

PARTS & INSTALLATION MANUAL VC628

Included in this manual:

VC628

Capacity & Application Charts

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

VENCO VENTURO O INDUSTRIES LLC D

INST-628033 - 1/20/2025 (Rev: B0)

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12-00073 VNC3 WARRANTY PAGE

READ THIS FIRST - INSTALLATION

USE THE BODY PROP

- NEVER work under a raised body without the use of the body prop. Body could inadvertently fall, causing death or serious injury.
- ▶ 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



WILL RESULT IN SERIOUS INJURY OR DEATH



INSTALLATION SAFETY REQUIREMENTS

- 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.
- ► 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.
- Always wear eye protection and protective clothing when working around hydraulic systems. Fluid under pressure can pierce the skin and enter the bloodstream, causing serious injury or death.



CAN RESULT IN SERIOUS INJURY OR DEATH



IMPORTANT INSTALLATION REQUIREMENTS

- ▶ 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.
- ► NEVER adjust factory relief valve settings without consulting with the factory.



COULD RESULT IN MINOR OR MODERATE INJURY





TLE

INSTALLATION WARNINGS

DATE

SECTION

5 12-11-23C SUPERSEDES

11-07-23B

520951

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

HOISTS

READ THIS FIRST - OPERATION

USE THE BODY PROP

- ▶ When performing maintenance, truck should be turned off and the emergency brake set along with the body prop set under an UNLOADED body. NEVER prop a loaded body. Body could inadvertently fall, causing death or serious injury.
- ► NEVER work under a raised body without the use of the body prop. Body could inadvertently fall, causing death or serious injury.



WILL RESULT IN SERIOUS INJURY OR DEATH



DUMP SAFETY

- ► Overloading Hoist can cause equipment malfunction, which will cause serious injury or death.
- ► Venco hoists are designed for and intended to be used on <u>stationary trucks</u>, dumping on firm and level ground. Spreading applications and/or <u>shock-unloading</u> are strictly prohibited. Failure to follow these guidelines could result in serious injury or death.
- ▶ 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 operate this Hoist from outside the cab. This could cause serious injury or death.



CAN RESULT IN SERIOUS INJURY OR DEATH



UNDERSTAND YOUR EQUIPMENT

- ► Read and fully understand entire owner's manual prior to operating this equipment.
- ▶ Only allow qualified personnel to work on this equipment that understands its functions.
- ► 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.
- ▶ 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.



COULD RESULT IN MINOR OR MODERATE INJURY





OPERATOR WARNINGS

12-11-23B

SECTION

ERATOR WARNINGS 12-7

SUPERSEDES

11-07-23A 520952

VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

HOISTS

SECTION 200

INSTALLATION



VENCO HOIST MODEL VC628

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: 50 CONVERSION CLASS: E WEIGHT: 825 LBS.

POWER SOURCE: PD - POWER TAKE OFF DOUBLE ACTING ADDITIONAL DATA: 6" BORE x 28" STROKE CA: 72" - 162"

DUMP ANGLE: 40° - 50° MOUNTING HEIGHT REQ'D: 8"

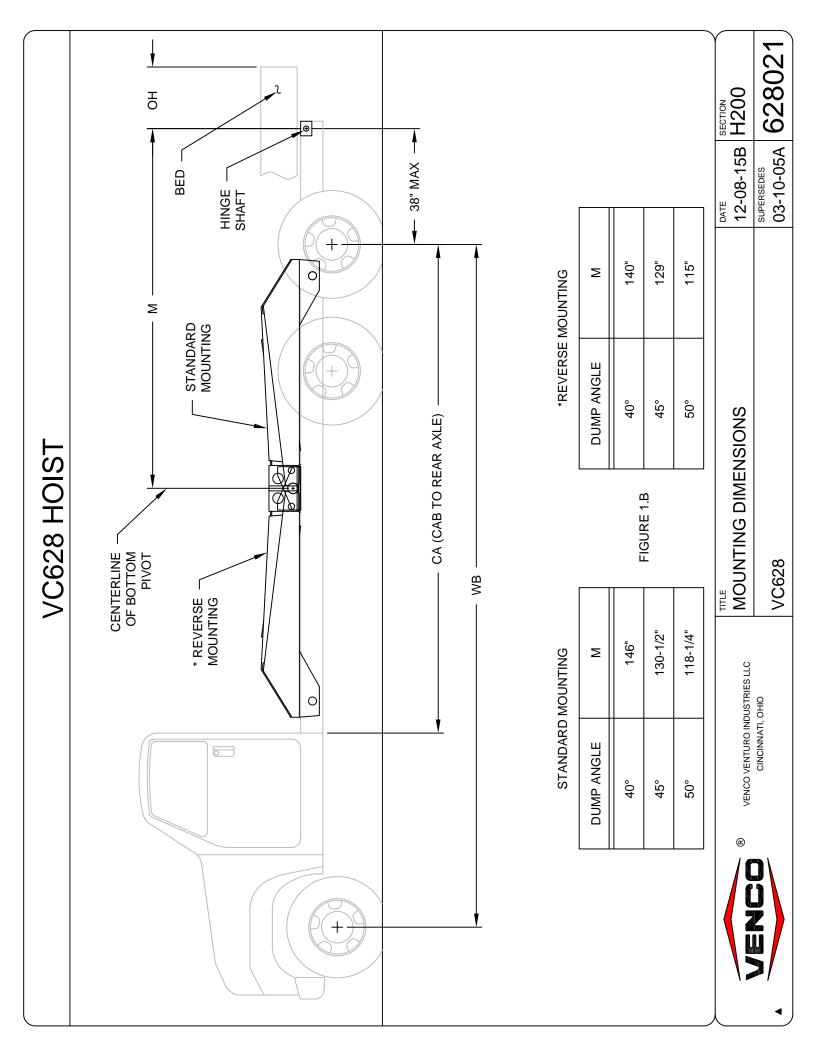
	CONVE	R S IO N A P P	LICATIONS	V C 6 2 8	
BODY	CA	ОН	40° (TON)	45° (TON)	50°(TON)
12'	72"	4 3 "	39.0	3 4 . 5	30.6
12'	8 4 "	3 1 "	27.6	24.4	21.7
13'	8 4 "	4 3 "	3 2 . 3	28.6	25.4
13'	102"	2 5 "	21.3	18.9	16.8
13'	108"	19"	19.2	17.0	15.1
13'	114"	13"	17.4	15.4	13.7
13'	1 2 0 "	7 "	15.9	14.1	12.5
1 4 '	102"	3 7 "	24.1	21.3	19.0
1 4 '	108"	3 1 "	21.3	18.9	16.8
14'	114"	2 5 "	19.2	17.0	15.1
14'	1 2 0 "	19"	17.4	15.4	13.7
1 4 '	1 2 4 "	15"	16.4	1 4 . 5	12.9
1 4 '	1 2 6 "	13"	15.9	14.1	12.5
15'	108"	4 3 "	24.1	21.3	19.0
15'	114"	3 7 "	21.3	18.9	16.8
15'	1 2 0 "	3 1 "	19.2	17.0	15.1
15'	1 2 4 "	2 7 "	18.0	15.9	14.1
15'	1 2 6 "	2 5 "	17.4	15.4	13.7
15'	1 3 8 "	13"	14.7	13.0	11.5
16'	114"	49"	24.1	21.3	18.9
16'	120"	4 3 "	21.3	18.9	16.8
16'	124"	39"	19.8	17.6	15.6
16'	1 2 6 "	3 7 "	19.2	17.0	15.1
16'	1 3 8 "	2 5 "	15.9	14.1	12.5
16'	1 4 4 "	19"	14.7	13.0	11.5
16'	150"	13"	13.7	1 2 . 1	10.7
16'	156"	7 "	12.7	11.3	10.0
18'	126"	61"	2 4 . 1	21.3	19.0
18'	132"	55"	21.3	18.9	16.8
18'	138"	49"	19.2	17.0	15.1
18'	1 4 4 "	4 3 "	17.4	15.4	13.7
18'	150"	3 7 "	15.9	14.1	12.5
18'	156"	3 1 "	14.7	13.0	11.5
18'	162"	25"	13.6	1 2 . 1	10.7

DUMP BODY APPLICATIONS VC628 *							
BODY CA O.H. 40° (TON) 45° (TON) 50° (TON)							
9'	-	12"	-	-	21.9		
10'	-	12"	-	-	19.2		
12'	-	12"	-	-	15.3		

^{*} 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.



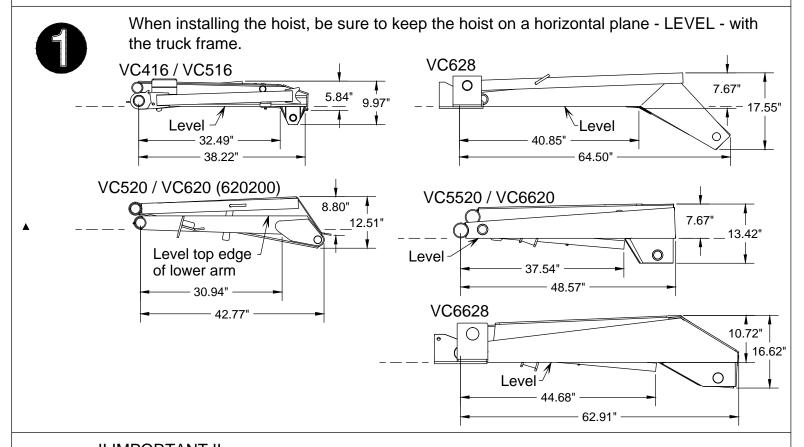
•	VC 628 HOIST	supersedes 03-10-05B	628020
	CAPACITY CHART	01-22-15C	H100
	TITLE	DATE	SECTION



628864 SECTION LIFTING HOLE LOCATIONS 12-08-15 SUPERSEDES DATE VC628 HOIST LIFTING HOLE LOCATIONS HOIST LIFTING HOLE LOCATIONS VC628 VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

!! IMPORTANT WARNING !!

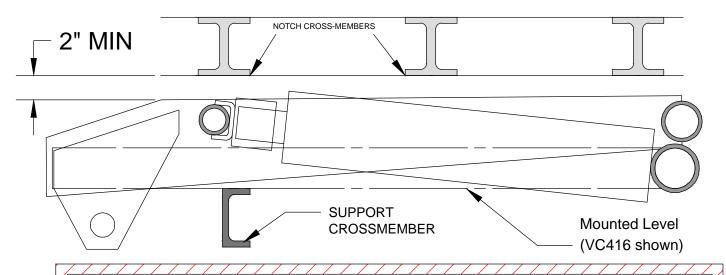
* ALL VENCO CONVERSION HOISTS → VC416 THRU VC6628 *





!! 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 CINCINNATI, OHIO

TITLE	
IMPORTANT WARNING	j
VENCO HOISTS	

12-08-20P H200
SUPERSEDES

11-05-15N

416086

HOIST MOUNTING INST. - VC628

Refer to Capacity Chart drawing 628020.

· 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
- A. 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 628021).
- B. Cut a 90° slot in each side of the frame as shown in Figure 2 below.
- C. 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.

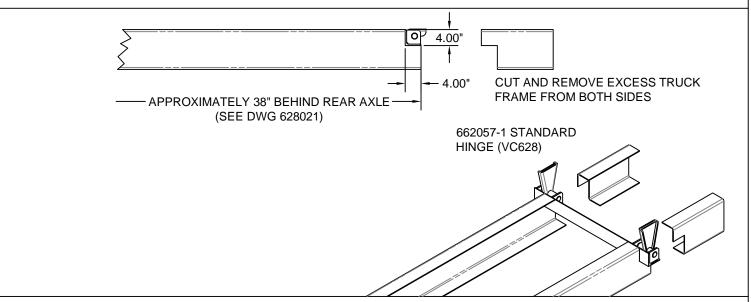


Figure 2 - Frame Modification and Rear Hinge Attachment

D. 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 628021 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 628020.



TITLE	DATE	SECTION
MOUNTING INSTRCTNS	12-08-15D	H200
	SUPERSEDES	F00070
VC628	10-27-97B	520072

HOIST MOUNTING INST. - VC628

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.

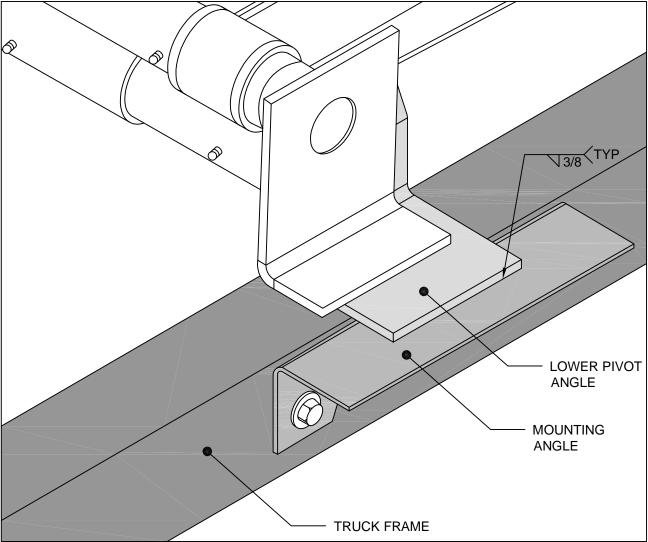


Figure 3. Mounting angle assembly.



VC628	09-04-97A	520074
	SUPERSEDES	E00074
MOUNTING INSTRCTNS	12-08-15B	H200
TITLE	DATE	SECTION

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 628034).
- 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 628034).
- H. Position and secure the filler strips (liner or sleeper) to the truck frame.

The VC628 requires a minimum of 8" 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 8" clearance is required and 6" long beams are on the truck body, a liner of at least 2" net will be required to obtain the minimum clearance required to mount the hoist.

6" + 2" = 8" minimum

 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 (662057-1)
 - 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 520604 Figure 2). See installation DWG 662861 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.



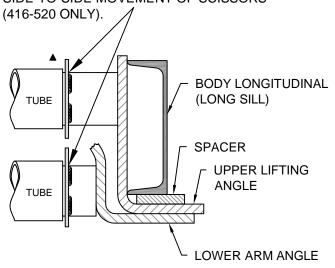
VC628	supersedes 12-08-15	628609
MOUNTING INSTRCTNS	08-01-17A	H200
TITLE	DATE	SECTION

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.

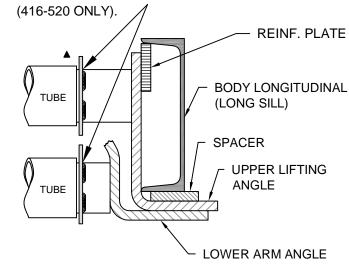
▲ COLLAR SHOULD BE PROPERLY LOCATED AND STITCH WELDED TO PIVOT ROD TO LIMIT SIDE-TO-SIDE MOVEMENT OF SCISSORS (416-520 ONLY)



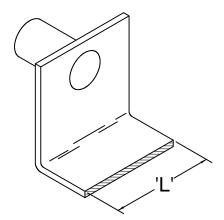
SITUATION B: LIFTING ANGLE DOES NOT ENVELOP BODY LONG SILL AND A REINFORCEMENT PLATE IS REQUIRED.

▲ COLLAR SHOULD BE PROPERLY LOCATED AND STITCH WELDED TO PIVOT ROD TO LIMIT SIDE-TO-SIDE MOVEMENT OF SCISSORS

(416-520 ONLY)

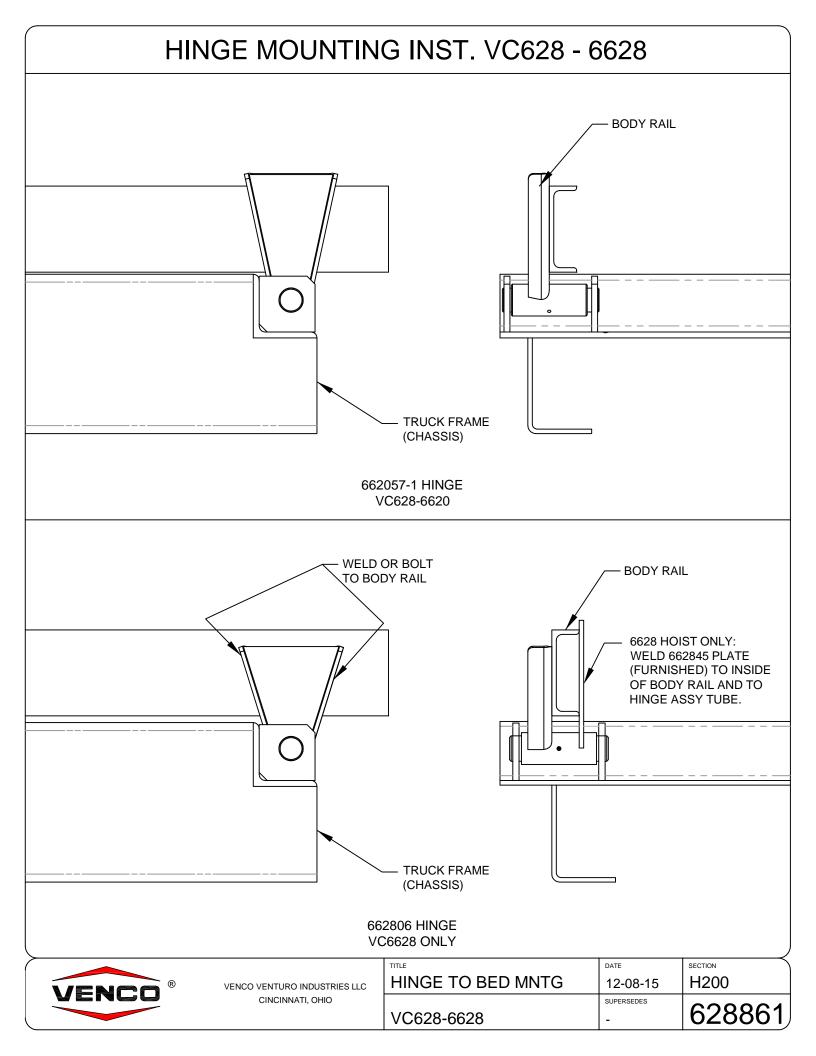


NOTE: THE SPACER AND REINFORCEMENT PLATE SHOULD BE THE SAME LENGTH AS THE LIFTING ARM. SEE 'L' DIMENSION BELOW.



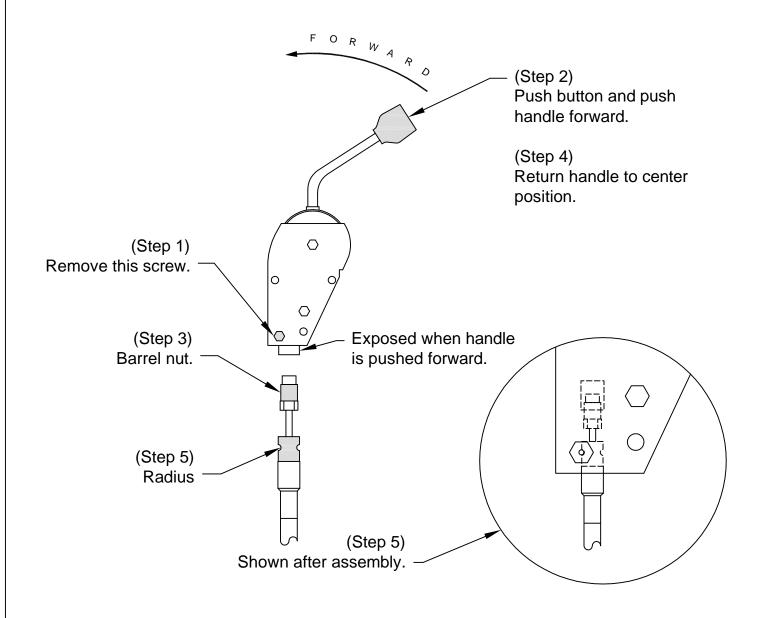


INSTLL. INSTRUCTIONS 08-20-14E H200	VC416-6628. TRLR313-6628	SUPERSEDES	520093
I TITLE I DATE I SECTION			1



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 positon.
- 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.





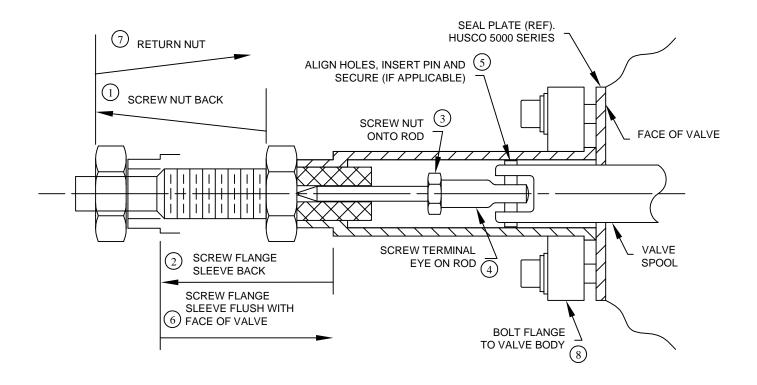
PTO PUMP CABLE	03-17-14A	620246
	SUPERSEDES	000040
CABLE / HANDLE ASSY	11-05-15B	-
TITLE	DATE	SECTION

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 overtightening will distort flange.





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO PTO PUMP CABLE INSTL

11-05-15B SUPERSEDES

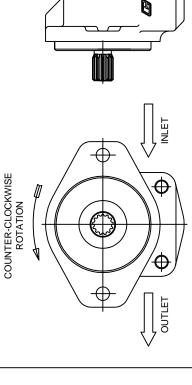
41675

SECTION

VC416-6628 03-17-14A

BI-ROTATIONAL PUMP INSTALLATION

CLOCKWISE ROTATION PTO REQUIRES COUNTER-CLOCKWISE ROTATION PUMP



-INLET

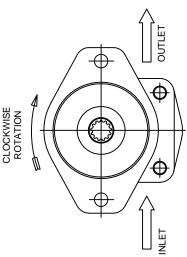
COUNTER-CLOCKWISE ROTATION PTO REQUIRES CLOCKWISE ROTATION PUMP

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

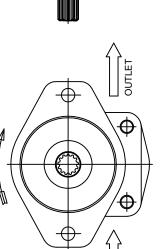
DO NOT OPERATE THE PUMP WITHOUT OIL.

ACCORDINGLY.

NOTE:



OUTLET





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

TITLE	DATE
BI-ROTATIONAL PUMP INSTALLATION	12-09-15A
	SUPERSEDES
VC628-6628	06-02-05

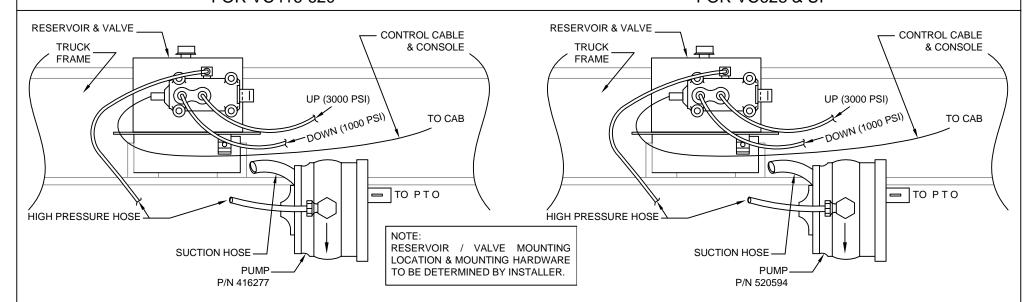
70077	4168
SUPERSEDES	06-02-05

SECTION

7

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**.

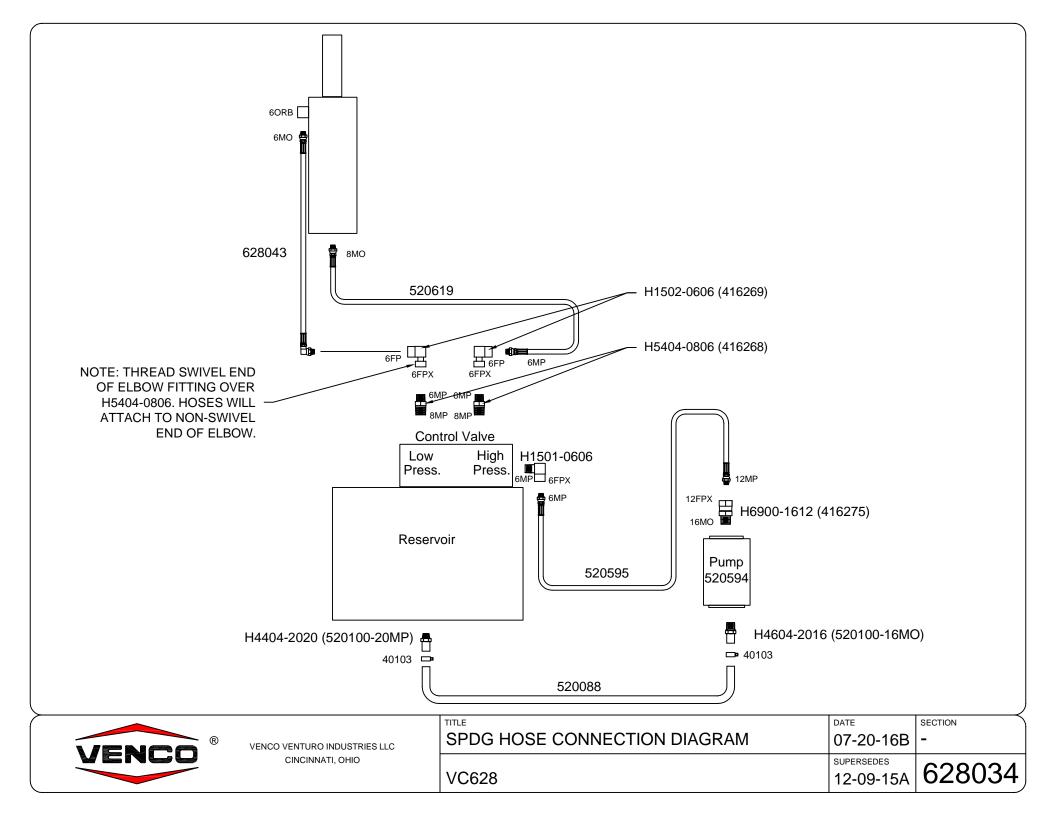
NOTE: FOR BI-ROTATIONAL PUMP MOUNTING AND HOSE CONNECTION INFORMATION, SEE DWG 416812 (IF APPLICABLE).

Model	VC416	VC516	VC520	V C620	V C628	VC5520	VC6620	VC6628
Control Cable & Console		620125 - Curved 620124 - Straight						
Cylinder Up Hose	416	044		520574			(2) 520574	
Cylinder Down Hose			41604	5	628041	(2) 4	16045	(2) 628041
High Pressure Hose (pump	416045	5 (7' LG, 3/8	HOSE)	620909 (10' LG, 3/8 HOSE) FOR V C620 NON-SF		20909 (10' L	G, 3/8 HOS	E)
to valve)	,		416045 (7' LG, 3/8 HOSE) FOR VC620 SF		,			
Suction Hose (reservoir to	416079	2 (7'1 G 1 0	O" D \	620910 (10' LG, 1.00" I.D.) FOR VC620 NON-SF	50	00088E (10' I	G 1-1//" I	D.)
pump)	410073	416079 (7' LG, 1.00" I.D.)		416079 (7' LG, 1.00" I.D.) FOR VC620 SF	520088F (10' LG, 1-1/4" I.D.)		<i>D.</i> ,	
Pump/Valve/Tank		6	320011 (9 Q	UART)		662077 (2	1 QUART)	
Pump (Only)			416277 (5	gpm)		520594	(10gpm)	



VENCO VENTURO INDUSTRIES LLC	
CINCINNATI, OHIO	

TITLE	DATE	SECTION
SPLIT PUMP	03-16-22E	H200
	SUPERSEDES	440700
VC416-6628	08-01-17D	416763



Williams. 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 rotatation 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 roation.

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

VENCO VENTURO INDUSTRIES LLC CINCINNATI. OHIO

- 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 roation (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 #

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



-	SUPERSEDES 03-17-14C	416287
WILLIAMS PTO WARNING	11-05-15D	H200
TITLE	DATE	SECTION

HPU GROUNDING CABLE INSTALLATION

HYDRAULIC POWER UNIT (HPU) GROUNDING CABLE INSTALLATION

STEP 1

Locate the 5/16-18 tapped hole in the aluminum pump housing and attach one end of the black #4 Gage battery cable with the 5/16" hex head cap screw and Lock Washer.

(C A U T I O N

• Prior to drilling the 9/32" hole in step 2, inspect the area on both sides of the chassis rail to ensure that you will NOT drill into other components - i.e. brake lines, etc. Then, drill hole as close to the center of the chassis rail as possible.

STEP 2

Drill a 9/32" hole in the truck frame.

STEP 3

Remove any undercoating around the drilled hole for best connection to the truck frame - clean surface to bare metal.

STEP 4

Attach the other end of the black #4 Gage battery cable with the 5/16" hex washer-head self-tapping fastener to the truck frame

NOTE: To prevent corrosion, both fasteners should be coated with dielectric grease (NOT provided in kit).

NOTE: Using the Ground Strap Kit (P/N 6474) and following the mounting instructions on page 6368 in your Hoist Owner's Manual will provide a solid ground.

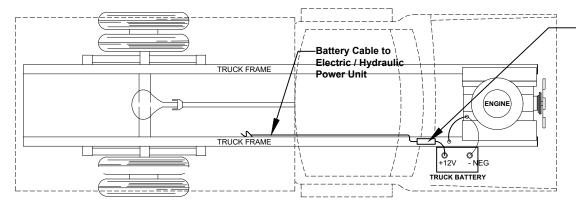


VENCO VENTURO INDUSTRIES LLC

CINCINNATI, OHIO

ELECTRICAL CONNECTIONS - HYDRAULIC POWER UNITS

+12 Volt Power Connection:



IMPORTANT

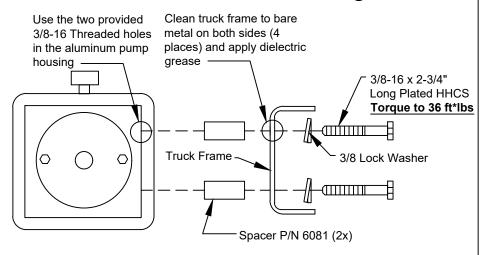
Locate the circuit breaker as close as practical to the battery for best protection of the battery cable servicing the electric / hydraulic power unit.

NOTE

Amp-draw of the electric / hydraulic power unit can be as high as 230amps under normal conditions. The amp rating of the circuit breaker should be sized appropriately.

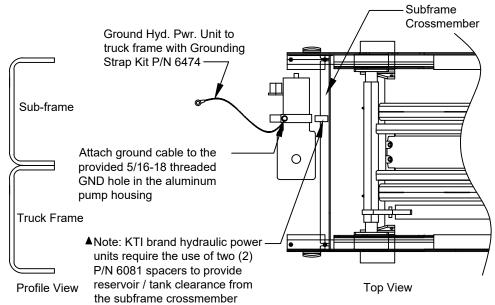
<u>Grounding:</u> Hydraulic power units WILL run with a poor ground connection, BUT the service life of the motor and control valve coils WILL be greatly reduced unless a proper ground connection is made - see illustrations below.

Non Sub-frame Grounding



DO NOT APPLY THREAD LOCK LIQUIDS TO BOLT THREADS, AS THEY WILL INSULATE THE BOLTS FROM THE ALUMINUM PUMP HOUSING.

Sub-frame Grounding





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

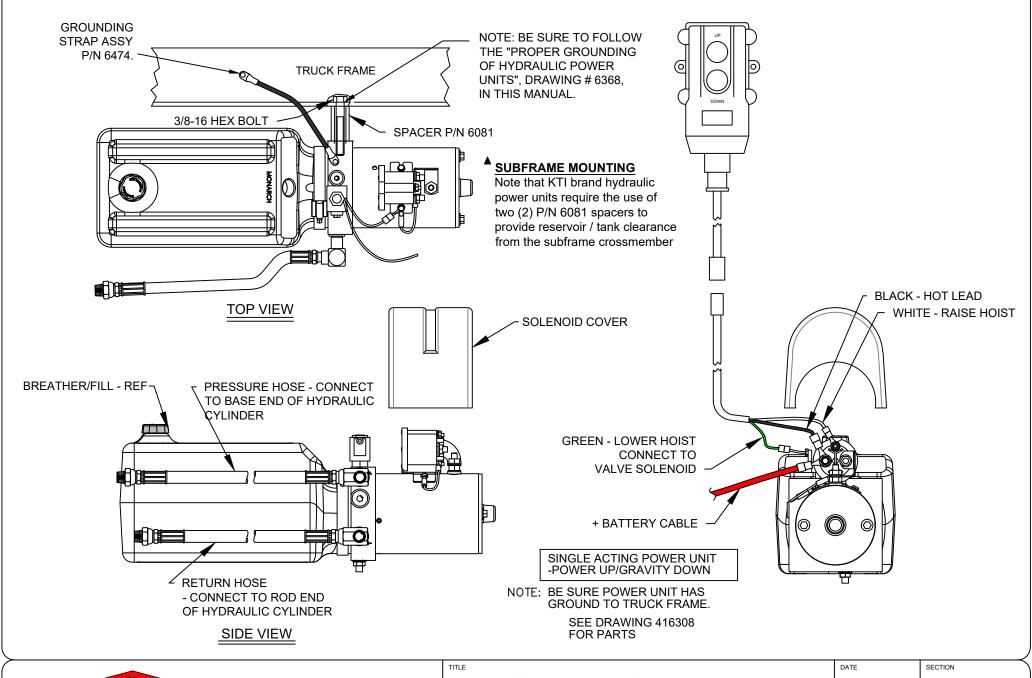
ELECTRICAL CONNECTIONS - HYD PWR UNITS 0.

S 01-30-24E

SUPERSEDES 6368

SECTION

40058M / MHD WITH MONARCH PUSH BUTTON CONTROL





VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO 40058M / 40058MHD POWER UNIT

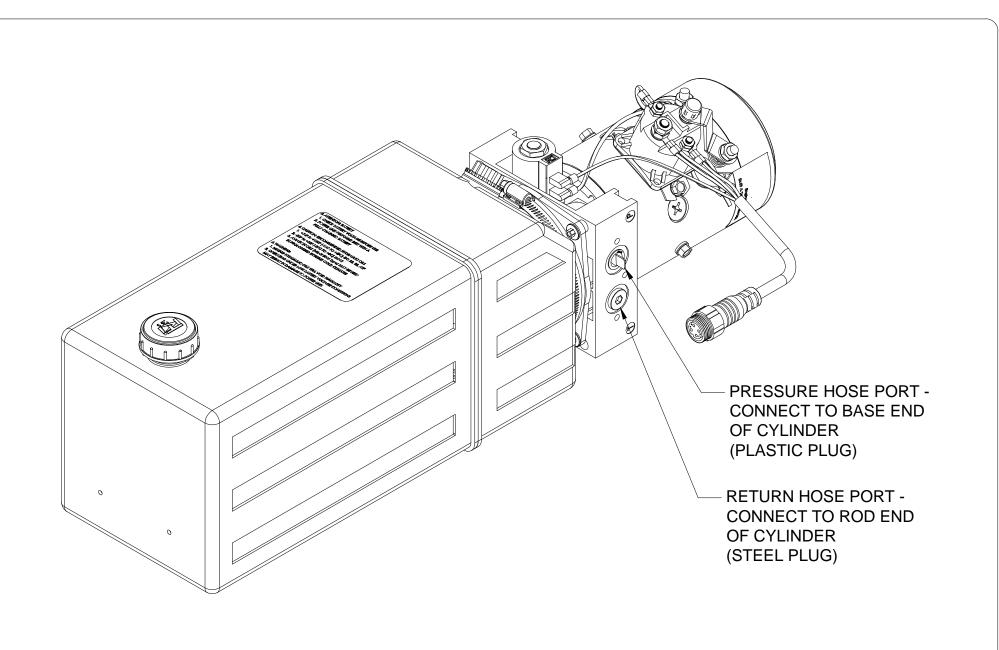
01-30-24H

H200

VC416-628

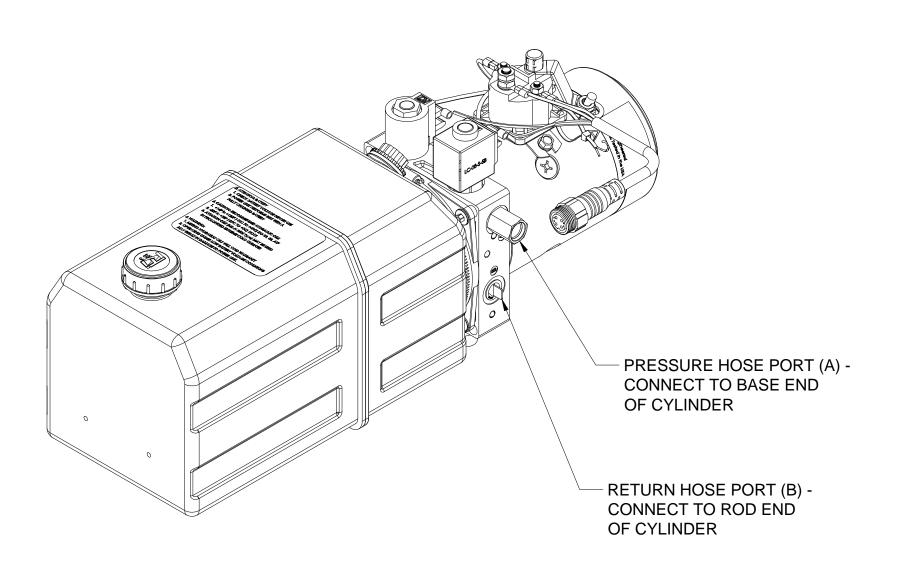
12-09-15G

416809





416307 90° ELBOWS NOT REQUIRED IF 90° PORTS ARE ON CYLINDER SECTION NMOC 416081M WITH MONARCH PUSH BUTTON CONTROL 10-09-15H 12-08-15J DATE GROUNDING STRAP KIT #6474 416081M ED POWER UNIT C5 C1 - FULL END CYL C2 - ROD END CYL W - WHITE WIRE **B - BLACK WIRE** G - GREEN WIRE HYDRAULICS R - RED WIRE ELECTRICAL VC416-628 TRUCK FRAME ENERGIZING 'G' COIL SENDS FLOW TO 'C1' PORT (HOIST UP) ENERGIZINF 'R' COIL SENDS FLOW TO 'C2' PORT (HOIST DOWN) \mathcal{S} VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO TO CAB C2 PORT C1 PORT <u>•</u> TO BATTERY POST NOTE:





HOIST MODELS	40DELS	VP/VC6	TRLR313	VC/TRLR 416	VC/TRLR 516	VC/TRLR 520	VC/TRLR 620	VC/TRLR 628
	ES/ED HYD PWR UNIT PART NUMBER 6425/6426	6425/6426	_	40058M / 41608M	40058M / 41608M	40058M / 41608M	40058M / 41608M 40058M / 41608M 40058M / 41608M 40058M / 41608M 40058MHD / 416081M 40058MHD / 416081M	40058MHD / 416081M
	RESERVOIR CAPACITY (QUARTS)	3.4/3.4		4.6/3.4	4.6/3.4	4.6/3.4	5.4/3.4	5.4/3.4
	TOTAL HYDRAULIC FLUID REQUIRED (QUARTS)	4	4	9	8	6	12	15
STEP 1	Attach base-end hose to cylinder. Do NOT attach the Rod-end hose at this time.	YES	YES	YES	YES	YES	YES	YES
STEP 2	Fill the hydraulic reservoir as recommended below. (see fluid note below)							
2a	With the hoist in the down position, add the indicated amounut (quarts) of hydraulic fluid.	2	2	3.5	3.5	3.5	3.5	3.5
2b	Raise hoist one-quarter of the way (approximately 12° dumonig angle) and add the indicated amount (quarts) of hydraulic fluid.	,	,		1	1.5	2	3
2с	Raise hoist one-half of the way (approximately 22-25° dumping angle) and add the indicated amount (quarts) of hydraulic fluid.	2	2	1.5	1	1.5	2	က
2d	Raise hoist three-quarters of the way (approximately 36° dumping angle) and add the indicated amount (quarts) of hydraulic fluid.		•		1	1.5	2	က
2e	Raise hoist completely (45-50° dumping angle) and add the indicated amount (quarts) of hydraulic fluid. DO NOT 'TOP OFF', or you will likely have overflow when the hoist is lowered.	0	0	1	1.5	1	2.5	2.5
STEP 3		ED ONLY	ED ONLY	YES	YES	YES	YES	YES
	Hydraulic fluid							

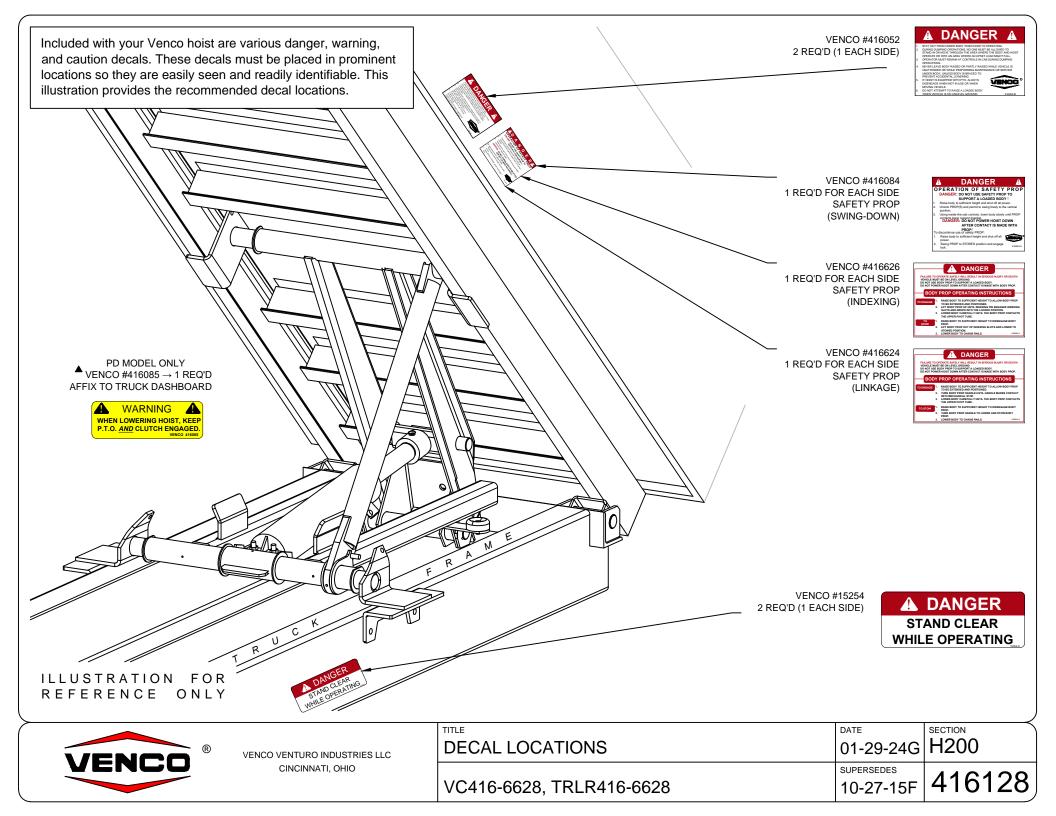
Hydraulic fluid:

Electric power units - ISO AW46 or Dextron III (type 3) ATF PTO power units - ISO AW46 (cold climates), ISO AW68 (warm climates)



FILLING HYDRAULIC	
VENCO VENTURO INDUSTRIES LLC	CINCINNATI, OHIO

DATE



SECTION 250

OPERATION



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.



- 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.



- 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 n the center 'hold' position.
- 6. Disengage PTO from transmission per the manufacturer's instructions.

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CAUTION

• 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.



MAINT. & OPER. INSTRC.

11-05-15D H250

SUPERSEDES — • • •

VC 520-6628

08-12-15C

520078

BODY PROP OPERATION GUIDE - GENERAL INFORMATION

D. Body prop(s): Federal Regualtion 1926.601, Paragraph10, 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

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

VENCO VENTURO INDUSTRIES LLC CINCINNATI. OHIO

! 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

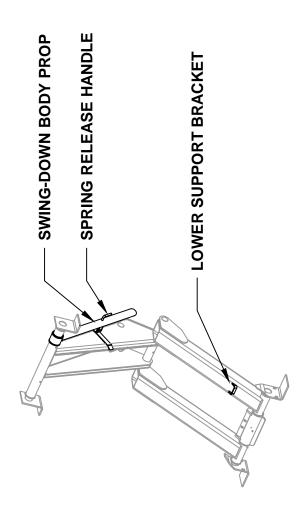
 Use care when reseating the body prop(s) in the locked position.



BODY PROP OP. GUIDE	11-05-15A SUPERSEDES	H250 A
BODT PROP OP. GUIDE		416644
BODY BROD OR CHIDE	DATE	SECTION A

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.

▲ D A N G E R A

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

- Raise body to sufficient height and shut off all power.
- Unlock PROP(S) and permit to swing freely to the vertical position.
- 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 VENCO
- Swing PROP to STORED position and engage lock

416084-A



BODY P		
ENTURO INDUSTRIES LLC	CINCINNATI, OHIO	

TITLE
BODY PROP OPERATIONS
VC628-6628

628645

H250

12-09-15 SUPERSEDES

DATE

SECTION 300

MAINTENANCE

&

SERVICE



628054 662806 (VC6628 ONLY) 2 GREASE POINTS PER PIVOT SECTION 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. 12-09-15 SUPERSEDES DATE 662057-1 (VC628-6620, STANDARD) GREASE POINTS FOR HOISTS HOIST GREASE POINTS GREASE POINT (ONE ON PIVOT TUBE OF EACH BODY PROP) GREASE POINT (ONE AT EACH END OF CYLINDER) ഗ z -0 ۵ VC628 ш ഗ TITLE ⋖ **GREASE POINT (ON CENTER PIVOT)** Ш ∝ VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO @

SECTION 400

REPLACEMENT PARTS



PART NO .: 416052

DECAL: DANGER STAY CLEAR

FUNCTION: To provide operator with a summary of key

hoist operating procedures.

QUANTITY:

PLACEMENT: One on each side of body.

- STAY OUT FROM UNDER BODY WHEN HOIST IS OPERATING.
 DURING DUMPING OPERATIONS, NO ONE MUST BE ALLOWED TO STAND
 IN OR MOVE THROUGH THE AREA WHERE THE BODY AND HOIST
 OPERATE OR INTO AN AREA WHERE AN UPSET LOAD MIGHT FALL.
 OPERATOR MUST REMAIN AT CONTROLS IN CAB DURING DUMPING
 OPERATIONS.
 NEVER LEAVE BODY RAISED OR PARTLY RAISED WHILE VEHICLE IS
 UNATTENDED OR WHILE PERFORMING MAINTENANCE OR SERVICE
 UNDER BODY, UNLESS BODY IS BRACED TO
 PREVENT ACCIDENTAL LOWERING.
 IF HOIST IS EQUIPPED WITH PTO, ALWAYS
 DISENGAGE WHEN NOT IN USE OR WHEN
 MOVING VEHICLE.
 DO NOT ATTEMPT TO RAISE A LOADED BODY
 WHEN VEHICLE IS ON UNLEVEL GROUND.

 416052-B



PART NO .: 416084 (VC620-VC6628 MODELS ONLY)

SAFETY PROP OPERATION DECAL:

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).

D A N G E OPERATION OF SAFETY PROP DANGER: DO NOT USE SAFETY PROP TO SUPPORT A LOADED BODY!

- Raise body to sufficient height and shut off all power Unlock PROP(S) and permit to swing freely to the vertical position
- 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.
 Swing PROP to STORED position and engage lock.

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).

A DANGER

FAILURE TO OPERATE SAFELY WILL RESULT IN SERIOUS INJURY OR DEATH VEHICLE MUST BE ON LEVEL GROUND.

DO NOT USE BODY PROP TO SUPPORT A LOADED BODY.

DO NOT POWER HOIST DOWN AFTER CONTACT IS MADE WITH BODY PROP.

BODY PROP OPERATING INSTRUCTIONS

RAISE BODY TO SUFFICIENT HEIGHT TO ALLOW BODY PROP TO

- BE EXTENDED AND POSITIONED.
 LIFT BODY PROP UP UNTIL INDEXING PIN ENGAGES INDEXING
 SLOTS AND DROPS INTO THE LOCKED POSITION.
 LOWER BODY CAREFULLY UNTIL THE BODY PROP CONTACTS
 THE LUDGED BUYCT TIBE.
- THE LIPPER PIVOT TUBE

RAISE BODY TO SUFFICIENT HEIGHT TO DISENGAGE BODY

- PROP.
 LIFT BODY PROP OUT OF INDEXING SLOTS AND LOWER TO

PART NO.: 15254

DECAL: **CAUTION STAND CLEAR**

FUNCTION: To inform the operator to stay clear of body /

hoist.

QUANTITY:

PLACEMENT: One on each side of truck frame.

DANGER

STAND CLEAR WHILE OPERATING

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.



WARNING



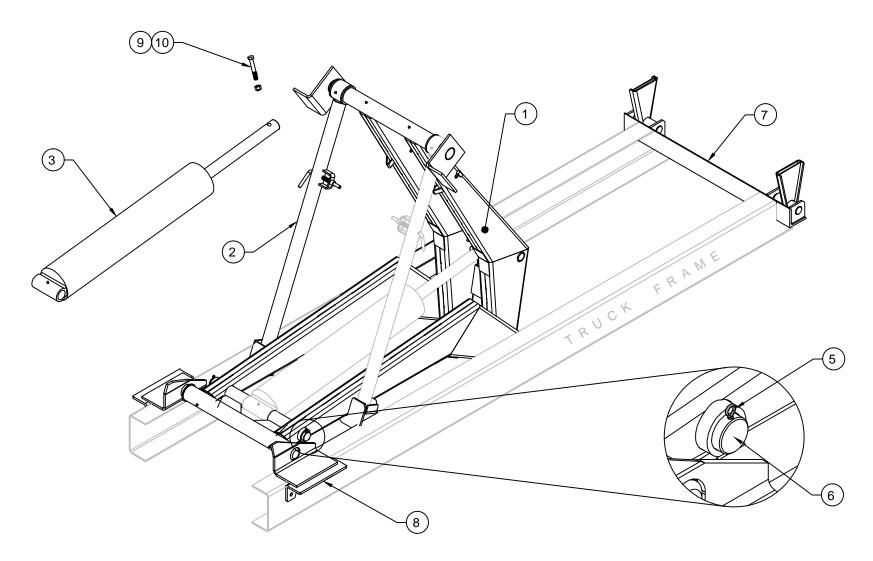
WHEN LOWERING HOIST, KEEP P.T.O. AND CLUTCH ENGAGED.



VENCO VENTURO INDUSTRIES LLC

SECTION **DECAL LIST** 11-05-15E SUPERSEDES VC/TRLR 416-6628 03-26-14D

CINCINNATI, OHIO



NOTE:

REFERENCE REPLACEMENT PARTS LIST 628028

628044-1 628044-2 VC628 STANDARD ASSEMBLY VC628 W/ OPTIONAL BODY PROP



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

TITLE	DATE	SECTION
REPLACEMENT PARTS DRAWING	11-15-23E	H400
	SUPERSEDES	000047
VC628	12-09-15D	628017

628017 REPLACEMENT PARTS LIST

1			1	
	ITEM	PART NUMBER	QTY.	DESCRIPTION
	1 2 3	628044 628015 628900	1 1 1	SCISSORS ASSEMBLY (STANDARD) OPTIONAL BODY PROP HYDRAULIC CYLINDER
	4 5	416010	2	COTTER PIN - 1/4" DIA. X 3" LONG
A	6 7 8 9 10	520014 662057-1 520920 !HHCS06311400-8 !LNUT-06311-8	1 1 2 1	LOWER PIVOT SHAFT - CYLINDER REAR HINGE ASSEMBLY FRAME MOUNTING ANGLE HHCS; 5/8-11 X 4 GR. 8 LOCK NUT; 5/8-11, GR. 8, ZNC/YLW, NYL-INSERT
	11 12 13 14 15	- - -		- - - -
	16 17 18 19 20	- - - -		- - - -
	21 22 23 24 25	- - - -		- - - -
	26 27 28 29 30	- - -		- - - -
	31 32 33 34 35	- - - -		- - - -

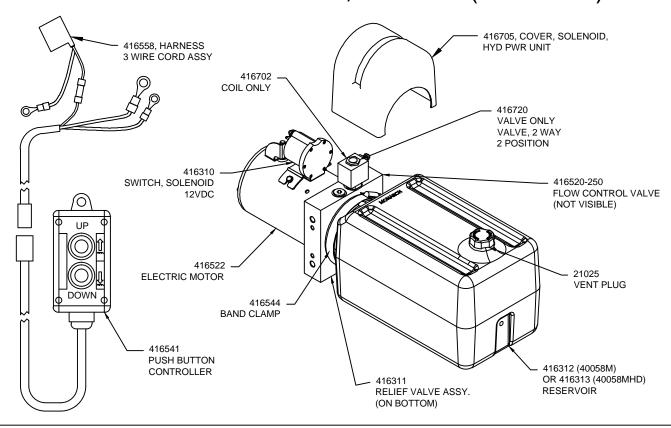
REPLACEMENT PARTS DWG REF. 628017

VC628 STANDARD HOIST VC628 HOIST W/ OPT. BODY PROP 628040-1 628040-2

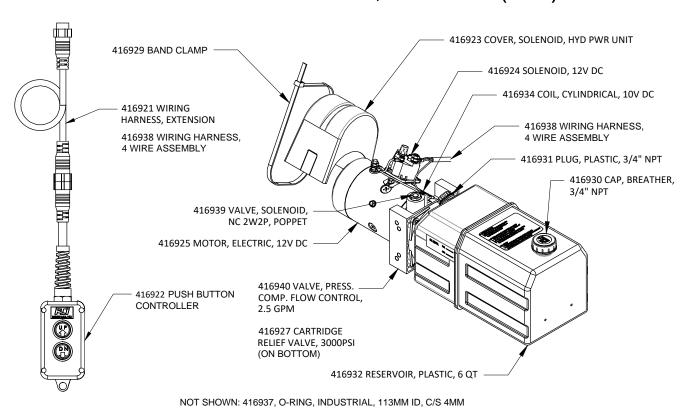


VC628	12-09-15F	628028
	SUPERSEDES	
RPLCMNT PARTS LIST	11-15-23G	H400
TITLE	DATE	SECTION

REPLACEMENT PARTS; 40058M (BUCHER)

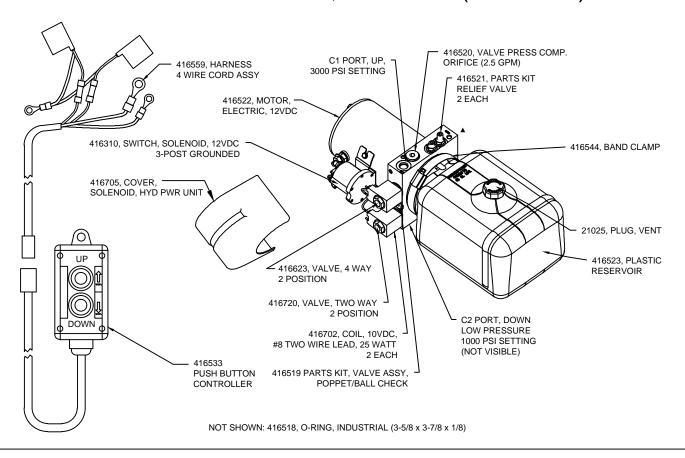


REPLACEMENT PARTS; 40058M (KTI)

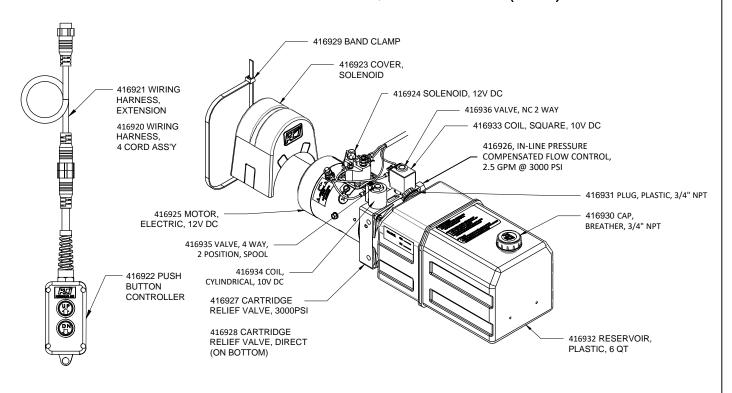




REPLACEMENT PARTS; 416081M (BUCHER)



REPLACEMENT PARTS; 416081M (KTI)



NOT SHOWN: 416937, O-RING, INDUSTRIAL, 113MM ID, C/S 4MM)



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

TITLE	DATE
REPLACEMENT PARTS	04-09-21K
	SUPERSEDES
416081M HYD. POWER UNIT	05-07-20J

SECTION H400

416508

CABLE & CONSOLE KITS; 620125 (CURVED) & 620124 (STRAIGHT) 620130 CABLE CONNECTOR KIT 620131 HANDLE, CURVED LEVER 620132 HANDLE, STRAIGHT LEVER CONTROL CABLE PUMP VALVE 620129 0 0 0 0 620126 CURVED HANDLE CABLE ASSEMBLY 620127 STRAIGHT HANDLE CABLE ASSEMBLY 416751 PTO CONTROLLER BRACKET DECAL - DIRECT MOUNT PUMP !HHCS03118250 HHCS 5/16-18 X 2-1/2" LG NYLON LOCK NUT 5/16-18 !LNUT-03118 620128

620245 SECTION H400 03-17-14A 10-29-15B SUPERSEDES DATE REPLACEMENT PARTS DWG & LIST PTO PUMP CABLE TITLE



VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO

USER NOTES			



HOISTS	SUPERSEDES	516919
USER NOTES (1)	09-17-15	-
TITLE	DATE	SECTION

USER NOTES			



HOISTS	SUPERSEDES	516919
USER NOTES (1)	09-17-15	-
TITLE	DATE	SECTION

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

Revised: January 2015 12-00073_VNC3-D