



DUSTMASTER® 50,000 CFM TIER III DIESEL XTREME-DUTY® DUST COLLECTORS



BUILT MARCO
TOUGH
MARCO MANUFACTURED

PART NUMBERS AND SCHEMATICS GUIDE

Company Profile

Since 1944, Marco has developed a strong tradition of providing innovative and reliable products and services to the surface preparation and protective coatings industries. We are the world's premier provider of Abrasives, Blasting, Coating, Dust Collectors, Engineered Systems, Rental, Safety, Service, Repair, & Modernization, and Vacuums.

Through innovative designs and a total commitment to quality, Marco manufactures products that increase production rates, create a safer workplace, and reduce maintenance costs. Marco's industry experience, manufacturing capabilities, legendary customer service, product availability, logistics services, and technology leadership is your assurance that we deliver high quality products and services, providing the best value to you, our customer.

The Marco Difference

- **Industry Experience** – With Marco 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 a Marco customer, you have access to hundreds of years of cumulative experience related to your operations.
- **Manufacturing Excellence** – Marco is a U.S. based, ISO 9001:2008 certified manufacturer of equipment for the Surface Preparation and Protective Coatings industries. Marco'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** – Marco'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 more than 45 shipping locations to serve North American and International markets for all major brands of blasting and coating equipment. As the largest provider of surface preparation and protective coatings equipment in the world, our inventory levels and product availability are unmatched.
- **Logistics Services** – Marco's in-house logistics team is dedicated to moving your shipment anywhere in the world. We move more than 14,000 truckloads every year, allowing you to save on freight costs by leveraging our buying power. Lower your process costs with a single invoice, which includes product and freight.
- **Technology Leadership** – Our website provides: Operator's Manuals, Part Numbers and Schematics Guides, SDS information, and Features & Specifications Guides, providing access to information 24/7. Our Extranet application allows you to receive quotes and place orders online. Our Intranet maintains a complete record of your purchase history to assist with ongoing support of your existing equipment and future purchasing decisions.

Vision Statement

Marco is the world's premier provider of Abrasives, Blasting, Coating, Dust Collectors, Engineered Systems, Rental, Safety, Service, Repair, & Modernization, and Vacuums.

Mission Statement

Marco provides strong leadership and innovation to the surface preparation and protective coatings industries. We dedicate our efforts to the continuous improvement of our products, services, processes, people, and most importantly, the quality of our customer's experience.

Quality Statement

Marco is committed to providing superior quality in the design, manufacturing, distribution, rental, service, and repair of our products. Our ISO 9001:2008 certification extends throughout all operations in all locations. Continuous improvement of our processes and supply chain Integration comprise the core of our business strategy for delivering exceptional quality and value in all Marco products and services.

Management Philosophy

We are a company dedicated to the success of every customer and associate. We discuss, debate, challenge, measure, and test our ideas. We will be boundless and limitless in our passion to improve. Through sound leadership and dedicated associates, we will ensure a long term, profitable future for Marco, our associates, customers, and suppliers.

TABLE OF CONTENTS

Company Profile	2	Dust Collector Filter Cartridge Hatch Door	41
Part numbers	4	Emergency-Stop Stations	42
Specifications	5	Trailer	43
Assembly Part Numbers and Schematics . 6		Optional Accessories	44
Fuel Tank	7	Literature References	46
Hydraulic Oil Filter Assembly	8		
Fan Exhaust	9		
Hydraulic Oil Tank	10		
Hydraulic Hoses	12		
Fan Belt Guard Back Assembly	13		
Fan Belt Assembly	14		
Fan Assembly	16		
Main Auger Drive Assembly	17		
Main Auger Bearing	18		
Main Auger Motor	19		
Main Auger	20		
Access Panel Assembly	21		
Main Auger Protective Grate	22		
Left Side Pneumatic Ball Vibrators	23		
Right Side Pneumatic Ball Vibrators	24		
Pulser Regulator and Timer Assembly	25		
Pulser System Assembly	26		
Pulser Solenoid Enclosure Assembly	28		
Discharge Auger Clean-out Assembly	29		
Discharge Auger Assembly - Trailer	30		
Discharge Auger Assembly - Skid	32		
Discharge Auger Drive Assembly	34		
Discharge Augers	36		
Hydraulic Pump	37		
Hydraulic Control Assembly	38		
Inlet Door Assembly	39		
Dust Collector Filter Cartridge Pulsers	40		

DUSTMASTER® 50,000 CFM TIER III DIESEL XTREME-DUTY® DUST COLLECTORS									
Part Numbers	Filter Cartridge Material						Trailer	Skid	Filter Cartridge Quantity
	None	85/15 Blend High Density Pleat Filters	85/15 Blend Reduced Pleat Filters	Fire Retardant	HEPA	Spunbond			
10105946	X						X		—
10105947		X					X		56
10106217			X				X		56
10105948				X			X		56
10105949					X		X		56
10105950						X	X		56
10106685	X							X	—
10106687		X						X	56
10106688			X					X	56
10106689				X				X	56
10106690					X			X	56
10106691						X		X	56

Complete unit with tier III diesel engine no longer available. Part numbers listed for service reference.

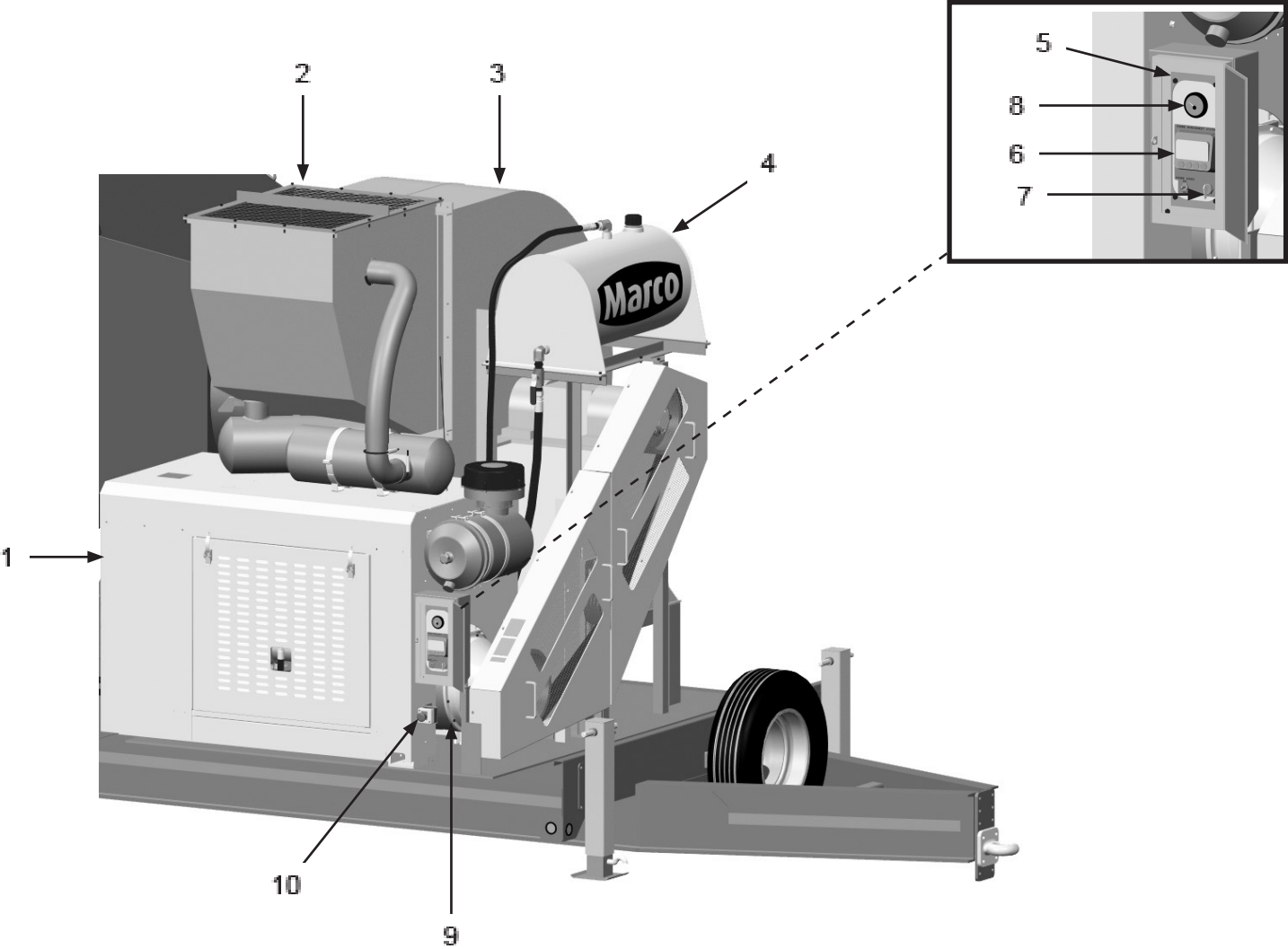


SPECIFICATIONS

Capacity:	CFM = 36,880 – 50,490 W.C. = 6 – 16"
Filter Cartridge Style:	Open Top with Flange, Closed Bottom 56 Required
Filter Cleaning:	Pulse System, 5–15 second intervals Pulse Duration: 200–350 millisecond
Air to Cloth Ratio:	3.43:1 @ 40,000 CFM
Filter Area:	11,662 square feet
Efficiency:	85/15 Blend High Density Pleat Filters – 99.8% @ 0.5 micron 85/15 Blend Reduced Pleat Filters – 99.8% @ 0.5 micron HEPA Filters – 99.99% @ 0.3 micron Fire Retardant Filters – 96.8% @ 2.0 micron Spunbond Filters – 97% @ 3.0 micron
Ducting Connections:	20" I.D., Quantity of Six
Clean-Out Ports:	One
Dust Removal Conveyor:	Main Auger, 6" Discharge Auger, Hydraulic Motor Drive
Fan:	Backward Inclined, non-overloading, spark resisting
Engine:	Diesel, Tier III, 174 Horsepower
Fuel Capacity:	Type: Diesel Capacity: 116 Gallons
Air Requirements:	Clean, Dry, Compressed Air 24 CFM @ 90 PSI
Electrical System:	12-Volt DC
Engine Protection:	Engine Monitoring System with automatic shutdown measures: coolant temperature, intake air temperature, engine intake manifold pressure, engine oil pressure, pressure in fuel rail, engine speed and timing.
Fluid Specifications:	Hydraulic Oil: H46 or equivalent, 40 Gallons Diesel Fuel: See Engine Operator's Manual for type, 116 Gallons Grease/Lubricator: Shell Alvania Grease EP or equivalent
Unit Dimensions Trailer:	Weight: 19,900 pounds (empty) Tongue Weight: 3,980 pounds Length: 36' 3" Width: 8' 6" Height: 11' 2"

ASSEMBLY PART NUMBERS AND SCHEMATICS

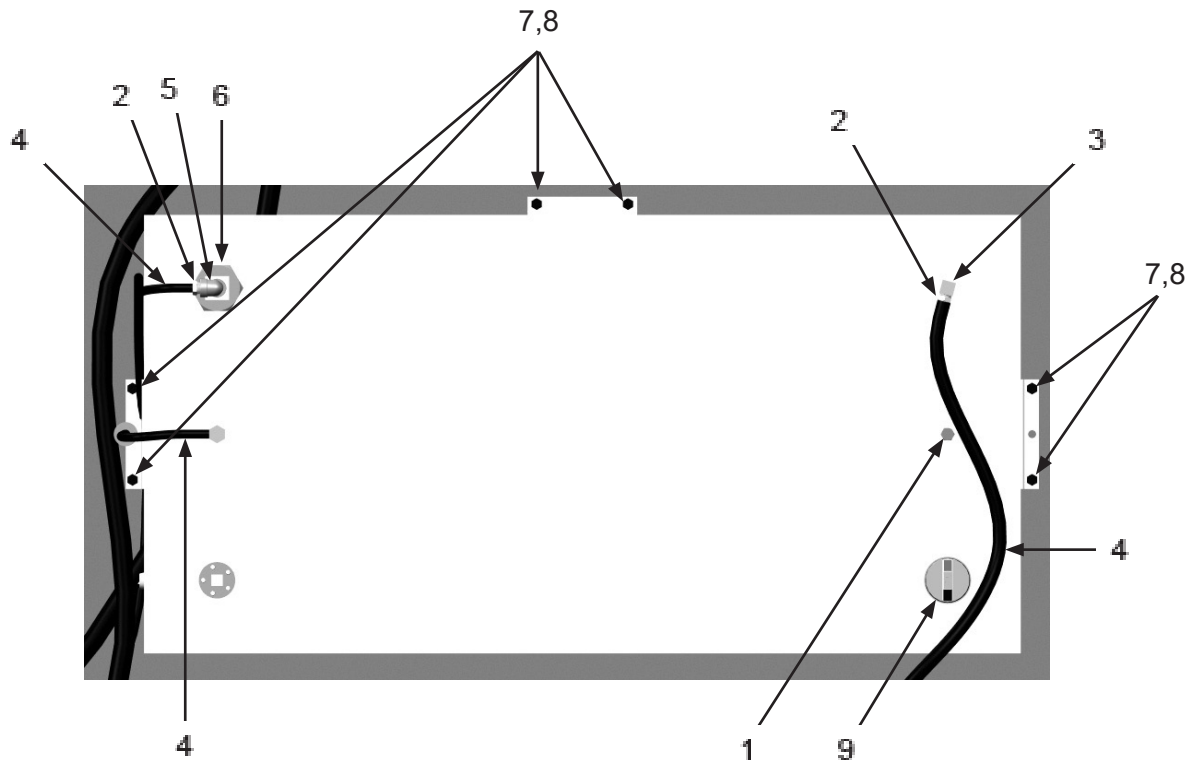
Figure 1: Front Assembly



Item#	Part#	Description
Fig. 1		
1	10103494	Perkins Engine 174 HP Tier 3
2	10105951	Fan Exhaust Assembly
3	10103495	Fan BI-365 TH ARRG I Class IV (See Figure 9)
4	10105031	40 Gallon Hydraulic Tank (See Figure 5)
5	10103972	Engine Control Panel Includes Item #'s: 6,7
6	10103969	Murphy® PowerView™ Gauge
7	10103970	Key
8	10104821	Analog Fuel Level Gauge
9	10103986	Twin Disc Clutch
10	10104062	Emergency-Stop Station (See Figure 31)

PART NUMBERS AND SCHEMATICS

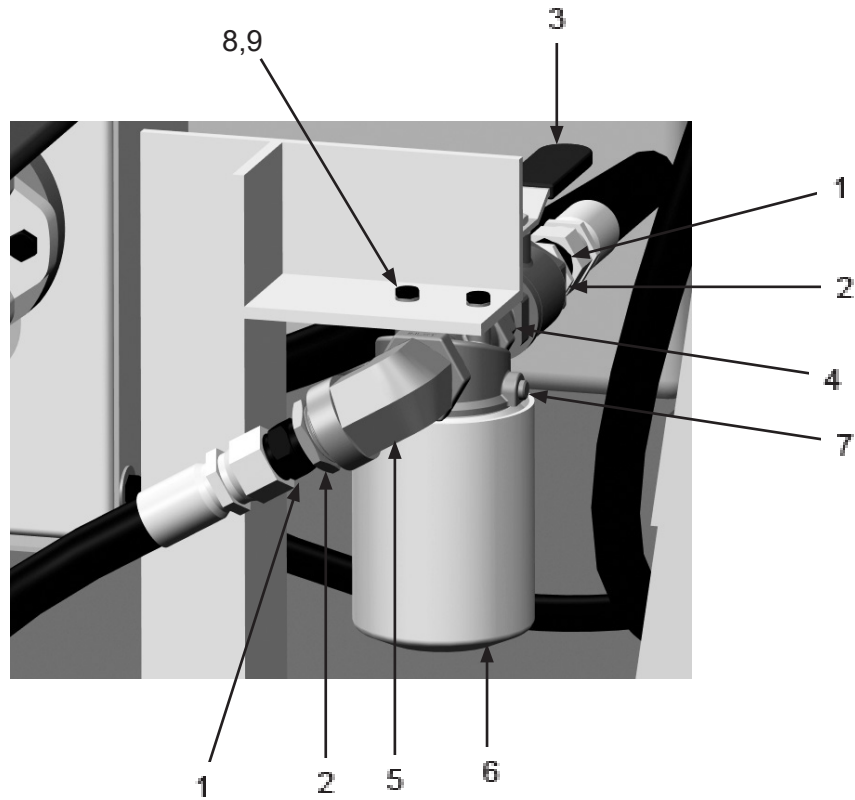
Figure 2: Fuel Tank



Item #	Part #	Description
Fig. 2		
—	10104704	Fuel Tank - 116 gallon
1	10106471	1/4" Pipe Plug
2	10106469	3/8" Barb x 3/8" NPT
3	10103617	16" Withdraw Tube
4	10103619	1/2" Fuel Hose (<i>Per Foot</i>)
5	10106470	3/8" NPT Street Elbow
6	10106484	Adapter
7	10104234	3/8-16 x 1-1/4" Bolt Zinc (<i>Six Required</i>)
8	1012318	3/8-16 Hex Nut (<i>Six Required</i>)
9	10103968	Locking Fuel Cap with Key
—	10103620	3/8" Inline Filter (<i>Not Shown</i>)
—	10103961	Fuel Tank Rubber Cushioning Pad (<i>Not Shown</i>)

PART NUMBERS AND SCHEMATICS

Figure 3: Hydraulic Oil Filter Assembly



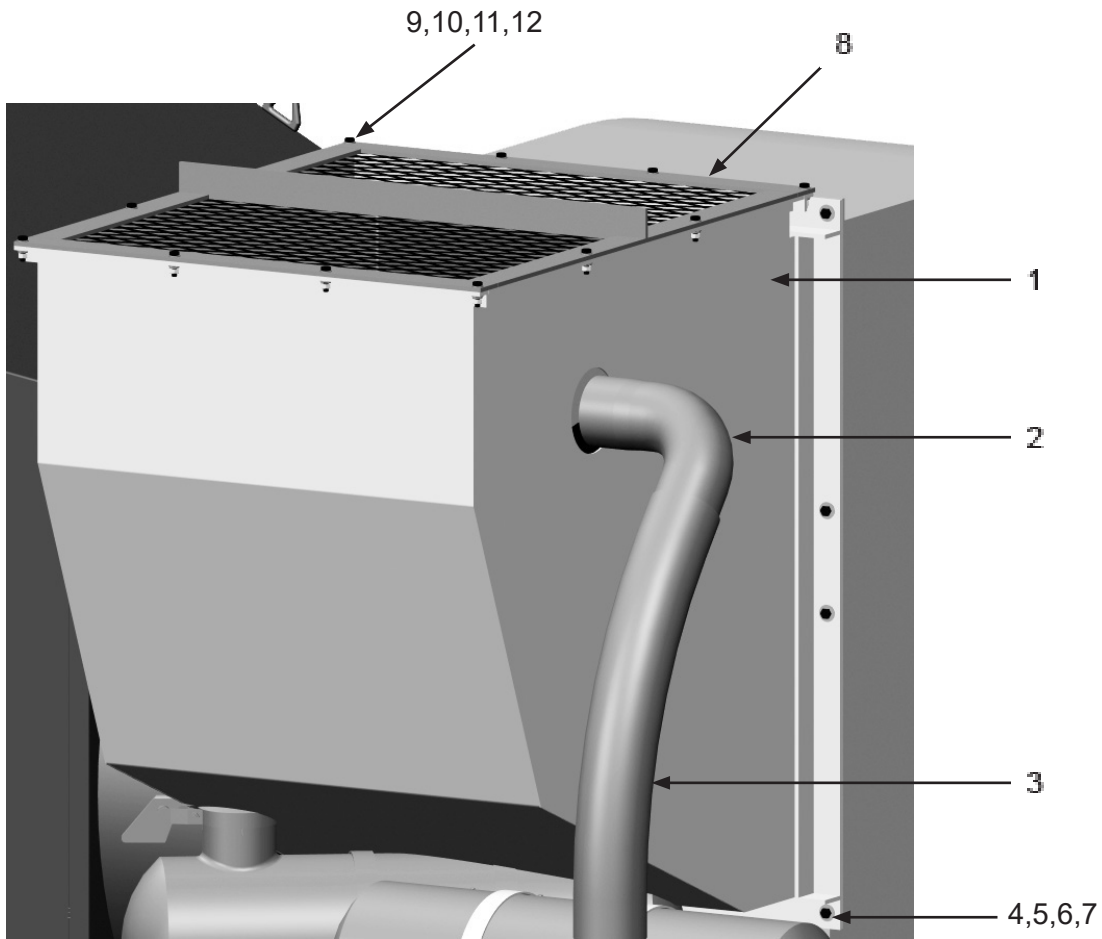
Item #	Part #	Description
--------	--------	-------------

Fig. 3

1	10103314	3/4" NPT x 12 JIC Straight Adapter
2	20PFHA24SB1612	1" x 3/4"Reducing Bushing (<i>Two Required</i>)
3	1011601	3/4"Full Port Brass Ball Valve
4	20PFHA24SA1616	1" Hex Nipple (<i>Two Required</i>)
5	20PFHA25UG1616	1" Street Elbow (<i>Two Required</i>)
6	10104058	Hydraulic Oil Filter
7	10104057	Hydraulic Oil Filter Head
8	1012153	1/4" Lock Washer
9	20100125	1/4-20 x 3/4" Zinc Bolt

PART NUMBERS AND SCHEMATICS

Figure 4: Fan Exhaust



Item #	Part #	Description
--------	--------	-------------

Fig. 4

1	10105951	Fan Exhaust Weldment
2	10103873	4" Exhaust Pipe Elbow
3	10105959	4" Flex Exhaust
4	10104234	3/8-16 x 1-1/4 Hex Bolt Zinc Grade 5
5	10101942	3/8" Flat Washer - Galvanized
6	10101936	3/8" Lock Washer - Zinc
7	1012318	3/8-16 HD Hex Nut
8	10103979	Bird Screen
9	1014019	5/16-18 x 1-1/4 Hex Bolt
10	10101935	5/16" Flat Washer - Galvanized
11	10L805014	5/16" Lock Washer
12	1035046	5/16-18 Nut

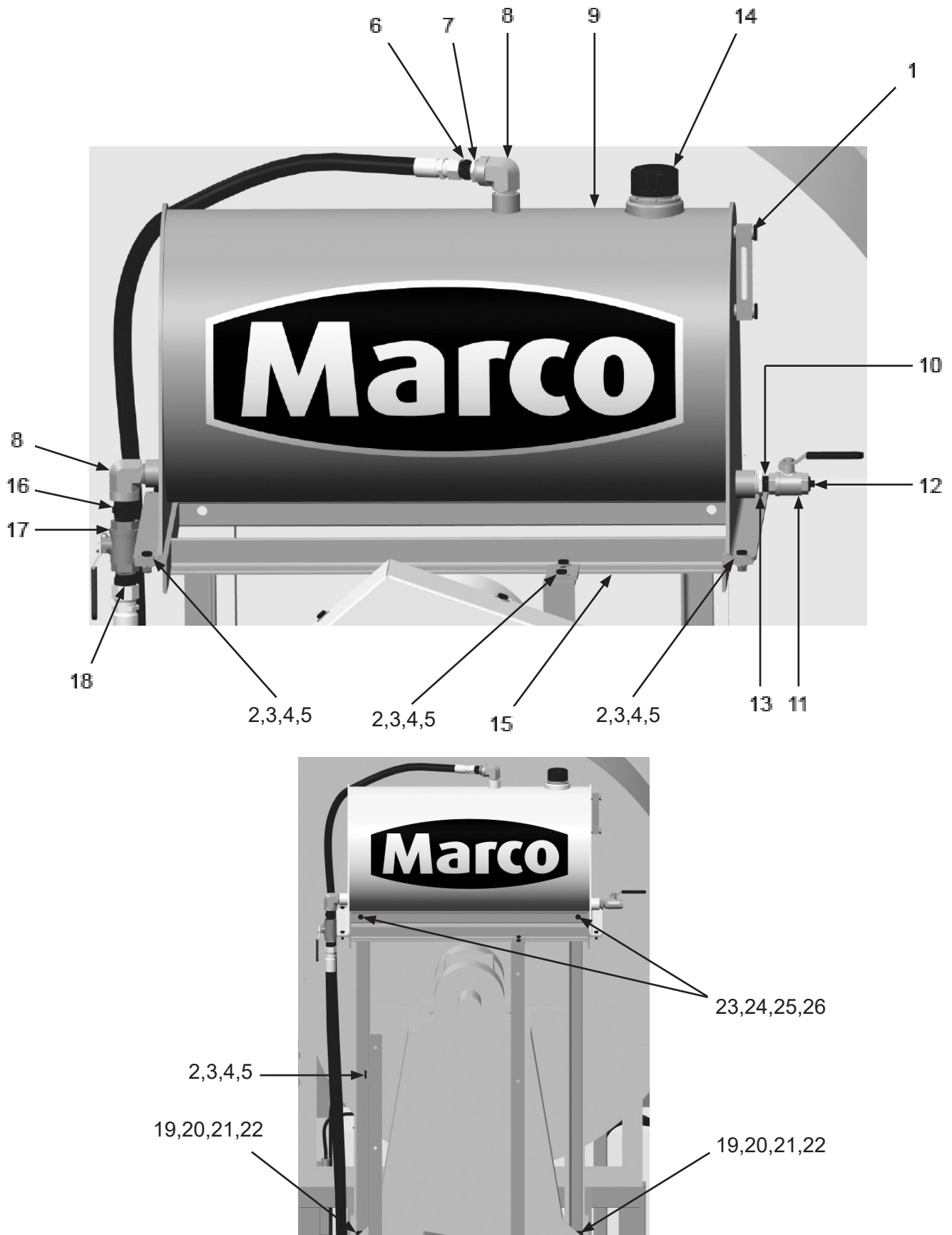
PART NUMBERS AND SCHEMATICS

Hydraulic Oil Tank

Item #	Part #	Description
Fig. 5		
1	10103942	Sight Level Gauge
2	1011747	3/8-16 x 1" Bolt <i>(10 Required)</i>
3	10101942	3/8" Flat Washer <i>(20 Required)</i>
4	10101936	3/8" Lock Washer <i>(10 Required)</i>
5	1012318	3/8-16 Hex Nut <i>(10 Required)</i>
6	10103314	3/4" NPT x 12 JIC Straight Adapter
7	20PFHA24SB1612	1" NPT x 3/4" NPT Reducing Bushing
8	20PFHA25UG1616	90° - 1" NPT Street Elbow <i>(Two Required)</i>
9	10105031	Hydraulic Oil Reservoir - 40 Gallon
10	1011213	3/4" NPT Close Nipple - Galvanized
11	10L8074C	3/4" NPT Full Port Ball Valve
12	10DSHP75	3/4" NPT Pipe Plug - Square Head
13	10102479	3/4" NPT - 90° Street Elbow - Galvanized
14	10103971	Filler/Breather Cap
15	10102958	Hydraulic Oil Tank Mount
16	20PFHA24SA1616	1" NPT Hex Nipple
17	1011601	1" NPT Full Port Ball Valve
18	10103312	1" NPT x 16 JIC Straight Adapter
19	10103417	3/4-10 UNC x 1-3/4" Grade 8 Bolt <i>(Four Required)</i>
20	10103418	3/8" Galvanized Flat Washer <i>(Eight Required)</i>
21	10103419	3/4" Lock Washer <i>(Four Required)</i>
22	10103420	3/4-10 Nut <i>(Four Required)</i>
23	10104603	1/2-13 x 1-1/4" Bolt <i>(Two Required)</i>
24	1014022	1/2-13 Hex Nut <i>(Two Required)</i>
25	10100674	1/2" Flat Washer <i>(Two Required)</i>
26	10100675	1/2" Lock Washer <i>(Two Required)</i>

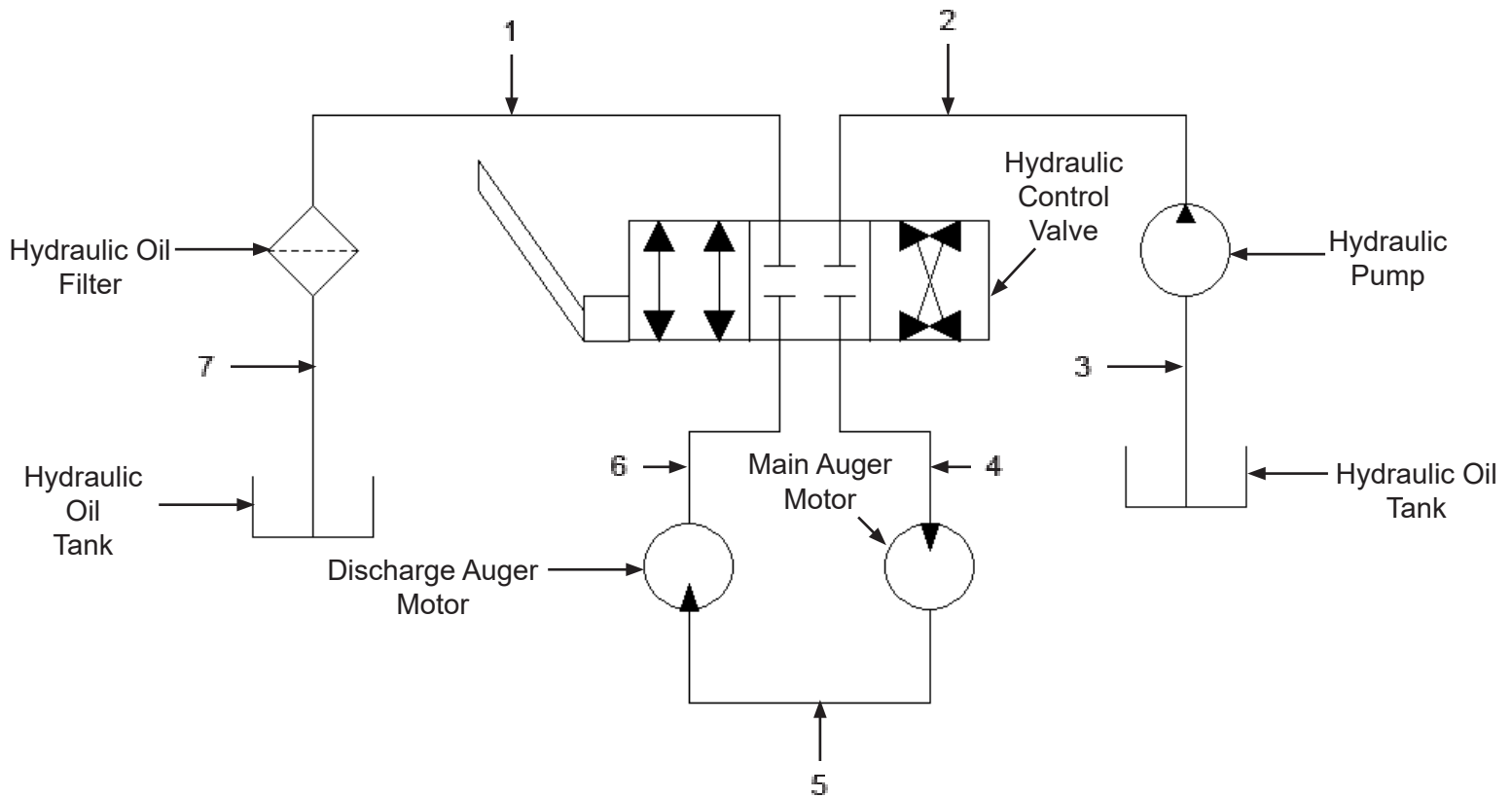
PART NUMBERS AND SCHEMATICS

Figure 5: Hydraulic Oil Tank



PART NUMBERS AND SCHEMATICS

Figure 6: Hydraulic Hoses



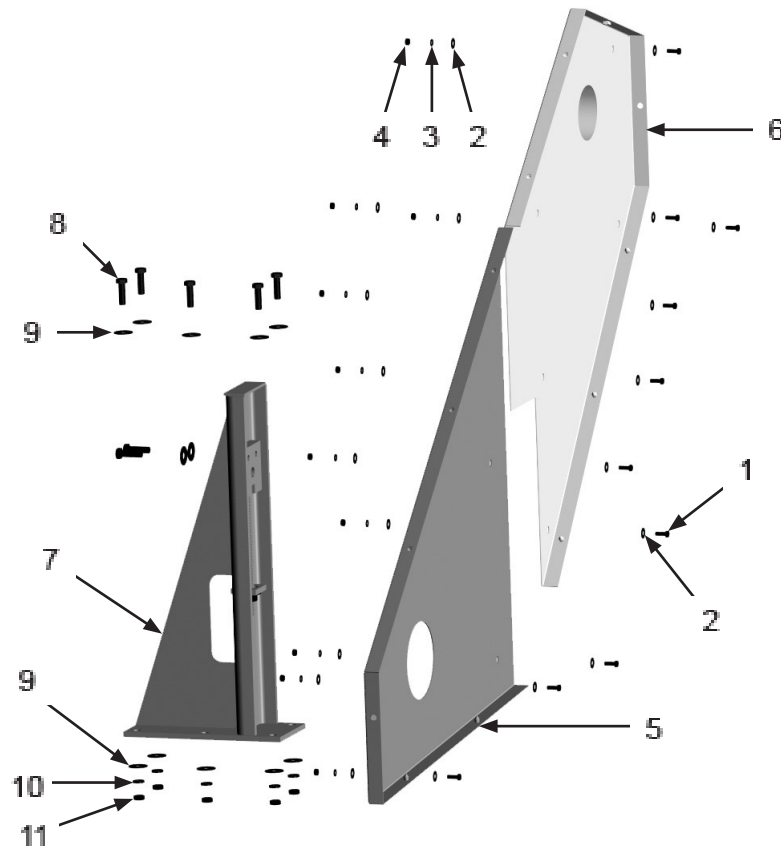
Item #	Part #	Description
--------	--------	-------------

Fig. 6

1	10103412	Hydraulic Hose - 3/4" I.D. x 23' – 3045 psi
2	10103505	Hydraulic Hose - 3/4" I.D. x 33' – 3045 psi
3	10105963	Hydraulic Hose - 1" I.D. x 12' – 2000 psi
4	10103502	Hydraulic Hose - 1/2" I.D. x 20' – 4500 psi
5	10104224	Hydraulic Hose - 1/2" I.D. x 24' – 2000 psi
6	10103409	Hydraulic Hose - 1/2" I.D. x 7' 1" – 2000 psi
7	10103707	Hydraulic Hose - 3/4" I.D. x 17' 7" – 3045 psi

PART NUMBERS AND SCHEMATICS

Figure 7: Fan Belt Guard Back Assembly



Item #	Part #	Description
--------	--------	-------------

Fig. 7

1	1011747	3/8-16 x 1" Bolt (10 Required)
2	10101942	3/8" Galvanized Flat Washer (20 Required)
3	10101936	3/8" Zinc Lock Washer (10 Required)
4	1012318	3/8-16 Hex Nut (10 Required)
5	10105986	Lower Belt Guard Back
6	10106011	Upper Belt Guard Back
7	10105981	Tensioner Mount
8	10103397	5/8-11 x 2" Zinc Bolt (Seven Required)
9	10103398	5/8" Washer (14 Required)
10	10103399	5/8" Lock Washer (Five Required)
11	10103393	5/8-11 Zinc Nut (Five Required)

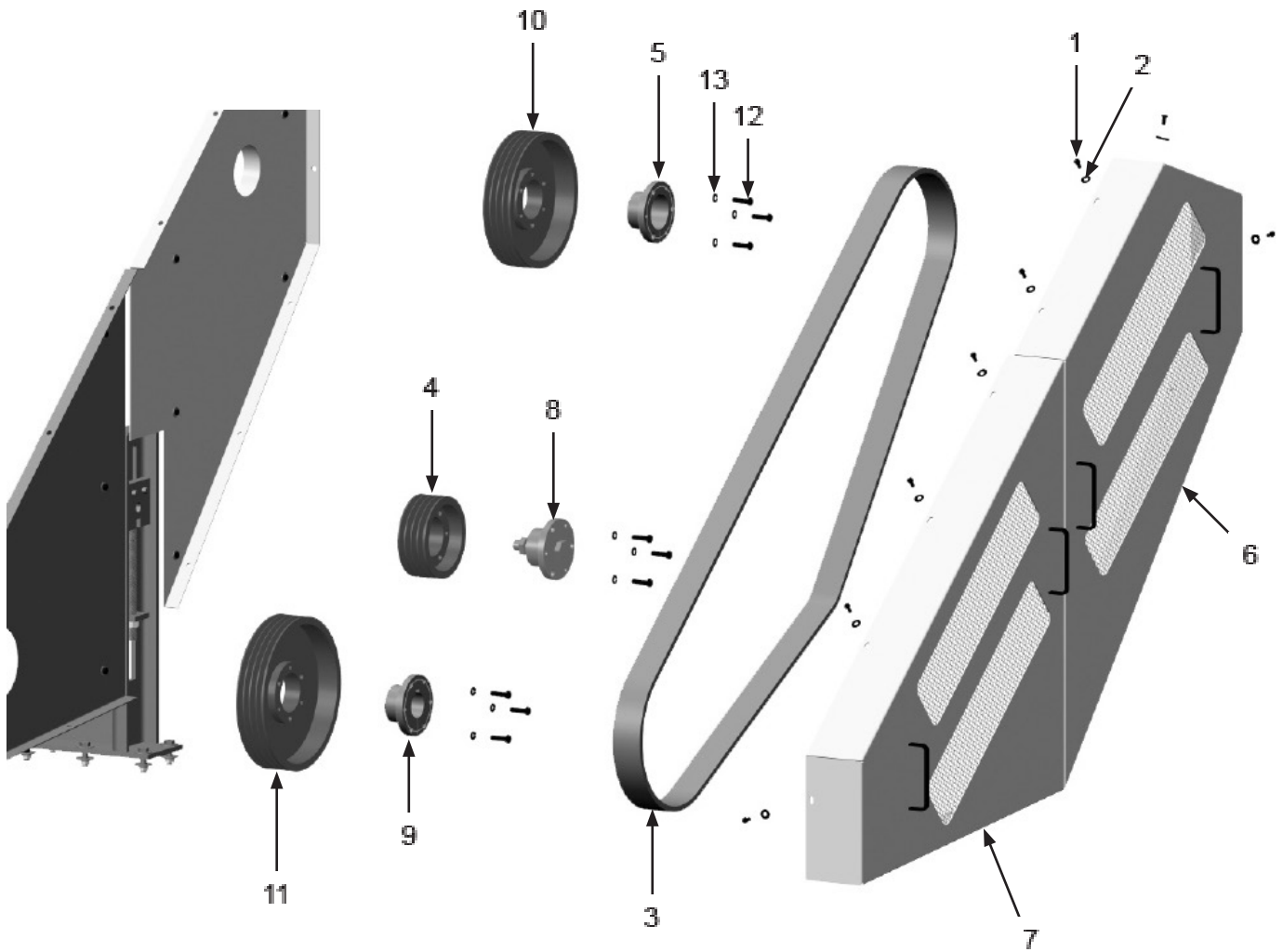
PART NUMBERS AND SCHEMATICS

Fan Belt Assembly

Item #	Part #	Description
Fig. 8		
1	10103400	3/8-16 x 3/4" Bolt (<i>Eight Required</i>)
2	10101942	3/8" Galvanized Flat Washer (<i>Eight Required</i>)
3	10106029	4/5 VX 1700 Banded Drive Belt
4	10103483	8" Sheave
5	10103482	3.4375 Bushing
6	10106016	Top Belt Cover
7	10105988	Bottom Belt Cover
8	10103484	Idler Bushing
9	10103485	2.5 Bore Bushing
10	10106754	12.5" Sheave
11	10106028	14" Sheave
12	10101943	1/2-13 x 1-3/4" Hex Bolt (<i>Nine Required</i>)
13	10100675	1/2" Lock Washer (<i>Nine Required</i>)

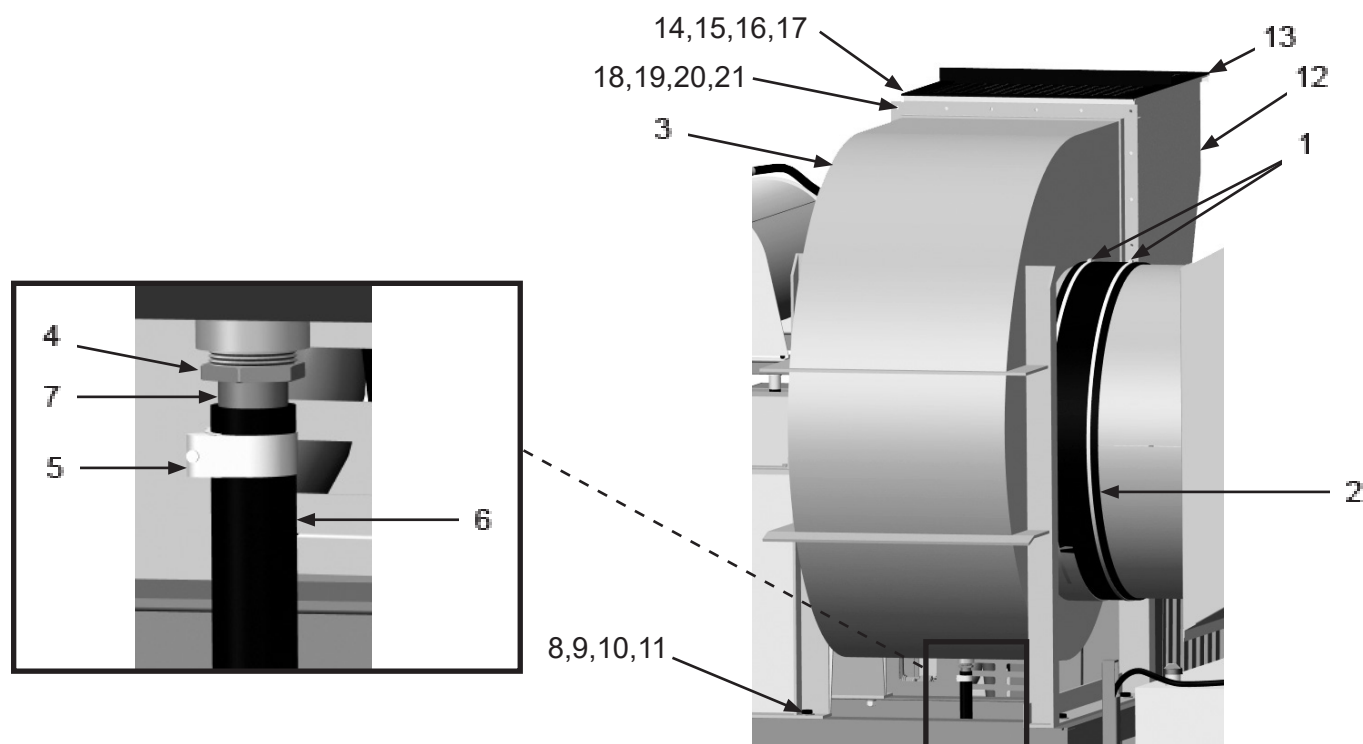
PART NUMBERS AND SCHEMATICS

Figure 8: Fan Belt Assembly



PART NUMBERS AND SCHEMATICS

Figure 9: Fan Assembly



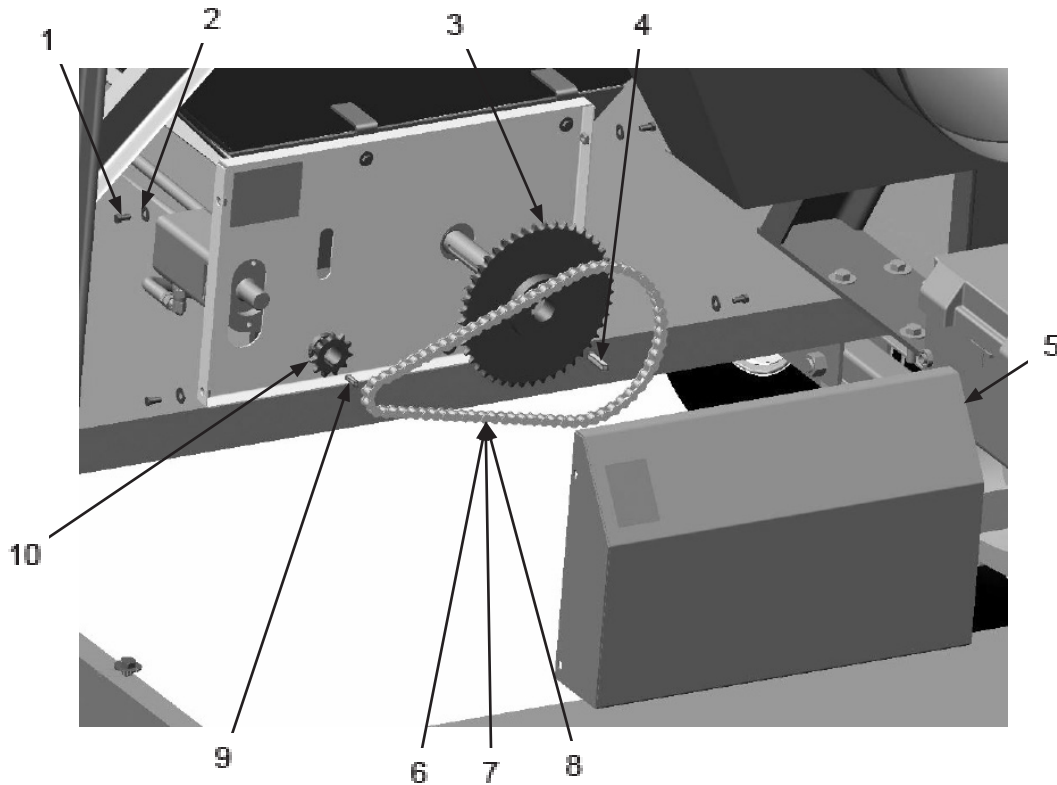
Item #	Part #	Description
--------	--------	-------------

Fig. 9

1	10103416	Banding - Make a Clamp <i>(Two Required)</i>
2	10103962	Connection Rubber Gasket
3	10103495	Fan
4	20PFHA24SB2016	1-1/4" x 1" Reducing Bushing
5	10104136	1-9/16" x 1-11/16" O.D. T-Bolt Clamp
6	10103654	1-1/4" I.D. Hose <i>(Per Foot)</i>
7	10000197	1" x 3" Toe Nipple
8	10103417	3/4-10 UNC x 1-3/4" Grade 8 Bolt <i>(Six Required)</i>
9	10103418	Washer - 3/4" - Grade 8 <i>(12 Required)</i>
10	10103419	3/4" Lock Washer <i>(Six Required)</i>
11	10103420	3/4-10 UNC Grade 8 Nut <i>(Six Required)</i>
12	10105951	Fan Exhaust
13	10103979	Bird Screen
14	1014019	5/16-18 x 1-1/4" Hex Bolt <i>(12 Required)</i>
15	10101935	5/16" Flat Washer - Galvanized <i>(12 Required)</i>
16	10L805014	5/16" Lock Washer <i>(12 Required)</i>
17	1035046	5/16-18 Nut <i>(12 Required)</i>
18	10104234	3/8-16 x 1-1/4" Hex Bolt Zinc Grade 5 <i>(12 Required)</i>
19	10101942	3/8" Galvanized Flat Washer <i>(24 Required)</i>
20	10101936	3/8" Zinc Lock Washer <i>(12 Required)</i>
21	1012318	3/8-16 Hex Nut <i>(12 Required)</i>

PART NUMBERS AND SCHEMATICS

Figure 10: Main Auger Drive Assembly



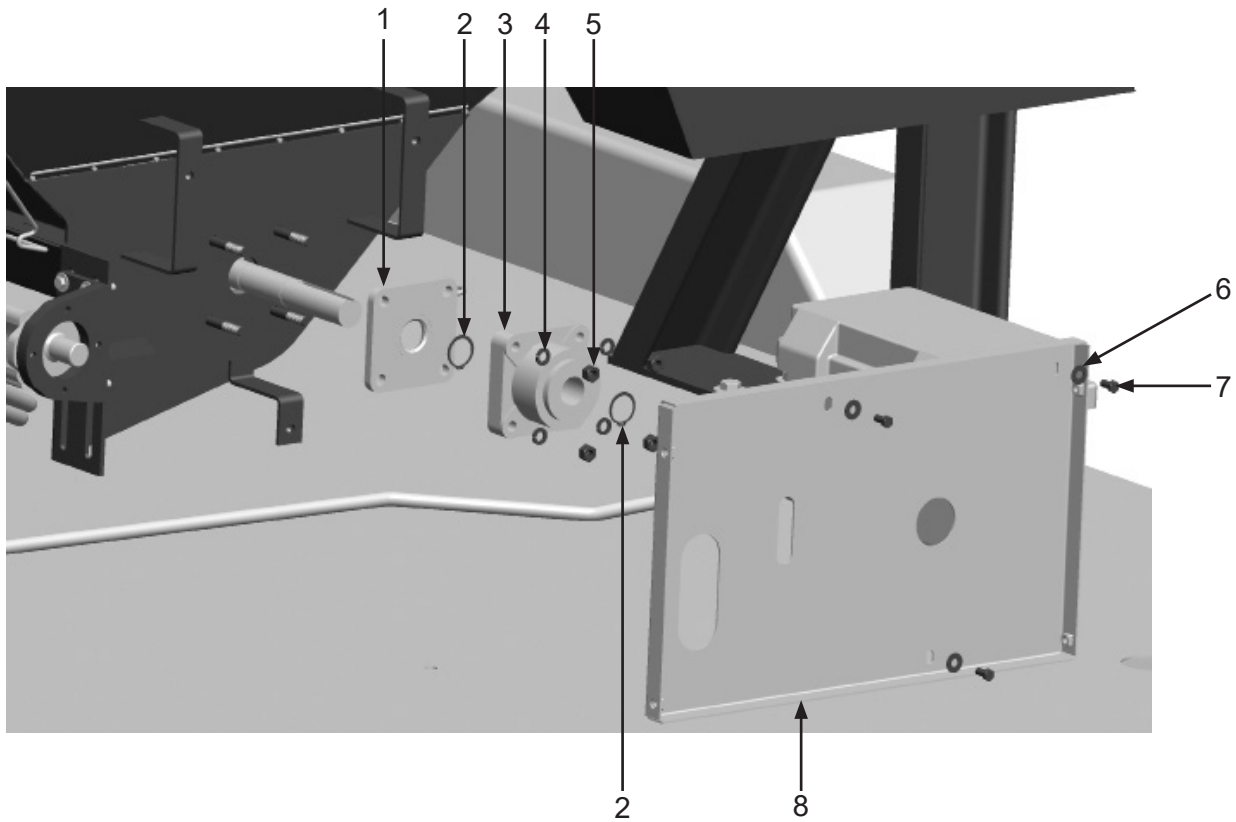
Item #	Part #	Description
--------	--------	-------------

Fig. 10

1	10103400	3/8-16 x 3/4" Bolt (<i>Four Required</i>)
2	10101942	3/8" Galvanized Flat Washer (<i>Four Required</i>)
3	10104218	45-Tooth Sprocket
4	10103641	3/8" Key Cut
5	10102952	Main Auger Motor Cover
6	10103391	60# Cottered Roller Chain (<i>Per Foot</i>)
7	10103392	60# Connecting Link
8	10103614	60# Offset Link
9	10103642	5/16" x 1/4" x 1/8" x 1/8" Key
10	10103265	11-Tooth Sprocket
—	10104192	Main Auger Chain Kit <i>Includes Item #'s: 7, 8, and 9</i>

PART NUMBERS AND SCHEMATICS

Figure 11: Main Auger Bearing



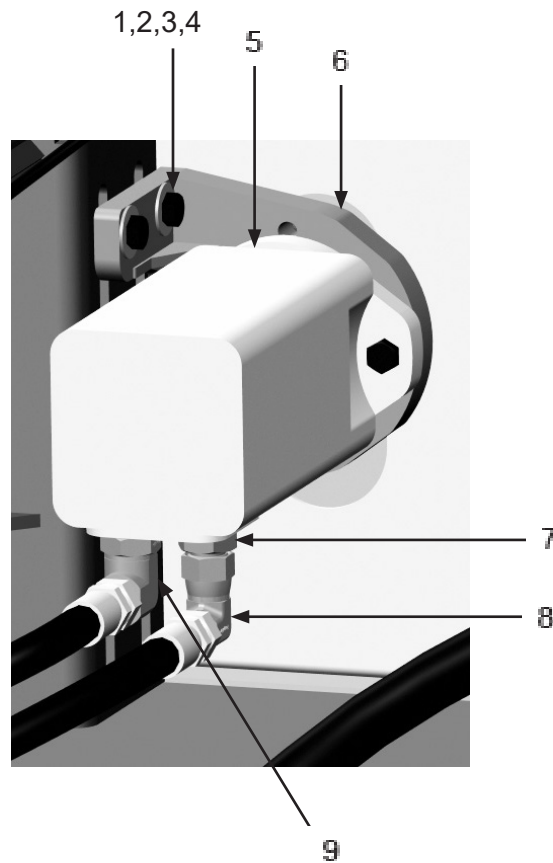
Item #	Part #	Description
--------	--------	-------------

Fig. 11

1	10102902	Seal Plate
2	10103605	Snap Ring <i>(Two Required)</i>
3	10102903	Thrust Bearing
4	10100675	1/2" Lock Washer <i>(Four Required)</i>
5	1014022	1/2-13 Hex Nut <i>(Four Required)</i>
6	10101942	3/8" Galvanized Flat Washer <i>(Three Required)</i>
7	10103400	3/8-16 x 3/4" Bolt <i>(Three Required)</i>
8	10102955	Main Auger Guard Back

PART NUMBERS AND SCHEMATICS

Figure 12: Main Auger Motor



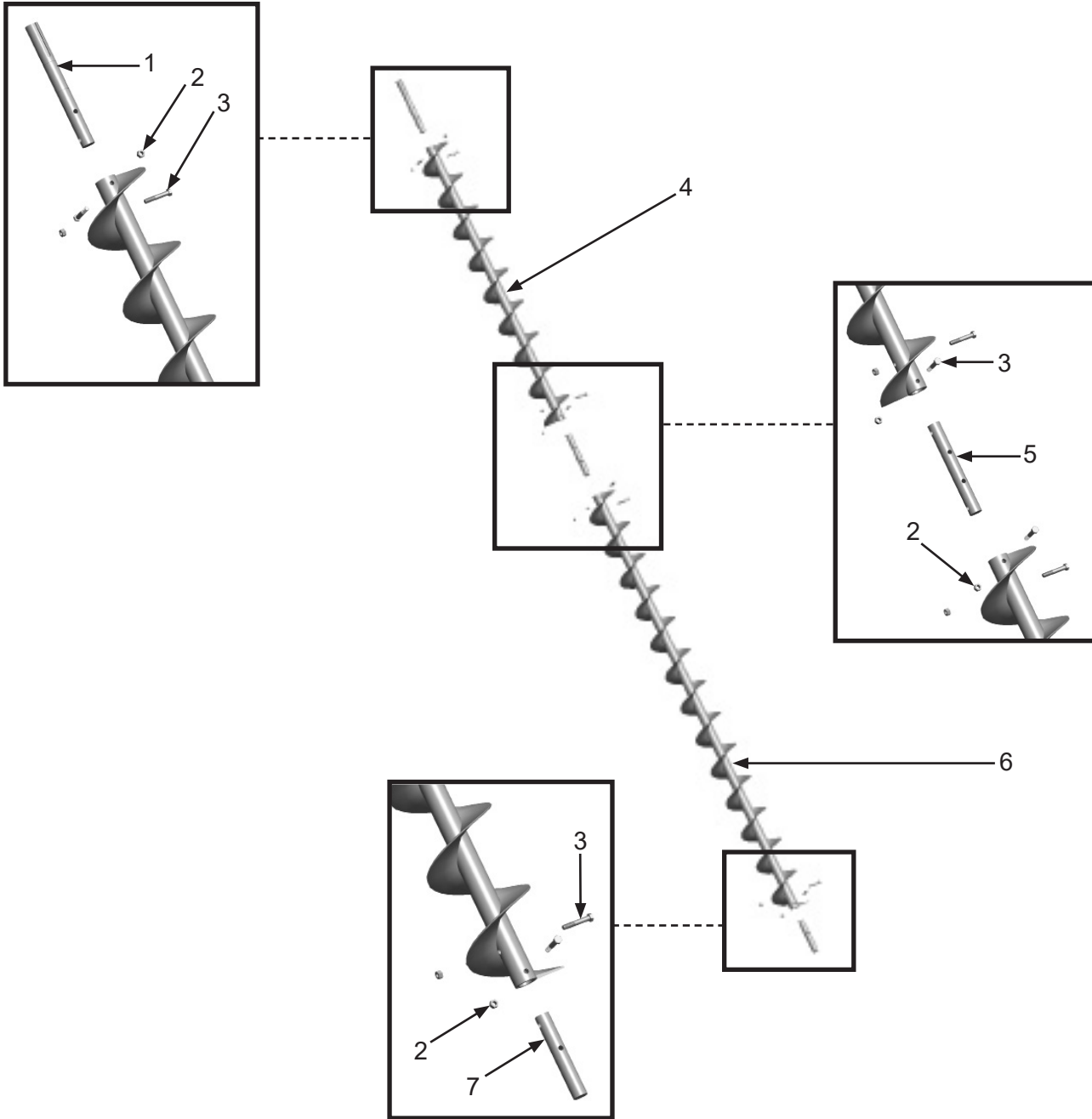
Item #	Part #	Description
--------	--------	-------------

Fig. 12

1	1028617	3/8-16 x 1-3/4" Shoulder Bolt (<i>Four Required</i>)
2	10101942	3/8" Galvanized Flat Washer (<i>Eight Required</i>)
3	10101936	3/8" Zinc Lock Washer (<i>Four Required</i>)
4	10101938	3/8-16 Galvanized Hex Nut (<i>Four Required</i>)
5	10103266	18.7 Displacement Hydraulic Motor
6	10102881	Hydraulic Motor Mount with Hardware
7	10103612	JIC 8 x SAE 10 Straight Adapter
8	10103611	JIC 8 x JIC 8 90° Elbow
9	10103308	JIC 8 x SAE 10 90° Elbow
—	10103941	Seal Kit for 18.7 Displacement Hydraulic Motor

PART NUMBERS AND SCHEMATICS

Figure 13: Main Auger



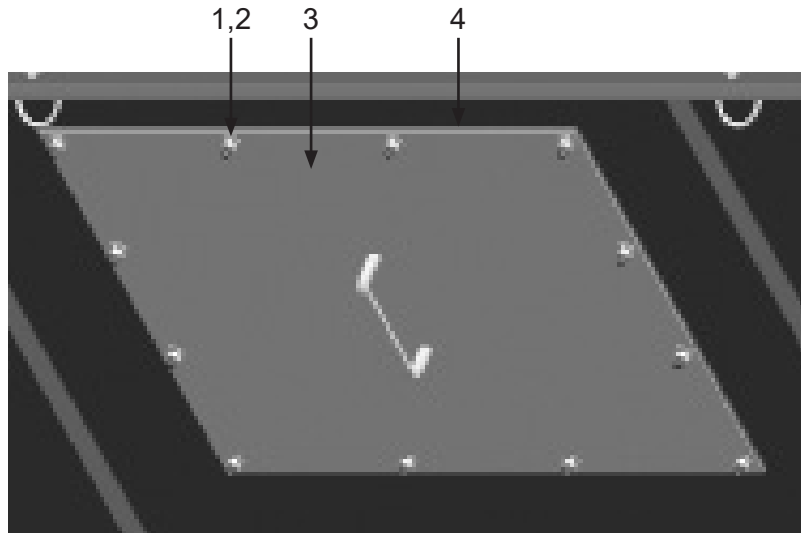
Item #	Part #	Description
--------	--------	-------------

Fig. 13

1	10103306	Drive Shaft
2	10101941	1/2-13 Galvanized Hex Nut (<i>Four Required</i>)
3	10103401	1/2-13 x 3" Galvanized Bolt (<i>Four Required</i>)
4	10103490	9" x 78" Standard Pitch Auger
5	10103491	Coupling Shaft for 1-1/2" Shaft
6	10103262	118" x 9" Standard Pitch Auger
7	10102910	Auger Shaft End

PART NUMBERS AND SCHEMATICS

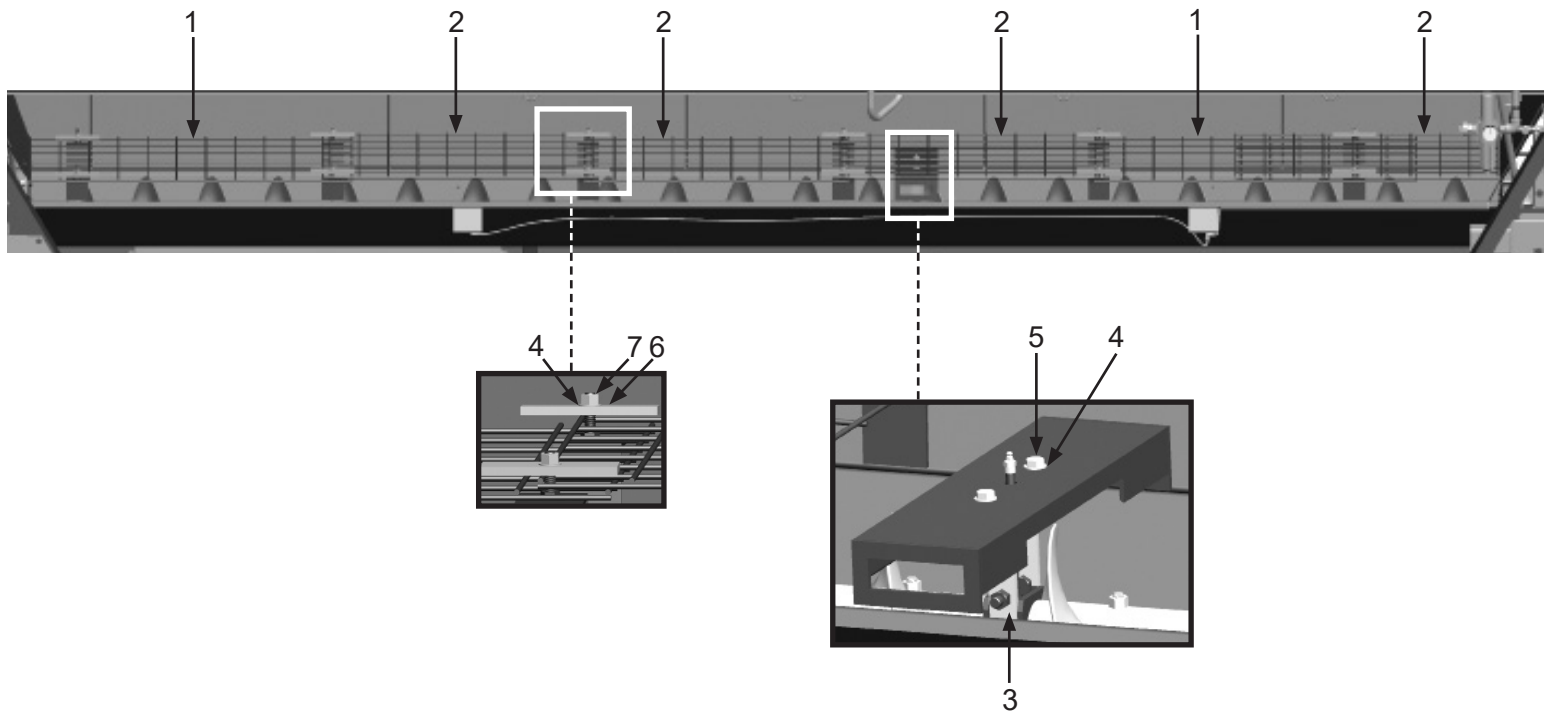
Figure 14: Access Panel Assembly



Item #	Part #	Description
Fig. 14		
1	10101938	3/8-16 Galvanized Hex Nut (12 Required)
2	10101942	3/8" Flat Washer (12 Required)
3	10102933	20" Access Panel Door
4	10103344	1/4" x 1-1/2" Adhesive-Backed Gasket (Per Foot)

PART NUMBERS AND SCHEMATICS

Figure 15: Main Auger Protective Grate



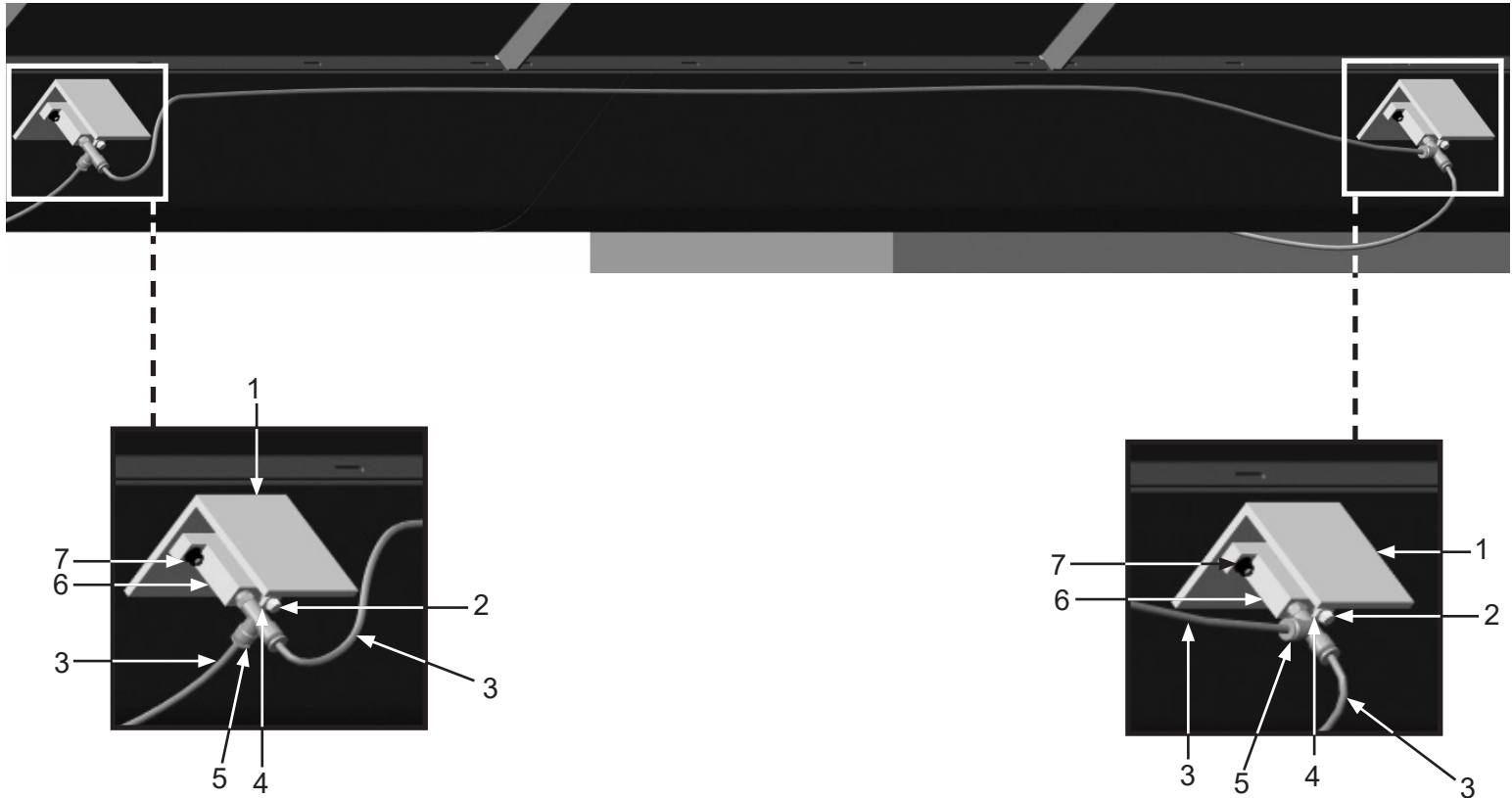
Item #	Part #	Description
--------	--------	-------------

Fig. 15

1	10103966	Protective Grate - 44 Inches (<i>Two Required</i>)
2	10103967	Protective Grate - 36 Inches (<i>Four Required</i>)
3	10102896	Main Auger Hanger Bearing Assembly
4	10100674	1/2" Flat Washer (<i>12 Required</i>)
5	10101943	1/2-13 x 1-3/4" Galvanized Hex Bolt (<i>Two Required</i>)
6	10102936	Protective Grate Bracket (<i>12 Required</i>)
7	1014022	1/2-13 Hex Nut (<i>12 Required</i>)

PART NUMBERS AND SCHEMATICS

Figure 16: Left Side Pneumatic Ball Vibrators



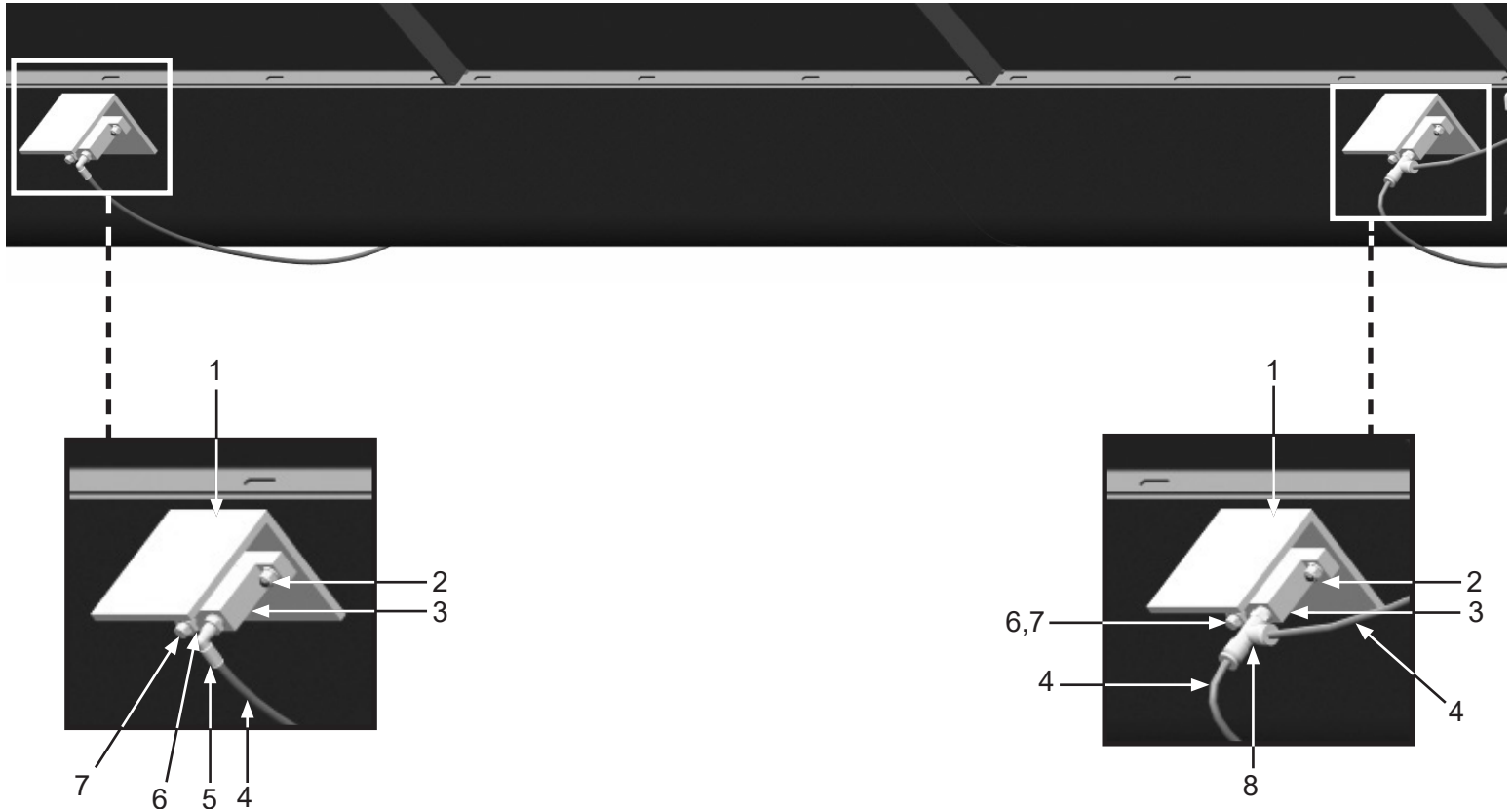
Item #	Part #	Description
--------	--------	-------------

Fig. 16

1	10103609	Vibrator Shield (<i>Two Required</i>)
2	1012905	1/8" Breather Muffler (<i>Two Required</i>)
3	10103322	1/4" I.D. Black Urethane Tubing (<i>Per Foot</i>)
4	20PFHA24SB0402	1/4" x 1/8" Reducing Bushing
5	10103261	1/4" Male Push-to-connect Tee
6	10103258	Pneumatic Ball Vibrator (<i>Two Required</i>)
7	1012323	1/4-20 Zinc Lock Nut with Nylon Insert (<i>Four Required</i>)

PART NUMBERS AND SCHEMATICS

Figure 17: Right Side Pneumatic Ball Vibrators



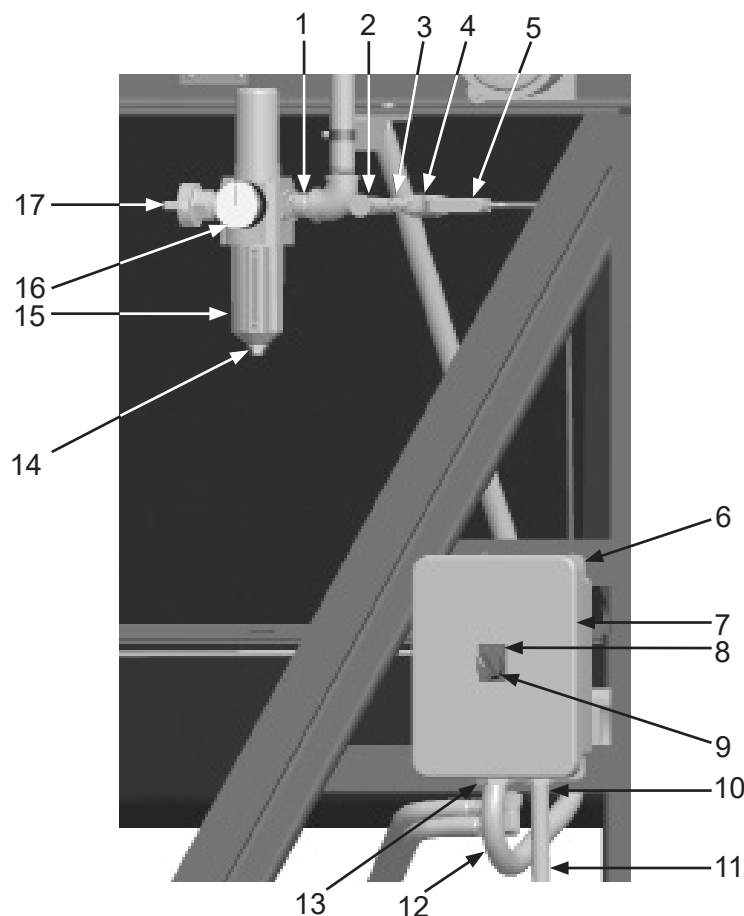
Item #	Part #	Description
--------	--------	-------------

Fig. 17

1	10103609	Vibrator Shield (<i>Two Required</i>)
2	1012323	1/4-20 Zinc Lock Nut with Nylon Insert (<i>Four Required</i>)
3	10103258	Pneumatic Ball Vibrator (<i>Two Required</i>)
4	10103322	1/4" I.D. Black Urethane Tubing (<i>Per Foot</i>)
5	20PFBA31095614	1/4" Tube x 1/4" NPT 90° Fitting
6	20PFHA24SB0402	1/4" x 1/8" Reducing Bushing
7	1012905	1/8" Breather Muffler (<i>Two Required</i>)
8	10103261	1/4" Male Push-to-connect Tee

PART NUMBERS AND SCHEMATICS

Figure 18: Pulser Regulator and Timer Assembly



Item #	Part #	Description
Fig. 18		
1	10103317	3/4" x 2" Pipe Nipple
2	10103292	1/4" Needle Valve
3	1017019	1/4" x 1/4" Hex Nipple
4	1080050	1/4" Ball Valve
5	10103261	1/4" Prestolock Tee
6	20100125	1/4-20 x 3/4" Zinc Hex Bolt <i>(Four Required)</i>
7	10103488	Timer Controller - 10 Channel
—	10103935	Timer Box Only
—	10103949	Timer Board Only
8	10103414	On/Off Name Plate
9	10103305	2-Way Selector Switch
10	20RST50	Straight Liquid Tite Connection Fitting <i>(Two Required)</i>
11	20RSEL050UL	1/2" UL/UA Seal-Tite Conduit Pipe <i>(Per Foot)</i>
12	10103304	3/4" Flexible Conduit
13	10103303	3/4" Conduit Hub
14	10103952	Filter Auto Drain
15	10103257	Excelon 74 Series Filter/Regulator
16	10103953	Sight Glass Kit
17	10ME1	3/4" Male 2-lug Coupling
—	10103950	Filter/Regulator Service Kit
—	10103951	Filter Element <i>(Not Shown)</i>

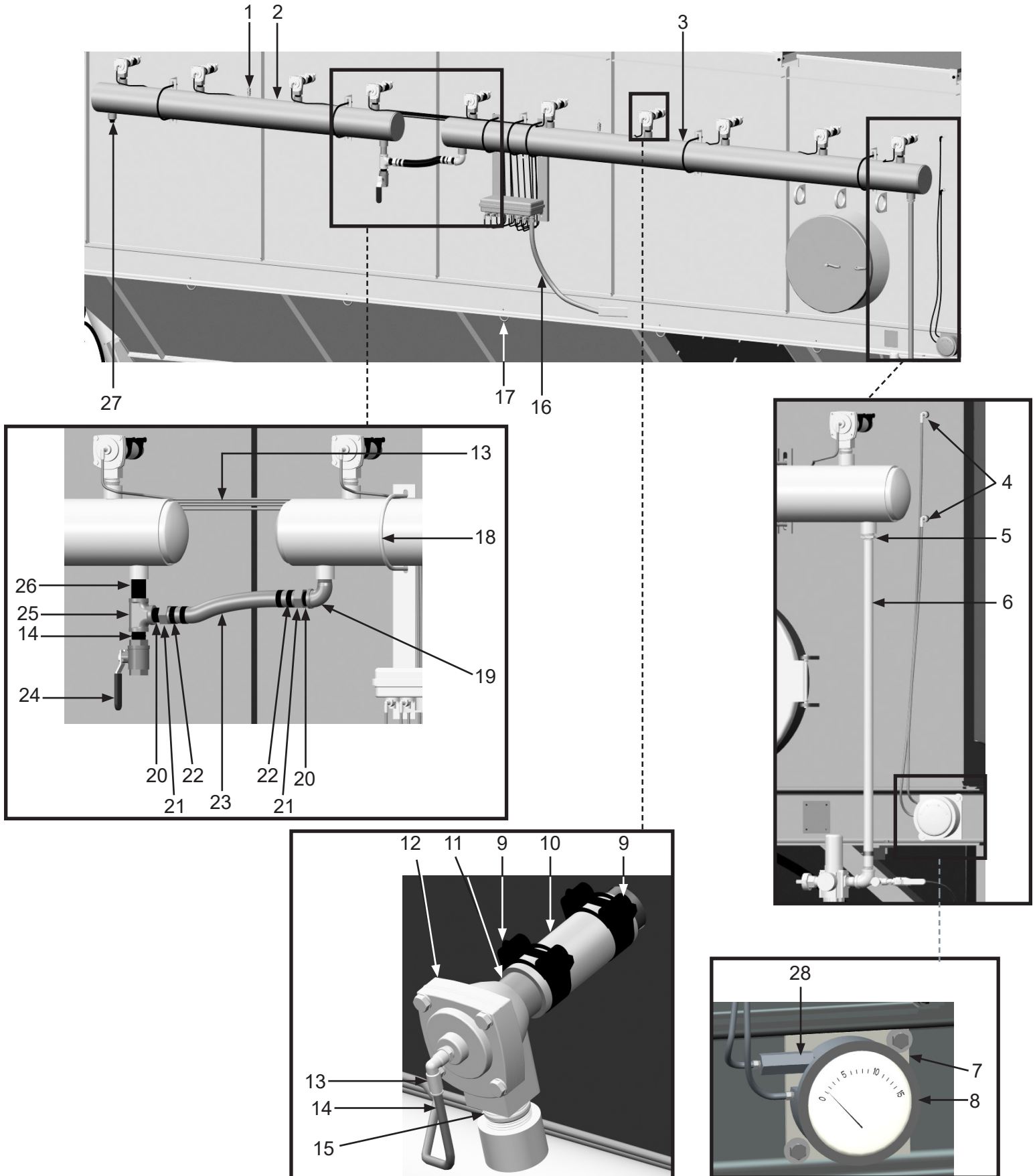
PART NUMBERS AND SCHEMATICS

Pulser System Assembly

Item #	Part #	Description
Fig. 19		
1	1028607	1/4" NPT Pressure Relief Valve – 125 PSI <i>(Two Required)</i>
2	10103452	4 Pipe Header
3	10102948	6 Pipe Header
4	20PFBA31095614	1/4" Tube x 1/4" NPT 90° Fitting <i>(Two Required)</i>
5	20PFHA24SB1612	1" x 3/4" Reducing Bushing
6	10103315	3/4" x 36" Pipe Nipple
7	10103608	Magnehelic Differential Pressure Gauge Mounting Bracket
8	10103259	Magnehelic Differential Pressure Gauge Assembly <i>Includes Mounting Hardware</i>
9	10104136	T-Bolt Clamp 1-9/16" x 1-11/16" O.D. <i>(20 Required)</i>
10	10103654	1-1/4" I.D. Marine Hose – 100 PSI <i>(Per Foot)</i>
11	10105207	1" x 3" Toe Nipple <i>(Six Required)</i>
12	10103255	1" Diaphragm Valve
13	20100579	1/4" O.D. Tube x 1/8" NPT Swivel <i>(20 Required)</i>
14	10103322	1/4" O.D. Black Urethane Tubing <i>(Per Foot)</i>
15	10103318	1" x 2" Pipe Nipple <i>(11 Required)</i>
16	10103304	3/4" I.D. Flexible Conduit
17	10103625	D-Ring with Nut <i>(16 Required)</i>
18	10103394	3/8-16 x 6" U-Bolt Assembly <i>(Seven Required)</i>
19	1011801	1" Street Elbow
20	1012151	1" Galvanized Close Nipple <i>(Two Required)</i>
21	10SFE2	1" Female Swivel End <i>(Two Required)</i>
22	10AHCL1	Band Clamp <i>(Two Required)</i>
23	10AH100	1" I.D. Air Hose
24	1011601	1" Full Port Ball Valve
25	1011816	1" Pipe Tee
26	1011843	1" x 2-1/2" NPT Pipe Nipple
27	1011901	1" Pipe Plug
28	10108373	1/8" NPT Inline Air Valve
—	10103954	1" Diaphragm Valve Service Kit <i>(Not Shown)</i>

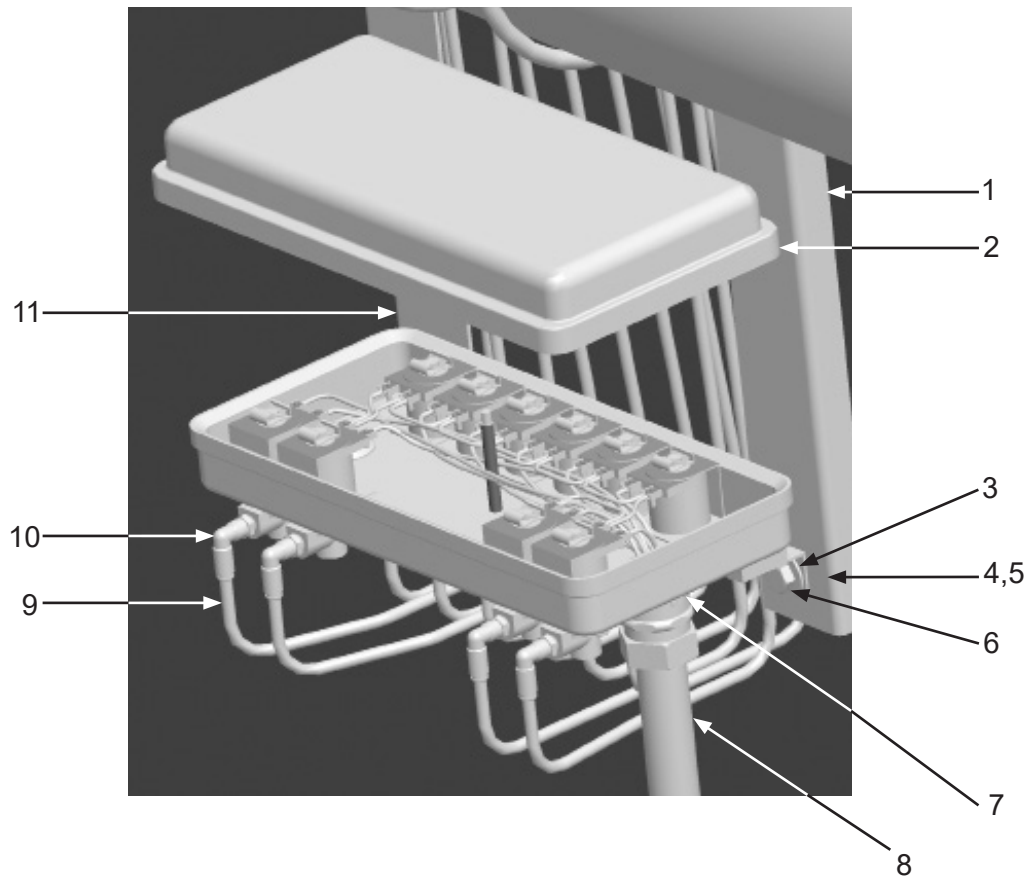
PART NUMBERS AND SCHEMATICS

Figure 19: Pulser System Assembly



PART NUMBERS AND SCHEMATICS

Figure 20: Pulser Solenoid Enclosure Assembly



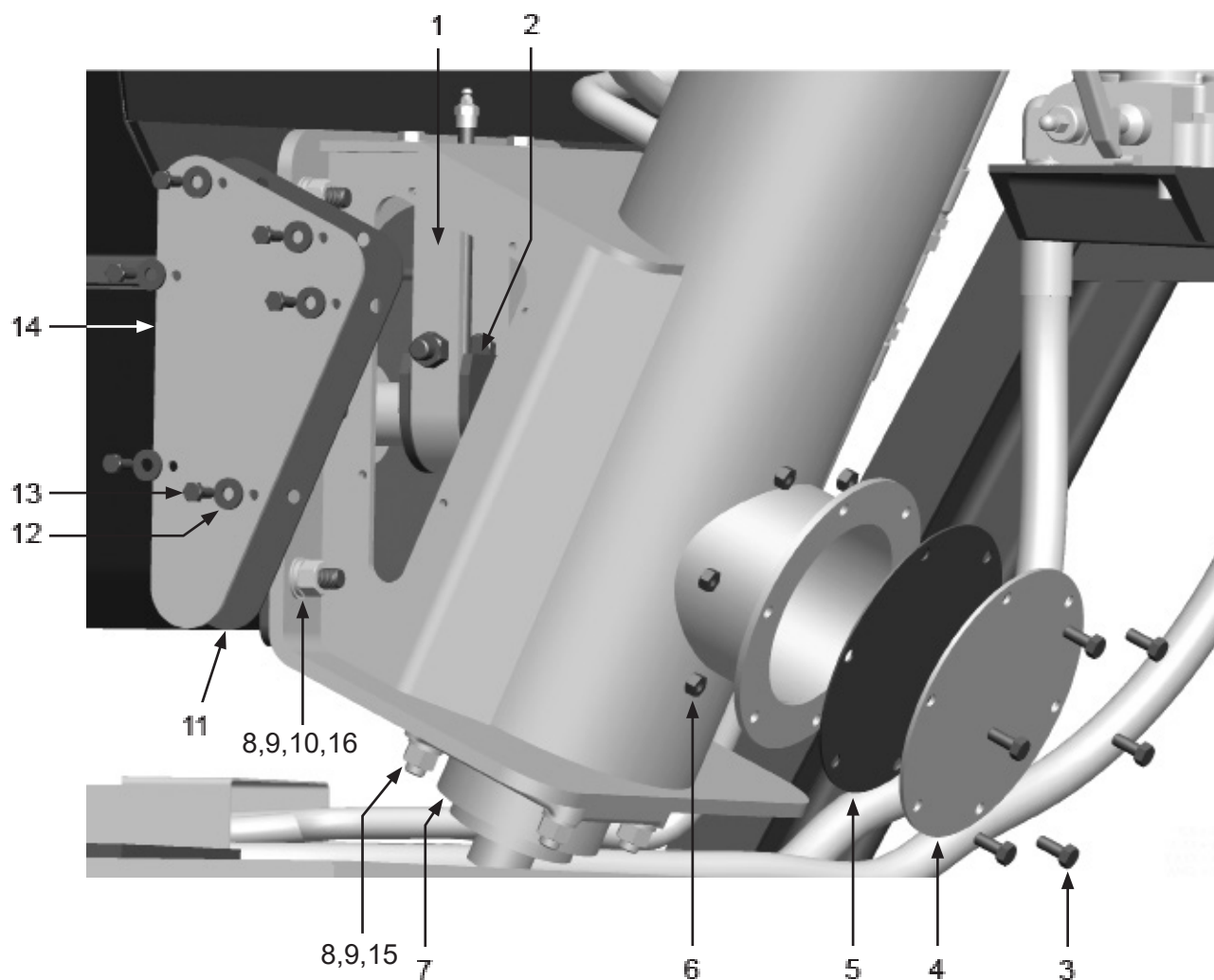
Item #	Part #	Description
--------	--------	-------------

Fig. 20

1	10102970	Solenoid Enclosure Mount – Right
2	10103489	10 Solenoid Pilot Valve
3	10101942	3/8" Galvanized Flat Washer <i>(Four Required)</i>
4	10101936	3/8" Zinc Lock Washer <i>(Two Required)</i>
5	1012318	3/8-16 Hex Nut <i>(Two Required)</i>
6	1011747	3/8-16 x 1" Bolt
7	10103303	3/4" Conduit Hub
8	10103304	3/4" Flexible Conduit
9	10103322	1/4" O.D. Black Urethane Tubing <i>(Per Foot)</i>
10	20100579	1/4" O.D. Tube x 1/8" NPT Swivel <i>(10 Required)</i>
11	10102969	Solenoid Enclosure Mount – Left
—	10103955	Solenoid Valve <i>(10 Required)</i>
—	10103956	Solenoid Coil <i>(One Required per Solenoid)</i>
—	10103957	Solenoid Service Kit <i>Includes: O-ring, Plunger, Spring, Ferrule</i>

PART NUMBERS AND SCHEMATICS

Figure 21: Discharge Auger Clean-out Assembly



Item #	Part #	Description
--------	--------	-------------

Fig. 21

1	10102896	Bearing Hanger
2	10103413	Bearing
3	10101346	5/16-18 x 3/4" Bolt (<i>Six Required</i>)
4	10103235	Auger Clean-out Cover
5	10103716	Neoprene Auger Clean-out Gasket
6	1035046	5/16-18 Nut (<i>Six Required</i>)
7	10102880	Discharge Auger Lower Bearing Assembly
8	10101941	1/2-13 Galvanized Hex Nut (<i>10 Required</i>)
9	10100675	1/2" Lock Washer (<i>10 Required</i>)
10	10100674	1/2" Flat Washer (<i>Six Required</i>)
11	10103717	Discharge Auger Side Gasket (<i>Two Required</i>)
12	10101940	1/4" Galvanized Flat Washer (<i>12 Required</i>)
13	20100125	1/4-20 x 3/4" Zinc Hex Bolt (<i>12 Required</i>)
14	10103236	Discharge Auger Side Cover (<i>Two Required</i>)
15	10102652	1/2-13 x 2-1/4" Grade 5 Bolt
16	10101943	1/2-13 x 1-3/4" Hex Bolt

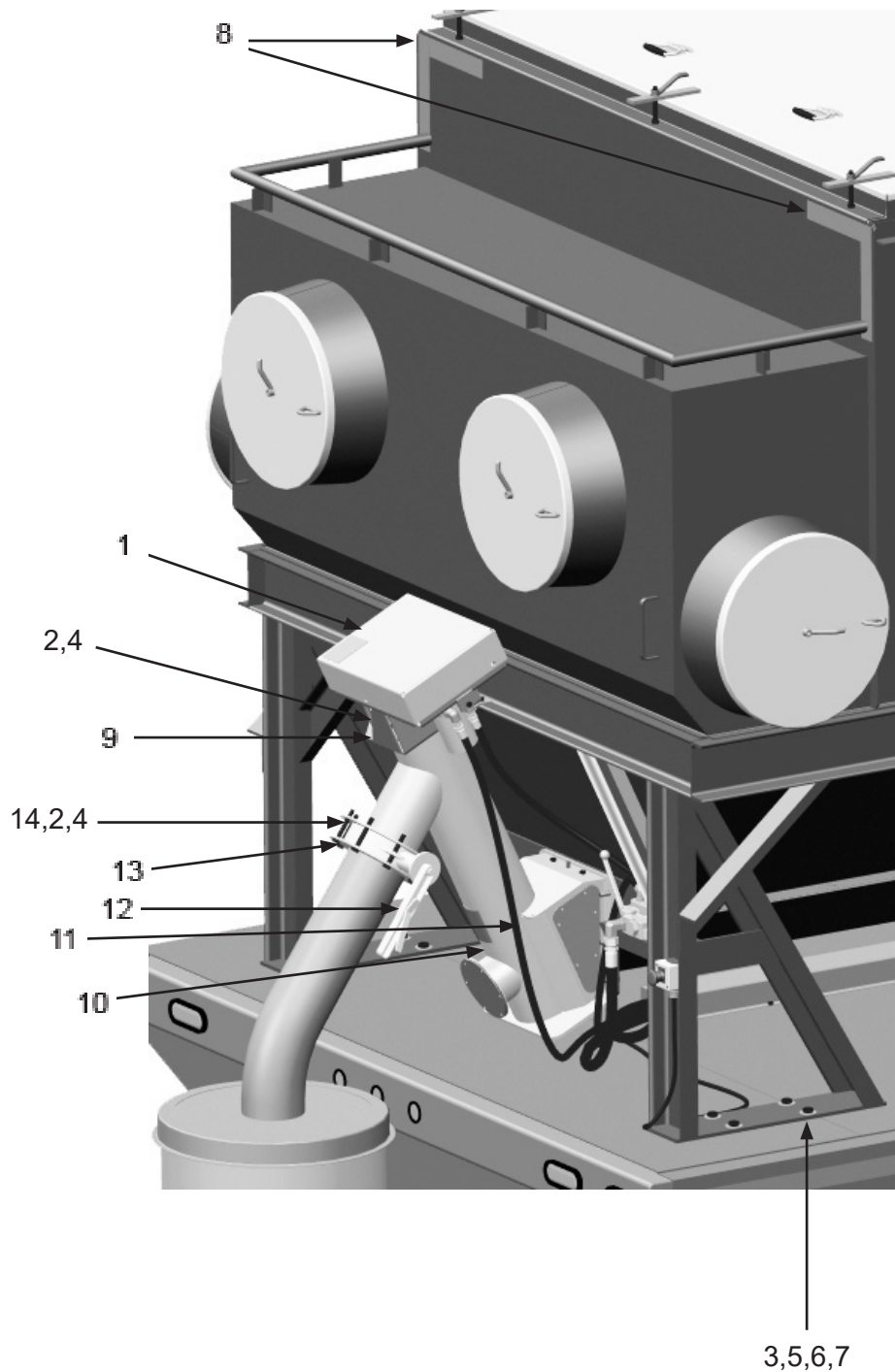
PART NUMBERS AND SCHEMATICS

Discharge Auger Assembly - Trailer

Item #	Part #	Description
Fig. 22		
1	10103363	Discharge Chain Cover
2	1014022	1/2-13 Hex Nut <i>(18 Required)</i>
3	10103393	5/8-11 Grade 8 Zinc Nut <i>(16 Required)</i>
4	10100675	1/2" Lock Washer <i>(Eight Required)</i>
5	10103397	5/8-11 x 2" Grade 8 Bolt- Zinc <i>(16 Required)</i>
6	10103398	Washer - 5/8" Grade 8 <i>(32 Required)</i>
7	10103399	Lock Washer - 5/8" <i>(16 Required)</i>
8	10103880	White Conspicuity Tape (Per Inch)
9	10104195	Discharge Auger Motor Mounting Bracket
10	10105936	Short Discharge Auger <i>(See Fig. 25)</i>
11	10103411	1/2" I.D. x 4' Hydraulic Hose with Fittings
12	10103302	6" Series Wafer Butterfly Valve
13	10102971	Discharge Hose Connector
14	10102703	1/2-13 x 3-1/2" Grade 5 Bolt <i>(Eight Required)</i>
—	10103881	Red Conspicuity Tape <i>(Per Inch)</i>

PART NUMBERS AND SCHEMATICS

Figure 22: Discharge Auger Assembly - Trailer



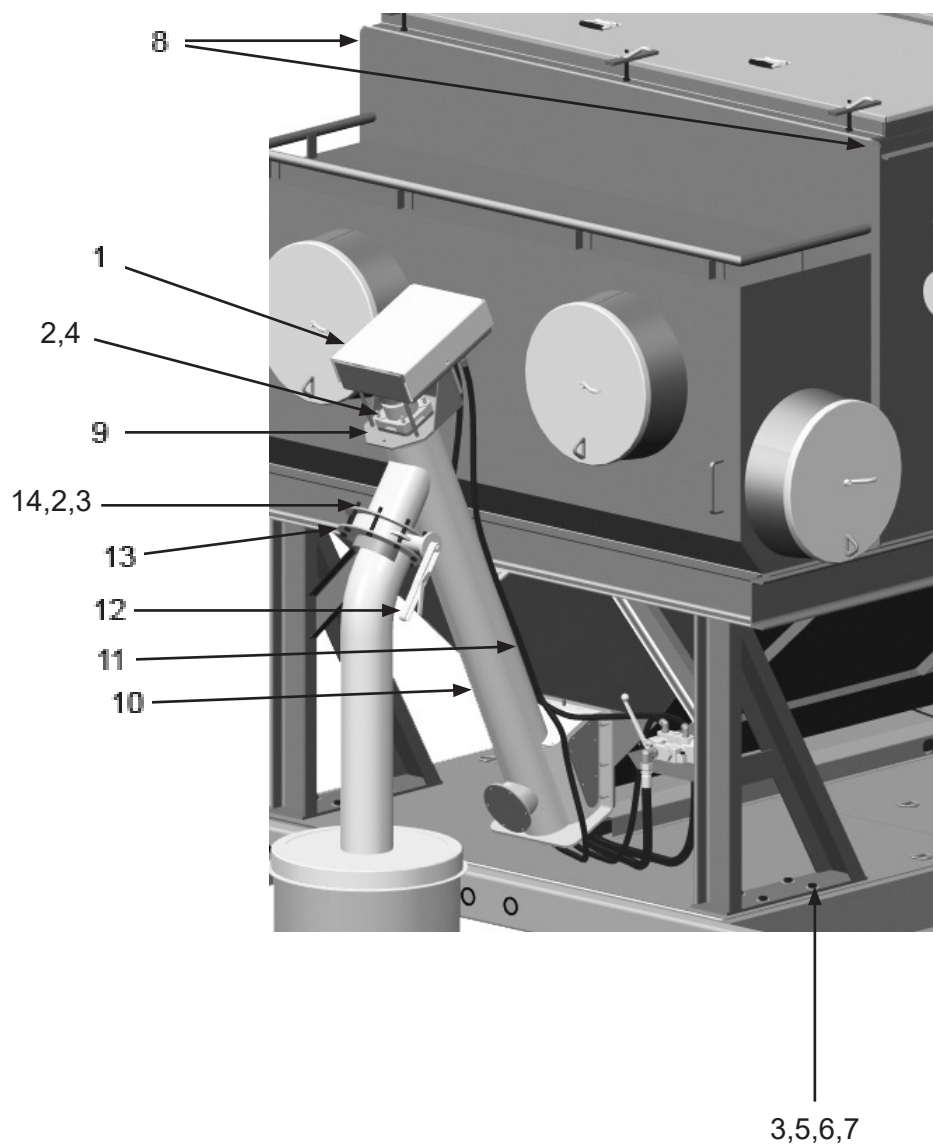
PART NUMBERS AND SCHEMATICS

Discharge Auger Assembly - Skid

Item #	Part #	Description
Fig. 23		
1	10103363	Discharge Chain Cover
2	1014022	1/2-13 Hex Nut <i>(18 Required)</i>
3	10103393	5/8-11 Grade 8 Zinc Nut <i>(16 Required)</i>
4	10100675	1/2" Lock Washer <i>(Eight Required)</i>
5	10103397	5/8-11 x 2" Grade 8 Bolt- Zinc <i>(16 Required)</i>
6	10103398	Washer - 5/8" Grade 8 <i>(32 Required)</i>
7	10103399	Lock Washer - 5/8" <i>(16 Required)</i>
8	10103880	White Conspicuity Tape <i>(Per Inch)</i>
9	10104195	Discharge Auger Motor Mounting Bracket
10	10103216	Discharge Auger <i>(See Fig. 25)</i>
11	10103411	1/2" I.D. x 4' Hydraulic Hose with Fittings
12	10103302	6" Series Wafer Butterfly Valve
13	10102971	Discharge Hose Connector
14	10102703	1/2-13 x 3-1/2" Grade 5 Bolt <i>(Eight Required)</i>
—	10103881	Red Conspicuity Tape <i>(Per Inch)</i>

PART NUMBERS AND SCHEMATICS

Figure 23: Discharge Auger Assembly - Skid



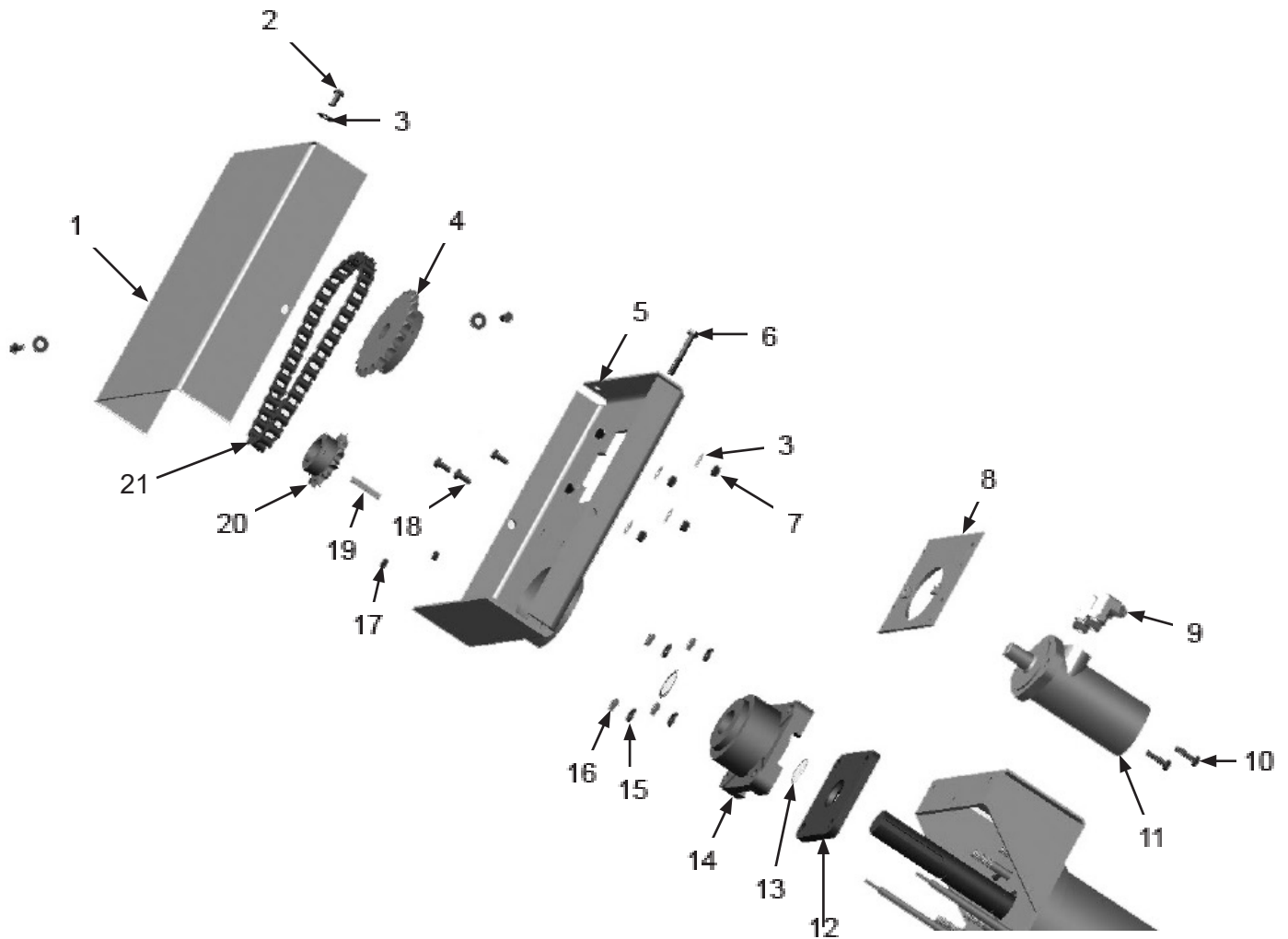
PART NUMBERS AND SCHEMATICS

Discharge Auger Drive Assembly

Item #	Part #	Description
Fig. 24		
1	10103363	Chain Cover
2	10103400	3/8-16 x 3/4" Bolt (<i>Seven Required</i>)
3	10101942	3/8" Galvanized Flat Washer (<i>Three Required</i>)
4	10104217	22-Tooth Sprocket
5	10104197	Chain Cover Base
6	10101933	3/8-16 x 2-1/2" Hex Bolt
7	1012318	3/8-16 Hex Nut (<i>Four Required</i>)
8	10104199	Sliding Motor Mount
9	10103308	JIC 8 x SAE 10 90° Elbow (<i>Two Required</i>)
10	10104234	3/8-16 x 1-1/4" Hex Bolt (<i>Two Required</i>)
11	10102887	Hydraulic Motor
12	10102902	Seal Plate
13	10103605	Snap Ring (<i>Two Required</i>)
14	10102903	Thrust Bearing
15	10100675	1/2" Lock Washer (<i>Four Required</i>)
16	1014022	1/2-13 Hex Nut (<i>Four Required</i>)
17	1035046	5/16-18 Nut (<i>Two Required</i>)
18	10101346	5/16-18 x 3/4" L Grade 5 Bolt (<i>Three Required</i>)
19	10103641	3/8" Key Cut
20	10102886	13-Tooth Sprocket
21	10104191	Discharge Auger Chain Kit <i>Includes 60# Connecting Chain Link, 60# Cottered Roller Chain (Quantity of Three), and 60# Offset Chain Link.</i>
—	10103392	60# Connecting Chain Link
—	10103391	60# Cottered Roller Chain (<i>Per Foot</i>)
—	10103614	60# Offset Chain Link
—	10103940	Seal Kit for Hydraulic Motor

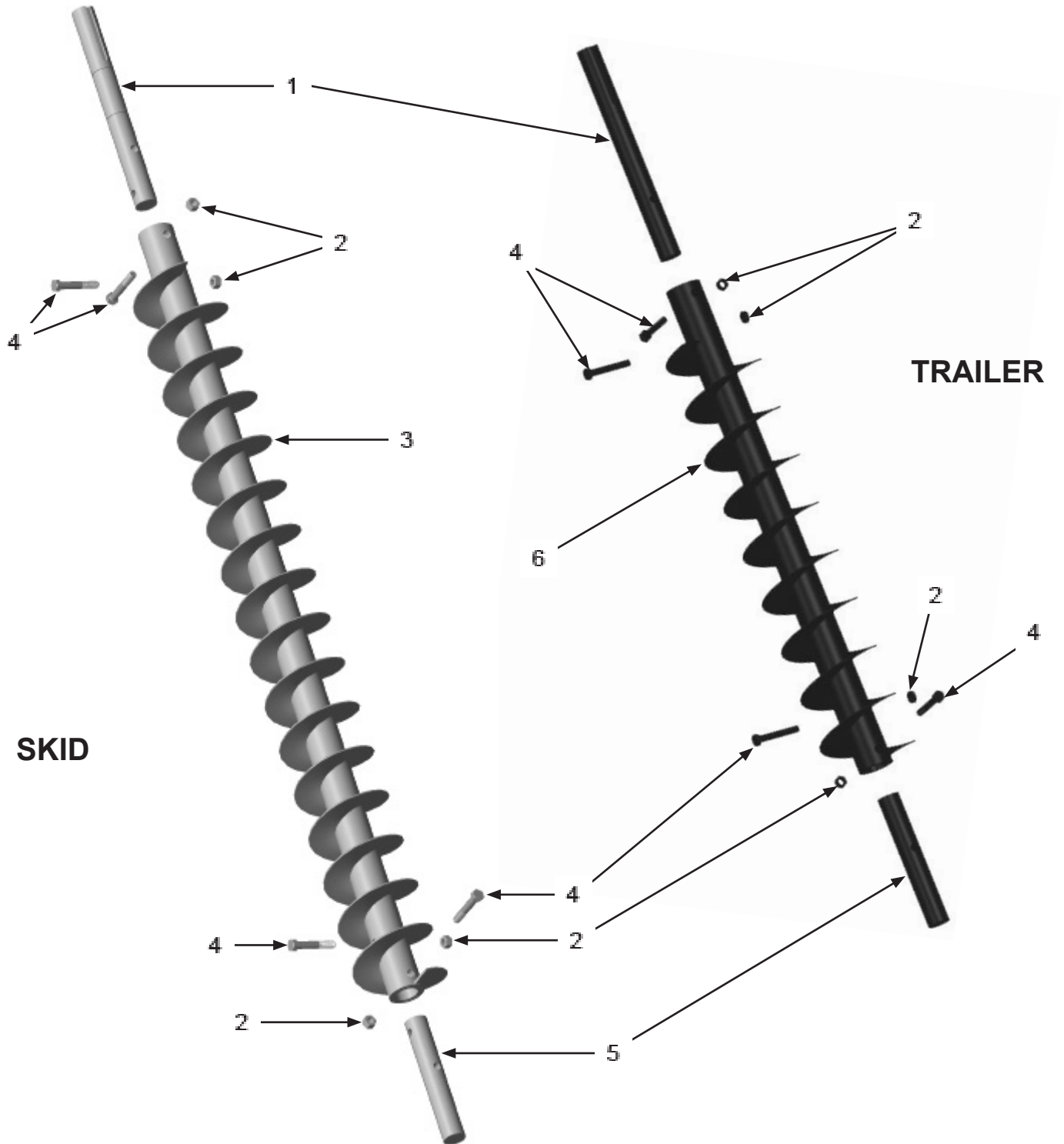
PART NUMBERS AND SCHEMATICS

Figure 24: Discharge Auger Drive Assembly



PART NUMBERS AND SCHEMATICS

Figure 25: Discharge Augers



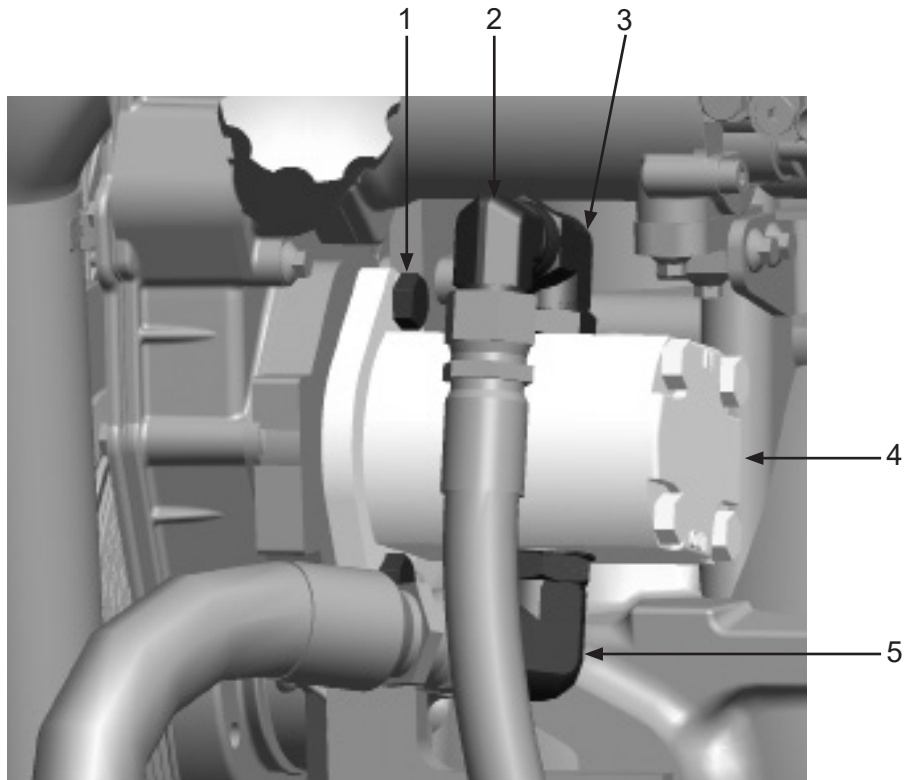
Item #	Part #	Description
--------	--------	-------------

Fig. 25

1	10103306	Drive Shaft
2	1014022	1/2-13 Hex Nut <i>(Four Required)</i>
3	10102883	58" x 6" Half Pitch Auger
4	10103401	1/2-13 x 3" Galvanized Bolt <i>(Four Required)</i>
5	10102910	Auger Shaft End
6	10105943	34" x 6" Half Pitch Auger

PART NUMBERS AND SCHEMATICS

Figure 26: Hydraulic Pump



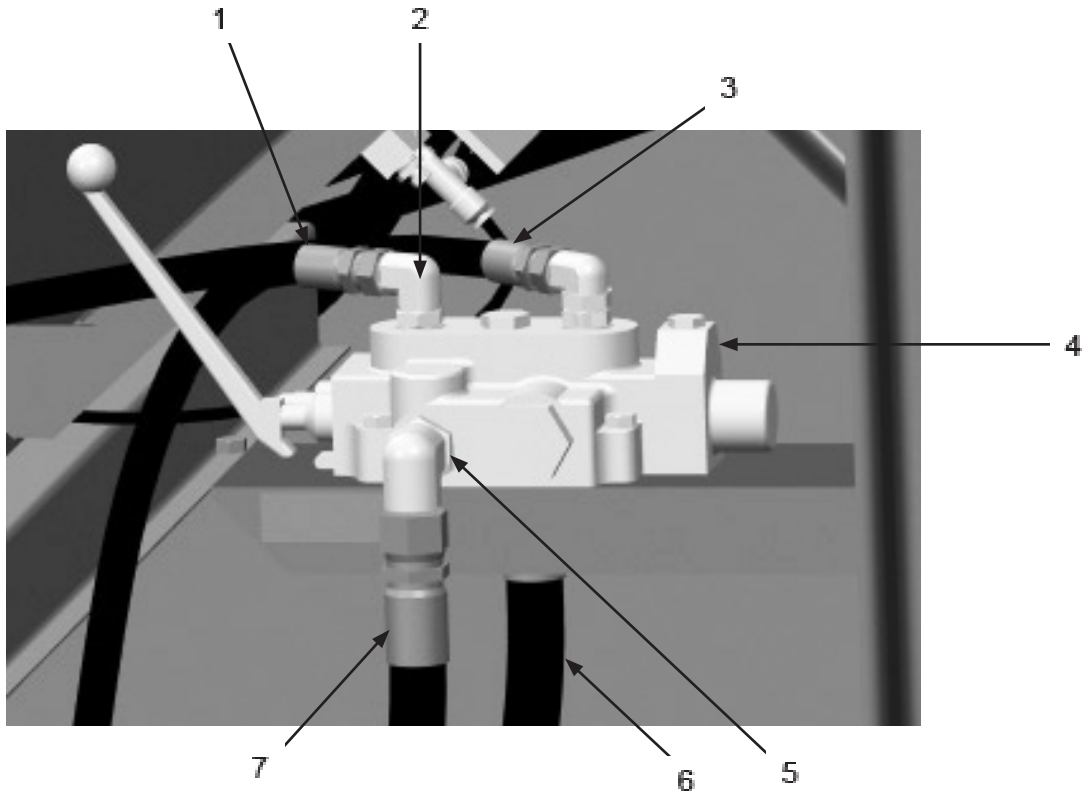
Item #	Part #	Description
--------	--------	-------------

Fig. 26

1	10101943	1/2-13 x 1-3/4" Galvanized Hex Bolt <i>(Two Required)</i>
2	10103610	JIC 12 x JIC 12 90° Elbow
3	10103310	JIC 12 x SAE 12 90° Elbow
4	10103269	2B Series 2.08 CI/REV Gear Pump
5	10103311	JIC 6 x SAE 16 90° Elbow

PART NUMBERS AND SCHEMATICS

Figure 27: Hydraulic Control Assembly



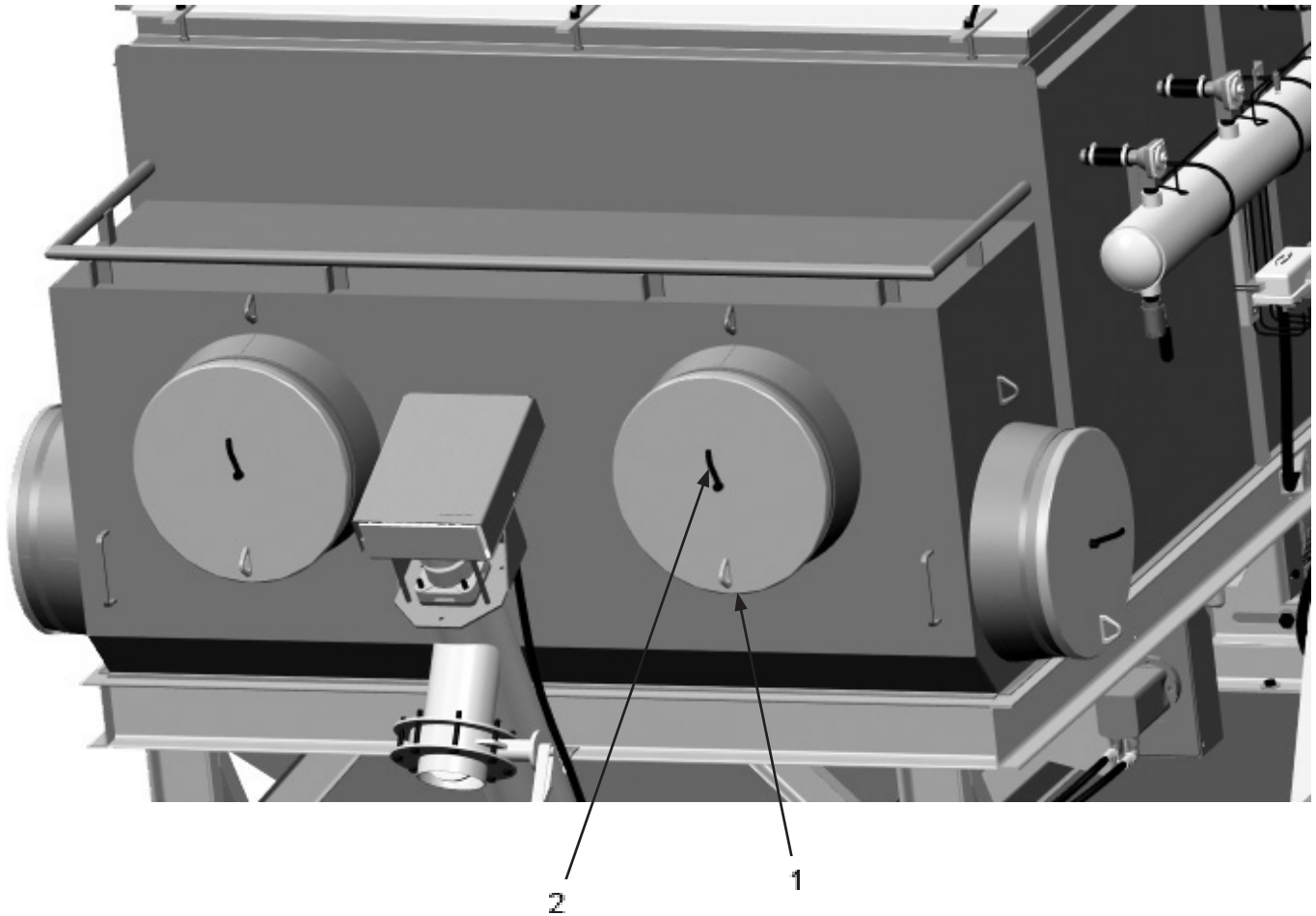
Item #	Part #	Description
--------	--------	-------------

Fig. 27

1	10103408	1/2" x 12'6" Hydraulic Hose with Fittings
2	10103309	JIC 8 x SAE 8 90° Elbow (<i>Two Required</i>)
3	10103409	1/2" x 7'1" Hydraulic Hose with Fittings
4	10103267	Cross Hydraulic Control Valve with Handle
5	10103310	JIC 12 x SAE 12 90° Elbow (<i>Two Required. One not shown</i>)
6	10103707	3/4" I.D. x 17.7' Hydraulic Hose with Fittings
7	10103710	3/4" I.D. x 13' Hydraulic Hose with Fittings
—	10108331	Cross Hydraulic Control Valve Seal Kit
—	10108332	Cross Hydraulic Control Valve Handle Kit
—	10108333	Cross Hydraulic Control Valve Relief Assembly

PART NUMBERS AND SCHEMATICS

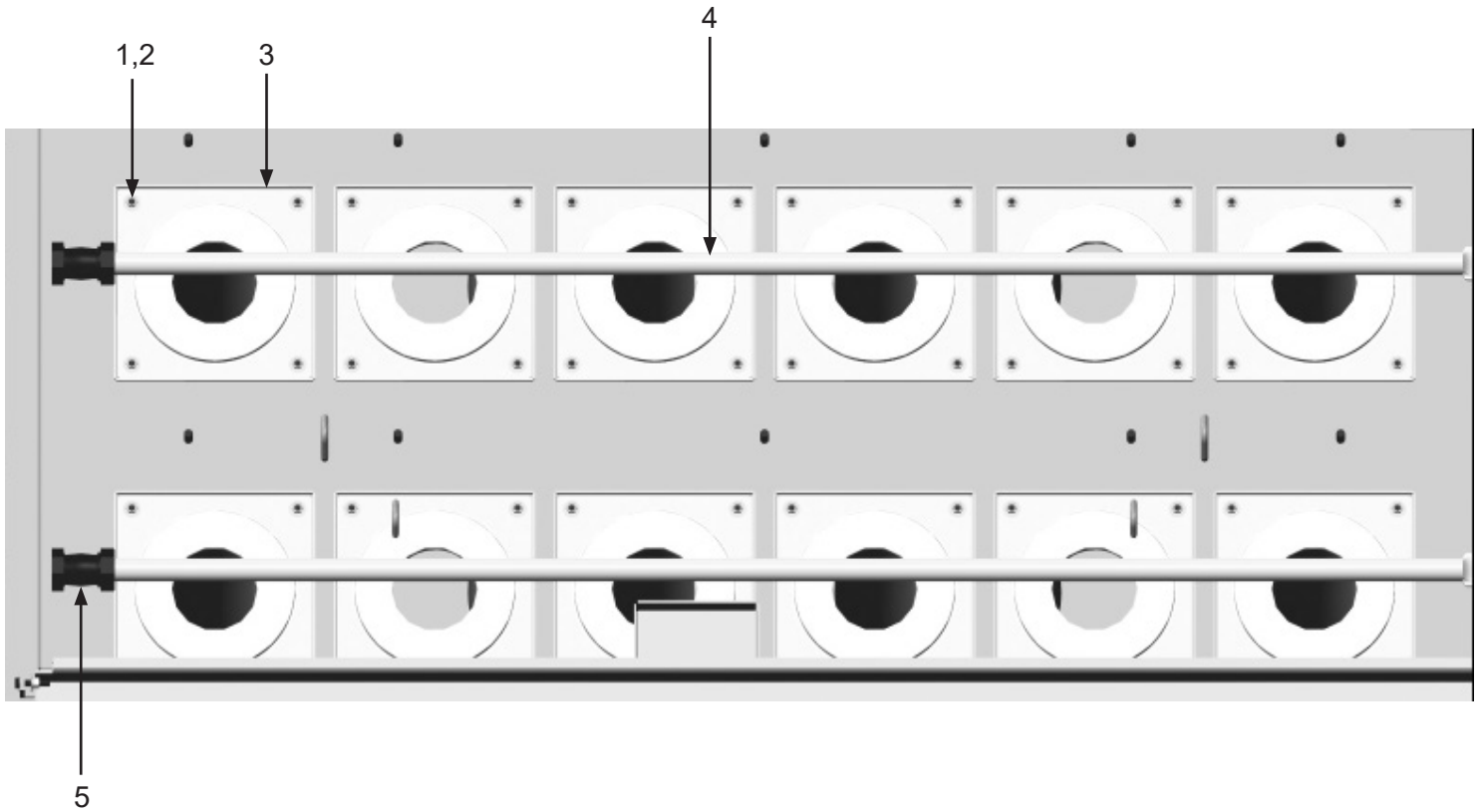
Figure 28: Inlet Door Assembly



Item #	Part #	Description
Fig. 28		
1	10105945	20" Inlet Cover (<i>Four Required</i>)
2	10105960	3/8-16 Handle Zinc (<i>Four Required</i>)

PART NUMBERS AND SCHEMATICS

Figure 29: Dust Collector Filter Cartridge Pulsers

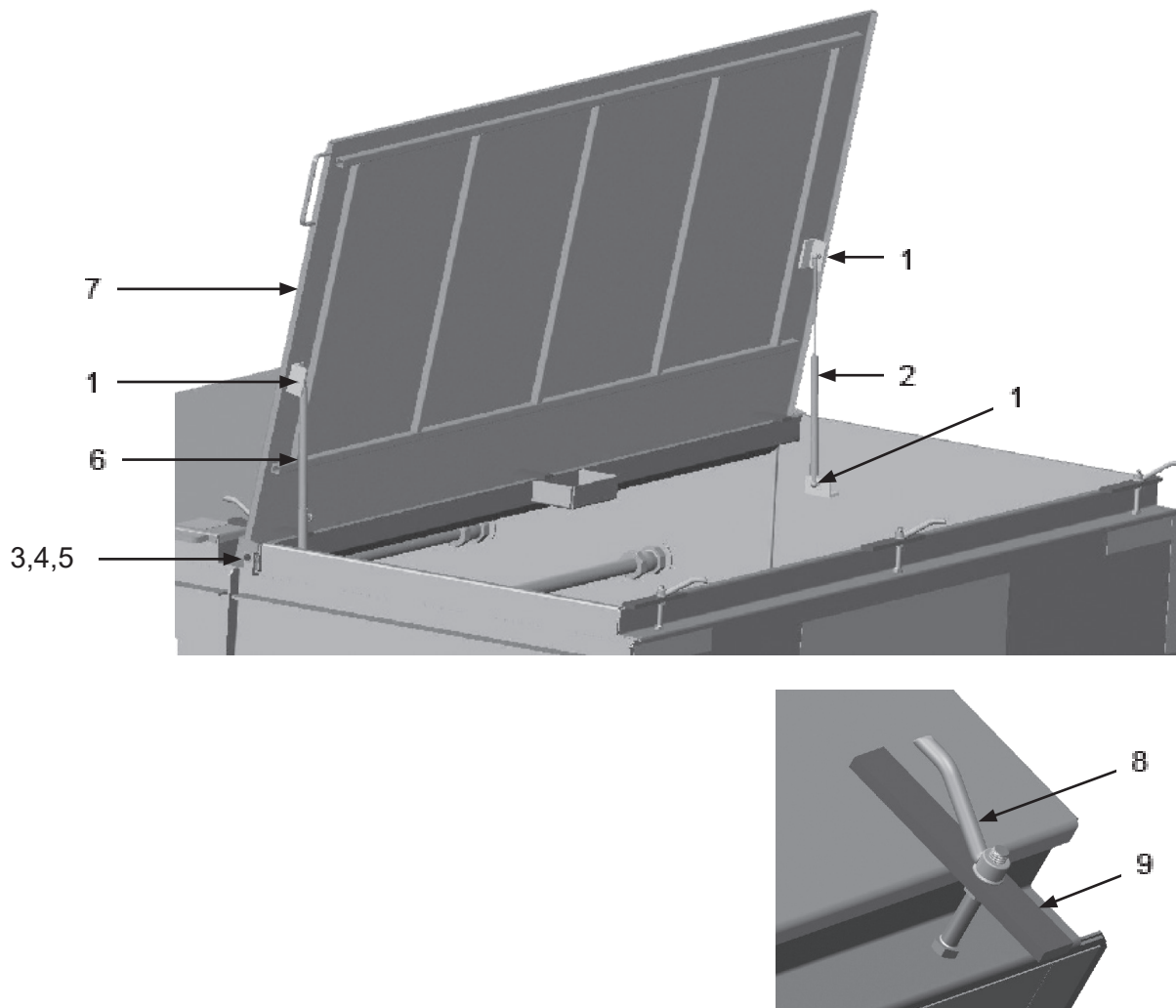


Item #	Part #	Description
Fig. 29		
1	10101942	3/8" Flat Washer (48 Required)
2	1012318	3/8" Hex Nut (48 Required)
3	10105939	Filter Bolt-Down (12 Required)
4	10105942	Small Filter Blowpipe (Two Required)
5	10102599	Compression Coupling Assembly (Two Required)

Quantities specified are per hatch opening

PART NUMBERS AND SCHEMATICS

Figure 30: Dust Collector Filter Cartridge Hatch Door



Item #	Part #	Description
--------	--------	-------------

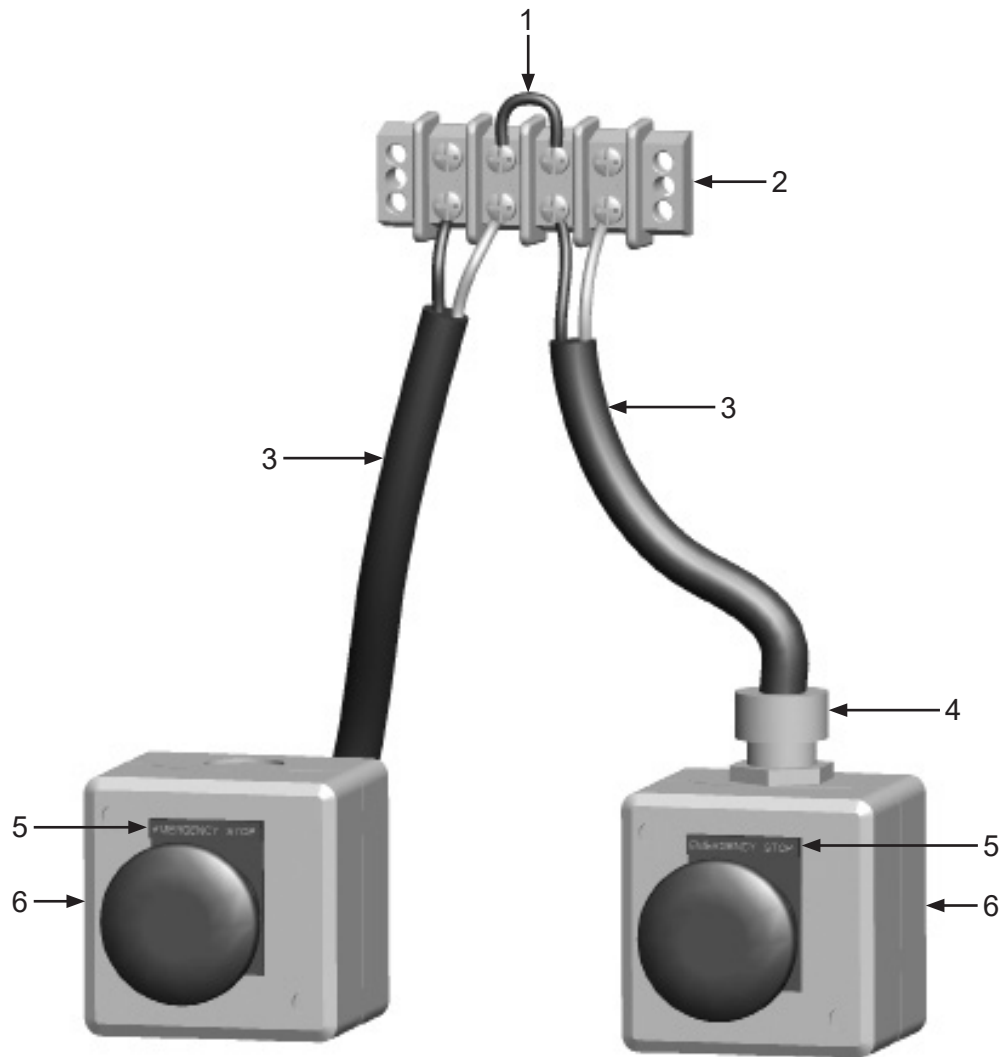
Fig. 30

1	1035046	5/16-18 Hex Nut (<i>Four Required</i>)
2	10103454	Non-Locking Gas Spring
3	1028617	3/8-16 x 1-3/4" Shoulder Bolt (<i>Two Required</i>)
4	10101942	3/8" Flat Washer (<i>Four Required</i>)
5	10101938	3/8-16 Hex Nut (<i>Two Required</i>)
6	10103455	Locking Gas Spring
7	10102917	Hopper Lid
8	10103395	1/2-13 Zinc Plated Handle (<i>Three Required</i>)
9	10104377	Latch Bar (<i>Three Required</i>)

Quantities specified are per hatch opening

PART NUMBERS AND SCHEMATICS

Figure 31: Emergency-Stop Stations



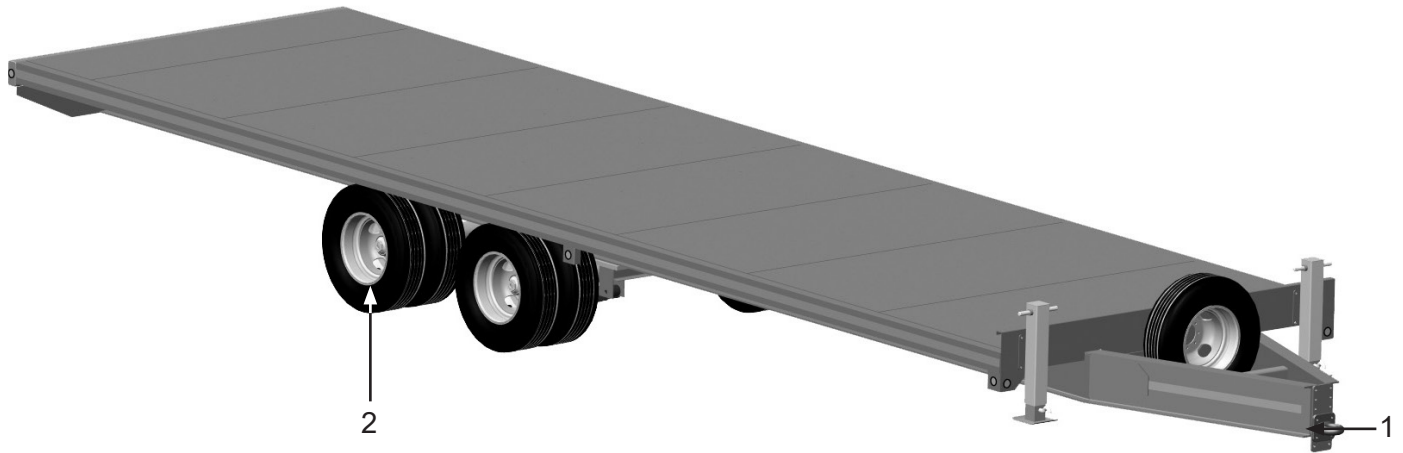
Item #	Part #	Description
--------	--------	-------------

Fig. 31

1	20R12AWGBLACK	Stranded Wire - 12 AWG - Black
2	10104066	Terminal Strip - 4-Circuit - 30 amp
3	1015570	12/2 SO Electric Cord (<i>Per Foot</i>)
4	1019048	1/2" NPT Cord Grip
5	10104063	Legend Plate - Emergency-Stop Station
6	10104071	Emergency-Stop Control Station (<i>Two Required</i>)
—	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 32: Trailer



Item #	Part #	Description
--------	--------	-------------

Fig. 32

1	10104079	Pintle Hitch with Flat Plate
2	10106290	16"- 8 Hole Pattern Rim with Tire <i>(Four Required)</i>
—	10104081	Breakaway Kit
—	10104135	Wire Harness
—	10104080	3/8" x 35" Chain with Hook
—	10104084	Red LED Oval Tail Light <i>(Four Required)</i>
—	10104085	Rubber Oval Grommet <i>(Four Required)</i>
—	10104086	2" Round Red LED Clearance Light <i>(Five Required)</i>
—	10104087	2" Round Amber LED Clearance Light <i>(Six Required)</i>
—	10104088	2" Round Rubber Grommet <i>(11 Required)</i>

OPTIONAL ACCESSORIES



Part Numbers

REPLACEMENT DUST COLLECTOR FILTER CARTRIDGES

	Material	I.D.	O.D.	Length
10105973	85/15 Blend High Density Pleat	4.87"	9.22"	35"
10106218	85/15 Blend Reduced Pleat	4.87"	9.22"	35"
10105974	Fire Retardant	4.87"	9.22"	35"
101569046	HEPA	4.87"	9.22"	35"
10105980	Spunbond	4.87"	9.22"	35"



Part Numbers

20" I.D. DUCT HOSE

	Duct Hose I.D.	Length	Pitch	Bend Radius	Body Material	Wear Strip Material	Wear Strip Color	Temperature Range (°F)
10DH2025HD	20"	25 Ft.	1-1/2"	17"	2-Ply Vinyl-Coated Polyester	PVC	Red	-20° – 180°
10DH2050HD	20"	50 Ft.	1-1/2"	17"	2-Ply Vinyl-Coated Polyester	PVC	Red	-20° – 180°



Part Numbers

20" I.D. DUCT HOSE COUPLINGS

	Duct Hose I.D.	Material
1017120	20"	Stainless Steel



Part Numbers

20" I.D. DUCT HOSE SCREW CLAMPS

	Duct Hose I.D.	Material
10DH062602000	20"	Stainless Steel

OPTIONAL ACCESSORIES



Part Numbers

3/4" I.D. X 1-1/4" O.D. AIR HOSE WITH COUPLINGS INSTALLED

	Length	Hose I.D.	Hose O.D.	Working Pressure	Hose Cover Color	Couplings
10AH034AC	50 Ft.	3/4"	1-1/4"	200 PSI	Red	2-Lug Crimped On



Part Numbers

3/4" I.D. X 1-1/4" O.D. AIR HOSE

	Length	Hose I.D.	Hose O.D.	Working Pressure	Hose Cover Color
10AH034	Per Ft.	3/4"	1-1/4"	200 PSI	Red



Part Numbers

MALE HOSE END COUPLING AND GASKET FOR 3/4" I.D. AIR HOSE

	Hose I.D.	Material	Coupling Style	GASKET		
				Rubber Gasket	Gasket I.D.	Gasket O.D.
10HE1	3/4"	Plated Iron	2-Lug	10UG2	3/4"	1-3/8"



Part Numbers

BOSS® CLAMP FOR 3/4" I.D. AIR HOSE

	Hose I.D.	Hose O.D. Range	Material
10A9	3/4"	1-1/8" – 1-5/16"	Plated Steel

LITERATURE REFERENCES

DUSTMASTER® 50,000 CFM TIER III DIESEL XTREME-DUTY DUST COLLECTORS

106M160	Part Numbers & Schematics Guide – Dustmaster® 50,000 CFM Tier III Diesel Xtreme-Duty® Dust Collectors
1090160	Operator's Manual – Dustmaster® 50,000 CFM Tier III Diesel Xtreme-Duty® Dust Collectors
109S160	Service Manual – Dustmaster® 50,000 CFM Tier III Diesel Xtreme-Duty® Dust Collectors
109V040	Operator's Manual - Hydraulic Motor
109V565	Operator's Manual - Perkins® Engine
109V037	Operator's Manual – Dynamic Fan Corporation
109V040	Operator's Manual - Hydraulic Motor
109V582	Operator's Manual - Behnke Trailer

MAINTENANCE NOTES

[illegible]

GLOBAL HEADQUARTERS

- 3425 East Locust Street
Davenport, IA 52803

ph: 800.BLAST.IT (800.252.7848)
ph: 563.324.2519
fax: 563.324.6258

REGIONAL BRANCH OFFICES

- **Iowa**
Davenport
- **Louisiana**
Gonzales
Harvey
Lafayette
- **Ohio**
Youngstown
- **Texas**
Beaumont
Corpus Christi
Deer Park



ABRASIVES

BLASTING

COATING

DUST COLLECTORS

ENGINEERED SYSTEMS

RENTAL

SAFETY

SERVICE, REPAIR, & MODERNIZATION

VACUUMS

40+ NATIONWIDE SHIPPING LOCATIONS



Marco Regional Branch Offices and Shipping Locations

● Direct Shipping Locations

CONTACT MARCO

800.BLAST.IT
(800.252.7848)
563.324.2519
FAX: 563.324.6258

WWW.MARCO.US
SALES@MARCO.US