This hoist is designed for use on single-axle trucks with a cab-to-axle, CA, dimension of 56 inches. It is designed to be used in conjunction with the TruckCraft 100” long flatbed.
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 a TC-515 Hoist, Subframe and Deck. 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 hoist assembly serial number, pump serial number and description or part number of parts needed are required. The hoist assembly serial number is located on the front rub rail-drivers side-of the deck. On units without a deck, the serial number will be on the drivers side subframe long sill near the decal. The pump serial number is located on the top of the valve block.

Hoist Serial Number: ________________________

Pump 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 deck: 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 deck in a raised position.
- 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 deck 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.

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<td>3/4-10</td>
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Mounting Instructions

**CAUTION:** Verify lifting and support devices can support the hoist, sub frame, and flatbed combined weight before picking up the assembly.

The hoist, sub-frame and flatbed are normally shipped assembled and ready to install on a truck frame-see Figure 4. Solid connections between the truck frame and the sub-frame are required at the rear of the sub-frame and at the location where the hoist pins to the sub-frame. The solid connections are accomplished by rigidly mounting the two cross members supplied to the truck frame approximately in the areas shown in figure 4. If possible, the cross members should align with the holes in the subframe. However, additional holes can be drilled in the subframe as required. The front mount should be located as close as possible to the hoist cylinder mount on the subframe-see Detail A.

1. Set the assembly on top of the frame cross members and position it a minimum of 3.0" from the cab as shown above in Figure 4.
2. Position the mounting angles along the sides of the frame in an area where the brackets do not interfere with existing frame bolts or hardware. Bolt cross member to the subframe and the angles to frame. Attach cross members to angles with bolts supplied—see Figure 5. Additional holes can be drilled in the sub-frame as required. **Caution:** Be careful of wiring, brake lines, etc. inside frame when drilling. Install 5/8”, grade 8 bolts and nuts supplied at all mounting locations 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.

**CAUTION:**

- The TruckCraft assembly is designed to bolt to the truck frame. No welding is required. **Do not weld any part of this assembly to the truck frame.**
- Never cut or drill any openings on the top or bottom flanges of the sub-frame.

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 bed. Do not reach under or place any body parts under the bed. Raise the bed 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 deck.

6. With the safety prop supporting the deck 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 nine grease zerks:
✓ One on rod end of cylinder
✓ One on barrel end of cylinder
✓ Two on the cross shaft at the deck
✓ Two on the hoist cross shaft at the sub-frame mount
✓ One on each deck pivot hinge at rear of sub-frame
✓ One on the hoist link arm cross shaft

**Warning:**
*Never use the safety prop to support a loaded deck. Never position yourself under a loaded deck.*

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. Depending on frequency of use, check hydraulic reservoir level and add oil. Periodically drain system and replace with clean oil. Use automatic transmission fluid only.

2. Depending on frequency of use, apply grease to all rotating parts at nine grease zerks.

3. 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.
Attach 50" long hose to this end of cylinder and to "C2" hoist lower port on pump.

Attach 36" long hose to this end of cylinder and to "C1" hoist raise port on pump.

Adjust lock nuts to open switch contacts when deck begins to rise off subframe.

The frame mount angles can be deleted from installation if existing bed mount holes in the truck frame can be used to bolt the 2 X 2 crossmember tube to the frame. Do not drill any new holes in the top flange of the truck frame-instead use the frame mount angles and drill through the sides of the truck frame to align with holes in mounting angles.

Deck not shown on this view for clarity.
WARRANTY

TRUCKCRAFT CORPORATION WARRANTS EACH STARLIFTER TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF TWO YEARS FROM THE DATE OF INITIAL SALE, LEASE, RENTAL, OR OTHER DISPOSITION OF SUCH PRODUCT, AND AGREES ONLY TO REPAIR OR REPLACE AT ITS OWN EXPENSE, F.O.B. THE PLACE OR PLACES OF MANUFACTURE, AT MANUFACTURER'S OPTION, ANY PART OR PARTS OF THE PRODUCT FOUND TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP, PROVIDED MANUFACTURER IS NOTIFIED OF SUCH DEFECT OR DEFECTS WITHIN THE TWO YEAR WARRANTY PERIOD AND GIVEN A REASONABLE TIME TO CORRECT THE DEFECT. DEFECTS FOLLOWING OPERATION BEYOND RATED CAPACITY OR THE IMPROPER USE OR APPLICATION OF ANY PRODUCTS SHALL NOT BE CONSIDERED DEFECTS WITHIN THE SCOPE OF THE FOREGOING WARRANTY. NO CLAIMS FOR LABOR SHALL BE CONSIDERED UNLESS AUTHORIZED BY THE MANUFACTURER.

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