

PARTS & INSTALLATION MANUAL

HT50-30'-85°

Included in this manual:

HT50-30'-85°

- 8,000 lbs Hydraulic Telescopic Service Crane
- 30 ft Hydraulic Powered, Two-Stage, Boom Extension
- 85° Boom Top-Angle
- Proportional Control
- No Cam Anti-Two Block Shut-Off

HT50KX-30'-85 (HSBACD-1)

INST-28390 - 5/20/2024 (Rev: NEW3)

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SECTION 100

DESCRIPTION

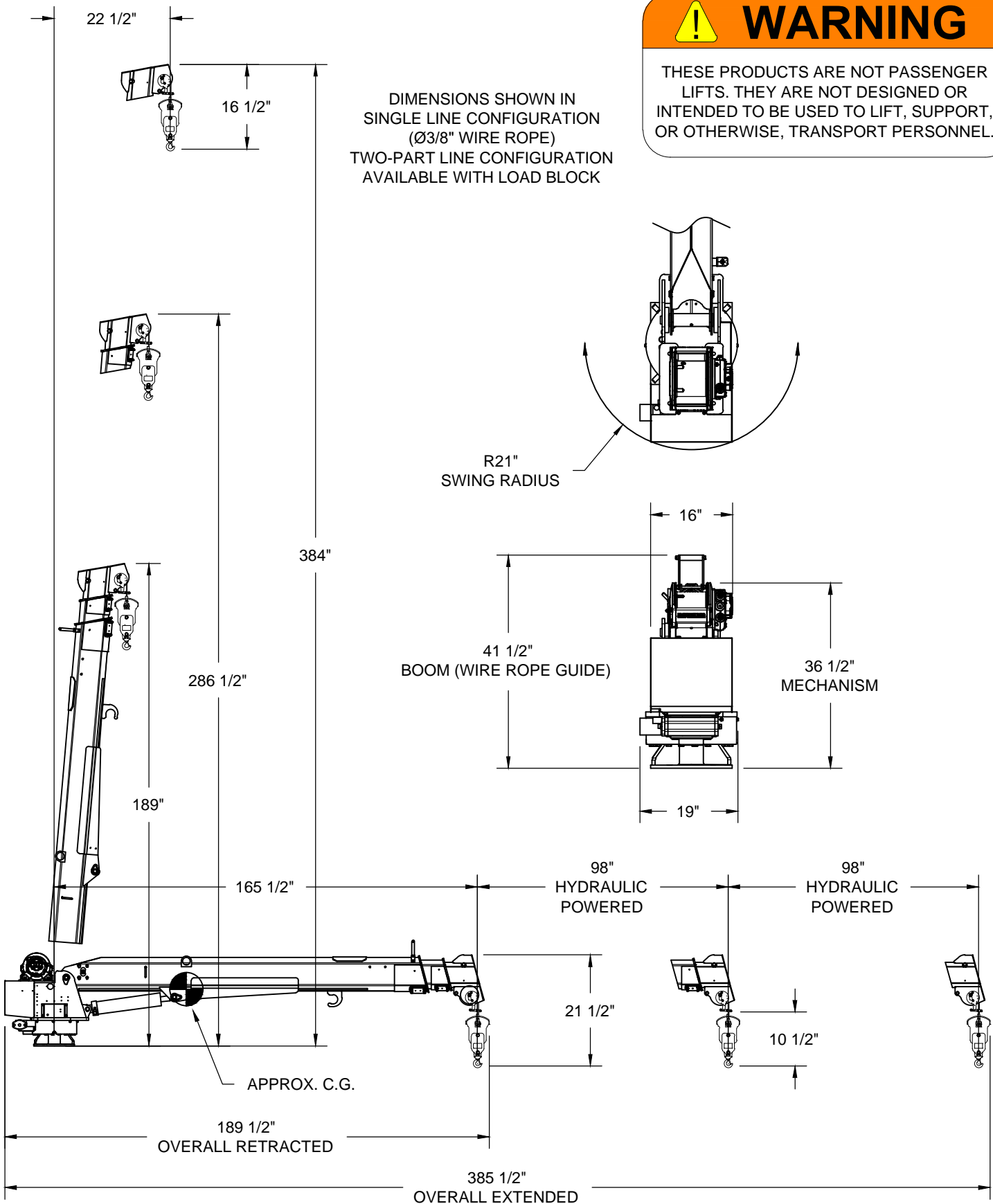
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SPECIFICATIONS



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

INSTALLATION DIMENSIONS - HT50-30'-85°



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
INSTALL DIMENSIONS

DATE
05-26-21

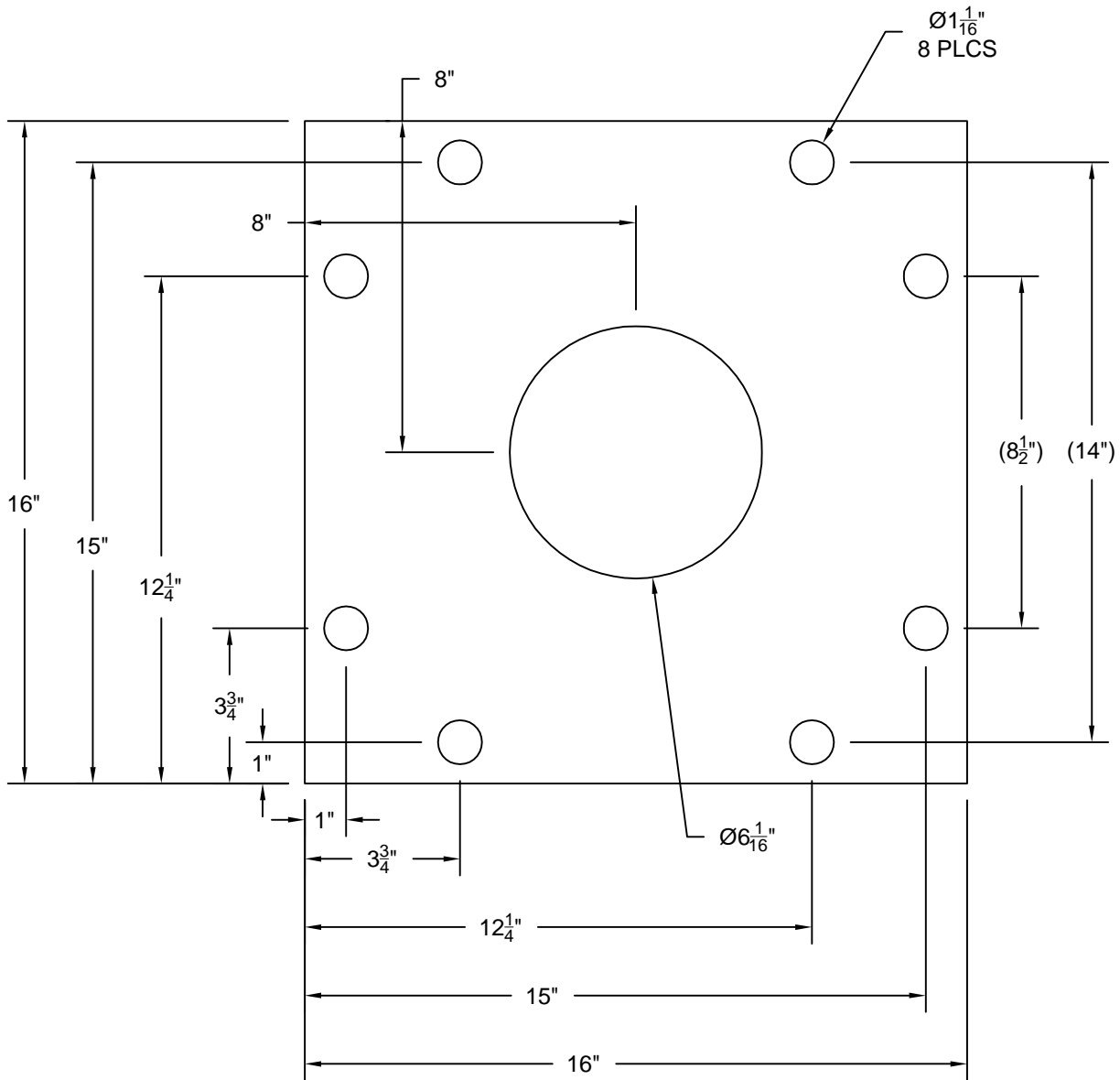
SECTION
C100

HT50-30'-85°

SUPERSEDES
-

28391

BASE MOUNTING DIMENSIONS - HT55 SERIES



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



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	BASE MNTNG DIMENSIONS
	HT55KX SERIES CRANES

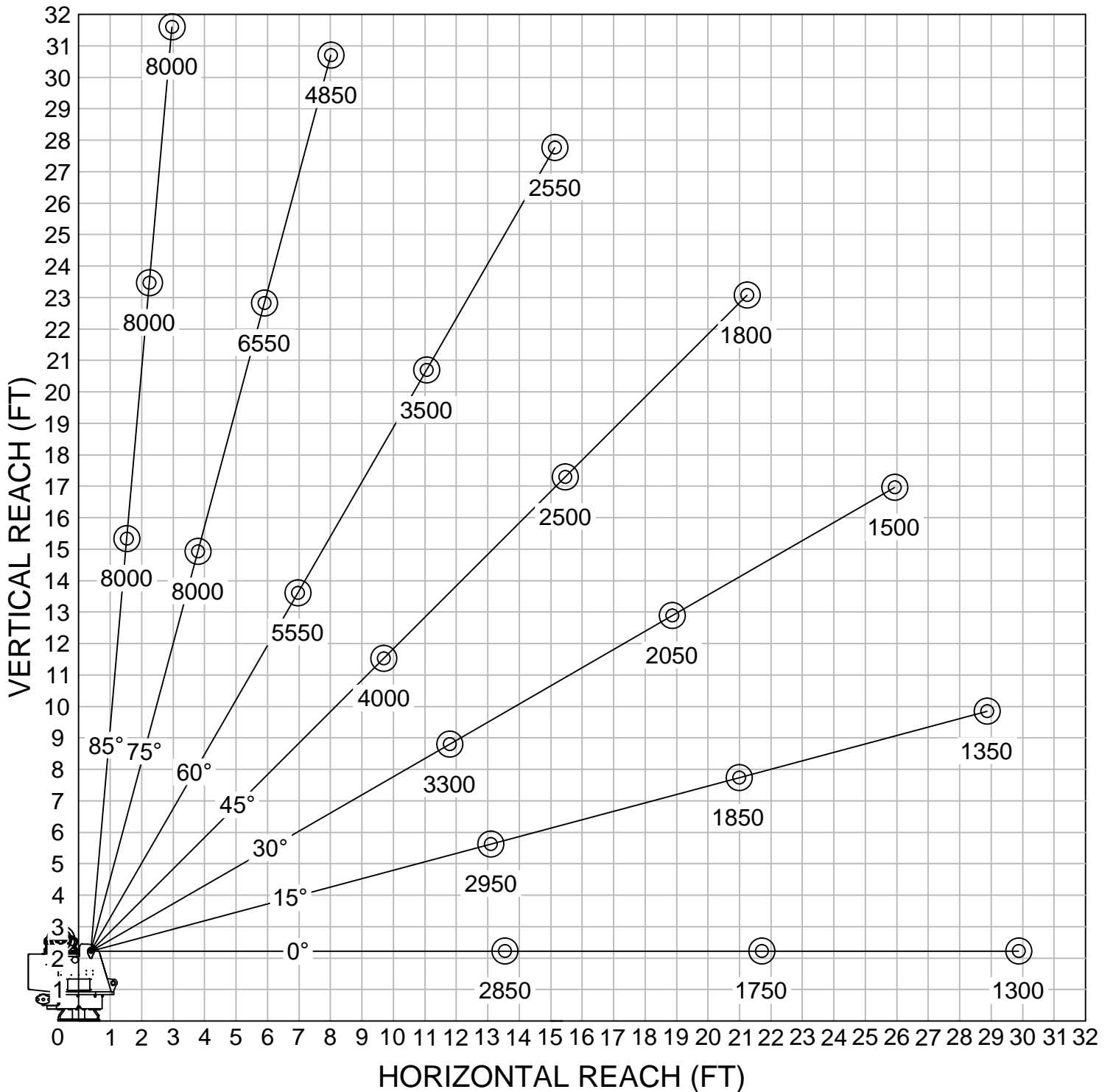
DATE	03-19-19
SUPERSEDES	-

SECTION	C100
	23852

HT50KX, 13'-22'-30' BOOM, 85° TOP-ANGLE

CRANE SERIAL NUMBER: _____

MAXIMUM LOAD CAPACITY CHART (LBS)



LOAD BLOCK USAGE

1-PART LINE FOR LOADS LESS THAN 4000 LBS

2-PART LINE FOR LOADS OF 4000 LBS AND GREATER

WEIGHT OF LOAD BLOCK = 51 LBS

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



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CINCINNATI, OHIO

TITLE

LOAD CAPACITY CHART

DATE

05-14-21

SECTION

C100

SUPERSEDES

-

HT50-30'-85° (HSBACD-1)

24182

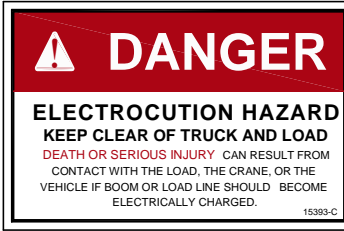
SECTION 150

SAFETY

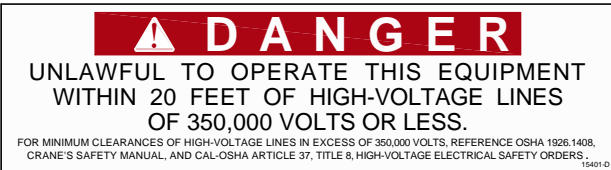


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VEHICLE & CRANE MOUNTED ELECTRICAL HAZARD SIGN APPLICATION & INFORMATION



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



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

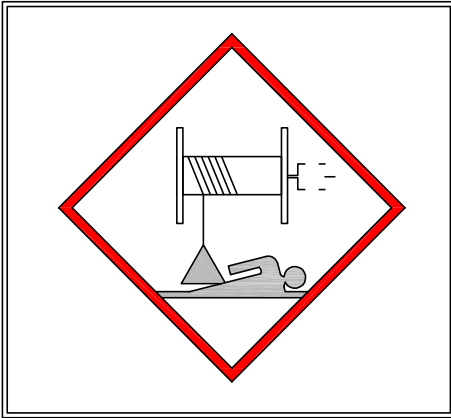
- THIS MACHINE IS NOT INSULATED.
- MAINTAIN SAFE CLEARANCES FROM ELECTRICAL LINES AND APPARATUS.
- YOU MUST ALLOW FOR BOOM SWAY, ROCK OR SAG, AND ELECTRICAL LINE AND LOADLINE SWAYING.
- THIS LIFTING DEVICE DOES NOT PROVIDE PROTECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR.
- 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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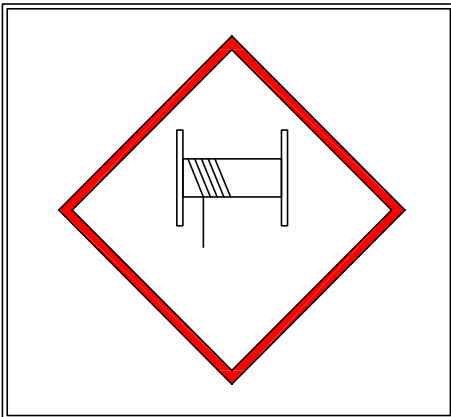
TITLE	DATE	SECTION
CRANE SAFETY & HZRDS	02-21-14D	C150
HYDRAULIC CRANES	SUPERSEDES 04-04-12C	920612

WINCH SAFETY WARNINGS



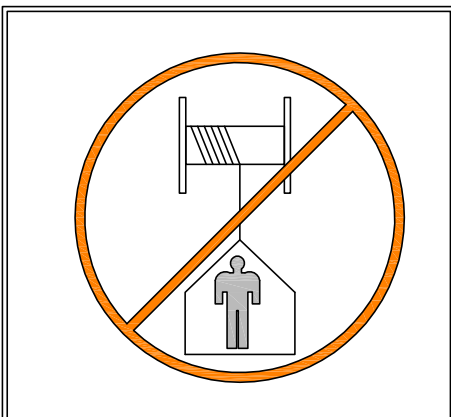
DANGER

- 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



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TITLE
WINCH SAFETY
HT CRANES

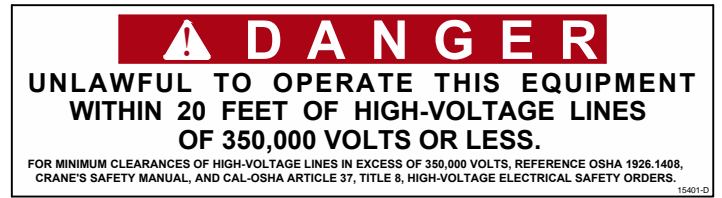
DATE
02-21-14D
SUPERSEDES
04-04-12C

SECTION
C150
19217

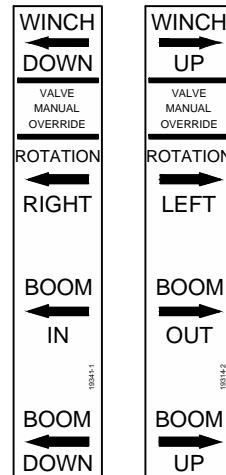
PART NO.: 15398
 DECAL: UNPLUG REMOTE CONTROL
 FUNCTION: To inform the operator to unplug remote control when not being used.
 QUANTITY: 1
 PLACEMENT: Right side of housing.



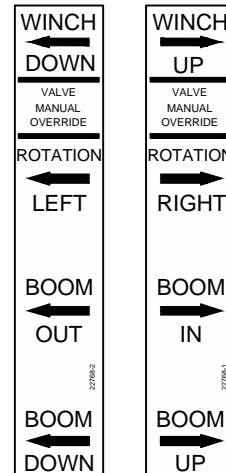
PART NO.: 15401
 DECAL: UNLAWFUL TO OPERATE
 FUNCTION: To inform the operator of proper operation in vicinity of power lines.
 QUANTITY: 1
 PLACEMENT: Right side of housing.



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.



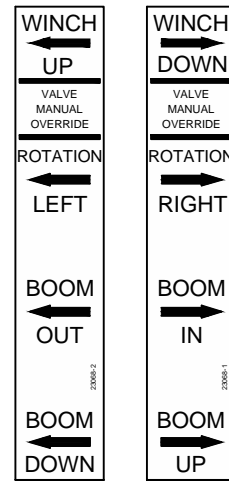
PART NO.: 22768-1 [LEFT] & -2 [RIGHT]
 DECAL: MANUAL OVERRIDE (PROPORTIONAL)
 FUNCTION: To inform the operator of manual override locations.
 QUANTITY: 1
 PLACEMENT: Inside of rear cover.



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TITLE	DATE	SECTION
DECAL DRAWING & LIST	11-30-22E	C150
HT40/50/60/66 SERIES	SUPERSEDES 02-21-14D	22181A

▲
 PART NO.: 23068-1 [LEFT] & -2 [RIGHT]
 DECAL: MANUAL OVERRIDE
 (HT66KXX w/ TH-2 Winch ONLY)
 FUNCTION: To inform the operator of
 manual override locations.
 QUANTITY: 1
 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: 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

19315-1 Rev B

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.

PROPORTIONAL VALVE
 ROTATE STEM

19315-2 Rev B

PART NO.: 20834
 DECAL: MANUAL OVERRIDE NOTICE
 FUNCTION: To inform the operator of
 manual override locations.
 QUANTITY: 1
 PLACEMENT: Inside rear cover.

NOTICE

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

20834-B

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.



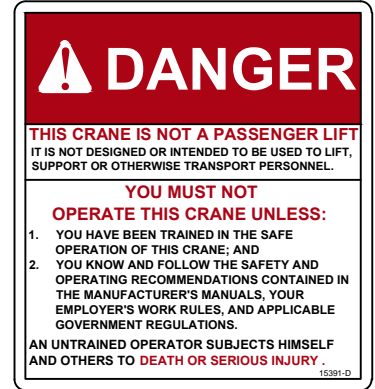
PART NO.: 15391

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.



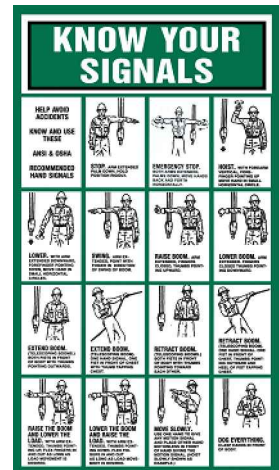
PART NO.: 22499

DECAL: KNOW YOUR SIGNALS

FUNCTION: To inform the operator of proper signals.

QUANTITY: 1

PLACEMENT: Right side of rear cover.



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TITLE
DECAL DRAWING & LIST

HT40/50/60/66 SERIES

DATE
11-30-22F

SUPERSEDES
02-21-14E

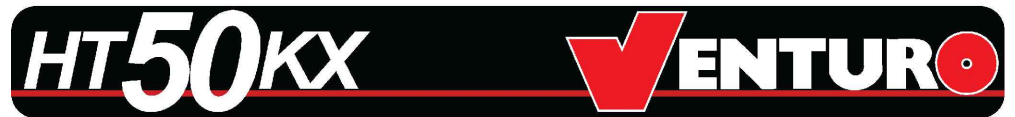
SECTION
C150

22181C

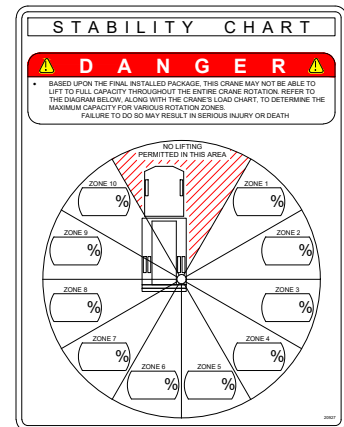
PART NO.: 17389
 DECAL: MEDIUM VENTURO
 FUNCTION: Branding.
 QUANTITY: 1
 PLACEMENT: Rear cover.



PART NO.: 28520
 DECAL: MODEL HT50KX
 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.



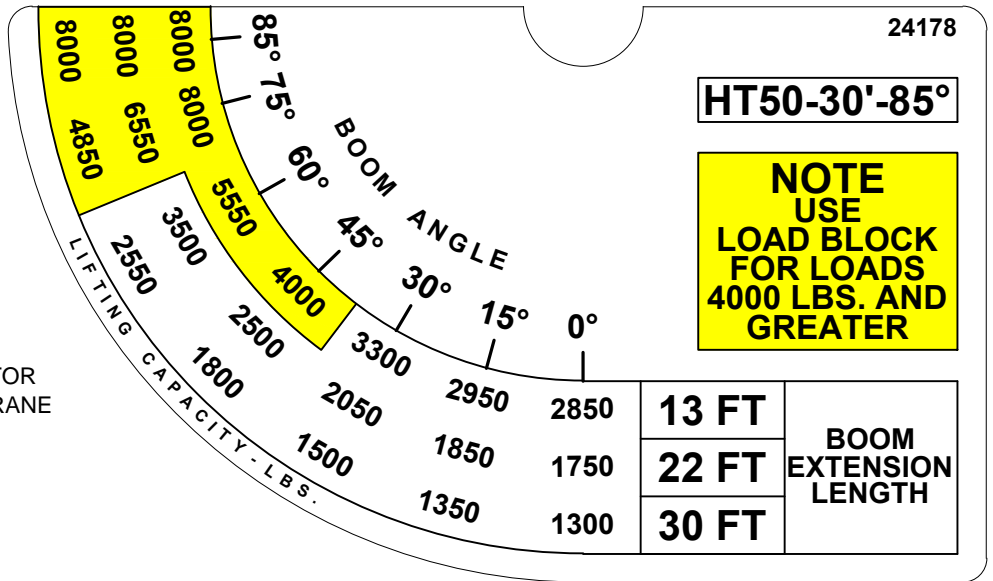
VENCO VENTURO INDUSTRIES LLC
 CINCINNATI, OHIO

TITLE
DECAL DRAWING & LIST
 HT50KX

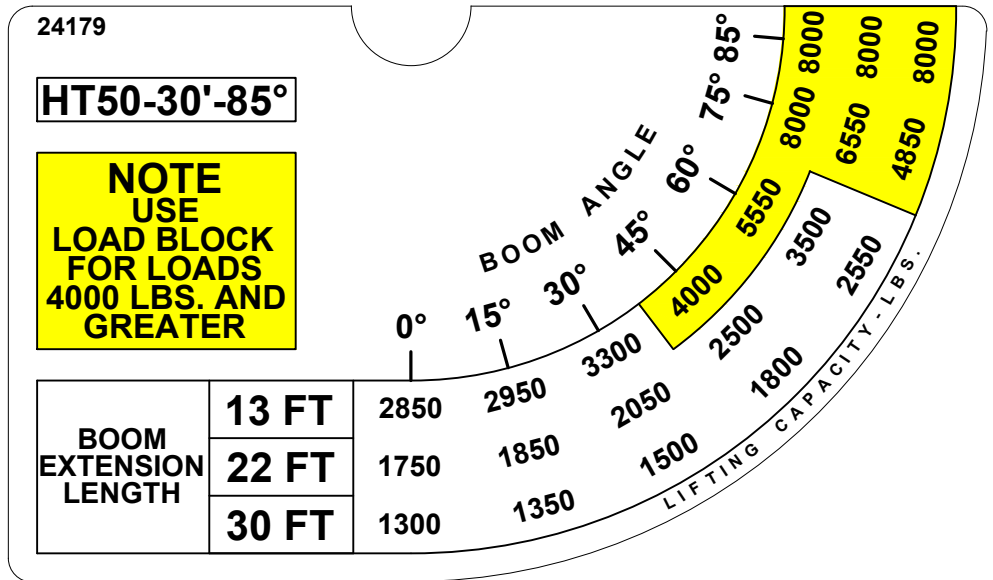
DATE
 06-16-23
 SUPERSEDES
 -

SECTION
 C150
28521

PART NUMBER: 24178
 DECAL: HT50-30'-85° CAPACITY
 FUNCTION: TO SHOW THE OPERATOR CAPACITIES OF THE CRANE
 QUANTITY: 1
 PLACEMENT: RIGHT SIDE OF BOOM



PART NUMBER: 24179
 DECAL: HT50-30'-85° CAPACITY
 FUNCTION: TO SHOW THE OPERATOR CAPACITIES OF THE CRANE
 QUANTITY: 1
 PLACEMENT: LEFT SIDE OF BOOM



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TITLE
BOOM CAPACITY DECALS
 HT50-30'-85°

DATE
 05-26-21
 SUPERSEDES
 -

SECTION
 C150
 28392

SECTION 200

INSTALLATION



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

CRANE INSTALLATION, PAGE 1

HT55-30' 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 HT55-30' VLC is 8,500 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.



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.



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TITLE

CRANE INSTALLATION

DATE

06-24-20

SECTION

C200

HT55-30' VLC SERIES

SUPERSEDES

-

24176

CRANE INSTALLATION, PAGE 2

HT45/55 VLC SERIES CRANES

▲ ELECTRICAL CONNECTIONS

An 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 electrical power lead. For added protection, the electrical power lead can be connected to a 20 amp protected circuit that, if possible, is powered only when the vehicle engine is running.

HYDRAULIC FLUID

<u>Average Climate</u>	<u>Type of Oil</u>
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 and pump should be sized to deliver approximately 12.0 GPM at 3000 psi for the HT45/55 VLC series cranes.

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.



VENCO VENTURO INDUSTRIES LLC
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TITLE
CRANE INSTALLATION
HT45/55 VLC SERIES

DATE
08-08-23C
SUPERSEDES
05-10-21B

SECTION
C200

23752

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.



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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

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 <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.

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.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
CRANE OP / MNTNC INST	02-22-23D	C200
HT40/50 VLC SERIES	SUPERSEDES 06-01-20C	23754

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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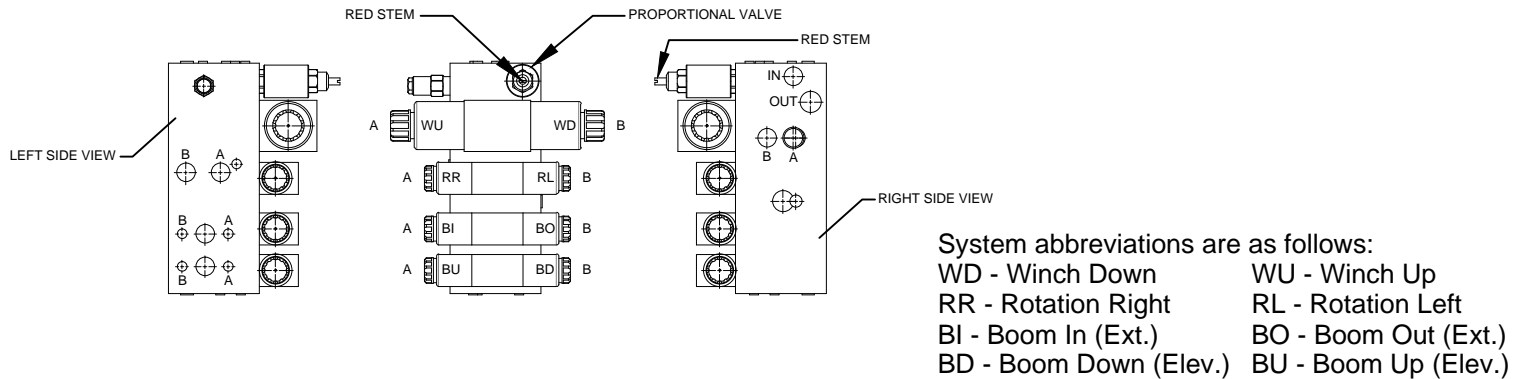
TITLE	DATE	SECTION
CRANE OP / MNTNC INST	10-11-18	C200
HT40/50 VLC SERIES	SUPERSEDES	23755
	-	

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

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.



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



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 on activating the red E-STOP button on the transmitter.



VENCO VENTURO INDUSTRIES LLC
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TITLE
HYDRAULIC SYSTEM

DATE
11-10-22E

SECTION
C200

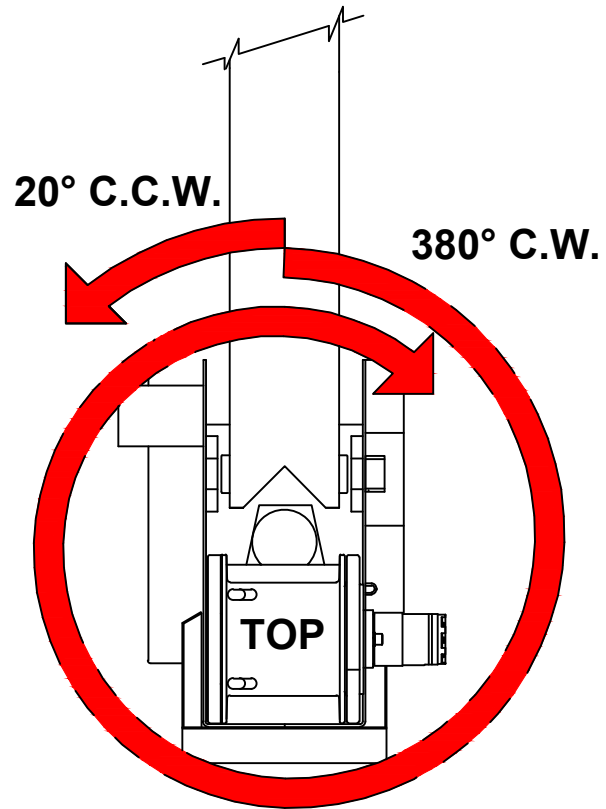
HT40/50/60/66KX; PROP

SUPERSEDES
02-21-14D

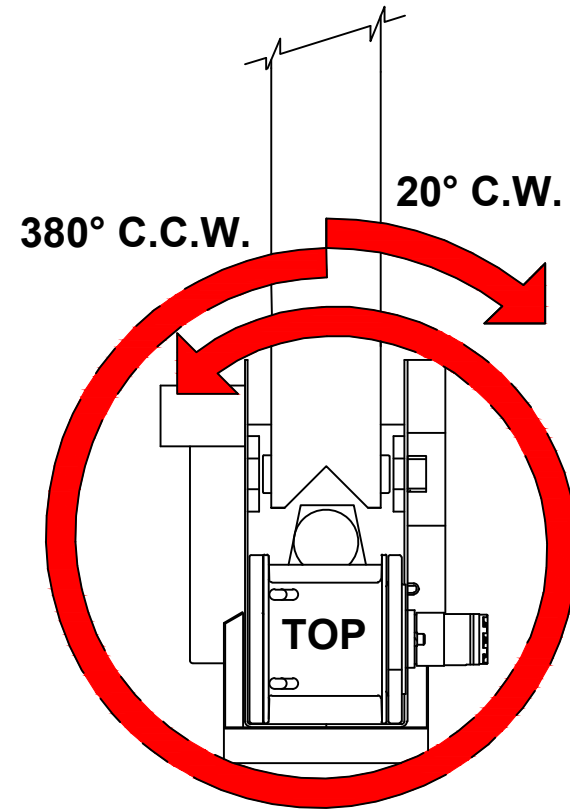
22168

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 - HT50-30'-85°

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 **1530 lbs**, (includes load block weight of **51 lbs.**) to a **maximum of 1920 lbs**.
6. Position the boom level and fully retracted.
7. 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.
8. 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. Extend the boom slowly, until one of two conditions occur: **1)** the boom reaches full extension or **2)** the vehicle begins to be unstable, **whichever occurs first**. Note: If the boom reaches full extension (without an overload or unstable condition) the % of Rated Capacity is 100% for the given ZONE.
10. Use the formula below to determine the **% of Rated Capacity** for each ZONE on the Stability Chart (ref. page 20907).
11. Note: The "**Max Stable Reach in inches**" is measured from the **center of rotation** of the crane housing to the **lifting load hook**.

$$\% \text{ Rated Capacity} = \frac{\text{"Max Stable Reach" in inches}}{360} \times 100$$

Example 1) Max Stable Reach = 360 (inches, full extension) ÷ 360 x 100 = **100** or 100% of Rated Capacity for the given ZONE

Example 2) Max Stable Reach = 291 (inches) ÷ 360 x 100 = 80% (rounded down) of Rated Capacity for the given ZONE

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.



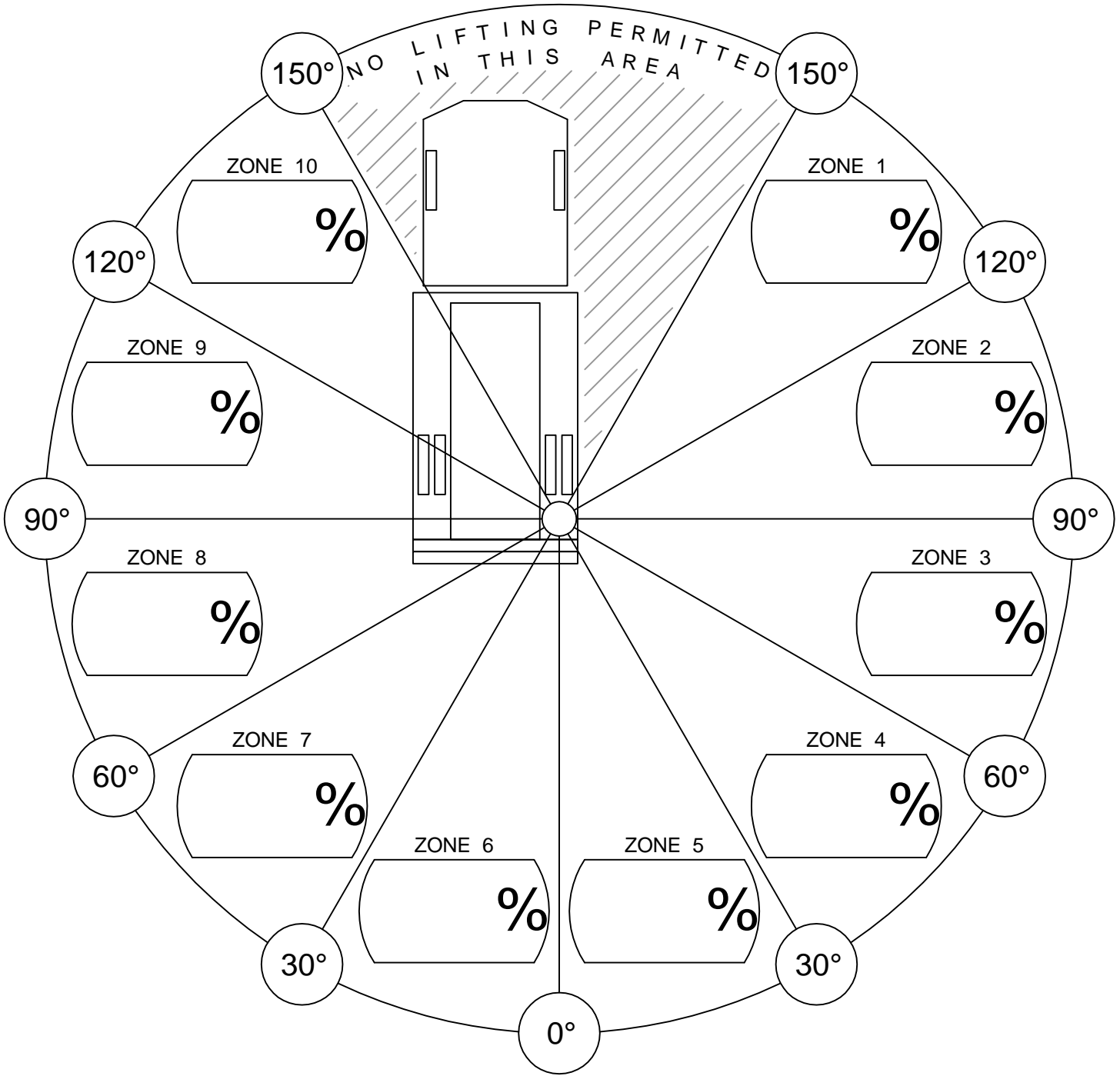
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
STABILITY TEST
HT50-30'-85°

DATE
05-26-21
SUPERSEDES
-

SECTION
C200
20906-50C-1

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

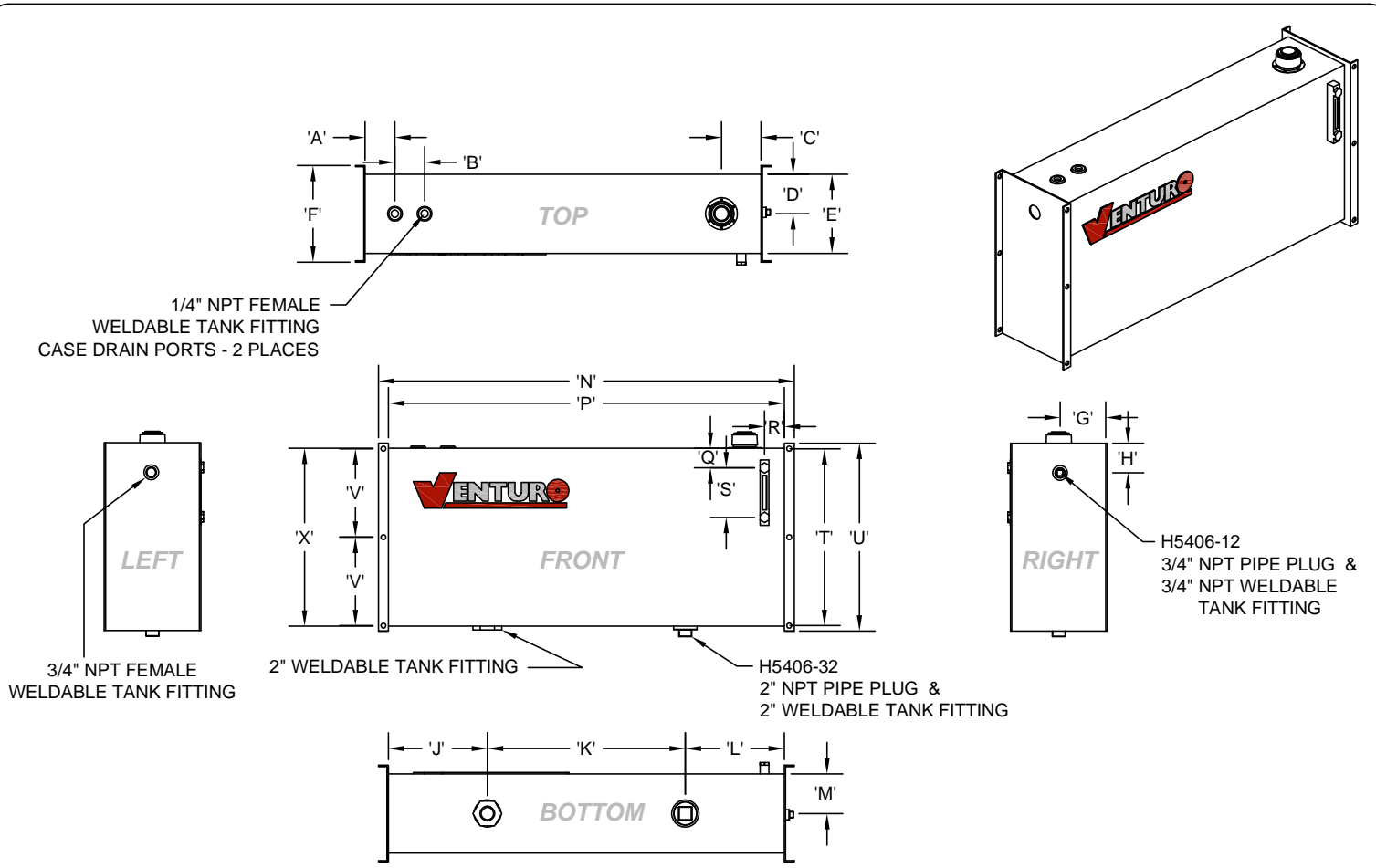
VENTURO CRANES

DATE
05-11-17F

SUPERSEDES
02-21-14E

SECTION
C200

20907



ILLUSTRATIONS FOR REFERENCE ONLY!
- COMPONENT LOCATIONS MAY DIFFER -

HYD. TANK DIMENSION (HTD) CHART			
DIMENSION	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"

MEASUREMENTS EXCLUDE MOUNTING APARATUSES

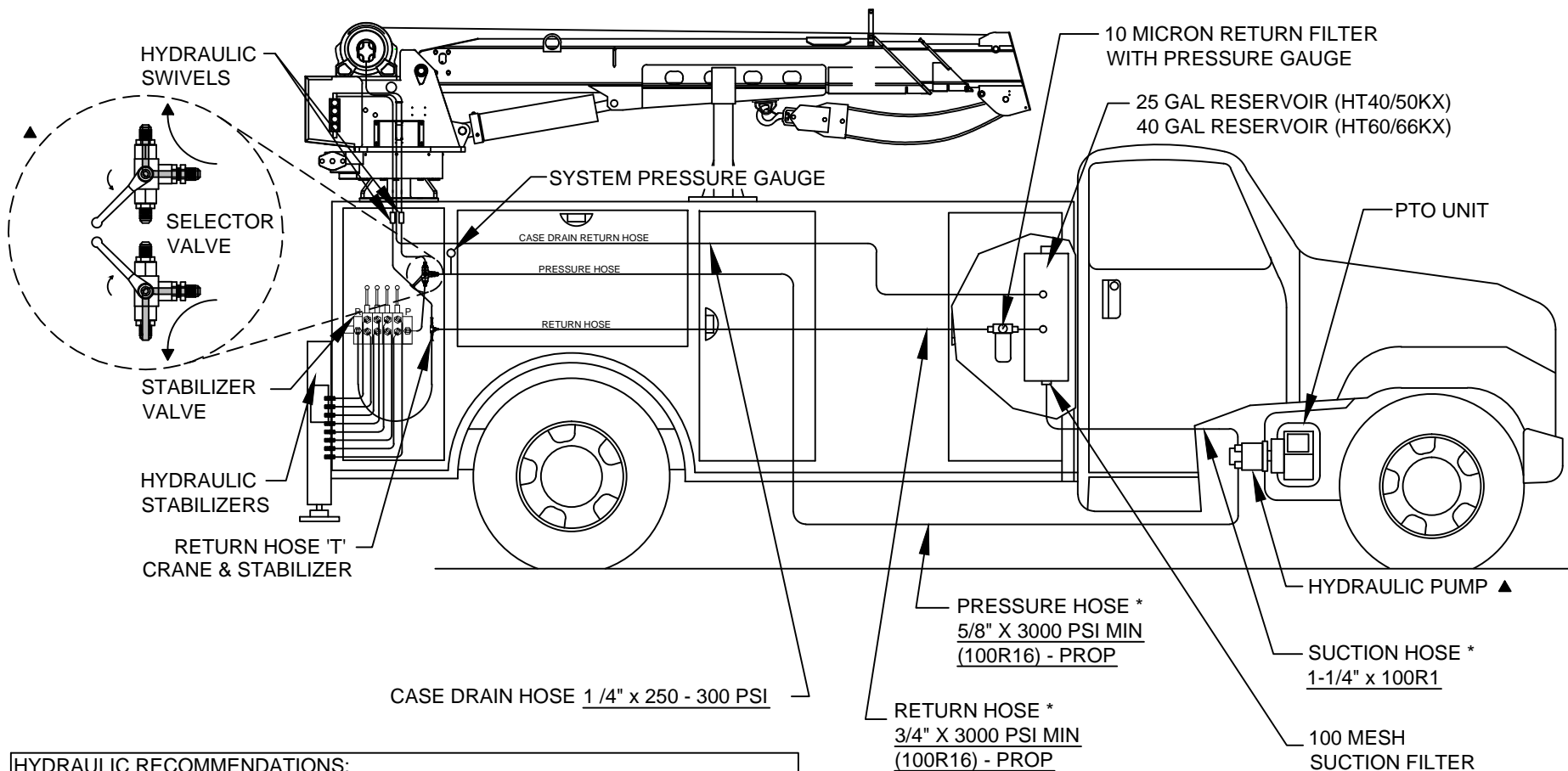
MOUNTING DIMENSION (TMD) CHART			
DIMENSION	PART NO.	22786 (25 GAL.)	22999 (40 GAL.)
'F'		9.75"	12"
'G'		4.875"	6"
'H'		3"	3"
'N'		42"	44"
'T'		17.875"	19.875"
'U'		19"	21"
'V'		8.938"	9.938"

MEASUREMENTS INCLUDE MOUNTING APARATUSES



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
RESERVOIR DIMENSIONS	02-21-14E	C200
HYD. TANKS (25/40 GAL.)	SUPERSEDES 06-04-13D	22825



HYDRAULIC RECOMMENDATIONS:
 HT40KX PROPORTIONAL - 12.0 GPM @ 3000 PSI (22784 PTO PACKAGE)
 HT50KX PROPORTIONAL - 12.0 GPM @ 3000 PSI (22784 PTO PACKAGE)
 HT60KX PROPORTIONAL - 12.0 GPM @ 3000 PSI (22998 PTO PACKAGE)
 HT66KX PROPORTIONAL - 12.0 GPM @ 3000 PSI (22998 PTO PACKAGE)

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

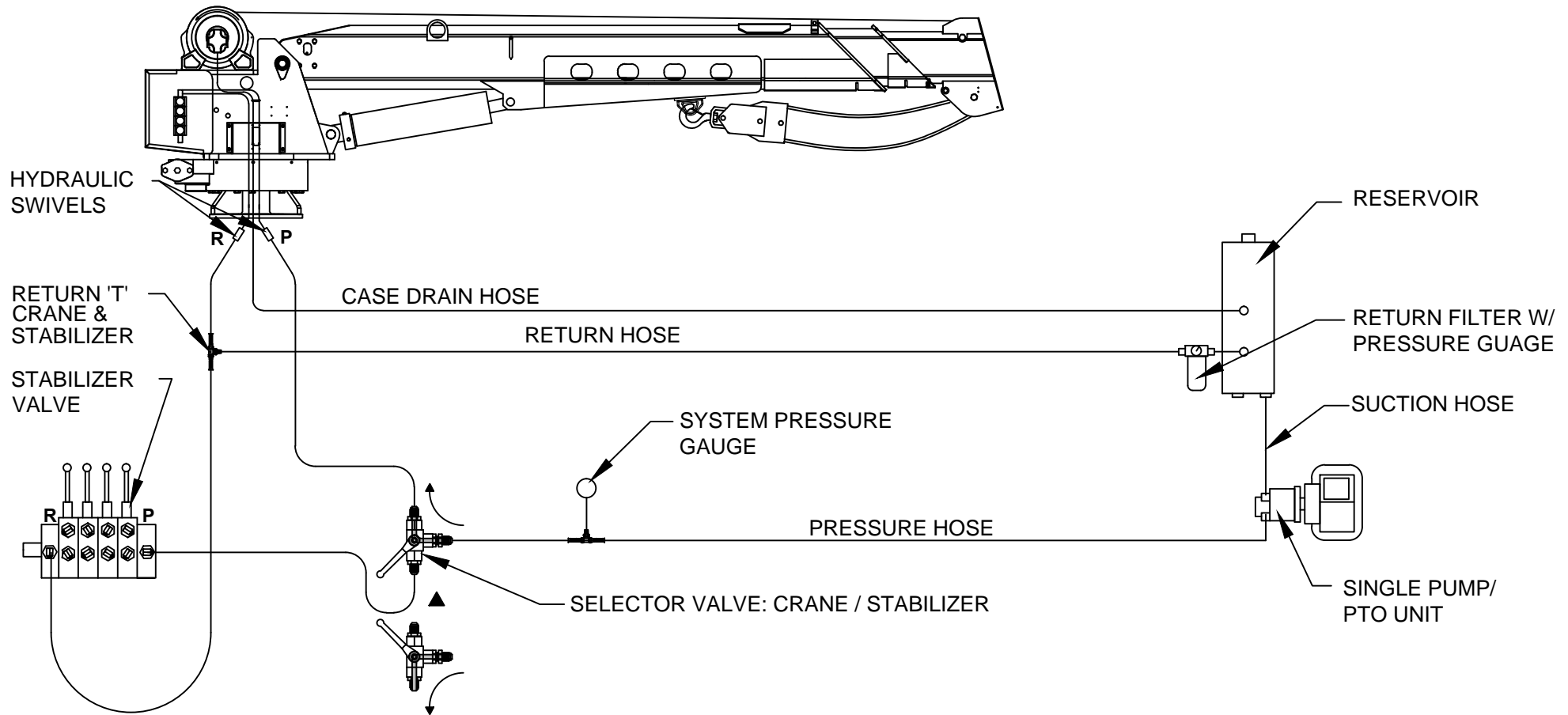
- THE CASE DRAIN LINE FROM THE WINCH MUST HAVE AN UNRESTRICTED PATH TO TANK/RESERVOIR.



VENCO VENTURO INDUSTRIES LLC
 CINCINNATI, OHIO

TITLE	DATE	SECTION
HYDRAULIC COMPONENT INSTALLATION	08-08-23G	C200
HT40-66, PROPORTIONAL	SUPSEDES	
	11-10-22F	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.

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

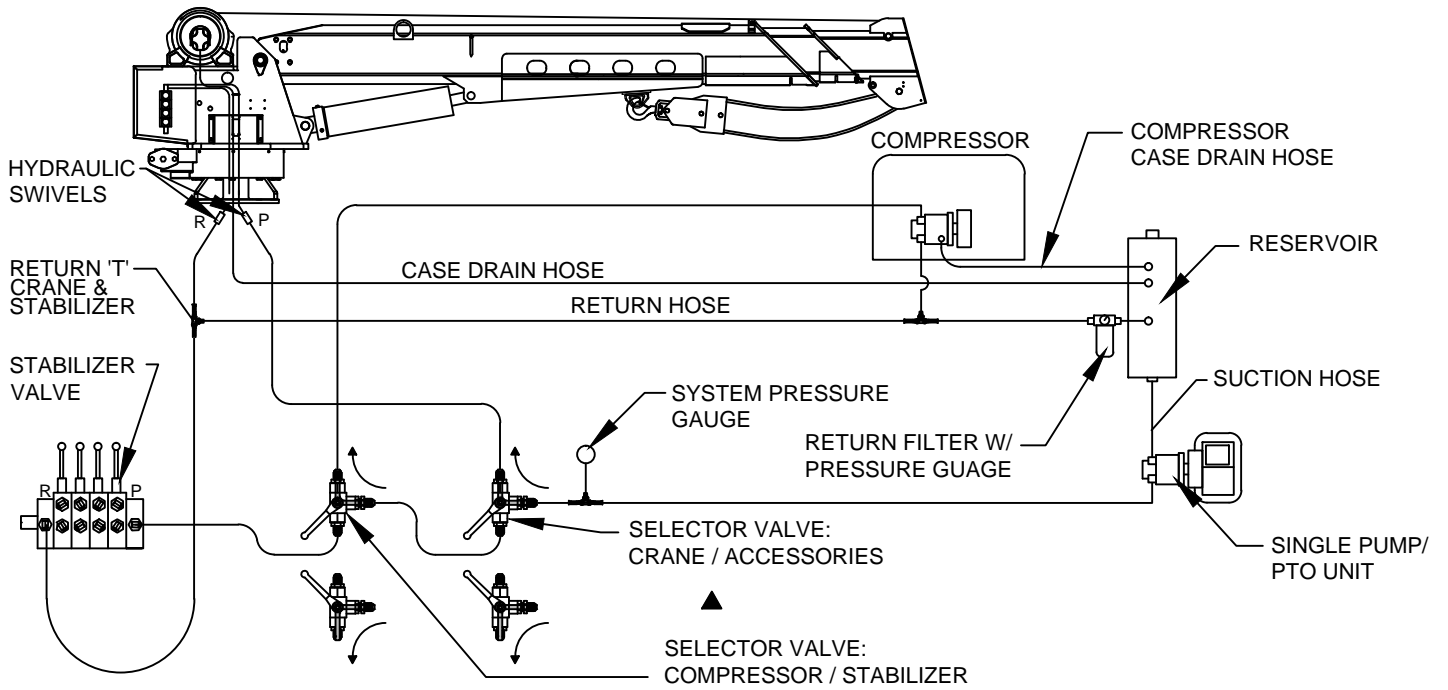
DATE
08-09-23C

SUPERSEDES
02-21-14B

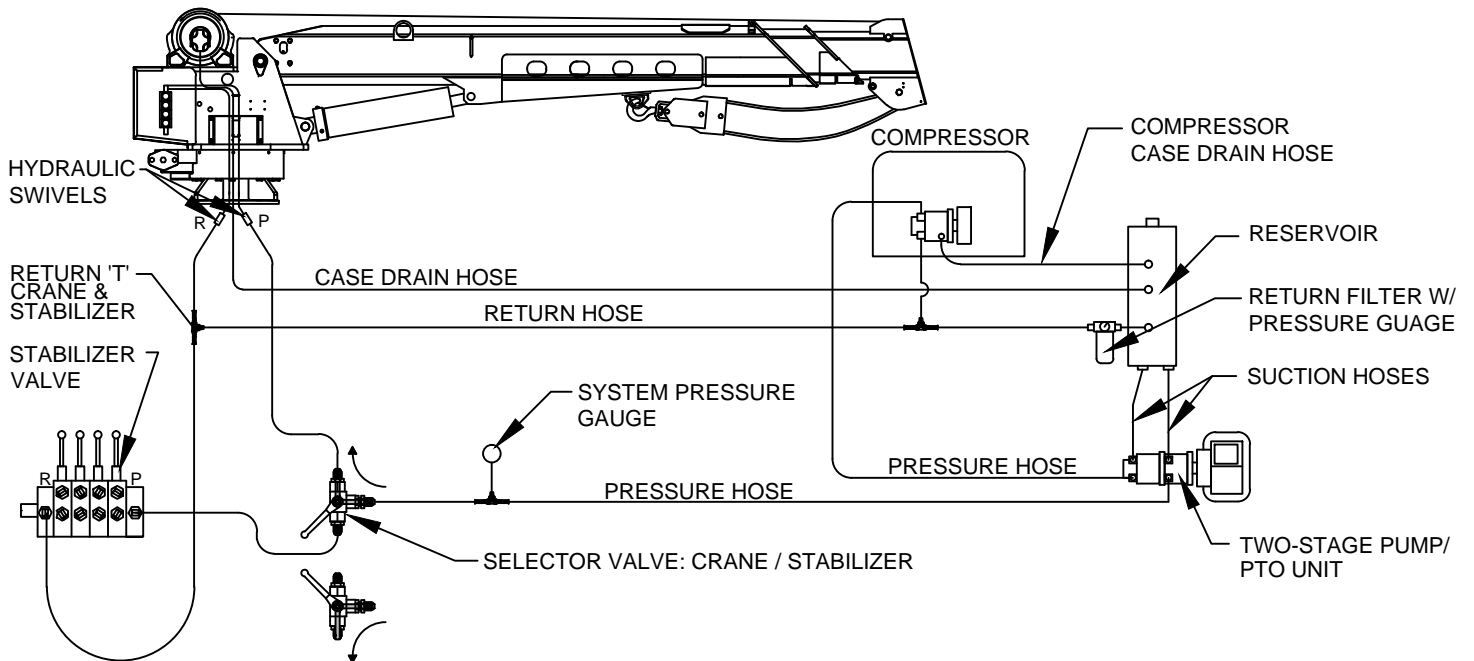
SECTION
C200

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.

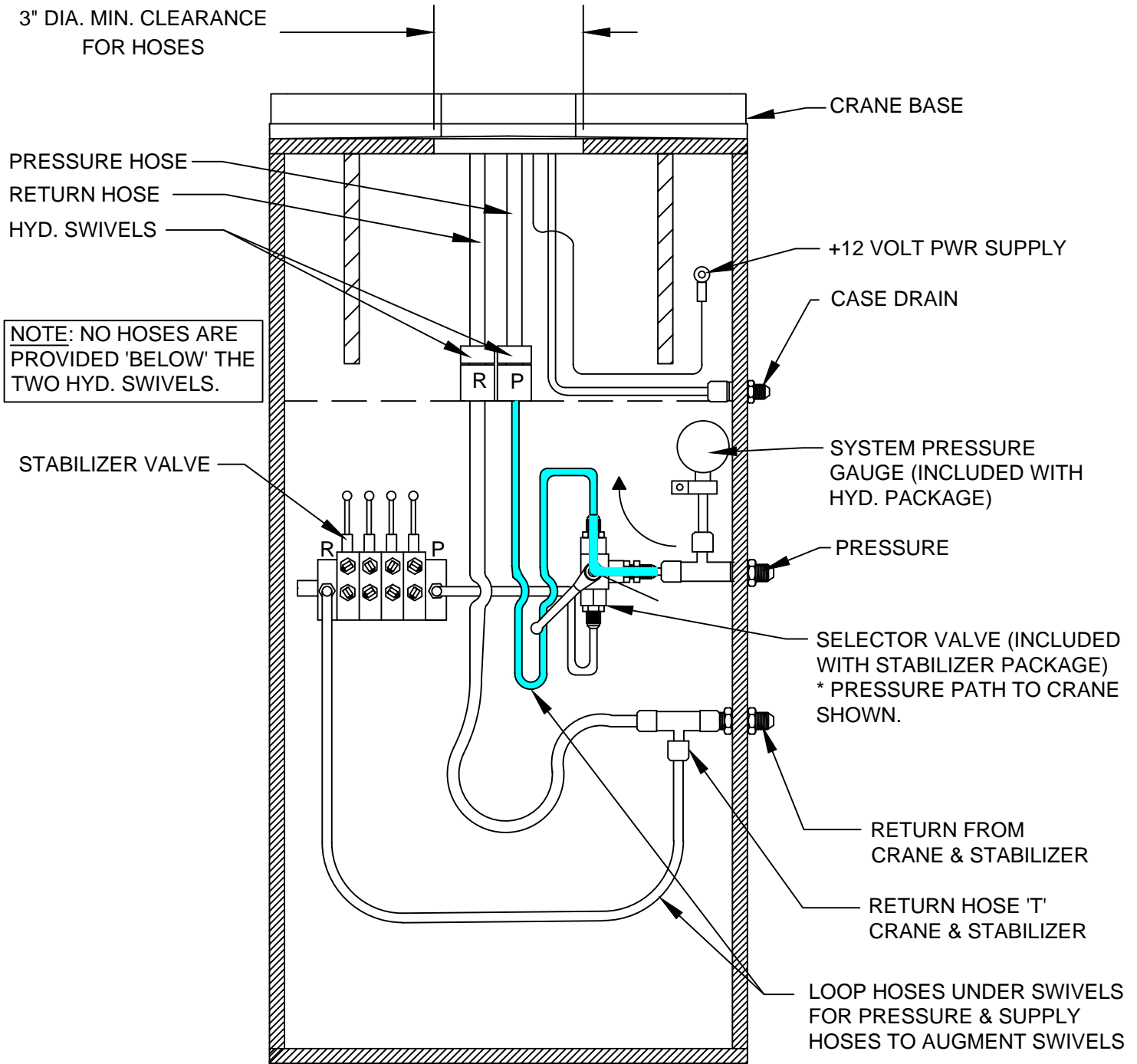
REFER TO SECTION 200 FOR MORE INFORMATION, INCLUDING HOSE SPECIFICATIONS



CAUTION

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

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.



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CINCINNATI, OHIO

TITLE
CONNECTIONS GUIDE

HT CRANES

DATE
08-07-23G

SUPERSEDES
02-21-14F

SECTION
C200

22913

WIRE ROPE INSTALLATION

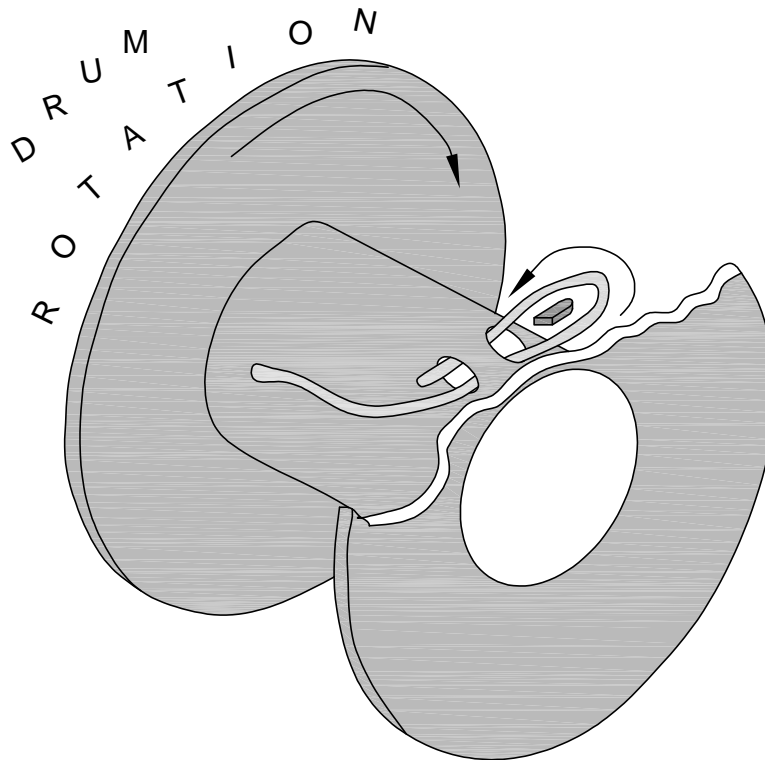


FIG. 1

- 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

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	Swepeco #201 multi-purpose gear oil



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE	DATE	SECTION
MAINTENANCE INFO	11-10-22D	C300
HT25/30/40/50/60/66KX(P)	SUPERSEDES 02-21-14C	23203

WIRE ROPE ASSEMBLY

WIRE ROPE:

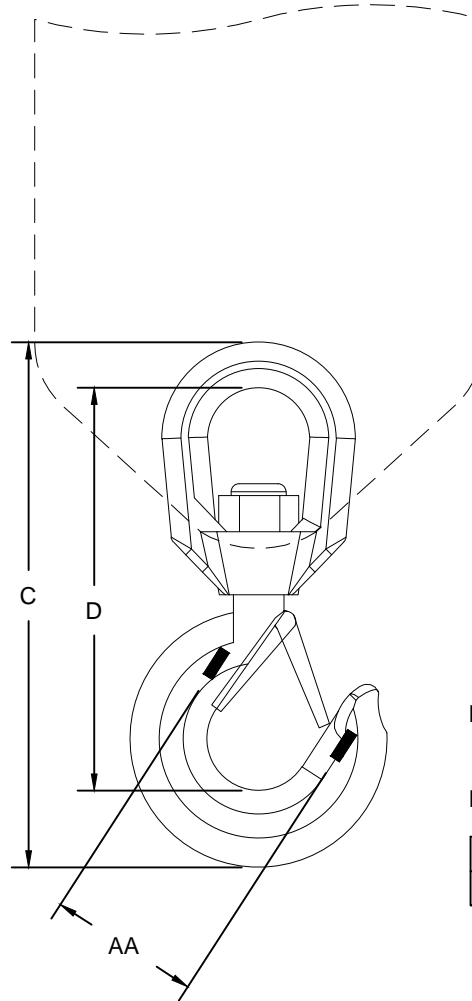
3/8" DIA, 100' LONG

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



TERMINATES IN THIMBLE
NO HOOK

LOAD BLOCK ASSEMBLY



LOAD BLOCK HOOK:

RATING: 5 TONNE (11,023 LBS)

DIMENSIONS:

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



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CINCINNATI, OHIO

TITLE

WIRE ROPE & HOOK SPECIFICATIONS

HT40/50KX

DATE

05-09-16D

SUPERSEDES

02-21-14C

SECTION

C300

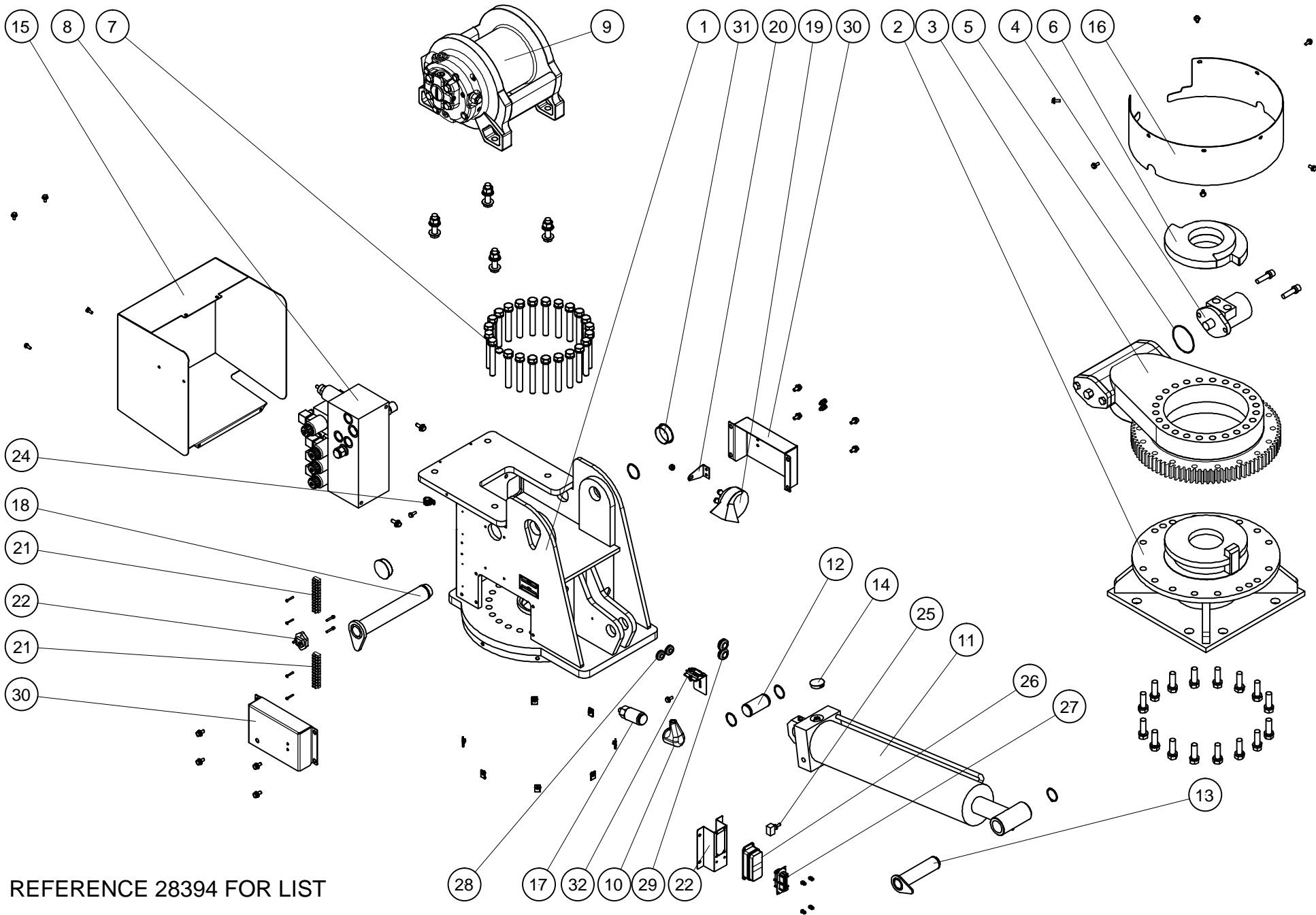
23231

SECTION 400

REPLACEMENT PARTS



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO



REFERENCE 28394 FOR LIST



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT PARTS ILLUSTRATION

HT50-30'-85° MECHANISM

DATE
05-27-21

SUPERSEDES
-

SECTION
C400

28393

REPLACEMENT PARTS LIST, MECHANISM, HT50-30'-85°

#	DESCRIPTION	QTY	PART NUMBER	#	DESCRIPTION	QTY	PART NUMBER
1	WELDED ASSY; HOUSING, MECHANISM, HT50-30'-85°	1	27033-1	17	PRESSURE SWITCH (2400 PSI)	1	17460-2400-21
2	PEDESTAL WELDED ASSEMBLY; HT40/50KX	1	22710	18	PIVOT PIN - MAIN BOOM PIVOT	1	22721
3	SLEWING RING & DRIVE, W/ EXTERNAL TEETH GEAR	1	22704	19	HORN, OPERATOR CONTROLLED 12V	1	21948
4	HYD ROTATION MOTOR	1	19177	20	BRACKET; HORN	1	22000
5	O-RING 3-7/16 O.D. X 3.25 I.D X 3/32 CROSS SEC, 50DU	1	OR-152-5	21	TERMINAL STRIP - 12 SECTIONS	2	19187-R
6	ROTATION STOP RING WELD ASSEMBLY	1	22702	22	CIRCUIT BREAKER - 20AMP	1	15683-20A
7	HOLE PLUG, 11/16 BLACK PLASTIC	1	28019	23	MOUNTING BRACKET IN COMP CONTROL HT25/40/50	1	20067
8	VALVE MANIFOLD, W/ HYDRAFORCE PV72	1	22736H	24	CLAMP; 1/2" ID, RUBBER CUSHION LOOP	1	19422
9	WINCH - HT50 PROP	1	22830	25	ON OFF SWITCH SPST	1	19464
10	BOOT COVER SWVEL ASSY.	1	17012	26	SOCKET CASE W/ HOOD-16+1 POLE	1	22481
11	ELEV CYL 5 BORE 2 ROD X 19.63 STROKE - HT50	1	21748	27	FEMALE (HOLES) INSERT-16+1 POLE	1	22482
12	ELEVATION CYLINDER PIN INBOARD	1	22256	28	GROMMET 1/2ID*13/16GROOVE DIA*3/16GROOVETHK	2	14775
13	ELEVATION CYLINDER PIN OUTBOARD	1	22257	29	GROMMET; RUBBER, BLACK, Ø1" X 1/4" X 11/16"	2	20890
14	PLASTIC CAP, BLACK NYLON R120 ELEV CYL	1	23077	30	COVER; SIDE, HOUSING, IN-COMPARTMENT, HT40-55KX	2	22715-1
15	REAR COVER; 1-PC, ALL HT40/50 (GEN . D)	1	22842	31	PLUG; DOME, 2-1/8" HOLE, 2-1/4 CAP, PLSTC	2	19271-2
16	SLEW GEAR COVER HT40/50KX	1	23644	32	BOOM TOP POSITION SWITCH AND BRACKET ASSY	1	MB19904-40

REFERENCE 28393 FOR REPLACEMENT PARTS ILLUSTRATION



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT PARTS LIST

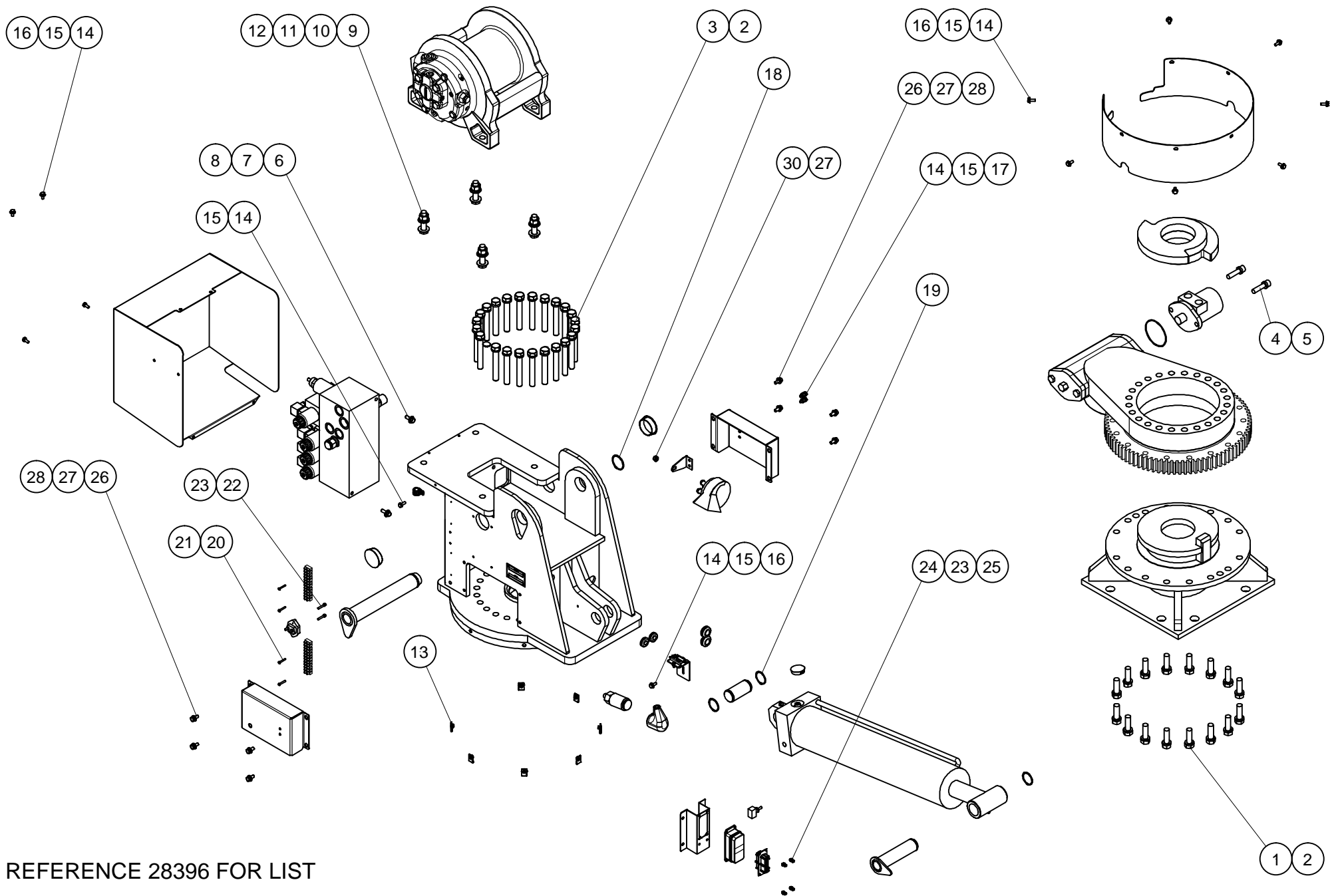
HT50-30'-85° MECHANISM

DATE
05-27-21

SUPERSEDES
-

SECTION
C400

28394



REFERENCE 28396 FOR LIST



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT FASTENERS ILLUSTRATION

HT50-30'-85° MECHANISM

DATE
05-27-21

SUPERSEDES
-

SECTION
C400

28395

REPLACEMENT FASTENERS LIST, MECHANISM, HT50-30'-85°

#	DESCRIPTION	QTY	PART NUMBER	#	DESCRIPTION	QTY	PART NUMBER
1	HHCS; 5/8-11 X 2", GR. 5, ZINC	16	!HHCS06311200	16	WASHER; FLAT, 1/4 USS, STAINLESS	10	!FWSH-025S
2	LOCK WSHR; 5/8, GR. 5, ZINC	39	!LWSH-063	17	FLANGE NUT; 1/4-20, STAINLESS STEEL	2	!FNUT-02520-SS
3	HHCS; 5/8-11 X 4-1/2, GR. 5, ZINC	23	!HHCS06311450	18	SNAP RING; 1-3/4, ZINC DICHRMATE	1	!SRNG-175
4	SHCS; 1/2-13 X 2	2	!SHCS05013200	19	SNAP RING FOR 1.5 SHAFT, ZINC PLATED	3	!SRNG-150
5	LOCK WSHR; 1/2, GR. 5, ZINC, HI-CLLR	2	!LWSH-050-HC	20	PHILLIPS HEAD, PAN, MACH SCREW #6-32 X 1.00LG SS	4	!PHPMS#0632100S
6	HHCS; 3/8-16 X 1", GR. 5, ZINC	2	!HHCS03816100	21	LOCK WASHER, #6, STAINLESS	4	!LWSH-#06S
7	LOCK WSHR; 3/8, GR. 5, ZINC	2	!LWSH-038	22	SOCKET HEAD CAP SCREW, #8-32 X 1.00 LONG, SS	2	!SHCS#832100SS
8	WASHER; FLAT, 3/8 SAE, ZNC PLTD	2	!FWSH-038SAE	23	LOCK WASHER, #8 STAINLESS	6	!LWSH-#08S
9	HHCS; 5/8-11 X 2-1/2, GR. 8, ZNC/YLW	4	!HHCS06311250-8	24	SLOT HEAD, PAN, MACH SCREW #8-32 X 1/2 LG SS	4	!SHPMS#0832050S
10	FLAT WASHER 5/8	8	!FWSH-063	25	HEX NUT, 8-32 STAINLESS	4	!HNUT-#0832S
11	LOCK WSHR; 5/8, GR. 5, ZINC	4	!LWSH-063	26	HEX HEAD CAP SCREW, 5/16-18 X 3/4 LG, SS	8	!HHCS03118075S
12	HEX NUT; 5/8-11, GR. 8, ZNC/YLW	4	!HNUT-06311-8	27	LOCK WASHER 5/16 S/S	9	!LWSH-031S
13	U-NUT; 1/4-20, LCKNG TYPE, AUVECO 8359	7	!UNUT-02520-LKG	28	WASHER, FLAT, 5/16 X .75 O.D., 304 STAINLESS	8	!FWSH-031S
14	HHCS 1/4-20 X 3/4, STAINLESS	15	!HHCS02520075S	29	SLOT HEAD, PAN, MACH SCREW #8-32 X 1/2 LG SS	4	!SHPMS#0832050S
15	LOCK WSHR; 1/4, STAINLESS	15	!LWSH-025S	30	HEX NUT; 5/16-18, BRASS	1	!HNUT-03118-B

HHCS = HEX HEAD CAP SCREW

SHCS = SOCKET HEAD CAP SCREW

REFERENCE 28395 FOR REPLACEMENT FASTENERS ILLUSTRATION



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT FASTENERS LIST

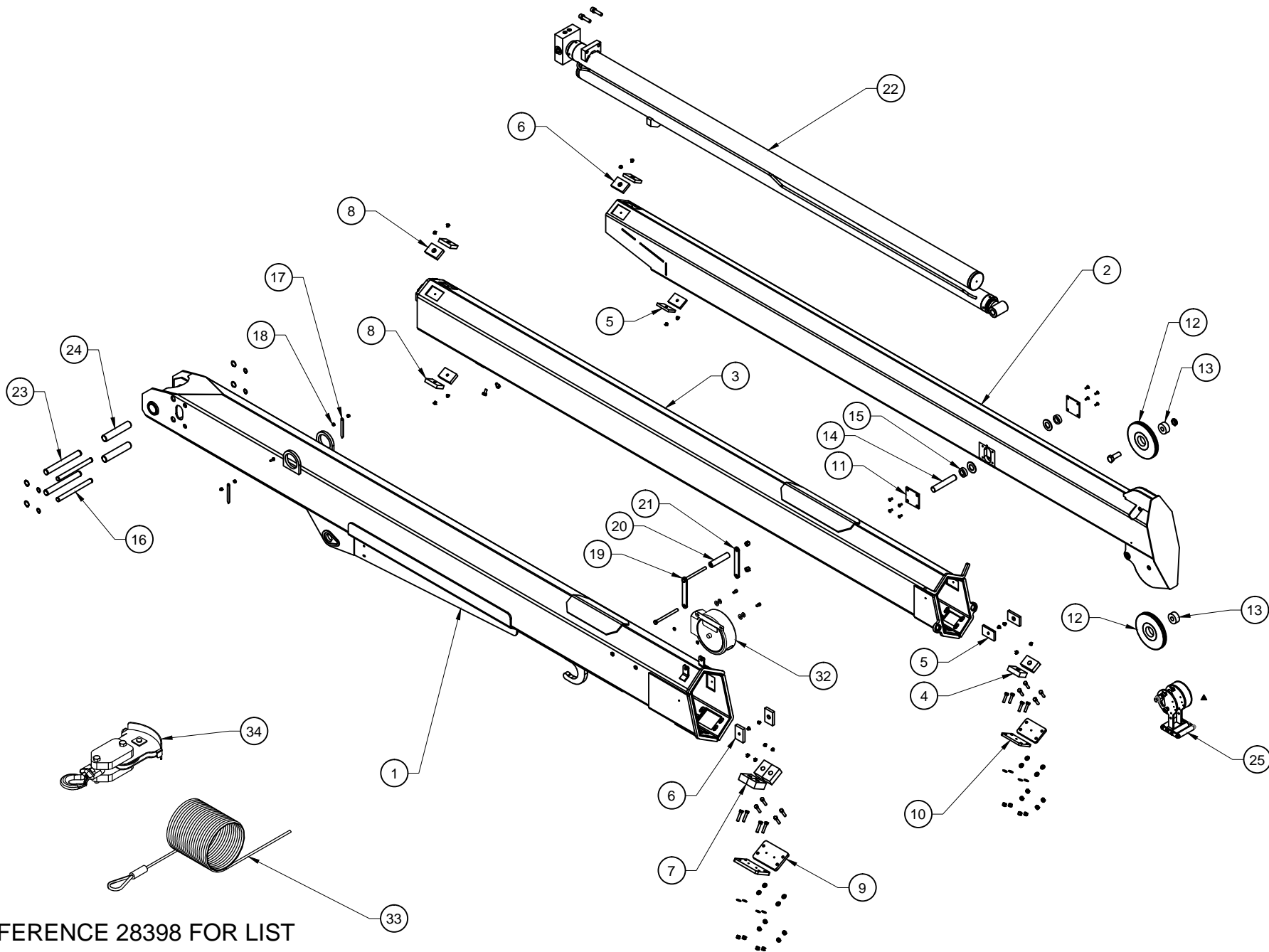
DATE
05-27-21

SECTION
C400

HT50-30'-85° MECHANISM

SUPERSEDES
-

28396



REFERENCE 28398 FOR LIST



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT PARTS ILLUSTRATION

HT50-30'-85° BOOM

DATE
05-20-24A

SUPERSEDES
05-27-21

SECTION
C400

28397

REPLACEMENT PARTS LIST, BOOM, HT50-30'-85°

#	DESCRIPTION	QTY	PART NUMBER	#	DESCRIPTION	QTY	PART NUMBER
1	PRIMARY BOOM WELDMENT	1	23881	18	SPACER; BOOM ARROW	2	22490
2	SECONDARY BOOM WELDMENT	1	23882	19	WIRE ROPE GUIDE; WELDMENT	1	21935
3	TERTIARY BOOM WELDMENT	1	23883	20	WIRE ROPE GUIDE; UMHW ROLLER	1	21560
4	BOOM PAD; 0.88" THICK	2	23631-7	21	WIRE ROPE GUIDE; FLAT, MOUNT	1	21936
5	BOOM PAD; 0.38" THICK	4	23631-3	22	EXTENSION CYLINDER	1	23875
6	BOOM PAD; 0.50" THICK	4	23631-4	23	EXTENSION CYLINDER 1" THRUST PIN	2	23905
7	BOOM PAD; 1.25" THICK	4	23631-10	24	THRUST ROLLER	2	27283
8	BOOM PAD; 0.63" THICK	4	23631-5	25	COMPACT ANTI-2-BLOCK	1	27469-L-0-22
9	COVER PLATE; PRIM. ADJ. PAD	2	23677	26	-	-	-
10	COVER PLATE; SEC. ADJ. PAD	2	23678	27	-	-	-
11	PIN BLOCK; REINFORCING	2	23116	28	-	-	-
12	BOOM SHEAVE W/ BUSHING	2	23928	29	-	-	-
13	SPACER; 23927 & 23928 POLY SHEAVES	2	23929	30	-	-	-
14	PIN; PIVOT, ROD END, EXT. CYLINDER	1	23906	31	-	-	-
15	BUSHING	2	21428	32	COMPLETE CORD REEL	1	28190
16	EXTENSION CYLINDER 0.75" THRUST PIN	2	23904	33	WIRE ROPE; 125 FT, NO HOOK	1	17094-3/8-125
17	ARROW	2	13459	34	LOAD BLOCK ASSEMBLY	1	17949-2

REFERENCE 28397 FOR REPLACEMENT PARTS ILLUSTRATION



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT PARTS LIST

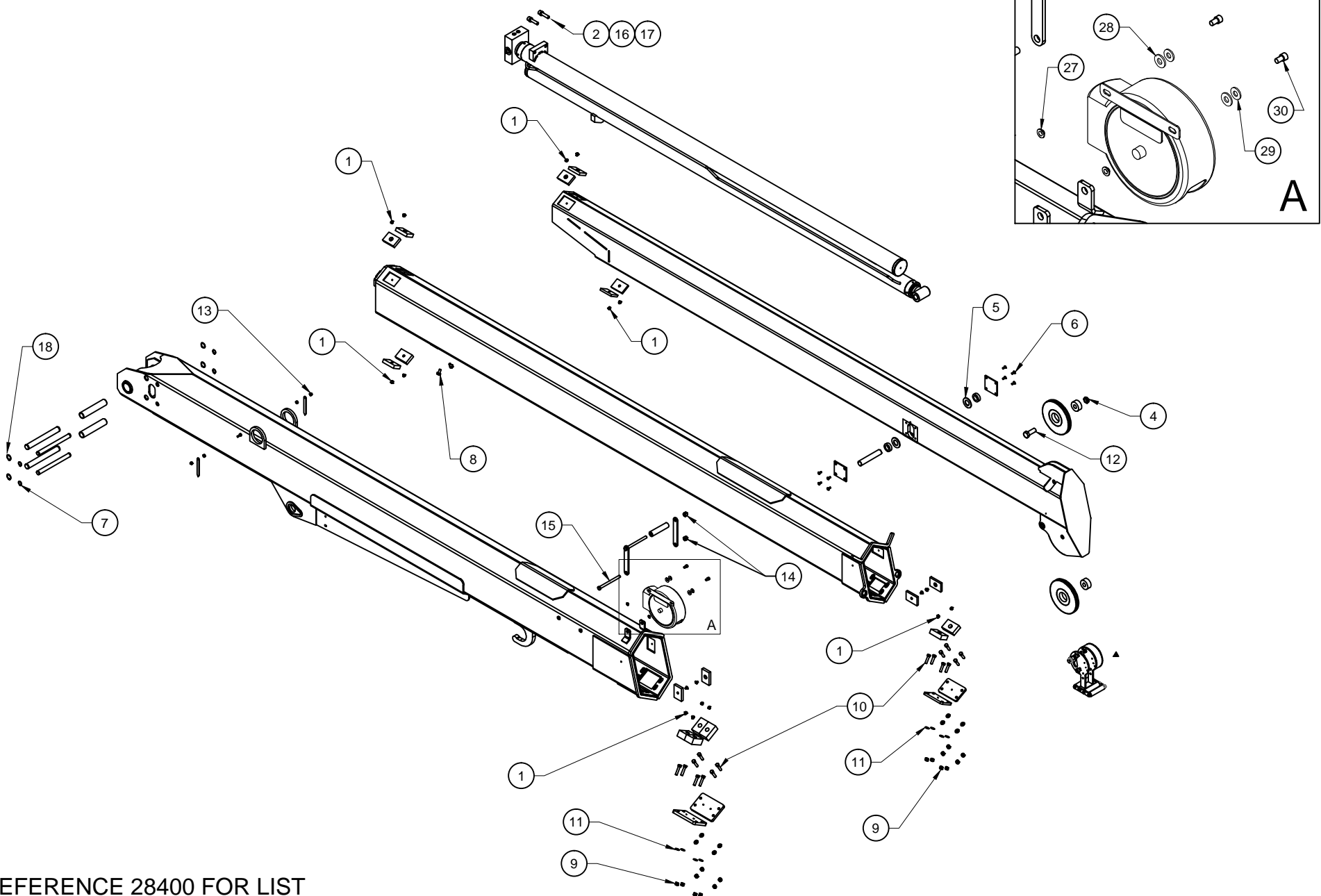
HT50-30'-85° BOOM

DATE
05-20-24A

SUPERSEDES
05-27-21

SECTION
C400

28398



REFERENCE 28400 FOR LIST



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT FASTENERS ILLUSTRATION

HT50-30'-85° BOOM

DATE
05-20-24A

SUPERSEDES
05-27-21

SECTION
C400

28399

REPLACEMENT FASTENERS LIST, MECHANISM, HT50-30'-85°

#	DESCRIPTION	QTY	PART NUMBER	#	DESCRIPTION	QTY	PART NUMBER
1	THCS; 1/4-20 x 3/8" LG, S/S	18	!THCS02520038	17	LOCK WASHER; 1/2, GR. 5, ZINC, HI-COLLAR	2	!LWSH-050-HC
2	SHIM KIT	1	14159	18	SNAP RING; 1"	3	!SRNG-100
3	-	-	-	19	-	-	-
4	LOCK NUT; 3/4-10, NYLON, ZINC	1	!LNUT-07510	20	-	-	-
5	FLAT WASHER; 1" SAE	2	!FWSH-100SAE	21	-	-	-
6	CACS; 1/4-20 x 1/2" LG, S/S	8	!CACS02520050S	22	-	-	-
7	SNAP RING; 3/4"	4	!SRNG-075	23	-	-	-
8	HHCS; 3/8-16 X 3/4", GR.5	2	!HHCS03816075	24	-	-	-
9	LOCK NUT; 3/8-16, GR. 5, ZINC	16	!LNUT-03816	25	-	-	-
10	HHCS; 3/8-16 x 1-3/4" LG, GR. 5, ZINC	16	!HHCS03816175	26	-	-	-
11	FLAT WASHER; 3/8", ZINC	16	!FWSH-038	27	INSULATING SLEEVE WASHER - 5/16"	2	28198
12	HHCS; 3/4-10 x 3-1/2" LG, GR. 5, ZINC	1	!HHCS07510350	28	FIBER WASHER	2	01016
13	ACORN NUT; 1/4-20, S/S	2	!ANUT-02520S	29	FLAT WASHER; 5/16"	2	!FWSH-031
14	LOCK NUT; 7/16-14, NYLON INSERT	2	!LNUT-04414	30	SHCS; 5/16-18 X 5/8" LG, S/S	2	!SHCS03118063S
15	HHCS; 7/16-14 x 5-1/2", GR. 5, ZINC	1	!HHCS04414550	31	-	-	-
16	SHCS; 1/2-13 x 2"	2	!SHCS05013200	-	-	-	-

THCS = TRUSS HEAD CAP SCREW

HHCS = HEX HEAD CAP SCREW

SHCS = SOCKET HEAD CAP SCREW

PMS = PAN MACHINE SCREW

REFERENCE 28399 FOR REPLACEMENT FASTENERS ILLUSTRATION



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

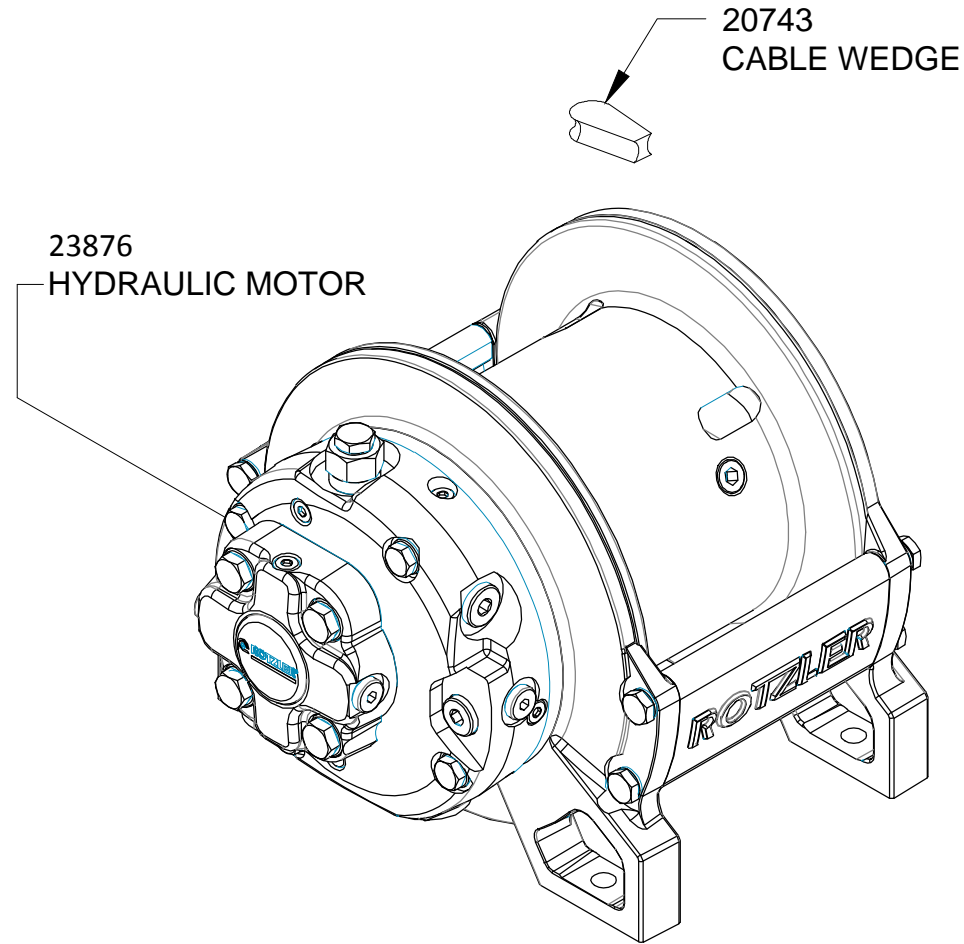
TITLE
REPLACEMENT FASTENERS LIST

DATE
05-20-24A SECTION
C400

HT50-30'-85° BOOM

SUPERSEDES
05-27-21 **28400**

22830 WINCH REPLACEMENT PARTS DRAWING



WINCH SEALS PACKAGE: 23848



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

22830 REPLACEMENT PARTS DRAWING

HT55KX-VLC

DATE

04-05-21C

SUPERSEDES

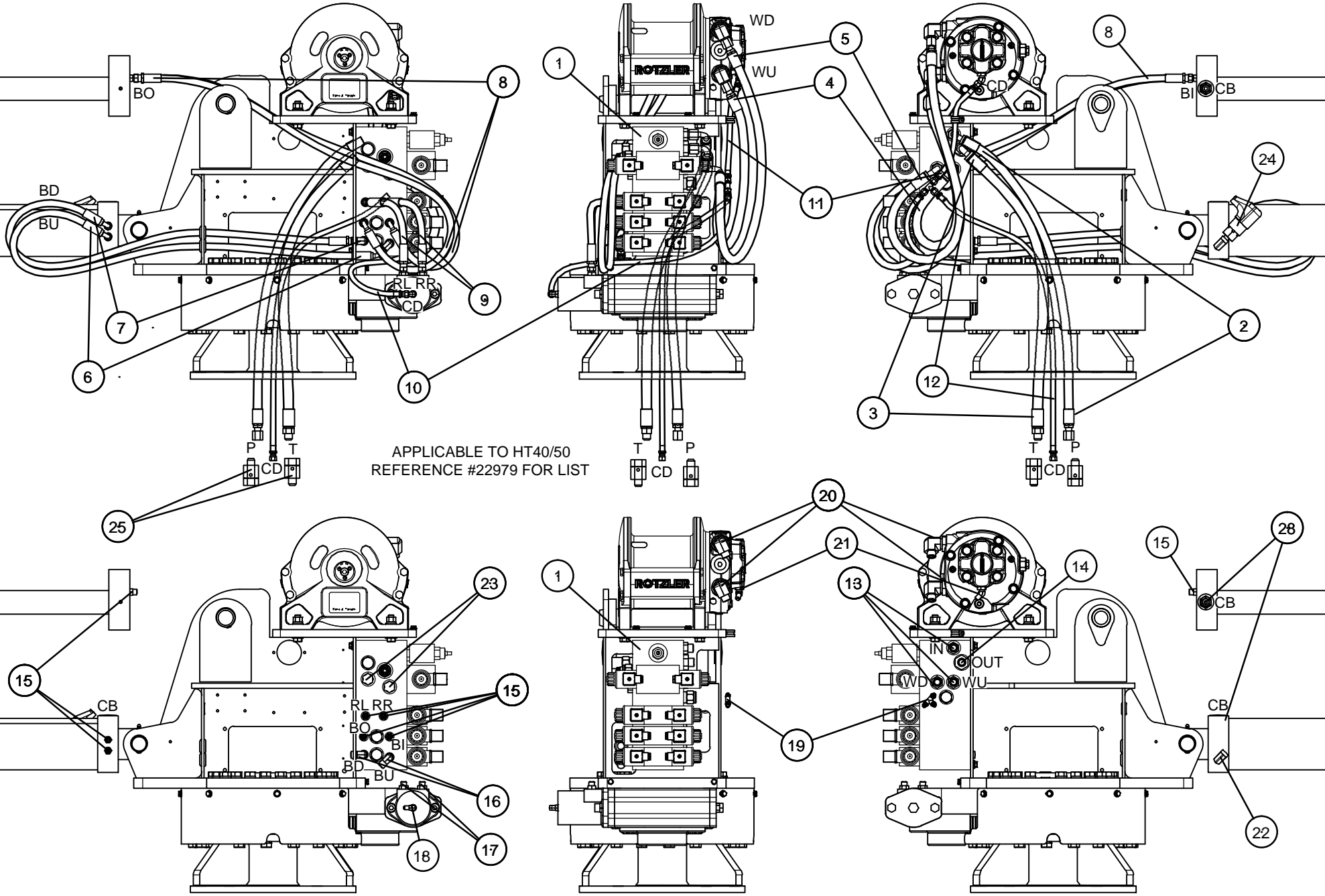
02-21-14B

SECTION

C400

22876

REPLACEMENT PARTS DRAWING, HYDRAULIC COMPONENTS



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT PARTS, HYD. COMPONENTS
HT40/50 PROPORTIONAL SERIES CRANES

DATE
04-27-21F
SUPERSEDES
10-22-20E

SECTION
C400
22978

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, 8OFS-10MO	3	FF6400-0810	RIGHT SIDE VALVE BANK; IN, WU & WD PORTS
14	FITTING; ADAPTER, STRAIGHT, 8OFS-12MO	1	FF6400-0812	RIGHT SIDE VALVE BANK, OUT PORT
15	FITTING; ADAPTER, STRAIGHT, 6OFS-6MO	8	FF6400-0606	ELEVATION, EXTENSION, RL, RR, BI & BO PORTS
16	FITTING; ADAPTER, 90° ELBOW, 6OFS-6MO	2	FF6801-0606	LEFT SIDE VALVE BANK, BU & BD PORTS
17	FITTING; ADAPTER, STRAIGHT, 6OFS-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, 8OFS-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	H6805-0404	ELEVATION BASE-END, PRESSURE SWITCH
23	FITTING; PLUG, 10MO	2	H6408-10	LEFT SIDE VALVE BANK, WU & WD PORTS
24	PRESSURE SWITCH, 2900 PSI RATING	1	17460-2900-21	BASE-END ON ELEVATION CYLINDER
25	LIVE SWIVEL; CONTINUOUS, STRAIGHT, 6MJ-6FJ	2	22764	PRESSURE & RETURN HOSES, COMPARTMENT SIDE
26	COUNTER-BALANCE VALVE; CBPA, 50/40, 3000 PSI SYS.	2	20893	ELEVATION & EXTENSION CYLINDER VALVE

HYDRAULIC FUNCTION KEY

P	PRESSURE SUPPLY	RL	ROTATION LEFT
T	TANK RETURN	RR	ROTATION RIGHT
CD	CASE DRAIN	BO	BOOM OUT
IN	PRESSURE IN	BI	BOOM IN
OUT	RETURN OUT	BU	BOOM UP
WU	WINCH UP	BD	BOOM DOWN
WD	WINCH DOWN	CB	COUNTER-BALANCE VALVE

REFERENCE #22978 FOR REPLACEMENT PARTS DRAWING



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

REPLACEMENT PARTS LIST

DATE

04-27-21E

SECTION

C400

HT40/50 PROPORTIONAL

SUPERSEDES

10-22-20D

22979

22736 SERIES VALVE MANIFOLD REPLACEMENT PARTS

22963
CHECK VALVE
(NOT SHOWN -
LOCATED ON BACK SIDE)

22595
MAIN RELIEF VALVE

22967 (HT40/50, 22736H)
22595 (HT66, 22736H-1)
22595-2600 (HT60, 22736H-2)
WINCH RELIEF VALVE

22312-2.25
PRIORITY FLOW VALVE
(BOOM EXTENSION)

22312-4.00
PRIORITY FLOW VALVE
(BOOM ELEVATION)

PRIORITY FLOW VALVE		
VALVE P/N	MANIFOLD	CRANE
22312-6.00	22736H	HT40/50KX
22312-7.50	22736H-1	HT66KX
22312-7.50	22736H-2	HT60KX
NOT SHOWN - LOCATED ON RIGHT SIDE		

PROPORTIONAL VALVE		
VALVE P/N & DESCRIPTION	MANIFOLD	CRANE MODEL
23046 HYDRAFORCE (ROUND COIL)	22736H	HT40KX
		HT50KX
	22736H-1	HT/66KX
	22736H-2	HT60KX

22873
VALVE SECTION ASSY

22523
VALVE SECTION ASSY



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
22736 REPLACEMENT PARTS

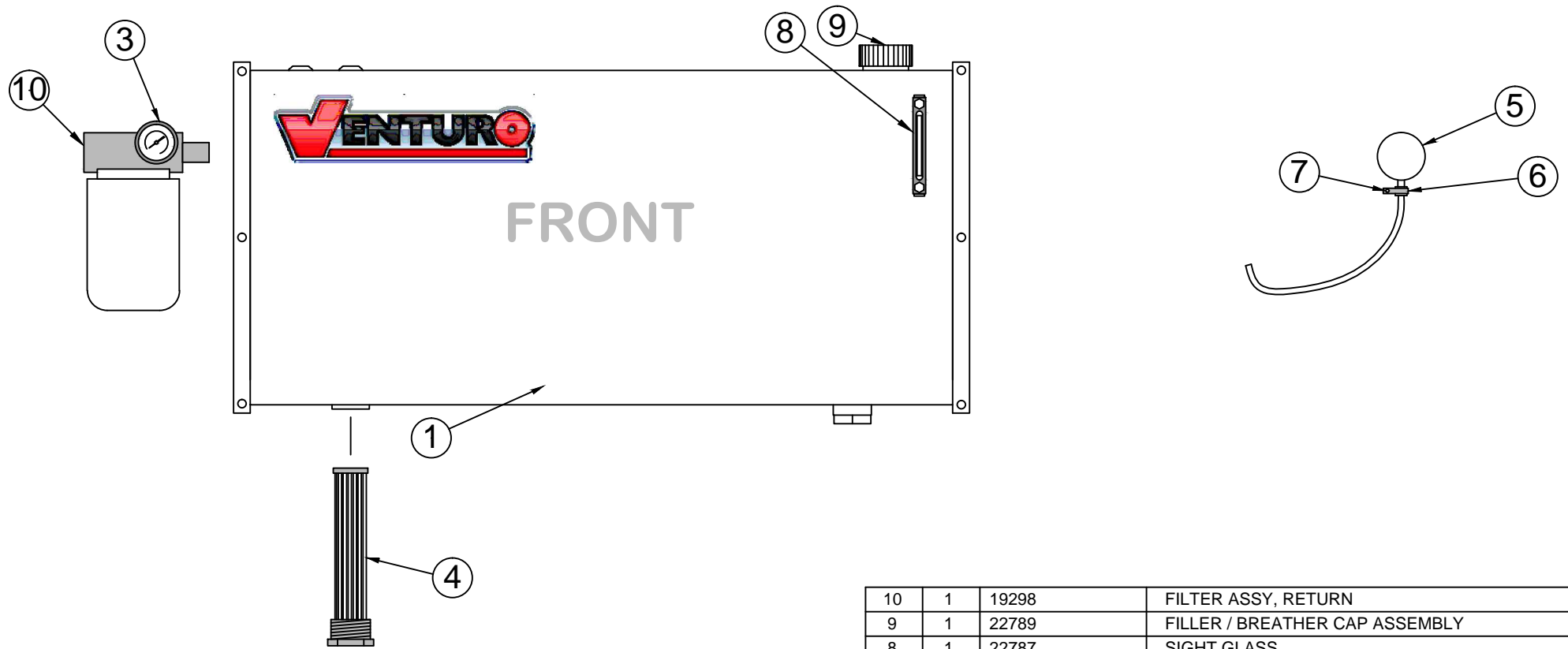
HT40/50/60/66KX PROPORTIONAL

DATE
11-10-22G

SUPERSEDES
11-13-17F

SECTION
C400

22940



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")
		22998	HYDRAULIC RESERVOIR - 40 GAL (20" x 42" x 11")
ITEM	QTY	PART NUMBERS	DESCRIPTION



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

RESERVOIR KIT REPL PARTS

DATE

12-09-22D

SECTION

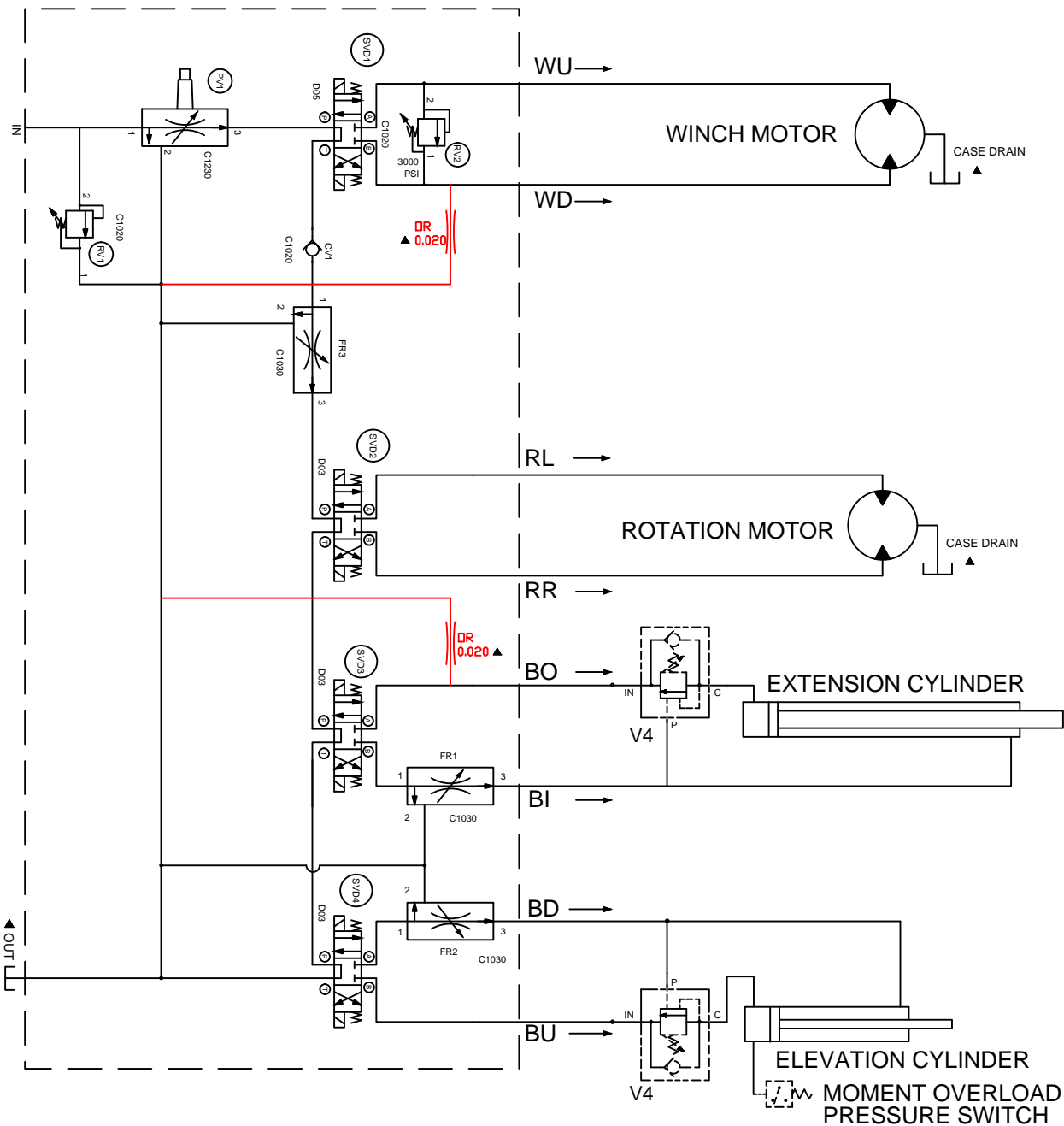
C400

HT CRANES; 25/40 GAL RESERVOIR

SUPERSEDES

08-04-15C

23224



- PVI PROPORTIONAL CONTROL VALVE (SIMPLIFIED REP)
- RV1 INLET RELIEF VALVE (3000 PSI)
- RV2 WINCH RELIEF VALVE
- FR1 PRIORITY FLOW REGULATOR - 2.25 GPM
- FR2 PRIORITY FLOW REGULATOR - 4.00 GPM
- FR3 PRIORITY FLOW REGULATOR - 6.00 GPM
- SVD1 3 POSITION - 4 WAY VALVE
- SVD2 3 POSITION - 4 WAY VALVE
- SVD3 3 POSITION - 4 WAY VALVE
- SVD4 3 POSITION - 4 WAY VALVE



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
HYDRAULIC SYSTEM DIAGRAM

HT40/50/66KX; PROPORTIONAL

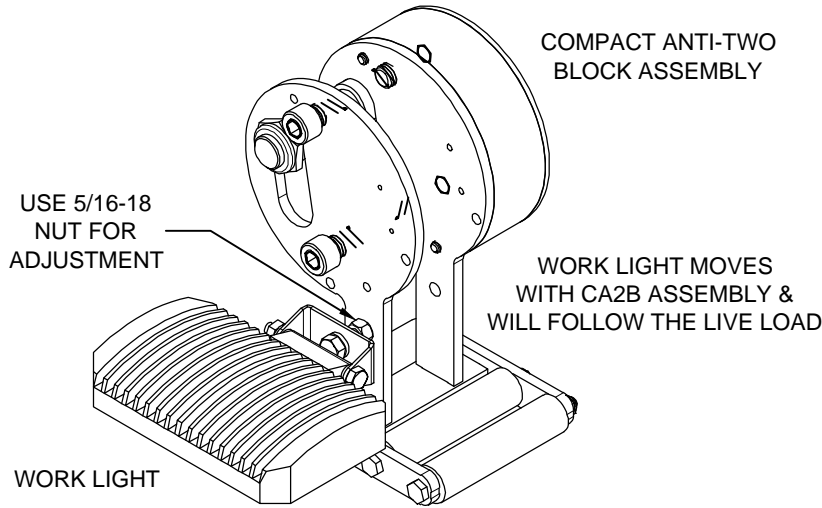
DATE
12-04-23D

SUPERSEDES
12-11-20C

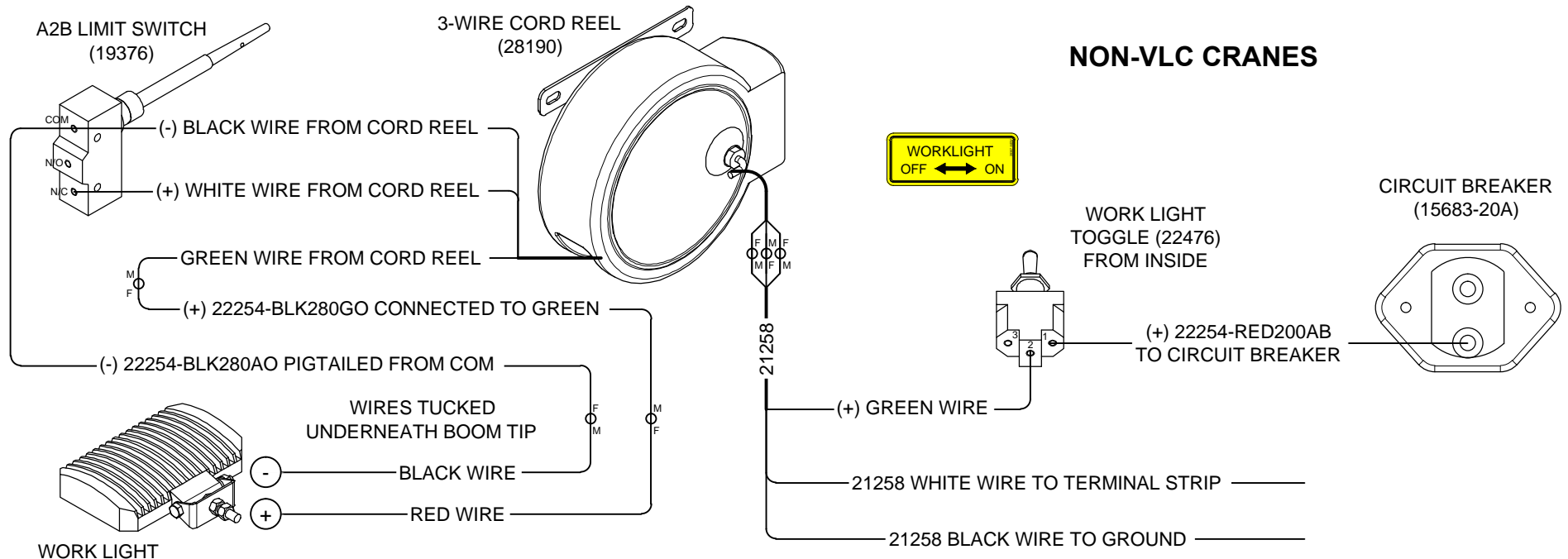
SECTION
C400

27352

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



BILL OF MATERIALS		-1	28240
#	DESCRIPTION		PART NUMBER
1	IDWG; WORK LIGHT INSTALLATION, NON-VLC CRANES	1	28199
2	LED WORK LIGHT	1	27483
3	TERMINAL; 16G, FEMALE, QUICK-CONNECT	3	ITERM16G250QCFI
4	TERMINAL; 16G, MALE, QUICK-CONNECT	4	ITERM16G250QCM
5	WIRE ASS'Y; 16G, BLACK, 28", #6 RING - STRIPPED END	1	22254-BLK280AO
6	WIRE ASS'Y; 16G, BLACK, 28", QCF - STRIPPED END	1	22254-BLK280GO
7	TOGGLE SWITCH; ON / OFF, IP-RATED	1	22476
8	HALF-BOOT, FOR IP-RATED TOGGLE SWITCH	1	19793
9	DECAL; ON/OFF, OPTIONAL WORK LIGHT W/ TOGGLE	1	28307
10	WIRE ASS'Y; 16G, RED, 20", #6 RING - #10 RING	1	22254-RED200AB
11	TERMINAL; 16G, #6 RING, CLOSED-END	1	ITERM16G#6RG



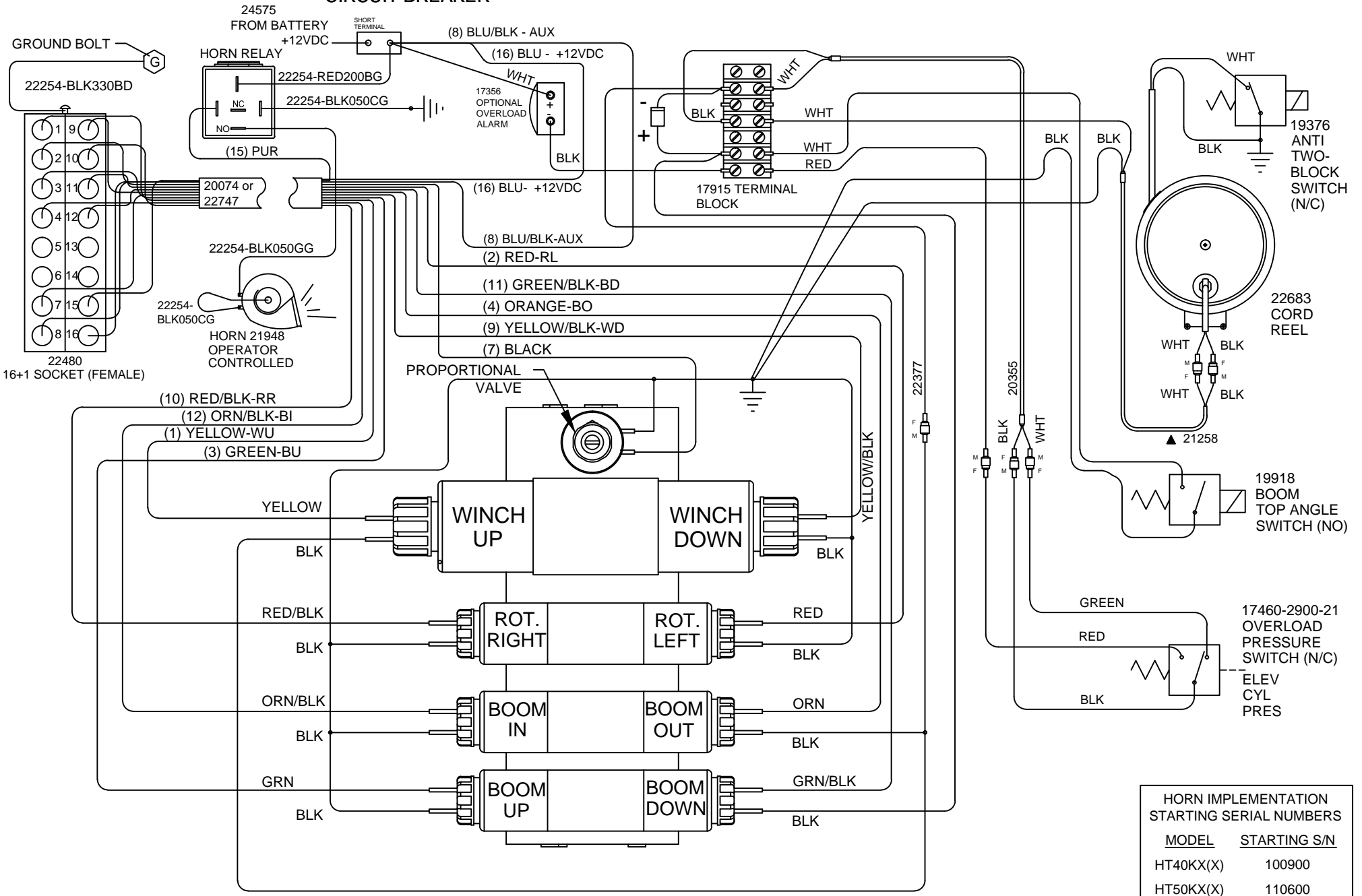
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

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

DATE
02-10-21
SUPERSEDES
-

SECTION
C400
28199

CIRCUIT BREAKER



HORN IMPLEMENTATION STARTING SERIAL NUMBERS	
MODEL	STARTING S/N
HT40KX(X)	100900
HT50KX(X)	110600



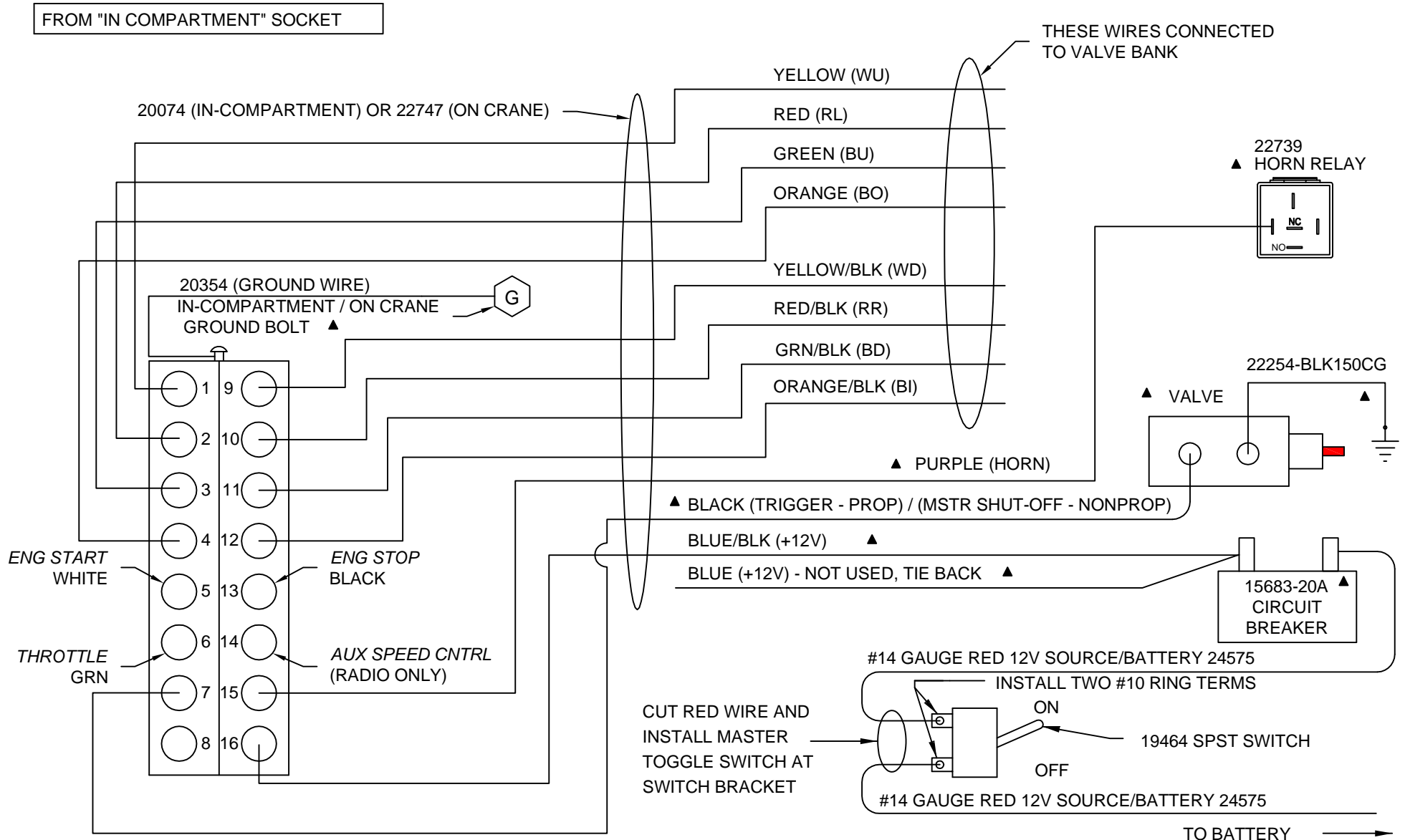
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
WIRING DIAGRAM

HT40/50KX; PROPORTIONAL

DATE 08-29-23N	SECTION C400
SUPSEDES 12-07-18M	22185

▲ SOCKET WIRING; 16-PIN, W/ OPTIONAL ENG CONTROLS



▲ ENGINE CONTROLS (#22616) SOLD AS AN OPTION (NOT INCLUDED WITH CRANE)



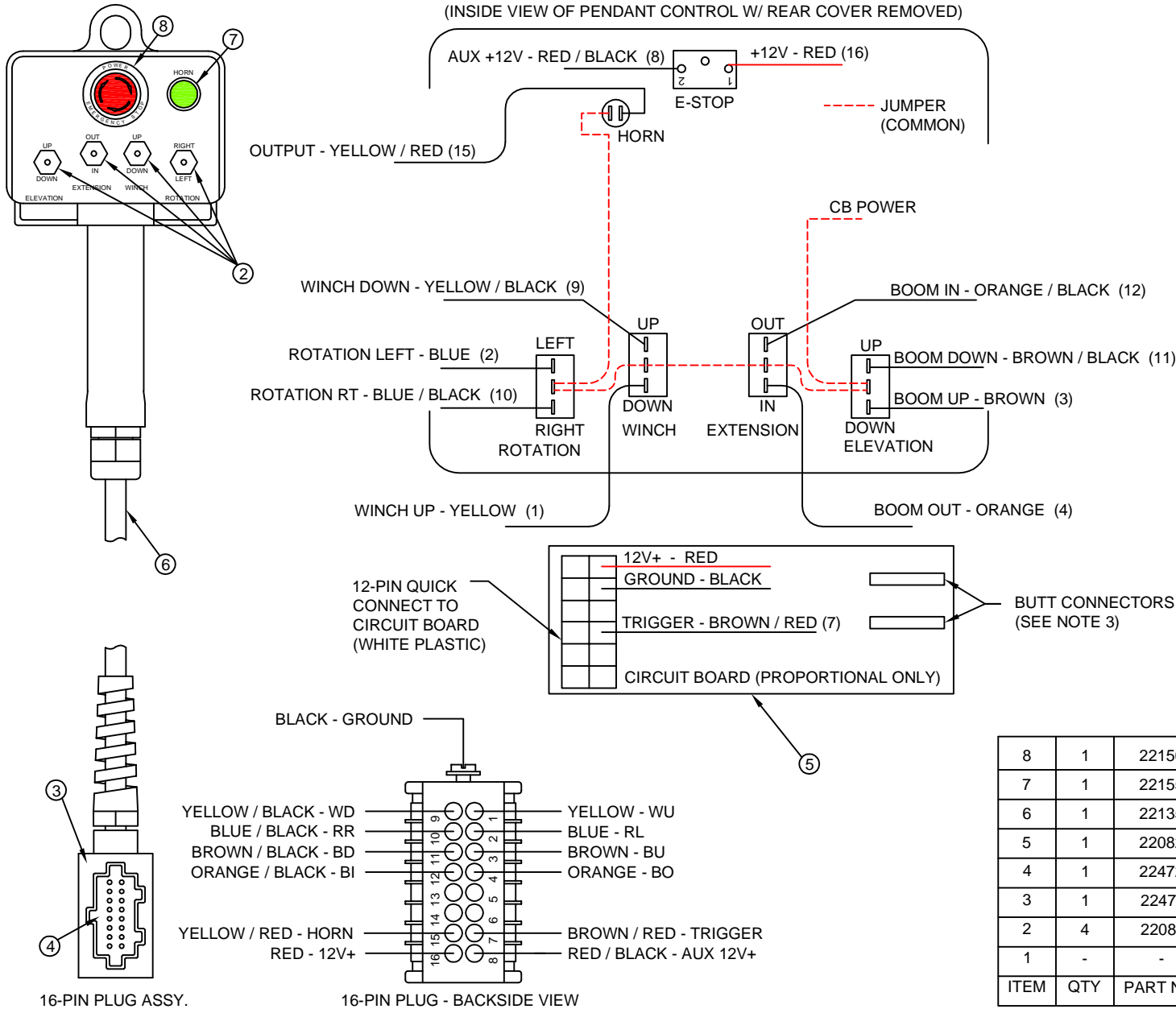
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
SOCKET WIRING; 16 PIN
HT CRANES

DATE
02-17-15G
SUPERSEDES
02-21-14F

SECTION
C400
22125

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



NOTE 1:

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

NOTE 2:

STOW OR CUT BACK UNUSED WIRES.

NOTE 3:

WHEN REPLACING CORD ASSY, CUT BLACK AND BLACK / RED WIRES FROM 12-PIN QUICK CONNECT AND INSTALL 'BUTT CONNECTORS'; MATCH UP BLACK TO BLACK WIRES AND BLACK / RED TO BLACK / RED WIRES FROM REPLACEMENT CORD ASSY.

MODEL	STARTING S/N
HT25K(X)	120300
HT30K(X)	115300
HT40KX(X)	100900
HT50KX(X)	110600
HT66KXX	150300

ITEM	QTY	PART NO.	DESCRIPTION
8	1	22156	SWITCH; E-STOP
7	1	22155	SWITCH; PUSHBUTTON, HORN
6	1	22135	KIT; REPLACEMENT CORD ASSY
5	1	22082	CIRCUIT BOARD; PROP VALVE CONTROLLER
4	1	22472	INSERT; MALE, 16 + 1 POLE
3	1	22471	PLUG CASE; 16 + 1 POLE
2	4	22081	SWITCH; SPDT, MOMENTARY
1	-	-	-



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

REPLACEMENT PARTS DWG & LIST

DATE

10-03-14

SECTION

C400

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

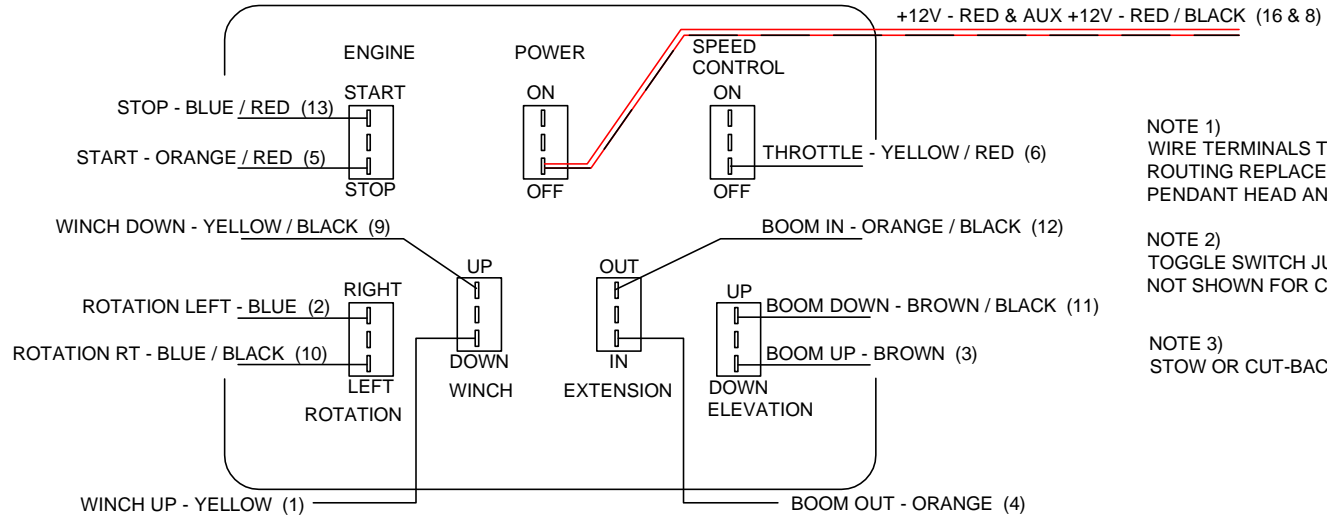
SUPERSEDES

-

23073

CORD REPLACEMENT INSTRUCTIONS

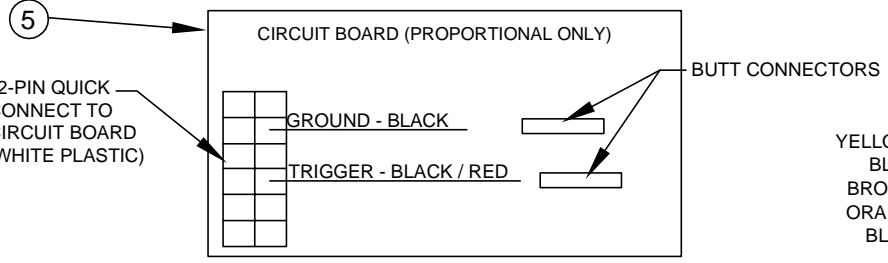
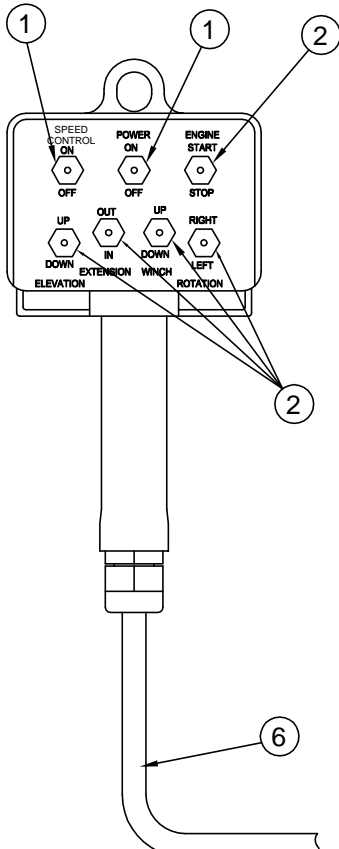
(INSIDE VIEW OF PENDANT CONTROL W/ REAR COVER REMOVED)



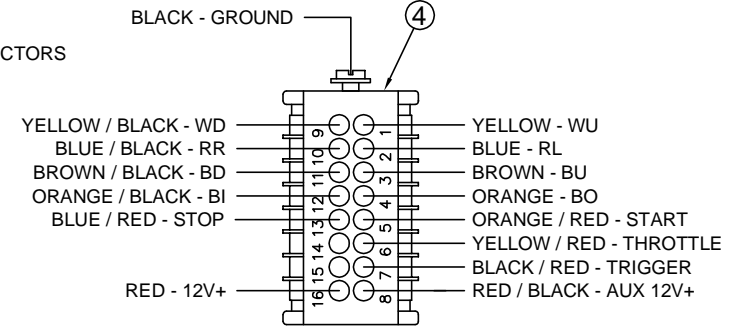
NOTE 1)
WIRE TERMINALS TO BE INSTALLED 'AFTER'
ROUTING REPLACEMENT CORD ASSY THROUGH
PENDANT HEAD AND PLUG HOUSING.

NOTE 2)
TOGGLE SWITCH JUMPER WIRES
NOT SHOWN FOR CLARITY.

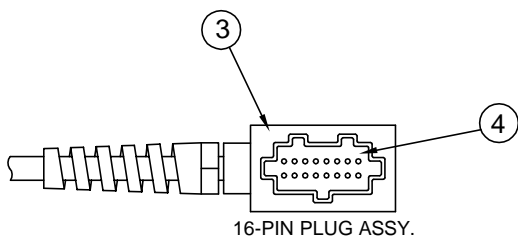
NOTE 3)
STOW OR CUT-BACK UNUSED WIRES.



NOTE 4)
WHEN REPLACING CORD ASSY CUT BLACK & BLACK / RED WIRES FROM
12-PIN QUICK CONNECT AND INSTALL 'BUTT CONNECTORS'; MATCH UP
BLACK & BLACK / RED WIRES FROM REPLACEMENT CORD ASSY.



16-PIN PLUG - BACKSIDE VIEW

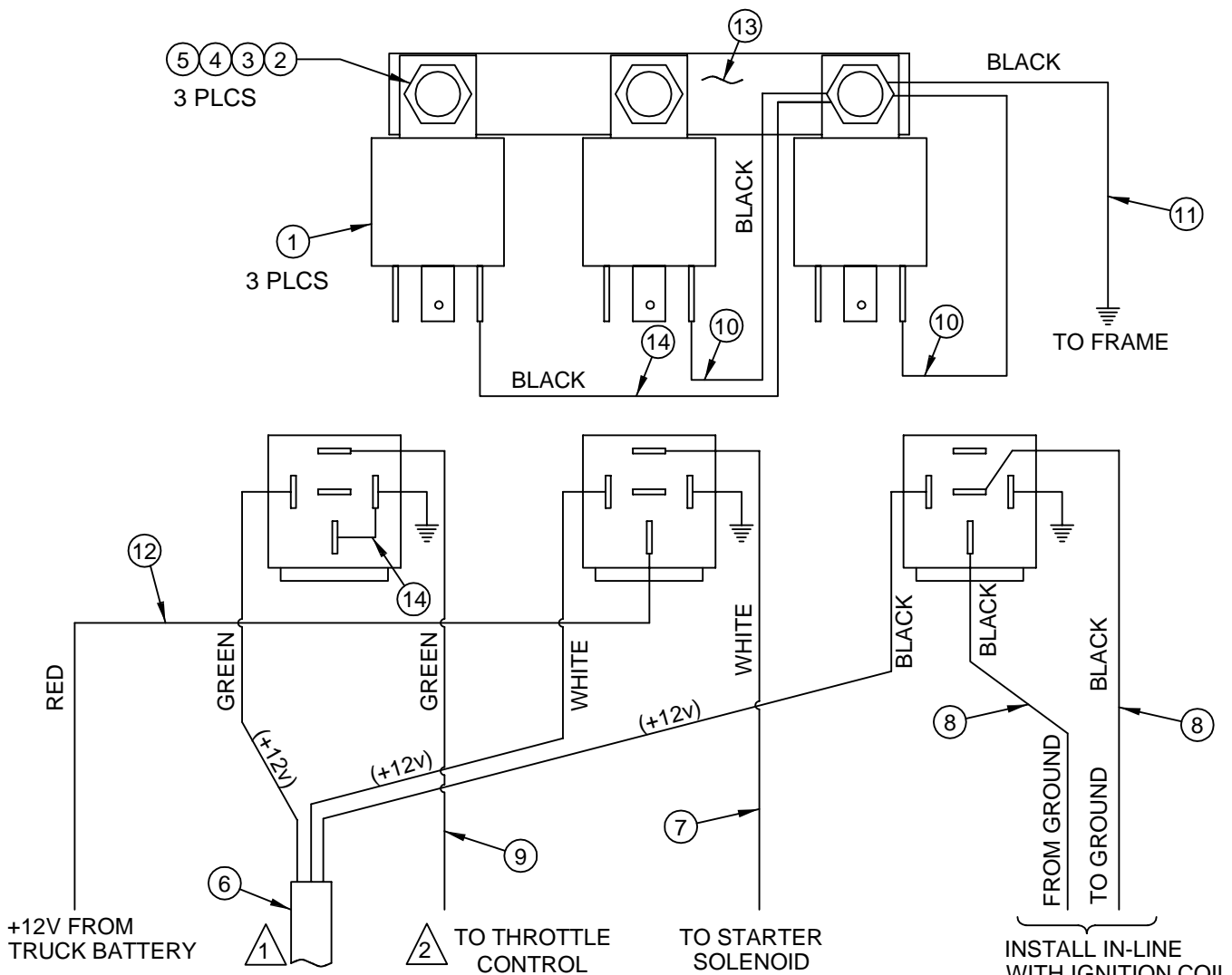


ITEM	QTY	PART NO.	DESCRIPTION
6	1	22135	REPL. CORD ASSY KIT
5	1	22082	PROP. VALVE DRIVER CONT. BOARD
4	1	22472	MALE INSERT - 16 + 1 POLE
3	1	22471	PLUG CASE - 16 + 1 POLE
2	4	22081	SPDT MOMENTARY SWITCH
1	1	22080	SPST SWITCH



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

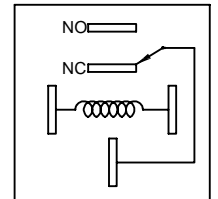
TITLE	DATE	SECTION
CORD REPLACEMENT INSTRUCTIONS	02-21-14C	C400
22065 PENDANT; PROP, ENGINE CONTROLS	SUPERSEDES 08-15-11B	22073



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

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



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

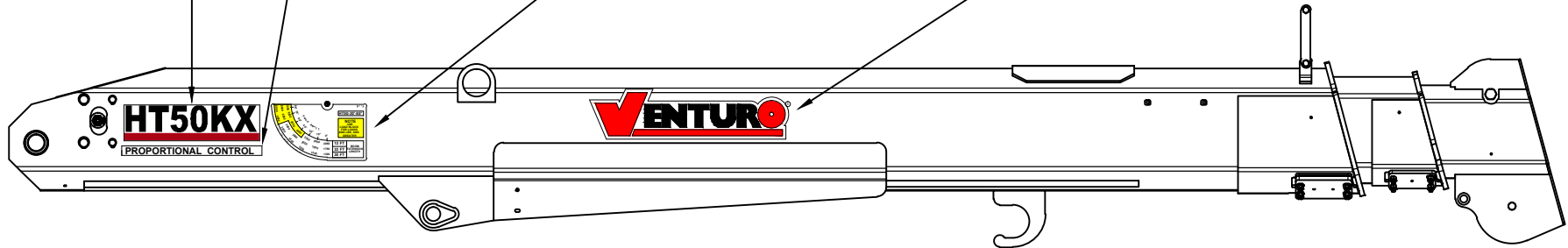
22615

2X 19747
HT50KX
MODEL DECAL

2X 19788
PROPORTIONAL
CONTROL

BOOM CAPACITY DECALS
24178 = RIGHT SIDE
24179 = LEFT SIDE

2X 22496
VENTURO LOGO
LARGE

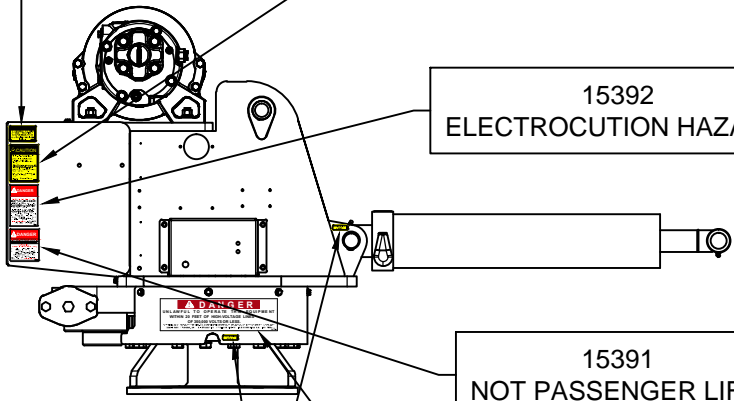


20834
MANUAL OVERRIDE
INSTRUCTIONS

15390
CAUTION DECAL

17389
VENTURO LOGO
MEDIUM

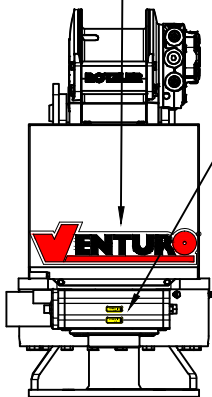
14473-1
OIL DECAL



15392
ELECTROCUTION HAZARD

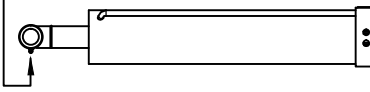
2X 14473-2
GREASE DECAL

14473-2
GREASE DECAL



14473-2
GREASE DECAL
UNDERNEATH

MANUAL OVERRIDES
22768-1 = LEFT
22768-2 = RIGHT



14473-2
GREASE DECAL

15391
NOT PASSENGER LIFT

15401
UNLAWFUL TO OPERATE

19315-2
MANUAL OVERRIDE
SHUT-OFF, PROPORTIONAL

22499
KNOW YOUR SIGNALS
DECAL



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
DECAL PLACEMENT

HT50-30'-85°

DATE
05-20-21

SUPERSEDES
-

SECTION
C400

28383

FIELD SERVICE LABEL KIT, HT50-30'-85°		28381
DESCRIPTION	QTY	PART #
DECAL; VENTURO LOGO, LARGE	2	22496
DECAL; VENTURO LOGO, MEDIUM	1	17389
DECAL; MODEL NAME, HT50KX	2	19747
DECAL; PROPORTIONAL CONTROL	2	19788
DECAL; BOOM CAPACITY, RIGHT, HT50-30'-85°	1	24178
DECAL; BOOM CAPACITY, LEFT, HT50-30'-85°	1	24179
DECAL; OIL	1	14473-1
DECAL; GREASE	6	14473-2
DECAL; OVERLOAD SENSING SYSTEM	1	17813
DECAL; KNOW YOUR SIGNALS	1	22499
DECAL; MANUAL OVERRIDE, INSTRUCTIONS	1	20834
DECAL; MANUAL OVERRIDE, SHUTOFF, PROPORTIONAL	1	19315-2
DECAL; MANUAL OVERRIDE, PROPORTIONAL, LEFT	1	22768-1
DECAL; MANUAL OVERRIDE, PROPORTIONAL, RIGHT	1	22768-2
IDWG; FIELD SERVICE LABEL KIT, HT50-30'-85°	1	28382
IDWG; DECAL PLACEMENTS, HT50-30'-85°	1	28383
SAFETY MANUAL, VENTURO CRANES	1	INST-23233
KIT; ACCIDENT PREVENTION SIGNS	1	15397

ACCIDENT PREVENTION SIGNS		15397
DESCRIPTION	QTY	PART #
DECAL; CAUTION	1	15390
DECAL; DANGER, NOT A PASSENGER LIFT	1	15391
DECAL; DANGER, ELECTROCUTION HAZARD	1	15392
DECAL; DANGER, ELECTRICAL HAZARD	4	15393
IDWG; HAZARDS & INFORMATION	1	15394
DECAL; UNPLUG THE PENDANT	1	15398
DECAL; UNLAWFUL TO OPERATE	1	15401
DECAL; MASTER DISCONNECT, ON/OFF	1	15513
DECAL SHEET; VENTURO, COMPLEMENTARY	1	22317
DECAL; CRANE STABILITY	1	20927



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
FIELD SERVICE LABEL KIT
HT50-30'-85° (HSBACD-1)

DATE
04-26-21
SUPERSEDES
-

SECTION
C400
28382



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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