Notice: Contents of this manual are subject to change without notice!

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LIMITATION OF WARRANTIES

Goods manufactured by Trinity Trailer Manufacturing, Incorporated ("Trinity Trailer") are warranted to be free from defects in workmanship or material under normal use and service for a period of **One (1) year** to **THE ORIGINAL OWNER** or any remaining time on the warranty period for **SUBSEQUENT OWNERS.**

This warranty is applicable if the owner has, as a minimum:

- Properly maintained the Truck Bed
- Not overloaded the Truck Bed (i.e. Exceeded the GVWR* or the GAWR*)
- Not transported corrosive cargo
- Adequately restrained the load
- Loaded the Truck Bed properly

The warranty period begins on the date the vehicle is delivered and ends at the expiration of the coverage period.

Goods Manufactured by parties other than Trinity Trailer are **not warranted** by Trinity Trailer.

THERE ARE NO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, OR OTHER WARRANTIES, EXPRESSED OR IMPLIED, UNLESS OTHERWISE EXPRESSLY SPECIFIED HEREIN.

Trinity Trailer's sole obligation under this warranty is to repair or exchange, at its option, any such goods manufactured which are found by Trinity Trailer to be defective in workmanship or materials. Trinity Trailer reserves the right to require any products to be returned for inspection at the buyer's expense to our facility in Boise, Idaho. The foregoing shall be the sole and exclusive remedy for any such defects, whether in contract, tort, warranty or otherwise.

In no event shall Trinity Trailer be liable for indirect, special, incidental or consequential damage in connection with or arising out of the sale of goods or furnishing services.

The warranty herein **does not apply** to and Trinity Trailer makes no warranties, expressed or implied with respect to:

- Items manufactured by other parties
- Items that have been modified by other parties
- Goods which wear out and have to be replaced during the warranty period. These goods include but are not limited to: tires, plastic liner, chains, flaps, tarp, light bulbs, electrical or hydraulic receptacles, paint, brakes, linings, drums and return springs, equalizer, torque rod, camshaft bushings, camshafts, slack adjusters, brake cylinder diaphragms, springs, slider pads, wheel bearings, oil and oil seals, door seals, rim clamps and studs, gaskets and sealers, etc.

***GVWR (Gross Vehicle Weight Rating)-**The structural capability of the Truck Bed when supported by the kingpin and axles with the load uniformly distributed throughout the cargo space.
***GAWR (Gross Axle Weight Rating)-**The structural capability of the lowest rated member of the running gear components-suspension and spring system, hub, wheels and drums, rims, bearings, brakes, axles or tires.

Important Safety Information

Before attempting to operate, load, unload or do anything with or to the Truck Bed, YOU MUST READ THIS MANUAL and become completely familiar with all of its operating instructions and safety precautions.
To avoid serious injury or death, ALWAYS FOLLOW THESE RECAUTIONS:

1. Do not allow unqualified, untrained or careless personnel to operate the Truck Bed. Do not use the Truck Bed for a purpose for which it was not intended.
2. Each person at the user's facility who may be involved with installing, operating, servicing, inspecting, maintaining or repairing the Truck Bed must read the complete operating instructions and carefully study and understand the safety instructions. All actual and potential operators should confirm their having done so in writing.
3. The Truck Bed must be serviced and maintained only by authorized and properly trained personnel. Such personnel must have undergone training by a factory-trained representative concerning the proper and safe operation of the Truck Bed. Only the manufacturer or factory-trained technicians should carry out more than minor repairs.
4. Do not allow anyone who is not physically fit or mentally alert near the Truck Bed or its operating area. Be constantly alert to possible hazards on or around the Truck Bed.
5. Keep a safe distance at all times from any moving parts, including the conveyor.
6. When unloading the Truck Bed:
    a. Long hair must be protected by headgear.
    b. Do not wear loose apparel such as ties, scarves, etc.
    c. Remove all wristwatches and jewelry.
    d. Wear only approved industrial grade eye protection or a face guard to protect against flying debris.
7. Do not allow tools or other loose objects to be placed on top of or around the Truck Bed.
8. At the very first sign of any problem and before attempting any troubleshooting or maintenance, the conveyor must be stopped.
9. Safety features must not be removed, dismantled, altered, put out of operation or relocated. All guards and safety devices are to be re-fitted and in place after changeovers, servicing or making repairs and before the Truck Bed is used. All safety devices must be checked at regular intervals for correct operation.
10. Do not remove safety signs or warning decals from the Truck Bed. Product safety signs should be periodically inspected and cleaned as necessary. Product safety signs should be replaced when they are no longer legible at a normal viewing distance. Replacements are available from Trinity Trailer Mfg., Inc.
11. Follow all workplace safety and accident prevention regulations applicable to the operation of the Truck Bed. Comply with local, state and/or federal environmental regulations, including those governing airborne dust particles.

12. Designate a person to be responsible at any given time for installation, commissioning, operating and repair of the Truck Bed so the responsibility for safety will not be lost.
13. The Truck Bed has been designed and built with original Trinity Trailer Mfg., Inc. parts only. Only original Trinity Trailer Mfg., Inc. parts must be used for maintenance or repair. Use of other parts will void your warranty.
14. Do not perform modifications to or reconstruction of the Truck Bed without first getting written approval from Trinity Trailer Mfg. Inc.
15. The cleanliness and tidiness of the Truck Bed and its surrounding area must be ensured through appropriate instructions, routine inspections and cleaning.

WARNING SYMBOLS USED IN THIS MANUAL

Truck Beds have inherent hazards associated with their use. We have made efforts to minimize these risks through the use of engineering controls. There are certain risks, however, which cannot be completely eliminated if the design is to remain functional.

The following symbols and classifications of hazards are used in this manual and on the safety labels on the Truck Bed.

This is a safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

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

This indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

This indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

CAUTION

A caution statement used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

SAFETY LABELS

Your Truck Bed had numerous safety labels affixed to it when it was built; they are shown throughout this manual. It is important that these labels remain visible and legible throughout the life of the Truck Bed. To help ensure they are visible, the Truck Bed should be cleaned regularly with water and a mild detergent. Over time the condition and/or color of the labels may deteriorate due to use of the Truck Bed and the environment in which it is used. If the labels should become illegible or lose their color, it is the owner's responsibility to replace them. Contact our customer service department at (800) 235-6577 to order replacements.

INSPECTION, SERVICE AND MAINTENANCE

It is important that your Truck Bed be inspected and serviced on a regular basis to keep it in a safe and functional condition. Regular maintenance will also save you money in costly repairs over time.

PREVENTATIVE MAINTENANCE SCHEDULE

We recommend that you follow the general preventative maintenance schedule below. The intervals given are for nominal operating conditions; service more frequently if the Truck Bed is used in overly humid or dusty conditions.

AFTER THE FIRST 50 HOURS OF OPERATION

- Replace the hydraulic oil and filter and check oil levels in all DC power units. Make certain all air is out of the systems to ensure proper operation
- Replace the oil in the planetary gearbox
- Check Truck Bed to truck mounting bolts for tightness
- Check rubber strip between the Truck Bed and truck frame for movement

ONCE A MONTH

- Wash thoroughly with a mild detergent and water
- Check general structural condition for corrosion or cracks
- Check condition of lights
- Check wiring harness for cracking or chafing
- Check hydraulic and pneumatic lines for signs of leakage or wear
- Check hinges on rear and side door(s) for signs of damage
- Lubricate hinges, latches and bearings (if applicable) on rear and side door(s)
- Check conveyor system for excessive wear or damage

- Check condition of tarp system, if installed
- Check condition and security of mud flaps
- Check oil level in planetary gear on conveyor hydraulic and add if necessary
- Check truck to Truck Bed mounting bolts for tightness
- Check rubber strip between the Truck Bed and truck frame for movement

ONCE A YEAR

- Drain and replace hydraulic fluid from reservoir
- Replace hydraulic oil and filter (or every 1,000 hours, whichever is first)
- Replace oil in the planetary gearbox (or every 1,000 hours, whichever is first)

TRUCK BED INSTALLATION GUIDELINES

CAUTION: Please read carefully. The following guidelines cover important points for safe and proper installation of standard configuration Truck Beds.

Before installing the Truck Bed:

- Make certain that the width of the Truck Bed frame rails and the width of your truck frame rails are compatible. If they are not, please call Trinity Trailer Mfg., Inc. at 1-800-235-6577 for installation assistance.
- Do not place the front of the Truck Bed forward any closer than 8" from the rear of the truck cab or most rearward truck cab protrusion. The rear of the truck frame should be a minimum of 12" from the front side of the rear bumper of the Truck Bed to allow for the conveyor flaps to fall and clear themselves before being drawn back into the body of the Truck Bed.
- Make certain that Truck Bed ribs clear all tires (including lift axle tires).
- **DO NOT WELD MOUNTING BRACKETS TO TRUCK FRAME**

TRUCK BED TO TRUCK FRAME RUBBER STRIP

Before installing the Truck Bed to your truck you must first place the provided 3”x 3/8” rubber strip (cut to the length of the Truck Bed frame) to the top of the truck frame (on both sides). Once the mounting is complete these rubber strips will help stabilize and cushion the Truck Bed on the truck frame rails.

MOUNTING BRACKETS & BOLTS

Your new Truck Bed comes with an appropriate number of pre-drilled 2 ½” x

3 ½" x ½" angle mounting brackets to mount your Truck Bed to the frame of your truck and may be used for a top or bottom mount. In addition, there are four special brackets with flat bars attached that are to be used only for the front and rear mounts. Because of the variations in Truck Beds/trucks, the required 5/8" bolts (Grade 5 minimum), washers and nylok nuts are not supplied and must be purchased in order to correctly mount the Truck Bed to the truck frame.

MOUNTING THE TRUCK BED TO THE TRUCK FRAME

When followed, the guidelines below will insure that the Truck Bed will stay securely attached to the truck and will not dislocate during normal use.
These mounting procedures are applicable to both sides of the Truck Bed/truck:

FRONT AND REAR RIBS

1. One of the supplied special brackets with a flat bar should be bolted to the frame of the Truck Bed with a 5/8" bolt just behind the front rib as close as possible with a maximum distance of 6" away from the rib. This bracket should be positioned so that the bottom of the flat bar extends below the Truck Bed frame at least 1" to 1½", overlapping the top of the truck frame. (See Figure 1 photo)
2. One regular angle bracket should be bolted to the truck frame right below the special bracket in item 1 with at least ½" clearance between the two brackets. Connect the upper and lower brackets using a 5/8" bolt the appropriate length for the application.

Figure 1-Front Mounting Brackets (typical)

3. One special bracket with a flat bar should be bolted just in front of the rear rib of the Truck Bed as close as possible with a maximum distance of 6” away from the rib. This bracket should be positioned so that the bottom of the flat bar extends below the Truck Bed frame at least 1" to1½”, overlapping the top of the truck frame. (See Figure 2 photo).
4. One regular angle bracket should be bolted to the truck frame right below the special bracket in item 3 with at least ½” clearance between the two brackets. Connect the upper and lower brackets using a 5/8” bolt the appropriate length for the application.

Figure 2-Rear Mounting Brackets (typical)

ALL OTHER RIBS

Upper and lower angle brackets (without the flat bar) must be installed in front of and behind each of the remaining ribs in the same manner as described in items 1~4. Make certain that all the upper and lower angle brackets are no closer than 1/2" from each other (See figure 3 photo). Failure to follow these guidelines can result in the Truck Bed moving off of the truck frame which could cause injury or death.

Figure 3-Center Mounting Brackets (typical)

HYDRAULIC AND ELECTRICAL CONNECTIONS

HYDRAULIC PTO CONNECTION

If your Truck Bed is equipped with a PTO option, a PTO pump is furnished and will be located in a box inside the Truck Bed. No PTO hoses are supplied with customer installed Truck Beds because of the variation in Truck Bed mounting. **It is strongly advised that if your PTO system does not have a pressure relief valve and filter that these items be installed before using your Truck Bed to ensure system protection.**

PTO PUMP PRESSURE LINE

If your Truck Bed has an electric unload system the pressure line from the PTO pump connects to shuttle valve located underneath the electric motor mount. If your Truck Bed does not have an electric unload system the pressure line from the PTO connects to a 3/4" hose (coming from the flow control valve located at the rear of the Truck Bed) terminating at the front of the Truck Bed.

PTO PUMP SUCTION LINE

The suction line from the PTO pump connects to the oil tank regardless if your Truck Bed is equipped with an electric unload system or not.

ELECTRICAL CONNECTIONS

TRUCK BED LIGHTS

Your Truck Bed wiring terminates at the end with a pre-wired 7 way socket plug. A companion 7 way plug is included in the ship loose package and must be wired

into the truck wiring system. Once wired in simply plug both ends together and check your lights for correct operation.

TRUCK BED DC POWER UNITS (If equipped)

In the front of the Truck Bed there are two 4 ga. wires, one red and one black, that power the DC units for the side door and for the rear door. The red wire should be connected to a 12V DC power source via the provided 200 amp breaker and the black wire should be connected to the battery negative post. It is recommended that the 200 amp breaker be installed in the battery box.

TRUCK BED DOOR CONTROLS (If equipped)

Also located in the front of the Truck Bed is a 16-4 wire. Two of the wires are labeled for the side door operation switch and the other two are labeled for the rear door operation switch. Connect the wires to the supplied switches and test for proper door operation.

TRUCK BED CONTROLS AND OPERATIONS

CONTROL LOCATIONS

The controls to operate the rear door are located in the cab and on the driver side rear. The conveyor control is also located on the driver side rear. The switch to control the side door (if equipped) is located inside the truck cab. This unit is designed for use by a single operator.

OPERATING INSTRUCTIONS

1. Make sure area is clear when backing up to equipment. Make sure discharge tail fins are properly aligned with other equipment.
2. Make sure all hydraulic controls are in the off position. (Flow control valve off.)

ELECTRIC

1. Connect pigtail to power source.
2. Switch on the electric motor with the power switch located on the shaft mount.
3. Open rear door slowly, the toggle switch to operate the door is located on the tail fin above the power switch.
4. To operate the conveyor, slowly move the flow control valve handle located on the rear tail fin until the desired speed is obtained.
5. When load has fully discharged, close the flow control handle, turn off the power switch and disconnect pigtail from the power source.

ELECTRIC/PTO OPTION

1. When using the electric unload system refer to operating instructions above.
2. To use the PTO system make sure the electric power switch is in the off position.
3. Engage PTO.
4. Conveyor operation is now controlled with the flow control valve located on the rear tail fin.
5. After load is discharged return the flow control handle to the off position.

ADJUSTING AND LUBRICATING THE CONVEYOR SYSTEM

CONVEYOR CHAIN

Tension on the conveyor chain is adjusted at the front of the bed. The front shaft assembly is spring loaded to keep tension on the chain. As the chain wears, the springs push forward on the bearings to maintain tension.

When the springs become extended too much they must be adjusted by tightening the adjuster nuts against the springs. Do not attempt to compress the spring all the way into the pipe. Adjust both sides of the chain so that the spring is exposed 1" between the washer and spring housing as shown in Figure 4 below.

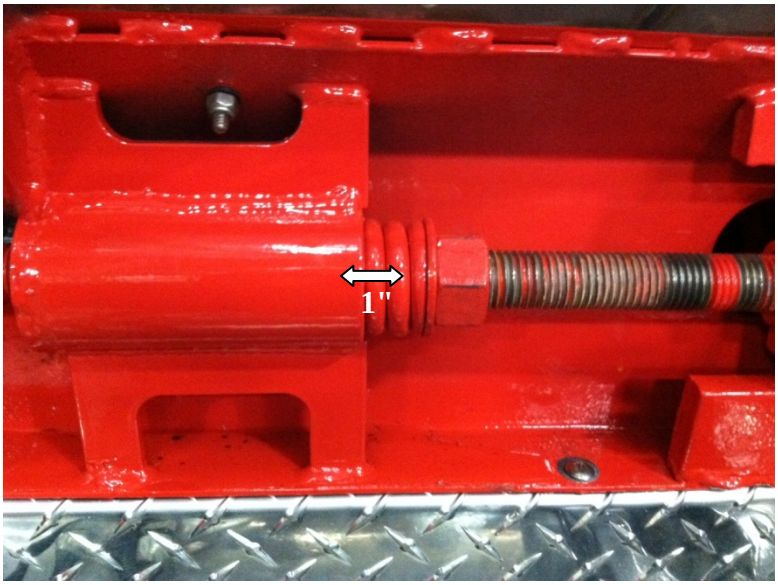

Figure 4 - Chain Adjustment

The conveyor chain must be inspected regularly and lubricated using a high quality oil. Do not use grease. Use Table 1 to determine which grade of lubricant to use based upon the operating temperature.

Temperature (Degree °F)	Recommended Lubricant
-20 to 20	SAE 10
20 to 40	SAE 20
40 to 100	SAE 30
100 to 120	SAE 40
120 to 140	SAE 50

Table 1-Chain lubricant guide

How often the chains need lubrication is dependent upon the amount of use and the type of product carried.

- Under daily use or in harsh environments, daily inspection is required. Lubricate as needed.
- Under all other uses, weekly inspection should be sufficient. Lubricate as needed.
- If a food-grade lubricant is used, you may need to apply it more often. It is your responsibility to determine how often lubrication is required.

WARNING

Attempting to lubricate the chains while they are in motion can result in serious bodily injury or death. Stay clear of the chains while they are in motion. Position the chains and completely disable the hydraulic system before doing any maintenance.

Remember, proper lubrication can extend chain life, reduce down time and save you money.

BEARINGS AND SPROCKETS

The bearings on the front and rear conveyor shafts must be inspected and lubricated at regular intervals using an NLGI Grade 2 general-purpose grease. As with chain lubrication, the amount of lubrication is dependent upon the amount of use.

- Under daily use, daily inspection is required. Lubricate as needed.
- Under all other uses, weekly inspection should be sufficient. Lubricate as needed.
- Inspect sprockets for excessive wear or damage.

WARNING

Attempting to lubricate the bearings while the shaft is rotating can result in serious bodily injury or death. Stay clear of the bearings while they are rotating. Completely disable the hydraulic system before doing any maintenance on the bearings.

CHAIN AND FLAP SERVICE PANELS

Your Truck Bed is equipped with two removable service panels, one on each side at the rear of the Truck Bed (See Figure 5 photo). By removing these panels you may service the chain and/or flaps. Please remember to re-install the service panels when service is complete:

Figure 5 - Service panel

PLANETARY GEARBOX

When using the planetary gearbox under normal temperature ranges between 0-120 °F, the gearbox is to be half full of SAE 80/90 oil. Use the lower of the two plugs to check the level of the oil on 48" belt Truck Beds and on 25" and 31" belt Truck Beds use the 1/8" plug. Oil is to be changed after the first 50 hours of operation with subsequent changes every 1000 hours or yearly, whichever comes first.

NOTE
There is absolutely no warranty, expressed or implied, on the chain or drive system if the system is not maintained properly, is misused or is overloaded. This includes, but is not limited to the hauling of corrosive materials such as fertilizer, sludge, brewer's mash or corn gluten.

LUBRICATION OF THE DOOR(S)

Door hinges and bearings must be lubricated regularly, especially if the Truck Bed has been operated or stored for an extended period of time in a humid or wet environment. Corrosion can lead to the failure of door hinges if they are not maintained properly. As a general rule with the rear and side doors, as with the entire Truck Bed, “if it moves, lubricate it.” Use an NLGI Grade 2 general-purpose grease on all shafts and grease zerks.

The seals on most doors should have silicone grease or spray-on lubricant applied to them once every three months. This will help them last longer and will help them provide a better seal. During cold, damp weather or under heavy use, apply the grease more frequently.

DOOR OPERATIONS

OPENING THE UPPER REAR DOOR (Spud Door)

The upper rear door has a slam latch on the passenger side. It has the door operator rope on the driver’s side.

To open the rear door, pull on the rope that is attached to the slam latch. This will release the door. Lower the door down into the Truck Bed with the door operator rope.

CLOSING THE UPPER REAR DOOR (Spud Door)

Pull on the door operator rope to raise the door into place. When the door is almost closed, give the rope a quick jerk to slam the door. The spring loaded latch will hold the door closed.

Tie off both ropes on the provided rope hook.

SIDE DOOR OPERATION

The side door is operated by a switch generally located on the dashboard of the truck. The door will function in either the opening or closing motion as long as the switch is held in that position.

CARE OF THE PLASTIC LINER

HIGH MOLECULAR WEIGHT (HWM) AND ULTRA-HIGH MOLECULAR WEIGHT (UHMW) LINER

The plastic liner under the chain (and on the slopes, if applicable) must be inspected for damage and wear. Replace the liner if it is worn through at any

spot. If any foreign material should become lodged between the liner and the body of the Truck Bed, remove it by blowing or vacuuming it out.

CAUTION Use eye protection when using air to blow material from underneath the liner to help prevent injuries from flying particles.

WARNING Getting inside the Truck Bed with the door(s) closed or the hydraulic system energized can result in serious injury or death. Open door(s) and disable all hydraulic systems before entering the Truck Bed.

COATING CARE AND CORROSION PREVENTION

Your Truck Bed is coated with a high-performance polyurethane paint. This paint is designed to give you durable performance in the rugged environments encountered by your Truck Bed.

The best way to preserve the finish on your Truck Bed and help prevent corrosion is to wash it regularly, especially after it has been used around road salt or other ice melting agents, road oil or tar, or any other potentially corrosive material. Use warm water with a mild detergent and allow the Truck Bed to air dry. Use of abrasive or caustic cleaning agents will void the paint warranty. Hauling corrosive products such as salts and fertilizers will also void the paint warranty.

Small nicks or chips in the paint can occur with normal use. Any chips or scratches in the finish should be repaired with matching touch-up paint. This is especially important for carbon steel Truck Beds, as even small areas of bare metal can corrode quickly. The cost of repairing any chips is the responsibility of the owner.

Removal or disrepair of mud flaps on either the truck or the Truck Bed will void the paint warranty. Frequent use of the Truck Bed on gravel roads will also void the warranty.

STAINLESS STEEL BODIES

Truck Beds with stainless steel bodies require the same care as painted Truck Beds. Regular washings to remove road grime and remnant corrosive material will help maintain the finish and help prevent corrosion. Use warm water with a mild detergent and allow the Truck Bed to air dry. Use of abrasive cleaning agents will dull and scratch the finish. Use of carbon steel utensils will result in surface contamination.

It is particularly important to rinse off the Truck Bed after hauling any material containing chlorides as prolonged contact with chlorides may dull the finish and leave it subject to pitting.

Carbon contamination of stainless steel will cause localized rust spots. The breakdown of the carbon on the surface of stainless steel does not affect the structural integrity of the Truck Bed.

CLEANING THE INTERIOR

If product accumulates underneath the chain and flaps, it can usually be removed by lifting each flap and vacuuming, sweeping or blowing the material out. **Under no circumstances should you get into the Truck Bed with the conveyor system running or enabled (See Figure 6). For your safety, completely disable the hydraulic system before entering the Truck Bed (See Figures 6a, 6b and 6c).**

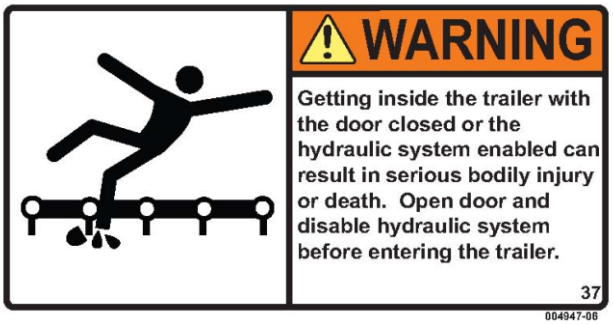

Figure 6-Entry into Trailer Decal

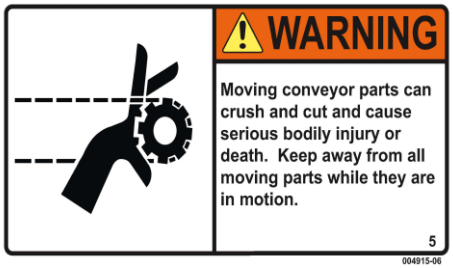

Figure 6a-Moving Conveyor Parts Decal Parts Decal

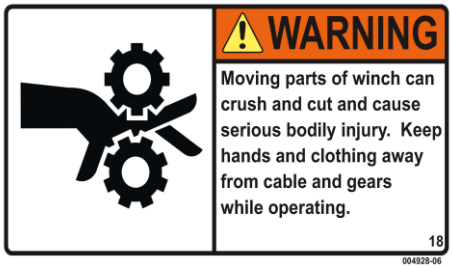

Figure 6b-Moving Winch

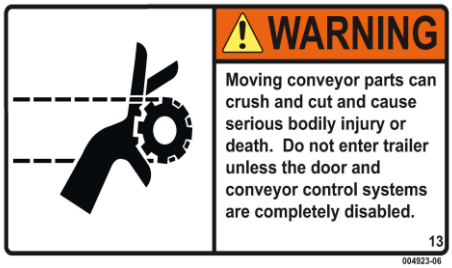

Figure 6c-Moving Conveyor Parts Decal