



VENCO®

HOISTS

VP/VC-6S

INSTALLATION & OWNER'S MANUAL

Sold and Serviced by:

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VP-6S HOIST SPECIFICATIONS OVERVIEW

- VP-6S - Designed for '99 and newer Chevrolet Silverado and GMC Sierra pickup truck frame using pickup box.
- VC-6S - Designed for '99 and newer Chevrolet Silverado and GMC Sierra pickup truck frame using contractor box.

Hydraulic Power Unit Options

- ES - Electric (12VDC) single-acting hydraulic power unit (power up and gravity down)
- ED - Electric (12VDC) double acting hydraulic power unit (power up and power down)

NOTE: For optional longitudinal body supports - add 30 lbs.
Recommended if payload is in excess of 1000 lbs.

Some trucks may require overload / helper springs to keep hoist from being too low.

Specifications:

- Weight (installed) 345 lbs. (ES / ED)
- Cylinder 3" dia., 17 $\frac{3}{8}$ " stroke
- Operating Pressure 2800 psi "up" (ES / ED) and 650 psi "down" (ED only)
- Capacity:
- VP-6S 6000 lbs. (suggested maximum capacity for pickup box)
- VC-6S Refer to chart

PLATFORM AND DUMP APPLICATIONS

LENGTH	CA	OVERHANG	CAPACITY AT 40
7'	56"	0"	3.43 TONS
8'	56"	10"	3.79 TONS
9'	56"	22"	4.50 TONS

- Cab to axle dimensions may differ resulting in a change in capacities shown.
- Capacities include weight of body which must be deducted to determine payload.

Caution - Weight of chasis combined with weight of body, hoist, and payload cannot exceed GVWR or GAWR of truck.

IMPORTANT: To avoid costly delays in installation and improper operation, read and understand this manual before proceeding. Any questions call 1-800-226-2238.

WARNING: Whenever work or maintenance is performed on a truck under a raised body, always remember to prop the body up with the optional safety prop (6495) or another safe method to avoid injury should the body inadvertently fall.

WARNING: To prevent damage to the truck's electrical system, disconnect the positive battery cable and alternator when arc welding on the truck.



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VP-6S INSTALLATION INSTRUCTIONS

Thank you for choosing the Venco VP-6S hoist. It has been specially engineered to fit the 1999 (and newer) Chevrolet Silverado and GMC Sierra Pickups. The installation is essentially bolt-on and requires no special tools or welding equipment.

We encourage your feedback on how we can make the product easier to install and how to make this manual more useful and easier to understand.

The installation of the VP-6S is broken up into two sections. The first section covers the installation of components which mount on the truck bed (pickup box) and the second section covers the components which mount directly to the truck.

PICKUP BOX (TRUCK BED) COMPONENTS INSTALLATION

1. Box Removal

- a. Remove pickup bumper. Save all hardware which will be used when reinstalling the pickup bumper onto the bumper brackets.
- b. Disconnect gas filler neck from the gas cap assembly and seal the neck to prevent the escape of gas vapor. Be sure to attach a ground strap from top of gas filler neck to existing gas tank ground. Cover gas tank(s) and filler neck(s) with a nonflammable material before proceeding.
- c. Remove six bed bolts from pickup box and set it, cab side down, in an upright position (or turn the disconnected truck bed on its back, so it is upside down). Save the bed bolts for use later in the installation..

2. Longitudinals and Upper Nest Installation

- a. For easiest installation, install the hoist components in the following order.
- b. Install the four extruded u-nuts (#6468 - Longitudal Hardware Kit #6459) onto the truck bed. See Figures 1 and 2 for more detail.



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Fig 1 - U-nuts



Fig 2 - U-nut Installation

- c. Begin with the driver's side Longitudinal Reinforcement component (#6444). Be sure that the triangular gusset is at the back of the box, facing in-board. Place the longitudinal on top of the truck bed. See Figure 3.



Fig 3 - Longitudinal Installation



Fig 3.5 - Longitudinal Installation

- d. Install two of the 3/8-16 x 1-1/4 hex head cap screws from the Longitudinal Hardware Kit (#6459) into the extruded u-nut holes. These fasteners should remain hand tightened for the time being.
- e. Install the Upper Nest assembly (#6454). Figure 4 illustrates the proper orientation of the Upper Nest. Notice the wide C-Channel in the nest is facing the back of the truck bed.



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- f. The Upper Nest should slide into place under the first longitudinal installed. The Upper Nest has a pair of holes on either side which need to be aligned with the corresponding set of holes in the longitudinal. The Upper Nest rests on the truck bed and by design can be adjusted before it is fastened in place. See Figure 5 for more detail. ▲



Fig 4 - Upper Nest



Fig 5 - Pickup Box Holes

- g. Insert another two of the 3/8-16 x 1-1/4 hex head cap screws from the Longitudinal Hardware Kit (#6459) to connect the upper nest with the longitudinal on the truck bed. These fasteners each get two flat washers, one on the longitudinal and one on the inside of the Upper Nest. These fasteners should be kept loose until all of the fasteners of the upper nest are connected in a later step.
- h. Connect the Upper Nest with the truck bed using the Upper Nest Hardware Kit (#6458). A small washer is used on the Upper Nest side, while the large washer and small washer are used on the truck bed side. See Figure 6 for the washer sequencing. These fasteners are also kept loose to facilitate the final joining of the hoist parts.
- i. The wireframe image in figure 5a, shows the parts oriented if the pickup box were back on the truck and the hoist opened approximately 45 degrees, looking towards the back from the passenger side. ▲

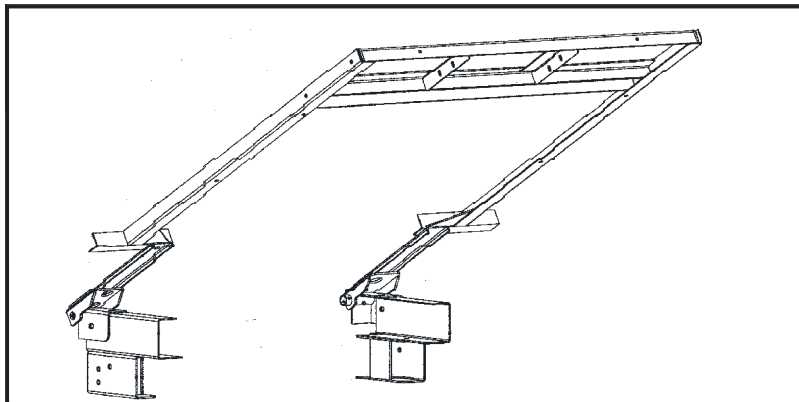


Fig 5a - Wireframe Hoist for Truck Bed ▲



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Fig 6 - Upper Nest Hardware

- i. Install the passenger side Longitudinal Reinforcement on the truck bed. Repeat the procedures for installing the first one (Step d).
- j. Insert another two of the 3/8-16 x 1-1/4 hex head cap screws from the Longitudinal Hardware Kit in the holes above the extruded u-nuts and hand tighten.
- k. Insert the final two 3/8-16 x 1-1/4 hex head cap screws from the Longitudinal Hardware Kit into the side holes on the Longitudinal. If the fasteners do not pass through the holes, the Upper Nest will need to be shifted around to align the Longitudinal and the corresponding Upper Nest holes.
- l. Once all of the fasteners are in, tighten the two Upper Nest fasteners first.
- m. Tighten the two fasteners for the driver's side Longitudinal a couple of turns before tightening the passenger side Longitudinal two or three turns. Repeat this procedure alternately until the four fasteners connecting the Longitudinals and Upper Nest are tight and torqued to approximately 30-40 in-lbs.
- n. Tighten the four fasteners using extruded u-nuts. Be careful not to over-torque and damage the U-nuts. These last four fasteners to be tightened do not require any alternating since the Longitudinals are located by the truck bed.

3. Upper Rear Hinge Installation

- a. Place the Upper Hinges (#6434) on the truck bed as shown in Figure 7. These will lie on a portion of the Longitudinals as shown in Figure 8. Locate the saved truck bed bolts and install, hand-tight, through the Upper Hinge into the truck bed. Be sure to only hand tighten the bed bolts at this stage, since the upper hinges will need to be adjusted.



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Fig 7 - Upper Rear Hinge Inst.



Fig 8 - Upper Rear Hinge Inst.

4. Lower Rear Hinge Installation

- a. Install the Lower Hinges (#6431) shown in Figure 9. Note, the larger washers in the Lower Hinge Kit (#6461) should be placed on the slots and the smaller washers on top. The Lower Hinges sit on the end of the truck frame as shown in figure 10.



Fig 9 - Lower Rear Hinges



Fig 10 - Lower Rear Hinge Inst.



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- ▲ b. Push the Lower Hinge against the end of the truck frame until the hole in the top flange of the hinge aligns with the corresponding hole in the chassis frame; the web of the truck chassis rail should be touching or nearly touching the Lower Hinge pivot tube.
- c. Insert the ½-13 fasteners from the Lower Hinge Hardware Kit (#6461) into the Lower Hinges. Be sure the hinge has been pushed against the truck frame and tighten the fasteners. The nuts should be torqued to approximately 40 ft-lbs.
- d. Measure the inside distance between the lower hinges, tube end to tube end, and make a note. This distance should be approximately 34 inches. This measurement will be used below to help determine the proper adjustment of the Upper Hinges.

5. Upper and Lower Rear Hinge Alignment Verification (CRITICAL STEP!)

WARNING: Do not underestimate the importance of this step. Failure to mount upper and lower hinges squarely and with the proper spacing will force you to remove the entire box and readjust the hinges later in the installation procedure. We cannot over-emphasize the importance of this step.

- a. The goal of this procedure is to locate the upper hinges such that the bed will install easily, be square with the truck cab, and clear the truck cab. Take your time and do it right.
- b. The Upper hinges need to fit on and over the lower hinges. To ensure they do, measure the distance between the inside of one Upper Hinge Gusset (side plate) to the same spot on the other hinge. See Figure 11 for more detail.



Fig 11 - Upper Hinge Measurement

- c. This Upper Hinge measurement should be smaller than the measurement of the Lower Hinges taken in step 4.d by a small amount. If Upper Hinge measurement is greater than the Lower Hinge measurement, adjust the Upper Hinges on the truck bed inward until the distance is less than the Lower Hinge measurement.
- d. Once the Upper Hinges are in the correct location, lock the bed bolts in place with approximately 40 in-lbs of torque. It is important that all of the fasteners on the Lower and Upper Hinges be tightened before the truck bed is put in place. Once the truck bed is in place, access to the fasteners will not be available.



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TRUCK FRAME (PICKUP CHASSIS) COMPONENTS INSTALLATION

This portion of the manual discusses the installation of scissors mechanism onto the truck frame. The Lower Hinges were installed as part of the truck bed portion of the manual and should already be installed before proceeding.

6. Base Mounting Plate Installation

- a. The Base Mounting Plate Assembly (#6406) is the first component installed onto the truck frame. This is the component to which the scissors mechanism is eventually connected and secured. The base mounting plate assembly weights approximately 26 pounds and can be dropped on the truck frame by a single person. See Figure 12.



Fig 12 - Base Mounting Plate Assy

- b. The cross tube assembly (#6419) was designed to fit snugly over the truck frame. If the fit is too tight when dropped onto the frame, an amount of undercoat may need to be scraped away from the frame to provide a better fit. The cross tube should be positioned directly behind the gas tank. The mounting plate pivots should sit directly forward of the tubular chassis crossmember.
- c. The U-Bolts from the Scissors Installation Kit (#6467) will wrap around the tubular chassis crossmember and mount to the base plate. See Figure 13 for more detail.

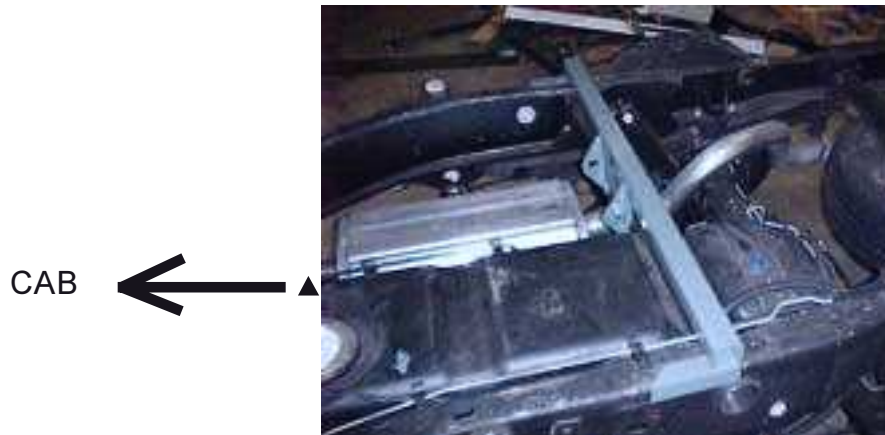


Fig 13 - Base Mounting Plate Inst

- d. Place the lock washers along with the nuts on the U-Bolts. The nuts on the two U-bolts need to be tightened and torqued to 30-40 in-lbs before the scissors component is installed on the base mounting plate.



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7. Scissors Assembly Installation

- a. Note: You may want to install the supplied elbow fitting (#HELB4MP-4FX-90) from the Power Unit Hardware Kit (#6462) at this time while the cylinder is easily accessible.
- b. This assembly is lowered between the truck frame in a reverse-mounting orientation (end that opens pointed towards the back). It is easiest if the unit is picked up at the pivot where the upper and lower arms are connected (this prevents the scissors from opening up). The Pivot Pin (#6408) will connect the Scissors Welded Assembly and the base mounting plate. Lower the Scissors Assembly down next to the Base Mounting Plate.
- c. Install the #6409 Pivot Pin through both the base plate collars and the pivot tube of the hoist. Center the pin on the assembly and tighten the set screws in the collars to keep the pin in place. We recommend using blue loctite on all set screws for additional reliability. See Figure 15.



Fig 15 - Base Mounting Plate Assy

- d. Once the pin is secure, lower the Scissors Assembly in the truck. Verify that there is clearance between the scissors assembly and both the gas tank shield and the forward chassis cross member.



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8. Nylon Pad (Bumpers) Installation

- a. The plastic pads are intended to provide support and fill the space between the bed cross members and the frame rails.
- b. The Bed Mounting Hardware Kit (#6465) needs to be installed on the truck. The mounting kit consists of Nylon bumpers and countersunk bolts. Six bumpers need to be put in place. The two thinnest bumpers are used on the cross tube. Place two 6424-1 bumpers over the holes at the end of the cross tube. Drop two counter sunk fasteners through the two bumpers. Secure these with 5/16 flat washers and a 5/16 lock washers on the inside of the tube, along with the jam nuts provided. See Figure 16 for more detail.
- c. The two thickest Nylon pads, 6424-3, will be used forward of the cross tube, Figure 17.



Fig 16 - Rear Nylon Pad



Fig 17 - Middle Nylon Pad

- d. Because of the slots in the truck frame, the fastener is put through the pad, and a ½ inch flat washer is used to span the slot. Next, a 5/16 flat washer is placed on the larger washer, and finally the lock washer is used with the jam nut.



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- e. The remaining two Nylon pads, 6424-2, are placed on the truck frame, closest to the truck cab. See Figure 18.



Fig 18 - Front Nylon Pad

- f. The washers are placed on the fasteners in the same order as the previous pad (Step d).
Note: This bumper also has a 3/4 washer underneath to give it the proper height. The truck bed should not be placed back on the truck until this Bed Mounting Kit has been installed.



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9. Upper Nest Pivots and Set Collars Installation

- a. Slide the set screw collars (#6451) from the Nest Pivot Hardware Kit (#6466) on the ends of the Upper Lift Shaft of the hoist and push them all the way in.
- b. Slide the Upper Nest Pivots, part numbers 6453-1 and -2, on the Upper Lift Shaft. Be sure they are oriented as shown in Figure 19 (the pivot on the left side is the passenger side). The flange without holes will rest in the Upper Nest and the pivot tube is closest to the rear hinges.



Fig 19 - Upper Nest Pivots

10. Hydraulic Power Unit Installation

Reference Drawing(s): 416140, 6493

IMPORTANT: Be sure to blow dirt and other material out of the hose(s) with compressed air to prevent the hydraulic system from being contaminated.

ED (Electric Double Acting) Power Unit

- a. Install the short hydraulic hose to the full/base end of the cylinder. Connect the long hydraulic hose to the rod end of the cylinder.
- b. Install the ED Power Unit on the outside of the frame forward of the right rear front spring hanger and near the cab. There should be existing holes/slots to which you can mount the power unit (two slots on the right and one on the upper left). See Figures 20 and 20.5.



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Fig 20 - Power Unit Mtg



Fig 20.5 - Power Unit Mtg (Close-up)

- c. Use supplied pipe spacers (#6081) from the Power Unit Hardware Kit (#6462) between frame and power unit, if required.▲ Bolt through frame and pipe into side of power unit. Use 3/8-16 bolts, 3/8 washers and lock washers. Two flat washers and one lock washer are used on each bolt. Should drilling be necessary, be careful not to drill through cables running on inside of truck long-sills (frame longitudinal channels).
 - d. Install elbow fittings (#HELB6MO-4FX-90) from the Power Unit Hardware Kit (#6462) into power unit.
 - e. Connect the short hose from the base end of the cylinder to the high pressure port (C1, bottom side) of the hydraulic power unit. Connect the long hose from the rod end to the low pressure port (C2, top side) of the hydraulic power unit.
 - f. Be sure hoses are not crimped, and use cable ties (#40113) to secure hoses in a safe manner between cylinder and power unit - the muffler hanger makes a convenient attachment point. NOTE: Be sure to leave enough slack so that the hoses will not be strained as the cylinder pivots to its nearly vertical position. Be sure to tie wrap all hoses securely and keep them clear of the drive shaft, muffler, and exhaust.
 - g. Check hydraulic fluid level in power unit reservoir. If fluid is required, use Dextron II - ATF, mobile DTE 13 or equivalent. Fill 3/4" from the top of the reservoir.
- ▲ NOTE: Be sure to install the 3' long #4 gage black battery cable - provided in the installation kit.

11. Dash Control Switch Installation

Reference Drawing(s): 40124, 6493

- a. Install dash mounting plate under the dash in a convenient location for operator control. Use the #12 pan head slotted screws (1/2" long) furnished in kit.
- b. Install switch in switch plate using lock nut.
- c. Install switch extension onto toggle switch.
- d. Connect center post of switch to the 20 amp in-line fuse.
- e. Connect the wiring harness (#416528) as shown on Dwg 6493.



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12. Gas Filler Hose Modification

- a. Shorten the hoses by approximately 6.25 inches to provide adequate clearance when bed is raised and lowered.
- b. Attach gas filler hose and breather hose to gas filler support and secure the gas filler support (#6439) to the truck frame using 1/4-20 bolt, flat washer, and nut from the Fuel Support Bracket Hardware Kit (#6463). See Figures 21 and 21.5.



Fig 21 - Gas Filler Bracket Inst.



Fig 21.5 - Gas Filler Bracket Inst.

- c. It is intended the unloaded bed be raised to gain access to the gas filler when refueling.

13. Pickup Box Reinstallation

- a. Before the bed is placed back on the truck, check and insure all fasteners have been torqued to their required values. Once the bed is back on the truck, there will be no tool access to some of the fasteners.
- b. Placing the truck bed back on the truck is a job best accomplished by four-six workers, an overhead crane, or a forklift.
 - i. The truck bed is turned right side up and set down on the as close as possible to the final position. The pivot pins from the Lower Hinge Hardware Kit (#6461) will be used to connect the Lower and Upper hinge.
 - ii. The truck bed may need to be adjusted to facilitate the placement of these two pins through both hinge tubes.
 - iii. Install the 40025 pivot (clevis) pins through the upper hinge and then the lower hinge.



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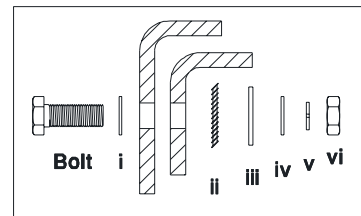
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- c. Once the pins are in place, verify the clearance and the squareness of the truck bed with the truck cab.
 - i. Move the bed up and down simulating the scissors pushing up on the truck bed. If the truck bed is going to come in contact with the truck cab, the front lower corners of the truck bed will contact the cab.
 - ii. If clearance or squareness is a problem, remove pivot pins and the truck bed from the back of the truck.
 - ▲ iii. -
 - ▲ iv. To correct a clearance problem, either (1) loosen the Upper Hinges, push both hinges as far forward as possible, then re-secure the Upper Hinges; or (2) loosen the Lower Hinges, push both hinges rearward an equal distance, then re-secure the Lower Hinges.
 - ▲ v. To correct the squareness problem, adjust either the Upper Hinges or Lower Hinges such that they are properly aligned. One hinge set may be more forward than the other, causing the problem.
 - vi. Repeat steps 12.a-c.
- d. When the truck bed has an acceptable orientation, while the truck bed is down, install the 1/4 x 1-1/4 roll pins from the Lower Hinge Hardware Kit (#6461) into the hinge pivot pins to hold them in place.

14. Connecting Pickup Box to Scissors Assembly

- a. Be sure that the pickup box is down and is resting on the nylon pads. Verify that the box is sitting square.
- b. From underneath the truck, while the truck bed is down rotate the passenger side pivot (#6453-2) up in place and insert two of the fasteners from the Pivot Mounting Kit (#6466). There is access to the passenger side pivot over and around the back of the muffler. The fasteners should be oriented so the threaded portion of the bolt faces inward.
- c. The fastener hardware needs to be assembled on the pivot fastener in order, as follows.
 - i. Smaller flat washer (3/8) - On outboard side
 - ii. Star tooth washer - Inside, over nest pivot slot
 - iii. 1/2 inch flat washer - Over star washer
 - iv. Smaller flat washer (3/8)
 - v. Lock washer
 - vi. Hex nut - On inboard side, closest to center of frame
- d. It is important to note, assembling this hardware in order will prevent the pivots from slipping while the hoist is in use. Once the hardware is place, torque the nut to approximately 35-40 ft-lbs.
- e. To insure the driver's side pivot can be fastened in the correct position, place a clamp on the pivot and upper nest while the bed is down. Access at this point to the driver's side pivot is tricky. However, a small clamp can be put in place to hold the two parts together.



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- f. Raise the truck bed, about 40 degrees, using the hydraulic unit. If the Body Prop is present, then place the unit in above the cylinder. Whether the body prop has been purchased or not, support the truck bed to prevent it from falling in case of a hydraulic failure.
- g. Do not work above the truck frame and under the truck bed for any reason without adequate safety measures to prevent the truck bed from coming down. Failure to do so could result in death or serious injury.
- h. With the truck bed secured and blocked from coming down, determine if the clamped pivot has moved. If it appears the pivot has moved with the clamp on, use a c-clamp attached to the pivot and portion of the upper nest to move the pivot back in place (so that it is aligned with passenger side pivot).
- i. Be sure the upper flange of the Pivot Assy is in contact with the Upper Nest. With the truck bed secured, place last two fasteners from the Pivot Hardware Kit (#6466) in the slots of the driver's side pivot. Fasten them in place as described in Steps b-d.
- j. Move the Set Collars (#20-00173) outward against the nest pivots and tighten the set screw on the collar (we recommend using Loctite blue for a more secure installation). Note, the Set Collars will keep the bed square to the cab and will prevent it from shifting.

15. Pickup Bumper Reinstallation

- a. Attach bumper brackets to under-side of truck frame using hardware supplied in Bumper Bracket Hardware Kit (#6464).
- b. The bumper brackets simulate the rear portion of the truck frame so that the pickup bumper can be reinstalled to the bumper brackets using the same method and hardware used when the pickup bumper was originally attached to the truck frame. See Figure 23.



Fig 23 - Bumper Bracket Installation



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16. Grease all fittings located at pivot points and repeat at least every 90 days.

Reference Drawing(s): 40260

17. Safety decals (provided for the safety of anyone who may operate this unit and intended to protect all parties from potential liability) must be installed as follows:

- a. Two "Caution (w/ Instructions)" decals (#416052) - one on each side of the pickup bed adjacent to the cab in a highly visible location.
- b. Two "Caution Stand Clear" decals (#15254) - one on each side of truck frame in a highly visible location.

IMPORTANT: Always use safety prop or other bed supports to safely prop the truck bed in "up" position when servicing hoist. Always completely unload the pickup box. Never work under a loaded box.



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HOIST MODEL(S)

ES/ED Hyd Pwr Unit Part Number	6426 / 6425	40058M / 416081M	VC416, TRL416	VC516, TRL516	VC520, TRL520	VC620, TRL620	VC628, TRL628
Reservoir Capacity (Quarts)	3.4 / 3.4	4.6 / 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	6	8	9	12	15

Step 1 Attach base-end hose to cylinder. Do NOT attach the Rod-end hose at this time.

Step 2 Fill the hydraulic reservoir as recommended below. Use only hydraulic fluid - Tellus 32 or equivalent is recommended.

2a With the hoist in the down position, add the indicated amount (Quarts) of hydraulic fluid.

2b Raise hoist one-quarter of the way (approximately 12° dumping angle) and add the indicated amount (Quarts) of hydraulic fluid.

2c Raise hoist one-half of the way (approximately 22-25° dumping angle) and add the indicated amount (Quarts) of hydraulic fluid.

2d Raise hoist three-quarters of the way (approximately 36° dumping angle) and add the indicated amount (Quarts) of hydraulic fluid.

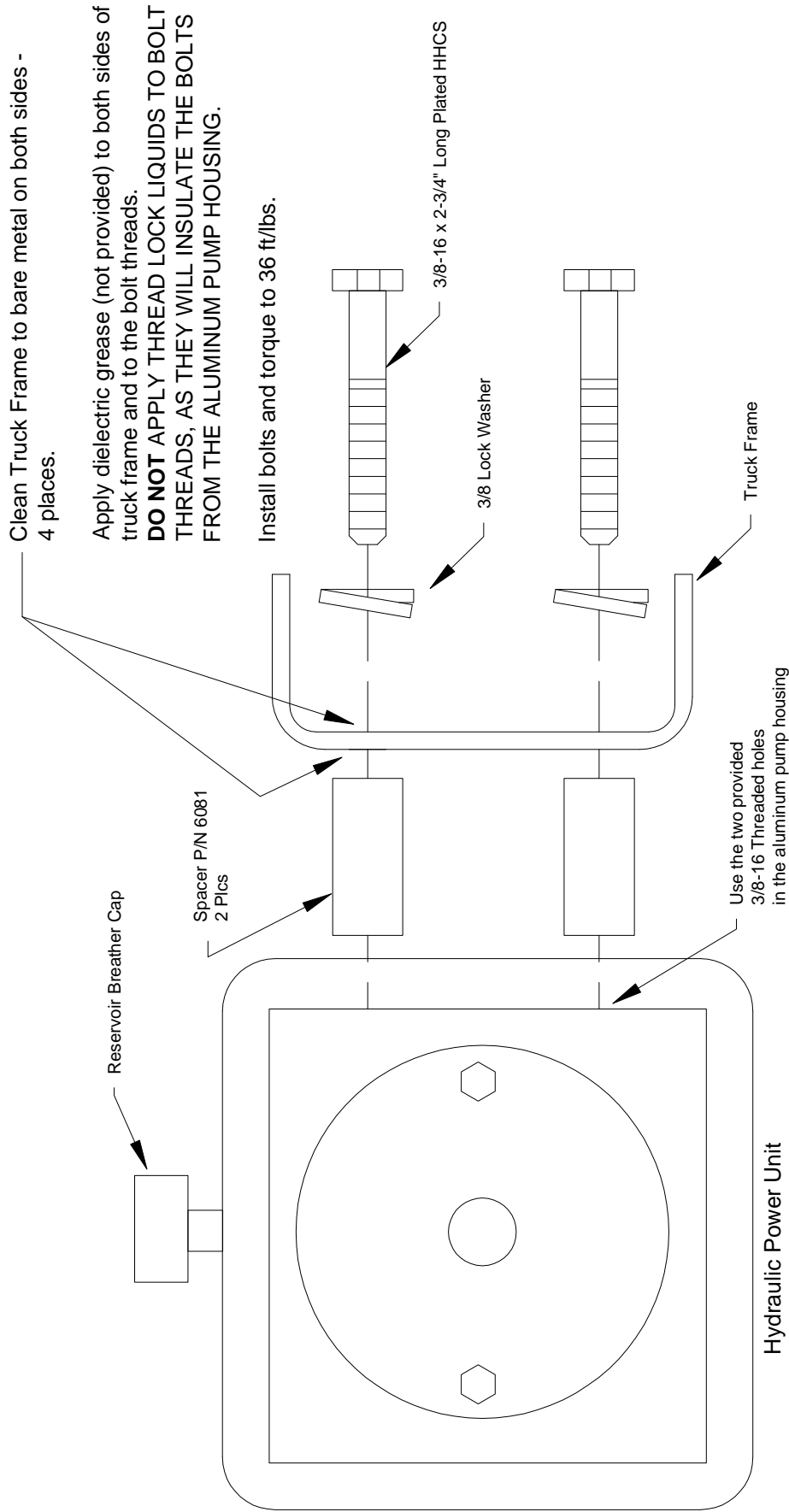
2e Raise hoist completely (45-50° dumping angle) and add the indicated amount (Quarts) of hydraulic fluid. DO NOT "TOP OFF" or you will likely have overflow when the hoist is lowered.


Step 3 Attach the remaining hose to the Rod-end of they cylinder (not req'd on VP/VC6 & TRL313 hoists w/ ES hyd pwr unit)

 VENCO MANUFACTURING, INC.	TITLE			DATE			SECTION
	FILLING HYDRAULIC RESERVOIR			6-16-05C			-
VP/VC6-628, TRL313-628			SUPERSEDES			416140	

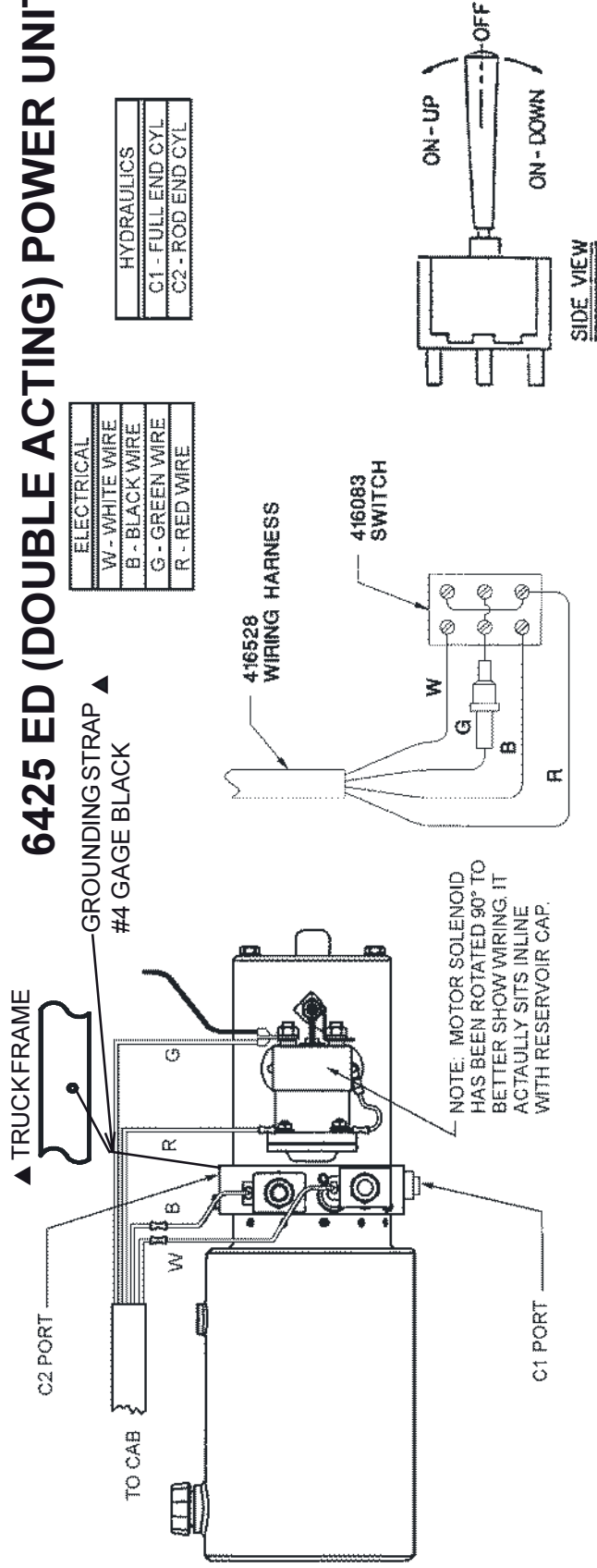
PROPER GROUNDING OF HYDRAULIC POWER UNIT

NOTE: 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 illustration below. The mounting instructions below will provide an "adequate ground". In addition, for the best ground configuration, consider our optional Ground Strap Kit P/N 6474.

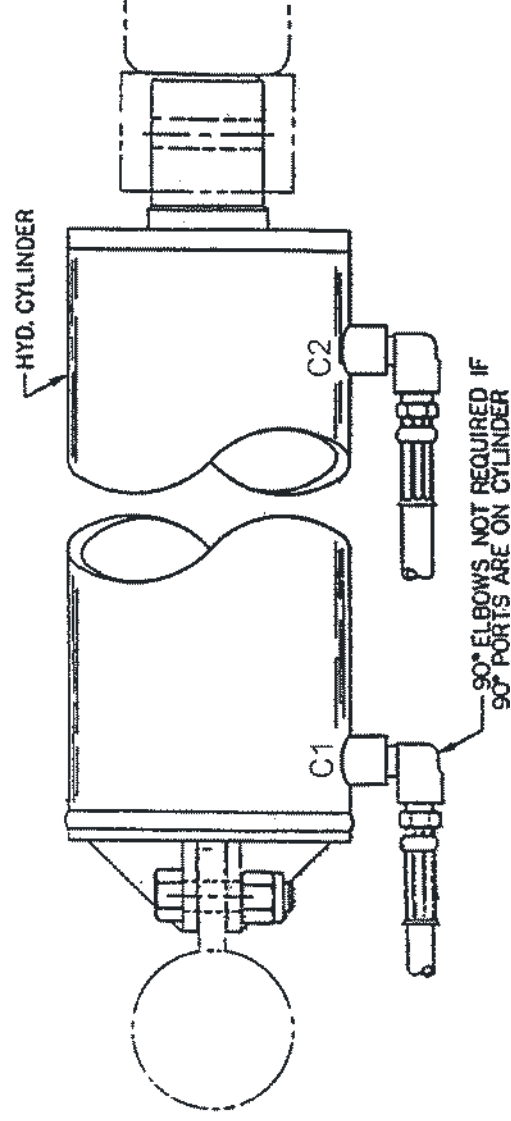


	TITLE		DATE	SECTION
	HYDRAULIC POWER UNIT GROUNDING		03-17-14A	-
	ALL APPLICATIONS		SUPERSEDES 06-03-05	6368

6425 ED (DOUBLE ACTING) POWER UNIT



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



VENCO MANUFACTURING, INC.

TITLE
6425 ED POWER UNIT

DATE
12-1-04B

SECTION
-

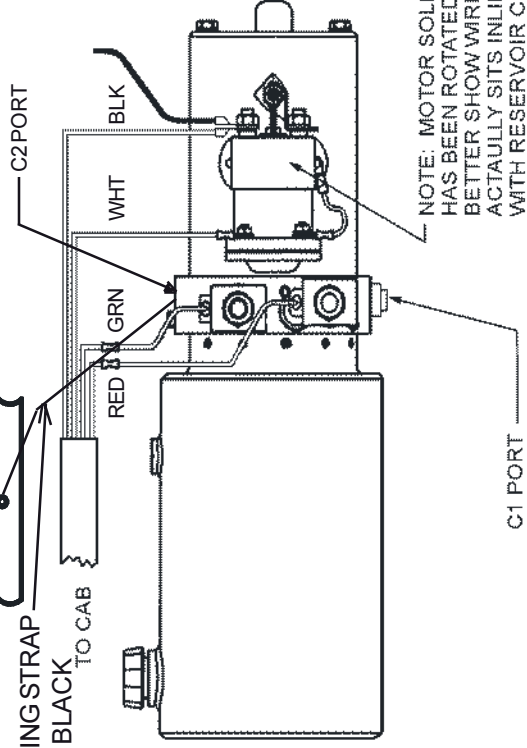
VP6S

SUPERCEDES
10-27-00A

6493

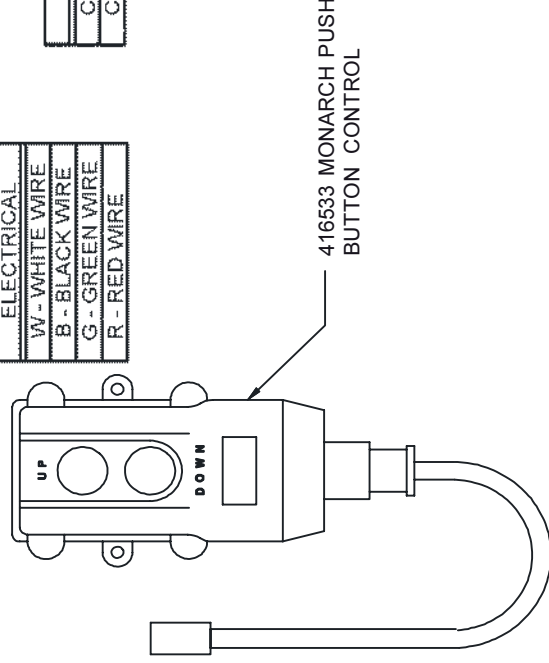
6425 ED WITH MONARCH PUSH BUTTON CONTROL

▲ TRUCK FRAME
▲ GROUNDING STRAP
#4 GAGE BLACK
TO CAB

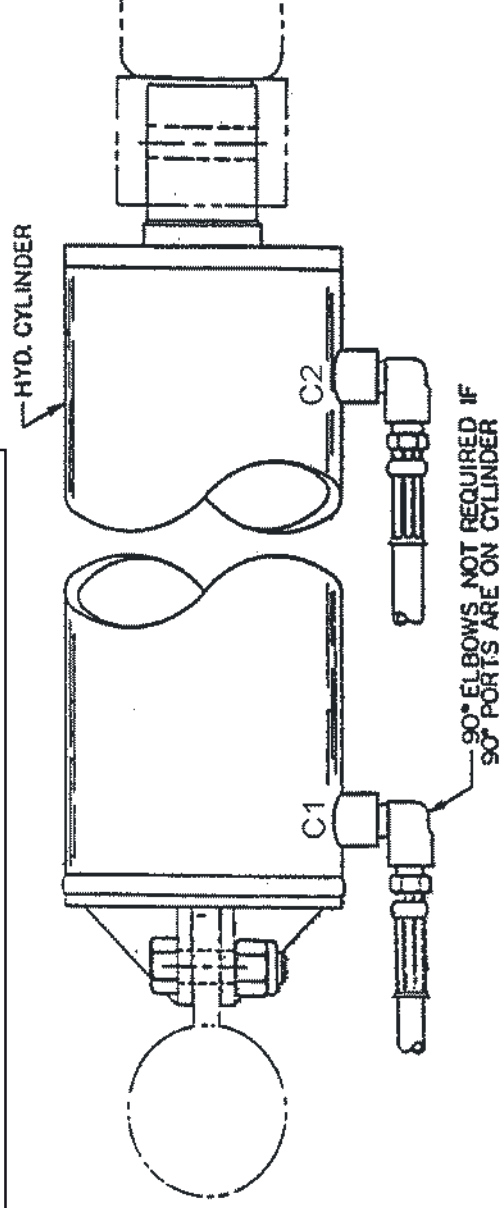


ELECTRICAL	
W - WHITE WIRE	
B - BLACK WIRE	
G - GREEN WIRE	
R - RED WIRE	

HYDRAULICS	
C1 - FULL END CYL	
C2 - ROD END CYL	



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
6425 ED POWER UNIT

DATE
12-1-04C

SECTION
-

VP6S

SUPERCEDES
8-24-01B

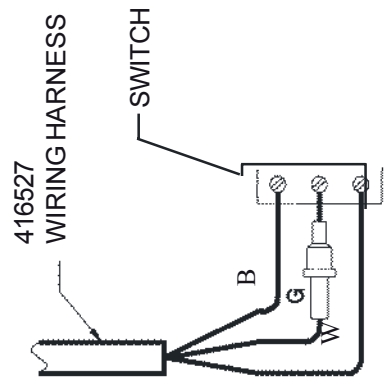
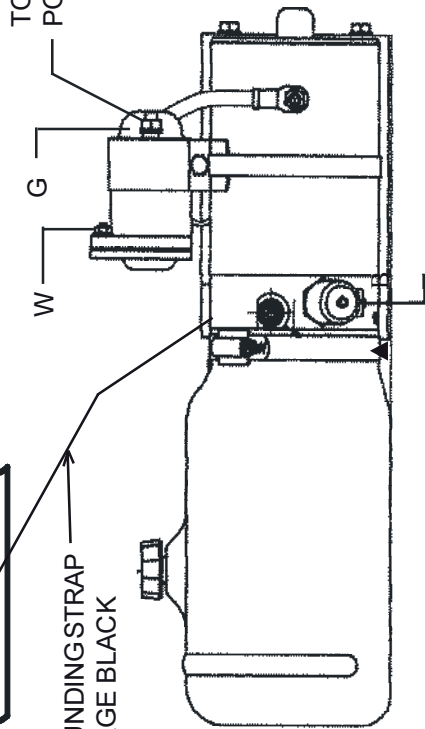
6500

6426 ES (SINGLE ACTING) POWER UNIT

▲ TRUCKFRAME

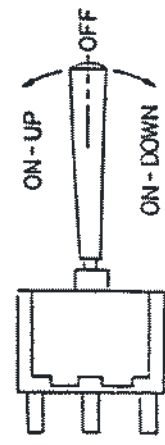


▲ GROUNDING STRAP
#4 GAGE BLACK

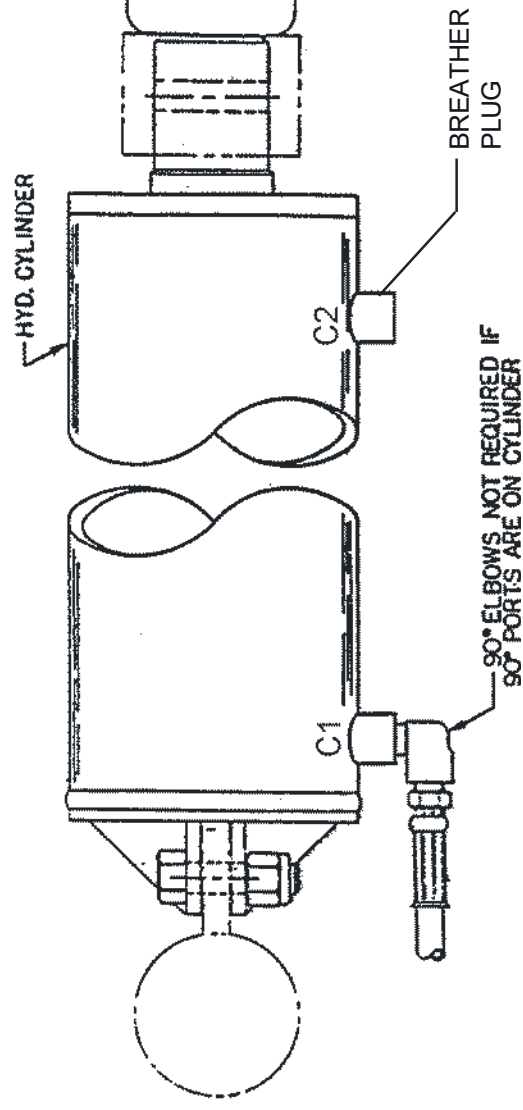


ELECTRICAL	
W - WHITE WIRE	
B - BLACK WIRE	
G - GREEN WIRE	

HYDRAULICS	
C1 - FULL END CYL	
C2 - ROD END CYL	

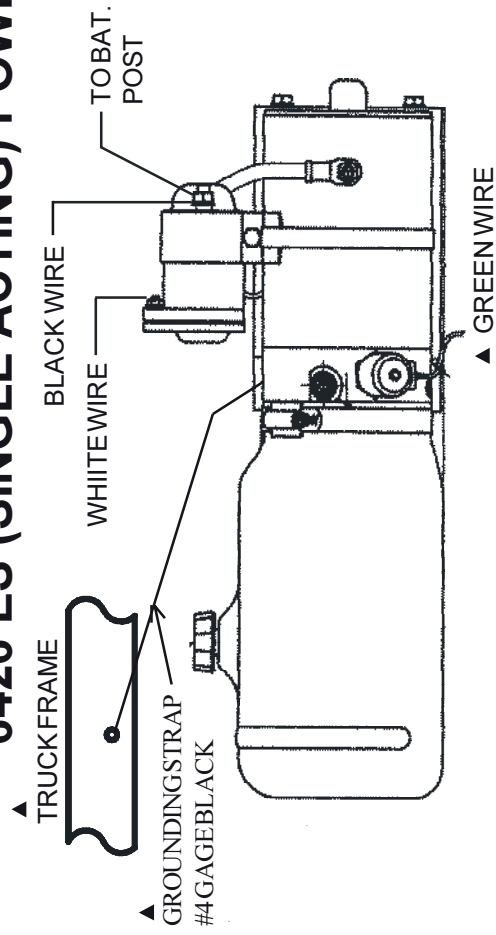


NOTE: ENERGIZING 'B' COIL RELEASES 'C1' PORT
ENERGIZING SOLENOID COIL SENDS FLOW TO 'C1' PORT



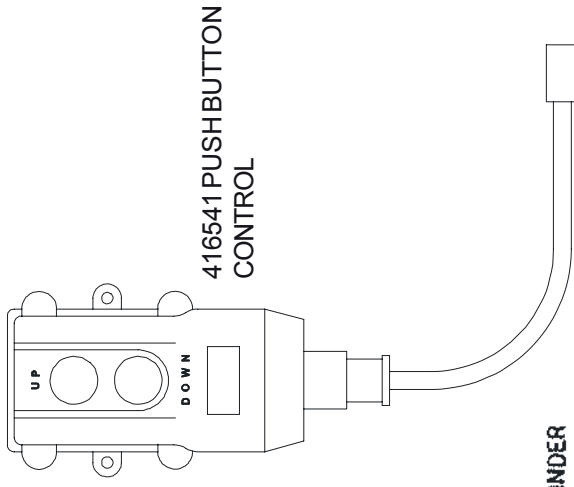
 VENCO MANUFACTURING, INC.	TITLE 6426 ES POWER UNIT		DATE 12-1-04C	SECTION -
	VP6S		SUPERCEDES 8-2-01B	6506

6426 ES (SINGLE ACTING) POWER UNIT

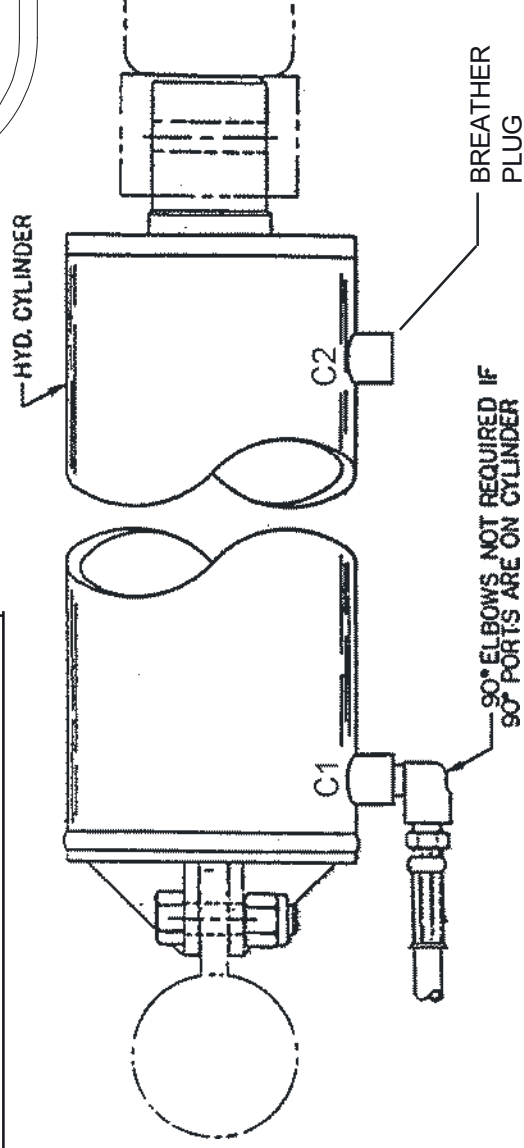


ELECTRICAL
W - WHITE WIRE
B - BLACK WIRE
G - GREEN WIRE

HYDRAULICS
C1 - FULL END CYL
C2 - ROD END CYL



NOTE: ENERGIZING 'B' COIL RELEASES 'C1' PORT
ENERGIZING SOLENOID COIL SENDS FLOW TO 'C1' PORT



VENCO MANUFACTURING, INC.

TITLE
6426 ES PWR UNIT W/ PUSHBUTTON INST.

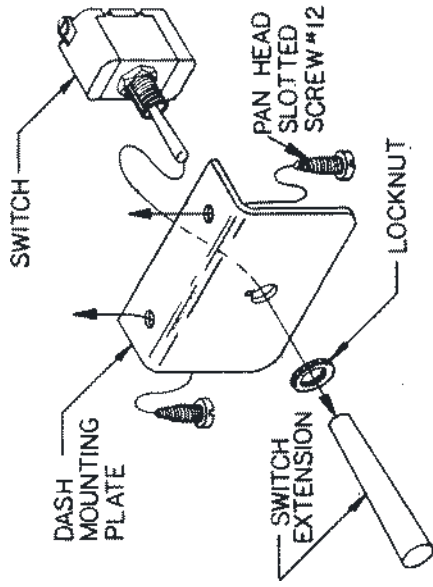
DATE
12-1-04C

SECTION
-

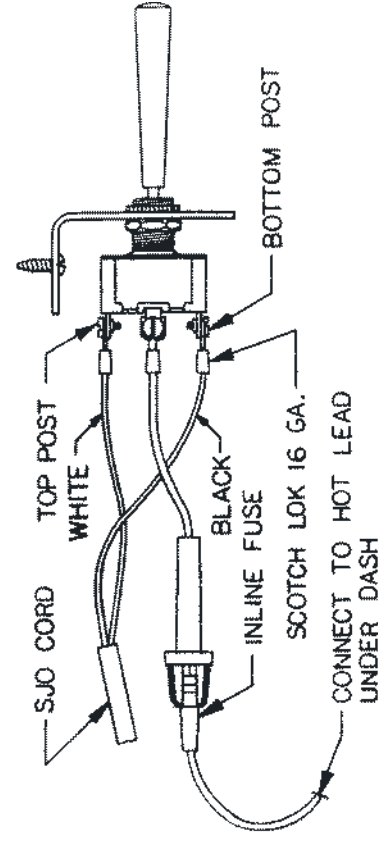
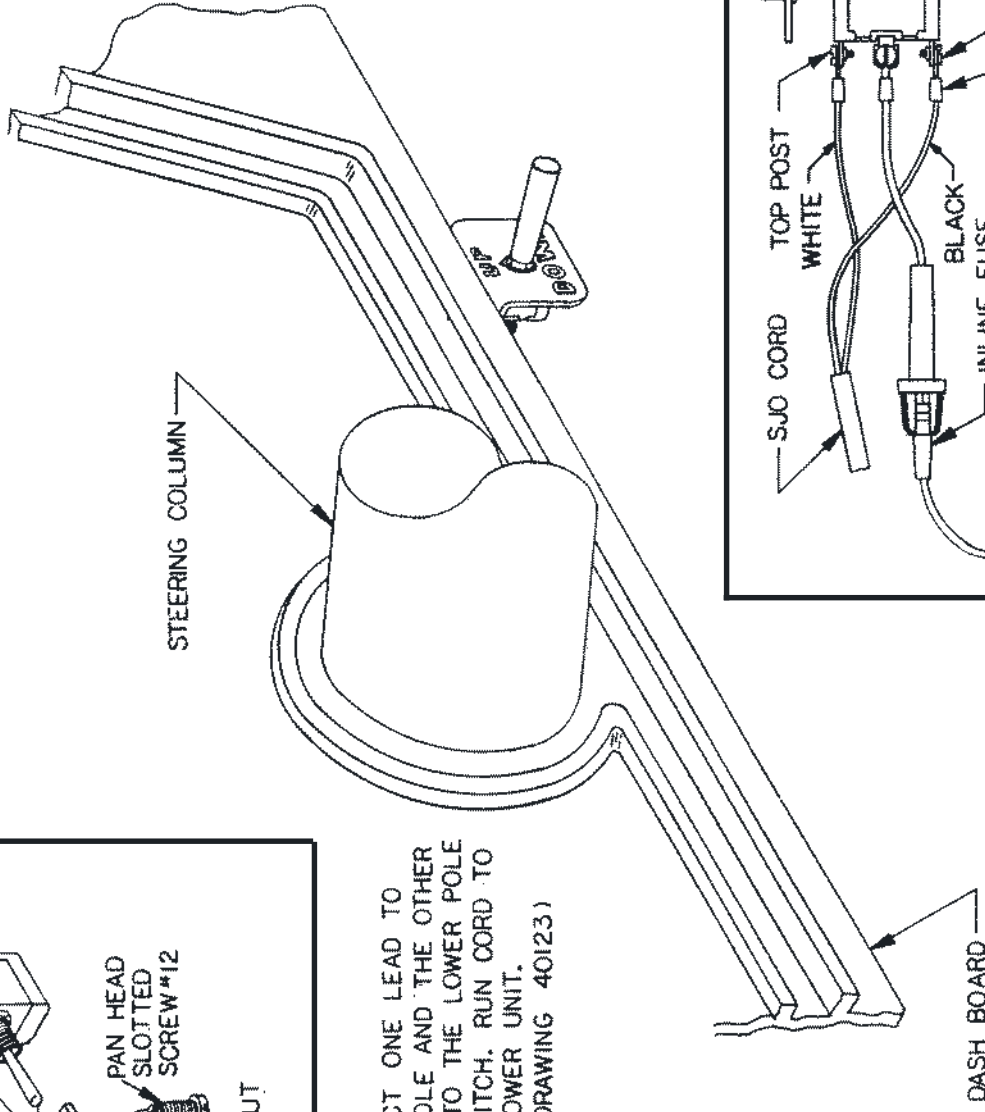
VP6S

SUPERCEDES
11-15-04B

6507



SJO CORD: CONNECT ONE LEAD TO TOP POLE AND THE OTHER LEAD TO THE LOWER POLE OF SWITCH. RUN CORD TO THE POWER UNIT. (SEE DRAWING 40123)



VENCO MANUFACTURING, INC.

TITLE **DASH CONTROL INSTALLATION**

DATE **5-15-98B**

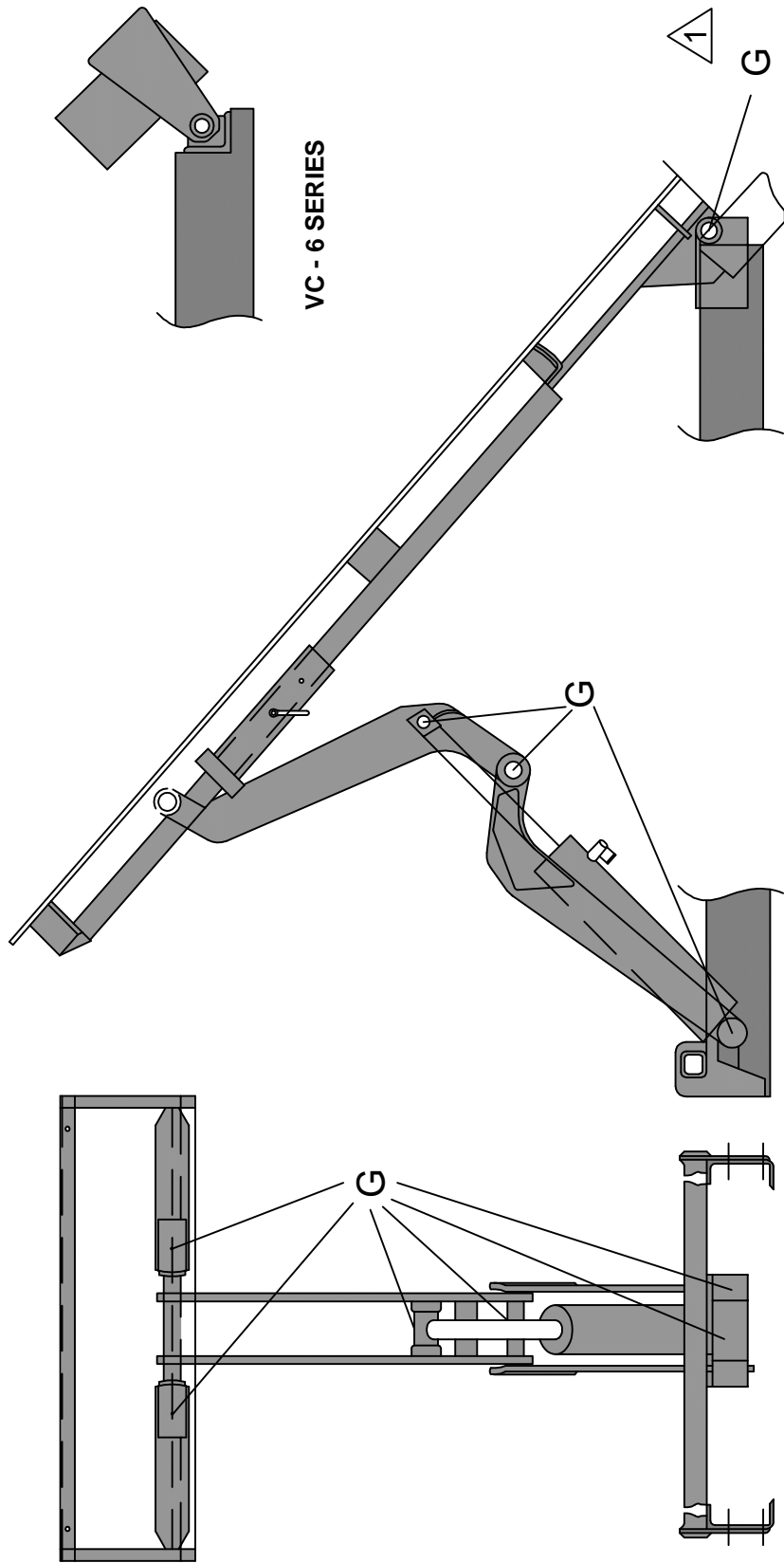
SECTION

H200

SUPERCEDES **1-22-90A**

VP/VC-6 SERIES

40124



VC - 6 SERIES



NOTE: VP 6600 PICKUP HOIST USES COMPOSITE BEARINGS FOR THE LOWER REAR HINGES; NO LUBRICATION REQUIRED ON THIS MODEL ONLY.
VC 6600 CONTRACTOR HOIST DOES REQUIRE LUBRICATION AT THE LOWER REAR HINGE ASSEMBLY.

Lubrication required:	Lubrication used:	Service:	Inspections:
G ---- Grease fittings w/ pressure grease gun	Chassis grease	Time of truck service	Check for leaks around fittings / hoses
Fill oil reservoir 3/4" from top with hoist down	ATF - Dexron II or Mobile DTE 13 - Below 20° F add 3/4 pt. Kerosene	Check periodically or when hoist jerks	Check battery water periodically



MANUFACTURING, INC.
CINCINNATI, OHIO

TITLE

LUBRICATION / SERVICE CHART

VP / VC - 6 SERIES

DATE

01-14-13D

SUPERSEDES

05-15-12C

SECTION

H300

40260

VENCO CONTRACTOR HOIST - MODEL VC-6S

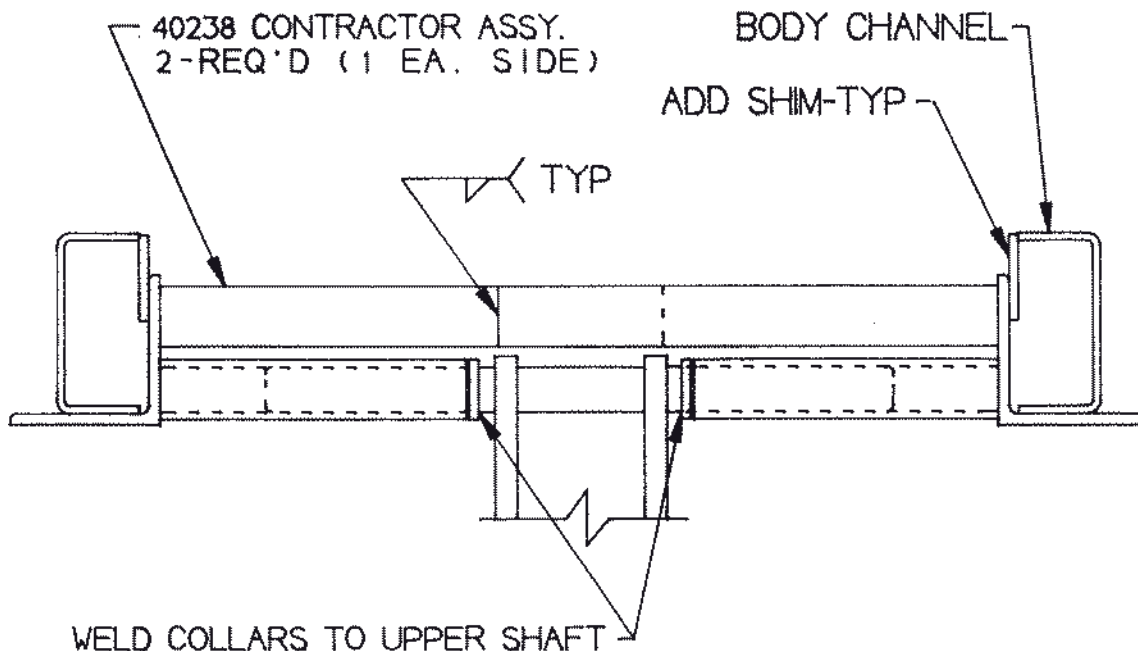
The installation of a VC-6S hoist is identical to the VP-6S hoist with the following exceptions:

1. The rear pivot angle is welded to the truck frame.
The upper rear hinge assembly is welded to rear of contractor body. See Dwg. 6142.
2. The contractor's upper lift shaft assembly is also welded to the understructure of contractor body. See figure below.

IMPORTANT

USE SAFETY PROP (OPTION) OR OTHER BED SUPPORTS TO SAFELY PROP TRUCK BED IN 'UP' POSITION WHILE SERVICING HOIST.

STANDARD MOUNTING



MANUFACTURING, INC.

TITLE

VC LIFT SHAFT INST.

VP/VC-6S ▲

DATE

12-3-02B

SUPERCEDES

11-25-02A

SECTION

H200

6144

VC-6R / VC-6S See Figure 1 Below

CAUTION

If a distance of more than 38" is exceeded between the centers of the rear axle and rear hinge assembly, additional reinforcement of the truck frame will be required.

- Mark the location for the rear hinge. This location should be immediately behind a truck crossmember. The hole center of the rear pivot angle should not be more than 6" rearward of the rear spring hanger.
- See Figure 1, cut as shown a 90° slot in frame (both sides).
- Position the angle iron frame of the rear hinge assembly in the truck frame cut outs. Make sure the rear pivot angle assembly is properly positioned on the truck frame. Weld all around truck frame, hinge assembly joint.

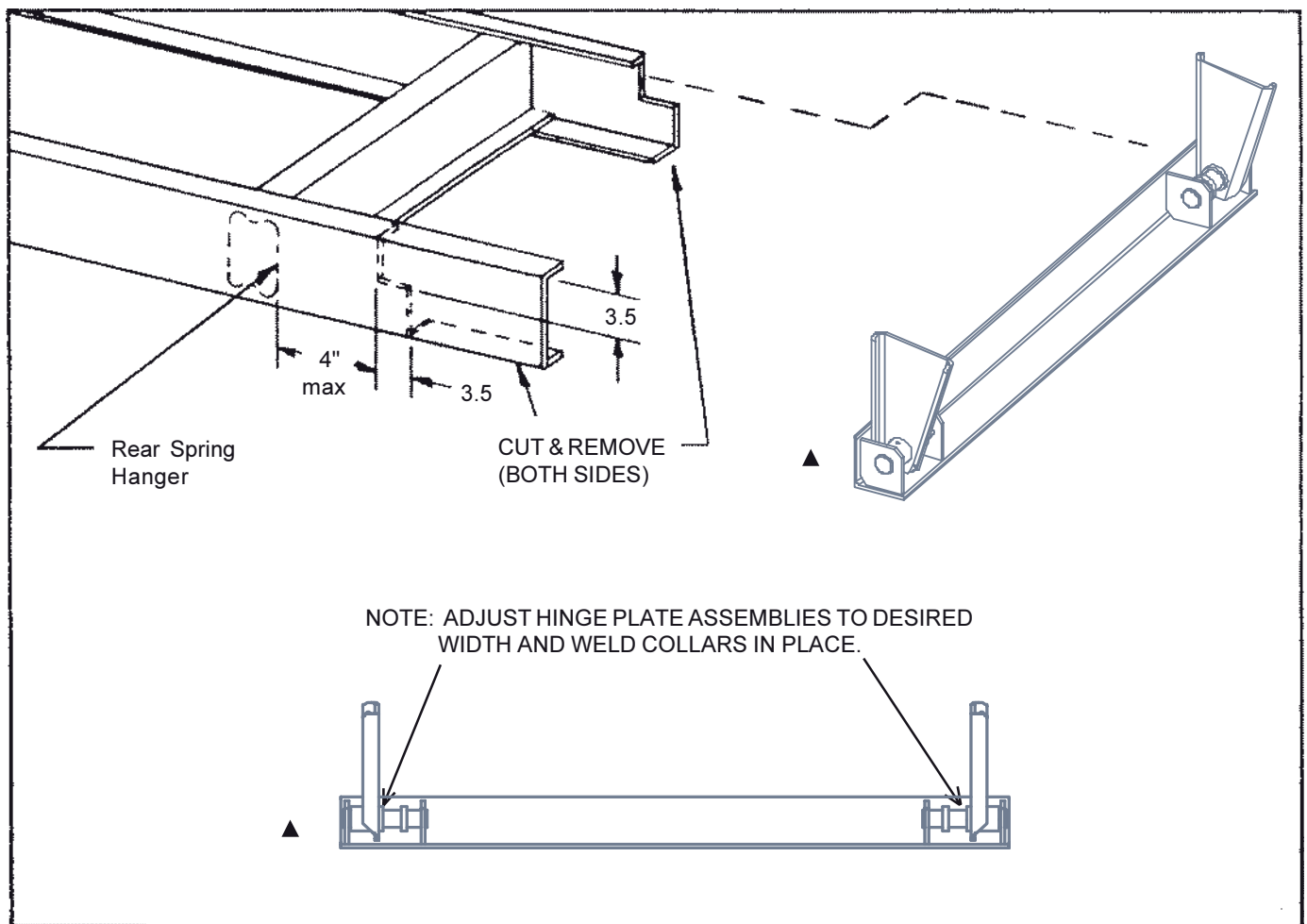


FIGURE 1 - FRAME MODIFICATION AND REAR HINGE ATTACHMENT



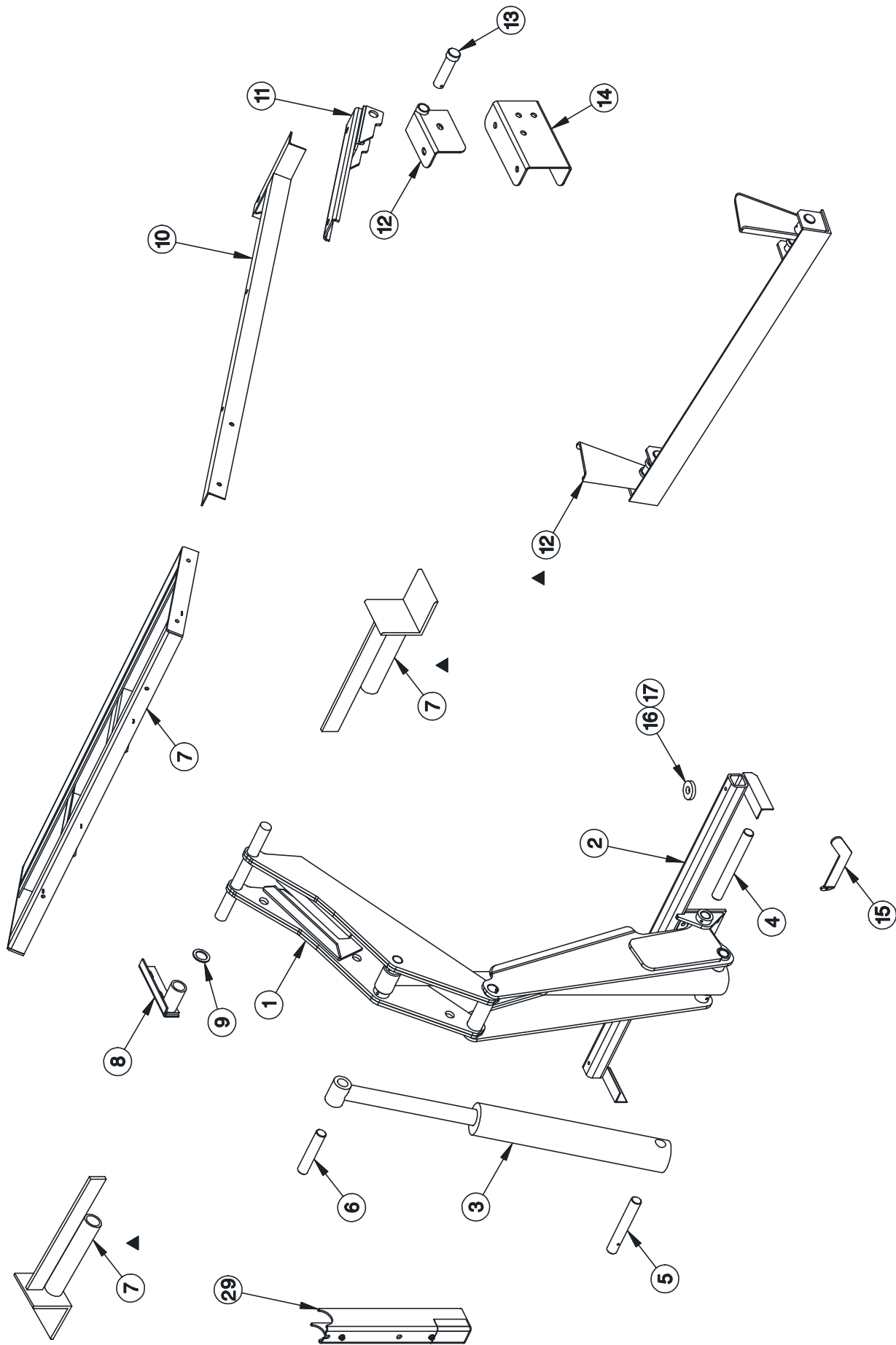
MANUFACTURING, INC.

TITLE
INST INSTRUCTIONS
VC/VC-6R, VP/VC-6S

DATE
12-20-02B
SUPERCEDES
11-18-02A

SECTION
H200
6142

REPLACEMENT PARTS LIST REF 6498



VENTURO MANUFACTURING, INC. CINCINNATI, OHIO	TITLE REPLACEMENT PARTS DRAWING	DATE 10-24-02A	SECTION H400
		SUPERSEDES 2-11-00	6497
	VP6S		

VP / VC-6S
REPLACEMENT PARTS LIST

ITEM	QTY	VP-6S	VC-6S	DESCRIPTION
1	1	6403	6403	ASS'Y: HOIST SCISSORS (CYL. NOT INCLUDED)
2	1	6406	6406	ASS'Y: BASE MOUNTING PLATE
3	1	6407	6407	CYLINDER; 3" X 17 $\frac{3}{8}$ "
4	1	6408	6408	PIVOT PIN; SCISSORS MOUNTING PLATE
5	1	6409	6409	PIVOT PIN; CYLINDER BASE
6	1	40003	40003	PIVOT PIN; CYLINDER ROD
▲ 7	1	6454	40243	UPPER NEST
8	2	6453 (-1/-2)	-	UPPER NEST PIVOT
9	2	20-00173	20-00173	SET COLLAR; 1 $\frac{1}{4}$ " ID, UPPER HOIST ARM PIVOT
10	2	6444 (-1/-2)	-	LONGITUDINAL REINFORCEMENT
11	2	6434 (-1/-2)	-	UPPER REAR HINGE
12	2	6431 (-1/-2)	416207-1	LOWER REAR HINGE
13	2	40025	-	PIVOT PIN; CLEVIS, REAR HINGE
14	2	6438 (-1/-2)	6438 (-1/-2)	BUMPER BRACKET
15	1	6439	6439	GAS FILLER SUPPORT
16	4	6424-1	6424-1	NYLON PAD; 2" X 0.25"
17	2	6424-2	6424-2	NYLON PAD; 2" X 0.44"
* 18	1	6425	6425	ED (DOUBLE-ACTING) HYD. POWER UNIT
* 19	3	6081	6081	MOUNTING SPACER; HYD. POWER UNIT
* 20	1	6470-1	6470-1	HOSE; BASE (FULL) END, 70" ("SHORT HOSE")
* 21	1	6470-2	6470-2	HOSE; ROD END, 88" ("LONG HOSE")
* 22	2	H6901-0604	H6901-0604	FITTING; 6MO-4FX X 90°, ELBOW, HYD. PWR UNIT
* 23	1	H1501-0404	H1501-0404	FITTING; 4MP-4FX X 90°, ELBOW, CYLINDER
* 24	1	416083	416083	TOGGLE SWITCH; DPDT (ED ONLY)
* 25	1	40223	40223	SWITCH BRACKET W/ SCREWS
* 26	1	01025-4*16FT	01025-04*16FT	ASS'Y: BATTERY CABLE (4 GAUGE X 16 FT.)
* 27	1	416528	416528	WIRE HARNESS; ED PWR UNIT W/ TOGGLE SW.
* 28	1	14793-2	14793-2	DECAL; UP / DOWN, PWR UNIT W/ TOGGLE SW.
29	1	6495	6495	SAFETY PROP (OPTION)
30	-	-	-	-
31	-	-	-	-
32	-	-	-	-
33	-	-	-	-
34	-	-	-	-
35	-	-	-	-

* ITEM NOT SHOWN ON DRAWING

REPLACEMENT PARTS DWG REF 6497



MANUFACTURING, INC.
CINCINNATI, OHIO

TITLE

RPLCMNT PARTS LIST

VP /VC-6S

DATE

04-24-13B

SUPERSEDES

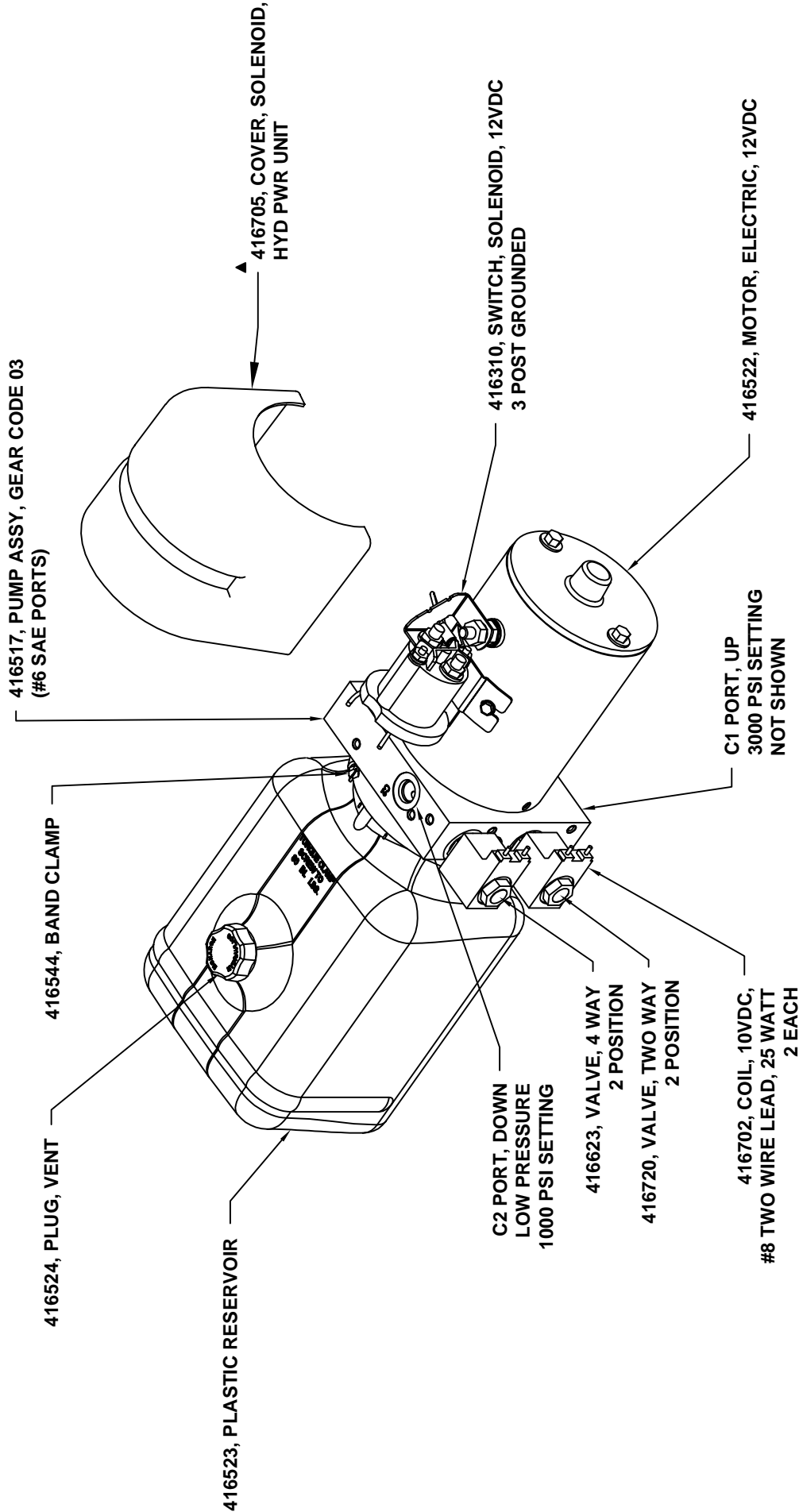
10-24-02A

SECTION

H400

6498

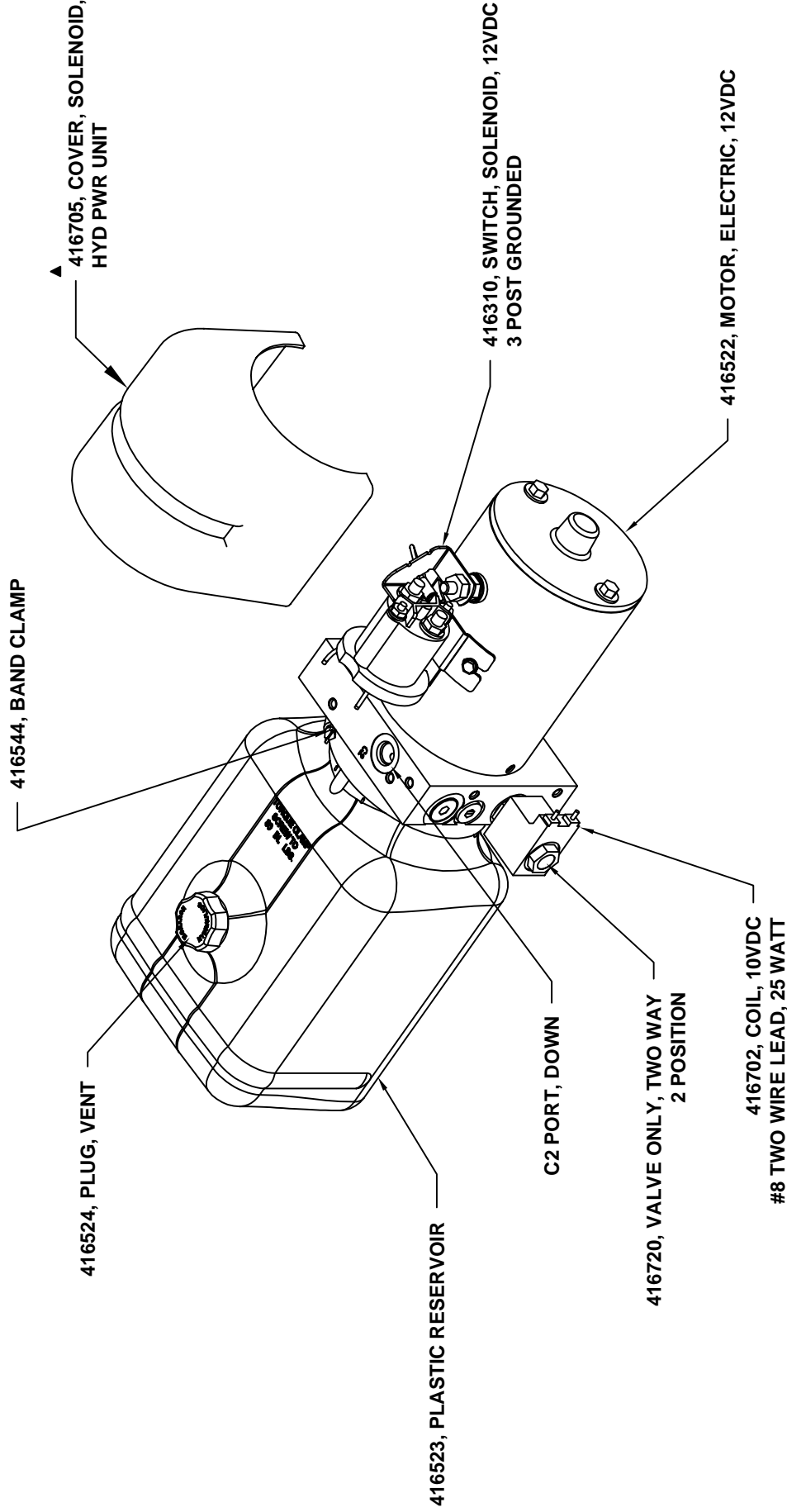
REPLACEMENT PARTS 6425 ED



NOT SHOWN: 416533, PUSH BUTTON PENDANT, YELLOW & GREY
416518, O-RING, INDUSTRIAL (3-5/8 x 3-7/8 x 1/8)
416521, PARTS KIT, RELIEF VALVE, 2 EACH

	VENCO VENTURO INDUSTRIES LLC CINCINNATI, OHIO	TITLE REPLACEMENT PARTS		DATE 03-20-15A	SECTION -
		6425 ED POWER UNIT		SUPersedes 10-27-05	6482

REPLACEMENT PARTS 6426 ES



NOT SHOWN: 416541, PUSH BUTTON PENDANT, GREY & ORANGE
416518, O-RING, INDUSTRIAL (3-5/8 X 3-7/8 X 1/8)
6504, PUMP ASSEMBLY (GEAR CODE = 03)
6505, RELIEF VALVE KIT



VENCO VENTURO INDUSTRIES LLC
CINCINNATI, OHIO

TITLE		DATE	SECTION
REPLACEMENT PARTS DRAWING		03-20-15C	-
6426 ES POWER UNIT		SUPERSEDES 10-05-05B	6508



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.

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