**INST-21890** 



ELAAAC-00

# PARTS & INSTALLATION MANUAL ET25KX

Included in this manual:

### ET25KX(P)

- 5,000 lbs Electric Telescopic Service Crane
- 10-16 ft Powered w/ 16-20 ft Manual, Single-Stage Boom Extension





This manual also available online at www.venturo.com.

#### ET25KX(P) INST-21890 - 6/30/2025 (Rev: NEW0)

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12-00073\_VNT1 WARRANTY PAGE

# DESCRIPTION & SPECIFICATIONS



### SPECIFICATIONS AND OPERATING FEATURES

ET25KX-10/20

### **SPECIFICATIONS**

#### 12 VOLT BATTERY OPERATED

25,000 FT-LBS OVERTURNING MOMENT (Or as limited by truck stability)

MOMENT OVERLOAD SYSTEM

TELESCOPIC BOOM	10 / 20
BOOM HYD ELEVATION	-8° TO 75°
BOOMHYDEXT	10 - 16 FT
BOOMMANUALEXT	4 FT
	1250 LBS @ 20 FT REACH
CAPACITY	5000 LBS @ 3 TO 5 FT REACH
WIRE ROPE	5/16" DIA x 80 FT
PENDANTCORDLENGTH	25 FT

WINCH - 2500 LBS SINGLE LINE CAPACITY With Automatic Load Brake

ELECTRIC HYDRAULIC BOOM ELEVATION

ELECTRIC HYDRAULIC BOOM EXTENSION & RETRACTION - 6 FT STROKE

#### 360° CONTINUOUS

REMOTE CONTROL PENDANT

25 ft Straight Cord with Four Environmentally Sealed Toggle Switches Protected by a Guard

MASTER DISCONNECT SWITCH

**OUTRIGGERS AVAILABLE** 

Side Bracket Type Outriggers

Fold Away Type Outriggers

Pullout Type Outrigger System

		DATE 10-9-09	<sup>SECTION</sup>
<b>ENIURO</b> MFG., INC. CINCINNATI, OHIO	ET25KX-10/20	SUPERCEDES	21891a

### 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 electrcal 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 ET25KX 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 Cranes Standards. The cable sheaves are either 16 (snatch block) or 18 (boom) times the cable diameter which likewise conforms.

### **MISCELLANEOUS**

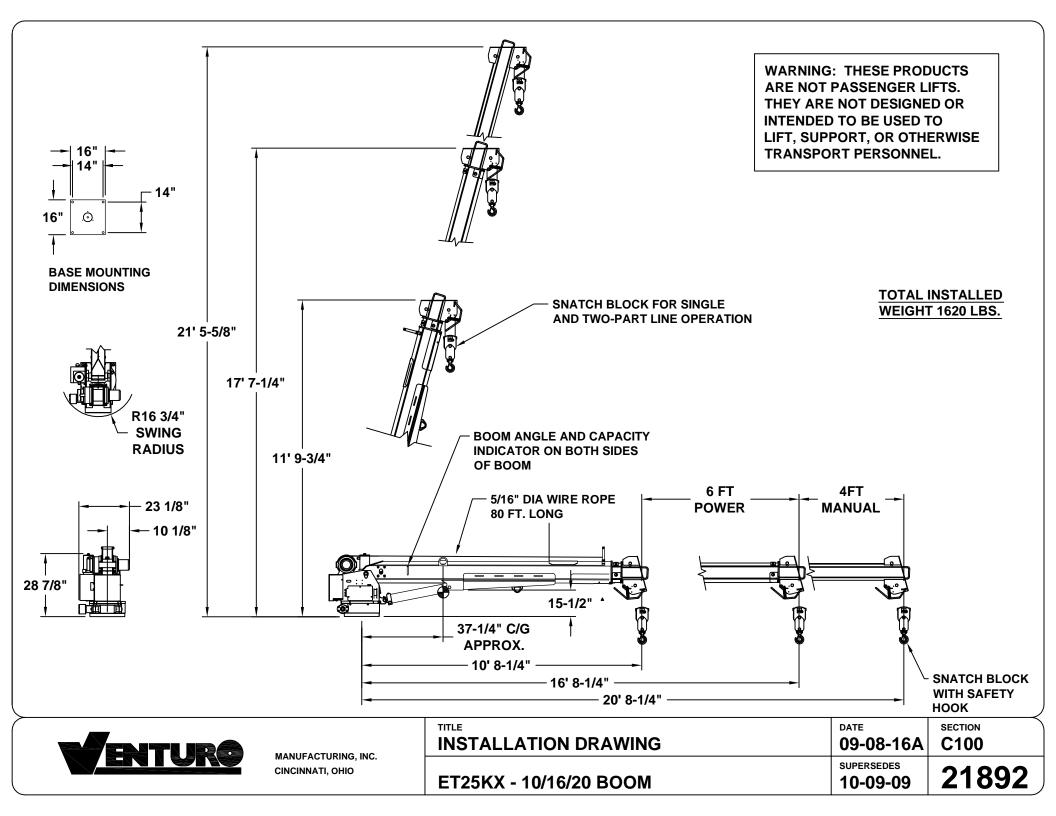
A. CAPACITY INDICATOR

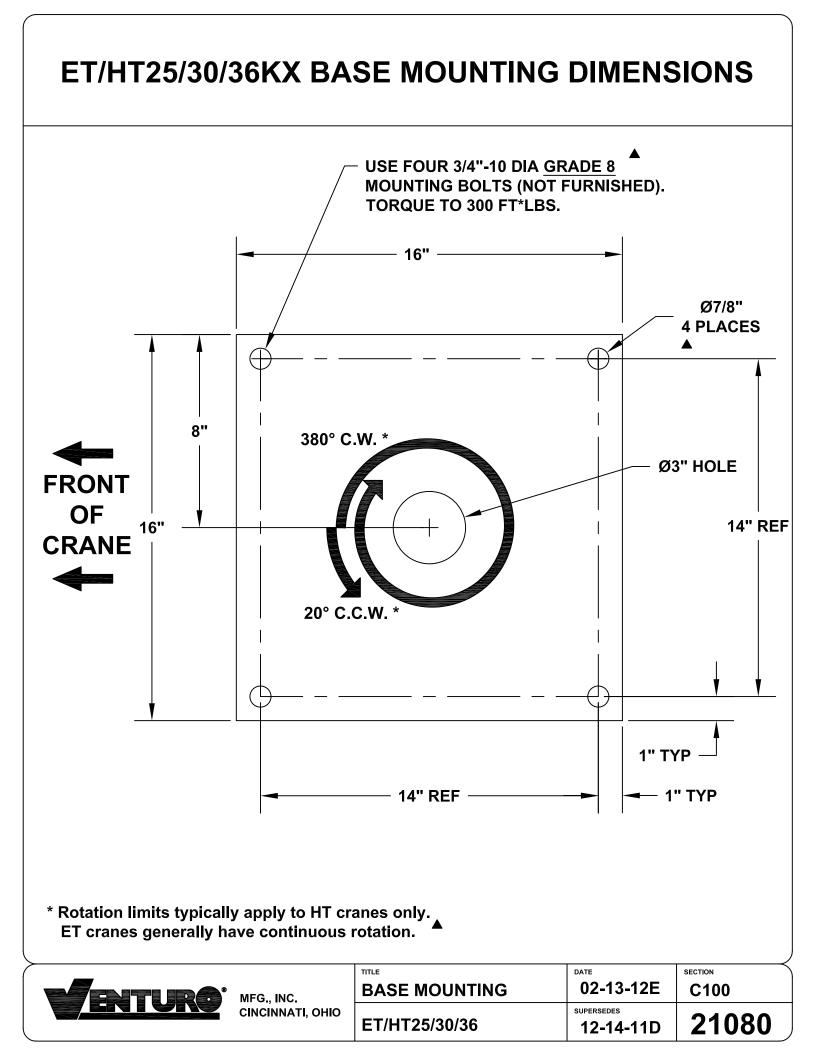
Select boom reach and angle allowable for load by using capacity indicator arrow and chart on either side of boom.

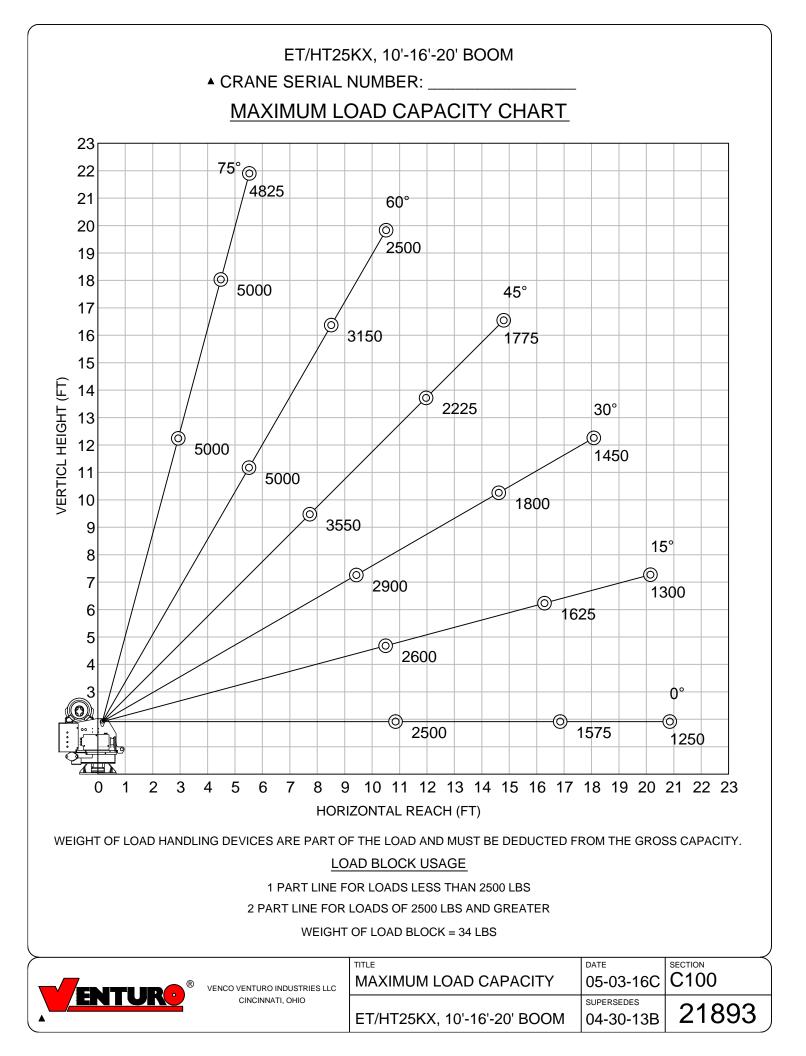
B. BATTERY HOOKUP

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.

MFG., INC. CINCINNATI, OHIO		DATE 10-9-09	section C120
	<sup>I, оню</sup> ET25KX-10/20	SUPERCEDES	21891b







## SAFETY



### CRANE SAFETY AND HAZARDS

### CAUTIONS

- 1. INSPECT VEHICLE AND CRANE, INCLUDING OPERATION, PRIOR TO USE DAILY.
- 2. DO NOT USE THIS EQUIPMENT EXCEPT ON FIRM LEVEL GROUND 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. 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

™	<sup>date</sup>	section
SAFETY & HAZARDS	01-29-15K	C150
ELECTRIC CRANES	supersedes 12-20-13J	

### **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

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TITLE	
SAFETY & HZRDS, CONT.	
ELECTRIC CRANES	

DATE	SECTION
01-29-15	C15
SUPERSEDES	_

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### 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.

**A DANGER** UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN 20 FEET OF HIGH-VOLTAGE LINES OF 350,000 VOLTS OR LESS. 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 - Minimun	n Clearance Distances

Voltage	Minimum clearance distance
(nominal, kV, alternating current)	(feet) *
Up to 50 over 50 - 200 over 200 - 350 over 350 - 500 over 500 - 750 over 750 - 1000 Over 1000	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	While traveling - minimum clearance distance
(nominal, kV, alternating current)	(feet) *
0 - 0.75 over 0.75 - 50 over 50 - 345 over 345 - 750 over 750 - 1000 Over 1000	4 6 10 16 20 (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

O VENTURO INDUSTRIES LLC	HAZARD APPS & INFO	<sup>DATE</sup> 02-21-14M	section C150
CINCINNATI, OHIO	ET/HT CRANES	SUPERSEDES	15394

DECAL #: DESCRIPTION: PURPOSE: QUANTITY: PLACEMENT:	15390 CAUTION, INSPECT VEHICLE & CRANE TO INFORM THE OPERATOR OF KEY OPERATING REQUIREMENTS. 1 REAR COVER OR SIDE OF CRANE	CAUTION     ADD CRAME INCLUDING     OPERATION, PRIOR TO USE DAILY.     ADD CRAME INCLUDING     OPERATION, PRIOR TO USE DAILY.     ADD COMPLEX TRANSPORT     SOLD, LEVEL SURFACE WITH CRAME     MOUTED ON FACTOR/MECOMMENCED     TRUCK.     ADD CRAME CRAME REFER TO     MAXIMUM LOAD (CAPACITY) CHART ON CRAME     PORTONIC DAIL (CAPACITY) CHART ON CRAME     DO NOT OPERATING LOAD. LIMITATIONS.     DO NOT OPERATE, WALK, OR STAND BENEATH     BOOM OR A SUSFENDED LOAD.     UNSUE OPENATION CLANS DHUT OFF MASTER     DISCOMECT SWITCH WHEN CRAME NOT IN     USE.     FOR TRAVEL, BOOM MUST BE IN STOWED     POSITION.
DECAL #:	15391	
DESCRIPTION:	DANGER, NOT A PASSENGER LIFT	<b>A</b> DANGER
PURPOSE:	TO INFORM OPERATOR NOT TO LIFT, SUPPORT, OR TRANSPORT	THIS CRANE IS NOT A PASSENGER LIFT IT IS NOT DESIGNED OR INTENDED TO BE USED TO LIFT, SUPPORT OR OTHERWISE TRANSPORT PERSONNEL.
	PERSONNEL, AND TO ENSURE OPERATOR IS ADEQUATELY TRAINED	D. YOU MUST NOT OPERATE THIS CRANE UNLESS: 1. YOU HAVE BEEN TRAINED IN THE SAFE
QUANTITY:	1	OPERATION OF THIS CRANE; AND 2. YOU KNOW AND FOLLOW THE SAFETY AND OPERATING RECOMMENDATIONS CONTAINED IN THE MANUFACTURER'S MANUALS, YOUR
PLACEMENT:	REAR COVER OR SIDE OF CRANE	EMPLOYER'S WORK RULES, AND APPLCABLE GOVERNMENT REGULATIONS. AN UNTRAINED OPERATOR SUBJECTS HIMSELF AND OTHERS TO DEATH OR SERIOUS INJURY. 1591.0
DECAL #:	15392	
DESCRIPTION:	DANGER, ELECTROCUTION HAZARD, MACHINE (CRANE)	
PURPOSE:	TO INFORM OPERATOR THAT MACHINE (CRANE) REPRESENTS AN	THIS MACHINE IS NOT INSULATED ELECTROCUTION HAZARD
	ELECTROCUTION HAZARD SHOULD IT COME CLOSE TO OR IN CONT	ACT MAINTAIN SAFE CLEARANCES FROM ELECTRICAL LINES AND APPARTUS. YOU MUST ALLOW FOR BOOM SWAY, ROCK OR SAG, AND ELECTRICAL LINE AND LOAD LINE SWAYING.
	WITH AN ELECTRICAL VOLTAGE SOURCE.	THIS LIFTING DEVICE DOES NOT PROVIDE PRO- TECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTICALLY CHARGED CONDUCTOR.
QUANTITY:		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 YOLTS, ONE
PLACEMENT:	REAR COVER OR SIDE OF CRANE	FOOT ADDITIONAL CLEARANCE IS REQUIRED FOR EVERY ADDITIONAL 3000 VOLTS OR LESS. DEATH OR SERIOUS INJURY WILL RESULT FROM CONTACT OR INADEQUATE CLEARANCE. 1980 E
DECAL #:	15401	
DESCRIPTION:	DANGER, UNLAWFUL TO OPERATE	ADANGER
PURPOSE:	WITHIN	IL TO OPERATE THIS EQUIPMENT 20 FEET OF HIGH-VOLTAGE LINES
	FOR MINIMUM CLEARANCE CRANES SAFETY MANUA	OF 350,000 VOLTS OR LESS. ES OF HIGH-VOLTAGE LINES IN EXCESS OF 350,000 VOLTS, REFERENCE OSHA 1926.1408, AL, AND CAL-OSHA ARTICLE 37, TITLE 8, HIGH-VOLTAGE ELECTRICAL SAFETY ORDERS
QUANTITY: PLACEMENT:	1 RING COVER OR SIDE OF CRANE	
DECAL #:	15393	
DESCRIPTION:	DANGER, ELECTROCUTION HAZARD, VEHICLE (TRUCK)	DANGER
PURPOSE:	WARNS OF DANGER FROM ELECTRICALLY CHARGED	
	VEHICLE, CRANE, OR LOAD.	P CLEAR OF TRUCK AND LOAD 4 OR SERIOUS INJURY CAN RESULT FROM TACT WITH THE LOAD, THE CRUNE, OR THE
	VEHICLE	
QUANTITY:	4 EACH SIDE & EACH END OF VEHICLE	E IF BOOM OR LOAD LINE SHOULD BECOME ELECTRICALLY CHARGED.

	ENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO
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EN

VENTURO CRANES

SAFETY DECALS

04-29-16E	C150
SUPERSEDES 10-24-13D	21353

PART NO.:	15513		DISCONNECT
DECAL:	MASTER DISCONNECT SWITCH		NUST OF FUE
FUNCTION:	To inform the operator of location and operation of master disconnect switch.	(	
QUANTITY:	1		CHAN OLE WHELE
PLACEMEN	: On master disconnect switch bracket.		MANE NOT IN US
PART NO.:	20927		IS T A B I L I T Y C H A R T
DECAL:	CRANE STABILITY		A D A N G E R
FUNCTION:	To inform the operator of the crane's lifti capacity throughout the entire rotation.	ng	NOLITING ART TRAITING IN BE ART 200 11 200 11 200 12 200 12 20000000 200 12 200 10 10 200 10 200 1000 10
QUANTITY:	1		
	: In prominent location, so it is easily see readily identifiable.	en and	

D VEN CIN
) VE CI

O VENTURO INDUSTRIES LLC		DATE 06-06-14C	C150	
CINCINNATI, OHIO	CRANES	supersedes 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.

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.



CONDUCTIVE GREASE

Retract All Cylinders Prior to Servicing





MANUFACTURING, INC. CINCINNATI, OHIO

	TITLE	DATE	SECTION
).	DECALS	11-12-19E	C150
		SUPERSEDES	
	ET CRANES	12-23-13D	21354

PART NO.: 23132-1 & 23132-2

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.: 19743

- DECAL: MODEL NUMBER (ET25KX)
- FUNCTION: To show the model of the crane.
- QUANTITY: 2

PLACEMENT: One on each side of boom.

PART NO.: 19788-1

DECAL: PROPORTIONAL DECAL

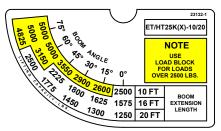
FUNCTION: To show the crane has proportional feature.

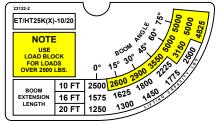
### PROPORTIONAL CONTROL

QUANTITY: 2

PLACEMENT: One on each side of boom.

	VENCO VENTURO INDUSTRIES LLC	MODEL/CAPACITY DECALS	<sup>date</sup> 09-16-19A	SECTION C150
<u>ENTUR</u> ®	CINCINNATI, OHIO	ET25KX(P)	supersedes	21895







## INSTALLATION



### **!! IMPORTANT !!**

### ADEQUATE WIRING IMPERATIVE FOR PROPER OPERATION

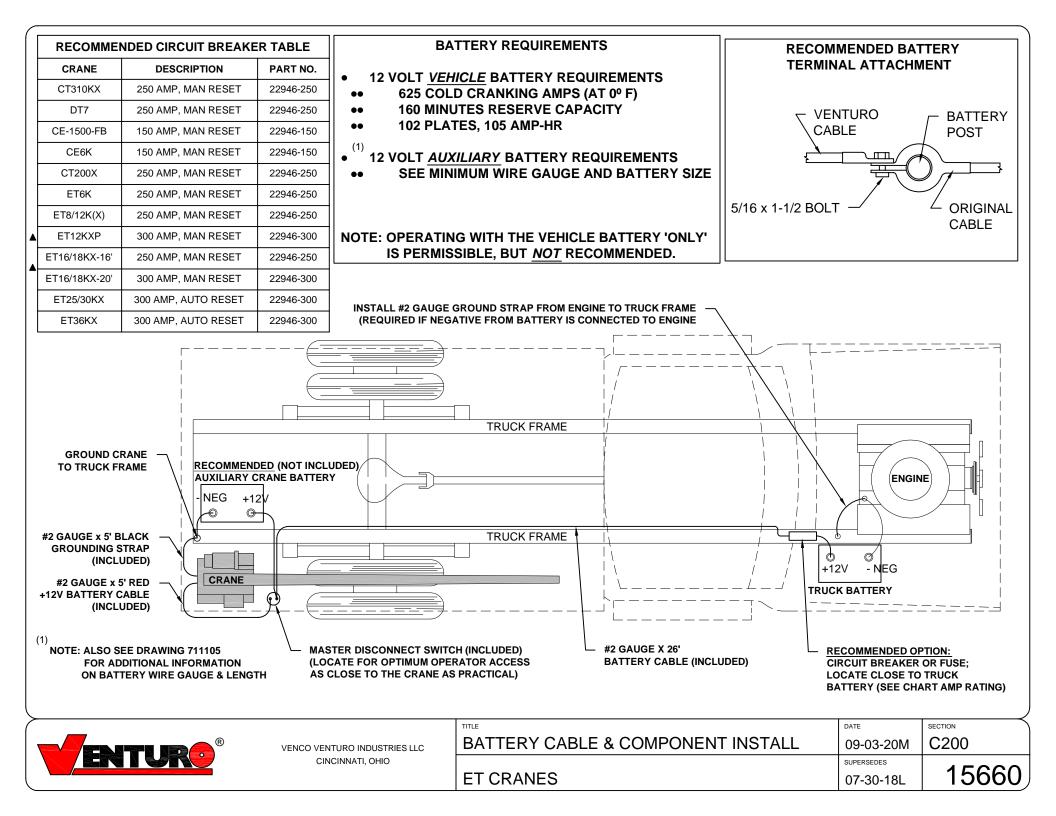
- 1. PROPER GROUND PATH SEE DWG 15660
- 2. CURRENT DRAW IS SEVERAL HUNDRED AMPERES -ADEQUATE WIRE SIZE AND BATTERY CAPACITY IS ABSOLUTELY ESSENTIAL (SEE CHART BELOW).

### ▲ MINIMUM WIRE GAUGE AND AUXILIARY BATTERY SIZE

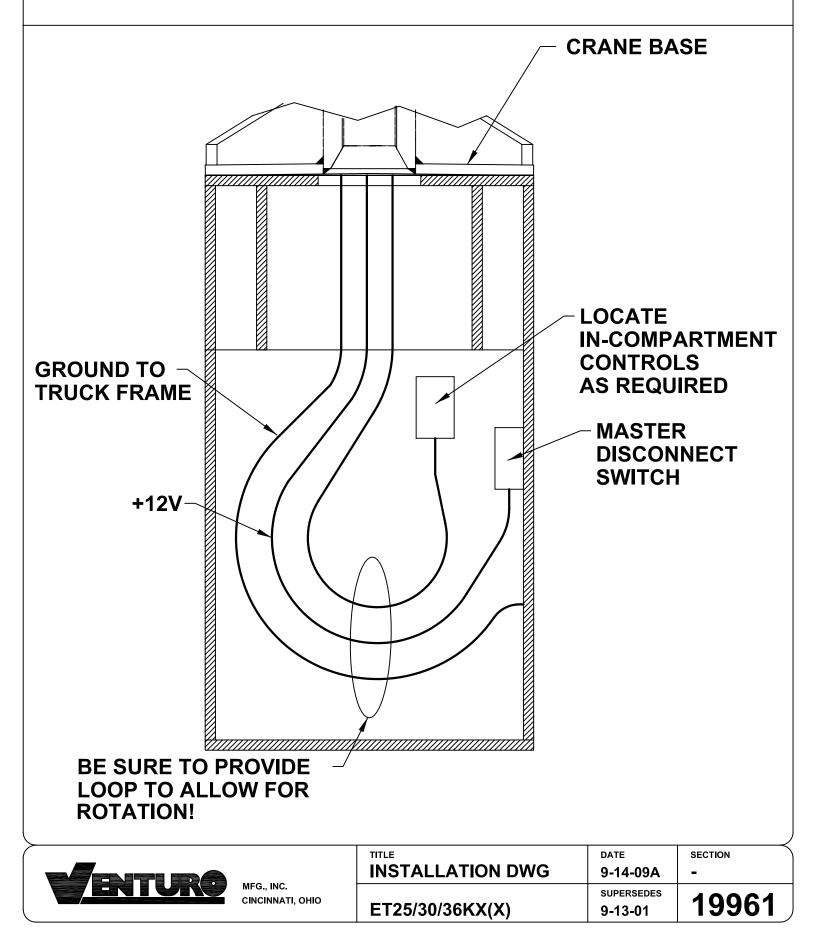
MODEL		TOTAL LENGTH OF CABLE (FT) *					▲ 12 VOLT A BATTERY RE	AUXILIARY QUIREMENTS		
	0-20	21-25	26-30	31-40	41-50	51-60	61-70	71-80	CCA (A) **	RC (MIN) ***
▲ CE1500 CE6K CT2000 CT2003/4/5 DT7K	#4	#4	#2	#2	#1	#0	#0	#00	350	100
ET5500MPB ET5500R ET6KMPB ET6KR ET6K ET8K ET10K ET12K	#2	#2	#1	#0	#00	NOT R	ECOMN	IENDED	450	100
ET8KX ET10KX ET12KX ▲ ET12KXP	#2	#2	#1	#0	#00	NOT R	ECOMN	IENDED	550	150
ET18K(X) ET25K(X) ET30KX ET36KX		SEE DRAWING 15660 FOR CABLE AND BATTERY REQUIREMENTS								

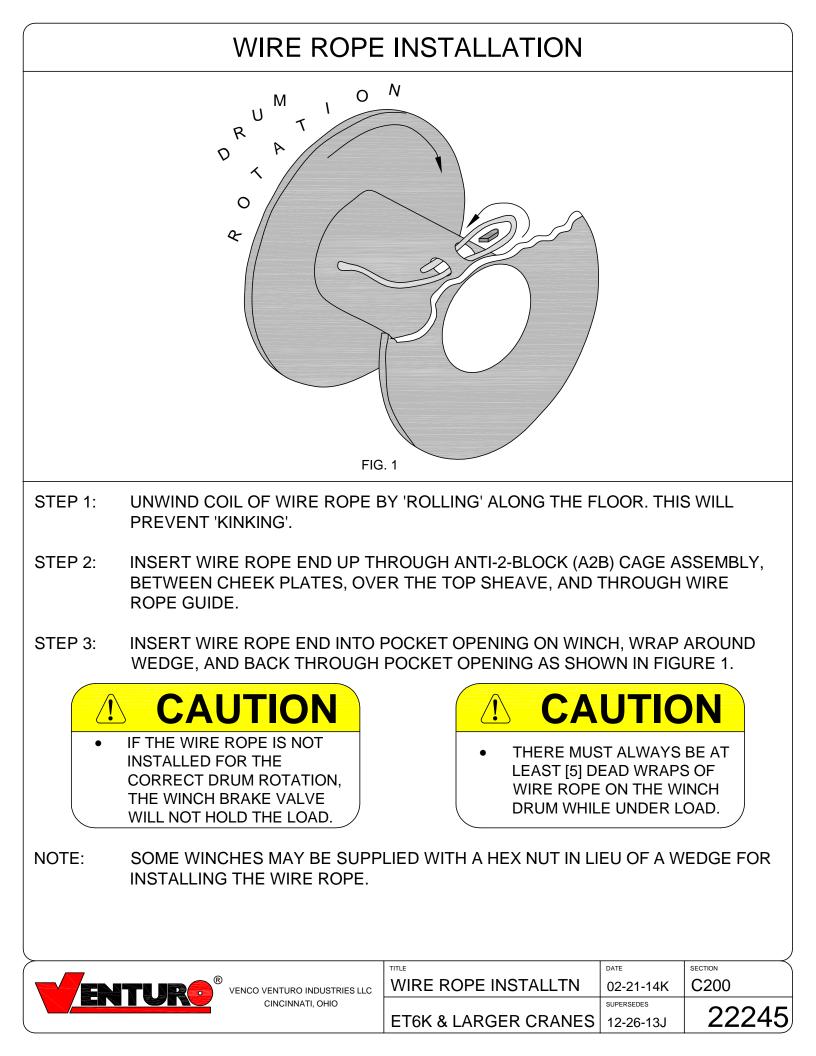
- \*\* CCA = COLD CRANKING AMPS AT 0° (F).
- RC = RESERVE CAPACITY IN MINUTES AT 25 AMPS AND 80° (F).
   THE RC RATING IS A MEASURE OF THE PERIOD OF TIME THE BATTERY CAN SUPPLY A GIVEN CURRENT WITHOUT RECHARGING.

	CABLE & BATTERY	<sup>DATE</sup> 07-30-18X	section C200	
	CINCINNATI, OHIO	ELECTRIC CRANES	supersedes 09-27-17W	711105



### IN-COMPARTMENT CONTROLS INSTALLATION ET25/30/36KX(X)



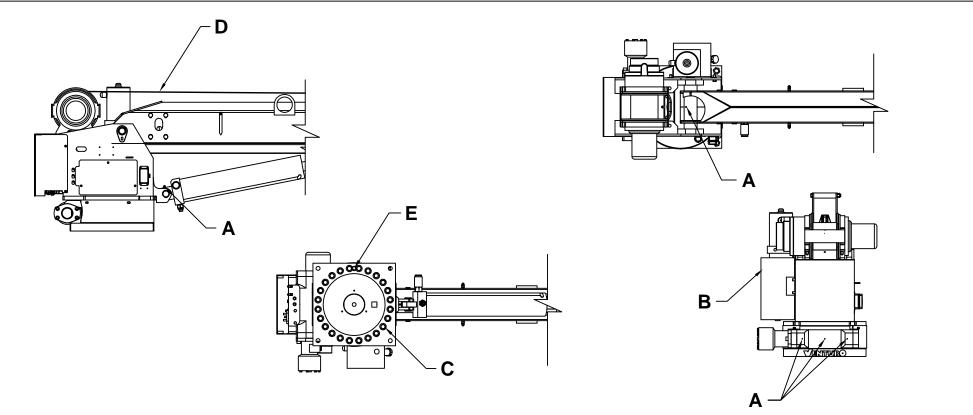


## MAINTENANCE

### &

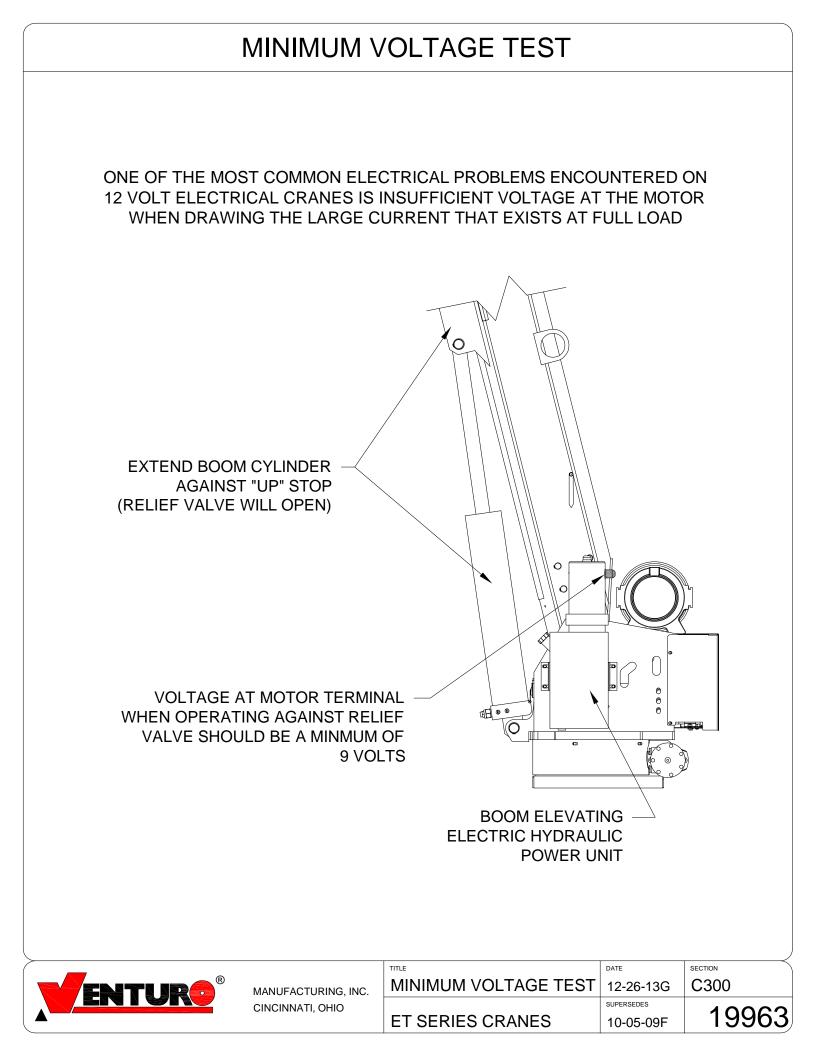
## SERVICE





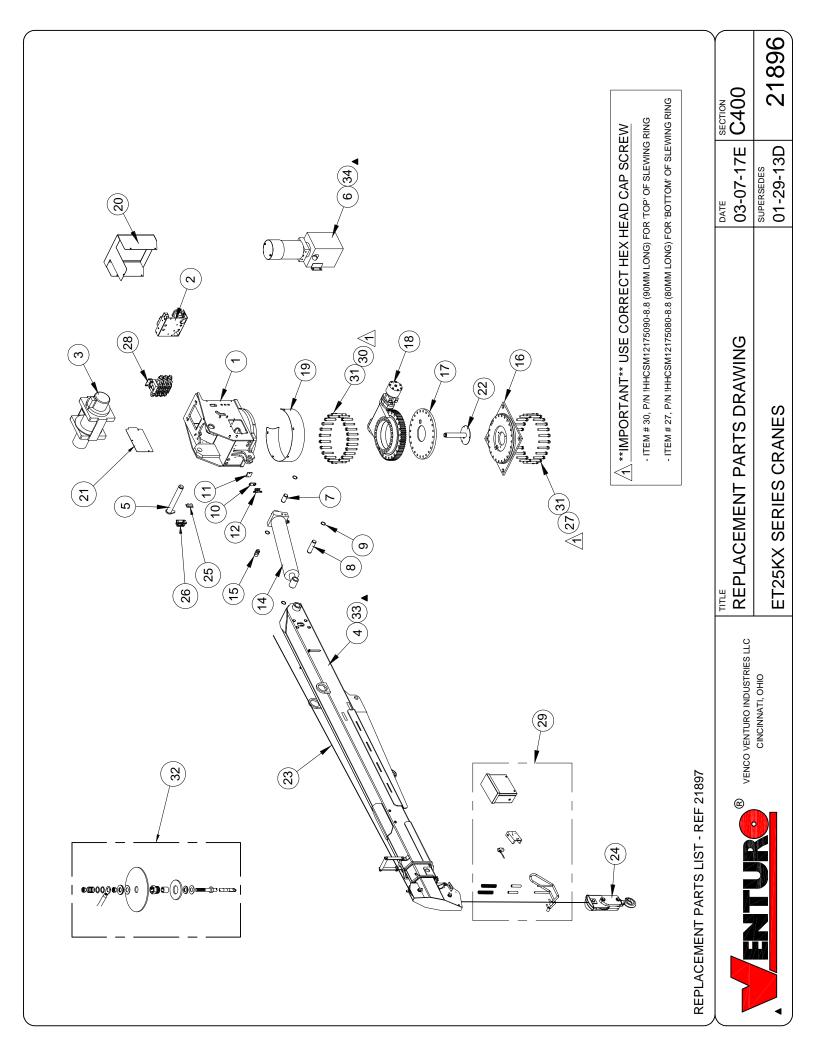
Location	Service Required	Note	Service Interval
Α	Grease fitting With Pressure Grease Gun	USE ELECTRICALLY CONDUCTIVE GREASE Example: Fuch's Renolit Aluminum Complex Grease P/N 155250-2 (or equivalent).	Time of Truck Service
В	Fill Oil Reservoir to Oil Level with Boom Down	ISO Grade AW 46 for Use ISO Grade 68 or	Time of Truck Service and as requried by changes in the ambient temperature range
С	Check Torque of bolts		Time of Truck Service
D	Check Wire Rope and Hook	Rope should be free of kinks and fraying	Time of Truck Service
Е	Grease Fitting With Pressure Grease Gun	USE ELECTRICALLY CONDUCTIVE GREASE Example: Fuch's Renolit Aluminum Complex Grease P/N 155250-2 (or equivalent).	Every 6 months

ENTUR© MANUFACTURING, INC. CINCINNATI, OHIO		<sup>date</sup> 07-29-19A	SECTION
	ET25/30/36KX(X)	supersedes 08-11-09	21878



# REPLACEMENT PARTS





34	1	27512	HYDRAULIC POWER UNIT; DUAL-STAGE BOOM				
33	1	27197	BOOM FINAL ASS'Y (DUAL-STAGE)				
32	1	16780-1	1 SWIVEL TERMINAL ASS'Y.				
31	50	!LWSH-050	50 LOCK WASHER; 1/2"				
30	26	!HHCSM12175090-8.8	HHCS; 12MM-1.75MM X 90MM LG, GR. 8.8				
29	1	27738	ANTI-2-BLOCK; MECHANICAL ASS'Y.				
28	1	28801	VALVE BLOCK - 3-SPOOL				
27	24	!HHCSM12175080-8.8	HHCS; 12MM-1.75MM X 80MM LG, GR. 8.8				
26	1	19425	SOCKET CASE				
25	1	19428	INSERT; 10 PIN FEMALE				
24	1	27667	LOAD BLOCK; 6000 LBS.				
23	1	27668-5/16-80	WIRE ROPE; 5/16" X 80 FT.				
22	1	27568	CANDLESTICK ASS'Y.; SWIVEL PIGTAIL				
21	1	27000	SIDE COVER; HOUSING				
20	1	27600	REAR COVER; HOUSING				
19	1	27186	COVER; SLEWING RING				
18	1	21418	SLEWING RING				
17	1	27520H	SPACER				
16	1	27520M-2-R	WELDED ASS'Y.; BASE				
15         1           14         1		17460-2400-21	OVERLOAD PRESSURE SWITCH				
		21752	ELEVATION CYLINDER				
13	1	19269	CABLE CLAMP; 1/4"				
12	1	19917	SWITCH BRACKET; BOOM SHUT-OFF				
11	1	20896	MOUNTING BLOCK; BOOM SWITCH				
* 10	1	19918	SWITCH; BOOM SHUT-OFF				
9	4	!SRNG-125	RETAINING RING; 1/4" SHAFT DIA.				
8	1	18761	PIVOT PIN; ELEVATION CYLINDER				
7	1	18762	PIVOT PIN; ELEVATION CYLINDER				
6	1	27009	HYDRAULIC POWER UNIT; SINGLE-STAGE BOOM				
5	1	21012	PIVOT PIN; MAIN BOOM PIVOT				
4	1	27198	BOOM FINAL ASS'Y (SINGLE-STAGE)				
3	1	19813	ELECTRIC WINCH				
2	1	23154-2	ELECTRICAL COMPONENT ASS'Y.				
1	1	27184	WELDED ASS'Y.; HOUSING				
ITEM NO.	QTY.	PART NO.	DESCRIPTION				

(\*) NOT ILLUSTRATED

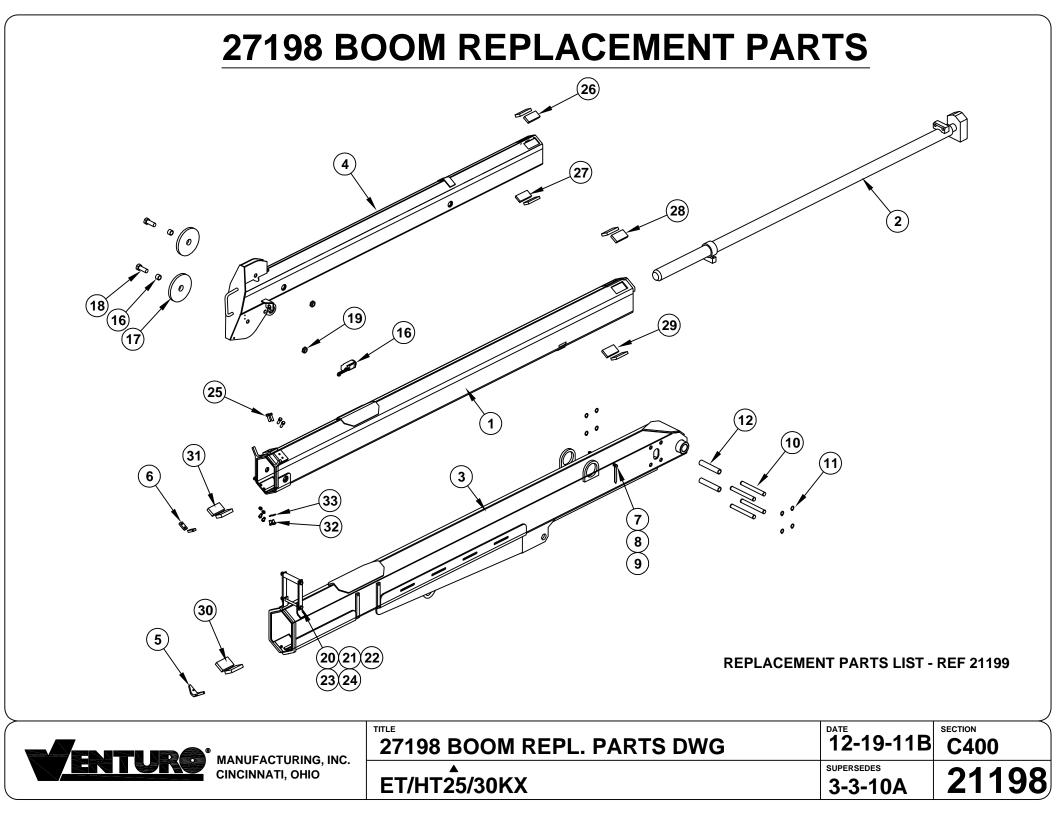
**REFERENCE REPLACEMENT PARTS DRAWING 21896** 



TITLE

6-25K	SECTION
EDES	
7-17J	2189

7



	33	6	!LW SH-038	LOCK WASHER 3/8"			
	32	6	!HHC\$03816063	HEX HEAD CAP SCREW 3/8-16 X 5/8 LG			
	31	2	23217-10	UHMW PAD			
	30	2	23217-10	UHMW PAD			
29 2			23217-3				
	27	2	23217-8	UHMW PAD			
	20	2	23217-8				
	26	2	23217-6	UHMW PAD			
	25	4		C-SINK CAP SCREW 3/8-16 X 3/4 LG			
	23	2	!LNUT-04414	NYLON INSERT LOCK NUT - 7/16-14			
	24	1	21560	ROLLER, UHM W GUIDE			
	23	1	21936	FLAT, MOUNT; WIRE ROPE GUIDE			
	22	1		HHCS - 7/16-14 X 5-1/2 LG			
	20	1	21935				
	19	2		WIRE-ROPE GUIDE WELDED			
		2	!LNUT-07510				
	18		17059-6	SHEAVE AXLE 3/4 X 2 W / 1" SHANK			
	17	2	27001	SHEAVE - BOOM			
	16	2	23924	SPACER - SHEAVE			
	15	-	-	-			
	14	-	-	-			
	13	-	-				
	12	2	21498				
	11	8	!SRNG-075	RETAINING RING - 3/4" SHAFT DIA.			
	10	4	21497 THRUST PIN - EXTENSION CYLINDER				
	9	2	!ANUT-02520S	ACORN NUT 1/4-20 STAINLESS			
	8	2	13459-2	BOOM ARROW 4-7/16 LONG			
	7	2	22490	SPACER, BOOM ARROW 1/2" O.D.			
	6	2	23119	BEARING RETAINING BLOCK			
	5	1	23183	V-BLOCK SLIDER			
	4	1	27110	TERTIARY BOOM WELDED ASSEMBLY			
	3	1	21472	PRIMARY BOOM WELDED ASSEMBLY			
	2	1	20061	EXTENSION CYLINDER - HOLLOW ROD			
	1	1	27108	SECONDARY BOOM WELDED ASSEMBLY			
	ITEM NO.	EXPLODE/QTY.	PART NUMBER	DESCRIPTION			

REPLACEMENT PARTS DRAWING - REF 21198



MANUFACTURING, INC. CINCINNATI, OHIO 27198 BOOM REPL. PARTS LIST

### ET/HT25/30KX

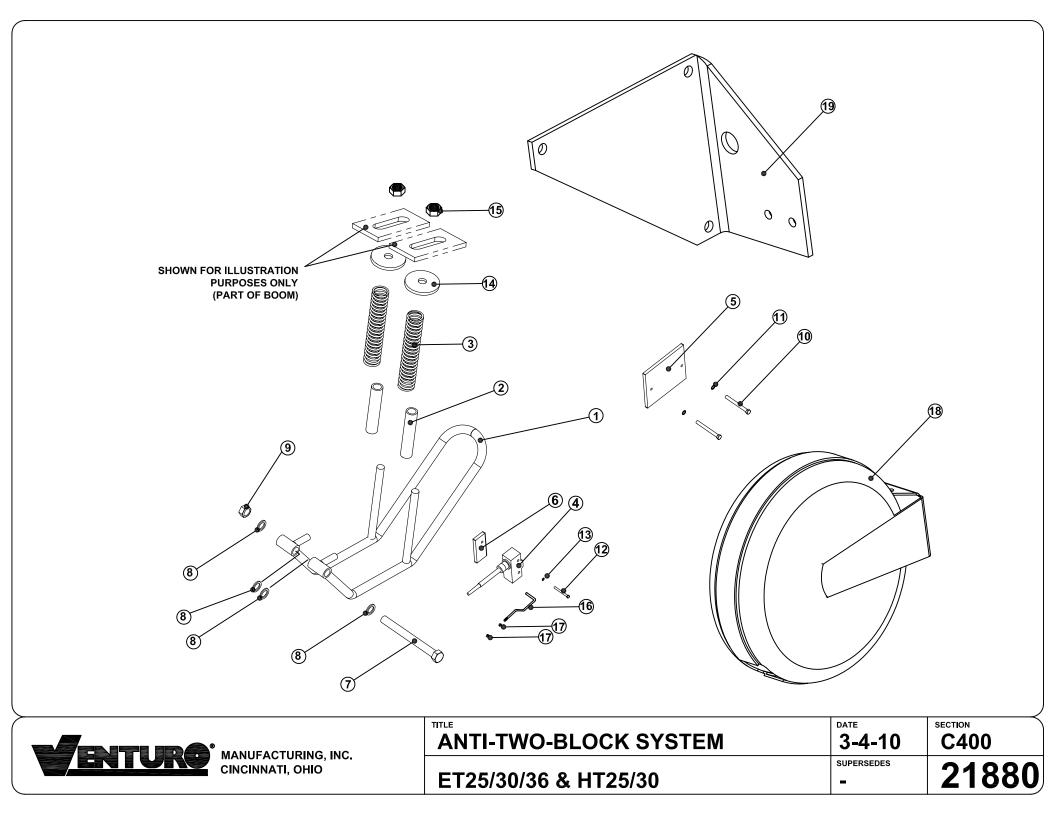
TITLE

 Date
 Section

 12-19-11C
 C400

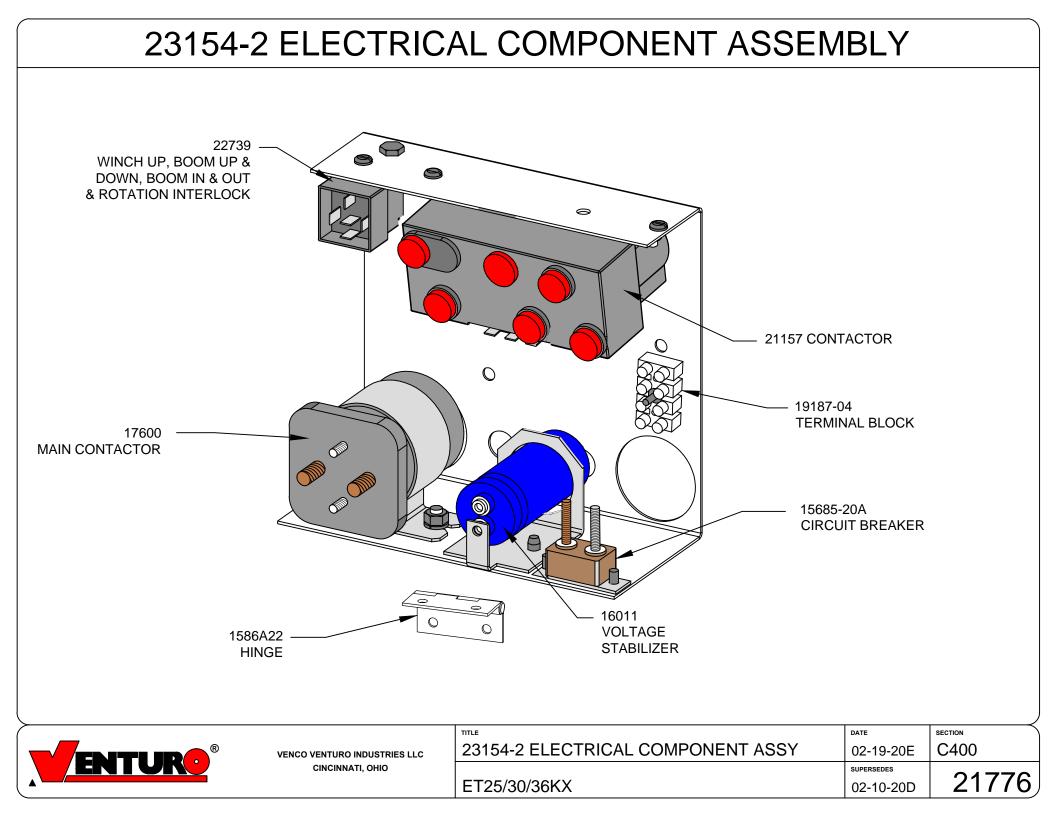
 SUPERSEDES
 21199

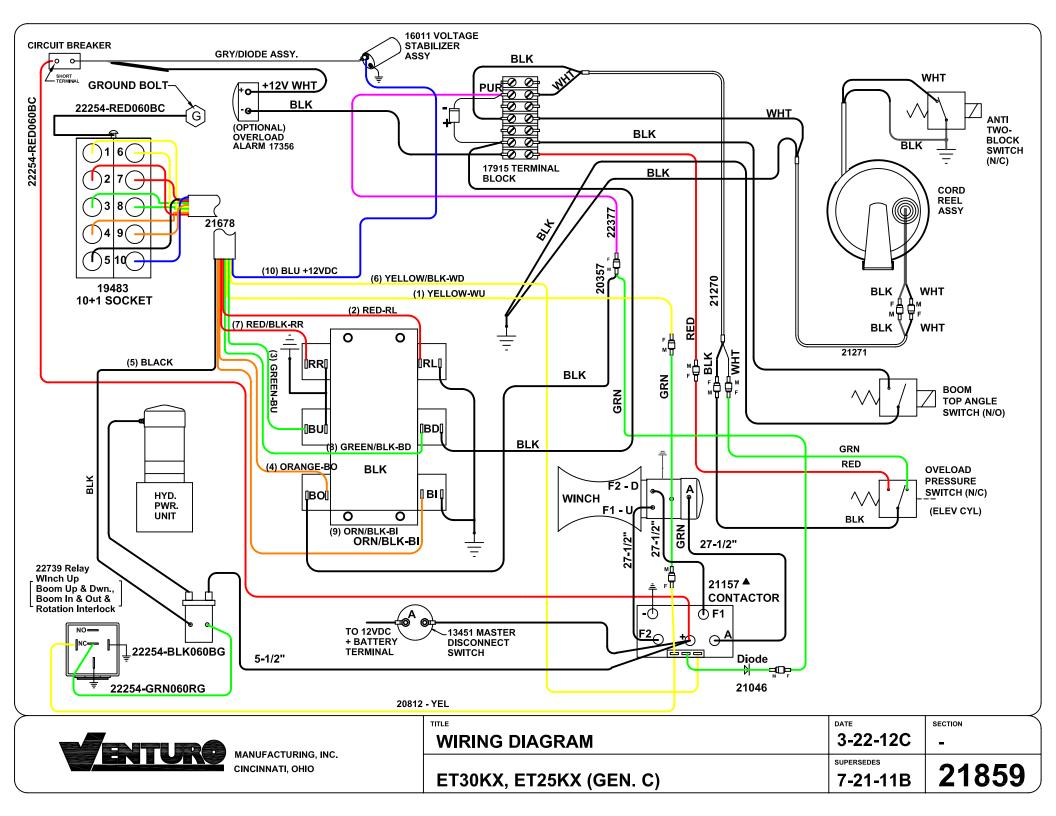
 7-12-11B
 21199



19	1	27583	MOUNTING BRACKET - CORD REEL
18	1	27310	CORD REEL
17	2	!LNUT-#0440	LOCKNUT W/ NYLON INSERT - 4-40
16	1	27624	ROD ASSY. ADJUSTABLE A2B
15	2	!LNUT-04414	LOCKNUT W/ NYLON INSERT - 7/16-14
14	2	!FWSH-050	FLAT WASHER - 1/2" USS
13	1	<b>!LWSH-#06-STAR</b>	EXTERNAL STAR LOCK WASHER - #06
12	1	<b>!PHCS#0632100</b>	PAN HD CAP SCREW - #6-32 x 1
11	2	!LWSH-#10	LOCK WASHER - #10
10	2	!PHCS#1024125	PAN HD CAP SCREW - #10-24 x 1-1/4
9	1	!JNUT-04414N	HEX JAM LOCKNUT - 7/16-14
8	4	<b>!FWSH-044SAE</b>	FLAT WASHER - 7/16 SAE
7	1	<b>!HHCS04414450</b>	HEX HD CAP SCREW - 7/16-14 x 4-1/2
6	1	27696	BASE - NEOPRENE
5	1	27698	COVER PLATE
4	1	19376	ANTI-TWO BLOCK SWITCH
3	2	27586	SPRING
2	2	27579b	SPRING LOCATING TUBE
1	1	21870	ANTI - TWO - BLOCK CAGE ASSEMBLY
ITEM NO.	EXPLODED/QTY.	PART NUMBER	DESCRIPTION

MANUFACTURING, INC.	ANTI-TWO-BLOCK SYSTEM	<sup>дате</sup> <b>3-4-10</b>	section C400
	ET25/30/36 & HT25/30	SUPERSEDES	21881



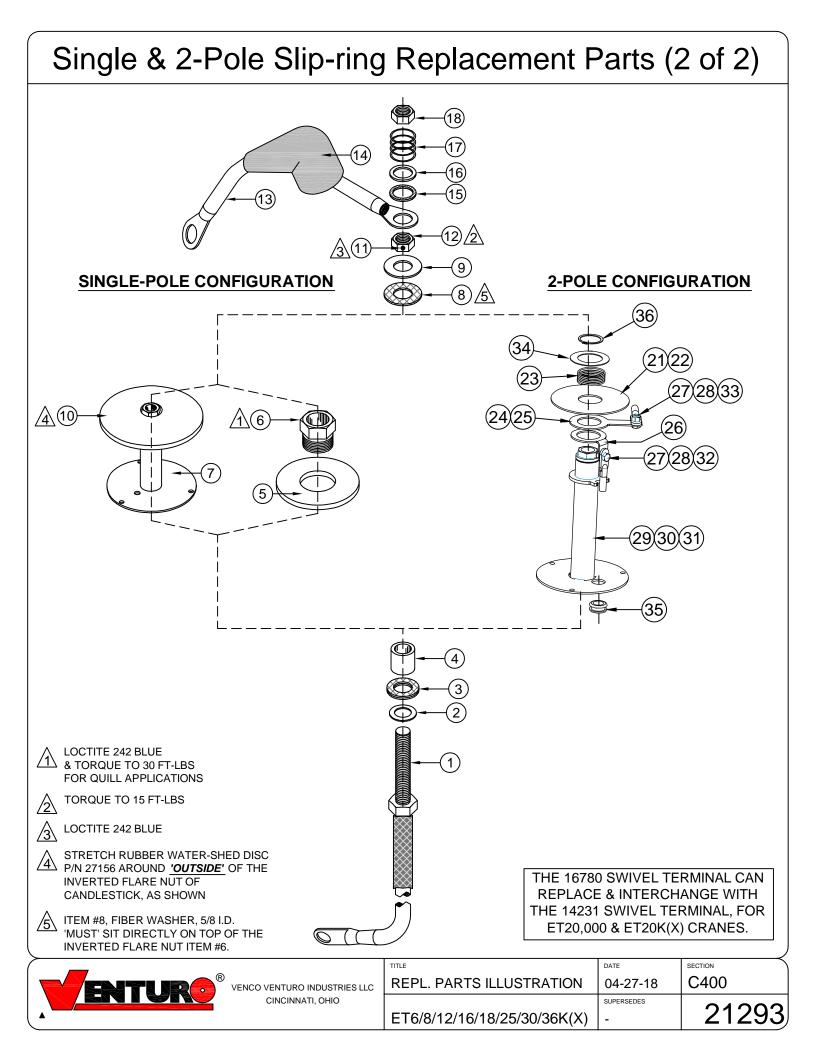


### Single & 2-Pole Slip-ring Replacement Parts (1 of 2)

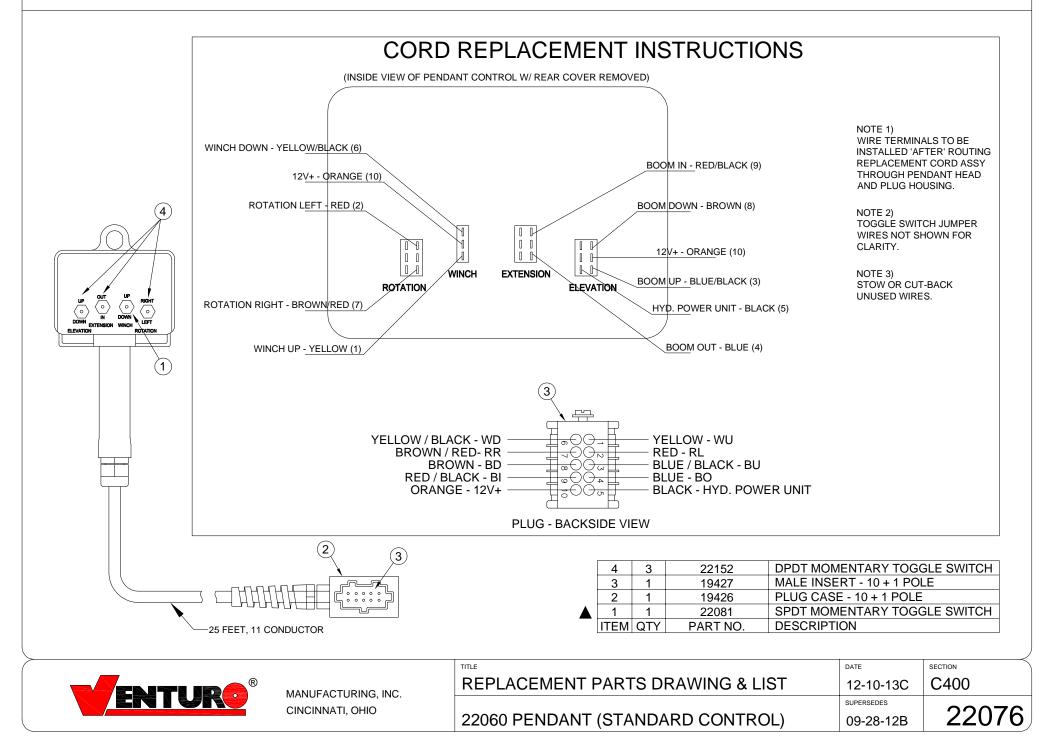
Quill Rotation	Slew Rotation Single Pole Slip-Ring	Slew Rotation 2-Pole Slip- Ring (ET6K ONLY)	Slew Rotation 2-Pole Slip- Ring (ET8-18KX)	Slew Rotation 2-Pole Slip- Ring (ET25-36KX)	ALL CRANES		16780 BILLS OF MATERIALS			
16780	16780 - 1	16780 - 2 <mark>P</mark> 6	16780 - 2P8	16780 - 2P25	16780 - KIT					
		Q	TY			#	PART	DESCRIPTION		
1	1	1	1	1	-	1	<mark>1</mark> 6783	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	-		-	1	-	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	-	-	-	-	10	27156	RUBBER WATER SHIELD; 1/8" THICK		
1	1	1	1	1	1	11				
1	1	1	1	1	1	12	21273 BRASS JAM NUT; 5/8"-11			
-	-	-	-	-	-	13	26035-2 PIGTAIL; SWIVEL TERMINAL			
-	-	-	-	19 <u>-</u> 9	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	1	20	19368	IDWG: 16780 SWIVEL TERMINAL		
-	-	1	-	-	-	21	27456	UHMW WATER SHIELD, (ET6K ONLY)		
-	-	-	1	1	-	22	27456-1 UHMW WATER SHIELD, (ET8 - ET36)			
e	-	1	1	1	-	23	27461 SPRING, (-) SLIP-RING ASSY.			
-	-	-	1	1	-	24		27441-1 COPPER SLIP-RING, (ET8 - ET36)		
-	5	1	-	-	-	25 26	27441 27449-1	27441         COPPER SLIP-RING, (ET6K ONLY)           27449-1         BRASS SLIP-RING (ET6 - ET36)		
2	2	1	1	1	2	27	!HHCS03118075-B	BRASS HHCS		
-	-	1	1	1	-	28	Innests intervention     BRASS HICS       IHNUT-03118-B     BRASS NYLOC NUT			
-	÷	1	-	<b>.</b> .	-	29	23255 SLIP-RING, WELDED ASSY, ET6K			
		-	1	- 1		30	23255-1 SLIP-RING, WELDED ASSY, ET8 - 18K(X)			
-	-	- 1	-	1	-	31 32	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			
5	-	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		
-	Ξ.	1	1	1	-	36	ISRNG-150 SNAP-RING, EXTERNAL, 1-1/2"			

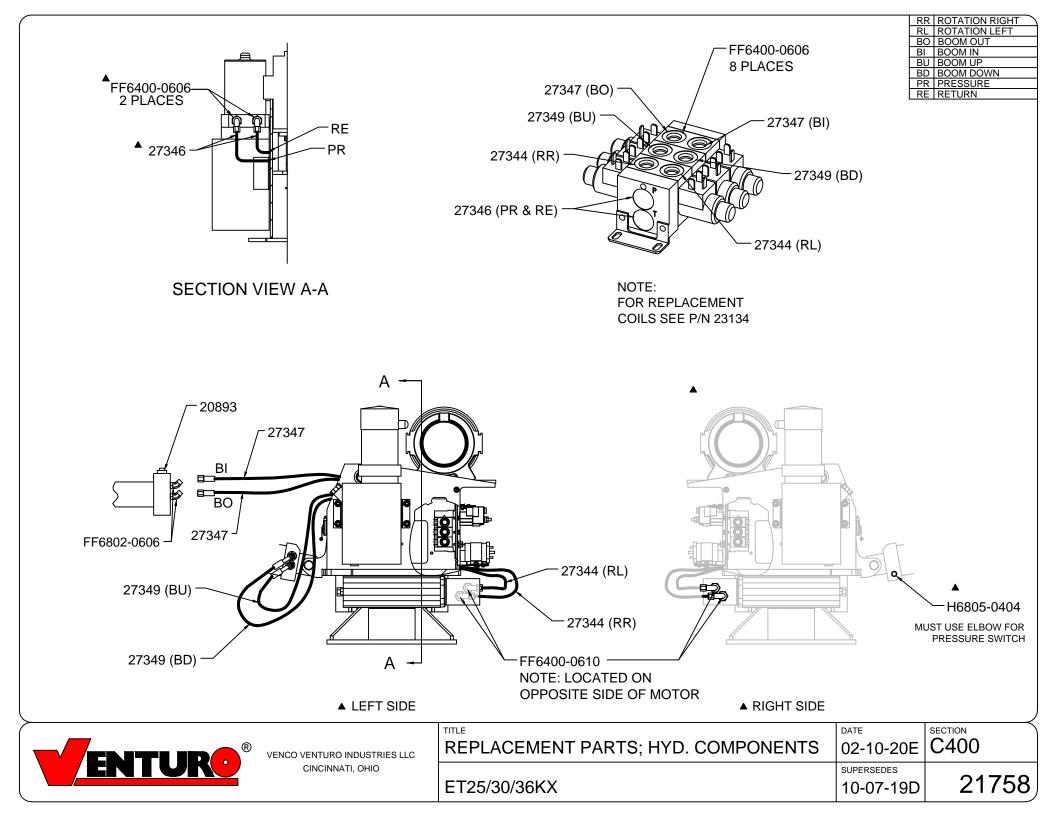
<b>ENTUR</b>	/ENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO
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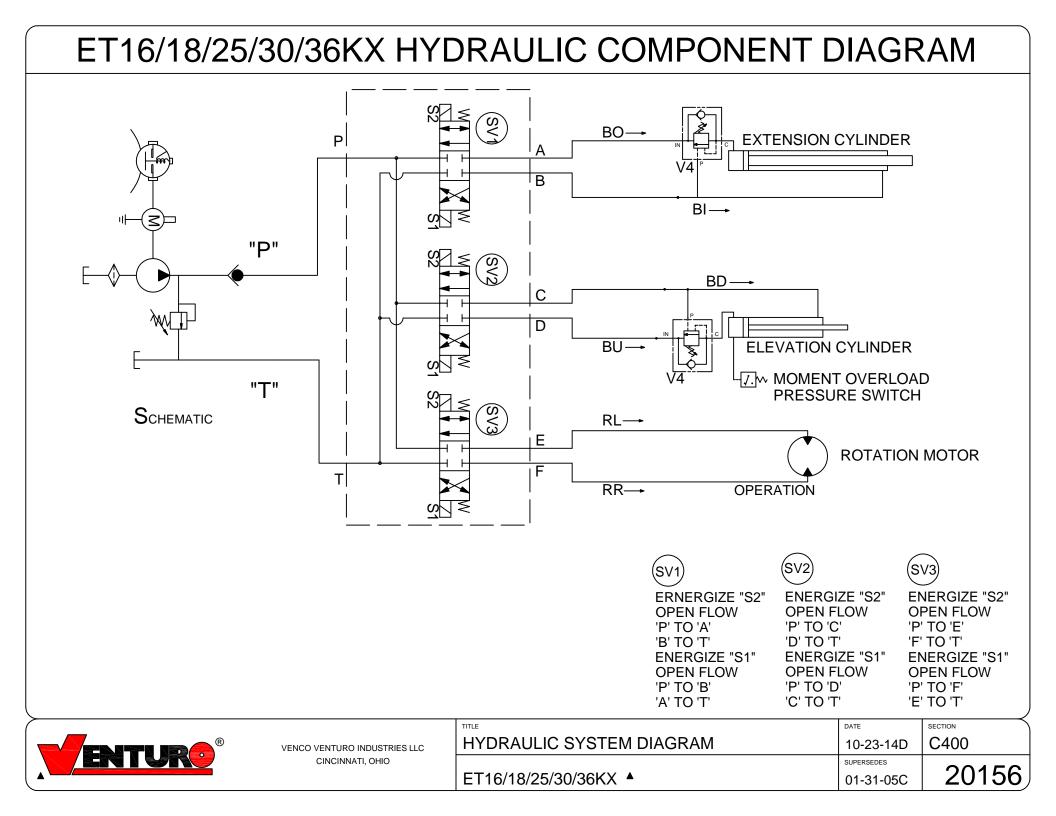
TITLE	DATE	SECTION
16780 REPLACEMENT PARTS	03-29-19A	C400
	SUPERSEDES	04000
ET6/8/12/16/18/25/30/36K(X)	04-27-18	21292

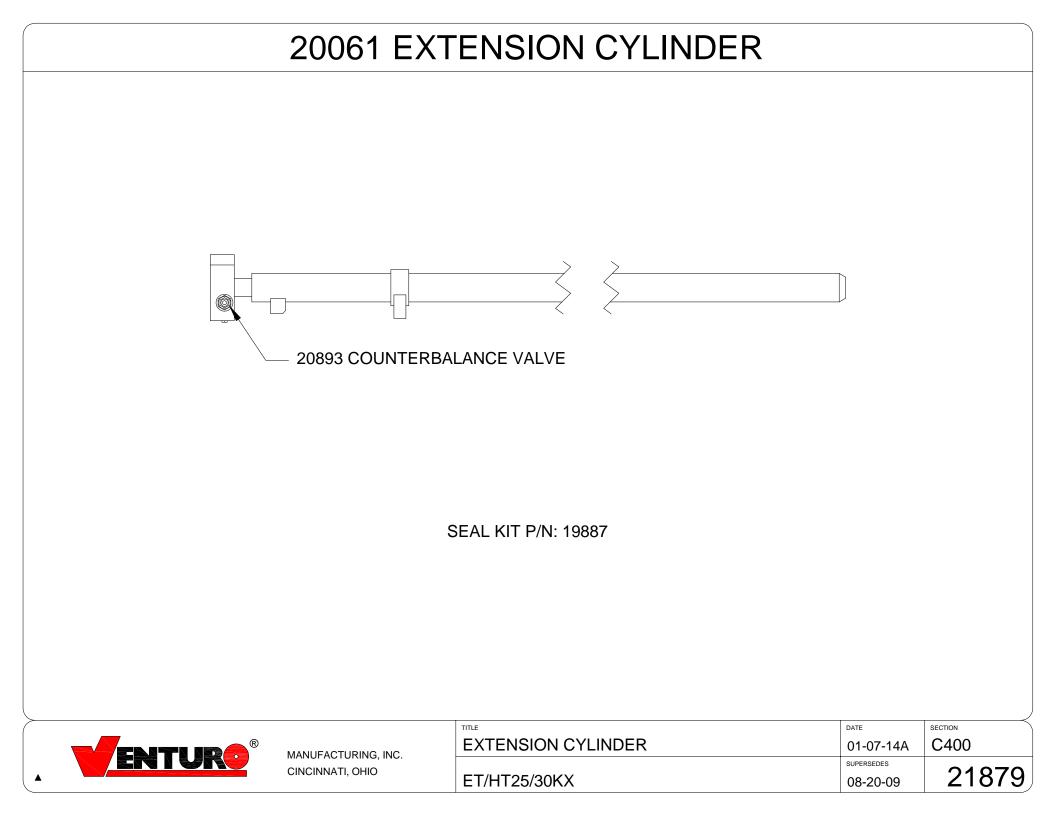


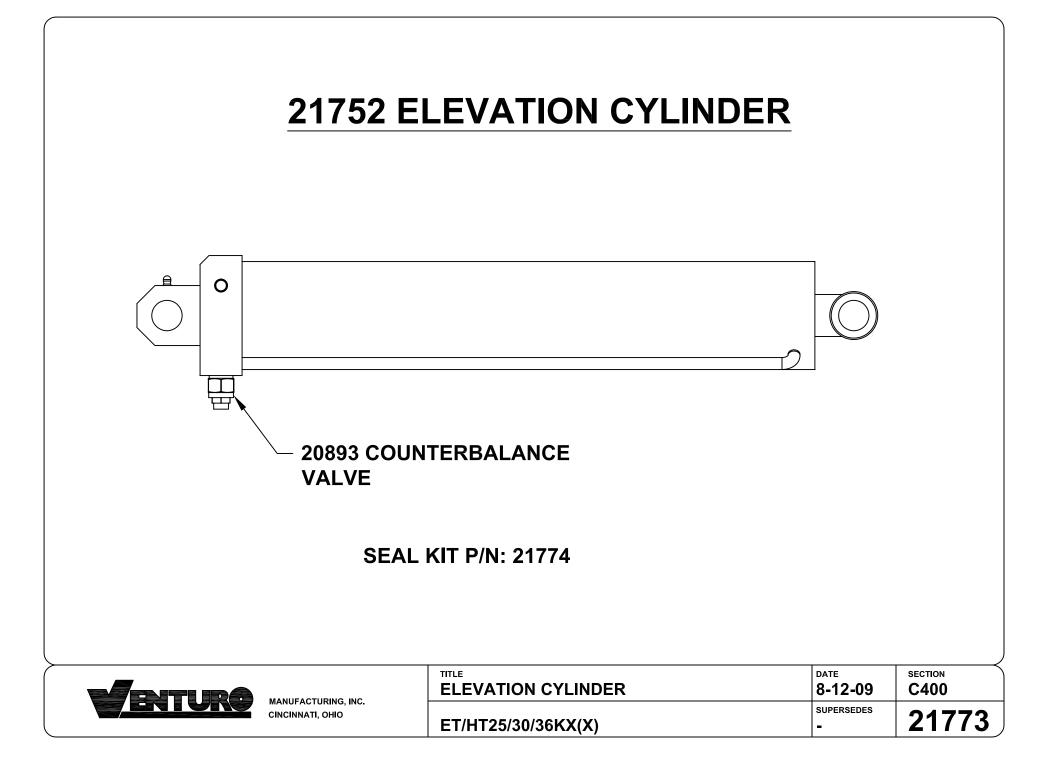
### 22060 PENDANT (4 - SWITCH)



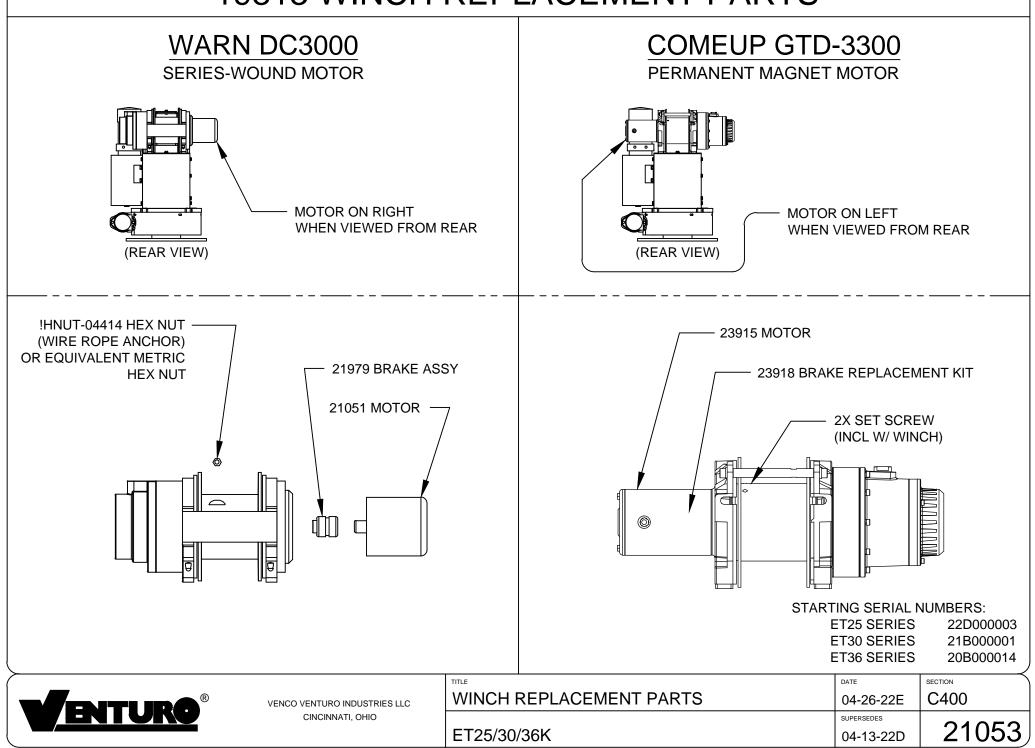


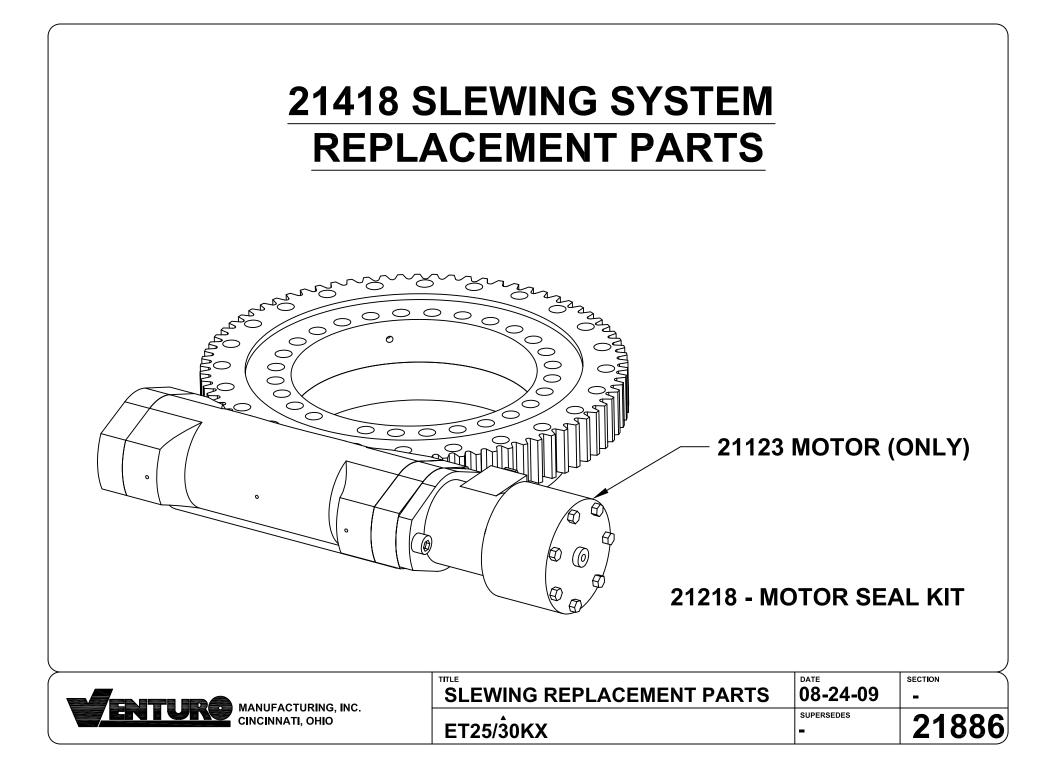


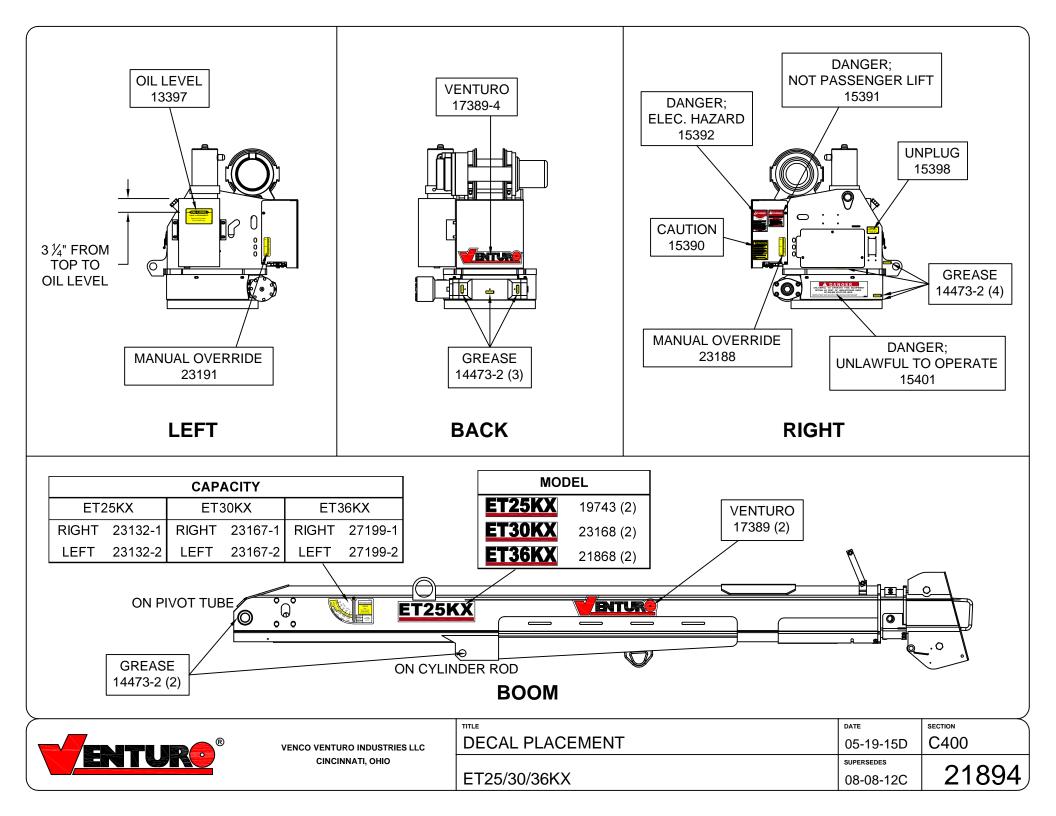




# **19813 WINCH REPLACEMENT PARTS**







## 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	



VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE	DATE	SECTION
	FIELD SERVICE LABEL KIT	03-13-23F	C400
		SUPERSEDES	21000
	ET25/30/36KX	08-04-20E	21899

### **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.

#### **<u>1-Year Limited Warranty Policy</u>**

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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Revised: January 2015

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