

**Vermeer MV Solutions, Inc.**

Trenchless  
Piedmont, SC 29673 USA

**FIELD CAMPAIGN KIT #: VVK000001 Rev. 3**

**DATE: 2025 May 29**

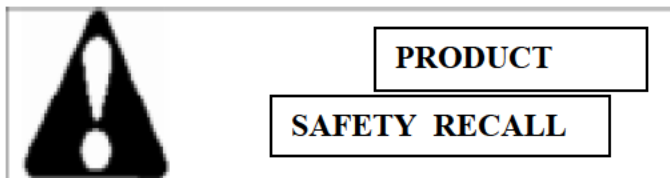
**For Dealer Reference: Service Bulletin #: SVV2019-001 Rev. 3**

**On-Highway Safety Component Enhancement Kit**

<b>CAMPAIGN TYPE:</b>	Mandatory – Product Safety
<b>CAMPAIGN CATEGORY:</b>	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 LPSDT Heavy	2024 – 2084		

**\*\*FOR COMPLETE LIST OF UNITS SEE PAGES 18 - 20\*\***



**Purpose:**

**REASON FOR REVISION 3:**

The kit was revised to update part numbers.

**REASON FOR REVISION 2:**

The kit instructions are being revised to have revision 1 description match the bulletin's description.

**REASON FOR REVISION 1:**

The kit instructions and bulletin are being revised to add a note and image to identify the scissor lift and to advise the dealership if the machine had a scissor jack, to contact product safety at [productsafety@vermeer.com](mailto:productsafety@vermeer.com).

**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.

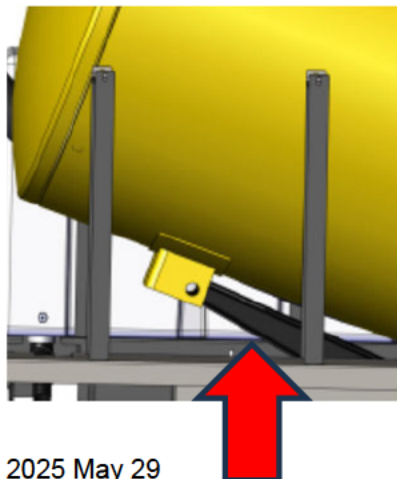
VVK00-0001 has been created to provide the necessary parts and instructions to install marker lights, reflectors, conspicuity tape and a lower chassis extension on the rear of the machine. **This kit must be installed as soon as possible.**

**Special tools and conditions:**

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

**NOTE:**

**IF THE UNIT HAS A SCISSORS JACK INSTALLED, BEFORE PROCEEDING CONTACT PRODUCT SAFETY AT [productsafety@vermeer.com](mailto:productsafety@vermeer.com)**



## Shutdown procedure:



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

### 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.

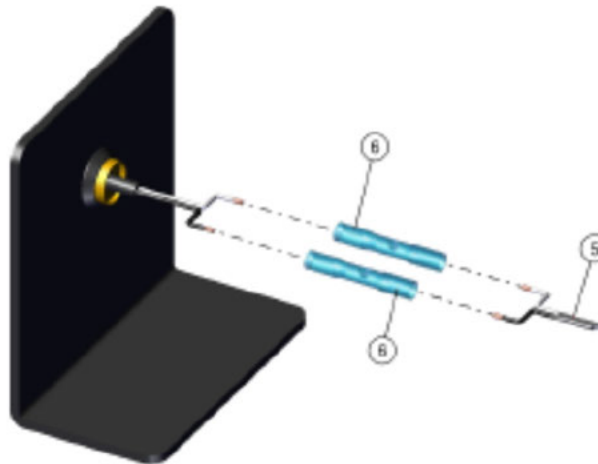
Step 5: Pull trigger on any high-pressure water tool to relieve line pressure. (Warning: Do not point high pressure water tool in the direction of people when relieving the pressure).



**WARNING:** Pressurized fluid can penetrate body tissue and result in death or serious injury. Leaks can be invisible. Keep away from any suspected leak. Relieve pressure in the hydraulic system before searching for leaks, disconnecting hoses, or performing any other work on the system. If you must pressurize the system to find a suspected leak, use an object such as a piece of wood or cardboard rather than your hands. When loosening a fitting where some residual pressure may exist, slowly loosen the fitting until oil begins to leak. Wait for leaking to stop before disconnecting the fitting. Fluid injected under the skin must be removed immediately by a surgeon familiar with this type of injury.

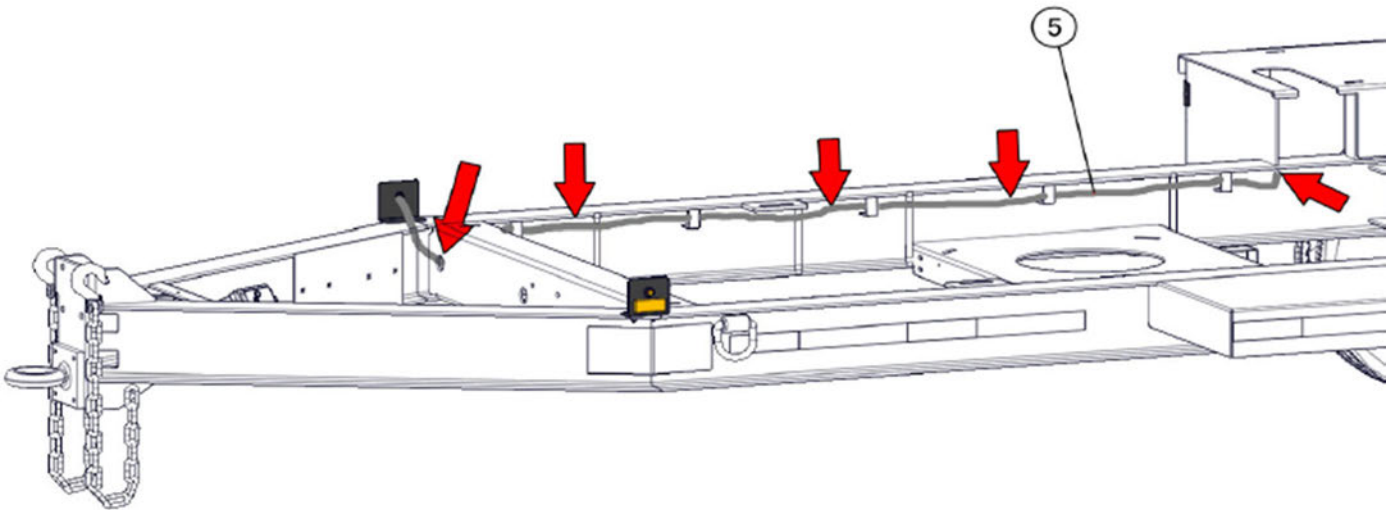
#### Procedure 1:

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, Figure 1.

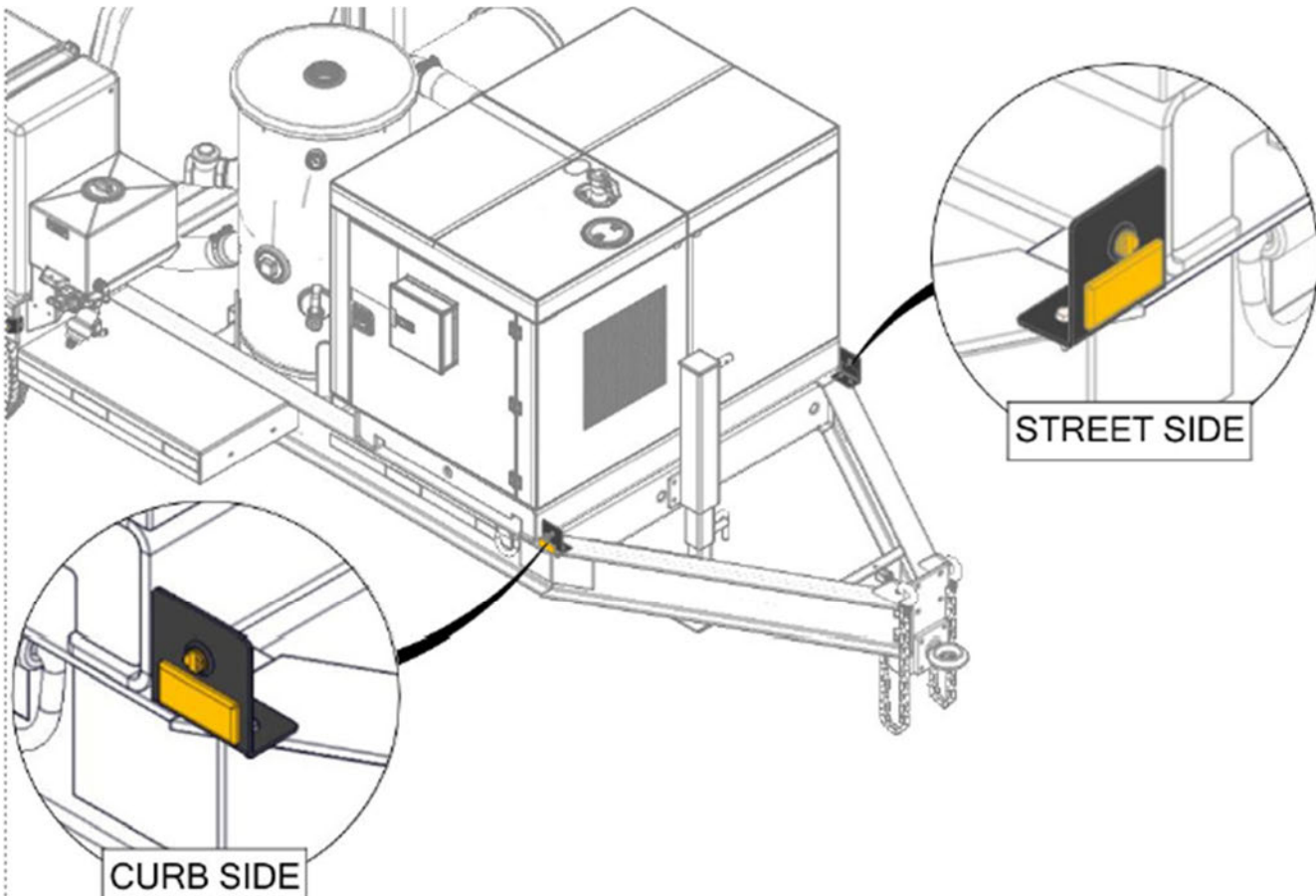


4. Place loom over wires for protection. Ref. 8, Figure 1.
5. Run the wire through the cross member and inside of the I-Beam to connect with the front side marker lamp. Reference step 3, Procedure 2 for connecting the front side marker lamp and front clearance lamp.

6. Use supplied zip ties to fasten wire harness to trailer frame.

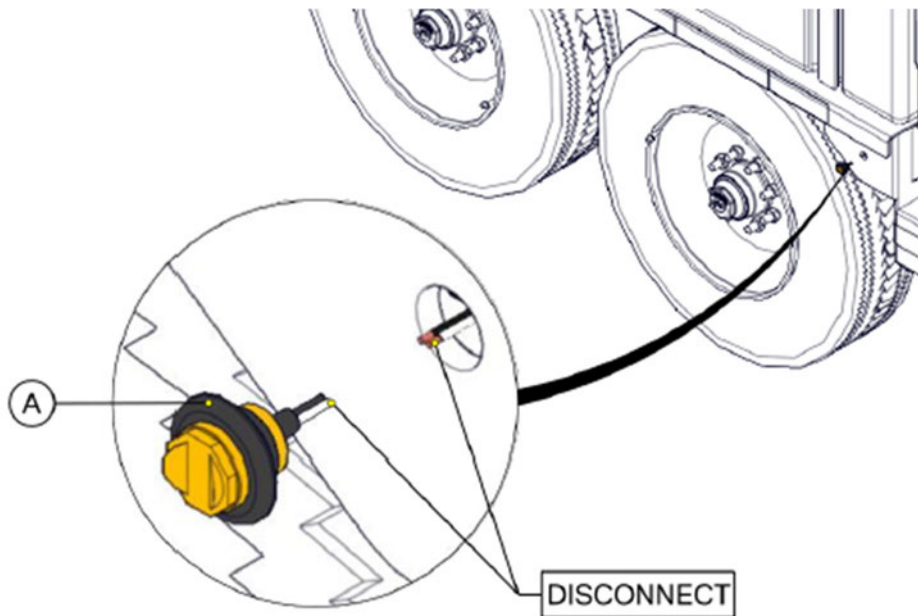


7. Complete all steps for the street side of the trailer.



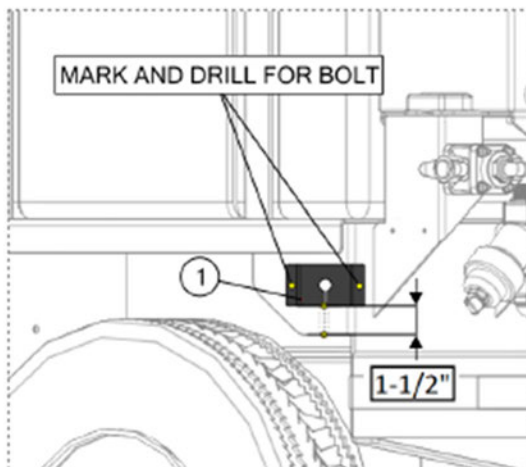
## Procedure 2:

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

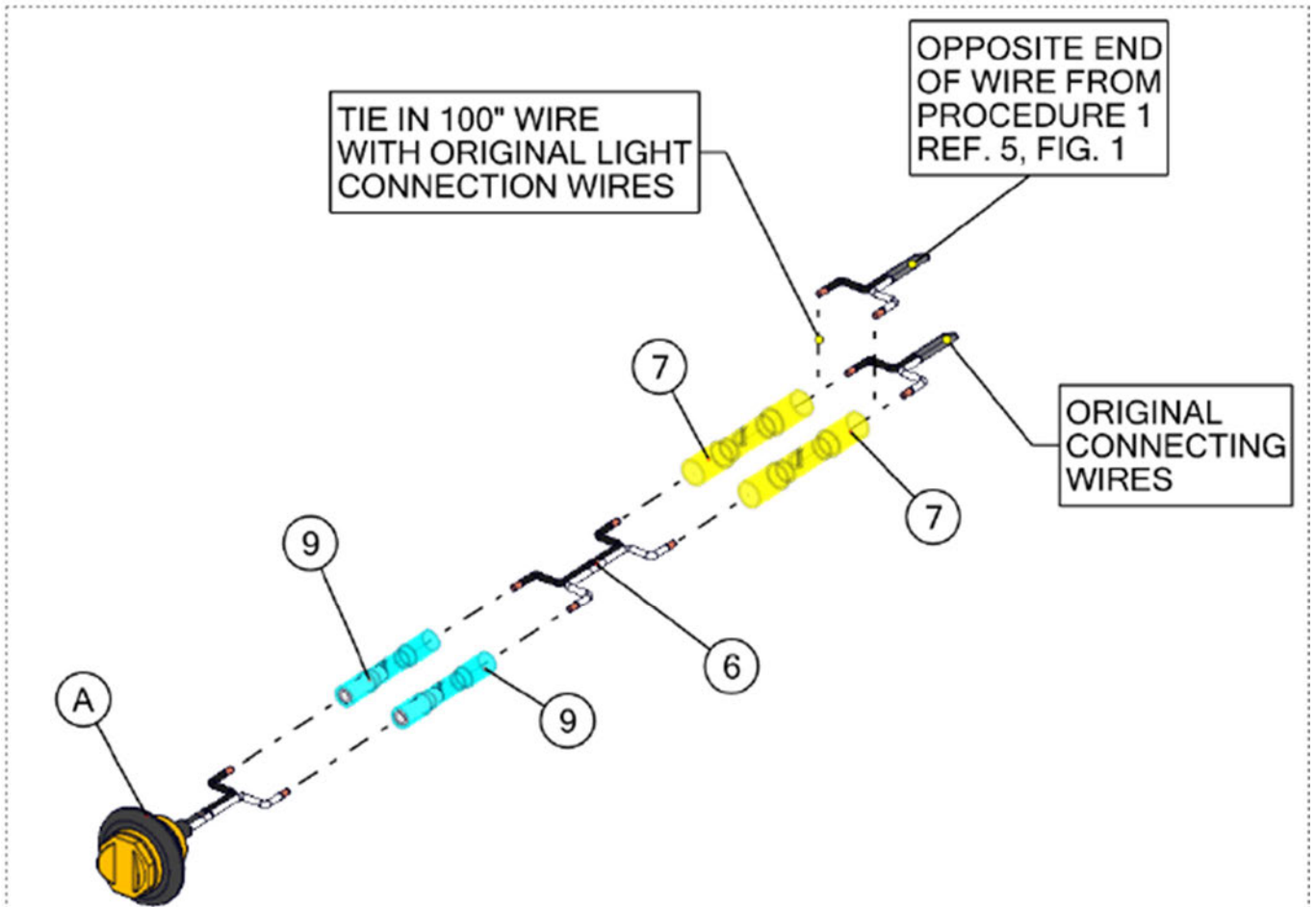


2. Place the front clearance lamp bracket on the gusset approximately 1-1/2" (3.81 cm) from the bottom as shown. Mark the bolt locations on the gusset and drill using a 9/32" (7.15 mm) size drill bit.

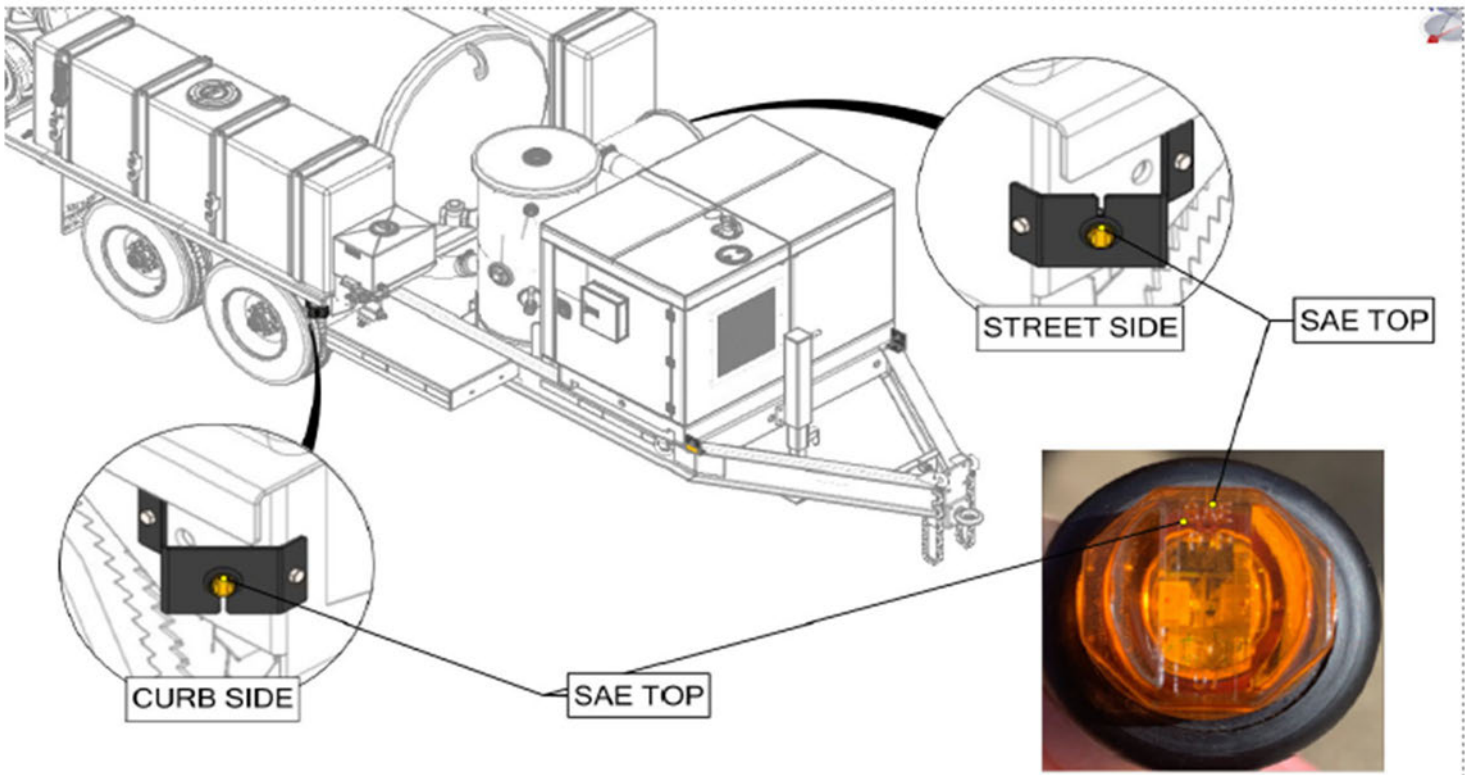
(Curb side shown)



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 Figure 2.

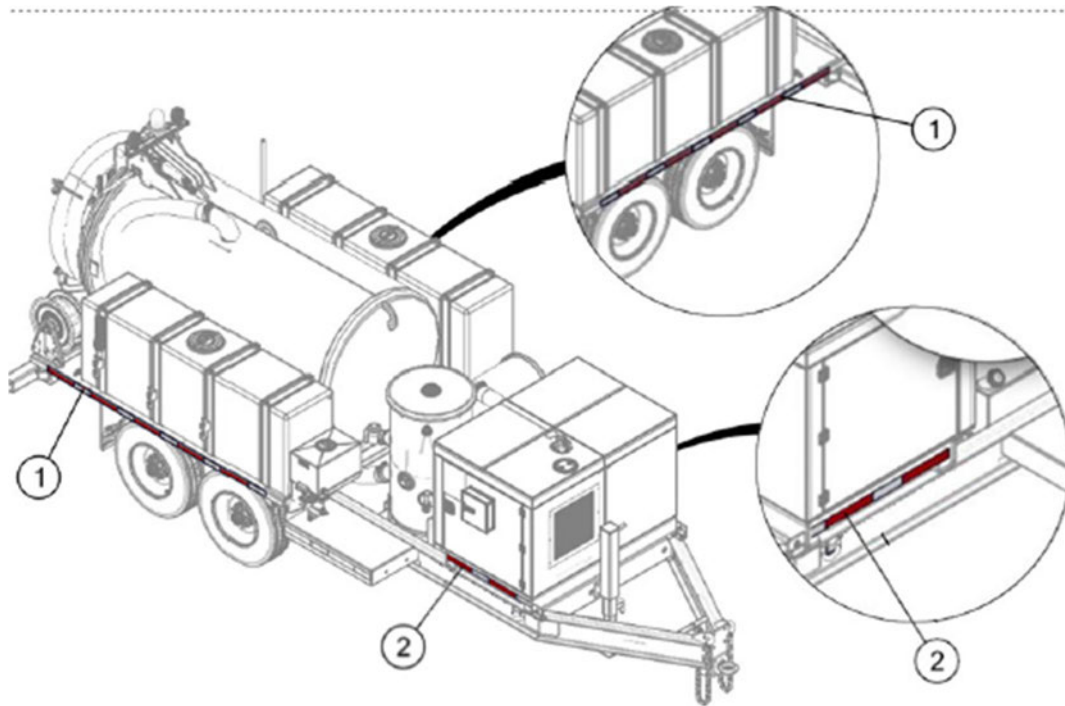


4. Insert the front clearance lamp into the front clearance lamp bracket as shown Ref 1 and A, Figure 2. Refer to the illustration below for proper lamp orientation.
5. Attach the front clearance lamp bracket with the hardware as shown Ref. 3, 4, and 5 Figure 2.
6. Loom all exposed wires. Ref. 8 Figure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



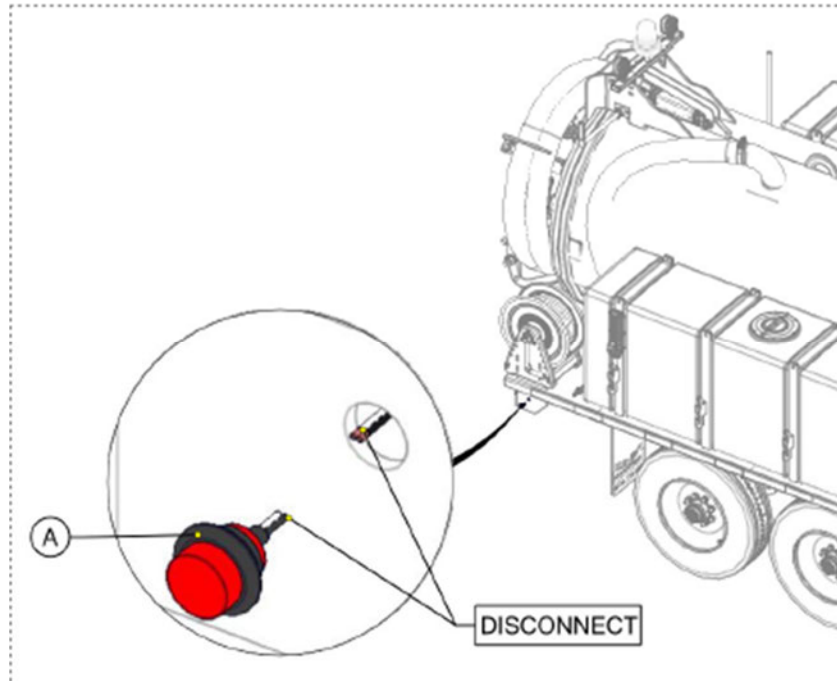
**Procedure 3:**

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, Figure 3.
3. Repeat for the opposite side of the trailer.

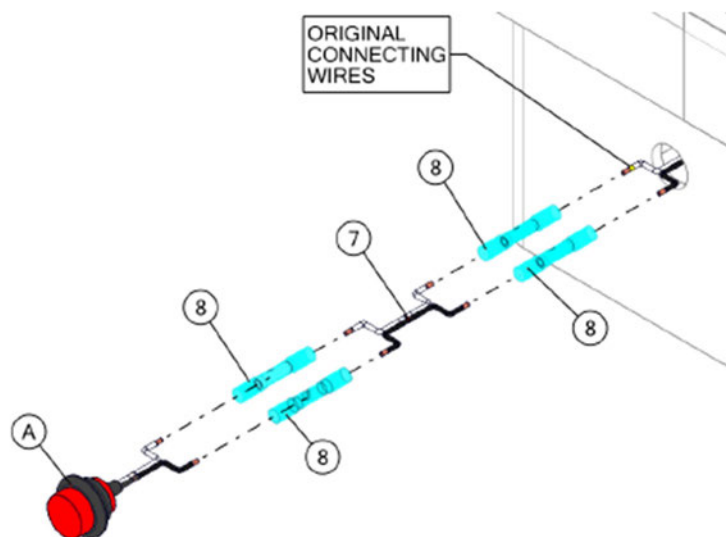


**Procedure 4:**

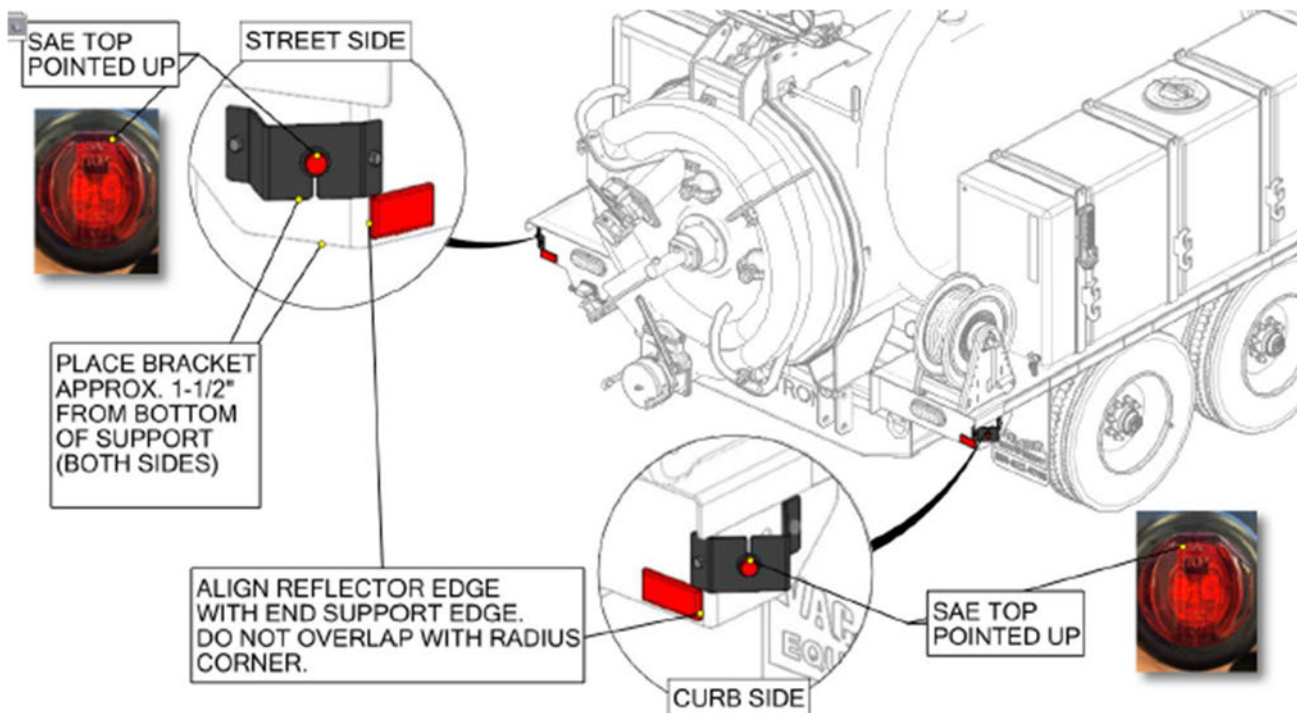
1. Remove the existing rear side marker lamp Ref. A from the gusset (retain for future installation) and disconnect the wires.



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, Figure 4.

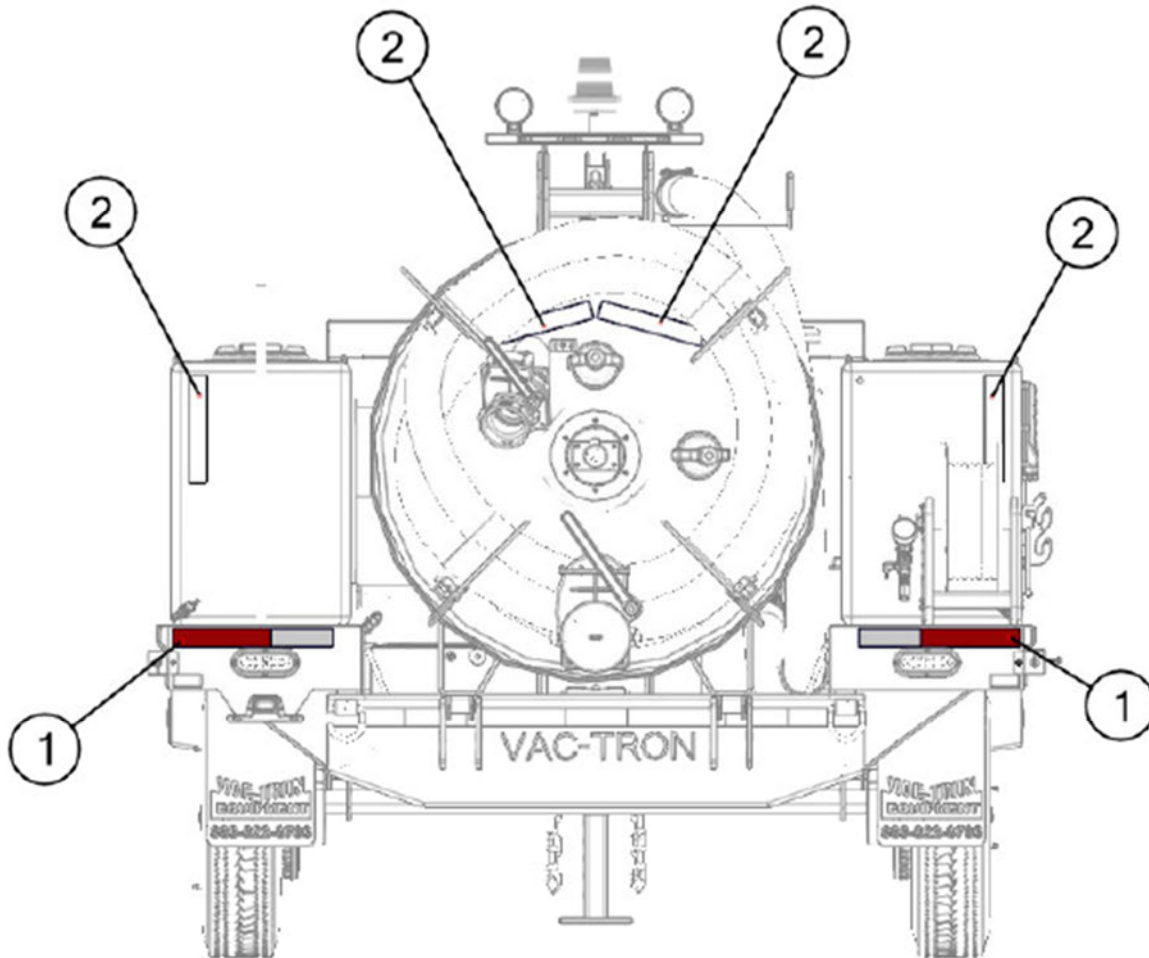


4. Attach the rear side marker lamp bracket with the hardware as shown Ref. 3, 4, and 5, Figure 4.
5. Loom all exposed wires. Ref. 9, Figure 4.
6. Insert the rear side marker lamp into the bracket as shown Ref 1 and A, Figure 4. Refer to the below illustration for proper lamp orientation.
7. Clean area 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.



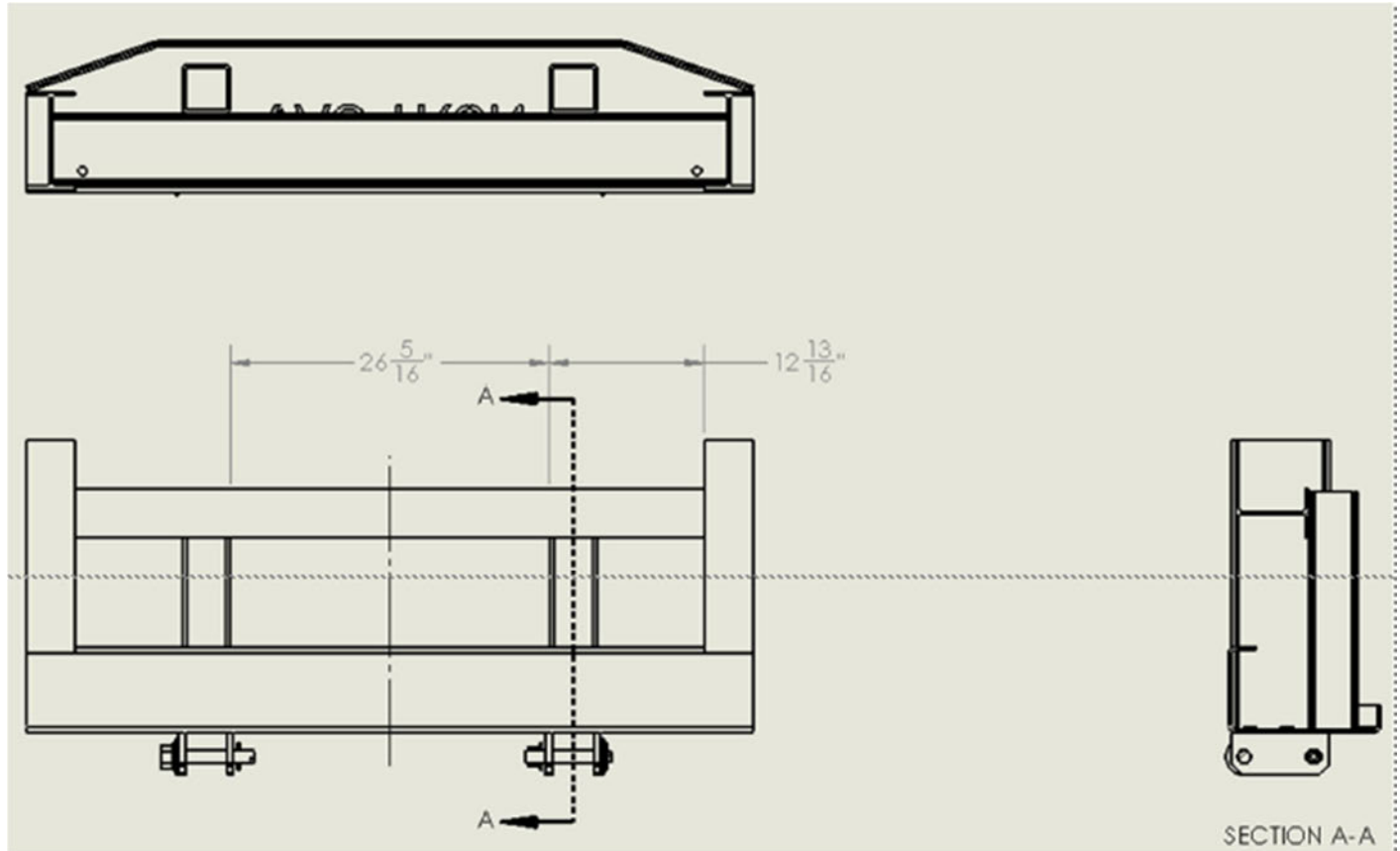
**Procedure 5:**

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, Figure 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, Figure 5.

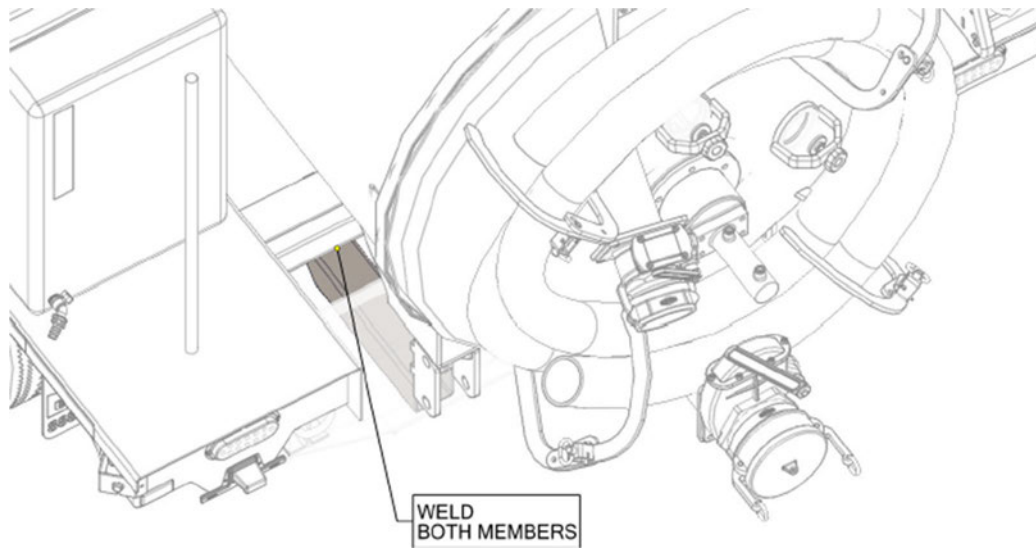
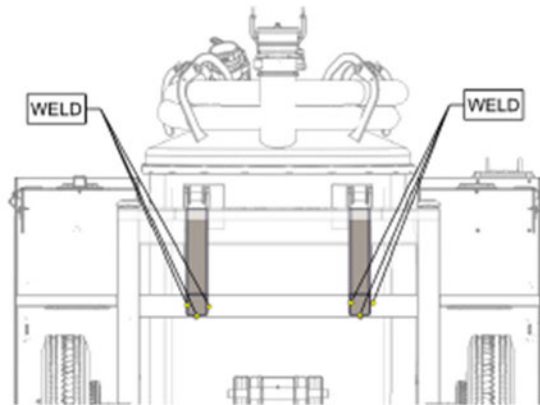
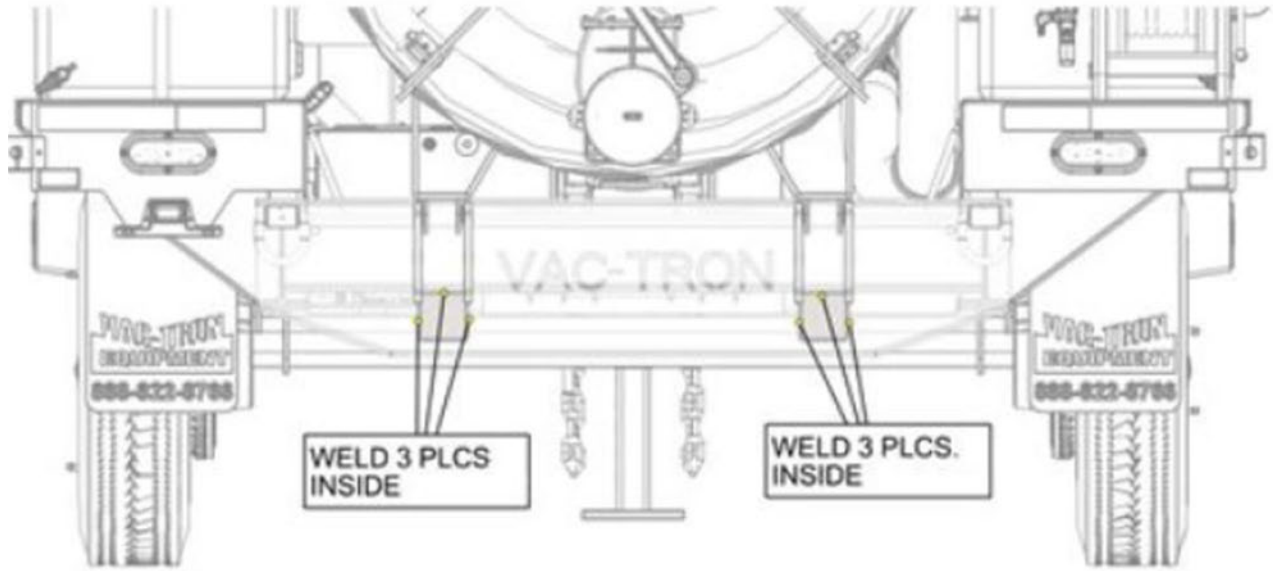


**Procedure 6:**

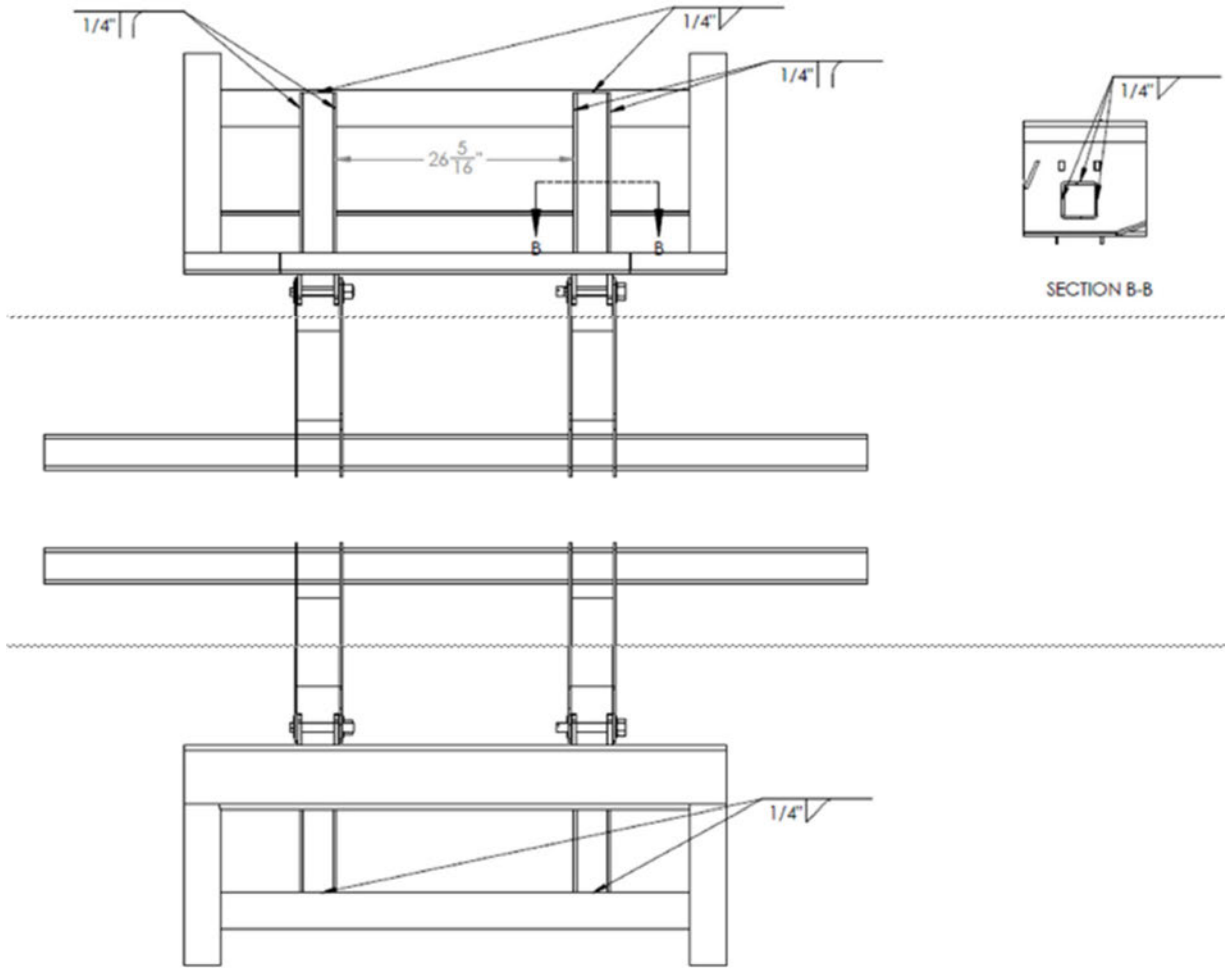
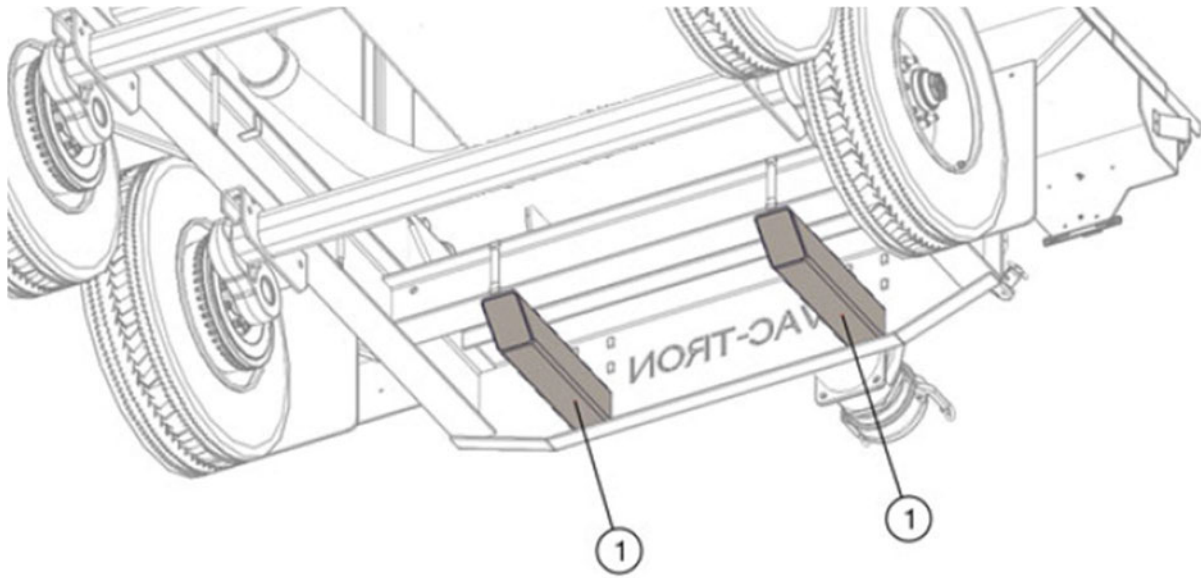
1. Grind off the paint and rust where the cross members provided are to be installed. Refer to the figure in Step 2.
2. Position the reinforcement members as indicated below Reference Figure 6.



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:**

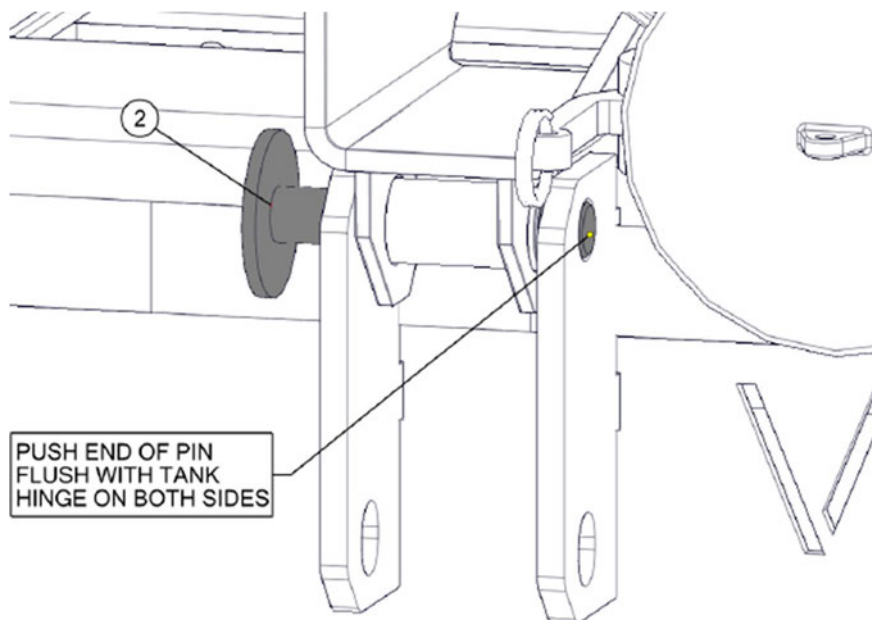


**WARNING:** Never lift machine over personnel. The load may fall or shift, crushing anyone beneath it.

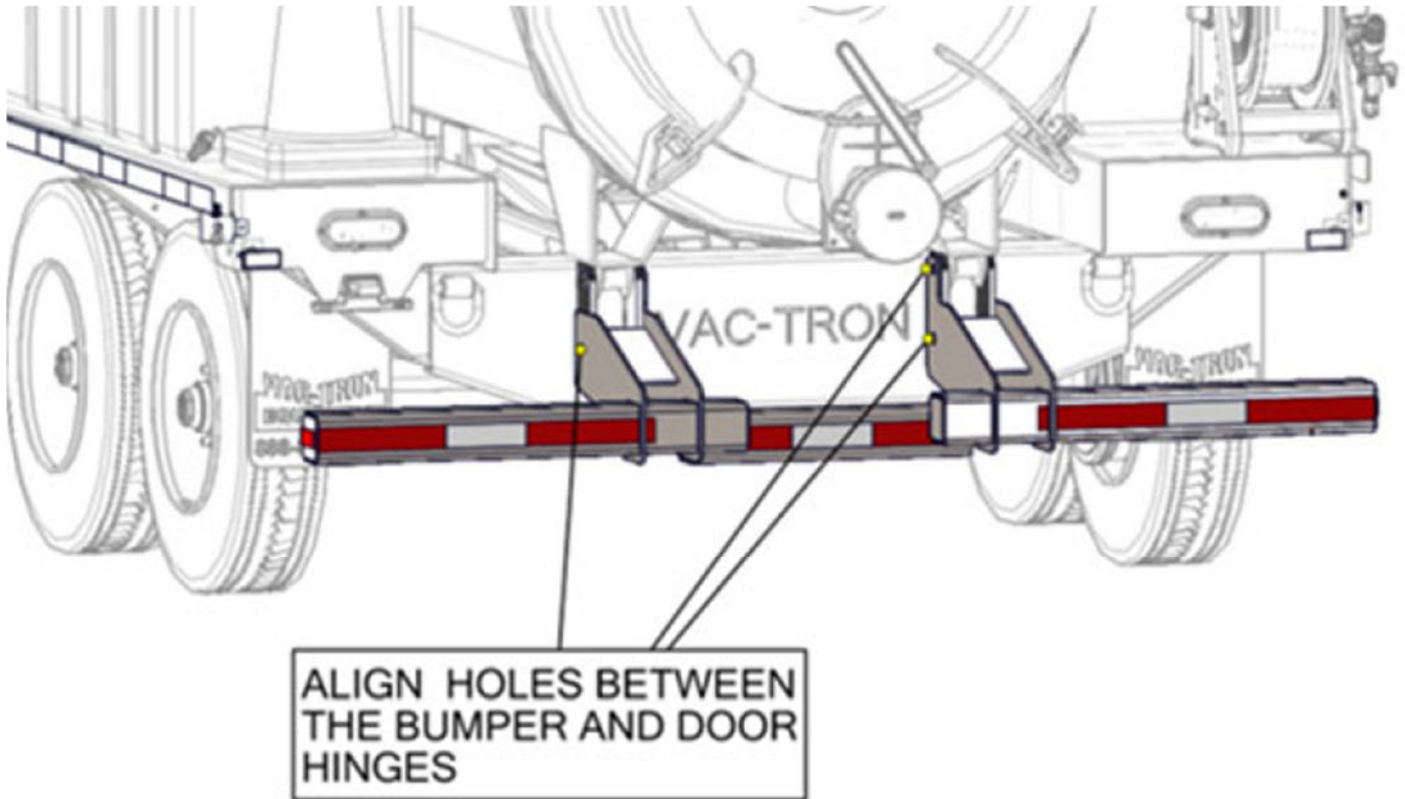
1. Ensure the debris tank is empty. Using suitable blocking, block debris tank to prevent shifting. Debris tank weighs approximately 1,000 lbs (454 kg).
2. Remove the cotter pin on both sides.



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 lbs (55 kg).
5. Install the bumper and align the bolt holes with the tank hinges.









UNIT OWNER COPY:  
Insert in parts manual  
for future reference.

Figure 1

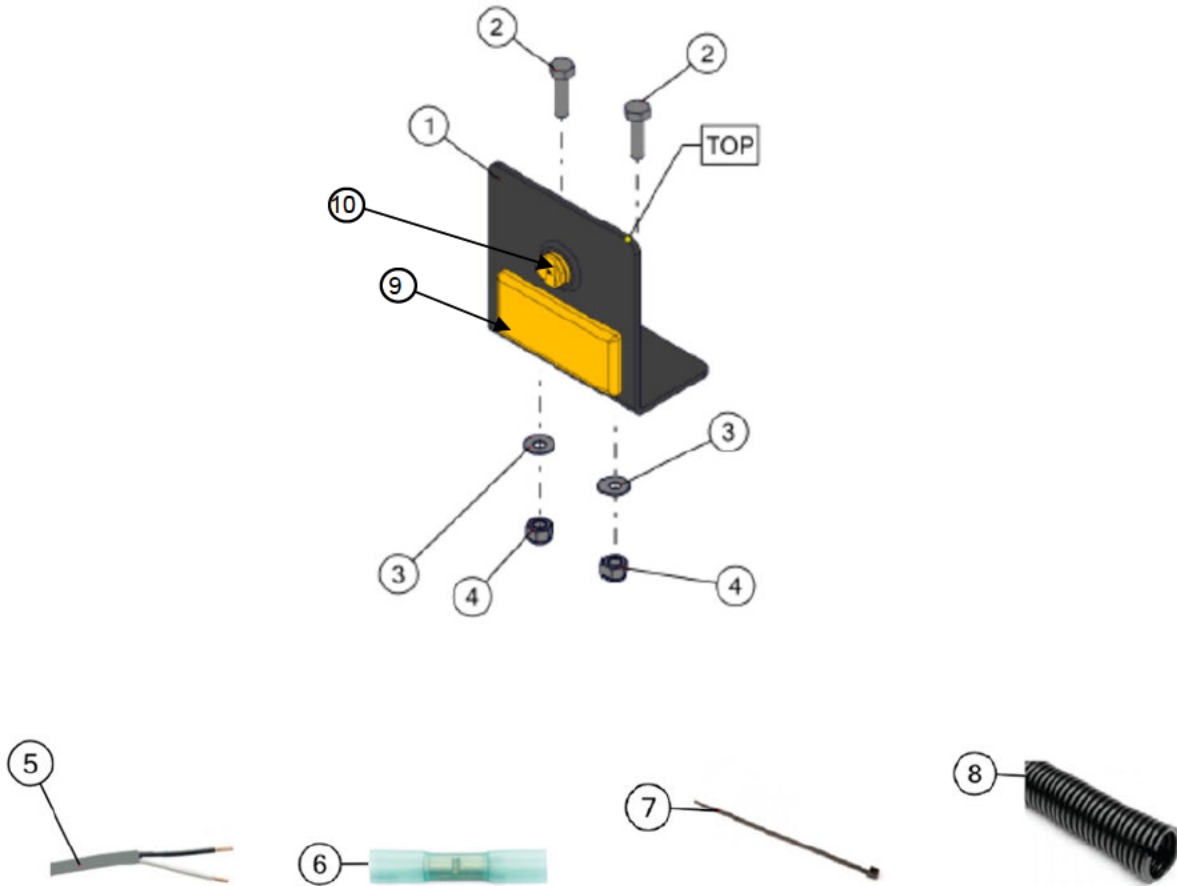
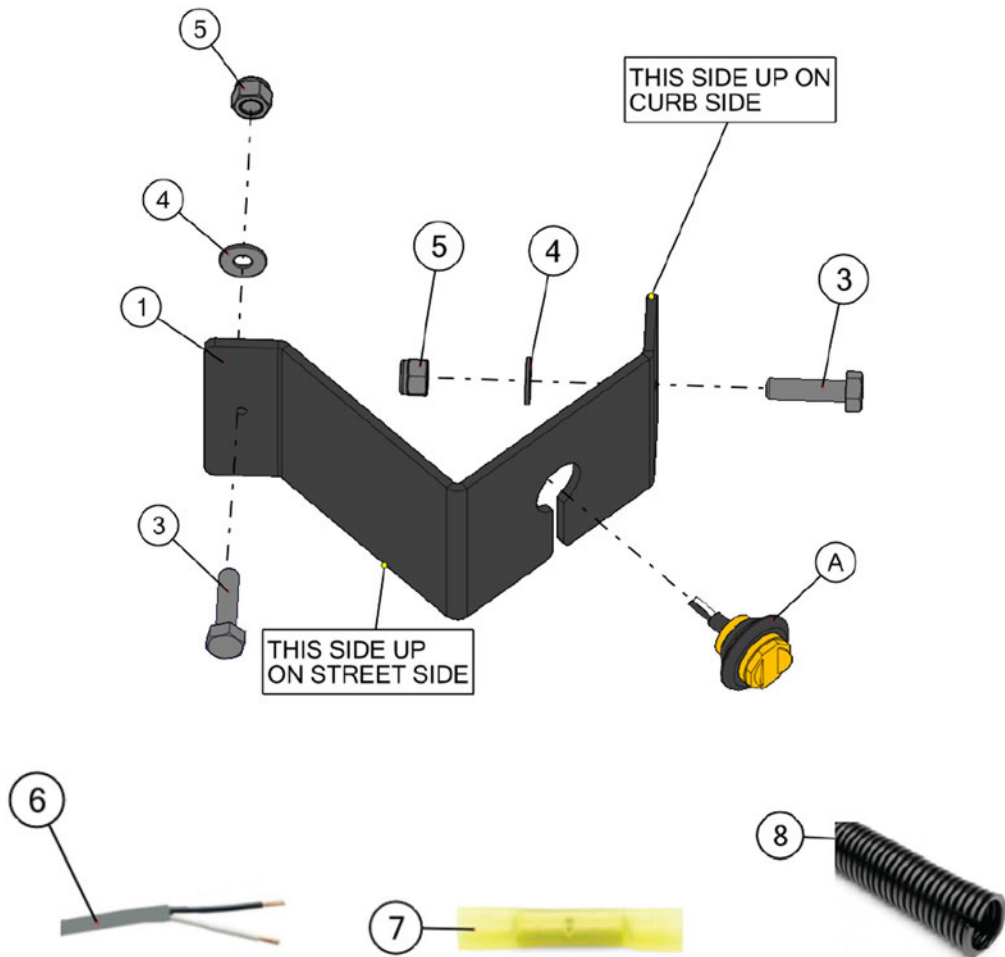


Figure 1 parts list

REF. NO.	PART NO.	DESCRIPTION	VVK01 QTY.
1	B134-5749	Fr Marker Light Brkt	2
2	P-1473	Hex Head Bolt 1/4-20x1, Zn	4
3	P-1472	Washer, 1/4" Flat, Steel, Zinc Plate	4
4	P-2782	NUT, NYLOCK 1/4-20	4
5	135018910	CABLE, 16 AWG, 2 CONDUCTOR, BLK/WHT, 100"L	2
6	P-2369	Terminal, Heat Shrink Butt Splice 16-14 GA Blue	4
7	P-1840	CABLE TIE, STANDARD 8", BLACK, 2"BUNDLE DIA.	10
8	135018908	1/4" SPLIT WIRE LOOM, POLY BLACK, 100" LENGTH	2
9	135500469	High Vis Conspicuity Sticker, Amber, 2"x3.5"	2
10	P-4190	LED Marker Light - AMBER	2
		Kit includes all items in Figure 1 parts list.	

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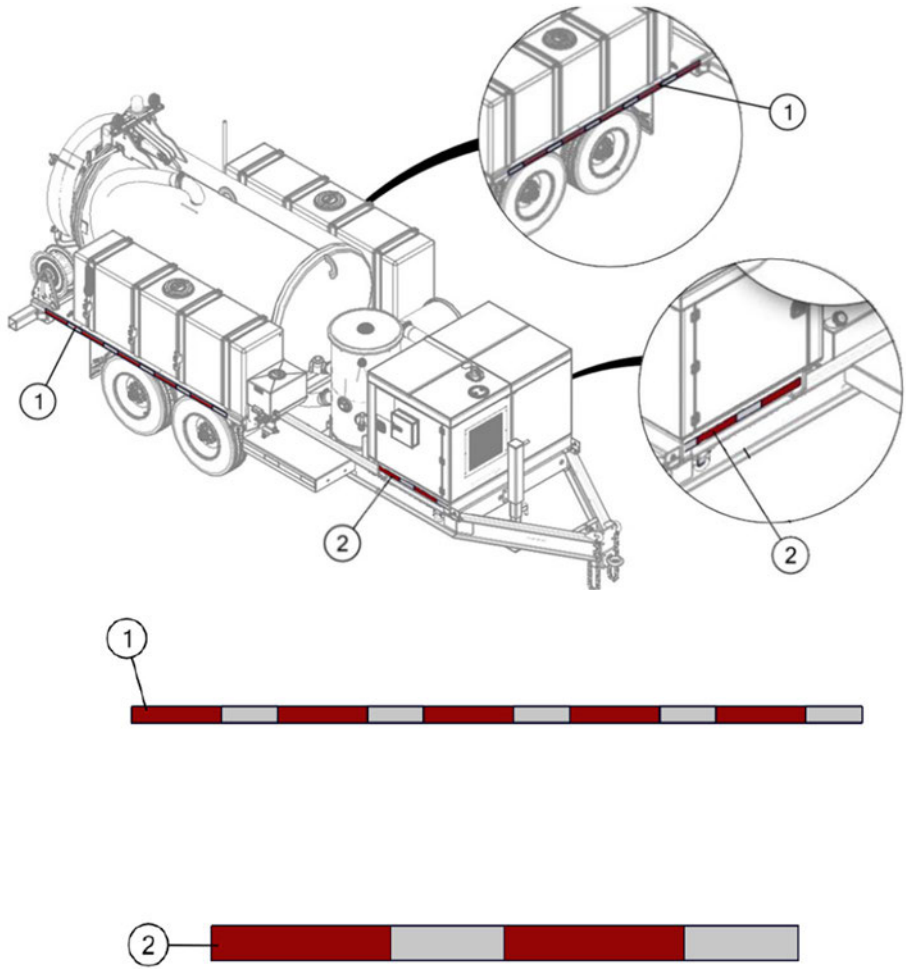
**Figure 2**



<b>Figure 2 parts list</b>			
<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>VVK01 QTY.</u>
1	B134-5748	Brkt, Marker Light	2
2	P-4190	LED Marker Light - AMBER	2
3	P-1473	Hex Head Bolt 1/4-20x1, Zn	4
4	P-1472	Washer, 1/4" Flat, Steel, Zinc Plate	4
5	P-2782	NUT, NYLOCK 1/4-20	4
6	135018467	CABLE, 16 AWG, 2 CONDUCTOR, BLK/WHT, 12"L	2
7	P-1611	10-12 AWG YELLOW BUTT CONNECTOR	4
8	135018897	1/4" SPLIT WIRE LOOM, POLY BLACK, 12" LENGTH	2
		Kit includes all items in Figure 2 parts list.	

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**Figure 3**

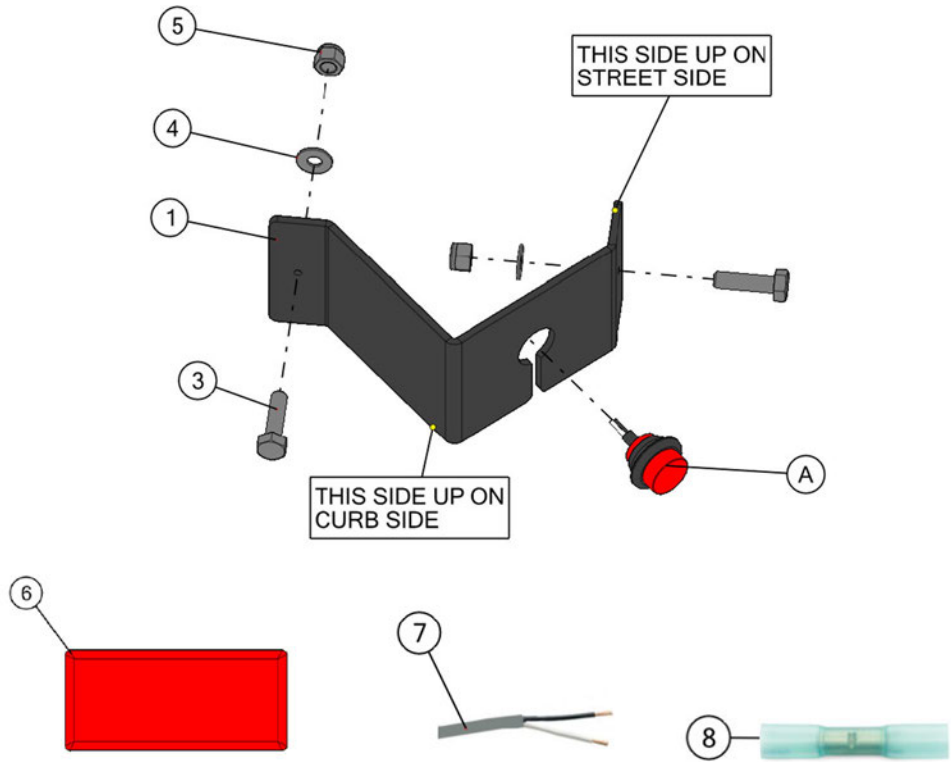


**Figure 3 parts list**

<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>VVK01 QTY.</u>
1	135018459	CONSPICUITY TAPE RED/WHITE 101"L	2
2	163818387	TAPE 2IN REFLECTIVE RED/SILVER -36IN	2
		Kit includes all items in Figure 3 parts list.	

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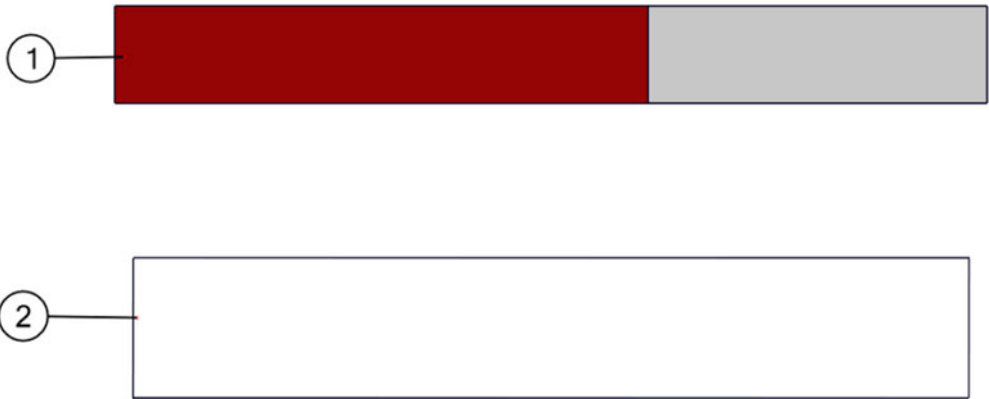
**Figure 4**



<b>Figure 4 parts list</b>			
<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>VVK01 QTY.</u>
1	B134-5748	Brkt, Marker Light	2
2	P-4189	LED Marker Light - RED	2
3	P-1473	Hex Head Bolt 1/4-20x1, Zn	4
4	P-1472	Washer, 1/4" Flat, Steel, Zinc Plate	4
5	P-2782	NUT, NYLOCK 1/4-20	4
6	135500470	High Vis Conspicuity Sticker, Red, 2"x3.5"	2
7	135018467	CABLE, 16 AWG, 2 CONDUCTOR, BLK/WHT, 12"L	2
8	P-2369	Terminal, Heat Shrink Butt Splice 16-14 GA Blue	4
		Kit includes all items in Figure 4 parts list.	

UNIT OWNER COPY:  
 Insert in parts manual  
 for future reference.

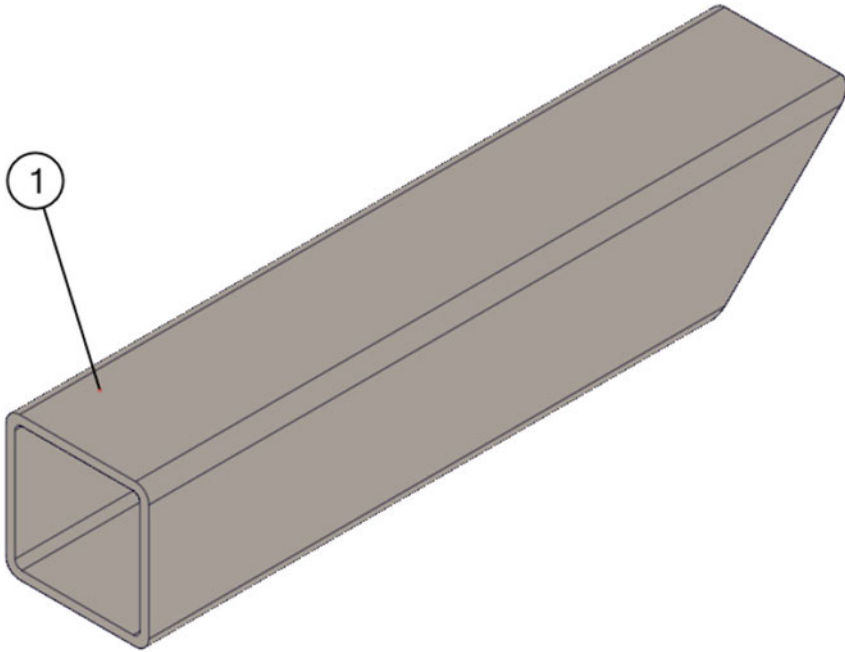
**Figure 5**



<b>Figure 5 parts list</b>			
<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>VVK01 QTY.</u>
1	635221540	TAPE-2" REFLECTIVE RED/SILVER 18"	2
2	135017611	TAPE, 2", REFLECTIVE, WHITE ONLY, CUT 12" LONG	4
		Kit includes all items in Figure 5 parts list.	

UNIT OWNER COPY:  
 Insert in parts manual  
 for future reference.

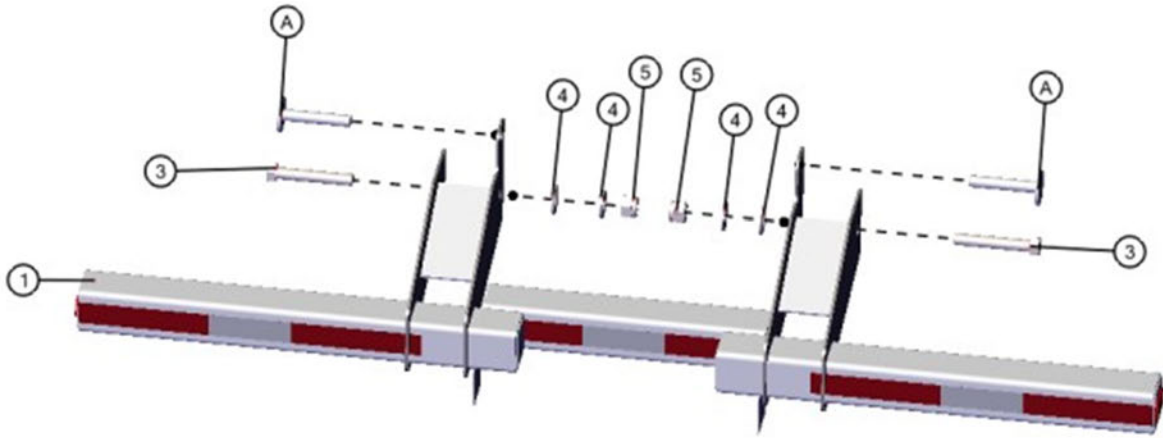
**Figure 6**



<b>Figure 6 parts list</b>			
<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>VVK01 QTY.</u>
1	S400-5761	Reinf, Rr XMbr, 800 Hvy	2
		Kit includes all items in Figure 6 parts list.	

UNIT OWNER COPY:  
 Insert in parts manual  
 for future reference.

**Figure 7**



<b>Figure 7 parts list</b>			
<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>VVK01 QTY.</u>
1	135500205	Frm Extension Rear	1
A	SA-4471	HEADED PIN (EXISTING ON TRAILER)	2
3	135500218	1-8 X 6-1/2" HEX HEAD CAP SCREW, 2-1/2" THREAD Gr8	2
4	P-3827	WASHER, FLAT, 1" SAE, ZP	4
5	U120060	NUT, LOCK 1.00-8 NY ZP G2	2
		Kit includes all items in Figure 7 parts list.	