

# **VENTURO**

## **OWNER'S MANUAL**

INST-23530

**CT2003/4 SERIES**

# **PARTS & INSTALLATION MANUAL**

---

# **CT2003/4 SERIES**

---

Included in this manual:

### **CT2003/4 SERIES**

- Electric Mast Crane
- 3 or 4 ft Folding Boom

VENCO VENTURO INDUSTRIES LLC  
12110 BEST PLACE | CINCINNATI, OHIO 45241  
800-226-2238



This manual also available online at [www.venturo.com](http://www.venturo.com).



# CT2003/4 SERIES

INST-23530 - 4/28/2026 (Rev: NEW2)

7607100A	SECTION 100: DESCRIPTION & SPECIFICATIONS
18580	INSTALLATION - CT2003FB
18581	INSTALLATION - CT2004FB
19481	INSTALLATION DRAWING - CT2003/4/5 MAX CUTDOWN
18585	INSTALLATION - 13171 & 13172 SOCKETS
7607150A	SECTION 150: SAFETY
870701	CRANE SAFETY AND HAZARDS - CA, CE, CT, & DT
21353	SAFETY DECALS DRAWING & LIST
21384	SAFETY DECALS DRAWING & LIST
21366	SAFETY DECALS DRAWING & LIST
21367	MODEL & CAPACITY DECALS DRAWING & LIST - CT2003FB
21368	MODEL & CAPACITY DECALS DRAWING & LIST - CT2004FB
7607200A	SECTION 200: INSTALLATION
870702	OPERATING INSTRUCTIONS - CA, CE, CT, & DT
711105	CABLE & BATTERY REQUIREMENTS
15660	BATTERY CABLE & COMPONENT INSTALL
711006	WIRE ROPE SPECIFICATIONS
7607400A	SECTION 400: REPLACEMENT PARTS
19711	REPLACEMENT PARTS DRAWING - CT2003/4/5
20985	REPLACEMENT PARTS LIST - CT2003/4/5
19591	WIRING KIT & DIAGRAM - CT2003/4/5 & DT7K
19590I	CONTACTOR ASSY - CT/DT
19795	REPL PARTS DWG & LIST - 19797 SINGLE SWITCH PENDANT
I16100	REPLACEMENT PARTS DRAWING - 16100 SERIES POWER UNIT
811016	REPLACEMENT PARTS LIST - 16100 SERIES POWER UNIT
16176	DECAL PLACEMENT
15545-3	FIELD SERVICE LABEL KIT - CT2003FB
15545-4	FIELD SERVICE LABEL KIT - CT2004FB
25431	USER NOTES
25431	USER NOTES
12-00073_VNT1	WARRANTY PAGE



**SECTION 100**

**DESCRIPTION**

**&**

**SPECIFICATIONS**



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

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

**SWIVEL SNATCH BLOCK REQUIRED FOR LOADS OVER 1200 LBS.**

**3/16" DIA WIRE ROPE  
35 FT**

**PLUG IN  
PENDANT CONTROL  
WITH 15 FT  
STRAIGHT CORD**

**SWIVEL LOCK  
306° ROTATION  
POSITIVE LOCK  
IN 8 POSITIONS**

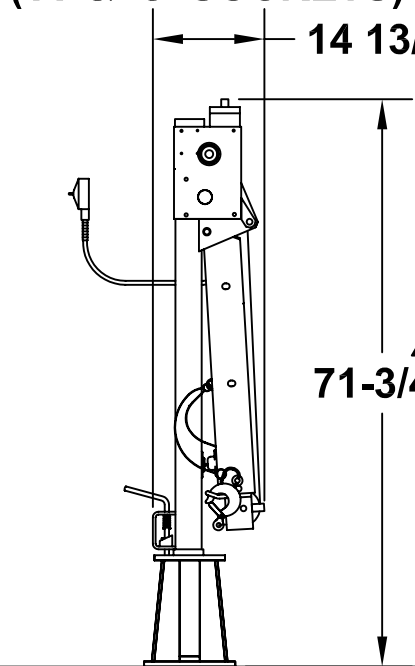
**'C' SOCKET**

**TRUCK BED**

**BOOM IN FOLDED  
POSITION  
( 'A' & 'C' SOCKETS )**

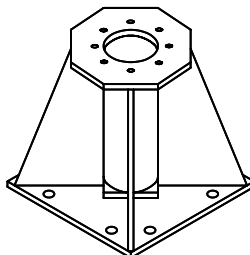
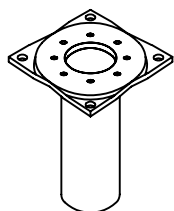
**14 13/16**

**71-3/4"**

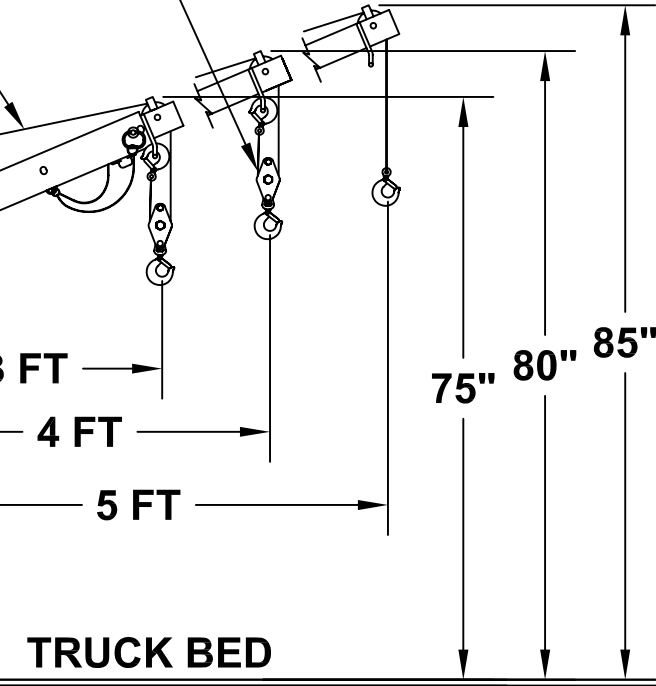


**'A' SOCKET**

**'C' SOCKET**



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



PERFORMANCE CHARACTERISTICS			
BOOM POSITION	LOAD CAPACITY	PART LINE	LIFTING SPEED 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.**



MANUFACTURING, INC.  
CINCINNATI, OHIO

TITLE  
**INSTALLATION DRAWING**

**CT2003 FB CRANE**

DATE  
**11-21-00A**

SUPERSEDES  
**12-12-97**

SECTION  
**C100**

**18580**

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

**SWIVEL SNATCH BLOCK REQUIRED FOR LOADS OVER 1200 LBS.**

**3/16" DIA WIRE ROPE  
35 FT**

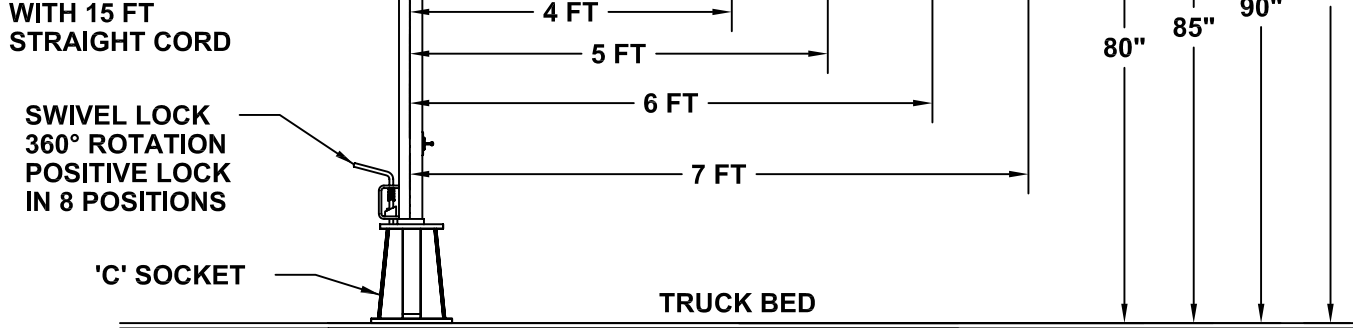
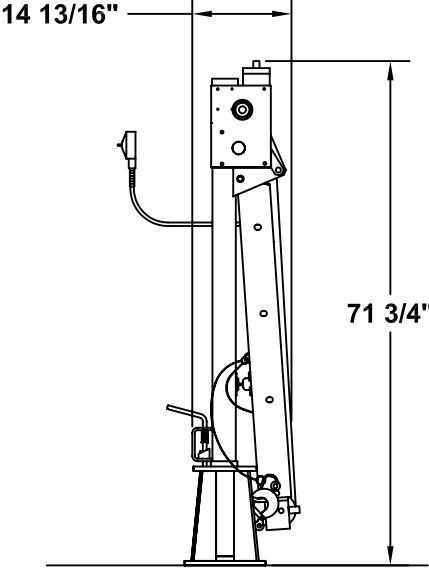
**PLUG IN  
PENDANT CONTROL  
WITH 15 FT  
STRAIGHT CORD**

**SWIVEL LOCK  
360° ROTATION  
POSITIVE LOCK  
IN 8 POSITIONS**

**'C' SOCKET**

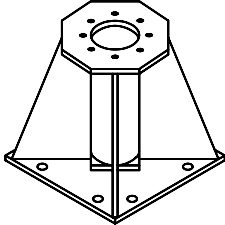
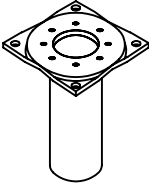
**TRUCK BED**

**BOOM IN FOLDED  
POSITION  
( 'C' SOCKET ONLY)**



**'A' SOCKET**

**'C' SOCKET**



**BOOM WILL NOT FOLD  
WITH 'A' 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.**



MANUFACTURING, INC.  
CINCINNATI, OHIO

TITLE  
**INSTALLATION DRAWING**

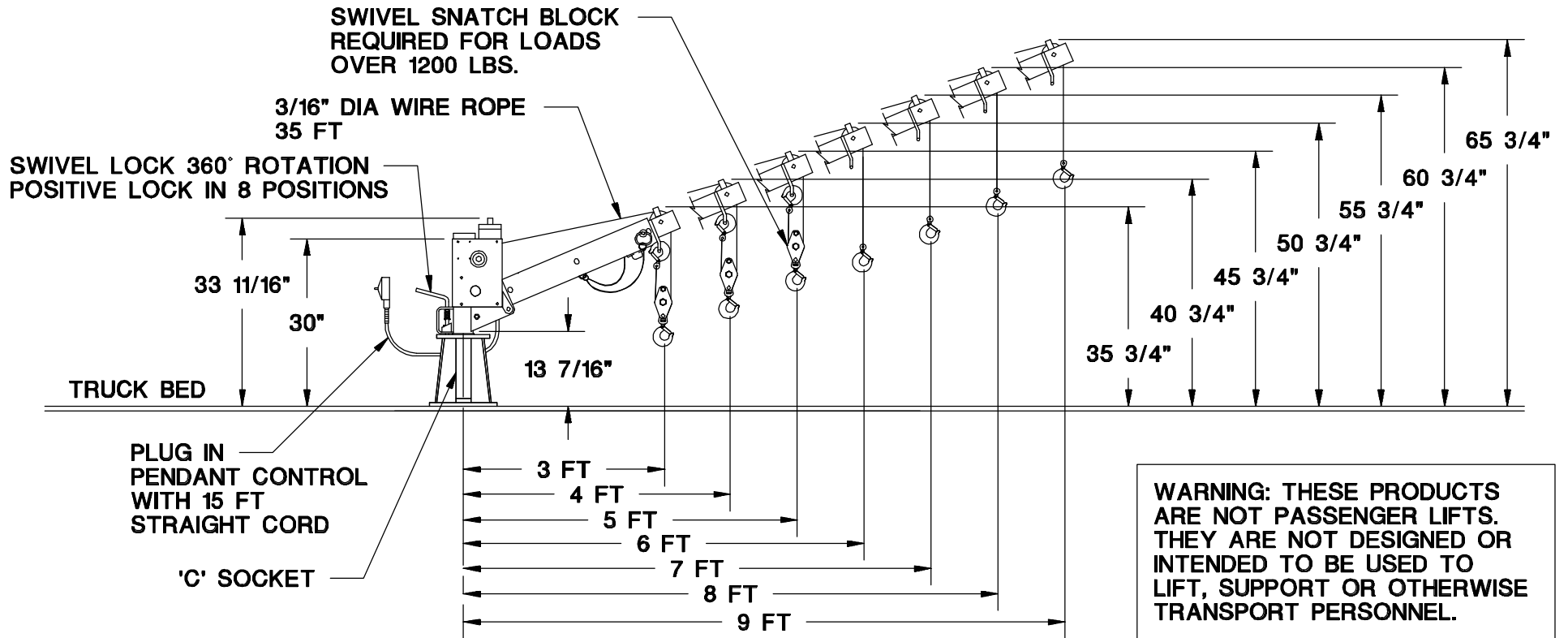
**CT2004 FB CRANE**

DATE  
**11-21-00A**

SUPERSEDES  
**12-12-97**

SECTION  
**C100**

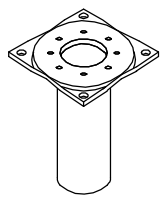
**18581**



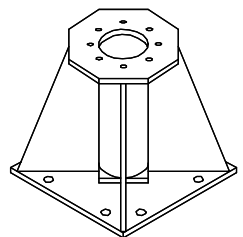
**WARNING: THESE PRODUCTS ARE NOT PASSENGER LIFTS. THEY ARE NOT DESIGNED OR INTENDED TO BE USED TO LIFT, SUPPORT OR OTHERWISE TRANSPORT PERSONNEL.**

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

**'A' SOCKET**



**'C' SOCKET**



**BOOM WILL NOT FOLD WITH 'A' OR 'C' SOCKETS**

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 APPROX. 39" LESS THAN STANDARD CTFB CRANES.
- HEIGHT DIMENSIONS ARE FOR C-SOCKET MODELS
- DEDUCT 12 1/2" FROM HEIGHT DIMENSIONS FOR A-SOCKET MODELS



TITLE <b>INSTALLATION DRAWING</b>	DATE <b>4-16-98</b>	SECTION <b>C100</b>
<b>CT2003/4/5FB-S - MAX CUTDOWN</b>	SUPERSEDES <b>-</b>	<b>19481</b>

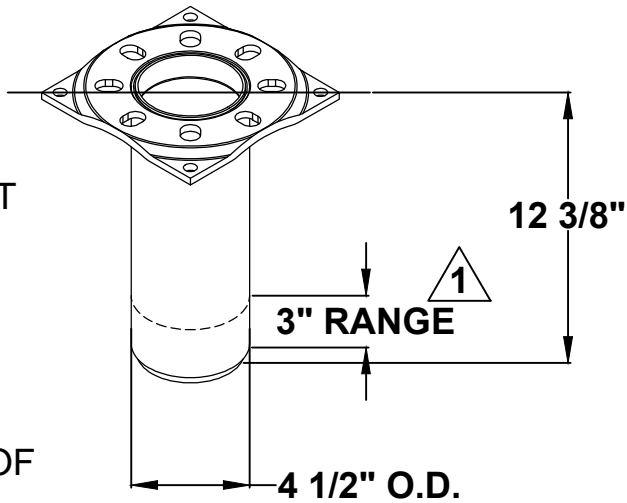
# TYPE 'A' SOCKET (13171)

## RECESS MOUNTING

WEIGHT 18 LBS.

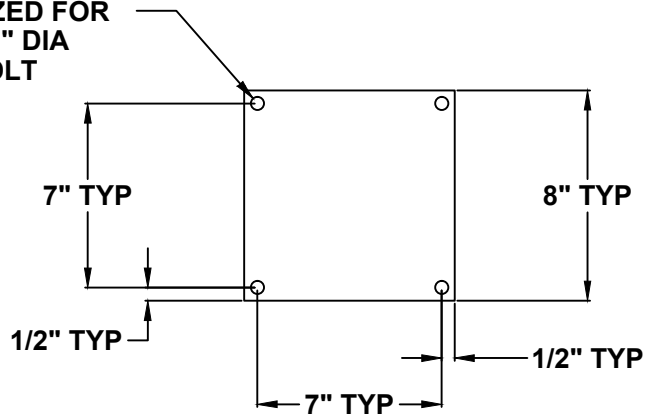
1

IMPORTANT:  
THE TUBE OF  
THE 'A' SOCKET  
MUST BE  
REINFORCED  
("TIED" TO THE  
TRUCK BODY)  
WITHIN 3" OF  
THE BOTTOM OF  
THE TUBE.



### MOUNTING DIMENSIONS

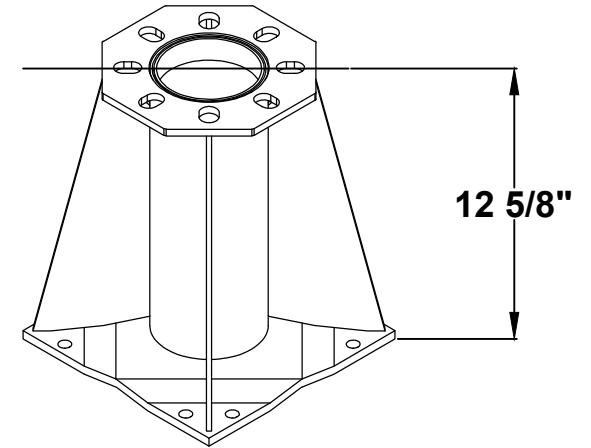
SIZED FOR  
1/2" DIA  
BOLT



# TYPE 'C' SOCKET (13172)

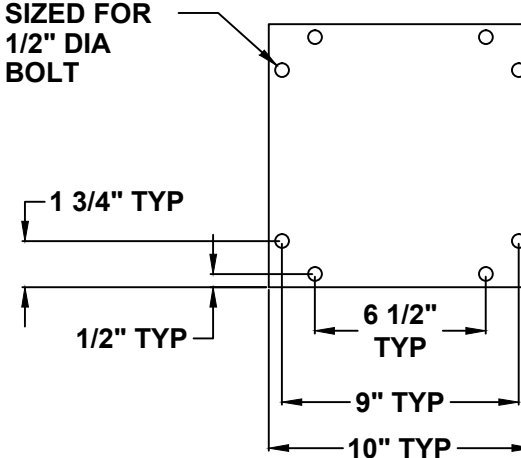
## SURFACE MOUNTING

WEIGHT 36 LBS.



### MOUNTING DIMENSIONS

SIZED FOR  
1/2" DIA  
BOLT



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
INSTALLATION DRAWING

13171 & 13172 SOCKETS

DATE  
02-06-19C

SUPERSEDES  
05-03-99B

SECTION  
C100

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

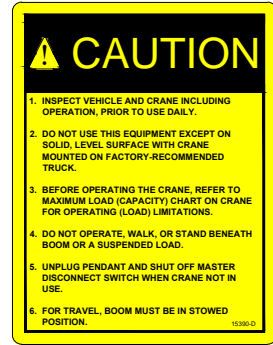
1. YOU HAVE BEEN TRAINED IN THE SAFE OPERATION OF THIS CRANE  
*AND*
2. YOU KNOW AND FOLLOW THE SAFETY AND OPERATING RECOMMENDATIONS CONTAINED IN THE MANUFACTURER'S MANUALS, YOUR EMPLOYER'S WORK RULES, AND APPLICABLE GOVERNMENT REGULATIONS. AN UNTRAINED OPERATOR SUBJECTS HIMSELF AND OTHERS TO DEATH OR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



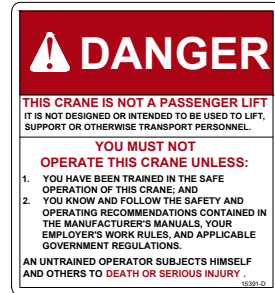
MFG., INC.  
CINCINNATI, OHIO

TITLE	INSTALLATION DWG	DATE	3-2-99C	SECTION	C150
	CA, CE, CT, AND DT	SUPERCEDES	10-17-97B		870701

DECAL #: 15390  
 DESCRIPTION: CAUTION, INSPECT VEHICLE & CRANE...  
 PURPOSE: TO INFORM THE OPERATOR OF KEY OPERATING REQUIREMENTS.  
 QUANTITY: 1  
 PLACEMENT: REAR COVER OR SIDE OF CRANE



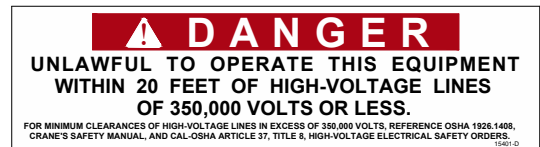
DECAL #: 15391  
 DESCRIPTION: DANGER, NOT A PASSENGER LIFT  
 PURPOSE: TO INFORM OPERATOR NOT TO LIFT, SUPPORT, OR TRANSPORT PERSONNEL, AND TO ENSURE OPERATOR IS ADEQUATELY TRAINED.  
 QUANTITY: 1  
 PLACEMENT: REAR COVER OR SIDE OF CRANE



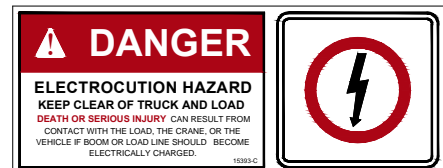
DECAL #: 15392  
 DESCRIPTION: DANGER, ELECTROCUTION HAZARD, MACHINE (CRANE)  
 PURPOSE: TO INFORM OPERATOR THAT MACHINE (CRANE) REPRESENTS AN ELECTROCUTION HAZARD SHOULD IT COME CLOSE TO OR IN CONTACT WITH AN ELECTRICAL VOLTAGE SOURCE.  
 QUANTITY: 1  
 PLACEMENT: REAR COVER OR SIDE OF CRANE



DECAL #: 15401  
 DESCRIPTION: DANGER, UNLAWFUL TO OPERATE  
 PURPOSE: TO INFORM OPERATOR OF PROPER OPERATION IN VICINITY OF ELECTRICAL LINES.  
 QUANTITY: 1  
 PLACEMENT: RING COVER OR SIDE OF CRANE



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



VENCO VENTURO INDUSTRIES LLC  
 CINCINNATI, OHIO

TITLE  
 SAFETY DECALS

VENTURO CRANES

DATE  
 04-29-16E

SUPERSEDES  
 10-24-13D

SECTION  
 C150

21353

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.



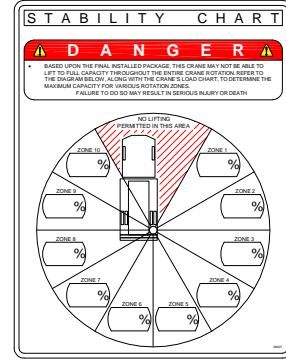
PART NO.: 20927

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.



▲



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE	DATE	SECTION
SAFETY DECALS	06-06-14C	C150
CRANES	SUPERSEDES 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.



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.



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.



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.



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.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
MODEL & CAPACITY DECALS

DATE  
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: 2  
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: 2  
PLACEMENT: One on each side of boom.



DECAL #: 15672-900  
DESCRIPTION: CAPACITY 900LBS  
PURPOSE: To show the operator the capacity at 6 foot boom length.  
QUANTITY: 2  
PLACEMENT: One on each side of boom.



DECAL #: 15672-1200  
DESCRIPTION: CAPACITY 1200LBS  
PURPOSE: To show the operator the capacity at 5 foot boom length.  
QUANTITY: 2  
PLACEMENT: One on each side of boom.



DECAL #: 15672-1500  
DESCRIPTION: CAPACITY 1500LBS  
PURPOSE: To show the operator the capacity at 4 foot boom length.  
QUANTITY: 2  
PLACEMENT: One on each side of boom.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
MODEL & CAPACITY DECALS

DATE  
03-04-19A

SECTION  
C150

CT2004FB

SUPERSEDES  
09-13-05

21368

# SECTION 200

# INSTALLATION



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

# 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 permanently 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.



TITLE	INSTALLATION DWG	DATE	8-01-01C	SECTION	C200
	CA, CE, CT, & DT	SUPERCEDES	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			450	100
ET8KX ET10KX ET12KX ▲ ET12KXP	#2	#2	#1	#0	#00	NOT RECOMMENDED			550	150
ET18K(X) ET25K(X) ET30KX ET36KX	SEE DRAWING 15660 FOR CABLE AND BATTERY REQUIREMENTS									

\* 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.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
CABLE & BATTERY

DATE  
07-30-18X

SECTION  
C200

ELECTRIC CRANES

SUPERSEDES  
09-27-17W

711105

**RECOMMENDED CIRCUIT BREAKER TABLE**

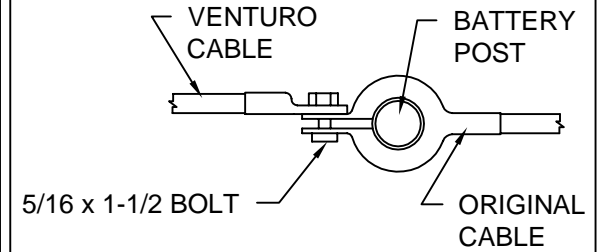
CRANE	DESCRIPTION	PART NO.
CT310KX	250 AMP, MAN RESET	22946-250
DT7	250 AMP, MAN RESET	22946-250
CE-1500-FB	150 AMP, MAN RESET	22946-150
CE6K	150 AMP, MAN RESET	22946-150
CT200X	250 AMP, MAN RESET	22946-250
ET6K	250 AMP, MAN RESET	22946-250
ET8/12K(X)	250 AMP, MAN RESET	22946-250
ET12KXP	300 AMP, MAN 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**

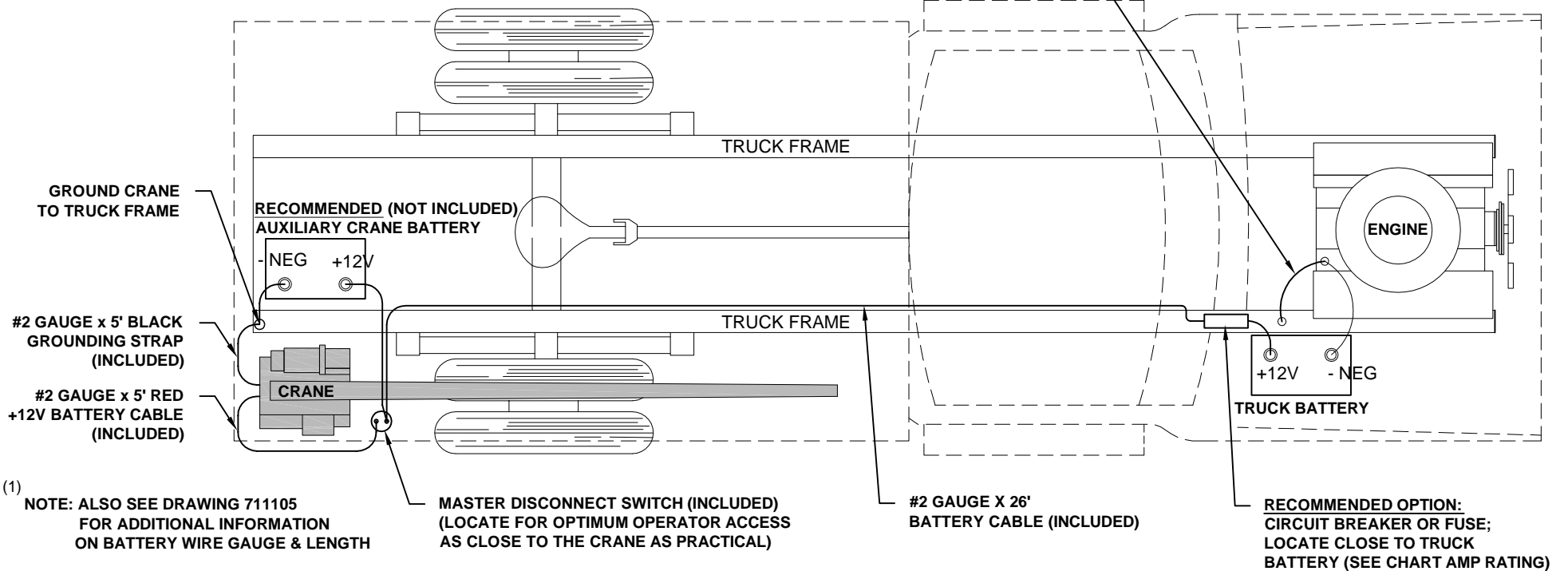
- 12 VOLT VEHICLE BATTERY REQUIREMENTS
  - 625 COLD CRANKING AMPS (AT 0° F)
  - 160 MINUTES RESERVE CAPACITY
  - 102 PLATES, 105 AMP-HR
- (1) ● 12 VOLT AUXILIARY BATTERY REQUIREMENTS
  - SEE MINIMUM WIRE GAUGE AND BATTERY SIZE

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

**RECOMMENDED BATTERY TERMINAL ATTACHMENT**



**INSTALL #2 GAUGE GROUND STRAP FROM ENGINE TO TRUCK FRAME (REQUIRED IF NEGATIVE FROM BATTERY IS CONNECTED TO ENGINE)**



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE

**BATTERY CABLE & COMPONENT INSTALL**

**ET CRANES**

DATE

09-03-20M

SUPSEDES

07-30-18L

SECTION

**C200**

**15660**

# ▲ WIRE ROPE SPECIFICATIONS

## SELECTION

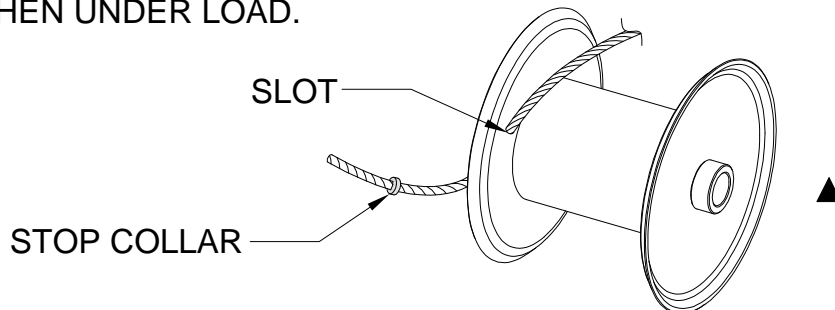
The chart below shows the maximum working load and breaking strength of 7 x 19 Galvanized AIRCRAFT Grade Wire Rope in various diameters. The breaking strength is 3 ½ times the maximum working load. Do not use wire rope with a maximum working load rating less than the single line capacity of the crane. Use wire rope diameter larger than the size furnished with the crane will reduce the fatigue life of the wire rope.

▲

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

## INSTALLATION

1. Unwind coil of rope by rolling it along the floor. This will prevent kinking
2. Most VENTURO cranes are provided with a slot in the winch side plate for attaching the end of the wire rope with a stop collar. A hole in the housing allows access for the end of the wire rope when inserted thru the slot.  
The ET20K(X) & ET25K(X) cranes have a clamp built into the winch drum and do not use a stop collar.
3. THERE MUST ALWAYS BE AT LEAST THREE [3] TURNS OF WIRE ROPE ON THE DRUM WHEN UNDER LOAD.



MANUFACTURING, INC.  
CINCINNATI, OHIO

TITLE  
WIRE ROPE SPECS  
WINCH & CRANE

DATE  
12-05-13K  
SUPERSEDES  
11-10-08J

SECTION  
WC 200  
**711006**



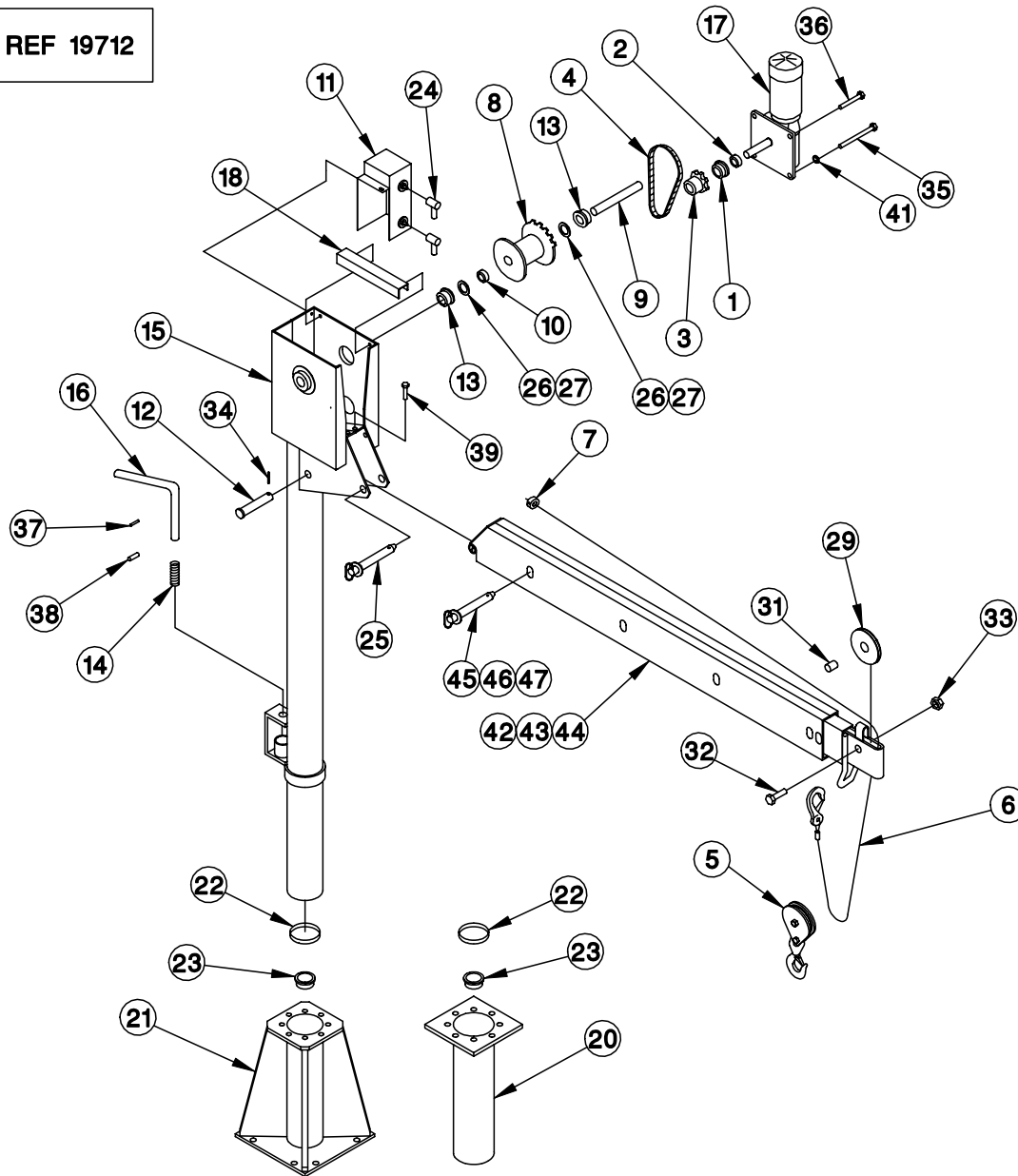
# SECTION 400

# REPLACEMENT PARTS



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

REPLACEMENT PARTS LIST REF 19712



REPLACEMENT PARTS					
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

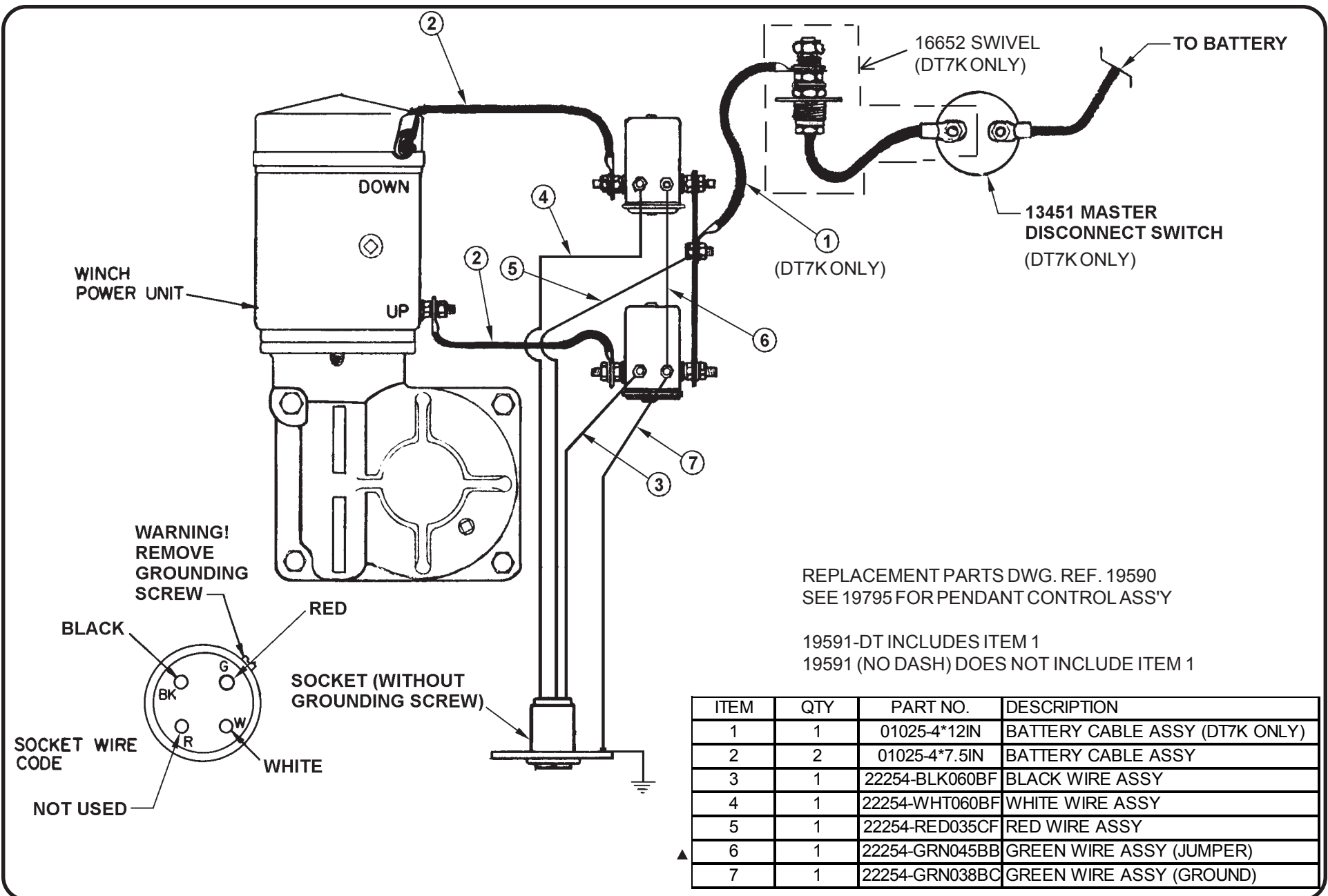


VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
**REPLACEMENT PARTS**  
  
CT2003FB/CT2004FB/CT2005FB

DATE  
**11-15-24A**  
  
SUPERSEDES  
**5-12-04**

SECTION  
**C400**  
  
**20985**



REPLACEMENT PARTS DWG. REF. 19590  
SEE 19795 FOR PENDANT CONTROL ASS'Y

19591-DT INCLUDES ITEM 1  
19591 (NO DASH) DOES NOT INCLUDE ITEM 1

ITEM	QTY	PART NO.	DESCRIPTION
1	1	01025-4*12IN	BATTERY CABLE ASSY (DT7K ONLY)
2	2	01025-4*7.5IN	BATTERY CABLE ASSY
3	1	22254-BLK060BF	BLACK WIRE ASSY
4	1	22254-WHT060BF	WHITE WIRE ASSY
5	1	22254-RED035CF	RED WIRE ASSY
6	1	22254-GRN045BB	GREEN WIRE ASSY (JUMPER)
7	1	22254-GRN038BC	GREEN WIRE ASSY (GROUND)



MANUFACTURING, INC.  
CINCINNATI, OHIO

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

# CONTACTOR BOX ASSEMBLY, 19590

PART NO.	QTY	DESCRIPTION
19591	1	WIRING KIT
12102-1	1	PLUG SOCKET
15831C	2	CONTACTOR - SPNO
16634	1	CONTACTOR COVER
01181	1	BUSS BAR
16637	2	GROMMET; 5/8" ID, 7/8" OD, 1/16" GROOVE
18542	4	BOOT; MOTOR TERMINAL
14858-1	1	PLUG - 7/8"
15398	1	DECAL; UNPLUG PENDANT
!HHCS03118063-B	1	HEX HEAD CAP SCREW; 5/16-18 X 5/8", BRASS
!HNUT-03118-B	1	HEX NUT; 5/16-18, BRASS
!LWSH-031S	1	LOCK WASHER; Ø5/16", SS
!UNUT15195-1420	2	U-NUT; 1/4-20, TNNRMN C15195-1420-4
!PHCS02520063	2	PAN HEAD CAP SCREW; 1/4-20 X 5/8", GR. 5, ZINC
!HWHS02520075-F	2	HEX WASHER HEAD SCREW; 1/4-20 X 3/4", SELF-TAP, GR. 5, ZINC
!FNUT-02520-SS	1	FLANGE NUT; 1/4-20, SS



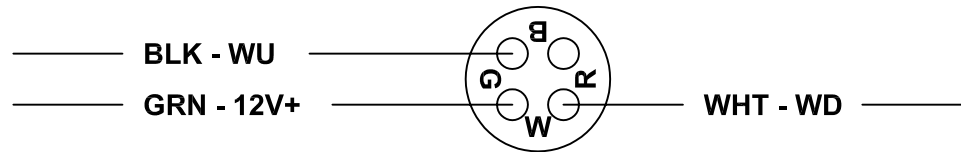
VENCO VENTURO LLC  
CINCINNATI, OHIO

TITLE  
CONTACTOR BOX ASS'Y  
CT200X SERIES CRANES

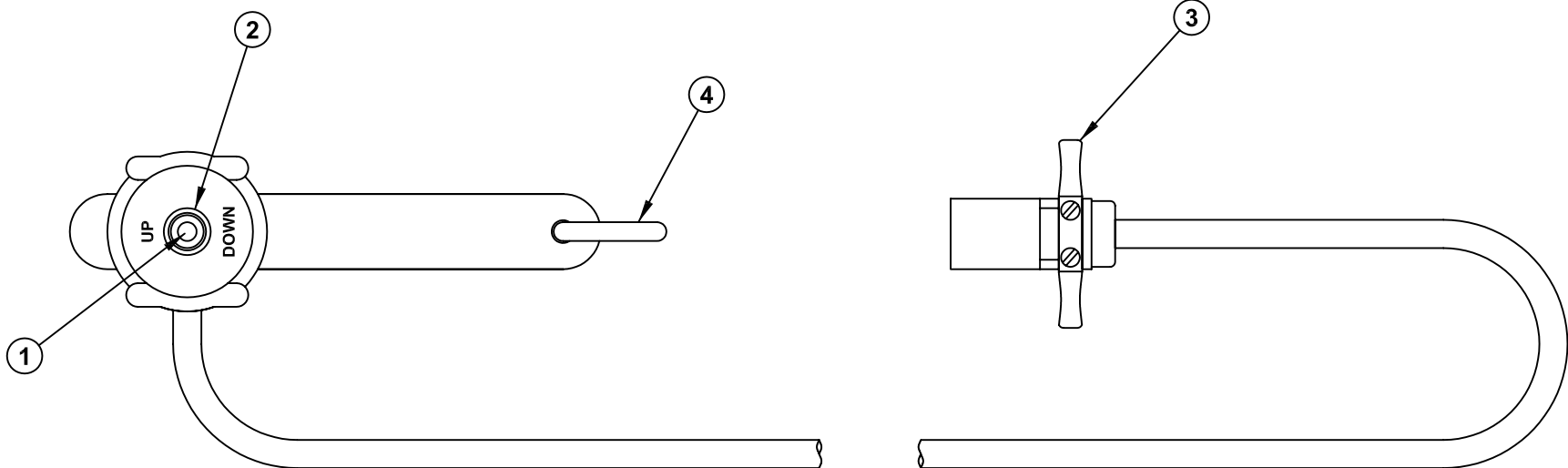
DATE  
04-27-26D  
SUPERSEDES  
10-06-99C

SECTION  
C400  
19590I

# 19797 SINGLE SWITCH PENDANT



## PLUG - BACKSIDE VIEW



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



MANUFACTURING, INC.  
CINCINNATI, OHIO

TITLE  
REPL. PARTS DWG.

1 FUNCTION CRANES

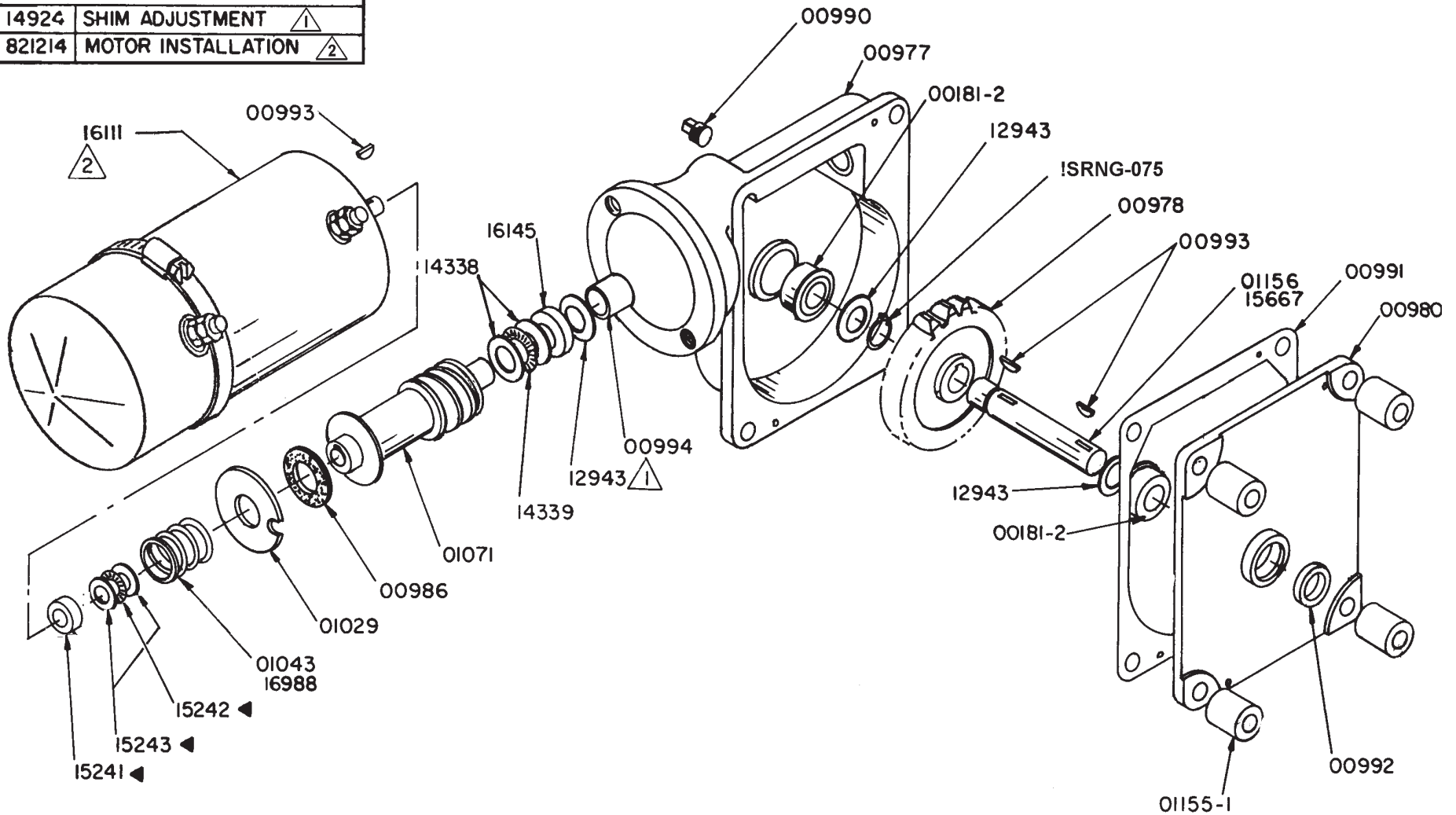
DATE  
7-14-99

SUPERSEDES  
-

SECTION  
C400

19795

SERVICE BULLETINS		
14924	SHIM ADJUSTMENT	⚠
821214	MOTOR INSTALLATION	⚠



SEE DWG. 14924/14926 FOR SERVICE INSTRUCTION

16100 SERIES POWER UNITS



MANUFACTURING, INC.  
CINCINNATI, OHIO

TITLE  
REPLACEMENT PARTS

WINCH & CRANE

DATE  
5-9-06F

SUPERCEDES  
4-14-04E

SECTION  
C450

16100

# 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 <sup>2</sup> 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 <sup>3</sup> 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
* ISRNG-075 00990 * 00991 * 00992 <sup>4</sup> * 00993	RETAINING RING - 3/4" OIL PLUG - 1/4" PIPE GASKET OIL SEAL KEY - #9 WOODRUFF
00994 01029 01043 <sup>4</sup> 01071 01155-1	BUSHING BRAKE PLATE BRAKE SPRING (16102 & 16107 ROTATION POWER UNIT ONLY) WORM SHAFT SPACER (16105 ONLY)
01156 * 12943-1 <sup>4</sup> * 12943-2 <sup>4</sup> * 12943-3 <sup>4</sup> 14338	WORM GEAR SHAFT - 3/4" x 5 3/16" LONG (16105 & 16106 ONLY) SHIM WASHER - .005" THICK (AS REQUIRED) SHIM WASHER - .015" THICK (AS REQUIRED) SHIM WASHER - .030" 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) <sup>4</sup> 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 <sup>4</sup> 16145 16988 <sup>4</sup>	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 *)

<sup>1</sup> AVAILABLE ONLY AS PART OF 15290 SMALL PARTS KIT

<sup>2</sup> 16101 POWER UNIT REPLACED BY 16106 POWER UNIT  
16102 POWER UNIT REPLACED BY 16107 POWER UNIT

<sup>3</sup> REPLACE 30E & 16100 POWER UNITS AS FOLLOWS:  
16105 REPLACES 11497  
16106 REPLACES 11497NS & 16101  
16107 REPLACES 16102

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

<sup>5</sup> 16988 BRAKE SPRING REPLACES 01043 BRAKE SPRING ON  
16101, 16105 & 16106 WINCH POWER UNITS ONLY



MFG., INC.  
CINCINNATI, OHIO

TITLE  
**REPL. PARTS LIST**

**16100 ELECTRIC PU**

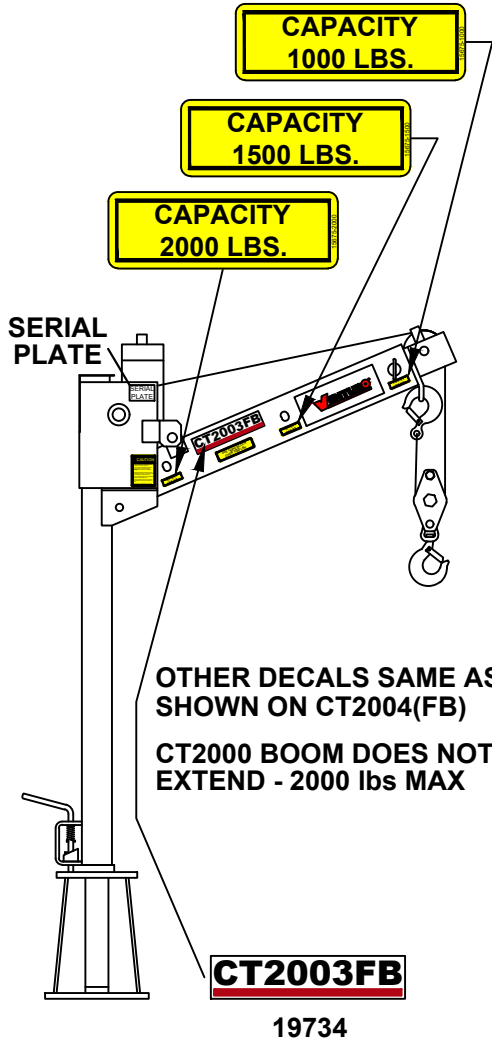
DATE  
**6-13-07G**

SUPERCEDES  
**12-6-04F**

SECTION  
**C400**

**811016**

CAPACITY DECALS (#15672-XXXX-D)  
ON BOTH SIDES OF BOOM



OTHER DECALS SAME AS SHOWN ON CT2004(FB)  
CT2000 BOOM DOES NOT EXTEND - 2000 lbs MAX

**CAUTION**

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 SHUT OFF MASTER DISCONNECT SWITCH WHEN CRANE NOT IN USE.
6. FOR TRAVEL, BOOM MUST BE IN STOWED POSITION.

15390

15390  
PLACE ON BOTTOM LEFT OF BACKSIDE MECH

**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
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 OR SUBJECTS HIMSELF AND OTHERS TO DEATH OR SERIOUS INJURY.

15391

15391  
PLACE ON BOTTOM LEFT OF CONTACTOR BOX

**UNPLUG REMOTE CONTROL PENDANT WHEN NOT IN USE**

15398

15398  
PLACE ON OPPOSITE SIDE NEAR SOCKET

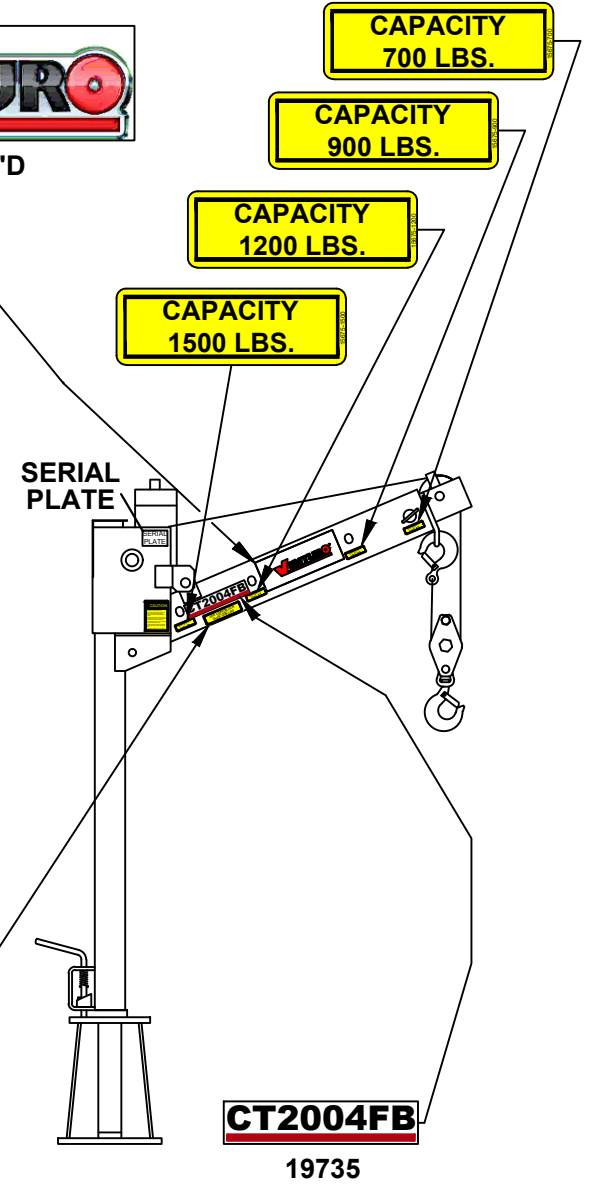


DECAL 17389-4 2 REQ'D  
1 EACH SIDE

USE LOAD BLOCK FOR LOADS OVER 1200 LBS

13191

13191  
1 EACH SIDE



CT2003FB

15545-3 FIELD SERVICE LABEL KIT

ITEM	PART NUMBER	QTY	DESCRIPTION
1	11917-4	1	DECAL; VOLTAGE IDENTIFICATION
2	-	-	-
3	14793		DECAL; CONTROL IDENTIFICATION:
	-2	*1	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:
	-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.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

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

CT2004FB

15545-4 FIELD SERVICE LABEL KIT

ITEM	PART NUMBER	QTY	DESCRIPTION
1	11917-4	1	DECAL; VOLTAGE IDENTIFICATION
2	-	-	-
3	14793		DECAL; CONTROL IDENTIFICATION:
	-2	*1	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
▲ 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	-	-	-

\* 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.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

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







## 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**  
12110 BEST PLACE | CINCINNATI, OHIO 45241  
P: 800-226-2238 | F: 513-326-5427  
[www.venturo.com](http://www.venturo.com)