# CURBTENDER

## Quantum<sup>®</sup> Compact

#### **Operation, Service & Parts Manual**



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#### PLEASE CONTACT YOUR LOCAL **CURBTENDER** DEALER AND PROVIDE THEM WITH THE FOLLOWING IMPORTANT INFORMATION

COMPANY NAME
SHIPPING ADDRESS
BILLING ADDRESS
SHIPPING METHOD
Curbtender UNIT
MODEL UNIT SERIAL

Your Model and Serial Number can be found on the Unit's Identification Plate as Identified Below

SERIAL NO MODEL DATE WEIGHT CERTIFICATION I WARNING	цж 	

### Curbtender, Inc

**Important Contact Information:** 

Curbtender, Inc. 701 Performance Drive Cedar Falls, IA 50613

319.266.1721 - phone 319.266.8207 - fax 1.877.889.2963 - Toll Free

Parts & Service - Extension 380

www.curbtender.com

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# Introduction

#### To The Owner

Thank you for choosing the Curbtender Quantum<sup>®</sup> Compact for refusing collecting needs. This owner's manual contains information needed for proper operation, maintenance and care. A thorough un-derstanding of these instructions will help you maintain the maximum life expectancy from your new Curbtender Quantum<sup>®</sup>. If you have questions about the operation or maintenance of your unit, please contact Curbtender Inc at 319.266.1721 or 877.889.2963.



Curbtender, Inc continually seeks advancements in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your machine and this manual. If there are any questions concerning this manual, please contact Curbtender, Inc.

#### SAFETY MESSAGES



Safety must always be given first consideration. Look for the Safety Alert Symbol throughout this manual for important safety information. This symbol alerts you that personal injury or property damage is a possibility unless specified precautions are taken. Additional Safety Information is contained throughout this manual.

#### **Important Safety Notices**

Proper maintenance and service are important to the safe, reliable operation of all CURBTENDER products. DO NOT service this equipment/machine until you have read and understood this manual. Service procedures recommended by CURBTENDER are described in this service manual and are effective for performing service operations. Some of these service operations may require the use of tools or blocking devices specially designed for the purpose. Special tools should be used when and as recom-mended. It is important to note that some warnings against the use of specific methods that can dam-age the product or render it unsafe are stated in the manual. It is also important to understand that these warnings are not exhaustive. CURBTENDER could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or the possible hazardous consequences of each way. Consequently, CURBTENDER has not undertaken any such broad evaluations. Accordingly, anyone who uses service procedures or tools which are not recommended by CURBTENDER must first satisfy himself that neither his safety not the product safety will be jeopardized by the method he selects.

#### Warning

If incorrectly used this equipment can cause severe injury. Those who use and maintain equipment should be trained in its proper use, warned of its dangers and should read the entire manual before at-tempting to set-up, operate, adjust or service the equipment. Keep this manual for future reference.

#### **Lockout Procedure**

During repairs to the tailgate, packing mechanism or hydraulic drive system, a lockout procedure should be employed whereby the power shall be shut off, the ignition key removed and a sign placed on the steering wheel warning against any attempt to start the unit.

#### Operation

DO NOT operate this machine until you have read and understood the Operator's Manual supplied with this equipment. When operating be certain that all individuals are clear and be ready to stop and/or reverse the operation at any point.

#### **Modifications**

It is the responsibility of any person reconstructing or modifying this equipment to do so in accor-dance with the appropriate sections of the ANSI Z245.1 safety standard and to furnish instructions and safety precautions associated with the reconstruction or modification of the unit.

#### About this Manual

This manual is intended primarily as a guide for the driver and should be used only in conjunction with a period of formal instruction to ensure complete operator competence.

Care and attention will ensure safe and efficient performance and operation. You must have the maintenance operations carried out at the periods specified in the Preventative Maintenance section of this manual. Never run the vehicle in a doubtful condition. Report any and all defect or malfunctions to your garage/maintenance department for inspection and competent attention.

Throughout this manual, Left Hand (L.H.) and Right Hand (R.H.) sides will be referenced. The L.H. and R.H. sides indicate a position on the unit from the perspective of sitting in the driver's seat.

Please read and remember the safety precautions; they are given for your protection and must be followed at all times.

Before operating this vehicle it is essential that this manual is read and understood, and that training is undertaken in the correct and safe use of this vehicle. This manual covers only the Quantum rear loader (Compact Series). Important safety information will also be found in the applicable chassis manual/handbook which must be read and understood in conjunction with this manual.

Although every endeavor has been made to be technically accurate in the complication of this manual, it is imperative that the reader contact Curbtender, Inc should any error be noticed.

#### \*\*\*THIS MANUAL SHOULD ALWAYS BE KEPT IN THE VEHICLE FOR WHICH IT WAS ISSUED WITH\*\*\*

#### WARRANTY INFORMATION

The goal of Curbtender, Inc. is to produce innovative products of the highest quality in design and manufacture. These products are expected to provide our customers with excellent service for many years under normal usage. Should any equipment not meet this goal, it is our policy to correct and resolve the situation through warranty procedures. In order to provide a timely resolution of warranty coverage with the least inconvenience to our customers, these warranty procedures should be fol-lowed closely. It will be the dealer's responsibility to ensure that all requirements of warranty are met.

#### **Pre-Delivery Inspection Report**

Prior to shipment of each CURBTENDER unit or equipment item, an Inspection Report is completed as to its condition and operation. Because other conditions arise during and after shipment due to transport, handling, storage, etc., it is necessary that the Dealer complete a Pre-Delivery Inspection Report prior to the customer taking receipt. This will help ensure the quality and condition of the product and pre-pare it for service by the customer. The completed Pre-Delivery Inspection Report must be returned to Curbtender, Inc to qualify the product for warranty considerations.

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#### **Warranty Registration**

At the time of delivery the Dealer will review the Warranty Agreement with the purchaser. Once the purchaser understands the terms of the Warranty Agreement, receives instruction on the proper operation and maintenance procedures, and all manuals for the equipment, he/she must sign the Warranty Registration. When the purchaser and the Dealer have completed the Warranty Registration, it must be returned to Curbtender, Inc. to qualify the product for warranty consideration.

The Warranty Registration must be received at Curbtender, Inc. within thirty (30) days of signing by the purchaser unless a reasonable explanation for the delay can be provided. If the regis-tration is received after thirty days and without reasonable cause, the warranty period will have com-menced on the date the product was shipped from the factory. In order to provide the purchaser with the expected warranty coverage, prompt return of the Warranty Registration is advised.

#### **Warranty Qualifications**

The following are the requirements necessary for warranty consideration. Failure to meet these re-quirements will disqualify the unit for warranty consideration and any warranty request will be de-nied.

The unit must be within the applicable warranty period. Warranty commences on the date of the delivery to the customer or 60 days after shipment from the factory, whichever is earlier.

The failure must not, among other things, be the result of improper operation, lack of maintenance or accident (see Exhibit B for a list of other warranty exclusions).

Warranty coverage does not apply to modifications or alterations to the unit. Any non-CURBTENDER ap-proved modifications or alterations may remove the unit from warranty coverage.

A completed Warranty Registration Form, signed and dated by the Dealer and Customer must be on file at CURBTENDER prior to any warranty consideration.

#### **Extended Warranty**

Warranty periods beyond the standard six (6) month term are available to the purchaser as a sales option. Extended terms up to twelve (12) months or up to twenty-four (24) months from delivery of a complete unit may be requested.

Extended warranties are offered until the date of delivery. If no extended warranties are purchased, the standard six (6) month period shall be in force.

#### **Retrofit Equipment**

All equipment, options, and accessories sold will be warranted as service parts if they are not in-

stalled at the factory. As these applications and installations are beyond control of Curbtender, Inc. any such items, if installed incorrectly, may void all or part of the unit warranty coverage.

#### **Service Parts**

Replacement parts purchased from Curbtender, Inc. shall be warranted to be free of defects in material and workmanship for ninety (90) days from the date of shipment from the factory. To maintain the quality and integrity of CURBTENDER products only those replacement parts supplied by Curbtender, Inc. will be credited on a warranty claim. Parts supplied by outside vendors or purchased locally will not be given credit.

#### Warranty Claims

In order to fi le a warranty claim, fi rst contact your local dealer. With this contact, please have the unit's serial number and model number code available, and be prepared to discuss the problem in detail. Service will record this information on a Service Report form and inform the caller of the Service Report Number. This number will be used to track the warranty claim and allow for its processing.

Also during this initial contact, the Service Department may provide information on repair procedures. If repair parts are required, a parts order will be initiated. Be prepared to off er a purchase order number to be applied to the cost of parts and shipping. All parts will be shipped at the lowest surface rate avail-able. Faster delivery is available, at the customer's request.

If the item or part in question is covered under the CURBTENDER New Equipment Limited Warranty and is deemed by the Warranty staff to be faulty, then CURBTENDER will provide a warranty credit to the customer's account. The Warranty staff will instruct you of the proper process to complete the Warranty Request and how to receive a credit.

#### **Service Parts**

Replacement parts purchased from CURBTENDER shall be warranted to be free of defects in material and workmanship for a period of ninety (90) days from the date of shipment from the factory. To maintain the quality and integrity of CURBTENDER products, only those replacement parts supplied by CURBTENDER will be considered for warranty credit. Parts supplied by outside vendors or purchased locally will not be considered. To qualify replacement parts for warranty consideration, the CURBTENDER invoice number for replacement part purchases must appear on the CURBTENDER Warranty Request Form.

#### Exclusions

Warranty coverage does not extend to include time or materials required for troubleshooting and di-agnosing a problem or for travel time to or from a service site.

### **CURBTENDER ENGINEERING, LLC**

#### **STANDARD NEW EQUIPMENT SIX (6) MONTH LIMITED WARRANTY**

Curbtender, Inc. ("CURBTENDER") warrants that the goods purchased (the "Unit") shall be free from defects in material and workmanship under normal use, only when proper service and maintenance are performed as described and required in CURBTENDER Service Bulletins and CURBTENDER Operator, Service and Parts manuals and when the then current CURBTENDER Warranty Policy and Procedures are followed, for a period of six (6) months from the date when the Unit is delivered to the initial owner or sixty (60) days after the Unit is delivered to the dealer (the "Warranty"). Failure to comply with the then current CURBTENDER Warranty Policy and Procedures may, in WAYNE's discretion, invalidate this Warranty in its entirety or invalidate any individual warranty claim. This Warranty is expressly limited to the repair or replacement of any component or part that is proven to WAYNE's satisfaction to have been defective in material or workmanship. Such components or parts shall be repaired or replaced without cost.

Any service parts sold by CURBTENDER shall carry a ninety (90) day limited warranty for replacement only (labor is not included), provided that factory inspection reveals a material or workmanship defect. CURBTENDER reserves the right to make changes in the design or make additions to or improvements on its products without creating any obligation for installation in previously manufactured units.

THE WARRANTY SET FORTH HEREIN IS THE SOLE AND EXCLUSIVE WARRANTY BEING GIVEN BY CURBTENDER WITH RESPECT TO THE UNIT AND ANY RELATED PARTS OR PRODUCTS AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUD-ING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT ARE HEREBY DISCLAIMED. THE REMEDIES PROVIDED IN THIS WAR-RANTY ARE THE EXCLUSIVE REMEDIES AVAILABLE AND ARE LIMITED TO REPAIR AND REPLACEMENT OF THE NONCONFORMING PARTS.

IN NO EVENT, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT OR IN TORT, INCLUDING BUT NOT LIMITED TO NEGLIGENCE, PRODUCT LIABILITY OR STRICT LIABILITY, SHALL CURBTENDER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS, PRODUCTS, DOWN TIME, COVER, TEMPORARY REPLACEMENT COST OR ANY OTHER DIRECT, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES, INCLUDING ATTORNEYS' FEES. IN NO EVENT SHALL CURBTENDER BE LIABLE FOR ANY LOSS, DAMAGE, CLAIM, COST OR EXPENSE, INCLUDING ATTORNEYS' FEES, ARISING FROM OR RELATED TO ANY LEAK OR SPILL OF HYDRAULIC FLUID OR ANY HAZARDOUS MATERIAL (AS DEFINED UNDER ANY APPLICABLE FEDERAL, STATE OR LOCAL STATUTE, REGULATION OR THE LIKE) OR THE FAIL-URE TO PROPERLY DISPOSE OF HYDRAULIC FLUID OR ANY HAZARDOUS MATERIAL. OWNER AGREES TO DEFEND AND HOLD CURBTENDER HARMLESS FROM ANY LOSS, DAMAGE, CLAIM, COST OR EXPENSE, ARISING FROM OR RELATED TO ANY ENVIRONMENTAL OR HAZARDOUS MATERIAL CLAIM.

THIS WARRANTY IS CONTINGENT UPON AND APPLICABLE ONLY IF THE THEN CURRENT CURBTENDER WAR-RANTY POLICY AND PROCEDURES ARE COMPLIED WITH. OTHER THAN THE PURCHASE OF AN EXTEND-ED WARRANTY, NO EMPLOYEE OR REPRESENTATIVE OF CURBTENDER IS AUTHORIZED TO MODIFY THIS WAR-RANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY. THIS IS THE SOLE AND EXCLUSIVE WARRANTY OFFERED BY CURBTENDER.

#### **CURBTENDER GENUINE PARTS**

#### Only Curbtender...

Only Curbtender, inc. can provide genuine quality parts that perform properly for your refuse compactor. Our engineers determine the exact specifi cations required for each part on the unit. Other outfi tters or parts distributors may try to sell you counterfeit parts that are not OEM quality. These indi-viduals do not know the exact specifi cations, variances, or guidelines required by each item. Therefore, 3rd party parts suppliers CAN NOT provide quality parts. It some instances it may be dangerous to even use these parts as they could cause damage to the refuse system and its operators.

#### Ensuring Quality...

Look for Wayne's seal of approval on key manufactured items. For instance, pieces of the Curbtender Curb-tender arm and pack panels feature a trademark "C". This "C" is precision welded using a robotic welder and can't be replicated by 3rd party parts suppliers. Look for this symbol on major manufactured items. If you are concerned that a substitute or 3rd party part is being sold to you, contact a Curbtender Service Technician immediately (319-266-1721).

Other parts, such as hydraulic cylinders, have laser etching that feature the part's serial number and Curbtender Part Number. Make sure your replacement cylinders come are equipped with this feature, as it means they were provided by Curbtender, Inc. Replacement cylinders that do not feature this laser etching are likely to be substitutes and *are not to specification*. Contact a Curbtender Service Technician immediately if you believe you're dealer has sold you a 3rd party cylinder.

Finally, certain electronic components (such as proximity sensors) feature the Curbtender, Inc. logo stamped, etched, or labeled on the part. If an original equipment part on your system features the Curbtender logo, make sure its replacement part does as well!









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# 2 Safety Precautions

Any machinery that applies a force through hydraulic pressure presents a safety concern. The ultimate responsibility for safety rests with you, the operator. An alert, conscientious attitude and observance of all known safe-operating practices are the best ways to prevent accidents.

An untrained operator presents a safety hazard. Before operating the Quantum Compact or using the controls to move any components, it is the operator's responsibility to be thoroughly familiar with the instructions and safety precautions contained in the operator's manual.

Publication of these precautions does not imply or in any way represent an all-inclusive list. It is the operator's responsibility to be familiar with and ensure that operation is in accordance with safety requirements and codes including all applicable Occupational Safety & Health Act (OSHA) and American National Standards Institute (ANSI) regulations.

#### **SAFETY WARNINGS**



**DANGER:** Description of an imminent hazard that will result in severe injury or death if not avoided and should be limited to the most extreme situations.

**WARNING:** Description of a potentially hazardous situation which if not avoided could result in minor, moderate, and serious injuries or death. It also advises against unsafe practices.

**CAUTION:** Description of a potentially hazardous situation which if not avoided could result in minor or moderate or serious injury or death. It could also advise against unsafe practices.

**NOTICE:** Used to notify people on information for installation, operation, maintenance, performance, or general tips that are important but not hazardous to anything or anyone.

These safety warnings appear throughout this manual and are to be obeyed at all times. Your refuse truck also has safety decals installed. These should be followed and in place at all times. If you are missing any decals, report it to the proper authorities. Replacement decals can be order free of charge from an authorized CURBTENDER dealer.

#### **PRE-OPERATION SAFETY PRECAUTIONS**

- 1) Never operate machinery while wearing jewelry or loose clothing that may catch on moving parts. Wear proper safety equipment as specified by your employer.
- 2) Never operate machinery while under the influence of intoxicants or narcotics. Workers under the influence of intoxicants or narcotics present a hazard to themselves and others.
- **3)** Perform daily checks listed under the Pre-Operation "Walk Around" in Section 3, OPERATION. Never start or operate any malfunctioning equipment.
  - A) Be sure to immediately report any malfunctions to the proper authority.
  - **B)** If a malfunction is found: power must be shut off, ignition key removed and a sign attached to the steering wheel stating "inoperative" or "malfunctioning equipment."
- 4) Walk around vehicle to make sure all persons are clear before starting the unit.

#### **OPERATION SAFETY PRECAUTIONS**

- 1) It is the operator's responsibility to ensure the operation of the unit is in accordance with the guidelines contained in the Operator's manual and in accordance with all the applicable code including Occupational Safety and Health Act (OSHA) and American National Standards Institute (ANSI) regulations.
- 2) Do not attempt to operate this equipment without proper training.
- 3) Always make sure the roadway is clear and move the vehicle as slowly as possible without stalling when traveling in reverse.
- 4) Do not travel in reverse for distances greater than those dictated by local ordinances. If reverse travel exceeds 10 feet use a spotter or move the vehicle in 10-foot increments only; and then check to make sure the roadway is clear between increments.
- 5) Never use the vehicle to push or pull another vehicle.
- 6) Never drive with the tailgate in the raised position.
- 7) Never place head, body, fingers or any limbs into a scissors point or pinch point on the equipment.
- 8) Before operating the vehicle, the driver must be thoroughly familiar with the employer's safety program concerning traffic rules, warning devices and hand signals.

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- 8) Before operating the vehicle, the driver must be thoroughly familiar with the employer's safety program concerning traffic rules, warning devices and hand signals.
- 9) Know where to get assistance in the event of an emergency.
- **10)** Know your machine. Know the location and the function of all controls, gauges, instruments and protective devices.
- **11)** Wear your seat belt.
- **12)** Always set the parking brake before leaving the cab.
- **13)** All service opening covers and access doors must be maintained and latched in place while operating equipment.
- 14) Ensure all co-workers are in view before operating or moving any controls, or the unit.
- **15)** Ensure that there is sufficient overhead clearance before raising the tailgate.
- **16)** Stand clear when the tailgate and or body is being raised or lowered and during the unloading cycle.
- 17) Ensure that persons are clear of the container before raising or lowering.
- **18)** Always have the container dumper in the travel position before transporting.
- **19)** Ride only in the cab.
- **20)** Never overfill the hopper.
- 21) SHUTDOWN>
  - A) Lower the body and move to its most forward position, if applicable.
  - **B)** Lower the tailgate to its lowest position.
  - **C)** Set the parking brake.
  - **D)** Turn off the control panel.
  - **E)** Shut off the engine.
  - **F)** Remove the ignition key.
  - **G**) Remove any debris from the cab.

- H) Open both clean-out doors and clean out behind the pack/ejector panel.
- I) Close and latch doors properly, if applicable.
- J) Lock the vehicle.

#### **GENERAL PRECAUTIONS**

- 1) Comply with all ANSI Z245.1 and OSHA regulations at all times.
- 2) Comply with lock out/tag out procedures by removing the ignition key before working on the unit.
- 3) Position OSHA approved props prior to working under any part of the body.
- 4) Operate levers and controls to release stored energy prior to working on the hydraulic system.

#### HYDRAULIC PRECAUTIONS

- 1) Hydraulic fluid operates under high temperatures. Avoid contact with piping, hoses or cylinders to prevent burns.
- 2) Never use hands to check for leaks. Hydraulic fluid escaping under pressure may cause injury.
- 3) In case of injury, seek proper medical treatment immediately.

#### **FIRE PROTECTION**

- 1) Keep a fire extinguisher accessible at all times, as recommended by the Bureau of Motor Carrier Safety.
- 2) Never use lighted smoking materials, open flame or sparks when working with flammable materials such as fuel tanks or storage batteries.
- 3) Never use an open flame as a light source.

#### HOUSEKEEPING

- 1) Good housekeeping habits are a major factor in accident prevention. Keep handrails clean and free of grease or debris.
- 2) Do not store brooms or other equipment where they could inadvertently be dislodged or create a hazard.

# **3** Operation

This section will provide all of the instructions necessary to operate the Quantum Compact. However, prior to attempting any operation of the unit, make sure you are familiar with all of the safety information contained in Section 2, SAFETY PRECAUTIONS.

There are only a few controls required for the complete and efficient operation of the Quantum Compact. It is important that you know the location and function of each control before attempting to operate the unit. Refer to the accompanying illustrations for their locations.

#### **MAIN CONTROL BOX**

**WARNING:** THE FOLLOWING INFORMATION IS FOR DESCRIPTIVE PUR-POSES ONLY AND IS NOT TO BE MISCONSTRUED AS OPERAT-ING INSTRUCTIONS. REFER TO OPERATING PROCEDURES LATER IN THIS SECTION.

- 1) SYSTEM ON SWITCH- This switch enables/ disables the PTO and engine acceleration circuit.
- 2) SYSTEM ON LIGHT- The system on light is illuminated whenever the system is on.
- **3) TAILGATE OPEN LIGHT** The tailgate open light is illuminated whenever the tailgate is not closed.
- **4) STROBE OR BEACON SWITCH** This switch is a standard optional toggle switch allowing a strobe light to be installed.
- 5) WORK LIGHT SWITCH- This switch is an optional toggle switch allowing a work light to be installed.
- 6) **PTO LIGHT** The PTO light is illuminated whenever the PTO is engaged.
- 7) PTO OVER SPEED LIGHT- This indicator light illuminates when the PTO shaft is operating too fast. Take precautionary safety measures when this happens (i.e. decrease system load, lower throttle, or even shut of hydraulic system).
- 8) CONTROL BOX BRACKET- This secures the control box into position. To adjust, loosen both wing nuts, angle to desired position, and then tighten the wing nuts.



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#### **UNLOADING CONTROLS**

#### (THE 2 SPOOL VALVE IS LOCATED AT THE FORWARD, LEFT HAND SIDE OF THE BODY)

WARNING: BE CERTAIN NO ONE IS NEAR TAILGATE WHEN ACTIVATING TAILGATE CONTROL. LOOKOUT FOR OVERHEAD OBJECTS.

- 1) **TAILGATE CONTROL LEVER** The tailgate lift cylinders are controlled by pushing in on the tail gate control lever to lower the tailgate and pulling out to raise the tailgate.
- 2) EJECTOR PANEL CONTROL LEVER- The ejector panel extends into the body when the ejector control lever is pushed inward and the ejector panel retracts to the front of the body when the ejector control lever is pulled outward from the body. When transporting the vehicle, move the ejector panel forward in the body
- 3) ENGINE ACCELERATOR SWITCH- The engine accelerator switch is installed on the 2 spool valve bracket adjacent to the tailgate and ejector panel control levers. Actuation of this electric switch will speed up the engine to provide adequate hydraulic pressure and flow for raising the tailgate and ejector panel functions.



#### **PACKING CONTROLS**

# (THE TAILGATE/ MAIN VALVE IS LOCATED AT THE UPPER RIGHT HAND SIDE OF THE TAILGATE)

The Quantum Compact incorporates the backhoe principle of operation. Two panels make up the backhoe, the Sweep Panel (lower) and the Swing Panel (upper).

The *Swing Panel* slides up and down the tailgate on replaceable guide blocks. Two double acting swing cylinders, one located on each side of the Swing Panel, provide the power.

The *Sweep Panel* is attached to and pivots on the Swing Panel. The Swing Panel carries the Sweep Panel and supports the two cylinders.

The two panels are controlled by movement of two packing control levers located on the right side of the tailgate. These two packing control levers are linked to the hydraulic tailgate/main valve which directs hydraulic fluid to the packing panel cylinders.

The tailgate/main valve is located on the right upper side of the tailgate. The two packing control levers are connected to this valve. The top packing control lever controls the movement of the Sweep Panel and the bottom packing control lever controls the movement of the Swing Panel. The valve sections are detented to "kick-out" the valve spool back to neutral when a pre-set pressure of the valve is reached, such as when a cylinder is "bottomed-out" at the end of the stroke. Four distinct movements of the two blades make up the packing cycle. The cycle starts with the Swing Panel fully up or in the pack position, and the Sweep Panel down.

- 1) SWEEP PANEL (UP)- The sweep panel is raised when the top packing control lever is pulled outward from the tailgate.
- 2) SWEEP PANEL (DOWN)- The sweep panel is lowered when the top packing control lever pushed inward toward the tailgate.
- **3) SWING PANEL (DOWN)** The Swing Panel is lowered when the bottom packing control lever is pulled outward from the tailgate.
- 4) SWING PANEL (UP)- The carriage panel is raised when the bottom control lever is pushed inward toward the tailgate.

#### WALK AROUND INSPECTION

Preventative maintenance is the key. Be alert and conscientious- report any malfunction, need for adjustment, or necessary repair to your Garage or Maintenance Department without delay.

**EACH DAY,** before beginning work, check the following:

#### 1) LIGHTS AND WIRING

- A) Headlights, Tail Lights, and Clearance Lights
- B) Turn Signals and Hazard Warning Lights
- Brake Lights and Backup Lights **C**)
- D) Hazard Warning Beacon Lights (if applicable)
- Hopper Work Lights (if applicable) E)
- F) "System On" illuminates one the in-cab control panel when the system power is on
- "Tailgate Open" light illuminates when the tailgate is raised **G**)
- H) Check all wiring for cut or frayed wires

#### 2) **HYDRAULIC SYSTEM**

A) Check for fluid leaks:

> The oil should be between FULL and ADD on the tank sight gauge, with the vehicle in the following position:

- i) Vehicle on Level Ground
- ii) All Hydraulic Cylinders in Fully Retracted Position
- Engine/PTO Off iii)
- B) Start the engine and operate the packing function two or three times. (REFER TO SAFETY WARNINGS IN THIS MANUAL AND ON TRUCK BEFORE OPERATION)
- **C**) Return the vehicle to the position described in (A) and recheck oil
- D) Add oil as necessary



PROLONGED EXPOSURE AND REPEATED CONTACT WITH HYDRAULIC OIL MAY CAUSE SERIOUS SKIN DISORDERS, IN-CLUDING DERMATITIS AND CANCER. AVOID CONTACT WITH SKIN AS MUCH AS POSSIBLE, AND WASH

THOROUGHLY AFTER ANY CONTACT.

AVOID CONTAMINATING THE HYDRAULIC SYSTEM! KEEP AREA AROUND SYSTEM COMPONENTS CLEAN OF DIRT AND DEBRIS BE-FORE DISCONNECTING OR REMOVING. ALWAYS FILL RESERVOIR THROUGH A 200 MESH (OR FINER) SCREEN. NEVER USE CLOTH TO FILTER OIL!

#### WALK AROUND INSPECTION (cont.)

#### 3) BOLTS, PINS, & FASTENERS

- A) Visually check the security of the bolts over the entire unit, paying especially close attention to the mounting brackets
- B) Ensure all pins are properly retained
- C) Check for loose capscrews, fasteners, and broken or excessively worn parts.

#### 4) SWITCHES AND CONTROLS

Check for security and proper operation.

- A) Operate the packing panels through several cycles and verify smooth operation
- B) Verify that the engine accelerator switch functions properly
- C) Operate the tailgate through several raising and lowering cycles
- D) Verify that the tailgate alarm sounds when raising the tailgate
- E) Operate the ejector panel fully forward and rearward several times

**WARNING:** ENSURE ALL INDIVIDUALS ARE CLEAR OF ANY MOVING PARTS, MECHANISMS, OR COMPONENTS OF THE VEHICLE BE-FORE ACTUATING CONTROLS. BE ATTENTIVE AT ALL TIMES AND PREPARED TO STOP FUNCTION.

#### 5) BODY & BODY CAVITY

- A) Clear any refuse forward of the ejector panel
- B) Visually inspect the ejector panel for evidence of wear or damage
- C) Inspect the ejector cylinder and connecting hoses for evidence of hydraulic leaks
- D) Ensure all safety labels and decals are in place and readable. (call CURBTENDER for decal kit)



Visually inspect the body and mountings for cracks, severe dents, and other damage

**DANGER:** BEFORE ENTERING THE BODY, THE VEHICLES ENGINE POWER MUST BE SHUT OFF, THE IGNITION KEY REMOVED, AND A SIGN PLACED ON THE STEERING WHEEL WARNING AGAINST ANY ATTEMPT TO START THE UNIT.

WHEN THE VEHICLE IS PARKED OVERNIGHT, OR FOR LONG PERIODS OF TIME, ALL THE HYDRAULIC CYLINDERS MUST BE IN THE FULLY RETRACTED POSITION. THIS PROTECTS THE POLISHED SURFACE OF THE CYLINDER RODS AND PREVENTS DAMAGE TO CYLINDER SEALS. THIS ALSO RAISES THE OIL LEVEL IN THE HYDRAULIC TANK, MINIMIZING INTERNAL CONDENSATION AND CONTAMINATION.



**NOTICE:** LOOKING AFTER YOUR VEHICLE MAKES IT LAST LONGER. SERVICING SHOULD BE CARRIED OUT ON THIS VEHICLE REGULARLY.

#### **OPERATING INSTRUCTIONS**

This section of the manual provides all the instructions necessary to start and operate the Quantum Compact, including specific instructions for loading, packing, and unloading the unit.

#### PACKING THE LOAD

The Quantum Compact incorporates the backhoe principle of operation. The sweep panel (lower) and swing panel (upper) make up the backhoe. Another vital component in the packing operation is the ejector panel. When operated correctly, these three components are capable of producing fairly consistent refuse loads.

- 1) Engage the PTO control by turning the system switch "On." This switch is located on the main control box in the cab. This action will start the hydraulic pump (hot shift PTO only). While operating in cold climates, it may be necessary to allow the hydraulic system to warm-up for a while before engaging any of the hydraulic functions.
- 2) Be certain the **tailgate is in its lowered position**. The tailgate open light will illuminate if the tailgate is not latched.
- 3) Move the ejector panel to the rear of the body before starting to pack the refuse. Failure to do this will produce a light and uneven load density. Your Quantum rear loader is equipped with a resistance cartridge as an added feature to the body valve. The resistance cartridge allows the hydraulic system to sense the pressure created on the face of the ejector panel during the packing process. When the pressure exceeds a pre-set pressure setting, the resistance cartridge automatically causes the ejector panel to move forward a few inches. Because of this, no additional action on the eject panel is needed by the operator until the ejector panel has reached the front of the body.

### 4) PULL BOTH PACKING CONTROL LEVERS OUT TO THE DETENT POSITION.

The sweep panel will pivot up and the sweep control lever will "pop out" of detent at the end of the sweep cylinder stroke.



The sweep and swing panel will move down over the loaded hopper. The swing control lever will "pop out" of detent at the end of the swing cylinder stroke.

#### 5) PULL BOTH THE PACKING CONTROL LEVERS IN TO THE DETENT POSI-TION.

The sweep panel will pivot down to sweep the hopper clean. The sweep control lever will "pop out" of detent at the end of the sweep cylinder stroke.

The sweep and swing panels will pivot up to pack the refuse tightly into the body. The swing control lever will "pop out" of detent at the end of the swing cylinder stroke.







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#### **EJECTING THE LOAD**

- 1) **Engage the PTO** by turning the system on. This will start the hydraulic pump and enable the engine acceleration circuit.
- 2) Raise the tailgate: Activate the engine accelerator switch; then pull outward on the rear body valve lever until the tailgate is in the fully raised position.
- **Eject the load:** Activate the engine accelerator switch; then pull outward on the forward body 3) valve lever until the load is ejected.
- 4) Pull the vehicle forward, retract the eject panel, and clean all debris from the body and tailgate.





**WARNING:** USE A SPOTTER AND BE CAREFUL WHEN BACKING. MAKE SURE THE TRUCK IS ON HARD, LEVEL GROUND AND LOOK FOR OVERHEAD OBSTRUCTIONS BEFORE RAISING THE TAIL-

GATE. THIS IS NECESSARY TO PREVENT EQUIPMENT DAMAGE AND PERSONAL INJURY FROM THE TRUCK TIPPING OVER.



WARNING: NEVER DRIVE THE UNIT MORE THAN 10 FEET WITH THE TAIL-GATE IN THE RAISED POSITION!

# General Repair

**CARCENTING:** PROPER SERVICE AND REPAIR IS IMPORTANT FOR THE SAFE, RELIABLE OPERATION OF ALL MECHANICAL PRODUCTS. The service procedures recommended and described in this service manual are effe ctive methods for performing service operations. Some of these service operations require the use of tools specially designed for the purpose. Curbtender, Inc. could not possibly know, evaluate and advise the service trade of all possible ways in which service might be done or of the possible hazardous consequences of each way. Therefore, anyone who uses a service procedure or tool that is not recommended by Curbtender, Inc. must first thoroughly satisfy himself that neither his nor the operator's safety will be jeopardized by the service methods selected. Any person who modifies their equipment must do so in accordance with American National Standard Institute Z245-1-1992. It is important to note that deviating from these procedures could cause damage to the unit or render it unsafe. However, please remember that these procedures are not all inclusive.

Do not add engine oil, automatic transmission fl uid (ATF), diesel fuel or kerosene to the hydraulic fluid . Service life of all hydraulic components may be adversely aff eted.

#### **PREPARATION FOR SERVICE**

Proper preparation is very important forefficient and safe service work. A clean work area at the start of each job will allow you to perform the repair as easily and quickly as possible, and reduce the incidence of misplaced tools and parts. If the portion of the unit to be repaired is excessively dirty, it should be cleaned before work starts. The cleaning process may include the use of high-pressure equipment and strong chemicals. Follow the manufacturer's instructions and precautions during this process. Cleaning will occasionally uncover trouble sources. Tools, instruments and parts needed for the job should be gathered before work is started. Interrupting a job to locate tools or parts is a needless delay.

#### SERVICE BULLETINS

In addition to the information provided in this Service Manual, service bulletins are issued when needed to cover interim changes or to provide supplementary information necessary for maintaining the refuse unit in a proper safe operating condition. Check with your authorized Curbtender Dealer periodi-cally to ensure all your Curbtender service manuals are up to date.

#### **REMOVAL, DISASSEMBLY, AND REPAIR**

- 1) Cleanliness is very important: dirt is the number one cause of wear in bearings, bushings and especially in hydraulic components.
- 2) Inspect hydraulic components for leaks before cleaning. The dirt buildup on the component can aid in tracing fluid leaks.
- 3) Clean hydraulic connections before removal to prevent dirt from entering the component.
- 4) Loosen hydraulic fittings slowly to release pressure.
- 5) Cap hydraulic fittings immediately after removal to prevent dirt from entering the component or line and to prevent fluid from leaking.
- 6) Clean the component in non-flammable solvent before disassembly.
- 7) Inspect the component after cleaning for signs of wear or external damage.
- 8) When disassembling a component, note the position of each part as it is removed to aid in reassembly.
- **9)** During disassembly note the condition of each part as it is removed to aid in diagnosing problems and to prevent them in the future.
- **10)** Clean and inspect disassembled parts for wear, cracks, dirt, etc.
- 11) After cleaning and inspecting, reusable hydraulic parts should be immediately coated with clean fresh hydraulic fluid to prevent rust formation. If these parts are not going to be reinstalled immediately, they should be wrapped in a clean, lint free cloth or paper to prevent nicks or scratches.
- 12) When replacing a cylinder, or resealing a valve, replace all seals and o-rings that are disturbed during the repair. The price of a few seals is very little compared to a return repair job.

#### **REASSEMBLY AND INSTALLATION**

- 1) Assemble parts in the same position as removed.
- 2) Align parts accurately before mating.
- **3)** Inspect o-ring and seal grooves for sharp edges, nicks or burrs before installing new sealing parts.
- 4) Lubricate all new sealing parts with clean, fresh hydraulic fluid before installation.
- 5) Use care not to damage new sealing parts on reassembly.
- 6) Use correct torque values when reassembling and installing components. See CAPSCREW MARKING AND TORQUE VALUES later in this section.
- 7) Always check the hydraulic fluid level in the hydraulic reservoir after performing any service or repair of the hydraulic system.
- 8) Always lubricate components with grease fittings after they have been repaired and reinstalled.
- **9)** Use only Curbtender replacement parts for critical components, such as hydraulic cylinders, pumps, solenoids, OEM body panels, and proprietary Curbtender parts. Refer to page 7 for more information on Curbtender parts and ensuring high quality.

#### CAPSCREW MARKING AND TORQUE VALUES

Capscrew Diameter & Minimum Tensile Strength (PSI)	TO 3/4 - 120,000 TO 1 - 115,000	TO 5/8 - 140,000 TO 3/4 - 133,000	150,000
Quality of Material	Minimum Commercial	Medium Commercial	Best Commercial
SAE Grade Number	5	6 or 7	8
Capscrew Head Markings (Manufacturer's Marks May Vary)	$\langle \cdot \rangle$	$\oplus$	
Capscrew Body Size (Inches - Thread)	Torque [Ft - Lb (kg m)]	Torque [Ft - Lb (kg m)]	Torque [Ft - Lb (kg m)]
1/4 - 20	8 (1.11)	10 (1.38)	12 (1.66)
- 28	10 (1.38)		14 (1.94)
5/16 - 18	17 (2.35)	19 (2.63)	24 (3.32)
- 24	19 (2.63)	i	27 (3.73)
3/8 - 16	31 (4.29)	34 (4.70)	44 (6.09)
- 24	35 (4.64)		49 (6.78)
7/16 - 14	49 (6.76)	55 (7.61)	70 (9.68)
- 20	55 (7.61)		78 (10.79)
1/2 - 13	75 (10.37)	85 (11.76)	105 (14.25)
- 20	85 (11.76)		120 (16.60)
9/16 - 12	110 (15.21)	120 (16.60)	155 (21.44)
- 18	120 (16.60)		170 (23.51)
5/8 - 11	150 (20.75)	167 (23.10)	210 (29.04)
- 18	170 (23.51)	100 M	240 (33,19)
3/4 - 10	270 (37.34)	280 (38.72)	375 (51.86)
- 16	295 (40.80)		420 (58.09)
7/8 - 9	395 (54.63)	440 (60.85)	605 (83.67)
- 14	435 (60.16)	and the second second second	675 (93.35)
1.8	590 (81.60)	660 (91.28)	910 (125.85)
-14	660 (91.28)		990 (136.92)

#### **Additional Torque Notes**

- 1) Always use the torque values listed on the previous page when specific torque values are not available.
- 2) The torque values are based upon the use of clean, dry threads.
- 3) Reduce torque by 10% when engine oil is used as a lubricant.
- 4) Reduce torque by 20% if new plated capscrews are used.
- 5) General formula for calculating Torque is as follows: Torque in Inch Lbs = 0.2 x Nominal diameter of Screw x Load in Lbs., where Load = 80% of Yield Strength, expressed in Lbs., not in pounds per square inch.

#### **ELECTRICAL REPAIR**

#### **Electrical Testing**

The electrical system used on this unit consists of various lights, switches and wiring. Testing the component and wiring can be accomplished by two simple checks; CHECKING FOR VOLTAGE and CHECKING FOR CONTINUITY. It is important to perform regular electrical testing on your machine in order to prevent incidents or malfunctions while on route. Proper electrical maintenance and testing will ensure the Quantum unit has less down time.

#### **Checking for Voltage**

A test light is used to check for the presence of electricity in live circuits. Connect the test light clip to a good ground and the probe at the point where the presence of voltage is to be checked. If voltage is present, the light will be on... if no voltage is present, the light will be off.

#### **Checking Continuity**

A continuity tester is used to check the ability of a conductor to allow current to pass. A continuity tester uses a self-contained power source, and should never be used on a live circuit. Connect the clip to one side of the component to be tested and touch the probe to the other side. If the component has the potential to pass current, has continuity, the tester will register accordingly.

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### Quantum Specifications

<b>Body Construction</b>	on	Hydraulic System	
Roof:	11 gauge GR 50	Fluid Reservoir:	20 Gallons
Sides:	11 gauge GR 50	Oil Flow / Std Pump	22 GPM
Floor:	11 gauge GR 50	System Main Pressure:	2,700 psi
Ejection Panel:	11 gauge GR 50	Engine RPM	1,300 RPM
Sweep Face:	3/16″ GR 100	Hose Burst Ratio	4:1
Tailgate Side Wall:	11 gauge GR 50	Return Filter	10 Micron
Tailgate Floor:	3/16" GR 100	Pack Cylinders	3.5 x 20" stroke
		Sweep Cylinders	3.5″ x 10″ stroke
<b>Filtration</b>		Eject Cylinder	
Return Line:	10 Micron spin-on filter	6 cu. yd.	3.5, 2 stage telescopic
		8 cu. yd.	4.5, 3 stage telescopic
<u>Lubricants</u>		10 cu. yd.	4.5, 3 stage telescopic
Oil:	SAE #10 or Equivalent	Tailgate Lift	3 x 18″ stroke
Grease:	Multiservice -quality grade		

Grade ISO / Viscosity	22	32	46
AGMANON	33	31	31
Gravity API	375	380	390
Pour Point, OF	-20	-20	-20
Flash, OF	112	158	228
Viscosity:			
SSU @ 100 deg Farenheit	40	44	48
SSU @ 210 deg Farenheit	21	30.5	44
cST @ 40 deg Celsius	4.1	5.2	6.5
cST @ 100 deg Celsius	98	99	99
Viscosity Index	2500	2500	2500
ASTM Oxidation Test (Hours to 2.0 Neut. No.)	Pass	Pass	Pass
ASTM Rust Test, A & B	Pass	Pass	Pass
Foam Test	Pass	Pass	Pass
Vickers Vane Pump Test	25 Kv	25 Kv	25 Kv
Dielectric Strength (ASTM 877) EC # @ 180 OF	40-37-3 (10)	40-37-3 (15)	40-37-3 (15)

#### **Curbtender Hydraulic Fluid Recommendation**

All Curbtender hydraulic systems are factory filled with a high quality anti-wear hydraulic fluid meeting an ISO 32 specification. On units put into service where there are high ambient temperatures or sustained high duty cycles, it may be desirable to change the fluid to an ISO 46 specification (higher viscosity). In colder climates or light duty cycles, an ISO 22 might be more appropriate. The Interna-tional Standards Organization assigns specification numbers so that a consumer receives the same product from various suppliers. Refer to the previous chart for specifi cations on different ISO rated fluids.


# **Preventative Maintenance**

### General

The objective of preventive maintenance is to anticipate and prevent operational diffi ulties before they require extended shut down for costly repairs. The Quantum Compact has been designed for long periods of efficient uninterrupted operation. Careful attention to proper preventive maintenance, as described in this section, will insure and extend trouble-free operation of the unit. Particular attention to correct lubrication of the unit and maintenance of the filt er, are two vital areas of required preventive maintenance.

### **Operating and Maintenance Records**

Prepare and adhere to a maintenance schedule. Keep detailed records of all maintenance performed. Regularly inspect operating and maintenance records for deviations from normal operating conditions. Analyze the records for indications of potential trouble.

### **Curbtender Service Bulletins**

Occasionally distributors will receive service bulletins from CURBTENDER concerning updated maintenance information. Keep those bulletins with this manual and make notes at the appropriate places in the manual referencing the updated information.



DANGER: NEVER GO UNDER THE VEHICLE WITH THE ENGINE RUNNING. DEATH OR SERIOUS INJURY COULD RESULT.

### **PREVENTATIVE MAINTENANCE REQUIREMENTS**

### **Daily Preventative Maintenance**

### 1) INSPECTION

Perform the WALK AROUND INSPECTION described in Section 3, OPERATION.

- A) When checking for hydraulic leaks pay particular attention to hose fittings and connections at the cylinders and valves. Build up of hydraulic fluid and dirt indicates a small leak that can probably be corrected by tightening the fitting or connection.
- **B)** Check the visual indicator to determine the condition of the filter element (This procedure must be done with the vehicle running and the hydraulic system on.)
- **D)** Inspect the mounting sills and mounting hardware.

### 2) CLEANING

Hose the entire unit inside and out with clean water. Make sure no refuse is lodged behind the pack/eject panel.

### 3) LUBRICATION

Frequent inspection of grease points will indicate when lubrication is needed. When filling grease zerks pump grease until grease begins to expel from the pin bore.

### 4) CHECKING FLUID LEVEL

Position and fully retract all the cylinders to check the fluid level. When checking the fluid level in the hydraulic reservoir note any frequent or sudden loss of fluid. This may indicate leakage, which must be traced and corrected to avert equipment failure and possible damage to other components.

If the hydraulic fluid is low, fill the hydraulic reservoir to the "NORMAL FILL LEVEL" with hydraulic fluid as specified in Section 4, SPECIFICATIONS according to operating and weather conditions.

### **Weekly Preventative Maintenance**

### 1) CLEANING & PRESERVATION

Clean and paint exposed metal surfaces to remove and prevent the formation of rust.

### 2) **INSPECTION**

In addition to the body mounting hardware, which is checked daily, inspect all other

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accessible mounting hardware and fittings for tightness. Refer to the CAPSCREW MARKING AND TORQUE VALUE CHART provided in Section 4, GENERAL REPAIR. Check electrical wiring and insulation for frays, breaks and loose connections.

### 3) LUBRICATION

A lubrication decal is located on the front driver's side. The lubrication decal points out the areas that need to be greased weekly. When filling grease zerks pump grease until grease begins to expel from the pin bore.

### 4) HYDRAULIC SYSTEM

- A) The return filter is vital to the service life of the hydraulic system.
- **B)** Check the breather cap on the hydraulic reservoir tank. Clean it weekly and replace it if it can not be cleaned thoroughly or is missing.

### 5) CHECK-OUT PROCEDURES

Each week perform the CHECKOUT PROCEDURES listed in Section 7 of this manual.

### Six Month Preventative Maintenance

### 1) FLUSHING HYDRAULIC SYSTEM

- A) Drain all fluid from the hydraulic reservoir into a suitable container by removing the hydraulic return hose.
- **B)** Fill the hydraulic reservoir with fresh fluid as specified in Section 5, SPECIFICATIONS, according to operating and weather conditions.
- C) Start the unit and operate all hydraulic levers and buttons as described in Section 3, OPERATION. Leave all hydraulic cylinders in the retracted position and shut down the unit.
- D) Recheck the fluid level and add fluid as necessary to bring level to the "NORMAL FILL LEVEL" on the sight gauge.

### 2) CHECK/REPLACE RETURN FILTER

The return filter is a vital component of the hydraulic system. Without proper filtration, problems with hydraulic system components will occur. Stick to a strict maintenance schedule for this item. (See page 33 for procedure).

### Time Lapse Recommendations for Filter Replacement:

- A) After the first 20-hours of hydraulic pump operation.
- **B)** After the next 50-hours of hydraulic pump operation.
- **C)** Thereafter, every 250-hours of hydraulic pump operation or sooner, if so indicated by adverse operating conditions.

### The condition of the filter must be checked weekly!

### HYDRAULIC SYSTEM SERVICE

### **Replacement of Filter**

- 1) Unscrew the filter housing from the filter assembly, allow oil to drain from the filter and discard properly.
- 2) Coat the rubber gasket with fresh hydraulic fluid.
- 3) Screw the filter on to the housing (hand tighten only).
- 4) Check the fluid level and replenish with fresh fluid.
- 5) Operate the hydraulic system and check for leaks.

### Contamination

It is estimated that as much as 90% of all hydraulic problems can be traced directly to the fluid. It is imperative that all foreign matter be kept from the hydraulic fluid. Quantities of invisible abrasive contamination will cause serious pump wear, malfunctioning of pumps and valves, and sludge accumulations within the system in relatively short periods of time. It is also essential that moisture and water be kept from the hydraulic system.

### **Commercial Hydraulic Fluid Testing**

Hydraulic fluid samples should be taken periodically for laboratory analysis. The actual sampling method is critical. It should be done on ANSI Standard 893.19M (R1980). This standard is available from the National Fluid Power Association, 3333 N. Mayfair Road, Milwaukee, WI 53222.

Two identical hydraulic fluid samples should be taken from the center of the reservoir when the fluid is at operating temperature. One will be sent laboratory analysis and one will be kept for your own preliminary analysis. Each of the samples is to be placed in a clean, dry glass bottle with a non-shedding screw-on cap. The bottles should be labeled with the date, type of fluid, and model and serial number of the machine.

We recommend the use of commercial laboratory services for analysis of routine fluid samples taken on a regularly scheduled basis. The cost is about \$20 to \$30 per sample. The most important analyses are particle count, Spectro-chemical analysis, water content, and viscosity.

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### **In-House Hydraulic Fluid Testing**

Eliminate air bubbles by allowing your sample to stand for 20 to 30 minutes, and then hold the bottle up to the light to check whether the fluidscleapecloudy

Any visible debris is an indication of a severe solid contamination problem, the source of which must be located and corrected immediately. Common sources of this kind of contamination may be component wear, under-sealed reservoir covers, or dirty air breather flt ers. If the sample is the least bit"cloudy" it is an indication of water contamination, the source of which must be found and eliminated immediately. Common sources of solid contamination are inadequate outdoor storage, unsealed reservoir covers or condensation.

### **Blotter Spot Test**

A"BLOTTER SPOT TEST" may also be performed to test for OXIDATION. Place a DROP of hydraulic flui d on a piece of white blotter paper. The Blotter Test will provide an indication that a complete test may be necessary.

- 1) (A) If the blotter remains colorless or develops only a light yellow ring, oxidation is under control.
- 2) (B) If color develops but is uniform throughout, the fluid is still serviceable but should be checked for correct additive content.
- 3) (C) If the sample shows distinct rings the fluid should be changed.
- 4) (D) If a distinct dark spot remains in the middle, but a lighter colored fluid migrates outward in the blotter paper, the fluid is about to dump (or already has) sludge or other by-products into the system. The time for replacement of this fluid has already passed.



### **MAINTAINING GUIDE BLOCKS**



operate.

REMEMBER! GREASE IS CHEAPER THAN STEEL! Grease is not necessary; however, it is recommended for trucks containing nylon sleeve guide blocks. The user can significantly extend the service life of the guide blocks by insuring that adequate grease is applied to the guide block channels in which the guide blocks

### Inspection of Carriage and Push-Out Panel Guide Blocks

The Quantum Compact uses nylon sleeve style guide blocks. The carriage and push-out panels slide in channels on each side of the tailgate and body. Normal wear will occur on the guide blocks that fit in these channels.

Often times the guide blocks, which area normal wearing part, will be neglected and will wear to the point that results in subsequent damage to other components in the packing mechanism. The guide blocks on the carriage panel (packer panel) should be inspected daily and replaced if worn beyond the recommended dimension.

It is difficult to recommend or inspect the clearance between the guide blocks and the guide block guide channels; however, it is essential that the guide blocks be replaced before any portion of the carriage or push-out panel comes into contact with the tailgate or body itself. The panels may come into contact from either the top or bottom surfaces of the guide block channels.

For removal and replacement procedures see the Service and Repair section of this manual.

## Checks and Adjustments Checks and Adjustments Make sure you know and observe all safety PRECAUTIONS LISTED IN SECTION 2 BEFORE PERFORMING ANY OF THE FOLLOWING CHECKOUT PROCEDURES. USE EXTREME CAUTION TO AVOID COMING NEAR

ANY OF THE FOLLOWING CHECKOUT PROCEDURES. USE EXTREME CAUTION TO AVOID COMING ANY MOVING PARTS. NEVER ENTER THE BODY OF THE UNIT WHEN THE TRUCK IS RUNNING.

### CHECKOUT

The Quantum Compact is designed and built to provide long periods of trouble free operation. Performing the checkout procedures in this section, at regular weekly intervals, will ensure the unit operates to design specifications and will help prevent unscheduled down time.

### Hydraulic Reservoir Fluid Level Check

- 1) The unit must be in the following position with all cylinders retracted:
  - A) Packing panel as close to front of unit as possible.
  - **B)** Tailgate lowered.
  - **C)** Carriage and sweep panels in the start position, both fully retracted.
- 2) The fluid level should be in the safe range on the sight gauge.

### **Electrical System Check**

- 1) Main Control Box (in-cab)
  - A) Tailgate On Light (when tailgate is raised)
  - **B)** System On Light
  - C) PTO On Light
  - D) Strobe Lights / Rotating (option)
  - E) Work Light (option)



DO NOT hold the pump over relief (lever engaged at the end of the cylinder stroke) longer than 30 seconds at a time. Pro-

longed relief time could cause severe pump damage from internal overheating.

### **BODY VALVE MAIN RELIEF PRESSURE CHECK**

- 1. Install a 0-4,000 PSI test gauge on the 2 spool valve assembly test port.
- 2. Press the engine speed-up button located directly above the 2 spool valve assembly. At the same time pull the ejector panel lever to fully retract the ejector panel. Once the panel is "dead-headed," keep the ejector lever actuated. The pressure gauge should read 2,700 PSI.

### **IF NOT**

- 3) Adjust the 2 spool valve main relief pressure.
  - A) Loosen the locknut on the main relief cartridge, located to the right of the tailgate lever.
  - **B)** Insert an Allen wrench and turn the adjustment clockwise to increase pressure, or counter-clockwise to decrease the pressure.
- 4) Repeat step 2 to check the main relief pressure setting.

### **RESISTANCE CARTRIDGE PRESSURE CHECK**

(CHECKING THE RESISTANCE CARTRIDGE REQUIRES THE USE OF AN EXTERNAL HYDRAULIC POWER SOURCE)

- 1) Install a 0-4,000 PSI test gauge on the body valve assembly test port.
- 2) Install the external hydraulic power source to the pack extend pressure hose returning to the 2 spool valve. Ensure that the open cylinder port is plugged. Next, begin applying hydraulic pressure to the extend line. Build pressure until 1,100 PSI is reached. If the resistance cartridge is working properly the pressure should not go beyond 1,100 PSI

### IF NOT

- **3)** Adjust the resistance cartridge pressure.
  - **C)** Loosen the locknut on the resistance cartridge, located on the eject section of the main body valve.

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- **D)** Insert an Allen wrench and turn the adjustment clockwise to increase pressure, or counter-clockwise to decrease the pressure.
- 4) Repeat step 2 to check the resistance cartridge pressure setting.

### TAILGATE ("MAIN" VALVE) RELIEF PRESSURE CHECK

(The main valve relief cartridge is in series with the body valve relief cartridge. Therefore, the body valve relief cartridge will need to be set to a pressure setting above 2,700 PSI before the main valve relief can be set properly)

- 1) Install a 0-4,000 PSI test gauge on the body valve assembly test port.
- 2) Push and hold the sweep lever. Once the panel is "dead-headed", keep the sweep lever actuated, and read the pressure gauge. The pressure gauge should read 2,700 PSI.

### IF NOT

- 3) Adjust the tailgate valve main relief pressure.
  - A) Loosen the locknut on the main relief cartridge, located to the right of the tailgate lever.
  - **B)** Insert an large flat head screw driver and turn the adjustment clockwise to increase pressure, or counter-clockwise to decrease the pressure.
- 4) Repeat step 2 to check the main relief pressure setting.

### TAILGATE PACKING MECHANISM CHECK (13 SECOND CYCLE)

- 1) Begin with the carriage and sweep cylinders in the fully retracted position. Push both the swing and sweep levers in simultaneously.
- 2) The engine should accelerate, and the sweep panel should swing down. Once the sweep panel has fully extended the detent should kick out, and the carriage panel will begin to rise. At the end of it's travel it will un-detent and stop.
- 3) Next, pull both the swing and sweep levers out simultaneously. The engine should accelerate, and the sweep panel should move out. Once the sweep panel has fully retracted the detent should kick out, and the swing panel will begin to fall. At the end of it's travel it will un-detent and stop.

4) The complete cycle time should take approximately 13-15 seconds.

IF NOT

5) Refer to the troubleshooting section in this manual.

### **AUTOMATIC PACK VALVE DETENTS**

Refer to the drawing below. A 5/32 Allen wrench is required to perform this adjustment procedure.

For automatic cycle, if the valve actuating handles fail to "pop-out" of detent at the end of the cylinder stroke, a detent adjustment may be required. Proceed as follows:

- 1) Since low system pressure can also cause detent malfunction, always check the main relief pressure first. The main relief pressure adjustment is listed earlier in this section.
- 2) Misalignment of detent caps at upper end of the valve can cause the detents to hang-up and fail to release. Loosen the screws, re-align the caps, re-tighten the screws and check operation.
- **3)** If these two steps fail to correct the detent problem, the detents can be adjusted by the following procedures:
  - **A)** Remove the plastic plug in the end cap opposite the spool attachment end and insert the Allen wrench into the screw and locknut.
  - **B)** Loosen the locknut and turn the screw in (clockwise) to increase the detent force, or screw out (counter-clockwise) to reduce the detent force.
  - **C)** Screw the adjuster inward until the detent fails to release at the end of the cylinder stroke, and then back it off until it releases.
  - **D)** Tighten the locknut and re-check operation through several packing cycle. Reset if necessary. Install the plastic plugs.



**NOTICE:** The sweep section detent should be set to approximately 2,300 PSI, and the slide approximately 2,500 PSI.

### **SLIDE BLOCK**

Refer to section 6, preventative maintenance, for slide block wear information.

### **ADJUSTING ACCELERATOR PROXIMITY SWITCH**

1) With the engine running and the unit operating, operate the tailgate packing mechanism. If the engine accelerates while the packing panels are in motion, the proximity switch is operating correctly.

### IF NOT

- 2) Loosen the nuts retaining the accelerator proximity switch, and adjust the switch to give approximately a 1/8th inch gap between the switch and the linkage flag. Then tighten the switch retaining nuts securely.
- **3)** Repeat step 1.
- 4) Once the switch is adjusted properly, apply silicone to the retaining nuts to lock them in place.

# 8 Troubleshooting

Factory trained mechanics, experienced operators, require a thorough understanding of the information in this manual and accurate maintenance records are the best troubleshooting tools available.

Hydraulic flo w diagrams are provided later in this section. These diagrams can be helpful in determining which parts are associated with a particular function. An electrical wiring diagram is included in SERVICE AND REPAIR under ELECTRICAL SYSTEM. Problems in the hydraulic system may be found by performing the pressure checks found in the CHECK-OUT PROCEDURES.

If at any point during the troubleshooting process you feel unqualified for the task at hand, call your dealer or a factory service representative. Continuing to perform troubleshooting or tuning methods in an improper or incorrect manner can cause further problems aside from the original issue. A factory representative can guide you through technical processes, while a certifi edCurbtender dealer is capable of performing the task for you. Rely upon their expertise!

The inability of the hydraulic system to build pressure does not necessarily mean that the hydraulic pump is bad. First check all system relief's to ensure that they are not stuck in the open position. The only accurate way to test the hydraulic pump is with the use of a hydraulic fl ow gauge. The Quantum Compact pump is rated for 22 gpm @ 1300 RPM.

### **TEST FOR BYPASSING CYLINDERS**



Before testing any cylinders, make sure the main relief pressure is set at 2500 PSI.

**VARNING:** Extreme care should be taken to insure the service person does not become pinched by moving components!

**DANGER:** There are some procedures in this section that will require the chassis engine to be running. In these instances, the operational status will be indicated. Otherwise, make sure that the chassis engine is shut off and the keys are removed. The pressure of the hydraulic system and resulting movement of the unit's parts can cause serious injury or death.

- 1) With the chassis engine running and the hydraulic system activated, fully extend the cylinder to be tested for bypassing.
- 2) Disconnect and cap the hydraulic line which connects to the rod end of the cylinder.
- **3)** Apply hydraulic pressure to the case end of the cylinder. While holding a suitable container to catch any hydraulic fluid which may escape, observe for hydraulic fluid flow from the open port on the rod end. The flow of hydraulic fluid should be no more than 2 fluid ounces (60 ml) per minute. A flow greater than 2 fluid ounces (60 ml) indicates an excessively leaking piston seal. If the cylinder does not leak excessively continue the test.
- 4) Reconnect the hydraulic line to the rod end of the cylinder.
- 5) Fully retract the cylinder.
- 6) Disconnect and cap the hydraulic line which connects to the case end of the cylinder.
- 7) Apply hydraulic pressure to the rod end of the cylinder. While holding a suitable container to catch any hydraulic fluid which may escape, observe for hydraulic fluid flow from the open port on the rod end. The flow of hydraulic fluid should be no more than 2 fluid ounces (60 ml) per minute. A flow greater than 2 fluid ounces (60 ml) indicates an excessively leaking piston seal. If the cylinder does not leak excessively continue the test.
- 8) Reconnect the hydraulic line to the case end of the cylinder.

### COMPACTION

Before troubleshooting a unit, it is important to remember that the compaction may vary with the following conditions:

- 1) **Type of refuse.** Tree branches, dry leaves, furniture, and any other items loaded into the body that take up relatively large amounts of space will reduce the compaction ratio.
- 2) Moisture content of refuse. Wet refuse will pack tighter than dry and consequently, a wet load will weigh more than a dry load. Wet refuse loaded into the body will increase the compaction ratio.
- **3) Operation of the equipment.** As with the operation of any type of heavy equipment, one machine can yield different results with different operators.
- 4) Preventive Maintenance. A properly maintained unit will achieve higher compaction rates than one that is poorly maintained. The condition of the hydraulic system, pump, main relief settings and the condition of the operating cylinder seals will all have an effect on unit performance and compaction. Some chassis components will also affect compaction. The engine speed during packing, fluid level in an automatic transmission, and the condition of the clutch assembly in a standard transmission may also affect compaction.

Compaction rates of a unit will depend on the season, the type of trash, the weather, and the operation and maintenance of a unit. If the unit packs relatively consistent loads and has been properly maintained according to the Service manual, then it is safe to assume that it is getting maximum compaction for your particular conditions.

### **HYDRAULIC SCHEMATIC - MANUAL VALVE**



### TROUBLESHOOTING 45

9	FILTER, RETURN 10 MICRON	1	
8	VALVE, MANUAL CONTROL TG	17	VALVE, DIVERTOR
7	EJECT CYLINDER	16	VALVE, POPPET NORMALLY CLOSED
6	ORIFICE, Ø 0.06	15	PRESSURE SWITCH, 2800 PSI
5	TAILGATE LIFT CYLINDERS	14	VALVE, FLOW REGULATOR
4	VALVE, MANUAL CONTROL BODY	13	VALVE, MANUAL CART DUMPER
3	PUMP	12	ROTARY CART DUMPER (OPTION)
2	GATE VALVE	11	PACK CYLINDER
1	DIL RESERVOIR	10	SWEEP CYLINDER
SYM	NAME	SYM	NAME

### INAL RUTARY T DUMPER



# **9** Service & Repair

This section contains instruction necessary for the repair and replacement of the main components of the unit. Before attempting any repair of the unit, become thoroughly familiar with OPERATION instructions (Section 3) and General Repair (Section 4). Also, before performing any work on the unit know and OBSERVE all SAFETY PRECAUTIONS listed in Section 2.

### **REPLACING PACK PANEL GUIDE BLOCKS**

**WARNING:** Never disconnect a hydraulic hose or tube containing pressure. Pressures in this hydraulic system are high enough to cause serious injury or death. Hoses may whip or hydraulic oil may burn skin, or cause eye damage. Use extreme caution when working with the hydraulic system.

**DANGER:** There are some procedures in this section that will require the chassis engine to be running. In these instances, the operational status will be indicated. Otherwise, make sure that the chassis engine is shut off and the keys are removed. Movement of the unit's parts can cause serious injury or death. Keep clear of tailgate area.

It is essential that the guide blocks be replaced before any portion of the swing/ pack panel assembly comes into contact with the tailgate itself. The swing panel may come into contact with tailgate from either the top or bottom surfaces of the guide blocks.

- 1) Park the unit on a level surface with the tailgate shut. Bring the swing and sweep panels to the retracted position. Remove the keys from the ignition, use proper lock-out/ tag-out procedures, and chock the tires. Finally, disconnect the negative battery cable.
- 2) Remove the tailgate light bar assembly.
- **3)** Reduce the hydraulic pressure in the system by operating the hydraulic valve on the tailgate until all the hoses are limp.
- 4) Next, disconnect and CAP/ PLUG the packing cylinders and hoses at the pack panel.
- 5) With a suitable lifting device, lift the complete pack panel assembly. The pack panels will rotate until the guide blocks become exposed.
- 6) Once the pack panel assembly is raised, the guide blocks may be inspected or replaced.
- 7) For installation, simply perform the above procedures in reverse order.

### **TAILGATE REMOVAL**

VARNING: Never disconnect a nyuraume mose of table commonly pressure. Pressures in this hydraulic system are high enough to cause serious injury or death. Hoses may whip or hydraulic oil may burn skin, or cause eye damage. Use extreme caution when working with the hydraulic system.



The tailgate assembly weighs between 7,000 and 9,000 pounds, depending on optional equipment. Ensure the proper equipment

is used when removing or installing the tailgate.



**WARNING:** The tailgate center of gravity will be different depending on the optional equipment installed on the tailgate. Use extreme caution when removing the tailgate from the body.

- 1) Park the unit on a level surface with the tailgate shut. Bring the swing and sweep panels to the retracted position. Remove the keys from the ignition, use proper lock-out/ tag-out procedures, and chock the tires. Finally, disconnect the negative battery cable.
- 2) Reduce the hydraulic pressure in the system by operating the hydraulic valve on the tailgate and body until all the hoses are limp.
- 3) Disconnect the main pressure, return and tailgate lift cylinder hoses at the union located on the tailgate hose bracket. Also, disconnect the tubes at the tailgate lift cylinders. Ensure caps and plugs are installed on all hoses to prevent contamination.
- 4) Remove the tailgate lift cylinders by removing the bolts, locknuts and cylinder pins. Ensure the tailgate lift cylinder is plugged to prevent contamination.
- 5) Remove the tailgate hinge pins by bending the pin head guards out of the way and removing the snap rings.
- Using an overhead crane, or other suitable lifting device, remove the tailgate from the body. 6)
- 7) For installation, simply perform the above procedures in reverse order.

### SWEEP CYLINDER REPLACEMENT

**WARNING:** Never disconnect a hydraulic hose or tube containing pressure. Pressures in this hydraulic system are high enough to cause serious injury or death. Hoses may whip or hydraulic oil may burn skin, or cause eye damage. Use extreme caution when working with the hydraulic system.



The sweep cylinder is heavy. Use caution when removing.

- 1) Park the unit on a level surface with the tailgate shut. Bring the swing and sweep panels to the retracted position. Remove the keys from the ignition, use proper lock-out/ tag-out procedures, and chock the tires. Finally, disconnect the negative battery cable.
- 2) Reduce the hydraulic pressure in the system by operating the hydraulic valve on the tailgate and body until all the hoses are limp.
- 3) Disconnect the hoses going to the sweep cylinder you intend to remove. Ensure all hoses are capped and plugged; and the cylinder is plugged to prevent contamination.
- 4) Disconnect the sweep cylinder from the sweep panel first by removing the bolt, nut, and lock washer. Then slide the cylinder pin inward to remove it.
- 5) Disconnect the sweep cylinder from the swing panel by removing the bolt, nut, and lock washer. Then slide the cylinder pin inward to remove it.
- 6) The sweep cylinder should now be loose. Remove the sweep cylinder from the tailgate, drain the hydraulic fluid, and plug the cylinder.
- 7) For installation, simply perform the above procedures in reverse order. Apply a liberal coating of anti-seize compound to all pins before installation.

### SWING CYLINDER REPLACEMENT

**WARNING:** Never disconnect a hydraulic hose or tube containing pressure. Pressures in this hydraulic system are high enough to cause serious injury or death. Hoses may whip or hydraulic oil may burn skin, or cause eye damage. Use extreme caution when working with the hydraulic system.





The swing cylinder is heavy. Use caution when removing.

- 1) Park the unit on a level surface with the tailgate shut. Bring the swing and sweep panels to the retracted position. Remove the keys from the ignition, use proper lock-out/ tag-out procedures, and chock the tires. Finally, disconnect the negative battery cable.
- 2) Reduce the hydraulic pressure in the system by operating the hydraulic valve on the tailgate and body until all the hoses are limp.
- 3) Disconnect the hoses going to the swing cylinder you intend to remove. Ensure all hoses are capped and plugged; and the cylinder is plugged to prevent contamination.
- 4) Disconnect the swing cylinder from the lower, tailgate mount first by removing the bolt, nut, washer and lock washer. Then slide the cylinder pin outward to remove it.
- 5) Disconnect the swing cylinder from the swing panel by removing the bolt, nut, and lock washer. Then slide the cylinder pin inward to remove it.
- 6) The swing cylinder should now be loose; however, the swing panel may need to be raised several inches in order to assist in the removal of the cylinder. Remove the swing cylinder from the tailgate, drain the hydraulic fluid, and plug the cylinder.
- 7) For installation, simply perform the above procedures in reverse order. Apply a liberal coating of anti-seize compound to all pins before installation.

### TAILGATE SEAL REPLACEMENT

- 1) Raise the tailgate to a sufficient height to extend the tailgate props. Slowly lower the tailgate until the tailgate props are supporting the tailgate. Remove the keys from the ignition, use proper lock-out/ tag-out procedures, and chock the tires.
- 2) Using a small pry bar, bend the metal seal channel upward in those areas where the channel is depressed into the rubber seal.
- **3)** Grasp one end of the rubber seal and pull outward to remove the rubber seal from the metal seal channel.
- 4) Thoroughly clean dirt and debris from the inside grooves of the metal seal channel. Insert one end of the rubber seal into either end of the metal seal channel. Continue pushing/ pulling the rubber seal through the entire width of the metal seal channel.

### **REPLACING PUSH-OUT PANEL GUIDE BLOCKS**

**CAUTION:** Removing the push-out panel slide blocks may require some manipulation of the push-out panel itself. The push-out panel is EXTREMELY HEAVY. Use caution when removing the slide blocks, and DO NOT place your fingers in any pinch points between the push-out panel and body.

- 1) Begin with the push-out panel in the fully extended position.
- 2) There are four push-out panel slide blocks. Replace them one at a time.
- 3) Remove the slide block retaining bolt and remove the retainer.
- 4) The forward slide blocks should slide out rearward, and the rear slide blocks should slide out forward.
- 5) For installation, simply perform the above procedures in reverse order.

# **10** Parts

Please refer to the following pages for support in identifying replacement parts for your Quantum compact rear loader. If you are having troubles identifying a part, or believe the part you need is not depicted here, then please contact a Curbtender Technician for further assistance.

All parts orders are processed through the Curbtender dealer network. Contact your local dealer to facili-tate your parts sale. If you do not know who your dealer is, call 1-888-669-2963 for assistance.

Please remember, that only Curbtender, Inc. can supply your refuse truck with genuine OEM replacement parts. Please refer to page 7 for information on ways to ensure you are receiving quality CURBTENDER parts.

Description	Part Number	Qty
Pump	*Please Call Curbtender Service	1
Return Filter	510-011-000	1
Filter Breather	500-009-001	1
Proximity Switch	345-014-009	2
Ejector Panel Slide Block (Top)	00-32282-02-OA	1
Ejector Panel Slide Block (Lower)	00-28017-01-WA	4
Pack Panel Slide Blocks	00-35371-01-OA	2
Tailgate Seal	00-20155-02-OA	1
Sweep Cylinder	00-35591-02-AB	2
Pack Cylinder	00-35592-02-AB	2
Eject Cylinder (6 Yard)	00-17636-04-AD	1
Eject Cylinder (8 Yard)	00-21231-04-AD	1
Eject Cylinder (10 Yard)	00-36256-00-AB	1
Lamp, Amber Strobe (360 Deg)	332-035-002	*
Lamp, Stop, Turn, Tail, 4"	332-040-015	*
LED Lamp, Stop, Turn, Tail, 4"	332-140-015	*
Lamp, Backup, 4"	332-040-017	*
LED Lamp, 4" Clear	332-140-017	*
Lamp, Red, 2" marker	332-030-001	*
LED Lamp, Red, 2" marker	332-130-001	*
Strobe, Synchronous, LED, 6.5" Oval	332-035-013	*
Strobe, Alternating, LED, 6.5" Oval	332-035-014	*
Grommet, Light, 4"	332-040-011	*
Grommet, Light, 2"	332-031-004	*
Grommet, Light, 6.5" Oval	332-035-016	*
*Variad dapanding on model and configur	(ation	

### **QUICK REFERENCE LIST**

\*Varied depending on model and configuration.



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20         445-008-003         4         NUT,STD           19         485-008-002         4         WASHER,LOCK           18         485-008-000         8         WASHER,STD FLAT           17         415-008-024         4         CAPSCREW           16         00-27986-00-OA         1         REITAINER,SLIDE BLOCK,           13         415-012-032         2         CAPSCREW           14         00-322182-02-OA         1         BLOCK, SLIDE,           11         00-20147.00-AA         1         PIN ASSY, CYL           10         00-14360-00-OA         2         BLOCK, SLIDE,           11         00-20155-02-OA         1         SELA           8         00-336164-00-AB         2         AICH WLD, TAILGATE, PLS           7         00-317636-00-AA         2         PIN WLD, LATCH HOOK,           10         00-36164-00-AB         2         AICH WLD, TAILGATE, PLS           5         00-36160-01-AB         2         AICH WLD, TAILGATE, PLS           5         00-36160-01-AB         1         AICH WLD, TAILGATE, PLS           3         00-2014-01-AA         2         PIN WLD, TAILGATE, PLS           3         00-30160-01-AB         1				
17       415-008-024       4       CAPSCREW         16       00-27986-00-OA       1       RETAINER,SLIDE BLOCK,         15       00-28017-01-WA       4       BLOCK, SLIDE,         14       00-32282-02-OA       1       BLOCK,SLIDE,         12       00-14360-00-OA       2       BLOCK,SLIDE,         11       00-20147-00-AA       1       PIN ASSY, CYL.         10       00-17636-04-AD       1       CYL, EJECTOR,         9       00-20155-02-OA       1       SEAL,         8       00-36164-00-AB       2       LATCH WLD, TAILGATE, PLS         7       00-31756-00-AA       2       PIN WLD,LATCH HOOK,         6       00-36160-02-AB       1       ATCH WLD, TAILGATE, PLS         5       00-36160-02-AB       1       ATCH WLD, TAILGATE, PLS         5       00-36160-01-AB       1       ATCH WLD, TAILGATE, PLS         5       00-36160-01-AB       1       ATCH WLD, TAILGATE, PLS         3       00-20146-01-AA       2       PIN ASSY	20 445-008-003 4 NUT,STD 19 485-008-002 4 WASHER,LOCK	9		
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	4 00-36160-01-AB 1 LATCH WLD, TAILGATE, PLS	OF SEAL CHANNELS TO FILL GAPS		PARTS ASSY, BODY,
2       00-24210-01-WB       2       CYLINDER ASSY,TG LIFT,CTFE       BLOCKS TO CENTER EJECT PANEL       5       ECN       DRAWN BY       SCALE       1:14         1       00-23261-00-AA       5       PIN ASSEMBLY       BLOCKS TO CENTER EJECT PANEL       6       ECN       0       BLOCKS TO CENTER EJECT PANEL       6       ECN       0       1:14       1:14         1       00-23261-00-AA       5       PIN ASSEMBLY       BLOCKS TO CENTER EJECT PANEL       6       ECN       0       BLOCKS TO CENTER EJECT PANEL       1       1       0       1	200-24210-01-WB2CYLINDER ASSY,TG LIFT,CTFE100-23261-00-AA5PIN ASSEMBLY	BLOCKS TO CENTER EJECT PANEL	5         ECN            6         ECN            7         ECN	DAS I:14 CHK'D ECN RELEASE DATE 09/15/05

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### SHEET 1 OF 2



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### SHEET 2 OF 2

-GRIND SMOOTH THE TOP SURFACE OF THE I-BEAM AND GREASE

## EJECT PANEL LOWER SLIDE BLOCK DETAIL



## EJECT PANEL RETAINER DETAIL SCALE 1:6

SHEET 2 OF 2



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ormation thereon is the property of WAYNE ENGINEERING CORPORATION. It may not be produced or used in any way to the detriment of WAYNE ENGINEERING CORPORATION. o you and is to be returned upon our request.

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	420,002,000	0				1
52	430-003-000	8	8		STRAP, TIE	-
51	07-52015-00-R	9	9	9	HOSE COVERING	
50	G12C12E12-036	2	2	2	HOSE ASSY,	
49	00-36217-02-AA	1			TUBE ASSY, RH TG LIFT, PLS	
48	00-36218-02-AA		1		TUBE ASSY, RH TG LOWER, PLJR	
47	848-008-000	1	1	1	ELBOW, SWIVEL NUT	-
46	806-011-008	2	2	2	TEE, UNION	4
45	G06E06E06-024	2	2		HOSE ASSY,	4
44	G06E06E06-028	2	2	2	HOSE ASSY,,	4
43	841-008-006	4	4	4	ADAPTER, MALE O-RING, MALE JIC	_
42	00-24369-02-OA	2	2	2	FITTING,ORIFICE,	
41	842-006-006	4	4	4	ELBOW,M O-RING/M JIC,	
40	842-006-008	4	4		ELBOW, MALE O-RING, MALE JIC	
39	00-36217-01-AA	1	1	1	TUBE ASSY, LH TG LIFT, PLS	
38	00-36218-01-AA	1	1	1	TUBE ASSY, LH TG LOWER, PLS	
37	G12C12E12-019	1	1	1	HOSE ASSY,	
36	841-008-008	2	2	2	ADAPTER, MALE O-RING	
35	G06C08G08-030	2	2	2	HOSE ASSY,,	1
34	485-008-004	4	4	4	WASHER,LOCK	]
33	415-004-024	4	4	4	CAPSCREW	]
32	00-36220-01-AB	1	1	1	VALVE ASSY, BODY, PLS	1
31	00-36222-00-AA	1	1	1	TUBE ASSY, PRESSURE, PLS	1
30	00-36230-00-AA	1	1	1	TUBE ASSY, RETURN, PLS	1
29	848-012-001	1	1	1	ELBOW, TUBE	1
28	445-004-006	10	10		NUT, FLANGE LOCK	1
27	00-36227-00-AA	1	1	1	TUBE ASSY, PRESSURE, PLJR	1
26	00-36224-00-AA	1	1	1	TUBE ASSY, EJECT RETRACT, PLS	1
25	00-36228-00-AA	1	1	1	TUBE ASSY, TG RAISE, PLS	INSTALL F
24	00-36225-00-AA	1	1	1	TUBE ASSY, EJECT EXTEND, PLS	ARROWS P
23	00-36229-00-AA	1	1	1	TUBE ASSY, TG LOWER, PLS	(FILTER ELEMEN
22	755-032-000	1	1	1	ELBOW, STREET	
21	545-084-002	1	1	1	VALVE,2" GATE,	-
20	520-032-000	1	1	1	BARB,HOSE,	-
19	00-28183-00-AB	1	1		HYD ASSY, RESERVOIR	-
18	715-020-016	1	1		BUSHING, REDUCING	-
17	760-016-032	1	1	1	NIPPLE	4
16	510-010-000	1	1		FILTER ASSY, SPIN-ON RETURN	4
15	715-020-012	<mark>_</mark>			BUSHING, REDUCING	4
14	804-012-000	1	1	1	STRAIGHT ADAPTER	4
13	851-012-012	1	1	1	TEE,BRANCH,JIC,SWIVEL NUT	-
12	G12E12E12-030	1	1	1	HOSE ASSY,,	4
12	850-012-000	1	1		UNION, 90 DEG, JIC	4
10	843-012-000	1	1			4
9	843-012-000	ー -  -  -  -  -  -  -  -  -  -  -  -  -				
<del>9</del> 8		2 7	2	2	UNION, JIC CLAMP SET,HOSE,19MM	00-36304-01-AB I
	432-003-019	-	-			00-36304-02-AB
7	445-004-002	24	24	32		00-36304-03-AB
6	415-004-032	34	34		CAPSCREW	4
5	432-003-002	19	19	23	COVER PLATE, CLAMP, 3 SIZE	4
4	432-003-013	12	12	14	CLAMP SET, HOSE, 13MM	4
3	00-36215-03-AA	-	-	1	TUBE ASSY, TG RETRACT, QUS	4
3	00-36215-02-AA	-	1	-	TUBE ASSY, TG RETRACT, PLS	4
3	00-36215-01-AA	1	-	-	TUBE ASSY, TG RETRACT, PLS	ALL HYD. HOSES
2	00-29605-03-AA	-	-	1	TUBE ASSY, TG LIFT, QUS	
2	00-29605-02-AA	-	1	-	TUBE ASSY, TG LIFT	00-65015-01-AA
2	00-29605-01-AA	1	-	-	TUBE ASSY, TG LIFT	4
1	00-36219-03-AA	-	-	2	TUBE ASSY, 3/4 ROOF, PLS	
1	00-36219-02-AA	-	2	-	TUBE ASSY, 3/4 ROOF, PLS	ALL HYD TUBES R
1	00-36219-01-AA	2	-	-	TUBE ASSY, 3/4 ROOF, PLS	6YD: 00-65014-0
ITEM		6 YD	8 YD	10 YD		8YD: 00-65014-0
	PART NUMBER	QTY.	QTY.	/QTY.	DESCRIPTION	10YD: 00-65014-0
NO.						





HYD ASSY, BODY, PLS	



10	770-004-000	1	PLUG, 1/4° PIPE
9			
8	500-009-001	1	BREATHER, FILLER
7	500-004-001	1	GAGE, SIGHT LEVEL
6	770-020-000	1	PIPE PLUG, MAGNETIC
5	440-029-000	2	WASHER, LOCK
4	485-006-001	2	WASHER, FLAT
3	445-006-001	2	NUT, 3/8-16
2			
1	AC-28284-00	1	TANK WLD
SYM	PART NUMBER	QTY	NAME

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SYM	REVISION RECORD	BY	DATE	\v'AYNE	ENGINEERIN	IG CORP,		
1	DROP, 804-020-016	DSS	11/17/97	CEDAR FALLS J ID\v'A				
2	445-006-001 WAS 445-008-003 485-006-001 WAS 485-008-000	DJK	01/30/98					
з	440-029-000 WAS 485-008-002	DJK	01/30/98	$\frac{1}{3}$ HYD ASSY, RESERVOIR				
4	REMOVED ITEM 2	JVF	06/08/99	drawn by DJK	scale 1:8	AUTOCAD DRAWING		
				СНК'D	DATE 09-25-97	DRAw'ING ND.		
				DATE PLOTTED	APP'D	AB-28183-00		

# NOTE: CAP ALL PEN PORTS FDR STORAGE

					$\square$	12 13	)	(14)
	Н	IANDLE	KIT #545-004-798	3				
	FOR REPLAC	SERVIC CEMENT	e only, adj. Relief Part #545-004-512					
			CE ONLY: VELOCITY FUSE RT NUMBER #545-128-001					
				11 10 4 9				
14	535-004-005	1	NIPPLE, DIANOSTIC			8		
13	345-005-007	1	BOOT, SWITCH			$\bigcirc$		
12	345-005-006	1	SWITCH,TOGGLE					
11	535-004-007	2	CAP, NIPPLE DUST					
10	535-004-010	1	NIPPLE, DIANOSTIC		(E	EXCEPT AS NOTED)		$\pi$
9	849-008-000	1	TEE, RUN, JIC		2	PLACE DECIMALS ± .005 PLACE DECIMALS ± .06 NGULAR ± 1°		<u>_</u> _
8	842-012-000	1	ELBOW, MALE, O-RING		DI	IMENSIONS IN () ARE REFERENCE	This drawing a	and the info
7	445-005-001	3	NUT,		SYP		This drawing an copied, duplic This drawing is	cated, repl loaned to
6	470-031-000	3	WASHER, LOCK		1	2011		
5	415-005-048	3			3		DESCRIPTION	
4	841-012-008	4	ADAPTER, MALE O RING		4			
3 2	841-012-000 00-36221-01-OA	2	ADAPTER, MALE O-RING BRKT, VALVE MOUNTING, PLS		5		DRAWN BY	DAS
1	00-36194-00-AB	1	VALVE, BODY MANUAL, PLS		6			-
ITEM NO.	PART NUMBER	OTY.	DESCRIPTION		7	2011	СНК'D	ECN REL 3034
		<u>v</u> 11.			0			3034

## 00-36220-01-AB



VALVE ASSY, BODY, PLS
-----------------------

SCALE 1:3 RELEASE DATE 34

07/11/05

DRAWING NO.

00-36220-01-AB



### 00-36320-00-AB

### SHEET 1 OF 2

03-000	25	STRAP, TIE				
14-009	1	SWITCH, PROX N.O. W/DEUTSCH				
10-012	1	BUSHING, SNAP				
29-000	1	WASHER,LOCK				
06-001	2	NUT,STD				
15-012	1	CLAMP, HOSE SUPPORT				
16-00-AB	1	HARNESS, BODY MAN CONTROL, PLS				
70-00-AB	1	HARNESS, POWER				
60-00-AB	1	HARNESS, CHASSIS,				
17-00-AB	1	HARNESS, BODY LIGHT, PLS				
NUMBER	QTY.	DESCRIPTION				
nformation thereon is the property of WAYNE ENGINEERING CORPORATION. It may not be produced or used in any way to the detriment of WAYNE ENGINEERING CORPORATION.						
to you and is to be returned upon our request.						
FLEC ASSY BODY MAN CONTROL PLS						

ELE	C ASSY,	BODY MAN CON	TROL, PLS
	SCALE	1:10	DRAWING NO.
LEASE	DATE	7/10/2017	00-36320-00-AB

7/18/2017



### 00-36320-00-AB

### SHEET 2 OF 2

SHEET 2 OF 2

ENGINEERING CORPORATION CEDAR FALLS, IOWA

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ELEC ASSY, BODY MAN CONTROL, PLS						
	SCALE	1:8	DRAWING NO.			
elease 7	DATE	7/18/2017	00-36320-00-AB			

	TOLERANCES (EXCEPT AS NOTED)       ENG         3 PLACE DECIMALS ±.005 2 PLACE DECIMALS ±.06 ANGULAR ±1°       ENG         ANGULAR ±1°       This drawing and the information thereon is the property of WAY
	SYM         ECN NUMBER         BY         DATE         Copied, duplicated, reproduced or used in any way to the detr This drawing is loaned to you and is to be returned upon our rec           1         ECN         ECN
4         445-006-002         6         NUT,LOCK           3         485-006-001         12         WASHER,SAE FLAT	3     ECN     DESCRIPTION       4     ECN     TRIM KIT, NARROW MUL       5     ECN     DRAWN BY       6     ECN     DRAWN BY
2         415-006-020         6         CAPSCREW           1         400-012-001         2         MUD FLAP, WAYNE LOGO 18 X 24           ITEM NO.         PART NUMBER         QTY.         DESCRIPTION	6         ECN         DAS         1.0           7         ECN         CHK'D         ECN RELEASE 03022         DATE 10/07/05

## 00-36295-01-AB







IGINEERING CORPORATION CEDAR FALLS, IOWA

AYNE ENGINEERING CORPORATION. It may not be letriment of WAYNE ENGINEERING CORPORATION. request.

### UD FLAPS, PLS

DRAWING NO.

00-36295-01-AB



### 00-36259-00-AB

## APPLY ANTI SEIZE TO PINS AND 1/2 X 6 1/2 BOLT APPLY BLUE LOCKTITE TO ITEM 19

20	2	CAPSCREW, BUTTON SOCKET HEAD			
)2	2	NUT,LOCK			
18	2	CAPSCREW			
ЮA	2	PIN, TAILGATE, QUS			
-AA	2	PIN WLD,,			
-AB	2	CYL, PACK, PLS			
ЮA	2	GUIDE BLOCK,,QUS			
10	2	WASHER, STD FLAT			
)3	4	NUT,JAM,			
)2	2	NUT,LOCK			
)4	2	CAPSCREW			
-AB	1	LIGHT BAR WLD,, PLS			
)1	6	WASHER, SAE FLAT			
)2	6	WASHER,LOCK			
6	6	CAPSCREW			
00	4	FITTING, GREASE, STRAIGHT			
)1	1	PLUG, SQUARE HEAD PIPE,			
-AB	<mark>1</mark>	PANEL ASSY, PACK, PLS			
-AD	1	TAILGATE WLD,, PLS			
BER	QTY.	DESCRIPTION			
ENGINEERING CORPORATION CEDAR FALLS, IOWA					
ormation thereon is the property of WAYNE ENGINEERING CORPORATION. It may not be					

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PARTS	, PLS	
SCALE	1.10	DRAWING NO.

1:12 DATE 09/19/05 DRAWING NO.

00-36259-00-AB



### APPLY ANTI SEIZE TO PINS

12	485-016-040	ſ	
		2	WASHER, STD FLAT
11	445-016-003	4	NUT,JAM,
10	00-36191-00-OB	2	SHAFT, CYLINDER, PLS
9	00-35746-00-AA	2	PIN WLD
8		1	
7	445-008-002	2	NUT,LOCK
6	485-008-001	2	WASHER,SAE FLAT
5	415-008-024	2	CAPSCREW
4	00-35612-02-AA	2	PIN WLD,,
3	00-35591-02-AB	2	CYL, SWEEP, QUS
2	00-36272-00-AB	1	SWEEP WLD,,PLS
<mark>  1</mark>	00-36261-00-AC	1 (	PANEL WLD, PACK, PLS
ITEM NO.	PART NUMBER	sweep/qty.	DESCRIPTION

TOLERANCES (EXCEPT AS NOTED) 3 PLACE DECIMALS ± .005 2 PLACE DECIMALS ± .06 ANGULAR ± 1° DIMENSIONS IN () ARE REFERENCE				This drawing and the inf		
SYM	ECN NUMBER	BY	DATE	copied, duplic This drawing is	ated, rep	
1	ECN 04057	DAS	04/09/09			
2	ECN 04439	DAS	03/23/10			
3	ECN			DESCRIPTION		
4	ECN					
5	ECN			DRAWN BY	A C	
6	ECN			D	AS	
7	ECN			CHK'D	ECN REL	
8	ECN			]	03013	

WEIGHT: 736.05 LBS

### 00-36260-00-AB



### ENGINEERING CORPORATION CEDAR FALLS, IOWA

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### PANEL ASSY, PACK, PLS

SCALE LEASE DATE

1:8

DRAWING NO.

00-36260-00-AB

09/19/05


### 00-36310-00-AB

### SHEET 1 OF 2

### INSTALL DECALS PER DECAL KIT DRAWING

00-WA	1	DECAL, WARNING STEP CAB
00-0A	1	DECAL, WARNING RIDING STEP,
00-0A	2	GUSSET, STEP, PLS
-01-AB	1	HANDLE WLD, LH TAILGATE, PLS
-002	8	NUT,LOCK
-001	16	WASHER,SAE FLAT
-016	8	CAPSCREW
-02-AB	1	HANDLE WLD, RH TAILGATE, PLS
01-OA	4	PLATE, STEP MTG, QUS
8-002	8	NUT,LOCK
8-001	16	WASHER,SAE FLAT
8-024	8	CAPSCREW
-00-AB	2	
MBER	QTY.	DESCRIPTION
	VE	ENGINEERING CORPORATION CEDAR FALLS, IOWA
	+	A STATE OF A

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### STEP ASSY,, PLS

 SCALE
 1:12

 LEASE
 DATE
 11/09/05

DRAWING NO.

00-36310-00-AB







-					
(EXC 3 PL/ 2 PL/ ANG	DLERANC CEPT AS NOTED) ACE DECIMALS ± .003 ACE DECIMALS ± .06 JULAR ± 1° ENSIONS IN () ARE REFE	ō			
SYM	ECN NUMBER	BY	DATE	<ul> <li>This drawing an copied, duplic</li> <li>This drawing is</li> </ul>	nd the info ated, rep
1	ECN			This drawing is	ioaneu ic
2	ECN				
3	ECN			DESCRIPTION	
4	ECN				
5	ECN			DRAWN BY	10
6	ECN			- U	AS
7	ECN			CHK'D	ECN REL
8	ECN			]	04991

5	00-61035-00-OA	2	SPACER, TG GUARD, QUS
4	485-004-001	4	WASHER,SAE FLAT
3	485-008-004	4	WASHER,LOCK
2	415-004-012	4	CAPSCREW, 1/4-20 X 3/4
1	00-60851-00-OA	2	guard, tg latch cyl, qus
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION

G	UARD KIT, TG LATCH CY	L, QUS
	scale 1:6	DRAWING NO.

elease	DATE
11	

09/23/11

00-61033-00-AB



					00-36196-00-AD
12 SV		2 3		/ IN HY	CFOR PRESSURE TUBE D CONTROLS #00-36303-0AD 5 6 6
		$\sim$			EERING CORPORATION EDAR FALLS, IOWA
	This drawing a copied, duplic This drawing is	nd the information cated, reproduced loaned to you and	thereon is th or used in ar d is to be retu		ENGINEERING CORPORATION. It may not be not of WAYNE ENGINEERING CORPORATION.
	DESCRIPTION	HYI	D ASSY, <sup>-</sup>	TG MANUAL, PL	S
	DRAWN BY	DAS	SCALE	1:6	DRAWING NO.
_	CHK'D	ECN RELEASE	DATE	06/24/05	00-36196-00-AD

06/24/05

03021



(EXC 3 PLA 2 PLA ANG	CEPT AS NO ACE DECIMA ACE DECIMA SULAR	DTED) ALS ± .00 ALS ± .06 ± 1°	5	
SYM	ECN NUM	1BER	ΒY	DATE
1	ECN	04083	DAS	06/18/09
2	ECN	04672	DAS	10/15/10
3	ECN			
4	ECN			
5	ECN			
6	ECN			
7	ECN			
	(EXC 3 PLA 2 PLA ANG DIME SYM 1 2 3 4 5 6	(EXCEPT AS NC 3 PLACE DECIMA 2 PLACE DECIMA ANGULAR DIMENSIONS IN ( SYM ECN NUM 1 ECN 2 ECN 3 ECN 4 ECN 5 ECN 6 ECN	(EXCEPT AS NOTED)         3 PLACE DECIMALS ± .00         2 PLACE DECIMALS ± .06         ANGULAR ± 1°         DIMENSIONS IN () ARE REFE         SYM         ECN NUMBER         1         ECN 04083         2         ECN 04672         3         ECN         4         ECN         5         ECN         6         ECN	3 PLACE DECIMALS ± .005 2 PLACE DECIMALS ± .06 ANGULAR ± 1° DIMENSIONS IN () ARE REFERENCESYMECN NUMBERBY1ECN 04083DAS2ECN 04672DAS3ECN046724ECN040835ECN66ECN04083

00-36303-01-AD



11	535-004-007	1	CAP, NIPPLE DUST
10	535-004-005	1	NIPPLE, DIANOSTIC
9	863-012-000	2	PLUG, MALE O-RING HEX HEAD,
8	445-005-001	3	NUT,
7	470-031-000	3	WASHER, LOCK
6	415-005-048	3	CAPSCREW
5	842-012-000	1	ELBOW, MALE, O-RING
4	841-012-010	4	ADAPTER, MALE O-RING
3	841-012-000	1	ADAPTER, MALE O-RING
2	00-36195-00-AB	1	VALVE, TG MANUAL, PLS
1	00-36197-00-OB	1	BRKT, TG VALVE, PLS
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION

(EXCE 3 PLAC 2 PLAC ANGL	CE DECIMALS ± .00 CE DECIMALS ± .00 CE DECIMALS ± .00 JUAR ± 1° VISIONS IN () ARE REFE	5			7/2/
SYM	ECN NUMBER	BY	DATE	<ul> <li>This drawing an copied, duplic</li> <li>This drawing is</li> </ul>	nd the inform ated, repro-
1	ECN			This drawing is	ioaned to y
2	ECN				
3	ECN			DESCRIPTION	
4	ECN			-	
5	ECN				
6	ECN			<b>1</b> U	AS
7	ECN			CHK'D	ECN RELEA
8	ECN			1	04083

## 00-38762-01-AB



### ENGINEERING CORPORATION CEDAR FALLS, IOWA

prmation thereon is the property of WAYNE ENGINEERING CORPORATION. It may not be roduced or used in any way to the detriment of WAYNE ENGINEERING CORPORATION. you and is to be returned upon our request.

### VALVE ASSY, TAILGATE, QUS

SCALE 1:3 EASE DATE 04/13/08 DRAWING NO.

00-38762-01-AB





### TORQUE TIE BOLTS TO 32 FT-LBS

(EXC 3 PLA 2 PLA ANG	CEPT AS NOTE ACE DECIMALS ACE DECIMALS SULAR ±	D) ± .005 ± .06 1°				1/2
DIME	ENSIONS IN () A	RE REFER	RENCE		This drawing an	nd the info
SYM	ECN NUME	BER	BY	DATE	<ul> <li>This drawing ar copied, duplication</li> <li>This drawing is labeled</li> </ul>	ated, repro
1	ECN 0	4083	DAS	06/19/09		ouncu to
2	ECN					
3	ECN				DESCRIPTION	
4	ECN					
5	ECN				DRAWN BY	10
6	ECN				ן ט	AS
7	ECN				CHK'D	ECN RELE
8	ECN					04073

13	841-010-010	2	ADAPTER, MALE O-RING, MALE JIC
12	535-004-007	1	CAP, NIPPLE DUST
11	535-004-005	1	NIPPLE, DIANOSTIC
10	863-012-000	2	PLUG, MALE O-RING HEX HEAD,
9	445-005-001	3	NUT,
8	470-031-000	3	WASHER, LOCK
7	415-005-048	3	CAPSCREW
6	842-012-000	1	ELBOW, MALE, O-RING
5	841-012-010	4	ADAPTER, MALE O-RING
4	<mark>545-004-038</mark>	<mark>1</mark>	VALVE WORK SECTION W/ STUD KIT
3	841-012-000	1	ADAPTER, MALE O-RING
2	00-36195-00-AB	1	VALVE, TG MANUAL, PLS
1	00-36197-00-OB	1	BRKT, TG VALVE, PLS
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION

## 00-38762-02-AB

### -MOVE FROM WHERE ITEM 3 IS LOCATED

## 

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### VALVE ASSY, ONE OPTION, QUS

 SCALE
 1:3

 ELEASE
 DATE
 04/13/08

DRAWING NO.

00-38762-02-AB



2 OPTION TAILGATE VALVE

		1	
5	445-005-001	1	NUT,
4	470-031-000	2	WASHER, LOCK
3	485-005-002	2	WASHER,STD FLAT
2	415-005-012	2	CAPSCREW
1	00-63162-00-AA	1	COVER WLD, REAR VALVE, QUS
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION



NO OPTIONS AND 1 OPTION TAILGATE VALVE

TOLERANCES (EXCEPT AS NOTED) 3 PLACE DECIMALS ± .005 2 PLACE DECIMALS ± .06 ANGULAR ± 1°								EERING CORPORATION EDAR FALLS, IOWA				
DIME	INSIONS IN () ARE REFER	RENCE		This drawing an	nd the information	thereon is th	ne property of WAYNE	INGINEERING CORPORATION It may not be				
SYM	ECN NUMBER	BY	DATE	copied, duplica This drawing is l	This drawing and the information thereon is the property of WAYNE ENGINEERING CORPORATION. It may not be copied, duplicated, reproduced or used in any way to the detriment of WAYNE ENGINEERING CORPORATION. This drawing is loaned to you and is to be returned upon our request.							
1	ECN				This drawing is loaned to you and is to be retained upon our request.							
2	ECN											
3	ECN			DESCRIPTION	COVER INSTALL, TG VALVE, QUS							
4	ECN				C		ISTALL, IG VAL	VE, QUS				
5	ECN			DRAWN BY	10	SCALE	1.1	DRAWING NO.				
6	ECN			D	DAS		1:4					
7	ECN			CHK'D	ECN RELEASE	DATE	04/25/14	1 00-63163-00-AB				
8	ECN				05880		0 11 20111					

## 00-63163-00-AB





### 00-36314-00-AB

SHEET 1 OF 3

25	430-003-000	5	STRAP, TIE			
24	415-004-008	2	CAPSCREW, SELF TAPPING			
23	345-005-007	1	BOOT, SWITCH			
22	345-005-003	1	SWITCH, TOGGLE			
21	00-35479-00-OA	1	PLATE, SWITCH			
20	440-020-000	2	BUSHING, MACHINE, 1 1/4			
9	345-014-009	1	SWITCH, PROX N.O. W/DEUTSCH			
8	00-32221-00-OA	1	HARNESS, CLUSTER			
7	445-003-002	2	NUT,FINE THREAD			
6	461-003-014	2	WASHER,LOCK,EXTERNAL TOOTH			
5	461-003-008	2	SCREW,MACHINE,			
4	332-024-000	1	LAMP, LICENSE			
3	303-009-010	1	BUSHING, SNAP			
2	445-004-001	2	NUT,STD			
1	485-008-004	2	WASHER,LOCK			
0	485-004-001	2	WASHER, SAE FLAT			
9	415-004-012	2	CAPSCREW, 1/4-20 X 3/4			
8	00-14638-00-AB	<mark>1</mark>	ALARM ASSY, BACK-UP/TG OPEN,			
7	00-36319-00-AB	1	HARNESS, LOWER LIGHT, PLS			
6 5	303-010-012	2	BUSHING, SNAP			
5	440-029-000	2	WASHER,LOCK			
4 3 2	445-006-001	4	NUT,STD			
3	400-015-012	2	CLAMP, HOSE SUPPORT			
2	00-36318-00-AB	1	HARNESS, TAILGATE LIGHT, PLS			
1	00-36315-00-AB	1	HARNESS, TG MAN CONTROLS, PLS			
NO.	PART NUMBER	QTY.	DESCRIPTION			
ENGINEERING CORPORATION CEDAR FALLS, IOWA						
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ELEC A	ASSY, TAILGATE,	PLS
SCALE	1.10	DRAWING NO.

00-36314-00-AB

DATE 11/21/05

1:12



### 00-36314-00-AB

SHEET 2 OF 3

	ELEC /	ASSY, TAILGATE,	PLS
	SCALE	1:6	DRAWING NO.
n release 8047	DATE	7/17/2017	00-36314-00-AB



ATTACH BLUE WIRE 177A-

ATTACH RED WIRE 012I-

ATTACH TO BLUE WIRE 147E

(EXC 3 PLA 2 PLA ANG	DLERANC CEPT AS NOTED) ACE DECIMALS ± .005 ACE DECIMALS ± .06 SULAR ± 1° ENSIONS IN () ARE REFEI						
SYM	ECN NUMBER	BY	DATE	This drawing au copied, duplic This drawing is	ated, rep		
1	ECN			This drawing is loaned			
2	ECN						
3	ECN			DESCRIPTION			
4	ECN						
5	ECN			DRAWN BY	4.0		
6	ECN			U U	AS		
7	ECN			CHK'D	ECN REI		
8	ECN				03047		

## 00-36314-00-AB

### SHEET 3 OF 3



SWITCH DETAIL SCALE 2:1

SHEET 3 OF 3



ENGINEERING CORPORATION CEDAR FALLS, IOWA

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ELEC ASSY, TAILGATE, PLS	(

CLEASE DATE 7/17/2017

DRAWING NO.

00-36314-00-AB

×AB-14638-24638-012-024 24			
AB-14638-00 <mark>638-012-001</mark> 12-24		-	
PART NUMBER SYM 6 VOLTS			
Ø×□BS□LETE - REPLACED BY AB-14638-00	BLUE 4″(6)		
	6″(5)		
	C 1/2"(4)	SOLDER	
	RED 2 1/2"(3)		
	2		
	1		
9 R3-451116-01.58' WIRE - BLACK 16 GA			
8 300-017-000 2 DIDDE			
7 R3-45116-06.33' WIRE - GREEN/BLACK 6 R3-45116-02.33' WIRE - DARK BLUE 16		DIMENSIONS SHOWN (X. sym revision record	XX) ARE
5 R7-52002-80.50' 1/8 HEAT SHRINK		1 WAS 4" & .33'	MG 12
4 R7-52003-80,21' 3/16 HEAT SHRINK		2 WAS 300-017-001	CLB 09/
3 R3-45116-11,17′ WIRE - RED 16 GA		3 ADDED TABLE	RLK 08/
2 310-005-000 2 RING TERMINAL		4 ADDED	MG 03
1 SEE TABLE) 1 BACK - UP ALARM		5 REDRAWN ON CAD: 12-24 VOLT REPLACES 6-36 VOLT ALARM	MLK 11/
SYM PART NUMBER QTY NAME		6 RED WIRE ADDED & HEAT Shrink replaces insulation	MLK 11/0





### NOTE:

CONNECT THE WHITE WIRE 043C IN THE TAILGATE HARNESS TO THE RED WIRES IN THE STROBES. CONNECT THE WHITE WIRES IN THE STROBES TO GROUND AT BACK UP ALARM USING RING TERMINAL. CONNECT THE BLACK WIRE IN THE RIGHT STROBE TO THE BLACK WIRE IN THE LEFT STROBE. RETAIN WIRE TO HYD TUBES WITH TIE STRAPS

10	430-003-000	8	STRAP, TIE
9	310-005-001	1	TERMINAL, 1/4" RING
8	310-015-003	6	CONNECTOR, BUTT, HEAT SEAL
7	07-52005-90-R	7	LOOM, CORRUGATED .35 ID
6	03-45116-11-R	7	WIRE, RED 16 GA
5	03-45116-01-R	5	WIRE, BLACK 16 GA
4	03-45116-00-R	5	WIRE, WHITE 16 GA
3	332-035-016	2	GROMMET
2	332-035-014	1	STROBE, ALTERNATING, LED
1	332-035-013	1	STROBE, SYNCHRONOUS, LED
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION





11	07-52005-90-R	6F	LOOM, CORRUGATED .35 ID
10	03-45116-17-R	5F	WIRE, BLACK ON WHITE
9	03-45116-01-R	5F	WIRE, BLACK 16 GA
8	310-015-003	5	CONNECTOR, BUTT, HEAT SEAL
7	310-005-001	1	TERMINAL, 1/4" RING
6	445-005-001	2	NUT,
5	470-031-000	2	WASHER, LOCK
4	485-005-002	2	WASHER, STD FLAT
3	415-005-012	2	CAPSCREW
2	00-39279-00-OA	2	BRKT, WORK LIGHT, QUS
1	332-038-001	2	LIGHT,FLOOD
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION

(EXCEPT AS NOTED) 3 PLACE DECIMALS ±.005 2 PLACE DECIMALS ±.06 ANGULAR ±1° DIMENSIONS IN () ARE REFERENCE				ENGINEERING CORPORATION CEDAR FALLS, IOWA									
SYM	ECN NUMBER	BY	DATE	copied, duplica This drawing is	This drawing and the information thereon is the property of WAYNE ENGINEERING CORPORATION. It may not be copied, duplicated, reproduced or used in any way to the detriment of WAYNE ENGINEERING CORPORATION. This drawing is loaned to you and is to be returned upon our request.								
1	ECN			This drawing is i	This drawing is loaned to you and is to be returned upon but request.								
2	ECN												
3	ECN												
4	ECN					LIGHT KIT, WORK LIGHT, QUS							
5	ECN			DRAWN BY	DRAWN BY		1.4	DRAWING NO.					
6	ECN			DAS			1:6						
7	ECN			CHK'D	ECN RELEASE	DATE	11/02/09	<b>00-39012-05-AB</b>					
8	ECN				04312		11/02/07						

## 00-39012-05-AB

ITEM NO.	PART NUMBER	-01-/QTY.	-02-/QTY.	-03-/QTY.	-04-/QTY.	-05-/QTY.	-06-/QTY.	DESCRIPTION
10	332-040-011	10	10	10	10	6	10	GROMMET,4 IN,
4	332-040-015	8	-	-	-	-	-	LAMP, STOP TAIL TURN,
7	332-140-015	-	8	8	-	4	-	LED LAMP 4, STOP, TURN, TAIL
8	332-040-018	-	-	-	8	-	-	LAMP, STOP/TURN/TAIL 24V,
11	332-140-018	-	-	-	-	-	8	LAMP, LED STOP/TURN/TAIL 24V,
5	332-040-017	2	2	-	-	-	-	LAMP,BACK UP,
1	332-140-017	-	-	2	-	2	-	LED LAMP , 4" CLEAR
9	332-040-019	-	-	-	2	-	-	LAMP,BACKUP 24V,
12	332-140-019	-	-	-	-	-	2	LAMP, LED BACKUP 24V,
13	332-031-004	5	-	-	5	-	-	GROMMET,2 IN,
3	332-030-001	5	-	-	-	-	-	LAMP,RED 2 IN,
6	332-130-001	-	5	5	-	5	5	LED LAMP, RED MARKER
2	332-030-024	_	_	-	5	-	_	LAMP,RED 2 IN,24V



(EXC 3 PLA 2 PLA ANG	DLERANC CEPT AS NOTED) ACE DECIMALS ± .005 ACE DECIMALS ± .06 SULAR ± 1° ENSIONS IN () ARE REFE					
SYM	ECN NUMBER	BY	DATE	This drawing and the in copied, duplicated, re This drawing is loaned t		
1	ECN 05048	DAS	05/06/11			
2	ECN 05625	DAS	08/14/13			
3	ECN 05938	DAS	07/17/14	DESCRIPTION		
4	ECN					
5	ECN					
6	ECN			DAS	1	
7	ECN			CHK'D EC	CN RE	
8	ECN			0	4058	

### 00-38785-XX-AB

## 00-38785-01-AB IS STANDARD 12V INCANDESCENT 00-38785-02-AB IS 12V LED STOP/TURN/TAIL 00-38785-03-AB IS 12V LED STOP/TURN/TAIL/ BACKUP 00-38785-04-AB IS 24V INCANDESCENT 00-38785-05-AB IS NY PARKS 2013 SPECIAL COMBINED STOP/TURN, NO STOP ONLY LIGHT 00-38785-06-AB IS 24V LED STOP/TURN/TAIL/BACKUP



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### LIGHT KIT, S/T/T/R, QUS

SCALE 1:16 ELEASE DATE 04/14/09 58

DRAWING NO.

00-38785-XX-AB

	00-61110-00-AB
	USE HARDOX HOPPER BOTTOM PLATES INSTEAD OF STANDARD HOPPER BOTTOM PLATES
	3PLACE DECIMALS ±.005         2PLACE DECIMALS ±.06         ANGULAR ±1°         DIMENSIONS IN () ARE REFERENCE         SYM       ECN NUMBER         BY       DATE    This drawing is loaned to you and is to be returned upon our request.
	Alternational K     Bit     DATE       1     ECN       2     ECN       3     ECN       4     ECN   HOPPER BTM KIT, HARDOX 450, QUS
2         00-36113-02-OA         1         PLATE, REAR HOPPER BOTTOM, QUS           1         00-36115-01-OA         1         PLATE, HOPPER BOTTOM, QUS	5     ECN     DRAWN BY     DAS     SCALE     1:12     DRAWING NO.       6     ECN     00     / 1110     00     / 1110     00     / 1110
ITEM NO. PART NUMBER QTY. DESCRIPTION	7         ECN         CHK'D         ECN RELEASE         DATE         11/16/11         00-61110-00-AB           8         ECN         05030         DATE         11/16/11         00-61110-00-AB

## 00-61110-00-AB





# INSTALL WINCH GUIDE SO THAT THERE IS .06 CLEARANCE WITH THE DRUM WINCH AND THE WINCH CABLE CAN NOT SLIDE OUT OF THE WINCH DRUM

(12)

.19 2-5

(11)

<sup>′</sup>17

21	00-03311-00-OA	1	HOOK,LIFTING
20	545-004-011	2	RELIEF V 1500PSI WORK-PORT
19	485-008-001	10	WASHER,SAE FLAT
18	415-008-020	4	CAPSCREW
17	00-38473-00-OA	1	PLATE, WINCH MTG, PLJR
16	G10E10E10-042	2	HOSE ASSY,,
15	841-010-010	2	ADAPTER, MALE O-RING, MALE JIC
14	00-38475-00-OA	2	GUSSET, WINCH MTG, PLJR
13	01-48107-00-R	25	CABLE, 7/16 DIA 6 X 37,
12	00-33868-00-OA	1	GUIDE,WINCH,PL
11	638-019-040	1	WINCH,4000 LB
10	445-008-003	10	NUT,STD
9	485-008-002	10	WASHER,LOCK
8	415-808-032	6	CAPSCREW
7	00-38472-00-OA	1	TUBE, WINCH, PLJR
6	00-38853-00-AA	2	PIPE ASSY, CABLE GUIDE, QU
5	00-38854-03-AA	1	GUIDE WLD, RH ROLLER, QUS
4	410-008-000	2	CLAMP,CABLE,
3	638-008-008	1	THIMBLE
2	620-065-000	1	SLING HOOK W/SAFETY LATCH KIT
1	00-38854-04-AA	1	GUIDE WLD, LH ROLLER, QUS
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION





### HOSE ROUTING DETAIL



(EXCEPT AS NOTED) 3 PLACE DECIMALS ± .005 2 PLACE DECIMALS ± .06 ANGULAR ± 1° DIMENSIONS IN () ARE REFERENCE							
SYM	ECN NUM	IBER	BY	DATE			
1	ECN	04148	DAS	07/01/09			
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8	ECN						

## 00-38470-00-AD





## 00-36305-05-AD

### 00-38548-01-AB ELECTRICAL ASSEMBLY, MOUNTING

Line	Level	Part Number/Rev	Description	Unit	Quantity
1	1*****	310-011-002 0	TERMINAL, RING	EA	2.0000
2	1*****	330-011-000 0	HOLDER, FUSE, WATERPROOF	EA	2.0000
3	1*****	330-006-000 0	FUSE, INLINE, 20A	EA	1.0000
4	1*****	330-009-000 0	FUSE, IN LINE 5 AMP	EA	1.0000
5	1*****	00-38307-00-AB 0	CONTROL ASSY, CAB 12V, RL & TC	EA	1.0000
6	1*****	415-004-012 0	CAPSCREW, 1/4-20 X 3/4	EA	5.0000
7	1*****	445-004-001 0	NUT,STD	EA	5.0000
8	1*****	485-004-001 0	WASHER, SAE FLAT	EA	3.0000
9	1*****	485-008-004 0	WASHER,LOCK	EA	5.0000
10	1*****	00-33067-04-OA 3	BRKT, CAB BOX MOUNT, RL & TC	EA	1.0000
11	2*****	01-13011-50-R	SHEET, 11 GA ASTM A715 GR 50 HR	SI	51.5300
12	1*****	310-015-003 0	CONNECTOR, BUTT, HEAT SEAL	EA	9.0000
13	1*****	300-017-000 0	DIODE, 1 AMP	EA	2.0000
14	1*****	07-52002-80-R	TUBING, HEAT SHRINK 1/8	IN	6.0000
15	1*****	310-015-000 0	CONNECTOR, CLOSED END	EA	2.0000
16	1******	345-005-029 0	CONTACT, SOCKET,	EA	1.0000





(EXC 3 PLA 2 PLA ANG	CEPT AS NOTED) ACE DECIMALS ± .003 ACE DECIMALS ± .06 ULAR ± 1° INSIONS IN () ARE REFE	This drawing ar			
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8	ECN				03833

### PURCHASE FROM PACIFIC INSIGHT

### 00-38307-00-AB



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ormation thereon is the property of WAYNE ENGINEERING CORPORATION. It may not be roduced or used in any way to the detriment of WAYNE ENGINEERING CORPORATION. o you and is to be returned upon our request.

### CONTROL ASSY, CAB 12V, RL & TC

 SCALE
 1:1.5
 DRAWING NO.

 ELEASE
 DATE
 10/06/08
 00-3

00-38307-00-AB



### 00-36309-1X-AB





(EXC 3 PLA 2 PLA ANG	CEPT AS NOTED) ACE DECIMALS ± .005 ACE DECIMALS ± .06 ULAR ± 1° ENSIONS IN () ARE REFER	This drawing ar			
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<ul> <li>This drawing and the copied, duplicated, This drawing is loane</li> </ul>	DATE	BY	ECN NUMBER	SYM					
			ECN	1					
<b>—</b>			ECN	2					
DESCRIPTION			ECN	3					
			ECN	4					
DRAWN BY			ECN	5					
DAS			ECN	6	7				
CHK'D ECM			ECN	7		spill sheild, isuzu, qus	1	00-39999-00-OA	1
04			ECN	8		DESCRIPTION	QTY.	PART NUMBER	ITEM NO.

### 00-60588-00-AB

### 00-38901-00-AB DECAL KIT, RH CONTROLS

Line	Level	Part Number/Rev	Description	Unit	Quantity
1	1******	00-26850-00-OA 0	DECAL, WARNING RIDING STEP,	EA	2.0000
2	1******	400-013-000 0	GRIP, HANDLE	EA	4.0000
3	1******	00-25850-02-OA 0	DECAL, PACK CONTROLS, RH	EA	1.0000
4	1******	00-09587-00-WA 5	DECAL, ENGINE ACCEL	EA	2.0000
5	1******	00-09586-00-WA 3	DECAL, DRIVER ALERT	EA	1.0000
6	1******	00-26851-00-WA 3	DECAL, DANGER PACK PANEL,	EA	4.0000
7	1******	332-010-001 0	REFLECTOR, RED LEXAN	EA	2.0000
8	1******	07-11032-01-R	DECAL, RED/WHITE REF CONSP TAPE	FT	35.0000
9	1******	00-26490-00-WA 3	DECAL, DANGER UNLOADING	EA	2.0000
10	1******	00-38899-00-AC 0	DECAL, LUBRICATION, QUS	EA	1.0000
11	1******	00-26849-00-OA 0	DECAL, DANGER, BODY ENTRY	EA	4.0000
12	1******	00-26364-00-WA 3	DECAL, NO STEP	EA	2.0000
13	1******	00-60505-01-OA 0	DECAL, WAYNE LOGO WHITE,	EA	2.0000
14	1******	07-11032-00-R	REFLECTIVE CONSPICUITY TAPE, WH	FT	5.0000
15	1******	00-60505-02-OA 0	DECAL, WAYNE LOGO BLACK,	EA	2.0000
16	1******	00-26485-00-WA 2	DECAL, ANSI	EA	1.0000
17	1******	00-26778-00-WA 0	PLATE, SERIAL NUMBER,	EA	1.0000
18	1******	450-003-005 0	RIVET, POP	EA	4.0000
19	1******	00-12872-00-OA 0	DECAL, TG & EJECT CONTROL	EA	1.0000
20	1******	00-35508-00-WA 1	DECAL, EJECT CYL	EA	1.0000
21	1******	07-70002-09-R	TRIM LOCK	IN	30.0000
22	1******	00-26484-00-WA 2	DECAL, FILTER ELEMENT	EA	1.0000
23	1******	00-26492-00-WA 3	DECAL, HYD FLUID LEVEL	EA	1.0000
24	1******	00-26491-00-WA 1	DECAL, HYD FLUID ONLY	EA	1.0000
25	1******	00-37285-00-OA 0	DECAL, TG PROP, PX	EA	2.0000

### 00-34956-00-AA DECAL KIT, CHASSIS

1         1*******         00-26480-00-WA         3         DECAL,WARNING,ROTATING SHAFT         EA           2         1*******         00-26488-00-WA         2         DECAL,WARNING, DO NOT OPERATE         EA           3         1*******         00-26488-00-WA         2         DECAL,WARNING, OV OPERATE         EA           4         1*******         00-26489-00-WA         3         DECAL,WARNING,OVERHEAD CLEARAN         EA           5         1*******         00-26493-00-WA         3         DECAL,WARNING,VEHICLE HEIGHT         EA           5         1*******         00-26852-00-WA         1         DECAL,WARNING STEP (CAB)         EA           6         1*******         00-26852-00-WA         1         DECAL,WARNING STEP (CAB)         EA	Line	Level	Part Numb	er/Rev	Description	Unit	Quantity
3         1*******         00-26489-00-WA         3         DECAL,WARNING,OVERHEAD CLEARAN         EA           4         1*******         00-26493-00-WA         3         DECAL,WARNING,VEHICLE HEIGHT         EA           5         1*******         00-26852-00-WA         1         DECAL,WARNING STEP (CAB)         EA	1	1******	00-26480-00-WA	3	DECAL, WARNING, ROTATING SHAFT	EA	2.0000
4         1*******         00-26493-00-WA         3         DECAL,WARNING,VEHICLE HEIGHT         EA           5         1*******         00-26852-00-WA         1         DECAL,WARNING STEP (CAB)         EA	2	1******	00-26488-00-WA	2	DECAL, WARNING, DO NOT OPERATE	EA	1.0000
5 1****** 00-26852-00-WA 1 DECAL,WARNING STEP (CAB) EA	3	1******	00-26489-00-WA	3	DECAL, WARNING, OVERHEAD CLEARAN	EA	1.0000
5 T 00-20032-00-WA T DECAL, WARNING STEP (CAB)	4	1******	00-26493-00-WA	3	DECAL, WARNING, VEHICLE HEIGHT	EA	1.0000
	5	1******	00-26852-00-WA	1	DECAL, WARNING STEP (CAB)	EA	1.0000
6 T 00-33366-00-0A 0 DECAL, UNAUTHORIZED MOD, CT EA	6	1******	00-33386-00-OA	0	DECAL, UNAUTHORIZED MOD, CT	EA	1.0000

	PACK SWEEP		DPTIENAL CART TIPPER HAND VALVE
			2500 P 2500 P 2500 P 14 C REGULATOR - 1 TO 5 C
9 8 7 6 5 4 3 2 1 5 YM	FILTER, RETURN 10 MICRON VALVE, MANUAL CONTROL TG EJECT CYLINDER ORIFICE, Ø 0.06 TAILGATE LIFT CYLINDERS VALVE, MANUAL CONTROL BODY PUMP GATE VALVE OIL RESERVOIR NAME	16       VALV         15       PRES         14       VALV         13       VALV         12       ROTA         11       PACK	/E, DIVERTOR E, POPPET NORMALLY CLOSED SURE SWITCH, 2800 PSI /E, FLOW REGULATOR /E, MANUAL CART DUMPER RY CART DUMPER (OPTION) CYLINDER P CYLINDER NAME



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2700 PSI	
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	CEDAR FALLS, IOWA
formation thereon is the property of WAYNI not be copied, duplicated, reproduced or us GINEERING CORPORATION. This drawing is r request.	sed in any way to the
HYD SCHEMATI	C, MANUAL VALVE
AS scale NONE	DRAWING NO.
Release Date 11/29/1	00-36245-05-MB









TOLERANCES (EXCEPT AS NOTED) 3 PLACE DECIMALS ± .005 2 PLACE DECIMALS ± .06 ANGULAR ± 1° DIMENSIONS IN () ARE REFERENCE					
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## 00-36313-01-MD

### 62 | CURBTENDER, INC

## **User Notes:**

Use the following pages to record important notes about the Quantum's performance, service history, replacement part numbers, past trouble shooting methods, and other information that you may wish to reference to in the future.



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CURBTENDER, INC, 701 Performance Drive. • Cedar Falls, IA 50613 ph: 319-266-1721 fax: 319-266-8207 • www.Curbtender.com

