

INST-28910

EE*AAC-*0*0

PARTS & INSTALLATION MANUAL 4020E/4016E

Included in this manual:

4020E

- 4,000 lbs. Electric Telescopic Service Crane.
- 10 16 20 ft Powered, Dual-Stage, Boom Extension.
- Proportional Controls & Non-Proportional Controls.

4016E

- 4,000 lbs. Electric Telescopic Service Crane.
- 8 − 12 ft Powered, Single-Stage, Boom Extension.
- 12 16 ft Manual, Pullout, Boom Extension
- Proportional Controls & Non-Proportional Controls.

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

5241 VENTURO VENTURO VENTURO VENTURO VENTURO

DESCRIPTION & SPECIFICATIONS SPECIFICATIONS & OPERATING FEATURES 7607100A 28915 SPECIFICATIONS & OPERATING FEATURES 28925 INSTALLATION DIMENSIONS 28813 INSTALLATION DIMENSIONS 28892 28814 BASE MOUNTING DIMENSIONS **CAPACITY CHART 4020E** 28914 **CAPACITY CHART 4016E** 28924 7607150A SAFETY SAFETY & HAZARDS - GENERAL SAFETY & HAZARDS - GENERAL, CONT 850711 850712 VEHICLE & CRANE ELECTRIC HAZARD INFORMATION 15394 21353 SAFETY DECALS SAFETY DECALS DECALS FOR ET CRANES 21384 21354 MODEL & CAPACITY DECALS 4016E/4020E 28916 28819 ADDITIONAL DECALS 7607200A INSTALLATION TYPICAL REINFORCEMENT FOR MOUNTING CRANE ON TOP OF SERVICE BODY 28816 TYPICAL REINFORCEMENT FOR MOUNTING CRANE ON FLAT BED 28817 28820 CABLE & BATTERY REQUIREMENTS - ET & HT CRANES BATTERY & CABLE INSTALLATION DRAWING STABILITY TESTING 4020E STABILITY TESTING 4016E STABILITY CHART 28821 20906-4020E 20906-4016E 20907 WIRE ROPE INSTALLATION 28822 28855 WORK LIGHT INSTALLATION INSTRUCTIONS; COMPACT A2B MOUNT 7607300B **OPERATION & MAINTENANCE** OPERATION & MAINTENANCE INSTRUCTIONS (1 OF 3) OPERATION & MAINTENANCE INSTRUCTIONS (2 OF 3) 28852 28853 28854 OPERATION & MAINTENANCE INSTRUCTIONS (3 OF 3) MANUAL OVERRIDE INSTRUCTIONS, NON-PROPORTIONAL MANUAL OVERRIDE INSTRUCTIONS, PROPORTIONAL 28826 28827 **LUBRICATION & MAINTENANCE CHART** 28823 28824 MINIMUM VOLTAGE TEST 28239 A2B STOWAGE CUT-OUT 7607400A REPLACEMENT PARTS REPLACEMENT PARTS DRAWING, MECH REPLACEMENT PARTS LIST, MECH REPLACEMENT HARDWARE DRAWING, MECH 28828 28829 28830 REPLACEMENT HARDWARE LIST, MECH 28831 REPLACEMENT PARTS DRAWING, 28656 BOOM ASSY (4020E) 28832 REPLACEMENT PARTS LIST, 28656 BOOM ASSY (4020E)
REPLACEMENT PARTS DRAWING, 28662 BOOM ASSY (4016E)
REPLACEMENT PARTS LIST, 28652 BOOM ASSY (4016E) 28833 28895 28896 26942 COMPACT A2B REPLACEMENT PARTS (4020E) REPLACEMENT PARTS LIST/DWG; A2B (4016E) REPLACEMENT PARTS LIST, 27667 LOAD BLOCK (4020E) REPLACEMENT PARTS LIST, 23169 LOAD BLOCK (4016E) 28861 28856 28950 28700 ELECTRICAL COMPONENT ASSY 28835 WIRING DIAGRAM, 45**E/40**E/351*E/3215E, NON PROP 28836 WIRING DIAGRAM, 45**E/40**E/351*E/3215E, PROPORTIONAL REPLACEMENT PARTS DRAWING, 16780, 2-POLE SLIP-RING REPLACEMENT PARTS LIST, 16780, 2-POLE SLIP-RING 28837 28843 28842 28840 21990 PENDANT; REPLACEMENT PARTS DRAWING / LIST (4 FUNCTION) 21988 PENDANT, REPLACEMENT PARTS DRAWING & LIST 28841 HYDRAULIC SYSTEM COMPONENTS REPLACEMENT PARTS DRAWING HYDRAULIC SYSTEM COMPONENTS REPLACEMENT PARTS DRAWING (PROPORTIONAL) 28838 28839 HYDRAULIC SYSTEM SCHEMATIC 28844 HYDRAULIC SYSTEM SCHEMATIC (PROPORTIONAL) 21215 WINCH REPLACEMENT PARTS DRAWING & LIST 28845 28846 28847 21735-1 SLEWING REPLACEMENT PARTS 28720 HYDRAULIC POWER UNIT REPLACEMENT PARTS 28848 28849 DECAL PLACEMENT, 4520E/4020E DECAL PLACEMENT, 4516E/4016E 28898 28912 FIELD SERVICE LABEL KIT 4020E FIELD SERVICE LABEL KIT 4016E 28922

SECTION 100

DESCRIPTION & SPECIFICATIONS



SPECIFICATIONS

12-volt battery operated

16,000 ft-lb overturning moment (or as limited by truck stability)

Moment overload shut-off system

Electric winch - 2,000 lb single-line capacity with automatic load brake

Electric-hydraulic boom elevation

Electric-hydraulic boom extension - 10 ft stroke

Electric-hydraulic continuous power rotation

Corded remote control pendant

Radio remote control pendant (optional)

Master disconnect switch

Accessories (optional):

Stabilizers: 24962, 13500, 11822-2

Pedestal: 26027

Boom Rest: 20381-2

| TELESCOPIC BOOM | 10.5 - 20.5 ft |
|---------------------|------------------|
| BOOM ELEVATION | -5° TO 75° |
| BOOM HYD EXTENSION | 10 ft |
| BOOM MANUAL EXT | - |
| CAPACITY | 600 lb @ 20.5 ft |
| CAPACITY | 4000 lb @ 3 ft |
| WIRE ROPE | %₀" x 80 ft |
| PENDANT CORD LENGTH | 25 ft |

SPECIFICATIONS

12-volt battery operated

16,000 ft-lb overturning moment (or as limited by truck stability)

Moment overload shut-off system

Electric winch - 2,000 lb single-line capacity with automatic load brake

Electric-hydraulic boom elevation

Electric-hydraulic boom extension - 4 ft stroke

Electric-hydraulic continuous power rotation

Corded remote control pendant

Radio remote control pendant (optional)

Master disconnect switch

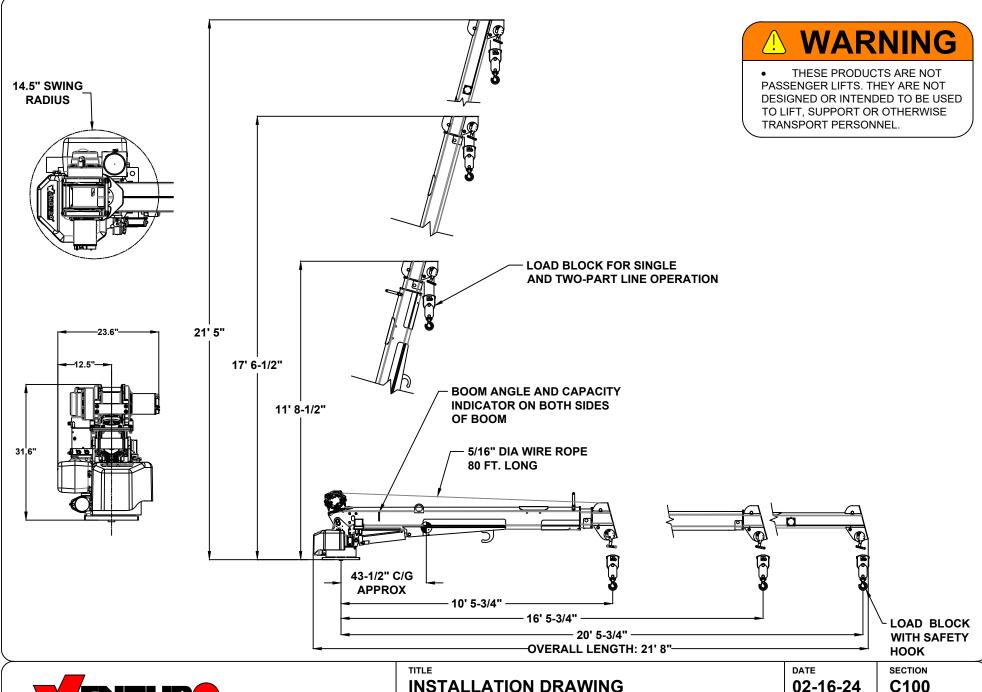
Accessories (optional):

Stabilizers: 24962, 13500, 11822-2

Pedestal: 26027

Boom Rest: 20381-2

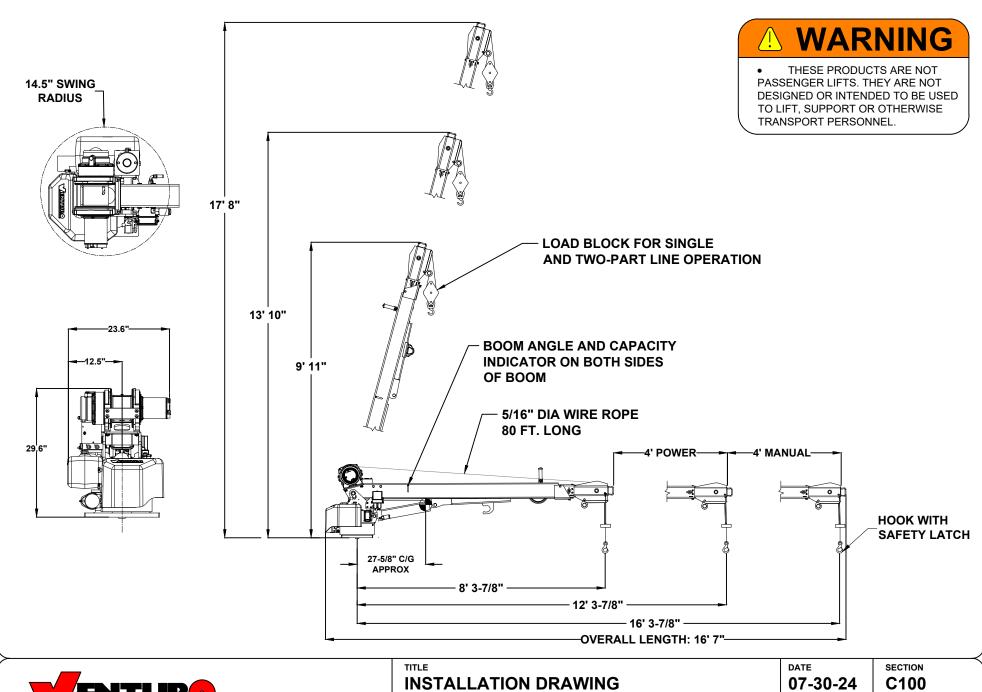
| TELESCOPIC BOOM | 8 - 16 ft |
|---------------------|-----------------|
| BOOM ELEVATION | -5° TO 75° |
| BOOM HYD EXTENSION | 4 ft |
| BOOM MANUAL EXT | 4 ft |
| CAPACITY | 1000 lb @ 16 ft |
| CAPACITY | 4000 lb @ 3 ft |
| WIRE ROPE | %6" x 80 ft |
| PENDANT CORD LENGTH | 25 ft |





MANUFACTURING, INC. CINCINNATI, OHIO

| 4020E/4520E | SUPERSEDES | 28813 |
|----------------------|------------|---------|
| INSTALLATION DRAWING | 02-16-24 | C100 |
| TITLE | DATE | SECTION |

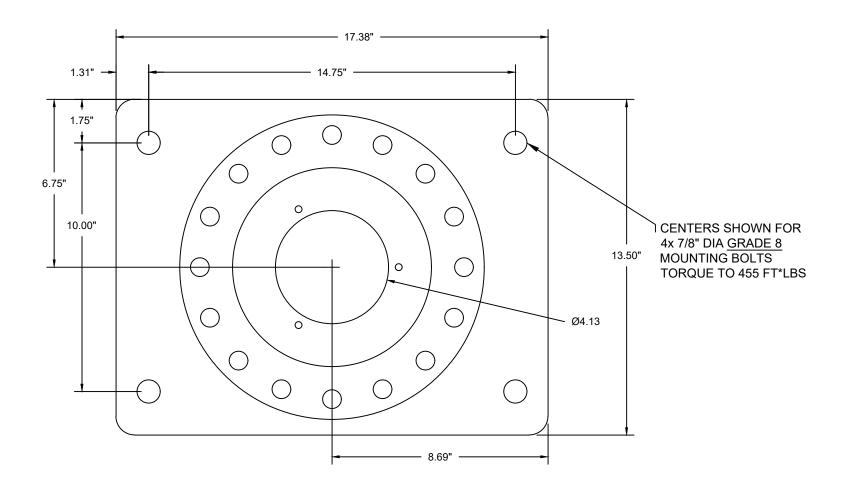




MANUFACTURING, INC. CINCINNATI, OHIO

| INSTALLATION DRAWING | 07-30-24 | C100 |
|----------------------|------------|-------|
| 4016E/4516E | SUPERSEDES | 28892 |

21735-WRB/CRB - RECTANGULAR





| ES LLC | 21 |
|--------|----|
| | |

CINCINNATI, OHIO

| TITLE |
|--------------------------------|
| 21735 BASE MOUNTING DIMENSIONS |
| |

11-12-24A

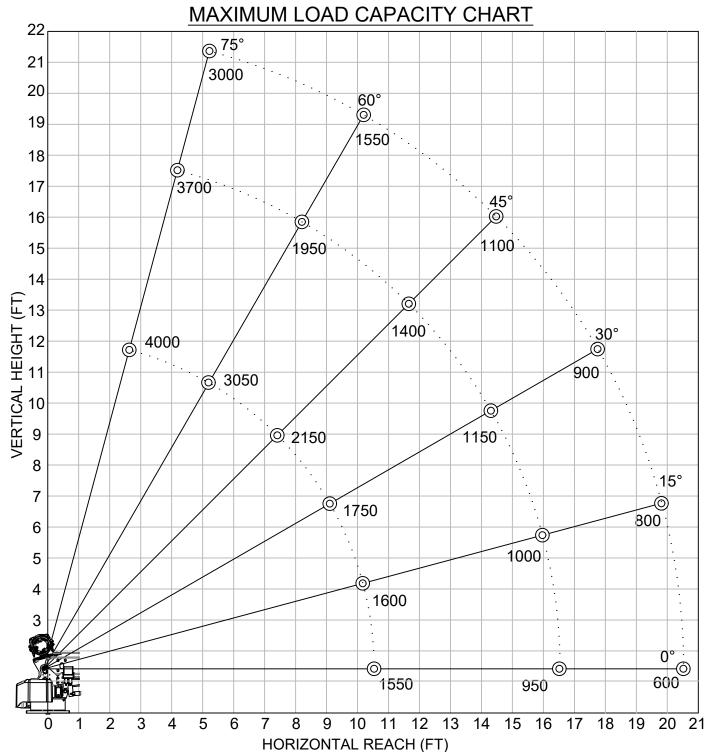
SECTION C100

3215E/351*E/40**E/45**E

SUPERSEDES 04-05-24

28814

4020E CRANE SERIAL NUMBER:



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 2000 LBS
2 PART LINE FOR LOADS OF 2000 LBS AND GREATER

WEIGHT OF LOAD BLOCK = 34 LBS

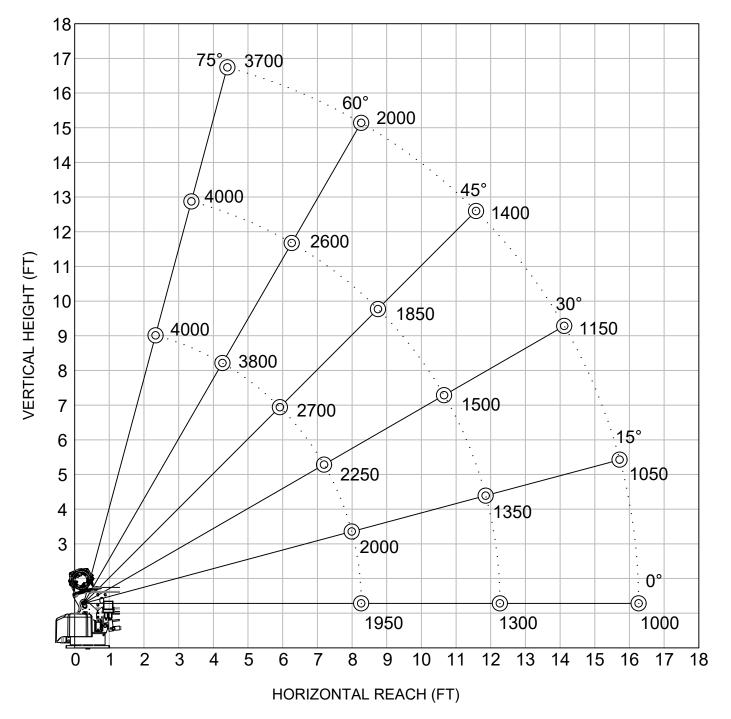


| MAXIMUM LOAD CAPACITY | 02-12-25A | C100 |
|-----------------------|---------------------|-------|
| 4020E | SUPERSEDES 08-26-24 | 28914 |

4016E

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 2000 LBS 2 PART LINE FOR LOADS OF 2000 LBS AND GREATER

WEIGHT OF LOAD BLOCK = 28 LBS



| ; | MAXIMUM LOAD CAPACITY | 02-12-25A | C100 |
|---|-----------------------|---------------------|-------|
| | 4016E | SUPERSEDES 08-27-24 | 28924 |

SECTION 150

SAFETY



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

CRANE SAFETY AND HAZARDS

CAUTIONS

- 1. INSPECT VEHICLE AND CRANE, INCLUDING OPERATION, PRIOR TO USE DAILY.
- DO NOT USE THIS EQUIPMENT EXCEPT ON FIRM LEVEL GROUND WITH CRANE MOUNTED ON FACTORY-RECOMMENDED TRUCK.
- BEFORE OPERATING THE CRANE, REFER TO MAXIMUM LOAD (CAPACITY) CHART ON CRANE FOR OPERATING (LOAD) LIMITATIONS.
- DO NOT OPERATE, WALK, OR STAND BENEATH BOOM OR A SUSPENDED LOAD.
- 5. ATTACH PENDANT CORD SUPPORT SNAP TO ATTACHMENT POINT BEFORE PLUGGING IN PENDANT, IF SO EQUIPPED.
- 6. UNPLUG PENDANT AND SHUT OFF MASTER DISCONNECT SWITCH WHEN CRANE IS NOT IN USE.
- 7. FOR TRAVEL, BOOM MUST BE IN STOWED POSITION.

DANGER

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

YOU MUST NOT OPERATE THIS CRANE, UNLESS:

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

ELECTROCUTION HAZARD

- THIS MACHINE IS NOT INSULATED.
- MAINTAIN SAFE CLEARANCES FROM ELECTRICAL LINES AND APPARATUSES.
- YOU MUST ALLOW FOR BOOM SWAY, ROCK, OR SAG, AND ELECTRICAL LINE AND LOAD-LINE SWAYING
- THIS LIFTING DEVICE DOES NOT PROVIDE PROTECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR.
- YOU MUST MAINTAIN A CLEARANCE OF AT LEAST 10 FEET BETWEEN ANY PART OF THE CRANE, LOAD-LINE, OR LOAD, AND ANY ELECTRICAL LINE OR APPARATUS CARRYING UP TO 50,000 VOLTS. REFER TO DRAWING 15394 FOR ADDITIONAL INFORMATION.
- DEATH OR SERIOUS INJURY WILL RESULT FROM CONTACT OR INADEQUATE CLEARANCES.

OVERLOAD SENSING SYSTEM - STANDARD ON ALL CRANES

- 1. IF OVERLOADED, THE WINCH UP, BOOM DOWN, AND (OPTIONAL) BOOM OUT FUNCTIONS WILL AUTOMATICALLY, SHUT OFF TO PREVENT INCREASED OVERLOAD.
- 2. ON CRANES EQUIPPED WITH AN OPTIONAL OVERLOAD ALARM, IT WILL ALSO SOUND.
- 3. IF AN OVERLOAD OCCURS, USE THE WINCH DOWN, BOOM UP OR BOOM IN FUNCTIONS TO RELIEVE THE OVERLOAD.
- 4. THE OVERLOAD SENSING SYSTEM IS INOPERATIVE IF THE BOOM ELEVATION IS AT THE BOTTOM OR TOP LIMIT OF TRAVEL. TO RELIEVE THIS CONDITION, RAISE OR LOWER THE BOOM SLIGHTLY BEFORE LIFTING THE LOAD.
- 5. SEE MANUAL FOR TESTING THE OVERLOAD SYSTEM.

NOTICE - WARRANTY VOID IF DISCONNECTED

THE OVERLOAD SENSING SYSTEM HAS BEEN INSTALLED AS A SAFETY FEATURE TO PROTECT THE EQUIPMENT AND THE OPERATOR.

DO NOT DISCONNECT THIS SYSTEM

| ® VENCO VENTURO INDUSTRIES LLC | SAFETY & HAZARDS | 01-29-15K | C150 |
|--------------------------------|------------------|-----------|--------|
| CINCINNATI, OHIO | ELECTRIC CRANES | 12-20-13J | 850711 |

CRANE SAFETY AND HAZARDS - CONT'D

OVERLOAD ALARM SYSTEM - OPTIONAL

- 1. OVERLOAD ALARM HORN SOUNDS IF RATED LOAD IS EXCEEDED AT ANY REACH.
- 2. IF ALARM SOUNDS, RAISE BOOM OR LOWER WINCH TO REMOVE OVERLOAD.
- 3. ALWAYS RAISE BOOM SLIGHTLY BEFORE LIFTING LOAD. WARNING SYSTEM INOPERATIVE WHEN CYLINDER IS COMPLETED BOTTOMED.
- 4. ALARM CAN BE TESTED BY TYING DOWN BOOM WITH WINCH CABLE AND OPERATING BOOM UP OR BY RAISING BOOM AGAINST UP LIMIT STOP.

NOTICE - WARRANTY VOID IF DISCONNECTED

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

DO NOT DISCONNECT THIS SYSTEM

INTENTIONALLY LEFT BLANK



| S LLC | SA |
|-------|----|
| | |

TITLE

VEHICLE & CRANE MOUNTED ELECTRICAL HAZARD SIGN APPLICATION & INFORMATION





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

UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN 20 FEET OF HIGH-VOLTAGE LINES OF 350,000 VOLTS OR LESS.

FOR MINIMUM CLEARANCES OF HIGH-VOLTAGE LINES IN EXCESS OF 350,000 VOLTS, REFERENCE OSHA 1926.1408. CRANE'S SAFETY MANUAL, AND CAL-OSHA ARTICLE 37, TITLE 8, HIGH-VOLTAGE ELECTRICAL SAFETY ORDERS.

SIGN NO. 15401 PROVIDES ADDITIONAL WARNING OF LEGAL REQUIREMENTS WHEN OPERATING NEAR HIGH VOLTAGE LINES. THIS SIGN IS PLACED ON THE CONTROL PENDANT SIDE OF BOOM.

Table A - Minimum Clearance Distances

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

| Voltage (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

CINCINNATI, OHIO



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

DECAL #: 15390

CAUTION, INSPECT VEHICLE & CRANE... DESCRIPTION:

PURPOSE: TO INFORM THE OPERATOR OF KEY OPERATING REQUIREMENTS.

QUANTITY:

REAR COVER OR SIDE OF CRANE PLACEMENT:



DECAL #: 15391

DESCRIPTION: DANGER, NOT A PASSENGER LIFT

PURPOSE: TO INFORM OPERATOR NOT TO LIFT, SUPPORT, OR TRANSPORT

PERSONNEL, AND TO ENSURE OPERATOR IS ADEQUATELY TRAINED.

QUANTITY:

PLACEMENT: REAR COVER OR SIDE OF CRANE



OPERATE THIS CRANE UNLESS:

OPERATE THIS CRANE UNLESS:
YOU HAVE BEEN TRAINED IN THE SAFE
OPERATION OF THIS CRANE; AND
YOU KNOW AND FOLLOW THE SAFETY AND
OPERATING RECOMMENDATIONS CONTAINED I
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.

15392 DECAL #:

DESCRIPTION: DANGER, ELECTROCUTION HAZARD, MACHINE (CRANE)

PURPOSE: TO INFORM OPERATOR THAT MACHINE (CRANE) REPRESENTS AN

ELECTROCUTION HAZARD SHOULD IT COME CLOSE TO OR IN CONTACT

WITH AN ELECTRICAL VOLTAGE SOURCE.

QUANTITY: 1

PLACEMENT: REAR COVER OR SIDE OF CRANE



THIS MACHINE IS NOT INSULATED **ELECTROCUTION HAZARD**

THIS LIFTING DEVICE DOES NOT PROVIDE PRO-TECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR.

TO AN ELECTRICALLY CHARGED CONDUCTOR. YOU MUST MAINTAIN A CLEARANCE OR AT LEAST 10 FEET BETWEEN ANY PART OF THE CRANE, LOAD LINE OR LOAD, AND ANY ELECTRICAL LINE OR APPARATUS CARRYING UP TO 50,000 VOLTS. ON EFOOT ADDITIONAL CLEARANCE IS REQUIRED FOR EVERY ADDITIONAL 30,000 VOLTS OR LESS.

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

DECAL #: 15401

DESCRIPTION: DANGER, UNLAWFUL TO OPERATE

PURPOSE: TO INFORM OPERATOR OF PROPER OPERATION

IN VICINITY OF ELECTRICAL LINES.

QUANTITY:

PLACEMENT: RING COVER OR SIDE OF CRANE

UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN 20 FEET OF HIGH-VOLTAGE LINES OF 350,000 VOLTS OR LESS.

FOR MINIMUM CLEARANCES OF HIGH-VOLTAGE LINES IN EXCESS OF 350,000 VOLTS, REFERENCE OSHA 1926.140 CRANE'S SAFETY MANUAL, AND CAL-OSHA ARTICLE 37, TITLE 8, HIGH-VOLTAGE ELECTRICAL SAFETY ORDERS

DECAL #: 15393

DESCRIPTION: DANGER, ELECTROCUTION HAZARD, VEHICLE (TRUCK)

WARNS OF DANGER FROM ELECTRICALLY CHARGED PURPOSE:

VEHICLE, CRANE, OR LOAD.

QUANTITY:

PLACEMENT: EACH SIDE & EACH END OF VEHICLE







SAFETY DECALS

DATE

04-29-16E

SECTION C150

SUPERSEDES 10-24-13D

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

VENTURO CRANES

TITLE

PART NO.: 15513

DECAL: MASTER DISCONNECT SWITCH

FUNCTION: To inform the operator of location and operation of master disconnect

switch.

QUANTITY: 1

PLACEMENT: On master disconnect switch bracket.

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.







CINCINNATI, OHIO

| SAFETY DECALS | 06-06-14C | C150 |
|---------------|-----------|-------|
| CRANES | 04-02-13B | 21384 |

PART NO.: 14473-2

DECAL: CONDUCTIVE GREASE

FUNCTION: To show the operator where to apply grease.

QUANTITY: Varies

PLACEMENT: Near grease fittings.



PART NO.: 13397

DECAL: OIL LEVEL

FUNCTION: To inform the operator of proper oil level to

maintain.

QUANTITY: 1

PLACEMENT: Side of hydraulic power unit.

OIL LEVEL

AW46 or DEXRON III ATF

Retract All Cylinders
Prior to Servicing

3397-E

PART NO.: 15398

DECAL: UNPLUG REMOTE CONTROL

FUNCTION: To inform the operator to unplug remote

control when not in use.

QUANTITY: 1

PLACEMENT: Near pendant socket.

UNPLUG
REMOTE CONTROL
PENDANT WHEN
NOT IN USE



| MANUFACTURING, INC. | |
|---------------------|--|
| CINCINNATI, OHIO | |

| TITLE | DATE | SECTION |
|-----------|------------|---------|
| DECALS | 11-12-19E | C150 |
| | SUPERSEDES | 21251 |
| ET CRANES | 12-23-13D | Z1354 |

PART NO.: 28866-1 & 28866-2 (4020E) ▲

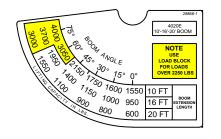
DECAL: CRANE CAPACITY

FUNCTION: To show the operator the operating

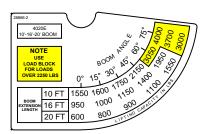
capacities of crane.

QUANTITY: 1 each

PLACEMENT: One on each side of boom.



4020E



PART NO.: 28865

DECAL: MODEL NUMBER (4020E)

FUNCTION: To show the model of the crane.

QUANTITY: 2

PLACEMENT: One on each side of boom.

PART NO.: 28881-1 & 28881-2 (4016E)

DECAL: CRANE CAPACITY

FUNCTION: To show the operator the operating

capacities of crane.

QUANTITY: 1 each

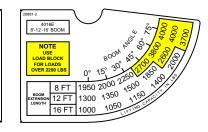
PLACEMENT: One on each side of boom.

28881-1
4016E
8-12-16 BODM

NOTE
LUSE
LUSE
FOR LUADS
OVER 2250 LBS

1500 2000 1950 8 FT
1500 1350 1300 12 FT
1500 1000 16 FT

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PART NO.: 28880

DECAL: MODEL NUMBER (4016E)

FUNCTION: To show the model of the crane.

QUANTITY: 2

PLACEMENT: One on each side of boom.

4016E ENTUR

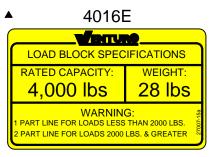
PART NO.: 27007-15a (4016E) & 27007-16a (4020E)

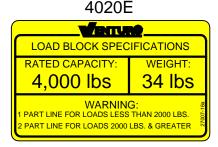
DECAL: LOAD BLOCK CAPACITY

FUNCTION: To show the capacity of the load block.

QUANTITY: 2

PLACEMENT: One on each side of load block.







ENCO VENTURO INDUSTRIES L CINCINNATI, OHIO MODEL/CAPCTY DECALS

02-18-25A

SECTION C150

4016E/4020E

SUPERSEDES 08-26-24

28916

PART NO.: 17813

DECAL: OVERLOAD SENSING SYSTEM DECAL

FUNCTION: To advise operator of overload sensing system.

QUANTITY: 1

PLACEMENT: Location may vary.

CRANE IS EQUIPPED WITH AN OVERLOAD SENSING SYSTEM

- ON CRANES EQUIPPED WITH AN OPTIONAL OVERLOAD ALARM, IT WILL ALSO SOUN IF AN OVERLOAD OCCURS, USE THE WINCH DOWN, BOOM UP OR BOOM IN FUNCTIONS TO RELIEVE THE OVERLOAD.

 THE OVERLOAD SENSING SYSTEM IS INOPERATIVE IF THE BOOM ELEVATION IS AT THE BOTTOM OR TOP LIMIT OF TRAVEL. TO RELIEVE THIS CONDITION, RAISE OR LIWER THE BOOM SLIGHTLY BEFORE LIFTING THE LOAD.

 SEE MANUAL FOR TESTING OVERLOAD SYSTEM.

NOTICE - WARRANTY VOID IF DISCONNECTED

DO NOT DISCONNECT THIS SYSTEM

PART NO.: 14459 (WITH OPTIONAL ALARM)

OVERLOAD ALARM SYSTEM DECAL DECAL:

FUNCTION: To advise operator of overload alarm system.

QUANTITY: 1

PLACEMENT: Location may vary.

THIS CRANE IS EQUIPPED WITH AN OVERLOAD ALARM SYSTEM OVERLOAD ALARM HORN SOUNDS IF RATED LOAD IS EXCEEDED AT ANY REACH.

- IF ALARM SOUNDS, RAISE BOOM OR LOWER WINCH TO REMOVE OVERLOAD.
- ALARM CAN BE TESTED BY TYING DOWN BOOM WITH WINCH CABLE AND OPERATING

NOTICE - WARRANTY VOID IF DISCONNECTED

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

DO NOT DISCONNECT THIS SYSTEM

PART NO.: 28870-1 (RIGHT) & 28870-2 (LEFT)

DECAL: MANUAL OVERRIDE DECAL

FUNCTION: To show the manual override ports.

QUANTITY: 1

PLACEMENT: Inside rear cover.

28870-2

28870-1

VALVE MANUAL **OVERRIDE** BOOM

IN

BOOM DOWN

ROTATION LEFT

VAI VF MANUAL OVERRIDE

BOOM OUT

BOOM UP

ROTATION RIGHT

PART NO.: 19315-2

DECAL: MANUAL OVERRIDE (PROPORTIONAL)

FUNCTION: To show operator how to override proportional valve.

QUANTITY: 1

PLACEMENT: Location may vary.

OVERRIDE POSITION IS INTENDED FOR EMERGENCY USE ONLY.



PROPORTIONAL

ROTATE STEM



| ADDITIONAL DECALS | 7.001110147.L | DE OTTEO |
|-------------------|---------------|---------------|
| | ADDITIONAL | DECALS |

SUPERSEDES

SECTION

C150

40**E/45**E

04-05-24

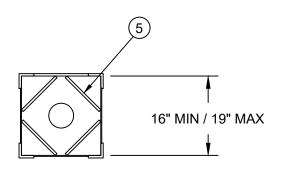
28819

SECTION 200

INSTALLATION



TYPICAL SERVICE BODY REINFORCEMENT

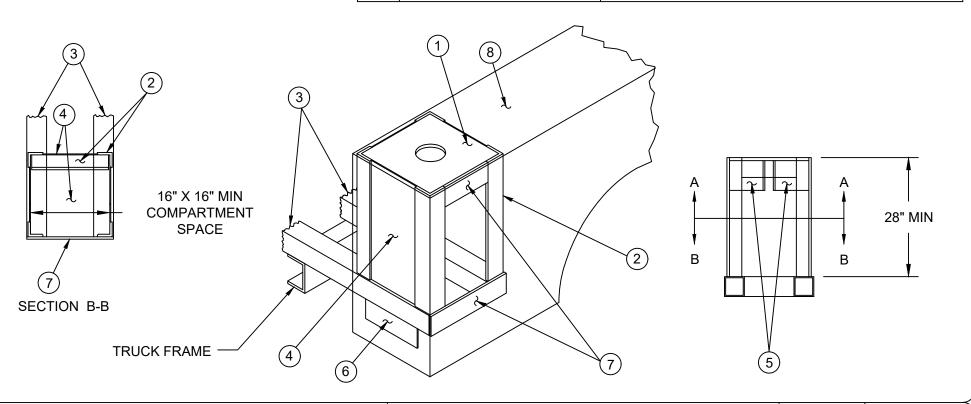


SECTION A-A

NOTE:

IT IS THE SOLE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT THE TOTAL STRUCTURE OF CRANE, TRUCK, AND STABILIZERS ARE STRUCTURALLY SOUND AND THAT THE COMPLETED VEHICLE HAS SUFFICIENT STABILITY AGAINST OVERTURNING.

| ITEM | DESCRIPTION | MINIMUM RECOMMENDED MATERIAL SIZE |
|------|------------------------|---|
| 1 | TOP PLATE | 1/2" STEEL |
| 2 | CORNER POST | 3" X 3" X 1/2" STEEL ANGLE |
| 3 | CROSS FRAME | 4" X 4" X 5/16" SQUARE TUBING, SPAN FULL WIDTH |
| 4 | SHEAR WEB | 3/16" STEEL PLATE |
| 5 | TOP PLT REINFORCEMENT | 1/2" X 6" OR 3/4" X 5" STEEL BAR |
| 6 | OUTRIGGER RNFRCMNT PLT | 1/4" THICK STEEL PLATE |
| 7 | GUSSET | 1/2" X 4" H.R. STEEL |
| 8 | BODY TOP REINFORCEMENT | 10 GA SMOOTH OR DIAMOND PLATE W/ 1" LIP OVER SIDE OF BODY |

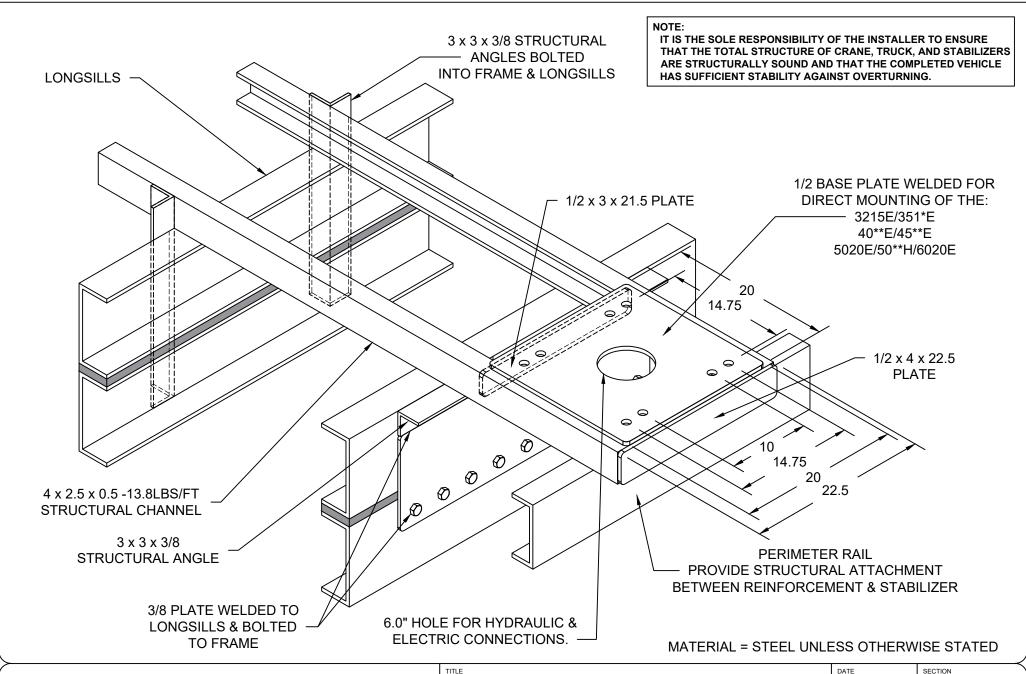




VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

| TYPICAL SERVICE BODY REINFORCEMENT | 02-16-24 | C100 |
|------------------------------------|------------|------|
| 45**E/40**E | SUPERSEDES | 2 |

TYPICAL FLATBED MOUNTING REINFORCEMENT





VENCO VENTURO INDUSTRIES LLC
CINCINNATI. OHIO

| Ì | 22455/254*5/40**5/45**5/50205/50**11/60205 | SUPERS |
|---|--|--------|
| | TYPICAL FLATBED MNTNG REINFORECMENT | 02-1 |
| ١ | TITLE | DATE |

2-16-24 C100
PERSEDES 28817

3215E/351*E/40**E/45**E/5020E/50**H/6020E -

!! IMPORTANT!!

ADEQUATE WIRING IMPERATIVE FOR PROPER OPERATION

- 1. PROPER GROUND PATH SEE DWG 28821
- 2. CURRENT DRAW IS SEVERAL HUNDRED AMPERES ADEQUATE WIRE SIZE AND BATTERY CAPACITY IS ABSOLUTELY ESSENTIAL (SEE CHART BELOW).

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

- * INCLUDES GROUND CABLE
- ** CCA = COLD CRANKING AMPS AT 0° (F).
- *** RC = RESERVE CAPACITY IN MINUTES AT 25 AMPS AND 80° (F).

 THE RC RATING IS A MEASURE OF THE PERIOD OF TIME THE BATTERY CAN SUPPLY A GIVEN CURRENT WITHOUT RECHARGING.

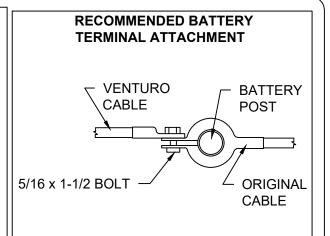
| | VENCO VENTURO INDUSTRIES LLC | CABLE & BATTERY | 02-19-24 | C200 | |
|-------|------------------------------|-----------------|------------|-------|---------|
| ENION | CINCINNATI, OHIO | ELECTRIC CRANES | SUPERSEDES | 28820 | $\Big]$ |

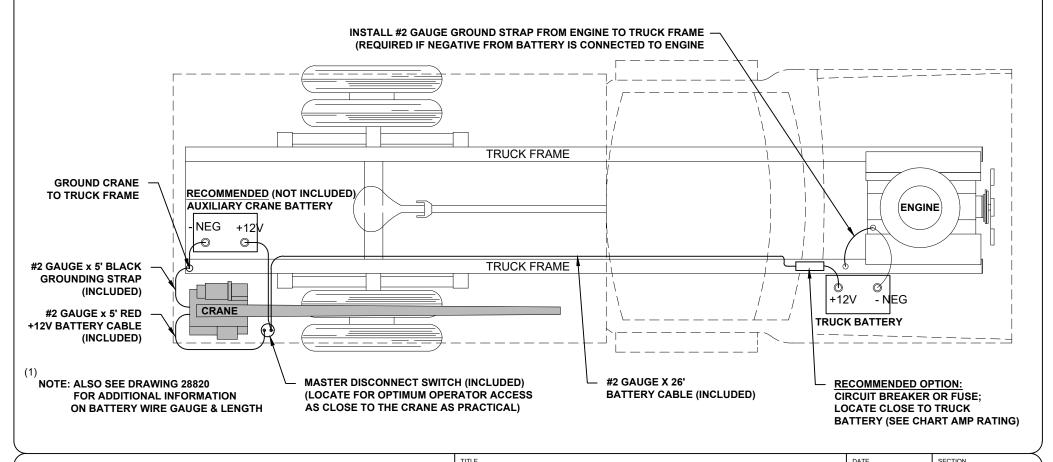
| RECOMMENDED CIRCUIT BREAKER TABLE | | | | | |
|-----------------------------------|---------------------|-----------|--|--|--|
| CRANE | DESCRIPTION | PART NO. | | | |
| 2010E | 300 AMP, MAN RESET | 22946-300 | | | |
| 3215E | 300 AMP, MAN RESET | 22946-300 | | | |
| 3515E/3516E | 300 AMP, MAN RESET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

BATTERY REQUIREMENTS

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

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







VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

| BATTERY CABLE & COMPONENT INSTALL |
|-----------------------------------|
| ET CRANES |

DATE SECTION C200 SUPERSEDES SO O O

STABILITY TEST - 4020E 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 be completed.
- Use a *Test Weight* weighing a *minimum* of <u>950 lbs</u>, (includes load block weight of <u>34</u> lbs.) to a *maximum of 1000 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 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 contract with the gound
- 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.

| | "Max Stable Reach" in inches" | |
|--------------------|-------------------------------|-------|
| % Rated Capacity = | | X 100 |
| | 251 | |

- 12. Record the <u>% of Rated Capacity</u> 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 | STABILITY TEST | 08-26-24 | C200 | |
|--------------------------------|----------------|--------------|-------------|--|
| CINCINNATI, OHIO | 4020E | SUPERSEDES - | 20906-4020E | |

STABILITY TEST - 4016E 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

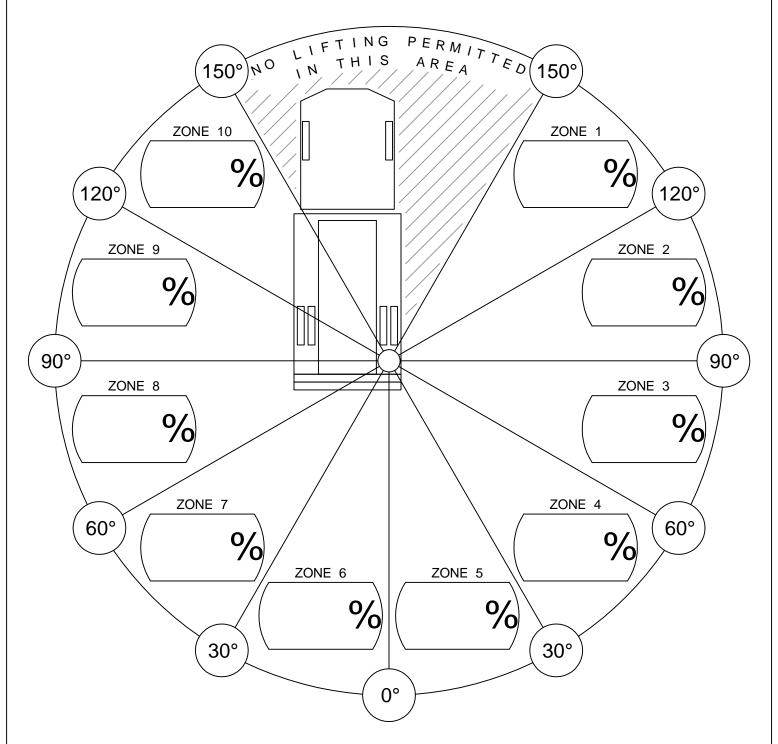
- 1. Locate the truck on firm, level ground and set parking brake.
- 2. Fully deploy stabilizers, making sure they are firmly in contact with supportive ground; use stabilizer pads as required. The tires of the truck should remain in full contact with the ground.
- 3. Inspect wire rope and other key 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 be completed.
- 6. Use a *Test Weight* weighing a *minimum* of <u>1175 lbs</u>, (includes load block weight of <u>28</u> lbs.) to a *maximum of* 1300 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 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 contract with the gound
- 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.

| | "Max Stable Reach" in inches" | |
|--------------------|-------------------------------|-------|
| % Rated Capacity = | | X 100 |
| | 106 | |

- 12. Record the <u>% of Rated Capacity</u> 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 | STABILITY TEST | 08-27-24 | C200 | |
|--------------------------------|----------------|--------------|-------------|---|
| CINCINNATI, OHIO | 4016E | SUPERSEDES - | 20906-4016E | ļ |

CRANE STABILITY



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

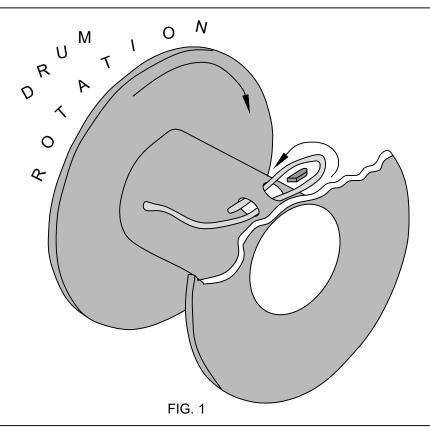
CONDITIONS:

 STABILIZERS FULLY EXTENDED & DOWN, ON FIRM LEVEL GROUND.



| TITLE | DATE | SECTION |
|-----------------|------------|---------|
| STABILITY CHART | 05-11-17F | C200 |
| | SUPERSEDES | 00007 |
| VENTURO CRANES | 02-21-14E | 20907 |

WIRE ROPE INSTALLATION



STEP 1: UNWIND COIL OF WIRE ROPE BY 'ROLLING' ALONG THE FLOOR. THIS WILL PREVENT 'KINKING'.

STEP 2: INSERT WIRE ROPE END UP THROUGH ANTI-2-BLOCK (A2B) ASSEMBLY, BETWEEN CHEEK PLATES, OVER THE TOP SHEAVE, AND THROUGH WIRE ROPE GUIDE.

STEP 3: INSERT WIRE ROPE END INTO POCKET OPENING ON WINCH, WRAP AROUND WEDGE, AND BACK THROUGH POCKET OPENING AS SHOWN IN FIGURE 1.

CAUTION

IF THE WIRE ROPE IS NOT INSTALLED FOR THE CORRECT DRUM ROTATION, THE WINCH BRAKE VALVE WILL NOT HOLD THE LOAD.

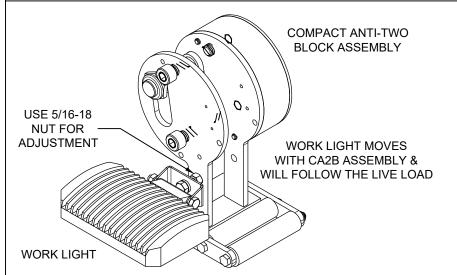
CAUTION

 THERE MUST ALWAYS BE AT LEAST [5] DEAD WRAPS OF WIRE ROPE ON THE WINCH DRUM WHILE UNDER LOAD.

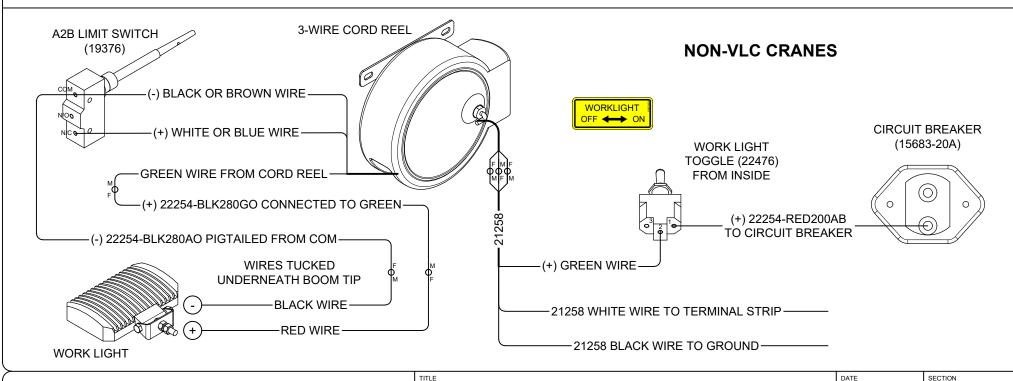
NOTE: SOME WINCHES MAY BE SUPPLIED WITH A HEX NUT IN LIEU OF A WEDGE FOR INSTALLING THE WIRE ROPE.

| 1 | | | TITLE | DATE | SECTION | ١ |
|---|---------|--------------------------------|-----------------------|------------|---------|---|
| | | R VENCO VENTURO INDUSTRIES LLC | WIRE ROPE INSTALLTN | 02-20-24 | C200 | |
| | ENION | CINCINNATI, OHIO | | SUPERSEDES | 00000 | ١ |
| | | | 2010E & LARGER CRANES | - | 28822 | |

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 | !TERM16G250QCFI |
| 4 | TERMINAL; 16G, MALE, QUICK-CONNECT | 4 | !TERM16G250QCM |
| 5 | WIRE ASS'Y; 16G, BLACK, 28", #6 RING - STRIPPED END | 1 | 22254-BLK280AO |
| 6 | WIRE ASS'Y; 16G, BLACK, 28", QCF - STRIPPED END | 1 | 22254-BLK280GO |
| 7 | 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 | !TERM16G#6RG |





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

WORK LIGHT INSTALLATION, 3-WIRE CORD REEL

09-13-24

13-24 C400

NON-VLC CRANES -

28855

SECTION 300

OPERATION & MAINTENANCE



SAFETY

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

CRANE INSPECTION

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

CAPACITY

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

LOAD BLOCK

If the load exceeds the one-part line rating as shown on the "MAXIMUM LOAD CAPACITY" page in this manual *or* if reduced winch line speed for better control of loads is desired, use the load block to rig the crane for two-part line operation.

CONTROLS

This crane is operated by either a corded or radio remote control pendant. If corded, the pendant should be unplugged and stored in a compartment or the cab when the crane is not in use.

With the Master Disconnect Switch in the OFF position, inspect pendant head and switches for damage; for corded remote controls also inspect the plug, socket, and cord. Actuate all switches or buttons in both directions to verify that they all have the same feel and sound, and that they return to the center or resting position.

Plug the pendant into the socket on the right side of the crane.

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

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

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

| VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO |
|---|
|---|

| TITLE | DATE | SECTION |
|----------------------|------------|---------|
| OP & MAINT INSTR 1/3 | 02-18-25 | C300 |
| 3200E - 4500E SERIES | SUPERSEDES | 28852 |

CONTROL FUNCTIONS

<u>WINCH</u> - "WINCH UP" raises the wire rope and "WINCH DOWN" lowers the wire rope. An integrated brake holds the load in place when the winch is not in operation and controls the lowering speed of the load.

<u>ELEVATION</u> - "BOOM UP" raises the boom (increases the boom angle) and "BOOM DOWN" lowers the boom (decreases the boom angle). A counterbalance valve on the cylinder prevents the boom from coming down if a hose breaks and controls the rate at which the boom lowers.

<u>EXTENSION</u> - "BOOM OUT" extends the boom and "BOOM IN" retracts the boom. A counterbalance valve on the cylinder prevents the boom from retracting if a hose breaks and controls the rate at which the boom retracts.

<u>ROTATION</u> - "ROTATE LEFT" and "ROTATE RIGHT" control the direction of rotation. The crane can be rotated continuously. The rotation system is self-locking when not in operation.

<u>TRIGGER</u> (Proportional Only) - Varies the flow rate delivered to the hydraulic functions (elevation, extension, and rotation). The farther the trigger is pulled, the faster the selected hydraulic function operates.

<u>CONTROL PRIORITY SYSTEM</u> - When operating "Winch Up", all hydraulic functions (elevation, extension, and rotation) will be disabled to limit the total current (amp) draw.

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 Left" and "Rotation Right" functions also will continue to operate.

The warning system is INOPERATIVE when the elevation cylinder is fully retracted ("bottomed out"). Use "BOOM UP" to extend the elevation cylinder and ensure that the overload system is active.

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 will be disabled. The "Winch Down", "Boom Up", and "Boom In" functions will continue to operate and can be used to relieve the two-block condition.

CRANE OPERATION

Avoid rapid reversal of the winch switch. The high in-rush current to the motor during reversal can reduce the life of electrical components.

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

Never lift or drag a load sideways ("side load") using any of the crane functions; it could cause permanent damage to the crane.



| TITLE | DATE | SECTION |
|----------------------|------------|---------|
| OP & MAINT INSTR 2/3 | 02-18-25 | C300 |
| 3200E - 4500E SERIES | SUPERSEDES | 28853 |

OVERLOAD ALARM (Optional)

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

- 1. Overload alarm horn sounds if rated load is exceeded at any reach.
- 2. If alarm sounds, use "WINCH DOWN", "BOOM UP", or "BOOM IN" to remove the overload.
- 3. The warning system is INOPERATIVE when the elevation cylinder is fully retracted ("bottomed out"). Use "BOOM UP" to extend the elevation cylinder and ensure that the overload system is active.
- 4. Overload alarm can be tested by raising boom to full elevation.

MANUAL TELESCOPIC BOOM

If your crane has a manual telescoping section, use toggle pin to position the boom in either the extended or retracted position. Never operate the crane without the toggle pin secured in place.

TRUCK SETUP & STABILIZERS

- 1. The truck should be parked on firm, level ground when using the crane.
- 2. The center of the crane should be positioned close enough to the job so that it can be operated at a reach that puts the load within the rated capacity of the crane.
- 3. Set the vehicle parking brake and put the vehicle transmission in "park" (automatic transmission).
- 4. Deploy the stabilizers to stabilize the vehicle against rocking or overturning when lifting with the crane.

PREPARATION FOR TRAVEL

- 1. Return the stabilizers to the stowed position. Install and secure all pins.
- 2. Stow the crane boom in the boom rest.
- 3. Hook the winch line to a tie-down point on the body or pedestal and apply light tension.
- 4. Turn OFF Master Disconnect Switch.
- 5. If using corded control pendant, unplug pendant and store in body compartment or cab.

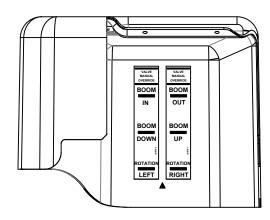


Master Disconnect Switch (power) must be turned "OFF" when the crane is not in use! If corded, the pendant must be unplugged from the crane socket. Failure to follow these steps may result in dangerous, unintentional activation of the crane functions.



| OP | & | MAINT | INSTR | 3/3 |
|-------|---|-------|--------------|-----|
| TITLE | | | | |

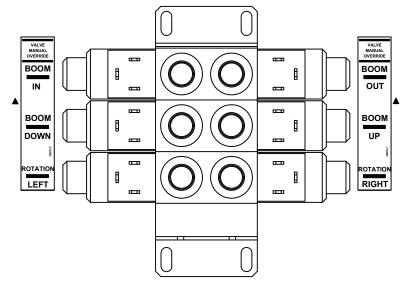
!! READ ALL INSTRUCTIONS BEFORE PERFORMING MANUAL OVERRIDE PROCEDURES !!

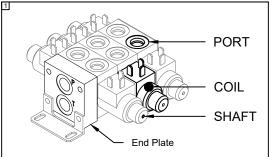


Each valve station incorporates [2] hydraulic ports and [2] coils. Manual override shafts are located in the center of the coils (see figure 1). Manual override decals are placed on each crane inside the plastic cover near the valve assembly. These decals provide a visual aid that helps the operator determine the function designations.

2-STATION FUNCTIONS:

Boom In **Boom Out** ВΙ = BD Boom Down BU Boom Up RL Rot. Left RR Rot. Right





ALWAYS BE SURE TO CHECK HYDRAULIC OIL LEVEL BEFORE PROCEEDING. IT IS RECOMMENDED TO REMOVE ANY ITEM(S) THAT MAY INTERFERE WITH OPERATING THE CRANE MANUALLY. IF POSSIBLE, STRAPS AND/OR HARNESSES SHOULD BE REMOVED BEFORE OPERATING A CRANE IN MANUAL OVERRIDE!!

Procedure:

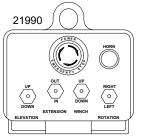
- Turn Master disconnect switch to "ON"
- 2. Power up the pendant / radio
 - PENDANT twist EMERGENCY STOP button clockwise 2.1.
 - 2.2. RADIO - Press green ON button
- Inside the plastic cover, reference the function you wish to perform using the manual override
- Using a tool with a diameter of 1/8" or smaller, press the shaft inward and hold
- Reference the functions listed on your pendant or radio (see figure 2) 5.
- 6. Press the switch or button for the same function
- If you need to change function,
- 7.1. Release switch or button
- 7.2. Remove tool from shaft
- 7.3. Go to step 3

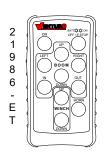
For assistance, please feel free to contact Technical Support at 800-226-2238.

CINCINNATI, OHIO

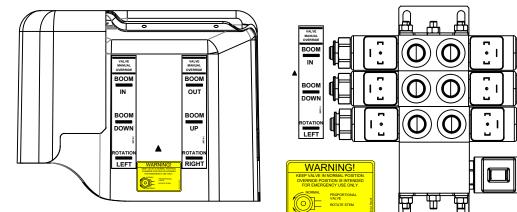


| MAN. OVERRIDE INSTR. | 04-03-25A | C200 |
|---|---------------------|------|
| 3215E/351*E/40**E/45**E NON-PROPORTIONAL VALVE | SUPERSEDES 02-21-24 | 288 |





READ ALL INSTRUCTIONS BEFORE PERFORMING MANUAL OVERRIDE PROCEDURES !!



Each valve station incorporates [2] hydraulic ports and [2] coils. Manual override shafts are located in the center of the coils (see figure 1). Manual override decals are placed on each crane inside the plastic cover near the valve assembly. These decals provide a visual aid that helps the operator determine the function designations.

3-STATION FUNCTIONS:

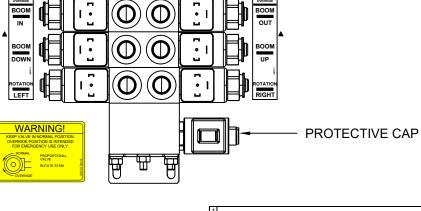
Rot. Right RL RR Rot. Left = BU Boom Up **Boom Down** BD Boom Out ΒI Boom In BO

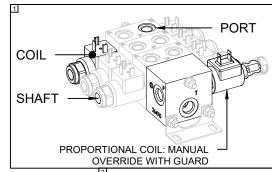
ALWAYS BE SURE TO CHECK HYDRAULIC OIL LEVEL BEFORE PROCEEDING. IT IS RECOMMENDED TO REMOVE ANY ITEM(S) THAT MAY INTERFERE WITH OPERATING THE CRANE MANUALLY. IF POSSIBLE, STRAPS AND/OR HARNESSES SHOULD BE REMOVED BEFORE OPERATING A CRANE IN MANUAL OVERRIDE!! Procedure:

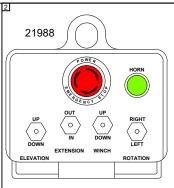
- Turn Master disconnect switch to "ON" 1.
- Remove Protective cap 2.
- 3. Rotate Valve Stem Clockwise to close
- Power up the pendant / radio
- Twist EMERGENCY STOP button clockwise 4.1.
- Inside the plastic cover, reference the function you wish to perform using the manual override decal
- Using a tool with a diameter of 1/8" or smaller, press the shaft inward and hold
- 7. Reference the functions listed on your pendant or radio (see figure 2)
- Press the switch or button for the same function
- If you need to change function,
- Release switch or button 9.1.
- 9.2. Remove tool from shaft
- 9.3. Go to step 5

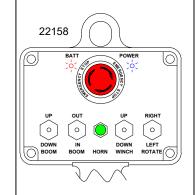
For assistance, please feel free to contact Technical Support at 800-226-2238.

CINCINNATI, OHIO



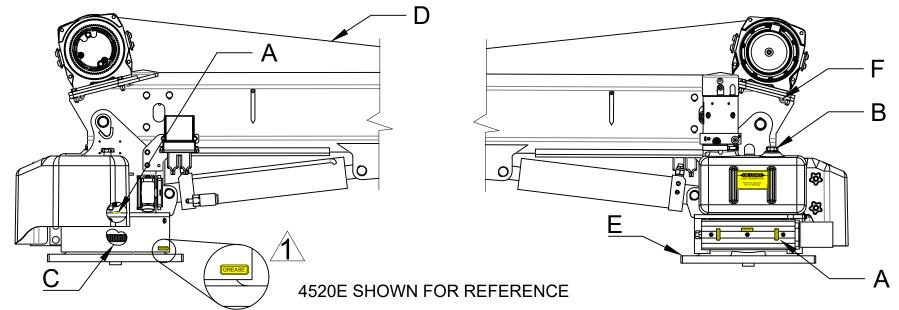








| .c | MAN. OVERRIDE INSTR. | 04- | _ | SECTION C200 |
|----|---|-----|--------|--------------|
| | 3215E/351*E/40**E/45**E PROPORTIONAL VALVE | 00 | -21-24 | 28827 |



ATTENTION:

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

| Location | Service Required | Note | Service Interval |
|----------|---|---|--|
| Α | Constant With December Constant Constant | Use FUCHS Renolit Aluminum Complex Grease, or equivalent | Time of Truck Service |
| | Grease fitting With Pressure Grease Gun | ALIGNMENT: To align hole w/ fitting, remove Cover, line up grease decals on lower cover and base gusset. | |
| В | Fill Oil Reservoir to Oil Level with Boom Down and Boom In. | Use Dextron ATF for Ambient Temperatures Between -22° F and 30° F Use ISO Viscosity Grade 68 or Equivalent for Ambient Temperatures Between 10°F and 125°F | Time of Truck Service and as required by changes in the ambient temperature range |
| С | Lubricate Gear Teeth | Remove Cover & Use Chassis Grease | Time of Truck Service |
| D | Check Wire Rope and Hook | Rope should be free of kinks and fraying | Time of Truck Service |
| E | Check Torque of Base Mounting Bolts | Square Base: Torqued to 200 ft-lbs | Time of Truck Service |
| - | Check Torque of Base Mounting Bolts | Rectangular Base: Torqued to 455 ft-lbs | Time of Truck Service |
| F | Check Torque of Winch Mounting Bolts | Bolts should be torqued to 35 ft-lbs* | Time of Truck Service |

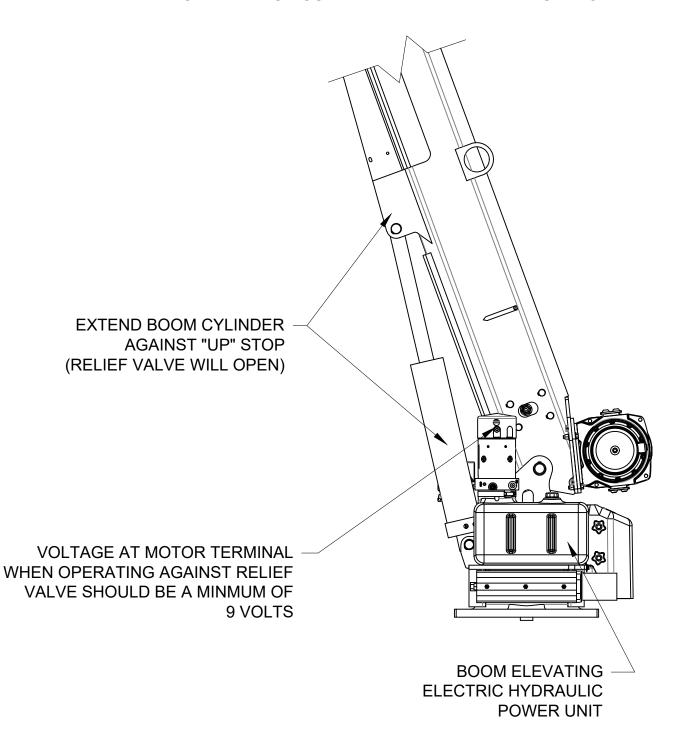
^{* 32} FT-LBS FOR 3215E/351XE WITH GTD-2200 COMEUP WINCH. SEE PAGE 28846 FOR WINCH IDENTIFICATION.



| LUBRICATION & MAINTENANCE CHART | 02-20-24 SUPERSEDES | C300 |
|---------------------------------|---------------------|-------|
| 3215E/351*E/40**E/45**E | - | 28823 |

MINIMUM VOLTAGE TEST

ONE OF THE MOST COMMON ELECTRICAL PROBLEMS ENCOUNTERED ON 12 VOLT ELECTRICAL CRANES IS INSUFFICIENT VOLTAGE AT THE MOTOR WHEN DRAWING THE LARGE CURRENT THAT EXISTS AT FULL LOAD



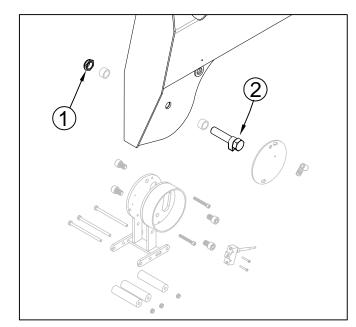


| - | WIINIWOW VOLTAGE TEST | UZ-ZU-Z4 SUPERSEDES | C300 |
|---|-----------------------|------------------------|------|
| | MINIMUM VOLTAGE TEST | 02-20-24 | C300 |

Compact A2B with Stowage Cut-out, Install/Adjustment Instructions (Kit: 28375)

The purpose of the Stowage Cut-out system is to prevent a situation whereby the wire rope is over-tensioned when the load block / wire rope is attached to the stowage hook on the bottom of the primary boom assembly. However, the OPERATOR is ultimately responsible for ensuring that the wire rope is not over-tensioned when stowing the wire rope and boom assembly into the boom rest.

- Initially, apply a light torque to the nyloc full nut Item #1 (P/N !LNUT-07510), such that the axle bolt & cam welded assembly can be rotated / adjusted in the steps below.
- Position the cam *lobe* Item #2 (P/N 28362) so that it is pointing towards the housing / mechanism
- 3. Hang the load block on the open stowage hook under the primary boom.
- 4. Thread the wire rope through the load block in a two-line configuration; the wire rope end / eyelet is pinned in the standard position on the tertiary boom tip
- 5. Actuate the Winch Up function until the load block and wire rope are *taut* enough to prevent the load block from bouncing during transit, *but do not tighten excessively so as to prevent damage to the wire rope.*
- 6. Rotate the axle bolt & cam welded assembly towards the housing (clockwise in standard configuration) until the cam lobe makes contact with and trips the wobble micro switch and actuates the A2B function.
- 7. Once adjusted, torque the nyloc full nut (Item #1) to 100 ft*lbs to prevent further rotational movement of the axle bolt & cam welded assembly.
- 8. Test the A2B trip-point by slackening and tightening the wire rope / load block assembly by actuating Winch Up/Down. NOTE: The point at which the A2B trips WILL vary to some degree, depending upon the winch up speed. It is recommended to actuate the winch up function slowly, which will yield a consistent and repeatable result, in terms of wire rope tension when stowed.





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

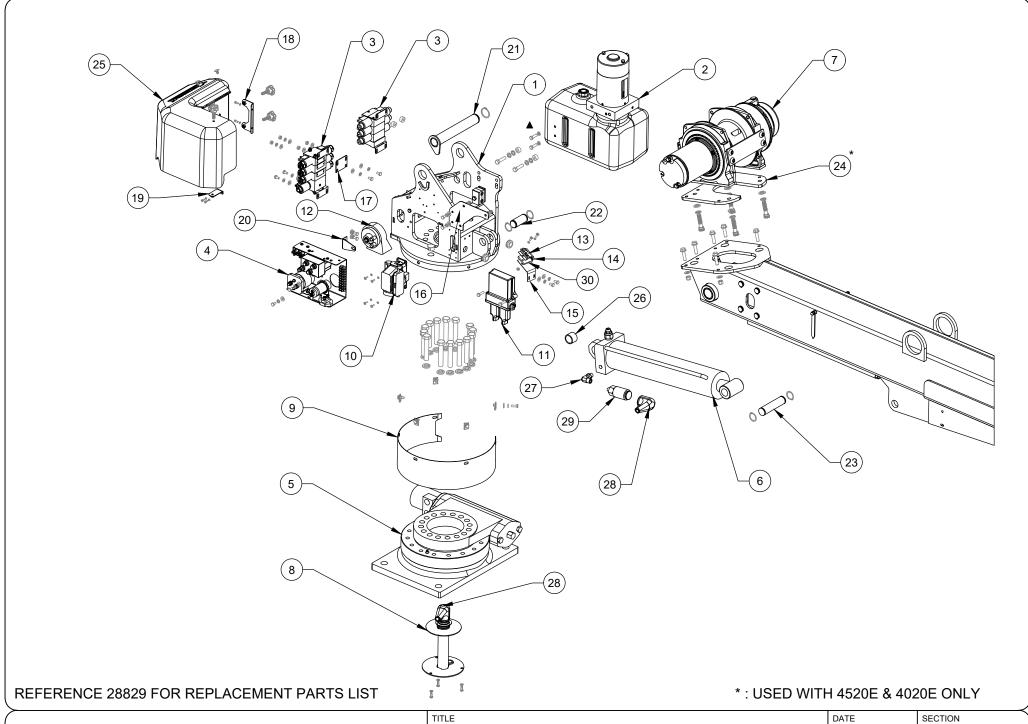


| A2B Stowage Cut-out | 10-04-21B | C400 |
|---------------------------|----------------------|-------|
| ET/HT Cranes w/ Comp. A2B | SUPERSEDES 08-03-21A | 28239 |

SECTION 400

REPLACEMENT PARTS







VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

REPLACEMENT PARTS DWG - MECH

06-20-25B C400

C400

40**E/45**E

06-17-25A

SUPERSEDES

28828

| ITEM NO | NON-PROP | PROP | DADT NUMBER | DECORIDATION | | |
|----------|----------|------|-------------|--|--|--|
| ITEM NO. | QT | Υ. | PART NUMBER | R DESCRIPTION | | |
| 1 | 1 | 1 | 28637 | HOUSING WELDMENT ASSEMBLY | | |
| 2 | 1 | 1 | 28720 | HYDRAULIC POWER UNIT | | |
| | - | 1 | 28800 | VALVE BLOCK ASSY; 3-SPOOL W/ PROP VALVE. | | |
| 3 | 1 | _ | 28801 | VALVE BLOCK ASSY; 3-SPOOL W/ NON-PROP V. | | |
| 4 | 1 | 1 | 28700 | ELECTRICAL COMPONENT PANEL | | |
| 5 | 1 | 1 | 21735-1 | SLEWDRIVE W/ CAST RECTANGULAR BASE | | |
| 6 | 1 | 1 | 28675 | ELEVATION CYLINDER | | |
| 7 | 1 | 1 | 21215 | ELECTRIC WINCH | | |
| 8 | 1 | 1 | 16780-2P8 | ASSY; 2-POLE SLIP-RING | | |
| 9 | 1 | 1 | 21185 | ROTATION GEAR GUARD | | |
| 10 | 1 | 1 | 22480 | SOCKET ASSY; 16 + 1 POLE | | |
| 4.4 | - | 1 | 22158 | RADIO, ET, PROPORTIONAL | | |
| 11 | 1 | _ | 21986-ET | RADIO, ET, NON-PROPORTIONAL | | |
| 12 | 1 | 1 | 21948 | HORN | | |
| 13 | 1 | 1 | 19918 | BOOM SHUT OFF SWITCH | | |
| 14 | 1 | 1 | 19917 | BOOM SHUT OFF SWITCH BRACKET | | |
| 15 | 1 | 1 | 28641 | SHUT OFF SWITCH ADJUSTABLE BRACKET | | |
| 16 | 1 | 1 | 28642 | BRACKET; RADIO RECEIVER. | | |
| 17 | - | 1 | 28803 | ADAPTER PLATE, PROP VALVE ASSY | | |
| 18 | 1 | 1 | 28646 | PLASTIC COVER BACK BRACKET WELDMENT | | |
| 19 | 1 | 1 | 28647 | PLASTIC COVER SIDE BRACKET WELDMENT | | |
| 20 | 1 | 1 | 22000 | BRACKET; HORN | | |
| 21 | 1 | 1 | 28690 | BOOM PIVOT PIN - WELDMENT | | |
| 22 | 1 | 1 | 21172 | ELEVATION CYLINDER INBOARD PIN | | |
| 23 | 1 | 1 | 21127 | ELEVATION CYLINDER OUTBOARD PIN | | |
| 24* | 1 | 1 | 28657 | WINCH SPACER | | |
| 25 | 1 | 1 | 28740 | PLASTIC COVER | | |
| 26 | 1 | 1 | 21124 | POLY BEARING - ELEVATION CYLINDER BASE | | |
| 27 | 1 | 1 | FF6801-0606 | FITTING, ADAPTER, 90°, 6MOFS-6MORB | | |
| 28 | 1 | 1 | 17012 | BOOT: PRESSURE SWITCH | | |
| 29 | 1 | 1 | SEE TABLE | PRESSURE SWITCH | | |
| 30 | 1 | 1 | 20896 | TOP ANGLE SWITCH BLOCK | | |

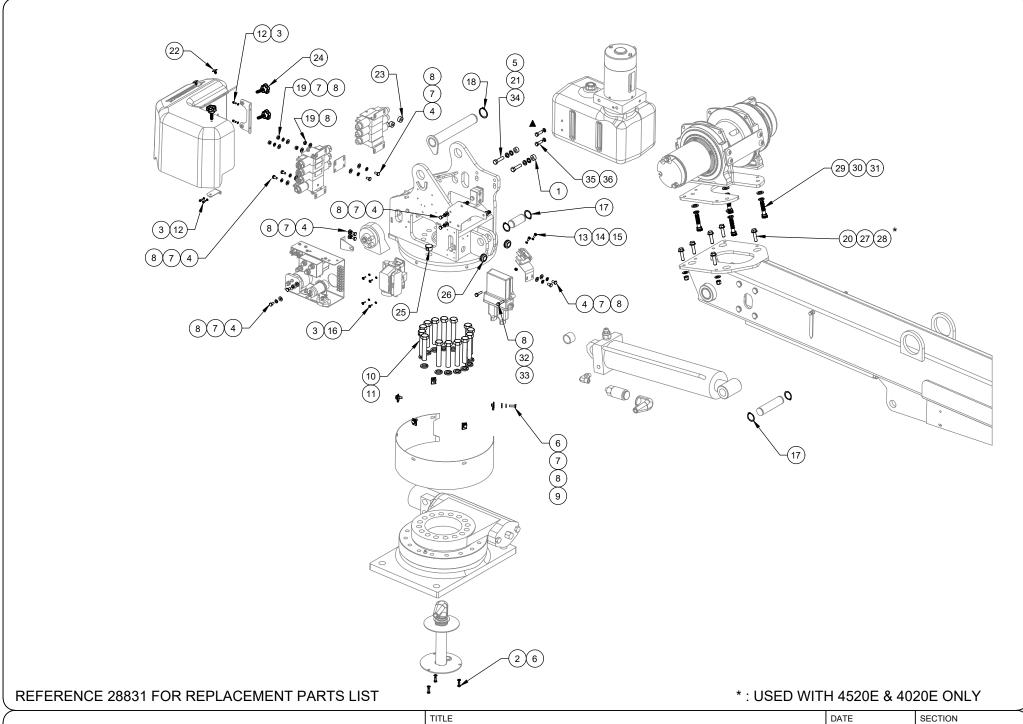
| ITEM NO. | 4520E | 4516E | 4020E | 4016E | PART NUMBER |
|-----------|-------|-------|-------|---------------|---------------|
| II EWINO. | | Q1 | | PARI NUIVIBER | |
| | 1 | - | - | - | 17460-2900-21 |
| 29 | - | 1 | 1 | - | 17460-2700-21 |
| | - | - | - | 1 | 17460-2200-21 |

REFERENCE 28828 FOR REPLACEMENT PARTS DRAWING

*: USED WITH 4520E & 4020E ONLY



| REPLACEMENT PARTS LIST - MECH | 06-17-25A | C400 |
|-------------------------------|---------------------|-------|
| 40**E/45**E | SUPERSEDES 02-23-24 | 28829 |



40**E/45**E



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

REPLACEMENT FASTENERS DWG - MECH

06-20-25A C400 SUPERSEDES

07-30-24 28830

| ITEM NO. | NON-PROP | PROP | PART NUMBER | DESCRIPTION | | |
|----------|----------|------------|-------------------|---|--|--|
| ITEM NO. | QT | ′ . | PART NUMBER | DESCRIPTION | | |
| 1* | 2 | 2 | 28804 | ALUMINUM SPACER | | |
| 2 | 3 | 3 | !LWSH-025-STAR-SS | LOCK WASHER, 1/4" STAR, SS | | |
| 3 | 8 | 8 | !LWSH-08S | LOCK WASHER; #08, SS | | |
| 4 | 10 | 12 | !HHCS02520050S | HEX HEAD CAP SCREW 1/4-20 X 1/2 LG, SS | | |
| 5 | 2 | 2 | !LWSH-038-STAR | LOCK WASHER, 3/8" STAR, ZINC | | |
| 6 | 8 | 8 | !HHCS02520075S | HEX HEAD CAP SCREW 1/4-20 X 3/4 LG, SS | | |
| 7 | 16 | 18 | !LWSH-025S | LOCK WASHER; 1/4", SS | | |
| 8 | 17 | 21 | !FWSH-025S | FLAT WASHER; 1/4", SS | | |
| 9 | 5 | 5 | !UNUT-02520-LKG | U-NUT; 1/4-20, LOCKING TYPE, ZINC | | |
| 10 | 14 | 14 | !HHCS06311350-5 | !HHCS; 5/8-11 X 3-1/2 LG, GR 5, ZINC | | |
| 11 | 14 | 14 | !LWSH-063 | LOCK WSHR; 5/8, ZINC | | |
| 12 | 4 | 4 | !SHCS#0832038S | SHCS, #8-32 X 0.38" LG, SS | | |
| 13 | 2 | 2 | !PHPMS#1024050S | PHILLIPS HEAD PAN, #10-24 X 1/2LG, SS | | |
| 14 | 2 | 2 | !HNUT-#1024S | HEX NUT, 10-24, SS | | |
| 15 | 2 | 2 | !LWSH-#10S | LOCK WASHER - #10, SS | | |
| 16 | 4 | 4 | !SHPMS#0832050S | SLOT HEAD, #8-32 X 1/2 LG, SS | | |
| 17 | 2 | 2 | !SRNG-113 | SNAP RING - 1-1/8" IN - PLATED | | |
| 18 | 1 | 1 | !SRNG-138 | SNAP RING - 1-3/8 IN - PLATED | | |
| 19 | 2 | 4 | !HNUT-02520S | HEX NUT 1/4-20, SS | | |
| 20 | 6 | 6 | !HHCS03816150-8 | HEX HEAD CAP SCREW 3/8-16 X 1-1/2 LG GR 8, ZINC | | |
| 21 | 2 | 2 | !LWSH-038 | LOCK WASHER; 3/8", ZINC | | |
| 22 | 2 | 2 | 28741 | PUSH-IN RIVETS WITH RIBBED SHANK, 0.25" | | |
| 23 | 2 | 2 | 28802 | NYLON SPACER | | |
| 24 | 3 | 3 | 28742 | KNOB, HAND, 5-POINT | | |
| 25 | 2 | 2 | 25019 | HOLE PLUG - 7/8 OD | | |
| 26 | 2 | 2 | 20889 | GROMMET: RUBBER, BLACK | | |
| 27 | 12 | 12 | !FWSH-038 | FLAT WASHER; 3/8", ZINC | | |
| 28 | 6 | 6 | !LNUT-03816 | LOCK NUT 3/8-16, ZINC | | |
| 29 | 4 | 4 | 25921 | SHCS M12-175x50mm Gr.12.9, ZINC | | |
| 30 | 4 | 4 | !LWSH-M12-8.8 | M12 LOCK WASHER, ZINC | | |
| 31 | 4 | 4 | !FWSH-M12 | M12 FLAT WASHER, ZINC | | |
| 32 | 2 | 2 | !JNUT-02520NS | JNUT, NYLON INSERT, 1/4-20, SS | | |
| 33 | 2 | 2 | !HHCS02520100S | HEX HEAD CAP SCREW 1/4-20 X 1.0 LG, SS | | |
| 34 | 2 | 2 | !HHCS03816150-8 | HHCS 3/8-16 X 1-1/2 LG GR 8, ZINC (KTI HPU) | | |
| | 2 | 2 | !HHCS03816125-8 | HHCS 3/8-16 X 1-1/4 LG GR 8, ZINC (BUCHER HPU) | | |
| 35** | 2 | 2 | !LWSH-031S | LOCK WASHER; 5/16", S/S | | |
| 36** | 2 | 2 | !HHCS3118100S | HEX HEAD CAP SCREW 5/16-18 X 1.0 LG, S/S | | |

REFERENCE 28830 FOR REPLACEMENT PARTS DRAWING

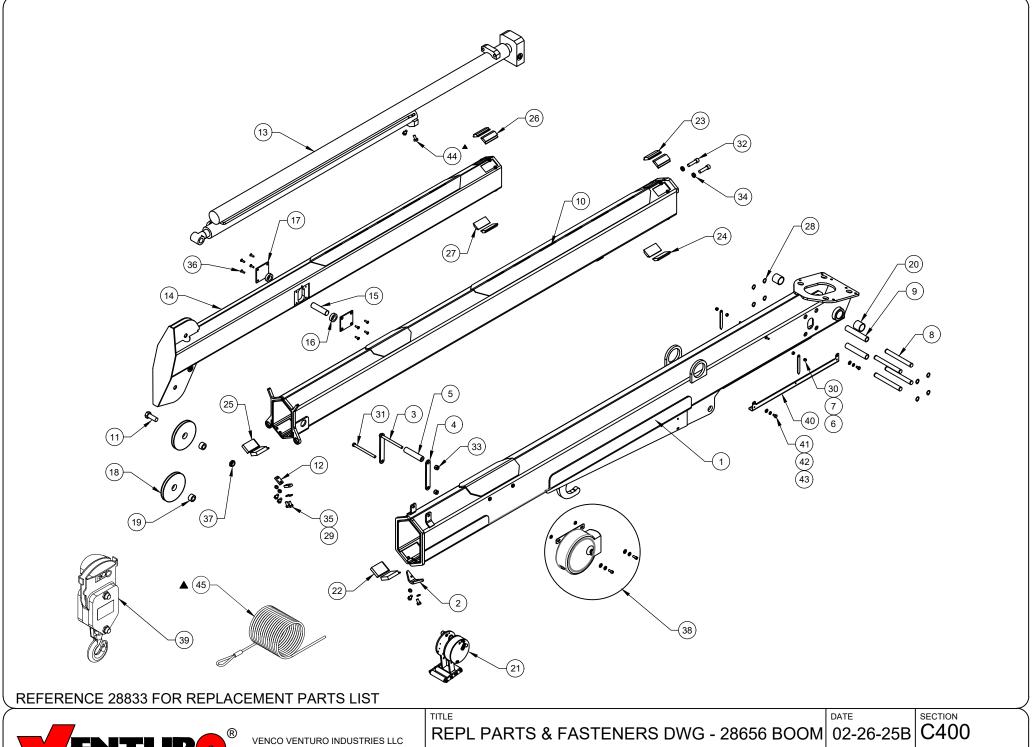
CINCINNATI, OHIO

: USED WITH KTI HPU ONLY

: USED WITH BUCHER HPU ONLY DATE SECTION



| REPLACEMENT FASTENERS LIST - MECH | 06-20-25B | C400 |
|-----------------------------------|------------|------|
| | SUPERSEDES | 0000 |
| 40**E/45**E | 02-25-25A | 2883 |



VENCO VENTURO INDUSTRIES LLC

SUPERSEDES

4020E/4520E

11-19-24A

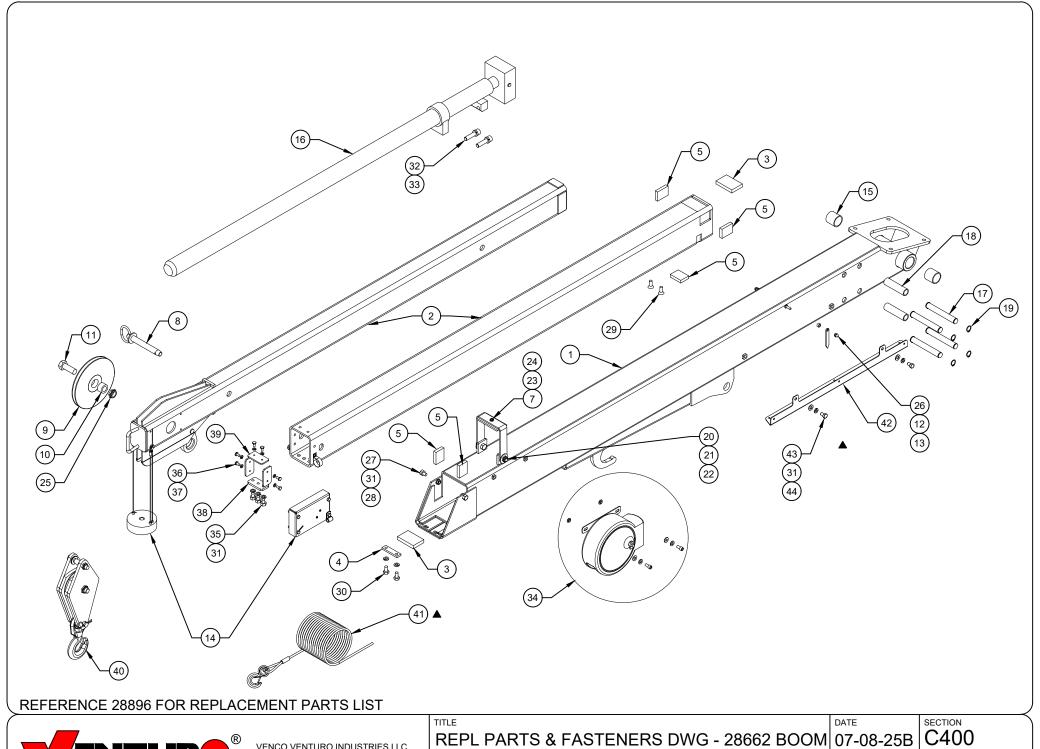
28832

REPLACEMENT PARTS & FASTENERS LIST - 28656 BOOM

| ITEM NO. | QTY. | PART NUMBER | DESCRIPTION |
|----------|------|-----------------|---|
| 1 | 1 | 28650 | PRIMARY BOOM WELDED ASSEMBLY |
| 2 | 1 | 23183 | V-BLOCK SLIDER |
| 3 | 1 | 21935 | WIRE-ROPE GUIDE WELDED |
| 4 | 1 | 21936 | FLAT,MOUNT;WIRE ROPE GUIDE |
| 5 | 1 | 21560 | ROLLER,UHMW GUIDE |
| 6 | 2 | 22490 | SPACER, BOOM ARROW 1/2" O.D. |
| 7 | 2 | 13459-2 | BOOM ARROW 4-7/16 LONG |
| 8 | 4 | 21497 | THRUST PIN - EXTENSION CYLINDER |
| 9 | 2 | 21498 | EXTENSION CYLINDER ROLLER |
| 10 | 1 | 27165 | SECONDARY BOOM WELDED ASSEMBLY |
| 11 | 1 | 17059-6 | SHEAVE AXLE 3/4 X 2 W/ 1" SHANK |
| 12 | 2 | 23119 | BEARING RETAINING BLOCK |
| 13 | 1 | 21753 | EXTENSION CYLINDER |
| 14 | 1 | 27167 | TERTIARY BOOM WELDED ASSEMBLY |
| 15 | 1 | 21941 | EXTENSION CYLINDER PIN |
| 16 | 2 | 21428 | BUSHING |
| 17 | 2 | 23116 | PIN BLOCK REINFORCING |
| 18 | 2 | 27001 | SHEAVE - BOOM |
| 19 | 2 | 23924 | BUSHING |
| 20 | 2 | 21206 | POLY BEARING - PRIMARY BOOM PIVOT |
| 21 | 1 | 27469-L-C-00 | COMPACT A2B |
| 22 | 2 | 23217-3 | UHMW, B, 3.19, 2.13, 0.63 |
| 23 | 2 | 23217-8 | UHMW, A, 3.19, 1.75, 0.50 |
| 24 | 2 | 23217-9 | UHMW, A, 3.19, 1.75, 0.44 |
| 25 | 2 | 23217-10 | UHMW, B, 3.19, 1.75, 0.63 |
| 26 | 2 | 23217-6 | UHMW, A, 3.19, 1.50, 0.50 |
| 27 | 2 | 23217-7 | UHMW, A, 3.19, 1.50, 0.44 |
| 28 | 8 | !SRNG-075 | RETAINING RING - 3/4" SHAFT DIA. |
| 29 | 6 | !LWSH-038 | LOCK WASHER; 3/8", ZINC |
| 30 | 2 | !ANUT-02520S | ACORN NUT 1/4-20, SS |
| 31 | 1 | !HHCS04414550 | HHCS - 7/16-14 X 5-1/2 LG, ZINC |
| 32 | 2 | !SHCS05013200 | SOCKET HEAD CAP SCREW 1/2-13 X 2", ZINC |
| 33 | 2 | !LNUT-04414 | NYLON INSERT LOCK NUT - 7/16-14, ZINC |
| 34 | 2 | !LWSH-050-HC | LOCK WASHER 1/2" HI COLLAR, ZINC |
| 35 | 6 | !HHCS03816075 | HEX HEAD CAP SCREW - 3/8-16 X 3/4, ZINC |
| 36 | 8 | !CACS02520063-N | ALLEN HEAD CAP SCREW 1/4-20 X 5/8 LG W/ PATCH |
| 37 | 1 | !LNUT-07510 | LOCKNUT 3/4-10, ZINC |
| 38 | 1 | 26577-1-20 | CORD REEL ASSEMBLY |
| 39 | 1 | 27667-3 | LOAD BLOCK ASSEMBLY FOR 4520E |
| | 1 | 27667-4 | LOAD BLOCK ASSEMBLY FOR 4020E |
| 40 | 1 | 26940-2 | HEX BOOM CABLE GUARD BRACKET |
| 41 | 2 | !HHCS03118050S | HEX HEAD CAP SCREW - 5/16 X 1/2 LONG S/S |
| 42 | 2 | !LWSH-031S | LOCK WASHER; 5/16", S/S |
| 43 | 2 | !FWSH-031S | FLAT WASHER; 5/16", S/S |
| 44 | 2 | !HHCS03816100N | HHCS; NYLON PATCH 3/8-16 X 1, GR. 5 |
| 45 | 1 | 27668-5/16-80 | WIRE ROPE, 5/16" x 80' |

REFERENCE 28832 FOR REPLACEMENT PARTS DRAWING





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

REPL PARTS & FASTENERS DWG - 28662 BOOM 07-08-25B SUPERSEDES

4016E/4516E

02-26-25A

28895

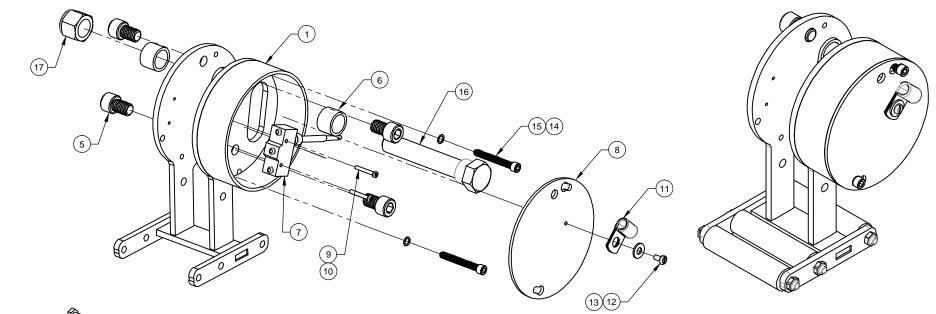
REPLACEMENT PARTS & FASTENERS LIST - 28662 BOOM

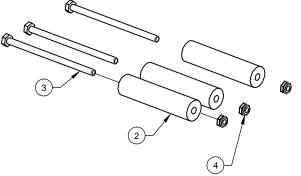
| ITEM NO. | QTY. | PART NUMBER | DESCRIPTION |
|----------|------|----------------|---|
| 1 | 1 | 28658 | PRIMARY BOOM WELDED ASSEMBLY |
| 2 | 1 | 21203 | SECONDARY / TERTIARY WELDED ASSEMBLY |
| 3 | 2 | 21208 | BOOM BEARING - 2 X 3 X 1/2 |
| 4 | 1 | 21207 | PRIMARY BEARING RETAINING BAR |
| 5 | 5 | 21209 | BOOM BEARING - 1-1/2 X 2 X 7/16 |
| 6 | 1 | 19880 | CABLE GUIDE STRUCTURE |
| 7 | 1 | 19881 | CABLE GUIDE WEAR STRIP |
| 8 | 1 | 23042-B-14-14 | ASSY; PIN / LANYARD |
| 9 | 1 | 23925 | BOOM SHEAVE WITH BUSHING |
| 10 | 1 | 23924 | BUSHING |
| 11 | 1 | 17059-6 | SHEAVE AXLE 3/4 X 2 W/ 1" SHANK |
| 12 | 2 | 13459-1 | BOOM ARROW 3-3/16 LONG |
| 13 | 2 | 22490 | SPACER, BOOM ARROW 1/2" O.D. |
| 14 | 1 | 28860 | ANTI-TWO-BLOCK ASSEMBLY- LEFT HAND |
| 15 | 2 | 21206 | POLY BEARING - PRIMARY BOOM PIVOT |
| 16 | 1 | 21217 | EXTENSION CYLINDER |
| 17 | 4 | 21211 | THRUST PIN - EXTENSION CYLINDER |
| 18 | 2 | 19885 | EXTENSION CYLINDER ROLLER |
| 19 | 8 | !SRNG-075 | RETAINING RING - 3/4" SHAFT DIA. |
| 20 | 2 | | HEX HEAD CAP SCREW 1/2-13NC X 1 LG GR5 |
| 21 | 2 | !FWSH-050 | FLAT WASHER 1/2" |
| 22 | 2 | !JNUT-05013N | 1/2-13 NYLON INSERT JAM NUT |
| 23 | 1 | !PHCS02520063 | PAN HEAD CAP SCREW - 1/4-20 X 5/8 LONG |
| 24 | 1 | !JNUT-02520N | NYLON INSERT JAM NUT - 1/4-20 |
| 25 | 1 | !LNUT-07510 | LOCKNUT 3/4-10 |
| 26 | 2 | !ANUT-02520S | ACORN NUT 1/4-20 SS |
| 27 | 2 | !HHCS03816050 | HEX HEAD CAP SCREW 3/8-16 X 1/2" LG - GR 5 |
| 28 | 2 | !JNUT-03816 | JAM NUT - 3/8-16 GRADE 5 |
| 29 | 2 | !CACS03816100 | CNTRSNK ALLEN HEAD CAP SCREW 3/8-16 X 1" LG |
| 30 | 2 | !HHCS03816075 | HEX HEAD CAP SCREW - 3/8-16 X 3/4 LG - GR 5 |
| 31 | 6 | !LWSH-038 | LOCK WASHER 3/8" |
| 32 | 2 | !SHCS05013200 | SOCKET HEAD CAP SCREW - 1/2-13 X 2 LG, |
| 33 | 2 | !LWSH-050-HC | LOCK WASHER; 1/2", HI-COLLAR |
| 34 | 1 | 26577-1-20 | CORD REEL ASSY |
| 35 | 3 | !HHCS03824050 | HEX HEAD CAP SCREW - 3/8-24 X 1/2 LG - GR 5, ZINC |
| 36 | 6 | !HHCS02520050 | HEX HEAD CAP SCREW - 1/4-20 X 1/2 LG - GR 5, ZINC |
| 37 | 6 | !LWSH-025 | LOCK WASHER 1/4" |
| | 1 | 22145 | LOWER STOP BLOCK |
| 38 39 | 3 | 22145 | SIDE SHIM |
| 39 | 1 | | LOAD BLOCK ASSEMBLY FOR 4516E |
| 40 | | 23169 | |
| 11 | 1 | 23169-2 | LOAD BLOCK ASSEMBLY FOR 4016E |
| 41 | 1 | 25810-5/16-80 | WIRE ROPE, 5/16" x 80' |
| 42 | 1 | 26720 | RECTANGULAR BOOM CABLE GUARD BRACKET |
| 43 | 2 | !LWSH-031S | LOCK WASHER; 5/16", S/S |
| 44 | 2 | !HHCS03118050S | HEX HEAD CAP SCREW - 5/16 X 1/2 LONG S/S |

REFERENCE 28895 FOR REPLACEMENT PARTS DRAWING



COMPACT A2B - 27469-* - REPLACEMENT PARTS LIST





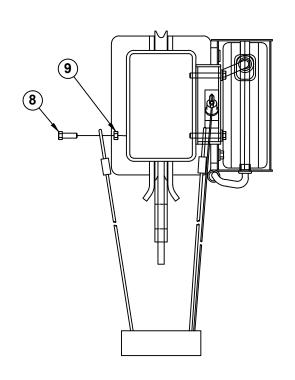
| COMPACT A2B CONFIGURATIONS - 27469-* | | | | | |
|--------------------------------------|-----------------|--|---|-------------|--|
| ITEM NO. | PART NUMBER | IUMBER -L-C-00 -L-C-11 -L-0-22 DESCRIPTION | | DESCRIPTION | |
| 1 | 27468 | 1 | 1 | 1 | WLDMNT - COMPACT A2B FRAME LH |
| 2 | 27475 | 3 | 3 | 3 | WIRE ROPE GUIDE ROLLER |
| 3 | !HHCS02520450 | 3 | 3 | 3 | HHCS 1/4-20 X 4-1/2 LG |
| 4 | !JNUT-02520N | 3 | 3 | 3 | NYLON INSERT JAM NUT - 1/4-20 |
| 5 | 27467 | 4 | 4 | 4 | SHCS NYLON BLACK 1/2-13 X 3/4 LG |
| | 27476 | 2 | - | - | SPACER/PIVOT - 0.69" |
| 6 | 27476-1 | - | 2 | - | SPACER/PIVOT - 0.57" |
| | 27476-2 | - | - | 2 | SPACER/PIVOT - 1.06" |
| 7 | 19376 | 1 | 1 | 1 | ANTI-TWO BLOCK SWITCH |
| 8 | 27473 | 1 | 1 | 1 | COVER PLATE |
| 9 | !PHCS#0632100 | 2 | 2 | 2 | PHILLIPS HEAD CAP SCREW 6-32 X 1 LONG |
| 10 | !LWSH#06 | 2 | 2 | 2 | LOCK WASHER - 6 |
| 11 | 19269 | 1 | 1 | 1 | WIRE CLAMP, 3/8 ID VIBRATION DAMPING |
| 12 | !PHCS#1032038 | 1 | 1 | 1 | PAN HEAD CAP SCREW 10-32 X 3/8 LONG |
| 13 | !FWSH-025 | 1 | 1 | 1 | FLAT WASHER - 1/4 |
| 14 | !SHCS02520200SS | 2 | 2 | 2 | SHCS, 1/4-20 X 2.00 LONG, STAINLESS STEEL |
| 15 | 23379 | 2 | 2 | 2 | WASHER, NYLON, BLACK, .375" O.D. X .25" I.D. |
| 16 | 28362 | 1 | 1 | - | COMPACT A2B CUT-OUT CAM WELDED ASSY. |
| 16 | !HHCS07510450 | - | - | 1 | HHCS, 3/4-10 X 4.50 LONG, GR.5 |
| 17 | LNUT-07510 | 1 | 1 | 1 | NYLON INSERT LOCK NUT - 3/4-10 |

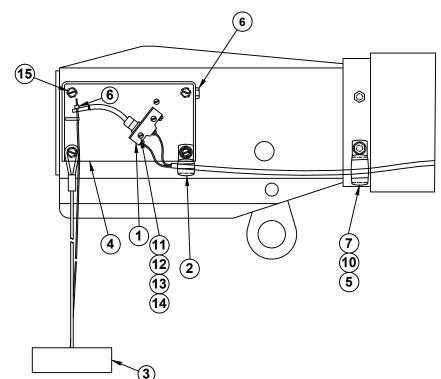


VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

| REPLACEMENT PARTS LIST | 7-10-24A | C400 |
|------------------------|---------------------|-------|
| COMPACT A2B - 27469-* | SUPERSEDES 06-11-24 | 26942 |

ANTI-TWO-BLOCK ASSY





NO DASH: 4016E & 4516E

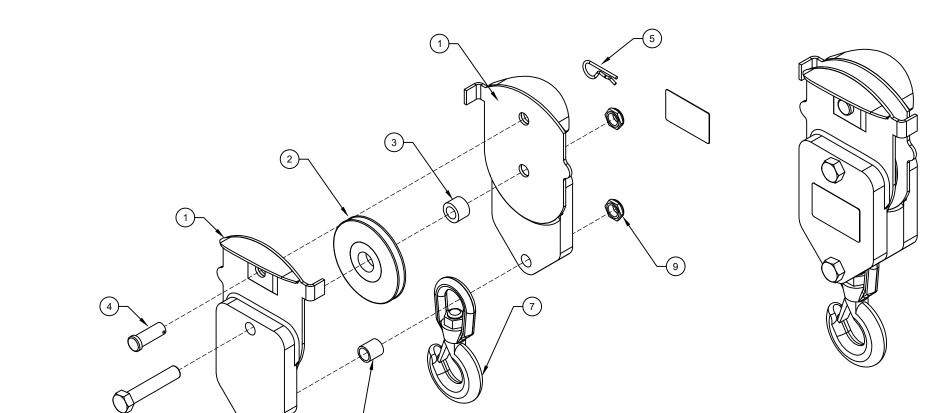
-1: 3215E & 3515E

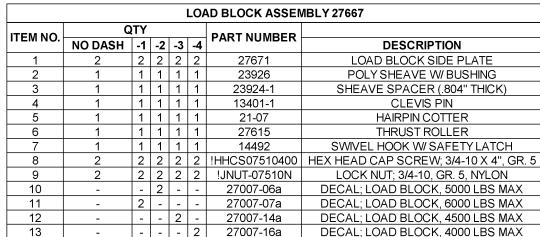
| ITEM | Qī | ΓΥ | PART NO. | DESCRIPTION | |
|--------|---------|----|-----------------|--|--|
| ITEIVI | NO DASH | -1 | PARTNO. | DESCRIPTION | |
| 1 | 1 | 1 | 19376 | LIMIT SWITCH | |
| 2 | 1 | 1 | 19269 | CABLE CLAMP - SMALL | |
| 3 | - | 1 | 19377-1 | CABLE WEIGHT ASSY | |
| 3 | 1 | - | 19377-2 | CABLE WEIGHT ASSY | |
| 4 | 1 | 1 | 21291 | ANTI TWO-BLOCK HOUSING ASSEMBLY | |
| 5 | 1 | - | !LWSH-025 | LOCK WASHER - 1/4" | |
| 6 | 1 | 1 | 19302 | SET COLLAR - 3/32" | |
| 7 | 1 | - | 19275 | CABLE CLAMP - LARGE | |
| 8 | 1 | 1 | !HHCS02520075-5 | HEX HEAD CAP SCREW - 1/4-20 x 3/4" GR. 5 | |
| 9 | 1 | 1 | !HNUT-02520 | HEX NUT - 1/4-20 | |
| 10 | 1 | - | !ANUT-02520 | ACORN NUT - 1/4-20 | |
| 11 | 2 | 2 | !PHMS#632125 | PAN HEAD MACHINE SCREW - #6-32 x 1 1/4" | |
| 12 | 2 | 2 | !HNUT-#0632 | HEX NUT - #6-32 | |
| 13 | 2 | 2 | !FWSH-#06 | FLAT WASHER - #6 | |
| 14 | 2 | 2 | !LWSH-#06 | LOCK WASHER - #6 | |
| 15 | 4 | 4 | !HHCS02520175 | HEX HEAD CAP SCREW - 1/4-20 x 1 3/4" | |



| ANTI-2-BLOCK REPL PARTS DWG & LIST | 04-16-25 | C400 |
|------------------------------------|--------------|-------|
| 3215E, 3515E, 4016E, 4516E | SUPERSEDES - | 28861 |

REPLACEMENT PARTS LIST - 27667 LOAD BLOCK







VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

 $\left(6\right)$

REPLACEMENT PARTS LIST -27667 LOAD BLOCK

09-13-24

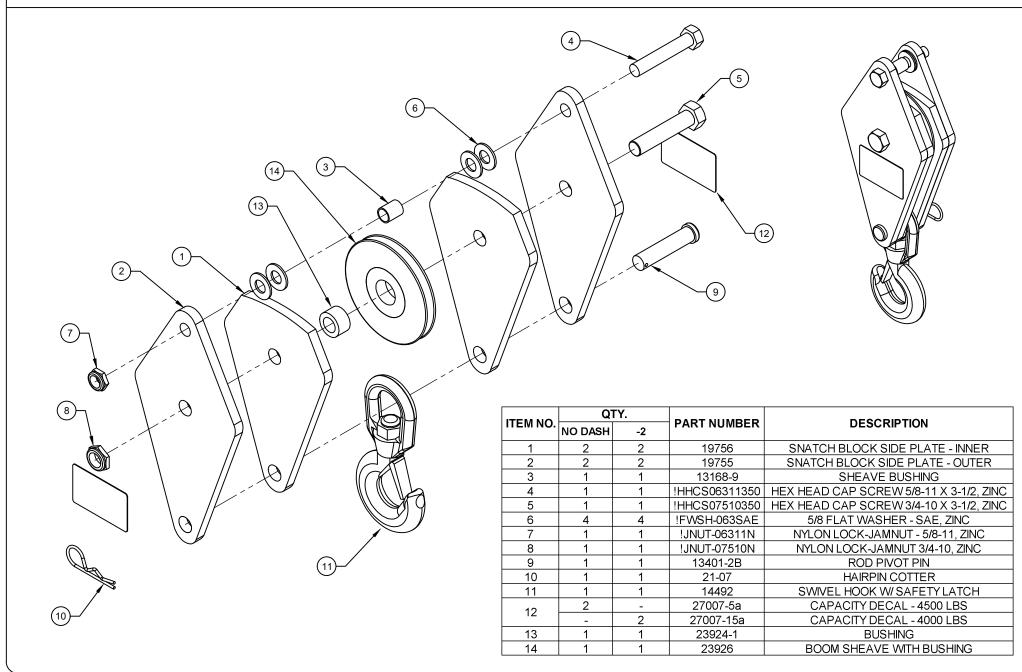
C400

SECTION

4020E/4520E/5020*/5025H/6020E

SUPERSEDES 28856

REPLACEMENT PARTS LIST - 23169 LOAD BLOCK





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

REPLACEMENT PARTS LIST -23169 LOAD BLOCK

09-16-24

C400

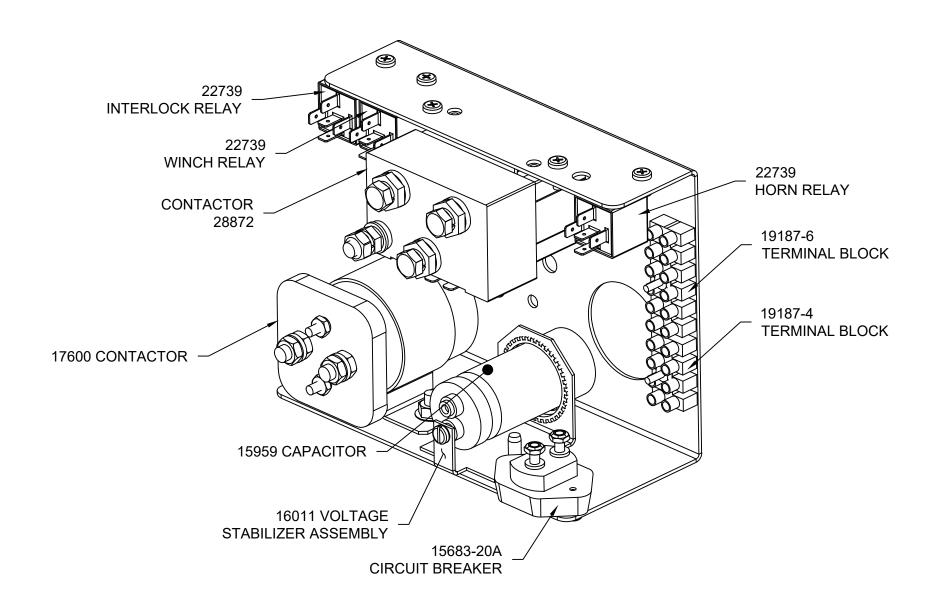
4016E/4516E

SUPERSEDES

DATE

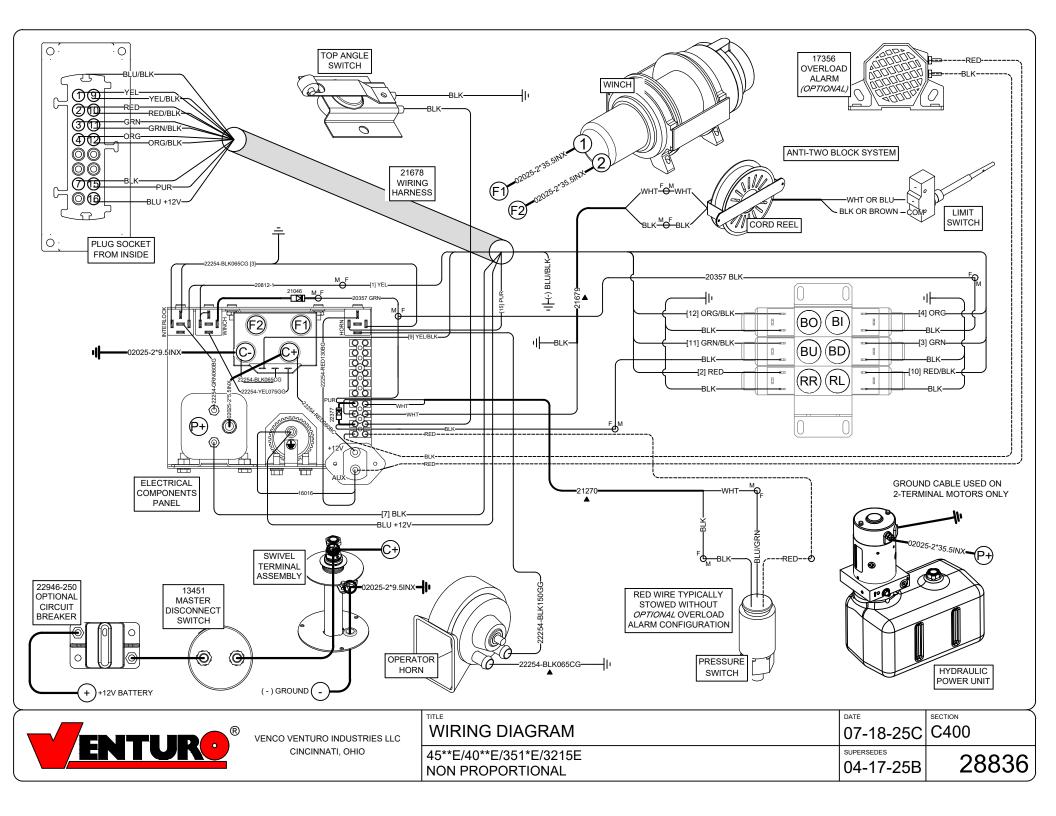
28950

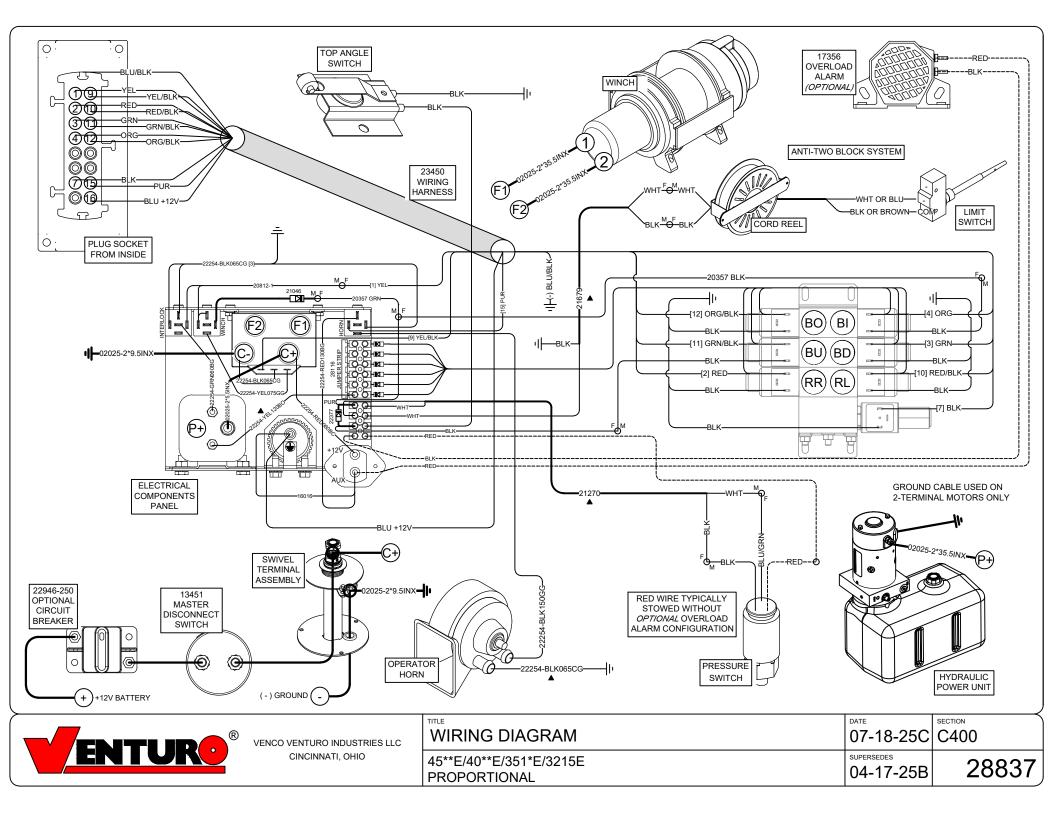
28700 ELECTRICAL COMPONENT ASSEMBLY



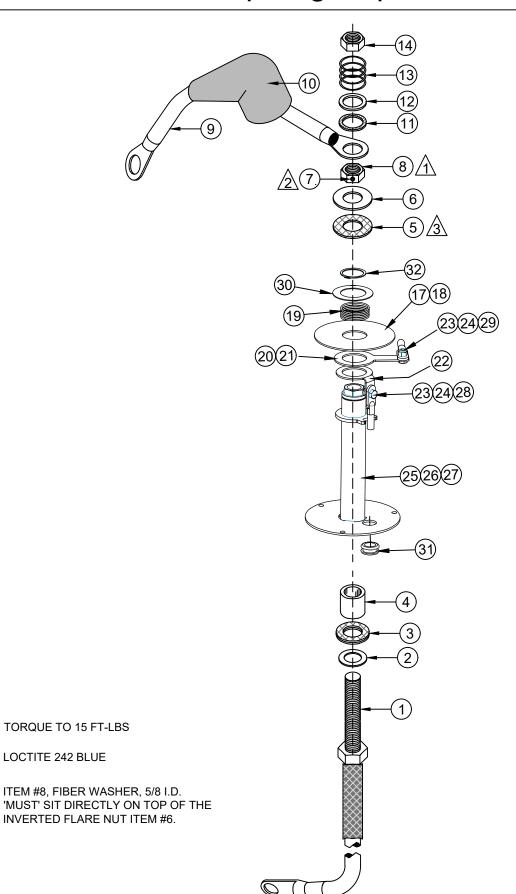


| TITLE | DATE | SECTION |
|-------------------------------|------------|---------|
| ELECTRICAL COMPONENT ASSEMBLY | 04-09-24 | C400 |
| | SUPERSEDES | 20025 |
| 3215E/351*E/40**E/45**E | - | 28835 |





2-Pole Slip-ring Replacement Parts





VENCO VENTURO INDUSTRIES LLC

CINCINNATI, OHIO

REPL. PARTS ILLUSTRATION

04-23-24

C400

ET CRANES

SUPERSEDES 28843

SECTION

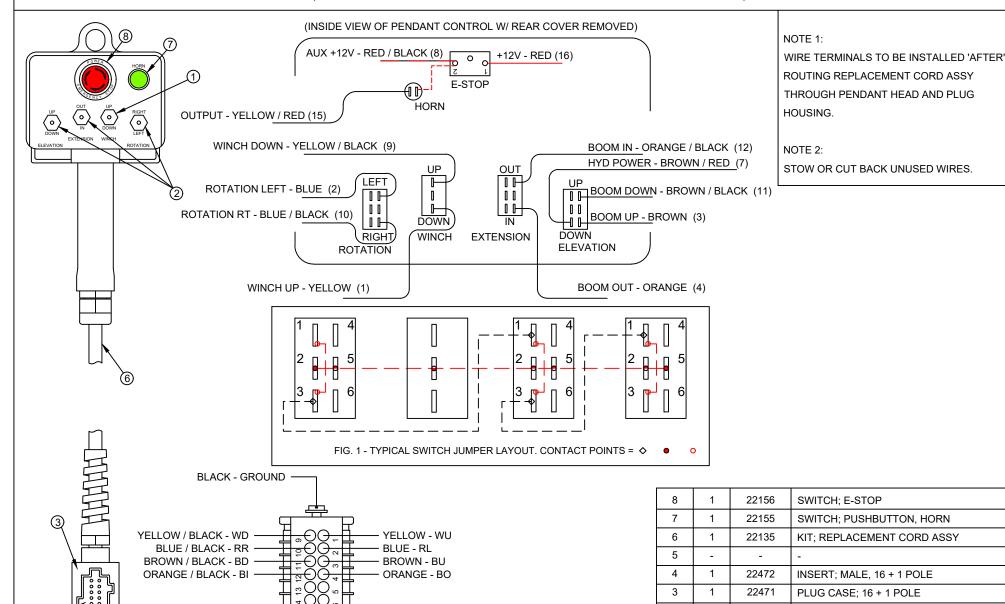
2-Pole Slip-ring Replacement Parts

| Slew Rotation 2-Pole Slip-Ring (2010E ONLY) | Slew Rotation 2-Pole Slip-Ring (3215E/351*E/40**E/45**E) | Slew Rotation 2-Pole Slip-Ring (5020E/6020E) | T ALL CRANES | 16780 BILLS OF MATERIALS | | | |
|---|--|--|--------------|--------------------------|------------------|--|--|
| 16780 - 2P6 | 16780 - 2P8 | 16780 - 2P25 | 16780 - KIT | | | | |
| | | | · | # | PART | DESCRIPTION | |
| 1 | 1 | 1 | _ | 1 | 16783 | PIGTAIL AND STUD ASSEMBLY | |
| 1 | 1 | 1 | 1 | 2 | 12534-5 | ZINC BUSHING; 5/8" I.D. X 1" O.D. X 14 GAUGE | |
| 2 | 2 | 2 | 2 | 3 | 14357-1 | FIBER WASHER; 5/8" I.D. X 1 1/16" O.D. X 1/16" | |
| | | | | | 14233 | 100100000000000000000000000000000000000 | |
| 1 | 1 | 1 | 1 | 4 | 00 85004 505 | INSULATING BUSHING; 5/8" I.D. X 7/8" O.D. X 7/8" | |
| 1 | 1 | 1 | 1 | 5 | 14357-2 | FIBER WASHER; 5/8" I.D. X 1 1/4" O.D. X 1/16" | |
| 1 | 1 | 1 | 1 | 6 | !FWSH-063SAE | FLAT WASHER; 5/8" SAE | |
| 1 | 1 | 1 | 1 | 7 | !SHCS02528025KC | SET SCREW W/ KNURLED CUP; 1/4"-28 X 1/4" | |
| 1 | 1 | 1 | 1 | 8 | 21273 | BRASS JAM NUT; 5/8"-11 | |
| - | - | - | - | 9 | 26035-2 | PIGTAIL; SWIVEL TERMINAL | |
| - | - | - | - | 10 | 17012 | RUBBER BOOT; SWIVEL TERMINAL | |
| 1 | 1 | 1 | 1 | 11 | 5612-162-62 | TEFLON WASHER | |
| 1 | 1 | 1 | 1 | 12 | 5714-113-62 | BRASS WASHER | |
| 1 | 1 | 1 | 1 | 13 | LC-098K-00 | SPRING; 0.845" O.D. X 0.098" WIRE X 1.00 F.L. | |
| 1 | 1 | 1 | 1 | 14 | !JNUT-06311N | JAM NUT; 5/8"-11, NYLON NUT | |
| 1 | 1 | 1 | 1 | 15 | LOCTITE-24205 | REMOVABLE THREAD LOCKER; 0.5ML | |
| | | | | | | | |
| 1 | 1 | 1 | 1 | 16 | 19368 | IDWG; 16780 SWIVEL TERMINAL | |
| 1 | 1 | 1 | - | 17 18 | 27456 27456-1 | UHMW WATER SHIELD, (ET6K ONLY) UHMW WATER SHIELD, (ET8 - ET36) | |
| 1 | 1 | 1 | - | 19 | 27461 | SPRING, (-) SLIP-RING ASSY. | |
| - | 1 | 1 | - | 20 | 27441-1 | COPPER SLIP-RING, (ET8 - ET36) | |
| 1 | - | - | - | 21 | 27441 | COPPER SLIP-RING, (ET6K ONLY) | |
| 1 | 1 | 1 | - | 22 | 27449-1 | BRASS SLIP-RING (ET6 - ET36) | |
| 1 | 1 | 1 | - | 23 | !HHCS03118075-B | BRASS HHCS | |
| 1 | 1 | 1 | - | 24 | !HNUT-03118-B | BRASS NYLOC NUT | |
| 1 - | 1 | - | - | 25 26 | 23255 23255-1 | SLIP-RING, WELDED ASSY, ET6K SLIP-RING, WELDED ASSY, ET8 - 18K(X) | |
| - | - | 1 | - | 27 | 23255-2 | SLIP-RING, WELDED ASSY, ET25 - 36K(X) | |
| 1 | 1 | 1 | - | 28 | 02025-2*96.5INX | (-) WELDING CABLE ASSY, BRASS SLIP-RING | |
| 1 | 1 | 1 | - | 29 | 02025-2*22.5INX | (-) WELDING CABLE ASSY, COPPER SLIP-RING | |
| 1 | 1 | 1 | - | 30 | 27463 | SHIM, WIDE RIM, 18GA, 2-1/4 O.D. X 1-1/2 I.D. | |
| 1 | 1 | 1 | E | 31 | 20889 | RUBBER GROMMET | |
| 1 | 1 | 1 | - | 32 | !SRNG-150 | SNAP-RING, EXTERNAL, 1-1/2" | |



| 16780 REPLACEMENT PARTS 04-23-24 C400 | SUPERSEDES - | 2884 |
|---------------------------------------|-----------------------|-------------------|
| | CEMENT PARTS 04-23-24 | RTS 04-23-24 C400 |
| TITLE DATE SECTION | DATE | DATE SECTION |

21990 PENDANT; 4 FUNCTION ET CRANES, E-STOP / HORN



BROWN / RED - HYD POWER UNIT CONTACTOR

| ENTURO ® |
|-----------------|
|-----------------|

16-PIN PLUG ASSY.

YELLOW / RED - HORN

RED - 12V+

16-PIN PLUG - BACKSIDE VIEW

CINCINNATI, OHIO

VENCO VENTURO INDUSTRIES LLC

RED / BLACK - AUX 12V+

SECTION REPLACEMENT PARTS DWG & LIST C400 04-22-24 21990 PNDNT; 4 FNCTN ET CRNS, ESTP/HRN

3

QTY

22152

22081

PART NO.

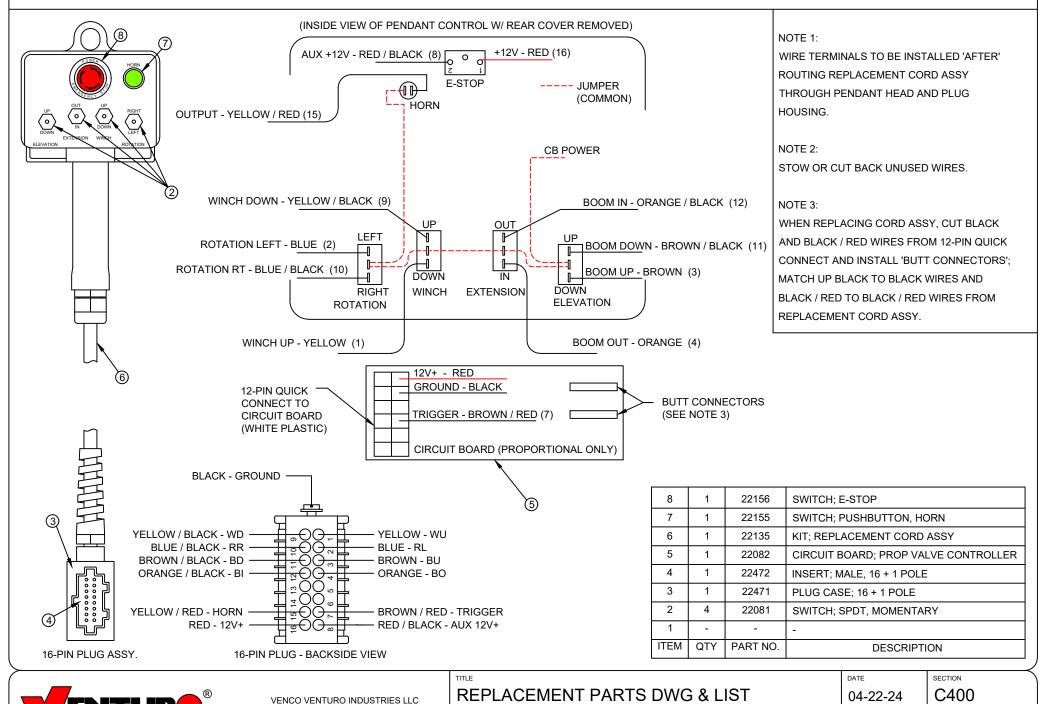
SWITCH; DPDT, MOMENTARY

SWITCH; SPDT, MOMENTARY

DESCRIPTION

2

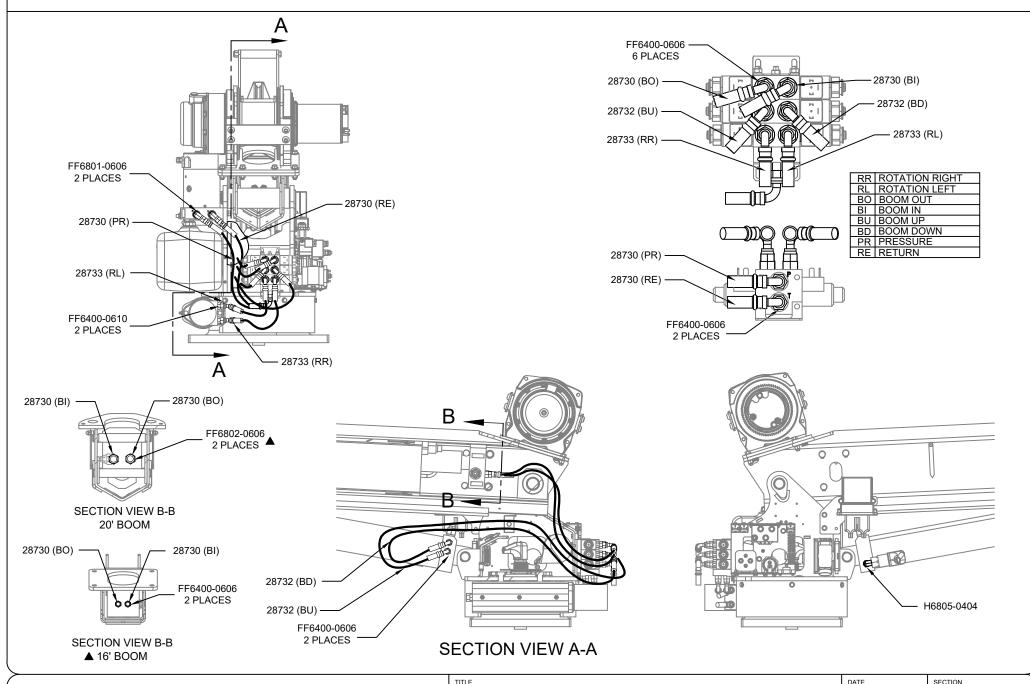
21988 PENDANT; PROP, NO ENG CNTRL, E-STOP / HORN



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

CINCINNATI, OHIO

HYDRAULIC COMPONENTS DRAWING





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

HYDRAULIC COMPONENTS DRAWING

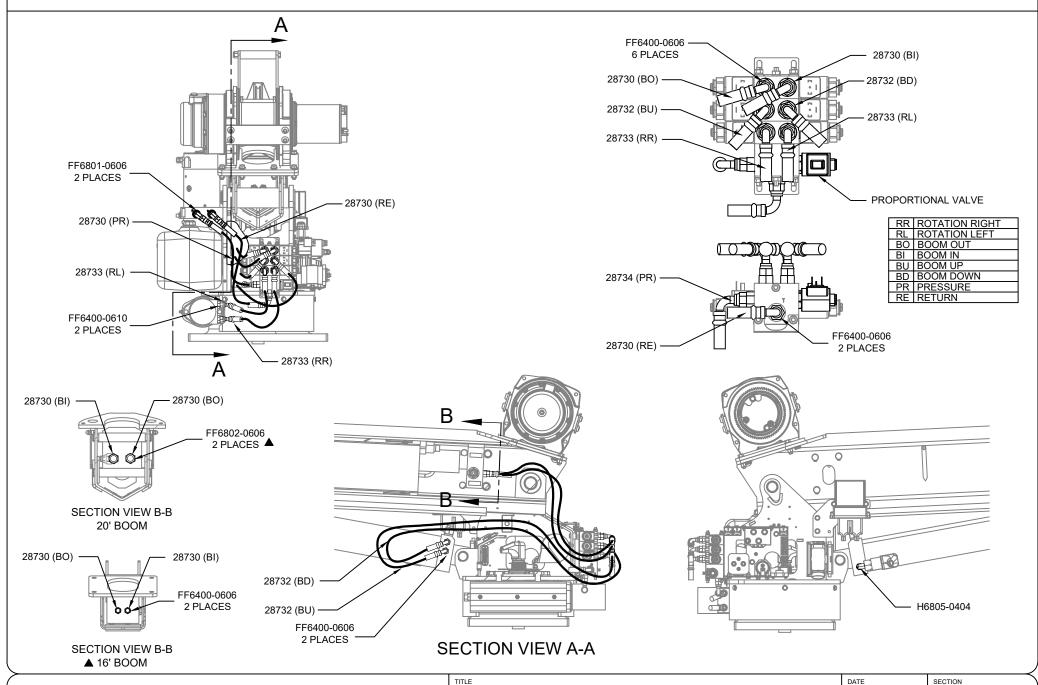
03-06-25A

C400

45**E/40**E/3516E, NON-PROPORTIONAL

04-16-24 28838

HYDRAULIC COMPONENTS DRAWING



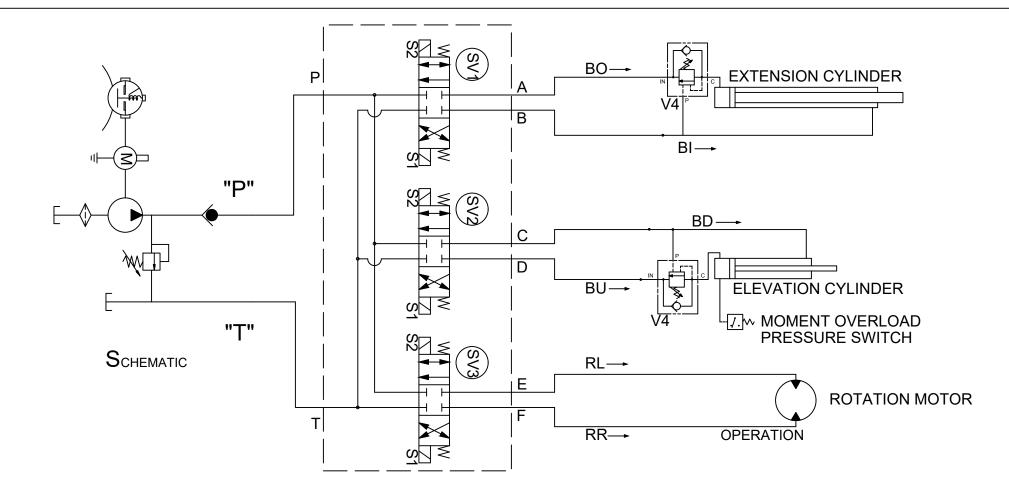


VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO HYDRAULIC COMPONENTS DRAWING
45**E/40**E/3516E, PROPORTIONAL

03-06-25A C400 SUPERSEDES

04-22-24 28839

HYDRAULIC COMPONENT DIAGRAM



(SV1)

ERNERGIZE "S2"
OPEN FLOW
'P' TO 'A'
'B' TO 'T'
ENERGIZE "S1"
OPEN FLOW
'P' TO 'B'
'A' TO 'T'

SV2

ENERGIZE "S2"
OPEN FLOW
'P' TO 'C'
'D' TO 'T'
ENERGIZE "S1"
OPEN FLOW
'P' TO 'D'
'C' TO 'T'

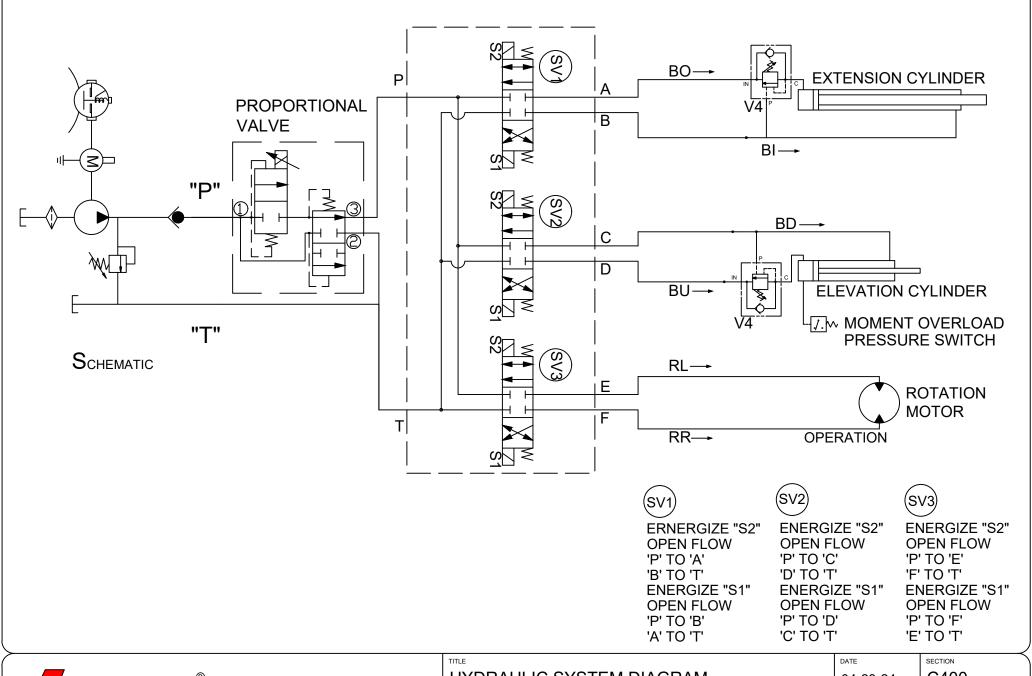
(SV3)

ENERGIZE "S2"
OPEN FLOW
'P' TO 'E'
'F' TO 'T'
ENERGIZE "S1"
OPEN FLOW
'P' TO 'F'
'E' TO 'T'



| TITLE | DATE | SECTION |
|-------------------------------|------------|---------|
| HYDRAULIC SYSTEM DIAGRAM | 04-23-24 | C400 |
| 40**E/45**E, NON PROPORTIONAL | SUPERSEDES | 28844 |

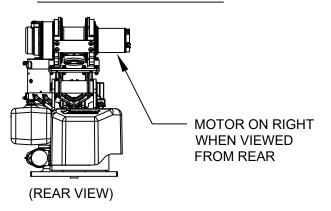
HYDRAULIC COMPONENT DIAGRAM



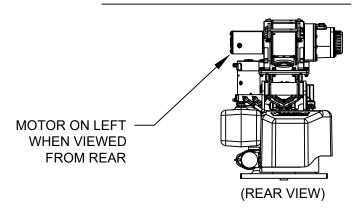


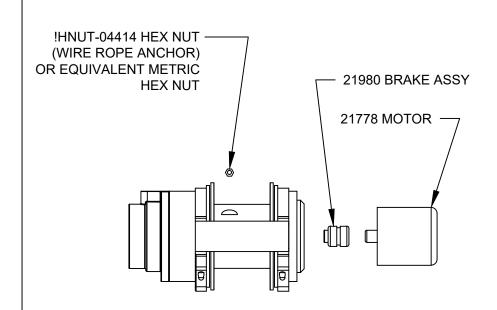
21215 WINCH REPLACEMENT PARTS

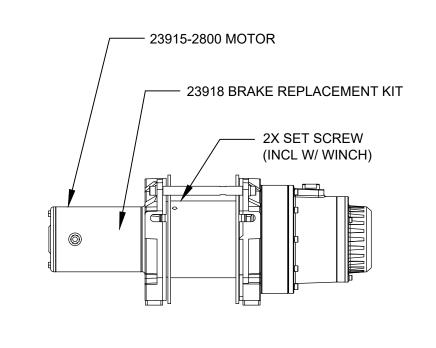
WARN DC2500



COMEUP GTD-2800





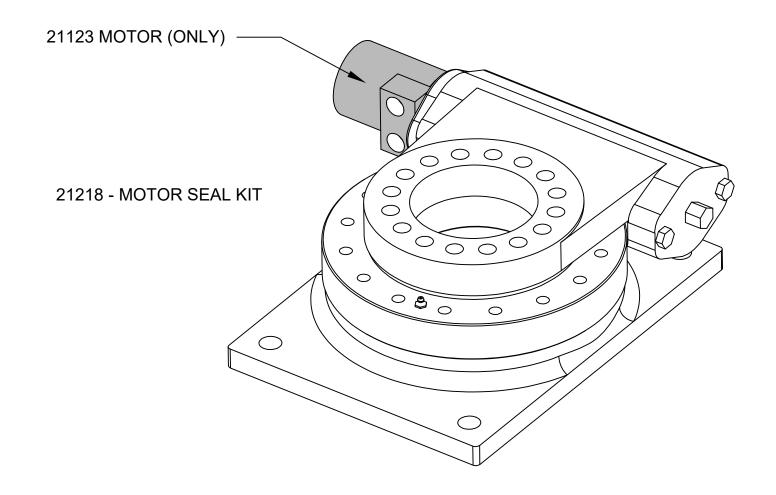




VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

| WINCH REPLACEMENT PARTS | 04-23-24 SUPERSEDES | C400 |
|-------------------------|------------------------|-------|
| 40**E/45**E | - | 28846 |

21735-1 SLEWING SYSTEM REPLACEMENT PARTS

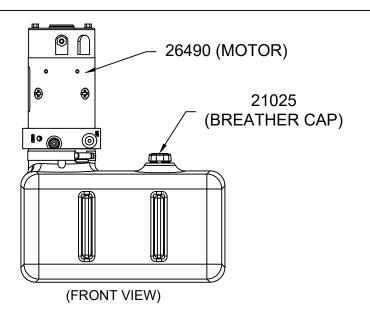




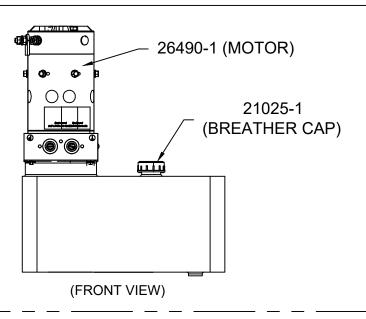
| 3215E/351*E/40**E/45**E | SUPERSEDES | 28847 | |
|----------------------------------|------------|---------|--|
| SLEWING SYSTEM REPLACEMENT PARTS | 04-24-24 | C400 | |
| TITLE | DATE | SECTION | |

28720 HYD. POWER UNIT REPLACEMENT PARTS

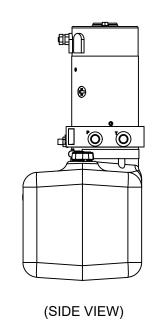
BUCHER



KTI

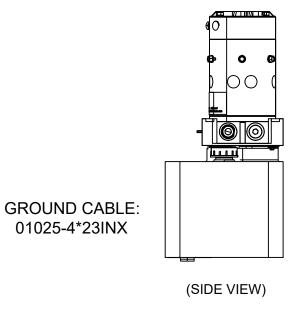


BUCHER



KTI

01025-4*23INX



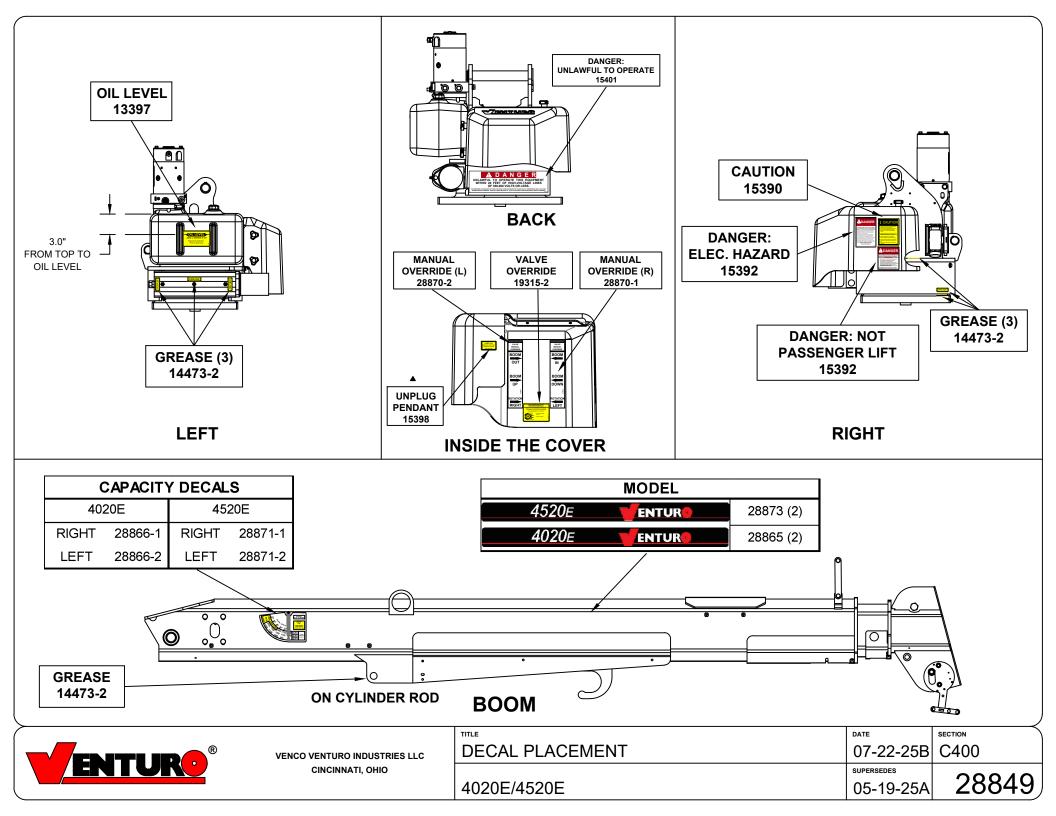


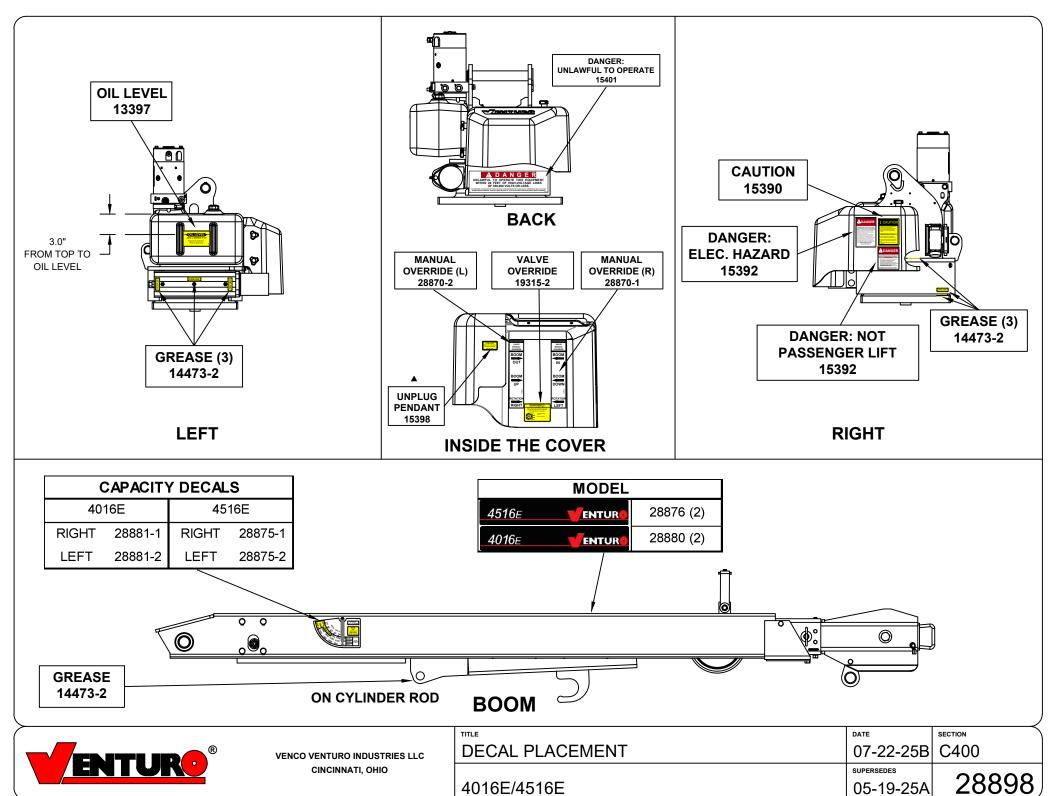
NO GROUND

CABLE NEEDED

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

| TITLE | | DATE | SECTION |
|---------|----------------------------------|------------|---------|
| HYDRAUI | LIC POWER UNIT REPLACEMENT PARTS | 04-24-24 | C400 |
| 3215E/3 | 51*E/40**E/45**E | SUPERSEDES | 28848 |





4020E FIELD SERVICE LABEL KITS

28911: FSLK 4020E NON PROP

| PART NUMBER | QTY. | DESCRIPTION |
|-----------------------------|------|-------------------------------------|
| 14473-2 | 6 | DECAL; GREASE |
| 28865 | 2 | DECAL; MODEL 4020E |
| 28866-1 | 1 | DECAL; BOOM CAPAICTY - RIGHT, 4020E |
| 28866-2 | 1 | DECAL; BOOM CAPACITY - LEFT, 4020E |
| 13397 | 1 | DECAL; OIL LEVEL |
| 28870-1 | 1 | DECAL; MANUAL OVERRIDE, RIGHT |
| 28870-2 | 1 | DECAL; MANUAL OVERRIDE, LEFT |
| 28912 | 1 | IDWG; FIELD SERVICE LABEL KIT |
| 28849 | 1 | IDWG; DECAL PLACEMENT |
| INST-23233 | 1 | SAFETY MANUAL, VENTURO CRANES |
| 16184-1 1 DECAL: HORN RELAY | | DECAL: HORN RELAY |
| 15397 | 1 | KIT; ACCIDENT PREVENTION SIGNS |
| 17813 | 1 | DECAL; OVERLOAD SENSING SYSTEM |

28911-1: FSLK 4020E PROP

| PART NUMBER | QTY. | DESCRIPTION |
|-------------|------|-------------------------------------|
| 14473-2 | 6 | DECAL; GREASE |
| 28865 | 2 | DECAL; MODEL 4020E |
| 28866-1 | 1 | DECAL; BOOM CAPAICTY - RIGHT, 4020E |
| 28866-2 | 1 | DECAL; BOOM CAPACITY - LEFT, 4020E |
| 13397 | 1 | DECAL; OIL LEVEL |
| 28870-1 | 1 | DECAL; MANUAL OVERRIDE, RIGHT |
| 28870-2 | 1 | DECAL; MANUAL OVERRIDE, LEFT |
| 28912 | 1 | IDWG; FIELD SERVICE LABEL KIT |
| 28849 | 1 | IDWG; DECAL PLACEMENT |
| INST-23233 | 1 | SAFETY MANUAL, VENTURO CRANES |
| 16184-1 | 1 | DECAL: HORN RELAY |
| 15397 | 1 | KIT; ACCIDENT PREVENTION SIGNS |
| 17813 | 1 | DECAL; OVERLOAD SENSING SYSTEM |
| 19315-2 | 1 | DECAL; PROP MANUAL OVERRIDE |



| 4020E | SUPERSEDES | 28912 |
|--------------------------|------------|-------|
| FIELD SERVICE LABEL KITS | 08-28-24 | C400 |

4016E FIELD SERVICE LABEL KITS

28921: FSLK 4016E NON PROP

| PART NUMBER | QTY. | DESCRIPTION |
|-------------|------|-------------------------------------|
| 14473-2 | 6 | DECAL; GREASE |
| 28880 | 2 | DECAL; MODEL 4016E |
| 28881-1 | 1 | DECAL; BOOM CAPAICTY - RIGHT, 4016E |
| 28881-2 | 1 | DECAL; BOOM CAPACITY - LEFT, 4016E |
| 13397 | 1 | DECAL; OIL LEVEL |
| 28870-1 | 1 | DECAL; MANUAL OVERRIDE, RIGHT |
| 28870-2 | 1 | DECAL; MANUAL OVERRIDE, LEFT |
| 28922 | 1 | IDWG; FIELD SERVICE LABEL KIT |
| 28898 | 1 | IDWG; DECAL PLACEMENT |
| INST-23233 | 1 | SAFETY MANUAL, VENTURO CRANES |
| 16184-1 | 1 | DECAL: HORN RELAY |
| 15397 | 1 | KIT; ACCIDENT PREVENTION SIGNS |
| 17813 | 1 | DECAL; OVERLOAD SENSING SYSTEM |

28921-1: FSLK 4016E PROP

| PART NUMBER | QTY. | DESCRIPTION |
|-------------|------|-------------------------------------|
| 14473-2 | 6 | DECAL; GREASE |
| 28880 | 2 | DECAL; MODEL 4016E |
| 28881-1 | 1 | DECAL; BOOM CAPAICTY - RIGHT, 4016E |
| 28881-2 | 1 | DECAL; BOOM CAPACITY - LEFT, 4016E |
| 13397 | 1 | DECAL; OIL LEVEL |
| 28870-1 | 1 | DECAL; MANUAL OVERRIDE, RIGHT |
| 28870-2 | 1 | DECAL; MANUAL OVERRIDE, LEFT |
| 28922 | 1 | IDWG; FIELD SERVICE LABEL KIT |
| 28898 | 1 | IDWG; DECAL PLACEMENT |
| INST-23233 | 1 | SAFETY MANUAL, VENTURO CRANES |
| 16184-1 | 1 | DECAL: HORN RELAY |
| 15397 | 1 | KIT; ACCIDENT PREVENTION SIGNS |
| 17813 | 1 | DECAL; OVERLOAD SENSING SYSTEM |
| 19315-2 | 1 | DECAL; PROP MANUAL OVERRIDE |



| FIELD SERVICE LABEL KITS | 08-28-24 | C400 |
|--------------------------|--------------|-------|
| 4016E | SUPERSEDES - | 28922 |

VENTURO CRANES LIMITED WARRANTY POLICY



Venturo products are built to last...we guarantee them.

As a purchaser of any new Venturo product covered by warranty, you will receive 1 year of the most complete coverage available...and, at no added cost to you.

1-Year Limited Warranty Policy

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

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

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

Warranty Claims

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

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

VENCO VENTURO INDUSTRIES LLC

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

Revised: January 2015 12-00073_VNT1-D