

# **COTTRELL, INC.**



## **OPERATOR'S MANUAL FOR CAR-HAULING EQUIPMENT**

### **TWO CAR CARRIER**

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**2125 Candler Road  
Gainesville, GA 30507**

**(770) 532-7251**

**(800) 827-0132**

**[www.cottrelltrailers.com](http://www.cottrelltrailers.com)**

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## INTRODUCTION

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Thank you for selecting the Cottrell Two Car Carrier (the “Carrier”). The design and construction of your Carrier reflects Cottrell’s concern for precision, efficiency and, above all, safety.

This Manual has been prepared to acquaint you with various aspects of service, maintenance and operation. It explains various features and controls that should be familiar to the operator before attempting to operate the Carrier. **THIS MANUAL SHOULD BE KEPT WITH THE CARRIER AT ALL TIMES FOR REFERENCE. THE MANUAL IS PART OF THE CARRIER AND SHOULD STAY WITH THE CARRIER IN THE EVENT OF SALE.**

Text, illustrations and specifications in this Manual are based on information available at the time of printing. Cottrell reserves the right to make changes to this Manual at any time without notice. You are encouraged to contact Cottrell directly if additional maintenance information or assistance is needed. To receive the most-recent updates and revisions to this Manual, please contact Cottrell, Inc. at 1-800-827-0132 or refer to our website at [www.cottrelltrailers.com](http://www.cottrelltrailers.com).

Proper operation, service and maintenance are important to the safety and reliability of all motor vehicles. The information contained in this Manual is provided as a reference for systems and components that require periodic service. The intervals provided are manufacturer’s recommendations and should be considered maximum intervals. Actual operating conditions must be considered and maintenance intervals adjusted accordingly.

Any time a system or component does not perform satisfactorily, corrective service should be performed at once.

**NOTE: Throughout this Manual are warnings to use only Cottrell-supplied replacement parts. Use of non-Cottrell supplied replacement parts may create hazards in operation that may result in injury to the operator or other personnel, and may void the Limited Warranty offered by Cottrell on all new Two Car Carriers.**

Familiarity with automobile operation and controls is assumed to be common knowledge to anyone who will be operating this Carrier. This Manual is to be utilized in conjunction with the manuals provided separately by the Truck manufacturer, the winch manufacturer (if equipped) and the curtain manufacturer (if equipped).





**NOTE: Do not attempt to operate this Carrier without: (1) thorough knowledge of all instruments and controls; (2) direct supervision, or hands-on training in this or similar Two Car Carriers under direct supervision; and (3) an appropriate license or permit to operate. The operator should read this Manual, as well as the manuals supplied by the Truck manufacturer, the winch manufacturer (if equipped) and the curtain manufacturer (if equipped) before attempting to operate this Carrier.**

## FOREWORD

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This Operator's Manual provides some general and specific information regarding safe operation and maintenance of your Carrier. It does not address all items or situations that may arise, and it is not a substitute for proper driver and mechanic training. Exercise of care, common sense, and good driving habits and practices are necessary for safe operation.

Some information will be especially important as you read this Manual. It will be highlighted in the following manner:

 <b>DANGER</b>	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
 <b>WARNING</b>	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
 <b>CAUTION</b>	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
 <b>NOTICE</b>	Indicates a situation that, if not avoided, could result in property damage.

It is the operator's responsibility to ensure that all components on the Carrier are in proper working condition. The Carrier should be inspected prior to each use as set forth in this Manual.

You should also have received with your Carrier operator's manuals from the Truck manufacturer, the winch manufacturer (if equipped), and the curtain manufacturer (if equipped). If you failed to receive such manuals, contact the appropriate manufacturers or their dealers immediately to obtain the necessary manuals.

Cottrell welcomes your comments and suggestions regarding this Manual. Please write to:

Cottrell, Inc.  
Attn: Sales Publications - Manual  
2125 Candler Road  
Gainesville, GA 30507

**NOTE: PLEASE READ THIS MANUAL AND THE MANUALS PROVIDED BY THE TRUCK MANUFACTURER, THE WINCH MANUFACTURER (IF EQUIPPED), AND THE CURTAIN MANUFACTURER (IF EQUIPPED) CAREFULLY BEFORE OPERATING YOUR CARRIER.**

## **REPORTING SAFETY DEFECTS**

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If you believe that your Carrier has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Cottrell, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Cottrell, Inc.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to <http://www.safercar.gov>; or write to:

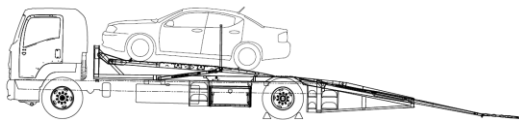
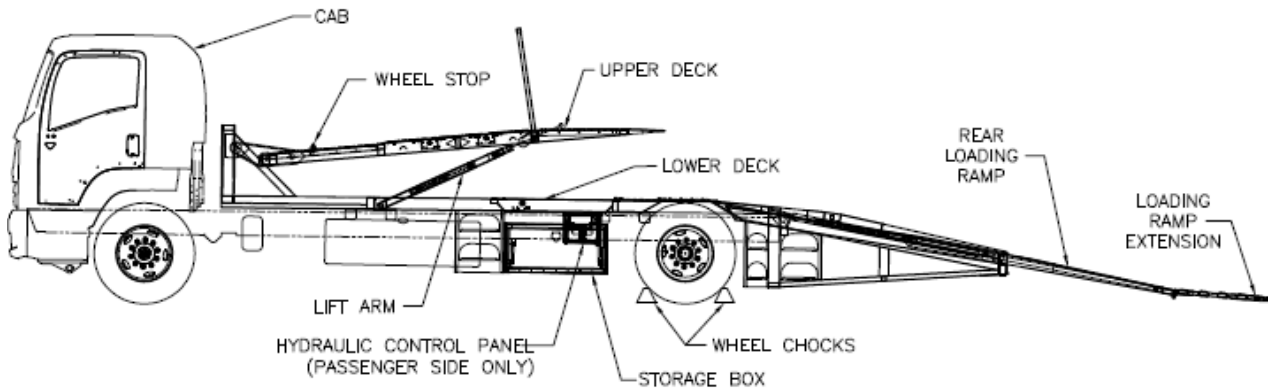
Administrator  
NHTSA  
1200 New Jersey Avenue SE  
West Building  
Washington, DC 20590

You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

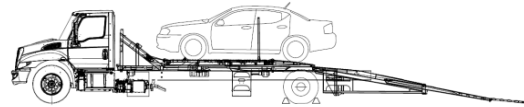
# **CARRIER DIAGRAM AND PARTS IDENTIFICATION**

The **Identification Plate** certifies that your Carrier conforms to all applicable Federal Motor Vehicle Safety Standards in effect on the date of manufacture. Do not remove or deface the plate. The plate is located on the driver's side of the Carrier.

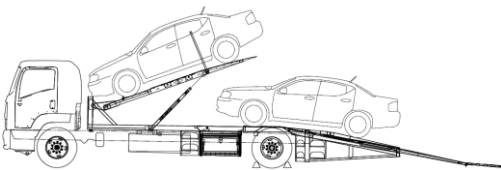
## **CARRIER DIAGRAM AND PARTS IDENTIFICATION**



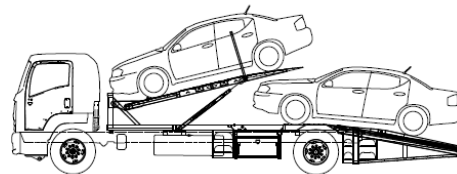
**Deck Position to Load/Unload Front Cargo Vehicle on Standard Unit**



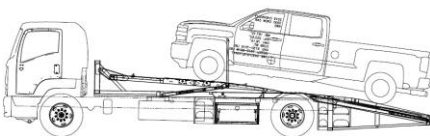
**Deck Position to Load/Unload Front Cargo Vehicle on XL Unit**



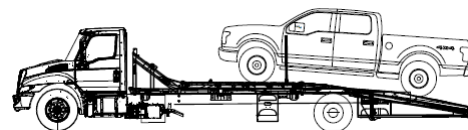
**Deck Position to Load/Unload Rear Cargo Unit**



**Two Car Transport Position**



**One Car Transport Position: Standard Unit**



**One Car Transport Position: XL Unit**

## GENERAL WARNINGS AND INSTRUCTIONS

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### **DANGER**

**Never operate hydraulic controls with any part of your body, other than your hand, or anyone on or inside the Carrier. Always operate controls standing outside of the Carrier with both feet on the ground.**

**Failure to comply with these Instructions could result in death or serious injury.**



### **DANGER**

**Never operate Pendant Control with anyone on the Carrier. Always operate controls standing outside of the Carrier with both feet on the ground.**

**Failure to comply with these Instructions could result in death or serious injury.**

### **Operator Precautions**

1. Refer to Cottrell Operator's Manual before operating the Carrier.
2. Do not wear loose fitting clothing or jewelry while operating the Carrier. It can become caught on the structure, on the Cargo Vehicle, on the winch drum (if equipped) or in moving parts of the Carrier.
3. Keep hands, limbs, loose articles and clothing away from moveable objects, including the hydraulic lift, while hydraulic system is operating. Hands, limbs and other body parts can be injured when caught between a moving and fixed part, or drawn into a moving object by loose articles or clothing, resulting in personal injury.
4. Always wear full-toed, rubber-soled shoes while operating the Carrier, and ensure that shoes are in proper condition with adequate soles. Do not wear sandals, flip flops, tennis shoes, or leather-soled shoes or boots. Inspect your footwear periodically, including the soles, to ensure they are in proper condition.
5. Always wear gloves while operating the Carrier. Your hands can be injured from contact with the Carrier during operation.
6. Stand clear of Deck and ensure other persons and property are clear of Deck before operating hydraulic system.
7. Do not operate hydraulics unless parking brake is engaged and rear tires are chocked in front of and behind the tires, using the four (4) wheel chocks provided with the Carrier.



8. Do not walk on Deck to load or unload Cargo Vehicle.
9. Always maintain three (3) points of contact while ascending and descending from the Deck or otherwise moving about on the Carrier. This means two (2) feet and one (1) hand, or two (2) hands and one (1) foot.
10. Never use Cargo Vehicle door handle or other moveable object as a point of contact.
11. Ensure Decks are properly locked prior to loading/unloading/transporting Cargo Vehicles.
12. Read all decals, warnings and instructions on the Carrier prior to operation.
13. Stand clear of Cargo Vehicle and Decks and ensure other persons and property are clear of Cargo Vehicle and Decks before operating Pendant Control.
14. Do not operate Pendant Control when on the Carrier.
15. Refer to winch Operator's Manual and all posted warnings and instructions before operating the winch (if equipped).
16. Refer to curtain manufacturer instructions before operating curtain (if equipped).

### **Equipment – General**



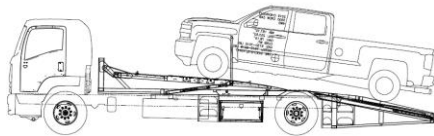
## **WARNING**

**Understanding your load and awareness of the room for maneuvering are necessary for safe operation, consistent with the information provided in this Manual.**

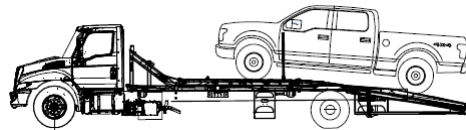
**Failure to comply with these Warnings and Instructions could result in death or serious injury.**

1. Refer to Cottrell Operator's Manual before operating the Carrier.
2. Observe all DANGER, WARNING and CAUTION decals.
3. Inspect the Carrier prior to each use to ensure all components are in proper operating condition. Equipment not in proper operating condition can result in unexpected hazards and injury during operation of the Carrier.
4. Parking Brakes must be set at all times the Carrier is not in transport mode. Movement of the Carrier after stopping, during loading or unloading can trap a person or body part and result in serious personal injury.
5. If the ABS warning light on the instrument panel illuminates, it may be an indication of the wheel end prematurely wearing out. All ABS system warnings need to be investigated as soon as possible.
6. Do not operate the Carrier without all factory-installed guard devices in place. Moving parts can injure you if the guard is not in place.
7. Use only Cottrell-supplied replacement parts. Use of non-Cottrell supplied replacement parts may create hazards in operation resulting in injury to the operator or other personnel.
8. Comply with additional warnings and instructions contained on component parts.
9. Do not use a Carrier that has not been properly maintained. Make sure mounting bolts are tight and check hydraulic system for leaks.

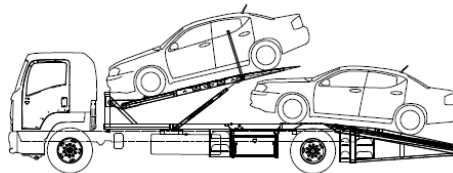
10. Do not operate the engine faster than recommended. Excessive speeds can damage the power take-off (PTO) and hydraulic pumps.
11. NEVER travel with the PTO engaged. Damage to the Carrier's transmission and hydraulic components may occur. Engage the PTO only when operating the controls.
12. Ensure you are clear of oncoming traffic. Passenger side controls are standard on the Carrier.
13. Stay clear of moving equipment to avoid pinching injury.
14. NEVER permit bystanders in the area while performing a lift. Keep them clear of the danger zone.
15. When loading or unloading the Cargo Vehicle, make sure the area behind the Deck is clear of personnel and obstacles.
16. Do not step on any surface labeled "No Step."
17. Use ladder provided to access curtain latches (if equipped).
18. NEVER allow passengers in the Cargo Vehicle during loading, unloading or transport.
19. Keep alert. Do not be distracted during any operating sequence.
20. NEVER work behind the Carrier with a Cargo Vehicle on the Deck unless all four (4) wheels are properly secured with straps.
21. Do not drive or otherwise move the Carrier (loaded or unloaded) unless the Deck is in Transport Position.



**One Car Transport Position  
On Standard Unit**



**One Car Transport Position  
On XL Unit**



**Two Car Transport Position for Standard Unit and XL Unit**

22. Review the Operator's Pre-Trip Inspection Checklist each time before you transport a Cargo Vehicle.
23. Check winch (if equipped) to ensure it is operating properly.
24. When performing maintenance, Carrier should be turned off and emergency brake set. Never perform maintenance under a loaded Deck. Maintenance should be performed inside a shop using a hoist or other support for the Deck. Failure to follow this warning could result in the Deck inadvertently falling, causing serious equipment damage, personal injury or death.
25. Do not exceed the factory pressure setting on the hydraulic system as set forth on the Warning label on your Carrier. Exceeding this setting can result in failure of the system components and possible injury to the operator or other personnel. See diagram below.

## PSI WARNING



WARNING: FAILURE TO COMPLY WITH THIS WARNING MAY RESULT IN SERIOUS INJURY AND DEATH.

1. REFER TO OPERATOR'S MANUAL BEFORE OPERATING THIS CARRIER.
  2. INSPECT ALL EQUIPMENT PRIOR TO EACH USE TO ENSURE EQUIPMENT IS IN PROPER OPERATING CONDITION.
  3. KEEP HANDS, LIMBS, LOOSE ARTICLES, & CLOTHING AWAY FROM MOVABLE OBJECTS WHILE HYDRAULIC SYSTEM IS OPERATING & ENSURE OTHER PERSONS & PROPERTY ARE CLEAR BEFORE OPERATING HYDRAULICS.
  4. **DO NOT EXCEED 2250 P.S.I. ON HYDRAULIC SYSTEM PRESSURE SETTING.**
  5. DO NOT OPERATE HYDRAULICS UNLESS THE PARKING BRAKE IS ENGAGED & REAR TIRES ARE CHOCKED IN FRONT OF AND BEHIND THE TIRES.
  6. DO NOT WALK ON DECKS TO LOAD OR UNLOAD CARGO VEHICLES.
  7. USE ONLY LADDERS/STEPS PROVIDED AND AREAS WITH NON-SKID SURFACE TO ASCEND AND DESCEND FROM THE CARRIER AND WHEN MOVING ABOUT ON THE UNIT.
  8. ALWAYS MAINTAIN 3 POINTS OF CONTACT WHILE ASCENDING OR DESCENDING FROM THE DECK OR OTHERWISE MOVING ABOUT ON THE CARRIER. THIS MEANS 2 FEET & 1 HAND OR 2 HANDS AND 1 FOOT.
  9. NEVER USE CARGO VEHICLE DOOR HANDLE OR OTHER MOVEABLE OBJECT AS A POINT OF CONTACT.
26. Check the valve plate(s) on your Carrier for proper operating instructions.
  27. Always maintain three (3) points of contact with the Carrier and/or the Cargo Vehicle to ensure proper balance while moving about on the Carrier. Never use the door handle of a Cargo Vehicle as a point of contact.
  28. Non-skid areas should be kept clean and free of oils and debris. Non-skid surfaces are subject to wear. Inspect them regularly. You can slip and fall from surfaces not properly maintained and be seriously injured.

### **Load Capacity**

1. Know the loads being moved. NEVER OVERLOAD!
2. Become familiar with the loads that the Carrier can safely transport without exceeding the structural rating of the Carrier or the gross axle weight ratings and gross vehicle weight rating of your Carrier.
3. NEVER exceed the axle ratings of your Carrier.
4. NEVER exceed the rated capacity of the Carrier and its components.

### **DO NOT EXCEED THE FOLLOWING RATINGS:**

**GROSS COMBINED WEIGHT RATING (GCWR) - THE VALUE SPECIFIED BY THE TRUCK MANUFACTURER AS GCW.**

**GROSS COMBINED WEIGHT (GCW) - ACTUAL WEIGHT OF THE CARRIER INCLUDING CARGO VEHICLE, DRIVER, PASSENGER AND FUEL (EVERYTHING THAT MOVES WITH THE CARRIER).**

**NOTE: Load capacity might be limited by the axle rating and gross vehicle weight rating of the Carrier.**

The payload and load capacity of the Carrier must meet the following:

- The total weight of the Carrier (cab chassis, Carrier structure, driver, passenger(s), tools, fuel, etc.) and the Cargo Vehicle must not exceed the GVWR (Gross Vehicle Weight Rating) of the Carrier.
- The total weight of the Carrier and Cargo Vehicle must be distributed so that each axle's GAWR (Gross Axle Weight Rating) is not exceeded.

Staying within these ratings is necessary to maintain the safety and performance of the Carrier.

**CHECK TRUCK MANUAL FOR SPECIFIC GVW & AXLE RATINGS. ALSO LOOK AT THE CERTIFICATION DECAL AFFIXED TO DRIVER'S SIDE DOOR JAMB.**

**CHECK WINCH MANUAL FOR SPECIFIC RATINGS (IF EQUIPPED).**

Staying within these ratings is necessary to maintain the safety and performance of the Carrier.

### Wheel Straps



## **DANGER**

**Use four (4) wheel straps, one (1) on each tire, to secure Cargo Vehicle for transport. Failure to follow this instruction could result in detachment and loss of Cargo Vehicle during transport, which could result in death or serious injury to the operator and/or the motoring public.**



## **WARNING**

**Failure to comply with these Warnings and Instructions could result in death or serious injury.**

1. Use only Cottrell-supplied wheel strap and hook assemblies. Non-Cottrell strap and hook assemblies may fail during securement, releasing or during transport and result in personal injury and/or cargo damage.
2. Inspect wheel straps before each use for wear. Refer to the enclosed strap care and maintenance guide for inspection procedures. Do not use any wheel strap that is fraying or showing signs of excessive wear. See examples of Damaged Straps (Synthetic Web Tie Downs) in the Figures below.
3. Inspect wheel straps to ensure that protective sleeves and cleats are in place. Do not use wheel strap if protective sleeves or cleats are missing or damaged.
4. Store wheel straps in the storage box provided on the side of the Carrier when not in use. Failure to store wheel straps properly could result in premature wear, damage or unexpected failure.



Photo: Storage Box

5. Do not drive over wheel straps or hooks with Cargo Vehicles. Failure to follow this instruction could result in premature wear, damage or unexpected failure.
6. Install and remove all wheel straps while standing on the ground in an adequate posture and balanced position.
7. Install and remove wheel straps while Deck is in the proper Loading/Unloading Position. **Refer to Hydraulic Deck – Position Deck to Load/Unload section below.**
8. Ensure wheel straps are lying flat (not twisted) and running in a straight line from the ratchet shaft to the tire. Failure to follow this instruction may cause wheel straps to become loose during securement or transport, or could result in premature wear, damage or unexpected failure.
9. Position protective sleeves over wheel strap as needed to prevent abrasion, which can lead to premature wear, damage or unexpected failure.
10. Do not use excessive force to secure Cargo Vehicle. Using excessive force to tighten wheel straps may lead to premature wear to the strap and assembly, damage to the Cargo Vehicle, or unexpected failure of the straps, and could result in personal injury. For the purpose of this warning, “excessive force” means more force than is necessary to adequately and properly secure the Cargo Vehicle to the Carrier. Apply only the force necessary to adequately and properly secure the Cargo Vehicle to the Carrier in compliance with the Cargo Vehicle manufacturer’s specifications and this Manual.
11. Do not overtighten wheel straps. Overtightening may lead to premature wear of the strap and assembly, damage to the Cargo Vehicle, or unexpected failure of the straps, and could result in personal injury. For the purpose of this warning, “overtightening” means applying more force than is necessary to adequately and properly secure the Cargo Vehicle to the Carrier. Apply only the force necessary to adequately and properly secure the Cargo Vehicle to the Carrier in compliance with the Cargo Vehicle manufacturer’s specifications and this Manual.
12. Wheel straps should never be so tight as to cause the tire sidewall to bulge. If the tire sidewall starts to bulge, **STOP IMMEDIATELY**, release the tension on the wheel strap (see procedures for releasing in this Manual), and start the securement process again.
13. Do not twist the wheel strap during the securement process.
14. Affix hooks as close to the tire as possible to prevent tire movement.

## FIGURES - DAMAGED SYNTHETIC WEB TIE DOWNS

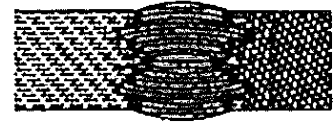
**Figure 1**  
Holes, Tears  
Cuts, Snags



**Figure 2**  
Broken Or Worn Stitching  
In Load Bearing Sew  
Patterns



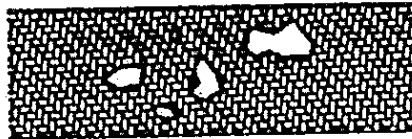
**Figure 3**  
Excessive  
Abrasive Wear



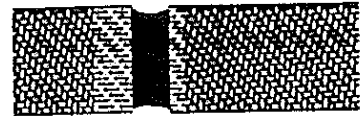
**Figure 4**  
Knots In The  
Tie Down



**Figure 5**  
Melting Or Charring  
Of The Tie Down,  
Or Weld Spatter  
On The Tie Down



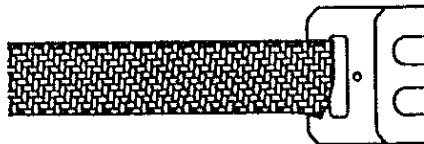
**Figure 6**  
Chemical  
Burns



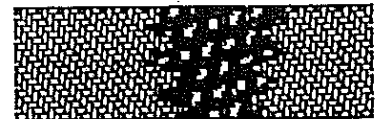
**Figure 7**  
Damaged Loop,  
Eye Hook Too  
Small Or Too Rough



**Figure 8**  
Tear In Webbing  
At The Fitting



**Figure 9**  
Other Apparent Damages  
That May Affect Strength  
Ratings; Such As Crushed  
Webbing, Etc.



\* THESE GRAPHICS WERE DEVELOPED AND PROVIDED BY THE WEB SLING AND TIE DOWN ASSOCIATION (WSTDA). COPYRIGHT 2005 BY WSTDA.

## Proper Jacking Procedures for Jacking the Carrier



**DANGER**

**Failure to follow these instructions could result in death or serious injury.**

1. The Carrier must be on a hard level surface capable of supporting the rated load capacities of both the jack and jack stands. If the ground is too soft or uneven, the Carrier must be moved to an area with a suitable surface for the jack and jack stands.
2. Apply parking brake.
3. Secure the Carrier using four (4) wheel chocks provided with the Carrier to ensure that the Carrier cannot move forwards or backwards. Place wheel chocks on the opposite side from the working position whenever possible.
4. Jacks are designed to lift the Carrier, not support its weight. A Carrier that is supported solely by a jack without a jack stand is extremely dangerous and poses a serious risk to persons on or under the Carrier. After lifting, the Carrier must be immediately supported by a jack stand.
5. Never work under Carrier supported solely by a jack.
6. Never move or dolly Carrier with a jack.
7. Jacks and jack stands must be of sufficient capacity to support their intended load. A fully loaded Carrier will require jacks and jack stands rated for a minimum of the GVWR.
8. Inspect jacks and jack stands before each use. Do not use if broken, bent, cracked, or damaged in any way.
9. **Refer to manual supplied by the Truck manufacturer for proper lift points and jack/jack stand placements and additional jacking instructions.**

## INITIAL INSPECTION OF THE CARRIER

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### **WARNING**

**Upon receipt of the Carrier, all brakes must be checked for proper adjustment. Failure to comply with this instruction could result in death or serious injury.**



### **CAUTION**

**Upon receipt of the Carrier, the following items should be checked and repairs or adjustments made according to the Truck manufacturer's and Carrier's specifications. Failure to follow this instruction could result in minor or moderate injury.**



### **NOTICE**

**Upon receipt of the Carrier, the following items should be checked and repairs or adjustments made according to the Truck manufacturer's and Carrier's specifications. Failure to follow this instruction could result in property damage.**

1. Check for proper oil level in all wheel hubs, if applicable.
2. Check wheel nuts for tightness.
3. Check tire inflation for correct pressure while tires are cool.
4. Check torque on bolts that attach hydraulic oil tank. See Torque Chart in Appendix A.
5. Check torque on suspension U-bolts and all attaching bolts on suspension. See Torque Chart in Appendix A.
6. Check all lights, reflectors and conspicuity tape for presence and proper function.
7. Check hydraulic system for proper operation and inspect for leaks.
8. Check for proper hydraulic fluid level.
9. Check battery cables to ensure no chafing, loose or shorted connections and ensure proper installation of hold-downs.
10. Check for air leaks and chafing of air hoses.
11. If Carrier is equipped with a back-up alarm, ensure that alarm is operating properly.
12. Check for proper brake adjustment.
13. Ensure proper maintenance on Carrier axles. Refer to specific maintenance instructions and other materials from the axle supplier.



## **PRE-TRIP INSPECTION OF THE CARRIER**

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### **Equipment – Structure and Surfaces**

The pre-trip inspection, which must be performed before each trip with the Carrier, should include the following items:



### **WARNING**

**Failure to comply with these Warnings and Instructions could result in death or serious injury.**

1. Check structure, Deck, tie downs and suspension for cracks, loose or missing parts and proper friction on walking/working surfaces.
2. Check fiberglass for damage, and do not use if damaged.
3. Check all walking/climbing surfaces for adequate friction material and repair or replace as necessary.
4. Inspect Carrier for the presence of ice or snow. Do not attempt to load or unload Carrier if ice or snow is present on the Deck. Use available means to remove ice or snow before proceeding.
5. Check for any fluids, debris or other contaminants on Decks. If found, identify the source, correct the problem, and clean up any residue prior to operating the Carrier.

### **Equipment – General**

The pre-trip inspection, which must be performed before each trip with the Carrier, should include the following items:



### **WARNING**

**Failure to comply with these Warnings and Instructions could result in death or serious injury.**

1. Check for proper oil level in all wheel hubs, if applicable.
2. Check all lights, reflectors and conspicuity tape for presence and proper function. Repair or replace as necessary.
3. Check brakes for proper adjustment, broken drums, or missing parts.
4. Check all tires for flats or unusual appearance such as tread beginning to separate, “knots” on sidewall, or unusual tread wear pattern.
5. Check for signs that wheels or brakes have overheated. Look for discoloration of hub or hubcap, deformation of hubcap, blistering of tires, etc.
6. Check wheel nuts for tightness.
7. Check that parking brakes are in proper operating condition.
8. Check for air leaks and chafing of air hoses. Repair or replace as necessary.

9. If Carrier is equipped with a back-up alarm, ensure that alarm is operating properly.
10. Check hydraulic system for proper operation and inspect for leaks. Repair or replace components as necessary.
11. Check the winch cable/synthetic rope, for kinks, frays or a build-up of rust (if equipped). Repair or replace as necessary.

### **Securement Wheel Straps**

The pre-trip inspection, which must be performed before each trip with the Carrier, should include the following items:



## **WARNING**

**Failure to comply with these Warnings and Instructions could result in death or serious injury.**

1. Check all wheel straps for damage or excessive wear and replace as necessary. (Refer to sections on wheel straps for additional instructions).
2. Check all securement ratchet shafts for proper operation of quick-release mechanism and for signs of excessive wear. Replace as necessary.
3. Do not insert a strap securement hook into any Deck pooch or hole or wheel stop hole that shows signs of cracking or other damage. Replace any decking or wheel stop that shows signs of cracking or other damage through or around pooch holes or securement holes.

## LOADING AND UNLOADING VEHICLES

### I. Drive/Back-On Loading/Unloading Procedure: Standard and XL Units

#### Drive/Back-On Operator Precautions

**NOTE: CARGO VEHICLES MAY BE LOADED USING WINCH (IF EQUIPPED) IN THE FRONT POSITION ONLY, REAR POSITION ONLY, NEITHER FRONT NOR REAR POSITION OR IN BOTH THE FRONT AND REAR POSITIONS OF THE CARRIER. REFER TO WINCH LOADING/UNLOADING PROCEDURE SECTION BELOW, AS NEEDED. DO NOT EXCEED THE STRUCTURAL RATING OF THE CARRIER OR THE GROSS AXLE WEIGHT RATINGS AND GROSS VEHICLE WEIGHT RATING OF THE CARRIER.**

The safe operation of your Carrier is your responsibility. You can be held legally responsible for any injuries or damage caused by the unsafe operation of your Carrier. If you follow our instructions, you will operate the Carrier properly.

Always know the weight distribution of your load and ensure you are within your Carrier's Gross Axle Weight Rating (GAWR) and Gross Vehicle Weight Rating (GVWR) as well as any federal or state regulations. In addition, be aware of your Carrier's overall loaded height to be sure that you are under the federal bridge law height of 13 feet 6 inches.



### **DANGER**

**Do not transport vehicles if proper height clearances are not attained. If all vehicles are properly secured and positioned yet appropriate height clearance cannot be attained, reposition vehicles or remove one or more vehicles from the load in order to attain proper height clearances. Failure to follow this instruction could result in a collision with bridges or other structures and loss of vehicles during transport, which may result in death or serious injury to the operator and/or the motoring public.**



### **WARNING**

**Failure to comply with these Warnings and Instructions could result in death or serious injury.**

1. Refer to Cottrell Operator's Manual before operating the Carrier.
2. Stay clear of moving Deck to avoid crushing injury.

3. Set the parking brake on the Carrier. Failure to do so prior to beginning the loading or unloading process may result in death or serious injury.
4. Do not operate hydraulics unless parking brake is engaged and rear tires are chocked in front of and behind the tires, using the four (4) wheel chocks provided with the Carrier.
5. Always maintain three (3) points of contact while moving about on the Carrier. This means two (2) feet and one (1) hand or two (2) hands and one (1) foot. Failure to maintain three points of contact may cause you to lose your balance and fall.
6. Never use the door handle of a Cargo Vehicle as a point of contact.
7. Never lie down on the Carrier to affix or remove straps. Lying on the Deck may allow you to roll off the side of the Carrier causing injury.
8. Keep hands and other body parts and loose clothing away from moveable objects while hydraulic system is operating.
9. When loading and unloading vehicles in conditions of ice or snow, remove ice and snow from Deck before operating the Carrier. If you believe the Cargo Vehicle is going to slide or fall off the Carrier, stay inside the Cargo Vehicle and lean away from the point of impact. Do not attempt to exit the Cargo Vehicle if you believe it is sliding or falling off the Carrier, as the Cargo Vehicle may fall on you, resulting in serious injury or death.
10. Do not step on any surface labeled "No Step."
11. Be sure areas are clear of personnel before operating the hydraulic system. NEVER permit bystanders in the area while performing a lift. Keep them clear of the danger zone.
12. DO NOT walk on Deck to load or unload Cargo Vehicles. Use only ladders/steps and areas with non-skid surface to ascend or descend from the Carrier and when moving about on the Equipment.
13. Drive slowly and carefully when driving Cargo Vehicles on and off the Carrier. In the event you drive the Cargo Vehicle off the side or over the edge of the Carrier, or if you believe the Cargo Vehicle is going to slide or fall off the Carrier, do not attempt to jump out of the Cargo Vehicle. Stay inside the Cargo Vehicle and lean away from the point of impact. Do not attempt to exit the Cargo Vehicle if you believe it is sliding or falling off the Carrier, as the Cargo Vehicle may fall on you, resulting in serious injury or death.
14. Take care entering and exiting the Cargo Vehicle while it is loaded on the Carrier. Be careful not to slip, trip, stumble or hit your head.
15. When approaching a Cargo Vehicle to unload it, be careful not to open the door into yourself, as you may lose your balance and fall from the Carrier causing injury. Never use the door handle of a Cargo Vehicle as a point of contact.
16. When positioning a Cargo Vehicle on the Deck, proceed with extreme caution and comply with the Loading Procedures set forth below. Continuing to drive the vehicle past the front end of the Deck could result in damage to the Carrier or Cargo Vehicle.
17. Ensure Decks are properly locked prior to loading/unloading/transporting Cargo Vehicles.
18. After loading the Cargo Vehicle and before exiting the Cargo Vehicle, place the Cargo Vehicle's transmission into Park and set the parking brake or otherwise secure the Cargo Vehicle.

19. Confirm the Deck is in Loading/Unloading Position prior to releasing the Cargo Vehicle's parking brake and unloading the Cargo Vehicle.
20. Be aware that axle weights will change as you load and unload cargo. Reposition Cargo Vehicle as needed to maintain proper axle weights.
21. Park the Carrier on a firm, level surface to load and unload Cargo Vehicles.
22. Watch for traffic while loading and unloading Cargo Vehicles.

### **Equipment – Structure and Surfaces**

 <b>WARNING</b>
<b>Failure to comply with the following Warnings and Instructions could result in death or serious injury.</b>

1. Check structure, Deck, tie downs and suspension for cracks, missing parts and proper friction on working surfaces, and send to shop for replacement as necessary.
2. Inspect Carrier for the presence of ice or snow. Do not attempt to load or unload Carrier if ice or snow is present on the Deck or climbing surfaces. Use available means to remove ice or snow before proceeding.
3. Check for any fluids, debris or other contaminants on Deck. If found, identify the source, correct the problem, and clean up any residue prior to proceeding.

## Drive/Back On Loading Procedure: Standard and XL Units

Note: If winch loading a Cargo Vehicle, go to the **Winch Loading Procedure: Standard and XL Units** section below.

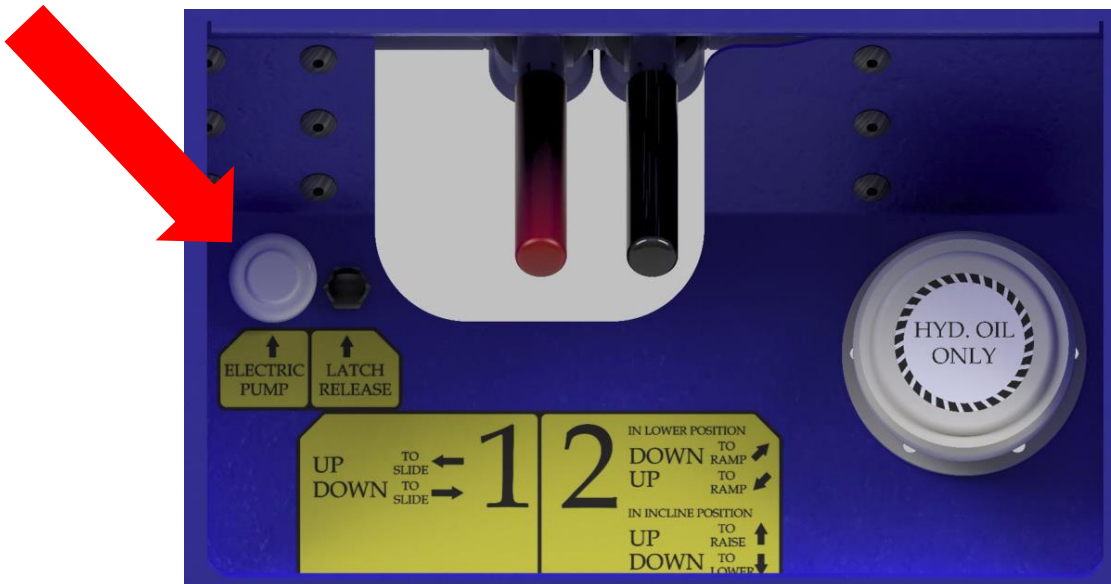


**WARNING**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

### Preparing to Drive/Back On Load Cargo Vehicle: Standard and XL Units

1. Park the Carrier on a firm, level surface.
2. Place the Carrier's transmission gear selector into Park and set the parking brakes.
3. Turn on the work lights. Operate Dump Valve (if equipped). Switches are located on the switch panel in the dash.
4. Do not operate hydraulics unless parking brake is engaged and rear tires are chocked in front of and behind the tires, using the four (4) wheel chocks provided with the Carrier.
5. Engage the power take-off (PTO) or enable the electric pump (if applicable). Refer to the PTO operator's manual for instructions. Engage electric pump using electric switch on Cab dashboard. **Never travel with the PTO control engaged.** This could result in damage to the PTO unit and the Carrier's transmission.



XL Valve Plate: Electric Pump Button (Optional)

6. Position the Cargo Vehicle about 12 feet from the Carrier. Make sure the Cargo Vehicle is in line to be loaded in the center of the Carrier. Put the Cargo Vehicle's

transmission into Park and set the parking brake or otherwise secure the Cargo Vehicle.

7. If PTO engaged, adjust the electronic or manual throttle control to set the proper engine speed. Refer to Truck operator's manual for proper operation of the auxiliary throttle. If your Truck is equipped with the remote throttle up option from the Truck manufacturer there is no need to set the throttle up control in the cab because the throttle will automatically increase when any of the Carrier's hydraulic functions are operated.
8. Operate Hydraulics to move the Rear Loading Ramp into its fully-extended position.



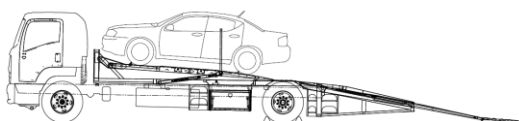
Rear Loading Ramp in Extended Position

9. Manually flip both Loading Ramp Extensions over into Loading/Unloading Position, so that they come into contact with the ground.

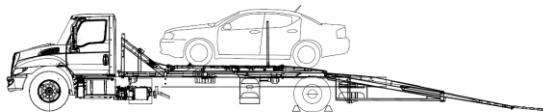


Loading Ramp Extensions in Loading/Unloading Position

10. Operate Hydraulics to position the Upper Deck to load the front Cargo Vehicle, if needed.



**Deck Position to Load Front Cargo Vehicle on Standard Unit**



**Deck Position to Load Front Cargo Vehicle on XL Unit**

**Refer to Hydraulic Deck – Position Deck to Load/Unload section below and the label on your Carrier for instructions on directional movement of the Deck.**

11. Ensure wheel straps are out of path of Cargo Vehicle to be loaded. Do not drive over wheel straps or hooks with Cargo Vehicles. **Refer to Wheel Straps section above.**

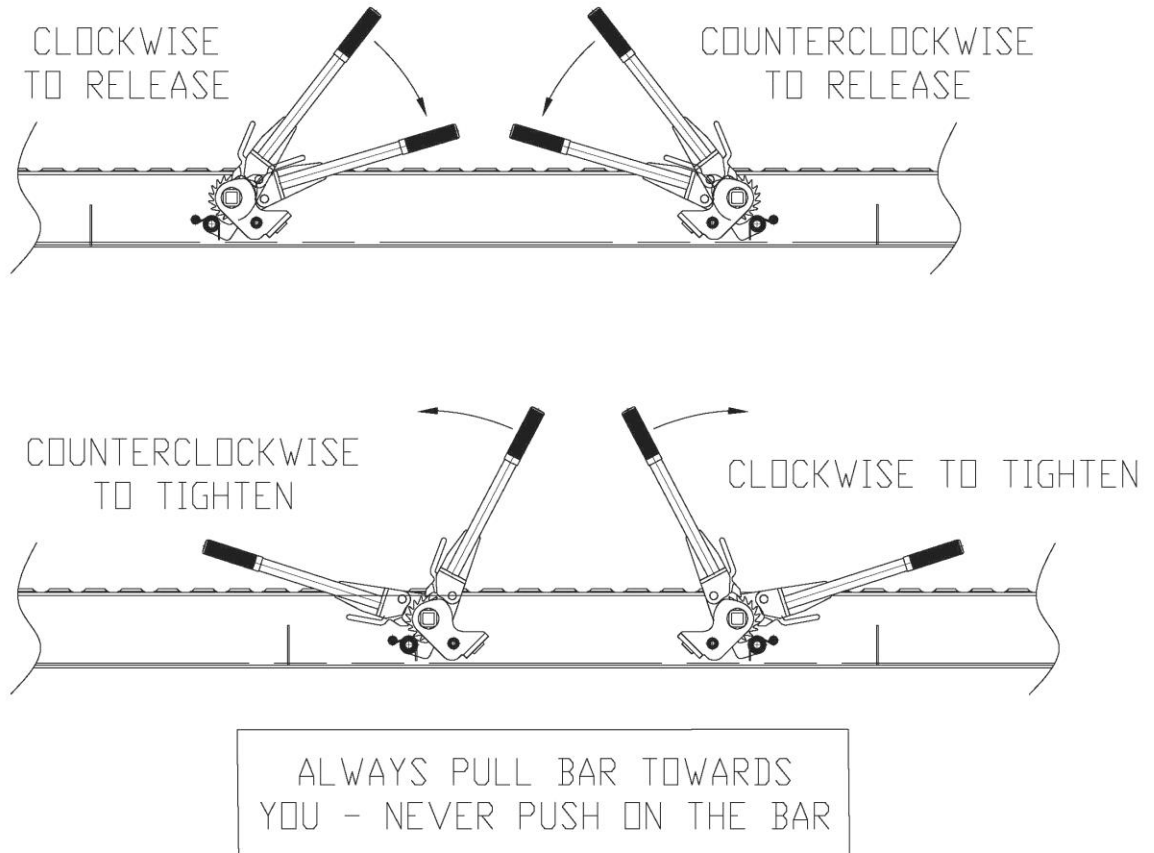
### **Drive/Back-On Loading Front Cargo Vehicle: Standard and XL Units**

Note: If winch loading front Cargo Vehicle, go to the **Winch Loading Front Cargo Vehicle: Standard and XL Units** section below.

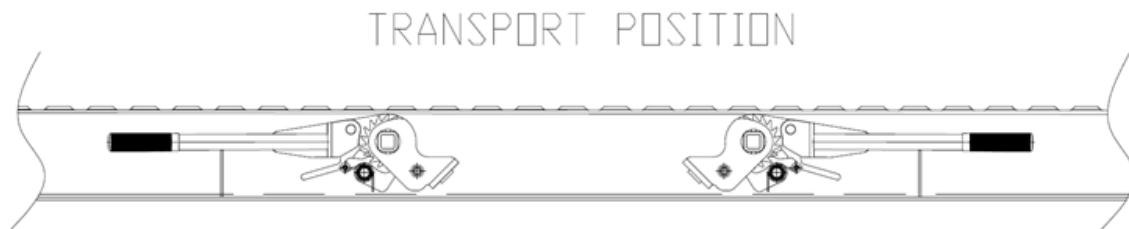
1. Slowly drive or back the Cargo Vehicle onto the Deck. Cargo Vehicle centered on the Deck.
2. Drive or back Cargo Vehicle to appropriate Deck position. When loading front Cargo Vehicle, make sure the front of the Cargo Vehicle does not extend beyond the front of the Deck when loaded. Provided wheel stop may be used as a reference for positioning the Cargo Vehicle. Reposition cargo as needed so the front of the Cargo Vehicle does not extend beyond the front of the Deck. Be aware that axle weights will change as you load and unload cargo. Reposition cargo as needed to maintain proper axle weights. **Refer to Appendix B: Loading Scenario Diagrams for recommended Cargo Vehicle orientations and positioning.**
3. Place the Cargo Vehicle's transmission into Park and set the parking brake or otherwise secure the Cargo Vehicle.
4. Exit the Cargo Vehicle maintaining three (3) points of contact. This means two (2) feet and one (1) hand or two (2) hands and one (1) foot. Failure to maintain three points of contact may cause you to lose your balance and fall.
5. Never use the door handle of a Cargo Vehicle as a point of contact.
6. DO NOT walk on Deck when exiting the Cargo Vehicle. Use only ladders/steps and areas with non-skid surface to ascend or descend from the Carrier and when moving about on the Equipment.
7. While standing on the ground, use four (4) wheel straps, one (1) on each tire, to secure Cargo Vehicle. **Refer to Wheel Strap Securement section below.**



8. Operate Integrated Ratchet Bar as follows to secure all wheel straps:



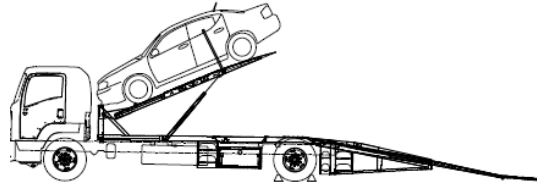
9. Ensure wheel straps are lying flat (not twisted) from the spindle to the tire.  
10. Do not overtighten wheel straps.  
11. Ensure each Integrated Ratchet Bar is returned to the Ratchet Transport Position.



## Drive On Loading Rear Cargo Vehicle on a Standard Unit

Note: If winch loading a rear Cargo Vehicle on a standard unit, go to the **Winch Loading Rear Cargo Vehicle on a Standard Unit** section below.

1. Confirm the Cargo Vehicle's transmission is in Park and the parking brake is set or the Cargo Vehicle is otherwise secured.
2. If loading rear Cargo Vehicle on a Standard Unit, once front Cargo Vehicle is secured, operate Hydraulics to position the Upper Deck to provide clearance for rear Cargo Vehicle to be loaded.



### **Deck Position to Load Rear Cargo Vehicle on Standard Unit**

**Refer to Hydraulic Deck –Position Deck to Load/Unload Cargo Vehicle: Standard Unit section below and the label on your Carrier for instructions on directional movement of the Deck.**



Standard Unit Valve Plate Diagram

3. Secure Deck by engaging Deck Lock Pin in appropriate hole on the Lift Arm.

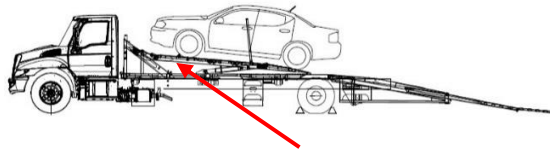


4. Repeat #3 to secure other side of Deck with Deck Lock Pin using the same Lift Arm hole positions on both sides so Deck is level.
5. Follow steps 1-11 in the **Drive/Back on Loading Front Cargo Vehicle: Standard and XL Units** Section above. Rear Cargo Vehicles should only be loaded forward facing and never backed on. **Refer to Appendix B: Loading Scenario Diagrams for recommended Cargo Vehicle orientations and positioning.**

### **Drive-On Loading Rear Cargo Vehicle on an XL Unit**

Note: If winch loading a rear Cargo Vehicle on an XL unit, go to the **Winch Loading Rear Cargo Vehicle on an XL Unit** section below.

1. Confirm the Cargo Vehicle's transmission is in Park and the parking brake is set or the Cargo Vehicle is otherwise secured.
2. If loading rear Cargo Vehicle on an XL Unit, once front Cargo Vehicle is secured, operate Hydraulics to raise Upper Deck until forward motion of Upper Deck stops and you hear and see the latches on both sides of the Upper Deck lock.



**Upper Deck in Slightly Raised Position with Upper Deck Latches Locked**  
**Refer to label on your Carrier for instructions on directional movement of the Deck.**

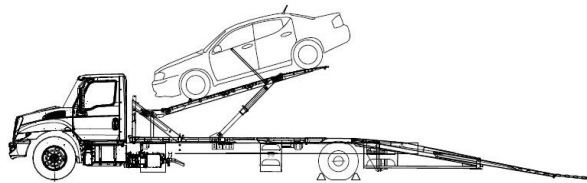


Deck Latch Engaged



Deck Latch Disengaged

3. Operate Hydraulics to position the back of the Upper Deck to provide clearance for rear Cargo Vehicle to be loaded.



### Deck Position to Load Rear Cargo Vehicle on XL Unit

**Refer to Hydraulic Deck –Position Deck to Load/Unload Cargo Vehicle: XL Unit section below and the label on your Carrier for instructions on directional movement of the Deck.**

4. Retrieve Deck Lock Pin from the storage location by removing the Linch Pin from the prong.



Deck Lock Pin Storage Location



Deck Lock Pin Secured with Linch Pin in Storage Location

- Secure Deck by placing Deck Lock Pin prongs through lowest unblocked holes on the Lift Arm, tether side to outside of Deck, and push Linch Pin over bottom of outside prong to lock.



Deck Lock Pin Placement in Lowest Unblocked Holes on Lift Arm

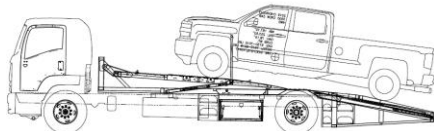


Deck Lock Pin secured with Linch Pin

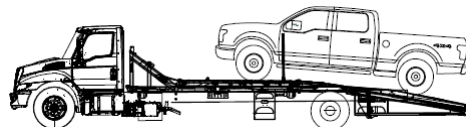
- Repeat #4 and #5 to secure other side of Deck with Deck Lock Pin in lowest unblocked holes on Lift Arm. Deck Lock Pin should be placed in same holes on both Lift Arms so Deck is level.
- Follow steps 1-11 in the **Drive/Back on Loading Front Cargo Vehicle: Standard and XL Units** Section above. Rear Cargo Vehicles should only be loaded forward facing and never backed on. **Refer to Appendix B: Loading Scenario Diagrams for recommended Cargo Vehicle orientations and positioning.**

**Prior to Transport: Standard and XL Units**

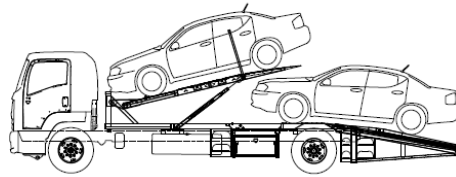
- After Cargo Vehicle(s) are loaded and secured, operate Hydraulics to position the Upper Deck into Transport Position adjusting Deck Lock Pins, if needed to ensure proper placement. **DO NOT** transport vehicles if proper height clearances are not attained. **Refer to Drive/Back-On Operator Precautions section above.**



**One Car Transport Position On Standard Unit**



**One Car Transport Position On XL Unit**



### Two Car Transport Position

Refer to Hydraulic Deck - Position Deck to Load/Unload section below and the label on your Carrier for instructions on directional movement of the Deck.

2. Manually flip both Loading Ramp Extensions over into Transport Position, coming into contact with the Rear Loading Ramp.



Flip Loading Ramp Extensions into Transport Position

3. Operate Hydraulics to move the Rear Loading Ramp into Transport Position.



Rear Loading Ramp in Transport Position

4. Remove the wheel chocks from around the Carrier's tires.
5. Disengage the power take-off (PTO) or electric pump (if applicable). Refer to the PTO operator's manual for instructions. Disengage electric pump on Cab dashboard. **NEVER TRAVEL WITH THE PTO CONTROL ENGAGED.** This could result in damage to the PTO unit and the Carrier's transmission.

## Driven/Backed On Unloading Procedure: Standard and XL Units

Note: If unloading a winched Cargo Vehicle, go to the **Winch Unloading Procedure: Standard and XL Units** section below.

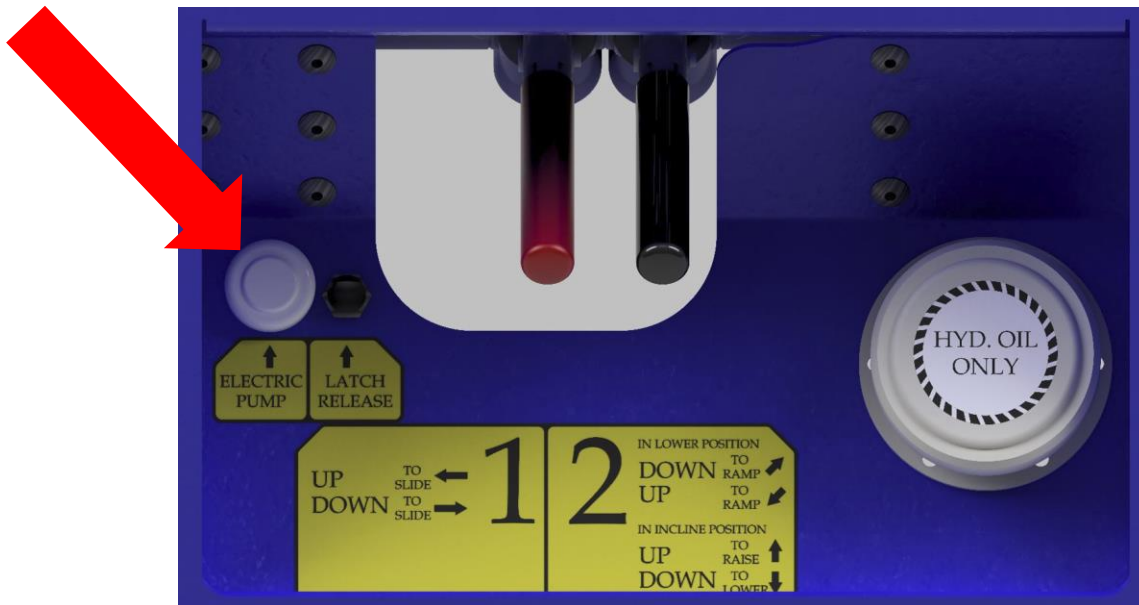


### **WARNING**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

## Preparing to Unload Driven/Backed On Cargo Vehicle: Standard and XL Units

1. Park the Carrier on a firm, level surface.
2. Place the Carrier's transmission gear selector into Park and set the parking brakes.
3. Turn on the work lights. Operate Dump Valve (if equipped). Switches are located on the switch panel in the dash.
4. Do not operate hydraulics unless parking brake is engaged and rear tires are chocked in front of and behind the tires, using the four (4) wheel chocks provided with the Carrier..
5. Engage the power take-off (PTO) or enable the electric pump (if applicable). Refer to the PTO operator's manual for instructions. Engage electric pump using electric switch on Cab dashboard. **Never travel with the PTO control engaged.** This could result in damage to the PTO unit and the Carrier's transmission.



XL Valve Plate: Electric Pump Button (Optional)

6. If PTO engaged, adjust the electronic or manual throttle control to set the proper engine speed. Refer to Truck operator's manual for proper operation of the auxiliary

throttle. If your Truck is equipped with the remote throttle up option from the Truck manufacturer there is no need to set the throttle up control in the cab because the throttle will automatically increase when any of the Carrier's hydraulic functions are operated.

7. Operate Hydraulics to move the Rear Loading Ramp into its fully-extended position.



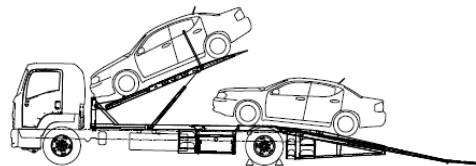
Rear Loading Ramp in Extended Position

8. Manually flip both Loading Ramp Extensions over into Loading/Unloading Position, so that they come into contact with the ground.



Loading Ramp Extensions in Loading/Unloading Position

9. If unloading two Cargo Vehicles, operate the Hydraulics to position the Upper Deck for unloading rear Cargo Vehicle, adjusting Deck Lock Pins, if needed.



Deck Position to Unload Rear Cargo Vehicle

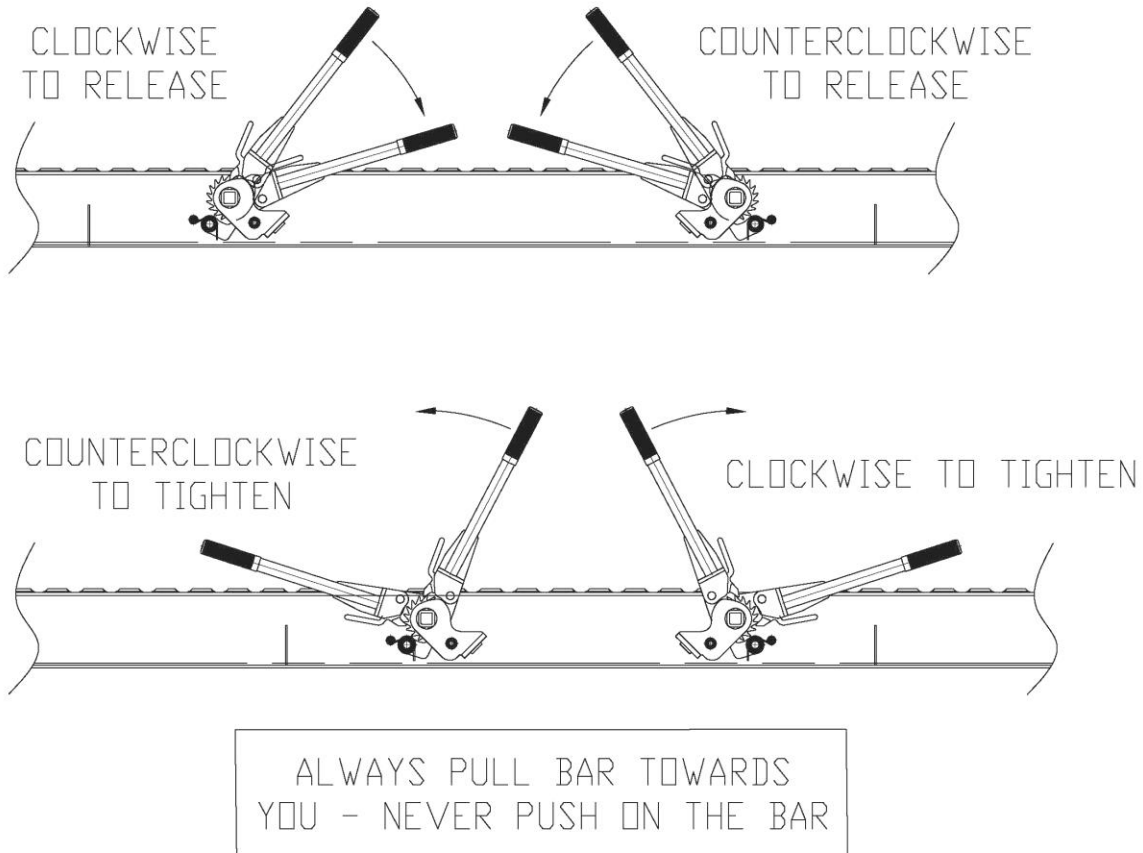
**Refer to Hydraulic Deck - Position Deck to Load/Unload section below and the label on your Carrier for instructions on directional movement of the Deck.**



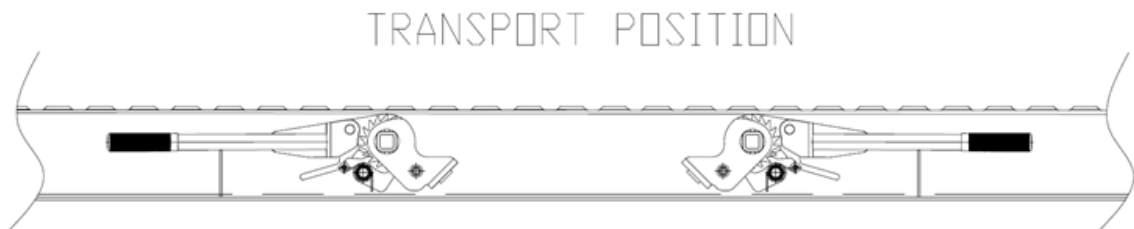
## Unloading Driven On Rear Cargo Vehicle: Standard and XL Units

Note: If unloading a winched rear Cargo Vehicle, go to the **Unloading Winched Rear Cargo Vehicle: Standard and XL Units** section below.

1. Confirm Cargo Vehicle's transmission is in Park and the parking brake is set or the Cargo Vehicle is otherwise secured.
2. Operate Integrated Ratchet Bar as follows to release the wheel straps on all four (4) tires of the Cargo Vehicle. **Refer to Wheel Strap Securement section below.**



3. Ensure each Integrated Ratchet Bar is returned to the Ratchet Transport Position.



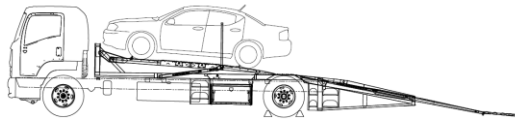
4. Store Wheel Straps on the Spindle as far Inboard as Possible when not in use, or place them in the Storage Box provided on the side of the Carrier.

5. DO NOT walk on Decks to reach and enter the Cargo Vehicle. Use only ladders/steps and areas with non-skid surface to ascend or descend from the Carrier and when moving about on the Equipment.
6. Enter the Cargo Vehicle maintaining three (3) points of contact. This means two (2) feet and one (1) hand or two (2) hands and one (1) foot. Failure to maintain three (3) points of contact may cause you to lose your balance and fall.
7. Never use the door handle of a Cargo Vehicle as a point of contact.
8. When approaching a Cargo Vehicle to unload it, be careful not to open the door into yourself, as you may lose your balance and fall from the Carrier causing injury.
9. Confirm the Deck is in Unloading Position and slowly drive or back the Cargo Vehicle off the Deck. Be aware that axle weights will change as you unload Cargo Vehicles. Ensure sufficient space is left to unload front Cargo Vehicle (if applicable).
10. Ensure sufficient space is left to unload front Cargo Vehicle (if applicable). Set the Cargo Vehicle's parking brake and put the transmission into Park or otherwise secure the Cargo Vehicle.

### **Unloading Driven/Backed On Front Cargo Vehicle from a Standard Unit**

Note: If unloading a winched front Cargo Vehicle from a standard unit, go to the **Unloading Winched Front Cargo Vehicle from a Standard Unit** Section below.

1. Disengage the Deck Lock Pins from both Lift Arms.
2. If unloading a front Cargo Vehicle from a Standard Unit, operate Hydraulics to position Upper Deck to unload front Cargo Vehicle.



**Deck Position to Unload Front Cargo Vehicle on Standard Unit**

**Refer to Hydraulic Deck - Position Deck to Load/Unload Cargo Vehicle: Standard Unit section below and the label on your Carrier for instructions on directional movement of the Deck.**

3. Follow steps 1-10 in the **Unloading Driven On Rear Cargo Vehicle: Standard and XL Units** section above.

### **Unloading Driven/Backed On Front Cargo Vehicle from an XL Unit**

Note: If unloading a winched front Cargo Vehicle from an XL unit, go to the **Unloading Winched Front Cargo Vehicle from an XL Unit** section below.

1. If unloading a front Cargo Vehicle from an XL Unit, unlock the Deck Lock Pin by pulling the Linch Pin off the Deck Lock Pin prong and remove the Deck Lock Pin from the Lift Arm.



Remove Deck Lock Pins  
From Lift Arms



Deck Lock Pin Linch Pin

2. Replace Deck Lock Pin in storage location and secure and lock in position by pushing Linch Pin over bottom of prong.

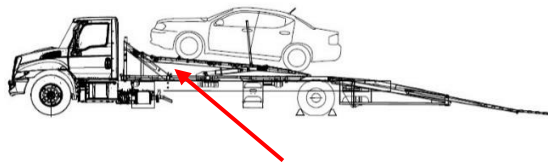


Deck Lock Pin Storage Location



Deck Lock Pin secured with Linch Pin in  
storage location.

3. Repeat #2 and #3 to remove Lock Pin on other side of Deck and secure with Linch Pin in storage location.
4. Operate Hydraulics to lower Upper Deck until forward motion of Deck stops and the front of the Upper Deck is in a slightly raised position.



**Upper Deck in Slightly Raised Position with Upper Deck Latches Locked  
Refer to label on your Carrier for instructions on directional movement of the Deck.**

5. Release latches on both sides of the Deck by pushing and holding the Latch Release button located in the Hydraulic Deck Panel while simultaneously operating the

hydraulics until you hear and see the latches disengage. It is necessary to slightly raise the front of the Upper Deck for the Deck latches to release before lowering the front of the Upper Deck. Continue to depress the Latch Release until the front of the Upper Deck clears the latches.



Latch Release Button

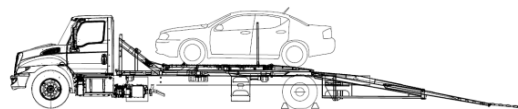


Deck Latch Engaged



Deck Latch Disengaged

6. Operate Hydraulics to position Upper Deck to unload front Cargo Vehicle.



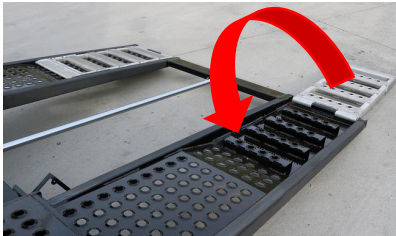
Deck Position to Unload Front Cargo Vehicle on XL Unit

**Refer to Hydraulic Deck - Position Deck to Load/Unload Cargo Vehicle: XL Unit section below and the label on your Carrier for instructions on directional movement of the Deck.**

7. Follow steps 1-10 in the **Unloading Driven On Rear Cargo Vehicle: Standard and XL Units** section above.

### **Prior to Transport: Standard and XL Units**

1. Operate Hydraulics to lower the Upper Deck to Transport Position, if needed.
2. Manually flip both Loading Ramp Extensions over into Transport Position, coming into contact with the Rear Loading Ramp.



Flip Loading Ramp Extensions into Transport Position

3. Operate Hydraulics to move the Rear Loading Ramp into Transport Position.



Rear Loading Ramp in Transport Position

4. Remove the wheel chocks from around the Carrier's tires, and store them in the Storage Box on the side of the Carrier.
5. Disengage the power take-off (PTO) or electric pump (if applicable). Refer to the PTO operator's manual for instructions. Disengage electric pump on Cab dashboard. **NEVER TRAVEL WITH THE PTO CONTROL ENGAGED.** This could result in damage to the PTO unit and the Carrier's transmission.

## **II. Winch Loading/Unloading Procedures (if equipped): Standard and XL Units**

**NOTE: CARGO VEHICLES MAY BE LOADED USING WINCH IN THE FRONT POSITION ONLY, REAR POSITION ONLY, NEITHER FRONT NOR REAR POSITION OR IN BOTH THE FRONT AND REAR POSITIONS OF THE CARRIER. REFER TO DRIVE/BACK ON LOADING/UNLOADING PROCEDURE SECTION ABOVE, AS NEEDED. DO NOT EXCEED THE STRUCTURAL RATING OF THE CARRIER OR THE GROSS AXLE WEIGHT RATINGS AND GROSS VEHICLE WEIGHT RATING OF THE CARRIER.**

### **Winch Operator Precautions**

The safe operation of your Carrier is your responsibility. You can be held legally responsible for any injuries or damage caused by the unsafe operation of your Carrier. If you follow our instructions, you will operate the Carrier properly.

Always know the weight distribution of your load and ensure you are within your Carrier's Gross Axle Weight Rating (GAWR) and Gross Vehicle Weight Rating (GVWR) as well as any federal or state regulations. In addition, be aware of your Carrier's overall loaded height to be sure that you are under the federal bridge law height of 13 feet 6 inches.



### **DANGER**

**Do not transport vehicles if proper height clearances are not attained. If all vehicles are properly secured and positioned yet appropriate height clearance cannot be attained, reposition vehicles or remove one or more vehicles from the load in order to attain proper height clearances. Failure to follow this instruction could result in a collision with bridges or other structures and loss of vehicles during transport, which may result in death or serious injury to the operator and/or the motoring public.**



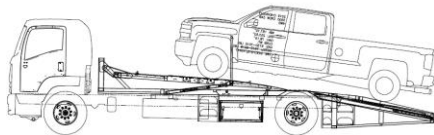
### **WARNING**

**Failure to comply with these Warnings and Instructions could result in death or serious injury.**

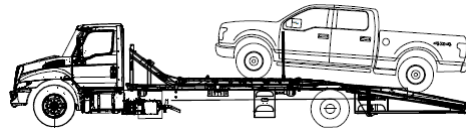
1. Refer to Cottrell Operator's Manual and winch manual before operating this winch.
2. Stay clear of moving Deck to avoid crushing injury.
3. Set the parking brake on the Carrier. Failure to do so prior to beginning the loading or unloading process may result in death or serious injury.

4. Do not operate hydraulics unless parking brake is engaged and rear tires are chocked in front of and behind the tires, using the four (4) wheel chocks provided with the Carrier.
5. Always maintain three (3) points of contact while moving about on the Carrier. This means two (2) feet and one (1) hand or two (2) hands and one (1) foot. Failure to maintain three points of contact may cause you to lose your balance and fall.
6. Never use the door handle of a Cargo Vehicle as a point of contact.
7. Inspect all equipment prior to each use to ensure equipment is in proper operating condition.
8. Always wear gloves when handling cable/synthetic rope.
9. Do not step on any surface labeled "No Step."
10. Do not use winch for side pulling. Always make sure Carrier is in line with the Cargo Vehicle being loaded.
11. Do not attach the cable hook to the object being loaded. Attach the cable hook to a hook-up chain suitable for the object being loaded. Refer to the manual supplied by the Cargo Vehicle manufacturer for correct attachment points.
12. Do not wrap the cable/synthetic rope around an object as this tends to fray or kink the cable/synthetic rope.
13. Maintain a uniform cable/synthetic rope wrap on the winch drum and also observe that the cable/synthetic rope does not climb up the side of the winch drum when in use.
14. Do not walk on Deck when unreeling cable/synthetic rope.
15. Use only ladders/steps and areas with non-skid surface to ascend or descend from the Carrier and when moving about on the Equipment.
16. Take care entering and exiting the Cargo Vehicle while it is loaded on the Carrier. Be careful not to slip, trip, stumble or hit your head.
17. When approaching a Cargo Vehicle on the Carrier, be careful not to open the door into yourself, as you may lose your balance and fall from the Carrier causing injury. Never use the door handle of a Cargo Vehicle as a point of contact.
18. Ensure Decks are properly locked prior to loading/unloading/transporting Cargo Vehicles.
19. Ensure the Cargo Vehicle's transmission is placed in Park and the parking brake is set or the Cargo Vehicle is otherwise secured prior to operating Decks.
20. Confirm the Deck is in proper Loading/Unloading Position prior to releasing the Cargo Vehicle's parking brake to unload the Cargo Vehicle.
21. A minimum of five (5) wraps of cable/synthetic rope around the drum barrel is necessary to hold the load.
22. Continually observe the cable/synthetic rope condition for kinks, frays, or a build-up of rust. Should any of these conditions be noticed, replace the cable/synthetic rope assembly. Do not use cable/synthetic rope clamps.
23. Stand to the side of the deck when operating the winch. Stay clear of cable/synthetic rope and load when operating.
24. When operating the winch, make sure the area behind the load is clear of personnel and obstacles.
25. Never rely on the winch as the only means of holding the load. Secure each Cargo Vehicle using four (4) wheel straps, one (1) over each tire.
26. The winch drum clutch must be fully engaged before and during winch operation.

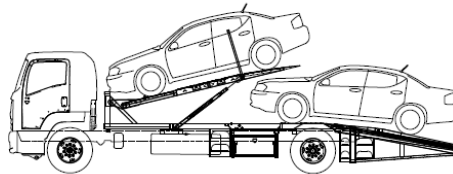
27. Never use the Winch Drum Release Handle to move the release knob while the cable/synthetic rope is under load.
28. Do not continue to wind in winch cable/synthetic rope if the hook is caught on an immovable object, the structure of this Carrier, or is in contact with the roller guides attached to the winch.
29. Do not exceed the working load limit of cable/synthetic rope. Consult the cable/rope manufacturer for ratings.
30. Use only Cottrell-supplied replacement parts.
31. Do not use winch to lift, support or otherwise transport people.
32. Never lie down on the Carrier to affix or remove straps. Lying on the Deck may allow you to roll off the side of the Carrier causing injury.
33. Keep hands and other body parts and loose clothing away from moveable objects while hydraulic system is operating.
34. Be sure areas are clear of personnel before operating the hydraulic system. NEVER permit bystanders in the area while performing a lift. Keep them clear of the danger zone.
35. When loading and unloading Cargo Vehicles in conditions of ice or snow, remove ice and snow from Deck before operating the Carrier.
36. Be aware that axle weights will change as you load and unload cargo. Reposition Cargo Vehicle as needed to maintain proper axle weights.
37. Do not drive or otherwise move Carrier unless Deck is flat and in Transport Position.



**One Car Transport Position  
On Standard Unit**



**One Car Transport Position  
On XL Unit**



**Two Car Transport Position**

38. Park the Carrier on a firm, level surface to load and unload the Cargo Vehicles.
39. Watch for traffic while loading and unloading the Cargo Vehicles.
40. Refer to curtain manufacturer instructions before operating curtain (if equipped).

### **Equipment – Structure and Surfaces**



**WARNING**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**



1. Check structure, Deck, tie downs and suspension for cracks, missing parts and proper friction on working surfaces, and send to shop for replacement, repair or maintenance as necessary.
2. Inspect Carrier for the presence of ice or snow. Do not attempt to load or unload Carrier if ice or snow is present on the Deck or climbing surfaces. Use available means to remove ice or snow before proceeding.
3. Check for any fluids, debris or other contaminants on Deck. If found, identify the source, correct the problem, and clean up any residue prior to proceeding.

## **Pendant Control**



### **WARNING**

**Failure to comply with these Warnings and Instructions could result in death or serious injury.**

1. Read and fully understand the winch manual before using Pendant Control to operate winch drum.
2. Do not operate the Pendant Control until you have been properly trained.



Pendant Control

3. Always unplug Pendant Control and store in clean dry place when not in use.
4. Replace cap on Pendant Control Box when Pendant Control is not plugged in.



Pendant Control Box with Cap Closed



Pendant Control Box with Cap Open



Pendant Control Plug

5. Never operate Pendant Control when on the Carrier.

6. Never pull tether attached to Pendant Control over the Deck or through the Carrier.
7. Never operate Pendant Control with any part of your body other than your hands.
8. Confirm all area around Carrier and inside Carrier are clear of personnel and equipment prior to operating Pendant Control.
9. While on ground, tether attached to Pendant Control may be a trip hazard.
10. Keep alert. Do not be distracted while operating the Pendant Control.
11. DO NOT use a damaged Pendant Control to operate the winch.

## Winch Loading Procedure: Standard and XL Units

Note: If drive/back on loading a Cargo Vehicle, go to the **Drive/Back On Loading Procedure: Standard and XL Units** section above.



### WARNING

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

## Preparing to Winch Load Cargo Vehicle: Standard and XL Units

1. Park the Carrier on a firm, level surface.
2. Place the Carrier's transmission gear selector into Park and set the parking brakes.
3. Turn on the work lights. Operate Dump Valve (if equipped). Switches are located on the switch panel in the dash.
4. Do not operate hydraulics unless parking brake is engaged and rear tires are chocked in front of and behind the tires, using the four (4) wheel chocks provided with the Carrier.
5. Engage the power take-off (PTO) or enable the electric pump (if applicable). Refer to the PTO operator's manual for instructions. Engage electric pump using electric switch on Cab dashboard. **Never travel with the PTO control engaged.** This could result in damage to the PTO unit and the Carrier's transmission.



XL Valve Plate Electric Pump Button (Optional)

6. Position the Cargo Vehicle about 12 feet from the Carrier. Make sure the Cargo Vehicle is in line to be loaded in the center of the Carrier. Put the Cargo Vehicle's transmission into Park and set the parking brake or otherwise secure the Cargo Vehicle.
7. If PTO engaged, adjust the electronic or manual throttle control to set the proper engine speed. Refer to Truck operator's manual for proper operation of the auxiliary throttle. If your Truck is equipped with the remote throttle up option from the Truck manufacturer there is no need to set the throttle up control in the cab because the throttle will automatically increase when any of the Carrier's hydraulic functions are operated.
8. Operate Hydraulics to move the Rear Loading Ramp into its fully-extended position.



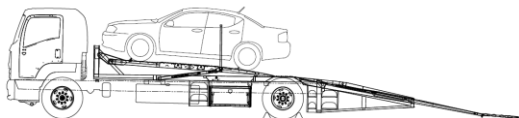
Rear Loading Ramp in Extended Position

9. Manually flip both Loading Ramp Extensions over into Loading/Unloading Position, so that they come into contact with the ground.

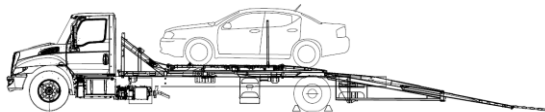


Loading Ramp Extensions in Loading/Unloading Position

10. Operate Hydraulics to position the Upper Deck for loading front Cargo Vehicle, if needed.



**Deck Position to Load Front Cargo Vehicle on Standard Unit**



**Deck Position to Load Front Cargo Vehicle on XL Unit**

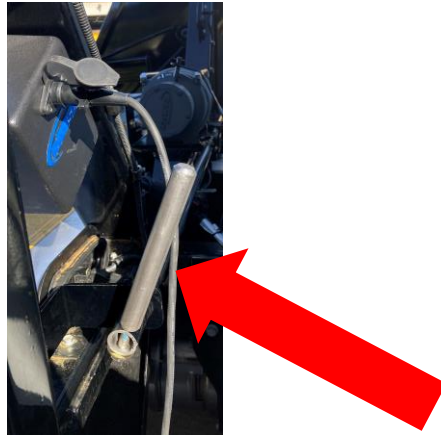
Refer to **Hydraulic Deck - Position Deck to Load/Unload** section below and the label on your **Carrier** for instructions on directional movement of the Deck.

11. Ensure wheel straps are out of path of Cargo Vehicle to be loaded. Do not drive over wheel straps or hooks with Cargo Vehicles. Refer to **Wheel Straps** section above.

### **Winch Loading Front Cargo Vehicle: Standard and XL Units**

Note: If loading a driven/backed on front Cargo Vehicle, go to the **Drive/Back On Loading Front Cargo Vehicle: Standard and XL Units** section above.

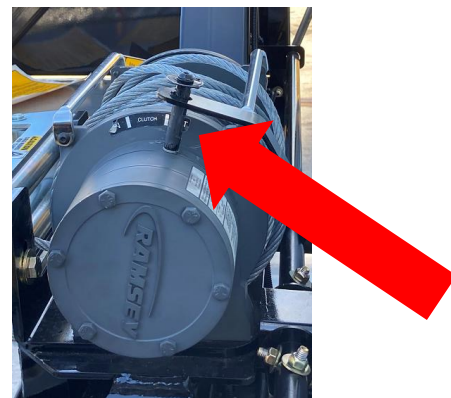
1. After confirming that the cable/synthetic rope is not under load, disengage the winch drum by using the Winch Drum Release Handle to push/pull release knob until the release knob clicks into the “Out” position. Refer to the diagram on the Carrier for Winch Drum Release Handle movement. See Photographs below.



**Winch Drum Release Handle**



**Winch Drum “In” Position**



**Winch Drum “Out” Position**

2. While standing on the ground to the side of the Carrier, remove hook from its stored position. Do not walk on Deck to remove hook. Operator may choose to store cable/synthetic rope on either side of Carrier.

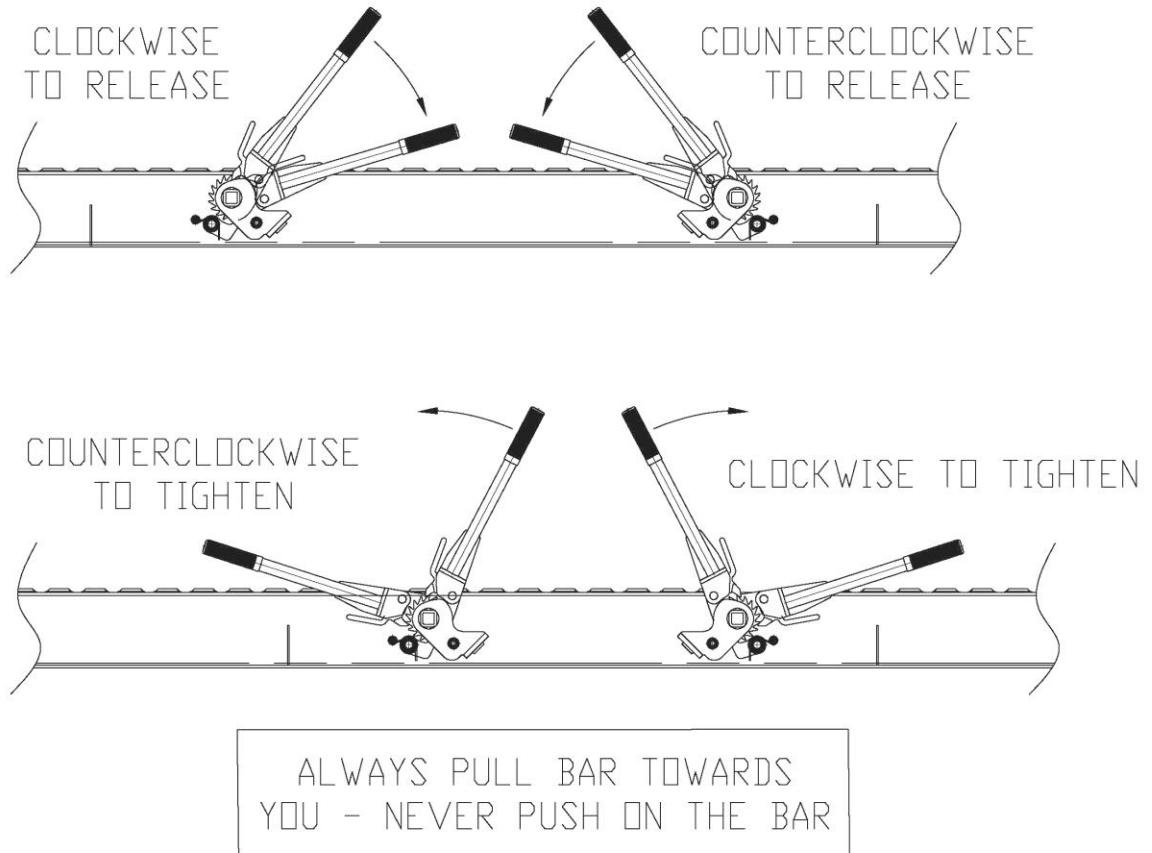
3. Walking on the ground to the side of the Carrier, unreel enough of the cable/synthetic rope from the winch to hook up the Cargo Vehicle. Always maintain a minimum of five (5) wraps of cable/synthetic rope around the drum barrel and maintain a uniform wrap of cable/synthetic rope on the drum to avoid crushing of the cable/synthetic rope. Do not walk on Deck when unreeling cable/synthetic rope.
4. While standing on the ground to the side of the Carrier, with the hook pointing up, attach the cable/synthetic rope to the Cargo Vehicle to be loaded. Always use hook-up chain (provided) to attach the cable/synthetic rope to the Cargo Vehicle. Refer to the manual supplied by the Cargo Vehicle manufacturer for correct attachment points.
5. Re-engage the winch drum by using the Winch Drum Release Handle to push/pull release knob until the release knob clicks into the “In” position. **Refer to the diagram on the Carrier for Winch Drum Release Handle movement.** See Photographs above.
6. Confirm winch drum is re-engaged by pulling on cable/synthetic rope to ensure the cable/synthetic rope will no longer unreel.
7. Using Pendant Control, remove any slack in the cable/synthetic rope.



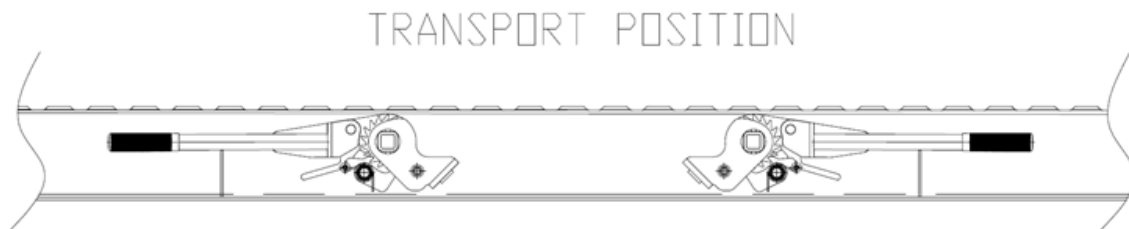
**Pendant Control**

8. Confirm the Cargo Vehicle is centered with the Deck and the tires are parallel with the sides of the Carrier.
9. Ensure the Cargo Vehicle is on a firm, level surface.
10. Confirm the Cargo Vehicle’s parking brake is released and the transmission is in neutral. Be aware if the Cargo Vehicle is on an incline it will roll forward or backward when the parking brake is released and the transmission is placed in neutral.
11. Using Pendant Control while standing to the side of the unit, slowly move the Cargo Vehicle to appropriate Deck position. When loading front Cargo Vehicle, make sure the front of the Cargo Vehicle does not extend beyond the front of the Deck when loaded. Provided wheel stop may be used as a reference for positioning the Cargo Vehicle. Reposition cargo as needed so the front of the Cargo Vehicle does not extend beyond the front of the Deck. Be aware that axle weights will change as you load and unload cargo. Reposition cargo as needed to maintain proper axle weights. **Refer to Appendix B: Loading Scenario Diagrams for recommended Cargo Vehicle orientations and positioning.**
12. While standing on the ground, use four (4) wheel straps, one (1) on each tire, to secure Cargo Vehicle. **Refer to Wheel Strap Securement section below.**

- Operate Integrated Ratchet Bar as follows to secure all wheel straps:



- Ensure wheel straps are lying flat (not twisted) from the spindle to the tire.
- Do not overtighten wheel straps.
- Ensure each Integrated Ratchet Bar is returned to the Ratchet Transport Position.



- Place the Cargo Vehicle's transmission into Park and set the parking brake or otherwise secure the Cargo Vehicle.
- Using Pendant Control, spool out some cable/synthetic rope until slack.

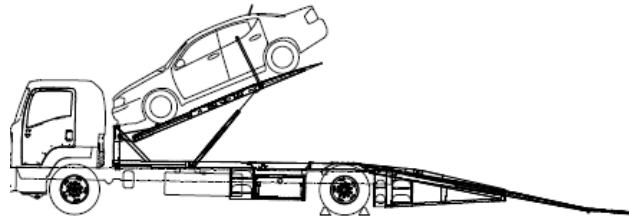
### **Winch Loading Rear Cargo Vehicle on a Standard Unit**

Note: If loading a driven on rear Cargo Vehicle on a standard unit, go to the **Drive On Loading Rear Cargo Vehicle on a Standard Unit** section above.

- If using a winch to load a rear Cargo Vehicle on a Standard Unit, confirm the front loaded Cargo Vehicle's transmission is in Park and the parking brake is set or the

Cargo Vehicle is otherwise secured and unhook cable/synthetic rope from the front Cargo Vehicle. Place the cable/synthetic rope on the Lower Deck so it may be reached from the side of the Carrier.

- Operate Hydraulics to position Upper Deck to provide clearance for rear Cargo Vehicle to be loaded.



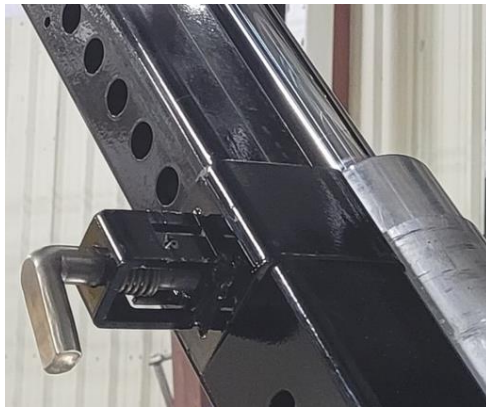
### Deck Position to load Rear Cargo Vehicle on Standard Unit

Refer to Hydraulic Deck - Position Deck to Load/Unload Cargo Vehicle: Standard Unit section below and the label on your Carrier for instructions on directional movement of the Deck.



Standard Unit Valve Plate Diagram

- Secure Deck by engaging Deck Lock Pin in appropriate hole on the Lift Arm.

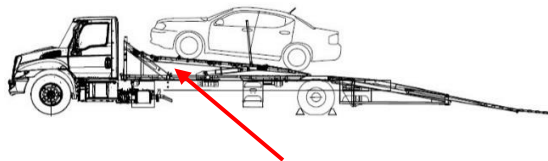


4. Repeat #3 to secure other side of Deck with Deck Lock Pin using the same Lift Arm hole positions on both sides so Deck is level.
5. Follow steps 1-18 set forth in the **Winch Loading Front Cargo Vehicle: Standard and XL Units** Section above to winch load a rear Cargo Vehicle. Rear Cargo Vehicles should only be winched on the Carrier forward facing. **Refer to Appendix B: Loading Scenario Diagrams for recommended Cargo Vehicle orientations and positioning.**

### **Winch Loading Rear Cargo Vehicle on an XL Unit**

Note: If loading a driven on rear Cargo Vehicle on an XL Unit, go to the **Drive-On Loading Rear Cargo Vehicle on an XL Unit** section above.

1. If using a winch to load a rear Cargo Vehicle on a XL Unit, confirm the front loaded Cargo Vehicle's transmission is in Park and the parking brake is set or the Cargo Vehicle is otherwise secured and unhook cable/synthetic rope from the front Cargo Vehicle. Place the cable/synthetic rope on the Lower Deck so it may be reached from the side of the Carrier.
2. Operate Hydraulics to raise Upper Deck until forward motion of Deck stops and you hear and see the latches on both sides of the Upper Deck lock.



**Upper Deck in Slightly Raised Position with Upper Deck Latches Locked**

**Refer to label on your Carrier for instructions on directional movement of the Deck.**



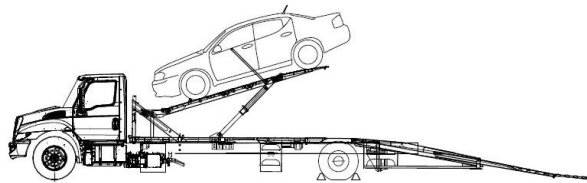


Deck Latch Engaged



Deck Latch Disengaged

3. Operate Hydraulics to position the back of the Upper Deck to provide clearance for rear Cargo Vehicle to be loaded.



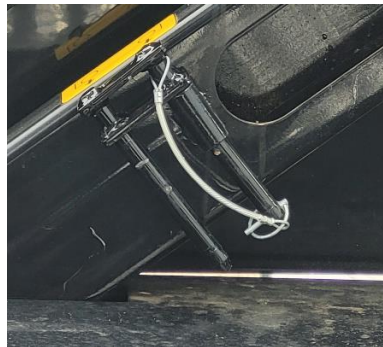
**Deck Position to Load Rear Cargo Vehicle on XL Unit**

**Refer to Hydraulic Deck –Position Deck to Load/Unload Cargo Vehicle: XL Unit section below and the label on your Carrier for instructions on directional movement of the Deck.**

4. Retrieve Deck Lock Pin from the storage location by removing the Linch Pin from the prong.



Deck Lock Pin Storage Location



Deck Lock Pin Secured with Linch Pin in Storage Location

5. Secure Deck by placing Deck Lock Pin prongs through lowest unblocked holes on the Lift Arm, tether side to outside of Deck, and push Linch Pin over bottom of outside prong to lock.



Deck Lock Pin Placement in Lowest Unblocked Holes on Lift Arm

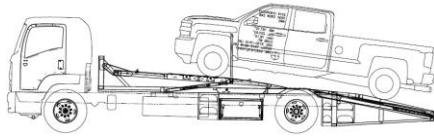


Deck Lock Pin secured with Linch Pin

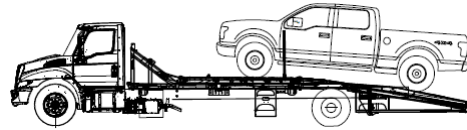
6. Repeat #4 and #5 to secure other side of Deck with Deck Lock Pin in lowest unblocked holes on Lift Arm. Deck Lock Pin should be placed in same holes on both Lift Arms so Deck is level.
7. Follow steps 1-18 set forth in the **Winch Loading Front Cargo Vehicle: Standard and XL Units** Section above to winch load a rear Cargo Vehicle. Rear Cargo Vehicles should only be winched on the Carrier forward facing. **Refer to Appendix B: Loading Scenario Diagrams for recommended Cargo Vehicle orientations and positioning.**

## **Prior to Transport: Standard and XL Units**

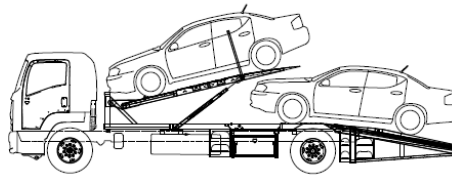
1. After Cargo Vehicle(s) are loaded and secured, operate Hydraulics to position Upper Deck into Transport Position adjusting Deck Lock Pins, if needed to ensure proper placement. DO NOT transport vehicles if proper height clearances are not attained. **Refer to Winch Operator Precautions section above.**



**One Car Transport Position  
On Standard Unit**



**One Car Transport Position  
On XL Unit**



**Two Car Transport Position**

**Refer to Hydraulic Deck - Position Deck to Load/Unload section below and the label on your Carrier for instructions on directional movement of the Deck.**

2. Manually flip both Loading Ramp Extensions over into Transport Position, coming into contact with the Rear Loading Ramp.



**Flip Loading Ramp Extensions into Transport Position**

3. Operate Hydraulics to move the Rear Loading Ramp into Transport Position.



**Rear Loading Ramp in Transport Position**

4. Unplug Pendant Control from Pendant Box.



Disconnected Pendant Plug

5. Store Pendant Control in clean, dry place when not in use.
6. Replace cap on Pendant Control Box.



Pendant Control Box with  
Cap Closed



Pendant Control Box with  
Cap Open

7. Remove the wheel chocks from around the Carrier's tires.
8. Disengage the power take-off (PTO) or electric pump (if applicable). Refer to the PTO operator's manual for instructions. Disengage electric pump on Cab dashboard. **NEVER TRAVEL WITH THE PTO CONTROL ENGAGED.** This could result in damage to the PTO unit and the Carrier's transmission.

## Winch Unloading Procedure: Standard and XL Units

Note: If unloading a driven/backed-on Cargo Vehicle, go to the **Driven/Backed On Unloading Procedure: Standard and XL Units** section above.

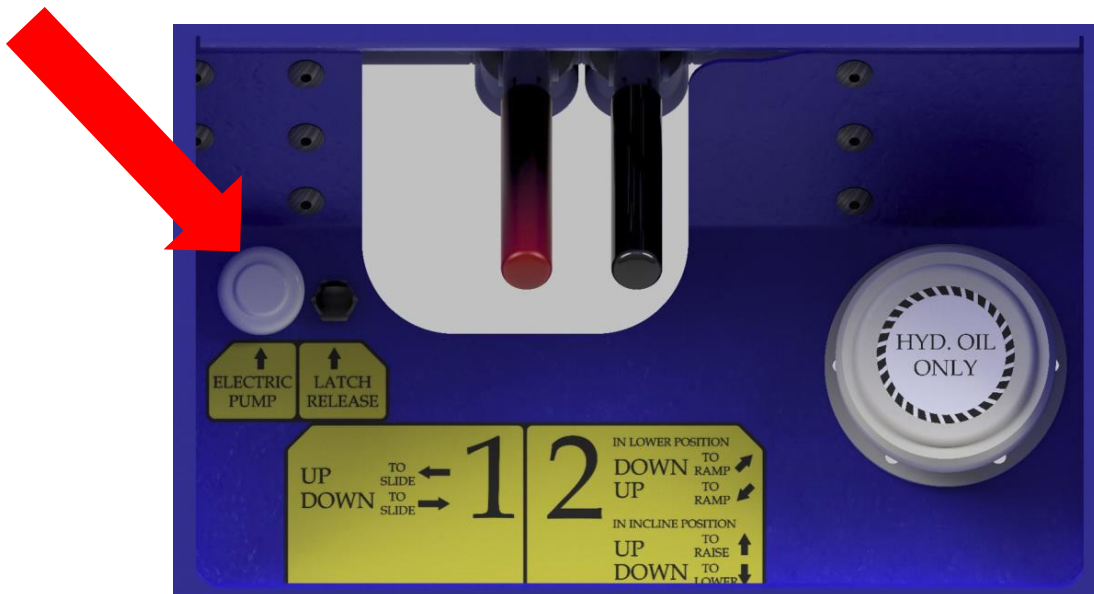


### **WARNING**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

## Preparing to Unload Winched-On Cargo Vehicle: Standard and XL Units

1. Park the Carrier on a firm, level surface.
2. Place the Carrier's transmission gear selector into Park and set the parking brakes.
3. Turn on the work lights. Operate Dump Valve (if equipped). Switches are located on the switch panel in the dash.
4. Do not operate hydraulics unless parking brake is engaged and rear tires are chocked in front of and behind the tires, using the four (4) wheel chocks provided with the Carrier.
5. Engage the power take-off (PTO) or enable the electric pump (if applicable). Refer to the PTO operator's manual for instructions. Engage electric pump using electric switch on Cab dashboard. **Never travel with the PTO control engaged.** This could result in damage to the PTO unit and the Carrier's transmission.



XL Valve Plate: Electric Pump Button (Optional)

6. If PTO engaged, adjust the electronic or manual throttle control to set the proper engine speed. Refer to Truck operator's manual for proper operation of the auxiliary throttle. If your Truck is equipped with the remote throttle up option from the

Truck manufacturer there is no need to set the throttle up control in the cab because the throttle will automatically increase when any of the Carrier's hydraulic functions are operated.

7. Operate Hydraulics to move the Rear Loading Ramp into its fully-extended position.



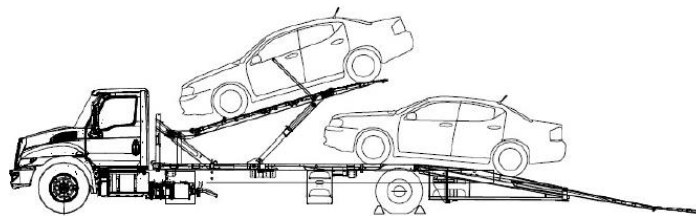
Rear Loading Ramp in Extended Position

8. Manually flip both Loading Ramp Extensions over into Loading/Unloading Position, so that they come into contact with the ground.



Loading Ramp Extensions in Loading/Unloading Position

9. If unloading two Cargo Vehicles, operate the Hydraulics to position the Upper Deck to unload rear Cargo Vehicle, adjusting Deck Lock Pins, if needed.



Deck Position to Unload Rear Cargo Vehicle

**Refer to Hydraulic Deck - Position Deck to Load/Unload section below and the label on your Carrier for instructions on directional movement of the Deck.**

### **Unloading Winched Rear Cargo Vehicle: Standard and XL Units**

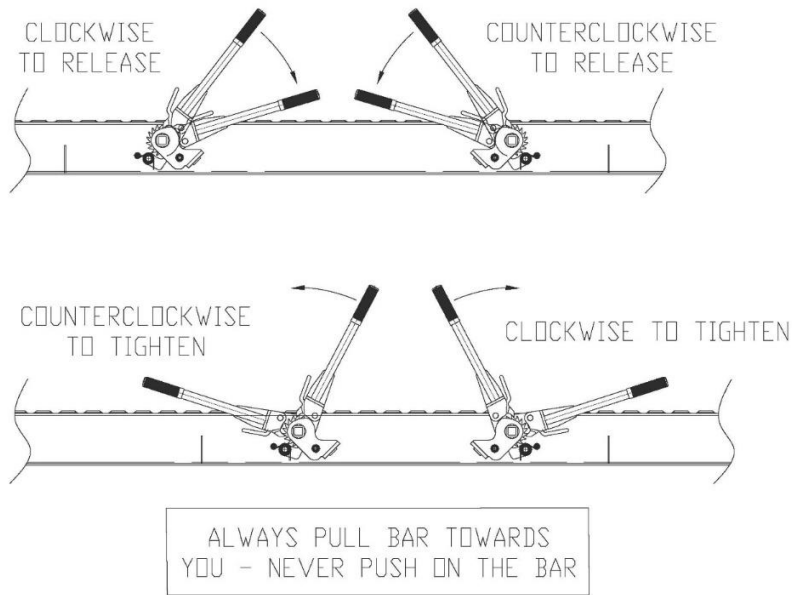
Note: If unloading a driven on rear Cargo Vehicle, go to the **Unloading Driven On Rear Cargo Vehicle: Standard and XL Units** section above.

1. Confirm hook is properly attached to Cargo Vehicle. **Refer to Winch Loading Front Cargo Vehicle section above, if needed.**
2. Using Pendant Control, remove any slack in the cable/synthetic rope.

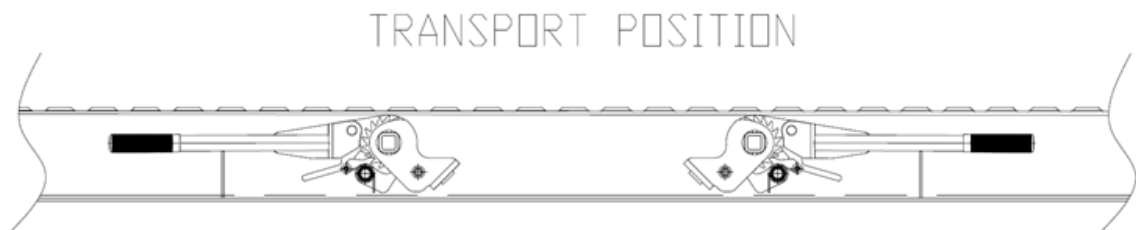


**Pendant Control**

3. Confirm the Cargo Vehicle's parking brake is released and the transmission is in neutral.
4. Operate Integrated Ratchet Bar as follows to release the wheel straps on all four (4) tires of the Cargo Vehicle. **Refer to Wheel Strap Securement section below.**



5. Ensure each Integrated Ratchet Bar is returned to the Ratchet Transport Position.



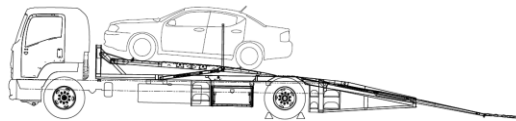
6. Store Wheel Straps on the Spindle as far Inboard as Possible when not in use, or place them in the Storage Box provided on the side of the Carrier.

7. Using Pendant Control, slowly start unreeling the cable/synthetic rope from the winch. Unreel enough of the cable/synthetic rope from the winch to allow the Cargo Vehicle to roll off of the Deck. Ensure sufficient space is left to unload front Cargo Vehicle (if applicable).
8. Set the Cargo Vehicle's parking brake and put the transmission into Park or otherwise secure the Cargo Vehicle.
9. Remove the hook-up chain(s) and cable/synthetic rope. Unreel additional cable/synthetic rope, if necessary.
10. Using Pendant Control, spool the cable/synthetic rope back on to the winch drum. Confirm cable/synthetic rope wraps properly on the winch spool to avoid birdnesting.

### **Unloading Winched Front Cargo Vehicle from a Standard Unit**

Note: If unloading a driven/backed on front Cargo Vehicle from a Standard Unit, go to the **Unloading Driven/Backed On Front Cargo Vehicle from a Standard Unit** section above.

1. Disengage the Deck Lock Pins from both Lift Arms.
2. If unloading two Cargo Vehicles on a Standard Unit, operate Hydraulics to position Upper Deck to unload front Cargo Vehicle.



### **Deck Position to Unload Front Cargo Vehicle on Standard Unit**

**Refer to Hydraulic Deck - Position Deck to Load/Unload: Standard Unit section below and the label on your Carrier for instructions on directional movement of the Deck.**

3. Follow steps 1-10 in the **Unloading Winched Rear Cargo Vehicle: Standard and XL Units** section above.

### **Unloading Winched Front Cargo Vehicle from an XL Unit**

Note: If unloading a driven/backed on front Cargo Vehicle from an XL Unit, go to the **Unloading Driven/Backed On Front Cargo Vehicle from an XL Unit** section above.

1. If unloading a front Cargo Vehicle from an XL Unit, unlock the Deck Lock Pin by pulling the Linch Pin off the Deck Lock Pin prong and remove the Deck Lock Pin from the Lift Arm.





Remove Deck Lock Pins  
From Lift Arms



Deck Lock Pin Linch Pin

2. Replace Deck Lock Pin in storage location and secure and lock in position by pushing Linch Pin over bottom of prong.

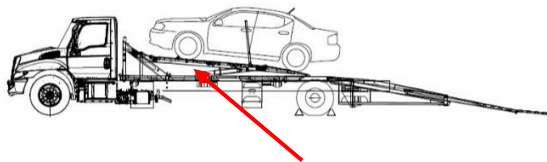


Deck Lock Pin Storage Location



Deck Lock Pin secured with Linch Pin in  
storage location.

3. Repeat #2 and #3 to remove Deck Lock Pin on other side of Deck and secure with Linch Pin in storage location.
4. Operate Hydraulics to lower Upper Deck until forward motion of Deck stops and the front of the Upper Deck is in a slightly raised position.



**Upper Deck in Slightly Raised Position with Upper Deck Latches Locked**  
Refer to label on your Carrier for instructions on directional movement of the Deck.

- Release latches on both sides of the Deck by pushing and holding the Latch Release button located in the Hydraulic Deck Panel while simultaneously operating the hydraulics until you hear and see the latches disengage. It is necessary to slightly raise the front of the Upper Deck for the Deck latches to release before lowering the front of the Upper Deck. Continue to depress the Latch Release until the front of the Upper Deck clears the latches.



Latch Release

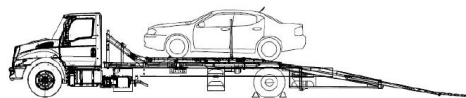


Deck Latch Engaged



Deck Latch Disengaged

- Operate Hydraulics to position Upper Deck to unload front Cargo Vehicle.



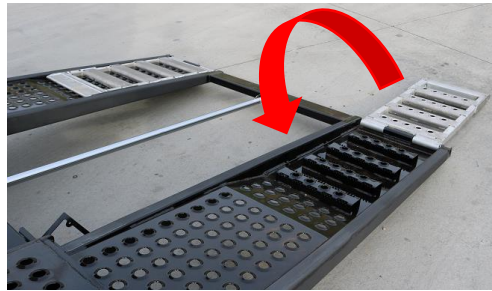
Deck Position to Unload Front Cargo Vehicle on XL Unit

**Refer to Hydraulic Deck - Position Deck to Load/Unload Cargo Vehicle: XL Unit section below and the label on your Carrier for instructions on directional movement of the Deck.**

7. Follow steps 1-10 in the **Unloading Winched Rear Cargo Vehicle: Standard and XL Units** section above.

**Prior to Transport: Standard and XL Units**

1. Walking on the ground to the side of the Carrier, return hook to its secured position. Do not walk on Deck to return hook to its secured position. Operator may choose to store cable/synthetic rope on either side of Carrier.
2. Operate Hydraulics to lower the Upper Deck to Transport Position, if needed.
3. Manually flip both Loading Ramp Extensions over into Transport Position, coming into contact with the Rear Loading Ramp.



Flip Loading Ramp Extensions into Transport Position

4. Operate Hydraulics to move the Rear Loading Ramp into Transport Position.



Rear Loading Ramp in Transport Position

5. Unplug Pendant Control from Pendant Box.



Disconnected Pendant Plug

6. Store Pendant Control clean, dry place when not in use.
7. Replace cap on Pendant Control Box.



Pendant Control Box with  
Cap Closed



Pendant Control Box with  
Cap Open

8. Remove the wheel chocks from around the Carrier's tires, and store them in the Storage Box on the side of the Carrier.
9. Disengage the power take-off (PTO) or electric pump (if applicable). Refer to the PTO operator's manual for instructions. Disengage electric pump on Cab dashboard. **NEVER TRAVEL WITH THE PTO CONTROL ENGAGED.** This could result in damage to the PTO unit and the Carrier's transmission.

## **Hydraulic Deck**

### **General Operating Instructions**

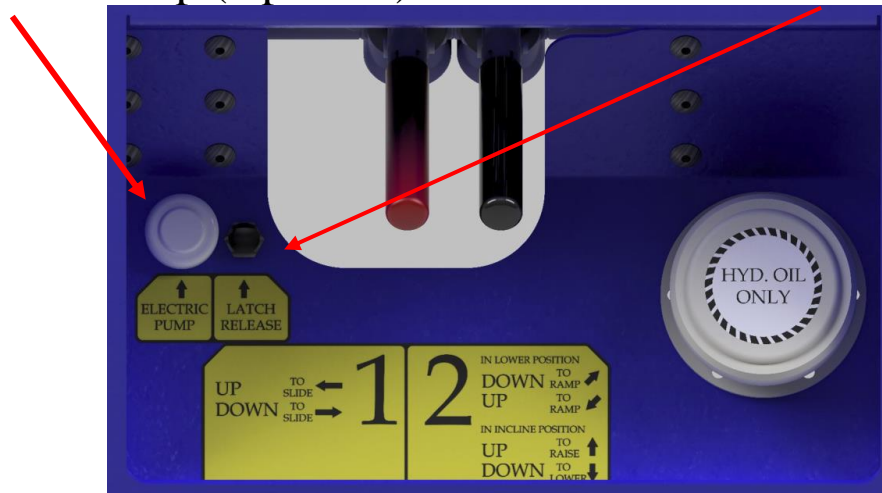
The Carrier is equipped with a Deck which can slide and tilt using a hydraulic system. Hydraulic valves mounted on the passenger side of the Carrier control Deck movement. The valves are numerically labeled to indicate the movement of the Deck. Follow the directions for Deck movement on the Valve Plate Diagram.



Standard Unit Valve Plate

Electric Pump (Optional)

Latch Release




XL Valve Plate

 **DANGER**

**Do not operate, maintain, adjust or repair the hydraulic system unless you have been trained to do so.**

**Failure to follow these instructions could result in death or serious injury.**

1. Before moving the Deck, ensure that the adjacent area is clear of personnel and equipment.
2. Never operate the controls with any part of your body, other than your hands, or with anyone inside the Carrier or Cargo Vehicle. Always operate controls standing outside of the Carrier with both feet on the ground.
3. Keep hands, limbs, loose articles and clothing away from moveable objects while hydraulic system is operating.
4. Ensure other persons and property are clear before operating hydraulics.
5. Do not exceed the factory pressure setting on hydraulic system as set forth on the Warning label on your Carrier. See diagram below.

 WARNING: FAILURE TO COMPLY W RESULT IN SERIOUS INJURY AN
<ol style="list-style-type: none"> <li>1. REFER TO OPERATOR'S MANUAL BEFORE OPERATING THIS CARRIER.</li> <li>2. INSPECT ALL EQUIPMENT PRIOR TO EACH USE TO ENSURE EQUIPMENT IS IN PROPER OPERATING CONDITION.</li> <li>3. KEEP HANDS, LIMBS, LOOSE ARTICLES, &amp; CLOTHING AWAY FROM MOVABLE OBJECTS WHILE HYDRAULIC SYSTEM IS OPERATING &amp; ENSURE OTHER PERSONS &amp; PROPERTY ARE CLEAR BEFORE OPERATING HYDRAULICS.</li> <li>4. <b>DO NOT EXCEED 2250 P.S.I. ON HYDRAULIC SYSTEM PRESSURE SETTING.</b></li> <li>5. DO NOT OPERATE HYDRAULICS UNLESS THE PARKING BRAKE IS ENGAGED &amp; REAR TIRES ARE CHOCKED IN FRONT OF AND BEHIND THE TIRES.</li> <li>6. DO NOT WALK ON DECKS TO LOAD OR UNLOAD CARGO VEHICLES.</li> <li>7. USE ONLY LADDERS/STEPS PROVIDED AND AREAS WITH NON-SKID SURFACE TO ASCEND AND DESCEND FROM THE CARRIER AND WHEN MOVING ABOUT ON THE UNIT.</li> <li>8. ALWAYS MAINTAIN 3 POINTS OF CONTACT WHILE ASCENDING OR DESCENDING FROM THE DECK OR OTHERWISE MOVING ABOUT ON THE CARRIER. THIS MEANS 2 FEET &amp; 1 HAND OR 2 HANDS AND 1 FOOT.</li> <li>9. NEVER USE CARGO VEHICLE DOOR HANDLE OR OTHER MOVEABLE OBJECT AS A POINT OF</li> </ol>

6. Do not operate hydraulics unless parking brake is engaged and rear tires are chocked in front of and behind the tires, using the four (4) wheel chocks provided with the Carrier.
7. Slowly push or pull the valve from its center position. This will initiate the flow of hydraulic fluid and start the Deck to move. Pushing or pulling the valve handle further will cause the Deck to move faster in the desired direction. As the Deck is moving, be aware of anything in its path and stop moving the Deck immediately if something is in its path. Releasing the valve will return the valve to its neutral position and cause the Deck to stop.
8. Engage the electric pump (if applicable) using the electric switch on Cab dashboard. When electric pump is engaged, operator must press Electric Pump button located with the hydraulic valves simultaneously with the hydraulic valves for the hydraulic valves to work. See photo above. To disengage the electric pump, use the electric switch on Cab dashboard.
9. On the XL unit, release latches on both sides of the Deck by pushing and holding the Latch Release button located in the Hydraulic Deck Panel while simultaneously operating the hydraulics until you hear and see the latches disengage. See photo above.

# Position Deck to Load/Unload Cargo Vehicle: Standard Unit

Note:  
All loading views are shown from the drivers side (left hand side) of the rig for clarity. All vehicles are to be exited and entered through the drivers side door of the vehicle being loaded or unloaded.



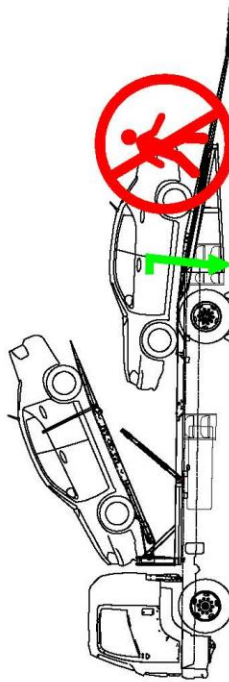
"Do not walk down deck" symbol

Arrow highlights access path to and from vehicle

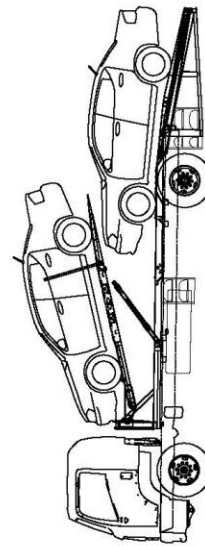
2 VEHICLES



DECK POSITION TO LOAD/UNLOAD FRONT CARGO VEHICLE

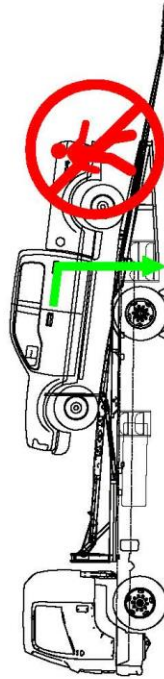


DECK POSITION TO LOAD/UNLOAD REAR CARGO VEHICLE

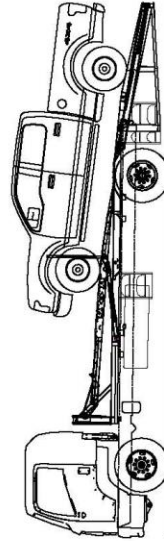


TRANSPORT POSITION

1 VEHICLE



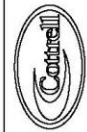
DECK POSITION TO LOAD/UNLOAD ONE CARGO VEHICLE



TRANSPORT POSITION

Warning: All decks must be positioned as low as possible before loading and unloading.

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Load Sequence Drawing  
Typical configuration shown, specific configurations may vary

Head Ramp: 2 CARDU

Tractor:


Trailer: N/A


Load: 2 GENERIC MID SIZE CARS & 1 GENERIC TRUCK

DCC 5000 016

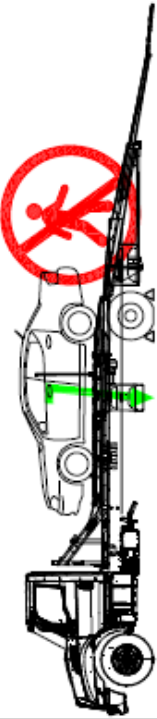
# Position Deck to Load/Unload Cargo Vehicle: XL Unit

**Note:**  
All loading views are shown from the drivers side (left hand side) of the rig for clarity. All vehicles are to be exited and entered through the drivers side door of the vehicle being loaded or unloaded.

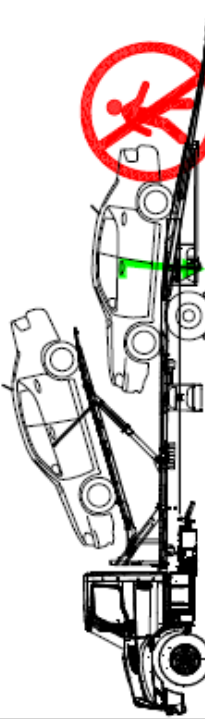
**"Do not walk down deck" symbol**  


**Arrow highlights access path to and from vehicle**  


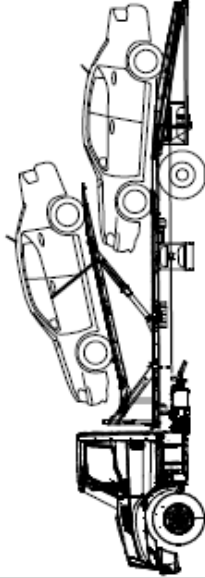
**2 VEHICLES**



DECK POSITION TO LOAD/UNLOAD FRONT CARGO VEHICLE

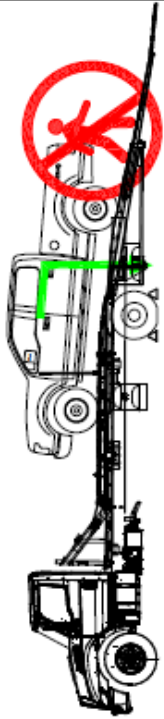


DECK POSITION TO LOAD/UNLOAD REAR CARGO VEHICLE

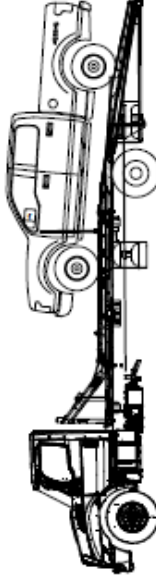


TRANSPORT POSITION

**1 VEHICLE**



DECK POSITION TO LOAD/UNLOAD ONE CARGO VEHICLE




TRANSPORT POSITION

**Warning:** All decks must be positioned as low as possible before loading and unloading.

Load Sequence Drawing

Typical configuration shown, specific configurations may vary

<small>Head Ramp:</small>	2 CARDJXL	<small>Tractor:</small>	N/A
<small>Load:</small>	2 GENERIC MID SIZE CARS & 1 GENERIC TRUCK		



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## Care and Maintenance



### **WARNING**

**Failure to comply with these Warnings and Instructions could result in death or serious injury.**

1. Use only Cottrell supplied or approved parts for repair and maintenance of the Carrier. Use of parts not approved by Cottrell may void the warranty and create an unsafe condition.
2. Although hydraulic cylinders may appear to be similar, Cottrell hydraulic cylinders are specifically designed for use in certain applications. Replace hydraulic cylinders only with identical-size cylinders manufactured by Cottrell.
3. The shafts of Cottrell hydraulic cylinders are specially coated and are not suitable for any other application. It is unsafe to weld on chrome or chrome-plated cylinders.
4. Do not exceed the factory pressure setting on hydraulic system as set forth on the Warning label on your Carrier. See diagram below.

### **PSI WARNING**



**WARNING: FAILURE TO COMPLY WITH THESE INSTRUCTIONS  
RESULT IN SERIOUS INJURY AND DEATH.**

1. REFER TO OPERATOR'S MANUAL BEFORE OPERATING THIS CARRIER.
  2. INSPECT ALL EQUIPMENT PRIOR TO EACH USE TO ENSURE EQUIPMENT IS IN PROPER OPERATING CONDITION.
  3. KEEP HANDS, LIMBS, LOOSE ARTICLES, & CLOTHING AWAY FROM MOVABLE OBJECTS WHILE HYDRAULIC SYSTEM IS OPERATING & ENSURE OTHER PERSONS & PROPERTY ARE CLEAR BEFORE OPERATING HYDRAULICS.
  4. **DO NOT EXCEED 2250 P.S.I. ON HYDRAULIC SYSTEM PRESSURE SETTING.**
  5. DO NOT OPERATE HYDRAULICS UNLESS THE PARKING BRAKE IS ENGAGED & REAR TIRES ARE CHOCKED IN FRONT OF AND BEHIND THE TIRES.
  6. DO NOT WALK ON DECKS TO LOAD OR UNLOAD CARGO VEHICLES.
  7. USE ONLY LADDERS/STEPS PROVIDED AND AREAS WITH NON-SKID SURFACE TO ASCEND AND DESCEND FROM THE CARRIER AND WHEN MOVING ABOUT ON THE UNIT.
  8. ALWAYS MAINTAIN 3 POINTS OF CONTACT WHILE ASCENDING OR DESCENDING FROM THE DECK OR OTHERWISE MOVING ABOUT ON THE CARRIER. THIS MEANS 2 FEET & 1 HAND OR 2 HANDS AND 1 FOOT.
  9. NEVER USE CARGO VEHICLE DOOR HANDLE OR OTHER MOVEABLE OBJECT AS A POINT OF CONTACT.
5. Prior to each use, check hydraulic system for leaks. If leaks are found, identify source of leak, properly repair it, and clean up residue.
  6. Ensure all metal-to-metal sliding surfaces are regularly lubricated with Cottrell authorized lubricant.
  7. Use only approved hydraulic fluids and filters. Contact Cottrell, Inc. for recommended oils and filters.
  8. Hydraulic oil filters must be changed within two (2) weeks of initial placement in service of the Carrier and, at a minimum, every three (3) months thereafter.
  9. Hydraulic fluid must be changed, at a minimum, every twelve (12) months.

## Wheel Strap Securement

### Requirements for Transporting with Wheel Straps



#### **WARNING**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

1. Do not secure or transport vehicles with wheel straps unless approved by the Cargo Vehicle manufacturer.
2. Do not secure or transport vehicles with wheel straps if tires do not have adequate tread depth to maintain the cleats in position on the tire.
3. Do not secure or transport vehicles with wheel straps if tires are under-inflated or cannot maintain correct inflation pressure during transport.
4. Do not secure straps from an elevated position.
5. Comply with all Cargo Vehicle manufacturer requirements for utilizing straps with their vehicles.

### Care and Maintenance



#### **WARNING**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

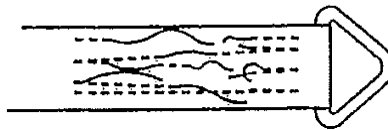
1. Use only Cottrell-supplied wheel strap and hook assemblies. Non-Cottrell strap and hook assemblies may fail during securement or transport and result in personal injury.
2. Inspect wheel straps before each use for wear. Refer to the enclosed strap care and maintenance guide for inspection procedures. Do not use any wheel strap that is fraying or showing signs of excessive wear. See examples of Damaged Straps (Synthetic Web Tie Downs) in the Figures below:

## FIGURES - DAMAGED SYNTHETIC WEB TIE DOWNS

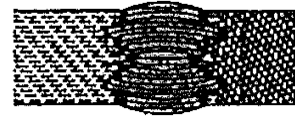
**Figure 1**  
Holes, Tears  
Cuts, Snags



**Figure 2**  
Broken Or Worn Stitching  
In Load Bearing Sew  
Patterns



**Figure 3**  
Excessive  
Abrasive Wear



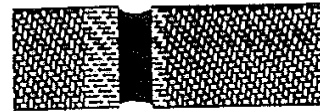
**Figure 4**  
Knots In The  
Tie Down



**Figure 5**  
Melting Or Charring  
Of The Tie Down,  
Or Weld Spatter  
On The Tie Down



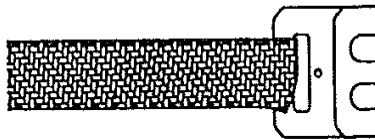
**Figure 6**  
Chemical  
Burns



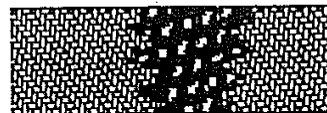
**Figure 7**  
Damaged Loop,  
Eye Hook Too  
Small Or Too Rough



**Figure 8**  
Tear In Webbing  
At The Fitting



**Figure 9**  
Other Apparent Damages  
That May Affect Strength  
Ratings; Such As Crushed  
Webbing, Etc.



\* THESE GRAPHICS WERE DEVELOPED AND PROVIDED BY THE WEB SLING AND TIE DOWN ASSOCIATION (WSTDA). COPYRIGHT 2005 BY WSTDA.

3. Inspect wheel straps to ensure that protective sleeves and cleats are in place. Do not use wheel strap if protective sleeves or cleats are missing or damaged.

4. Store wheel straps in the Storage Box provided on the side of the Carrier when not in use. Failure to store wheel straps properly could result in premature wear, damage or unexpected failure.
5. Do not drive over wheel straps or hooks with Cargo Vehicle. Failure to follow this instruction could result in premature wear, damage or unexpected failure.
6. Install and remove all wheel straps while standing on the ground in an adequate posture and balanced position.
7. Ensure wheel straps are lying flat (not twisted) and running in a straight line from the ratchet shaft to the tire. Failure to follow this instruction may cause wheel straps to become loose during securement or transport, or could result in premature wear, damage or unexpected failure.
8. Position protective sleeves over wheel strap as needed to prevent abrasion, which can lead to premature wear, damage or unexpected failure.
9. Do not use excessive force to secure Cargo Vehicle. Using excessive force to tighten wheel straps may lead to premature wear, damage or unexpected failure of the straps, and could result in personal injury. For the purpose of this warning, “excessive force” means more force than is necessary to adequately and properly secure the Cargo Vehicle to the Carrier. Apply only the force necessary to adequately and properly secure the Cargo Vehicle to the Carrier in compliance with the Cargo Vehicle manufacturer’s specifications and this Manual.
10. Do not overtighten wheel straps. Overtightening may lead to premature wear, damage or unexpected failure of the wheel strap, and could result in personal injury. For the purpose of this warning, “overtightening” means applying more force than is necessary to adequately and properly secure the Cargo Vehicle to the Carrier. Apply only the force necessary to adequately and properly secure the Cargo Vehicle to the Carrier in compliance with the Cargo Vehicle manufacturer’s specifications and this Manual.
11. Wheel straps should never be so tight as to cause the tire sidewall to bulge. If the tire sidewall starts to bulge, **STOP IMMEDIATELY**, release the tension on the wheel strap (see procedures for releasing in this Manual), and start the securement process again.
12. Do not twist the wheel strap during the securement procedure.
13. Affix hooks as close as to the tire as possible to prevent tire movement

## Wheel Strap Securement Procedure



### **DANGER**

**Use four (4) wheel straps, one (1) on each tire, to secure Cargo Vehicle for transport. Failure to follow this instruction could result in detachment and loss of vehicles during transport, which may result in death or serious injury to the operator and/or the motoring public.**



### **WARNING**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

1. Insert hook in a hole in the Deck as far under the tire as possible and centered on the tire. See Figure below – (a). As shown, ensure the hook is loaded at the crotch of the hook and not the tip of the hook. Tip loading will result in higher stresses and may cause hook failure. In the event the Cargo Vehicle is adjusted so the front of the Cargo Vehicle does not extend beyond the front of the Deck such that the front tires are not flush against the wheel stops, the wheel stop located immediately in front of each front tire may be used as an additional securement point to secure the front tire. See photo below.



Photo: Hook secured in wheel stop

2. Place wheel strap over the tire, ensuring that the rubber cleats are centered across the width of the tire. See Figure below – (b).
3. Ensure that the cleats are spaced equally over the top of the tire, and remove any slack between the first hook and the cleats. Push the first cleat as far towards the ratchet end as the cleat stop will allow. See Figure below – (c).

4. Position the cleats to ensure that the dimples are securely inserted into the tire tread. See Figure below – (d).
5. Insert hook in a second hole in the Deck as far under the tire as possible. See Figure below – (e). As shown, ensure the hook is loaded at the crotch of the hook and not the tip of the hook. Tip loading will result in higher stresses and may cause hook failure. In the event the Cargo Vehicle is adjusted so the front of the Cargo Vehicle does not extend beyond the front of the Deck such that the front tires are not flush against the wheel stops, the wheel stop located immediately in front of each front tire may be used as an additional securement point to secure the front tire. See photo below.

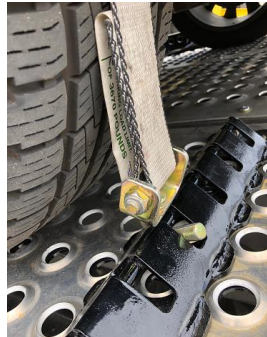
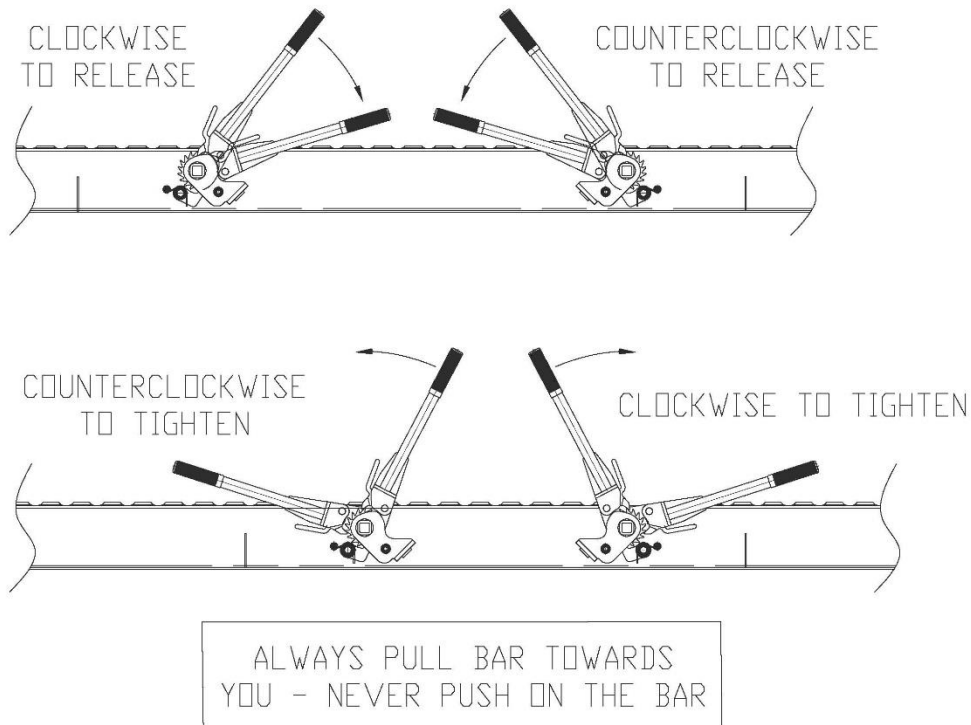


Photo: Hook secured in wheel stop

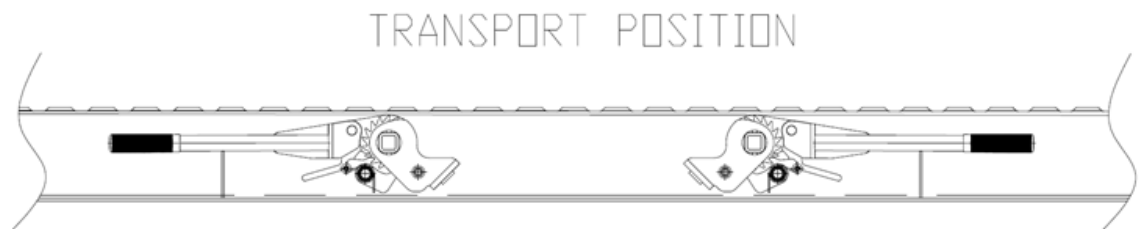
6. Position protective sleeve as needed to prevent abrasion of the wheel strap. See Figure below – (f).
7. Slide the strap on the ratchet shaft to align it with the wheel strap over the tire.
8. Insert the wheel strap into the strap spool and pull it to eliminate slack in the strap.
9. Ensure wheel strap is lying flat (not twisted) and running in a straight line from the ratchet shaft to the tire. Failure to follow this instruction may cause wheel straps to become loose during securement or transport, or could result in premature wear, damage or unexpected failure.
10. Using an approved two or three-point stance as appropriate to safely maintain your balance, turn Integrated Ratchet Bar to fully tighten the wheel strap. Never push on the Integrated Ratchet Bar during the securement process.



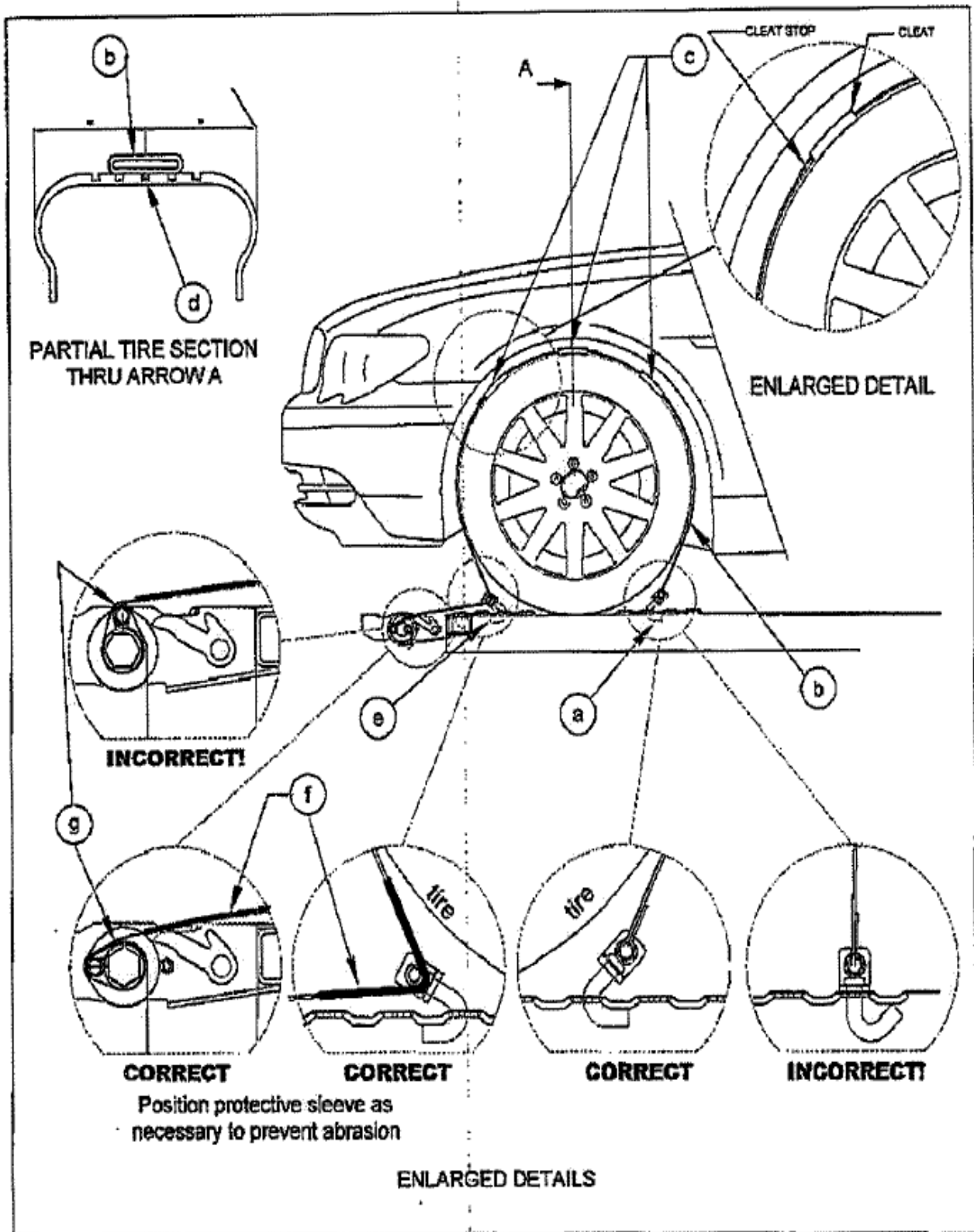
**Integrated Ratchet Bar**



11. Using a steady, slow, non-jerking movement, exert enough force on the Integrated Ratchet Bar to securely tension the wheel strap around the circumference of the tire. During the strap tensioning process, the ratchet pawl will “click” on each successive ratchet tooth.
12. See Figure (g) below for final correct position of strap on spool. Note that strap is threaded into slot in an “over-center” position on spool for securement.
13. When the wheel strap is securely tensioned around the circumference of the tire, return the Integrated Ratchet Bar to the Ratchet Transport Position.



# STRAPS WITH INTEGRAL RATCHET SYSTEM





14. Do not use excessive force to secure vehicles. Using excessive force to tighten wheel straps may lead to premature wear, damage or unexpected failure of the straps, and could result in personal injury. For the purpose of this warning, “excessive force” means more force than is necessary to adequately and properly secure the Cargo Vehicle to the Carrier. Apply only the force necessary to adequately and properly secure the Cargo Vehicle to the Carrier in compliance with the Cargo Vehicle manufacturer’s specifications and this Manual.
15. Do not overtighten wheel straps. Overtightening may lead to premature wear, damage or unexpected failure of the wheel strap, and could result in personal injury. For the purpose of this warning, “overtightening” means applying more force than is necessary to adequately and properly secure the Cargo Vehicle to the Carrier. Apply only the force necessary to adequately and properly secure the Cargo Vehicle to the Carrier in compliance with the Cargo Vehicle manufacturer’s specifications and this Manual.
16. Wheel straps should never be so tight as to cause the tire sidewall to bulge. If the tire sidewall starts to bulge, **STOP IMMEDIATELY**, release the tension on the wheel strap (see procedures for releasing in this Manual), and start the securement process again.
17. Ensure that the amount of strap on the ratchet spool does not exceed the outer diameter of the strap ratchet spool.
18. Do not insert a strap securement hook into any Deck pooch or hole or wheel stop hole that shows signs of cracking or other damage. Replace any decking or wheel stop that shows signs of cracking or other damage through or around pooch holes or securement holes.
19. **Repeat this procedure at the other three (3) corners of the Cargo Vehicle, for a total of four (4) wheel straps. Failure to use four (4) straps when transporting vehicles could result in detachment and loss of vehicles during transport, which could cause serious personal injury or death to the motoring public.**

### Wheel Strap Releasing Procedure



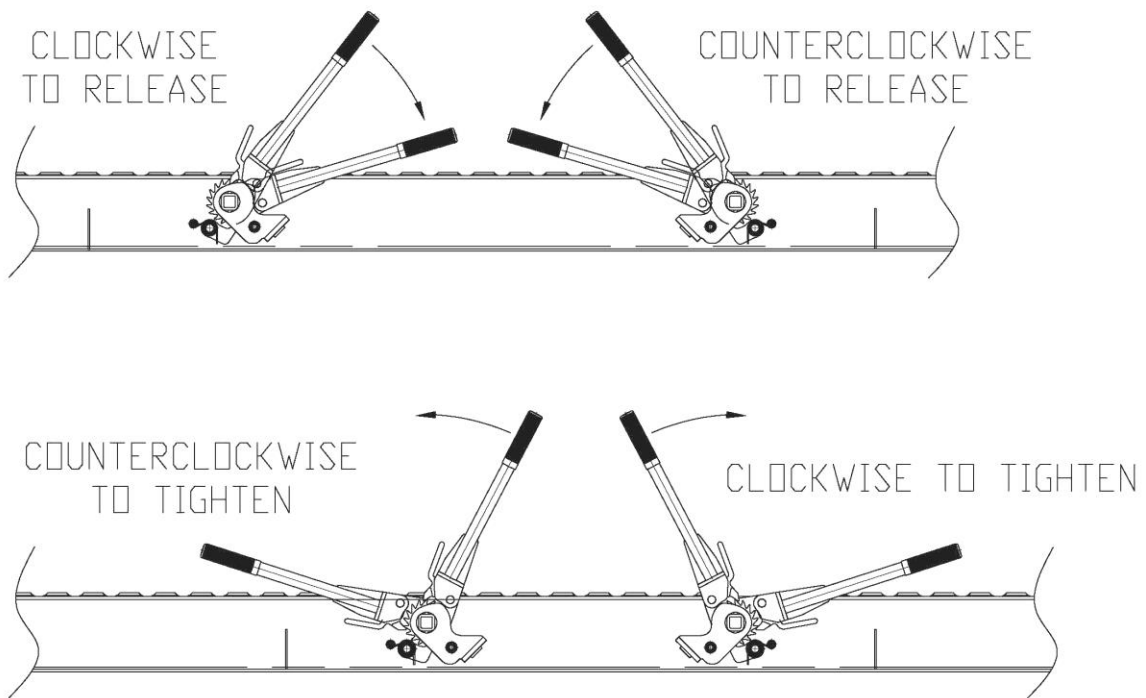
## **WARNING**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

1. Always keep hands, fingers, and all body parts clear of the wheel strap and Cargo Vehicle while releasing tension on the wheel strap.
2. With hand firmly on grip portion of Integrated Ratchet Bar, apply pressure to Integrated Ratchet Bar to release the pawl (quick-release mechanism).



### Integrated Ratchet Bar



ALWAYS PULL BAR TOWARDS YOU - NEVER PUSH ON THE BAR

3. When the wheel strap is loose, return the Integrated Ratchet Bar to the Ratchet Transport Position.

## TRANSPORT POSITION



4. Remove the cleats from the tire tread and remove the wheel strap from the tire.
5. Store wheel straps in the Storage Box provided on the side of the Carrier when not in use. Failure to store wheel straps properly could result in premature wear, damage or unexpected failure.



Photo: Storage Box

6. Do not drive over wheel straps or hooks with Cargo Vehicle during loading or unloading.
7. Repeat steps 1-4 for the other three (3) corners of the vehicle.

## Cargo Vehicle



### **WARNING**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

1. Unless instructed otherwise in the Cargo Vehicle's manufacturer's shipping manual, be certain that all vehicles are in "Park" with the parking brake applied before exiting the Cargo Vehicle. For manual transmissions, vehicles must be in first gear with parking brake applied.
2. Do not operate the Carrier if the Cargo Vehicle is not properly distributed and secured in compliance with Federal Regulations. Refer to [www.fmcsa.dot.gov](http://www.fmcsa.dot.gov) for regulations regarding cargo securement.
3. Be aware of clearance between Cargo Vehicle and structure when operating hydraulic system.
4. Ensure that the Cargo Vehicle has sufficient clearance from all surfaces and components on the Carrier before driving on or off.
5. Position Cargo Vehicle on the Carrier to allow you to enter and exit the Cargo Vehicle through the driver's side door. Do not enter or exit the Cargo Vehicle through any other doors or windows.
6. When positioning a Cargo Vehicle on the Deck, proceed with extreme caution and ensure the front of the Cargo Vehicle does not extend beyond the front of the Deck when loaded. Driving the vehicle past the front of the Deck could result in damage to the Carrier or Cargo Vehicle.
7. In the event you drive the Cargo Vehicle off the side or over the edge of the Carrier, or if you believe the Cargo Vehicle is going to slide or fall off the Carrier, do not attempt to jump out of the Cargo Vehicle. Stay inside the Cargo Vehicle and lean away from the point of impact. Do not attempt to exit the Cargo Vehicle if you believe it is sliding or falling off the Carrier, as the Cargo Vehicle may fall on you, resulting in serious injury or death.

## **TRANSPORTING A VEHICLE**



**DANGER**

**When transporting a Cargo Vehicle, use four (4) wheel straps, one (1) on each tire, to secure the Cargo Vehicle. Failure to follow this instruction could result in detachment and loss of vehicles during transport, which may result in death or serious injury to the operator and/or the motoring public.**



**DANGER**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

1. Do not operate the Carrier if the Cargo Vehicle is not properly distributed and secured in compliance with Federal Regulations. Refer to [www.fmcsa.dot.gov](http://www.fmcsa.dot.gov) for regulations regarding cargo securement.
2. Be aware of low clearance of Carrier when crossing railroad tracks or other uneven roadway surfaces.
3. Be aware of overhead load clearance at all times during transport, including overhead power lines.
4. Be aware of and comply with all height requirements, which vary by jurisdiction.
5. Periodically check tension in the securement straps and retighten as needed.
6. Periodically check for signs that wheels or brakes have overheated. Look for discoloration of hub or hubcap, deformation of hubcap, blistering of tires, etc.
7. Secure all wheel straps and any other loose objects prior to transport. Never drag wheel straps during transport.
8. In the event of ice and/or snow, comply with state and federal regulations regarding the use of snow chains. If the Carrier is equipped with automatic snow chains, refer to specific snow chain instructions from the snow chain supplier. If the Carrier is not equipped with automatic snow chains, manual snow chains (not supplied) may be needed.
9. Ensure Decks are properly locked prior to loading/unloading/transporting Cargo Vehicles.

## **REPAIR AND MODIFICATION OF THE CARRIER**

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**DANGER**

**Failure to comply with the following Warnings and Instructions could result in death or serious injury.**

1. Do not modify or alter your Carrier without the prior written consent of Cottrell, Inc. Modifications or alterations may compromise the structural integrity or safety aspects that exist in the original design of the Carrier. Such modifications or alterations may also cause property damage and void the Warranty.
2. All repairs and modifications/refurbishments must be made by Cottrell, Inc. or a Cottrell authorized repair facility. Contact Cottrell, Inc. at 1-800-827-0132 or refer to [www.cottrelltrailers.com](http://www.cottrelltrailers.com) for a current listing of authorized repair facilities.

## **LIMITED WARRANTY**

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**THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, EXCEPT AS SPECIFICALLY SET FORTH HEREIN.**

Cottrell warrants to Buyer for the period set forth below (the “Warranty Period”), from the “In-Service Date” submitted by the customer and approved by Cottrell, that each new Carrier will be free from design failures and defects in workmanship under normal use and service as follows:

- (1) Mainframe Structure: Twenty-four (24) Months.
- (2) Paint Manufacturer warrants paint on the Carrier for 500,000 miles or five (5) years from application date, whichever first occurs as follows:
  - (A) Years 1 and 2 - 100% of materials and labor
  - (B) Year 3 - 100% of materials and 50% of labor
  - (C) Year 4 - 50% of materials and labor
  - (D) Year 5 - 50% of materials and 25% of labor
- (3) Suspension, lighting, hydraulic hoses and other related items supplied to Cottrell by various component manufacturers are warranted by that particular manufacturer under its warranty policy and not by Cottrell. All claims for warranty work should be directed to Cottrell for determination and handling.
- (4) All warranty work must be approved and a work order issued by Cottrell before repair/replace work is commenced. Photographs of alleged failed parts shall be furnished by Buyer/Customer at the request of Cottrell. Failed parts shall be returned to Cottrell on all claims.

**THE FOREGOING WARRANTIES APPLY ONLY TO THE ORIGINAL BUYER (WARRANTIES ARE NOT TRANSFERABLE OR ASSIGNABLE), AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

Cottrell’s obligations under this Warranty are limited to repair or replacement at Cottrell’s option and at Cottrell’s facility in Gainesville, Georgia, or at a location approved by Cottrell, of any product or parts thereof that Cottrell determines may not conform to this Warranty. Buyer shall promptly notify Cottrell in writing of any alleged defect in the Product and specifically describe the problem. Cottrell shall have no obligation under this Warranty with respect to any defect unless it

receives notice and a description of such defect during the Warranty Period. Upon receipt of such notice, Cottrell shall advise Buyer that warranty service shall be provided, or that the problem is not covered under this Warranty. Buyer shall pay the costs of transportation for warranty work.

The foregoing warranties shall not apply to the Product in the event it has been (i) used or operated in a manner inconsistent with the use intended by Cottrell, (ii) modified or repaired by anyone other than Cottrell's personnel or Cottrell's authorized representatives, (iii) damaged because of accident, neglect or misuse by anyone other than Cottrell's personnel, or (iv) damaged during shipment and/or when returning the Product to Cottrell for repair or replacement. Any statements made about the Product by salespersons, dealers, distributors or agents are not warranties, shall not be relied upon by Buyer, and are not part of the sale.

Cottrell shall in no event have obligations or liabilities to Buyer or any other person for loss of profits, loss of use or collateral (including cargo damage), incidental, special or consequential damages, whether based on contract, tort (including negligence), strict liability, or any other theory or form of action, even if Cottrell has been advised of the possible theory or form of action, arising out of the sale, delivery, use, repair or performance of the Product, or any failure or delay in connection with any of the foregoing. In no event shall the liability of Cottrell arising out of or in connection with the sale of the Product exceed the actual amount paid by Buyer to Cottrell for the Product.



## **WARRANTY PROCEDURES AND GUIDELINES**

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Following are the procedures and guidelines for submitting and processing warranty claims:

1. Registration of your Carrier is required for warranty coverage. You may register on-line at [www.cottrelltrailers.com](http://www.cottrelltrailers.com).
2. Cottrell must receive an estimate for repair, with an agreed-upon labor rate, before a Purchase Order will be issued.
3. Cottrell must issue a Purchase Order prior to the repair work being done.
4. All Purchase Order numbers must be referenced on invoices in order for the invoice to be processed for payment by Cottrell.
5. Pictures may be required of any structural damage before work will be authorized.
6. When a warranty claim involves a failed part, that part must be returned to Cottrell for evaluation.
7. Cottrell must issue a Returned Goods Authorization (“RGA”) number before returning the part(s).
8. When a warranty claim involves failed parts, Cottrell will provide replacement parts. You will initially be charged for these parts, but your account will be credited once the failed parts have been returned and approved for warranty. The RGA number to return the failed parts will be on the packing slip of the replacement parts.
9. Cottrell will pay you your cost plus 10% for parts used out of your inventory, provided the parts were purchased from Cottrell.
10. When a warranty claim involves a vendor part, Cottrell may choose to get the vendor involved.
11. Parts in question **MUST** be returned (or pictures, if structural or fabrication). Such parts or pictures must be received before credits are applied and labor is paid.
12. Please review Cottrell’s Limited Warranty for further information and explanation. (Refer to prior section in this Manual).
13. Check Cottrell’s website ([www.cottrelltrailers.com](http://www.cottrelltrailers.com)) regularly for service bulletins and other updates concerning your Carrier.

## **INFORMATION PACKET**

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All Carriers comes with two (2) copies of this Operator's Manual. One copy is affixed to your Carrier and is to stay with the Carrier at all times for reference. The second copy is included with other items in the Information Packet that accompanies the sale of all Carriers, and allows the owner or operator to keep a copy of the Operator's Manual with the file of other important documents pertaining to the Carrier, should the owner or operator desire to do so.

Inside the Information Packet, you will find a colored "Contents" page that lists the items included in the Packet. A **SAMPLE** list of contents, as may be included in your Information Packet, is as follows:

1. Operator's Manual
2. Limited Warranty
3. Warranty Procedures
4. Current Listing of Authorized Repair Facilities - Contact Cottrell at 1-800-827-0132 or refer to our website at [www.cottrelltrailers.com](http://www.cottrelltrailers.com) for a current listing of authorized repair facilities.
5. Parker - Safety Guide for Hoses/Fittings
6. Parker - Mobile Service Guide
7. Truck-Lite - Product Information/CD
8. Valve Warranty Policy
9. Recommended Operating, Care/Maintenance and Inspection Manual for Synthetic Web Tie Downs
10. PTO Manual
11. Automatic Snow Chain Instruction Manual (if equipped)
12. Winch Operator's Manual (if equipped)
13. Curtain Operator's Manual (if equipped)

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