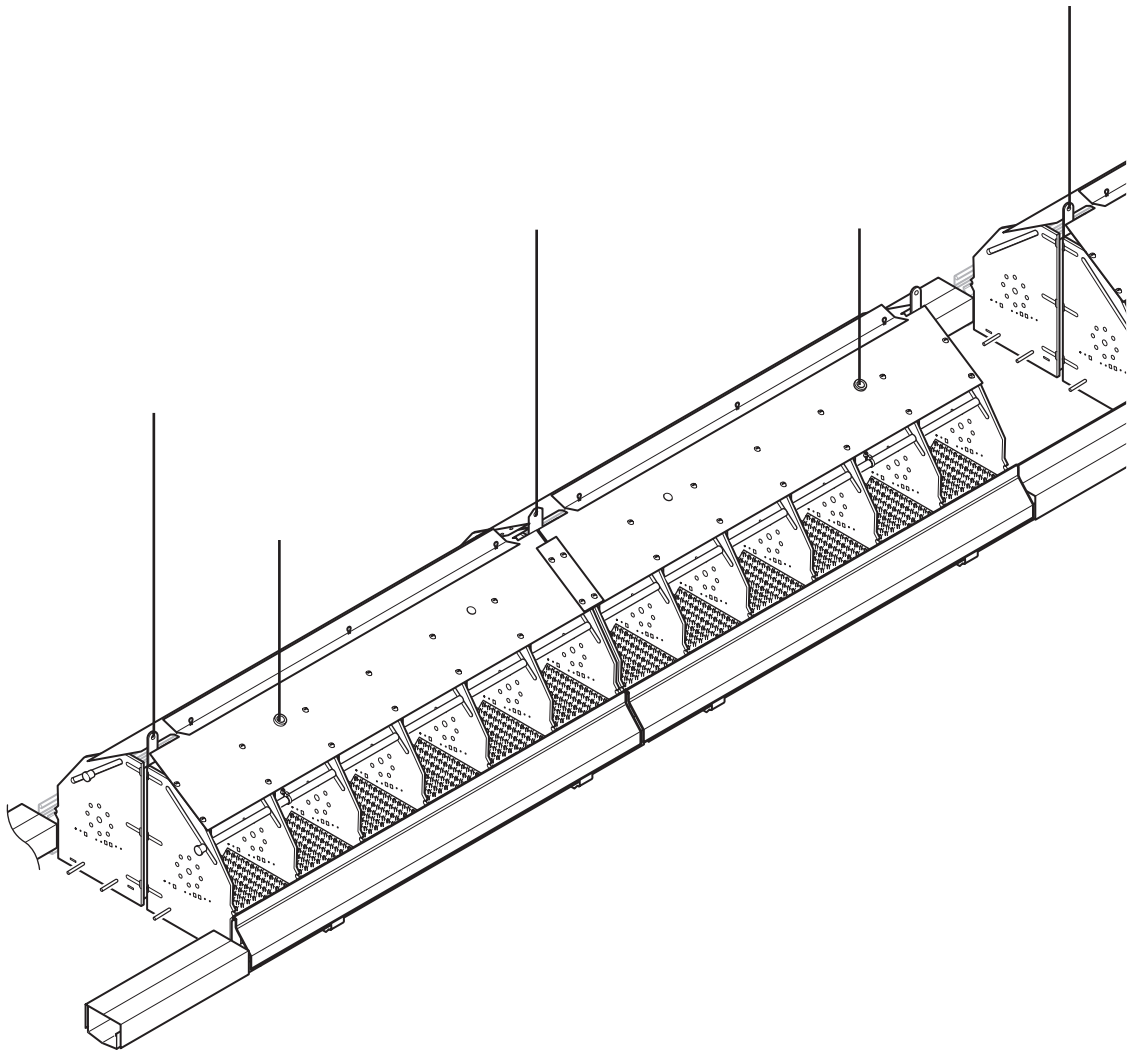


# Gather-Eze® Nest System

## Installation Guide

Instr. # 37-03-0020 10/04



**IMPORTANT:** It is very important that the steps in this manual are followed **EXACTLY**. Failure to do so may result in difficult assembly and/or part shortages.



**Big Dutchman**

# Notes, Warnings, and Cautions



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

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



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



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

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

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

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

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

Observe the following precautions when servicing the machinery:

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

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# Introduction

Thank you for purchasing the Big Dutchman Gather-Eze® Nest System. As part of our total Breeder Management System, this nest has been specifically designed with bird comfort and safe egg handling as top priority.

By applying care of assembly, good management techniques and using an ongoing preventive maintenance program this system can supply years of reliable service in your facility.

Please take the time to review this Assembly Manual completely, before starting any phase of nest installation. Take notice of all notes and warnings. These are provided to help assure efficient and safe installation of the nest system.

## Assembly Notes

- This Instruction manual will explain the assembly of the nest in a general manner, but each installer/assembler will develop their own methods and sequence of assembly, based on the tools, area and manpower available to them.
- When two 5 ft. [1.5 m] nests are joined they form a 10 ft. [3 m] nest. A nest is therefore either 5 ft. [1.5 m] or 10 ft. [3 m].
- The belt channel is designed to protect incoming and outgoing egg belt. The belt must run off from one sheet metal surface onto the next surface without hitting an edge.
- Nests are packaged one nest per carton.



**CAUTION: The sheet metal parts may have sharp edges. Big Dutchman recommends that gloves be worn when working with the nest components.**

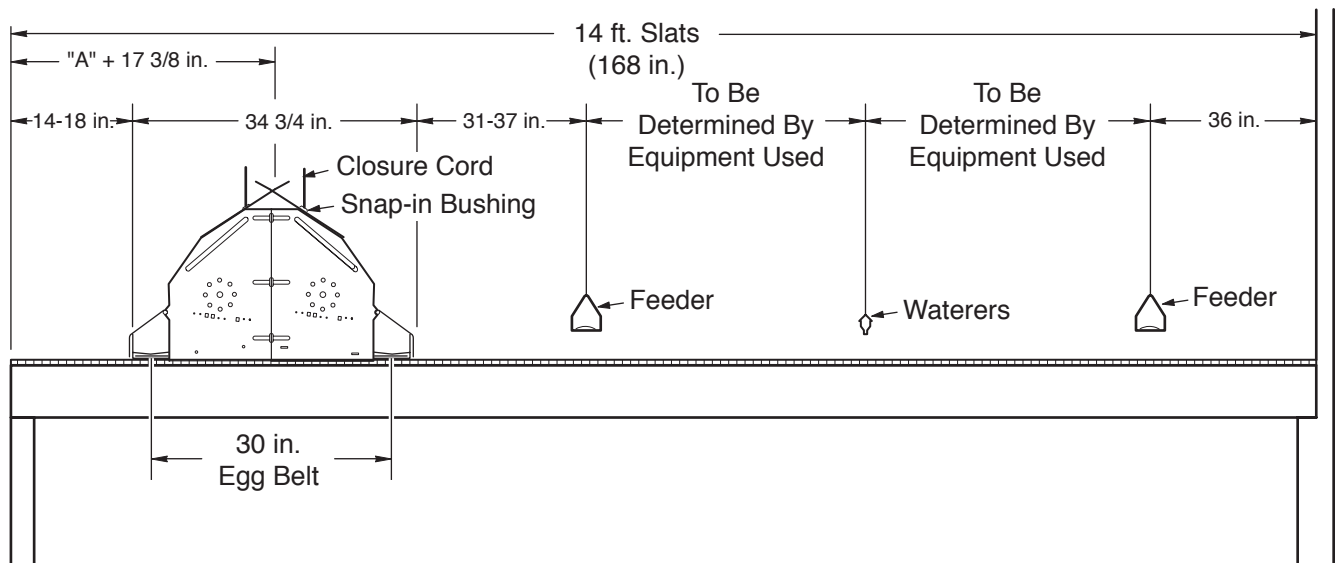
## Installation Recommendations

- Be sure to put enough nests in the building for approximately 5.5 to 5.75 birds (maximum) per nest opening.
- Allow at least 18 in. [457 mm] (minimum), 24 in. [610 mm] (preferred) between the nests to the nearest feed line.
- Try to maintain 2/3 slat area and 1/3 scratch area in the building.
- Allow at least 18 in. [457 mm] (minimum), 24 in. [610 mm] or more (preferred) between groups of nests.
- Discourage nesting in the scratch area by using only enough litter over a hard surface to prevent leg problems to the cockerels.
- Lights should be installed directly over the nests allowing the individual nest openings to be relatively dark, enticing hens to enter.
- Areas in the building that are in shadow should have lights installed on a separate circuit from house lights.
- At each end of the house, leave an 8 to 10 ft. [2.4 to 3 m] space between the wall and the first (or last) nest. This will discourage floor eggs in the corners.

# Overview

## Typical House Layout

SIDE BELT TYPICAL INSTALLATION ON 14 FT. SLATS



## Tools Required

#2 Phillips Driver 12 in. long

#2 Phillips Driver 6 in. long

Air Pop Rivet Gun

Hand Pop Rivet Gun

Hot Glue Gun and Glue Sticks

7/16 in. Combination Wrench & Socket

1/2 in. Combination Wrench

Battery Operated or Electric Drill

7/32 in. Drill Bit

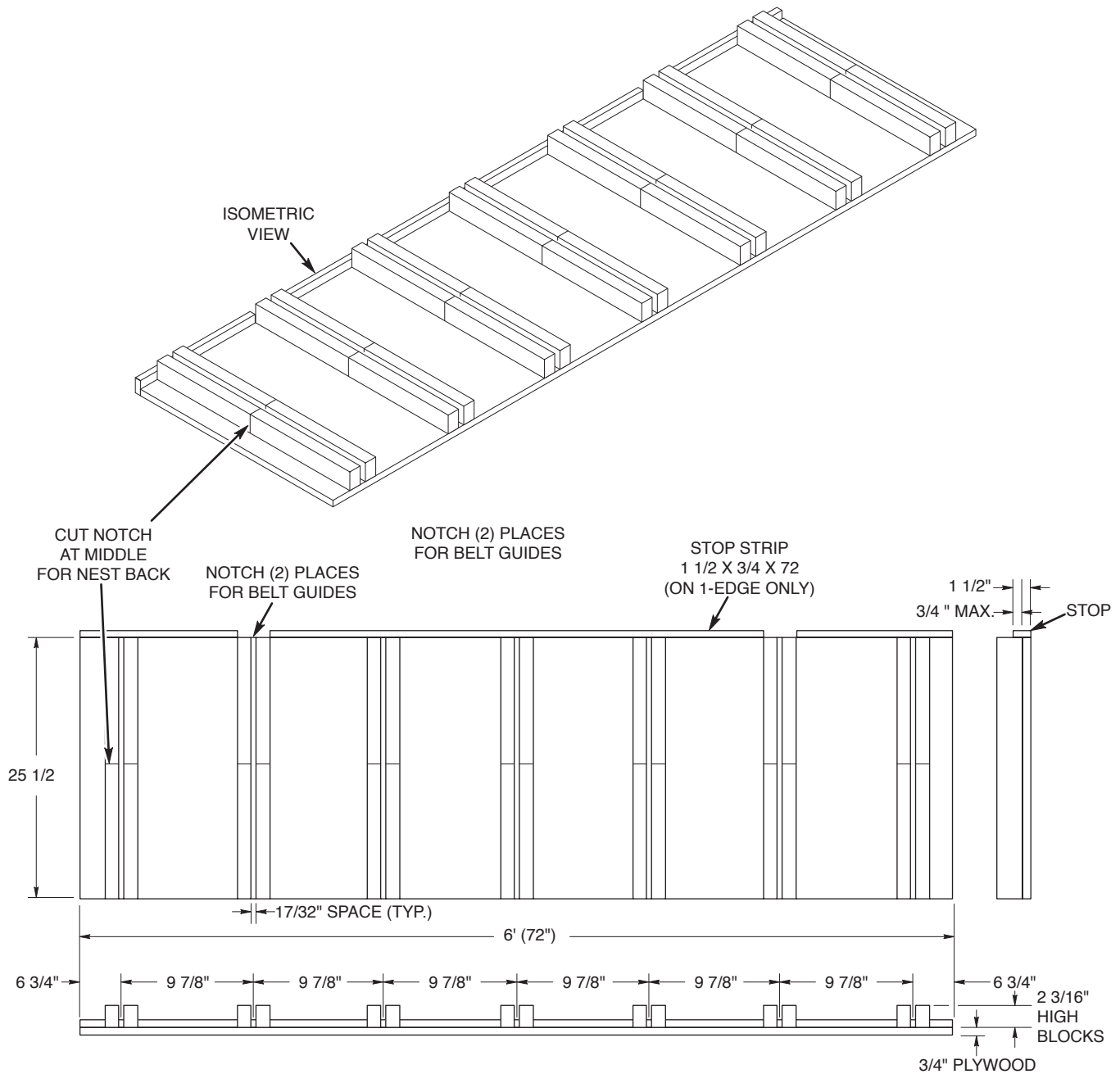
Scissors

Hand Sewing Needle & Heavy Waxed Thread

Electric Iron

# BOTTOM ASSEMBLY JIG

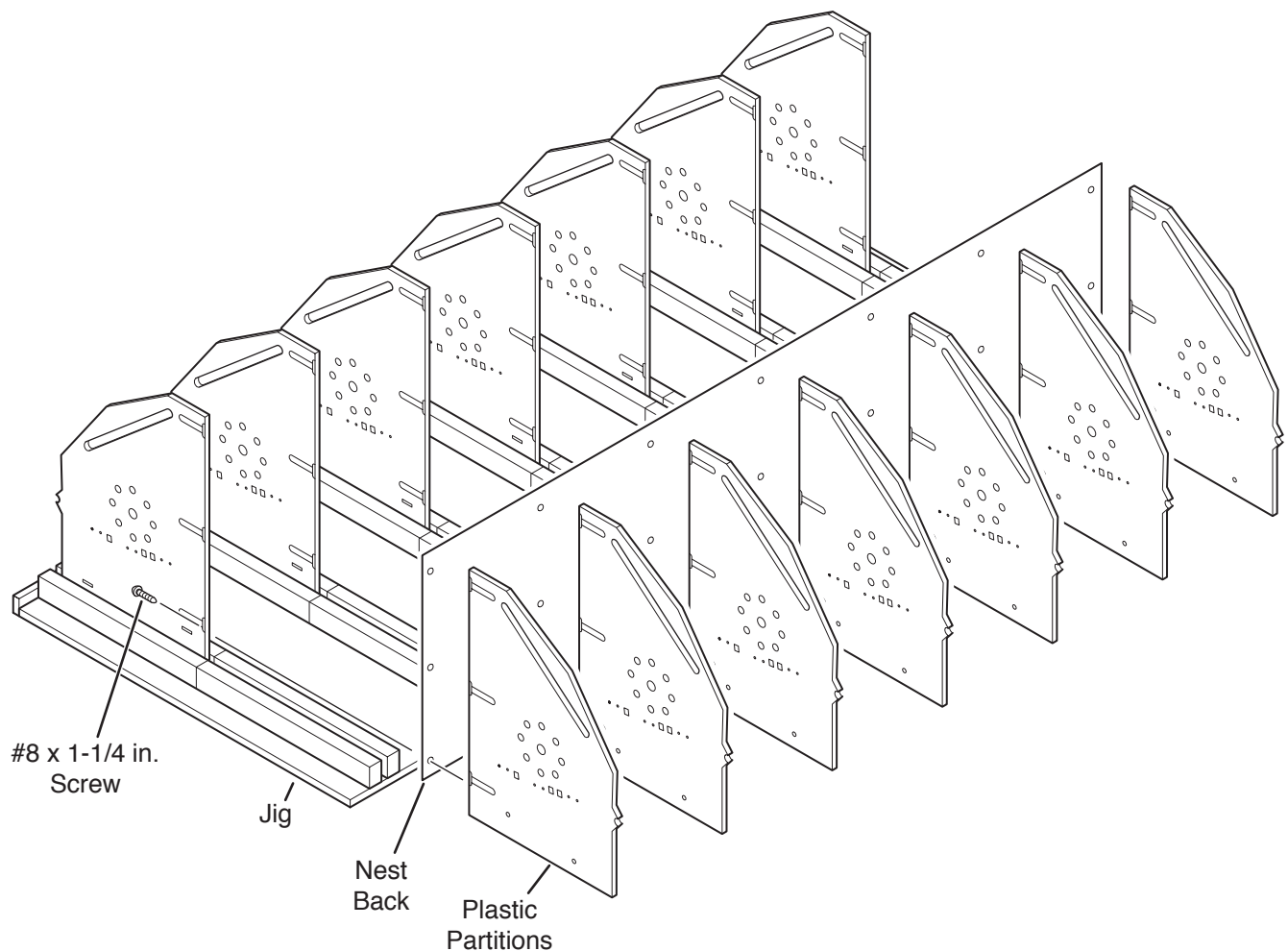
- Build Bottom Assembly Jig out of plywood and 2-3/16" high wood blocks (see drawing below). This will speed assembly time.



DualSideBell01

# ASSEMBLE PARTITIONS & BACK

- Assemble the plastic partitions and back as shown in drawing below.
- Use (21) #8 x 1-1/4 in. long screws to assemble these parts. **DO NOT** over tighten screws and strip holes in plastic. Just snug screws down. Pre-Assemble screws in half of the plastic partitions so that the screws protrude slightly out of the partition. This can be done while partition is lying flat on the table. **Install bottom screw first, then center and top screws.**

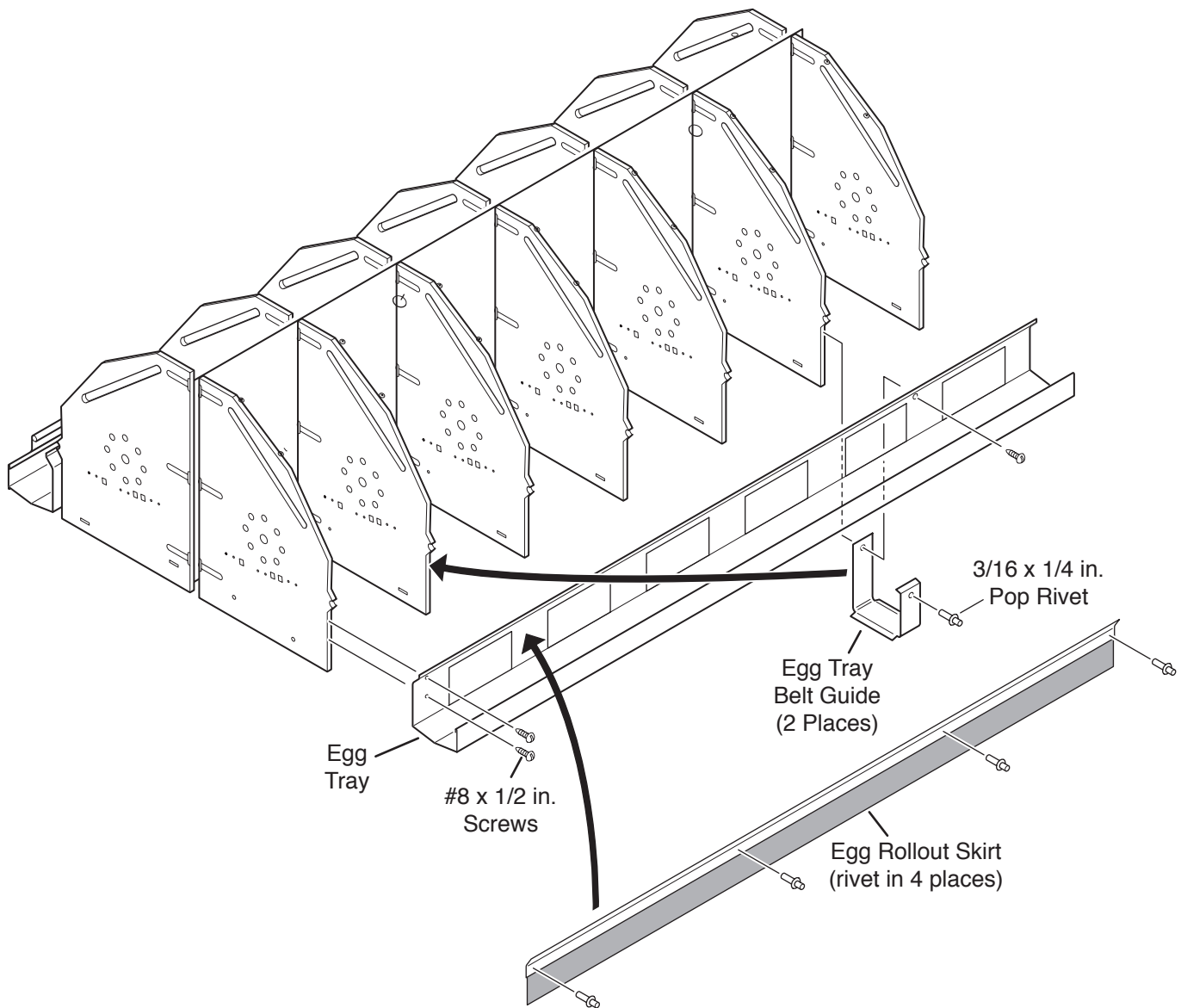


# Troughs, Egg Rollout Skirt, & Belt Guides

Attach troughs, egg rollout skirt and belt guides.

1. First install (7) #8 x 1/2 in. screws in top holes of trough.

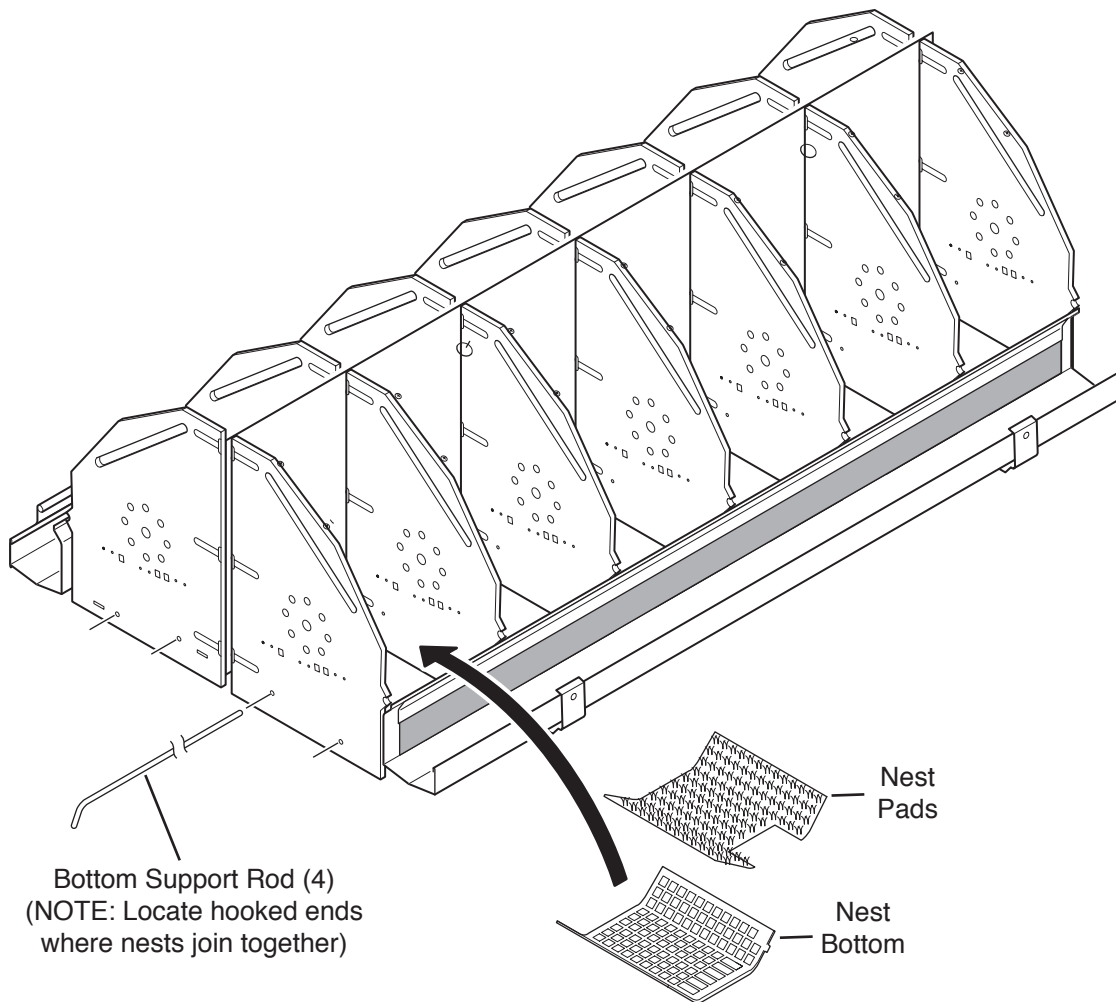
2. Then, locate the (2) belt guides at the second partition from end of nest. Back side of belt guide is flat and goes behind trough. The front side of the belt guides go over the front of the trough. Attach the back of the egg tray with #8 x 1/2 in. screws and (4) 3/16 x 1/4 in. pop rivet. Install remaining (5) #8 x 1/2 in. screws in bottom holes of trough. Next attach Egg Rollout Skirt using (4) 3/16 x 1/4 in. pop rivets.



# Bottom Support Rods, Nest Bottom & Pads

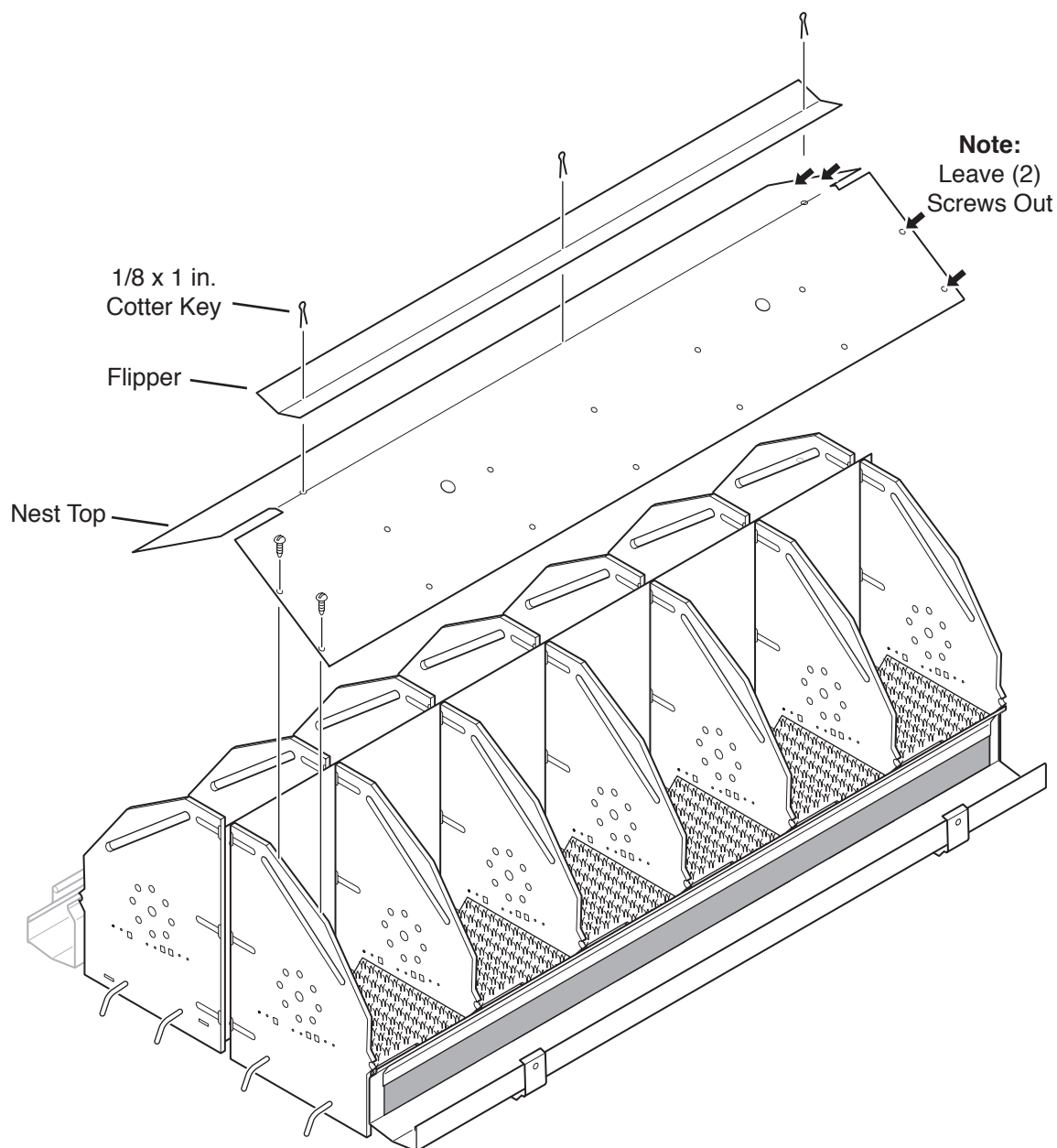
Install nest bottom support rods as shown.  
Install rods so that hooked ends are where  
(2) 5-ft. nests join. This will prevent rod from  
working out.

Install nest pads and nest bottoms. Angled  
end of bottom goes at front. Pad grass slopes  
toward front of nest.



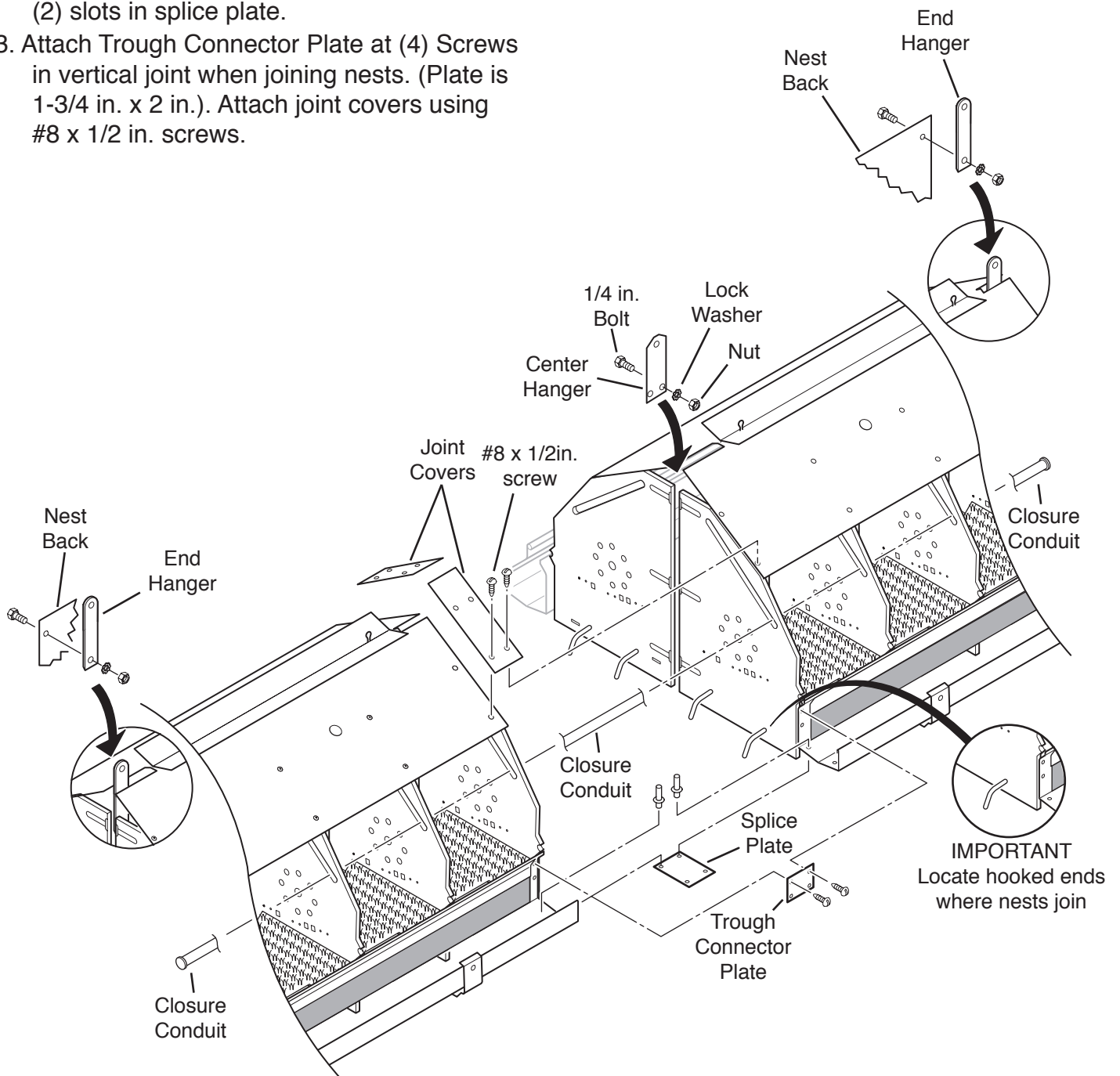
## Nest Top & Flipper

Next attach nest top and flipper. Attach flipper to nest top using (3) 1/8 in. x 1 in. cotter keys. Attach nest top to plastic partitions using (28) #8 x 1/2 in. screws. Note: Leave (2) end screws out at each end of the nest top at this time. When nests are joined later, these holes will be used to attach joint cover. See drawing.



# Joining Nests

1. Join the (2) 5 foot nests to make 10 foot sections. First make sure Bottom Support Rods are installed so that hooked ends are where nests join.
2. Connect egg tray ends using splice plates, using (4) 3/16 x 1/4 in. pop rivet and (2) #10 flat washers. Flat washers are used under (2) slots in splice plate.
3. Attach Trough Connector Plate at (4) Screws in vertical joint when joining nests. (Plate is 1-3/4 in. x 2 in.). Attach joint covers using #8 x 1/2 in. screws.
4. Attach center hanger and end Hangers. Attach hangers to slotted holes in nest back using 1/4 in. bolts, Nuts and lock washers.
5. Install closure conduit and insert plug ends. Crimp end of pipe with pliers to retain end plugs.



# Overhead Winching Installation

Overhead winching can be installed prior to installing nest down each side of the house. Drops should be on 59 in. centers and space between 10 ft. nest sections should be tray length plus 2 in. See drawing below.

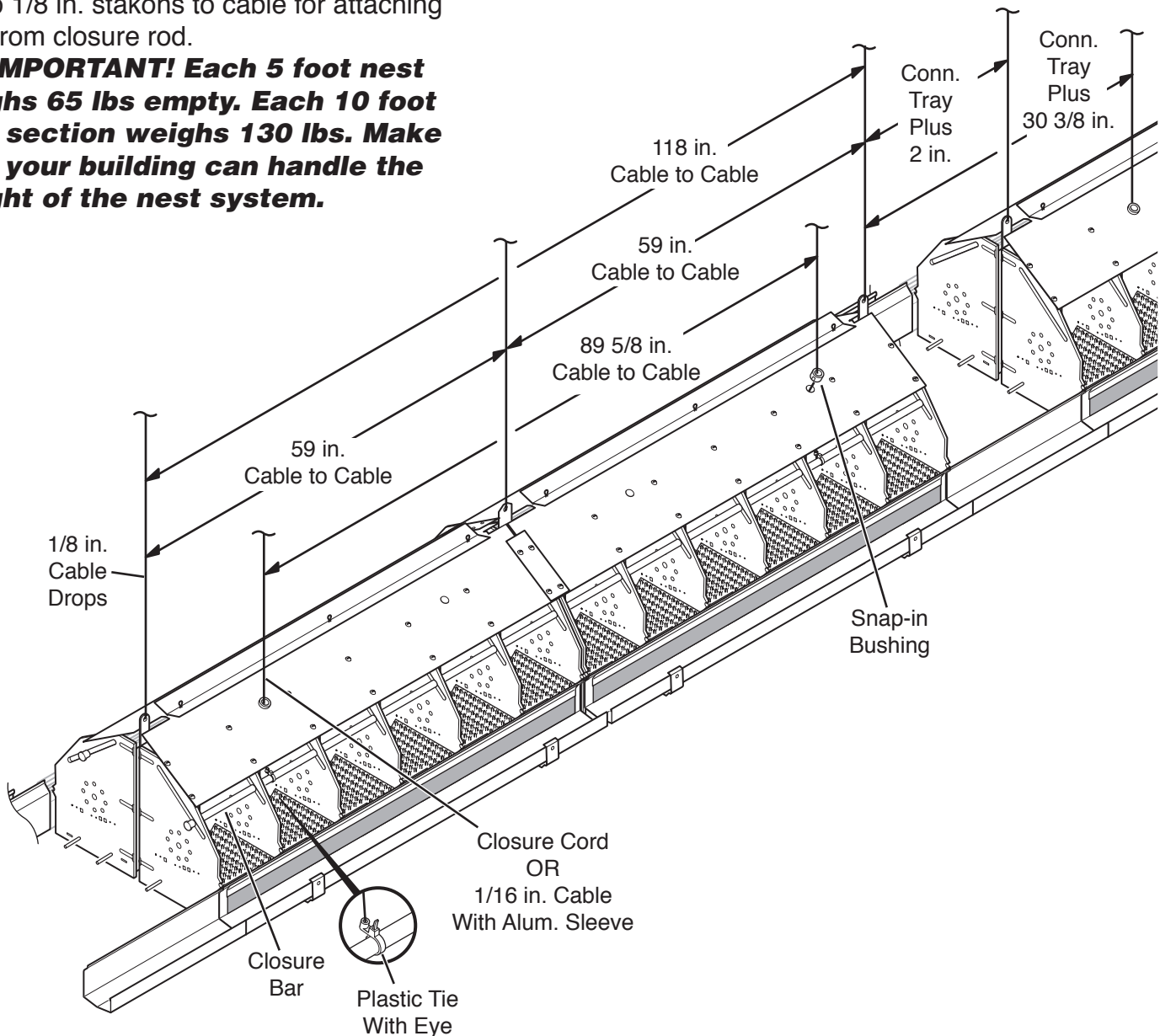
Line nests up and connect 10 ft. sections with connector trays.

Attach cable drops as shown. Run 1/8 in. cable overhead to attach cords to closure rods. Crimp 1/8 in. stakons to cable for attaching cord from closure rod.

**IMPORTANT! Each 5 foot nest weighs 65 lbs empty. Each 10 foot nest section weighs 130 lbs. Make sure your building can handle the weight of the nest system.**

Use tie straps with eye on closure rod to attach cord. Each 10 ft. closure rod requires (2) cords.

The closure systems can be hand winched or can be operated with an electric winch and time clock.



## Egg Belt Installation

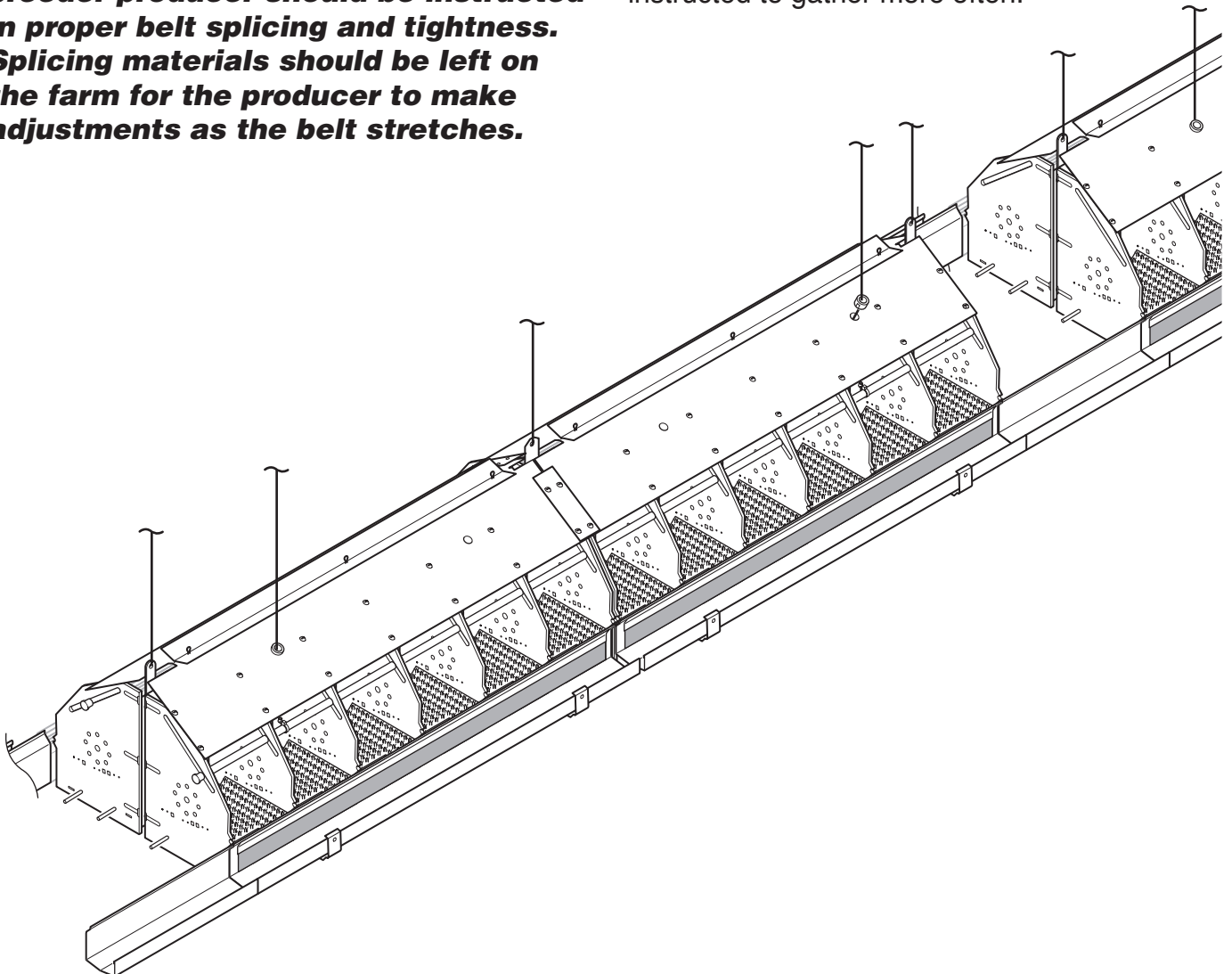
Install egg belt by pulling through all belt guides on bottom side then through top of egg tray. Raising nests off of slats will make this easier.

***It is recommended that the belt be run as loosely as possible without interfering with the drive system. The belt should be pulled up snugly and then stretched no more than 12-18 inches. The ends of the belt should be overlapped 8 inches and spliced. Hand sewing with a needle and heavy waxed thread is recommended. The breeder producer should be instructed in proper belt splicing and tightness. Splicing materials should be left on the farm for the producer to make adjustments as the belt stretches.***

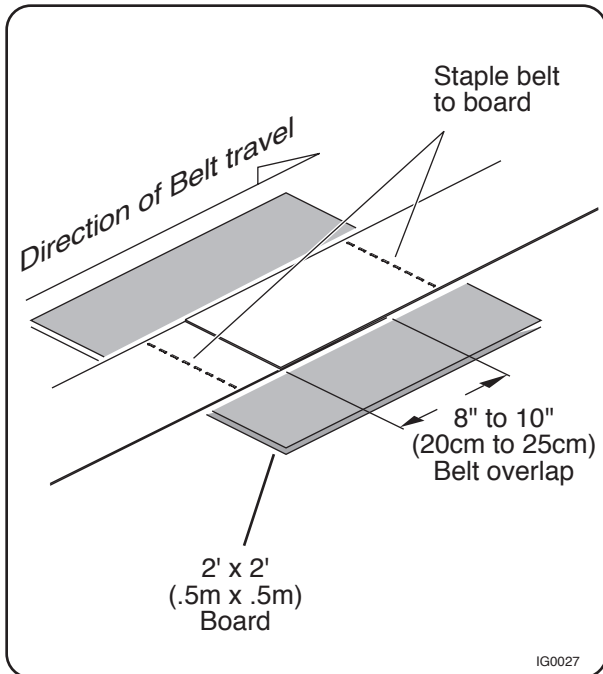
***Use caution against using detergents and disinfectants to clean the belt.*** The use of these products will destroy the protective coating in the fibers of the belt and greatly reduce the life of the belt. If a belt must be cleaned, use plain water in a high-pressure sprayer. If a belt is snagged or has rodent damage, instruct your customers to burn the effected area with a small propane torch to prevent loose fibers from hanging in the system.

***Also, it is important that eggs be gathered frequently.***

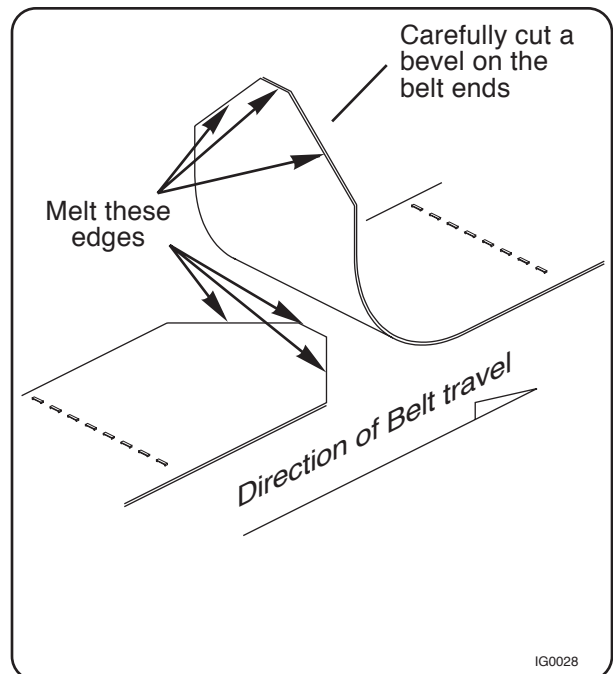
Eggs should be gathered a minimum of 4 times a day, and as many as 6 times during peak production periods. Customers with houses over 500 feet in length should also be instructed to gather more often.



# Egg Belt Splicing

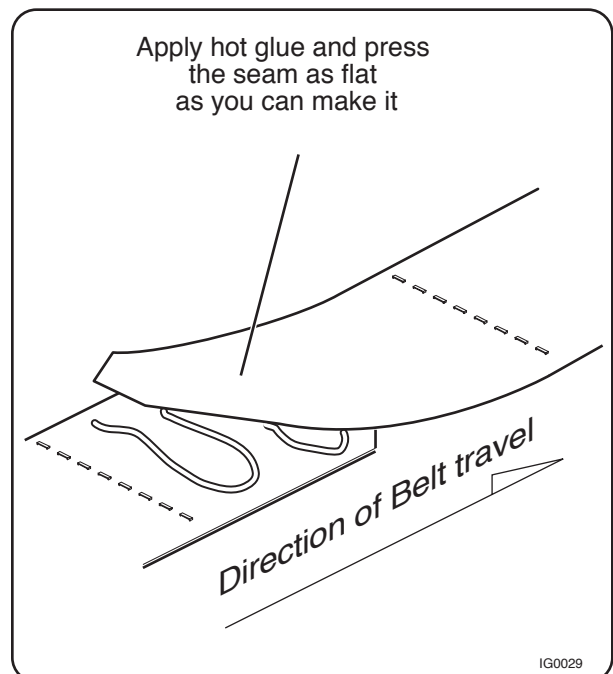


Place a 24" by 24" (60cm by 60cm) board under belt, pull belt tight, properly align and staple to board as shown



Trim ends of belt as shown and carefully melt the raw edges. (A butane lighter works well.)

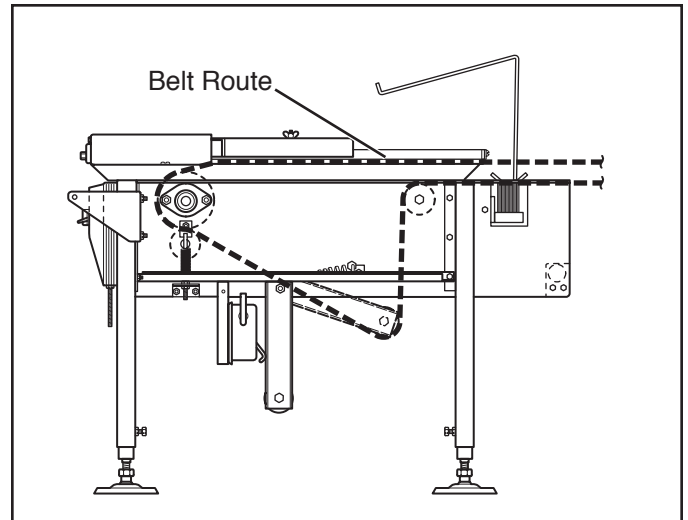
Use a hot glue gun to glue the overlap working with only 2" (5cm) at a time. A hot iron will help flatten the joint nicely. (Be carefull not to scorch the belt.) Use the cord and needle supplied to stitch all seams as well as the center of the joint. Remove staples and board.



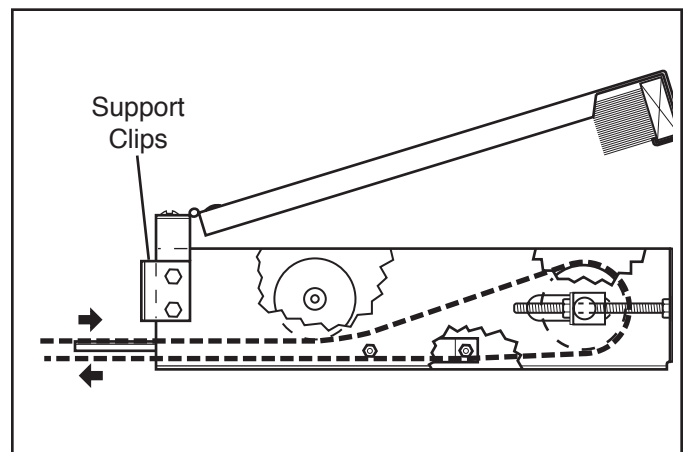
# Egg Belt Idler & Collector

Notice how to route belt through collector machine.

Notice that idlers are marked R.H. and L.H. It will be necessary to drill (4)  $7/32$  in. dia. holes in plastic end panel to attach Idler Support Clips. Use (4) #10 x  $1/2$  in. screws & locknuts provided.



**Collector Machine**

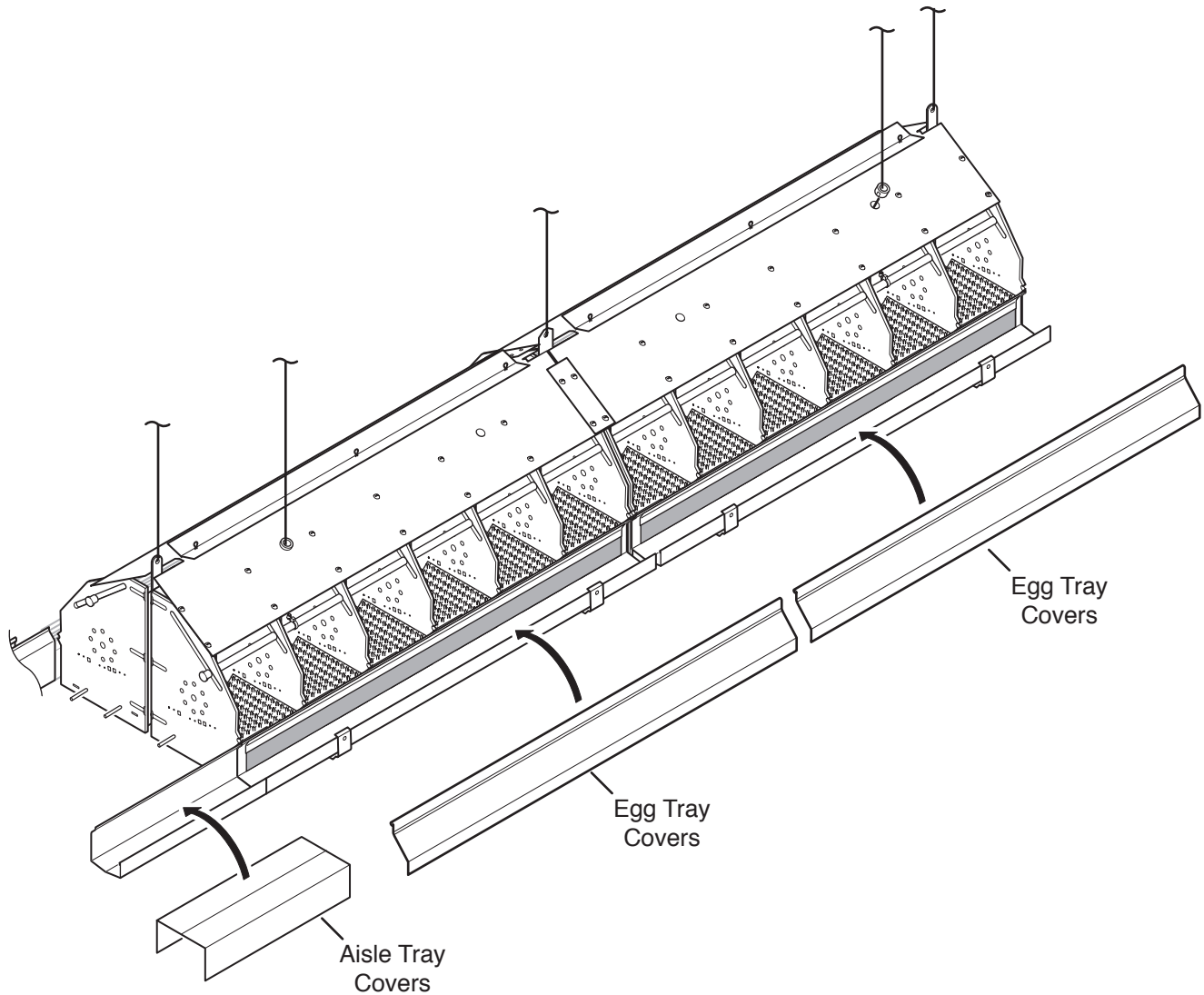


**Idler Machine**

# Aisle Tray Covers & Egg Tray Covers

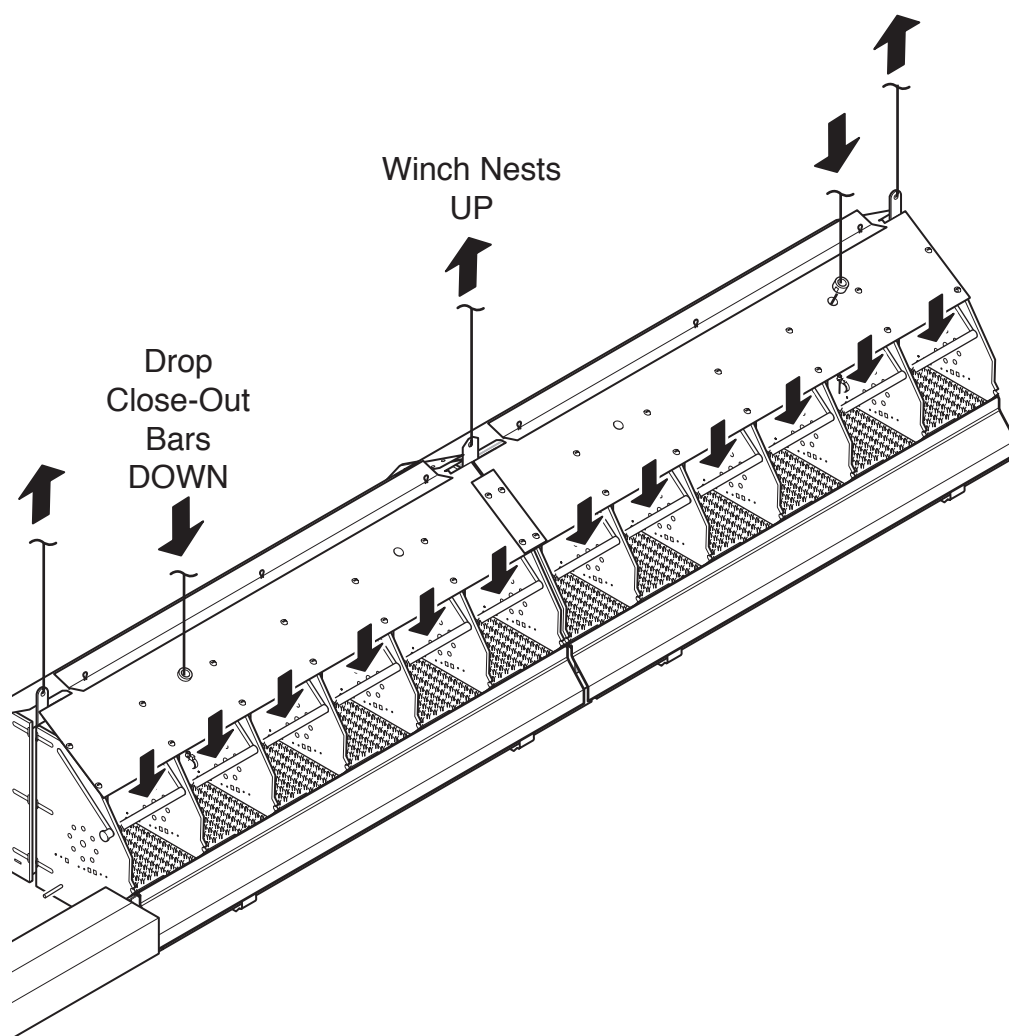
Install Aisle Tray Covers and Egg Tray Covers.

Snap Tray Covers into sockets by pressing against Top Lip of Egg Tray.



## Operation of Close-Out System

1. Close-out system can be operated by use of hand winch or electric winch tied in with a time clock to raise the nests up.
2. It is important to close nests in late afternoon (after last pick-up) by dropping the close-out bar and leave closed until early next morning, before hens start to lay.
3. Leaving nests open at night will entice hens to roost in nests or on belt cover rolled edge.
4. Keeping hens out of nests at night will help prevent broody hens and promote cleaner eggs.



## Operation Recommendations

- Use a time clock with the collector to remove litter from the belt circuit prior to the beginning of the daily egg lay. The run time should correspond with the first feeding cycle and last long enough for one complete revolution of the belt.

**NOTE: Be sure the last gathering in the evening is late enough that the collection table can hold any remaining eggs during this cleaning cycle.**

- It is possible to reduce the floor and slat eggs by walking the slats and scratch areas a least six times a day. Begin this practice with a flock when the first eggs are found and continue until the flock peaks. Pick up any eggs found on floor or slats and place in the center of the nearest nest. This will attract the birds to the nests.
- When walking the house, look for any pads that may have manure build up or broken eggs. These pads must be removed immediately and cleaned.



**CAUTION: Broken egg residue on pads and belt will attract rodents and they will destroy the pads and belting.**

## Cleaning the Nest System

Nests are usually raised for catching birds at the end of the lay period and remain suspended during the slat and manure removal. During this time, the building is usually cleaned with forced air or sprayed with some type of water solution.

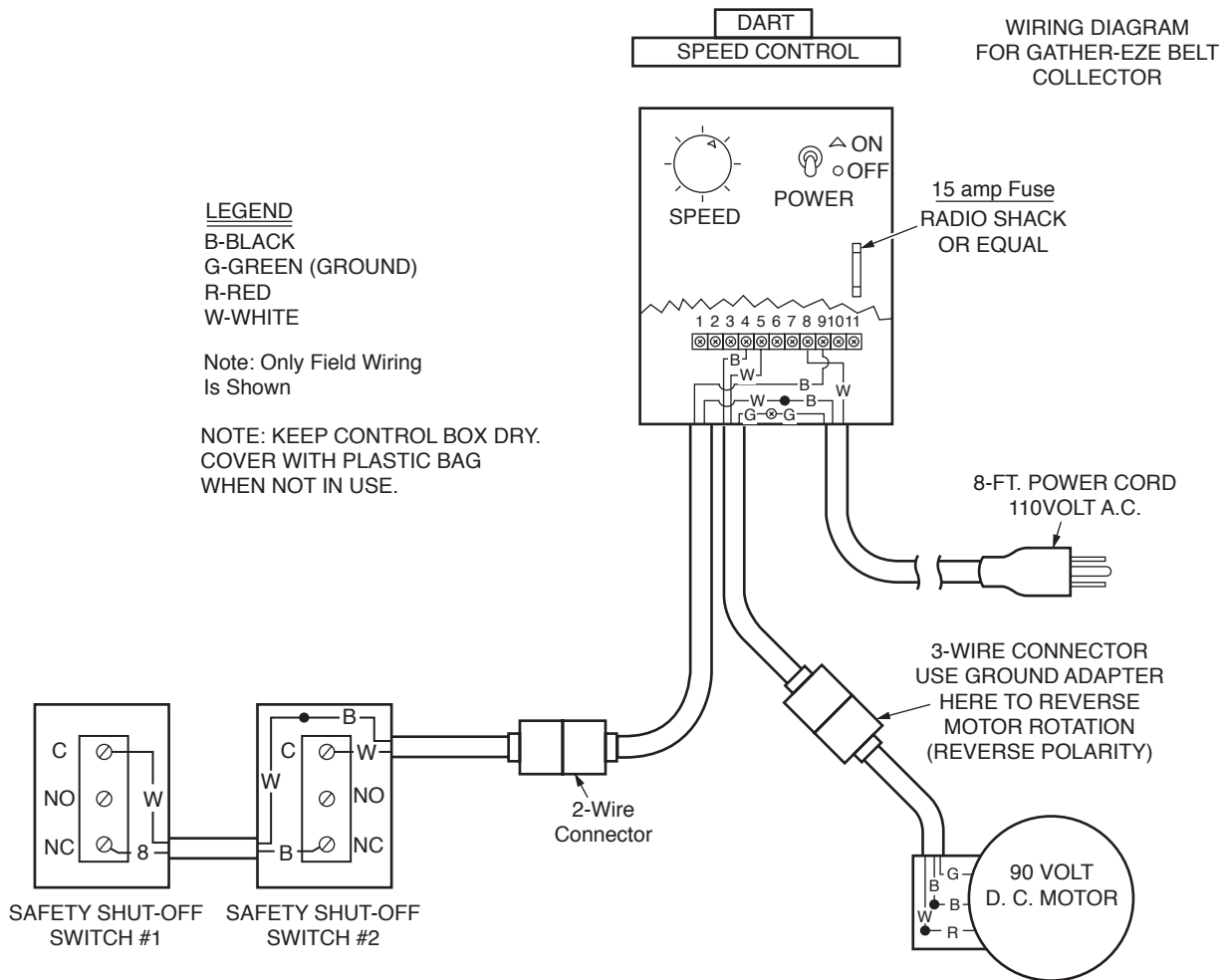
Either method of cleaning will leave a residue of dust or liquid in undesirable places. This residue can accumulate on or around the egg belt. A damp belt will most likely develop an odor from the growth of bacteria and mold.

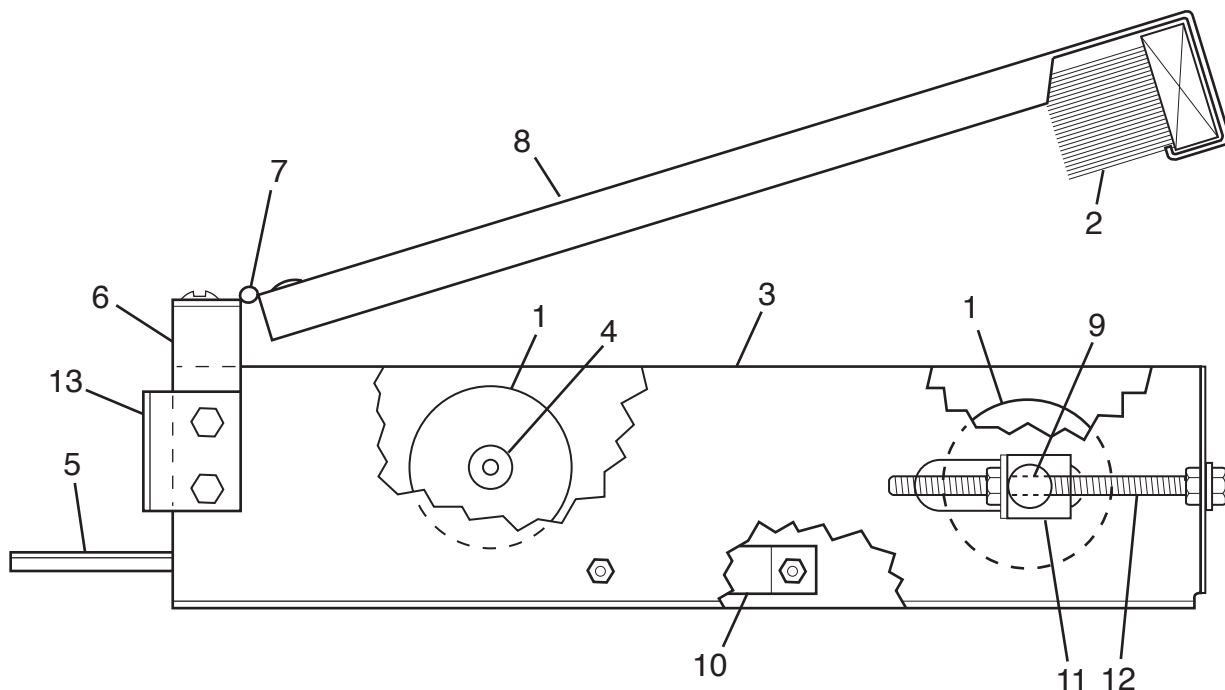
Suggestions to promote longer belt life:

- Before clean out disconnect belt and pull out of the nests into a roll. Install belt after clean out. This practice may be labor intensive, but offers good results.
- If building is washed down with the belt still in place, leave the top covers on the nests and the channel covers in place.
- If the belt gets wet during wash down, the belt should be run as soon as possible to help dry the belt. Move as much air as possible through the building and run the belt until the wet belt is on the underside of the circuit to allow more air circulation around the wet belt.
- When washing the nests, do not use corrosive chemicals, even detergent, if the belt can get wet. Chemicals may destroy the protective coating on the belt material and cause early deterioration. The only acceptable use of chemicals would be a small amount of ammonia in water to spot clean where eggs have broken during collection.



# Wiring Diagram





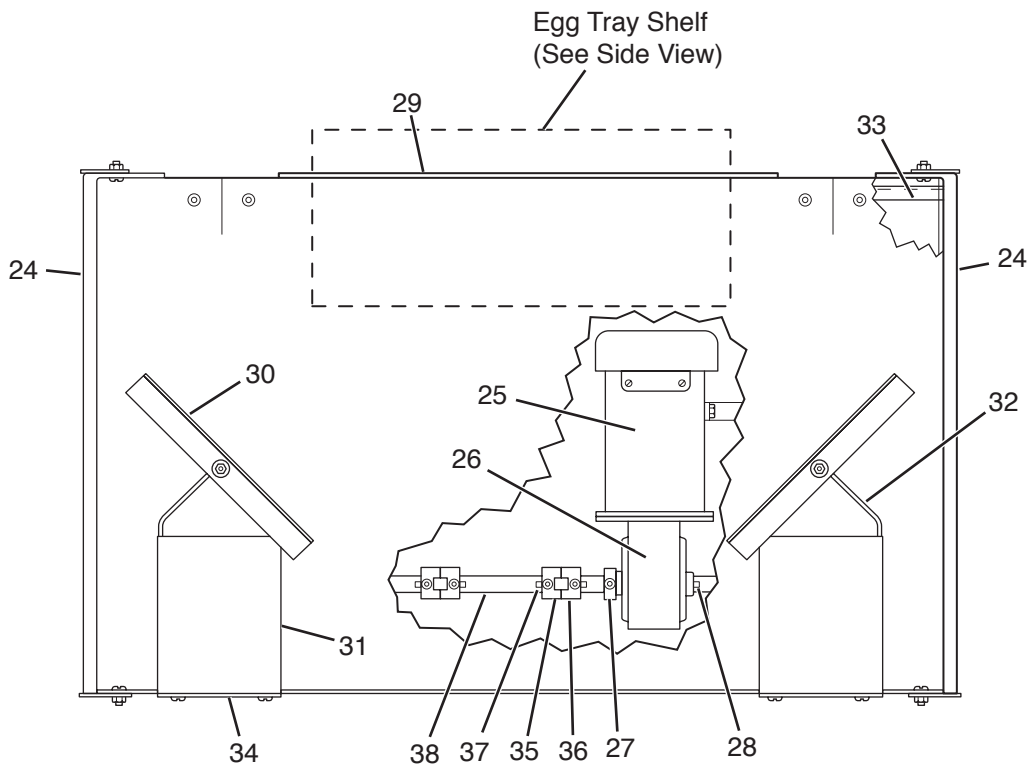
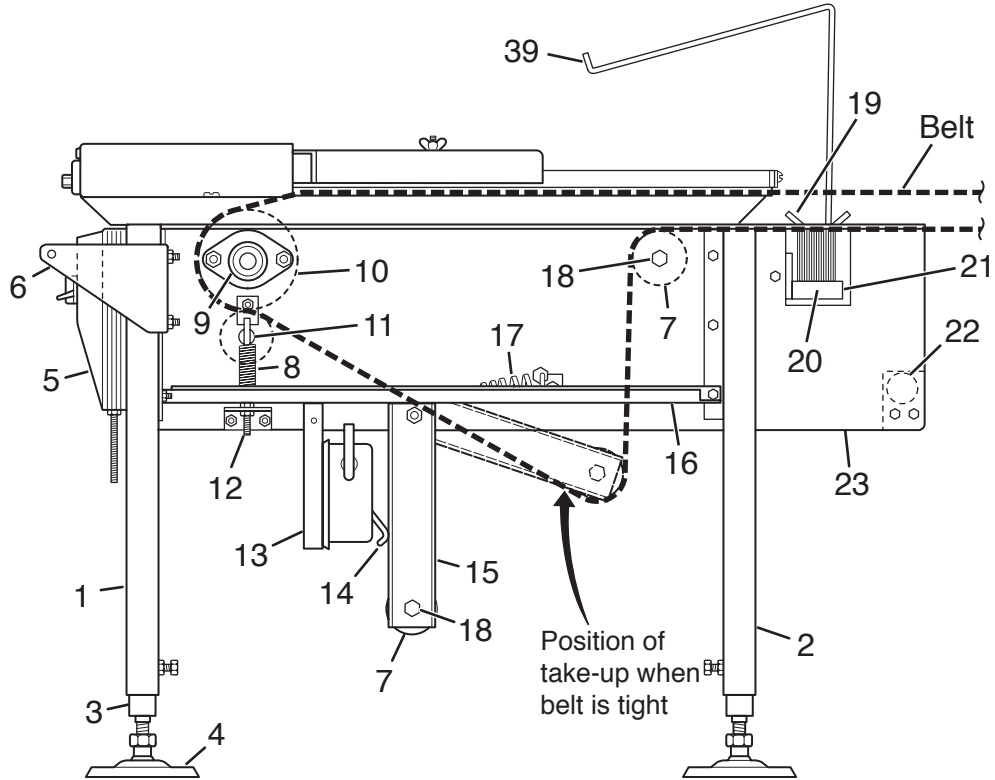
## Gather-Eze®

# Idler Assembly Parts Replacement

Part No. 37-03-0003

Item No.	Part No.	Desc.
1	37-03-1823	Idler Roller 2-3/8 x 5-1/2 in.
2	37-03-1947	Brush 6 in. Long
3	37-03-2769	Side Plate - R.H.
	37-03-2770	Side Plate - L.H.
4	37-03-1931	Take Up Shaft - 5-3/4 in.
5	37-03-2768	Idler Support Strap
6	37-03-2772	Cover Support Strap
7	37-03-2780	Cover Hinge
8	37-03-2767	Cover
9	37-03-1932	Idler Shaft 7-1/2 in. Long
10	37-03-2771	Scraper
11	37-03-1490	Adj. Clip Assy.
12	37-03-1853	Adj. Bolt 5/16 - 18 x 3 in.
13	37-03-2785	Support Clip

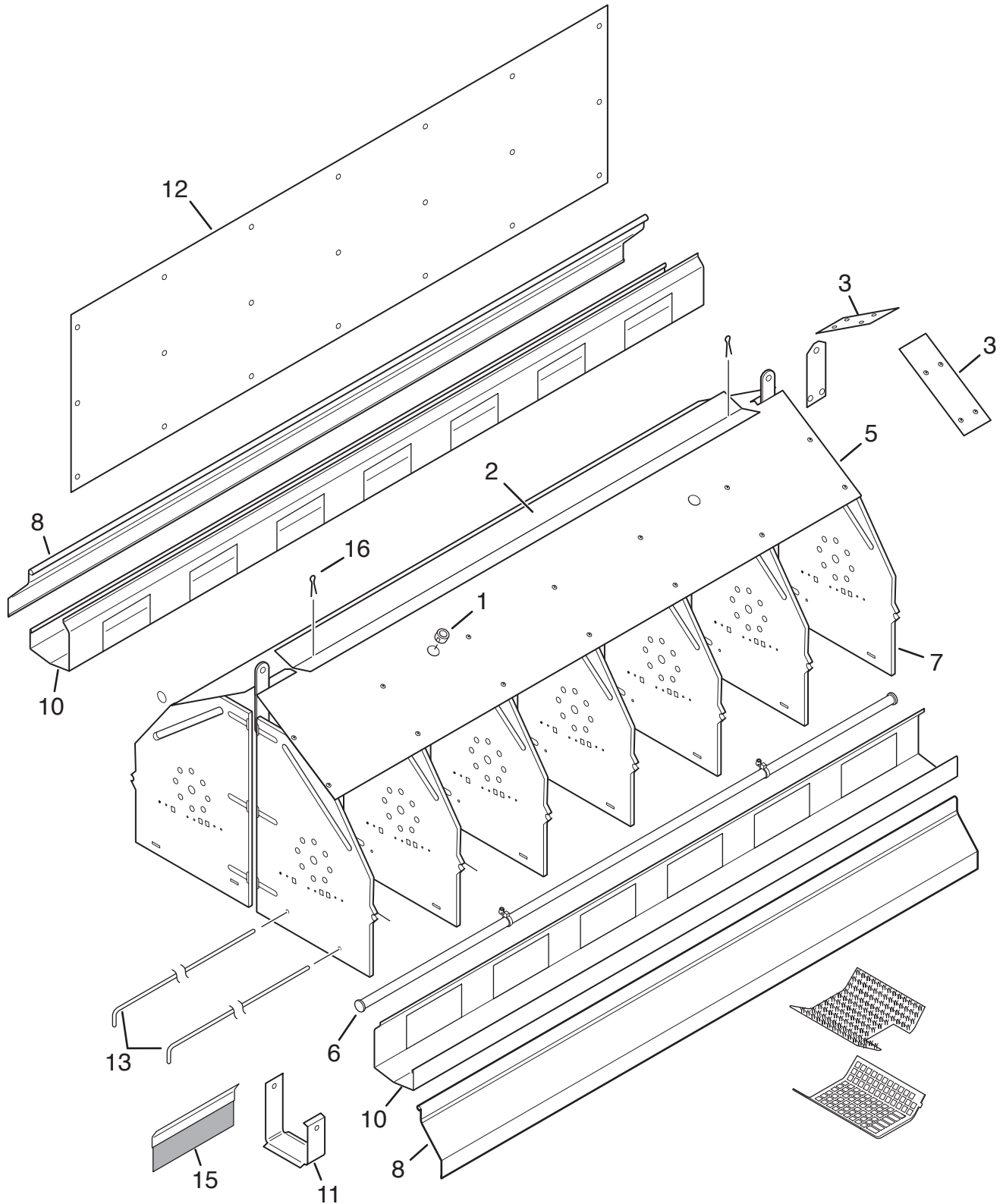
# Gather-Eze® Collector Parts Replacement



# Gather-Eze® Parts Replacement Part No. 37-03-0002

Item No.	Part No.	Desc.
1	37-03-1521	Front Leg Assembly
2	37-03-1520	Rear Leg Assembly
3	37-03-1505	Adj. Leg Assembly
4	37-03-1856	Adj. Foot
5	37-03-0023	Control Box - Prewired
6	37-03-2663	Front Lifting Lug
7	37-03-1824	Idler, Opp. End, Take-up & Pinch Roller
8	37-03-1863	Pinch Roller Spring
9	37-03-1842	3/4 in. Ball Bearing
10	37-03-1862	RH Drive Roller (STD) 4 in.
	37-03-1920	LH Drive Roller (Elevator) 4 in.
11	37-03-1847	Pinch Roller Shaft
12	37-03-1506	Pinch Roller Adjustable Rod Assembly
13	37-03-2650	Safety Switch Mounting Bracket
14	37-03-0664	Micro Switch
15	37-03-2649	Take-up Arm
16	37-03-2664	RH Leg Brace (Long)
	37-03-2665	LH Leg Brace (Short)
17	37-03-1843	Take-Up Spring
18	37-03-1848	Take-Up Shaft
19	37-03-2516	Brush Plate
20	37-03-1844	Brush
21	37-03-2515	Brush Holder
22	37-03-1504	Rear Lifting Handle
23	37-03-2639	Side Plate-RH
	37-03-2640	Side Plate-LH
24	37-03-1508	Flip-up Bar
25	37-03-1830	1/2 HP 90 Volt D.C. Motor
26	37-03-1908	Shaft Mount Gear Red. 20:1 Alum
27	37-03-1760	3/4 in. Set-screw Collar
28	37-03-1865	3/16 x 3 in. L. Key
29	37-03-1516	Table Assembly
30	37-03-2778	Single Direction Egg Diverter
31	37-03-2783	Roller Cover
32	37-03-2779	Two Direction Egg Diverter
33	37-03-1522	Table Support Frame
34	37-03-2780	Roller Cover Hinge
35	37-03-1942	Coupling Spider
36	37-03-1943	Coupling Half 3/4 in. Bore
37	37-03-0024	3/16 x 7/8 in. Sq. Key
38	37-03-1933	Connector Shaft
39	37-03-1523	Egg Tray Shelf

# Nest Parts Replacement



# Gather-Eze® Nest Parts Replacement

Part No.37-03-0005

Item No.	Part No.	Desc.
1	37-03-1937	1/2 in. Snap-In Bushing
2	37-03-2749	Flipper
3	37-03-2750	Joint Cover
4	37-03-1939	#8 x 1/2 in. screw
5	37-03-2746	Nest Top
6	37-03-1938	10 Ft. x 1/2 in. Conduit Closure
7	37-03-1934	Plastic Partition
8	37-03-2748	Egg Tray Cover
9	37-03-1821	3/16 x 1/4 in. Pop Rivet
10	37-03-2766	Egg Tray
11	37-03-2751	Egg Tray Belt Guide
12	37-03-2747	Nest Back
13	37-03-1914	Nest Bottom Support Rod
14	37-03-1940	#8 x 1 1/4 in. screw
15	37-03-1519	Egg Roll Out Skirt
16	37-03-1933	1/8 x 1 in. Cotter Key

## Big Dutchman, Inc. Limited Warranty

1. Big Dutchman warrants to the original purchaser that as to any product of its manufacture proving to be defective in material or workmanship under normal and intended use and service within one year from date of purchase thereof Big Dutchman will, at its option, (a) repair or replace such product free of charge, or (b) in lieu of repair or replacement, refund to the original purchaser the original purchase price less the reasonable value of the product's use to the original purchaser.
2. Any component parts that are not manufactured by Big Dutchman, such as electrical motors and controls, are excluded from this warranty, although such parts may be covered by separate warranties of the respective manufacturers. Copies of those other warranties, if any, may be obtained through Big Dutchman.
3. This warranty does not apply if all components of a system are not supplied by Big Dutchman, or if the product is not purchased from and installed by an authorized Big Dutchman distributor or company warehouse, or installed and operated in accordance with Big Dutchman specifications and instructions.
4. This warranty does not cover malfunctions or failures resulting from misuse, abuse, negligence, alterations, unauthorized or improper repairs, accident, damage while in transit, or lack of authorized or proper maintenance or installation. In addition, this warranty does not cover normal wear and tear or any problem with a product not caused by a defect in Big Dutchman materials or workmanship.
5. The obligations of Big Dutchman under this warranty do not include shipping charges, labor (whether for dismantling, installing, replacing or repairing), travel and subsistence allowance.
6. This warranty applies only to systems for the care of poultry and livestock. It does not apply to industrial or commercial installation. In addition, with respect to Big Dutchman's breeder nest system, Big Dutchman makes no warranty or guarantee that individual birds or any given population of birds will utilize the nests.
7. Warranty claims must be made in writing to Big Dutchman within 20 days of discovery and in accordance with Big Dutchman's published return-goods procedures, a copy of which may be obtained from Big Dutchman. For this warranty to apply, the product must be returned to a facility specified by Big Dutchman, freight prepaid and insured with proof of original purchase and date.
8. The acceptance by Big Dutchman of any product for repair, replacement or refund will not be deemed an admission by Big Dutchman that the product is defective or in violation of any warranty. Products that are replaced or for which a refund is issued become the property of Big Dutchman.
9. The rights and obligations of the purchaser under this warranty may neither be assigned nor delegated without the prior written permission of an authorized officer of Big Dutchman.
10. This warranty contains the entire warranty agreement between Big Dutchman and the purchaser, and the terms and conditions of this warranty supersede any and all other understandings, representations or proposals between Big Dutchman and the purchaser with respect to the matters covered by this warranty. This warranty shall not be modified by any custom or practice of the trade or of the parties, nor by any instances of Big Dutchman's waiver of or failure to enforce any of the provisions of this warranty.
11. This warranty may be modified or amended only in writing signed by both the purchaser and an authorized officer of Big Dutchman, and no other agent, employee, salesman, representative, dealer or distributor is authorized to make or to bind Big Dutchman to any representation, affirmation or warranty concerning the products in any manner whatsoever.
12. If Big Dutchman fails to fulfill its obligations in this warranty, or if Big Dutchman is determined to be liable to the purchaser or any other person for any reason related to any product covered by this warranty or the sale of that product, the maximum amount of damages, whether arising out of tort, contract, negligence or otherwise, recoverable from Big Dutchman by the purchaser shall be limited to the purchase price of the product with respect to which Big Dutchman's obligations or liability arises, less the reasonable value of the product's use to the purchaser.
13. THE OBLIGATIONS AND LIABILITIES OF BIG DUTCHMAN AND THE RIGHTS AND REMEDIES OF THE PURCHASER UNDER THIS WARRANTY ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, OBLIGATIONS, LIABILITIES, RIGHTS AND REMEDIES, EXPRESSED OR IMPLIED, ARISING BY LAW OR OTHERWISE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY IMPLIED OR EXPRESSED WARRANTY ARISING FROM THE COURSE OF PERFORMANCE, COURSE OF DEALING OR USAGE OR TRADE. BIG DUTCHMAN SHALL HAVE NO OBLIGATION OR LIABILITY, WHETHER UNDER THIS WARRANTY OR OTHERWISE, FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, LOST PROFITS, REVENUE OR OTHER INCOME, LOSS OF USE, DAMAGES FOR INJURY TO PERSONS OR PROPERTY, OR ANY OTHER DAMAGES.
14. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to each purchaser. This warranty gives the purchaser specific legal rights, and the purchaser may have other rights that vary from state to state.



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