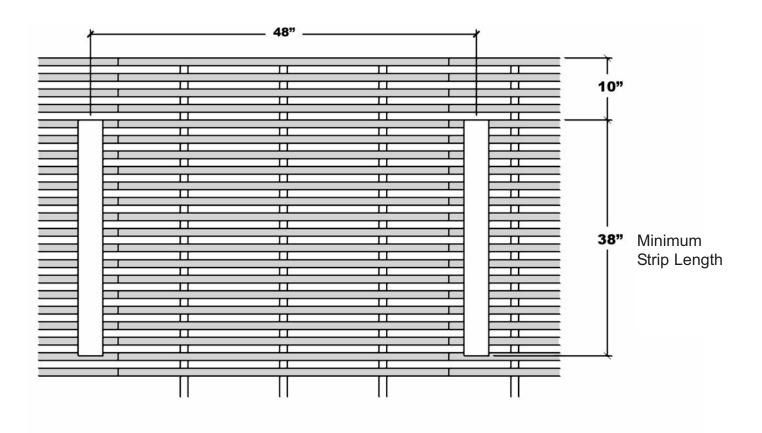
WE, THE MANUFACTURER, CANNOT BE RESPONSIBLE FOR THE CAPABILITIES OF THE STRUCTURE TO SUPPORT THIS SYSTEM. FOR WEIGHT LOAD CAPABILITIES, CONTACT YOUR BUILDING CONTRACTOR.

A cable drop is required at the end of each 8' nest section. Cable saddles, cable clamps or 'S' hooks may be used to attach to the nest brackets.

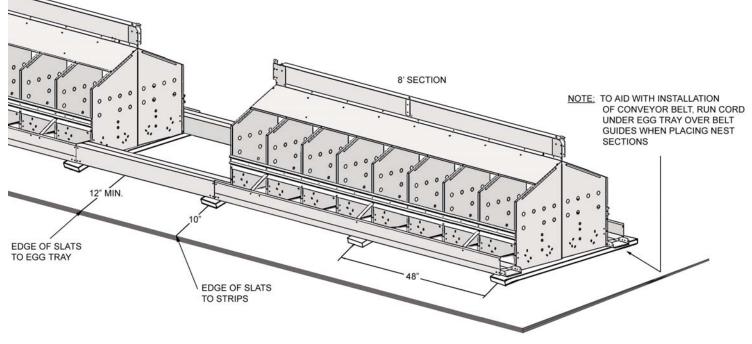
Level the system from side to side as well as along the length of the line.



When placing the nest system on slats, whether wooden or plastic, Agile Mfg. requires that the nest line be level along the <u>entire</u> length of the line. This can be accomplished by placing 1" x 4" strips over the slats and underneath the nests as a base to shim the nests.



8' SECTION PLACEMENT OF 1 x 4 x 38 STRIPS



PLACEMENT OF NEST ON STRIPS

STEP 12. PASSAGEWAY INSTALLATION INSTRUCTIONS

It is essential the sections be properly aligned and leveled to allow free movement of the conveyor belt.

The double nest sections are to be connected together, or to the conveyor passage, by the connector brackets on the conveyor trays and suspension bracket at the top.

View from back of nest.

View from front of nest.

0 0 0 0 0 0 0 0 0 Hole for optional 00 rivet for **RIGID** passageway connection. ()Hole for optional rivet for RIGID Attach passageway to nest brackets using rivets. Rivet in all holes (4x) passageway. are OPTIONAL for added strength and line rigidity. Rivets in holes nearest nest body only (2x) allow for flex between uneven suspension



Illustration of a 2 Rivet connection per end of passageway to permit line flex.

points or winching systems along line length. See picture below.

ATTENTION:

Nest Line Alignment Notice

Nest Lines <u>MUST</u> be aligned and straightened after installation and before egg collection begins at the start of each flock. Once the nests are resting on the slats, the nest egg trays must be straightened with each other horizontally from side to side, and vertically. Shims may be required to lift the nests from underneath off the slats for vertical leveling the egg trays.

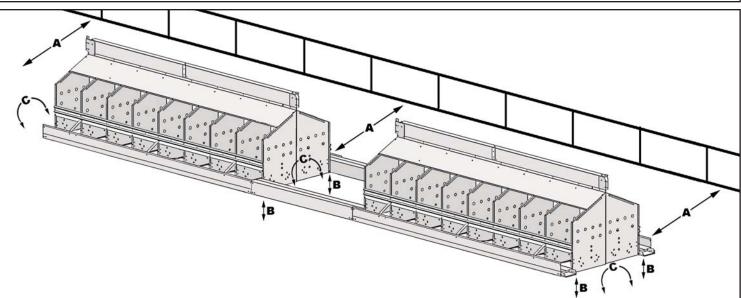
Failure to complete this alignment of the nest line <u>WILL</u> result in premature egg belt wear, belt edge fraying, eggs under belts, and possible belt breakage. In addition, badly frayed and worn belts can cause damage to the egg belt drive system and control.

Also, the nests must be adjusted to be level from side to side to insure the correct bottom and pad angle for proper egg roll-out from the nest pads to the egg belt and trays. Nests that are not level from side to side may have eggs remaining in the nest hole on one side of the line, while the other side will be too steep and may cause egg shell checks and cracks. Again, shims may be required to lift the nests from underneath off the slats for vertical leveling the nest bodies.

A - Dimensions from nest to outer wall or slat system wall. Dimension "A" assumes wall on stem wall is straight. Buildings may vary. Adjust nest line side to side to make "A" dimension equal on all nests in the line.

B- Vertical adjustment. Shim nest lines on slats in "B" direction (up or down)as required to make egg tray surfaces between nest bodies and nest bodies and passageways flush at connection joints.
C - Line leveling. Egg trays should be level from side to side to insure correct floor angle in nest bodies.

Note: A laser level can be used for A,B, and C.



PASSAGEWAY COMPONENTS



16-33139	RIVET: POP 3/16" AL AD64ABS LG
16-34096	RIVET: POP 3/16" AL AD62ABS SH

	165600
	165600
participant and an experimental and and a first state of the	165600
	165600
	165600
Contraction of the second s	165600
and the second sec	165600
Conveyor Passageway	

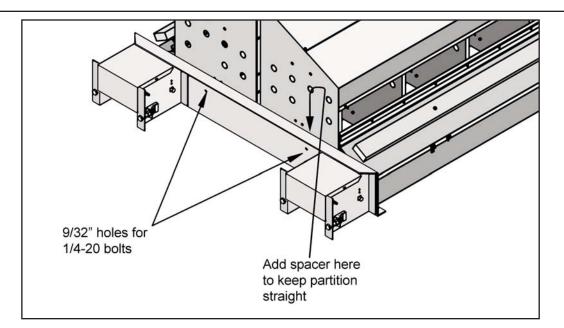
16560041	P-WAY, 18" SS w/CONNECTOR
16560042	P-WAY, 24" SS w/CONNECTOR
16560043	P-WAY, 28-3/4" SS w/CONNECTOR
16560044	P-WAY, 36" SS w/CONNECTOR
16560045	P-WAY, 48" SS w/CONNECTOR
16560046	P-WAY, 72" SS w/CONNECTOR
16560047	P-WAY, 96" GALV w/HINGE TOP



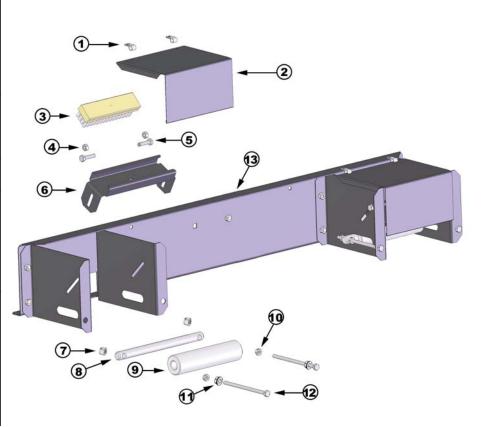
16560017 BRACKET: EGG TRAY CHANNEL CONN.

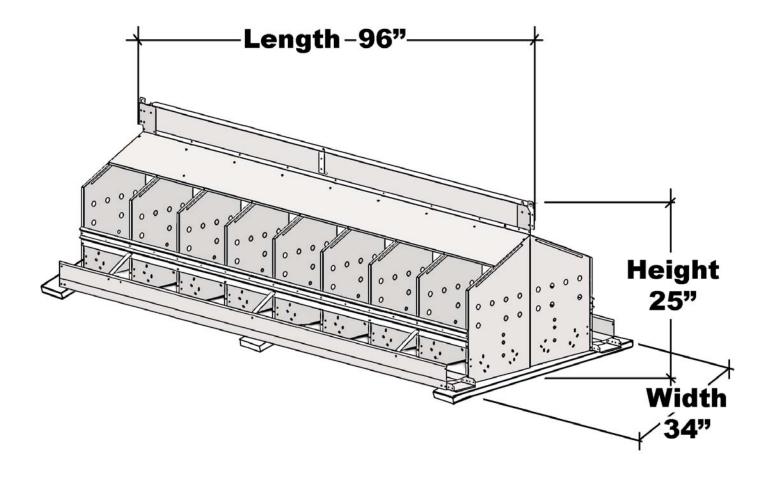
END RETURN ROLLER ASSEMBLY

- 1. Align Roller Assembly to Last Nest End as shown, making sure that rollers are lined up with the centers of the Egg Trays.
- 2. Use Idler Assembly as a guide to drill two 9/32" holes for 1/4-20 bolts.
- 3. Two 1/4-20x1" bolts and two 1/4-20 flange nuts and one nylon shoulder washer are included for Return Roller Assembly attachment. Use the shoulder washer as a spacer -- see picture below.

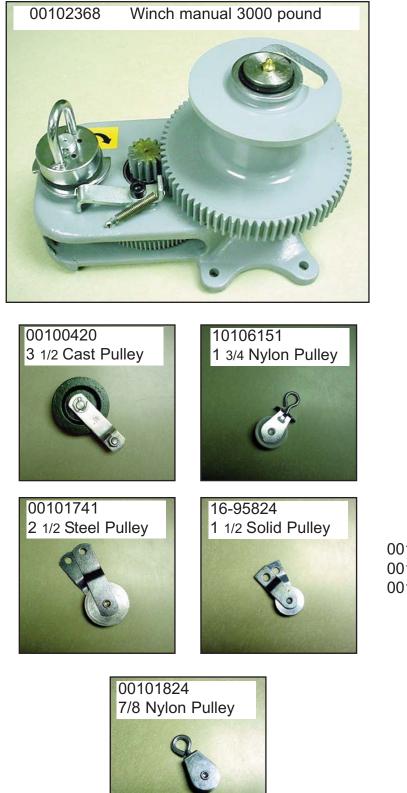


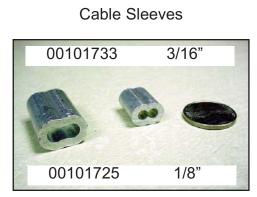
1	16-8904	CLAMP: HINGE SS
		3/8 WID
2	16560061	DUST COVER,SB
		IDLER ROLL
3	16-35572	BRUSH: TAMPICO
		WHT 5" x 2
4	16-13200550	NUT: HEX FLG LCK
		3/8-16
5	16-63700	SCREW: HEX
		1/4-20 X 1/2
6	16560060	BRACKET,BRUSH
		SB IDLER
7	16005182	NUT 3/8-16
		NYLON LOCK
8	16-102977	SHAFT: ADJ ROLLER
		5/8OD
9	16060012	ROLLER, TAKE-UP
		1.5 x 6.
10	16-63702	NUT: HEX 3/8-16 -
		PLATED
11	16-35629	NUT: HEX 1/4-20
		SERR FL
12	16000006	BOLT,CARR
		SHORT NECK 5/16x3/4
13	16560064	MOUNTING FRAME,
		SB IDLER





SUSPENSION COMPONENTS





Cable Clamps



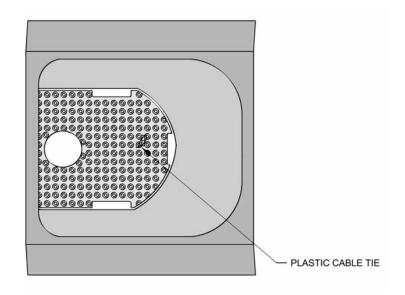
00101865	HANDLE LONG ELEC. 8'
00101691	CABLE 3/16" 7 X 7 WEAVE
00101683	CABLE 1/8" 7 X 7 WEAVE

Install Pads and Bottoms into nest holes per the following diagrams.

- a. Molded Bottom and Chute
- b. Finger Pad
- c. Turf Pad
- d. Full Turf Pad
- e. Wire Bottom and Blue Plastic Pad

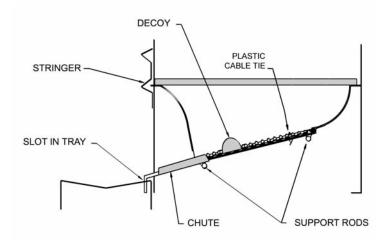
MOLDED NEST BOTTOM ASSEMBLY

- 1. Assemble decoy egg, nest pad to molded nest bottom.
- Secure Finger Pad with plastic cable tie. Insert Cable Tie from underside of Nest Bottom through small hole in Nest Bottom through matching hole in Finger Pad back down through adjacent hole in Finger Pad through larger hole in nest bottom. Close Plastic Cable Tie. Do not over tighten tie.



CHUTE AND NEST INSTALLATION

- <u>1.</u> Insert lip of chute into slot in tray and over front support rod.
- 2. Place the nest bottom assembly into nest opening with door facing out. Insert front lip of molded nest bottom into lower groove on the stringer then press back of molded nest bottom down so it rests on support rod.



61511100 for 9.6" holes

Kit: 20 Hole, Plastic Molded Btm w/Egg, chute, pad



16-37192 : Chute 16-37199 : Tie: Cable Outdoor 7-1/2" 16-37184 : Molded Bottom 16-37187 : Decoy Egg 16-37186 : Finger Pad for Molded Bottom

61521100 for 12" holes

Kit: 16 hole, plastic molded btm w/egg, chute, sm. finger pad

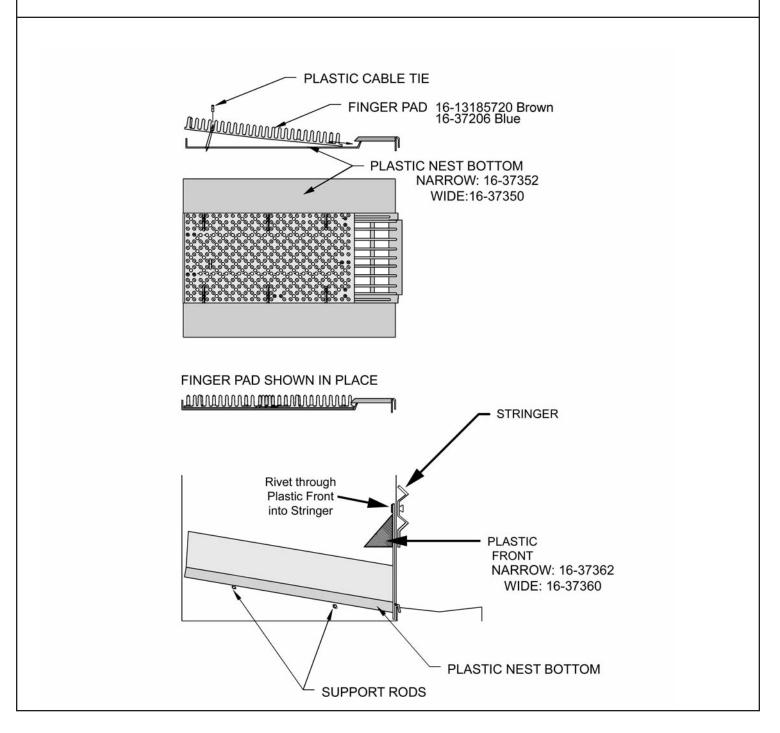


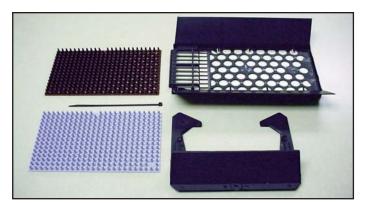
16-37190 : Chute 16-37199 : Tie: Cable Outdoor 7-1/2" 16-37183 : Molded Bottom 16-37187 : Decoy Egg 16-37186 : Finger Pad for Molded Bottom

ASSEMBLY OF FINGER PAD TO NEST BOTTOM

- 1. Insert pad under (3) fingers on right-hand side.
- 2. Insert pad under (3) fingers on left-hand side.
- 3. Insert plastic cable tie up from the underside of the plastic nest bottom through small hole (matching on the nest finger pad) through the finger pad, back down through adjacent hole in the finger pad, through large hole in the plastic nest bottom. Secure the plastic cable tie.

Do not over-tighten tie or pad may buckle.





61512200 for 9.6" holes

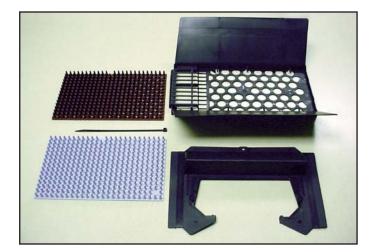
KIT, 20 HOLE: BROWN FINGER PAD PLAST BTM w/GRILL, FRONT, TIE

16-37352 : Bottom with Grill 16-13185720 : 5.63 x 9.63 BROWN Finger Pad 16-37199 : Tie: Cable Outdoor 7-1/2" 16-37362 : Front

61512600 for 9.6" holes

KIT, 20 HOLE: BLUE FINGER PAD PLAST BTM w/GRILL, FRONT, TIE

16-37352 : Bottom with Grill 16-37206 : 5.63 x 9.63 BLUE Finger Pad 16-37199 : Tie: Cable Outdoor 7-1/2" 16-37362 : Front



61522200 for 12" holes

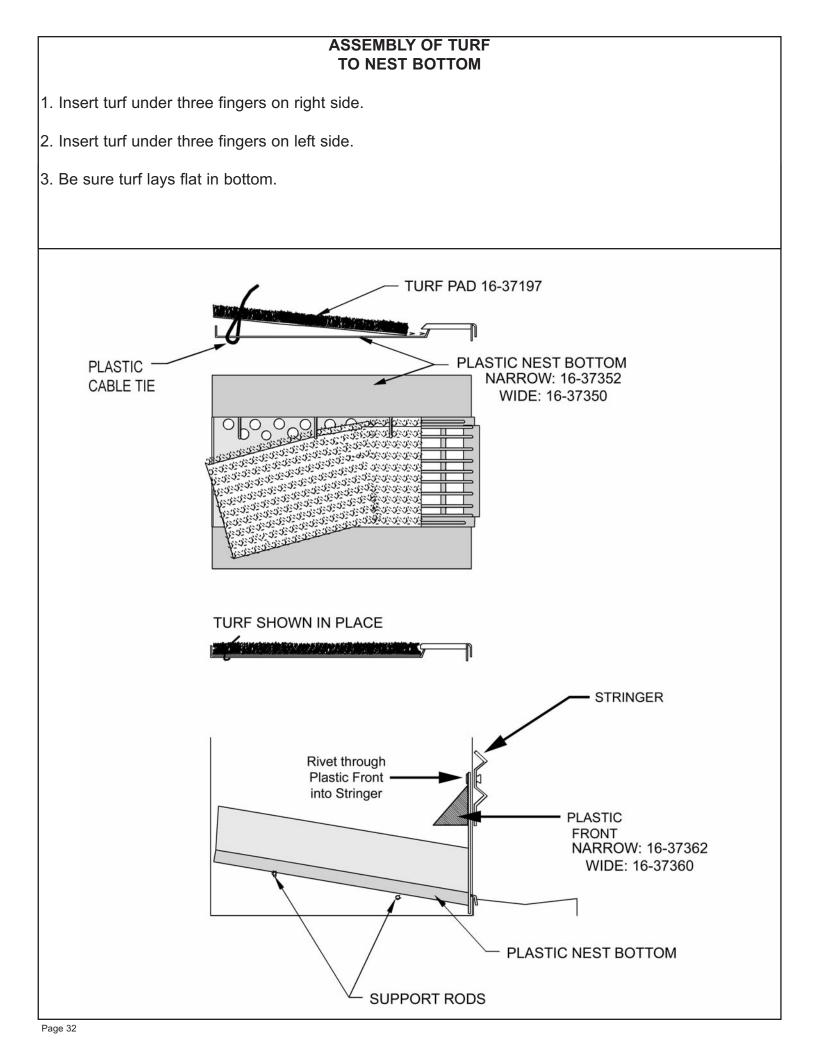
Kit: 16 hole, plastic btm. w/grill, finger pad, front

16-37350 : Bottom with Grill 16-13185720 : 5.63 x 9.63 BROWN Finger Pad 16-37360 : Front 16-37199 : Tie: Cable Outdoor 7-1/2"

61522600 for 12" holes

Kit: 16 hole, plastic btm. w/grill, finger pad, front

16-37350 : Bottom with Grill 16-37206 : 5.63 x 9.63 BLUE Finger Pad 16-37360 : Front 16-37199 : Tie: Cable Outdoor 7-1/2"





61522300 for 12" holes

Kit: 16 hole, plastic btm w/grill, sm. turf pad, front



16-37360 : Plastic Front 16-37350 : Plastic Bottom with Grill 16-37197 : 5.63 x 9.63 Turf Pad 16-37199 : Tie: Cable Outdoor 7-1/2"

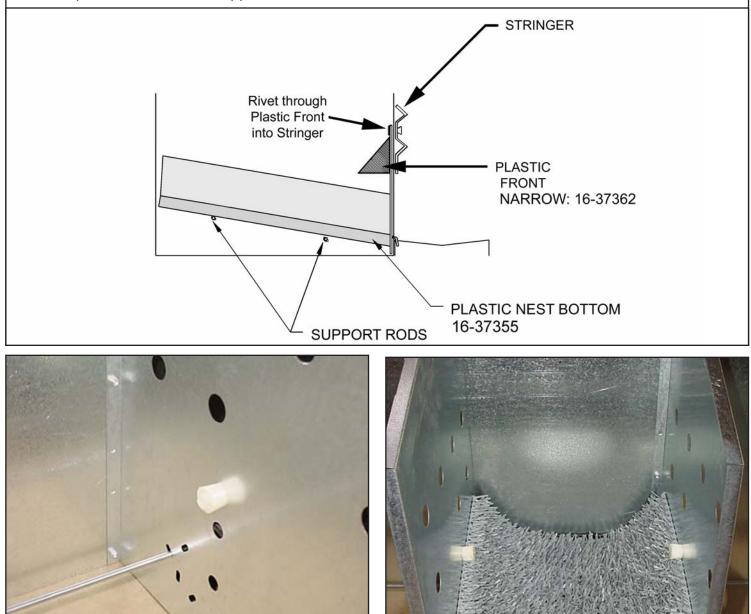
ASSEMBLY OF FULL TURF AND NEST BOTTOM

1. Insert Nest Bottom in Nest Hole as shown

2. Install basket retainers into the nest partitions as shown.

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3. Insert pad on bottom and clipped under basket retainer to secure.



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61513401 for 9.6" holes Kit: 20 hole, plastic btm. less grill, full turf 12x13, front



RETAINER, BASKET

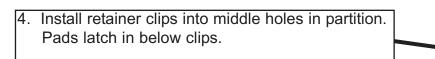
JD3922

ASSEMBLY OF WIRE BOTTOM AND BLUE DIRECTIONAL PAD.

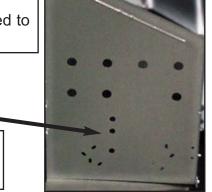
1. install wireform support on support rods in nest hole. See picture below.

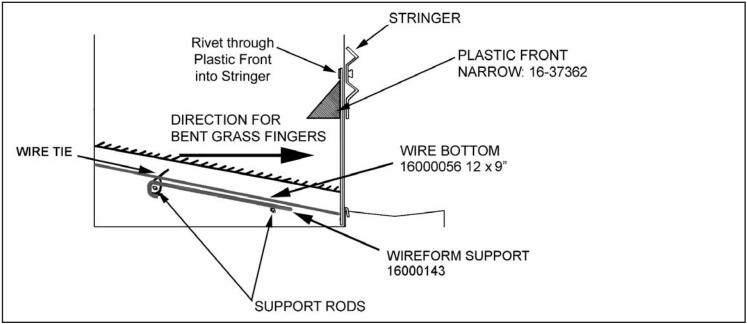


- 2. Insert Wire Bottom into nest hole. See diagram below.
- 3. Tie Bottom to BACK support rod as shown. Wire bottoms MUST be tied to rods, as shown below.



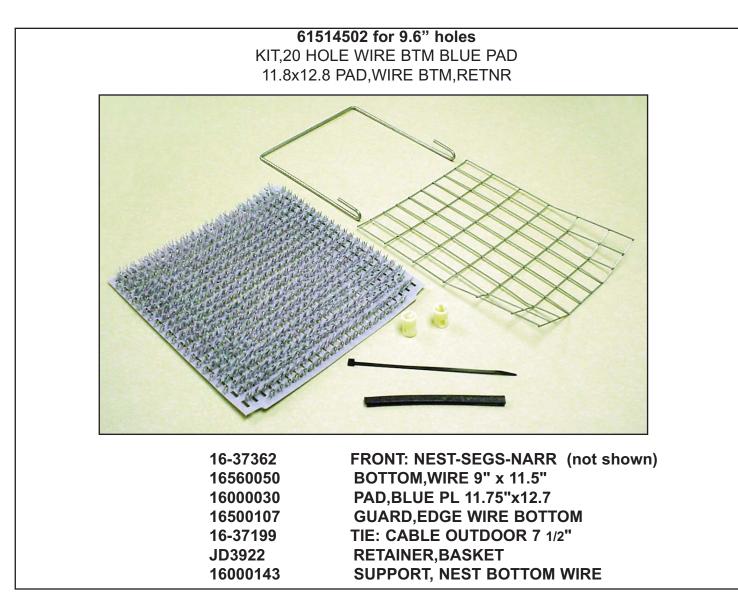
Insert Blue Pad onto wire bottom and center within nest hole.
 NOTE: Insert pad so that bent Grass Fingers are TOWARD Egg Tray.
 On 9.6" nests, pad will lay against nest partitions on each side.





6. Install Edge Guard over slot edge in egg tray as shown. Edge guard should grip metal very tightly





WARRANTY

Manufacturer warrants each new product manufactured by it to be free from defects in material or workmanship for one (1) year from and after the date of initial installation by or for the original purchaser. If such a defect is found by Manufacturer to exist within the one-year period, the Manufacturer will, at its option, (a) repair or replace such product free of charge, F.O.B. the factory of manufacture, or (b) refund to the original purchaser the original purchase price, in lieu of such repair or replacement. Labor costs associated with the replacement or repair of the product are not covered by the Manufacturer.

Conditions and Limitations

1. The product must be installed by and operated in accordance with the instructions published by the **Manufacturer or Warranty will be void**.

2. Warranty is void if **all components** of the system are not original equipment supplied by the Manufacturer.

3. This product must be purchased from and installed by an authorized distributor or installer or a certified representative thereof **or the Warranty will be void**.

4. Malfunctions or failure resulting from misuse, abuse, negligence, alteration, accident, or lack of proper maintenance, or from lightning strikes, electrical power surges or interruption of electricity, shall not be considered defects under the Warranty.

5. This Warranty applies only to systems for the care of poultry and livestock. Other applications in industry, commerce, or residential applications are not covered by this Warranty and are **strictly prohibited**. Any such use **will void the Warranty**.

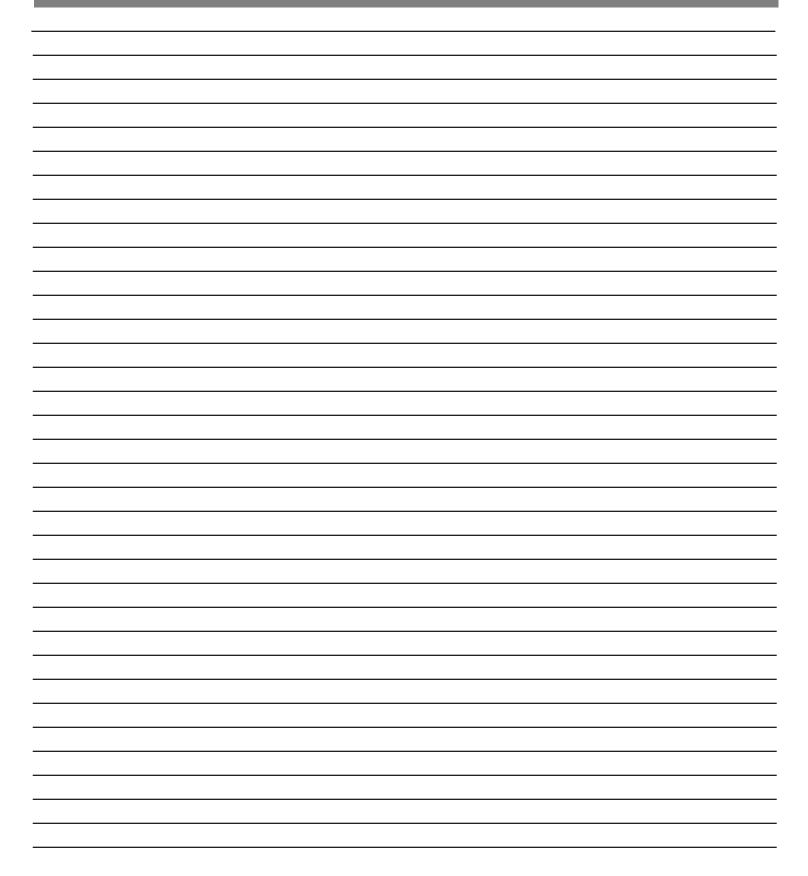
Manufacturer shall not be liable for any **Consequential or Special Damage** which any purchaser may suffer or claim to suffer as a result of any defect in the product. "**Consequential**" or "**Special Damages**" *as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.*

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Effective 01/07

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