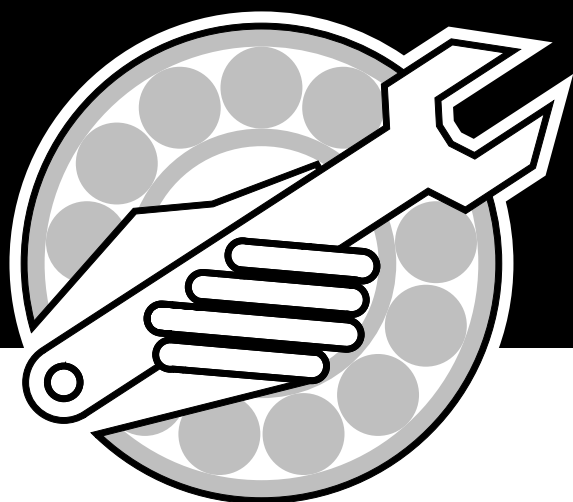




Parts Manual



RAZR Disc Drill

IMPORTANT:

ALL ITEMS ARE IDENTIFIED WITH A PART NUMBER. Some of the smaller parts such as bolts, nuts, washers, etc. are not all shown, however, the quantity used are listed in the text for that section which they fit into. That particular quantity is always the quantity required for one complete assembly.

Smaller parts, which are welded together to construct a larger part, are not to be ordered as individual pieces, unless they have a part number to identify them.

Contact your nearest dealer for genuine repair parts. Dealers carry ample stock and are backed by the manufacturer and regional associations.

MORRIS PAINT

Spray Cans:

Part Number	Description
W-4647	Red MORRIS Spray Can
N31087	Sky White MORRIS Spray Can

Litre Cans:

Part Number	Description
Z-10.....	Red MORRIS Paint/Litre

Manuals

Part Number	Description
S51367.....	Operator's Manual
S51368.....	Assembly Manual

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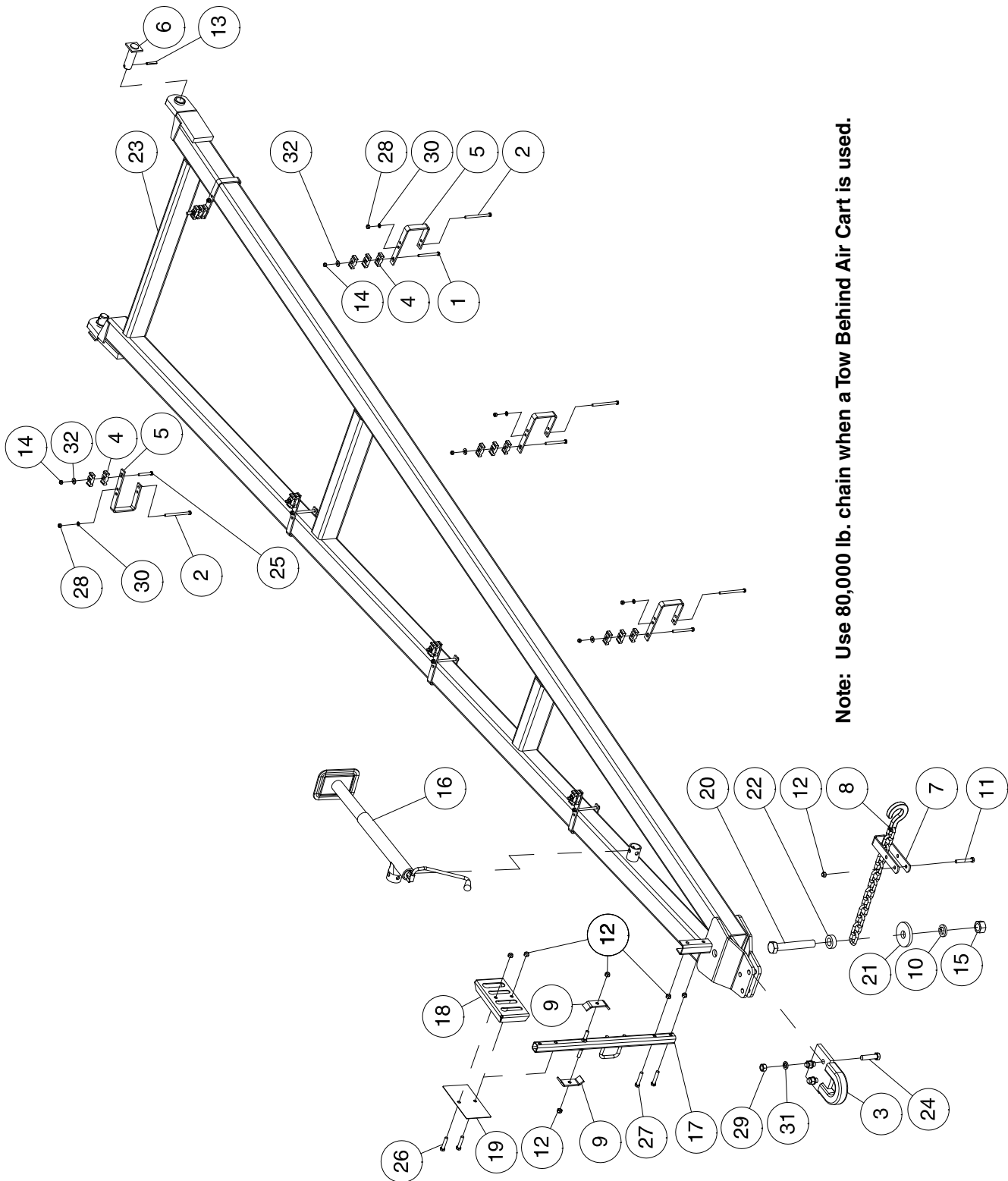
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Frames Front Hitch - Prior to 2015



Note: Use 80,000 lb. chain when a Tow Behind Air Cart is used.

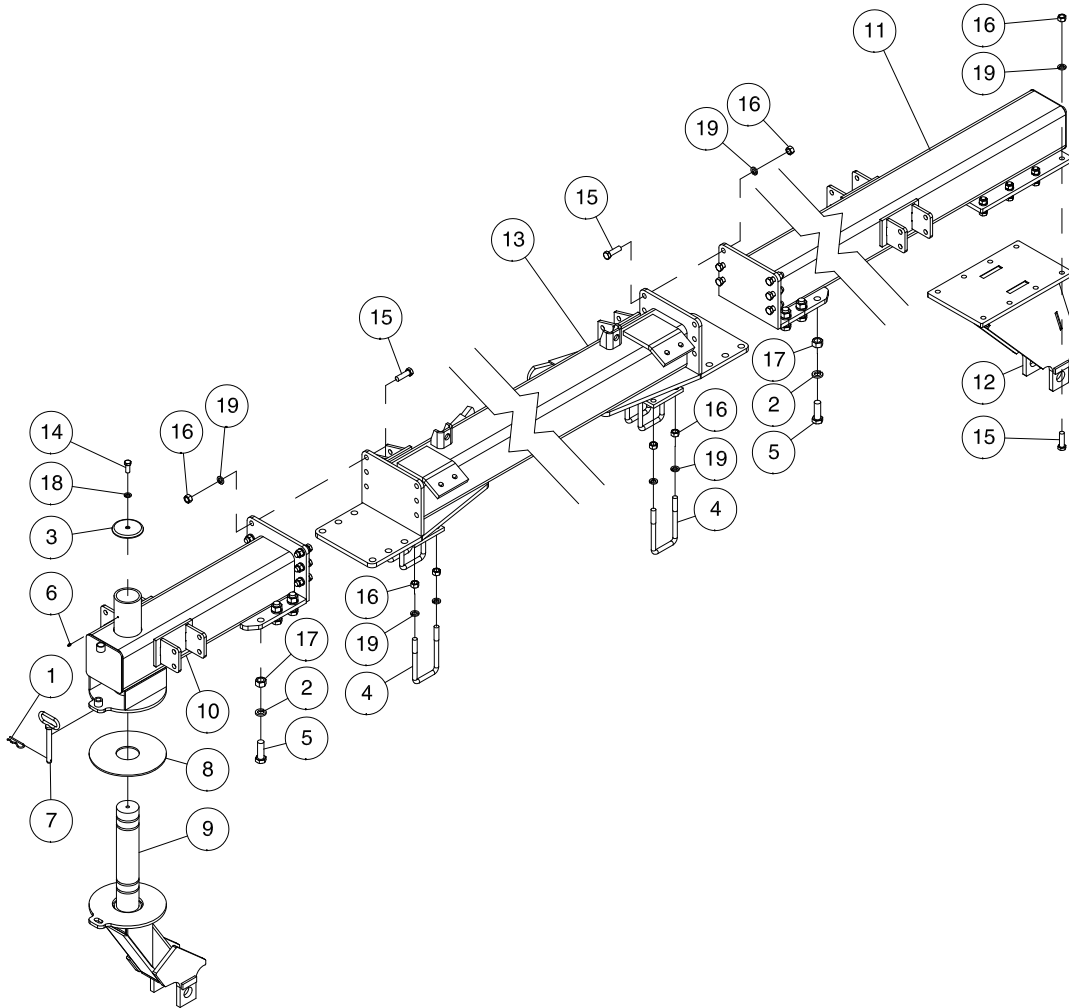
Frames - Front Hitch - Prior to 2015

Item	Part No.	Description	Qty
1	C-1550	Hex Bolt - 3/8 x 4 Lg.....	4
2	C-3918	Hex Bolt - 3/8 x 5 Lg.....	8
3	C-4438	Clevis	1
4	C-4698	Oil Line Clamp	20
5	C14411	Oil Line Bracket.....	8
6	C18531	Pin - 1 3/8 Dia x 3 5/8 UL.....	2
7	C18758	Safty Chain Intermed. Support.....	1
8	C18761	Safety Chain - 40,000 Lb - Standard on 40 ft.....	1
	N44710	Safety Chain - 80,000 Lb - Standard on 50 and 60 ft.....	1
9	C26321	Hose Holder Clamp.....	2
10	C39432	Lockwasher - 1 1/4.....	1
11	D-5519	Hex Bolt - 1/2 x 3 1/4 Lg.....	1
12	F-3405	Locknut - 1/2 Unitorque.....	7
13	J12281	Heavy Duty Coiled Spring Pin.....	2
14	M-3388	Locknut - 3/8 Unitorque.....	8
15	P61D20	Hex Nut - 1 1/4.....	1
16	S39391	Top Wind Jack	1
17	S39665	Hose Holder Stand.....	1
18	S39666	Hydraulic Hose Holder Plate - 4 Slot.....	1
19	S39669	Back Plate - 4 Slot	1
20	S44715	Hex Bolt - 1 1/4 x 8 Lg.....	1
21	S44716	Retaining Washer	1
22	S44717	Chain Link Spacer.....	1
23	S48695	5 Frame Hitch.....	1
	S48694	3 Frame Hitch.....	1
24	W-63	Hex Bolt - 3/4 x 3 Lg.....	3
25	W-480	Hex Bolt - 3/8 x 2 1/2 Lg.....	4
26	W-489	Hex Bolt - 1/2 x 2 1/4 Lg.....	2
27	W-490	Hex Bolt - 1/2 x 2 1/2 Lg.....	2
28	W-514	Hex Nut - 3/8.....	8
29	W-518	Hex Nut - 3/4.....	3
30	W-523	Lockwasher - 3/8.....	8
31	W-527	Lockwasher - 3/4.....	3
32	W-538	Washer - 7/16 ID x 1 OD.....	8
		Prior to 2015 production year	
		40 ft Prior to Serial # RD40140421	
		50 ft Prior to Serial # RD50140510	
		60 ft Prior to Serial # RD60140619	

Frames - Front Hitch - 2015 to present

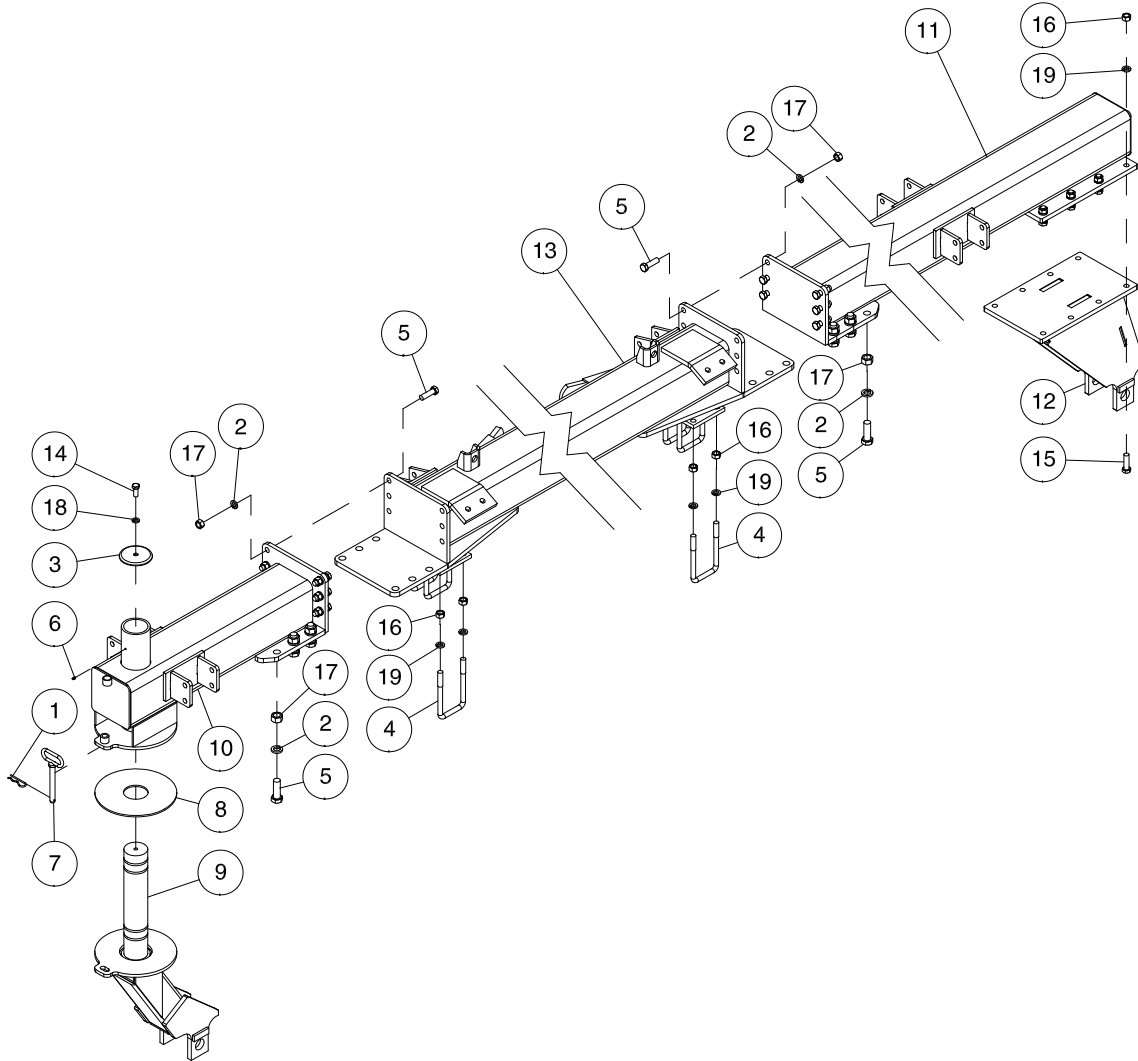
Item	Part No.	Description	Qty
1	C-1550	Hex Bolt - 3/8 x 4 Lg.....	4
2	C-3918	Hex Bolt - 3/8 x 5 Lg.....	8
3	C-4438	Clevis	1
4	C-4698	Oil Line Clamp	20
5	C14411	Oil Line Bracket.....	8
6	S55909	Pin- 1 1/2 Dia x 3 11/16 UL	2
7	C18758	Safty Chain Intermed. Support.....	1
8	C18761	Safety Chain - 40,000 Lb - Standard on 40 ft.....	1
	N44710	Safety Chain - 80,000 Lb - Standard on 50 and 60 ft	1
9	C26321	Hose Holder Clamp.....	2
10	C39432	Lockwasher - 1 1/4.....	1
11	D-5519	Hex Bolt - 1/2 x 3 1/4 Lg.....	1
12	F-3405	Locknut - 1/2 Uunitorque.....	7
13	S55309	Spring Bushing - 1 1/2 ID x 1 7/8 OD x 1 3/4 Lg.....	2
14	M-3388	Locknut - 3/8 Uunitorque.....	8
15	P61D20	Hex Nut - 1 1/4.....	1
16	S39391	Top Wind Jack	1
17	S39665	Hose Holder Stand.....	1
18	S39666	Hydraulic Hose Holder Plate - 4 Slot - Single Fan.....	1
	S62722	Hydraulic Hose Holder Plate - 5 Slot - Dual Fan	
19	S39669	Back Plate - 4 Slot - Single Fan	1
	S62723	Back Plate - 5 Slot - Dual Fan	
20	S44715	Hex Bolt - 1 1/4 x 8 Lg.....	1
21	S44716	Retaining Washer	1
22	S44717	Chain Link Spacer.....	1
23	S55916	Hitch - 40 ft.....	1
	S55917	Hitch - 50 & 60 ft	1
24	W-63	Hex Bolt - 3/4 x 3 Lg.....	3
25	W-480	Hex Bolt - 3/8 x 2 1/2 Lg.....	4
26	W-489	Hex Bolt - 1/2 x 2 1/4 Lg.....	2
27	W-490	Hex Bolt - 1/2 x 2 1/2 Lg.....	2
28	W-514	Hex Nut - 3/8	8
29	W-518	Hex Nut - 3/4	3
30	W-523	Lockwasher - 3/8.....	8
31	W-527	Lockwasher - 3/4.....	3
32	W-538	Washer - 7/16 ID x 1 OD	8
33	S-1197	Locknut - 5/8 Uunitorque.....	2
34	W-499	Hex Bolt - 5/8 x 2 Lg.....	2
35	N58671	Plate - Case Drain Header Mount (Tow Behind Air Cart only)	1
		2015 production year to present	
		40 ft Serial # RD40150425 and newer	
		50 ft Serial # RD50150515 and newer	
		60 ft Serial # RD60150631 and newer	

Frame Main Frame 40ft Depth Beam



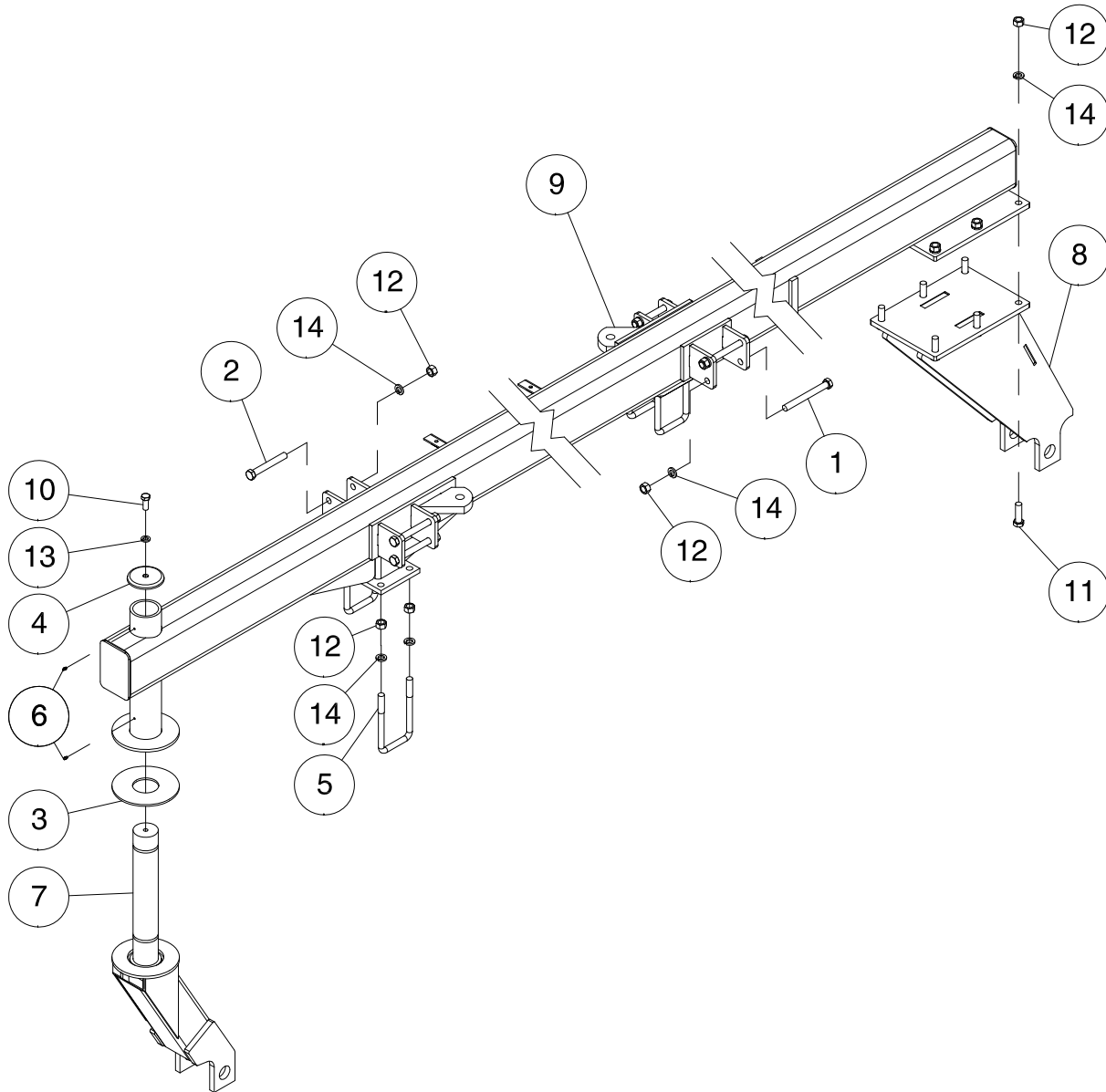
Item	Part No.	Description	Qty
1	BW-11	Hairpin - 3/16.....	1
2	C-705	Lockwasher - 1.....	12
3	C18781	Cap - 3-1/2".....	1
4	C26955	U-Bolt - 3/4 x 4 x 8.....	6
5	J12344	Hex Bolt - 1 x 3 Lg.....	12
6	S-752	Straight Grease Zerk - 1/4.....	2
7	S33404	Auger Lock Pin.....	1
8	S39728	Wear Plate.....	1
9	S44309	Offset Castor HD - Main - 12.5 Tire.....	1
	S53265	Offset Castor HD - Main - 16.5 Tire.....	1
10	S51010	Main Front Depth Tube - 12.5 Tire.....	1
	S45902	Main Front Depth Tube - 16.5 Tire.....	1
11	S45903	Rear Main Depth Tube.....	1
12	S51020	Rear Main Axle Mount - 12.5 Tire.....	1
	S53264	Rear Main Axle Mount - 16.5 Tire.....	1
13	S47578	Center Main Depth Tube.....	1
14	W-497	Hex Bolt - 5/8 x 1 1/2 Lg.....	1
15	W-509	Hex Bolt - 3/4 x 2 1/2 Lg.....	20
16	W-518	Hex Nut - 3/4.....	33
17	W-520	Hex Nut - 1.....	12
18	W-526	Lockwasher - 5/8.....	1
19	W-527	Lockwasher - 3/4.....	32

Frame Main Frame 50ft & 60ft Depth Beam



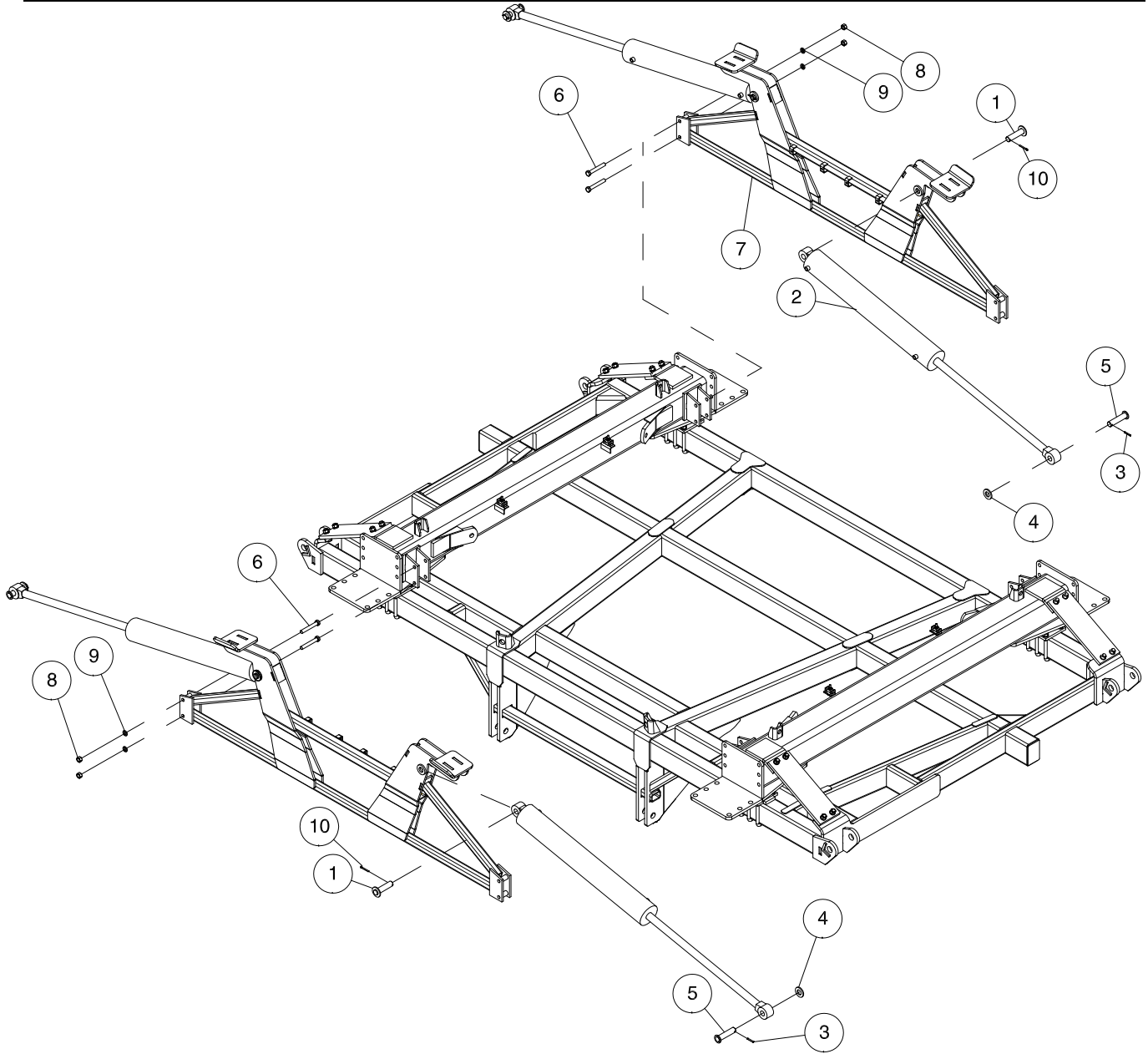
Item	Part No.	Description	Qty
1	BW-11	Hairpin - 3/16.....	1
2	C-705	Lockwasher - 1.....	24
3	C18781	Cap - 3-1/2".....	1
4	C26955	U-Bolt - 3/4 x 4 x 8.....	6
5	J12344	Hex Bolt - 1 x 3 Lg.....	24
6	S-752	Straight Grease Zerk - 1/4.....	2
7	S33404	Auger Lock Pin.....	1
8	S39728	Wear Plate.....	1
9	S53265	Offset Castor HD - Main.....	1
10	S51320	Main Heavy Front Depth Tube.....	1
11	S51322	Rear Heavy Main Depth Tube.....	1
12	S53264	Rear Main Axle Mount.....	1
13	S51321	Center Heavy Main Depth Tube.....	1
14	W-497	Hex Bolt - 5/8 x 1-1/2 Lg.....	1
15	W-509	Hex Bolt - 3/4 x 2-1/2 Lg.....	8
16	W-518	Hex Nut - 3/4.....	21
17	W-520	Hex Nut - 1.....	24
18	W-526	Lockwasher - 5/8.....	1
19	W-527	Lockwasher - 3/4.....	20

Frame Wing Depth Beam



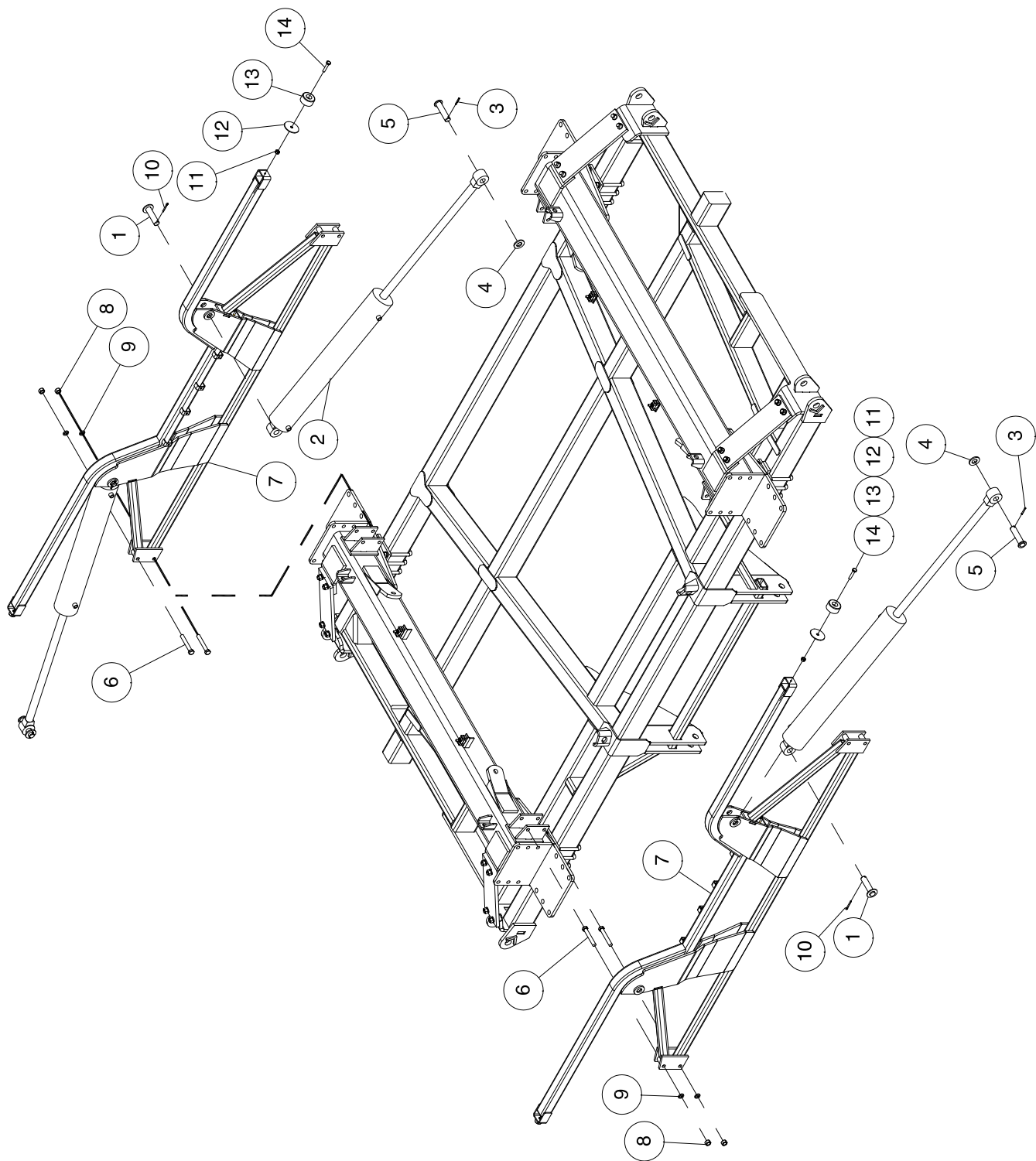
Item	Part No.	Description	Qty
1	C-3917	Hex Bolt - 3/4 x 7 Lg Gr5.....	4
2	C-3919	Hex Bolt - 3/4 x 5 1/2 Lg.....	4
3	C18662	Wear Plate.....	1
4	C18782	Cap - 3".....	1
5	C26955	U-Bolt - 3/4 x 4 x 8.....	4
6	S-752	Straight Grease Zerk - 1/4".....	2
7	S45720	Offset Castor - Wing.....	1
8	S47084	Rear Axle Wing Depth Beams.....	1
9	S49976	Depth Tube - Left Wing.....	1
	S49975	Depth Tube - Right Wing.....	1
10	W-497	Hex Bolt - 5/8 x 1-1/2 Lg.....	1
11	W-509	Hex Bolt - 3/4 x 2-1/2 Lg.....	6
12	W-518	Hex Nut - 3/4.....	22
13	W-526	Lockwasher - 5/8.....	1
14	W-527	Lockwasher - 3/4.....	22

Frame Main Frame Wing Lift - 40 and 60 ft



Item	Part No.	Description	Qty
1	C26715	Pin - 1-1/4 Dia x 4-3/8 UL.....	4
2	C39030	Hydraulic Cylinder - 4 1/2 x 36 - 40 ft	4
	C39490	Hydraulic Cylinder - 5 x 36 - 50 and 60 ft	4
3	D-5244	Spiral Pin - 1/4 x 2.....	4
4	N13962	Washer - 2-1/2 OD x 1-9/32 ID x 1/4	4
5	N28998	Pin - 1-1/4 Dia x 4-3/4 UL.....	4
6	S-1191	Hex Bolt - 3/4 x 5 Lg.....	8
7	S47544	Main Wing Lift Truss.....	2
8	W-518	Hex Nut - 3/4	8
9	W-527	Lockwasher - 3/4.....	8
10	W-4181	Cotter Pin - 1/4 x 2 Lg	4

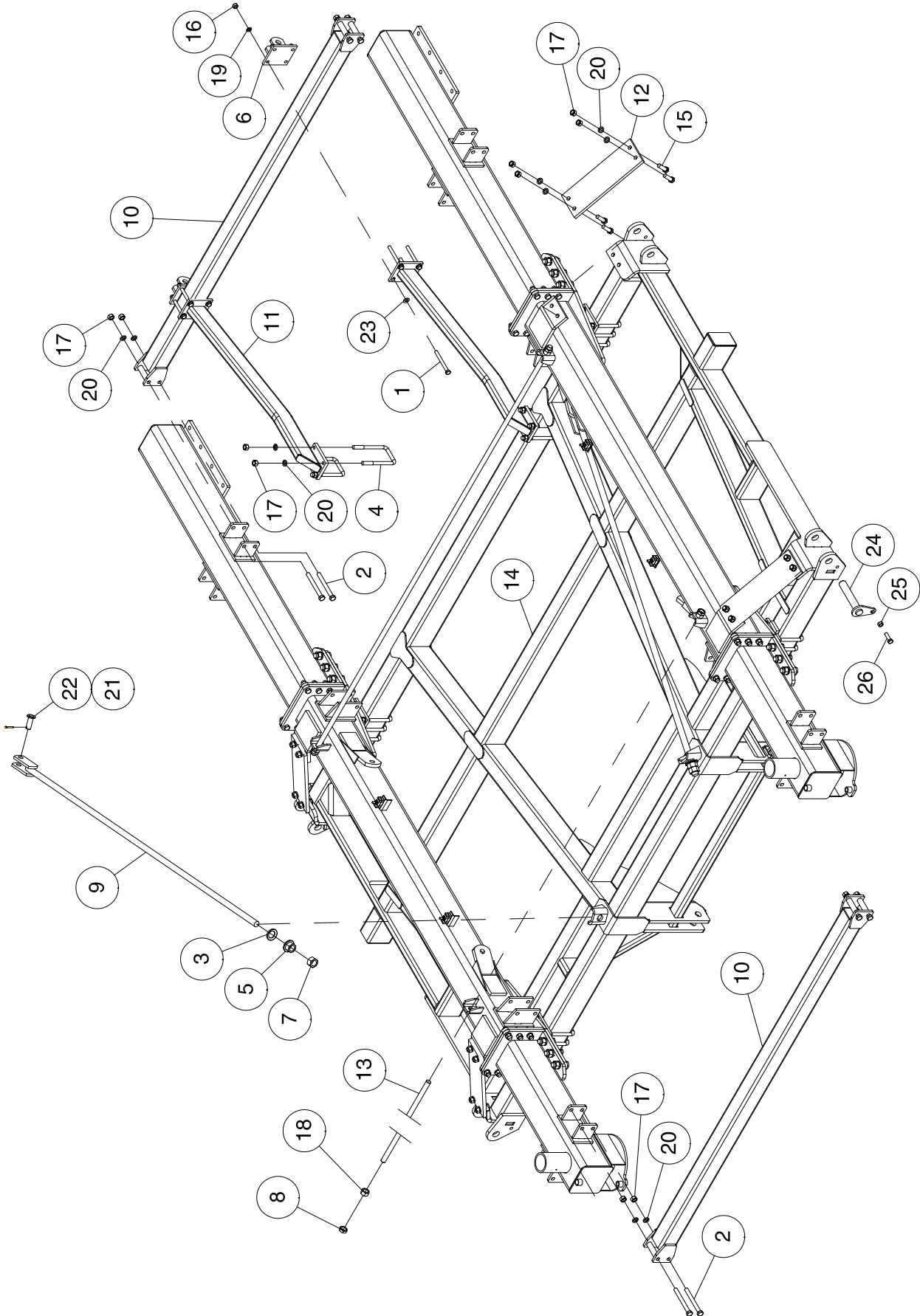
Frame Main Frame Wing Lift - 50ft



Frame - Main Frame Wing Lift - 50ft

Item	Part No.	Description	Qty
1	C26715	Pin - 1-1/4 Dia x 4-3/8 UL.....	4
2	C39490	Hydraulic Cylinder - 5 x 36 - 50 ft	4
3	D-5244	Spiral Pin - 1/4 x 2.....	4
4	N13962	Washer - 2-1/2 OD x 1-9/32 ID x 1/4	4
5	N28998	Pin - 1-1/4 Dia x 4-3/4 UL.....	4
6	S-1191	Hex Bolt - 3/4 x 5 Lg.....	8
7	S51511	Main Wing Lift Truss - 50ft.....	2
8	W-518	Hex Nut - 3/4.....	8
9	W-527	Lockwasher - 3/4.....	8
10	W-4181	Cotter Pin - 1/4 x 2 Lg	4
11	N15757	Locknut - 1/4 Unitorque.....	4
12	S-4747	Washer - 9/32 ID x 1 3/4 OD	4
13	S22578	Rubber Stopper.....	4
14	W-470	Hex Bolt - 1/4 x 1 1/4 Lg.....	4

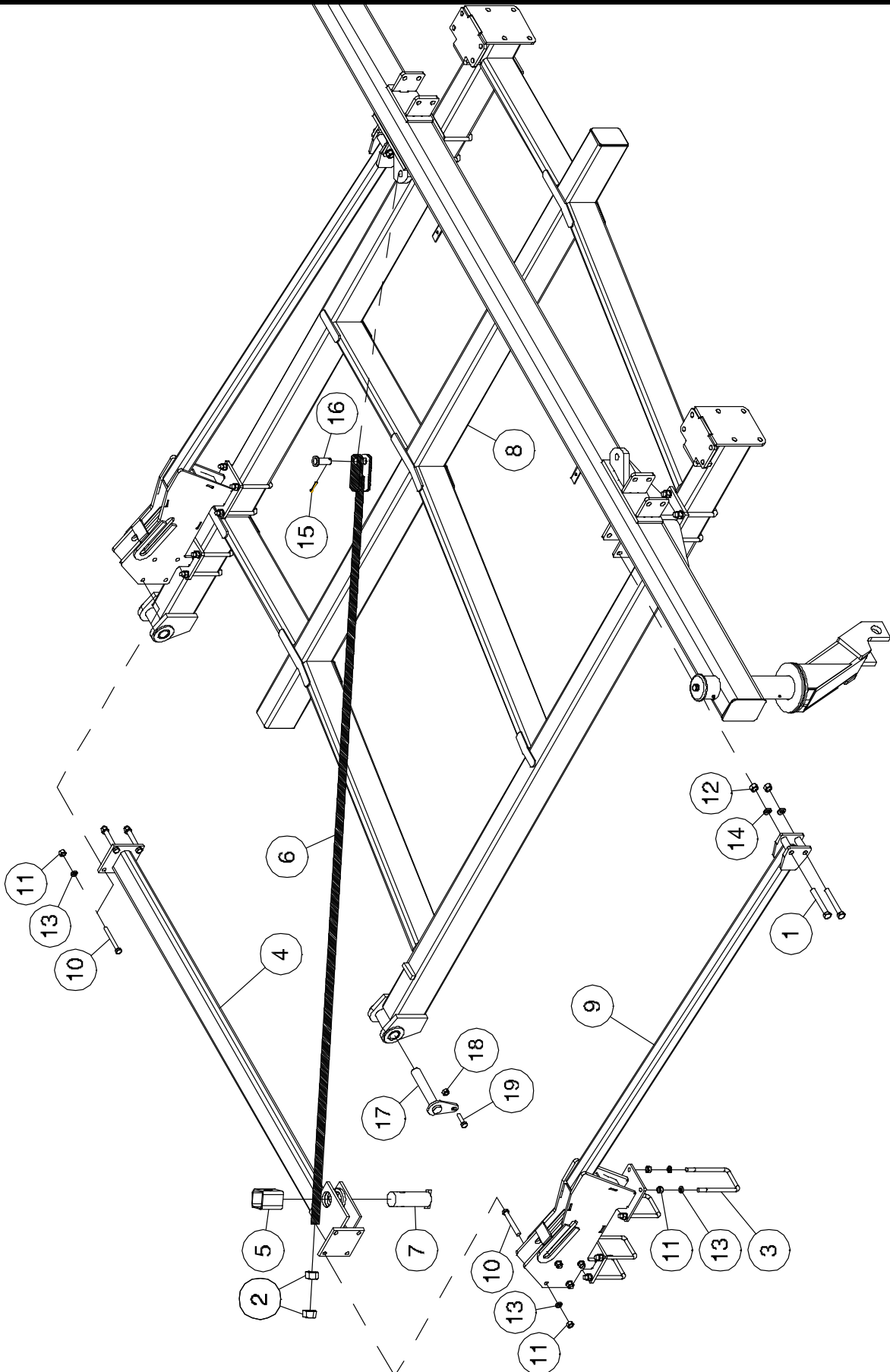
Frame Main Frame



Frame - Main Frame

Item	Part No.	Description	Qty
1	C-507	Hex Bolt - 5/8 x 6 Lg.....	8
2	C-3917	Hex Head Bolt - 3/4 x 7 Lg.....	8
3	C15767	Spherical Washer - 2 1/2 Dia	2
4	C26955	U-Bolt - 3/4 x 4 x 8	4
5	C31361	Spherical Nut - 1 1/4	2
6	N19203	Mounting Bracket	2
7	P61D20	Hex Nut - 1 1/4.....	2
8	S-711	Hex Jam Nut - 1	2
9	S42649	Tie Rod.....	2
10	S47580	Rear Hitch Cross Member.....	2
11	S47582	Rear Tow Hitch Brace	2
12	S48572	Brace Plate.....	4
13	S49881	Truss Rod - 1 Dia x 122 Lg.....	2
14	S50490	Main Frame - 1 3/8 Dia Hitch Pins - Prior to 2015	1
	S55912	Main Frame - 1 1/2 Dia Hitch Pins - 2015 production year to present	
15	W-509	Hex Bolt - 3/4 x 2 1/2 Lg.....	16
16	W-517	Hex Nut - 5/8.....	16
17	W-518	Hex Nut - 3/4.....	32
18	W-520	Hex Nut - 1	4
19	W-526	Lockwasher - 5/8.....	8
20	W-527	Lockwasher - 3/4.....	32
21	W-535	Cotter Pin - 1/4 x 1 1/2 Lg	2
22	W-558	Pin - 1 Dia x 2 1/4 UL.....	2
23	W-629	Flat Washer - 5/8.....	8
24	S51278	Pin - Main Hinge - 1 1/2 Dia x 8 1/4 UL	4
25	S-1197	Locknut - 5/8	4
26	W-499	Hex Bolt - 5/8 x 2 Lg.....	4
<p>Prior to 2015 production year - S50490 Main Frame</p> <ul style="list-style-type: none"> - 40 ft Prior to Serial # RD40140421 - 50 ft Prior to Serial # RD50140510 - 60 ft Prior to Serial # RD60140619 <p>2015 production year to present - S55912 Main Frame</p> <ul style="list-style-type: none"> - 40 ft Serial # RD40150425 and newer - 50 ft Serial # RD50150515 and newer - 60 ft Serial # RD60150631 and newer 			

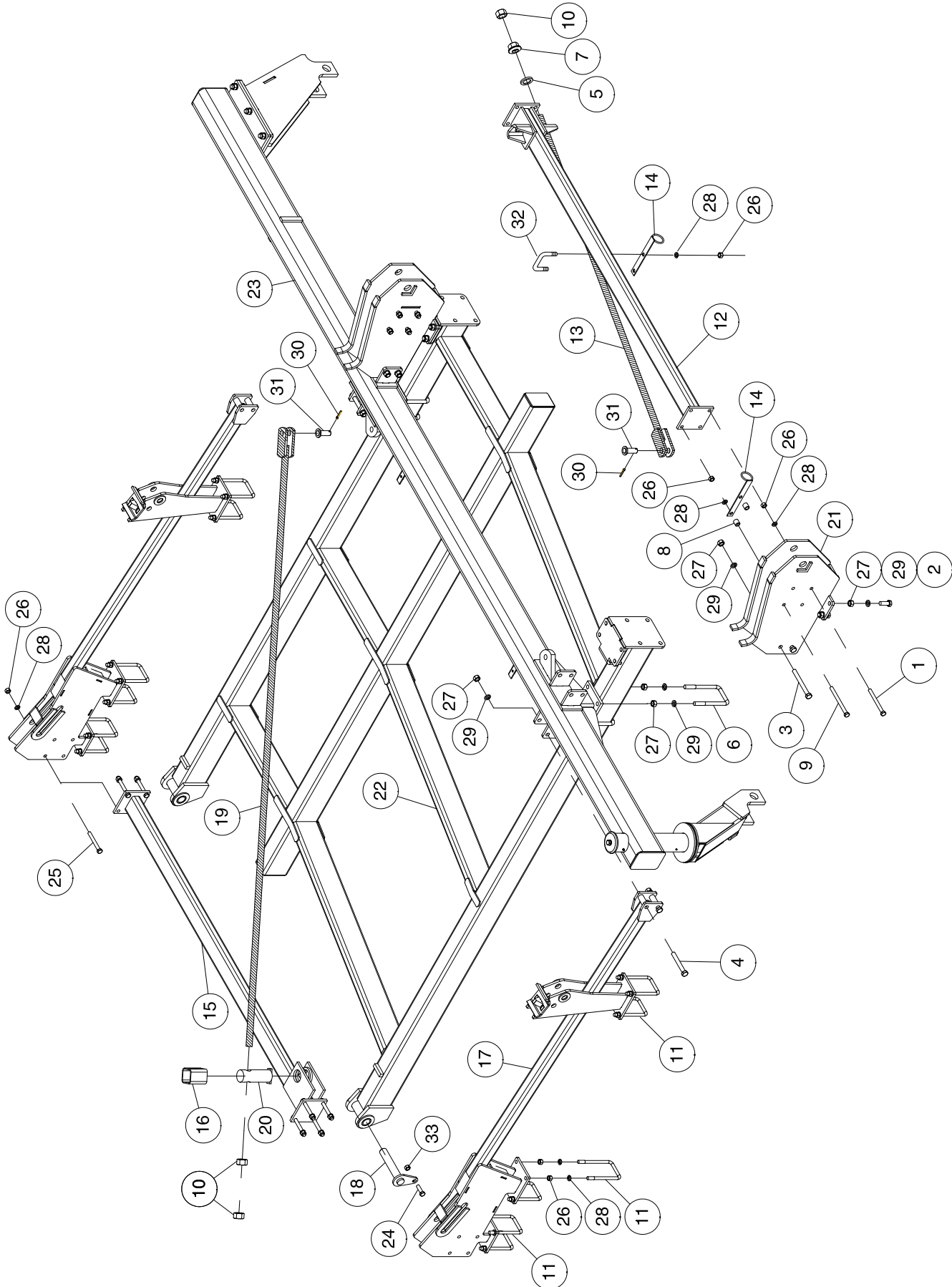
Frame 40ft Wing



Frame - 40ft Wing

Item	Part No.	Description	Qty
1	C-3919	Hex Bolt - 3/4 x 5 1/2 Lg.....	4
2	P61D20	Hex Nut - 1 1/4.....	2
3	S39649	U-Bolt - 5/8 x 4 x 7 3/4	8
	S53545	Hex Bolt - 5/8 x 8 1/2 Lg - used to mount opener to wing truss mounts.....	AsReq
4	S44981	Support Beam	1
5	S44984	Spacer Tube	1
6	S47588	Tie Rod - 1 1/4 Dia x 124 Lg	1
7	S47655	Tie Rod Pin	1
8	S49961	Wing - Left.....	1
	S49962	Wing - Right	1
9	S51425	Winglift - 40 Ft.....	2
10	W-506	Hex Bolt - 5/8 x 5 Lg.....	8
11	W-517	Hex Nut - 5/8.....	24
12	W-518	Hex Nut - 3/4.....	4
13	W-526	Lockwasher - 5/8.....	24
14	W-527	Lockwasher - 3/4.....	4
15	W-535	Cotter Pin - 1/4 x 1 1/2 Lg	1
16	W-558	Pin - 1 Dia x 2-1/4 UL.....	1
17	S51278	Pin - Main Hinge - 1 1/2 Dia x 8 1/4 UL	2
	S47586	Hinge Pin - 1 1/2 Dia x 7 13/16 UL - Prior to July 2013 (Use T-5245 - Spiral Pin - 3/8 x 2 1/2 Lg)	
18	S-1197	Locknut - 5/8	2
19	W-499	Hex Bolt - 5/8 x 2 Lg.....	2
20	S51230	Extension Stub - 12 3/4 Lg - (7 1/2 and 15 spacing)	2

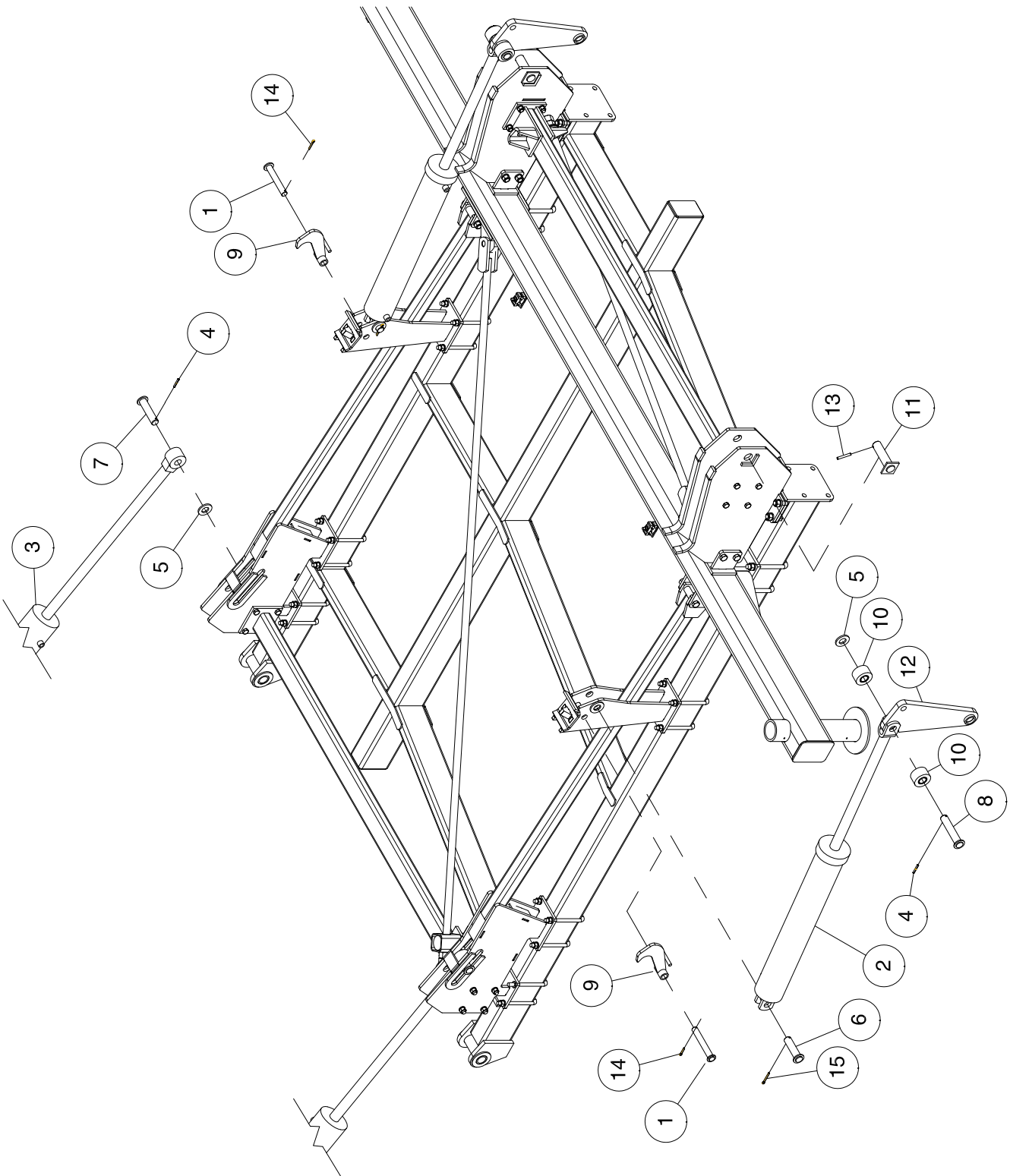
Frame 50ft & 60 ft Inner Wing



Frame - 50ft & 60 ft Inner Wing

Item	Part No.	Description	Qty
1	C-508	Hex Bolt - 5/8 x 6 1/2 Lg.....	4
2	C-695	Hex Bolt - 3/4 x 2 Lg.....	8
3	C-3917	Hex Head Bolt - 3/4 x 7 Lg.....	4
4	C-3919	Hex Bolt - 3/4 x 5 1/2 Lg.....	4
5	C15767	Spherical Washer - 2 1/2 Dia	1
6	C26955	U-Bolt - 3/4 x 4 x 8	4
7	C31361	Spherical Nut - 1 1/4	1
8	H27972	Bushing - 1 OD x .640 ID	4
9	P1C101	Hex Bolt - 5/8 x 7 1/2 Lg.....	4
10	P61D20	Hex Nut - 1 1/4.....	3
11	S39649	U-Bolt - 5/8 x 4 x 7 3/4	12
	S53545	Hex Bolt - 5/8 x 8 1/2 Lg - used to mount opener to wing truss mounts.....	AsReq
12	S42849	Support Beam	1
13	S42987	Tie Rod - 1 1/4 Dia x 80 1/2 Lg	1
14	S44313	Hose Holder	2
15	S44981	Support Beam	1
16	S44984	Spacer Tube	1
17	S47551	Inner Winglift	2
18	S51278	Pin - Main Hinge - 1 1/2 Dia x 8 1/4 UL	2
	S47586	Hinge Pin - 1 1/2 Dia x 7 13/16 UL - Prior to July 2013 (Use T-5245 - Spiral Pin - 3/8 x 2 1/2 Lg)	
19	S47588	Tie Rod - 1 1/4 Dia x 124 Lg	1
20	S47655	Tie Rod Pin	1
21	S48566	Outer Winglift Hinge Bracket	2
22	S49961	Wing - Left.....	1
	S49962	Wing - Right	1
23	S49976	Left Wing Depth Tube	1
24	W-499	Hex Bolt - 5/8 x 2 Lg.....	2
25	W-506	Hex Bolt - 5/8 x 5 Lg.....	8
26	W-517	Hex Nut - 5/8.....	40
27	W-518	Hex Nut - 3/4.....	20
28	W-526	Lockwasher - 5/8.....	40
29	W-527	Lockwasher - 3/4.....	16
30	W-535	Cotter Pin - 1/4 x 1 1/2 Lg	2
31	W-558	Pin - 1 Dia x 2-1/4 UL.....	2
32	C-4569	U-Bolt - 5/8 x 4 1/32 x 3 1/4	1
33	S-1197	Locknut - 5/8	2

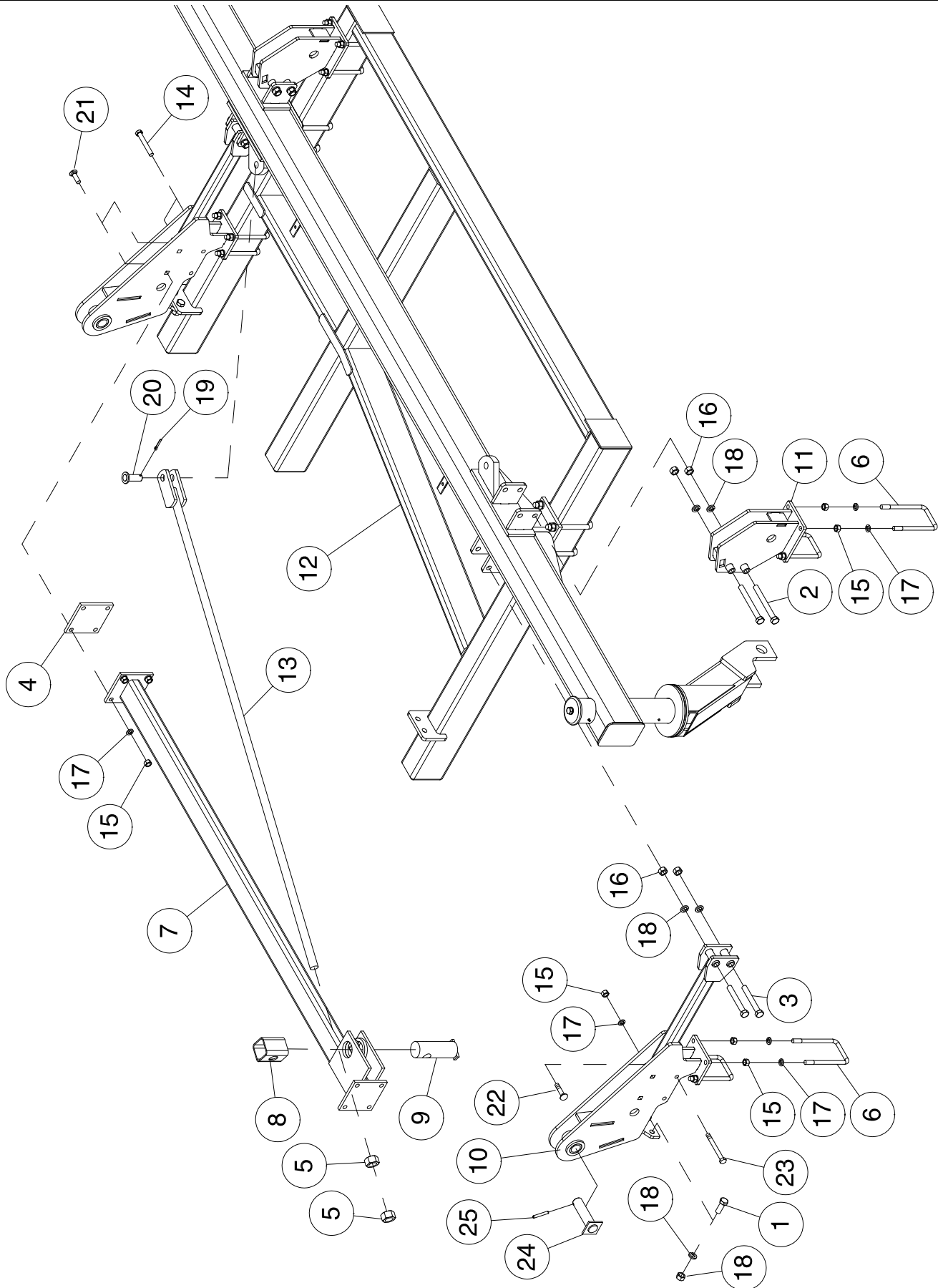
Frame 50ft & 60ft - Inner Wing Lift



Frame - 50ft & 60ft - Inner Wing Lift

Item	Part No.	Description	Qty
1	C26844	Pin - 1 Dia x 6-1/8 UL.....	2
2	C34442	Cylinder - 4 1/2 x 30.....	2
3	C39490	Cylinder - 5 x 36 Stroke.....	2
4	D-5244	Spiral Pin - 1/4 x 2.....	4
5	N13962	Washer - 2-1/2 OD x 1-9/32 ID x 1/4.....	4
6	N28994	Pin - 1 1/4 Dia x 4 1/4 UL.....	2
7	N28998	Pin - 1 1/4 Dia x 4 3/4 UL.....	2
8	N33874	Pin - 1 1/4 Dia x 6 3/16 UL.....	2
9	S39443	Transport Gravity Lock Hook.....	2
10	S39570	Outer Wing Lift Roller.....	4
11	S42822	Pin - 1 1/2 x 5 1/8 UL.....	2
12	S48591	Outer Winglift Lever.....	2
13	T-5245	Spiral Pin - 3/8 x 2 1/2.....	2
14	W-535	Cotter Pin - 1/4 x 1 1/2 Lg.....	2
15	W-4181	Cotter Pin - 1/4 x 2 Lg.....	2

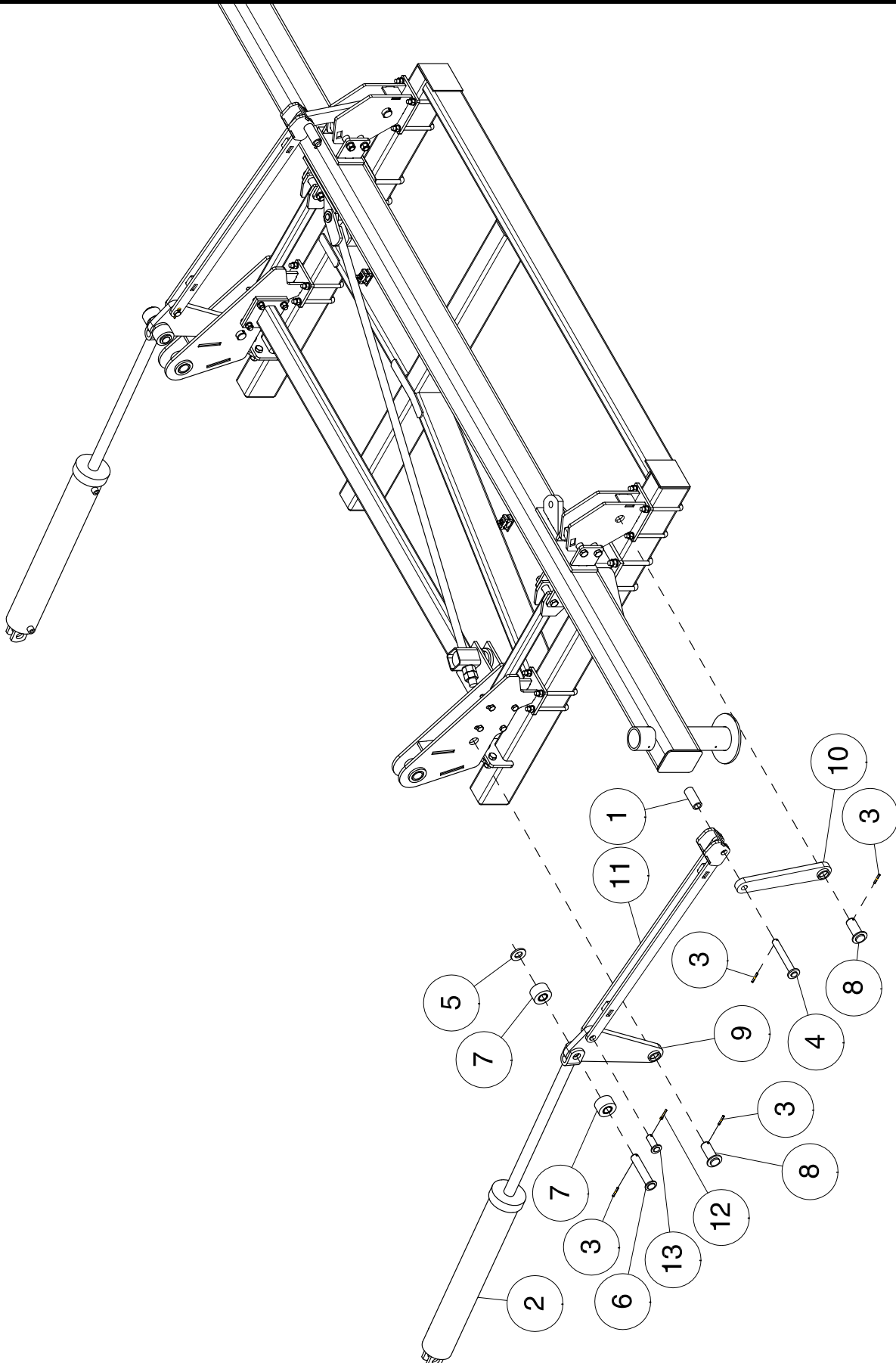
Frame 50ft Outer Wing



Frame - 50ft Outer Wing

Item	Part No.	Description	Qty
1	C-695	Hex Bolt - 3/4 x 2 Lg.....	4
2	C-3917	Hex Head Bolt - 3/4 x 7 Lg.....	4
3	C-3919	Hex Bolt - 3/4 x 5 1/2 Lg.....	4
4	F10542	Center Mounting Plate	1
5	P61D20	Hex Nut - 1 1/4.....	2
6	S39649	U-Bolt - 5/8 x 4 x 7 3/4	8
	S53545	Hex Bolt - 5/8 x 8 1/2 Lg - used to mount opener to wing truss mounts.....	AsReq
7	S44981	Support Beam	1
8	S44984	Spacer Tube	1
9	S47655	Tie Rod Pin	1
10	S51283	Wing Lift Truss	2
11	S51284	Wing Lift	2
12	S51371	Outer Wing - Left.....	1
	S51372	Outer Wing - Right	1
13	S42649	Tie Rod - 1 1/4 Dia x 84 1/2 Lg	1
14	W-506	Hex Bolt - 5/8 x 5 Lg.....	8
15	W-517	Hex Nut - 5/8.....	24
16	W-518	Hex Nut - 3/4.....	12
17	W-526	Lockwasher - 5/8.....	24
18	W-527	Lockwasher - 3/4.....	12
19	W-535	Cotter Pin - 1/4 x 1 1/2 Lg	1
20	W-558	Pin - 1 Dia x 2 1/4 UL.....	1
21	N33594	Carriage Bolt - 5/8 x 2 1/4 Lg	2
22	T-5268	Carriage Bolt - 5/8 x 2 Lg	2
23	C-852	Hex Bolt 5/8 x 4 1/2 Lg.....	2
24	S42822	Pin - 1 1/2 x 5 1/8 UL	2
25	T-5245	Spiral Pin - 3/8 x 2 1/2 Lg.....	2

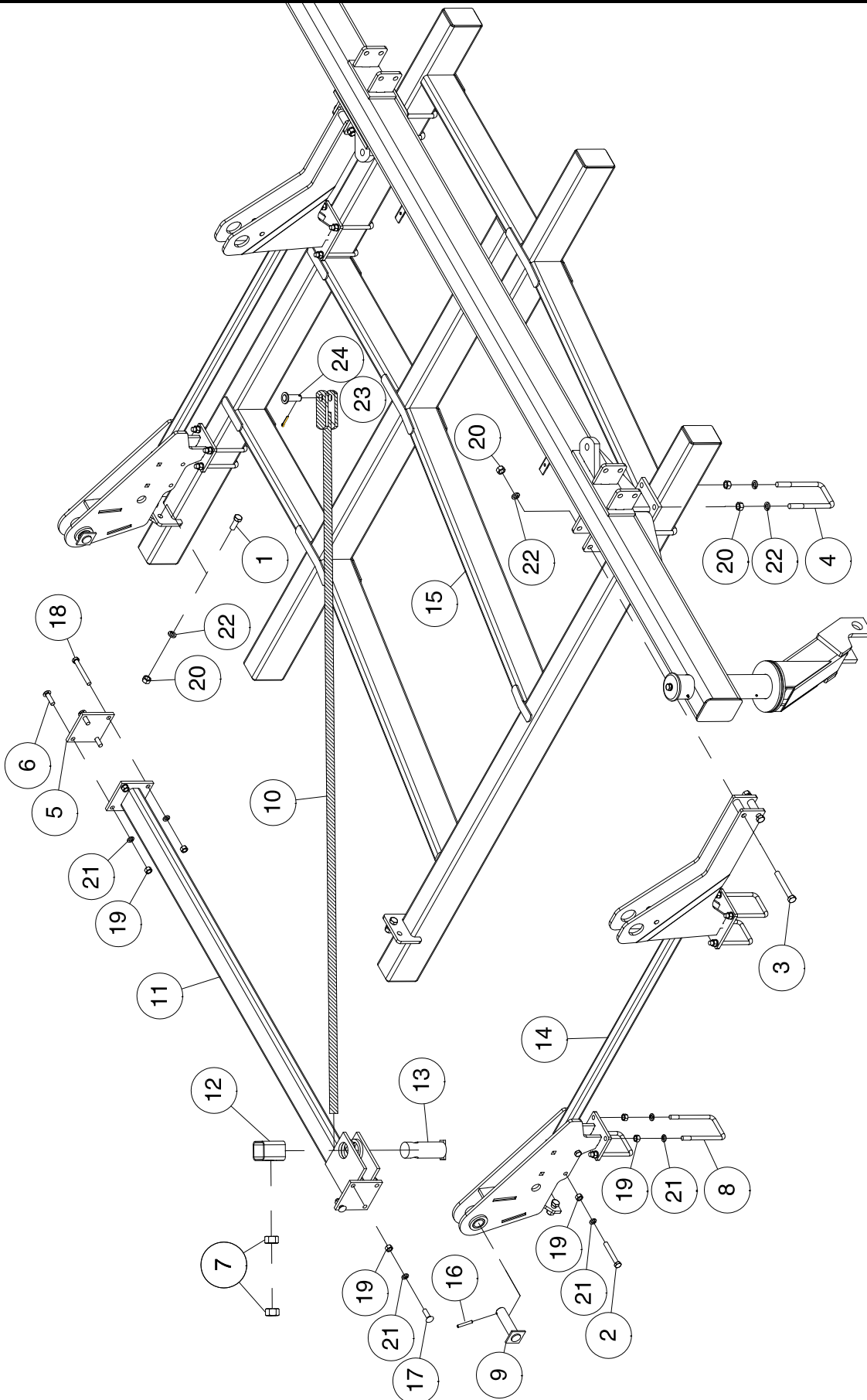
Frame 50ft Outer Wing Lift



Frame - 50ft Outer Wing Lift

Item	Part No.	Description	Qty
1	A31164	Bushing - 1 1/2 OD x 1.031 ID x 1 1/2 OD	2
2	C34442	Hydraulic Cylinder - 4 1/2 x 30	2
3	D-5244	Spiral Pin - 1/4 x 2.....	8
4	D17974	Pin - 1 x 6 7/8 UL	2
5	N13962	Washer - 2-1/2 OD x 1-9/32 ID x 1/4	2
6	N33874	Pin - 1 1/4 Dia x 6 3/16 UL	2
7	S39570	Outer Wing Lift Roller	4
8	S44311	Pin - 1 1/2 Dia x 3 1/16 UL	4
9	S48591	Outer Winglift Lever.....	2
10	S51281	Lift Lever	2
11	S51282	Lift Link.....	2
12	W-535	Cotter Pin - 1/4 x 1 1/2 Lg	2
13	W-558	Pin - 1 Dia x 2 1/4 UL.....	2

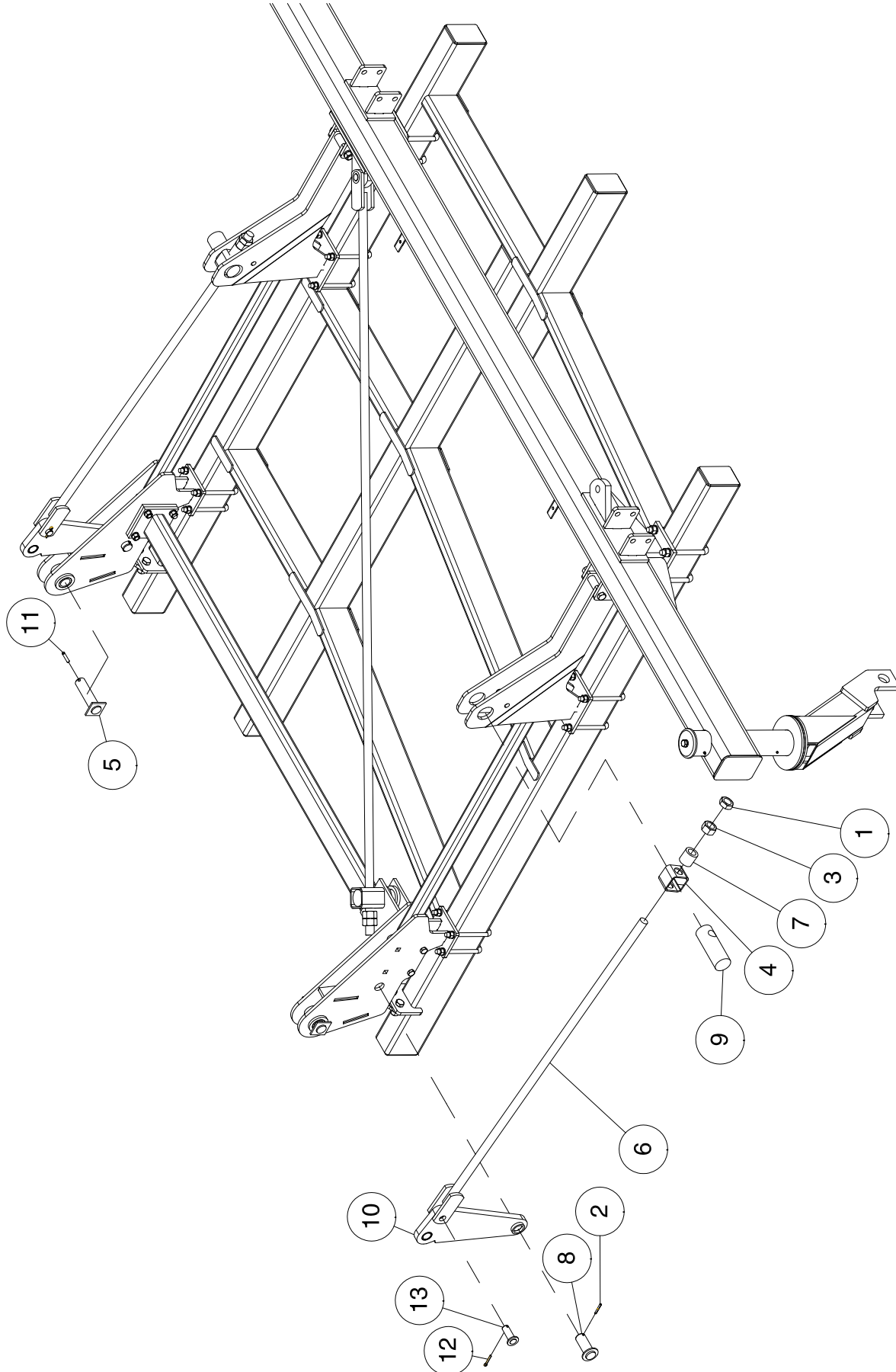
Frame 60ft Outer Wing



Frame - 60ft Outer Wing

Item	Part No.	Description	Qty
1	C-695	Hex Bolt - 3/4 x 2 Lg.....	4
2	C-852	Hex Bolt 5/8 x 4 1/2 Lg.....	2
3	C-3919	Hex Bolt - 3/4 x 5 1/2 Lg.....	4
4	C26955	U-Bolt - 3/4 x 4 x 8	4
5	F10542	Center Mounting Plate	1
6	N33594	Carriage Bolt - 5/8 x 2 1/4 Lg	2
7	P61D20	Hex Nut - 1 1/4.....	2
8	S39649	U-Bolt - 5/8 x 4 x 7 3/4	8
	S53545	Hex Bolt - 5/8 x 8 1/2 Lg - used to mount opener to wing truss mounts.....	AsReq
9	S42822	Pin - 1 1/2 x 5 1/8 UL	2
10	S49817	Tie Rod - 109 1/2 Lg.....	1
11	S44981	Support Beam	1
12	S44984	Spacer Tube	1
13	S47655	Tie Rod Pin	1
14	S48586	Front Outer Wing Lift Truss	2
15	S49965	Outer Wing - Left.....	1
	S49966	Outer Wing - Right	1
16	T-5245	Spiral Pin - 3/8 x 2 1/2 Lg.....	2
17	T-5268	Carriage Bolt - 5/8 x 2 Lg	2
18	W-506	Hex Bolt - 5/8 x 5 Lg.....	2
19	W-517	Hex Nut - 5/8.....	24
20	W-518	Hex Nut - 3/4.....	12
21	W-526	Lockwasher - 5/8.....	24
22	W-527	Lockwasher - 3/4.....	16
23	W-535	Cotter Pin - 1/4 x 1 1/2 Lg	1
24	W-558	Pin - 1 Dia x 2 1/4 UL.....	1

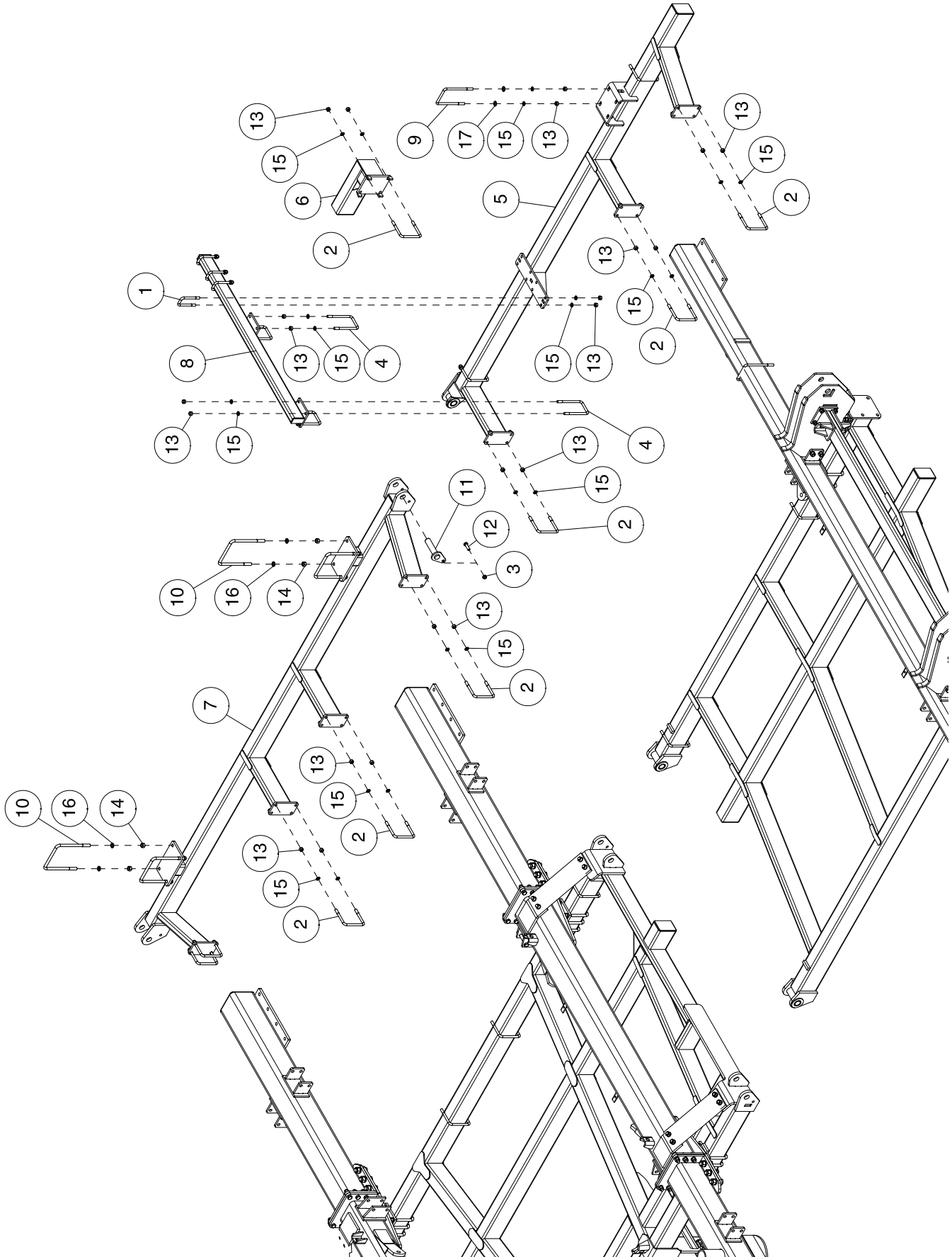
Frame 60ft Outer Wing Lift



Frame - 60ft Outer Wing Lift

Item	Part No.	Description	Qty
1	C15768	Hex Jam Nut - 1 1/4	2
2	D-5244	Spirol Pin - 1/4 x 2.....	2
3	P61D20	Hex Nut - 1 1/4.....	2
4	S42813	Spacer Tube	2
5	S42822	Pin - 1 1/2 x 5 1/8 UL	2
6	S42828	Tie Rod - 1 1/4 Dia x 61 Lg	2
7	S44040	Bushing - 2 OD x 1.264 ID	2
8	S44311	Pin - 1 1/2 Dia x 3 1/16 UL.....	2
9	S44983	Outer Wing Lift Pivot	2
10	S48591	Outer Winglift Lever.....	2
11	T-5245	Spiral Pin - 3/8 x 2 1/2 Lg.....	2
12	W-535	Cotter Pin - 1/4 x 1 1/2 Lg	2
13	W-558	Pin 1 Dia x 2 1/4 UL	2

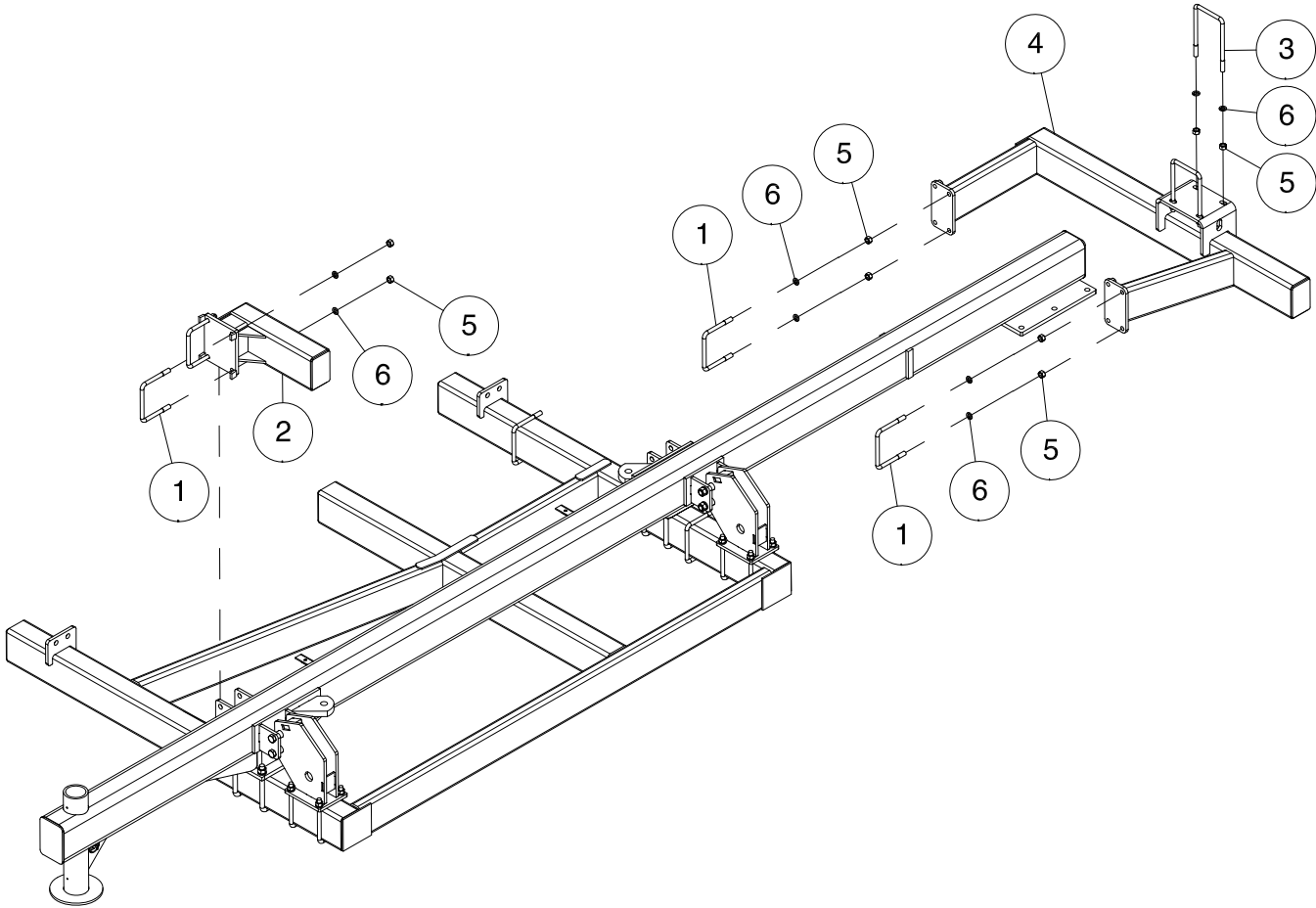
Options Fertilizer Opener - Main and Inner Frame - 40ft, 50ft, & 60ft



Fertilizer Opener - Main and Inner Frame - 40ft, 50ft, & 60ft

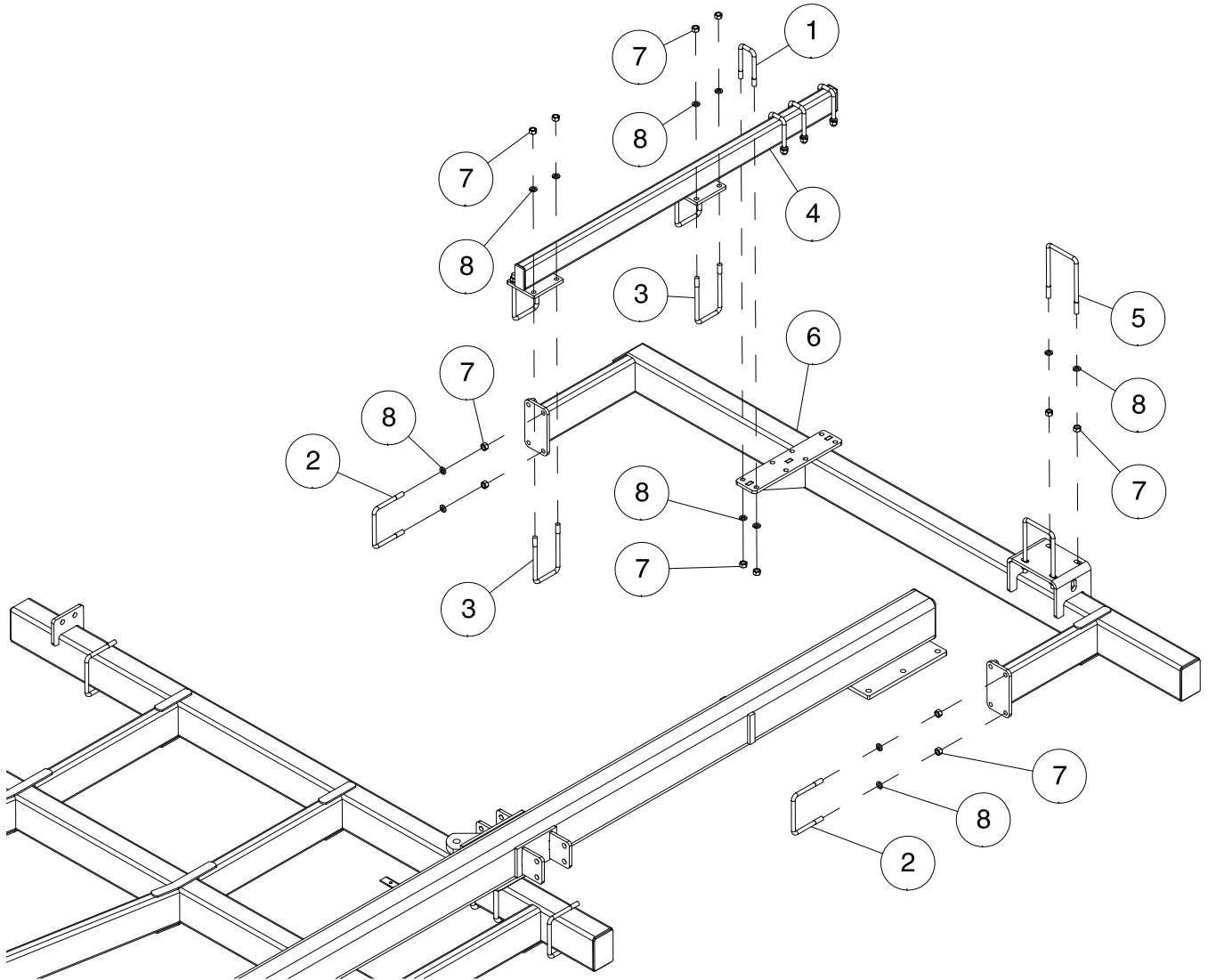
Item	Part No.	Description	Qty
1	D-4931	U-Bolt - 1/2 x 5-1/2.....	8
2	F-4642	U-Bolt - 5/8 x 6 x 5-1/2.....	24
3	S-1197	Locknut - 5/8 Unitorque.....	2
4	S39649	U-Bolt - 5/8 x 4 x 7 3/4.....	8
5	S49970	Coulter Beam - Left.....	1
	S49971	Coulter Beam - Right.....	1
6	S49972	Ext Sub.....	2
7	S49980	Coulter Beam.....	1
8	S49989	Mounting Arm.....	2
9	S49990	U-Bolt - 5/8 x 5-1/16 x 9.....	4
10	S49996	U-Bolt - 3/4 x 8-1/4 x 10-1/2.....	4
11	S55025	Pin - Coulter Beam Hinge.....	2
12	W-499	Hex Bolt - 5/8 x 2 Lg.....	2
13	W-517	Hex Nut - 5/8.....	90
14	W-518	Hex Nut - 3/4.....	24
15	W-526	Lockwasher - 5/8.....	96
16	W-527	Lockwasher - 3/4.....	24
17	W-629	Flat Washer - 5/8.....	4

Options Fertilizer Opener - Outer Wing 50ft



Item	Part No.	Description	Qty
1	F-4642	U-Bolt - 5/8 x 6 x 5-1/2	12
2	S49972	Ext Stub	2
3	S49990	U-Bolt - 5/8 x 5-1/16 x 9	4
4	S51293	Coulter Beam - Left	1
	S51294	Coulter Beam - Right.....	1
5	W-517	Hex Nut - 5/8.....	32
6	W-526	Lockwasher - 5/8.....	32

Options Fertilizer Opener - Outer Wing 60ft



Item	Part No.	Description	Qty
1	D-4931	U-Bolt - 1/2 x 5-1/2.....	8
2	F-4642	U-Bolt - 5/8 x 6 x 5-1/2.....	8
3	S39649	U-Bolt - 5/8 x 4 x 7 3/4	8
4	S49989	Mounting Arm.....	2
5	S49990	U-Bolt - 5/8 x 5-1/16 x 9	4
6	S49993	Coulter Beam - Left.....	1
	S49994	Coulter Beam - Right.....	1
7	W-517	Hex Nut - 5/8.....	56
8	W-526	Lockwasher - 5/8.....	56

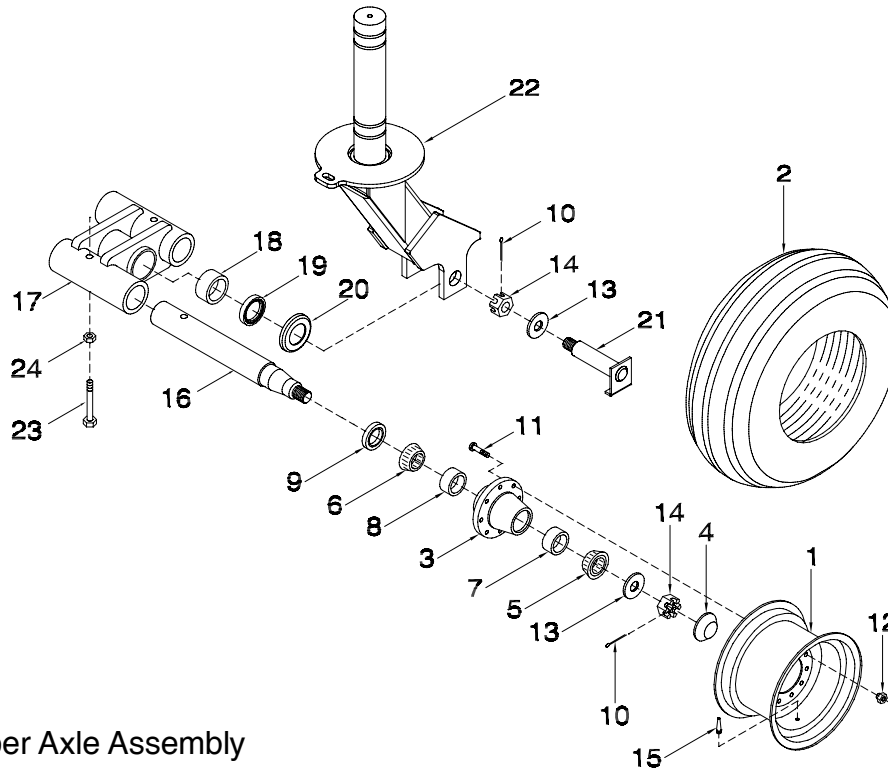
Notes

Section 2: Wheels

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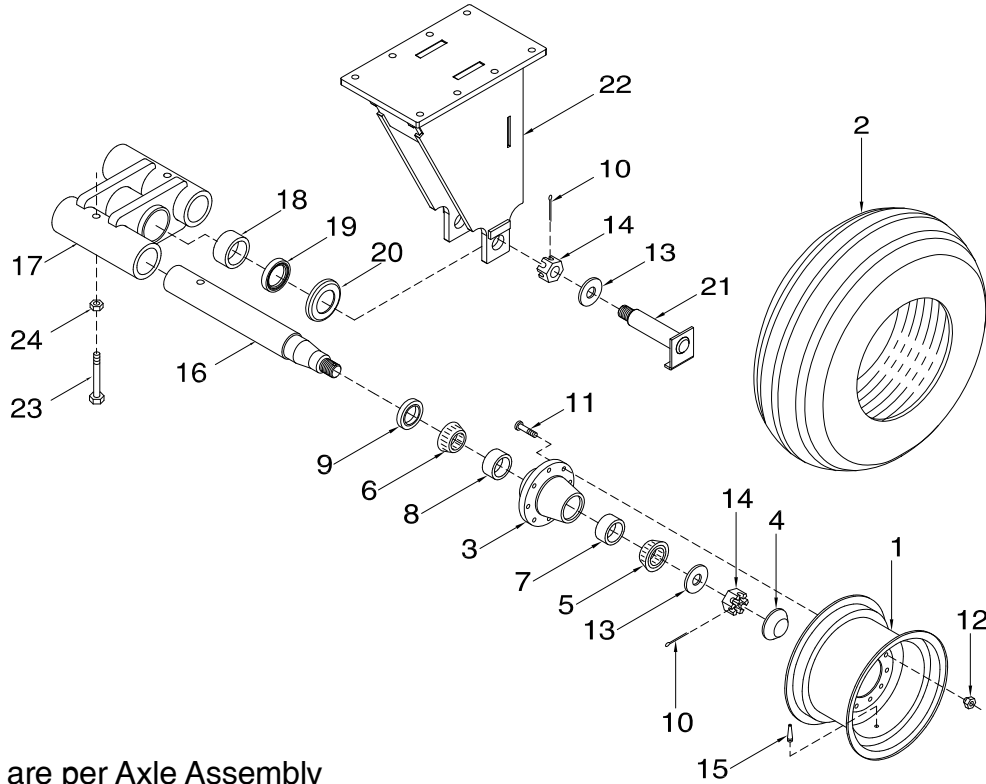
Wheels Main Front Dual Axle Castor



Quantities are per Axle Assembly

Item	Part No.	Description	Qty
1	C17355	Rim - 15 x 10 - 8 Bolt - 12.5L tires.....	2
	S47512	Rim - 16.1 x 14 - 8 Bolt - 16.5L tires.....	2
2	C26840	Tire - 12.5L x 15FI - Load Range F.....	2
	S47510	Tire - 16.5L x 16.1FI - Load Range E.....	2
3	N19173	Hub (Includes Items 7, 8 & 11).....	2
4	N19171	Dust Cap.....	2
5	N19170	Outer Wheel Bearing.....	2
6	N19169	Inner Wheel Bearing.....	2
7	N19168	Outer Bearing Cup.....	2
8	N19167	Inner Bearing Cup.....	2
9	N19172	Seal.....	2
10	D-5239	Cotter Pin - 1/4 x 2 1/4.....	3
11	N19727	Wheel Stud - 5/8 x 18 UNF x 2 1/2.....	16
12	N19586	Tapered Wheel Nut - 5/8 - 18 UNF.....	16
13	N13962	Flatwasher - 1 9/32 ID x 2 1/2 OD x 1/4 thick.....	3
14	N19484	Castle Nut - 1 1/4.....	3
15	C17348	Valve Stem - TR-416.....	2
16	S47509	Spindle - 2 1/2 Dia.....	2
17	S47629	Axle Bracket - Offset - 2 1/2 Spindle.....	1
18	C26086	Bearing - Garlock - 1 3/4 OD x 1 1/2 Lg.....	2
19	C26266	Dust Seal - 2.254 OD x 0.266 Thick.....	2
20	C26082	Washer - Formed - 1 3/4 ID.....	2
21	S47627	Pin - Walking Beam Pivot - 1 3/4 x 6 1/2 UL.....	1
22	S44309	Castor Fork - Main Frame - 12.5L x 15 FI Tire.....	1
	S53265	Castor Fork - Main Frame - 16.5L x 16.1 FI Tire.....	1
23	W-495	Hex Bolt - 1/2 x 4 Lg.....	2
24	F-3405	Locknut - 1/2 Unitorque.....	2

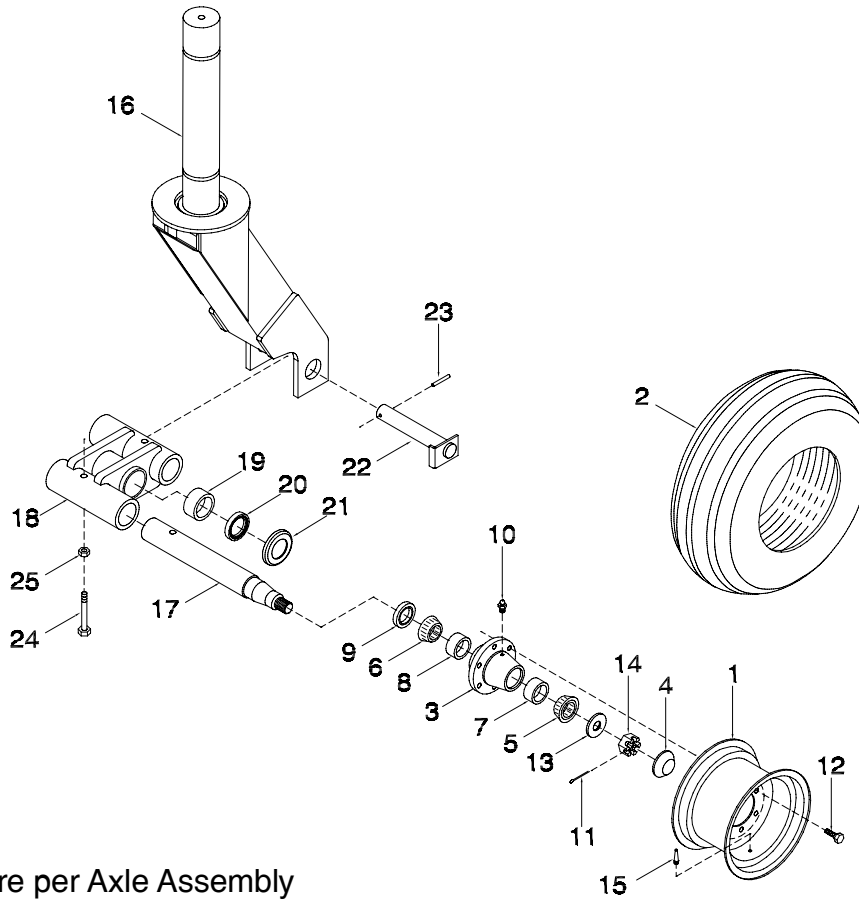
Wheels Main Rear Axles



Quantities are per Axle Assembly

Item	Part No.	Description	Qty
1	C17355	Rim - 15 x 10 - 8 Bolt - 12.5L tires.....	2
	S47512	Rim - 16.1 x 14 - 8 Bolt - 16.5L tires.....	2
2	C26840	Tire - 12.5L x 15FI - Load Range F.....	2
	S47510	Tire - 16.5L x 16.1FI - Load Range E.....	2
3	N19173	Hub (Includes Items 7, 8 & 11).....	2
4	N19171	Dust Cap.....	2
5	N19170	Outer Wheel Bearing.....	2
6	N19169	Inner Wheel Bearing.....	2
7	N19168	Outer Bearing Cup.....	2
8	N19167	Inner Bearing Cup.....	2
9	N19172	Seal.....	2
10	D-5239	Cotter Pin - 1/4 x 2 1/4.....	3
11	N19727	Wheel Stud - 5/8 x 18 UNF x 2 1/2.....	16
12	N19586	Tapered Wheel Nut - 5/8 - 18 UNF.....	16
13	N13962	Flatwasher - 1.281ID x 2 1/2 OD x 1/4 Thick.....	3
14	N19484	Castle Nut - 1 1/4.....	3
15	C17348	Valve Stem - TR-416.....	2
16	S47509	Spindle - 2 1/2 Dia.....	2
17	S47629	HD Axle Bracket - Offset - 2 1/2 Spindle (Includes items 18 & 19).....	1
18	C26086	Bearing - Garlock - 1 3/4 OD x 1 1/2 Lg.....	2
19	C26266	Dust Seal - 2.254 OD x 0.266 Thick.....	2
20	C26082	Washer - Formed - 1 3/4 ID.....	2
21	S47627	Pin - Walking Beam Pivot - 1 3/4 x 6 1/2 UL.....	1
22	S51020	Rear Main Axle Mount - 12.5 Tire.....	2
	S53264	Rear Main Axle - 16.5L tires.....	2
23	W-495	Hex Bolt - 1/2 x 4 Lg.....	2
24	F-3405	Locknut - 1/2 Unitorque.....	2

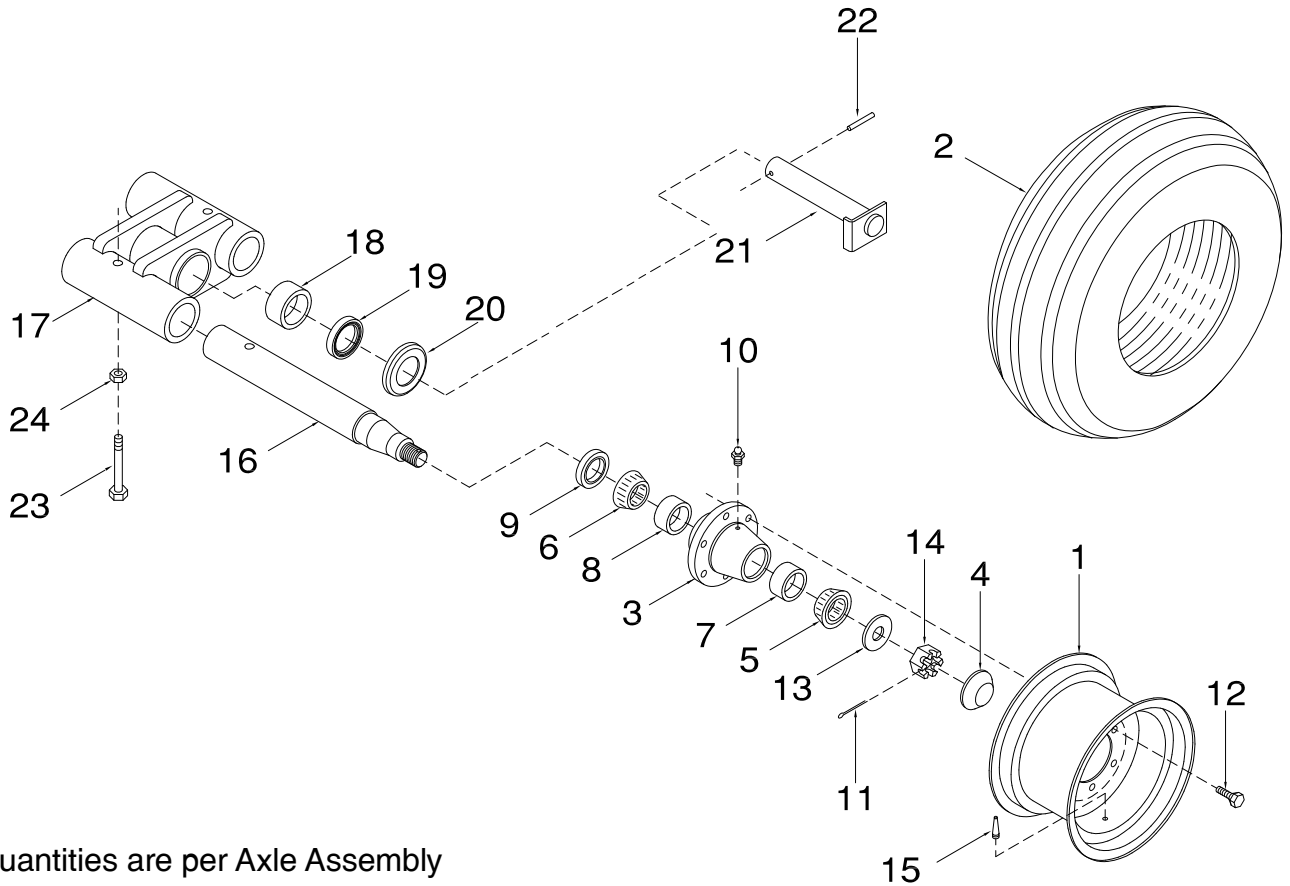
Wheels Wing Front Gauge - Dual Axle



Quantities are per Axle Assembly

Item	Part No.	Description	Qty
1	C16611	Rim - 15 x 10 - 6 Bolt.....	2
2	C24562	Tire - 12.5L x 15SL - 12 Ply rating.....	2
3	C-1463	Heavy Duty Hub - 6 Bolt (Includes Items 7, 8 & 10)	2
4	C-1522	Dust Cap	2
5	W-1474	Outer Wheel Bearing.....	2
6	W-1475	Inner Wheel Bearing	2
7	W-1537	Outer Bearing Cup.....	2
8	W-1538	Inner Bearing Cup	2
9	C-1521	Seal.....	2
10	S-752	Grease Zerk - 1/4 NPT Straight	2
11	W-1416	Cotter Pin - 3/16 x 1 1/2	2
12	W-1383	Wheel Stud Bolt - 9/16 x 1 11/16	12
13	C-3258	Flatwasher - 2 OD x 1 1/16 ID x 3/16	2
14	S-1311	Slotted Nut - 1 SAE	2
15	C17348	Valve Stem - TR-416.....	2
16	S45720	Offset Castor - 3/4" side plates	1
17	S32545	Spindle 2" Dia	2
18	S39440	Axle Bracket - Offset (Includes items 19 & 20)	1
19	C26086	Bearing - Garlock - 1 3/4 OD x 1 1/2 Lg	2
20	C26266	Dust Seal - 2.54 OD x 0.266 Thick	2
21	C26082	Washer - Formed - 1 3/4 ID	2
22	C26085	Pin - Walking Beam Pivot - 1 3/4 x 6 5/8 UL	4
23	T-5245	Spiral Pin - 3/8 x 2 1/2.....	1
24	W-493	Hex Bolt - 1/2 x 3 1/2 Lg.....	2
25	F-3405	Locknut - 1/2 Unitorque.....	2

Wheels Wing Rear Axle



Quantities are per Axle Assembly

Item	Part No.	Description	Qty
1	C16611	Rim - 15 x 10 - 6 Bolt.....	2
2	C24562	Tire - 12.5L x 15SL - 12 Ply rating.....	2
3	C-1463	Heavy Duty Hub - 6 Bolt (Includes Items 7, 8 & 10)	2
4	C-1522	Dust Cap	2
5	W-1474	Outer Wheel Bearing.....	2
6	W-1475	Inner Wheel Bearing	2
7	W-1537	Outer Bearing Cup	2
8	W-1538	Inner Bearing Cup	2
9	C-1521	Seal.....	2
10	S-752	Grease Zerk - 1/4 NPT Straight	2
11	W-1416	Cotter Pin - 3/16 x 1 1/2	2
12	W-1383	Wheel Stud Bolt - 9/16 x 1 11/16	12
13	C-3258	Flatwasher - 2 OD x 1 1/16 ID x 3/16	2
14	S-1311	Slotted Nut - 1 SAE	2
15	C17348	Valve Stem - TR-416 - 5 Frame Models.....	2
16	S32545	Spindle 2" Dia	2
17	S39440	Axle Bracket - Offset (Includes items 19 & 20)	1
18	C26086	Bearing - Garlock - 1 3/4 OD x 1 1/2 Lg	2
19	C26266	Dust Seal - 2.54 OD x 0.266 Thick	2
20	C26082	Washer - Formed - 1 3/4 ID	2
21	C26085	Pin - Walking Beam Pivot - 1 3/4 x 6 5/8 UL	4
22	T-5245	Spiral Pin - 3/8 x 2 1/2.....	1
23	W-493	Hex Bolt - 1/2 x 3 1/2 Lg.....	2
24	F-3405	Locknut - 1/2 Unitorque.....	2

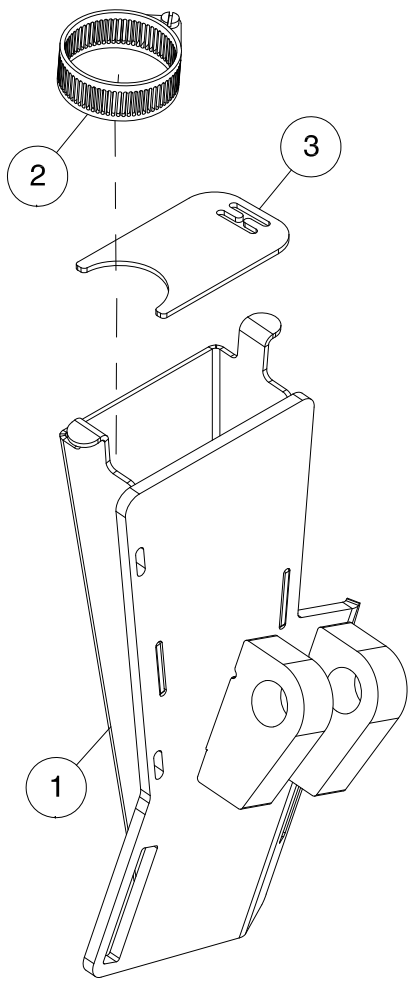
Section 3: Opener

Section Contents

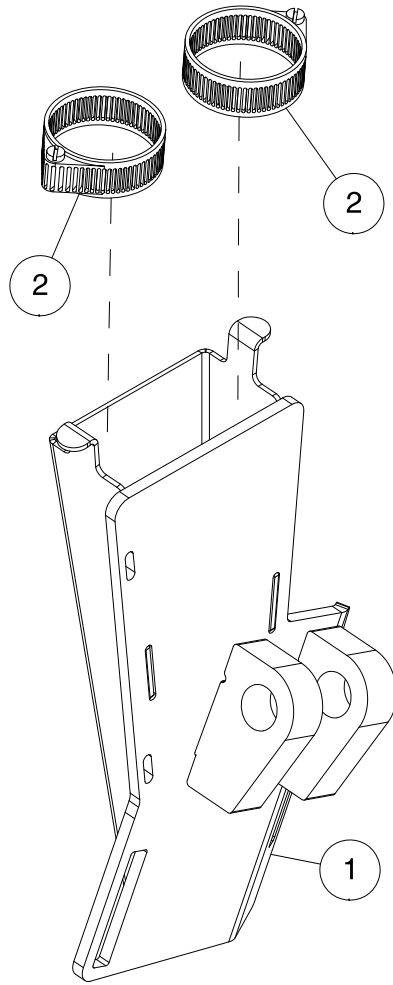
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Note: The Right openers (S51185) mount to the left side on the machine and the Left openers (S51190) mount to the right side on the machine.

**Disc Opener
Boot Hose Hardware - Prior to 2016**



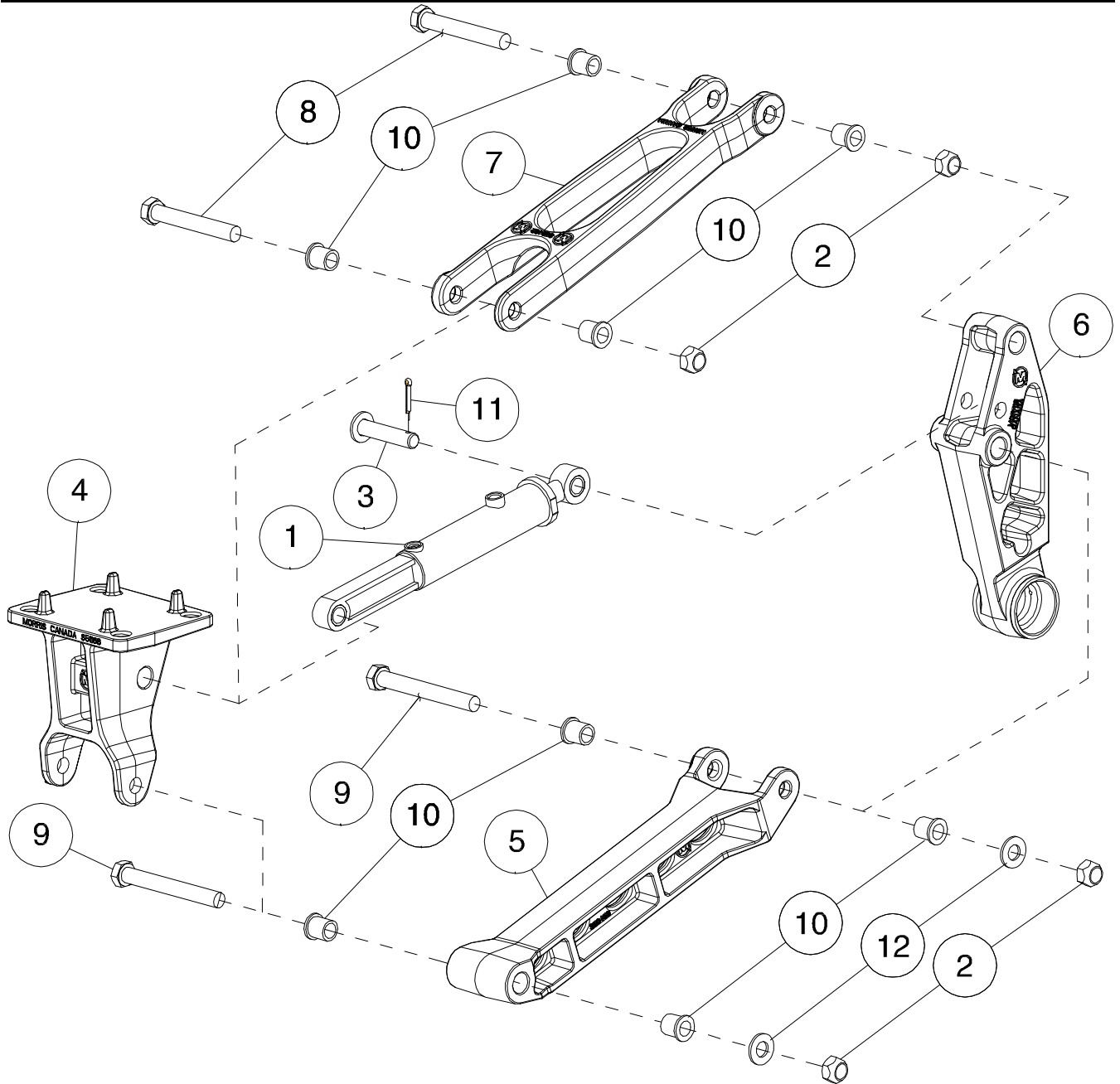
Single Hose



Double Hose

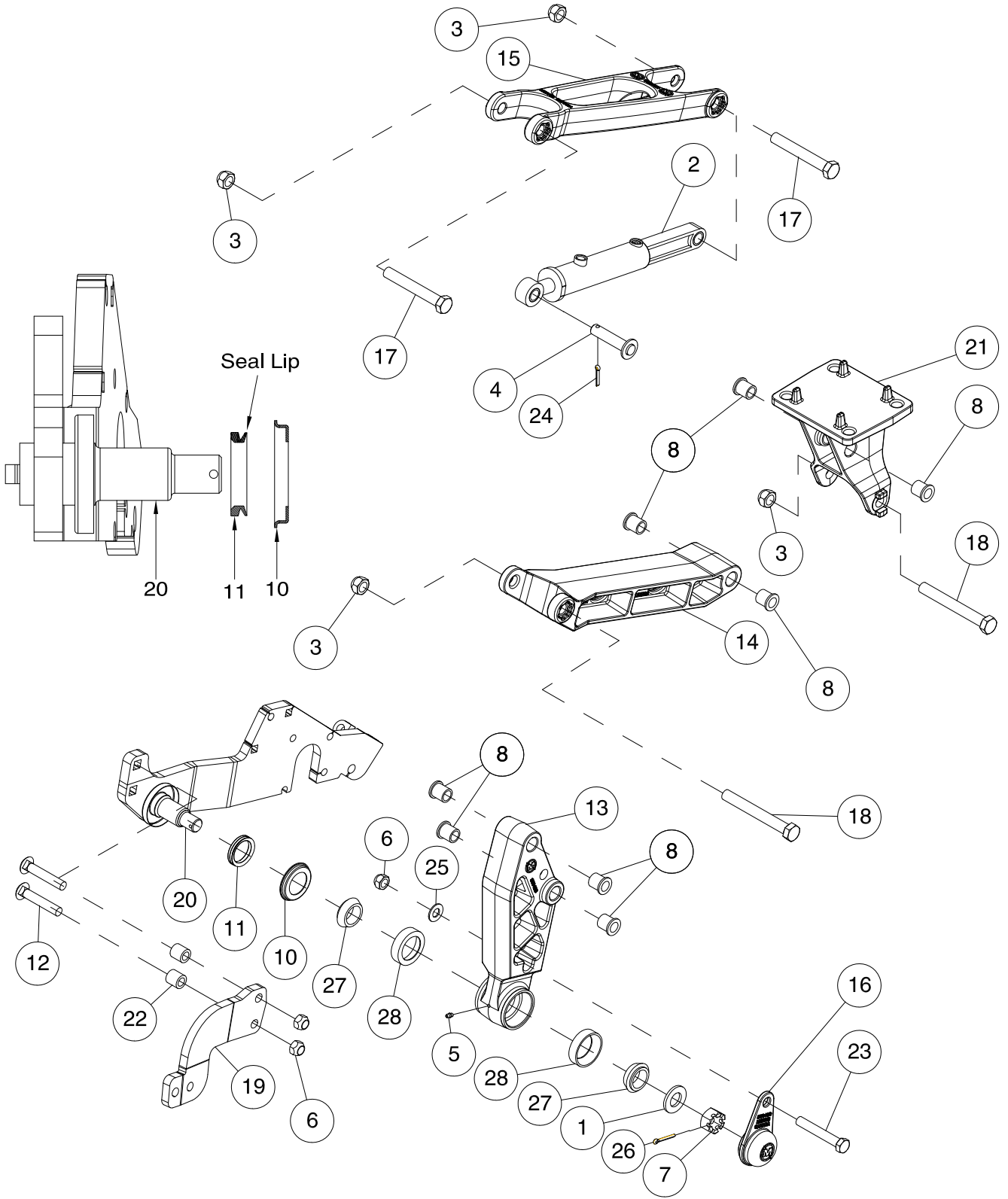
Item	Part No.	Description	Qty
1	S53805	Rear Sead Boot - Right.....	1
	S53835	Rear Sead Boot - Left	1
2	N11470	Hose Clamp HC5-20 - 1"	1
3	S53832	Cover Plate	1
<p>Note: The Right openers (S51185) mount to the left side on the machine and the Left openers (S51190) mount to the right side on the machine.</p>			

Disc Opener Base Assembly



Item	Part No.	Description	Qty
1	C51153	Hydraulic Cylinder - 1 3/4 Bore x 4 Stroke	1
2	D-5273	Locknut - 3/4 Unitorque.....	4
3	D12671	Pivot Pin - 3/4 Dia x 2 7/8 UL.....	1
4	S51166	Cast Mounting Bracket.....	1
5	S50459	Cast Lower Link	1
6	S50458	Cast Rear Link	1
7	S50462	Top Link.....	1
8	S51004	Hex Bolt - 3/4 x 5 1/4 Lg.....	2
9	S51006	Hex Bolt - 3/4 x 6 1/8 Lg.....	2
10	S53833	Flange Bushing	8
11	W-532	Cotter Pin - 3/16 x 1 1/4 Lg	1
12	W-476	Flatwasher - 13/16 ID x 1 1/2 OD x 11 Ga	2

Disc Arm Assembly Right - Prior to 2016

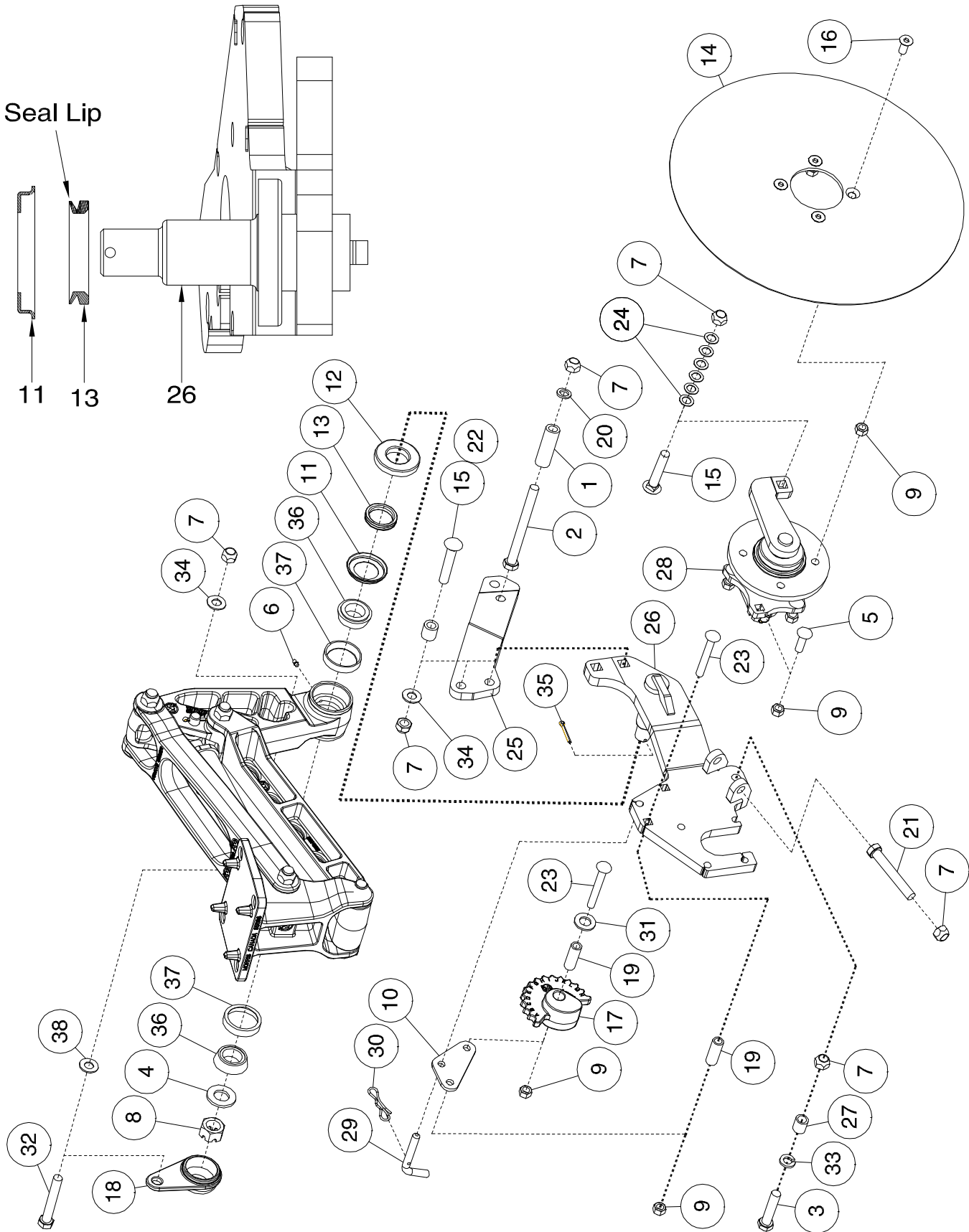


Disc Arm Assembly S51150 - Right - Prior to 2016

Item	Part No.	Description	Qty
1	C-3258	Washer - 1 1/32 ID x 2 OD x 3/16 thick.....	1
2	C51153	Hydraulic Cylinder - 1 3/4 Bore x 4 Stroke	1
3	D-5273	Locknut - 3/4 Unitorque.....	4
4	D12671	Pivot Pin - 3/4 Dia x 2 7/8 UL.....	1
5	S-752	Grease Zerk - 1/4.....	1
6	S-1197	Locknut - 5/8 Unitorque.....	3
7	S-1311	Hex Slotted Nut - 1-14 UNS.....	1
8	S53833	Flange Bushing - 3/4 ID x 1 OD x 1 1/8 Lg - August 2013 to present.....	8
	S44397	Bushing - 3/4 ID x 1 OD x 1 Lg - Prior to August 2013	8
	S47384	Wear Washer - 25/32 ID x 2 OD x 1/8 Thick - Prior to August 2013 (Not shown)	8
10	S48827	Seal Counterface	1
11	S48829	V-Seal - 1 5/8 Shaft.....	1
12	S48856	Carriage Bolt - 5/8 x 3 1/2 Lg.....	2
13	S50458	Rear Link.....	1
14	S50459	Lower Link.....	1
15	S50462	Top Link.....	1
16	S50489	Dustcap.....	1
17	S51004	Hex Bolt - 3/4 x 5 1/8 Lg.....	2
18	S51006	Hex Bolt - 3/4 x 6 1/8 Lg.....	2
19	S51154	Packer Arm Right	1
20	S51155	Walking Bean - Right (S48828 - V-Seal Retainer).....	1
21	S51166	Mounting Bracket	1
22	S51312	Bushing - .627/.632 ID x 1 OD x 1 Lg	2
23	W-504	Hex Bolt - 5/8 x 4 Lg.....	1
24	W-532	Cotter Pin - 3/16 x 1 1/4	1
25	W-629	Flat Washer - 5/8.....	1
26	W-1416	Cotter Pin - 3/16 x 2 Lg	1
27	W-1474	Bearing Cone - 1 3/8 Bore	2
28	W-1537	Bearing Cup.....	2

Note: The Right openers (S51185) mount to the left side on the machine and the Left openers (S51190) mount to the right side on the machine.

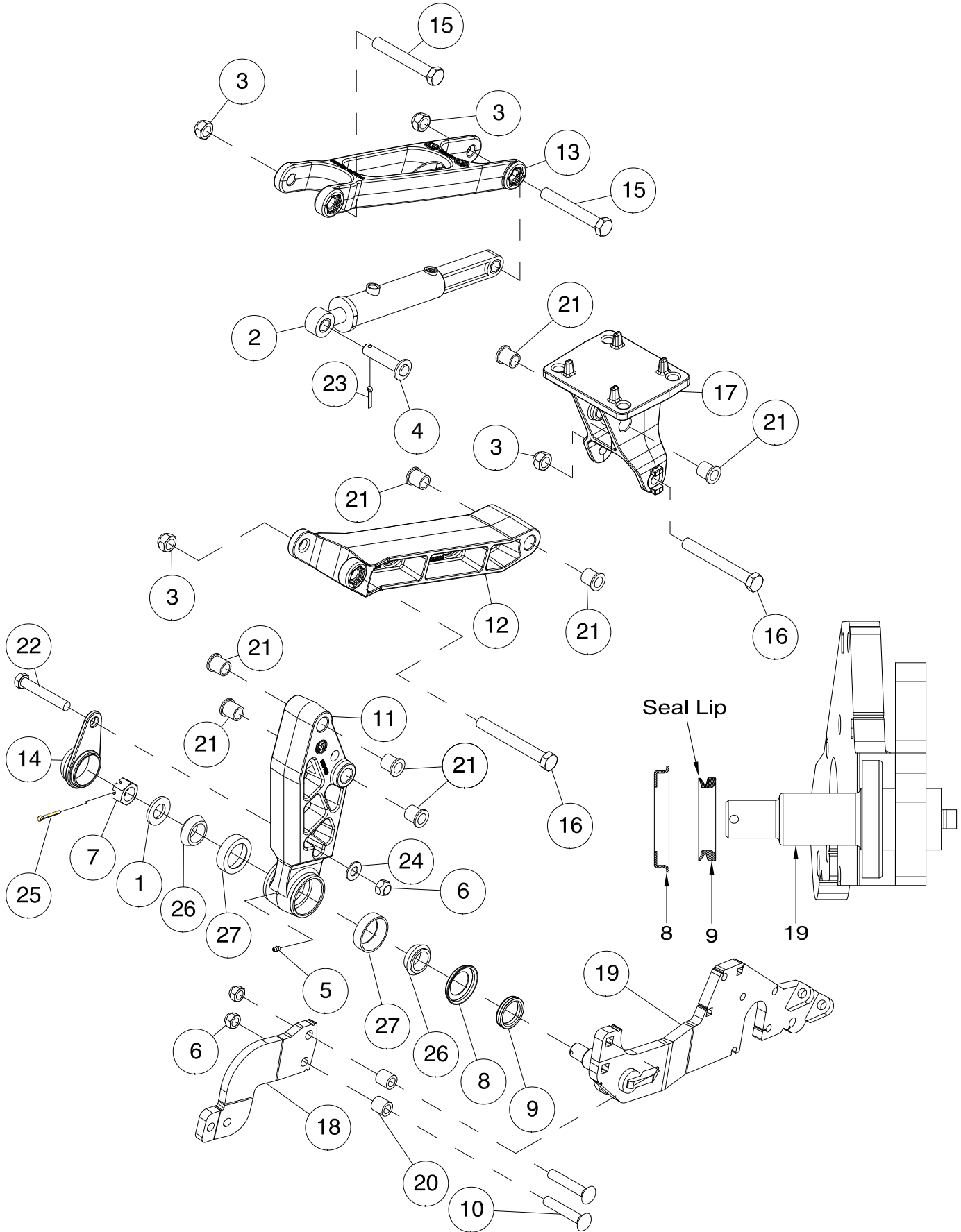
Disc Arm Assembly Right - 2016 to Present



Disc Arm Assembly - Right - 2016 to Present

Item	Part No.	Description	Qty
1	AHH-96	Bushing - .627/.632 ID x 1 OD x 3 Lg	1
2	C-508	Hex Bolt - 5/8 x 6 1/2 Lg.....	1
3	C-3016	Hex Bolt - 5/8 x 3 Lg.....	1
4	C-3258	Flatwasher - 1	1
5	D-5267	Carriage Bolt - 1/2 x 1 3/4 Lg	4
6	S-752	Grease Zerk - 1/4.....	1
7	S-1197	Locknut - 5/8 Unitorque.....	7
8	S-1311	Hex Slotted Nut - 1-14 UNs	1
9	S47110	Hex Nut - 1/2 Center Lock.....	10
10	S47397	Cam Holder Plate.....	1
11	S48827	Seal Counterface	1
12	S48828	Seal Retainer	1
13	S48829	V-Seal - 1 5/8 Shaft.....	1
14	S48851	Coutler Disc - 20" Dia	1
15	S48856	Carriage Bolt - 5/8 x 3 1/2 Lg	3
16	S49253	Flat Socket Cap Screw - 1/2 x 1 1/4 Lg.....	4
17	S49260	Depth Cam - Cast	1
18	S50489	Dustcap.....	1
19	S51181	Spacer Bushing - .510 ID x 3/4 OD x 2 1/8 Lg	2
20	S51182	Flat Washer - 21/32ID x 1.0 OD x 10 Ga	1
21	S51307	Hex Bolt - 5/8 x 4 1/4 Lg.....	1
22	S51312	Bushing - .627/.632ID x 1 OD x 1 Lg	2
23	S51514	Carriage Bolt - 1/2 x 4 Lg	2
24	S55028	Washer - 5/8 ID x 1 OD x 18Ga	6
25	S60022	Packer Arm - Right - Dual Position Packer Arm	1
26	S55605	Walking Beam Arm.....	1
27	S56059	Spacer Bushing - .635 ID x 7/8 OD x 1 Lg.....	1
28	S56089	Disc Hub Depth Assembly - Right.....	1
29	S56559	Depth Pin - 1/2 Dia.....	1
30	S58710	Lock Pin - 0.656 ID x 1.313 Lg	1
31	W-476	Flat Washer - 3/4.....	1
32	W-504	Hex Bolt - 5/8 x 4 Lg.....	1
33	W-526	Lockwasher - 5/8.....	1
34	W-629	Flat Washer - 5/8.....	3
35	W-1416	Cotter Pin - 3/16 x 2 Lg	1
36	W-1474	Bearing Cone - 1 3/8 Bore	2
37	W-1537	Bearing Cup.....	2
38	S-543	Flat Washer - 3/4 ID x 1 1/4 OD x 14 Ga.....	1

Disc Arm Assembly Left - Prior to 2016

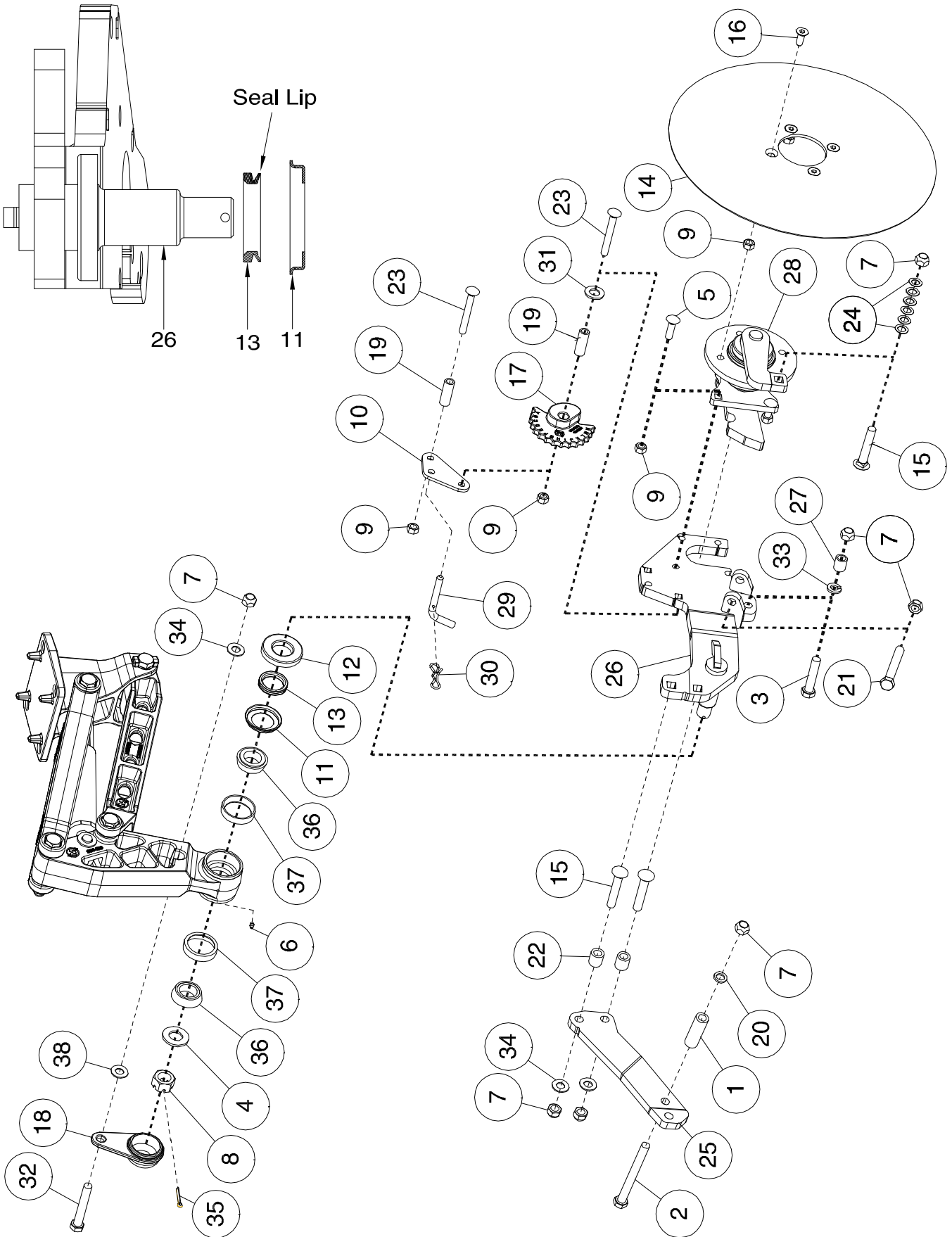


Disc Arm Assembly S51170 - Left - Prior to 2016

Item	Part No.	Description	Qty
1	C-3258	Flatwasher - 1	1
2	C51153	Hydraulic Cylinder - 1 3/4 Bore x 4 Stroke	1
3	D-5273	Locknut - 3/4 Unitorque.....	4
4	D12671	Pivot Pin - 3/4 Dia x 2 7/8 UL.....	1
5	S-752	Grease Zerk - 1/4.....	1
6	S-1197	Locknut - 5/8 Unitorque.....	3
7	S-1311	Hex Slotted Nut - 1-14 UNS.....	1
8	S48827	Seal Counterface	1
9	S48829	V-Seal - 1 5/8 Shaft.....	1
10	S48856	Carriage Bolt - 5/8 x 3 1/2 Lg.....	2
11	S50458	Rear Link.....	1
12	S50459	Lower Link.....	1
13	S50462	Top Link.....	1
14	S50489	Dustcap.....	1
15	S51004	Hex Bolt - 3/4 x 5 1/8 Lg.....	2
16	S51006	Hex Bolt - 3/4 x 6 1/8 Lg.....	2
17	S51166	Mounting Bracket	1
18	S51177	Packer Arm Left.....	1
19	S51180	Walking Beam Arm - Left (S48828 - V-Seal Retainer).....	1
20	S51312	Bushing - .627/.632 ID x 1 OD x 1 Lg	2
21	S53833	Flange Bushing - 3/4 ID x 1 OD x 1 1/8 Lg - August 2013 to present.....	8
	S44397	Bushing - 3/4 ID x 1 OD x 1 Lg - Prior to August 2013	8
	S47384	Wear Washer - 25/32 ID x 2 OD x 1/8 Thick - Prior to August 2013 (Not shown)	8
22	W-504	Hex Bolt - 5/8 x 4 Lg.....	1
23	W-532	Cotter Pin - 3/16 x 1 1/4	1
24	W-629	Flat Washer - 5/8.....	1
25	W-1416	Cotter Pin - 3/16 x 2 Lg	1
26	W-1474	Bearing Cone - 1 3/8 Bore	2
27	W-1537	Bearing Cup.....	2

Note: The Right openers (S51185) mount to the left side on the machine and the Left openers (S51190) mount to the right side on the machine.

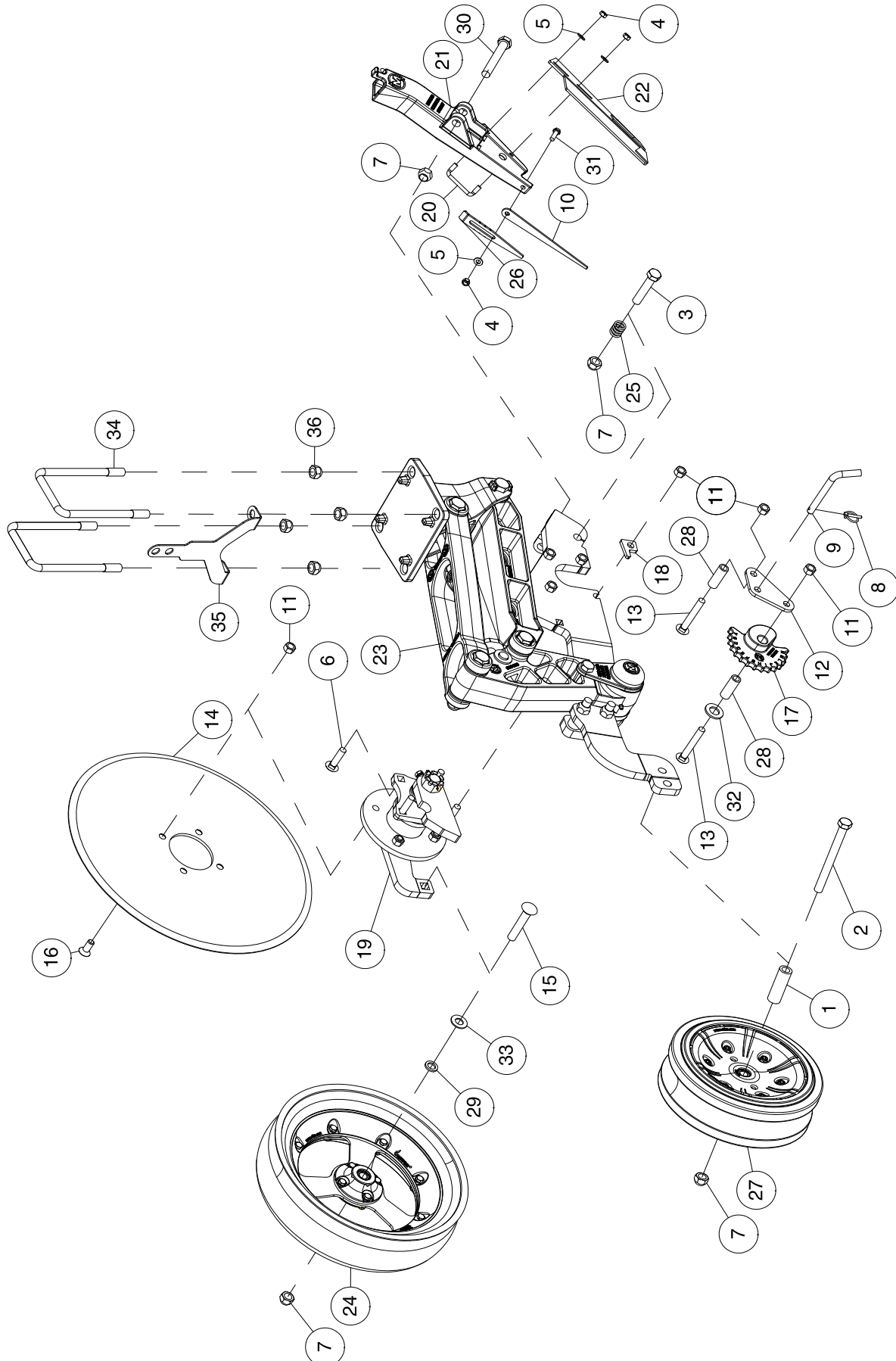
Disc Arm Assembly Left - 2016 to Present



Disc Arm Assembly - Left - 2016 to Present

Item	Part No.	Description	Qty
1	AHH-96	Bushing - .627/.632 ID x 1 OD x 3 Lg	1
2	C-508	Hex Bolt - 5/8 x 6-1/2 Lg	1
3	C-3016	Hex Bolt - 5/8 x 3 Lg.....	1
4	C-3258	Flat Washer - 1.....	1
5	D-5267	Carriage Bolt - 1/2 x 1-3/4 Lg	4
6	S-752	Grease Zerk - 1/4.....	1
7	S-1197	Locknut - 5/8 Unitorque.....	7
8	S-1311	Hex Slotted Nut - 1-14 UNS.....	1
9	S47110	Hex Nut - 1/2 Center Lock.....	10
10	S47397	Cam Holder Plate.....	1
11	S48827	Seal Counterface	1
12	S48828	Seal Retainer	1
13	S48829	V-Seal 1-5/8 Shaft	1
14	S48851	Coutler Disc - 20" Dia	1
15	S48856	Carriage Bolt - 5/8 x 3-1/2 Lg.....	3
16	S49253	Flat Socket Cap Screw - 1/2 x 1-1/4 Lg.....	4
17	S49260	Depth Cam - Cast	1
18	S50489	Dustcap.....	1
19	S51181	Spacer Bushing - .510 ID x 3/4 OD x 2 1/8 Lg.....	2
20	S51182	Flat Washer - 21/32 ID x 1.0 OD x 10 Ga	1
21	S51307	Hex Bolt - 5/8 x 4-1/4 Lg	1
22	S51312	Bushing - .627/.632 ID x 1 OD x 1 Lg	2
23	S51514	Carriage Bolt - 1/2 x 4 Lg.....	2
24	S55028	Flat Washer - 5/8 ID x 1 OD x 18 Ga.....	6
25	S60023	Packer Arm - Left - Dual Position.....	1
26	S55956	Walking Beam Arm - Left.....	1
27	S56059	Spacer Bushing - .635 ID x 7/8 OD x 1 Lg.....	1
28	S56086	Disc Hub Depth Assy - Left	1
29	S56559	Depth Pin - 1/2 Dia.....	1
30	S58710	Lock Pin - 0.656 ID x 1.313 Lg	1
31	W-476	Flat Washer - 3/4.....	1
32	W-504	Hex Bolt - 5/8 x 4 Lg.....	1
33	W-526	Lockwasher - 5/8.....	1
34	W-629	Flat Washer - 5/8.....	3
35	W-1416	Cotter Pin - 3/16	1
36	W-1474	Bearing Cone - 1 3/8 Bore	2
37	W-1537	Bearing Cup.....	2
38	S-543	Flat Washer - 3/4 ID x 1 1/4 OD x 14 Ga.....	1

**Disc Opener - Right
Prior to August 2013**

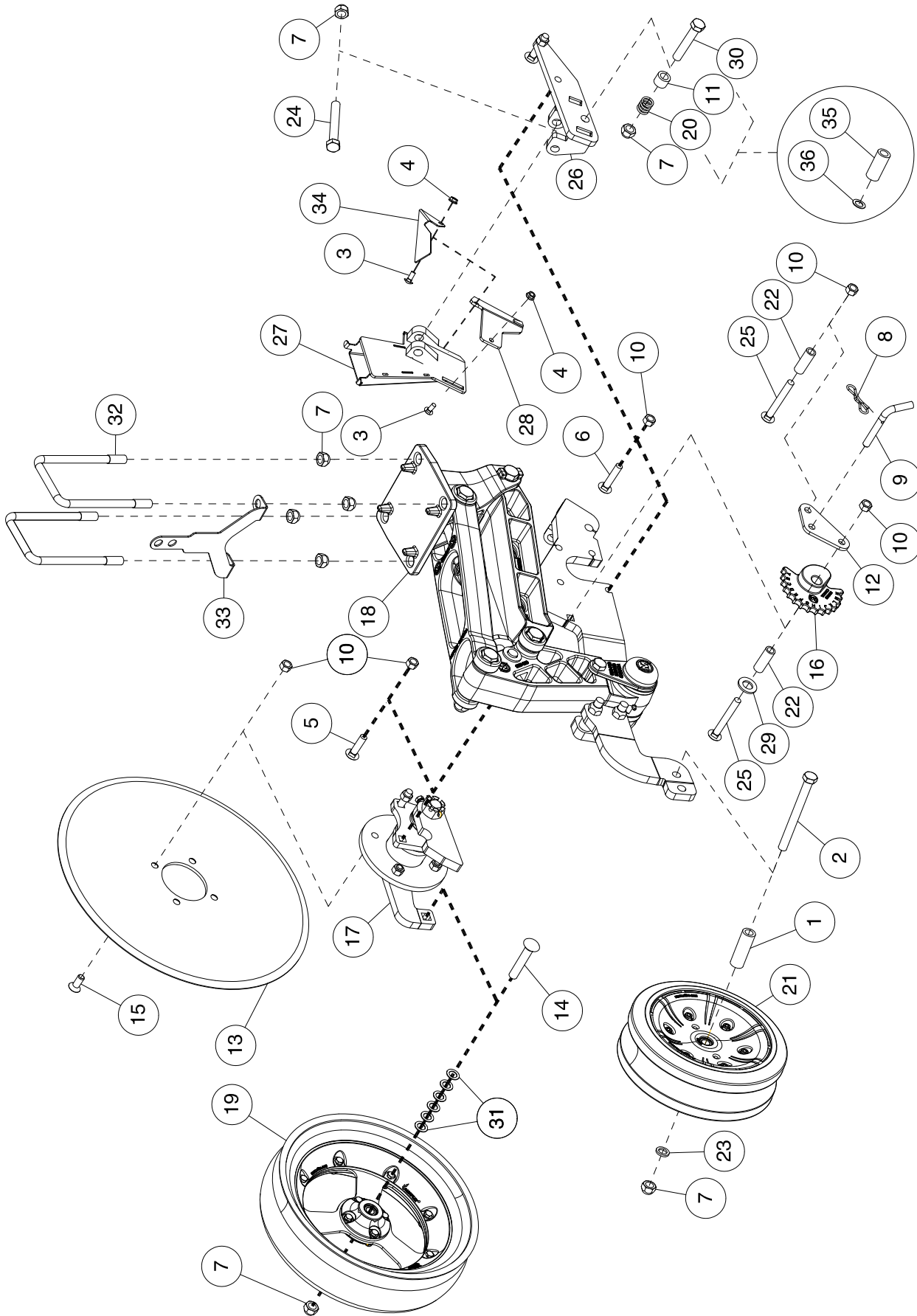


Disc Opener - Disc Assembly S51185 - Right - Prior to August 2013

Item	Part No.	Description	Qty
1	AHH-96	Bushing - 0.627 ID x 1 OD x 3 Lg	1
2	C-508	Hex Bolt - 5/8 x 6 1/2 Lg.....	1
3	C-3016	Hex Bolt - 5/8 x 3 Lg.....	1
4	C32925	Center Locknut - 5/16.....	3
5	D-5488	Washer - 11/32 ID x 11/16 OD x 16 Ga	3
6	D12820	Carriage Bolt - 1/2 x 2 Lg	4
7	S-1197	Unitorque Locknut - 5/8	8
8	S42294	Lynch Pin - 3/16 Dia x 1/14 Lg	1
9	S42659	Depth Pin	1
10	S45856	Seed Bounce Strip	1
11	S47110	Center Lock Hex Nut - 1/2	10
12	S47397	Cam Holder Plate.....	1
13	S47593	Carriage Bolt - 1/2 x 3 1/2 Lg	2
14	S48851	Coutler Disc - 20" Dia	1
15	S48856	Carriage Bolt - 5/8 x 3 1/2 Lg	1
16	S49253	Flat Socket Cap Screw - 1/2 x 1-1/4 Lg	4
17	S49260	Universal Cast Depth Cam.....	1
18	S49522	Stop Plate	1
19	*****	Disc Hub Depth Assembly - Right - S50200 - See page 3-15.....	1
20	S51036	U-Bolt - 5/16 x 2 1/2 x 7/8 UL.....	1
21	S51037	Cast Scraper Boot Right	1
22	S51045	Carbide Scraper Right.....	1
23	S51150	Top End Sub-Assy Right	1
24	S51157	3 Spoke Gauge Wheel	1
25	S51163	Scraper Compression Spring	1
26	S51164	Seed Bounce Retainer	1
27	S51172	Dual Rib Packer Wheel	1
28	S51181	Spacer Bushing - .510 ID x 3/4 OD.....	2
29	S51182	Washer - 21/32 ID x 1.0 OD x 10 Ga	1
30	S51307	Hex Bolt - 5/8 x 4 1/4 Lg.....	1
31	W-471	Hex Bolt - 5/16 x 1 Lg.....	1
32	W-476	Flat Washer - 3/4	1
33	W-629	Flat Washer - 5/8.....	1
34	S39649	U-bolt - 5/8 x 4 7 3/4 Lg	2
	S53545	Hex Bolt - 5/8 x 8 1/2 Lg - used on wing truss mounts.....	AsReq
35	S48631	Hydraulic Hose Holder	1
	N11470	Hose Clamp	1
	S47076	Secondary Hose Grommet Option - 15/16 ID Hose.....	1

Note: The Right openers (S51185) mount to the left side on the machine and the Left openers (S51190) mount to the right side on the machine.

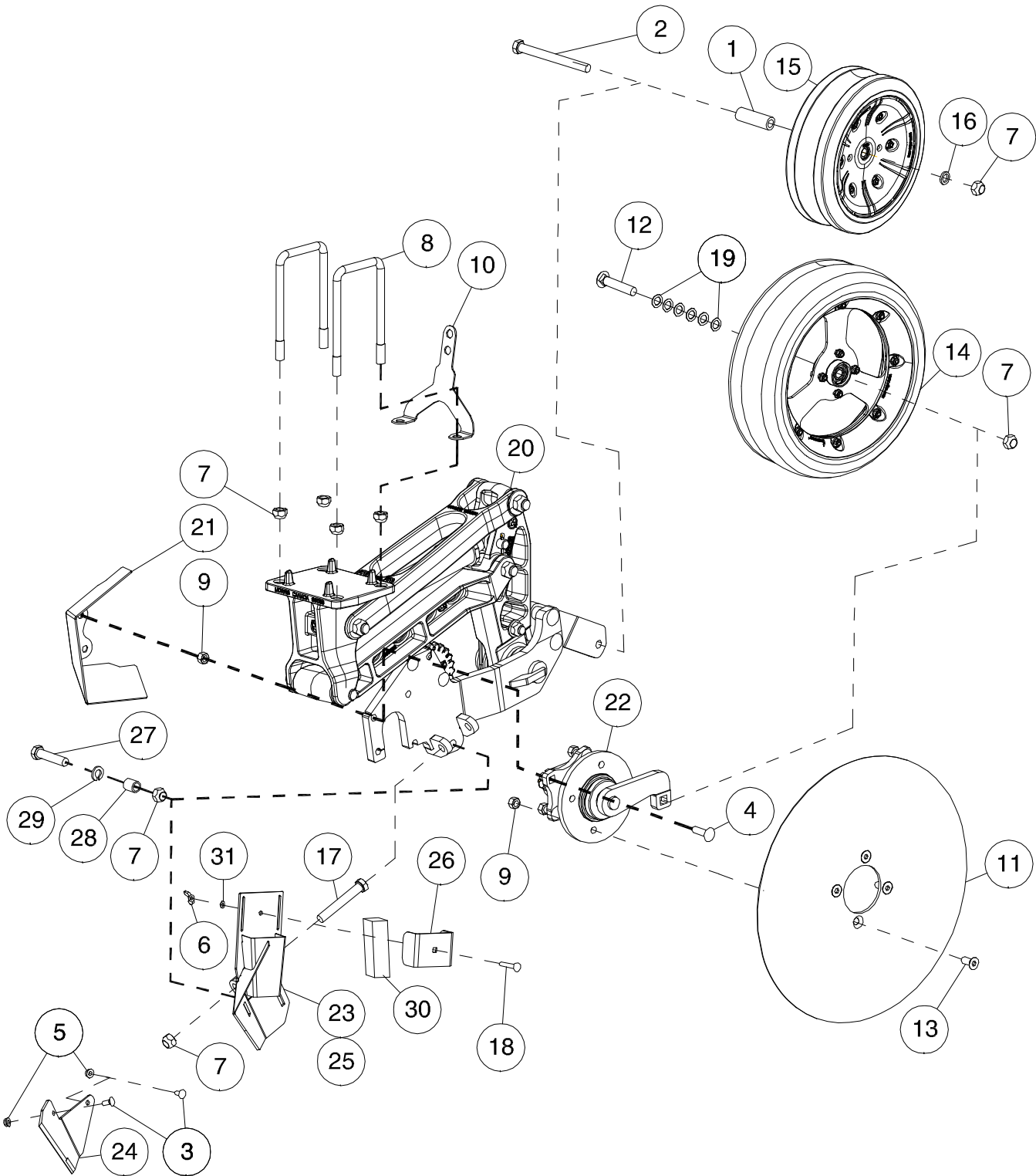
Disc Opener - Right Prior to 2016



Disc Opener - Right - Prior to 2016

Item	Part No.	Description	Qty
1	AHH-96	Bushing - .627/.632 ID x 1 OD x 3 Lg	1
2	C-508	Hex Bolt - 5/8 x 6 1/2 Lg.....	1
3	D-5259	Carriage Bolt - 5/16 x 3/4 Lg	2
4	D-5278	Flange Lock Nut - 5/16.....	2
5	D12820	Carriage Bolt - 1/2 x 2 Lg	2
6	J12190	Carriage Bolt - 1/2 x 2 1/2 Lg	2
7	S-1197	Locknut - 5/8 Unitorque.....	8
8	S56571	Hair Pin - Self Locking - 0.12 Dia x 2 3/4 Lg.....	1
9	S56559	Depth Pin	1
10	S47110	Center Lock Hex Nut - 1/2	10
11	S47395	Spacer Bushing - .627 ID x 1 OD x 3/4 Lg.....	1
12	S47397	Cam Holder Plate.....	1
13	S48851	Coutler Disc - 20" Dia	1
14	S48856	Carriage Bolt - 5/8 x 3 1/2 Lg	1
15	S49253	Flat Socket Cap Screw - 1/2 x 1 1/4 Lg.....	4
16	S49260	Depth Cam - Cast	1
17	*****	Disc Hub Depth Assembly - Right - S50200 - See page 3-15.....	1
18	S51150	Top End Sub-Assembly - Right	1
19	S51157	Gauge Wheel - 3 Spoke.....	1
20	S51163	Scraper Compression Spring	1
21	S51172	Dual Rib Packer Wheel	1
22	S51181	Spacer Bushing - .510 ID x 3/4 OD x 2 1/8 Lg.....	2
23	S51182	Washer - 21/32 ID x 1.0 OD x 10Ga.....	1
24	S51307	Hex Bolt - 5/8 x 4 1/4 Lg.....	1
25	S51514	Carriage Bolt - 1/2 x 4 Lg	2
26	S53800	Scraper Pivot Brkt - Right.....	1
27	S53805	Rear Seed Boot - Right.....	1
28	S53810	Carbide Scraper - Right	1
29	W-476	Flat Washer - 3/4.....	1
30	W-503	Hex Bolt - 5/8 x 3 1/2 Lg.....	1
31	S55028	Washer - 5/8 ID x 1 OD x 18 Ga	6
32	S39649	U-Bolt - 5/8 x 4 x 7 3/4 Lg	2
	S53545	Hex Bolt - 5/8 x 8 1/2 Lg - used on wing truss mounts	AsReq
33	S48631	Hose Holder	1
34	S56458	Trash Guard - Right.....	1
35	S56071	SPACER BUSHING - 0.635 ID x 7/8 OD x 1 3/4 Lg	1
36	W-526	Lockwasher - 5/8	1
	S46500	Rear Scraper Kit Right - Contains items# (3, 4, 7, 11, 20, 24, 26, 28, & 30)	
	S56692	KIT: SCRAPER - RIGHT- RAZR - Contains items# (3, 4, 27, 28 & 34)	
	S56694	KIT: SCRAPER BUSHING - RAZR - Contains items# (35 & 36) For customers with trash plugging concerns. Bushing replaces the spring (S51163) and bushing (S47395) combo. This prevents the scraper from pulling away from the disc blade in tough trash conditions.	
		Note: The Right openers (S51185) mount to the left side on the machine and the Left openers (S51190) mount to the right side on the machine.	

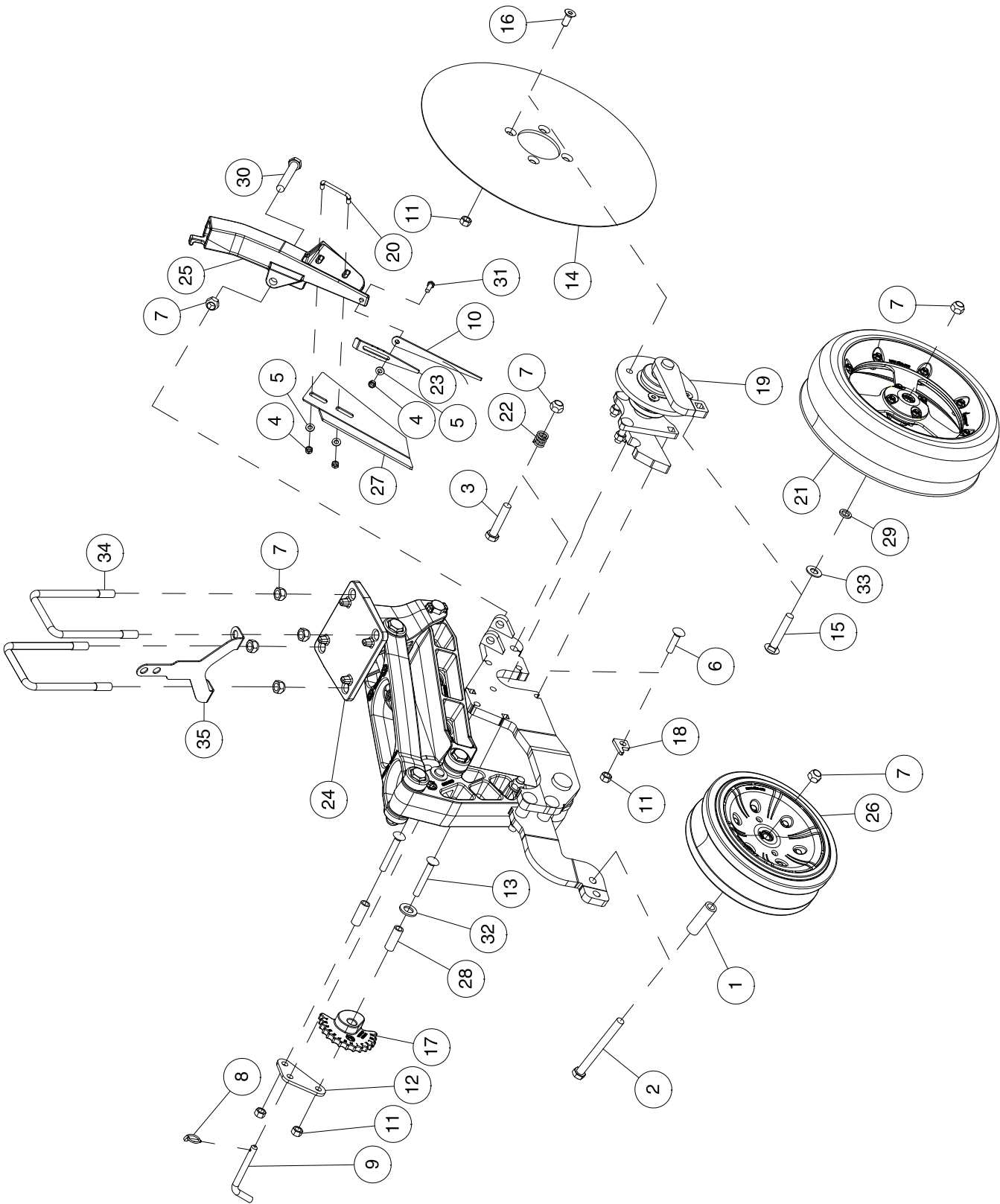
Disc Opener - Right 2016 to Present



Disc Opener - Right - 2016 to Present

Item	Part No.	Description	Qty
1	AHH-96	Bushing - .627/.632 ID x 1 OD x 3 Lg	1
2	C-508	Hex Bolt - 5/8 x 6 1/2 Lg.....	1
3	D-5259	Carriage Bolt - 5/16 x 3/4 Lg	2
4	D-5267	Carriage Bolt - 1/2 x 1 3/4 Lg	4
5	D-5278	Flange Lock Nut - 5/16.....	2
6	N31016	Wing Nut - 5/16	1
7	S-1197	Locknut - 5/8 Uunitorque.....	8
8	S39649	U-Bolt - 5/8 x 4 x 7 3/4 Lg	2
9	S47110	Hex Nut - 1/2 Center Lock.....	8
10	S48631	Hose Holder	1
11	S48851	Coutler Disc - 20" Dia	1
12	S48856	Carriage Bolt - 5/8 x 3 1/2 Lg	1
13	S49253	Flat Socket Cap Screw - 1/2 x 1 1/4 Lg.....	4
14	S51157	Gauge Wheel - 3 Spoke.....	1
15	S51172	Dual Rib Packer Wheel	1
16	S51182	Washer - 21/32 ID x 1.0 OD x 10 Ga	1
17	S51307	Hex Bolt - 5/8 x 4 1/4 Lg.....	1
18	S51466	Carriage Bolt - 5/16 x 2 Lg	1
19	S55028	Washer - 5/8 ID x 1 OD x 18Ga	6
20	S55960	Right Row Unit (Includes Items #1, 2, 4, 7, 9, 11, 12, 13, 14, 16, 17, 19, 22, 28 & 29)	1
21	S56075	Trash Shield - Optional	1
22	*****	Disc Hub Depth Assembly - Right - S56089 - See Page 3-26	1
23	S56588	Right Seed Boot.....	1
24	S56669	Carbide Scraper - Right	1
24A	S58630	NH3 Scraper Carbide - Right	
25	S56690	Tall Scraper Kit - Right (Contains Items# 3, 5, 6, 7, 18, 23, 24 & 26).....	1
	S62200	NH3 Tall Scraper Kit - Right (Contains Items# 3, 5, 6, 7, 18, 23, 24A & 26)	
26	S56725	Hose Holder Clamp.....	1
27	C-3016	Hex Bolt - 5/8 x 3 Lg.....	1
28	S56059	Bushing - .635 ID x 7/8 OD x 1 Lg	1
29	W-526	Lockwasher - 5/8.....	1
30	S58014	Seed Boot Plug.....	1
31	W-522	Lockwasher - 5/16.....	1

Disc Opener - Left
Prior to August 2013

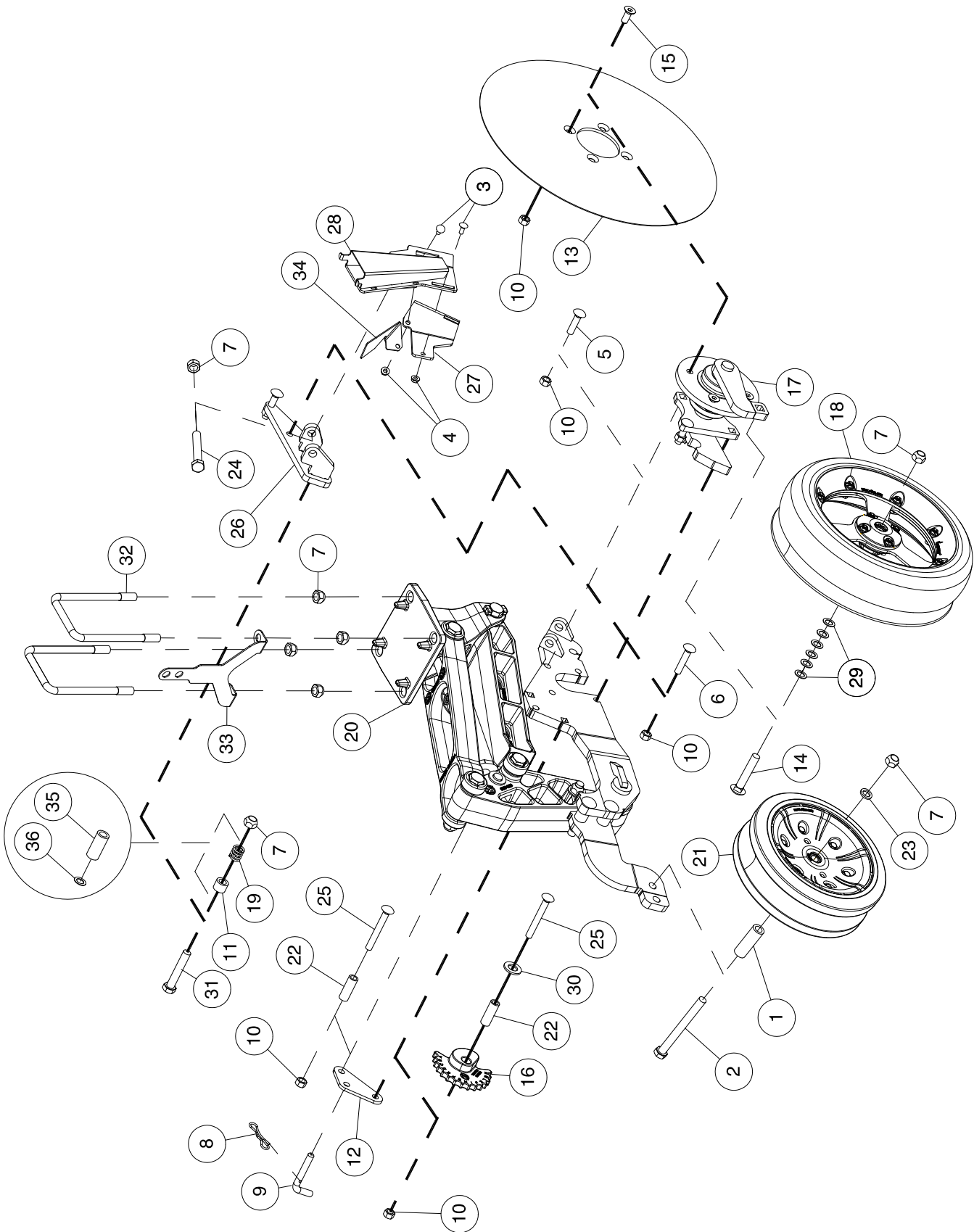


Disc Opener - Disc Assembly S51190 - Left - Prior to August 2013

Item	Part No.	Description	Qty
1	AHH-96	Bushing - 0.627 ID x 1 OD x 3 Lg	1
2	C-508	Hex Bolt - 5/8 x 6 1/2 Lg.....	1
3	C-3016	Hex Bolt - 5/8 x 3 Lg.....	1
4	C32925	Center Locknut - 5/16.....	3
5	D-5488	Washer - 11/32 ID x 11/16 OD x 16 Ga	3
6	D12820	Carriage Bolt - 1/2 x 2 Lg	4
7	S-1197	Locknut - 5/8 Unitorque.....	8
8	S42294	Lynch Pin - 3/16 Dia x 1 1/4 Lg	1
9	S42659	Depth Pin	1
10	S45856	Seed Bounce Strip	1
11	S47110	Center Lock Hex Nut - 1/2	10
12	S47397	Cam Holder Plate.....	1
13	S47593	Carriage Bolt - 1/2 x 3 1/2 Lg	2
14	S48851	Coutler Disc - 20" Dia	1
15	S48856	Carriage Bolt - 5/8 x 3-1/2 Lg.....	1
16	S49253	Flat Socket Cap Screw - 1/2 x 1 1/4 Lg.....	4
17	S49260	Depth Cam - Cast	1
18	S49522	Stop Plate	1
19	*****	Disc Hub Depth Assembly - Left - S50465 - See page 3-16	1
20	S51036	U-Bolt - 5/16 x 2 1/2 x 7/8 UL.....	1
21	S51157	3 Spoke Gauge Wheel	1
22	S51163	Scraper Compression Spring	1
23	S51164	Seed Bounce Retainer	1
24	S51170	Top End Sub-Assy Left.....	1
25	S51171	Cast Scraper Boot Left.....	1
26	S51172	Dual Rib Packer Wheel	1
27	S51175	Carbide Scraper Left	1
28	S51181	Spacer Bushing - .510 ID x 3/4 OD x 2 1/8 Lg	2
29	S51182	Washer - 21/32 ID x 1.0 OD x 10 Ga	1
30	S51307	Hex Bolt - 5/8 x 4 1/4 Lg.....	1
31	W-471	Hex Bolt - 5/16 x 1 Lg.....	1
32	W-476	Flat Washer - 3/4	1
33	W-629	Flat Washer - 5/8.....	1
34	S39649	U-bolt - 5/8 x 4 7 3/4 Lg	2
	S53545	Hex Bolt - 5/8 x 8 1/2 Lg - used on wing truss mounts.....	AsReq
35	S48631	Hydraulic Hose Holder	1
	N11470	Hose Clamp	1
	S47076	Secondary Hose Grommet Option - 15/16 ID Hose.....	1

Note: The Right openers (S51185) mount to the left side on the machine and the Left openers (S51190) mount to the right side on the machine.

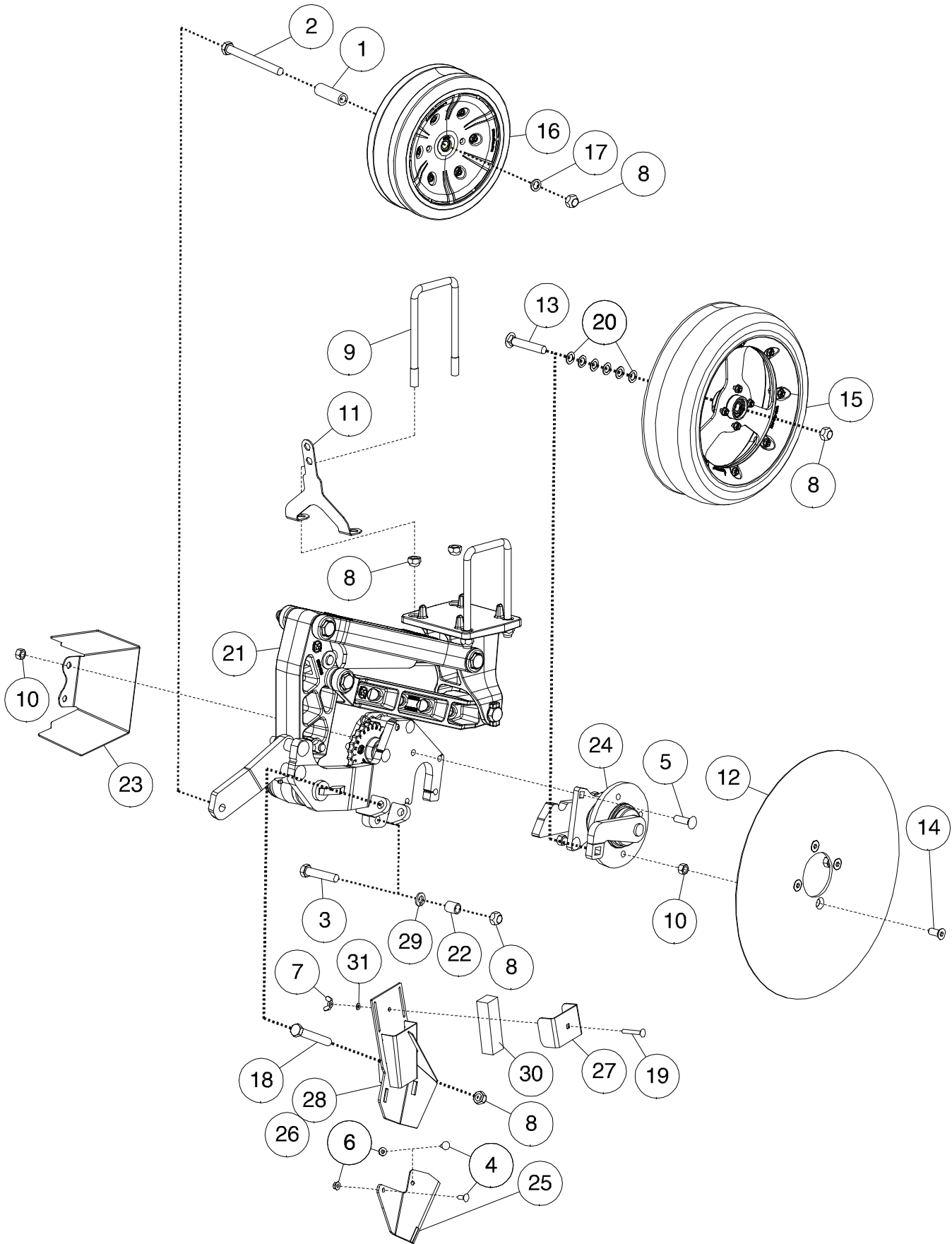
Disc Opener - Left
Prior to 2016



Disc Opener - Left - Prior to 2016

Item	Part No.	Description	Qty
1	AHH-96	Bushing - 0.627 ID x 1 OD x 3 Lg	1
2	C-508	Hex Bolt - 5/8 x 6 1/2 Lg.....	1
3	D-5259	Carriage Bolt - 5/16 x 3/4 Lg	2
4	D-5278	Flange Lock Nut - 5/16.....	2
5	D12820	Carriage Bolt - 1/2 x 2 Lg	2
6	J12190	Carriage Bolt - 1/2 x 2 1/2 Lg	2
7	S-1197	Locknut - 5/8 Unitorque.....	4
8	S56571	Hair Pin - Self Locking - 0.12 Dia x 2 3/4 Lg.....	1
9	S56559	Depth Pin	1
10	S47110	Center Lock Hex Nut - 1/2	10
11	S47395	Spacer Bushing - .627 ID x 1 OD x 3/4 Lg.....	1
12	S47397	Cam Holder Plate.....	1
13	S48851	Coutler Disc - 20" Dia	1
14	S48856	Carriage Bolt - 5/8 x 3 1/2 Lg	1
15	S49253	Flat Socket Cap Screw - 1/2 x 1 1/4 Lg.....	4
16	S49260	Depth Cam - Cast	1
17	*****	Disc Hub Depth Assembly - Left - S50465 - See page 3-16	1
18	S51157	Gauge Wheel - 3 Spoke.....	1
19	S51163	Scraper Compression Spring	1
20	S51170	Top End Sub-Assembly - Left.....	1
21	S51172	Dual Rib Packer Wheel	1
22	S51181	Spacer Bushing - .510 ID x 3/4 OD x 2 1/8 Lg.....	2
23	S51182	Washer - 21/32 ID x 1.0 OD x 10 Ga.....	1
24	S51307	Hex Bolt - 5/8 x 4 1/4 Lg.....	1
25	S51514	Carriage Bolt - 1/2 x 4 Lg	2
26	S53830	Scraper Pivot Bracket - Left.....	1
27	S53831	Carbide Scraper - Left.....	1
28	S53835	Rear Seed Boot - Left	1
29	S55028	Machine Washer - 5/8 ID x 1 OD x 18 Ga.....	6
30	W-476	Flat Washer - 3/4	1
31	W-503	Hex Bolt - 5/8 x 3 1/2 Lg.....	1
32	S39649	U-Bolt - 5/8 x 4 x 7 3/4 Lg	2
	S53545	Hex Bolt - 5/8 x 8 1/2 Lg - used on wing truss mounts	AsReq
33	S48631	Hose Holder	1
34	S56564	Trash Guard - Right.....	1
35	S56071	SPACER BUSHING - 0.635 ID x 7/8 OD x 1 3/4 Lg	1
36	W-526	Lockwasher - 5/8	1
	S46501	Rear Scraper Kit Left - Contains items# (3, 4, 7, 11, 19, 24, 26, 27 & 31)	
	S56693	KIT: SCRAPER - LEFT- RAZR - Contains items# (3, 4, 27, 28 & 34)	
	S56694	KIT: SCRAPER BUSHING - RAZR - Contains items# (35 & 36) For customers with trash plugging concerns. Bushing replaces the spring (S51163) and bushing (S47395) combo. This prevents the scraper from pulling away from the disc blade in tough trash conditions.	
		Note: The Right openers (S51185) mount to the left side on the machine and the Left openers (S51190) mount to the right side on the machine.	

Disc Opener - Left 2016 to Present



Disc Opener - Left - 2016 to Present

Item	Part No.	Description	Qty
1	AHH-96	Bushing - .627/.632 ID x 1 OD x 3 Lg	1
2	C-508	Hex Bolt - 5/8 x 6 1/2 Lg.....	1
3	C-3016	Hex Bolt - 5/8 x 3 Lg.....	1
4	D-5259	Carriage Bolt - 5/16 x 3/4 Lg	2
5	D-5267	Carriage Bolt - 1/2 x 1 3/4 Lg	4
6	D-5278	Flange Lock Nut - 5/16.....	2
7	N31016	Wing Nut - 5/16	1
8	S-1197	Locknut - 5/8 Unitorque.....	11
9	S39649	U-Bolt - 5/8 x 4 x 7 3/4 Lg	2
10	S47110	Hex Nut - 1/2 Center Lock.....	10
11	S48631	Hydraulic Hose Holder	1
12	S48851	Coutler Disc - 20" Dia	1
13	S48856	Carriage Bolt - 5/8 x 3 1/2 Lg	3
14	S49253	Flat Socket Cap Screw - 1/2 x 1 1/4 Lg.....	4
15	S51157	Gauge Wheel - 3 Spoke.....	1
16	S51172	Dual Rib Packer Wheel	1
17	S51182	Washer - 21/32 ID x 1.0 OD x 10 Ga	1
18	S51307	Hex Bolt - 5/8 x 4-1/4 Lg	1
19	S51466	Carriage Bolt - 5/16 x 2 Lg	1
20	S55028	Washer - 5/8 ID x 1 OD x 18Ga	6
21	S55965	Left Row Unit (Contains Items# 1, 2, 3, 5, 8, 10, 12, 13, 14, 17, 18, 20, 22, 24 & 29)	1
22	S56059	Spacer Bushing - .635 ID x 7/8 OD x 1 Lg.....	1
23	S56075	Trash Shield - Optional	1
24	S56086	Disc Hub Depth Assembly - Left - S56086 - See Page 3-27.....	1
25	S56668	Carbide Scraper - Left.....	1
25A	S62053	NH3 Scraper Carbide - Left	
26	S56695	Tall Scraper Kit - Left (Contains Items# 4, 6, 7, 19, 25, 27 & 28)	1
	S62098	NH3 Tall Scraper Kit - Left (Contains Items# 4, 6, 7, 19, 25A, 27 & 28)	
27	S56725	Hose Holder Clamp.....	1
28	S56727	Left Seed Boot	1
29	W-526	Lockwasher - 5/8.....	1
30	S58014	Seed Boot Plug.....	1
31	W-522	Lockwasher - 5/16.....	1

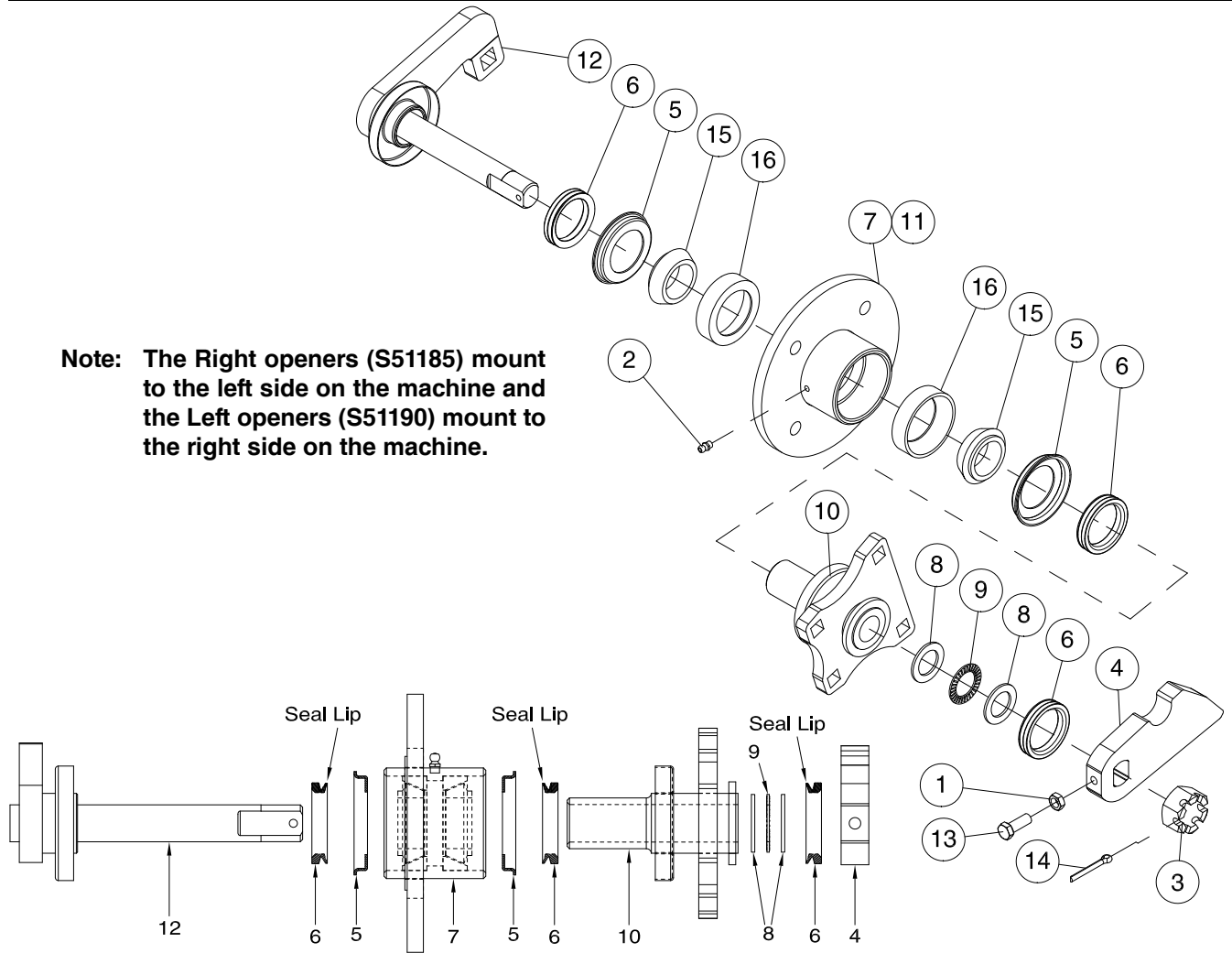
Disc Hub Assembly Right - S50200 - Prior to 2016

Note: The Right openers (S51185) mount to the left side on the machine and the Left openers (S51190) mount to the right side on the machine.



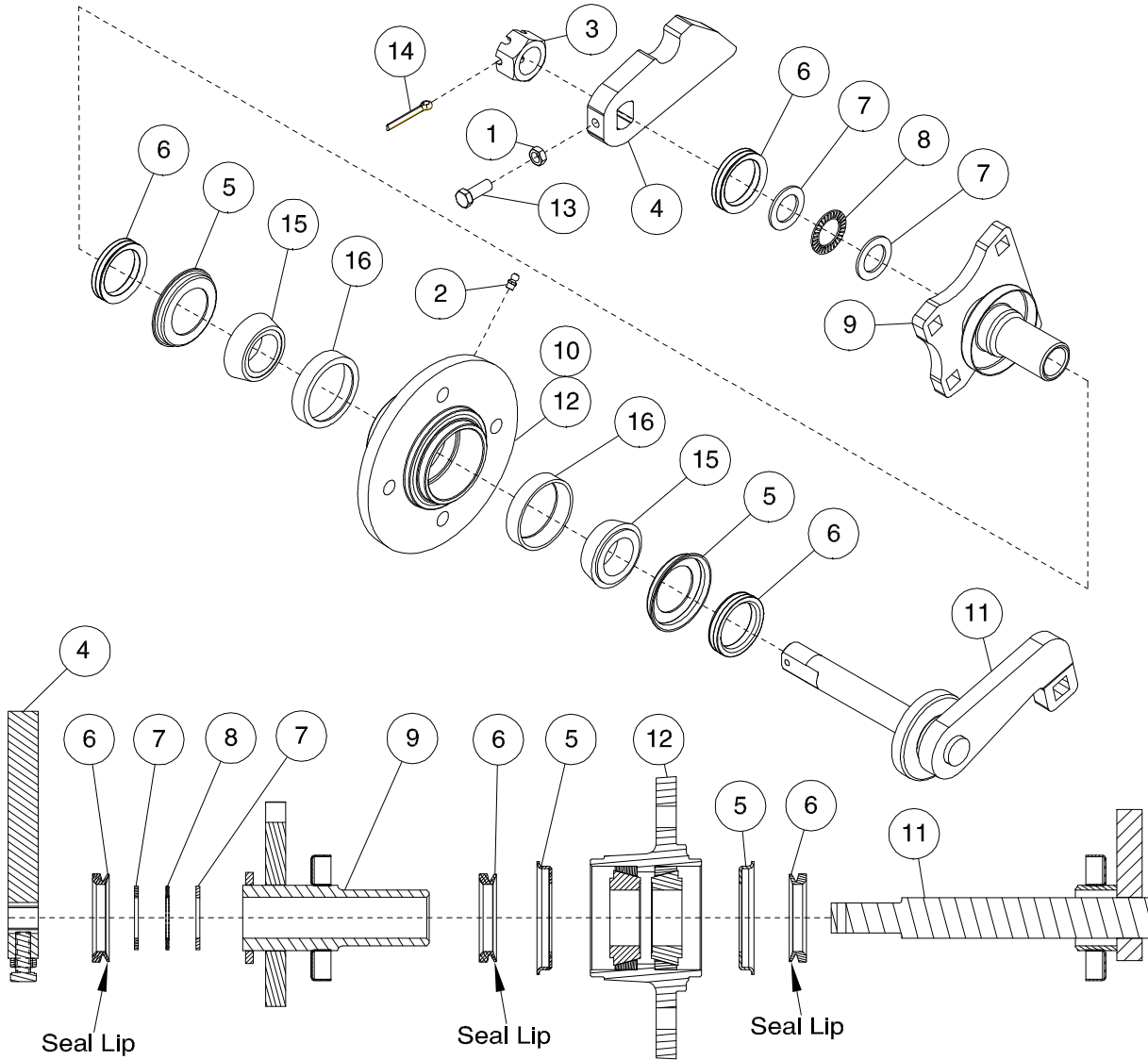
Item	Part No.	Description	Qty
1	S-748	Hex Jam Nut - 3/8	1
2	S-752	Grease Fitting - 1/4 Straight	1
3	S-1311	Hex Slotted Nut - 1-14 UNS.....	1
4	S47985	Gauge Wheel Spindle - Right (S48828 - V-Seal Retainer).....	1
5	S48192	Cam Stop Plate	1
6	S48827	Seal Counterface	2
7	S48829	V-Seal - 1 5/8 Shaft.....	3
8	S56607	4-Bolt Hub - Cast.....	1
9	S48863	Thrust Washer.....	2
10	S48864	Thrust Bearing - 1 ID x 1 9/16 OD	1
11	S48865	Disc Spindle	1
12	S50207	Disc Hub (Includes Items 6, 8, 15, 16)	1
13	W-475	Hex Bolt - 3/8 x 1 Lg.....	1
14	W-1416	Cotter Pin - 3/16 x 2 Lg	1
15	W-1474	Outer Wheel Bearing - LM48548	2
16	W-1537	Outer Bearing Cup - LM48510	2
	S46503	Seal Kit - RAZR Disc Hub - Includes items 6 & 7	
	S60003	Kit: Field Gauge Wheel Spindle - Right (Kit allows the hubs to be overhauled if they run out of adjustment)	

Disc Hub Assembly Left - S50465 - Prior to 2016



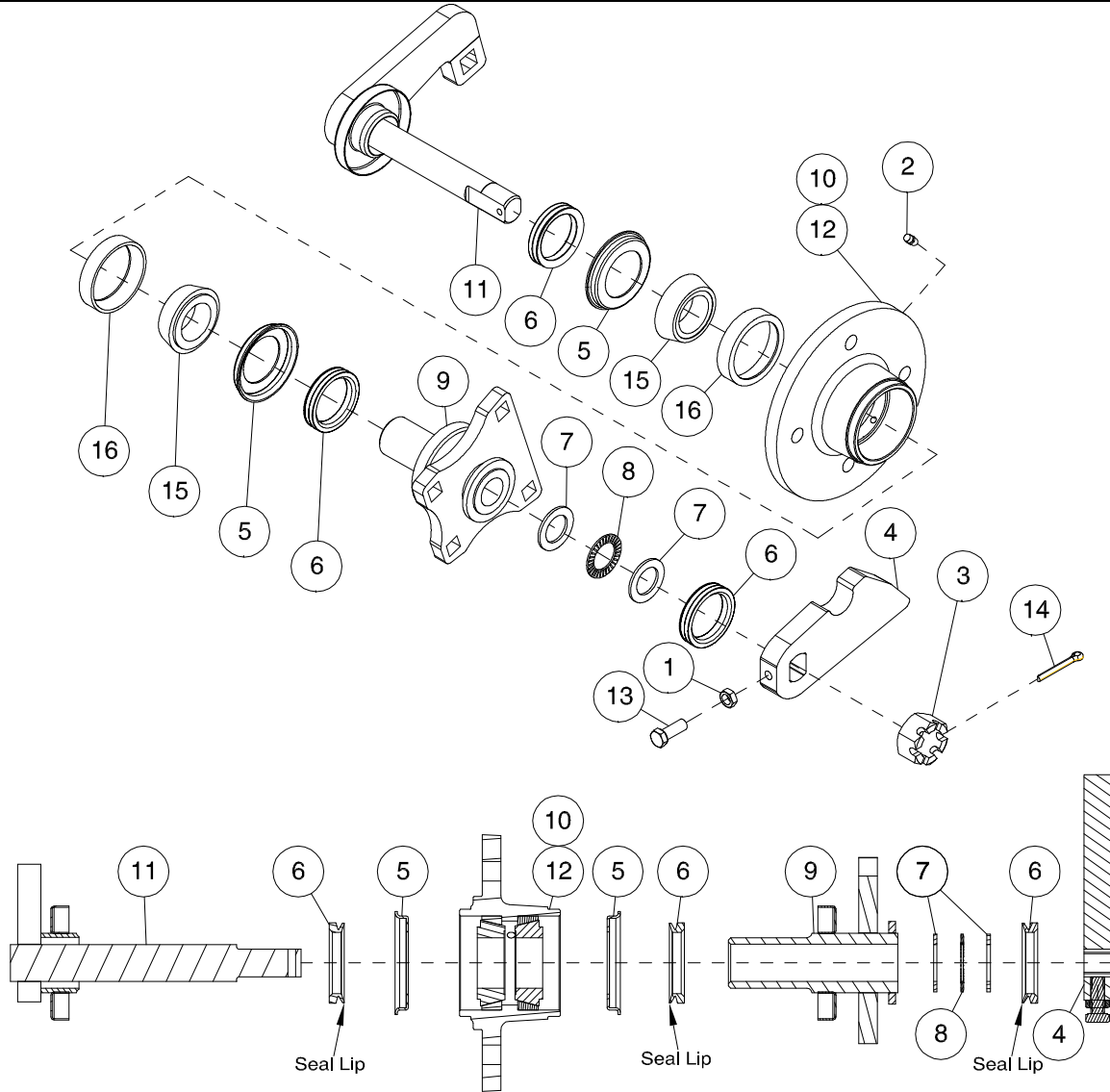
Item	Part No.	Description	Qty
1	S-748	Hex Jam Nut - 3/8	1
2	S-752	Str. Grease Fitting - 1/4	1
3	S-1311	Hex Slotted Nut - 1-14 Uns.....	1
4	S48192	Cam Stop Plate.....	1
5	S48827	V-Seal Counterface	2
6	S48829	V-Seal	3
7	S56607	4-Bolt Hub - Cast.....	1
8	S48863	Hardened Thrust Washer	2
9	S48864	Thrust Bearing - 1 ID x 1 9/16 OD	1
10	S48865	Disc Spindle	1
11	S50207	Disc Hub (Includes Items 5, 7, 15, 16).....	1
12	S50460	Gauge Wheel Spindle - Left (S48828 - V-Seal Retainer)	1
13	W-475	Hex Bolt - 3/8 x 1 Lg.....	1
14	W-1416	Cotter Pin - 3/16 x 2 Lg	1
15	W-1474	Outer Wheel Bearing - LM48548	2
16	W-1537	Outer Bearing Cup - LM48510	2
	S46503	Seal Kit - RAZR Disc Hub - Includes items 5 & 6	
	S60004	Kit: Field Gauge Wheel Spindle - Left (Kit allows the hubs to be overhauled if they run out of adjustment)	

Disc Hub Assembly Right - S56089 - 2016 to Present



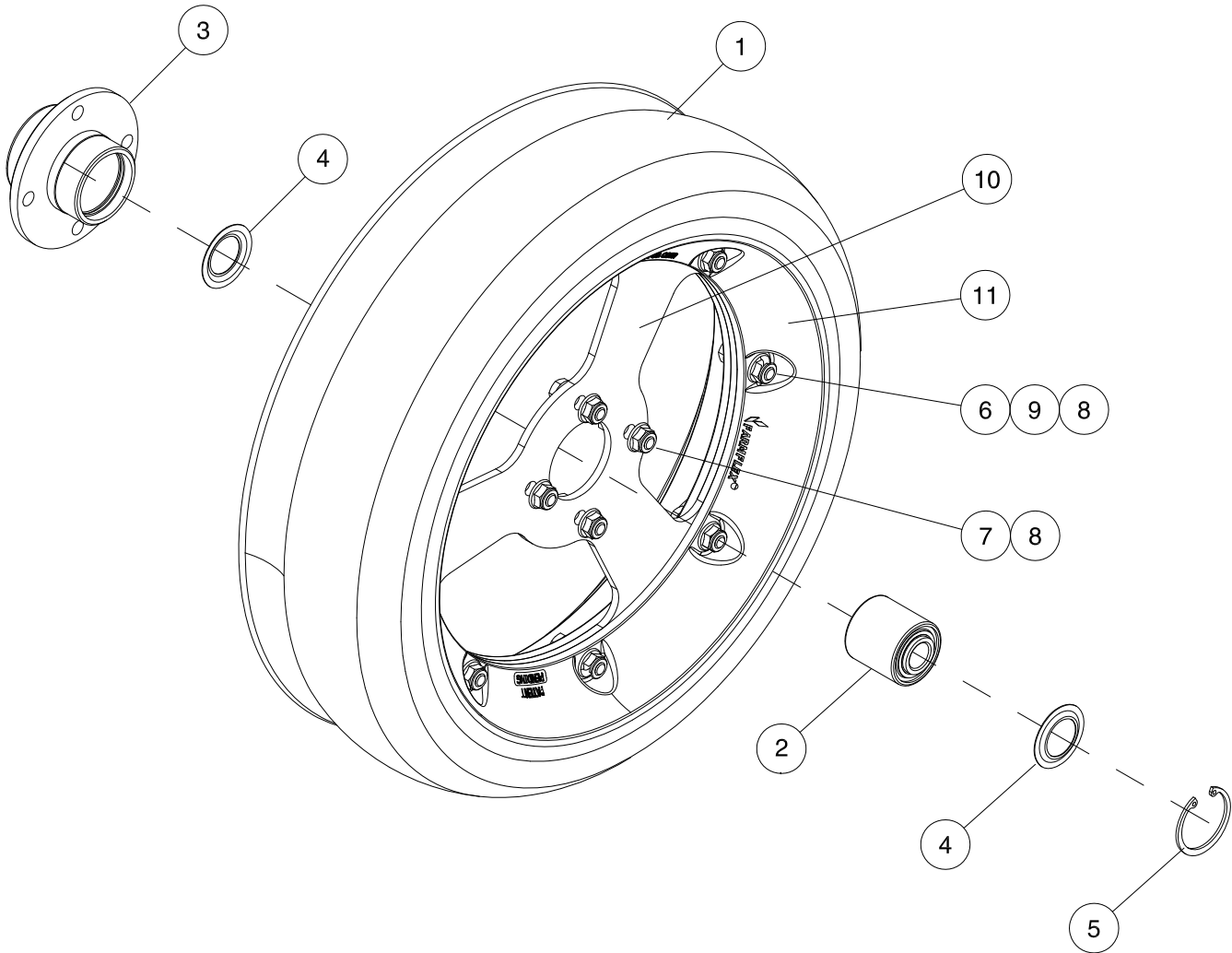
Item	Part No.	Description	Qty
1	S-748	Hex Jam Nut - 3/8	1
2	S-752	Grease Fitting - 1/4 Straight	1
3	S-1311	Hex Slotted Nut - 1-14 Uns.....	1
4	S48192	Cam Stop Plate	1
5	S48827	Seal Counterface	2
6	S48829	V-Seal 1 5/8 Shaft	3
7	S48863	Thrust Washer.....	2
8	S48864	Thrust Bearing - 1 ID x 1 9/16 OD.....	1
9	S48865	Disc Spindle.....	1
10	S50207	Disc Hub Assembly (Includes Items #5, 12, 15 & 16)	1
11	S56088	Gauge Wheel Spindle - Right (S48828 - V-Seal Retainer).....	1
12	S56607	4-Bolt Hub - Cast	1
13	W-475	Hex Bolt - 3/8 x 1 Lg.....	1
14	W-1416	Cotter Pin - 3/16 x 2 Lg	1
15	W-1474	Outer Wheel Bearing - LM48548	2
16	W-1537	Outer Bearing Cup - LM48510	2
	S46503	Seal Kit - RAZR Disc Hub - Includes items 5 & 6	
	S60003	Kit: Field Gauge Wheel Spindle - Right (Kit allows the hubs to be overhauled if they run out of adjustment)	

Disc Hub Assembly Left - S56086 - 2016 to Present



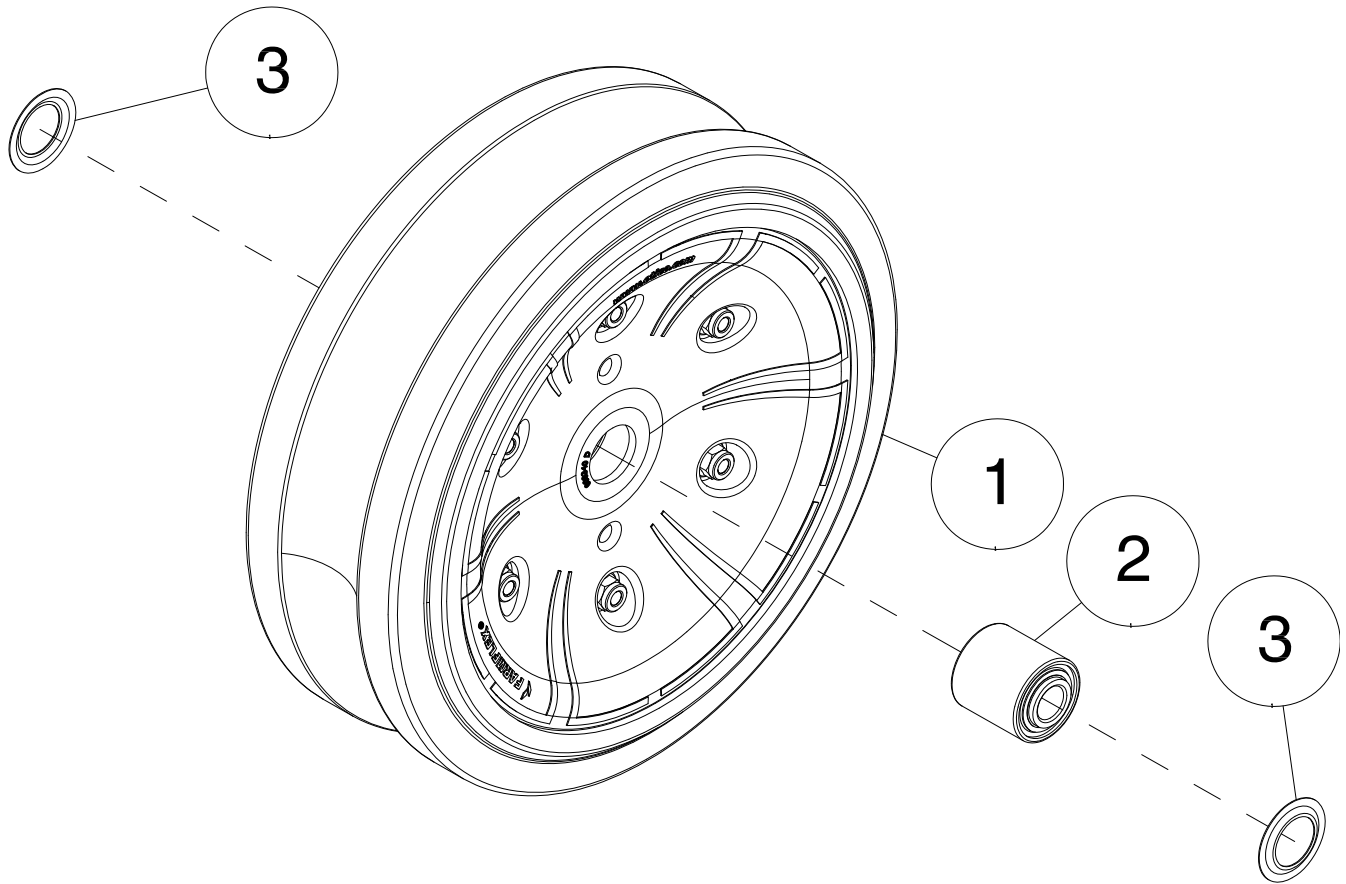
Item	Part No.	Description	Qty
1	S-748	Hex Jam Nut - 3/8	1
2	S-752	Grease Fitting - 1/4 Straight	1
3	S-1311	Hex Slotted Nut - 1-14 Uns.....	1
4	S48192	Cam Stop Plate	1
5	S48827	Seal Counterface	2
6	S48829	V-Seal 1 5/8 Shaft	3
7	S48863	Thrust Washer.....	2
8	S48864	Thrust Bearing - 1 ID x 1 9/16 OD.....	1
9	S48865	Disc Spindle	1
10	S50207	Disc Hub Assembly (Includes Items #5, 12, 15 & 16)	1
11	S56084	Gauge Wheel Spindle - Left (S48828 - V-Seal Retainer)	1
12	S56607	4-Bolt Hub - Cast	1
13	W-475	Hex Bolt - 3/8 x 1 Lg.....	1
14	W-1416	Cotter Pin - 3/16 x 2 Lg	1
15	W-1474	Outer Wheel Bearing - LM48548	2
16	W-1537	Outer Bearing Cup - LM48510	2
	S46503	Seal Kit - RAZR Disc Hub - Includes items 5 & 6	
	S60004	Kit: Field Gauge Wheel Spindle - Left (Kit allows the hubs to be overhauled if they run out of adjustment)	

Disc Opener Guage Wheel



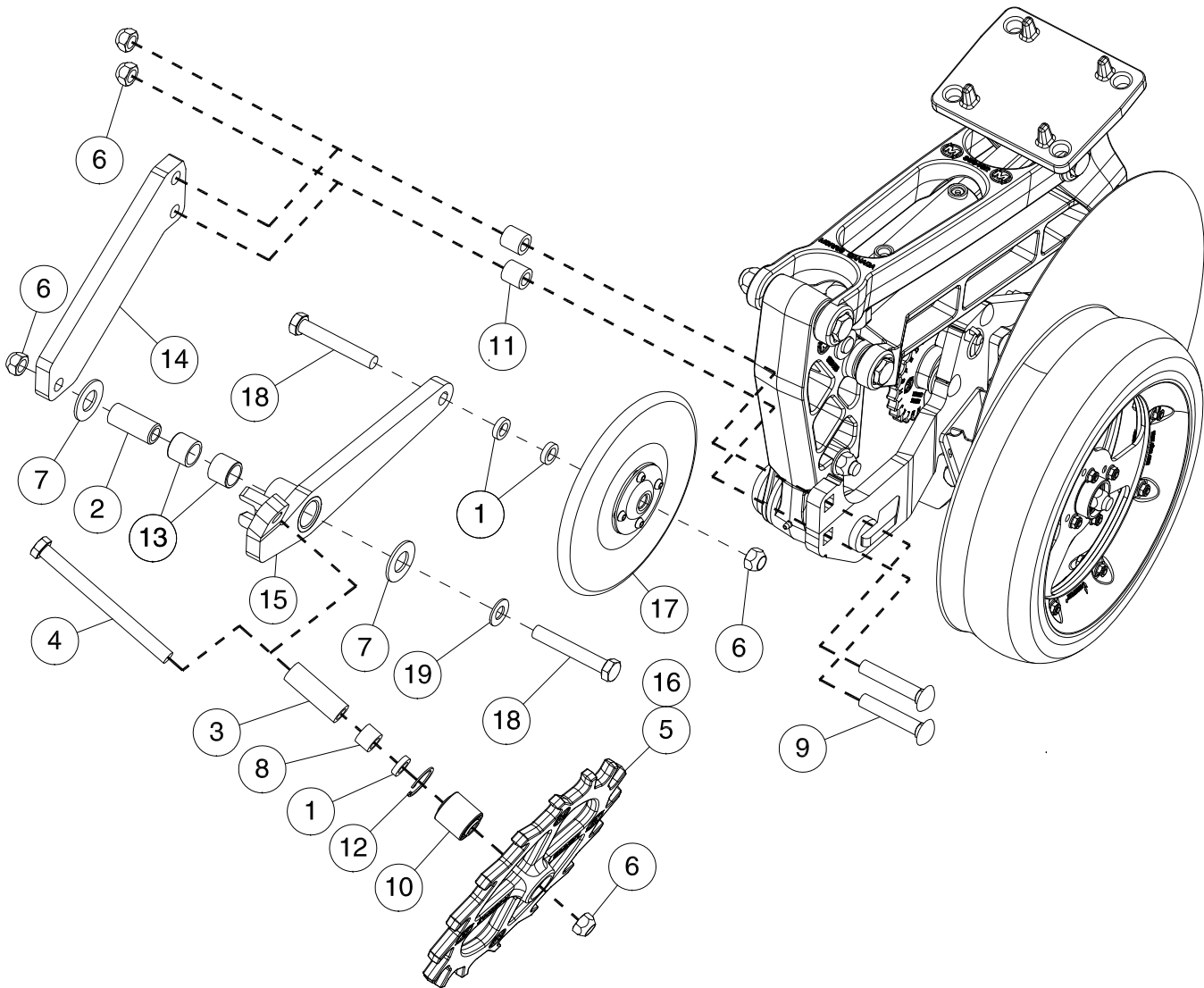
Item	Part No.	Description	Qty
1	S51205	Rubber Guage Tire - 4 1/2 x 16.....	1
2	S51206	Double Ball Bearing	1
3	S55300	Steel Hub	1
4	S51209	Washer - Bearing Cap.....	2
5	S55305	CIRCLIP - 40 x 1.75 DIN472	1
6	S55313	Hex Bolt - M8 x 30 x 8.8.....	8
7	S55314	Hex Bolt - M8 x 25 x 8.8.....	4
8	S55310	Hex Nut - M8 x 8.8 Prevailing Torque.....	12
9	S55315	Flat Washer - M8 Sandard	8
10	S55316	Rim Plate	1
11	S55317	Split Rim Flange.....	2
	S51157	3 Spoke Guage Wheel - 4 1/2 x 16 (Includes all above items)	

Disc Opener Packer Wheel



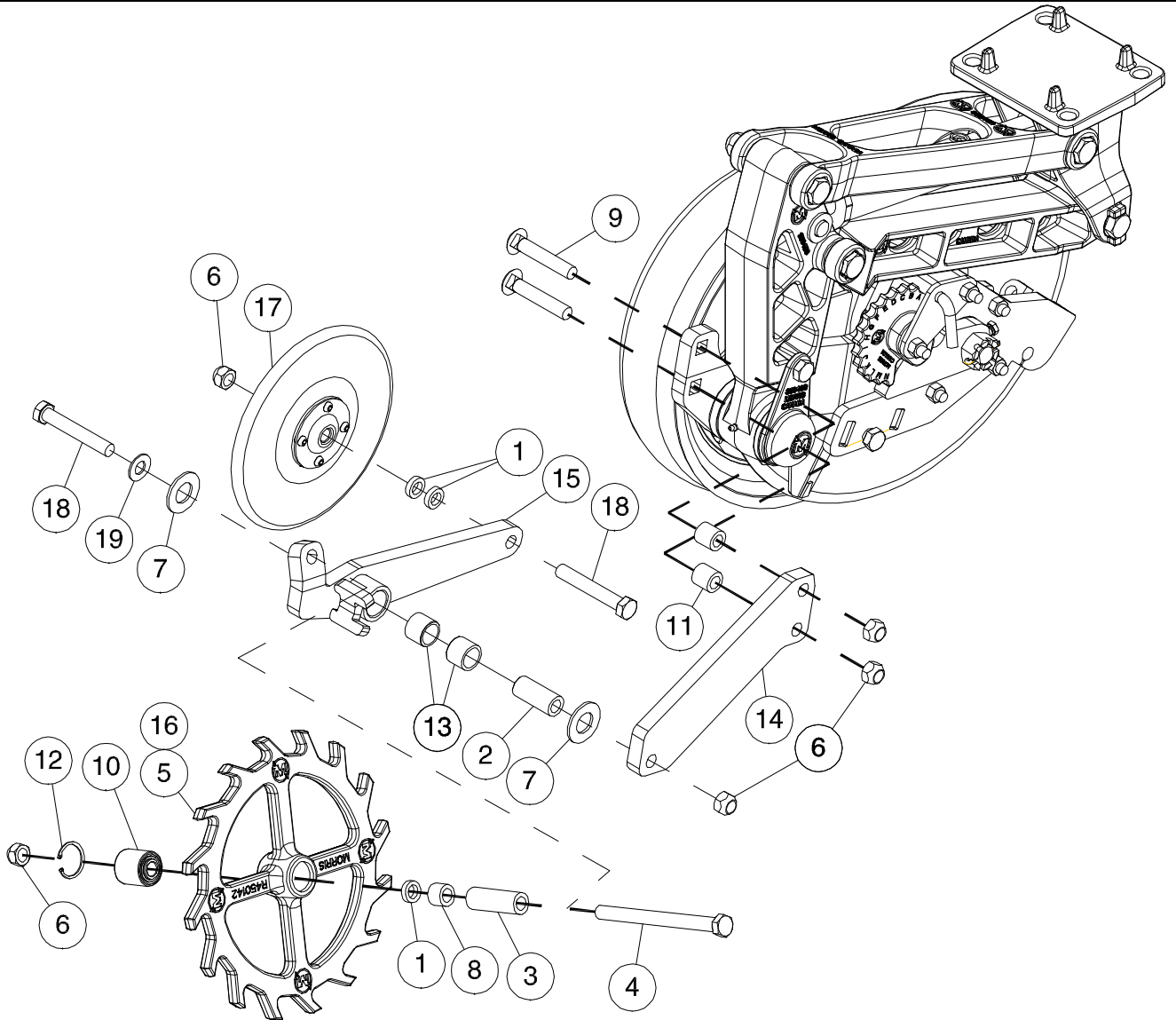
Item	Part No.	Description	Qty
1	S51172	Dual Rib Packer Wheel	1
2	S51206	Double Ball Bearing	2
3	S51209	Washer - Bearing Cup.....	2

Disc Opener Crumbler Wheel - Left



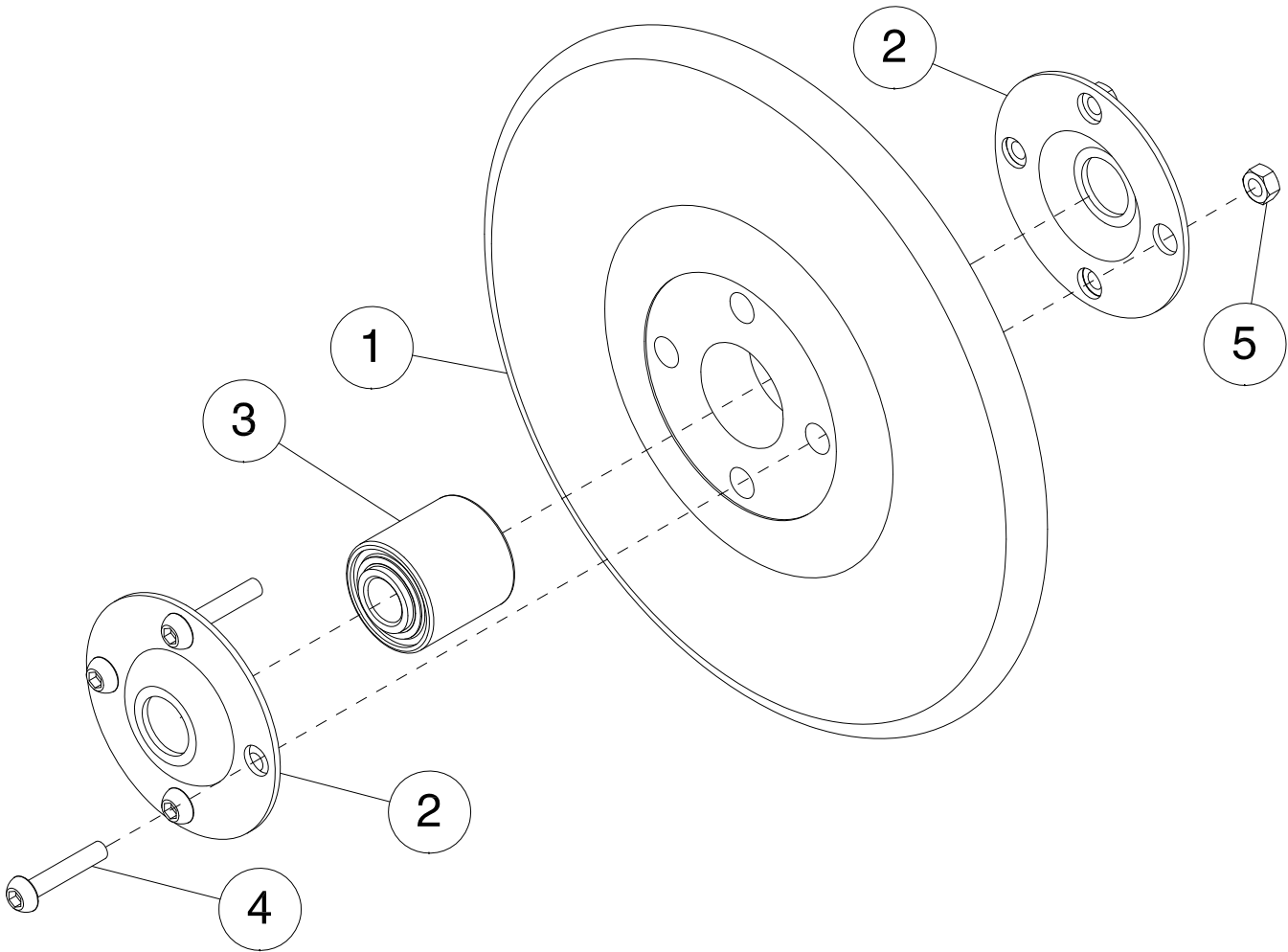
Item	Part No.	Description	Qty
1	A14417	Washer - 5/8 ID x 1 OD x 1/4 Thick.....	3
2	A47388	Bushing - 0.627 ID x 1 OD x 2 5/16 Lg	1
3	AHH-96	Bushing - 0.627 ID x 1 OD x 3 Lg	1
4	P1C10120	Hex Bolt - 5/8 x 7 1/2 Lg.....	1
5	R450142	Spiked Closing Wheel Casting	1
6	S-1197	Locknut - 5/8 Unitorque	5
7	S42675	Washer - 1 1/32 ID x 2 OD x 1/8 Thick Nylaton GS.....	2
8	S47395	Bushing - 0.627 ID x 1 OD x 3/4 Lg	1
9	S48856	Carriage Bolt - 5/8 x 3-1/2 Lg.....	2
10	S51206	Bearing - Double Ball - 40mm Koyo.....	1
11	S51312	Bushing - 0.632 ID x 1 OD x 1 Lg	2
12	S55305	Circlip - 40 x 1.75 Din 472	1
13	S59806	Q2 Bushing - 1 ID x 1 1/4 OD x 1 Lg Nominal size.....	2
14	S59813	Packer Arm.....	1
15	S62226	Crumbler Arm - Left.....	1
16	S62242	Crumbler Wheel Assembly (Includes Items 5, 10, 12).....	1
17	S62247	Seed Firming Wheel.....	1
18	W-504	Hex Bolt - 5/8 x 4 Lg.....	2
19	W-629	Washer - 21/32 ID x 1 5/16 OD x 13 Ga.....	1

Disc Opener Crumbler Wheel - Right



Item	Part No.	Description	Qty
1	A14417	Washer - 5/8 ID x 1 OD x 1/4 Thick.....	3
2	A47388	Bushing - 0.627 ID x 1 OD x 2 5/16 Lg	1
3	AHH-96	Bushing - 0.627 ID x 1 OD x 3 Lg	1
4	P1C10120	Hex Bolt - 5/8 x 7 1/2 Lg.....	1
5	R450142	Spiked Closing Wheel Casting	1
6	S-1197	Locknut - 5/8 Unitorque.....	5
7	S42675	Washer - 1 1/32 ID x 2 OD x 1/8 Thick Nylon GS.....	2
8	S47395	Bushing - 0.627 ID x 1 OD x 3/4 Lg	1
9	S48856	Carriage Bolt - 5/8 x 3 1/2 Lg.....	2
10	S51206	Double Ball Bearing - 40mm Koyo.....	1
11	S51312	Bushing - 0.632ID x 1 OD x 1 Lg	2
12	S55305	Circlip - 40 x 1.75 Din 472	1
13	S59806	Q2 Bushing - 1 ID x 1 1/4 OD x 1 Lg Nominal Size	2
14	S59813	Packer Arm.....	1
15	S59816	Crumbler Arm - Right	1
16	S62242	Crumbler Wheel Assembly (Includes Items 5, 10, 12).....	1
17	S62247	Seed Firming Wheel.....	1
18	W-504	Hex Bolt - 5/8 x 4 Lg.....	2
19	W-629	Washer - 21/32 ID x 1-5/16 OD x 13 Ga.....	1

Disc Opener Crumbler Firming Wheel



Item	Part No.	Description	Qty
1	A62243	Firming Wheel	1
2	A62248	Hub Plate	2
3	S51206	Double Ball Bearing - 40MM Koyo	1
4	*****	Allen Bolt - 1/4 Dia x 1 3/8 UL.....	4
5	W-512	Hex Nut - 1/4	4
	S62247	Firming Wheel Assembly - Contains all Items above	1

Section 4: Hydraulics

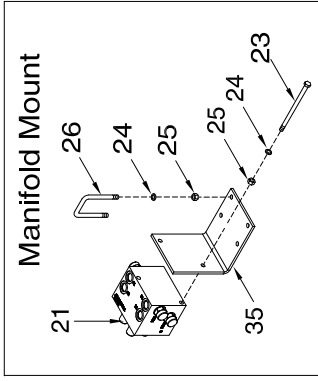
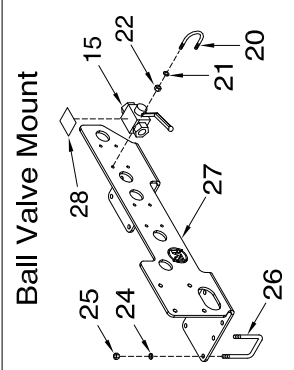
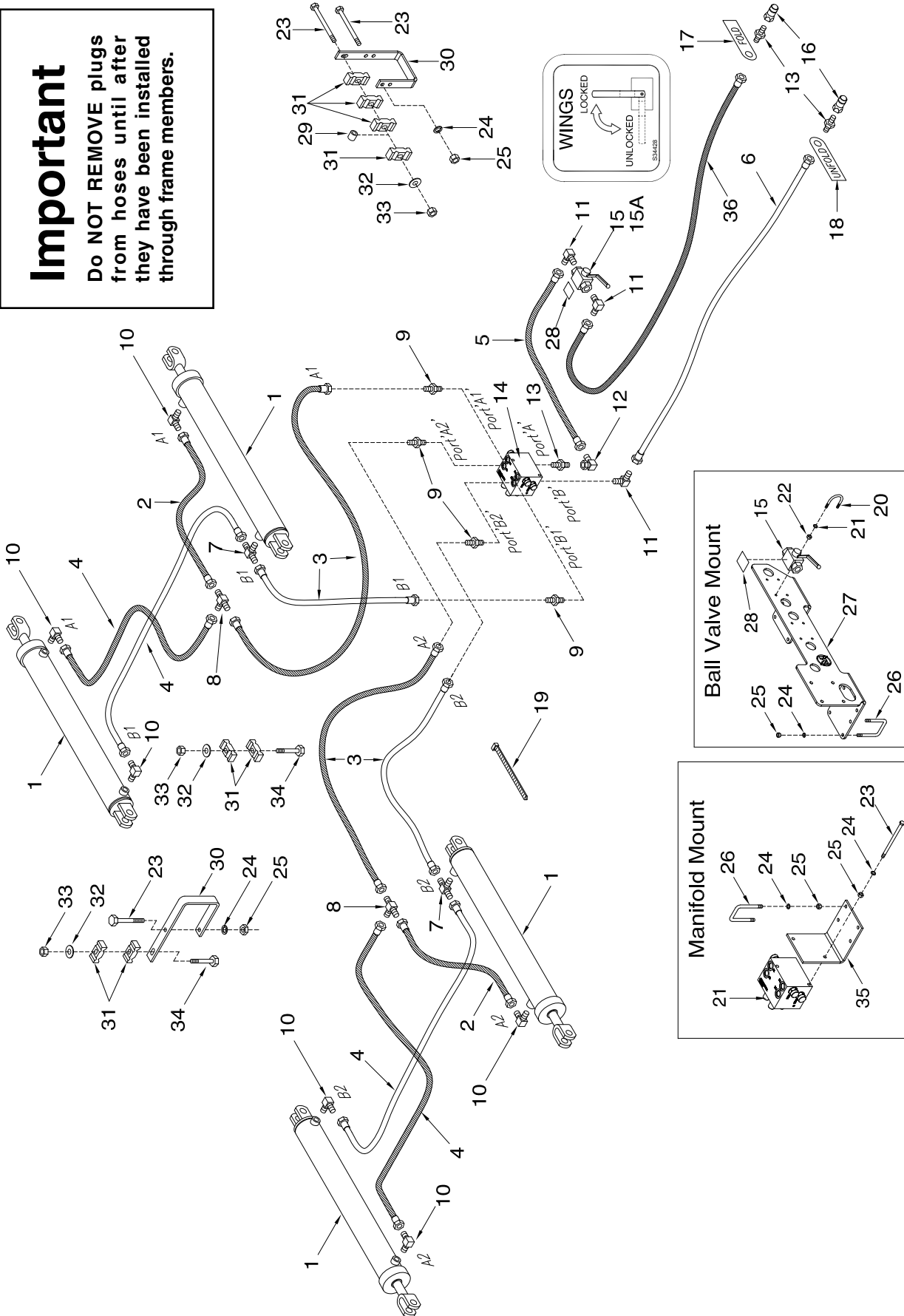
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Wing Lift Hydraulics 40 Ft Model

Important

Do NOT REMOVE plugs from hoses until after they have been installed through frame members.



Wing Lift Hydraulics - 40 Ft Model

Item	Part No.	Description	Qty
1	C39030	Cylinder - 4 1/2 x 36.....	4
2	C14835	Hyd. Hose - 1/4 x 36 - 9/16-18 FJIC	2
3	C15349	Hyd. Hose - 1/4 x 48 - 9/16-18 FJIC	4
4	S39503	Hyd. Hose - 1/4 x 132 - 9/16-18 FJIC	4
5	N19345	Hyd. Hose - 1/2 x 132 - 7/8-14 FJIC	1
6	S39539	Hyd. Hose - 1/2 x 330 - 7/8-14 FJIC	2
7	N31908	Tee - (2) 9/16-18 MJIC x (1) 9/16-18 MORB.....	2
8	C-4393	Tee - (3) 9/16-18 MJIC.....	2
9	C15348	Male Connector - 3/4-16 ORB x 9/16-18 JIC.....	4
10	N16143	Elbow 90 deg - 9/16-18 JIC x 9/16-18 ORB	6
11	C24585	Elbow 90 deg - 7/8-14 MJIC x 3/4-16 ORB	3
12	K-5806	Elbow 90 deg - 7/8-14 FJIC x 7/8-14 MJIC	1
13	C14840	Reducer - 3/4-16 MORB x 7/8-14 MJIC	3
14	C53849	Manifold - Pressure Compensated Flow Control	1
15	N42880	Valve - 2 Way Ball.....	1
15A	N42881	Handle - Valve	1
16	N34443	Male Tip - 3/4-16 ORB.....	2
17	S29960	Tag - Hose ID - Wing Lift - FOLD.....	1
18	S29961	Tag - Hose ID - Wing Lift - UNFOLD	1
19	S13336	Nylon Tie Strap - 1/2 x 28 1/4.....	12
19A	D-4838	Nylon Tie Strap - 1/2 x 14 1/2.....	8
19B	D-4951	Nylon Tie Strap - 1/2 x 7 3/8.....	70
20	N34319	U-Bolt - 1/4 x 1 1/2 x 1 3/4 Lg	2
21	W-521	Lockwasher - 1/4.....	4
22	W-512	Hex Nut - 1/4	4
23	C-3918	Hex Bolt - 3/8 x 5 Lg.....	12
24	W-523	Lockwasher - 3/8.....	18
25	W-514	Hex Nut - 3/8	18
26	D12714	U-Bolt - 3/8 x 2 x 2 3/4 Lg	3
27	S47642	Multi-Valve Mounting Plate.....	1
28	S34428	Decal - Wings Lock	1
29	N16257	Bushing - Spacer	3
30	C14411	Oil Line Bracket.....	7
31	C-4698	Oil Line Clamp	28
32	W-538	Flatwasher - 3/8	15
33	M-3388	Locknut - 3/8	15
34	W-480	Hex Bolt - 3/8 x 2 1/2.....	8
35	S39565	Mounting Bracket - Valve.....	1

Important

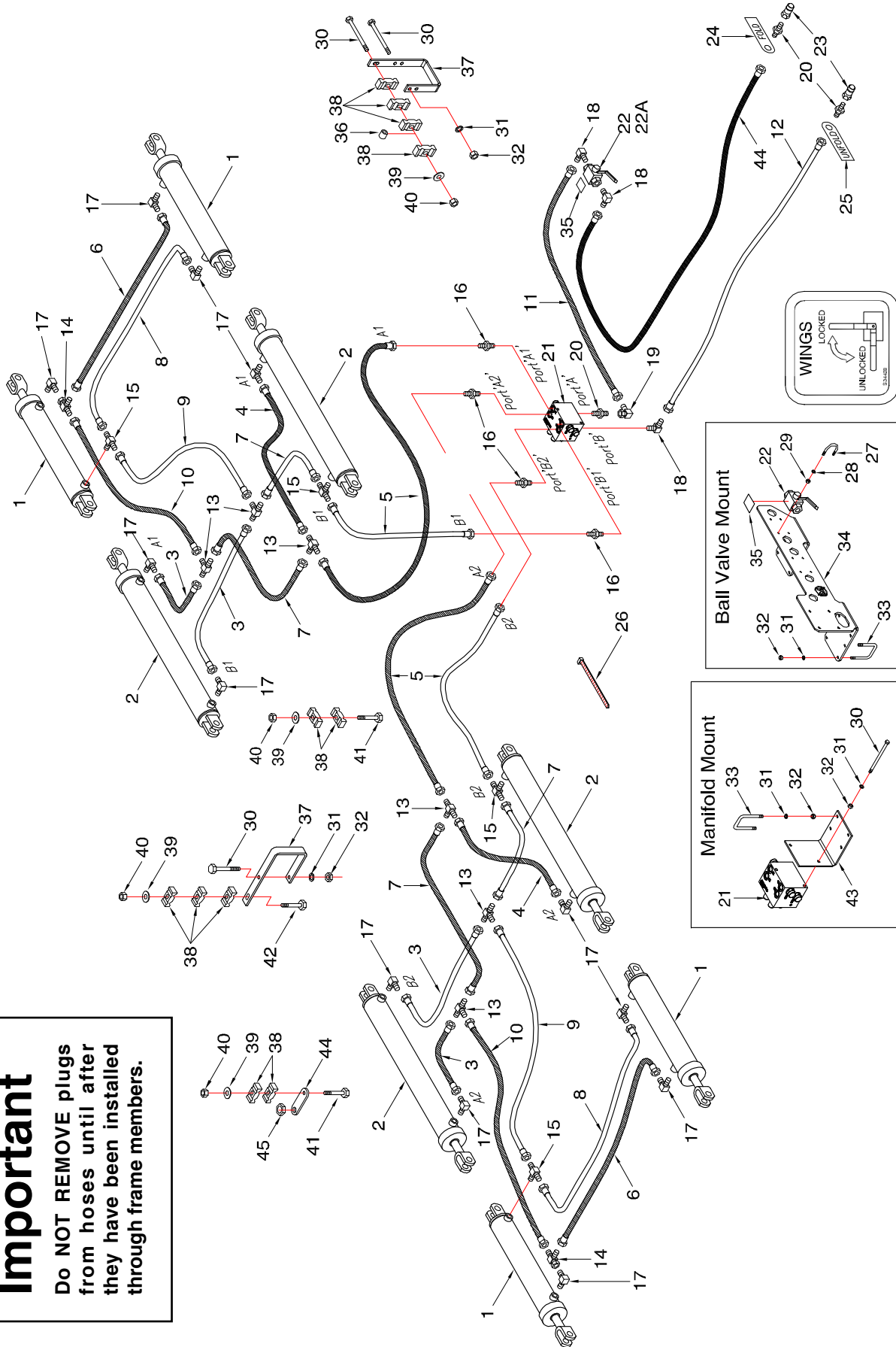
The following safety procedure must be followed to eliminate possible damage to the machine when initially filling wing lift cylinders.

Operate hydraulic on tractor until wings *"just start to lift"*. Then reverse hydraulic on tractor to fill opposite end of cylinders and remove air from the hydraulic system.

Note: This applies to wing lift cylinders only.

Wing Lift Hydraulics 50 Ft and 60 Ft Models

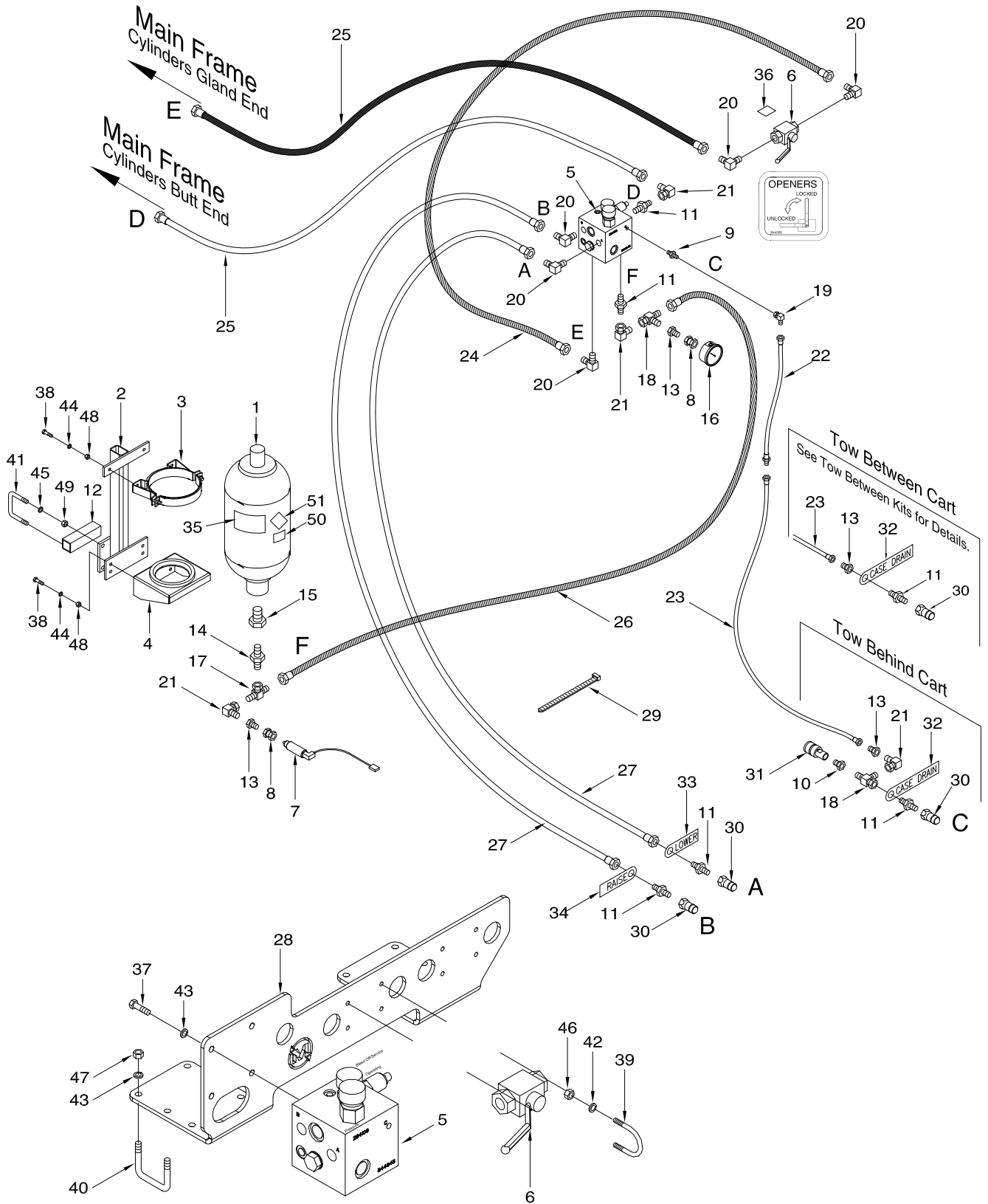
Important
Do NOT REMOVE plugs from hoses until after they have been installed through frame members.



Wing Lift Hydraulics - 50 Ft and 60 Ft Models

Item	Part No.	Description	Qty
1	C34442 C47594	Cylinder - 4 1/2 x 30 - Prior to 2015 Production..... Cylinder - 5 x 30 - 2015 Production to present	4 4
2	C39490 C53250	Cylinder - 5 x 36 - Prior to 2015 Production..... Cylinder - 5 1/2 x 36 - 2015 Production to present	4 4
3	C-4552	Hyd. Hose - 1/4 x 24 - 9/16-18 FJIC x 9/16-18 FJIC Ends	4
4	C14835	Hyd. Hose - 1/4 x 36 - 9/16-18 FJIC x 9/16-18 FJIC Ends	2
5	C16652	Hyd. Hose - 1/4 x 60 - 9/16-18 FJIC x 9/16-18 FJIC Ends	4
6	H18267	Hyd. Hose - 1/4 x 96 - 9/16-18 FJIC x 9/16-18 FJIC Ends	2
7	W21962	Hyd. Hose - 1/4 x 108 - 9/16-18 FJIC x 9/16-18 FJIC Ends.....	4
8	S39503	Hyd. Hose - 1/4 x 132 - 9/16-18 FJIC x 9/16-18 FJIC Ends.....	2
9	F14658	Hyd. Hose - 1/4 x 150 - 9/16-18 FJIC x 9/16-18 FJIC Ends.....	2
10	S13317	Hyd. Hose - 1/4 x 180 - 9/16-18 FJIC x 9/16-18 FJIC Ends.....	2
11	N19345	Hyd. Hose - 1/2 x 132 - 7/8-14 FJIC Ends	1
12	S39537	Hyd. Hose - 1/2 x 372 - 7/8-14 FJIC Ends	2
13	C-4393	Tee - (3) 9/16-18 MJIC.....	6
14	C-4403	Swivel Tee - (2) 9/16-18 MJIC x (1) 9/16-18 FJIC (MMF)	2
15	N31908	Swivel Tee - (2) 9/16-18 MJIC x (1) 9/16-18 MORB.....	4
16	C15348	Male Connector - 3/4-16 ORB x 9/16-18 JIC.....	4
17	N16143	Elbow 90 deg - 9/16-18 JIC x 9/16-18 ORB	12
18	C24585	Elbow 90 deg - 7/8-14 MJIC x 3/4-16 ORB	1
19	K-5806	Elbow 90 deg - 7/8-14 FJIC x 7/8-14 MJIC	1
20	C14840	Reducer - 3/4-16 MORB x 7/8-14 MJIC	4
21	C53849	Manifold - Pressure Compensated Flow Control	1
22	N42880	Valve - 2 Way Ball.....	1
22A	N42881	Handle - Valve	1
23	N34443	Male Pioneer Tip - 3/4-16 ORB	2
24	S29960	Tag - Hose ID - Wing Lift - FOLD.....	1
25	S29961	Tag - Hose ID - Wing Lift - UNFOLD	1
26	D-4951	Nylon Tie Strap - 1/2 x 7 3/8.....	80
27	N34319	U-Bolt - 1/4 x 1 1/2 x 1 3/4 Lg	2
28	W-521	Lockwasher - 1/4.....	4
29	W-512	Hex Nut - 1/4	4
30	C-3918	Hex Bolt - 3/8 x 5 Lg.....	14
31	W-523	Lockwasher - 3/8.....	18
32	W-514	Hex Nut - 3/8	18
33	D12714	U-Bolt - 3/8 x 2 x 2 3/4 Lg	3
34	S47642	Multi-Valve Mounting Plate.....	1
35	S34428	Decal - Wings Lock	1
36	N16257	Bushing - Spacer	4
37	C14411	Oil Line Bracket.....	8
38	C-4698	Oil Line Clamp	44
39	W-538	Flatwasher - 3/8	20
40	M-3388	Locknut - 3/8	20
41	W-480	Hex Bolt - 3/8 x 2 1/2.....	8
42	C-1550	Hex Bolt - 3/8 x 4.....	4
43	S39565	Mounting Bracket - Valve.....	1
44	S53010	Plate - Hose Holder.....	6
45	C-1472	Jam Nut - 5/8	6
 Prior to 2015 production year - Wing Lift Cylinders			
- 50 ft Prior to Serial # RD50140510			
- 60 ft Prior to Serial # RD60140619			
2015 production year to present - Wing Lift Cylinders			
- 50 ft Serial numbers RD50140505, RD50140506, RD50140508, RD50140507, RD50140510 and all from Serial # RD50150515 and newer.			
- 60 ft Serial number RD60140615 and all from Serial # RD60150631 and newer.			

Opener Hydraulics Accumulator and Hitch Hydraulics - Prior to 2016

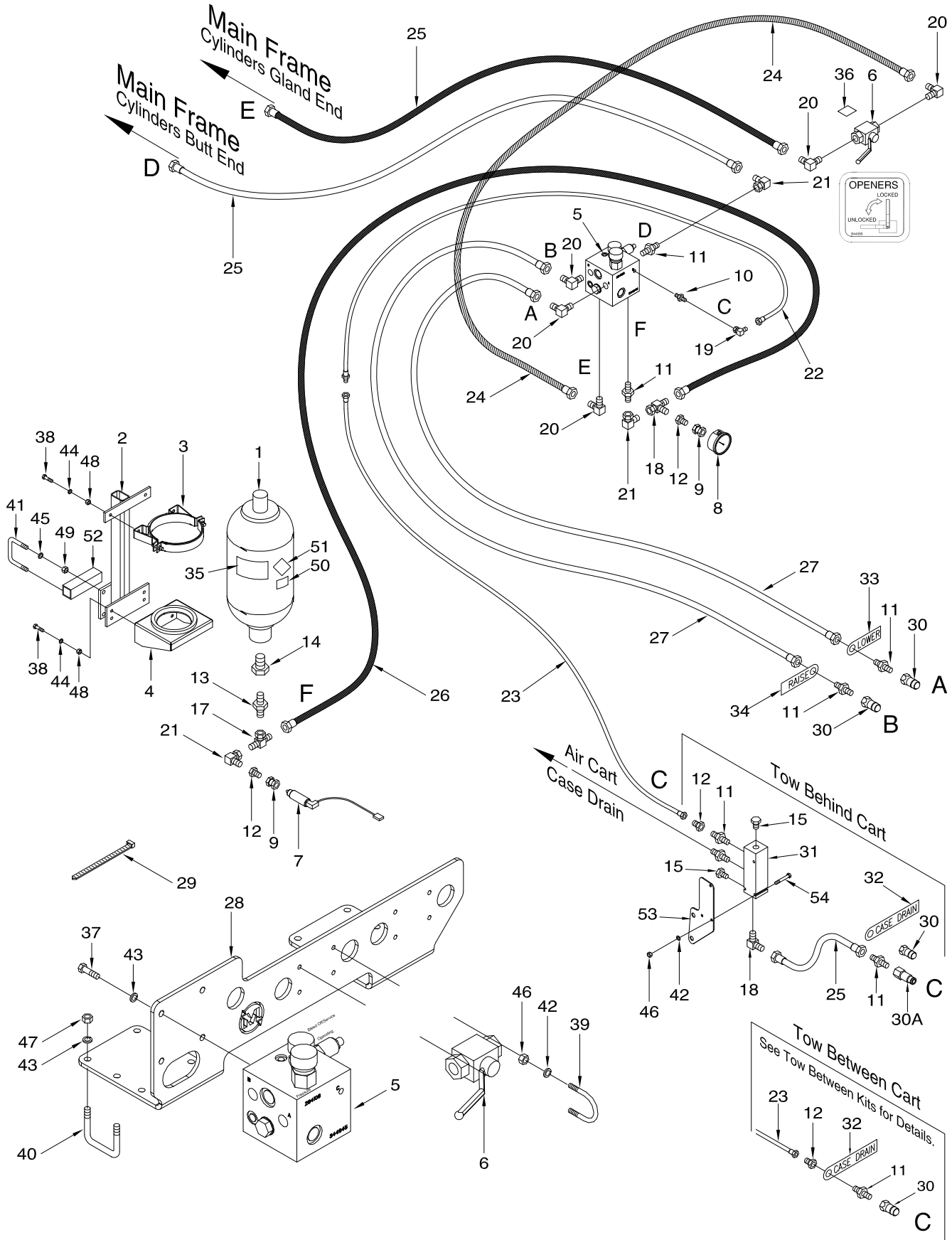


Note: Case Drain Tee with Quick Coupler must be moved to the front of a Tow Between Air Cart.

Opener Hydraulics - Accumulator and Hitch Hydraulics - Prior to 2016

Item	Part No.	Description	Qty
1	S47095	5 Gallon Hydraulic Accumulator - Global Certified	1
2	S42320	Mounting Bracket - Accumulator	1
3	C42313	Clamp - Accumulator.....	1
4	C42314	Base - Accumulator.....	1
5	S44945	Manifold Block - Down Pressure	1
6	N42880	Valve - 2 Way Ball.....	1
6A	N42881	Handle - Valve	1
7	S49545	Pressure Transducer	1
8	S42998	Connector - 1/4 FNPT x 9/16-18 FJIC	2
9	S34115	Connector - 9/16-18 JIC x 7/16-20 MORB	1
10	N34620	Connector - Swivel - 7/8-14 MORB x 7/8-14 FJIC	1
11	C14840	Connector - 3/4-16 MORB x 7/8-14 MJIC	5
12	S44929	Tube - Accumulator Mount - 2 x 2 x 6 1/2 Lg.....	1
13	F10384	Reducer - 9/16-18 MJIC x 7/8-14 FJIC	3
14	C42312	Reducer - 7/8-14 MJIC x 1 5/16-14 MORB	1
15	C42311	Reducer - 1 7/8-14 MORB x 1 5/16-14 FORB.....	1
16	S48845	Pressure Gauge - 2 1/2 Dia with 1/4NPT.....	1
17	F24559	Tee - (1) 7/8-14 FJIC x (2) 7/8-14 MJIC (MFM).....	1
18	H18746	Tee - Swivel - (2) 7/8-14 MJIC x (1) 7/8-14 FJIC (MMF)	2
19	S29967	90 Elbow - 9/16-18 FJIC x 9/16-18 MJIC	1
20	C24585	90 Elbow - 7/8-14 MJIC x 3/4-16 MORB.....	6
21	K-5806	90 Elbow - Swivel - 7/8-14 MJIC x 7/8-14 FJIC	4
22	W21963	Hyd Hose - 1/4 x 96 Lg w/9/16-18 MJIC x 9/16-18 FJIC.....	1
23	C26341	Hyd Hose - 1/4 x 282 Lg w/9/16-18 FJIC.....	1
24	C-4468	Hyd Hose - 1/2 x 24 Lg w/7/8-14 FJIC x 7/8-14 FJIC	1
25	F-4565	Hyd Hose - 1/2 x 60 Lg w/7/8-14 FJIC.....	2
26	H-4410	Hyd Hose - 1/2 x 96 Lg w/7/8-14 FJIC.....	1
27	S39539	Hyd. Hose - 1/2 x 330 - 7/8-14 FJIC - 40 ft.....	2
	S39537	Hyd. Hose - 1/2 x 372 - 7/8-14 FJIC Ends - 50 & 60 ft	2
28	S47642	Multi-Valve Mounting Plate.....	1
29	S13336	Nylon Tie Strap - 28 1/4 Lg.....	12
29A	D-4838	Nylon Tie Strap - 1/2 x 14 1/2.....	8
30	N34443	Male Tip - 3/4-16 MORB.....	3
31	N34488	Pioneer Coupler - 7/8-14 FORB.....	1
32	S44468	Tag - Hose ID - Reducing Valve - CASE DRAIN.....	1
33	S29959	Tag - Hose ID - Depth Control - LOWER.....	1
34	S29958	Tag - Hose ID - Depth Control - RAISE	1
35	C-4262	Decal - Warning - Pressure Hazard.....	1
36	S44355	Decal - Opener.....	1
37	W-475	Hex Bolt - 3/8 x 1 Lg.....	4
38	W-485	Hex Bolt - 1/2 x 1 1/4 Lg.....	6
39	N34319	U-Bolt - 1/4 x 1 1/2 x 1 3/4 Lg	2
40	N15098	U-Bolt - 3/8 x 4 x 5 Lg	4
41	C-4569	U-Bolt - 5/8 x 4 5/8 x 3 1/4 Lg	2
42	W-521	Lockwasher - 1/4.....	4
43	W-523	Lockwasher - 3/8.....	12
44	W-525	Lockwasher - 1/2.....	6
45	W-526	Lockwasher - 5/8.....	4
46	W-512	Hex Nut - 1/4	4
47	W-514	Hex Nut - 3/8.....	12
48	W-516	Hex Nut - 1/2.....	6
49	W-517	Hex Nut - 5/8.....	4
50	S44930	Decal - Pre-Charged Dry Nitrogen	1
51	S44932	Decal - Compressed Nitrogen - UN1066.....	1

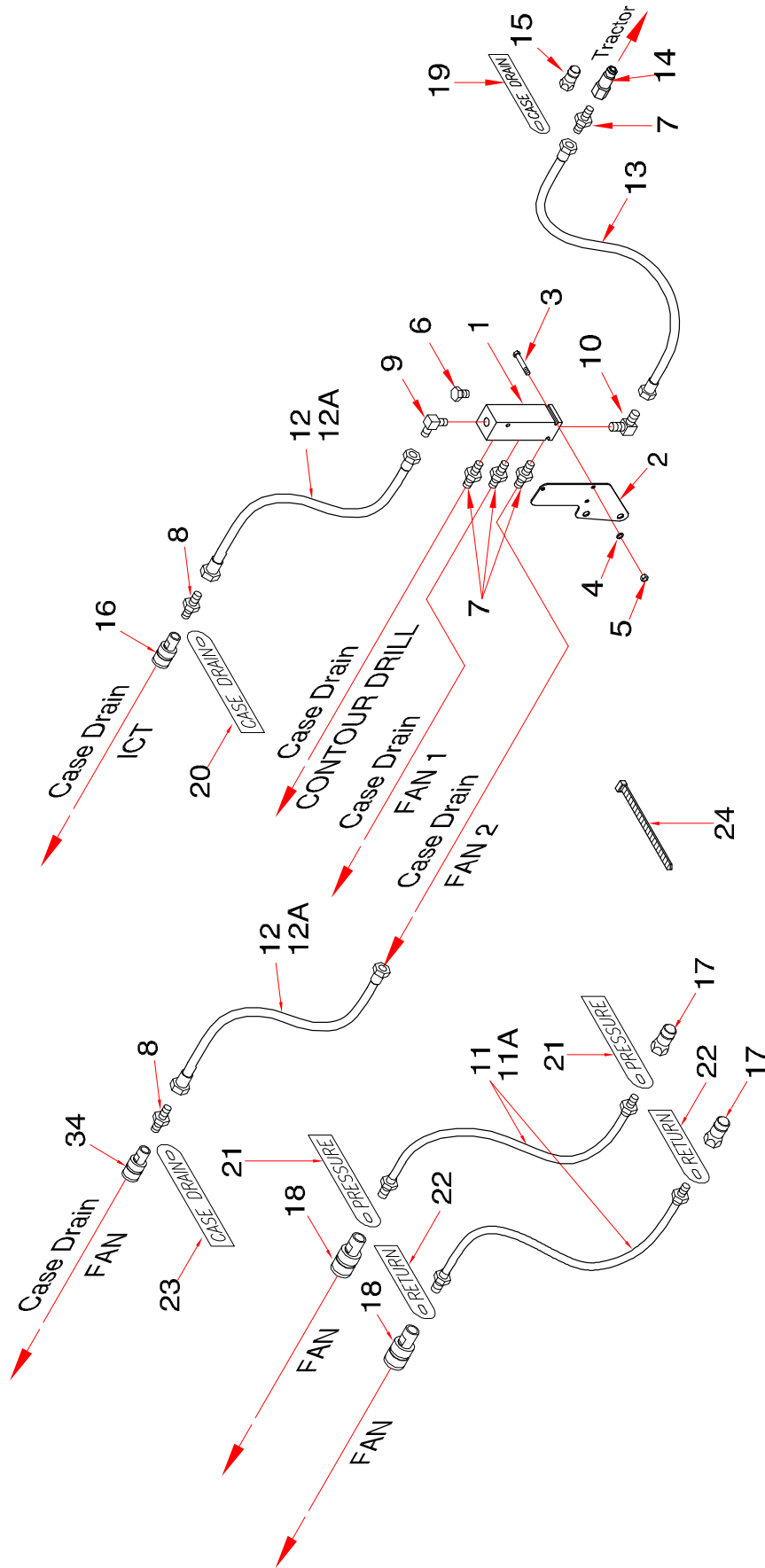
Opener Hydraulics Accumulator and Hitch Hydraulics - 2016 to Present



Opener Hydraulics - Accumulator and Hitch Hydraulics - 2016 to Present

Item	Part No.	Description	Qty
1	S47095	5 Gallon Hydraulic Accumulator - Global Certified	1
2	S42320	Mounting Bracket - Accumulator	1
3	C42313	Clamp - Accumulator	1
4	C42314	Base - Accumulator	1
5	S44945	Manifold Block - Down Pressure	1
6	N42880	Valve - 2 Way Ball	1
6A	N42881	Handle - Valve	1
7	S49545	Pressure Transducer	1
	N58963	Pressure Transducer - Apollo System	
8	S48845	Pressure Gauge - 2 1/2 Dia with 1/4NPT	1
9	S42998	Connector - 1/4 FNPT x 9/16-18 FJIC	2
10	S34115	Connector - 9/16-18 JIC x 7/16-20 MORB	1
11	C14840	Connector - 3/4-16 MORB x 7/8-14 MJIC	7
12	F10384	Connector - 9/16-18 MJIC x 7/8-14 FJIC.....	3
13	C42312	Connector - 7/8-14 MJIC x 1 5/16-14 MORB	1
14	C42311	Connector - 1 7/8-14 MORB x 1 5/16-14 FORB.....	1
15	C28505	Plug - 3/4-16 MORB - Used on Ports not in use on Case Drain Header.....	2
16	H18746	Tee - Swivel - (2) 7/8-14 MJIC x (1) 7/8-14 FJIC (MMF).....	1
17	F24559	Tee - (1) 7/8-14 FJIC x (2) 7/8-14 MJIC (MFM)	1
18	N34646	90 Elbow - 7/8-14 MJIC x 1 1/16-12 MORB.....	1
19	S29967	90 Elbow - 9/16-18 FJIC x 9/16-18 MJIC	1
20	C24585	90 Elbow - 7/8-14 MJIC x 3/4-16 MORB	6
21	K-5806	90 Elbow - Swivel - 7/8-14 MJIC x 7/8-14 FJIC	3
22	W21963	Hyd Hose - 1/4 x 96 Lg w/9/16-18 MJIC x 9/16-18 FJIC	1
23	F14659	Hyd Hose - 1/4 x 230 Lg w/9/16-18 FJIC - Tow Behind	1
	C26341	Hyd Hose - 1/4 x 282 Lg w/9/16-18 FJIC - Tow Between	1
24	C-4468	Hyd Hose - 1/2 x 24 Lg w/7/8-14 FJIC x 7/8-14 FJIC	1
25	F-4565	Hyd Hose - 1/2 x 60 Lg w/7/8-14 FJIC	3
26	H-4410	Hyd Hose - 1/2 x 96 Lg w/7/8-14 FJIC.....	1
27	S39539	Hyd Hose - 1/2 x 330 - 7/8-14 FJIC - 40 ft	2
	S39537	Hyd Hose - 1/2 x 372 - 7/8-14 FJIC Ends - 50 & 60 ft	2
28	S47642	Multi-Valve Mounting Plate.....	1
29	S13336	Nylon Tie Strap - 28 1/4 Lg.....	12
29A	D-4838	Nylon Tie Strap - 1/2 x 14 1/2	8
30	N34443	Male Tip - 3/4-16 MORB.....	3
30A	K50834	3/8 Flat Face Tip - 3/4-16 FORB	1
31	N58670	Case Drain Header	1
32	S44468	Tag - Hose ID - Reducing Valve - CASE DRAIN.....	1
33	S29959	Tag - Hose ID - Depth Control - LOWER	1
34	S29958	Tag - Hose ID - Depth Control - RAISE	1
35	C-4262	Decal - Warning - Pressure Hazard.....	1
36	S44355	Decal - Opener.....	1
37	W-475	Hex Bolt - 3/8 x 1 Lg.....	4
38	W-485	Hex Bolt - 1/2 x 1 1/4 Lg.....	6
39	N34319	U-Bolt - 1/4 x 1 1/2 x 1 3/4 Lg	2
40	N15098	U-Bolt - 3/8 x 4 x 5 Lg	4
41	C-4569	U-Bolt - 5/8 x 4 5/8 x 3 1/4 Lg	2
42	W-521	Lockwasher - 1/4	7
43	W-523	Lockwasher - 3/8.....	12
44	W-525	Lockwasher - 1/2.....	6
45	W-526	Lockwasher - 5/8.....	4
46	W-512	Hex Nut - 1/4	7
47	W-514	Hex Nut - 3/8	12
48	W-516	Hex Nut - 1/2.....	6
49	W-517	Hex Nut - 5/8.....	4
50	S44930	Decal - Pre-Charged Dry Nitrogen	1
51	S44932	Decal - Compressed Nitrogen - UN1066.....	1
52	S44929	Tube - Accumulator Mount - 2 x 2 x 6 1/2 Lg.....	1
53	N58671	Plate - Case Drain Header Mount.....	1
54	C15319	Hex Bolt - 1/4 x 2 1/2 Lg.....	3

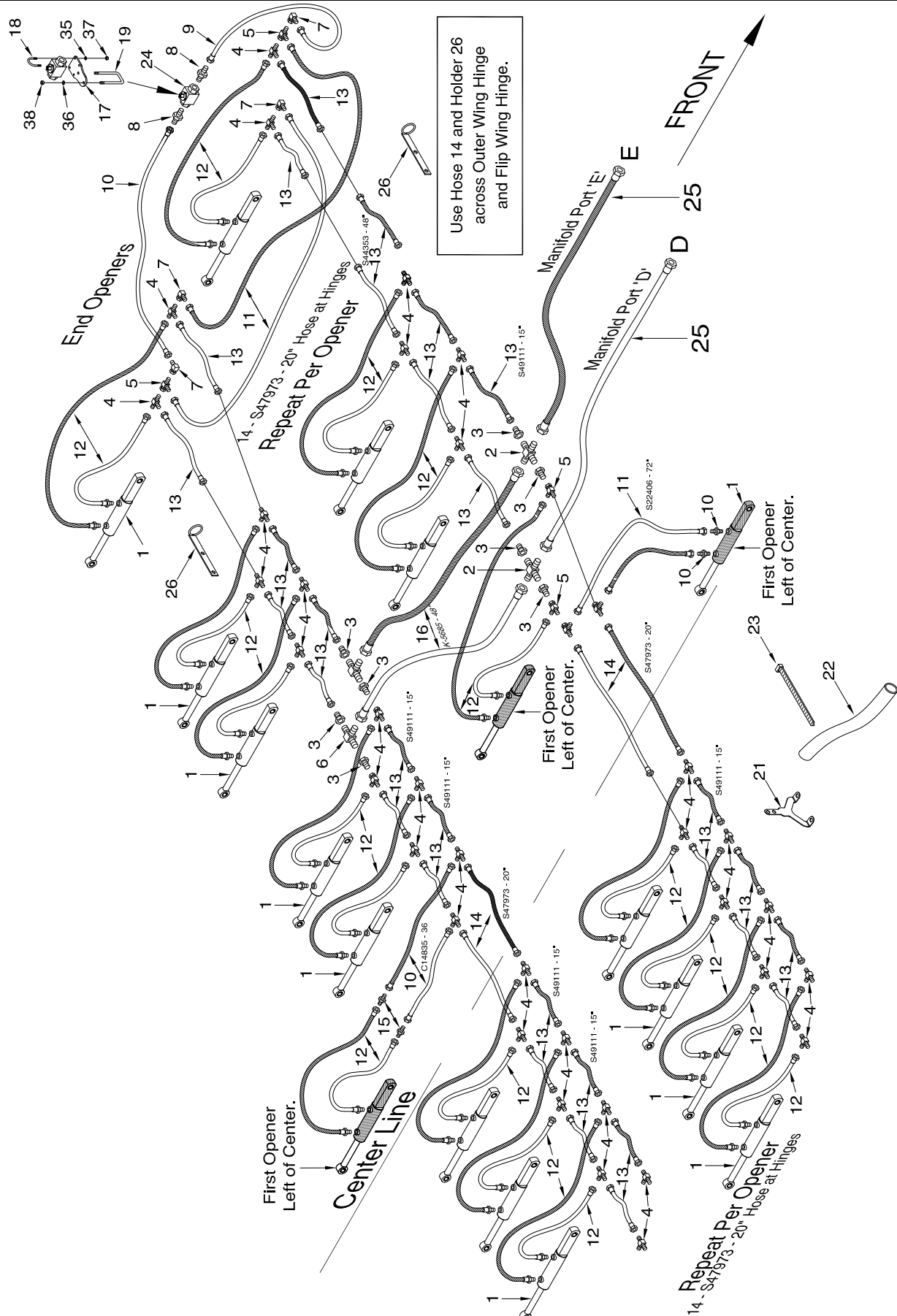
Opener Hydraulics Case Drain - 2016 to Present



Opener Hydraulics - Case Drain - 2016 to Present

Item	Part No.	Description	Qty
1	N58670	Case Drain Header	1
2	N58671	Plate - Case Drain Header Mount.....	1
3	C15319	Hex Bolt - 1/4 x 2 1/2 Lg.....	3
4	W-521	Lockwasher - 1/4.....	3
5	W-512	Hex Nut - 1/4.....	3
6	C28505	Plug - 3/4-16 MORB - Used on Ports not in use on Case Drain Header.....	1
7	C14840	Connector - 3/4-16 MORB x 7/8-14 MJIC	4
8	N34505	Connector - Swivel - 7/8-14 MORB x 7/8-14 MJIC.....	1
9	C24585	90 Elbow - 7/8-14 MJIC x 3/4-16 MORB	1
10	N34646	90 Elbow - 7/8-14 MJIC x 1 1/16-12 MORB	1
11	N37036	Hyd Hose - 3/4 x 396 Lg w/1 1/16-12 MORB (3-Frame Contour Air Drill)	2
11A	N37035	Hyd Hose - 3/4 x 348 Lg w/1 1/16-12 MORB	2
11B	N44955	Hyd Hose - 3/4 x 456 Lg w/1 1/16-12 MORB (5-Frame Contour Air Drill)	2
12	N50099	Hyd Hose - 3/8 x 348 Lg w/7/8-14 FJIC x 7/8-14 FJIC Swivel End	1
12A	N55806	Hyd Hose - 3/8 x 300 Lg w/7/8-14 FJIC Ends.....	1
12B	N50088	Hyd Hose - 3/8 x 396 Lg w/7/8-14 FJIC Ends (5-Frame Contour Air Drill)	1
13	F-4565	Hyd Hose - 1/2 x 60 Lg w/7/8-14 FJIC.....	1
14	K50834	3/8 Flat Face Tip - 3/4-16 FORB	1
15	N34443	1/2 Male Pioneer Tip - 3/4-16 FORB	2
16	N34488	1/2 Pioneer Coupler - 7/8-14 FORB.....	1
17	N37914	3/4 Male Tip - 1 1/16-12 FORB.....	2
18	N37915	3/4 Female Coupler - 1 1/16-12 FORB.....	2
19	S44468	Tag - Hose ID - Reducing Valve - CASE DRAIN.....	1
20	N58343	Tag - Hose ID - ICT - CASE DRAIN	1
21	N34576	Tag - Hose ID - Air Tank - Fan/Auger - PRESSURE	3
21A	N58340	Tag - Hose ID - Air Tank - Fan 2 - PRESSURE	3
22	N34577	Tag - Hose ID - Air Tank - Fan/Auger - RETURN	3
22A	N58341	Tag - Hose ID - Air Tank - Fan 2 - RETURN	3
23	N34578	Tag - Hose ID - Air Tank - Fan/Auger - CASE DRAIN	3
23A	N58342	Tag - Hose ID - Air Tank - Fan 2 - CASE DRAIN	3
24	D-4951	Nylon Tie Strap - 7 3/8 Lg	12

Opener Hydraulics 7 1/2 inch Spacing



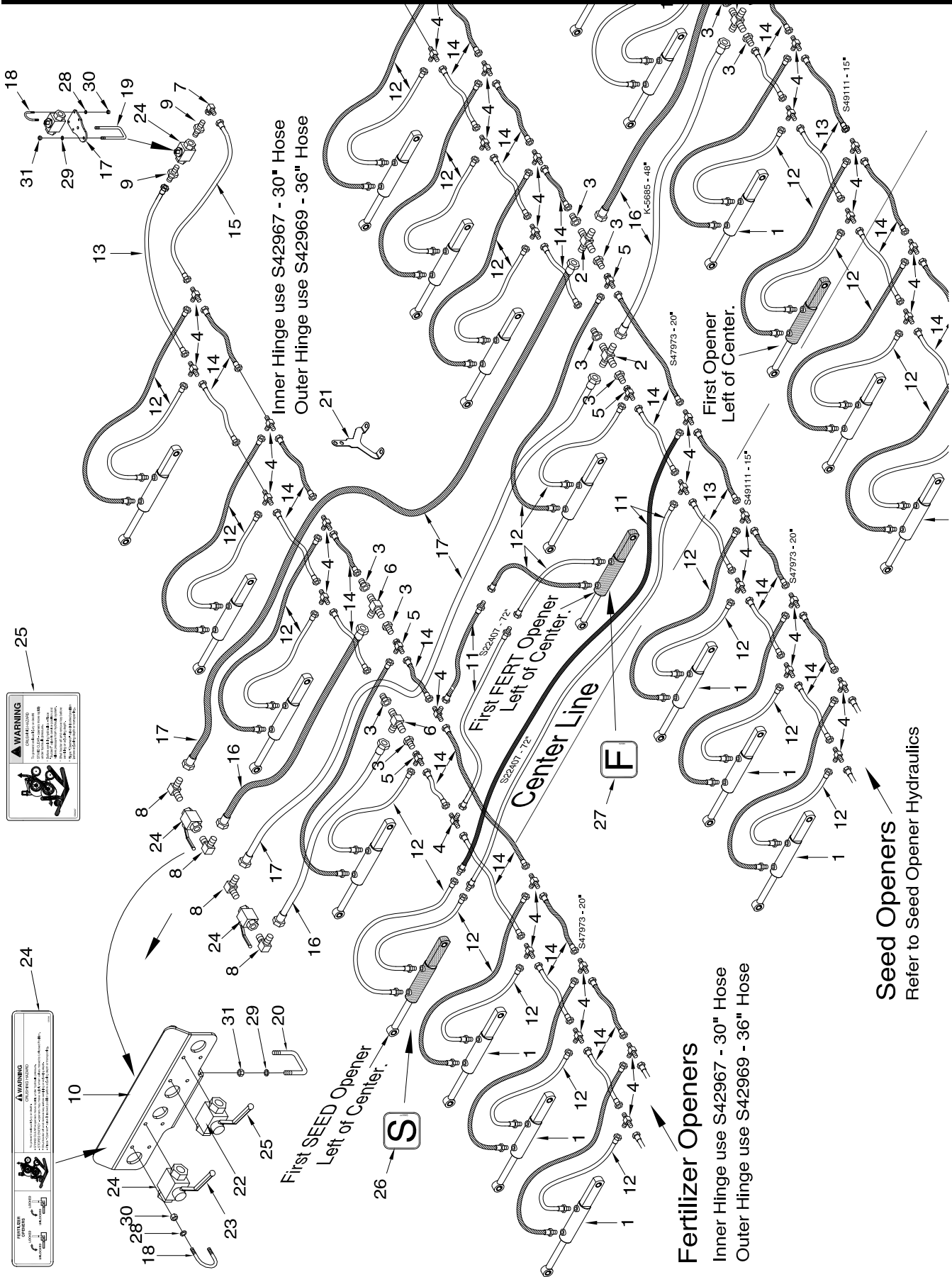
Opener Hydraulics - 7 1/2 inch Spacing

Item	Part No.	Description	Qty
1	C51153	Cylinder	AsReq
2	C-4401	Cross - (4) 7/8-14 MJIC.....	2
3	F10384	Reducer - 7/8-14 MJIC x 9/16-18 MJIC.....	8
4	C-4393	Tee - (3) 9/16-18 MJIC.....	AsReq
5	C-4403	Tee - (2) 9/16-18 MJIC x (1) 9/16-18 FJIC (MMF).....	4
6	C-4394	Tee - (3) 7/8-14 MJIC	2
7	S29967	90 Elbow - 9/16-18 FJIC x 9/16-18 MJIC	4
8	C15348	Connector - 9/16-18 MJIC x 3/4-16 MORB	4
9	C-4552	Hyd Hose - 1/4 x 24 Lg w/ #6 9/16-18 FJIC.....	2
10	C14835	Hyd Hose - 1/4 x 36 Lg w/ #6 9/16-18 FJIC (60 ft).....	2
	C15349	Hyd Hose - 1/4 x 48 Lg w/ #6 9/16-18 FJIC (40, 50 & 60 Ft).....	2
11	S22406	Hyd Hose - 1/4 x 72 Lg w/ #6 9/16-18 FJIC.....	4
12	S44352	Hyd Hose - 1/4 x 24 Lg w/ #6 9/16-18 FJIC x #6 9/16-18 MORB	AsReq
13	N49111	Hyd Hose - 3/8 x 15 Lg w/ #6 9/16-18 FJIC	AsReq
14	S47973	Hyd Hose - 3/8 x 20 Lg w/ #6 9/16-18 FJIC - Across Inner Wing Hinges.....	AsReq
14A	S42967	Hyd Hose - 3/8 x 30 Lg w/ #6 9/16-18 FJIC - Across Outer Wing Hinges	AsReq
15	N29358	Connector - 9/16-18 (#06) MJIC x 9/16-18 (#06) MORB.....	2
16	K-5685	Hyd Hose - 1/2 x 48 Lg w/7/8-14 FJIC.....	2
17	S39546	Mount Plate - Ball Valve	2
18	N34319	U-Bolt - 1/4 x 1 1/2 x 2	4
19	N34423	U-Bolt - 3/8 x 2 x 7 Lg	4
20	C-4698	Oil Line Clamp	12
21	S48631	Hose Holder.....	AsReq
22	R480045	Hose Cover - 2 ID Bulk/foot	AsReq
23	D-4951	Nylon Tie Strap - 1/2 x 7 3/8.....	AsReq
24	N42880	Lock Valve	2
25	F-4565	Hyd Hose - 1/2 x 60 Lg w/7/8-14 FJIC.....	2
26	S44313	Hose Holder.....	6
27	C-4569	U-Bolt - 5/8 x 4 x 3 1/4 Lg	2
28	W-526	Lockwasher - 5/8.....	4
29	W-517	Hex Nut - 5/8.....	4
30	C14411	Oil Line Bracket.....	6
31	W-538	Flatwasher - 3/8.....	6
32	M-3388	Locknut - 3/8	6
33	W-480	Hex Bolt - 3/8 x 2 1/2.....	6
34	C-3918	Hex Bolt - 3/8 x 5 Lg.....	6
35	W-521	Lockwasher - 1/4.....	8
36	W-523	Lockwasher - 3/8.....	6
37	W-512	Hex Nut - 1/4	8
38	W-514	Hex Nut - 3/8	6

Opener Hydraulics - 10 inch Spacing

Item	Part No.	Description	No: Used		
			40 ft	50 ft	60 ft
Quantities Listed are for the Seed Openers only. Refer to Fertilizer Opener Hydraulics for additional information.					
1	C51153	Cylinder	47	59	71
2	C-4401	Cross - (4) 7/8-14 MJIC	2	2	2
3	F10384	Reducer - 7/8-14 MJIC x 9/16-18 MJIC	8	8	8
4	C-4393	Tee - (3) 9/16-18 MJIC	90	114	138
5	C-4403	Tee - (2) 9/16-18 MJIC x (1) 9/16-18 FJIC (MMF)	4	4	4
6	C-4394	Tee - (3) 7/8-14 MJIC	2	2	2
7	S29967	90 Elbow - 9/16-18 FJIC x 9/16-18 MJIC	4	4	4
8	C15348	Connector - 9/16-18 MJIC x 3/4-16 MORB	4	4	4
9	C-4552	Hyd Hose - 1/4 x 24 Lg w/ #6 9/16-18 FJIC	2	2	2
10	C15349	Hyd Hose - 1/4 x 48 Lg w/ #6 9/16-18 FJIC	2	2	2
11	S22406	Hyd Hose - 1/4 x 72 Lg w/ #6 9/16-18 FJIC	4	4	4
12	S44352	Hyd Hose - 1/4 x 24 Lg w/ #6 9/16-18 FJIC x #6 9/16-18 MORB	94	118	142
13	N49111	Hyd Hose - 3/8 x 15 Lg w/ #6 9/16-18 FJIC	4	4	4
14	S47973	Hyd Hose - 3/8 x 20 Lg w/ #6 9/16-18 FJIC	78	94	118
15	S42967	Hyd Hose - 3/8 x 30 Lg w/ #6 9/16-18 FJIC - Across Hinges	8	8	8
16	K-5685	Hyd Hose - 1/2 x 48 Lg w/7/8-14 FJIC	2	2	2
17	S39546	Mount Plate - Ball Valve	2	2	2
18	N34319	U-Bolt - 1/4 x 1 1/2 x 2	4	4	4
19	N34423	U-Bolt - 3/8 x 2 x 7 Lg	2	2	2
20	C-4698	Oil Line Clamp	12	12	12
21	S48631	Hose Holder	47	59	71
22	R480045	Hose Cover - 2 ID Bulk/foot - 12ft	1	1	1
23	D-4951	Nylon Tie Strap - 1/2 x 7 3/8	-	-	-
24	N42880	Lock Valve	2	2	2
25	F-4565	Hyd Hose - 1/2 x 60 Lg w/7/8-14 FJIC	2	2	2
26	S44313	Hose Holder	6	6	6
27	C-4569	U-Bolt - 5/8 x 4 x 3 1/4 Lg	2	2	2
28	W-526	Lockwasher - 5/8	4	4	4
29	W-517	Hex Nut - 5/8	4	4	4
30	C14411	Oil Line Bracket	6	6	6
31	W-538	Flatwasher - 3/8	6	6	6
32	M-3388	Locknut - 3/8	6	6	6
33	W-480	Hex Bolt - 3/8 x 2 1/2	6	6	6
34	C-3918	Hex Bolt - 3/8 x 5 Lg	6	6	6
35	W-521	Lockwasher - 1/4	8	8	8
36	W-523	Lockwasher - 3/8	6	6	6
37	W-512	Hex Nut - 1/4	8	8	8
38	W-514	Hex Nut - 3/8	6	6	6

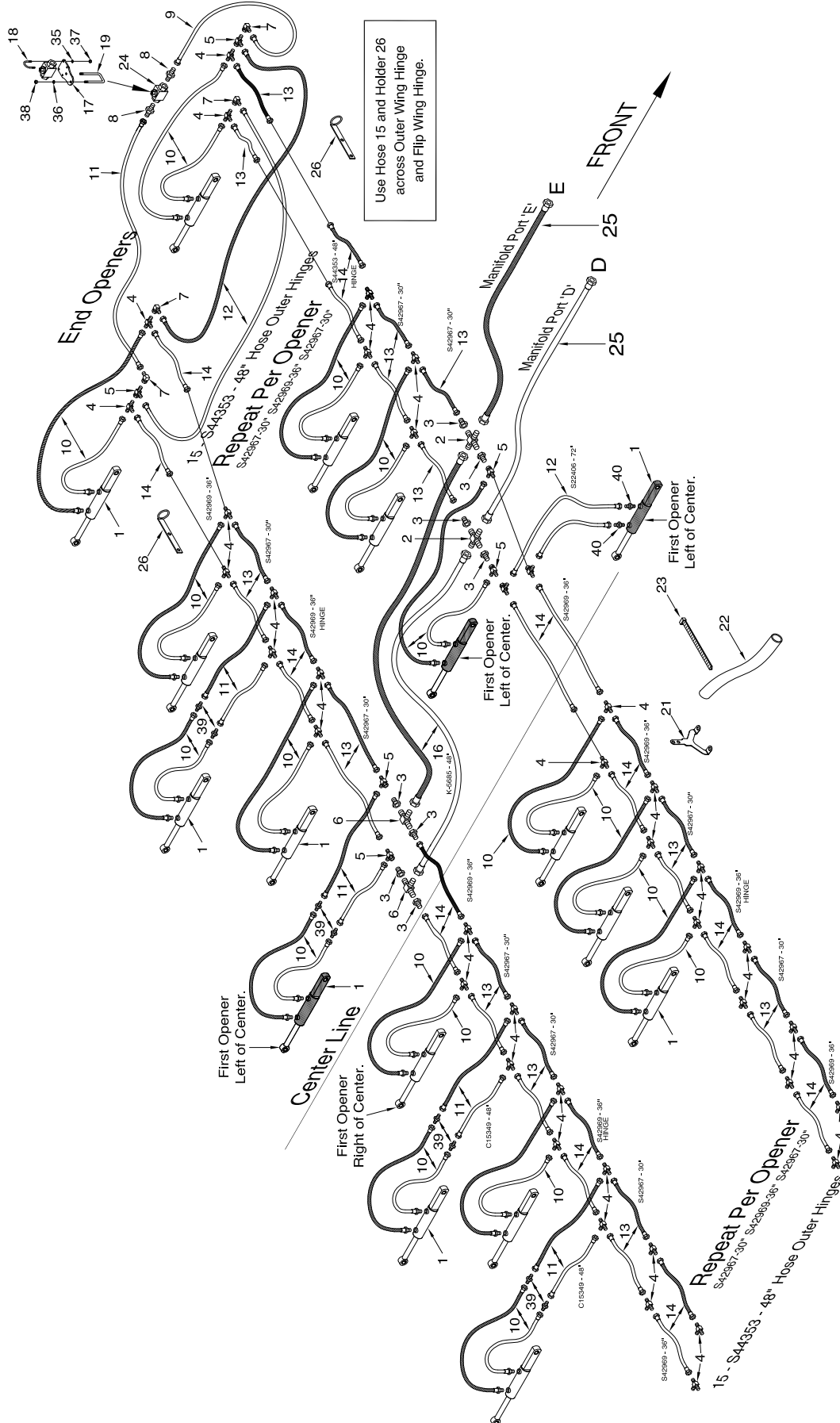
Opener Hydraulics 10 inch Spacing - Fertilizer Openers



Fertilizer Opens - 10 inch Spacing

Item	Part No.	Description	No: Used		
			40 ft	50 ft	60 ft
Quantities Listed are for the Fertilizer Openers only. Refer to Seed Opener Hydraulics for additional information.					
1	C51153	Cylinder	24	30	36
2	C-4401	Cross - (4) 7/8-14 MJIC	2	2	2
3	F10384	Reducer - 7/8-14 MJIC x 9/16-18 MJIC	4	4	4
4	C-4393	Tee - (3) 9/16-18 MJIC	46	58	70
5	C-4403	Tee - (2) 9/16-18 MJIC x (1) 9/16-18 FJIC (MMF)	2	2	2
6	C-4394	Tee - (3) 7/8-14 MJIC	2	2	2
7	S29967	90 Elbow - 9/16-18 FJIC x 9/16-18 MJIC	2	2	2
8	C24585	90 Elbow - 7/8-14 MJIC x 3/4-16 MORB	4	4	4
9	C15348	Connector - 9/16-18 MJIC x 3/4-16 MORB	4	4	4
10	S55261	Mount Plate - Ball Valve	2	2	2
11	S22407	Hyd Hose - 1/4 x 72 Lg w/ #6 9/16-18 FJIC x #6 9/16-18 MJIC	4	4	4
12	S44352	Hyd Hose - 1/4 x 24 Lg w/ #6 9/16-18 FJIC x #6 9/16-18 MORB	48	60	72
13	N49111	Hyd Hose - 3/8 x 15 Lg w/ #6 9/16-18 FJIC	2	2	2
14	S47973	Hyd Hose - 3/8 x 20 Lg w/ #6 9/16-18 FJIC	42	50	62
15	S42967	Hyd Hose - 3/8 x 30 Lg w/ #6 9/16-18 FJIC - Across Inner Hinges.....	6	6	6
15A	S42969	Hyd Hose - 3/8 x 36 Lg w/ #6 9/16-18 FJIC - Across Outer Hinges.....	-	4	4
16	K-5685	Hyd Hose - 1/2 x 48 Lg w/7/8-14 FJIC	2	2	2
17	H-4410	Hyd Hose - 1/2 x 96 Lg w/7/8-14 FJIC	2	2	2
18	N34319	U-Bolt - 1/4 x 1 1/2 x 2.....	8	8	8
19	N34423	U-Bolt - 3/8 x 2 x 7 Lg.....	2	2	2
20	N15098	U-Bolt - 3/8 x 4 x 5 Lg.....	2	2	2
21	S48631	Hose Holder	24	30	36
22	N42880	Lock Valve	4	4	4
23	N42881	Handle - Valve	2	2	2
24	S55266	Decal - Lockout Valves Coulter Beams.....	1	1	1
25	S55267	Decal - Lockout Warning Coulter Beams.....	4	4	4
26	S55277	Decal - "S" - SEED Opener Label	3	3	3
27	S55278	Decal - "F" - FERTILIZER Opener Label	3	3	3
28	W-521	Lockwasher - 1/4	16	16	16
29	W-523	Lockwasher - 3/8	8	8	8
30	W-512	Hex Nut - 1/4	16	16	16
31	W-514	Hex Nut - 3/8	8	8	8

Opener Hydraulics 15 inch Spacing

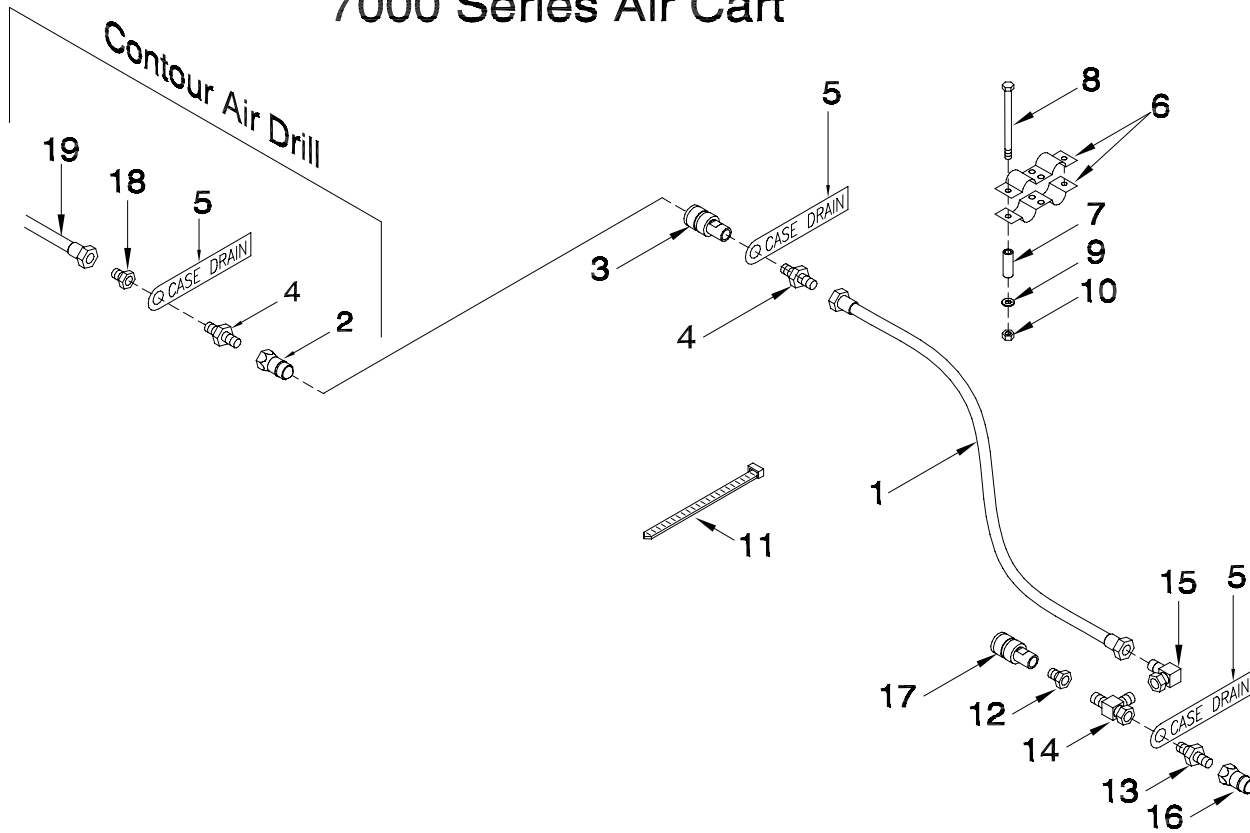


Opener Hydraulics - 15 inch Spacing

Item	Part No.	Description	No: Used		
			40 ft	50 ft	60 ft
1	C51153	Cylinder	32	40	48
2	C-4401	Cross - (4) 7/8-14 MJIC	2	2	2
3	F10384	Reducer - 7/8-14 MJIC x 9/16-18 MJIC	8	8	8
4	C-4393	Tee - (3) 9/16-18 MJIC	60	74	90
5	C-4403	Tee - (2) 9/16-18 MJIC x (1) 9/16-18 FJIC (MMF)	4	4	4
6	C-4394	Tee - (3) 7/8-14 MJIC	2	2	2
7	S29967	90 Elbow - 9/16-18 FJIC x 9/16-18 MJIC	4	4	4
8	C15348	Connector - 9/16-18 MJIC x 3/4-16 MORB	4	4	4
9	C-4552	Hyd Hose - 1/4 x 24 Lg w/ #6 9/16-18 FJIC	2	2	2
10	S44352	Hyd Hose - 1/4 x 24 Lg w/ #6 9/16-18 FJIC x #6 9/16-18 MORB	62	78	94
11	C15349	Hyd Hose - 1/4 x 48 Lg w/ #6 9/16-18 FJIC	16	20	24
12	S22406	Hyd Hose - 1/4 x 72 Lg w/ #6 9/16-18 FJIC	6	6	6
13	S42967	Hyd Hose - 3/8 x 30 Lg w/ #6 9/16-18 FJIC	32	44	56
14	S42969	Hyd Hose - 3/8 x 36 Lg w/ #6 9/16-18 FJIC	26	22	22
15	S44353	Hyd Hose - 3/8 x 48 Lg w/ #6 9/16-18 FJIC - Across Outer Hinges - 5 frame	0	8	12
16	K-5685	Hyd Hose - 1/2 x 48 Lg w/7/8-14 FJIC	2	2	2
17	S39546	Mount Plate - Ball Valve	2	2	2
18	N34319	U-Bolt - 1/4 x 1 1/2 x 2	4	4	4
19	N34423	U-Bolt - 3/8 x 2 x 7 Lg	4	4	4
20	C-4698	Oil Line Clamp	12	12	12
21	S48631	Hose Holder	32	40	48
22	R480045	Hose Cover - 2 ID Bulk/foot - 12 ft length	1	1	1
23	D-4951	Nylon Tie Strap - 1/2 x 7 3/8	16	16	16
24	N42880	Lock Valve	2	2	2
25	F-4565	Hyd Hose - 1/2 x 60 Lg w/7/8-14 FJIC	2	2	2
26	S44313	Hose Holder	6	6	6
27	C-4569	U-Bolt - 5/8 x 4 x 3 1/4 Lg	2	2	2
28	W-526	Lockwasher - 5/8	4	4	4
29	W-517	Hex Nut - 5/8	4	4	4
30	C14411	Oil Line Bracket	6	6	6
31	W-538	Flatwasher - 3/8	6	6	6
32	M-3388	Locknut - 3/8	6	6	6
33	W-480	Hex Bolt - 3/8 x 2 1/2	6	6	6
34	C-3918	Hex Bolt - 3/8 x 5 Lg	6	6	6
35	W-521	Lockwasher - 1/4	8	8	8
36	W-523	Lockwasher - 3/8	6	6	6
37	W-512	Hex Nut - 1/4	8	8	8
38	W-514	Hex Nut - 3/8	6	6	6
39	H18269	Connector - 9/16-18 (#06) MJIC	16	20	24
40	N29358	Connector - 9/16-18 (#06) MJIC x 9/16-18 (#06) MORB	2	2	2

**Opener Hydraulics
Tow Between Air Cart - 7000 Series**

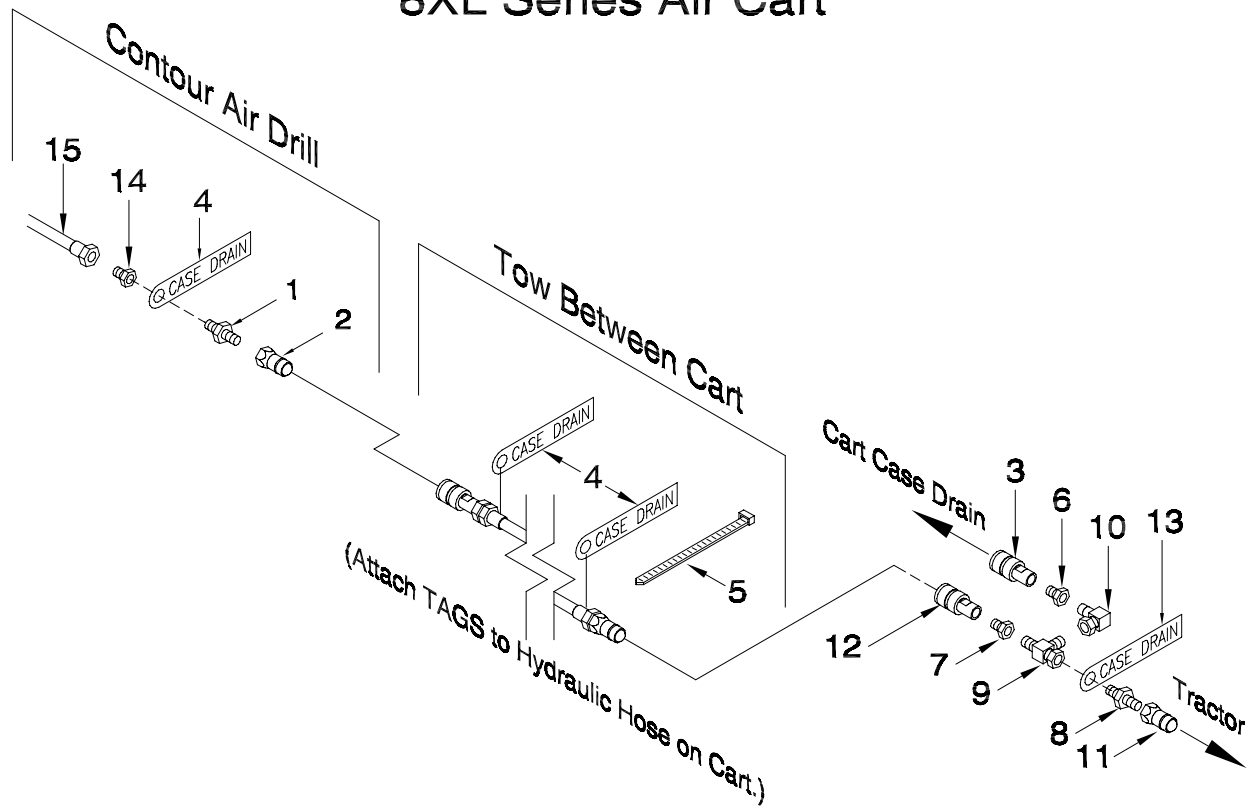
7000 Series Air Cart



Item	Part No.	Description	Qty
KIT ITEMS - TOW BETWEEN			
1	C26337	Hyd Hose - 1/2 x 276 Lg w/7/8-14 FJIC	1
2	N34498	Male Tip - 7/8-14 MORB.....	1
3	N34488	Pioneer Coupler - 7/8-14 FORB.....	1
4	N36489	Connector - 7/8-14 MORB x 7/8-14 MJIC	2
5	S44468	Tag - Hose ID - Reducing Valve - CASE DRAIN.....	3
6	N16608	Coupler Clamp - Female Pioneer.....	2
7	N19458	Spacer - 2	2
8	H-4696	Hex Bolt - 1/4 x 3 Lg.....	2
9	W-521	Lockwasher - 1/4.....	4
10	W-512	Hex Nut - 1/4.....	4
11	D-4951	Nylon Tie Strap - 7 3/8 Lg.....	2
ITEMS MOVED FROM CONTOUR AIR DRILL			
12	N34620	Connector - Swivel - 7/8-14 MORB x 7/8-14 FJIC	1
13	C14840	Connector - 3/4-16 MORB x 7/8-14 MJIC	1
14	H18746	Tee - Swivel - (2) 7/8-14 MJIC x (1) 7/8-14 FJIC (MMF)	1
15	K-5806	90 Elbow - Swivel - 7/8-14 MJIC x 7/8-14 FJIC	1
16	N34443	Male Tip - 3/4-16 MORB.....	1
17	N34488	Pioneer Coupler - 7/8-14 FORB.....	1
CONTOUR AIR DRILL ITEMS			
18	F10384	Reducer - 9/16-18 MJIC x 7/8-14 FJIC	3
19	C26341	Hyd Hose - 1/4 x 282 Lg w/9/16-18 FJIC	1

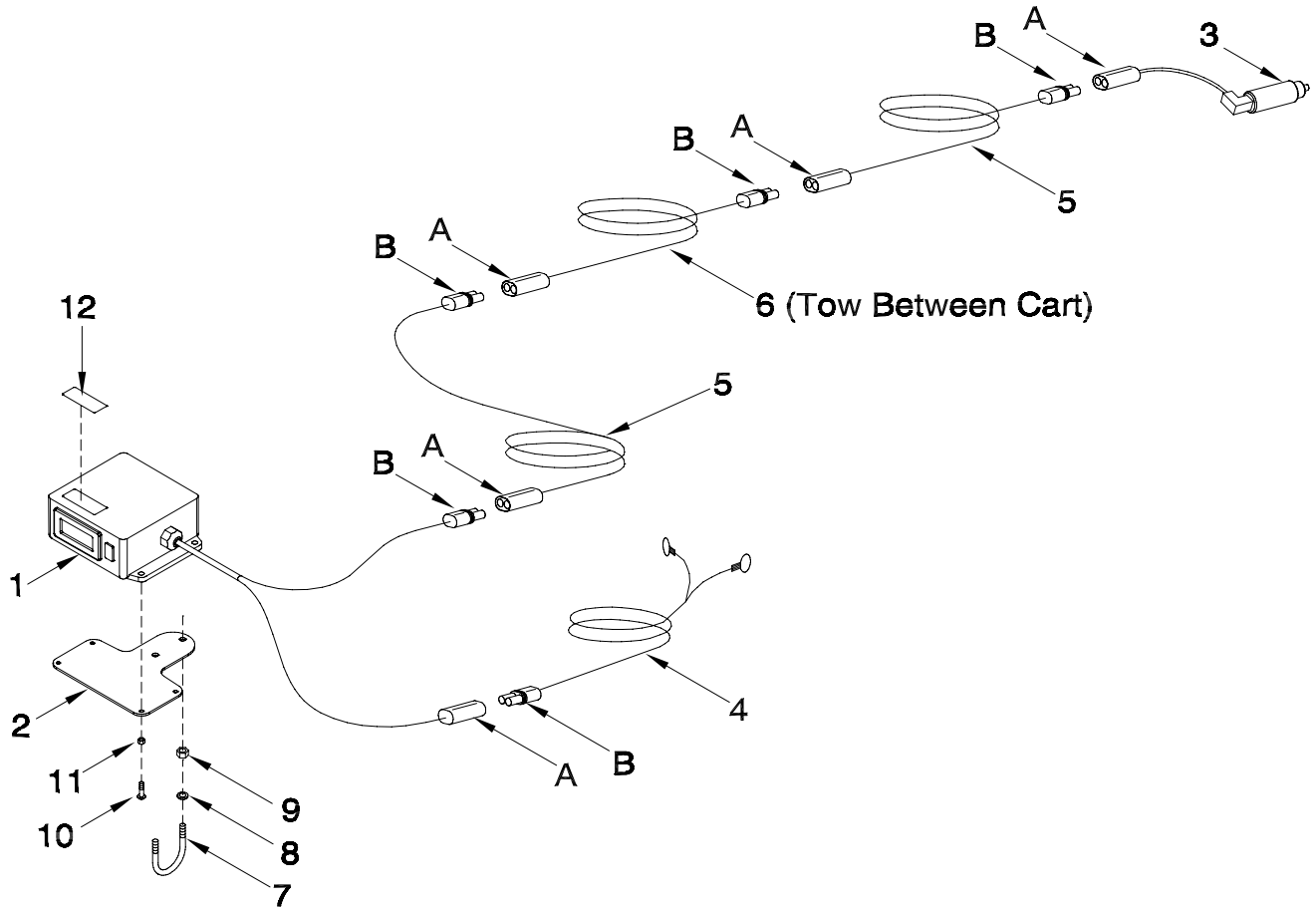
**Opener Hydraulics
Tow Between Air Cart - 8XL Series**

8XL Series Air Cart



Item	Part No.	Description	Qty
KIT ITEMS - TOW BETWEEN			
1	C14840	Connector - 3/4-16 MORB x 7/8-14 MJIC.....	6
2	N34498	Male Tip - 7/8-14 MORB.....	1
3	N34488	Pioneer Coupler - 7/8-14 FORB.....	1
4	S44468	Tag - Hose ID - Reducing Valve - CASE DRAIN.....	2
5	D-4951	Nylon Tie Strap - 7 3/8 Lg.....	2
6	N34620	Connector - Swivel - 7/8-14 MORB x 7/8-14 FJIC	2
ITEMS MOVED FROM CONTOUR AIR DRILL			
7	N34620	Connector - Swivel - 7/8-14 MORB x 7/8-14 FJIC	1
8	C14840	Connector - 3/4-16 MORB x 7/8-14 MJIC	1
9	H18746	Tee - Swivel - (2) 7/8-14 MJIC x (1) 7/8-14 FJIC (MMF)	1
10	K-5806	90 Elbow - Swivel - 7/8-14 MJIC x 7/8-14 FJIC	1
11	N34443	Male Tip - 3/4-16 MORB.....	1
12	N34488	Pioneer Coupler - 7/8-14 FORB.....	1
13	S44468	Tag - Hose ID - Reducing Valve - CASE DRAIN.....	1
CONTOUR AIR DRILL ITEMS			
14	F10384	Reducer - 9/16-18 MJIC x 7/8-14 FJIC	3
15	C26341	Hyd Hose - 1/4 x 282 Lg w/9/16-18 FJIC.....	1

Opener Hydraulics Digital Gauge



Note: TOPCON option only uses items 3, 5, and 6.

Apollo System does not use any of the above components. See 9 Series Parts Manual for details.

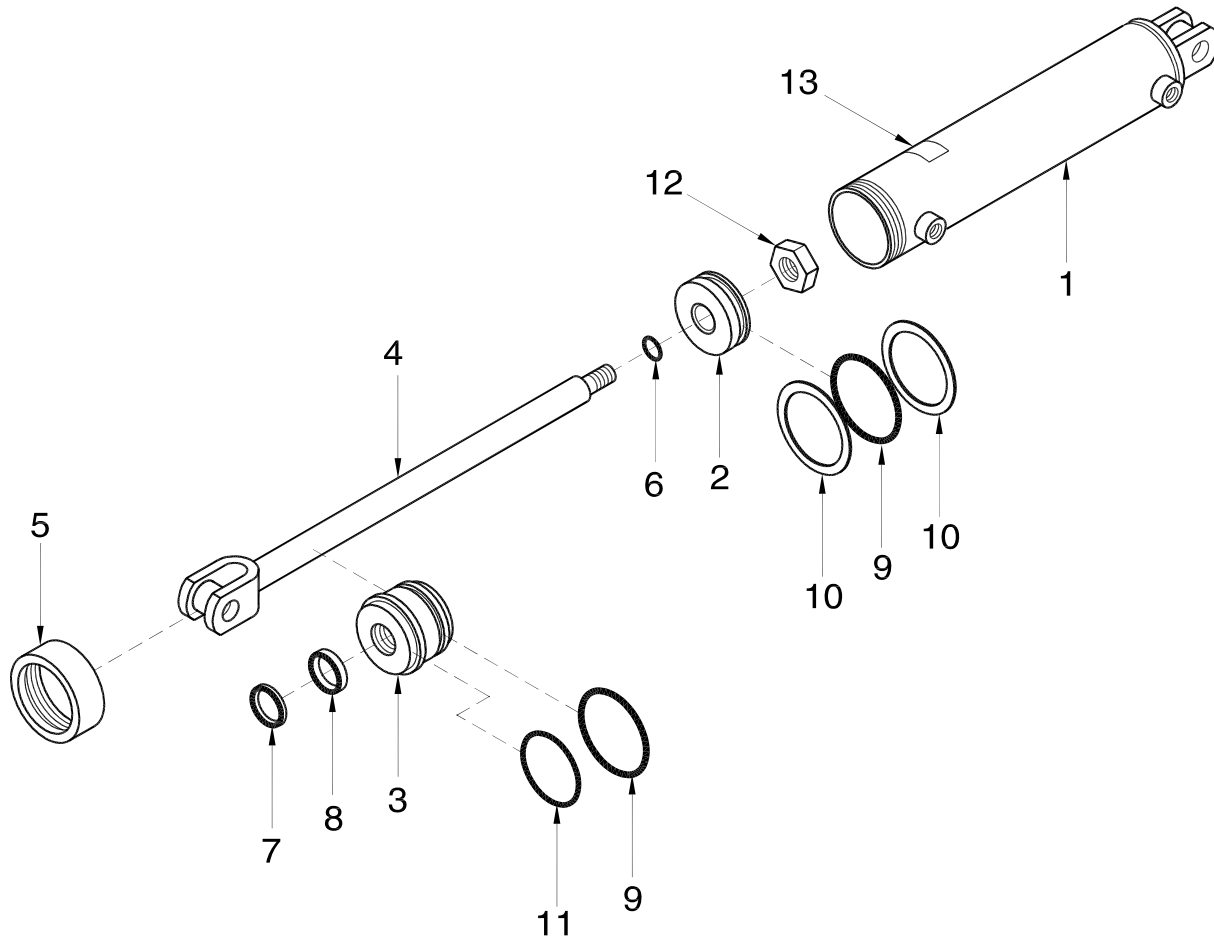
Item	Part No.	Description	Qty
1	S42999	Digital Gauge (Includes item 12).....	1
2	S44350	Mounting Bracket - Digital Gauge	1
3	S49545	Pressure Transducer	1
	N58963	Pressure Transducer - Apollo System (Not included in Kit N46098)	
4	N27609	Power Cable - Monitor	1
5	N37018	Extension Cable - 20 ft Lg.....	2
6	N37020	Extension Cable - 30 ft Lg (Tow Between Air Cart)	1
7	N34319	U-Bolt - 1/4 x 1 1/2 x 1 3/4 Lg	1
8	W-521	Lockwasher - 1/4.....	2
9	W-512	Hex Nut - 1/4	2
10	N29486	Machine Screw - #8 x 5/8.....	4
11	N16564	Locknut - #8 - Serrated	4
12	S44464	Decal - Digital Gauge Identification.....	1
	N46098	Kit: Contour Pressure Display (Includes above items)	
		Replacement Connectors	
A	N29384	Weather Pak Connector - BLACK - 2 Pin Plug	
B	N29385	Weather Pak Connector - BLACK - 2 Pin Socket	

Section 5: Cylinders and Valves

Section Contents

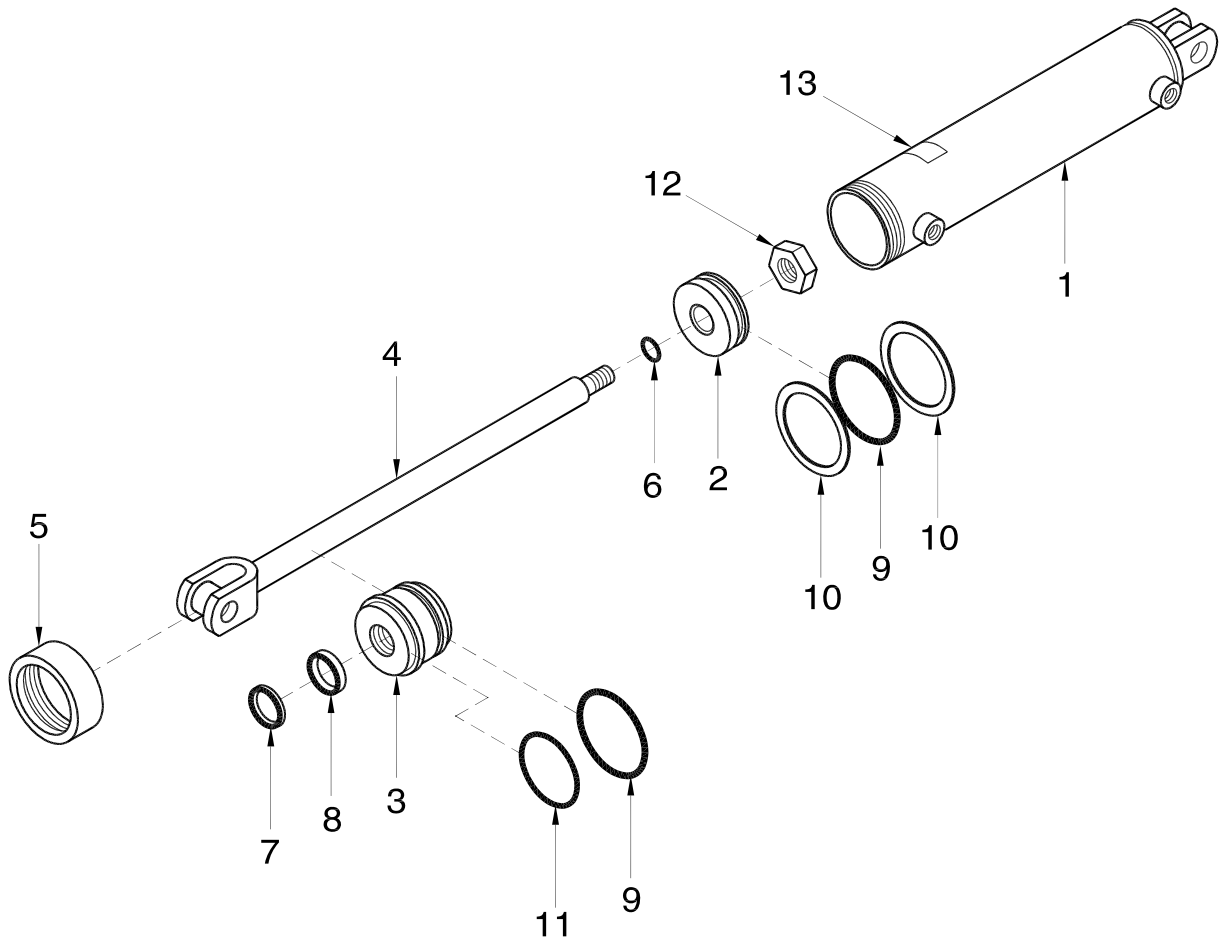
Wing Lift	5-2
Opener Cylinder	5-8
Opener Valve Block	5-9
Wing Lift Valve Block	5-10

Hydraulic Cylinders Wing Lift



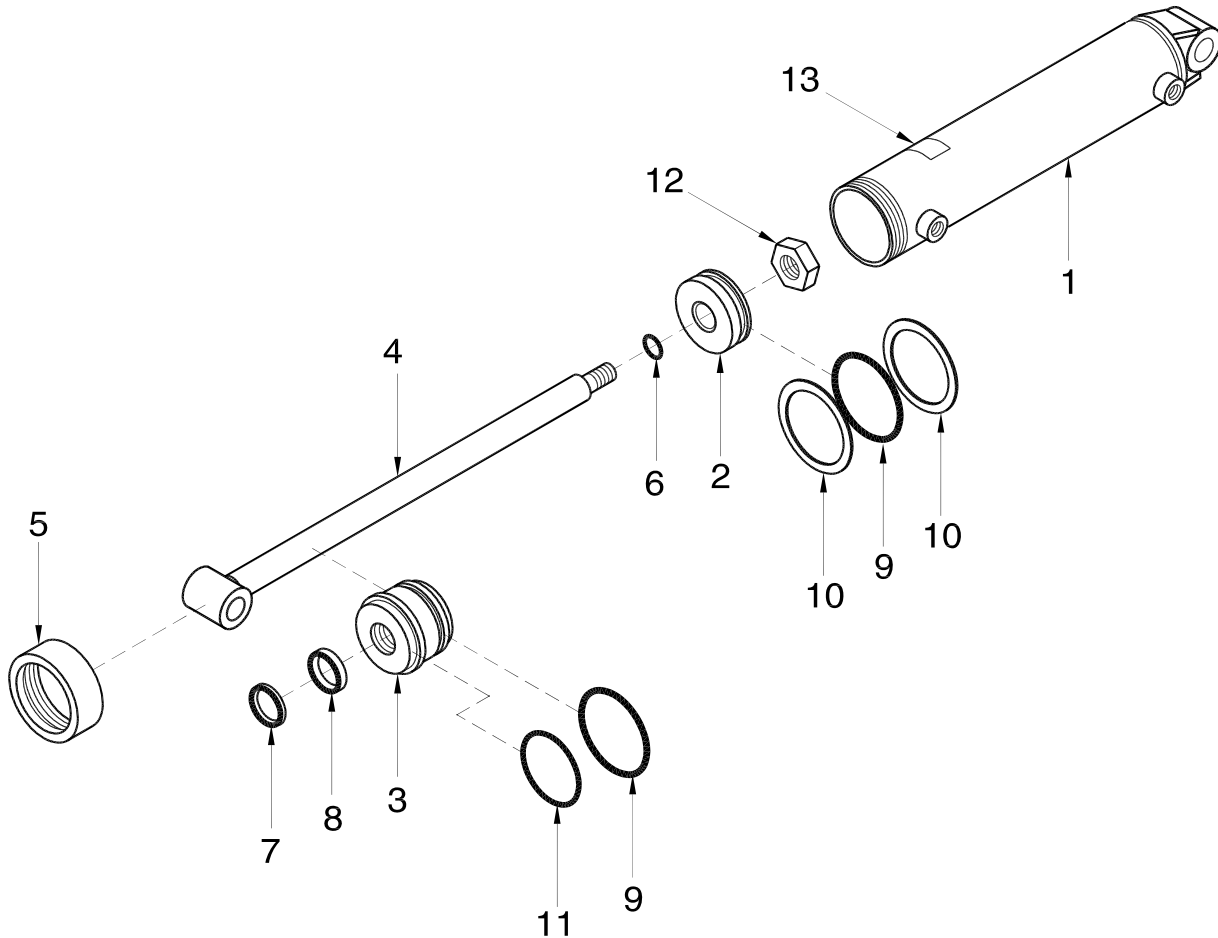
Item	Part No.	Description	Qty
		Wing Lift Cylinder - C26436 - 4 x 18	
1	C26437	Barrel - 4 x 18 ORB.....	1
2	C16637	Piston - 4 Dia - 7/8 Shaft.....	1
3	C-2026	Gland - 4 Dia - 1 1/4 Shaft.....	1
4	C32025	Cylinder Shaft - 1 1/4 Dia x 25 7/8.....	1
5	C-2023	Collar - 4 Cylinder.....	1
6	C-2187	1 OD x 1/16 C/S 90D BUNA O-Ring.....	1
7	C-2007	1 1/4 ID x 3/16 C/S 90D URTH Wiper.....	1
8	C-2008	1 1/4 ID x 5/16 C/S 90D URTH U-Cup.....	1
9	C-2030	4 OD x 3/16 C/S 90D BUNA O-Ring.....	2
10	C15386	Backup Washer - 4 Dia - #342.....	2
11	C-2215	3 7/8 OD x 1/16 C/S 70A BUNA-N O-Ring.....	1
12	C-2017	Locknut - 7/8 UNF Unitorque.....	1
13	C26846	Part # Plate for C26436.....	1
	C26436	Cylinder Assembly (Includes All Above Items)	
	C20449	Seal Kit (Includes Items #6, 7, 8, 9, 10 & 11)	

Hydraulic Cylinders Wing Lift



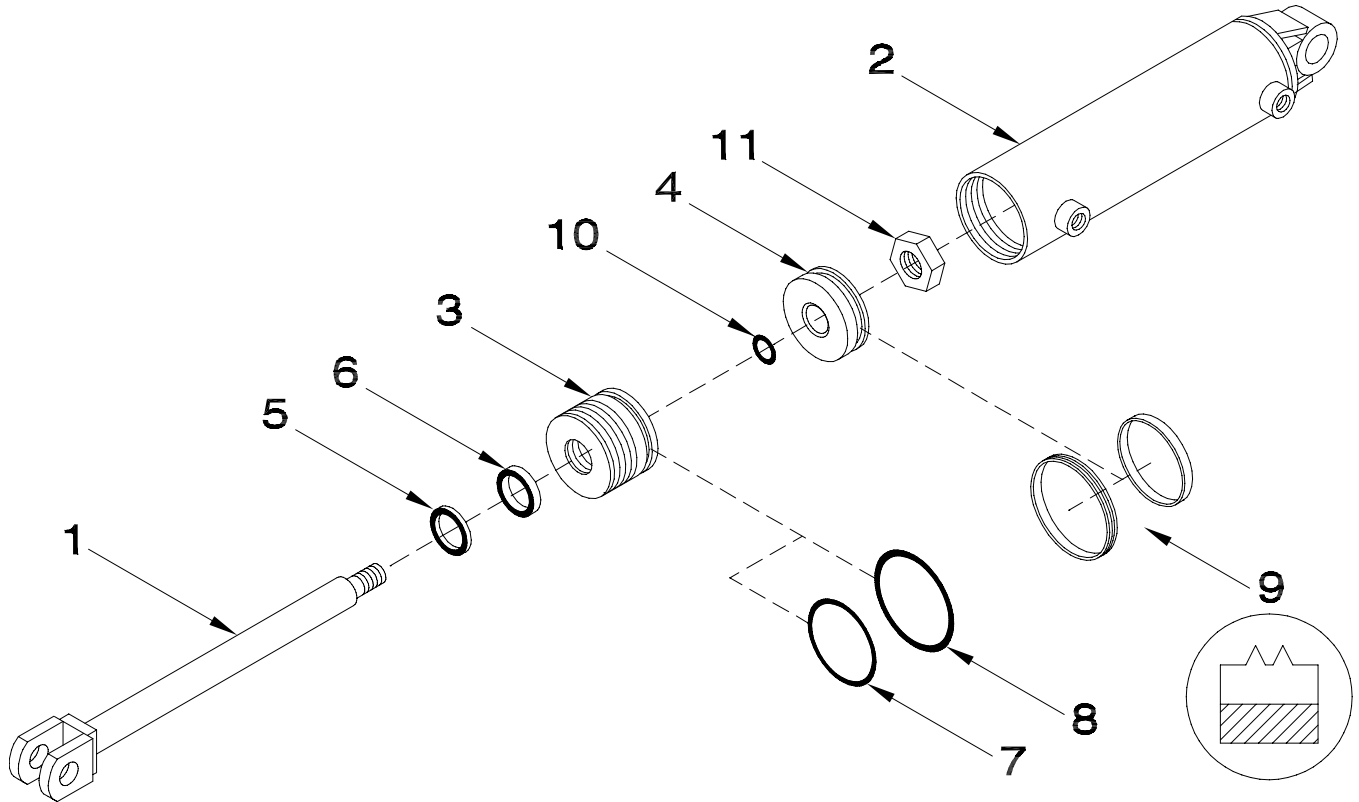
Item	Part No.	Description	Qty
		Wing Lift Cylinder - C34442 - 4 1/2 x 30	
1	C34441	Barrel - 4 1/2 x 30 - 1 1/4 clevis hole.....	1
2	C12836	Piston - 4 1/2 Dia - 1 Shaft.....	1
3	C-2154	Gland - 4 1/2 Dia - 1 3/4 Shaft	1
4	C26190	Cylinder Shaft - 1 3/4 Dia.....	1
5	C-2155	Collar - 4 1/2 Cylinder	1
6	C13282	1 1/8 OD x 1/16 C/S 90D BUNA O-Ring.....	1
7	C-2136	1 3/4 ID x 3/16 C/S 90D URTH Wiper.....	1
8	C-2135	1 3/4 ID x 3/8 C/S 90D URTH U-Cup.....	1
9	C-2164	4 1/2 OD x 3/16 C/S 90D BUNA O-Ring.....	2
10	C15387	Backup Washer - 4 1/2 Dia - #346	2
11	C-2215	3 7/8 OD x 1/16 C/S 70A BUNA-N O-Ring	1
12	C13763	Locknut - 1-14 UNS Uunitorque	1
13	C36064	Part # Plate for C34442.....	1
	C34442	Cylinder Assembly (Includes All Above Items)	
	C12849	Seal Kit (Includes Items #6, 7, 8, 9, 10 & 11)	

Hydraulic Cylinders Wing Lift



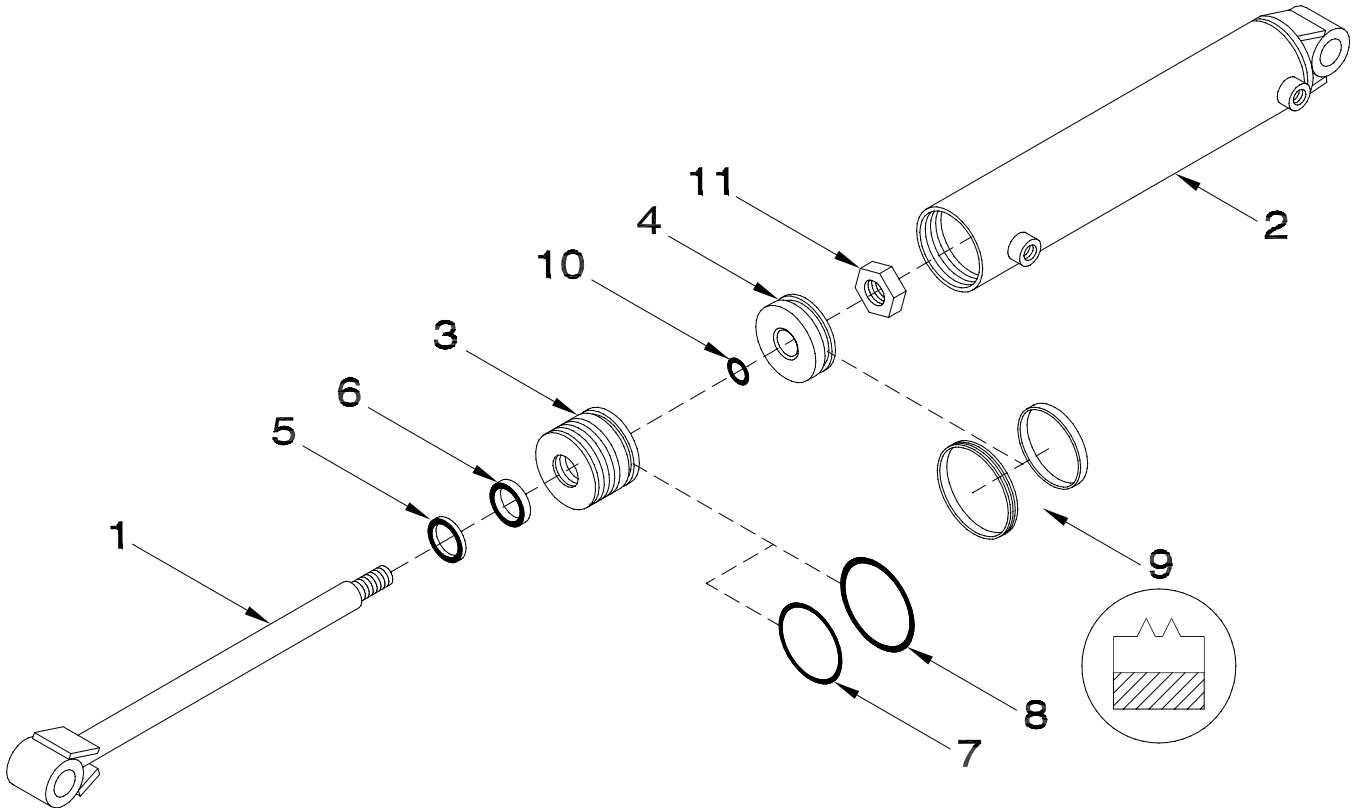
Item	Part No.	Description	Qty
		Wing Lift Cylinder - C39030 - 4 1/2 x 36	
1	C39027	Barrel - 4 1/2 x 36 - 1 1/4 clevis hole.....	1
2	C12836	Piston - 4 1/2 Dia - 1 Shaft.....	1
3	C-2154	Gland - 4 1/2 Dia - 1 3/4 Shaft	1
4	C39029	Cylinder Shaft - 1 3/4 Dia.....	1
5	C-2155	Collar - 4 1/2 Cylinder	1
6	C13282	1 1/8 OD x 1/16 C/S 90D BUNA O-Ring.....	1
7	C-2136	1 3/4 ID x 3/16 C/S 90D URTH Wiper.....	1
8	C-2135	1 3/4 ID x 3/8 C/S 90D URTH U-Cup.....	1
9	C-2164	4 1/2 OD x 3/16 C/S 90D BUNA O-Ring.....	2
10	C15387	Backup Washer - 4 1/2 Dia - #346.....	2
11	C-2215	3 7/8 OD x 1/16 C/S 70A BUNA-N O-Ring	1
12	C13763	Locknut - 1-14 UNS Uunitorque	1
13	C39031	Part # Plate for C39030.....	1
	C39030	Cylinder Assembly (Includes All Above Items)	
	C12849	Seal Kit (Includes Items #6, 7, 8, 9, 10 & 11)	

Hydraulic Cylinders Wing Lift



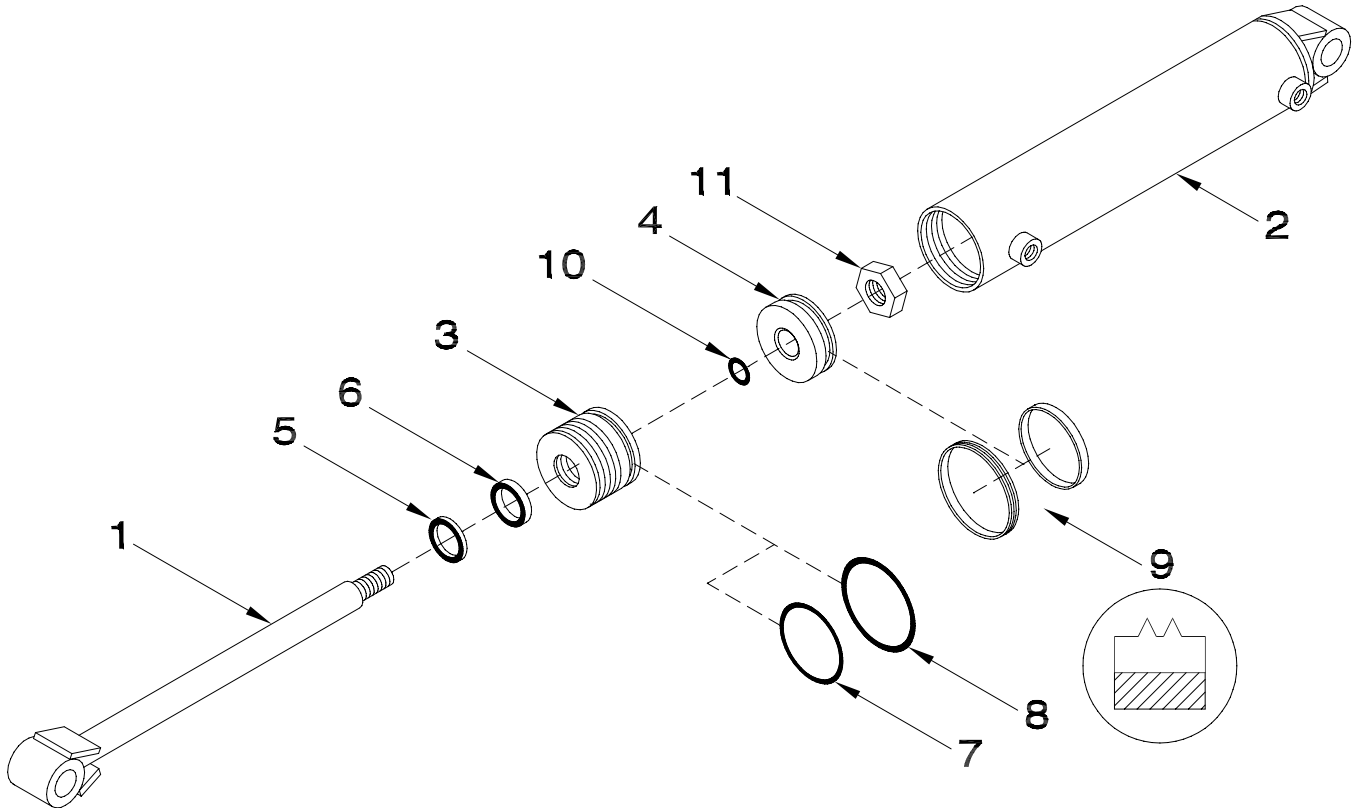
Item	Part No.	Description	Qty
Wing Lift Cylinder - C47594 - 5 x 30			
1	C50179	Cylinder Shaft.....	1
2	C45675	Barrel - 5 x 30 ORB.....	1
3	C39916	Gland - 5 Dia.....	1
4	C39913	Piston - 5 Dia	1
5	C34598	Wiper.....	1
6	C34599	Shaft Seal.....	1
7	C39904	Backup Ring.....	1
8	C39900	Gland Seal (O-Ring)	1
9	C39892	Piston Seal - (PSP-A) (2 part seal)	1
10	C34592	Shaft Seal.....	1
11	C34596	Locknut	1
	C47594	Cylinder Assembly (Includes All Above Items)	
	C39906	Seal Kit (Includes Items #5, 6, 7, 8, 9 & 10)	

Hydraulic Cylinders Wing Lift



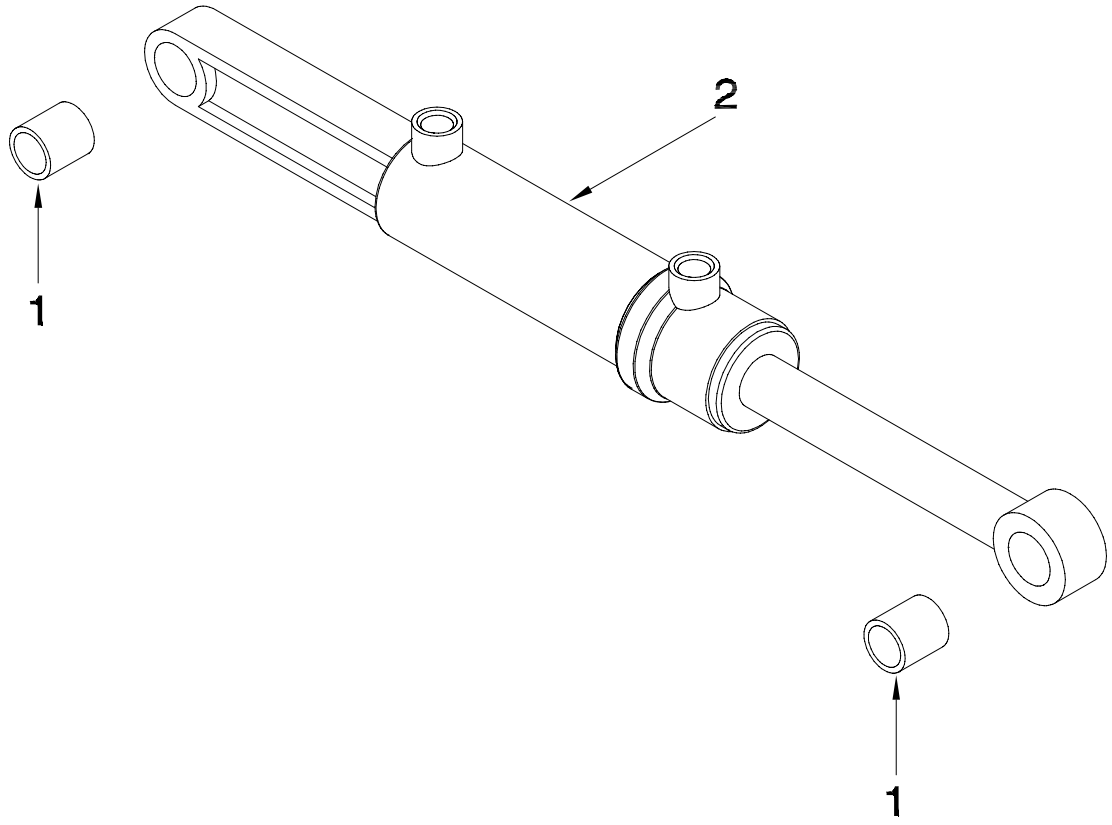
Item	Part No.	Description	Qty
Wing Lift Cylinder - C39490 - 5 x 36			
1	C39910	Cylinder Shaft.....	1
2	C39919	Barrel - 5 x 36 ORB.....	1
3	C39916	Gland - 5 Dia.....	1
4	C39913	Piston - 5 Dia	1
5	C34598	Wiper.....	1
6	C34599	Shaft Seal.....	1
7	C39904	Backup Ring.....	1
8	C39900	Gland Seal (O-Ring)	1
9	C39892	Piston Seal - (PSP-A) (2 part seal)	1
10	C34592	Shaft Seal.....	1
11	C34596	Locknut	1
	C39490	Cylinder Assembly (Includes All Above Items)	
	C39906	Seal Kit (Includes Items #5, 6, 7, 8, 9 & 10)	

Hydraulic Cylinders Wing Lift



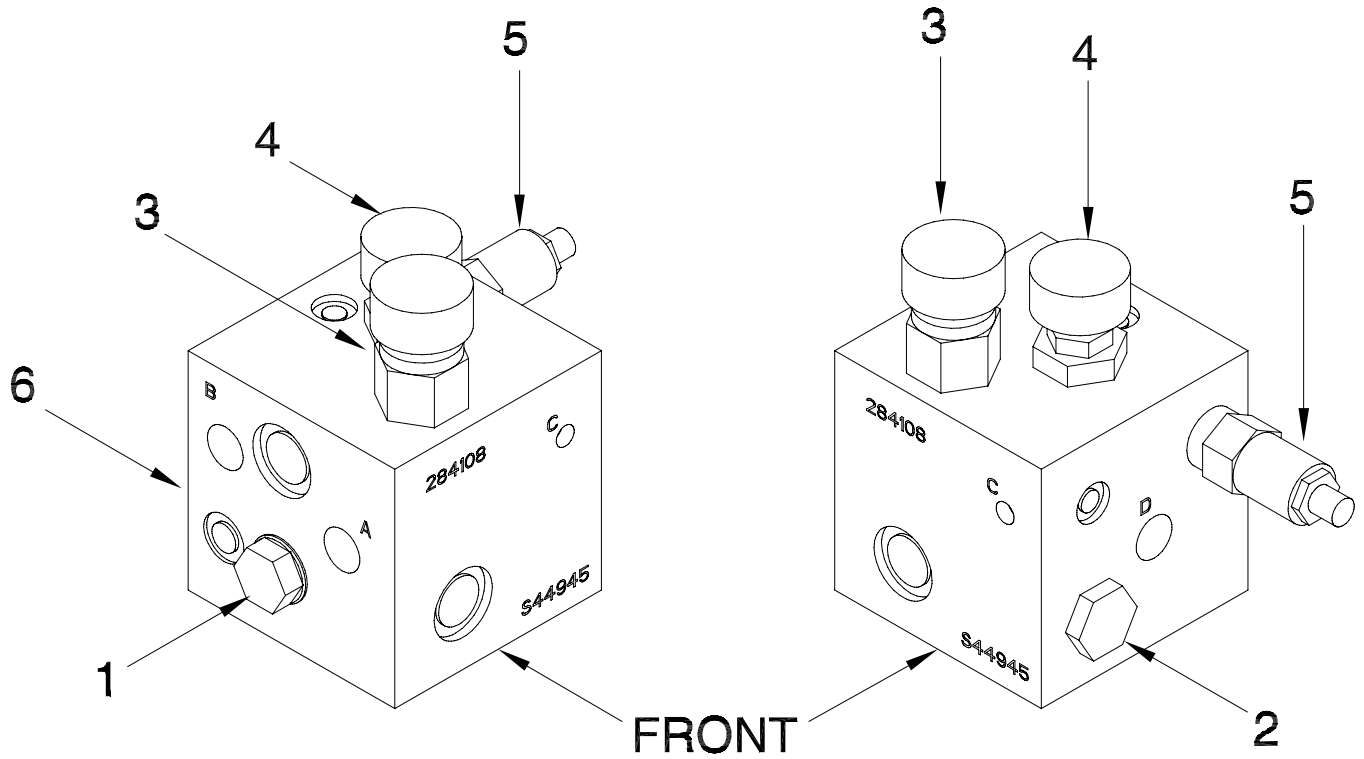
Item	Part No.	Description	Qty
Wing Lift Cylinder - C53250 - 5 1/2 x 36			
1		Cylinder Shaft - 2 Dia x 36	
2		Barrel - 5 1/2 x 36 ORB	
3		Gland - 5 1/2 Dia.....	1
4		Piston - 5 1/2 Dia	1
5		Wiper.....	1
6		Shaft Seal.....	1
7		Backup Ring.....	1
8		Gland Seal (O-Ring)	1
9		Piston Seal - (PSP-A) (2 part seal)	1
10		Shaft Seal.....	1
11		Locknut	1
	C53250	Cylinder Assembly - 5 1/2 x 36	
	C55803	Seal Kit (Includes Items #5, 6, 7, 8, 9 & 10)	

Hydraulic Cylinders Opener Cylinder



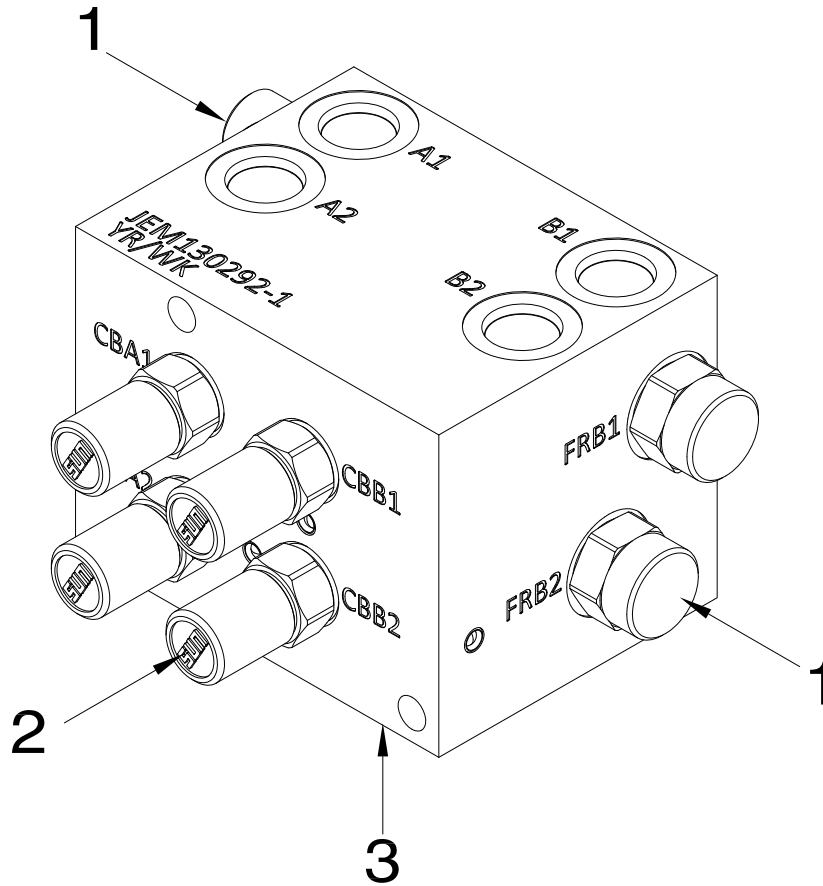
Item	Part No.	Description	Qty
1	S51494	Cylinder - C51153 - 1 3/4 x 4 - retracted length 16.13"	
2	C51153	Bushing - 3/4 ID x 1 OD x 1 Lg	2
		Cylinder Assembly (Includes All Above Items)	1
	C51152	Seal Kit	

Hydraulic Cylinders Opener Valve Block



Item	Part No.	Description	Qty
1	S47139	Check Valve Cartridge - Pilot Operated.....	1
2	S47140	Check Valve Cartridge - Poppet	1
3	S47141	Check Valve Cartridge - Reducing/Relieving Valve.....	1
4	S47142	Cartridge Valve - Needle Valve	1
5	S47143	Cartridge - Pilot Operated - Accumulator Lock Out Valve.....	1
6	S44945	Hydraulic Down Pressure Manifold (Includes All Above Items)	

Hydraulic Cylinders Wing Lift Valve Block



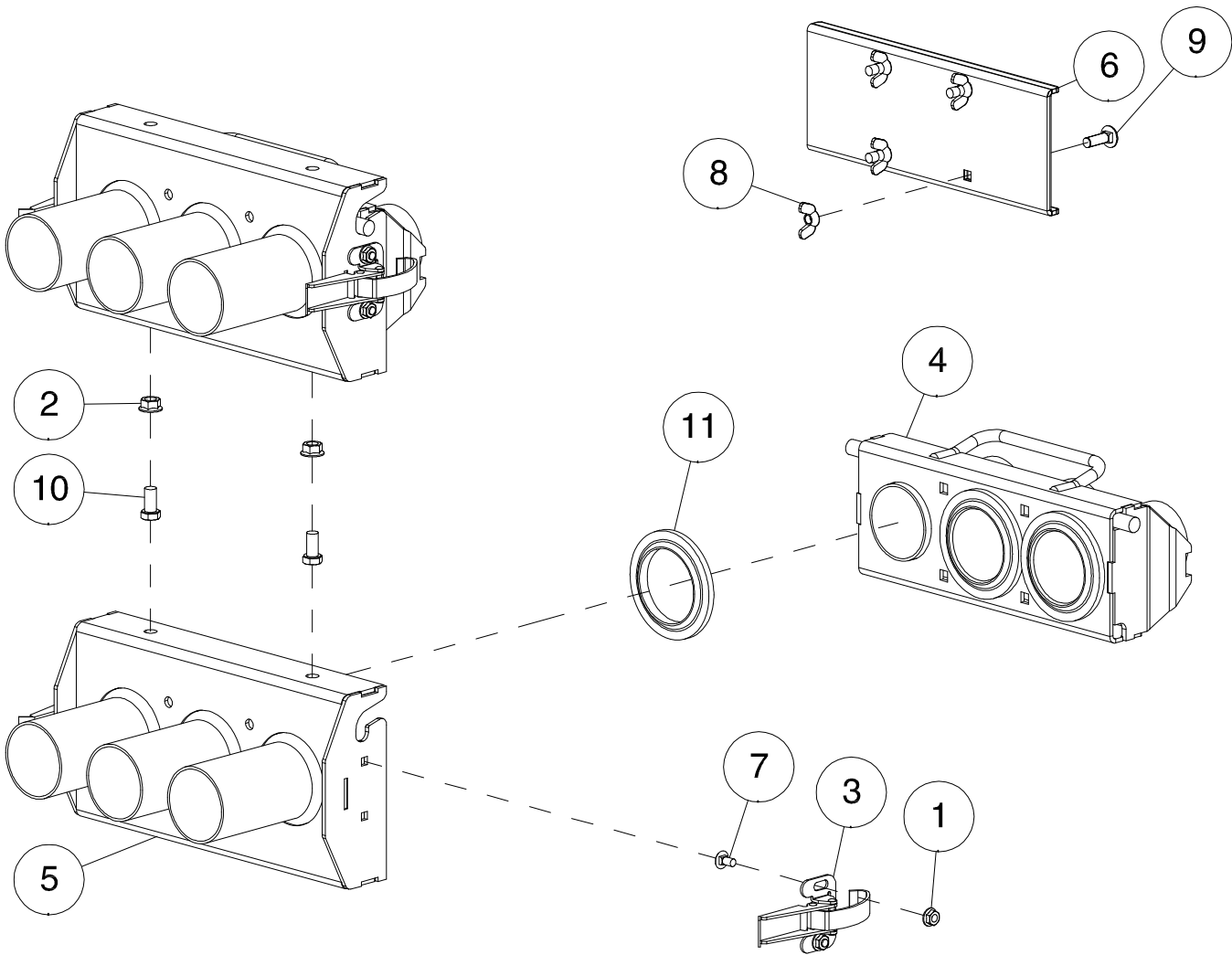
Item	Part No.	Description	Qty
1	C53847	Pressure Compensated Flow Control Cartridge - 5 gpm.....	4
2	C53848	Counterbalance Cartridge - 2700 psi	4
3	C53849	Counterbalance Winglift Manifold (Includes All Above Items)	

Section 6: Distribution

Section Contents

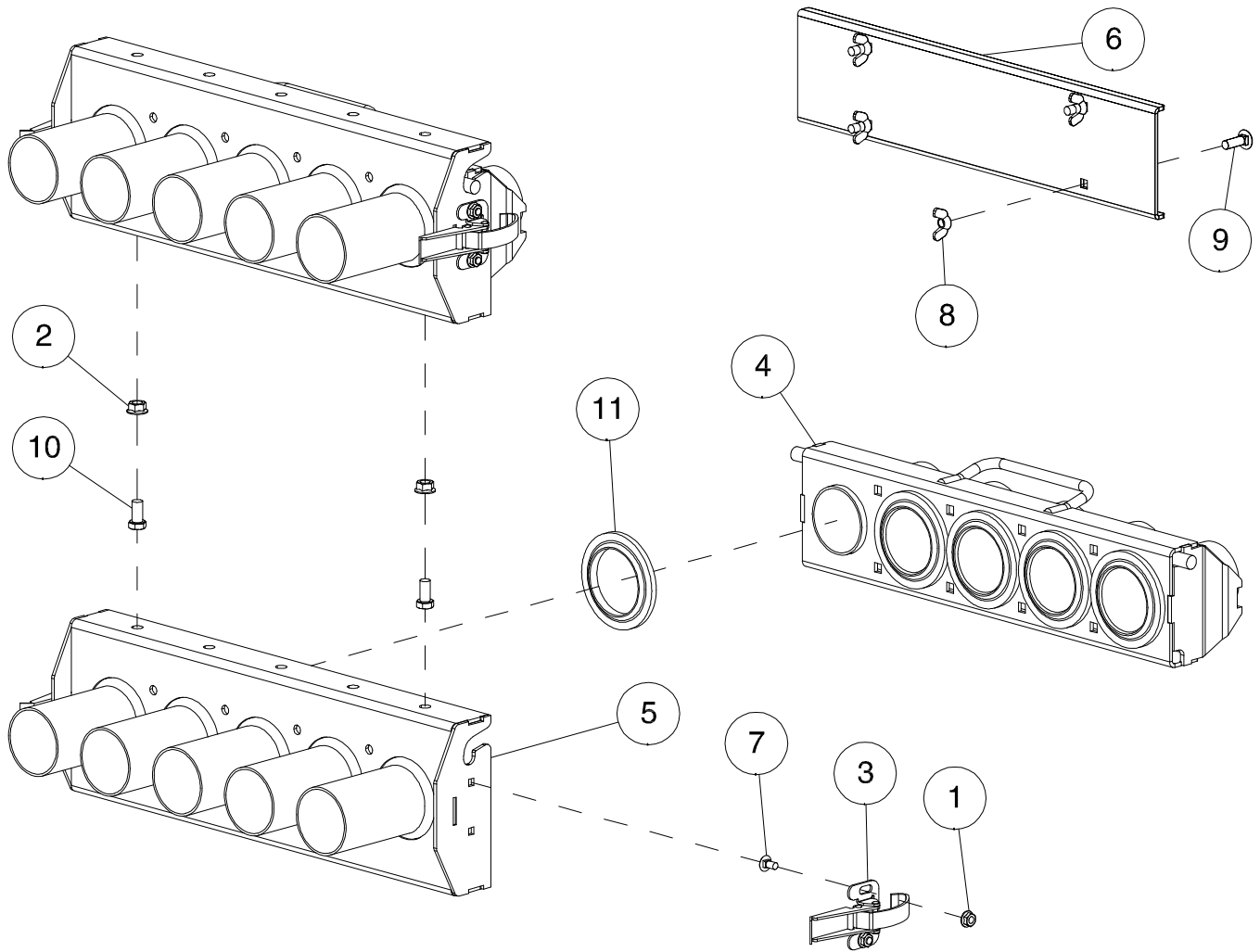
Quick Coupler - 3 Outlet.....	6-2
Quick Coupler -5 Outlet.....	6-3
Single Shoot Tow Behind - 40, 50 & 60 ft	6-4
Single Shoot Tow Between - 40, 50 & 60 ft	6-6

Distribution Quick Coupler - 3 Outlet



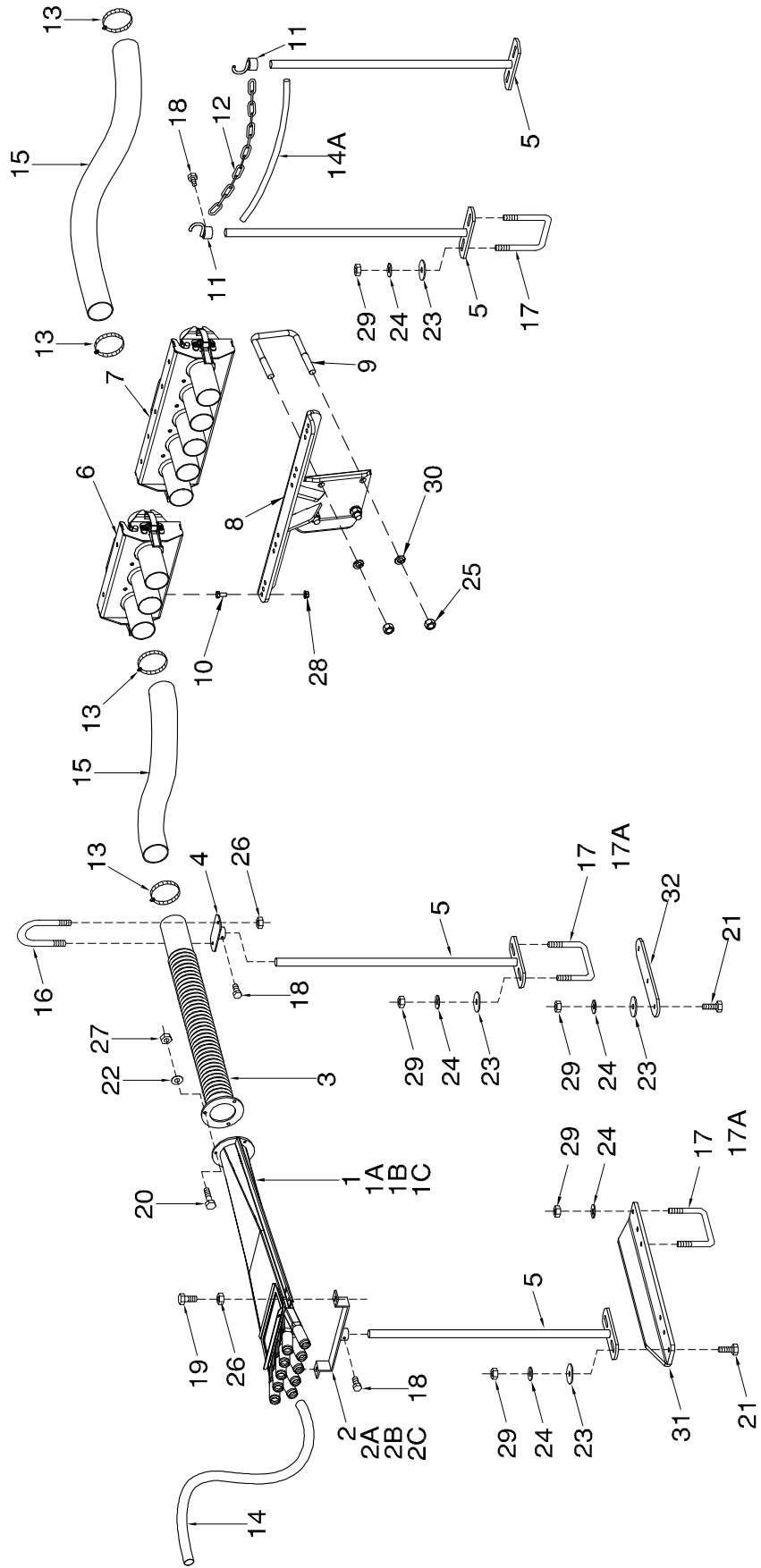
Item	Part No.	Description	Qty
1	D-5277	Flange Lock Nut - 1/4 Unc Serrated.....	8
2	D-5279	Flange Lock Nut - 3/8 Unc Serrated.....	2
3	N42213	Latch	4
4	N51983	Quick Coupler - 3 Run - Cart - Contains Item 11	2
5	N53200	Quick Coupler - 3 Run - Drill	2
6	N53207	Cover Plate - 3 Run.....	2
7	N53215	Carriage Bolt - 1/4 x 1/2 Lg	8
8	S-747	Wing Nut - 5/16	8
9	S33420	Carriage Bolt - 5/16 x 1 Lg	8
10	W-867	Hex Bolt - 3/8 x 3/4 Lg.....	2
11	N40735	Washer Seal.....	6
	N16170	Clear Silicon 305ml - used to assemble 11 to 4	As Req

Distribution Quick Coupler -5 Outlet



Item	Part No.	Description	Qty
1	D-5277	Flange Lock Nut - 1/4 Unc Serrated.....	8
2	D-5279	Flange Lock Nut - 3/8 Unc Serrated.....	2
3	N42213	Latch	4
4	N51955	Quick Coupler - 5 Run - Cart - Contains Item 11	2
5	N51960	Quick Coupler - 5 Run - Drill	2
6	N53209	Cover Plate - 5 Run.....	2
7	N53215	Carriage Bolt - 1/4 x 1/2 Lg	8
8	S-747	Wing Nut - 5/16	8
9	S33420	Carriage Bolt - 5/16 x 1 Lg	8
10	W-867	Hex Bolt - 3/8 x 3/4 Lg.....	2
11	N40735	Washer Seal.....	6
	N16170	Clear Silicon 305ml - used to assemble 11 to 4	As Req

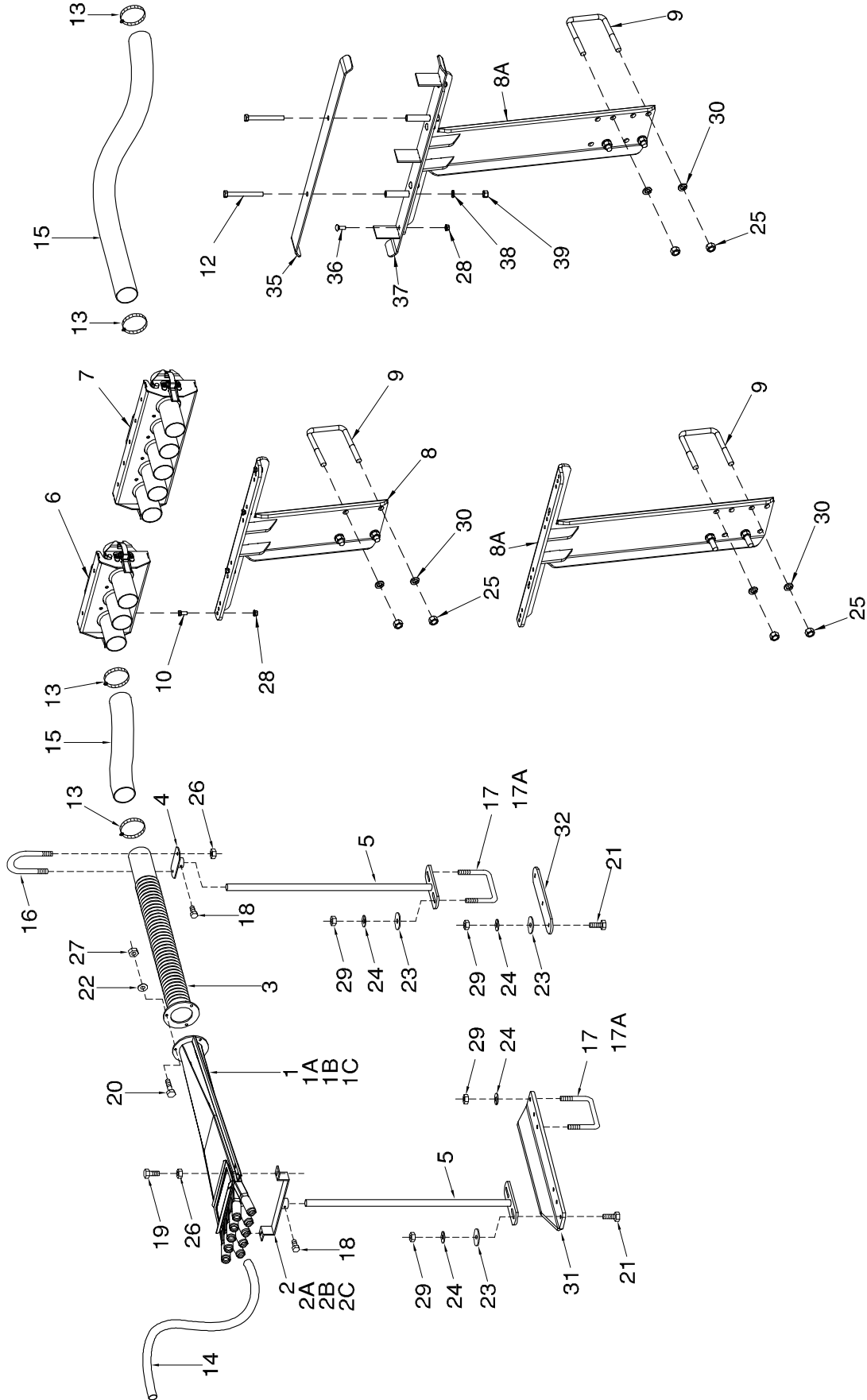
Distribution Single Shoot Tow Behind - 40, 50 & 60 ft



Distribution - Single Shoot Tow Behind - 40, 50 & 60 ft

Item	Part No.	Description	No: Used									
			40ft			50ft			60ft			
			7.5	10	15	7.5	10	15	7.5	10	15	
1	N42274	Divider Assembly - 11 Outlet	-	-	-	-	-	-	-	5	-	-
1A	N31190	Divider Assembly - 10 Outlet.....	-	-	-	-	-	-	-	4	-	-
1B	N31189	Divider Assembly - 9 Outlet	-	-	-	7	-	-	-	-	-	-
1C	N31188	Divider Assembly - 8 Outlet	7	5	4	2	3	5	-	8	6	
1D	N31187	Divider Assembly - 7 Outlet	1	1	-	-	5	-	-	1	-	
2	N40544	Support - 11 Outlet.....	-	-	-	-	-	-	5	-	-	
2A	N19406	Support - 10 Outlet.....	-	-	-	-	-	-	4	-	-	
2B	N15595	Support - 9 Outlet	-	-	-	7	-	-	-	-	-	
2C	N15107	Support - 8 Outlet	7	5	4	2	3	5	-	8	6	
2D	N15594	Support - 7 Outlet	1	1	-	-	5	-	-	1	-	
3	N15135	Pipe - Corr Diff - Divider Head	8	6	4	9	8	5	9	9	6	
4	N15102	Support - Rear	8	6	4	9	8	5	9	9	6	
5	N19531	Support - Bottom - Rod 24"	16	12	8	18	16	10	18	18	12	
6	*****	Quick Coupler 3 Run (Refer Pg 6-2).....	-	2	-	-	-	-	-	-	2	
7	*****	Quick Coupler 5 Run (Refer Pg 6-3).....	2	-	1	2	2	1	2	2	-	
8	N53203	Coupler Tower - Behind.....	1	1	1	1	1	1	1	1	1	
9	C-219	U-Bolt - 5/8 x 4 x 5 9/16 Lg	2	2	2	2	2	2	2	2	2	
10	W-867	Hex Bolt - 3/8 x 3/4 Lg	4	4	2	4	4	2	4	4	4	
11	N19717	Hook - Chain.....	2	2	2	2	2	2	2	2	2	
12	N19448	Chain - 80 Link.....	1	1	1	1	1	1	1	1	1	
13	N11905	Hose Clamp - 2 1/2.....	28	24	16	32	28	20	36	36	24	
14	R480034	Hose - .929 ID x 1.169 OD/ft (75 ft roll)	525	450	300	675	600	375	675	675	450	
14A	R480034	Hose - .929 ID x 1.169 OD/ft (75 ft roll)	1.5 ft	1.5 ft	1.5 ft	1.5 ft	1.5 ft	1.5 ft	1.5 ft	1.5 ft	1.5 ft	
15	R480055	Hose - 2 1/2 ID/ft (100 ft rolls)	125	100	75	175	175	75	175	175	125	
16	N15096	U-Bolt - 1/4 x 2.5 x 3 1/4 Lg	8	6	4	9	8	5	9	9	6	
17	N19723	U-Bolt - 3/8 x 4 x 7 Lg	14	12	8	12	12	4	10	14	6	
17A	N34423	U-Bolt - 3/8 x 2 x 7 Lg	2	2	2	4	4	6	4	6	6	
18	N24396	Setscrew - 1/4 x 1/2 Lg	18	14	10	20	18	12	20	20	14	
19	K-3830	Hex Bolt - 1/4 x 1/2 Lg	16	12	8	18	16	10	18	18	12	
20	W-469	Hex Bolt - 1/4 x 3/4 Lg	24	18	12	27	24	15	27	27	18	
21	W-187	Hex Bolt - 3/8 x 1 1/4 Lg	12	10	2	?	?	?	?	8	2	
22	W-521	Lockwasher - 1/4	24	18	12	27	24	15	27	27	18	
23	D-5579	Flatwasher - 3/8	48	34	18	56	46	28	44	48	22	
24	W-523	Lockwasher - 3/8	48	34	18	56	46	28	44	48	22	
25	W-517	Hex Nut - 5/8.....	4	4	4	4	4	4	4	4	4	
26	D-5277	Serrated Locknut - 1/4	32	24	16	36	32	20	36	36	24	
27	W-512	Hex Nut - 1/4.....	24	18	12	27	24	15	27	27	18	
28	D-5279	Serrated Locknut - 3/8	4	4	4	4	4	4	4	4	4	
29	W-514	Hex Nut - 3/8.....	48	34	18	56	46	28	44	48	22	
30	W-526	Lockwasher - 5/8	4	4	4	4	4	4	4	4	4	
31	S44308	Extension Bracket - Head Support.....	10	5	1	10	7	4	8	6	1	
32	S44467	Head Support Plate	-	-	-	-	-	-	-	-	-	

Distribution Single Shoot Tow Between - 40, 50 & 60 ft



Distribution - Single Shoot Tow Between - 40, 50 & 60 ft

Item	Part No.	Description	No: Used								
			40ft			50ft			60ft		
			7.5	10	15	7.5	10	15	7.5	10	15
1	N42274	Divider Assembly - 11 Outlet	-	-	-	-	-	-	5	-	-
1A	N31190	Divider Assembly - 10 Outlet.....	-	-	-	-	-	-	4	-	-
1B	N31189	Divider Assembly - 9 Outlet	-	-	-	7	-	-	-	-	-
1C	N31188	Divider Assembly - 8 Outlet	7	5	4	2	3	5	-	8	6
1D	N31187	Divider Assembly - 7 Outlet	1	1	-	-	5	-	-	1	-
2	N40544	Support - 11 Outlet.....	-	-	-	-	-	-	5	-	-
2A	N19406	Support - 10 Outlet.....	-	-	-	-	-	-	4	-	-
2B	N15595	Support - 9 Outlet	-	-	-	7	-	-	-	-	-
2C	N15107	Support - 8 Outlet	7	5	4	2	3	5	-	8	6
2D	N15594	Support - 7 Outlet	1	1	-	-	5	-	-	1	-
3	N15135	Pipe - Corr Diff - Divider Head	8	6	4	9	8	5	9	9	6
4	N15102	Support - Rear	8	6	4	9	8	5	9	9	6
5	N19531	Support - Bottom - Rod 24"	16	12	8	18	16	10	18	18	12
6	*****	Quick Coupler 3 Run (Refer Pg 6-2).....	-	2	-	-	-	-	-	-	2
7	*****	Quick Coupler 5 Run (Refer Pg 6-3).....	2	-	1	2	2	1	2	2	-
8	N51962	Coupler Tower - Short - 5 Frame	-	-	-	1	1	1	1	1	1
8A	N51967	Coupler Tower - Tall	1	1	1	1	1	1	1	1	1
9	C-219	U-Bolt - 5/8 x 4 x 5 9/16 Lg	2	2	2	4	4	4	4	4	4
10	W-867	Hex Bolt - 3/8 x 3/4 Lg	4	4	2	4	4	2	4	4	4
12	C-3684	Hex Bolt - 1/2 x 4 1/2 Lg	2	2	2	2	2	2	2	2	2
13	N11905	Hose Clamp - 2 1/2.....	28	24	16	32	28	20	36	36	24
14	R480034	Hose - .929 ID x 1.169 OD/ft (75 ft roll)	525	450	300	675	600	375	675	675	450
15	R480055	Hose - 2 1/2 ID/ft (100 ft rolls)	175	125	75	275	225	150	250	225	175
16	N15096	U-Bolt - 1/4 x 2.5 x 3 1/4 Lg	8	6	4	9	8	5	9	9	6
17	N19723	U-Bolt - 3/8 x 4 x 7 Lg	12	10	6	14	12	4	10	12	4
17A	N34423	U-Bolt - 3/8 x 2 x 7 Lg	2	2	2	4	4	6	4	6	6
18	N24396	Setscrew - 1/4 x 1/2 Lg	16	12	8	18	16	10	18	18	12
19	K-3830	Hex Bolt - 1/4 x 1/2 Lg	16	12	8	18	16	10	18	18	12
20	W-469	Hex Bolt - 1/4 x 3/4 Lg	24	18	12	27	24	15	27	27	18
21	W-187	Hex Bolt - 3/8 x 1 1/4 Lg	20	10	2	20	14	8	16	12	2
22	W-521	Lockwasher - 1/4	24	18	12	27	24	15	27	27	18
23	D-5579	Flatwasher - 3/8.....	48	34	18	56	46	28	44	48	22
24	W-523	Lockwasher - 3/8	48	34	18	56	46	28	44	48	22
25	W-517	Hex Nut - 5/8.....	4	4	4	8	8	8	8	8	8
26	D-5277	Serrated Locknut - 1/4	32	24	16	36	32	20	36	36	24
27	W-512	Hex Nut - 1/4.....	24	18	12	27	24	15	27	27	18
28	D-5279	Serrated Locknut - 3/8	4	4	4	6	6	6	6	6	6
29	W-514	Hex Nut - 3/8.....	48	34	18	56	46	28	44	48	22
30	W-526	Lockwasher - 5/8	4	4	4	8	8	8	8	8	8
31	S44308	Extension Bracket - Head Support.....	10	5	1	10	7	4	8	6	1
32	S44467	Head Support Plate	-	-	-	-	-	-	-	-	-
35	N51977	Clamp Plate	1	1	1	1	1	1	1	1	1
36	P7C616	Carriage Bolt - 3/8 x 1 Lg.....	-	-	-	2	2	2	2	2	2
37	N51979	Hose Clamp Strap	1	1	1	1	1	1	1	1	1
38	W-525	Lockwasher - 1/2	2	2	2	2	2	2	2	2	2
39	W-516	Hex Nut - 1/2.....	2	2	2	2	2	2	2	2	2

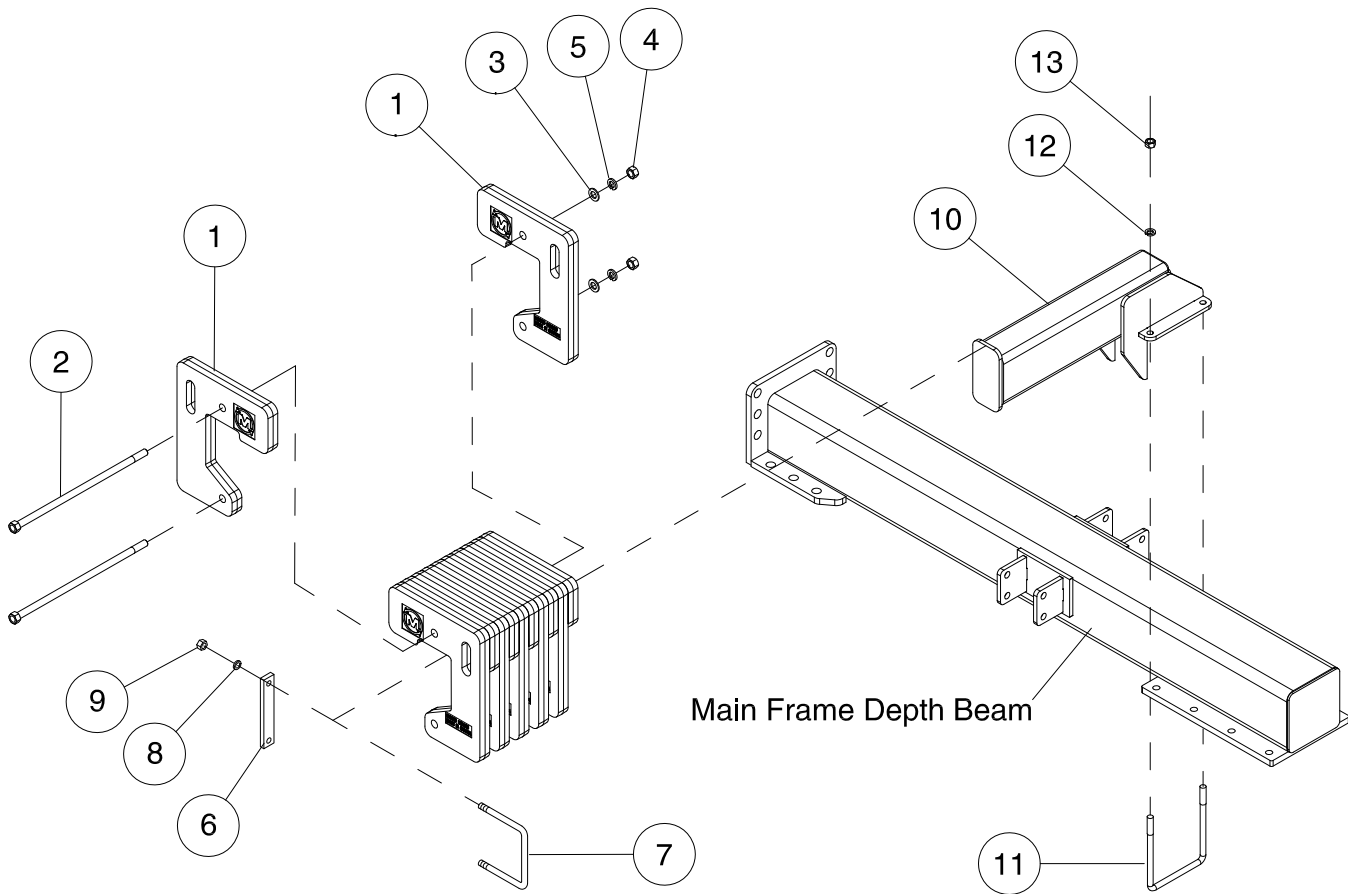
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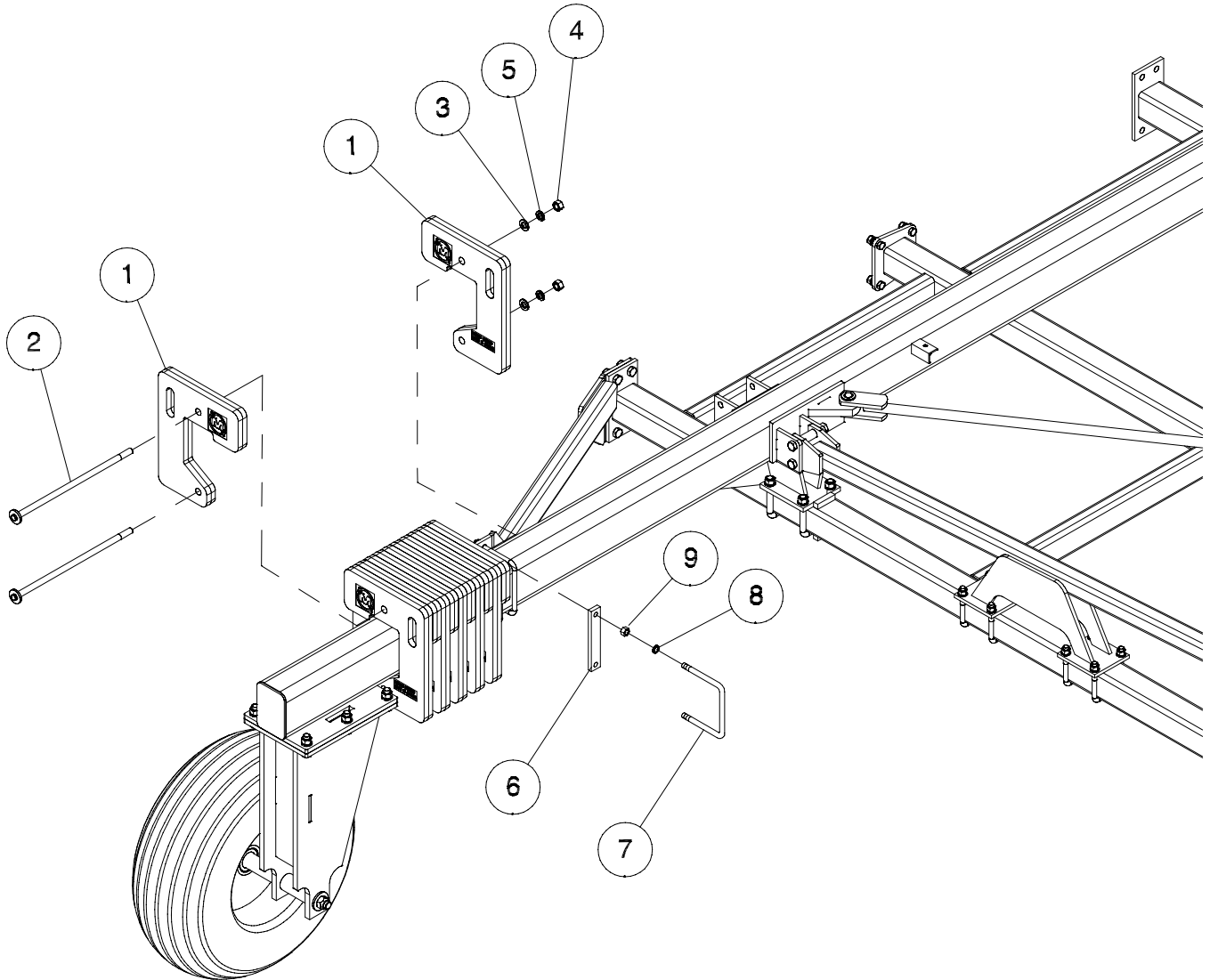
Options Weight Kit - Main Frame



Note: Wrap Weights (1) around beam alternating left to right.

Item	Part No.	Description	Qty
1	N37523	Weight - 50 lb.....	12
2	S44449	Rod - 3/4 Dia x 20 Lg.....	2
3	W-476	Flat Washer - 3/4.....	2
4	W-518	Hex Nut - 3/4.....	2
5	W-527	Lockwasher - 3/4.....	2
6	S47530	Plate - Weight Kit Stop.....	1
7	N33342	U-Bolt - 5/8 x 7 x 6 1/2 UL.....	1
8	W-526	Lockwasher - 5/8.....	2
9	W-517	Hex Nut - 5/8.....	2
10	S55270	Weight Mounting Arm - Main Frame.....	2
11	S49996	U-Bolt - 3/4 x 8 1/4 x 10 1/2 UL.....	4
12	W-527	Lockwasher - 3/4.....	8
13	W-518	Hex Nut - 3/4.....	8

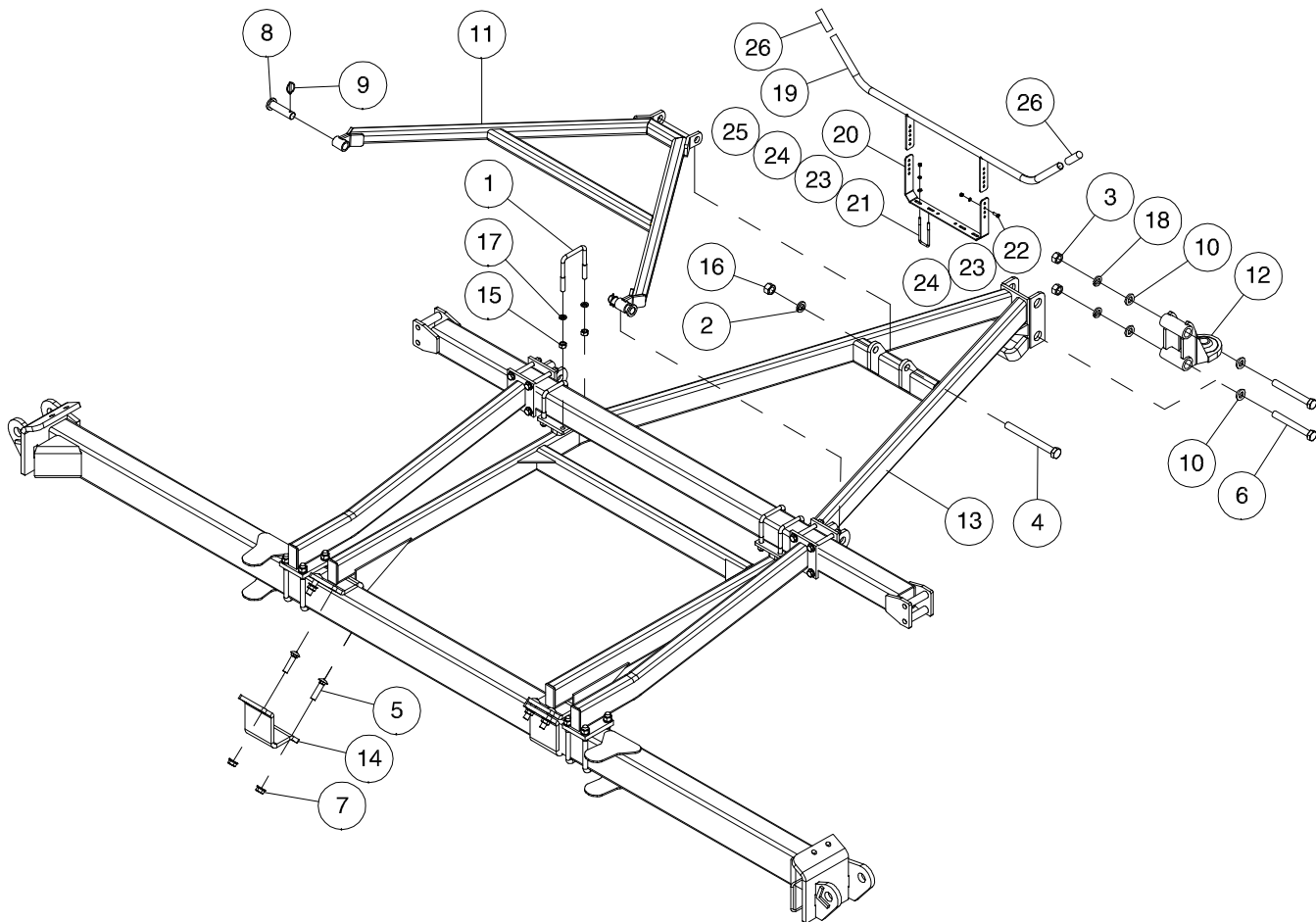
Options Weight Kit - Wing Frame



Note: Wrap Weights (1) around beam alternating left to right.

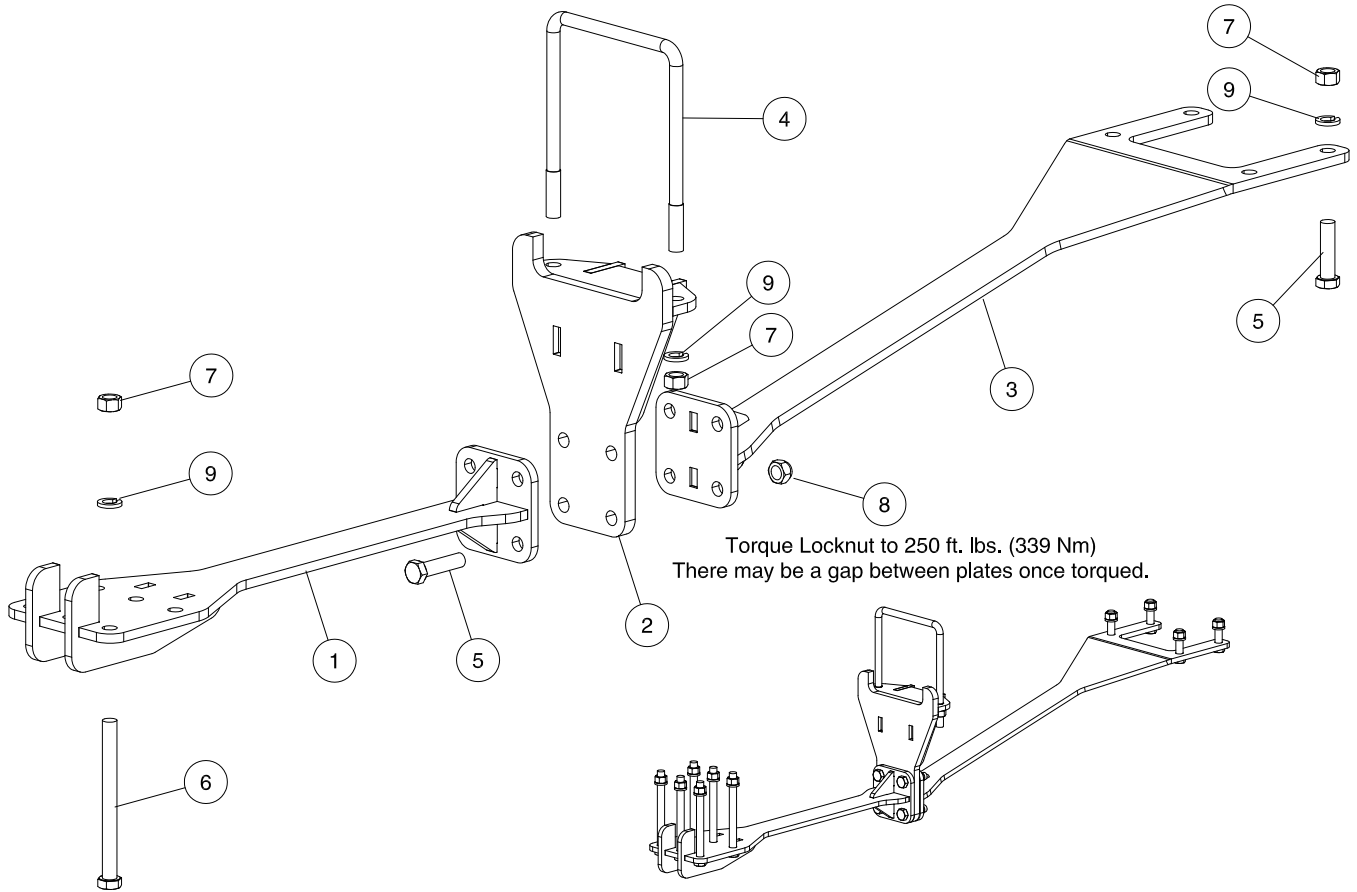
Item	Part No.	Description	Qty
1	N37523	Weight - 50lb	12
2	S44449	Rod - 3/4 Dia x 20 Lg	2
3	W-476	Flat Washer - 3/4.....	2
4	W-518	Hex Nut - 3/4.....	2
5	W-527	Lockwasher - 3/4.....	2
6	S47530	Plate - Weight Kit Stop	1
7	N33342	U-Bolt - 5/8 x 7 x 6 1/2	1
8	W-526	Lockwasher - 5/8.....	2
9	W-517	Hex Nut - 5/8.....	2
	S43741	Weight Kit (Includes all above items)	

Options Rear Tow Hitch



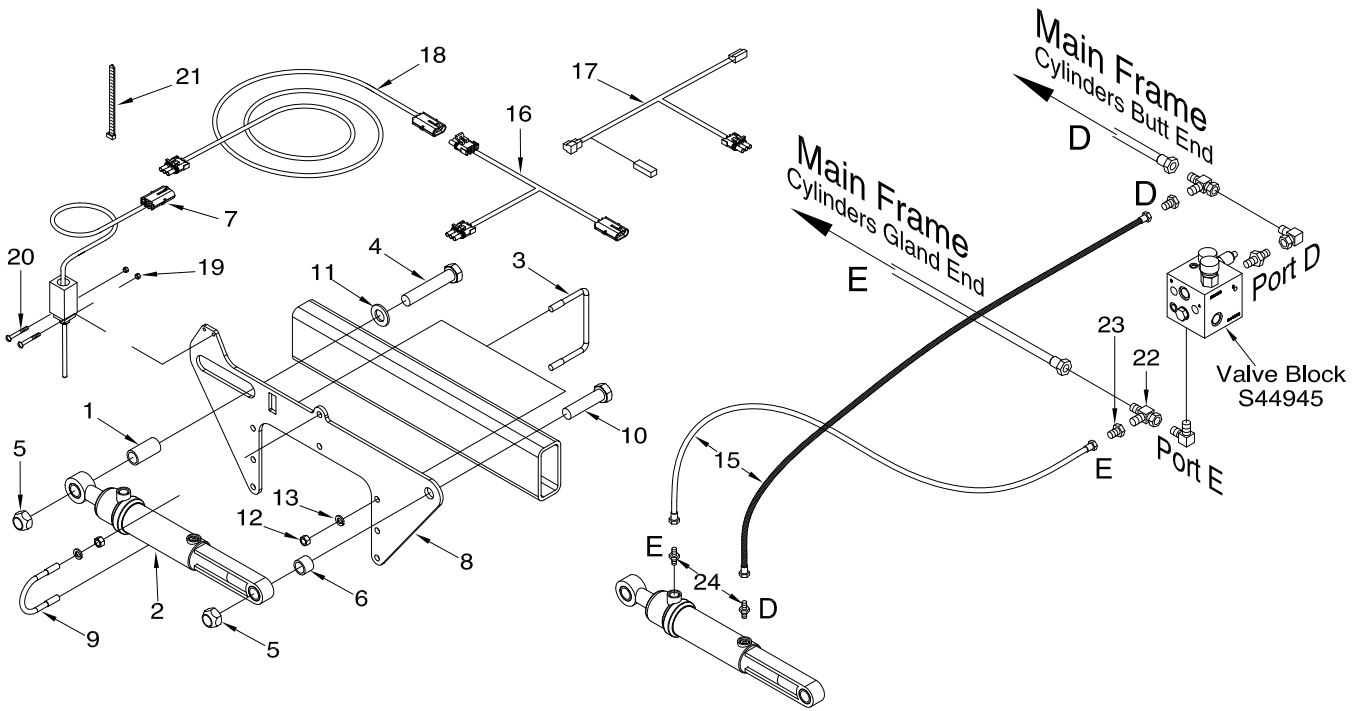
Item	Part No.	Description	Qty
1	C-219	U-Bolt - 5/8 x 4 x 5 9/16	4
2	C-705	Lockwasher - 1	1
3	W-520	Hex Nut - 1	2
4	C18756	Hex Bolt - 1 x 10 Lg.....	1
5	C33957	Carriage Bolt - 3/4 x 3 Lg	8
6	C18597	Hex Bolt - 1 x 8 Lg.....	2
7	D12942	Flange Lock Nut - 3/4	8
8	N16226	Hitch Pin - 1 18 Dia x 3 11/16 UL	2
9	N19307	Klik Pin - 1/4 x 1 3/4 Lg.....	2
10	F-4490	Washer - 1 1/32 ID x 1 7/8 OD x 1/4 Thick.....	4
11	S55035	HD Brace - Hitch - (2 1/2 x 2 1/2 tubing)	1
12	S56135	Hitch Clevis - Rear	1
13	S55045	HD Hitch Beam - Quad Steer - (3 x 4 Beam)	1
14	S51353	Mounting Plate	2
15	W-517	Hex Nut - 5/8	16
16	W-520	Hex Nut - 1	1
17	W-526	Lockwasher - 5/8.....	16
18	C-705	Lockwasher - 1	2
19	N56370	Bracket - Hose Holder.....	1
20	N56371	Strap - Hose Holder	1
21	N15098	U-Bolt - 3/8 x 4 x 5 UL.....	2
22	W-475	Hex Bolt - 3/8 x 1 Lg.....	4
23	W-514	Hex Nut - 3/8.....	8
24	W-523	Lockwasher - 3/8.....	8
25	D-5489	Flatwasher - 13/32 ID x 13/16 OD x 16 Ga	4
26	N37049	Rubber Grip	2

Options Rear Truss Kit - Main Depth Beam



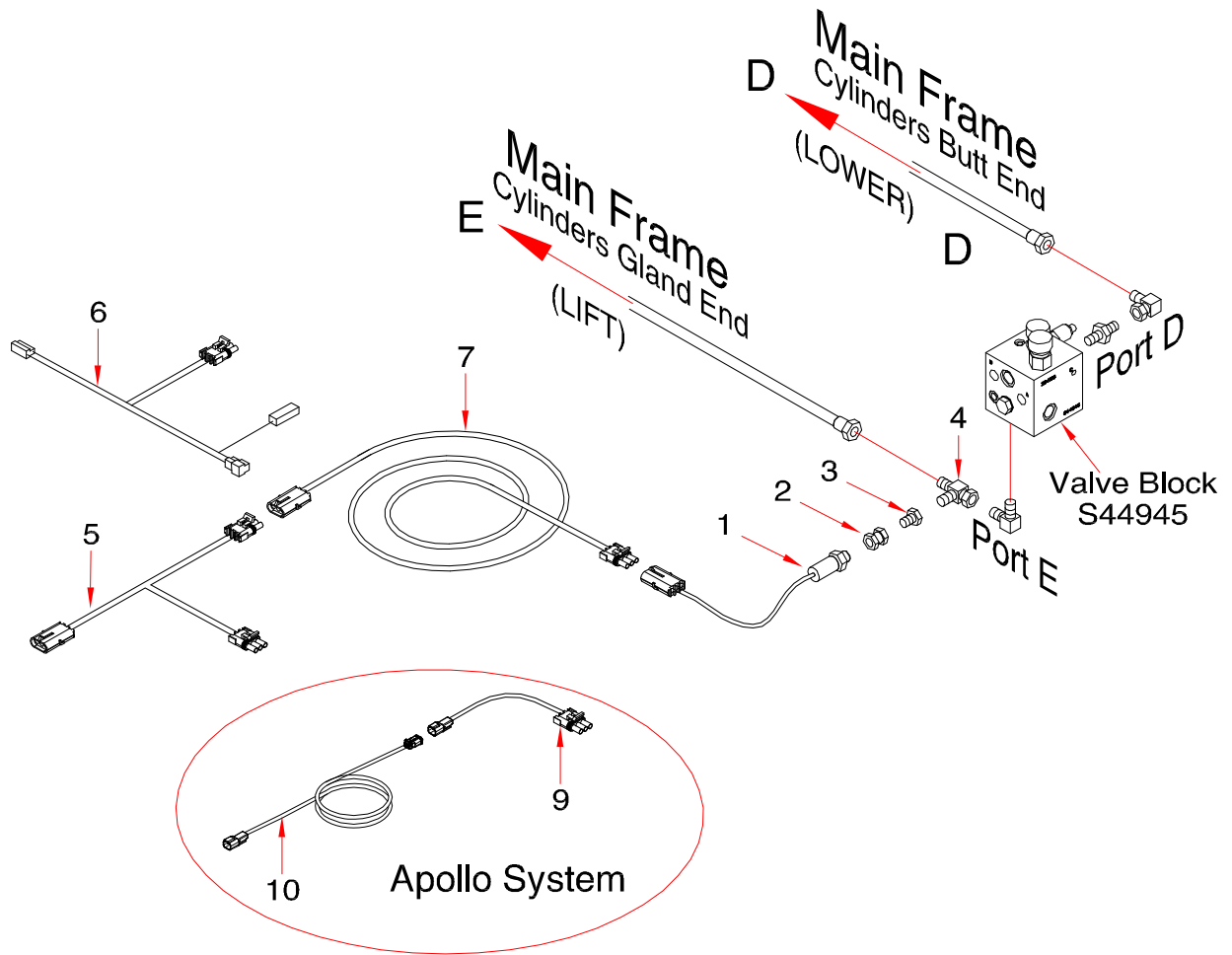
Item	Part No.	Description	Qty
1	S55470	Truss Strap - Front.....	2
2	S55475	Truss Strap - Center Support.....	2
3	S55480	Truss Strap - Rear.....	2
4	S49996	U-Bolt - 3/4 x 8 1/2 x 10 1/2 UL.....	2
5	W-63	Hex Bolt - 3/4 x 3 Lg GR. 5.....	16
6	S55482	Hex Bolt - 3/4 x 8 1/2 Lg GR.8.....	12
7	W-518	Hex Nut - 3/4 GR.5.....	24
8	N49659	Locknut - 3/4 Unitorque.....	8
9	W-527	Lockwasher - 3/4.....	24
	S55775	Kit - Main Depth Beam Rear Truss (Includes all above items)	

Options Remote Clutch Switch - Prior to September 2014



Item	Part No.	Description	Qty
1	C33727	Spacer - 0.760 ID x 1 OD x 2 Lg.....	1
2	C51153	Cylinder - 1 3/4 Bore x 4 Stroke.....	1
3	D-4932	U-Bolt - 3/8 x 4 x 3.....	2
4	D-5256	Hex Bolt - 3/4 x 4 Lg.....	1
5	D-5273	Locknut - 3/4 Unitorque.....	2
6	J11333	Spacer - 0.760 ID x 1 OD x 3/4 Lg.....	1
7	N32481	Work Switch.....	1
8	S50463	Mounting Plate - Work Switch.....	1
9	S50464	U-bolt - 3/8 x 2-1/16 x 3.....	1
10	W-63	Hex Bolt - 3/4 x 3 Lg.....	1
11	W-476	Flat Washer - 3/4.....	1
12	W-514	Hex Nut - 3/8.....	6
13	W-523	Lockwasher - 3/8.....	6
14	*****		
15	S22406	Hydraulic Hose - 1/4 x 72 Lg - 9/16-18 FJIC.....	2
16	N32482	Connector - 'Y' Wire - Tow Behind ONLY - Weather Pak Ends.....	1
17	N32483	Connector - 'Y' Wire - Tow Between ONLY - Weather Pak Ends.....	1
18	N32457	Wire - Clutch Extension (Main) - 37 1/2 ft - Weather Pak Ends.....	1
19	N32102	Nut - 3/16.....	2
20	N32101	Stove Bolt - 3/16 x 1 1/2 Lg.....	2
21	S13336	Tie Strap.....	6
22	H18746	Tee - Swivel - (2) 7/8-14 MJIC x (1) 7/8-14 FJIC.....	2
23	F10384	Reducer - 9/16-18 MJIC x 7/8-14 FJIC.....	2
24	N29358	Connector - 9/16-18 MJIC x 9/16-18 MORB.....	2

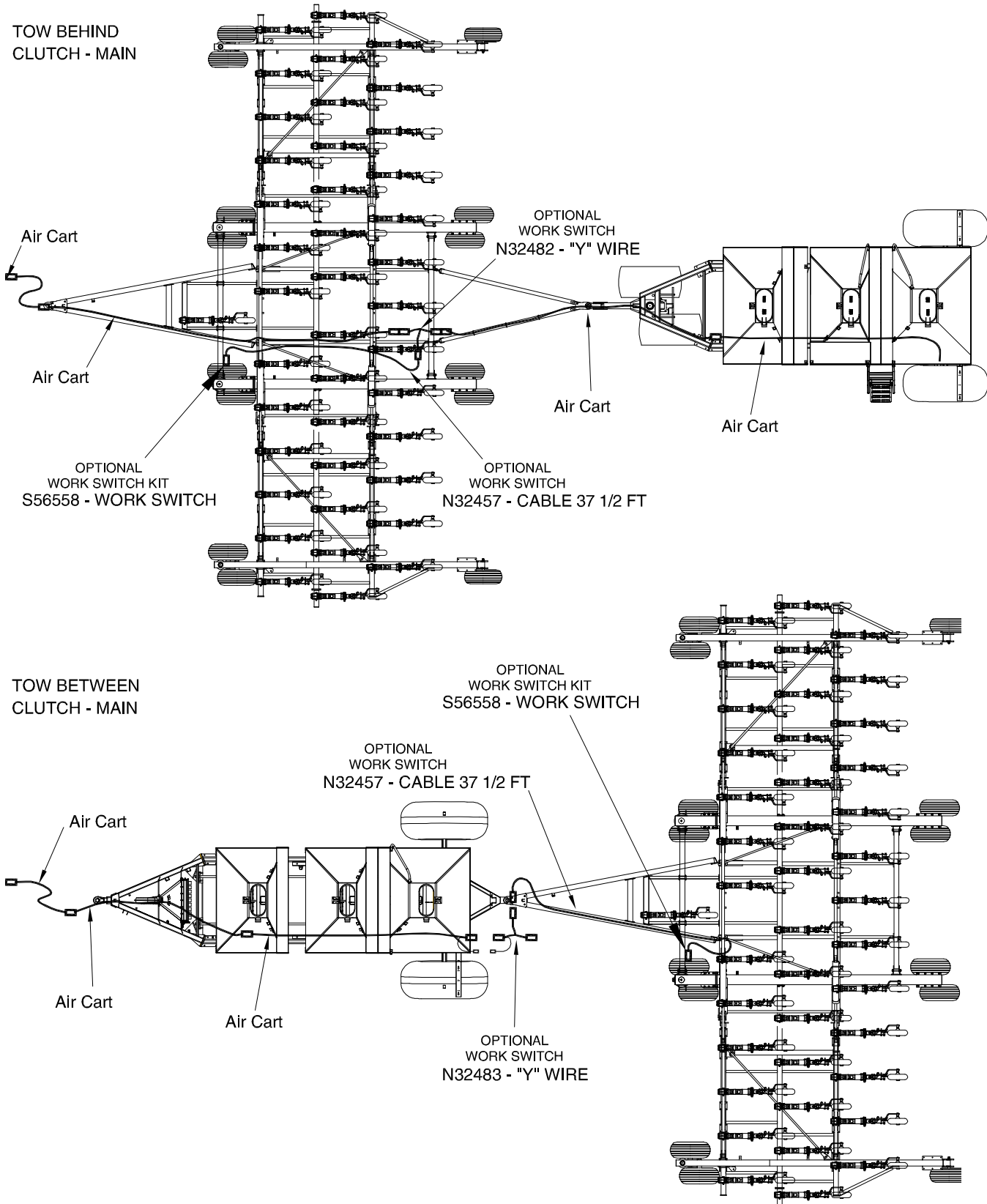
Options
Remote Clutch Switch - September 2014 to Present



Item	Part No.	Description	Qty
Ground Drive and Base X20 and X30 Systems			
1	S56558	Pressure Switch	1
2	S42998	Connector - 1/4 FNPT x 9/16-18 FJIC	1
3	F10384	Connector - 9/16-18 MJIC x 7/8-14 FJIC	1
4	H18746	Tee - Swivel - (2) 7/8-14 MJIC x (1) 7/8-14 FJIC	1
5	N32482	Connector - 'Y' Wire - Tow Behind ONLY - Weather Pak Ends	1
6	N32483	Connector - 'Y' Wire - Tow Between ONLY - Weather Pak Ends	1
7	N32457	Wire - Clutch Extension (Main) - 37 1/2 ft - Weather Pak Ends.....	1
8	S13336	Tie Strap.....	4
	S54297	Tow Between - Work Switch Kit (Includes Items 1, 2, 3, 4, 6, 7, and 8)	
	S54298	Tow Behind - Work Switch Kit (Includes Items 1, 2, 3, 4, 5, 7, and 8)	
Apollo System - 2016			
1	S56558	Pressure Switch	1
2	S42998	Connector - 1/4 FNPT x 9/16-18 FJIC	1
3	F10384	Connector - 9/16-18 MJIC x 7/8-14 FJIC	1
4	H18746	Tee - Swivel - (2) 7/8-14 MJIC x (1) 7/8-14 FJIC	1
9	N60323	Harness Adaptor - Pressure Work Switch.....	1
10	N59010	Harness - Work Switch - 5 m.....	1

Options Remote Clutch Switch

The "Y" adaptor and extension cable attach to the Air Cart clutch harness as illustrated below.

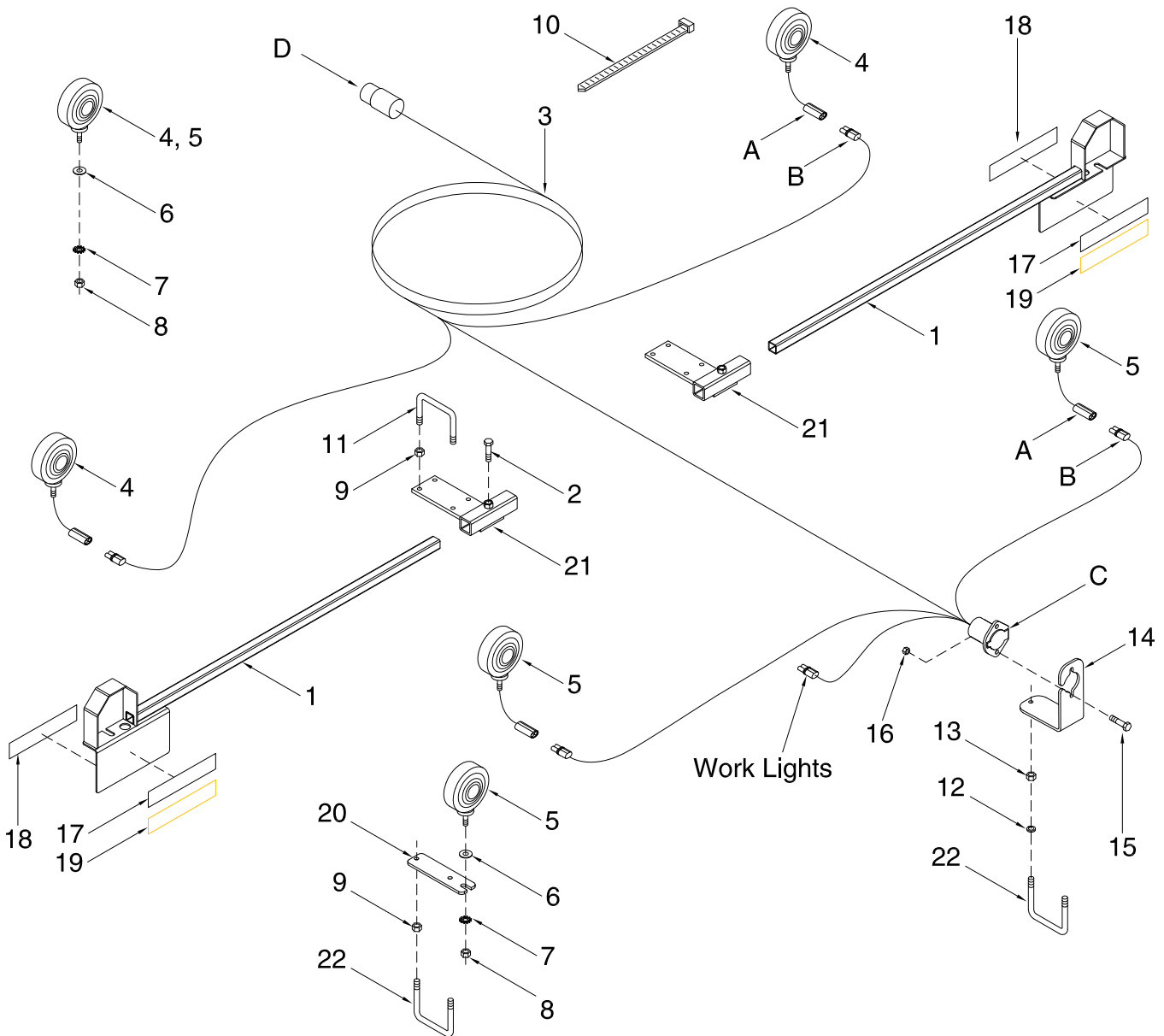


Section 8: Lighting and Safety Signs

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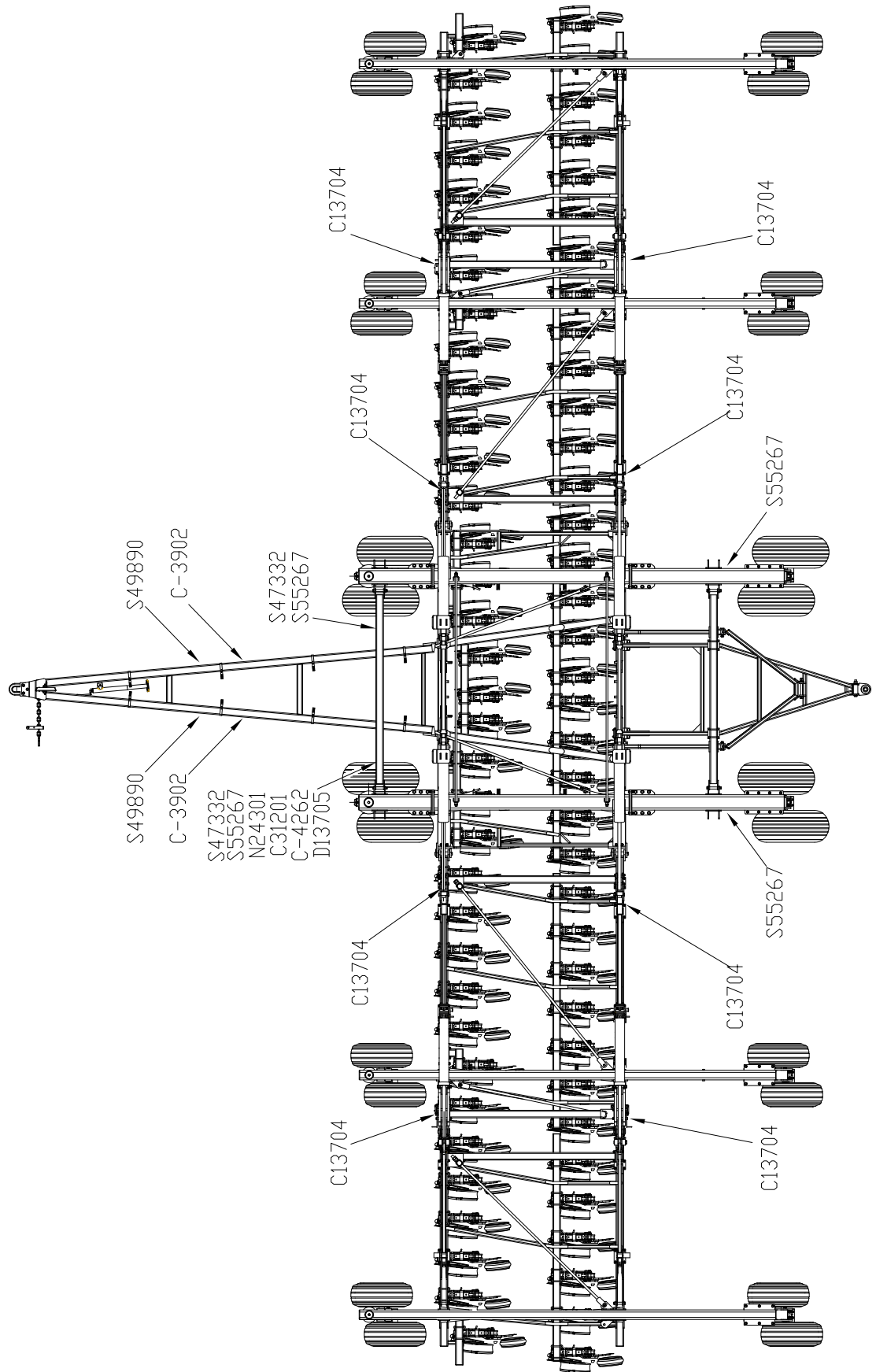
Lighting RAZR Disc Drill



Lighting - RAZR Disc Drill

Item	Part No.	Description	Qty
1	S34464	Tube - Mounting - Main - Lighting.....	2
2	W-484	Hex Bolt - 1/2 x 1.....	2
3	S34466	Wiring Harness - Safety Lights.....	1
4	C32765	Light - Amber.....	2
5	C32766	Light - Red	2
6	W-539	Flatwasher - 1/2.....	4
7	D-5280	Starwasher - 1/2.....	4
8	W-516	Hex Nut - 1/2.....	4
9	D-5279	Flange Locknut - 3/8	12
10	D-4951	Nylon Tie Strap - 7 3/8 lg.....	20
	S13336	Nylon Tie Strap - 28 1/4 lg.....	10
11	N19723	U-Bolt - 3/8 x 4 x 7	4
12	W-523	Lockwasher - 3/8.....	2
13	W-514	Hex Nut - 3/8.....	2
14	N32001	Bracket - Mounting.....	1
15	N29048	Carriage Head Bolt - 5/16 x 1 lg.....	2
16	D-5278	Serrated Nut - 5/16.....	2
17	N34476	Reflector - Red.....	2
18	N34477	Reflector - Amber	2
19	N34478	Reflector - Orange.....	2
20	S34465	Bracket - Mounting.....	2
21	S44325	Bracket - Mounting.....	2
22	N15098	U-Bolt - 3/8 x 4 x 5.....	3
	C32761	Red Acrylic Lens	
	C32762	Amber Acrylic Lens	
	C32515	Bulb - #1156 (Amber Light)	
	C32656	Bulb - #1157 (Red Light)	
A	C32681	Receptacle Connector Assembly - GRAY - 2 Pin	
B	C32682	Plug Connector Assembly - GRAY - 2 Pin	
C	C32686	Connector Assembly - 7 Pin Socket	
	C32684	Interior - Socket - 7 Pin Connector	
	C32685	Protective Boot - Socket - 7 Pin Connector	
D	C32690	Connector Assembly - 7 Pin Plug (Complete with Cable Protector Spring)	
	C32688	Interior - Plug - 7 Pin Connector	
	C32689	Cable Protector Spring - Plug - 7 Pin Connector	

Safety Signs 50 ft and 60 ft Disc Drill



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www.morris-industries.com

Corporate Head Office
and Training Centre:

2131 Airport Drive
Saskatoon, Saskatchewan
S7L 7E1 Canada
Phone: 306-933-8585
Fax: 306-933-8626

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