



INST-25440

*25100-PHX(-LC)*

# PARTS & INSTALLATION MANUAL

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## 25100-PHX(-LC)

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Included in this manual:

### 25100-PHX(-LC)

- Stabilizer with Hydraulic Pullout and Hydraulic Legs
- Available in “Less Crosstube” (-LC) configuration

VENCO VENTURO INDUSTRIES LLC  
12110 BEST PLACE | CINCINNATI, OHIO 45241  
800-226-2238



This manual also available online at [www.venturo.com](http://www.venturo.com).



# 25100-PHX(-LC)

INST-25440 - 7/2/2025 (Rev: A4)

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12-00073\_VNT1 WARRANTY PAGE



# SECTION 200

# INSTALLATION



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CINCINNATI, OHIO

## STABILIZER INSTALLATION GUIDELINES

Read instructions completely prior to starting installation. If this unit is to be installed on a Venturo crane body, continue to the stabilizer assembly section of this manual.

Prior to mounting the stabilizer crosstube, orient the stabilizer so the longer pullout is on the crane side of the truck.

### REAR MOUNTED

Crosstube should be centered at the rear of the truck and tied into the truck frame, body longills, and crane support. Installer is responsible for proper mounting brackets and hardware that will be needed during this process. If unit is to be mounted on a service body, do not attach crosstube to body sheet metal unless otherwise specified. Allow clearance between crosstube and body for the stabilizer legs to be fully retracted. Consult chassis up-fitter guide prior to installation for proper welding and bolting procedures to chassis.

*See the 'RECOMMENDED MOUNTING TO TRUCK FRAME' page*

Leg installation (refer to assembly section of manual) legs are adjustable to maintain proper ground penetration of 4" to 6". The stabilizer is designed to level the truck and not lift the chassis off of the ground. They are designed to work in conjunction with the chassis suspension to stabilize the unit with the bulk of the load being supported by the chassis suspension and tires. Tires must be set at the proper pressure according to the chassis manufacture, stabilizers fully extended, and legs deployed on firm, level ground prior to crane use.

**IMPORTANT** - When legs are fully retracted in the stowed position, a 15° degree departure angle between the bottom of the rear tire and the lowest point of the stabilizer is recommended.

*See the 'DEPARTURE ANGLE' page*

For hydraulic stabilizers, the control valve and selector valve are supplied in kit. It is the installer's responsibility to supply necessary hoses and fittings between these valves and stabilizer. Refer to proper hydraulic schematic for your particular stabilizer model.

**IMPORTANT** - The selector valve is designed to separate the crane and stabilizer hydraulic circuits. This will not allow stabilizer use while in crane mode.

### FRONT MOUNTED

Front mounted crosstube will be located on top of the chassis frame and welded to body longills. Additional shear plates (installer supplied) to be welded to crosstube and bolted to chassis frame. Crosstube to be spaced away from body for leg clearance when fully retracted. See assembly section of manual for pullout and leg installation detail.



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INSTALLATION GUIDELINES

STABILIZERS

DATE

12-08-23A

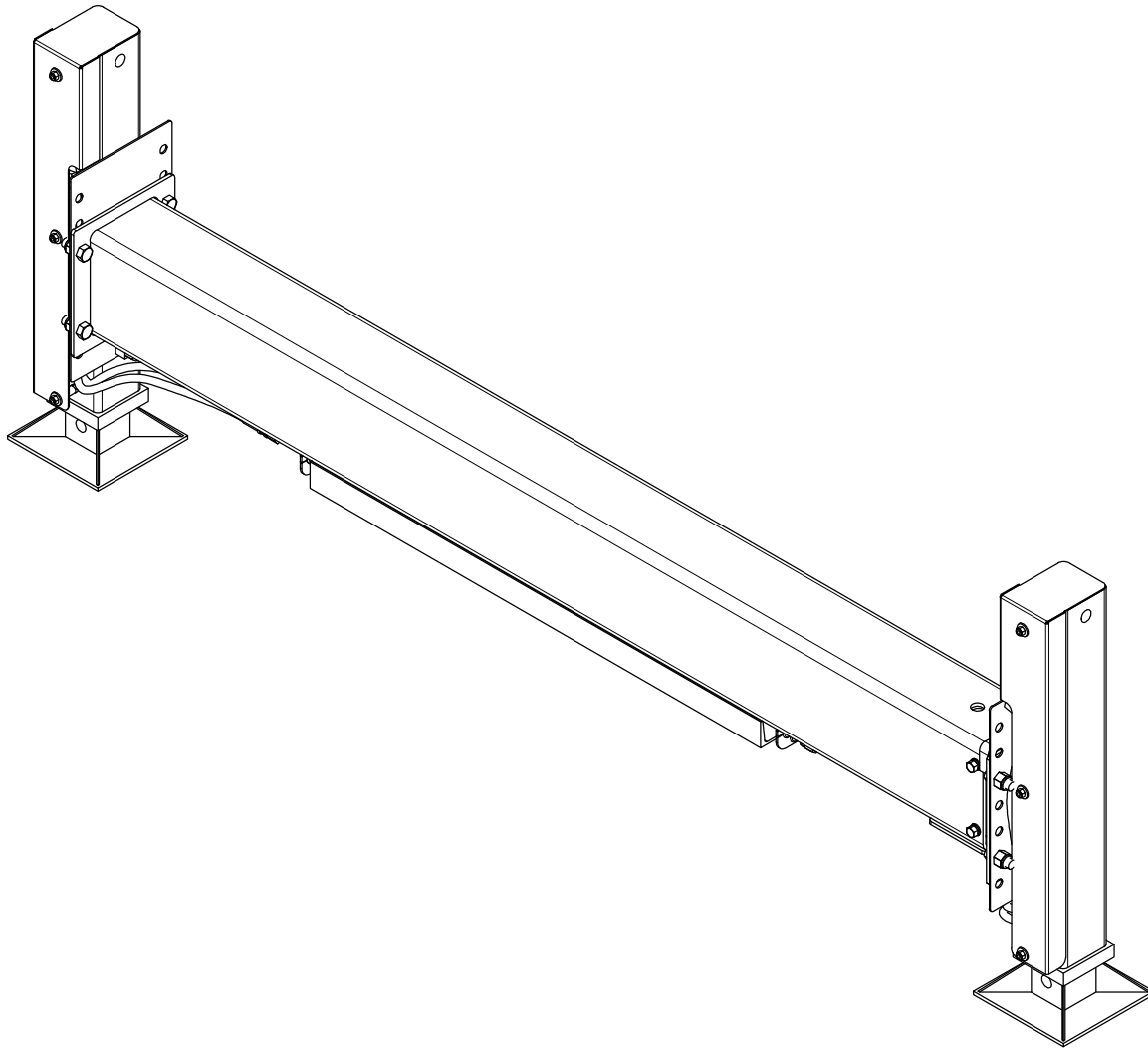
SUPERSEDES

01-17-17

SECTION

C200

25480



VENCO VENTURO INDUSTRIES LLC  
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ISOMETRIC VIEW

25100-PHX OUTRIGGER (WITH SHORT LEGS)

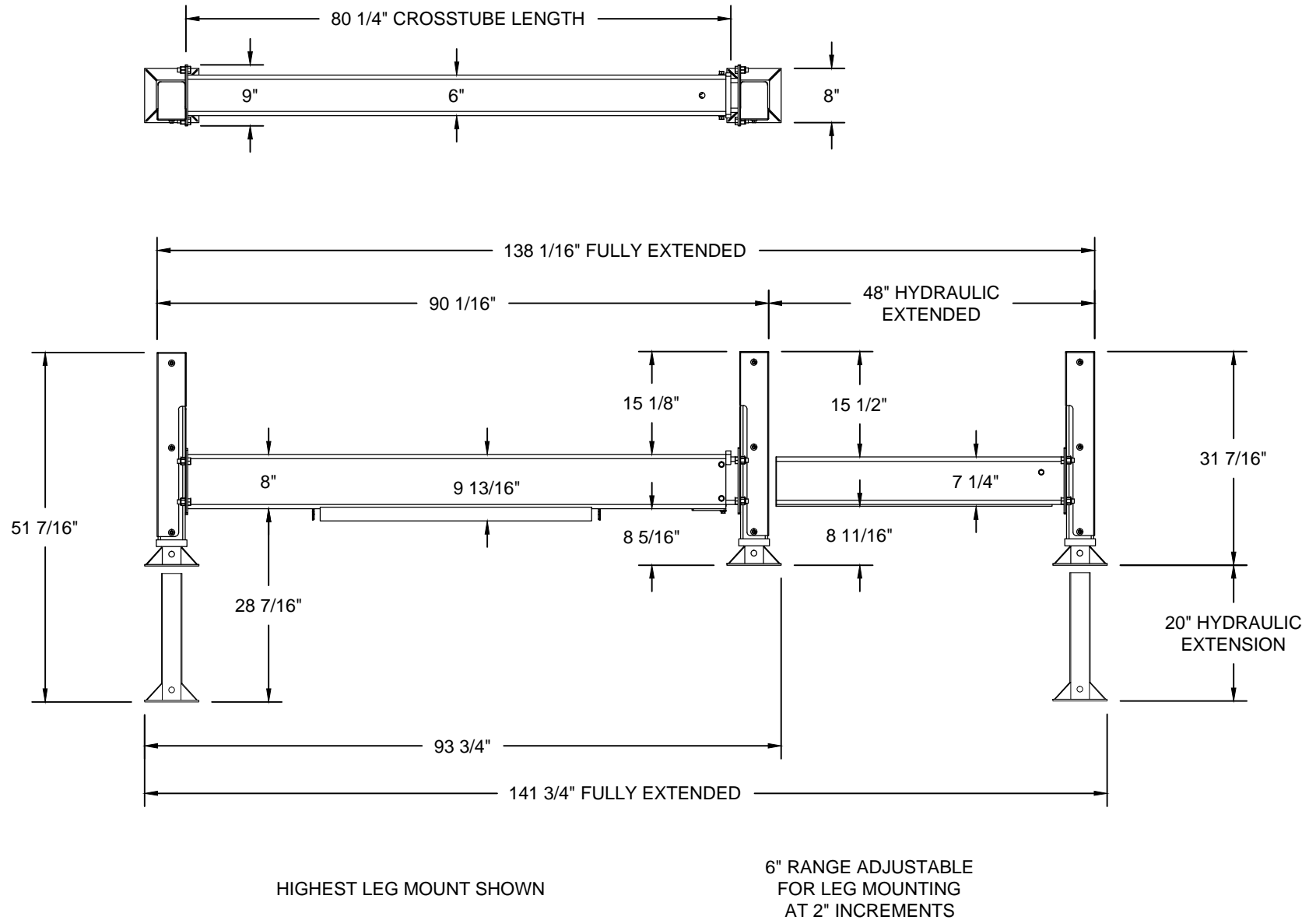
DATE  
01-20-17

SUPERSEDES  
-

PAGE

02

25488



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## OVERALL DIMENSIONS

25100-PHX OUTRIGGER WITH SHORT LEGS

DATE  
01-20-17

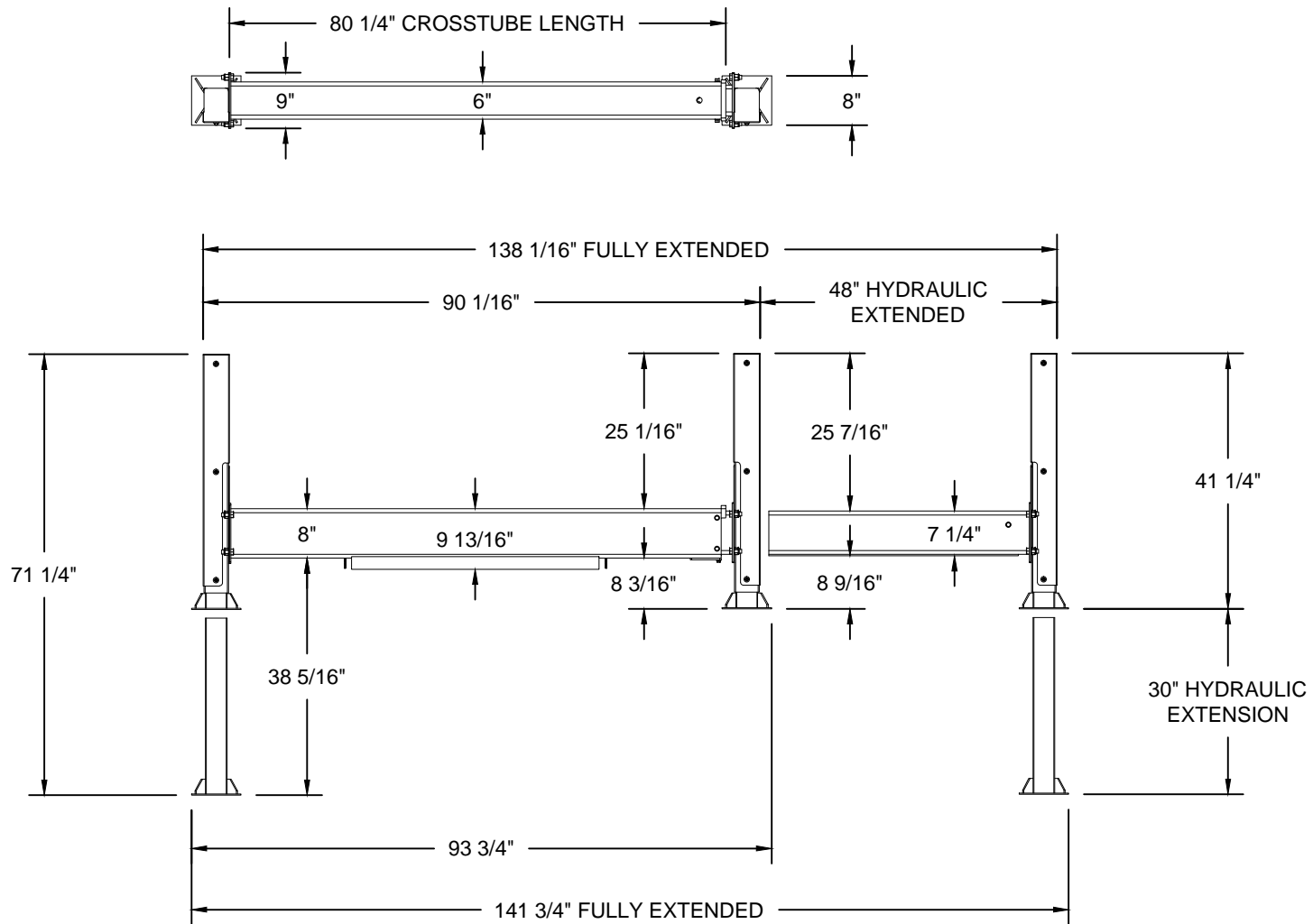
SUPERSEDES  
-

PAGE

03

25489





HIGHEST LEG MOUNT SHOWN

6" RANGE ADJUSTABLE  
FOR LEG MOUNTING  
AT 2" INCREMENTS



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## OVERALL DIMENSIONS

25100-PHX OUTRIGGER WITH LONG LEGS

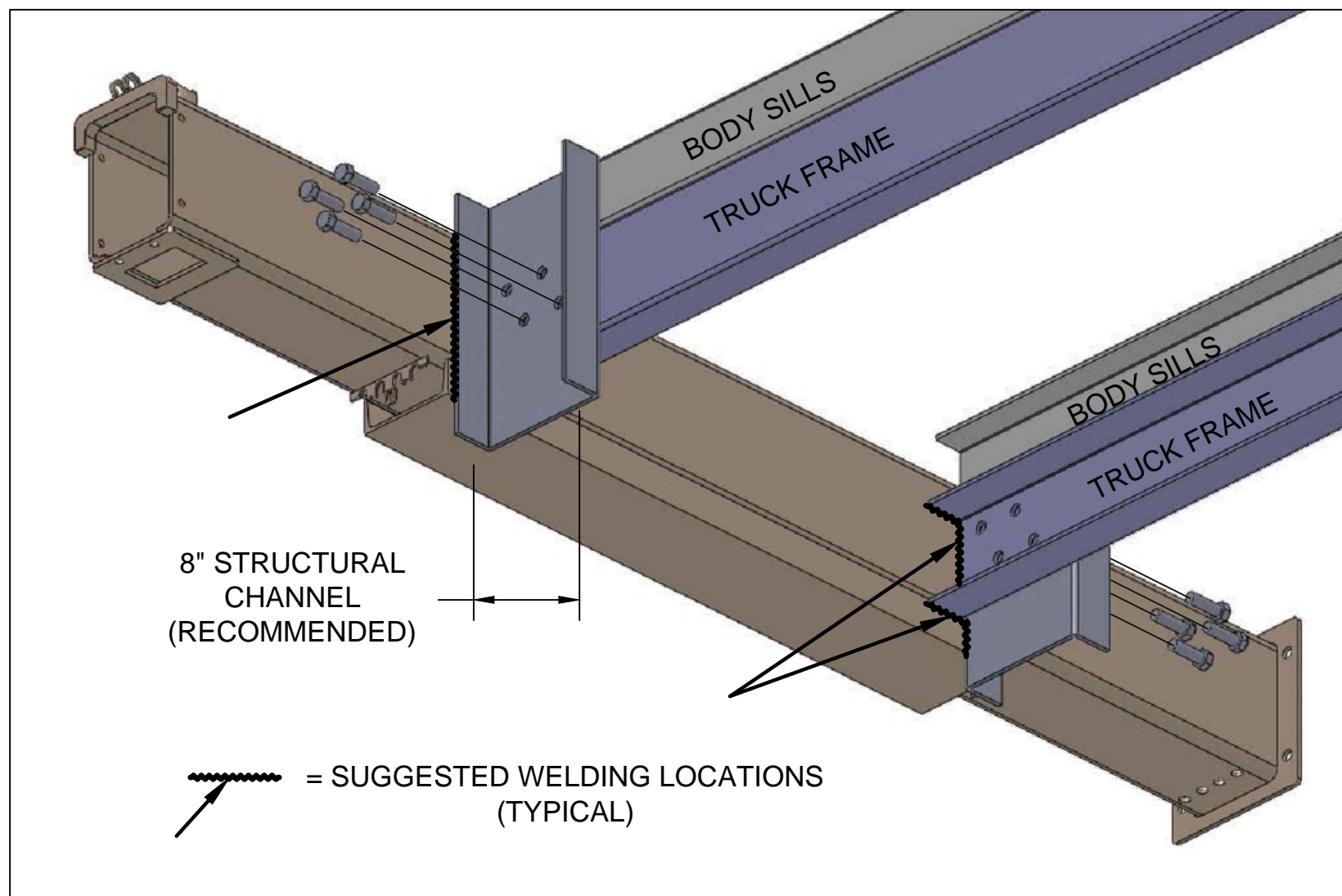
DATE  
01-20-17

SUPERSEDES  
-

PAGE

04

25490



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## RECOMMENDED MOUNTING TO TRUCK FRAME

25100/26100 SERIES STABILIZERS

DATE  
12-08-23A

SUPERSEDES  
01-20-17

SECTION  
C200

25484-2



REFERENCE PAGE 15 FOR ITEM NUMBERS



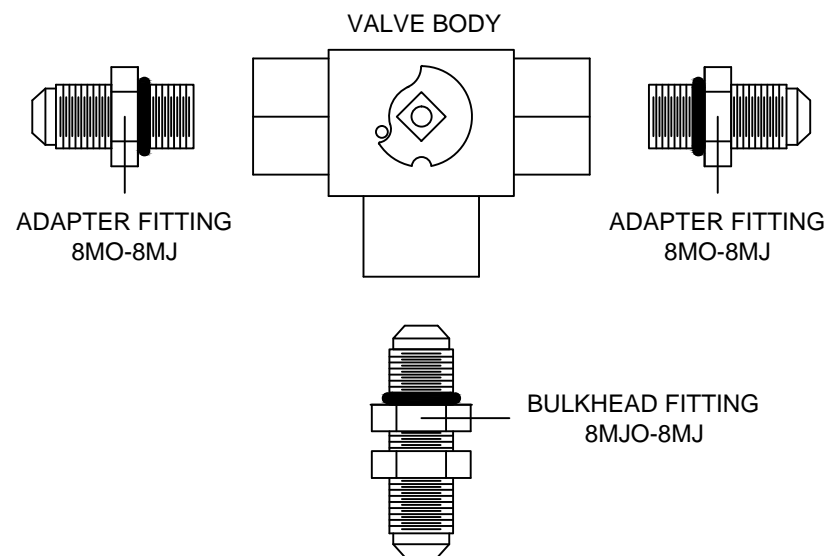
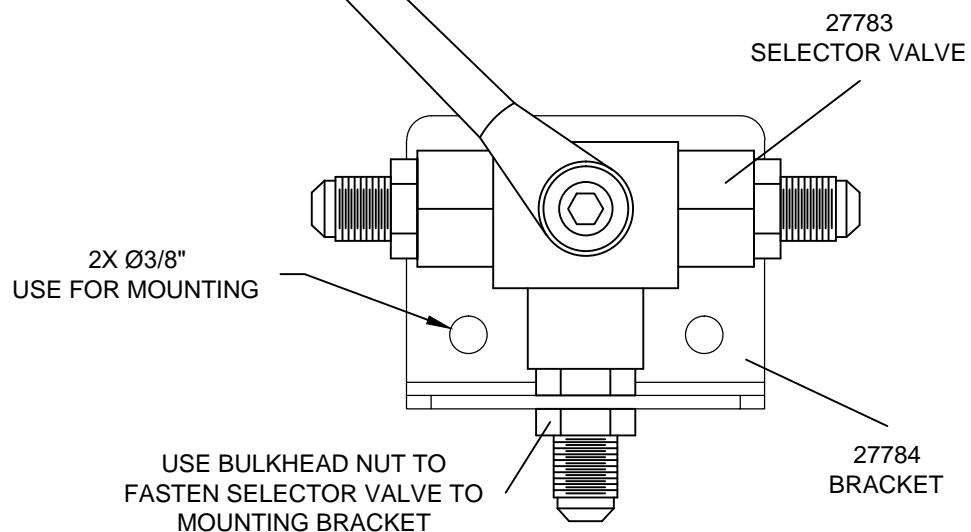
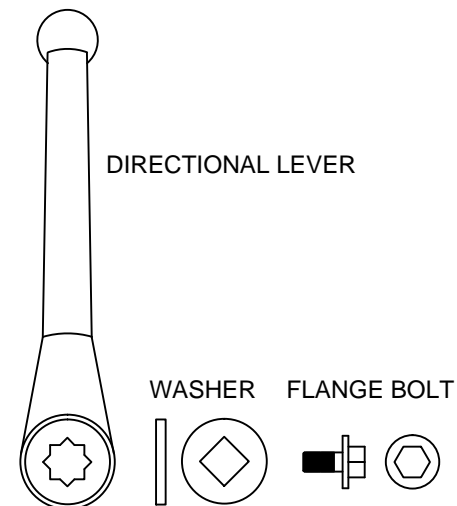
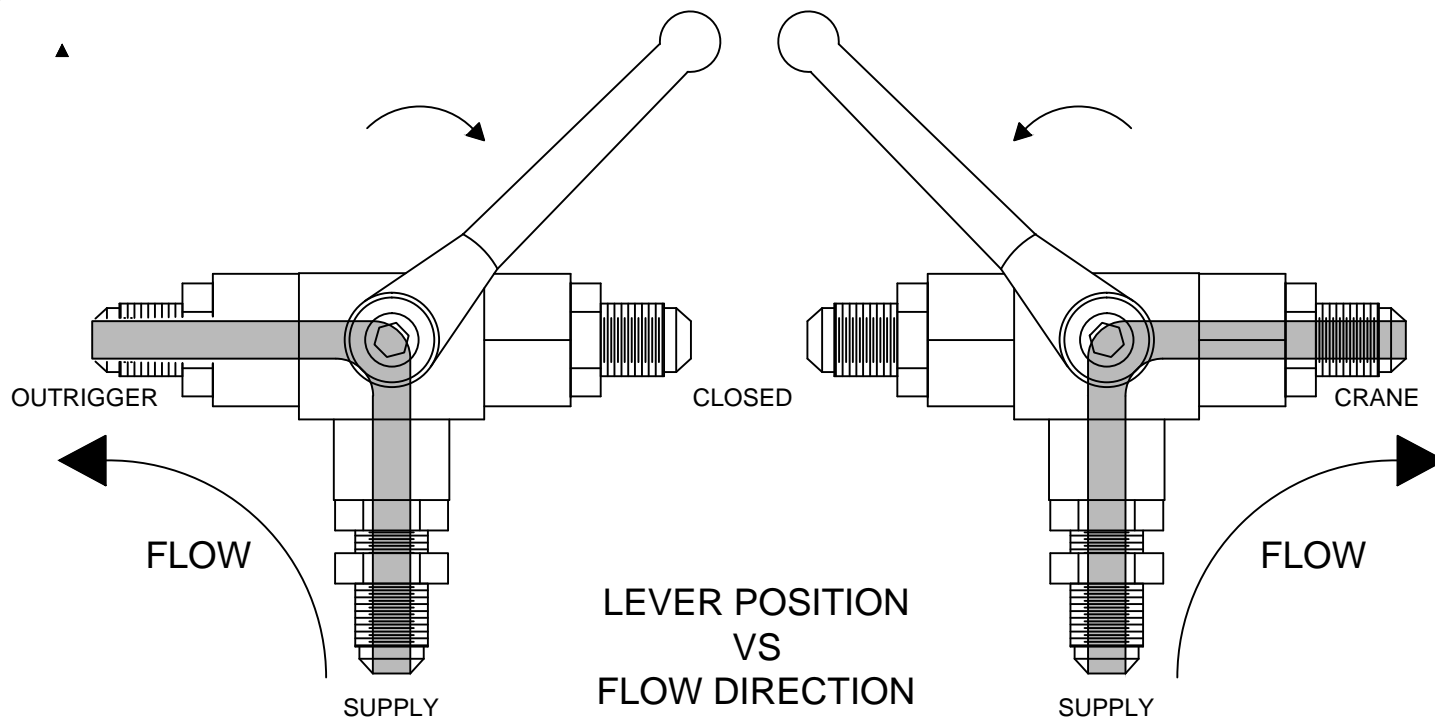
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SMALL PARTS IMAGE

25100-PHX OUTRIGGERS

DATE  
01-20-17A  
SUPERSEDES  
03-11-16

PAGE  
06  
25448



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CINCINNATI, OHIO

## SELECTOR VALVE OVERVIEW

HYDRAULIC CRANES & STABILIZERS

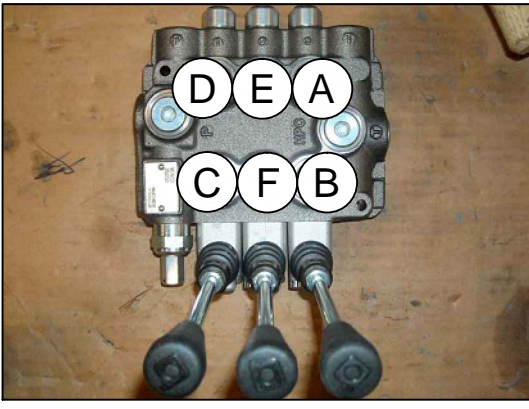
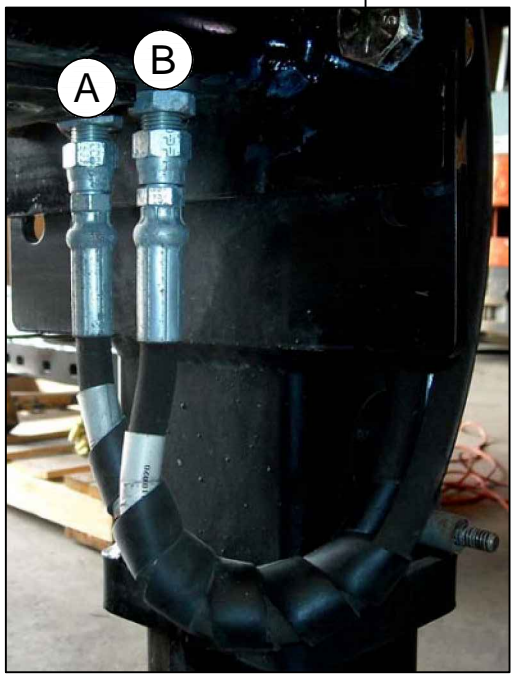
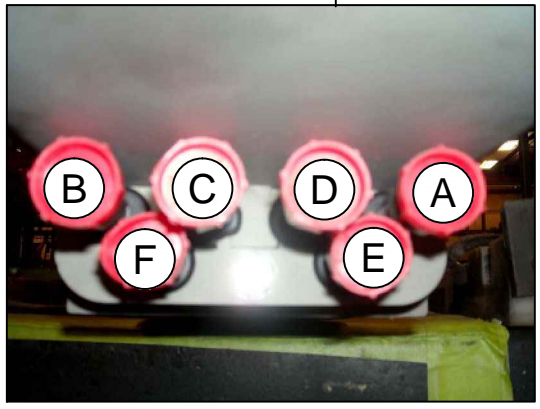
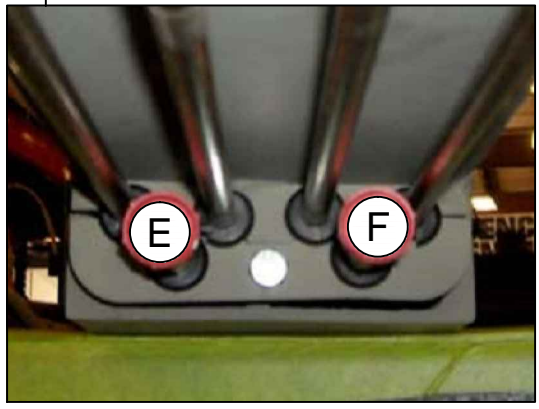
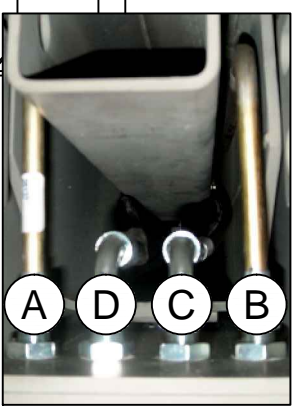
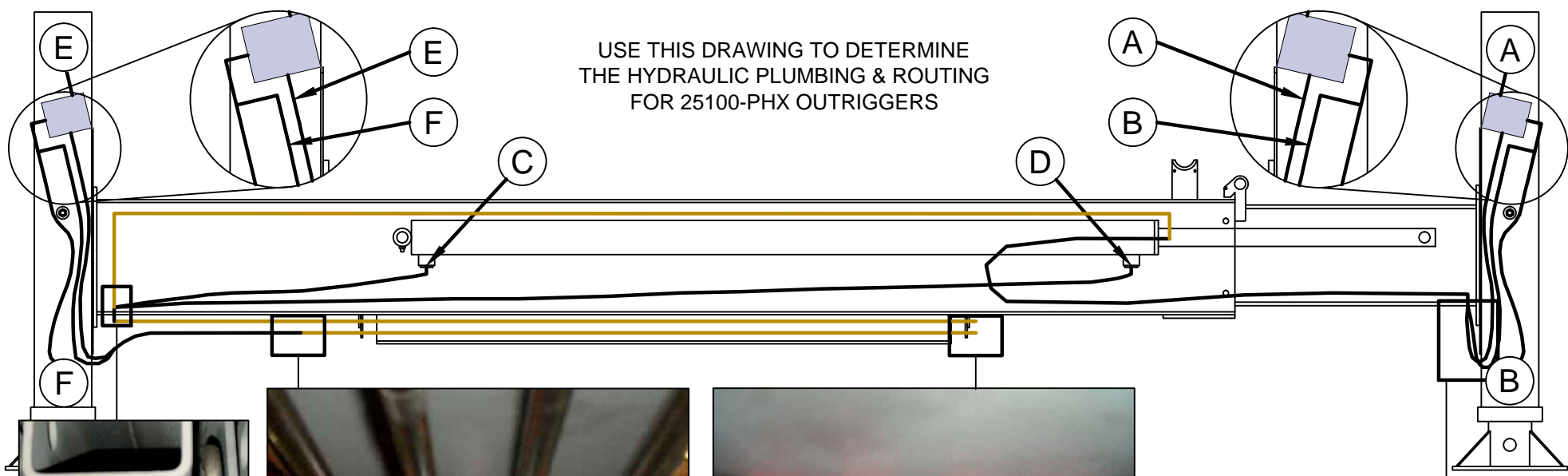
DATE  
12-07-23B  
SUPERSEDES  
01-20-17A

SECTION  
C200

25447-1

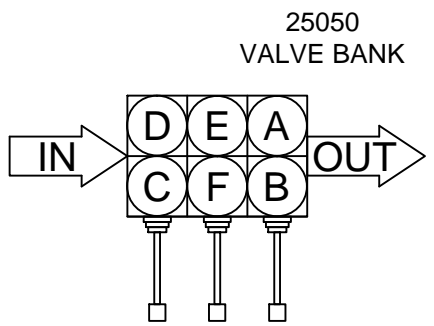


USE THIS DRAWING TO DETERMINE  
THE HYDRAULIC PLUMBING & ROUTING  
FOR 25100-PHX OUTRIGGERS



**OUTRIGGER FUNCTIONS**

- A = RIGHT LEG DOWN
- B = RIGHT LEG UP
- C = PULLOUT OUT
- D = PULLOUT IN
- E = LEFT LEG DOWN
- F = LEFT LEG UP



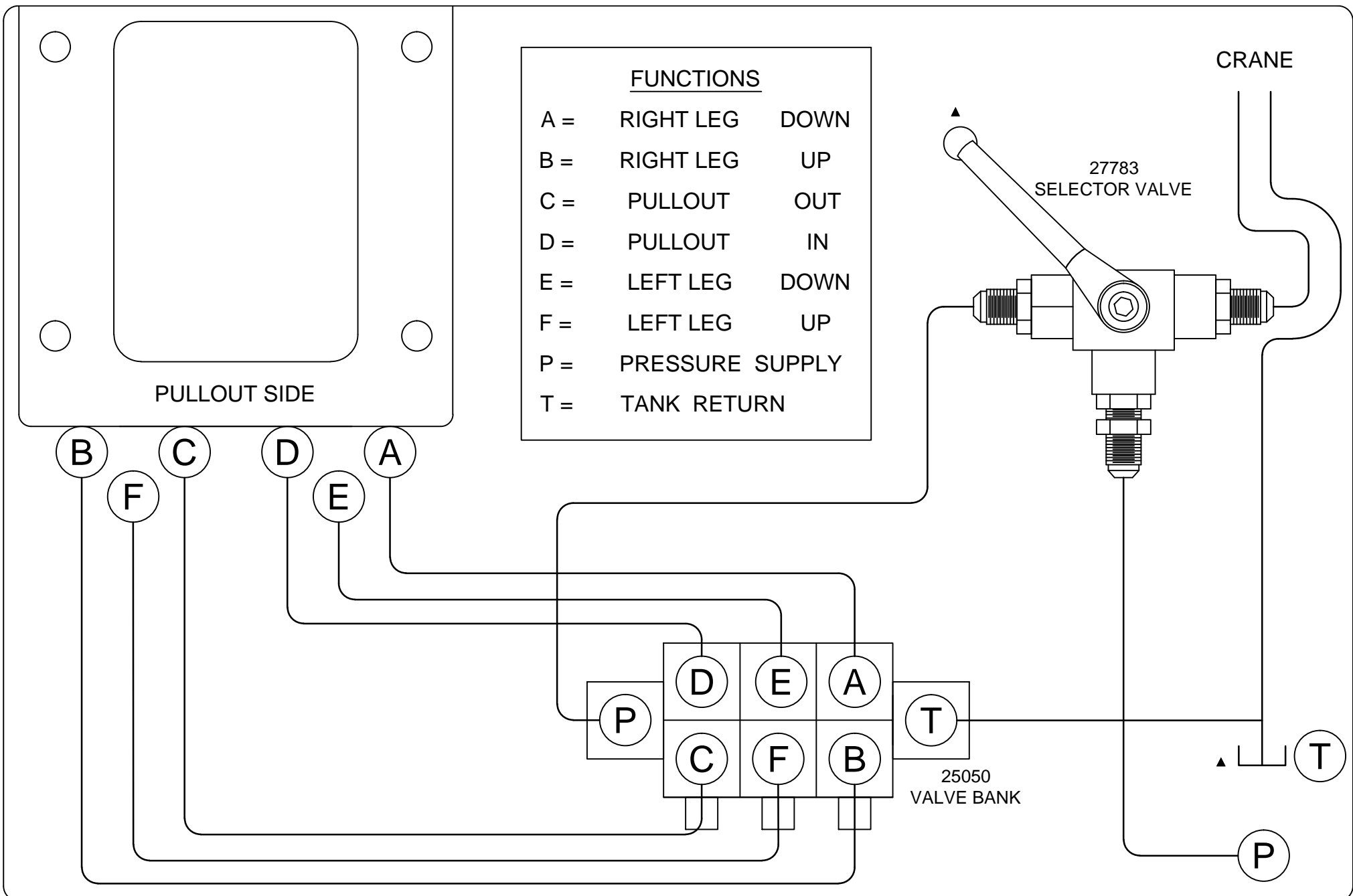
VENCO VENTURO INDUSTRIES LLC  
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HYDRAULIC MAPPING, 1 OF 2

25100-PHX OUTRIGGERS

DATE  
01-20-17B  
SUPERSEDES  
03-17-16A

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08  
25446



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## HYDRAULIC MAPPING, 2 OF 2

25100 / 26100-PHX STABILIZERS ▲

DATE  
12-08-23C

SUPERSEDES  
01-23-17B

SECTION  
C200 ▲

25449

## RECOMMENDED DEPARTURE ANGLE



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RECOMMENDED DEPARTURE ANGLE

REAR MOUNTED OUTRIGGERS

DATE  
08-25-22A

SUPERSEDES  
01-18-17

PAGE

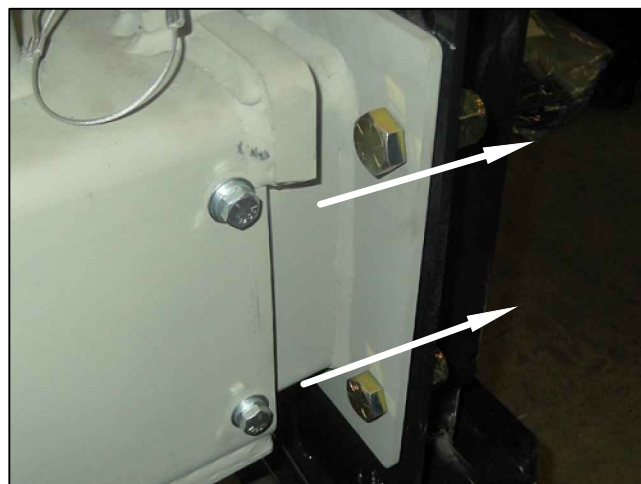
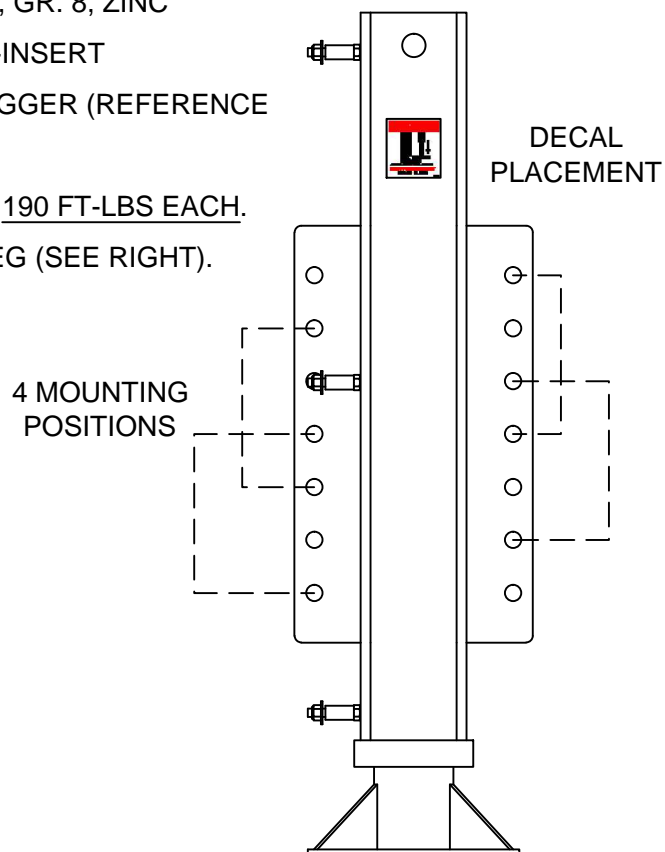
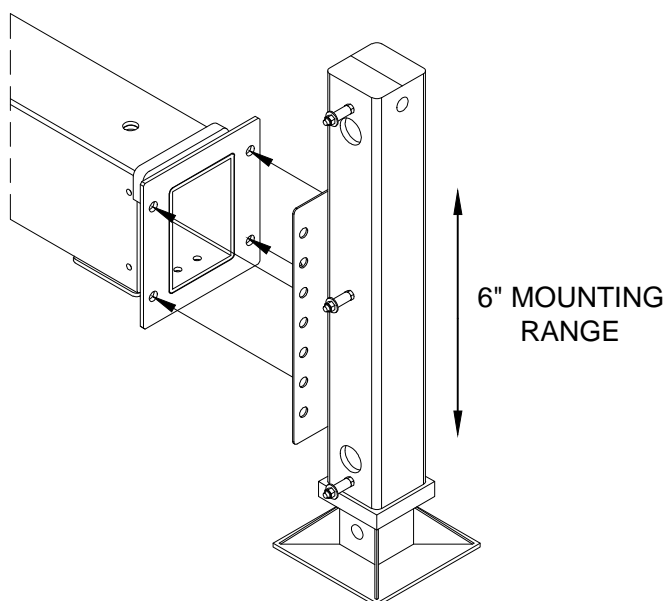
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25485

## MOUNTING THE OUTRIGGER LEGS, 25100 SERIES OUTRIGGERS

FOLLOW INSTRUCTIONS FOR MOUNTING 25100 SERIES OUTRIGGER LEGS.

- ▲ 1. DETERMINE PLACEMENT OF OUTRIGGER LEGS. REFER TO MODEL SPECIFIC 'OVERALL DIMENSIONS' PAGE.
2. USE HARDWARE & FASTENERS PROVIDED (REFERENCE IMAGE BELOW):
  - [8] HEX HEAD CAP SCREW; 5/8-11 X 1-1/2", GR. 8, ZINC
  - [8] LOCK NUT; 5/8-11, GR. 8, ZINC, NYLON-INSERT
3. INSERT BOLTS POINTING AWAY FROM OUTRIGGER (REFERENCE IMAGE BELOW).
4. TORQUE OUTRIGGER LEG BOLTS & NUTS TO 190 FT-LBS EACH.
5. PLACE 24964 DANGER DECAL, [1] ON EACH LEG (SEE RIGHT).



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MOUNTING THE LEGS

25100 SERIES OUTRIGGERS

DATE  
01-23-17A

SUPERSEDES  
03-11-16

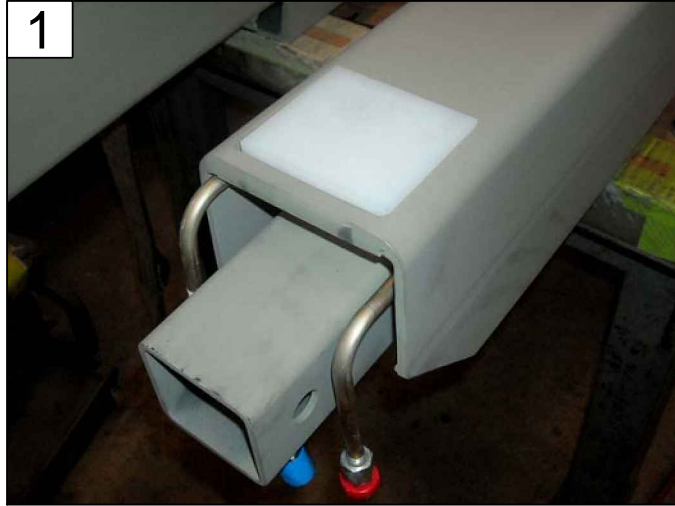
PAGE

11

25428-2



# ASSEMBLY OF 25100-PHX OUTRIGGER WITH LESS-CROSSTUBE CONFIGURATION



1

PLACE [1] UHMW PAD ON PULLOUT  
PAGE 15 - ITEM 1



2

PLACE [1] UHMW PAD IN CROSSTUBE  
PAGE 15 - ITEM 1



3

ENSURE PULLOUT CYLINDER HOUSING  
& PLUMBING ARE TIED



4

SLIDE PULLOUT INTO CROSSTUBE



5

FASTEN 25065 NUT BAR RETAINERS IN CROSSTUBE  
PAGE 15 - ITEMS 2, 7, 8, & 9



6

FASTEN 25077 NUT BAR RETAINER IN CROSSTUBE  
PAGE 15 - ITEMS 3, 4, 5, & 6



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LESS-CROSSTUBE ASSY

25100-PHX OUTRIGGERS

DATE  
01-23-17A

SUPERSEDES  
03-11-16

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12

25443

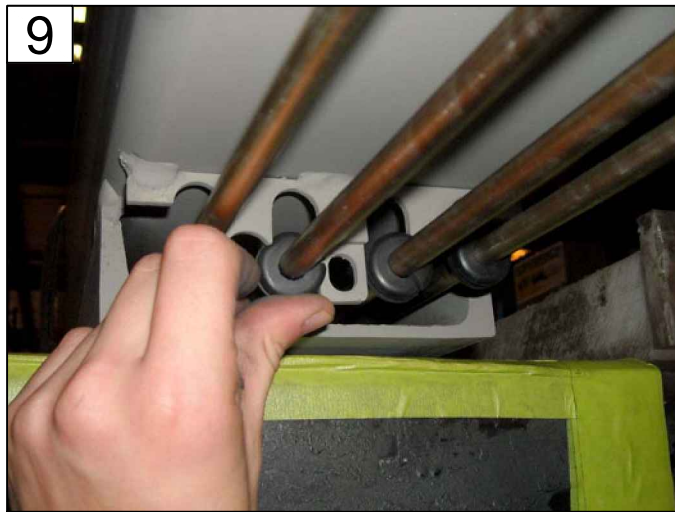
# ASSEMBLY OF 25100-PHX OUTRIGGER WITH LESS-CROSSTUBE CONFIGURATION



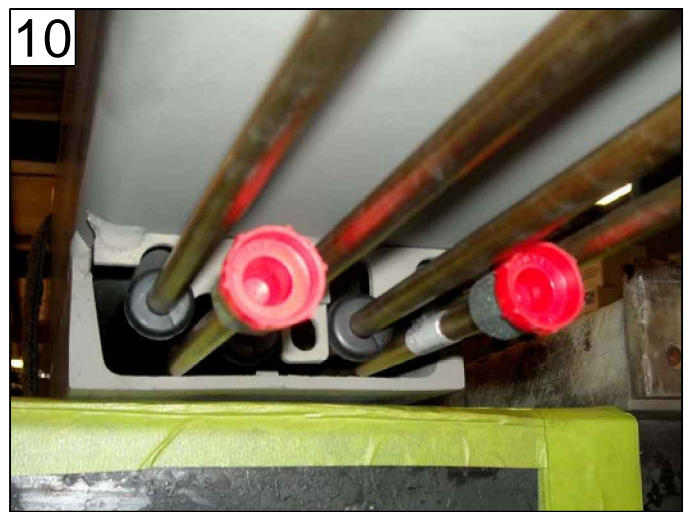
FASTEN BULKHEADS - SEE NEXT STEP'S IMAGE  
PAGE 15 - ITEM 12



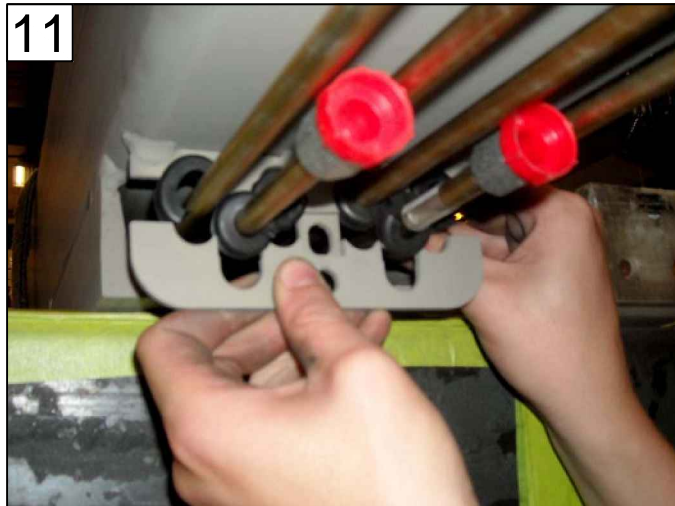
FASTEN 25138 TUBES TO BULKHEADS  
PAGE 15 - ITEM 13



PUSH GROMMETS AROUND TUBES  
PAGE 15 - ITEM 15



PLACE 25139 TUBES  
PAGE 15 - ITEM 14



CLAMP AROUND GROMMETS  
PAGE 15 - ITEM 16



FASTEN CLAMP, PAGE 15 - ITEMS 4 & 17  
REPEAT STEPS 9 TO 11 FOR OPPOSITE CLAMP



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LESS-CROSSTUBE ASSY

25100-PHX OUTRIGGERS

DATE  
01-23-17A

SUPERSEDES  
03-11-16

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13

25444



13



UNTIE PULLOUT CYLINDER HOUSING & PLUMBING

14



SEE HYDRAULIC MAPPING  
PAGES 8 & 9

15



INSERT SHAFT & COLLARS INTO CYLINDER HOUSING

16



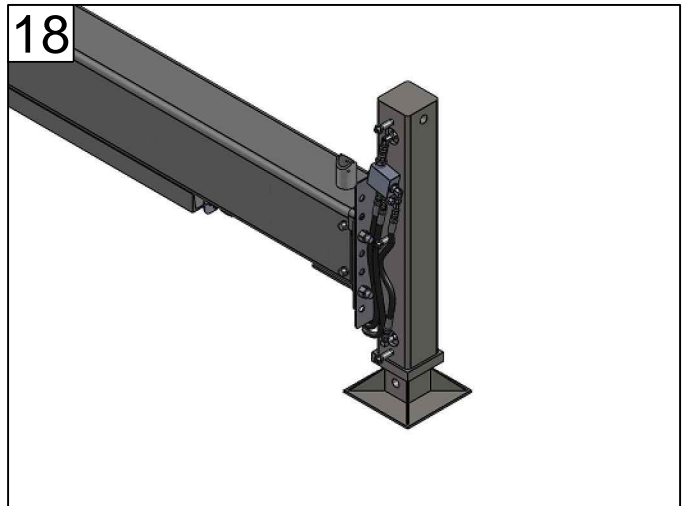
PUSH SHAFT INTO TOP SLOT OF CROSSTUBE

17



WITH CYLINDER HOUSING CENTERED  
LOCTITE & FASTEN COLLARS FLUSH

18



PROCEED TO MOUNTING OF LEGS  
& HYDRAULICS



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LESS-CROSSTUBE ASSY

25100-PHX OUTRIGGERS

DATE  
01-23-17A

SUPERSEDES  
03-11-16

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25445



# **SECTION 400**

## **REPLACEMENT PARTS**



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# PARTS BREAKDOWN, 25100-PHX OUTRIGGERS (LESS-CROSSTUBE PARTS INCLUDED)

#	PART #	DESCRIPTION	QTY	
			-SL	-LL
*1	25081	UHMW PAD; 3-1/8 X 3-1/2 X 3/8	2	2
*2	25065	NUT BAR RETAINER	2	2
*3	25077	NUT BAR RETAINER	1	1
*4	!HHCS03118075	HEX HEAD CAP SCREW; 5/16-18 X 3/4, GR. 5	2	2
*5	!LWSH-031	LOCK WASHER; 5/16, GR. 5	2	2
*6	!FWSH-031	FLAT WASHER; 5/16, GR. 5	2	2
▲ *7	!HHCS03816050	HEX HEAD CAP SCREW; 3/8-16 X 1/2, GR. 5	4	4
*8	!LWSH-038	LOCK WASHER; 3/8, GR. 5	4	4
▲ *9	-	-	-	-
*10	!HHCS06311150-8	HEX HEAD CAP SCREW; 5/8-11 X 1-1/2, GR. 8	8	8
*11	!LNUT-06311-8	LOCK NUT; 5/8-11, GR. 8, NYLON INSERT	8	8
*12	H2701-0606	ADAPTER FITTING; 90° BULKHEAD, 6MJ-6MJ	4	4
*13	25138	HYDRAULIC TUBE, 60"	4	4
*14	25139	HYDRAULIC TUBE, 47"	2	2
*15	14883	GROMMETS, HYDRAULIC TUBES	12	12
*16	25157	CROSSTUBE CLAMP PLATE	2	2
*17	!LNUT-03118	LOCK NUT; 5/16-18, GR.5, NYLON INSERT	2	2
*18	28446	CLAMPING SHAFT COLLAR - 3/4 ID	2	2
*19	25051	SHAFT, CYLINDER HOUSING	1	1
*20	24964	DECAL; DANGER, CRUSHING INJURY	2	2
21	SEE PAGES 19 & 20	HYDRAULIC LEG; SHORT, LEFT, 25100 O.R.	1	-
22	SEE PAGES 19 & 20	HYDRAULIC LEG; SHORT, RIGHT, 25100 O.R.	1	-
23	SEE PAGES 19 & 20	HYDRAULIC LEG; LONG, LEFT, 25100 O.R.	-	1
24	SEE PAGES 19 & 20	HYDRAULIC LEG; LONG, RIGHT, 25100 O.R.	-	1
*25	25050	VALVE BLOCK, 3-SPOOL	1	1
*26	H6400-0808	ADAPTER FITTING; STRAIGHT, 8MJ-8MO	2	2
*27	H6400-0608	ADAPTER FITTING; STRAIGHT, 6MJ-8MO	6	6
*28	27783	SELECTOR VALVE	1	1
*29	27784	BRACKET, SELECTOR VALVE	1	1
30	INST-21024	OUTRIGGER & ACCESSORIES MANUAL	1	1
31	25085-2	CROSSTUBE; 25100 SERIES OUTRIGGERS	1	1
32	-	-	-	-
*33	!HHCS03118063	HEX HEAD CAP SCREW; 5/16-18 X 5/8, GR. 5	2	2

\* WHEN PURCHASED IN "LESS CROSS TUBE" ("LCT") CONFIGURATION, THESE ITEMS WILL BE SHIPPED LOOSE AND REQUIRE INSTALLATION



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## PARTS BREAKDOWN

25100-PHX OUTRIGGERS

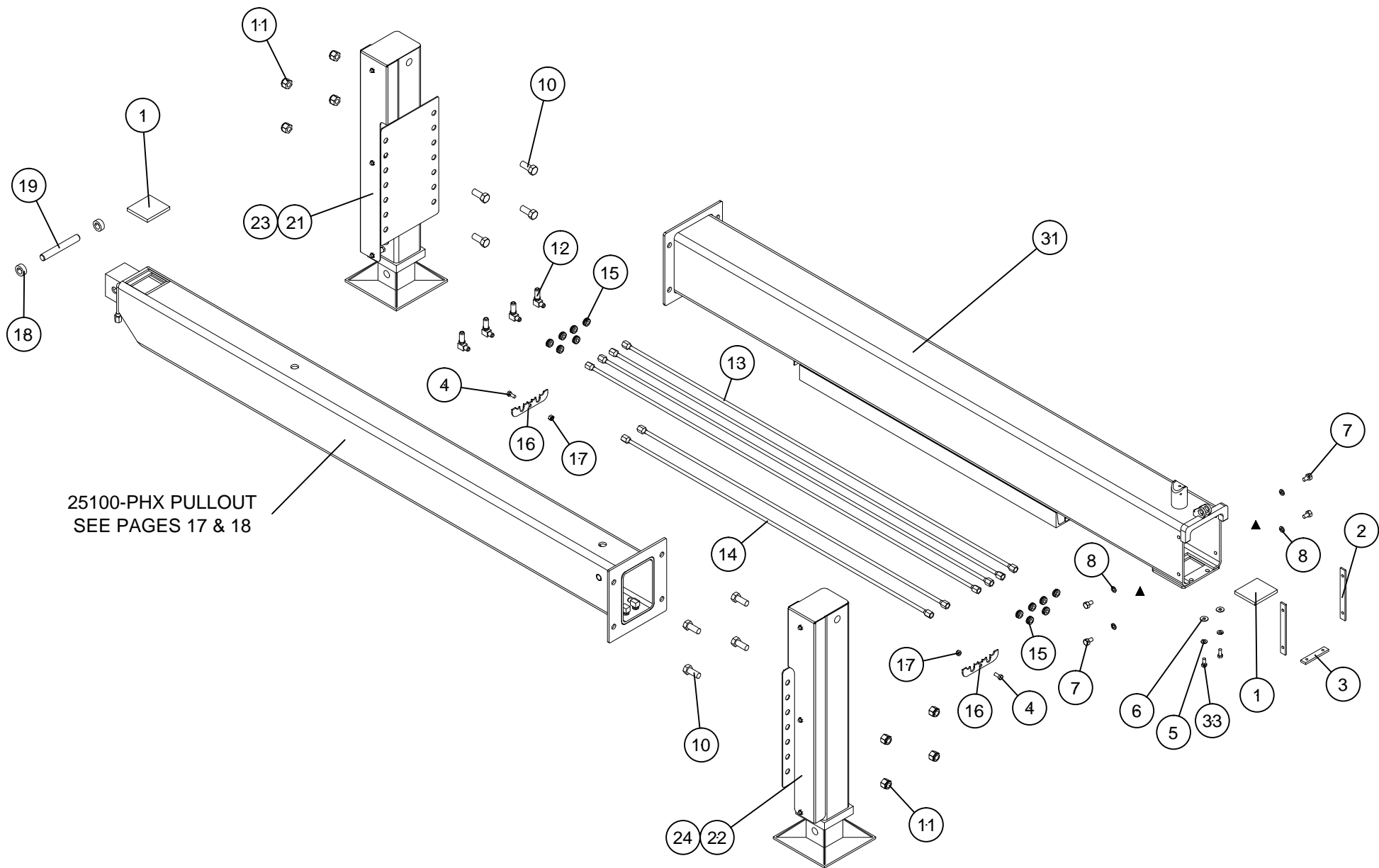
DATE  
07-02-25F

SUPERSEDES  
07-30-24E

PAGE

15

25442



REFERENCE PAGE 15 FOR ITEM NUMBERS



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## PARTS BREAKDOWN (LESS-CROSSTUBE PARTS INCLUDED)

25100-PHX OUTRIGGERS

DATE  
07-02-25C  
SUPERSEDES  
07-29-24B

PAGE

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25441

# PARTS BREAKDOWN, 25100-PHX PULLOUT ASSEMBLY

#	PART #	DESCRIPTION	QTY
1	25087-2	PULLOUT; 4', 25100-PHX OUTRIGGERS	1
2	25086	EXTENSION CYLINDER; 4', 25100-PHX	1
3	25088	HOUSING; EXTENSION CYLINDER BASE-END	1
4	25137	HYDRAULIC TUBE; RIGHT LEG, DOWN	1
5	25136	HYDRAULIC TUBE; RIGHT LEG, UP	1
6	25149	HOSE ASSEMBLY; RIGHT LEG, UP & DOWN	2
7	25154	HOSE ASSEMBLY; CYLINDER, OUT	1
8	25155	HOSE ASSEMBLY; CYLINDER, IN	1
9	25049	SHAFT; CYLINDER & HOUSING, BASE-END	1
10	!SRNG-075	SNAP RING; 3/4", PLATED	2
11	25052	SHAFT; CYLINDER & PULLOUT, ROD-END	1
12	28446	CLAMPING SHAFT COLLAR - 3/4" ID	4
13	H2701LN-0606	BULKHEAD FITTINGS; 90°, 6MJ-6MJ, L-NUT	2
14	H6400-0408	HYD TUBE ADAPTER - 4MJ-8MO	2



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PARTS BREAKDOWN

25100-PHX PULLOUT ASSY

DATE  
07-30-24C

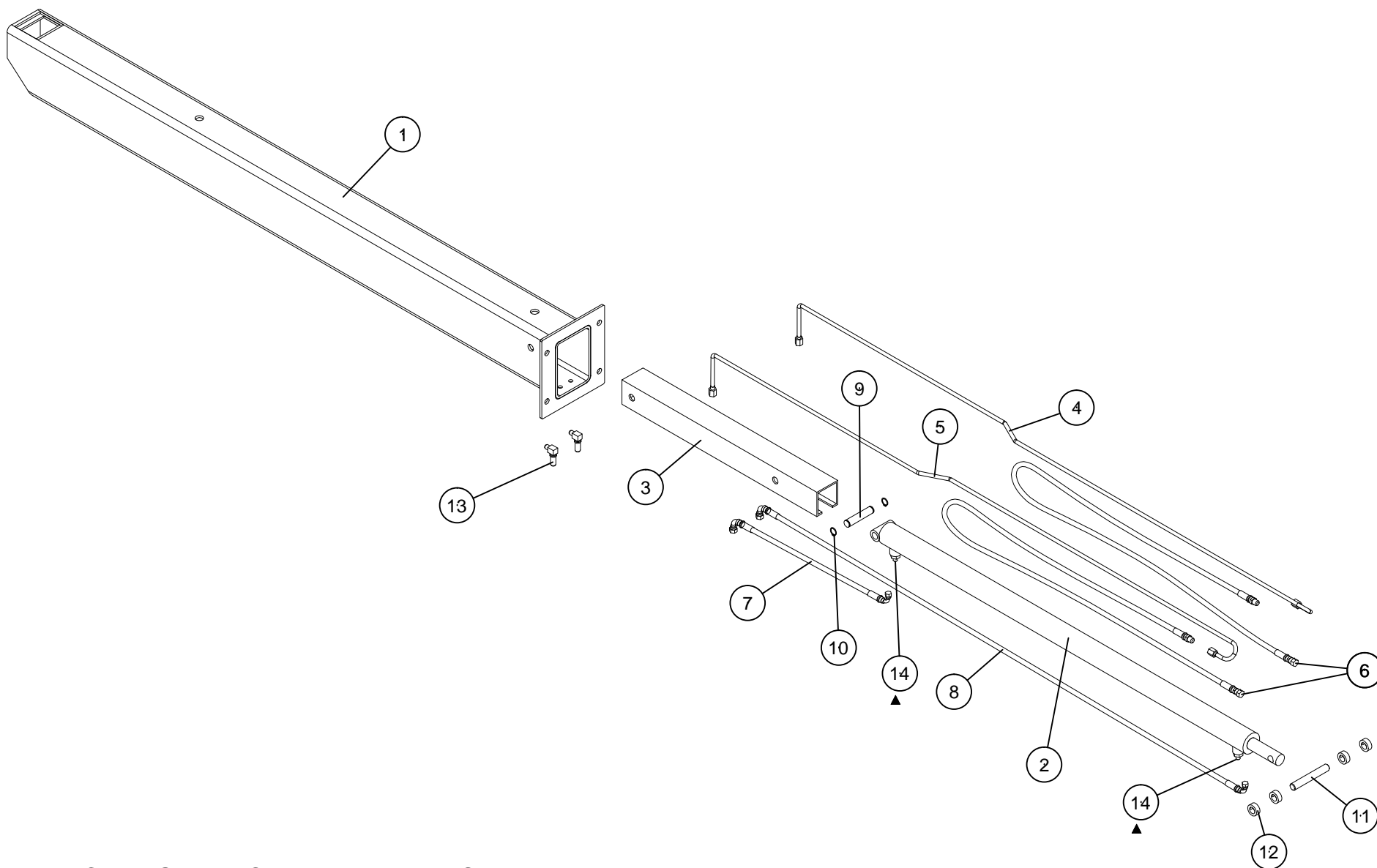
SUPERSEDES  
07-26-24B

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25451





REFERENCE PAGE 17 FOR ITEM NUMBERS



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## PARTS BREAKDOWN

25100-PHX PULLOUT ASSEMBLY

DATE  
07-30-24B

SUPERSEDES  
01-23-17A

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25450

# PARTS BREAKDOWN, 25100 SERIES HYDRAULIC LEGS ASSEMBLY

25100 SERIES OUTRIGGERS HYDRAULIC LEGS ASSEMBLY PARTS BREAKDOWN		SHORT		LONG		
		LEFT	RIGHT	LEFT	RIGHT	
#	DESCRIPTION	QUANTITY				PART #
1	HYDRAULIC LEG; SHORT, LEFT-SIDE	1	-	-	-	25064-1
2	HYDRAULIC LEG; SHORT, RIGHT-SIDE	-	1	-	-	25064-2
3	HYDRAULIC LEG; LONG, LEFT-SIDE	-	-	1	-	25055-1
4	HYDRAULIC LEG; LONG, RIGHT-SIDE	-	-	-	1	25055-2
5	COVER; SHORT LEG, LEFT-SIDE	1	-	-	-	25069-1
6	COVER; SHORT LEG, RIGHT-SIDE	-	1	-	-	25069-2
7	COVER; LONG LEG, LEFT-SIDE	-	-	1	-	25068-1
8	COVER; LONG LEG, RIGHT-SIDE	-	-	-	1	25068-2
9	HOSE ASSY KIT -SL (INCLUDES HOSE AND FITTING)	1	1	-	-	25193-KIT
▲ 10	HOSE ASSY KIT -LL (INCLUDES HOSE AND FITTING)	-	-	1	1	25217-KIT
11	HOSE ASSEMBLY; 47", 4FX-6MJ, SHORT LEG, LEFT-SIDE	2	-	-	-	25151
12	HOSE ASSEMBLY; 27", 4FX-6FX, SHORT LEG, RIGHT-SIDE	-	2	-	-	25147
13	HOSE ASSEMBLY; 54", 4FX-6MJ, LONG LEG, LEFT-SIDE	-	-	2	-	25153
14	HOSE ASSEMBLY; 37", 4FX-6FX, LONG LEG, RIGHT-SIDE	-	-	-	2	25152
15	VALVE BLOCK; CHECK BODY & CARTRIDGE	1	1	1	1	22765
16	SPACER; HYDRAULIC LEG COVERS	3	3	3	3	25070
17	FLAT WASHER; 5/16, GR. 5, ZINC	3	3	3	3	IFWSH-031
18	LOCK NUT; 5/16-18, GR. 5, ZINC, NYLON-INSERT	3	3	3	3	ILNUT-03118
19	ADAPTER FITTING; 90° ELBOW, 6MO-6MJ	1	1	1	1	H6801L-0606
20	ADAPTER FITTING; COUPLING SWIVEL, 6FJX-6FJX	1	1	1	1	H6565-0606
21	ADAPTER FITTING; ADAPTER, 6MJ-8MP	1	1	1	1	H2404-0608
22	ADAPTER FITTING; 90° ELBOW, 6MO-4MJ	1	1	1	1	H6801-0406
23	ADAPTER FITTING; T-SHAPE, 4MJ-4FJX-4MJ	1	1	1	1	H6602-040404
24	ADAPTER FITTING; CONNECTOR, 6MO-4MJ	1	1	1	1	H6400-0406
25	ADAPTER FITTING; 90° ELBOW, 4MJ-4FX	1	1	1	1	H6500-0404
▲ 26	-	-	-	-	-	-

## REFERENCE 25453 PARTS DRAWING



VENCO VENTURO INDUSTRIES LLC  
CINCINNATI, OHIO

### PARTS BREAKDOWN

25100 SERIES HYD. LEGS

DATE  
09-05-24C

SUPERSEDES  
05-23-23B

PAGE

-

25452

# PARTS BREAKDOWN, 25100 SERIES HYDRAULIC LEGS ASSEMBLY

LEFT	SHORT LEGS	RIGHT
LEFT	LONG LEGS	RIGHT
REFERENCE 25452 PARTS LIST		



# VENTURO CRANES LIMITED WARRANTY POLICY

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

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

## 1-Year Limited Warranty Policy

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

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

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

## Warranty Claims

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

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

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