



**VENCO®**

**HOISTS**

**VC6628**

**INSTALLATION & OWNER'S MANUAL**

**Sold and Serviced by:**



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## VC6628 OWNER'S MANUAL

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VENCO VENTURO INDUSTRIES LLC  
 CINCINNATI, OHIO

TITLE	DATE	SECTION
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VC6628	SUPERSEDES	662874
	-	

# SECTION 200

# INSTALLATION



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

# READ THIS FIRST

## INSTALLATION WARNINGS

- ▶ Read and fully understand entire owner's manual prior to installation.
- ▶ Refer to Body Builder's Guide BEFORE welding or drilling on chassis as not to void the chassis warranty.
- ▶ When drilling the chassis make sure all brake lines, wire harnesses, and hoses are protected so as not to cause damage to these items resulting in failure. All fasteners must be installed so they do not interfere with these items as well.
- ▶ Cover all fuel related items (hoses, brake lines, wiring, etc.) so as not to cause fire or explosions that will result in serious injury or death.
- ▶ Route all wiring and hoses away from exhaust systems. Heat from exhaust systems can cause melting of wiring and hoses, resulting in fire and/or explosions that could result in serious injury or death.
- ▶ Only use body prop when vehicle is on firm level ground, and with an UNLOADED body only!
- ▶ NEVER work under a raised body without the use of the body prop. Failure to do so can cause serious injury or death.
- ▶ Hydraulic system must be designed to work within the manufacturer's specifications. Systems with more flow or PSI can cause hoist to fail during the dumping of a load; which could cause damage, serious injury or death.
- ▶ NEVER adjust factory relief valve settings without consulting with the factory.
- ▶ Fluid under pressure can pierce the skin and enter the bloodstream, causing serious injury or death. Always wear eye protection and protective clothing when working around hydraulic systems.
- ▶ NEVER operate hoist from outside the cab. Doing so can cause serious injury or death.
- ▶ NEVER perform maintenance on a Hoist without applying the following:
  - ▶▶ Chassis brake set and engine turned off
  - ▶▶ Removing battery cable, if necessary
  - ▶▶ Properly deploying the Hoist body prop
- ▲ ▶ Venco hoists are designed for and intended to be used on stationary trucks dumping on firm and level ground. Spreading applications and/or shock unloading are strictly prohibited and will void this warranty.



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CINCINNATI, OHIO

TITLE

INSTALLATION WARNING

DATE

12-02-15A

SECTION

-

HOISTS

SUPERSEDES

09-03-15

520951

# !! READ THIS FIRST !!

BE SURE TO DO THE FOLLOWING, AND YOU WILL  
AVOID THE MOST COMMON INSTALLATION MISTAKES.

▲ 1. HOIST MUST BE LEVEL

1.1. SEE APPLICABLE PAGE : 416086

2. MUST HAVE 2" SPACE

2.1. SEE APPLICABLE PAGE : 416086

▲ 3. SUFFICIENT OVERHANG

3.1. SEE APPLICABLE PAGE :

VC416 :	416266
VC516 :	516203
VC520 NON SUB-FRAME :	520601
VC520 W/ SUB-FRAME :	520602
VC620 NON SUB-FRAME :	620103
VC620 W/ SUB-FRAME :	620104
VC628 :	628020
VC6620 :	662052
VC6628 :	662851

4. USE PUMP WHICH MEETS VENCO SPECIFICATION(S)

4.1. SEE APPLICABLE PAGE : 416763



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE

CAUTIONARY NOTICE

DATE

12-07-15D

SECTION

-

HOISTS

SUPERSEDES

11-04-15C

416733

# VENCO HOIST MODEL VC6628

CAPACITIES ARE BASED ON WATER LEVELS AND NON-DIMINISHING LOADS. DUE TO THE VARIATIONS IN TRUCK EQUIPMENT AND CAB-AXLE LENGTHS (CA), *THE DATA PROVIDED ON THIS PAGE IS TO BE USED AS A GUIDELINE ONLY.*

DUMP CLASS: 90

CONVERSION CLASS: J

WEIGHT: 1200 LBS.

POWER SOURCE:

ES - ELECTRIC SINGLE CTING

ED - ELECTRIC DOUBLE ACTING

PD - POWER TAKE OFF DOUBLE ACTING

ADDITIONAL DATA:

DUAL CYLINDERS, 6" BORE x 28" STROKE

CA: 138"-252"

CT: 126"-240"

DUMP ANGLE: 40° - 50°

MOUNTING HEIGHT REQ'D: 10-1/2"

C O N V E R S I O N   A P P L I C A T I O N S   V C 6 6 2 8					
B O D Y	C A	C T	O . H .	4 5 ° ( T O N )	5 0 ° ( T O N )
18'	138"	126"	48"	35.7	32.4
18'	144"	132"	42"	32.4	29.4
18'	150"	138"	36"	29.7	27.0
18'	156"	144"	30"	27.4	24.9
18'	162"	150"	24"	25.5	23.1
18'	168"	156"	18"	23.8	21.6
18'	174"	162"	12"	22.3	20.2
18'	180"	168"	6"	21.0	19.0
20'	162"	150"	48"	29.7	27.0
20'	168"	156"	42"	27.4	24.9
20'	174"	162"	36"	25.5	23.1
20'	180"	168"	30"	23.8	21.6
20'	186"	174"	24"	22.3	20.2
20'	192"	180"	18"	21.0	19.0
20'	198"	186"	12"	19.8	18.0
20'	204"	192"	6"	18.8	17.0
22'	186"	174"	48"	25.5	23.1
22'	192"	180"	42"	23.8	21.6
22'	198"	186"	36"	22.3	20.2
22'	204"	192"	30"	21.0	19.0
22'	210"	198"	24"	19.8	18.0
22'	216"	204"	18"	18.8	17.0
22'	222"	210"	12"	17.8	16.2
22'	228"	216"	6"	17.0	15.4
24'	210"	198"	48"	22.3	20.2
24'	216"	204"	42"	21.0	19.0
24'	222"	210"	36"	19.8	18.0
24'	228"	216"	30"	18.8	17.0
24'	234"	222"	24"	17.8	16.2
24'	240"	228"	18"	17.0	15.4
24'	246"	234"	12"	16.2	14.7
24'	252"	240"	6"	15.5	14.1

D U M P   B O D Y   A P P L I C A T I O N S   V C 6 6 2 8   *					
B O D Y	C A	C T	O . H .	4 5 ° ( T O N )	5 0 ° ( T O N )
12'	102"	90"	12"	35.7	32.4
13'	114"	102"	12"	32.4	29.4
14'	126"	114"	12"	29.7	27.0
15'	138"	126"	12"	27.4	24.9
16'	150"	138"	12"	25.5	23.1
18'	174"	162"	12"	22.3	20.2

\* VENCO hoists are designed for and intended to be used on stationary trucks dumping on firm and level ground. Spreading applications and/or shock unloading are strictly prohibited and will void this warranty.



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TITLE

CAPACITY CHART

VC 6628 HOIST

DATE

01-23-15D

SUPERSEDES

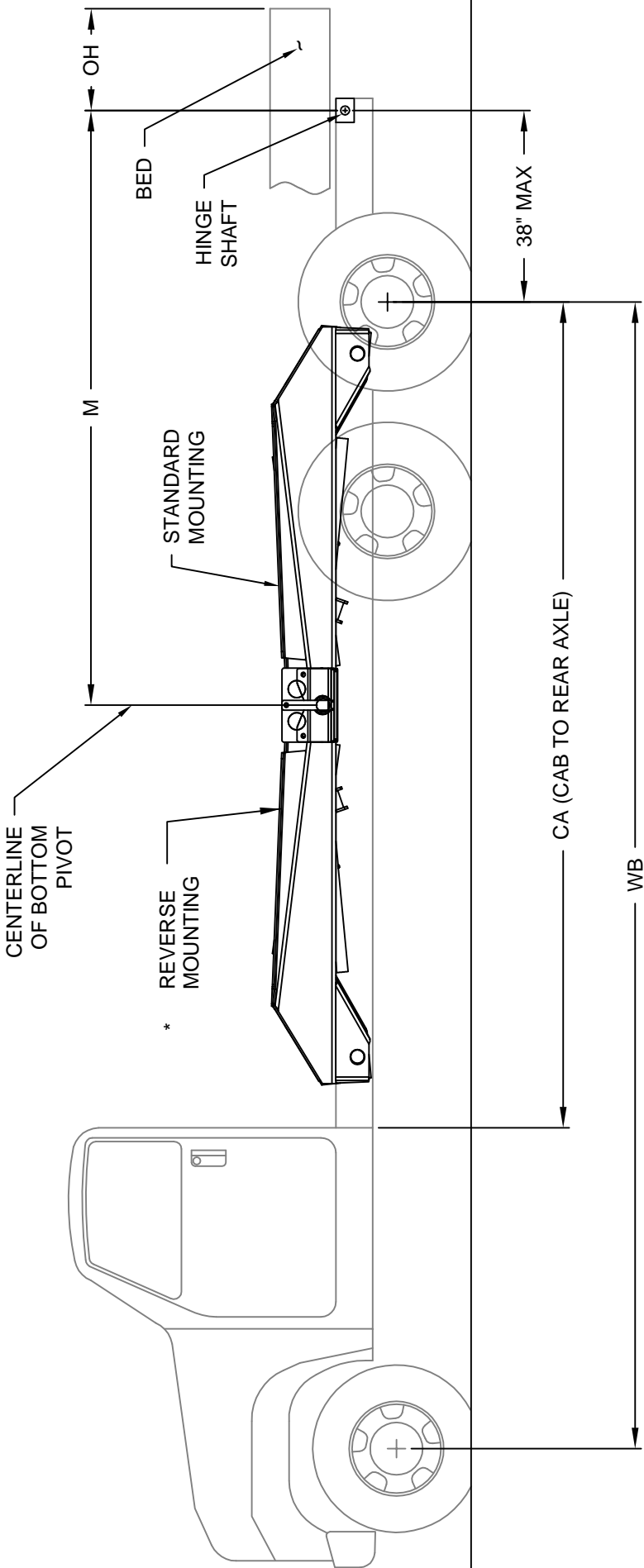
03-10-05C

SECTION

H100

662851

VC6628 HOIST MOUNTING DIMENSIONS



STANDARD MOUNTING

DUMP ANGLE	M
40°	146"
45°	130-1/2"
50°	118-1/4"

\*REVERSE MOUNTING

DUMP ANGLE	M
40°	140"
45°	129"
50°	115"

FIGURE 1.C



VENCO VENTURO INDUSTRIES LLC  
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TITLE  
MOUNTING DIMENSIONS

VC6628

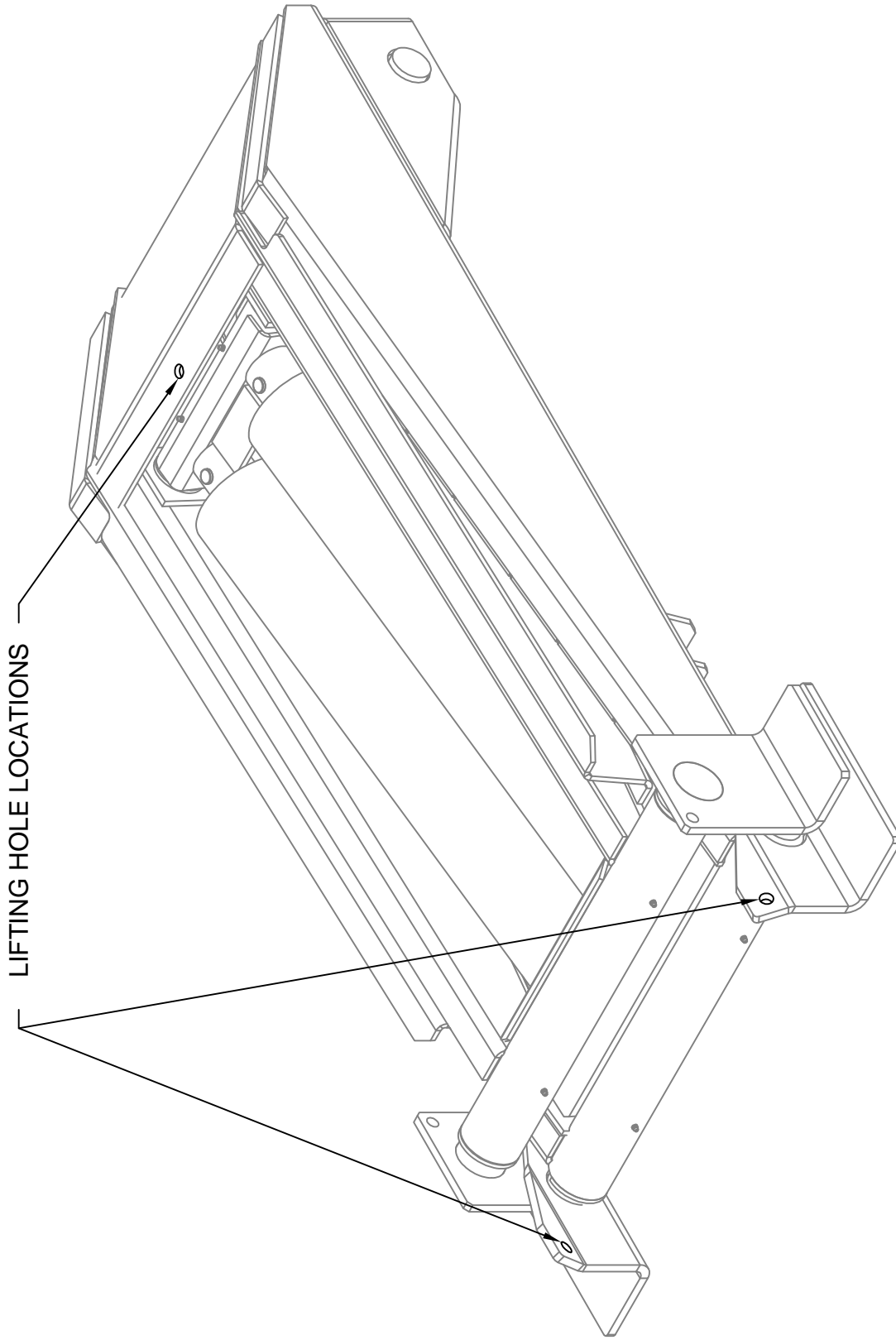
DATE  
10-05-16A


SUPERSEDES  
12-16-15

SECTION  
H200

662867





 VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE	DATE	SECTION
	HOIST LIFTING HOLE LOCATIONS	12-17-15B	-
	VC6628	SUPERSEDES	03-11-05A

662864

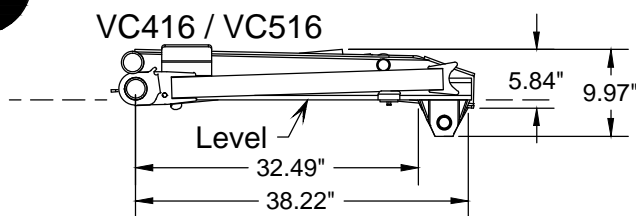
# !! IMPORTANT WARNING !!

\* ALL VENCO CONVERSION HOISTS → VC416 THRU VC6628 \*

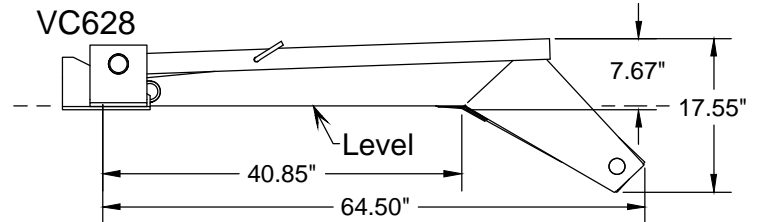
1

When installing the hoist, be sure to keep the hoist on a horizontal plane - **LEVEL** - with the truck frame.

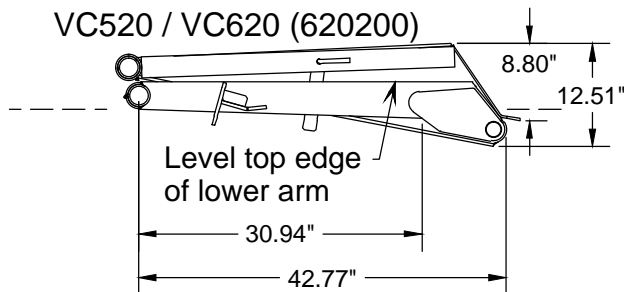
VC416 / VC516



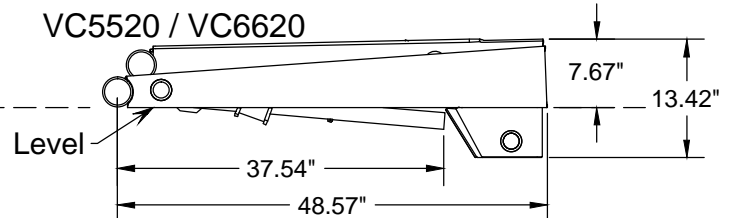
VC628



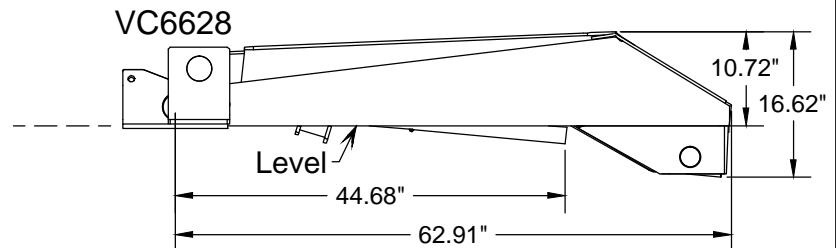
VC520 / VC620 (620200)



VC5520 / VC6620



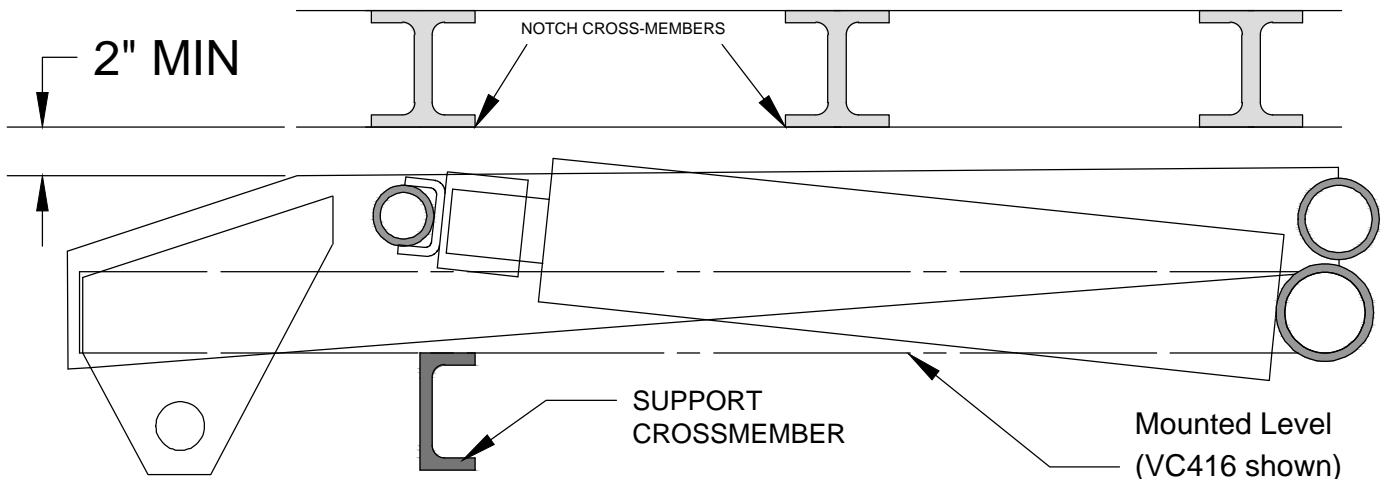
VC6628



2

!! IMPORTANT !!

A minimum clearance of 2" is required between the hoist (upper arm) and the body cross-members in order to prevent a mechanical lockout. If clearance is less than 2", then cross-members must be notched above arms.



!! IMPORTANT !!

THE HOIST SCISSOR MUST BE SUPPORTED WITH A CHASSIS-MOUNTED SUPPORT CROSSMEMBER. IF THE TRUCK CHASSIS DOES NOT HAVE A CROSSMEMBER TO SUPPORT THE HOIST IN A 'LEVEL' POSITION, THE INSTALLER 'MUST' INSTALL A SUPPORT CROSSMEMBER AS SHOWN ABOVE.



VENCO VENTURO INDUSTRIES LLC  
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TITLE  
IMPORTANT WARNING

VENCO HOISTS

DATE  
12-08-20P

SUPERSEDES  
11-05-15N

SECTION  
H200

416086

# HOIST MOUNTING INST. - VC6628

Refer to Capacity Chart drawing 662851.



## CAUTION



- If the distance between the center of the rear axle and the rear hinge assembly exceeds 38", additional reinforcement of the truck frame is necessary

- Mark the location for the rear hinge. Ideally, this location will be immediately behind a truck cross member, approximately 38" behind the center of the rear axle on a single axle truck (see drawing 662867).
- Cut a 90° slot in each side of the frame as shown in Figure 2 below.
- Position the angle iron frame of the rear hinge assembly in the truck frame cut-outs. Make sure the rear hinge assembly is properly positioned on the truck frame. Weld all around truck frame rear hinge assembly joint (both sides). See DWG 628861 for information regarding the mounting of the Rear Hinge Brackets to the body.

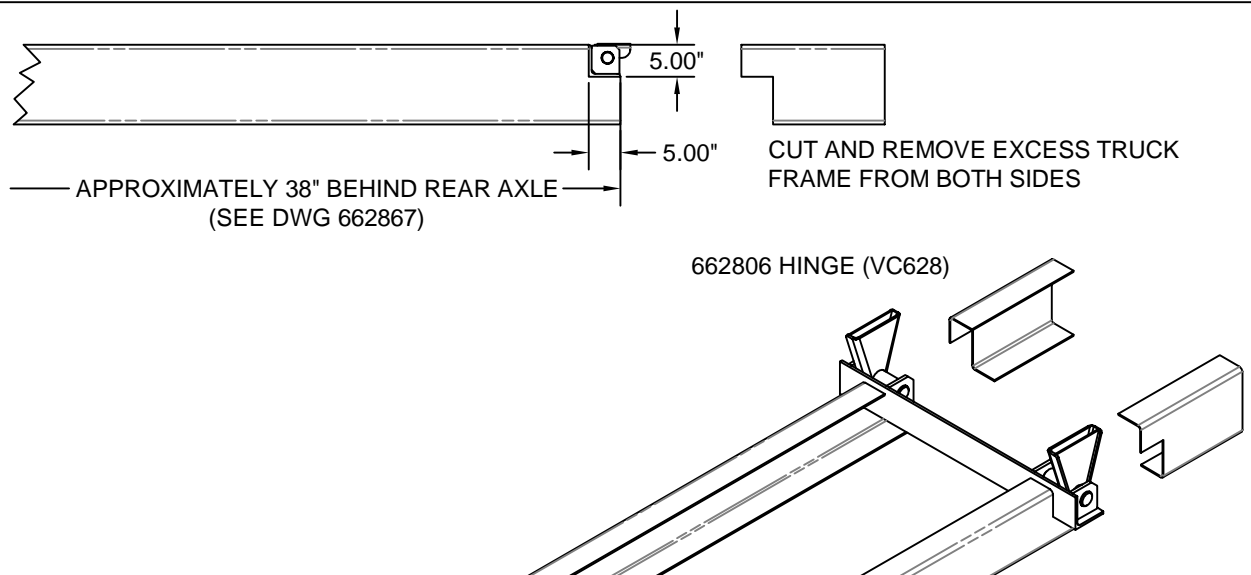


Figure 2 - Frame Modification and Rear Hinge Attachment

- Locate the hoist on the truck frame, making sure to center and square the hoist to the truck frame. The VC hoist is designed to rest on the truck frame. A section of the hoist extends below the truck frame level. Therefore, the hoist may have to be moved slightly forward or backwards to avoid frame crossmembers. The distance between the rear hinge assembly center and the center of the lower pivot is referred to as the "M Dimension". The table on Mounting Dimensions drawing 662867 provide the dump angles associated with the "M Dimensions".

Note: Moving the hoist along the truck frame will affect the hoist's performance. A forward movement (towards the cab) decreases dump angle and increases capacity. A backwards movement increases dump angle and decreases capacity. Reference Capacity Chart drawings 662851.



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TITLE

MOUNTING INSTRUCTNS

VC6628

DATE

07-12-22A

SUPERSEDES

12-17-15

SECTION

H200

662871

# HOIST MOUNTING INST. - VC6628

- E. After the hoist is positioned, place the mounting angles (Figure 3) under the lower pivot angles and against the truck frame. Clamp securely in place. Drill through the frame and install the mounting angle with two [2] 1/2-13 x 1-1/2" Grade 8 hex head cap screws, lock washers, hex nuts, and four [4] flat washers (both sides).



## C A U T I O N

- The hoist lower pivot assembly must sit flush on the truck frame. If rivet head interference is encountered, use a filler block or countersink clearance holes in the bottom of the pivot assembly. DO NOT weld hoist mounting angle to truck frames - this may void the truck warranty.

- F. Weld each end of the lower pivot angle to its mounting angle as shown in Figure 3. Note the welding symbols. Do not weld to the truck frame.

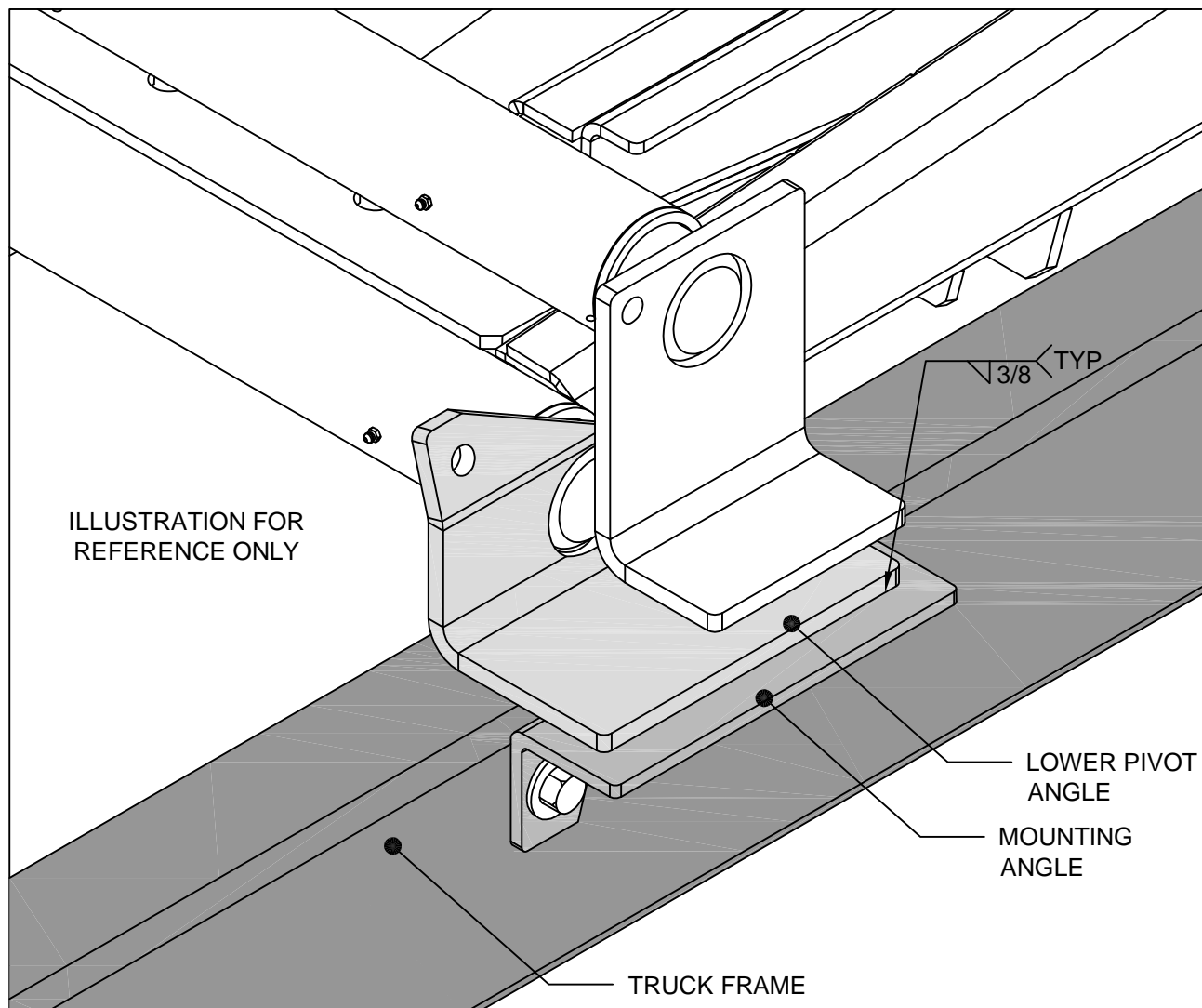


Figure 3. Mounting angle assembly.



VENCO VENTURO INDUSTRIES LLC  
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TITLE  
**MOUNTING INSTRCTNS**  
VC6628

DATE  
12-17-15  
SUPERSEDES  
-

SECTION  
H200  
**662872**

# HOIST MOUNTING INSTRUCTIONS (CONT.)

G. Install hydraulic hoses per the following instructions:

- ▲ 1. 7' (or 7'-10") hose(s) installation - Connect one end of the hose to the front pump port (low pressure). Connect the other end of the hose to the rod end of the hoist cylinder (Reference DWGs 416763 and 552004).
- ▲ 2. 5' hose(s) installation - Connect one end of the hose to the rear pump port (high pressure). Connect the other end of the hose to the base end of the hoist cylinder (Reference DWGs 416763 and 552004).

H. Position and secure the filler strips (liner or sleeper) to the truck frame.

The VC6628 requires a minimum of 10-1/2" clearance above the truck frame.

NOTE: If the hoist needs to be mounted higher due to interference between the hoist knuckle and the truck frame, additional clearance above the truck frame will be required.

## EXAMPLE:

Assuming that an 10-1/2" clearance is required and 6" long beams are on the truck body, a liner of at least 4 1/2" net will be required to obtain the minimum clearance required to mount the hoist.

$$6" + 4 \frac{1}{2}" = 10\text{-}1\frac{1}{2}" \text{ minimum}$$



I. Position the body longitudinals (long beams) onto the truck frame / sub-frame.

NOTE: At least 2" clearance between the cab and closest point on the truck body is required.

J.

a. STANDARD HINGE (662806)

With the body aligned with the truck frame, push the hinge rockers outward as far as possible. Ensure that the longitudinal rails are sitting flat on the rockers, weld the body longitudinals to rockers (DWG 662871 Figure 2). See installation DWG 628861 for more information regarding the mounting of the rear hinge rockers to the body.

K. **Refer to DWG 520093 on the following page.** Make sure that the dump body longitudinals are resting flush on the top of the lifting angles. Weld the top of both lifting angles (the vertical 'leg') to the top flanges of the body longitudinals - a reinforcement plate may be required to fill the space between the lifting angles and body longitudinals. Weld all around the lifting angles, body longitudinals, and reinforcement plates (if applicable). **Be sure that your installation follows the method shown on the following page (DWG 520093).**



## CAUTION



- Step "K" (above) is a critical installation procedure that must be carefully followed to ensure a successful hoist installation. Deviation from the suggested installation method may result in damage to the hoist.



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TITLE

MOUNTING INSTRCTNS

VC6628

DATE

08-01-17A

SUPERSEDES

12-17-15

SECTION

H200

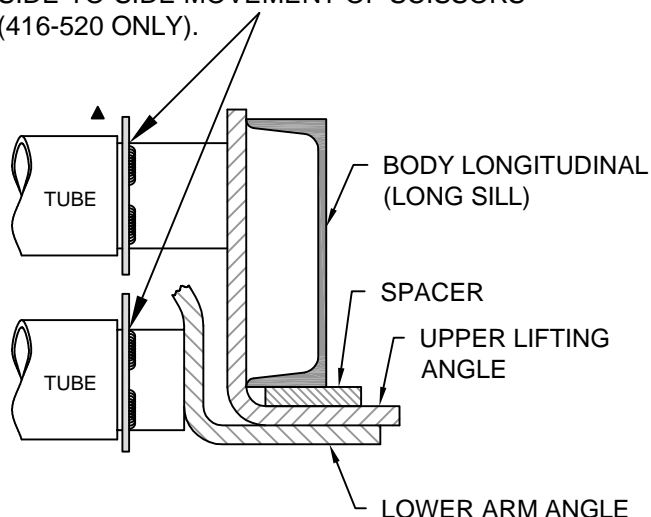
662873

## IMPORTANT!

WHEN INSTALLING THE UPPER LIFTING ANGLES, THE GOAL IS TO COMPLETELY "BOX IN" THE LIFTING ANGLE, BODY LONG SILL SPACER, AND REINFORCEMENT PLATE - 100% WELD.

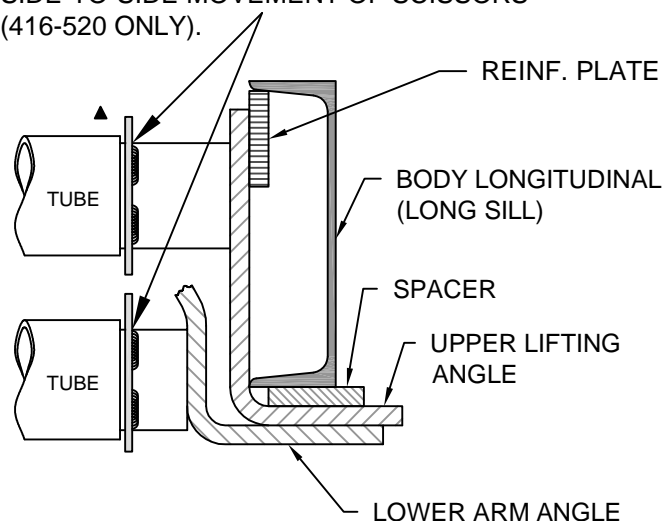
### SITUATION A: LIFTING ANGLE FULLY ENVELOPS BODY LONG SILL.

- ▲ COLLAR SHOULD BE PROPERLY LOCATED AND STITCH WELDED TO PIVOT ROD TO LIMIT SIDE-TO-SIDE MOVEMENT OF SCISSORS (416-520 ONLY).

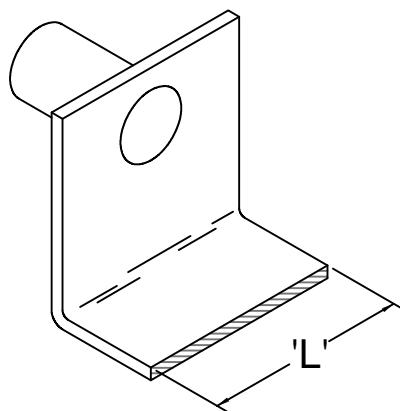


### SITUATION B: LIFTING ANGLE DOES NOT ENVELOP BODY LONG SILL AND A REINFORCEMENT PLATE IS REQUIRED.

- ▲ COLLAR SHOULD BE PROPERLY LOCATED AND STITCH WELDED TO PIVOT ROD TO LIMIT SIDE-TO-SIDE MOVEMENT OF SCISSORS (416-520 ONLY).



NOTE: THE SPACER AND REINFORCEMENT PLATE SHOULD BE THE SAME LENGTH AS THE LIFTING ARM. SEE 'L' DIMENSION BELOW.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
**INSTLL. INSTRUCTIONS**

VC416-6628, TRLR313-6628

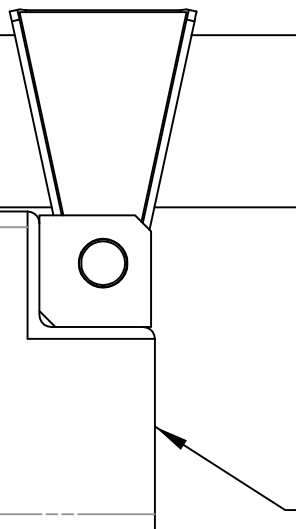
DATE  
08-20-14E

SUPERSEDES  
01-14-13D

SECTION  
H200

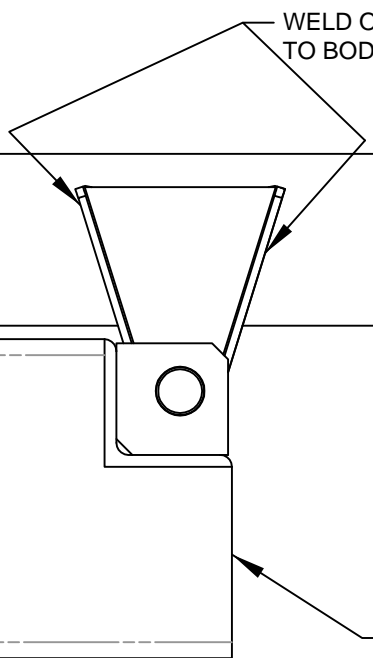
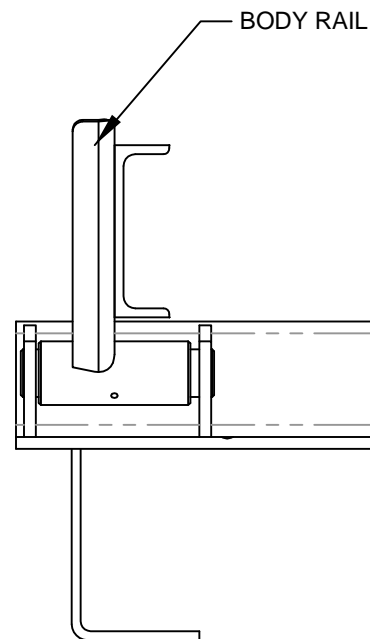
**520093**

# HINGE MOUNTING INST. VC628 - 6628



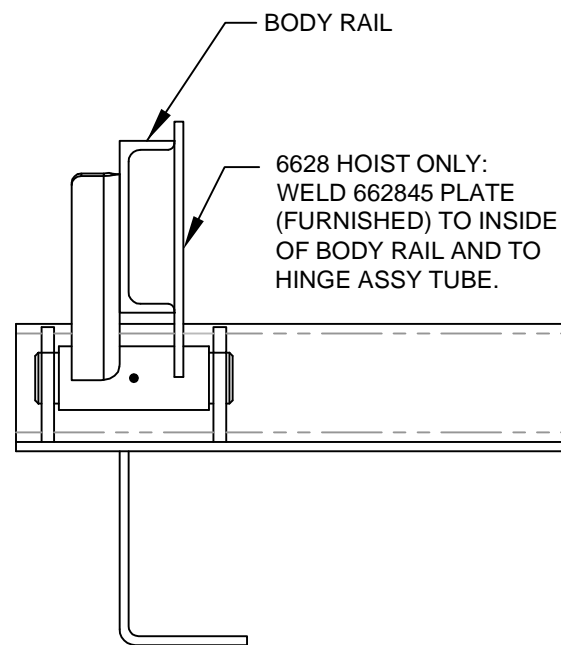
TRUCK FRAME  
(CHASSIS)

662057-1 HINGE  
VC628-6620



TRUCK FRAME  
(CHASSIS)

662806 HINGE  
VC6628 ONLY



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CINCINNATI, OHIO

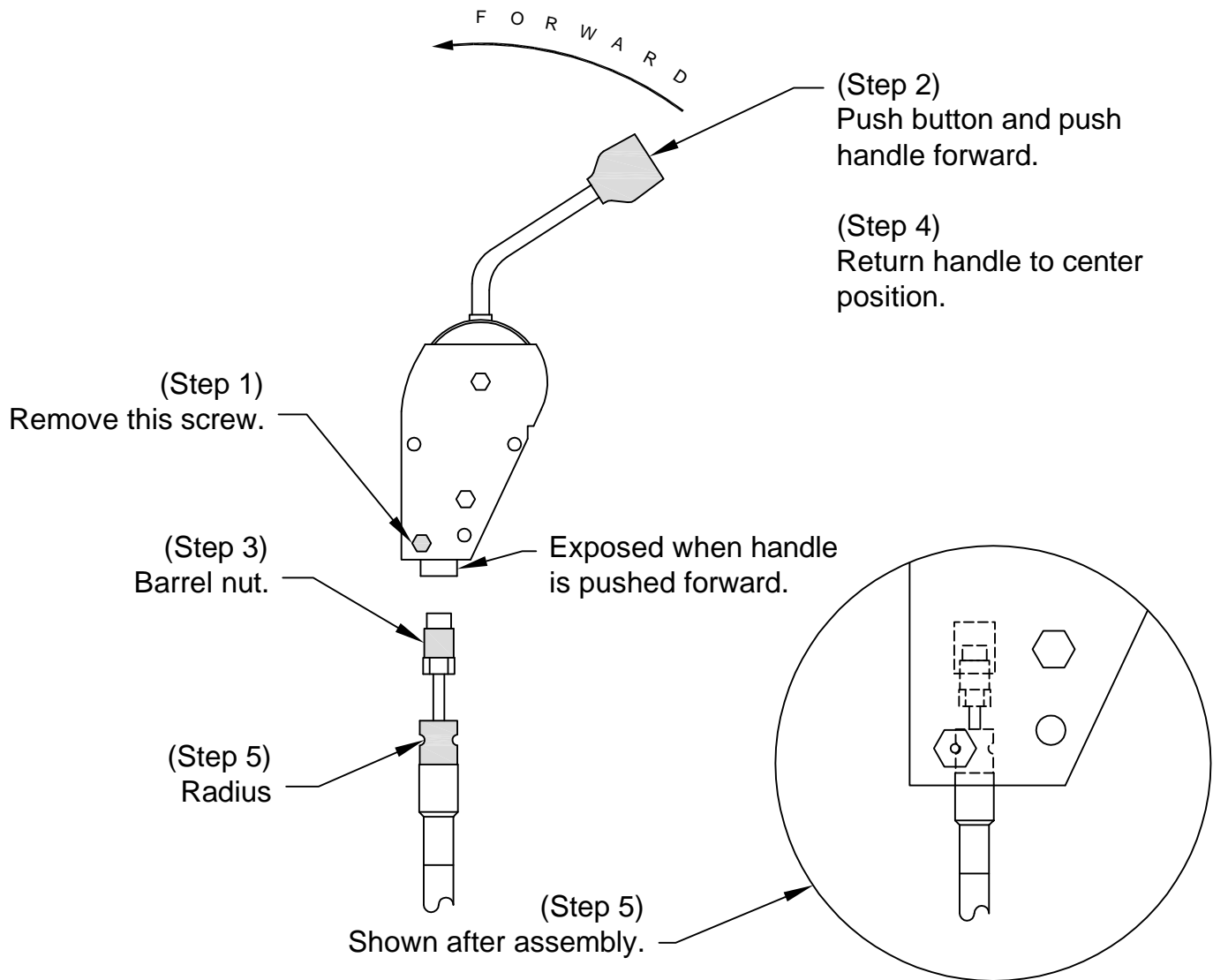
TITLE  
**HINGE TO BED MNTG**  
VC628-6628

DATE  
12-08-15  
SUPERSEDES  
-

SECTION  
H200  
**628861**

# ATTACHING 620129 CABLE TO 620131 / 132 HANDLE

- Step 1. Remove lowest screw & nut.  
Step 2. Depress red button on top of handle. Push handle forward and hold.  
Step 3. While holding handle, thread "barrel nut" into threaded hole in bottom and tighten.  
Step 4. Release handle. Handle should return to center position.  
Step 5. Replace screw & nut, making sure that radius on cable end is aligned with screw hole. After tightening screw, move handle forward and backward to make sure cable end is secure in console.



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TITLE  
**CABLE / HANDLE ASSY**  
**PTO PUMP CABLE**

DATE  
**11-05-15B**  
SUPERSEDES  
**03-17-14A**

SECTION  
**-**  
**620246**



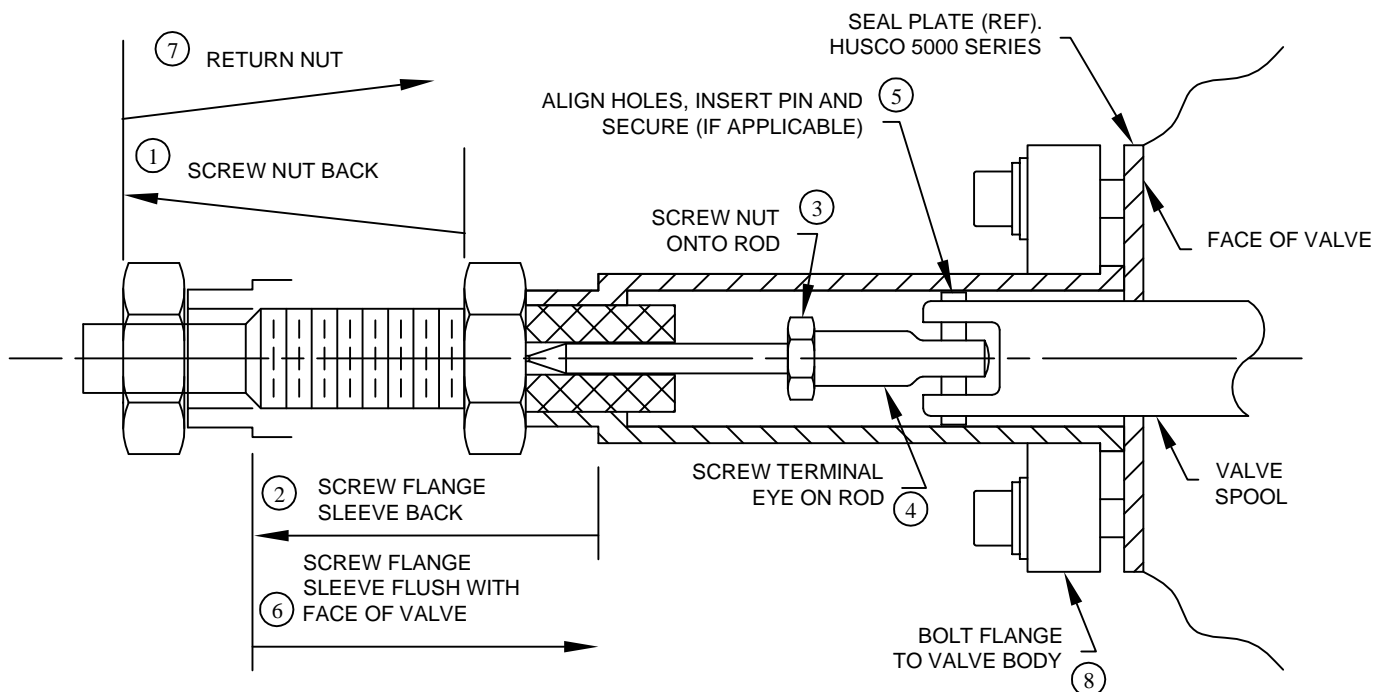
# PTO PUMP CABLE INSTALLATION

1. Thread 0.750-16 UNF jam nut entire length of threaded hub and onto cable.
2. Place flange on sleeve and turn flange / sleeve assembly entire length of threaded hub and onto cable.
3. Threade 0.250-28 UNF jam nut onto threaded rod until it bottoms.
4. Thread terminal eye onto threaded rod and bottom against jam nut, turn to align with spool slot and secure jam nut against terminal eye.
5. Slide terminal eye into slot in spool and align holes. Insert connecting pin and secure with cotter pin (if applicable).
6. With cable attached to valve and input device, thread the flange / sleeve assembly onto the threaded hub until it is flush with the valve face. When turning the flange / sleeve assembly, make sure the input device remains in the neutral position.
7. Tighten the 0.750-16 UNF jam nut against the sleeve to lock in position.
8. Bring flange into position and bolt assembly to valve housing using two [2] socket head cap screws and two [2] split lock washers under head and two [2] flat washers under lockwashers. Tighten screws sufficiently to flatten lock washers or secure flange (see CAUTION).



## CAUTION

- Excessive torque or over-tightening will distort flange.



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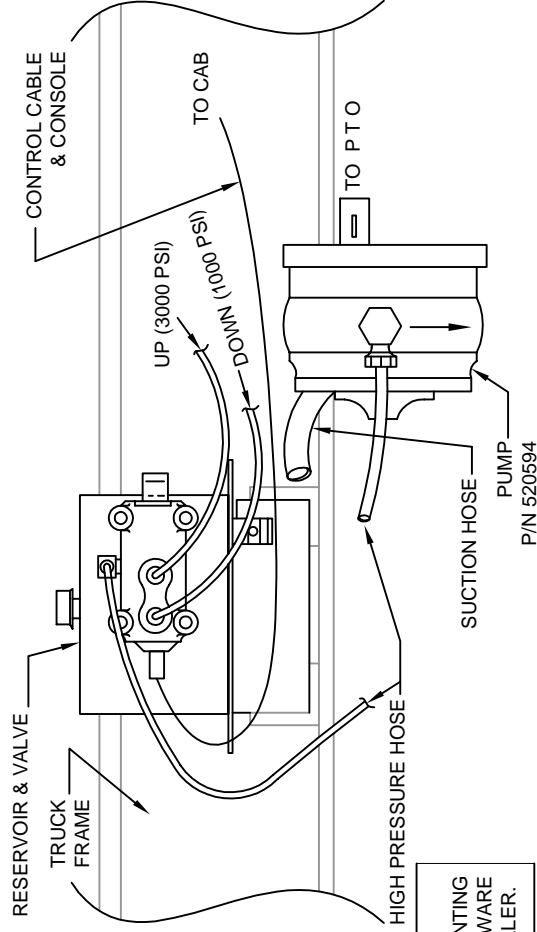
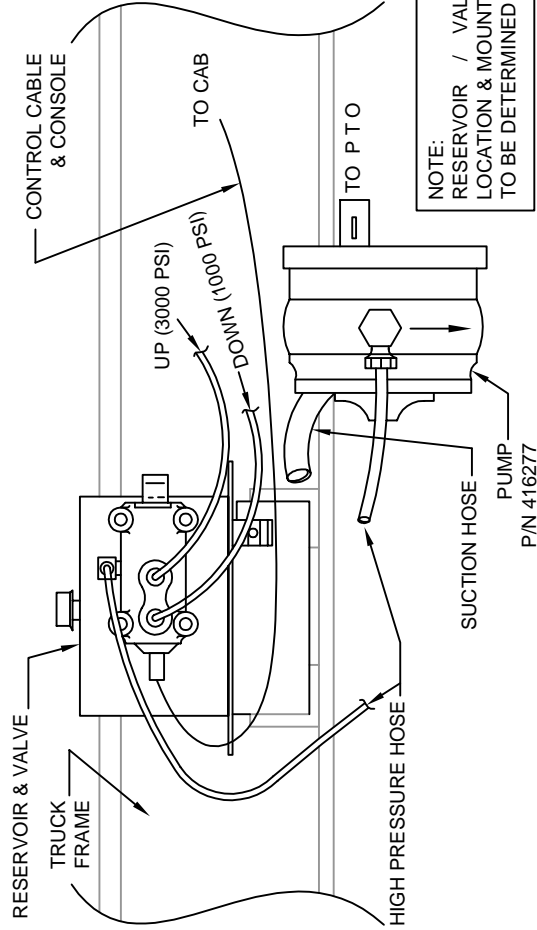
TITLE  
**PTO PUMP CABLE INSTL**  
VC416-6628

DATE  
11-05-15B  
SUPERSEDES  
03-17-14A

SECTION  
-  
**416755**

# DIRECTIONAL PUMP CONFIGURATION FOR VC416-620

# BI-DIRECTIONAL PUMP CONFIGURATION FOR VC628 & UP



NOTE: ARROW ON PUMP HOUSING INDICATED ROTATION DIRECTION. FAILURE TO MATCH PTO ROTATION WITH PUMP ROTATION **WILL RESULT IN PUMP FAILURE.**

NOTE: FOR BI-ROTATIONAL PUMP MOUNTING AND HOSE CONNECTION INFORMATION, SEE DWG 416812 (IF APPLICABLE).

Model	VC416	VC516	VC520	VC620	VC628	VC5520	VC6620	VC6628
Control Cable & Console	620125 - Curved 620124 - Straight							
Cylinder Up Hose	416044	520574		(2) 520574		(2) 520574		
Cylinder Down Hose	416045		628041		(2) 416045		(2) 628041	
High Pressure Hose (pump to valve)	416045 (7' LG, 3/8 HOSE)		620909 (10' LG, 3/8 HOSE) FOR VC620 NON-SF		620909 (10' LG, 3/8 HOSE)			
Suction Hose (reservoir to pump)	416079 (7' LG, 1.00" I.D.)		620910 (10' LG, 1.00" I.D.) FOR VC620 NON-SF		520088F (10' LG, 1-1/4" I.D.)			
			416079 (7' LG, 1.00" I.D.) FOR VC620 SF					
Pump/Valve/Tank	620011 (9 QUART)				662077 (21 QUART)			
Pump (Only)	416277 (5gpm)				520594 (10gpm)			



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
SPLIT PUMP

VC416-6628

DATE

03-16-22E

SECTION

H200

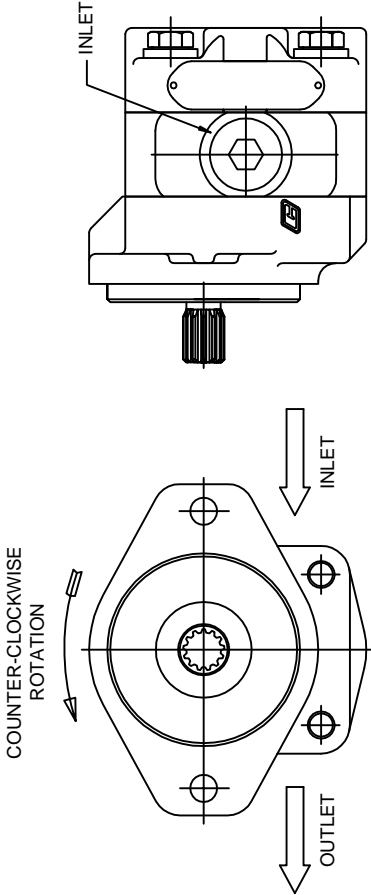
SUPERSEDES

08-01-17D

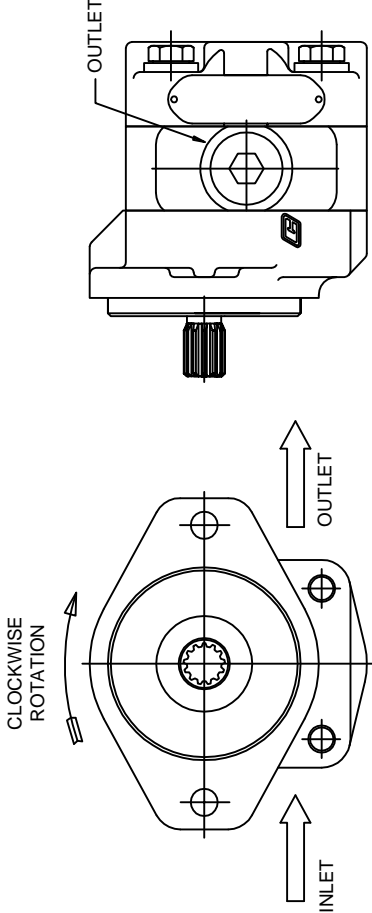
416763

BI-ROTATIONAL PUMP INSTALLATION

CLOCKWISE ROTATION PTO REQUIRES  
COUNTER-CLOCKWISE ROTATION PUMP



COUNTER-CLOCKWISE ROTATION PTO  
REQUIRES CLOCKWISE ROTATION PUMP



TO VERIFY THE INLET PORT ON A BI-ROTATIONAL PUMP,  
DETERMINE WHICH WAY THE SHAFT OF THE PUMP IS GOING  
TO TURN FROM THESE TWO SAMPLE DIAGRAMS AND PLUMB  
ACCORDINGLY.

NOTE: DO NOT OPERATE THE PUMP WITHOUT OIL.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
BI-ROTATIONAL PUMP INSTALLATION

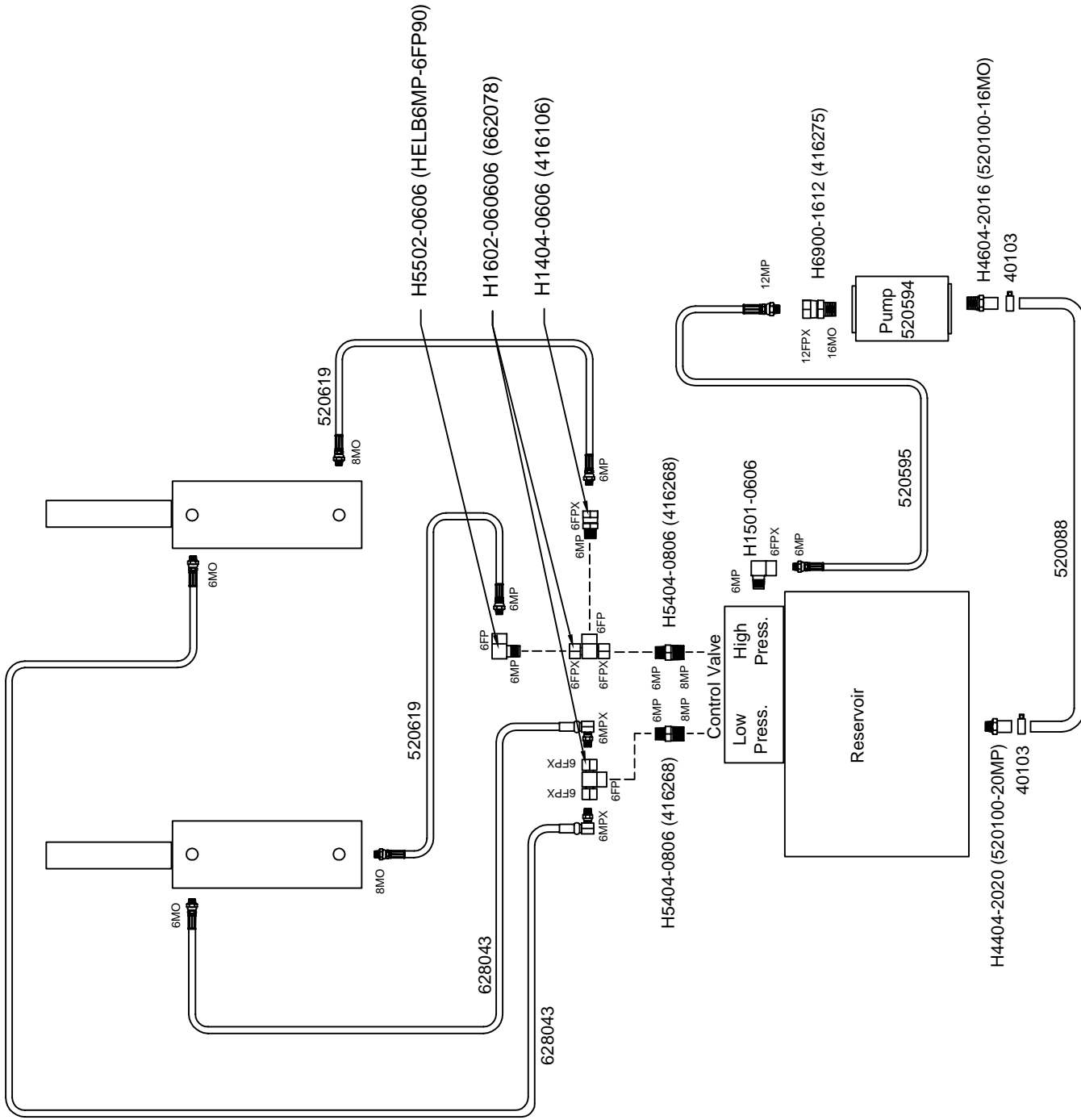
DATE  
12-09-15A

SECTION

SUPERSEDES  
06-02-05

VC628-6628

416812



 VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE		SPDG HOSE CONNECTION DIAGRAM	
	DATE	SECTION	-	
	SUPERSEDES	07-20-16B	552004	

# Williams<sup>®</sup> Machine & Tool Co.

MANUFACTURERS OF HYDRAULIC PISTON PUMPS



## CAUTION



- The gear pump you have purchased is a single rotation Gear Pump. Installation of this Gear Pump into a system that does not match the rotation of the Gear Pump may result in personal injury and/or property damage.

The Gear Pump you have purchased is a single rotation Gear Pump. The direction of rotation can be found by using the Williams Machine and Tool Co.'s Model Number. Directly following the Model Number are the letters CCW or CW. These letters indicate the direction of rotation for the Gear Pump. CCW indicates a counter-clockwise rotation. CW indicates a clockwise rotation. Pump shaft rotation is determined by viewing pump from the shaft end.

Example: GP1538 CCW. The CCW indicates a counter-clockwise rotation.

To verify the direction of rotation of your Gear Pump, perform the following steps:

- 1.) Locate the Part Number on the Gear Pump. The Part Number, Serial Number, and date code are located on the rear of the Gear Pump.
- 2.) Part Numbers ending in an even number are clockwise rotation (CW). Part Numbers ending in an odd number are counter-clockwise rotation (CCW).

Example: 1830201. The last number is 1 (an odd number). This indicates a counter-clockwise rotation (CCW).

Date	GP	Serial #
Part Number		

The following chart specifies torque requirements for the SAE O' ring plugs installed into the side or rear ports of the Gear Pump. Any combination of inlet and outlet ports may be used, ie., inlet large rear port. outlet small side port; inlet large side and outlet small rear ports; or both side ports or both rear ports. One inlet and one outlet part must be plugged for proper Gear Pump operation.

PORT SIZE (SAE)	TORQUE (FT. LBS)
3/4 - 16	15 - 20
7/8 - 14	20 - 25
1 - 1/16 - 12	30 - 35
1 - 5/16 - 12	45 - 50
1 - 5/8 - 12	65 - 70



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE

WILLIAMS PTO WARNING

DATE

11-05-15D

SECTION

H200

SUPERSEDES

03-17-14C

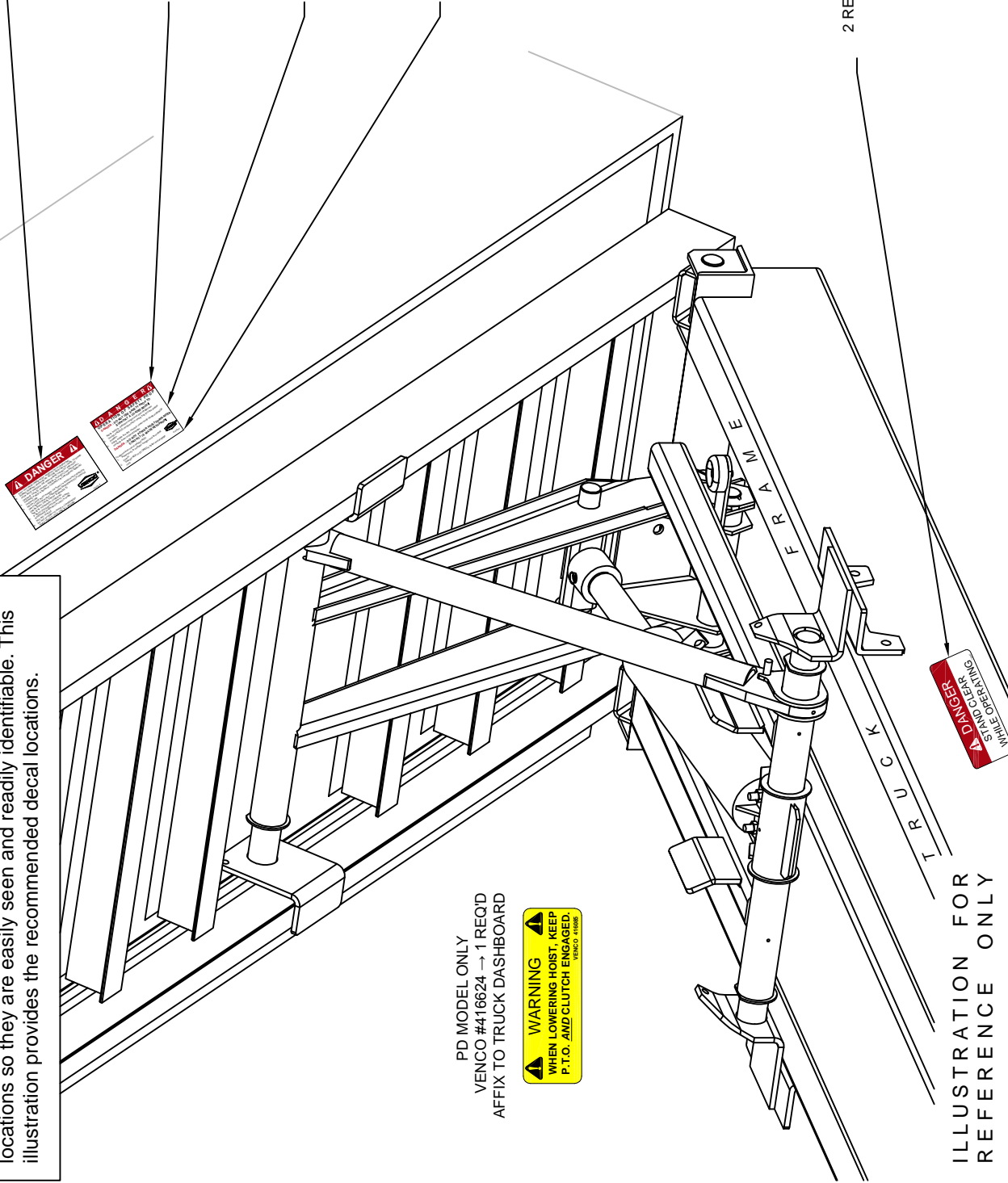
416287

Included with your Venco hoist are various danger, warning, and caution decals. These decals must be placed in prominent locations so they are easily seen and readily identifiable. This illustration provides the recommended decal locations.

PD MODEL ONLY  
VENCO #416624 → 1 REQ'D  
AFFIX TO TRUCK DASHBOARD



ILLUSTRATION FOR  
REFERENCE ONLY



VENCO #416052  
2 REQ'D (1 EACH SIDE)

VENCO #416084  
1 REQ'D FOR EACH SIDE  
SAFETY PROP  
(SWING-DOWN)

VENCO #416626  
1 REQ'D FOR EACH SIDE  
SAFETY PROP  
(INDEXING)

VENCO #416624  
1 REQ'D FOR EACH SIDE  
SAFETY PROP  
(LINKAGE)

VENCO #15254  
2 REQ'D (1 EACH SIDE)



	TITLE DECAL LOCATIONS		SECTION H200
	VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO		DATE 10-27-15F
	VC416-6628, TRLR416-6628		SUPERSEDES 10-31-14E

416128

# **SECTION 250**

# **OPERATION**



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

# READ THIS FIRST

## OPERATOR - WARNINGS

- ▶ Read and fully understand entire owner's manual prior to operating this equipment.
- ▶ Do not dump while on uneven ground or if vehicle is uneven side to side. Dumping while uneven can cause vehicle to overturn and cause property damage, equipment damage, serious injury or death.
- ▶ Stay clear of dump body when dumping. Moving vehicle parts or the moving load could cause serious injury or death.
- ▶ NEVER be under a raised body, and keep all others clear when raising body. Body could inadvertently fall causing serious injury or death. Reference operator section for proper body prop use.
- ▶ Only allow qualified personnel to work on this equipment that understands its functions.
- ▶ Overloading Hoist can cause equipment malfunction, serious injury or death.
- ▶ NEVER operate this Hoist from outside the cab. This could cause serious injury or death.
- ▶ Make sure all warning and caution labels are legible and properly placed. Refer to the installation section for placement and the replacement parts section for replacement decals.
- ▶ When performing maintenance, truck should be turned off and emergency brake set along with body prop set under an UNLOADED body. NEVER prop a loaded body. Body could inadvertently fall, causing serious equipment damage, personal injury or death.
- ▶ We strongly recommend you contact your truck equipment distributor to perform any type of repair or maintenance on your equipment. If you do not have a local distributor, call VENCO VENTURO INDUSTRIES LLC for the closest authorized distributor.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE

OPERATOR - WARNINGS

DATE

09-03-15

SECTION

-

HOISTS

SUPERSEDES

-

520952



# HOIST MAINTENANCE AND OPERATION INSTRUCTIONS

## A. Hoist unit lubrication

1. Lubricate all grease fittings on the hoist unit.
2. Lubricate the rear hinge assembly.
3. The hoist system should be serviced at the same time the truck is serviced, and sooner if the hoist unit is performing heavy duty service.
4. Pump Reservoir → Shall be filled with the recommended oil per the manufacturer's instructions. Periodically check the hydraulic fluid and change when the truck engine oil is changed.

## B. PTO Pump Operation

With the hoist and body completely installed, cycle the hoist several times to purge the hydraulic system of air. Operate the hoist system per the instructions in this manual and per the PTO manufacturer's instructions.



## C A U T I O N



- Do not operate the pump at more than 1000 RPM. Severe hoist system damage could result. The PTO speed to engine speed is governed by the gear ratio of the PTO drive installed in the truck transmission.
- For long service and safety from VC hoists, it is important that the following procedure be followed each time the hoist is operated:

1. Engage the PTO from the truck cab and adjust the engine speed to obtain the correct PTO and lift speed desired.
2. Pull the pump stick out. This will cause the hoist to raise.
3. When the pump has reached its maximum capacity, the pump will bypass through the relief valve. To prevent the pump from bypassing, push the pump knob to the center / middle position. Whenever the pump knob is centered, the hoist will stop moving and hold its position.



## C A U T I O N



- Do not allow the pump to bypass for long periods of time, as this will put stress on the hydraulic and electrical systems of the hoist.

4. To lower the hoist, push the pump stick in.  
NOTE: The Venco hoist powered by PTO drive pumps must be 'powered down'. Failure to 'power down' will cause the reservoir to overflow.
5. To lock the hoist against the truck frame when it is in the down position, push the pump knob in. When the pump bypasses, place the knob in the center 'hold' position.
6. Disengage PTO from transmission per the manufacturer's instructions.



## C A U T I O N



- Do not drive the truck without first disengaging the PTO. Failure to disengage the PTO may result in severe damage to the pump and pump drive unit.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE

MAINT. & OPER. INSTRC.

DATE

11-05-15D

SECTION

H250 ▲

VC 520-6628

SUPERSEDES

08-12-15C

520079

# BODY PROP OPERATION GUIDE - GENERAL INFORMATION

D. Body prop(s): Federal Regulation 1926.601, Paragraph 10, requires the use of a body prop. Accordingly, all Venco hoist units will have included as a standard item a body prop (safety strut). See Paragraphs D.1. & D.2. below.

1. The body prop is designed for use only when the truck body is **empty**. The purpose of the body prop is to provide a safety strut for use when maintenance or inspections are performed on an **unloaded** truck body in the raised position.
2. One [1] body prop shall be furnished for truck bodies up to and including 15 feet. For bodies longer than 15 feet in length, two [2] body props should be used.
3. Venco hoists are equipped with one of three types of body props: **Indexing**, **Swing-down** or **Linkage**. The chart below shows the hoist model number and the corresponding body prop types available.

▲

HOIST BODY PROP CONFIGURATION CHART				
HOIST MODEL	STD. BODY PROP TYPE	OPTIONAL LINKAGE BODY PROP	DUAL BODY PROP	OPERATIONAL DECAL PART NUMBER
VC416/516	INDEXING	OPTIONAL	NOT AVAILABLE	INDEX= 416626, LINKAGE= 416624
VC520	INDEXING	OPTIONAL	NOT AVAILABLE	INDEX= 416626, LINKAGE= 416624
VC620	SWING-DOWN	OPTIONAL	NOT AVAILABLE	SWING-DOWN=416084, LINKAGE=416624
VC628	SWING-DOWN	NOT AVAILABLE	OPTIONAL	SWING-DOWN=416084
VC6620	SWING-DOWN	NOT AVAILABLE	OPTIONAL	SWING-DOWN=416084
VC6628	SWING-DOWN	NOT AVAILABLE	STANDARD	SWING-DOWN=416084


NOTE: For an illustration and operating instructions for each body prop type, see page 416645 in this manual.

#### 4. Special Precautions for Swing-down Body Props -

- Make sure the truck is parked on a **flat level surface**.
- Use a suitable tool to pull out the Spring-loaded release pin (stowage device) to release the body prop from the hoist frame. This will release the body prop allowing it to swing downward to a vertical position.
- Make sure that the body prop is aligned with the body prop foot rest (the body prop will be in a vertical position), then allow the truck body to move downward until the body prop is seated in the foot rest.  
NOTE: DO NOT POWER DOWN AFTER MAKING CONTACT WITH BODY PROP FOOT REST
- To disengage the body prop, raise the truck body until the body prop swings freely away from the foot pad. Using a suitable tool, place the tool in a leverage position on the body prop and propel sharply to the left and upward (or to the right and upward) so that the locking pin can be compressed and seated in the locking pin hole. Make certain the body prop is latched securely before the hoist is operated.

 **WARNING**

- Do not place arms, hands, or any part of the body between the truck longitudinals (long beams) or moving parts to pull the body prop release / locking pin.

 **WARNING**

- Do not use the body prop(s) to support a loaded truck body.
- Body prop(s) should be free swinging to a vertical position after the locking pin is released

 **WARNING**

- Read operation of safety strut and caution labels **before** operating the hoist.

 **WARNING**

- Use care when reseating the body prop(s) in the locked position.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
**BODY PROP OP. GUIDE**  
VC416 - VC6628 HOISTS

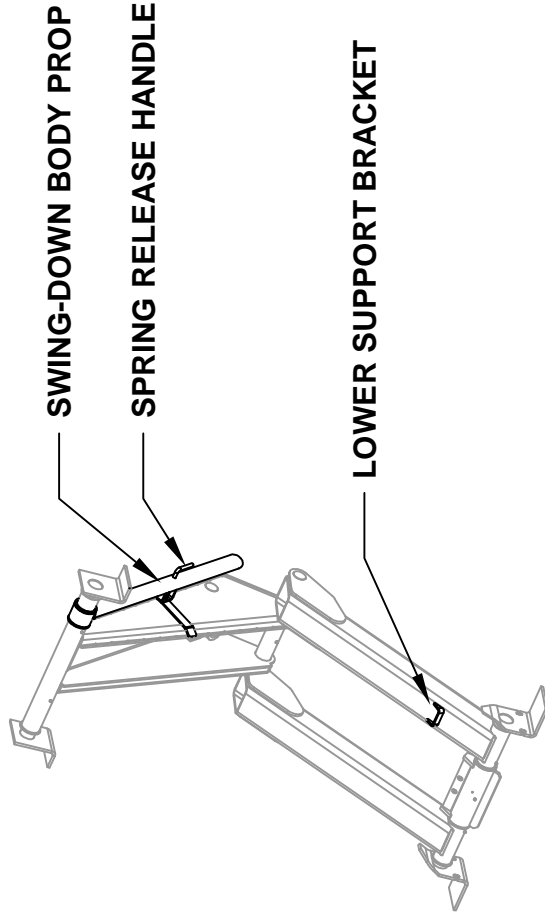
DATE  
11-05-15A  
SUPERSEDES  
5-28-14

SECTION  
H250  
**416644**

▲

# BODY PROP OPERATION GUIDE - ILLUSTRATIONS & INSTRUCTIONS

## VC628 - VC6628 (STANDARD) SWING-DOWN BODY PROP



**NOTE: DUAL BODY PROPS ARE STANDARD ON HOIST MODEL VC6628.** REFER TO THE HOIST BODY PROP CONFIGURATION CHART ON DRAWING 416644 TO DETERMINE THE AVAILABILITY OF DUAL BODY PROPS FOR OTHER HOIST MODELS.

## **⚠ DANGER ⚠**

### OPERATION OF SAFETY PROP

**DANGER: DO NOT USE SAFETY PROP TO SUPPORT A LOADED BODY!**

1. Raise body to sufficient height and shut off all power.
2. Unlock PROP(S) and permit to swing freely to the vertical position.
3. Using inside-the-cab controls, lower body slowly until PROP contacts lower support bracket.

**DANGER: DO NOT POWER HOIST DOWN AFTER CONTACT IS MADE WITH PROP!**

To discontinue use of safety PROP:

1. Raise body to sufficient height and shut off all power.
2. Swing PROP to STORED position and engage lock.



416084-A

TITLE  
**BODY PROP OPERATIONS**  
  
VC628-6628

DATE  
**12-09-15**  
  
SUPERSEDES  
-

SECTION  
**H250**

**628645**

# **SECTION 300**

# **MAINTENANCE**

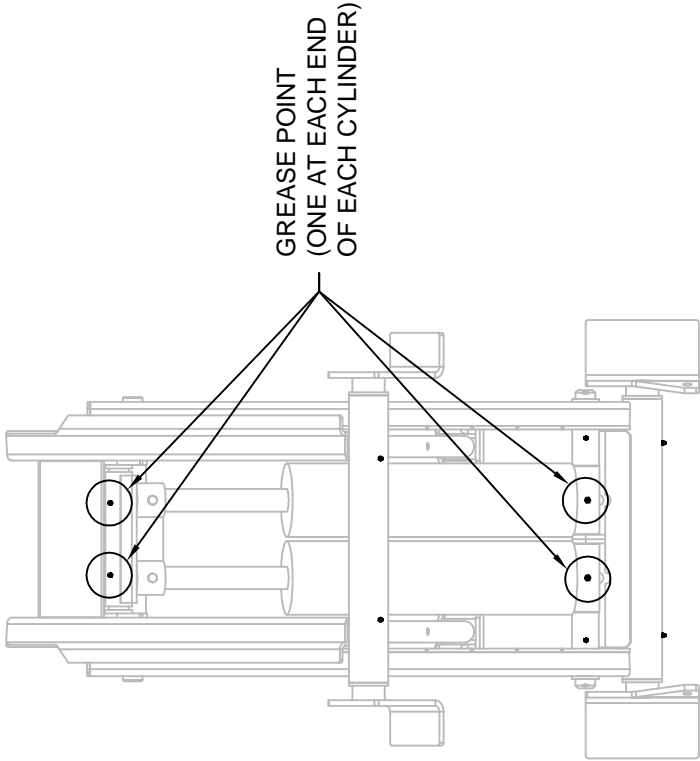
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# **SERVICE**

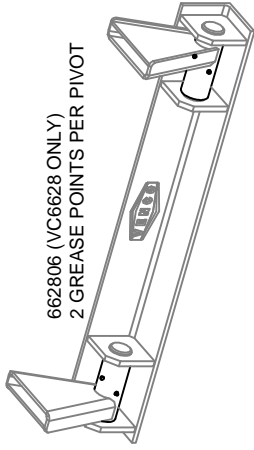
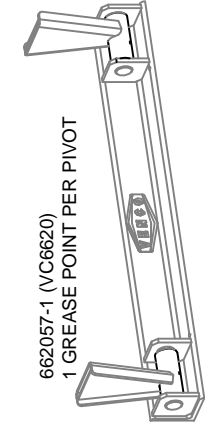
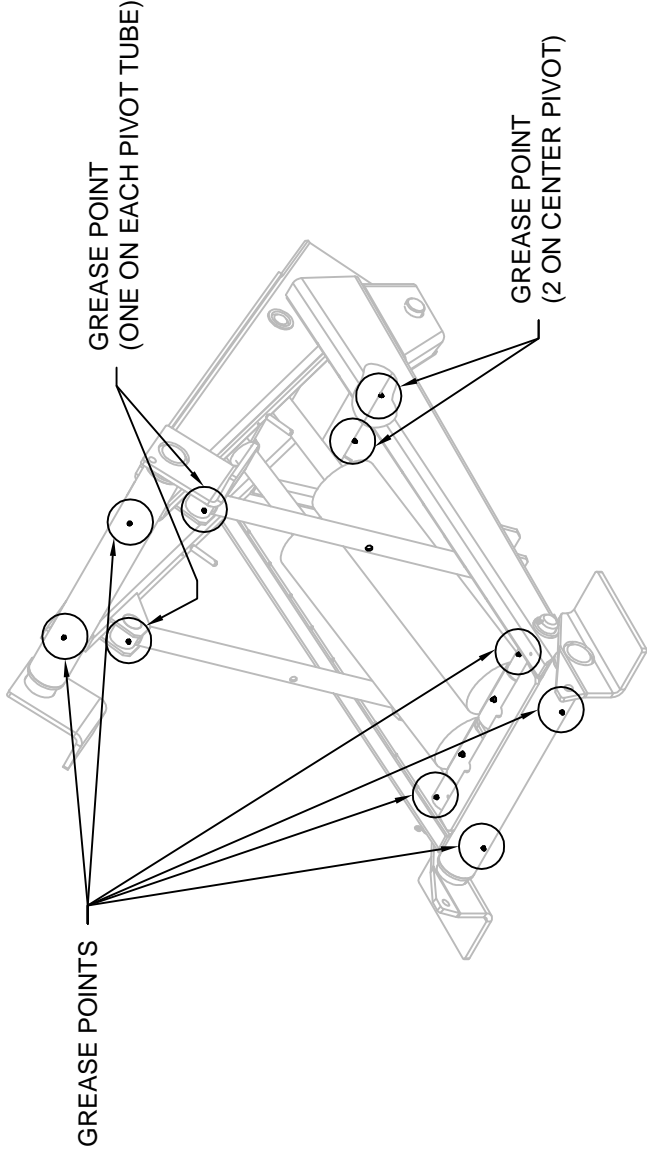


VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

# HOIST GREASE POINTS



TOP VIEW



TO ENSURE THE RELIABLE PERFORMANCE OF YOUR VENCO HOIST, IT IS NECESSARY THAT YOU GREASE THE HOIST AT THE TIME OF TRUCK SERVICE WITH CHASSIS GREASE. THE GREASE POINTS FOR THE HOIST SCISSORS AND REAR HINGES ARE SHOWN ABOVE. ADDITIONAL FITTINGS FOR TWIN CYLINDER HOISTS AND ADDITIONAL BODY PROPS ARE ALSO NOTED.



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE  
GREASE POINTS FOR HOISTS

DATE  
12-14-15

SECTION  
-

VC6620/6628

SUPERSEDES  
-

662124

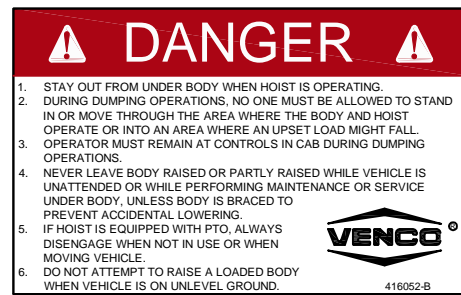
# **SECTION 400**

# **REPLACEMENT PARTS**

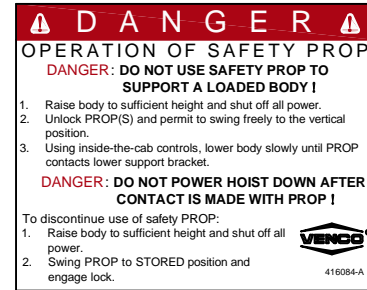


VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

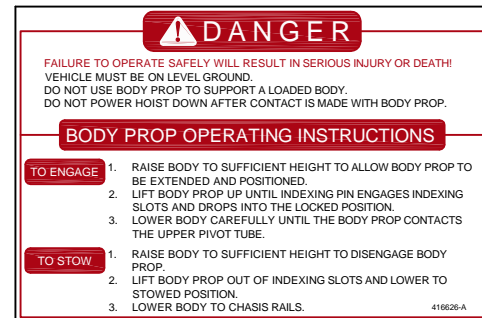
PART NO.: 416052  
DECAL: DANGER STAY CLEAR  
FUNCTION: To provide operator with a summary of key hoist operating procedures.  
QUANTITY: 2  
PLACEMENT: One on each side of body.



▲  
PART NO.: 416084 (VC620-VC6628 MODELS ONLY)  
DECAL: SAFETY PROP OPERATION  
FUNCTION: To inform the operator of proper operation of safety prop.  
QUANTITY: 1 For each safety prop.  
PLACEMENT: On side of body closest to safety prop(s).



▲  
PART NO.: 416626 (VC416,516 & 520 MODELS ONLY)  
DECAL: SAFETY PROP OPERATION, 'INDEXING' ONLY  
FUNCTION: To inform the operator of proper operation of safety prop.  
QUANTITY: 1 For each safety prop.  
PLACEMENT: On side of body closest to safety prop(s).




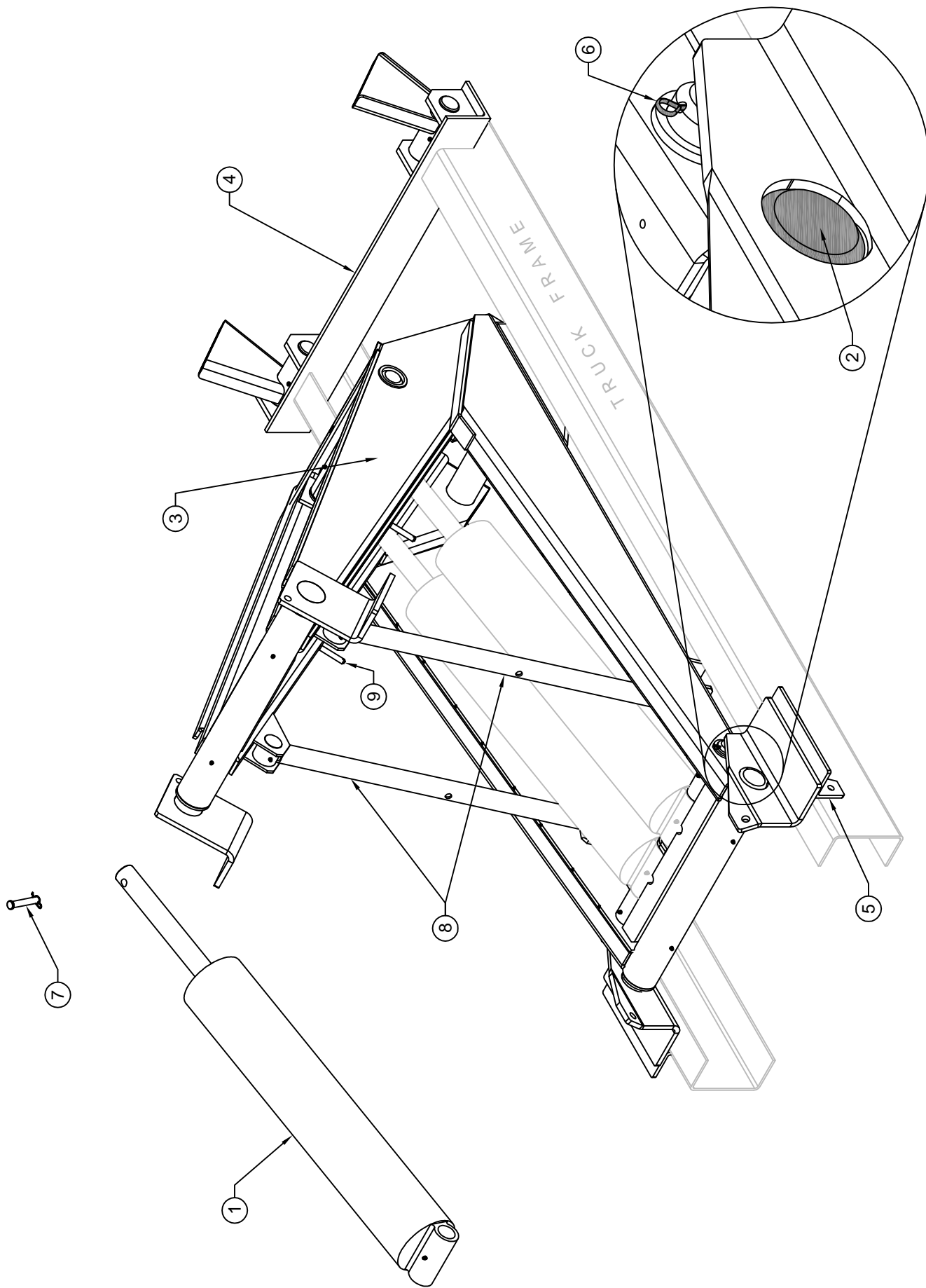
PART NO.: 15254  
DECAL: CAUTION STAND CLEAR  
FUNCTION: To inform the operator to stay clear of body / hoist.  
QUANTITY: 2  
PLACEMENT: One on each side of truck frame.



PART NO.: 416085  
DECAL: WARNING WHEN LOWERING  
FUNCTION: To inform the operator to keep P.T.O. and clutch engaged when lowering the hoist.  
QUANTITY: 1  
PLACEMENT: Affixed to truck dashboard.



	VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE DECAL LIST	DATE 11-05-15E	SECTION -
		VC/TRLR 416-6628	SUPERSEDES 03-26-14D	628820



	TITLE		REPLACEMENT PARTS DRAWING	
	VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO		VC6628	
	DATE	12-17-15D	SECTION	H400
		SUPERSEDES	08-07-00C	662853



# 662853 REPLACEMENT PARTS LIST

ITEM	PART NUMBER	QTY.	DESCRIPTION
1	628900	2	CYLINDER; 6" BORE X 20" STROKE
2	662808	1	LOWER CYLINDER PIVOT SHAFT
3	662809	1	SCISSORS ASSEMBLY
4	662806	1	REAR HINGE ASSEMBLY
5	520920	2	MOUNTING ANGLE
6	41610	2	COTTER PIN; 1/4" X 3"
7	416545	2	5/8 X 3 1/2" CLEVIS PIN W/ RUE RING ASSEMBLY
8	662836	2	BODY PROP (STANDARD)
9	662860	2	PIN; BODY PROP KEEPER
10	-	-	-
11	-	-	-
12	-	-	-
13	-	-	-
14	-	-	-
15	-	-	-
16	-	-	-
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35	-	-	-

REPLACEMENT PARTS DWG REF 662853



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

TITLE

RPLCMNT PARTS LIST

VC6628

DATE

12-17-15F

SUPERSEDES

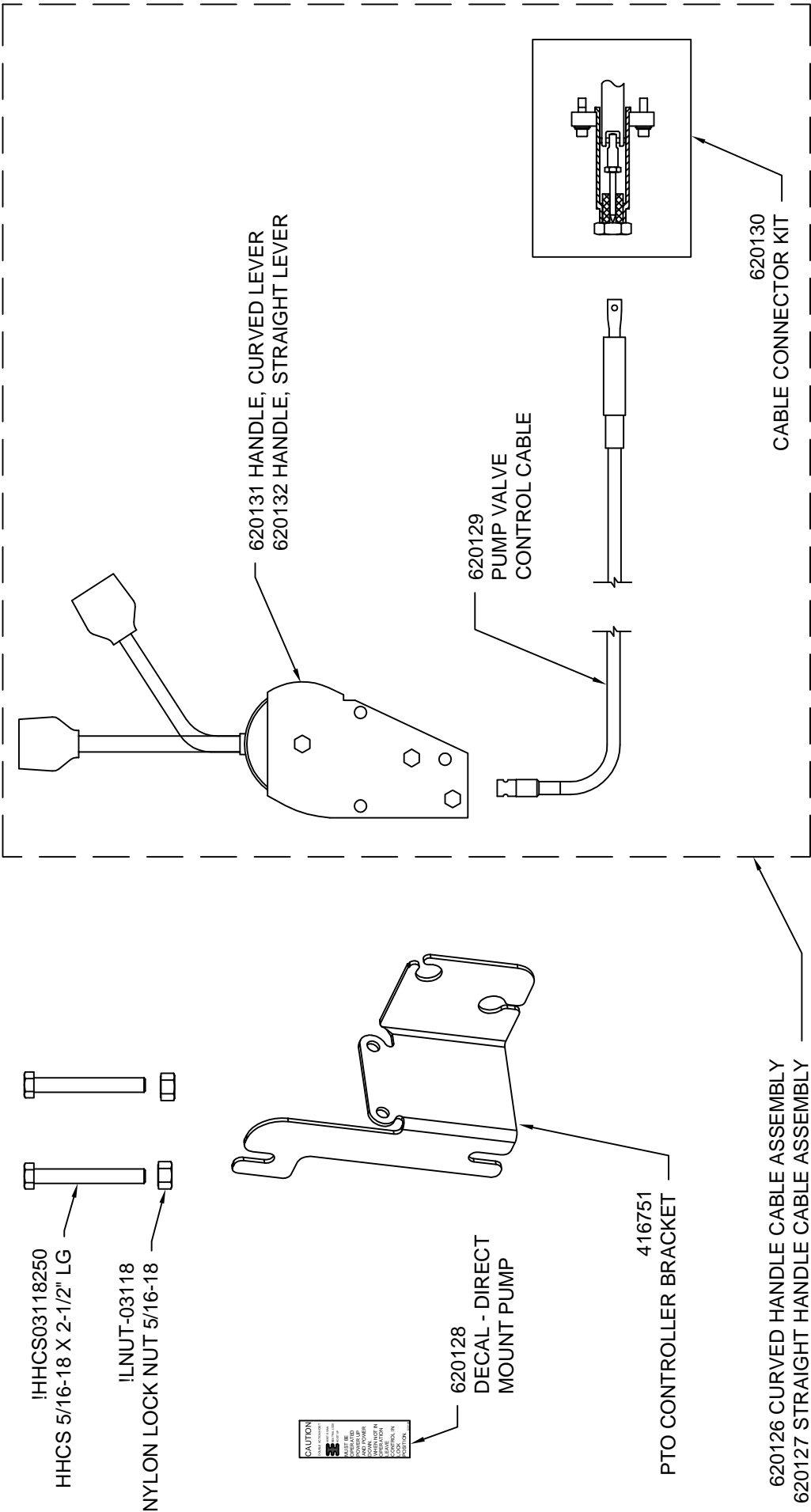
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SECTION

H400

662854

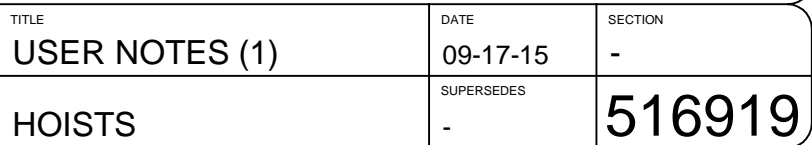
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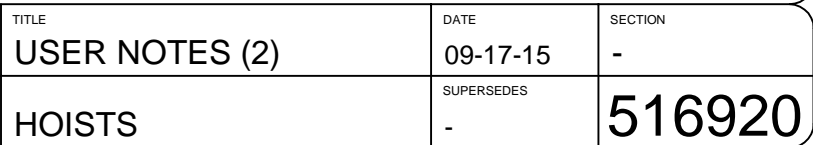


TITLE	REPLACEMENT PARTS DWG & LIST		SECTION	H400
	PTO PUMP CABLE		DATE	10-29-15B
VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO		SUPERSEDES	03-17-14A	620245





[illegible]

[illegible]





## VENCO HOISTS LIMITED WARRANTY POLICY

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

As a purchaser of any new Venco product covered by warranty, you will receive 3 years of the most complete coverage available...and, at no added cost to you.

### 3-Year Limited Warranty Policy

This limited policy warrants new products of Venco to be free from defects in material and workmanship for a period of three (3) years from date of original installation. OEM products or accessories purchased by Venco 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. Venco hoists are designed for and intended to be used on stationary trucks dumping on firm and level ground. Spreading applications and/or shock unloading are strictly prohibited and will void this warranty. 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 Venco 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, Venco requires the model and serial number. Only authorized Venco Distributors can perform warranty. For the name and address of your local Venco 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 Venco Distributor. No modifications or alterations may be made to any Venco product without the expressed written consent of Venco Venturo Industries LLC. Installation of any Venco product must be done by an authorized Venco 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](http://www.venturo.com)