

42-SERIES





# 4265LPD & 4260D POULTRY HOUSE CLEANER



**OPERATOR'S MANUAL** 

THIS MANUAL TO ACCOMPANY MACHINE

## 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 PUR-POSE 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

## 4265LPD & 4260D PHC OWNERS MANUAL

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## **INTRODUCTION:**

The **4265 and 4260D Poultry House Cleaner** - is designed to be operated from the stationary drawbar of the tractor. It can be operated from a lower lift arm drawbar if a stationary bar is not available. The unit comes equipped with a hydraulic cylinder to raise and lower the cutter blade (this will require a set of remote hydraulic couplers on the tractor). When attaching to the stationary drawbar of the tractor, you should set the distance from the end of the tractor PTO to the center of the hitch pin hole at 14 inches. If your tractor has an option of a 540 or 1000 RPM PTO you should install the 540 shaft.

## **TO THE PURCHASER**

This **4265LPD and 4260D Poultry House Cleaner** - has been carefully designed and manufactured to give years of dependable service. In order to operate it efficiently and maintain it properly, please read the instructions within this manual thoroughly.

Some components of this machine are labeled left or right. The notations are determined by standing behind the implement and facing the direction of forward travel.

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 Model Number, Serial Number, and Purchase Date as shown below:

POLLAT HOUSE -426 CLEANER -426	S LPD - KMC-			
	Model No Serial No			T
	Purchase Da	te		

## PRE-OPERATIONAL CHECKLIST:

- □ All safety and operating procedures reviewed
- □ All hardware checked for tightness
- Hitch connection to implement information reviewed
- □ Field adjustment procedures reviewed
- Lubrication information reviewed
- Machine fully lubricated
- Warranty information reviewed



## SYMBOL INFORMATION



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

REMEMBER







(RED)

This symbol indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



(ORANGE)

This symbol indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. It may also be used to alert against unsafe practices.



(YELLOW)

(GREEN OR BLACK)

This symbol indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



Is used for instruction on operating, adjusting, or servicing a machine.

#### BEING SAFETY CONSCIOUS IS GOOD BUSINESS!

## SAFETY DECALS

The Safety decals that follow are associated with the implement covered in this owner's manual. They should be reviewed and associated with where they are applicable on the implement being covered.



33-050-248



## 02-050-078



42-050-069

## **RETAIL CUSTOMERS RESPONSIBILITY UNDER THE KMC WARRANTY:**

## The retail customer's responsibilities are:

- 1. To read the Operator's Manual and operate the **4265LPD and 4260D PHC** in accordance with the instructions given in this manual.
- 2. To inspect the 4265LPD and 4260D PHC daily, lubricate as specified and repair or replace parts as needed, especially when continued use would cause damage or excessive wear to other parts.
- 3. To maintain and keep in place all safety shields, decals and devices.
- 4. When warranty service is necessary, it is the customer's responsibility to deliver the machine to the KMC dealer from which it 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 the 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. All persons operating this piece of equipment should **<u>READ</u>** the Owner's Manual.



- 2. Do not permit anyone to ride on the machine at any time.
- 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. (The equipment must be properly maintained and guarded and must be suitable to performing its task.)



4. Keep all persons a safe distance away from all sides of the machine while it is in operation.

5. Do not allow children to operate the 4265LPD and 4260D PHC. Only experienced tractor operators should operate the tractor when the PHC is in use.



6. Stay clear of hydraulic lines, as they maybe under extreme pressure or heat.

- 7. Drive safely during transport; excessive speed while turning or on rough ground could cause damage to the 4265LPD and 4260D PHC and/or cause the tractor to tip over. (Maximum speed of implement should never exceed 20 mph on highway and 10 mph off-highway.)
- 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 PTO, apply parking brake, and stop tractor engine before dismounting tractor. Allow mechanisms to stop completely before cleaning, working, or adjusting on machine. Even when the tractor is stationary, you should make sure it is properly secured and made safe by following the **Safe Stop procedure**:
  - 1. Handbrake/Footbrake on
  - 2. Controls in neutral/park
  - 3. Engine off
  - 4. Key out



11. Keep hands, feet and clothing away from moving parts.

12. Make sure everyone is clear of machine before starting tractor or operating machine.

13. Observe all safety decals located on machine. Replace them if they become damaged.



## HIGH VOLTAGE SAFETY ACT

Georgia Law requires that anyone operating equipment within 10 feet of an overhead high voltage line of more than 750 volts, must contact the Utilities Protection Center (UPC) by telephone at least 72 hours before commencing the work. For more information call (811), toll free (1-800-282-7411) or visit on the web "www.gaupc.com". **Please** contact your local power company about laws before operating near high voltage lines.

## **ASSEMBLY SET-UP**

## **GENERAL:**

Throughout this manual we will be discussing various features and components of the KMC Poultry House Cleaner Dump Style. References to various components for adjustments, settings, performance, and lubrication are made. The following chart will help you **IDENTIFY** those areas of discussion for better understanding and discussion with your dealer and representative as the need arises.

## POULTRY HOUSE CLEANER DUMP BASIC FEATURES





CARE SHOULD BE TAKEN DURING SET-UP AND ASSEMBLY OF THIS PRODUCT. <u>DEATH OR SERIOUS INJURY</u> COULD OCCUR IF PROPER STEPS ARE NOT TAKEN TO FULLY SECURE THE UNIT WHEN WORKING UNDERNEATH IT. FOR YOUR SAFETY, ENSURE THE UNIT IS PROPERLY SUPPORTED BY LOWERING THE JACKSTAND SUPPORTS THAT HAVE COME ASSEMBLED WITH IT, OR PROPERLY SECURE THE UNIT WITH ANY HOISTING DEVICES BEFORE ATTEMPTING ANY FURTHER SET-UP OF THIS PRODUCT. ANY HOISTING DEVICES SHOULD BE RATED TO FULLY SUPPORT THE LOAD OF THE UNIT BEING LIFTED.



## ! IMPORTANT !

Before set-up and assembly can be completed ensure that all hardware is in place and fully tightened. Refer to the **Bolt Torque Chart** below for proper torque values.

DIAMETER & THREADS PER INCH	TENSILE STRENGTH MIN. PSI	PROOF LOAD LB	CLAMP LOAD LB	TORQUE DRY FT LB	LUBRICATED FT LB	
1/4-20	120,000	2,700	2,020	8	6.3	
1/4-28	120,000	3,100	2,320	10	7.2	
5/16-18	120,000	4,450	3,340	17	13	
5/16-24	120,000	4,900	3,700	19	14	
3/8-16	120,000	6,600	4,950	30	23	
3/8-24	120,000	7,450	5,600	35	25	
7/16-14	120,000	9,050	6,780	50	35	
7/16 20	120,000	10,100	7,570	55	40	
1/2-13	120,000	12,100	9,050	75	55	
1/2-20	120,000	13,600	10,200	85	65	
9/16-12	120,000	15,500	11,600	110	80	
9/16-18	120,000	17,300	12,950	120	90	
5/8-11	120,000	19,200	14,400	150	110	
5/8-18	120,000	21,800	16,350	170	130	
3/4-10	120,000	28,400	21,300	260	200	
3/4-16	120,000	31,700	23,780	300	220	
7/8-9	120,000	39,300	29,450	430	320	
7/814	120,000	43,300	32,450	470	350	
1-8	120,000	51,500	38,600	640	480	
1-14	120,000	57,700	43,300	720	540	

<u>SAE GRADE 8</u>	

Diameter & Threads Per Inch	TENSILE STRENGTH MIN. PSI	PROOF LOAD LB	CLAMP LOAD LB	TORQUE DRY FT LB	LUBRICATED FT LB
1/4-20	150,000	3,800	2,850	12	9
1/4-28	150,000	4,350	3,250	14	10
5/16-18	150,000	6,300	4,700	24	18
5/16-24	150,000	6,950	5,200	27	20
3/8-16	150,000	9,300	6,980	45	35
3/8-24	150,000	10,500	7,900	50	35
7/16-14	150,000	12,800	9,550	70	50
7/16 20	150,000	14,200	10,650	80	60
1/2-13	150,000	17,000	12,750	110	80
1/2-20	150,000	19,200	14,400	120	90
9/16-12	150,000	21,800	16,350	150	110
9/16-18	150,000	24,400	18,250	170	130
5/8-11	150,000	27,100	20,350	210	160
5/8-18	150,000	30,700	23,000	240	180
3/4-10	150,000	40,100	30,100	380	280
3/4-16	150,000	44,800	33,500	420	310
7/8-9	150,000	55,400	41,600	600	450
7/8 14	150,000	61,100	45,800	670	500
1-8	150,000	72,700	54,500	910	680
1-14	150,000	81,500	61,100	1,020	760

## **SPECIFICATIONS:**

## **SPECIFICATIONS**

	4260D	4265LPD
WEIGHT	With Tandem Axle Wheels: 5,570lbs; With Single Axle Wheels: 5,345lbs	
WIDTH	82"	
HEIGHT (WORKING)	76"	69/66"
LENGTH	270"	
PICKUP WIDTH	72"	
TANK CAPACITY	170 Cubic Feet	
TIRE SIZE	Tandem Axle: 9.5L X 15SL (12PLY), Single Axle: 12.5L X 16SL (12PLY)	Tandem Axle: 26X12X12 (12PLY), Single Axle: 12.5L X16SL (12PLY)
CONVEYORS	667X Pintle Chain On Sifter & Leveler	
TONGUE	Swivel Clevis, Manual Side Adjustment	
DEPTH CONTROL	Raised, Lowered (from tractor) With Hydraulic Cylinder	
HYDAULIC PUMP	Mounts To Tractor PTO Shaft, 540 RPM	
BLADE	Beveled, High Strength Steel	
RECOMMENDED HP	55-65 HP	

#### **OPTION:**

WALKING TANDEM AXLE WHEELS (SINGLE AXLE STANDARD)

SIFT ONLY VERSION AVAILABLE BY ORDERING LESS TOTAL CLEANOUT PANELS

BALL-TYPE HITCH

## **ATTACHING TO THE IMPLEMENT:**

The KMC Poultry House Cleaner Dump Style is designed to be operated from the stationary drawbar of the tractor. It can be operated from a lower lift arm drawbar if a stationary bar is not available. The unit comes equipped with a hydraulic cylinder to raise and lower the cutter blade (this will require a set of remote hydraulic couplers on the tractor). When attaching to the stationary drawbar of the tractor, you should set the distance from the end of the tractor PTO to the center of the hitch pin hole at 14 inches. If your tractor has an option of a 540 or 1000 RPM PTO you should install the 540 shaft.



Once the tractor has been set, attach the Poultry House Cleaner to the tractor drawbar using a 1  $1/2 \times 5 1/2$  inch grade 5 bolt. Tighten the bolt securely. Next, attach the hydraulic pump to the tractor PTO. Secure its position by wrapping the chain on the torque bar around some portion of the tractor hitch which is secure and will not allow the pump to slide off the PTO or spin once the PTO is engaged. Next, connect the tongue cylinder hose into the tractor tor remotes.

### Installation of the new torque arm requires the following:

2, grade5, <sup>1</sup>/<sub>2</sub>"-13 UNC bolts, 2" long. (the 1-1/2" long bolts that come stock with the pump and speed increaser are not long enough once the torque arm is installed.)

2, <sup>1</sup>/<sub>2</sub>" flat washers

2,  $\frac{1}{2}$ " lock washers

2 drops of Teflon based thread sealant (**DO NOT USE THREAD TAPE!**)

Start by turning off the oil supply from the reservoir. Also, since there is no way to stop the oil from coming out of the gearbox case drain line, remove the case drain hose and position the end of the hose so that it is at a higher elevation than the fluid level in the tank.

Next, use a <sup>3</sup>/<sub>4</sub>" wrench to remove the two bolts that hold the gear pump to the speed increaser, But use care not to separate the pump from the speed increaser as there is a large o-ring between the two that could be damaged if not properly reinstalled.

With the pump and speed increaser still together, hold the speed increaser and the plate between the pump and speed increaser while rotating the pump 180°. The holes should line back up and the longer side of the pump should be aligned with the case drain hole on the speed increaser.





Align the torque arm so that the offset on the torque arm and the big hose is on the right hand side of the pump when looking at the rear of the pump. Insert, hand start the two, 2" bolts and tighten with a <sup>3</sup>/<sub>4</sub>" wrench. Index the 90° hydraulic adapter so that when the hose is installed, it will just pass by the pump on the left hand side (This is so the hose cannot become loose over time.)

Re-install the case drain hose to the speed increaser.

Install the lock washer, then the flat washer onto the bolt, and then place a small amount of the Teflon based thread sealant on the 2" long bolts as shown.





Apply grease to the internal splines of the speed increaser (NLGI no.2, Lithium thickener based with molybdenum additive.)

Slide the speed increaser onto the PTO shaft and let torque arm rotate to the right side of the drawbar.

Attach the chain to the tractor so that it will not allow the pump to slide backwards more than  $\frac{3}{4}$ ". (If the pump is able to slide off the pto shaft too much, damage to the pto shaft and internal splines of the speed increaser can occur.)



Grease Spline Shaft on PTO on Tractor Before Hooking up to Tractor





#### <u>Tongue</u>

The tongue of the unit is designed to pivot from a straight pull in the center of the machine to an offset pull to the left of the machine. This is to facilitate shifting the unit to the right of the tractor wheels for cleaning close to the walls inside the poultry house. Before starting to clean out a house, you should decide whether you want to start next to the walls or in the middle of the house and set the tongue accordingly.

## CAUTION

Always install the safety latch on the tongue cylinder when transporting or working underneath or around the pickup.

To pivot the tongue, remove the klik pin on the bottom side of the stop pin and remove the stop pin. Pivot the tongue by setting the front of the machine of the ground to take the weight off the tongue and backing the tractor in the appropriate direction until the other pin hole is aligned, then re-insert the stop pin and klik pin.



## Control Valves



NOTE: Grease fitting located in YOKE of tongue.

The operations control valve should be set such that it is easily accessible to the tractor operator yet not so close that it will contact the tractor during turns and other maneuvers. To set the valve vertically, loosen the setscrew at the base of the vertical support tube, then pull the locator pin and adjust up or down as necessary and re-secure with pin and setscrew. To set the horizontal distance from the operator, loosen the setscrews at the end of the horizontal support tube and slide the control valve in or out to the desired position and re-tighten setscrews.



## **SETTING THE MACHINE FOR TOTAL CLEANOUT:**



#### **Total Cleanout Panels**

To set the machine for total cleanout, the two cover panels must be added to the top face of the load conveyor. This is done by sliding the panels one at the time down from the top of the conveyor. It may require loosening the chains to get the panels underneath the bars. Attach the left and right hold down plate to help hold panels flat using the  $3/8 \times 1$  socket head counter-sunk screws provided. Holes are located at the top of the panels.

NOTE: Adding some anti-seize compound or other lubricant to the threads of the screw will help insure their removal at a later date.

#### **Conveyor Trough**

Install the conveyor trough. This item comes mounted on the machine from the factory. If it has not been removed, this procedure can be omitted. This trough catches any material that might fall to the floor as the conveyor bars are rotating around the bottom end of the conveyor. It installs in the first set of holes from the front on the lower frame channel. Two  $1/2 \times 1 \ 1/2$  capscrews are used on each side to secure it to the frame.



CONVEYOR TROUGH

## **SETTING THE MACHINE FOR SIFTING:**

#### **Dry Litter Operation**

Move wet litter hold down blocks to storage position and place bump pads as shown in diagram.

#### Wet Litter Operation

Move the wet litter hold down blocks into the working position and remove all bump pads when operating in wet litter. Place bump pads in storage canister.

STORAGE CANISTER





## **Other Settings**

The hydraulic valve which controls the speed of the load conveyor and the leveler is located on the top panel of the pickup as shown. It should be set on No. 4 for most conditions. It can be moved higher if the leveler is not taking the material to the rear of the tank fast enough and is overloading.

**NOTE:** Small adjustments make a large amount of difference. Also, when speed of the leveler is increased the speed of the load conveyor decreases.



## **OPERATIONAL SETUP**

## **TRACTOR PREPARATION:**

Before operating implement refer to tractor operator's manual for information concerning safe methods of operation, hydraulics, hitch adjustment, tire inflation, wheel adjustments and tractor weights.

Check tractor brakes and warning lights, make sure they are in proper working order.

Check tractor hydraulics oil reservoir and add oil if needed.

## 

TRANSPORTING THE IMPLEMENT WILL ADD SIGNIFICANT WEIGHT TO YOUR TRACTOR. MAKE SURE THE TRACTOR IS PROPERLY BALLASTED.

## Front-End Weights:

Use front-end weights as needed to provide effective steering control and front-end stability. See your tractors Operator's Manual for recommendations on ballasting procedures.



DO NOT EXCEED THE TRACTOR'S LIFT CAPACITY OR BALLAST RECOMMENDATIONS.

## Horse Power Requirements:

The minimum power requirement for the 4-Row is 130 HP & 6-Row is 165 HP, depending on soil type and tank size. (Combines are harder to pull in sandy conditions.) Select a tractor with sufficient power to operate these machines.

## Wheel Spacing

Set tractor wheels so they are equally spaced from center of tractor and centered between the rows.

See your Tractor Operator's Manual for correct tire inflation pressure.

## **Drawbar Position**

Place the drawbar in the center position to keep combine in the center of the rows.

## HITCHING TO THE IMPLEMENT:

#### Setting Tractor to the Proper Speed

The Poultry House Cleaner (PHC) is designed to be operated with the tractor PTO turning within a range of 500 to 540 rpm with 540 rpm being most desirable since this will produce the maximum flow and pressures from the pump. To put the machine into operation, first engage the PTO of the tractor and then pull the handle of the control valve forward as shown. This should start the reel. convevor and leveler into motion. Next bring the PTO of the tractor up to speed. The ground speed will depend on the particular operation being performed and the amount of material being removed from the floor of the house. Generally, first gear or 1 to 1 1/2 miles per hour is used for total cleanout and removing heavy cake during sifting. Higher gears can be used when sifting



where the litter does not exceed three to four inches and the cake is light.

The PHC operates best at depths of three to four inches. If litter is deeper than four inches it is recommended that two passes be made through the house to retrieve or sift the total depth of litter.

#### Setting Machine Drive Components

Speeds of the drive components is very important to the performance of the PHC. Bv running faster, smaller amounts of material are carried up the conveyor by the bars and sifts out quicker. Also the high speeds produce a tumbling effect with the larger pieces of cake which shakes dry material off of them for a better sifting job. The following shaft speeds are recommended by best performance under most conditions:



### Setting Machine to the Proper Depth

Setting and maintaining the blade depth is also an important part of good performance. To set the depth, slowly retract the hydraulic cylinder until desired depth is reached. It may take some time to become accustomed to how deep the blade is running by viewing the blade and cruster reel guard. In houses where uniform amounts of material will be taken off everywhere, cylinder stops can be added to the rod end of the cylinder. This will provide consistent blade depth each time the front is picked up and let down.

#### **Operating the Dump Tank**

The tank loads from front to rear and although it is sometimes difficult to see the rear of the tank because of the dust, you can tell the tank is full when the leveler bars begin to kick litter up into the air. When this occurs, push the control valve handle to the center position to stop the conveyors.

Before dumping make sure the control for the sifter, leveler, and feeder reel is in the neutral position. The tank can be unloaded by dumping. First carry the content to the compost or dump site and push the control valve lever to the rear. This is to energize the tank cylinder that raise the tank, which in turn opens the rear door. It is important that all the litter is unloaded or the rear door will not close properly. The machine is now ready for re-loading.



#### NOTE: PULL OFF PILE BEFORE LETTING TANK DOWN.

It is recommended that you start from walls and work toward the center of the house to minimize the number of trips through the house. Since the blade width is wider that the tire track, maintaining a minimal overlap you can leave the floor of the house smooth and ridge free. This will eliminate need for additional trips through the house with other leveling equipment.

## MAINTENANCE

## **ADJUSTMENT POINTS**

#### **Cruster Reel Drive Chain**

The only adjustments that should ever have to be made to the Poultry House Cleaner is that of conveyor or drive chains. There are two different conveyor chains and two drive chains. From the front, the first chain is the cruster reel drive chain, as is wears and stretches from use, the idler sprocket should be adjusted to take up any slack. tension on the chain Proper should allow for approximately one inch of movement in the side of the chain.



### Conveyor Chain



The load conveyor chain will also need tensioning as it wears. To tension this chain, loosen the bolts through the base of the upper shaft bearing, then back off on the jam nut on the adjusting screw. Next tighten the adjusting screw to increase the tension in the chain. Proper tension of this chain should allow you to lift the chain off the conveyor floor between 1 1/2 to 2 inches. This adjustment will need to be made on both sides of the conveyor. Secure jam nuts after adjustment is complete.

## Leveler Chain



The leveler chain adjusts from the back of the chain. The left side adjustment is more involved than the right side because of the hydraulic motor. On the left side, start by loosening the bolts in the hydraulic motor mount and the bearing mount. Then screw the setscrew which pushes against the bearing mount until the chain is properly tensioned. On the right side, the bearing mount bolts is all that is required to be loosen before the adjustment can be made. After tensioning both sides equally tighten all bolts. Proper tension for the leveler chain is 1-1/2 to 2 inches of movement above the slide on the top chain.

## **Rear Door Settings**



## **Check Seals**

A seal is provided between the rear of the sifter and the front of the tank to keep litter from piling up on front of machine.



#### **Relief Pressure Adjusment**

#### PLEASE NOTE:

TO OBTAIN AN ACCURATE PRESSURE READING, A 3000 PSI (OR GREATER) HYDRAULIC PRESSURE GAUGE MUST BE USED. THE CORRECT RELIEF PRES-SURE IS 2700 PSI. THE RELIEF PRESSURE SHOULD BE SET WITH THE MACHINE COOL. DO NOT LET THE HYDRAULIC PUMP RUN FOR MORE THAN 5 MINUTES WHEN SETTING THE RELIEF VALVE PRESSURE. IF YOU ARE UNABLE TO SET THE PRESSURE WITHIN 5 MINUTES, LET THE FLUID COOL BEFORE RUNNING THE PUMP AGAIN.

Remove the relief valve acorn nut and loosen the jam nut a couple of turns. With the tractor at idle, engage the pump and shift the control valve lever so that flow is to port A (pull the lever toward you).

After bringing the tractor engine speed up to the PTO operating speed of 540 RPM, observe the pressure gauge reading. Use a 3/16" allen wrench to turn the adjusting screw (clockwise to increase and counter-clockwise to decrease) the correct pressure. Re-tighten the jam nut and re-check the pressure to ensure accuracy, then replace the acorn nut.



## Seal Replacement for Dual Spool Control Valve



- 1. All hydraulic valves must be properly installed into the hydraulic system to prevent personal injury and/or property damage. Further the improper servicing of a valve may result in personal injury and/or property damage. Please read and understand all catalog and service information before starting. As with all mechanical work the proper tools, knowledge, and safety equipment are required. Always wear safety glasses
- 2. Make sure all pressure has been relieved in the hydraulic lines before installing or servicing a hydraulic valve.

## WARNING

Escaping hydraulic fluid under pressure can have sufficient force to penetrate skin, causing serious personal injury. Do not use your hand to check for hydraulic leaks.

3. Before installing or servicing a hydraulic component make sure all weight has been removed from the cylinders or motors before disconnecting hydraulic lines.

## WARNING

Disconnecting the hydraulic lines while the Cylinder or Motor is under pressure may result in the unexpected rapid movement of machine resulting in serious personal injury.

4. Do not exceed the operating specifications for pressure, flow or temperature. All hydraulic systems require a means to limit the maximum pressure. This requires either a pressure relief valve in the system or a pump that has pressure compensation.



WARNING

Overpressure may cause sudden and unexpected failure of a component in the hydraulic system resulting in serious personal injury. Always use a gauge when adjusting a relief valve.

## **LUBRICATION POINTS**

There are certain things which need daily or regular attention to keep your Poultry House Cleaner in good operating condition.

#### Hydraulic Reservoir



The hydraulic fluid level is of most importance. Low levels can cause overheating and damage to hydraulic components. The hydraulic system holds approximately 24 gallons of fluid. With the machine on level ground, the oil level in the tank with fluid cold should come to within three inches from the top of the tank. If it is necessary to add fluid, use a petroleum-based, anti-wear hydraulic oil with ISO 46 viscosity grade or substitute with an operating grade of 70-250 SUS. Oil temperature should not exceed 180 degrees Fahrenheit.

## WARNING

IF YOU SUSPECT AN OIL LEAK, DO NOT ATTEMPT TO LOCATE IT WITH YOUR HANDS OR FINGERS. OIL UNDER PRESSURE PENETRATES SKIN VERY EAS-ILY AND CAN CAUSE SERIOUS INJURY OR DEATH. USE WOOD, PLASTIC, OR RUBBER TO RUB ALONG HOSES AND FITTINGS TO LOCATE THE SOURCE OF THE LEAK.

SOURCE OF THE LEAK.

The return filter pressure gauge measures the pressure increase in the return line. This increase is an indication that contaminates are collecting in the filter element as designed. Normal pressure readings should be as low as 0 - 5 PSI. When the gauge reading exceeds 20 PSI, (with fluid warm) the filter element should be replaced.



### **Lubrication Chart**

The following chart shows locations of bearings which need regular lubrication. We recommend that all bearings be greased on a weekly basis (every 50 hours of use). If the use of the machine is going to be less than a week, we recommend that it be greased just prior to storage.



**GREASE ALL POINTS EVERY 50 HOURS AND BEFORE STORAGE** 

## Spline Shaft



## **TRANSPORTATION**

#### Transport Lock Position

If it becomes necessary to tow the PHC behind a truck for extended distances, the following adjustments are recommended: Store the hydraulic pump on the support pin on the tongue and secure it with the torque bar chain as shown. Next, turn the control valve ninety degrees from the direction of travel and pin the position as shown.

Put the transport lock in position on the tongue cylinder ram. Tie up all hoses to prevent them from dragging or getting pulled off.

Maximum tow speed for the machine is 25 mph.

Tongue weight for towing is 1,500 lbs.





## Safety Chain

Safety chains are available when transporting the machine from one field to the next.



## Tank Lock Storage

Transport Locks are available to lock cylinders when lifting the tank for maintenance or cleaning out tank.



## **TIRE INFLATION CHART**

It is important that the inflation of all tires be set properly for maximum safety and performance. Use the following guide to adjust the inflation pressure in the tires to match the application of the machine.

TIRE SIZE	COLD INFLATION PRESSURE
12.5L X 16SL (12-PLY) (Single Axle Machines)	<b>52 PSI</b> (Cold)
9.5L X 15SL (12 PLY) (Tandem Axle Machines)	<b>44 PSI</b> (Cold)
26 X 12 X 12 (12 PLY)	<b>62 PSI</b> (Cold)

#### COLD INFLATION PRESSURE VALUES IN PSI

## **STORAGE**

After each use the Poultry House Cleaner should be washed down thoroughly, removing all litter inside and outside. After washing, treating with a disinfectant is recommended to kill any remaining bacteria. The next step is treating the machine with a soluble oil to protect it 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 other farm supple dealers.

## <u>NOTES</u>

The following is a list of serial numbers issued to our implements at the beginning of each year. To determine when a unit was made, find the range in which the particular serial number falls. The implement would have been produced between January 1<sup>st</sup> to December 31<sup>st</sup> 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	85093-86418
2014	86419-87790
2015	87791-89096
2016	89097-89924
2017	89925-91270
2018	91271-92260
2019	92261-





## **KELLEY MANUFACTURING CO.**

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