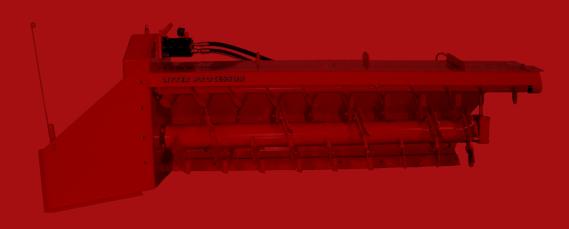


LVI LITTER PROCESSOR SL84 #LTMAN013





Index

Introduction	Pg. 2
Safety Decals	Pg. 3
Safety Message	Pg. 4
Operating Safety	Pg. 5
Maintenance Safety	Pg. 5
Hydraulic Safety	Pg. 6
Storage Safety	Pg. 6
Pre-operation Checklist	Pg. 6
Equipment Matching	Pg. 7
Operation	Pg. 7
Lubrication	Pg. 8-9
Maintenance Schedule	Pg. 9
Parts Index	Pg. 1
Warranty Forms	Pgs. 34-36

Thank you for the Purchase & Support of your LVI Litter Processor.



INTRODUCTION

Congratulations on your choice of a LVI LITTER PROCESSOR to complement your operation. This equipment has been designed and manufactured to meet the needs of the discriminating buyer for efficient processing of poultry litter. Safe, efficient and trouble free operation of your processor requires that you and anyone else who will be operating or maintaining the machine, read and understand the safety, operation, maintenance, and trouble-shooting information contained within the Operator's Manual.

This manual covers models SL84 and SLF84 manufactured by Binkley & Hurst, LP.

Keep this manual readily available for reference and be sure to pass it on to new operators or owners. Contact Binkley & Hurst, LP if you need assistance or information for a complete listing of parts and accessories.

OPERATOR ORIENTATION - The directions left, right, front and rear as mentioned throughout the manual are as seen from the skid Loader driver's seat, facing forward.

CUSTOMER REFERENCE INFORMATION

LVI Model Nui	mber:			
LVI Serial Nun	nber:			
Date Purchase	ed:			
Dealer Name:				
Dealer Tel #: _				
D: 11 A 11		—	000 111 == 10	_

Binkley & Hurst, LP Toll-free: 888-414-7518 Fax: 717-866-2005

Website Information

Binkley & Hurst Home Page: http://www.binkleyhurst.com/

LVI Litter Processor Website: http://www.lvimfg.com

LVI Dealer List: http://www.lvimfg.com/dealerlist/



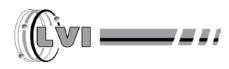
SAFETY DECALS

The safety decals are placed on the litter processor at the time of manufacture. It is important that all the decals are kept clean and legible at all times. If any decals have become eligible or have been removed, replacements are available from Binkley & Hurst, LP.

TEL: 888-414-7518 FAX: 717-866-2005



These Safety Decals Are on your Litter Processor



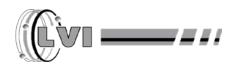
DANGER

You are responsible for the SAFE operation and maintenance of your LVI LITTER PROCESSOR. You must ensure that you, and anyone else who will be operating, maintaining, servicing or working around the processor be familiar with the operating and maintenance procedures and related safety information contained in this manual. This manual will take you step-by-step through the operation procedures and alerts you to all good safety practices that should be adhered to while operating the litter processor.

Remember, YOU are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Be certain that EVERYONE operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Litter Processor owners must give operating instructions to their employees before allowing them to operate the machine and ensure that all operators have read and understood the safety and operating procedures.
- The most important safety device on the equipment is a SAFE operator. It is the operator's responsibility to read and understand ALL safety and operating instructions in the manual and follow them.
- A person who has not read and understood all operating and safety instructions is not qualified to operate this machine. An untrained operator exposes himself and bystanders to possible or serious injury or death.
- Do not modify the equipment in any way. Unauthorized modifications may impair the function and/or safety and could affect the life and warranty of the equipment.
- Think SAFETY! Work SAFELY!

Do not allow riders on machinery. Place all controls in neutral, stop the engine, set park brake, remove ignition key and wait for all moving parts to come to a complete stop before servicing, repairing or unplugging machinery.

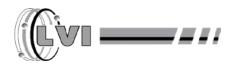


OPERATING SAFETY

- 1. Read and understand the Operator's Manual and all safety decals before using the equipment.
- 2. Clean reflectors, slow moving vehicle signs and lights before transporting.
- 3. Before applying pressure to the hydraulic system, make sure all components are tight and that all lines, hoses and couplings are in good condition.
- 4. Place all controls in neutral, stop the engine, set park brake, remove ignition key and wait for all moving parts to come to a complete stop before servicing or repairing.
- 5. Install and secure guards before starting.
- 6. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- 7. Do not operate when guards are missing or broken.
- 8. Clear the area of all bystanders, especially children, before starting.
- 9. Do not allow children to play on or around the machine.
- Do not allow riders on the LITTER PROCESSOR or tractor. Be sure the PTO driveline guard telescopes and rotates freely on the shaft before installation.
- 11. Use hazard flashers on tractor when transporting on roads, and follow all local laws.
- 12. Do not operate with leaks in the hydraulic system or lubrication system.
- 13. Review safety instructions annually.

MAINTENANCE SAFETY

- 1. Follow ALL the operating, maintenance, and safety information in this manual.
- 2. Place all controls in neutral, stop the engine, set park brake, remove ignition key and wait for all moving parts to come to a complete stop before servicing, adjusting, repairing or unplugging.
- 3. Relieve pressure from hydraulic circuit before servicing or disconnecting from tractor.
- 4. Support the machine with blocks or safety stands when working under it.
- 5. Follow good shop practices:
 - Keep service area clean and dry.
 - Be sure electrical outlets and tools are properly grounded.
 - Use adequate lighting for the job at hand
- 6. Use only tools, jacks and hoists of sufficient capacity for the job.
- 7. Make sure all guards and shields are in place and properly secured when maintenance work is completed.
- 8. Before applying pressure to the hydraulic system, make sure all lines, fittings and couplers are tight and in good condition.
- 9. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- 10. Clear the area of all bystanders, especially children, when operating, repairing, or making adjustments to the machine



HYDRAULIC SAFETY

- 1. Make sure that all components in the hydraulic system are kept in good condition and are clean.
- 2. Relieve pressure before working on the hydraulic system.
- 3. Replace any rusted, worn, cut, abraded, flattened or kinked hoses and metal lines immediately.
- 4. Do not attempt makeshift repairs to hydraulic lines, fittings or hoses by using tape, clamps or cements. The hydraulic system operates under extremely high pressure. Such repairs will fail suddenly and create a hazardous and unsafe condition.
- 5. Wear proper hand and eye protection when searching for a highpressure hydraulic leak. Use a piece of wood or metal as a backstop instead of hands to isolate and identify leak. Do not attempt to repair a leak, but replace the hose instead.
- 6. If injured by a concentrated high-pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop from hydraulic fluid piercing the skin.
- 7. Before applying pressure to the system, make sure all components are tight and that lines, hoses, and couplings are not damaged.

 Think SAFETY! Work SAFELY!

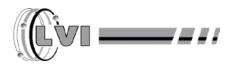
STORAGE SAFETY

- 1. Store the unit in an area away from human activity.
- 2. Do not permit children to play on or around the stored machine.
- 3. Store the unit in a dry, level area.
- 4. Do not lay hydraulic hoses on the ground and keep the fittings free of dirt.

PRE-OPERATION CHECKLIST

Efficient and safe operation of the LVI LITTER PROCESSOR requires that each operator reads and understands all the operating procedures and all the related safety precautions outlined in this section.

- 1. Lubricate the machine as per the schedule in the Service and Maintenance section of the manual.
- 2. Use only skid loader with adequate power to operate your LVI LITTER PROCESSOR.
- 3. Make sure the chain case reservoir is filled to the proper level.
- 4. Ensure that the machine is properly attached to your skid loader.
- 5. Check the hydraulic system.
- 6. Inspect all hydraulic and oil lines, hoses, fittings, and coupler for tightness.
- 7. Check for and remove entangled material from the augers.
- 8. Close and secure all guards.



EQUIPMENT MATCHING

The LVI LITTER PROCESSOR -These models are designed to be used with an appropriate size skid loader. It is recommended to use a skid loader with hydraulic flow rating of 25gpm- 30gpm for SLF-84 and 25gpm-30gpm for SL-84. A skid loader with a "hi-flow" hydraulic system works the best.

Attach skid loader to the LVI PROCESSOR. Park on a hard, flat level surface. Lower the skid loader boom all the way down. Tilt Processor machine forward. If the machine does not set level on the floor, adjust the height of the attaching frame (six large bolts with slots) where it is attached to the main processor trough. The machine must set flat onto the floor with the skid loader boom all the way down.

OPERATION

The LVI LITTER PROCESSOR is specifically designed to windrow poultry litter for in-house composting. Many of the features incorporated into this machine are the result of suggestions made by customers like you. Read this manual carefully to learn how to operate the machine safely and how to adjust it to provide maximum efficiency. Following the operating instructions with a proper maintenance program will extend the life of your machinery. It is recommended to operate the skid loader at full throttle and to drive forward at a slow steady movement.

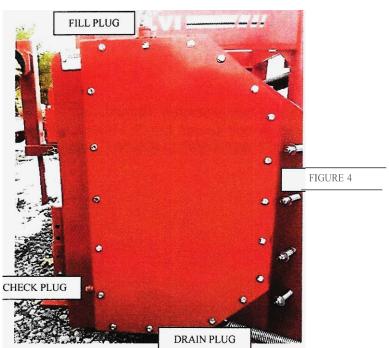
Proceed along the outer wall of the poultry house with the right hand wing of the processor machine. Travel around the perimeter of the poultry house. (It is advisable to scoop litter out of the corners before beginning the process.) Proceed to make a 2nd round bringing in the first small windrow along with the unprocessed litter. Travel slowly forward, watch oil pressure gauge on the machine to avoid having the gauge go higher than **2500 psi**. After making 2 or 3 rounds, then proceed up and down the center of the poultry house in order to have 2 or 3 final windrows the length of the poultry house. After at least 48 hours of heating, these windrows can be reprocessed into fresh windrows in order to have proper composting.

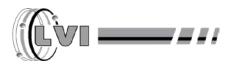


CHAIN CASE

The processor is equipped with an enclosed chain case for powering the rotor and auger. The oil level should be to the bottom of check plug. **Check every 3 months.** It is common to see some oil seepage where the rotor shaft enters the chain case. If oil level is not to bottom of check plug remove fill plug and fill with **80-90 gear oil.** Be sure to reinstall plugs. The chain case has a drain plug on the bottom side if you should have to drain the oil.

To check chain tensions, unplug both hydraulic hoses from the skid loader. To check drive chain for main rotor, rock the main rotor back and forth. There should be very little free play. To check upper auger free play, hold main rotor stationary and rock upper auger. There should be very little free play. To tighten chains, drain oil from chain case and remove cover. Adjust chains as necessary and reinstall cover using silicone sealer to seal cover. Refill chain case with oil.





BEARINGS

There are two bearings to grease and five grease zerks on the attachment frame pivot. Grease every **8 Hours**.





MAINTENANCE SCHEDULE

To ensure the long life for which the processor was designed, it is essential that the proper maintenance procedure be followed. The following chart indicates the manufacturer's recommended lubrication/maintenance schedule.

DESCRIPTION	HOURS OF OPERATION	SPECIAL INSTRUCTIONS
CHAIN CASE	EVERY 3 MONTHS	80-90EP GL-5 GEAR OIL

Maintain skid loader hydraulic oil as recommended by its manufacturer. Keep in mind that operating the Litter Processor will increase the hydraulic oil temperature of the skid loader.



Parts Manual Index

Basic Views of Machine	Pgs. 2-5
Chain Case Exterior	Pg. 6
Skid Shoe	Pgs. 10-11
Sprockets	Pgs. 13-15
Chains	Pg. 16
Drive Keys	Pg. 17
Scraper Bar	Pg. 18
Bearing Box	Pgs. 20-21
Paddles	Pgs. 24-25
Bearing Unit	Pgs. 27-30
Hydraulic Drive Motor	Pgs. 31-33

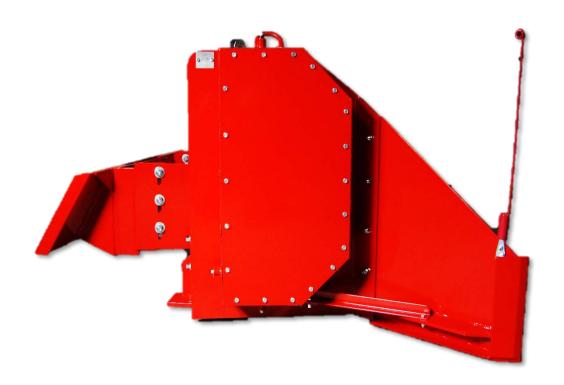


SL-84 Front View



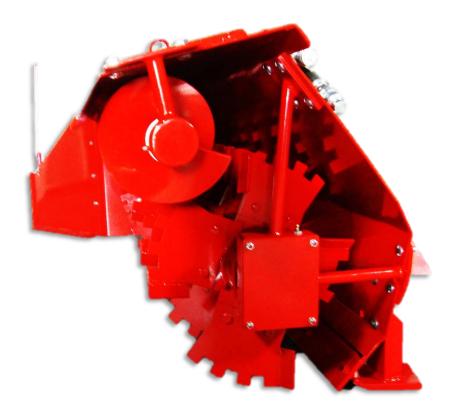


SL-84 Right End View





Left End View of Machine- Output End



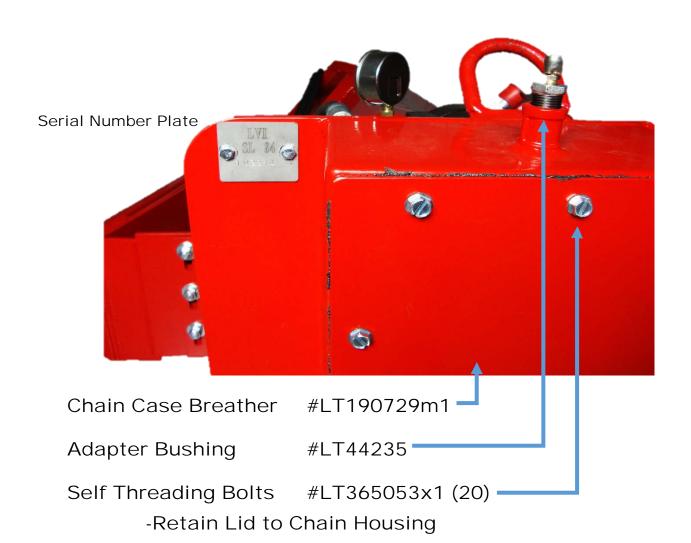


Rear View



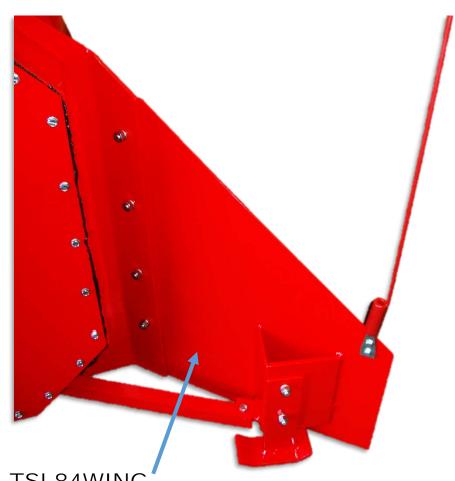


SL-84 Serial Location - Chain Case





Wing- Right End of Machine



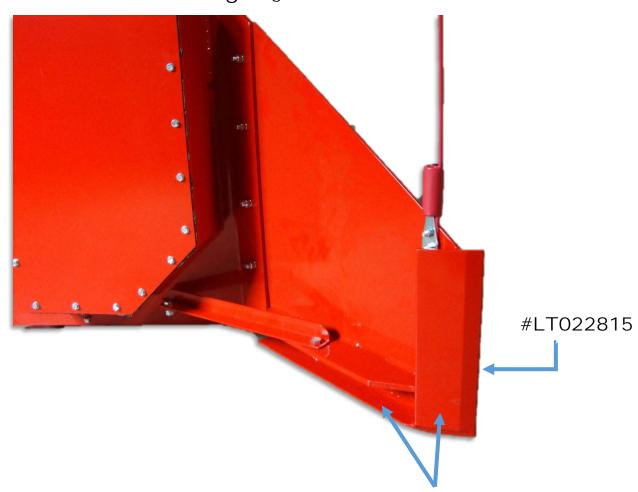
#LTSL84WING

Prior to SN 060114

Can Install Heavy Duty Wing Assembly



Wing- Right of Machine



After SN 060114, Heavy Duty Wing With Wear Plate on Leading Edge and Bottom Edge.

*Can be Installed on Prior Machines



Sealant and Marker Whip



Sealant for Cover on Chain Case



Skid Shoe



(2) Per Machine

Call Manufacturer for Availability

Prior to SN 010115



Skid Shoe



#LT121314 Bracket



#LT121314 Shoe



Pin Adjustable Skid Shoe Used After SN 010115 Can be Installed on Prior SN 0101115 Machines Will Need:

- 1 Shoe
- 1 Bracket
- 3 5/8" x 11/2" Carriage Bolt
- 3 5/8 Nuts, Lock Washer and Flat Washer
- 1 #LTFX01500 Pin



Chain Case



Bearing- Upper Auger

#LTHCFS20720

1¼" Diameter. 4 Bolts.

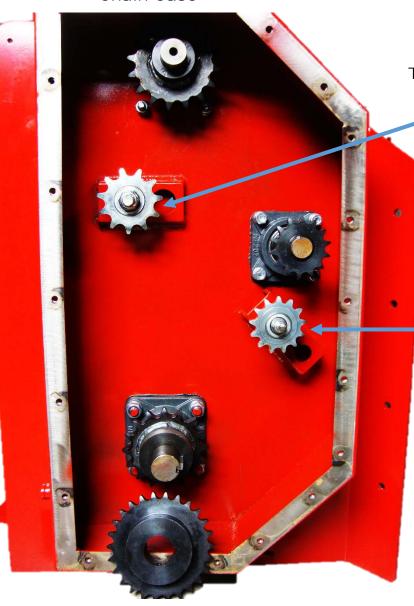
Bearing- Main Rotor

#LTHCFS20928

1¾ Diameter. 4 Bolts.



Chain Case



Tensioner Sprocket

#LT20801112 #80 11 Tooth Retained by ¾ x 3½ gr.5 Carriage Bolt, ¾ Lock Nut.

Tensioner Sprocket

#LT20601308 #60 13 Tooth Retained by ½ x 4 gr.5 Carriage Bolt, ½" Lock Nut



Chain Case



Upper Auger Drive Sprocket #60 16 Tooth 1¼" diameter. ¼" Keyway

Bottom Auger Drive Sprocket #60 26 Tooth 1¾" Diameter. 3/8" Keyway

After SN 100114 #60 26 Tooth 1¾" Diameter. 7/16" Keyway



Main Rotor Drive Sprockets

Top Sprocket on Hyd. Drive Motor

#80 16 Tooth 1½" Diameter. 3/8" Keyway

Bottom Rotor Drive Sprocket.

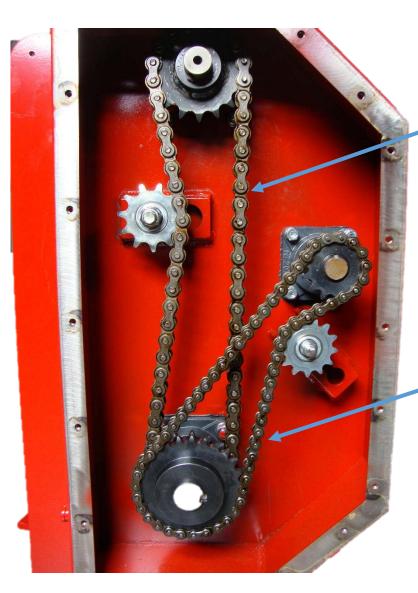
#80 20 Tooth 13/4" Diameter. 3/8" Keyway

After SN 100114: #80 16 Tooth 1¾" Diameter. 7/16" Keyway

*All Keys Must be "Hardened"
See "Key" Page



Chains



#80 Chain #80RCX 66" Long.

1 Connector Link: #LT80CLX

#60 Chain #60RCX 46" Long

1 Connector Link: #LT60CLX



Drive Keys





All Keys are Hardened Keys Except Step Key.



Scraper Bar



Retained By:

- (8) 7/16 x 11/4 Bolts
- (8) 7/16 Flat Washer

- (8) 7/16 Lock Washer
- (8) 7/16 Nuts



Main Rotor Drive Shaft and Snap Ring



Main Rotor Drive Shaft

Prior SN 100114 3/8 Keyway

After SN 100114 7/16 Keyway



Bearing - Outer end of Main Rotor

Prior to Serial # 010117



Main Rotor End Bearing



#LTHCFS20722

4 Bolt Bearing

1&3/8" I.D. With Lock Collar

4 - 1/2 X 11/2 Bolts, Nut, Lock Washer

Cover - Bearing Box #1110-9





Bearing – Outer end of Main Rotor After Serial # 010117



3 Bolt Mount - Does not use Lock Collar - Set Screws only See "Grease Tube" Page for Grease Tube Items

Round Bearing Cover #0217-3





Grease Tube Items



1/4" Grease Sert

#LT061848 Nut

#LT061847 Straight Fitting



#LT061845 2 Part Fitting



1/8" Plastic Line, 6" Long



#LT061845 2 Part Fitting



 $\#\text{LT216200}\ 90^\circ$ Fitting 1/8" Male NPT - Check brg housing thread size



#LT080861 90° Fitting ¼" Male Thread - Check brg Thread Size.

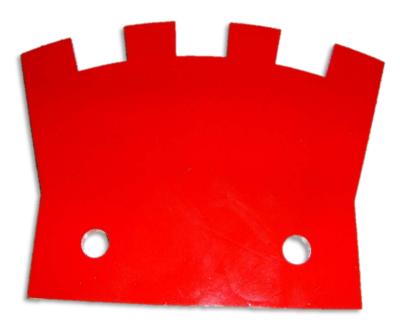


Main Rotor With Paddles





34 Paddles on Main Rotor



(34) Prior to SN 060114

(26) After SN 060114 - See Next Page

#092508-1 1/4" Thick- Normal Use

#092508-1TH 5/16" Thick- Heavy Duty Use

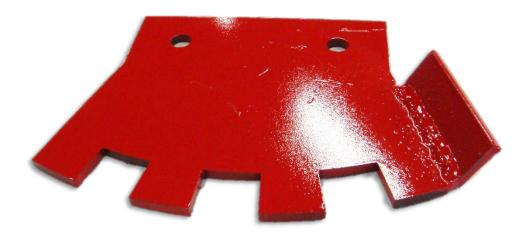
Attached With:

1/2" x 11/4" Hex Bolt

1/2" Lock Nut



Paddles on Main Rotor



(26) After SN 060114

Has Bent Wing on the One Side of Paddle

1/4" Thickness



Top Auger Assembly



#LTTOPAUGER

Uses Ball Bearing on Outter End

Top Auger Drive Shaft



Uses ¼" Key way



Bushing Bearing Unit - Prior to SN 010114



#LT020915

*Ball Bearing Arrangement in Use After SN 010114



Outer End of Top Auger Bushings-Prior to SN 010114



#LT35443431
White Plastic Bushing



#LTDELUXEBUSHING
Brown Phenolic Bushing
Wears Longer for
Heavy Duty Use



Upper Auger- Outter End Bearing Carrier-After SN 010114



Update Kit Available to Convert "Bushing" Carrier to Ball Bearing Carrier.

Call Manufacturer for Details.



Upper Auger- Outter End Ball Bearing With Washer and Collar





#LT111514 Collar/Washer

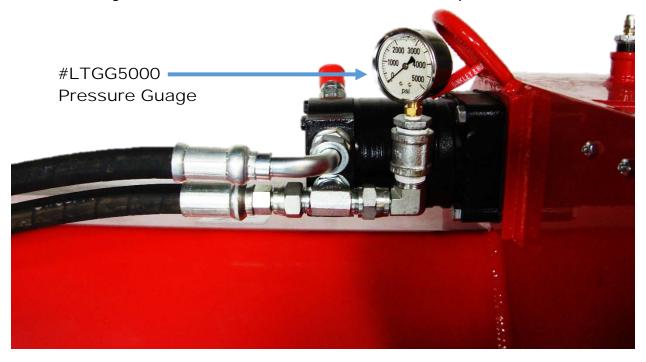


#LTSA206-19
Bearing With Collar 1&3/16" I.D.





Hydraulic Drive Motor and Components



Top Hose - Return Hose

7 ft. Long ¾ x 2 Hose

90° #12 Female JIC - Motor End

3/4" NPT - Coupler End

Lower Hose - Pressure Hose

7 ft. Long ¾ x 4 Hose

Straight #12 Female JIC - Motor End

3/4" NPT - Coupler End



Hydraulic Flat Face Couplers



#LTFF495-6 - Female

#LTFF491-6 - Male



Hydraulic Drive Motor



#LTK3/8HD Drive Key - Hardened $3/8 \times 3/8 \times 1\frac{1}{2}$ "



WARRANTY POLICY AND CONDITIONS

BINKLEY & HURST, LP P.O. BOX 100, 700 EAST LINDEN STREET, RICHLAND, PA 17087, hereinafter called B&H, offers the following limited warranty in accordance with the provisions below to each original retail purchaser of B&H new equipment of its own manufacturer, that such equipment is at the time of delivery to such purchaser, free from defects in material and workmanship and that such equipment will be warranted for a period of 6 months for single farm use and 3 months for commercial use from the date of delivery to the end user providing the machine is used and serviced in accordance with the recommendations of B&H and is operated under normal farm conditions.

- 1. This warranty will be withdrawn if any equipment has been used for purposes other than for which is was intended or if it has been misused, neglected, or damaged by accident, let out on hire or furnished by a rental agency. Nor can claims be accepted if parts other than those manufactured by B&H have been incorporated in any of our equipment. Further, B&H shall not be responsible for damage in transit or handling and under no circumstances within or without the warranty period will B&H be liable for damages of loss of use, or damages resulting from delay or any consequential damage.
- 2. We cannot be held responsible for loss of livestock, or any expense or loss incurred for labor, supplies, substitute machinery, rental for any other reason, or for injuries either to the owner or to a third party, nor can we be called upon to be responsible for labor charges, other than originally agreed, incurred in the removal or replacement of components.
- 3. The customer will be responsible for and bear the cost of:
 - a. Normal maintenance such as greasing, maintenance of oil levels, minor adjustments, etc.
 - b. Transportation of any B&H product to and from where the warranty work is performed.
 - Dealer travel time to and from the machine or to deliver and return the machine from the service workshop for repair.
 - d. Dealer travel costs.
- 4. Parts defined as normal wearing items, (i.e. cutting edge, skid shoes, etc.) are not in any way covered under this warranty.
- 5. This warranty will not apply to any product that is altered or modified without the express written permission of B&H and/or repaired by anyone other than B&H or B&H's approved dealers.
- 6. This warranty may not be assigned or transferred to anyone.
- 7. SIGNING THIS FORM INDICATES THAT YOU HAVE READ AND UNDERSTAND THE OWNERS MANUAL & MACHINE SAFETY.

WARRANTY REGISTRATION

Customer Name:			
Address:			
City/State/Zip:			
Phone:			
Machine Model:		Machine Serial#_	
Delivery Date:	_Sales Person:		
Customer Signature:			



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- 1. This warranty will be withdrawn if any equipment has been used for purposes other than for which is was intended or if it has been misused, neglected, or damaged by accident, let out on hire or furnished by a rental agency. Nor can claims be accepted if parts other than those manufactured by B&H have been incorporated in any of our equipment. Further, B&H shall not be responsible for damage in transit or handling and under no circumstances within or without the warranty period will B&H be liable for damages of loss of use, or damages resulting from delay or any consequential damage.
- 2. We cannot be held responsible for loss of livestock, or any expense or loss incurred for labor, supplies, substitute machinery, rental for any other reason, or for injuries either to the owner or to a third party, nor can we be called upon to be responsible for labor charges, other than originally agreed, incurred in the removal or replacement of components.
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WARRANTY REGISTRATION

Customer Name:		
Address:		
	Cell:	
	Machine Serial#	
Delivery Date:	Sales Person:	
Customer Signature:		



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- 2. We cannot be held responsible for loss of livestock, or any expense or loss incurred for labor, supplies, substitute machinery, rental for any other reason, or for injuries either to the owner or to a third party, nor can we be called upon to be responsible for labor charges, other than originally agreed, incurred in the removal or replacement of components.
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- 6. This warranty may not be assigned or transferred to anyone.
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WARRANTY REGISTRATION

Customer Name:	
Address:	
City/State/Zip:	
	Machine Serial#
Customer Signature:	