

PARTS & INSTALLATION MANUAL

HT40KXP-25

Included in this manual:

HT40KXP-25

- 6,000 lb Hydraulic Telescopic Service Crane
- 25 ft Fully-Powered, Two-Stage Boom Extension

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



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

HT40KX-25', PROP

INST-26911 - 3/15/2024 (Rev: A0)

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SECTION 100

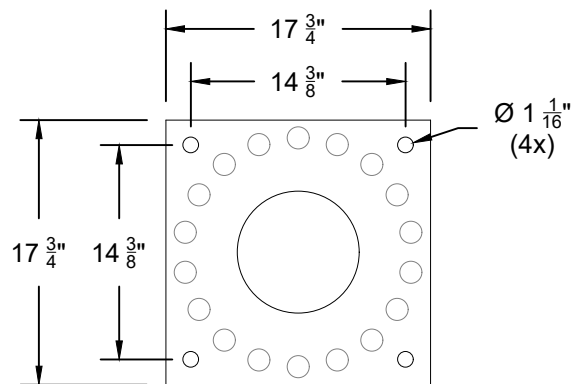
DESCRIPTION

&

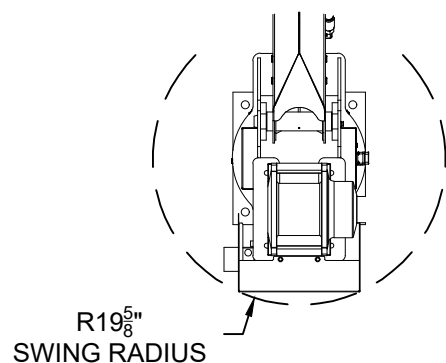
SPECIFICATIONS



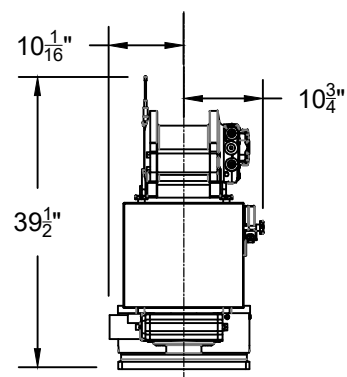
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO



BASE MOUNTING DIMENSIONS



R19⁵/₈"
SWING RADIUS



CENTER OF ROTATION

25' - 9¹/₂"

19' - 6³/₁₆"

13' - 2¹³/₁₆"

LOAD BLOCK FOR SINGLE AND TWO-PART LINE OPERATION

3' - 10¹³/₁₆"; TWO-PART LINE, FROM CENTER OF ROTATION @ 75°

BOOM ANGLE AND CAPACITY INDICATOR ON BOTH SIDES OF BOOM

3/8" DIAMETER WIRE ROPE, 100 FT. LONG

6' - 6"
POWER

6' - 6"
POWER

C.G. (APPROX)

3' - 8⁷/₁₆"

11' - 11"

18' - 8"

25' - 2"

OAL: RETRACTED = 13' 10³/₈" EXTENDED = 26' 10³/₈"

WARNING

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



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TITLE
INSTALLATION DIMENSIONS

HT40/45/50KX-25' BOOM

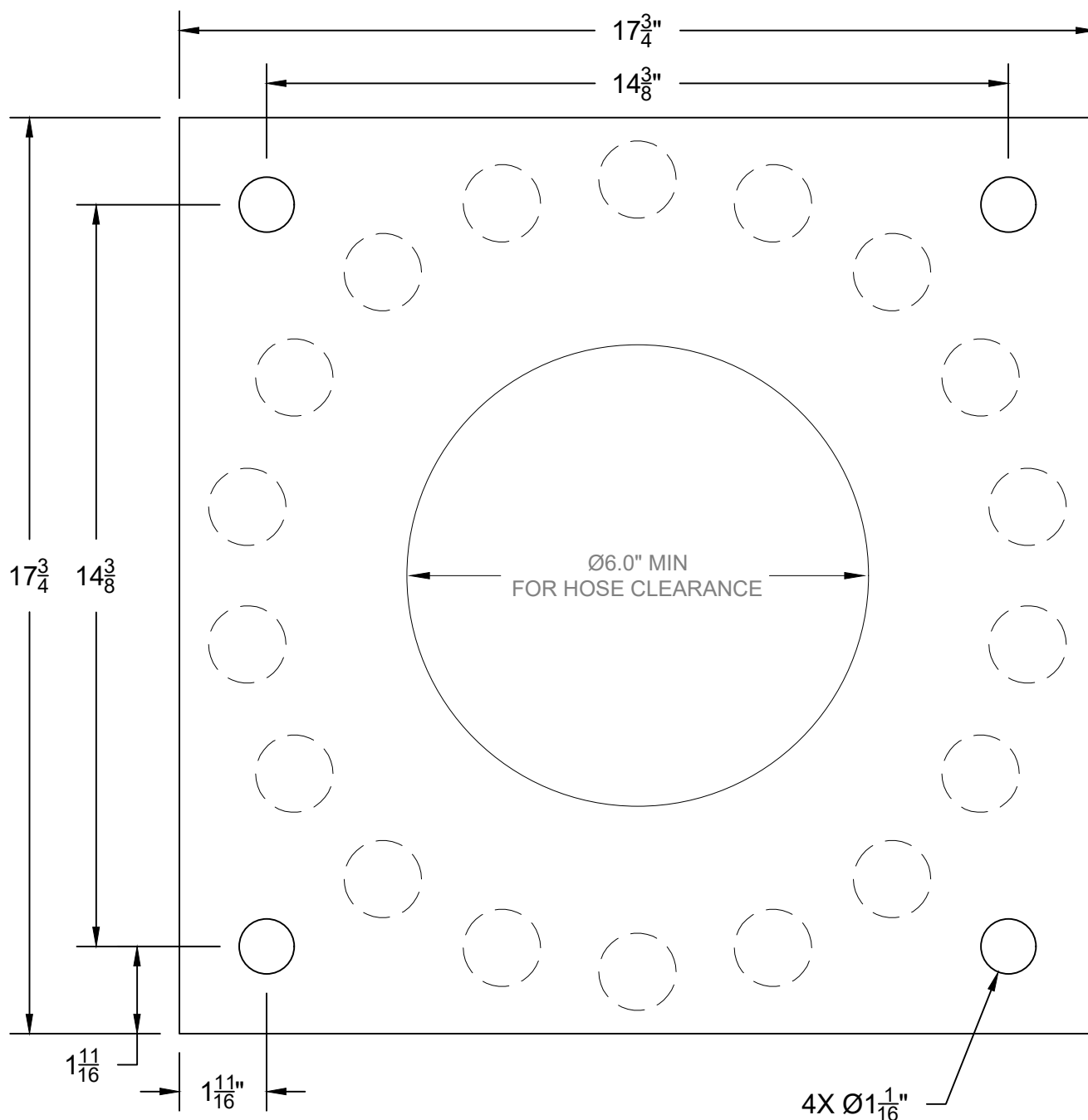
DATE
05-25-23

SUPERSEDES
-

SECTION
C100

26893

HT40/45/50KX SERIES MOUNTING DIMENSIONS



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
MOUNTING DIMENSIONS

HT40/45/50KX SERIES

DATE
05-25-23

SUPERSEDES
-

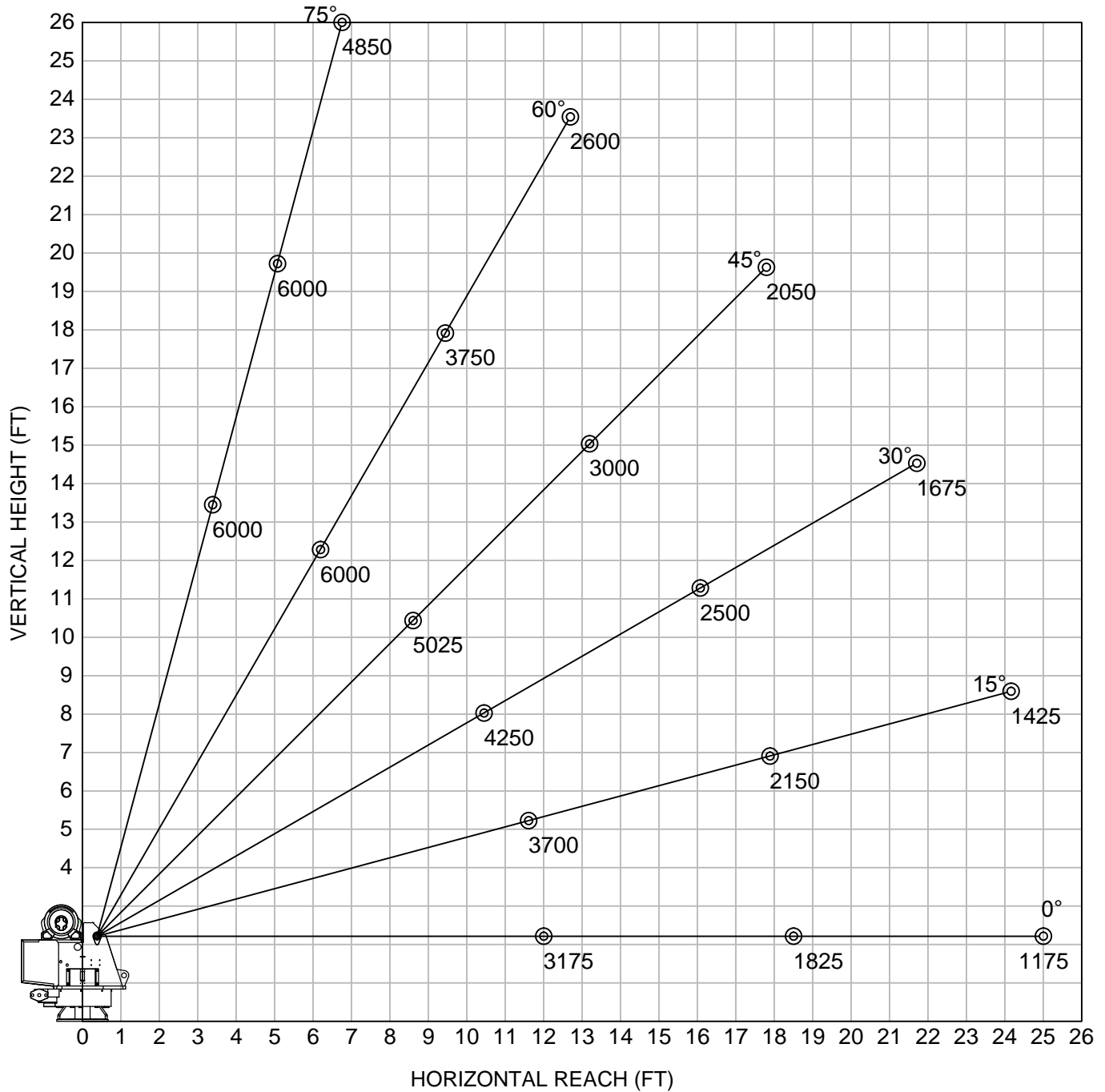
SECTION
C100

26892

HT40KX, 12'-18.5'-25' BOOM

▲ CRANE SERIAL NUMBER: _____

MAXIMUM LOAD CAPACITY CHART



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

LOAD BLOCK USAGE

1 PART LINE FOR LOADS LESS THAN 3000 LBS

2 PART LINE FOR LOADS OF 3000 LBS AND GREATER

WEIGHT OF LOAD BLOCK = 51 LBS



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TITLE
MAXIMUM LOAD CAPACITY
HT40KX, 12'-18.5'-25' BOOM

DATE
05-03-16A
SUPERSEDES
04-23-14

SECTION
C100
23061

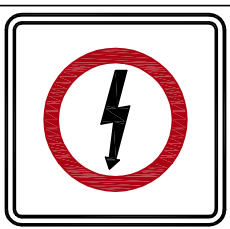
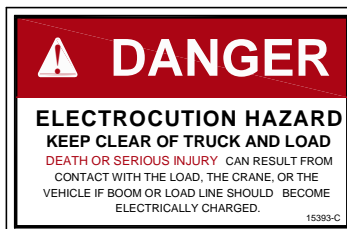
SECTION 150

SAFETY

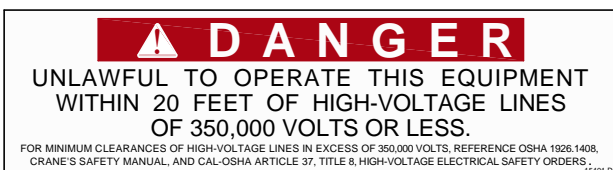


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VEHICLE & CRANE MOUNTED ELECTRICAL HAZARD SIGN APPLICATION & INFORMATION



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

CRANE SAFETY & HZRDS

DATE

02-21-14D

SECTION

C150

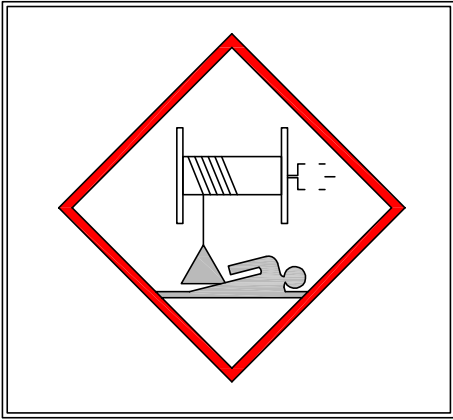
HYDRAULIC CRANES

SUPERSEDES

04-04-12C

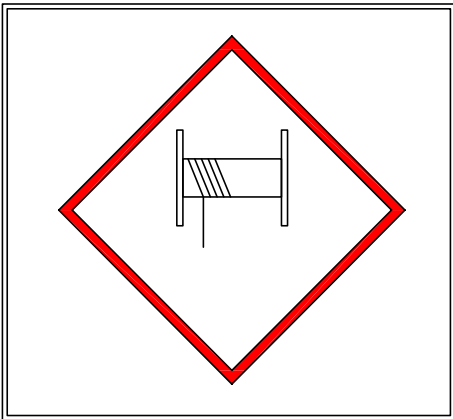
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WINCH SAFETY WARNINGS



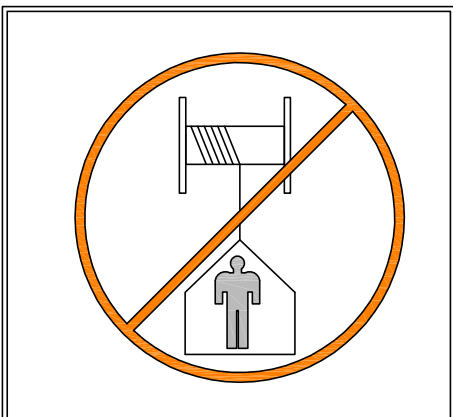
DANGER

- 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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CINCINNATI, OHIO

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.



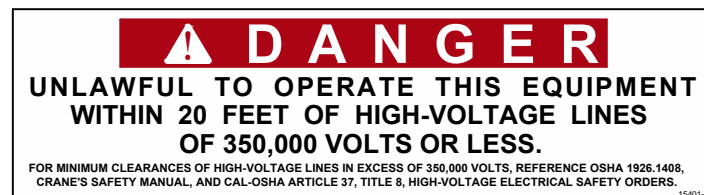
PART NO.: 15401

DECAL: UNLAWFUL TO OPERATE

FUNCTION: To inform the operator of proper operation in vicinity of power lines.

QUANTITY: 1

PLACEMENT: Right side of housing.



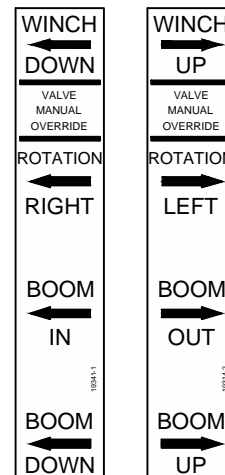
PART NO.: 19314-1 [LEFT] & -2 [RIGHT]

DECAL: MANUAL OVERRIDE (NON-PROP)

FUNCTION: To inform the operator of manual override locations.

QUANTITY: 1 EACH

PLACEMENT: Inside of rear cover.



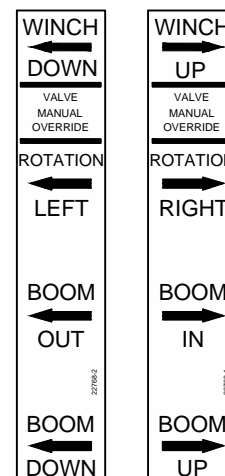
PART NO.: 22768-1 [LEFT] & -2 [RIGHT]

DECAL: MANUAL OVERRIDE (PROPORTIONAL)

FUNCTION: To inform the operator of manual override locations.

QUANTITY: 1

PLACEMENT: Inside of rear cover.



VENCO VENTURO INDUSTRIES LLC
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TITLE
DECAL DRAWING & LIST

HT40/50/60/66 SERIES

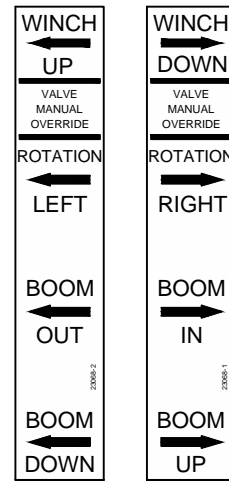
DATE
11-30-22E

SUPERSEDES
02-21-14D

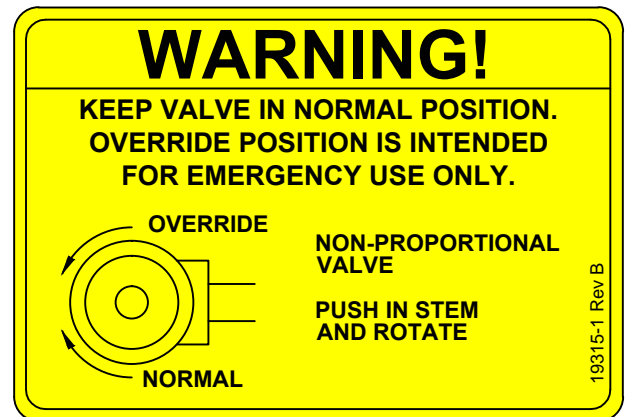
SECTION
C150

22181A

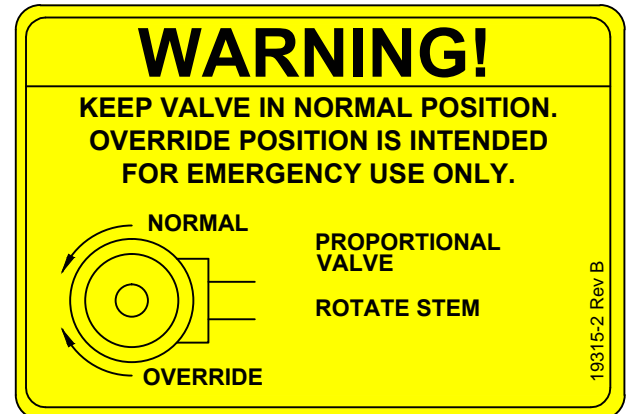
▲
PART NO.: 23068-1 [LEFT] & -2 [RIGHT]
DECAL: MANUAL OVERRIDE
 (HT66KXX w/ TH-2 Winch ONLY)
FUNCTION: To inform the operator of
 manual override locations.
QUANTITY: 1
PLACEMENT: Inside of rear cover.



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.



PART NO.: 19315-2
DECAL: MANUAL OVERRIDE (PROPORTIONAL)
FUNCTION: To show the operator how to
 override proportional valve.
QUANTITY: 1
PLACEMENT: Inside rear cover.



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



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 CINCINNATI, OHIO

TITLE
DECAL DRAWING & LIST

HT40/50/60/66 SERIES

DATE
 04-14-23H

SUPERSEDES
 11-30-22G

SECTION
 C150

22181B

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.



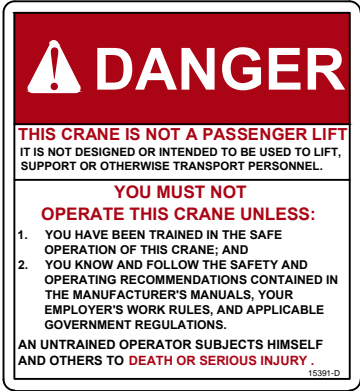
PART NO.: 15391

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.



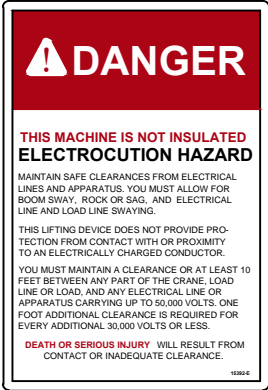
PART NO.: 15392

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.



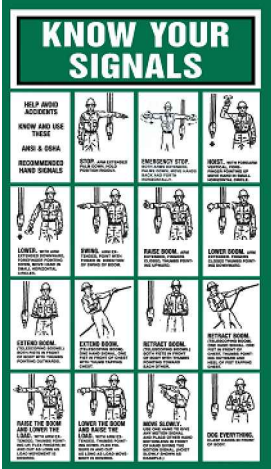
PART NO.: 22499


DECAL: KNOW YOUR SIGNALS

FUNCTION: To inform the operator of proper signals.

QUANTITY: 1

PLACEMENT:Right side of rear cover.



| | | | |
|---|-------------------------------|-------------------------|-----------------|
|  VENTURO [®] VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO | TITLE DECAL DRAWING & LIST | DATE 11-30-22F | SECTION C150 |
| | HT40/50/60/66 SERIES | SUPERSEDES 02-21-14E | 22181C |

PART NO.: 17389

DECAL: MEDIUM VENTURO

FUNCTION: Branding.

QUANTITY: 1

PLACEMENT: Rear cover.



PART NO.: 28523

DECAL: MODEL HT40KX

FUNCTION: Branding.

QUANTITY: 2

PLACEMENT: Boom.



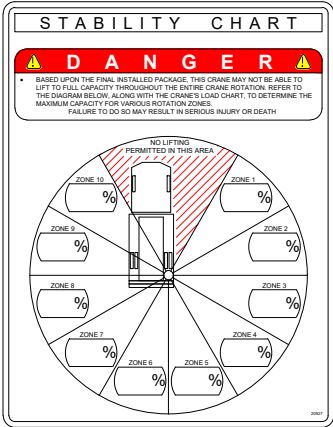
PART NO.: 20927

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.



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TITLE
DECAL DRAWING & LIST
HT40KX

DATE
06-16-23
SUPERSEDES
-

SECTION
C150
28524

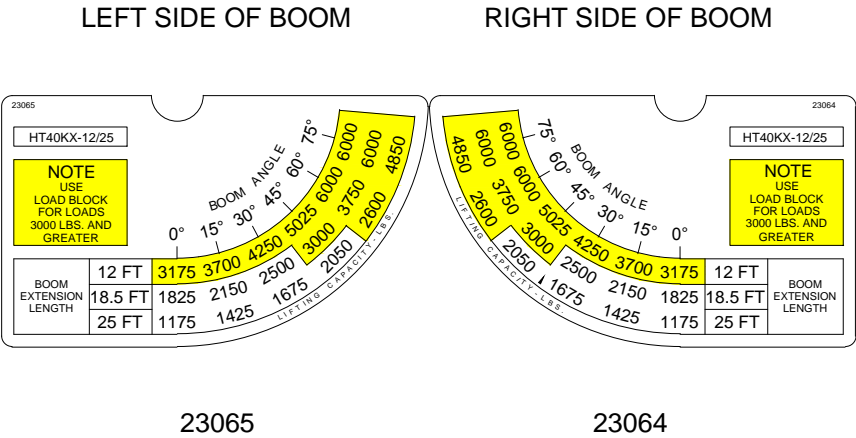
PART NO.: 23065 & 23064

DECAL: HT40-25' CRANE CAPACITY

FUNCTION: To show the operator the operating capacities of the crane

QUANTITY: 1 each

PLACEMENT: Right side of boom, Left side of boom



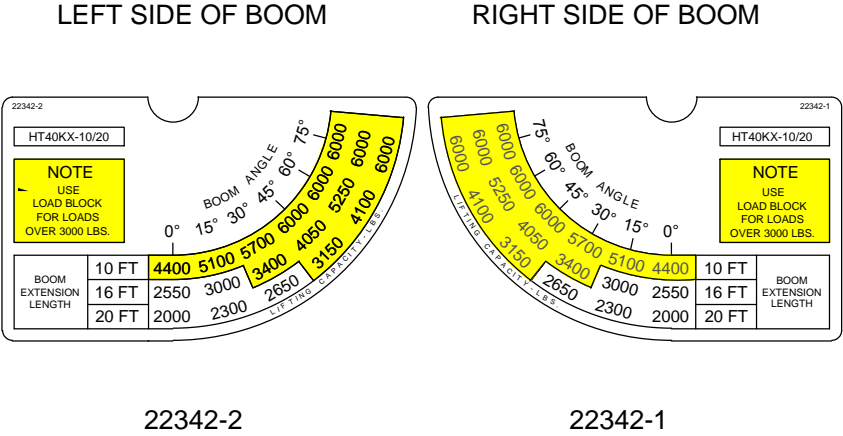
PART NO.: 22342-2 & 22342-1

DECAL: HT40-20' CRANE CAPACITY

FUNCTION: To show the operator the operating capacities of the crane

QUANTITY: 1 each

PLACEMENT: Right side of boom, Left side of boom



S P A C E I N T E N T I O N A L L Y L E F T B L A N K

S P A C E I N T E N T I O N A L L Y L E F T B L A N K



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

| | | |
|----------------------|------------|---------|
| TITLE | DATE | SECTION |
| BOOM CAPACITY DECALS | 11-11-20 | C150 |
| HT40 SERIES | SUPERSEDES | 24196 |
| | - | |

SECTION 200

INSTALLATION



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

CRANE INSTALLATION, PAGE 1

HT40/50KX

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 HT40KX is 45,000 ft. lbs. and for the HT50KX is 55,000 ft. lbs.

The maximum vertical loads for the HT40/50KX are listed based on the boom length:

| | HT40KX | | HT50KX | |
|-------------------------|--------|------|--------|-------|
| BOOM LENGTH (FT) | 20' | 25' | 20' | 25' |
| MAX VERTICAL LOAD (LBS) | 7900 | 8050 | 9900 | 10050 |

CRANE MOUNTING

The crane base plate or mounting pedestal must be bolted to the body reinforcing plate with four [4] grade eight (8) bolts of 1" dia. with coarse threads, torqued to 680 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.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
CRANE INSTALLATION
HT40/50KX

DATE
05-26-23
SUPERSEDES
-

SECTION
C200
26895

▲ 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 | NON-PROPORTIONAL | PROPORTIONAL |
|-----------------|------------------|--------------|
| PRESSURE | 3/8" | 5/8" |
| RETURN | 1/2" | 3/4" |
| SUCTION | 3/4" | 1-1/4" |

RESERVOIR

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

▲ PTO PUMP

The PTO pump should be sized to allow an engine idle speed range that will deliver approximately 2.5 GPM for the HT40 non-proportional, 12.0 GPM for the HT40 proportional, 3.0 GPM for the HT50 non-proportional, or 12.0 GPM for the HT50 proportional. 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 / 25 gallon = 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.



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CINCINNATI, OHIO

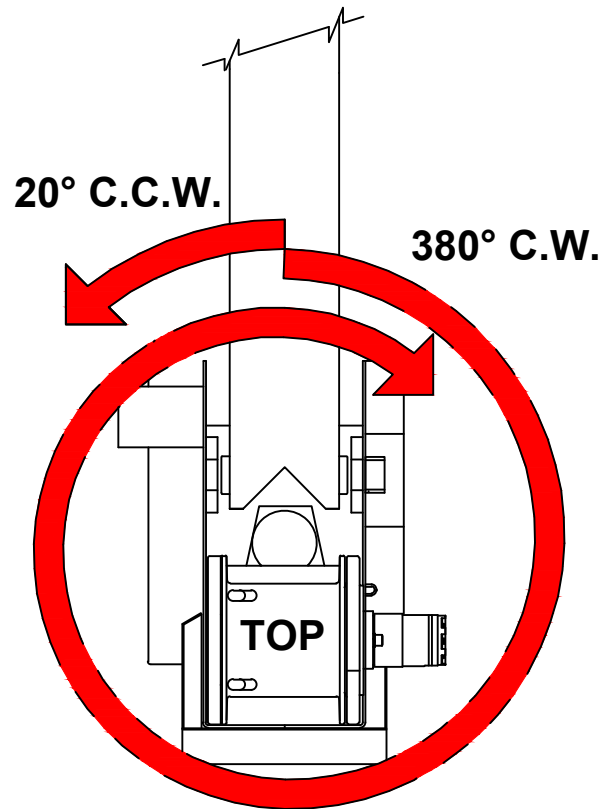
| |
|-----------------------|
| TITLE |
| CRANE INSTALLATION |
| HT40/50 SERIES CRANES |

| |
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| DATE |
| 05-10-21G |
| SUPERSEDES |
| 07-31-15F |

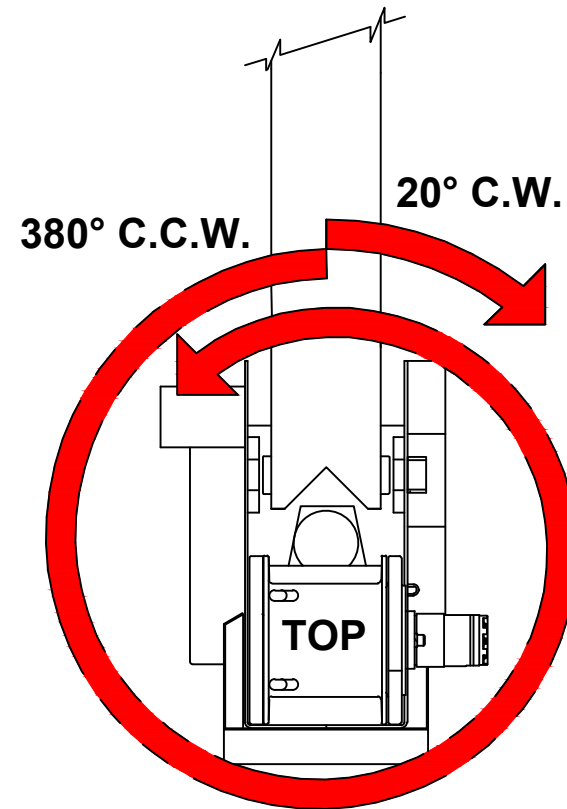
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| SECTION |
| C200 |
| 22173 |

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 - HT40-25' 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. Locate the Overload Pressure Switch at the base of the elevation cylinder
 - 5.1. Disconnect the black & white wires from the housing and then connect the black & white wires together to by-pass the Overload Pressure Switch for the stability test. **Note: The black & white wires MUST be reconnected to the Overload Pressure Switch after the stability test has been completed.**
6. Use a **test weight** weighing a **minimum** of **1382 lbs**, (includes load block weight of **51 lbs.**) to a **maximum of 1450 lbs**.
7. Position the boom level and fully retracted.
8. Referring to the Stability Chart (drawing 20907) rotate the crane to a position between 1 and 2 o'clock (truck cab is facing 12 o'clock) to begin testing.
9. Use the winch to lift the Test Weight; DO NOT allow the weight to be more than 6" off the ground at any time during testing (for safety).
10. Using the test weight, extend the boom slowly, until one of the two conditions occur:
 - 10.1. Full extension is reached - Mark the ZONE in question **100%**
 - 10.2. The truck becomes unstable i.e. a tire lifts off the ground
 - 10.2.1. Retract the boom until at least one tire on each corner of the truck is making contact with the ground
 - 10.2.2. Use the formula below to determine the allowable **% of Rated Capacity** for the ZONE in question:
11. Note: The "**Max Stable Reach in inches**" is measured from the **center of rotation** of the crane housing to the **lifting load hook**.

$$\% \text{ Rated Capacity} = \frac{\text{"Max Stable Reach" in inches}}{300} \times 100$$
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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TITLE

STABILITY TEST

HT40-25' SERIES

DATE

03-01-23D

SUPERSEDES

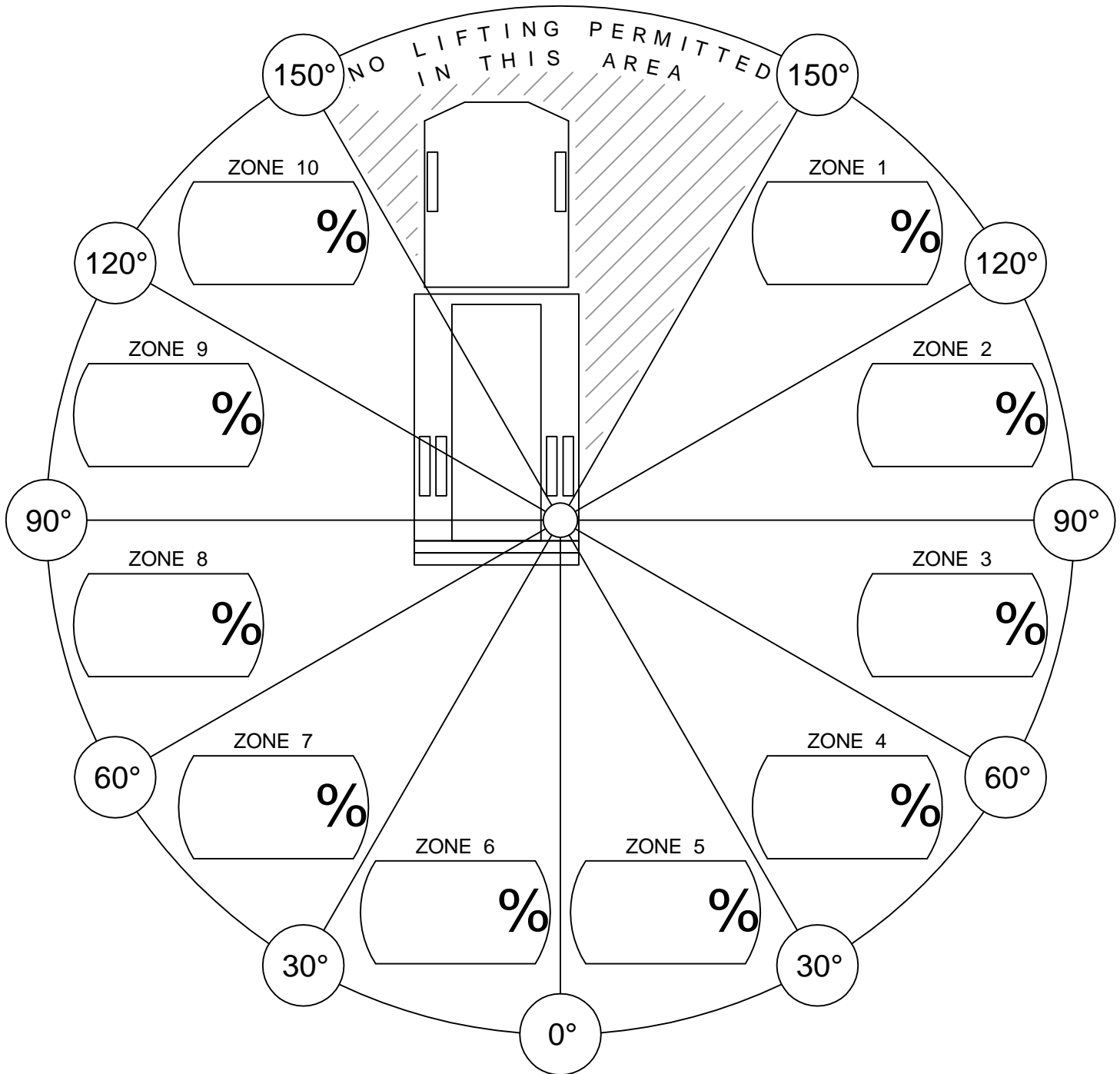
11-24-21C

SECTION

C200

20906-40B

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

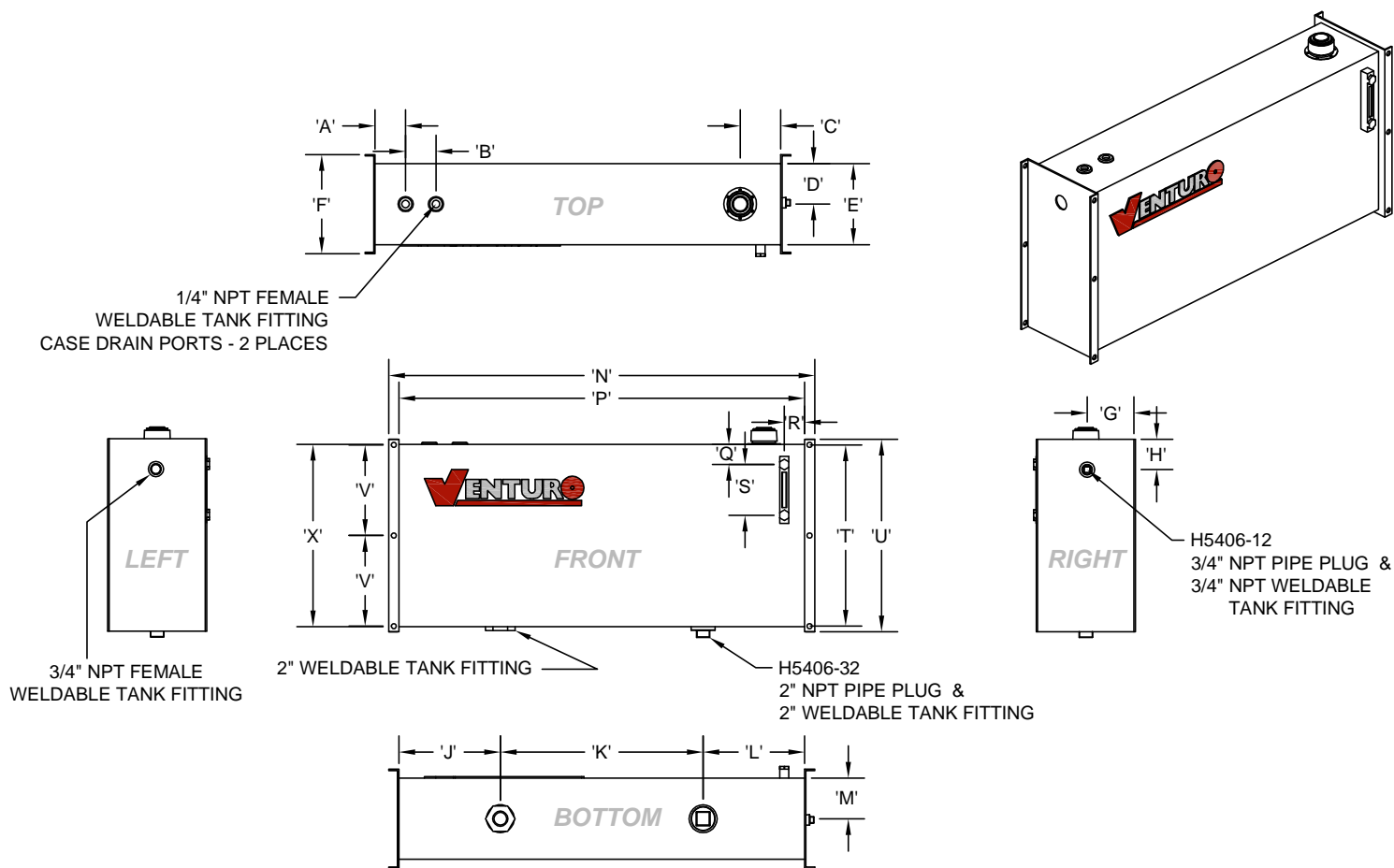
VENTURO CRANES

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



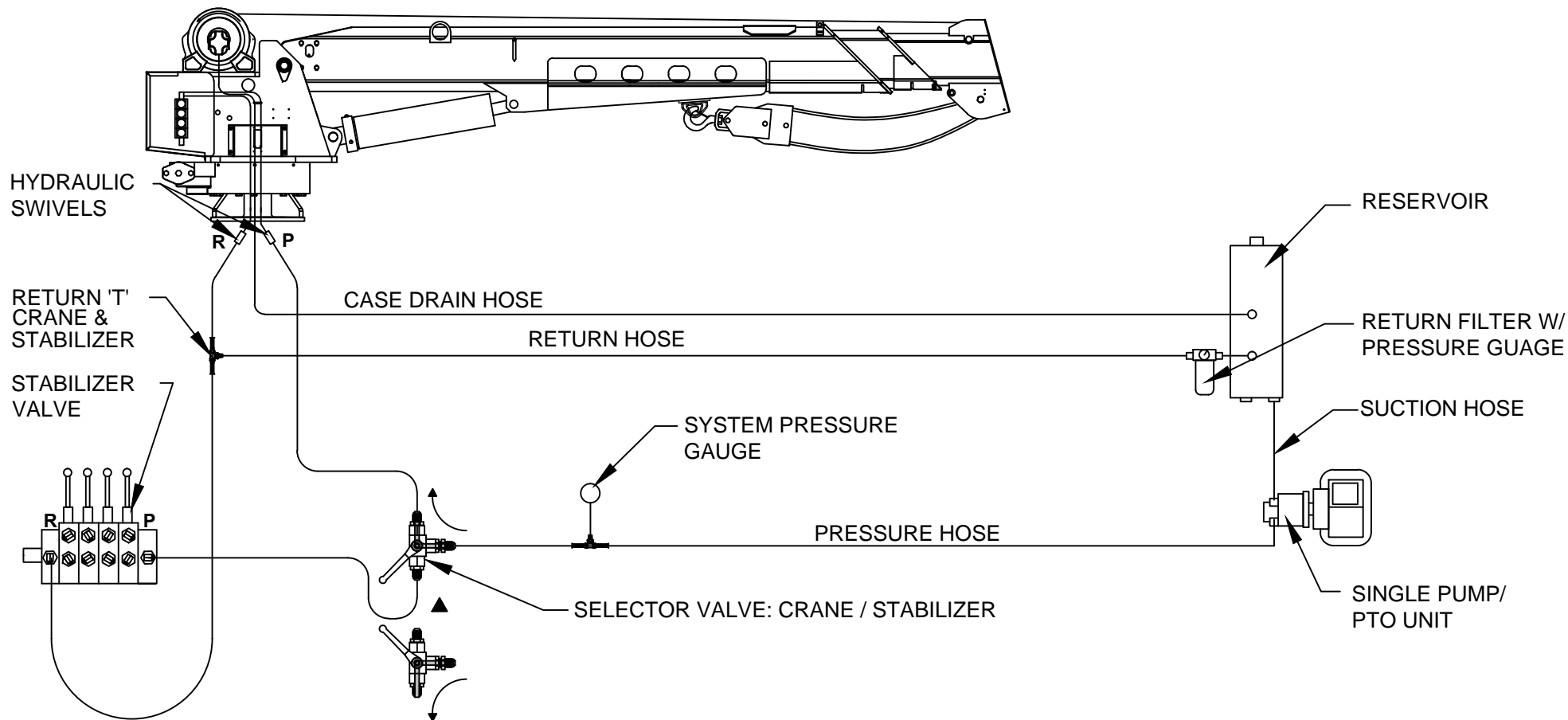
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
RESERVOIR DIMENSIONS
HYD. TANKS (25/40 GAL.)

DATE
02-21-14E
SUPERSEDES
06-04-13D

SECTION
C200
22825

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

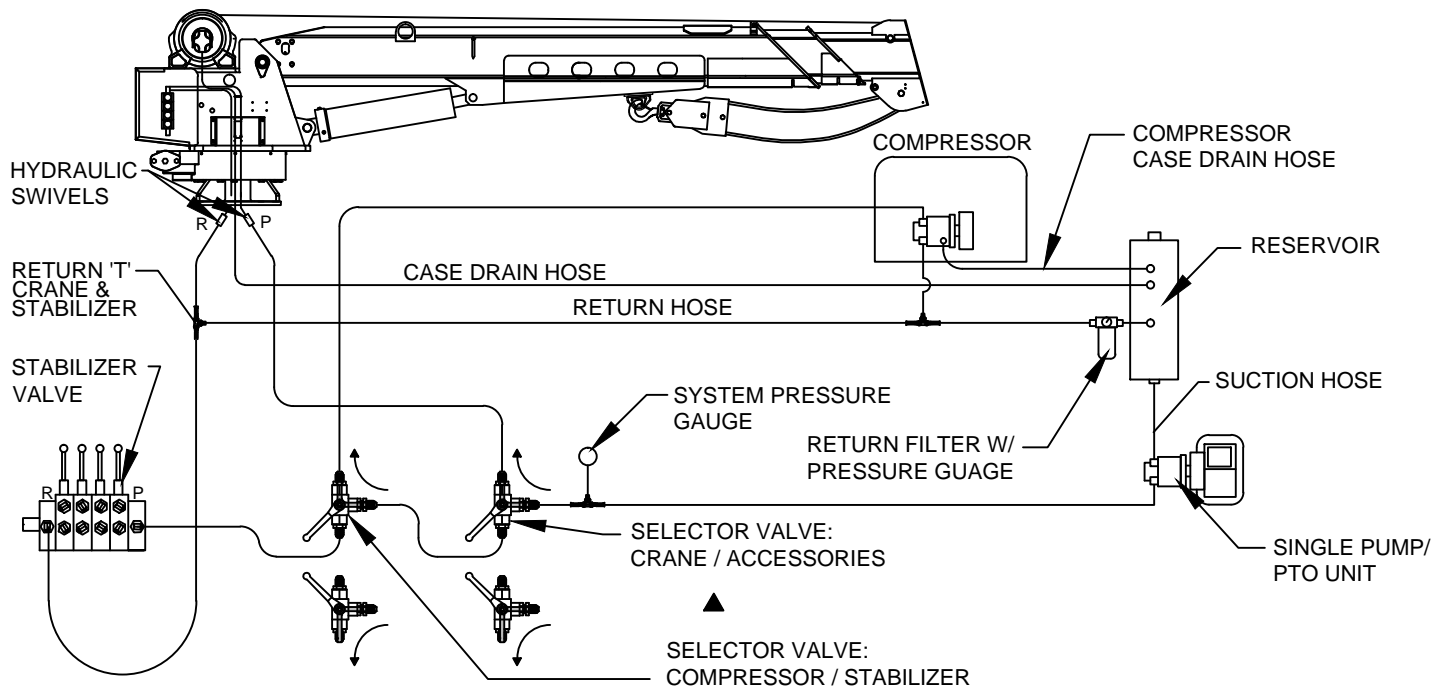
02-21-14B

SECTION

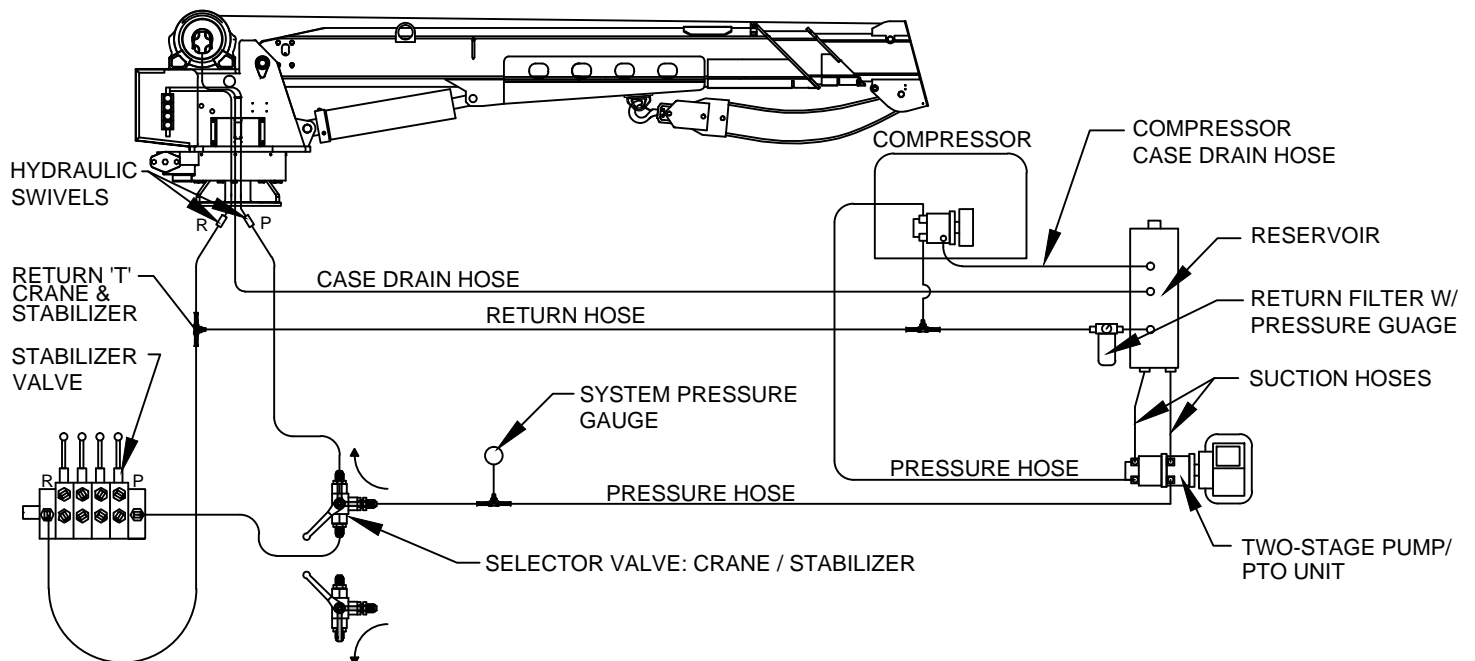
C200

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.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
CNNCTN GDE, PAGE 2/2

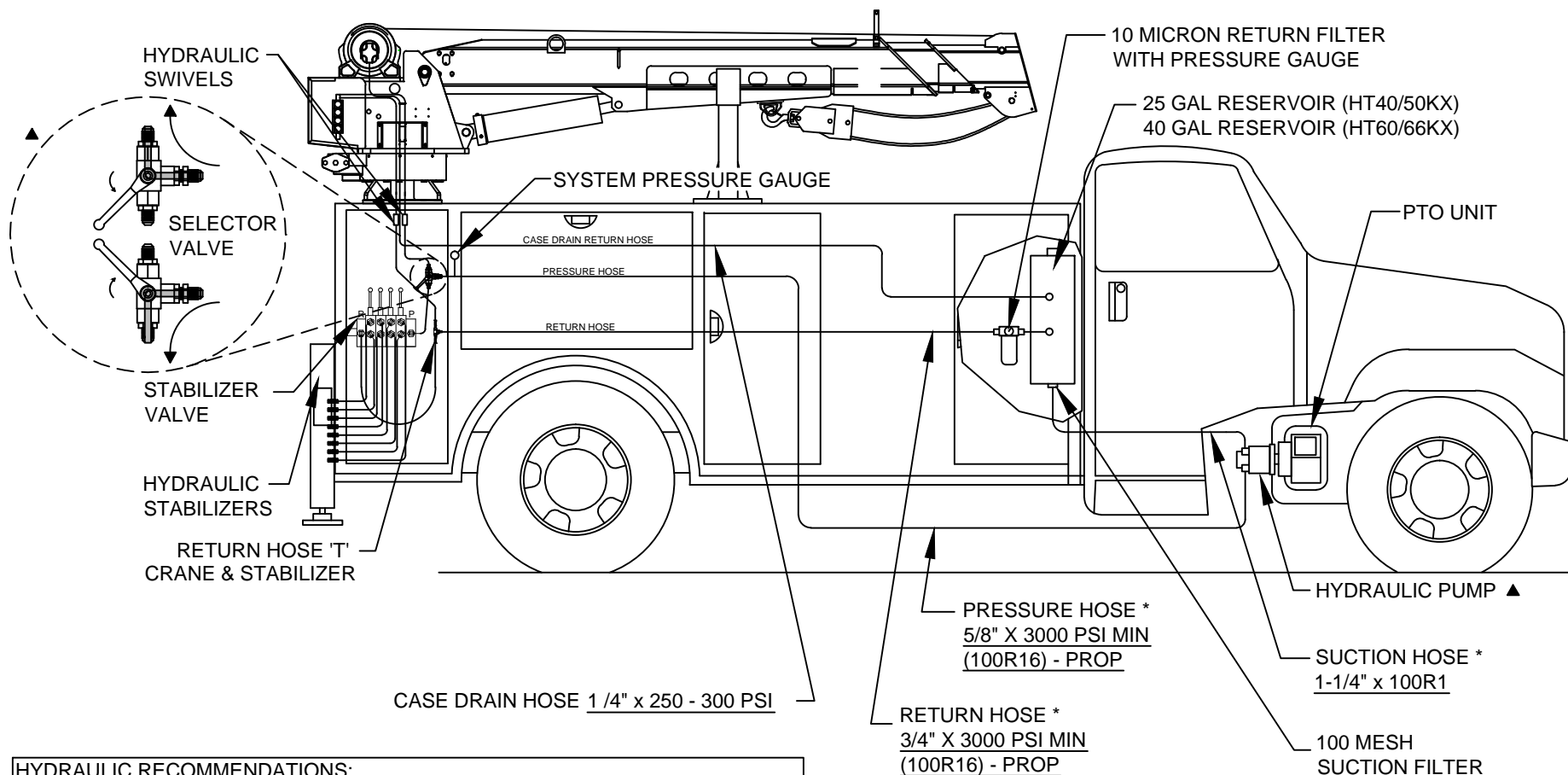
HT CRANES

DATE
08-08-23C

SUPERSEDES
02-21-14B

SECTION
C200

23014



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

HYDRAULIC COMPONENT INSTALLATION

HT40-66, PROPORTIONAL

DATE

08-08-23G

SUPSEDES

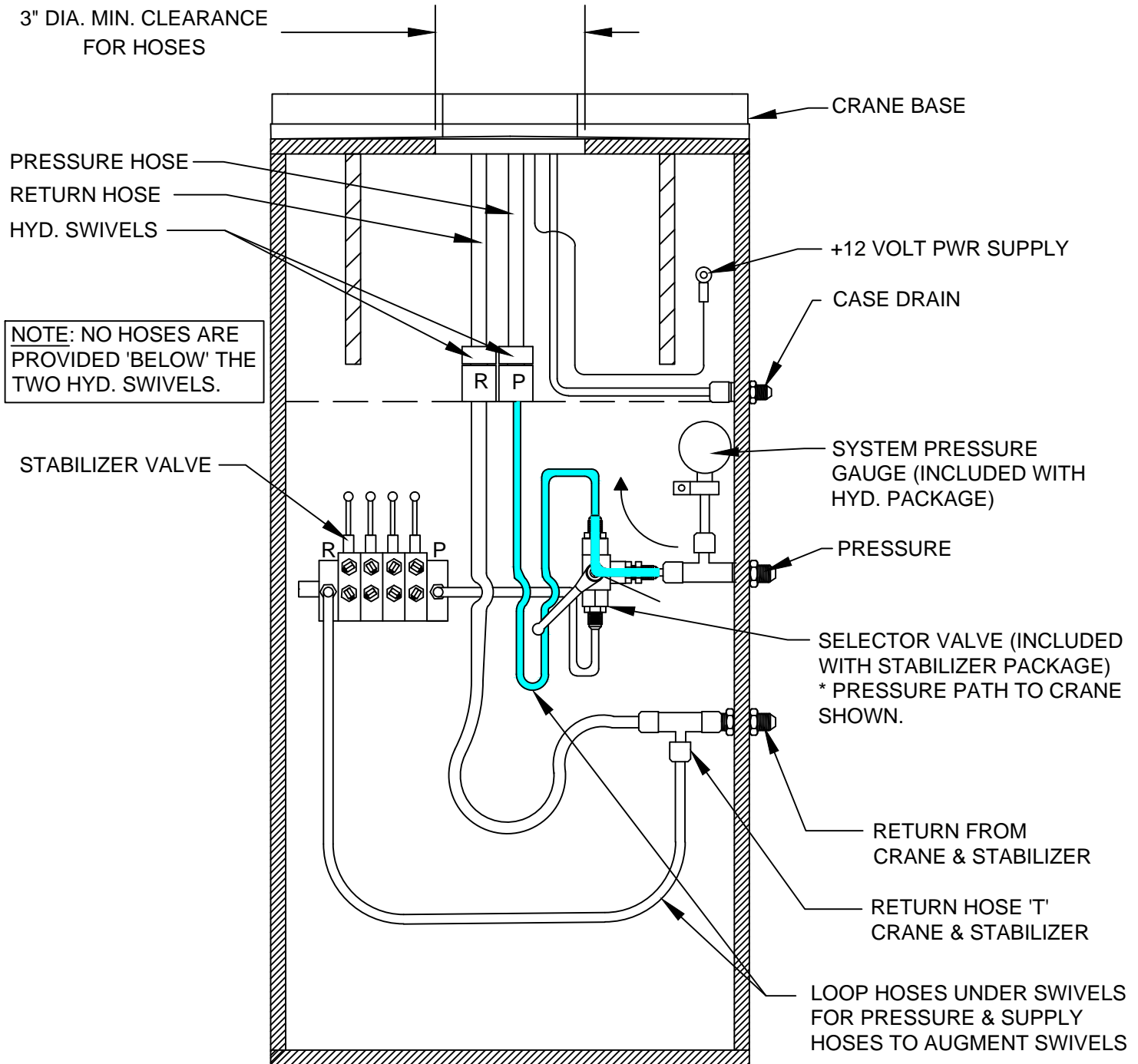
11-10-22F

SECTION

C200

22883

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

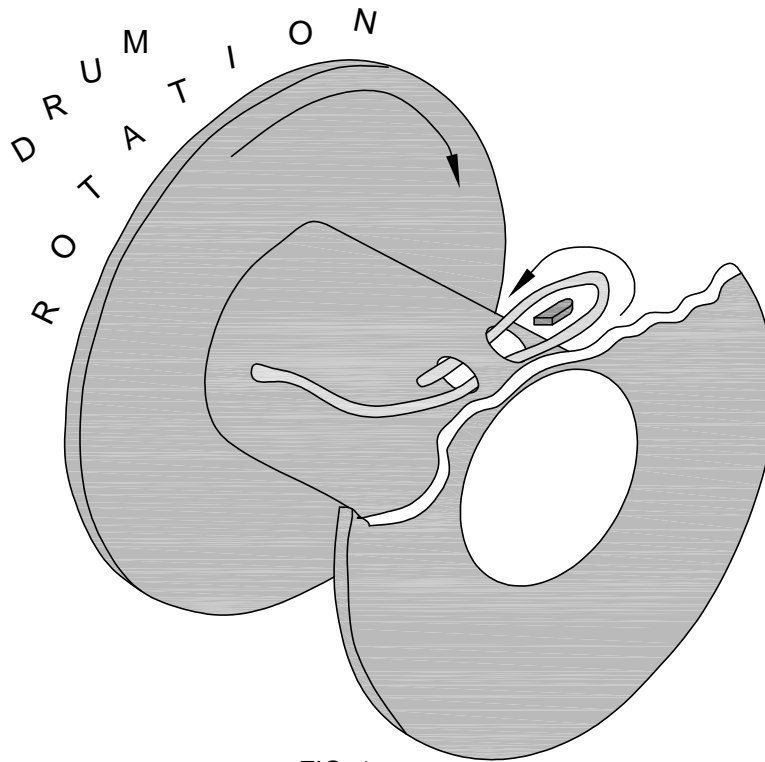


FIG. 1

- 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

OPERATION

&

MAINTENANCE



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 | Sweptco #201 multi-purpose gear oil |



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

MAINTENANCE INFO

DATE

11-10-22D

SECTION

C300

HT25/30/40/50/60/66KX(P)

SUPERSEDES

02-21-14C

23203

CRANE OPERATION AND MAINTENANCE INSTRUCTIONS, PAGE 1

HT40/50KX

SAFETY

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

CRANE INSPECTION

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

See Crane Safety Manual for proper inspection schedules and reports.

CAPACITY

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

LOAD BLOCK

If the load exceeds 3000 lbs.-HT40KX or 4000 lbs.-HT50KX or if reduced winching speed for better control of smaller loads is required, use the load block to rig the crane for two part line operation .

CONTROLS

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

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

Plug the pendant into the socket on the right side of the crane and secure with socket case handle.

PTO SYSTEM

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

CRANE OPERATION

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

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

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

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



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

CRANE OP / MNTNC INST

HT40/50KX

DATE

02-21-14E

SUPERSEDES

06-18-12D

SECTION

C200

22345A

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.

POWER - (Non Proportional Systems) Energizes safety shutoff valve. See page 22328 for detailed operations instructions and warnings.

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.

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

STANDARD LENGTH (10' - 20'); Double Stage

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 24188 and 24189).

OPTIONAL LENGTH (12' - 25'); 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 24190 and 24191).

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.



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

| TITLE | DATE | SECTION |
|-----------------------|-------------------------|---------|
| CRANE OP / MNTNC INST | 12-16-20P | C200 |
| HT40/50KX | SUPERSEDES 02-21-14N | 22345B |

CRANE OPERATION AND MAINTENANCE INSTRUCTIONS, PAGE 3

HT40/50KX

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

MAINTENANCE

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

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

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

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

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

| Temp Range (°F) | Winch Gear Oil |
|-----------------|--|
| 120° to 10° | High quality SAE 90 gear lubricant oil |
| Severe Duty | Swepco #201 multi-purpose gear oil |

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

Grease fitting locations:

- Boom pivot at rear of boom
- Speed reducer (2 fittings)
- Elevation cylinder tail clevis
- Bottom of Swing Bearing (2 fittings)

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

Check electrical connections for looseness and corrosion .



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CINCINNATI, OHIO

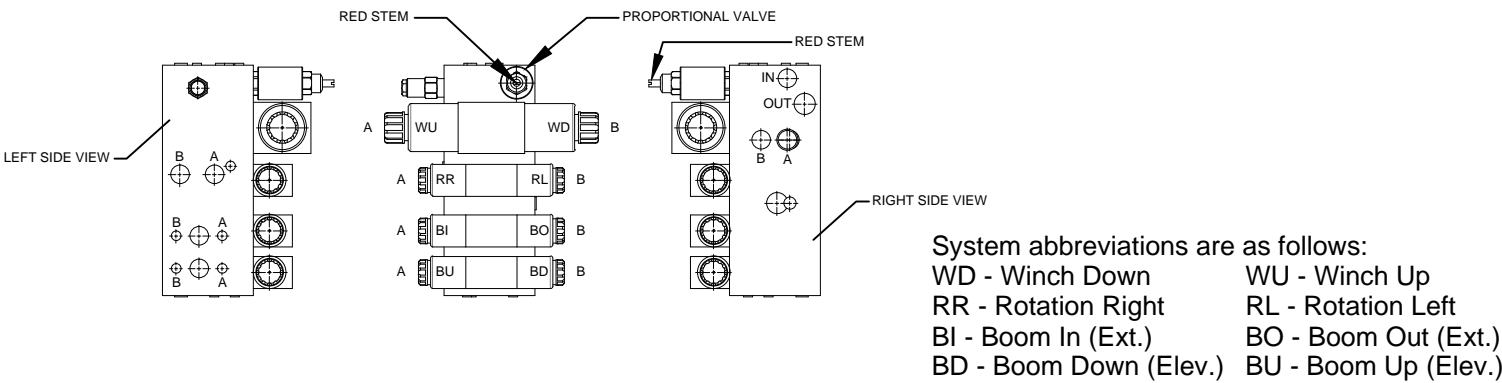
| TITLE | DATE | SECTION |
|-----------------------|-------------------------|---------|
| CRANE OP / MNTNC INST | 02-21-14E | C200 |
| HT40/50KX | SUPERSEDES 11-29-12D | 22174 |

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.



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CINCINNATI, OHIO

| | | |
|-----------------------|-------------------------|---------|
| TITLE | DATE | SECTION |
| HYDRAULIC SYSTEM | 11-10-22E | C200 |
| HT40/50/60/66KX; PROP | SUPERSEDES 02-21-14D | 22168 |

WIRE ROPE ASSEMBLY

WIRE ROPE:

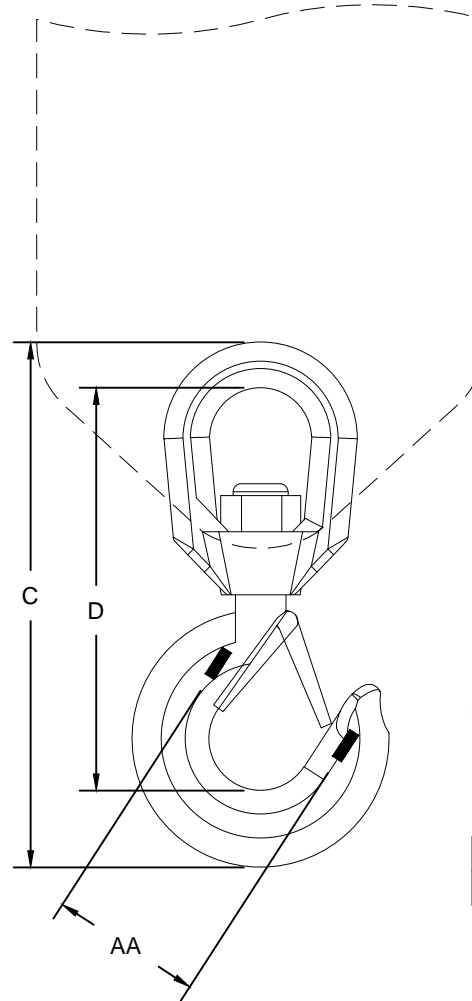
3/8" DIA, 100' LONG

▲ 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" |



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

WIRE ROPE & HOOK SPECIFICATIONS

HT40/50KX

DATE

05-09-16D

SUPERSEDES

02-21-14C

SECTION

C300

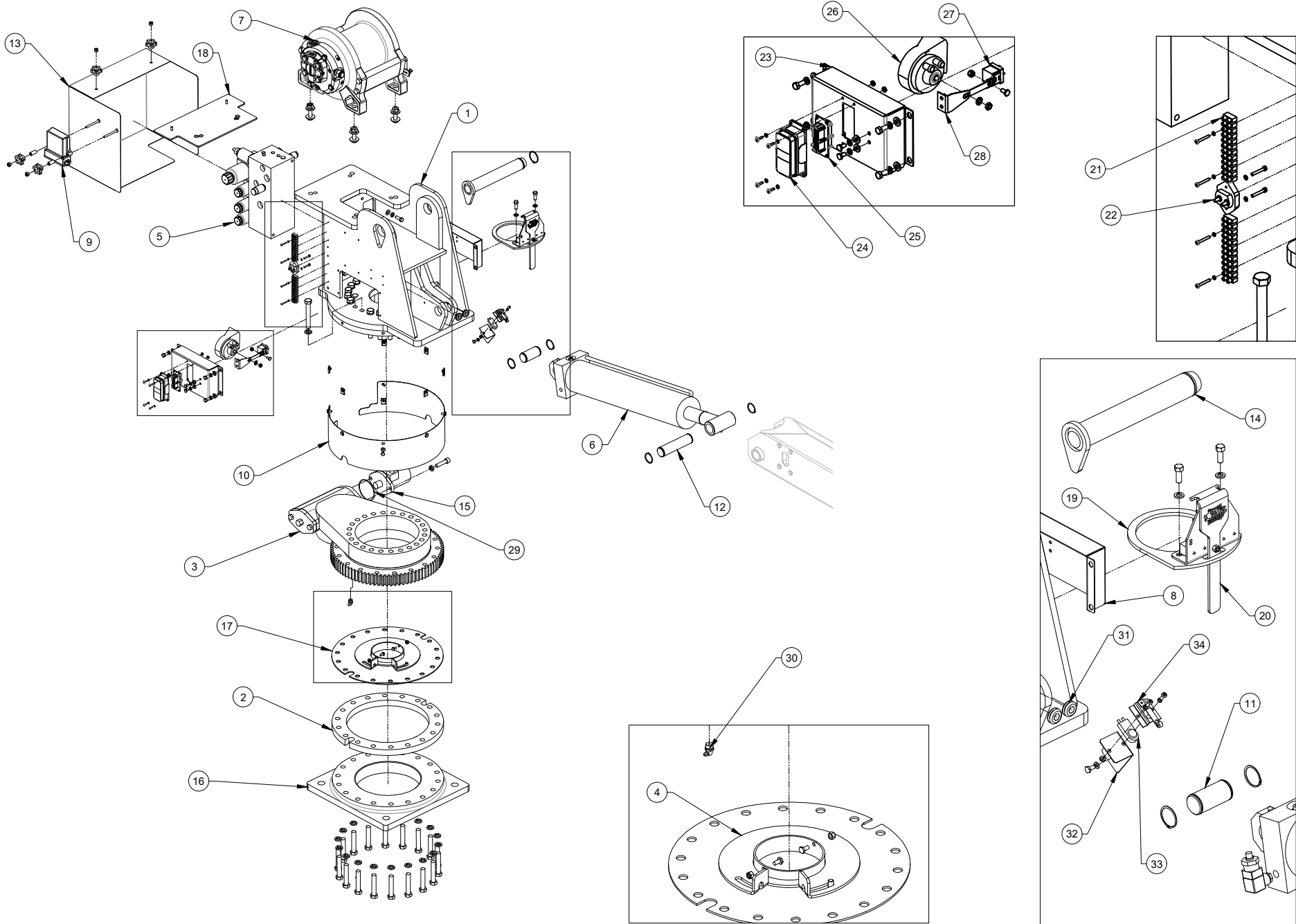
23231

SECTION 400

REPLACEMENT PARTS



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO



REFERENCE 26891 OR 26881 FOR REPLACEMENT PARTS LIST



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT PARTS DRWNG - MECHANISM
HT40/50 SERIES

DATE
05-25-23
SUPERSEDES
-

SECTION
C400
26890

REPLACEMENT PARTS LIST - HT40 SERIES; MECHANISM

| ITEM | QTY. | | PART NUMBER | DESCRIPTION |
|------|------|----|-----------------|-------------------------------------|
| | P | NP | | |
| 1 | 1 | 1 | 26600 | WELDED ASSEMBLY; HOUSING, MECHANISM |
| 2 | 1 | 1 | 23662 | SPACER PLATE |
| 3 | 1 | 1 | 22704 | SLEWING RING |
| 4 | 1 | 1 | 24920 | STOP DISK |
| 5 | 1 | - | 22736H | HYDRAULIC VALVE MANIFOLD, PROP |
| 5 | - | 1 | 22501-0-225-225 | HYDRAULIC VALVE MANIFOLD, NON PROP |
| 6 | 1 | 1 | 21747 | ELEVATION CYLINDER |
| 7 | 1 | - | 22829 | HYDRAULIC WINCH, PROP |
| 7 | - | 1 | 22828 | HYDRAULIC WINCH, NON PROP |
| 8 | 1 | 1 | 22715-1 | HOUSING SIDE COVER |
| 9 | 1 | 1 | 21986-HT | RECEIVER; RADIO REMOTE |
| 10 | 1 | 1 | 23644 | SLEWING RING COVER |
| 11 | 1 | 1 | 22256 | ELEVATION CYLINDER PIN - INBOARD |
| 12 | 1 | 1 | 22257 | ELEVATION CYLINDER PIN - OUTBOARD |
| 13 | 1 | 1 | 22842 | REAR COVER |
| 14 | 1 | 1 | 22721 | PIVOT PIN - MAIN BOOM PIVOT |
| 15 | 1 | 1 | 19177 | HYDRAULIC ROTATION MOTOR |
| 16 | 1 | 1 | 26606 | MACHINED BASE |
| 17 | 1 | 1 | 28473 | SLIPPER PLATE WELD |
| 18 | 1 | 1 | 28319 | REAR COVER MOUNTING PLATE WELDEMENT |
| 19 | 1 | 1 | 23680 | HOUSING WATER DAM |
| 20 | 1 | 1 | 28474 | ELECTRIC ROTATION STOP ASSEMBLY |

| ITEM | QTY. | | PART NUMBER | DESCRIPTION |
|------|------|----|---------------------|-------------------------------|
| | P | NP | | |
| 21 | 1 | 1 | 19187-12 | TERMINAL STRIP; 12 SECTIONS |
| 22 | 1 | 1 | 15683-20A | CIRCUIT BREAKER; 20A |
| 23 | 1 | 1 | 22715-2 | HOUSING SIDE COVER |
| 24 | 1 | 1 | 22481 | SOCKET CASE W/ HOOD; 16-PIN |
| 25 | 1 | 1 | 22482 | SOCKET; 16-PIN FEMALE INSERT |
| 26 | 1 | 1 | 21948 | HORN |
| 27 | 1 | 1 | 22739 | HIGH CAPACITY RELAY |
| 28 | 1 | 1 | 22000 | BRACKET; HORN |
| 29 | 1 | 1 | OR-152-5 | O-RING; ROTATION MOTOR |
| 30 | 1 | 1 | IZERK-013-27 NPT-90 | FITTING; GREASE, 90° |
| 31 | 2 | 2 | 14775 | GROMMET - RUBBER |
| 32 | 1 | 1 | 20497 | BRACKET; SWITCH |
| 33 | 1 | 1 | 19918 | SWITCH; BOOMTOP POSITION |
| 34 | 1 | 1 | 19917 | BRACKET; BOOM SHUT-OFF SWITCH |
| 35 | | - | | |
| 36 | | - | | |
| 37 | | - | | |
| 38 | | - | | |
| 39 | | - | | |
| 40 | | - | | |
| 41 | | - | | |
| 42 | | - | | |

REFERENCE 26890 FOR REPLACEMENT PARTS DRAWING



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
REPLACEMENT PARTS LIST - MECHANISM

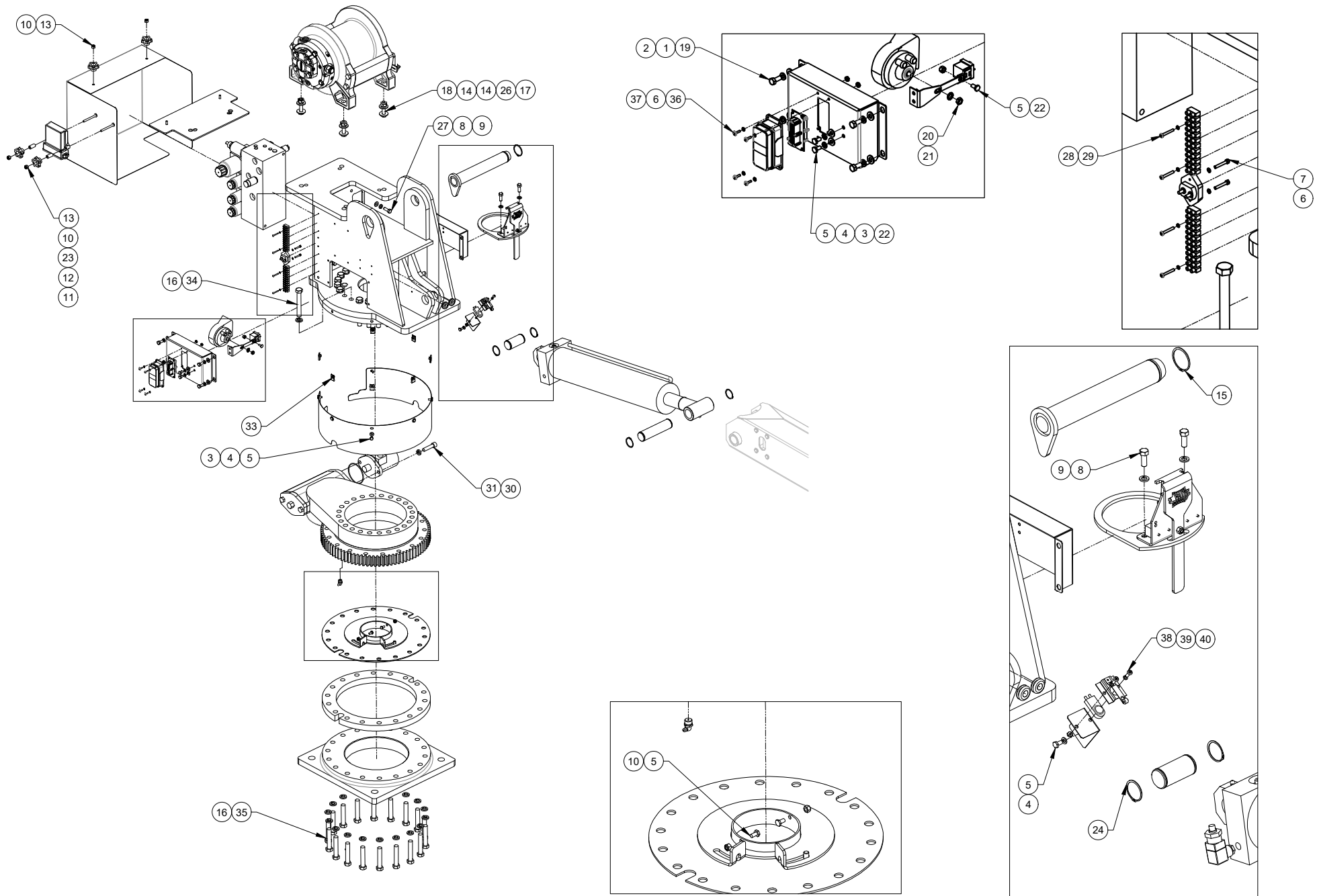
HT40 SERIES

DATE
05-25-23

SUPERSEDES
-

SECTION
C400

26891



REFERENCE 26906 FOR REPLACEMENT PARTS LIST



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

| | | |
|-------------------------------------|------------|---------|
| TITLE | DATE | SECTION |
| RPLCMNT FASTENERS DRWNG - MECHANISM | 05-30-23 | C400 |
| HT40/50 SERIES | SUPERSEDES | |
| | - | |

| | |
|------------|---------|
| DATE | SECTION |
| 05-30-23 | C400 |
| SUPERSEDES | |
| - | 26905 |

RPLCMNT FASTENERS LIST - HT40/50KX VLC SERIES; MECHANISM

| ITEM | QTY. | PART NUMBER | DESCRIPTION |
|------|------|-----------------|---------------------------------------|
| 1 | 8 | !LWSH-031S | LOCK WASHER; 5/16", S/S |
| 2 | 8 | !FWSH-031S | FLAT WASHER; 5/16", S/S |
| 3 | 13 | !FWSH-025S | FLAT WASHER; 1/4", S/S |
| 4 | 12 | !LWSH-025S | LOCK WASHER; 1/4", S/S |
| 5 | 11 | !HHCS02520050S | HHCS; 1/4-20 x 1/2" LG, S/S |
| 6 | 6 | !LWSH-#08S | LOCK WASHER; #8, S/S |
| 7 | 2 | !SHCS#0832100S | SHCS; #8-32 X 1", S/S |
| 8 | 4 | !LWSH-038 | LOCK WASHER; 3/8", ZINC-PLTD |
| 9 | 4 | !HHCS03816100 | HHCS; 3/8-16 X 1", ZINC-PLTD |
| 10 | 4 | 28327 | KNOB, HAND, 5-POINT |
| 11 | 2 | !HHCS02520275 | HHCS, 1/4-20 X2.75", S/S, FULL THREAD |
| 12 | 2 | !JNUT-02520NS | JNUT, NYLON INSERT, 1/4-20, S/S |
| 13 | 4 | !LNUT-02520-H | LOCK NUT; 1/4-20, HVY PAT, NYLON |
| 14 | 8 | !FWSH-050 | FLAT WASHER; 1/2", GR. 8 |
| 15 | 1 | !SRNG-175 | SNAP RING; 1-3/4", ZINC-PLTD |
| 16 | 40 | !LWSH-063 | LOCK WASHER; 5/8", GR. 5, ZINC |
| 17 | 4 | !HNUT-05013-8 | HEX NUT; 1/2-13, GR. 8 |
| 18 | 2 | !HHCS05013225-8 | HHCS; 1/2-13 X 2-1/4" LG, GR 8 |
| 19 | 8 | !HHCS03118075S | HHCS; 5/16-18 X 3/4", S/S |
| 20 | 1 | !LWSH-031-STAR | LOCK WASHER; 5/16", ZINC |

| ITEM | QTY. | PART NUMBER | DESCRIPTION |
|------|------|-----------------|--|
| 21 | 1 | !HNUT-03118 | HEX NUT; 5/16-18, ZINC |
| 22 | 5 | !LNUT-02520SS | NYLOCK HEX NUT 1/4-20 |
| 23 | 2 | 28328 | NYLON SPACER, BLK - .25"IDX.50"ODX1"LG |
| 24 | 4 | !SRNG-150 | SNAP RING; 1-1/2", ZINC-PLTD |
| 25 | 2 | !HHCS02520125S | HHCS; 1/4-20 X 1-1/4", S/S |
| 26 | 4 | !LWSH-050 | LOCK WASHER; 1/2", GR. 8, ZINC |
| 27 | 2 | !FWSH-038 | FLAT WASHER; 3/8", ZINC-PLTD |
| 28 | 4 | !LWSH-#06S | LOCK WASHER; #06, S/S |
| 29 | 4 | !PHPMS#0632100S | PHILIPS-HD PMS; #6-32 X 1", S/S |
| 30 | 2 | !LWSH-050-HC | LOCK WASHER; 1/2", HI-COLLAR |
| 31 | 2 | !SHCS05013200 | SOCKET HEAD CAP SCREW - 1/2-13 X 2 LG |
| 32 | 4 | !HHCS02520100S | HHCS; 1/4-20 X 1-1/4", S/S |
| 33 | 5 | !UNUT-02520-LKG | U-NUT 1/4-20, LOCKING TYPE |
| 34 | 20 | !HHCS06311450 | HHCS; 5/8-11 x 4.5" LG, GR. 5, ZINC |
| 35 | 20 | !HHCS06311350 | HHCS; 5/8-11 x 3.5" LG, GR. 8, ZINC |
| 36 | 4 | !SHPMS#0832050S | SLOT-HD PMS; #8-32 x 1/2", S/S |
| 37 | 4 | !HNUT-#0832S | HEX NUT; #08-32, S/S |
| 38 | 2 | !PHPMS#1024050S | PHILIPS-HD PMS; #10-24 x 1/2", S/S |
| 39 | 2 | !LWSH-#10S | LOCK WASHER; #10, S/S |
| 40 | 2 | !HNUT-#1024S | HEX NUT; #10-24, S/S |

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

REFERENCE 26905 FOR REPLACEMENT PARTS DRAWING



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

RPLCMNT FASTENERS LIST - MECHANISM

HT40/50 SERIES

DATE

05-30-23

SUPERSEDES

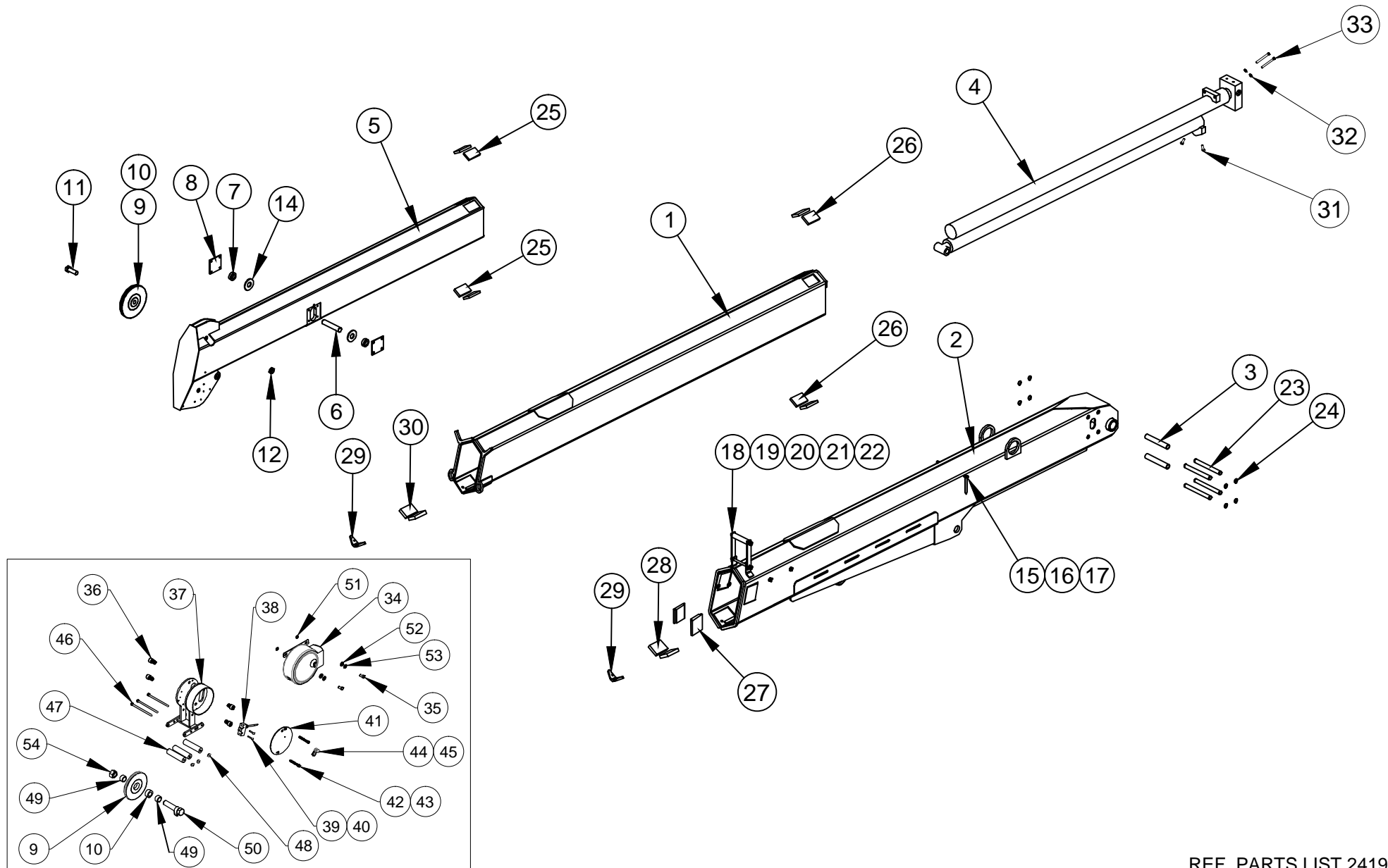
-

SECTION

C400

26906

23107 BOOM PARTS DRAWING



REF. PARTS LIST 24191



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
23107 BOOM PARTS DRAWING
HT40/50 25' BOOM

DATE
05-24-21B
SUPERSEDES
02-09-21A

SECTION
C400
24190

23107 BOOM PARTS LIST

| ITEM NO. | QTY. | PART NUMBER | DESCRIPTION |
|----------|------|---------------|--|
| 1 | 1 | 27175 | WELDED ASSY; SECONDARY BOOM |
| 2 | 1 | 27172 | WELDED ASSY; PRIMARY BOOM |
| 3 | 1 | 24535 | THRUST ROLLER |
| 4 | 1 | 21749 | CYLINDER; EXTENSION |
| 5 | 1 | 23105 | WELDED ASSY; TERTIARY BOOM |
| 6 | 1 | 21405 | PIN; CYLINDER |
| 7 | 2 | 21428 | BUSHING |
| 8 | 2 | 23116 | COVER PLATE; PIN STOP |
| 9 | 2 | 23928 | BOOM SHEAVE W/ BUSHING |
| 10 | 2 | 23929 | SPACER; 23927 & 23928 POLY SHEAVES |
| 11 | 1 | 17059-6 | SHEAVE AXLE |
| 12 | 1 | !JNUT-07510N | JAM NUT; 3/4-10, NYLON |
| 13 | - | - | - |
| 14 | 2 | !FWSH-100SAE | FLAT WASHER; 1", SAE |
| 15 | 2 | 22490 | SPACER; BOOM ARROW, 1/2" O.D. |
| 16 | 2 | 13459-2 | ARROW; BOOM, 4 - 7/16" LONG |
| 17 | 2 | !ANUT-02520S | ACORN NUT; 1/4-20, STAINLESS |
| 18 | 1 | 21935 | WELDED ASSY; WIRE ROPE GUIDE |
| 19 | 1 | 21936 | WIRE ROPE GUIDE; FLAT MOUNT |
| 20 | 1 | !HHCS04414550 | HEX HEAD CAP SCREW; 7/16-14 x 5 - 1/2 LG |
| 21 | 1 | 21560 | ROLLER; UHMW GUIDE |
| 22 | 2 | !LNUT-04414 | JAM NUT; 7/16-14, NYLON LOCK |
| 23 | 4 | 22555 | THRUST PIN; EXTENSION CYLINDER |
| 24 | 8 | !SRNG-075 | RETAINING RING - 3/4" SHAFT DIA. |
| 25 | 4 | 23217-1 | UHMW GUIDE PAD |
| 26 | 4 | 23217-2 | UHMW GUIDE PAD |
| 27 | 2 | 23217-13 | UHMW GUIDE PAD |

| ITEM | QTY. | PART NUMBER | DESCRIPTION |
|------|------|-----------------|---|
| 28 | 2 | 23217-17 | UHMW GUIDE PAD |
| 29 | 2 | 23183 | V-BLOCK SLIDER |
| 30 | 2 | 23217-14 | UHMW GUIDE PAD |
| 31 | 2 | !HHCS03816100 | HEX HEAD CAP SCREW; 3/8-16 X 1" LG |
| 32 | 2 | !LWSH-050-HC | LOCK WASHER; 1/2" HI-COLLAR |
| 33 | 2 | !SHCS05013200 | SOCKET HEAD CAP SCREW; 1/2-13 X 2" LG |
| 34 | 1 | 28190 | CORD REEL ASSEMBLY |
| - | 1 | 28191 | BRACKET, CORD REEL, (RIGHT HAND MOUNTING) |
| 35 | 2 | !SHCS03118063S | SHCS; 5/16-18 X 5/8" LG, S/S |
| 36 | 4 | 27467 | SOCKET HEAD CAP SCREW; NYLON, 1/2-13 X 3/4" |
| 37 | 1 | 27468 | WELDMENT, COMPACT A2B FRAME (LEFT HAND) |
| 38 | 1 | 19376 | A2B SWITCH |
| 39 | 2 | !PHCS#0632100 | PHCS; 6-32 X 1" |
| 40 | 2 | !LWSH-#06 | LOCK WASHER; #06, GR. 5 |
| 41 | 1 | 27473 | COVER PLATER; COMPACT A2B |
| 42 | 2 | !SHCS02520200SS | SOCKET HEAD CAP SCREW; 1/4-20 X 2", SS |
| 43 | 2 | 23379 | WASHER, NYLON, BLACK, .375" OD X .25" ID X .02" |
| 44 | 1 | 19269 | CABLE CLAMP, 1/4" |
| 45 | 1 | !PHCS#1032038-M | PHCS; 10-32 X 3/8", GR. 5 |
| 46 | 3 | !HHCS02520450 | HHCS; 1/4-20 X 4-1/2" LG |
| 47 | 3 | 27475 | WIRE ROPE GUIDE ROLLER |
| 48 | 3 | !JNUT-02520N | JAM NUT; 1/4-20 W/ NYLON INSERT |
| 49 | 1 | 27476 | SPACER/PIVOT; COMPACT A2B |
| 50 | 1 | 28362 | ASSY, WELDED, CAM & HHCS CA2B CUT-OUT |
| 51 | 2 | 28198 | INSULATING SLEEVE WASHER - 5/16" |
| 52 | 2 | 01016 | FIBER WASHER |
| 53 | 2 | !FWSH-031 | FLAT WASHER; 5/16" SAE |
| 54 | 1 | !LNUT-07510 | NYLOC LOCK NUT, FULL, 3/4-10, GR. 5, ZINC |

REFERENCE PARTS DRAWING 24190



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

23107 REPLACEMENT PARTS LIST

HT40/50 25' BOOM

DATE

06-09-23D

SUPERSEDES

06-07-23C

SECTION

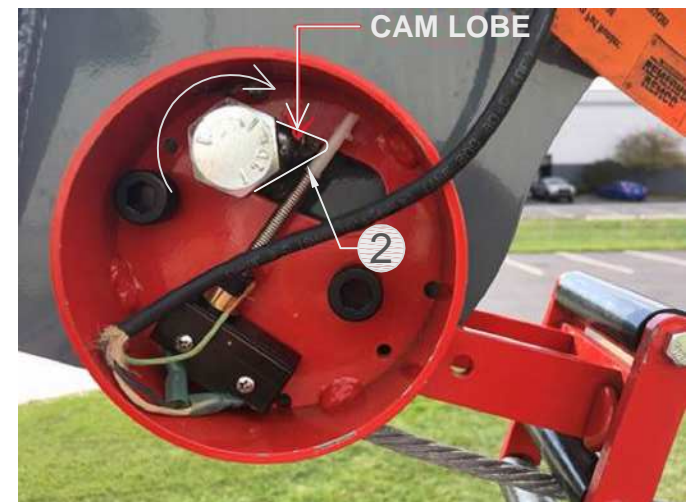
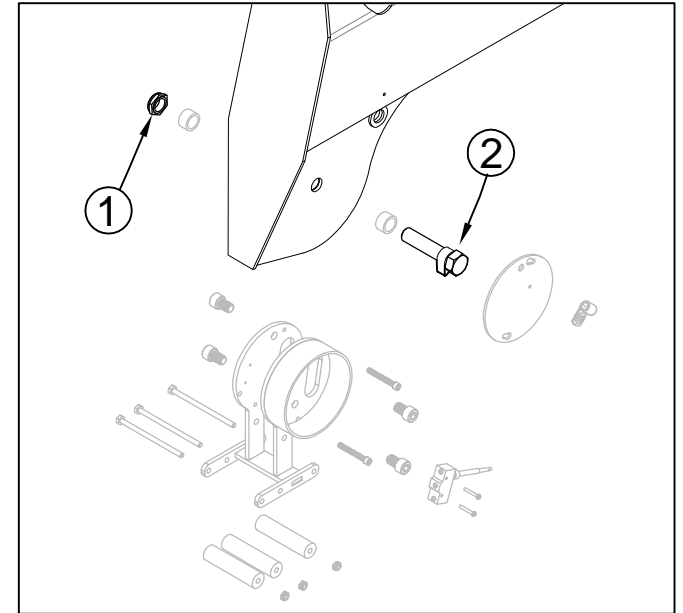
C400

24191

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 Ventura 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

SUPERSEDES

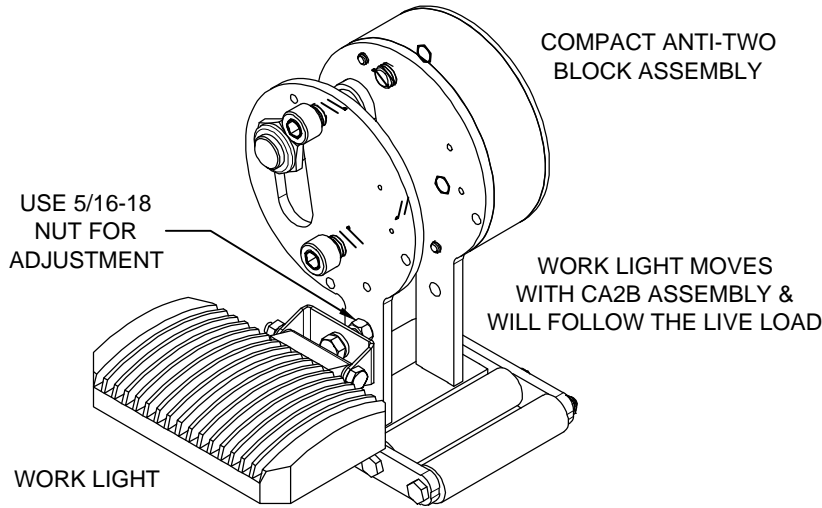
08-03-21A

SECTION

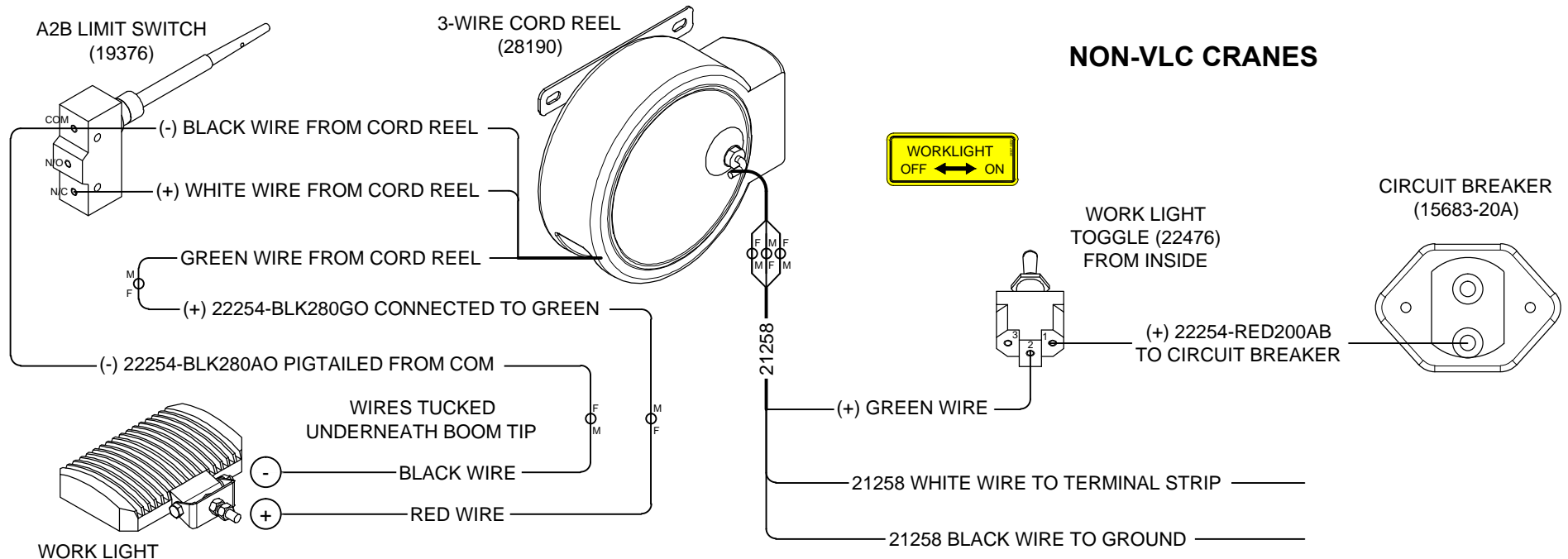
C400

28239

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 | ITEM16G250QCFI |
| 4 | TERMINAL; 16G, MALE, QUICK-CONNECT | 4 | ITEM16G250QCM |
| 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 | ITEM16G#6RG |



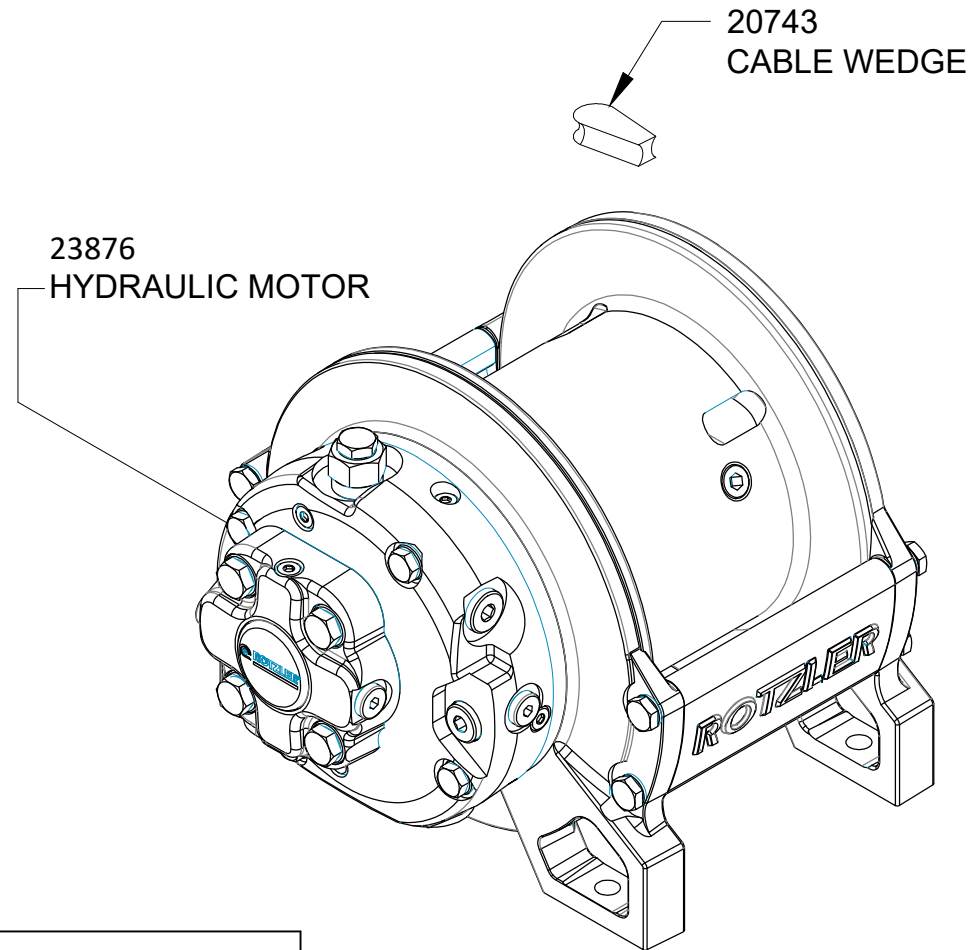
VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

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

DATE
02-10-21
SUPERSEDES
-

SECTION
C400
28199

TI1 & TI2 WINCH REPLACEMENT PARTS DRAWING



WINCH SEALS PACKAGE

| TI1 | TI2 |
|-------|-------|
| 23874 | 23848 |



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE

TI1 & TI2 REPLACEMENT PARTS DRAWING

HT40/45/50KX

DATE

05-30-23

SUPERSEDES

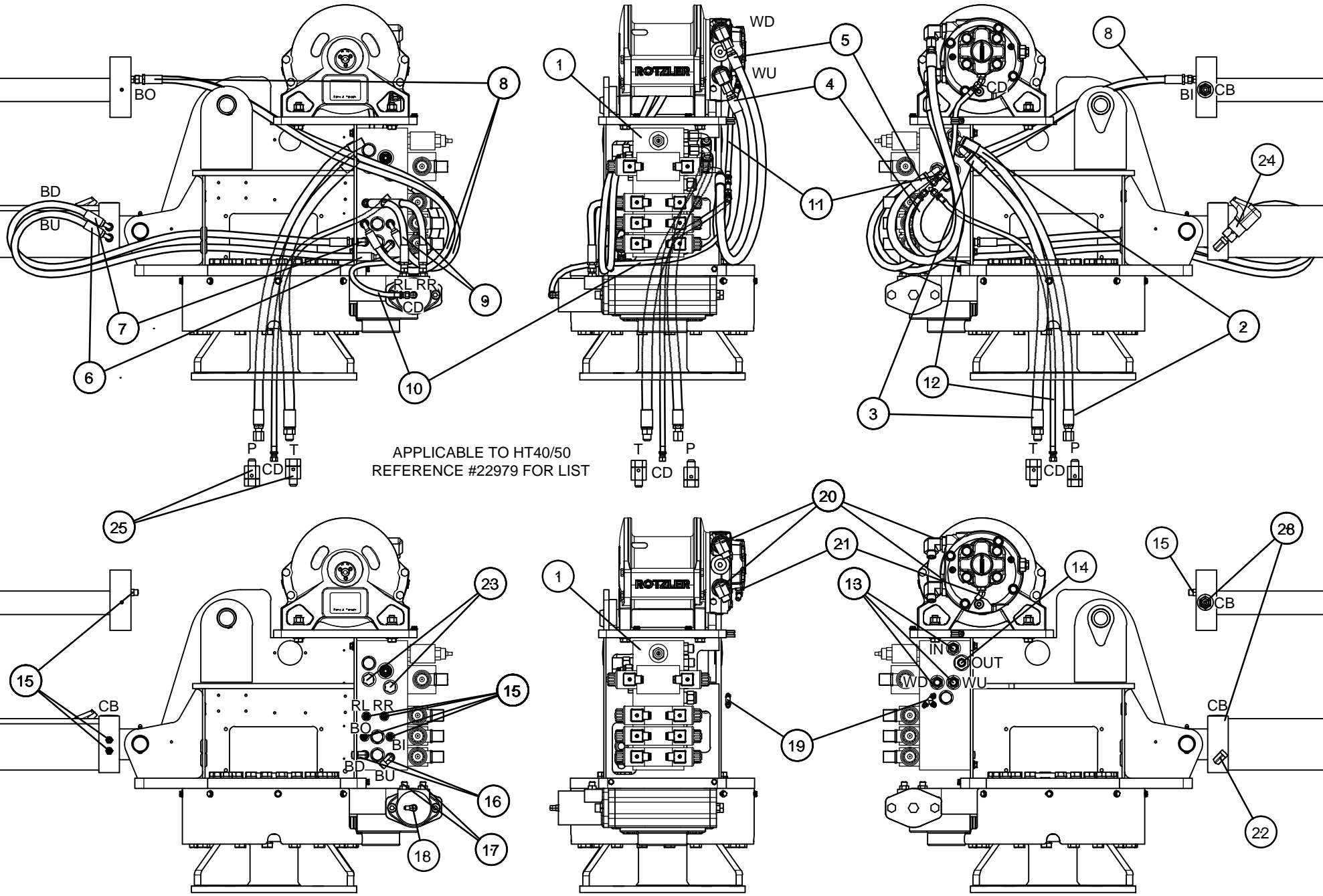
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SECTION

C400

26896

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

HT40/50 PROPORTIONAL

DATE

04-27-21E

SUPERSEDES

10-22-20D

SECTION

C400

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

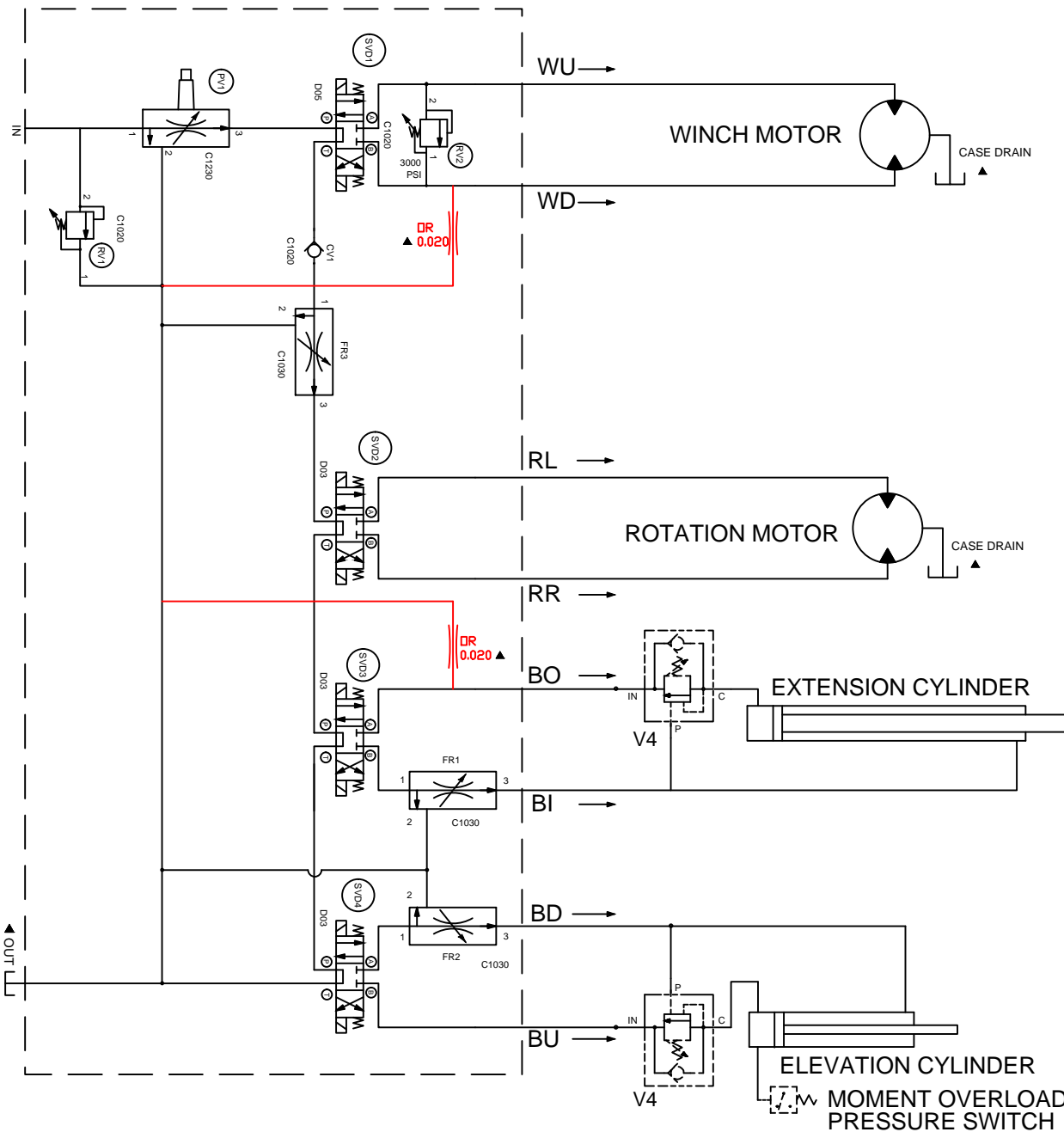
HT40/50/60/66KX PROPORTIONAL

DATE
11-10-22G

SUPERSEDES
11-13-17F

SECTION
C400

22940



- 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

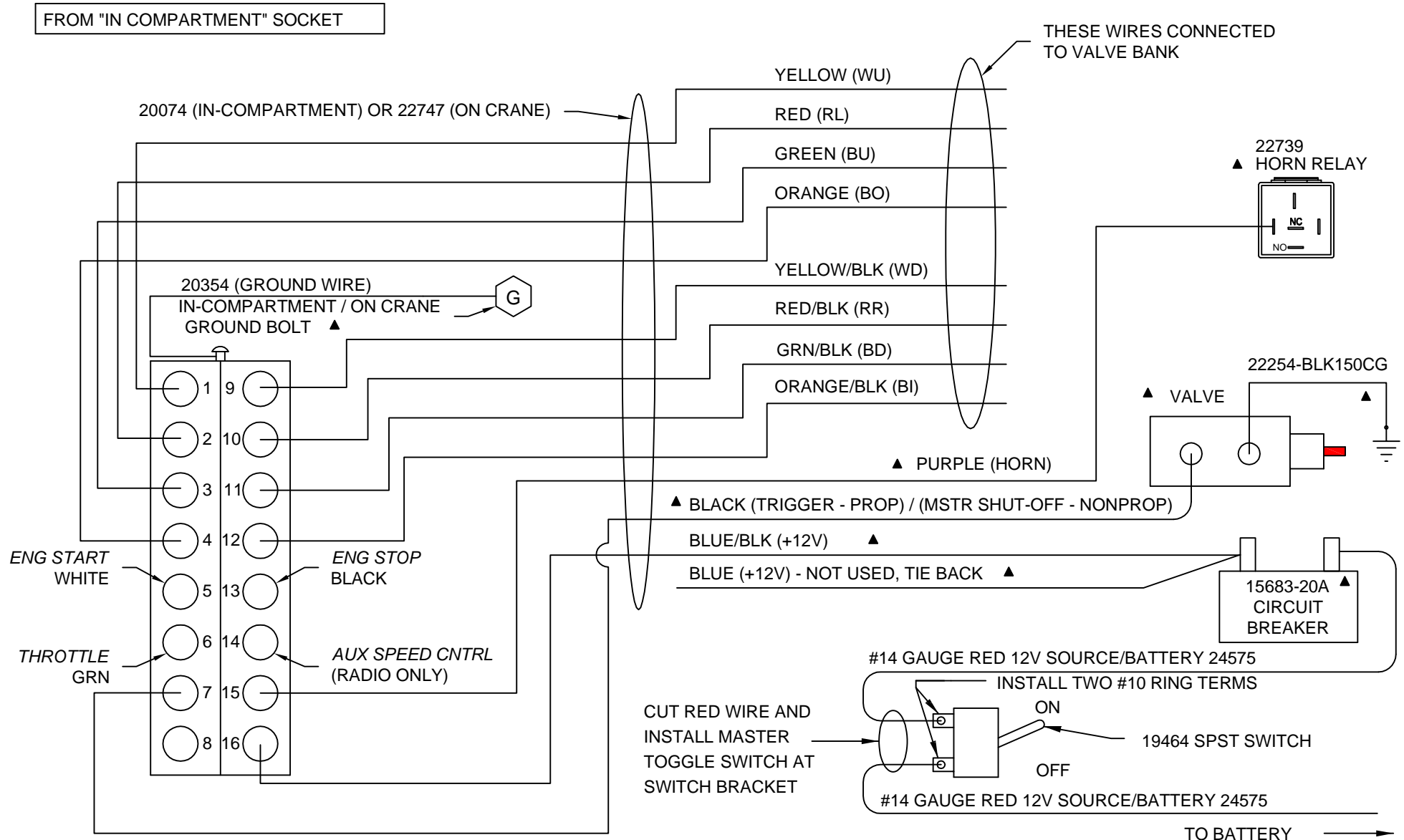
DATE
12-04-23D

SUPERSEDES
12-11-20C

SECTION
C400

27352

▲ 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

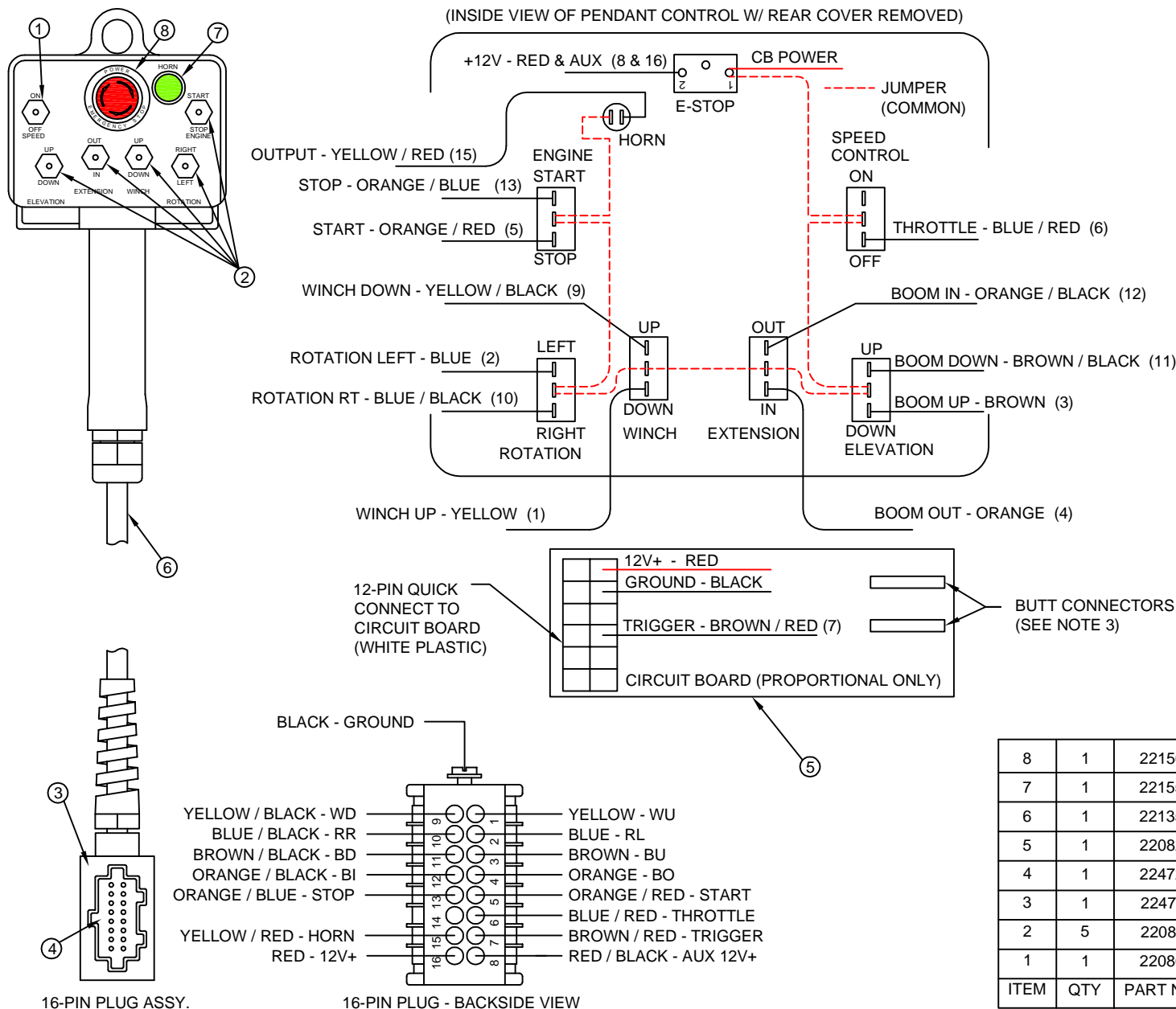
02-21-14F

SECTION

C400

22125

21987 PENDANT; PROP, 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.

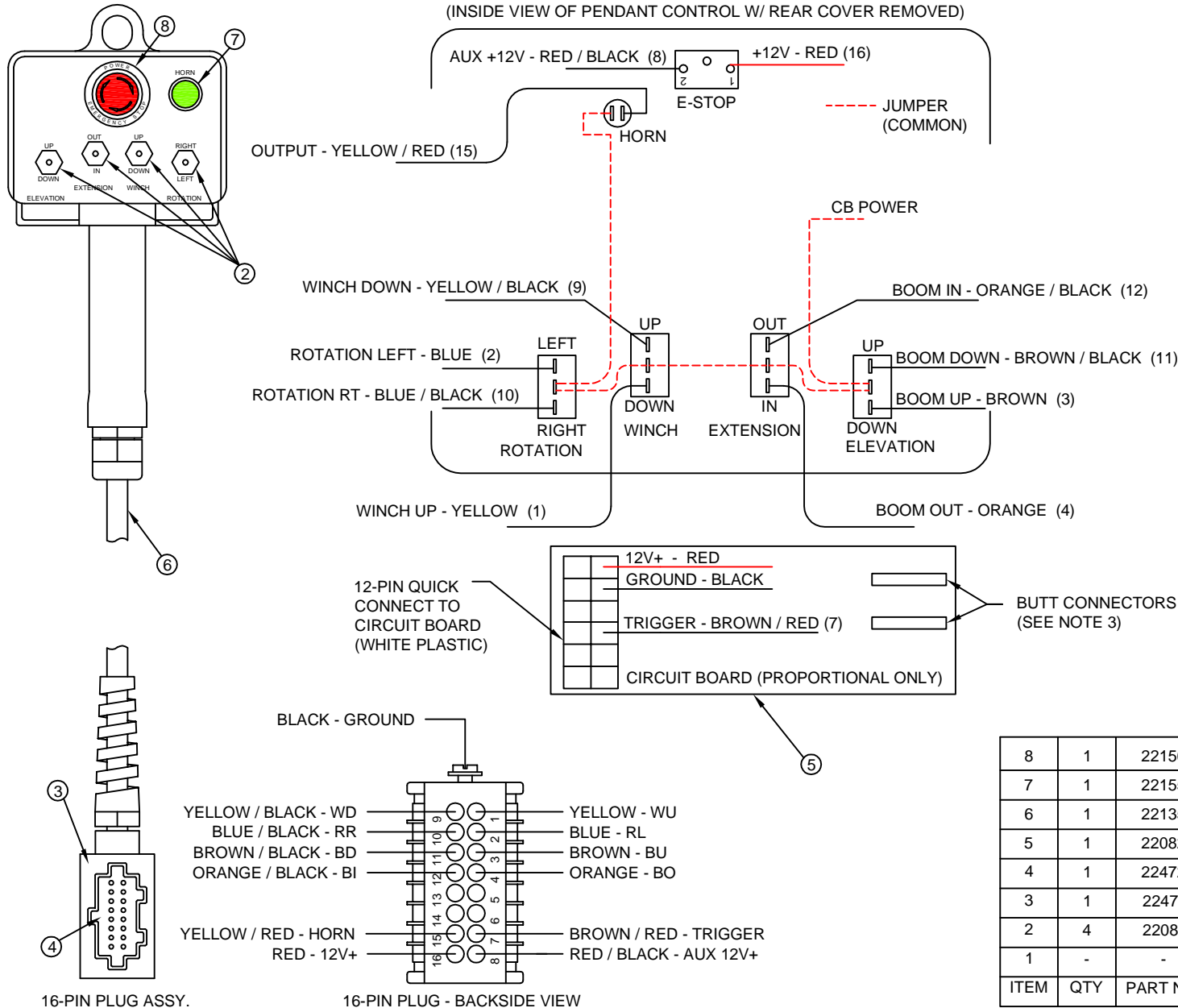
NOTE 3:

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.

| <u>MODEL</u> | <u>STARTING S/N</u> |
|--------------|---------------------|
| HT25K(X) | 120300 |
| HT30K(X) | 115300 |
| HT40KX(X) | 100900 |
| HT50KX(X) | 110600 |
| HT66KXX | 150300 |

| | | | |
|------|-----|----------|--------------------------------------|
| 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 | 5 | 22081 | SWITCH; SPDT, MOMENTARY |
| 1 | 1 | 22080 | SWITCH; SPST |
| ITEM | QTY | PART NO. | DESCRIPTION |

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

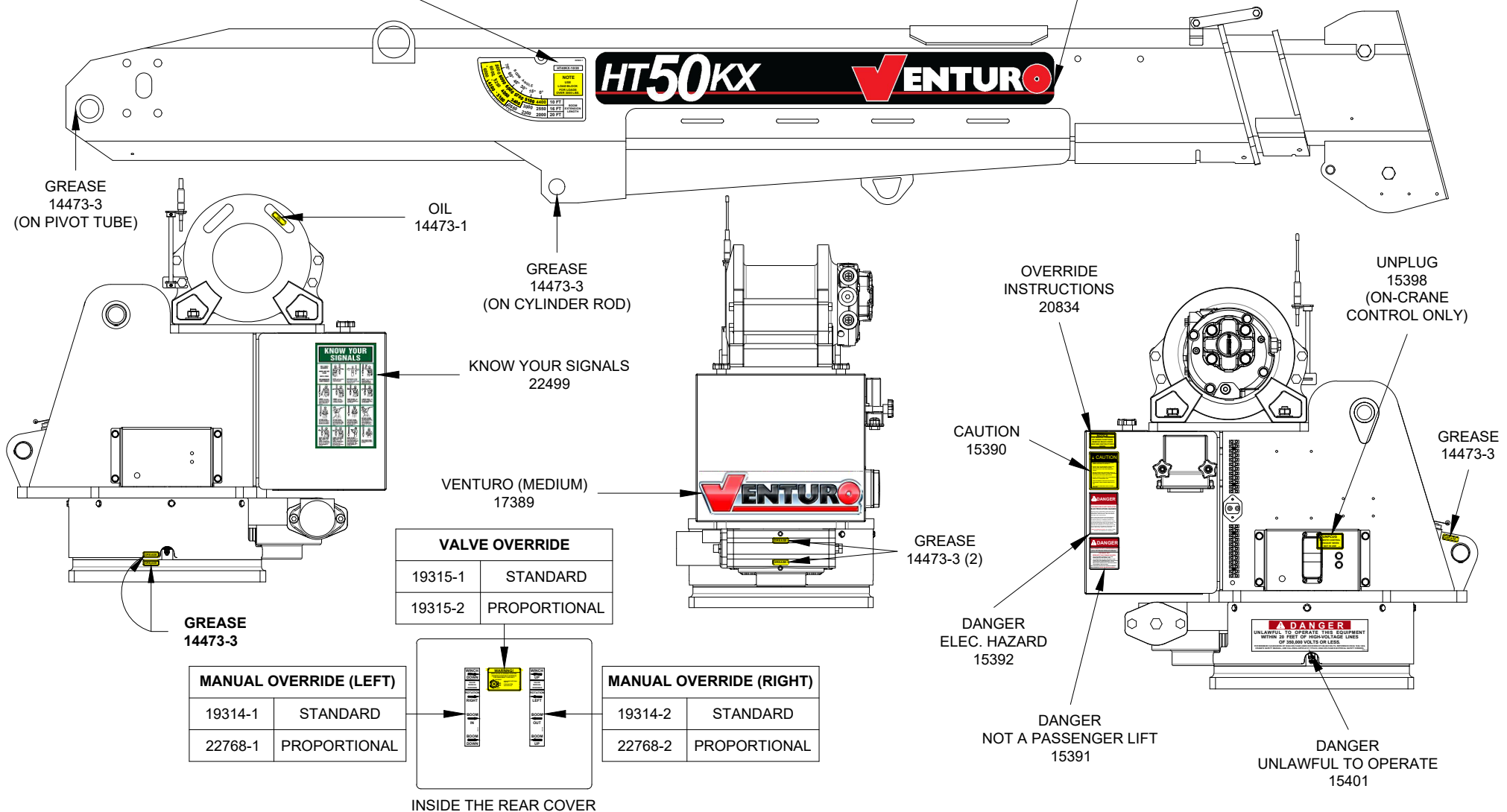
SUPERSEDES

-

23073

| | BOOM CAPACITY DECALS | | | |
|-------|----------------------|----------|----------|----------|
| | HT40KX | | HT50KX | |
| | 20' BOOM | 25' BOOM | 20' BOOM | 25' BOOM |
| RIGHT | 22342-1 | 23064 | 22352-1 | 22877-1 |
| LEFT | 22342-2 | 23065 | 22352-2 | 22877-2 |

| MODEL NAME DECALS | |
|-------------------|-----------|
| HT40KX | HT50KX |
| 28523 (2) | 28520 (2) |



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
DECAL PLACEMENTS

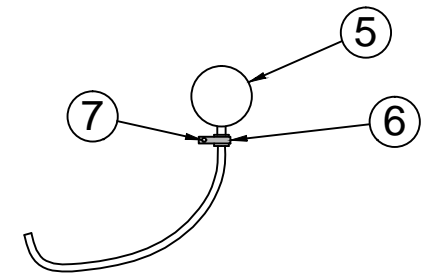
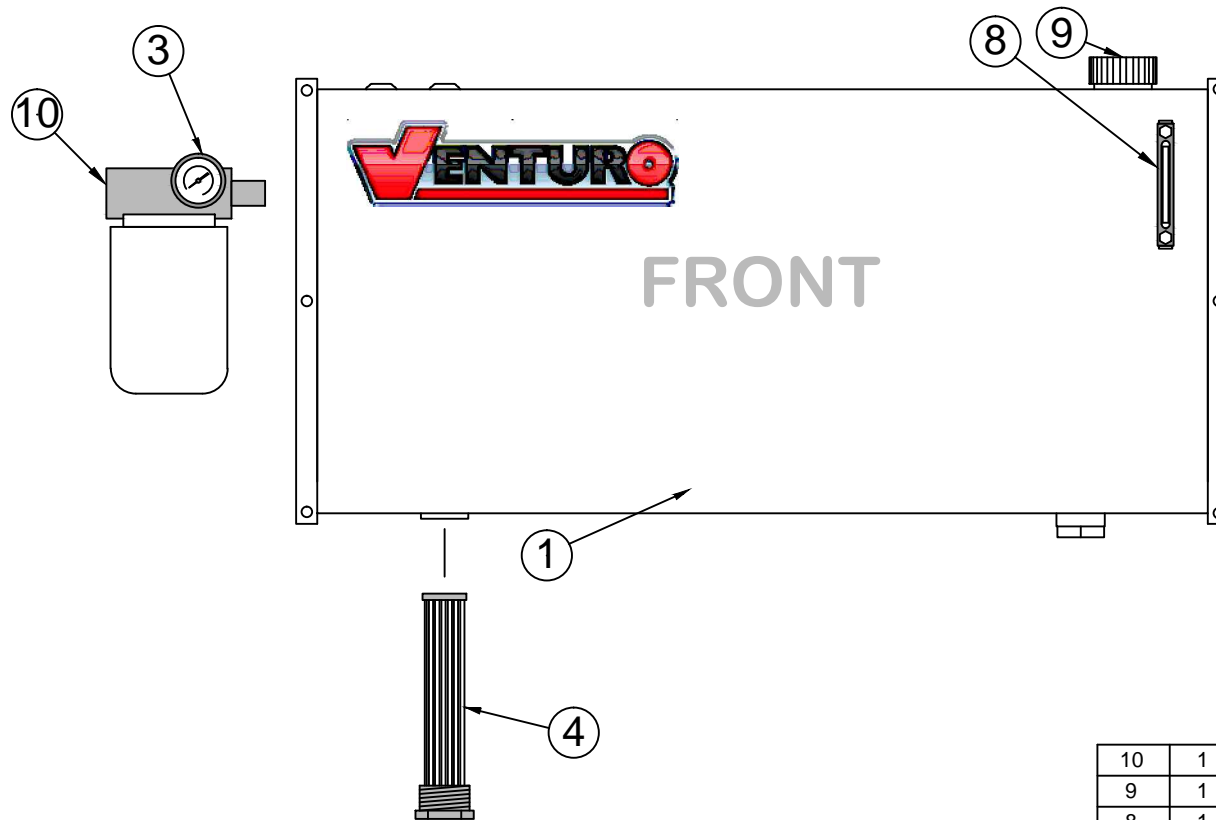
HT40/50KX SERIES

DATE
06-16-23

SUPERSEDES
-

SECTION
C400

28522



| 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

SUPSEDES

08-04-15C

23224

HT40KX FIELD SERVICE LABEL KITS

| HT40KX | | | | 22920 FIELD SERVICE LABEL KITS (FOR HT40KX) | |
|--------------|------------------|--------------|------------------|--|--|
| STANDARD 20' | PROPORTIONAL 20' | STANDARD 25' | PROPORTIONAL 25' | | |
| QUANTITY | | | | PART # | DESCRIPTION |
| 2 | 2 | 2 | 2 | 28523 | DECAL; MODEL HT40KX |
| 1 | 1 | 1 | 1 | 17389 | DECAL; VENTURO LOGO, MEDIUM |
| 1 | 1 | | | 22342-1 | DECAL; BOOM CAPACITY, HT40KX, 10'/16'/20', RIGHT |
| 1 | 1 | | | 22342-2 | DECAL; BOOM CAPACITY, HT40KX, 10'/16'/20', LEFT |
| | | 1 | 1 | 23064 | DECAL; BOOM CAPACITY, HT40KX, 12'/18.5'/25', RIGHT |
| | | 1 | 1 | 23065 | DECAL; BOOM CAPACITY, HT40KX, 12'/18.5'/25', LEFT |
| 1 | 1 | 1 | 1 | 14473-1 | DECAL; OIL |
| 7 | 7 | 7 | 7 | 14473-3 | DECAL; GREASE |
| 1 | 1 | 1 | 1 | 17813 | DECAL; OVERLOAD SENSING SYSTEM |
| 1 | 1 | 1 | 1 | 14459 | DECAL; OVERLOAD ALARM SYSTEM (OPTIONAL PART) |
| 1 | 1 | 1 | 1 | 22499 | DECAL; KNOW YOUR SIGNALS |
| 1 | 1 | 1 | 1 | 20834 | DECAL; MANUAL OVERRIDE, INSTRUCTIONS |
| 1 | | 1 | | 19315-1 | DECAL; MANUAL OVERRIDE, SHUTOFF, STANDARD |
| | 1 | | 1 | 19315-2 | DECAL; MANUAL OVERRIDE, SHUTOFF, PROPORTIONAL |
| 1 | | 1 | | 19314-1 | DECAL; MANUAL OVERRIDE, STANDARD, LEFT |
| 1 | | 1 | | 19314-2 | DECAL; MANUAL OVERRIDE, STANDARD, RIGHT |
| | 1 | | 1 | 22768-1 | DECAL; MANUAL OVERRIDE, PROPORTIONAL, LEFT |
| | 1 | | 1 | 22768-2 | DECAL; MANUAL OVERRIDE, PROPORTIONAL, RIGHT |
| 1 | 1 | 1 | 1 | 22922 | IDWG; FIELD SERVICE LABEL KITS, HT40KX |
| 1 | 1 | 1 | 1 | 28522 | IDWG; DECAL PLACEMENTS, HT40/50KX |
| 1 | 1 | 1 | 1 | INST-23233 | SAFETY MANUAL, VENTURO CRANES |
| 1 | 1 | 1 | 1 | 15397 | KIT; ACCIDENT PREVENTION SIGNS |



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE
FIELD SERVICE LABEL KITS

DATE
07-17-23H

SECTION
C400

HT40KX

SUPERSEDES
06-16-23G

22922



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.

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