NEW2

INST-26820

VENTURO

OWNER'S MANUAL

ECBAAB-**

PARTS & INSTALLATION MANUAL

2010E

Included in this manual:

2010E

- 2,000 lbs. Hydraulic Telescopic Service Crane
- 10 ft Manual Boom Extension

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

VENCO VENTURO INDUSTRIES LLC

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

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26752 CAPACITY CHART 2010E
26753 MOUNTING DIMENSIONS, CRANE BASE MOUNTING PLATE

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12-00073_VNT1 WARRANTY PAGE

SECTION 100

DESCRIPTION

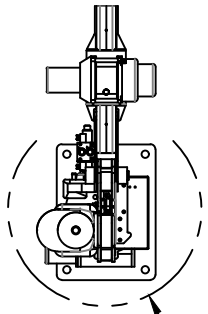
&

SPECIFICATIONS

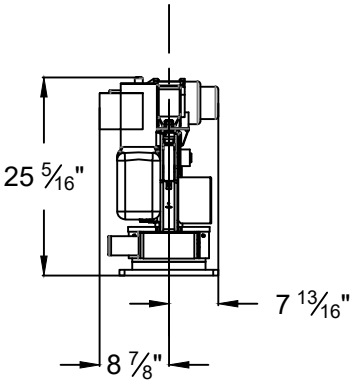
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

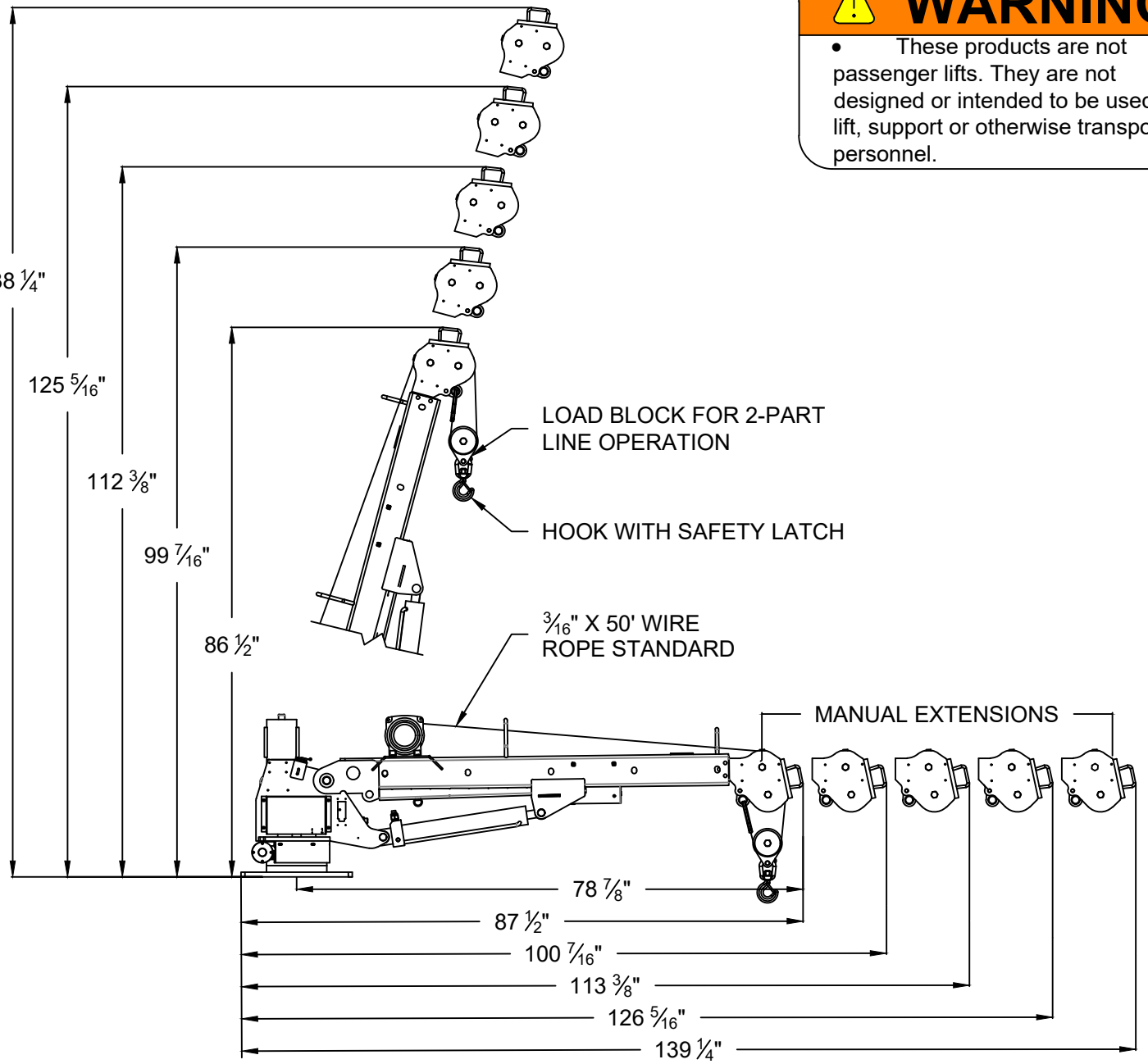
WARNING

- These products are not passenger lifts. They are not designed or intended to be used to lift, support or otherwise transport personnel.



R12"
SWING RADIUS





VENTURO®

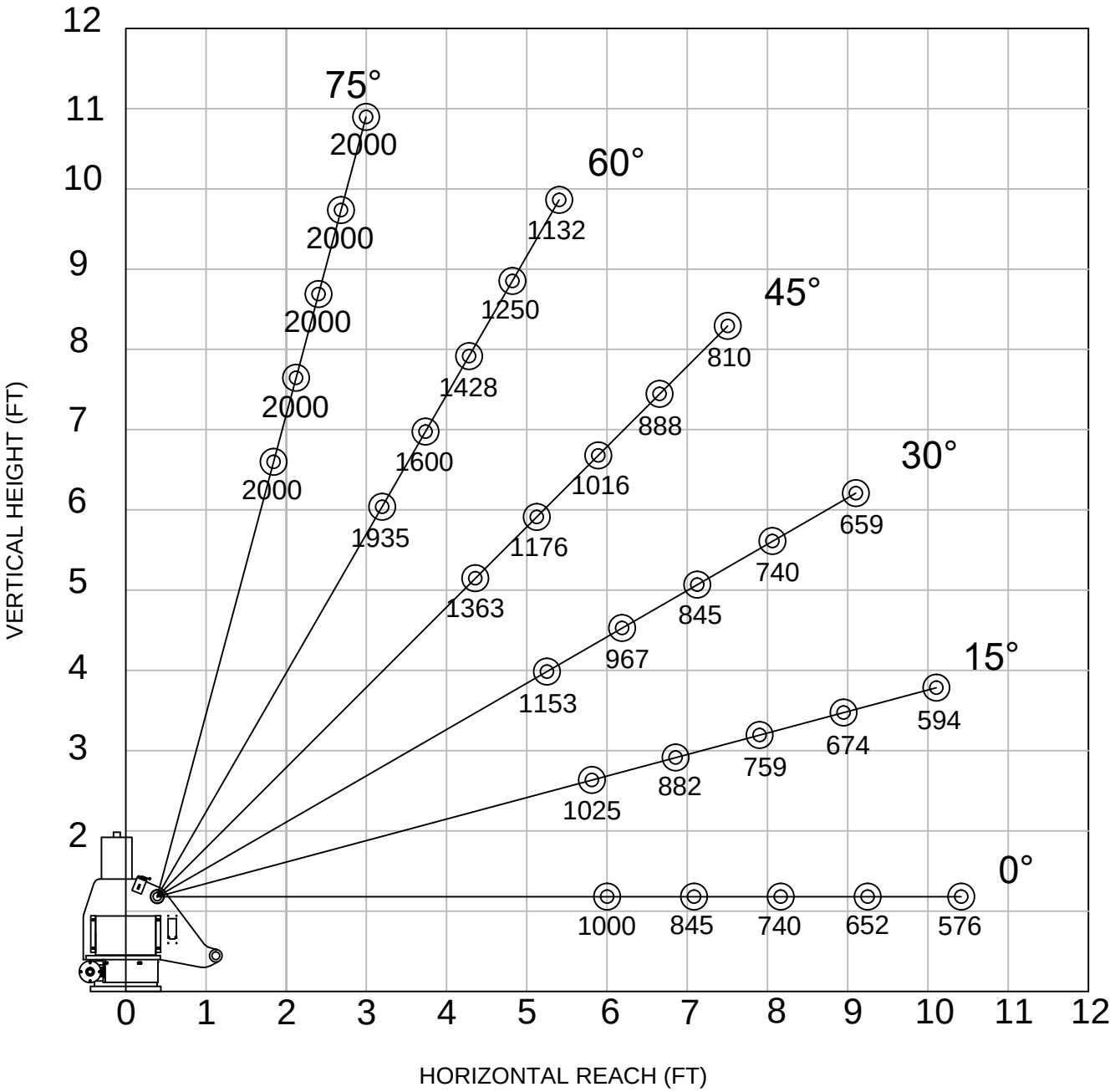
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
CRANE DIMENSIONS	02-07-25	C100
2010E	SUPERSEDES -	26751

2010E, 6'-10' 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

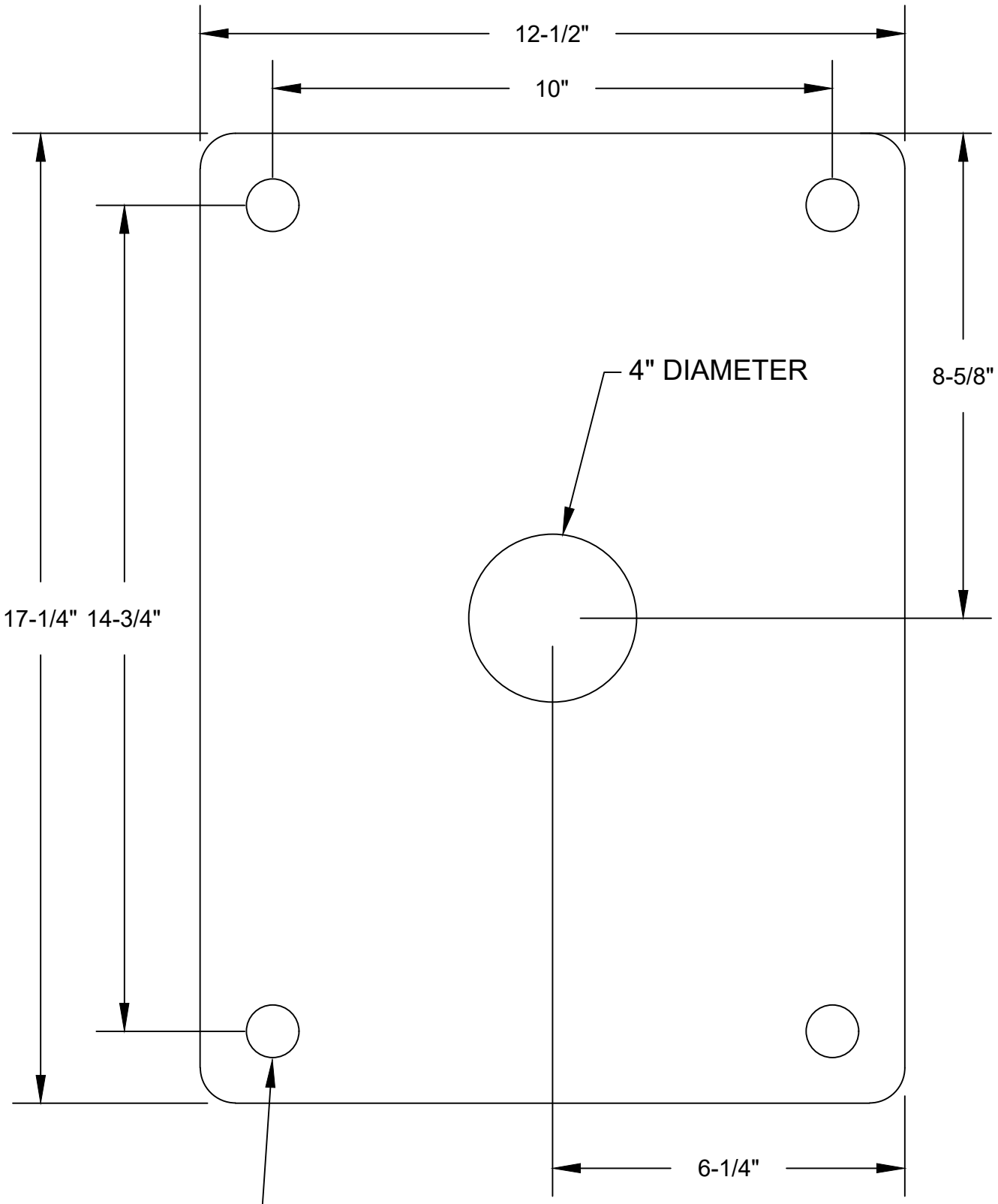
1 PART LINE FOR LOADS LESS THAN 1000 LBS

2 PART LINE FOR LOADS OF 1000 LBS AND GREATER

▲

VENTURO® VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE: MAXIMUM LOAD CAPACITY	DATE: 08-06-25A	SECTION: C100
	2010E, 6'-10' BOOM	SUPERSEDES: 01-31-25	26752

CRANE BASE MOUNTING HOLE TEMPLATE



VENTURO® VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE: MOUNTING DIMENSIONS	DATE: 01-31-25	SECTION: C100
	2010E	SUPERSEDES: -	26753

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.
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

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.

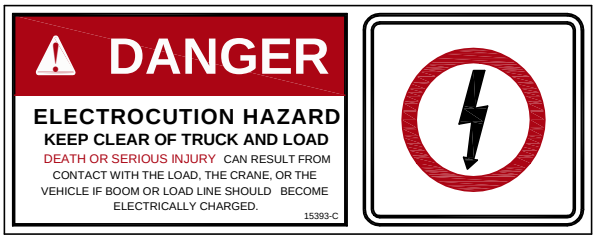
NOTICE - WARRANTY VOID IF DISCONNECTED

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

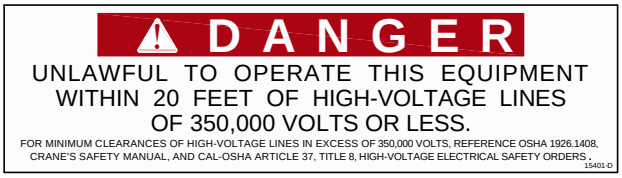
DO NOT DISCONNECT THIS SYSTEM

INTENTIONALLY LEFT BLANK

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.



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

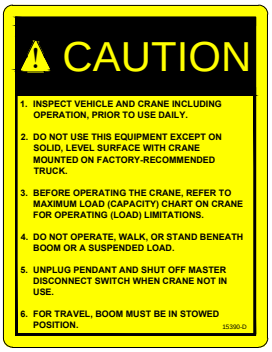
Voltage (nominal, kV, alternating current)	Minimum clearance distance (feet) *
Up to 50	10
over 50 - 200	15
over 200 - 350	20
over 350 - 500	25
over 500 - 750	35
over 750 - 1000	45
Over 1000	(as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution).

Table T - Minimum Clearance Distances While Traveling With No Load

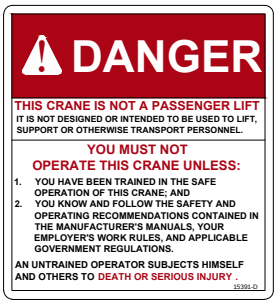
Voltage (nominal, kV, alternating current)	While traveling - minimum clearance distance (feet) *
0 - 0.75	4
over 0.75 - 50	6
over 50 - 345	10
over 345 - 750	16
over 750 - 1000	20
Over 1000	(as established by the utility owner/operator or registered professional engineer who is a qualified person with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

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

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



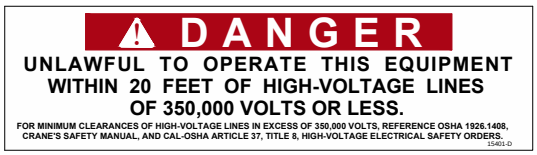
DECAL #: 15391
DESCRIPTION: DANGER, NOT A PASSENGER LIFT
PURPOSE: TO INFORM OPERATOR NOT TO LIFT, SUPPORT, OR TRANSPORT PERSONNEL, AND TO ENSURE OPERATOR IS ADEQUATELY TRAINED.
QUANTITY: 1
PLACEMENT: REAR COVER OR SIDE OF CRANE



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



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



DECAL #: 15393
DESCRIPTION: DANGER, ELECTROCUTION HAZARD, VEHICLE (TRUCK)
PURPOSE: WARNS OF DANGER FROM ELECTRICALLY CHARGED VEHICLE, CRANE, OR LOAD.
QUANTITY: 4
PLACEMENT: EACH SIDE & EACH END OF VEHICLE



PART NO.: 14473-2

DECAL: CONDUCTIVE GREASE

FUNCTION: To show the operator where to apply grease.

QUANTITY: Varies

PLACEMENT: Near grease fittings.



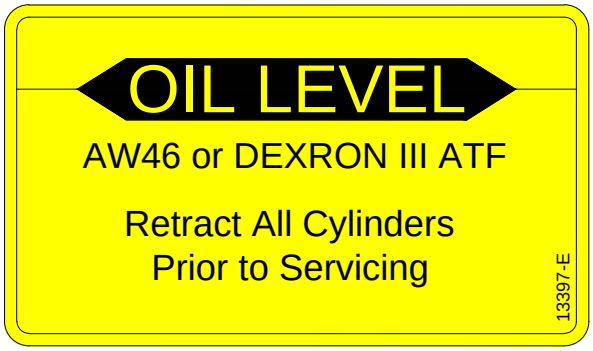
PART NO.: 13397

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.



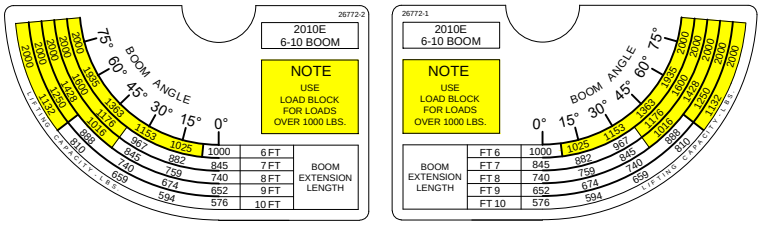
PART NO.: 26772-1 & 26772-2

DECAL: CRANE CAPACITY

FUNCTION: To show the operator the crane capacities.

QUANTITY: 1 each

PLACEMENT: One on each side of boom.



PART NO.: 26771

DECAL: MODEL NUMBER (2010E)

FUNCTION: To show the model of the crane.

QUANTITY: 2

PLACEMENT: One on each side of boom.



PART NO.: 26774

DECAL: VENTURO

FUNCTION: To show the brand of the crane.

QUANTITY: 2

PLACEMENT: One on each side of boom.



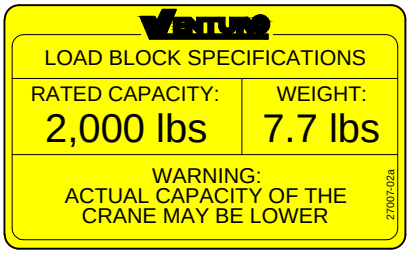
PART NO.: 27007-02a

DECAL: LOAD BLOCK CAPACITY DECAL

FUNCTION: To show the capacity of load block.

QUANTITY: 2

PLACEMENT: Each side of load block.



SECTION 200

INSTALLATION

VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

7607200A

!! IMPORTANT !!

ADEQUATE WIRING IMPERATIVE FOR PROPER OPERATION

1. PROPER GROUND PATH - SEE DWG 28821

2. CURRENT DRAW IS SEVERAL HUNDRED AMPERES - ADEQUATE WIRE SIZE AND BATTERY CAPACITY IS ABSOLUTELY ESSENTIAL (SEE CHART BELOW).

MINIMUM WIRE GAUGE AND AUXILIARY BATTERY SIZE

MODEL	TOTAL LENGTH OF CABLE (FT) *								12 VOLT AUXILIARY BATTERY REQUIREMENTS	
	0-20	21-25	26-30	31-40	41-50	51-60	61-70	71-80	CCA (A) **	RC (MIN) ***
2010E	#2	#2	#1	#0	#00	NOT RECOMMENDED			450	100
3215E 3515E 3516E	#2	#2	#1	#0	#00	NOT RECOMMENDED			550	150
4016E 4020E 4516E 4520E 5020E 6020E	SEE DRAWING 28821 FOR CABLE AND BATTERY REQUIREMENTS									

* INCLUDES GROUND CABLE

** CCA = COLD CRANKING AMPS AT 0° (F).

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

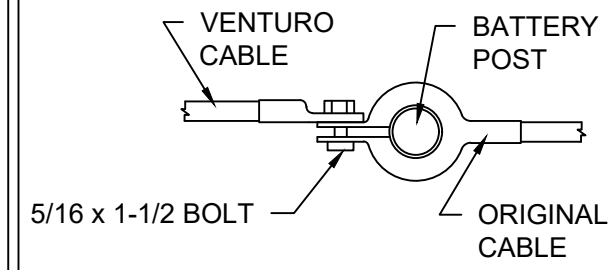
RECOMMENDED CIRCUIT BREAKER TABLE		
CRANE	DESCRIPTION	PART NO.
2010E	300 AMP, MAN RESET	22946-300
3215E	300 AMP, MAN RESET	22946-300
3515E/3516E	300 AMP, MAN RESET	22946-300
4016E/4020E	300 AMP, MAN RESET	22946-300
4516E/4520E	300 AMP, MAN RESET	22946-300
5020E	300 AMP, AUTO RESET	22946-300
6020E	300 AMP, AUTO RESET	22946-300

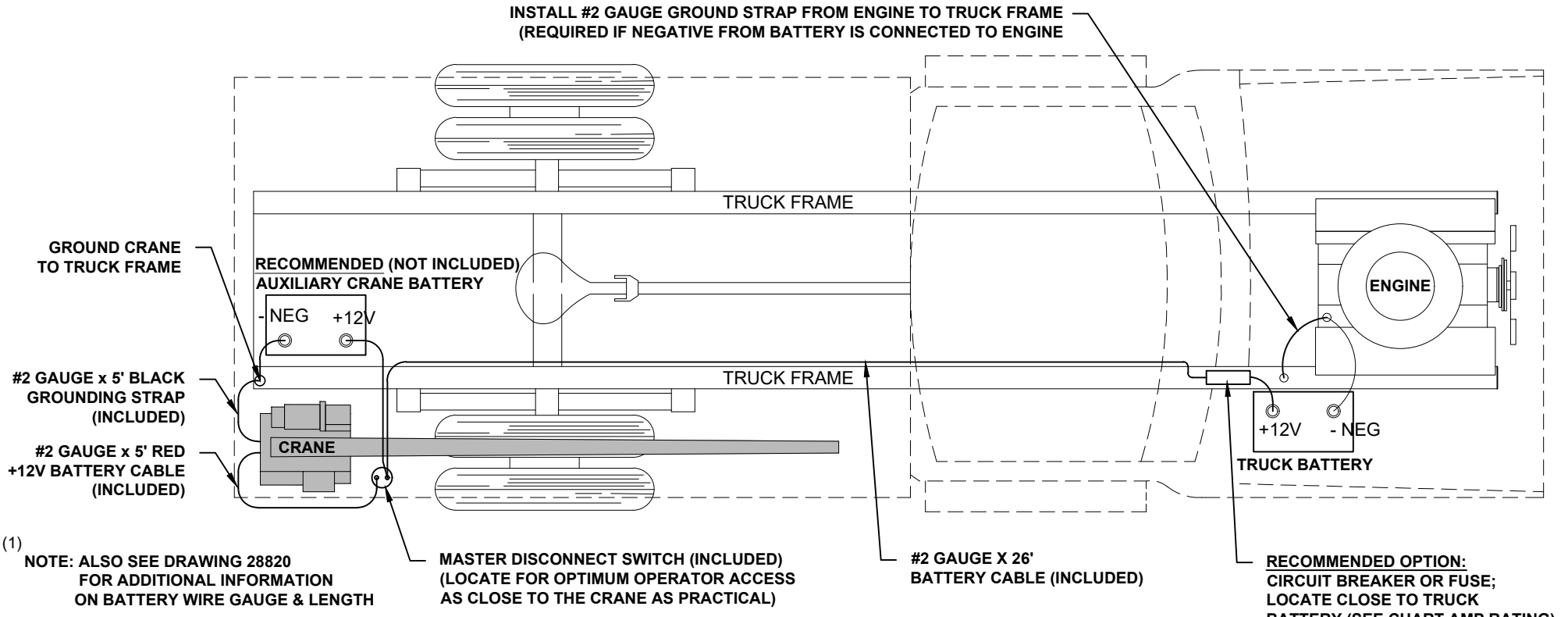
BATTERY REQUIREMENTS

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

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

RECOMMENDED BATTERY TERMINAL ATTACHMENT





VENTURO®

VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
BATTERY CABLE & COMPONENT INSTALL	02-19-24	C200
ET CRANES	SUPERSEDES -	28821

STABILITY TEST - 2010E

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 ***678 lbs***, (includes load block weight of 8 lbs.) to a ***maximum of 705 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 the 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 of the ground
        10.2.1. Retract the boom until at least one tire on each corner of the truck is making contract with the ground
        10.2.2. Use the formula below to determine the allowable ***% of Rated Capacity*** for the ZONE in question.

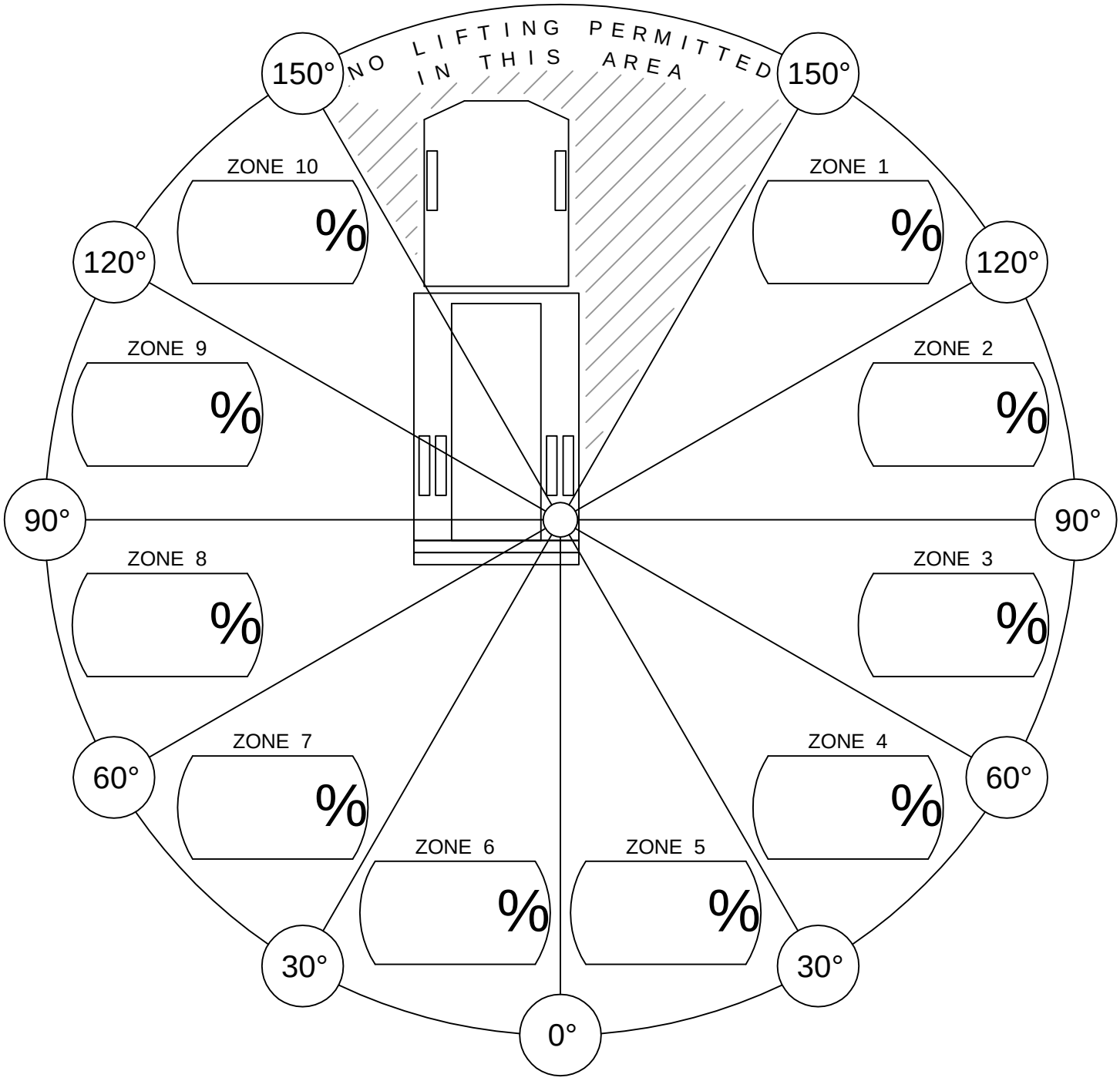
11. Note: The "***Max Stable Reach in inches"*** is measured from the ***center of rotation*** of the crane housing to the ***lifting load hook.***

$$\text{\% Rated Capacity} = \frac{\text{"Max Stable Reach" in inches"}}{127} \text{ X 100}$$

12. Record the **% of Rated Capacity** 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.

CRANE STABILITY



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

CONDITIONS:

- STABILIZERS FULLY EXTENDED & DOWN, ON FIRM LEVEL GROUND.

VENTURO® VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE: STABILITY CHART	DATE: 05-11-17F	SECTION: C200
	VENTURO CRANES	SUPERSEDES: 02-21-14E	20907

CRANE OPERATION AND MAINTENANCE INSTRUCTIONS

SAFETY

Before operating this crane, read and understand these instructions, the "CRANE SAFETY AND HAZARDS" pages, and review all safety and instruction labels on the crane.

CRANE INSPECTION

Before operating this crane, inspect for wear, damage, and oil leakage. After the wire rope has been run out, check for wear, kinks, and broken strands. Check the hook and safety latch for damage. Correct problems before using the crane.

CAPACITY

Before operating this crane, review the capacity charts on the sides of the boom to relate the load to be lifted to the boom length and angle. The boom angle is indicated by a gravity arrow.

LOAD BLOCK

If the load exceeds:

1000 lbs. for the 2010E, or
1600 lbs. for the 3215E, or
1750 lbs. for the 3515E/3516E Series,

or if reduced winching speed for better control of smaller loads is required, use the load block to rig the crane for two-part line operation. Refer to your crane's "MAXIMUM LOAD CAPACITY" page within this manual.

CONTROLS

This crane is operated by a remote control pendant. The pendant should be unplugged and stored in a compartment or the cab when the crane is not in use.

Before plugging the pendant in, inspect the plug, socket, cord, pendant head, and switches for damage. Actuate all switches in both directions to verify that they all have the same feel and sound, and that they return to the center position.

Plug the pendant into the socket on the right side of the crane and, if applicable, snap the strain relief tether to the crane housing.

Turn on the Master Disconnect Switch. Use "WINCH DOWN" to release tension on the wire rope and unhook it from the storage tie-down position.

Use "BOOM UP" to elevate the boom from the boom rest position.

Check all control functions to see that they are working correctly.

CRANE OPERATION AND MAINTENANCE INSTRUCTIONS

CONTROL FUNCTIONS

WINCH UP and WINCH DOWN - Raises and lowers the load with the wire rope.

POWER EXTENSION - "Up" raises the boom elevation by operating the valves and the electric hydraulic power unit. "DOWN" operates a solenoid release valve mounted on the cylinder to lower the load and/or boom by gravity at a controlled rate. A check valve on the cylinder prevents the boom from coming down if a hose breaks. A flow control valve controls the lowering rate.

POWER ROTATION - "L" and "R" control the direction of rotation. The 2010E, 3215E or 351*E can be rotated continuously thru 360° or more. There are no restrictions on the number of rotations in any direction.

CONTROL PRIORITY SYSTEM (NON-PROPORTIONAL SYSTEMS) - As a built in safety feature, the operator can perform only one major and one minor function at any one time. Major functions include rotation, winching up of a load, and elevating, extending, and retracting the boom. Minor functions include winching down and lowering the boom.

a. "WINCH UP" has priority over "BOOM UP", "BOOM OUT", "BOOM IN", and "ROTATION."

b. "BOOM UP" has priority over "BOOM OUT", "BOOM IN", and "ROTATION."

c. "BOOM OUT" and "BOOM IN" have priority over "ROTATION."

d. "BOOM DOWN" and "WINCH DOWN" can be operated with any function.

TRIGGER (351*E) - Varies the flow rate delivered to the crane valve. The farther the trigger is pulled, the faster the selected crane function operates.

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.

TWO-BLOCK SENSING SYSTEM

This crane is equipped with an anti two-block device that is mounted at the tip of the boom. If the load block / overhaul weight contacts the device the "Winch Up", "Boom Down", and "Boom Out" functions are disabled. The "Winch Down", "Boom Up", and "Boom In" functions will continue to operate and can be used to relieve the two-block condition.

CRANE OPERATION

Avoid rapid reversal of the winch and rotation control switches. The high inrush current to the motors during reversal can reduce the life of the contactors, motor brushes, and commutators.

When operating "WINCH UP", "BOOM DOWN", or "BOOM OUT," always maintain clearance between the boom head and the load block or hook.

Do not lift or drag a load sideways using any of the crane funcitons. The boom has much lower bending strength sideways than in a vertical direction.

CRANE OPERATION AND MAINTENANCE INSTRUCTIONS

OVERLOAD ALARM SYSTEMS (OPTIONAL)

This crane may be equipped with an optional overload alarm system.

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 completely bottomed.

4. Alarm can be tested by raising boom against up limit stop.

MANUAL TELESCOPIC BOOM

The 6' -14' and 7' - 15' booms have a 4' manual telescoping section in addition to the 4' power extension. A toggle pin locks the boom into either the extended or retracted position.

TRUCK SETUP & STABILIZERS

1. The truck should be parked on firm level ground when using the crane.

2. The center of the crane should be positioned close enough to the job so that it can be operated at a reach that puts the load within the rated capacity of the crane.

3. Set the vehicle parking brake and put the vehicle transmission in "park" (automatic transmission) or low gear (manual transmission), unless the engine is to be left running.

4. Deploy the stabilizers to stabilize the vehicle against rocking or overturning when lifting with the crane.

PREPARATION FOR TRAVEL

1. Return the stabilizers to the stowed position. Install and secure all pins.

2. Stow the crane boom in the boom support.

3. Hook the winch line to a tie down point on the body or pedestal and apply tension.

4. TURN OFF MASTER DISCONNECT SWITCH.

5. Unplug the control pendant and store in a body compartment or the cab.

WARNING

- The pendant (or receiver) plug must be unplugged from the crane socket and the Master Disconnect Switch (power) turned "OFF" when the crane is not in use! Leaving the pendant (or receiver) connected and power on when not in use may result in dangerous, unintentional activation of the crane functions.

WIRE ROPE INSTALLATION

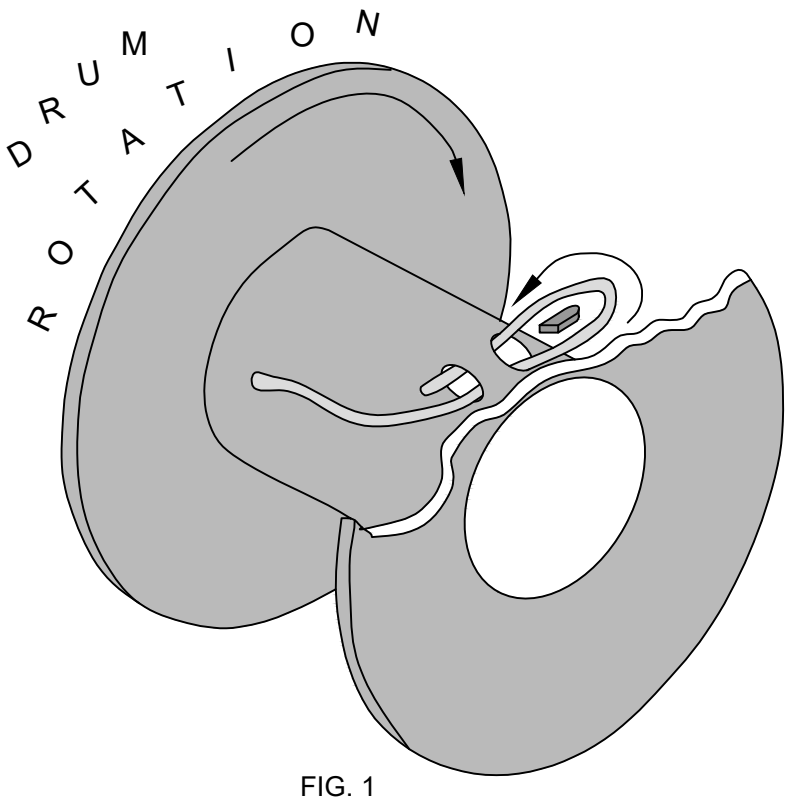


FIG. 1

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) 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.

SECTION 300

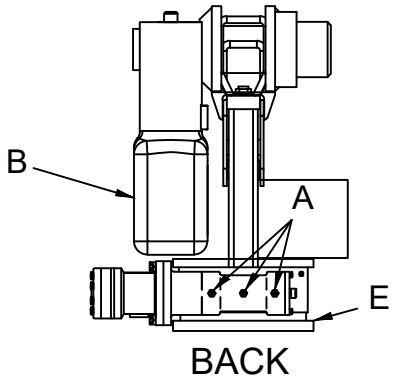
MAINTENANCE

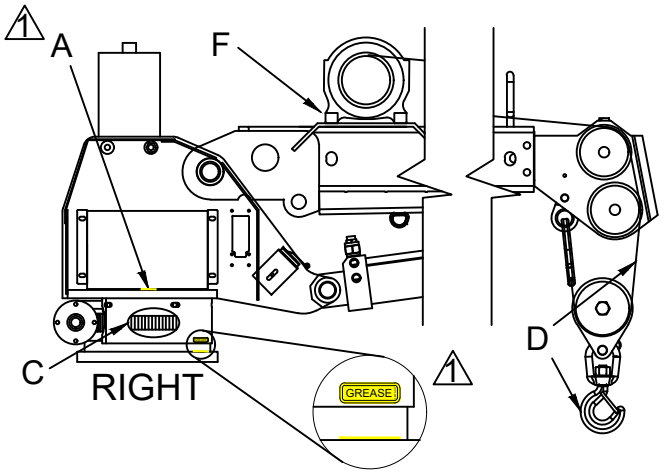
&

SERVICE

VENCO VENTURO INDUSTRIES LLC
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7607300A





ATTENTION:
NEVER WASH THIS CRANE WITH CHEMICAL PRODUCTS OR HIGH PRESSURE WATER JETS, AS THEY CAN CAUSE DETACHMENT OF DECALS OR ENTRANCE OF WATER INTO ELECTRICAL OR SLEWING RING COMPONENTS

Location	Service Required	Note		Service Interval
A	Grease fitting With Pressure Grease Gun	Use FUCHS Renolit Aluminum Complex Grease, or equivalent ⚠1 ALIGNMENT: To align hole w/ fitting, line up grease decals on lower cover and baseplate.		Time of Truck Service
B	Fill Oil Reservoir to Oil Level with Boom Down and Boom In.	Use Dextron ATF for Ambient Temperatures Between -22° F and 30° F	Use ISO Viscosity Grade 68 or Equivalent for Ambient Temperatures Between 10°F and 125°F	Time of Truck Service and as required by changes in the ambient temperature range
C	Lubricate Gear Teeth	Remove Cover & Use Chassis Grease		Time of Truck Service
D	Check Wire Rope and Hook	Rope should be free of kinks and fraying		Time of Truck Service
E	Check Torque of Base Mounting Bolts	Rectangular base: torqued to 455 ft-lbs		Time of Truck Service
F	Check Torque of Winch Mounting Bolts	Bolts should be torqued to 32 ft-lbs		Time of Truck Service

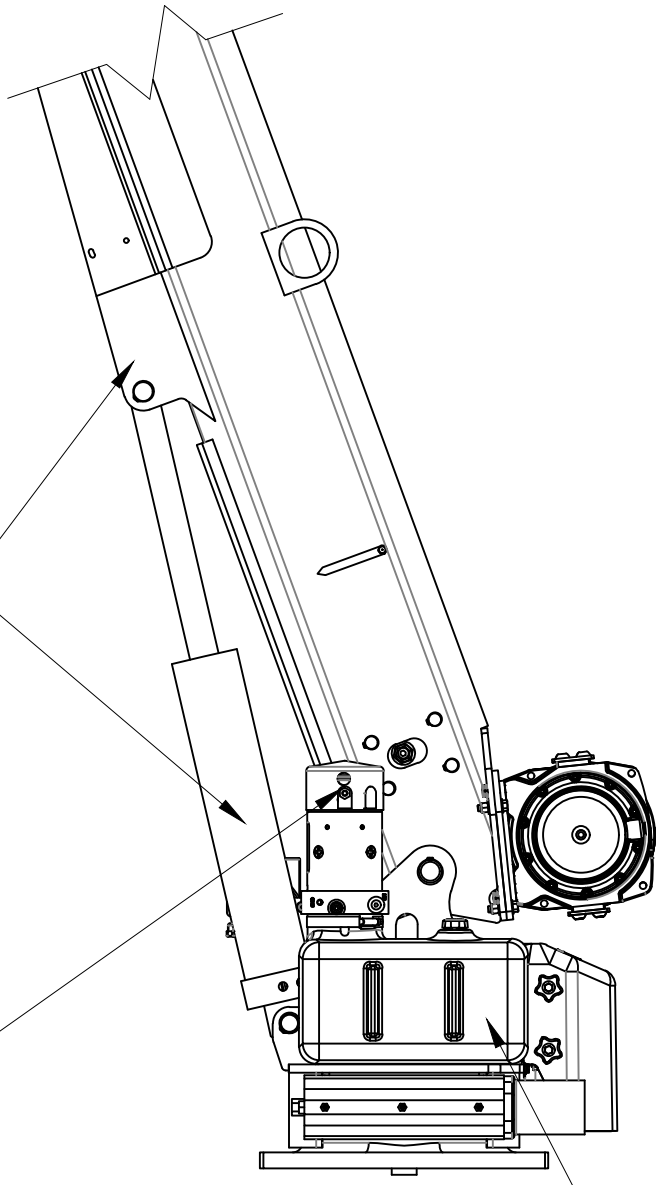
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TITLE	DATE	SECTION
LUBRICATION & MAINTENACE CHART	02-03-25	C300
2010E W/ RECTANGULAR BASE	SUPERSEDES -	26755

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



EXTEND BOOM CYLINDER AGAINST "UP" STOP (RELIEF VALVE WILL OPEN)

VOLTAGE AT MOTOR TERMINAL WHEN OPERATING AGAINST RELIEF VALVE SHOULD BE A MINMUM OF 9 VOLTS

BOOM ELEVATING ELECTRIC HYDRAULIC POWER UNIT

WIRE ROPE ASSEMBLY

2010E WIRE ROPE:

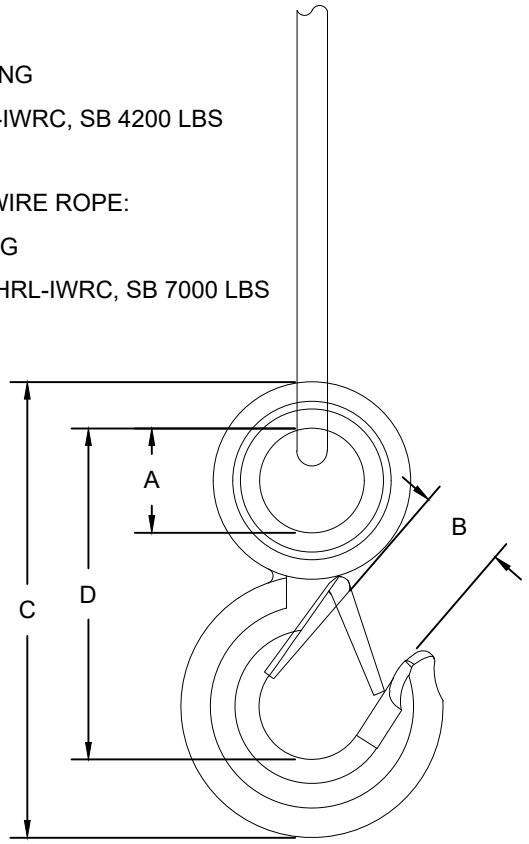
3/16" DIA, 50' LONG

GAC 7X19 LHRL-IWRC, SB 4200 LBS

3215E/351*E SERIES WIRE ROPE:

1/4" DIA, 65' LONG

GAC 7X19 IPS-LHRL-IWRC, SB 7000 LBS



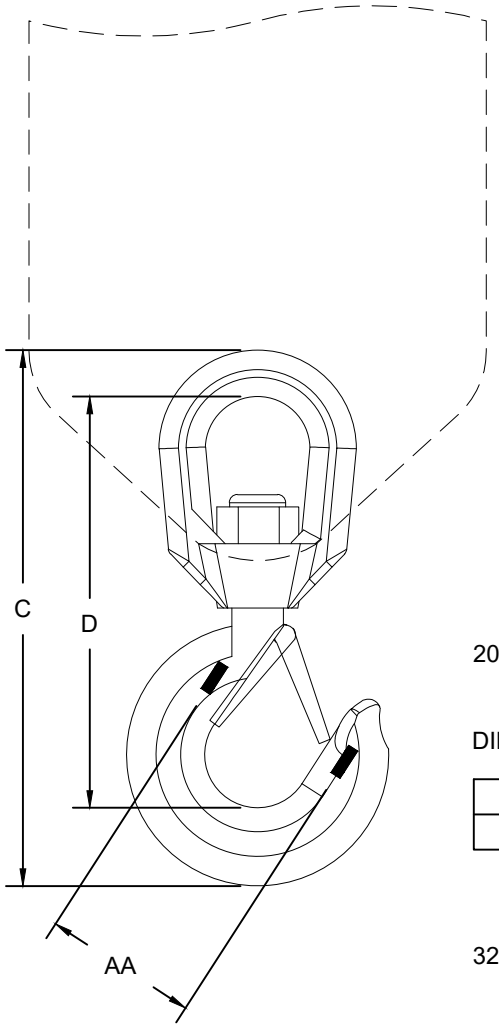
WIRE ROPE HOOK:

RATING: 1 TONNE (2205 LBS)

DIMENSIONS:

A	B	C	D
0.88"	1.06"	4.88"	3.63"

LOAD BLOCK ASSEMBLY



2010E LOAD BLOCK HOOK:

RATING: 1.5 TONNE (3307 LBS)

DIMENSIONS:

AA	C	D
2.00"	7.75"	6.12"

3215E/351*E SERIES LOAD BLOCK HOOK:

RATING: 2 TONNE (4410 LBS)

DIMENSIONS:

AA	C	D
2.00"	8.25"	6.50"

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CINCINNATI, OHIO

TITLE	DATE	SECTION
WIRE ROPE & HOOKS SPECIFICATIONS	09-12-24	C300
2010E/3215E/351*E	SUPERSEDES -	28942

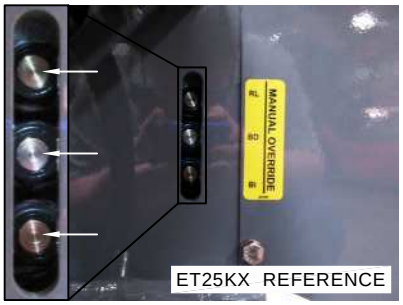
MANUAL OVERRIDE INSTRUCTIONS
ET NON-PROPRTIONAL SERIES CRANES ▲

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


ET8K REFERENCE



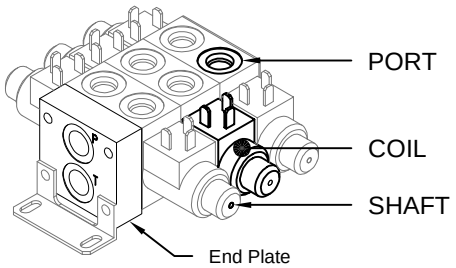
ET18KX REFERENCE



ET25KX REFERENCE

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).

1



2-STATION FUNCTIONS:

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

3-STATION FUNCTIONS include previous functions, plus:

BI	=	Boom In	BO	=	Boom Out

2



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:

1. Turn Master disconnect switch to "ON"

2. 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

4. Using a tool with a diameter of 1/8" or smaller, press the shaft inward and hold

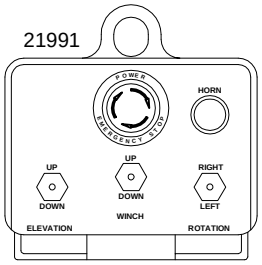
5. Reference the functions listed on your pendant or radio (see figure 3)

6. Press the switch or button for the same function

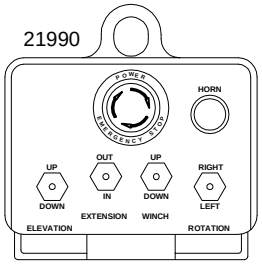
7. If you need to change function,
   7.1. Release switch or button
   7.2. Remove tool from shaft
   7.3. Go to step 3

3

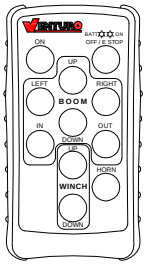
21991



21990



21986-ET



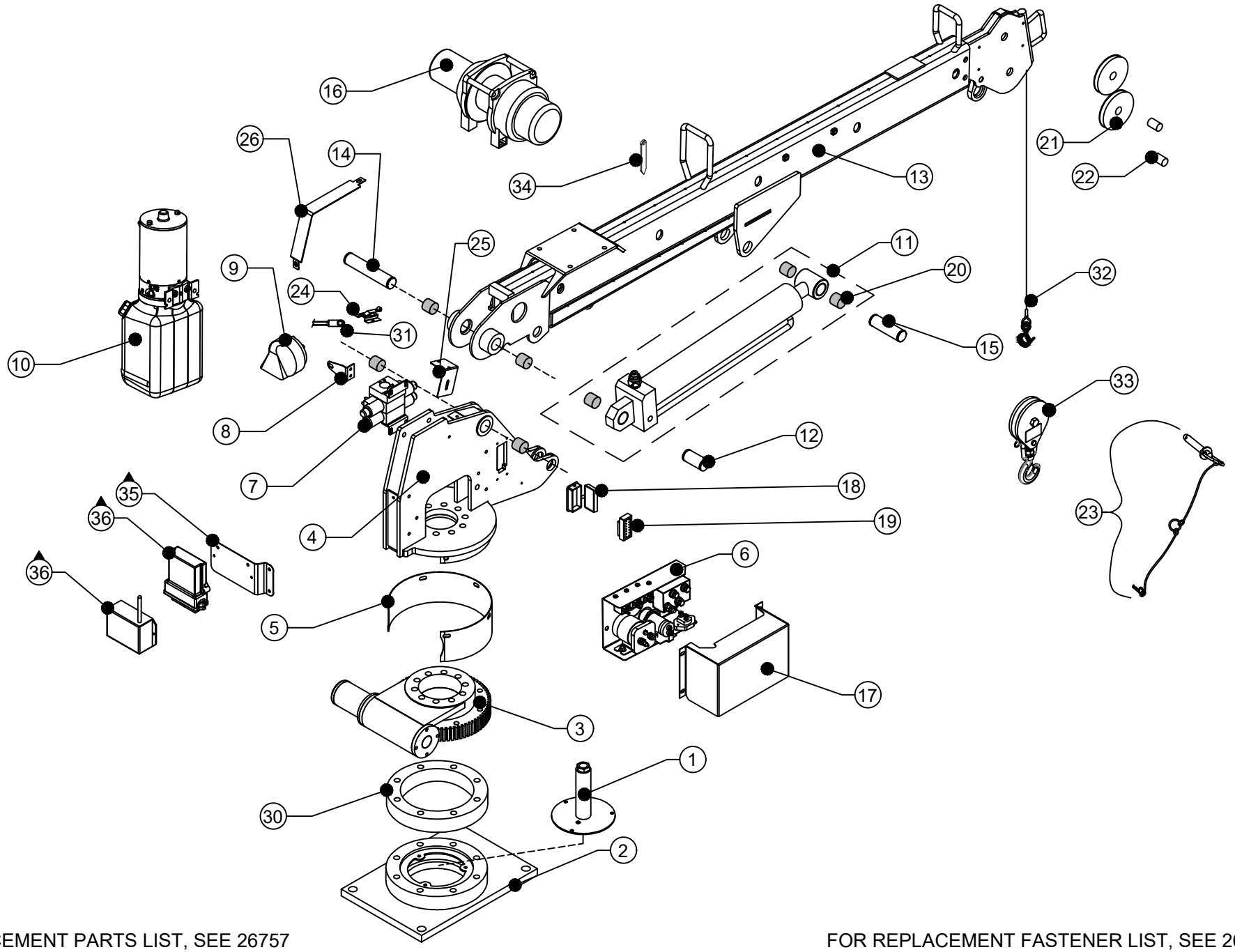
For assistance, please feel free to contact Technical Support at 800-226-2238.

SECTION 400

REPLACEMENT

PARTS

VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO



FOR REPLACEMENT PARTS LIST, SEE 26757

FOR REPLACEMENT FASTENER LIST, SEE 26758

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CINCINNATI, OHIO

TITLE	DATE	SECTION
REPLACEMENT PARTS DRAWING	10-27-26D	C400
2010E	SUPERSEDES 09-02-26C	26756

REPLACEMENT PARTS LIST FOR 2010E

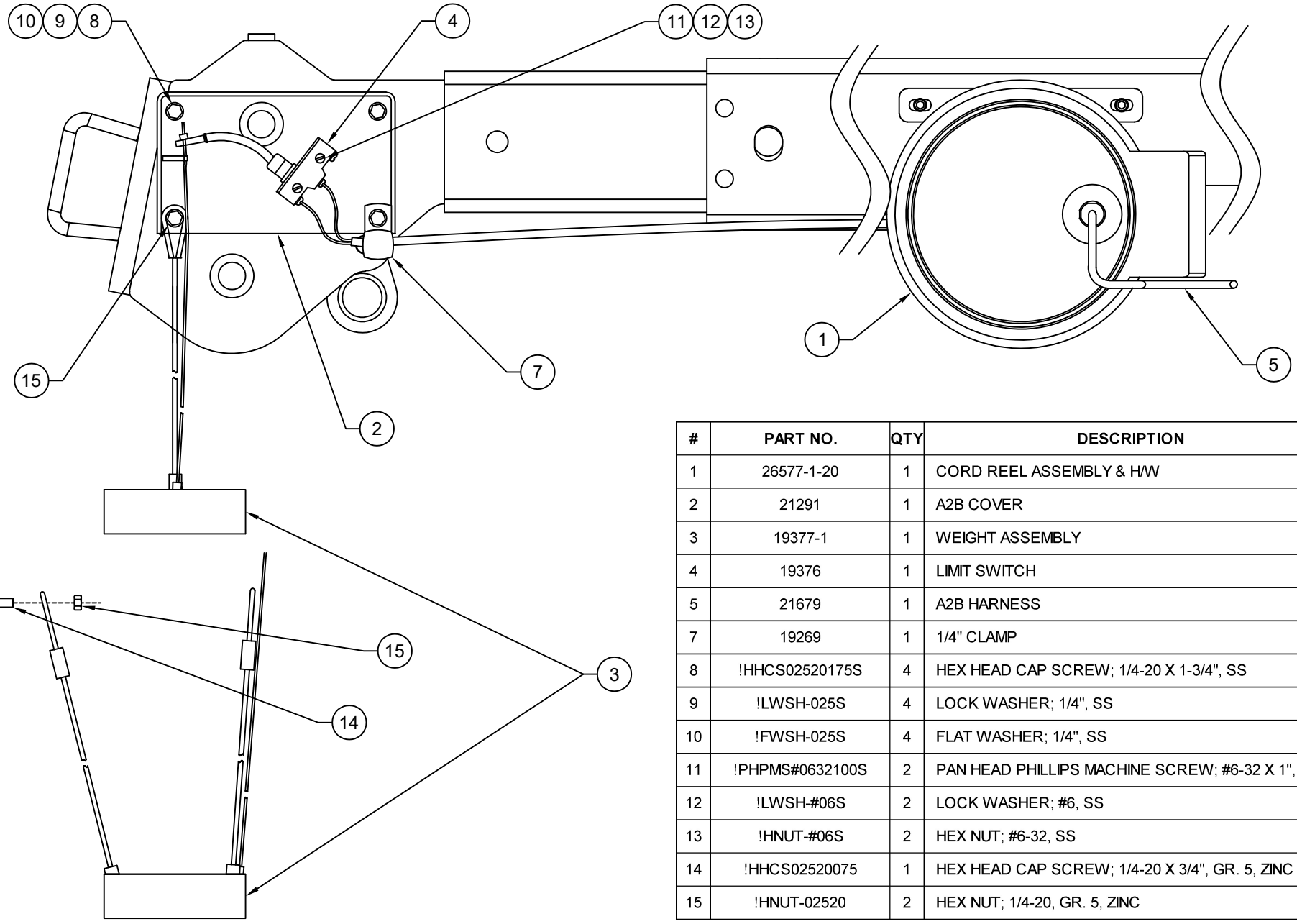
#	PART NO.	QTY	DESCRIPTION
1	16780-2P6	1	SWIVEL TERMINAL ASSY -- SEE SPECIFIC PARTS DWG/LIST
2	26017	1	WELDED ASSY; MOUNTING BASE (RECTANGULAR)
3	27243	1	SLEW DRIVE ASSY; 7" W/ HD HYD MOTOR (50RA) & MNTNG BASE
4	25998	1	WELDED ASSY; MECHANISM
5	27519	1	COVER; SLEWING RING
6	21515	1	ELECTRICAL COMPONENT PANEL
7	28805	1	VALVE BLOCK ASSEMBLY - 2 SPOOL
8	22000	1	BRACKET; HORN
9	21948	1	HORN
10	20456-1-R	1	HYDRAULIC POWER UNIT
11	21788	1	ELEVATION CYLINDER W/ COMPOSITE BEARINGS
12	21546	1	PIVOT PIN, ELEVATION CYLINDER, BASE PIVOT
13	25997	1	BOOM, PRIMARY AND SECONDARY WELDED ASSY'S., 2010E
14	27443	1	PIVOT PIN, PRIMARY BOOM PIVOT
15	27444	1	PIVOT PIN, ELEV. CYL, ROD PIVOT
16	24130-1	1	WINCH
17	27435	1	SIDE COVER
18	22481	1	SOCKET CASE W/ HOOD; 22482 PLUG
19	22482	1	PLUG; FEMALE INSERT, 16 PIN + 1 POLE
20	21789	7	COMPOSITE BEARING; ELEVATION / PRIMARY PIVOTS, AND MECHANISM
21	19646	2	SHEAVE WITH BUSHING
22	13168-2	2	SLEEVE
23	23042-F-34-34	1	HITCH PIN ASSY; BOOM LOCK
24	19917	1	SWITCH HOUSING; TOP POSITION
25	20497	1	SWITCH BRACKET; TOP POSITION
26	27433	1	COVER; MECHANISM
27*	26773	1	FIELD SERVICE LABEL KIT, 2010E
28*	25992	1	WIRING KIT
29*	25996	1	HOSE & FITTING KIT
30*	27217	1	SPACER RING
31	19918	1	SWITCH, TOP POSITION
32	15810-3/16-50	1	WIRE ROPE ASSY. 3/16 GALV. AIRCRAFT
33	19678	1	LOAD BLOCK
34	13459-1	2	BOOM ARROW, 3 INCH
▲ 35	25610	1	BRACKET; RADIO RECEIVER, 2010E
▲ 36	21986-ET	1	RADIO REMOTE SYSTEM; BASE ENG
▲ 36	24470-ET	1	RADIO REMOTE SYSTEM; KAR-TECH

* NOT SHOWN

FOR REPLACEMENT PARTS DRAWING SEE 26756

REPLACEMENT FASTENERS & HARDWARE LIST, 2010E

	PART NO.	QTY	DESCRIPTION	WHERE USED
	19270	1	SNAP BUSHING	UNDER THE BOOM, A2B HARNESS
	19269	1	CABLE CLAMP, Ø1/4"	PRESSURE SWITCH HARNESS
	!SSRNG-113	6	SPIRAL SNAP RING; Ø1-1/8", SS	PIVOT PINS
	!HWHST03118075S	5	HEX WASHER HEAD SELF TAP; 5/16-18 X 3/4", TYPE F, SS	CANDLESTICK TO BASE, ELECTRICAL PANEL
	!LWSH-031-STAR-SS	7	LOCK WASHER; Ø5/16", EXTERNAL STAR, SS	CANDLESTICK TO BASE, ELECTRICAL PANEL
	!PHPCS#0832050S	4	PAN HEAD PHILLIPS MACHINE SCREW; #8-32 X 1/2", SS	SOCKET DOOR
	!LWSH-#08S	4	LOCK WASHER; #8, SS	SOCKET DOOR
	!HHCS02520063S	1	HEX HEAD CAP SCREW; 1/4-20 X 5/8", SS	TOP POSITION SWITCH BRACKET
	!LWSH-025S	5	LOCK WASHER; Ø1/4", SS	TOP POSITION SWITCH BRACKET, VALVE BLOCK
	!FWSH-025S	8	FLAT WASHER; Ø1/4", SS	TOP POSITION BRACKET, VALVE BLOCK, HARNESS, RECEIVER
	!FNUT02520S	3	FLANGE NUT; 1/4-20, SS	HORN BRACKET, RECEIVER
	!LWSH-#10-STAR-SS	2	LOCK WASHER; #10, EXTERNAL STAR, SS	HORN BRACKET
▲	!PHPMS#1024050S	5	PAN HEAD PHILLIPS MACHINE SCREW; #10-24 X 1/2", SS	HORN BRACKET, PRESSURE SWITCH HARNESS, KAR TECH RADIO RX
▲	!LWSH-#10S	5	LOCK WASHER; #10, SS	HORN BRACKET, PRESSURE SWITCH HARNESS, KAR-TECH RADIO RX
	!LWSH-025-STAR-SS	4	LOCK WASHER; Ø1/4", EXTERNAL STAR, SS	VALVE BLOCK
	!HHCS02520075S	3	HEX HEAD CAP SCREW; 1/4-20 X 3/4", SS	VALVE BLOCK
	!HHCS02520100-5	1	HEX HEAD CAP SCREW; 1/4-20 X 1"	VALVE BLOCK
	!SHCS03118050Z	5	SOCKET HEAD CAP SCREW; 5/16-18 X 1/2", GR. 5, ZINC	HYDRAULIC POWER UNIT, SIDE COVER
	!LWSH-031S	5	LOCK WASHER; Ø5/16", SS	HYDRAULIC POWER UNIT, SIDE COVER
	!FWSH-031S	4	FLAT WASHER; Ø5/16", SS	SIDE COVER
	!HHCS03816100	2	HEX HEAD CAP SCREW; 3/8-16 X 1", GR. 5, ZINC	HYDRAULIC POWER UNIT
	!FWSH-038SAE	2	FLAT WASHER; Ø3/8" SAE, GR. 5, ZINC	HYDRAULIC POWER UNIT
	!LWSH-038	2	LOCK WASHER; Ø3/8, GR. 5, ZINC	HYDRAULIC POWER UNIT
	!FWSH-M10-18MM-OD	4	FLAT WASHER; M10, 10.5MM ID, 18MM OD	WINCH
	!HHCS06311150	2	HEX HEAD CAP SCREW; 5/8-11 X 1-1/2", GR. 5, ZINC	SHEAVE AXLE
	!JNUT-06311N	2	JAM NUT; 5/8-11, NYLOC, GR. 5, ZINC	SHEAVE AXLE
	27452	2	NYLON RIVET; BLACK, Ø0.25"	SIDE OF BOOM WITHOUT CORD REEL
	27453	6	NYLON RIVET; BLACK, Ø0.187"	HOUSING, BOOM TIP CHEEK PLATE
	!HWHS02520050-F	3	HEX WASHER HEAD SCREW; 1/4-20 X 1/2", TYPE F, SELF T	REAR PANEL, RADIO RECEIVER BRACKET
	!HHCS02520100S	2	HEX HEAD CAP SCREW; 1/4-20 X 1", SS	RADIO RECEIVER, BASE ENG
	22490	3	SPACER	BOOM ARROWS, RADIO RECEIVER BRACKET
	!ANUT-02520S	2	ACORN NUT; 1/4-20, SS	BOOM ARROWS
▲	!FSWH-#10S	2	FLAT WASHER; #10, S/S	RADIO RECEIVER, KAR-TECH
▲	!HNUT-#1024S	2	HEX NUT; #10-24,S/S	RADIO RECEIVER, KAR-TECH

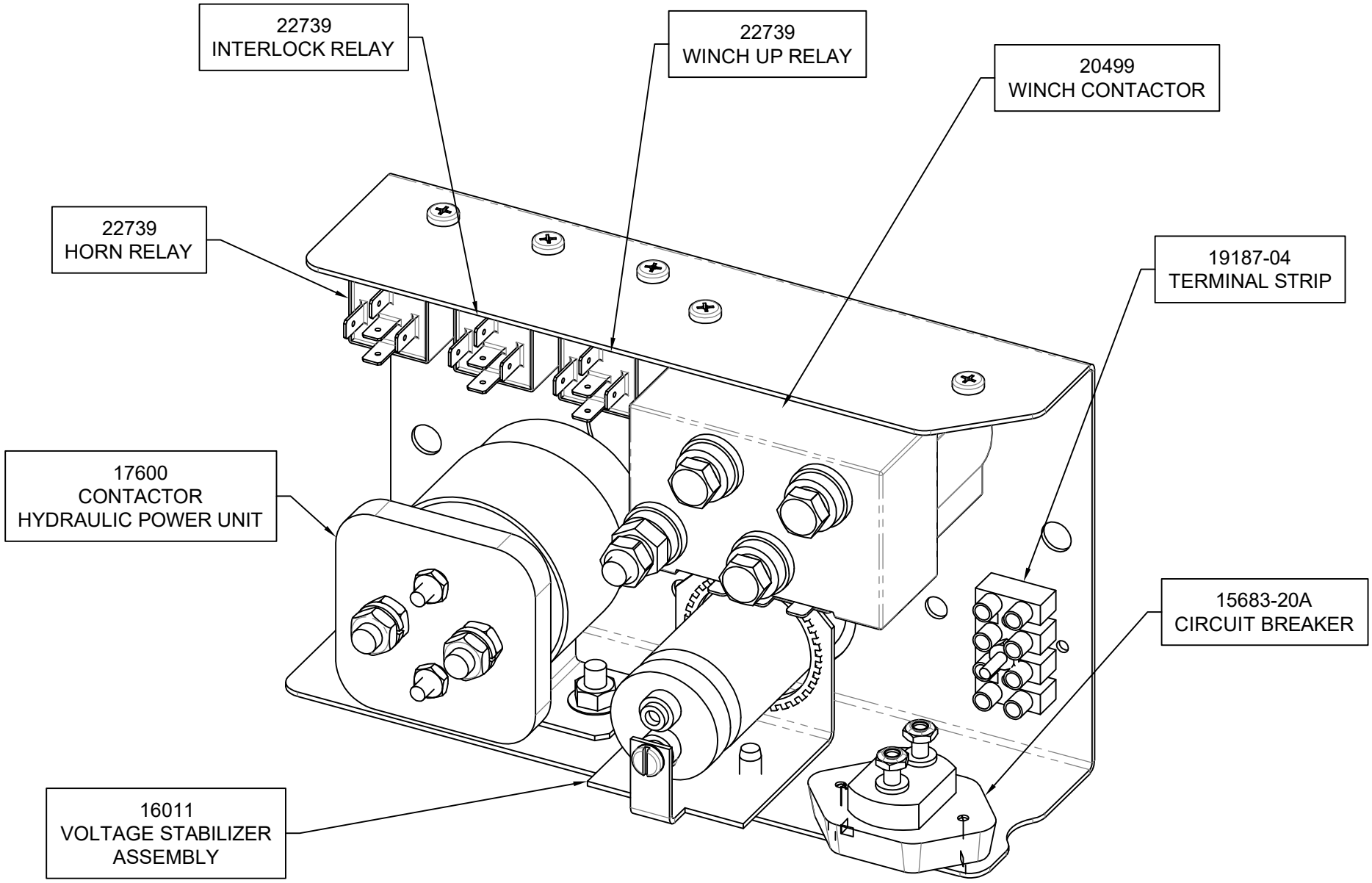


#	PART NO.	QTY	DESCRIPTION
1	26577-1-20	1	CORD REEL ASSEMBLY & H/W
2	21291	1	A2B COVER
3	19377-1	1	WEIGHT ASSEMBLY
4	19376	1	LIMIT SWITCH
5	21679	1	A2B HARNESS
7	19269	1	1/4" CLAMP
8	!HHCS02520175S	4	HEX HEAD CAP SCREW; 1/4-20 X 1-3/4", SS
9	!LWSH-025S	4	LOCK WASHER; 1/4", SS
10	!FWSH-025S	4	FLAT WASHER; 1/4", SS
11	!PHPMS#0632100S	2	PAN HEAD PHILLIPS MACHINE SCREW; #6-32 X 1", SS
12	!LWSH-#06S	2	LOCK WASHER; #6, SS
13	!HNUT-#06S	2	HEX NUT; #6-32, SS
14	!HHCS02520075	1	HEX HEAD CAP SCREW; 1/4-20 X 3/4", GR. 5, ZINC
15	!HNUT-02520	2	HEX NUT; 1/4-20, GR. 5, ZINC

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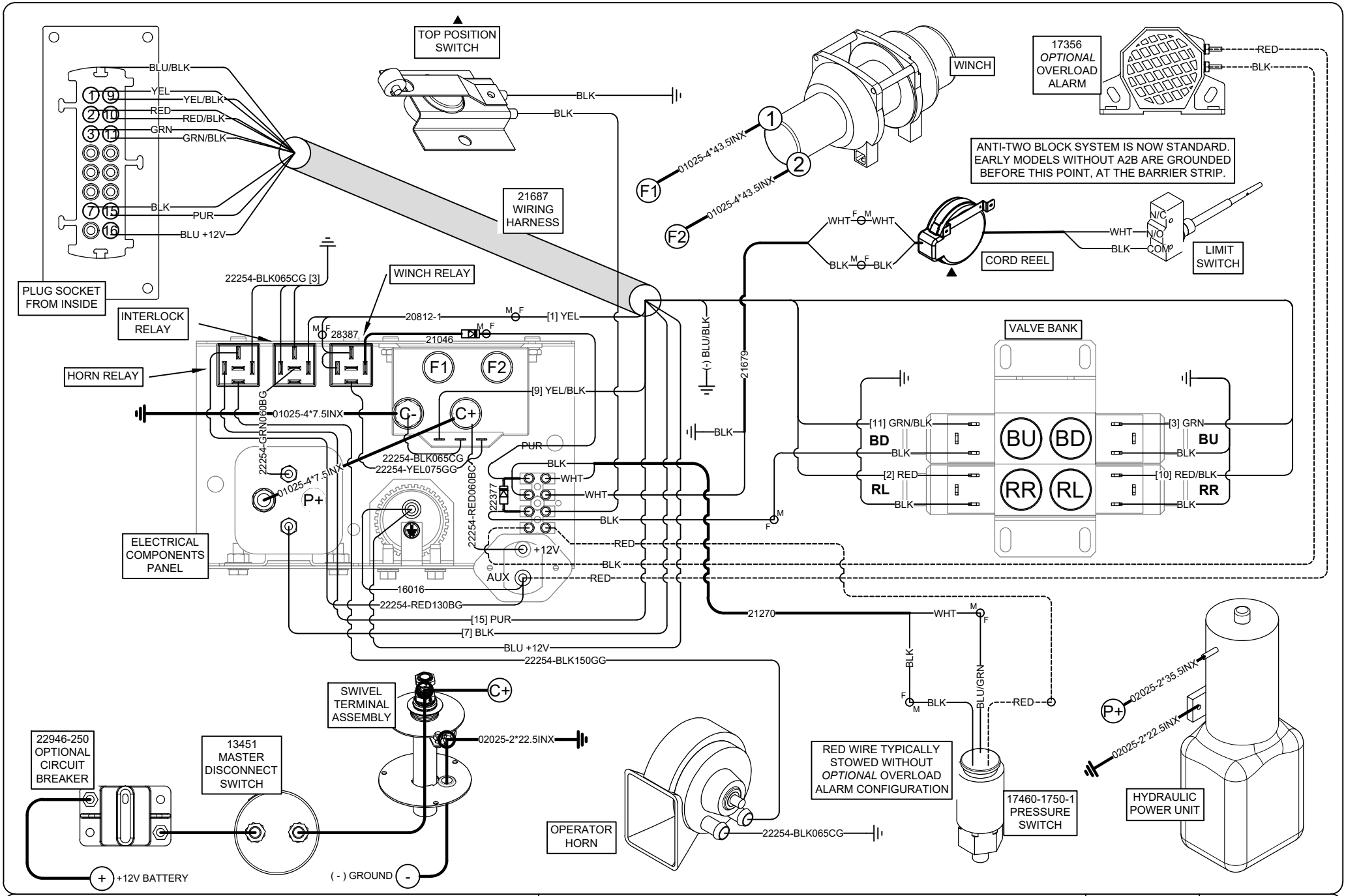
TITLE	DATE	SECTION
A2B ASSEMBLY, REPLACEMENT PARTS & H/W	03-20-26A	C400
ET6K / 2010E	SUPERSEDES 02-03-25	26759



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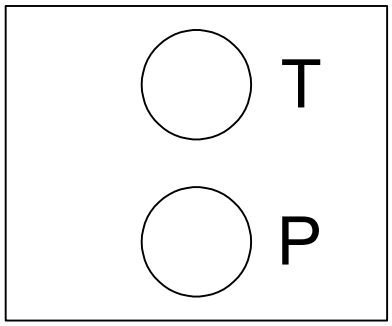
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ELECTRICAL PANEL PARTS	03-23-26A	C400
2010E	SUPERSEDES 02-03-25	26760



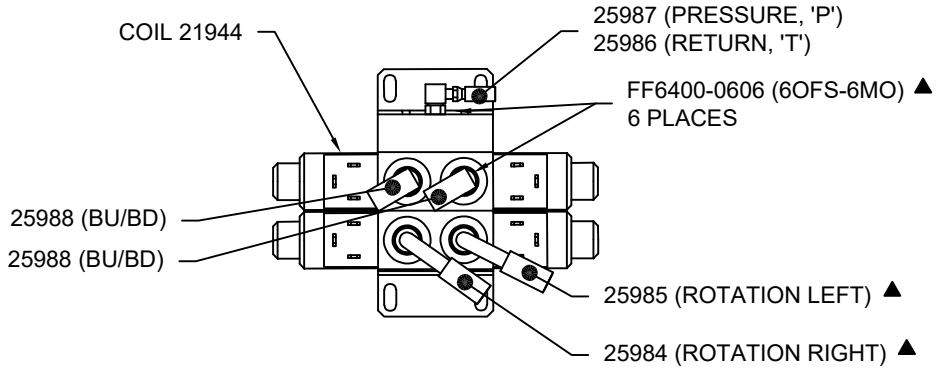
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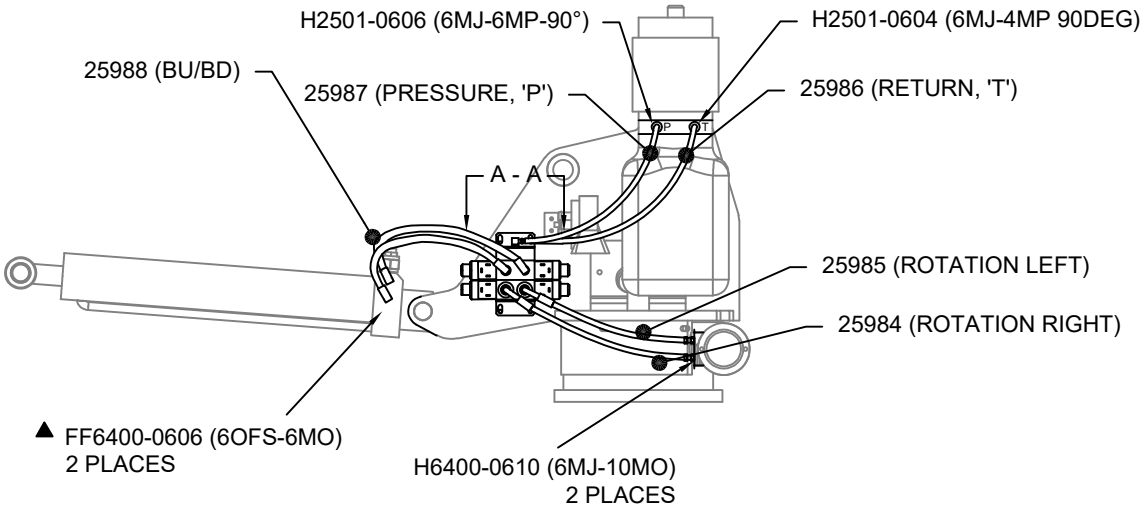
VENCO VENTURO LLC
CINCINNATI, OHIO

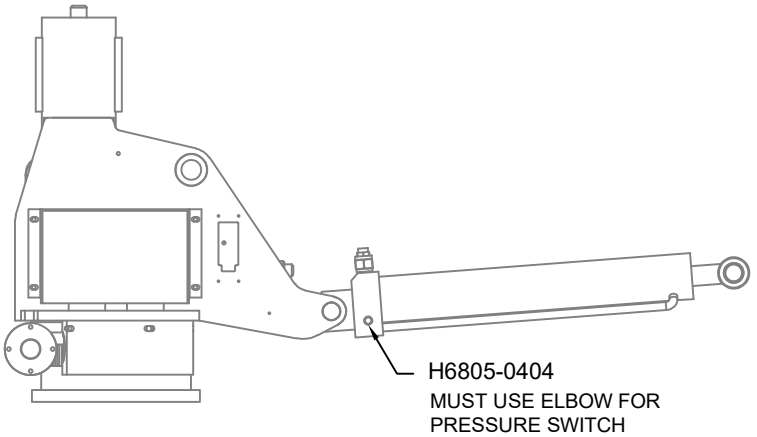
TITLE	DATE	SECTION
WIRING DIAGRAM	09-09-26C	C400
2010E	SUPERSEDES 03-20-26B	26762



SECTION A - A
NOT TO SCALE





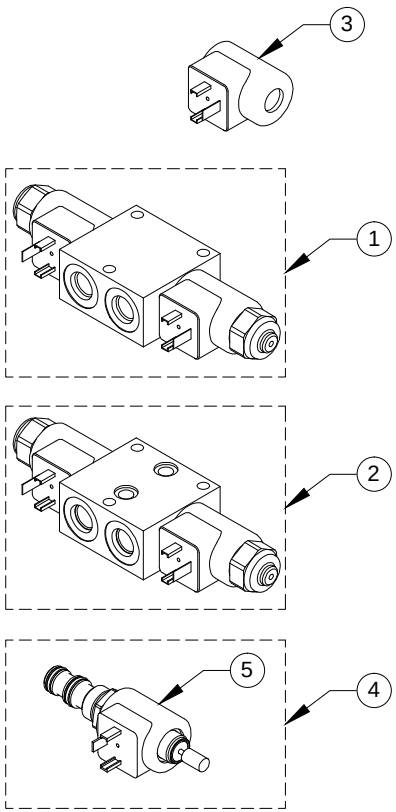


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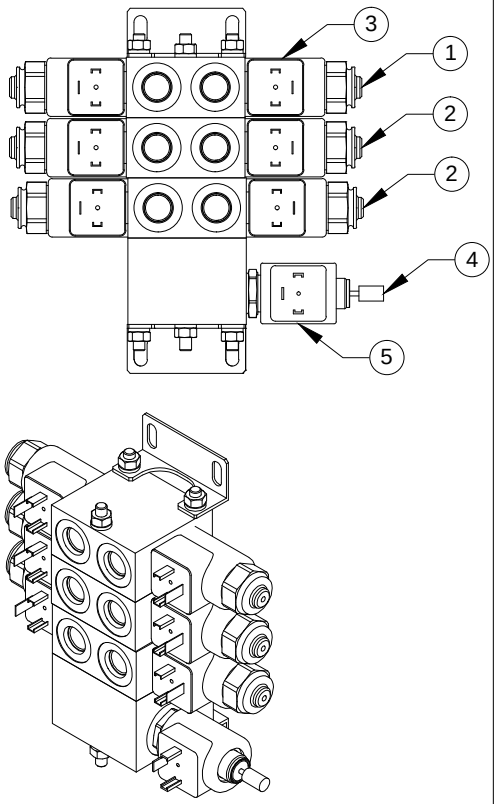
VENCO VENTURO LLC
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TITLE	DATE	SECTION
REPLACEMENT PARTS DRAWING	03-20-26A	C400
2010E	SUPERSEDES 02-03-25	26763

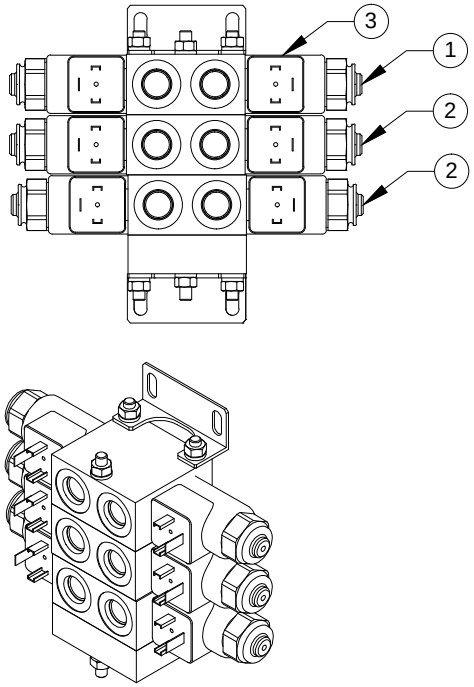
28800 / 28801 / 28805 VALVE ASSY REPLACEMENT PARTS



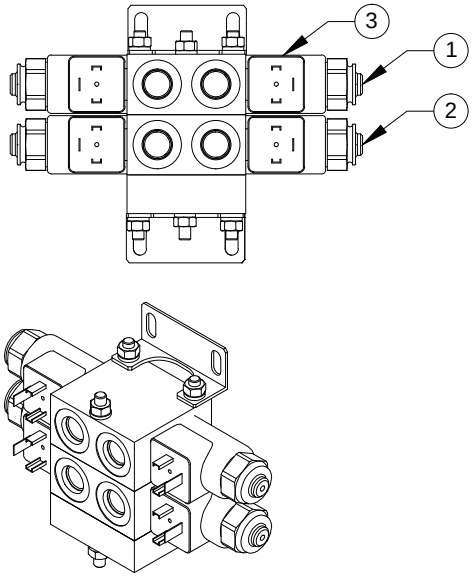
28800
3-SPOOL
PROPORTIONAL



28801
3-SPOOL
NON-PROPORTIONAL



28805
2-SPOOL
NON-PROPORTIONAL

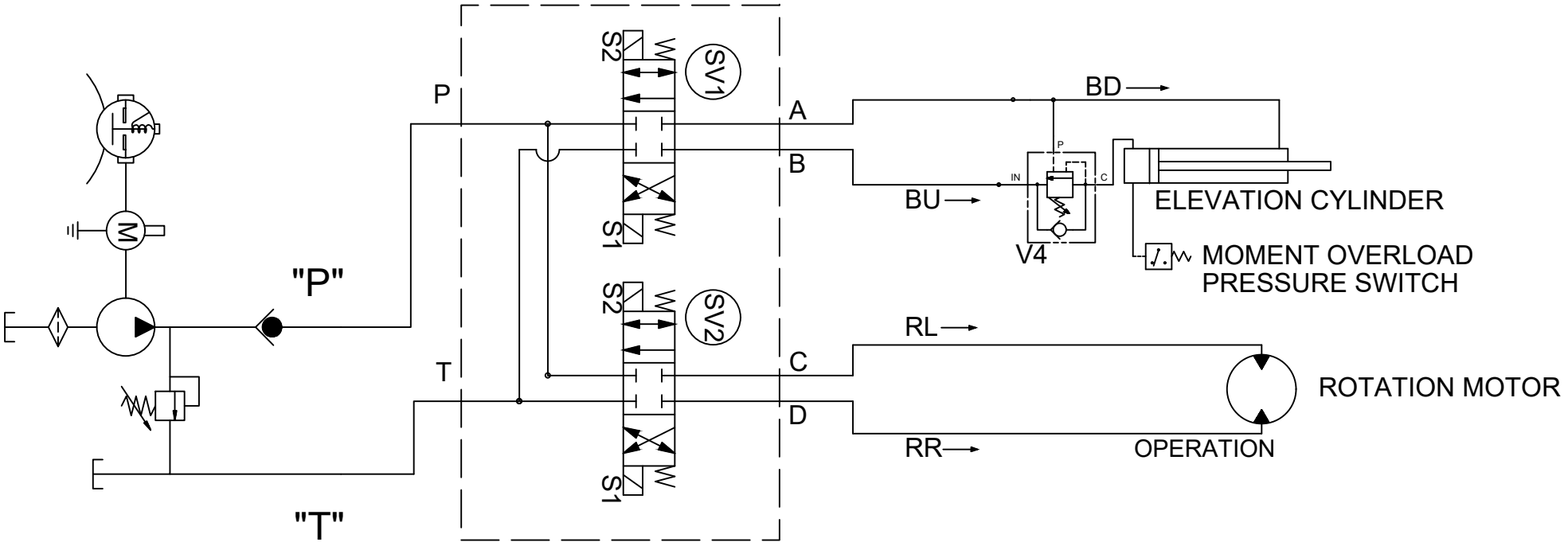


ITEM #	PART #	DESCRIPTION
1	28807	END SECTION W/ SPOOL AND COILS
2	28806	INTERMEDIATE SECTION W/ SPOOL AND COILS
3	▲ 21944	FUNCTION COIL (ONLY)
4	26485	PROPORTIONAL VALVE AND COIL
5	26487	PROPORTIONAL COIL (ONLY)

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TITLE	DATE	SECTION
28800/28801/28805 REPL PARTS DWG & LIST	10-09-25A	C400
ET CRANES	SUPERSEDES 10-08-25	28808



SCHEMATIC

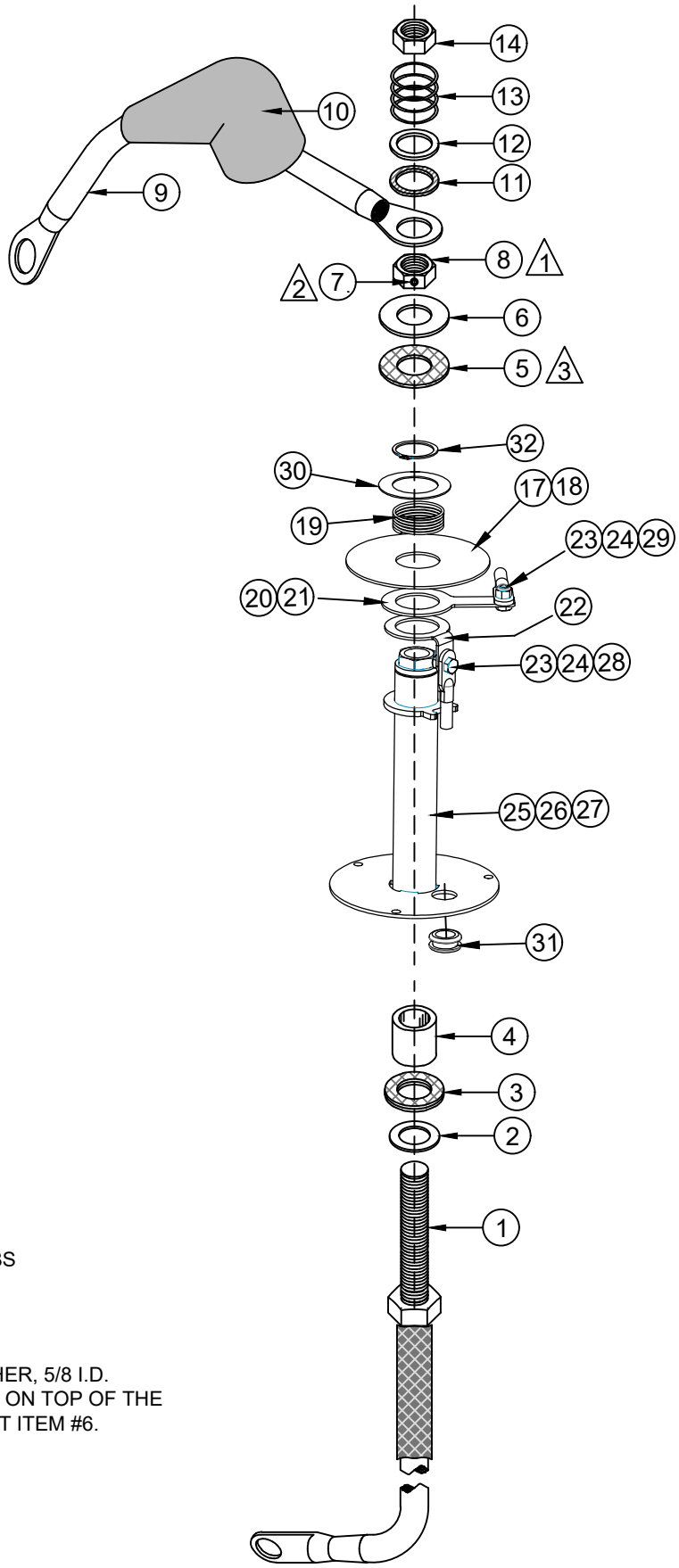
SV1	SV2
ERNERGIZE "S2"	ENERGIZE "S2"
OPEN FLOW	OPEN FLOW
'P' TO 'A'	'P' TO 'C'
'B' TO 'T'	'D' TO 'T'
ENERGIZE "S1"	ENERGIZE "S1"
OPEN FLOW	OPEN FLOW
'P' TO 'B'	'P' TO 'D'
'A' TO 'T'	'C' TO 'T'

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TITLE	DATE	SECTION
HYDRAULIC SYSTEM DIAGRAM	02-03-25	C400
2010E	SUPERSEDES -	26764

2-Pole Slip-ring Replacement Parts



1 TORQUE TO 15 FT-LBS

2 LOCTITE 242 BLUE

3 ITEM #8, FIBER WASHER, 5/8 I.D.
'MUST' SIT DIRECTLY ON TOP OF THE
INVERTED FLARE NUT ITEM #6.

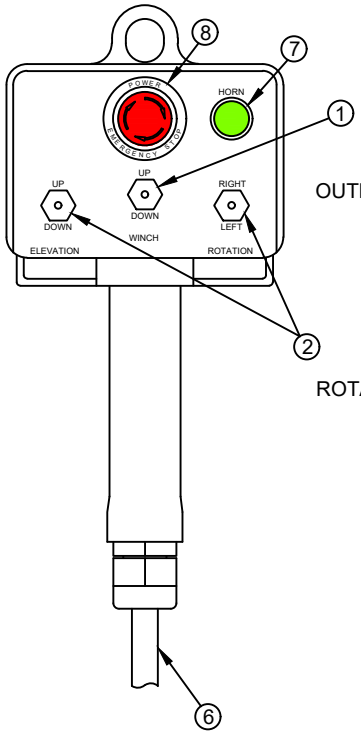
VENTURO®

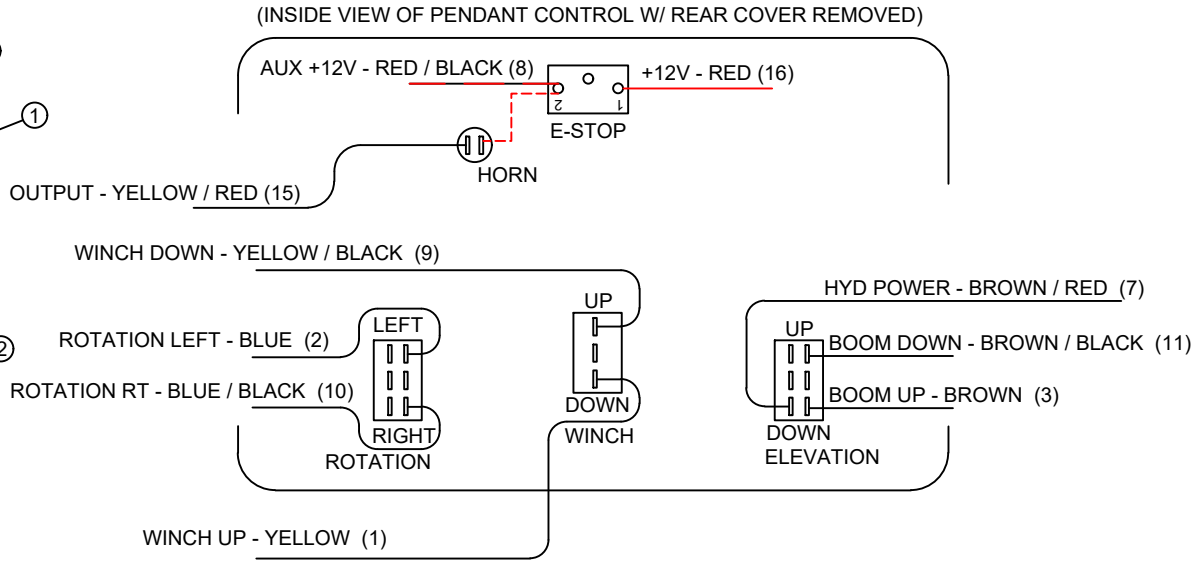
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
REPL. PARTS ILLUSTRATION	04-23-24	C400
ET CRANES	SUPERSEDES -	28843

16780		ALL CRANES	2010E	3215E TO 4520E	5020E & 6020E	SWIVEL TERMINAL ASSEMBLIES
		16780-KIT	16780-2P6	16780-2P8	16780-2P25	
#	PART		QUANTITY			DESCRIPTION
1	16783	-	1	1	1	PIGTAIL AND STUD ASSEMBLY
2	12534-5	1	-	-	-	ZINC BUSHING; 5/8" I.D. X 1" O.D. X 14 GAUGE
3	14357-1	2	-	-	-	FIBER WASHER; 5/8" I.D. X 1 1/16" O.D. X 1/16"
4	14233	1	-	-	-	INSULATING BUSHING; 5/8" I.D. X 7/8" O.D. X 7/8"
5	14357-2	1	-	-	-	FIBER WASHER; 5/8" I.D. X 1 1/4" O.D. X 1/16"
6	!FWSH-063SAE	1	-	-	-	FLAT WASHER; 5/8" SAE
7	!SHCS02528025KC	1	-	-	-	SET SCREW W/ KNURLED CUP; 1/4"-28 X 1/4"
8	21273	1	-	-	-	BRASS JAM NUT; 5/8"-11
9	26035-2	-	-	-	-	PIGTAIL; SWIVEL TERMINAL
10	17012	-	-	-	-	RUBBER BOOT; SWIVEL TERMINAL
11	5612-162-62	1	-	-	-	TEFLON WASHER
12	5714-113-62	1	-	-	-	BRASS WASHER
13	LC-098K-00	1	-	-	-	SPRING; 0.845" O.D. X 0.098" WIRE X 1.00 F.L.
14	!JNUT-06311N	1	-	-	-	JAM NUT; 5/8"-11, NYLON NUT
15	LOCTITE-24205	1	-	-	-	REMOVABLE THREAD LOCKER; 0.5ML
16	19368	1	-	-	-	IDWG; 16780 SWIVEL TERMINAL
17	27456	-	1	-	-	UHMW WATER SHIELD, (ET6K ONLY)
18	27456-1	-	-	1	1	UHMW WATER SHIELD, (ET8 - ET36)
19	27461	-	1	1	1	SPRING, (-) SLIP-RING ASSY.
20	27441-1	-	-	1	1	COPPER SLIP-RING, (ET8 - ET36)
21	27441	-	1	-	-	COPPER SLIP-RING, (ET6K ONLY)
22	27449-1	-	1	1	1	BRASS SLIP-RING (ET6 - ET36)
23	!HHCS03118075-B	-	1	1	1	BRASS HHCS
24	!HNUT-03118-B	-	1	1	1	BRASS NYLOC NUT
25	23255	-	1	-	-	SLIP-RING, WELDED ASSY, ET6K
26	23255-1	-	-	1	-	SLIP-RING, WELDED ASSY, ET8 - 18K(X)
27	23255-2	-	-	-	1	SLIP-RING, WELDED ASSY, ET25 - 36K(X)
28	02025-2*96.5INX	-	1	1	1	(-) WELDING CABLE ASSY, BRASS SLIP-RING
29	02025-2*22.5INX	-	1	1	1	(-) WELDING CABLE ASSY, COPPER SLIP-RING
30	27463	-	1	1	1	SHIM, WIDE RIM, 18GA, 2-1/4 O.D. X 1-1/2 I.D.
31	20889	-	1	1	1	RUBBER GROMMET
32	!SRNG-150	-	1	1	1	SNAP-RING, EXTERNAL, 1-1/2"
33	16780-KIT	-	1	1	1	KIT; SWIVEL TERMINAL, CONTAINS H/W, ETC.

21991 PENDANT; 3 FUNCTION ET CRANES, E-STOP / HORN





NOTE 1:
WIRE TERMINALS TO BE INSTALLED 'AFTER' ROUTING REPLACEMENT CORD ASSY THROUGH PENDANT HEAD AND PLUG HOUSING.

NOTE 2:
STOW OR CUT BACK UNUSED WIRES.

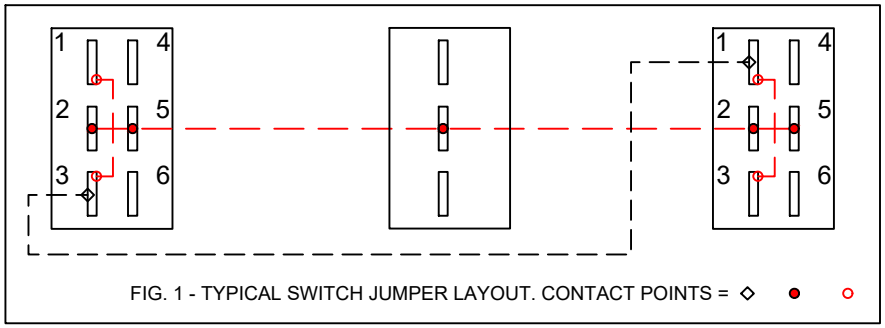
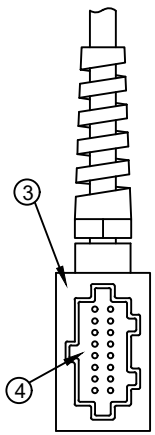
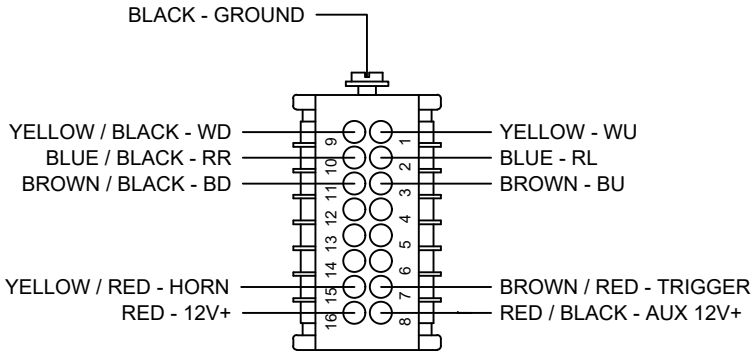


FIG. 1 - TYPICAL SWITCH JUMPER LAYOUT. CONTACT POINTS = ◇ ● ○



16-PIN PLUG ASSY.



16-PIN PLUG - BACKSIDE VIEW

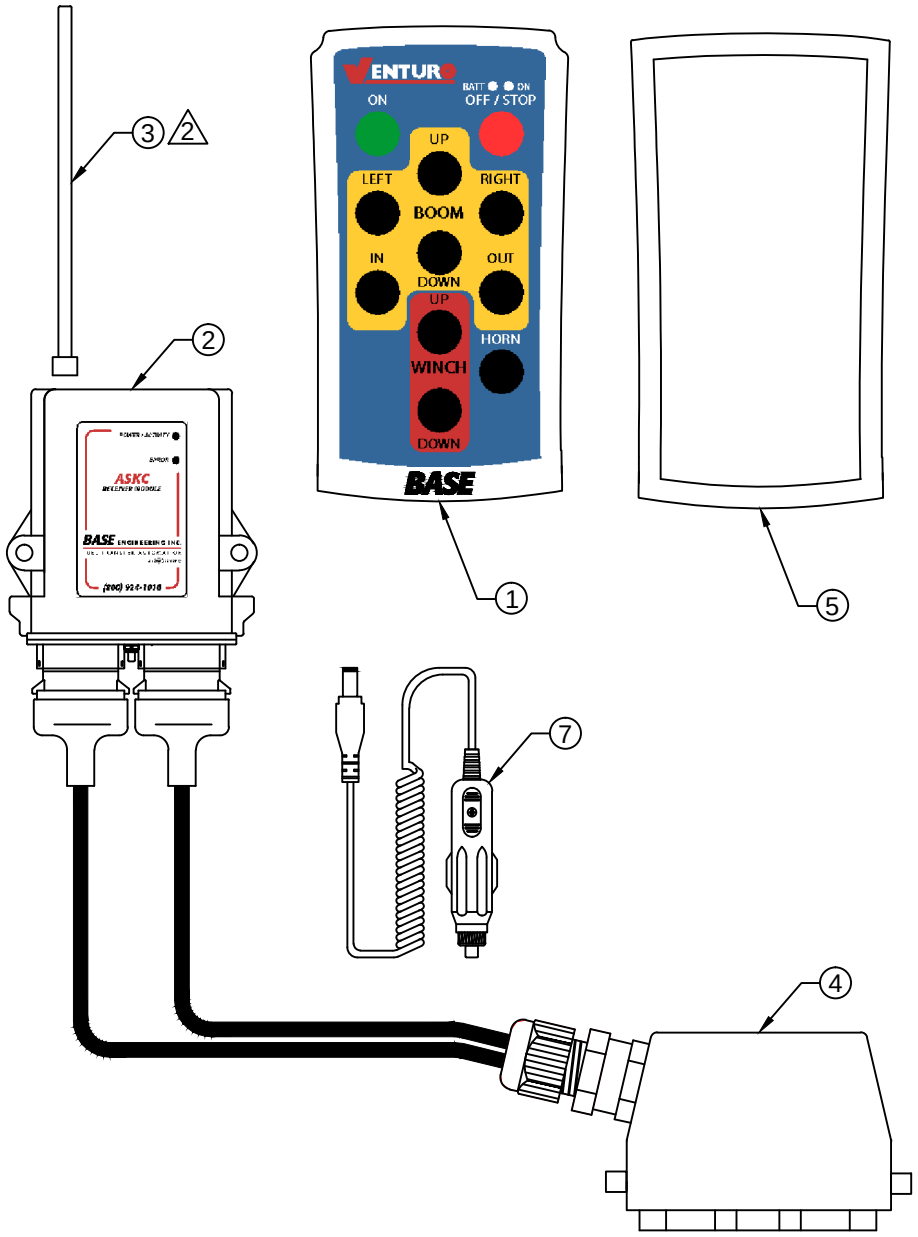
ITEM	QTY	PART NO.	DESCRIPTION
1	1	22081	SWITCH; SPDT, MOMENTARY
2	2	22152	SWITCH; DPDT, MOMENTARY
3	1	22471	PLUG CASE; 16 + 1 POLE
4	1	22472	INSERT; MALE, 16 + 1 POLE
5	-	-	-
6	1	22135	KIT; REPLACEMENT CORD ASSY
7	1	22155	SWITCH; PUSHBUTTON, HORN
8	1	22156	SWITCH; E-STOP

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TITLE	DATE	SECTION
REPLACEMENT PARTS DWG & LIST	02-03-25	C400
21991 PNDNT; 3 FNCTN ET CRNS, ESTP/HRN	SUPERSEDES: -	26765

21986-ET/-HT RADIO; NON-PROP, NON-CAN, NO ENG CTRL, W/ HORN



COMPONENTS		
ITEM NO.	PART NO.	DESCRIPTION
1	21986-TX	TRANSMITTER
2	21986-RX-ET	RECEIVER - ET CRANES
1	21986-RX-HT	RECEIVER - HT CRANES
2	3	21986-ANT	ANTENNA
4	21986-HN	HARNESS
5	21986-CASE	CASE
6	22910-BATT	BATTERY
7	22910-CHGR	CHARGER

1 21986-RX-** DOES NOT INCLUDE 21986-ANT

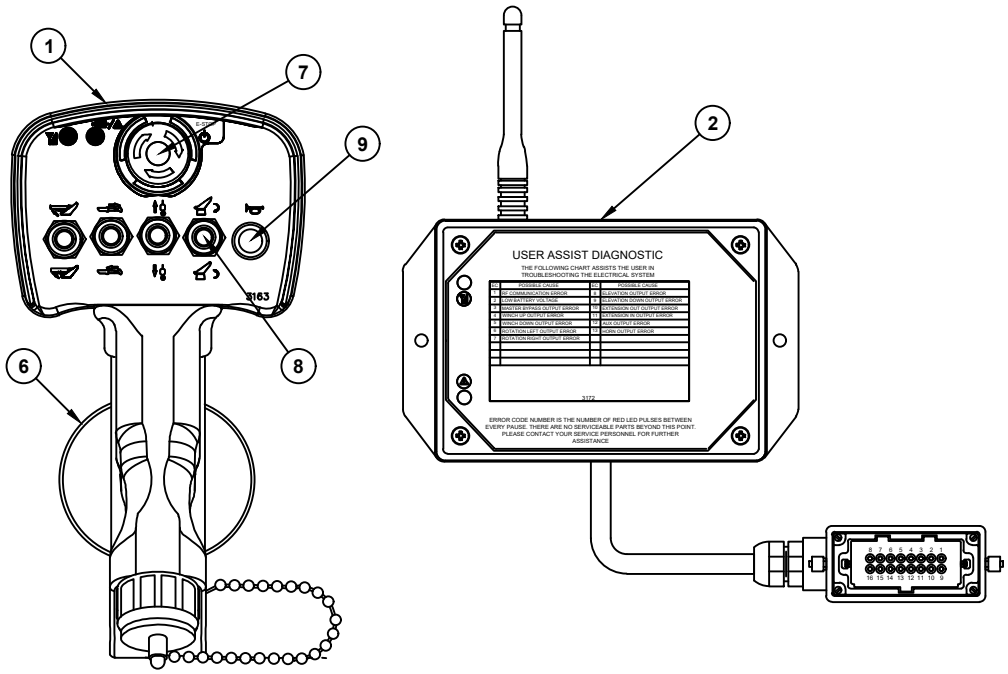
2 ASKCEX1200RX (INTRODUCED 07/2025) HAS PROVISION FOR EXTERNAL WHIP ANTENNA; EARLIER ASKC1100RX & ASKC1200RX CANNOT USE EXTERNAL ANTENNA

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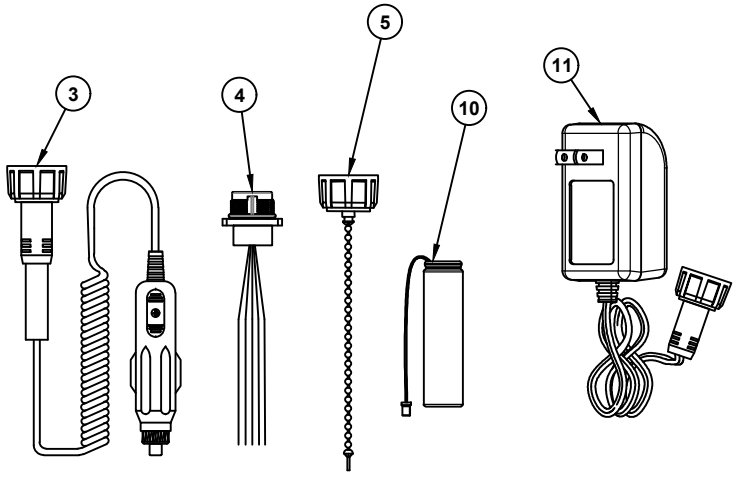
TITLE	DATE	SECTION
REPLACEMENT PARTS DWG & LIST	08-05-25	C400
ET NON-PROPORTIONAL CRANES	SUPERSEDES -	23529

24470 RADIO; NON PROP, NON-CAN, NO ENG CNTRLS, E-STOP/HORN

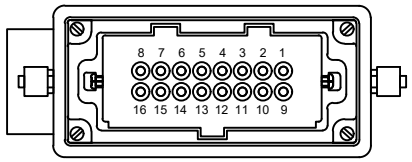


24470 RADIO SYSTEM REPLACEMENT PARTS		
ITEM#	PART#	DESCRIPTION
1	24470-TX	ET & HT NON PROP RADIO TRANSMITTER
2	24470-RX-HT	RADIO RECEIVER; HT PROGRAMMED, NON PROP
	24470-RX-ET	RADIO RECEIVER; ET PROGRAMMED, NON PROP
3	23908-CHG	CHARGER, TRANSMITTER, 12V CIG / AUX PLUG
4	24470-CCR	CAN CHARGER RECEPTACLE
5	24470-CRC	TRANSMITTER CAN PORT CAP
6	22089	MAGNET ASSEMBLY
7	24470-ESS	EMERGENCY STOP SWITCH
8	24470-TOG	TOGGLE SWITCH (ON)-OFF-(ON), SCREW CONNECT TERMS, W/BOOT
9	22155	PUSH BUTTON SWITCH, GREEN
10	23908-BAT	BATTERY; TX
*11	24470-ADP	110 VOLT A/C WALL CHARGER

* OPTIONAL ACCESSORY, NOT INCLUDED



VIEW FROM CONNECTING FACE



16 PIN CONNECTOR WIRING		
PIN#	WIRE COLOR	FUNCTION
1	YELLOW	WINCH UP OUTPUT
2	BLUE	ROTATION LEFT OUTPUT
3	BROWN	ELEVATION UP OUTPUT
4	ORANGE	EXTENSION OUT OUTPUT
5	-	-
6	-	-
7	BROWN / RED	MASTER BY PASS OUTPUT
8	RED / BLACK	AUX POWER +12V
9	YELLOW / BLACK	WINCH DOWN OUTPUT
10	BLUE / BLACK	ROTATION RIGHT OUTPUT
11	BROWN / BLACK	ELEVATION DOWN OUTPUT
12	ORANGE / BLACK	EXTENSION IN OUTPUT
13	-	-
14	-	-
15	YELLOW / RED	HORN OUTPUT
16	RED	SYSTEM POWER +12V
-	BLACK	SYSTEM GROUND (SHELL / HOUSING)

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TITLE
REPLACEMENT PARTS DWG & LIST

▲
NON-PROPORTIONAL CRANES

DATE
10-21-26A

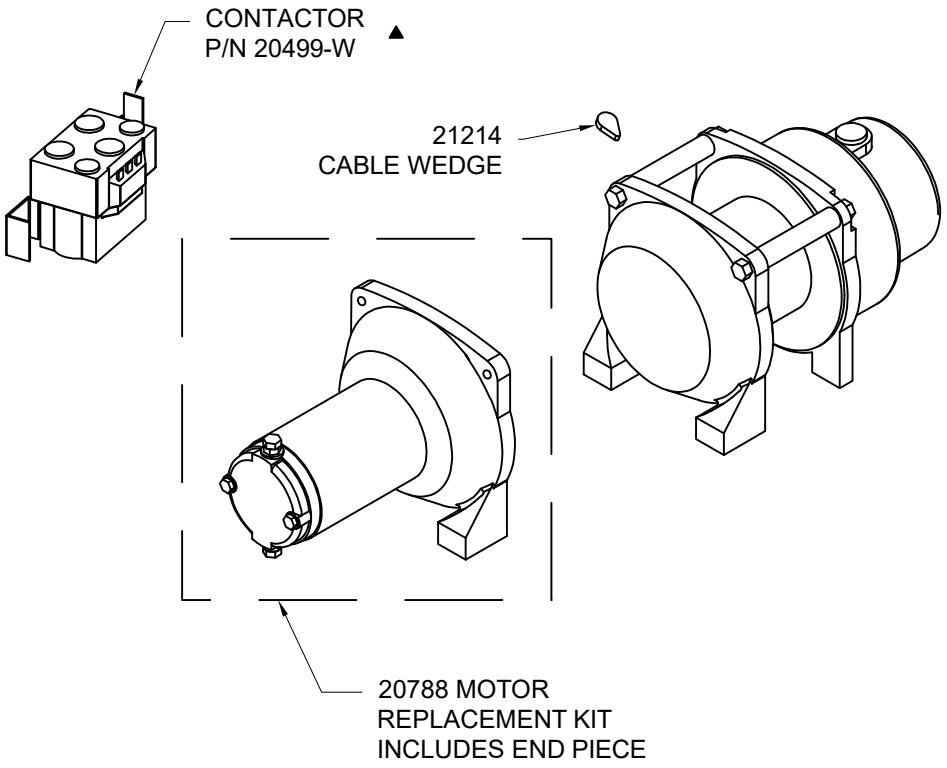
SUPERSEDES
07-16-26

SECTION
C400

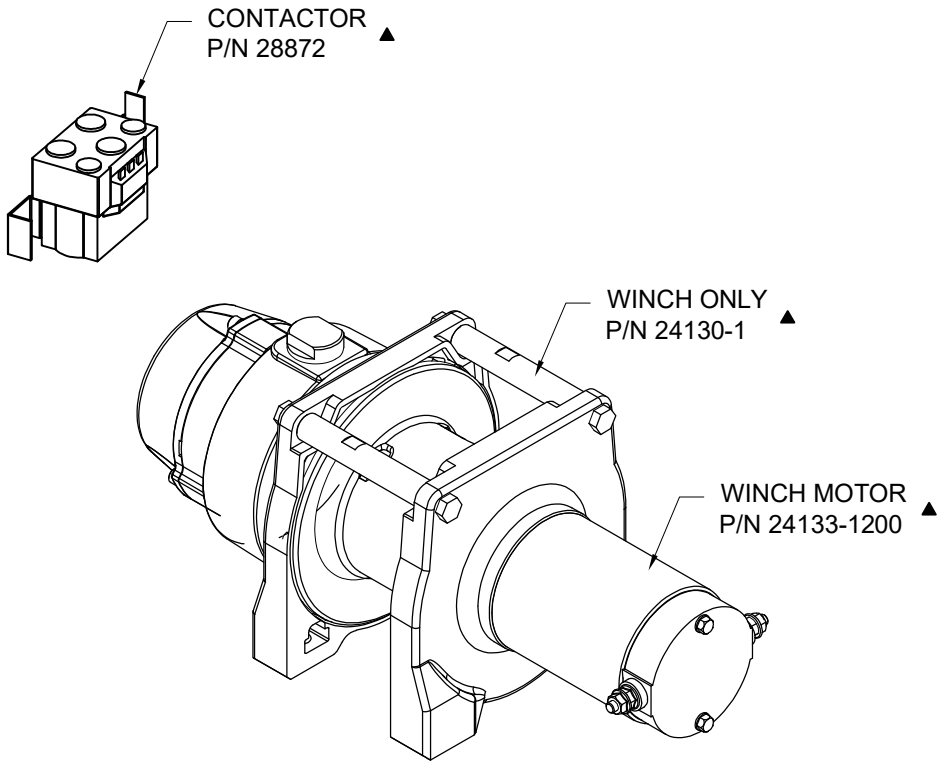
35310

WINCH REPLACEMENT PARTS

WARN DC1200
WINCH P/N 20586



COMEUP GTD-1200
WINCH P/N 24130-1

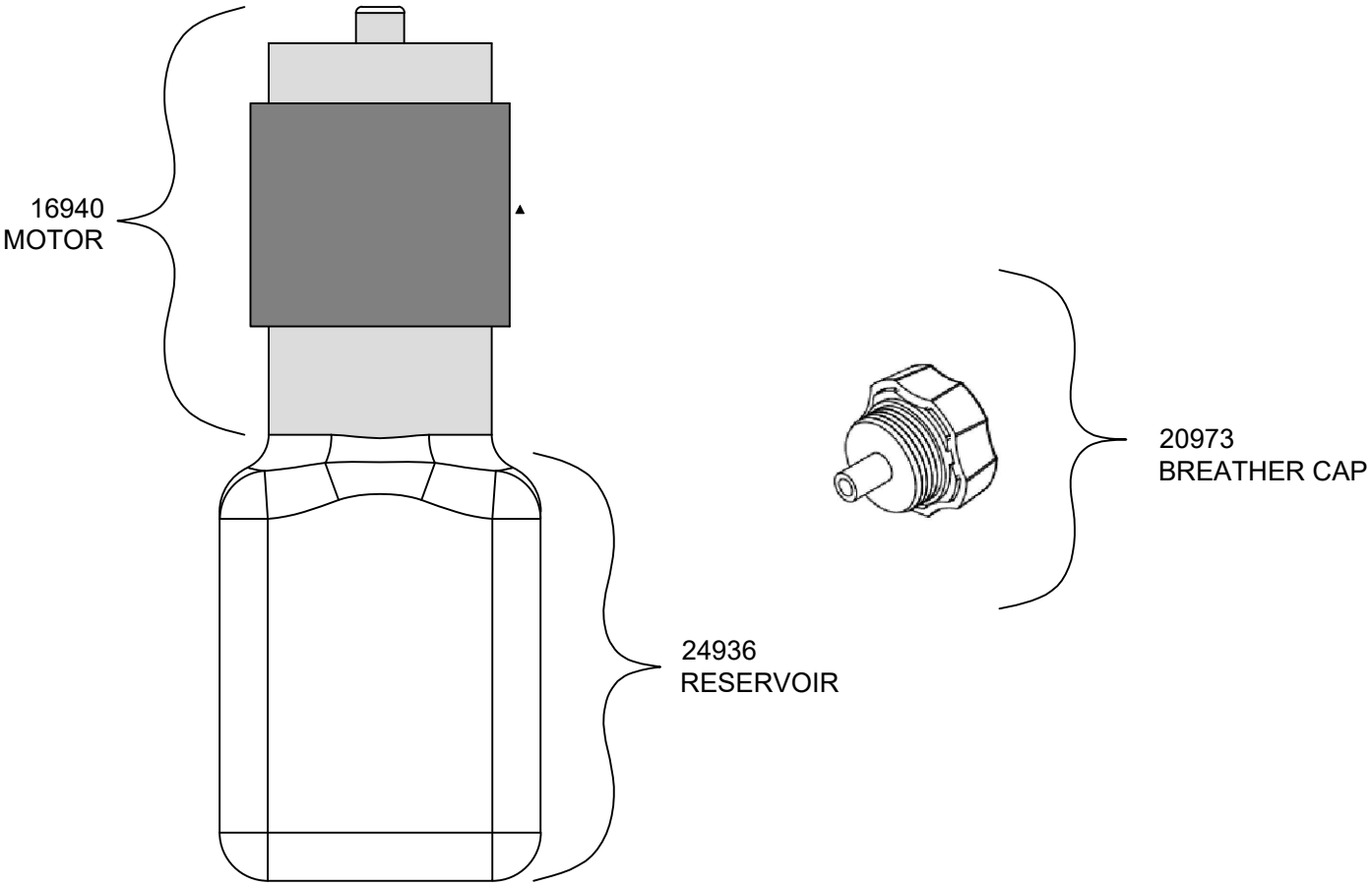


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CINCINNATI, OHIO

TITLE	DATE	SECTION
WINCH REPLACEMENT PARTS	04-23-26G	C400
CT310KX & 2010E (ET6K)	SUPERSEDES 02-11-25F	20837

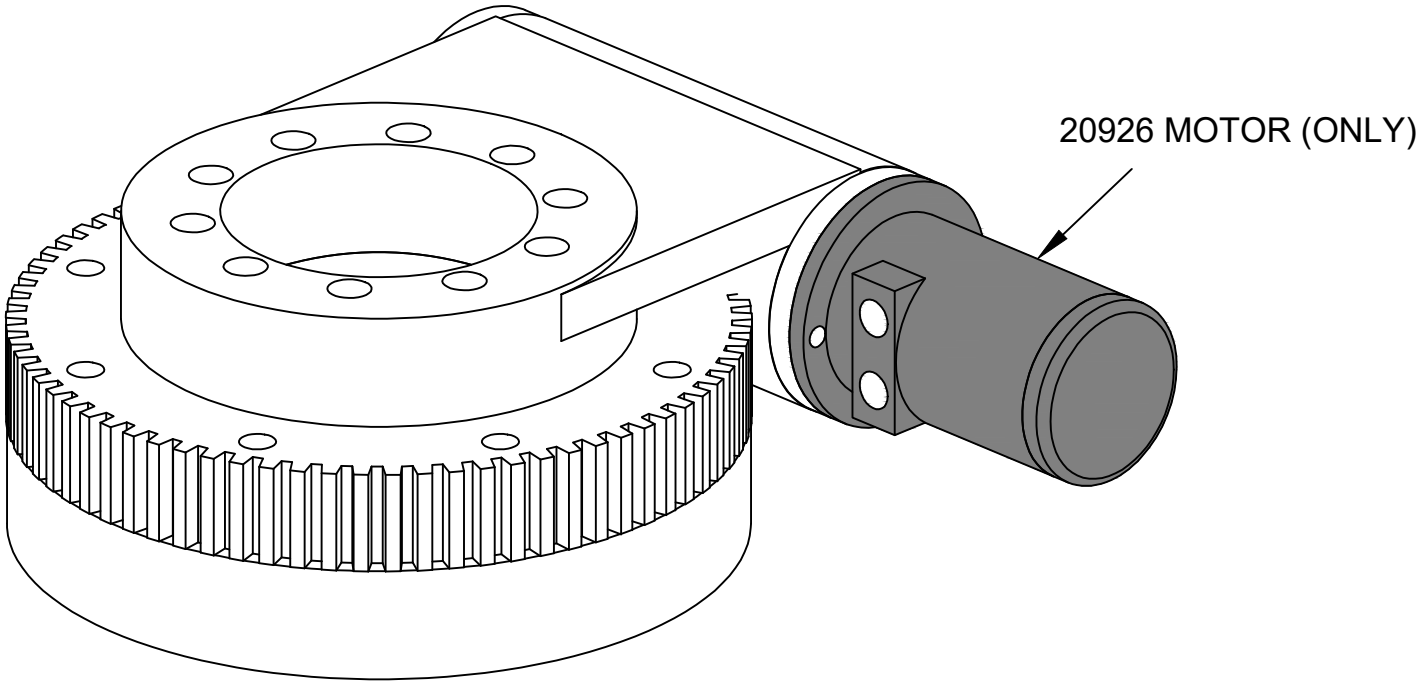
20456 REPLACEMENT PARTS DWG/LIST

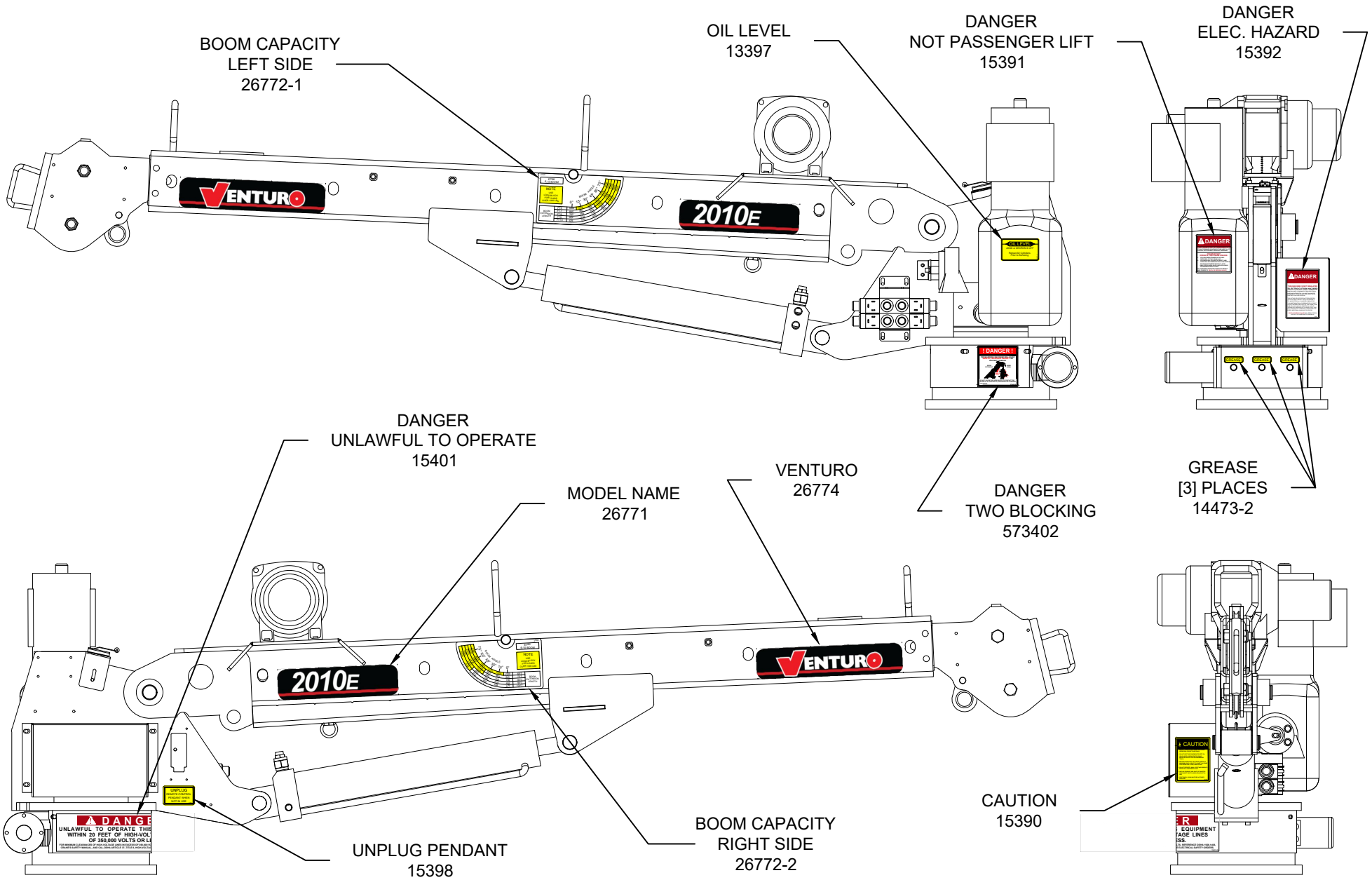


VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
RPLCMNT PARTS DWG	09-09-26A	C400
2010E	SUPERSEDES 02-03-25	26767

27243 SLEWING SYSTEM REPLACEMENT PARTS





VENTURO® VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE DECAL PLACEMENT	DATE 05-01-25	SECTION C400
	2010E	SUPERSEDES -	26769

2010E FIELD SERVICE LABEL KIT, 26773

	PART NO.	QTY	DESCRIPTION
	14473-2	3	DECAL, CONDUCTIVE GREASE
	26774	2	DECAL, VENTURO LOGO
▲	26772-1	1	DECAL, BOOM CAPACITY 2010E LEFT
▲	26772-2	1	DECAL, BOOM CAPACITY 2010E RIGHT
	26771	2	DECAL, MODEL NAME DECAL 2010E
	13397	1	DECAL, OIL LEVEL
	16184-1	1	DECAL; HORN RELAY
▲	26770	1	FIELD SERVICE LABEL KIT LIST
▲	26769	1	IDWG; DECAL PLACEMENT
	INST-23233	1	SAFETY MANUAL, VENTURO CRANES
	15397	1	KIT; ACCIDENT PREVENTION SIGNS

VENTURO CRANES LIMITED WARRANTY POLICY

Venturo products are built to last…we guarantee them.
As a purchaser of any new Venturo product covered by warranty, you will receive 1 year of the most complete coverage available…and, at no added cost to you.

1-Year Limited Warranty Policy

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

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

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

Warranty Claims

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

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

VENCO VENTURO INDUSTRIES LLC
12110 BEST PLACE | CINCINNATI, OHIO 45241
P: 800-226-2238 | F: 513-326-5427
www.venturo.com

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