



MARCO® 15T TIER 4 DIESEL ABRASIVE VACUUMS - JCB



Powered by **ALLREDI**.

PART NUMBERS AND SCHEMATICS GUIDE

Company Profile

Allredi was formed in the early 2020, when two of the largest distributors in the blasting, coating, safety, and environmental industry, APE Companies and Marco Group International, joined forces. While the qualities both companies are known for have not changed, a lot about our business is new. New abilities. New agilities. New ways to help you win. This calls for a new name, Allredi.

This name exemplifies what we have become. It is completely oriented to the needs of our customers. To your needs. It says that when you call us for anything – products, service, expert advice, anything – you can consider it done. Or even better, Allredi done.

We are your right-now supplier. From skills to SKUs, we deliver the goods fast. So you can be more agile every minute, every day. This is who we are. This is what our new name means. Go ahead and expect excellence, because we're bringing it.

Our Mission and Vision

To be the industry's preferred partner in surface preparation solutions through unrivaled technical expertise, customer experience, product availability, and tailored service offerings.

The Allredi Difference

- **Industry Experience** – With Allredi on your team, you have access to expertise which can only come from decades of industry leadership. We have organized our engineering department, production specialists, customer operations, and safety support into a "Center of Competence." As an Allredi customer, you have access to hundreds of years of cumulative experience related to your operations.
- **Manufacturing Excellence** – Allredi is a U.S. based manufacturer of equipment for the Surface Preparation and Protective Coatings industries. Allredi's engineers benchmark the industry to ensure that we design and manufacture superior products that set the "Gold Standard" for performance, safety, and quality.
- **Legendary Customer Service** – Allredi's legendary customer service team is staffed by friendly, highly-trained individuals who are focused on providing the highest level of product support, order accuracy, and customer satisfaction.
- **Product Availability** – We stock over 10,000 SKU's and have over 45 shipping locations to serve North American and International markets for all major brands of blasting, coating, environmental, and safety equipment. Allredi is your right-now supplier, so you can keep your projects moving. From our foundation of strong relationships, we have built a nationwide network that puts vast inventory and ready service close to our customers. We provide advanced expertise, and we deliver the goods fast – so you can easily access the products and services you need to me more agile every minute, every day.
- **Technology Leadership** – Our website provides: Operator's Manuals, Part Numbers and Schematics Guides, SDS information, and key product features and specifications, providing access to information 24/7.

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PART NUMBERS

VACMASTER® 15T TIER 4 DIESEL ABRASIVE VACUUMS

	Engine Type	Filter Cartridge Style	
Part Numbers	Tier 4	Acrylic-Coated Filter Bags	Filter Bags Quantity
10106515	X	X	37



SPECIFICATIONS

Performance:	MAX 2367 CFM
Filter Cartridge Style:	Acrylic-Coated Filter Bags 37 Required
Filter Cleaning:	Pulse System, 25–30 second intervals. Pulse Duration: 200–350 millisecond
Vacuum	27" Hg
Ducting Connections:	6" I.D. Inlet with 4" adapter
Inspection Ports:	One 10" Viewable to Filters with access ports to hopper
Material Removal:	Automatic Direct Dump
Blower:	Rotary lobe, positive displacement with jet inlet
Engine:	Diesel, Tier 4 Final, 174 Horsepower
Fuel Capacity:	Capacity: 116 Gallons Type: Diesel
Air Compressor:	On Board 13 CFM
Electrical System:	12-Volt DC
Engine Protection:	Engine Monitoring System with automatic shutdown
Fluid Specifications:	Hydraulic Oil: H46 or equivalent, 2 gallon capacity Diesel Fuel: See Engine Operator's Manual for type Grease/Lubricator: Shell Alvania Grease EP or equivalent Alcohol Evaporator: Alcohol 99 Isopropyl, 32 oz. capacity Vibrator Lubricator: 4 oz. pneumatic air tool oil DEF: BlueDEF Diesel Exhaust Fluid Blower Oil: ROOTS™ synthetic lubricating oil
Unit Dimensions:	Weight: 11,250 pounds (empty) Length: 19' 7" Width: 7' 10" Height: 11' 6" Raised Height: 19' Dump Clearance: 8'

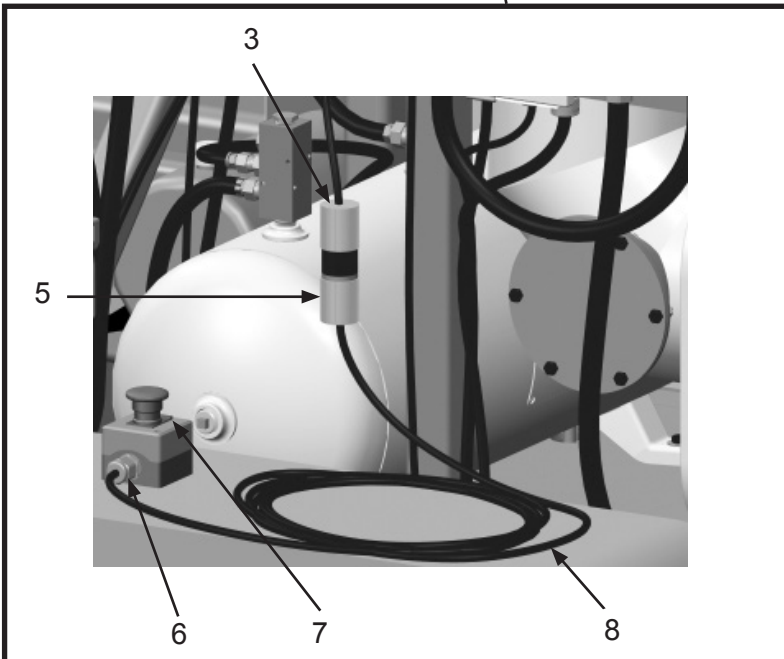
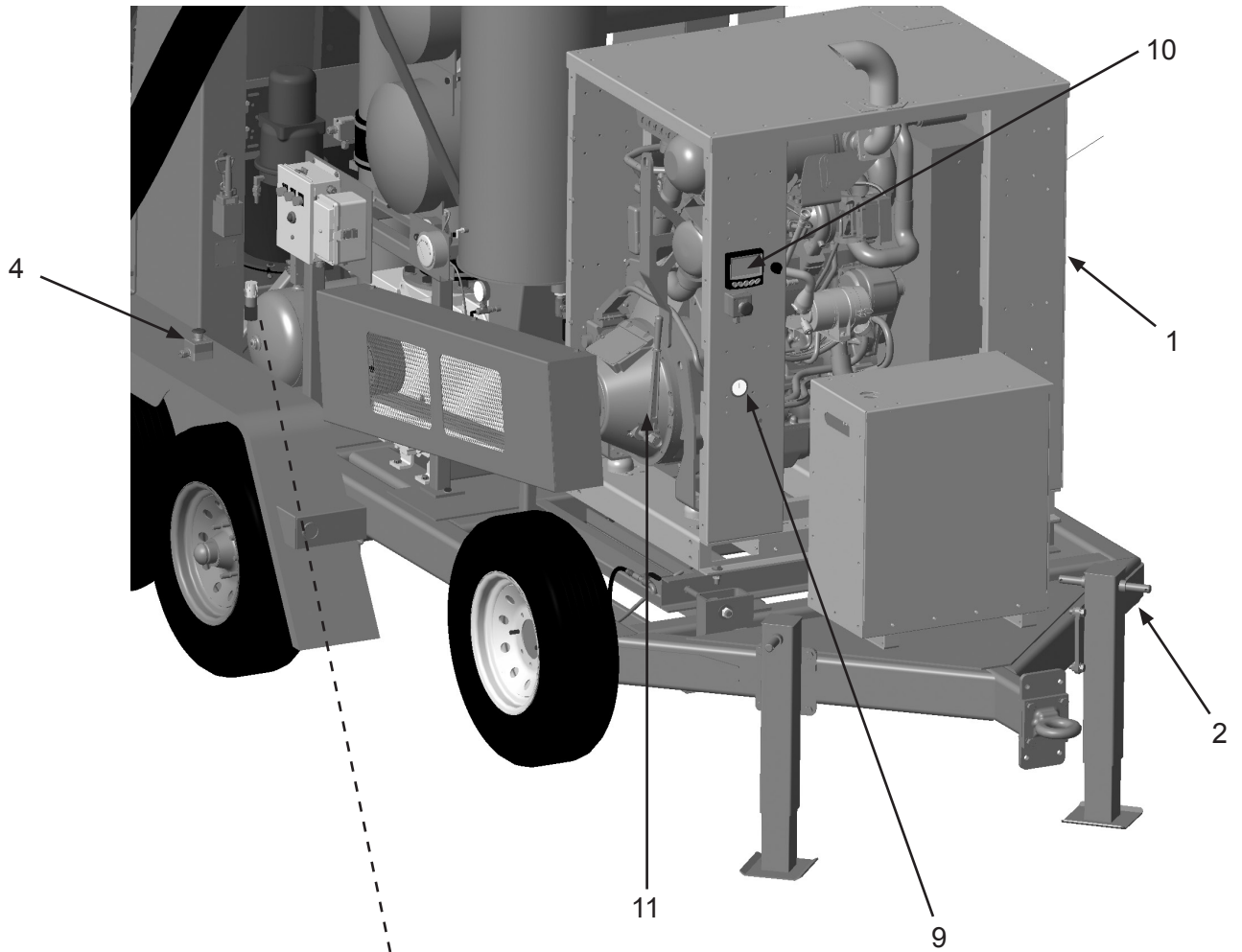
ASSEMBLY PART NUMBERS AND SCHEMATICS

Front Assembly

Item #	Part #	Description
Fig. 1		
1	10110578	JCB Engine 174 Hp Tier 4
2	10104455	Trailer (See Figure 20)
3	1015552	Female Twist Lock Plug Two Prong
4	10104071	E-Stop Control Station
5	1015551	Male Twist Lock Plug Two Prong
6	10104703	Cord Grip Nylon 1/2"-NPT .2-.47 Diameter
7	10104063	Legend Plate - Emergency Stop
8	1015540	16/2 Xtreme-Duty Power Cord - Red
9	10104820	Panel Mount Pressure Gauge 0-160 PSI
10	10110830	Control Panel
11	10110751	PTO Clutch
—	10110829	JCB Tractair Comp Kit
—	10110736	Key Switch for Panel
—	10110753	Engine Oil Filter M22x1
—	10110831	Fuel Filter
—	10110758	Fuel Filter Element
—	10110832	Filter, Main Element
—	10110833	Filter, Safety Element
—	10110739	Replacement Keys
—	10110754	Element CCV Filter
—	10110755	Fuel Filter

PART NUMBERS AND SCHEMATICS

Figure 1: Front Assembly



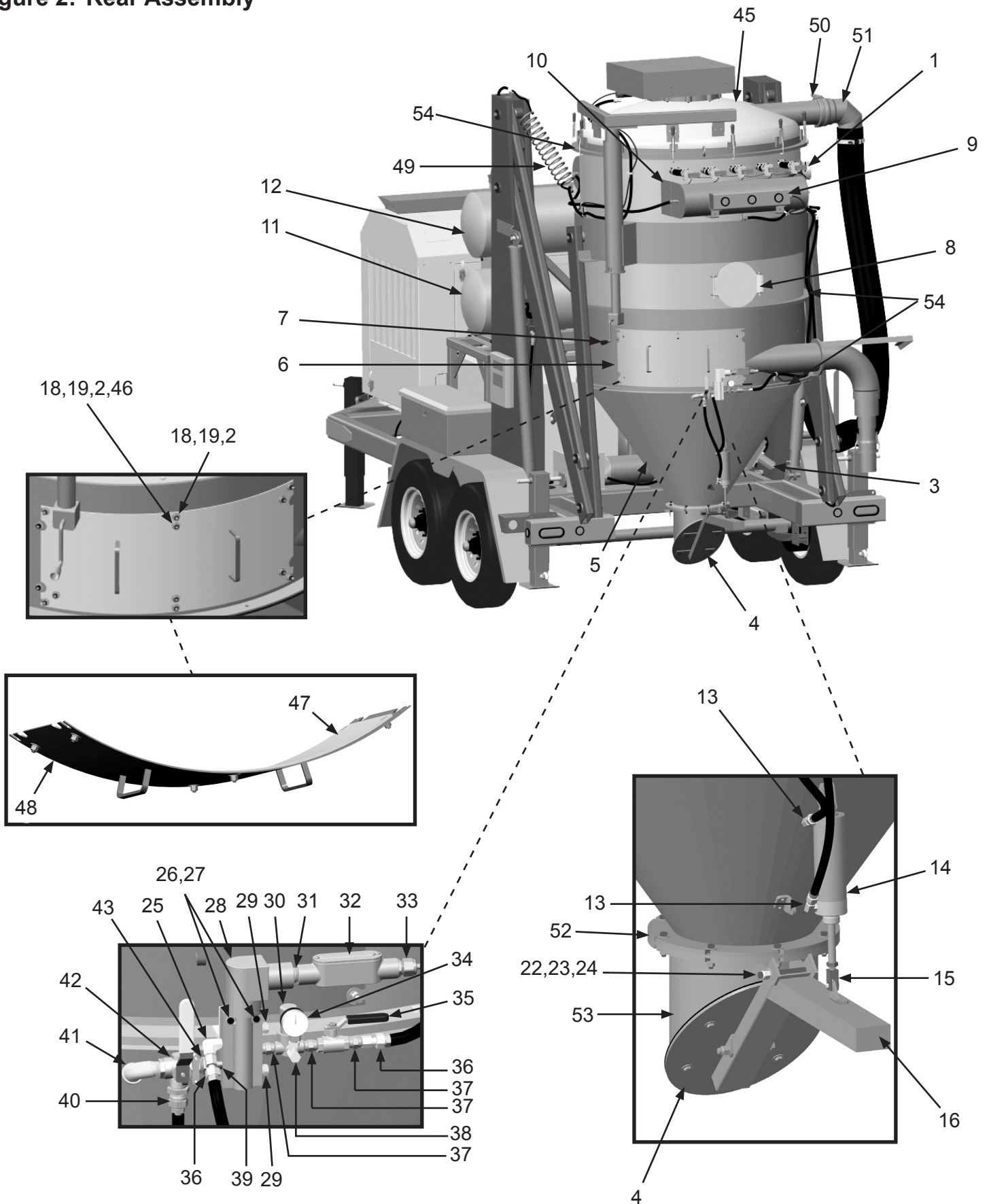
PART NUMBERS AND SCHEMATICS

Rear Assembly

Item #	Part #	Description	Item #	Part #	Description
Fig. 2			27	1012323	1/4-20 Zinc Lock Nut with Nylon Insert (<i>Two Required</i>)
1	10104673	0-50" Differential Pressure Gauge	28	10104670	Solenoid
2	10101938	3/8-16 Hex Nut GALV. (<i>12 Required</i>)	29	1019024	Breather Vent
3	10104665	APV Series Piston Vibrator	30	10104676	Series MPR Mini Pressure Relief
4	—	Dump Door (<i>See Fig. 3,4</i>)	31	10L803035	1/2" Close Nipple
5	10104411	Vacuum Hopper Cone	32	1019025	1/2" Straight Conduit Body
6	10106511	Vacuum Wear Door	33	10104703	Cord Grip, 1/2" Nylon .2-.47 Diameter
7	10104638	Bulldog Trailer Jack	34	10104678	1/8" Pressure Gauge 100 PSI
8	10104439	Hatch	35	1080050	1/4" Ball Valve
9	10105334	Vacuum Light Bar	36	20PFHA60SG0406	1/4" (F) x 3/8" (F) Swivel Union (<i>Two Required</i>)
10	10104498	Vacuum Header	37	20PFHA24SA0404	1/4" Hex Nipple (<i>Three Required</i>)
11	10104459	Blower Exhaust Silencer	38	1014239	1/8" x 1/8" 90° Fitting
12	10104461	Blower Intake Silencer	39	1011210	1/4" NPT x 1-1/2" Nipple
13	20PFHA60UA0406	1/4" (M) x 3/8" (F) 90° Swivel (<i>Two Required</i>)	40	20PFHA60SA0806	1/2" (M) x 3/8" (F) Swivel Union
14	10104667	2.5" Pneumatic Cylinder	41	1011819	1/2" Street Elbow
15	10104668	Piston Rod Clevis	42	20100571	1/2" NPT 3-Way Brass Ball Valve
16	—	Dump Arm (<i>See Fig. 3,4</i>)	43	1011818	1/2" x 1/4" Galvanized Bushing
17	—	3/8-16 x 1-1/4" Hex Bolt Zinc (<i>Four Required</i>)	44	10104486	Vacuum Lid Overcenter Clamp (<i>12 Required</i>)
18	10101942	3/8" Flat Washer - Galvanized (<i>12 Required</i>)	45	10104479	Lid Weldment
19	10101936	3/8" Lock Washer - Zinc (<i>12 Required</i>)	46	10104705	3/8-16 x 1" Bolt Zinc (<i>12 Required</i>)
20	—	3/8-16 Hex Nut (<i>Four Required</i>)	47	10105189	Wear Door Liner
21	—	Dump Door Gasket	48	10105190	Wear Door
	—	Dump Door Internal Plate (<i>See Fig. 3,4</i>)	49	10104679	3/8" (M) Swivel Recoil AH 225 PSI
22	20100160	1/2-13 x 4-1/2" Zinc Hex Bolt	50	10104637	6" Bandlock Clamp
23	10100674	1/2" Flat Washer (<i>Two Required</i>)	51	10104636	6" 90° Elbow
24	20100124	1/2-13 Hex Lock Nut - Zinc	52	10104502	Dump Section Gasket
25	20PFHA25UA0404	1/4" Male 90° Elbow	53	10104503	Vacuum Discharge Tube
26	1019044	1/4-20 x 1-3/4" Zinc Bolt (<i>Two Required</i>)	54	10104426	Vacuum Hopper Section Gasket
			—	10106513	6" Gasket

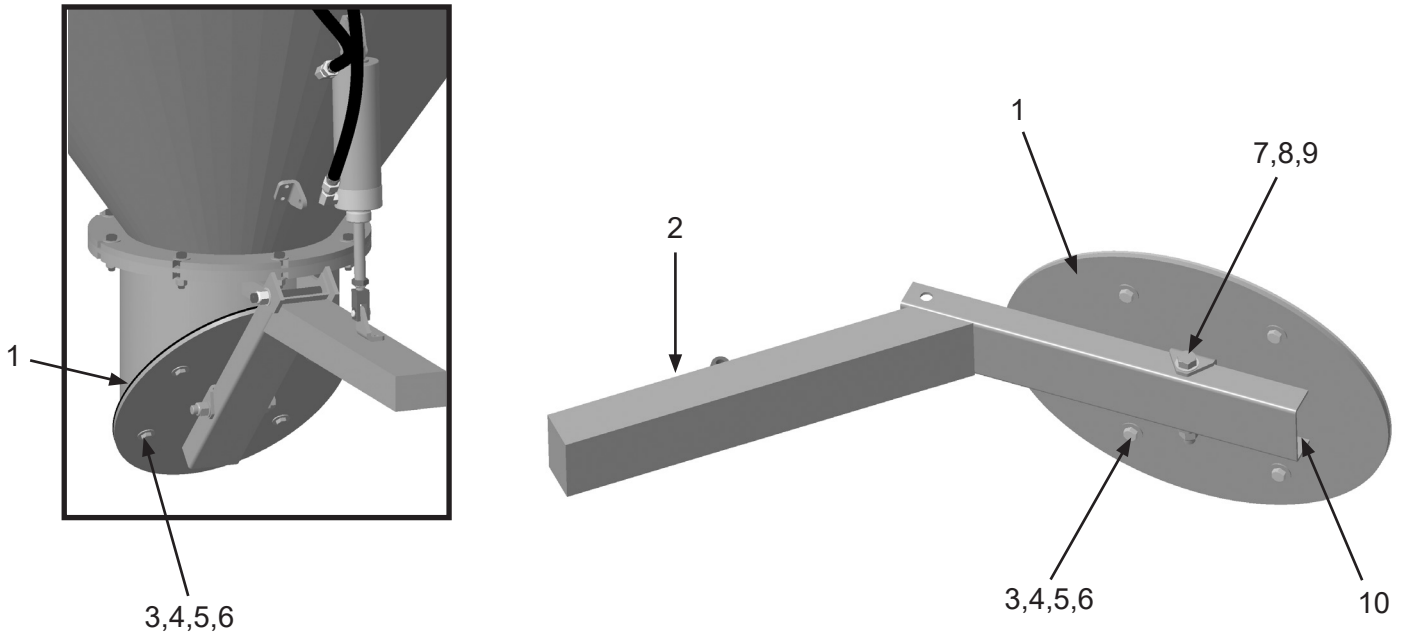
PART NUMBERS AND SCHEMATICS

Figure 2: Rear Assembly



PART NUMBERS AND SCHEMATICS

Figure 3: Dump Door Assembly (Vacuums Manufactured After 7/1/2025)



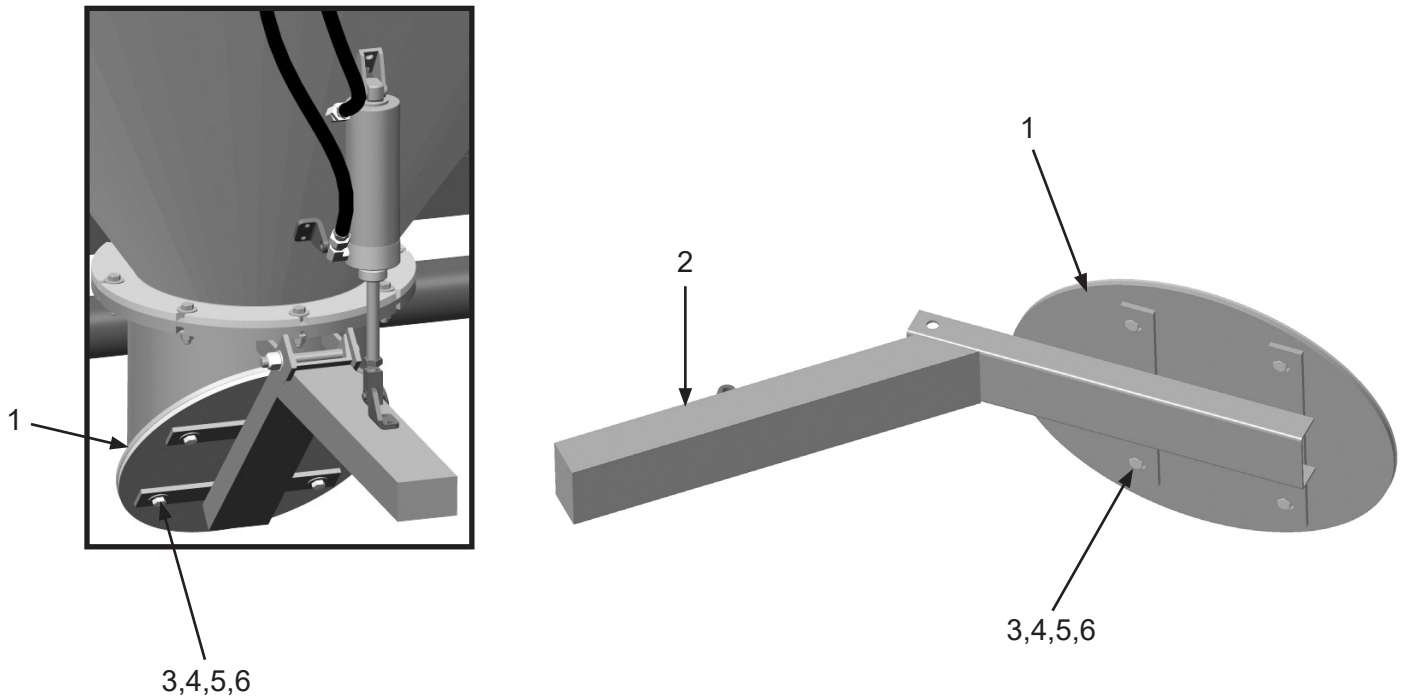
Item #	Part #	Description
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Fig. 3

1	10104512	Dump Door Gasket
—	10104511	Dump Door Internal Plate
2	10110653	Dump Arm
3	10104234	3/8-16 x 1-1/4" Hex Bolt Zinc (Four Required)
4	10101942	3/8" Flat Washer - Galvanized (Eight Required)
5	10101936	3/8" Lock Washer - Zinc (Four Required)
6	1012318	3/8-16 Hex Nut (Four Required)
7	20100160	1/2-13 x 4-1/2" Zinc Hex Bolt
8	10100674	1/2" Galvanized Flat Washer
9	20100124	1/2-13 Zinc Hex Lock Nut
10	10110654	Pivot Door Weldment

PART NUMBERS AND SCHEMATICS

Figure 4: Dump Door Assembly (*Vacuums Manufactured Before 7/1/2025*)



Item #	Part #	Description
Fig. 4		
1	10104512	Dump Door Gasket
—	10104511	Dump Door Internal Plate
2	10104507	Dump Arm
3	1028617	3/8-16 x 1-3/4" Shoulder Bolt (<i>Four Required</i>)
4	10101942	3/8" Flat Washer - Galvanized (<i>Four Required</i>)
5	10101936	3/8" Lock Washer - Zinc (<i>Eight Required</i>)
6	1012318	3/8-16 Hex Nut (<i>Four Required</i>)

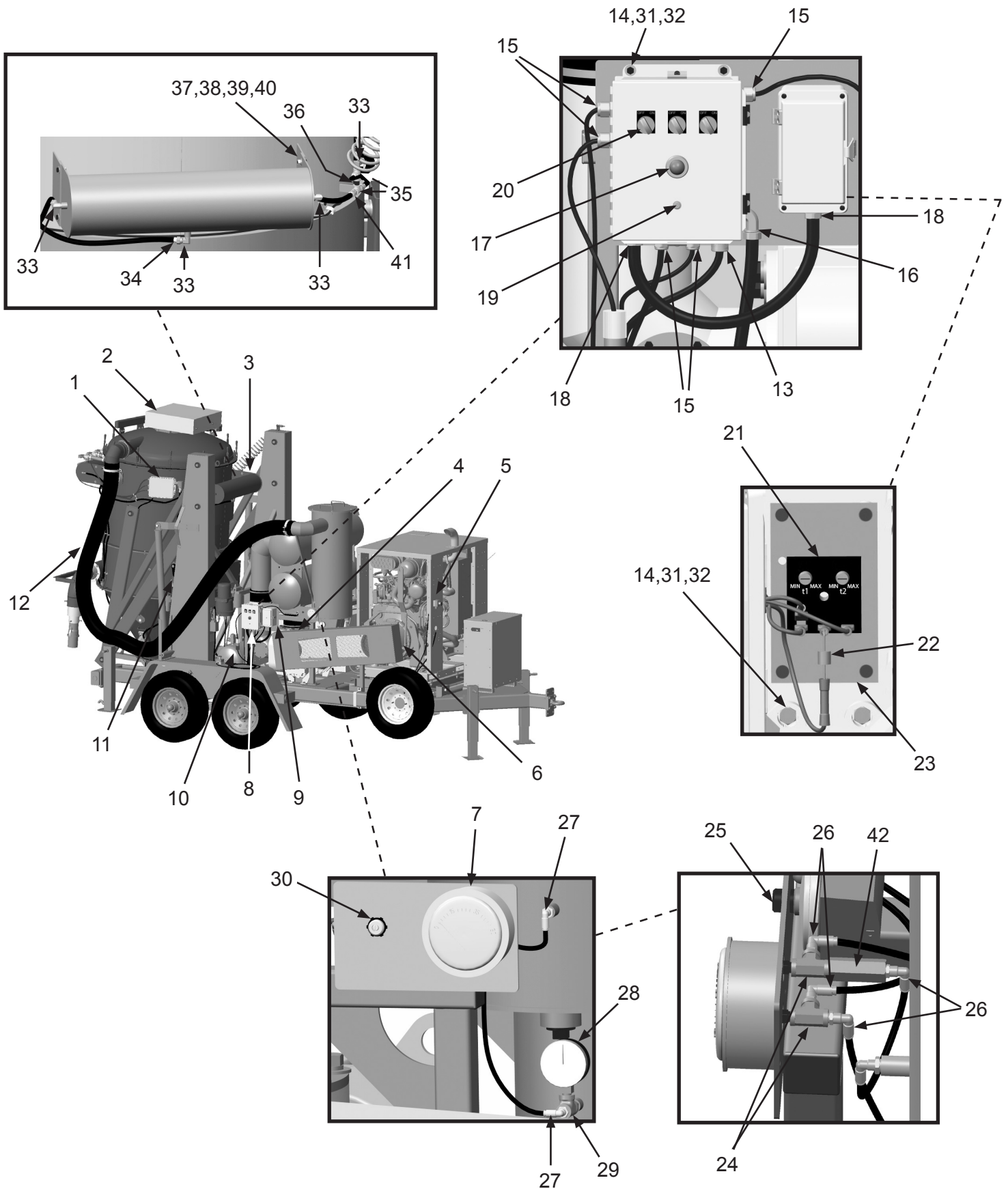
PART NUMBERS AND SCHEMATICS

Right Side Front Assembly

Item #	Part #	Description
Fig. 5		
1	—	Pulse Timer Control Box
2	10104559	Vacuum Butterfly Cover
3	10104493	Vacuum Aux Header
4	10104456	Blower Top Shaft Left Discharge
5	10104071	E-Stop Control Station
6	10104579	Vacuum Belt Guard Cover
7	10104673	0—50" Differential Pressure
8	10104614	10" x 8" x 4" Nema 4 Enclosure
9	10104615	8" x 4" x 5" Fiberglass Latch Enclosure
10	10104610	Horizontal Pressure Tank - 15 Gallon
11	10104674	Lubricator 1/2" NPT 156 CFM
12	10VH620B	6" I.D. Vacuum Hose 20' Section
13	1030025	1/2" NPT x .4—.5 Diameter Cord Grip
14	20100125	1/4-20 x 3/4" Zinc Hex Bolt <i>(Eight Required)</i>
15	10104703	1/2" NPT x .2—.47 Diameter Nylon Cord Grip <i>(Three Required)</i>
16	20RST9050	90° Liquid Tite Connection Fitting
17	10104692	12-Volt Pilot Light - Red
18	20RST50	Straight Liquid Tite Connection Fitting <i>(Two Required)</i>
19	10104686	10 Amp Circuit Breaker
20	10103305	Selector Switch - 2-Way <i>(Three Required)</i>
21	10106818	Vacuum Control Timer
22	10104109	6 Amp 50-Volt Rectifier
23	10105193	Enclosure Panel
24	20PFHA25VJ02	1/8" Female Tee <i>(Two Required)</i>
25	10104672	Differential Pressure Switch
26	20100579	1/4" O.D. Tube x 1/8" NPT PTC Swivel <i>(Four Required)</i>
27	20PFBA31095614	1/4" Tube x 1/4" NPT 90° Fitting <i>(Two Required)</i>
28	10104677	Liquid Filled Vacuum Gauge
29	1011844	1/4" Pipe Tee - Galvanized
30	10104073	Panel Lock Nut - 1/2"
31	10101940	1/4" Flat Washer - Galvanized <i>(Four Required)</i>
32	10101939	1/4-20 Stainless Steel Lock Nut with Nylon Insert <i>(Four Required)</i>
33	20PFHA60UA0606	3/8" (M) x 3/8" (F) 90° Swivel Union <i>(Four Required)</i>
34	10103631	3/8" Barb x 3/8" NPTF Brass <i>(Seven Required)</i>
35	1011809	3/8" NPT Tee <i>(Two Required)</i>
36	1011209	3/8 NPT Close Nipple
37	1011747	3/8-16 x 1" Bolt - Zinc <i>(Four Required)</i>
38	10101942	3/8" Flat Washer - Galvanized <i>(Four Required)</i>
39	10101936	3/8" Lock Washer - Zinc <i>(Four Required)</i>
40	10101938	3/8-16 Hex Nut - Galvanized <i>(Four Required)</i>
41	20PFHA60SA0606	Union Swivel 3/8" (M) x 3/8" (F) <i>(Two Required)</i>
42	10108373	1/8" NPT Inline Air Filter

PART NUMBERS AND SCHEMATICS

Figure 5: Right Side Front Assembly



PART NUMBERS AND SCHEMATICS

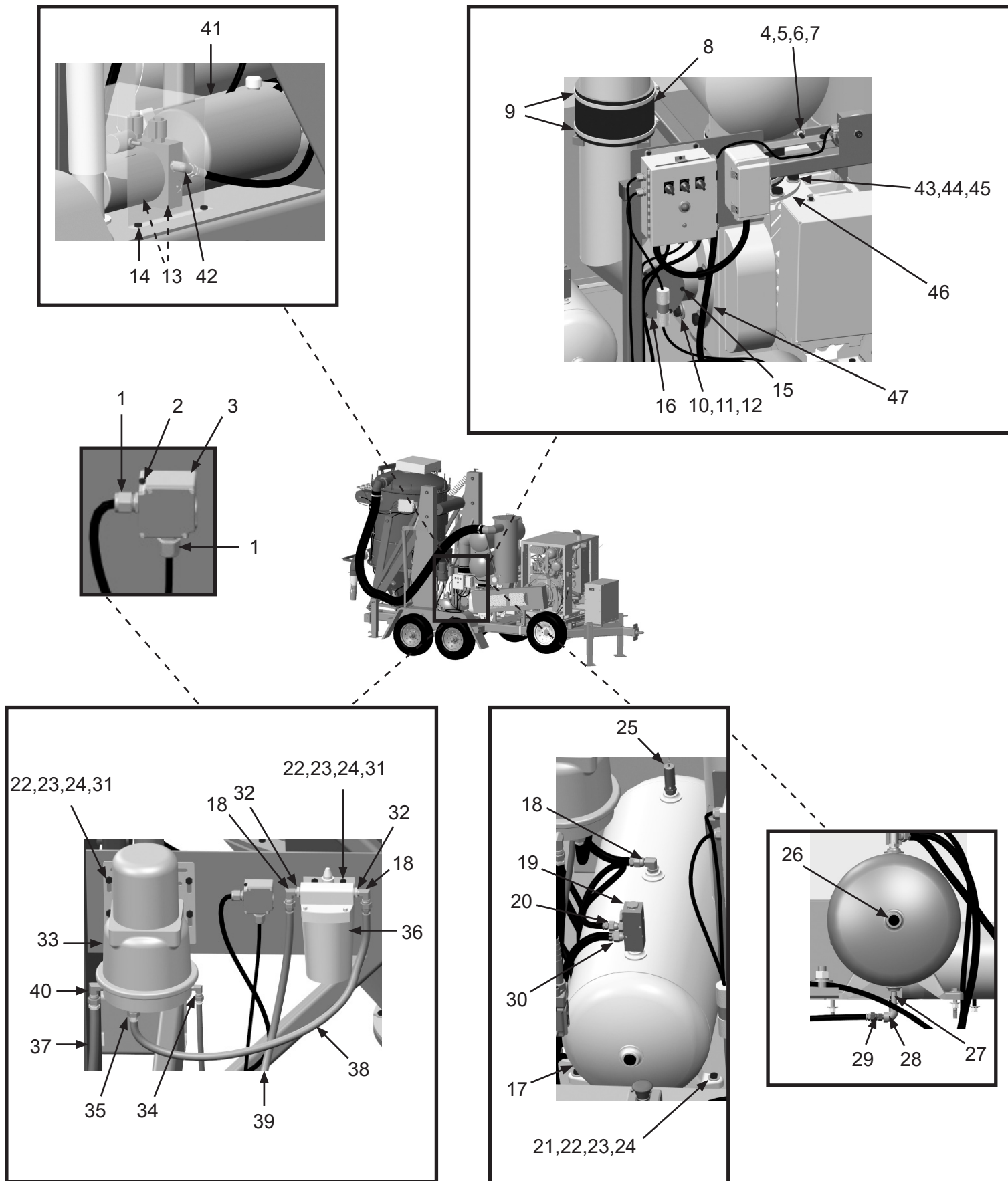
Center Assembly

Item #	Part #	Description
Fig. 6		
1	10104703	Nylon Cord Grip <i>(Two Required)</i>
2	20000031	8-32 x 1-1/2" Machine Screw <i>(Two Required)</i>
3	10105897	Terminal Box
4	10101943	1/2-13 x 1-3/4" Hex Bolt <i>(Eight Required)</i>
5	10100674	1/2" Flat Washer <i>(16 Required)</i>
6	10100675	1/2" Lock Washer <i>(Eight Required)</i>
7	10101941	1/2-13 Hex Nut <i>(Eight Required)</i>
8	10104774	10-3/4" I.D. Hose <i>(Two Required)</i>
9	10103416	Banding Clamp <i>(Four Required)</i>
10	10104715	7/8-9 x 2" Grade 5 Bolt
11	10104716	7/8" Flat Washer - Zinc
12	10104717	7/8" Lock Washer - Zinc
13	20100195	3/8-16 x 1" Bolt <i>(Two Required)</i>
14	10103400	3/8-16 x 3/4" Bolt <i>(Four Required)</i>
15	1035045	5/16-18 x 1" Bolt <i>(Six Required)</i>
16	10103235	Cover
17	10104610	Compressed Air Tank
18	20PFHA60UA0606	3/8" (M) x 3/8" (F) 90° Swivel Union <i>(Three Req)</i>
19	10104618	Pressure Manifold
20	20PFHA60SA0604	3/8" (M) x 1/4" (F) Swivel Union <i>(Two Required)</i>
21	1028617	3/8-16 x 1-3/4" Shoulder Bolt <i>(Four Required)</i>
22	10101942	3/8" Flat Washer <i>(48 Required)</i>
23	10101936	3/8" Lock Washer - Zinc <i>(15 Required)</i>
24	1012318	3/8-16 Hex Nut <i>(15 Required)</i>
25	10104681	1/2" NPT Pressure Relief Valve
26	10DSHP75	3/4" Square Head Pipe Plug <i>(Two Required)</i>

Item #	Part #	Description
27	1011217	1/4" x 2" Nipple
28	1011832	1/4" 90° Elbow
29	10SME025	1/4" NPT x 1/4" (F) Straight Swivel
30	20PFHA60SA0606	3/8" (M) x 3/8" (F) Swivel Union
31	20100195	3/8-16 x 1" Bolt <i>(12 Required)</i>
32	20PFHA24SB0806	1/2" x 3/8" Reducing Bushing <i>(Three Required)</i>
33	10104611	Air Dryer
34	1012326	1/4" (M) x 1/4" (F) 90° Swivel Union
35	20PFHA60SA0806	1/2" (M) x 3/8" (F) Swivel Union
36	10104612	Alcohol Evaporator
37	10105838	1/2" x 168" Stainless Steel Braided Hose Assembly with 1/2" (M) NPT Ends
38	10104684	3/8" x 2' Braided Hose
39	10104683	3/8" x 4-1/2' Braided Hose
40	20PFHA60UA0808	1/2" (M) x 1/2" (F) 90° Swivel Union
41	10105779	Hydraulic Power Unit
42	10105782	SAE 6 x JIC 8 Elbow <i>(Two Required)</i>
43	10104714	3/4-10 x 1-5/8" Bolt <i>(Eight Required)</i>
44	10100596	3/4" Lock Washer <i>(Eight Required)</i>
45	10100704	3/4" Flat Washer <i>(Eight Required)</i>
46	10107990	Blower Intake Silencer Adapter
47	10107985	Silencer Exhaust Elbow
—	10106896	Blower Oil 100 <i>For below 0° F</i>
—	10106897	Blower Oil 150 <i>For 0 – 32° F</i>
—	10105254	Blower Oil 220 <i>For 32 – 90° F</i>
—	10106898	Blower Oil 320 <i>For above 90° F</i>
—	10105292	Alcohol 99 Isopropyl
—	10106512	Desiccant Element Kit

PART NUMBERS AND SCHEMATICS

Figure 6: Center Assembly



PART NUMBERS AND SCHEMATICS

Right Side Rear Assembly

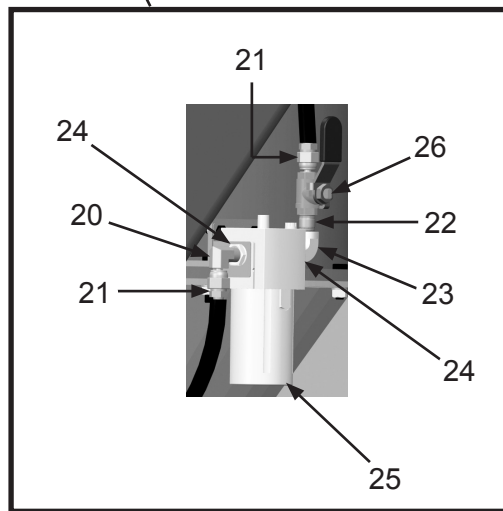
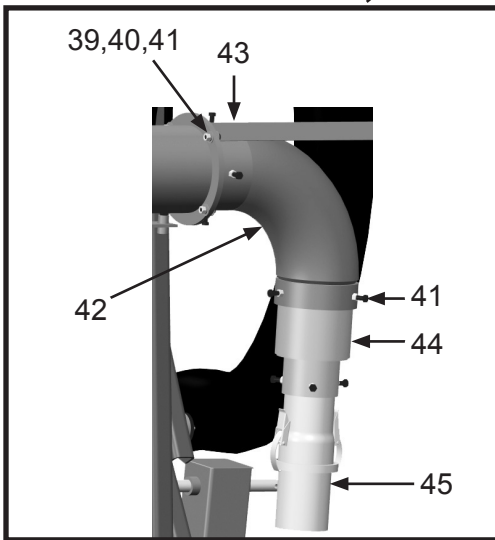
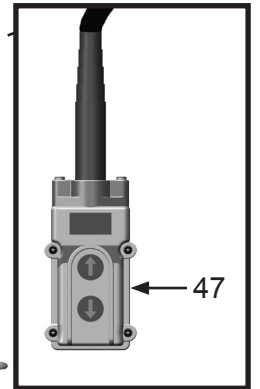
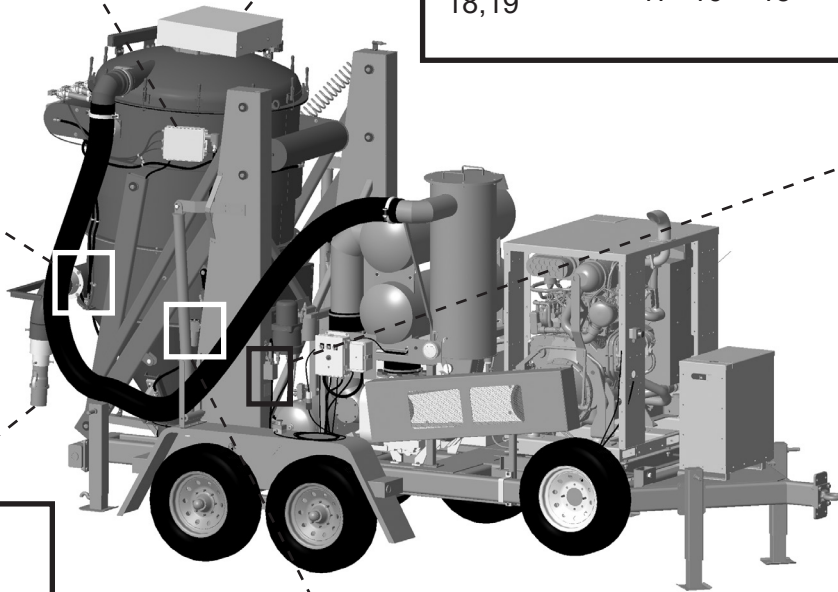
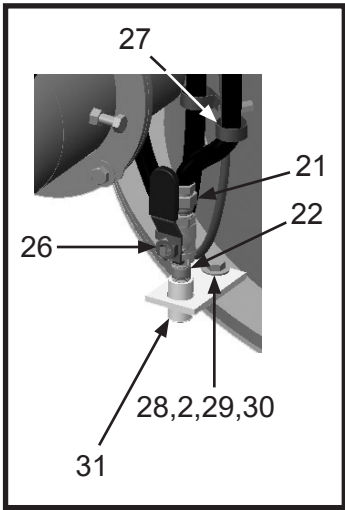
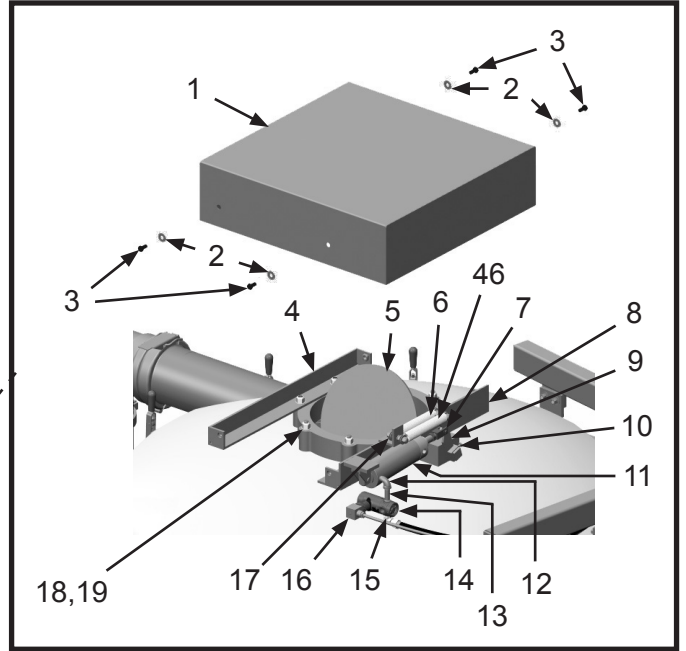
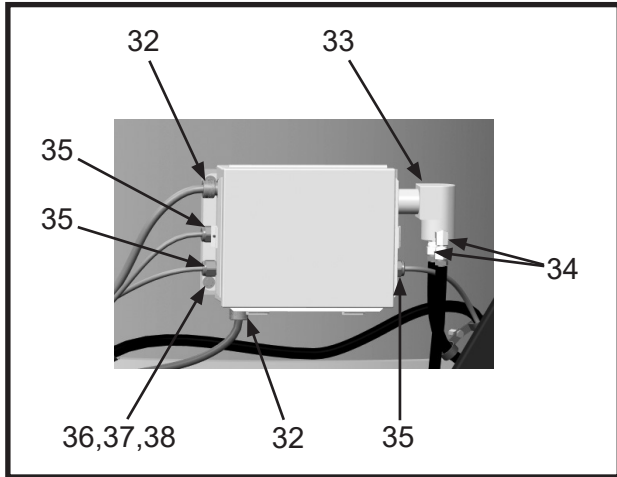
Item #	Part #	Description
Fig. 7		
1	10104559	Vacuum Butterfly Cover
2	10101942	3/8" Flat Washer - Galv (Five Required)
3	10103400	3/8-16 x 3/4" Bolt (Four Required)
4	10104554	Butterfly Cover Mount Weldment
5	10104537	12" Butterfly
6	10107175	6.5" Extension Spring
7	10104668	Piston Rod Clevis
8	10104538	Vacuum Butterfly Cylinder Weldment
9	10104543	Butterfly Actuating Arm
10	20100125	1/4-20 x 3/4" Zinc Hex Bolt
11	10104667	2.5" Pneumatic Cylinder
12	1011824	1/4" Street Elbow
13	1011217	1/4" x 2" Nipple Galv
14	*10104669	Solenoid For Butterfly
15	20PFHA60UA0406	1/4" (M) x 3/8" (F) 90° Swivel
16	10105287	Din Connector
—	*10110835	Flat Gasket Type B
	*10110836	Type B Din Connector
17	10104706	3/8-16 x 2-1/2" Thread Stud
18	10100674	1/2" Flat Washer (Eight Required)
19	20100124	1/2-13 Hex Lock Nut (Eight Required)
20	20PFHA60UA0606	3/8" (M) x 3/8" (F) 90° Swivel Union
21	20PFHA60SA0606	Union Swivel 3/8" (M) x 3/8" (F) (Three Required)
22	1011209	3/8" NPT Close Nipple
23	20PFHA25UG0606	3/8" Street Elbow
24	20PFHA24SB0806	1/2" x 3/8" Reducing Bushing (Two Required)
25	10104674	Lubricator, 1/2" NPT 156 CFM

Item #	Part #	Description
26	1080060	3/8" NPT Full Port Brass Ball Valve (Two Required)
27	10103624	1" Rubber Cushioned Loop Clamp
28	1028617	3/8-16 x 1-3/4" Shoulder Bolt
29	10101936	3/8" Lock Washer - Zinc (Five Required)
30	1012318	3/8-16 Hex Nut
31	10104597	Airline Drain
32	1030025	1/2" NPT x .4—.5 Diameter Cord Grip (Two Required)
33	10104671	Vibrator Solenoid
34	20PFHA60UA0406	1/4" (M) x 3/8" (F) 90° Swivel (Two Required)
35	10104703	1/2" NPT x .2—.47 Diameter Nylon Cord Grip (Three Required)
36	10101939	1/4-20 Stainless Steel Lock Nut with Nylon Insert (Four Required)
37	10101940	1/4" Flat Washer Galv (Four Required)
38	20100125	1/4-20 x 3/4" Zinc Hex Bolt (Four Required)
39	10101942	3/8" Flat Washer Galv (Eight Required)
40	10101938	3/8-16 Hex Nut Galv (Four Required)
41	1011747	3/8-16 x 1" Bolt - Zinc (13 Required)
42	10110840	Vacuum Inlet Elbow
43	10104496	Vacuum Inlet Insert
44	10104550	Vacuum Inlet Adapter
45	10107797	4" Quick Disconnect Coupling Assembly
46	10107176	6.5" Long Extension Spring - Zinc
47	10107204	Remote Control Pendant

***Both 10110835 and 10110836 required to replace Din Connector on units purchased after August 2025 and are also required with 10104669. Use 10105287 for units prior to August 2025.**

PART NUMBERS AND SCHEMATICS

Figure 7: Right Side Rear Assembly



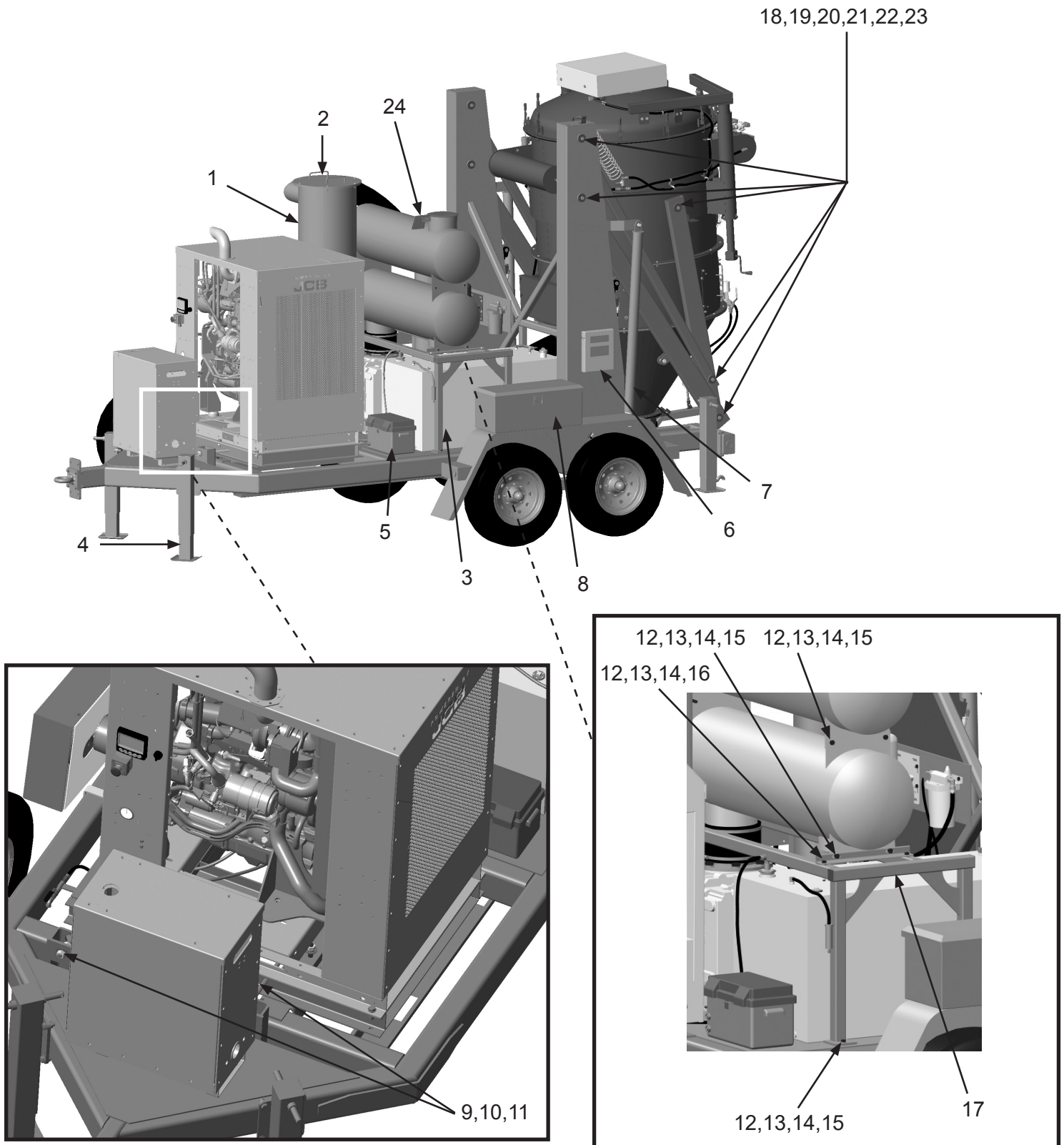
PART NUMBERS AND SCHEMATICS

Left Side Front Assembly

Item #	Part #	Description
Fig. 8		
1	10104457	Intake Filter Housing <i>(See Figure 13)</i>
2	10104640	6" Double Bolt Clamp
3	10104704	116 Gallon Rectangle Fuel Tank <i>(See Figure 11)</i>
4	10104082	Jack Stand <i>(Four Required)</i>
5	10103342	Battery Box
6	10104273	Document Holder
7	10104608	Support Arm
8	10105896	Tool Box
9	10110635	16" Draw Bolt <i>(Two Required)</i>
10	10103418	Washer - 3/4" - Grade 8 <i>(Four Required)</i>
11	10103420	3/4-10 UNC Grade 8 Nut <i>(Four Required)</i>
12	10101943	1/2-13 x 1-3/4" Hex Bolt <i>(12 Required)</i>
13	10100674	1/2" Flat Washer <i>(24 Required)</i>
14	10100675	1/2" Lock Washer <i>(12 Required)</i>
15	10101941	1/2-13 Hex Nut - <i>(12 Required)</i>
16	10101927	1/2-13 x 3" Galvanized Hex Bolt <i>(Four Required)</i>
17	10104584	Silencer Mount Weldment
18	10104708	1/4-28 Straight Grease Zerk
19	10106402	5/8-11 Grease Zerk Thru Bolt
20	10106403	3/16" x 5/8" Dowel Pin
21	10101061	5/8" Lock Washer
22	10104600	Vacuum Pin Cap
23	10104602	Vacuum Shoulder Pin
24	10104824	8" Raincap
—	10103343	Battery Cables, 156" Long
—	10103341	Battery <i>(not shown)</i>

PART NUMBERS AND SCHEMATICS

Figure 8: Left Side Front Assembly



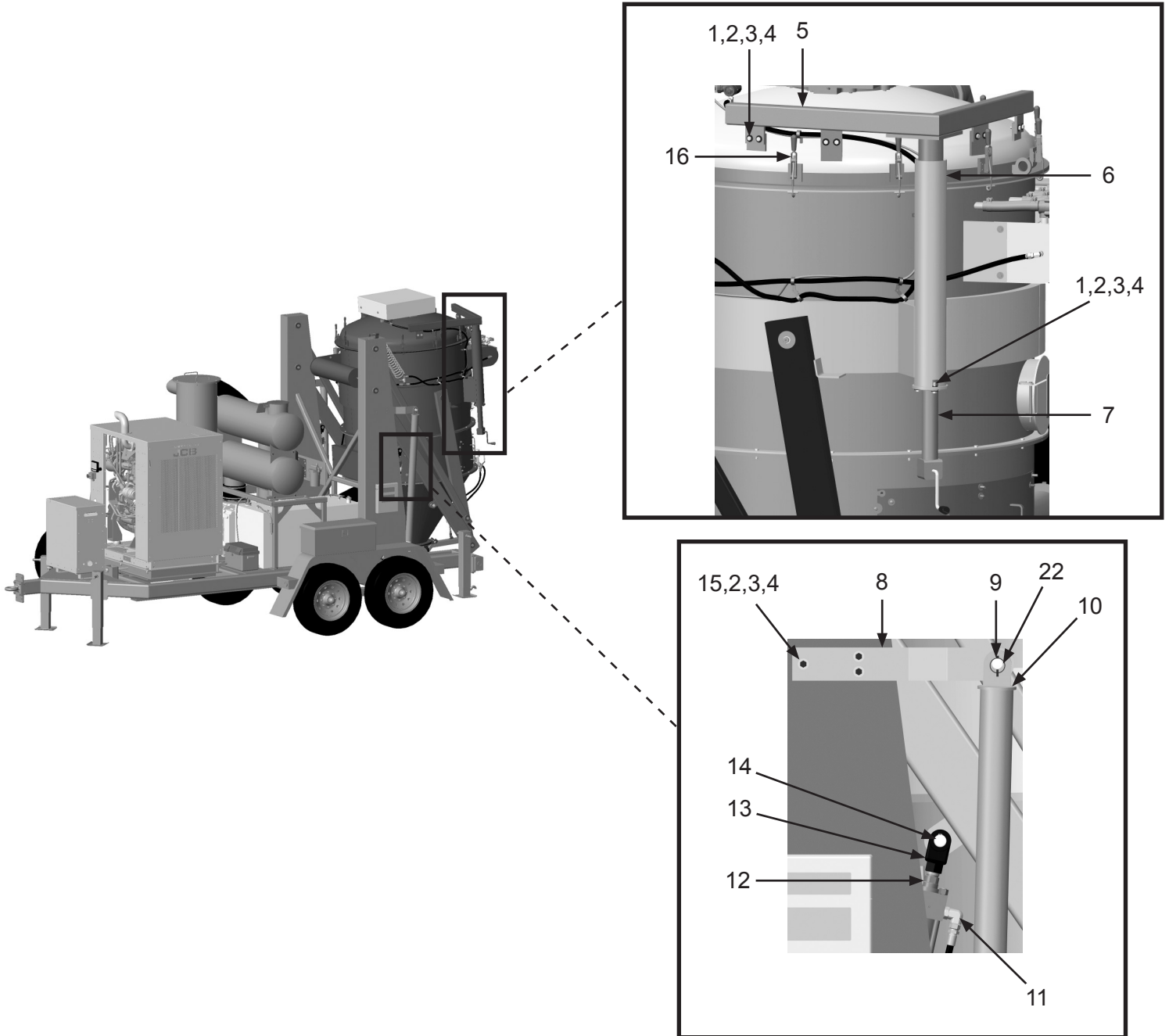
PART NUMBERS AND SCHEMATICS

Left Side Rear Assembly

Item #	Part #	Description
Fig. 9		
1	10104234	3/8-16 x 1-1/4" Hex Bolt Zinc <i>(Eight Required)</i>
2	10101942	3/8" Flat Washer - Galvanized <i>(40 Required)</i>
3	10101936	3/8" Lock Washer - Zinc <i>(11 Required)</i>
4	1012318	3/8-16 Hex Nut <i>(11 Required)</i>
5	10104472	Vacuum Lid Lift
6	10104434	Vacuum Top Section
7	10104638	Bulldog Trailer Jack
8	10104728	Lift Arm Support Bracket <i>(Two Required)</i>
9	10104729	Lift Arm Support Bracket Pin <i>(Two Required)</i>
10	10104608	Support Arm Outer <i>(Two Required)</i>
—	10104605	Support Arm Inner <i>(Two Required) (not shown)</i>
11	10103308	Elbow - 90° - JIC 8 x SAE 10 <i>(Four Required)</i>
12	10104645	Hopper Lift Cylinders <i>(Two Required)</i>
13	10104646	Lift Cylinder Clevis <i>(Two Required)</i>
14	10104647	1" x 3-1/8" Pin <i>(Two Required)</i>
15	10105290	3/16" x 1-5/8" Pin
16	10104486	Over Center Clamp <i>(12 Required)</i>

PART NUMBERS AND SCHEMATICS

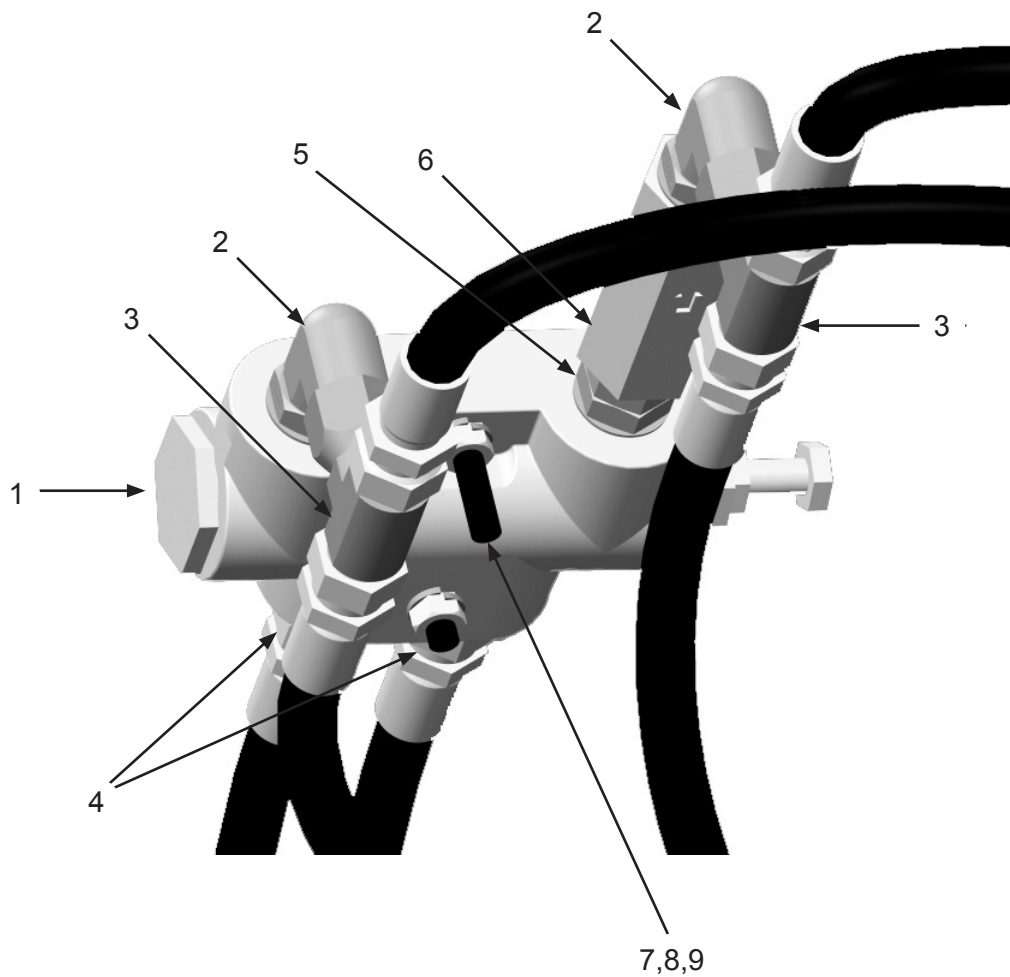
Figure 9: Left Side Rear Assembly



PART NUMBERS AND SCHEMATICS

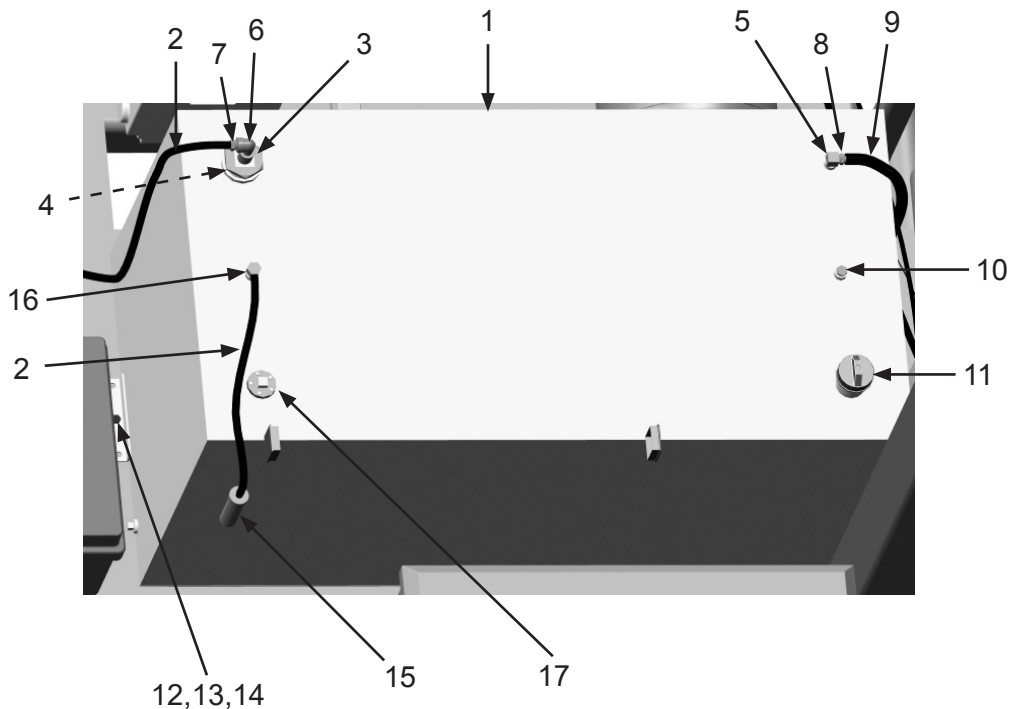
Figure 10: Double Lock Valve Assembly

Item #	Part #	Description
Fig. 10		
1	10104650	Double Lock Valve
2	10103309	Elbow - 90° - JIC 8 x SAE 8 <i>(Two Required)</i>
3	10105081	JIC 8 Tee <i>(Two Required)</i>
4	10104651	Union - Straight SAE 8 x JIC 8 <i>(Two Required)</i>
5	10103613	Union - Straight SAE 8 x SAE 8
6	10105288	Flow Restrictor SAE 8
7	10105286	5/16-18 x 2-1/2" Grade 5 Zinc Bolt <i>(Two Required)</i>
8	10L805014	5/16" Lock Washer <i>(Two Required)</i>
9	1035046	5/16-18 Nut <i>(Two Required)</i>



PART NUMBERS AND SCHEMATICS

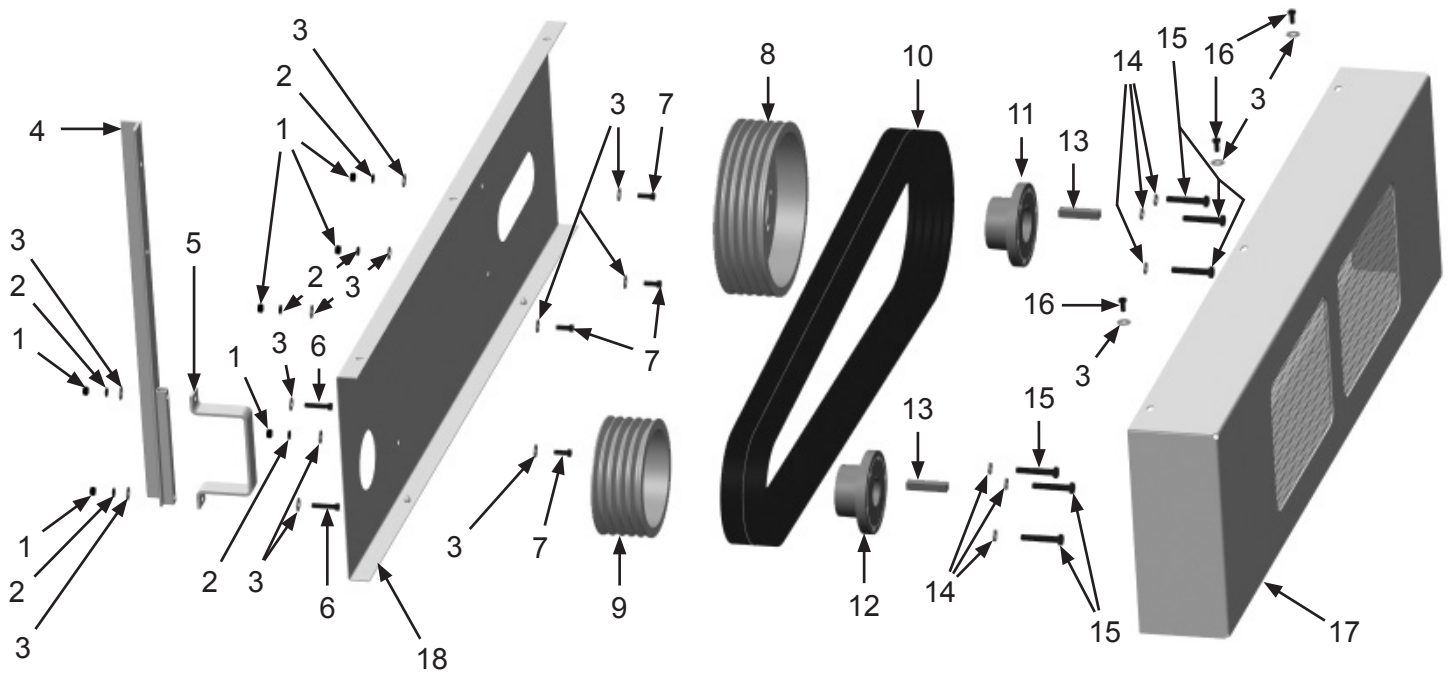
Figure 11: Fuel Tank



Item #	Part #	Description
Fig. 11		
1	10104704	116 Gallon Rectangle Fuel Tank
2	10103423	3/8" I.D. Fuel Hose (<i>Per Foot</i>)
3	10106484	Fuel Return Adapter
4	10106466	3/8" NPT x 18" Pipe Nipple - 304 Stainless Steel
5	10103617	Withdraw Tube - 16"
6	10106470	3/8" NPT Street Elbow - 304 Stainless Steel
7	10106469	3/8" Hose Barb x 3/8" NPT - 304 Stainless Steel
8	10106503	3/8" NPT x 1/2" Hose Barb - 304 Stainless Steel
9	10103619	1/2" Flexible Fuel Line (<i>Per Foot</i>)
10	10106502	3/8" NPT Plug - 304 Stainless Steel
11	10103968	Locking Fuel Cap with Keys
12	10104234	3/8-16 x 1-1/4" Hex Bolt Zinc (<i>Two Required</i>)
13	10101942	3/8" Flat Washer - Galvanized (<i>Two Required</i>)
14	10101938	3/8-16 Hex Nut - Galvanized
15	10103620	3/8" Inline Filter
16	20PFHA60UA0606	3/8" (M) x 3/8" (F) 90° Swivel Union
17	10104821	Fuel Level Gauge
—	10104631	Fuel Tank Rubber Cushioning Pad (<i>not shown</i>)

PART NUMBERS AND SCHEMATICS

Figure 12: Fan Belt Assembly



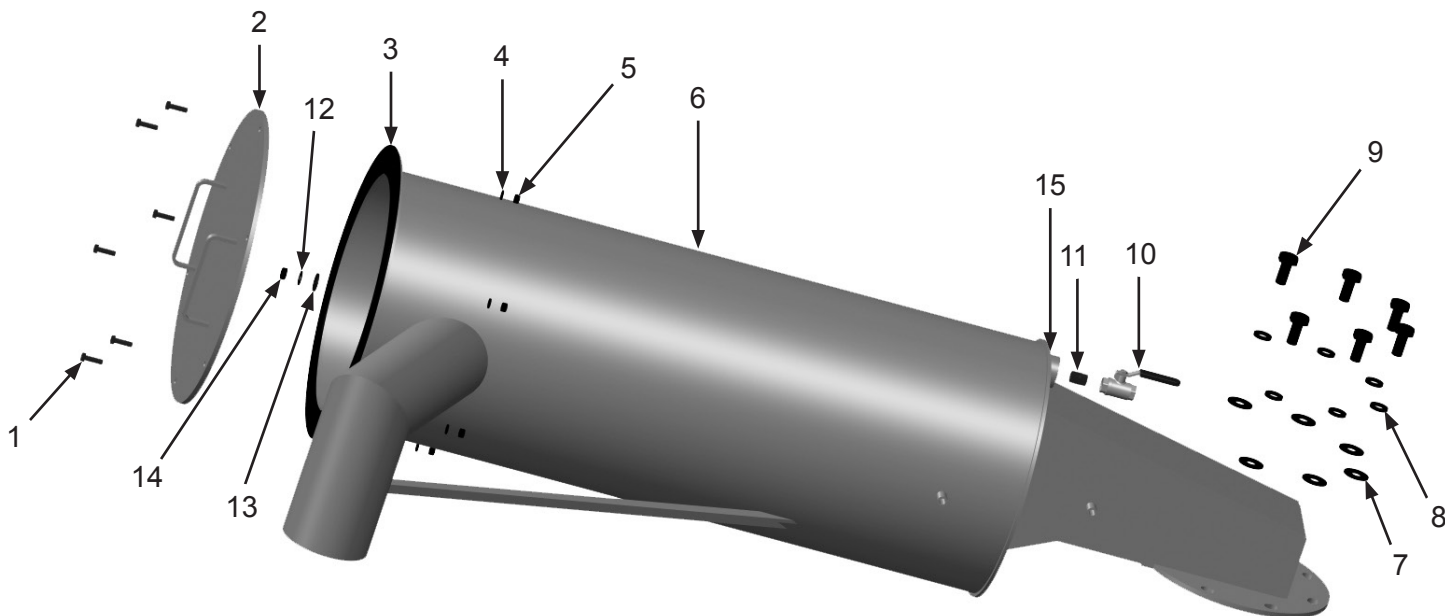
Item #	Part #	Description
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Fig. 12

1	1012318	3/8" Galvanized Hex Nut (Four Required)
2	10101936	3/8" Zinc Lock Washer (Four Required)
3	10101942	3/8" Galvanized Flat Washer (15 Required)
4	10110633	Vacuum Belt Guard Mount
5	10104576	Belt Guard Clamp
6	1028617	3/8-16 x 1-3/4" Shoulder Bolt (Two Required)
7	1011747	3/8-16 x 1" Bolt (Four Required)
8	10104641	12.5" 5V 5 Groove Sheave
9	10104642	8.5" 5V 5 Groove Sheave
10	10104644	5VX 1180 Banded Belt
11	10110593	Bushing 2.25" Bore
12	10104643	Bushing 2" Bore
13	10103643	5/8" Key Cut (Two Required)
14	10100675	1/2" Lock Washer (Six Required) (Included with Item 12)
15	10102820	1/2-13 x 2-3/4" Gade 5 Bolt (Six Required) (Included with Item 12)
16	10103400	3/8-16 x 3/4" Bolt (Three Required)
17	10104579	Belt Guard Cover
18	10110631	Belt Guard Back

PART NUMBERS AND SCHEMATICS

Figure 13: Intake Filter Housing



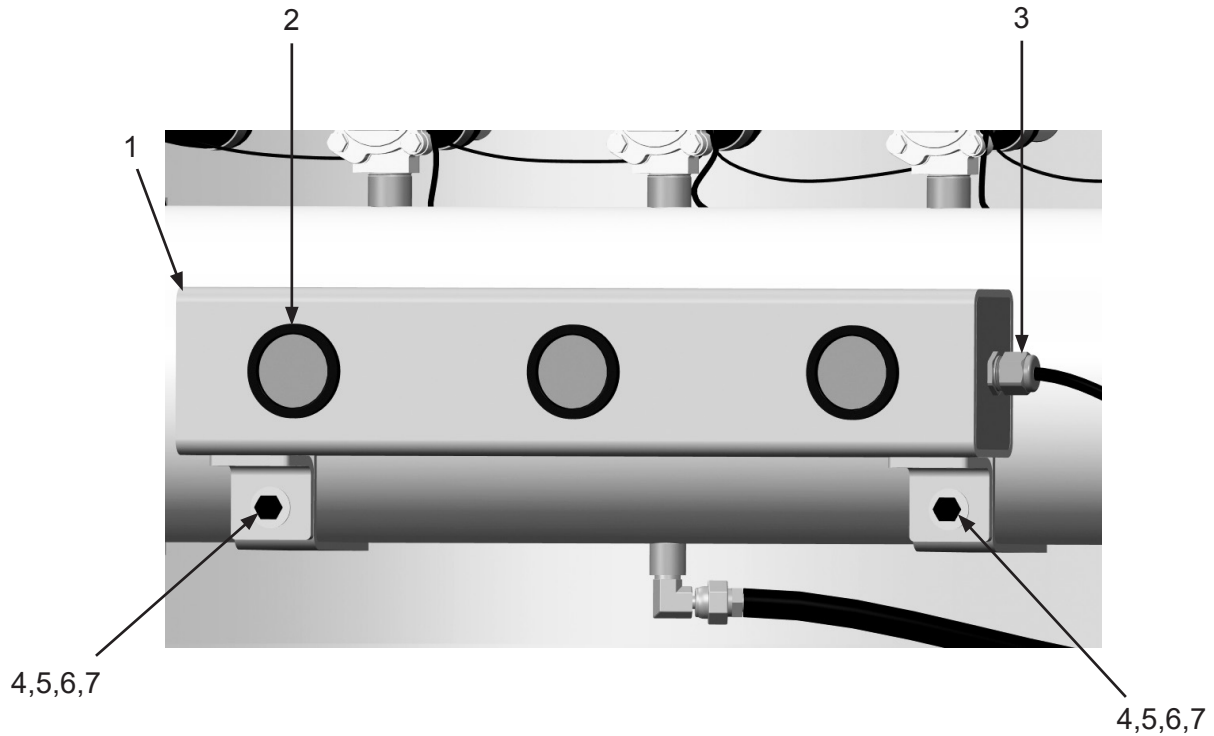
Item #	Part #	Description
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Fig. 13

1	10104234	3/8-16 x 1-1/4" Hex Bolt Zinc (<i>Six Required</i>)
2	10106508	Intake Filter Housing Cap
3	10104727	Air Filter Housing Gasket
4	10101936	3/8" Lock Washer - Zinc (<i>Four Required</i>)
5	10101938	3/8-16 Hex Nut - Galvanized (<i>Four Required</i>)
6	10107984	Intake Filter Housing
7	10100704	3/4" Flat Washer (<i>Six Required</i>)
8	10100596	3/4" Lock Washer (<i>Six Required</i>)
9	10104714	3/4-10 x 1-5/8" Zinc Bolt (<i>Six Required</i>)
10	10L363	1/2" NPT Full Port Ball Valve
11	10L803035	1/2" Close Nipple Galvanized
12	10100674	1/2" Flat Washer
13	10102005	Rubber Washer 1.25 O.D. x .375 I.D. x .13
14	10101941	1/2-13 Hex Nut - Galvanized
15	1011820	1-1/4" x 1/2" Bushing - Galvanized
—	10102253	Filter Cartridge

PART NUMBERS AND SCHEMATICS

Figure 14: Vacuum Light Bar



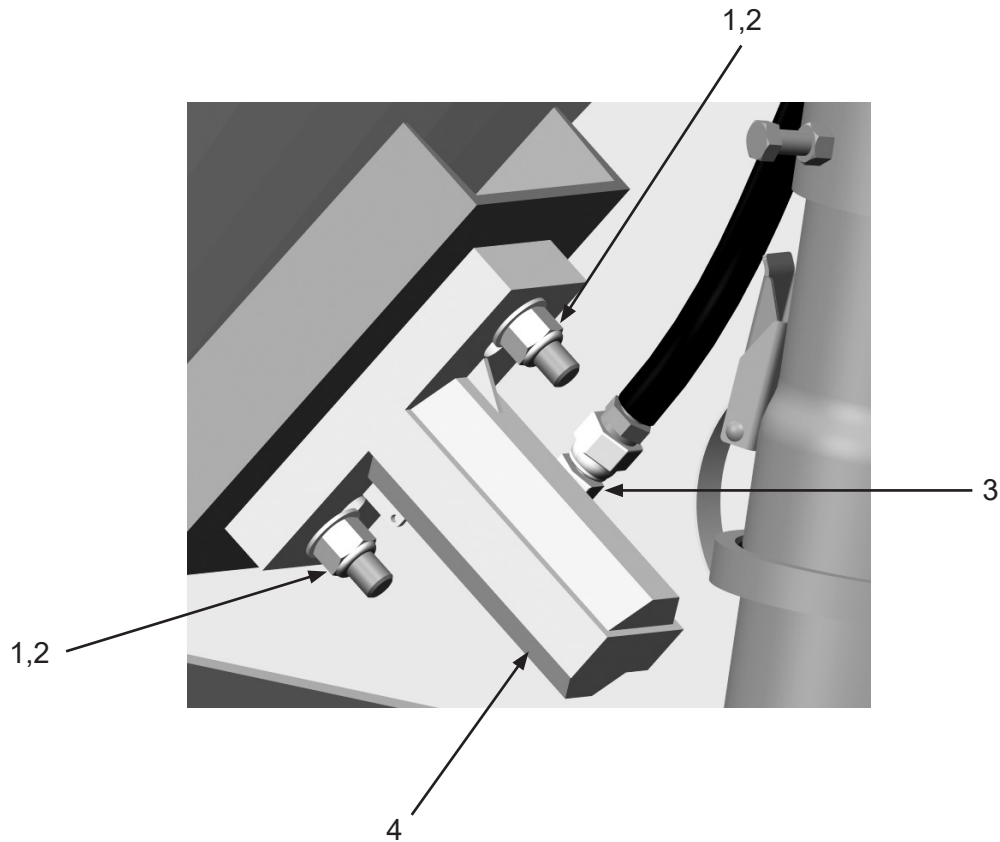
Item #	Part #	Description
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Fig. 14

1	10105334	Vacuum Light Bar (Includes Item #2)
2	10104086	2" Round LED Red Clearance Light (Three Required)
3	10104703	Cord Grip, Nylon 1/2" NPT .2-.47 Diameter
4	10101942	3/8" Flat Washer - Galvanized (Four Required)
5	10101936	3/8" Lock Washer - Zinc (Two Required)
6	1011747	3/8-16 x 1" Bolt (Two Required)
7	1012318	3/8-16 Hex Nut (Two Required)

PART NUMBERS AND SCHEMATICS

Figure 15: Pneumatic Piston Vibrators



Item #	Part #	Description
Fig. 15		
1	20100124	1/2-13 Hex Lock Nut - Zinc (<i>Two Required</i>)
2	10100674	1/2" Flat Washer (<i>Two Required</i>)
3	20PFHA60UA0406	1/4" (M) x 3/8" (F) 90° Swivel Union
4	10104665	APV Series Piston Vibrator

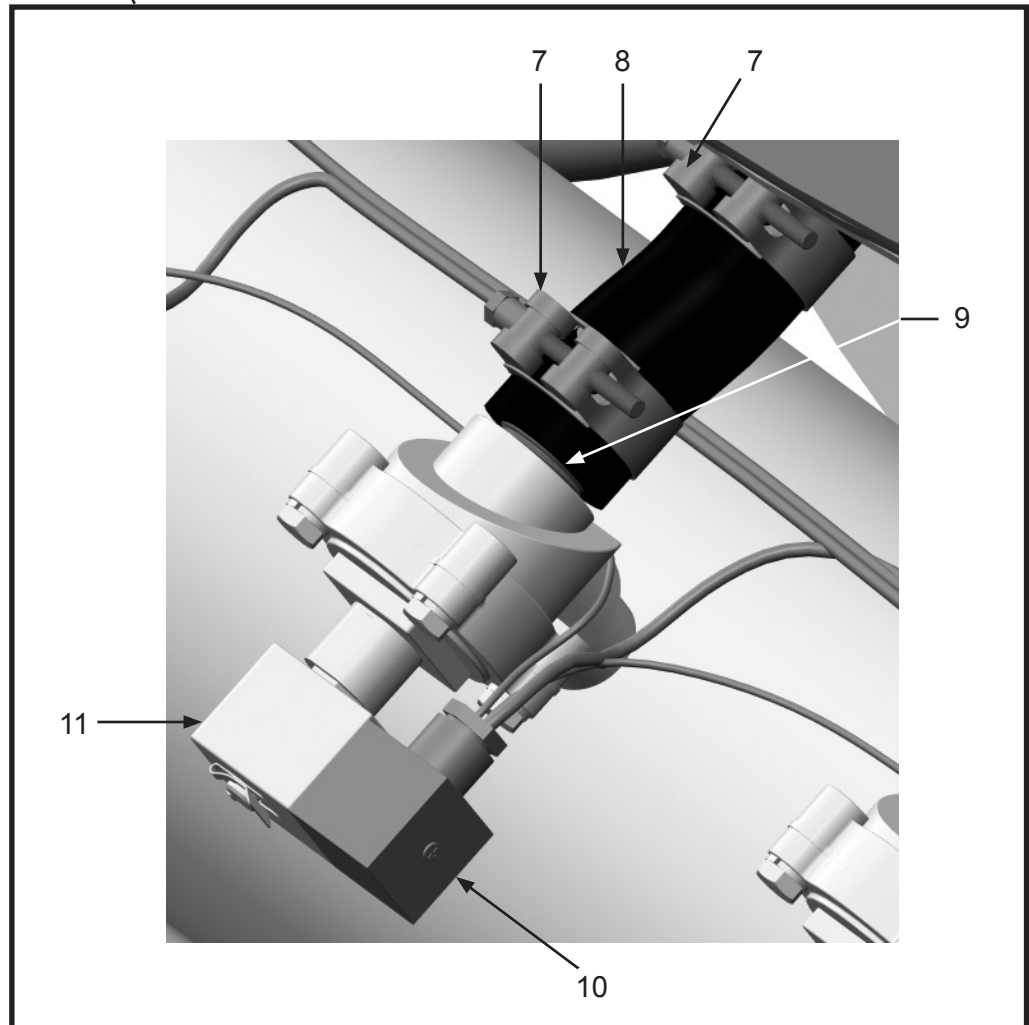
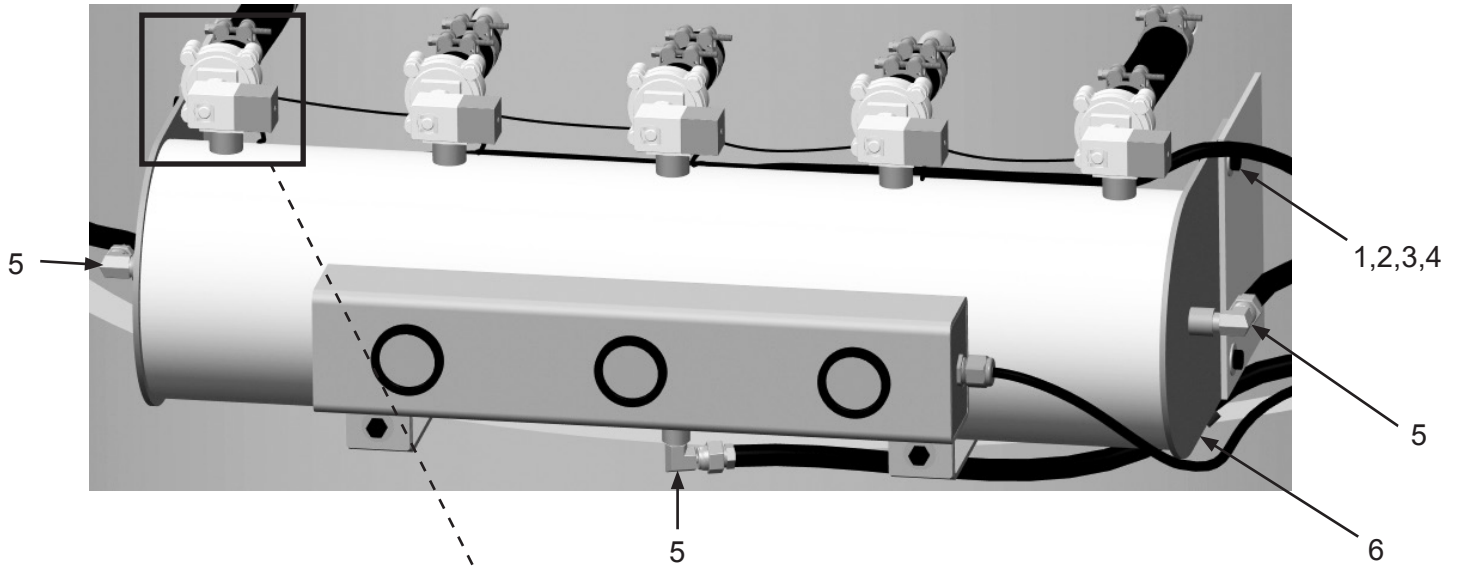
PART NUMBERS AND SCHEMATICS

Pulser System Assembly

Item #	Part #	Description
Fig. 16		
1	10101942	3/8" Flat Washer - Galvanized (<i>Eight Required</i>)
2	10101936	3/8" Lock Washer - Zinc (<i>Four Required</i>)
3	1011747	3/8-16 x 1" Bolt (<i>Four Required</i>)
4	10101938	3/8-16 Hex Nut (<i>Four Required</i>)
5	20PFHA60UA0606	3/8" (M) x 3/8" (F) 90° Swivel Union
6	10104498	Vacuum Header
7	10103736	T-Bolt Hose Clamp For 1" I.D. (<i>10 Required</i>)
8	10106509	1" 75W Marine Hose - 100 PSI
9	10104500	3/4" NPT x 1-1/2" Toe Nipple (<i>Five Required</i>)
10	10105287	Din Connector
11	10104666	3/4" Diaphragm Valve with Solenoid (<i>Five Required</i>)
—	10107192	Pilot Valve Repair Kit
—	10107193	Diaphragm Repair Kit

PART NUMBERS AND SCHEMATICS

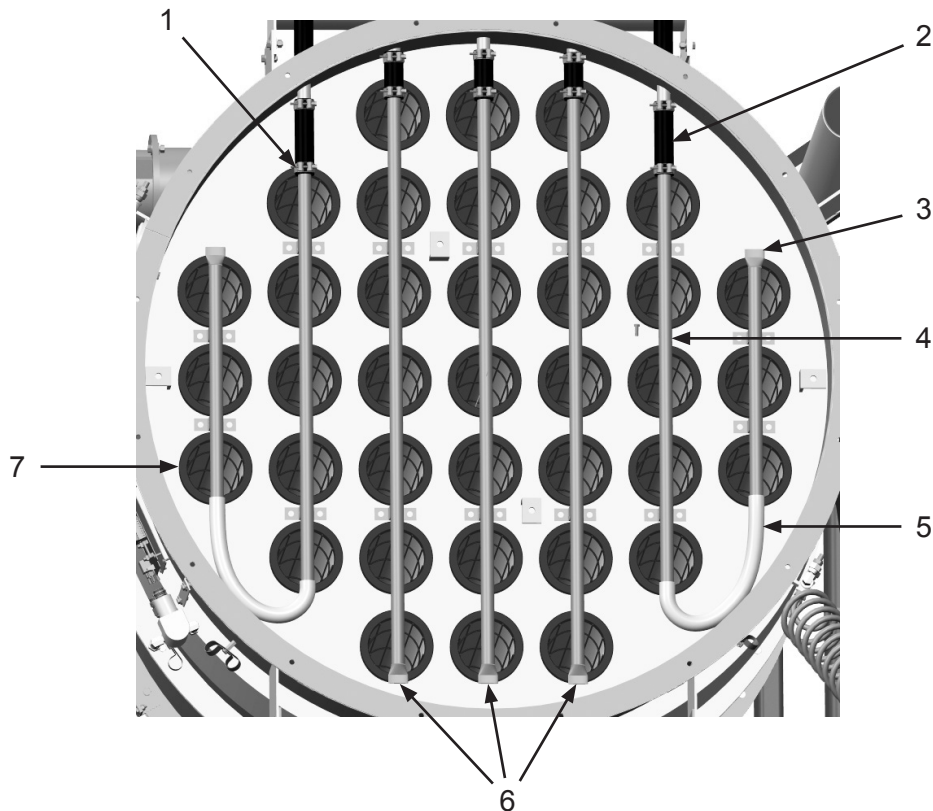
Figure 16: Pulser System Assembly



PART NUMBERS AND SCHEMATICS

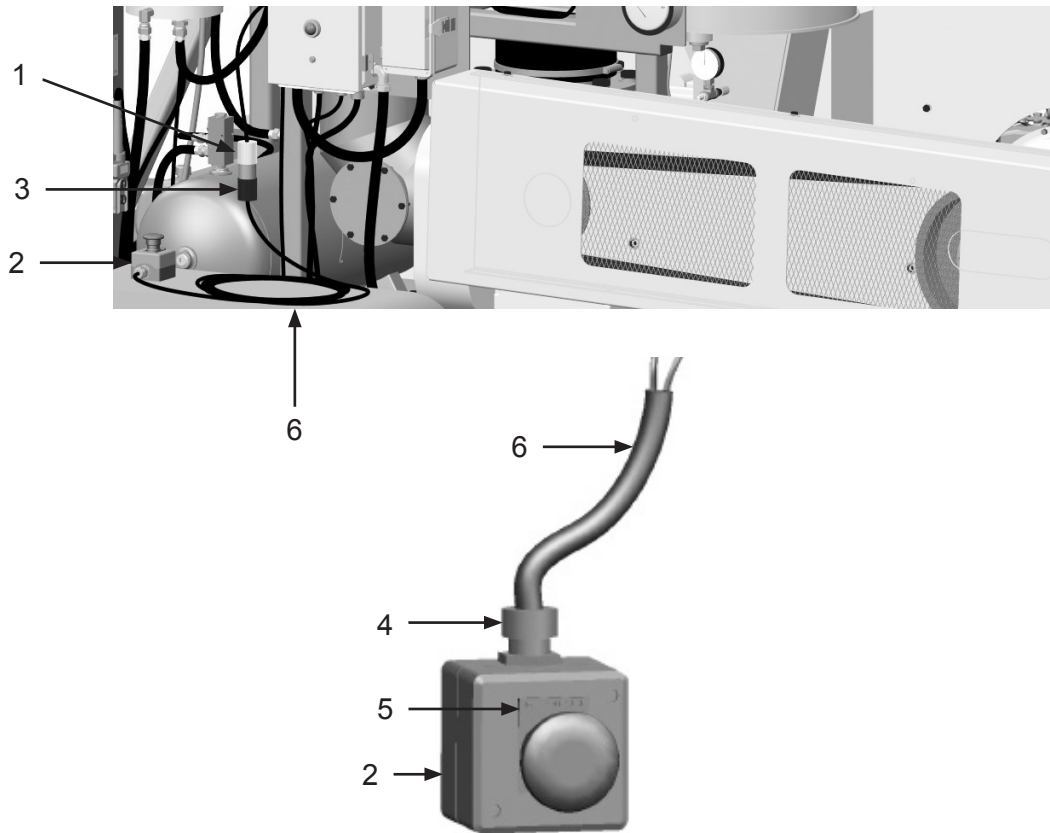
Figure 17: Filter Bag Pulsers

Item #	Part #	Description
Fig. 17		
1	10103736	T-Bolt Hose Clamp For 1" I.D. (10 Required)
2	10106509	1" 75W Marine Hose - 100 PSI
3	10104562	Pulsar System Short Blowpipe (Two Required)
4	10104565	Pulsar System Medium Blowpipe (Two Required)
5	10104680	1" Flexible Tubing For Blowpipes (Two Required)
6	10104567	Pulsar System Long Blowpipe (Three Required)
7	10104633	Vacuum Baghouse Filter (37 Required)
—	10104634	Vacuum Baghouse Filter Cage (37 Required)



PART NUMBERS AND SCHEMATICS

Figure 18: Emergency-Stop Station



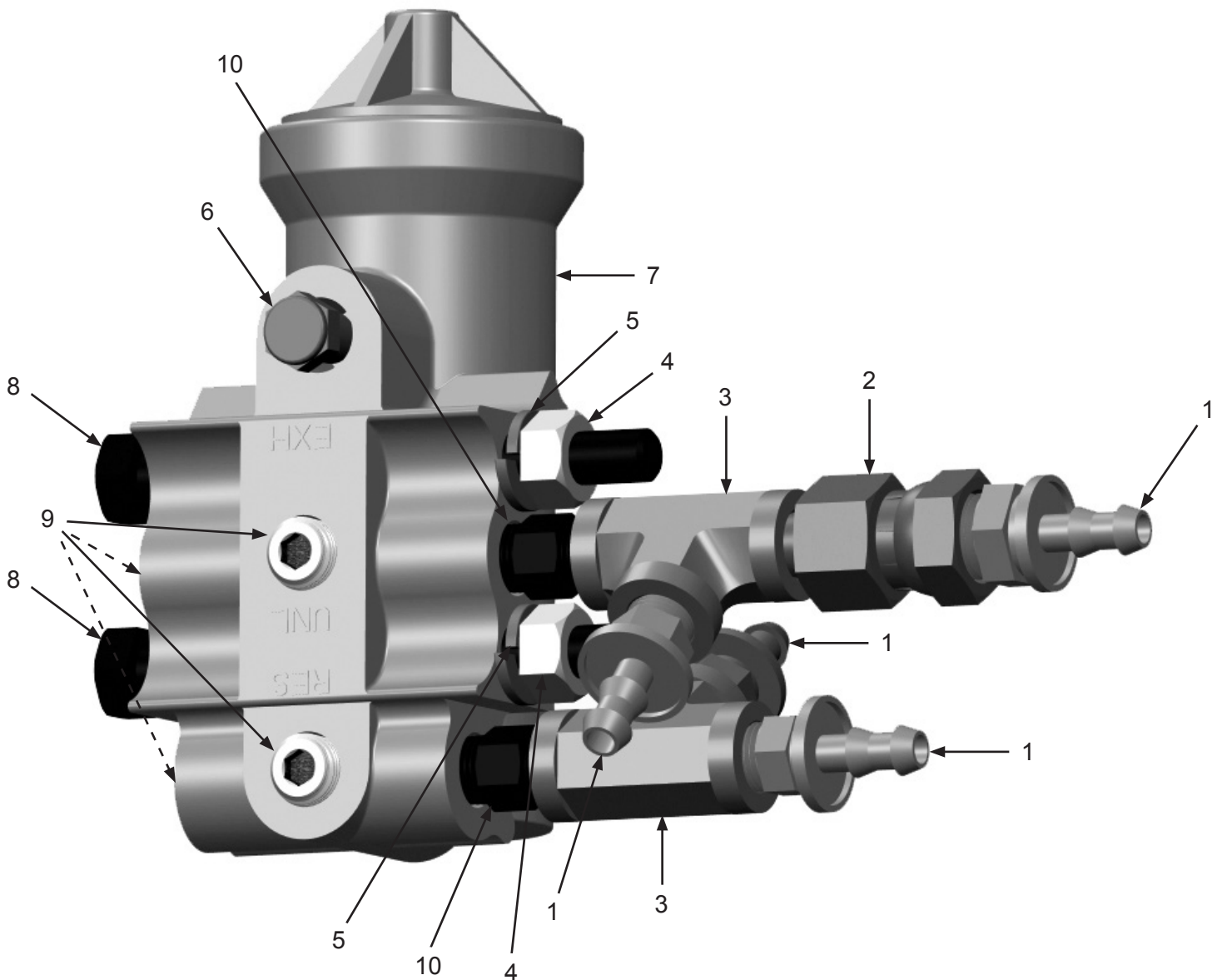
Item #	Part #	Description
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Fig. 18

—	10107200	Remote Emergency-Stop Station <i>(Includes Item #'s: 2, 4, 5, and 6 (100'))</i>
1	1015552	Female Twist Lock Plug Two Prong
2	10104071	E-Stop Control Station
3	1015551	Male Twist Lock Plug Two Prong
4	10104703	Cord Grip, Nylon 1/2"-NPT .2-.47 Diameter
5	10104063	Legend Plate - Emergency Stop
6	1015540	16/2 Xtreme Duty Power Cord - Red
—	1015009	8-32 x 1" Pan Head Phillips Screw <i>(Four Required)</i>
—	20000021	8-32 Zinc Nut <i>(Four Required)</i>
—	20000018	#8 Zinc Lock Washer <i>(Four Required)</i>
—	20000019	#8 Zinc Flat Washer <i>(Four Required)</i>

PART NUMBERS AND SCHEMATICS

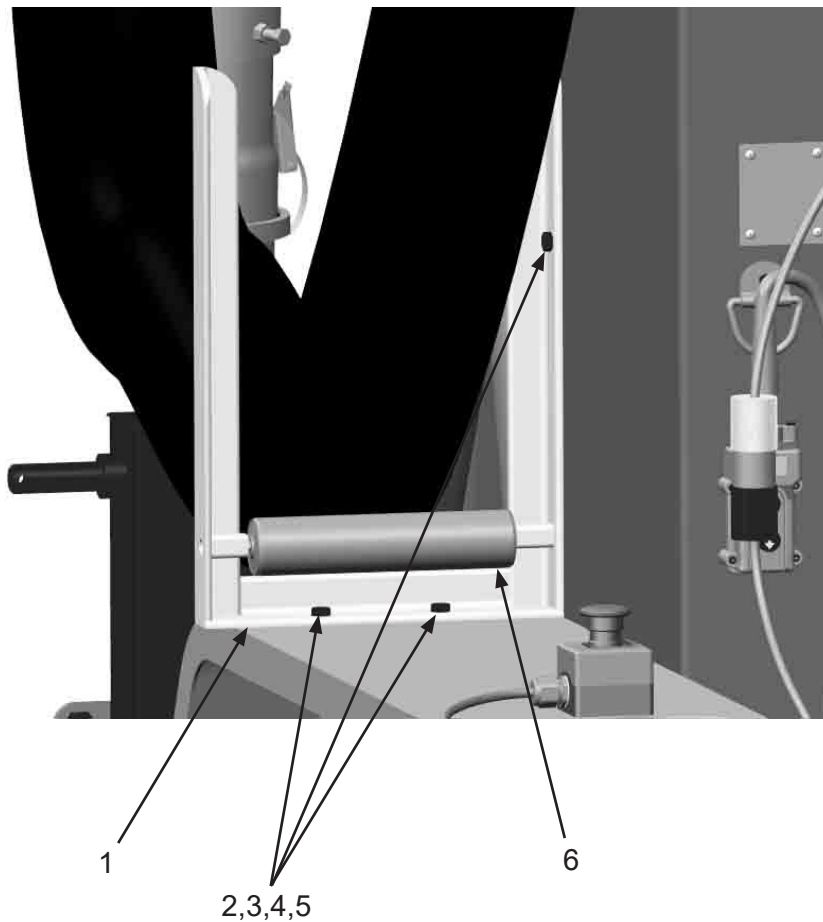
Figure 19: Compressor Governor



Item #	Part #	Description
Fig. 19		
1	10PAF025	1/4" x 1/4" Push-On Fitting (Four Required)
2	20PFHA60SA0204	1/8" (M) x 1/4" (F) Swivel Union
3	20PFHA25VJ02	1/8" Female Tee (Two Required)
4	1035046	5/16-18 Nut (Two Required)
5	10L805014	5/16" Lock Washer (Two Required)
6	1012905	1/8" Breather Muffler
7	10105816	Compressor Governor
8	1014112	5/16-18 x 3-1/4" Hex Bolt (Two Required)
9	10105717	1/8" Hollow Hex Pipe Plug Male (Four Required)
10	20PFHA24SA0202	1/8" Hex Nipple (Two Required)

PART NUMBERS AND SCHEMATICS

Figure 20: Vacuum Hose Support Bracket



Item #	Part #	Description
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Fig. 20

1	10105264	Vacuum Hose Bracket
2	1011747	3/8-16 x 1" Bolt – Zinc (<i>Three Required</i>)
3	10101942	3/8" Flat Washer – Galvanized (<i>Three Required</i>)
4	10101936	3/8" Lock Washer – Zinc (<i>Three Required</i>)
5	10101938	3/8-16 Hex Nut – Galvanized (<i>Three Required</i>)
6	10106374	1.9" Diameter Conveyor Roller – 9" Long

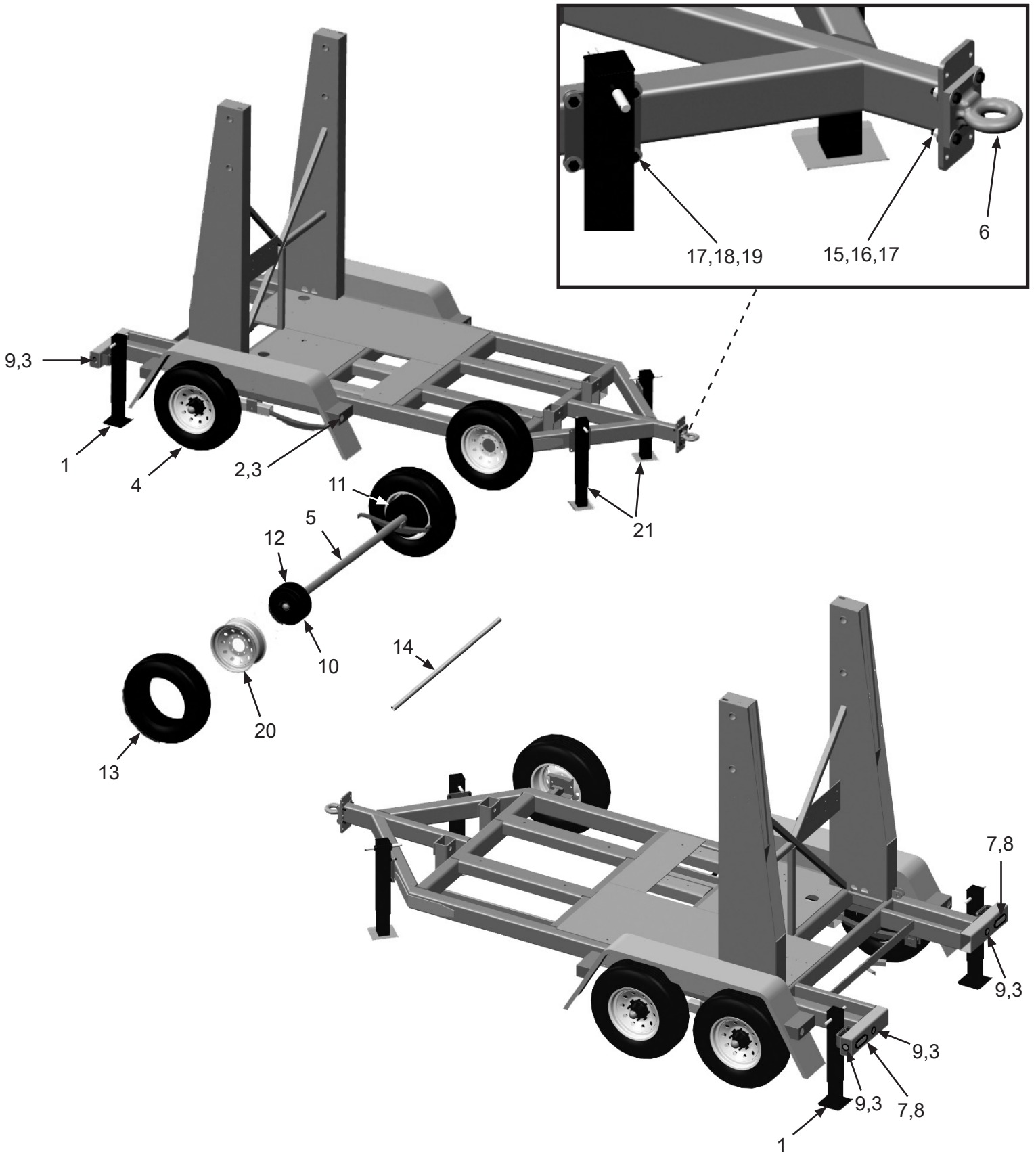
PART NUMBERS AND SCHEMATICS

Trailer

Item #	Part #	Description
Fig. 21		
—	10104455	7 Ton Double Axle Trailer
1	10106418	10,000# Heavy Spring Loaded Jack <i>(Two Required)</i>
2	10104087	2" Round LED Amber Clearance Light <i>(Two Required)</i>
3	10104088	2" Round Rubber Grommet <i>(Six Required)</i>
4	10104089	16" - 8 Hole Pattern Rim with Tire <i>(Four Required)</i>
5	10106084	7,000# Axle With Electric Brakes, Complete with Hubs and Springs 89" HF x 71" SC
6	10104079	Pintle Hitch with Flat Plate
7	10104085	Oval Rubber Grommet <i>(Two Required)</i>
8	10104084	Oval LED Red Tail Light <i>(Two Required)</i>
9	10104086	2" Round LED Red Clearance Light <i>(Four Required)</i>
10	10106086	Axle Hub Only – No Bearings or Seal <i>(Two Required)</i>
11	10106088	Right-Hand Electric Brake Assembly <i>(Two Required)</i>
12	10106087	Left-Hand Electric Brake Assembly <i>(Two Required)</i>
13	10104096	Tire – ST235/85R/16 – 14-ply <i>(Four Required)</i>
14	10106085	Axle Beam/Tube Only
15	10105746	5/8 x 2-1/2" Grade 8 Bolt <i>(16 Required)</i>
16	10105747	5/8" Reverse Lock Nut <i>(16 Required)</i>
17	10103398	5/8" Flat Washer <i>(40 Required)</i>
18	10103397	5/8" x 2" Grade 8 Bolt <i>(Four Required)</i>
19	10103393	5/8" Reverse Lock Nut <i>(Four Required)</i>
20	10107126	16" x 6" - 8-Hole White Rim
21	10109737	Front Trailer Jack <i>(Two Required)</i>
—	10105826	Redline 12V - 5AH Battery Sealed
—	10104081	Breakaway Kit
—	10104142	Wire Harness – Complete <i>(Front, Middle & Rear)</i>
—	10105827	Breakaway Switch with Pin
—	10104769	3/8" x 41" Safety Chain with Hook
—	10103879	2" x 6" x 6" Red/White Conspicuity Tape
—	10105829	Cable with Plug
—	10107329	Sidewind Crank

PART NUMBERS AND SCHEMATICS

Figure 21: Trailer



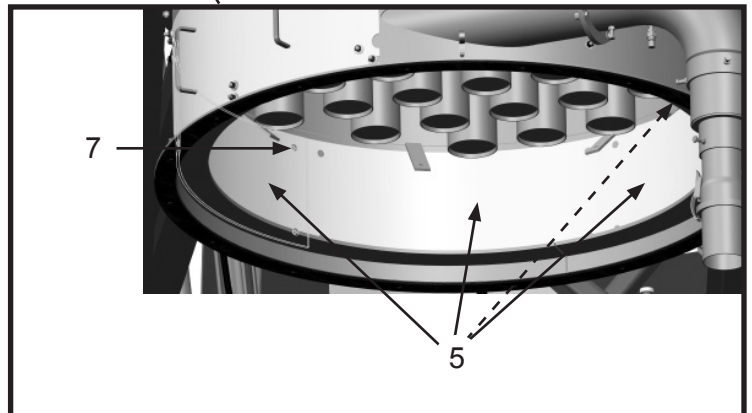
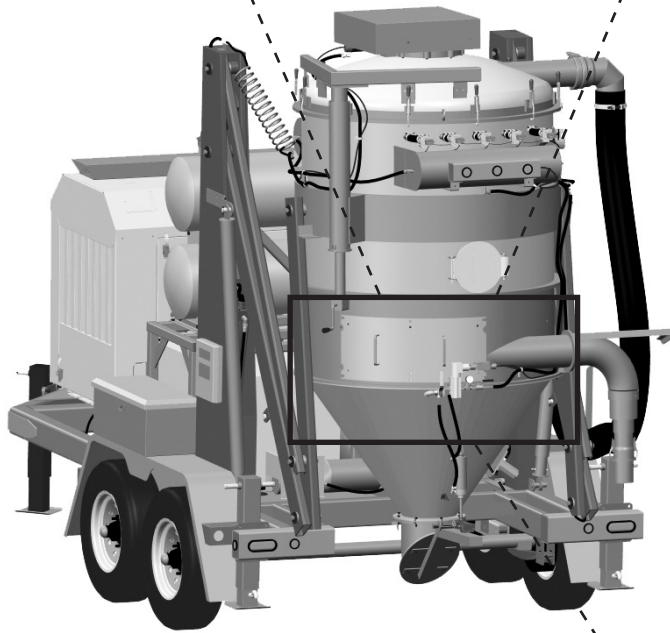
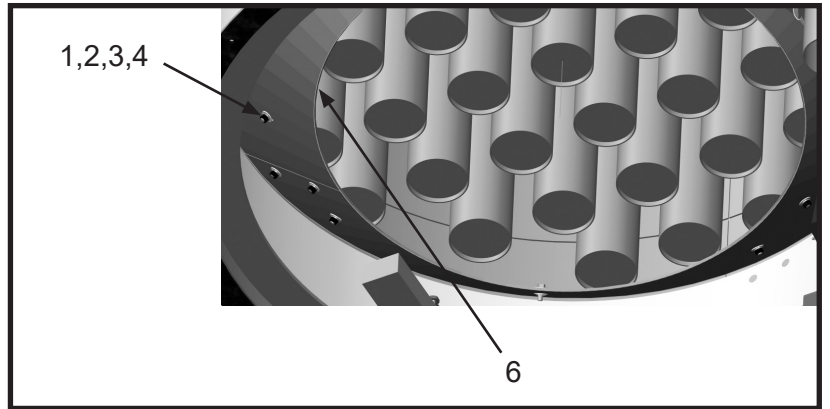
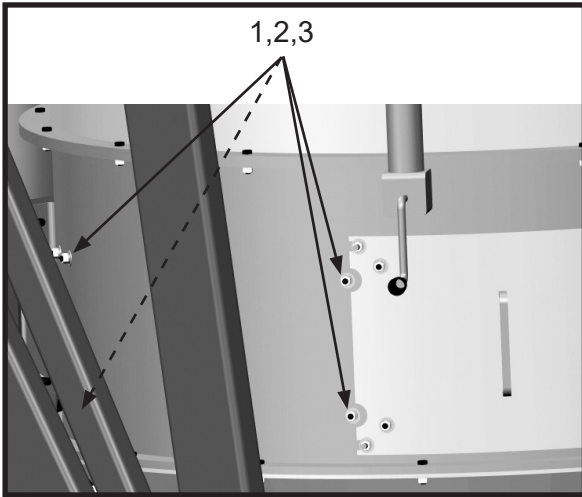
PART NUMBERS AND SCHEMATICS

Wear Plates and Baffles

Item #	Part #	Description
Fig. 22		
1	10101942	3/8" Flat Washer - Galvanized (35 Required)
2	10101936	3/8" Lock Washer - Zinc (35 Required)
3	10101938	3/8-16 Hex Nut (35 Required)
4	1011747	3/8-16 x 1" Bolt (15 Required)
5	10104489	Vacuum Wear Plates (Four Required)
6	10104490	Vacuum Baffle (Three Required)
7	10104705	3/8-16 x 1" Bolt Zinc (16 Required)

PART NUMBERS AND SCHEMATICS

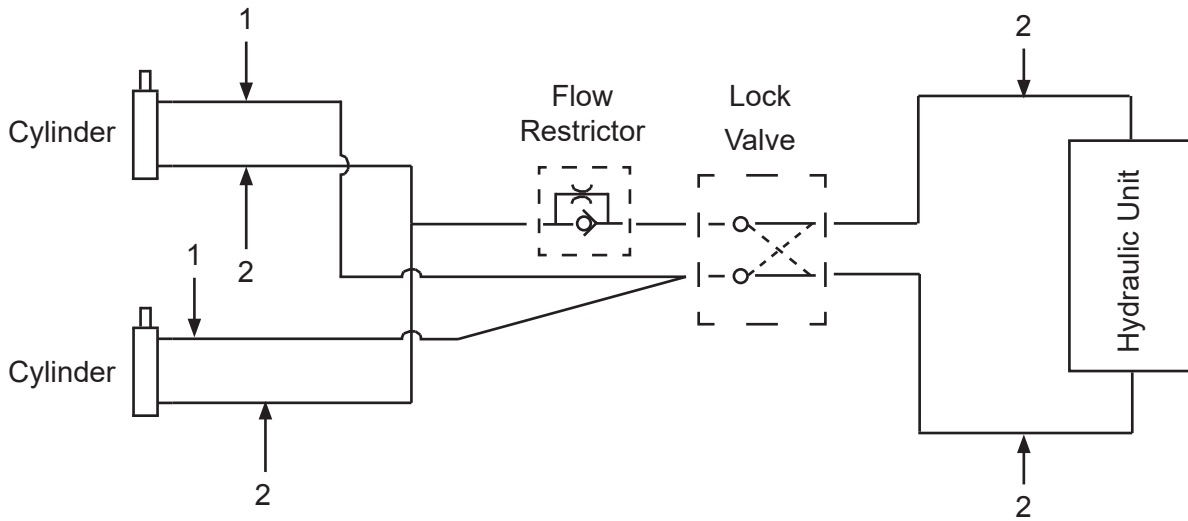
Figure 22: Wear Plates and Baffles



PART NUMBERS AND SCHEMATICS

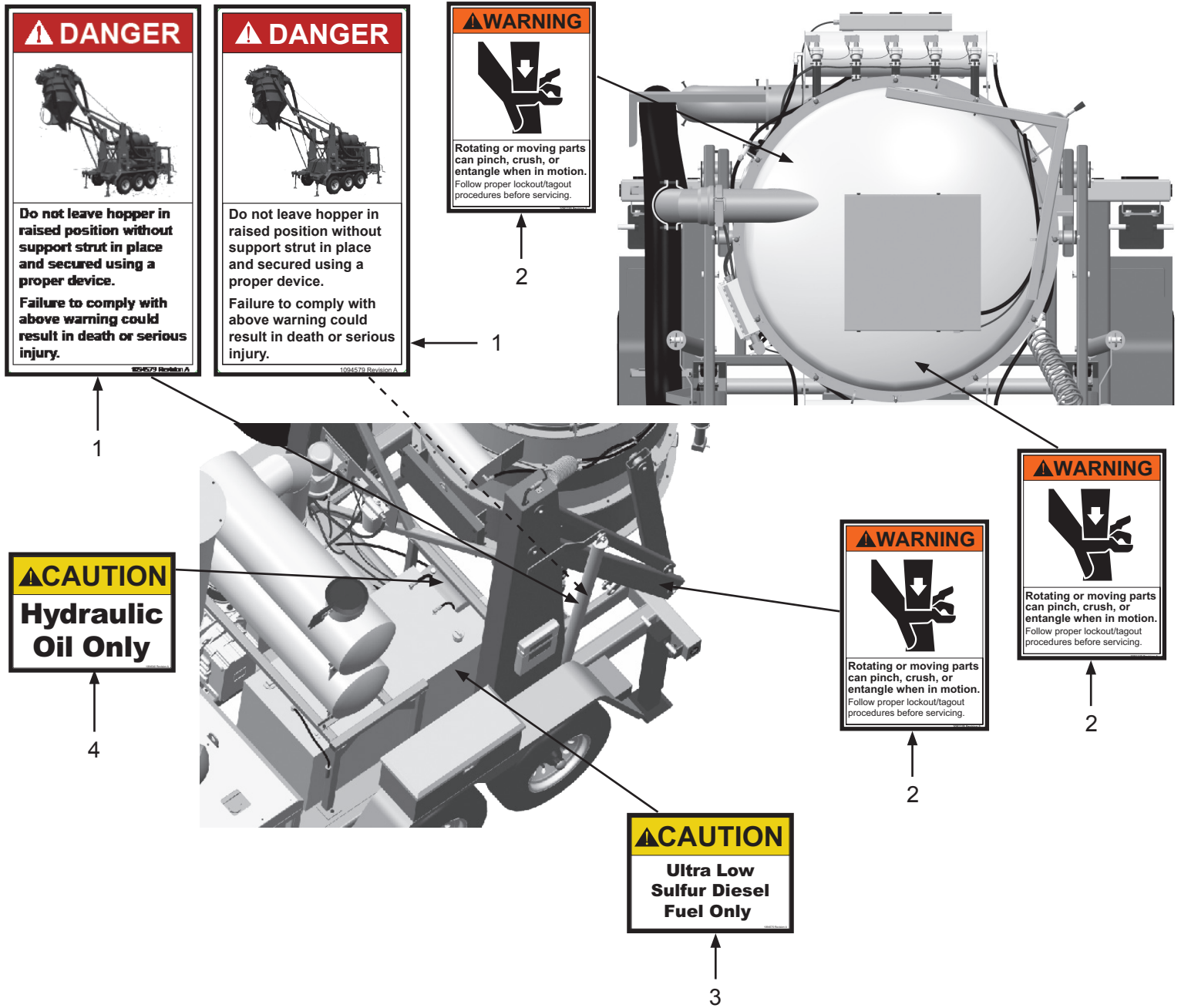
Figure 23: Hydraulic Hoses

Item #	Part #	Description
1	10104664	Hydraulic Hose – 3/8" I.D. x 8' – 2600 PSI
2	10104663	Hydraulic Hose – 3/8" I.D. x 5' – 2600 PSI



PART NUMBERS AND SCHEMATICS

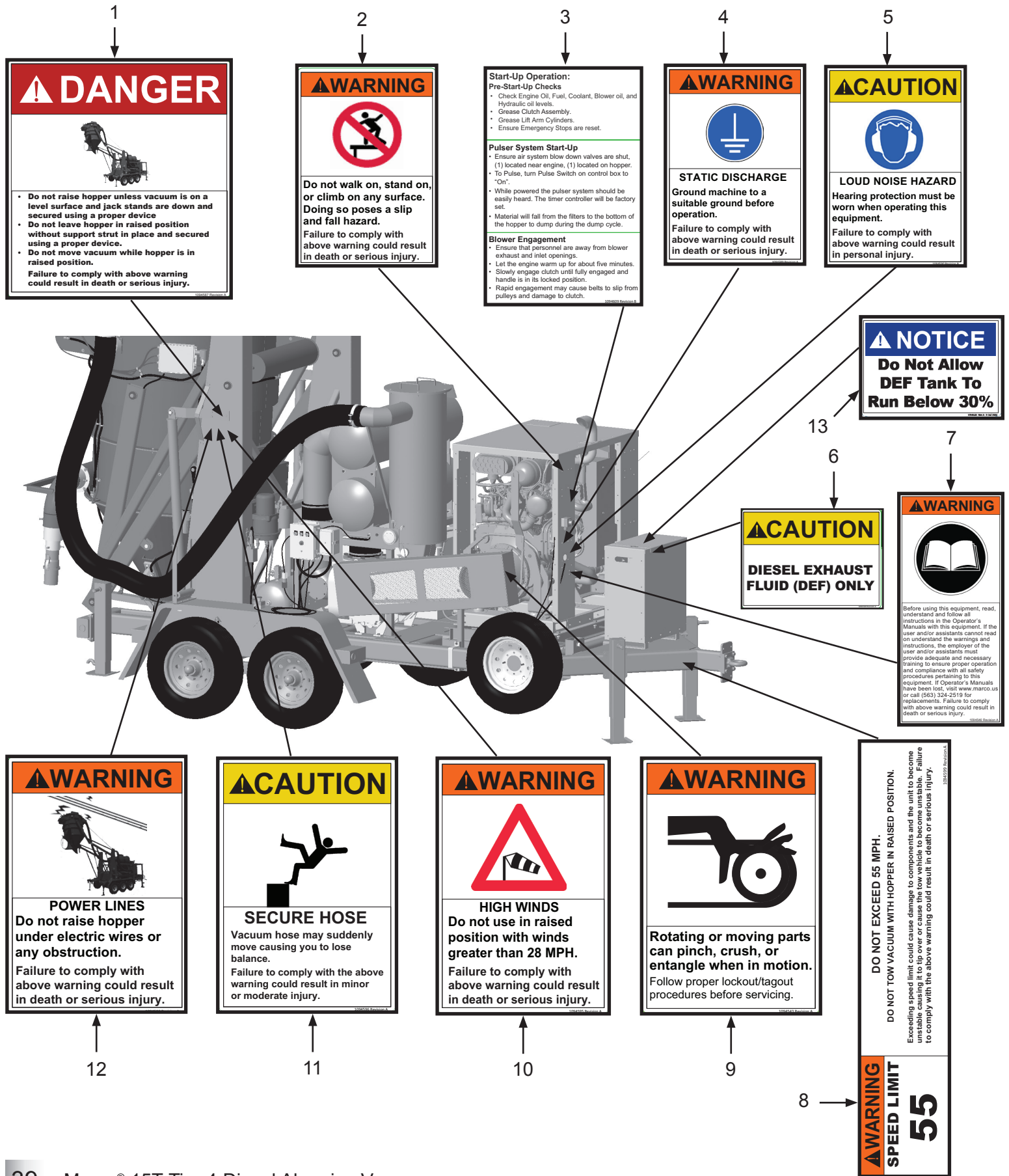
Figure 24: Hazard Identification Decals



Item #	Part #	Description
1	1094579	Hopper Position Danger Decal
2	1091135	Rotating or Moving Parts Warning Decal
3	1094570	Ultra Low Sulfur Diesel Fuel Only Caution Decal
4	1094540	Hydraulic Oil Only Caution

PART NUMBERS AND SCHEMATICS

Figure 25: Hazard Identification Decals (Cont.)




PART NUMBERS AND SCHEMATICS

Figure 25: Hazard Identification Decals (Cont.)

Item #	Part #	Description
Fig. 25		
1	1094587	Do Not Raise Hopper Danger Decal
2	1094591	Do Not Climb On Warning Decal
3	1094609	Start-Up Operation Decal
4	1094589	Static Discharge Warning Decal
5	1094590	Loud Noise Hazard Warning Decal
6	1094569	Diesel Exhaust Fluid Only Warning Decal
7	1094546	Read Manual Warning Decal
8	1094599	Speed Limit Warning Decal
9	1094543	Rotating or Moving Parts Warning Decal
10	1094595	High Winds Warning Decal
11	1094596	Secure Hose Caution Decal
12	1094592	Power Line Warning Decal
13	1094638	DEF Tank Level Notice Decal
14	1094636	Diesel Vacuum Start-Up/Shut-Down Instructions

14 →



For Service or Parts Call:
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**DIESEL VACUUM START-UP/
 SHUT-DOWN INSTRUCTIONS**

VACUUM UNIT START-UP:

1. Start Engine.
2. Allow compressed air system to build pressure to 100 psi before vacuum use.
3. Before lifting hopper, lower jacks. Raise hopper and install locking pins.
4. Plug in E-stop pendant near vacuum controls. Pull red knob out.
5. Set desired time on vacuum timer for vacuum cycle.
6. Ensure engine is at low idle. Engage engine clutch.
7. Move Vacuum switch to "ON" position.
8. Move Pulse switch to "ON" position.
9. Move Vibrator switch to "ON" position.
10. Start Vacuuming.

VACUUM UNIT SHUT DOWN:

1. Allow material to clear vacuum hose.
2. Ensure engine is at low idle. Disengage clutch.
3. Move vacuum switch to "OFF" position.
4. Allow pulse system to operate for 5 minutes.
5. Move vibrator switch to "OFF" position
6. Turn off engine.
7. Drain air tanks.

VACUUM UNIT TRANSPORTATION:

1. Ensure hopper is empty and discharge door is secured in the closed position.
2. Shut down unit.
3. Remove hopper safety supports from lift arms; secure to trailer.
4. Push "LOWER" button to lower hopper from raised position.
5. Disconnect vacuum hose from inlet elbow.
6. Raise rear trailer support jacks before transport.
7. Tow unit with proper tow vehicle with electric brake controller.

Do not exceed 55 mph speed limit. 1094636_Rev A_Diesel Vacuums

PART NUMBERS AND SCHEMATICS

Figure 26: Hazard Identification Decals (Cont.)



PART NUMBERS AND SCHEMATICS

Figure 26: Hazard Identification Decals (Cont.)

Item #	Part #	Description
Fig. 26		
1	1094594	Do Not Open Door Warning Decal
2	1094581	No Not Vacuum Flammable Material Danger Decal
3	1094579	Hopper Position Danger Decal
4	1091135	Rotating or Moving Parts Warning Decal
5	1094580	Stay Clear Warning Decal
6	1094586	Powerful Suction Warning Decal
7	1091054	Confined Space Warning Decal

Maintenance Tools

Item #	Part #	Description
1	10HDW300969	Grease
2	10110807	Grease Gun
3	10110809	Oil Wrench - Socket Style
4	10110808	Oil Wrench - Strap Style




OPTIONAL ACCESSORIES








**Part
Numbers**

VACUUM HOSE							
Vacuum Hose I.D.	Length	Vacuum HG	Cover Material	Reinforcement Material	Liner	Hose Color	
10VH11250	1-1/2"	50 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Black
10VH225	2"	25 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH250	2"	50 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH200	2"	100 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH2550	2-1/2"	50 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH325	3"	25 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH350	3"	50 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH300	3"	100 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH425	4"	25 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH450	4"	50 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH400	4"	100 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH525	5"	25 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH550	5"	50 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH500	5"	100 Ft.	29"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH625	6"	25 Ft.	25"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH650	6"	50 Ft.	25"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH600	6"	100 Ft.	25"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH825	8"	25 Ft.	25"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue
10VH850	8"	50 Ft.	25"	Pliovic®	Pliovic® PVC Helix	Polyurethane	Blue



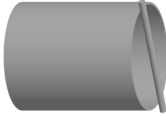
OPTIONAL ACCESSORIES

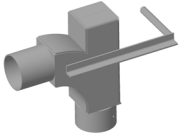
		VACUUM HOSE REDUCERS	
Part Numbers		Size	
	10106712	8" x 4"	
	10106716	6" x 4"	
	10106872	6" x 5"	

		WYE ADAPTERS	
Part Numbers		Size	
	10106719	4" x 2" x 2"	
	10107485	6" x 2" x 2"	
	10106723	6" x 4" x 4"	
	10106727	8" x 4" x 4"	

		VACUUM HOSE MENDERS			
Part Numbers		Vacuum Hose I.D.	Mender Length	Thickness	Material
	10HM2	2"	8"	1/8"	Steel
	10HM3	3"	9"	1/8"	Steel
	10HM4	4"	10"	1/8"	Steel
	10HM5	5"	11"	1/8"	Steel
	10HM6	6"	12"	1/8"	Steel
	10HM8	8"	14"	1/8"	Steel

OPTIONAL ACCESSORIES

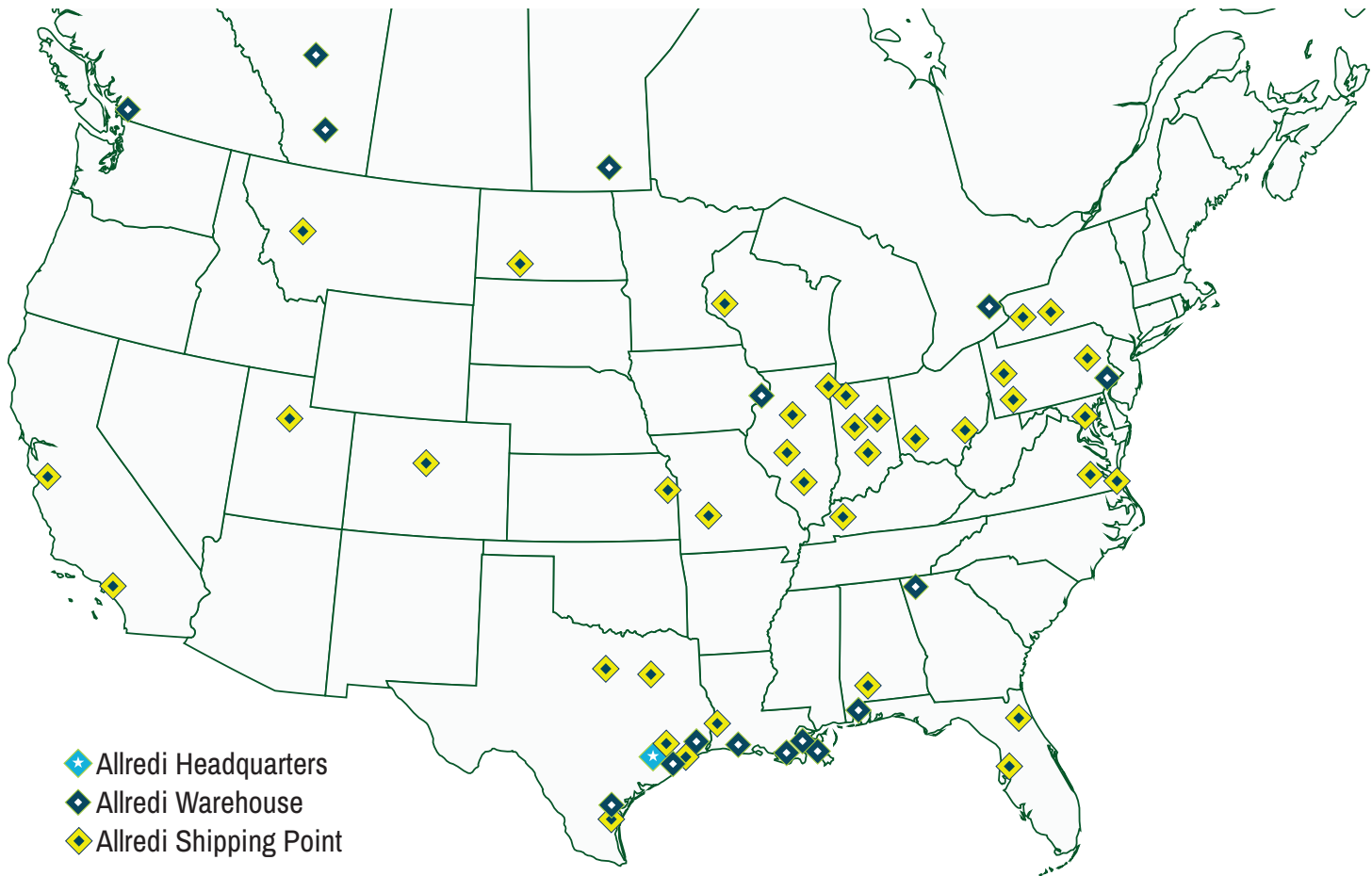
Part Numbers		VACUUM HOSE INSERTS
		Size
	10104831	4"
	10104828	5"
	10104825	6"

Part Numbers		HOSE INLET ELBOW
		Description
	10110840	Heavy-Duty Hose Elbow

LITERATURE REFERENCES

Vacmaster® 15T Tier 4 Diesel Abrasive Vacuums

106M166	Part Numbers & Schematics Guide - Vacmaster® 15T Tier 4 Diesel Abrasive Vacuums
1090166	Operator's Manual - Vacmaster® 15T Tier 4 Diesel Abrasive Vacuums
109V044	Operator's Manual - Perkins® Engine
109V521	Operator's Manual - Blower
109V582	Operator's Manual - Behnke Trailer



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