

CT2003/4 SERIES

PARTS & INSTALLATION MANUAL CT2003/4 SERIES

<u>Included in this manual:</u>

CT2003/4 SERIES

- Electric Mast Crane
- 3 or 4 ft Folding Boom

VENCO VENTURO INDUSTRIES LLC 12110 BEST PLACE | CINCINNATI, OHIO 45241

VENCU VENTURO INDUSTRIES LLC

CT2003/4 SERIES

INST-23530 - 11/20/2024 (Rev: NEW0)

SECTION 100: DESCRIPTION & SPECIFICATIONS 7607100A

18580 **INSTALLATION - CT2003FB**

18581 **INSTALLATION - CT2004FB**

INSTALLATION DRAWING - CT2003/4/5 MAX CUTDOWN INSTALLATION - 13171 & 13172 SOCKETS 19481

18585

7607150A SECTION 150: SAFETY

CRANE SAFETY AND HAZARDS - CA, CE, CT, & DT 870701

21353 SAFETY DECALS DRAWING & LIST SAFETY DECALS DRAWING & LIST 21384 21366

SAFETY DECALS DRAWING & LIST MODEL & CAPACITY DECALS DRAWING & LIST - CT2003FB 21367 MODEL & CAPACITY DECALS DRAWING & LIST - CT2004FB 21368

7607200A SECTION 200: INSTALLATION

870702 OPERATING INSTRUCTIONS - CA, CE, CT, & DT

CABLE & BATTERY REQUIREMENTS 711105 **BATTERY CABLE & COMPONENT INSTALL** 15660

WIRE ROPE SPECIFICATIONS 711006

7607400A SECTION 400: REPLACEMENT PARTS REPLACEMENT PARTS DRAWING - CT2003/4/5 REPLACEMENT PARTS LIST - CT2003/4/5 19711 20985 WIRING KIT & DIAGRAM - CT2003/4/5 & DT7K 19591

CONTACTOR ASSY - CT/DT 19590

19795 REPL PARTS DWG & LIST - 19797 SINGLE SWITCH PENDANT REPLACEMENT PARTS DRAWING - 16100 SERIES POWER UNIT I16100 811016 REPLACEMENT PARTS LIST - 16100 SERIES POWER UNIT

DECAL PLACEMENT 16176

FIELD SERVICE LABEL KIT - CT2003FB 15545-3 15545-4 FIELD SERVICE LABEL KIT - CT2004FB

25431 **USER NOTES** 25431 **USER NOTES**

12-00073 VNT1 WARRANTY PAGE

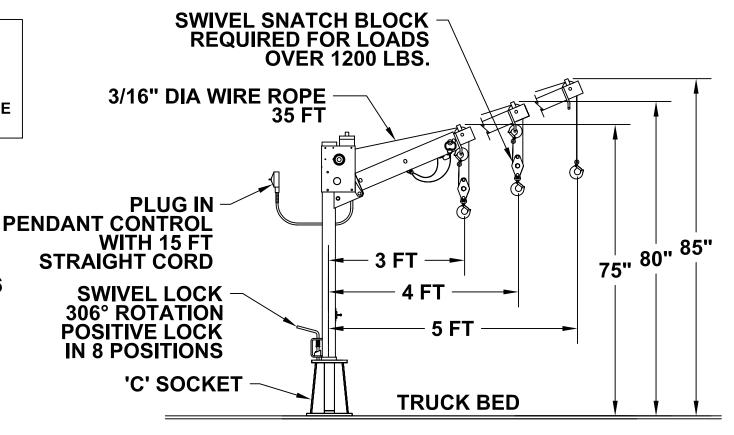
SECTION 100

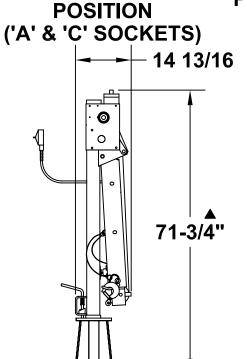
DESCRIPTION & SPECIFICATIONS



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

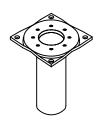
BOOM IN FOLDED

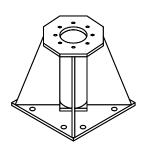




'A' SOCKET

'C' SOCKET





BOOM WILL FOLD WITH BOTH 'A' & 'C' SOCKETS

PERFORMANCE CHARACTERISTICS			
воом	LOAD	PART	LIFTING SPEED
POSITION	CAPACITY	LINE	AT CAPACITY LOAD
5 FT	1000 LBS	1	15 FT/MIN
4 FT	1500 LBS	2	9 FT/MIN
3 FT	2000 LBS	2	8 FT/MIN

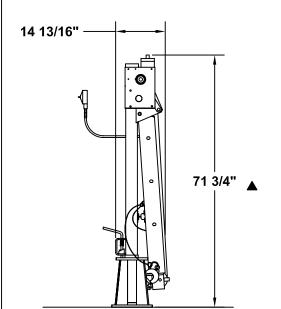
SNATCH BLOCK REQUIRED FOR LOADS OVER 1200 LBS. NET WEIGHT WITHOUT SOCKET 195 LBS.

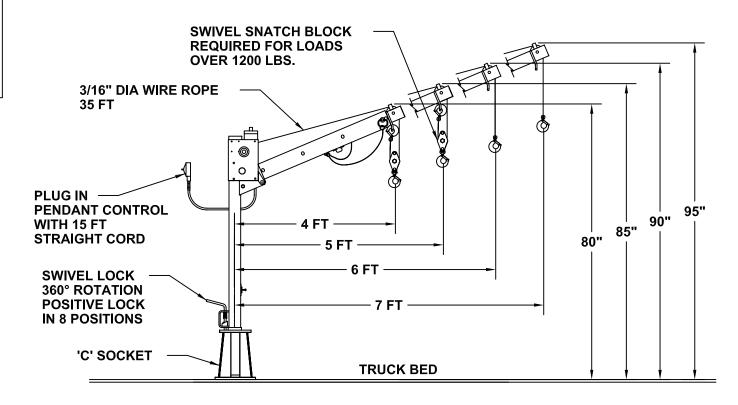


INSTALLATION DRAWING	11-21-00A	SECTION C100
CT2003 FB CRANE	SUPERSEDES 12-12-97	18580

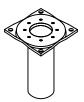
WARNING: THESE PRODUCTS ARE NOT PASSENGER LIFTS. THEY ARE NOT DESIGNED OR INTENDED TO BE USED TO LIFT, SUPPORT OR OTHERWISE TRANSPORT PERSONNEL.

BOOM IN FOLDED POSITION ('C' SOCKET ONLY)





'A' SOCKET

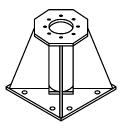


BOOM WILL NOT FOLD

WITH 'A' SOCKET



'C' SOCKET



BOOM WILL FOLD WITH 'C' SOCKET

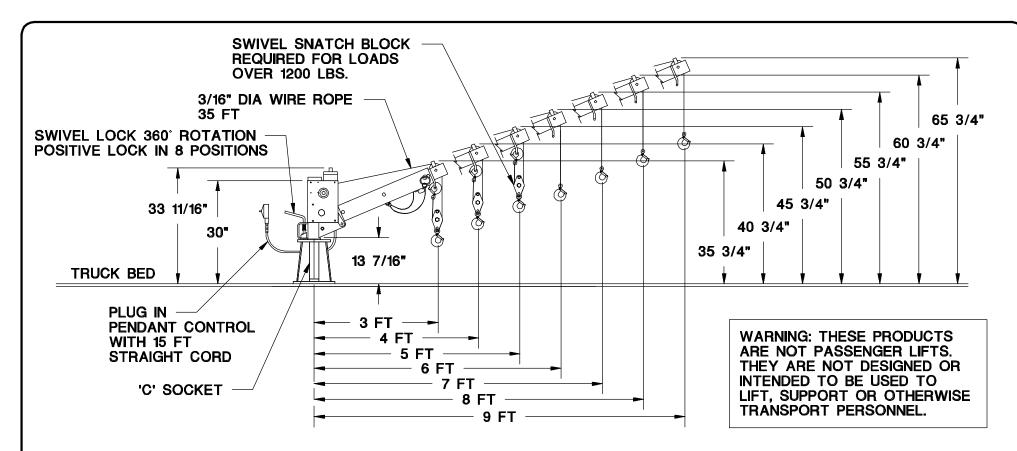
PERFORMANCE CHARACTERISTICS			
BOOM POSITION	LOAD CAPACITY	PART LINE	LIFTING SPEED AT CAPACITY LOAD
7 FT	700 LBS	1	18 FT/MIN
6 FT	900 LBS	1	16 FT/MIN
5 FT	1200 LBS	1	13 FT/MIN
5 FT	1200 LBS	2	10 FT/MIN
4 FT	1500 LBS	2	9 FT/MIN

SNATCH BLOCK REQUIRED FOR LOADS OVER 1200 LBS.

NET WEIGHT WITHOUT SOCKET 200 LBS.



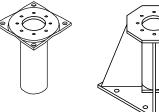
INSTALLATION DRAWING	11-21-00A	SECTION C100
CT2004 FB CRANE	SUPERSEDES 12-12-97	18581



NET WEIGHT W/OUT SOCKET (MAX CUT-DOWN)	
CT2003	155 LBS
CT2004	160 LBS
CT2005	165 LBS

'A' SOCKET

'C' SOCKET



		9
BOOM WITH 'A	WILL N	

PERFORMANCE CHARACTERISTICS			
BOOM POSITION	LOAD CAPACITY	PART LINE	LIFTING SPEED AT CAPACITY LOAD
9 FT	500 LBS	1	20 FT/MIN
7 FT	700 LBS	1	18 FT/MIN
5 FT	1000 LBS	1	15 FT/MIN
5 FT	1200 LBS	2	10 FT/MIN
3 FT	2000 LBS	2	8 FT/MIN

SNATCH BLOCK REQUIRED FOR LOADS OVER 1200 LBS.

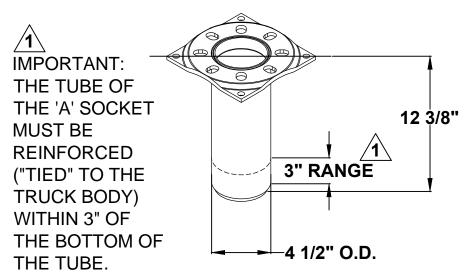
- HEIGHT DIMENSIONS ARE FOR MAXIMUM CUT-DOWN MODEL AND ARE APPOX. 39" LESS THAN STANDARD CTFB CRANES.
- HEIGHT DIMENSIONS ARE FOR C-SOCKET MODELS
- DEDUCT 12 1/2" FROM HEIGHT DIMENSIONS FOR A-SOCKET MODELS

INSTALLATION DRAWING	_{дате} 4-16-98	SECTION C100
CT2003/4/5FB-S - MAX CUTDOWN	SUPERSEDES -	19481

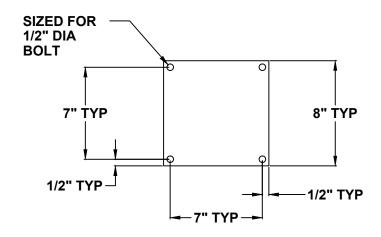
TYPE 'A' SOCKET (13171)

RECESS MOUNTING

WEIGHT 18 LBS.



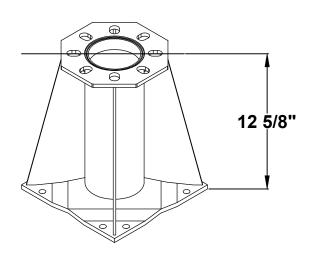
MOUNTING DIMENSIONS



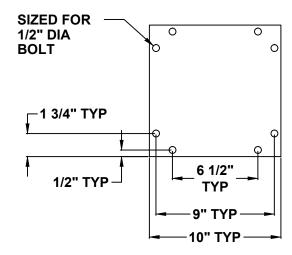
TYPE 'C' SOCKET (13172)

SURFACE MOUNTING

WEIGHT 36 LBS.



MOUNTING DIMENSIONS





VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE		DATE	SECTION
INSTALLA	TION DRAWGING	02-06-19C	C100
		SUPERSEDES	10707
13171 & 13	3172 SOCKETS	05-03-99B	18585

SECTION 150

SAFETY



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

CRANE SAFETY AND HAZARDS

CA, CE, CT, AND DT 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. 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

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

WENTLING MEG INC	NTURO MFG., INC. INSTALLATION DWG 3	3-2-99C	C150	
	O CA, CE, CT, AND DT	10-17-97B	870701	\int

DECAL #: 15390

CAUTION, INSPECT VEHICLE & CRANE... DESCRIPTION:

PURPOSE: TO INFORM THE OPERATOR OF KEY OPERATING REQUIREMENTS.

QUANTITY:

REAR COVER OR SIDE OF CRANE PLACEMENT:



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:

PLACEMENT: REAR COVER OR SIDE OF CRANE



OPERATE THIS CRANE UNLESS:

OPERATE THIS CRANE UNLESS:
YOU HAVE BEEN TRAINED IN THE SAFE
OPERATION OF THIS CRANE; AND
YOU KNOW AND FOLLOW THE SAFETY AND
OPERATING RECOMMENDATIONS CONTAINED I
THE MANUFACTURER'S MANUALS, YOUR
EMPLOYER'S WORK RULES, AND APPLICABLE
GOVERNMENT REGULATIONS.

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

15392 DECAL #:

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: REAR COVER OR SIDE OF CRANE



THIS MACHINE IS NOT INSULATED **ELECTROCUTION HAZARD**

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

TO AN ELECTRICALLY CHARGED CONDUCTOR. YOU MUST MAINTAIN A CLEARANCE OR AT LEAST 10 FEET BETWEEN ANY PART OF THE CRANE, LOAD LINE OR LOAD, AND ANY ELECTRICAL LINE OR APPARATUS CARRYING UP TO 50,000 VOLTS. ON EFOOT ADDITIONAL CLEARANCE IS REQUIRED FOR EVERY ADDITIONAL 30,000 VOLTS OR LESS.

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

DECAL #: 15401

DESCRIPTION: DANGER, UNLAWFUL TO OPERATE

PURPOSE: TO INFORM OPERATOR OF PROPER OPERATION

IN VICINITY OF ELECTRICAL LINES.

QUANTITY:

PLACEMENT: RING COVER OR SIDE OF CRANE

UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN 20 FEET OF HIGH-VOLTAGE LINES OF 350,000 VOLTS OR LESS.

FOR MINIMUM CLEARANCES OF HIGH-VOLTAGE LINES IN EXCESS OF 350,000 VOLTS, REFERENCE OSHA 1926.140 CRANE'S SAFETY MANUAL, AND CAL-OSHA ARTICLE 37, TITLE 8, HIGH-VOLTAGE ELECTRICAL SAFETY ORDERS

DECAL #: 15393

DESCRIPTION: DANGER, ELECTROCUTION HAZARD, VEHICLE (TRUCK)

WARNS OF DANGER FROM ELECTRICALLY CHARGED PURPOSE:

VEHICLE, CRANE, OR LOAD.

QUANTITY:

PLACEMENT: EACH SIDE & EACH END OF VEHICLE







TITLE

SAFETY DECALS

DATE

04-29-16E

SECTION C150

VENTURO CRANES

SUPERSEDES 10-24-13D

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

PART NO.: 15513

DECAL: MASTER DISCONNECT SWITCH

FUNCTION: To inform the operator of location and operation of master disconnect

switch.

QUANTITY: 1

PLACEMENT: On master disconnect switch bracket.

PART NO.: 20927

DECAL: **CRANE STABILITY**

FUNCTION: To inform the operator of the crane's lifting

capacity throughout the entire rotation.

QUANTITY: 1

PLACEMENT: In prominent location, so it is easily seen and readily identifiable.







CINCINNATI, OHIO

SAFETY DECALS	06-06-14C	C150
CRANES	04-02-13B	21384

PART NO.: 15398

DECAL: UNPLUG REMOTE CONTROL

FUNCTION: To inform the operator to unplug remote control

when not in use.

QUANTITY: 1

PLACEMENT: Near pendant socket.

UNPLUG
REMOTE CONTROL
PENDANT WHEN
NOT IN USE
#15398

PART NO.: 13191-12

DECAL: USE SNATCH BLOCK

FUNCTION: To inform the operator when to use a snatch

block.

QUANTITY: 2

PLACEMENT: One on each side of boom.

USE SNATCH BLOCK OVER 1200 LBS



TITLE	DATE	SECTION
MISC. DECALS	03-04-19A	C150
	SUPERSEDES	21366
CT200XFB	09-13-05	21366

DECAL #: 19734

DESCRIPTION: MODEL NUMBER

PURPOSE: To show the model of the crane.

QUANTITY: 2

PLACEMENT: One of each side of boom.



DECAL #: 15672-1000

DESCRIPTION: CAPACITY 1000LBS

PURPOSE: To show the operator the capacity at 5 foot boom length.

QUANTITY: 2

PLACEMENT: One on each side of boom.

CAPACITY 1000 LBS

DECAL #: 15672-1600

DESCRIPTION: CAPACITY 1600LBS

PURPOSE: To show the operator the capacity at 4 foot boom length.

QUANTITY: 2

PLACEMENT: One on each side of boom.

CAPACITY 1500 LBS

DECAL #: 15672-2000

DESCRIPTION: CAPACITY 2000LBS

PURPOSE: To show the operator the capacity at 3 foot

boom length.

QUANTITY: 2

PLACEMENT: One on each side of boom.





MODEL & CAPACITY DECALS

03-04-19A

SECTION C150

CT2003FB

SUPERSEDES **09-13-05**

21367

DECAL #: 19735

DESCRIPTION: MODEL NUMBER

> PURPOSE: To show the model of the crane.

QUANTITY:

PLACEMENT: One on each side of boom.



DECAL #: 15672-700

DESCRIPTION: **CAPACITY 700LBS**

> PURPOSE: To show the operator the capacity at 7 foot boom length.

QUANTITY:

PLACEMENT: One on each side of boom.

CAPACITY 700 LBS

DECAL #: 15672-900

DESCRIPTION: **CAPACITY 900LBS**

> PURPOSE: To show the operator the capacity at 6 foot boom length.

QUANTITY:

PLACEMENT: One on each side of boom.

CAPACITY 900 LBS

DECAL #: 15672-1200

DESCRIPTION: **CAPACITY 1200LBS**

> PURPOSE: To show the operator the capacity at 5 foot boom length.

QUANTITY:

PLACEMENT: One on each side of boom.

CAPACITY 1200 LBS

DECAL #: 15672-1500

DESCRIPTION: **CAPACITY 1500LBS**

> PURPOSE: To show the operator the capacity at 4 foot boom length.

QUANTITY:

PLACEMENT: One on each side of boom.

CAPACITY 1500 LBS



MODEL & CAPACITY DECALS

SECTION 03-04-19A

C150

CT2004FB

SUPERSEDES 09-13-05

21368

SECTION 200

INSTALLATION



OPERATING INSTRUCTIONS

CA, CE, CT, & DT CRANES

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.

TELESCOPING BOOM

On CE6K, CT & DT Cranes the boom can be manually extended. The hole in the extension section of the boom should be aligned with the slot in the stationary section at the position desired and the toggle pin inserted. The crane lifting capacity is shown at each toggle pin position on the CT & DT cranes. The CE6K has a decal on the mast which shows the capacities of the crane at its various angles and extensions.

SWIVEL SNATCH BLOCK

On CA2000, CT200X, and DT Cranes, the swivel snatch block must be used for loads over 1200 lbs. On the CE6K, the swivel snatch block must be used on loads over 1000 lbs. It may also be used for lower loads to reduce lifting speed for better control and to prevent loads from spinning. CA1000 & CT100X Cranes have a permantly rigged swivel block.

SWIVEL LOCK

On the CT & DT Cranes the hand lever operated swivel lock controls the 360° rotation of the crane and provides positive locking in 8 positions.

BANDBRAKE

The CE6K is equipped with a band brake that provides unlimited rotational positioning.

BOOM TIE DOWN

The load line should be used to tie down the boom to the socket or truck bed while the crane is not in use.

OPTIONAL MASTER DISCONNECT SWITCH

This switch should be turned "OFF" when the crane is not in use to disconnect the crane from the battery.

MAINTENANCE

The crane should be lubricated when the vehicle is serviced.

WINCH GEAR BOX (CT & DT cranes only) ▲

Check the oil level by removing the plug in the side of the gear box. If the oil level is below the plug opening, fill with SAE 85W-140 Hypoid gear oil.

WINCH DRIVE CHAIN (CT & DT cranes only)

Oil lightly. **DO NOT GREASE**. Excess oil or grease will collect dirt and cause excessive chain wear. Inspect the chain and sprockets for excessive wear and proper alignment. Replace if excessively worn.

CRANE SOCKET SWIVEL BEARINGS

The crane should be removed from the socket once a year or more often if excessive dirt is present. Dirt should be cleaned out from around the lower bearing. Use a rag or brush to apply a light weight oil several times to the lower and upper bearings which are both oilite bronze except for the CE, CT200X & DT Cranes upper bearing which does not require lubrication.



INSTALLATION DWG	8-01-01C	C200
CA, CE, CT, & DT	3-3-99B	870702

!! IMPORTANT!!

ADEQUATE WIRING IMPERATIVE FOR PROPER OPERATION

- 1. PROPER GROUND PATH SEE DWG 15660
- 2. CURRENT DRAW IS SEVERAL HUNDRED AMPERES ADEQUATE WIRE SIZE AND BATTERY CAPACITY IS ABSOLUTELY ESSENTIAL (SEE CHART BELOW).

▲ MINIMUM WIRE GAUGE AND AUXILIARY BATTERY SIZE										
MODEL	TOTAL LENGTH OF CABLE (FT) *							▲ 12 VOLT AUXILIARY BATTERY REQUIREMENTS		
	0-20	21-25	26-30	31-40	41-50	51-60	61-70	71-80	CCA (A) **	RC (MIN) ***
▲ CE1500 CE6K CT2000 CT2003/4/5 DT7K	#4	#4	#2	#2	#1	#0	#0	#00	350	100
ET5500MPB ET5500R ET6KMPB ET6KR ET6K ET8K ET10K ET12K	#2	#2	#1	#0	#00	NOT RECOMMENDED		//ENDED	450	100
ET8KX ET10KX ET12KX • ET12KXP	#2	#2	#1	#0	#00			550	150	
ET18K(X) ET25K(X) ET30KX ET36KX										

- * INCLUDES GROUND CABLE
- ** CCA = COLD CRANKING AMPS AT 0° (F).
- *** RC = RESERVE CAPACITY IN MINUTES AT 25 AMPS AND 80° (F).

 THE RC RATING IS A MEASURE OF THE PERIOD OF TIME THE BATTERY CAN SUPPLY A GIVEN CURRENT WITHOUT RECHARGING.

	TITLE	DATE	SECTION
VENCO VENTURO INDUSTRIES LLC	CABLE & BATTERY	07-30-18X	C200
CINCINNATI, OHIO		SUPERSEDES	744405
	ELECTRIC CRANES	09-27-17W	711105

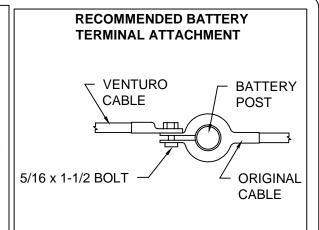
RECOMMENDED CIRCUIT BREAKER TAB							
	CRANE	DESCRIPTION	PART NO.				
	CT310KX	250 AMP, MAN RESET	22946-250				
	DT7	250 AMP, MAN RESET	22946-250				
	CE-1500-FB	150 AMP, MAN RESET	22946-150				
	CE6K	150 AMP, MAN RESET	22946-150				
	CT200X	250 AMP, MAN RESET	22946-250				
	ET6K	250 AMP, MAN RESET	22946-250				
	ET8/12K(X)	250 AMP, MAN RESET	22946-250				
▲	ET12KXP	300 AMP, MAN RESET	22946-300				
	ET16/18KX-16'	250 AMP, MAN RESET	22946-250				
_	ET16/18KX-20'	300 AMP, MAN RESET	22946-300				
	ET25/30KX	300 AMP, AUTO RESET	22946-300				
	ET36KX	300 AMP, AUTO RESET	22946-300				
	·	·					

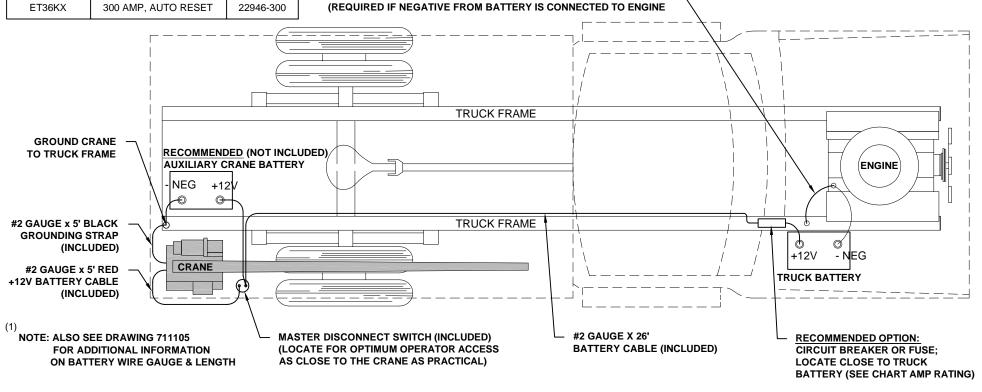
BATTERY REQUIREMENTS

- 12 VOLT *VEHICLE* BATTERY REQUIREMENTS
- •• 625 COLD CRANKING AMPS (AT 0° F)
- •• 160 MINUTES RESERVE CAPACITY
- •• 102 PLATES, 105 AMP-HR
- 12 VOLT *AUXILIARY* BATTERY REQUIREMENTS
- •• SEE MINIMUM WIRE GAUGE AND BATTERY SIZE

NOTE: OPERATING WITH THE VEHICLE BATTERY 'ONLY' IS PERMISSIBLE, BUT *NOT* RECOMMENDED.

INSTALL #2 GAUGE GROUND STRAP FROM ENGINE TO TRUCK FRAME







VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

TITLE	DATE	SECTION
BATTERY CABLE & COMPONENT INSTALL	09-03-20M	C200
	SUPERSEDES	45000
ET CRANES	07-30-18L	15660

WIRE ROPE SPECIFICATIONS

SELECTION

reduce the fatigue life of the wire rope. capacity of the crane. Use wire rope diameter larger than the size furnished with the crane will working load. Do not use wire rope with a maximum working load rating less than the single line AIRCRAFT Grade Wire Rope in various diameters. The breaking strength is 3 $\,\%$ times the maximum The chart below shows the maximum working load and breaking strength of 7 x 19 Galvanized

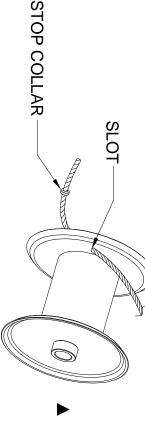
3/8"	5/16"	1/4"	7/32"	3/16"	5/32"	1/8"	WIRE ROPE
4114 LBS.	2800 LBS.	2000 LBS.	1600 LBS.	1200 LBS.	800 LBS.	570 LBS.	MAXIMUM WORKING LOAD
14400 LBS.	9800 LBS.	7000 LBS.	5600 LBS.	4200 LBS.	2800 LBS.	2000 LBS.	BREAKING STRENGTH

INSTALLATION

- . ` Unwind coil of rope by rolling it along the floor. This will prevent kinking
- 2 rope when inserted thru the slot. the wire rope with a stop collar. A hole in the housing allows access for the end of the wire Most VENTURO cranes are provided with a slot in the winch side plate for attaching the end of

use a stop collar. The ET20K(X) & ET25K(X) cranes have a clamp built into the winch drum and do not

ယ WHEN UNDER LOAD. THERE MUST ALWAYS BE AT LEAST THREE [3] TURNS OF WIRE ROPE ON THE DRUM





MANUFACTURING, INC. CINCINNATI, OHIO

WIRE ROPE SPECS

WINCH & CRANE

12-05-13K

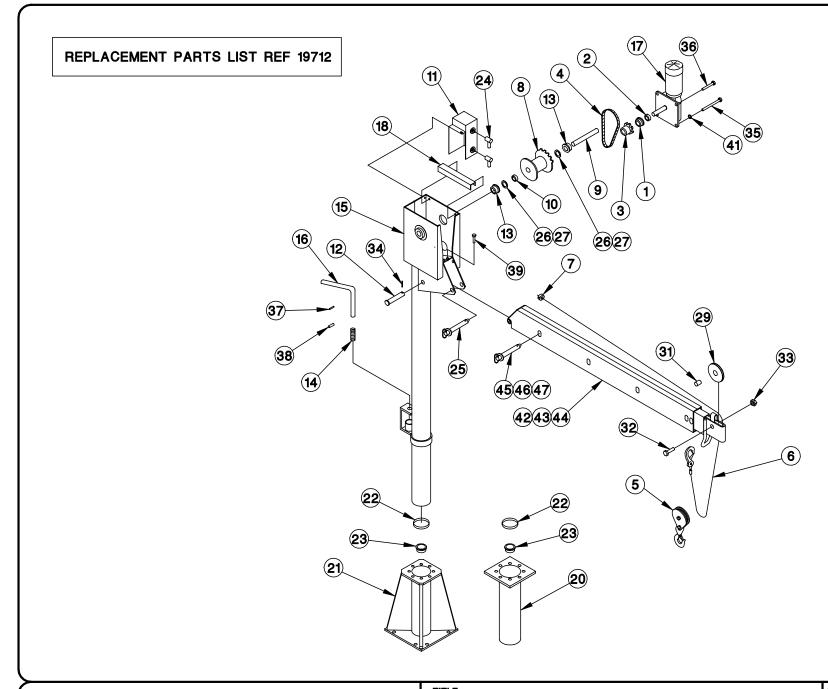
< WC 200

11-10-08J **711006**

SECTION 400

REPLACEMENT PARTS







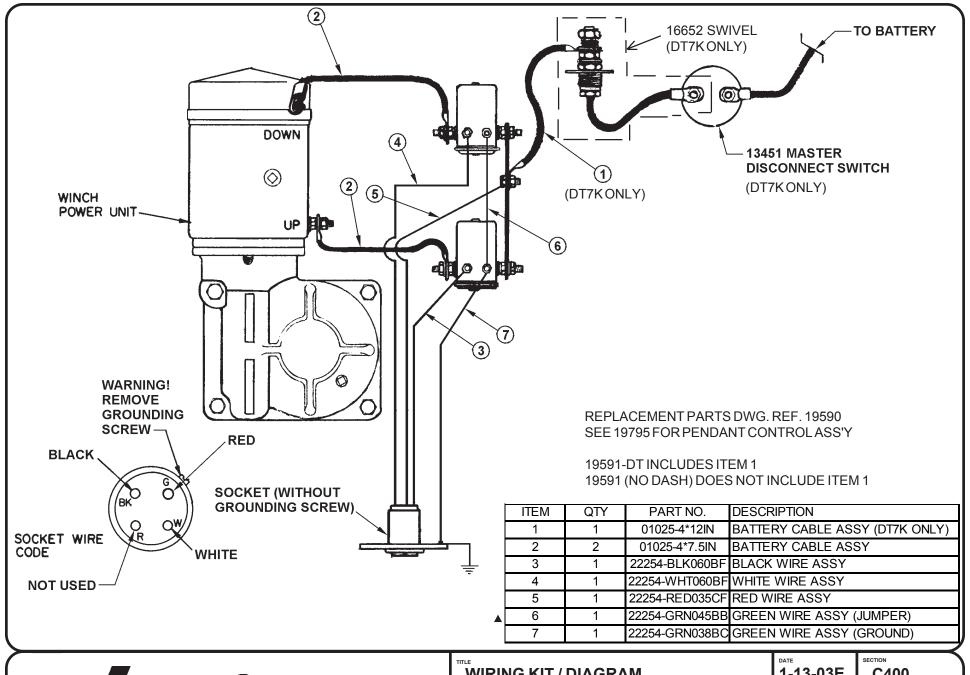
REPLACEMENT PARTS DWG	8-21-02A	C400
CT2003FB/CT2004FB/CT2005	SUPERSEDES 11-4-98	19711

	T	REPLACEI	MENT PAR	TS	
ITEM#	PART#	DESCRIPTION	ITEM#	PART#	DESCRIPTION
1	20982	FLANGED BEARING -3/4" I.D. x 1-3/4" O.D.	41	!LWSH-038	LOCK WASHER - 3/8" (4 PLCS)
2	00210	THRUST COLLAR - 3/4" BORE	42	19333	BOOM WELDED ASSY - 3FT
3	15999	SPROCKET - 3/4" BORE	43	19334	BOOM WELDED ASSY - 4FT
4	00867-1	WINCH DRIVE CHAIN (NO CONNECTION LINKS) 50 LINKS	44	19335	BOOM WELDED ASSY - 5FT
5	19678	SWIVEL LOAD BLOCK W/ SAFETY LATCH	45	23042-F-18-18	PIN & LANYARD ASSY 3/4" O.D. X 3-1/2" LG - 3FT BOOM ASSY
6	15810-3/16-35	WIRE ROPE ASSY - 3/16" X 35 FT	46	23042-F-24-24	PIN & LANYARD ASSY 3/4" O.D. X 3-1/2" LG - 4FT BOOM ASSY
7	13463-1	STOP SLEEVE	47	23042-F-34-34	PIN & LANYARD ASSY 3/4" O.D. X 3-1/2" LG - 5FT BOOM ASSY
8	001149	CABLE DRUM	48	-	
9	01153	MAIN SHAFT - CABLE DRUM	49	-	
10	01158	THRUST COLLAR - MAIN SHAFT - 1.00" BORE	50	-	
11	19590	CONTACTOR, SOCKET & COVER SUBASSY	51	15545-3	FIELD SERVICE LABEL KIT - CT2003FB
12	13401-2B	PIVOT PIN - CYL ROD	52	15545-4	FIELD SERVICE LABEL KIT - CT2004FB
13	01299	FLANGED BEARING -1.00" I.D. x 2.00" O.D.	53	15545-5	FIELD SERVICE LABEL KIT - CT2005FB
14	11889	SPRING	54		
15	19331	WELDED MAST ASSY.	55		
16	14785	LOCK BOLT	56		
17	16105-1	WINCH POWER UNIT	57		
18	16972	CHAIN COVER	58		
19	-	-	59		
20	13171	MOUNTING SOCKET - TYPE 'A'	60		
21	13172	MOUNTING SOCKET - TYPE 'C'	61		
22	20179	BEARING - 4" I.D. X 1.00" WIDTH	62		
23	11893	BEARING - 1.5" I.D. X 9/16" WIDTH	63		
24	18542	BOOT -MOTOR TERMINAL	64		
25	18541	PIN ASSY - 3/4" O.D. X 3-1/2" LONG - BOOM ELEVATION	65		
26	12534-8	BUSHING - 1" I.D. X 1-1/2" O.D. X 14 GA	66		
27	12534-9	BUSHING - 1" I.D. X 1-1/2" O.D. X 18 GA	67		
28	-	-	68		
29	19646	SHEAVE WITH BRONZE BUSHING	69		
30	-	-	70		
31	13168-2	SLEEVE	71		
32	!HHCS06311175	HEX HEAD CAPS SCREW - 5/8"-11 X 1-3/4" LONG	72		
33	!JNUT-06311N	JAM LOCK NUT - 5/8"-11	73		
34	!RPIN-016125	ROLL PIN - 5/32" X 1-1/4"	74		
35	!HHCS03816300	HEX HEAD CAPS SCREW - 3/8-16 X 3.00" LONG	75		
36	!HHCS03816150	HEX HEAD CAPS SCREW - 3/8-16 X 1.50" LONG (3PLCS)	76		
37	!RPIN-019125	ROLL PIN - 3/16" X 1-1/4"	77		
38	!RPIN-031125	ROLL PIN - 5/16" X 1-1/4"	78		
39	!HHCS03816100	HEX HEAD CAPS SCREW - 3/8-16 X 1.00" LONG	79		
40	_	-	80		

REFERENCE 19711 FOR REPLACEMENT PARTS DRAWING



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO



ENTURO	MANUFACTURING, INC. CINCINNATI, OHIO
	CINCINNATI, OFIIO

WIRING KIT / DIAGRAM	1-13-03E	C400
CT2003/4/5(FB), DT7K	1-10-03D	19591

ITEM	QTY	PART NO	DESCRIPTION
1	1	19591	WIRING KIT
2	1	12102-R	SOCKET 4 POLE LESS GROUND SCREW HOLE
3	2	15831C	CONTACTOR
4	1	16634	CONTACTOR COVER
5	1	1181	BUSS BAR
6	2	16637	GROMMET - 5/8" I.D. X 7/8" O.D. X 1/16" GROOVE
7	1	!HHCS03118075-B	HEX HEAD CAP SCREW - 5/16"-18 X 3/4" LG BRASS
8	1	!HNUT-03118-B	HEX NUT - 5/16"-18 BRASS
9	1	!LWSH-031	LOCKWASHER - 5/16"
10	1	15398	DECAL - UNPLUG PENDANT
11	2	18542	BOOT - MOTOR TERMINAL
12	2	!HNUT15195-1420	U-NUT - 1/4"-20
13	1	14858-1	PLUG - 7/8"
14	2	!PHCS02520063	PAN HEAD CAP SCREW - 1/4"-20 X 5/8"
15	2	!HWHS02520075-F	HEX WASHER HEAD - 1/4"-20 X 3/4" SELF TAPPING
16	1	!LWSH-025	LOCKWASHER - 1/4"
17	1	!HNUT-02520	HEX NUT - 1/4"-20

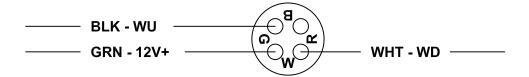
REPLACES 16635

WIRING SCHEMATIC REF 19591

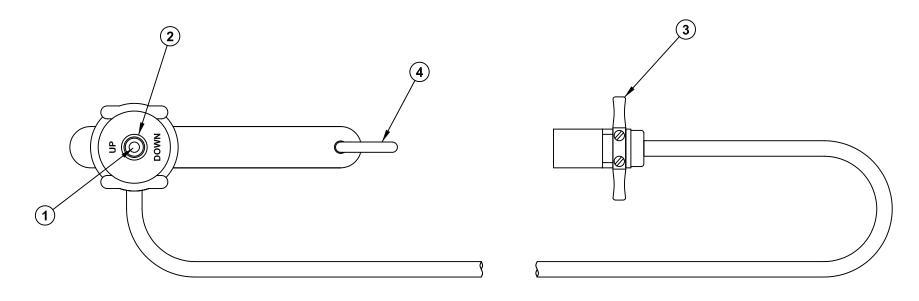


CONTACTOR ASSEMBLY	10-6-99C	SECTION
CT/DT CRANES	3-5-99B	19590

19797 SINGLE SWITCH PENDANT



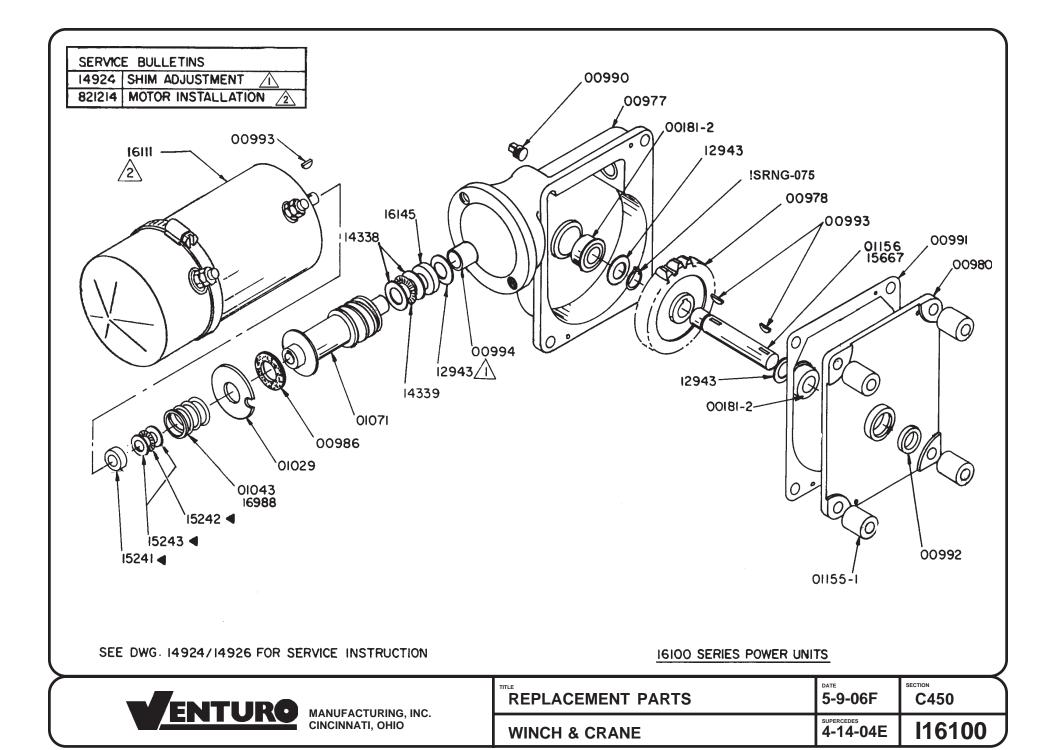
PLUG - BACKSIDE VIEW



4	1	1 19794	D-RING
3	1	1 12102-2	PLUG - 4 POLE
2	1	1 19793	TOGGLE BOOT
1	1	1 13763	TOGGLE SWITCH
ITEM	QTY	TY PART NO.	DESCRIPTION



REPL. PARTS DWG.	7-14-99	SECTION C400
1 FUNCTION CRANES	SUPERSEDES	19795



REPLACEMENT PARTS LIST - 16100 ELECTRIC POWER UNIT

MODEL(S): ET5500MPB, ET6KM, ET6KR

PART NO.	DESCRIPTION
16101 16102 16105 16105-1 16106 16107	POWER UNIT - LONG SHAFT - ET5500R WINCH POWER UNIT - SHORT SHAFT - ET5500R ROTATION POWER UNIT - LONG SHAFT - CA 2000, CT 2003, WA/SL 3000 (WITH SPACERS) POWER UNIT - LONG SHAFT - CA 2000, CT 2003/4/5(FB), WA/SL 3000 (WITHOUT SPACERS) POWER UNIT - LONG SHAFT A POWER UNIT - SHORT SHAFT - ET5500R ROTATION
00181-2 00977 00978 00980 * 00986	FLANGE BEARING - 3/4" BORE x 1 3/4" O.D. GEAR CASE (INCLUDES 00994 BUSHING) WORM GEAR BASE PLATE (00980-1) & INSERT (00980-2) ASSEMBLY BRAKE DISC
* !SRNG-075 00990 * 00991 * 00992 \triangle * 00993	RETAINING RING - 3/4" OIL PLUG - 1/4" PIPE GASKET OIL SEAL KEY - #9 WOODRUFF
00994 01029 01043	BUSHING BRAKE PLATE BRAKE SPRING (16102 & 16107 ROTATION POWER UNIT ONLY) WORM SHAFT SPACER (16105 ONLY)
01156 * 12943-1 △ * 12943-2 △ * 12943-3 △ 14338	WORM GEAR SHAFT - 3/4" x 5 3/16" LONG (16105 & 16106 ONLY) SHIM WASHER005" THICK (AS REQUIRED) SHIM WASHER015" THICK (AS REQUIRED) SHIM WASHER030" THICK (AS REQUIRED) NEEDLE THRUST RACE 3/4" I.D.
14339 15241 15242 15243 15667	NEEDLE THRUST BEARING 3/4" I.D. SPACER (INSTALL NEXT TO MOTOR) ▲ NEEDLE THRUST BEARING 5/8" I.D. NEEDLE THRUST RACE .092" x 5/8" I.D. WORM GEAR SHAFT - 3/4" x 4 3/16" LONG (16102 & 16107 ONLY)
16111 <u>▲</u> 16145 16988 <u>▲</u>	MOTOR - 12 VOLT 4 1/2" DIAMETER SPACER BRAKE SPRING (16101, 16105 & 16106 WINCH POWER UNITS ONLY)
14889 15290	MOTOR REPAIR KIT SMALL PARTS KIT (INCLUDES ITEMS MARKED *)
15667 16111	WORM GEAR SHAFT - 3/4" x 4 3/16" LONG (16102 & 16107 ONLY) MOTOR - 12 VOLT 4 1/2" DIAMETER SPACER BRAKE SPRING (16101, 16105 & 16106 WINCH POWER UNITS ONLY) MOTOR REPAIR KIT



AVAILABLE ONLY AS PART OF 15290 SMALL PARTS KIT



16101 POWER UNIT REPLACED BY 16106 POWER UNIT 16102 POWER UNIT REPLACED BY 16107 POWER UNIT



🖄 REPLACE 30E & 16100 POWER UNITS AS FOLLOWS:

16105 REPLACES 11497

16106 REPLACES 11497NS & 16101

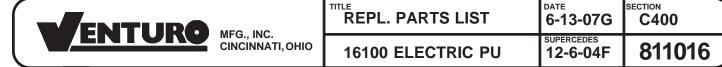
16107 REPLACES 16102



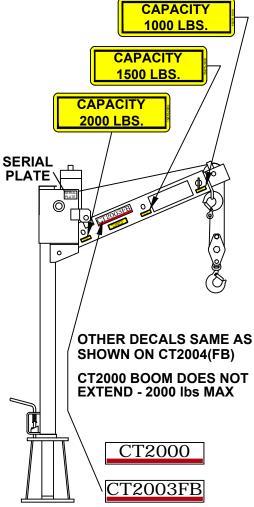
4 16111 MOTOR REPLACES 01024 E & F & 16112 MOTORS ON ALL 30E & 16100 SERIES POWER UNITS



16988 BRAKE SPRING REPLACES 01043 BRAKE SPRING ON 16101, 16105 & 16106 WINCH POWER UNITS ONLY









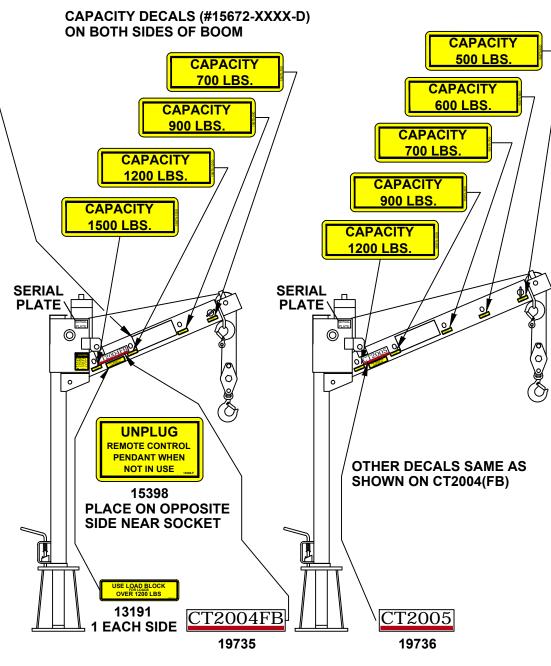
15390
PLACE ON BOTTOM RIGHT
OF RIGHTSIDE OF MECH



15391
PLACE ON BOTTOM LEFT
OF CONTACTOR BOX



15392
PLACE ON BOTTOM LEFT
OF BACKSIDE OF MECH





19734

DECAL PLACEMENT	03-01-19D	C150
CT2000/3/4/5 & CT2003/4FB CRANES	SUPERSEDES 07-27-12C	16176

CT2003FB

15545-3 FIELD SERVICE LABEL KIT

ITEM	PART NUMBER	QTY	DESCRIPTION
I I CIVI		QII	
1	11917-4	1	DECAL; VOLTAGE IDENTIFICATION
2 3	- 14793	-	- DECAL CONTROL IDENTIFICATION:
3	-2	*1	DECAL; CONTROL IDENTIFICATION: AC MODELS ONLY, SQUARE-FACED CONTROLLERS
	-3	*1	STANDARD MODELS, ROUND-FACED CONTROLLERS
4		2	
5	17389-4 15672		DECAL; VENTURO LOGO, SMALL DECAL; CAPACITY:
	-1000	2	1000 LBS.
	-1500	2	1500 LBS.
	-2000	2	2000 LBS.
6	19734	2	DECAL; MODEL, CT2003FB
7	15397	1	KIT; ACCIDENT PREVENTION SIGNS
8	16176	1	IDWG; DECAL APPLICATIONS
▲ 9	13191-12	2	DECAL; OPERATING INSTRUCTIONS (LOAD BLOCK)
10	-	-	-
11	-	-	-
12	-	-	-
13	-	-	-
14 15	-	-	- -
	_	_	
16	-	-	-
17 18	_	_	- -
19	_	_	-
20	_	_	-
21	-	-	_
22	-	-	_
23	-	-	-
24	-	-	-
25	-	-	-
26	-	-	-
27	-	-	-
28	-	-	-
29	-	-	-
30	-	-	-

^{* 14793-2} IS USED FOR HEAVY DUTY APPLICATIONS (AC) ONLY - OMIT DECAL 14793-3. * 14793-3 IS USED FOR STANDARD APPLICATIONS ONLY - OMIT DECAL 14793-2.

ENTURO	3)	١
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TITLE	DATE	SECTION
FIELD SRVC LABEL KIT	07-03-14E	-
	SUPERSEDES	455450
CT2003FB	04-23-13D	15545-3

CT2004FB 15545-4 FIELD SERVICE LABEL KIT

ITEM	PART NUMBER	BER QTY DESCRIPTION		
I I E IVI		QII		
1	11917-4	1	DECAL; VOLTAGE IDENTIFICATION	
2 3	- 14793	-	- DECAL: CONTROL IDENTIFICATION:	
3	-2	*1	DECAL; CONTROL IDENTIFICATION: AC MODELS ONLY, SQUARE-FACED CONTROLLERS	
	-3	*1	STANDARD MODELS, ROUND-FACED CONTROLLERS	
4	17389-4	2	DECAL; VENTURO LOGO, SMALL	
5	15672		DECAL; CAPACITY:	
	-700	2	700 LBS.	
	-900	2	900 LBS.	
	-1200	2	1200 LBS.	
	-1500	2	1500 LBS.	
6	19735	2	DECAL; MODEL, CT2004FB	
7	15397	1	KIT; ACCIDENT PREVENTION SIGNS	
8	16176	1	IDWG; DECAL APPLICATIONS	
4 9	13191-12	2	DECAL; OPERATING INSTRUCTIONS (LOAD BLOCK)	
10	-	-	-	
11	-	-	-	
12	-	-	-	
13 14	- -	_		
15 16	-	-	-	
17	_	_	_	
18	_	_	_	
19	-	-		
20	-	-	-	
21	-	-		
22	-	-		
23	-	-	-	
24	-	-	-	
25	-	-		
26	-	-	-	
27	-	-	-	
28	-	-	-	
29	-	-	-	

 $^{^{\}ast}$ 14793-2 IS USED FOR HEAVY DUTY APPLICATIONS (AC) ONLY - OMIT DECAL 14793-3.

^{* 14793-3} IS USED FOR STANDARD APPLICATIONS ONLY - OMIT DECAL 14793-2.

	CT2004FB	04-23-13D	15545-4
		SUPERSEDES	4 4 - 4
2	FIELD SRVC LABEL KIT	07-03-14E	-
	TITLE	DATE	SECTION

USER NOTES			
-			
			_
	LIGER NOTES	DATE	PAGE _
® VENCO VENTURO INDUSTRIES LLC	USER NOTES	02-23-16	_



INSTALLATION MANUALS	SUPERSEDES	25431
USER NOTES	02-23-16	-
	DATE	PAGE

USER NOTES			
-			
			_
	LIGER NOTES	DATE	PAGE _
® VENCO VENTURO INDUSTRIES LLC	USER NOTES	02-23-16	_



INSTALLATION MANUALS	SUPERSEDES	25431
USER NOTES	02-23-16	-
	DATE	PAGE

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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