



## Vac-Tron Equipment, LLC

Trenchless Okahumpka, FL 34762 USA

## FIELD CAMPAIGN KIT # VVK00-0011 DATE: 13 October 2020

**FIELD KIT** 

For Dealer Reference: Service Bulletin # SVV2020-014

### Reflectors, Lights and Discharge Tube Overhang Update Kit

CAMPAIGN TYPE:	Mandatory-Product Safety
CAMPAIGN CATEGORY:	Kit and Bulletin
	DEALER INSTALLATION ONLY

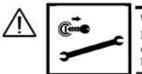
MACHINE /	Serial Numl	bers	
ATTACHMENT MODEL (S):	Included	Excluded	Kit Version
HTV873PTO	See attached licting on		
JTV873PTO	See attached listing on pages 15–18 of this Kit	N1/A	
HTV573PTO	Instructions for specific	N/A	VVK01
HTV373PTO	VIN and Serial/Unit numbers		



#### PURPOSE: Lighting, Marking, and Rear Extremity Limits

The side and rear reflectors, and the rear facing marker lights do not meet US Federal Motor Vehicle Safety Standard (FMVSS/CMVSS) governmental regulation 108 for the United States. The discharge tubes on the spoil tank exceed the permitted length and do not meet US Title 49 Code of Federal Regulations §393.86 for the United States. When driving or parking the vacuum excavator on public roadways, a crash may occur resulting in **death or serious injury** resulting from a driver(s) of other vehicle(s) not seeing the vacuum excavator at night or during limited sunlight and strike the vacuum excavator. To reduce the potential of this occurring, vehicle reflectors and lights will be added. In the event of a rear impact crash, the vacuum excavator spoil tank discharge tubes may collide with another vehicle, increasing the risk of **death or serious injury** to vehicle occupants. Property or equipment damage may also occur.

VVK00-0011 has been created to provide the necessary parts and instructions to add side and rear reflectors and rear facing lights. The spoil tank discharge tubes will also be shortened. In addition, a new Vac-Tron product identification tag will be installed on the vacuum excavator for recordkeeping purposes. **The kit must be installed as soon as possible**.



**WARNING:** Failure to use shutdown procedure can result in unexpected hazard(s). Death or serious injury could result due to entanglement, crushing, cutting, or other hazardous contact. Follow Shutdown Procedure after operating, before performing any service or maintenance, and before transporting.

# Shutdown Procedure STOPPING 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: Let *PTO* run to allow vacuum pump to cool down with *CVS Filter Housing / Cyclone* in NEUTRAL.
- Step 3: Turn Water Pump Switch to OFF.
- Step 4: Pull trigger on high pressure water tool to relieve pressure.
- Step 5: Disassemble all water line connections, vacuum hoses, and tools. Stow properly on machine.
- Step 6: Drain CVS Filter Housing / Cyclone.

Step 7: Disengage PTO.



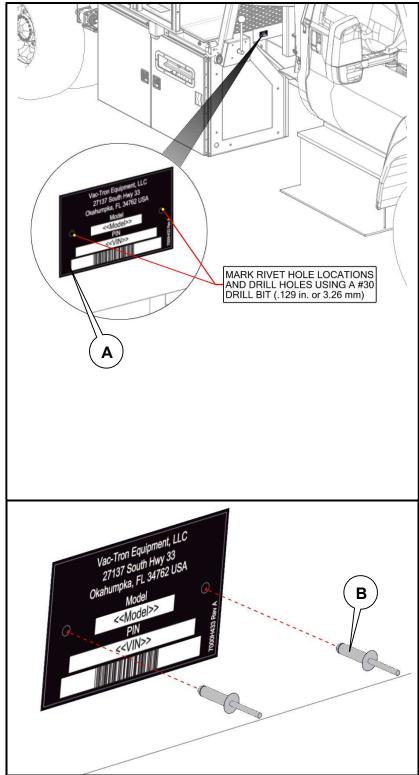
**WARNING:** Do not point high pressure water tool in the direction of people when relieving the pressure.

### **Install Machine ID Tag**

**Note:** At time of manufacture of the vacuum excavator, a Product Identification ID (PIN) was not assigned. A new PIN has been assigned and a PIN Tag 7000H433 **(A)** must be installed with this Kit but is NOT included because it is machine specific. To request the PIN tag, send an email to:

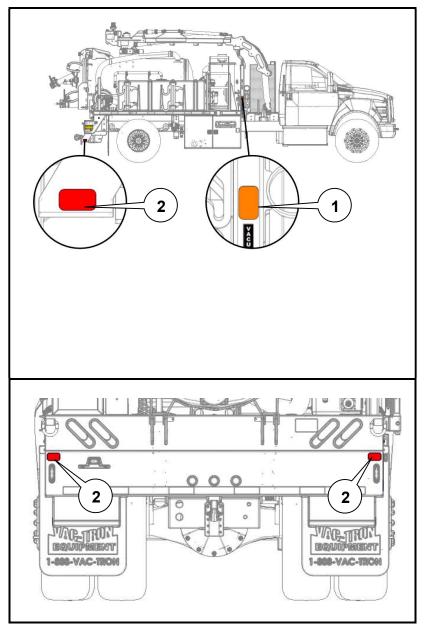
productsafety@vermeer.com referencing this Kit #, the Truck Model, the Truck VIN and the Vac-Tron Model . The PIN Tag will be shipped overnight.

- Position the Machine ID Tag (A) on the headboard crossmember in the approx. position shown (curb side of vehicle). Mark hole locations on the crossmember and drill the rivet holes using a #30 drill bit (.129 in. or 3.26 mm).
- **2.** Attach the Machine ID Tag using the supplied 1/8" rivets **(B)**.



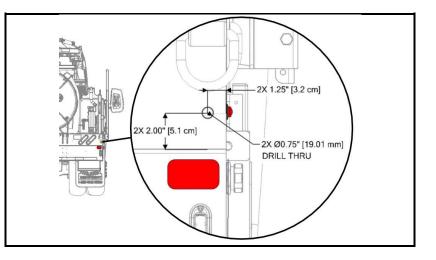
#### **Install Reflectors**

- 1. Reference Figure 1 for parts list.
- 2. Clean and dry the surface areas where reflectors are to be installed.
- 3. Place the curb-side amber reflector (1) positioned on the headboard above the VACUUM-NEUTRAL-PRESSURE decal. Repeat on the street-side, placing the reflector at a similar position on the headboard.
- **4.** Position the side facing red reflector **(2)** centered at the bottom of the grated step as shown. Repeat for the street-side.
- 5. Position the rear-facing red reflectors (2) on the upper corners of the bumper step as shown.



#### **Install Marker Lights**

- 1. Reference Figure 2 for parts list.
- **2.** Drill a Ø0.75" [19.01 mm] hole above the bumper step in the location shown.

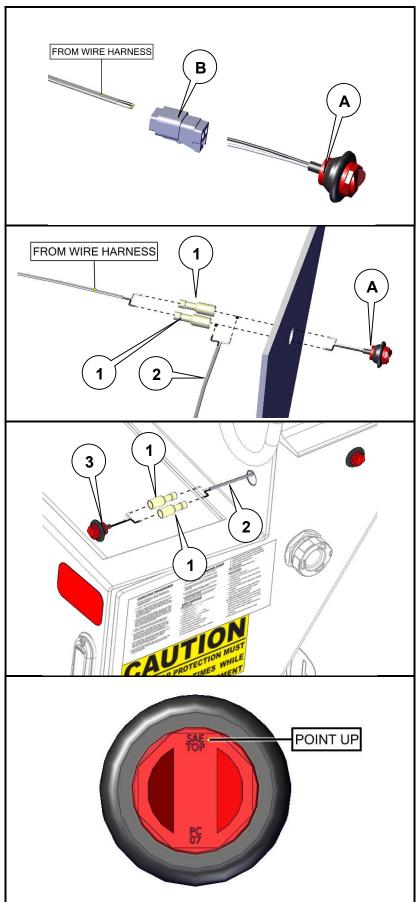


 Locate the Deutsch connector (B) that connects the marker light (A) to the wire harness under the bumper. Cut the wires to remove the Deutsch connector (B) and discard.

- Use heat shrink butt connectors

   to reconnect the wire harness to the red marker light (A) and tie in with one end of the supplied dual core wire (2). Place the red marker light (A) back into the bumper.
- Feed the dual core wire (2) through the hole drilled in step 1. Connect the supplied red marker light (3) using heat shrink butt connectors (1). Insert the red marker light (1) into the hole drilled in step 2.

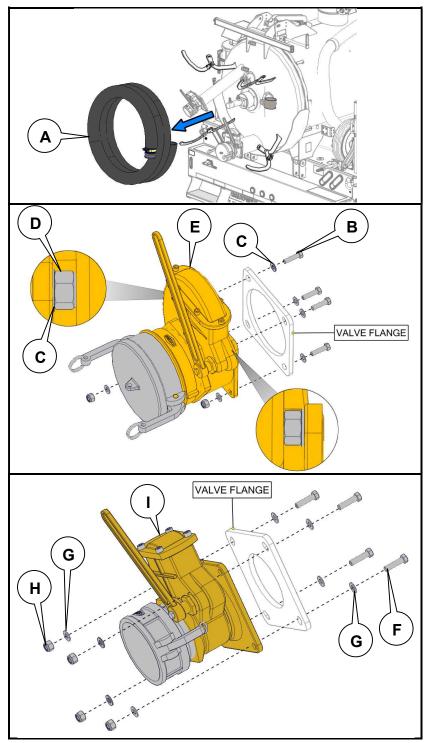
- 6. Ensure that the SAE TOP indicator is pointed up on all marker lights.
- 7. Place split loom (4) over all exposed wires.
- 8. Repeat all steps for the streetside of the vehicle.



#### Modify the Debris Tank Door

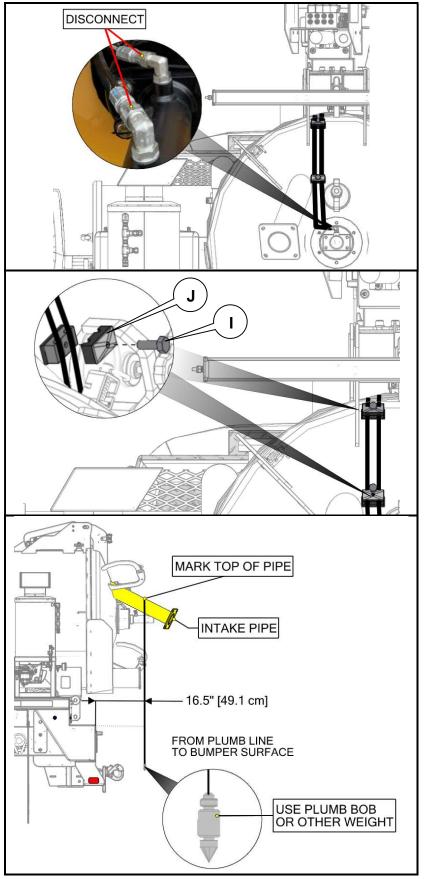
- **1.** Refer to Figure 3 for parts list.
- **2.** Remove the hose assembly **(A)** from the debris tank door and retain for future installation.
- Remove the 1/2" bolts (B), washers (C), and lock nuts (D) and pull the 6" gate valve (E) from the flange. Retain the bolts and washers for future installation. Discard the lock nuts.

 Remove the bolts (F), washers (G), and lock nuts (H) and pull the 4" gate valve (I) from the flange. Retain the bolts, washers, and flange for future installation. Discard the lock nuts.



**5.** Disconnect the hydraulic hoses from the cylinder on the debris tank door.

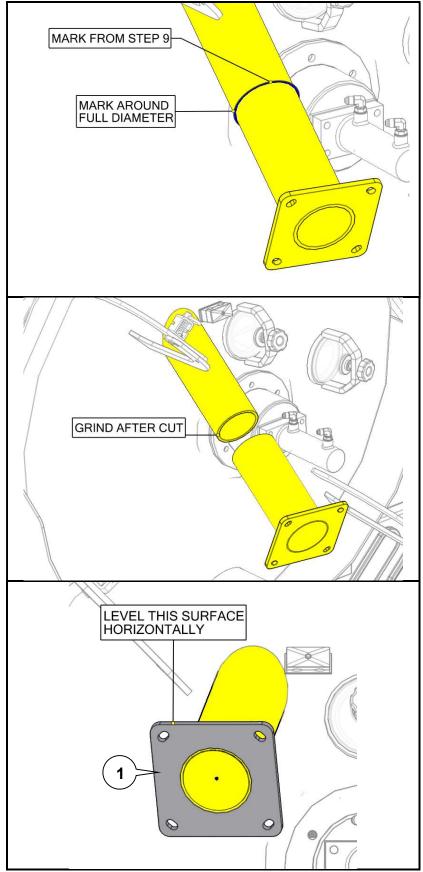
- Remove the bolt (I) and the hydraulic hose holder top (J) from each of the two hose holders on the debris tank door. Retain for future installation.
- 7. Store the hydraulic hoses on the top of the debris tank where they will be safe from grind and weld spatter in future steps.
- **8.** Hang a plumb line from the intake pipe of the debris tank and position 16.5" [49.1 cm] from the surface of the bumper as shown.
- **9.** Mark the position of the plumb line on the top of the intake pipe.



**10.** Aligned with the mark from step 9 ensure to draw the circumference of the marked line around the entire tube to cut it evenly.

**11.** Cut the intake pipe along the marked line using a portable bandsaw or similar tool. Grind the end of the remaining pipe section to remove rough edges.

**12.** Place the 4" gate valve plate onto the intake pipe as shown and tack weld into place.



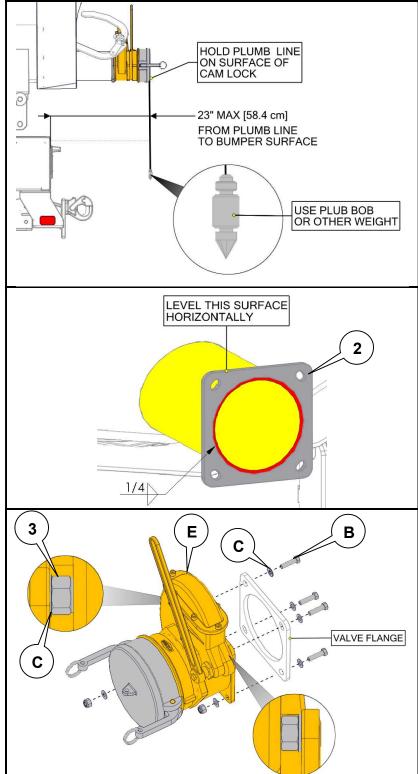
- 13. Hold the 4" gate valve on the intake flange and measure the distance from the cam lock to the bumper as shown to ensure the distance is no more than 23". If the distance is over 23", remove the valve flange and cut the extra length from the drainpipe as in step 11 and repeat this measurement.
  - HOLD AT PLUMB LINE AT OUTER MOST POINT OF CAM LOCK 60 23" MAX. [58.4 cm] 0 FROM PLUMB LINE TO BUMPER SURFACE USE PLUMB BOB OR OTHER WEIGHT LEVEL THIS SURFACE HORIZONTALLY 9 9 0 0 1/4 VALVE FLANGE 3
- **14.** Once the measurement in step 13 is 23" maximum, weld the flange on both sides. Stagger the start/stop points on each side of the flange.
- **15.** Sand, clean, and paint all exposed surfaces for both intake and drainpipes.

**16.** Attach the 4" gate valve to the intake flange using the fasteners retained in step 4 and the supplied lock nuts **(3)**.

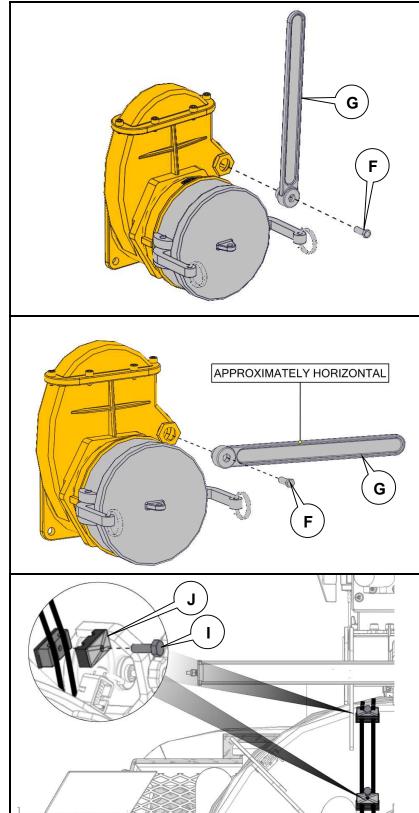
**17.** Hang a plumb line from the MARK TOP OF PIPE drainpipe of the debris tank and position 14.5" [36.8 cm] from the surface of the bumper as shown. DRAIN PIPE 18. Mark the position of the plumb 14.5" [36.8 cm] line on the top of the drainpipe. FROM PLUMB LINE TO BUMPER SURFACE USE PLUMB BOB OR OTHER WEIGHT **19.** Aligned with the mark from step 18 ensure to draw the MARK AROUND FULL DIAMETER circumference of the marked line around the entire tube to cut it evenly. MARK FROM STEP 18 **20.** Cut the drainpipe along the marked line using a portable bandsaw or similar tool. Grind the end of the remaining pipe section to remove rough edges. GRIND AFTER CUT 21. Position the 6" valve flange (2) LEVEL THIS SURFACE HORIZONTALLY onto the drainpipe and tack weld.

22. Hold the 6" gate valve on the flange and measure the distance from the cam lock to the bumper as shown to ensure the distance is no more than 23". If the distance is over 23", remove the valve flange and cut the extra length from the drainpipe as in step 16 and repeat this measurement.

- **23.** One the measurement in step 19 is 23" maximum, weld the flange on both sides. Stagger the start/stop points on each side of the flange.
- **24.** Sand, clean, and paint all exposed surfaces for both intake and drainpipes.
- **25.** Attach the 6" gate valve to the drainpipe flange using the hardware retained in 9 and the supplied lock nuts **(3)**.

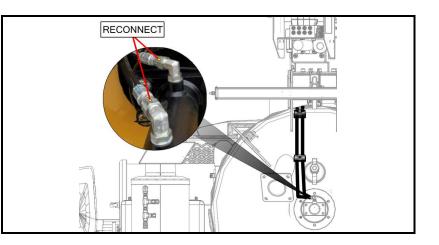


26. Remove the gate valve handle bolt (F) and gate valve handle (G).



27. Reattach the gate valve handle (G) positioned approximately horizontal as shown while the gate valve is in the CLOSED position.

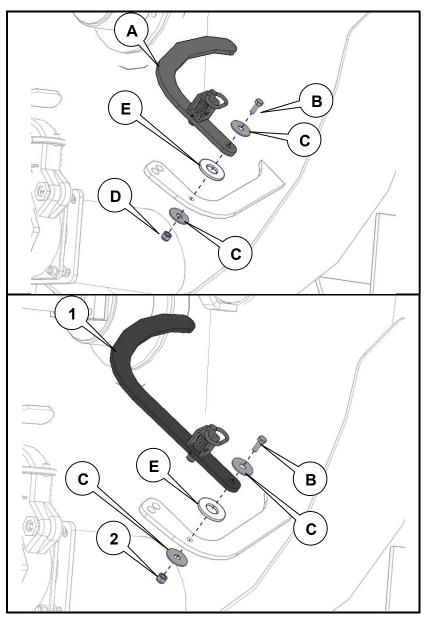
 Replace the hydraulic hoses into the hose holders. Attach hose holder tops (J) and fastening bolts (I) retained from step 6. **29.** Reconnect the hydraulic hoses from to the cylinder on the debris tank door.



### Replace the Lower Hose Clamp Arms

 Remove the lower RH hose clamp arm. Retain the bolt (B), washers (C), and nylon washer (E) for future installation. The lock nuts (D) may be discarded.

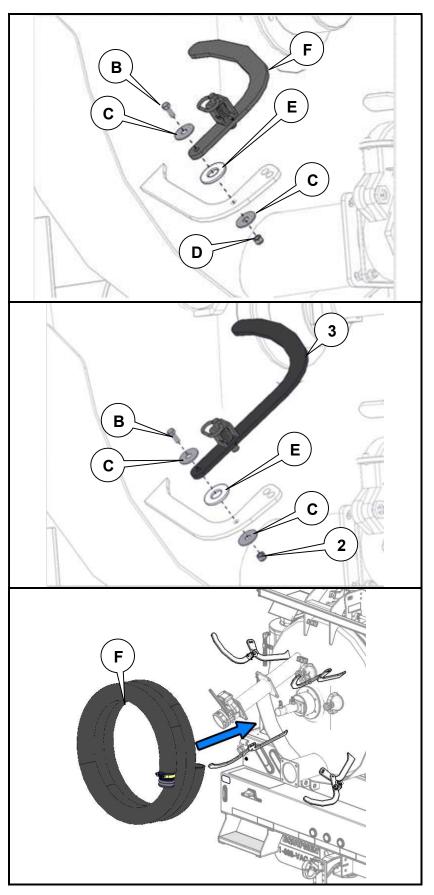
Install the new lower RH hose clamp arm (1) using the bolt (B), washers (C), and nylon washer (E) retained in step 1. Tighten with new nylon lock nuts (2).



 Remove the lower LH hose clamp arm. Retain the bolt (B), washers (C), and nylon washer (E) for future installation. The lock nuts (D) may be discarded.

 Install the new lower LH hose clamp arm (3) using the bolt (B), washers (C), and nylon washer (E) retained in step 3. Tighten with new nylon lock nuts (2).

 Replace the hose assembly (F) onto the debris tank door retained from step 2 on page 6.



AFFECTED MACHINES - VVK01-0011					
TRUCK MAKE	TRUCK MODEL	TRUCK VIN	VAC-TRON MODEL	VAC-TRON PIN	
Freightliner	MM106042S	1FVACWFC2JHJP7155	HTV373PTO	111111	
Ford	F650	3FRNF6FC6FV747520	HTV573PTO	161001	
Ford	F650	1FDNF6AY5GDA02210	HTV873PTO	161022	
Ford	F750	1FDXF7DE2GDA00186	HTV873PTO	161023	
Ford	F750	1FDXF7DE2GDA00253	HTV873PTO	161024	
Ford	F650	1FDNF6DC6GDA00322	HTV573PTO	161027	
Ford	F650	1FDNF6DCXGDA00646	HTV573PTO	161028	
Ford	F650	1FDNF6DCXGDA00324	HTV573PTO	161029	
Ford	F750	1FDXF7DE2GDA02147	HTV873PTO	161030	
Ford	F750	1FDXF7DE4GDA02148	HTV873PTO	161031	
Ford	F750	1FDXF7DE6GDA02149	HTV873PTO	161032	
Ford	F650	1FDNW6DC5GDA00120	HTV573PTO	161034	
Ford	F650	1FDNF6DC7GDA02144	HTV573PTO	161058	
Ford	F750	1FDXF7DE5GDA00327	HTV873PTO	161059	
Peterbilt	335	2NPLHN6X88M752463	HTV873PTO	161078	
Ford	F750	1FDXF7DE1GDA04469	HTV873PTO	161079	
Ford	F750	1FDXF7DE8GDA04470	HTV873PTO	161080	
Ford	F750	1FDXF7DEXGDA06365	HTV873PTO	161109	
Ford	F750	1FDXW7DE7GDA00121	HTV873PTO	161110	
Ford	F750	1FDYW7DXXGDA04394	HTV873PTO	161114	
Ford	F650	1FDNF6DCXGDA04468	HTV573PTO	161128	
Ford	F750	1FDXF7DE8GDA06364	HTV873PTO	161129	
Ford	F550	1FDUF5HY4GEA29811	HTV373PTO	161130	
Ford	F750	1FDXF7DC3HDB00863	HTV873PTO	161160	
Ford	F750	1FDXF7DE3GDA07034	JTV873PTO	161171	
Ford	F750	1FDXF7DE1GDA06366	HTV873PTO	161194	
Ford	F750	1FDXF7DE3GDA06367	HTV873PTO	161202	
Ford	F750	1FDXF7DE2HDB01732	HTV873PTO	161203	
Ford	F650	1FDNF6DE8GDA07306	HTV573PTO	161205	
Ford	F650	1FDNF6DE6GDA07031	HTV573PTO	161206	
Ford	F750	1FDXF7DE7HDB02116	HTV873PTO	161208	
Ford	F750	1FDXF7DE4HDB01733	HTV873PTO	161223	
Freightliner	MM106042S	3ALACXDT8HDJD3553	HTV873PTO	161228	
Ford	F650	1FDNF6DE8GDA07032	HTV573PTO	161232	
Ford	F650	1FDNX6DE7GDA07035	HTV573PTO	161239	
Ford	F750	1FDNF7DC5HDB02640	HTV873PTO	161241	
Ford	F750	1FDXF7DE0HDB02118	HTV873PTO	161248	
Ford	F750	1FDXW7DE5HDB03667	HTV873PTO	161259	
Ford	F650	1FDNF6DEXGDA07033	HTV573PTO	161260	
Ford	F750	1FDXF7DE9HDB02117	HTV873PTO	161283	

AFFECTED MACHINES - VVK01-0011					
TRUCK MAKE	TRUCK MODEL	TRUCK VIN	VAC-TRON MODEL	VAC-TRON PIN	
Ford	F750	1FDXF7DE2HDB02119	HTV873PTO	161284	
Ford	F750	1FDXF7DE4HDB02297	JTV873PTO	161323	
Ford	F550	1FDUF5GT9HEC03914	HTV373PTO	171001	
Ford	F750	1FDXF7DE1HDB03567	HTV873PTO	171003	
Ford	F750	1FDXF7DE6HDB04245	HTV873PTO	171004	
Ford	F650	1FDNF6DCXHDB03566	HTV573PTO	171015	
Ford	F650	1FDNF6DC5HDB05872	HTV573PTO	171094	
Ford	F650	1FDNF6DC7HDB03704	HTV873PTO	171095	
Ford	F550	1FD0W5HT2HED33515	HTV373PTO	171115	
Ford	F750	1FDXF7DE8HDB04246	HTV873PTO	171131	
Ford	F750	1FDXF7DEXHDB04247	HTV573PTO	171158	
Ford	F750	1FDXF7DE6HDB05458	HTV873PTO	171167	
Ford	F650	1FDNF6DC3HDB05871	HTV573PTO	171189	
Ford	F650	1FDNF6DC7HDB05873	HTV573PTO	171190	
Ford	F650	1FDNF6DC2HDB07742	HTV573PTO	171191	
Ford	F550	1FDUF5GT2GED16070	HTV373PTO	171257	
Ford	F750	1FDXF7DE8HDB05459	JTV873PTO	171305	
Ford	F750	1FDXF7DE9HDB05874	JTV873PTO	171322	
Ford	F550	1FD0W5GT5HED05600	HTV373PTO	171354	
Ford	F750	1FDXF7DE4HDB11629	HTV873PTO	171355	
Ford	F750	1FDNF7DE4JDF00476	HTV873PTO	171368	
Ford	F750	1FDXW7DE9JDF01566	HTV873PTO	171463	
Ford	F550	1FD0W5HT3HED45821	HTV373PTO	171488	
Ford	F650	1FDNF6DC4HDB07743	HTV573PTO	171501	
Ford	F650	1FDNF6DC6HDB07744	HTV573PTO	171502	
Ford	F750	1FDXF7DE0HDB05875	HTV873PTO	171511	
Freightliner	MM106042S	3ALACWFC2JDJZ6486	HTV873PTO	171512	
Freightliner	MM106042S	3ALACWFC4JDJZ6487	HTV873PTO	171513	
Ford	F650	1FDNF6DCXHDB10601	HTV573PTO	171516	
Ford	F650	1FDNF6DC2HDB07742	HTV573PTO	171991	
Ford	F750	1FDXW7DE3JDF03040	HTV873PTO	181034	
Ford	F750	1FDXW7DE5JDF03041	HTV873PTO	181037	
Freightliner	MM106084S	1FVMCYFE2KHKE9995	HTV573PTO	181038	
Ford	F750	1FDXW7DE7JDF03042	HTV873PTO	181039	
Ford	F750	1FDXF7DE2HDB05876	HTV873PTO	181086	
Ford	F750	1FDNF7DE5JDF04598	HTV873PTO	181088	
Ford	F750	1FDXF7DE2HDB09765	HTV873PTO	181093	
Freightliner	MM106042S	3ALACXFC4JDJP3202	HTV873PTO	181137	
Ford	F750	1FDXF7DE6JDF04599	HTV873PTO	181184	

	AFFECTED MACHINES - VVK01-0011					
TRUCK MAKE	TRUCK MODEL	TRUCK VIN	VAC-TRON MODEL	VAC-TRON PIN		
Kenworth	T3 Series	2NKHHM7X1KM258831	HTV873PTO	181203		
Ford	F750	1FDXF7DE0KDF00548	HTV873PTO	181228		
Ford	F750	1FDXW7DE9KDF00550	HTV873PTO	181239		
Ford	F750	1FDXF7DE2KDF00549	HTV873PTO	181350		
Ford	F750	1FDXF7DE2KDF01104	HTV573PTO	181355		
Ford	F750	1FDWF7DE7KDF02597	HTV573PTO	181502		
Ford	F750	1FDWF7DE9KDF02598	HTV573PTO	181503		
Ford	F750	1FDXF7DE8KDF00734	HTV873PTO	181555		
Ford	F750	1FDXF7DE1KDF00736	JTV873PTO	181649		
Ford	F750	1FDXF7DE8KDF00118	HTV873PTO	181682		
Ford	F650	1FDNF6DC5KDF05292	HTV573PTO	181694		
Ford	F550	1FDUF5HY9KDA11836	HTV373PTO	191017		
Ford	F750	1FDXF7DEXKDF00735	HTV873PTO	191046		
Ford	F750	1FDWF7DE4KDF04212	HTV573PTO	191074		
Ford	F650	1FDNF6DC9KDF06588	JTV873PTO	191091		
Ford	F650	1FDNF6DC0KDF01862	HTV573PTO	191134		
Ford	F750	1FDXF7DE4KDF01105	JTV873PTO	191146		
Ford	F750	1FDXF7DE1KDF04821	JTV873PTO	191147		
Ford	F650	1FDNF6DC1KDF08965	HTV873PTO	191284		
Ford	F750	1FDXF7DE7KDF05858	HTV873PTO	191295		
Ford	F650	1FDNF6DC1KDF09758	HTV873PTO	191313		
Ford	F550	1FDUF5HT1KEF58582	HTV373PTO	191315		
Ford	F650	1FDNF6DC3KDF09759	HTV873PTO	191396		
Ford	F650	1FDNF6DC6KDF08928	HTV873PTO	191397		
Ford	F750	1FDXF7DE9KDF05859	HTV873PTO	191473		
Ford	F750	1FDXF7DE7KDF04211	HTV873PTO	191489		
Ford	F750	1FDNF7DE1KDF04048	JTV873PTO	191490		
Ford	F650	1FDNF6DCXKDF09998	HTV873PTO	191503		
Ford	F750	1FDXF7DE7KDF05617	HTV873PTO	191513		
Ford	F750	1FDXF7DE2HDB02296	HTV873PTO	191537		
Ford	F750	1FDXF7DE5KDF05857	HTV873PTO	191620		
Ford	F750	1FDXF7DE8KDF15332	JTV873PTO	191673		
Ford	F750	1FDXF7DEXKDF13162	HTV873PTO	191674		
Ford	F750	1FDXW7DE5KDF14154	HTV873PTO	191722		
Ford	F650	1FDNF6DC7KDF10803	HTV873PTO	191746		
Ford	F650	1FDNF6DC1KDF14278	HTV873PTO	191747		
Ford	F750	1FDXF7DEXKDF15333	HTV873PTO	191844		
Ford	F650	1FDNF6DC4KDF15764	HTV873PTO	191863		
Ford	F750	1FDXW7DE6KDF15765	HTV873PTO	200053		

AFFECTED MACHINES - VVK01-0011				
TRUCK MAKE	TRUCK MODEL	TRUCK VIN	VAC-TRON MODEL	VAC-TRON PIN
Ford	F750	1FDXF7DE1MDF00688	HTV873PTO	200054
Ford	F750	1FDXF7DE0MDF00682	HTV873PTO	200055
Ford	F750	1FDXF7DE4MDF00684	HTV873PTO	200056
Ford	F750	1FDXF7DE6MDF00685	HTV873PTO	200057
Ford	F750	1FDXF7DE8MDF00686	HTV873PTO	200058
Ford	F750	1FDXF7DEXMDF00687	HTV873PTO	200059
Ford	F750	1FDXF7DE2MDF00683	HTV873PTO	200082
Ford	F650	1FDNF6DC9MDF00440	HTV873PTO	200116
Ford	F650	1FDNF6DC0MDF00441	HTV873PTO	200117
Ford	F650	1FDNF6DCXKDF14277	HTV873PTO	200123
Ford	F650	1FDNF6DC2MDF00442	HTV873PTO	200126
Ford	F750	1FDXF7DE3MDF00689	HTV873PTO	200165
Ford	F650	1FDNF6DC9MDF00681	HTV873PTO	200428
Ford	F750	1FDXF7DEXMDF01483	HTV873PTO	200517
Ford	F750	1FDXF7DE7MDF04955	HTV873PTO	200555
Ford	F750	1FDXF7DE9JDF04600	JTV1273PTO	181174

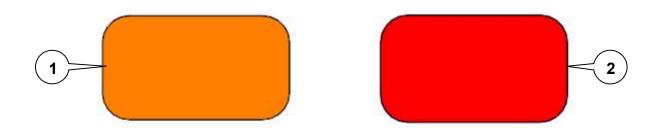


	FIGURE 1 Parts List				
REF. <u>NO.</u>	PART NO.	DESCRIPTION	<u>VVK01</u> <u>QTY.</u>		
1	135500469	HIGH VISIBILITY REFLECTIVE STICKER, AMBER	2		
2	135500470	HIGH VISIBILITY REFLECTIVE STICKER, RED	4		

Figure 2

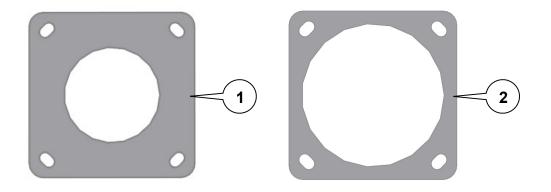






	FIGURE 2 Parts List				
REF. <u>NO.</u>	PART NO.	DESCRIPTION	<u>VVK01</u> <u>QTY.</u>		
1	135500217	12-10 HEAT SEAL BUTT CONNECTOR	4		
2	P-1054	2' (60.7 cm) LENGTH DUAL CORE CONDUCTOR WIRE	2		
3	P-4189	RED MARKER LAMP	2		
4	P-2762	1/2" SPLIT WIRE LOOM, 2' (30.48 cm) LENGTH	2		





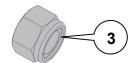


	FIGURE 3 Parts List				
REF. NO.	PART NO.	DESCRIPTION	<u>VVK01</u> QTY.		
1	F375-3353	4" GATE VALVE PLATE	1		
2	F375-3601	6" GATE VALVE PLATE	1		
3	P-1396	1/2-13 STEEL LOCK NUT	8		

# Figure 4

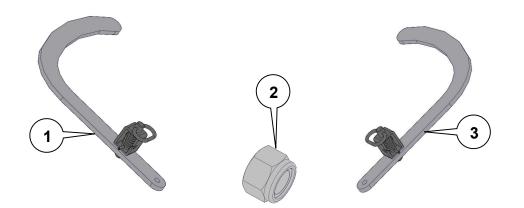


	FIGURE 4 Parts List				
REF. <u>NO.</u>	PART NO.	DESCRIPTION	<u>VVK01</u> <u>QTY.</u>		
1	135500527	LOWER, LH, HOSE CLAMP ARM	1		
2	P-1474	3/8-16 NYLON LOCK NUT	2		
3	135500526	LOWER, RH, HOSE CLAMP ARM	1		