



FIELD KIT

Vermeer MV Solutions, Inc.

Trenchless
Piedmont, SC 29673 USA

FIELD CAMPAIGN KIT #: VVK000001 Rev. 1 DATE: 22 December 2022
For Dealer Reference: Service Bulletin #: SVV2019-001 Rev. 1

On-Highway Safety Component Enhancement Kit

CAMPAIGN
TYPE:

Mandatory – Product Safety
DEALER INSTALLATION ONLY

CAMPAIGN
CATEGORY:

Kit and Bulletin

MACHINE/ ATTACHMENT MODEL(S):	SERIAL NUMBERS:		Kit version
	Included	Excluded	
2015 LP573SDT Heavy	2170 – 2180	None	VVK01
2016 LP873SDT Heavy	2103 – 2190		
2017 LP873SDT Heavy	2102 – 2353		
2018 LP873SDT Heavy	2101 – 2380		
2019 LP873SDT Heavy	2109 – 2378		
2019 LP873SDT Heavy	2024 – 2084		

****FOR COMPLETE LIST OF UNITS SEE PAGES 15 – 19****



**PRODUCT
SAFETY ALERT**

Purpose:

REASON FOR REVISION 1:

- **THIS KIT DOES NOT APPLY TO UNITS WITH A SCISSOR-STYLE DEBRIS TANK LIFT. SOME UNITS WITH THE SCISSOR LIFT MAY HAVE BEEN INCLUDED IN THE ORIGINAL KIT INSTRUCTIONS.**
- **ADDED NOTE AND IMAGE TO IDENTIFY THE SCISSOR LIFT.**

ON-HIGHWAY SAFETY COMPONENT ENHANCEMENTS As you know, Vermeer recently acquired Vac-Tron Equipment, LLC. As part of the acquisition, Vermeer assisted Vac-Tron in reevaluating the design of Model LP873SDT/LPSDT heavy vacuum excavator. The design reevaluation identified required upgrades to the on-highway safety components, including adding or changing marker lights, reflectors, conspicuity tape and adding an extension to the rear of the chassis. These upgrades are required by Federal Motor Vehicle Safety Standard (FMVSS) governmental regulation 108 and 224 for the United States, Canada and Mexico. When towing the vacuum excavator on public roadways, **death or serious injury** may result:

- If another vehicle strikes the rear of the vacuum excavator causing the other vehicle to travel under the rear of the vacuum excavator. To reduce the potential of this occurring, a rear chassis extension is being added.
- If driver(s) of other vehicle(s) do not see the vacuum excavator at night or during limited sunlight and strike the vacuum excavator. To reduce the potential of this occurring, additional marking lights, reflectors and conspicuity tape are being added.

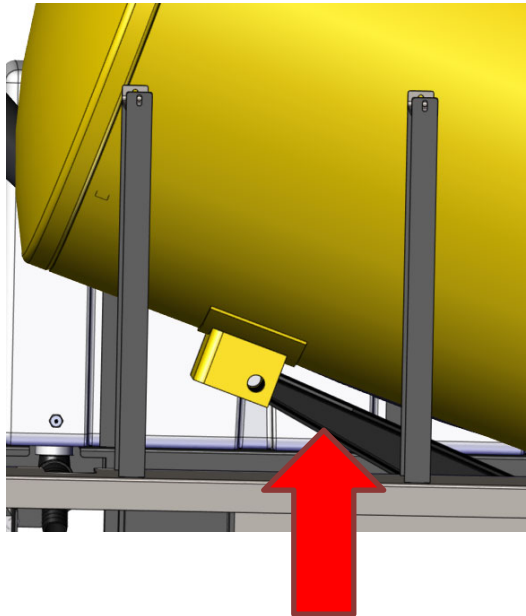
Property or equipment damage may also occur.

VVK00-0001 has been created to provide the necessary parts and instructions to install marker lights, reflectors, conspicuity tape and a lower chassis extension on the rear of the machine. **This kit must be installed as soon as possible.**

Special tools and conditions:

- Suitable lifting device capable of lifting approximately 390 lb (177kg)``

NOTE: DO NOT INSTALL THIS KIT ON UNITS WITH THE SCISSOR-STYLE LIFT MOUNTED TO THE BOTTOM OF THE DEBRIS TANK AS SHOWN.



WARNING: Use the following shutdown procedure before attempting to do any of the work described in this Kit.

Shutdown procedure:**Shutting down the machine**

For your safety and the safety of others, follow shutdown procedure before working on the machine for any reason, including servicing, maintaining, cleaning, inspecting, unclogging or transporting machine, or as otherwise directed in Operator's manual.

Step 1: Make sure end of vacuum hose is clear of all spoils, debris, and other materials.

Step 2: Turn *Water Pump Switch* to OFF.

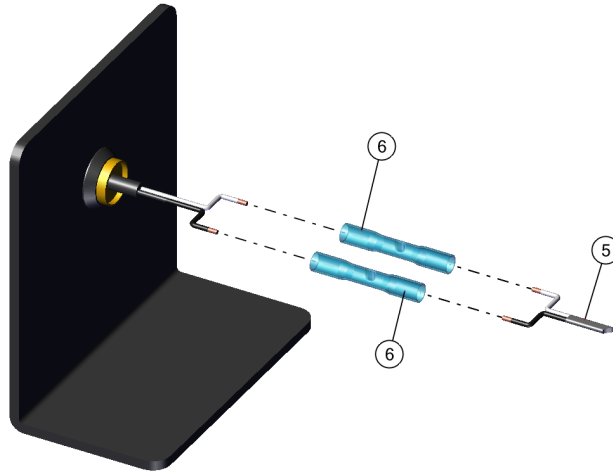
Step 3: Push *Throttle Switch* to SLOW. Idle engine five minutes to allow vacuum pump to cool down. This helps to prevent the build-up of condensation.

Step 4: Turn *Keyswitch* to OFF to shut off engine. Remove the key.

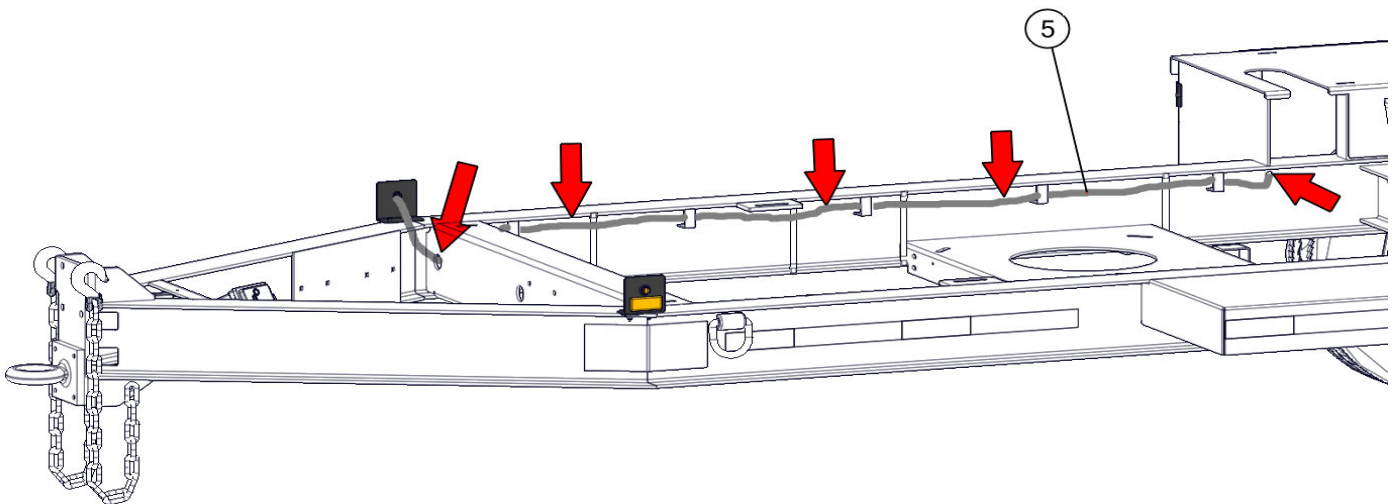
Step 5: Pull trigger on any high-pressure water tool to relieve line pressure. (Warning: Do not point high pressure water tool in the direction of people when relieving the pressure).

PROCEDURE 1:

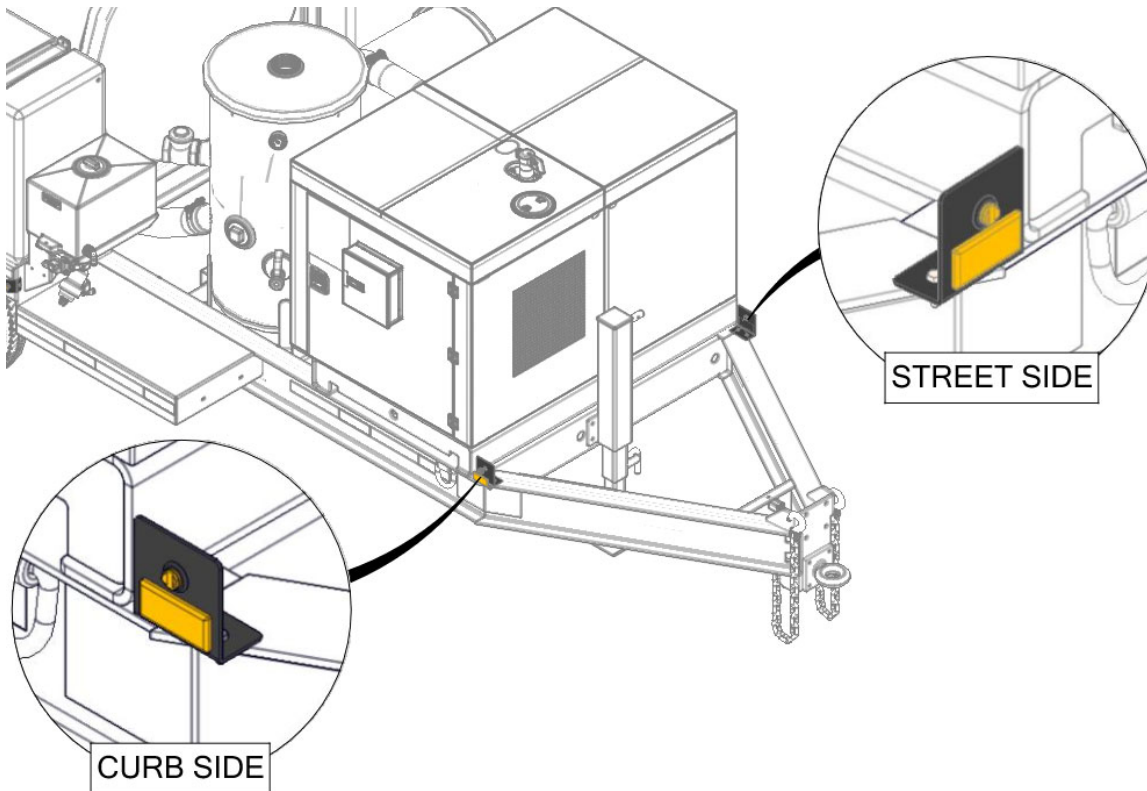
1. Align the bracket with the edge of the curbside I-beam as shown below.
2. Drill through the bracket and I-Beam using a 9/32" (7.15mm) size drill bit. Install the front side marker lamp bracket using the supplied hardware Ref. 2, 3, and 4 in Figure 1.
3. Connect one end of the 100" (2.54 m) length of dual core wire to the front side marker lamp using the butt connectors. Ref. 5 and 6, Fig. 1.



4. Place loom over wires for protection. Ref. 8, Fig. 1.
5. Run the wire through the cross member and inside of the I-Beam to connect with the front side marker lamp. Reference step 3, Procedure 2 for connecting the front side marker lamp and front clearance lamp.
6. Use supplied zip ties to fasten wire harness to trailer frame.

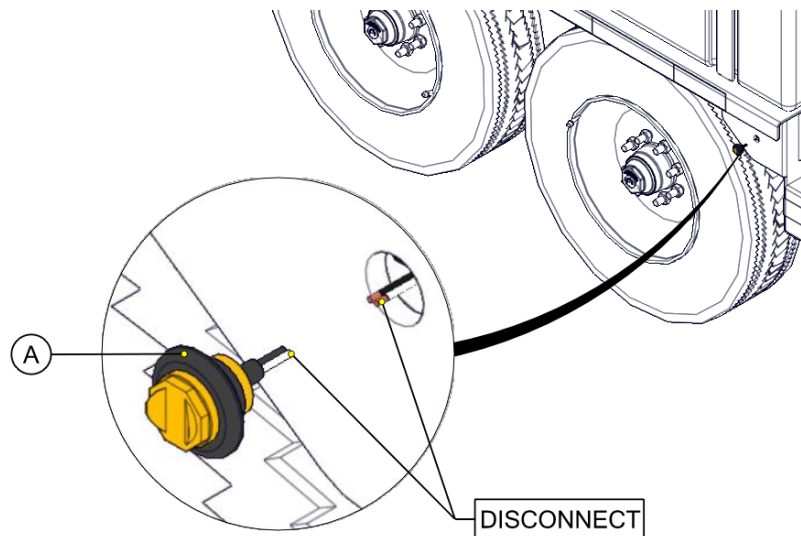


7. Complete all steps for the street side of the trailer.



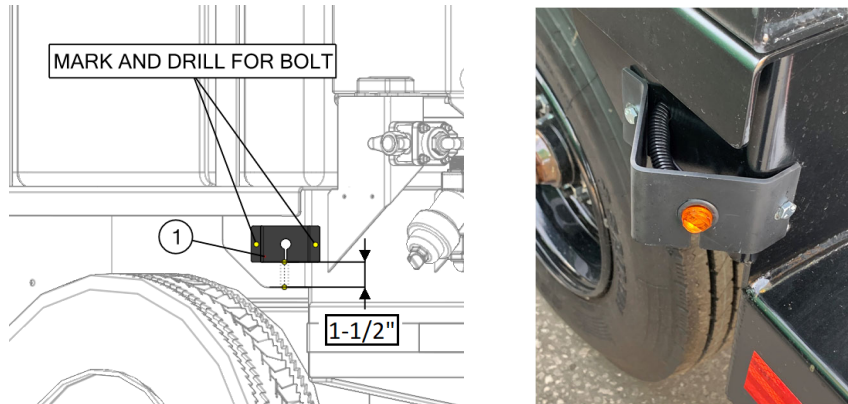
PROCEDURE 2:

1. Remove the existing curbside front clearance lamp Ref. A from the gusset (retain for future installation) and disconnect the wires.

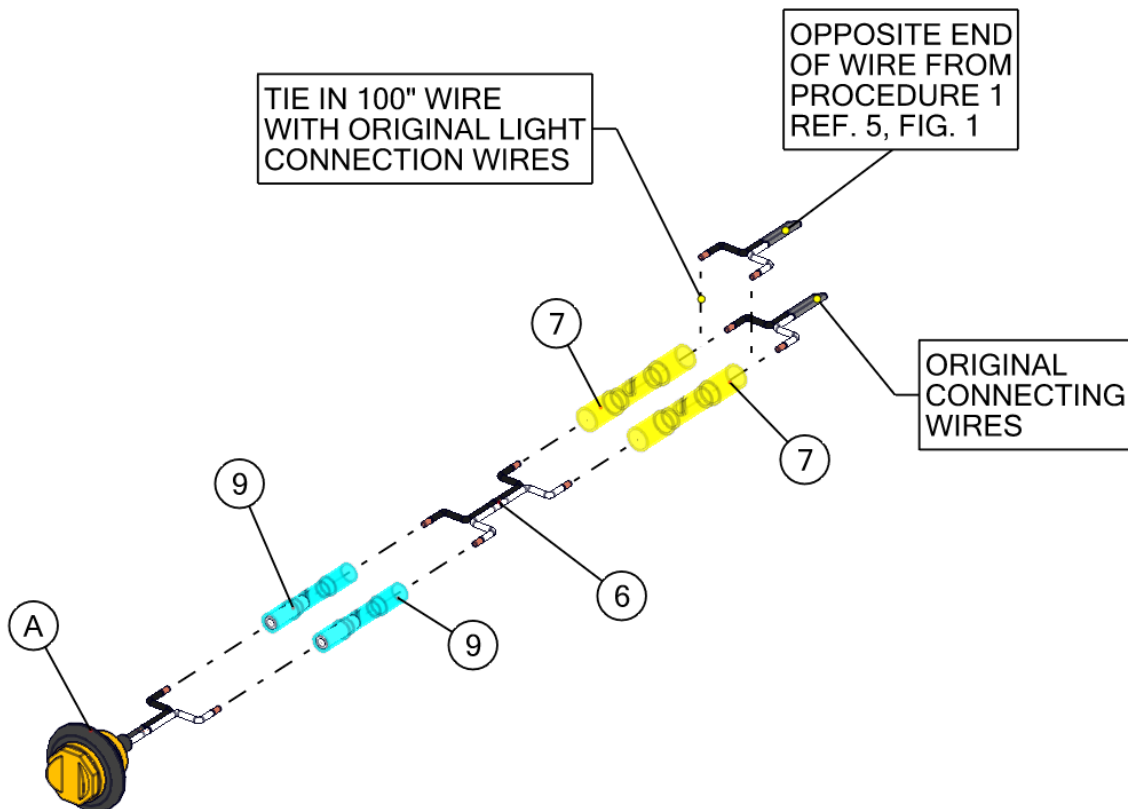


2. Place the front clearance lamp bracket on the gusset approximately 1-1/2" (3.81 cm) from the bottom as shown. Mark the bolt locations on the gusset and drill using a 9/32" (7.15 mm) size drill bit.

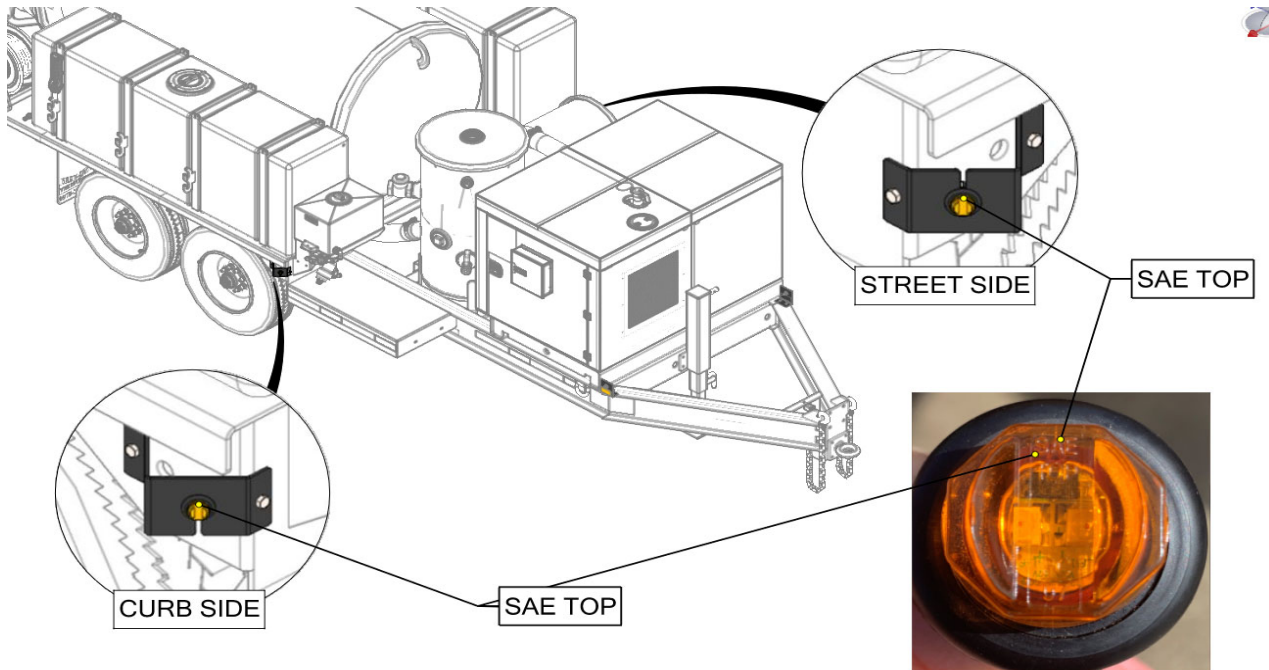
(Curb side shown)



3. Use the 1 ft (30.48 cm) length of dual core conductor wire to reconnect the front clearance lamp and tie in with the 100" (2.54 m) length wire from the front side marker lamp. Use the 12-10 (yellow) and 16-14 (blue) heat seal butt connectors to connect all wires according to diagram below. Ref. A, 6, 7 and 9 Fig. 2.



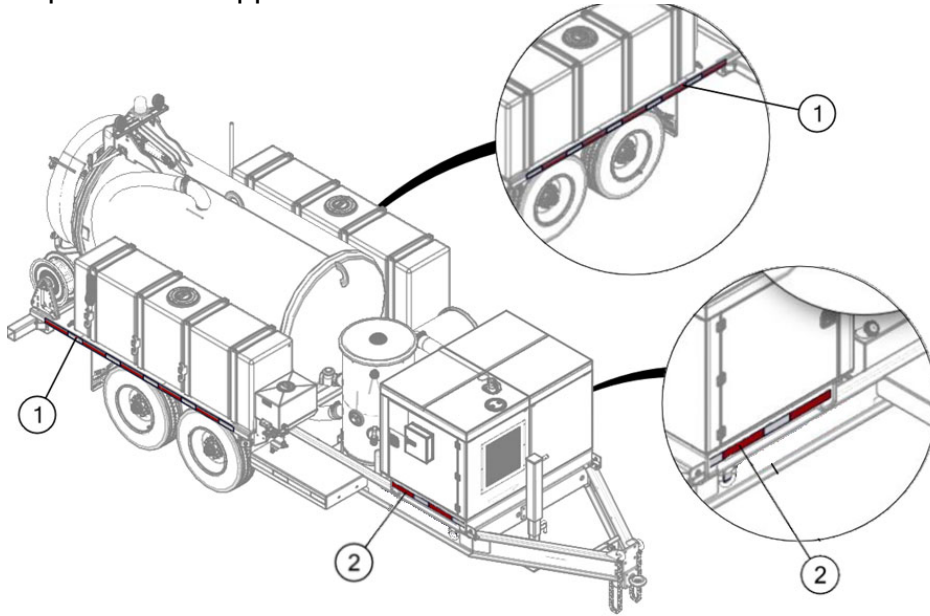
4. Insert the front clearance lamp into the front clearance lamp bracket as shown Ref 1 and A, Fig. 2. Refer to the illustration below for proper lamp orientation.
5. Attach the front clearance lamp bracket with the hardware as shown Ref. 3, 4, and 5 Fig. 2.
6. Loom all exposed wires. Ref. 8 Fig. 2.
7. Repeat all steps to connect the front clearance lamp on the street side of the trailer.



PROCEDURE 3:

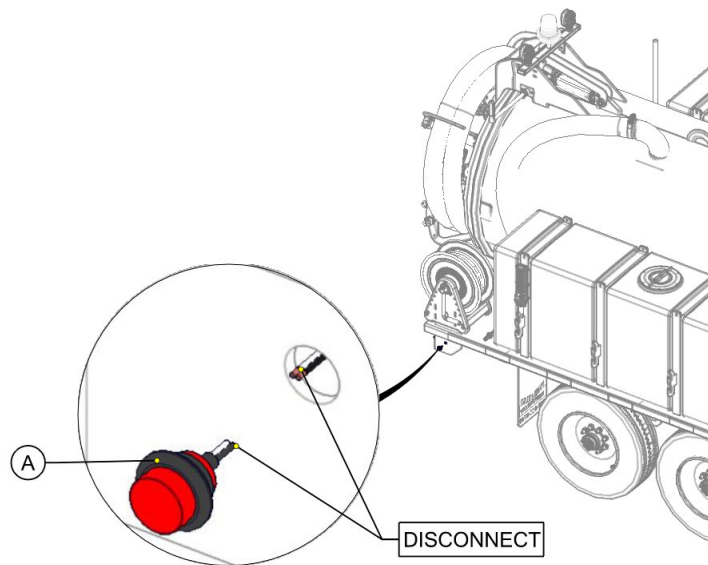
1. Clean area where the conspicuity tape will be installed with light soap and water. Areas with damaged paint or heavy corrosion should be prepped, painted, and thoroughly dry before applying conspicuity tape.
2. Refer to the illustration and install the conspicuity tape in the locations shown. Ref. 1 and 2, Fig. 3.

3. Repeat for the opposite side of the trailer.

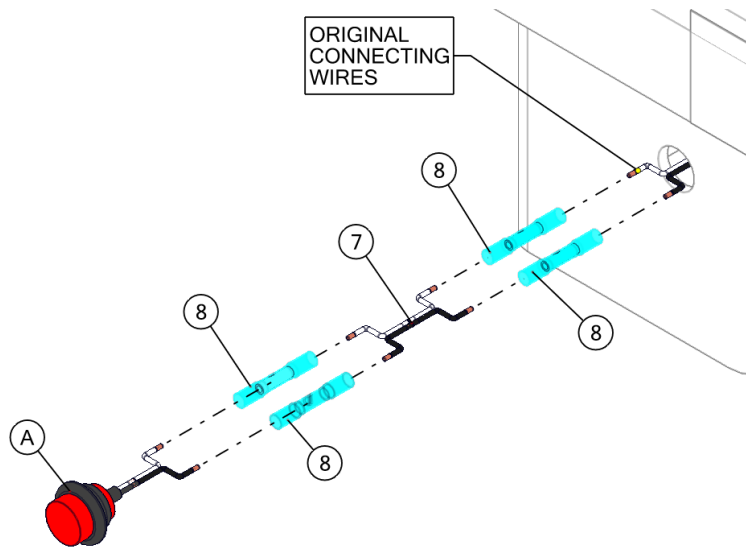


PROCEDURE 4:

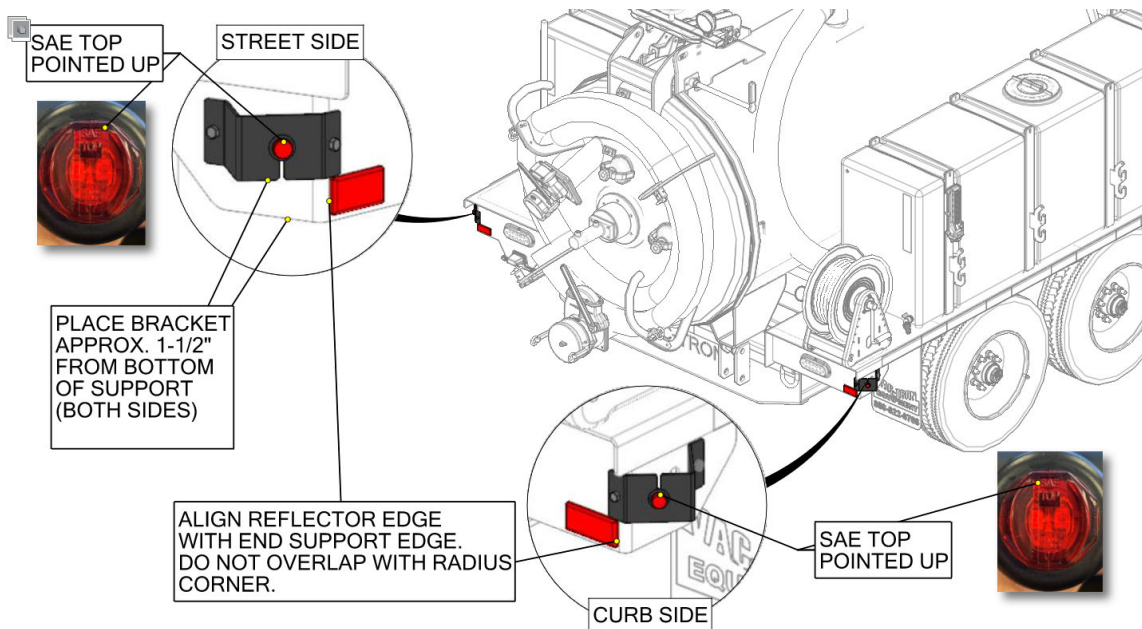
1. Remove the existing rear side marker lamp Ref. A from the gusset (retain for future installation) and disconnect the wires.



2. Place the rear side marker lamp bracket on the support approximately 1-1/2" (3.81 cm) from the bottom as indicated in the illustration below. Mark the bolt locations on the support and drill the bolt holes using a 9/32" (7.15 mm) drill bit.
3. Use the 1 ft (30.48 cm) length of dual core conductor wire to reconnect the rear side marker lamp using 16-14 butt connectors. Ref A, 7 and 8, Fig 4.

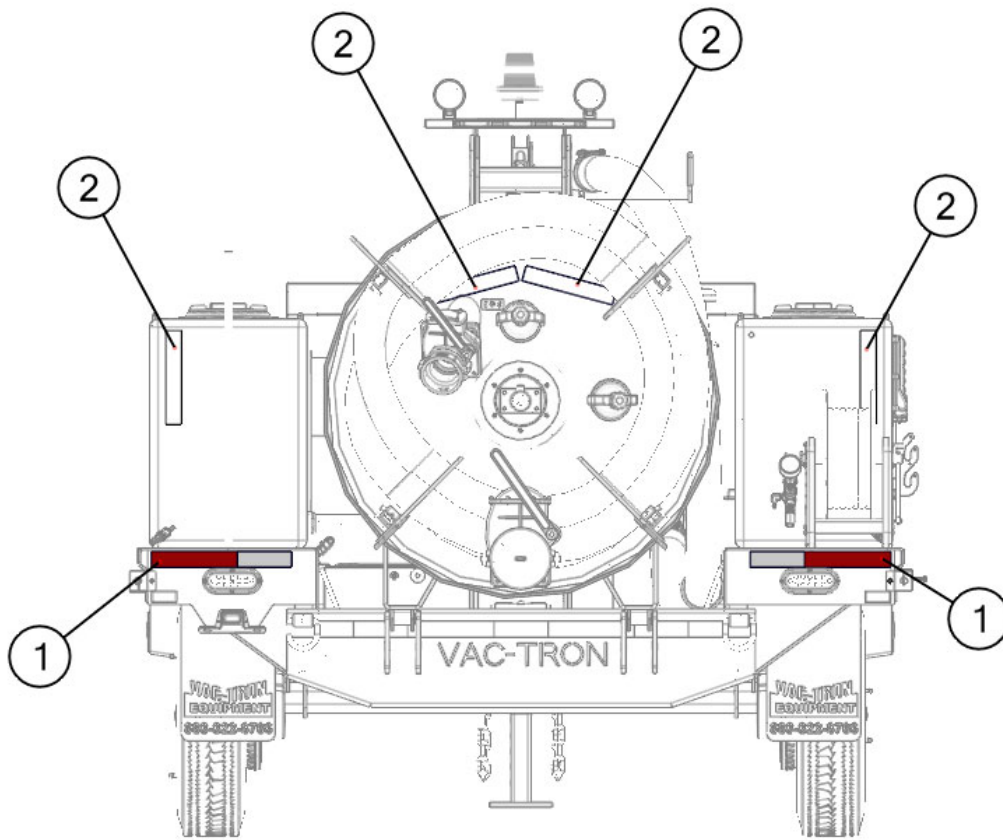


4. Attach the rear side marker lamp bracket with the hardware as shown Ref. 3, 4, and 5 Fig. 4.
5. Loom all exposed wires. Ref. 9 Fig. 4.
6. Insert the rear side marker lamp into the bracket as shown Ref 1 and A, Fig. 4. Refer to the below illustration for proper lamp orientation.
7. Clean area where the rear side marker reflectors will be installed with light soap and water. Areas with damaged paint or heavy corrosion should be prepped, painted, and thoroughly dry before applying reflectors.
8. Refer to the illustration below and install the rear side marker reflector below the rear side marker lamp bracket as shown.
9. Repeat all steps for the opposite side of the trailer.



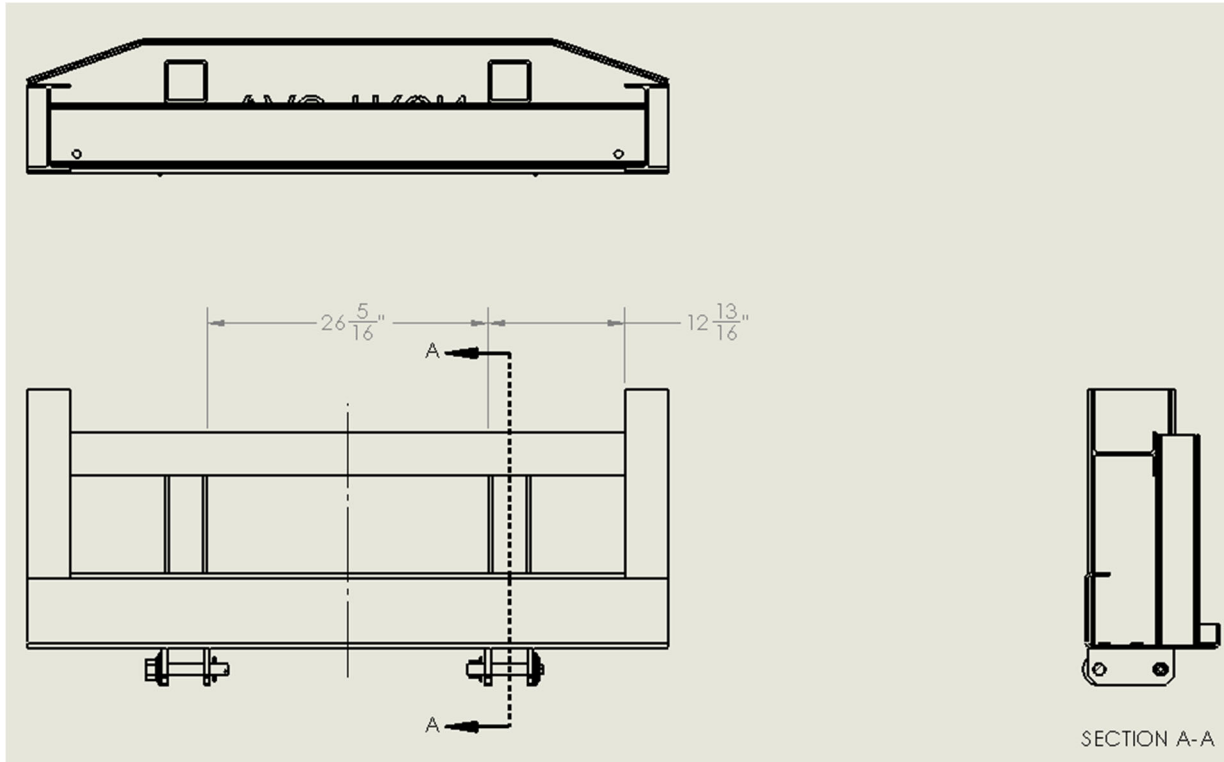
PROCEDURE 5:

1. Clean area where the conspicuity tape will be installed with light soap and water. Areas with damaged paint or heavy corrosion should be prepped, painted, and thoroughly dry before applying the conspicuity tape.
2. Refer to the illustration and install one conspicuity tape on the support as shown Ref 1, Fig. 5. Repeat for the other side of the trailer.
3. Refer to the illustration and install each of the white conspicuity tape on the debris tank door and water tanks as shown Ref 2, Fig. 5.

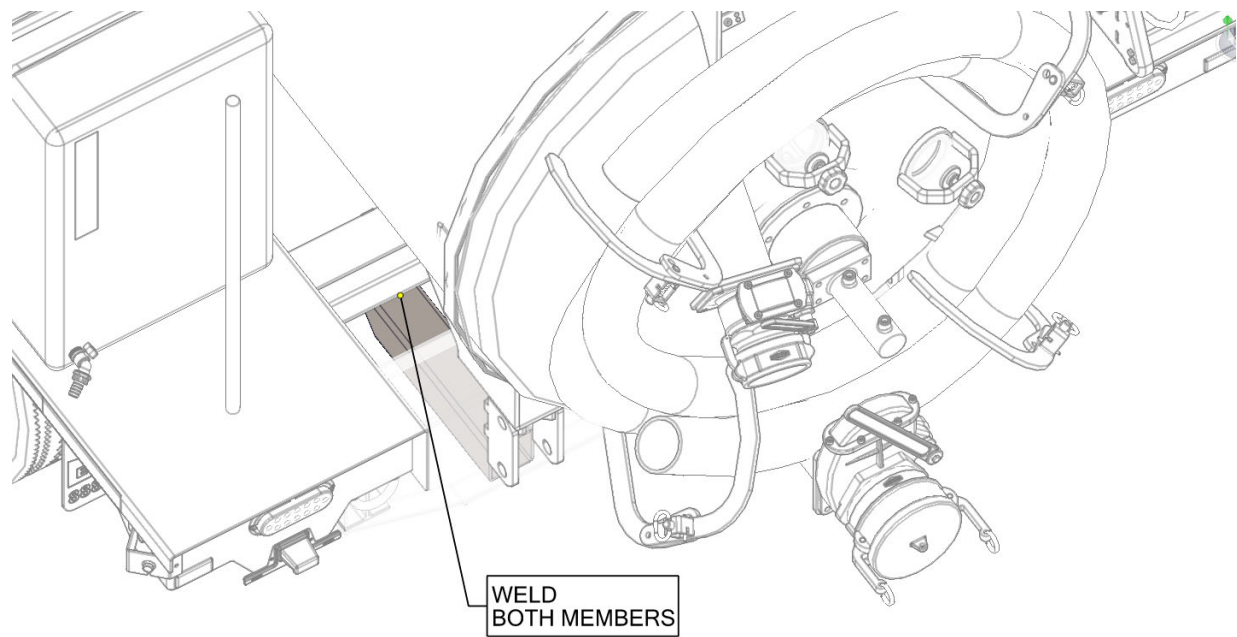
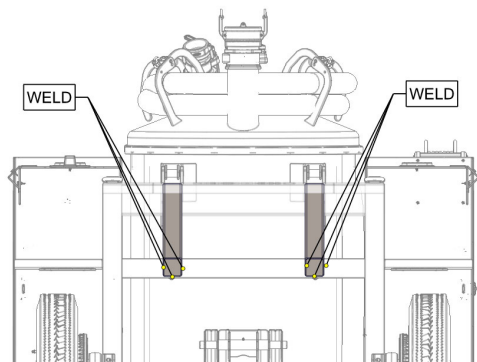
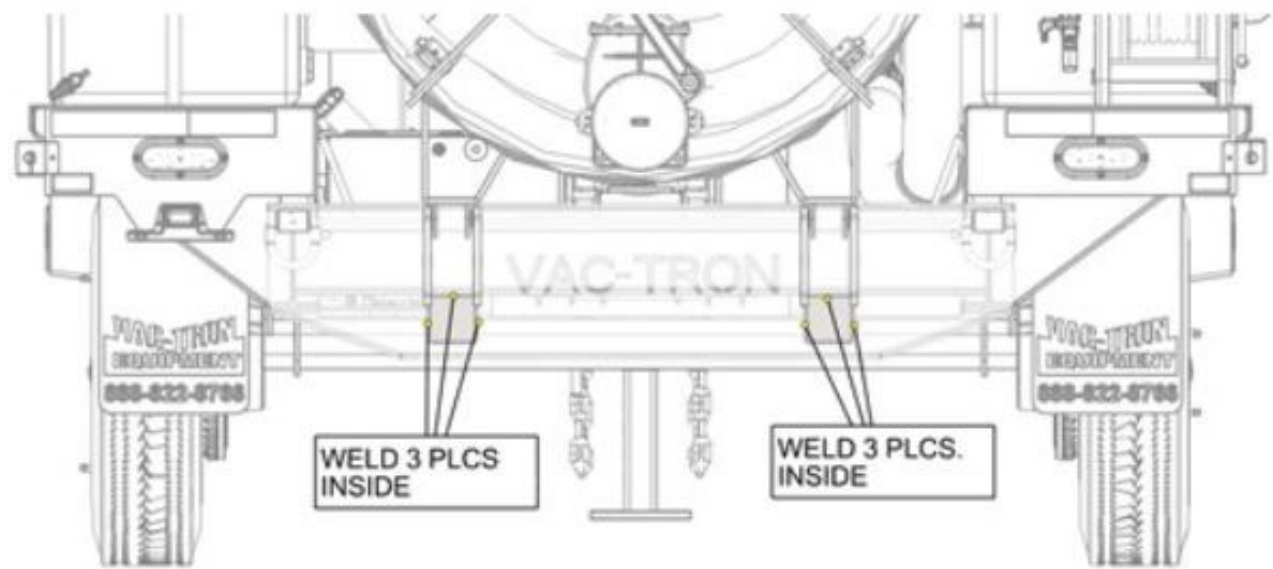


PROCEDURE 6:

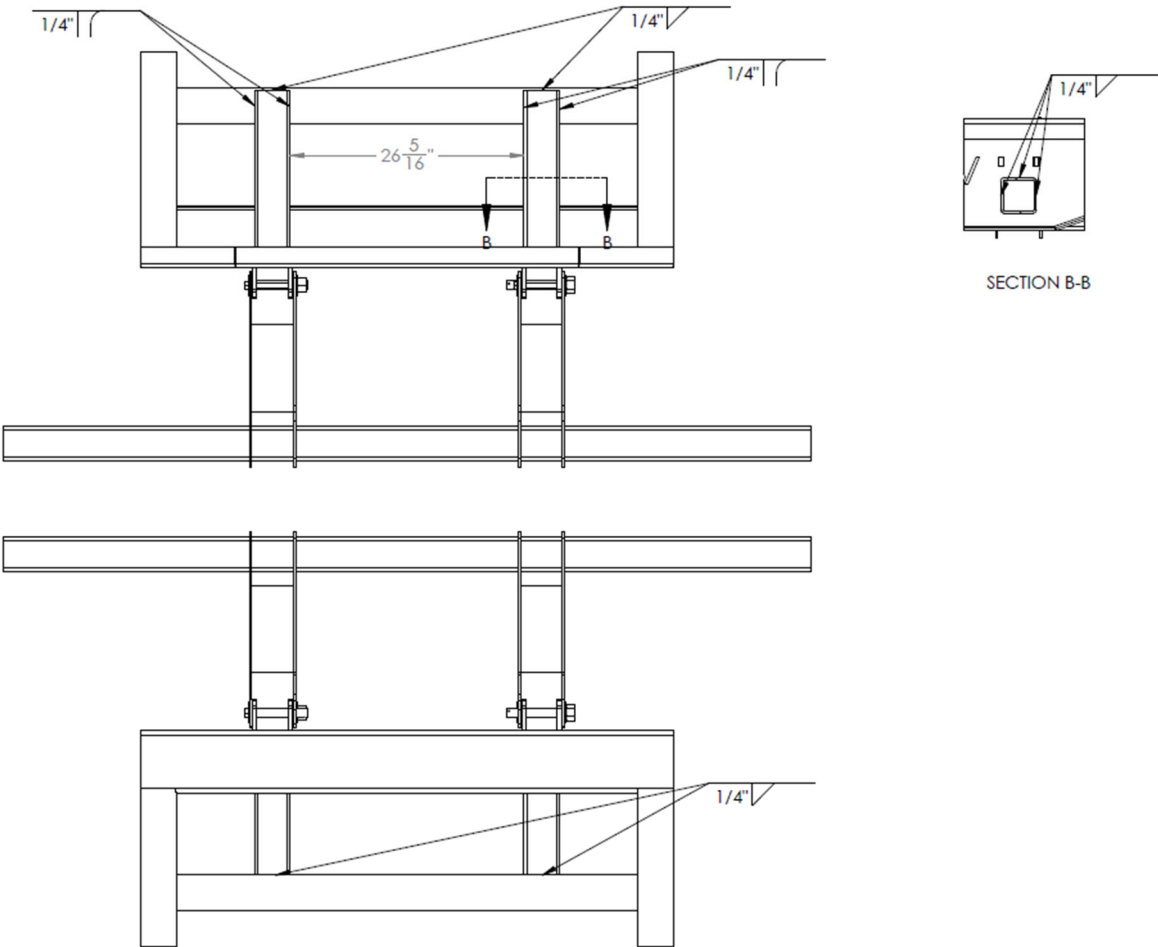
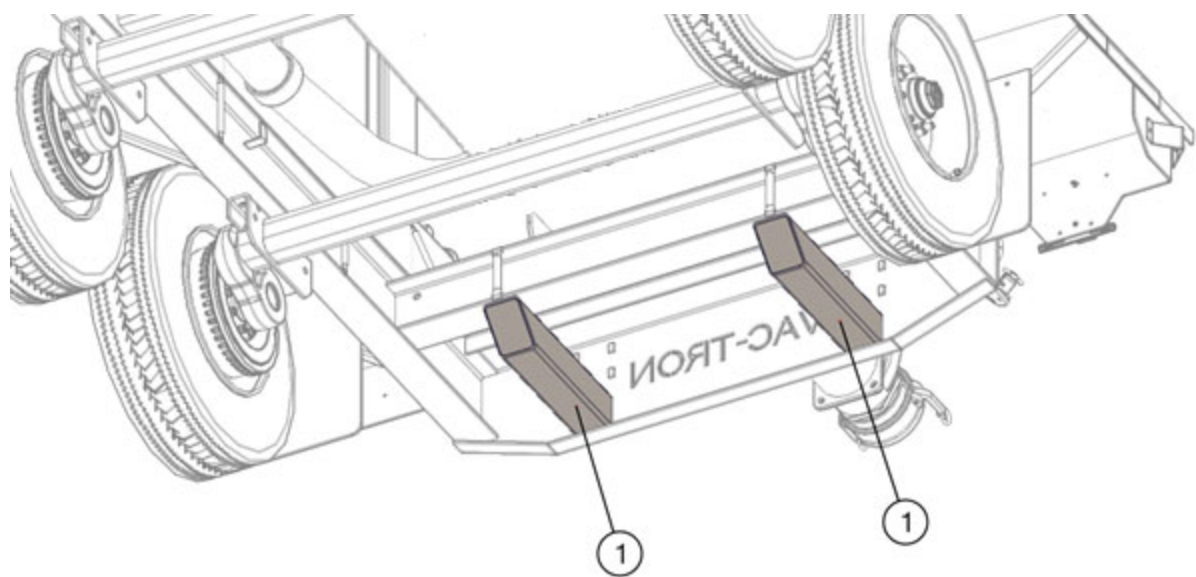
1. Grind off the paint and rust where the cross members provided are to be installed. Refer to the figure in Step 2.
2. Position the reinforcement members as indicated below Ref. 1 Fig. 6.



3. Place 3/16 in [5mm] fillet welds as indicated.



4. Remove any damaged paint down to the base metal. Repaint the affected areas as needed.

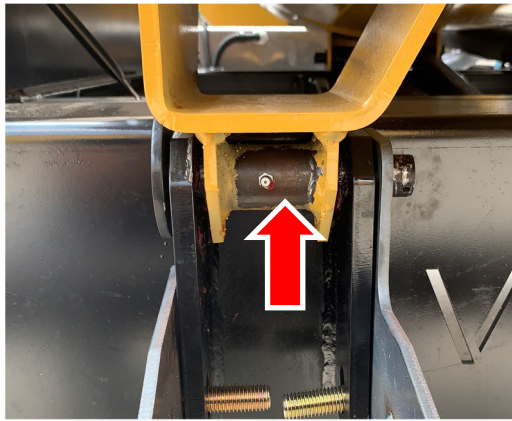


.PROCEDURE 7:

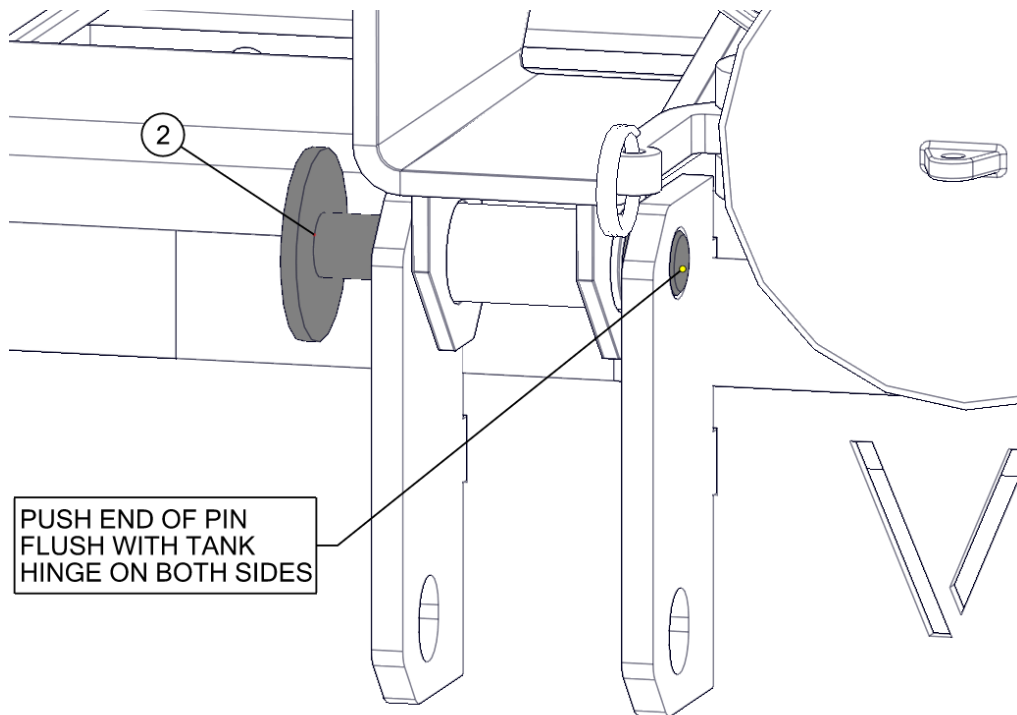


WARNING: Never lift machine over personnel. The load may fall or shift, crushing anyone beneath it.

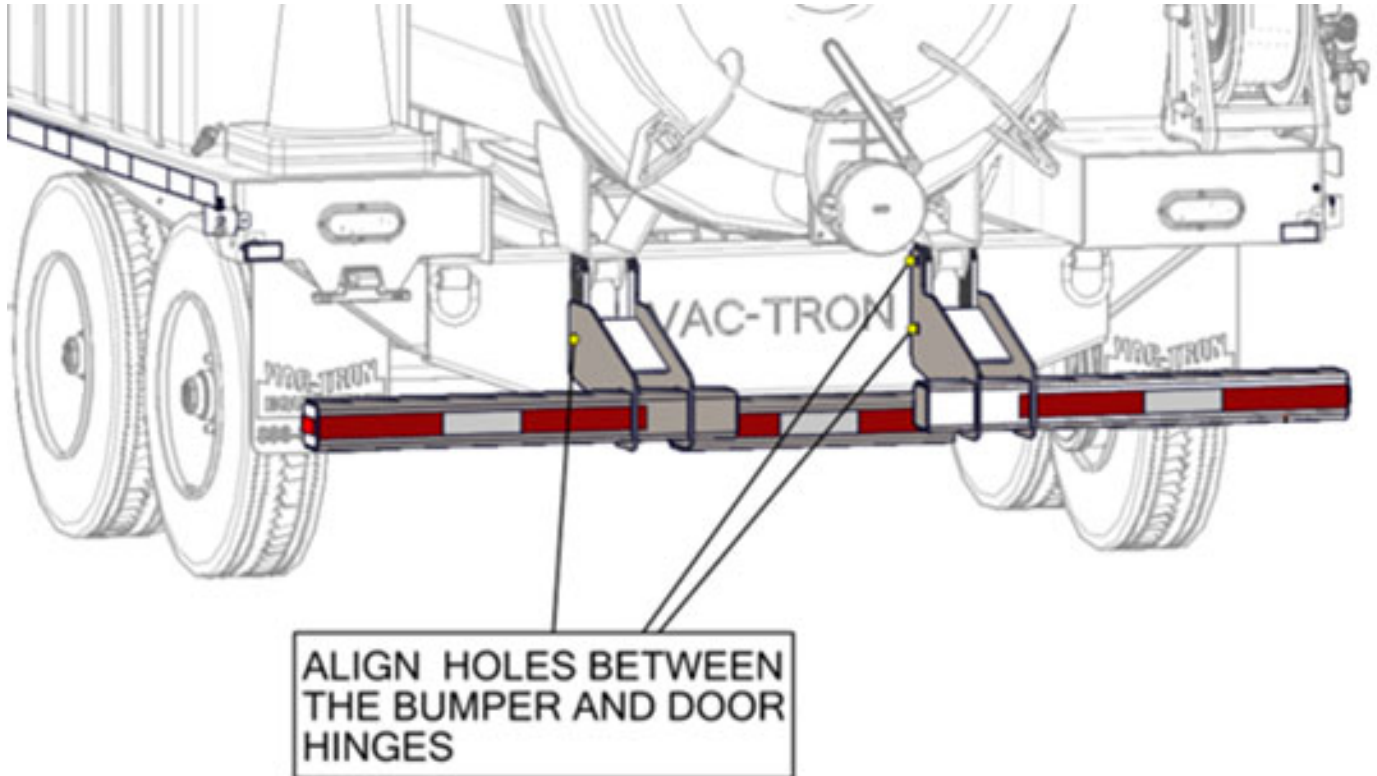
1. Ensure the debris tank is empty. Using suitable blocking, block debris tank to prevent shifting. Debris tank weighs approximately 1,000 lb (454 kg).
2. Remove the cotter pin on both sides.



3. Push the headed pins out to be flush with the inner side of the tank hinges. Be careful not to push the pin through the hinge.



4. Use a suitable lifting device when installing the rear chassis extension. Rear chassis extension weight is approximately 120 lb (55 kg)
5. Install the bumper and align the bolt holes with the tank hinges.

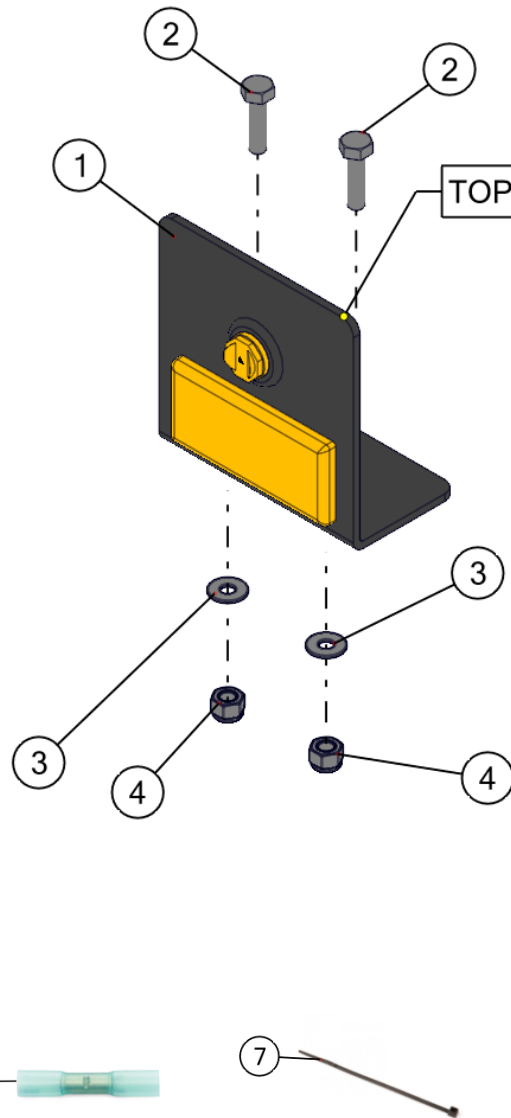


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AFFECTED MACHINES WITHIN SERIAL NUMBER RANGE IDENTIFIED ON PAGE 1 OF THIS SERVICE BULLETIN

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Figure 1



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Insert in Parts Manual
for future reference.

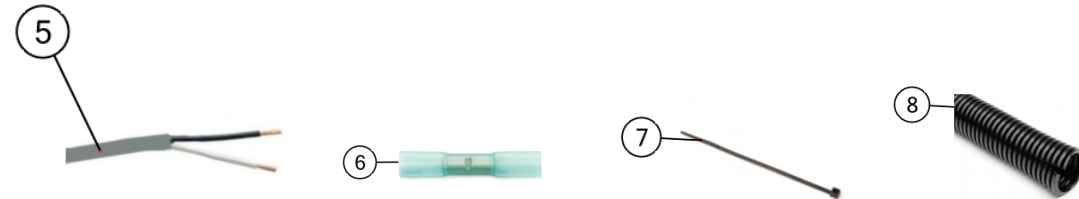
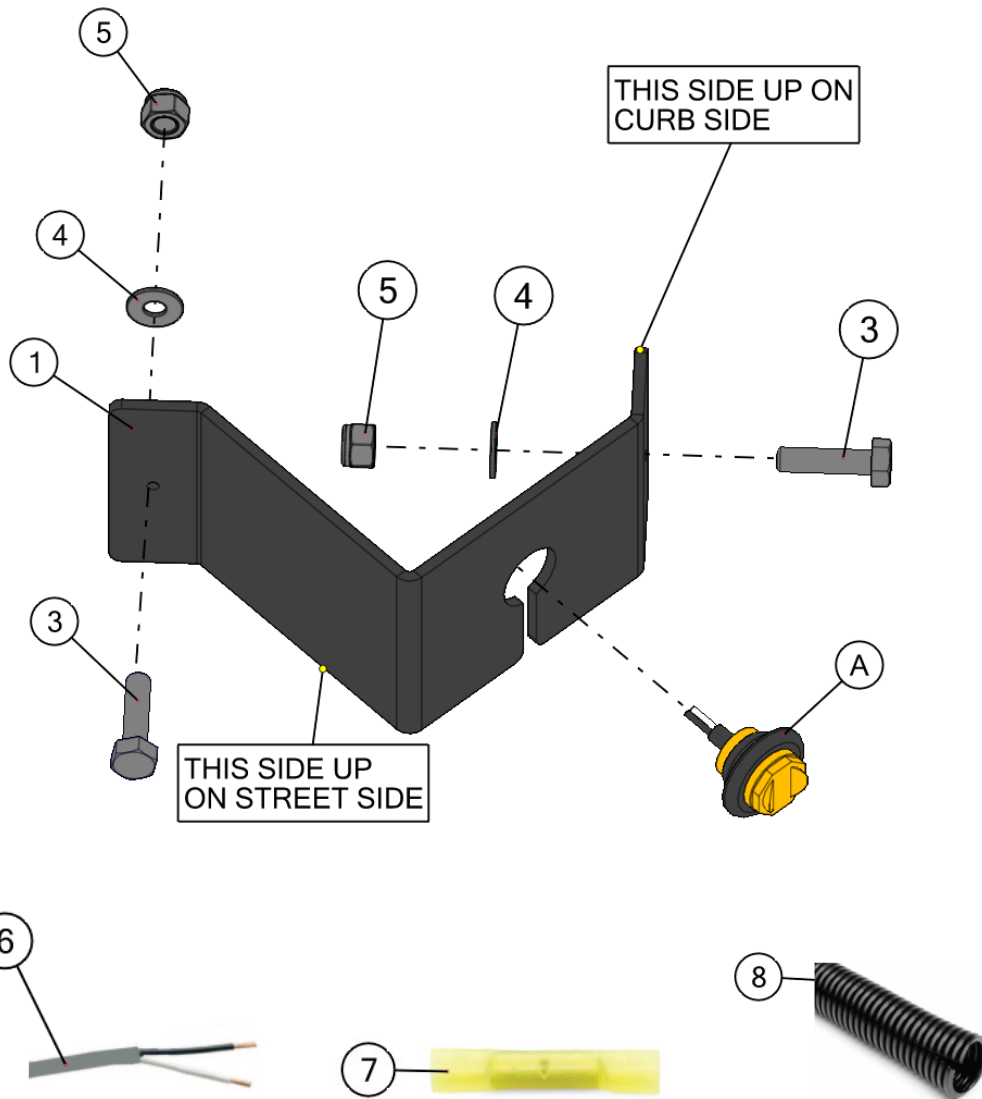


FIGURE 1 Parts List

REF. NO.	PART NO.	DESCRIPTION	VVK01 QTY.
1	B125-5749	FRONT MARKER LAMP BRACKET WITH REFLECTOR	2
2	FAST-HHCS00250-20X1.000	1/4-20 X 1 HEX HEAD BOLT	4
3	FAST-FW00250	1/4 ID FLAT WASHER	4
4	FAST-HLN00250-20	1/4-20 NYLON LOCKNUT	4
5	P-1054-0	100" LENGTH DUAL CORE CONDUCTOR WIRE	2
6	P-2369-0	16-14 HEAT SEAL BUTT CONNECTOR BLUE	4
7	P-1301-1	ZIP TIE	10
8	P-2762-0	1/4" SPLIT WIRE LOOM, 100" LENGTH	2

VVK000001 includes all items in Figure 1 Parts List.

Figure 2



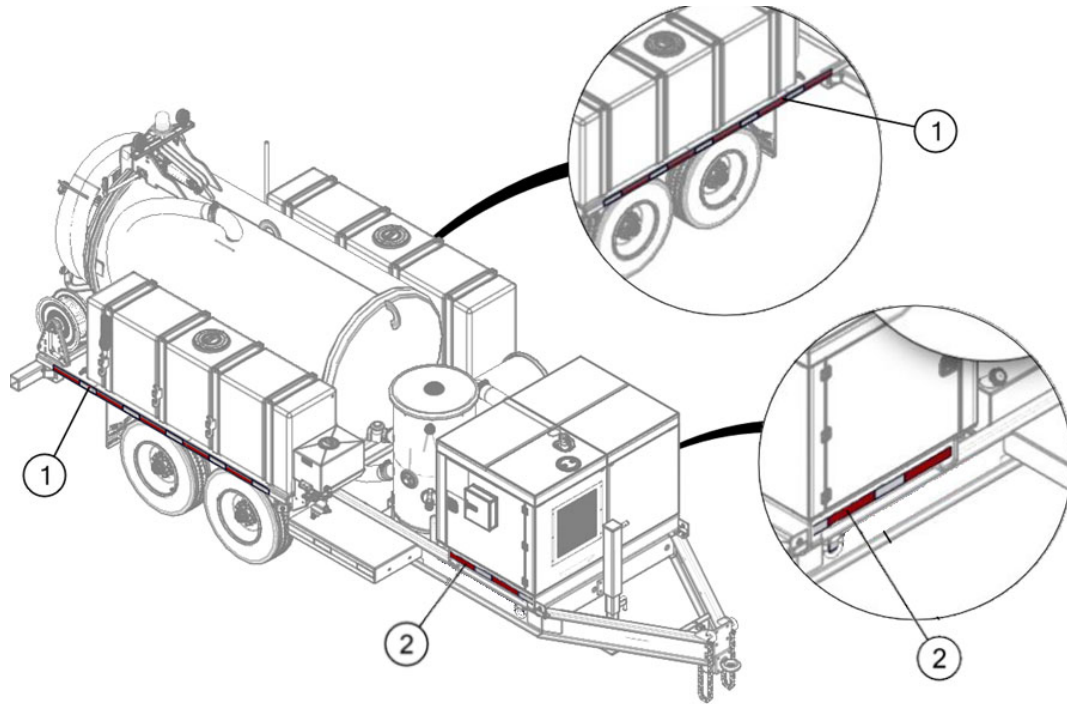
UNIT OWNER COPY: Insert in Parts Manual for future reference.

FIGURE 2 Parts List

REF. NO.	PART NO.	DESCRIPTION	VVK01 QTY.
1	B125-5748	SIDE MARKER LAMP BRACKET	2
A	P-1490-0	YELLOW BULB (EXISTING ON TRAILER)	2
3	FAST-HHCS00250-20X1.000	1/4-20 X 1 HEX HEAD BOLT	4
4	FAST-FW00250	1/4 ID FLAT WASHER	4
5	FAST-HLN00250-20	1/4-20 NYLON LOCKNUT	4
6	P-1054-0	1' LENGTH DUAL CORE CONDUCTOR WIRE	2
7	P-1611-0	12-10 HEAT SEAL BUTT CONNECTOR	4
8	P-2762-0	1/4" SPLIT WIRE LOOM, 1' LENGTH	2

VVK000001 includes all items in Figure 2 Parts List.

Figure 3



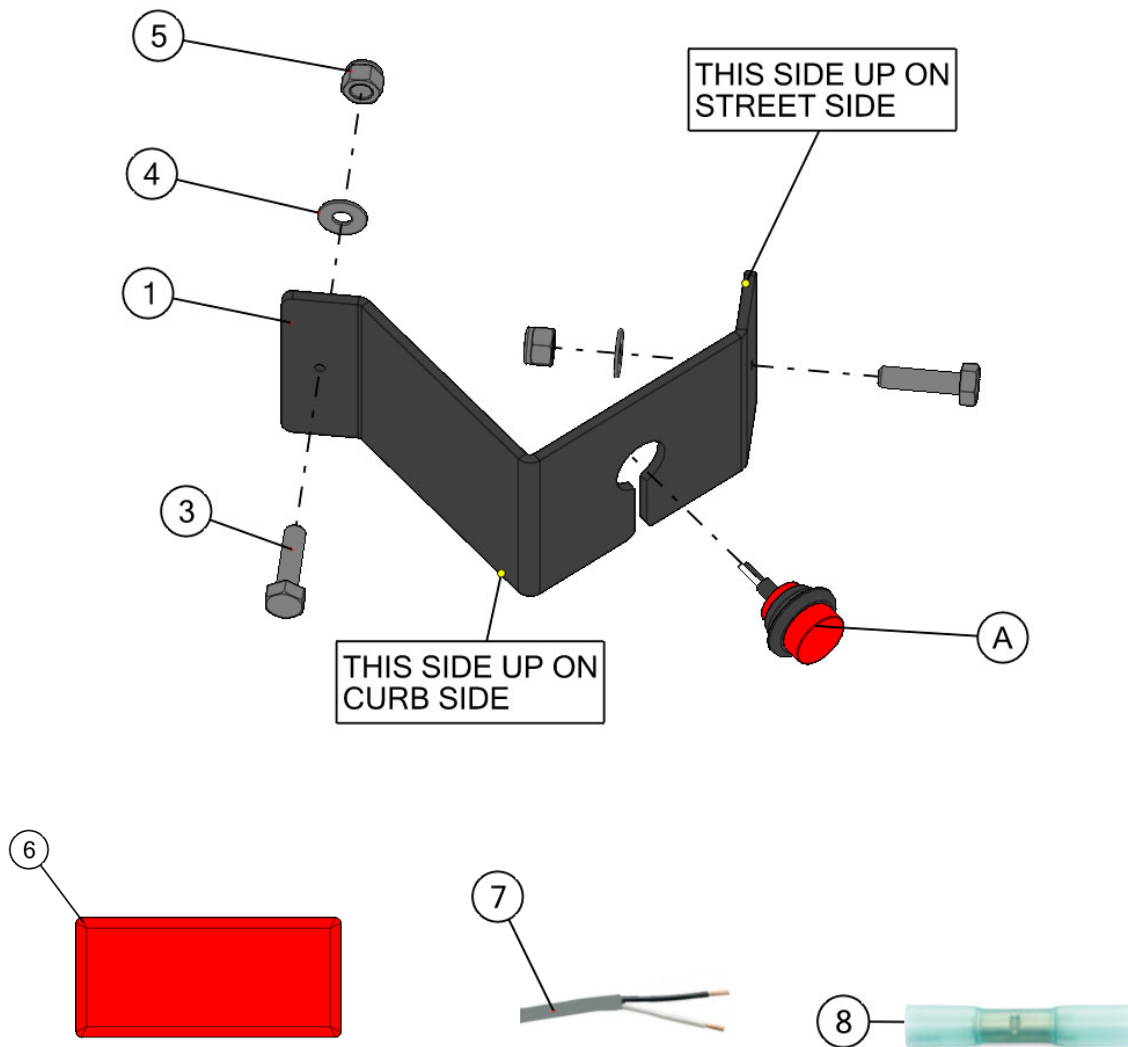
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FIGURE 3 Parts List

REF. NO.	PART NO.	DESCRIPTION	VVK01 QTY.
1	P-0485	2" WIDE, 101" LONG CONSPICUITY TAPE	2
2	P-0485	2" WIDE, 36" LONG CONSPICUITY TAPE	2

VVK000001 includes all items in Figure 3 Parts List.

Figure 4



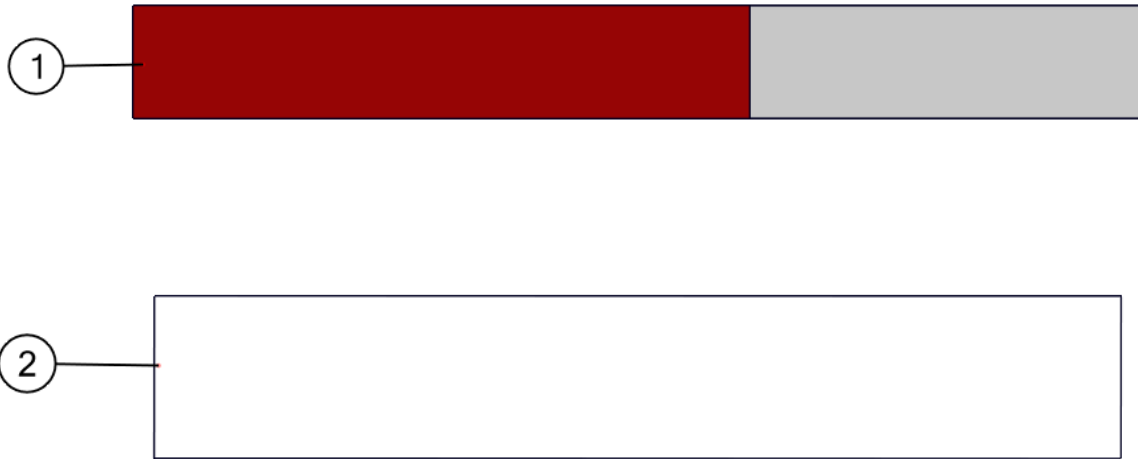
UNIT OWNER COPY: Insert in Parts Manual for future reference.

FIGURE 4 Parts List

REF. NO.	PART NO.	DESCRIPTION	VVK01 QTY.
1	B125-5748	SIDE MARKER LAMP BRACKET	2
A	P-4189	RED MARKER LIGHT (EXISTING ON TRAILER)	2
3	FAST-HHCS00250-20X1.000	1/4-20 X 1 HEX HEAD BOLT	4
4	FAST-FW00250	1/4 ID FLAT WASHER	4
5	FAST-HLN00250-20	1/4-20 NYLON LOCKNUT	4
6	P-5730	RED REFLECTOR	2
7	P-1054-0	1' LENGTH DUAL CORE CONDUCTOR WIRE	2
8	P-2369-0	16-14 HEAT SEAL BUTT CONNECTOR BLUE	4

VVK000001 includes all items in Figure 4 Parts List.

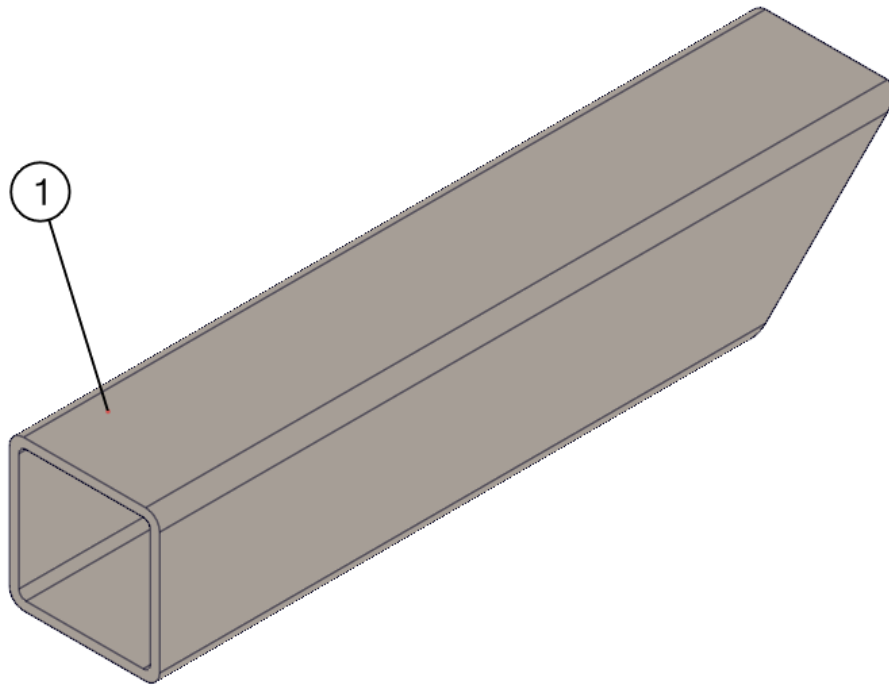
Figure 5



UNIT OWNER COPY: Insert in Parts Manual for future reference.

FIGURE 5 Parts List			
REF. NO.	PART NO.	DESCRIPTION	VVK01 QTY.
1	P-0485	2" WIDE, 18" LENGTH CONSPICUITY TAPE	2
2	P-4189	WHITE CONSPICUITY TAPE	4
VVK000001 includes all items in Figure 5 Parts List.			

Figure 6



UNIT OWNER COPY: Insert in Parts Manual for future reference.

FIGURE 6 Parts List

REF. NO.	PART NO.	DESCRIPTION	VVK01 QTY.
1	S400-5761	REAR REINFORCEMENT CROSS MEMBER	2
	VVK000001 includes all items in Figure 6 Parts List.		