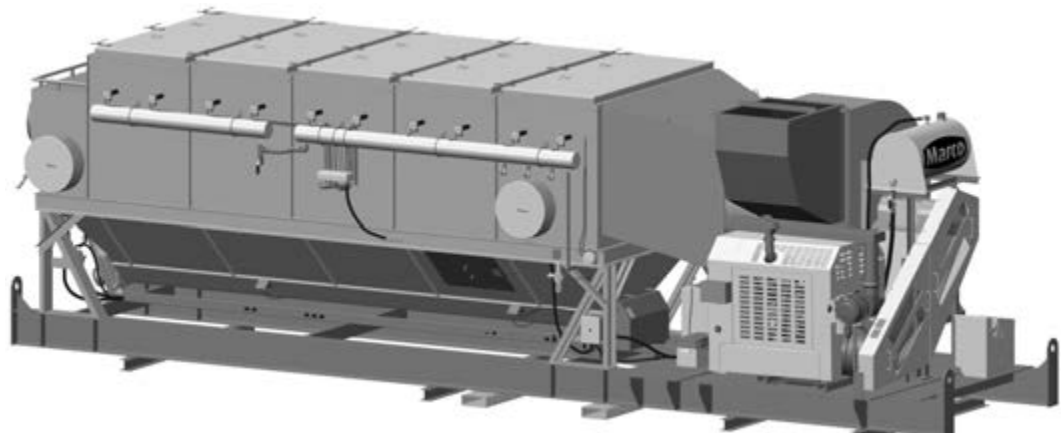




# DUSTMASTER® 50,000 CFM TIER 4 DIESEL DUST COLLECTORS



**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 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. 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.

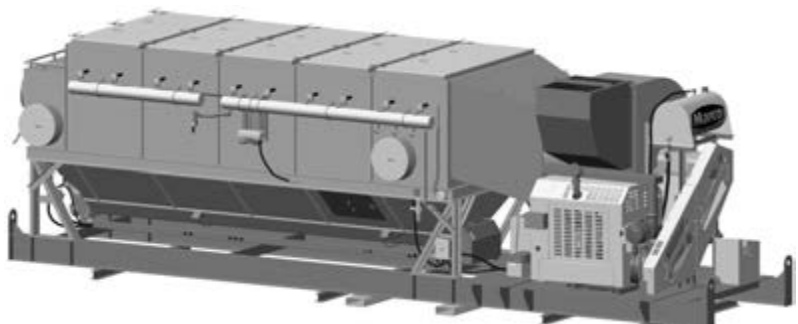
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# PART NUMBERS

## DUSTMASTER® 50,000 CFM TIER 4 DIESEL 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			
10106478	X						X		—
10106479		X					X		56
10106480			X				X		56
10106481				X			X		56
10106482					X		X		56
10106483						X	X		56
10106686	X							X	—
10106692		X						X	56
10106693			X					X	56
10106694				X				X	56
10106695					X			X	56
10106696						X		X	56



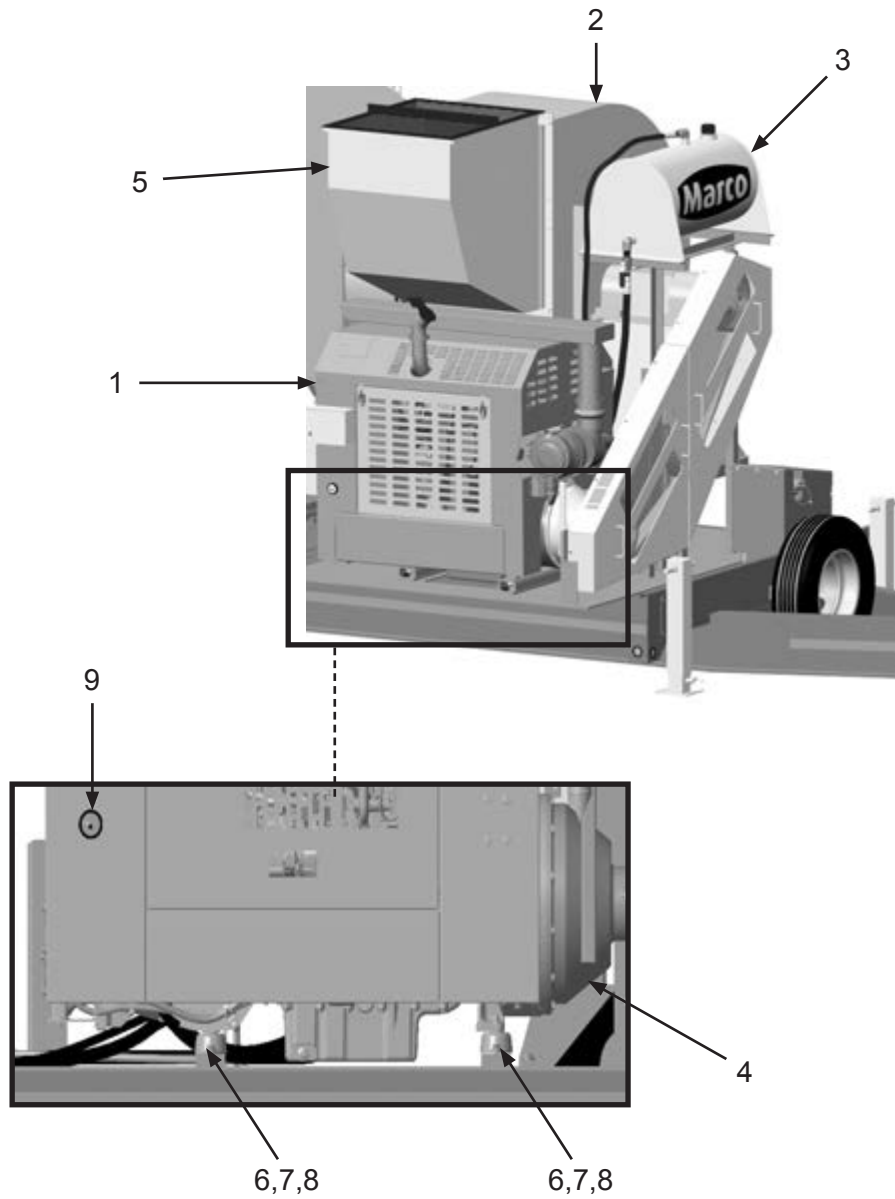


## SPECIFICATIONS

<b>Capacity:</b>	CFM = 36,880 – 50,490 W.C. = 6 – 16"
<b>Filter Cartridge Style:</b>	Open Top with Flange, Closed Bottom 56 Required
<b>Filter Cleaning:</b>	Pulse System, 5–15 second intervals Pulse Duration: 200–350 millisecond
<b>Air to Cloth Ratio:</b>	3.43:1 @ 40,000 CFM
<b>Filter Area:</b>	11,662 square feet
<b>Efficiency:</b>	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
<b>Ducting Connections:</b>	20" I.D., Quantity of Six
<b>Clean-Out Ports:</b>	One
<b>Dust Removal Conveyor:</b>	Main Auger, 6" Discharge Auger, Hydraulic Motor Drive
<b>Fan:</b>	Backward Inclined, non-overloading, spark resisting
<b>Engine:</b>	Diesel, Tier 4, 174 Horsepower
<b>Fuel Capacity:</b>	Type: Diesel Capacity: 116 Gallons
<b>Air Requirements:</b>	Clean, Dry, Compressed Air 24 CFM @ 90 PSI
<b>Electrical System:</b>	12-Volt DC
<b>Engine Protection:</b>	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.
<b>Fluid Specifications:</b>	Hydraulic Oil: H46 or equivalent, 40 Gallons Diesel Fuel: See Engine Operator's Manual for type, 116 Gallons Grease/Lubricator: Shell Gadus S2 V100 2 or equivalent DEF: BlueDEF Diesel Exhaust Fluid
<b>Unit Dimensions Trailer:</b>	Weight: 19,900 pounds (empty) Tongue Weight: 3980 pounds Length: 35' 6" Width: 8' 6" Height: 11'
<b>Unit Dimensions Skid:</b>	Weight: 18,000 pounds (empty) Length: 32' 5" Width: 8' 6" Height: 9' 7"

# ASSEMBLY PART NUMBERS AND SCHEMATICS

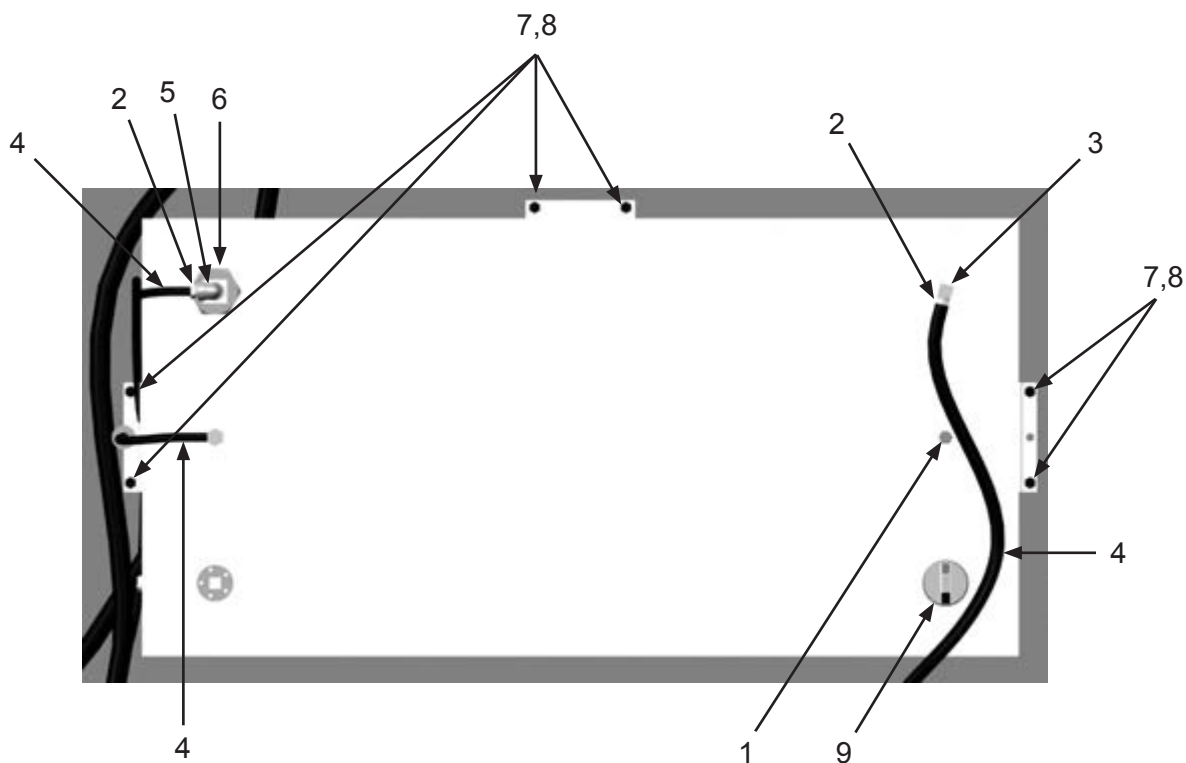
Figure 1: Front Assembly



Item#	Part#	Description
<b>Fig. 1</b>		
1	10106485	Perkins Engine 174 HP Tier 4 CPU With DEF Tank
2	10103495	BI 365 Fan (See Figure 7)
3	10105031	40 Gallon Hydraulic Tank (See Figure 4)
4	10103986	Twin Disc Clutch
5	10105951	Fan Exhaust
6	10104711	1/2" Flat Washer (Eight Required)
7	10104712	1/2" Lock Washer (Eight Required)
8	10104603	1/2-13 X 1-1/4" Bolt (Eight Required)
9	10104821	Sight Gauge

## PART NUMBERS AND SCHEMATICS

Figure 2: Fuel Tank



Item #	Part #	Description
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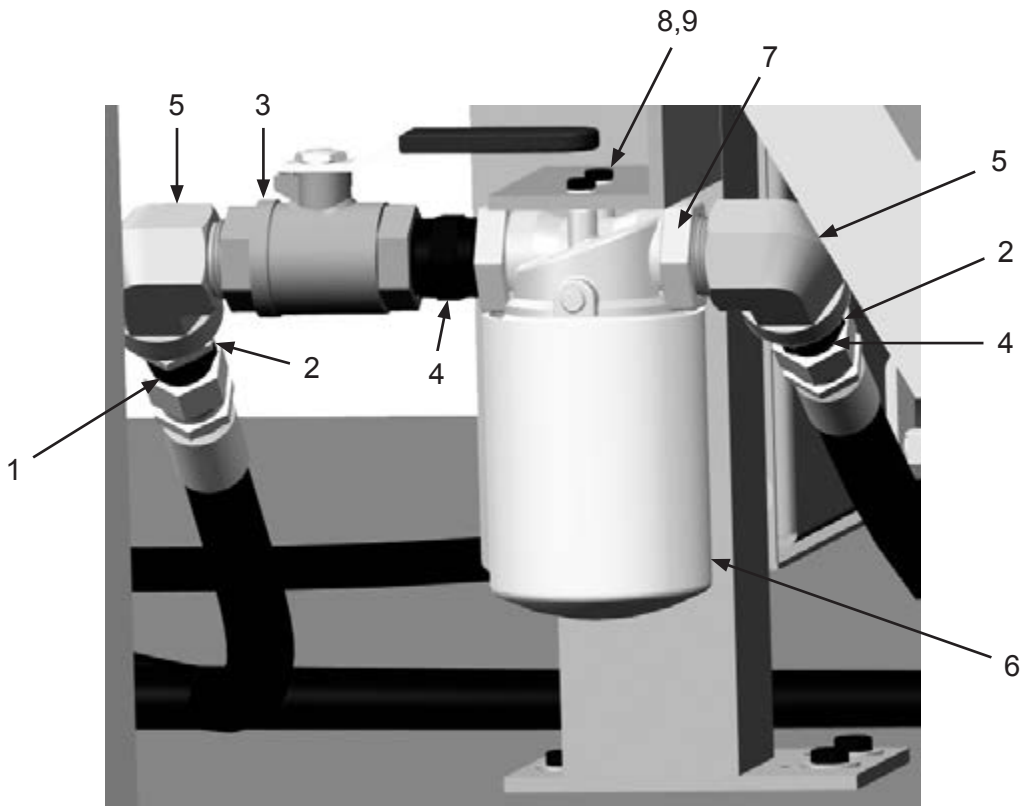
**Fig. 2**

—	10104704	Fuel Tank - 116 gallon
1	10106471	1/4" Pipe Plug
2	10106469	3/8" Barb x 3/8" NPT
3	10103617	Withdraw Tube - 16"
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> )

*\*Right Side Fuel Tank Shown. Left Side Fuel Tank uses identical parts.*

## PART NUMBERS AND SCHEMATICS

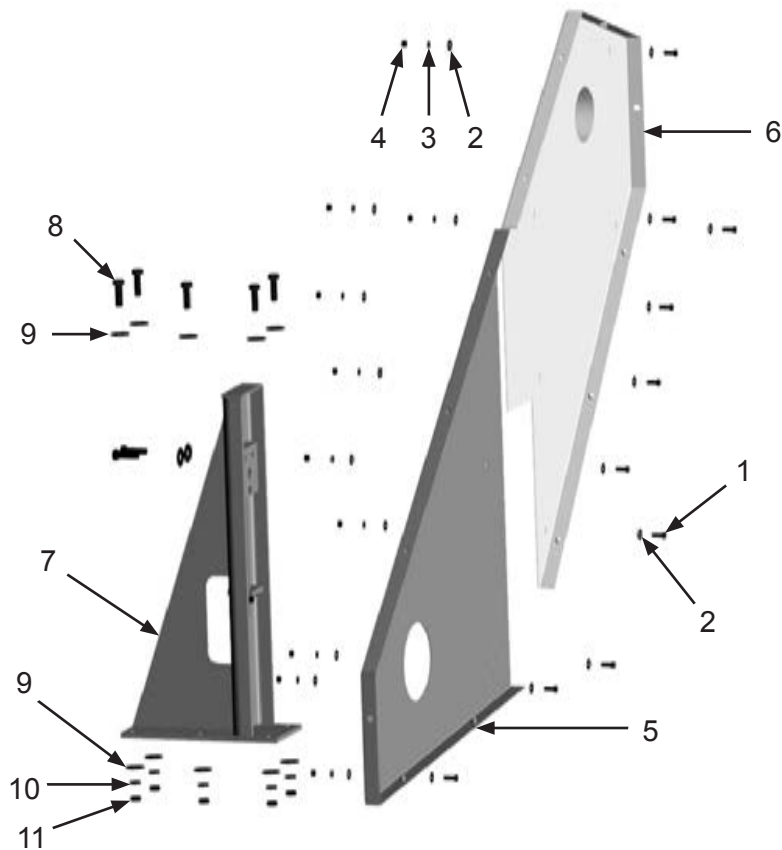
Figure 3: Hydraulic Oil Filter Assembly



Item #	Part #	Description
<b>Fig. 3</b>		
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 6: Fan Belt Guard Back Assembly



Item #	Part #	Description
<b>Fig. 6</b>		
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)

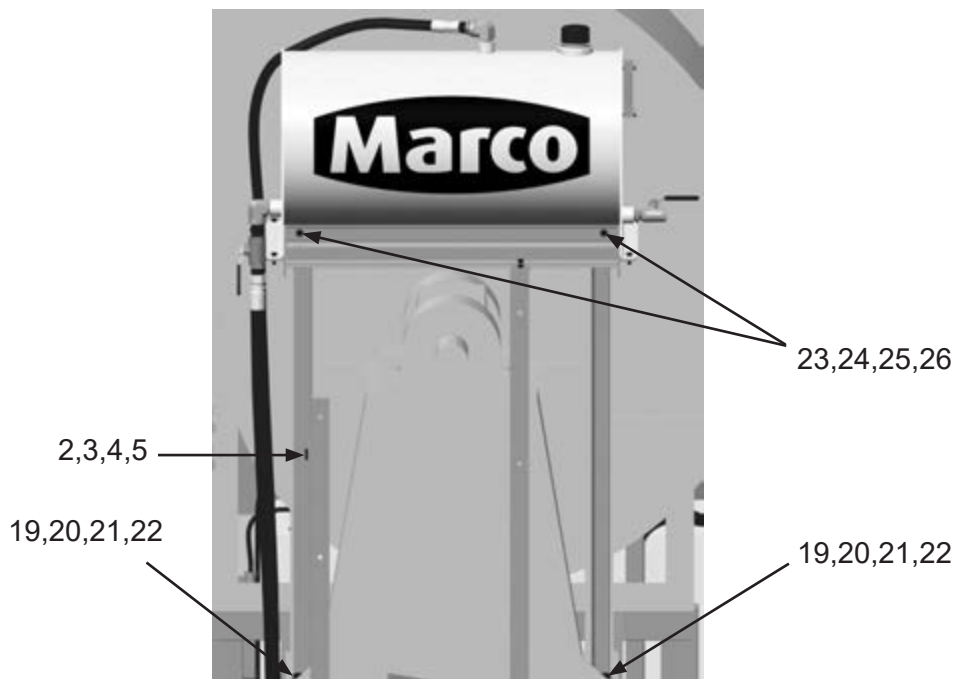
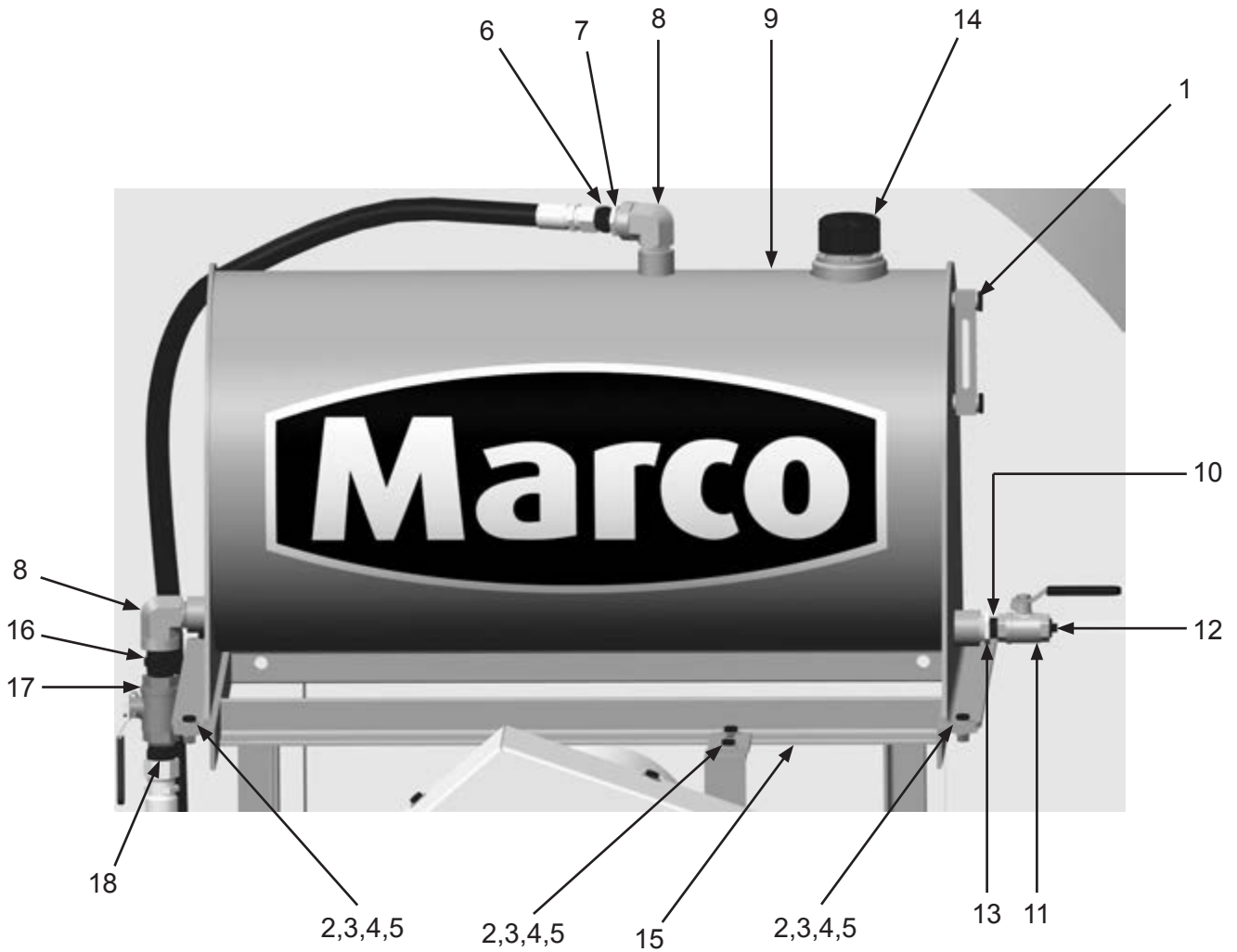
# PART NUMBERS AND SCHEMATICS

## Hydraulic Oil Tank

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





# PART NUMBERS AND SCHEMATICS

## Fan Belt Assembly

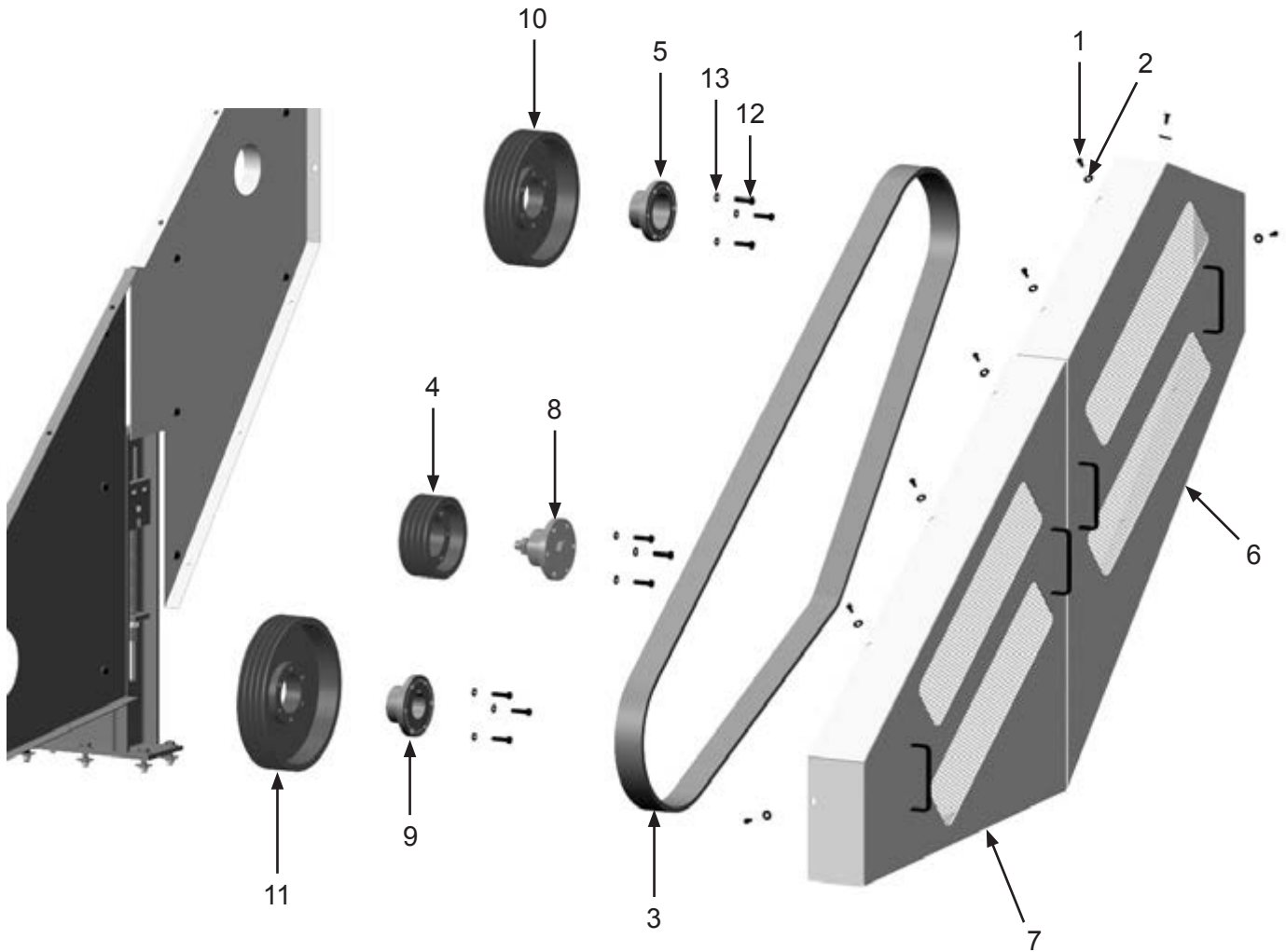
Item #	Part #	Description
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**Fig. 5**

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	13.2" Sheave
11	10106755	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> )

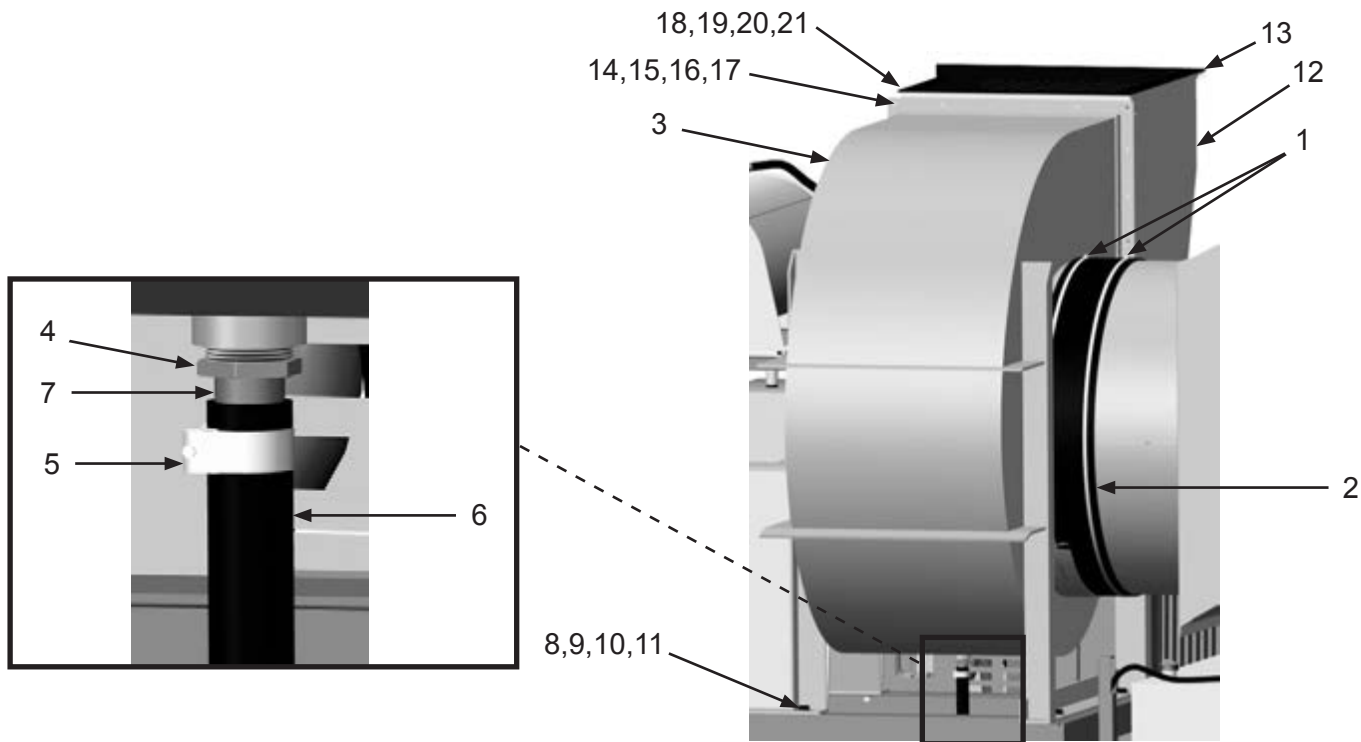
# PART NUMBERS AND SCHEMATICS

Figure 5: Fan Belt Assembly



## PART NUMBERS AND SCHEMATICS

Figure 7: Fan Assembly



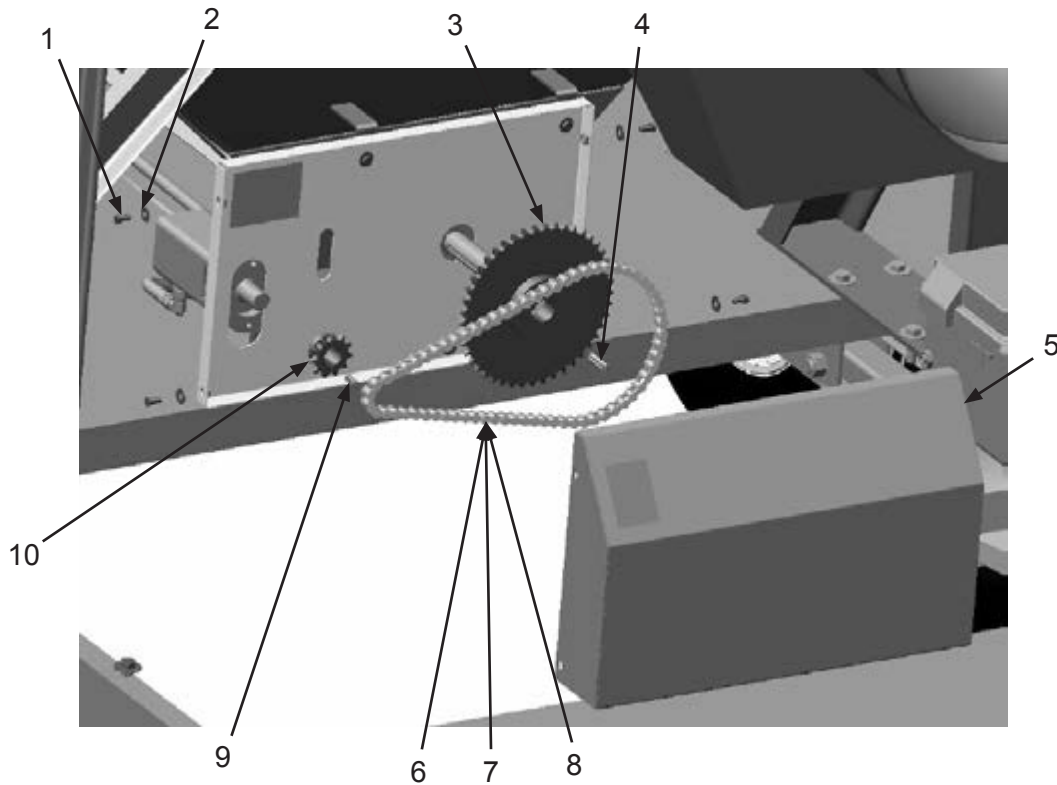
Item #	Part #	Description
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Fig. 7

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	T-Bolt Clamp 1-9/16" x 1-11/16" OD
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	Lock Washer - 3/4" HD <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	10101937	1/4-20 x 1" Bolt Grade 5 - Galvanized <i>(12 Required)</i>
15	10101940	1/4" Galvanized Flat Washer <i>(12 Required)</i>
16	1012153	1/4" Lock Washer <i>(12 Required)</i>
17	10101347	1/4-20 Hex Bolt <i>(12 Required)</i>
18	10L805318	3/8-24 x 1-1/4 Grade 5 Bolt <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	10L804303	3/8-24 Hex Nut <i>(12 Required)</i>

## PART NUMBERS AND SCHEMATICS

Figure 8: Main Auger Drive Assembly



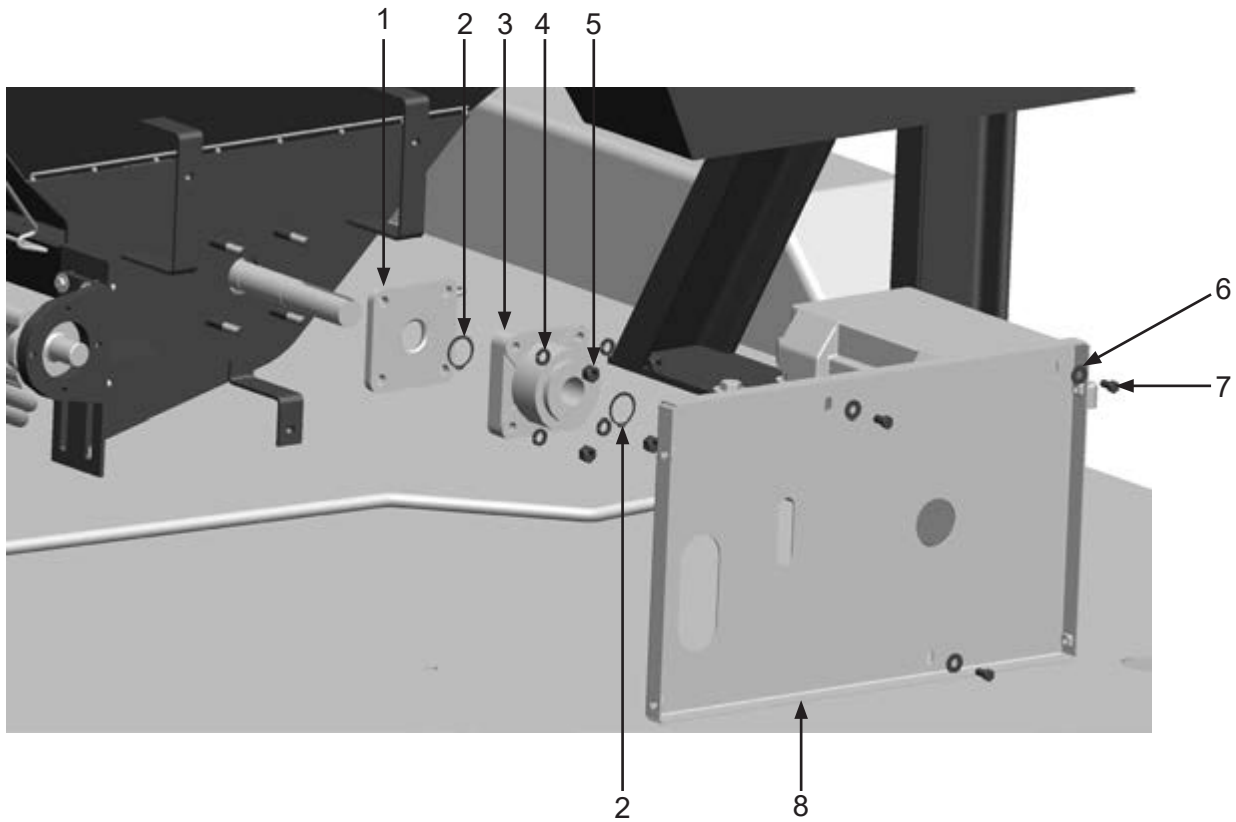
Item #	Part #	Description
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Fig. 8

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 9: Main Auger Bearing



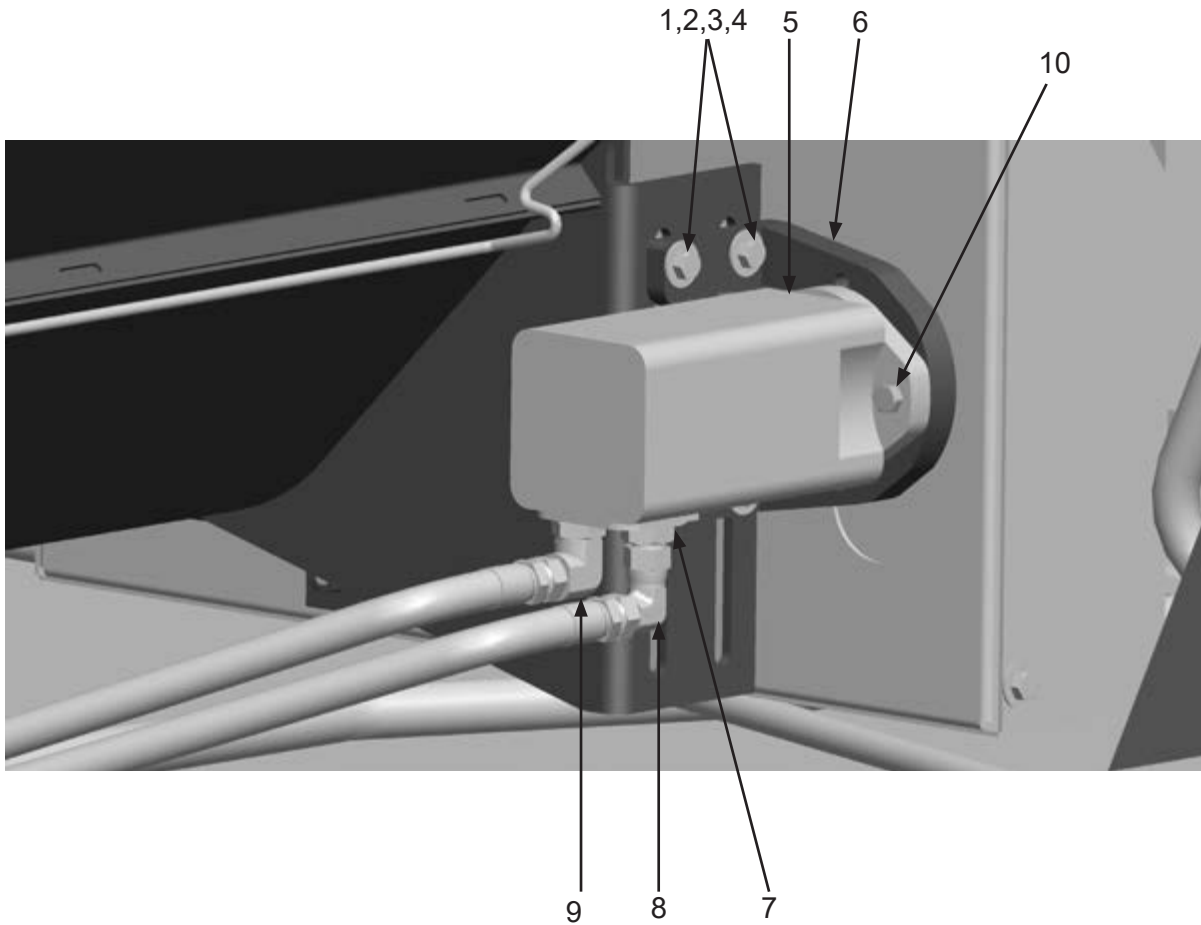
Item #	Part #	Description
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**Fig. 9**

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

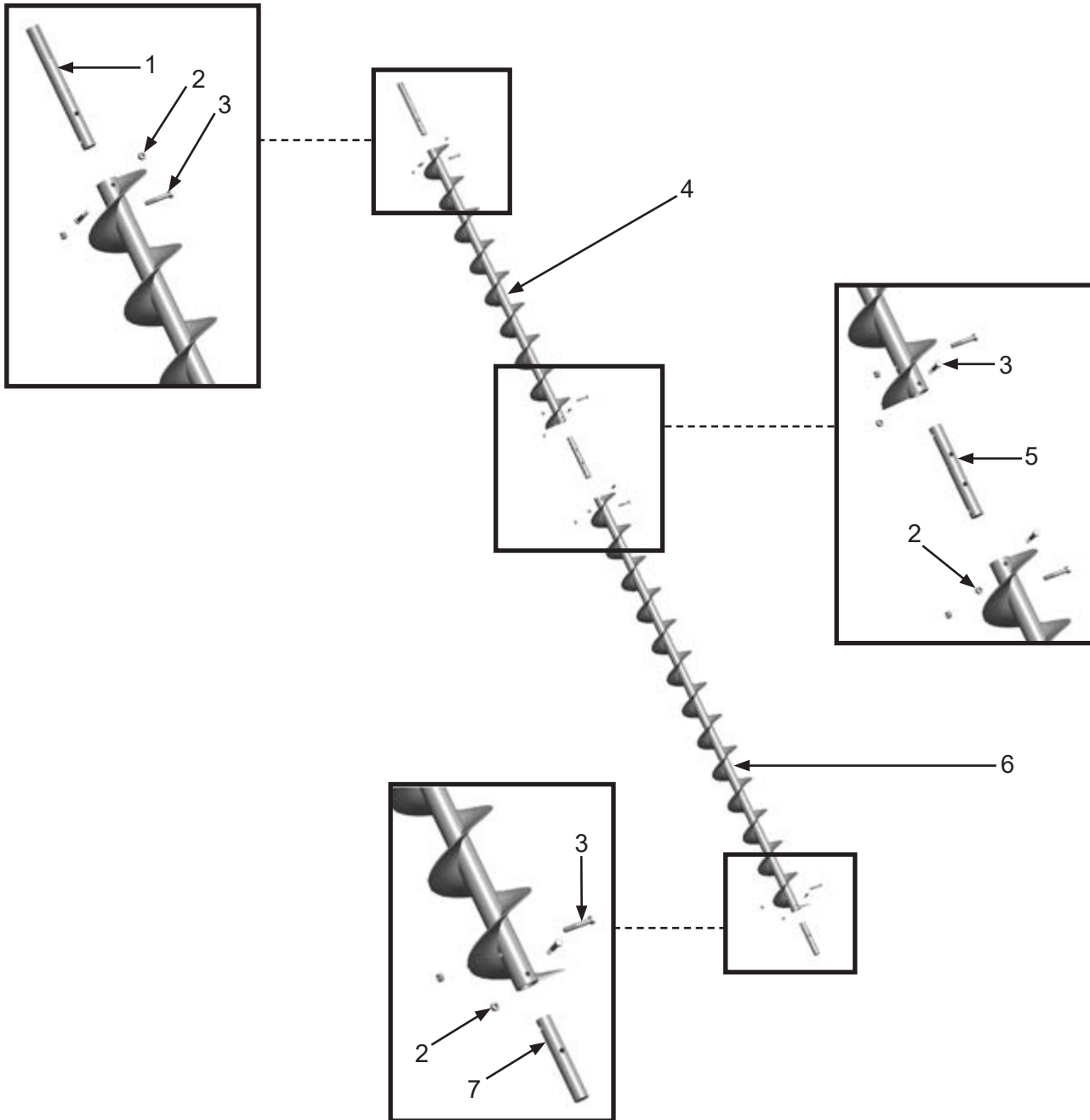
Figure 10: Main Auger Motor



Item #	Part #	Description
<b>Fig. 10</b>		
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	1012318	3/8-16 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
10	10104234	3/8-16 x 1-1/4 Hex Bolt Zinc GR 5
—	10103941	Seal Kit for 18.7 Displacement Hydraulic Motor

## PART NUMBERS AND SCHEMATICS

Figure 11: Main Auger



Item #	Part #	Description
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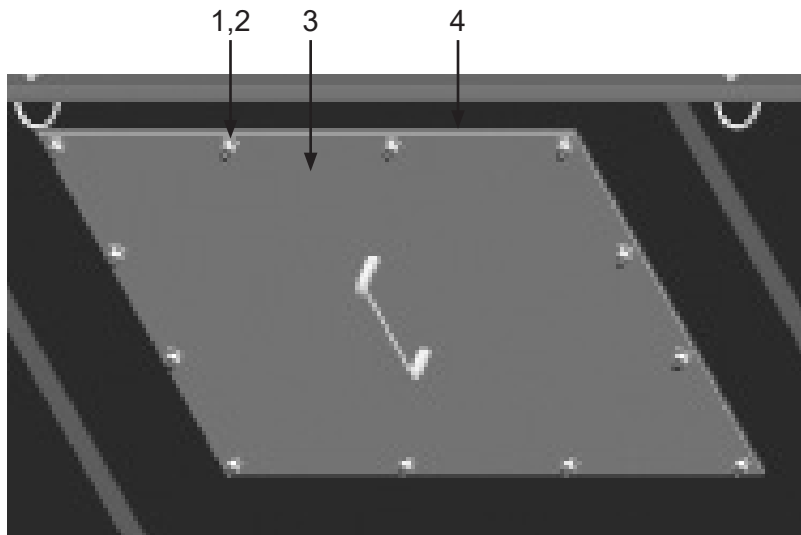
Fig. 11

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

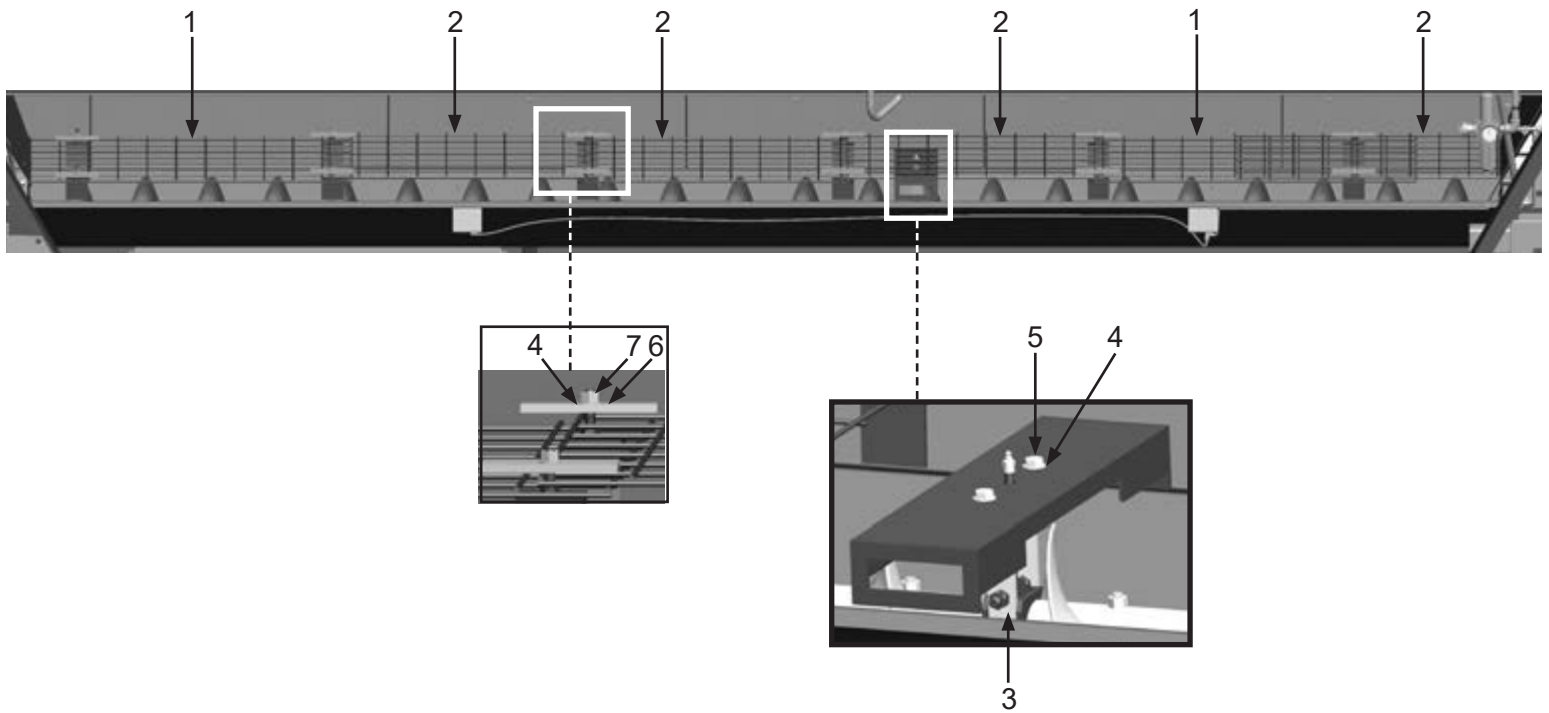
Figure 12: Access Panel Assembly



Item #	Part #	Description
<b>Fig. 12</b>		
1	10101938	3/8-16 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 13: Main Auger Protective Grate



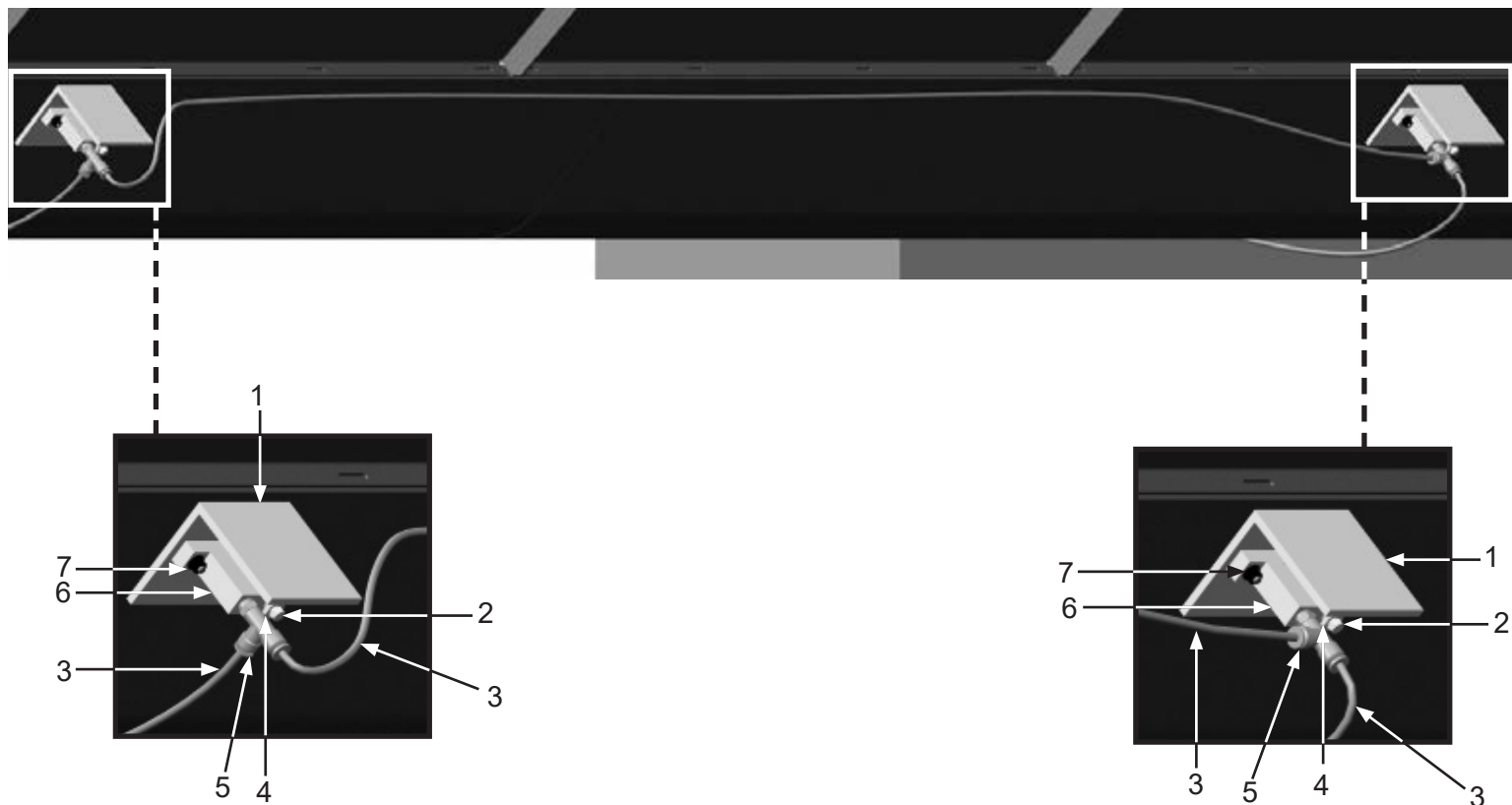
Item #	Part #	Description
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**Fig. 13**

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 14: Left Side Pneumatic Ball Vibrators



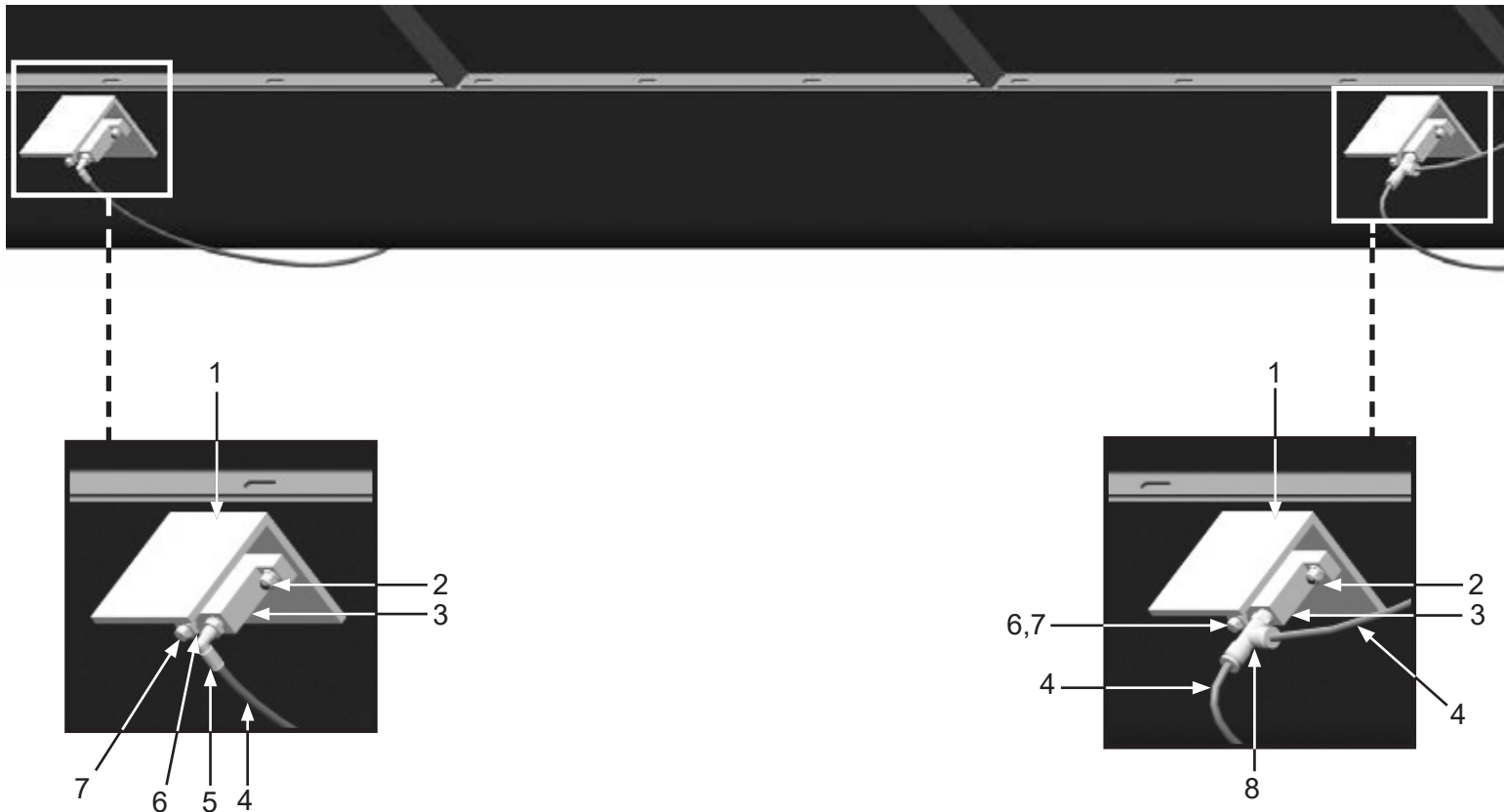
Item #	Part #	Description
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**Fig. 14**

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 15: Right Side Pneumatic Ball Vibrators



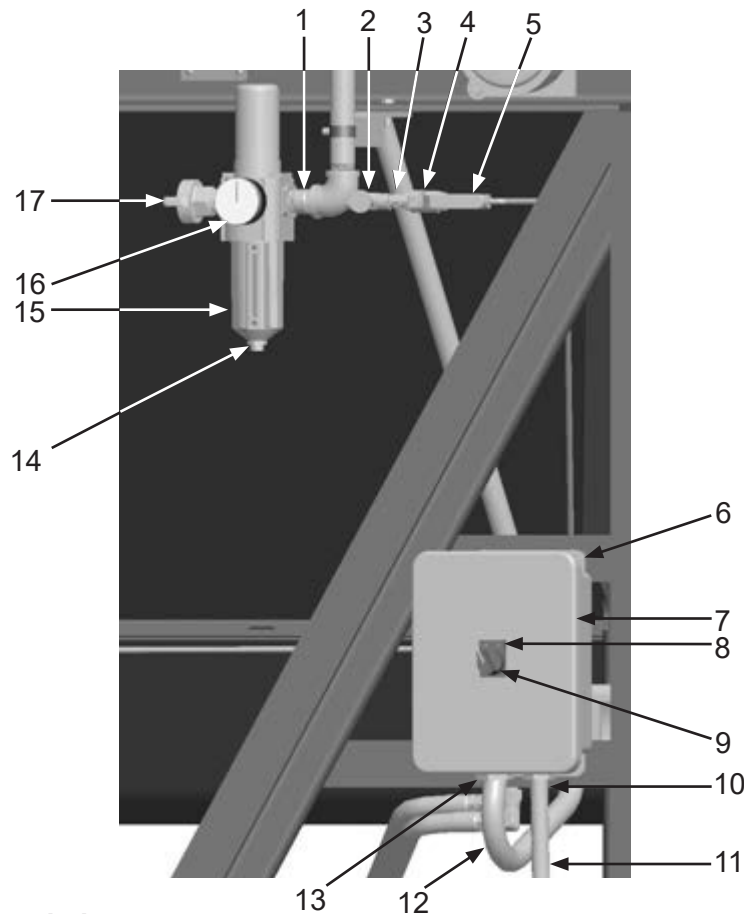
Item #	Part #	Description
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**Fig. 15**

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 17: Pulsar Regulator and Timer Assembly



Item # Part #

Description

Fig. 17

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 Box with Timer Board
—	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	Excelon 74 Series Filter/Regulator Service Kit
—	10103951	Filter Element <i>(Not Shown)</i>

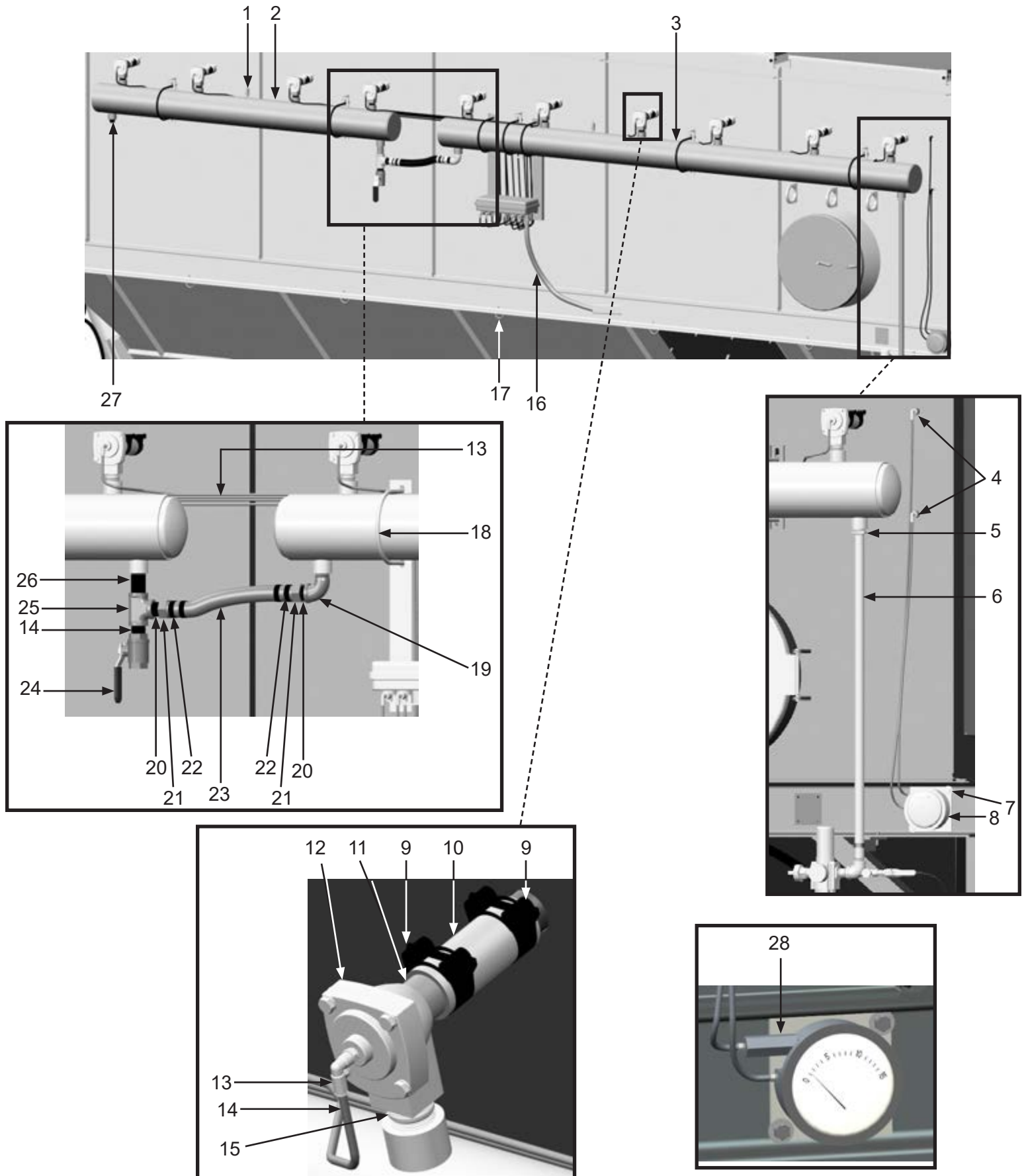
## PART NUMBERS AND SCHEMATICS

### Pulser System Assembly

Item #	Part #	Description
<b>Fig. 16</b>		
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" OD <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 <i>(See Figure 31)</i>
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 Filter
—	10103954	1" Diaphragm Valve Service Kit <i>(Not Shown)</i>

# PART NUMBERS AND SCHEMATICS

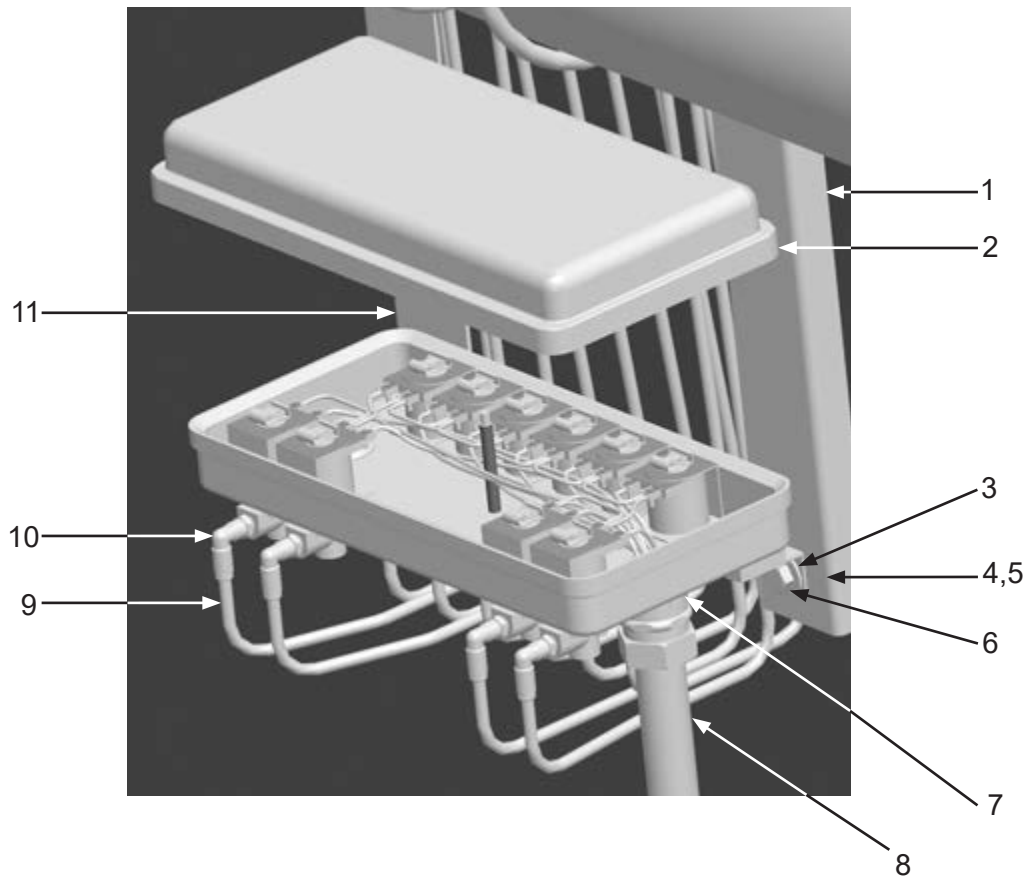
Figure 16: Pulsar System Assembly





## PART NUMBERS AND SCHEMATICS

Figure 18: Pulsar Solenoid Enclosure Assembly



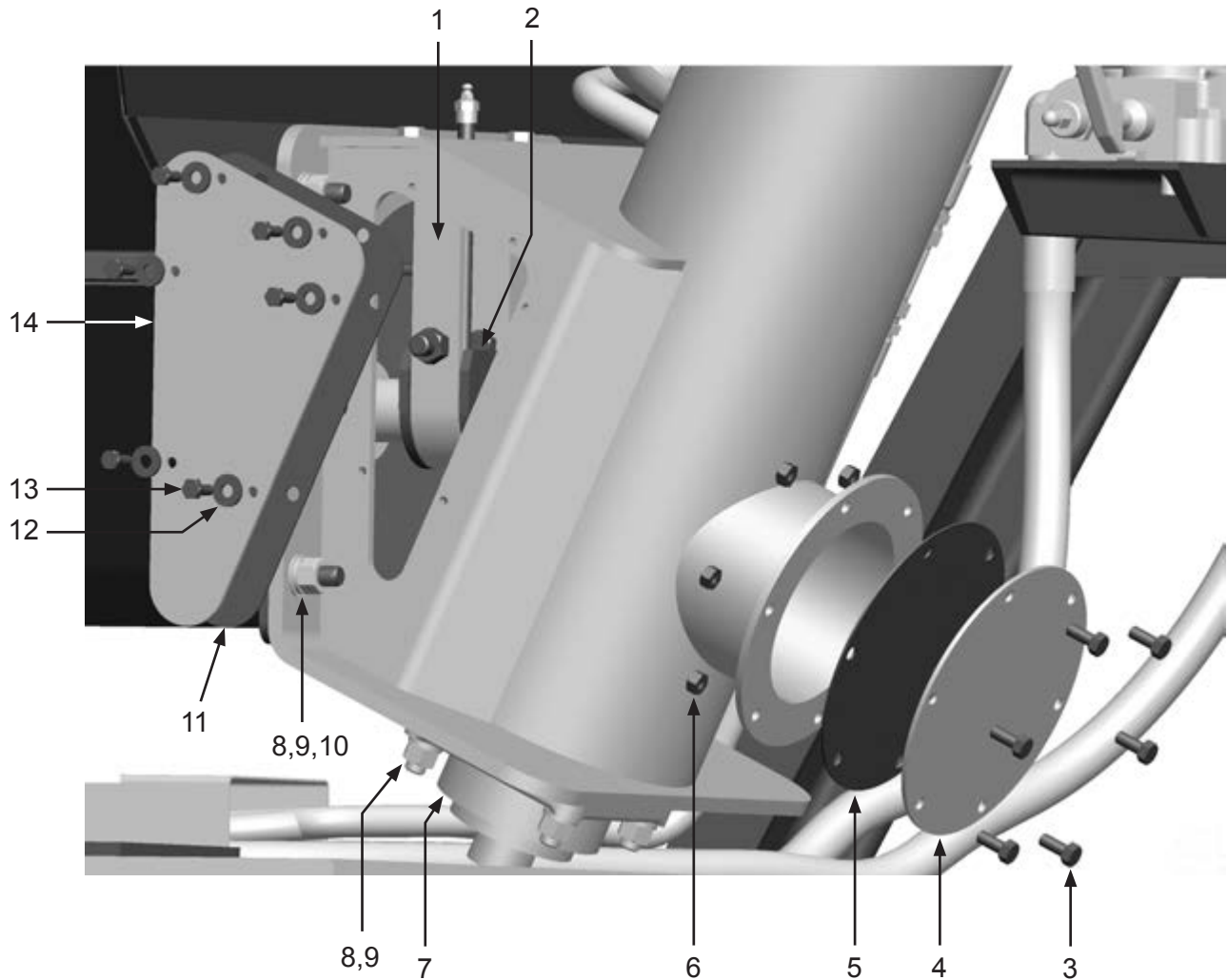
Item #	Part #	Description
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**Fig. 18**

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 22: Discharge Auger Clean-out Assembly



Item #	Part #	Description
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> )

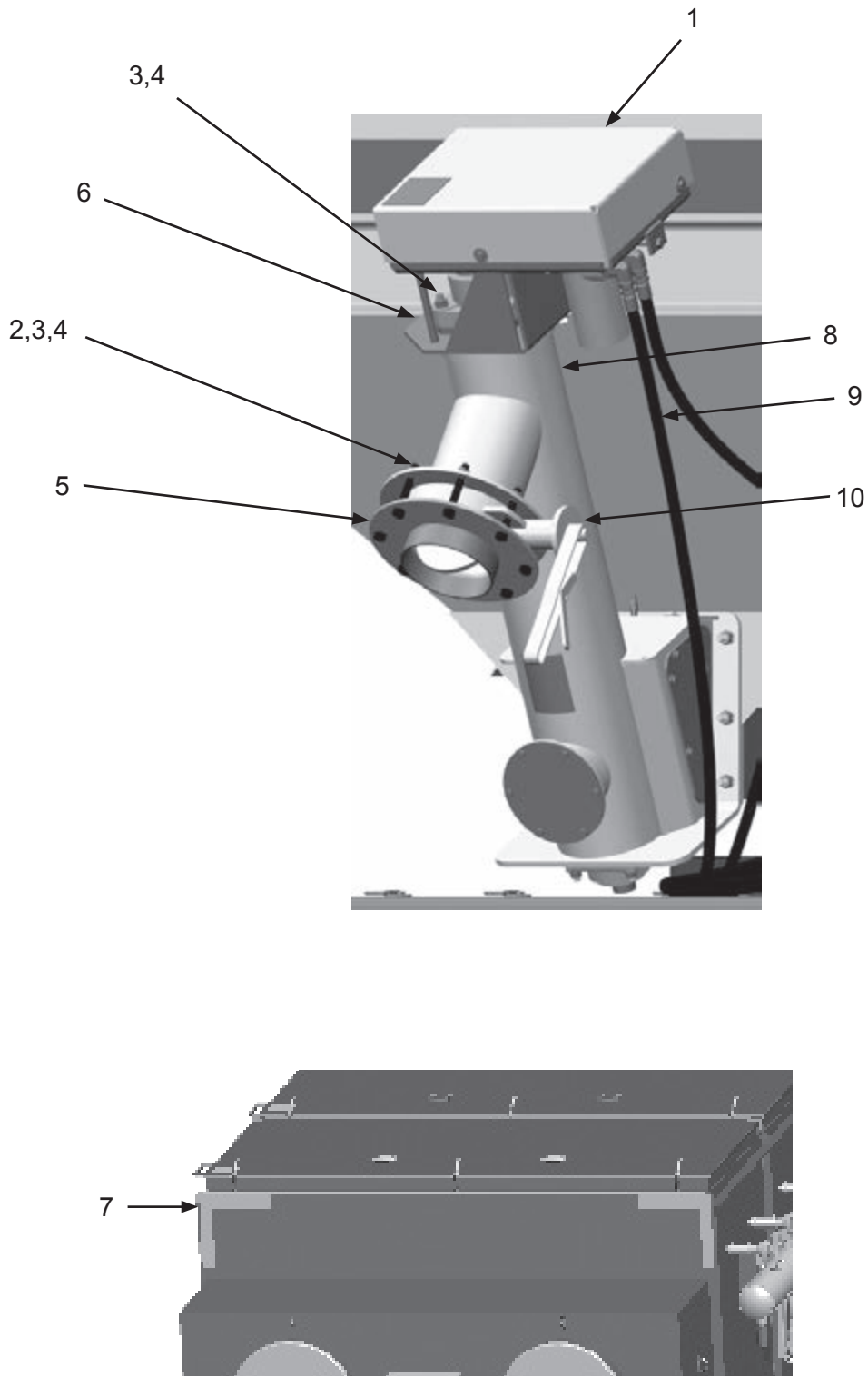
## PART NUMBERS AND SCHEMATICS

### Discharge Auger Assembly - Trailer

Item #	Part #	Description
<b>Fig. 19</b>		
1	10103363	Discharge Chain Cover
2	10102703	1/2-13 x 3-1/2" Grade 5 Bolt ( <i>Eight Required</i> )
3	10100675	1/2" Lock Washer ( <i>12 Required</i> )
4	1014022	1/2-13 Hex Nut ( <i>12 Required</i> )
5	10102971	Discharge Hose Connector
6	10104195	Discharge Auger Motor Mounting Bracket
7	10103880	White Conspicuity Tape ( <i>Per Inch</i> )
8	10105936	Discharge Auger Tube ( <i>See Fig. 23</i> )
9	10104223	1/2" I.D. x 16' Hydraulic Hose with Fittings
10	10103302	6" Series Wafer Butterfly Valve
—	10103881	Red Conspicuity Tape ( <i>Per Inch</i> )

## PART NUMBERS AND SCHEMATICS

Figure 19: Discharge Auger Assembly - Trailer



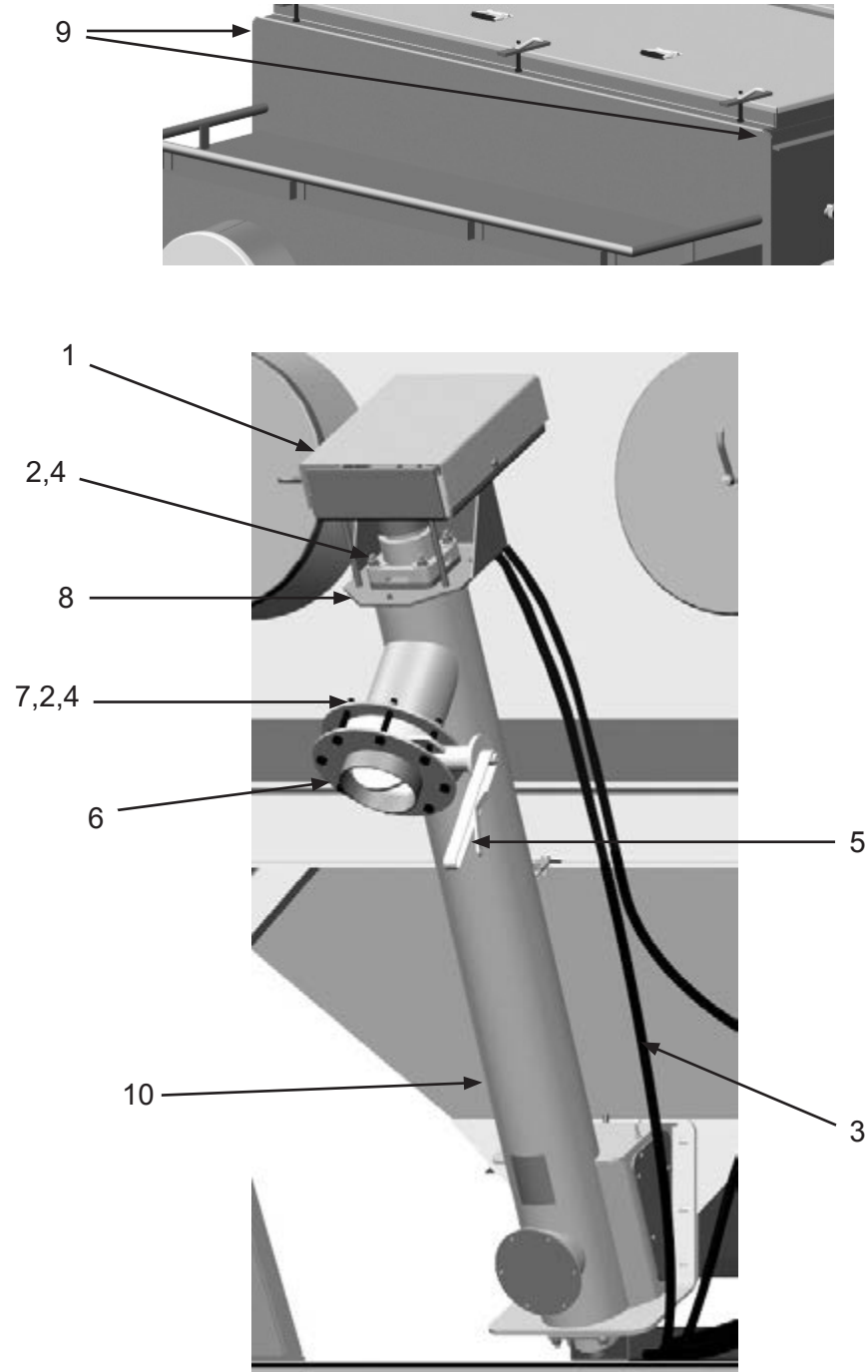
## PART NUMBERS AND SCHEMATICS

### Discharge Auger Assembly - Skid

Item #	Part #	Description
<b>Fig. 20</b>		
1	10103363	Discharge Chain Cover
2	1014022	1/2-13 Hex Nut ( <i>12 Required</i> )
3	10103411	1/2" I.D. x 4' Hydraulic Hose with Fittings
4	10100675	1/2" Lock Washer ( <i>12 Required</i> )
5	10103302	6" Series Wafer Butterfly Valve
6	10102971	Discharge Hose Connector
7	10102703	1/2-13 x 3-1/2" Grade 5 Bolt ( <i>Eight Required</i> )
8	10103359	Discharge Auger Motor Mounting Bracket
9	10103880	White Conspicuity Tape (Per Inch)
10	10103216	Discharge Auger ( <i>See Fig. 24</i> )
—	10103881	Red Conspicuity Tape (Per Inch)

## PART NUMBERS AND SCHEMATICS

Figure 20: Discharge Auger Assembly - Skid



## PART NUMBERS AND SCHEMATICS

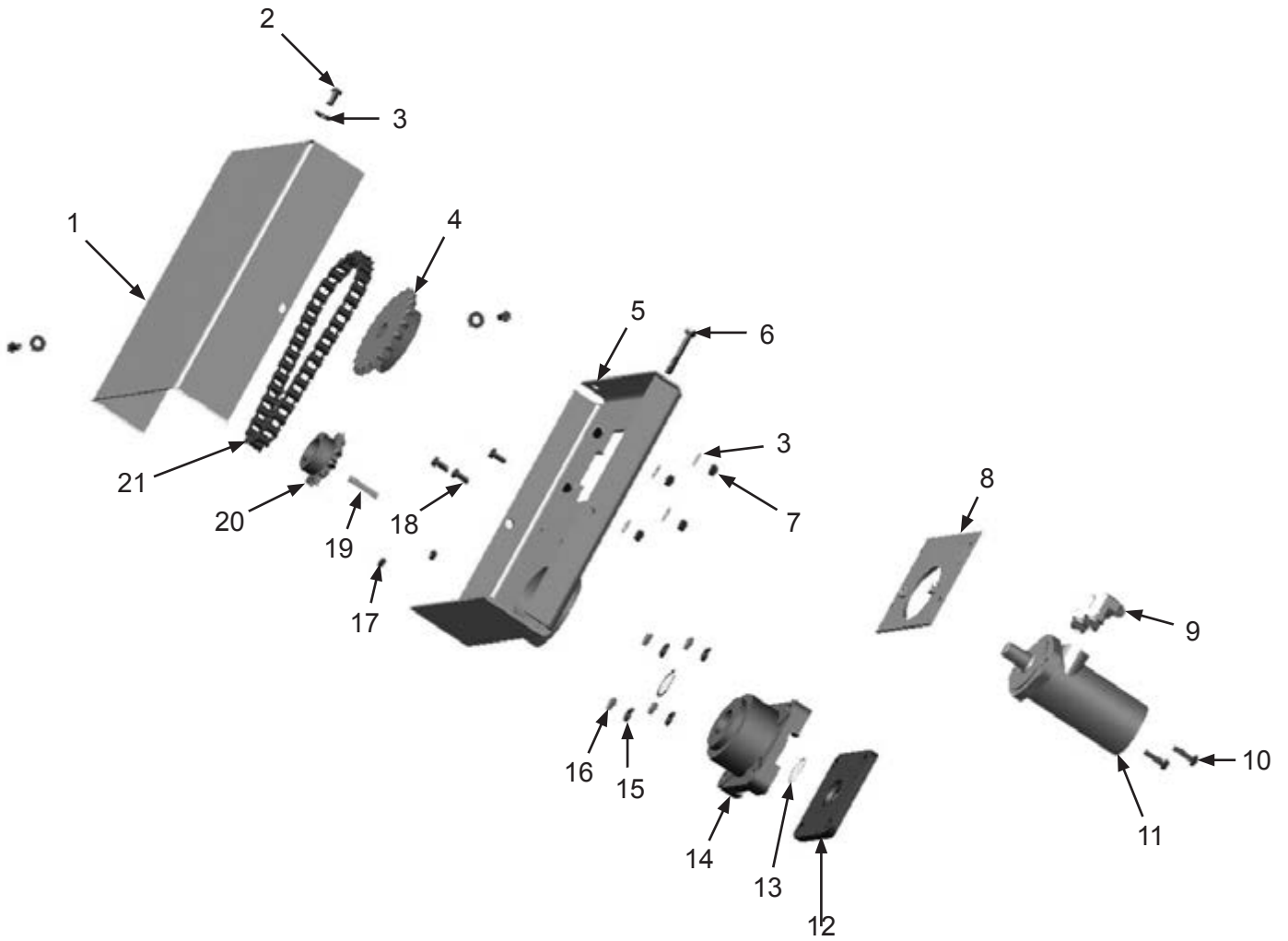
### Discharge Auger Drive Assembly

Item #	Part #	Description
<b>Fig. 21</b>		
1	10103363	Chain Cover
2	10103400	3/8-16 x 3/4" Bolt <i>(Seven Required)</i>
3	1012318	3/8" 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	10101938	3/8-16 Galvanized 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	10101059	3/8-16 X 1-1/4" A307 Bolt Galv <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 GR 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 part #'s 10103392, 10103391, 10103614.</i>
—	10103392	Connecting Link #60
—	10103391	Cottered Roller Chain #60 <i>(Per Foot)</i>
—	10103614	Offset Link #60
—	10103940	Seal Kit for Hydraulic Motor 10102887



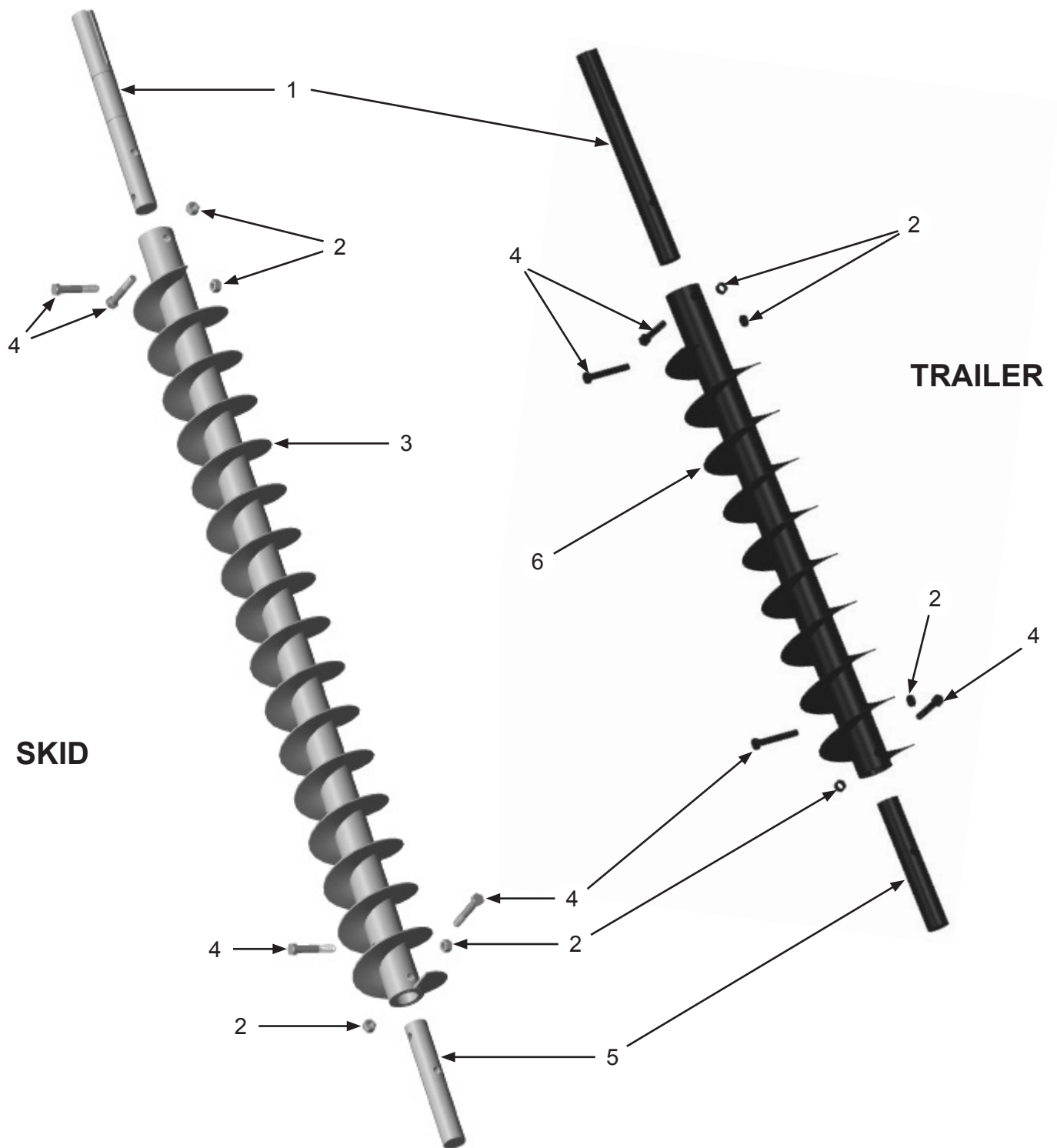
# PART NUMBERS AND SCHEMATICS

Figure 21: Discharge Auger Drive Assembly



## PART NUMBERS AND SCHEMATICS

Figure 23: Discharge Augers



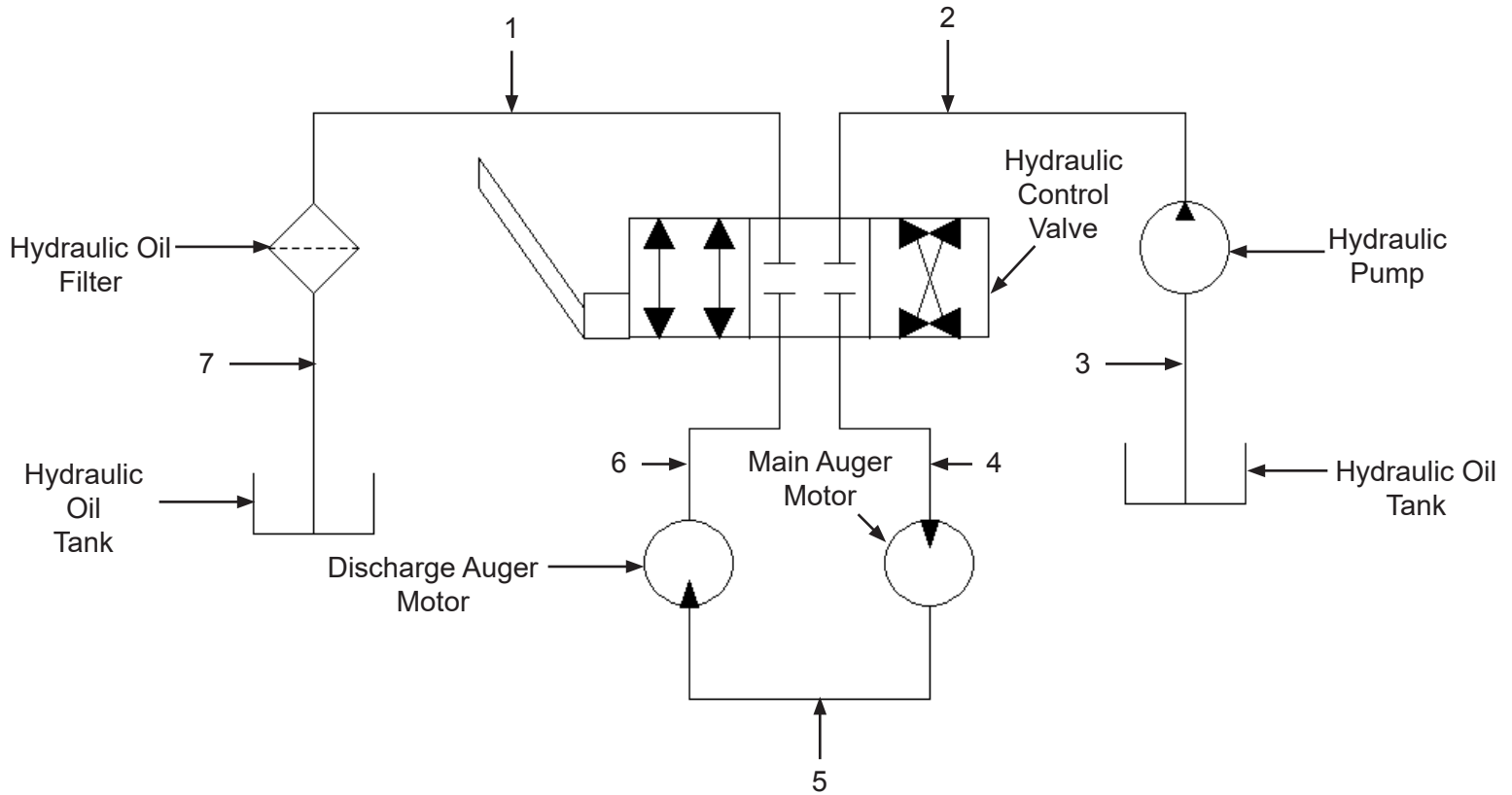
Item #	Part #	Description
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Fig. 23

1	10103306	Drive Shaft
2	1014022	1/2-13 Hex Nut (Four Required)
3	10102883	58" x 6" Half Pitch Auger
4	10103401	1/2-13 x 3" Galvanized Bolt (Four Required)
5	10102910	Auger Shaft End
6	10105943	34" x 6" Half Pitch Auger
33	Dustmaster® 50,000 CFM Tier 4 Diesel Dust Collectors	

## PART NUMBERS AND SCHEMATICS

**Figure 24: Hydraulic Hoses**



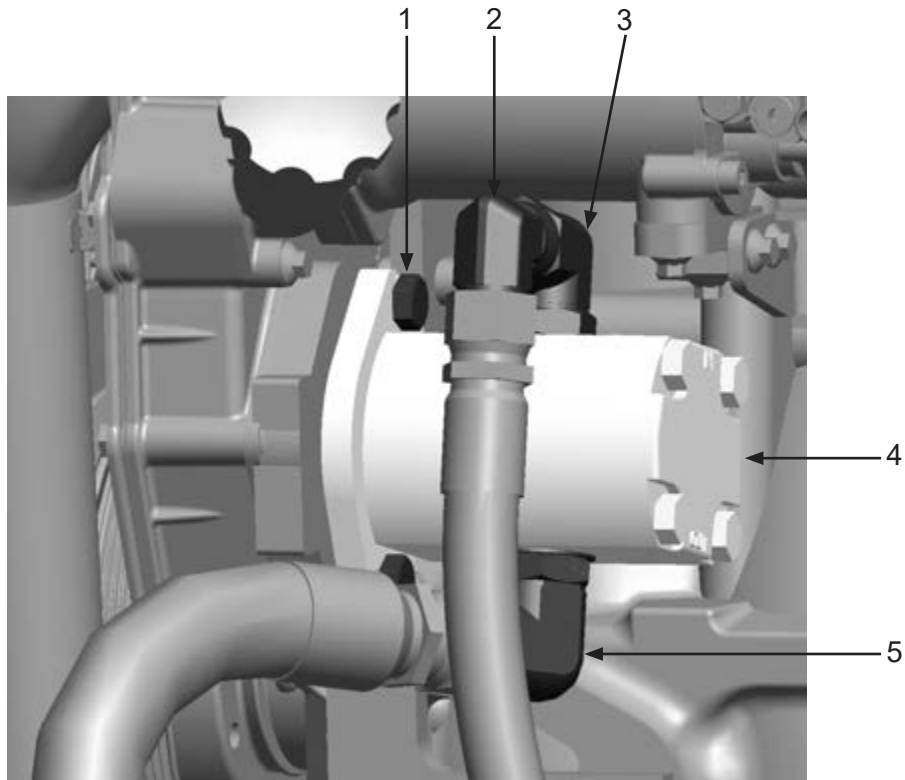
Item #	Part #	Description
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**Fig. 23**

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	10103405	Hydraulic Hose - 1" I.D. x 9' 6" - 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	10104056	Hydraulic Hose - 3/4" I.D. x 2' - 3045 psi

## PART NUMBERS AND SCHEMATICS

Figure 25: Hydraulic Pump



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

Fig. 25

1	10101943	1/2-13 x 1-3/4" Galvanized Hex Bolt ( <i>Two Required</i> )
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2	10103610	JIC 12 x JIC 12 90° Elbow
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3	10103310	JIC 12 x SAE 12 90° Elbow
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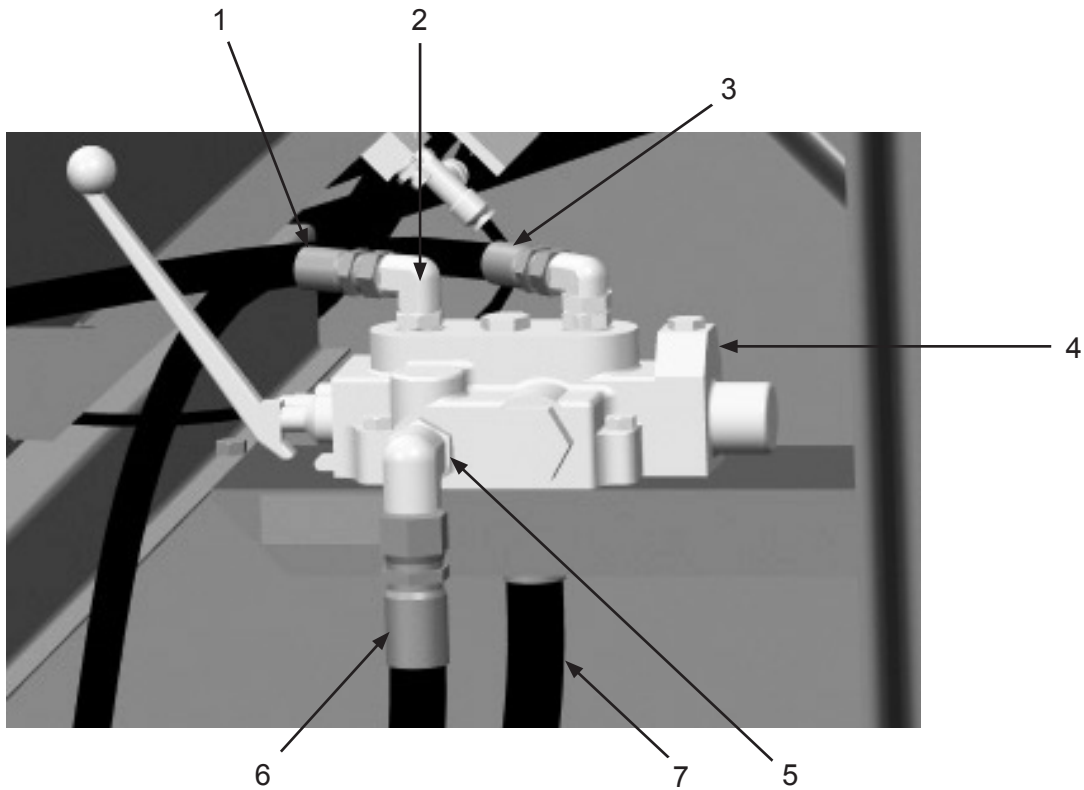
4	10103269	2B Series 2.08 CI/REV Gear Pump
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5	10103311	JIC 6 x SAE 16 90° Elbow
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—	10105869	Flange Gasket
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## PART NUMBERS AND SCHEMATICS

Figure 26: Hydraulic Control Assembly



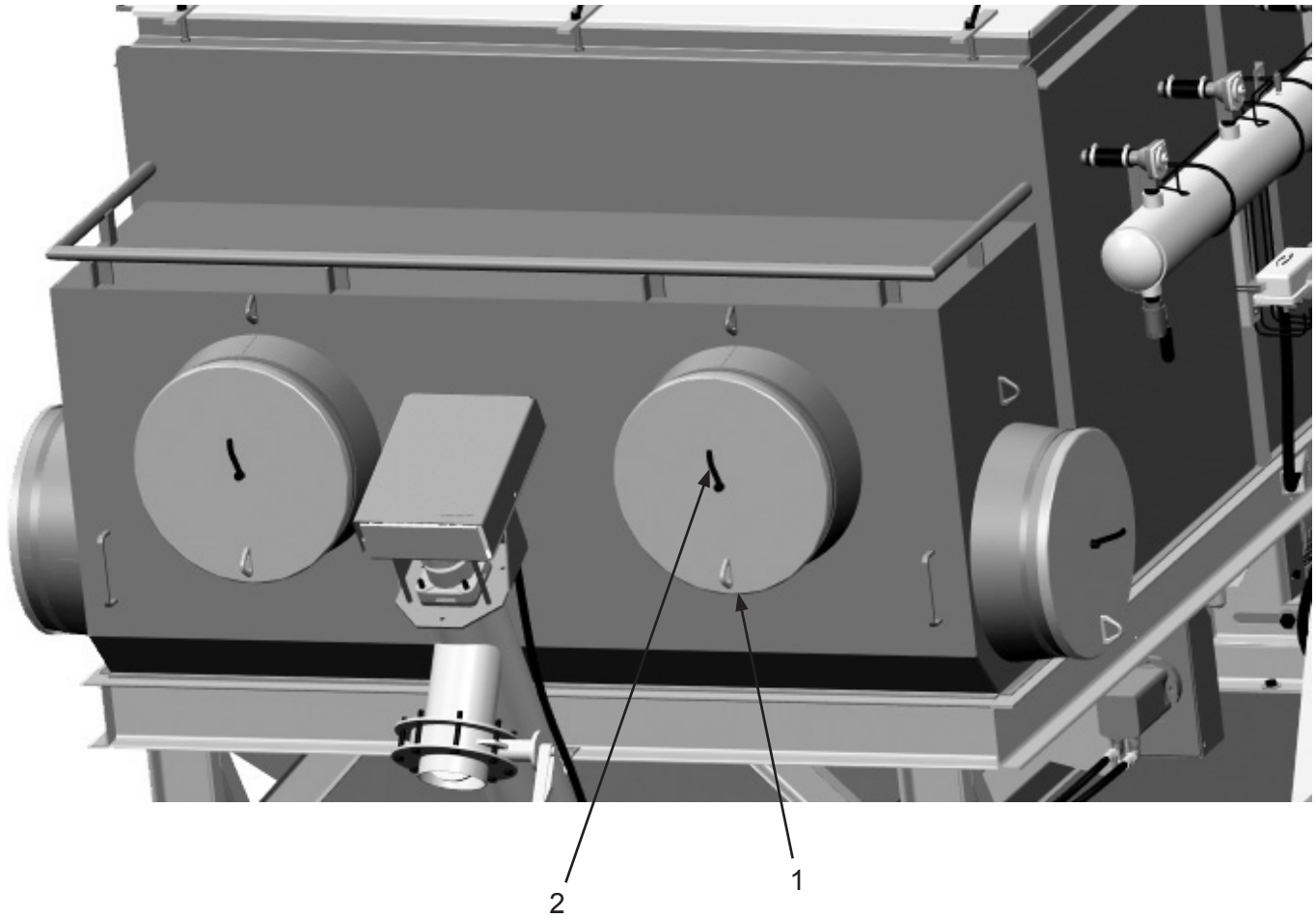
Item #	Part #	Description
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**Fig. 26**

1	10103502	Hydraulic Hose - 1/2" I.D. x 20' - 4500 psi
2	10103309	JIC 8 x SAE 8 90° Elbow ( <i>Two Required</i> )
3	10103409	Hydraulic Hose - 1/2" I.D. x 7' 1" - 2000 psi
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	10103412	Hydraulic Hose - 3/4" I.D. x 23' - 3045 psi
7	10103505	Hydraulic Hose - 3/4" I.D. x 33' - 3045 psi
—	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 27: Inlet Door Assembly



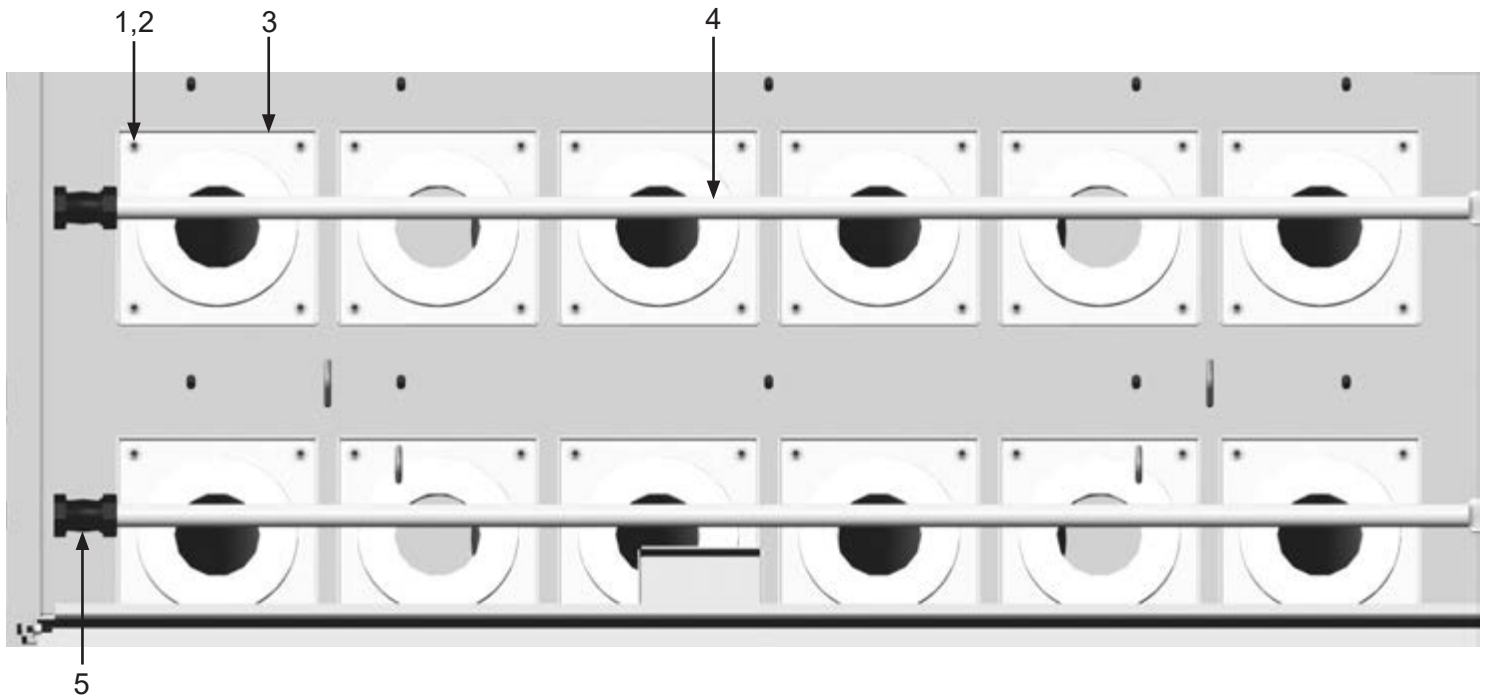
Item #	Part #	Description
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Fig. 27

1	10105945	20" Inlet Cover (Four Required)
2	10105960	3/8-16 Handle Zinc (Four Required)
—	10102339	Camlock Closure - Chain
—	10102410	Spring Snap Hook - 1/4" (Eight Required)

## PART NUMBERS AND SCHEMATICS

Figure 28: Dust Collector Filter Cartridge Pulsers



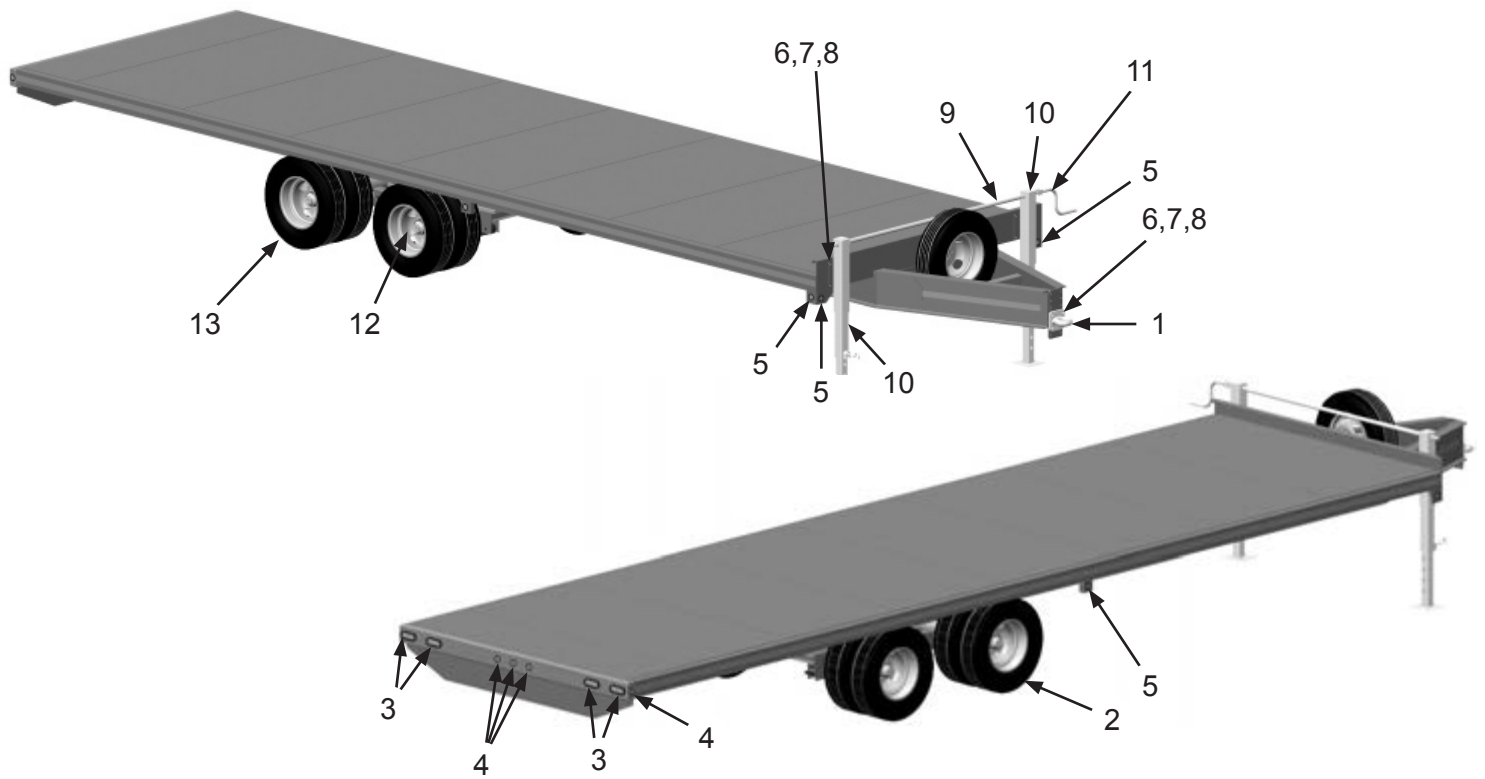
Item #	Part #	Description
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Fig. 28

1	10101942	3/8" Flat Washer (4 Required Per Filter)
2	1012318	3/8" Hex Nut (4 Required Per Filter)
3	10105939	Filter Bolt-Down (1 Required Per Filter)
4	10105942	Small Filter Blowpipe (Two Required Per Hatch Opening)
5	10102599	Compression Coupling Assembly (Two Required Per Hatch Opening)

# PART NUMBERS AND SCHEMATICS

Figure 30: Trailer





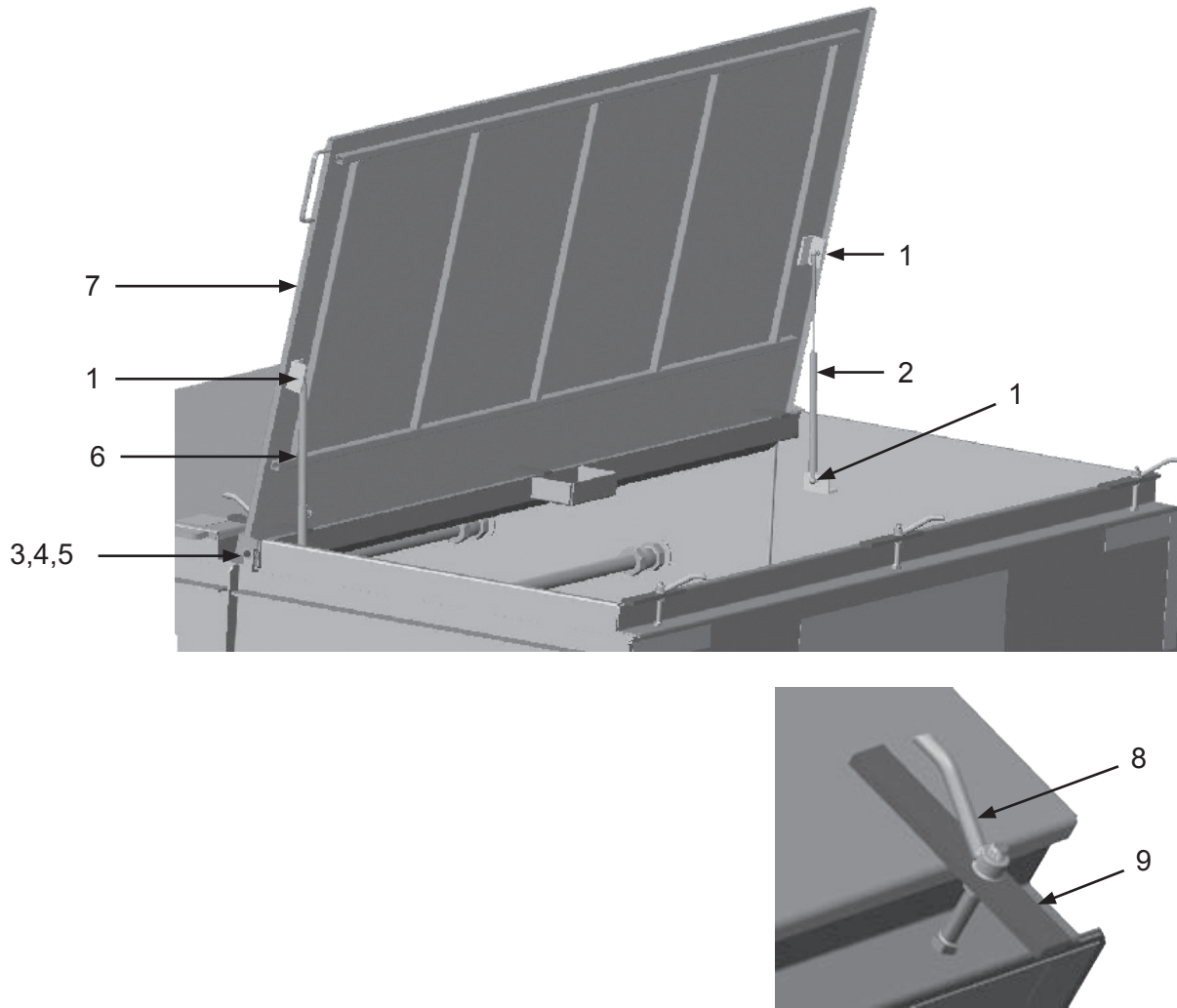
## PART NUMBERS AND SCHEMATICS

### Trailer

Item #	Part #	Description
<b>Fig. 30</b>		
—	<b>10105938</b>	<b>30' Long x 96" Wide Flat Steel Deck Trailer</b>
1	10104079	Pintle Hitch with Flat Plate
2	10106290	ST235/85R16 14-Ply Dual-Rim / Tire <i>(Four Required)</i>
3	10104084	Red LED Oval Tail Light <i>(Four Required)</i>
4	10104086	2" Round Red LED Clearance Light <i>(Five Required)</i>
5	10104087	2" Round Amber LED Clearance Light <i>(Six Required)</i>
6	10105746	5/8 x 2-1/2" Gr 8 Bolt <i>(12 Required)</i>
7	10105747	5/8 Reverse Lock Nut <i>(12 Required)</i>
8	10103398	5/8" Flat Washer <i>(12 Required)</i>
9	10106830	Jack Stand Assembly
10	10104082	10,000 # Heavy Spring Loaded Jack <i>(Two Required)</i>
11	10107329	Sidewind Crank with Hardware
12	10107324	Rim For Dual Wheel 12,000 Lb Axle
13	10107369	ST235/85R16 14-Ply Tire <i>(Four Required)</i>
—	10104081	Breakaway Kit
—	10107323	50K 12,000 Lb Axle
—	10104135	Wire Harness
—	10105826	Redline 12V - 5AH Battery Sealed
—	10104080	3/8" x 35" Chain with Hook
—	109V582	Operator's Manual - Behnke Trailer

## PART NUMBERS AND SCHEMATICS

Figure 29: Dust Collector Filter Cartridge Hatch Door

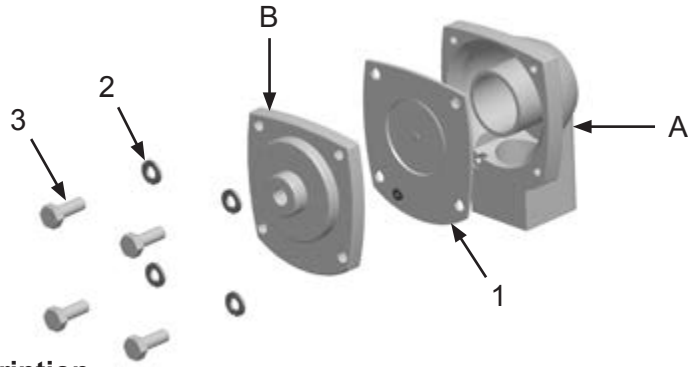


Item #	Part #	Description
<b>Fig. 29</b>		
1	1035046	5/16-18 Hex Nut ( <i>Four Required</i> )
2	10103454	Non-Locking Gas Spring
3	1028617	3/8-16 X 1-3/4" Shoulder Bolt ( <i>Two Required</i> )
4	10101942	3/8" Flat Washer ( <i>Four Required</i> )
5	10101938	3/8"-16 Hex Nut ( <i>Two Required</i> )
6	10103455	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

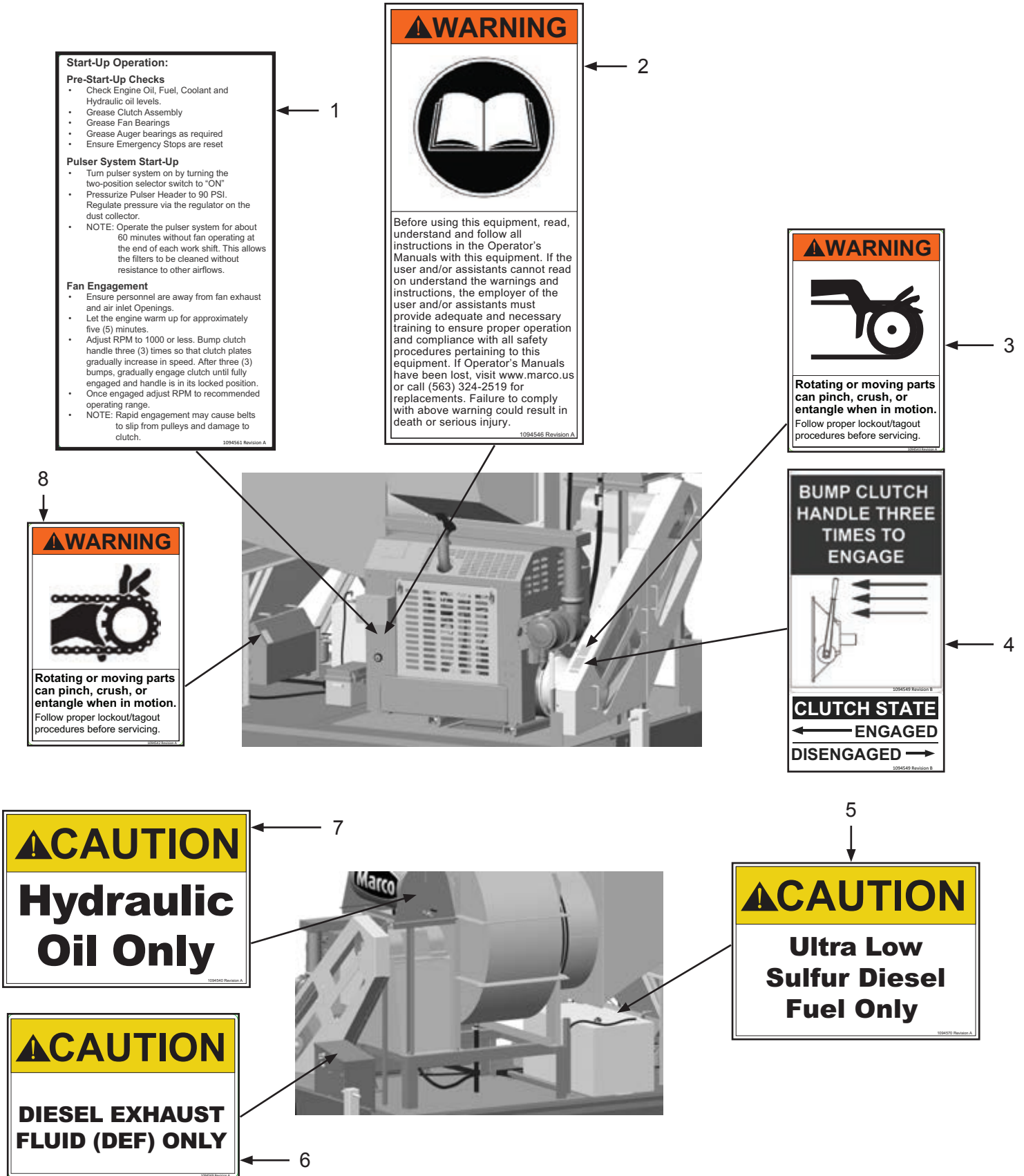
Figure 31: Diaphragm Valve



Item #	Part #	Description
Fig. 31		
—	10103255	1" Diaphragm Valve – Complete <i>(Three Required)</i> <i>Includes Items: A,B,1,2,3</i>
1	10103954	1" Diaphragm Valve
2	1012153	1/4" Lock Washer <i>(Four Required)</i>
3	20101232	M6 x 1 x 14 HHCS <i>(Four Required)</i>

# PART NUMBERS AND SCHEMATICS

Figure 32: Hazard Identification Decals



# PART NUMBERS AND SCHEMATICS

## Hazard Identification Decals

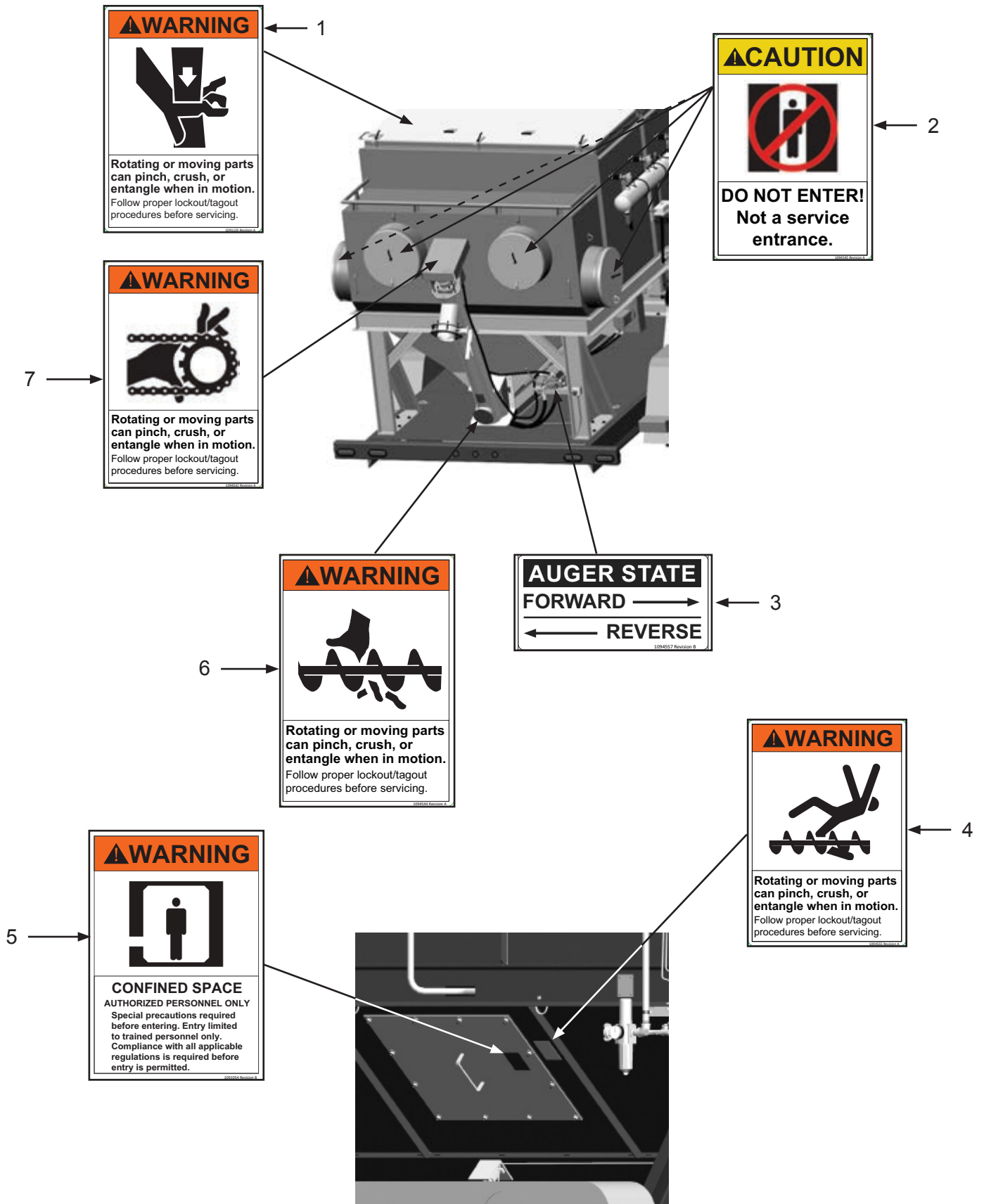
Item #	Part #	Description
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**Fig. 32**

1	1094561	Start-Up Operation Decal
2	1094546	Read Manual Warning Decal
3	1094543	Rotating or Moving Parts Warning Decal
4	1094549	Clutch State Decal
5	1094570	Ultra Low Sulfur Diesel Fuel Only Caution Decal
6	1094569	Diesel Exhaust Fluid (DEF) Only Caution Decal
7	1094540	Hydraulic Oil Only Caution Decal
8	1094542	Rotating or Moving Parts Warning Decal

# PART NUMBERS AND SCHEMATICS

Figure 33: Hazard Identification Decals



# PART NUMBERS AND SCHEMATICS

## Hazard Identification Decals

Item #	Part #	Description
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**Fig. 33**

1	1091135	Rotating or Moving Parts Warning Decal
2	1094545	Do Not Enter Caution Decal
3	1094557	Auger State Decal
4	1094555	Rotating or Moving Parts Warning Decal
5	1091054	Confined Space Warning Decal
6	1094544	Rotating or Moving Parts Warning Decal
7	1094542	Rotating or Moving Parts Warning Decal

## 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°
15DH2025	20"	25 Ft.	2"	17.9"	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 4 Diesel Dust Collectors

106M161	Part Numbers & Schematics Guide – Dustmaster® 50,000 Cfm Tier 4 Diesel Dual Axle – Dual Wheel Dust Collectors
1090161	Operator's Manual – Dustmaster® 50,000 Cfm Tier 4 Diesel Dual Axle – Dual Wheel 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



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