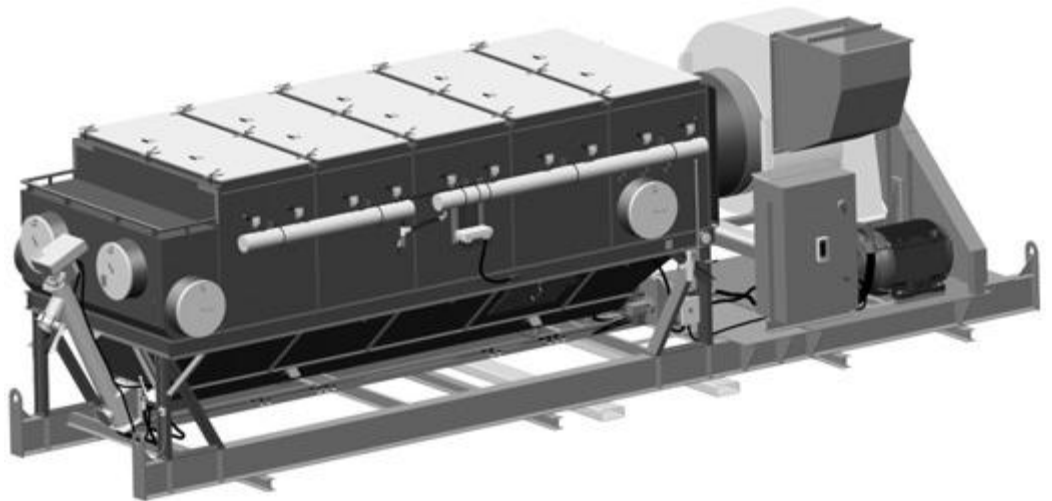
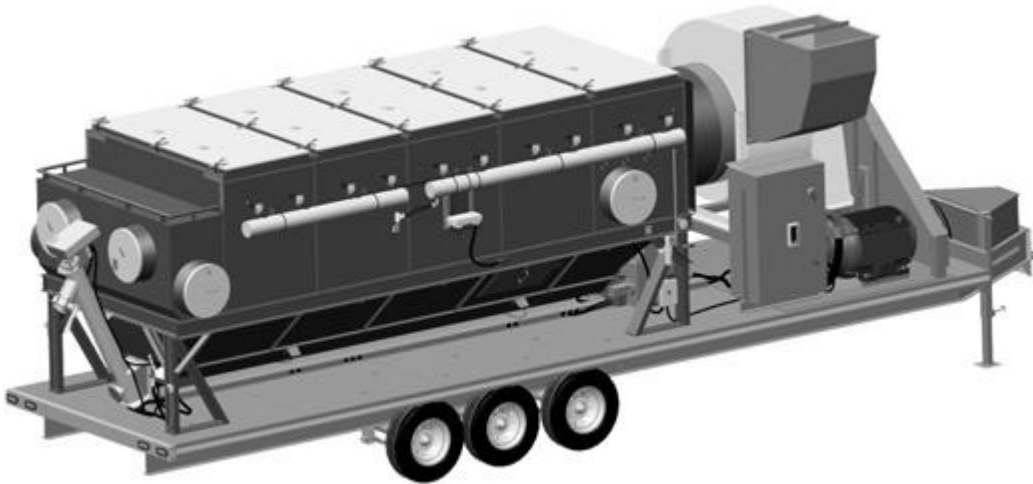




# DUSTMASTER® 50,000 CFM ELECTRIC DUST COLLECTORS



**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.

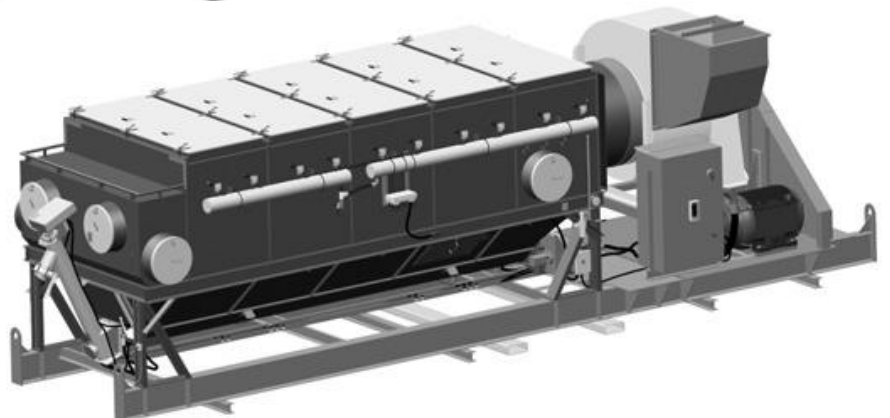
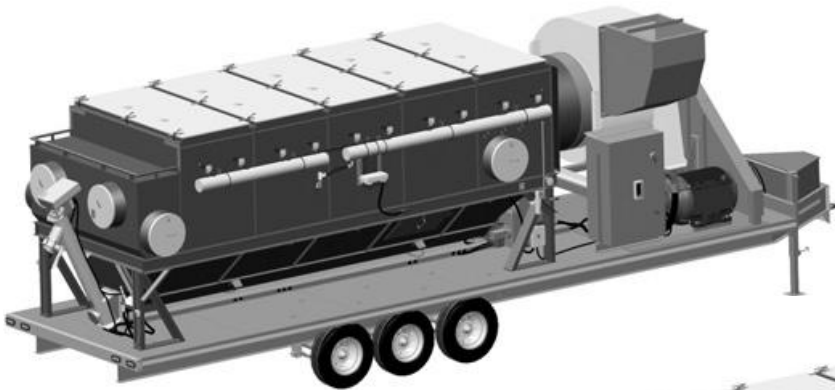
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# PART NUMBERS

## DUSTMASTER® 50,000 CFM ELECTRIC DUST COLLECTORS

Part Numbers	Filter Cartridge Material						Trailer	Skid	Filter Cartridge Quantity
	None	High Density Pleat 85% Cellulose/15% Poly Blend	Reduced Pleat 85% Cellulose/15% Poly Blend	Fire Retardant	HEPA	Spunbond			
10106092	X						X		-
10106093		X					X		56
10106094			X				X		56
10106095				X			X		56
10106096					X		X		56
10106097						X	X		56
10106158	X							X	-
10106159		X						X	56
10106160			X					X	56
10106161				X				X	56
10106162					X			X	56
10106163						X		X	56



## SPECIFICATIONS

<b>Capacity:</b>	CFM = 36,880 – 50,490 W.C. = 6 – 16"
<b>Filter Cartridge Style:</b>	Open Top, 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 High Density Pleat Blend Filters – 99.8% @ 0.5 micron 85/15 Reduced Pleat Blend 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>Motor:</b>	150 Horsepower Electric 3-Phase - Fan 10 Horsepower Electric 3-Phase - Hydraulic
<b>Electrical System:</b>	460 V, 60 Hz 195 FLA
<b>Air Requirements:</b>	Clean, Dry, Compressed Air 24 CFM @ 90 PSI
<b>Motor Protection:</b>	Motors are fused in control box
<b>Fluid Specifications:</b>	Hydraulic Oil: H46 or equivalent, 40 Gallons Grease/Lubricator: Mobil Polyrex EM or equivalent
<b>Unit Dimensions Trailer Model:</b>	Weight: 19,900 pounds (empty) Tongue Weight: 3980 pounds Length: 36' 3" Width: 8' 6" Height: 11' 2"
<b>Unit Dimensions Skid Model:</b>	Weight: 15,500 pounds (empty) Length: 32' 6" Width: 8' 6" Height: 9' 7"

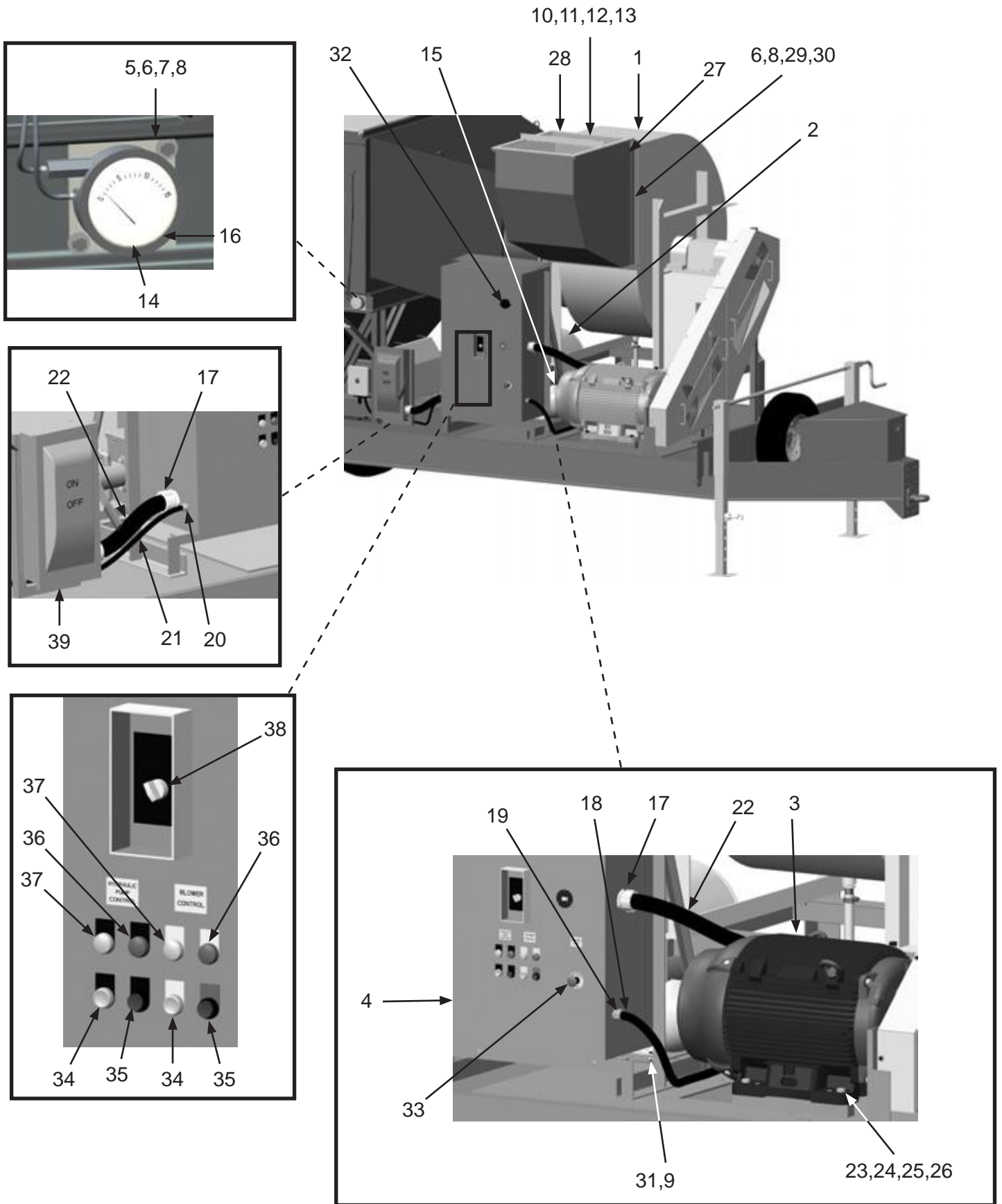
# ASSEMBLY PART NUMBERS AND SCHEMATICS

## Front Assembly

Item #	Part #	Description
<b>Fig. 1</b>		
1	10103495	Fan
2	10105031	Hydraulic Oil Tank <i>(See Figure 2)</i>
3	10106015	Electric Motor - 150 HP, 3-Phase
4	10106112	Control Panel
5	1011747	3/8-16 x 1" Bolt <i>(Eight Required)</i>
6	10101936	3/8" Lock Washer – Zinc <i>(24 Required)</i>
7	1012318	3/8-16 Hex Nut <i>(12 Required)</i>
8	10101942	3/8" Flat Washer <i>(36 Required)</i>
9	10104234	3/8-16 x 1-1/4 Hex Bolt Zinc Grade 5 <i>(Four Required)</i>
10	10101937	1/4-20 x 1" Grade 5 Bolt <i>(12 Required)</i>
11	10101940	1/4" Flat Washer <i>(16 Required)</i>
12	1012153	1/4" Lock Washer <i>(12 Required)</i>
13	10101347	1/4-20 Hex Nut <i>(12 Required)</i>
14	10103259	Magnehelic Differential Pressure Gauge with Mounting Hardware
15	10106002	Electric Motor 10 HP, 3-Phase
16	10103608	Magnehelic Differential Pressure Gauge Mounting Bracket
17	10106126	2" Straight Conduit Hub <i>(Four Required)</i>
18	10103853	1" Liquid-Tight Flexible Conduit
19	10103854	1" Straight Hub
20	20RST50	Straight Liquid Tite Connection Fitting
21	20RSEL050UL	1/2" UI/UA Seal-Tite Conduit
22	10106125	2" Flexible Sealtite Conduit
23	10106101	3/4-10 x 5-1/4" Grade 8 Bolt Zinc <i>(Four Required)</i>
24	10103418	Washer - 3/4" - Grade 8 <i>(Four Required)</i>
25	10103419	Lock Washer - 3/4" HD <i>(Four Required)</i>
26	10103420	3/4-10 UNC Grade 8 Nut <i>(Four Required)</i>
27	10103512	Fan Exhaust
28	10103979	Bird Screen Frame
29	10L805318	3/8-24 X 1-1/4 Grade 5 Bolt <i>(12 Required)</i>
30	10L804303	3/8-24 Hex Nut <i>(12 Required)</i>
31	10102331	3/8 SAE Flat Washer Zinc Plate <i>(Four Required)</i>
32	10105360	Black Handle Mechanism
33	10105371	40mm Red Mushroom twist release
34	10105372	Red Momentary switch
35	10105373	Black Momentary switch
36	10105374	Red Indicating light 120 Volt AC
37	10105375	Green Indicating light 120 Volt AC
38	10103305	Selector Switch - 2-Way
39	10100610	Breaker Box
—	105M135	Features & Specifications Guide – Dustmaster® 50,000 CFM Electric Dust Collectors
—	106M135	Part Numbers & Schematics Guide – Dustmaster® 50,000 CFM Electric Dust Collectors
—	1090135	Operator's Manual – Dustmaster® 50,000 CFM Electric Dust Collectors

# PART NUMBERS AND SCHEMATICS

Figure 1: Front Assembly



# PART NUMBERS AND SCHEMATICS

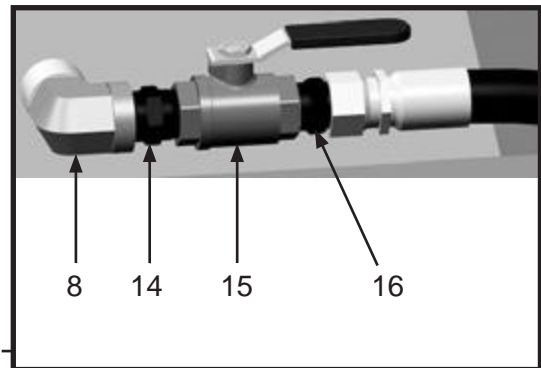
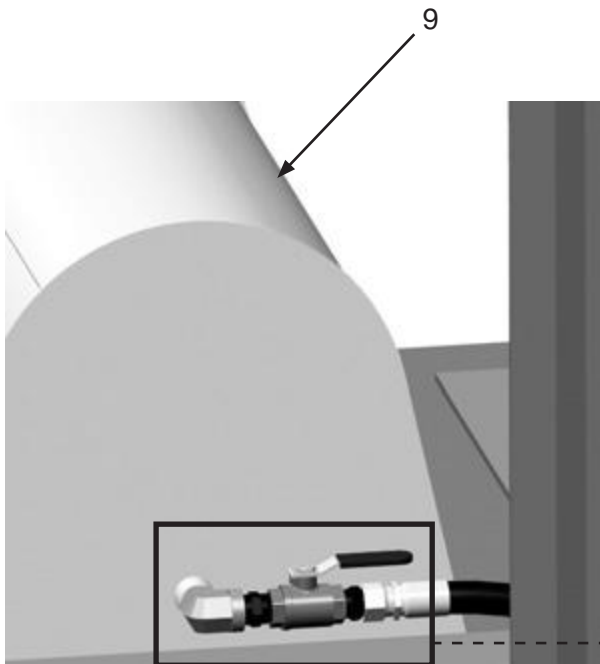
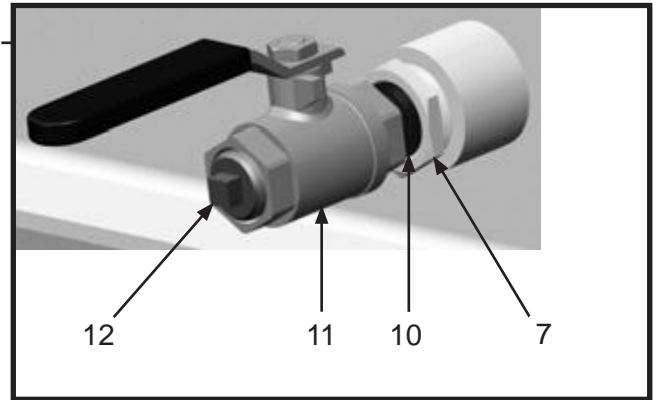
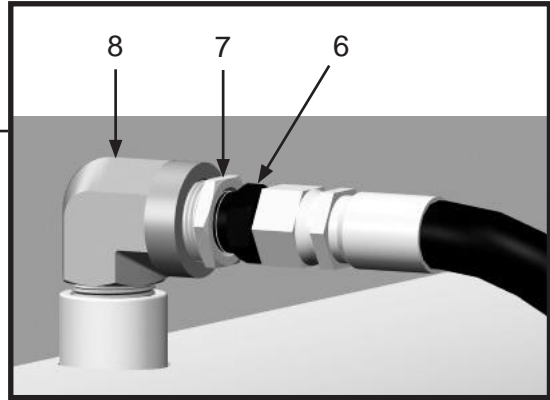
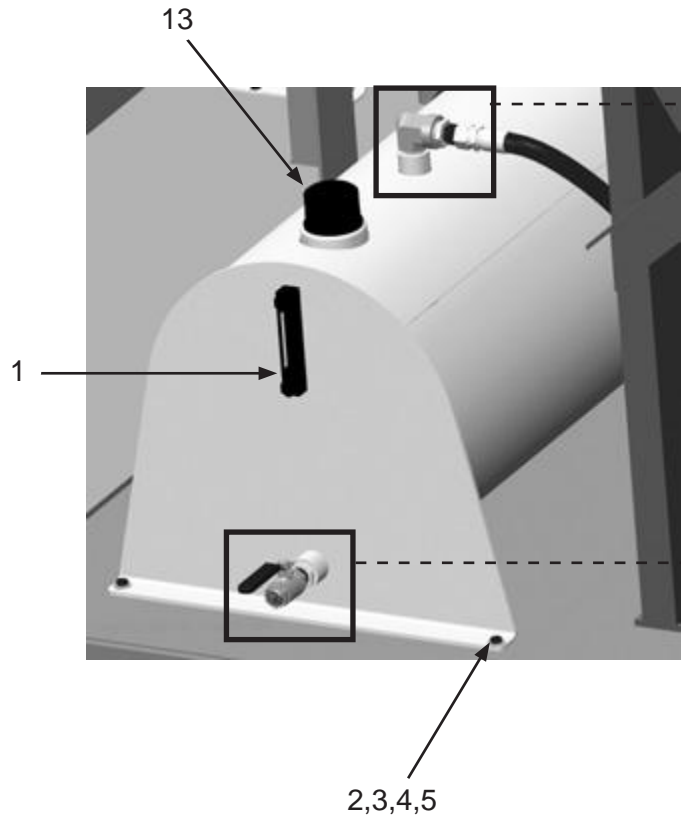
## Hydraulic Oil Tank

Item #	Part #	Description
<b>Fig. 2</b>		
1	10103942	Sight Level Gauge
2	1011747	Bolt - 1/2-13 x 1-3/4" - Galvanized ( <i>Four Required</i> )
3	10101942	Flat Washer - 3/8" ( <i>Eight Required</i> )
4	10101936	Lock Washer - 3/8" ( <i>Four Required</i> )
5	1012318	3/8-16 Hex Nut ( <i>Four 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	10103971	Filler/Breather Cap
14	20PFHA24SA1616	Hex Nipple - 1" NPT
15	1011601	Full Port Ball Valve - 1" NPT
16	10103312	Straight Adapter - 1" NPT x 16 JIC



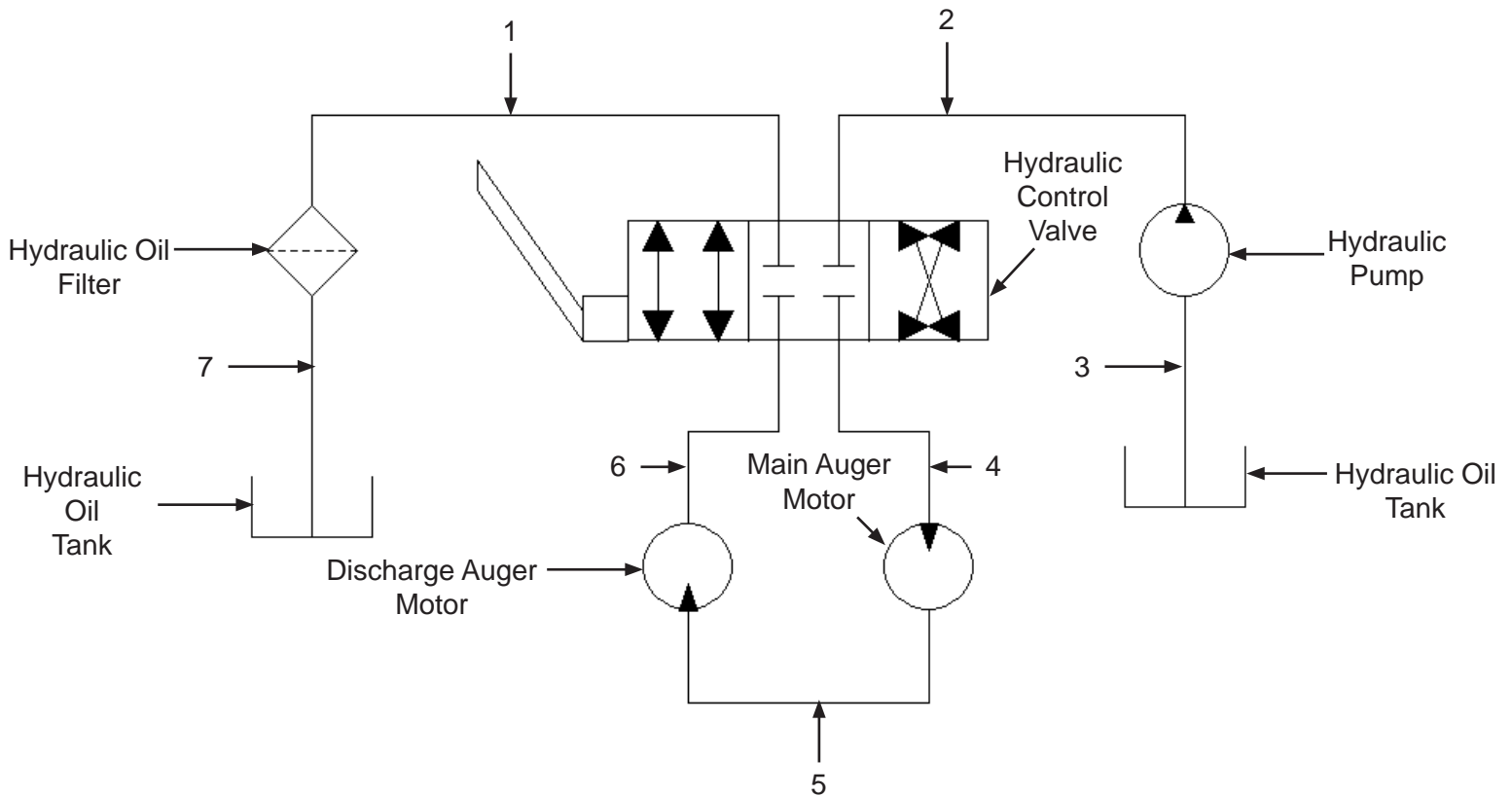
# PART NUMBERS AND SCHEMATICS

Figure 2:Hydraulic Oil Tank



## PART NUMBERS AND SCHEMATICS

Figure 3: Hydraulic Hoses



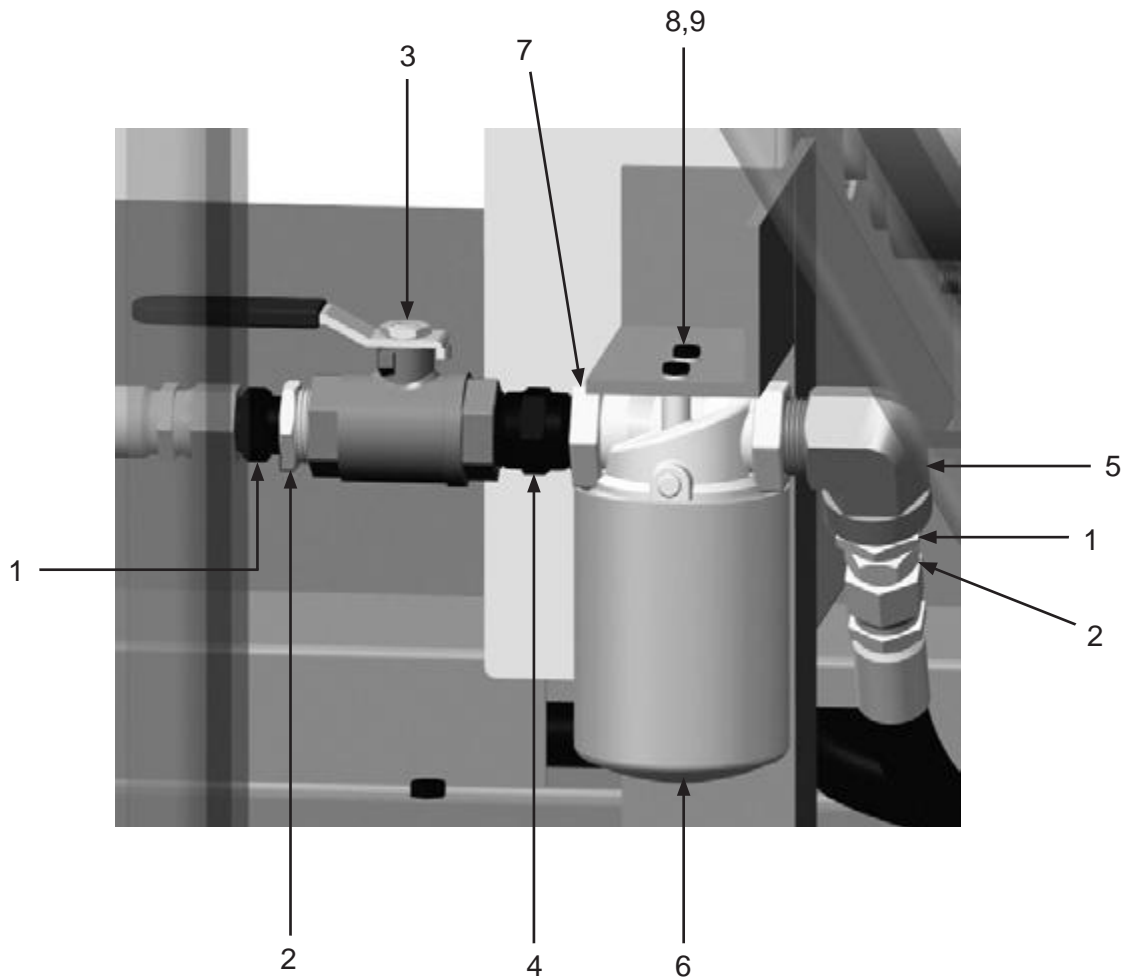
Item #	Part #	Description
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Fig. 3

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 - 1-1/4" I.D. x 9.5' - 2000 psi
4	10103502	Hydraulic Hose - 1/2" I.D. x 20' - 4500 psi
5	10104224	Hydraulic Hose - 1/2" 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

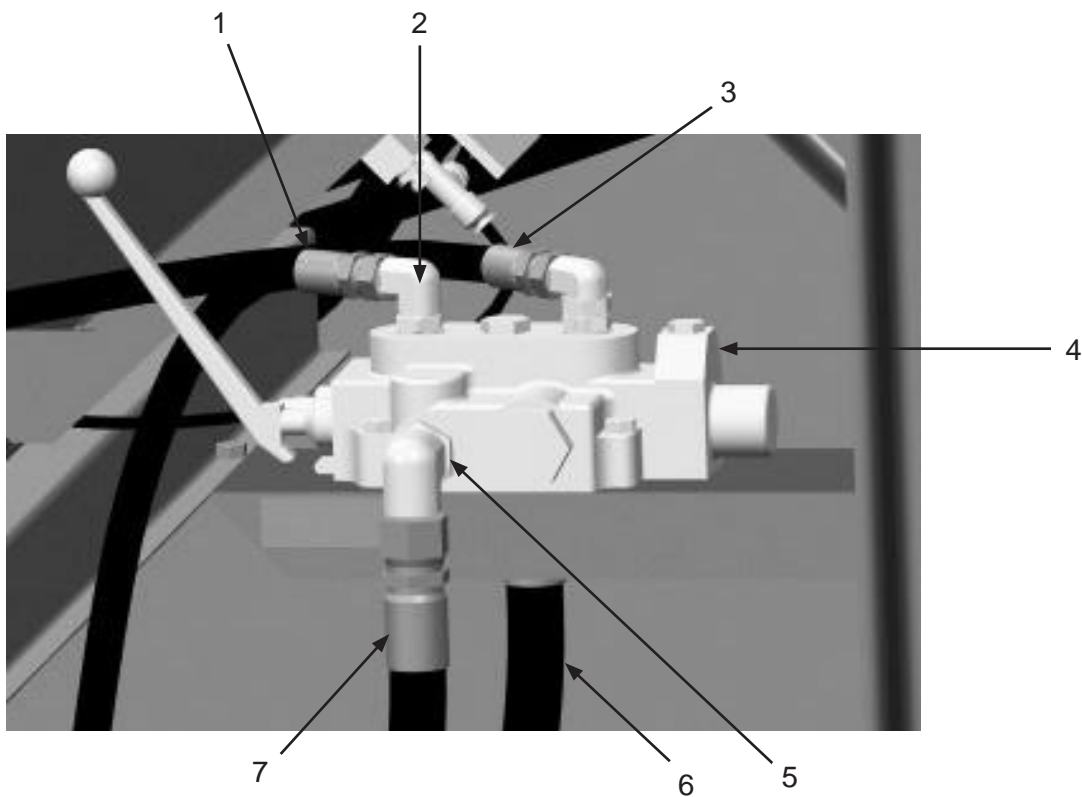
Figure 4: Hydraulic Oil Filter Assembly



Item #	Part #	Description
<b>Fig. 4</b>		
1	10103314	3/4" NPT x 12 JIC Straight Adapter <i>(Two Required)</i>
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
5	20PFHA25UG1616	1" Street Elbow
6	10104058	Hydraulic Oil Filter
7	10104057	Hydraulic Oil Filter Head
8	1012153	1/4" Lock Washer <i>(Two Required)</i>
9	20100125	1/4-20 x 3/4" Zinc Bolt <i>(Two Required)</i>

## PART NUMBERS AND SCHEMATICS

Figure 5: Hydraulic Control Assembly



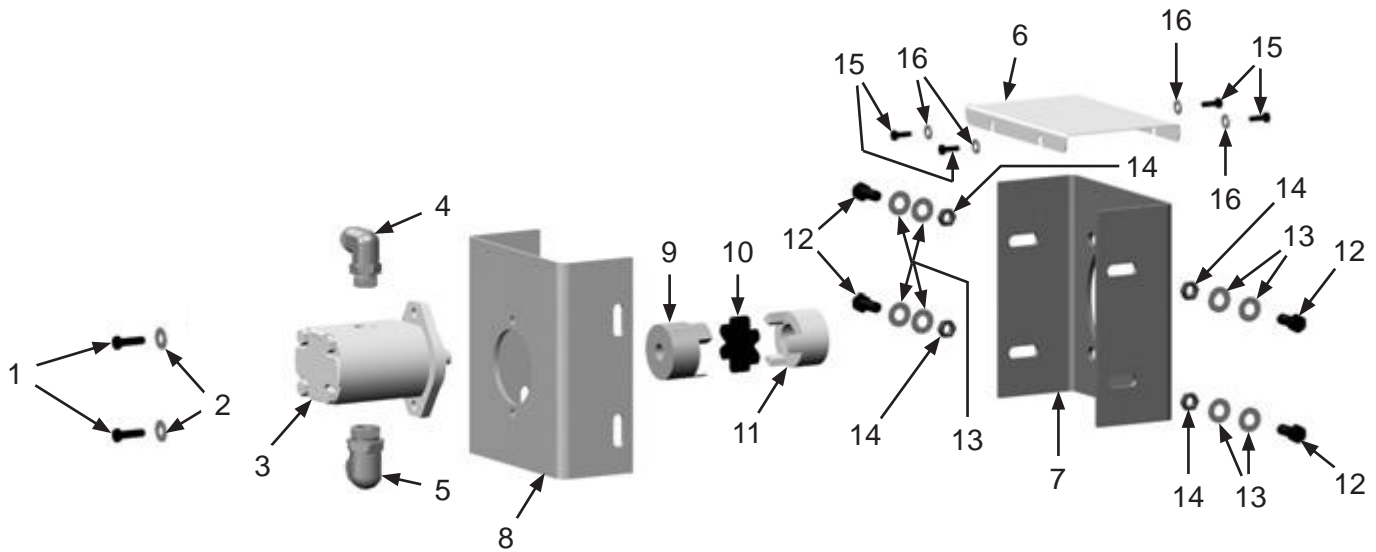
Item #	Part #	Description
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**Fig. 5**

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	10103505	Hydraulic Hose - 3/4" I.D. x 33' - 3045 psi
7	10103412	Hydraulic Hose - 3/4" I.D. x 23' - 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 6: Hydraulic Pump



Item #	Part #	Description
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Fig. 6

1	10104234	3/8-16 x 1-1/4" Bolt ( <i>Two Required</i> )
2	10102331	3/8" Flat Washer ( <i>Two Required</i> )
3	10106003	2.08 CI/REV Keyed Gear Pump
4	10103310	JIC 12 x JIC 12 90° Elbow
5	10103311	JIC 16 x SAE 16 90° Elbow
6	10106006	Coupling Cover
7	10106004	Bracket 10HP Motor Mount
8	10106005	Bracket Pump Mount
9	10106009	Jaw Coupling 3/4 Bore
10	10106010	Coupling Buna-N Spider
11	10106008	Jaw Coupling 1-3/8 Bore
12	10104603	1/2-13 x 1-1/4" Bolt - Grade 5 – Zinc
13	10100674	1/2" Flat Washer
14	1014022	1/2-13 Hex Nut
15	20100125	1/4-20 x 3/4" Zinc Hex Bolt
16	1014017	1/4" Flat Washer
—	10105869	Flange Gasket

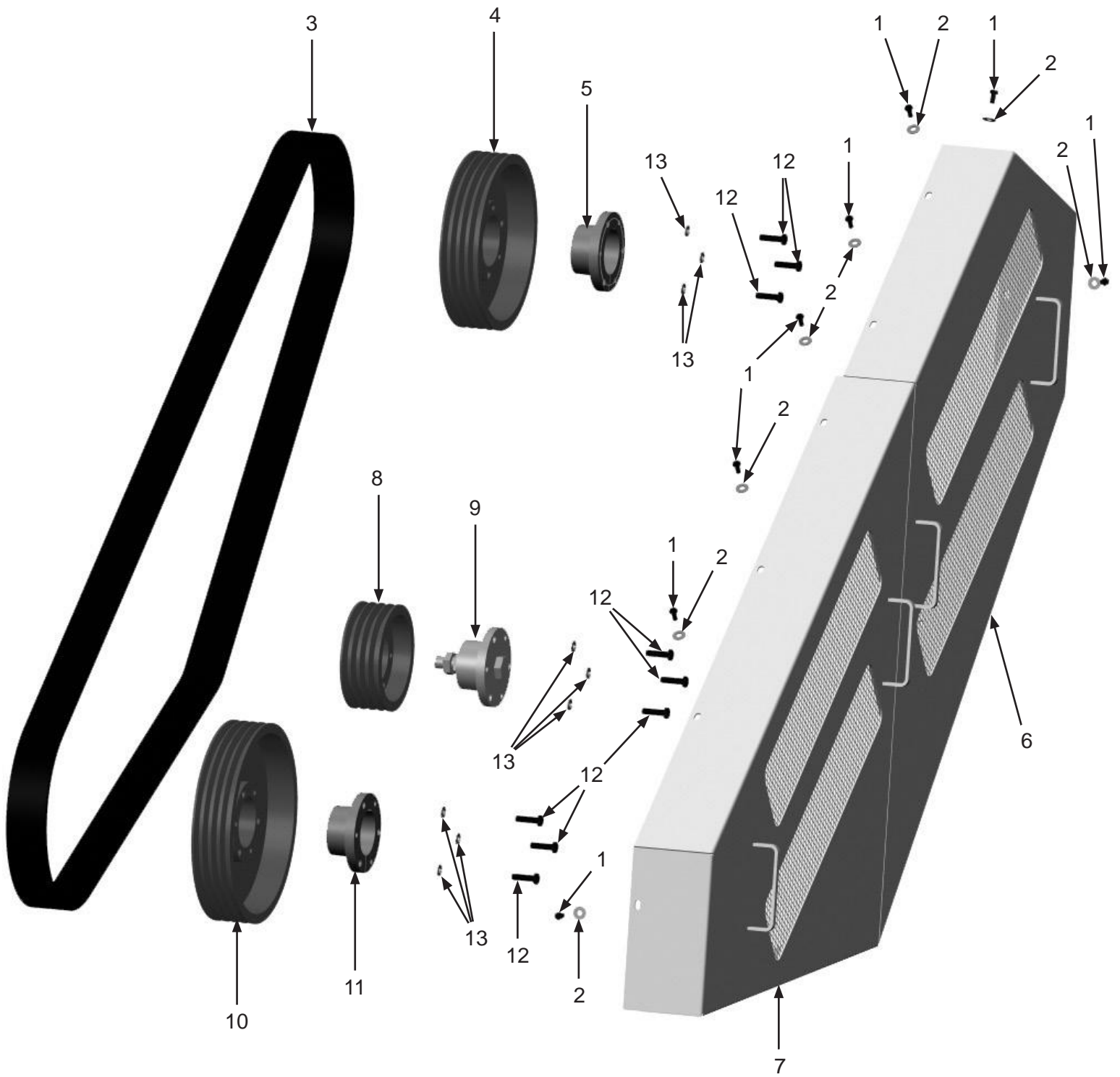
## PART NUMBERS AND SCHEMATICS

### Fan Belt Assembly

Item #	Part #	Description
<b>Fig. 7</b>		
1	10103400	3/8-16 x 3/4" Bolt <i>(Seven Required)</i>
2	10101942	3/8" Galvanized Flat Washer <i>(Seven Required)</i>
3	10106029	4/5VX 1700 Banded Belt
4	10106027	13.2" Sheave
5	10103482	3-7/16" Bore Sheave Bushing <i>Includes Mounting Hardware</i>
6	10106017	Belt Guard Cover - Fan
7	10105989	Belt Guard Cover - Motor
8	10103483	8" Sheave
9	10103484	Idler Bushing
10	10106028	15" Sheave
11	10106107	3-3/8" Bore Sheave Bushing <i>Includes Mounting Hardware</i>
12	10101943	1/2-13 x 1-3/4" Bolt <i>(Nine Required)</i>
13	10100675	1/2" Lock Washer <i>(Nine Required)</i>

# PART NUMBERS AND SCHEMATICS

Figure 7: Fan Belt Assembly



# PART NUMBERS AND SCHEMATICS

## Fan Belt Back Guard Assembly

Item #	Part #	Description
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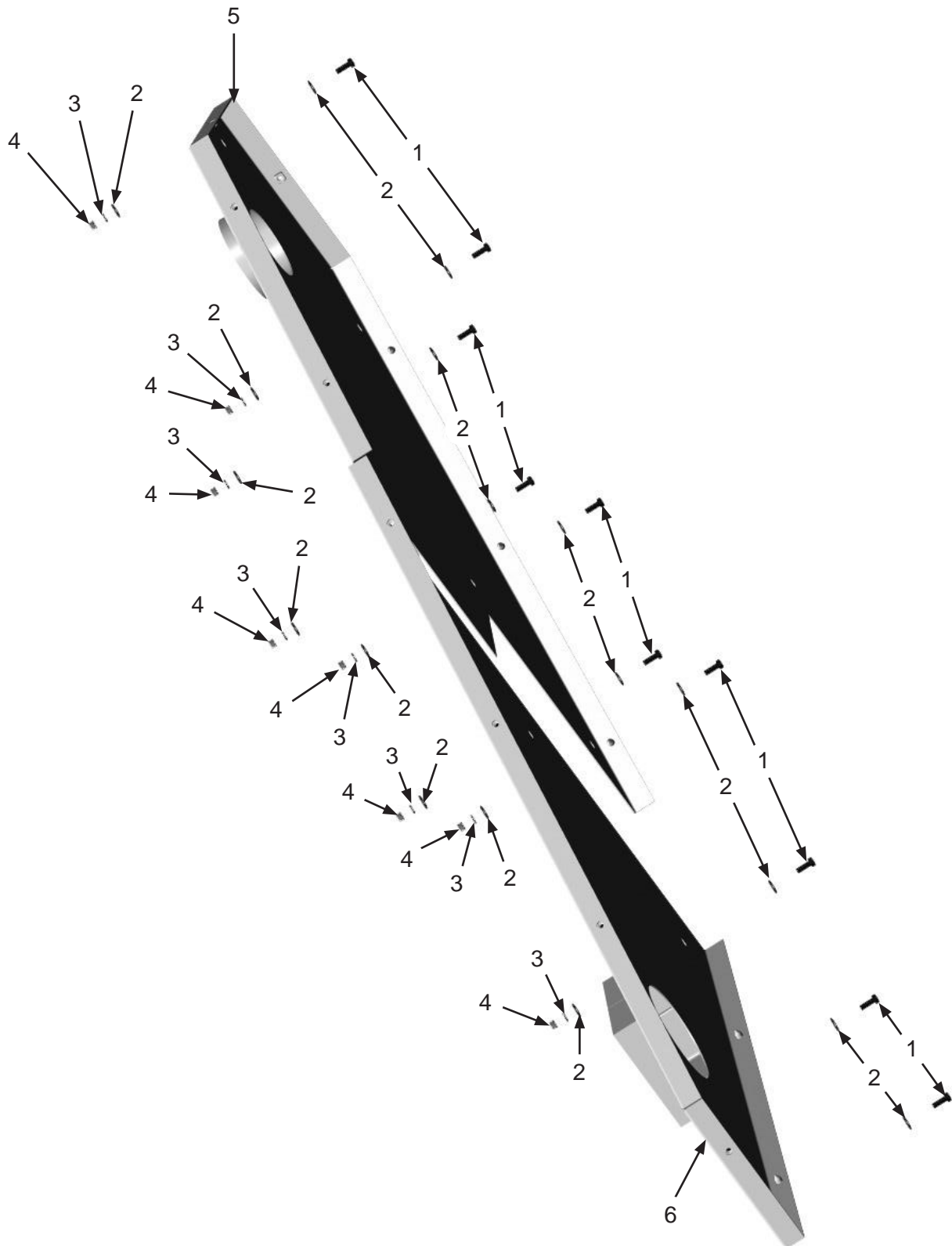
Fig. 8

1	1011747	3/8-16 x 1" Bolt <i>(10 Required)</i>
2	10101942	3/8" Galvanized Flat Washer <i>(18 Required)</i>
3	10101936	3/8" Zinc Lock Washer <i>(Eight Required)</i>
4	1012318	3/8-16 Hex Nut <i>(Eight Required)</i>
5	10106016	Belt Guard Back - Fan
6	10105988	Belt Guard Back - Motor



# PART NUMBERS AND SCHEMATICS

Figure 8: Fan Belt Back Guard Assembly



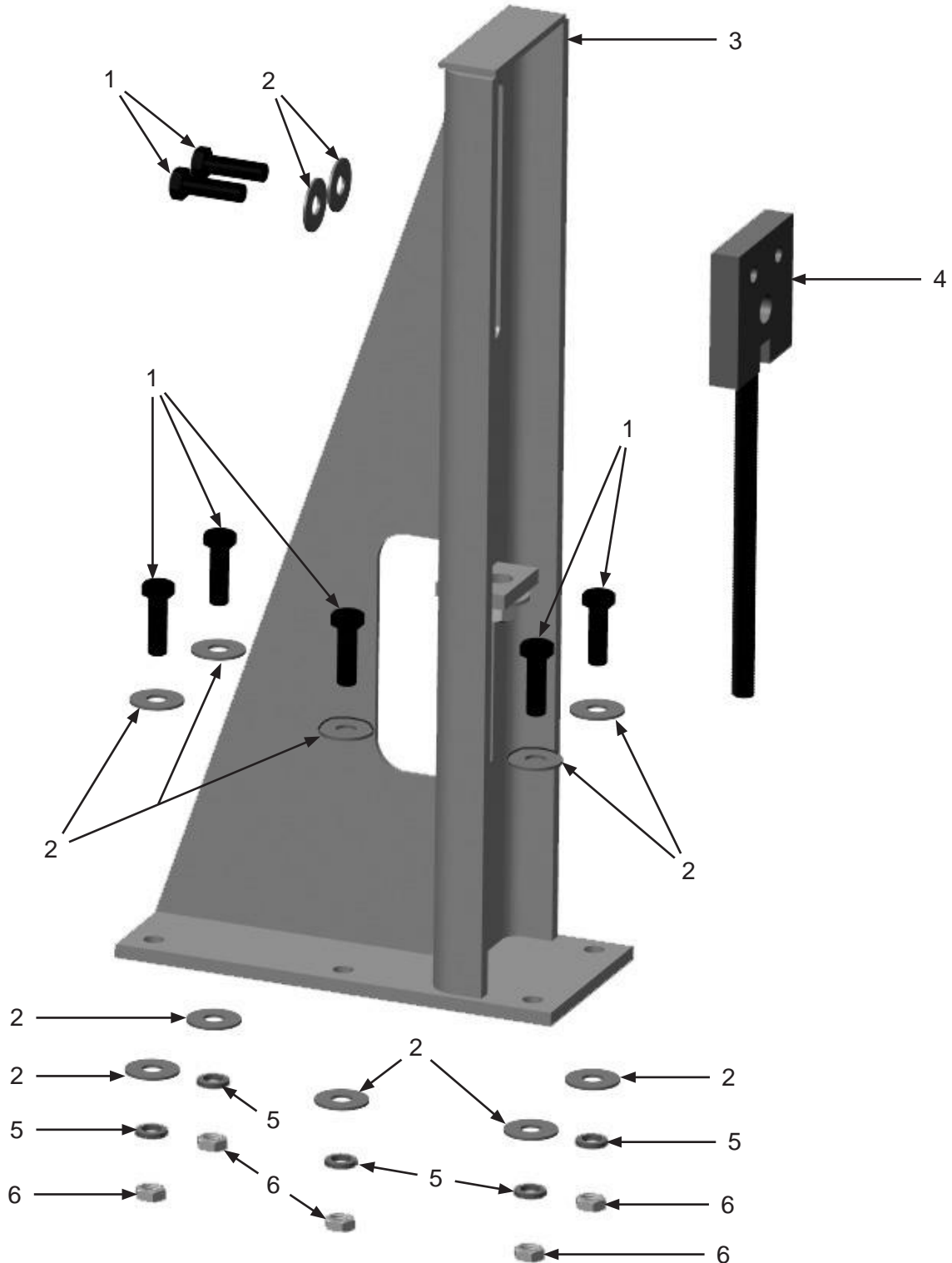
# PART NUMBERS AND SCHEMATICS

## Fan Belt Tensioner Assembly

Item #	Part #	Description
<b>Fig. 9</b>		
1	10103397	5/8-11 x 2" Bolt- Zinc
2	10103398	5/8" Washer
3	10105981	Tensioner Mount
4	10106018	Tensioner
5	10103399	5/8" Lock Washer
6	10103393	5/8-11 Zinc Nut

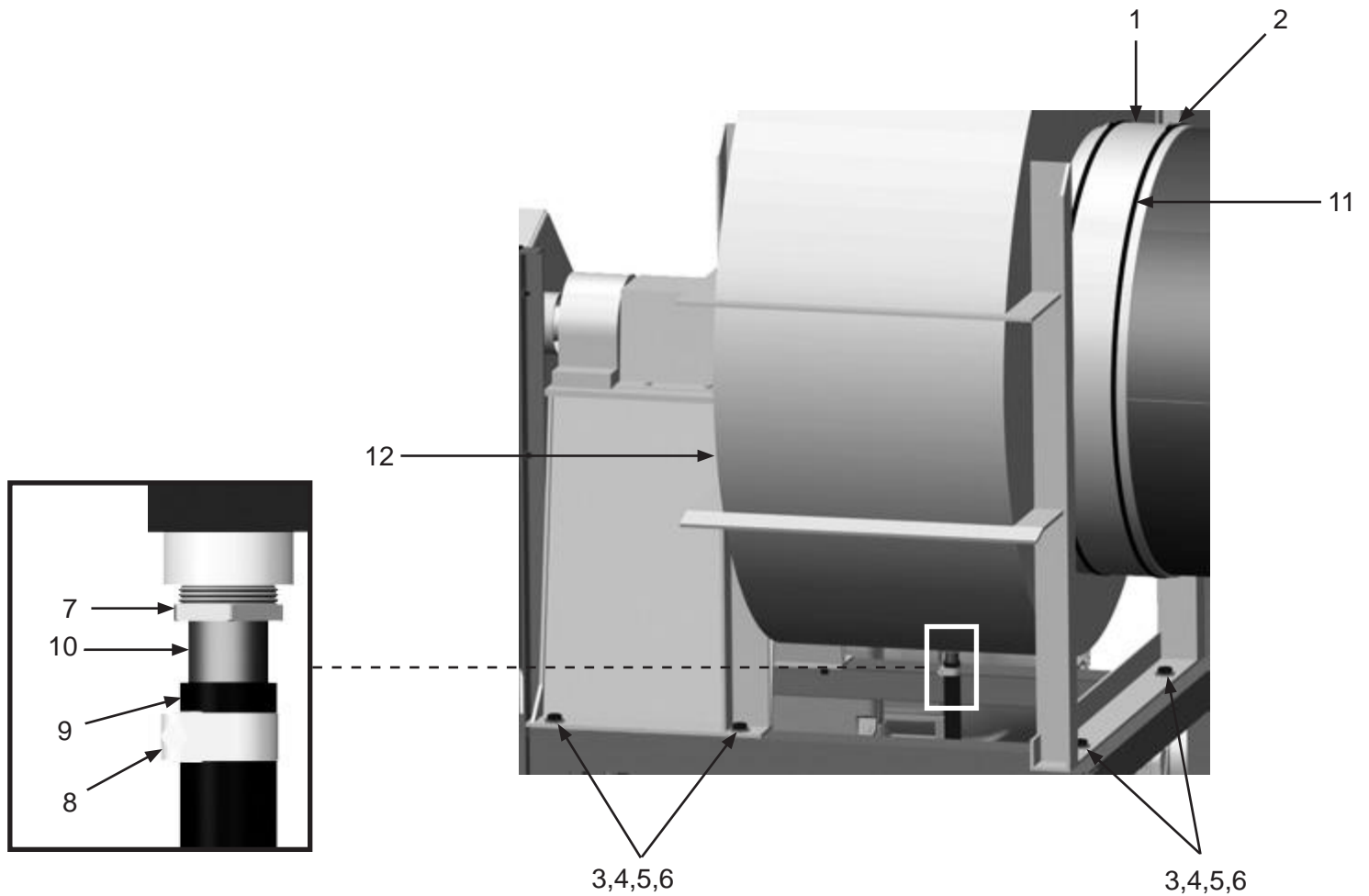
# PART NUMBERS AND SCHEMATICS

Figure 9: Fan Belt Tensioner Assembly



## PART NUMBERS AND SCHEMATICS

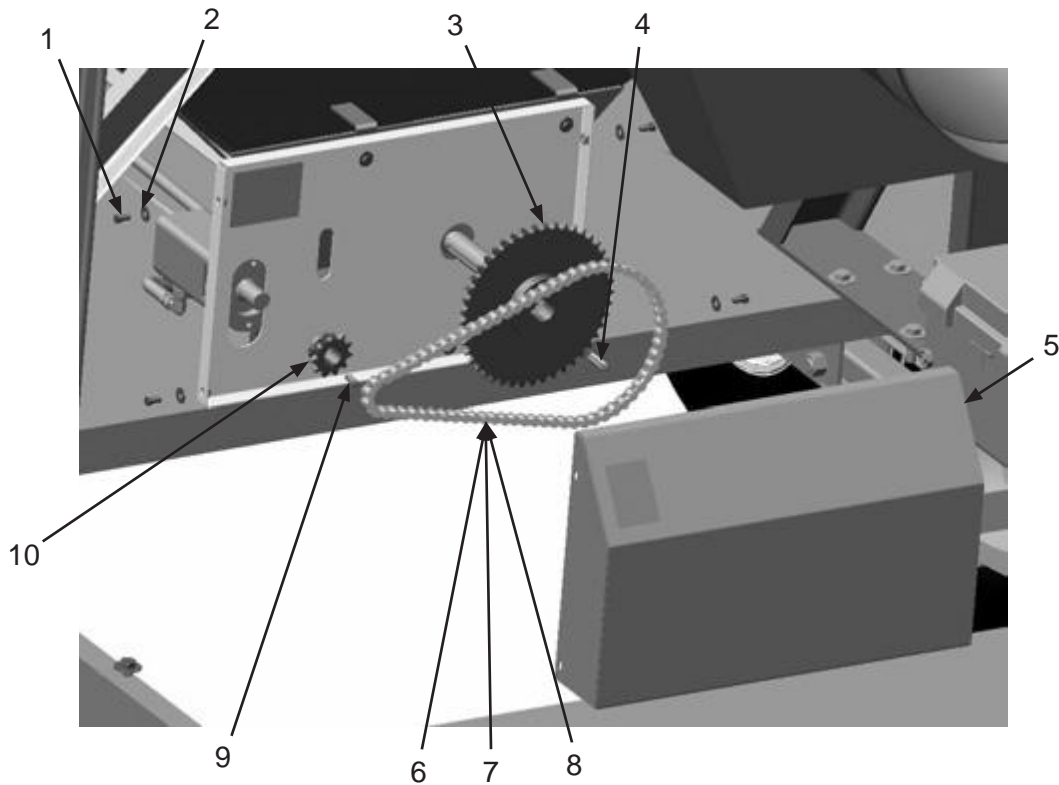
Figure 10: Fan Assembly



Item #	Part #	Description
<b>Fig. 10</b>		
1	10103962	Connection Rubber Gasket
2	10103416	Clamp Adjustable Fastener (25' Required)
3	10103417	3/4-10 UNC x 1-3/4" Grade 8 Bolt (Six Required)
4	10103418	3/4" Washer (12 Required)
5	10103420	3/4-10 UNC GR8 Nut (Six Required)
6	10103419	3/4" Lock Washer (Six Required)
7	20PFHA24SB2016	1-1/4" x 1" Reducing Bushing
8	10104136	Hose Clamp 1-1/16" x 2" O.D.
9	10103654	1-1/4" I.D. Hose (Per Foot)
10	10000197	1" NPT x 3" Toe Nipple
11	10103416	Banding - Make a Clamp (Per Foot)
12	10103495	Fan BI-365 TH ARRG I Class IV

## PART NUMBERS AND SCHEMATICS

Figure 11: Main Auger Drive Assembly



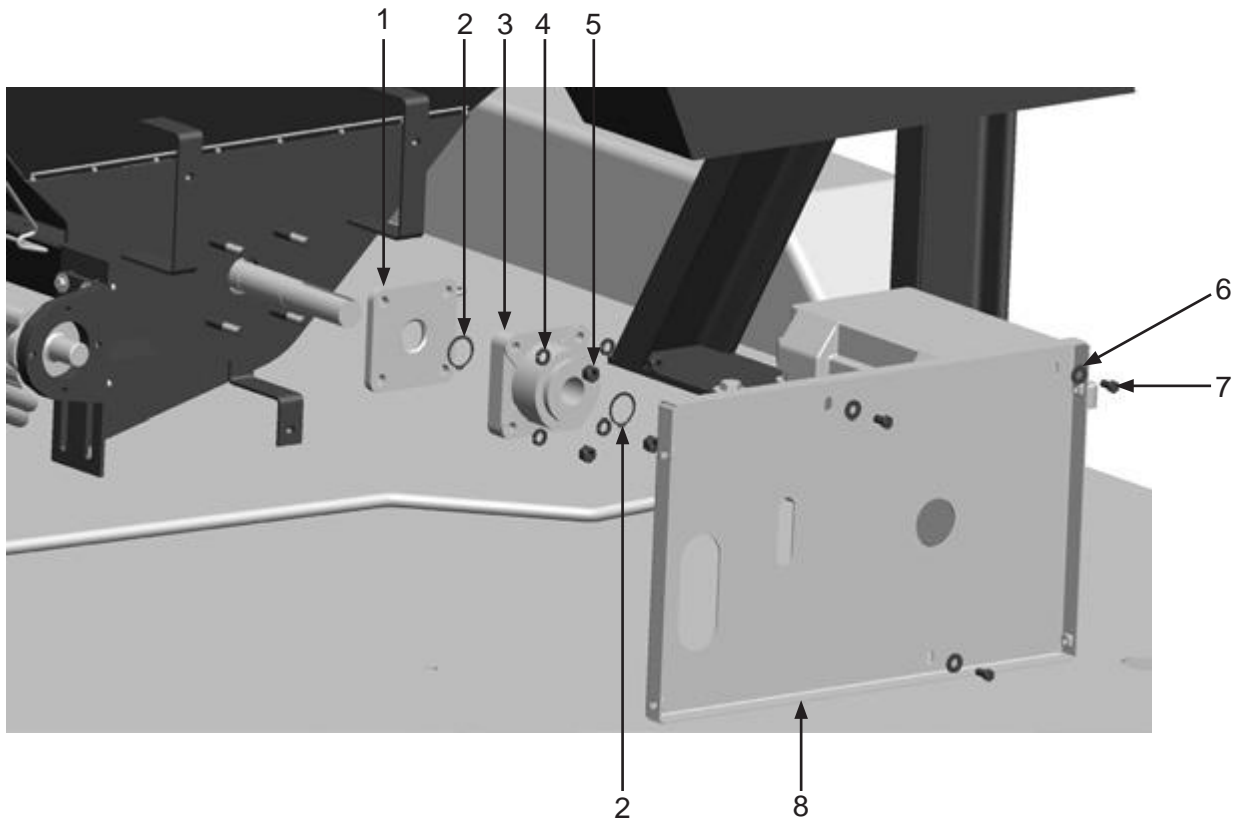
Item #	Part #	Description
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Fig. 11

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: 6,7,8</i>

## PART NUMBERS AND SCHEMATICS

Figure 12: Main Auger Bearing



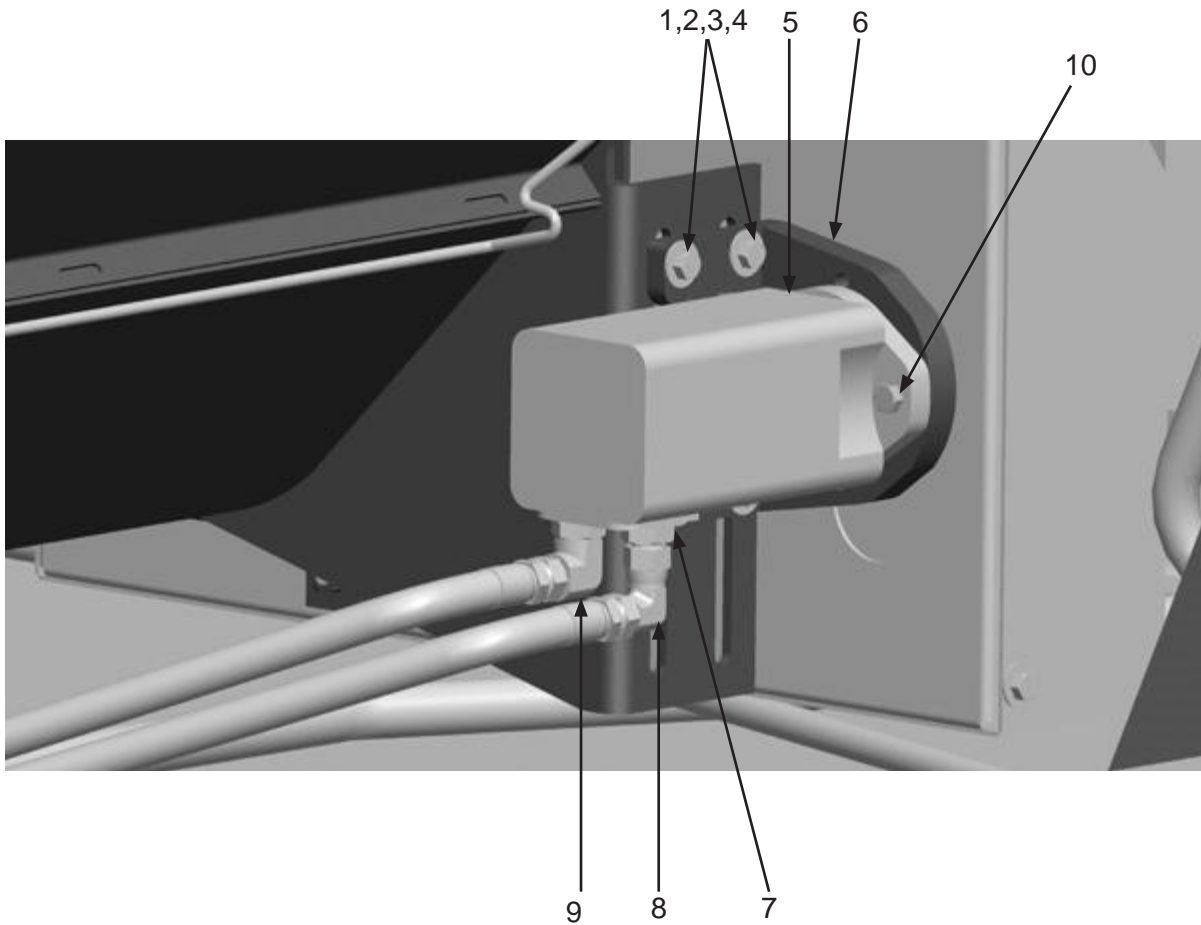
Item #	Part #	Description
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Fig. 12

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

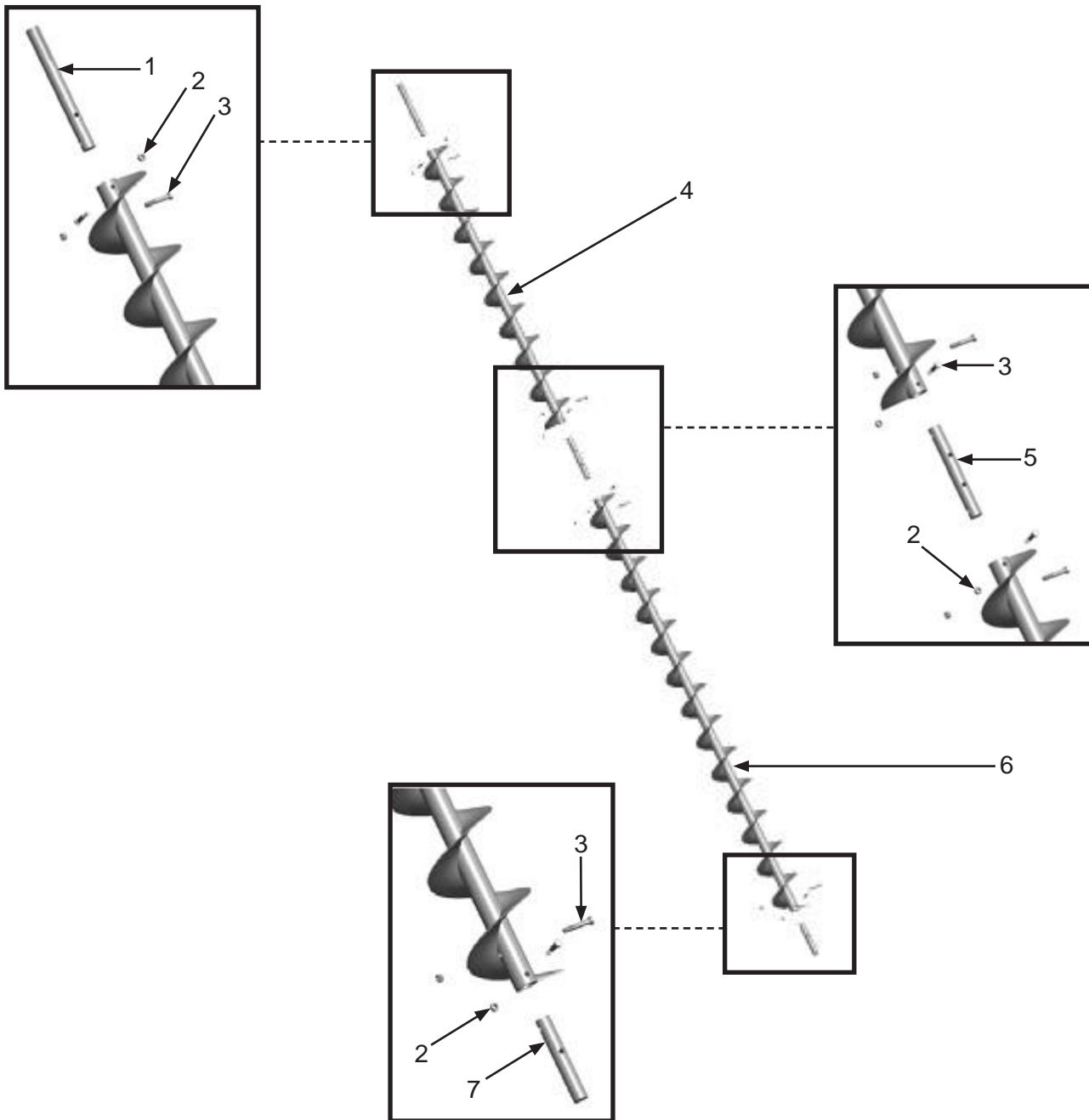
Figure 13: Main Auger Motor



Item #	Part #	Description
<b>Fig. 13</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 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
10	10101059	3/8-16 x 1-1/4" A307 Bolt Galvanized
—	10103941	Seal Kit for 18.7 Displacement Hydraulic Motor

## PART NUMBERS AND SCHEMATICS

Figure 14: Main Auger



Item #	Part #	Description
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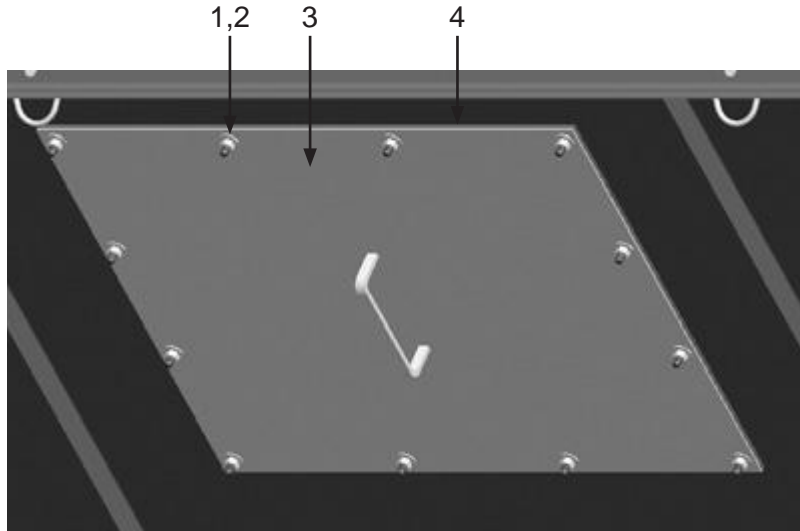
Fig. 14

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

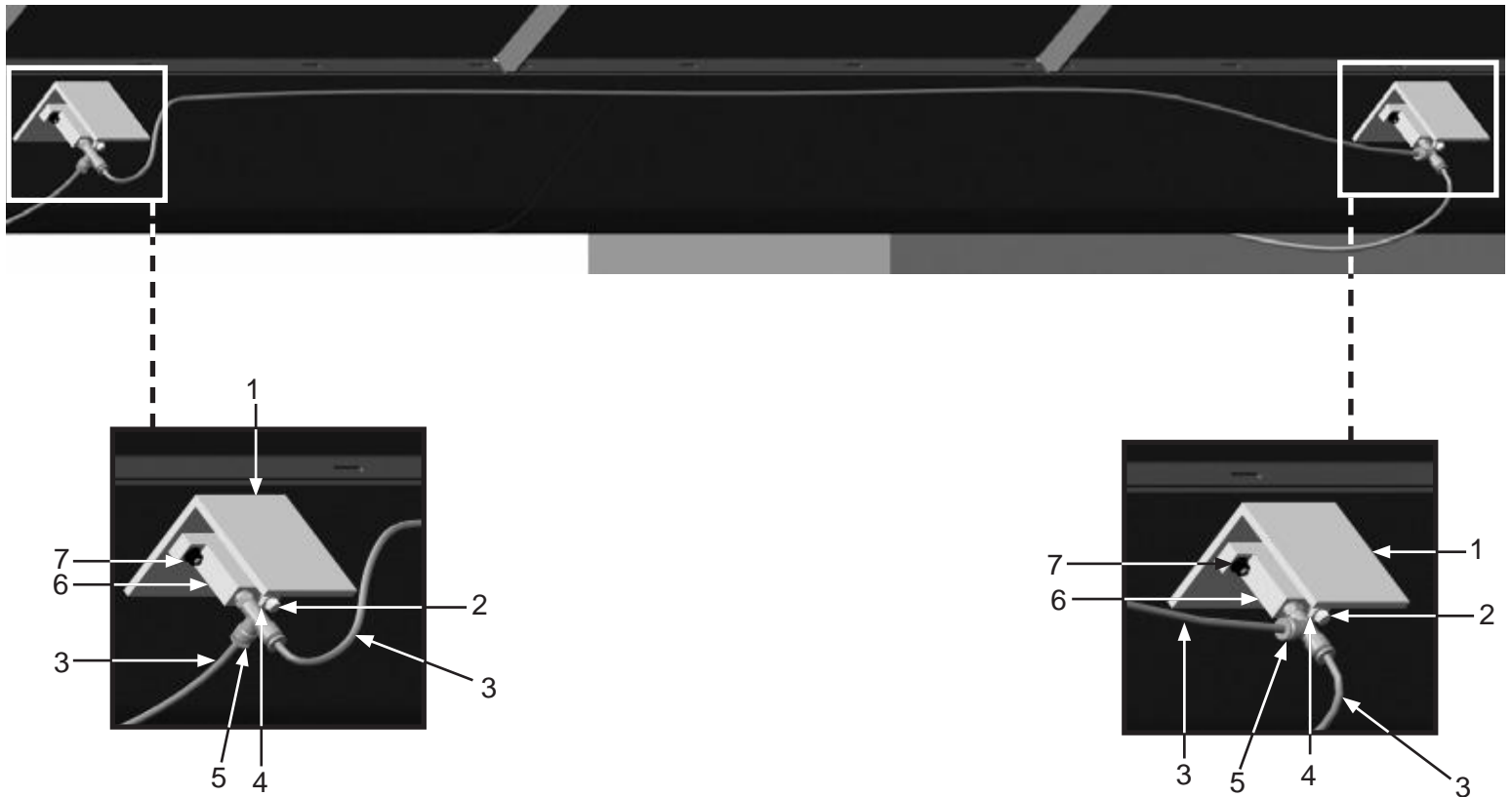
Figure 15: Access Panel Assembly



Item #	Part #	Description
<b>Fig. 15</b>		
1	1012318	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

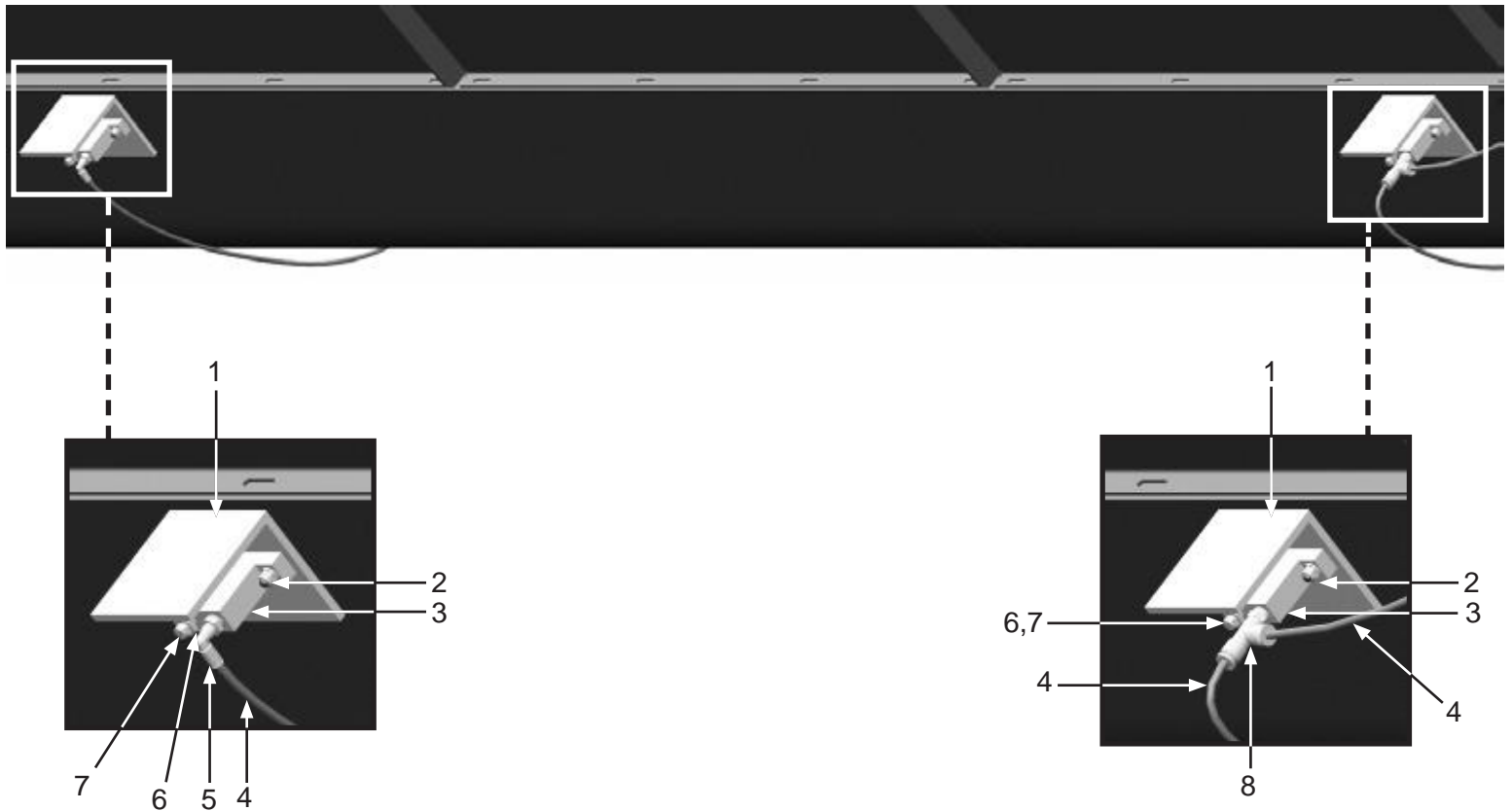
Figure 16: Left Side Pneumatic Ball Vibrators



Item #	Part #	Description
<b>Fig. 16</b>		
1	10103609	Vibrator Shield ( <i>Two Required</i> )
2	1019024	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
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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	1019024	1/8" Breather Muffler ( <i>Two Required</i> )
8	10103261	1/4" Male Push-to-connect Tee

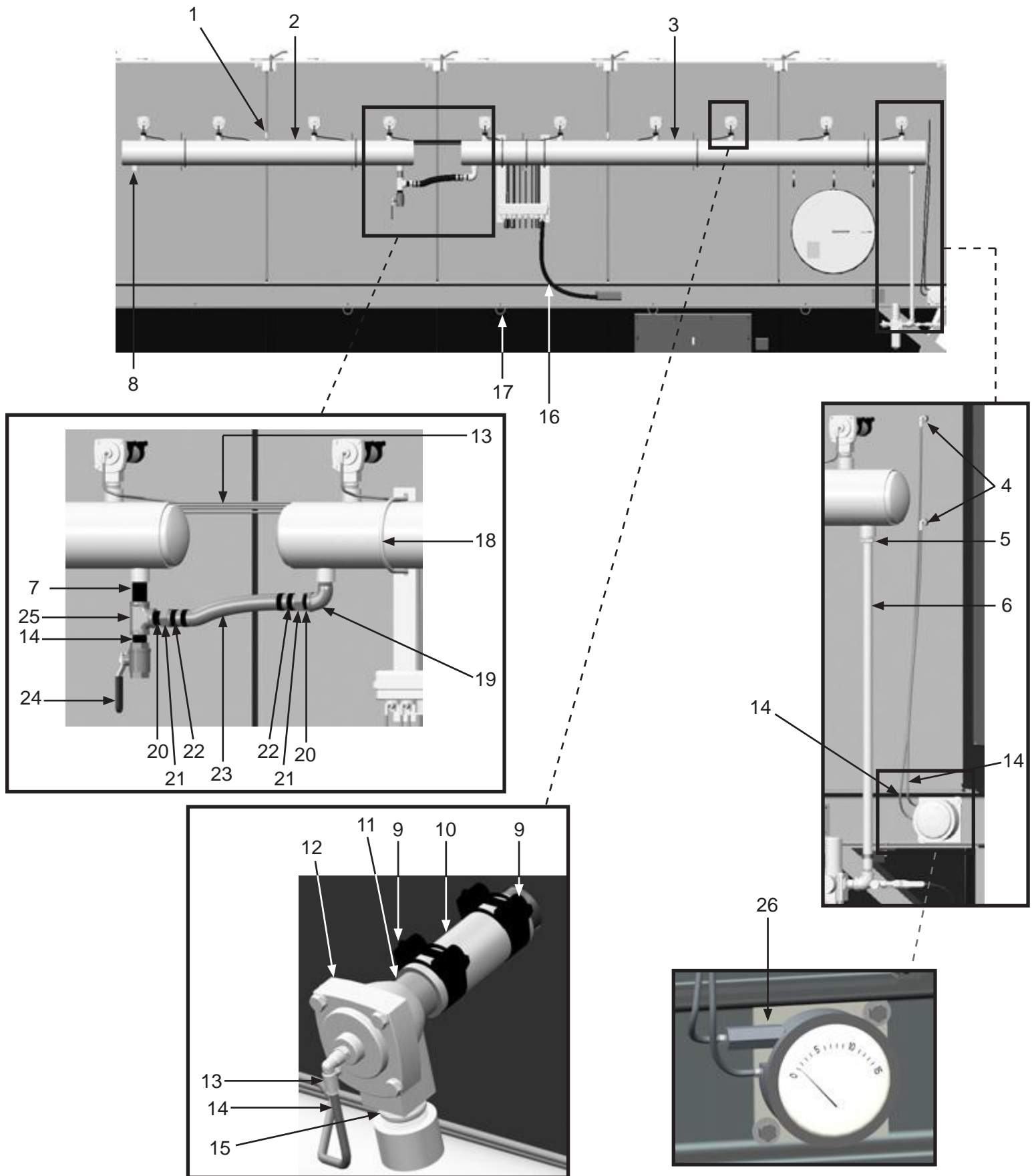
## PART NUMBERS AND SCHEMATICS

### Pulser System Assembly

Item #	Part #	Description
<b>Fig. 18</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	1011843	1" x 2-1/2" NPT Pipe Nipple
8	1011901	1" Pipe Plug
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	10108373	1/8" NPT Inline Air Filter
—	10103954	1" Diaphragm Valve Service Kit <i>(Not Shown)</i>

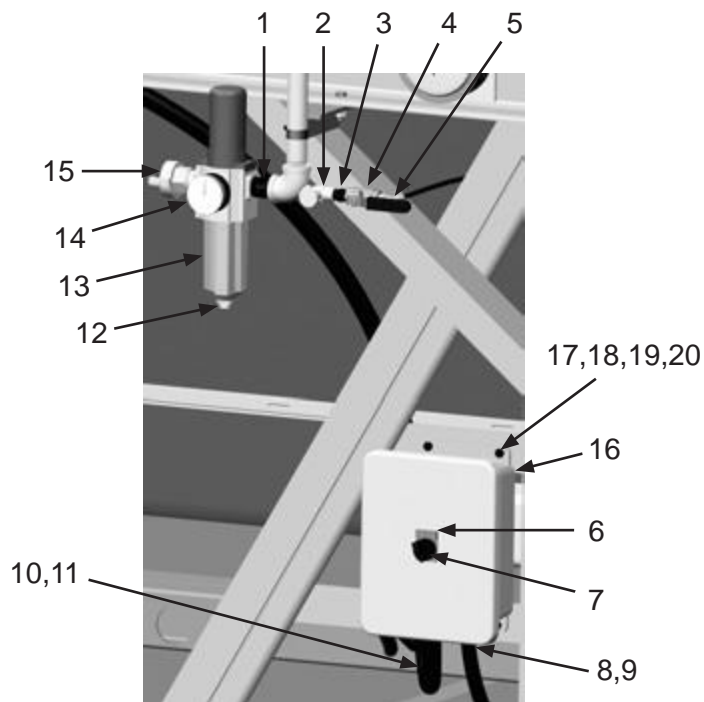
# PART NUMBERS AND SCHEMATICS

Figure 18: Pulsar System Assembly



## PART NUMBERS AND SCHEMATICS

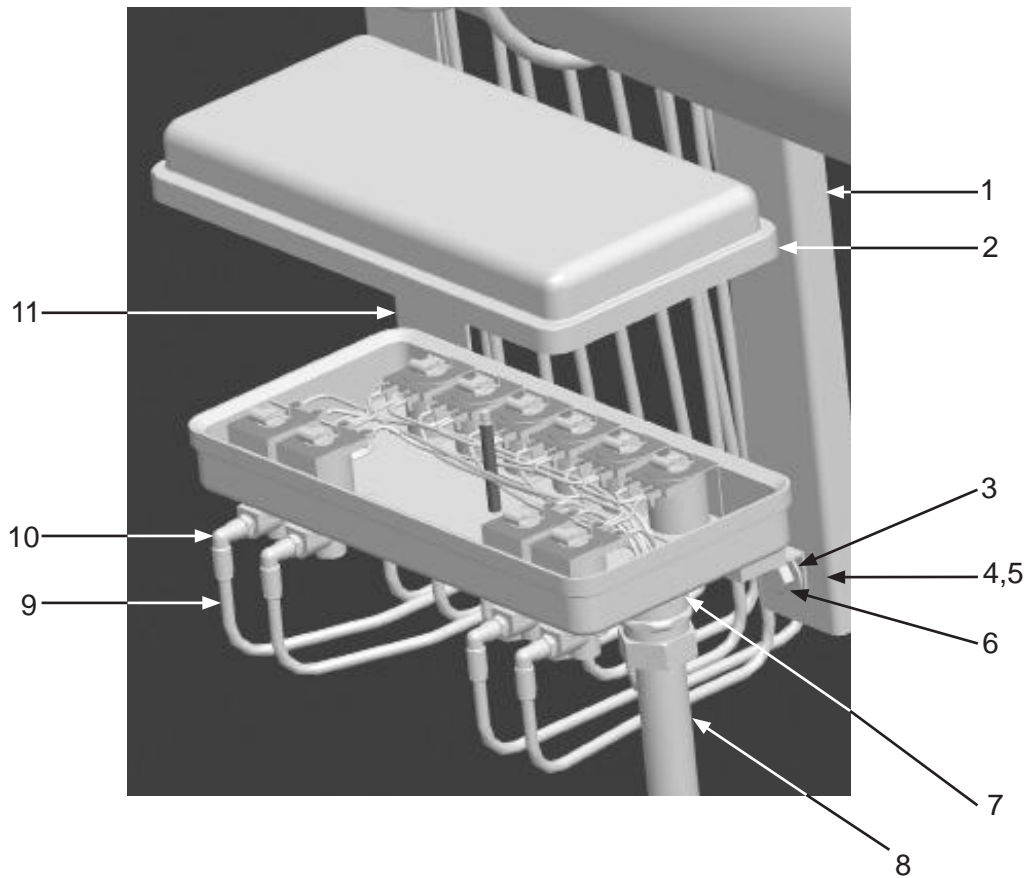
Figure 19: Pulsar Regulator and Timer Assembly



Item #	Part #	Description
<b>Fig. 19</b>		
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	10103414	On/Off Name Plate
7	10103305	2-Way Selector Switch
8	20RST50	Straight Liquid Tite Connection Fitting ( <i>Two Required</i> )
9	20RSEL050UL	1/2" UL/UA Seal-Tite Conduit Pipe ( <i>Per Foot</i> )
10	10103304	3/4" Flexible Conduit
11	10103303	3/4" Conduit Hub
12	10103952	Filter Auto Drain
13	10103257	Excelon 74 Series Filter/Regulator
14	10103953	Sight Glass Kit
15	10ME1	3/4" Male 2-lug Coupling
16	10106082	Timer Box with Timer Board
—	10103935	Timer Box Only
—	10106743	Timer Board Only
17	10101937	1/4-20 x 1" Grade 5 Bolt ( <i>Four Required</i> )
18	10101940	1/4" Flat Washer ( <i>Four Required</i> )
19	1012153	1/4" Lock Washer ( <i>Four Required</i> )
20	10101347	1/4-20 Hex Nut ( <i>Four Required</i> )
—	10103950	Filter/Regulator Service Kit
—	10103951	Filter Element ( <i>Not Shown</i> )

## PART NUMBERS AND SCHEMATICS

Figure 20: Pulsar Solenoid Enclosure Assembly



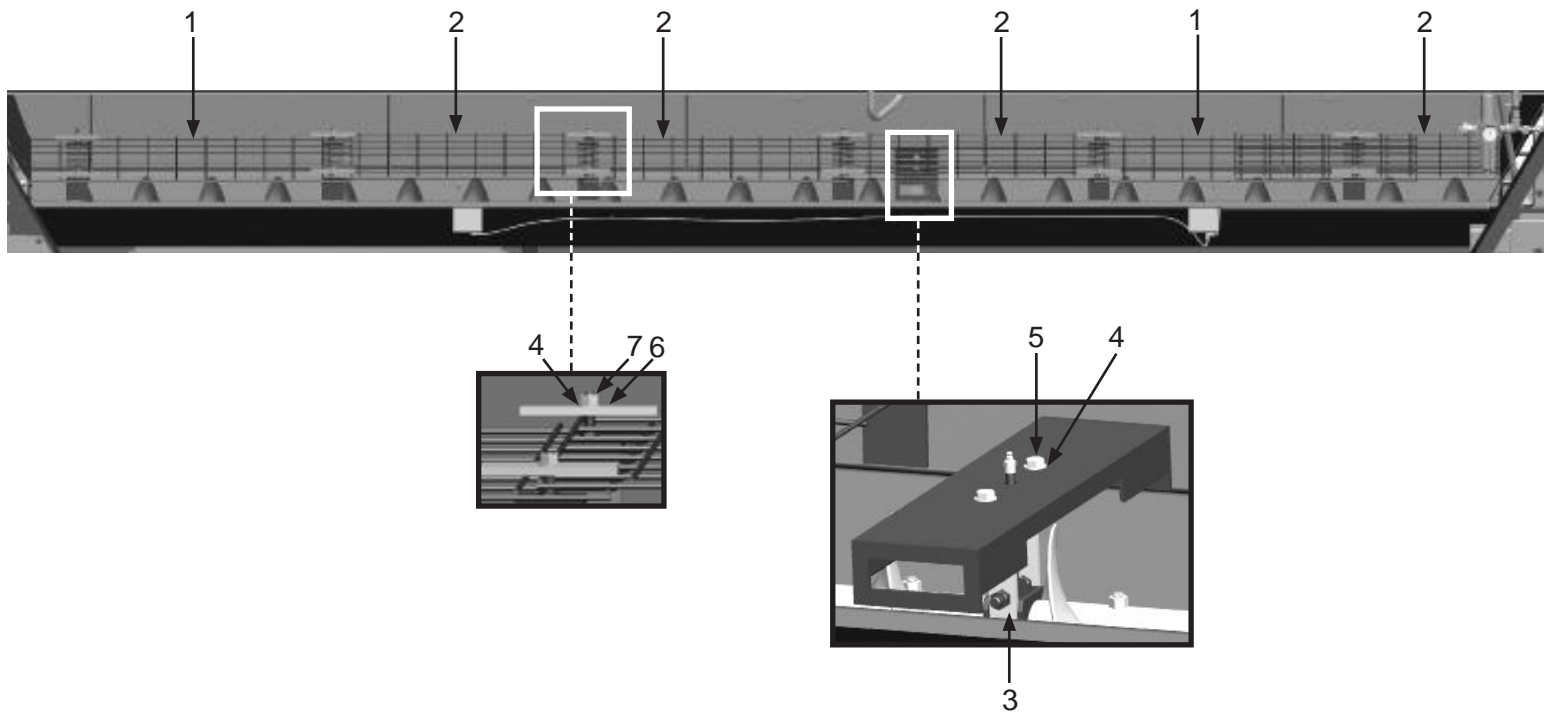
Item #	Part #	Description
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**Fig. 20**

1	10102970	Solenoid Enclosure Mount – Right
2	10106083	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	10101938	3/8-16 Galvanized 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
—	10107493	120 Volt AC Solenoid Valve Assembly <i>(Six Required)</i>
—	10107494	120 Volt AC 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: Main Auger Protective Grate

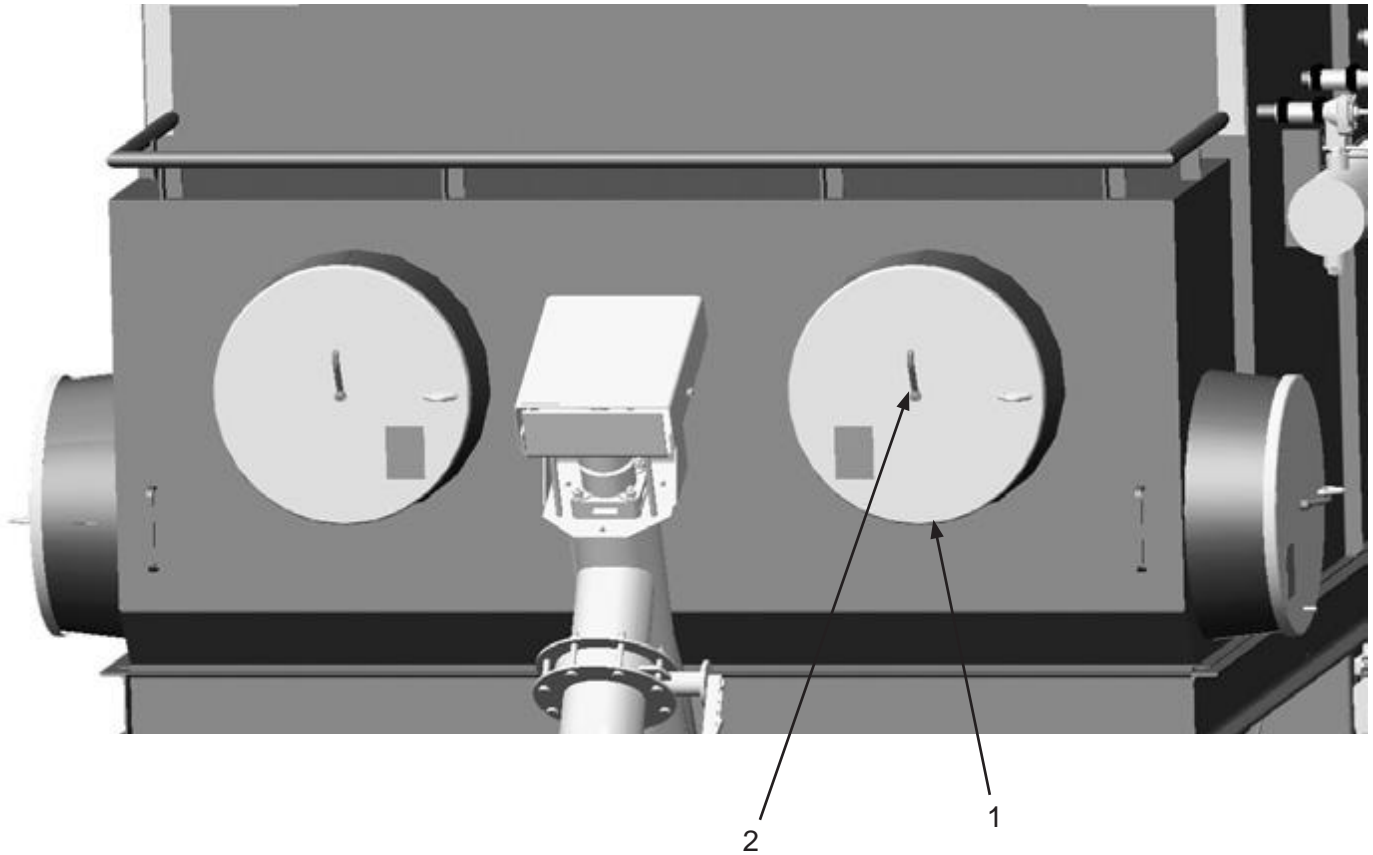


Item #	Part #	Description
<b>Fig. 21</b>		
1	10103966	Protective Grate - 44 Inches <i>(Two Required)</i>
2	10103967	Protective Grate - 36 Inches <i>(Four Required)</i>
3	10102896	Main Auger Hanger Bearing Assembly
4	10100674	1/2" Flat Washer <i>(12 Required)</i>
5	10101943	1/2-13 x 1-3/4" Galvanized 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 22: Inlet Door Assembly



Item #	Part #	Description
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Fig. 22

1	10105945	20" Inlet Cover (Six Required)
2	10105960	3/8-16 Handle Zinc (Six Required)
—	10102339	Camlock Closure - Chain (3' per Inlet. Not Shown)
—	10102410	Spring Snap Hook - 1/4" (Two Required per Inlet. Not Shown)

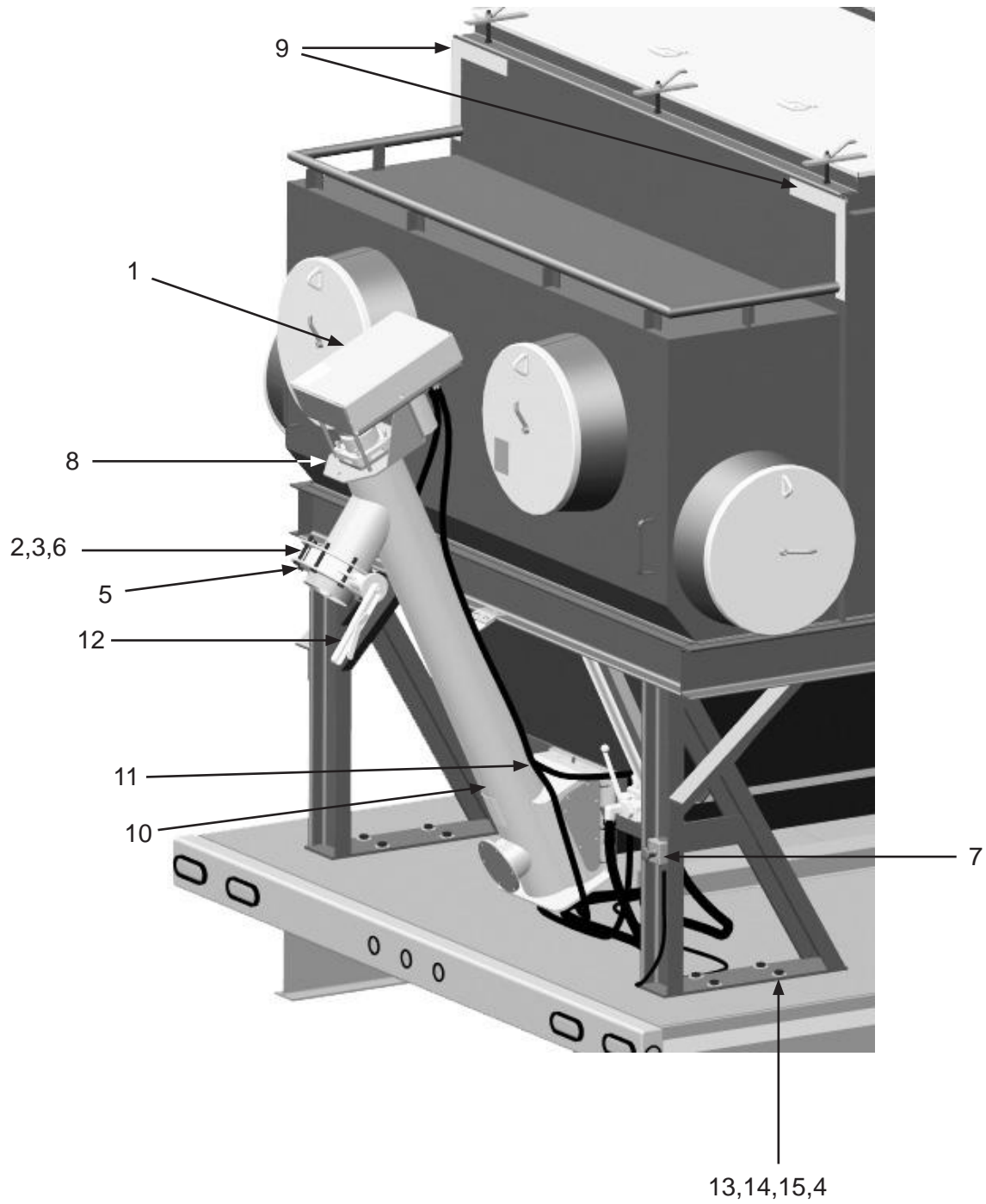
## PART NUMBERS AND SCHEMATICS

### Discharge Auger Assembly

Item #	Part #	Description
<b>Fig. 23</b>		
1	10103363	Discharge Chain Cover
2	1014022	1/2-13 Hex Nut <i>(18 Required)</i>
3	10100674	1/2" Flat Washer <i>(Six Required)</i>
4	10103393	Nut - 5/8-11 Grade 8 Zinc <i>(16 Required)</i>
5	10102971	Discharge Hose Connector
6	10102703	1/2-13 x 3-1/2" Grade 5 Bolt <i>(Eight Required)</i>
7	10104071	Emergency-Stop Station <i>(See Figure 30)</i>
8	10104195	Discharge Auger Motor Mounting Bracket
9	10103880	White Conspicuity Tape (Per Inch)
10	10105936	Short Discharge Auger
11	10103409	Hydraulic Hose - 1/2" I.D. x 7' 1" - 2000 psi
12	10103302	6" Series Wafer Butterfly Valve
13	10103397	5/8-11 x 2" Grade 8 Bolt- Zinc <i>(16 Required)</i>
14	10103398	Washer - 5/8" Grade 8 <i>(32 Required)</i>
15	10103399	Lock Washer - 5/8" Hd <i>(16 Required)</i>
—	10103881	Red Conspicuity Tape (Per Inch)

# PART NUMBERS AND SCHEMATICS

Figure 23: Discharge Auger Assembly



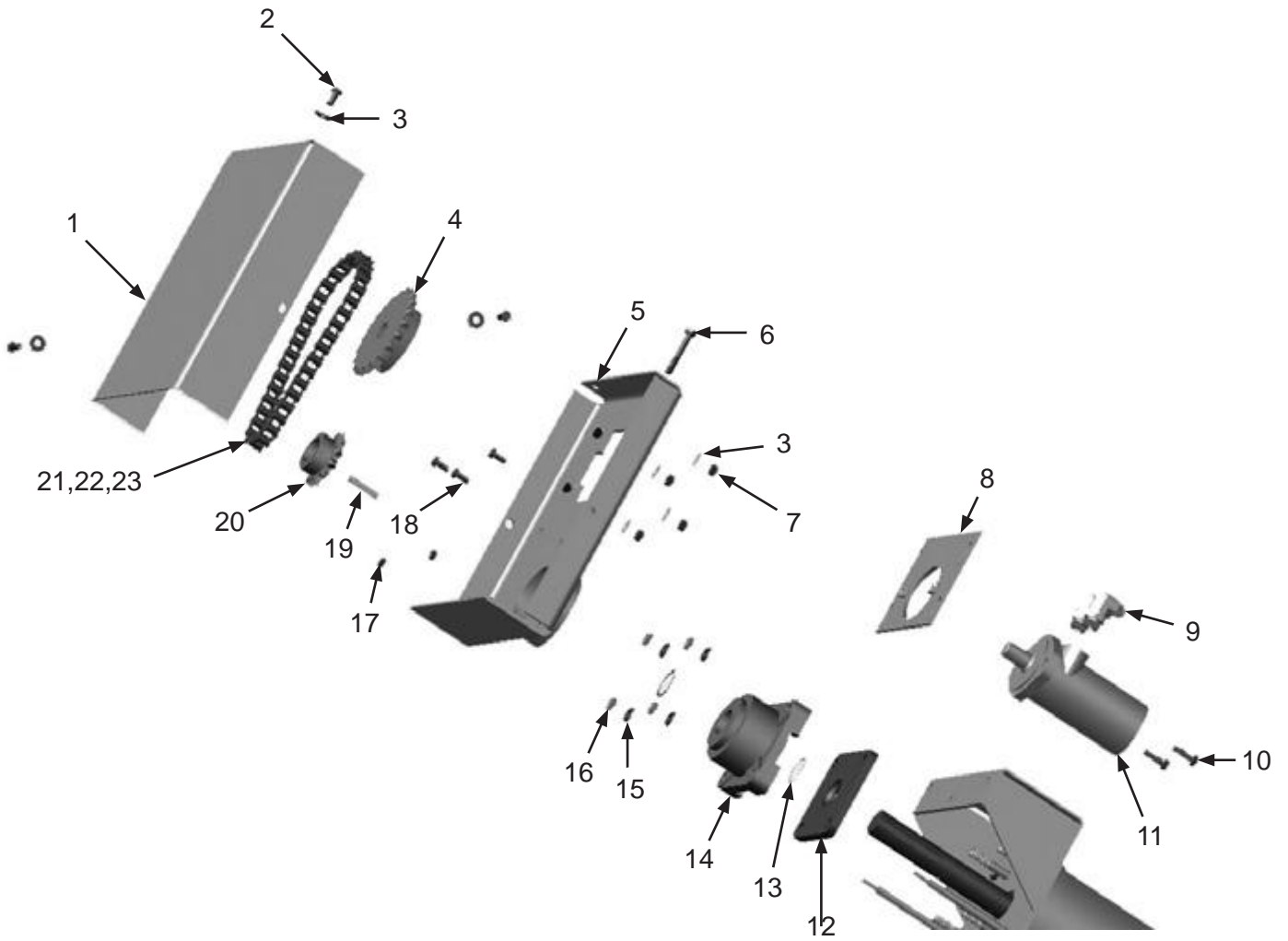
## PART NUMBERS AND SCHEMATICS

### Discharge Auger Drive Assembly

Item #	Part #	Description
<b>Fig. 24</b>		
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 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 Galvanized <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	10103392	Connecting Link #60
22	10103391	Cottered Roller Chain #60 <i>(Per Foot)</i>
23	10103614	Offset Link #60
—	10104191	Discharge Auger Chain Kit <i>Includes part #'s 10103392, 10103391, 10103614.</i>
—	10103940	Seal Kit for Hydraulic Motor 10102887

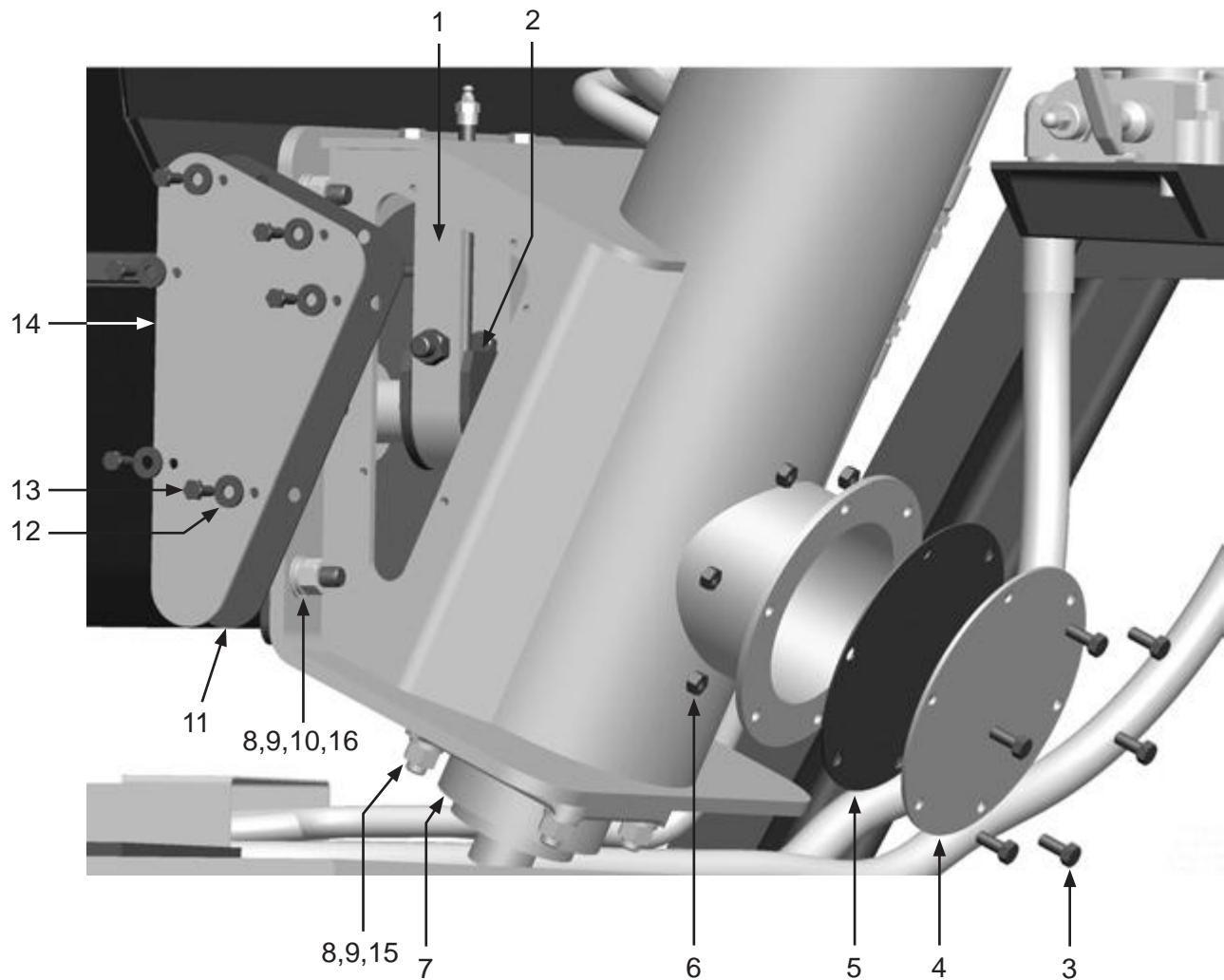
# PART NUMBERS AND SCHEMATICS

Figure 24: Discharge Auger Drive Assembly



## PART NUMBERS AND SCHEMATICS

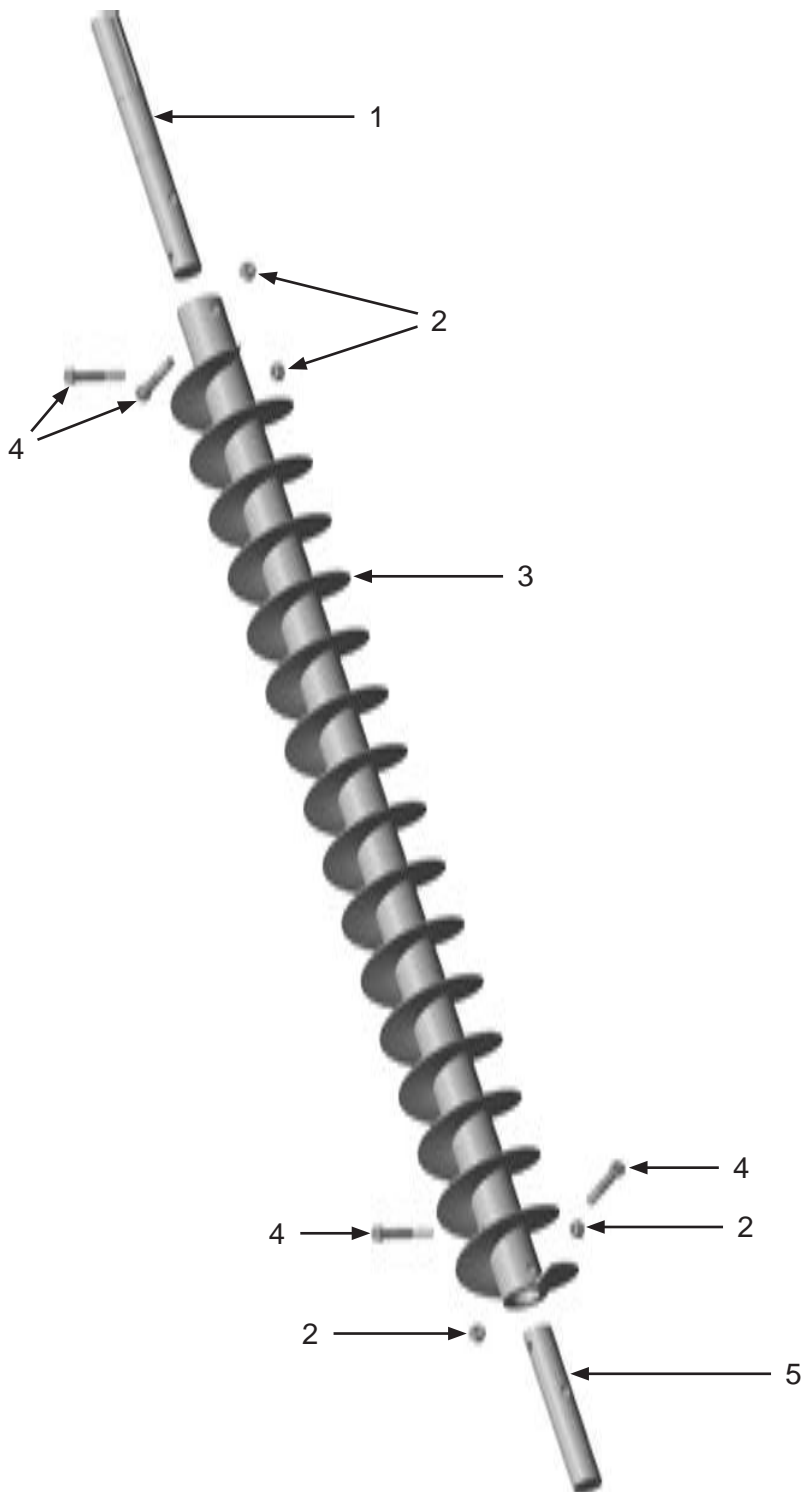
Figure 25: Discharge Auger Clean-out Assembly



Item #	Part #	Description
<b>Fig. 25</b>		
1	10102896	Bearing Hanger
2	10103413	Bearing
3	10101346	5/16-18 x 3/4" Bolt (Six Required)
4	10103235	Auger Clean-out Cover
5	10103716	Neoprene Auger Clean-out Gasket
6	1035046	5/16-18 Nut (Six Required)
7	10102880	Discharge Auger Lower Bearing Assembly
8	10101941	1/2-13 Galvanized Hex Nut (10 Required)
9	10100675	1/2" Lock Washer (10 Required)
10	10100674	1/2" Flat Washer (Six Required)
11	10103717	Discharge Auger Side Gasket (Two Required)
12	10101940	1/4" Galvanized Flat Washer (12 Required)
13	20100125	1/4-20 x 3/4" Zinc Hex Bolt (12 Required)
14	10103236	Discharge Auger Side Cover (Two Required)
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

Figure 26: Discharge Auger



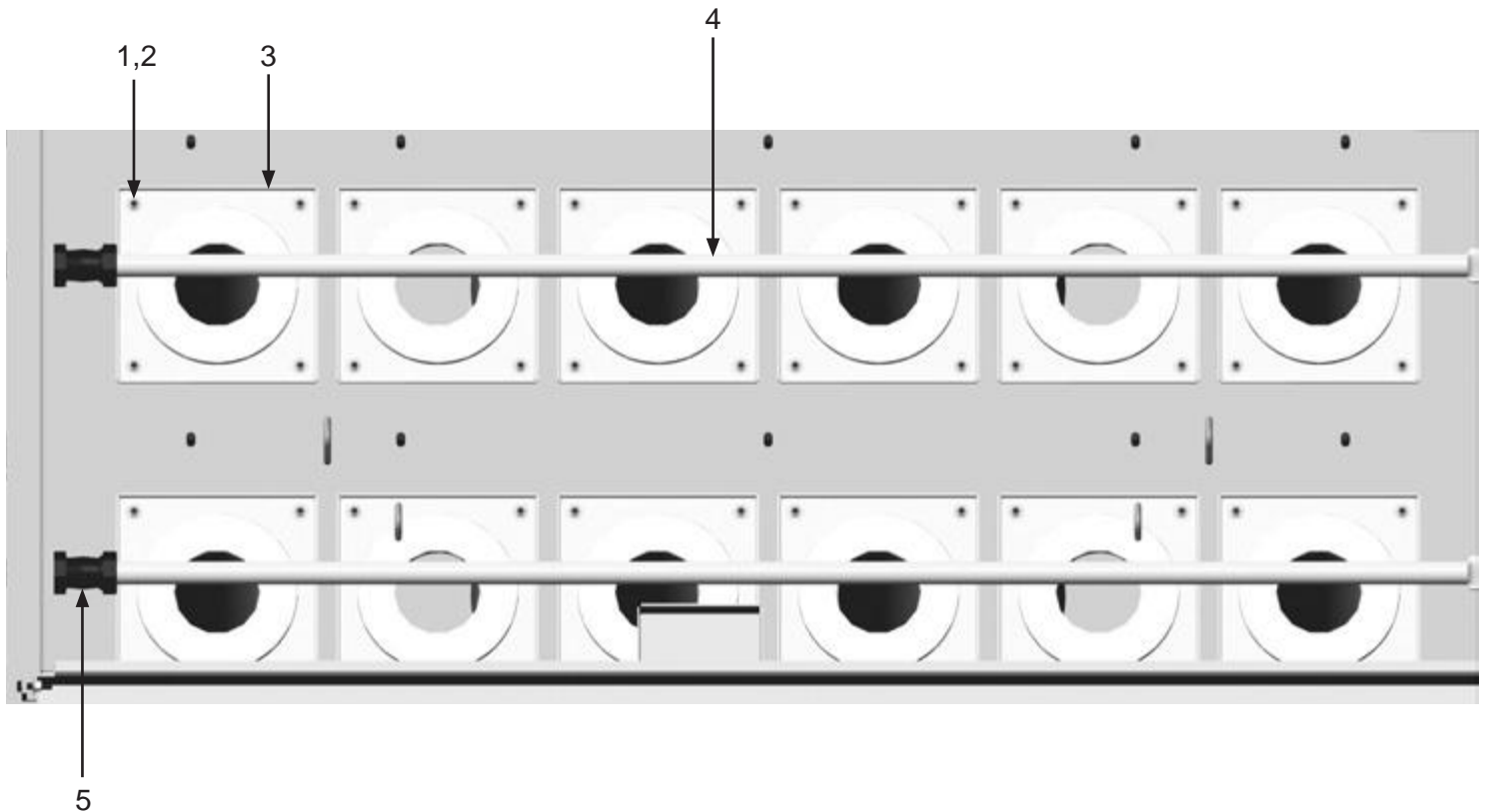
Item #	Part #	Description
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**Fig. 26**

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

## PART NUMBERS AND SCHEMATICS

Figure 27: Dust Collector Filter Cartridge Pulsers



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

Fig. 27

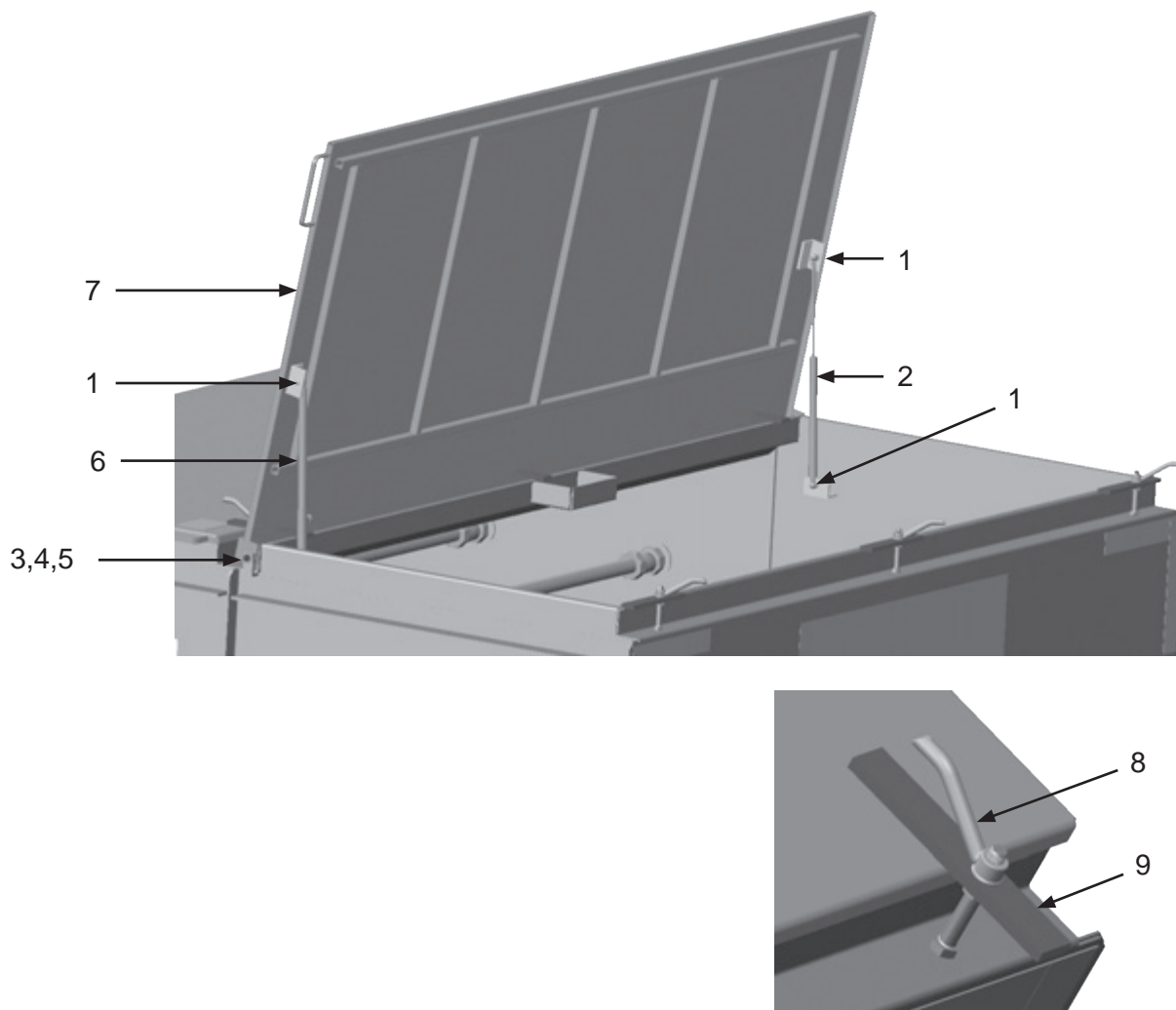
1	10101942	3/8" Flat Washer (Four Required Per Filter)
2	1012318	3/8" Hex Nut (Four Required Per Filter)
3	10105939	Filter Bolt-Down (One Required Per Filter)
4	10105942	Small Filter Blowpipe (Two Required Per Hatch Opening)
5	10102599	Compression Coupling Assembly (Two Required Per Hatch Opening)

See *Optional Accessories for Dust Collector Filter Cartridge* part numbers



## PART NUMBERS AND SCHEMATICS

Figure 28: Dust Collector Filter Cartridge Hatch Door



Item #	Part #	Description
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**Fig. 28**

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*

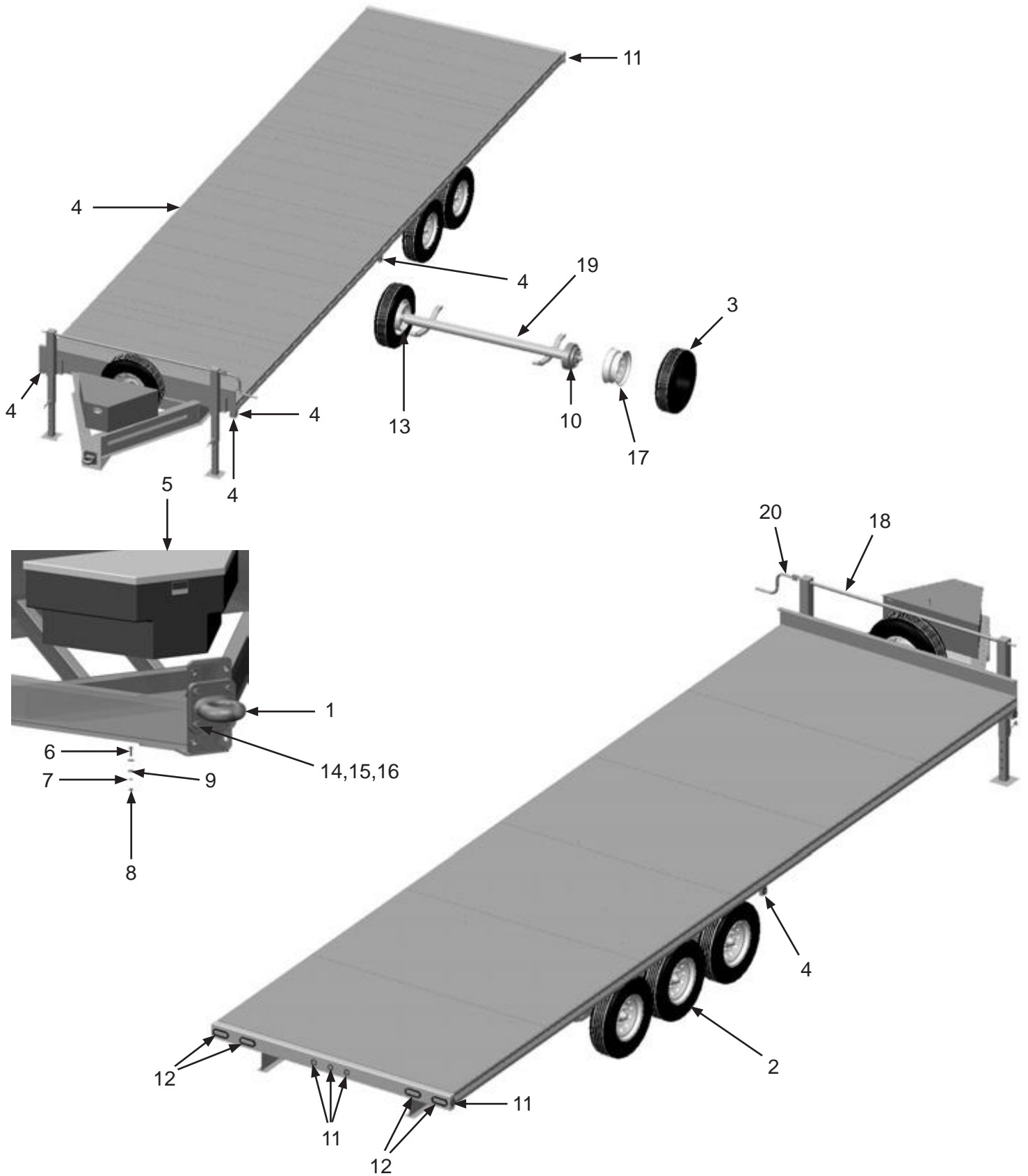
## PART NUMBERS AND SCHEMATICS

### Trailer

Item #	Part #	Description
<b>Fig. 29</b>		
	<b>10103496</b>	<b>Trailer 10.5 Ton 30' Long x 101" Wide Deck</b>
1	10104079	Pintle Hitch with Flat Plate
2	10104089	ST235/80R 16" 10-PLY Tire with Rim <i>(Six Required)</i>
3	10104096	ST235/80R 16" 14-PLY Tire <i>(Six Required)</i>
4	10104087	2" Round Amber LED Clearance Light <i>(Four Required)</i>
5	10103797	Tool Box (optional)
6	1012154	1/4-20 x 1" Bolt <i>(Five Required) (optional)</i>
7	1012153	1/4" Lock Washer <i>(Five Required) (optional)</i>
8	10101347	1/4-20 Hex Nut <i>(Five Required) (optional)</i>
9	10101940	1/4" Washer <i>(Ten Required) (optional)</i>
10	10106087	Left-Hand Electric Brake Assembly <i>(Three Required)</i>
11	10104086	2" Round Red LED Clearance Light <i>(Five Required)</i>
12	10104084	Red LED Oval Tail Light <i>(Four Required)</i>
13	10106088	Right-Hand Electric Brake Assembly <i>(Three Required)</i>
14	10105746	5/8 x 2-1/2" Gr 8 Bolt <i>(Four Required)</i>
15	10105747	5/8 Reverse Lock Nut <i>(Four Required)</i>
16	10103398	5/8" Flat Washer <i>(Four Required)</i>
17	10107126	16 x 6 8-Hole White Rim
18	10107218	Jack Stand Assembly
—	10104082	10,000# Heavy Spring Loaded Jack
19	10104077	7,000# Axle with Electric Brakes
20	10107329	Sidewind Crank with Hardware
—	10104081	Breakaway Kit
—	10105826	Redline 12V - 5AH Battery Sealed
—	10104082	Wire Harness
—	10104080	3/8" x 35" Chain with Hook
—	109V582	Operator's Manual - Behnke Trailer

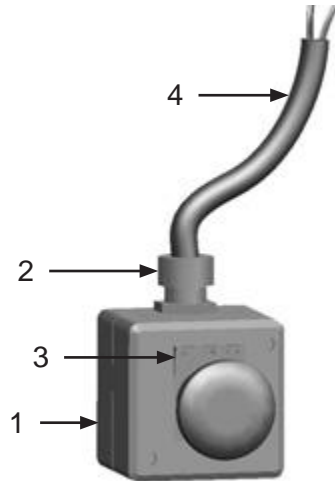
# PART NUMBERS AND SCHEMATICS

Figure 29: Trailer



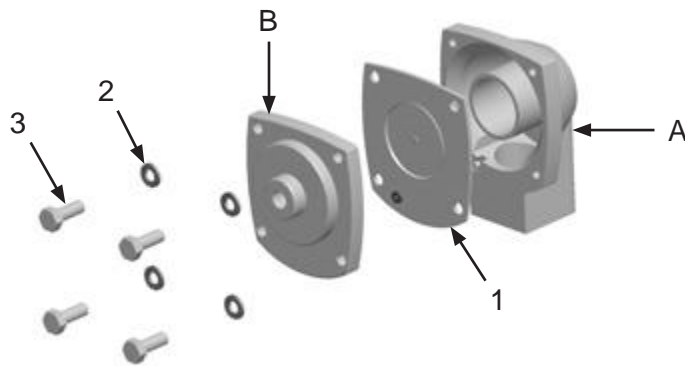
## PART NUMBERS AND SCHEMATICS

**Figure 30: Emergency-Stop Station**



Item #	Part #	Description
<b>Fig. 30</b>		
1	10104071	E-Stop Control Station
2	10104703	Cord Grip Nylon 1/2"-NPT .2-.47 Diameter
3	10104063	Legend Plate - Emergency Stop
4	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>

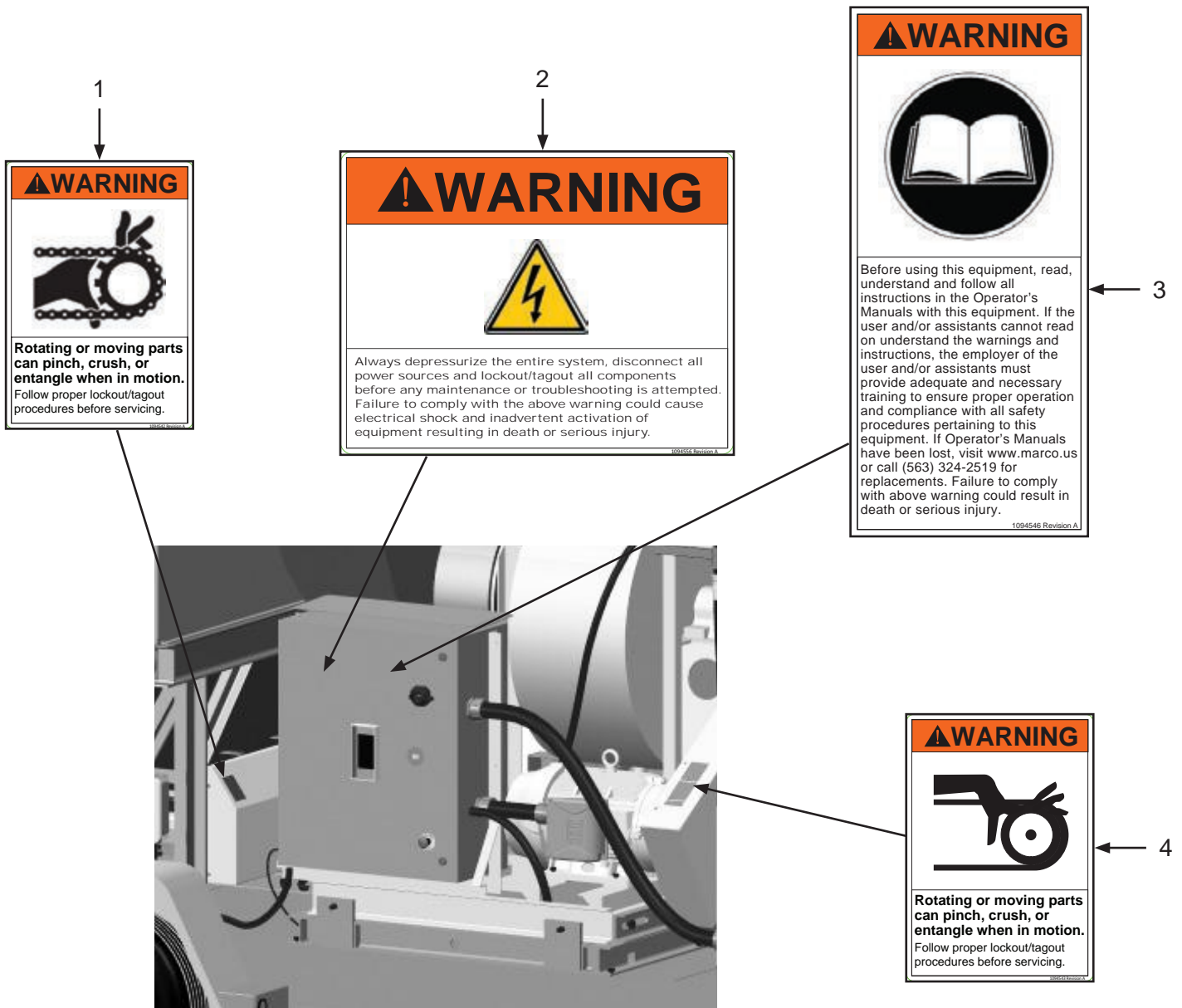
**Figure 31: Diaphragm Valve**



Item #	Part #	Description
<b>Fig. 31</b>		
—	10103255	1" Diaphragm Valve – Complete <i>(Three Required)</i> <i>Includes Items: A,B,1,2,3</i>
1	10103954	1" Diaphragm Valve Service Kit
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

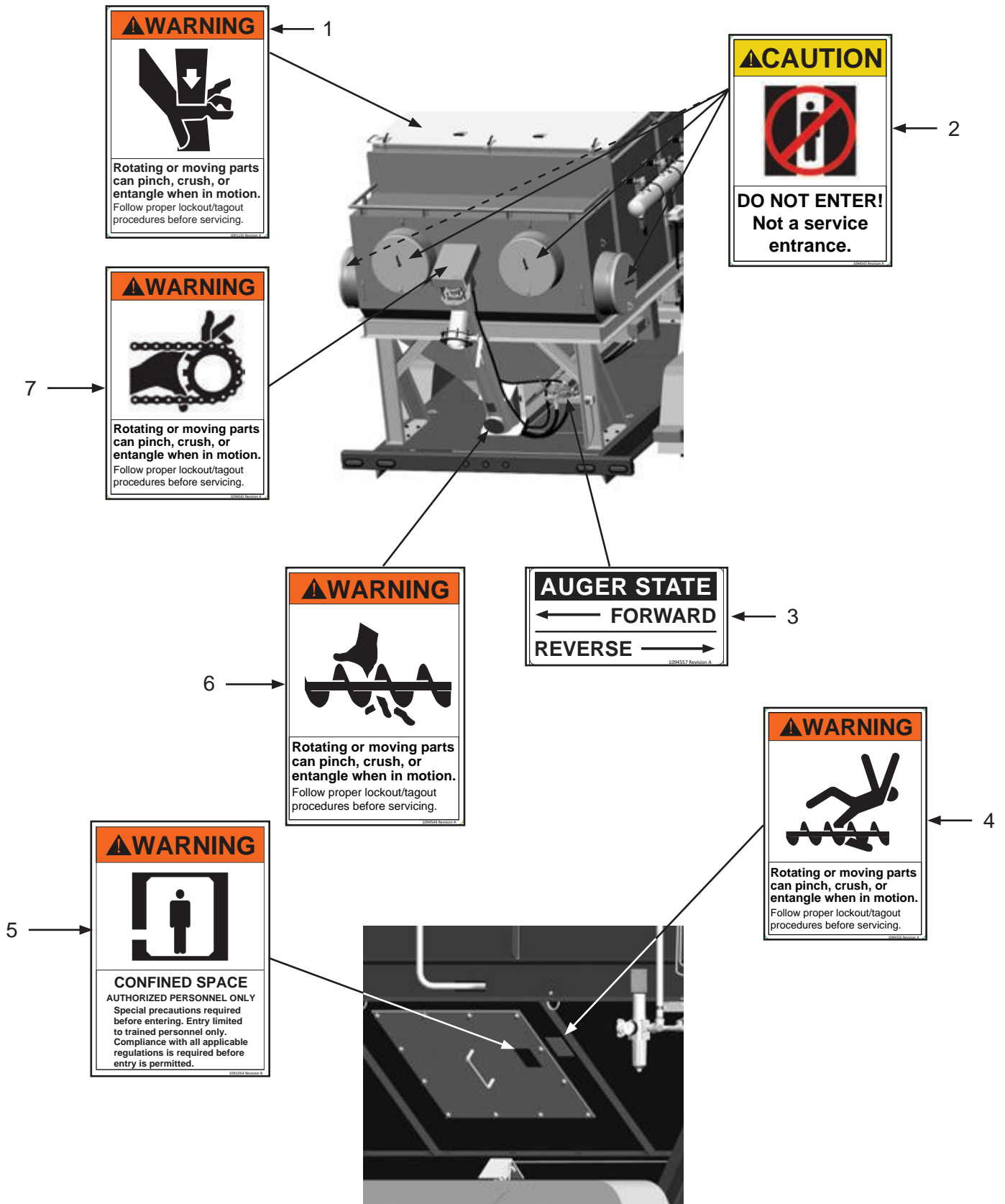
Figure 31: Hazard Identification Decals



Item #	Part #	Description
<b>Fig. 31</b>		
1	1094542	Rotating or Moving Parts Warning Decal
2	1094556	Lockout/Tagout Warning Decal
3	1094546	Read Manual Warning Decal
4	1094543	Rotating or Moving Parts Warning Decal

# PART NUMBERS AND SCHEMATICS

Figure 32: Hazard Identification Decals (cont.)



## PART NUMBERS AND SCHEMATICS

### Hazard Identification Decals *(cont.)*

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

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



### DUST COLLECTOR FILTER CARTRIDGES

Part Numbers	I.D.	O.D.	Material	Length	Serial Number
10105973	4.87"	9.22"	85/15 High Density	35"	0010 –
10106218	4.87"	9.22"	85/15 Reduced Pleat	35"	0010 –
10105974	4.87"	9.22"	Fire Retardant	35"	0010 –
101569046	4.87"	9.22"	HEPA	35"	0010 –
10105980	4.87"	9.22"	Spunbond	35"	0010 –



### DUCT HOSE

Part Numbers	I.D.	Length	Pitch
10DH2025HD	20"	25 Feet	1-1/2" Heavy-Duty
10DH2050HD	20"	50 Feet	1-1/2" Heavy-Duty



### DUCT HOSE COUPLING AND CLAMPS

Part Numbers	I.D.	Length
1017120	20"	Coupling
10DH062602000	20"	Screw Clamp



## OPTIONAL ACCESSORIES



**Part Numbers**

<b>3/4" I.D. X 1-1/4" O.D. AIR HOSE</b>					
	<b>Length</b>	<b>Hose I.D.</b>	<b>Hose O.D.</b>	<b>Working Pressure</b>	<b>Hose Cover Color</b>
<b>10AH034</b>	Per Ft.	3/4"	1-1/4"	200 PSI	Red



**Part Numbers**

<b>3/4" I.D. X 1-1/4" O.D. AIR HOSE WITH COUPLINGS INSTALLED</b>							
	<b>Length</b>	<b>Hose I.D.</b>	<b>Hose O.D.</b>	<b>Working Pressure</b>	<b>Hose Cover Color</b>	<b>Couplings</b>	<b>Band Clamps</b>
<b>10AH034AC</b>	50 Ft.	3/4"	1-1/4"	200 PSI	Red	10HE1	10AHCL1



**Part Numbers**

<b>MALE HOSE END COUPLING AND GASKET FOR 3/4" I.D. AIR HOSE</b>						
	<b>Hose I.D.</b>	<b>Material</b>	<b>Coupling Style</b>	<b>GASKET</b>		
				<b>Rubber Gasket</b>	<b>Gasket I.D.</b>	<b>Gasket O.D.</b>
<b>10HE1</b>	3/4"	Plated Iron	2-Lug	10UG2	3/4"	1-3/8"

## LITERATURE REFERENCES

### Dustmaster® 50,000 CFM Electric Dust Collectors

106M135	Part Numbers & Schematics Guide – Dustmaster® 50,000 CFM Electric Dust Collectors
109S135	Service Manual – Dustmaster® 50,000 CFM Electric Dust Collectors
1090135	Operator's Manual – Dustmaster® 50,000 CFM Electric Dust Collectors
109V045	Operator's Manual – Dynamic Fan Corporation
109V563	Operator's Manual – WEG Electric Motor Manual
109V582	Operator's Manual - Behnke Trailer



## CONTACT CENTER

- 3425 East Locust Street  
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**FAX: 563.324.6258**

**WWW.MARCO.US**

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