

EQBAAB-*0*0

PARTS & INSTALLATION MANUAL ET36KX(P)

Included in this manual:

ET36KX(P)

- 6,000 lbs Electric Telescopic Service Crane
- 10 16 20 ft Powered, Dual-Stage, Boom Extension
- Optional Proportional Controls

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

VENCO VENTURO O INDUSTRIES LLE

INST-24378 - 6/26/2025 (Rev: NEW0)

DESCRIPTION & SPECIFICATIONS SPECIFICATIONS & OPERATING FEATURES SPECIFICATIONS & OPERATING FEATURES 7607100A 21077 21078

INSTALLATION DIMENSIONS; ET36KX(P) - DUAL-STAGE MOUNTING DIMENSIONS; BASE PLATE 24390

21080

CAPACITY CHART; ET36KX(P) W/ 10-16-20 FT. BOOM 21081

7607150A

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7607200A INSTALLATION

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21886

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21899 FIELD SERVICE LABEL KIT; ET25/30/36KX FIELD SERVICE LABEL KIT; ET25/30/36KXP

12-00073_VNT1 WARRANTY PAGE

SECTION 100

DESCRIPTION & SPECIFICATIONS



SPECIFICATIONS

12-volt battery operated

36,000 ft-lb overturning moment (or as limited by truck stability)

Moment overload shut-off system

Electric winch - 3,000 lb single-line capacity with automatic load brake

Electric-hydraulic boom elevation

Electric-hydraulic boom extension

Electric-hydraulic continuous power rotation

Corded remote control pendant

Radio remote control pendant (optional)

Master disconnect switch

Accessories (optional):

Stabilizers: 25100, 13500, 11822-2

Pedestal: 17576

Boom Rest: 20381-2

TELESCOPIC BOOM	10.7 - 20.7 ft	
BOOM ELEVATION	-5° TO 75°	
BOOM HYD EXTENSION	10 ft	
BOOM MANUAL EXT	-	
CADACITY	1800 lb @ 20.5 ft	
CAPACITY	6000 lb @ 5.5 ft	
WIRE ROPE	5/16" x 80 ft	
PENDANT CORD LENGTH	25 ft	

OVERLOAD SENSING SYSTEM

This crane is equipped with an Overload Sensing System. If the capacity of the crane is exceeded, the "Winch Up", "Boom Down", and "Boom Out" functions will be shut down. The "Winch Down", "Boom Up", and "Boom In" functions will continue to operate and can be used to relieve the overload condition. The "Rotation" function also will continue to operate.

CONTROL PRIORITY SYSTEM

The design intent of the electrical and hydraulic system is such that some functions can be operated simultaneously, while others are meant to be operated individually. To summarize the control system see the explanations below.

- Winch up takes priority over all functions.
- Winch Down can be operated with any other single function.
- Hydraulic functions (Rotation Right, Rotation Left, Boom Up, Boom Down, Boom Out and Boom In) are designed to function one at a time.

CABLE DRUM AND SHEAVE DIAMETERS

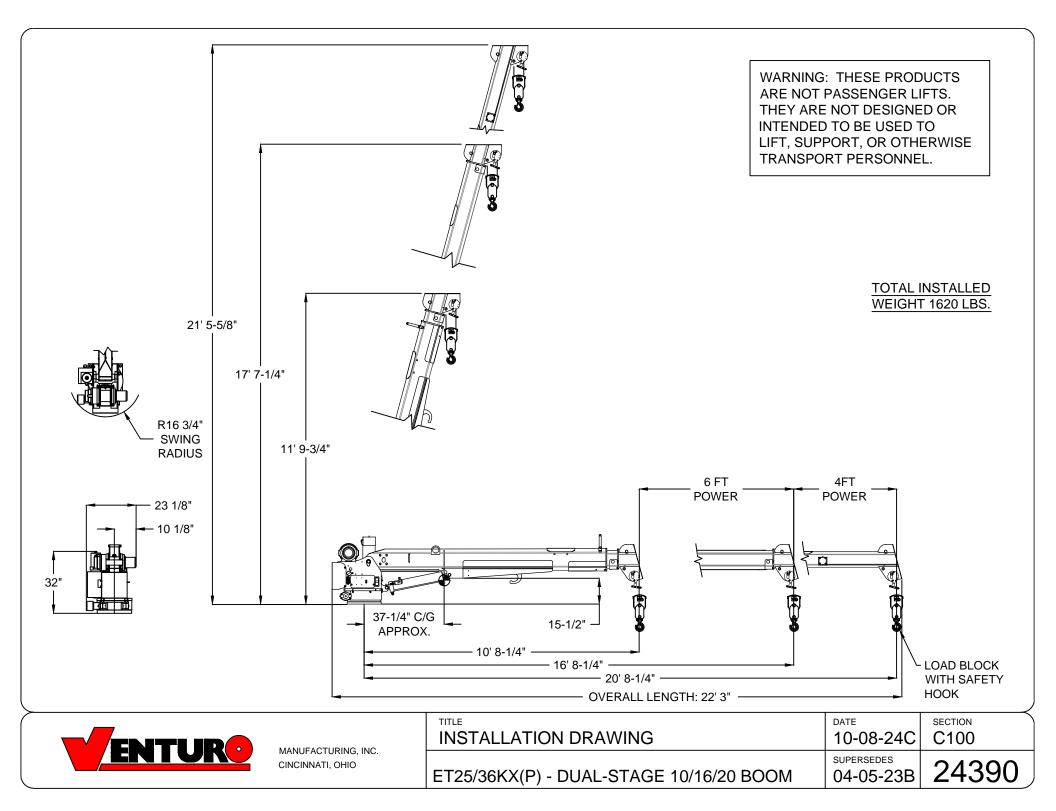
The drum on the ET36KX is 5-5/16" in diameter which provides the first layer wire rope pitch diameter 18 times the rope diameter as required by ANSI B30.5 Hydraulic Crane Standards. The cable sheaves are either 16 (snatch block) or 18 (boom) times the cable diameter which likewise conforms.

MISCELLANEOUS

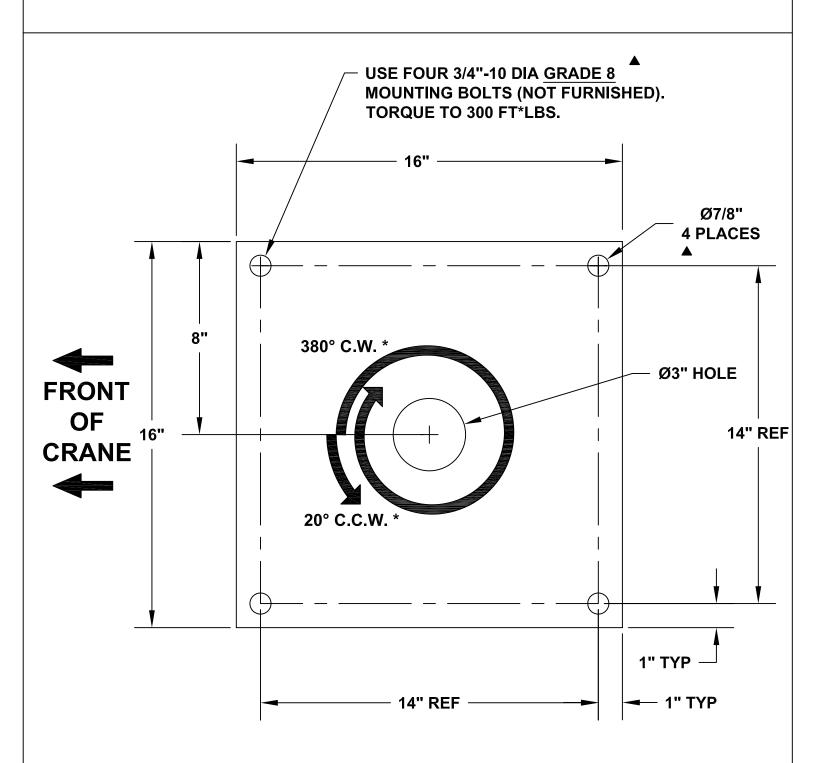
- A. CAPACITY INDICATOR
 - Select boom reach and angle allowable for load by using capacity indicator arrow and chart on either side of boom.
- B. BATTERY HOOKUP
 - A parallel auxiliary battery should be installed near the crane as shown on Dwg. 19947 under "RECOMMENDED INSTALLATION". The parallel auxiliary battery minimum rating should be 450 Cold Cranking Amps (at 0° F) and 100 reserve capacity, or 78 plates and 70 amp hours.



INSTALLATION DWG	3-18-08	C120
ET36KX-10/20	SUPERCEDES	21078



ET/HT25/30/36KX BASE MOUNTING DIMENSIONS



* Rotation limits typically apply to HT cranes only. ET cranes generally have continuous rotation.

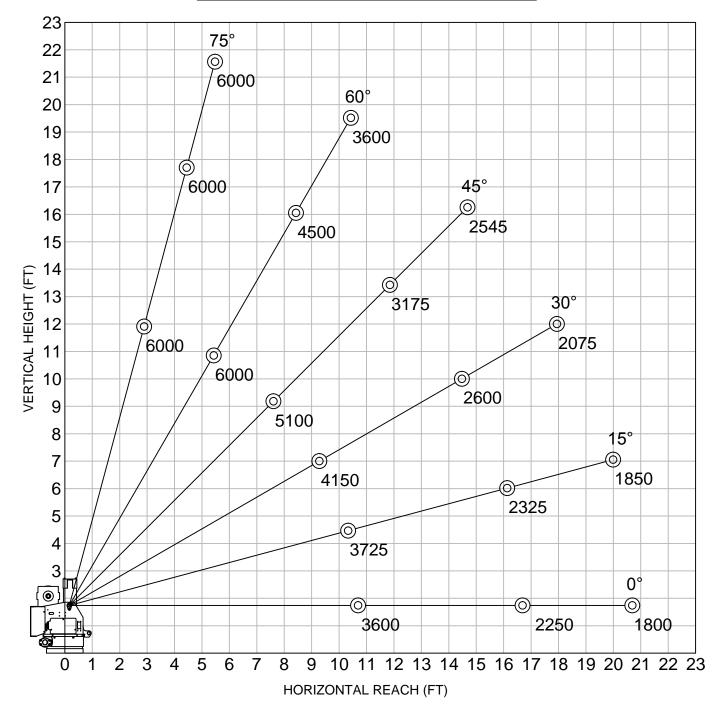


ET/HT25/30/36	12-14-11D	21080
BASE MOUNTING	02-13-12E	C100
TITLE	DATE	SECTION

ET36KX, 10'-16'-20' BOOM

▲ CRANE SERIAL NUMBER: _____

MAXIMUM LOAD CAPACITY CHART



WEIGHT OF LOAD HANDLING DEVICES ARE PART OF THE LOAD AND MUST BE DEDUCTED FROM THE GROSS CAPACITY.

LOAD BLOCK USAGE

1 PART LINE FOR LOADS LESS THAN 3000 LBS 2 PART LINE FOR LOADS OF 3000 LBS AND GREATER

WEIGHT OF LOAD BLOCK = 34 LBS



:	MAXIMUM LOAD CAPACITY	05-03-16B	C100
	ET36KX, 10'-16'-20' BOOM	SUPERSEDES 04-30-13A	21081

SECTION 150

SAFETY



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

CRANE SAFETY AND HAZARDS

CAUTIONS

- 1. INSPECT VEHICLE AND CRANE, INCLUDING OPERATION, PRIOR TO USE DAILY.
- DO NOT USE THIS EQUIPMENT EXCEPT ON FIRM LEVEL GROUND WITH CRANE MOUNTED ON FACTORY-RECOMMENDED TRUCK.
- BEFORE OPERATING THE CRANE, REFER TO MAXIMUM LOAD (CAPACITY) CHART ON CRANE FOR OPERATING (LOAD) LIMITATIONS.
- DO NOT OPERATE, WALK, OR STAND BENEATH BOOM OR A SUSPENDED LOAD.
- 5. ATTACH PENDANT CORD SUPPORT SNAP TO ATTACHMENT POINT BEFORE PLUGGING IN PENDANT, IF SO EQUIPPED.
- 6. UNPLUG PENDANT AND SHUT OFF MASTER DISCONNECT SWITCH WHEN CRANE IS NOT IN USE.
- 7. FOR TRAVEL, BOOM MUST BE IN 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 RECOMMENDATIONSCONTAINED 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.

ELECTROCUTION HAZARD

- THIS MACHINE IS NOT INSULATED.
- MAINTAIN SAFE CLEARANCES FROM ELECTRICAL LINES AND APPARATUSES.
- YOU MUST ALLOW FOR BOOM SWAY, ROCK, OR SAG, AND ELECTRICAL LINE AND LOAD-LINE SWAYING
- THIS LIFTING DEVICE DOES NOT PROVIDE PROTECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR.
- YOU MUST MAINTAIN A CLEARANCE OF 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. REFER TO DRAWING 15394 FOR ADDITIONAL INFORMATION.
- DEATH OR SERIOUS INJURY WILL RESULT FROM CONTACT OR INADEQUATE CLEARANCES.

OVERLOAD SENSING SYSTEM - STANDARD ON ALL CRANES

- 1. IF OVERLOADED, THE WINCH UP, BOOM DOWN, AND (OPTIONAL) BOOM OUT FUNCTIONS WILL AUTOMATICALLY, SHUT OFF TO PREVENT INCREASED OVERLOAD.
- 2. ON CRANES EQUIPPED WITH AN OPTIONAL OVERLOAD ALARM, IT WILL ALSO SOUND.
- 3. IF AN OVERLOAD OCCURS, USE THE WINCH DOWN, BOOM UP OR BOOM IN FUNCTIONS TO RELIEVE THE OVERLOAD.
- 4. THE OVERLOAD SENSING SYSTEM IS INOPERATIVE IF THE BOOM ELEVATION IS AT THE BOTTOM OR TOP LIMIT OF TRAVEL. TO RELIEVE THIS CONDITION, RAISE OR LOWER THE BOOM SLIGHTLY BEFORE LIFTING THE LOAD.
- 5. SEE MANUAL FOR TESTING THE OVERLOAD SYSTEM.

NOTICE - WARRANTY VOID IF DISCONNECTED

THE OVERLOAD SENSING SYSTEM HAS BEEN INSTALLED AS A SAFETY FEATURE TO PROTECT THE EQUIPMENT AND THE OPERATOR.

DO NOT DISCONNECT THIS SYSTEM

® VENCO VENTURO INDUSTRIES LLC	SAFETY & HAZARDS	01-29-15K	C150
CINCINNATI, OHIO	ELECTRIC CRANES	12-20-13J	850711

CRANE SAFETY AND HAZARDS - CONT'D

OVERLOAD ALARM SYSTEM - OPTIONAL

- 1. OVERLOAD ALARM HORN SOUNDS IF RATED LOAD IS EXCEEDED AT ANY REACH.
- 2. IF ALARM SOUNDS, RAISE BOOM OR LOWER WINCH TO REMOVE OVERLOAD.
- 3. ALWAYS RAISE BOOM SLIGHTLY BEFORE LIFTING LOAD. WARNING SYSTEM INOPERATIVE WHEN CYLINDER IS COMPLETED BOTTOMED.
- 4. ALARM CAN BE TESTED BY TYING DOWN BOOM WITH WINCH CABLE AND OPERATING BOOM UP OR BY RAISING BOOM AGAINST UP LIMIT STOP.

NOTICE - WARRANTY VOID IF DISCONNECTED

THIS ALARM SYSTEM HAS BEEN INSTALLED AS A SAFETY FEATURE TO PROTECT BOTH THE EQUIPMENT AND THE OPERATOR.

DO NOT DISCONNECT THIS SYSTEM

INTENTIONALLY LEFT BLANK



S LLC	SA

TITLE

VEHICLE & CRANE MOUNTED ELECTRICAL HAZARD SIGN APPLICATION & INFORMATION





SIGN NO. 15393 DISPLAYS THE INTERNATIONAL SYMBOL FOR ELECTRICITY AND WARNS OF DANGER FROM AN ELECTRICALLY CHARGED VEHICLE, CRANE, OR LOAD. FOUR ARE RECOMMENDED (ONE FOR EACH SIDE AND ONE FOR EACH END OF VEHICLE) TO BE APPLIED IN LOCATIONS WHICH ARE READILY VISIBLE TO GROUND PERSONNEL.

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 1926.1408. CRANE'S SAFETY MANUAL, AND CAL-OSHA ARTICLE 37, TITLE 8, HIGH-VOLTAGE ELECTRICAL SAFETY ORDERS.

SIGN NO. 15401 PROVIDES ADDITIONAL WARNING OF LEGAL REQUIREMENTS WHEN OPERATING NEAR HIGH VOLTAGE LINES. THIS SIGN IS PLACED ON THE CONTROL PENDANT SIDE OF BOOM.

Table A - Minimum Clearance Distances

Voltage (nominal, kV, alternating current)	Minimum clearance distance (feet) *
Up to 50	10 15 20 25 35 45 (as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution).

Voltage (nominal, kV, alternating current)	While traveling - minimum clearance distance (feet) *			
0 - 0.75	4			
over 0.75 - 50	6			
over 50 - 345	10			
over 345 - 750	16			
over 750 - 1000	20			
Over 1000	(as established by the utility owner/operator or registered			
	professional engineer who is a qualified person with respect to			
	electrical power transmission and distribution).			

NOTE: ENVIRONMENTAL CONDITIONS SUCH AS FOG, SMOKE, OR PRECIPITATION MAY REQUIRE INCREASED CLEARANCES

CINCINNATI, OHIO



SECTION HAZARD APPS & INFO C150 02-21-14M SUPERSEDES 15394 ET/HT CRANES 12-20-13L

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







SAFETY DECALS

DATE

04-29-16E

SECTION C150

SUPERSEDES 10-24-13D

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

VENTURO CRANES

TITLE

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.: 14473-2

DECAL: CONDUCTIVE GREASE

FUNCTION: To show the operator where to apply grease.

QUANTITY: Varies

PLACEMENT: Near grease fittings.



PART NO.: 13397

DECAL: OIL LEVEL

FUNCTION: To inform the operator of proper oil level to

maintain.

QUANTITY: 1

PLACEMENT: Side of hydraulic power unit.

OIL LEVEL

AW46 or DEXRON III ATF

Retract All Cylinders
Prior to Servicing

397-E

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



MANUFACTURING, INC.	
CINCINNATI, OHIO	

TITLE	DATE	SECTION
DECALS	11-12-19E	C150
	SUPERSEDES	21251
ET CRANES	12-23-13D	Z1354

PART NO.: 23191

DECAL: MANUAL OVERRIDE DECAL

FUNCTION: To show the manual override ports.

QUANTITY: 1 each

PLACEMENT: Left side of housing.

MANUAL OVERRIDE

R

m

PART NO.: 23188

DECAL: MANUAL OVERRIDE DECAL

FUNCTION: To show the manual override ports.

QUANTITY: 1 each

PLACEMENT: Right side of housing.

MANUAL OVERRIDE

RR

PART NO.: 19315-2

DECAL: MANUAL OVERRIDE (PROPORTIONAL)

FUNCTION: To show operator how to override

proportional valve.

QUANTITY:

PLACEMENT: Right side of Mechanism, near valve stem.

CINCINNATI, OHIO

WARNING! KEEP VALVE IN NORMAL POSITION. OVERRIDE POSITION IS INTENDED FOR EMERGENCY USE ONLY. PROPORTIONAL VALVE OVERRIDE **ROTATE STEM** 19315-2



ET25/30/36KX(P)	SUPERSEDES	24414
ADDITIONAL DECALS	09-16-19	C150

PART NO.: 27199-1 & 27199-2

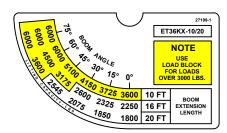
DECAL: CRANE CAPACITY

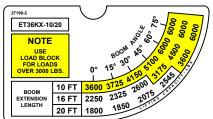
FUNCTION: To show the operator the operating

capacities of the crane.

QUANTITY: 1 each

PLACEMENT: One on each side of boom.





PART NO.: 21868

DECAL: MODEL NUMBER (ET30KX)

FUNCTION: To show the model of the crane.

QUANTITY: 2

PLACEMENT: One on each side of boom.



PART NO.: 19788-1

DECAL: PROPORTIONAL DECAL

FUNCTION: To show the crane has proportional

feature.

QUANTITY: 2

PLACEMENT: One on each side of boom.

PROPORTIONAL CONTROL



SLLC MOD

MODEL/CAPACITY DECALS

09-16-19A

C150

SUPERSEDES 02-11-09

21083

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

ET36KX(P)

SECTION 200

INSTALLATION



!! 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									▲ 12 VOLT A BATTERY RE	UXILIARY QUIREMENTS
	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	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	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.

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

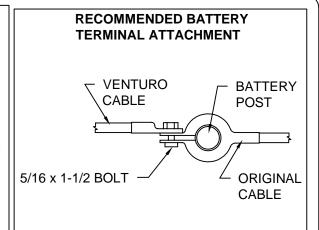
	RECOMMENDED CIRCUIT BREAKER TABLE						
	CRANE	DESCRIPTION	PART NO.				
	CT310KX	250 AMP, MAN RESET	22946-250				
	DT7	250 AMP, MAN RESET	22946-250				
	CE-1500-FB	150 AMP, MAN RESET	22946-150				
	CE6K	150 AMP, MAN RESET	22946-150				
	CT200X	250 AMP, MAN RESET	22946-250				
	ET6K	250 AMP, MAN RESET	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				
	·	·					

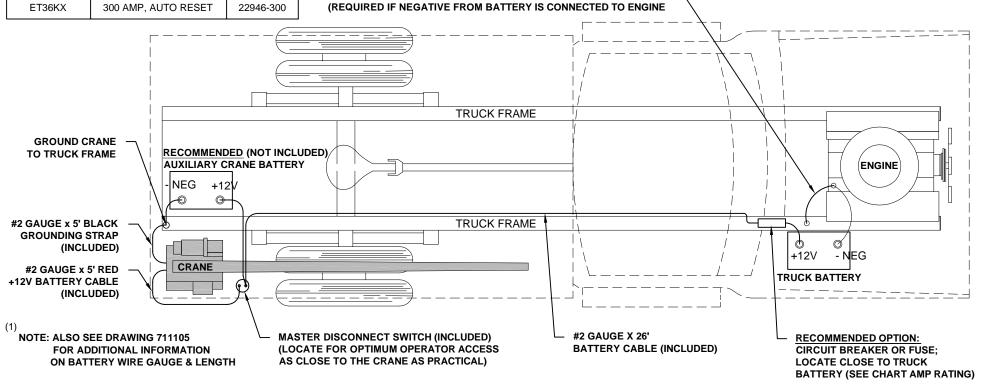
BATTERY REQUIREMENTS

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

STABILITY TEST - ET36-20' SERIES

Overview

Venturo follows the guidelines of ANSI B30.5 in defining stability. Generally speaking, a truck is considered stable as long as it is not on the verge of tipping - i.e. with the truck level, at least one tire on each corner of the truck must remain in contact with the ground.

It is important to note that nearly every installation is unique and will, therefore, typically require stability testing.

The procedure outlined below follows ANSI's (B30.5 - 5-1.1.1) specified "maximum load rating" of 85% of truck stability.

Testing Procedure

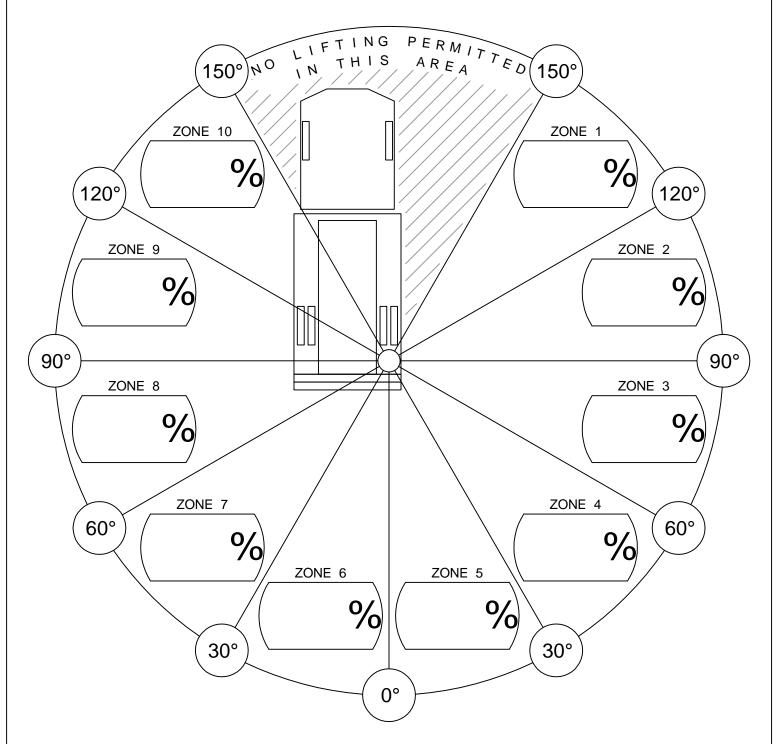
- 1. Locate the truck on firm, level ground and set parking brake.
- 2. Fully deploy stabilizers, making sure they are firmly in contact with supportive ground; use stabilizer pads as required. The tires of the truck should remain in full contact with the ground.
- 3. Inspect wire rope and other key components of crane (consult owners manual for more information).
- 4. Conduct an operational check of all crane functions.
- 5. Locate the Overload Pressure Switch at the base of the elevation cylinder
- 5.1. Disconnect the black & white wires from the housing and then connect the black & white wires together to by-pass the Overload Pressure Switch for the stability test. Note: The black & white wires MUST be reconnected to the Overload Pressure Switch after the stability test has be completed.
- 6. Use a **Test Weight** weighing a **minimum** of **2118 lbs**, (includes load block weight of <u>34</u> lbs.) to a **maximum of 2200 lbs**.
- 7. Position the boom level and fully retracted.
- 8. Referring to the Stability Chart (drawing 20907) rotate the crane to a position between 1 and 2 o'clock (truck cab is facing 12 o'clock) to begin testing.
- 9. Use the winch to lift the Test Weight; DO NOT allow the weight to be more than 6" off the ground at any time during testing (for safety).
- 10. Using the test weight, extend the boom slowly, until one of two conditions occur:
 - 10.1. Full extension is reached Mark the ZONE in question 100%
 - 10.2. The truck becomes unstable i.e. a tire lifts off the ground
 - 10.2.1. Retract the boom until at least one tire on each corner of the truck is making contact with the ground
 - 10.2.2. Use the formula below to determine the allowable % of Rated Capacity for the ZONE in question
- 11. Note: The "Max Stable Reach in inches" is measured (horizontally) from the center of rotation of the crane housing to the lifting load hook.

	"Max Stable Reach" in inches"	
% Rated Capacity =		X 100
	248	

- 12. Record the <u>% of Rated Capacity</u> in the appropriate blank (region) on the Crane Stability page (ref. 20907) and decal.
- 13. Repeat Steps 7 through 12 for each ZONE on the stability page.

® VENCO VENTURO INDUSTRIES LLC	STABILITY TEST	03-17-23E	C200
CINCINNATI, OHIO	ET36-20' SERIES	SUPERSEDES 11-23-21D	20906-36

CRANE STABILITY



% of Rated Capacity for each of the 10 regions are provided above.

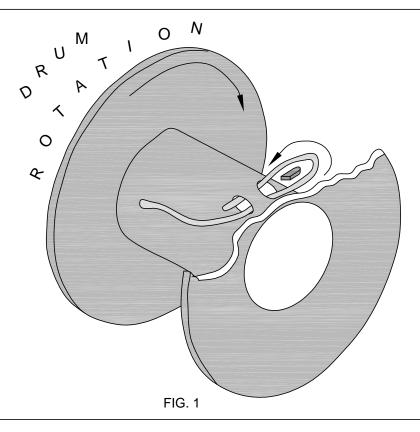
CONDITIONS:

 STABILIZERS FULLY EXTENDED & DOWN, ON FIRM LEVEL GROUND.



TITLE	DATE	SECTION
STABILITY CHART	05-11-17F	C200
	SUPERSEDES	00007
VENTURO CRANES	02-21-14E	20907

WIRE ROPE INSTALLATION



STEP 1: UNWIND COIL OF WIRE ROPE BY 'ROLLING' ALONG THE FLOOR. THIS WILL PREVENT 'KINKING'.

STEP 2: INSERT WIRE ROPE END UP THROUGH ANTI-2-BLOCK (A2B) CAGE ASSEMBLY, BETWEEN CHEEK PLATES, OVER THE TOP SHEAVE, AND THROUGH WIRE ROPE GUIDE.

STEP 3: INSERT WIRE ROPE END INTO POCKET OPENING ON WINCH, WRAP AROUND WEDGE, AND BACK THROUGH POCKET OPENING AS SHOWN IN FIGURE 1.

CAUTION

 IF THE WIRE ROPE IS NOT INSTALLED FOR THE CORRECT DRUM ROTATION, THE WINCH BRAKE VALVE WILL NOT HOLD THE LOAD.

CAUTION

 THERE MUST ALWAYS BE AT LEAST [5] DEAD WRAPS OF WIRE ROPE ON THE WINCH DRUM WHILE UNDER LOAD.

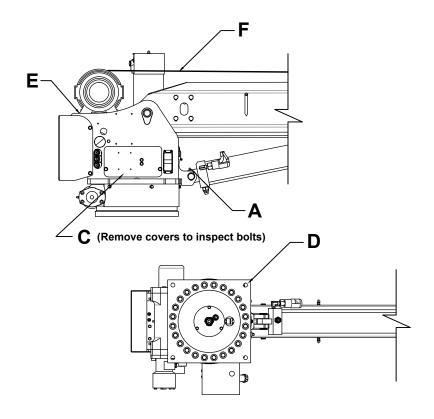
NOTE: SOME WINCHES MAY BE SUPPLIED WITH A HEX NUT IN LIEU OF A WEDGE FOR INSTALLING THE WIRE ROPE.

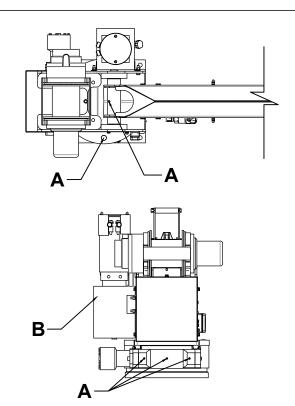
1		TITLE	DATE	SECTION	١
	VENCO VENTURO INDUSTRIES LLC	WIRE ROPE INSTALLTN	02-21-14K	C200	
	CINCINNATI, OHIO		SUPERSEDES	00045	1
		ET6K & LARGER CRANES	12-26-13J	22245	

SECTION 300

MAINTENANCE & SERVICE







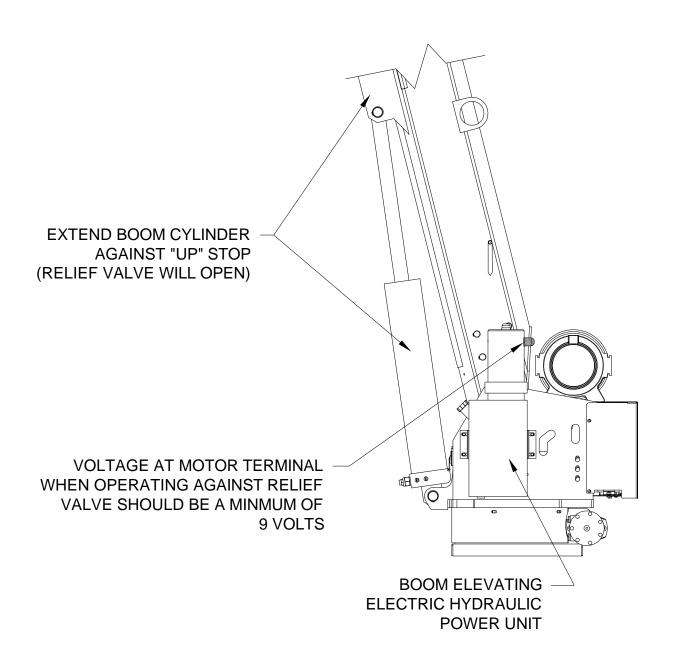
Location	Service Required	Note	Service Interval	
A	Grease fitting with pressure grease gun	USE ELECTRICALLY CONDU- Failure to use electrically con result in intermittent operatio Example: Fuch's Renolit Alun P/N 155250-2 (or equivalent).	nductive grease may on of the crane. minum Complex Grease	Time of Truck Service
В	Fill oil reservoir to "Oil Level" mark with boom down (elevation cylinder retracted)	ambient temperatures ec	Use ISO Grade 68 or quivalent for ambient emperatures between 10°F and 125°F	Time of Truck Service and as requried by changes in the ambient temperature range
С	Check torque of upper slew-drive bolts	Bolts should be torqued to 300 ft-lbs		Time of Truck Service
D	Check torque of base mounting bolts			Time of Truck Service
E	Check torque of winch mounting bolts			Time of Truck Service
F	Check wire rope and hook	Rope should be free or	of kinks and fraying	Prior to Use (Daily)



LUBRICATION & MAINTENANCE CHART	06-25-25D	C300
ET25/30/36KX	01-29-25C	24407

MINIMUM VOLTAGE TEST

ONE OF THE MOST COMMON ELECTRICAL PROBLEMS ENCOUNTERED ON 12 VOLT ELECTRICAL CRANES IS INSUFFICIENT VOLTAGE AT THE MOTOR WHEN DRAWING THE LARGE CURRENT THAT EXISTS AT FULL LOAD





TITLE	DATE	SECTION
MINIMUM VOLTAGE TEST	12-26-13G	C300
	SUPERSEDES	40000
ET SERIES CRANES	10-05-09F	19963

WIRE ROPE ASSEMBLY

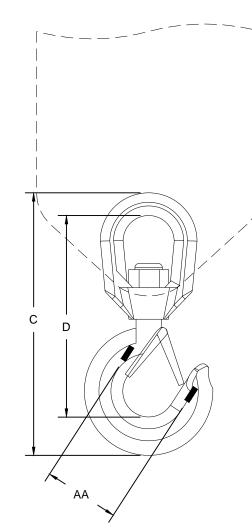
LOAD BLOCK ASSEMBLY

WIRE ROPE:

5/16" DIA, 80' LONG, HIGH-STRENGTH

▲ GAC 7X19 XXIP-RHRL-IWRC, SB 9800 LBS

TERMINATES IN THIMBLE NO HOOK



LOAD BLOCK HOOK:

RATING: 3 TONNE (6615 LBS)

DIMENSIONS:

COLOR	BRAND	AA	С	D
GOLD	CROSBY	2.00"	8.25"	6.50"



:	WIRE ROPE & HOOK SPECIFICATIONS	05-09-16A	C300
	ET36KX	SUPERSEDES 08-18-11	23229

READ ALL INSTRUCTIONS BEFORE PERFORMING MANUAL OVERRIDE PROCEDURES !!







Each valve station incorporates [2] hydraulic ports and [2] coils. Manual override shafts are located in the center of the coils (see figure 1). Manual override decals are placed on each crane near the valve assembly. These decals provide a visual aid that helps the operator determine the function designations (Reference figure 2).

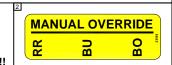
2-STATION FUNCTIONS:

Rot. Right RL Rot. Left RR Boom Up BU BD Boom Down

3-STATION FUNCTIONS include previous functions, plus:

Boom In ВО **Boom Out**

ALWAYS BE SURE TO CHECK HYDRAULIC OIL LEVEL BEFORE PROCEEDING. IT IS RECOMMENDED TO REMOVE ANY ITEM(S) THAT MAY INTERFERE WITH OPERATING THE CRANE MANUALLY. IF POSSIBLE, STRAPS AND/OR HARNESSES SHOULD BE REMOVED BEFORE OPERATING A CRANE IN MANUAL OVERRIDE!!



End Plate

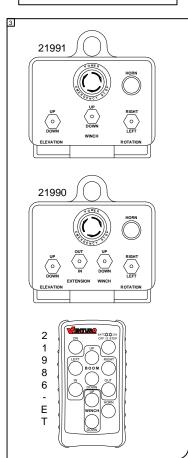
PORT

COIL

SHAFT

Procedure:

- Turn Master disconnect switch to "ON"
- Power up the pendant / radio
- 2.1. PENDANT - twist EMERGENCY STOP button clockwise
- 2.2. RADIO - Press green ON button
- 3. On the crane, reference the function you wish to perform using the manual override decal
- Using a tool with a diameter of 1/8" or smaller, press the shaft inward and hold 4.
- 5. Reference the functions listed on your pendant or radio (see figure 3)
- Press the switch or button for the same function
- 7. If you need to change function,
 - Release switch or button 7.1.
 - Remove tool from shaft 7.2.
 - 7.3. Go to step 3



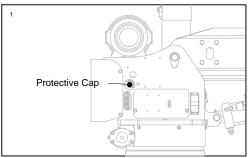
For assistance, please feel free to contact Technical Support at 800-226-2238.

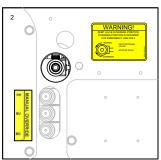
CINCINNATI, OHIO



DATE SECTION C200 MAN. OVERRIDE INSTR. 03-08-19A SUPERSEDES 23084 ET NON-PROP CRANES 02-09-17

!! READ ALL INSTRUCTIONS BEFORE PERFORMING MANUAL OVERRIDE PROCEDURES !!

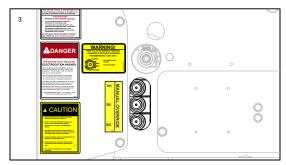


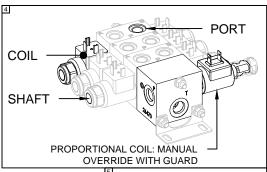


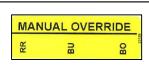
Each valve station incorporates [2] hydraulic ports and [2] coils. Manual override shafts are located in the center of the coils (see figure 4). Manual override decals are placed on each crane near the valve assembly. These decals provide a visual aid that helps the operator determine the function designations (Reference figure 3 & 5).

3-STATION FUNCTIONS:

RR = Rot. Right RL = Rot. Left
BU = Boom Up BD = Boom Down
BI = Boom In BO = Boom Out



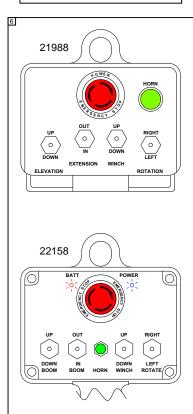




ALWAYS BE SURE TO CHECK HYDRAULIC OIL LEVEL BEFORE PROCEEDING. IT IS RECOMMENDED TO REMOVE ANY ITEM(S) THAT MAY INTERFERE WITH OPERATING THE CRANE MANUALLY. IF POSSIBLE, STRAPS AND/OR HARNESSES SHOULD BE REMOVED BEFORE OPERATING A CRANE IN MANUAL OVERRIDE!!

Procedure:

- Turn Master disconnect switch to "ON"
- 2. Remove Protective cap (see figure 1)
- 3. Rotate Valve Stem Clockwise to close (see figure 2)
- 4. Power up the pendant / radio
 - 4.1. Twist EMERGENCY STOP button clockwise
- 5. On the crane, reference the function you wish to perform using the manual override decal (see figure 3)
- 6. Using a tool with a diameter of 1/8" or smaller, press the shaft inward and hold
- 7. Reference the functions listed on your pendant or radio (see figure 6)
- 8. Press the switch or button for the same function
- 9. If you need to change function,
- 9.1. Release switch or button
- 9.2. Remove tool from shaft
- 9.3. Go to step 5



For assistance, please feel free to contact Technical Support at 800-226-2238.



MAN. OVERRIDE INSTR.

09-16-19

C200

ET25/30/36KXP

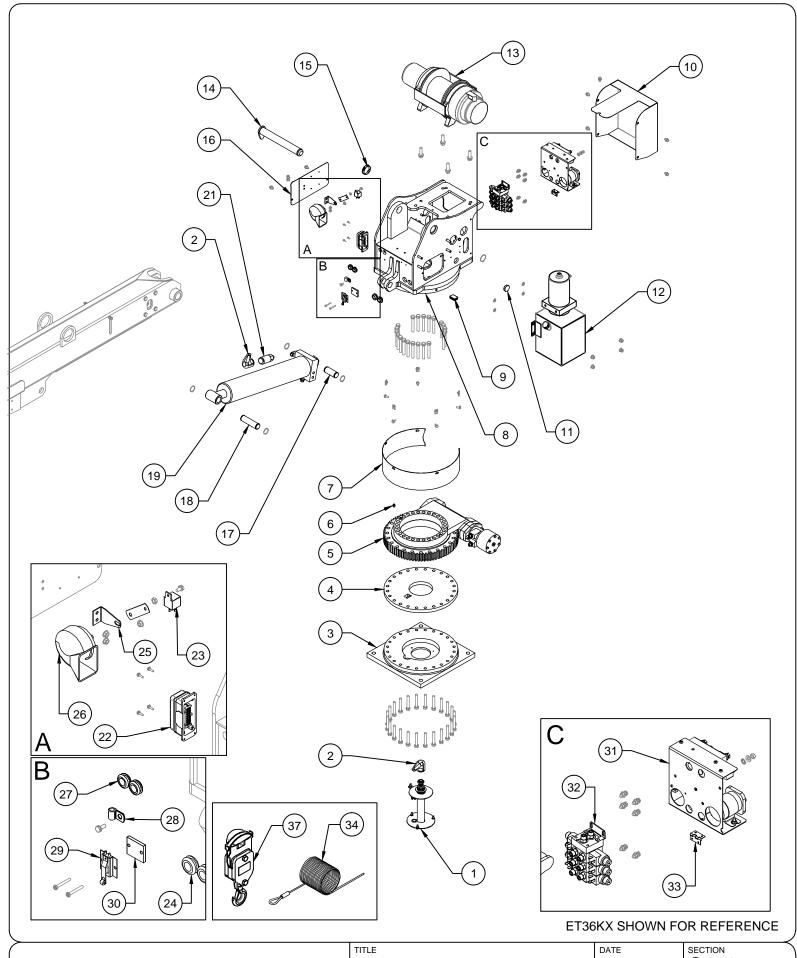
SUPERSEDES

24415

SECTION 400

REPLACEMENT PARTS





ENTURO* VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO**

ENTURO* VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO**

ENTURO* VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO**

ENTURO* ET25/30/36KX(P) SERIES**

ENTURO* DATE 11-17-23E C400

SUPERSEDES

O3-15-23D

ENTURO* ON THE CHART OF THE CANADA CANADA

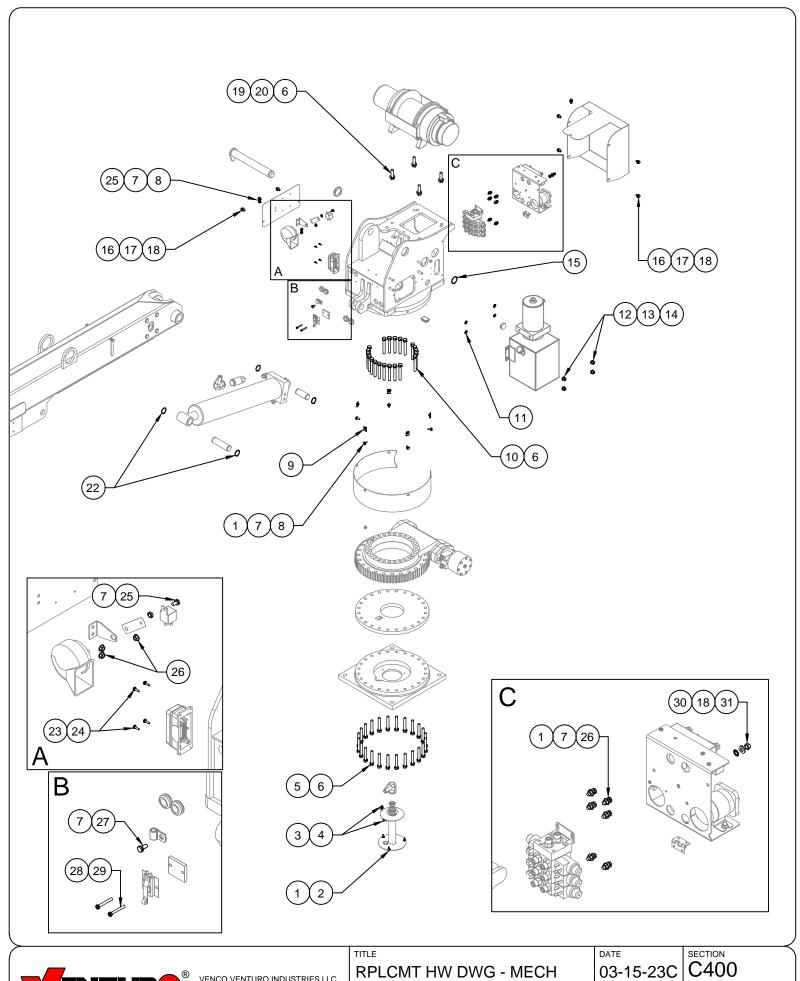
REPLACEMENT PARTS LIST - ET36KX(P) MECH

	ET36KX	ET36KXP		
ITEM NO.	QTY.	QTY.	PART NO.	DESCRIPTION
1	1	1	16780-2P25	SWIVEL TERMINAL ASS'Y.
2	2	2	17012	BOOT COVER
3	1	1	27520m	WELDED ASS'Y.: BASE
4	1	1	27520h	SPACER SPACER
5	1	1	21418	SLEWING RING
6	1	1	01327NPT	GREASE FITTING, 1/8-27 NPT
7	1	1	27186	COVER; SLEWING RING
8	1	1	26558	HOUSING WELDED ASSY
9	1	1	28005	PLUG; RECTANGULAR, HOUSING BASE PLATE
10	1	1	27600	COVER; REAR, MECHANISM
11	1	1	19122	HOLE PLUG; 1-1/4"
12	1	1	26489	HYDRAULIC POWER UNIT
13	1	1	19813	ELECTRIC WINCH
14	1	1	21012	PIVOT PIN, MAIN BOOM PIVOT
15	1	1	26492	PLUG; Ø2", LOCKING
16	1	1	27000	PLATE, SIDE COVER
17	1	1	18768	PIVOT PIN, ELEVATION CYLINDER
18	1	1	18761	PIVOT PIN, ELEVATION CYLINDER
19	1	1	21752	ELEVATION CYLINDER
20	-	-	-	-
21	1	1	17460-2900	PRESSURE SWITCH, 2900 PSI
22	1	1	22480	SOCKET ASS'Y.
23	1	1	22739	RELAY, 12V
24	2	2	20890	GROMMET; RUBBER, Ø1" X 1/4" X 11/16"
25	1	1	22000	BRACKET; HORN
26	1	1	21948	HORN
27	2	2	20889	GROMMET; RUBBER, Ø7/8" X 1/4" X 5/8"
28	1	1	19269	CLAMP, CABLE, 1/4"
29	1	1	19904	BOOM SHUT OFF SWITCH ASS'Y.
30	1	1	20896	UHMW SPACER - TOP POSIT SWITCH
31	1	1	23154-4	SUB-ASSY; ELECTRICAL CMPNNT
	1	-	28801	VALVE BLOCK; 4-3, 3-SPOOL
32	-	1	28800	VALVE BLK ASSY, 3-SPOOL W/ PROP VALVE
33	1	1	23826	HINGE
34	1	1		WIRE ROPE; 5/16 X 80 FT HIGH-STRENGTH
35	1	1	27604	WELDED ASS'Y; MOTOR COVER
36	2	2	28380	SPACER; STAND-OFF, 1/4-20 X 1", 1/2" HEX
37	1	1	27667-1	ASS'Y; LOAD BLOCK, 6000 LBS MAX RATING

REFERENCE 24392 FOR REPLACEMENT PARTS DRAWING



RPLCMT PARTS LIST- MECH	06-26-25H	C400
ET36KX(P) SERIES CRANES	SUPERSEDES 04-29-25G	24395

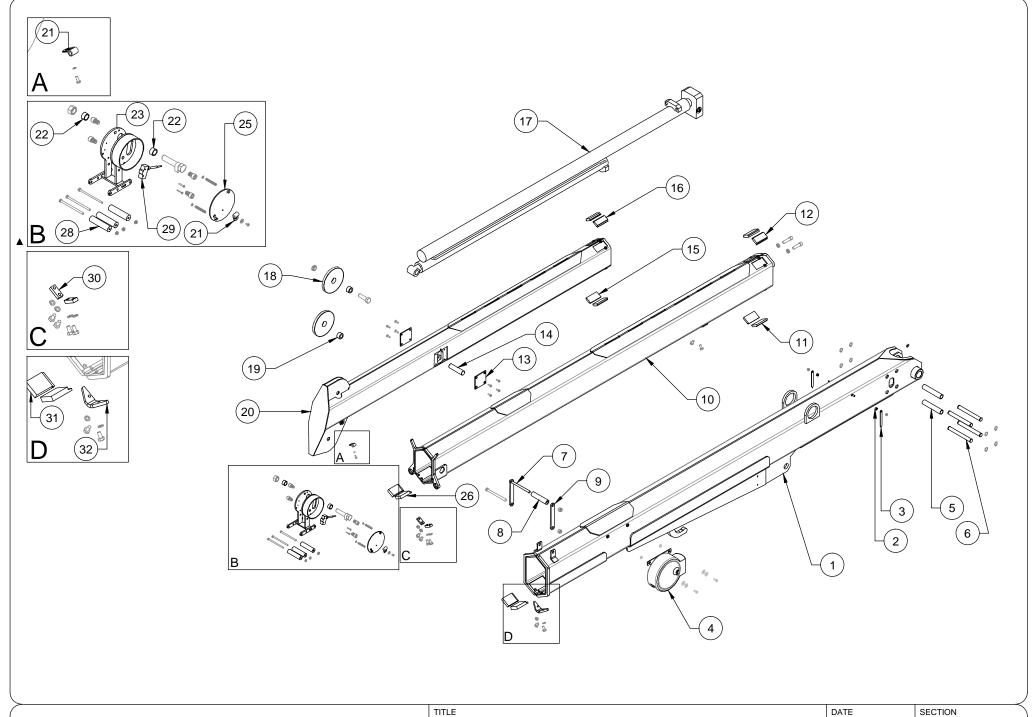


	ENTURO®	® VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	RPLCMT HW DWG - MECH	03-15-23C
				SUPERSEDES
			ET25/30/36KX(P) SERIES	09-28-22B

REPLACEMENT H/W LIST - ET25/30/36KX(P) MECH

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	14	!HHCS02520075S	HEX HEAD CAP SCREW, 1/4-20 X .75 LG, STAINLESS
2	6	!LWSH-025-STAR-SS	LOCK WSHR, 1/4, EXT STAR , STAINLESS STEEL
3	2	!HHCS03118075-B	HHCS; 5/16-18 X 3/4, BRASS
4	2	!HNUT-03118-B	HEX NUT; 5/16-18, BRASS
5	24	!HHCSM12175080-8.8	HEX HEAD CAP SCREW; 12MM-1.75MM X 80MM LG, GR. 8.8
6	45	!LWSH-M12-8.8	LOCK WASHER; M12, GRADE 8.8
7	15	!LWSH-025S	LOCK WASHER 1/4 S/S
8	7	!FWSH-025S	FLAT WASHER 1/4 S/S
9	5	!UNUT-02520-LKG	U-NUT; 1/4-20, LCKNG TYPE
10	21	!HHCSM12175090-8.8	HHCS; 12MM-1.75 X 90MM GR. 8.8, ZINC
11	4	!LWSH-038-STAR	LOCK WSHR; 3/8, GR. 5, ZINC, X-TOOTH
12	4	!FWSH-038SAE	WASHER; FLAT, 3/8 SAE, ZNC PLTD
13	4	!LWSH-038	LOCK WSHR; 3/8, GR. 5, ZINC
14	4	!LNUT-03816	LOCK NUT; 3/8-16, GR. 5, ZINC, NYL-NSRT
15	1	!SRNG-150	SNAP RING FOR 1.5 SHAFT, ZINC PLATED
16	7	!HHCS03118063S	HEX HEAD CAP SCREW, 5/16-18 X 5/8 LG, STAINLESS
17	7	!LWSH-031S	LOCK WASHER 5/16 S/S
18	7	!FWSH-031S	FLAT WASHER 5/16 S/S
19	4	25921	SHCS; M12-175 X 50MM, GR. 12.9
20	4	!FWSH-M12	WASHER; FLAT, M12
21	-	-	-
22	4	!SRNG-125	SNAP RING 1-1/4 IN - PLATED
23	4	!SHPMS#0832050S	SLOT HEAD, PAN, MACH SCREW #8-32 X 1/2 LG STAINLESS
24	4	!LWSH-#08S	LOCK WASHER, #8 STAINLESS
25	1	!HHCS02520050S	HEX HEAD CAP SCREW, 1/4-20 X 1/2 LG, STAINLESS
26	9	!FNUT-02520-SS	FLANGE NUT; 1/4-20, STAINLESS STEEL
27	7	!HHCS02520063S	HEX HEAD CAP SCREW, 1/4-20 X 5/8LG, STAINLESS
28	2	!PHPMS#1024150S	PHILLIPS HEAD PAN, MACH SCREW, # 10-24 X 1-1/2LG, S/S
29	2	!LWSH-#10S	LOCK WASHER, #10, STAINLESS
30	1	!LWSH-031-STAR-SS	LOCK WSHR, 5/16 EXT STAR , STAINLESS STEEL
31	1	!HNUT-03118S	HEX NUT 5/16-18 STAINLES S

ENTURO	VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	RPLCMNT HW LIST - MECH	03-15-23C	C400	
		ET25/30/36KX(P) SERIES	SUPERSEDES 09-28-22B	24397	





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

REPLACEMENT PARTS DWG - 28301 BOOM

02-08-21B C400 SUPERSEDES

ET25/30/36KX SERIES CRANES

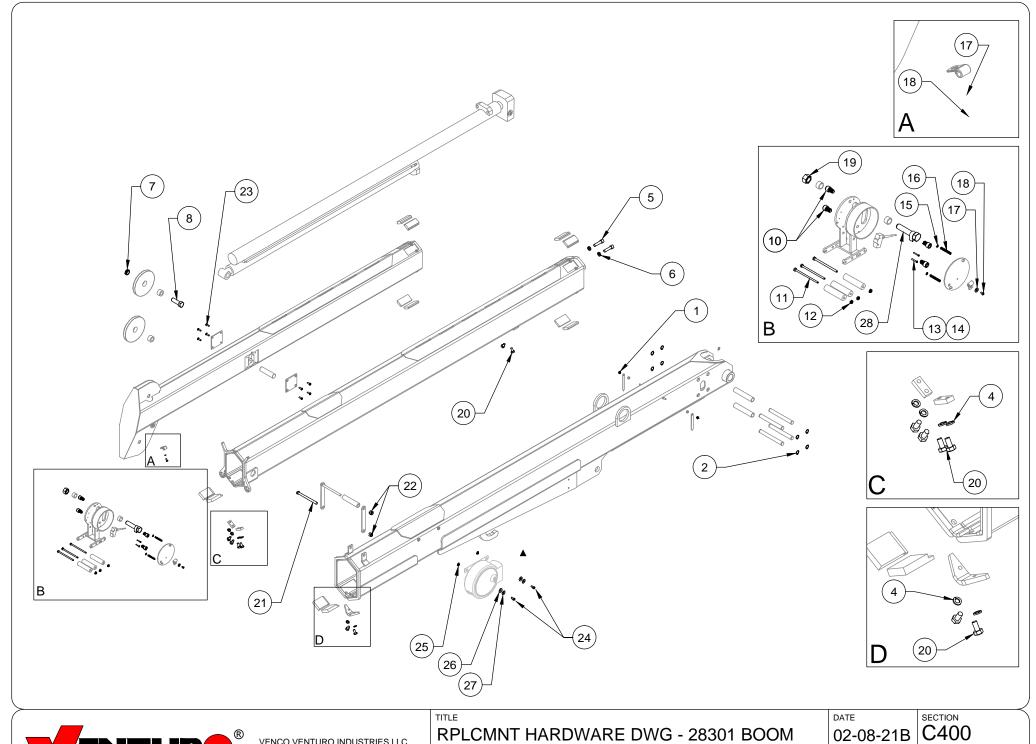
01-08-20A 24402

REPLACEMENT PARTS LIST - 28301 BOOM

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	21472	PRIMARY BOOM WELDED ASSEMBLY
2	2	22490	SPACER-BOOM ARROW
3	2	13459	ARROW - 3 INCH
4	1	28190-2	COMPLETE CORD REEL
5	2	21498	ROLLER - EXT CYLINDER
6	4	21497	THRUST PIN - EXTENSION CYLINDER
7	1	21935	WIRE ROPE GUIDE - WELDED
8	1	21560	ROLLER, UHMW GUIDE
9	1	21936	FLAT, MOUNT; WIRE ROPE GUIDE
10	1	27165	SECONDARY BOOM WELDED ASSEMBLY
11	2	23217-9	UHMW, A,3.19,1.75,0.44
12	2	23217-8	UHMW, A,3.19,1.75,0.50
13	2	23116	PIN BLOCK REINFORCING
14	1	21941	PIN; EXTENSION CYLINDER
15	2	23217-7	UHMW, A,3.19,1.50,0.44
16	2	23217-6	UHMW, A,3.19,1.50,0.50
17	1	21753	EXTENSION CYLINDER - DUAL
18	2	27001	POLY CABLE SHEAVE
19	2	23924	SPACER, SHEAVE
20	1	27167	TERTIARY BOOM ASSEMBLY
21	2	19269	CLAMP,CABLE - 1/4 IN.
22	2	27476	SPACER/PIVOT, COMPACT A2B
23	2	27468	WLDMNT - COMPACT A2B FRAME
24	-	-	-
25	2	27473	COVER PLATE; COMPACT A2B
26	2	23217-10	UHMW, B,3.19,1.75,063
27	-	-	-
28	3	27475	WIRE ROPE GUIDE ROLLER Ø7/8 BLK DELRIN, COMPACT A2B
29	1	19376	ANTI TWO BLOCK SWITCH
30	2	23119	BEARING RETAINING BLOCK
31	2	23217-3	UHMW, B,3.19,2.13,0.63
32	1	23183	V-BLOCK SLIDER



LC	RPLCMT PART LIST - 28301	03-26-24C	C400
	ET25/30/36KX SERIES	SUPERSEDES 02-08-21B	24403





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

RPLCMNT HARDWARE DWG - 28301 BOOM

ET25/30/36KX

02-08-21B

SUPERSEDES

01-08-20A

24404

REPLACEMENT HARDWARE LIST - 28301 BOOM

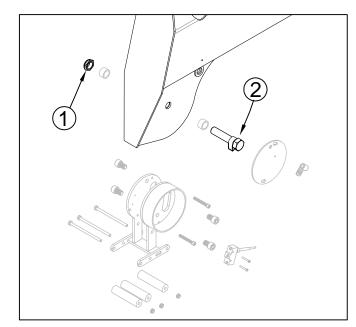
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	!ANUT-02520S	ACORN NUT; 1/4-20, SS
2	8	!SRNG-075	SNAP RING, PLATED 3/4
3	-	-	-
4	6	!LWSH-038	LOCK WSHR; 3/8, GR. 5, ZINC
5	2	!SHCS05013200	SHCS; 1/2-13 X 2
6	2	!LWSH-050-HC	LOCK WSHR; 1/2, GR. 5, ZINC, HI-CLLR
7	1	!LNUT-07510	NYLOC LOCK NUT, FULL, 3/4-10, GR5, ZINC PLATED
8	1	17059-6	SHEAVE AXLE; SS, HHCS 07510200, 1"
9	1	!HHCS07510350	HHCS; 3/4-10 X 3-1/2, GR. 5, ZINC
10	4	27467	SHCS, NYLON, BLACK, 1/2-13 X 3/4 LONG
11	3	!HHCS02520450	HHCS 1/4-20 X 4-1/2 LG
12	3	!JNUT-02520N	JAM NUT 1/4-20 W/ NYLON INSERT
13	2	!PHCS#0632100	PHCS 6-32 X 1
14	2	!LWSH-#06	LOCK WSHR; #06, GR. 5, ZINC
15	2	23379	WASHER, NYLON, BLACK
16	2	!SHCS02520200SS	SHCS 1/4-20 X 2.00" LG, STAINLESS STEEL
17	2	!FWSH-025	WASHER; FLAT, 1/4 USS, ZNC PLTD
18	2	!PHCS#1032038	PHCS; 10-32 X 3/8, GR. 5, ZINC, SLOT
19	1	!JNUT-07510N	JAM NUT; 3/4-10, GR. 5
20	8	!HHCS03816075	HHCS 3/8-16 X 3/4 GR.5
21	1	!HHCS04414550	HHCS 7/16-14 X 5-1/2 GR5
22	2	!LNUT-04414	LOCK NUT; 7/16-14, GR. 5 ZINC, NYL-NSRT
23	8	!CACS02520063-N	CNTRSNK ALLN HED CAP SCREW; 1/4-20 X 5/8
24	2	!SHCS03118063S	SHCS; 5/16-18 X 5/8" LG, S/S
25	2	28198	INSULATING SLEEVE WASHER - 5/16"
26	2	01016	FIBER WASHER
27	2	!FWSH-031	WASHER, FLAT; 5/16" SAE
28	1	28362	ASSY, WELDED, CAM & HHCS CA2B CUT-OUT

® ®	VENCO VENTURO INDUSTRIES LLC	RPLCMNT HW LIST - 28301 BOOM	02-08-21B	C400
ENIUN	CINCINNATI, OHIO	ETOS/20/20XX CEDIEC CDANEC	SUPERSEDES	24405
		ET25/30/36KX SERIES CRANES	01-08-20A	Z7700)

Compact A2B with Stowage Cut-out, Install/Adjustment Instructions (Kit: 28375)

The purpose of the Stowage Cut-out system is to prevent a situation whereby the wire rope is over-tensioned when the load block / wire rope is attached to the stowage hook on the bottom of the primary boom assembly. However, the OPERATOR is ultimately responsible for ensuring that the wire rope is not over-tensioned when stowing the wire rope and boom assembly into the boom rest.

- Initially, apply a light torque to the nyloc full nut Item #1 (P/N !LNUT-07510), such that the axle bolt & cam welded assembly can be rotated / adjusted in the steps below.
- Position the cam *lobe* Item #2 (P/N 28362) so that it is pointing towards the housing / mechanism
- 3. Hang the load block on the open stowage hook under the primary boom.
- 4. Thread the wire rope through the load block in a two-line configuration; the wire rope end / eyelet is pinned in the standard position on the tertiary boom tip
- 5. Actuate the Winch Up function until the load block and wire rope are *taut* enough to prevent the load block from bouncing during transit, *but do not tighten excessively so as to prevent damage to the wire rope.*
- 6. Rotate the axle bolt & cam welded assembly towards the housing (clockwise in standard configuration) until the cam lobe makes contact with and trips the wobble micro switch and actuates the A2B function.
- 7. Once adjusted, torque the nyloc full nut (Item #1) to 100 ft*lbs to prevent further rotational movement of the axle bolt & cam welded assembly.
- 8. Test the A2B trip-point by slackening and tightening the wire rope / load block assembly by actuating Winch Up/Down. NOTE: The point at which the A2B trips WILL vary to some degree, depending upon the winch up speed. It is recommended to actuate the winch up function slowly, which will yield a consistent and repeatable result, in terms of wire rope tension when stowed.



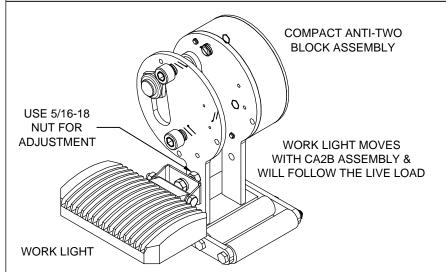


Contact Venturo Tech Support for assistance. 1-800-226-2238 ext. 124

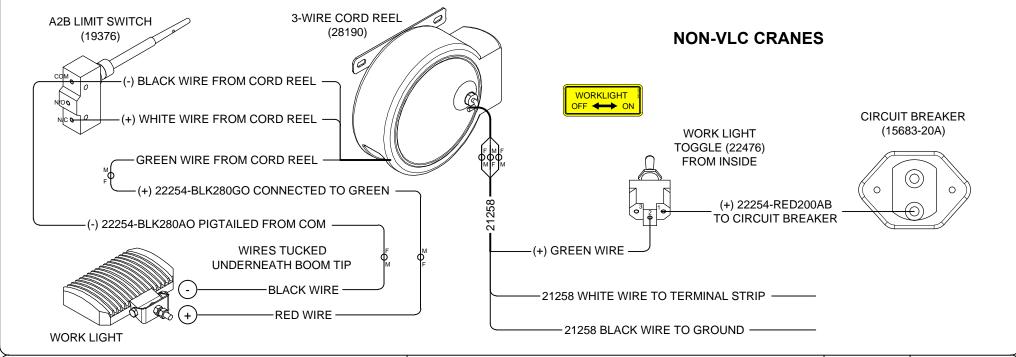


A2B Stowage Cut-out	10-04-21B	C400
ET/HT Cranes w/ Comp. A2B	SUPERSEDES 08-03-21A	28239

WORK LIGHT INSTALLATION: 28240-1 (3-WIRE CORD REEL ON NON-VLC CRANES)



	BILL OF MATERIALS	-1	28240
#	DESCRIPTION		PART NUMBER
1	IDWG; WORK LIGHT INSTALLATION, NON-VLC CRANES	1	28199
2	LED WORK LIGHT	1	27483
3	TERMINAL; 16G, FEMALE, QUICK-CONNECT	3	!TERM16G250QCFI
4	TERMINAL; 16G, MALE, QUICK-CONNECT	4	!TERM16G250QCM
5	WIRE ASS'Y; 16G, BLACK, 28", #6 RING - STRIPPED END	1	22254-BLK280AO
6	WIRE ASS'Y; 16G, BLACK, 28", QCF - STRIPPED END	1	22254-BLK280GO
7	TOGGLE SWITCH; ON / OFF, IP-RATED	1	22476
8	HALF-BOOT, FOR IP-RATED TOGGLE SWITCH	1	19793
9	DECAL; ON/OFF, OPTIONAL WORK LIGHT W/ TOGGLE	1	28307
10	WIRE ASS'Y; 16G, RED, 20", #6 RING - #10 RING	1	22254-RED200AB
11	TERMINAL; 16G, #6 RING, CLOSED-END	1	!TERM16G#6RG



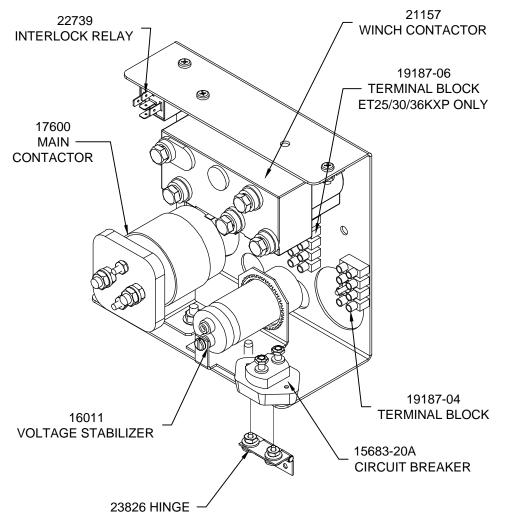


VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

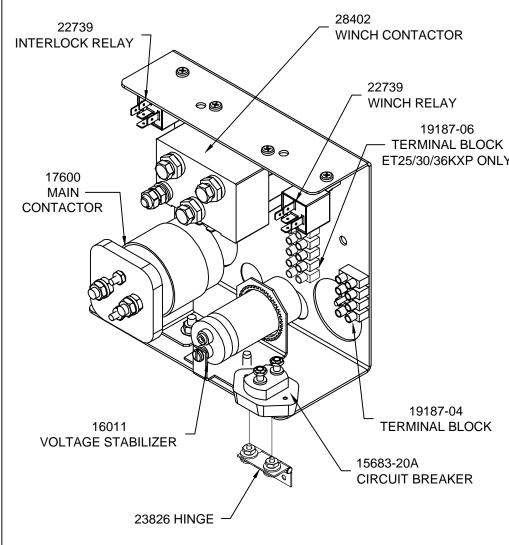
WORK LIGHT INSTALLATION, 3-WIRE CORD REEL	02-10-21	C400
NON-VLC CRANES	SUPERSEDES -	28199

23154-4 ELECTRICAL COMPONENT ASSEMBLY

WITH 21157 WINCH CONTACTOR FOR SERIES-WOUND OR PERMANENT MAGNET MOTOR



WITH 28402 WINCH CONTACTOR AND RELAY FOR PERMANENT MAGNET MOTOR ONLY





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

23154-4 ELECTRICAL COMPONENT ASS'Y

04-26-22A

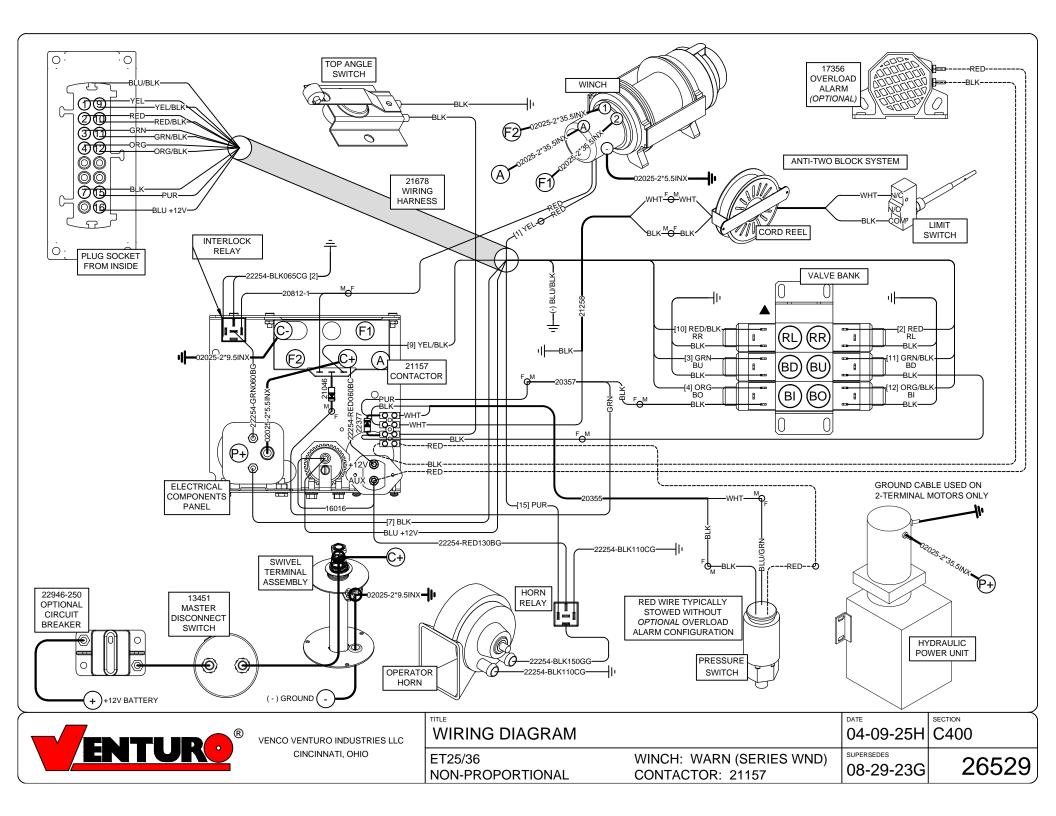
C400

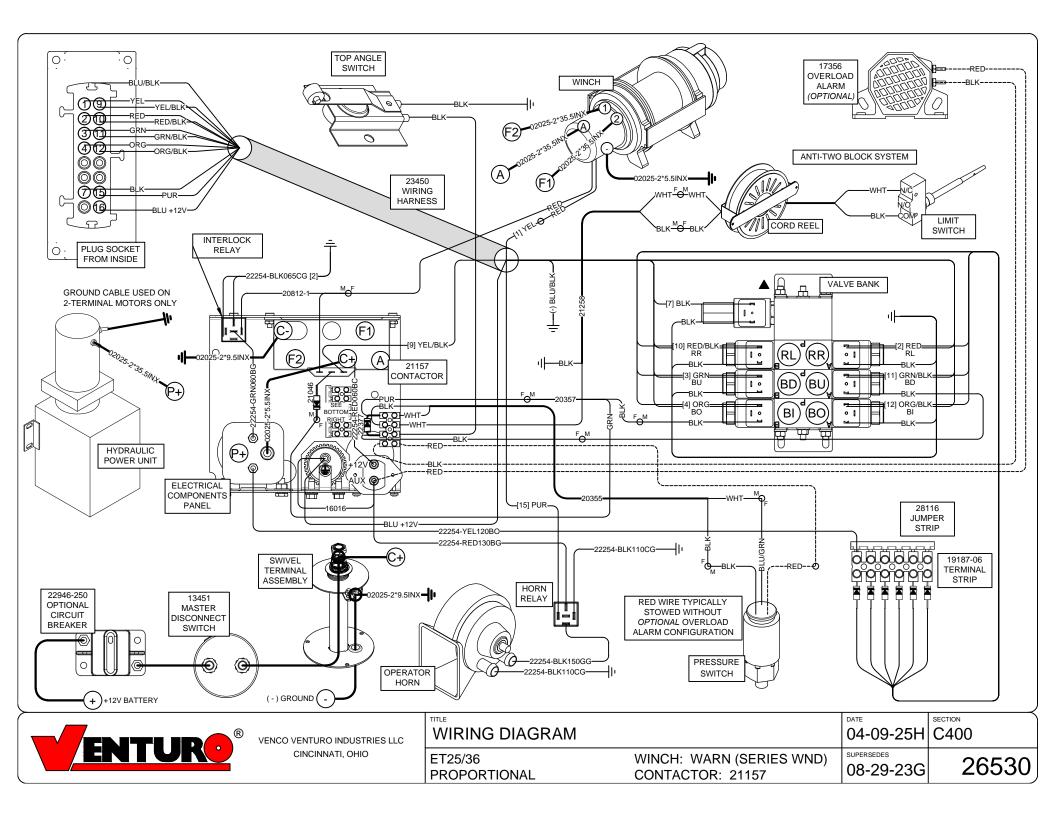
SECTION

ET25/30/36KX(P)

SUPERSEDES 01-07-20

28302





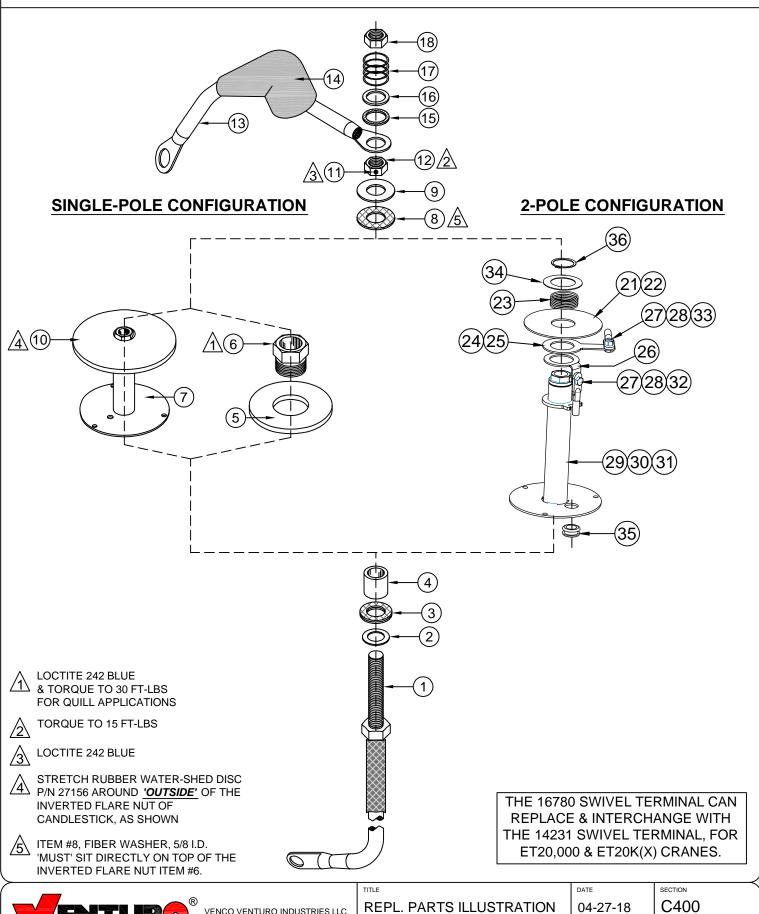
Single & 2-Pole Slip-ring Replacement Parts (1 of 2)

Quill Rotation	Slew Rotation Single Pole Slip-Ring	Slew Rotation 2-Pole Slip- Ring (ET6K ONLY)	Slew Rotation 2-Pole Slip- Ring (ET8-18KX)	Slew Rotation 2-Pole Slip- Ring (ET25-36KX)	ALL CRANES		16780 BILLS OF MATERIALS				
16780	16780 - 1	16780 - 2P6	16780 - 2P8	16780 - 2P25	16780 - KIT						
o		Q	TY			#	PART	DESCRIPTION			
1	1	1	1	1	-	1	16783	PIGTAIL AND STUD ASSEMBLY			
1	1	1	1	1	1	2	12534-5	ZINC BUSHING; 5/8" I.D. X 1" O.D. X 14 GAUGE			
2	2	2	2	2	2	3	14357-1	FIBER WASHER; 5/8" I.D. X 1 1/16" O.D. X 1/16"			
1	1	1	1	1	1	4	14233	INSULATING BUSHING; 5/8" I.D. X 7/8" O.D. X 7/8"			
1	2	-	-	12	2	5	14318	FLAT WASHER; 1 3/16" I.D. X 2 3/4" O.D. X 3/16"			
1		-	-			6	14232	INVERTED FLARE NUT; 1 3/16"-16			
-	-	-	-	-	-	7	27568	WELDED ASSY. CANDLESTICK			
1	1	1	1	1	1	8	14357-2	FIBER WASHER; 5/8" I.D. X 1 1/4" O.D. X 1/16"			
1	1	1	1	1	1	9	!FWSH-063SAE	FLAT WASHER; 5/8" SAE			
_	1	-	-	1 -	-	10	27156	RUBBER WATER SHIELD; 1/8" THICK			
1	1	1	1	1	1	11	!SHCS02528025KC	SET SCREW W/ KNURLED CUP; 1/4"-28 X 1/4"			
1	1	1	1	1	1	12	21273	BRASS JAM NUT; 5/8"-11			
_	-		-	-	-	13	26035-2	PIGTAIL; SWIVEL TERMINAL			
	_	_	-	Fi_1	2	14	17012	RUBBER BOOT; SWIVEL TERMINAL			
1	1	1	1	1	1	15	5612-162-62	TEFLON WASHER			
1	1	1	1	1	1	16	5714-113-62	BRASS WASHER			
1	1	1	1	1	1	17	LC-098K-00	SPRING; 0.845" O.D. X 0.098" WIRE X 1.00 F.L.			
1	1	1	1	1	1	18	!JNUT-06311N	JAM NUT; 5/8"-11, NYLON NUT			
1	1	1	1	1	1	19	LOCTITE-24205	REMOVABLE THREAD LOCKER: 0.5ML			
	1	1	1	1	1	20	19368	IDWG: 16780 SWIVEL TERMINAL			
1	-	1	-	1		21	27456	UHMW WATER SHIELD, (ET6K ONLY)			
-	-	-	1	1		22	27456-1	UHMW WATER SHIELD, (ET8 - ET36)			
-	-	1	1	1	•	23	27461	SPRING, (-) SLIP-RING ASSY.			
-	-,	-	1	1	•	24	27441-1	COPPER SLIP-RING, (ET8 - ET36)			
-	-	1	1	1	-	25 26	27441 27449-1	COPPER SLIP-RING, (ET6K ONLY) BRASS SLIP-RING (ET6 - ET36)			
-	-	1	1	1		27	!HHCS03118075-B	BRASS SLIP-RING (E 16 - E 136) BRASS HHCS			
-	-	1	1	1	-	28	!HNUT-03118-B	BRASS NYLOC NUT			
-	Ē	1	-	:=	-	29	23255	SLIP-RING, WELDED ASSY, ET6K			
-		•	1	-	-	30	23255-1	SLIP-RING, WELDED ASSY, ET8 - 18K(X)			
-	-	1	1	1	-	31	23255-2 02025-2*96.5INX	SLIP-RING, WELDED ASSY, ET25 - 36K(X) (-) WELDING CABLE ASSY, BRASS SLIP-RING			
-	-	1	1	1	-	33	02025-2*22.5INX	(-) WELDING CABLE ASSY, COPPER SLIP-RING			
-		1	1	1		34	27463	SHIM, WIDE RIM, 18GA, 2-1/4 O.D. X 1-1/2 I.D.			
.=	=	1	1	1	-	35	20889	RUBBER GROMMET			
-	=	1	1	1	=	36	!SRNG-150	SNAP-RING, EXTERNAL, 1-1/2"			



TITLE	DATE	SECTION
16780 REPLACEMENT PARTS	03-29-19A	C400
	SUPERSEDES	04000
ET6/8/12/16/18/25/30/36K(X)	04-27-18	21292

Single & 2-Pole Slip-ring Replacement Parts (2 of 2)

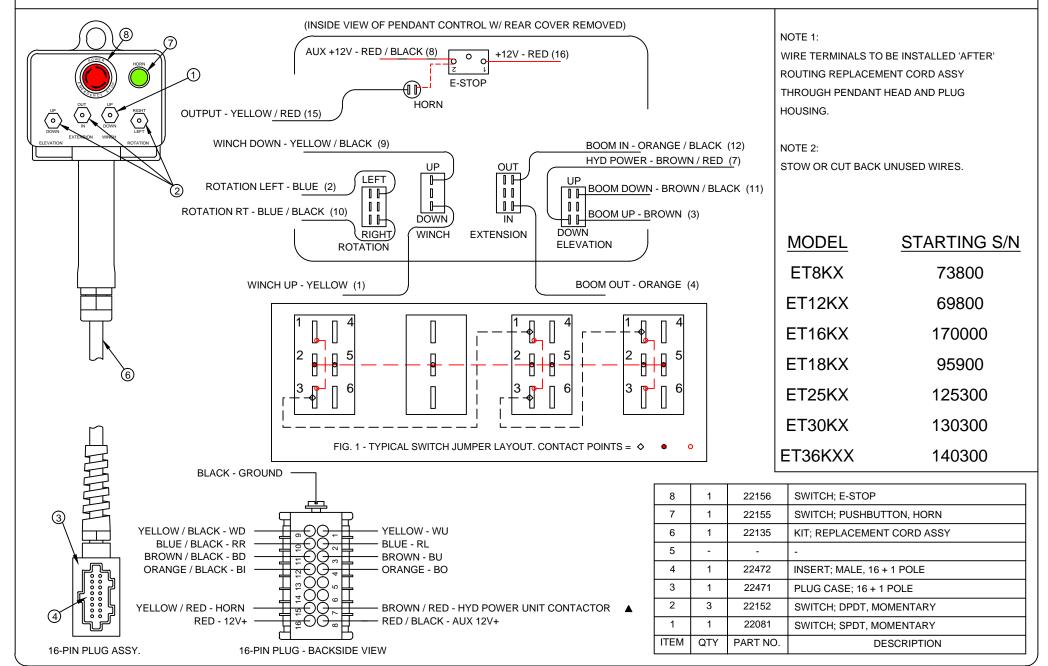


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A	

'ENCO VENTURO INDUSTRIES LL CINCINNATI, OHIO

ET6/8/12/16/18/25/30/36K(X)	SUPERSEDES	21293
REPL. PARTS ILLUSTRATION	04-27-18	C400
TITLE	DATE	SECTION

21990 PENDANT; 4 FUNCTION ET CRANES, E-STOP / HORN

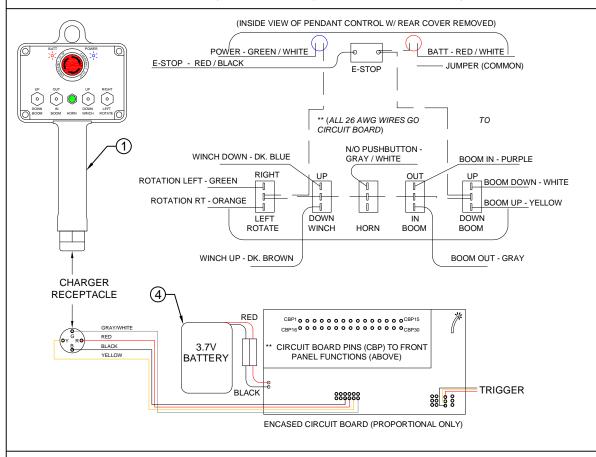


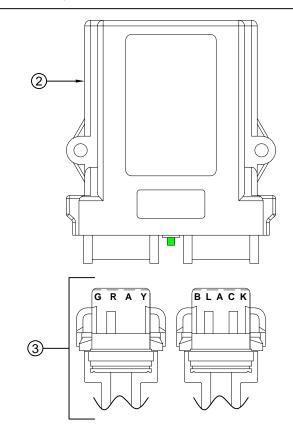


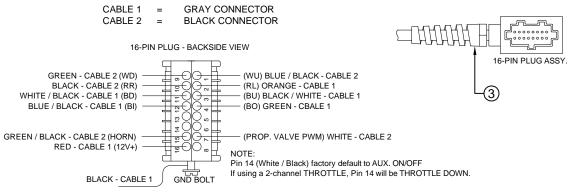
VENCO VENTURO INDUSTRIES LLC CINCINNATI. OHIO

REPLACEMENT PARTS DWG & LIST	01-12-17B	C400
	SUPERSEDES	22075
21990 PNDNT; 4 FNCTN ET CRNS, ESTP/HRN	10-20-14A	23075

22158 RADIO; PROP, NON-CAN, NO ENG CNTRLS, E-STOP/HORN







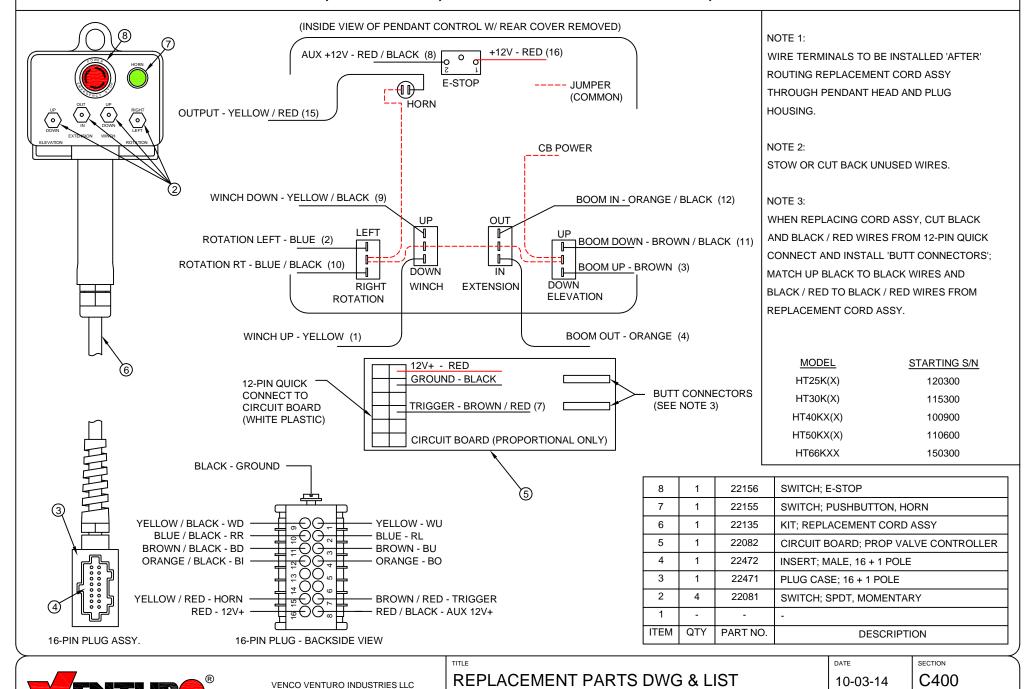
COMPONENTS		
ITEM NO.	PART NO.	DESCRIPTION
1	22158-TX	TRANSMITTER
2	22158-RX	RECEIVER
3	21983-HN	HARNESS
4	22965-BATT	BATTERY
5	22965-CHGR	CHARGER (NOT SHOWN)



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

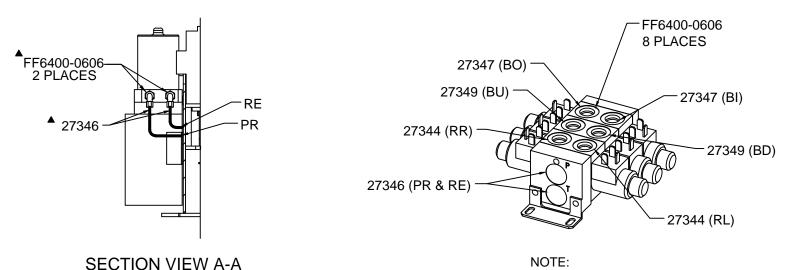
TITLE		DATE	SECTION
REPLACEMENT PARTS DWG & LIST		03-11-19A	C400
		SUPERSEDES	00700
ET PROPORTIONAL SERIES CRANES	A	07-31-18	23786

21988 PENDANT; PROP, NO ENG CNTRL, E-STOP / HORN

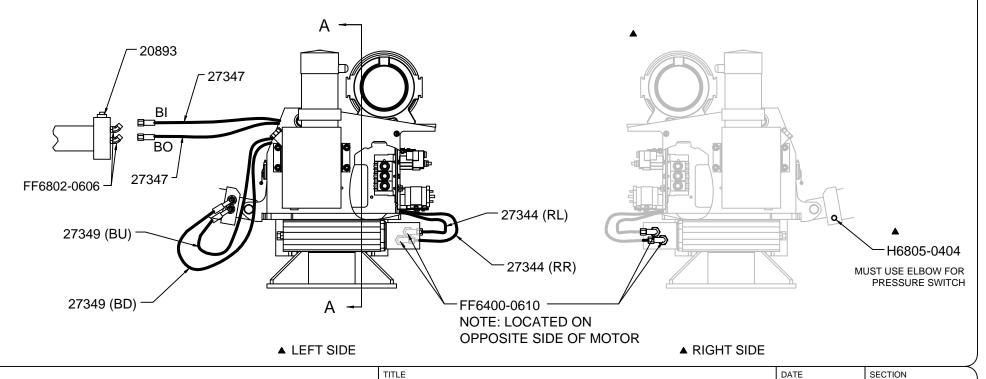


21988 PNDNT; PROP, NO ENG CNT, ESTP/HRN

CINCINNATI, OHIO



NOTE: FOR REPLACEMENT COILS SEE P/N 23134





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

REPLACEMENT PARTS; HYD. COMPONENTS

02-10-20E C

C400

RR ROTATION RIGHT RL ROTATION LEFT

BI BOOM IN

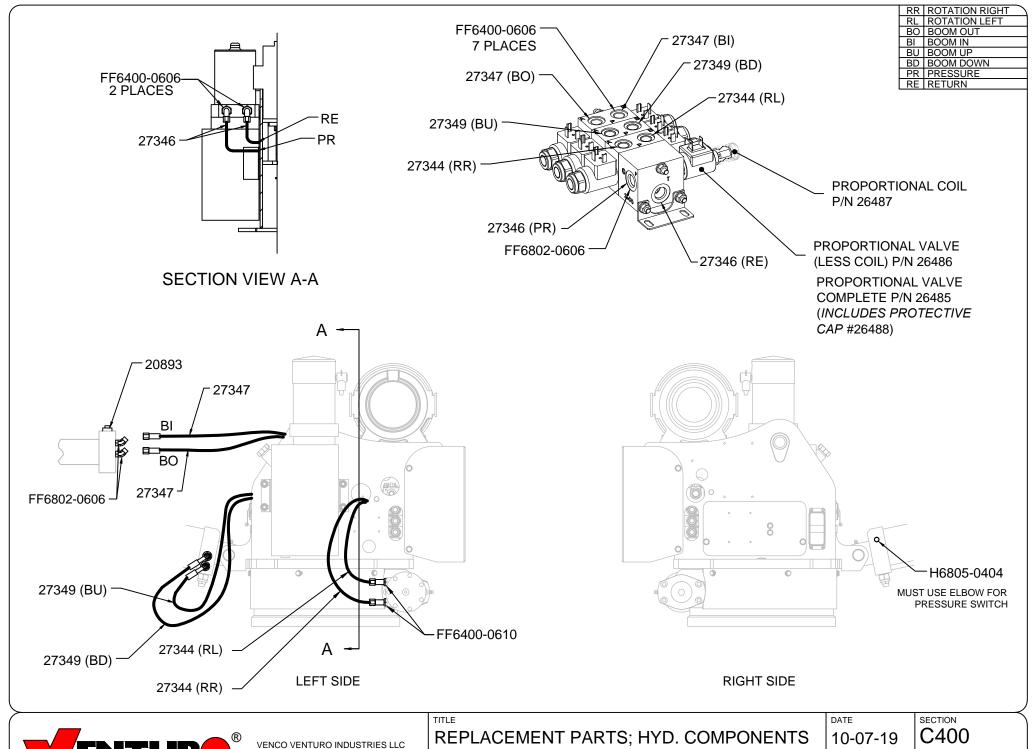
RE RETURN

BD BOOM DOWN PR PRESSURE

ET25/30/36KX

10-07-19D

21758





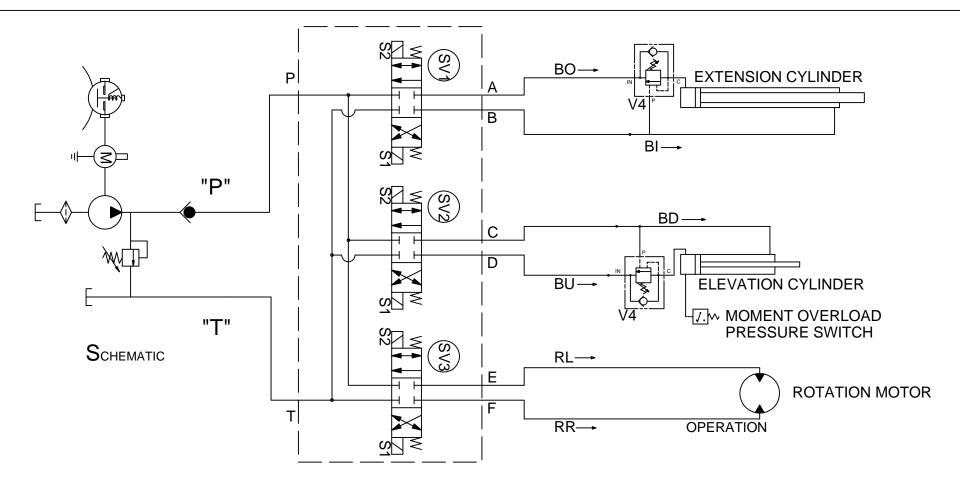
CINCINNATI, OHIO

SUPERSEDES

ET25/30/36KXP

24418

ET16/18/25/30/36KX HYDRAULIC COMPONENT DIAGRAM



ERNERGIZE "S2"
OPEN FLOW
'P' TO 'A'
'B' TO 'T'
ENERGIZE "S1"
OPEN FLOW
'P' TO 'B'
'A' TO 'T'

(SV2

ENERGIZE "S2"
OPEN FLOW
'P' TO 'C'
'D' TO 'T'
ENERGIZE "S1"
OPEN FLOW
'P' TO 'D'
'C' TO 'T'

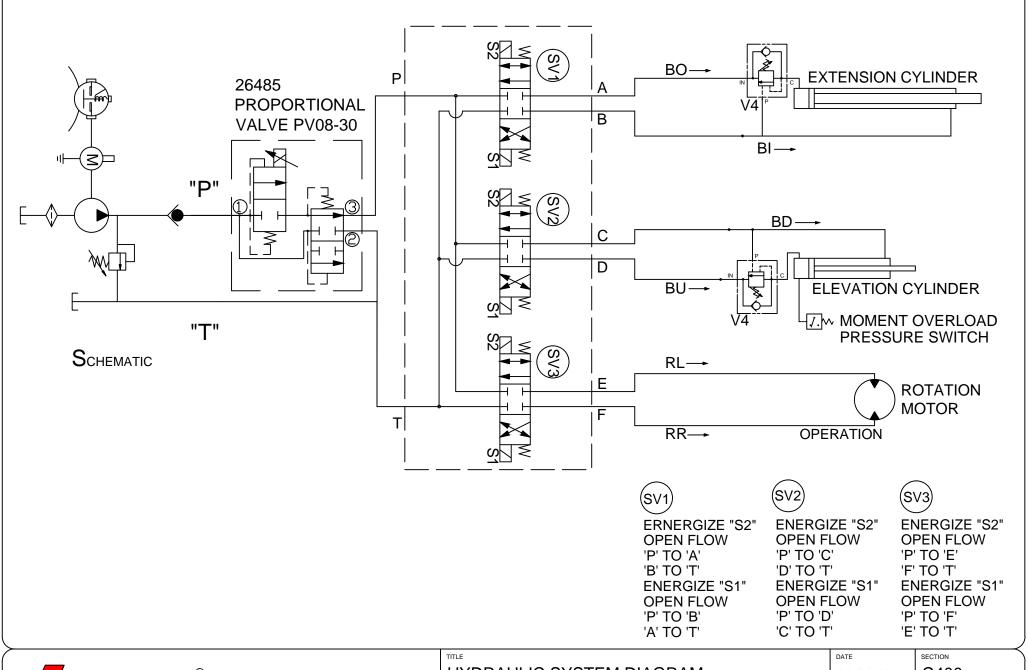
(SV3)

ENERGIZE "S2"
OPEN FLOW
'P' TO 'E'
'F' TO 'T'
ENERGIZE "S1"
OPEN FLOW
'P' TO 'F'
'E' TO 'T'



TITLE	DATE	SECTION
HYDRAULIC SYSTEM DIAGRAM	10-23-14D	C400
	SUPERSEDES	00450
ET16/18/25/30/36KX A	01-31-05C	20156

ET16/18/25/30/36KXP HYDRAULIC COMPONENT DIAGRAM

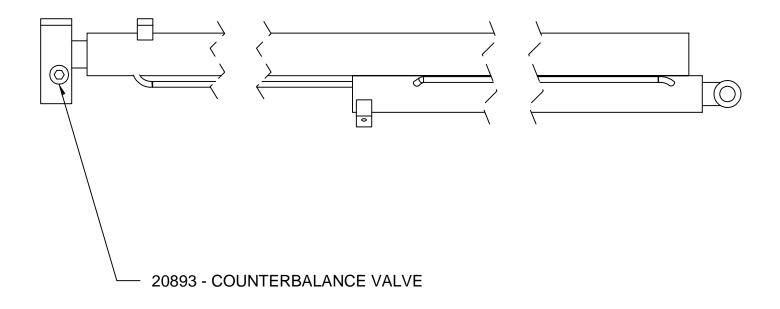




 HYDRAULIC SYSTEM DIAGRAM
 10-14-19
 C400

 ET16/18/25/30/36KXP
 24434

21753 DUAL-STAGE EXTENSION CYLINDER



SEAL KIT P/N: 21775



URO INDUSTRIES LLC	
ONO INDOSTRIES LLC	
CINNATI OHIO	

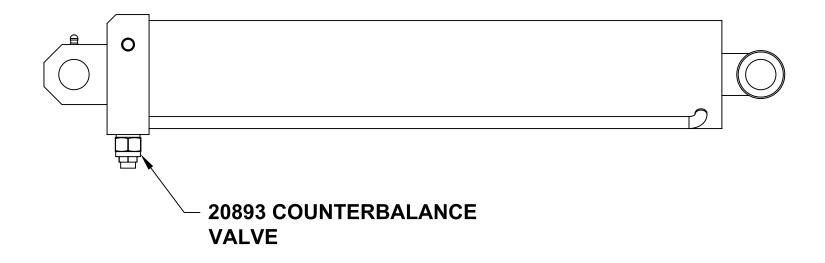
III LL
EXTENSION CYLINDER, DUAL-STAGE

	SECTION
03-08-17B	C400

ET25-36KX & HT25/30 SERIES CRANES

04-30-09A 21860

21752 ELEVATION CYLINDER



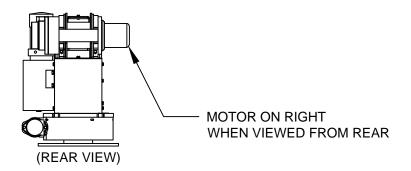
SEAL KIT P/N: 21774

	ET/HT25/30/36KX(X)	SUPERSEDES	21773
	ELEVATION CYLINDER	8-12-09 SUPERSEDES	C400

19813 WINCH REPLACEMENT PARTS

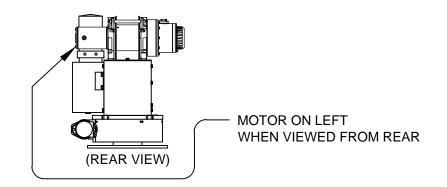
WARN DC3000

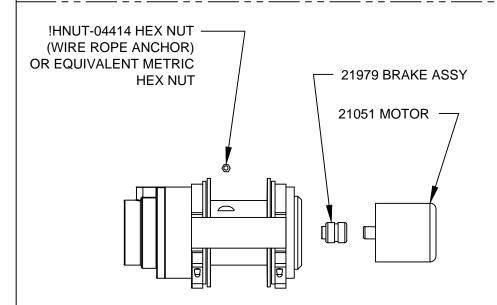
SERIES-WOUND MOTOR

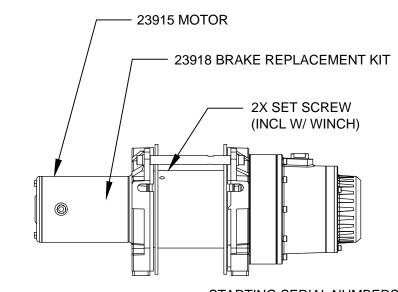


COMEUP GTD-3300

PERMANENT MAGNET MOTOR







STARTING SERIAL NUMBERS:

ET25 SERIES 22D000003 ET30 SERIES 21B000001

ET36 SERIES

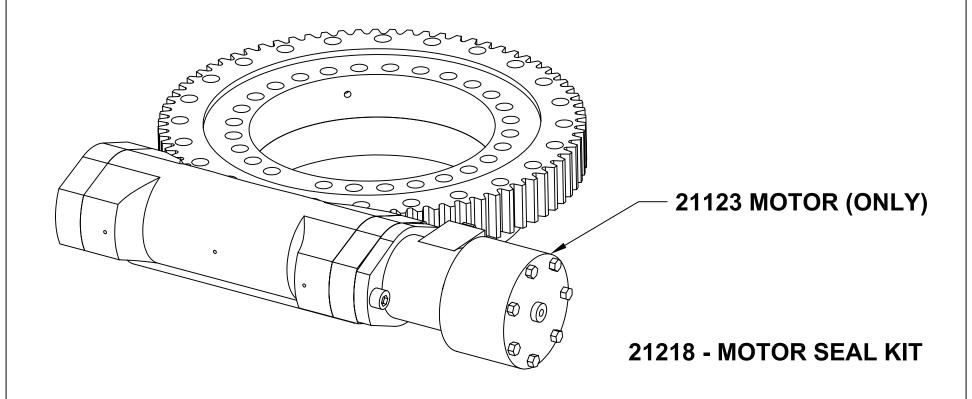
20B000014

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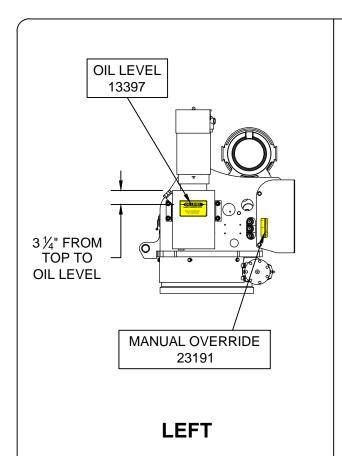
TITLE	DATE	SECTION
WINCH REPLACEMENT PARTS	04-26-22E	C400
	SUPERSEDES	04050
ET25/30/36K	04-13-22D	21053

21418 SLEWING SYSTEM REPLACEMENT PARTS

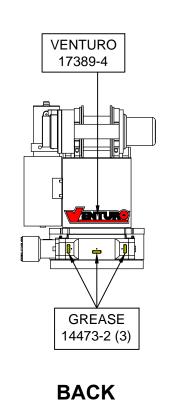


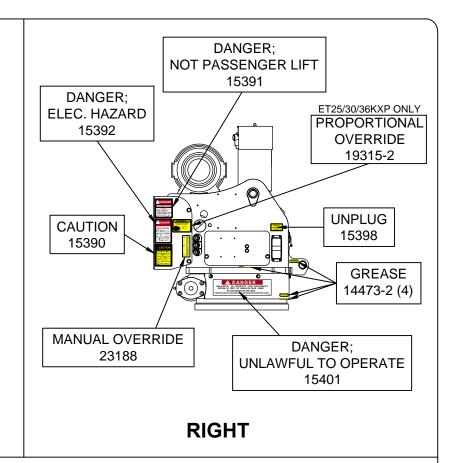


SLEWING REPLACEMENT PARTS	08-24-09	SECTION
ET25/30KX	SUPERSEDES	21886



ENTUR





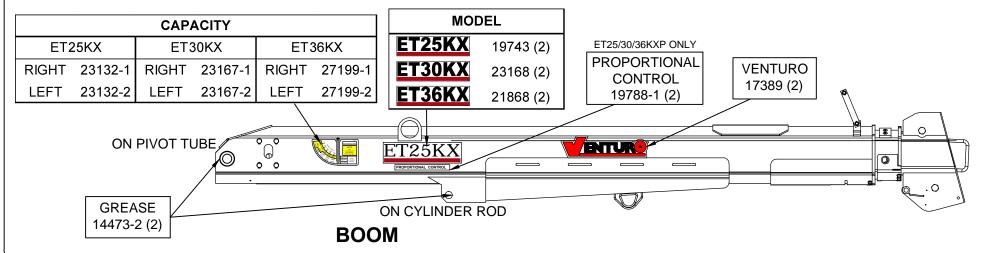
SECTION

09-16-19

SUPERSEDES

C400

24410



VENCO VENTURO INDUSTRIES LLC CINCINNATI. OHIO

DECAL PLACEMENT

ET25/30/36KX(P)

ET25/30/36KX FIELD SERVICE LABEL KITS

21898; FIELD SERVICE LABEL KIT, ET25KX

PART NO.	QTY.	DESCRIPTION
14473-2	9	DECAL; GREASE
17389	2	DECAL; VENTURO, MEDIUM
17389-4	1	DECAL; VENTURO, SMALL
23132-1	1	DECAL; BOOM CAPACITY, RIGHT, ET/HT25KX
23132-2	1	DECAL; BOOM CAPACITY, LEFT, ET/HT25KX
19743	2	DECAL; MODEL NAME, ET25KX
13397	1	DECAL; OIL LEVEL
23188	1	DECAL; MANUAL OVERRIDE, RIGHT
23191	1	DECAL; MANUAL OVERRIDE, LEFT
17813	1	DECAL; OVERLOAD SENSING SYSTEM
16184-1	1	DECAL; HORN RELAY
21899	1	IDWG; FIELD SERVICE LABEL KIT
21894	1	IDWG; DECAL PLACEMENT
INST-23233	1	SAFETY MANUAL, VENTURO CRANES
15397	1	KIT; ACCIDENT PREVENTION SIGNS

21863: FIELD SERVICE LABEL KIT, ET30KX

PART NO.	QTY.	DESCRIPTION
14473-2	9	DECAL; GREASE
17389	2	DECAL; VENTURO LOGO, MEDIUM
17389-4	1	DECAL; VENTURO LOGO, SMALL
23167-1	1	DECAL; BOOM CAPACITY, RIGHT, ET30KX
23167-2	1	DECAL; BOOM CAPACITY, LEFT, ET30KX
23168	2	DECAL; MODEL NAME, ET30KX
13397	1	DECAL; OIL LEVEL
23188	1	DECAL; MANUAL OVERRIDE, RIGHT
23191	1	DECAL; MANUAL OVERRIDE, LEFT
17813	1	DECAL; OVERLOAD SENSING SYSTEM
16184-1	1	DECAL; HORN RELAY
21899	1	IDWG; FIELD SERVICE LABEL KIT LIST
21894	1	IDWG; DECAL PLACEMENT
INST-23233	1	SAFETY MANUAL, VENTURO CRANES
15397	1	KIT; ACCIDENT PREVENTION SIGNS

21866; FIELD SERVICE LABEL KIT, ET36KX

PART NO.	QTY.	DESCRIPTION
14473-2	9	DECAL; GREASE
17389	2	DECAL; VENTURO LOGO, MEDIUM
17389-4	1	DECAL; VENTURO LOGO, SMALL
27199-1	1	DECAL; BOOM CAPACITY, RIGHT, ET36KX
27199-2	1	DECAL; BOOM CAPACITY, LEFT, ET36KX
21868	2	DECAL; MODEL NAME, ET36KX
13397	1	DECAL; OIL LEVEL
23188	1	DECAL; MANUAL OVERRIDE, RIGHT
23191	1	DECAL; MANUAL OVERRIDE, LEFT
17813	1	DECAL; OVERLOAD SENSING SYSTEM
16184-1	1	DECAL; HORN RELAY
21899	1	IDWG; FIELD SERVICE LABEL KIT LIST
21894	1	IDWG; DECAL PLACEMENT
INST-23233	1	SAFETY MANUAL, VENTURO CRANES
15397	1	KIT; ACCIDENT PREVENTION SIGNS

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TITLE	DATE	SECTION
FIELD SERVICE LABEL KIT	03-13-23F	C400
	SUPERSEDES	
ET25/30/36KX	08-04-20E	2

ET25/30/36KXP FIELD SERVICE LABEL KITS

24440; FIELD SERVICE LABEL KIT, ET25KXP

PART NO.	QTY.	DESCRIPTION
14473-2	9	DECAL; GREASE
17389	2	DECAL; VENTURO, MEDIUM
17389-4	1	DECAL; VENTURO, SMALL
23132-1	1	DECAL; BOOM CAPACITY, RIGHT, ET/HT25KX
23132-2	1	DECAL; BOOM CAPACITY, LEFT, ET/HT25KX
19743	2	DECAL; MODEL NAME, ET25KX
19788	2	DECAL; 'PROPORTIONAL CONTROL'
13397	1	DECAL; OIL LEVEL
23188	1	DECAL; MANUAL OVERRIDE, RIGHT
23191	1	DECAL; MANUAL OVERRIDE, LEFT
19315-2	1	DECAL; PROP. VALVE MANUAL OVERRIDE
17813	1	DECAL; OVERLOAD SENSING SYSTEM
16184-1	1	DECAL; HORN RELAY
24417	1	IDWG; FIELD SERVICE LABEL KIT
24410	1	IDWG; DECAL PLACEMENT
INST-23233	1	SAFETY MANUAL, VENTURO CRANES
15397	1	KIT; ACCIDENT PREVENTION SIGNS

24442; FIELD SERVICE LABEL KIT, ET30KXP

PART NO.	QTY.	DESCRIPTION
14473-2	9	DECAL; GREASE
17389	2	DECAL; VENTURO LOGO, MEDIUM
17389-4	1	DECAL; VENTURO LOGO, SMALL
23167-1	1	DECAL; BOOM CAPACITY, RIGHT, ET30KX
23167-2	1	DECAL; BOOM CAPACITY, LEFT, ET30KX
23168	2	DECAL; MODEL NAME, ET30KX
19788	2	DECAL; 'PROPORTIONAL CONTROL'
13397	1	DECAL; OIL LEVEL
23188	1	DECAL; MANUAL OVERRIDE, RIGHT
23191	1	DECAL; MANUAL OVERRIDE, LEFT
19315-2	1	DECAL; PROP. VALVE MANUAL OVERRIDE
17813	1	DECAL; OVERLOAD SENSING SYSTEM
16184-1	1	DECAL; HORN RELAY
24417	1	IDWG; FIELD SERVICE LABEL KIT LIST
24410	1	IDWG; DECAL PLACEMENT
INST-23233	1	SAFETY MANUAL, VENTURO CRANES
15397	1	KIT; ACCIDENT PREVENTION SIGNS

24442; FIELD SERVICE LABEL KIT, ET36KXP

PART NO.	QTY.	DESCRIPTION
14473-2	9	DECAL; GREASE
17389	2	DECAL; VENTURO LOGO, MEDIUM
17389-4	1	DECAL; VENTURO LOGO, SMALL
27199-1	1	DECAL; BOOM CAPACITY, RIGHT, ET36KX
27199-2	1	DECAL; BOOM CAPACITY, LEFT, ET36KX
21868	2	DECAL; MODEL NAME, ET36KX
19788	2	DECAL; 'PROPORTIONAL CONTROL'
13397	1	DECAL; OIL LEVEL
23188	1	DECAL; MANUAL OVERRIDE, RIGHT
23191	1	DECAL; MANUAL OVERRIDE, LEFT
19315-2	1	DECAL; PROP. VALVE MANUAL OVERRIDE
17813	1	DECAL; OVERLOAD SENSING SYSTEM
16184-1	1	DECAL; HORN RELAY
24417	1	IDWG; FIELD SERVICE LABEL KIT LIST
24410	1	IDWG; DECAL PLACEMENT
INST-23233	1	SAFETY MANUAL, VENTURO CRANES
15397	1	KIT; ACCIDENT PREVENTION SIGNS

VENCO VENTURO INDUSTRIES LLC	FIELD SERVICE LABEL KIT	03-13-23B	SECTION C400
CINCINNATI, OHIO	ET25/30/36KXP	supersedes 08-04-20A	24417

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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