

# LOAD KING



OPERATORS MANUAL

LOAD KING

SHINGLE CONVEYOR

REV B

AUGUST 8, 2018

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## Company

Load King has been producing quality trailers since 1956. We are located in Elk Point, South Dakota.

Although the trailer industry is an ever-changing environment and we've seen many changes over the years, we have remained committed to the simple philosophy that we will make a reasonable profit through the designing, manufacturing, and marketing of top quality products that we can always be proud to call Load King. We have not, and will not, compromise in this area.

Quality shows in all facets of an operation, from the moment you make your first phone call for a product inquiry to the time you sell your used equipment and realize you've received top dollar on your sale. We continue to strive for excellence in every area and never quit trying to improve. We have earned our reputation believing that quality is value and value sells products.

Through our shared Engineering, Marketing and Sales teams, Load King and Custom Truck One Source bring that tradition of quality and value to another market with the Load King Shingle Conveyor.

## About Custom Truck One Source

Beginning in February of 2015, three family-owned and operated companies (Custom Truck & Equipment, Utility Fleet Sales and Forestry Equipment of VA) joined together to form what is now Custom Truck One Source. Shortly after its inception, UCO Equipment became a part of the CTOS family along with TNT Equipment six months later. In December 2015, CTOS welcomed its sixth company under its brand, Load King, a leading manufacturer of high-quality and customizable trailers.

The announcement of the partnership represented the platform's collective commitment to the continued growth and dominance of each legacy company's individual offerings, now compounded to leverage the expertise of the team and, ultimately, better serve loyal CTOS customers all over the world. CTOS will build upon the market positions of each legacy company, while serving as a single source supplier of specialty equipment and services for the utility and heavy equipment industries. The utility and heavy equipment platform collectively offers sales, rentals, parts and after market services, remanufacturing, customized equipment and transportation.

## DEFINITIONS USED IN THIS MANUAL

The following table describes text and symbols used to highlight important information.

Signal Word	Symbol	Explanation
DANGER		Danger is used to alert readers about an immediate and serious hazard that will likely be fatal.
WARNING		Warning is used to alert readers about the potential for serious injury or death or serious damage to equipment.
CAUTION		Caution is used to alert readers about the potential for anything from moderate injury to serious equipment damage or destruction.
READ		Read is used to alert readers of information to be read on machinery
NOTE		Note is used for a tip or suggestion to help readers carry out a procedure successfully.

Table - 1

## OPERATORS MANUAL



When using a Load King Shingle Conveyor, it is important to have a good understanding of the proper pre-Inspection, post-inspections, and operating guidelines. By following these steps, you can safely operate the Load King Shingle Conveyor with minimal risks of damage to the machine or the surrounding property.

### 1. Pre-Use Inspection:

1. Before using the Load King Shingle Conveyor, do a 360 degree walk around to visually inspect that the stabilizers, as well as the conveyor boom itself, will be free of obstructions once in operation.
2. Be sure to check the oil sight gauge on the reservoir to ensure the tank is full and that no oil has leaked out.
3. Visually inspect the main lifting post to make sure it is well lubricated.
4. Complete a visual inspection of all the main critical fasteners to ensure there are no loose bolts, nuts or other fastener hardware.

### 2. Proper Operation Sequence:



**DANGER:** Choose an operating location where the boom can be rotated to the unloading location without approaching powerlines

1. Position the chassis on level ground.



**NOTE:** The outrigger stabilizers are to help the chassis remain stable during operations, not to level the chassis itself.

2. Remove the conveyor boom strap.
3. Turn on the chassis engine, set the parking brake, and engage the PTO switch located on the center dash panel.
4. Using the stabilizer control valve located on the street side of the tail shelf, lower both stabilizers until the weight from the rear tires has been visibly reduced.
5. Lift and swing the conveyor using the conveyor control valve located at the base of the conveyor, until the boom tip is located at the desired unloading location.
6. Lower the roof support foot and adjust it into position.
7. Lower the boom until support foot is the resting upon the unloading location, to reduce the possibility of damage to the conveyor boom or the platform.
8. Pull out the Boom Stop valve at the boom tip to ensure that the belt is free to operate.
9. Push up on the belt motor lever to begin the process of delivering the shingles to the roof. Belt speed can be controlled by the position of the lever.

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## OPERATORS MANUAL (Cont.)

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**WARNING:** Keep hands and all personal equipment free of the roller pin near the loading platform, due to a pinch point from the cleats.

10. Load a single packet of shingles per cleat pair. Shingles can be loaded onto the conveyor loading area to be picked up by the next set of cleats. The movement of the conveyor belt can be stopped and restarted at the lower control valve or at the Belt Stop valve located at the boom tip. The Belt Stop valve will instantly stop the conveyor belt, and only the belt, once engaged. Pulling out on the Belt Stop valve will restart the conveyor.
11. To stow the conveyor boom, first remove all cargo from the conveyor. Pulling the belt control lever down will reverse the direction of the belt and bring material back to the deck level. Raise the boom to the point of which the stabilizing foot can be put pack in the stowed position. Then lower the conveyor boom back into the cradle.



12. **CAUTION:** Using the boom strap, tie down the conveyor boom and secure for transportation.



13. **CAUTION:** Lift the rear stabilizers fully.



14. **CAUTION:** Disengage the PTO.

### 3. Post Operation Inspection:

1. Complete a 360 degree walk around the conveyor to ensure there have been no hydraulic leaks during operations.
2. Check the metal components for any structural stress cracks or any other malfunctions.
3. Visually inspect the cleats on the conveyor belt to make sure they have not loosened during operations.
4. Check the structural tie down and rotation bolts as well as all other critical fasteners, to ensure they did not come loose during operations.

## SAFETY INFORMATION



For the operator's protection, there are warning labels and safety devices on the Load King Shingle Conveyor that are **NOT** to be tampered with or removed. It is important for the operator to read all warning labels before operating the Load King Shingle Conveyor. It is the owner's responsibility to ensure that the operator and workers on and around the Shingle Conveyor understand all of the safety warnings herein and affixed to the machine. **Do not operate Shingle Conveyor if safety labels are missing or damaged.**



1. **WARNING:** Do not modify the hydraulic system in any way. Altering the hydraulic system increases the risk of operator injury and structural harm. Removing, altering or bypassing any hydraulic component directly violates and voids the warranty.



2. **WARNING:** The warning and safety labels must be legible. These labels must not be removed or altered in anyway. These labels are important directions to ensure that neither workers, nor the conveyor get damaged during working operations or traveling. The pictures in the following section show the decals and their locations. Operating the unit with illegible or missing safety labels is a direct violation of the intended use of the unit and voids the warranty.



3. **DANGER:** The conveyor is designed specifically for moving shingle materials. Do not allow any person to ride the conveyor. Doing so presents significant risk of serious personal injury or death.



4. **DANGER:** The conveyor boom is not intended to hoist loads. Do not suspend loads from the conveyor. Using the conveyor boom to hoist loads can result in property damage, personal injury or death.



5. **DANGER:** Never unload shingles without the roof support foot supporting the conveyor boom. Operating with the boom unsupported increases the risk of personal injury or death to workers on the roof and increases the risk of damaging the boom.



6. **CAUTION:** Before transportation, raise both stabilizers completely. Driving with the stabilizers extended will result in structural damage to the truck.



7. **DANGER:** Before transportation, place the conveyor boom fully down in the cradle. Install the tie down strap around the conveyor boom to prevent any possible boom movement during transportation. Driving without the boom secured could result in the boom rising and/or rotating into an unsafe position. Contact with fixed objects such as bridges or power lines could result in significant property damage, personal injury or death.



8. **CAUTION:** Never drive the vehicle with the PTO engaged. Doing so could cause serious damage to the chassis.

9. Load King is not responsible for any loss or damage resulting from operators neglect of the safety information provided.

## LUBRICATION AND MAINTENANCE

### 1. Turret Maintenance:

The two-wear plugs prevent friction between the inner and outer sleeves when the post is moving up and down.

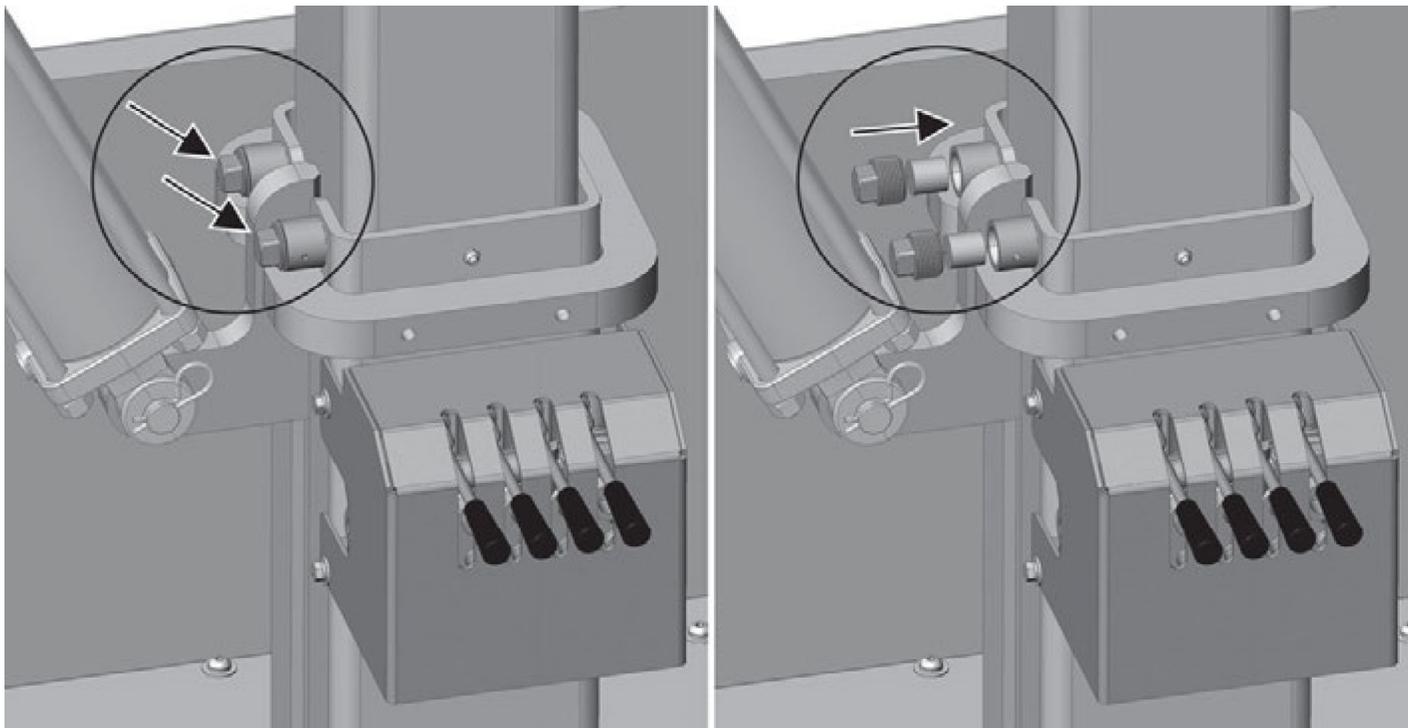


Figure - 1

Pressure should be supplied to the point of which the green wear pads make the inner post centered with the outer sleeve.



**CAUTION: The post should always be well lubricated.**

## LUBRICATION AND MAINTENANCE (Cont.)

Lubricate the grease zerks located on the slew drive (three in total). Slew drive is located under access panels surrounding the turret.

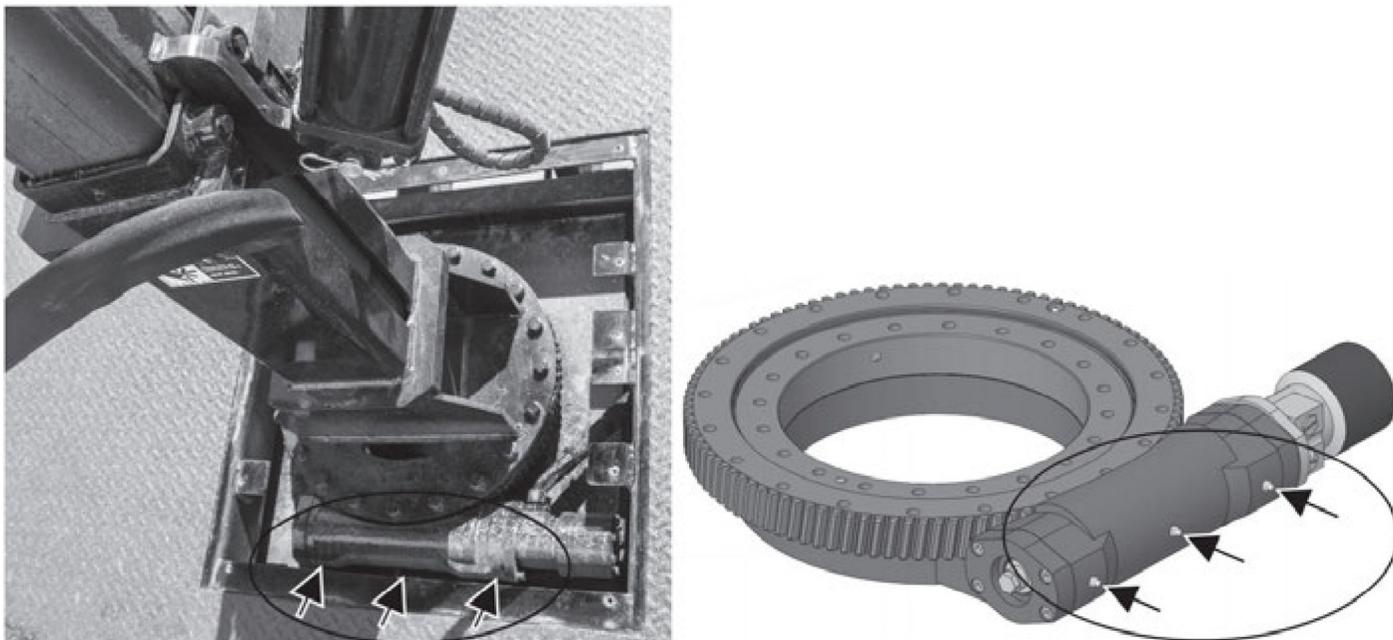


Figure - 2

Above the outer sleeve there are seven more grease zerks that will need lubed regularly.

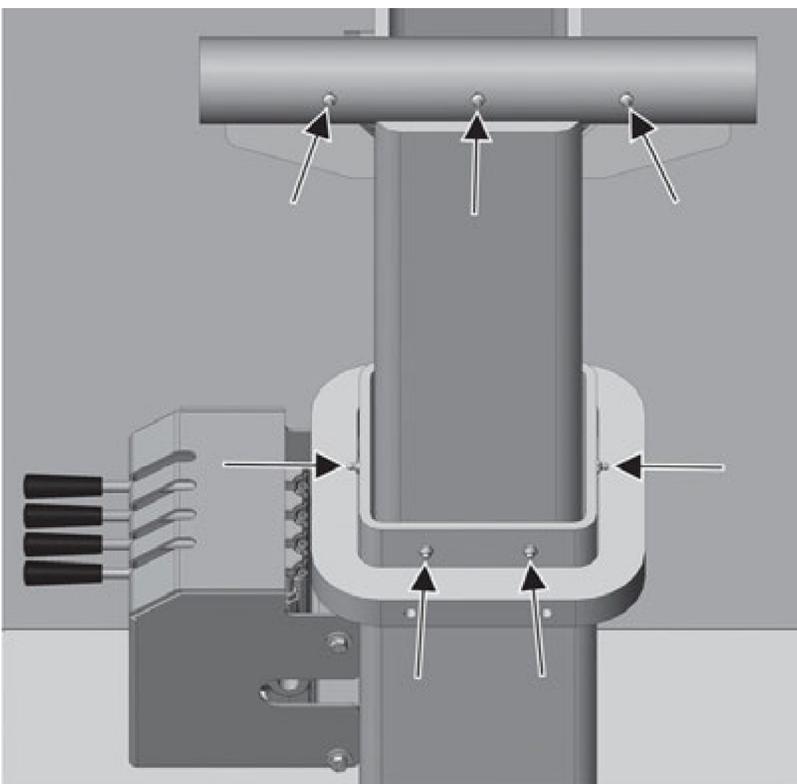


Figure - 3



**CAUTION:** All grease zerks are to be topped off prior to first use and every month following.

## **LUBRICATION AND MAINTENANCE (Cont.)**

### **2. Belt Tension:**

For the belt to operate correctly, without running off track, it should have no more than 8” of gap from frame to belt when 45lbs of lifting force is applied as the picture shows. If the belt has a larger gap than this, the two tensioner’s in the rear of the conveyor will need to be tightened. This is something that

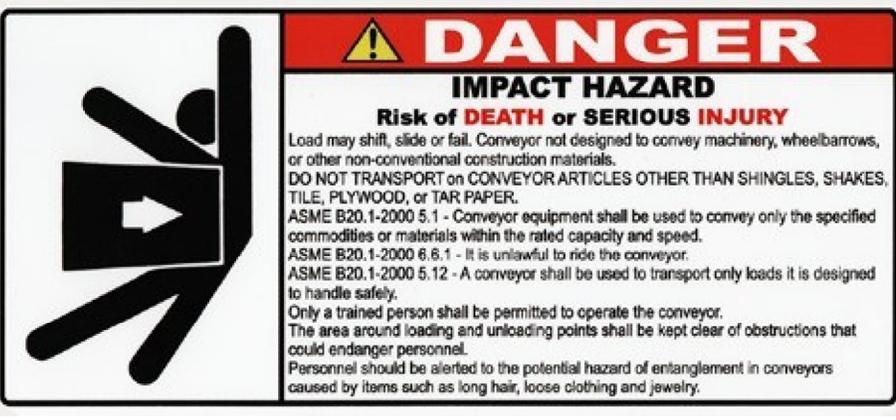
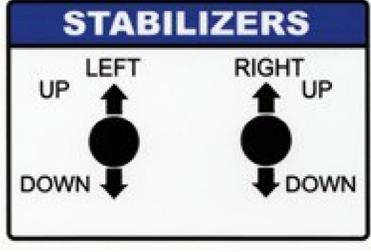
an operator should test prior to first use and every month following. Also, the belt should be inspected monthly for cuts, rips or any other imperfections that may cause the belt to break.

Checking for hydraulic leaks should be performed prior to and after every time this machine is being operated. Most importantly ensuring the hydraulic oil level hasn’t changed once operations are complete.



Figure - 4

**LOAD KING SHINGLE CONVEYOR LABELS**

		
<p>1</p>	<p>2</p>	<p>3</p>
		
<p>4</p>	<p>5</p>	<p>6</p>
		
<p>7</p>	<p>8</p>	<p>9</p>
		
<p>10</p>	<p>11</p>	<p>12</p>
		
<p>13</p>		<p>14</p>

**LOAD KING SHINGLE CONVEYOR LABELS**

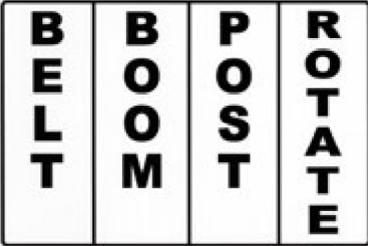
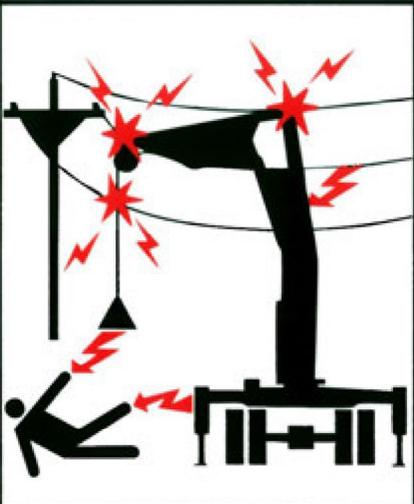
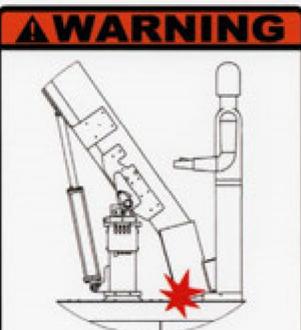
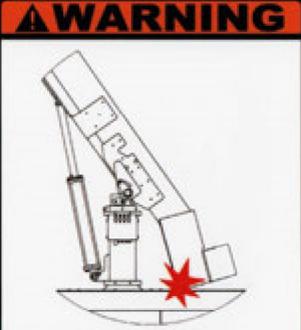
 <p><b>⚠ DANGER</b>  <b>CONVEYOR IMPACT HAZARD</b>          Risk of <b>SERIOUS INJURY</b> or <b>DEATH</b> due to hydraulic system failure. Conveyor may suddenly fail. Do not tamper with any hydraulic components. Unauthorized modification of the hydraulic system is illegal and highly dangerous.          If you are <b>UNCLEAR</b> or do not <b>UNDERSTAND ANY PART</b> of this <b>WARNING</b>, contact the manufacturer.</p>															
<p>15</p>	<p>16</p>														
<p><b>⚠ DANGER</b>  <b>ELECTROCUTION HAZARD</b>  <b>THIS CONVEYOR IS NOT INSULATED</b>  <b>DEATH OR SERIOUS INJURY WILL RESULT FROM CONTACT OR INADEQUATE CLEARANCE</b>          Maintain safe clearance from electrical lines. Allow for boom, electrical line, and loadline swaying.          This conveyor does not provide protection from contact with proximity to an electrically charged conductor.          Maintain a clearance of at least 10 feet between any part of the conveyor, loadline or load and any electrical line carrying up to 50,000 volts (50 kv). If electrical line voltage is unknown, assume maximum voltage and maintain a clearance of at least 45 feet.</p> <table border="1" data-bbox="162 1171 568 1276"> <thead> <tr> <th>NOMINAL Voltage, kV (Phase to Phase)</th> <th>MINIMUM REQUIRED DISTANCE</th> </tr> </thead> <tbody> <tr> <td>to 50</td> <td>10 feet</td> </tr> <tr> <td>Over 50 to 200</td> <td>15 feet</td> </tr> <tr> <td>Over 200 to 350</td> <td>20 feet</td> </tr> <tr> <td>Over 350 to 500</td> <td>25 feet</td> </tr> <tr> <td>Over 500 to 750</td> <td>35 feet</td> </tr> <tr> <td>Over 750 to 1000</td> <td>45 feet</td> </tr> </tbody> </table> 	NOMINAL Voltage, kV (Phase to Phase)	MINIMUM REQUIRED DISTANCE	to 50	10 feet	Over 50 to 200	15 feet	Over 200 to 350	20 feet	Over 350 to 500	25 feet	Over 500 to 750	35 feet	Over 750 to 1000	45 feet	<p><b>⚠ WARNING</b>    <b>KEEP HANDS &amp; FEET AWAY WHEN LOWERING CONVEYOR</b>          CVR00283</p>
NOMINAL Voltage, kV (Phase to Phase)	MINIMUM REQUIRED DISTANCE														
to 50	10 feet														
Over 50 to 200	15 feet														
Over 200 to 350	20 feet														
Over 350 to 500	25 feet														
Over 500 to 750	35 feet														
Over 750 to 1000	45 feet														
<p>17</p>	<p>18</p>														
 <p><b>⚠ DANGER</b>          Open belt or chain. Moving parts can crush and cut. Keep hands clear while operating. Risk of falling or entanglement of limbs or body parts in belt or chain. It is unlawful to stand, lie, kneel, walk, crawl or ride on conveyor.          ASME 820-2000          Personnel should be alerted to the potential hazard of entanglement in conveyors caused by items such as long hair, loose clothing or jewelry.          If you are <b>UNCLEAR</b> or do not <b>UNDERSTAND ANY PART</b> of this <b>WARNING</b> - Contact the Manufacturer.</p>	<p><b>⚠ WARNING</b>    <b>DO NOT LOWER CONVEYOR IN MAXIMUM OPERATING ANGLE</b>          CVR00282</p>														
<p>19</p>	<p>20</p>														

Table - 2

## LOAD KING SHINGLE CONVEYOR LABELS

ITEM NO.	DESCRIPTION	QTY.
1	CAUTION - LOOK OUT FOR CONTACT HAZARDS AND MOVING PARTS OF MACHINERY	2
2	CAUTION - LOW OVERHEAD CLEARANCE	2
3	CAUTION - DO NOT OPERATE WITHOUT GUARDS	1
4	EMERGENCY STOP	1
5	DANGER - CROSSING OR STANDING ON CONVEYOR IS FORBIDDEN	2
6	SAFETY FIRST	2
7	WARNING - KEEP OFF	8
8	DANGER - KEEP CLEAR	6
9	DANGER - KEEP AWAY	4
10	WARNING - OUTRIGGER STAND CLEAR	2
11	LOAD KING - BLACK	2
12	LOAD KING - WHITE	2
13	DANGER - IMPACT HAZARD	4
14	STABILIZERS	1
15	DANGER - CONVEYOR IMPACT HAZARD	2
16	CONTROLS - BELT, BOOM, POST, ROTATE	1
17	DANGER - ELECTROCUTION HAZARD	2
18	WARNING - KEEP HANDS AND FEET AWAY	1
19	DANGER - OPEN BELT	4
20	WARNING - DO NOT LOWER CONVEYOR	1

Table - 3

**LOAD KING SHINGLE CONVEYOR LABEL LOCATIONS**



Figure - 5

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## LOAD KING WARRANTY

*Load King (herein after referred to as the COMPANY) warrants all products manufactured by it and purchased by you to be free from defects in material and manufacture at the time of shipment, for one (1) year from date of delivery. The COMPANY will furnish replacements for such parts as the COMPANY finds to have been defective at the time of delivery or, at the COMPANY's option, will make or authorize repairs to such parts, provided that, upon request, such parts are returned, transportation is prepaid to the factory from which they were shipped.*

*This warranty shall not apply to any Product which has been subjected to misuse, misapplication, overloading, neglect (including but not limited to use of unauthorized parts or attachments), adjustments or repair. Engines, motor, tires, wheels, suspensions, axles, etc. and any accessories furnished with or used in the COMPANY's products, but which are not manufactured by the COMPANY, are not warranted by the COMPANY but are sold only with the express warranty, if any, or the manufacturers thereof. This warranted is limited to the first purchaser/user and is not transferable.*

**THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED (INCLUDING, WITHOUT LIMITATIONS, OF MERCHANTABILITY AND FITNESS OF ANY PRODUCT FOR A PARTICULAR PURPOSE), AND OF ANY OTHER OBLIGATION OR LIABILITY ON THE PART OF THE COMPANY. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE THEREOF.**

## LIMITATION OF LIABILITY

It is expressly understood and agreed by you that the COMPANY's liability for its products, whether due to breach of warranty, or otherwise is limited to the furnishing of such replacement parts, F.O.B.

factory, and the COMPANY will not be liable for any other injury, loss, damage, or expense, whether direct or consequential, including but not limited to loss of use, income, profit, or production, injury to person or increase in cost of operation, spoilage of or damage to material, arising out of or in connection with the sale, installation, use or inability to use, or the repair or replacement of the COMPANY's products.

All used vehicles and/or bodies are sold in the "AS IS" condition and no expressed or implied warranty is made.

All of COMPANY'S Products are of high quality and are manufactured in conformity with the best commercial practices in the various lines. The COMPANY guarantees all Products manufactured by it to be free from defects in material and manufactured at the time of shipment, for one (1) year from date of delivery. In addition, the COMPANY guarantees the portion of the product to be considered structural for one (1) year from date of manufacture.

While Load King, LLC. designs and manufactures its specific equipment configurations to industry standards, it is ultimate responsibility of the buyer/operator to assure that all loads are properly loaded and distributed. All loads must comply with the applicable state and federal load limits.

## LOAD KING WARRANTY DATA RECORD

Shingle Conveyor Warranty Form Submission		Date	
Date of Delivery			
Model Number			
S/N			
Dealer			
Address			
Customer			
Address			

Record this information at the time that warranty registration form is completed and returned to Load King

**REVISION CONTENT**

REVISION	DATE	DESCRIPTION	LOCATION
A	06/06/17	INITIAL RELEASE	
B	08/08/18	DECALS UPDATE	LABELS
		COMPANY NAME AND LOGO UPDATE	ENTIRE MANUAL



Load King

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