

PARTS & INSTALLATION MANUAL

HT25KX-20

Included in this manual:

HT25KX-20 (VLC)

- 5,000 lb Hydraulic Telescopic Service Crane
- Venturo Logic Control System w/ Proportional Control
- 20 ft Fully-Powered, Two-Stage, Boom Extension

HT25-20' VLC

INST-24300 - 6/20/2024 (Rev: C5)

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SECTION 100

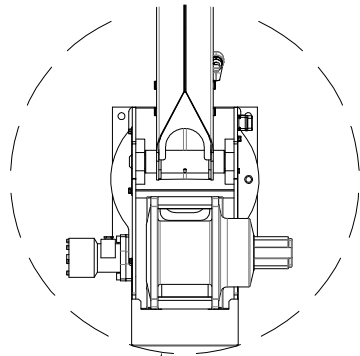
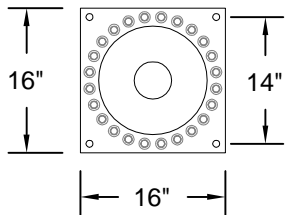
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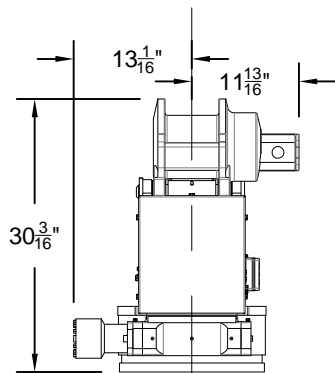
SPECIFICATIONS



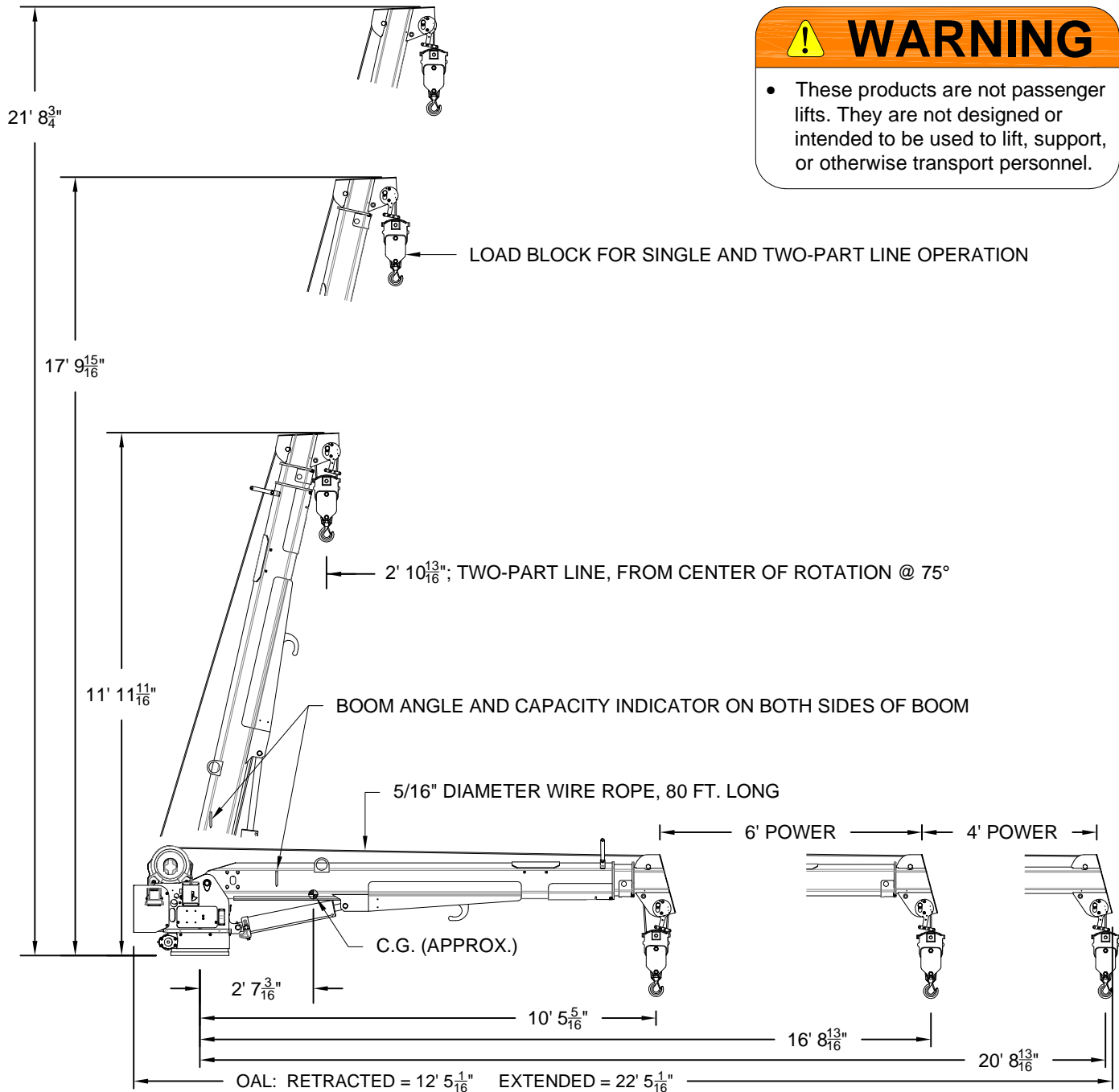
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO



R19¹/₄"
SWING RADIUS



CENTER OF ROTATION
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.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
INSTALLATION DIMENSIONS

HT25/30-20' VLC CRANES

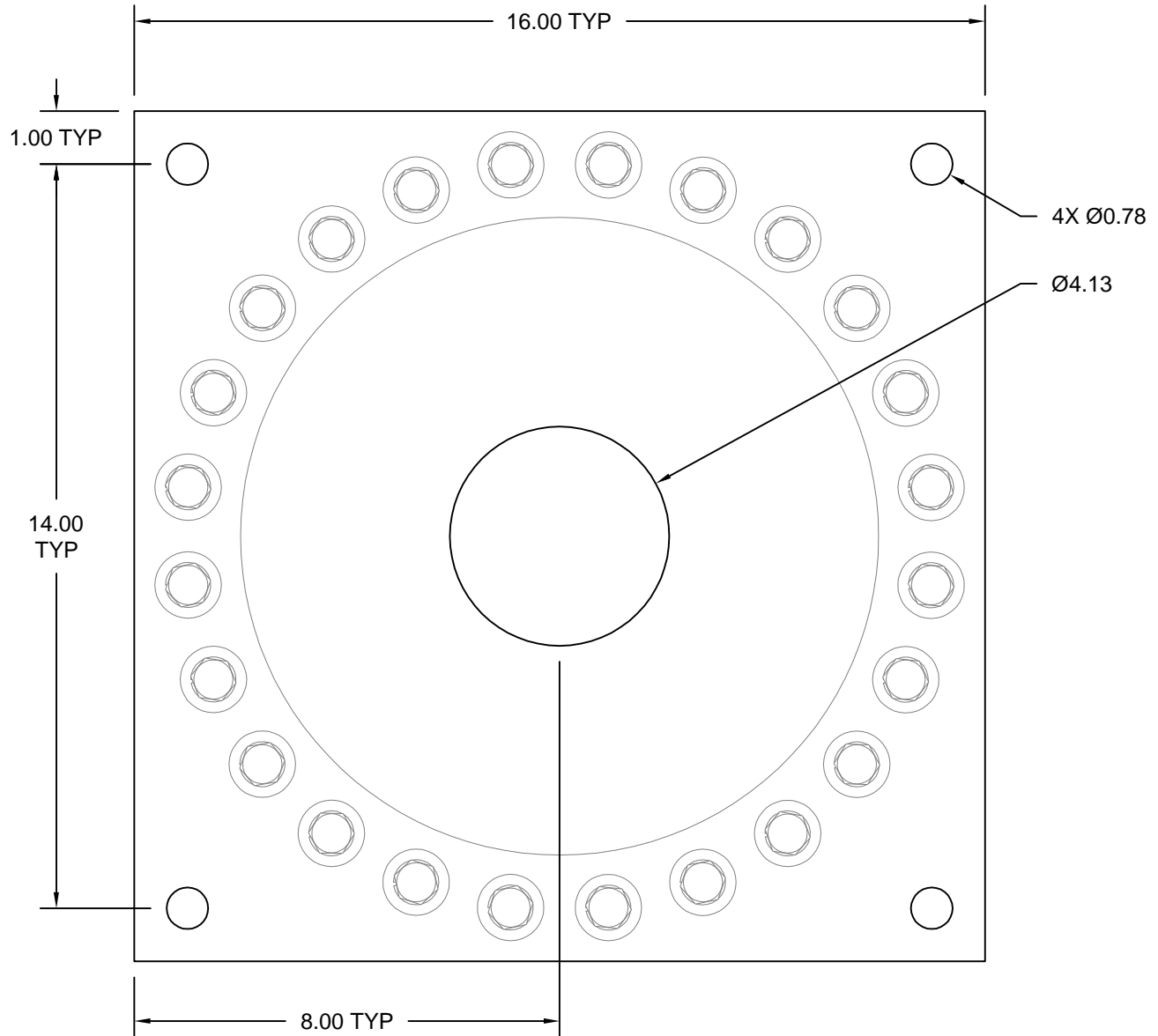
DATE
06-07-19

SUPERSEDES
-

SECTION
C100

24301

BASE MOUNTING DIMENSIONS; ET25-36 & HT25/30 SERIES



REFERENCE DWG #24311 FOR MOUNTING BOLT SIZE AND TORQUE SPECIFICATIONS.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

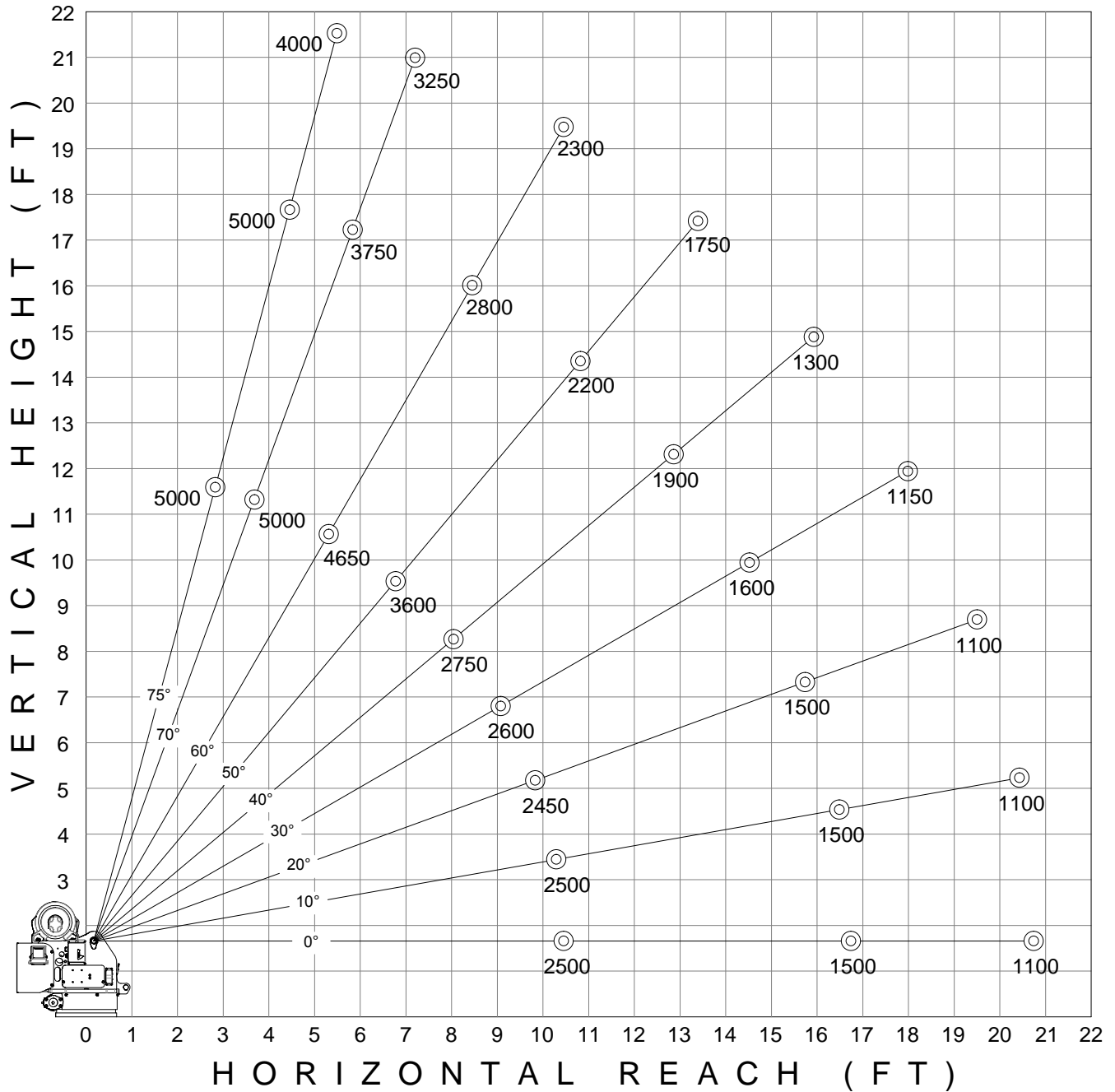
TITLE	BASE MOUNTING DIMS
	ET25-36 & HT25/30 SERIES

DATE	06-10-19
SUPERSEDES	-

SECTION	C100
	24302

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 2500 LBS

2-PART LINE FOR LOADS OF 2500 LBS AND GREATER

WEIGHT OF LOAD BLOCK = 34 LBS



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
MAX. LOAD CAPACITY	05-26-20B	C100
HT25-20' VLC CRANES	SUPERSEDES 08-09-19A	24303

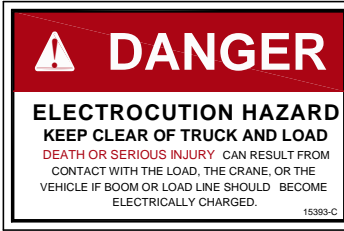
SECTION 150

SAFETY

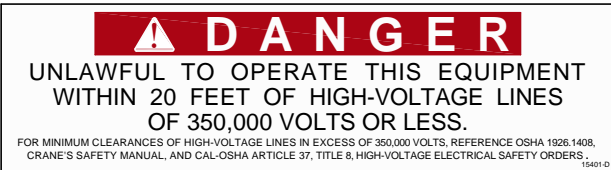


VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

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



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CINCINNATI, OHIO

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

CRANE SAFETY AND HAZARDS

HT SERIES CRANES

CAUTIONS

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

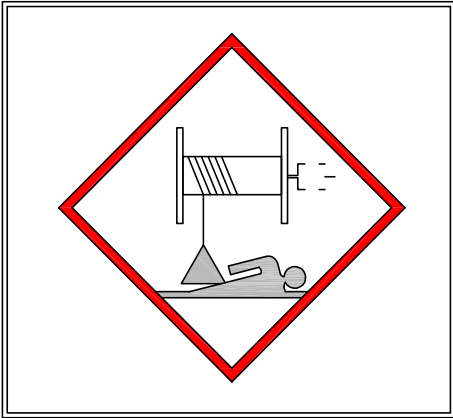
- THIS MACHINE IS NOT INSULATED.
- MAINTAIN SAFE CLEARANCES FROM ELECTRICAL LINES AND APPARATUS.
- YOU MUST ALLOW FOR BOOM SWAY, ROCK OR SAG, AND ELECTRICAL LINE AND LOADLINE SWAYING.
- THIS LIFTING DEVICE DOES NOT PROVIDE PROTECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR.
- 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.



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CINCINNATI, OHIO

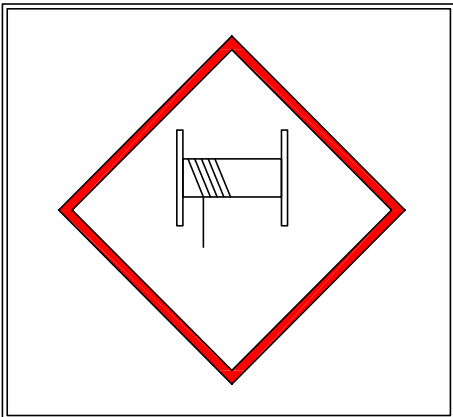
TITLE	DATE	SECTION
CRANE SAFETY & HZRDS	02-21-14D	C150
HYDRAULIC CRANES	SUPERSEDES 04-04-12C	920612

WINCH SAFETY WARNINGS



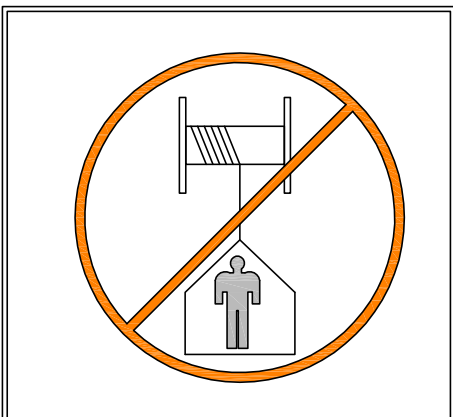
DANGER

- 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



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
WINCH SAFETY
HT CRANES

DATE
02-21-14D
SUPERSEDES
04-04-12C

SECTION
C150
19217

PART NO.: 14473-1

DECAL: OIL

PURPOSE: TO SHOW OPERATOR WHERE TO CHECK/ADD OIL

QTY: 1

LOCATION: SIDE OF WINCH



PART NO.: 14473-2

DECAL: GREASE

PURPOSE: TO SHOW OPERATOR WHERE TO ADD GREASE

QTY: 9

LOCATION: SLEW DRIVE & BOOM PIVOTS



PART NO.: 15390

DECAL: CAUTION, INSPECT VEHICLE & CRANE

PURPOSE: TO INFORM OPERATOR OF KEY OPERATING REQUIREMENTS

QTY: 1

LOCATION: REAR COVER OR SIDE OF CRANE



PART NO.: 15391

DECAL: DANGER, NOT A PASSENGER LIFT

PURPOSE: TO INFORM OPERATOR NOT TO LIFT, SUPPORT, OR TRANSPORT PERSONNEL, & TO ENSURE OPERATOR IS ADEQUATELY TRAINED

QTY: 1

LOCATION: REAR COVER OR SIDE OF CRANE



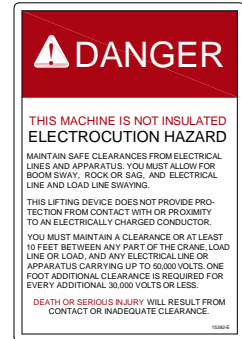
PART NO.: 15392

DECAL: 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

QTY: 1

LOCATION: REAR COVER OR SIDE OF CRANE



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
DECAL DWG & LIST

HT25/30 VLC CRANES

DATE
06-17-19

SUPERSEDES

-

SECTION
C150

24304

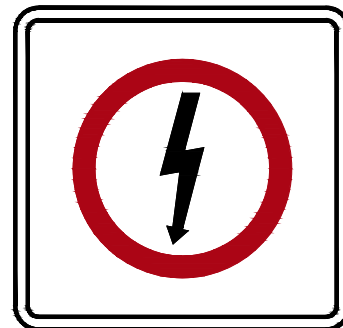
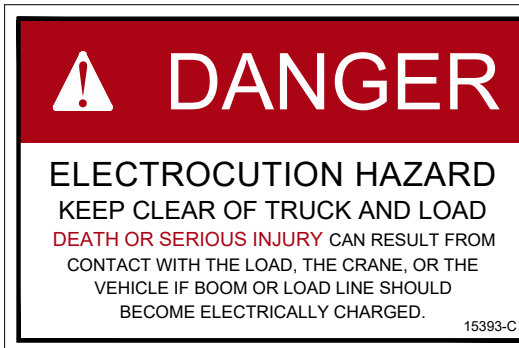
PART NO.: 15393

DECAL: DANGER, ELECTROCUTION HAZARD, VEHICLE (TRUCK)

PURPOSE: WARNS OF DANGER FROM ELECTRICALLY CHARGED VEHICLE, CRANE, OR LOAD

QTY: 4

LOCATION: EACH SIDE & EACH END OF VEHICLE



PART NO.: 15398

DECAL: UNPLUG REMOTE CONTROL

PURPOSE: TO INFORM OPERATOR TO UNPLUG REMOTE CONTROL WHEN NOT IN USE

QTY: 1

LOCATION: VICINITY OF REMOTE CONTROL SOCKET



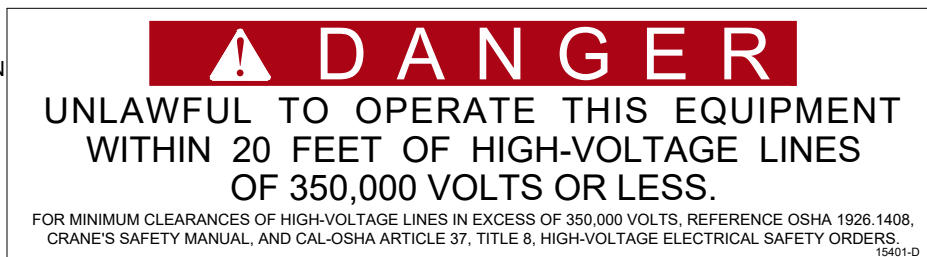
PART NO.: 15401

DECAL: DANGER, UNLAWFUL TO OPERATE

PURPOSE: TO INFORM OPERATOR OF PROPER OPERATION IN VICINITY OF ELECTRICAL LINES

QTY: 1

LOCATION: GEAR COVER OR SIDE OF CRANE



PART NO.: 15513

DECAL: MASTER DISCONNECT

PURPOSE: TO INFORM OPERATOR OF LOCATION AND OPERATION OF MASTER DISCONNECT SWITCH

QTY: 1

LOCATION: MASTER DISCONNECT SWITCH BRACKET



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VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
DECAL DWG & LIST

DATE
11-09-23

SECTION
C150

HT25/30 VLC CRANES

SUPERSEDES
-

24370

PART NO.: 17389-4

DECAL: VENTURO (2.8" x 11")

PURPOSE: TO INFORM OPERATOR THAT THEY ARE ABOUT TO OPERATE THE BEST CRANE ON THE MARKET!

QTY: 1

LOCATION: REAR COVER



PART NO.: 17813

DECAL: OVERLOAD SENSING SYSTEM

PURPOSE: TO INFORM OPERATOR OF OVERLOAD SENSING SYSTEM

QTY: 1

LOCATION: LOCATION MAY VARY

CRANE IS EQUIPPED WITH AN OVERLOAD SENSING SYSTEM

1. IF OVERLOADED, THE WINCH UP, BOOM DOWN, AND (OPTIONAL) BOOM OUT FUNCTIONS WILL AUTOMATICALLY SHUT OFF TO PREVENT INCREASED OVERLOAD. ON CRANES EQUIPPED WITH AN OPTIONAL OVERLOAD ALARM, IT WILL ALSO SOUND.
2. IF AN OVERLOAD OCCURS, USE THE WINCH DOWN, BOOM UP OR BOOM IN FUNCTIONS TO RELIEVE THE OVERLOAD.
3. 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.
4. SEE MANUAL FOR TESTING 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

17813A

PART NO.: 19314-1 (L) & 19314-2 (R)

DECAL: MANUAL OVERRIDE

PURPOSE: TO INFORM OPERATOR OF MANUAL OVERRIDE LOCATION

QTY: 1 EACH

LOCATION: LEFT & RIGHT SIDE OF REAR COVER

19314-1

WINCH DOWN
VALVE MANUAL OVERRIDE
ROTATION RIGHT
BOOM IN
BOOM DOWN

19314-2

WINCH UP
VALVE MANUAL OVERRIDE
ROTATION LEFT
BOOM OUT
BOOM UP

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PART NO.: 20834

DECAL: MANUAL OVERRIDE NOTICE

PURPOSE: TO INFORM OPERATOR OF MANUAL OVERRIDE LOCATIONS


QTY: 1

LOCATION: REAR COVER OR SIDE OF CRANE

NOTICE

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

20834-C

 VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE DECAL DWG & LIST	DATE 06-18-19	SECTION C150
	HT25/30 VLC CRANES	SUPERSEDES -	24306

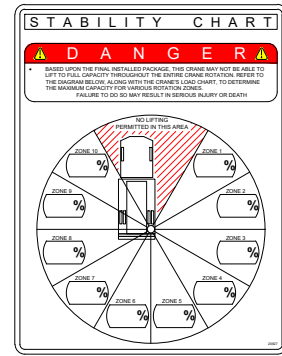
PART NO.: 20927

DECAL: CRANE STABILITY

PURPOSE: TO INFORM OPERATOR OF THE CRANE'S LIFTING CAPACITY THROUGHOUT THE ENTIRE ROTATION

QTY: 1

LOCATION: IN PROMINENT LOCATION, SO IT IS EASILY SEEN AND READILY IDENTIFIABLE



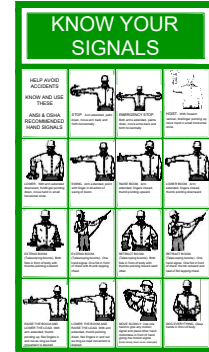
PART NO.: 22499

DECAL: KNOW YOUR SIGNALS

PURPOSE: TO INFORM OPERATOR OF PROPER SIGNALS

QTY: 1

LOCATION: LOCATION MAY VARY



PART NO.: 23742

DECAL: VLC, 2.94" x 6.00"

PURPOSE: TO SHOW THAT CRANE IS EQUIPPED WITH VENTURO LOGIC CONTROLS

QTY: 2

LOCATION: EACH SIDE OF HOUSING



PART NO.: 28530

DECAL: MODEL DECAL, HT25KX

PURPOSE: TO SHOW MODEL OF CRANE

QTY: 2

LOCATION: ONE ON EACH SIDE OF BOOM



PART NO.: 28531

DECAL: MODEL DECAL, HT30KX

PURPOSE: TO SHOW MODEL OF CRANE

QTY: 2

LOCATION: ONE ON EACH SIDE OF BOOM



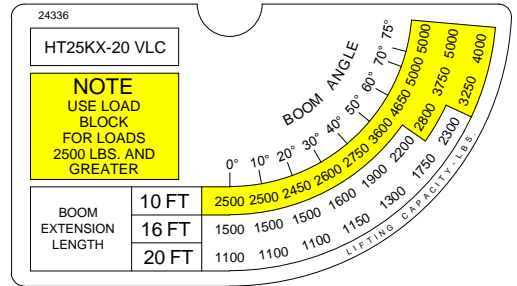
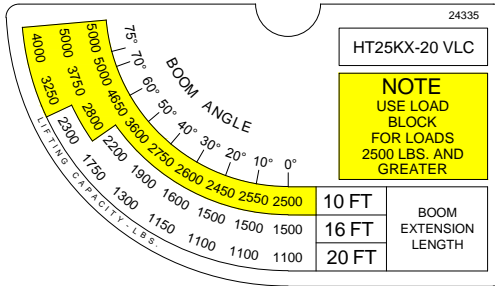
PART NO.: 24335 (RIGHT) & 24336 (LEFT)

DECAL: HT25-20 VLC CRANE CAPACITY

PURPOSE: TO SHOW OPERATOR THE OPERATING CAPACITIES OF THE CRANE

QTY: 1 EACH

LOCATION: ONE ON EACH SIDE OF BOOM



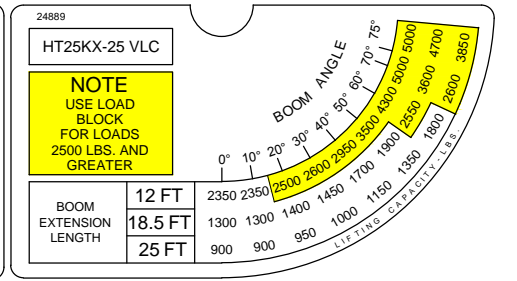
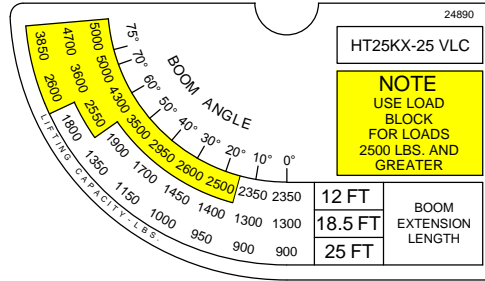
PART NO.: 24890 (RIGHT) & 24889 (LEFT)

DECAL: HT25-25 VLC CRANE CAPACITY

PURPOSE: TO SHOW OPERATOR THE OPERATING CAPACITIES OF THE CRANE

QTY: 1 EACH

LOCATION: ONE ON EACH SIDE OF BOOM



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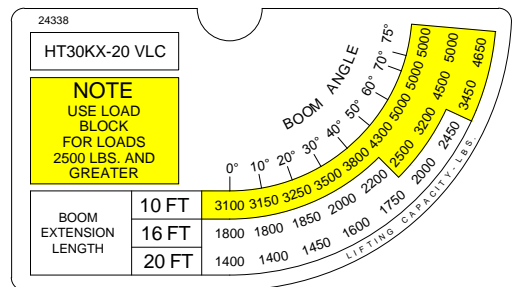
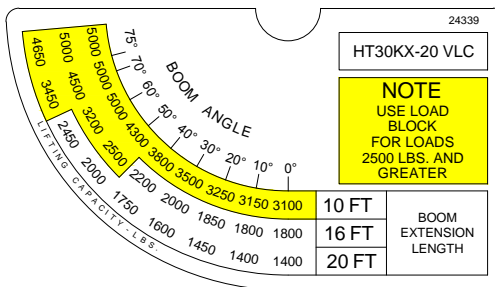
PART NO.: 24339 (RIGHT) & 24338 (LEFT)

DECAL: HT30-20 VLC CRANE CAPACITY

PURPOSE: TO SHOW OPERATOR THE OPERATING CAPACITIES OF THE CRANE

QTY: 1 EACH

LOCATION: ONE ON EACH SIDE OF BOOM



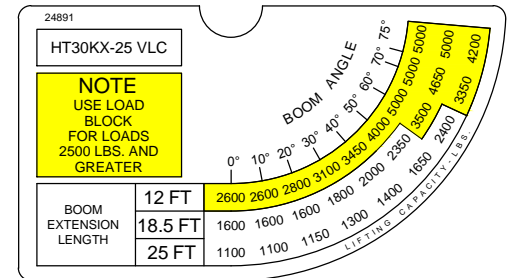
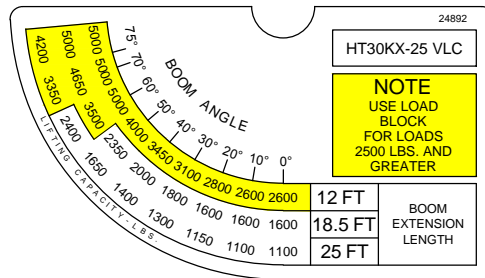
PART NO.: 24892 (RIGHT) & 24891 (LEFT)

DECAL: HT30-25 VLC CRANE CAPACITY

PURPOSE: TO SHOW OPERATOR THE OPERATING CAPACITIES OF THE CRANE

QTY: 1 EACH

LOCATION: ONE ON EACH SIDE OF BOOM



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
BOOM CAPACITY DECALS

DATE
06-04-20B

SECTION
C150

HT25/30 VLC CRANES

SUPERSEDES
05-26-20A

24308

SECTION 200

INSTALLATION



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

CRANE INSTALLATION, PAGE 1

HT25-20' 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 HT25KX is 28,000 ft. lbs.

The maximum vertical load for the HT25-20' VLC is 7,535 lbs.

CRANE MOUNTING

The crane base plate or mounting pedestal must be bolted to the body reinforcing plate with four [4] Grade 8 3/4"-10 bolts, torqued to 300 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.



C A U T I O N



- 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.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

CRANE INSTALLATION

DATE

12-08-20A

SECTION

C200

HT25-20' VLC SERIES

SUPERSEDES

06-19-19

24310

CRANE INSTALLATION, PAGE 2

HT25/30 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	HT25/30 SERIES
PRESSURE	3/8"
RETURN	1/2"
SUCTION	3/4"

RESERVOIR

The PTO reservoir should have a capacity of 10 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 provide 4.0 GPM at 3000 PSI when engine is at desired idle speed. These cranes' relief pressures are all 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 (10 gallon reservoir = 20 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.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
CRANE INSTALLATION
HT25/30 VLC SERIES

DATE
05-10-21B
SUPERSEDES
07-29-20A

SECTION
C200
24311

CRANE OPERATION AND MAINTENANCE INSTRUCTIONS ▲

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 the single-line rated load 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 ▲

The control pendant should be stored in a compartment or the cab when the crane is not in use.

Before activating the control pendant, inspect the cord(s) and pendant head/switches for damage. With the pendant OFF and the PTO disengaged, actuate all switches in both directions to verify that they all have the same feel/sound and return to the center position.

PTO SYSTEM ▲

Check the hydraulic fluid level in the PTO system reservoir. Engage PTO and set the engine speed to provide the desired hydraulic flow rate per the PTO system instructions.

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.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
CRANE OP / MNTNC INST	08-08-23A	C200
HT CRANES ▲	SUPERSEDES 10-11-18	23753

CRANE OPERATION AND MAINTENANCE INSTRUCTIONS, PAGE 2

HT25/30 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 75%	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 <small>Flashing text/inverted color - or after pressing OK button- Home Screen, flashing text/inverted color, SPD 25% icon</small>	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. Refer to Drawings 23024 or 27029 in this manual for replacement parts and configuration information, respectively.

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 (See pages 24322 thru 24325).

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 (See pages 24883 thru 24886).



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
CRANE OP / MNTNC INST	06-01-20A	C200
HT25/30 VLC SERIES	SUPERSEDES 06-21-19	24313

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	Swepeco #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.



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CINCINNATI, OHIO

TITLE	DATE	SECTION
CRANE OP / MNTNC INST	06-21-19	C200
HT25/30 VLC SERIES	SUPERSEDES	24314
	-	

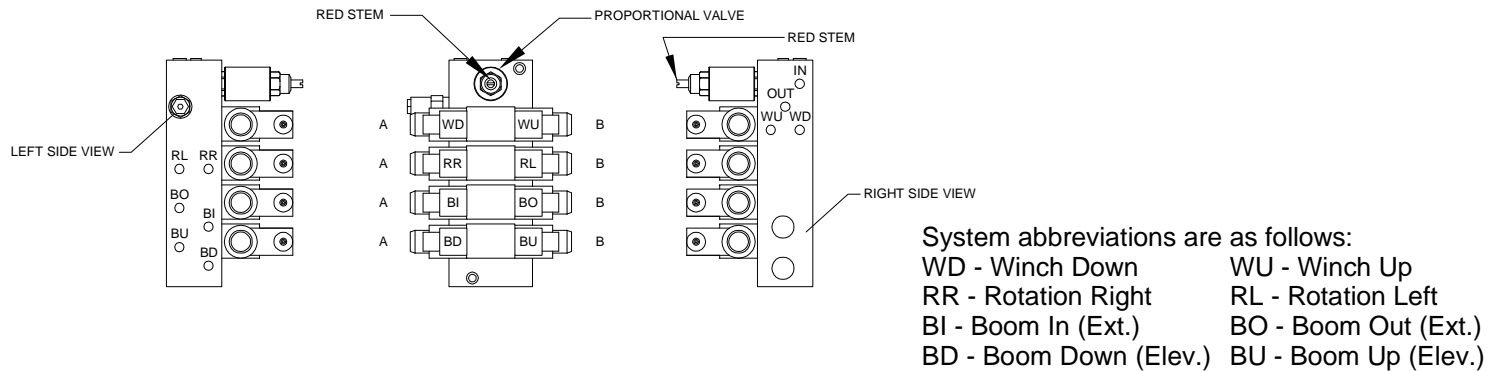
EXPLANATION OF HYDRAULIC VALVE SYSTEM

HT25/30 VLC SERIES CRANES

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 elevation, and boom extension) 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 (both "push").



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 down



W A R N I N G



- 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.



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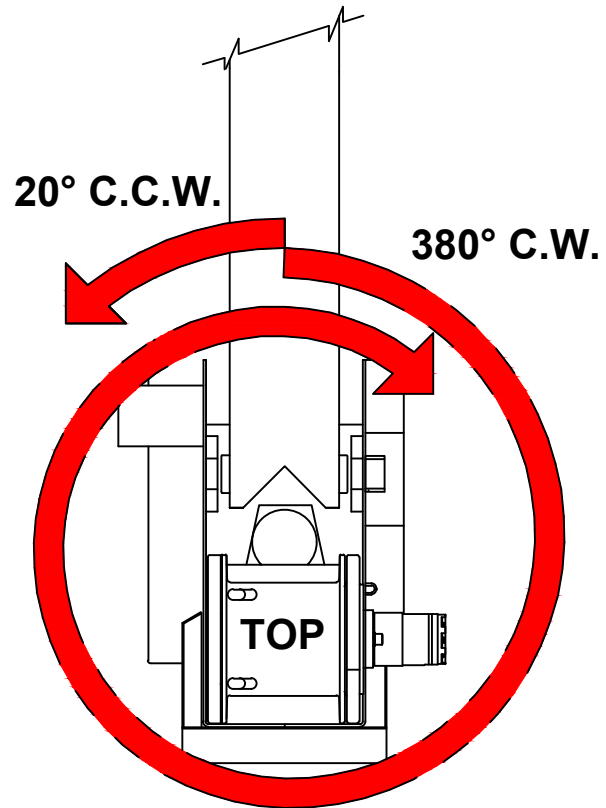
TITLE	HYDRAULIC SYSTEM
TITLE	HT25/30KX VLC SERIES

DATE	07-25-19
SUPERSEDES	-

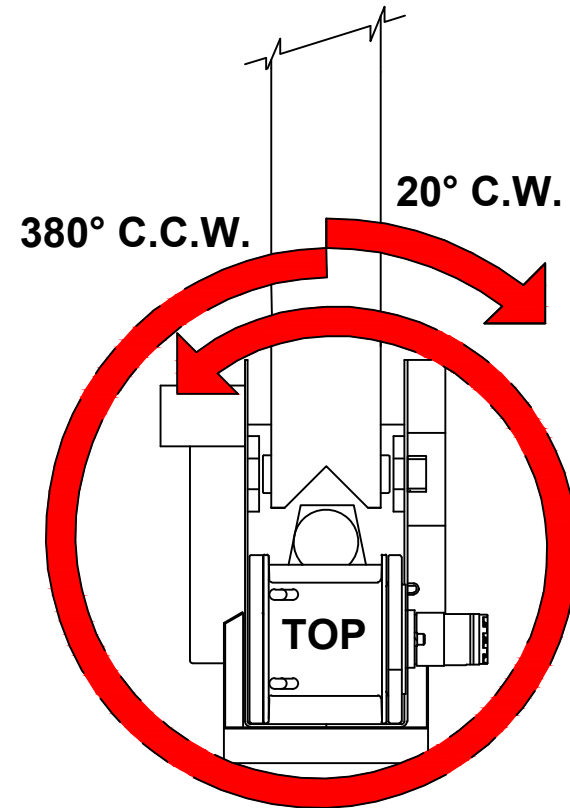
SECTION	C200
SECTION	24315

400° ROTATION STOP LOCATION

CURBSIDE



STREETSIDE



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
ROTATION STOP LOCATION

400° ROTATION CRANES

DATE
03-09-23F

SUPERSEDES
05-20-20E

SECTION
C200

20051

STABILITY TEST - HT25-20'-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

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. Use a **test weight** weighing a **minimum of 1294 lbs**, (includes load block weight of 34 lbs.) to a **maximum of 1375 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).
10. Using the test weight, extend the boom slowly, until one of three conditions occur:
 - 10.1. Full extension is reached - Mark the ZONE in question **100%**
 - 10.2. The VLC system stops the boom extension - Mark the ZONE in question **100%**
 - 10.3. The truck becomes unstable i.e. a tire lifts off the ground
 - 10.3.1. Retract the boom until at least one tire on each corner of the truck is making contact with the ground
 - 10.3.2. 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**.
$$\% \text{ Rated Capacity} = \frac{\text{"Max Stable Reach" in inches}}{248} \times 100$$
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.



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CINCINNATI, OHIO

TITLE

STABILITY TEST

DATE

02-28-23D

SECTION

C200

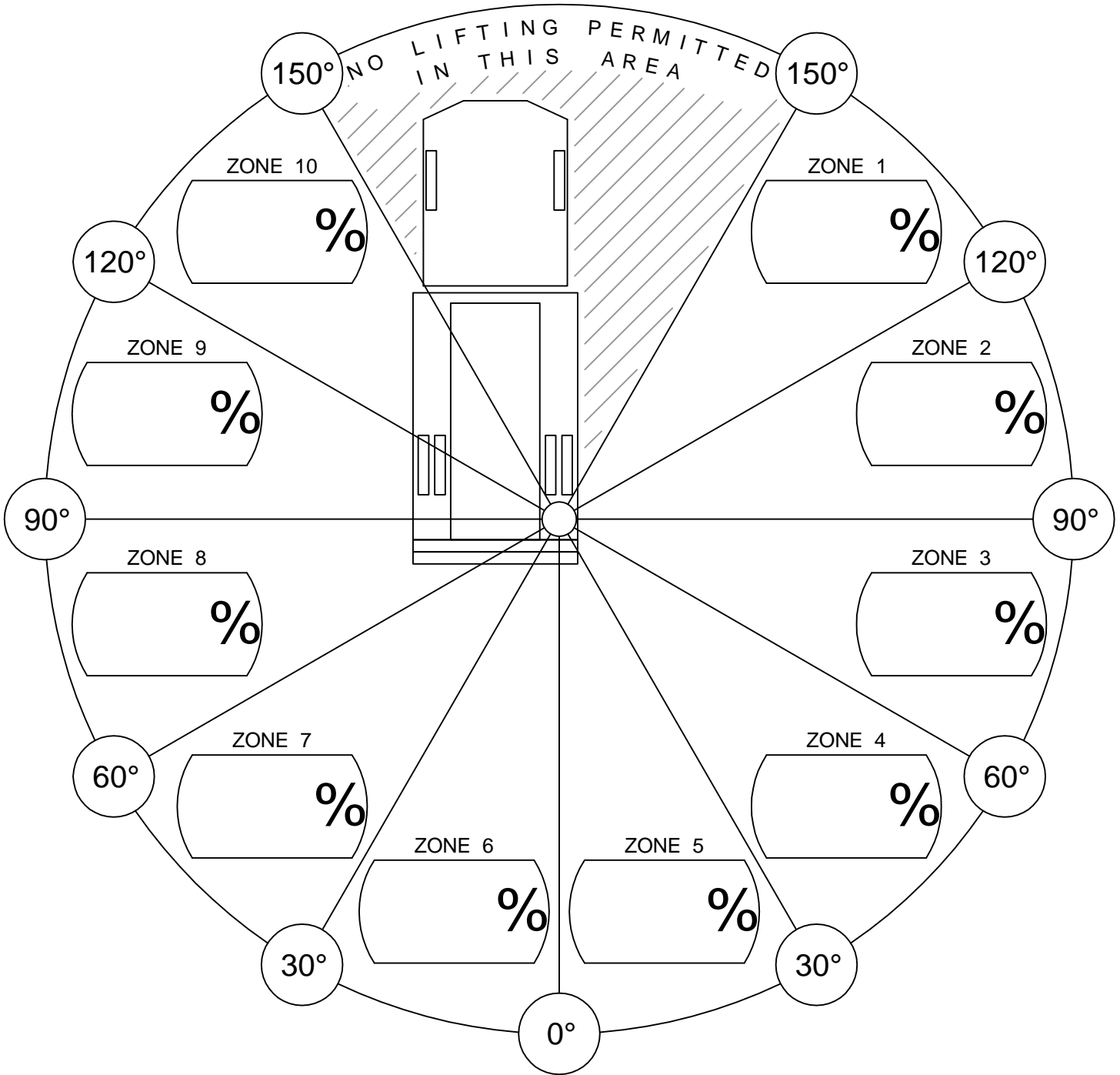
HT25-20'-VLC SERIES

SUPERSEDES

11-23-21C

20906-2520V

CRANE STABILITY



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

CONDITIONS:

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



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
STABILITY CHART

VENTURO CRANES

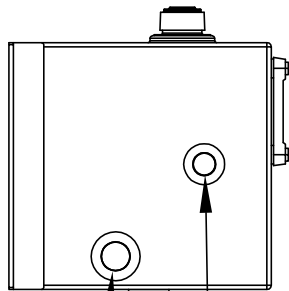
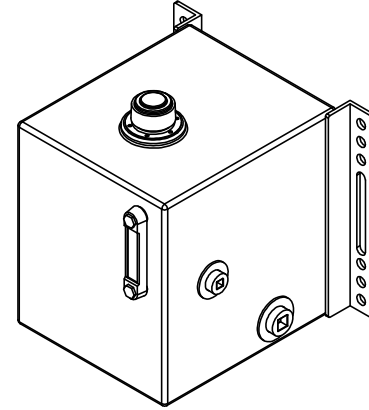
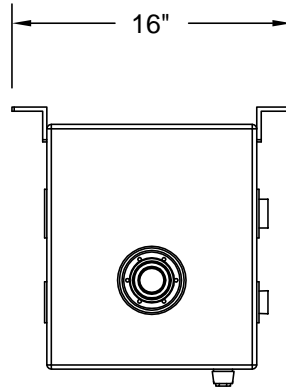
DATE
05-11-17F

SUPERSEDES
02-21-14E

SECTION
C200

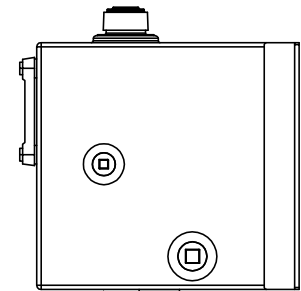
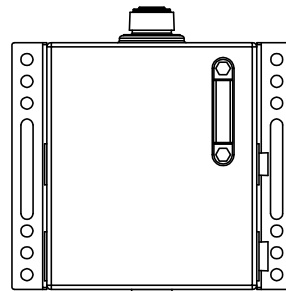
20907

19295; 10 GALLON HYDRAULIC TANK



1-1/4" NPT THREAD
TAPPED HOLE

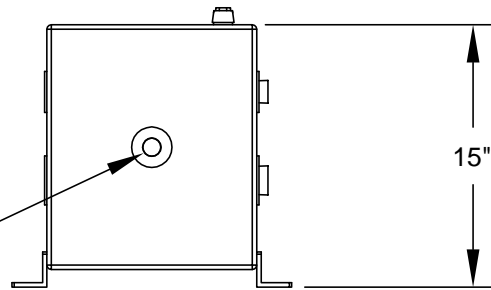
1" NPT THREAD
TAPPED HOLE



14 1/8"

19295 10 GALLON
RESERVOIR TANK

3/4" NPT THREAD
TAPPED HOLE

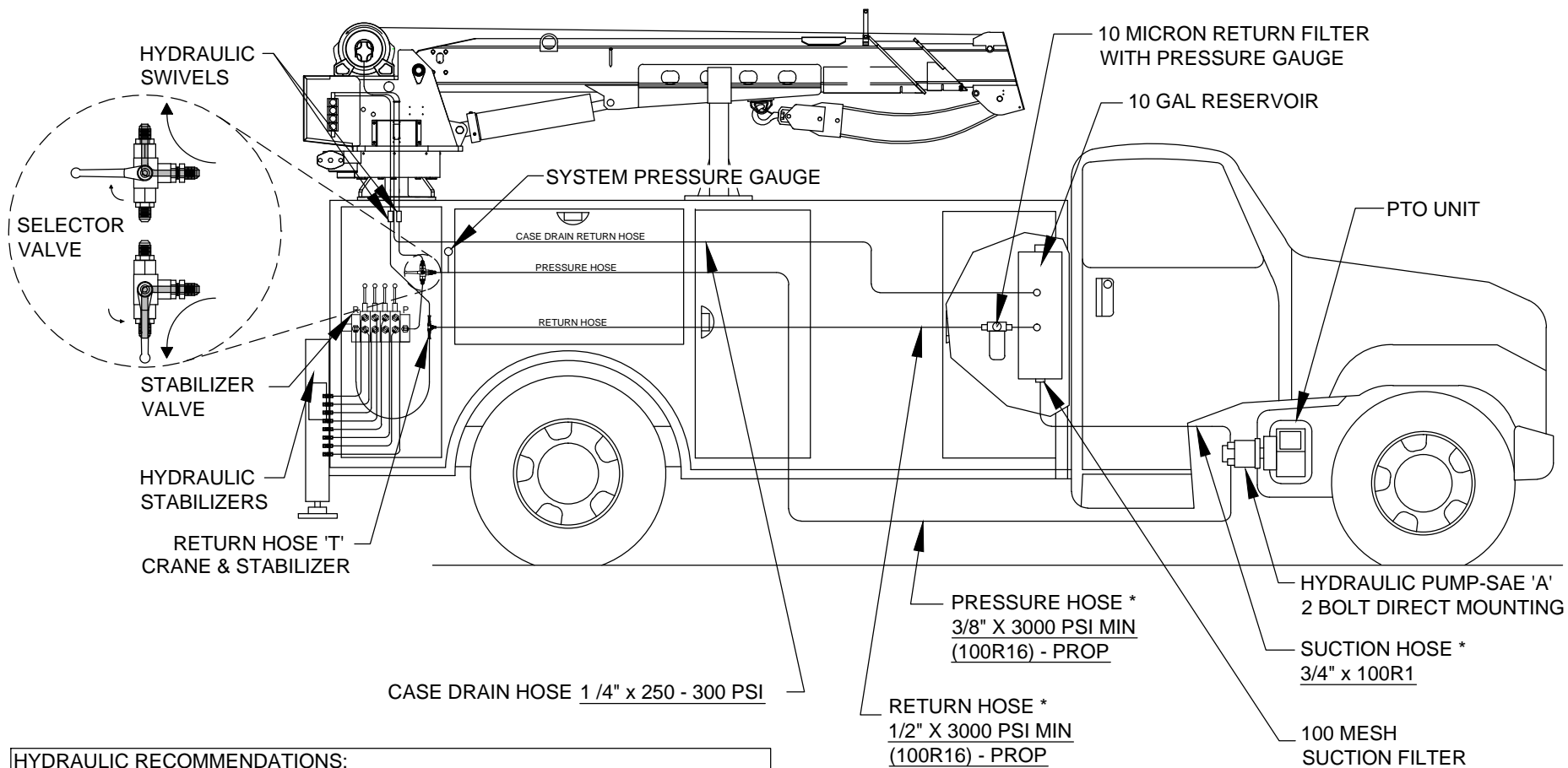


VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
10 GALLON HYDRAULIC TANK
VARIOUS APPLICATIONS

DATE
05-01-14A
SUPERSEDES
03-17-06

SECTION
-
22826



HYDRAULIC RECOMMENDATIONS:
 HT25KX VLC - 4.0 GPM @ 3000 PSI (19294-4.00 KIT)
 HT30KX VLC - 4.0 GPM @ 3000 PSI (19294-4.00 KIT)

CAUTION

- 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*.

CAUTION

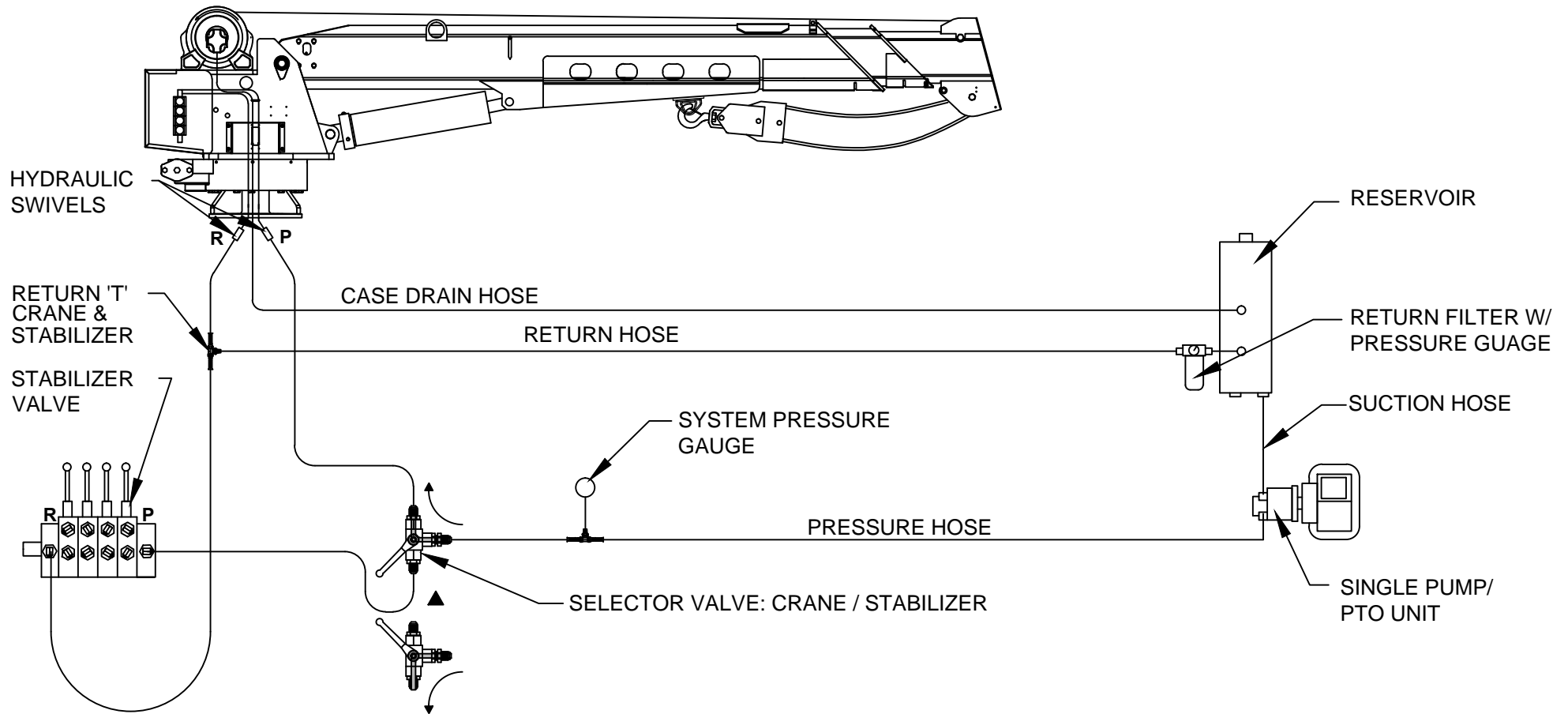
- THE CASE DRAIN LINE FROM THE WINCH MUST HAVE AN UNRESTRICTED PATH TO TANK/RESERVOIR.



VENCO VENTURO INDUSTRIES LLC
 CINCINNATI, OHIO

TITLE	DATE	SECTION
HYDRAULIC COMPONENT INSTALLATION	03-13-20A	C200
HT25/30 VLC CRANES	SUPSEDES 06-28-19	24316

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.

CAUTION

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



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
CONNECTION GUIDE, PAGE 1 / 2

HT CRANES

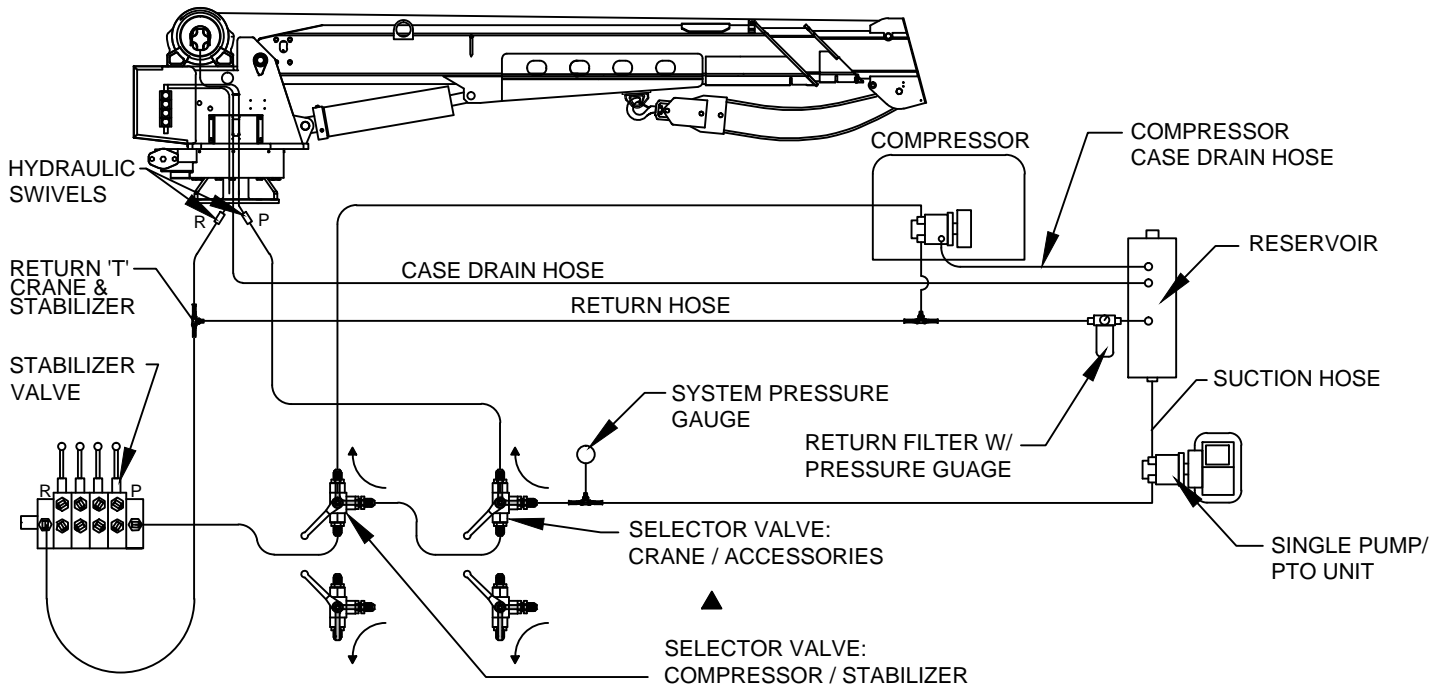
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SUPERSEDES
02-21-14B

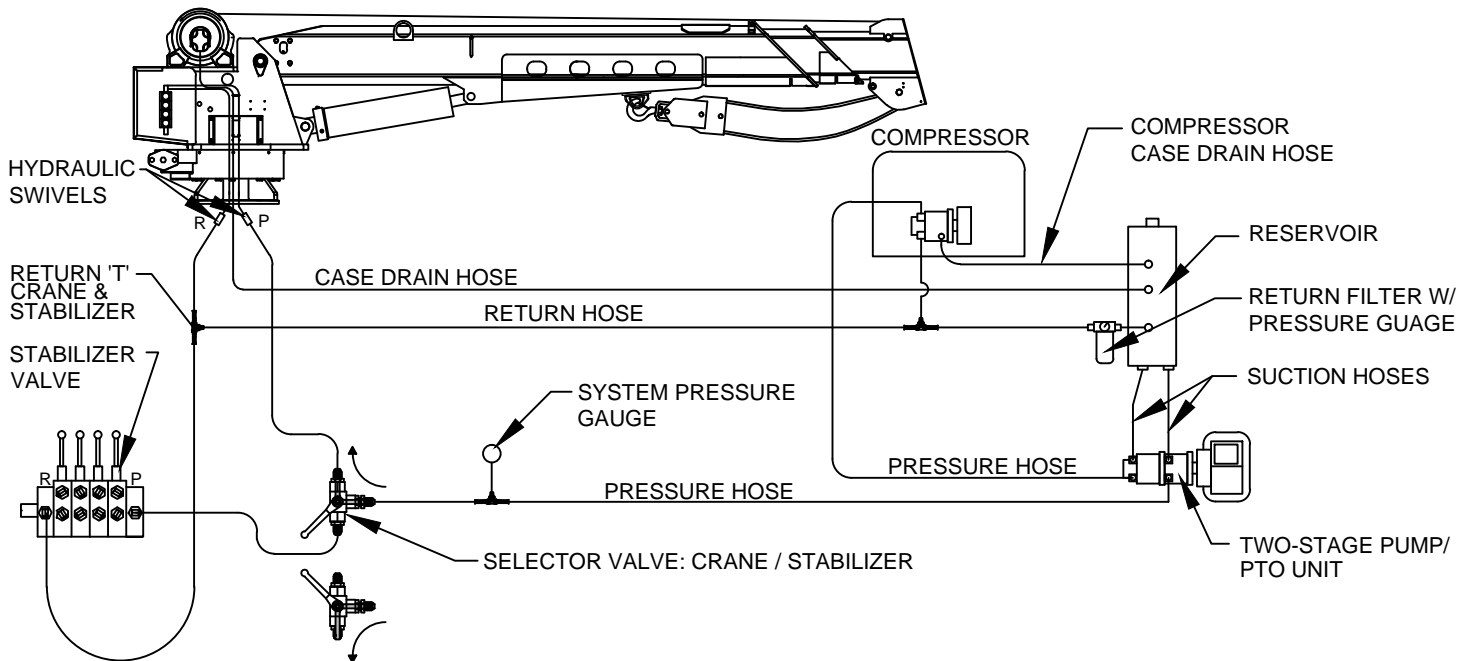
SECTION
C200

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
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TITLE
CNNCTN GDE, PAGE 2/2

HT CRANES

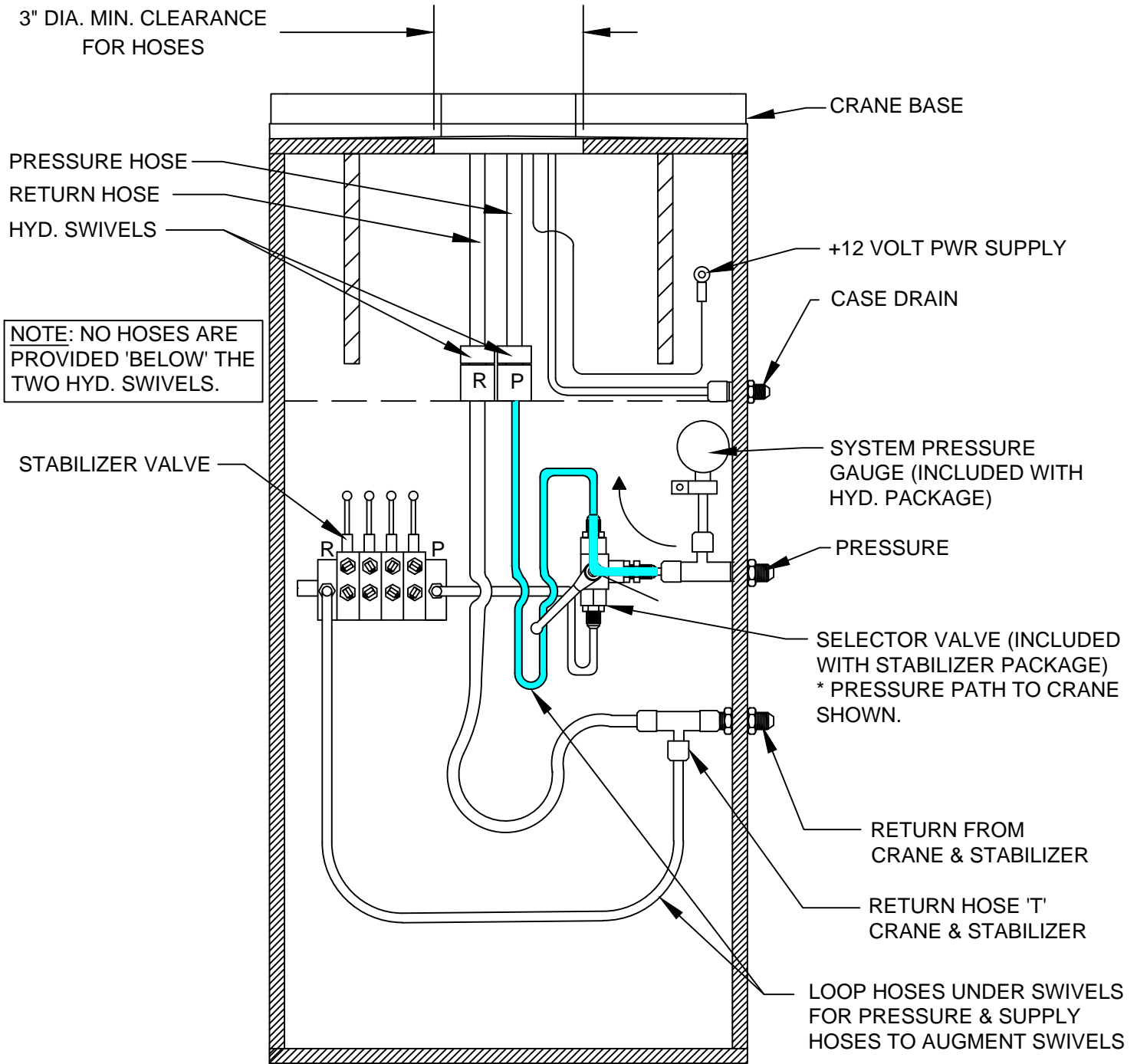
DATE
08-08-23C

SUPERSEDES
02-21-14B

SECTION
C200

23014

RECOMMENDED SUPPLY & RETURN HOSE CONNECTIONS CRANE & STABILIZERS



CAUTION

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



CAUTION

- CASE DRAIN MUST RETURN DIRECTLY TO RESERVOIR WITHOUT RESTRICTION.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
CONNECTIONS GUIDE

HT CRANES

DATE
08-07-23G

SUPERSEDES
02-21-14F

SECTION
C200

22913

WIRE ROPE INSTALLATION

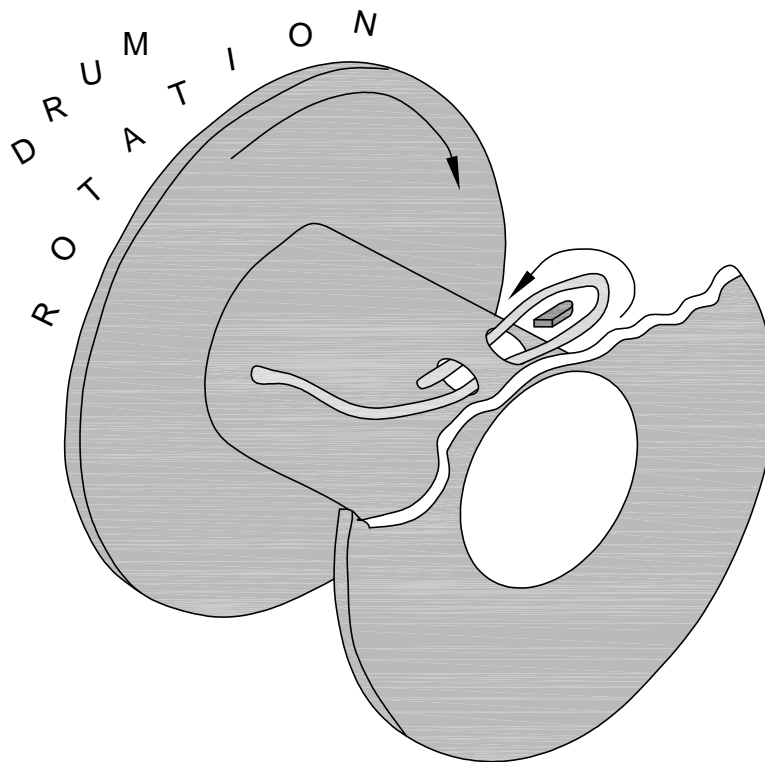


FIG. 1

- 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) 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.



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TITLE

WIRE ROPE INSTALLTN

DATE

02-21-14K

SECTION

C200

ET6K & LARGER CRANES

SUPERSEDES

12-26-13J

22245

SECTION 300

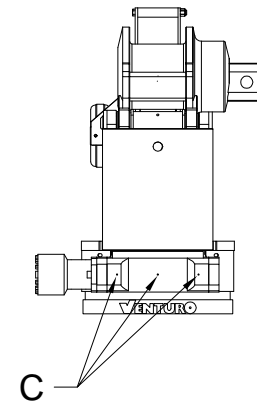
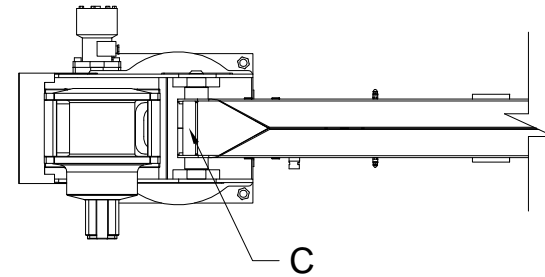
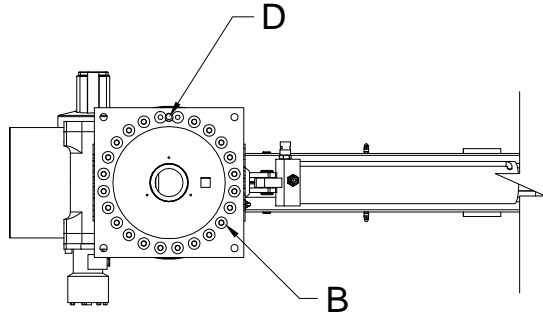
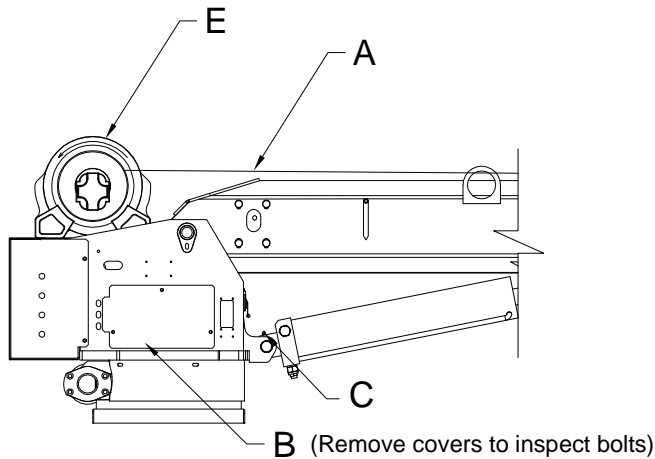
MAINTENANCE

&

SERVICE



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO



Location	Service Required	Note	Service Interval
A	Check Wire Rope and Hook	Rope should be free of kinks and fraying	Prior to Use (Daily)
B	Check Torque of bolts	Bolts should be torqued to 60 ft-lbs	Time of Truck Service
C	Grease Fitting with Pressure Grease Gun	Use Lithium Based Grease	Time of Truck Service
D	Grease Fitting with Pressure Grease Gun	Use Lithium Based Grease	Every 6 months
E	Check Winch gearbox oil level	SAE 90 Gear Lubricant	Every 6 months



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CINCINNATI, OHIO

TITLE
LUBRICATION & MAINTENANCE CHART

HT25/30 CRANES

DATE
06-21-19B

SUPERSEDES
01-23-10A

SECTION
C300

21956

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.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
MAINTENANCE INFO	06-11-24E	C300
HT25/30/40/50/60/66KX(P)	SUPERSEDES 11-10-22D	23203

WIRE ROPE ASSEMBLY

LOAD BLOCK ASSEMBLY

WIRE ROPE:

5/16" DIA, 80' LONG

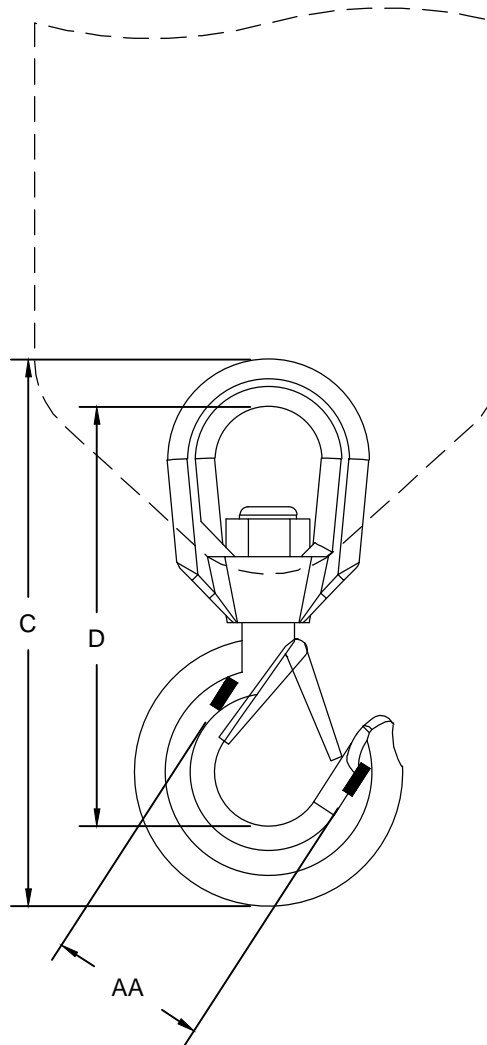
GAC 7X19 XIP-RHRL-IWRC, SB 9800 LBS

P/N: 27668-5/16-80



TERMINATES IN THIMBLE

NO HOOK



LOAD BLOCK HOOK:

RATING: 3 TONNE (6615 LBS)

DIMENSIONS:

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



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

WIRE ROPE & HOOK SPECIFICATIONS

ET16/18KXX-20, ET/HT25/30KX

DATE

11-17-23D

SUPERSEDES

03-12-20C

SECTION

C300

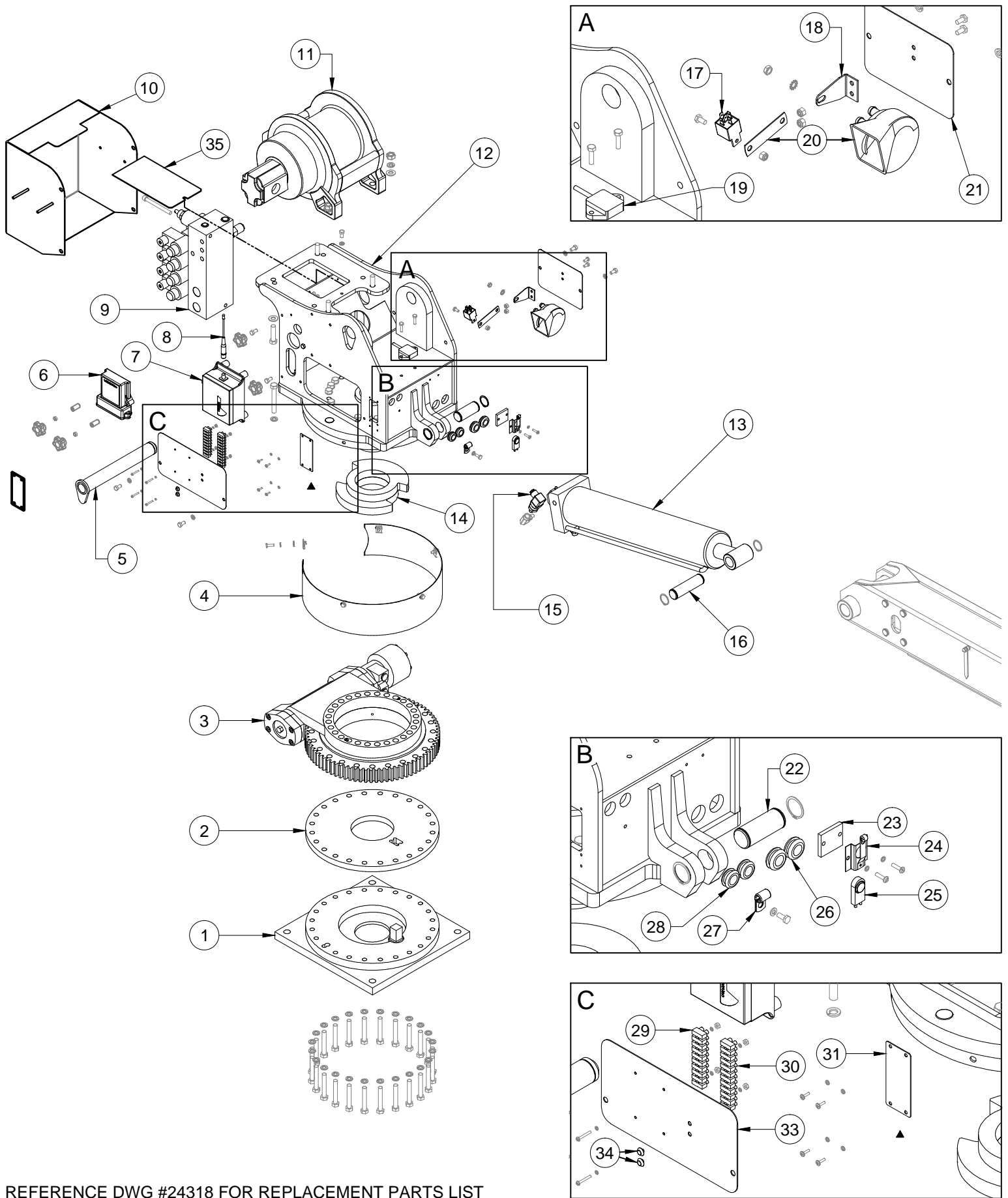
23228

SECTION 400

REPLACEMENT PARTS



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO



REFERENCE DWG #24318 FOR REPLACEMENT PARTS LIST



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
RPLCMNT PARTS DWG	02-23-24B	C400
HT25/30 VLC CRANES	SUPERSEDES 05-16-22A	24317

REPLACEMENT PARTS LIST; MECHANISM, HT25/30 VLC

ITEM NO.	PART NO.	QTY	DESCRIPTION
1	27520-m-1	1	WELDED ASS'Y; MOUNTING BASE
2	27520H	1	SPACER
3	21418	1	SLEWING RING
4	27186	1	COVER; ROTATION GEAR
5	21012	1	PIN; MAIN BOOM PIVOT
* 6	23720-VCM	1	VALVE CONTROL MODULE
* 7	23720-RX	1	E-SCAN RECEIVER
* 8	23720-ANT	1	ANTENNA; E-SCAN RECEIVER
9	22501-P-175-300	1	VALVE MANIFOLD
10	27315	1	COVER; REAR
11	19814	1	WINCH; HYDRAULIC
12	27521	1	HOUSING; MECHANISM
13	21752	1	CYLINDER; ELEVATION
14	27557	1	STOP RING; ROTATION
* 15	23720-PTD	2	PRESSURE TRANSDUCER
16	18761	1	PIN; ELEVATION PIVOT, OUTBOARD
17	22739	1	RELAY
18	22000	1	BRACKET; HORN
* 19	23720-INC	1	UNIVERSAL INCLINOMETER
20	21948	1	HORN
21	23156	1	COVER; LEFT SIDE
22	18762	1	PIN; ELEVATION PIVOT, INBOARD
23	20896	1	SPACER; UHMW, TOP POSITION SWITCH
24	19917	1	BRACKET; BOOM SHUT-OFF SWITCH
25	19918	1	SWITCH; BOOM SHUT-OFF
26	20890	2	GROMMET; Ø1" X 1/4" X 11/16"
27	19269	1	CLAMP; 1/4"
28	20889	2	GROMMET; 5/8" ID, 7/8" GROOVE ID, 1/4" GV THK
29	19187-10	1	TERMINAL STRIP; 10 SECTIONS
30	19187-12	1	TERMINAL STRIP; 12 SECTIONS
▲ 31	20068	1	COVER PLATE
▲ 32	-	-	-
33	27000	1	COVER; RIGHT SIDE
34	23069	2	PLUG; ROUND BLACK PLASTIC
35	28405	1	TOP COVER PLATE

* ITEMS INCLUDED IN 23720 KIT. PLEASE CALL TECHNICAL SUPPORT AT 1-800-226-2238 FOR ASSISTANCE.

REFERENCE DWG #24317 FOR REPLACEMENT PARTS DRAWING

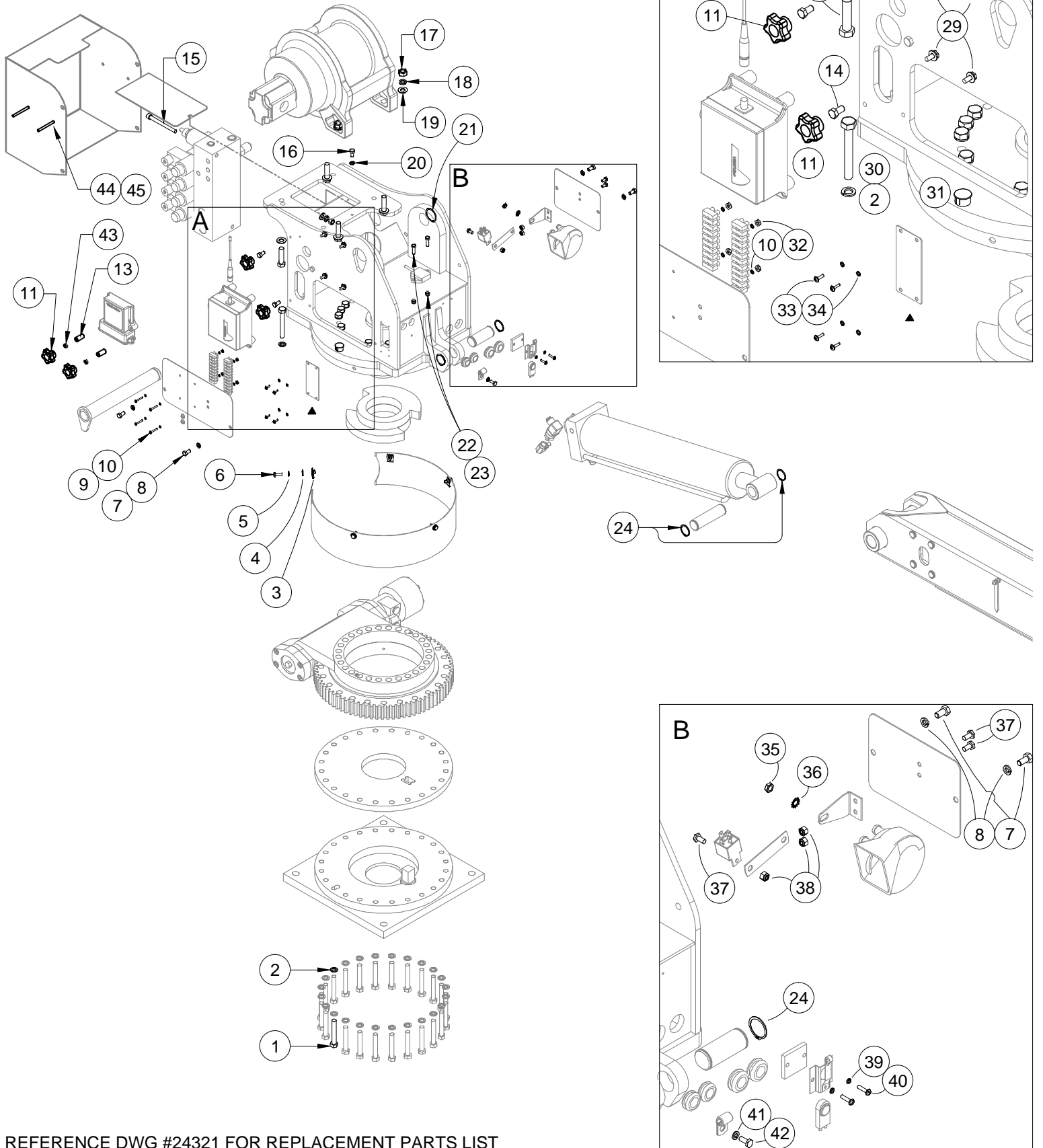


VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
RPLCMNT PARTS LIST
HT25/30 VLC CRANES

DATE
02-23-24B
SUPERSEDES
05-16-22A

SECTION
C400
24318



REFERENCE DWG #24321 FOR REPLACEMENT PARTS LIST

REPLACEMENT FASTENERS LIST; MECHANISM, HT25/30 VLC

ITEM #	PART #	QTY	DESCRIPTION	WHERE-USED
1	!HHCSM12175080-8.8	24	HHCS; 12mm-175 X 80mm, GR. 8.8	MOUNTING & SPACER PLATES TO SLEW DRIVE
2	!LWSH-050	45	LOCK WASHER; 1/2", ZINC	ITEM #1 AND ITEM #30
3	IUNUT-02520-LKG	5	U-NUT; 1/4-20, LOCKING	GEAR COVER TO HOUSING
4	!FWSH-025S	5	FLAT WASHER; 1/4", S/S	GEAR COVER TO HOUSING
5	!LWSH-025S	5	LOCK WASHER; 1/4", S/S	GEAR COVER TO HOUSING
6	IHHCS02520063S	5	HHCS; 1/4-20 X 5/8", S/S	GEAR COVER TO HOUSING
7	IHHCS03118063S	4	HHCS; 5/16-18 X 5/8", S/S	SIDE COVERS TO HOUSING
8	!LWSH-031S	4	LOCK WASHER; 5/16", S/S	SIDE COVERS TO HOUSING
9	IPHPMS#0632100S	4	PHPMS; #06-32 X 1", S/S	TERMINAL STRIPS TO SIDE COVER
10	!LWSH-#06S	4	LOCK WASHER; #06, S/S	TERMINAL STRIPS TO SIDE COVER
11	28327	6	KNOB, HAND, 5-POINT, 1/4"	VCM TO REAR COVER
12	-	-	-	-
13	28328	2	NYLON SPACER, .25" ID X .5" OD X 1"	VCM TO REAR COVER
14	!HHCS03118075	4	HHCS; 5/16-18 X 3/4", GR. 5, ZINC	REAR COVER TO HOUSING
15	!SHCS03816400	1	SHCS; 3/8-16 X 4", BLACK OXIDE	MANIFOLD TO HOUSING
16	IHHCS03118063S	1	HHCS; 5/16-18 X 5/8", S/S	TOP COVER PLATE TO HOUSING
17	IHNUT-05013-8	4	HEX NUT; 1/2-13, GR. 8	WINCH TO HOUSING
18	!LWSH-050	4	LOCK WASHER; 1/2", GR. 5 ZINC	WINCH TO HOUSING
19	!FWSH-050	8	FLAT WASHER; 1/2", GR. 5 ZINC	WINCH TO HOUSING
20	!LWSH-031S	1	LOCK WASHER; 5/16", S/S	TOP COVER PLATE TO HOUSING
21	!SRNG-150	1	SNAP RING; 1-1/2"	MAIN BOOM PIVOT PIN
22	IHHCS02520100S	2	HHCS; 1/4-20 X 1", S/S	INCLINOMETER TO HOUSING

ITEM #	PART #	QTY	DESCRIPTION	WHERE-USED
23	!LNUT-02520NS	2	LOCK NUT; 1/4-20, NYLON, S/S	INCLINOMETER TO HOUSING
24	!SRNG-125	4	SNAP RING; 1-1/4"	ELEVATION CYL. PIVOT PINS
25	!LWSH-038	1	LOCK WASHER; 3/8"	MANIFOLD TO HOUSING
26	!FWSH-038	1	FLAT WASHER; 3/8"	MANIFOLD TO HOUSING
27	IHNUT-03816	1	HEX NUT; 3/8-16	MANIFOLD TO HOUSING
28	IHHCS05013200-8	4	HHCS; 1/2-13 X 2", GR. 8	WINCH TO HOUSING
29	IHHCSM6M16-8.8	4	HHCS; 6mm-1mm X 16mm, GR. 8.8	ESCANNER TO HOUSING
30	IHHCSM12175090-8.8	21	HHCS; 12mm-175 X 90mm, GR. 8.8	HOUSING TO SLEW DRIVE
31	25019	1	PLUG; 7/8", PLASTIC	HOLE ON RT-SIDE HOUSING
32	IHNUT-#0632S	4	HEX NUT; #06, S/S	TERMINAL STRIPS TO INNER RT-SIDE COVER
33	!SHPMS#0832050S	4	SHPMS; #08-32 X 1/2", S/S	COVER PLATE TO HOUSING
34	!LWSH-#08S	4	LOCK WASHER; #08, S/S	COVER PLATE TO HOUSING
35	IHNUT-03124	1	HEX NUT; 5/16-24, GR. 5 ZINC	HORN TO BRACKET
36	!LWSH-031	1	LOCK WASHER; 5/16", GR. 5 ZINC	HORN TO BRACKET
37	IHHCS02520050S	3	HHCS; 1/4-20 X 1/2", S/S	BRACKET TO SIDE COVER; RELAY TO BRACE
38	!LNUT-02520NS	3	LOCK NUT; 1/4-20, NYLON, S/S	BRACKET TO SIDE COVER; RELAY TO BRACE
39	IPHPMS#1024075S	2	PHPMS; #10-24 X 3/4", S/S	SWITCH TO SWITCH BRACKET
40	!LWSH-#10S	2	LOCK WASHER; #10, S/S	SWITCH TO SWITCH BRACKET
41	!LWSH-025S	1	LOCK WASHER; 1/4", S/S	CLAMP TO HOUSING
42	IHHCS02520063S	1	HHCS; 1/4-20 X 5/8", S/S	CLAMP TO HOUSING
43	!LNUT-02520-H	2	LOCK NUT; 1/4-20, NYLON INSERT	VCM TO REAR COVER
44	IHHCS02520250SF	2	HHCS; 1/4-20 X 2.50", S/S, FULL THRD	VCM TO REAR COVER
45	IUNUT-02520NS	2	JAM NUT, NYLON INSERT, 1/4-20, S/S	VCM TO REAR COVER

REFERENCE DWG #24319 FOR REPLACEMENT FASTENERS DRAWING

HHCS =HEX HEAD CAP SCREW, PHPMS = PHILIPS-HEAD PAN MACHINE SCREW, SHPMS = SLOT-HEAD PAN MACHINE SCREW, S/S = STAINLESS STEEL



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

REPLACEMENT FASTENERS LIST - MECH

HT25/30 VLC CRANES

DATE

06-20-24C

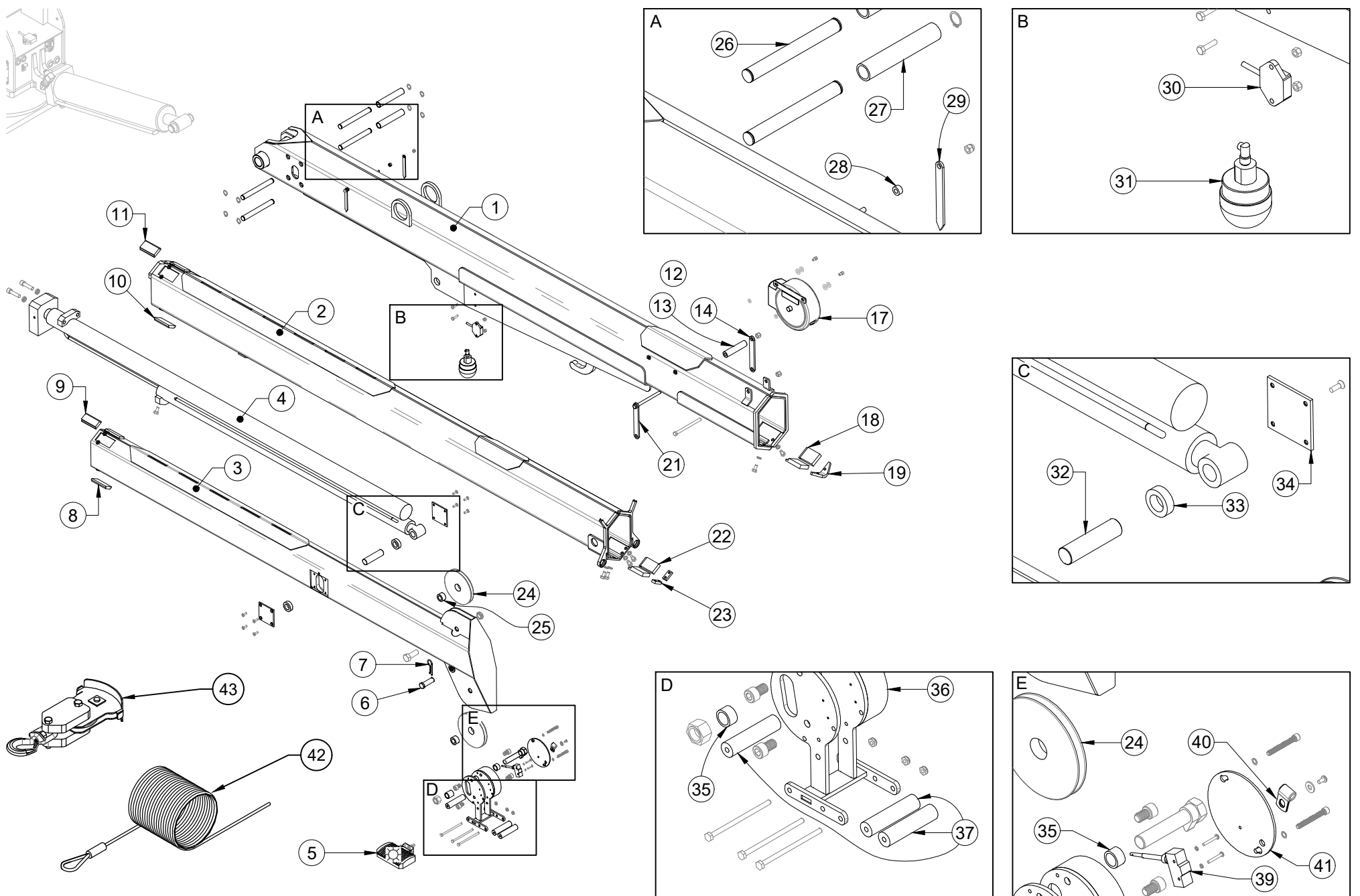
SUPERSEDES

06-24-22B

SECTION

C400

24321



REFERENCE #24323 FOR REPLACEMENT PARTS LIST

☼ ITEM #5 IS OPTIONAL, AND IS NOT INCLUDED WITH STANDARD EQUIPMENT



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT PARTS DWG; 28310 BOOM ▲
HT25/30 SERIES CRANES

DATE
03-27-24D
SUPERSEDES
02-08-21C

SECTION
C400
24322

REPLACEMENT PARTS LIST; 28310 BOOM

ITEM	PART NO.	QTY	DESCRIPTION
1	21472	1	WELDED ASSY; PRIMARY BOOM
2	27165	1	WELDED ASSY; SECONDARY BOOM
3	27167	1	WELDED ASSY; TERTIARY BOOM
4	21753	1	EXTENSION CYLINDER
☼ 5	27483	1	ASSY; WORK LIGHT, LED
6	13401-1	1	CLEVIS PIN
7	21-07	1	HAIRPIN COTTER
8	23217-7	2	BOOM PAD; UHMW, 'A', 3.19 x 1.50 x 0.44
9	23217-6	2	BOOM PAD; UHMW, 'A', 3.19 x 1.50 x 0.50
10	23217-9	2	BOOM PAD; UHMW, 'A', 3.19 x 1.75 x 0.44
11	23217-8	2	BOOM PAD; UHMW, 'A', 3.19 x 1.75 x 0.50
-	-	-	-
13	21560	1	ROLLER; UHMW, WIRE ROPE GUIDE
14	21936	1	FLAT MOUNT; WIRE ROPE GUIDE
-	-	-	-
-	-	-	-
17	▲ 28190-2	1	COMPLETE CORD REEL
18	23217-3	2	BOOM PAD; UHMW, 'B', 3.19 x 2.13 x 0.63
19	23183	1	V-BLOCK SLIDER; W/ CHAMFER
-	-	-	-
21	21935	1	WELDED ASSY; WIRE ROPE GUIDE

ITEM	PART NO	QTY	DESCRIPTION
22	23217-10	2	BOOM PAD; UHMW, 'B', 3.19 x 1.75 x 0.63
23	23119	2	RETAINING BLOCK; BEARING
24	27001	2	SHEAVE; POLY CABLE
25	23924-1	2	SPACER; 27001 SHEAVE
26	21497	4	THRUST PIN; EXTENSION CYLINDER
27	21498	2	ROLLER; EXTENSION CYLINDER
28	22490	2	SPACER; BOOM ARROW
29	13459-2	2	BOOM ARROW; 4" LONG
* 30	23720-INC	1	UNIVERSAL INCLINOMETER
31	23438	1	WARNING LIGHT; TRI-COLOR LED
32	21941	1	PIN; EXTENSION CYLINDER
33	21428	2	BUSHING; 1" BORE x 1-5/8" OD, 1/2"
34	23116	2	PIN BLOCK; REINFORCING
35	27476	2	SPACER/PIVOT; COMPACT A2B
36	27468	1	WELDMENT; COMPACT A2B, LEFT
37	27475	1	ROLLER; WIRE ROPE GUIDE, BLCK DELRIN
38	-	-	-
39	19376	1	SWITCH; ANTI-2-BLOCK (A2B)
40	19269	1	CLAMP; CABLE, 1/4"
41	27473	1	COVER PLATE; COMPACT A2B
42	27668-5/16-80	1	WIRE ROPE; 5/16" * 80'
43	27667-2	1	LOAD BLOCK ASSEMBLY

REFERENCE #24322 FOR REPLACEMENT PARTS DRAWING

☼ OPTIONAL: NOT INCLUDED WITH STANDARD EQUIPMENT



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

REPLACEMENT PARTS LIST; 28310 BOOM ▲

HT25/30 VLC CRANES

DATE

03-27-24D

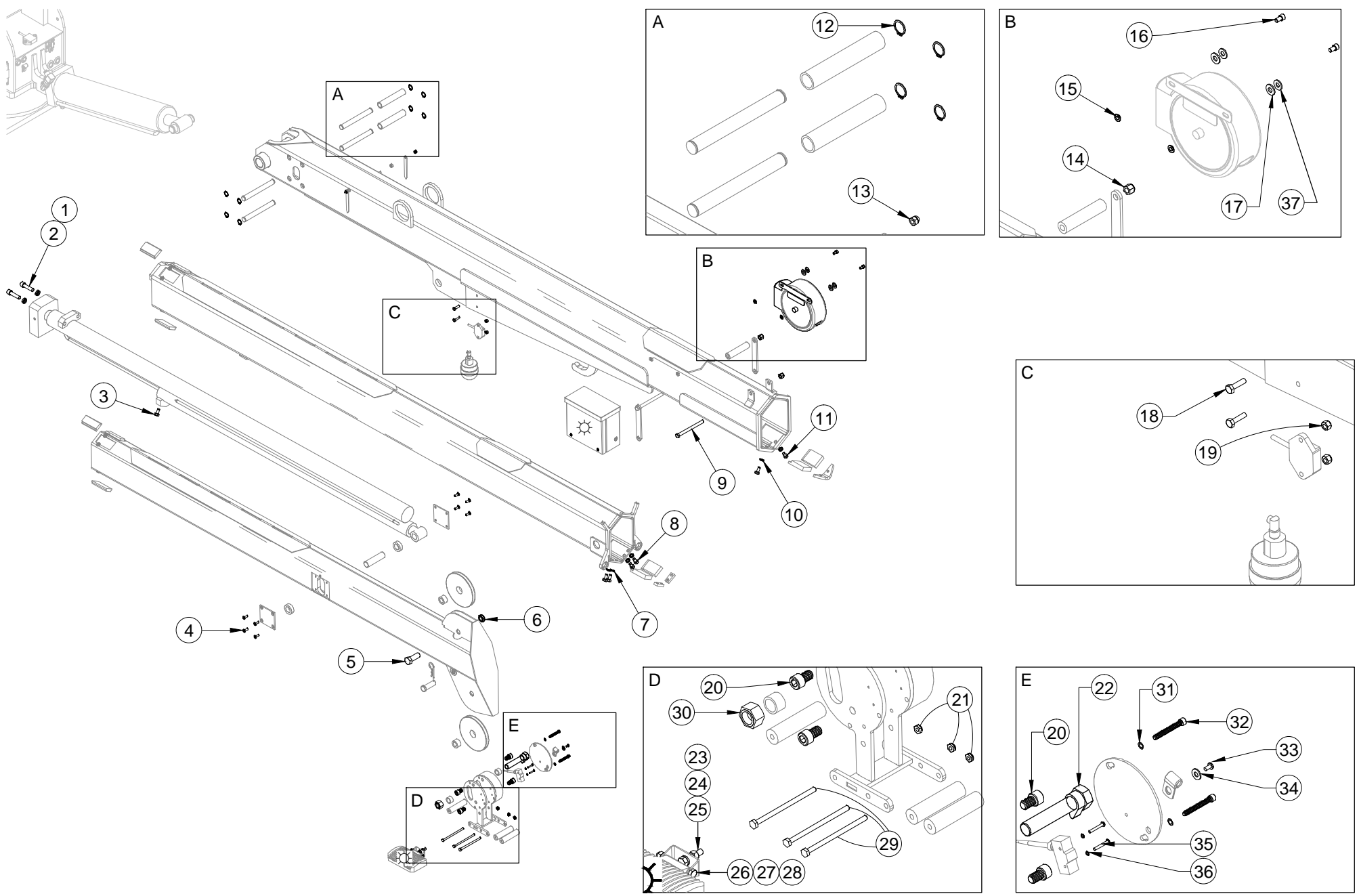
SUPERSEDES

02-08-21C

SECTION

C400

24323



REFERENCE #24325 FOR REPLACEMENT FASTENERS LIST

☼ OPTIONAL: NOT INCLUDED WITH STANDARD EQUIPMENT



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
RPLCMNT FASTENERS DWG; 27197 DS BOOM
HT25/30 SERIES CRANES

DATE
02-08-21A
SUPERSEDES
07-08-19

SECTION
C400
24324

REPLACEMENT FASTENERS LIST; 27197 BOOM, HT25/30 VLC CRANES

ITEM #	PART #	QTY	DESCRIPTION	WHERE-USED
1	!SHCS05013200	2	SHCS; 1/2-13 X 2", GR. 5 ZINC	EXTENSION CYLINDER
2	!LWSH-050-HC	2	LOCK WASHER; 1/2", HI-COLLAR	EXTENSION CYLINDER
3	!HHCS03816075-5	2	HHCS; 3/8-16 X 3/4", GR. 5 ZINC	EXTENSION CYLINDER V-BLOCK
4	!CACSO2520063-N	8	CACS; 1/4-20 X 5/8", NYLON PATCH	PIN BLOCK, REINFORCING
5	17059-6	1	SHEAVE AXLE; 1" SHOULDER, S/S	TOP SHEAVE
6	!LNUT-07510	1	LOCK NUT; NYLOC, 3/4-10, GR. 5 ZINC	TOP SHEAVE
7	!LWSH-038	4	LOCK WASHER; 3/8", GR. 5 ZINC	SECONDARY BOOM, PAD BLOCKS
8	!HHCS03816075-5	4	HHCS; 3/8-16 X 3/4", GR. 5 ZINC	SECONDARY BOOM, PAD BLOCKS
9	!HHCS04414550	1	HHCS; 7/16-14 X 5-1/2", GR. 5 ZINC	WIRE ROPE GUIDE
10	!LWSH-038	2	LOCK WASHER; 3/8", GR. 5 ZINC	PRIMARY BOOM, V-BLOCK
11	!HHCS03816075-5	2	HHCS; 3/8-16 X 3/4", GR. 5 ZINC	PRIMARY BOOM, V-BLOCK
12	!SRNG-075	8	SNAP RING; 3/4", PLATED	EXTENSION CYL. THRUST PINS
13	!ANUT02520S	2	ACORN NUT; 1/4-20, S/S	PRIMARY BOOM ARROWS
14	!LNUT-04414	2	LOCK NUT; 7/16-14, NYLON, GR. 5 ZINC	WIRE ROPE GUIDE
15	28198	2	INSULATING SLEEVE WASHER - 5/16"	CORD REEL TO PRIMARY BOOM
16	!SHCS03118063S	2	SHCS; 5/16-18 X 5/8" LG, S/S	CORD REEL TO PRIMARY BOOM
17	01016	2	FIBER WASHER	CORD REEL TO PRIMARY BOOM
18	!HHCS02520100S	2	HHCS; 1/4-20 X 1", S/S	INCLINOMETER
19	!LNUT-02520NS	2	LOCK NUT; 1/4-20, NYLOC, S/S	INCLINOMETER
20	27467	4	SHCS; 1/2-13 X 3/4, BLACK NYLON	COMPACT A2B ASSEMBLY

ITEM #	PART #	QTY	DESCRIPTION	WHERE-USED
21	!JNUT-02520NS	3	JAM NUT; 1/4-20, NYLON, S/S	COMPACT A2B ASSEMBLY
22	28362	1	ASSY, WELDED, CAM & HHCS CA2B CUT-OUT	COMPACT A2B ASSEMBLY
⚠ 23	!HHCS03118125S	1	HHCS; 5/16-18 X 1-1/4", S/S	LED WORK LIGHT
⚠ 24	!LWSH-031S	1	LOCK WASHER; 5/16", S/S	LED WORK LIGHT
⚠ 25	!HNUT-03118S	2	HEX NUT; 5/16-18, S/S	LED WORK LIGHT
⚠ 26	!HHCS02520250S	1	HHCS; 1/4-20 X 2-1/2", S/S	LED WORK LIGHT
⚠ 27	!LWSH-025S	1	LOCK WASHER; 1/2", S/S	LED WORK LIGHT
⚠ 28	!HNUT-02520S	1	HEX NUT; 1/4-20, S/S	LED WORK LIGHT
29	!HHCS02520450	3	HHCS; 1/4-20 X 4-1/2", GR. 5 ZINC	COMPACT A2B ASSEMBLY
30	!LNUT-07510	1	NYLOC LOCK NUT, FULL, 3/4-10, GR. 5, ZINC	COMPACT A2B ASSEMBLY
31	23379	2	WASHER; BLACK NYLON, 3/8" OD, 1/4" ID	COMPACT A2B ASSEMBLY
32	!SHCS02520200SS	2	SOCKET HCS; 1/4-20 X 2", S/S	COMPACT A2B ASSEMBLY
33	!PHCS#1032038-M	1	PHCS; #10-32 X 3/8", GR. 5 ZINC	COMPACT A2B ASSY; CLAMP
34	!FWSH-025	1	FLAT WASHER; 1/4", GR. 5 ZINC	COMPACT A2B ASSY; CLAMP
35	!PHCS-#0632100	2	PHCS; #6-32 X 1", GR. 5 ZINC, PHILIPS	COMPACT A2B ASSY; SWITCH
36	!LWSH-#06	2	LOCK WASHER, #06	COMPACT A2B ASSY; SWITCH
37	!FWSH-031	2	FLAT WASHER; 5/16"	CORD REEL TO PRIMARY BOOM
38	-	-	-	-
39	-	-	-	-
40	-	-	-	-

⚠ ITEMS #23-28 ARE FOR OPTIONAL COMPONENTS - NOT INCLUDED WITH STANDARD EQUIPMENT

REFERENCE #24324 FOR REPLACEMENT FASTENERS DRAWING

HHCS =HEX HEAD CAP SCREW, PHPS = PHILIPS-HEAD PAN MACHINE SCREW,
SHPMS = SLOT-HEAD PAN MACHINE SCREW, S/S = STAINLESS STEEL



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

RPLCMNT FASTENERS LIST; 27197 BOOM

HT25/30 VLC CRANES

DATE

02-08-21A

SUPERSEDES

07-10-19

SECTION

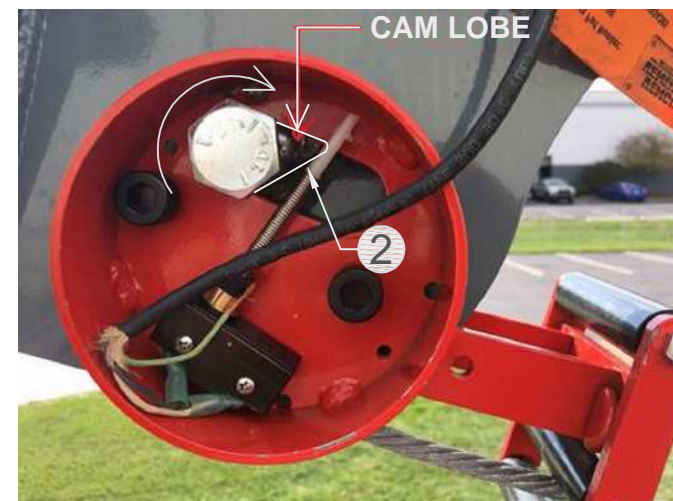
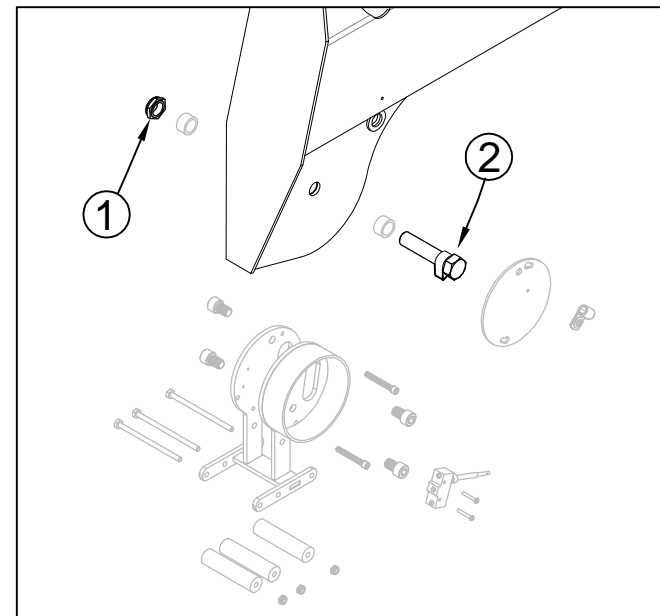
C400

24325

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.**

1. 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



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
A2B Stowage Cut-out

ET/HT Cranes w/ Comp. A2B

DATE
10-04-21B

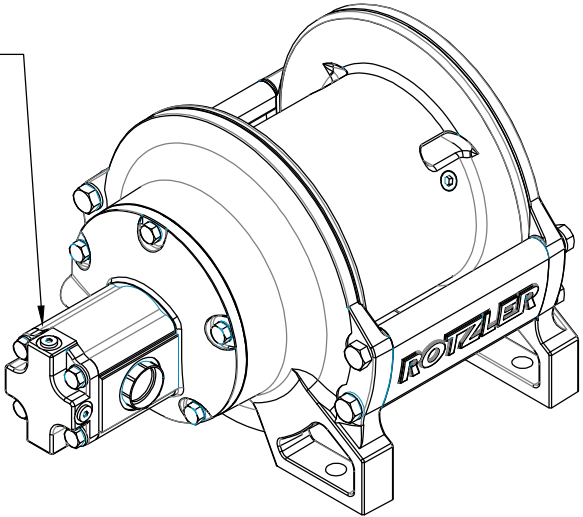
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08-03-21A

SECTION
C400

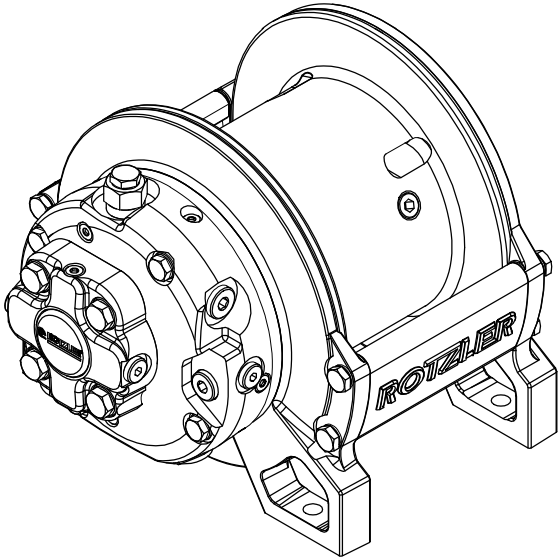
28239

REPLACEMENT PARTS DIAGRAM; 19814 WINCH

21380
HYDRAULIC MOTOR



20734
CABLE WEDGE



ROTZLER TH SERIES

ROTZLER TI SERIES

ROTZLER TH SERIES	ROTZLER TI SERIES
MOTOR P/N: 21380	CALL VENTURO TECH SUPPORT
SEAL KIT: 21381	CALL VENTURO TECH SUPPORT
MOTOR SEAL: 21382	CALL VENTURO TECH SUPPORT



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

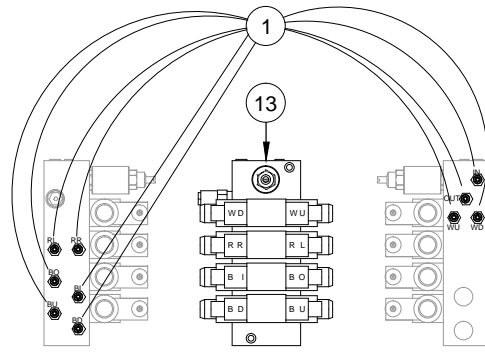
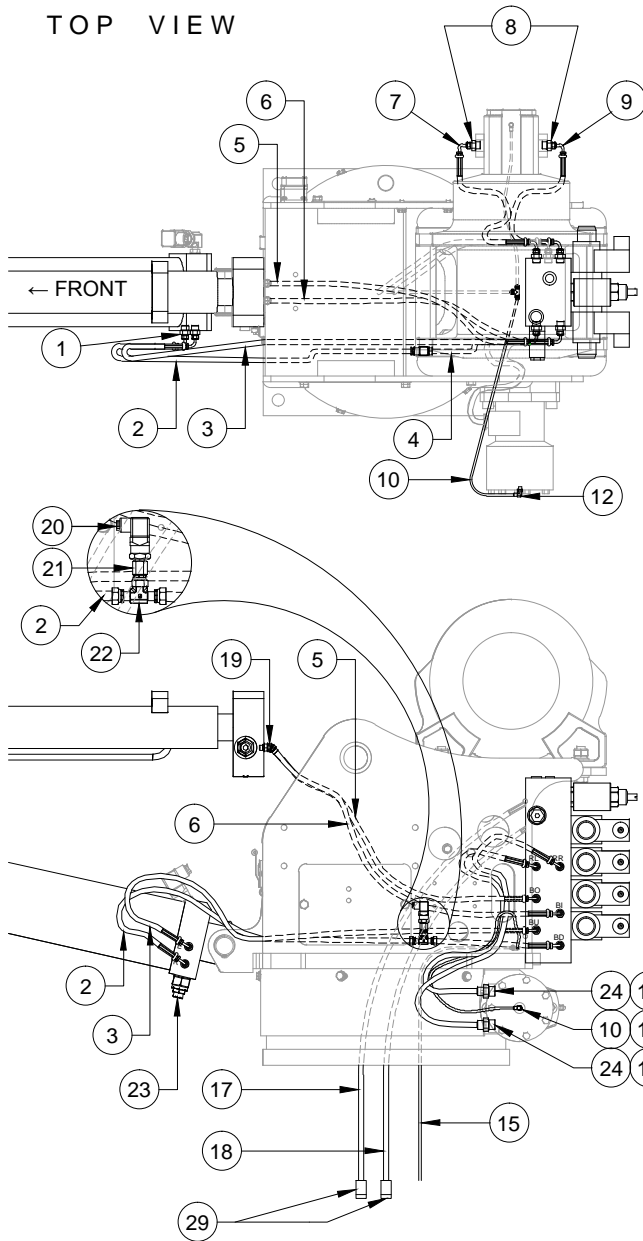
TITLE
REPLACEMENT PARTS DIAGRAM; 19814
HT25/30 SERIES CRANES

DATE
06-11-20D
SUPERSEDES
07-10-19C

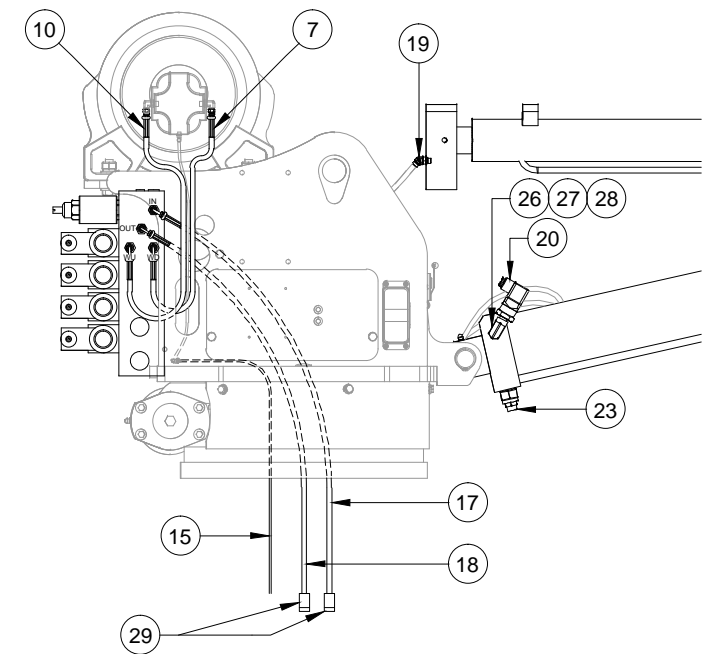
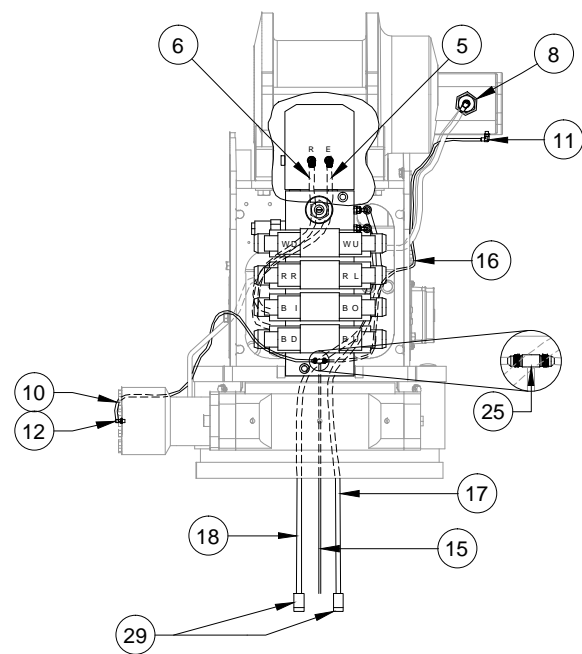
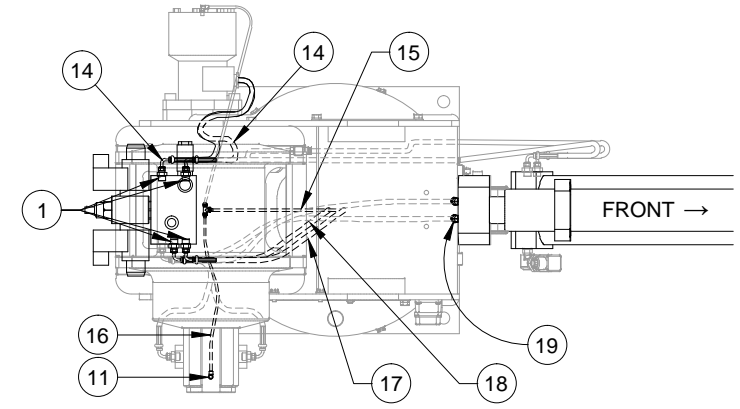
SECTION
C400
21379

REPLACEMENT PARTS DRAWING; HYDRAULIC COMPONENTS, HT25/30 VLC

TOP VIEW



TOP VIEW



REFERENCE #24327 FOR REPLACEMENT PARTS LIST

ILLUSTRATIONS ARE FOR REFERENCE ONLY



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
RPLCMNT PARTS DWG; HYD. COMPONENTS
HT25/30 VLC CRANES

DATE
09-28-20B
SUPERSEDES
09-09-20A

SECTION
C400
24326

REPLACEMENT PARTS LIST; HYDRAULIC COMPONENTS, HT25/30 VLC CRANES

ITEM	PART NO.	QTY	DESCRIPTION	INSTALLATION
1	FF6400-0606	12	FITTING; ADAPTER, STRAIGHT, 6OFS-6MO	ALL MANIFOLD & ELEV. CYL. PORTS
2	24299	1	HOSE ASSY; BOOM DOWN, CYLINDER SIDE	TRANSDUCER TO ELEVATION CYL.
3	21761	1	HOSE ASSY; BOOM UP	MANIFOLD TO ELEVATION CYLINDER
4	24298	1	HOSE ASSY; BOOM DOWN, MANIFOLD SIDE	MANIFOLD TO TRANSDUCER
5	21766	1	HOSE ASSY; BOOM OUT	MANIFOLD TO EXTENSION CYL.
6	21765	1	HOSE ASSY; BOOM IN	MANIFOLD TO EXTENSION CYL.
7	21768	1	HOSE ASSY; WINCH DOWN	MANIFOLD TO WINCH MOTOR
8	FF3801-06-08	2	FITTING; ADAPTER, 90° ELBOW, 6OFS-8MBP	WINCH MOTOR PORTS
9	21767	1	HOSE ASSY; WINCH UP	MANIFOLD TO WINCH MOTOR
10	22953	1	HOSE ASSY; CASE DRAIN, 30" LONG	ROTATION MOTOR TO T-SHAPE FITTING
11	FF3802-4-4	1	FITTING; ADAPTER, 45° ELBOW, 4MJ-4MBP	CASE DRAIN, ROTZLER TI SERIES WINCH
12	H6801-0404	1	FITTING; ADAPTER, 90° ELBOW, 4MJ-4MO	CASE DRAIN, ROTATION MOTOR
13	22501-P-175-300	1	MANIFOLD; PROPRTIONAL	REAR OF MECHNISM
14	21771	2	HOSE ASSY; ROTATE LEFT/RIGHT	MANIFOLD TO ROTATION MOTOR
15	22903	1	HOSE ASSY; CASE DRAIN, 96" LONG	T-SHAPE FITTING TO COMPARTMENT
16	22952	1	HOSE ASSY; CASE DRAIN, 13" LONG	WINCH CASE DRAIN TO T-SHAPE FITTING
17	21764	1	HOSE ASSY; PRESSURE SUPPLY	MANIFOLD TO COMPARTMENT
18	21763	1	HOSE ASSY; RETURN SUPPLY	MANIFOLD TO COMPARTMENT
19	FF6802-0606	2	FITTING; ADAPTER, 45° ELBOW, 6OFS-6MO	EXTENSION CYLINDER PORTS
20	23720-PTD	2	PRESSURE TRANSDUCER	ELEV. CYL. PORT & 24298 / 24299
21	23732	1	FITTING; REDUCER, 6FORFS-4FORB	23731 & PRESSURE TRANSDUCER
22	23731	1	FITTING; T-SHAPE, 6MORFS-6FORFS-6MORFS	24298, 24299, & 23732
23	20893	2	COUNTER-BALANCE VALVE	ELEVATION & EXTENSION CYLINDERS
24	FF6400-0610	2	FITTING; ADAPTER, STRAIGHT, 6OFS-10MO	ROTATION MOTOR PORTS
25	H2603-040404	1	FITTING; ADAPTER, T-SHAPE, 4MJ-4MJ-4MJ	22952, 22953, & 22903
26**	23733	1	FITTING; ADAPTER, 90° ELBOW, 4MORB-4FORB	ELEV. CYL. PRESSURE TRANSDUCER
27**	H5502-0404	1	FITTING; ADAPTER, 90° ELBOW, 4MNPT-4FNPT	ELEV. CYL. PRESSURE PORT
28**	H6404-0404	1	FITTING; STRAIGHT, 4MNPT-4FORB	H5502-04-04 TO PRESS. TRANSDUCER
29	20684	2	LIVE SWIVEL; CONTINUOUS, 6MJ-6FJ	RETURN AND SUPPLY HOSES

**CONFIGURATION INCLUDES EITHER ITEM NO. 26 OR ITEMS NO. 27 AND 28

REFERENCE #24326 FOR REPLACEMENT PARTS DRAWING



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT PARTS LIST

HT25/30 VLC CRANES

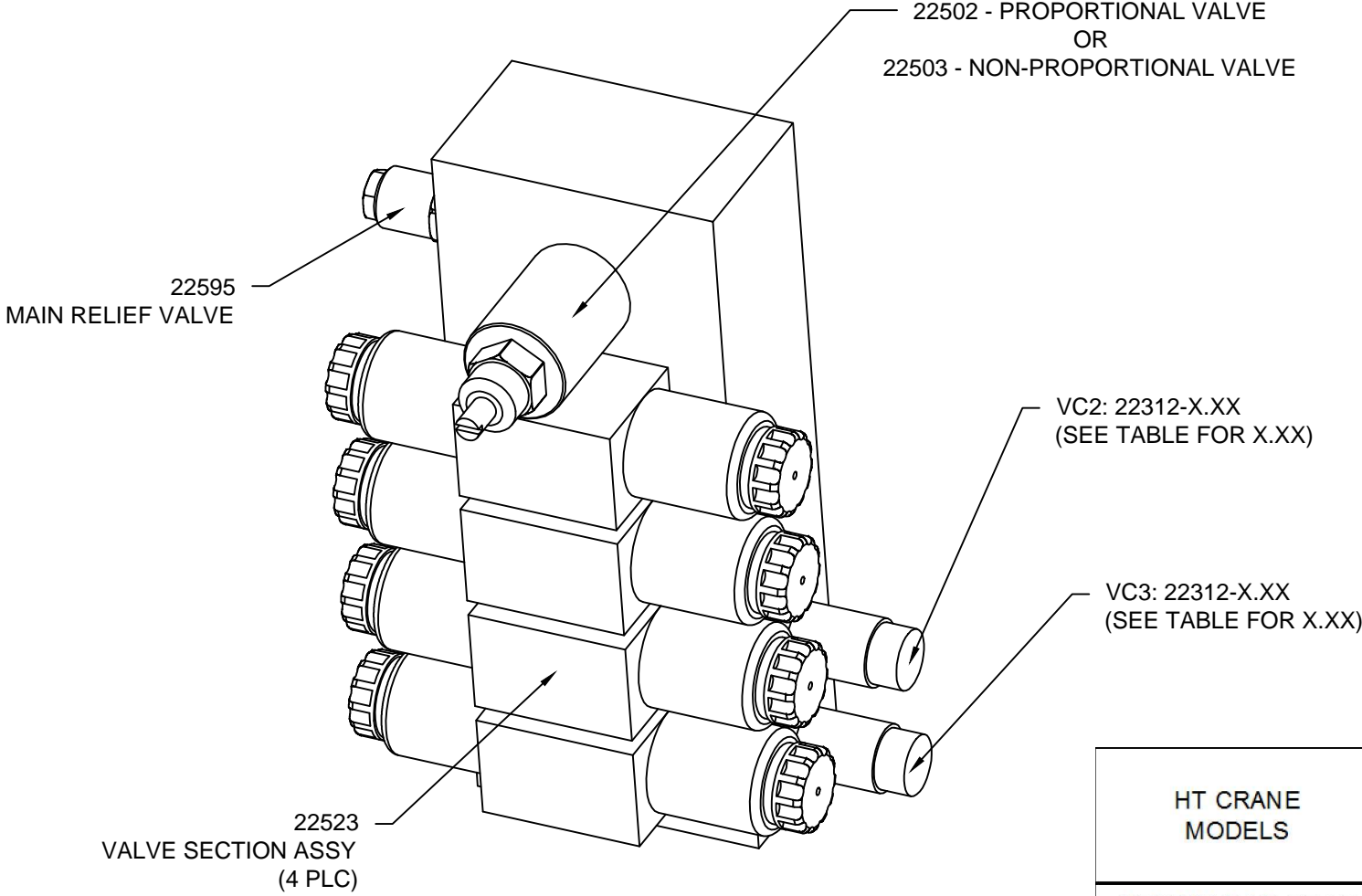
DATE
09-28-20B

SUPERSEDES
09-09-20A

SECTION
C400

24327

22501 HYDRAULIC VALVE MANIFOLD, REPLACEMENT PARTS



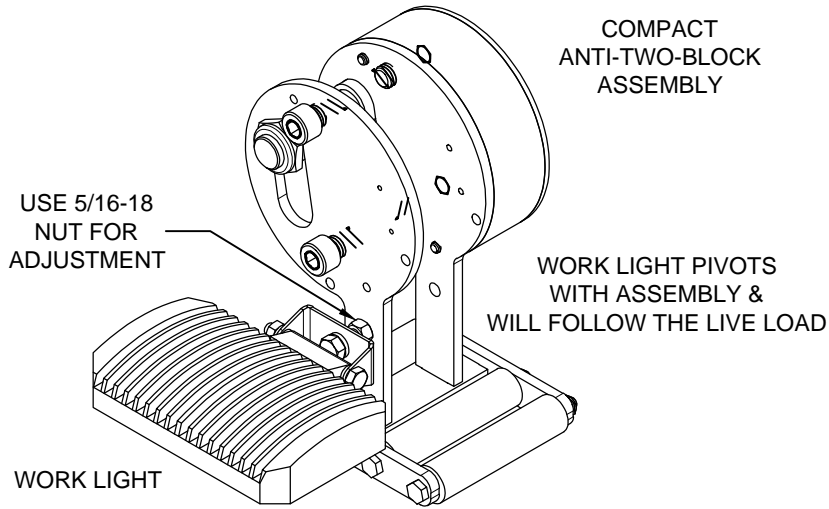
HT CRANE MODELS	PRIORITY FLOW VALVES	
	VC2	VC3
	EXTENSION	ELEVATION
HT 25/30 NON-PROP	1.00	1.75
HT 25/30 PROP	1.75	3.00
HT 40/50 NON-PROP	▲ 2.25	2.25



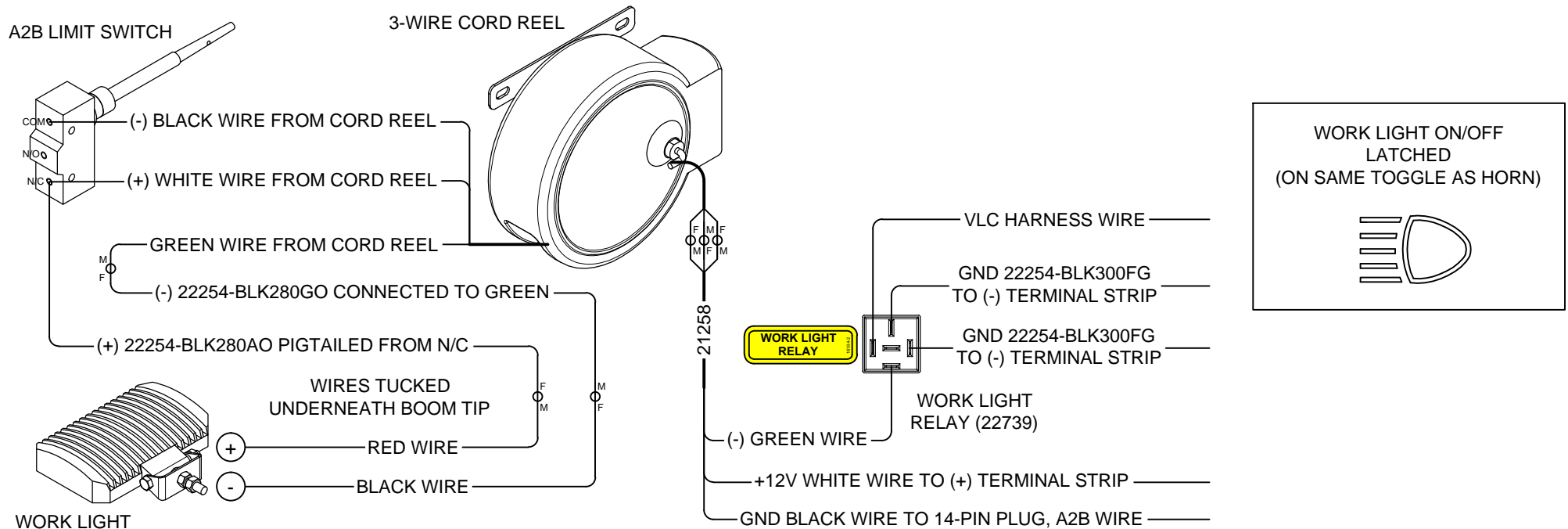
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE REPLACEMENT PARTS	DATE 10-22-15B	SECTION C400
22501 VALVE BLOCK, HT SERIES CRANES	SUPERSEDES 03-04-10A	22939

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

TITLE
WORK LIGHT INSTALLATION, 3-WIRE CORD REEL
VLC CRANES

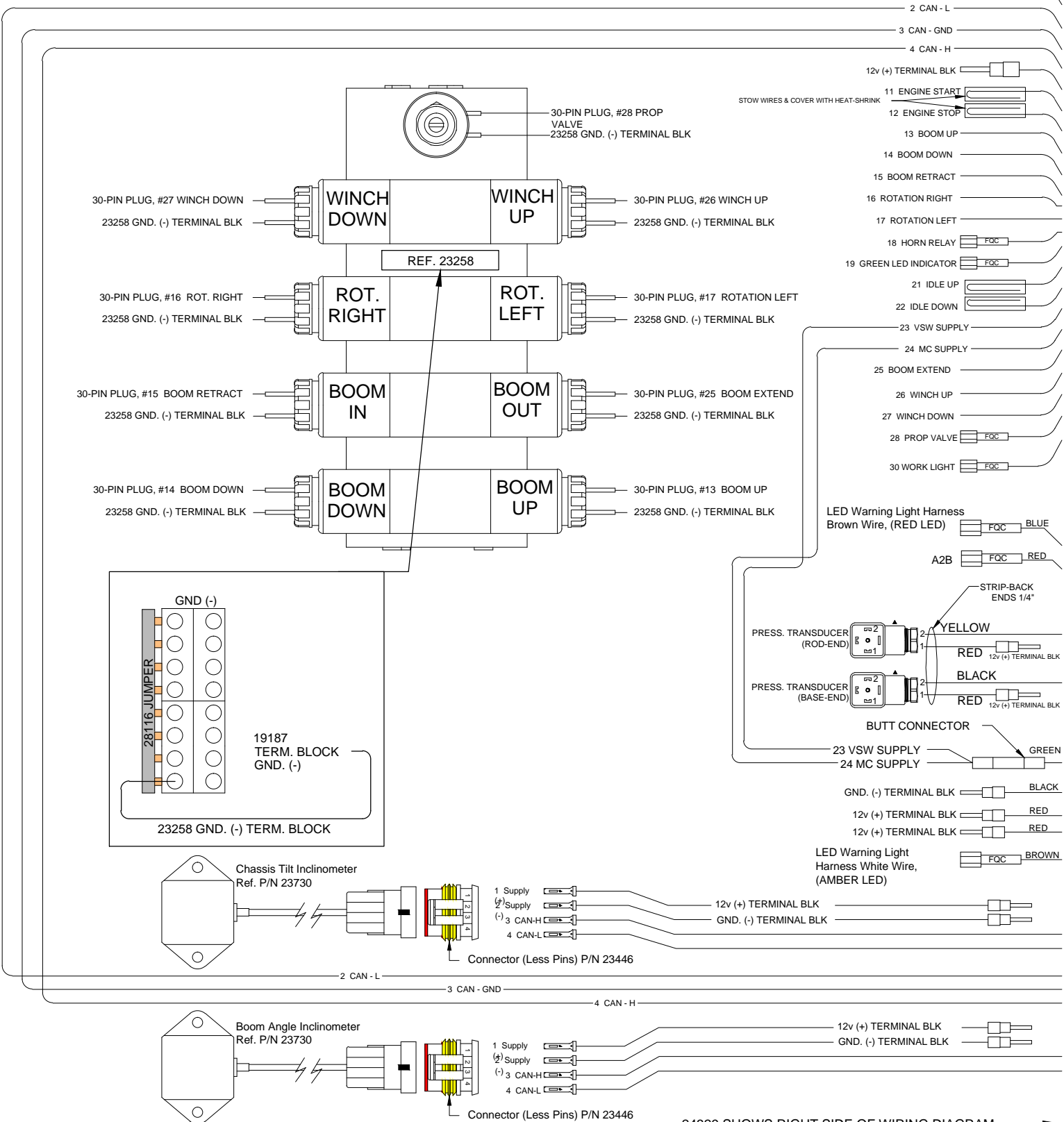
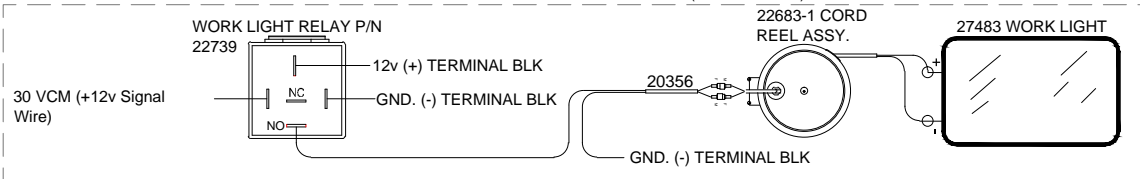
DATE
06-12-24B

SECTION
C400

SUPERSEDES
03-03-23A

28188

OPTIONAL WORK LIGHT CIRCUIT (KIT P/N 27484)



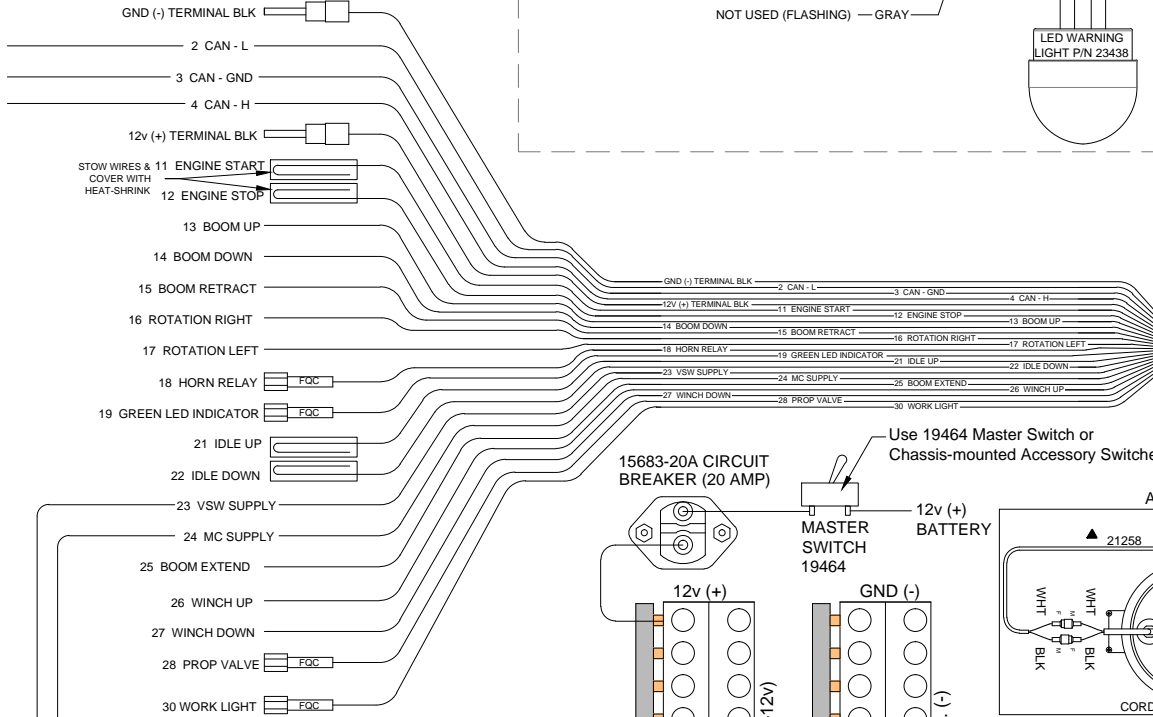
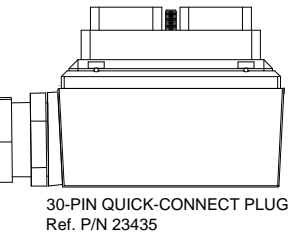
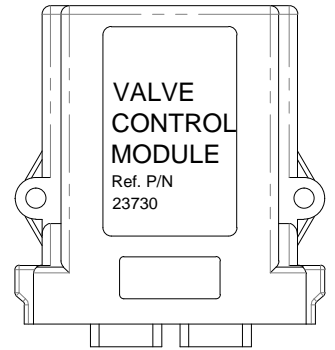
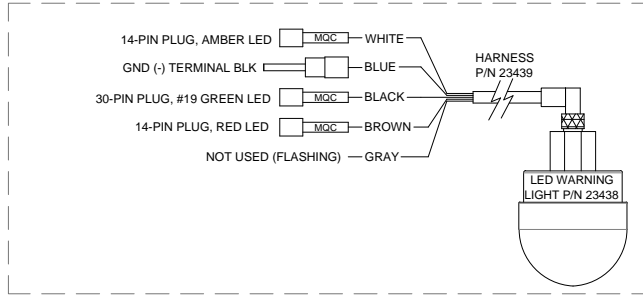
24329 SHOWS RIGHT SIDE OF WIRING DIAGRAM →



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

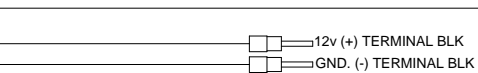
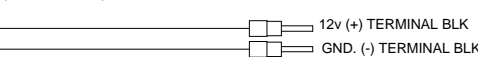
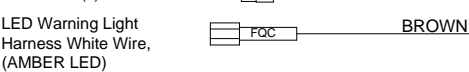
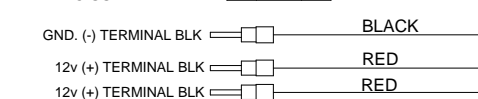
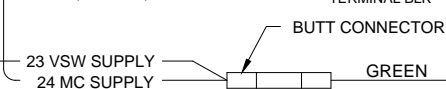
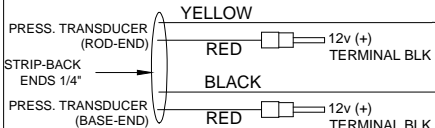
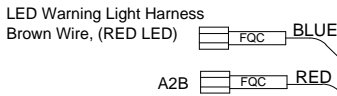
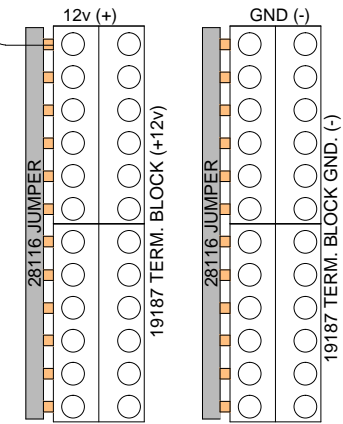
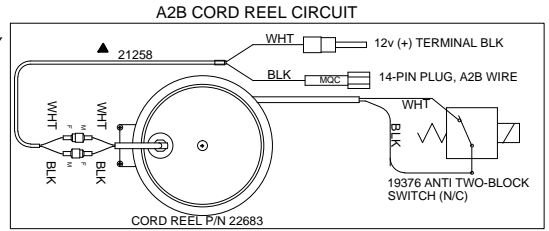
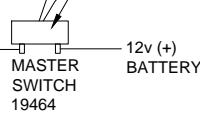
TITLE	DATE	SECTION
WIRING DIAGRAM, PG. 1	08-28-20C	C400
HT25/30 VLC SERIES	SUPERSEDES	
	08-05-20B	24328

TRI-COLOR LED WARNING LIGHT CIRCUIT (Ref. P/N 23730)

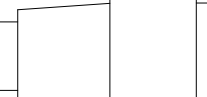


15683-20A CIRCUIT BREAKER (20 AMP)

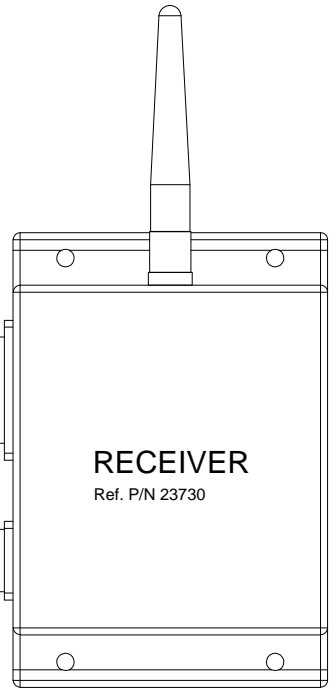
Use 19464 Master Switch or Chassis-mounted Accessory Switches



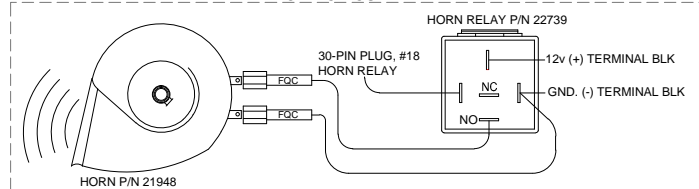
14-PIN QUICK-CONNECT PLUG (Ref. P/N 23435)



6-PIN QUICK-CONNECT PLUG (Ref. P/N 23435)



HORN CIRCUIT



24328 SHOWS LEFT SIDE OF WIRING DIAGRAM



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
WIRING DIAGRAM, PG. 2

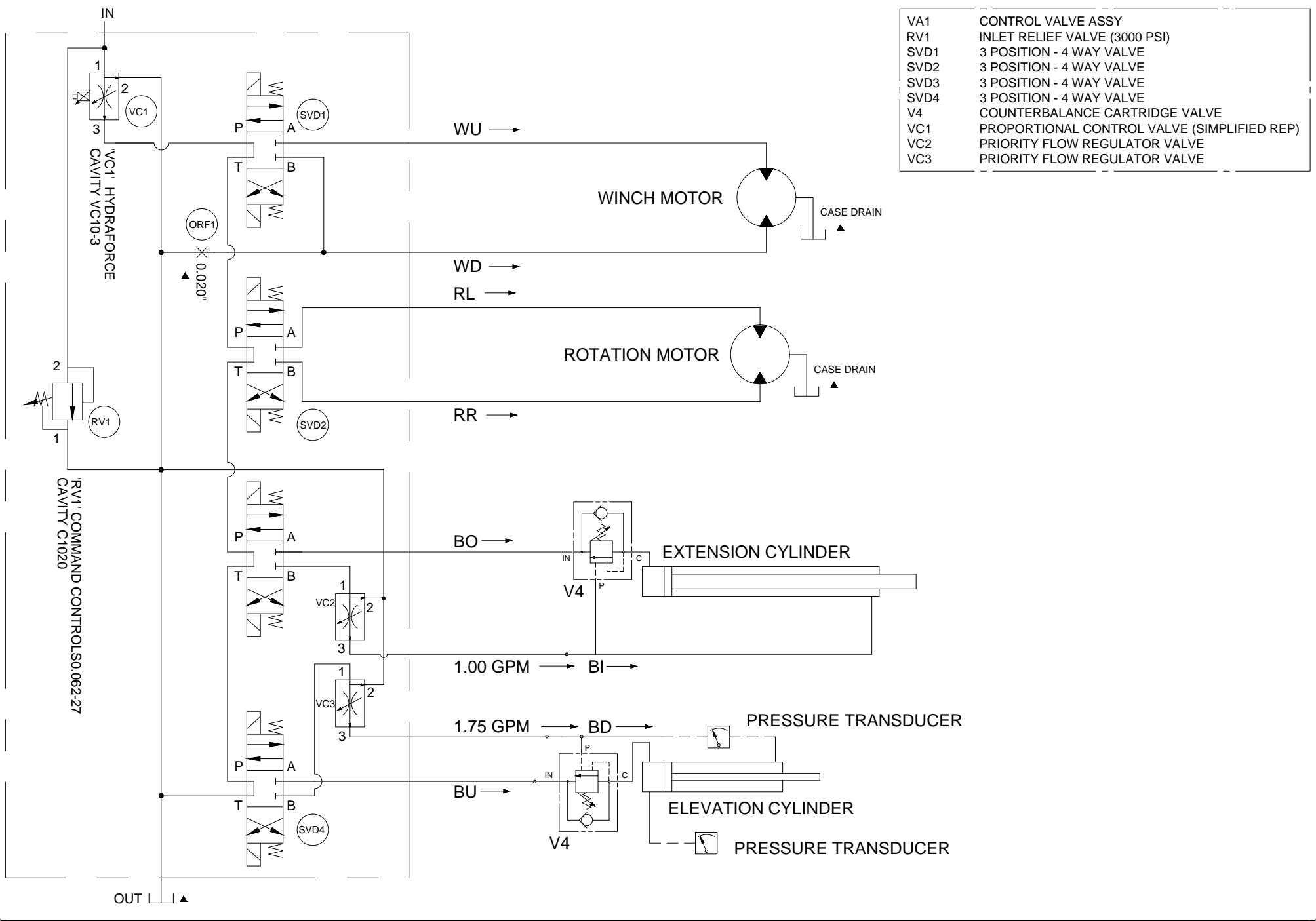
DATE
08-29-23E

SECTION
C400

HT25/30 VLC SERIES

SUPERSEDES
12-09-21D

24329

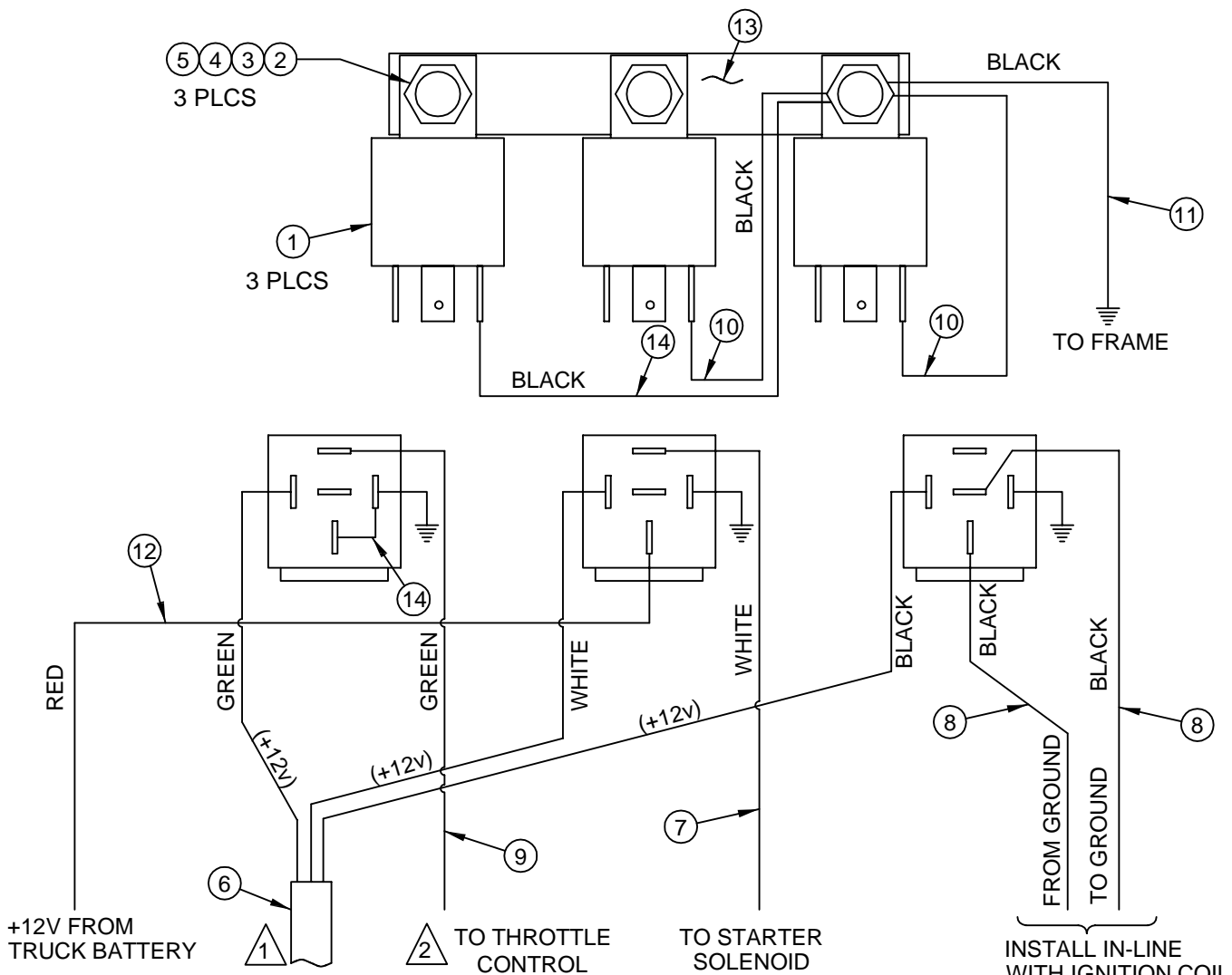


- VA1 CONTROL VALVE ASSY
- RV1 INLET RELIEF VALVE (3000 PSI)
- SVD1 3 POSITION - 4 WAY VALVE
- SVD2 3 POSITION - 4 WAY VALVE
- SVD3 3 POSITION - 4 WAY VALVE
- SVD4 3 POSITION - 4 WAY VALVE
- V4 COUNTERBALANCE CARTRIDGE VALVE
- VC1 PROPORTIONAL CONTROL VALVE (SIMPLIFIED REP)
- VC2 PRIORITY FLOW REGULATOR VALVE
- VC3 PRIORITY FLOW REGULATOR VALVE



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

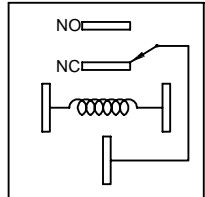
TITLE	DATE	SECTION
HYDRAULIC SYSTEM DIAGRAM	12-01-23A	C400
HT25/30 VLC SERIES	SUPERSEDES	
	07-22-19	24330



INSTALL IN-LINE WITH IGNITION COIL (GAS) OR FUEL SOLENOID (DIESEL).

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

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



RELAY SCHEMATIC

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

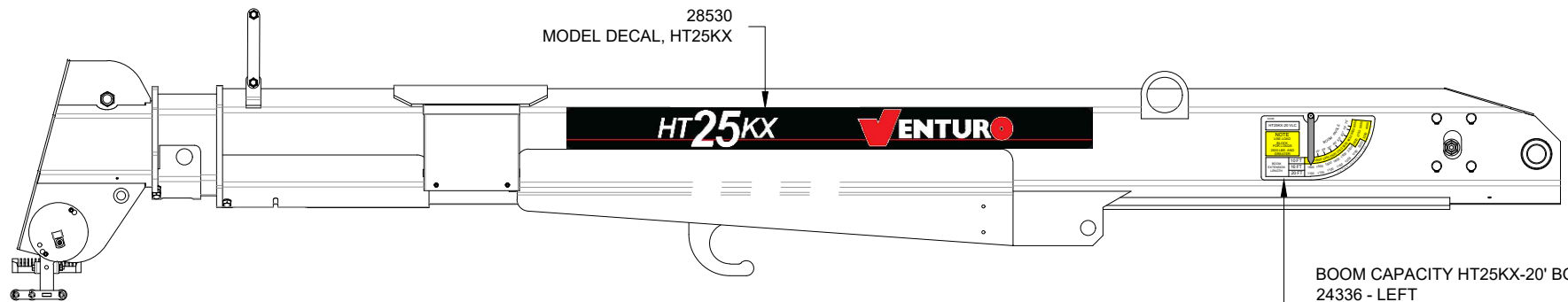


VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE ENGINE START / STOP
THROTTLE CONTROL
HT CRANES

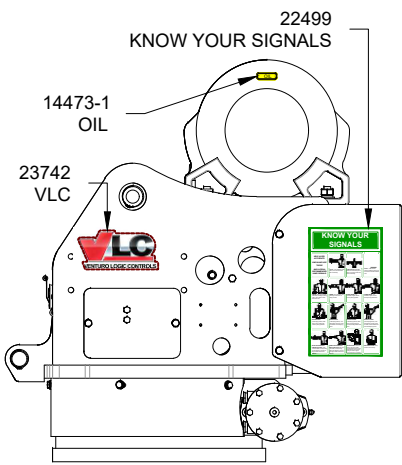
DATE 06-09-20F
SUPERSEDES 02-21-14E

SECTION C400
22615



28530
MODEL DECAL, HT25KX

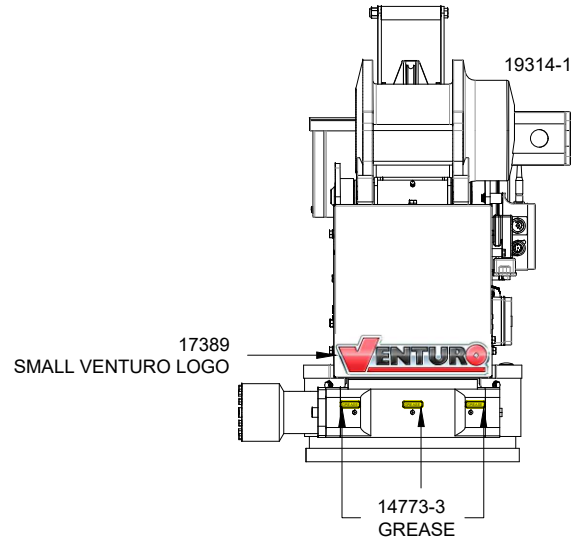
- BOOM CAPACITY HT25KX-20' BOOM
24336 - LEFT
- BOOM CAPACITY HT25KX-20' BOOM
24335 - RIGHT
- BOOM CAPACITY HT25KX-25' BOOM
24889 - LEFT
- BOOM CAPACITY HT25KX-25' BOOM
24890 - RIGHT



22499
KNOW YOUR SIGNALS

14473-1
OIL

23742
VLC



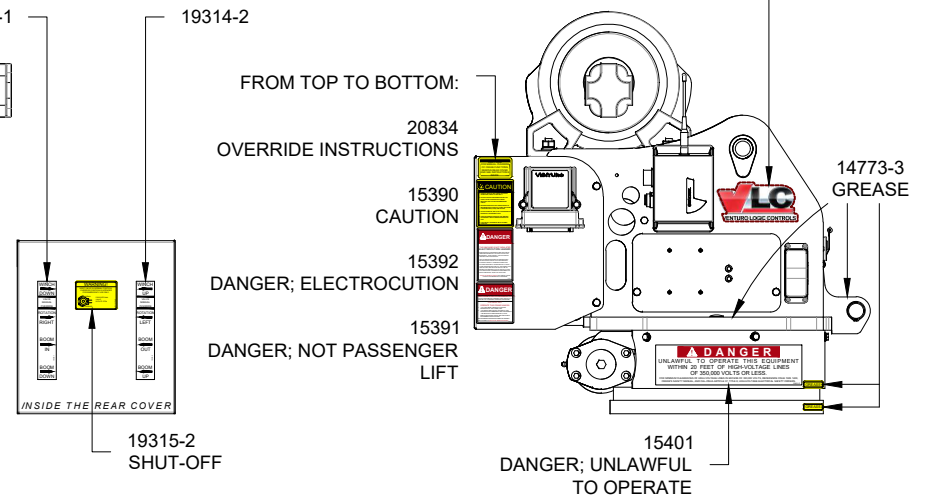
17389
SMALL VENTURO LOGO

14773-3
GREASE

19314-1

INSIDE THE REAR COVER

19315-2
SHUT-OFF



- FROM TOP TO BOTTOM:
- 20834
OVERRIDE INSTRUCTIONS
 - 15390
CAUTION
 - 15392
DANGER; ELECTROCUTION
 - 15391
DANGER; NOT PASSENGER LIFT

15401
DANGER; UNLAWFUL
TO OPERATE

23742
VLC

14773-3
GREASE

FIELD SERVICE LABEL KIT #24334



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
DECAL PLACEMENT

HT25 VLC SERIES

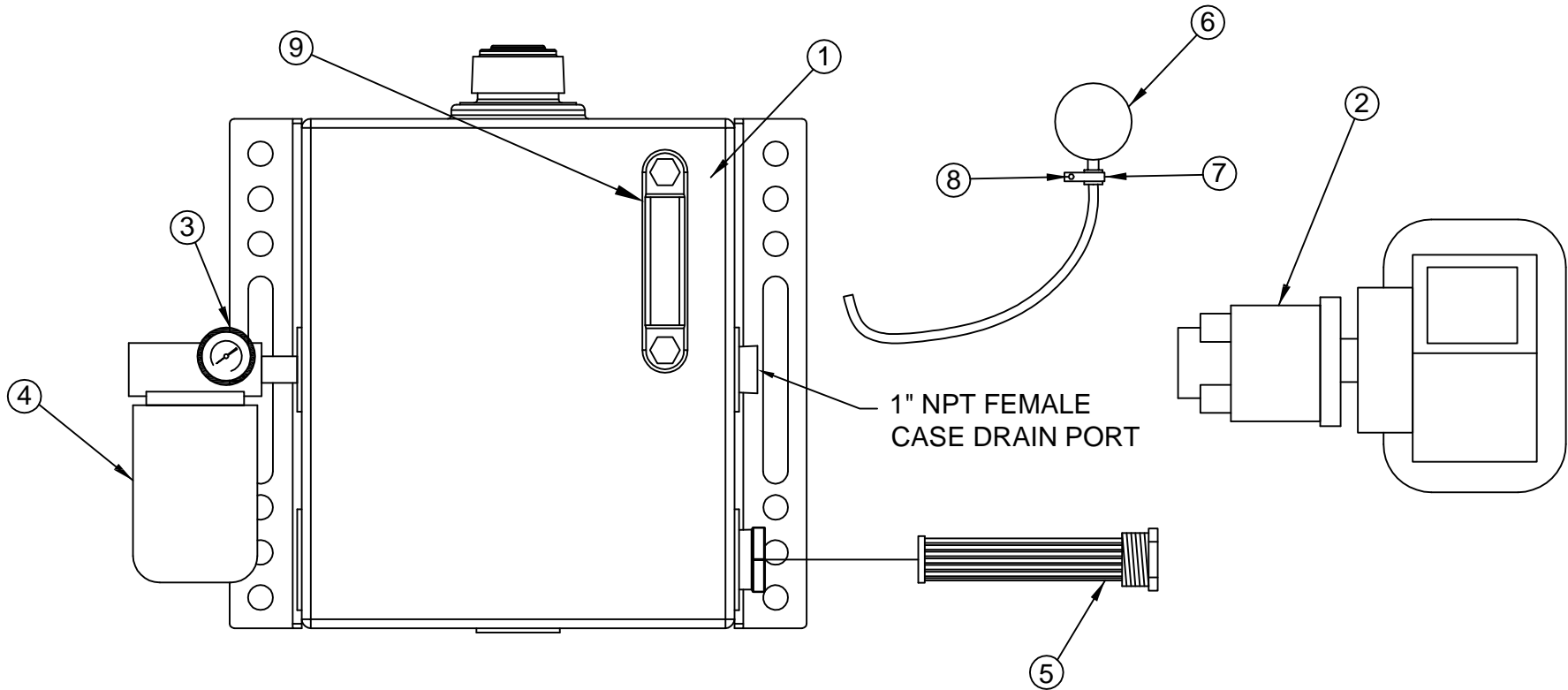
DATE
11-09-23

SUPERSEDES
-

SECTION
C400

24372

19294 PTO PACKAGES; 5.0 GPM & LOWER



PUMP	MOUNTING	RECOMMENDED GPM (RPM)
19296-1.60	SAE "A" 9 TOOTH SPLINED SHAFT	HT25/30 - STD. - 2.00 GPM (1250 RPM) ▲
19296-2.64		HT40 - STD. - 2.6 GPM (1000 RPM)
		HT50 - STD. - 3.0 GPM (1150 RPM)
19296-4.00		HT25/30 - PROP. - 4.0 GPM (1000 RPM) ▲

ITEM	QTY	PART NO.	DESCRIPTION
9	1	22184	SIGHT GLASS
8	1	!HWHS02520075-F	HEX WSHR HEAD, 1/4-20 X 3/4 SELF-TAP
7	1	19275	CLAMP
6	1	22730	PRESSURE GAUGE ASSEMBLY
5	1	19300	SUCTION SCREEN - 100 MESH
4	1	19298	FILTER ASSY, RETURN - 10 MICRON
3	1	19297	PRESSURE GAUGE - RETURN
2	1	SEE CHART	PTO PUMP - HT18/25/40/50KX
1	1	19295	RESERVOIR TANK - 10 GALLON



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

REPLACEMENT PARTS DIAGRAM

PTO KIT; HT CRANES (LOW FLOW)

DATE

08-04-15E

SUPERSEDES

05-01-15D

SECTION

C400

22744

24334 FIELD SERVICE LABEL KIT; HT25 VLC SERIES

-20 BOOM	-25 BOOM		
QTY	QTY	PART #	DESCRIPTION
9	9	14473-3	DECAL; GREASE
1	1	19314-1	DECAL; MANUAL OVERRIDE, VALVE BLOCK, LEFT
1	1	19314-2	DECAL; MANUAL OVERRIDE, VALVE BLOCK, RIGHT
2	2	28530	MODEL DECAL, HT25
1	-	24335	DECAL; BOOM CAPACITY, 10-16-20, RIGHT
1	-	24336	DECAL; BOOM CAPACITY, 10-16-20, LEFT
-	1	24889	DECAL; BOOM CAPACITY, 12-18.5-25, RIGHT
-	1	24890	DECAL; BOOM CAPACITY, 12-18.5-25, LEFT
2	2	23742	DECAL; VLC
1	1	19315-2	DECAL; PROPORTIONAL VALVE OVERRIDE
1	1	22499	DECAL; KNOW YOUR SIGNALS
1	1	20834	DECAL; MANUAL OVERRIDE INSTRUCTIONS
1	1	14473-1	DECAL; OIL (WINCH SERVICING)
1	1	17389-4	DECAL; VENTURO LOGO, SMALL
1	1	16184-1	DECAL; HORN RELAY
1	1	16184-2	DECAL; WORK LIGHT RELAY
1	1	24375	IDWG; FIELD SERVICE LABEL KIT
1	1	24372	IDWG; DECAL PLACEMENT
1	1	INST-23233	SAFETY MANUAL, VENTURO CRANES
1	1	15397	KIT; ACCIDENT PREVENTION SIGNS



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
FIELD SERVICE LABEL KIT

DATE
11-09-23

SECTION
C400

HT25 VLC SERIES

SUPERSEDES
-

24375



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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