

46-SERIES

4610 POULTRY HOUSE WALL CLEANER

OPERATOR'S MANUAL

THIS MANUAL TO ACCOMPANY MACHINE

PART NO. 46-OM-02 PRINTING DATE: NOV 2008

WARRANTY POLICY

KELLEY MANUFACTURING COMPANY (KMC) warrants that all goods sold to the original purchaser of any KMC product shall be free of any defects in material and workmanship if used under normal operating conditions. The warranty period begins on the date of purchase by the retail customer. For non-commercial users the warranty ends twelve (12) months thereafter. For commercial users the warranty period ends six (6) months thereafter. KMC's sole responsibility is to repair and/or replace the defective part or parts at no cost to purchaser. This remedy is the **SOLE AND EXCLUSIVE REMEDY** of purchaser.

The purchaser must fill out and return the warranty registration form found in the front of the operator's manual. Failure to return the warranty registration form within 30 days shall result in the goods being sold "AS IS", and all warranties shall be excluded.

This warranty shall not apply to those items that are by nature worn in normal service, including but not limited to belts, springs, teeth, chains, etc. Items such as tires, tubes, and gearboxes and all other items warranted by the original manufacturer are warranted only to the extent of their individual manufacturer warranty, and KMC is not warranting any of said items. All warranty claims must be made through a KMC licensed dealer, and a warranty form request must be submitted to KMC within 30 days of failure or the warranty provision shall be unenforceable against KMC.

No agent or person has authority to change or add to this warranty as written.

THE ABOVE IS THE ONLY WARRANTY MADE BY KMC AND IS MADE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. KMC MAKES NO WARRANTY OF MERCHANTABILITY AS TO ANY GOODS MANUFACTURED BY KMC AND FURTHER, KMC DOES NOT WARRANT ANY SUCH GOODS AS SUITABLE FOR ANY PARTICULAR PURPOSE TO THE RETAIL CUSTOMER. THE SUITABILITY OF GOODS FOR ANY PURPOSE PARTICULAR TO THE CUSTOMER IS FOR THE CUSTOMER, IN HIS SOLE JUDGEMENT, TO DETERMINE. KMC FURTHER MAKES NO WARRANTIES WITH RESPECT TO ITS MANUFACTURED GOODS THAT WOULD NORMALLY BE DISCLOSED BY AN EXAMINATION. THIS IS THE FULL AND FINAL EXPRESSION OF ALL WARRANTY LIABILITY OF KMC. NO OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED, SHALL BE ENFORCEABLE AGAINST KMC.

Kelley Manufacturing Co.

80 Vernon Drive / Zip 31794 P.O. Drawer 1467 / Zip 31793 Tifton GA

TABLE OF CONTENTS

TO THE PURCHASER2
Retail Customers Responsibility Under The KMC Warranty3
SAFETY PROCEDURES3
POULTRY HOUSE WALL CLEANER BASIC FEATURES4
ASSEMBLY INSTRUCTIONS5
MACHINE SETUPAttaching To Tractor5Wall Gauging Tire Adjustment6Plastic Wall Follower7Curb Deflector7Auger Rotation7Checking Poultry House For Obstructions7
OPERATING INSTRUCTIONS General Instructions
MAINTENANCECleaning Machine10Blade Pivot Lock Bolt Replacement10Scraper Blade Replacement10Wall Follower Slide Replacement10
LUBRICATION1
STORAGE12
TRANSPORTATION1
SDECIEIC ATIONS 14

TO THE PURCHASER

This **KMC Poultry House Wall Cleaner** has been carefully designed and manufactured to give years of dependable service. In order to operate it efficiently and maintain if properly, please read the instructions within this manual thoroughly.

While reading the manual through, you will notice that it is divided into sections which clearly explain the assembly and operations of each components of this machine. A Table of Contents is also provided for quick reference to these sections

Some components of this machine are labeled left or right. The notations are determined facing the direction the machine will travel in use.

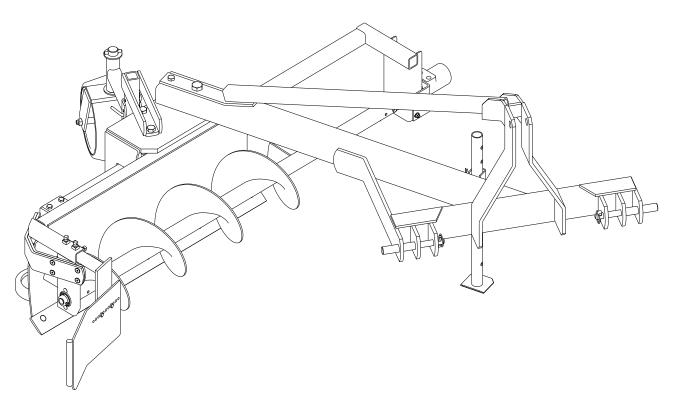


This safety alert symbol is used throughout this manual to identify safety messages. When you see this symbol, read the message which follows as it will advise you of possible injury.

After reading this Operator's Manual, Please keep it for reference each season.

To insure procurement of the proper repair parts, please record your machine's Serial Number and Purchase Date as shown below:

Model No	
Serial No	
Purchase Date	



Retail Customers Responsibility Under The KMC Warranty

The retail customer's responsibilities are:

- 1. To read the Operator's Manual and operate the **Poultry House Wall Cleaner** in accordance with instructions given in the manual
- To inspect the Poultry House Wall Cleaner daily, lubricate as specified and repair or replace parts as needed, especially when continued use would cause damage or excess wear to other parts.
- 3. To maintain and keep in place all safety shields and devices.
- 4. When Warranty Service is necessary, it is the customer's responsibility to deliver the machine to the KMC dealer from which is was purchased, Warranty repairs should be submitted to the dealer within **thirty (30)** days of failure.
- 5. Dealer travel to the machine or hauling the machine to his shop for the purpose of performing warranty service is not allowed under KMC warranty. It is a cost to be paid for by the retail customer. Any arrangement whereby the dealer agrees to absorb all or part of this cost is strictly between the dealer and retail customer.

SAFETY PROCEDURES

Safety and performance are the primary objectives of the designers of KMC equipment. Safety features have been incorporated into this machine where possible and warnings given in other areas. For your safety, **PLEASE** read and observe the following safety procedures.

- 1. **READ** the Owner's Manual.
- 2. Do not permit anyone to ride on the machine.
- 3. Before starting or operating the machine, make a walk-around inspection and check for obvious defects such as loose mounting bolts and damaged components. Correct any deficiencies before starting.
- 4. Keep all persons a safe distance away from the rear and sides of the machines while it is in operation.



- 5. Do not allow children to operate the Wall Cleaner. Only experienced tractor operators should operate the tractor when using the Wall Cleaner.
- 6. The work area should be cleared of objects that can be pickup and become entangled in the auger.
- 7. Drive safely during transport; excessive speed while turning on rough ground or over hills could cause tractor to tip over.
- 8. Make sure hitch components are attached securely before operating or transporting.
- 9. Use flashing warning lights when on highways, except where prohibited by law.
- 10. Disengage auger, apply parking brake, and stop tractor engine before dismounting tractor.
- 11. Keep all shields in place.
- 12. Keep hands, feet and clothing away from moving parts.
- 13. Make sure everyone is clear of machine before starting tractor or operating machine.
- 14. Observe all safety decals located on machine.

Please check with the proper authorities about state restrictions and/or regarding permits that may be necessary when transporting equipment on any highways in your state

POULTRY HOUSE WALL CLEANER BASIC FEATURES

Throughout this manual we will be discussing various features and components of the KMC Poultry House Cleaner. References to various components for adjustments, settings, performance, and lubrication are made. The following diagram will help in identifying these components.

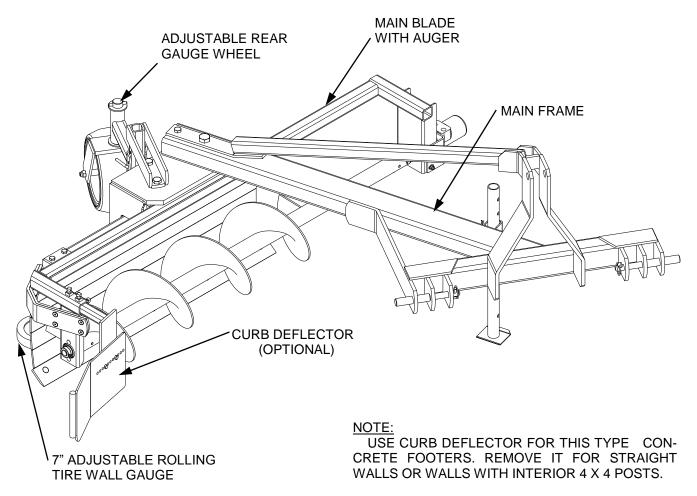
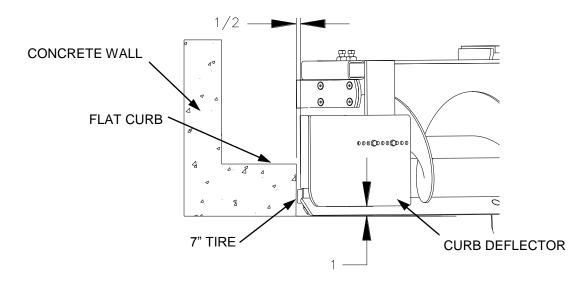


FIGURE 1



ASSEMBLY INSTRUCTIONS

The Poultry House Wall Cleaner is shipped in two pieces; the pivot frame and the blade assembly. Assembling the Wall Cleaner is accomplished by bolting the two together using a 1" x 5 1/2" long pivot bolt (and locknut) and a 5/8" x 5 1/2" **grade 2** bolt for the blade pivot lock down bolt (with lockwasher and nut). After aligning the 1" frame hole with the blade adjustment plate hole, insert the 1" pivot bolt and screw on the locknut. Tighten the locknut leaving just enough play to rotate the blade. Install the 5/8" blade shear bolt and nut, and tighten.

NOTE: ALWAYS USE A 5/8" DIAMETER, GRADE 2 BOLT FOR THE BLADE PIVOT LOCK DOWN BOLT. THIS BOLT LOCKS THE BLADE IN PLACE ALSO ACTS AS A SHEAR PIN, SHEARING IF AN IMMOVABLE OBJECT IS ENCOUNTERED.

Secure the hydraulic hoses to the frame with cable ties. Make sure the hoses are routed and secured in a manner that will keep them from getting into the auger.

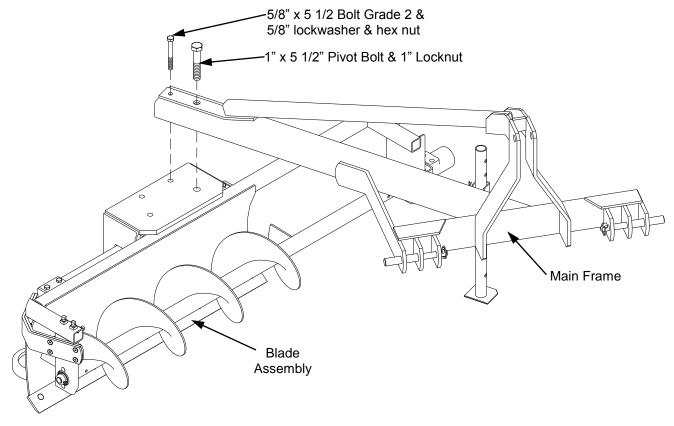


FIGURE 2

MACHINE SETUP

ATTACHING TO TRACTOR

The KMC Poultry House Wall Cleaner is designed to be operated with tractors having Category I or Category II three-point hitches. One set of tractor hydraulic remotes are also required to operate the cleaner.

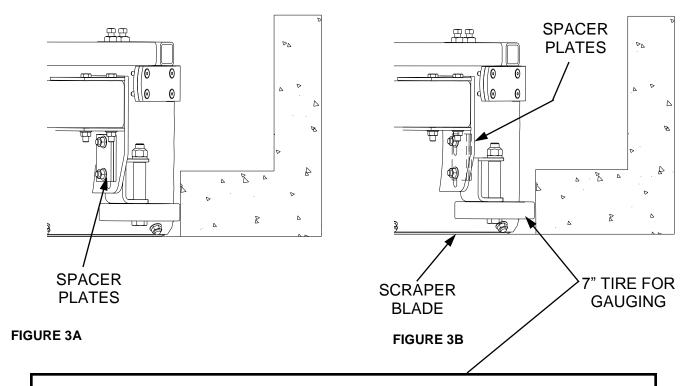
Once the tractor has been set, attach the Poultry House Wall Cleaner to the tractor's lower lift arms using the provided hitch pins. Attach the tractor top link to the cleaner using an appropriate hitch pin. Install tractor stabilizing bars to minimize lateral movement of the Wall Cleaner. After installing a set of hydraulic hose ends for your tractor onto the Wall Cleaner hoses, connect the hoses to one set of the tractor's remotes.

NOTE: Operation of the POULTRY HOUSE WALL CLEANER places substantial lateral (sideways) force on the cleaner. Make sure tractor hitch stabilizing bars are properly installed to minimize lateral movement of the wall cleaner.



<u>DANGER ROTATING AUGER:</u> ALL PERSONS SHOULD STAY CLEAR OF ROTATING AUGER. BEFORE DISMOUNTING TRACTOR TO MAKE ADJUSTMENTS, DISENGAGE AUGER DRIVE.

Wall Gauging Tire Adjustment



NOTE: 7" Tire should gauge the machine from the wall or footer before wall cleaner blade or scraper blade contacts the wall. It may be necessary to move spacer plates to the opposite side of mount to keep blade or scraper blade from being too close to the wall. The wheel can also be adjusted up or down as required for a better surface to witness the wall.

Plastic Wall Follower

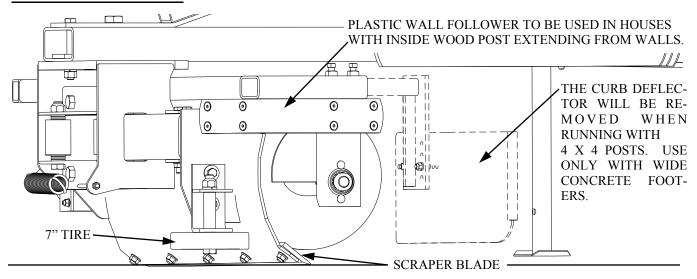


FIGURE 4

Position follower parallel to Poultry House Floor

An adjustable rolling wall monitoring tire is mounted on rear right side of the blade. A plastic wall follower is located at the top to help machine pass around inside wood post and other obstacles.

Curb Deflector

A curb deflector is only used when the houses have wide concrete footers. This allow the machine to push debris away from the footer so the auger can finish carrying it to the center of the house to be picked up. It has setscrews located on the arm that allows you adjust to the front and rear of machine. The capscrews located on the plate is for left and right and up and down adjustments.

Auger Rotation

With the tractor's 3-point hitch lowered and the Wall Cleaner's blade on the ground, adjust the tractor's top link until the Wall Cleaner's main frame tube is parallel to the ground. Raise the blade slightly and operate the auger noting its rotation. The auger should rotate so as to move material towards the hydraulic motor. If rotation is wrong, change the direction of the hydraulic remote engagement lever or reverse the hoses at the remote.

Checking Poultry House for Obstructions

While the KMC Poultry House Wall Cleaner is designed to clean out around interior posts and other obstacles, the poultry house should be checked for obstacles that may hang on the cleaner's blade. These obstacles may include exposed bolts, nails, wiring conduit, and water lines. One method of protecting items from the cleaner blade is to nail a board on both sides of the obstacle. This allows the sliding blade of the cleaner to move around the obstacle.

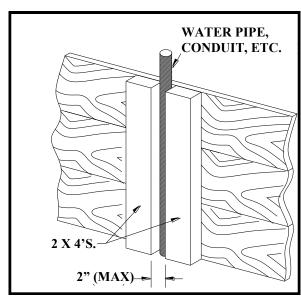


FIGURE 5

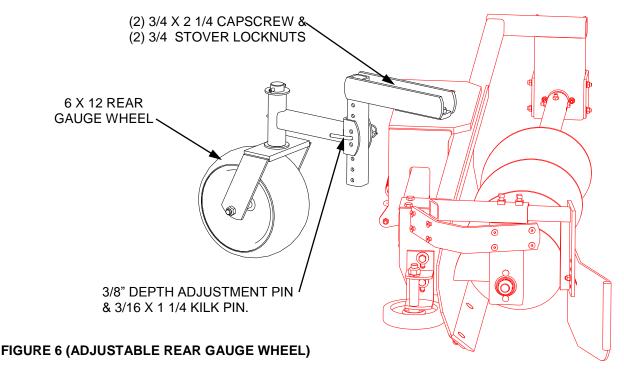
OPERATING INSTRUCTIONS

The KMC Poultry House Wall Cleaner is made up of 4 main components: a frame, a main blade, a rear gauge wheel, and an attached augering system. An optional curb deflector attaches on the right end of the cleaner for houses with flat curbs coming off the wall. Please remove this attachment if it is not required in your poultry house. This attachment prevents cake from flipping up on top of the curb as shown on page (4) Figure 1. The frame supports the other 3 components. The Poultry House Wall Cleaner runs along the wall moving around interior posts and other objects. Material is moved along the blade to be discharged by the augering system.

A tube bolted to the back side of blade moves through rollers located in a carriage assembly attached to the main frame. The roller mechanism allows the blade 12 inches of travel from wall. An extension spring provides the force to keep the sliding blade against the wall.

Although the Wall Cleaner can be used before or after the poultry house is cleaned with a house cleaner, it is suggested that it be used first if the litter is only 3" to 4" deep. If the litter is deeper, it is better to clean the walls with the wall cleaner after the house has been cleaned with the house cleaner.

Operating the Wall Cleaner requires the tractor operator to keep the tractor parallel with the wall at a distance, from the wall, that allows the sliding blade assembly to operate within its 12 inches of travel.



Blade Depth

The blade depth is set by adjusting the tractor's lift arms depth control and set the blade depth to remove the desired amount of material. On tractors that have open-center hydraulic systems, you may not be able to adjust the depth while the auger is turning. With these systems, it may take some trial and error to initially get the proper depth set. The Wall Cleaner blade frame must be ran level from left to right and front to rear in the operating position. Wrenchless depth adjustment can be make by moving rear 6 x 12 gauge wheel to desired depth.

Operating Speed

The auger rotational speed should be set to keep material sufficiently cleaned out from in front of the blade. The auger speed is adjusted by varying the tractor engine RPM or adjusting the flow control lever found on some tractors.

The Wall Cleaner should be operated at a ground speed of 3/4 miles per hour or slower. Ground speed will be dependent on the amount of material being removed and the auger speed. If the auger is overloaded causing the hydraulic motor turning the auger to stall, it may be necessary to decrease ground speed.

Slide Blade Return Force

The Poultry House Wall Cleaner spring adjustment is preset from the manufacturer. The amount of force used to return and hold the sliding blade against the wall is adjustable by varying the amount of preload on the return spring. The required amount of preload is dependent on the amount of material being removed and the hardness of the underlying floor. Ideally, the spring force should be enough to sufficiently and quickly return the slide blade to the wall after going around an obstacle. Initially, leave all the preload off the spring then adjust if necessary. To adjust the spring preload, first loosen the outside 3/8" hex nut. Then with the proper wrench increase or decrease the tension by adjusting the 3/8" hex nut on the eye bolt inside of carriage bracket. Once you have established the correct tension lock down the setting with the outside 3/8" hex nut. (Figure 7)

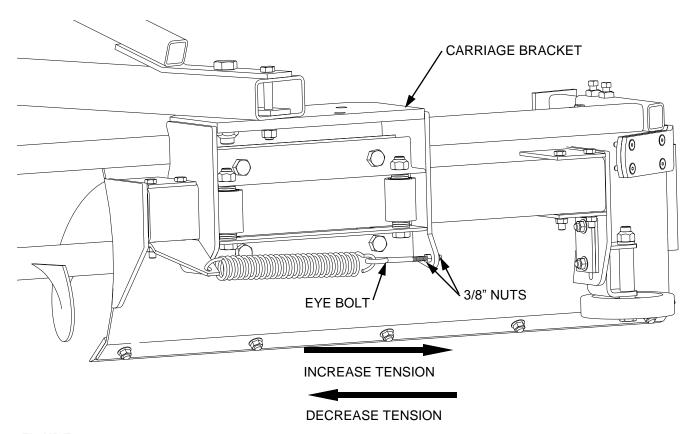


FIGURE 7

MAINTENANCE

Cleaning Machine

The environment that the Wall Cleaner is used in can be highly corrosive to steel components. Therefore, the Wall Cleaner should be washed off after each use. When washing the Wall Cleaner with a high pressure washer, do not get water stream too close to the bearings on the Wall Cleaner. Although the bearings are sealed, a stream of high pressure water placed too close to the bearings may penetrate the bearing seals allowing water to enter, and ultimately damage, the bearings. It is recommended that the Wall Cleaner be sheltered when not in use.

Too much build up of material in the tubes and on the rollers of the slide blade carriage assembly can hinder movement of the sliding blade. These areas should be clean periodically.

Blade Pivot Lock Bolt Replacement

If the blade hangs on an immovable object, the pivot lock bolt will shear allowing the blade to pivot. To replace the bolt, raise the cleaner, pivot the blade to the original position, and install a 5/8" x 5 1/2" long GRADE 2 bolt through the blade adjustment plate hole. Install a lockwasher and nut onto the bolt and tighten securely.

Scraper Blade Replacement

The scraper blade mounts onto the bottom of the main blade with 1/2" x 1 1/4" #3 Reg. plow bolts, lockwashers, and nuts. Mount the blade with the beveled edge down and to the rear, flushing the left end of the blade with the discharge end of the main blade.

Wall Follower Slide Replacement

The Wall Follower Slide is a strip of polyethylene bolted to the wall following arm on the side blade. The polyethylene strip provides a low friction surface to slide along obstacles in the poultry house. Eventually the strip will wear out and will have to be replaced. To replace the strip, remove the 8 nuts and allen head screws. When reinstalling the strip, make sure the screw heads are counter-sunk into the polyethylene to prevent them from hanging on objects in the poultry house.

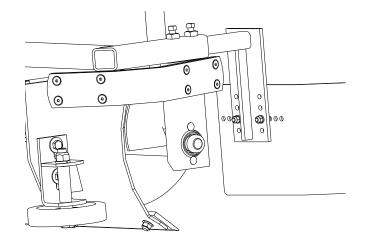


FIGURE 8

LUBRICATION

All bearing used on the Wall Cleaner are sealed and require <u>no lubrication</u>. <u>Do not lubricate</u> (grease or oil) the tube on the sliding blade. Lubricating this tube will attract material and cause build up on the tube resulting in improper operation of the slide blade.

TRANSPORTATION

When transporting the wall cleaner, be aware that on the right side of the tractor, the Wall Cleaner blade extends beyond the tractor tires. Care should be taken not to hang the blade on any objects.

STORAGE

The Poultry House Wall Cleaner should be washed thoroughly. After washing, treating with a disinfectant is recommended to kill any remaining bacteria. Treat the metal components of the machine with a soluble oil to protect from rust and corrosion. One product which meets these requirements is called "Film Fluid" manufactured by Eureka Chemical Co., San Francisco, CA. It is sold in some tractor dealerships and farm supply dealers.

SPECIFICATIONS

Machine Width: 77 inches

Machine Length: 63.3 inches

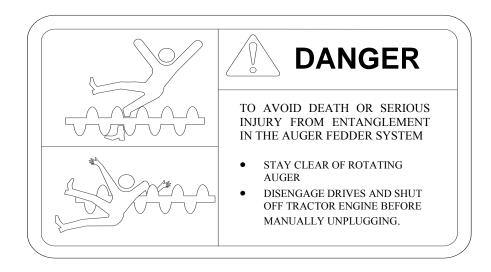
Weight: 723 lbs.

Blade Width: 48 x 3 x 3/8 inches

Slide Blade: Spring loaded return; 12 in. of travel

Hydraulic Motor Rotation Speed: 190 RPM @ 8 GPM; 350 RPM @ 15 GPM

Auger: 12 in. diameter, 0.12 in. thick at O.D.



The following is a list of serial numbers issued to our machines at the beginning of each year. To determine when a unit was made, find the range within which the particular serial number falls. It would have been produced between January 1 to December 31 of that year.

YEAR	SERIAL NUMBERS
1985	27986-29695
1986	29696-31095
1987	31096-33234
1988	33235-35548
1989	35549-38496
1990	38497-41771
1991	41772-44466
1992	44467-47001
1993	47002-48750
1994	48751-51549
1995	51551-54262
1996	54263-56661
1997	56662-59465
1998	59466-62097
1999	62098-63986
2000	63987-65692
2001	65693-67340
2002	67341-68699
2003	68700-70482
2004	70483-72646
2005	72647-74866
2006	74867-76368
2007	76369-77883
2008	77884-79891
2009	79892-80944
2010	80945-81775
2011	81776-83453
2012	83454-85092
2013	85093-



DEPENDABLE EQUIPMENT FOR PROGRESSIVE FARMING

Visit us at www.kelleymfg.com



80 Vernon Drive / Zip 31794 P.O. Drawer 1467 / Zip 31793 Tifton, GA

Tel: 229-382-9393 Toll Free: 1-800-444-5449 Fax: 229-382-5259 Email Address: info@kelleymfg.com