

HVBAAA-V*A0

Pages 1-60

PARTS & INSTALLATION MANUAL HT55KX-20

Included in this manual:

HT55KX-20 (VLC)

- 8,500 lb Hydraulic Telescopic Service Crane
- Venturo Logic Control System w/ Proportional Control
- 20 ft Fully-Powered, Two-Stage, Boom Extension

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

VENCO VENTURO INDUSTRIES LLC

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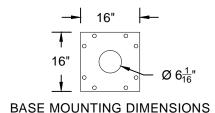


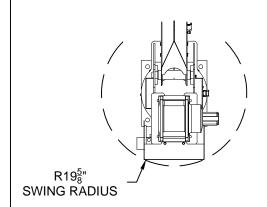
	TITLE	DATE	SECTION
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		SUPERSEDES	04400
	HT55-20' (HVBAAA-V*A0)	02-11-21A	24422

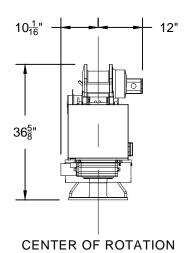
SECTION 100

DESCRIPTION & SPECIFICATIONS





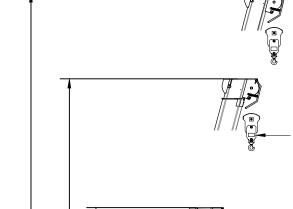




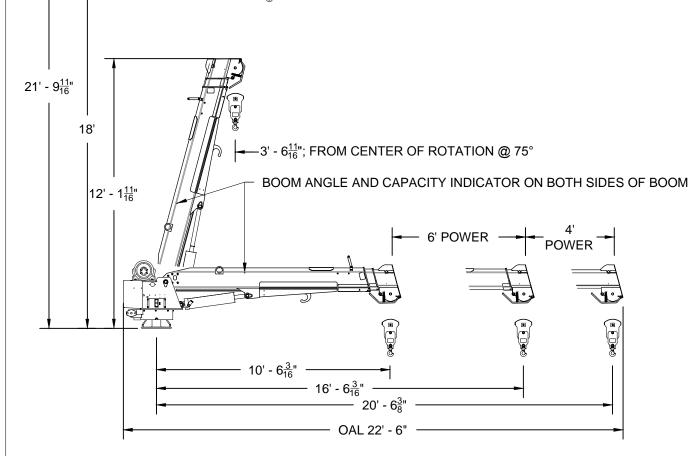
THIS SECTION SCALED 2:1 FOR CLARITY

WARNING

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



LOAD BLOCK FOR SINGLE AND TWO-PART LINE OPERATION

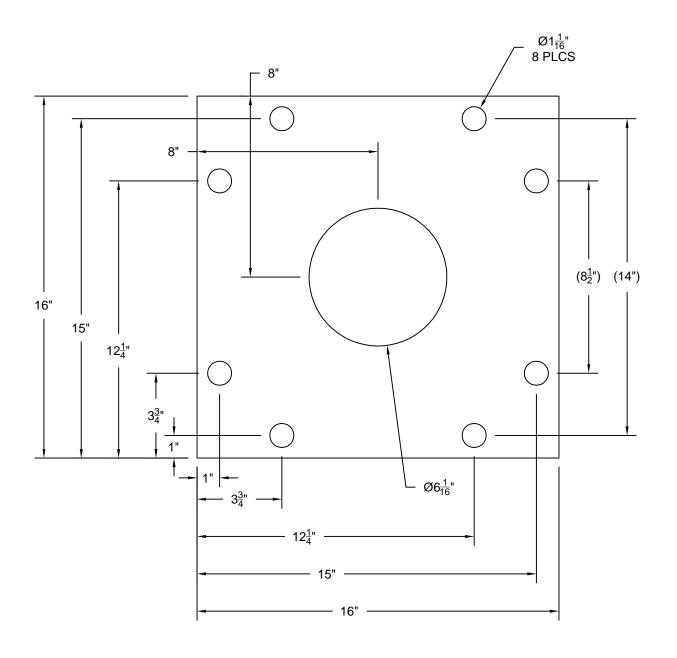




INSTALLATION DIMENSIONS	07-17-19	C100
HT55KX-20' SERIES CRANES	SUPERSEDES -	24420

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

BASE MOUNTING DIMENSIONS - HT55 SERIES

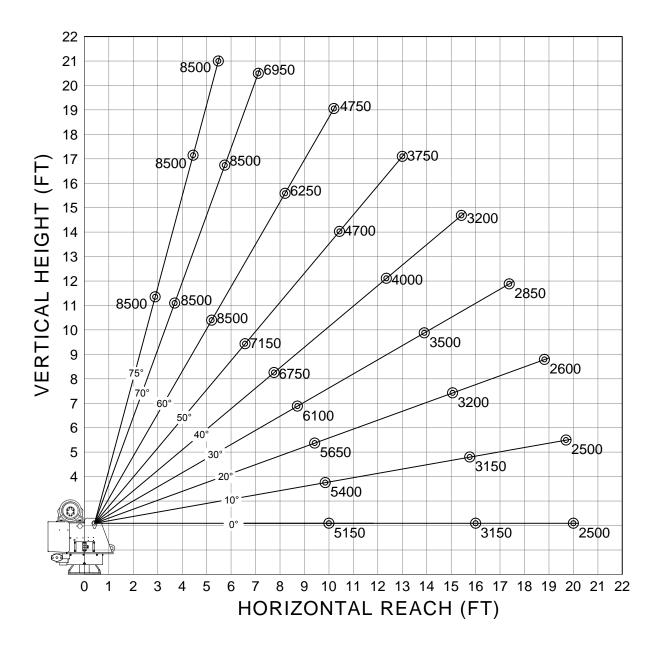


REFERENCE DWG #23855 FOR MOUNTING BOLT SIZE AND TORQUE SPECCIFICATIONS.

	VENCO VENTURO INDUSTRIES LLC	BASE MNTNG DIMENSIONS	03-19-19	C100
ERIUR	CINCINNATI, OHIO	HT55KX SERIES CRANES	SUPERSEDES	23852

HT55KX, 10' - 16' - 20' BOOM, WITH VENTURO LOGIC CONTROL SYSTEM 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 4250 LBS

2-PART LINE FOR LOADS OF 4250 LBS AND GREATER

WEIGHT OF LOAD BLOCK = 51 LBS



SECTION 150

SAFETY



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 While traveling - minimum clearance distance (nominal, kV, alternating current) (feet) *			
0 - 0.75	(1661)		
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



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

CRANE SAFETY AND HAZARDS HT SERIES CRANES

CAUTIONS

- INSPECT VEHICLE AND CRANE, INCLUDING OPERATION, PRIOR TO USE DAILY. 1.
- 2. DO NOT USE THIS EQUIPMENT EXCEPT ON SOLID, LEVEL SURFACE WITH CRANE MOUNTED ON FACTORY-RECOMMENDED TRUCK.
- 3. BEFORE OPERATING THE CRANE, REFER TO MAXIMUM LOAD (CAPACITY) CHART ON CRANE FOR OPERATING (LOAD) LIMITATIONS.
- DO NOT OPERATE, WALK, OR STAND BENEATH BOOM OR A SUSPENDED LOAD. 4.
- ATTACH PENDANT CORD SUPPORT SNAP TO ATTACHMENT POINT BEFORE PLUGGING IN PENDANT. 5.
- 6. UNPLUG PENDANT AND DISENGAGE PTO SYSTEM WHEN CRANE NOT IN USE.
- FOR TRAVEL, BOOM MUST BE IN STOWED POSITION. 7.

DANGER

- THIS CRANE IS NOT A PASSENGER LIFT
- IT IS NOT DESIGNED OR INTENDED TO BE USED TO LIFT, SUPPORT, OR OTHERWISE TRANSPORT PERSONNEL.

YOU MUST NOT OPERATE THIS CRANE UNLESS

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

ELECTROCUTION HAZARD

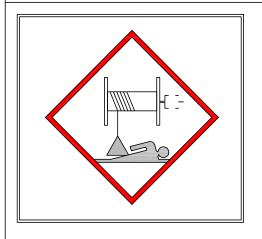
- THIS MACHINE IS NOT INSULATED.
- MAINTAIN SAFE CLEARANCES FROM ELECTRICAL LINES AND APPARATUS.
- YOU MUST ALLOW FOR BOOM SWAY, ROCK OR SAG, AND ELECTRICAL LINE AND LOADLINE SWAYING.
- THIS LIFTING DEVICE DOES NOT PROVIDE PROTECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR.
- YOU MUST MAINTAIN A CLEARANCE OF AT LEAST 20 FEET BETWEEN ANY PART OF THE CRANE, LOADLINE, OR LOAD, AND ANY ELECTRICAL LINE OR APPARATUS CARRYING UP TO 350 kV (SEE NEW CHART). ADDITIONAL CLEARANCES ARE REQUIRED FOR VOLTAGES IN EXCESS OF 50,000 VOLTS. REFER TO DRAWING 15394 FOR ADDITIONAL INFORMATION.
- **DEATH OR SERIOUS INJURY** WILL RESULT FROM CONTACT OR INADEQUATE CLEARANCE.



TITLE
CRANE SAFETY & HZRDS

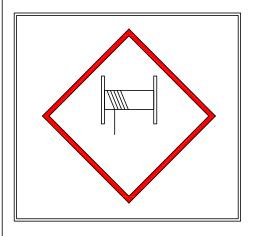
SECTION

WINCH SAFETY WARNINGS



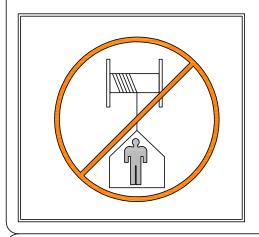
DANGER

DO NOT DISENGAGE WINCH UNDER LOAD



⚠ DANGER

THE LAST [5] (DEAD) WRAPS OF WIRE ROPE MUST BE LEFT ON TO **ASSIST WIRE ROPE** CLAMP IN HOLDING LOAD



. WARNING

Winches are not to be used to lift, support, or otherwise transport personnel



CINCINNATI, OHIO

TITLE	DATE	SECTION
WINCH SAFETY	02-21-14D	C150
HT CRANES	supersedes 04-04-12C	192
III CINAINES	04-04-120	102

PART NO.: 15398

DECAL: UNPLUG REMOTE CONTROL

FUNCTION: To inform the operator to

unplug remote control when

not being used.

QUANTITY: 1

PLACEMENT: Right side of housing.

PART NO.: 15401

DECAL: UNLAWFUL TO OPERATE

FUNCTION: To inform the operator of proper

operation in vicinity of power lines.

QUANTITY: 1

PLACEMENT: Right side of housing.

PART NO.: 19314-1 [LEFT] & -2 [RIGHT]

DECAL: MANUAL OVERRIDE (NON-PROP)

FUNCTION: To inform the operator of

manual override locations.

QUANTITY: 1 EACH

PLACEMENT: Inside of rear cover.

PART NO.: 22768-1 [LEFT] & -2 [RIGHT]

DECAL: MANUAL OVERRIDE (PROPORTIONAL)

FUNCTION: To inform the operator of

manual overide locations.

QUANTITY: 1

PLACEMENT: Inside of rear cover.

UNPLUG

REMOTE CONTROL
PENDANT WHEN
NOT IN USE

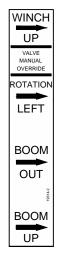
15398-F

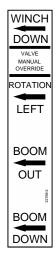
A DANGER

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.











DECAL DRAWING & LIST

11-30-22E

SECTION C150

HT40/50/60/66 SERIES

SUPERSEDES 02-21-14D

22181A

PART NO.: 23068-1 [LEFT] & -2 [RIGHT]

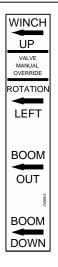
DECAL: MANUAL OVERRIDE (HT66KXX ONLY)

FUNCTION: To inform the operator of

manual overide locations.

QUANTITY:

PLACEMENT: Inside of rear cover.





PART NO.: 19315-1

DECAL: SHUT OFF (NON-PROPORTIONAL)

FUNCTION: To show the operator how to

override master shut off valve.

QUANTITY:

PLACEMENT: Inside rear cover.

PART NO.: 19315-2

DECAL: MANUAL OVERRIDE (PROPORTIONAL)

FUNCTION: To show the operator how to

override proportional valve.

QUANTITY: 1

PLACEMENT: Inside rear cover.

WARNING!

KEEP VALVE IN NORMAL POSITION. OVERRIDE POSITION IS INTENDED FOR EMERGENCY USE ONLY.



NON-PROPORTIONAL VALVE

PUSH IN STEM AND ROTATE

WARNING!

KEEP VALVE IN NORMAL POSITION. OVERRIDE POSITION IS INTENDED FOR EMERGENCY USE ONLY.



PROPORTIONAL VALVE

ROTATE STEM

20834 PART NO.:

DECAL: MANUAL OVERRIDE NOTICE

FUNCTION: To inform the operator of

manual override locations.

QUANTITY:

PLACEMENT: Inside rear cover.

NOTICE FOR MANUAL OVERRIDE OF CRANE FUNCTIONS, REMOVE REAR COVER AND SEE INSTRUCTIONS INSIDE.



DECAL DRAWING & LIST

DATE 11-30-22G

C150

HT40/50/60/66 SERIES

SUPERSEDES 08-21-14F

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

PART NO.: 15390

DECAL: CAUTION - INSPECT VEHICLE & CRANE

FUNCTION: To inform the operator of key

operating requirements.

QUANTITY: 1

PLACEMENT:Left side of rear cover.

PART NO.: 15391

DECAL: DANGER - NOT PASSENGER LIFT

FUNCTION: To inform the operator not to lift,

support or transport personnel, and to ensure that crane operator is adequately trained.

QUANTITY: 1

PLACEMENT:Left side of rear cover.

PART NO.: 15392

DECAL: DANGER - ELECTROCUTION HAZARD

FUNCTION: To inform the operator that the

machine (crane) represents an electrocution hazard should it come

too near or in contact with electrical voltage source.

QUANTITY: 1

PLACEMENT:Left side of rear cover.

PART NO.: 22499

DECAL: KNOW YOUR SIGNALS

FUNCTION: To inform the operator of

proper signals.

QUANTITY: 1

PLACEMENT: Right side of rear cover.





IT IS NOT DESIGNED OR INTENDED TO BE USED TO LIFT, SUPPORT OR OTHERWISE TRANSPORT PERSONNEL.

YOU MUST NOT OPERATE THIS CRANE UNLESS:

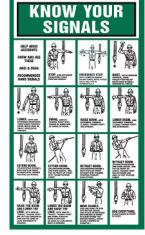
YOU HAVE BEEN TRAINED IN THE SAFE YOU HAVE BEEN IN TAINED IN INE SAFE OPERATION OF THIS CRANE; AND YOU KNOW AND FOLLOW THE SAFETY AND OPERATING RECOMMENDATIONS CONTAINED IN THE MANUFACTURER'S MANUALS, YOUR EMPLOYER'S WORK RULES, AND APPLICABLE GOVERNMENT REGULATIONS.

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

DANGER THIS MACHINE IS NOT INSULATED **ELECTROCUTION HAZARD** MAINTAIN SAFE CLEARANCES FROM ELECTRICAL LINES AND APPARATUS. YOU MUST ALLOW FOR BOOM SWAY, ROCK OR SAG, AND ELECTRICAL LINE AND LOAD LINE SWAYING. THIS LIFTING DEVICE DOES NOT PROVIDE PRO-TECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR. YOU MUST MAINTAIN A CLEARANCE OR AT LEAST 11 FEET BETWEEN ANY PART OF THE CRANE, LOAD LINE OR LOAD, AND ANY ELECTRICAL LINE OR APPARATUS CARRYING UP TO 50,000 VOLTS. ONE FOOT ADDITIONAL CLEARANCE IS REQUIRED FOR EVERY ADDITIONAL 30,000 VOLTS OR LESS.

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







DECAL DRAWING & LIST

DATE

11-30-22F

SECTION C150

HT40/50/60/66 SERIES

SUPERSEDES 02-21-14E

22181

PART NO.: 17389

DECAL: MEDIUM VENTURO

FUNCTION: Branding.

QUANTITY: 1

PLACEMENT: Rear cover.



PART NO.: 22496

DECAL: LARGE VENTURO

FUNCTION: Branding.

QUANTITY: 2

PLACEMENT: Boom.



PART NO.: 20927

DECAL: CRANE STABILITY

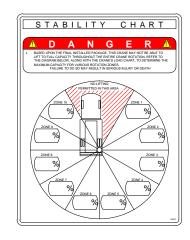
FUNCTION: To inform the operator of the crane's lifting capacity

throughout the entire rotation.

QUANTITY: 1

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

identifiable.





TITLE

DECAL DRAWING & LIST

DATE

11-30-22K

C150

SECTION

HT40/50/60/66 SERIES

12-11-18J

22181D

LEFT SIDE OF BOOM

RIGHT SIDE OF BOOM

PART NO.: 23743 & 23744

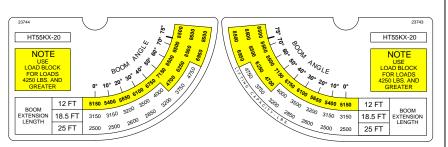
DECAL: HT55-20' CRANE CAPACITY

FUNCTION: To show the operator the operating

capacities of the crane

QUANTITY: 1 each

PLACEMENT: Right side of boom, Left side of boom



23744 23743

SPACE INTENTIONALLY LEFT BLANK

SPACE INTENTIONALLY LEFT BLANK

SPACE INTENTIONALLY LEFT BLANK



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

BOOM CAPACITY DECALS 07-26-19

SECTION C150

SUPERSEDES

HT55KX-20'

4

PART NO.: 23742

DECAL: VLC, 2.94" x 6.00"

FUNCTION: To show that the crane is equipped

with Venturo Logic Controls

QUANTITY: 2 each

PLACEMENT: Each side of Housing



•

SPACE INTENTIONALLY LEFT BLANK

SPACE INTENTIONALLY LEFT BLANK

SPACE INTENTIONALLY LEFT BLANK



/ENCO VENTURO INDUSTRIES LLC	
CINCINNATI, OHIO	

VLC SERIES CRANES	SUPERSEDES 10-11-18	23748
VLC DECALS	02-06-19A	C150
TITLE	DATE	SECTION

SECTION 200

INSTALLATION



CRANE INSTALLATION, PAGE 1 HT55-20' VLC SERIES

BODY REINFORCEMENT

The truck body must be reinforced and outriggers provided to withstand the combined loads resulting from lifting and the weight of the crane and boom.

The maximum combined overturning moment for the HT55KX is 55,000 ft. lbs.

The maximum vertical load for the HT55-20' VLC is 10,450 lbs.

CRANE MOUNTING

The crane base plate or mounting pedestal must be bolted to the body reinforcing plate with eight [8] grade five (5) bolts of 1" dia. with either coarse or fine threads, torqued to 587 foot pounds. A 6" dia. hose clearance hole must be cut in this plate to allow the hoses to swing and coil freely.

ROTATION POSITIONING

The HT cranes are shipped with the boom rotated as shown on drawing 20051. It can be in any position that pleases the user since the boom can always reach the storage and travel position by rotating one way or the other.

HYDRAULIC CONNECTIONS

The crane is furnished with a pressure, return and a case drain hoses that come down through the center of the housing. The pressure and return hoses connect to two hydraulic swivels to prevent damage while rotating the crane right and left.



 THE CASE DRAIN HOSE MUST BE A DEDICATED RETURN HOSE UNRESTRICTED TO TANK / RESERVOIR.
 DO NOT 'T' INTO ANOTHER EXISTING RETURN HOSE OR DAMAGE TO THE HYD. WINCH FROM BACK-PRESSURE WILL OCCUR. BACK-PRESSURE IN EXCESS OF 200 PSI WILL DAMAGE THE HYD. WINCH.

Arrange the pressure & return hoses in the compartment below the crane so that they are connected in a relaxed position while the crane is at the midpoint of the 400 degree rotation range -- regardless of the final position of the boom during storage/travel. See installation pages 22913 for more information on hose connections.

NOTE: If you purchased one of Venturo's hydraulic packages (P/N 19294-X.XXX), you will have received our pressure gauge kit. This kit includes a gauge, hose and bulkhead "T" fitting and should be installed on the main pressure hose.

CRANE INSTALLATION, PAGE 2 HT45/55 VLC SERIES CRANES

▲ ELECTRICAL CONNECTIONS

A 9 ft. electrical power lead - intended for 12V DC only - comes down through the center of the crane base plate along with the hoses. This power lead should be slacked in the compartment so that it remains relaxed throughout the 400 degree rotation of the crane.

A 20 amp circuit breaker is mounted on the crane and protects the crane's internal wiring and solenoid coils. The 20 amp circuit breaker does not protect the 9 ft. power lead. For added protection, the 9 ft. lead can be connected to a 20 amp protected circuit that, if possible, is powered only when the vehicle engine is running.

HYDRAULIC FLUID

Average Climate Type of Oil

Cold to Moderate ISO Grade AW 46 Warm to Hot ISO Grade AW 68

The fluid should have the highest anti-wear characteristics and treated to inhibit rust and oxidation.

▲ HYDRAULIC HOSES & LINES

The minimum sizes for lines and hoses are as follows:

HYDRAULIC LINES	HT45/55 SERIES	
PRESSURE	5/8"	
RETURN	3/4"	
SUCTION	1-1/4"	

▲ RESERVOIR

The PTO reservoir should have a capacity of 25 gallons fitted with 100 mesh suction screen, 10 micron return line filter, and filler/breather cap.

▲ PTO PUMP

The PTO pump should be sized to allow an engine idle speed range that will deliver approximately 12.0 GPM for the HT45/55 VLC series cranes. These cranes' relief pressures are set at 3000 psi.

▲ PTO START-UP

Before connecting the PTO system to the crane pressure and return hoses, connect the PTO pressure and return lines together at the bulkhead. Operate the PTO system for about two (2) minutes per gallon of reservoir capacity (25 gallon reservoir = 50 minutes) to flush out the lines and filter all the fluid several times.

ENGINE START/STOP & THROTTLE CONTROL

If your crane was purchased with optional engine start/stop and throttle control, refer to drawing 22615 in the replacement parts section for further information.



CRANE OPERATION AND MAINTENANCE INSTRUCTIONS, PAGE 1 HT40/50 VLC SERIES

SAFETY

Before operating this crane, read and understand these instructions, the 920612 Crane Safety and Hazards Information Sheet, and review all safety & instruction labels on the crane.

CRANE INSPECTION

Before operating this crane, inspect for wear, damage, or 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 any problems before using the crane.

See Crane Safety Manual for proper inspection schedules and reports .

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 shown by a gravity arrow.

LOAD BLOCK

If the load exceeds 3000 lbs. -HT40 Series, or 4000 lbs. -HT50 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.

CONTROLS

This crane is operated by a radio-controlled pendant. The pendant should be unplugged and stored in a compartment when the crane is not in use.

Before activating the pendant, inspect the receiver, cord(s), and pendant head/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.

PTO SYSTEM

Check the hydraulic fluid level in the PTO system reservoir. Engage PTO and set the engine idle speed to provide the desired hydraulic flow rate per the PTO system instructions. A lower idle setting may be used for more delicate spotting of loads if required.

CRANE OPERATION

Use "Winch Down" to release tension on the wire rope to unhook it from the storage tie down position.

Use "Boom Up" to elevate the boom from the boom rest position.

Avoid repeated rapid reversals of the control switches. This can cause the load to swing.

Check all control functions to see that they are working as described in the following section.



TITLE	DATE	SECTION
CRANE OP / MNTNC INST	10-11-18	C200
HT40/50 VLC SERIES	SUPERSEDES	23753

CRANE OPERATION AND MAINTENANCE INSTRUCTIONS, PAGE 2 HT40/50 VLC SERIES

CONTROL FUNCTIONS

- WINCH "UP" and "DOWN" Raises and lowers the load with the winch.
- BOOM "UP" and "DOWN" Raises and lowers the boom elevation angle. The boom elevates from 8 degrees below horizontal to 75 degrees above horizontal.
- BOOM "OUT" and "IN" Extends and retracts the boom. The boom hydraulic extension stroke is 6 ft. or 10 ft.
- ROTATION "L" and "R" Controls the left and right direction of the crane rotation. The crane rotation is limited to 400 degrees.
- TRIGGER (Proportional Systems Only) Varies the flow rate delivered to the crane valve. The farther the trigger is
 pulled, the faster the selected crane function operates. See page 22168 for detailed operations instructions and
 warnings.

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.

VENTURO LOGIC CONTROL (VLC) SYSTEM

This crane is equipped with Venturo's logic control system. The receiver collects data from the boom tilt sensor and hydraulic pressure transducer, and translates the results to one of the following actions:

% OF LOAD	CRANE RESPONSE	BOOM/RECEIVER INDICATOR LIGHTS	TRANSMITTER LCD	TRANSMITTER VIBRATOR
0 - 79%	NORMAL OPERATION	Green solid	Load xx% Angle xx°	None
80% - 89%	NORMAL OPERATION	Yellow flashing	Load xx% Angle xx°	None
90% - 99%	All crane functions speed reduced to 50%	Red flashing	Load xx% Angle xx° flashing text SPD 50% icon	[3] quick vibrations when 90% threshold is exceeded
>100%	Winch down, boom retract, and rotation @ 75%. All other functions prevented.	Red solid	Overload Limited functions Speed reduced Flashing text/inverted color - or after pressing OK button- Home Screen, flashing text/inverted color, SPD 25% icon	Continuous vibration for [4] seconds when 100% threshold is exceeded

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.

TELESCOPIC HEXAGONAL BOOM - VLC SYSTEMS

10' - 20' LENGTH Double stage only

The hexagonal shaped boom shall telescope to provide a horizontal reach range of 10 ft. to 20 ft. using a hydraulic power extension cylinder with a 10 ft. stroke.

12' - 25' LENGTH Double stage only

The hexagonal shaped boom shall telescope to provide a horizontal reach range of 12 ft. to 25 ft. using a hydraulic power extension cylinder with a 13 ft. stroke.

13' - 30' LENGTH Double stage only

The hexagonal shaped boom shall telescope to provide a horizontal reach range of 13 ft. to 30 ft. using a hydraulic power extension cylinder with a 17 ft. stroke.

_		TITLE	DATE	SECTION
ENTIRO E	VENCO VENTURO INDUSTRIES LLC	CRANE OP / MNTNC INST	02-22-23D	C200
ENION	CINCINNATI, OHIO		SUPERSEDES	00754
		HT40/50 VLC SERIES	06-01-20C	23/54

CRANE OPERATION AND MAINTENANCE INSTRUCTIONS, PAGE 3 HT40/50 VLC SERIES

TRUCK SETUP & STABILIZERS

- 1. The truck should be parked on firm level ground.
- 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" if it is an automatic.
- 4. Fully deploy stabilizers to help stabilize vehicle against rocking or overturning.
- 5. Use stabilizers to level vehicle only. Tires must maintain contact with ground.

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. Disengage the PTO pump and idle speed control.
- 5. Power down the control pendant and store in a body compartment or the cab.

MAINTENANCE

The crane requires only periodic lubrication. As a standard procedure, this can be done at the time the vehicle is serviced.

The winch planetary gearbox lube should be maintained at the level plug.

To ensure optimal winch performance, the following lube schedule and lube specifications should be followed:

Initial Change - after 6 weeks or 10 hours of operation.

Periodic Change - on an annual basis or every 50 hours of operation.

Temp Range (°F) Winch Gear Oil

120° to 10° High quality SAE 90 gear lubricant oil Severe Duty Swepco #201 multi-purpose gear oil

Service grease fittings and rotation gear with molybdenum-disulfide graphite-filled lithium-based extreme pressure grease.

Grease fitting locations:

Boom pivot at rear of boom

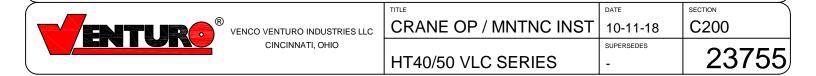
Speed reducer (2 fittings)

Elevation cylinder tail clevis

Bottom of Swing Bearing (2 fittings)

Remove rear cover and check all hydraulic tube and hose fittings for tightness.

Check electrical connections for looseness and corrosion.



EXPLANATION OF HYDRAULIC VALVE SYSTEM HT40/50/60/66KX, PROPORTIONAL ONLY

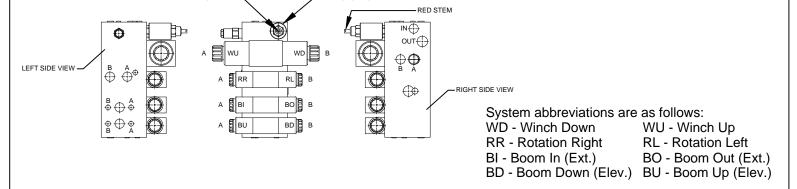
RED STEM

OVERVIEW

This proportional crane utilizes a proportional valve, which controls the rate at which the hydraulic fluid flows through the valve bank. When the proportional valve is fully closed, hydraulic fluid bypasses the valve bank and returns directly to the tank. When the proportional valve is fully open, hydraulic fluid cycles through the valve bank and allows the crane to function at full speed. When the proportional valve is at any setting between, a portion of the fluid is allowed through the valve bank, with the remainder returning to the tank.

The four [4] crane functions (winch, rotation, boom extension, and boom elevation) are controlled by four [4] separate valve sections. Each valve section has two [2] solenoid coils (and two [2] manual overrides) which control the direction that the function operates (e.g. winch up vs. winch down). For a given crane function and direction (e.g. winch up), the solenoid coil and associated manual override reside on the same side of the valve bank.

PROPORTIONAL VALVE



MANUAL OVERRIDE SYSTEM

Should an electrical failure occur, your Venturo crane can be operated manually.

The manual overrides are intended for emergency use only and should not be used for normal operation.

To operate in manual override mode:

- (1) Override the proportional valve by turning the red stem on the valve as stated below
 - For override operation, rotate stem clockwise (the farther the stem is turned the faster the crane will operate)
 - To return to normal operation, rotate the stem counter-clockwise until it stops
- (2) Determine the coil / override associated with the function you wish to operate, then insert a small diameter object (an
 - Allen wrench works well) into the detent on the end of the valve stem and firmly press inward. For example, pushing the stem labeled 'A' on the first bank (refer to illustration) will actuate winch up

For normal crane operation, the proportional valve must be in the 'normal' position (as described above). To verify 'normal' operation, you may set the pendant (or radio) control aside and actuate a single crane function by pushing inward on any of the manual override pins, located at the ends of each function control valve. If that function operates, the proportional valve is still in manual override. Check the position of the proportional valve's red stem to insure that it is fully counter-clockwise.

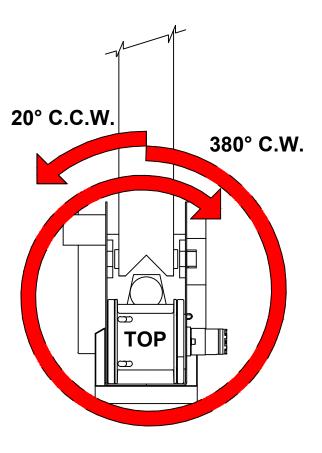
EMERGENCY STOP

In the unlikely event that a function of the crane does not stop once the function's toggle switch is released, the proportional crane can be stopped by releasing the trigger on activating the red E-STOP button on the transmitter.

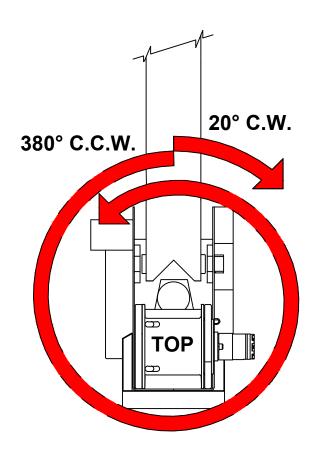
® VENCO VENTURO INDUSTRIES LLC	HYDRAULIC SYSTEM	11-10-22E	section C200
CINCINNATI, OHIO	HT40/50/60/66KX; PROP	02-21-14D	22168

400° ROTATION STOP LOCATION

CURBSIDE



STREETSIDE





TITLE	DATE	SECTION
ROTATION STOP LOCATION	03-09-23F	C200
	SUPERSEDES	000=4
400° ROTATION CRANES	05-20-20E	20051

STABILITY TEST - HT55-20'-VLC 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

- 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.
- Use a *Test Weight* weighing a *minimum* of <u>2941 lbs</u>, (includes load block weight of <u>51</u> lbs.) to a *maximum of* 3100 lbs.
- 6. Place the VLC system into Stability Mode (ref. VLC Manual, INST-30000, page 30005)
- 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).
 - 9.1. Using the test weight weighing between 2941 to 3100 lbs., extend the boom slowly, until one of the three conditions occur:
 - 9.1.1. Full extension is reached Mark the ZONE in question **100%**
 - 9.1.2. The VLC system stops the boom extension Mark the ZONE in question 100%
 - 9.1.3. The truck becomes unstable i.e. a tire lifts off the ground
 - 9.1.3.1. Retract the boom until at least one tire on each corner of the truck is making contact with the ground
 - 9.1.3.2. Use the formula below to determine the allowable % of Rated Capacity for the ZONE in question:
- Note: The "Max Stable Reach in inches" is measured from the center of rotation of the crane housing to the lifting load hook.

% Rated Capacity =

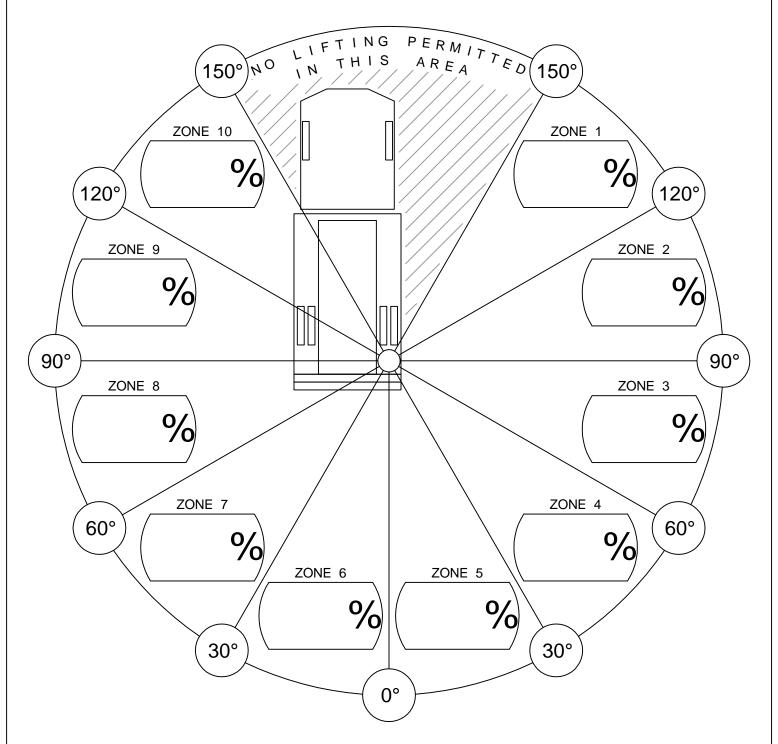
"Max Stable Reach" in inches

X 100

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

ENTUR® VE		 11-24-21C	C200	
ENIUN	CINCINNATI, OHIO	supersedes 02-25-21B	20906-5520V	

CRANE STABILITY



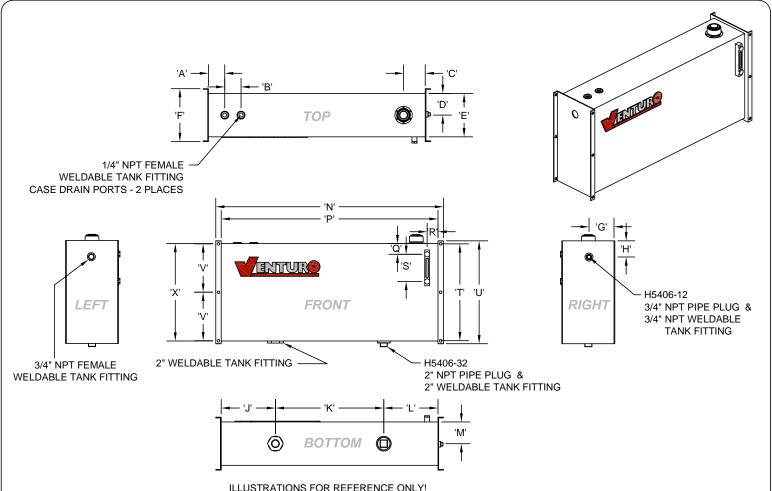
% of Rated Capacity for each of the 10 regions are provided above.

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



ILLUSTRATIONS FOR REFERENCE ONLY! - COMPONENT LOCATIONS MAY DIFFER -

HYD. TANK DIMENSION (HTD) CHART				
PART NO.	22786 (25 GAL.)	22999 (40 GAL.)		
'A'	3"	3"		
'B'	3"	3"		
'C'	4"	4"		
'D'	4"	5.5"		
'E'	8"	11"		
'J'	5"	6"		
'K'	30"	30"		
'L'	5"	6"		
'M'	4"	5.5"		
'P'	40"	42"		
'Q'	2"	2"		
'R'	2"	2"		
'S'	5"	5"		
'X'	18"	20"		

MOUNTING DIMENSION (TMD) CHART				
DIMENSION PART NO.	22786 (25 GAL.)	22999 (40 GAL.)		
'F'	9.75"	12"		
'G'	4.875"	6"		
'H'	3"	3"		
'N'	42"	44"		
'T'	17.875"	19.875"		
'U'	19"	21"		
'V'	8.938"	9.938"		

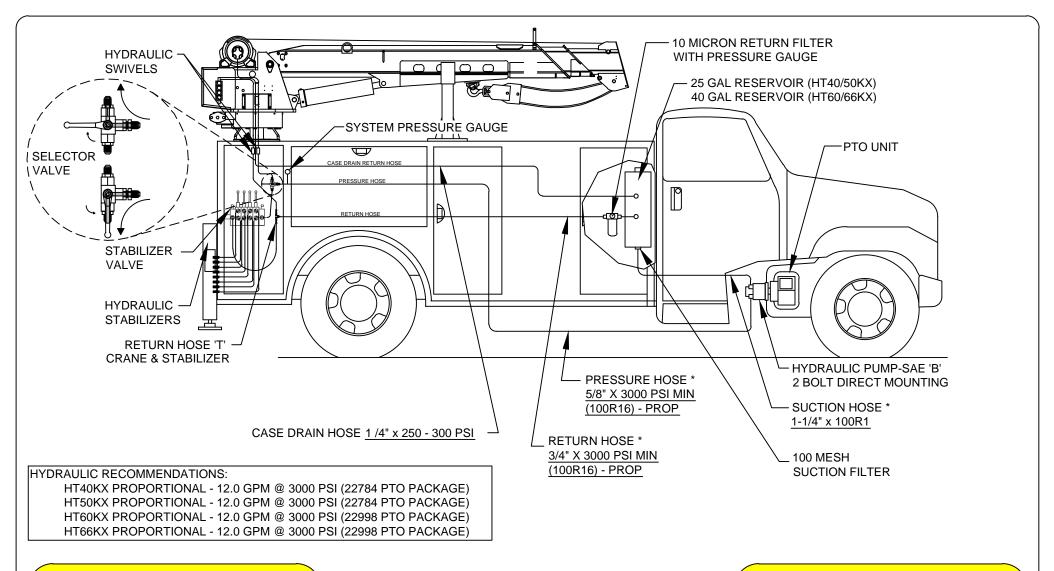
MEASUREMENTS INCLUDE MOUNTING APARATUSES

MEASUREMENTS EXCLUDE MOUNTING APARATUSES

CINCINNATI, OHIO



;	RESERVOIR DIMENSIONS		C200
	HYD. TANKS (25/40 GAL.)	06-04-13D	22825





 SELECTOR VALVE MUST BE 'NON-CLOSED CENTER TRANSITION' TYPE. REFER TO SECTION 200 FOR MORE INFORMATION ON INSTALLING HYDRAULIC COMPONENTS.

* HOSES AND FITTINGS BETWEEN PUMP, RESERVOIR, AND CRANE NOT INCLUDED.

(i)

CAUTION

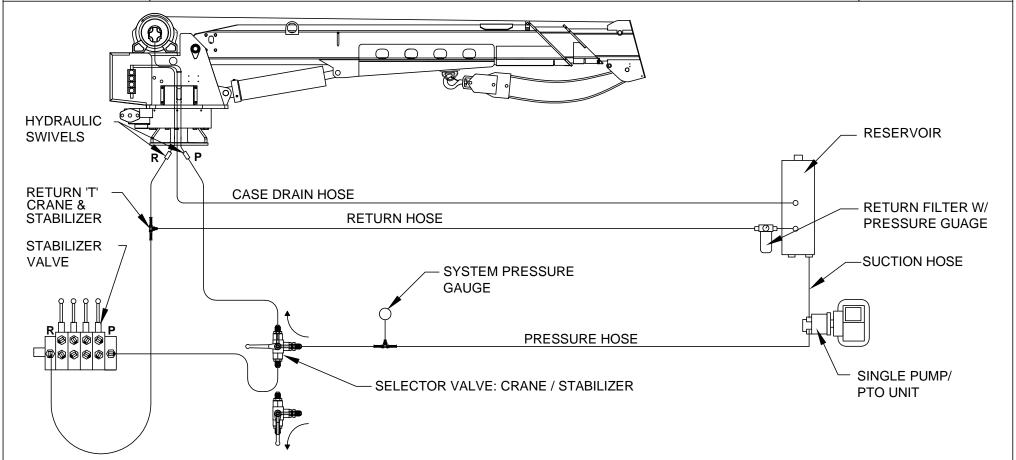
THE CASE DRAIN LINE FROM
THE WINCH MUST HAVE AN
UNRESTRICTED PATH TO TANK/
RESERVOIR.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI. OHIO

TITLE	DATE	SECTION
HYDRAULIC COMPONENT INSTALLATION	11-10-22F	C200
	SUPERSEDES	00000
HT40/50/60/66KX, PROPORTIONAL	05-07-14E	22883

HYDRAULIC CIRCUIT CONNECTION GUIDE - SINGLE PUMP (NO COMPRESSOR) (REFER TO SECTION 200 FOR MORE INFORMATION, INCLUDING HOSE SPECIFICATIONS)



CAUTION

 SELECTOR VALVE MUST BE 'NON-CLOSED CENTER TRANSITION' TYPE.



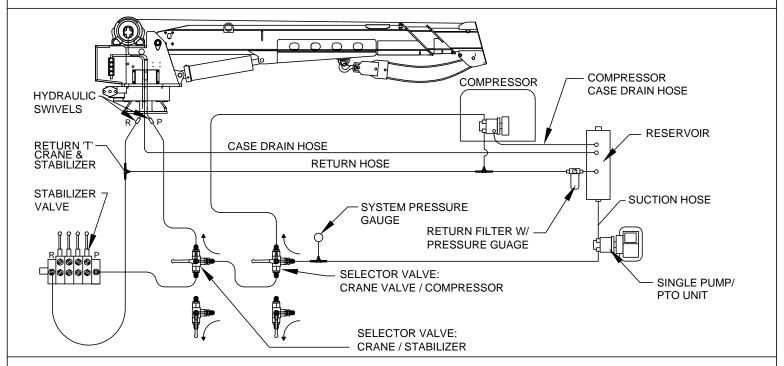
 THE CASE DRAIN LINE FROM THE WINCH MUST HAVE AN UNRESTRICTED PATH TO TANK/ RESERVOIR.



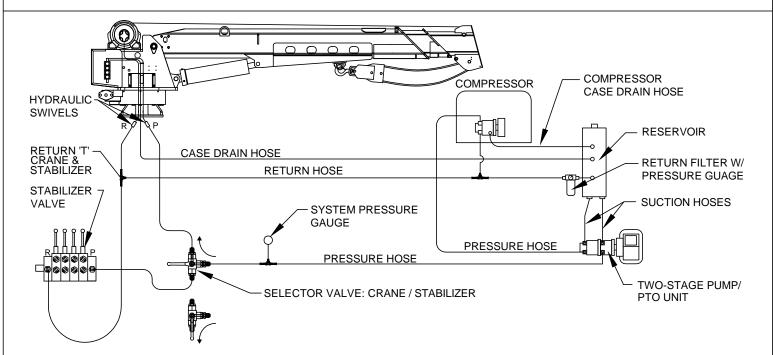
VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

TITLE	DATE	SECTION
CONNECTION GUIDE, PAGE 1 / 2	02-21-14B	C200
	SUPERSEDES	00045
HT CRANES	04-19-12A	23015

HYDRAULIC CIRCUIT CONNECTION GUIDE - SINGLE PUMP W/ COMPRESSOR



HYDRAULIC CIRCUIT CONNECTION GUIDE - TWO-STAGE PUMP W/ COMPRESSOR



! CAUTION

 SELECTOR VALVE MUST BE 'NON-CLOSED CENTER TRANSITION' TYPE. REFER TO SECTION 200
FOR MORE
INFORMATION,
INCLUDING HOSE
SPECIFICATIONS



CAUTION

 THE CASE DRAIN LINE FROM THE WINCH MUST HAVE AN UNRESTRICTED PATH TO TANK/ RESERVOIR.



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO CNNCTN GDE, PAGE 2/2

02-21-14B

C200

HT CRANES

04-19-12A | 23014

SECTION

RECOMMENDED SUPPLY & RETURN HOSE CONNECTIONS **CRANE & STABILIZERS** 3" DIA. MIN. CLEARANCE FOR HOSES CRANE BASE PRESSURE HOSE -RETURN HOSE -HYD. SWIVELS -+12 VOLT PWR SUPPLY **CASE DRAIN** NOTE: NO HOSES ARE PROVIDED 'BELOW' THE R TWO HYD. SWIVELS. SYSTEM PRESSURE STABILIZER VALVE -GAUGE (INCLUDED WITH HYD. PACKAGE) **PRESSURE** SELECTOR VALVE (INCLUDED RETURN HOSE 'T' -WITH STABILIZER PACKAGE) **CRANE & STABILIZER** * PRESSURE PATH TO CRANE SHOWN. **RETURN FROM CRANE & STABILIZER** LOOP HOSES UNDER SWIVELS FOR PRESSURE & SUPPLY HOSES TO AUGMENT SWIVELS



 SELECTOR VALVE MUST BE 'NON-CLOSED CENTER TRANSITION' TYPE VALVE.



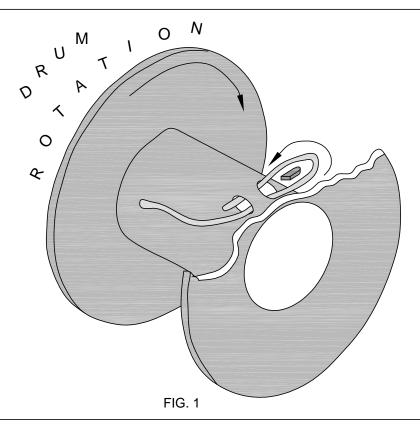
 CASE DRAIN MUST RETURN DIRECTLY TO RESERVOIR WITHOUT RESTRICTION.



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

HT CRANES	SUPERSEDES 10-24-12E	22
CONNECTIONS GUIDE	02-21-14F	C200
TITLE	DATE	SECTION

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 CINCINNATI, OHIO	WIRE ROPE INSTALLTN	02-21-14K	C200	
				SUPERSEDES	00045	ĺ
			ET6K & LARGER CRANES	12-26-13J	22245	

SECTION 300

MAINTENANCE & SERVICE



MAINTENANCE OVERVIEW INFORMATION

MAINTENANCE

The crane requires only periodic lubrication. As a standard procedure, this can be done at the time the vehicle is serviced.

GENERAL

Inspect wire rope for any evidence of kinks or fraying. Ensure that lifting hook of wire rope shows no evidence of damage and is functioning normally.

Inspect headache ball ("load block") for any signs of damage or excessive wear.

Service all grease fitting locations.

Inspect hydraulic hoses and hydraulic fittings for hydraulic leaks.

Inspect electrical connections for any looseness or corrosion.

Inspect bolts and verify all are tight, paying particular attention to winch, rotation system, and mounting base bolts.

Inspect all pins and snap rings for proper fit and function.

Inspect sheaves for excessive wear or play.

Perform a basic inspection of the winch with each use, monitoring for unusual noise or hydraulic leaks.

The winch planetary gearbox lube (SAE 90) should be maintained at the level plug (final base relief valve port) which is approximately half-full point.

To ensure optimal performance, the following oil change schedule should be followed:

Initial Change - after the initial 100 hours of operation or six months. Periodic Change - after every 300 hours of operation or two years.

Temp Range (°F) Winch Gear Oil

120° to 10° High quality SAE 90 gear lubricant oil Severe Duty Swepco #201 multi-purpose gear oil



TITLE	DATE	SECTION
MAINTENANCE INFO	11-10-22D	C300
	SUPERSEDES	000
HT25/30/40/50/60/66KX(P)	02-21-14C	232

WIRE ROPE ASSEMBLY

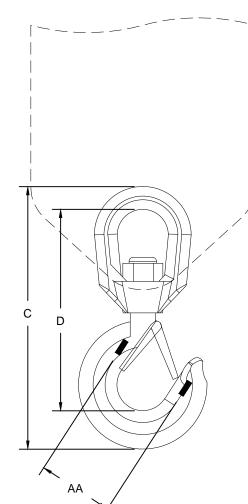
LOAD BLOCK ASSEMBLY

WIRE ROPE:

3/8" DIA, 100' LONG

▲ GAC 7X19 XIP-RHRL-IWRC, SB 14,400 LBS

TERMINATES IN THIMBLE NO HOOK



LOAD BLOCK HOOK:

RATING: 5 TONNE (11,023 LBS)

DIMENSIONS:

COLOR	BRAND	AA	С	D
GOLD	CROSBY	2.50"	9.69"	7.50"

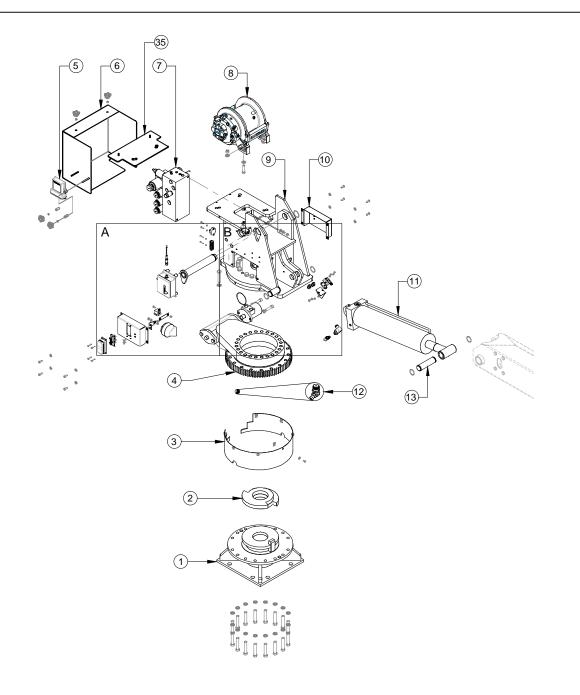


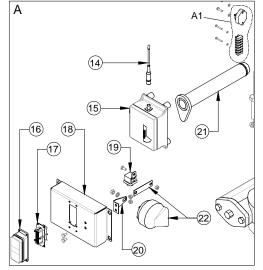
_C	WIRE ROPE & HOOK SPECIFICATIONS	05-09-16D	C300
	HT40/50KX	SUPERSEDES 02-21-14C	23231

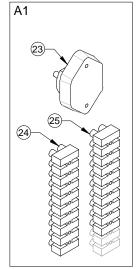
SECTION 400

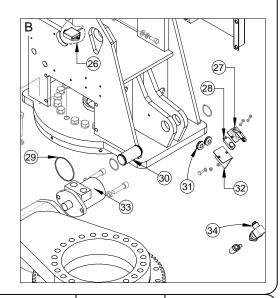
REPLACEMENT PARTS











REFERENCE #23857 FOR REPLACEMENT PARTS LIST



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

REPLACEMENT PARTS DRWNG - MECHANISM

05-17-22B SUPERSEDES

SECTION C400

HT55KX VLC SERIES

03-18-21A

23856

REPLACEMENT PARTS LIST; HT55KX VLC SERIES - MECHANISM

ITEM NO.	PART NO.	QTY	* DESCRIPTION
1	22710	1	WELDED ASS'Y; PEDESTAL
2	22702	1	WELDED ASS'Y; ROTATION STOP RING
3	23644	1	COVER; SLEW GEAR
4	22704	1	SLEWING RING & DRIVE
* 5	23720-RX	1	* E-SCAN RECEIVER
6	22842	1	REAR HOUSING COVER
7	22736H	1	HYDRAULIC VALVE MANIFOLD
8	22830	1	WINCH
9	27033	1	MECHANISM HOUSING WELDMENT
10	22715-1	1	SIDE COVER; NO SOCKET HOLE
11	21748	1	ELEVATION CYLINDER
12	!ZERK-01327	2	FITTING; GREASE
13	22257	1	PIN; ELEVATION CYLINDER, OUTBOARD
* 14	27320-ANT	1	* ANTENNA
* 15	23720-VCM	1	* VALVE CONTROL MODULE
16	22481	1	SOCKET CASE W/ HOOD; 16-PIN
17	22482	1	SOCKET; 16-PIN FEMALE INSERT
18	22715-2	1	SIDE COVER; WITH SOCKET HOLE
19	22739	1	RELAY; HIGH CAPACITY
20	22000	1	BRACKET; HORN

ITEM NO.	PART NO.	QTY	* DESCRIPTION
21	22721	1	PIN; MAIN BOOM PIVOT
22	21948	1	HORN
23	15683-20A	1	CIRCUIT BREAKER; 20 AMP
24	19187-10	1	TERMINAL STRIP; 10 SECTIONS
25	19187-12	1	TERMINAL STRIP; 12 SECTIONS
* 26	23720-INC	2	* UNIVERSAL INCLINOMETER
27	19917	1	BRACKET; BOOM SHUT-OFF SWITCH
28	19918	1	SWITCH; BOOM TOP POSITION
29	OR-152-5	1	O-RING; ROTATION MOTOR
30	22256	1	PIN; ELEVATION CYLINDER, INBOARD
31	14775	2	GROMMET; 1/2 x 3/16 x 3/16" THCK
32	20497	1	BRACKET; SWITCH
33	19177	1	ROTATION MOTOR
* 34	23720-PTD	2	* PRESSURE TRANSDUCER
35	28269	1	TOP COVER PLATE, WELDED ASS'Y
36	-	-	-
37	-	-	-
38	-	-	-
39	-	-	-
40	-	-	-

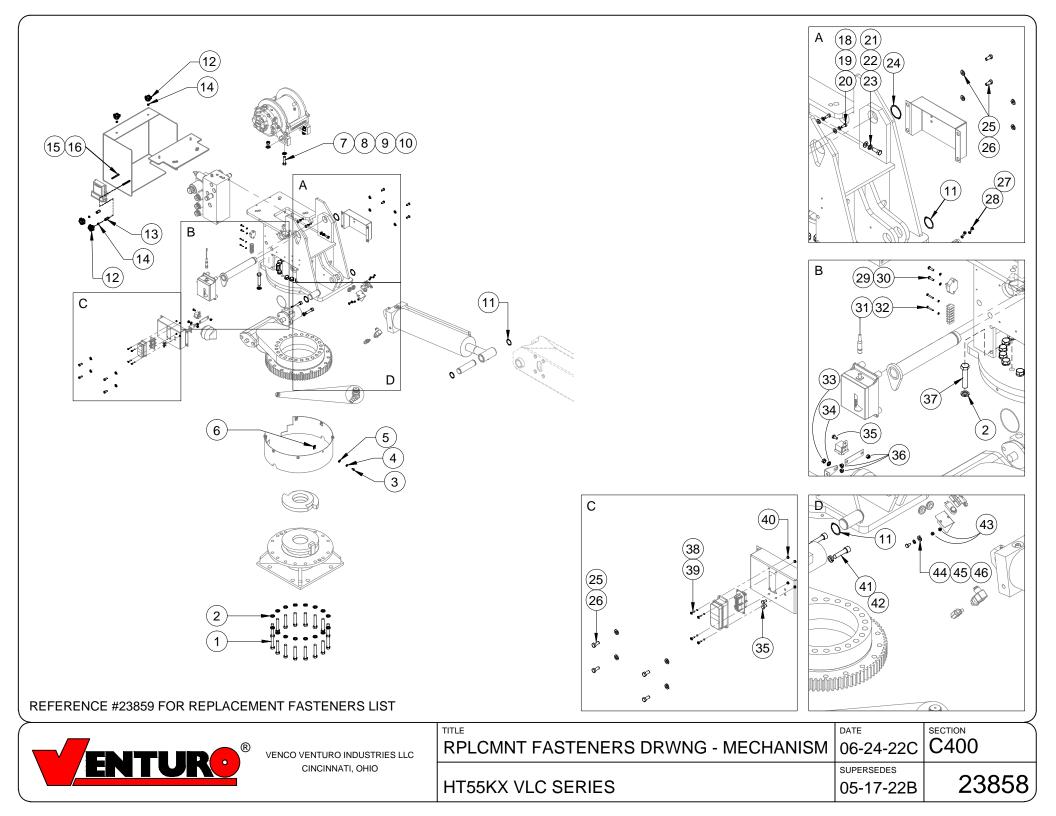
^{*} THESE ITEMS ARE INCLUDED IN 23720 KIT. PLEASE CALL TECHNICAL SUPPORT AT 1-800-226-2238 FOR ASSISTANCE.

CINCINNATI, OHIO

REFERENCE #23856 FOR REPLACEMENT PARTS DRAWING



REPLACEMENT PARTS LIST - MECHANISM	05-17-22A	C400
HT55KX VLC SERIES	03-19-19	23857



ITEM#	PART#	QTY	DESCRIPTION	WHERE-USED
1	!HHCS06311200	16	HHCS; 5/8-11 x 2" LG, GR. 5, ZINC	PEDESTAL - SLEW DRV
2	!LWSH-063	40	LOCK WASHER; 5/8", GR. 5, ZINC	ITEMS #1 & 37
3	!HHCS02520050S	7	HHCS; 1/4-20 x 1/2" LG, S/S	ROTATION GEAR COVER
4	!FWSH-025S	7	FLAT WASHER; 1/4", S/S	ROTATION GEAR COVER
5	!LWSH-025S	7	LOCK WASHER; 1/4", S/S	ROTATION GEAR COVER
6	!UNUT-02520-LKG	7	U-NUT; 1/4-20, LOCKING	ROTATION GEAR COVER
7	!HHCS06311250-8	4	HHCS; 5/8-11 X 2-1/2", GR. 8	WINCH
8	!FWSH-063-8	8	FLAT WASHER; 5/8", R. 8	WINCH
9	!LWSH-063-8	4	LOCK WASHER; 5/8", GR. 8	WINCH
10	!HNUT-06311-8	4	HEX NUT; 5/8-11, GR. 8	WINCH
11	!SRNG-150	4	SNAP RING; 1-1/2"	ELEV. CYL. PIVOT PINS
12	28327	4	KNOB, HAND, 5-POINT	VCM & REAR COVER
13	28328	2	NYLON SPACER, .25" ID X .5" OD X 1"	VCM TO REAR COVER
14	!LNUT-02520-H	4	LOCK NUT; 1/4-20 HVY PATT, NYLON	VCM & REAR COVER
15	!HHCS02520250SF	2	HHCS, 1/4-20 X 2.50", S/S, FULL THRD	VCM TO REAR COVER
16	!JNUT-02520NS	2	JAM NUT, NYLON INSERT, 1/4-20, S/S	VCM TO REAR COVER
17	-	-	-	-
18	!HHCSM6M1M16S	4	HHCS; 6mm-1mm X 16mm, S/S	E-SCANNER - HSNG
19	!LWSH-025S	4	LOCK WASHER; 1/4", S/S	E-SCANNER - HSNG
20	!FWSH-025S	4	FLAT WASHER; 1/4", S/S	E-SCANNER - HSNG
21	!HHCS03816100	2	HHCS; 3/8-16 X 1", GR. 5, ZINC	VALVE MANIFOLD
22	!LWSH-038	2	LOCK WASHER; 3/8", GR. 5, ZINC	VALVE MANIFOLD
23	!FWSH-038	2	FLAT WASHER; 3/8", GR. 5, ZINC	VALVE MANIFOLD
24	!SRNG-175	1	SNAP RING; 1-3/4"	MAIN BOOM PIVOT PIN
25	!HHCS03816100	8	HHCS; 3/8-16 X 1", GR. 5, ZINC	SIDE COVERS

ITEM#	PART #	QTY	DESCRIPTION	WHERE-USED
26	!LWSH-038	8	LOCK WASHER; 3/8", GR. 5, ZINC	SIDE COVERS
27	!PHPMS#1024050S	2	PHILIPS-HD PMS; #10-24 X 1/2", S/S	SWITCH & SWITCH BRKT
28	!LWSH-#10S	2	LOCK WASHER; #10, S/S	SWITCH & SWITCH BRKT
29	!PHPMS#1024100S	2	PHILIPS-HD PMS; #10-24 X 1", S/S	CIRCUIT BRKR - HSNG
30	!LWSH-#10S	2	LOCK WASHER; #10, S/S	CIRCUIT BRKR - HSNG
31	!PHPMS#0632100S	4	PHILIPS-HD PMS; #6-32 X 1", S/S	TRMNL STRIPS - HSNG
32	!LWSH-#06S	4	LOCK WASHER; #06, S/S	TRMNL STRIPS - HSNG
33	!HNUT-03120	1	HEX NUT; 5/16-20, GR. 5, ZINC	HORN - HORN BRKT
34	!LWSH-031-STAR	1	LOCK WASHER; 5/16", STAR	HORN - HORN BRKT
35	!HHCS02520050S	3	HHCS; 1/4-20 X 1/2", S/S	RELAY, SIDE CVR, BRKT
36	!LNUT-02520NS	3	LOCK NUT; 1/4-20, NYLON, S/S	RELAY, SIDE CVR, BRKT
37	!HHCS06311450	24	HHCS; 5/8-11 X 4-1/2", GR. 5, ZINC	SLEWING RING - HDNG
38	!SHPMS#0832050S	4	SLOT-HD PMS; #8-32 X 1/2", S/S	SCKT / CASE - SIDE CVR
39	!LWSH-#08S	4	LOCK WASHER; #08, S/S	SCKT / CASE - SIDE CVR
40	!HNUT-#0832S	4	HEX NUT; #08-32, S/S	SCKT / CASE - SIDE CVR
41	!SHCS05013200	2	SHCS; 1/2-13 X 2"	ROTATION MOTOR
42	!LWSH-050-HC	2	LOCK WASHER; 1/2", HI-COLLAR	ROTATION MOTOR
43	!HNUT-#1024S	2	HEX NUT; #10-24, S/S	SWITCH & SWITCH BRKT
44	!HHCS02520050S	1	HHCS; 1/4-20 X 1/2", S/S	SWITCH BRKT - HSNG
45	!FWSH-025S	1	FLAT WASHER; 1/4", S/S	SWITCH BRKT - HSNG
46	!LWSH-025S	1	LOCK WASHER; 1/4", S/S	SWITCH BRKT - HSNG
47	-	-	-	-
48	-	-	-	-
49	-	-	-	-
50	-	-	-	-

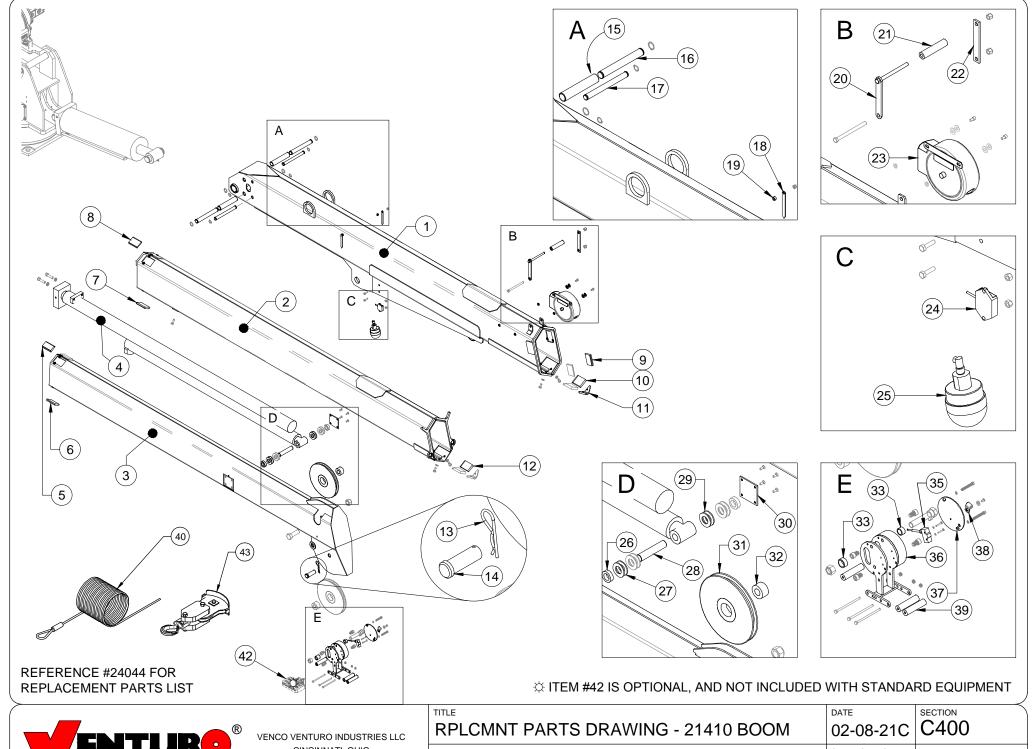
REFERENCE #23858 FOR REPLACEMENT FASTENERS DRAWING

CINCINNATI, OHIO

SHCS = SOCKET HEAD CAP SCREW HHCS = HEX HEAD CAP SCREW PMS = PAN MACHINE SCREW S/S = STAINLESS STEEL



SECTION 06-24-22B C400 **RPLCMNT FASTENERS LIST - MECHANISM** SUPERSEDES 23859 HT55KX VLC SERIES 05-17-22A



CINCINNATI, OHIO

SUPERSEDES

24043

HT45KX-20' VLC SERIES

01-04-21B

REPLACEMENT PARTS LIST - HT45KX & HT60KX - 20' VLC SERIES; 21410 BOOM

ITEM	PART NO.	QTY	DESCRIPTION
1	27207	1	WELDED ASS'Y; PRIMARY BOOM
2	27209	1	WELDED ASS'Y; SECONDARY BOOM
3	21416	1	WELDED ASS'Y; TERTIARY BOOM
4	21744	1	EXTENSION CYLINDER
5	23217-1	2	BOOM PAD; UHMW, 'A', 3.19 x 1.88 x 0.44
6	23217-1	2	BOOM PAD; UHMW, 'A', 3.19 x 1.88 x 0.44
7	23217-2	2	BOOM PAD; UHMW, 'A', 3.19 x 2.13 x 0.44
8	23217-2	2	BOOM PAD; UHMW, 'A', 3.19 x 2.13 x 0.44
9	23217-13	2	BOOM PAD; UHMW, 'A', 3.19 x 2.13 x 0.38
10	▲ 23217-17	2	BOOM PAD; UHMW, 'B', 3.19 x 2.50 x 0.50
11	23183	2	V-BLOCK, SLIDER
12	▲ 23217-14	2	BOOM PAD; UHMW, 'B', 3.19 x 2.13 x 0.50
13	21-08	1	PIN; HAIRPIN COTTER
14	27272	1	CLEVIS PIN
15	24535	2	THRUST ROLLER; EXTENSION CYLINDER
16	22255	2	THRUST PIN; REAR, EXTENSION CYLINDER
17	22255	2	THRUST PIN; FRONT, EXTENSION CYLINDER
18	13459-2	2	ARROW
19	22490	2	SPACER; BOOM ARROW
20	21935	1	WELDED ASS'Y; WIRE ROPE GUIDE
21	21560	1	ROLLER; UHMW, WIRE ROPE GUIDE
-	-	-	-

ITEM	PART NO.	QTY	DESCRIPTION
22	21936	1	FLAT, MOUNT; WIRE ROPE GUIDE
23	28190	1	COMPLETE CORD REEL
* 24	23720-INC	1	UNIVERSAL INCLINOMTER
25	23438	1	WARNING LIGHT; TRI-COLOR, LED
26	21428	2	BUSHING; EXTENSION CYLINDER
27	12534-8	2	BUSHING; MACHINE, 1" ID, 1-1/2" OD, 14G, ZINC
28	21405	1	PIN; CYLINDER
29	12534-2	2	BUSHING; MACHINE, 1" ID, 1-1/2" OD, 10G, ZINC
30	23116	2	PIN BLOCK REINFORCING
31	23928	2	CABLE SHEAVE
32	23929	2	SPACER; SHEAVE
33	27466	2	SPACER/PIVOT; COMPACT A2B
34	-	ı	-
35	19376	1	LIMIT SWITCH; MODIFIED
36	27468	1	WLDMNT; COMPACT A2B FRAME, LEFT-HAND
37	27473	1	PLATE; COMPACT A2B COVER
38	19269	1	CLAMP; 1/4" CABLE
39	27475	3	ROLLER; COMPACT A2B, WIRE ROPE GUIDE
40	17094-3/8-100	1	WIRE ROPE; 100 FT, NO HOOK
41	-	1	-
‡42	27483	1	ASS'Y; WORK LIGHT, LED
43	17949-4	1	LOAD BLOCK ASSEMBLY

^{*} THESE ITEMS ARE INCLUDED IN 23720 KIT. PLEASE CALL TECHNICAL SUPPORT AT 1-800-226-2238 FOR ASSISTANCE.

REFERENCE #24043 FOR REPLACEMENT PARTS DRAWING

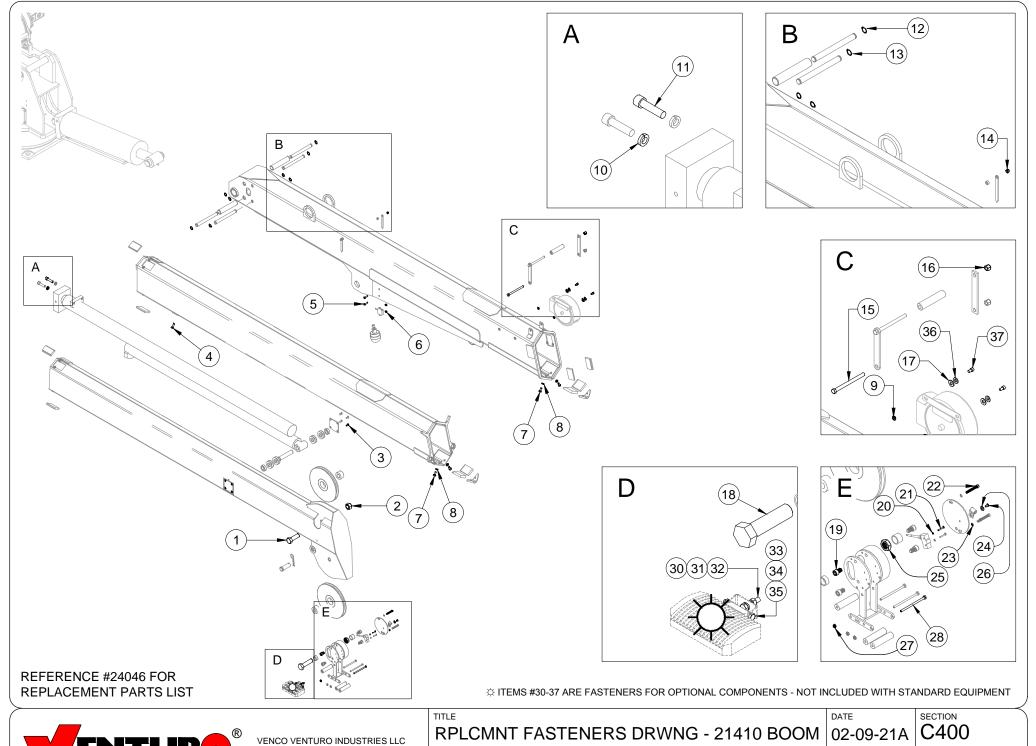
☼ OPTIONAL; NOT INCLUDED WITH STANDARD EQUIPMENT

SECTION

24044



06-07-23E C400 **REPLACEMENT PARTS LIST - 21410 BOOM** SUPERSEDES HT45KX & HT60KX - 20' VLC SERIES 11-10-22D





CINCINNATI, OHIO

RPLCMNT FASTENERS DRWNG - 21410 BOOM

HT45KX-20' VLC SERIES

SUPERSEDES 05-16-19

24045

ITEM#	PART#	QTY	DESCRIPTION	WHERE-USED
1	17059-6	1	SHEAVE AXLE; HHCS 3/4-10 X 2" LG.	TOP SHEAVE
2	!JNUT-07510N	1	JAM NUT; 3/4-10, GR. 5	TOP SHEAVE
3	!CACS02520050S	8	CACS; 1/4-20 X 1/2", S/S	PIN BLCK REINFORCING
4	!HHCS02520125S	2	HHCS; 1/4-20 X 1-1/4", S/S	EXTENSION CYLINDER
5	!HHCS02520100S	2	HHCS; 1/4-20 X 1", S/S	INCLINOMETER
6	!LNUT-02520NS	2	LOCK NUT; 1/4-20, NYLON, S/S	INCLINOMETER
7	!HHCS03816075S	4	HHCS; 3/8-16 X 3/4", S/S	V-BLOCKS
8	!LWSH-038	4	LOCK WASHER; 3/8", GR. 5, ZINC-PL	V-BLOCKS
9	28198	2	INSULATING SLEEVE WASHER - 5/16"	CORD REEL ASS'Y
10	!LWSH-050-HC	2	LOCK WASHER; 1/2", HI-COLLAR	EXTENSION CYLINDER
11	!SHCS05013200	2	SHCS; 1/2-13 X 2"	EXTENSION CYLINDER
12	!SRNG-075	4	SNAP RING; 3/4"	EXT. CYL. REAR PINS
13	!SRNG-075	4	SNAP RING; 3/4"	EXT. CYL. FRONT PINS
14	!ANUT-02520S	2	ACORN NUT; 1/4-20, S/S	BOOM ARROWS
15	!HHCS04414550	1	HHCS; 7/16-14 X 5-1/2", GR. 5, ZINC	WIRE ROPE GUIDE
16	!LNUT-04414	2	LOCK NUT; 7/16-14, GR. 5, ZINC	WIRE ROPE GUIDE
17	01016	2	FIBER WASHER	CORD REEL ASS'Y
18	28362	1	ASSY, CAM & HHCS CA2B CUT-OUT	COMPACT A2B ASS'Y
19	27467	4	SHCS; 1/2-13 X 3/4", BLACK NYLON	COMPACT A2B ASS'Y
20	!LWSH-#06	2	LOCK WASHER; #06, ZINC	COMPACT A2B SWITCH

ITEM#	PART #	QTY	DESCRIPTION	WHERE-USED
21	!PHCS#0632100	2	PHCS; #06-32 X 1", GR. 5, ZINC	COMAPCT A2B SWITCH
22	!SHCS02520200SS	2	SHCS; 1/4-20 X 2", S/S	COMPACT A2B COVER
23	23379	2	WASHER; 3/8" ID, 1/4" OD, NYLON	COMPACT A2B COVER
24	!SHPMS#1032038S	1	SLOT-HD PMS; #10-32 X 3/8", S/S	COMPACT A2B CLAMP
25	LNUT-07510	1	NYLOC LOCKNUT, FULL, 3/4-10,GR.5	COMPACT A2B ASS'Y
26	!FWSH-025S	1	FLAT WASHER; 1/4", S/S	COMPACT A2B CLAMP
27	!JNUT-02520NS	3	JAM NUT; 1/4-20, NYLON, S/S	COMPACT A2B ROLLERS
28	!HHCS02520450	3	HHCS; 1/4-20 X 4-1/2"	COMPACT A2B ROLLERS
29	-	-	-	-
☆ 30	!HHCS03118125S	1	HHCS; 5/16-18 X 1-1/4", S/S	WORK LIGHT
☆ 31	!HNUT-03118S	2	HEX NUT; 5/16-18, S/S	WORK LIGHT
☼ 32	!FWSH-031S	1	FLAT WASHER; 5/16", S/S	WORK LIGHT
⇔ 33	!HHCS02520250S	1	HHCS; 1/4-20 X 2-1/2", S/S	WORK LIGHT
☆ 34	!LWSH-025S	1	LOCK WASHER; 1/4", S/S	WORK LIGHT
☆ 35	!HNUT-02520S	1	HEX NUT; 1/4-20, S/S	WORK LIGHT
36	!FWSH-031	2	FLAT WASHER; 5/16"	CORD REEL ASS'Y
37	!SHCS03118063S	2	SHCS; 5/16-18 X 5/8" LG, S/S	CORD REEL ASS'Y
38	-	-	-	-
39	-	-	-	-
40	-	-	-	-

[☼] ITEMS #30-35 ARE FOR OPTIONAL COMPONENTS - NOT INCLUDED WITH STANDARD EQUIPMENT

SH = SOCKET HEAD HH = HEX HEAD THCS = TRUSS HEAD PHILLIPS SCREW CACS = COUNTERSUNK ALLEN HEAD CAP SCREW PMS = PAN MACHINE SCREW S/S = STAINLESS STEEL

REFERENCE #24045 FOR REPLACEMENT FASTENERS DRAWING

CINCINNATI, OHIO

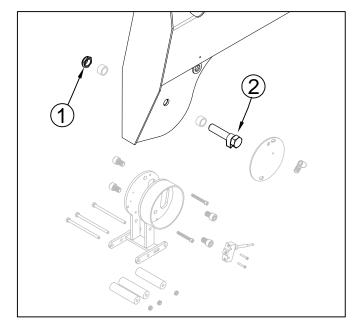


PLCMNT FASTENERS LIST - 21410 BOOM	02-09-21A	C400
HT45KX-20' VLC SERIES	SUPERSEDES 05-16-19	24046

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.
- 2. 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.



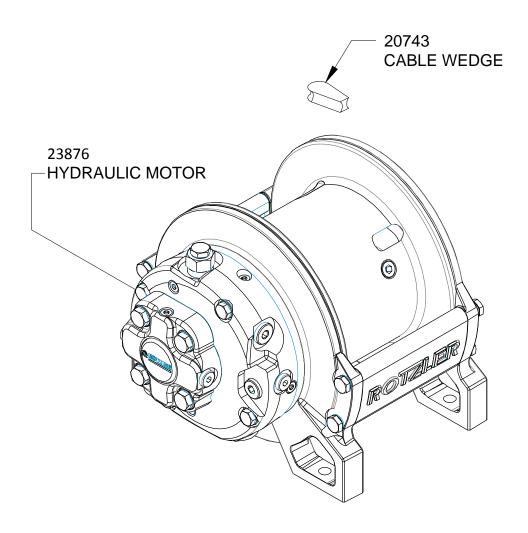


Contact Venturo Tech Support for assistance. 1-800-226-2238 ext. 124



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

22830 WINCH REPLACEMENT PARTS DRAWING

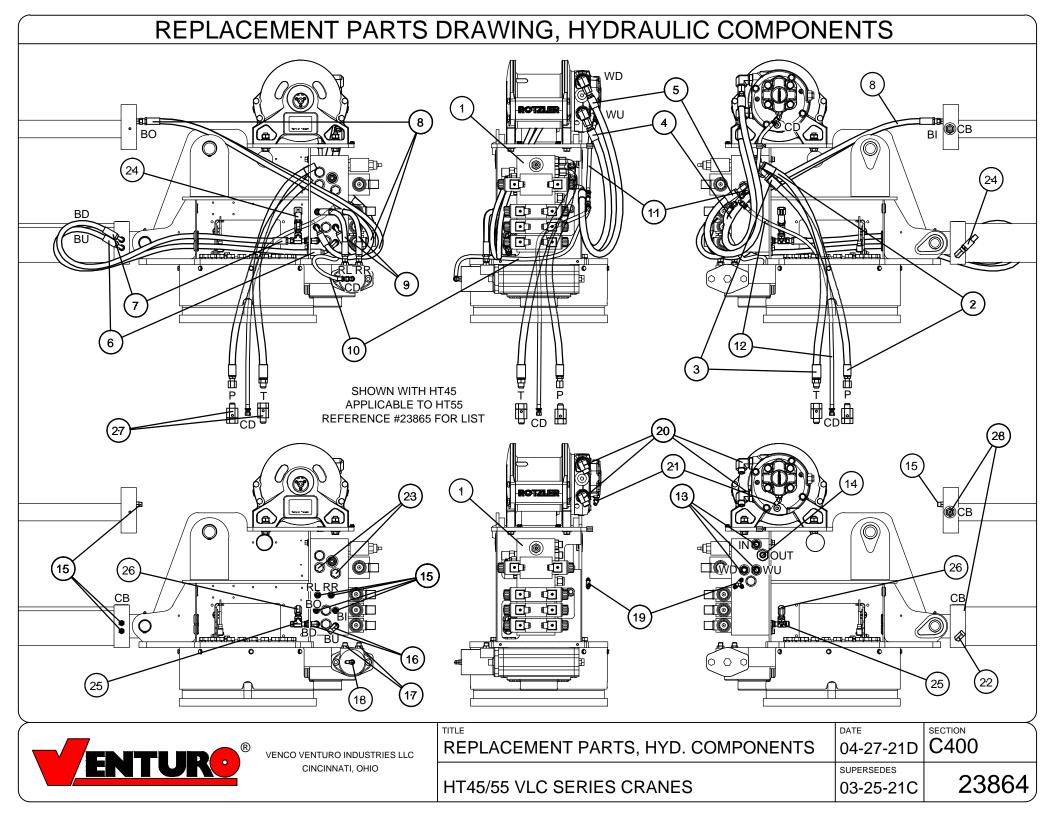


WINCH SEALS PACKAGE: 23848

VENCO VENTURO INDUSTRIES LLC
CINCINNATI. OHIO



22830 REPLACEMENT PARTS DRAWING	04-05-21C	C400
HT55KX-VLC	supersedes 02-21-14B	22876



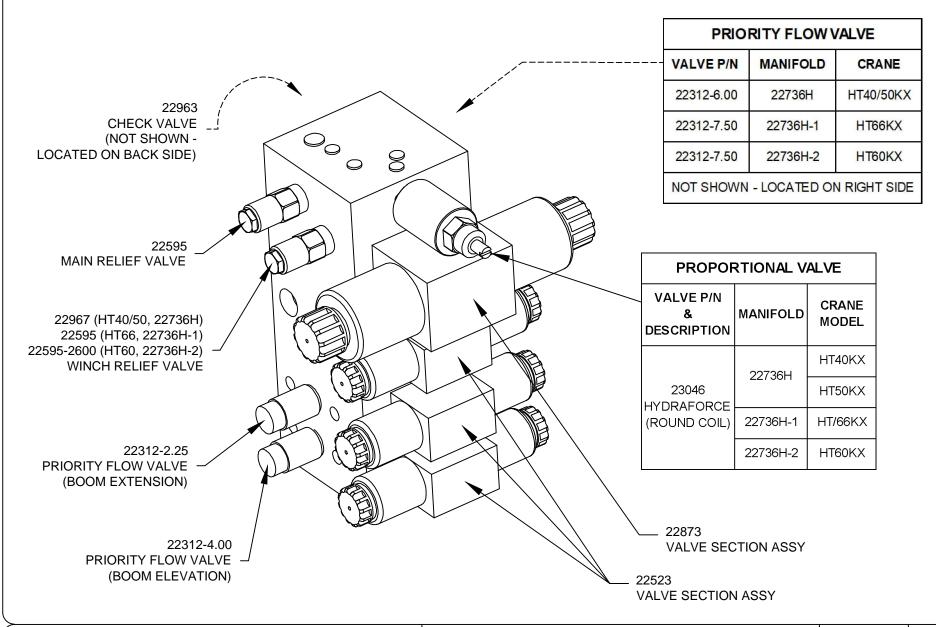
REPLACEMENT PARTS LIST; HYDRAULIC COMPONENTS

#	DESCRIPTION	QTY	PART NUMBER	APPLICATION		
1	VALVE MANIFOLD; PROPORTIONAL, HT40-55KX	1	22736H	REAR OF MECHANISM, INSIDE REAR COVER		
2	HOSE ASSEMBLY; PRESSURE SUPPLY	1	23798	RIGHT SIDE VALVE BANK TO COMPARTMENT SIDE		
3	HOSE ASSEMBLY; RETURN SUPPLY	1	23799	RIGHT SIDE VALVE BANK TO COMPARTMENT SIDE		
4	HOSE ASSEMBLY; WINCH UP	1	27024	RIGHT SIDE VALVE BANK TO WINCH UP PORT		
5	HOSE ASSEMBLY; WINCH DOWN	1	27025	RIGHT SIDE VALVE BANK TO WINCH DOWN PORT		
6	HOSE ASSEMBLY; BOOM UP	1	27026	LEFT SIDE VALVE BANK TO BOOM UP PORT		
7	HOSE ASSEMBLY; BOOM DOWN	1	27027	LEFT SIDE VALVE BANK TO BOOM DOWN PORT		
8	HOSE ASSEMBLY; BOOM IN & OUT	2	27592	EXTENSION PORTS TO LEFT SIDE VALVE BANK		
9	HOSE ASSEMBLY; ROTATION LEFT & RIGHT	2	27598	LEFT SIDE VALVE BANK TO ROTATION PORTS		
10	HOSE ASSEMBLY; WINCH CASE DRAIN	1	22952	ROTATION CASE DRAIN TO T-FITTING JUNCTION		
11	HOSE ASSEMBLY; ROTATION CASE DRAIN	1	22953	WINCH CASE DRAIN TO T-FITTING JUNCTION		
12	HOSE ASSEMBLY; CASE DRAIN OUT	1	22903	T-FITTING JUNCTION TO COMPARTMENT SIDE		
13	FITTING; ADAPTER, STRAIGHT, 80FS-10MO	3	FF6400-0810	RIGHT SIDE VALVE BANK; IN, WU & WD PORTS		
14	FITTING; ADAPTER, STRAIGHT, 80FS-12MO	1	FF6400-0812	RIGHT SIDE VALVE BANK, OUT PORT		
15	FITTING; ADAPTER, STRAIGHT, 60FS-6MO	8	FF6400-0606	ELEVATION, EXTENSION, RL, RR, BI & BO PORTS		
16	FITTING; ADAPTER, 90° ELBOW, 60FS-6MO	2	FF6801-0606	LEFT SIDE VALVE BANK, BU & BD PORTS		
17	FITTING; ADAPTER, STRAIGHT, 60FS-10MO	2	FF6400-0610	ROTATION RIGHT & LEFT PORTS		
18	FITTING; ADAPTER, 90° ELBOW, 4MJ-4MO	1	H6801-0404	ROTATION CASE DRAIN PORT		
19	FITTING; ADAPTER, T-SHAPE, 4MJ-4MJ-4MJ	1	H2603-040404	T-FITTING JUNCTION FOR CASE DRAIN HOSES		
20	FITTING; ADAPTER, 90° ELBOW, 80FS-12MO BRITISH	2	FF3801-8-12	WINCH UP & DOWN PORTS, ROTZLER TI SERIES		
21	FITTING; ADAPTER, 45° ELBOW, 4MJ-4MO BRITISH	1	3802-0404	WINCH CASE DRAIN PORT, ROTZLER TI SERIES		
22	FITTING; ADAPTER, 90° ELBOW, 4MO-4FO	1	23733	ELEVATION BASE-END, PRESSURE TRANSDUCER		
23	FITTING; PLUG, 10MO	2	H6408-10	LEFT SIDE VALVE BANK, WU & WD PORTS		
24	PRESSURE TRANSDUCER; VLC SYSTEM	2	23720-PTD	BASE-END ON EL. CYLINDER, ROD-END INSIDE MECH		
25	FITTING; ADAPTER, T-SHAPE, 6MOFS-6FOFS-6MOFS	1	23731	ROD-END OF EL. CYLINDER, INSIDE MECHANISM		
26	FITTING; ADAPTER, STRAIGHT, 60FS-4MO	1	23732	T-FITTING FOR ROD-END OF EL. CYLINDER		
27	LIVE SWIVEL; CONTINUOUS, STRAIGHT, 6MJ-6FJ	2	22764	PRESSURE & RETURN HOSES, COMPARTMENT SIDE		
28	COUNTER-BALANCE VALVE; CBPA, 50/40, 3000 PSI SYS.	2	20893	ELEVATION & EXTENSION CYLINDER VALVE		
	нус	RAUL	IC FUNCTION KEY			
Р	PRESSURE SUPPLY	RL	ROTATION LEFT			
Т	TANK RETURN	RR	ROTATION RIGHT			
CD	CASE DRAIN	во	воом оит			
IN	PRESSURE IN	ВІ	BOOM IN			
OUT	RETURN OUT	BU	BOOM UP			
WU	WINCH UP	BD	BOOM DOWN			
WD	WINCH DOWN	СВ	B COUNTER-BALANCE VALVE			

REFERENCE #23864 FOR REPLACEMENT PARTS DRAWING



22736 SERIES VALVE MANIFOLD REPLACEMENT PARTS

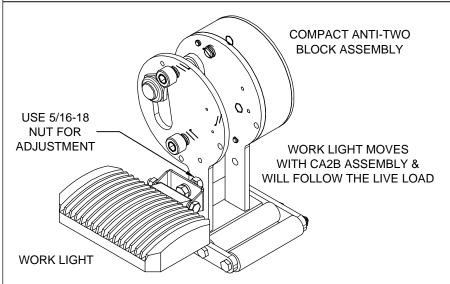




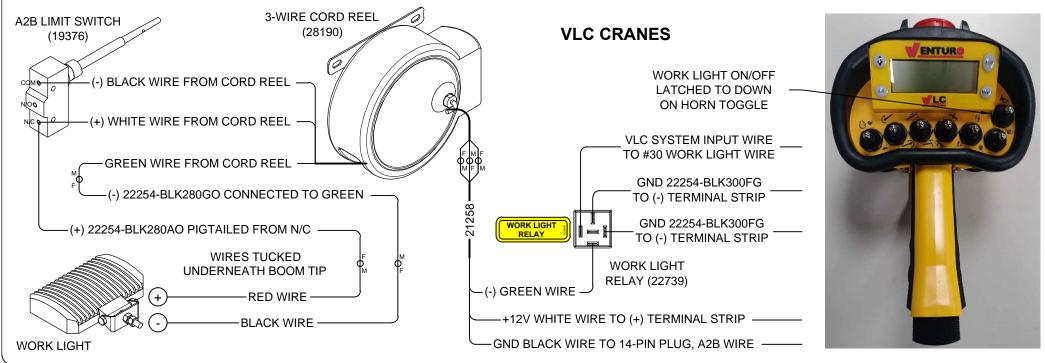
VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

22736 REPLACEMENT PARTS	11-10-22G	C400
HT40/50/60/66KX PROPORTIONAL	SUPERSEDES 11-13-17F	22940

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



	BILL OF MATERIALS	N/D	28240
#	DESCRIPTION	QTY	PART NUMBER
1	IDWG; WORK LIGHT INSTALLATION, VLC CRANES	1	28188
2	LED WORK LIGHT	1	27483
3	TERMINAL; 16G, FEMALE, QUICK-CONNECT	5	!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	RELAY; 12VDC	1	22739
8	DECAL; WORK LIGHT RELAY	1	16184-2
9	WIRE ASS'Y; 16G, BLACK, 30", MALE PIN - QCF	2	22254-BLK300FG





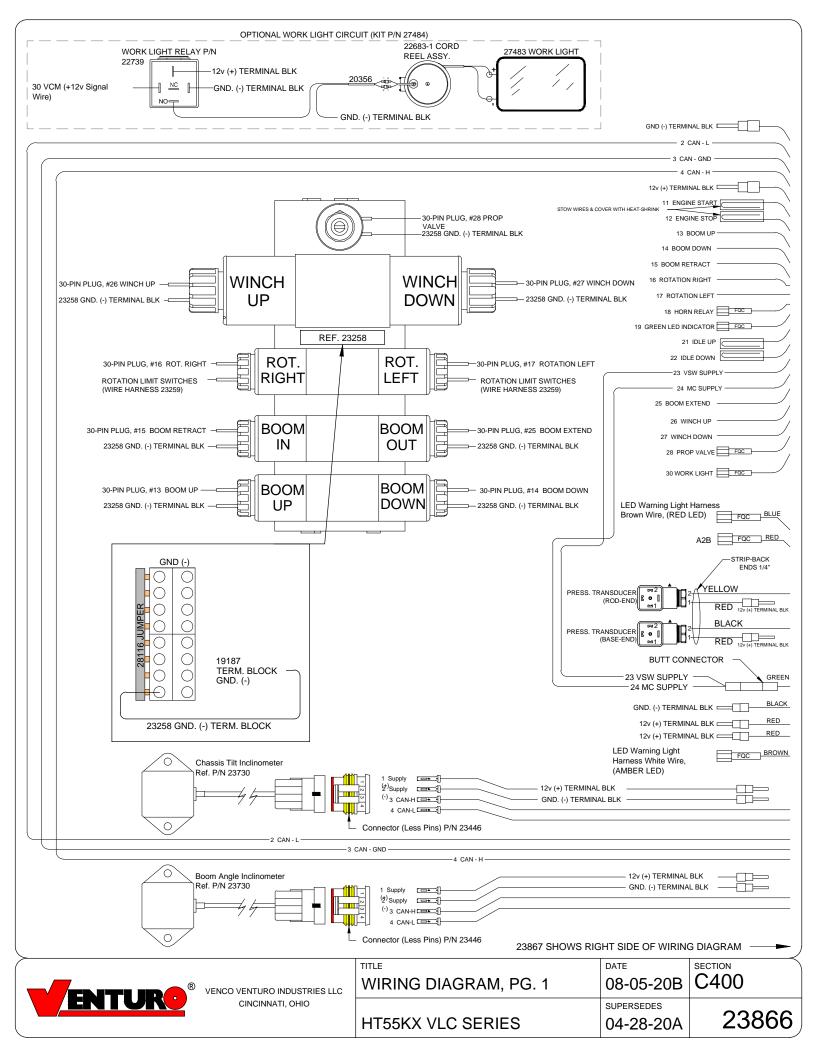
VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

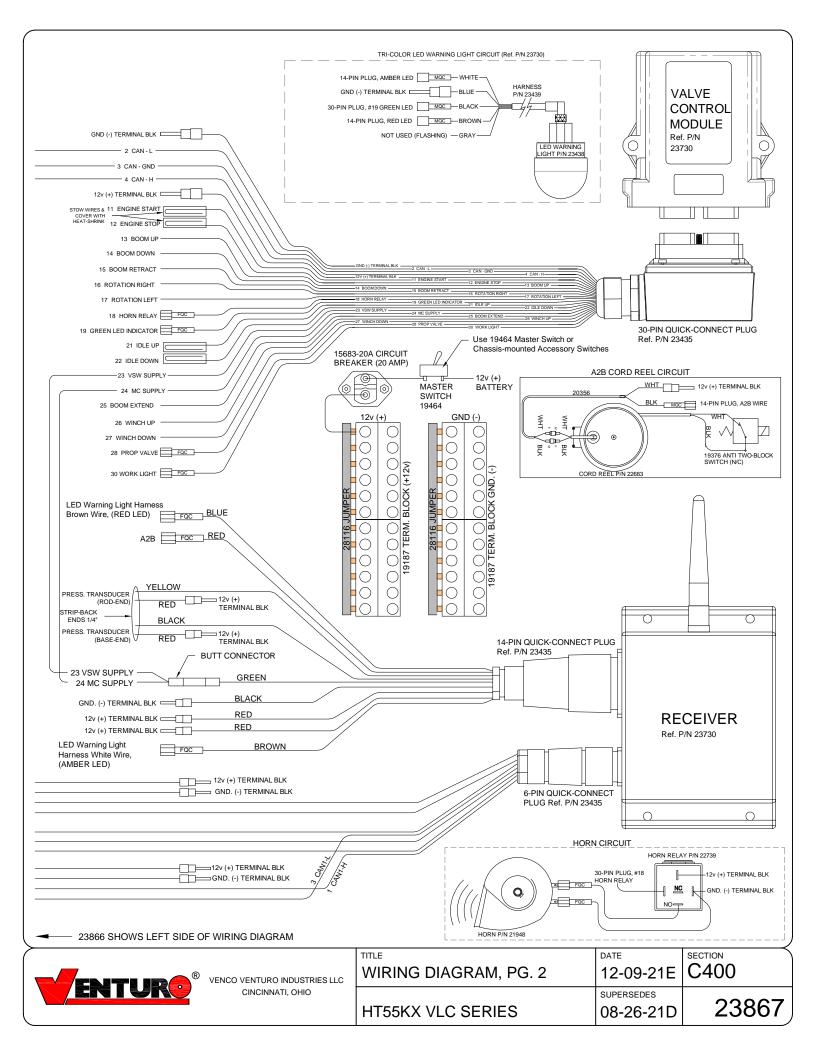
WORK LIGHT INSTALLATION, 3-WIRE CORD REEL	03-0
VLC CRANES	SUPERSI

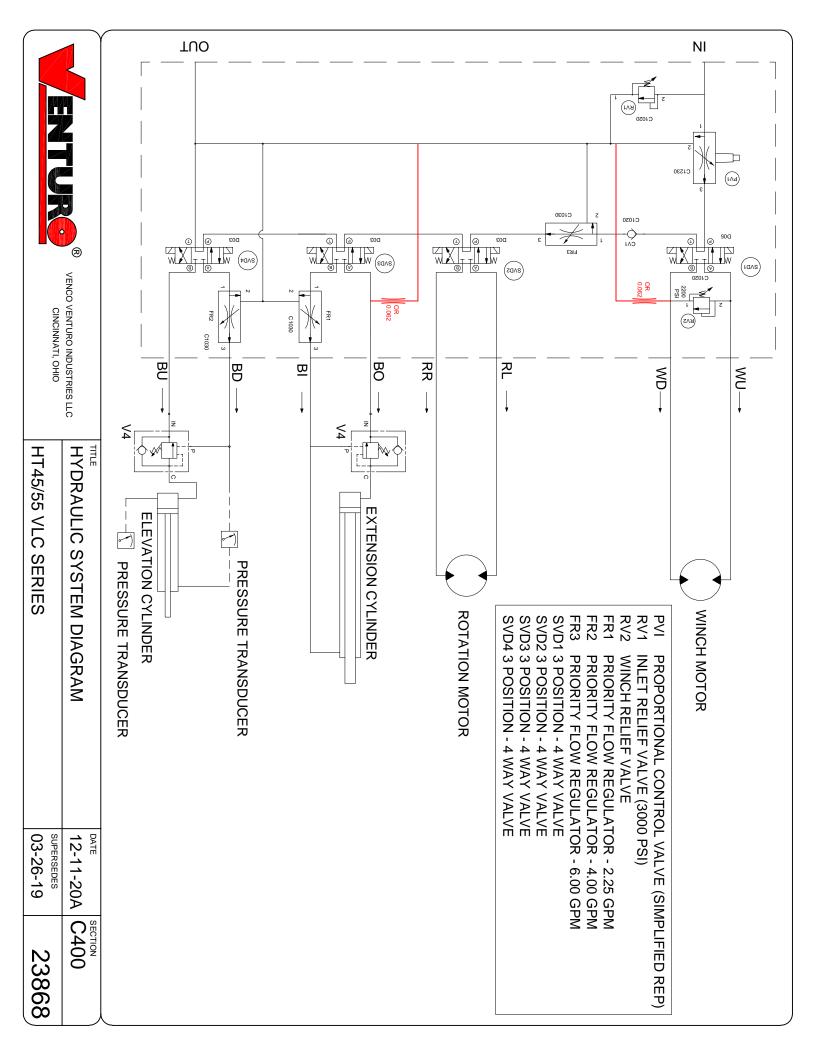
33-03-23A C400

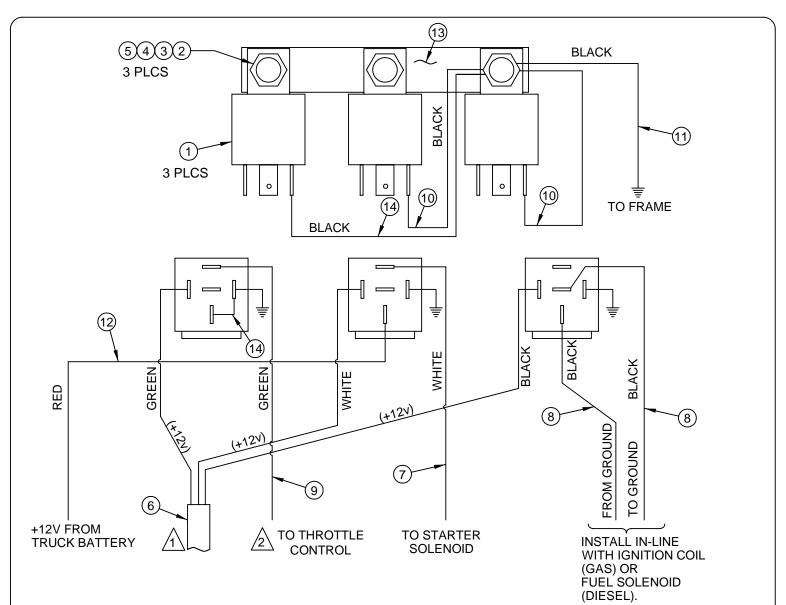
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28188





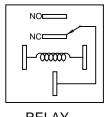




USER-CONTROLLED +12V INPUT SIGNALS FROM HETRONIC VLC SYSTEM OR ANALOG PENDANT OR RADIO SYSTEM

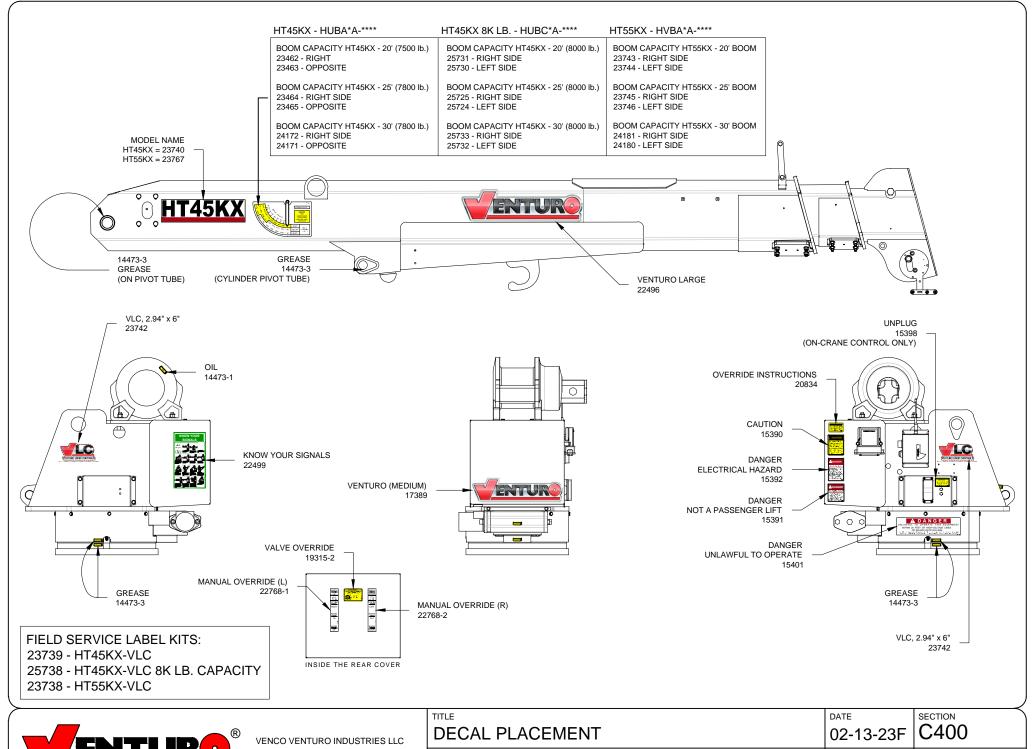
THROTTLE CONTROL IS DESIGNED TO PROVIDE A GROUND SIGNAL WHEN RELAY IS ACTIVATED

ITEM	QTY	PART#	DESCRIPTION
1	3	22739	RELAY
2	3	!PHCS#1024075	#10-24 X 3/4 PHIL PAN HD BOLT
3	3	!LWSH-#10	#10 LOCKWASHER
4	3	!FWSH-025	#10 WASHER
5	3	!HNUT-#1024	#10 NUT
6	1	22607	WIRE HARNESS - 12/3 SJO
7	1	22609	WHITE - 16 GAGE ELECTRICAL WIRE - 15 FEET LONG
8	2	22610	BLACK - 16 GAGE ELECTRICAL WIRE - 15 FEET LONG
9	1	22611	GREEN - 16 GAGE ELECTRICAL WIRE - 15 FEET LONG
10	2	22612	BLACK - 16 GAGE ELECTRICAL WIRE - 6 INCHES LONG
11	1	22613	BLACK - 16 GAGE ELECTRICAL WIRE - 8 FEET LONG
12	1	22614	RED - 14 GAGE ELECTRICAL WIRE - 15 FEET LONG
13	1	01181	BUSS BAR
14	1	22619	BLACK - 16GA WIRE ASSY - 6" LONG W/ 3 INCH PIGTAIL



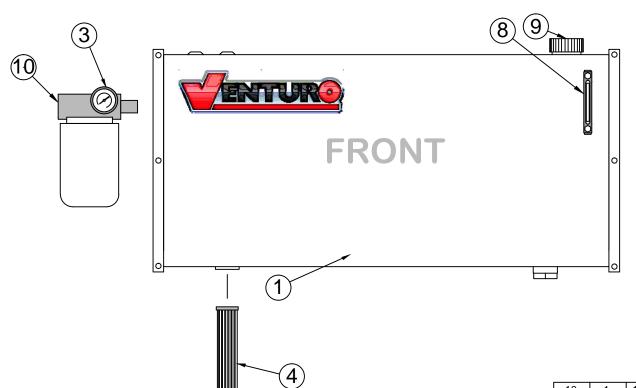
RELAY SCHEMATIC

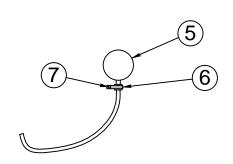
 TITLE ENGINE START / STOP THROTTLE CONTROL	06-09-20F	c400
HT CRANES	02-21-14E	22615



CINCINNATI, OHIO

DECAL PLACEMENT	02-13-23F	C400
	SUPERSEDES	00707
HT45/55KX VLC SERIES	05-02-22E	23765





	10	1	19298	FILTER ASSY, RETURN
	9	1	22789	FILLER / BREATHER CAP ASSEMBLY
	8	1	22787	SIGHT GLASS
	7	1	!HWHS02520075-F	HEX WASHER HEAD 1/4-20 X 3/4 SELF TAPPING
	6	1	19275	CLAMP
	5	1	22730	PRESSURE GAUGE ASSEMBLY
	4	1	22788	SUCTION SCREEN - 100 MESH
	3	1	19297	PRESSURE GAUGE - RETURN
	2	-	-	-
	* 1	1	22785	HYDRAULIC RESERVOIR - 25 GAL (18" x 40" x 8")
١.		'	22998	HYDRAULIC RESERVOIR - 40 GAL (20" x 42" x 11")
	ITEM	QTY	PART NUMBERS	DESCRIPTION



RESERVOIR KIT REPL PARTS

12-09-22D

C400

HT CRANES; 25/40 GAL RESERVOIR

DATE
12-09-22D

C400

SUPERSEDES
08-04-15C

23224

FIELD SERVICE LABEL KITS; HT55 VLC SERIES

	HT55KX						
-20' BOOM	-25' BOOM	-30' BOOM		23738 FIELD SERVICE LABEL KITS			
	QTY		PART#	DESCRIPTION			
2	2	2	22496	DECAL; VENTURO LOGO, LARGE			
1	1	1	17389	DECAL; VENTURO LOGO, MEDIUM			
2	2	2	23767	DECAL; MODEL NAME, HT55KX			
2	2	2	23742	DECAL; VLC MODEL SERIES	(NO	E	
1	-	1	23743	DECAL; BOOM CAPACITY, 10-16-20, RIGHT	GENERATION)	HT55KX GENERATION A: 16A000001 - CURRENT	
1	-	1	23744	DECAL; BOOM CAPACITY, 10-16-20, LEFT	EN EN	CUR	
-	1	-	23745	DECAL; BOOM CAPACITY, 12-18.5-25, RIGHT	Ж.	- 10	
-	1	-	23746	DECAL; BOOM CAPACITY, 12-18.5-25, LEFT	EACH	0000	
-	-	1	24181	DECAL; BOOM CAPACITY, 13-22-30, RIGHT	RANGES (FOR	16A	
-	-	1	24180	DECAL; BOOM CAPACITY, 13-22-30, LEFT	ES (A A	
1	1	1	14473-1	DECAL; OIL	ANG	ATIC	
8	8	8	14473-3	DECAL; GREASE	ERR	NER	
1	1	1	17813	DECAL; OVERLOAD SENSING SYSTEM	SERIAL NUMBER	(GEI	
1	1	1	22499	ECAL; KNOW YOUR SIGNALS		25KX	
1	1	1	20834	DECAL; MANUAL OVERRIDE, INSTRUCTIONS		Ŧ	
1	1	1	19315-2	DECAL; MANUAL OVERRIDE SHUT-OFF, PROPORTIONAL	S		
1	1	1	22768-1	DECAL; MANUAL OVERRIDE, PROPORTIONAL, LEFT			
1	1	1	22768-2	DECAL; MANUAL OVERRIDE, PROPORTIONAL, RIGHT			
1	1	1	16184-1	DECAL; HORN RELAY			
1	1	1	16184-2	DECAL; WORK LIGHT RELAY			
1	1	1	23766	IDWG: FIELD SERVICE LABEL KIT			
1	1	1	23765	IDWG: DECAL PLACEMENT			
1	1	1	INST-23233	SAFETY MANUAL, VENTURO CRANES			
1	1	1	15397	KIT; ACCIDENTAL PREVENTION SIGNS			

ENTURO [®]

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

FIELD SERVICE LABEL KITS	03-13-23E	SECTION C400	
HT55 VLC SERIES	SUPERSEDES 02-13-23D	23869	

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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