

### VC500FB

MFCAAA INSTALLATION & OWNER'S MANUAL

### TABLE OF CONTENTS VC500FB OWNER'S MANUAL

**DESCRIPTION & SPECIFICATIONS** SECTION 100

**CEV146 DIMENSIONS AND CAPACITIES** 

**CEV162** WIRE ROPE & HOOK SPECIFICATIONS

SECTION 150 SAFETY

CE-044 **CRANE SAFETY AND HAZARDS CEV147 DECAL DRAWINGS & LIST** 

**INSTALLATION** SECTION 200

MOUNTING & CAPACITY INFO. **CEV155** 

CE-022 WIRING DIAGRAM

**CEV156** ASSEMBLY; WIRE ROPE INSTALLATION.

CE-075 FOLDING BOOM STORAGE CEV150 **OPERATING INSTRUCTIONS** 

SECTION 400 REPLACEMENT PARTS CEV160 REPLACEMENT PARTS DWG REPLACEMENT PARTS LIST **CEV161** 

REPLACEMENT PARTS DWG & LIST; WINCH CE-055

**CEV157 DECAL LOCATIONS** 

**CEV158** KIT; FIELD SERVICE LABELS (KIT P/N CEV159)

CINCINNATI, OHIO



VC500FB	SUPERSEDES	CEV145
TABLE OF CONTENTS	03-09-16	-
TITLE	DATE	SECTION

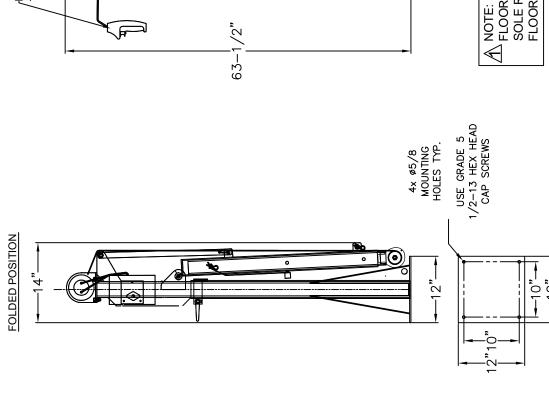
**DESCRIPTION** 

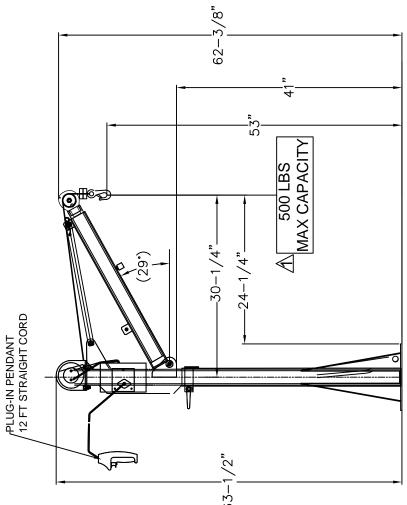
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**SPECIFICATIONS** 



THESE PRODUCTS ARE NOT PASSENGER LIFTS. THEY ARE NOT DESIGNED OR INTENDED TO BE USED TO LIFT, SUPPORT OR OTHERWISE TRANSPORT PERSONNEL. WARNING:





A NOTE: 500LB MAXIMUM CAPACITY IS BASED UPON TYPICAL VAN FLOOR STRUCTURE LIMITATIONS, NOT WINCH CAPACITY. IT IS THE SOLE RESPONSIBILITY OF THE INSTALLER TO DETERMINE IF ADDITIONAL FLOOR REINFORCEMENT IS NECESSARY.



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

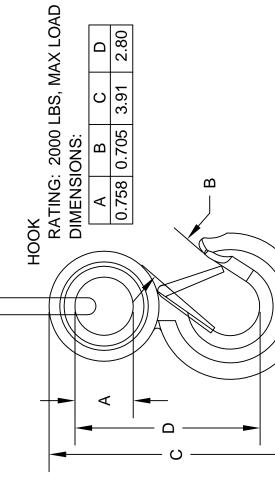
TITLE
<b>DIMENSIONS &amp; CAPACITY</b>

VC500FB

ACITY	DATE 03-09-16 SUPERSEDES	C100
		CEV146

# 15810-3/16-25 WIREROPE ASSEMBLY

TYPE: 3/16" DIAMETER
7 x 19, GALVANIZED
(GAC 7X19 LHRL-IWRC, SB 4200)
LENGTH: 25' VC500FB





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

	•
WIREROPE & HOOK SPECIFICATIONS	VC500/750FB & VC1000 VAN CRANES

TITLE

**CEV162** 

08-17-16C

C100

11-01-16D

SAFETY



### CRANE SAFETY & HAZARDS CE-/CEV SERIES CRANES

### **CAUTIONS**

- 1. INSPECT VEHICLE AND CRANE, INCLUDING OPERATION, PRIOR TO USE DAILY.
- 2. DO NOT USE THIS EQUIPMENT EXCEPT ON SOLID, LEVEL SURFACE WITH CRANE MOUNTED ON FACTORY RECOMMENDED TRUCK.
- 3. BEFORE OPERATING THE CRANE, REFER TO MAXIMUM LOAD (CAPACITY) CHART ON CRANE FOR OPERATING (LOAD) LIMITATIONS.
- 4. DO NOT OPERATE, WALK, OR STAND BENEATH BOOM OR A SUSPENDED LOAD.
- 5. UNPLUG PENDANT (AND OPTIONAL ELECTRIC QUICK DISCONNECT, IF ON MODEL) WHEN NOT IN USE.
- 6. FOR TRAVEL, BOOM MUST BE TIED DOWN IN THE STOWED POSITION.

### **DANGER**

- THIS CRANE IS NOT A PASSENGER LIFT
- IT IS NOT DESIGNED OR INTENDED TO BE USED TO LIFT, SUPPORT, OR OTHERWISE TRANSPORT PERSONNEL.

### YOU MUST NOT OPERATE THIS CRANE UNLESS:

- 1. YOU HAVE BEEN TRAINED IN THE SAFE OPERATION OF THIS CRANE, AND
- YOU KNOW AND FOLLOW THE SAFETY AND OPERATION RECOMMENDATIONS CONTAINED IN THE MANUFACTURER'S MANUALS, YOUR EMPLOYER'S WORK RULES, AND APPLICABLE GOVERNMENT REGULATIONS. AN UNTRAINED OPERATOR SUBJECTS THEMSELVES AND OTHERS TO DEATH OR SERIOUS INJURY.



CRANE SAFETY & HZRDS	08-16-16C	C200
CE- / CEV SERIES CRANES	05-05-98B	CE-044

DECAL #: 15390

DESCRIPTION: CAUTION, INSPECT VEHICLE & CRANE...

PURPOSE: TO INFORM THE OPERATOR OF KEY OPERATING REQUIREMENTS.

QUANTITY: 1

PLACEMENT: UPPER MAST ON SIDE, OPPOSITE PRIMARY BOOM



DECAL #: 15391

DESCRIPTION: DANGER, NOT A PASSENGER LIFT

PURPOSE: TO INFORM OPERATOR NOT TO LIFT, SUPPORT, OR TRANSPORT

PERSONNEL, AND TO ENSURE OPERATOR IS ADEQUATELY TRAINED.

QUANTITY: 1

PLACEMENT: UPPER MAST ON SIDE, OPPOSITE PRIMARY BOOM



DECAL #: 15392

DESCRIPTION: DANGER, ELECTROCUTION HAZARD, MACHINE (CRANE)

PURPOSE: TO INFORM OPERATOR THAT MACHINE (CRANE) REPRESENTS AN

ELECTROCUTION HAZARD SHOULD IT COME CLOSE TO OR IN CONTACT

WITH AN ELECTRICAL VOLTAGE SOURCE.

QUANTITY: 1

PLACEMENT: UPPER MAST ON SIDE, OPPOSITE PRIMARY BOOM



AN UNTRAINED OPERATOR SUBJECTS HIMSELF AND OTHERS TO DEATH OR SERIOUS INJURY.

### THIS MACHINE IS NOT INSULATED ELECTROCUTION HAZARD

MAINTAIN SAFE CLEARANCES FROM ELECTRICAL LINES AND APPARATUS, YOU MUST ALLOW FOR BOOM SWAY, ROCK OR SAG, AND ELECTRICAL LINE AND LOAD LINE SWAYING.

THIS LIFTING DEVICE DOES NOT PROVIDE PRO-TECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR.

TO AN ELECTRICALE CHARGES OF AT LEAST 10 FEBT BETWEEN ANY PART OF THE CRANE, LOAD LINE OR LOAD, AND ANY ELECTRICAL LINE OR APPARATUS CARRYING UP TO 50,000 VOLTS, ONE FOOT ADDITIONAL CLEARANCE IS REQUIRED FOR EVERY ADDITIONAL 30,000 VOLTS OR LESS.

DEATH OR SERIOUS INJURY WILL RESULT FROM CONTACT OR INADEQUATE CLEARANCE.

DECAL #: 15393

DESCRIPTION: DANGER, ELECTROCUTION HAZARD, VEHICLE (TRUCK)

PURPOSE: WARNS OF DANGER FROM ELECTRICALLY CHARGED

VEHICLE, CRANE, OR LOAD.

QUANTITY: 4

PLACEMENT: EACH SIDE & EACH END OF VEHICLE



ELECTROCUTION HAZARD
KEEP CLEAR OF TRUCK AND LOAD

DEATH OR SERIOUS INJURY CAN RESULT FROM CONTACT WITH THE LOAD, THE CRANE, OR THE VEHICLE IF BOOM OR LOAD LINE SHOULD BECOME ELECTRICALLY CHARGED. 15383-C





TITLE

SAFETY DECALS

09-29-16A

SECTION C400

**CEV170** 

VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

SUPERSEDES 08-02-16

VENTURO VAN CRANES

DECAL #: 15513

DESCRIPTION: MASTER DISCONNECT SWITCH

PURPOSE: TO INFORM THE OPERATOR OF LOCATION AND OPERATION OF MASTER

**DISCONNECT SWITCH** 

QUANTITY: 1

PLACEMENT: ON MASTER DISCONNECT SWITCH BRACKET



DECAL #: 15398

DESCRIPTION: UNPLUG REMOTE CONTROL

PURPOSE: TO INFORM OPERATOR TO UNPLUG REMOTE CONTROL WHEN NOT IN

USE

QUANTITY: 1

PLACEMENT: NEAR PENDANT SOCKET

DECAL #: 573403

DESCRIPTION: WARNING - STOWING

PURPOSE: TO INFORM OPERATOR TO STAY AWAY FROM THE BOOM WHEN

**STOWING** 

QUANTITY: 1

PLACEMENT: UPPER MAST ON SIDE, OPPOSITE PRIMARY BOOM







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SAFETY DECALS

09-29-16A

C400

**VENTURO VAN CRANES** 

SUPERSEDES 08-02-16

CEV17

PART NO.: 15390

DECAL: CAUTION - INSPECT VEHICLE & CRANE

FUNCTION: To inform the operator of key

operating requirements.

QUANTITY:

PLACEMENT: Top of pedestal.

PART NO.: 15398

UNPLUG REMOTE CONTROL DECAL:

To inform the operator to unplug remote FUNCTION:

control when not in use.

QUANTITY:

PLACEMENT: Near pendant socket.

PART NO.: 15672-500

DECAL: CAPACITY 500 LBS

FUNCTION: To show the operator the capacity at

9 foot boom length.

QUANTITY:

PLACEMENT: One on each side of boom.

CEV163 PART NO.:

MODEL NAME DECAL:

FUNCTION: To show the model of the crane.

QUANTITY: 2

PLACEMENT: One on each side of boom.









MFG., INC. **CINCINNATI, OHIO**  **DECAL DRAWINGS & LIST** 

DATE

SECTION

04-18-16A C150

SUPERSEDES

**CEV147** 

**VC500-FB** 

03-09-16

### **INSTALLATION**



### INSTALLATION INSTRUCTIONS / MINIMUM HARDWARE SPECIFICATIONS VC500FB (VFCAAA) and VC750FB (VJCAAA) VAN CRANES

THE VC500/750FB VAN CRANES ARE DESIGNED TO BE INSTALLED IN EITHER THE RIGHT SIDE OF THE VAN NEAR THE SIDE CARGO DOOR (PRIMARY LOCATION) OR THE RIGHT REAR CORNER (SECONDARY LOCATION).

### !! MINIMUM HARDWARE SPECIFICATIONS !!

### Reinforcement plates

It is the installer's responsibility to ensure the van's floor structure is able to withstand the stresses applied when lifting and maneuvering loads into and out of the van. Additional sub-floor plating may be required.

### **Bolts**

The VC500/750FB mounting bolts should be 1/2" in diameter with 13 threads per inch (1/2-13), grade 5 steel zinc plated. Lengths will vary depending on crane location, vehicle structure, and / or additional reinforcement requirements.

### Washers ▲

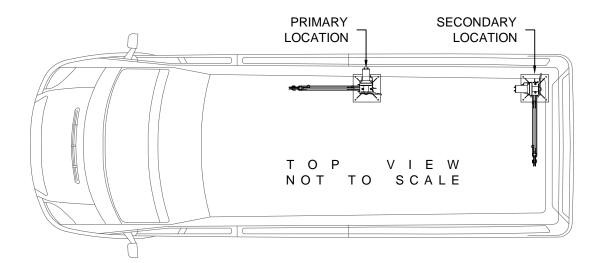
Use 1/2" flat washers. One [1] flat washer per bolt head (where applicable) and one [1] flat washer for the Nylon lock (nyloc) nut. Washers must be at grade 5 steel and zinc plated.

### Nyloc Nuts A

Four [4] 1/2-13 nyloc nuts must be properly torqued to 75 ft. lbs. to secure the crane to the van floor.

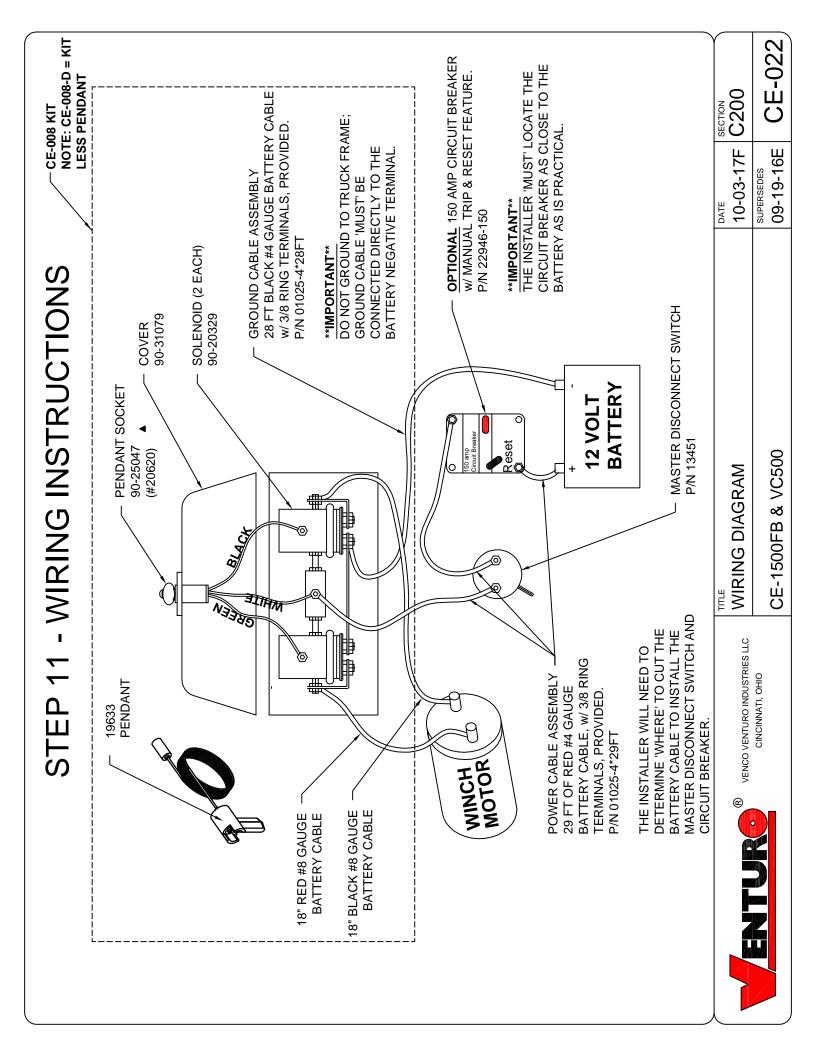
### · C A U T I O N

• THE VC500FB (500 LBS.) AND VC750FB (750 LBS.) CAPACITIES ARE BASED UPON VAN'S STRUCTURAL LIMITATIONS OF THE FLOOR, NOT WINCH CAPACITY. IT IS THE INSTALLER'S RESPONSIBILITY TO ENSURE PROPER REINFORCEMENT OF VAN'S STRUCTURE TO SUPPORT THE CRANE AND ITS LOAD.



THE ILLUSTRATION ABOVE SHOWS THE GENERAL PLACEMENT OPTIONS FOR THE VC500FB AND VC750FB VAN CRANES, AND ARE TO BE USED FOR REFERENCE ONLY. SPECIFIC LOCATIONS WILL BE LIMITED BY VEHICLE STRUCTURES AND / OR INSTALLER PREFERENCE(S).





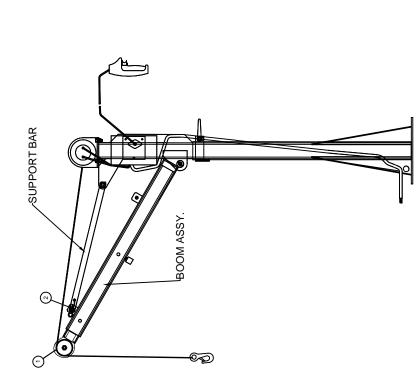
## **ASSEMBLY INSTRUCTIONS**

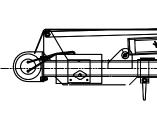
### Wire Rope Installation:

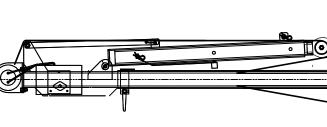
1) Remove the Hex Head Cap Screw & Nyloc nut from above the sheave on the two cheek plates. Reinstall the Hex Head Cap Screw & Nyloc nut after the wire rope is on the sheave.

**Elevating & Stowing the Boom**2) Remove the Quick Release Pin Assy between the Support bar and Boom Assy. to raise and lower the boom assy. Note: The boom stows vertically, parallel with the crane mast. When deployed the boom elevation is approx. 290 from level position.

STOWED POSITION









ASSEMBLY		
VENCO VENTURO INDUSTRIES LLC	CINCINNATI, OHIO	

	ASSEMBLY INSTRUCTIONS	
TITLE	ASSEMBLY INST	

**CEV156** 

C200 SECTION

> 03-16-16 SUPERSEDES

DATE

### **OPERATING INSTRUCTIONS**

### **ELECTRIC WINCH**

The winch is operated by a control switch in a plug-in remote pendant. Unplug the pendant and store it in the vehicle when the crane is not in use. For optional 110 volt AC winch, the pendant is non-removable.

### **ROTATION LOCK**

Before lifting the load, make sure the brake handle is tightened to keep boom from rotating (do not pull items at an angle. The load hook must be centered over the load.)

### **BOOM TIE-DOWN**

Release support bar and store crane in the folded position with pin assembly included in the support bar (See drawing CEV156).



 BOOM MUST BE FOLDED AND SECURED (STOWED POSITION) BEFORE DRIVING VEHICLE. DO NOT DRIVE WITH BOOM EXTENDED OUT.

### MASTER DISCONNECT SWITCH

The Master Disconnect Switch isolates electrical power from the crane and should be switched OFF anytime the crane is NOT in use.

### **OPTIONAL CIRCUIT BREAKER**

An optional 150amp circuit breaker (#22964-150) is available. The circuit breaker should be placed between the lead-acid battery supply and the crane; **as close as practical to the lead-acid battery.** 

### **MAINTENANCE**

### **WINCH**

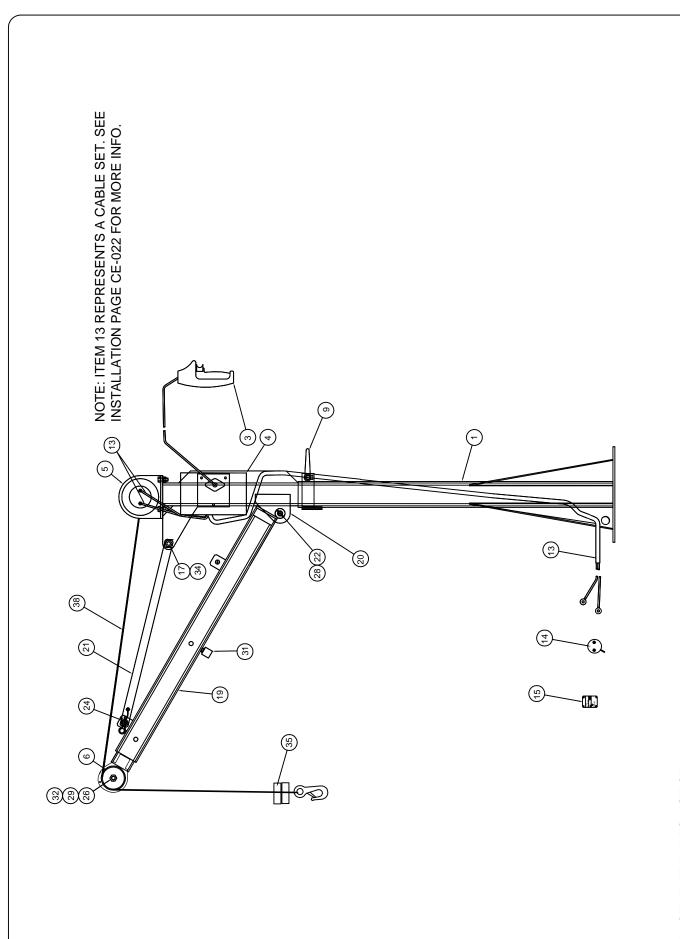
The winch is permanently lubricated. There may be grease leakage out of the winch, especially during the first few operations. This is normal and it is not necessary to grease or oil any part of the winch at any time.

### **WIRE ROPE**

Inspect wire rope periodically. If any wear or fraying exists, replace wire rope.

### **PARTS**





\* SEE REPLACEMENT PARTS LIST CEV161



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

VING	
PARTS DRA	
REPLACEMENT	
	REPLACEMENT PARTS DRAWING

REPLACEMENT PARTS DRAWING	03-17-16
	SUPERSEDES
VC500FB	

**CEV160** 

C400 SECTION

DATE

### VC500FB

### REPLACEMENT PARTS LIST

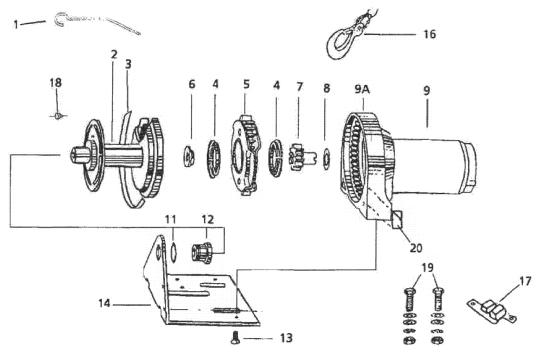
ITEM	PART NUMBER	QTY	DESCRIPTION
1 2	CE-002-4	1	BASE ASSEMBLY
3	- CE-006	1	PENDANT
4	CE-008	1	REMOTE KIT
5	CE-009	1	WINCH (MODEL X1, REF P/N 1102C)
6	19646	1	SHEAVE WITH BUSHING
7 8	-	-	- -
9	CE-017	1	BRAKE HANDLE
10	-	2	MOUNTING CHANNEL
11	-	-	-
12	-	- 1	- CARLE SET # 9CA DED 9 BLACK CARLES (DEE DAGE CE 022)
13 14	90-23339-10 13451	1 1	CABLE SET, # 8GA, RED & BLACK CABLES (REF. PAGE CE-022) MASTER DISCONNECT SWITCH
15	22964-150	1	(OPTIONAL) CIRCUIT BREAKER, 150AMP, MANUAL RESET / TRIP
10		·	(CI TICHME) CINCOTT BINES WELL, 1007 WITH , IIII WOONE TREET THAN
16	-	-	-
17	!LNUT-05013	1	LOCK NUT, NYLON, 1/2-13
18	- CEV452	-	- DDIMARY BOOM WELDER ACCEMBLY
19 20	CEV153 CE-059-2	1	PRIMARY BOOM, WELDED ASSEMBLY UPPER BODY ASSEMBLY
20	OL 000 Z		OFFER BODT AGGEWIDET
21	CEV148	1	SUPPORT BAR
▲ 22	CEV165	1	CLEVIS PIN, Ø1/2" X 4" LONG W/ 3-3/4" USEABLE LENGTH, PLATED
23	- OF 074	-	- DIN ACCEMBLY CURRENT DAD
24 25	CE-071	1	PIN ASSEMBLY; SUPPORT BAR
25	<u>-</u>		-
26	!HHCS06311150	1	HEX HEAD CAP SCREW; 5/8-11 X 1-1/2 LONG
▲ *27	!FWSH-050SAE	2	FLAT WASHER, SAE, 1/2" PLATED, FOR PRIMARY BOOM PIVOT PIN
▲ 28	416554	1	RUE-RING COTTER
29	!JNUT-06311-N	1 3	NYLON LOCK NUT; 5/8-11
30	PL-20-259	3	6" WIRE TIE
31	PL-20-364	1	BUMPER
32	13168-7	1	SLEEVE
33	-	- 4	-
34	!HHCS05013150	1 1	HEX HEAD CAP SCREW; 1/2-13 X 1-1/2 LONG, GR. 5
35	16735		HEADACHE BALL ASSY. (6.9LBS)
*36 37	CEV159	1	FIELD SERVICE LABEL KIT
37	- 15810-3/16-25	1	WIRE ROPE & HOOK ASSEMBLY

<sup>\* =</sup> NOT SHOWN



TITLE	DATE	SECTION
REPLCMNT PART LIST	04-25-16A	C400
	SUPERSEDES	05)/404
VC500FB	03-17-16	CEV161

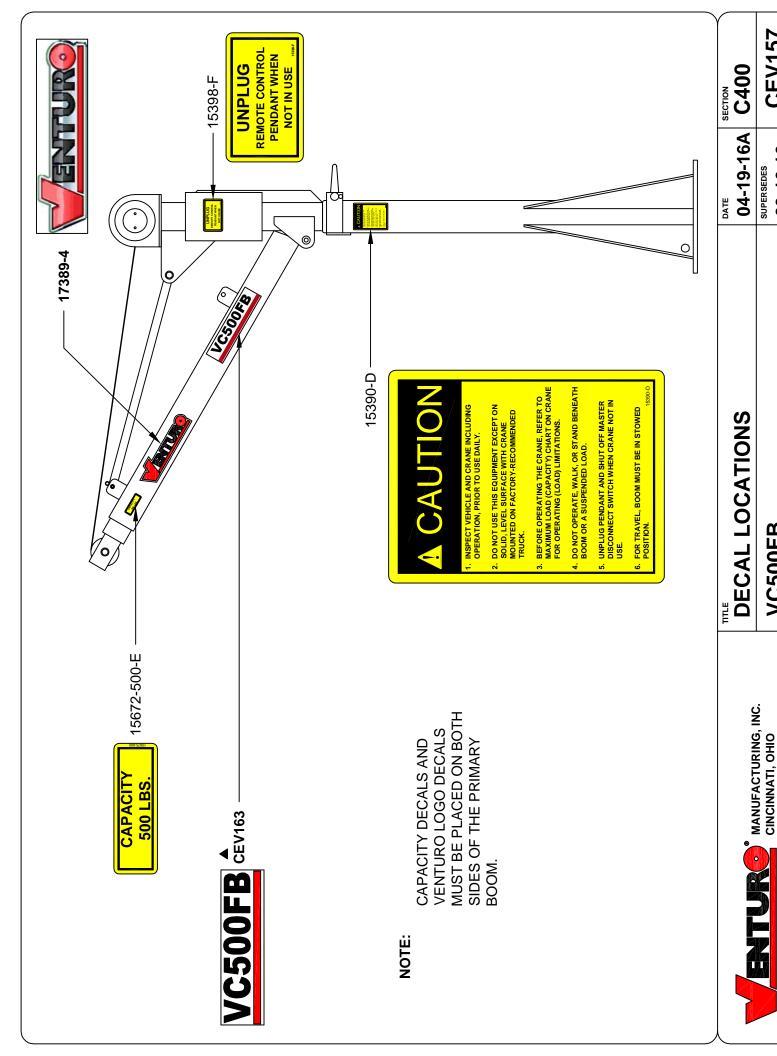
### REPLACEMENT PARTS LIST



Reference						
Number	Description	Part Number	Qty			
1	Handsaver	89-32300	1			
2	Rotating Gear Drum	90-32038	1			
3	Perimeter Bearing	90-23137	1			
4	Carrier Bearing	90-23140	2			
5	Planetary Gearing Assembly	90-23138	1			
6	Nylon Step Washer	90-12418	1			
7	10-Tooth Sun Gear	90-22865	1			
8	Flat Thrust Washer	90-23120-08	1			
9A	Stationary Ring Gear w/ Needle Bearing	90-12629	1			
9	12 Volt Motor w/Ring Gear & Needle Bearing	90-32425	1			
	12 Volt Motor (external mtg bolt applications only)	90-33293	1			
11	Shim Washer	90-23120-05	AR			
12	Bushing	90-12174	1			
13	5/16" Socket Head Cap Screw	90-23056-02	2			
14			1.			
	2461 2516 11 21 11	AFAA				
16	3/16" x 25' Cable & Hook Assembly	1511	1			
17	12V Circuit Breaker Assembly	90-22873	1			
18	Rope Retainer	90-12419	1			
19	Pair of 3/8" Bolts & Nuts, 4 Flat Washers &					
	2 Locking Washers	90-22892	1			
20	Handsaver Label	90-12417	1			
NS	Pulley Block	2227	1			
AR denotes "A	s Required"					



CE-1500-FB & CEV SERIES	SUPERSEDES 11-11-09C	CE-055
WINCH RPLCMNT PARTS	08-18-16D	C400
TITLE	DATE	SECTION



**CEV157** 

03-16-16

VC500FB

ITEM NO.	PART NO.	QTY	DESCRIPTION
1	15397	1	BOM, ACCIDENT PREVENTION SIGNS
2	17389-4	2	VENTURO DECAL (SMALL)
3	15672-500	2	CAPACITY DECAL - 500LBS
4	CEV163	2	DECAL, MODEL, VC500FB
5	CEV158	1	IDWG: FIELD SERVICE LABEL KIT

15397 ACCIDENT PREVENTION SIGNS				
PART NO. QTY.		DESCRIPTION		
15390	1	DECAL; CAUTION, OPERATIONS		
15391	1	DECAL; DANGER, NOT PASSENGER LIFT		
15392	1	DECAL; DANGER, ELECTRICAL HAZARD SIGN		
15393	4	DECAL; DANGER, ELECTRICAL HAZARD		
15394	1	APPLICATION INSTRUCTIONS		
15398	1	DECAL; UNPLUG PENDANT		
15401	1	DECAL; UNLAWFUL TO OPERATE		
15513	1	DECAL; MASTER DISCONNECT		
22317	1	DECAL SHEET; VENTURO, COMPLEMENTARY		
20927	1	DECAL; CRANE STABILITY		



FIELD SERVICE LABEL KIT	08-23-16B	C400
VC500FB	SUPERSEDES 04-18-16A	CEV158

### **VENTURO CRANES LIMITED WARRANTY POLICY**



Venturo products are built to last...we guarantee them.

As a purchaser of any new Venturo product covered by warranty, you will receive 1 year of the most complete coverage available...and, at no added cost to you.

### 1-Year Limited Warranty Policy

This limited policy warrants new products of Venturo to be free from defects in material and workmanship for a period of one (1) year from date of original installation. OEM products or accessories purchased by Venturo as part of or offered with our product will carry the OEM manufacturer's respective warranty. Our warranty covers:

- Repair or replacement of product
- Labor to repair or replace product
- Freight to return and/or replace product

We shall not be liable for any contingent liabilities arising out of the improper function of any products. Warranty shall become void if the product is improperly installed, modified, damaged, abused or used for application other than intended use. There is no warranty of merchantability, fitness for a particular purpose, warranty arising from course of dealing or usage of trade, or any other implied or expressed warranty, except as made specifically herein. This warranty supersedes all previous warranties, written or implied.

### **Warranty Claims**

Venco Venturo Industries LLC will make a good faith effort for prompt correction or other adjustment with respect to any product, which proves to be defective after our inspection and within the warranty period. Before any repairs are attempted or before returning any product, your Venturo Distributor is required to obtain a warranty claim number. This number is necessary for any claim to be considered. To obtain a warranty claim number, Venturo requires the model and serial number. Only authorized Venturo Distributors can perform warranty. For the name and address of your local Venturo Distributor call the **Warranty Claim Department - 513-772-8448.** 

**WARNING** - It is the responsibility of the installer to ensure the installation is completed according to the manufacturer's recommendations, ensure the ultimate user understands how to operate product in a safe manner, and understands the need for regular service and maintenance by an authorized Venturo Distributor. No modifications or alterations may be made to any Venturo product without the expressed written consent of Venco Venturo Industries LLC. Installation of any Venturo product must be done by an authorized Venturo Distributor, to the standards of the industry; including maintenance, service and affixing of all instruction, safety and warning decals. Users should be instructed as to the safe operation at time of delivery. Maintenance, service, operation and safety warning decals are available on request from Venco Venturo Industries LLC.

### **VENCO VENTURO INDUSTRIES LLC**

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