TABLE OF CONTENTS
VC 520 MANUAL

-P DECALS AND PACKAGE INCLUDES:

12524	CAUTION STAND CLEAR	2 PCS.
416052	CAUTION DECAL	2 PCS.
416084	SAFETY PROP DECAL	1 PC.
6066	PLASTIC BAG	1 PC.

READ THIS FIRST

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

1. HOIST MUST BE LEVEL
   SEE PAGE: 416086, 416272.

2. MUST HAVE 2” SPACE
   SEE PAGE: 416086.

3. SUFFICIENT OVERHANG
   SEE PAGE: 520069, 620010, 628020, 552010, 662052 OR 662851.

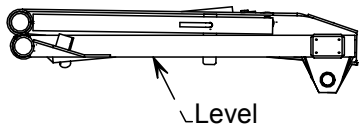
4. USE PUMP WHICH MEETS VENCO SPECIFICATION
   SEE PAGE: 416138.

IMPORTANT WARNING

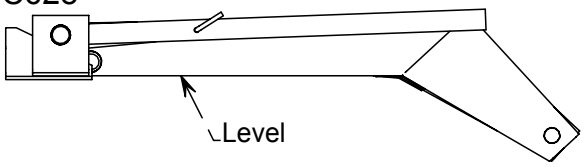
* All VENCO Conversion Hoists - VC416 thru VC6628 *

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

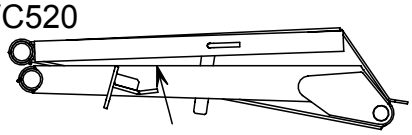
VC416 / VC516



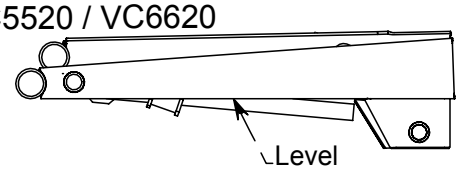
VC628



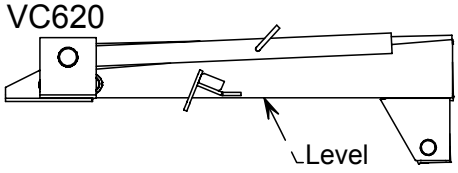
VC520



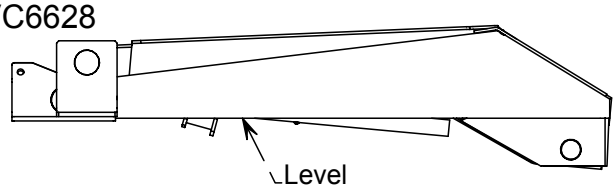
VC5520 / VC6620



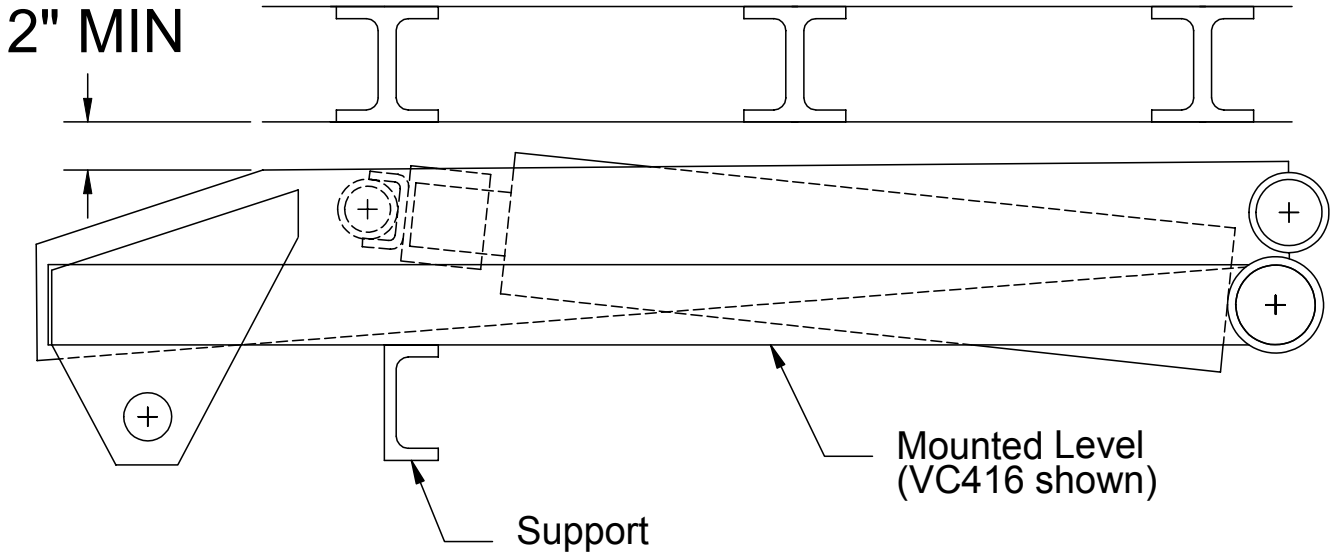
VC620



VC6628

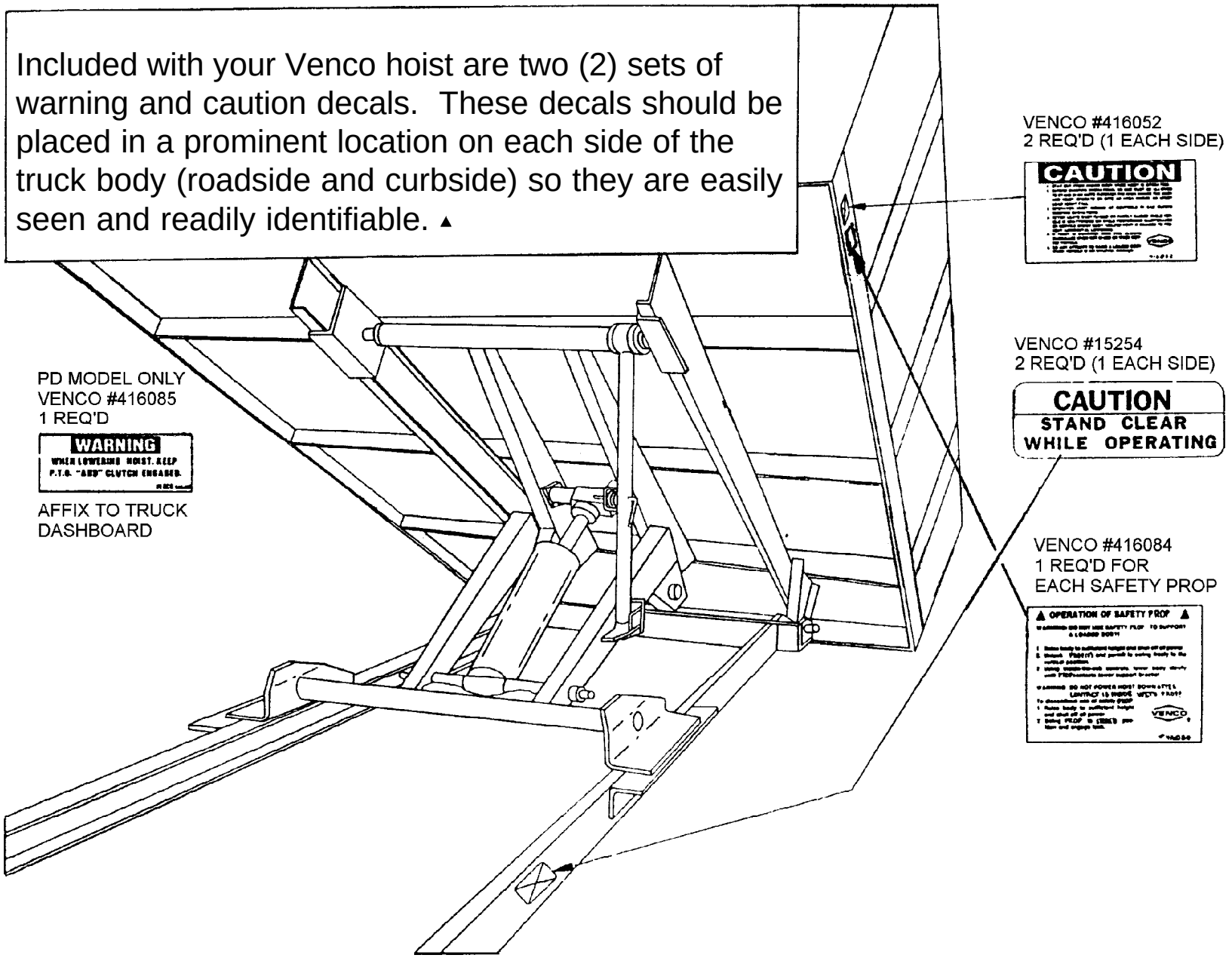


2 A minimum clearance of 2" is required between the hoist (upper arm) and the body cross members in order to prevent a mechanical lockout.



VENCO MANUFACTURING, INC.	TITLE IMPORTANT WARNING	DATE 11-7-02E	SECTION H150
	VENCO HOISTS	SUPERSEDES 8-28-97D	416086

Included with your Venco hoist are two (2) sets of warning and caution decals. These decals should be placed in a prominent location on each side of the truck body (roadside and curbside) so they are easily seen and readily identifiable. ▲



VENCO MANUFACTURING, INC.	TITLE	DATE	SECTION
	DECAL LOCATION	12-27-99B	H100
	VC 416/516, VC 520 - 6628	SUPERCEDES 7-13-98A	416128

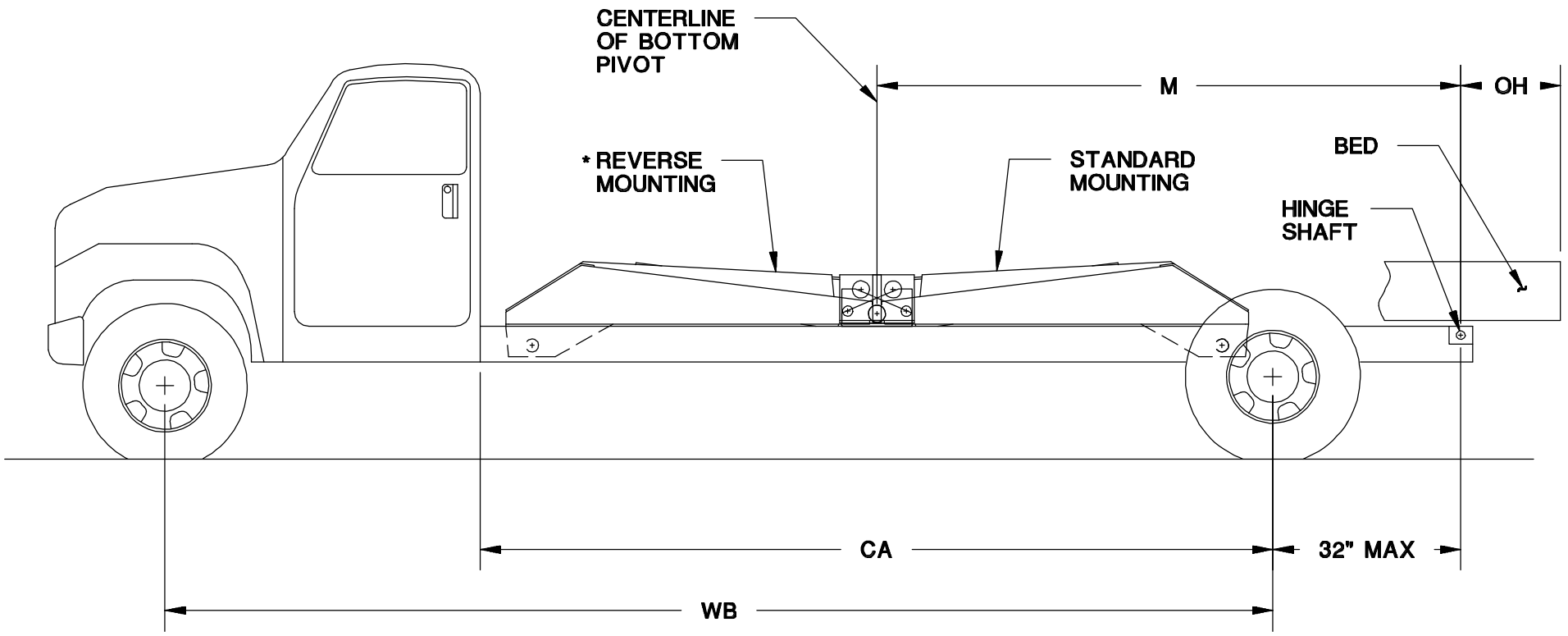
VENCO HOIST MODEL VC 520

CAPACITIES ARE BASED ON WATER LEVELS AND UNDIMINISHING 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: 40
CONVERSION CLASS: D
WEIGHT: 680 LBS
POWER SOURCE: PD - POWER TAKE OFF DOUBLE ACTING
ES - ELECTRIC SINGLE ACTING ▲
ED - ELECTRIC DOUBLE ACTING ▲
ADDITIONAL DATA:
SINGLE CYLINDER (5" BORE x 20" STROKE)
CA: 84"-138"▲
DUMP ANGLE: 40˚-50˚
MOUNTING HEIGHT REQ'D: 7.5"
LONG BEAMS: 6" (RECOMMENDED)

CONVERSION APPLICATIONS VC 520					
BODY	CA	REAR O.H.	40˚ (TON)	45˚ (TON)	50˚(TON)
12'	84"	31"	14.8	13.4	12.3
13'	84"	43"	17.3	15.7	14.4
13'	102"	25"	11.4	10.4	9.5
13'	108"	19"	10.3	9.3	8.6
14'	102"	37"	12.9	11.7 ▲	10.7
14'	108"	31"	11.4	10.4	9.5
14'	114"	25"	10.3	9.3	8.6
14'	120"	19"	9.3	8.5	7.8
14'	124"	15"	8.8	8.0	7.3
14'	126"	13"	8.5	7.8	7.1
15'	102"	49"	14.8	13.4	12.3
15'	108"	43"	12.9	11.7	10.8
15'	120"	31"	10.3	9.3	8.6
15'	124"	27"	9.6	8.7	8.0
15'	126"	25"	9.3	8.5	7.8
15'	138"	13"	7.3	7.1	6.6

DUMP APPLICATIONS VC 520					
BODY	CA	REAR O.H.	40˚ (TON)	45˚ (TON)	50˚ (TON)
8'	-	12"	-	-	14.0
9'	-	12"	-	-	12.0
10'	-	12"	-	-	10.5



VC 520 AND VC 620 HOISTS

STANDARD MOUNTING

DUMP ANGLE	M
40˚	103"
45˚	92"
50˚	84"

FIGURE 1.A

*REVERSE MOUNTING

DUMP ANGLE	M
40˚	101"
45˚	90"
50˚	82"

VENCO MANUFACTURING, INC.

TITLE	DATE	SECTION
MOUNTING DIMENSIONS	10-28-98	H100
VC 520 / VC 620 PD HOIST	SUPERSEDES 7-6-98	520071

HOIST MOUNTING INSTRUCTIONS

Refer to drawings 520071, 662053, or 628021 (on the preceding pages).

CAUTION

If the distance between the centers 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 34" behind the center of the rear axle on a single axle truck.

B. Cut a 90° slot in each side of the frame as shown in Figure 2.

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 installation drawing 662861 on the following page for information regarding the mounting of the rear hinge brackets to the body.

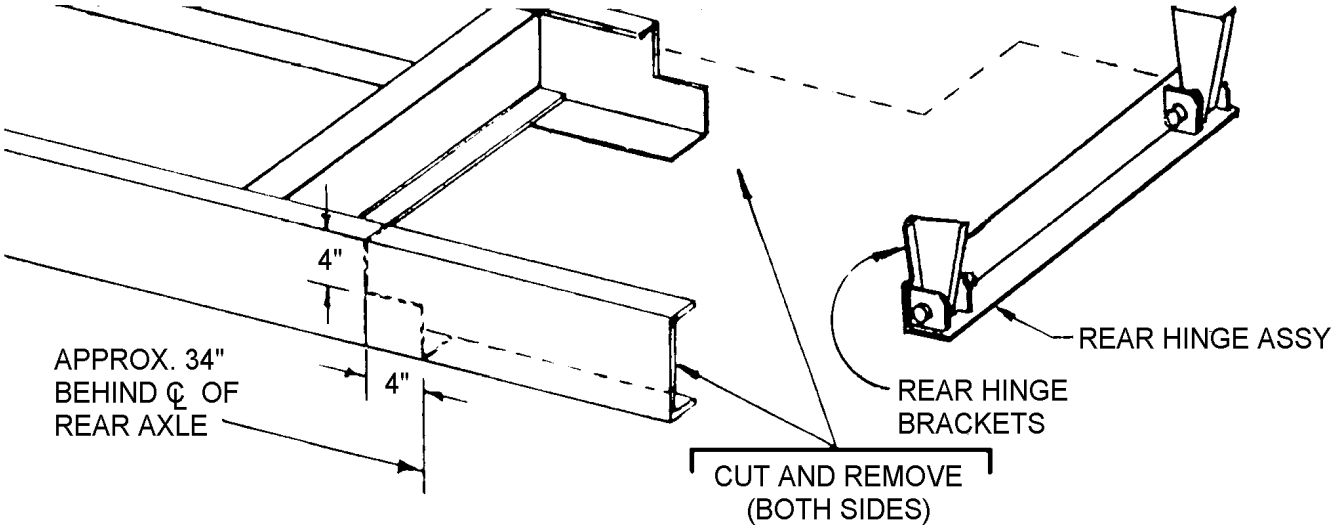
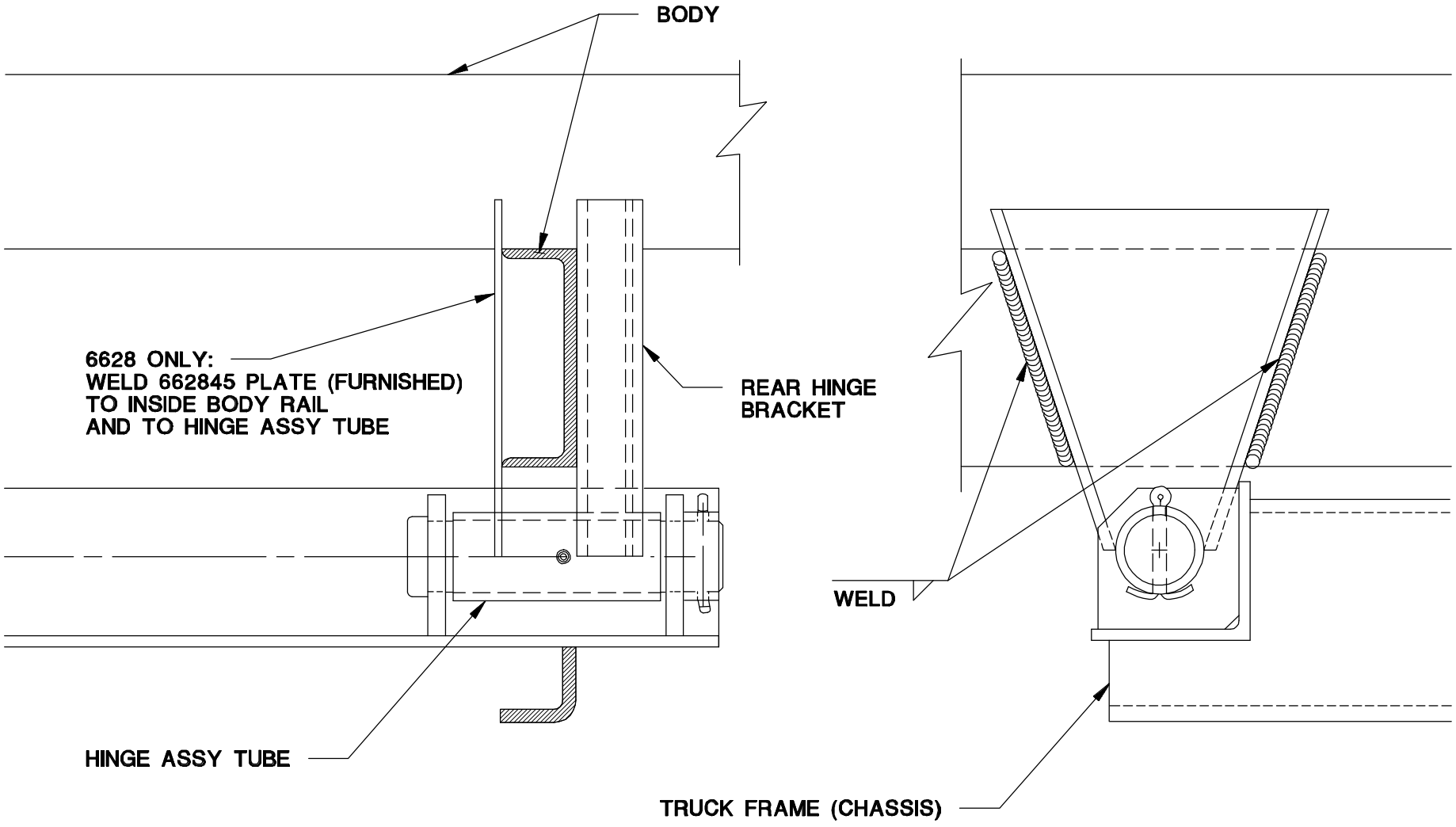


Figure 2 - Frame Modification and Rear Hinge Attachment

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 backward to avoid frame crossmembers. The distance between the rear hinge assembly center and the hoist center is referred to as the "M" dimension. The tables on drawings 520071, 662053, and 628021 provide the dump angles associated with various "M" dimensions.

Note: Moving the hoist along the truck frame will affect the hoist's performance. A forward movement decreases dump angle and increases capacity. A backward movement increases dump angle and decreases capacity.



VENCO MANUFACTURING, INC.	TITLE REAR HINGE TO BED MTG. INSTR.	DATE 10-23-97	SECTION H200
	VC 520 - VC 6628	SUPERSEDES -	662861

HOIST MOUNTING INSTRUCTIONS (Continued)

E. After the hoist is positioned, place the mounting angles (Figure 4) under each side of the hoist saddle and against the truck frame. Clamp securely in place. Drill though the frame (17/32") and install the mounting angle with three (3) 1/2" x 1-1/2" Grade 8 hex head cap screws, lock washers, and hex nuts (both sides).

NOTE: The hoist mounting bracket 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 hoist saddle.

Do not weld the hoist mounting bracket to the truck frame. This may void the truck warranty.

F. Weld each end of the hoist saddle to its mounting angle as shown in Figure 4. Note the welding symbols. Do not weld to the truck frame.

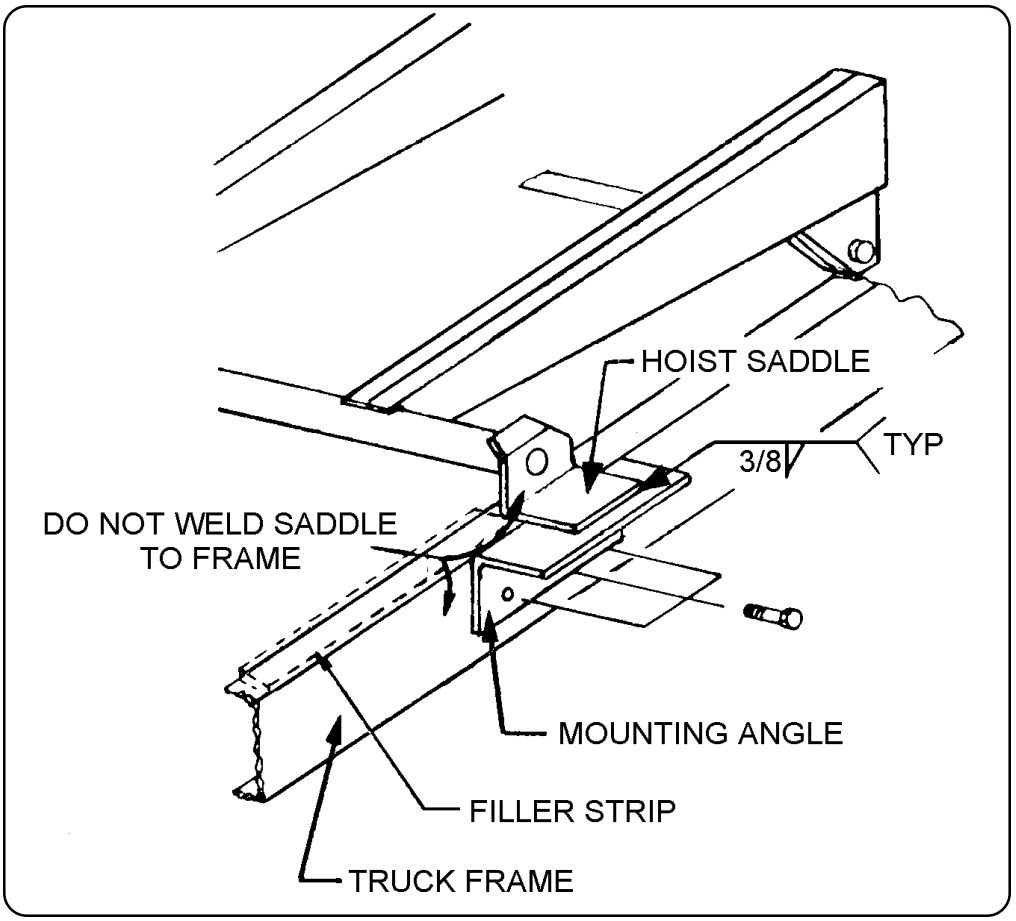


Figure 4 - Mounting Angle Assembly

HOIST MOUNTING INSTRUCTIONS (Continued)

G. Install the PTO pump per the following instructions and per the pump manufacturer's instructions.

1. See Figure 5. Position and bolt each pump bracket to the pump and secure with the 3/8 x 1-1/4" bolts and hex nuts (VC-520 requires only 2 pump brackets).

2. Position the pump assembly with brackets and securely clamp to the frame on the same side that the transmission mounted PTO shaft is located.

   Note: Position the pump brackets as high on the truck frame as possible when mounting the pump.

3. Two (2) 17/32" holes need to be drilled in the pump brackets and truck frame (Figure 5). Mark the hole locations as close to the truck frame flanges as possible. Drill 17/32" holes and install the 1/2" x 1-1/2" hex head cap screws with lockwashers and hex nuts.

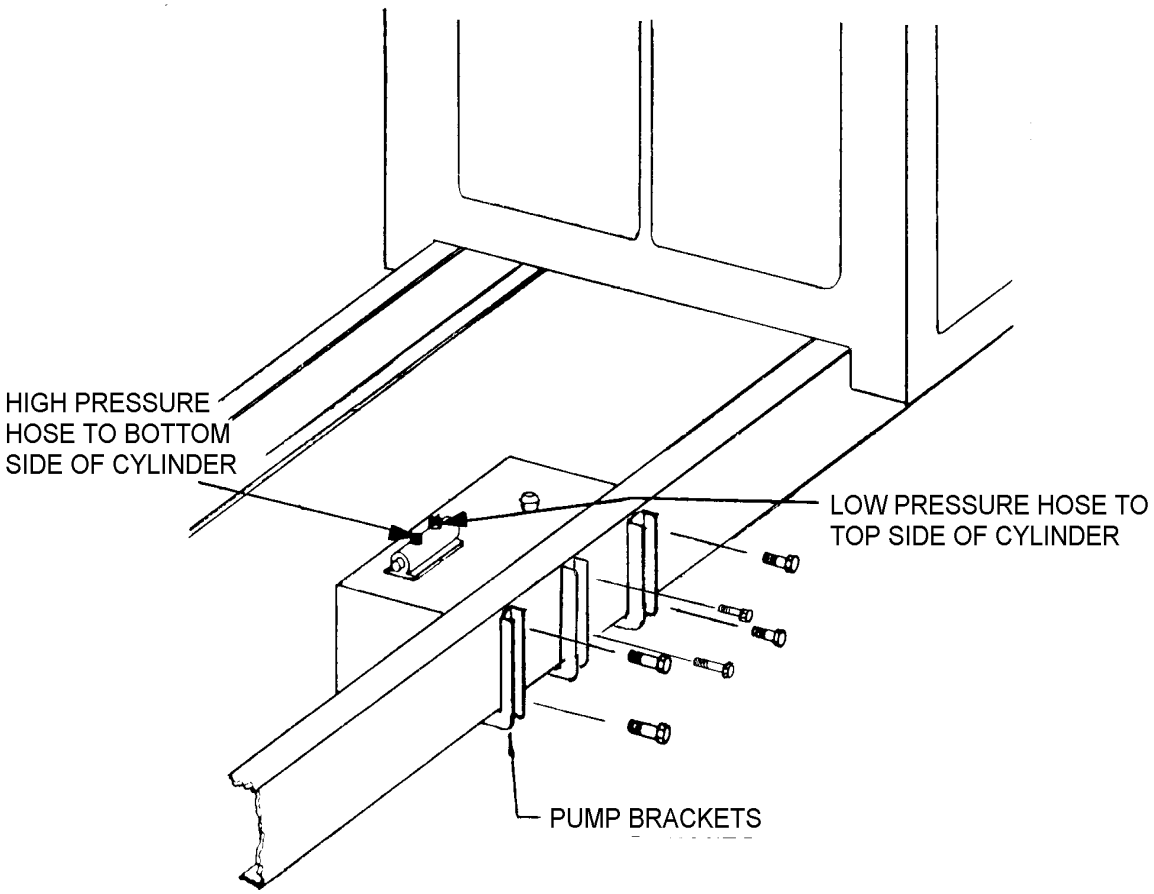


Figure 5 - Pump Installation

HOIST MOUNTING INSTRUCTIONS (Continued)

4. Install the truck PTO assembly using the manufacturer's instructions.
5. Determine the exact length "L" of the drive shaft (Figure 6). The drive shaft should be kept as short and level as possible.
6. Cut the 7/8" square drive shaft to the length that was determined in the previous steps.
7. The supplied U-joint (with the 1" round x 7/8" square slip yoke) fits on the pump drive shaft. The U-joint for the PTO is not furnished.
8. Trial fit each U-joint to the hex drive shaft and trial fit the drive shaft assembly to the pump and PTO. At this point, mark the set screw locations of the PTO U-joint on the square drive shaft. Disassemble the drive shaft assembly and countersink the drive shaft at the marked locations.
9. Assemble each U-joint to the hex drive shaft and install the drive shaft assembly. After installing, secure the PTO U-joint to the drive shaft using 3/8" x 5/8" drilled hex head set screw (furnished). Safety wire all (3) screws to insure that they do not loosen.
10. For additional pump and drive shaft mounting instructions, refer to the manufacturer's instructions included with the pump. Refer to Figures 6 and Dwg. 520078.

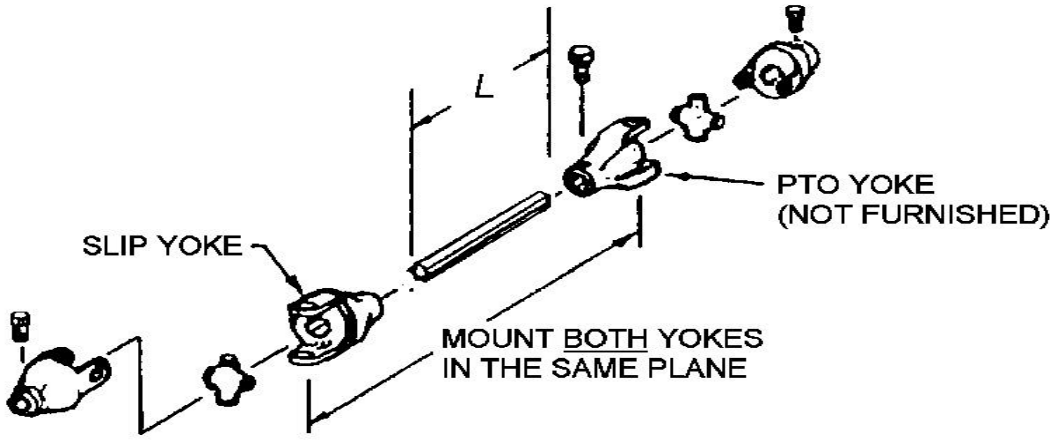


Figure 6 - Drive Shaft Assembly

H. 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 (Figure 5).
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 (Figure 5).

HOIST MOUNTING INSTRUCTIONS (Continued)

I. Position and secure the filler strips (liner or sleeper) to the truck frame (Figure 4).

The VC 520 and VC 620 require a minimum of 7-1/2" clearance above the truck frame.
The VC 628 requires a minimum of 8" clearance above the truck frame.
The VC 5520 and VC 6620 require a minimum of 8-1/2" clearance above the truck frame.
The VC 6628 requires a minimum of 10-1/2" clearance above the truck frame.

Example: Assuming that a 7-1/2" clearance is required and 5" long beams are on the truck body, a liner of at least 2-1/2" net will be required to obtain the minimum clearance required to mount the hoist.
5" + 2-1/2" = 7-1/2" min.

J. Position the body longitudinals (long beams) onto the truck frame.

Note: At least 2" are required for clearance between the cab and closest point on the truck body.

K. Place the rear hinge brackets in the vertical position (Figure 2). Weld and/or bolt the brackets to the longitudinals. If bolted, mark and drill each bracket four (4) places (17/32" holes) and secure the brackets to the longitudinals using eight (8) 1/2"-13 x 1-1/2" Grade 8 hex head cap screws, eight (8) 1/2" lockwashers, and eight (8) 1/2"-13 hex nuts.

L. **Refer to Drawing 520093 on the following page**. Make sure that the dump body longitudinals are resting flush on the top of the spacers (which are welded to 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, spacers, and reinforcement plates (if used). **Be sure that your installation follows the method shown on the following page - Drawing 520093**.

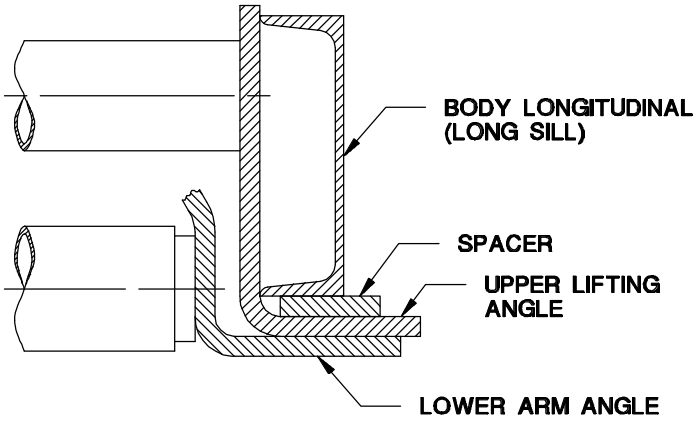
Note: Step "L" (above) is a critical installation procedure that must be carefully followed to ensure a successful hoist installation. Deviation from the suggested installation method may result in damage to the hoist.

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.

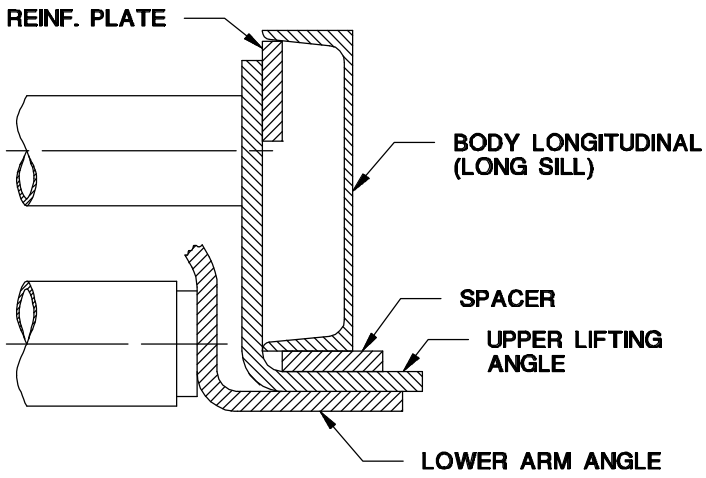
SITUATION A:

LIFTING ANGLE FULLY ENVELOPS BODY LONG SILL

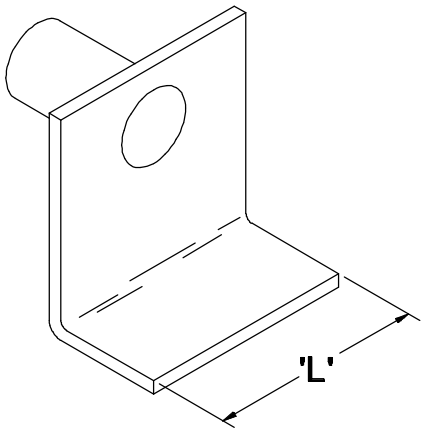


SITUATION B:

LIFTING ANGLE DOES NOT ENVELOP BODY LONG SILL AND A REINFORCEMENT PLATE IS REQUIRED

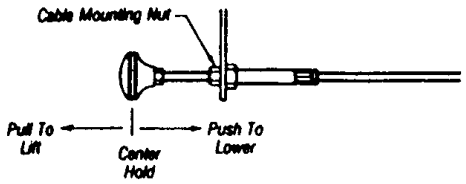


NOTE: THE SPACER AND REINFORCEMENT PLATE SHOULD BE THE SAME LENGTH AS THE LIFTING ARM. SEE 'L' DIMENSION BELOW.



VENCO MANUFACTURING, INC.	TITLE	DATE	SECTION
	INST. INSTRUCTIONS	5-20-98	H200
	VC-520 - VC-6628	SUPERSEDES -	520093

CORRECT CONTROL CABLE OPERATION



NOTE When installing cable control make sure lever moves full distance before knob hits cable mounting nut (When pushed in to lower hoist)

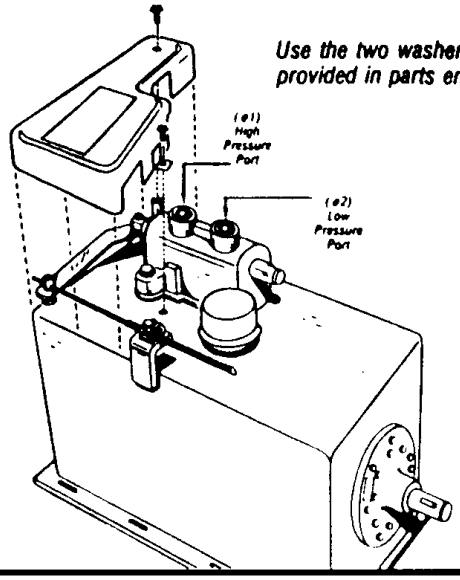
LEVER LOCATED TO THE REAR OF RESERVOIR ON THIS MODEL

HOIST CONTROL VALVE CONNECTIONS

The high pressure port *1* must be connected to the lifting end of the hoist cylinders in order for the pump to produce maximum lifting pressure.

The low pressure port *2* should be connected to the rod end of hoist cyl.

FOR DOUBLE ACTING HOIST
(Power Up — Hold — Power Down)
If hose connections are reversed hoist will not lift full loads.



Use the two washer head screws provided in parts envelope.

"VALVE LEVER GUARD MUST BE INSTALLED"

Operate Hoist Only From Cab

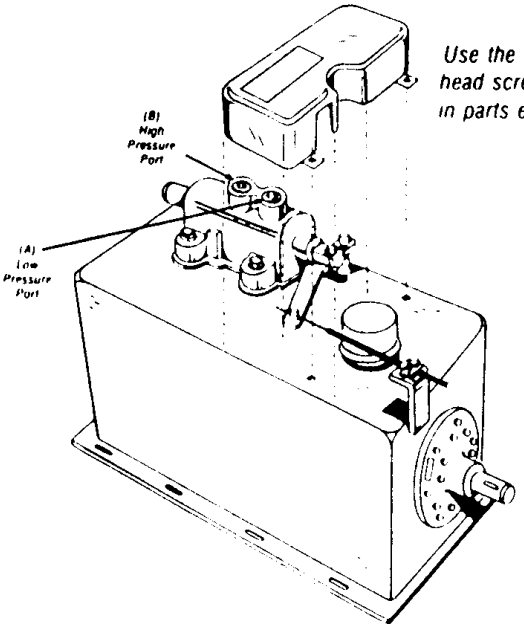
LEVER LOCATED TO THE FRONT OF RESERVOIR ON THIS MODEL

HOIST CONTROL VALVE CONNECTIONS

The high pressure port *B* must be connected to the lifting end of the hoist cylinders in order for the pump to produce maximum lifting pressures

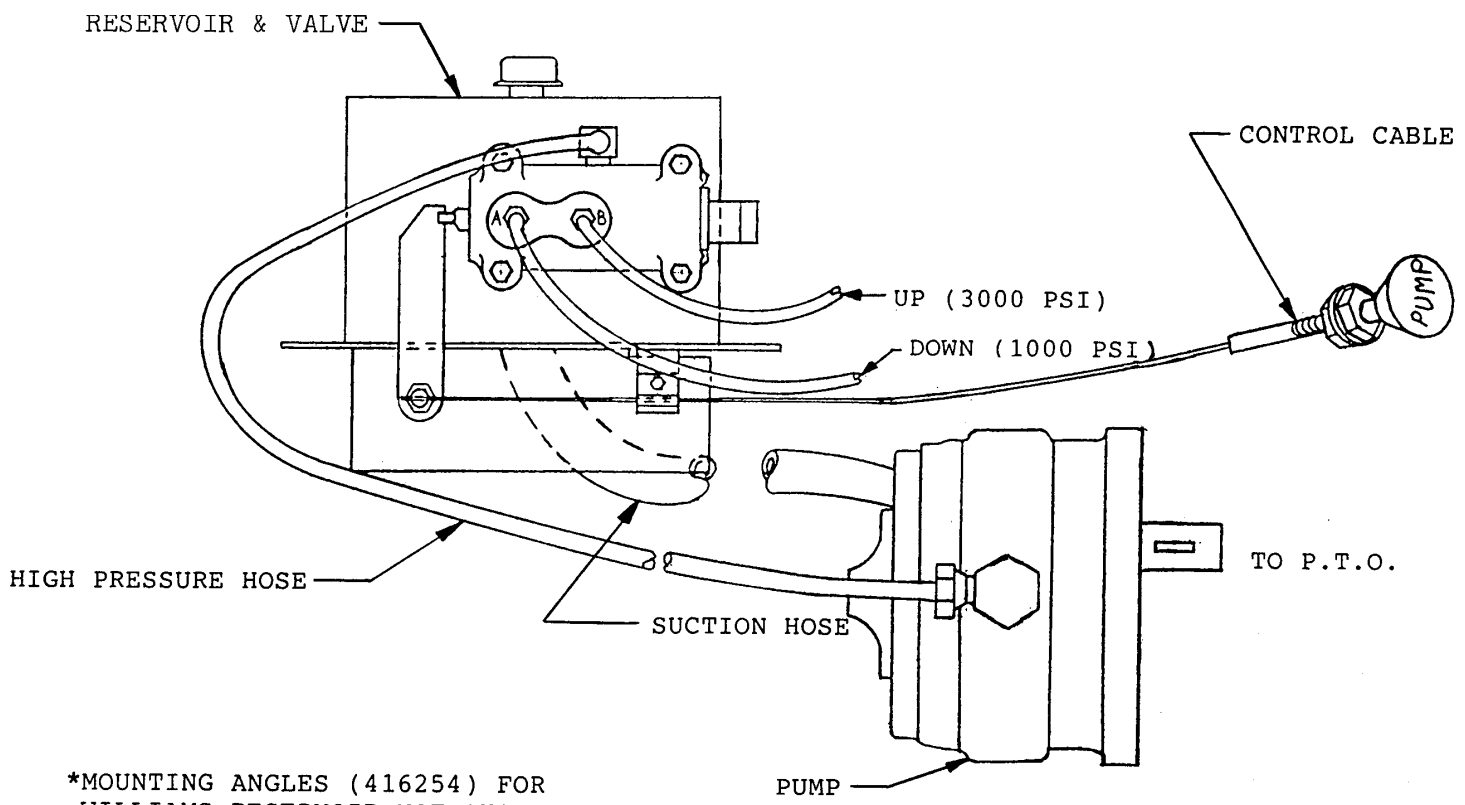
The low pressure port *A* should be connected to the rod end of hoist cyl.

FOR DOUBLE ACTING HOIST
(Power Up — Hold — Power Down)
If hose connections are reversed hoist will not lift full loads



Use the two washer head screws provided in parts envelope.

VENCO MANUFACTURING, INC.	TITLE PTO PUMP CABLE INST	DATE 7-13-98A	SECTION H200
	VC 520 - 6628	SUPERCEDES 3-15-90	520078



*MOUNTING ANGLES (416254) FOR WILLIAMS RESERVOIR NOT SHOWN

Model	VC416	VC516	VC520	VC620	VC628	VC5520	VC6620	VC6628
Control Cable	416041							
Up Hose	416044					(2) 416044		
Down Hose	416045				628041	(2) 416045		(2) 628041
High Pressure Hose	416045							
Suction Hose	416079				520088F			
Pump/Valve/Tank	620011				662077			
Pump (Only)	416277				520090			
Mounting/Spline Information	SAE "A" 2 BOLT MOUNTING FLANGE, 5/8"-9 SPLINE SHAFT, CCW ROTATION ▲				SAE "B" 2 BOLT MOUNTING FLANGE, 7/8"-13 SPLINE SHAFT, CCW ROTATION ▲			

VENCO MANUFACTURING, INC.

TITLE	DATE	SECTION
SPLIT PUMP	10-16-00E	H200
VC 416/516, VC 520 - 6628	SUPERCEDES 12-8-99D	416138

HOIST MAINTENANCE AND OPERATION INSTRUCTIONS

A. Hoist Unit Lubrication

1. PTO Driven Pump - Tighten and grease (with high quality commercial grade grease) the lube fittings located in the PTO drive shaft assembly.
2. Lubricate all grease fittings on the hoist unit.
3. Lubricate the rear hinge assembly.
4. 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.
5. 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.

WARNING

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.

CAUTION

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 knob out. This will cause the hoist to raise. Refer to Drawing 520078.
3. When the hoist 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.

   CAUTION

   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 knob in.

   NOTE

   The Venco Hoists 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.

   WARNING

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

BODY PROP USE AND WARNINGS

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.

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

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.

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

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 inspection 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.

   Note: For all dump bodies two (2) body props are required.

3. On models equipped with a spring-loaded release pin, use a suitable tool to pull out the release pin to release the body prop from the hoist frame. This will release the body prop allowing it to swing downward to a vertical position.

4. 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.

5. 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

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

INSTRUCTIONS FOR FILLING THE RESERVOIR OF ELECTRIC HYDRAULIC POWER UNITS

THE FOLLOWING HOIST MODELS ARE INCLUDED:
VP/VC-6(R), VC-416/516, VC-520 - ES & ED

MODEL NO.	RESERVOIR CAPACITY	TOTAL FLUID REQ'D
VP/VC-6(R) ED	2 QTS.	3.5 QTS
VC-416 ES/ED	4 QTS.	5.5 QTS
VC-516 ES/ED	4 QTS.	7.5 QTS
VC-520 ES/ED	4 QTS.	9.0 QTS.

PROCEDURE

STEP 1 - On 416, 516, 520 ES models only, do not attach rod end hose to the cylinder until after completing Steps 2 thru 6.

STEP 2 - Remove the reservoir breather. With the hoist in the down position, fill the reservoir with ISO viscosity ▲ grade 32 hydraulic oil (Tellus 32 or equivalent) - 3.5 qts. for 416, 516, 520 and 2 qts. for VP-6(R).

STEP3 - Raise the hoist halfway (22-25° dump angle, approx. 8" of cylinder stroke).

STEP 4 - Fill the reservoir with an additional 2 qts. for VP-6(R), 416, 516 and 3 qts. for 520.

STEP 5 - Raise the hoist completely.

STEP 6 - Refill the reservoir with the remaining fluid required.

STEP 7 - Attach hose to rod end of cylinder on the 416, 516, 520 ES models.

Example: VC-416 ES/ED Hoist

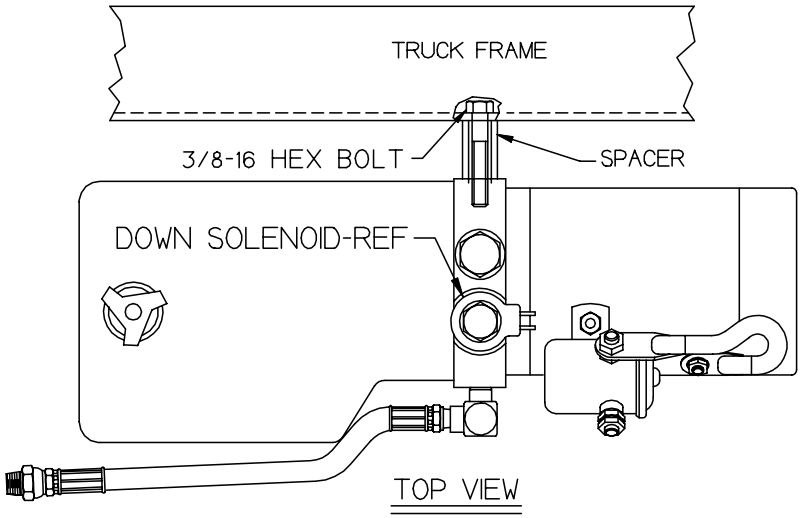
Step 2 - Add 3.5 qts.

▲ Step 4 - Add 2.0 qts.

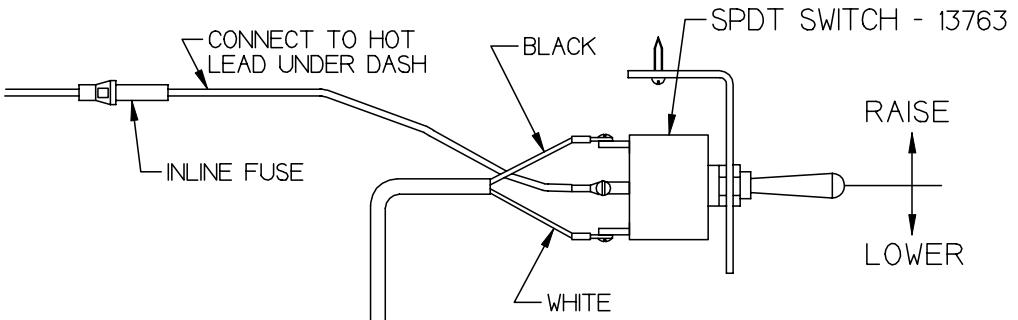
Step 6 - Add 0.0 qts. (none req'd)

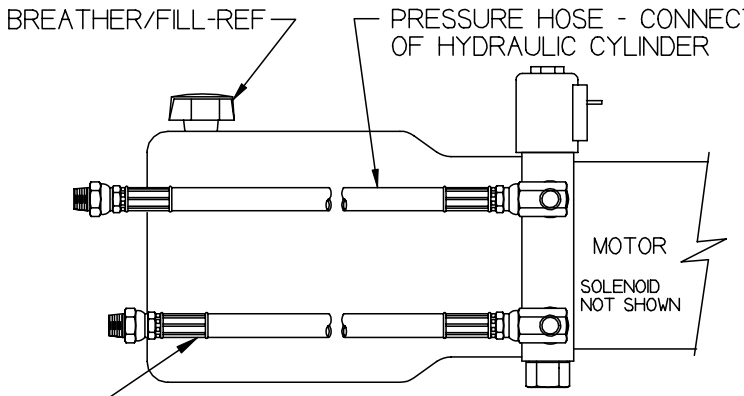
= 5.5 qts. total

* IF SPACERS ARE NOT USED USE 1" LG. BOLTS



TOP VIEW



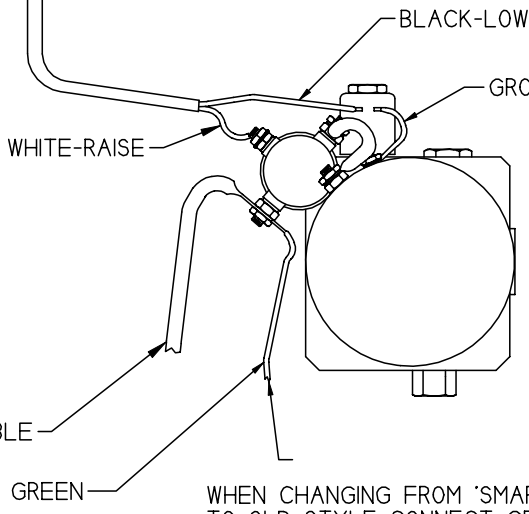


SIDE VIEW

SINGLE ACTING POWER UNIT
-POWER UP/GRAVITY DOWN

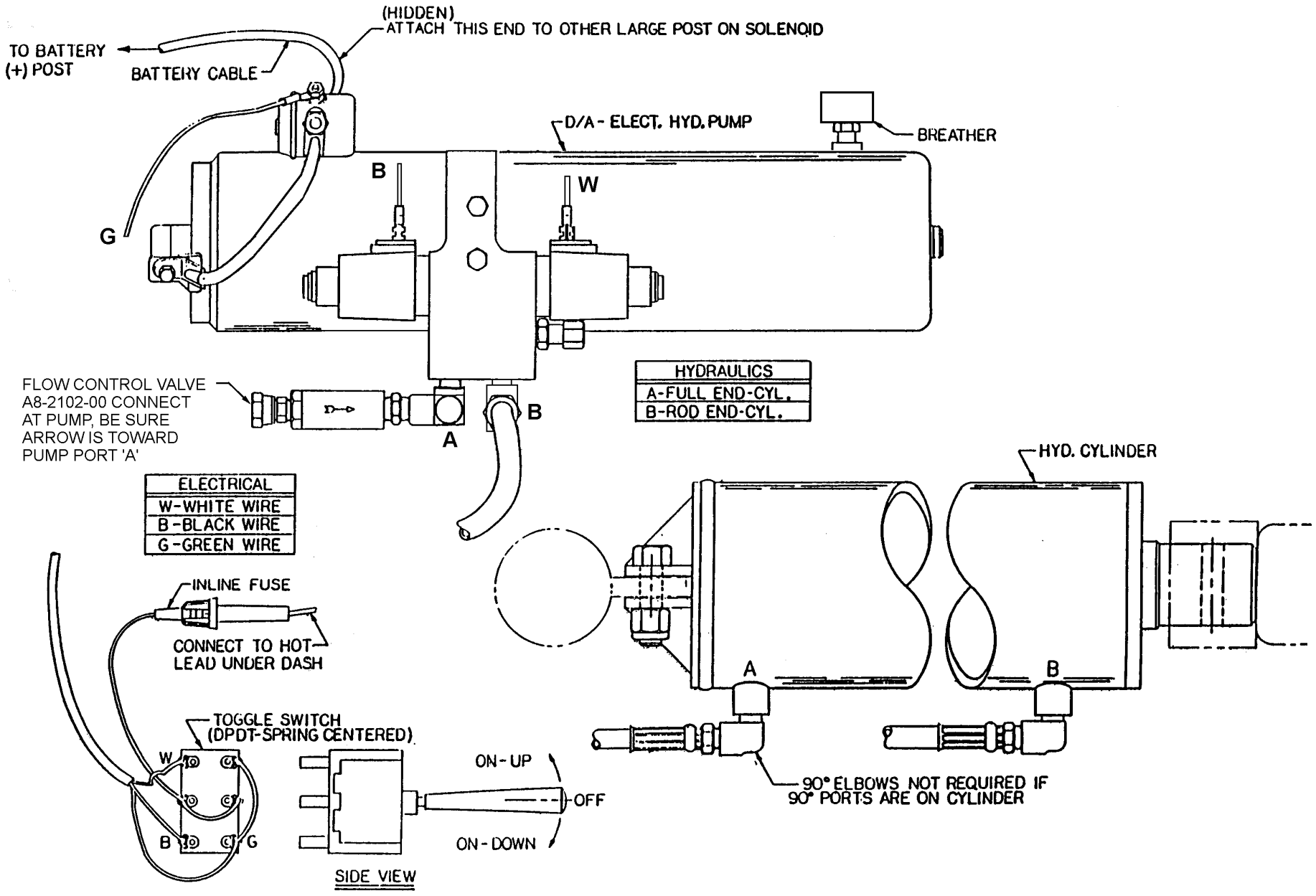
NOTE: BE SURE POWER UNIT HAS GROUND TO TRUCK FRAME.

SEE DRAWING 40058-2B FOR PARTS & HYDRAULIC SCHEMATIC.



WHEN CHANGING FROM 'SMART' SOLENOID TO OLD STYLE CONNECT GREEN WIRE HERE. CONNECT BLACK TO EITHER WIRE ON RELEASE SOLENOID AND GROUND THE OTHER WIRE.

VENCO MANUFACTURING, INC.	TITLE PLUMBING & WIRING DIAGRAM	DATE 7-18-00	SECTION H200
	FENNER ES POWER UNIT 40058-2B	SUPERSEDES 7-6-98	6133B

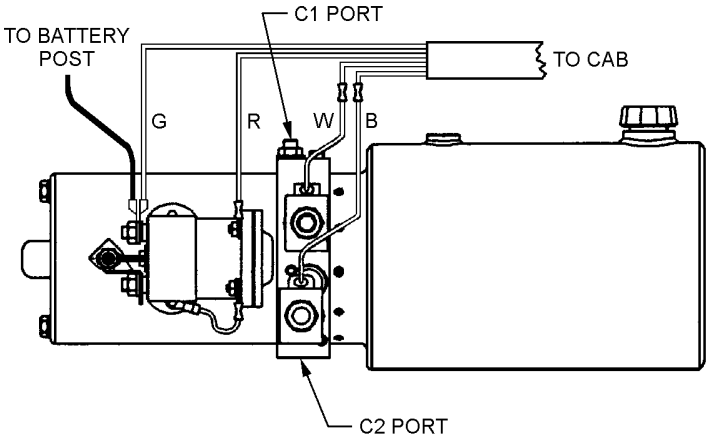


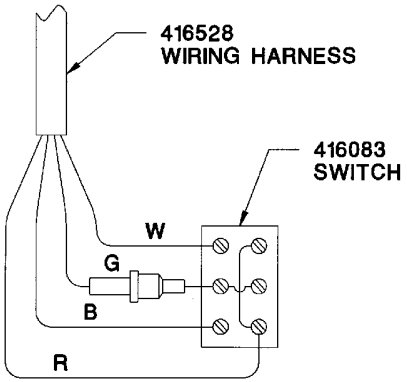
VENCO MANUFACTURING, INC.	TITLE: ED POWER UNIT DRAWING	DATE: 7-9-98C	SECTION: -
	VC416/516, VC520/620	SUPERCEDES: 8-13-86B	416080

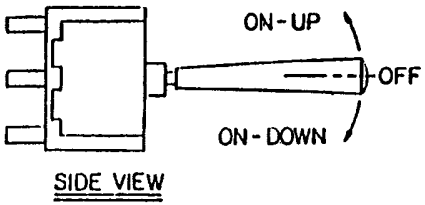
416081M

ELECTRICAL
W - WHITE WIRE
B - BLACK WIRE
G - GREEN WIRE
R - RED WIRE

HYDRAULICS
C1 - FULL END CYL
C2 - ROD END CYL

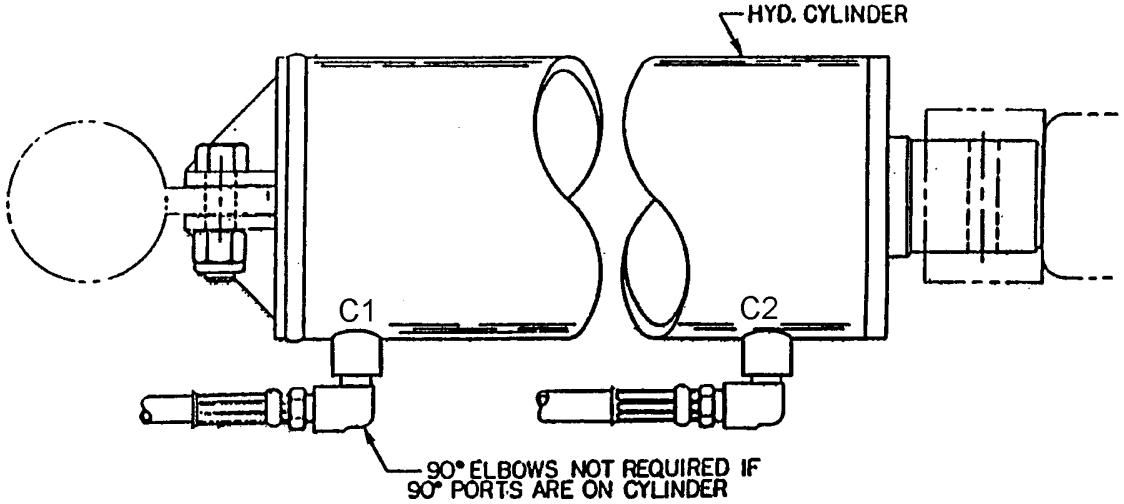






SIDE VIEW

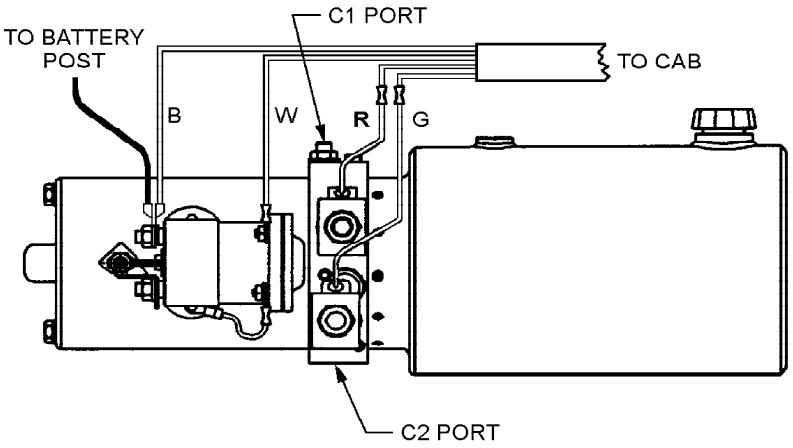
NOTE: ENERGIZING 'B' COIL SENDS FLOW TO 'C1' PORT
ENERGIZING 'W' COIL SENDS FLOW TO 'C2' PORT



VENCO MANUFACTURING, INC.

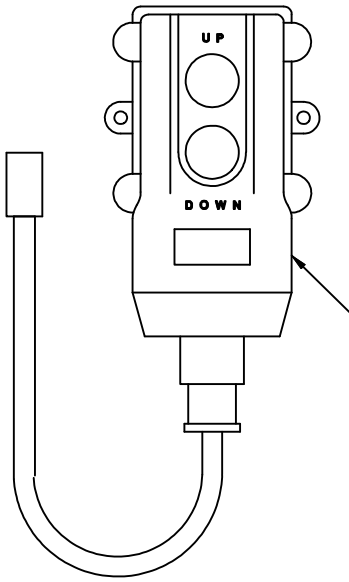
TITLE	DATE	SECTION
416081 ED POWER UNIT	2-15-99C	-
VC416/516, VC520/620	SUPERCEDES 12-10-98B	416306

416081M WITH MONARCH PUSH BUTTON CONTROL



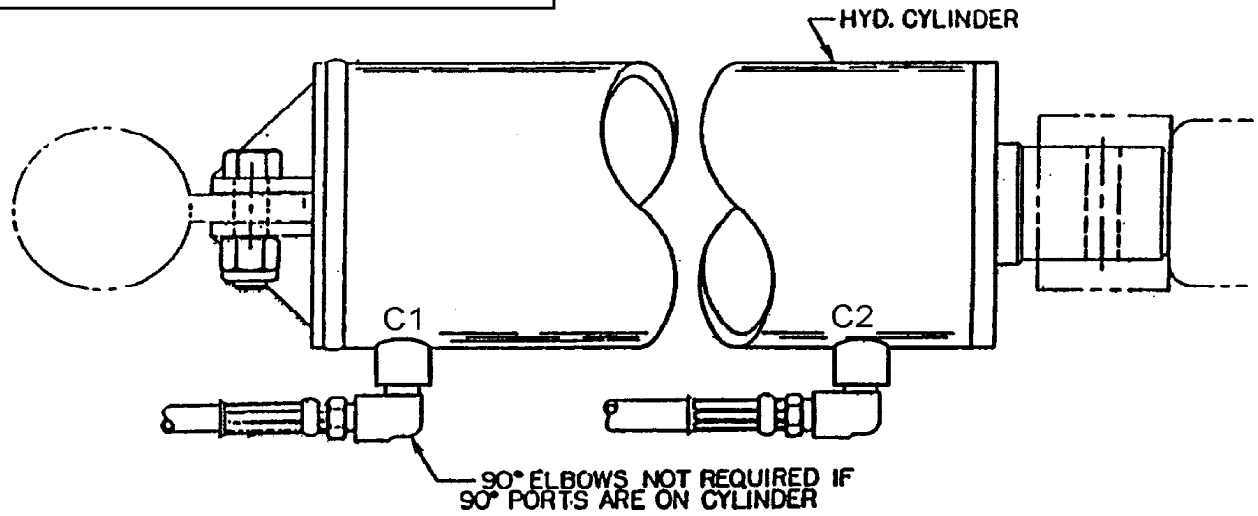
ELECTRICAL
W - WHITE WIRE
B - BLACK WIRE
G - GREEN WIRE
R - RED WIRE

HYDRAULICS
C1 - FULL END CYL
C2 - ROD END CYL



416533 MONARCH PUSH BUTTON CONTROL

NOTE: ENERGIZING 'G' COIL SENDS FLOW TO 'C1' PORT (HOIST UP)
ENERGIZING 'R' COIL SENDS FLOW TO 'C2' PORT (HOIST DOWN)



VENCO MANUFACTURING, INC.

TITLE	DATE	SECTION
416081M ED POWER UNIT	9-21-99D	-
VC416/516, VC520/620	SUPERCEDES 2-15-99C	416307

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 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.

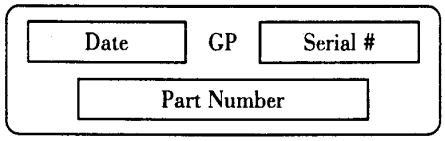
Example: GP1538 CCW. The CCW indicates a counter-clockwise rotation.

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).

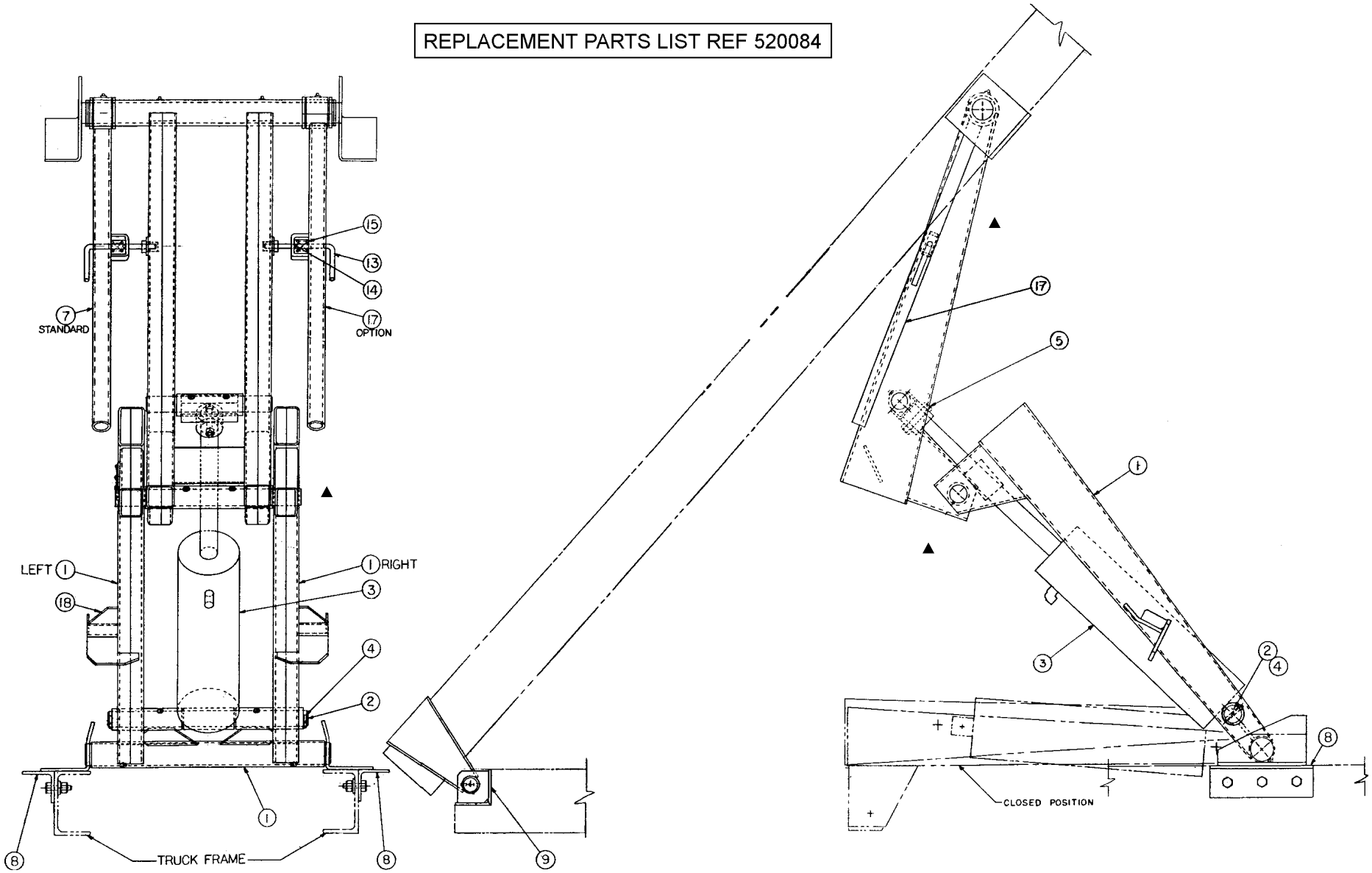
Example: 1830201. The last number is 1 (an odd number). This indicates a counter-clockwise rotation (CCW).



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 port 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

REPLACEMENT PARTS LIST REF 520084



VENCO MANUFACTURING, INC.	TITLE **REPLACEMENT PARTS**	DATE **3-28-01G**	SECTION **H400**
	VC 520/620	SUPERCEDES **8-4-00F**	**520064**

VC 520 / VC 620
REPLACEMENT PARTS LIST

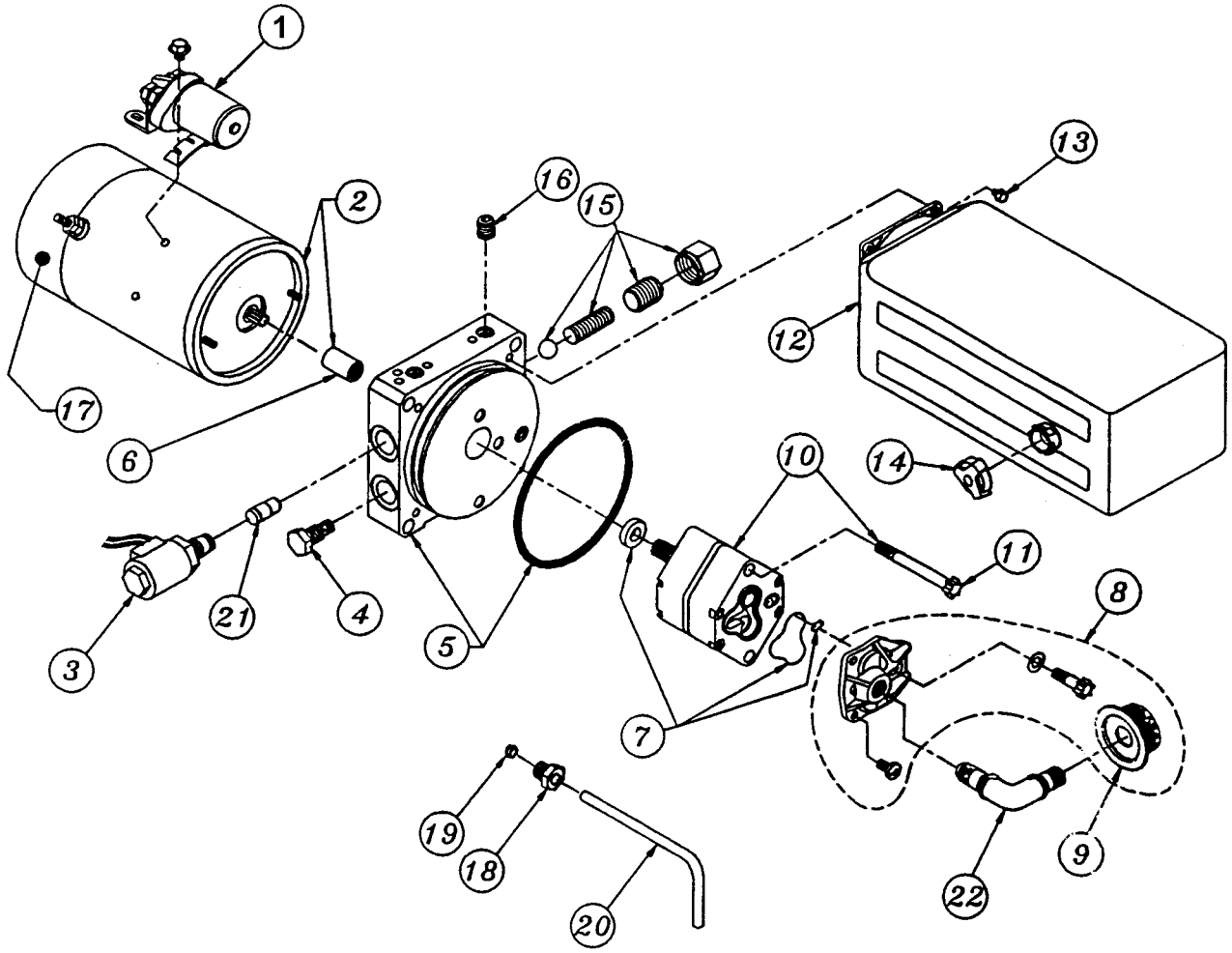
ITEM	QTY	VC 520	VC 620	DESCRIPTION
1	1	520003	520003	SCISSORS ASSEMBLY
2	1	520014	520014	LOWER CYLINDER PIVOT SHAFT
3	1	520004	620004	HYDRAULIC CYLINDER
4	2	416010	416010	COTTER PIN - 1/4" x 3"
5	1	416545 ▲	416545 ▲	5/8 X 3-1/2 CLEVIS W/ H.P. COTTER ▲
6	- ▲	- ▲	- ▲	- ▲
7	1	520009	520009	BODY PROP
8	2	520063	520063	MOUNTING ANGLE
9	1	662057	662057	REAR HINGE ASSEMBLY
10	-	-	-	-
11	-	-	-	-
12	-	-	-	-
13	1	416068-2	416068-2	LOCKING PIN
14	1	20-00022	20-00022	ROLL PIN - 5/32" DIA x 1" LONG
15	1	00170	00170	SPRING
*16	1	520006	620006	P.T.O. DOUBLE-ACTING HYDRAULIC PUMP
17	1	520009	520009	OPTIONAL BODY PROP
18	1	-	-	BODY PROP KEEPER
*19	1	520065	520065	HYDRAULIC HOSE - 3/8" x 5 FT.
*20	1	520067	520067	HYDRAULIC HOSE - 3/8" x 7 FT.
21		-		-
22		-		-
23		-		-
24		-		-
25		-		-
26		-		-
27		-		-
28		-		-
29		-		-
30		-		-
31		-		-
32		-		-
33		-		-
34		-		-
35		-		-

*ITEM NOT SHOWN ON DRAWING

REPLACEMENT PARTS DWG REF 520064

NOTE: PIN FOR MULTI-PIECE HINGE IS 520028

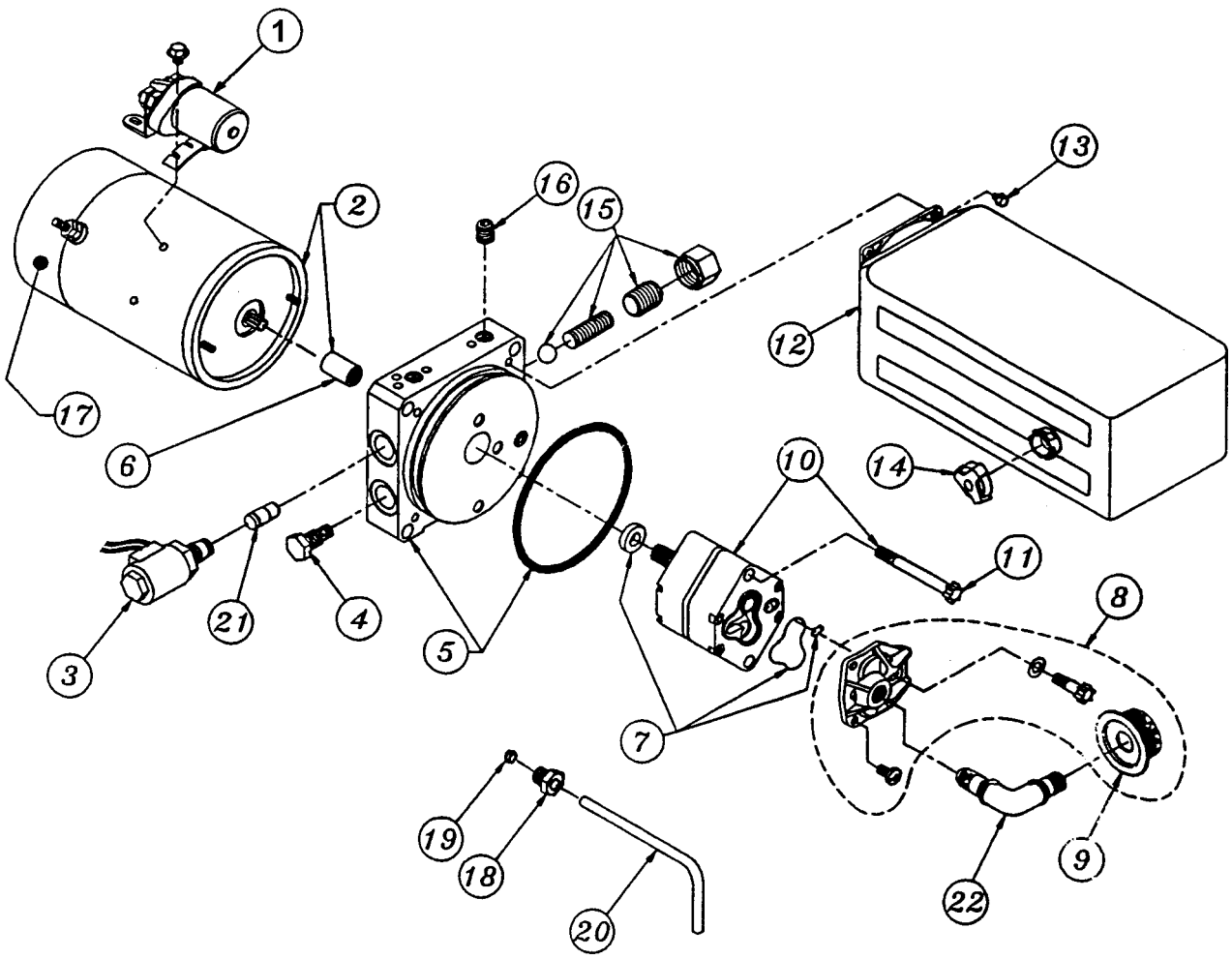
40058-2 SINGLE-ACTING HYDRAULIC POWER UNIT
SERVICE PARTS LIST



ITEM NO.	DESCRIPTION	FENNER P/N	QTY.
1	SOLENOID 12 VDC	4795-AA ▲	1
2	MOTOR 12 VDC	1787-AC	1
3	VALVE NC 12 VDC	EI-1019-04	1
4	VALVE CARTRIDGE CHECK	2507-AA	1
5	RESERVOIR O-RING	G1-1073-48	1
6	COUPLING	1118-AA	1
7	PUMP O-RING KIT	K-40	1
8	INLET PLUMBING KIT	KH	1
9	FILTER	1611-AA	1
10	PUMP ASSEMBLY	PS-2.0	1
11	PUMP MOUNTING BOLT	2825-AA	2

ITEM NO.	DESCRIPTION	FENNER P/N	QTY.
12	RESERVOIR	3856-AC	1
13	RESERVOIR SCREW	3346-AA	4
14	BREATHER	8060-CC	1
15	ADJ. RELIEF VALVE ASSY	RV-2	1
16	PLUG	1456-AA	1
17	MOTOR BRUSH KIT	K-90	1
18	COMPRESSION NUT	816-217	1
19	TUBE SLEEVE	816-218	1
20	RETURN TUBE	T2-1006-28	1
21	FLOW CONTROL	FC-2.5	1
22	INLET ELBOW ASSEMBLY	S7-4000-09	1

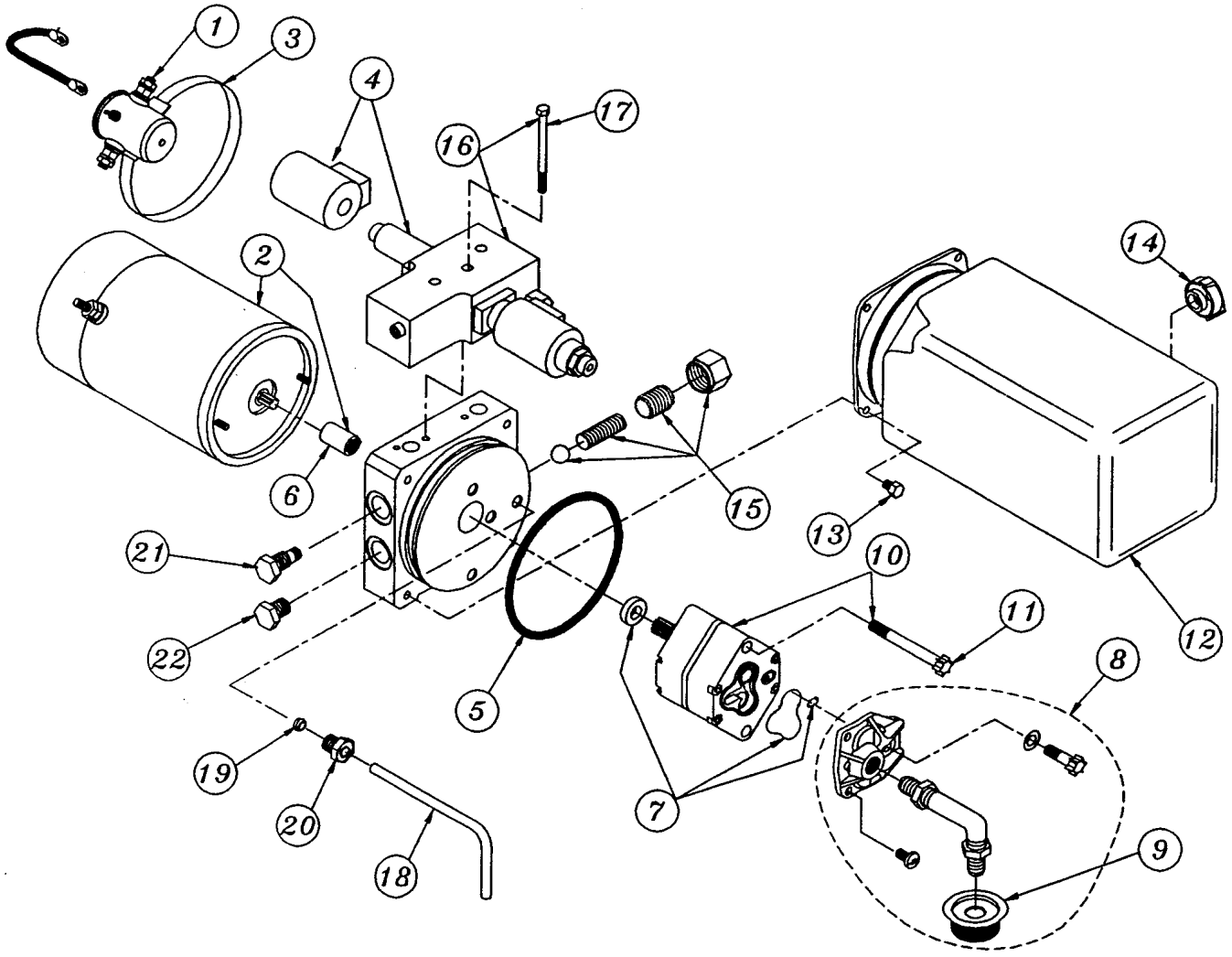
40058-HD SINGLE-ACTING HYDRAULIC POWER UNIT
SERVICE PARTS LIST



ITEM NO.	DESCRIPTION	FENNER P/N	QTY.
1	SOLENOID 12 VDC	2145-AA	1
2	MOTOR 12 VDC, EXT. DUTY	1789-AC	1
3	VALVE NC 12 VDC	EI-1019-04	1
4	VALVE CARTRIDGE CHECK	2507-AA	1
5	RESERVOIR O-RING	G1-1073-48	1
6	COUPLING	1118-AA	1
7	PUMP O-RING KIT	K-40	1
8	INLET PLUMBING KIT	KH	1
9	FILTER	1611-AA	1
10	PUMP ASSEMBLY	PS-2.0	1
11	PUMP MOUNTING BOLT	2825-AA	2

ITEM NO.	DESCRIPTION	FENNER P/N	QTY.
12	RESERVOIR	4454-AC	1
13	RESERVOIR SCREW	3346-AA	4
14	BREATHER	8060-CC	1
15	ADJ. RELIEF VALVE ASSY	RV-2	1
16	PLUG	1456-AA	1
17	MOTOR BRUSH KIT	K-90	1
18	COMPRESSION NUT	816-217	1
19	TUBE SLEEVE	816-218	1
20	RETURN TUBE	T2-1006-28	1
21	FLOW CONTROL	FC-2.5	1
22	INLET ELBOW ASSEMBLY	S7-4000-09	1

416081 DOUBLE-ACTING HYDRAULIC POWER UNIT
SERVICE PARTS LIST



ITEM NO.	DESCRIPTION	FENNER P/N	QTY.
1	SOLENOID 12 VDC	2145-AA	1
* 2	MOTOR 12vDC 1T STD DUTY	1787-AC	1
3	SOLENOID BAND KIT	K-105	1
4	12v VALVE	E1-4005-12	1
5	RESERVOIR O-RING	G1-1073-48	1
6	COUPLING	1118-AA	1
7	PUMP O-RING KIT	K-40	1
8	INLET PLUMBING KIT	KH	1
9	FILTER	1611-AA	1
10	PUMP ASSEMBLY	PS-2.0	1
11	PUMP MOUNTING BOLT	1112-AA	2

ITEM NO.	DESCRIPTION	FENNER P/N	QTY.
12	RESERVOIR	3854-AC	1
13	RESERVOIR SCREW	3346-AA	4
14	BREATHER	8060-CC	1
15	ADJ. RELIEF VALVE ASSY	RV-2	1
16	U-VALVE 4W3P CCCP 12v N2	U8-3710-02	1
17	BOLT 1/4-20x 4.50 HEX GR5	F1-1032-38	2
18	DRAIN TUBE	3870-AA	1
19	TUBE SLEEVE	816-218	1
20	TUBE NUT	816-217	1
21	VALVE PLUG 2-WAY	2780-BA	1
22	PLUG 3/4 SAE	1441-AA	1

*1789 (HEAVY DUTY) REPLACES 1787-AC (STANDARD) ON VC620ED HOIST

VENCO®

VENTURO

TRUCK MOUNTED CRANES

LIFTGATES AND HOISTS

WARRANTY POLICY

For one year from date of original purchase, we will replace or repair free of charge all Venco/Venturo parts returned to our factory prepaid and found upon inspection by us to be faulty due to defects in materials or workmanship. We shall not be liable for any contingent liabilities arising out of the improper function of any parts. We make no warranty with respect to parts not of our manufacture, but we will carry out the terms of the warranties of their respective manufacturers. One year warranty on hydraulic cylinders including labor.

WARNING - It is the responsibility of the installer to not only insure that the installation is completed according to the manufacturer's recommendations, but to insure that the ultimate user understands how to operate in a safe manner and the need for regular service and maintenance by an authorized Venco/Venturo Distributor. No modifications or alterations may be made to any Venco/Venturo equipment without the expressed written consent of the manufacturer. Reinstallation of any Venco/Venturo product must be done by an authorized Venco/Venturo Distributor to the standards of the industry, including the maintenance and service and the affixing of all instructional, safety and warning labels. Users should again 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.

WARRANTY CLAIMS

Venco/Venturo 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 or part, your Venco/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, Venco/Venturo requires the model and serial number. Only authorized Venco/Venturo Distributors can perform warranty. For the name and address of your local Venco/Venturo Distributor call the **Warranty Claims Department - 513-772-8448.**

VENCO / VENTURO
12110 BEST PLACE - CINCINNATI, OHIO 45241
(513) 772-8448