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**Parts Manual**  
**Vermeer/McLaughlin V500LTHD Vacuum Machine**  
**Part #E850502**  
**(SERIAL # 5DHDLT030906610\_5DHDLT060706664)**

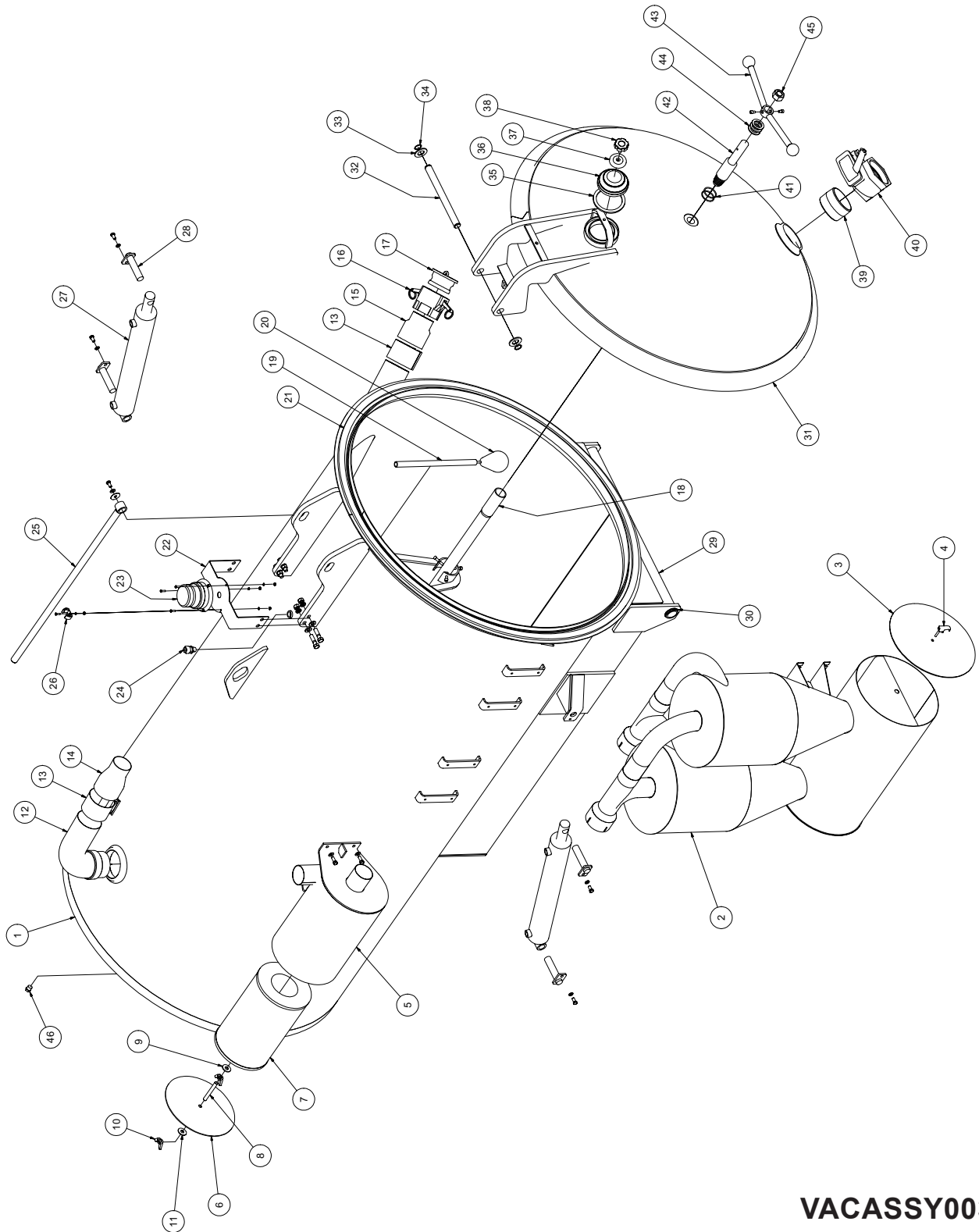
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# Tank and Door Assembly

# V500LTHD



VACASSY003

# Tank and Door Assembly

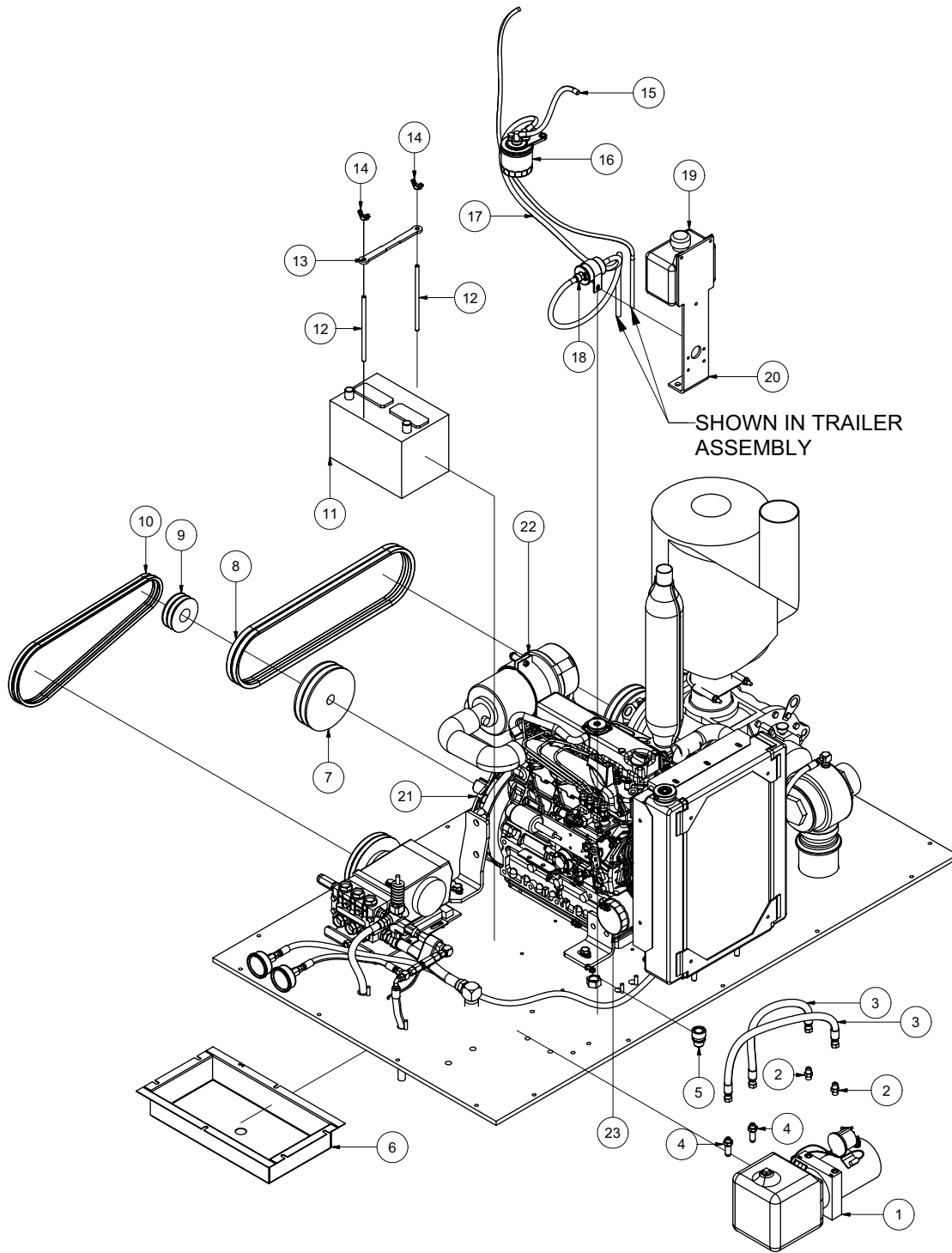
# V500LTHD

ITEM#	QTY	NUMBER	DESCRIPTION	ITEM#	QTY	NUMBER	DESCRIPTION
1	1	8040821	TANK	23	1	8030347	STROBE LIGHT
2	1	8040911	CYCLONE SEPARATOR HOUSING	3	U010006	SCREW, PHILLIPS #10-24 X 1"	
	8	U000420	SCREW, HC 3/8-16 X 1.00	3	U210005	WASHER, LOCK #10	
	8	U200600	WASHER, FLAT 3/8"	3	U100010	NUT, HEX #10-24	
3	1	8040315	CYCLONE SEPARATOR DOOR	24	1	X000113	1/2" STRAIN RELIEF
	1	8040079	CYCLONE SEPARATOR DOOR SEAL	25	1	8031118	SAFETY PROP ROD
4	1	8040334	SWELL LATCH	1	U000400	SCREW, HC 3/8-16 X 0.75	
5	1	8040469	AIR FILTER HOUSING	1	U200600	WASHER, FLAT 3/8"	
	4	U000420	SCREW, HC 3/8-16 X 1.00	1	8040595	WASHER, SAFETY PROP ROD	
	4	U200600	WASHER, FLAT 3/8"	26	1	8040899	CLIP, TOOL HOLDER
6	1	8040465	AIR FILTER HOUSING DOOR	1	U010006	SCREW, PHILLIPS #10-24 X 1"	
	1	8040466	AIR FILTER HOUSING DOOR SEAL	1	U210005	WASHER, LOCK #10	
7	1	8031293	AIR FILTER ELEMENT	1	U100010	NUT, HEX #10-24	
8	1	8040302	THREADED ROD	27	2	8030359	SPOIL TANK HYDRAULIC CYLINDER
9	1	8031036	SEALING WASHER	28	4	8030128	CYLINDER PIN
10	2	U130080	WING NUT, 1/2-13	4	U000400	SCREW, HC 3/8-16 X 0.75	
11	1	U200110	FLAT WASHER, 1/2" HARDENED	4	U210060	WASHER, LOCK 3/8"	
12	1	8040786	EXHAUST ELBOW	29	1	8030038	TANK PIVOT ROD
13		N/A		30	2	8030363	2" SPIRAL SNAP RING
14		N/A		31	1	8040843	DOOR
15	1	8040991	4" SUCTION PORT ADAPTER	32	1	8040058	DOOR HINGE ROD
16	1	8030846	4" FEMALE COUPLER	33	2	8030171	DOOR HINGE WASHER
17	1	8032006	4" COUPLING PLUG	34	2	8030362	1" SNAP RING
18	1	8040868	TANK ROD	35	1	8032007	4" COUPLER GASKET
	1	8030446	O-RING #328 BUNA	36	1	8031048	SIGHT GLASS
	4	U000880	SCREW, HC 1/2-13 X 2.00	37	1	8031047	SIGHT GLASS PLATE
	4	U100120	NUT, HEX 1/2-13	38	1	8031046	SIGHT GLASS HAND WHEEL
	8	U200100	WASHER, FLAT 1/2"	39	1	8030431	4" CLOSE NIPPLE
	3	U010055	SCREW, HSH 5/16-18 X 1.50	40	1	8030916	GATE VALVE
	3	8030369	TANK CLEANOUT NOZZLE	41	2	W200120	ORING #225 BUNA
19	1	8040769	HIGH LEVEL FLOAT SWITCH TUBE	42	1	8040306	DOOR STRIKER
20	1	8030531	HIGH LEVEL FLOAT SWITCH	43	1	8040235	DOOR HANDLE
21	1	8040874	DOOR SEAL	2	U010040	SCREW, HSH 5/16-18 X 0.50	
22	1	8040017	STROBE LIGHT BRACKET	2	J400060	KNOB	
	4	U000880	SCREW, HC 1/2-13 X 2.00	44	3	8030174	SPACER
	4	U200100	WASHER, FLAT 1/2"	45	1	U120060	LOCKNUT, NYLON 1" - 8
	4	U210111	WASHER, LOCK 1/2"	79	1	T405064	PLUG, 3/8" NPT
	4	U100120	NUT, HEX 1/2-13	*	34"	8030657	4" KANAFLEX
				*	30"	8030657	4" KANAFLEX
				*	136"	8030657	4" KANAFLEX

**VACASSY003**

# Power Pack Assembly

# V500LTHD



VACASSY104

# Power Pack Assembly

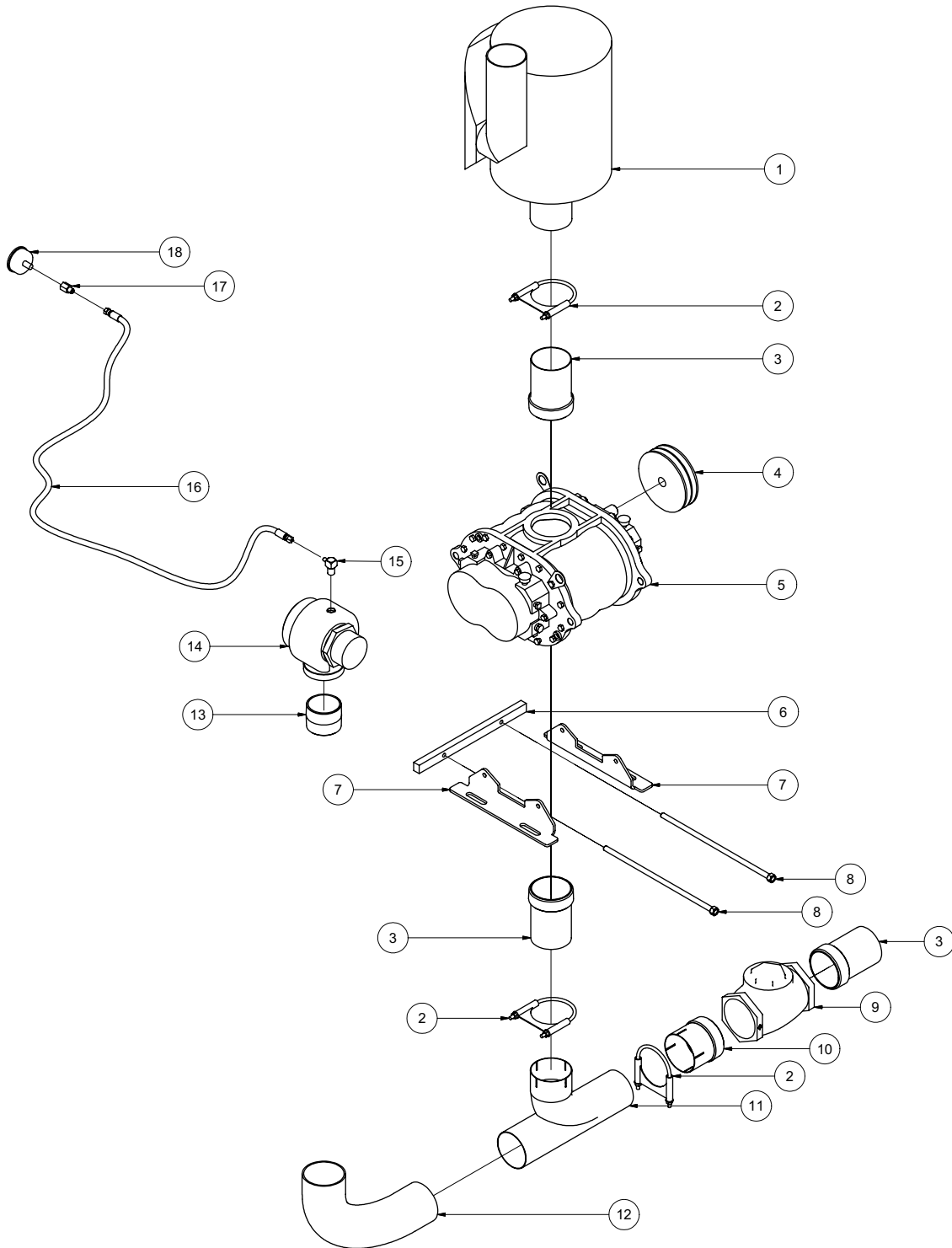
# V500LTHD

ITEM	QTY	NUMBER	DESCRIPTION
1	1	8040486	HYDRAULIC POWER PACK, 12V
	2	U000420	SCREW, HC 3/8"-16 X 1"
	2	U210060	WASHER, LOCK 3/8"
	2	U200600	WASHER, FLAT 3/8"
2	2	T400037	UNION 6MB-6MJ
3	2	8040973	HOSE ASSEMBLY HYDRAULIC #6 PRESSURE HOSE 20" LONG FITTING, HOSE 6HO 6FJ
4	2	T400391	BULKHEAD 6MJ 6MJ
5	1	X000112	CONNECTOR, PANEL 3/4 MNPT-3/4FNPT
	1	8030469	STRAIN RELIEF, 3/4" ALUM.
	1	X000108	3/4" COUPLING NUT
6	2	8040671	DRIP PAN
	6	U000040	SCREW, HC 1/4 - 20 X .750
	9	U210020	WASHER, LOCK 1/4"
	12	U200020	WASHER, FLAT 1/4"
7	1	8040484	SHEAVE 695 DIA 2 GROOVE
	1	8040960	BUSHING 1-7/16" SDS
	1	U410125	KEY 3/8" X 3/8" X 2"
8	2	8041027	BELT BX54
9	1	8030970	SHEAVE 2AK34H-1-7-16
	1	8030971	BUSHING 1-7/16" H
	1	U410125	KEY 3/8" X 3/8" X 2"
10	2	8040878	BELT AX45
11	1	X400020	MT-34R 12V BATTERY
12	2	8040684	ROD, BATTERY HOLD DOWN
13	1	8050016	BATTERY HOLD DOWN
14	2	U130040	NUT, WING 3/8-16
15	1	-	HOSE ASSEMBLY (FUEL FILTER - ENGINE))
		8030459	5/16" FUEL LINE 15" LONG
	2	U800015	CLAMP, HOSE 04 - 5/8"
16	1	-	KUBOTA FUEL FILTER ASSEMBLY
		T700046	KUBOTA FUEL FILTER
17	1	-	HOSE ASSEMBLY (FUEL PUMP - FUEL FILTER)
		8030459	5/16" FUEL LINE 32" LONG
	2	U800015	CLAMP, HOSE 04 - 5/8"
18	1	8030453	PUMP, ELECTRIC FUEL
19	1	8040645	TANK, OVERFLOW COOLANT
	1	-	HOSE ASSEMBLY OVERFLOW
		8030459	HOSE 24" LONG
	2	U800015	CLAMP, HOSE 04 - 5/8"
20	1	8040577	WATER REGULATOR/ OVERFLOW BRACKET
	3	U000040	SCREW, HC 1/4"-20 X 3/4"
	6	U200020	WASHER, FLAT 1/4"
	3	U210020	WASHER, LOCK 1/4"
	3	U100020	NUT, HEX 1/4"-20
21	1	8031245	ENGINE, 49 HP KUBOTA
	1	8031245-1	MUFFLER
22	1	T 700 150	KUBOTA AIR FILTER ELEMENT
23	1	T700076	KUBOTA OIL FILTER
*	4	8031392	ISOLATOR

VACASSY104

# Blower Assembly

# V500LTHD



VACASSY205

# Blower Assembly

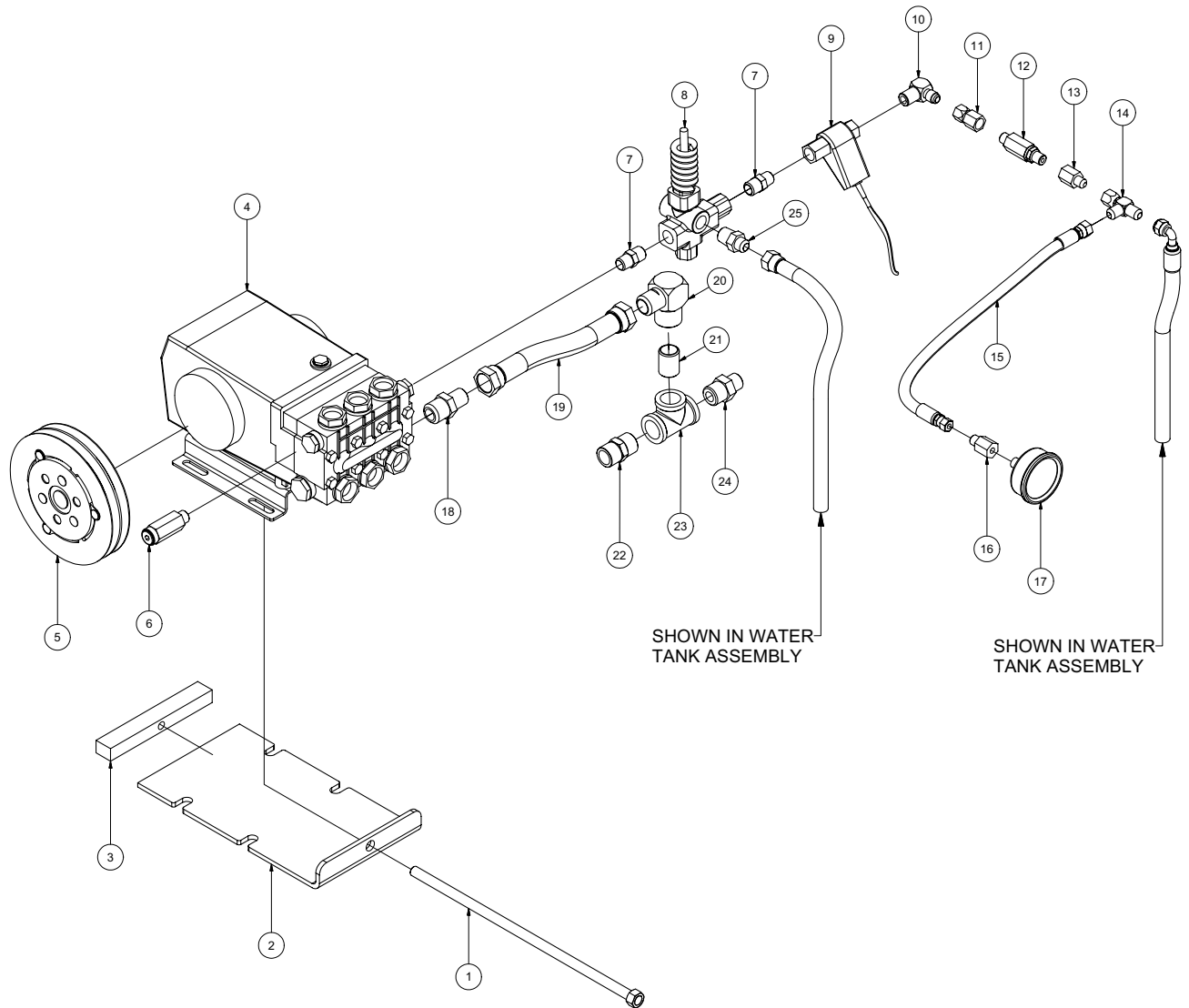
# V500LTHD

ITEM	QTY	NUMBER	DESCRIPTION
1	1	8030917	SILENCER, 1025 CFM, COWL
2	3	8031193	4" EXHAUST CLAMP
3	2	8030560	EXHAUST ADAPTER 4" MNPT - 4"OD
4	1	8040697	SHEAVE 6.55 OD SDS 2-GROOVE
	1	8040485	BUSHING 1 1/8" SDS
	1	U410090	KEY 1/4" X 1/4" X 2 3/4"
5	1	8040001	BLOWER (MODEL 59)
	4	U000817	SCREW, HC 1/2" - 13 X 1"
	4	U210100	WASHER, LOCK 1/2"
	4	U200100	WASHER, FLAT 1/2"
6	1	8040904	TENSION BLOCK 1025CFM
7	2	8040710	BLOWER FOOT (MODEL 59)
8	2	8040751	ROD TIGHTENER WELD" T
9	1	8041043	CHECK VALVE 4" FNPT
10	1	8040991	EXHAUST ADAPTER 4" MNPT - 4ID
11	1	8040930	WYE 4" IDOD
12	1	8041026	4" INLET HEADER HOSE
13	1	8030403	3" CLOSE NIPPLE
14	1	8030866	KUNKLE VALVE, 1025 CFM
15	1	T400590	ELBOW 6MP 4MJ
16	1	8041024	HOSE VACUUM GAUGE #4 PRESSURE HOSE 80" LONG FITTING, HOSE 4HO 4FJ
17	1	8030483	UNION 4FP 4MJ
18	1	8030371	VACUUM GAUGE

VACASSY205

# Water Pump Assembly

# V500LTHD



VACASSY302



# Water Pump Assembly

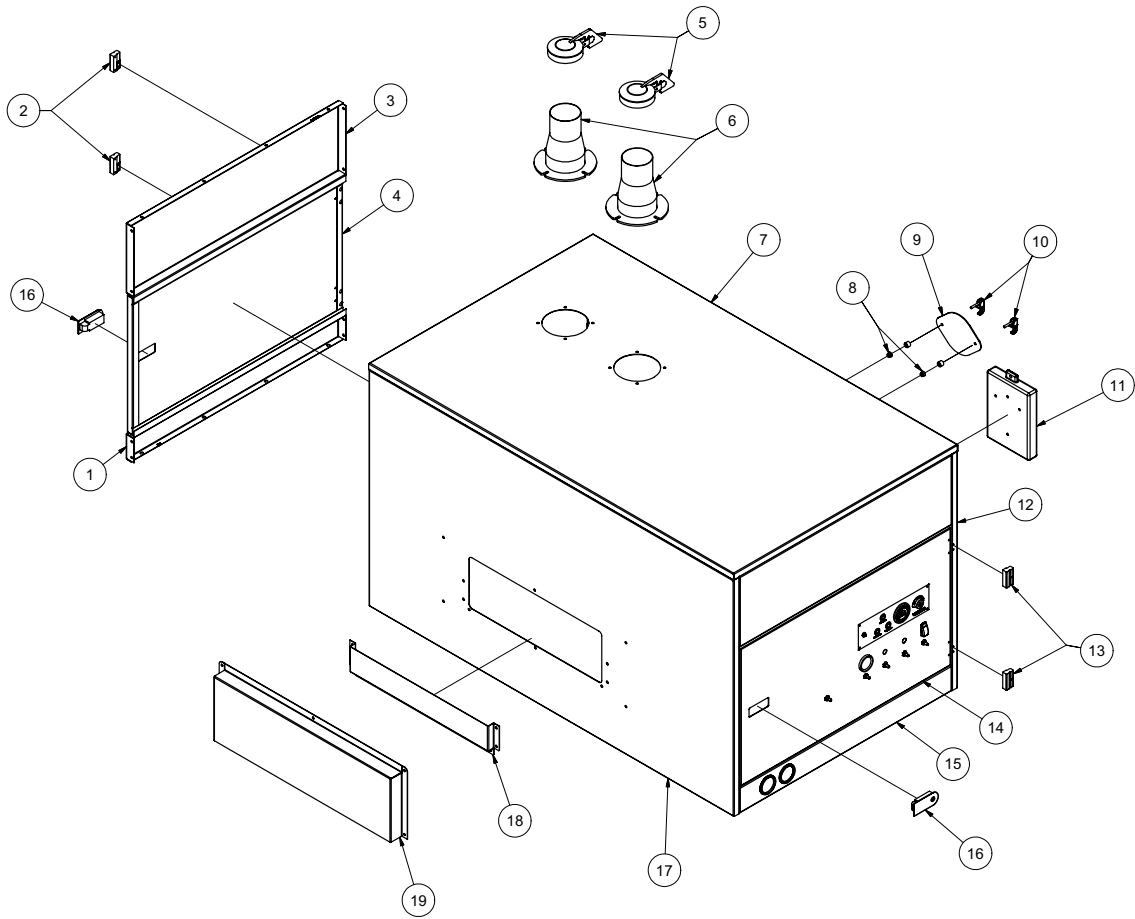
# V500LTHD

ITEM	QTY	NUMBER	DESCRIPTION
1	1	8040751	WATER PUMP TENSIONER ROD
2	1	8040892	WATER PUMP TENSIONER PLATE
3	1	8040893	WATER PUMP TENSIONER BLOCK
4	1	8031279	WATER PUMP
	4	U000420	SCREW, HC 3/8"-16 X 1"
	4	U210060	WASHER, LOCK 3/8"
	4	U200600	WASHER, FLAT 3/8"
5	1	8030961	WATER PUMP CLUTCH
	1	U410094	KEY 5/16" X 5/16" X 1 3/8"
6	1	8030340	SAFETY RELIEF VALVE 6GPM
7	2	T400805	UNION, 8MP 6MP
8	1	8030341	UNLOADER VALVE
9	1	8031267	FLOW SWITCH
10	1	T401102	ELBOW, 6MJ 6MP
11	1	8031125	UNION, 6FJ 4FP
12	1	8030923	HIGH PRESSURE WATER FILTER
13	2	8031126	UNION, 4FP 6MJ
14	1	T402153	TEE, 6MJ 6MJ 6FJ
15	1	8040971	HOSE ASSEMBLY, PRESSURE GAUGE #4HIGH PRESSURE HOSE 19" LONG FITTING, HOSE 4HO 6FJ FITTING, HOSE 4HO 4FJ
16	1	8030483	UNION, 4FP 4MJ
17	1	8030372	WATER PRESSURE GAUGE 1/4NPT
18	1	T400070	UNION, 8MP 12MJ
19	1	-	HOSE ASSEMBLY, INLET WATER #12 PUSH LOCK HOSE 8.5" LONG
	1	8030539	
	2	8030525	FITTING, HOSE #12FJ PUSH LOCK
20	1	T401180	ELBOW, 12MP 12MJ
21	1	T421020	NIPPLE,PIPE 12MP 12MP
22	1	T400100	UNION, 12MP 12MJ
23	1	T402160	TEE 12FP 12FP 12FP
24	1	T404030	UNION, 12MP 8MP
25	1	T400040	UNION, 8MP 8MJ

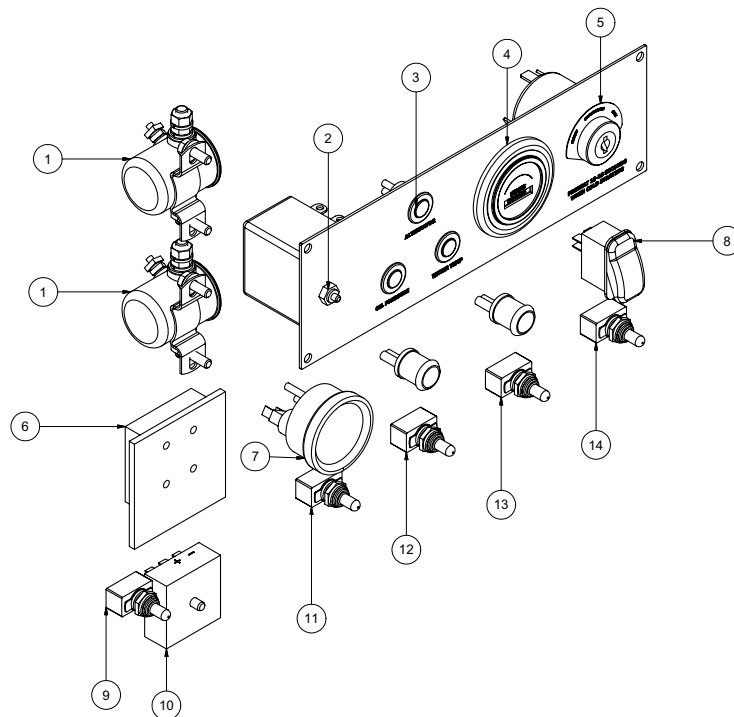
VACASSY302

# Enclosure Assembly

# V500LTHD



## VACASSY404



## VACASSY501

# Enclosure Assembly

## V500LTHD

ITEM	QTY	NUMBER	DESCRIPTION
1	1	8041018	SIDE PANEL
2	2	8040589	OFFSET HINGE TYPE A
	8	U030525	SCREW, PAN HD #10-32X1/2
3	2	8040935	UPPER SIDE PANEL
4	1	8040575	DOOR
5	2	8040742	RAIN CAP 4"
6	2	8040739	EXHAUST WELDMENT
7	1	8040934	TOP SHEET
8	2	U120142	NUT, FLANGED LOCK 1/4-20
9	1	8040592	RADIATER ACCESS PLATE
10	2	8040334	LATCH, SWELL
11	1	E250211	MANUAL BOX
12	1	8041016	FRONT SHEET
13	2	8040588	OFFSET HINGE TYPE B
	8	U030525	SCREW, PAN HD #10-32X1/2
14	1	8041032	DOOR, CONTROL
15	1	8041017	SIDE PANEL W/ GAUGES
16	2	8040586	LATCH, LEVER LOCKABLE
17	1	8041015	BACK SHEET
18	1	8040565	SMALL BAFFLE
19	1	8040566	LARGE BAFFLE
	72	U000060	SCREW, HC 1/4-20X1
	126	U200020	WASHER, FLAT 1/4
	72	U210020	WASHER, LOCK 1/4
	54	U100020	NUT, HEX 1/4-20

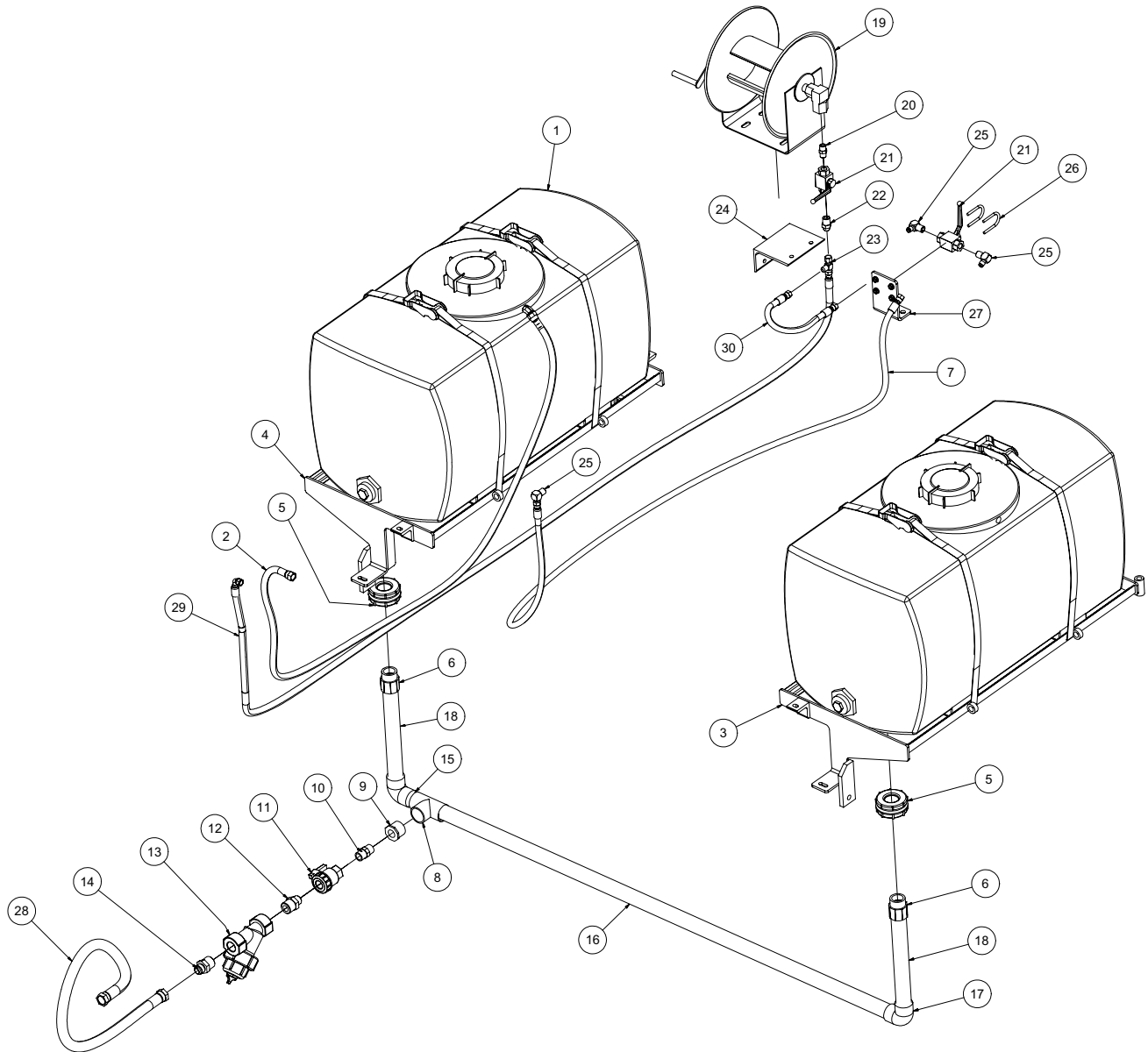
**VACASSY404**

ITEM	QTY	NUMBER	DESCRIPTION
1	2	8030443	80-12V SOLENOID
2	1	8030455	MURPHY SWITCH
3	5	8030457	PANEL LIGHTS
4	1	8030456	HOUR METER
5	1	8030458	KEY SWITCH
	1	8030829	KEYS
6	1	8031257	FUSE PANEL 8 POS.
	1	8030468	10 AMP FUSE
	6	8030461	5 AMP FUSE
7	1	8030330	FUEL GAUGE
8	1	X000021	ROCKER SWITCH THROTTLE HIGH/LOW
9	1	8041077	SWITCH, TANK RAISE/LOWER
10	1	8031231	SWITCH, DELAY RELAY
11	1	X000095	SWITCH, WORK LIGHTS
12	1	X000095	SWITCH, FULL TANK OVERRIDE
13	1	X000095	SWITCH, WATER PUMP CLUTCH
14	1	X000092	SWITCH, AUTOMATIC THROTTLE
	1	8030826	INLINE 20 AMP FUSE

**VACASSY501**

# Water Tank Assembly

# V500LTHD



VACASSY602

# Water Tank Assembly

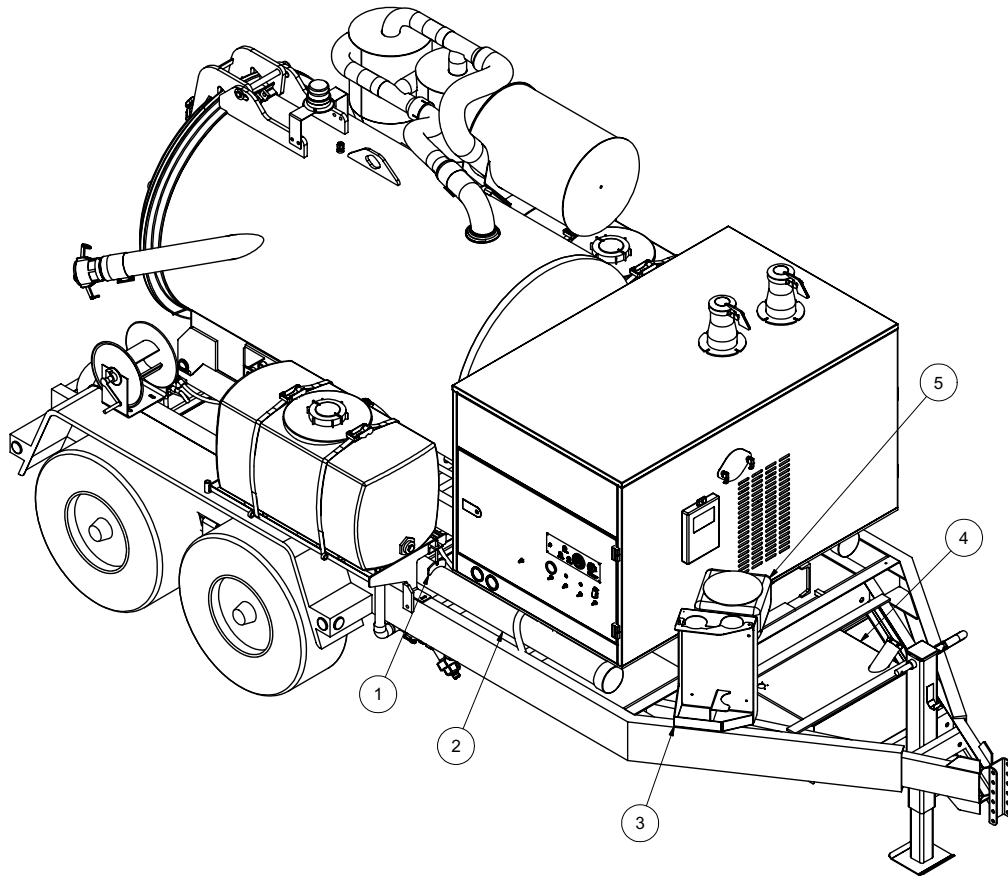
# V500LTHD

ITEM	QTY	NUMBER	DESCRIPTION
1	2	8034151	50 GALLON WATER TANK
	4	8040084	WATER TANK STRAP
	2	T405065	PLUG, 3/4" NPT
	2	8034151-1	TANK LID
2	1	8041059	BY-PASS HOSE
3	1	8040941	SADDLE FRAME
	1	U000560	SCREW, HC 3/8"-16 X 3.0
	3	U000420	SCREW, HC 3/8"-16 X 1.0
	8	U200060	WASHER, FLAT 3/8"
	4	U210060	WASHER, LOCK 3/8"
	4	U100060	NUT, HEX 3/8"-16
4	1	8040952	SADDLE FRAME (OPPOSITE)
	1	U000560	SCREW, HC 3/8"-16 X 3.0
	3	U000420	SCREW, HC 3/8"-16 X 1.0
	8	U200060	WASHER, FLAT 3/8"
	4	U210060	WASHER, LOCK 3/8"
	4	U100060	NUT, HEX 3/8"-16
5	2	8041044	BULKHEAD, POLY 1 1/4" FP
6	2	8030097	UNION, PVC 1 1/4"MP-1 1/4"SO
7	1	8041062	HOSE - TANK CLEANOUT VALVE TO SPOIL TANK
8	1	8041049	TEE, PVC 1 1/4"SO-1 1/4"SO-1 1/4"SO
9	1	8030095	UNION, PVC 3/4"FP-1 1/4"SO
10	1	T400800	UNION, 12MP-12MP
11	1	8030376	BALL VALVE, POLY 3/4" FP
12	1	T404060	UNION, 16MP-12MP
13	1	8040186	STRAINER
14	1	T400450	UNION, 12MJ-16MP
15	1	8041076	PIPE - 1 1/4" PVC X 2 1/2"LG
16	1	8041078	PIPE - 1 1/4" PVC X 65 1/2"LG
17	2	8030096	ELBOW, PVC 1 1/4"SO-1 1/4"SO
18	2	8041047	PIPE - 1 1/4" PVC X 13 1/2"LG
19	1	8030346	HOSE REEL
	4	U000420	SCREW, HC 3/8"-16 X 1.0
	8	U200060	WASHER, FLAT 3/8"
	4	U210060	WASHER, LOCK 3/8"
	4	U100060	NUT, HEX 3/8"-16
20	1	T400803	UNION, 6MP-6MP
21	2	8030351	BALL VALVE, STEEL 6FP
22	1	T400028	UNION, 6MP-6MJ
23	1	T402153	TEE, 6MJ-6MJ-6FJ
24	1	8040876	HOSE REEL BRACKET
	2	U000420	SCREW, HC 3/8"-16 X 1.0
	4	U200060	WASHER, FLAT 3/8"
	2	U210060	WASHER, LOCK 3/8"
	2	U100060	NUT, HEX 3/8"-16
25	3	T401102	ELBOW, 6MJ-6MP
26	2	U010017	U-BOLT, 1 1/2" X 1/4-20 UNC
	4	U120100	NUT,LOCK 1/4-20
	4	U200020	WASHER, FLAT 1/4"
27	1	8040670	BALL VALVE BRACKET
28	1	-	HOSE - WATER PUMP SUCTION
	1	8030539	#12 PUSH LOCK HOSE 36" LONG
	2	8030525	FITTING, HOSE #12FJ PUSH LOCK
29	1	8041060	HOSE - PUMP TO REEL
30	1	8041061	HOSE - REEL TO TANK CLEANOUT VALVE

**VACASSY602**

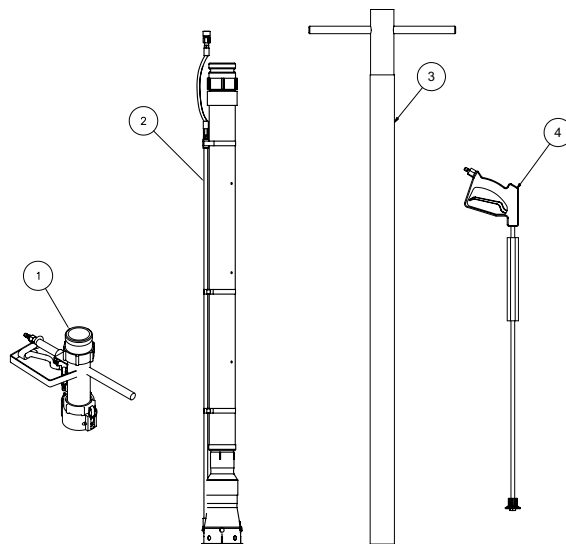
# Trailer Assembly

# V500LTHD



**VACASSY904**

# Tools



**VACASSY702**

# Trailer Assembly

# V500LTHD

ITEM	QTY	NUMBER	DESCRIPTION
1	4	8040959	HOSE STORAGE CLAMP
	8	U200060	WASHER, FLAT 3/8
	8	U100060	NUT, HEX 3/8
2	2	8041102	HOSE STORAGE 6" X 10'
	2	8030925	END CAP 6"
	2	R700160	R CLIP
	2	8041101	HOSE STORAGE RETAINING ROD
	1	8040985	TOOL RACK
3	1	8040989	TOOL RACK CLOSURE
	1	8040763	FUEL TANK (20 GAL)
4	120"	8030459	5/16" FUEL LINE
	1	36201441	FUEL CAP
	1	8030697	FUEL SENDING UNIT
	1	8030656	FUEL FILTER
	1	8030394	ANTI-FREEZE TANK (4 GAL)
	4	U000180	SCREW, HC 5/16"-18 X .75"
5	4	U200040	WASHER, FLAT 5/16
	4	U210040	WASHER, LOCK 5/16
	1	T403100	UNION 12FP 20MP
	1	T401040	ELBOW 90 12MP 12MP
	1	8030376	BALL VALVE 3/4" FP
	1	T400080	UNION 8MJ - 12MP
	2	8030524	# 8 FJ PUSHLOCK
	36"	8030540	HOSE #8 PUSHLOCK

**VACASSY904**

# Tools

Item	Qty	Number	Description	Item	Qty	Number	Description
1	1	8030635	Tool Head	4	1	8030348	Spray Wand Complete
2	2	8030486	Quick Disconnect SS		1	8030928	Trigger Assembly
	1	8031079	Banjo 3" Male		1	8030847	Wand
	1	8030392	Banjo 3" Female		1	8031308	Nozzle
	1	8030928	Trigger Assembly	*	2	8041100	Vacuum Hose Assembly 4" x 10'
	1	8041099	Reduction Tool, HD		1	8030844	Banjo 4" Male
3	2	8030370	Reduction Tool Nozzle		1	8030846	Banjo 4" Female
	2	8031268	Reduction Tool Nozzle 45Deg		2	8030560	Hose Adapter 4"
	1	8031079	Banjo 3" Male		112"	8030657	Vacuum Hose 4" Kanaflex
	1	8040983	Vacuum Tool 4"	*	1	8041080	Adapter 3" to 4"

\* ITEM NOT SHOWN

**VACASSY702**





# WARRANTY RETURN GOODS POLICY

## LIMITED WARRANTY

The Manufacturer warrants its products to be free from defects in material and workmanship for a period of twelve months from the date of shipment from the factory. Hole Hammer pistons, bodies, and nose pieces are warranted to be free from defects in material and workmanship for a period of three years from the date of shipment from the factory. The Manufacturer shall not be responsible for any damage resulting to or caused by its products by reason of installation, improper storage, unauthorized service, alteration of the products, neglect or abuse, or use of the product in a manner inconsistent with its design. This warranty does not extend to any component parts not manufactured by Manufacturer; however, Manufacturer's warranty herein shall not limit any warranties made by manufacturers of component parts which extend to Buyer.

Claims for defects in material and workmanship shall be made in writing to Manufacturer within ten days of discovery of defect. Manufacturer may either send a service representative or have the product returned to its factory at Buyer's expense for inspection. Upon notification of defect, Manufacturer will issue a return goods authorization number to Buyer. The return goods authorization number must accompany the product returned. If judged by the Manufacturer to be defective in material or workmanship, the product will be replaced or repaired at the option of the manufacturer, free from all charges except authorized transportation. Buyer shall be responsible for all maintenance services consisting of lubrication and cleaning of equipment, replacing expandable parts, making minor adjustments, and performing operating checks, all in accordance with procedures outlined in Manufacturer's maintenance literature.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES AND NO REPRESENTATIONS, GUARANTEES, OR WARRANTIES, EXPRESS OR IMPLIED, (INCLUDING BUT NOT LIMITED TO A WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), ARE MADE BY THE MANUFACTURER IN CONNECTION WITH THE MANUFACTURE OR SALE OF ITS PRODUCTS. NO EMPLOYEE, DISTRIBUTOR, OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY ON BEHALF OF MANUFACTURER. THE REMEDIES OF BUYER SET FORTH HEREIN ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER REMEDIES. THE LIABILITY OF MANUFACTURER WHETHER IN CONTRACT, TORT, UNDER ANY WARRANTY, OR OTHERWISE SHALL NOT EXTEND BEYOND ITS OBLIGATION TO REPAIR OR REPLACE, AT ITS OPTION ANY PRODUCT OR PART FOUND BY MANUFACTURER TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP. MANUFACTURER SHALL NOT BE LIABLE FOR COST OF INSTALLATION AND/OR REMOVAL OR BE RESPONSIBLE FOR DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

## GENERAL RETURNS OF MERCHANDISE

1. All returns must be pre-authorized
  - A. Please call our parts department for an RGA number
  - B. Please include RGA number on the outside of box
  - C. Include any required paper work or special instructions
  - D. Items returned without an RGA number will not be accepted
2. All returns are subject to a 20% restock charge.
3. Special items are non-returnable
  - A. Non-stock parts
  - B. Custom parts
  - C. If you are unsure about a parts status when ordering, ask your McLaughlin representative if the item fits on of the above conditions.
4. Items must be returned within thirty days of original order date.
5. Items not returned within 30 days from the date of RGA is issued will not be accepted.
6. The item(s) must be in new condition. Used item(s) are not returnable.



# Notes

A large rectangular area containing 30 horizontal lines for writing notes.