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Proudly built in the USA
Owner’s Manual TC-503 with Tailgate or Barn Doors
Hoist, Sub-Frame, Dump Body and Options
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**NOTE:** To activate the Warranty on your new TC-503 go online to [www.truckcraft.com](http://www.truckcraft.com) or contact your nearest TruckCraft dealer.

The TruckCraft hoists are designed for use with TruckCraft’s 9’-9” and 11’-5” aluminum dump bodies.
Preface

Read and understand all sections of this manual prior to installing or operating the TruckCraft hoist.

This manual contains information for the installation, operation, and maintenance of the TruckCraft TC-503 Hoist, Sub-Frame and Dump Body. Proper care and operation of the unit will assure years of dependable service. Your local TruckCraft Dealer will instruct you in its general operation. TruckCraft Corporation will be glad to answer any questions that may arise regarding the operation of your unit.

Ordering Repair Parts

When service is necessary, your local TruckCraft dealer can provide assistance. Always obtain original TruckCraft replacement parts from your dealer. Substitute items could affect the performance and warranty of the unit. Dealers in your area can be found on the web at www.TruckCraft.com.

When ordering parts the product serial number, and description or part number of parts needed are required. The product serial number is located on the drivers side of the front face (behind truck cab) of the dumper body.

Product Serial Number: ____________________________

Date of Purchase: ________________________________

Purchased From: _________________________________

TruckCraft Telephone #800.375.3867 or 717.375.2900
TruckCraft Fax #717.375.2975
Method of shipping parts to be specified such as customer pickup, UPS, Common Carrier, Parcel Post or Air Freight. All orders to be confirmed in writing, or faxed, to insure proper understanding of request.

Having preventative maintenance parts on hand could save valuable time.

Improvements and Changes

Because TruckCraft strives to continually improve our products, we reserve the right to make changes and improvements wherever practical, without obligation to make those same changes or improvements to the equipment already sold. Photographs used in this manual may not be up-to-date with current design changes.
Safety Information

Observe the following safety procedures during the use of the hoist and dump body: Before operating read and understand all information furnished with your hoist and in this manual.

✓ Keep hands, feet and clothing away from moving parts.
✓ Keep hinge pins and bushings well greased-inspect regularly for proper operation during rotation.
✓ Never exceed the rating of the hoist, truck, axles, or tires. Make certain the load is evenly distributed.
✓ Never work under a raised body unless the body is supported by blocking or propped in the raised position. Always unload the body prior to using the prop.
✓ Operate the hoist only when the truck is on a firm, level surface.
✓ Always inspect the area around the truck for safe dumping prior to operating the hoist.
✓ Do not move the truck with the body in a raised position.
✓ Always release the tailgate pins prior to raising the dump body when it is loaded. The tailgate pins should not be released with a load against the tailgate.
✓ Store the remote control in a location that assures that no object can come in contact with the raise button unintentionally.
✓ Before raising the dumper, check for adequate overhead clearance. Be alert for overhead electrical wires.
✓ Always ensure that the red warning light is off, indicating that the body is all the way down, before operating the truck.
✓ Regularly check and tighten all fasteners to the recommended torque values in the Torque Chart shown below.
✓ Maximum hydraulic pressure is factory set at 3200 PSI. Tampering with this setting can damage hydraulic components and result in system failure.
✓ Use automatic transmission fluid in the hydraulic reservoir. Check regularly and keep clean.

### Torque Chart - Steel Fasteners

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<th>Size</th>
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<td>90-100</td>
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<td>5/8-11</td>
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<td>180-190</td>
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<td>3/4-10</td>
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Certifying and Labeling Chassis-Cabs after mounting TruckCraft dump body

New chassis-cabs are supplied by the manufacturer with incomplete vehicle documentation (IVD). According to the National Highway Traffic Administration, "NHTSA," regulations a “manufacturer” is a person who performs a manufacturing operation on a new incomplete vehicle. A Final Stage Manufacturer is a person who performs such manufacturing operations on an incomplete vehicle that it becomes a complete vehicle. It is the responsibility of this Final Manufacturer to affix an approved label to the vehicle certifying that the vehicle meets all applicable Federal Motor Vehicle Safety Standards. Regulations also require certification in many instances when mounting a dump body on a used chassis-cab.

It is strongly recommended that anyone contemplating mounting a TruckCraft dump body and not familiar with the regulations obtain a copy of the National Truck Equipment Association’s, “NTEA’s”, “Vehicle Certification Guide”. Thoroughly read and understanding all sections of this guide before attempting to certify a completed vehicle. The “Guide”, free to NTEA members, can be purchased on the NTEA website, www.NTEA.com.

Below are answers/recommendations to key certification questions:

1) If the end-user purchases a new cab-chassis and mounts the dump body, does the completed vehicle need to be certified?

Per the NTEA “Guide” page 9B, “When the ultimate customer purchases an incomplete vehicle and installs additional equipment, he becomes, in effect, a manufacturer and thus is subject to the certification and registration requirements of the Act.”

2) What must an end-user/manufacturer do in order to be able to certify a completed vehicle?

Per the NTEA “Guide” pages 1C and 2C, Chapter 1, all manufacturers need to register with the NHTSA on form (49 CFR 566) - a copy of which is included in the book.

3) Will the chassis-cab safely handle the weight of the dump body and payload?

The Incomplete Vehicle Manual usually contains information on calculating maximum completed vehicle weights and acceptable horizontal and vertical combined centers of gravity for compliance to the Federal Motor Vehicle Safety Standards. If not supplied with the chassis-cab, this information should be obtained from the truck dealer and calculations need to be performed to make sure limits are not exceeded. Based on the maximum axle weight limitations,
calculations should also be run to determine the maximum payload capacity of the dump body.

4) What are the steps to certifying and labeling the completed vehicle?

Chapter 5, pages 1F through 4F, of the NTEA “Guide” outline this procedure when certification is within the guidelines of the Incomplete Vehicle Manual. Certification labels, item #2159, can be purchased from the NTEA in quantities of 100 labels per order.

5) What are the Tire and Loading label requirements?

Vehicles with a gross vehicle weight rating (GVWR) of 10,000# or less are required to have a Tire and Loading label. Chapter 7, 1H through 4H, of the NTEA “Guide” outlines the procedure for calculating the data on this label. This label, item #1220, can also be purchased in quantities of 60 from the NTEA.
Mounting Instructions

**CAUTION:** Verify lifting and support devices can support the hoist, sub frame, and dump body combined weight before picking up the assembly. The hoist, sub-frame and dump body are normally shipped assembled and ready to install on a truck frame—see Figure 4. Truck manufacturers recommend that the sub-frame does not contact the top of the frame. A gap can be established by attaching 1/4” thick wooden strips on top of the frame or installing a spacer layer of adhesive backed, high strength neoprene rubber on top of the frame. However, solid connections between the truck frame and the sub-frame are required at the location where the hoist pins to the sub-frame and at the rear of the frame. When mounting with a 1/4” gap, the steel spacers supplied with the kit need to be installed between the truck frame and the sub-frame at the hoist mount location—see Detail A. This spacer can be eliminated if the sub-frame is mounted directly on top of the truck frame with no space between the two.

1. Set the assembly on top of the frame or spacer and position it a minimum of 3.5” from the cab as shown above in Figure 4. Always make sure there is a solid connection between the sub-frame and the truck frame at the rear in the dump body pivot area and the hoist mount area shown in detail “A”. If the rear pivot centerline extends beyond the rear of the frame, an angle iron brace or similar structure can be welded across the back of the frame to support the pivot.

2. Position the sub-frame mounting brackets along the sides of the frame in an area where the brackets do not interfere with existing frame bolts or hardware—see Figure 5. Flipping the brackets or moving to alternate holes drilled in the sub-frame usually eliminates interference. However, additional holes can be drilled.
be drilled in the sub-frame as required. Use shims supplied to fill any gaps between the mounting brackets and the frame or sub-frame. Mark the location for mounting holes in the frame and drill 8 holes (12 on TC-430) 21/32” diameter for 5/8” grade 8 bolts supplied. **Caution:** Be careful of wiring, brake lines, etc. inside frame when drilling. Install bolts, nuts and 2 washers per hole and torque to 180 FT-LBS.

3. Route control cable into cab and install remote control box in an area where the up button will not be unintentionally bumped.

4. Route power supply cable to battery and hook up leads to battery.

5. Make sure all blocking and tie-downs used for shipping are removed. Activated the remote control up button and carefully raise the body. Do not reach under or place any body parts under the dump body. Raise the body up about half way to about 30 degrees from horizontal. Rotate the safety prop counterclockwise until it rests on the angle stop on the hoist—see figure 6. Carefully lower the hoist until the cross shaft of the hoist rests on the prop. **Do not power down the hoist after the shaft rests on the prop.** With the prop in this position it is now safe to work under the dump body.
6. With the safety prop supporting the dump body and the truck level, check the depth of the oil in the hydraulic reservoir. The depth of the fluid in the tank at this position should be 3”. Use automatic transmission fluid only to fill the reservoir to this level.

7. Apply grease at twelve grease zerks:
   See HOIST & SUBFRAME GREASE FITTING CHART (I5-080854) for location of the fittings.

8. Install the light, mount bracket and decal shown in figure 7 on the dash inside the cab of the truck. Using the fuse holder, wire the light to the dump switch mounted on the front of the sub-frame across from the hydraulic reservoir. Use the schematic shown in figure 8 to connect the wiring. Note: Wire not supplied by TruckCraft.

9. Place the two decals A4-04684 and A4-04685 inside the cab on the dash in an easy to read location.

10. Connect the marker light wiring harness to the truck wiring.

11. Push the remote control up button. Raise the hoist high enough to drop the safety prop back into its storage position. Cycle the hoist through the complete stroke of the telescope cylinder a couple times to make sure everything works properly.
**Maintenance**

1. Check hydraulic reservoir monthly and add oil as required, more frequently under heavy use. Every two to three years, depending on the use, drain the system and replace with clean fluid. Use Dexron Automatic Transmission fluid only.

2. Apply grease to all rotating parts every six months minimum, more often under heavy use. Apply grease at all twelve grease fittings.

3. Depending on frequency of use, check hydraulic reservoir level and add Check to make sure that the bed up warning light illuminates when the bed begins to raise. Adjust switch or replace bulb as required.

4. Depending on frequency of use, check all bolts for proper tightness and torque.
Mounting Tarp

1. Unfold tarp and stretch narrow width across cargo boat lining up grommets along sheet.
2. Use radiator screw clamps, open them up and wrap them around the crankshaft threading them through the tarp, one per grommet, to attach the tarp to the shaft.
3. Slide trolley board through the looped end of the tarp and into the cargo boat lining.
4. Drill a 3/16" dia x 3/8" deep hole, start the eye screw into the hole and turn until tight onto crankshaft.
5. Attach rope to eye screw and wind tarp onto crankshaft.
Major Product Components

Rear Top Screen Door & Tailgate

Side Door Option

Coal Chute Option

Rear Steel Bumper
Major Product Components

Manual Roll-Up Tarp System

(Optional) Chain Driven Crank Option

Cab Protector
TruckCraft Warranty Registration

Thank you for purchasing a TruckCraft Service Dumper. We appreciate your business and trust that your Service Body will give you many years of outstanding service. To provide you with the superior support that you deserve, we request that you register your warranty with us.

To register your warranty, please complete this form and mail or fax it to TruckCraft within 30 days of purchase.

Serial # __________Located on the front panel bottom corner on the Driver’s Side

Company Name __________________________________________________
Street Address   __________________________________________________
Address 2           __________________________________________________
City                     __________________________________________________
State                   ____________________ Zip ______________________
Your Name          _________________________________________________
Phone                          _________________________________________________
E-mail                          _________________________________________________
Date Purchased   _________________________________________________
Dealer Name        _________________________________________________
Intended Use        _________________________________________________

Copyright 2018 TruckCraft Corporation   Rev. 3/2018
TRUCKCRAFT CORPORATION WARRANTS EACH TC-503 STORM TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF TWO YEARS FROM THE DATE OF INITIAL SALE TO THE ORIGINAL RETAIL PURCHASER AND AGREES ONLY TO REPAIR OR REPLACE AT ITS OWN EXPENSE, ANY PART OR PARTS OF THE PRODUCT FOUND TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP, PROVIDED TRUCKCRAFT IS NOTIFIED OF SUCH DEFECT OR DEFECTS WITHIN THE TWO YEAR WARRANTY PERIOD AND GIVEN REASONABLE TIME TO CORRECT THE DEFECT.

INSTALLATION AND OPERATION OF THE PRODUCT MUST BE IN ACCORDANCE WITH TRUCKCRAFT’S INSTRUCTIONS. REPAIRS REQUIRED FOLLOWING OPERATION BEYOND THE RATED CAPACITY OR IMPROPER USE OR APPLICATION OF ANY PRODUCTS SHALL NOT BE CONSIDERED DEFECTS WITHIN THE SCOPE OF THE FOREGOING WARRANTY.

WARRANTY WILL NOT BE CONSIDERED ON ANY ALTERED, MODIFIED, OR MISUSED PART AND FAILURES DUE TO LACK OF MAINTENANCE OR ACCIDENTS. WARRANTY CLAIMS BY THE USER MUST BE MADE TO THE DEALER FROM WHICH THE PRODUCT WAS PURCHASED, UNLESS OTHERWISE AUTHORIZED BY TRUCKCRAFT. THIS WARRANTY DOES NOT COVER THE SHIPPING COSTS OF DEFECTIVE PARTS TO OR FROM THE DEALER. NO CLAIMS FOR LABOR SHALL BE CONSIDERED UNLESS PREAUTHORIZED BY TRUCKCRAFT.

NO DEALER HAS AUTHORITY TO MAKE ANY REPRESENTATION OR PROMISE ON BEHALF OF TRUCKCRAFT, OR TO ALTER OR MODIFY THE TERMS OR LIMITATIONS OF THIS WARRANTY.

NOTE: To activate the Warranty on your new TC-503 go online to www.truckcraft.com or contact your nearest TruckCraft dealer.

WHO BENEFITS FROM THIS WARRANTY?

TruckCraft obligation under this warranty applies to the first purchaser of the product.
HOW IS A WARRANTY CLAIM HANDLED?

The purchaser shall immediately notify the local Authorized Distributor or TruckCraft (In Writing) of any claim under this warranty. The information should include the model and serial number. A detailed description of the alleged defect and photographs of the entire unit including shots of the specified defect. All repairs must be authorized by TruckCraft prior to any work being completed. If after inspection TruckCraft determines the product is defective in material or workmanship as claimed. TruckCraft shall have the option to repair the defect TruckCraft’s option. TruckCraft shall not be liable for any rental reimbursement, loss of vehicle use, inconvenience, mileage, travel expense, storage, lost time/pay, etc.

EXCLUSIONS TO WARRANTY

1. Accessories or services not by TruckCraft Corporation or damages/corrosions caused by these accessories or services. This includes optional parts, aftermarket products, components, installation, finish painting, lettering, wiring or modifications.

2. Specific corrosion perforation and powder coat warranty exclusions:
   a. Products which may have been used to carry corrosive materials, where such materials may result in corrosion or rust-through perforation.
      i) Products purchased with optional bare surface and installed by the original owner.
      ii) Products being warranted under the corrosion perforation warranty must have a perforation warranty.
      iii) Corrosion on a powder-coated surface is not considered a corrosion perforation warranty.
      iv) Damage or corrosion caused by airborne fallout, salt from the sea air, salt or other materials used to control road conditions, chemicals, tree sap, stones, hail, earthquake, water or flood windstorm, lighting or the application of chemicals or sealants subsequent to manufacture are not covered.
      v) Normal wear-and-tear on the product is not covered.
      vi) Damage due to accident, misuse, abuse or alteration of the product.

3. Fatigue cracking of the body structure caused by improper mounting, overloading, severe off-road applications, twisting loads influenced by cranes or aerial devices are not covered.
DISCLAIMERS

TruckCraft Corporation warrants its products only as stated in the Warranty. TruckCraft makes no other warranties, express or implied, and disclaims all other warranties, including any implied warranty of merchantability or fitness for a particular purpose. TruckCraft’s obligations are limited to those expressed in this warranty and TruckCraft shall not be liable to the purchaser or any third party for any direct or indirect, incidental or consequential damage or loss. Some states do not allow limitations on how long an implied warranty lasts or exclusions or limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. If the product is improperly installed, modified, misused, damaged or otherwise tampered with, the foregoing warranty shall lapse and become null and void. This warranty shall be enforced and construed in accordance with the laws of the state of Pennsylvania. No person is authorized to modify or add to the foregoing Warranty.