

UniGROW³⁶⁰

Operation Manual

Inst. #11-00-0526 6/96



*Operation and Management of
flooding broiler feeder system*



Big Dutchman.

Warnings, Cautions and Notes



This manual contains **Warnings, Cautions, and Notes** in addition to the operating instructions. These comments offer helpful hints to aid in the operation of the UniGROW 360 and offer alerts to warn of situations where the possibility of personal injury exists.

Please take the time to read and understand this manual before operating.

CAREFULLY FOLLOW THE SAFETY AND OPERATING INSTRUCTIONS in this manual.

Observe the following precautions when working on or near the UniGROW 360:

- Understand the limitations and hazards associated with operating this equipment before using.
- Wear appropriate eye protection when assembling and operating 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 to 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**.

KEEP ALL COVERS AND GUARDS IN PLACE WHILE EQUIPMENT IS IN OPERATION.

Observe the following precautions when servicing the UniGROW 360:

- Do not remove guards except when performing maintenance.
- Do not operate the machine when guards or covers are 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 and auger 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**.

Introduction

This manual explains the operation of the UniGROW 360 Broiler Pan Feeding System. Read these instructions carefully and completely before operating the unit.

Please follow all instructions. Although Big Dutchman equipment is the best in the industry, following operation and maintenance procedures will increase your equipment's performance and service life.

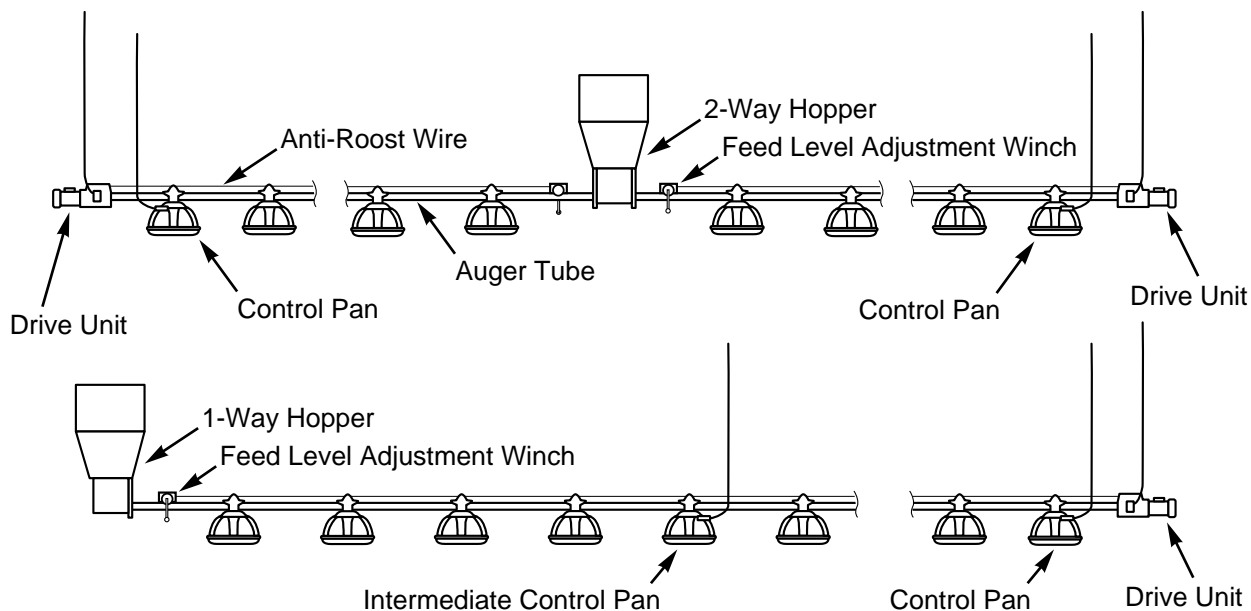
All wiring must be performed by a licensed electrician, in accordance with federal, state and local codes.

Big Dutchman reserves the right to change product specifications and designs without notice or obligation.

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Overview of System



Above are the two configurations of the UniGROW 360 flooding broiler feeder system. The top is a 2-Way with the hopper located at the center of the feed line and the drive units at each end. The lower is a 1-Way with the hopper at one end and a single drive unit at the other end.

There are two different drive units available for both the 1-Way and the 2-Way feeder. You may have a belt drive unit or a gear drive unit. All four configurations are covered in this manual.

Whatever system you have, it is hung from the ceiling by a series of cables and pulleys so that a single winch will raise and lower the feeder line. This is your suspension system.

For every drive unit, you will also have a control pan. This control pan is the last pan in the line next to the drive unit. The basic feeder pan parts are the same as any other pan in the line except for the drop which has a hole drilled in the side to accept the sensor which is the heart of the control pan. There are some additional parts with the control pan, such as a bracket to hold the sensor in place and all the necessary electrical assemblies to connect it to the electrical circuit at the ceiling.

You may also have intermediate control pans for partial house brooding. These intermediate control pans are identical to the control pan except they do not include a sensor. Only one sensor is used in each line and it is simply unplugged and moved to the pan you wish to be the current control pan.

Flooding of the pans is accomplished by the use of a winch mounted near the hopper. If the flooding feature is to be used for more than 250 feet, an additional winch is required and mounted in the center of the line. The winch pulls the anti-roost wire, raises the flood cone and allows feed to pile in the pan.

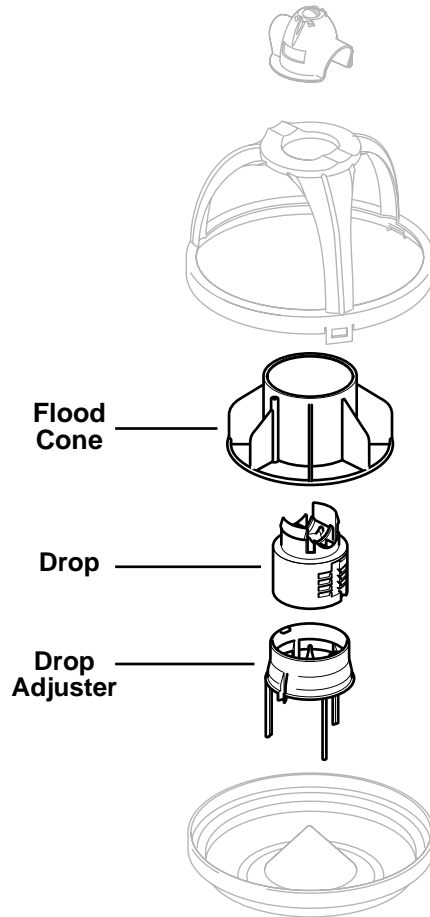
Feeder Adjustment Settings

Full Flood (Start) to Grow Out (Finish)

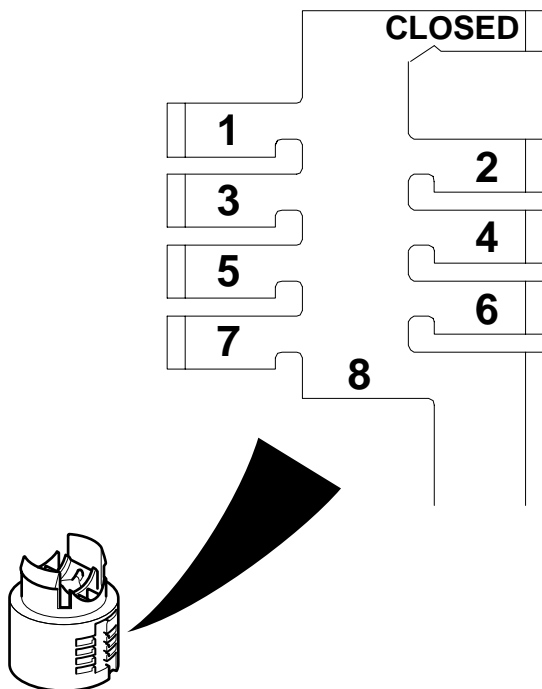
In this discussion, we will identify three parts of the UniGROW 360 feed pan, the drop, drop adjuster and the flood cone. The drop on the UniGROW 360 feed pan has nine adjustment positions, seven have numbers molded into the plastic. The drop adjuster has two tabs to fit into the adjustment positions on the drop and three legs to keep the flood cone aligned when lowered. It also has a cone shaped diverter inside to direct the feed outward when the flood cone is raised. The flood cone is suspended by cords and is raised and lowered by the use of a winch.

Adjustments are made to the finishing feed level by grasping and turning the adjusting ring (top of drop adjuster).

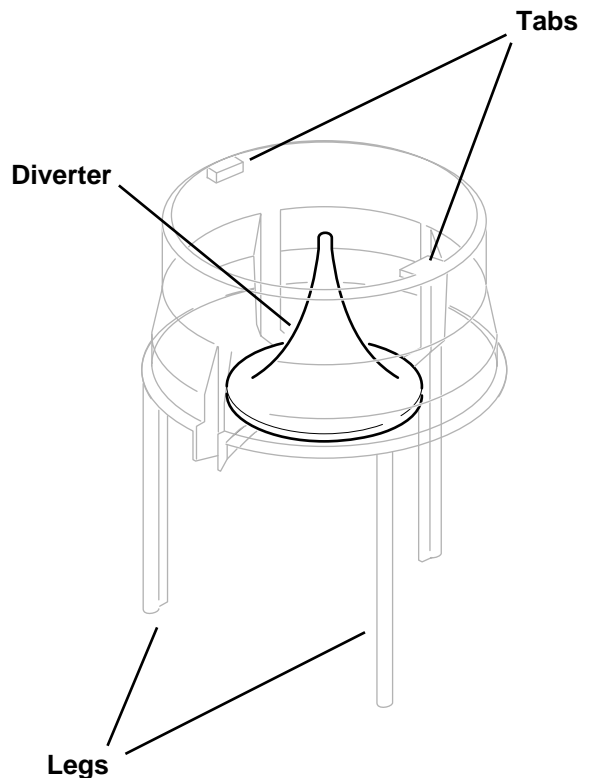
NOTE: A pan can be completely shut off and receive no feed by setting the adjuster in the closed position.



Feeder Adjustment Parts



9 Adjustment Positions

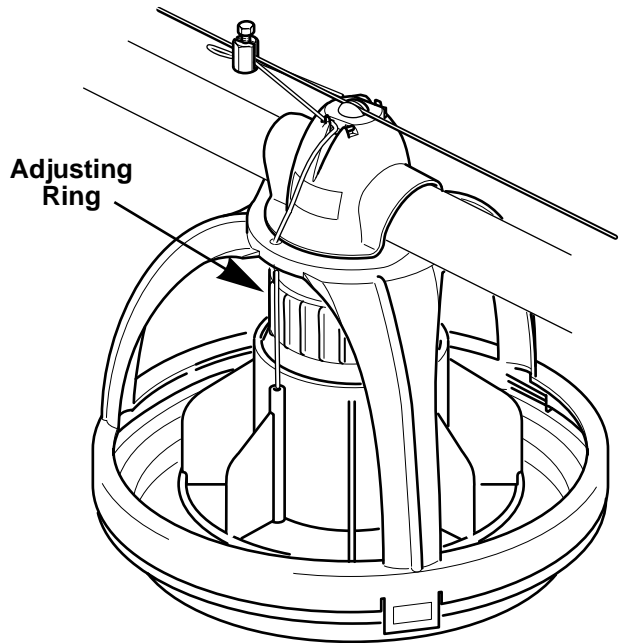


Drop Adjuster Parts

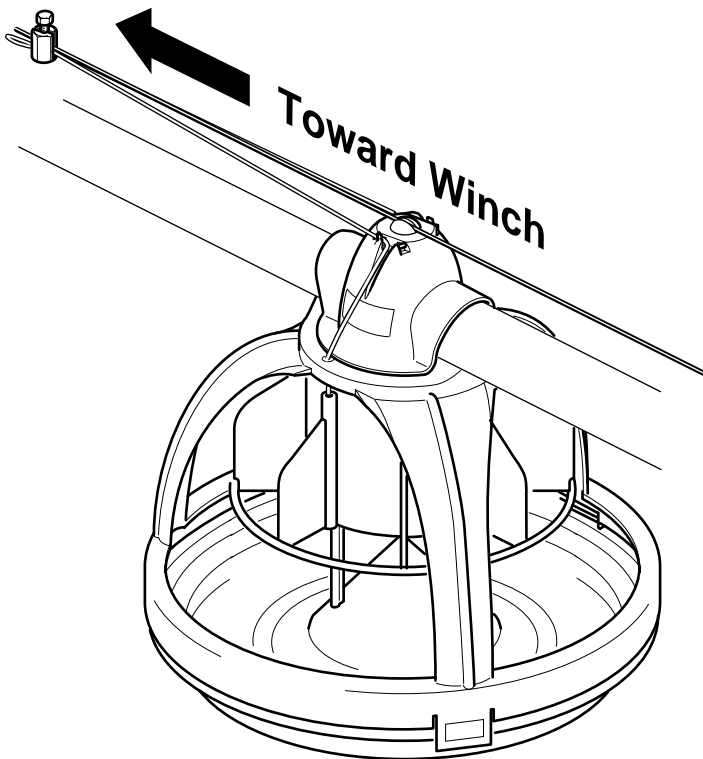
At start (or full flood) the flood cone is raised to the top most position, allowing a large amount of feed to pile up in the pan. Some feed may even sprinkle out of the pan depending on the type of feed and the adjustment position. This is the position when new chicks are started in the broiler house.

At final grow out, the flood cone has been lowered as far as it can go, reducing the amount of feed in the pan for growing out the birds. As much feed as the birds want is available. The feed baffle and anti-scratch ring built into the flood cone save feed from being wasted at the grow level.

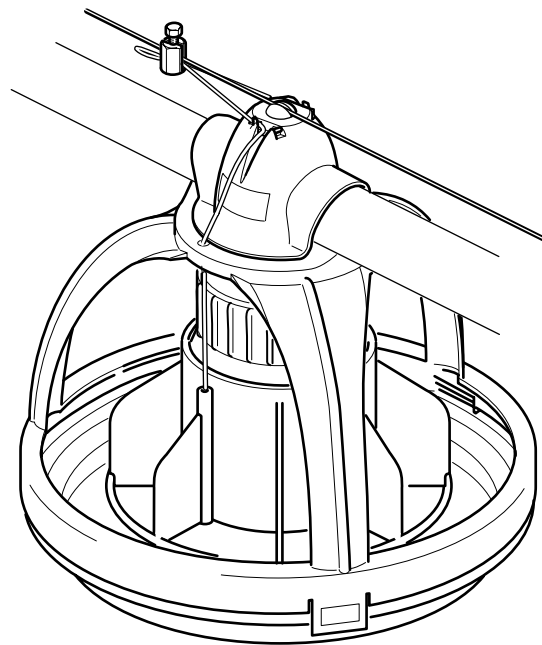
The adjustment positions have a direct effect on the amount of feed in the pan in both the start and the grow positions. This effect will vary with the type of feed used and the moisture content of the feed. Our initial recommendation is between the 4 and the 6 position (position 6 was suggested in the installation manual).



Adjusting Ring Location

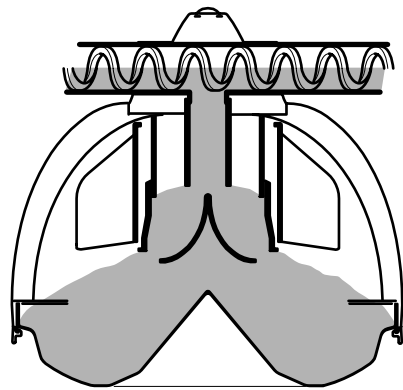


Full Flood Position

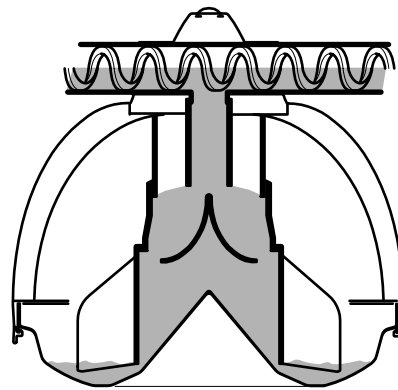


Final Grow Position

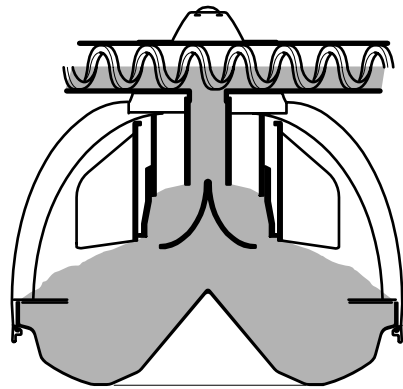
Flood and Grow Positions



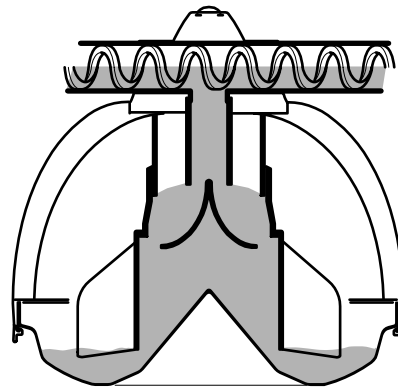
Position 7 Flood



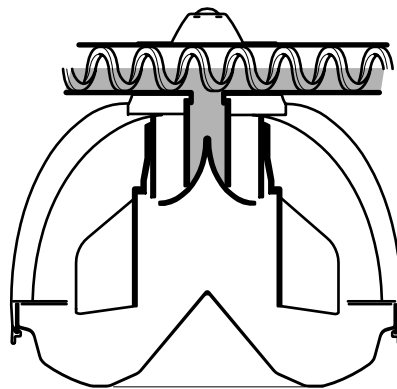
Position 7 Grow



Position 3-6 Flood



Position 3-6 Grow



Closed Position

With a setting of 7, the height of the mound of feed is lower in the flood stage. This position also allows the tabs on the bottom of the flood cone to rest on the pan giving the lowest level of feed during grow out. Settings in between the extremes will give the best results for normal operation. Any of these middle settings will give good flooding. The level of feed in the grow out stage is lower with the drop adjustment lower, and slightly higher with a higher drop adjustment.

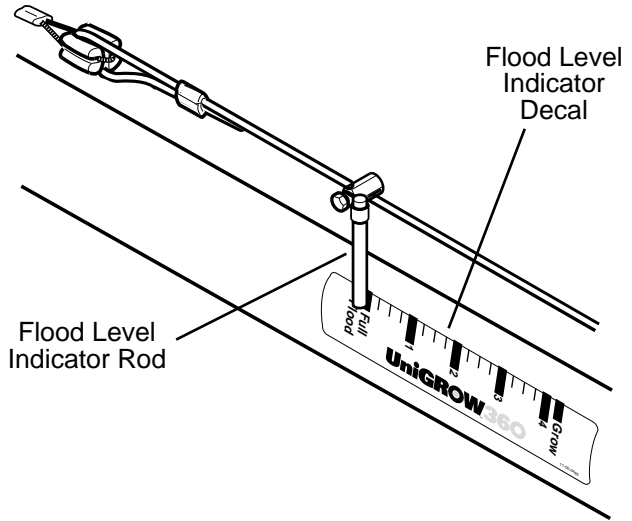
With a little experimentation, you will soon discover the setting that works best for your particular needs and feed conditions.

If the need should arise, any pan may be turned off so no feed will enter by setting in the closed position.

Flooding the Pans

Flooding is accomplished by turning the crank lever on the flood adjustment winch in the direction shown on the decal on top of the winch. When the stop clamp touches the cable guide on the winch housing, the flood cones should be in the fully raised position.

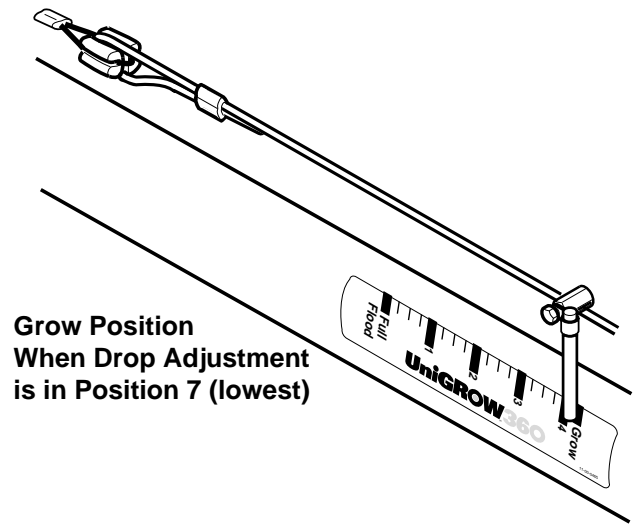
NOTE: The winch should make a clicking sound as you turn the crank. If you hear no clicking sound, locate the small release lever and flip it toward the pans.



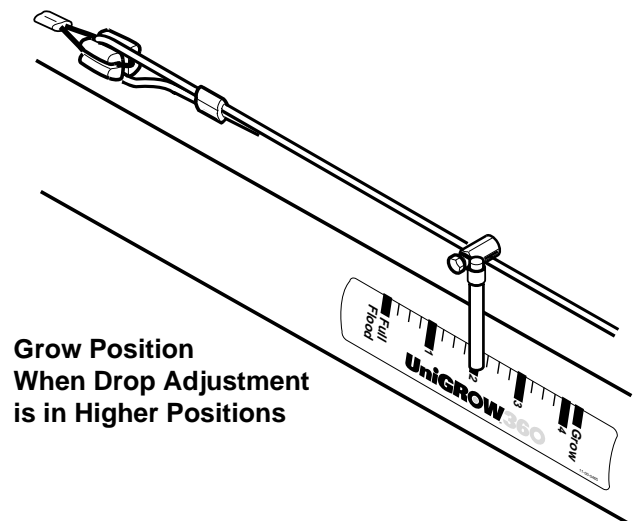
Full Flood Position

The Flood Level Indicator

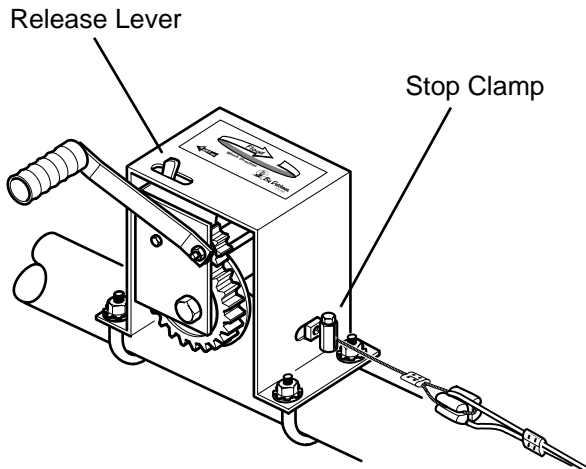
The flood level indicator will display the full flood position regardless of the adjustment level of the drop adjustment. Grow out position will vary with this adjustment. This is due to the flood cone falling less distance as the drop adjustment level is raised to higher positions. This means that if you have your drop adjustment in position 3, the flood cone will bottom out long before the flood level indicator reaches the grow position.



Grow Position When Drop Adjustment is in Position 7 (lowest)



Grow Position When Drop Adjustment is in Higher Positions



Flood Adjustment Winch

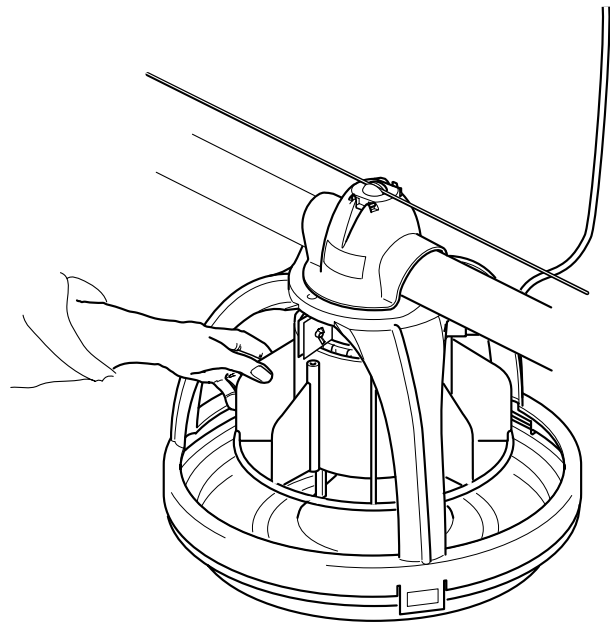
UniGROW 360 Management and Operation

Operation - Start/Brooding:

- 1) All feeder adjustments should be set in the number six (6) setting.
- 2) If feeders are placed on paper, then raise the flood cones to the maximum open position for flooding onto the paper.

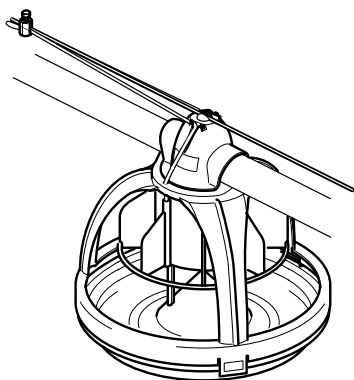
Note: If feeders are to be used on litter (without paper) the flood cone should not be fully opened because of potential feed wastage. Choose a setting between flood and grow that allows the desired amount of feed, without spilling over the edge of the pan. This is accomplished by adjusting the amount of feed as the first pan is filling.

- 3) After birds are placed in the building and are eating from the feeders, raise the flood cone in the control pan by hand twice daily to start the feeder and allow it to refill all pans each time.

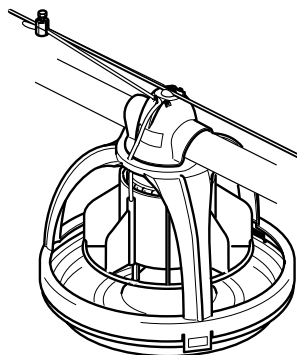


Raise Flood Cone on Control Pan to Activate Feed Motor

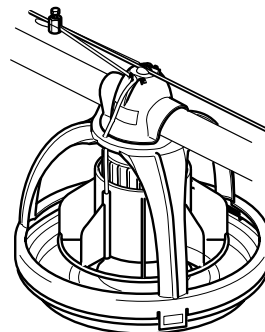
- 4) When birds are approximately 5 to 7 days of age, you should begin lowering the flood cones. First refill the feeders, then relax the winching system no more than 1/3 the distance of flood cone travel by watching the flood level indicator. As the birds eat the feed, the winching system should gradually be relaxed but never more than 1/3 of the distance of flood cone travel and only after the pans have filled. Continue to relax the winching system until the flood cones have moved down to the preset feeding or grow position.



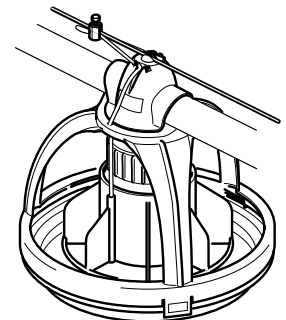
Full Flood



1/3 Down



2/3 Down

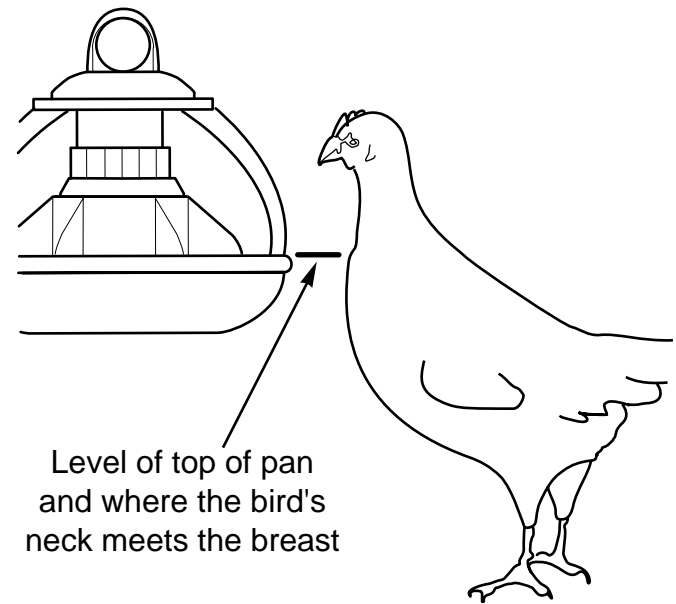


Grow (fully down)

Lower the Flood Cone in Stages

5) As the birds grow, the lip of the feeder pan should be kept even with the bird's neck, where it joins the breast. Proper height of the feeding systems can prevent birds from raking feed excessively and wasting it.

6) After birds are 2 to 3 weeks old, they should be allowed to eat pans empty once a day. This is accomplished by turning off the feeder manually or automatically with a time clock.



Optimum Height of Feed Pan

General Management of Feed Pan

Feeders should be operated before birds are placed in the house. Your feeding system should then be observed to see that all switches function properly and check for possible installation errors.

Due to a protective coating of oil on the auger and tubing, we recommend running enough feed through the feeder to clean the auger and tubing. The same feed may be run through the system several times before disposing of it.

Birds tend to shy away from dark or cold places. Some precautions that should be taken to be sure the birds utilize the control pans are as follows:

- 1) Place control pans no closer than six (6) feet from the end of the building.
- 2) Be sure that the temperature is comfortable near the control pan.
- 3) Sufficient lighting is also essential at the control pan.

In case you are out of feed for a long period of time, precautions should be taken to assure that birds don't pile up and injure one another, or possibly smother. Actions that can be helpful in a situation like this are as follows:

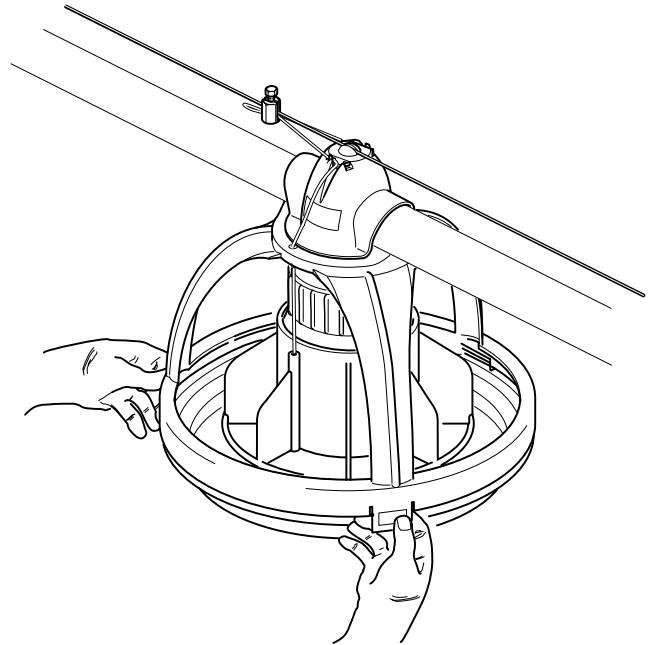
- 1) Raise feeders above the birds heads while filling. Also, lower the feeders with caution after filling, so as not to trap birds underneath the pans.
- 2) If birds are extremely hungry, scattering some feed in the litter can help occupy at least some of the birds, while others are eating from the pans.
- 3) Walking slowly up and down the lines will help break up possible pileups.

We recommend that old feed be removed from the feeding systems after birds have been removed from the building. The new starting birds will then have access to fresh feed, promoting better growth.

Releasing Pans for Cleaning

Grasp the two clamps with your fingers and pull out while pressing into the holes with your thumbs to release the pan. The pan is now free to swing down allowing water to drain when spraying down the line.

To lock pans in the feeding position, swing pan up into the grille and snap the clamps back under the corner of the pan. You will have to practice and acquire a "feel" for this procedure. Be sure to test the pan to ensure that it is firmly locked in place.



Releasing Pan for Cleaning

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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