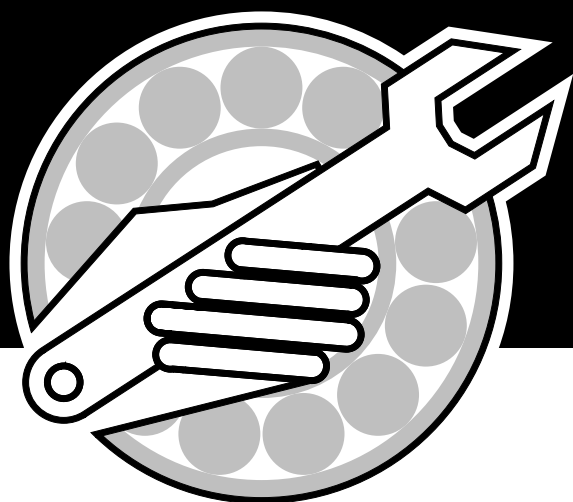




Parts Manual



Accessories

Openers, Coulters, Sweeps, Safety Lights,
Mounted Harrows and Packers, Shank
Mounted Ground Rod

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
W-4648	Blue MORRIS Spray Can
N31087	Sky White MORRIS Spray Can

Litre Cans:

Part Number	Description
Z-10	Red MORRIS Paint/Litre
Z-11	Blue MORRIS Paint/Litre

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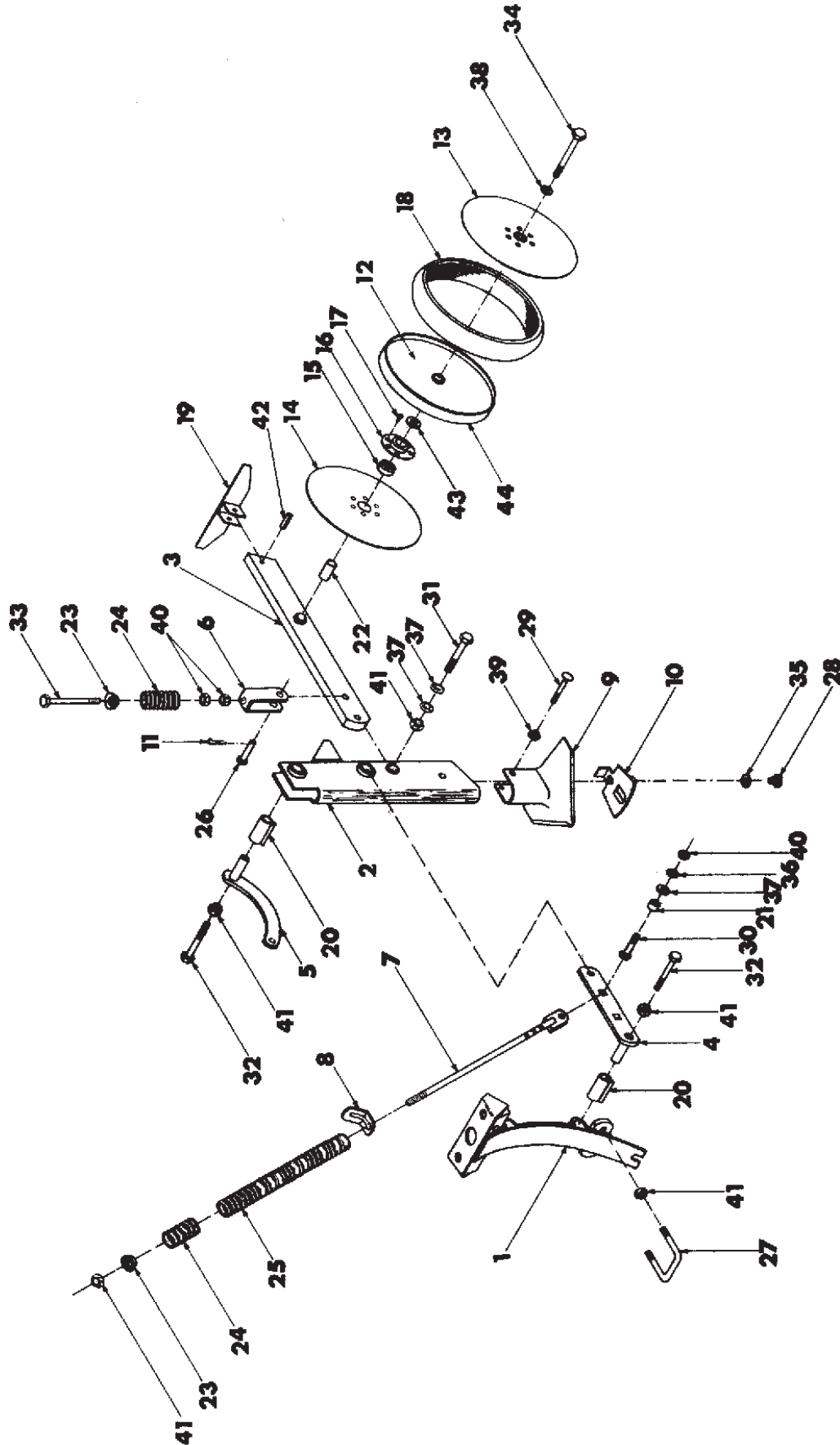
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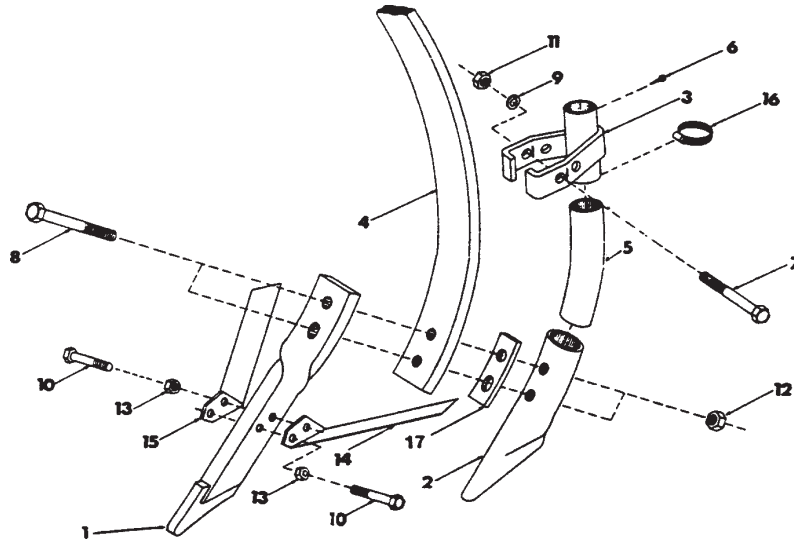
Openers Air Hoe Packer



Openers - Air Hoe Packer

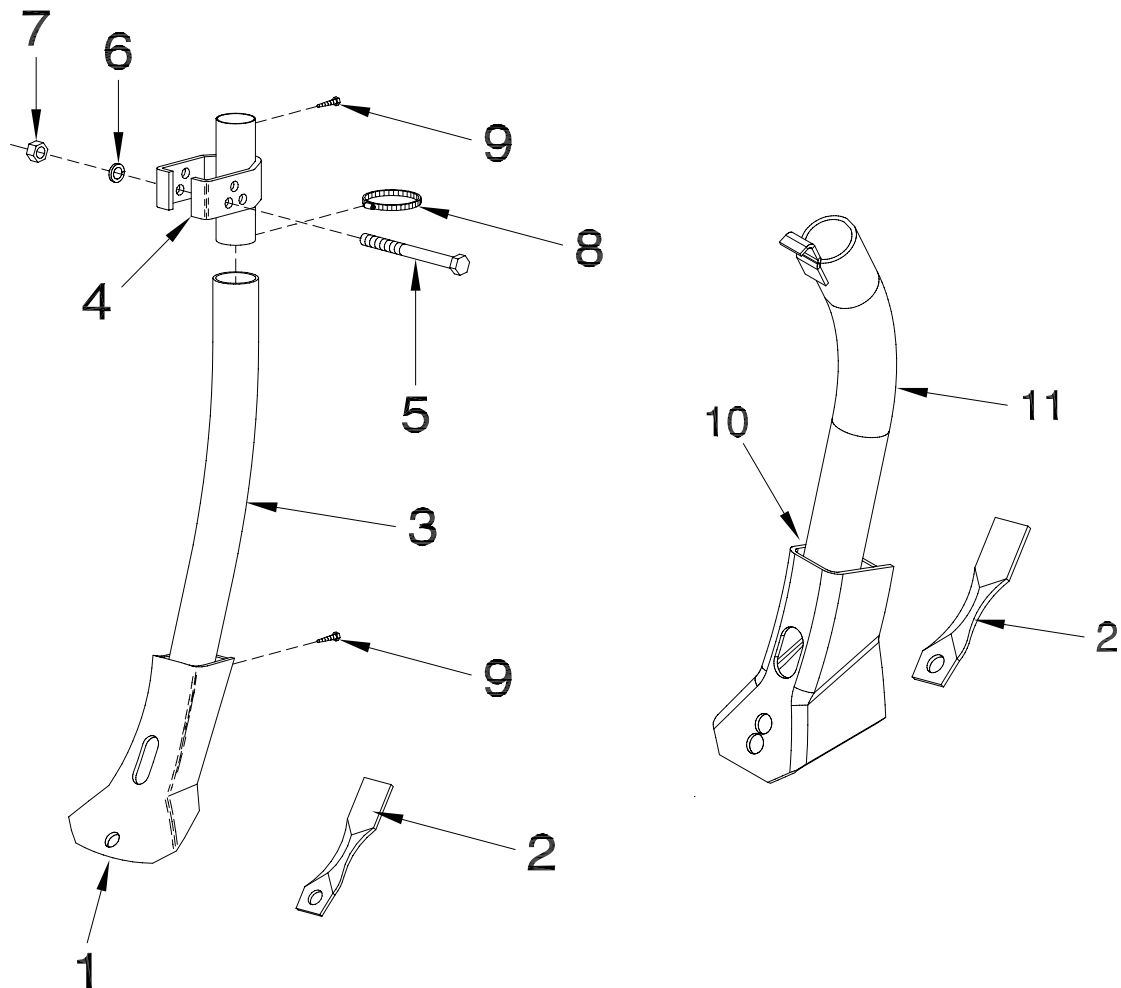
Item	Part No.	Description	Qty
1	C18008	Mounting Bracket	1
2	C18026	Hoe Opener	1
3	C18038	Packer Arm	1
4	C18019	Lower Link MAGNUM II SHANK 50 Deg & MAGNUM I 22" SHANK 43 Deg	2
	C18082	Lower Link MAGNUM I 26" SHANK 43 Deg	2
5	C18013	Upper Link MAGNUM II SHANK 50 Deg & MAGNUM I 26" SHANK 43 Deg	2
	C18077	Upper Link MAGNUM I 22" SHANK 43 Deg	2
6	C18024	Clevis	1
7	C18031	Spring Rod	2
8	C18028	Spring Locking Clip	2
9	C18062	7" Wide Sweep	1
9A	C18061	4" Narrow Sweep	1
10	C17346	Wide Deflector	1
10A	C17345	Narrow Deflector	1
11	W-530	Cotter Pin - 5/32 x 1	1
12	C18064	Center Support Disc	2
13	C18071	Packer Disc Riveted Assembly (Includes Items #14,15,16 & 17)	4
14	C18058	Packer Plate (Quantity Per C18071)	1
15	D-4799	Disc Bearing - Fafnir 3203 - AC	1
16	D17209	Bearing Retainer (Includes Item #15)	1
17	D-4801	Button Head Rivet - 1/4 Dia x 3/8 Lg	6
18	C18066	Rubber Tire	2
19	C18057	Larger Scraper	1
19A	C18033	Small Scraper	1
20	C18011	Bushing (Replaceable)	4
21	D13701	Bushing	2
22	C18052	Spacer (Use Only with Wide Sweep)	2
23	C18032	Retaining Washer	3
24	C18027	Short Spring	3
25	H-1814	Long Spring	2
26	D13699	Button Head Pin - 1/2 x 1 7/8	1
27	C18001	U-Bolt - 1/2 x 2 3/4	2
28	D-5247	Hex Bolt - 5/16 x 1/2	1
29	D12821	Carriage Bolt - 3/8 x 2	1
30	H-4584	Carriage Bolt - 1/2 x 1 1/2	2
31	C-4643	Hex Bolt - 1/2 x 2 1/4 w/3/4 Thread	1
32	W-493	Hex Bolt - 1/2 x 3 1/2	4
33	C18073	Hex Bolt - 1/2 x 4 1/2 w/2 1/4 Thread	1
34	W-501	Hex Bolt - 5/8 x 2 1/2	2
34A	T-5252	Hex Bolt - 5/8 x 3 1/4 (Use with Wide Sweep)	2
35	W-522	Lockwasher - 5/16	1
36	W-525	Lockwasher - 1/2	2
37	S-1925	Plain Washer - 33/64	4
38	W-526	Lockwasher - 5/8	2
39	M-3388	Locknut - 3/8	1
40	W-516	Hex Nut - 1/2	4
41	F-3405	Locknut - 1/2	11
42	W-1308	Spiral Pin - 3/16 x 1 1/8	1
43	W-629	Flatwasher - 5/8	2
44	C18858	Retaining Ring	2

Openers Knife Openers



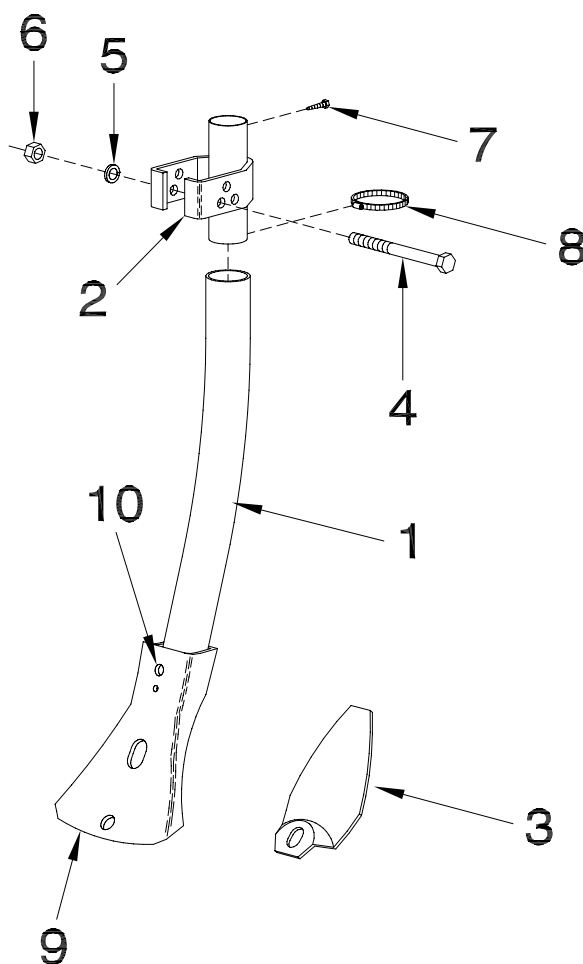
Item	Part No.	Description	No: Used	
			1” Shank	1 1/4” Shank
43 Degree Shank				
1	C16430	Knife Opener - Chrome Tip	1	1
	C16425	Weld On Chrome Tip	1	1
2	C15552	Knife Opener Boot	1	1
3	N10571	Boot Union	1	1
4	C-4420	Shank	1	-
5	C15549	Delivery Hose	-	1
6	D17725	Self Tapping Screw - #10 x 1/2	1	1
7	N19459	Hex Bolt - 5/16 x 3	1	1
8	W-1575	Hex Bolt - 1/2 x 5	1	2
9	W-522	Lockwasher - 5/16	2	2
10	W-619	Hex Bolt - 3/8 x 1 3/4	2	2
11	W-513	Hex Nut - 5/16	2	1
12	W-516	Hex Nut - 1/2	1	2
13	M-3388	Locknut - 3/8 Unitorque	2	2
14	C17847	Left Bolt-On Wing	2	1
15	C17848	Right Bolt-On Wing	1	1
16	N11470	Hose Clamp - HS-20	1	-
17	C15554	Shim	1	-
	C16433	Knife Opener Kit (Includes All Above Items Except Item #4) Order Through Parts Order Desk		
50 Degree Shank				
1	C16429	Knife Opener - Chrome Tip	1	1
	C16425	Weld On Chrome Tip	1	1
2	C15544	Knife Opener Boot	1	1
3	N10571	Boot Union	1	1
4	C13146	Shank	1	1
5	C15549	Delivery Hose	1	1
6	D17725	Self Tapping Screw - #10 x 1/2	1	1
7	N19459	Hex Bolt - 5/16 x 3	1	1
8	W-1575	Hex Bolt - 1/2 x 5	2	2
9	W-522	Lockwasher - 5/16	1	1
10	W-619	Hex Bolt - 3/8 x 1 3/4	2	2
11	W-513	Hex Nut - 5/16	1	1
12	W-516	Hex Nut - 1/2	2	2
13	M-3388	Locknut - 3/8 Unitorque	2	2
14	C17847	Left Bolt-On Wing	1	1
15	C17848	Right Bolt-On Wing	1	1
16	N11470	Hose Clamp HS-20	1	1
	C16434	Knife Opener Kit (Includes All Above Items Except Item #4)		
	C17849	Bolt-On Sweep Wing Kit (Includes Items #10,13,14 & 15) Order Through Wholegoods Order Desk		

Openers Seed Boots For 9" Spacing



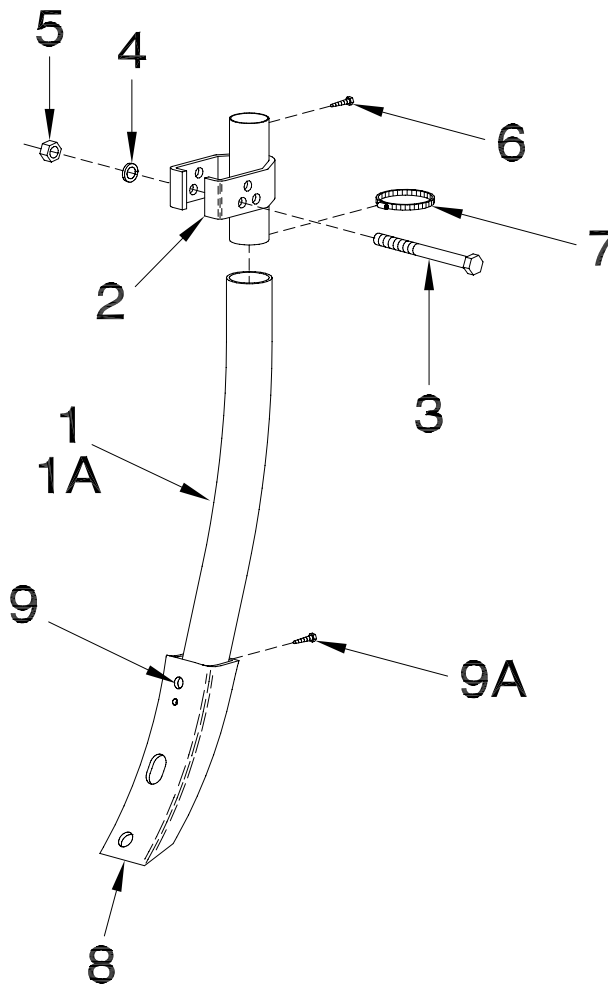
Item	Part No.	Description	Qty
1	C24360	Narrow Spread Seed Boot	1
2	C22811	Deflector	1
3	C15549	Hose - 16"	1
4	N10571	Boot Union	1
5	N19459	Hex Bolt - 5/16 x 3	1
6	W-522	Lockwasher - 5/16	1
7	W-513	Hex Nut - 5/16	1
8	N11470	Hose Clamp - HS-20	1
9	D17725	Self Tapping Screw - #10 x 1/2 Lg	2
10	S40525	Narrow Spread Seed Boot - Steel (Includes item 11)	1
11	S44280	Steel Seed Tube	1
	N22816	9" Spacing Narrow Spread Seed Boot Kit (Includes All Above Items except 10)	
	N41575	9" Spacing Narrow - Steel - Seed Boot Kit (Includes Items 2, 8 and 10)	
		Order Seed Boot Kits Through Wholegoods Order Desk	

Openers Seed Boots For 12" Spacing



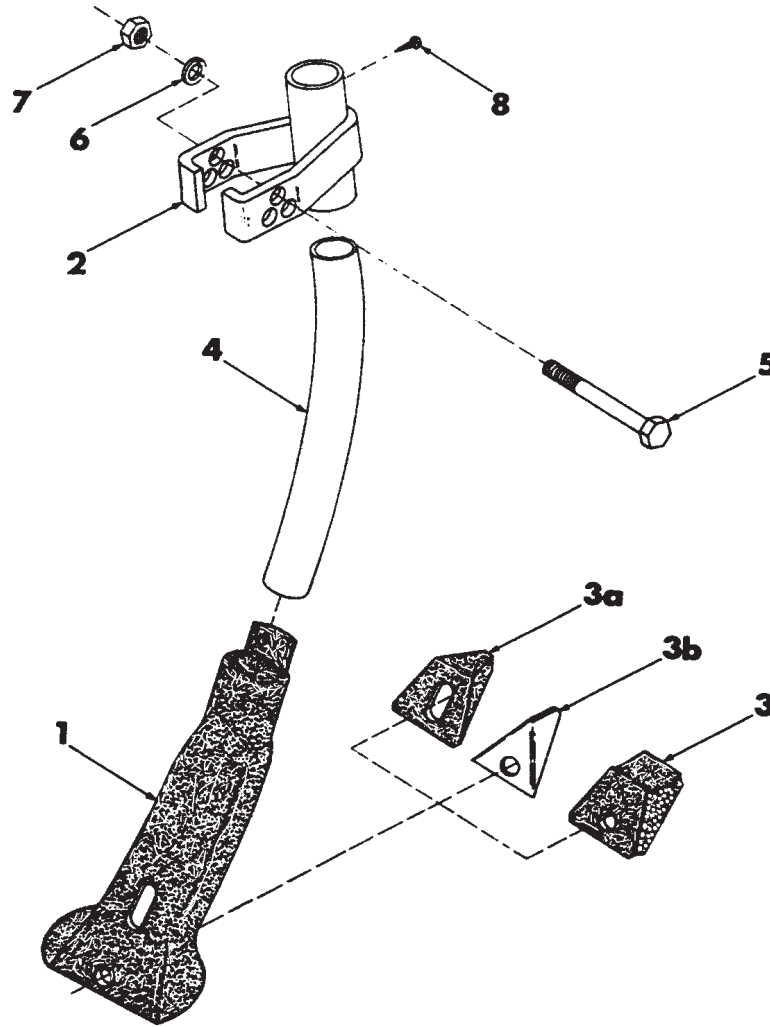
Item	Part No.	Description	Qty
1	N10567	Hose - 16 Lg	1
2	N10571	Boot Union	1
3	N10987	Back Plate	1
4	N19459	Hex Bolt - 5/16 x 3.....	1
5	W-522	Lockwasher - 5/16	1
6	W-513	Hex Nut - 5/16	1
7	D17725	Self Tapping Screw - #10 x 1/2 Lg (Not Shown)	1
8	N11470	Hose Clamp - HS-20	1
9	N10986	Seed Boot	1
10	N10569	Pop Rivet	2
11	N10564	Rivet Reinforcement (Not Shown)	1
	N10985	Seeding Boot Assembly (Includes Items 1, 9, 10 & 11)	
	N10988	Seeding Boot Kit (Includes All Above Items) Order Seed Boot Kits Through Wholegoods Order Desk	

Openers Banding Boot



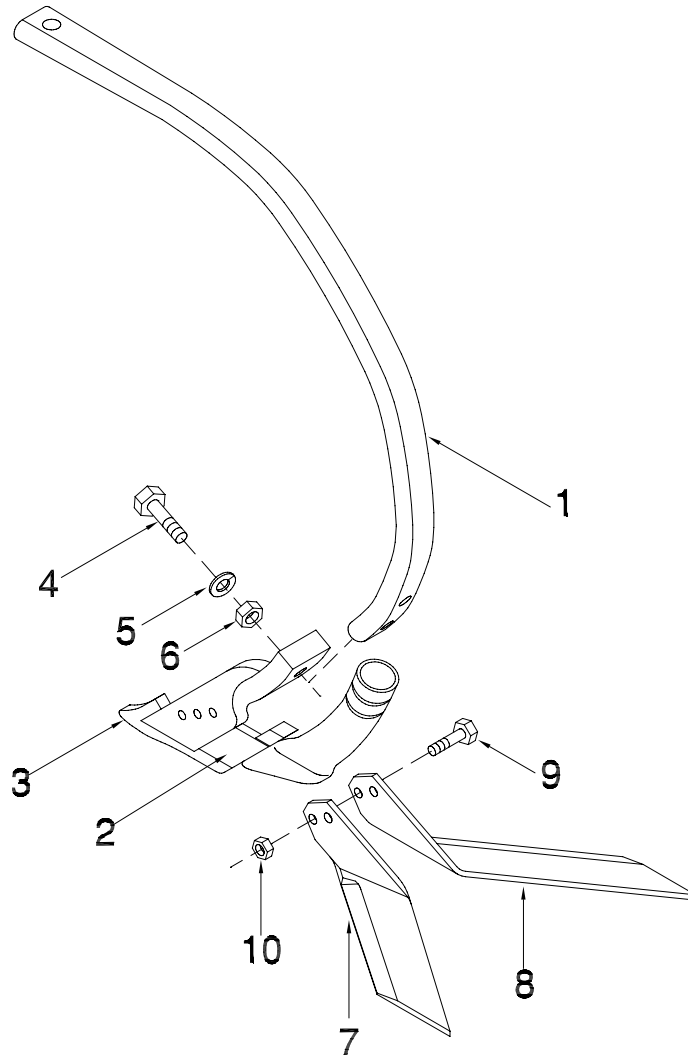
Item	Part No.	Description	Qty
1	N10567	Hose - 16 Lg - Prior to 2008	1
1A	C15549	Hose - 16 Lg - 2008 to present	1
2	N10571	Boot Union	1
3	N19459	Hex Bolt - 5/16 x 3	1
4	W-522	Lockwasher - 5/16	1
5	W-513	Hex Nut - 5/16	1
6	D17725	Self Tapping Screw - #10 x 1/2	1
7	N11470	Hose Clamp - HS-20	1
8	N10566	Seed Boot	1
9	N10569	Pop Rivet - Prior to 2008	2
9A	D17725	Self Tapping Screw - #10 x 1/2 - 2008 to present	1
10	N10564	Rivet Reinforcement (Not Shown) - Prior to 2008	1
	N10568	Banding Boot Assembly (Includes Items 1, 8, 9, 10)	
	N10572	Banding Boot Kit (Includes Items 1A, 2, 3, 4, 5, 6, 7, 8, & 9A) Order Kits Through Wholegoods Order Desk	

Openers Cast Seed Boots



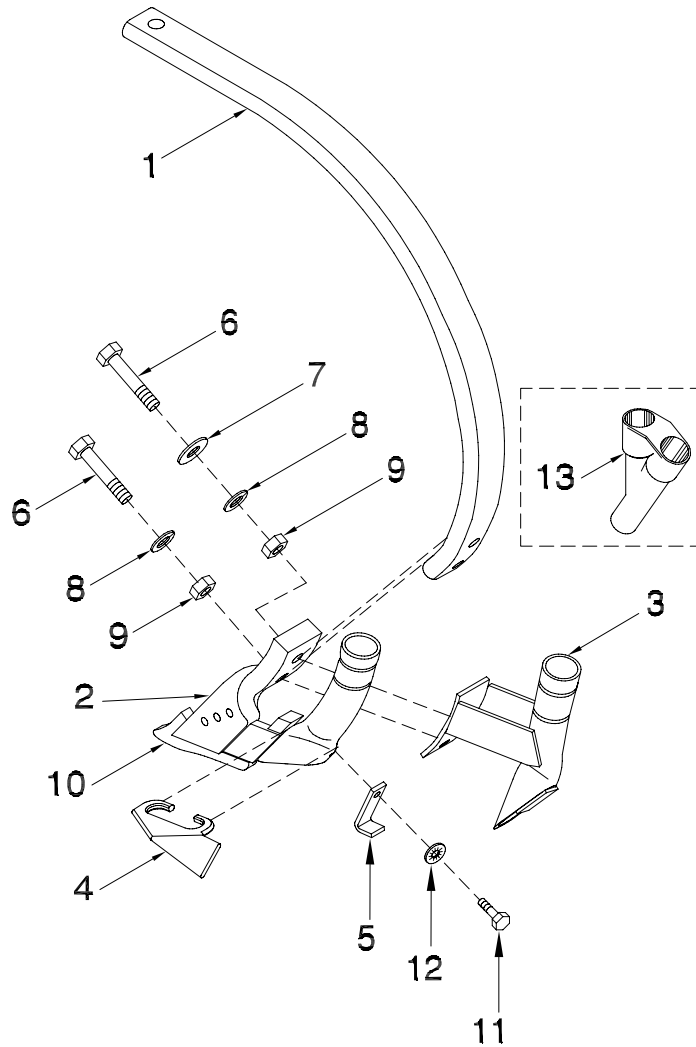
Item	Part No.	Description	Qty
1	N20799	Seed Boot - 8900, Magnum II & III and Concept 2000 (755 Trip)	1
1A	N21778	Seed Boot - 9000 (400 lb Trip), Challenger and Concept 2000 (400 lb)	1
2	N10571	Boot Union	1
3	N20811	Deflector - 12" Spacing (Used with Seed Boot N20799)	1
3A	N20810	Deflector - 9" Spacing (Used with Seed Boot N20799)	1
3B	N21779	Deflector (Used with Seed Boot N21778)	1
4	R480034	Hose - 1.169 OD x .929 ID x 18 Lg (Used with Seed Boot N20799)	1
4A	R480034	Hose - 1.169 OD x .929 ID x 12 Lg (Used with Seed Boot N21778)	1
5	N19459	Hex Bolt - 5/16 x 3	1
6	W-522	Lockwasher - 5/16	1
7	W-513	Hex Nut - 5/16	1
8	D17725	Self Tapping Screw - #10 x 1/2	1
	N20885	Kit - 12" Spacing Seed Boot (Includes Items 1, 2, 3, 4A, 5, 6, 7 & 8)	
	N20886	Kit - 9" Spacing Seed Boot (Includes Items 1, 2, 3A, 4A, 5, 6, 7 & 8)	
	N22776	Kit - Field Cultivator Seed Boot (Includes Items 1A, 2, 3B, 4, 5, 6, 7 & 8)	
		Order Kits Through Wholegoods Order Desk	

Openers Conventional Shank - Single Shoot Knife



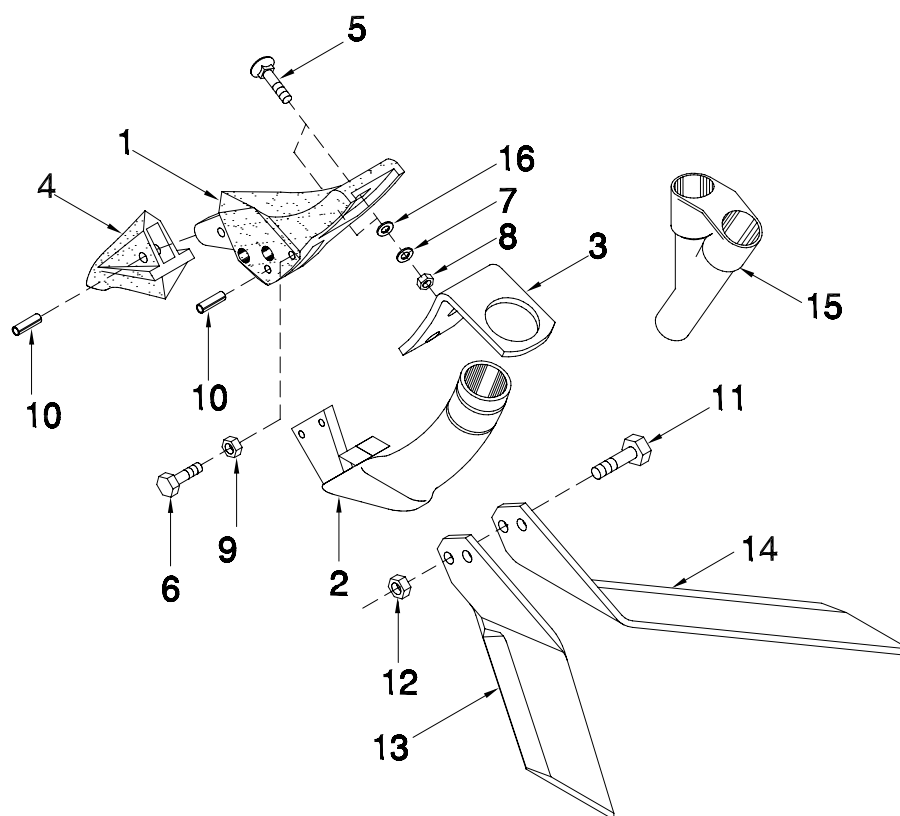
Item	Part No.	Description	Qty
1	S22340	Conventional Shank	1
2	S22720	Single Shoot Knife	1
3	C16425	Tip - Chrome - Weld On	1
4	W-490	Hex Bolt - 1/2 x 2 1/2	2
5	W-525	Lockwasher - 1/2	2
6	W-516	Hex Nut - 1/2	2
7	S25791	Bolt-On Wing - 9" Left	1
7A	S25793	Bolt-On Wing - 12" Left	1
8	S25792	Bolt-On Wing - 9" Right	1
8A	S25794	Bolt-On Wing - 12" Right	1
9	W-619	Hex Bolt - 3/8 x 1 3/4	2
9A	W-479	Hex Bolt - 3/8 x 2 1/4	2
10	M-3388	Locknut - 3/8 Unitorque	2
	S22670	Single Shoot Knife Assembly (Includes Items 2, 4, 5 & 6)	
	S25795	9" Bolt-On Sweep Wing Kit (Includes Items 7, 8, 9, 9A & 10)	
	S25796	12" Bolt-On Sweep Wing Kit (Includes Items 7A, 8A, 9, 9A & 10)	
		Order Kits Through Wholegoods Order Desk	

Openers Conventional Shank - Side Band Opener



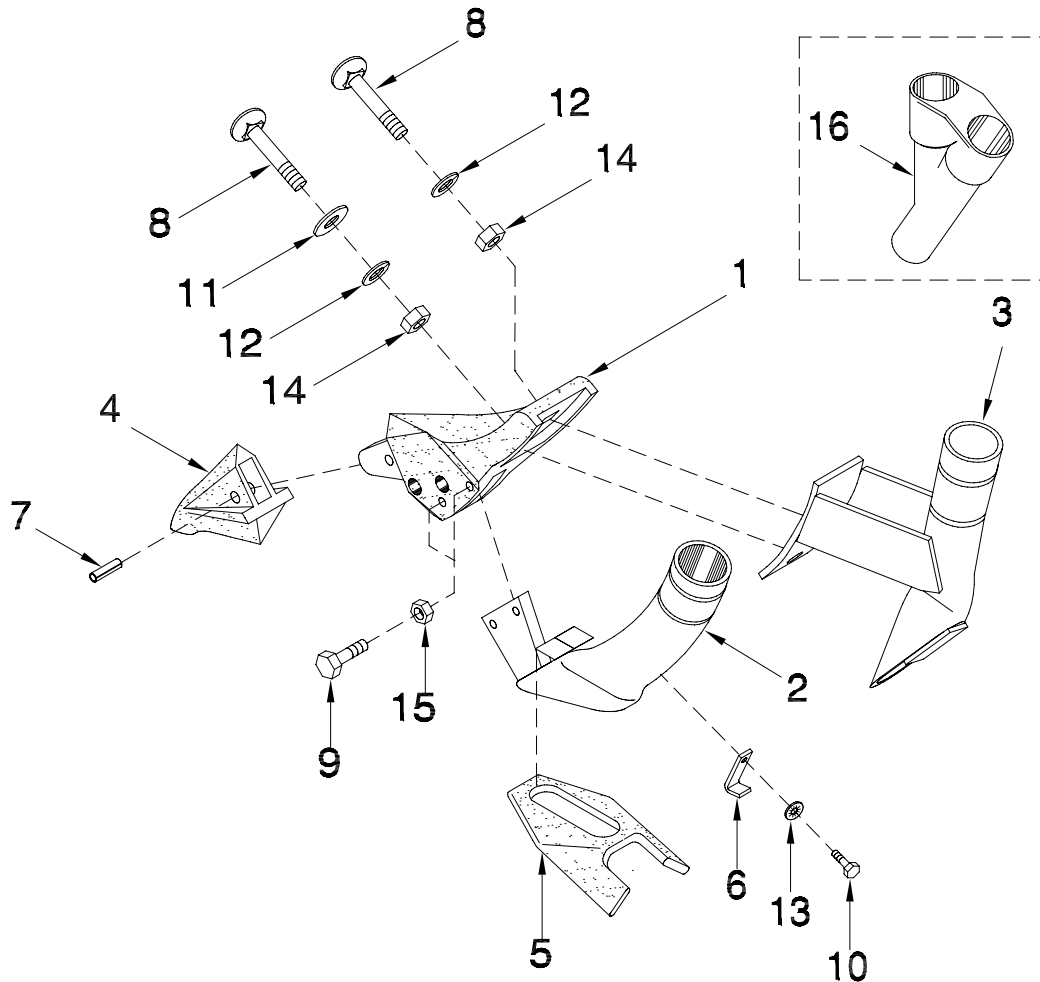
Item	Part No.	Description	Qty
1	S22340	Conventional Shank	1
2	S22720	Knife (Includes item #10)	1
3	S22690	Grain Tube	1
4	S22066	Deflector	1
5	S27557	Deflector Retainer	1
6	W-491	Hex Bolt - 1/2 x 2 3/4	2
7	W-539	Flatwasher - 1/2	1
8	W-525	Lockwasher - 1/2	2
9	W-516	Hex Nut - 1/2	2
10	C16425	Tip - Chrome - Weld On	1
11	S28514	Screw - Thread Cutting - #10-32 x 1/2	1
12	S28513	Lockwasher Internal Tooth - #10	1
13	S27509	"Y" - Union (Optional - used to quick change dual shoot to single shoot)	1
	S22700	Dual Shoot Knife Assembly (Includes Items 2-9, 11, 12) Order KitsThrough Wholegoods Order Desk	

Openers Conventional Shank - Single Shoot Knife - Cast



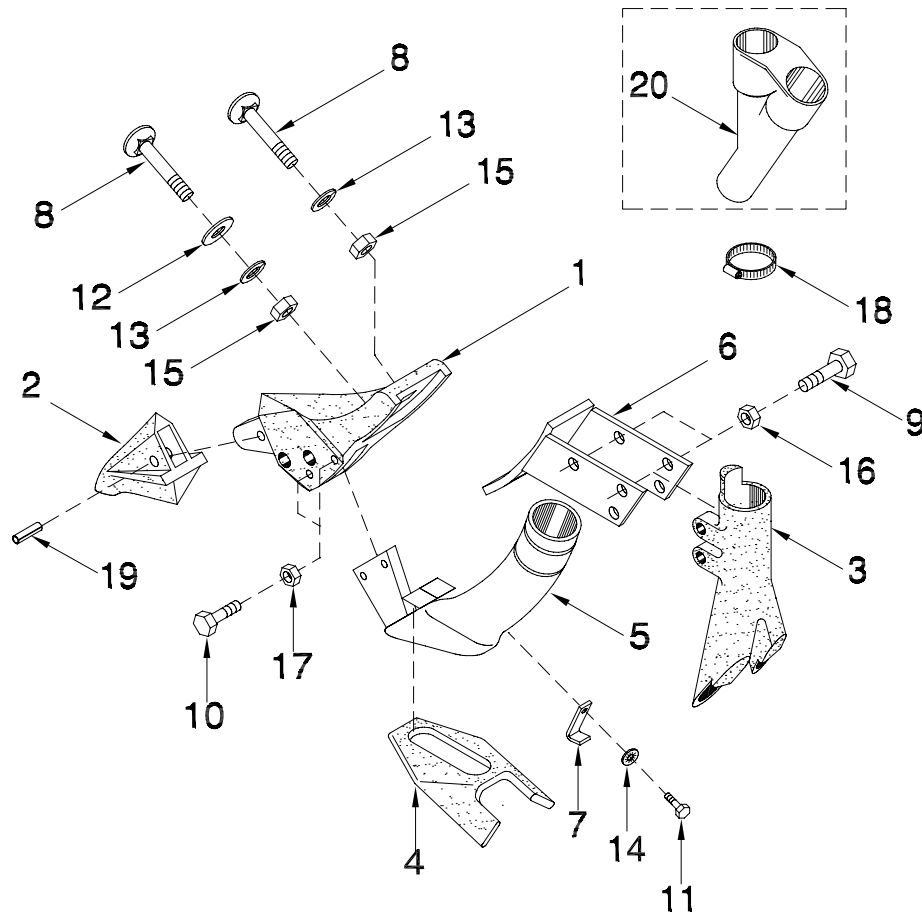
Item	Part No.	Description	Qty
1	S21974	Cast Opener	1
2	S21973	Fertilizer Tube	1
3	S27556	Brace - Fertilizer Tube	1
4	S22728	Replaceable Point	1
5	C15606	Sweep Bolt - 1/2 x 2 1/2 (Includes Item #8)	2
6	W-473	Hex Bolt - 5/16 x 1 1/2 Lg	2
7	W-525	Lockwasher - 1/2	2
8	W-516	Hex Nut - 1/2	2
9	D-5272	Locknut - 5/16 Unitorque	2
10	S24351	Spiral Pin - 5/16 x 1 1/8 Lg	1
11	W-479	Hex Bolt - 3/8 x 2 1/4	2
11A	W-619	Hex Bolt - 3/8 x 1 3/4	2
12	M-3388	Locknut - 3/8 Unitorque	2
13	S25791	Bolt-On Wing - 9" Left	1
13A	S25793	Bolt-On Wing - 12" Left	1
14	S25792	Bolt-On Wing - 9" Right	1
14A	S25794	Bolt-On Wing - 12" Right	1
15	S27509	"Y" - Union (Optional - used to quick change dual shoot to single shoot)	1
16	W-539	Flatwasher - 1/2 (Not Shown)	1
	S25953	Single Shoot Cast Knife Kit (Includes Items 1-10, & 16)	
	S25795	9" Bolt-On Sweep Wing Kit (Includes Items 11, 11A, 12, 13 & 14)	
	S25796	12" Bolt-On Sweep Wing Kit (Includes Items 11, 11A, 12, 13A & 14A)	
		Note: When using Bolt-on Wings the Lower bolt Item 6 must be replaced with Item 10 as shown	
		Order Kits Through Wholegoods Order Desk	

Openers Conventional Shank - Side Band - Cast



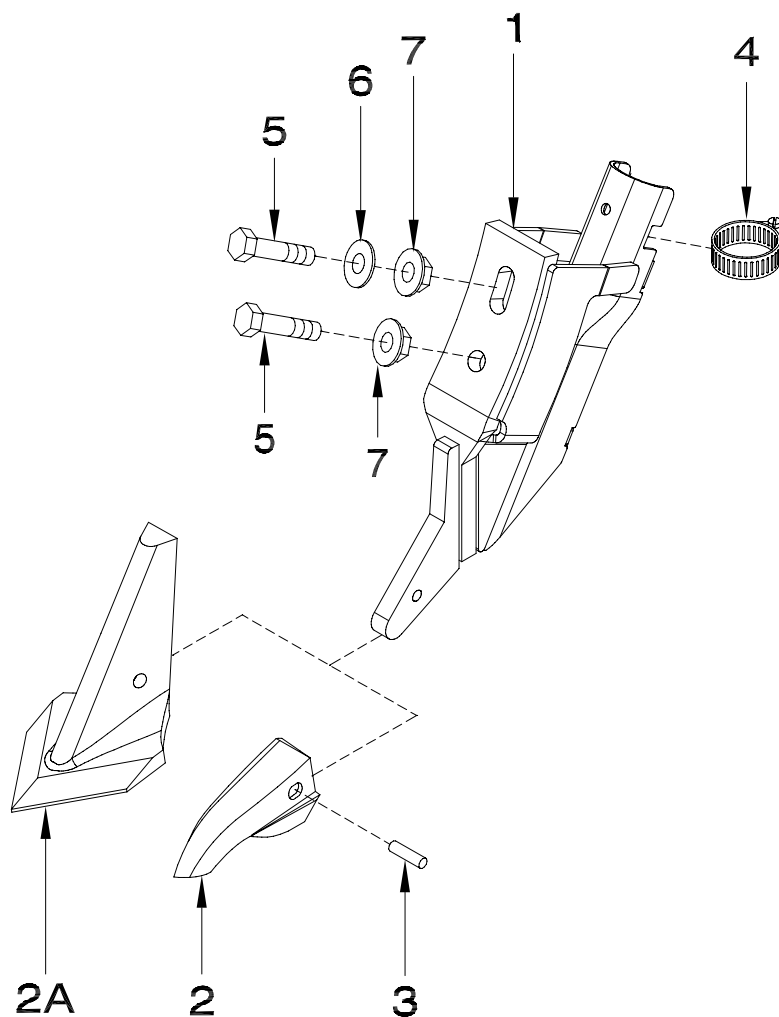
Item	Part No.	Description	Qty
1	S21974	Opener	1
2	S21973	Dual Shoot Fertilizer Tube	1
3	S22690	Grain Tube	1
4	S22728	Replaceable Point	1
5	S21929	Deflector - Double Wing	1
6	S27557	Retainer - Deflector	1
7	S24351	Spiral Pin - 5/16 x 1 1/8 Lg	1
8	C15606	Sweep Bolt - 1/2 x 2 1/2 Lg (includes #14)	2
9	W-473	Hex Bolt - 5/16 x 1 1/2 Lg	2
10	S28514	Screw Thread Cutting - #10-32 x 1/2 Lg	1
11	W-539	Flatwasher - 1/2	1
12	W-525	Lockwasher - 1/2	2
13	S28513	Lockwasher Internal Tooth - #10	1
14	W-516	Hex Nut - 1/2	2
15	D-5272	Locknut - 5/16	2
16	S27509	"Y" Union (Optional - used to quick change dual shoot to single shoot)	1
	S25954	Dual Shoot Cast Knife Kit (Includes Items 1 -15) Order KitsThrough Wholegoods Order Desk	

Openers Conventional Shank - Paired Row - Cast



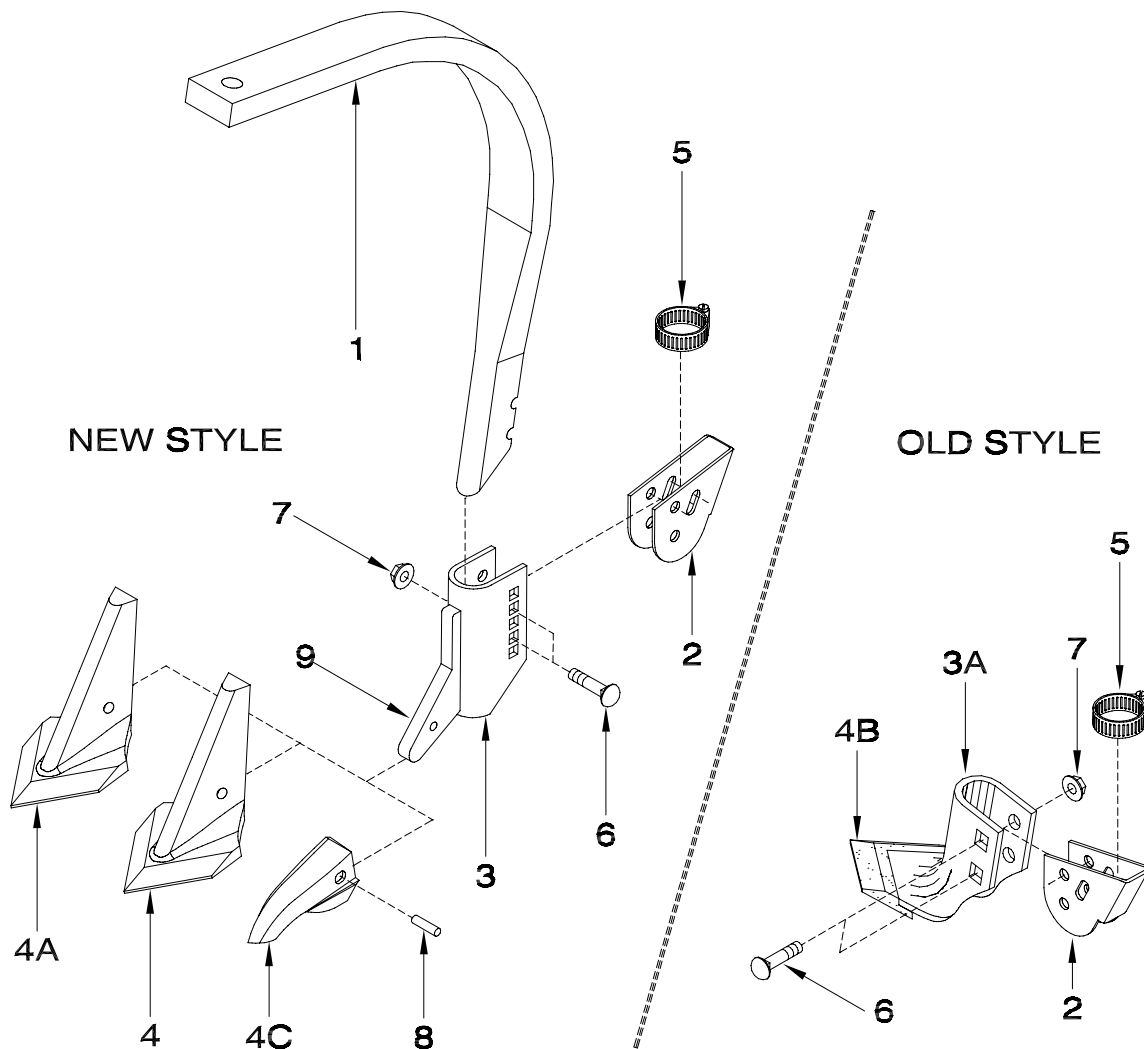
Item	Part No.	Description	Qty
1	S21974	Opener	1
2	S22728	Replaceable Point	1
3	S21989	Paired Row Cast Seed Tube	1
4	S21929	Deflector - Double Wing	1
5	S21973	Dual Shoot Fertilizer Tube	1
6	S24339	Paired Row Holder	1
7	S27557	Retainer - Deflector	1
8	C15606	Sweep Bolt - 1/2 x 2 1/2 (includes #15)	2
9	W-480	Hex Bolt - 3/8 x 2 1/2 Lg	3
10	W-473	Hex Bolt - 5/16 x 1 1/2 Lg	2
11	S28514	Screw Thread Cutting - #10-32 x 1/2 Lg	1
12	W-539	Flatwasher - 1/2	2
13	W-525	Lockwasher - 1/2	2
14	S28513	Lockwasher Internal Tooth - #10	1
15	W-516	Hex Nut - 1/2	2
16	M-3388	Locknut - 3/8	3
17	D-5272	Locknut - 5/16	2
18	N11470	Hose Clamp	1
19	S24351	Spiral Pin - 5/16 x 1 1/8 Lg	1
20	S27509	"Y" Union (Optional - used to quick change dual shoot to single shoot)	1
	S24352	Paired Row Cast Ass'y Kit (Includes Items 1-19)	
		Order Kits Through Wholegoods Order Desk	

Openers Conventional Shank - Single Shoot



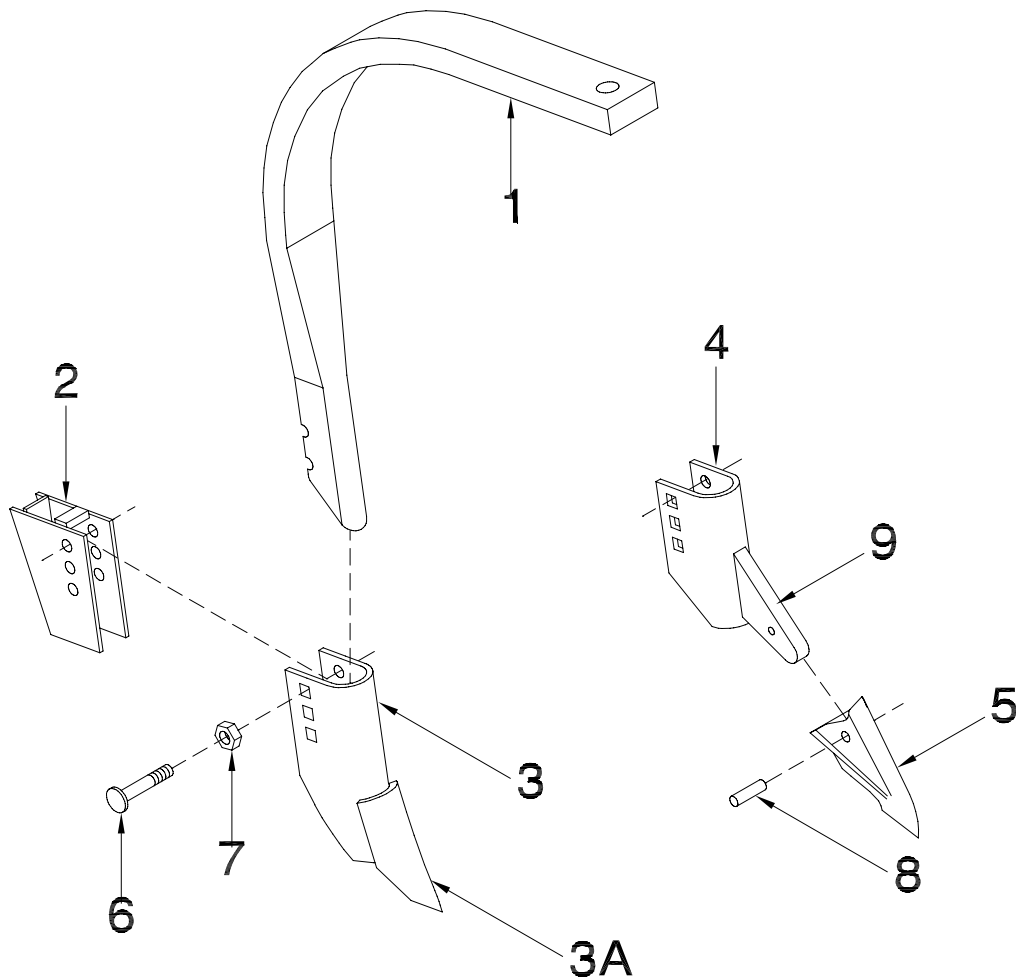
Item	Part No.	Description	Qty
1	S42250	Single Shoot C-Shank Boot	1
2	S22728	Replaceable Point - Acra Point	1
2A	S39550	Replaceable Point - 3 1/2 Cast - Carbide	1
3	S24351	Roll Pin - 5/16 x 1 1/8 Lg	1
4	N11470	Hose Clamp HS-20	1
5	W-490	Hex Bolt - 1/2 x 2 1/2 Lg - 1 1/4" shank	2
	W-488	Hex Bolt - 1/2 x 2 - 1" shank	2
6	W-539	Flatwasher - 1/2	1
7	D14565	Locknut - 1/2 Serrated Flange	2
	S43617	Acra Point Assembly - Includes Items 1, 2, 3, 4, 5, 6 & 7	
	S43618	3 1/2 Cast Sweep - Carbide/Opener Assembly - Includes Items 1, 2A, 3, 4, 5, 6 & 7	
		Order KitsThrough Wholegoods Order Desk	

Openers Forged Shank - Single Shoot



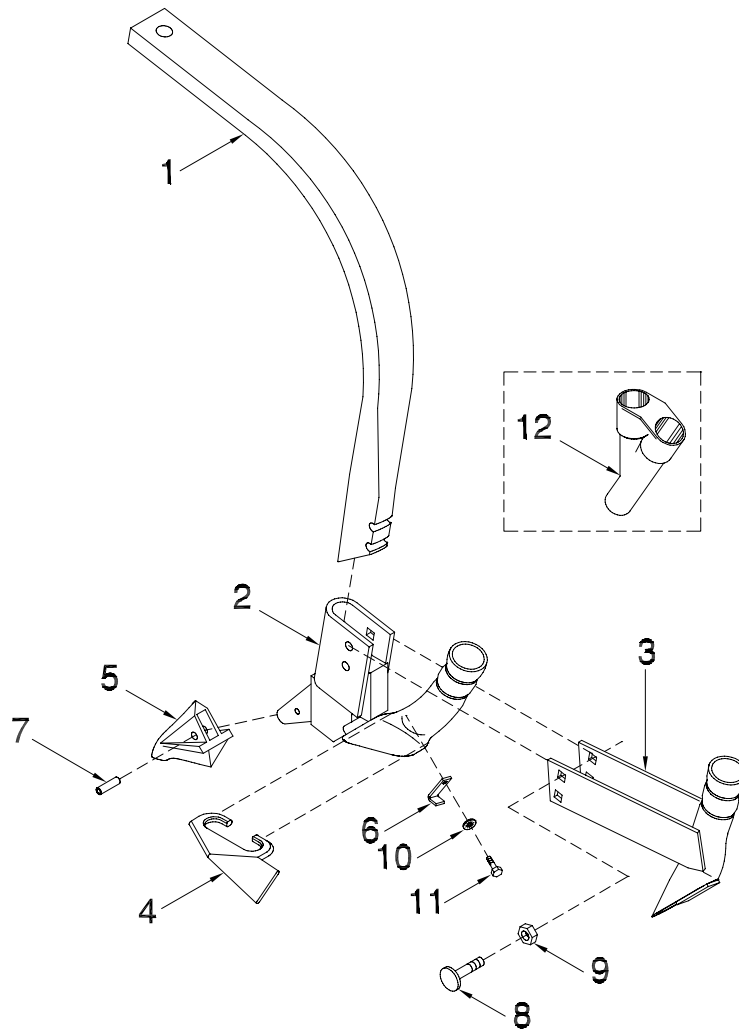
Item	Part No.	Description	Qty
1	S32100	Forged Shank - 1 x 2	1
2	S28318	Seed Boot/Hose Holder	1
3	S31751	Bracket	1
3A	S29020	3 1/2 Sweep w/ chrome leading edge (Includes item 9)	1
4	S31750	Replaceable Point - 3 1/2 Cast	1
4A	S39550	Replaceable Point - 3 1/2 Cast - Carbide	1
4B	A29019	Lead Edge Wear Point - Weld-on	1
4C	S22728	Replaceable Point - Acra Point	1
5	N11470	Hose Clamp HS-20	1
6	D12821	Carriage Bolt - 3/8 x 2 Lg	2
7	S27987	Flange Center Locknut - 3/8	2
8	S24351	Roll Pin - 5/16 x 1 1/8 Lg	1
9	A22706	Weld-on 1/2 x 2 5/16 x 4 15/16	1
	S29005	3 1/2 Sweep/Seed Opener Assembly - includes items 2, 3A, 4B, 5, 6, 7 & 8	
	S32010	3 1/2 Cast Sweep/Opener Assembly - Includes Items 2, 3, 4, 5, 6, 7 & 8	
	S32010C	3 1/2 Cast Sweep - Carbide/Opener Assembly - Includes Items 2, 3, 4A, 5, 6, 7 & 8	
	S32350	Acra Point Assembly - Includes Items 2, 3, 4C, 5, 6, 7 & 8	
		Order Kits Through Wholegoods Order Desk	

Openers Forged Shank - Single Shoot



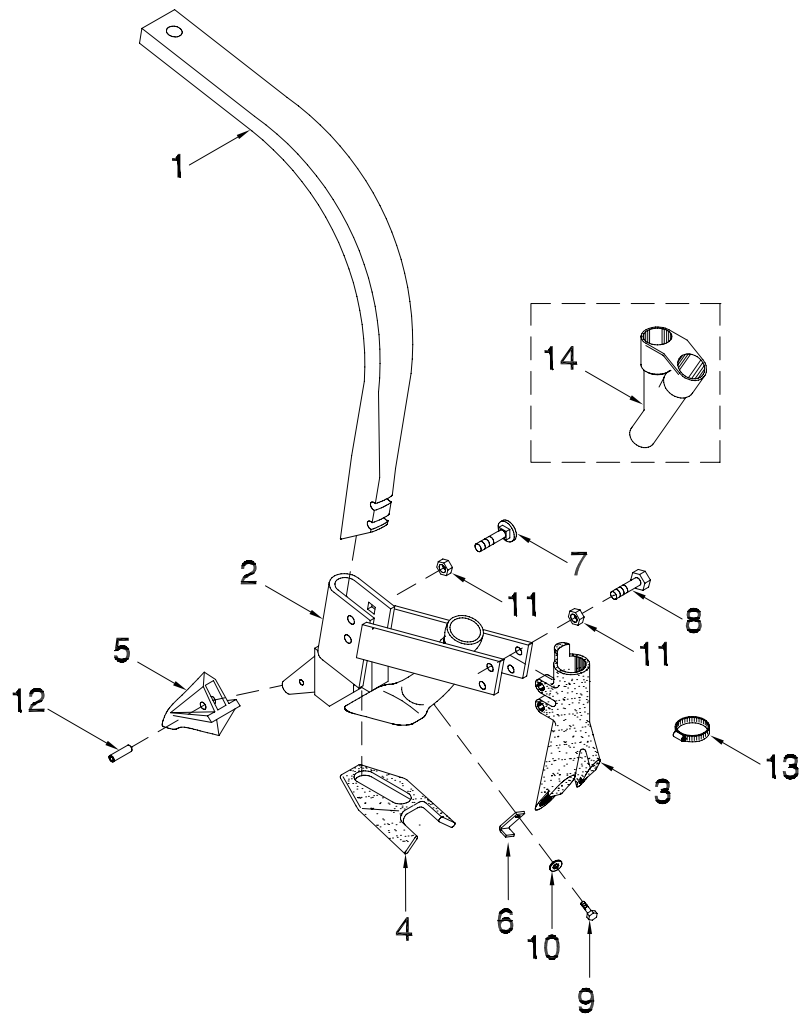
Item	Part No.	Description	Qty
1	S32100	Forged Shank - 1 x 2	1
2	S22326	Seed Boot	1
3	S22593	Hoe Point w/ Chrome Tip (Includes #3A)	1
3A	S22591	Chrome Tip - Weld-on	1
4	S22337	Bracket (Includes item 9) (Cannot use S31750 on this Bracket)	1
5	S22728	Replaceable Point	1
6	D12821	Carriage Bolt - 3/8 x 2 Lg	1
7	M-3388	Locknut - 3/8	1
8	S24351	Roll Pin - 5/16 x 1 1/8 Lg	1
9	A22706	Weld-On 1/2 x 3 x 2 1/4	1
	S30495	Hoe Point Assembly - Includes Items 2, 3, 6 & 7	
	S30496	Acra Point Assembly - Includes Items 2, 4, 5, 6, 7 & 8	
		Order Kits Through Wholegoods Order Desk	

Openers Forged Shank - Side Band



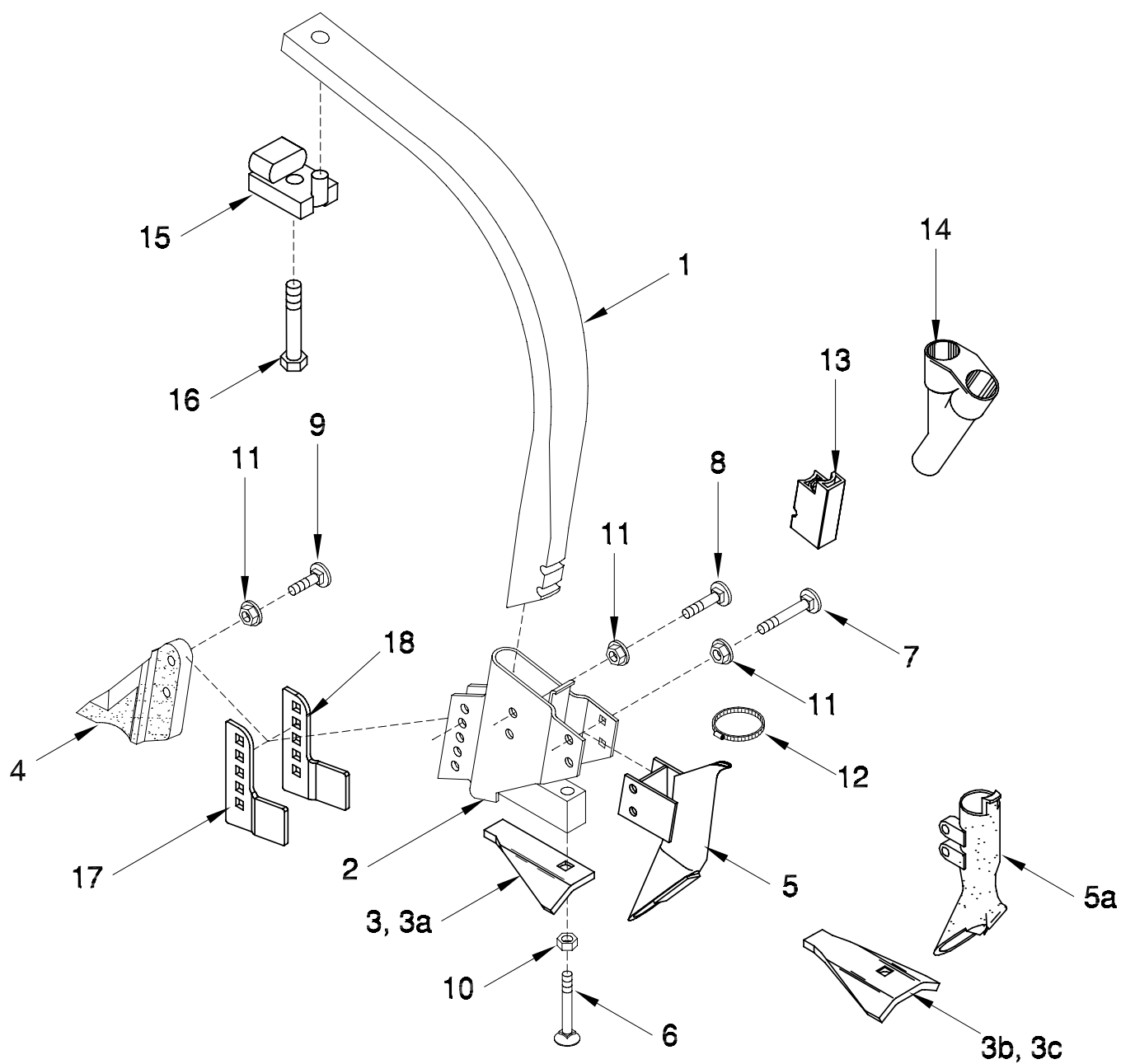
Item	Part No.	Description	Qty
1	S32100	Forged Shank - 1 x 2	1
2	S22696	Fertilizer Boot	1
3	S22697	Grain Tube	1
4	S22066	Deflector	1
5	S22728	Acra Point - 1/2" Insert	1
6	S27557	Deflector Retainer	1
7	S24351	Spiral Pin - 5/16 x 1 1/8	1
8	W14501	Carriage Bolt - 3/8 x 2 1/4	2
9	M-3388	Locknut - 3/8	2
10	S28514	Screw - Thread Cutting - #10-32 x 1/2	1
11	S28513	Lockwasher Internal Tooth - #10	1
12	S27509	"Y" Union (Optional - used to quick change dual shoot to single shoot)	1
	S22699	Dual Shoot Edge-On Assembly (Includes Items 2-11) Order KitsThrough Wholegoods Order Desk	

Openers Forged Shank - Edge on Paired Row



Item	Part No.	Description	Qty
1	S32100	Forged Shank - 1 x 2	1
2	S27508	Edge-on Paired Row Boot	1
3	S21989	Grain Tube Paired Row - Cast	1
4	S21929	Double Deflector	1
5	S22728	Replaceable Point	1
6	S27557	Deflector Retainer	1
7	D12821	Carriage Bolt - 3/8 x 2	2
8	W-480	Hex Bolt - 3/8 x 2 1/2	2
9	S28514	Screw - Thread Cutting - #10-32 x 1/2	1
10	S28513	Lockwasher Internal Tooth - #10	1
11	M-3388	Locknut - 3/8	4
12	S24351	Coiled Spring Pin	1
13	N11470	Hose Clamp	1
14	S27509	"Y" Union (Optional - used to quick change dual shoot to single shoot)	1
	S28515	Forged Shank - Edge - On Paired Row - Kit (includes items 2-13) Order KitsThrough Wholegoods Order Desk	

Openers Forged Shank - Dual Shoot Opener

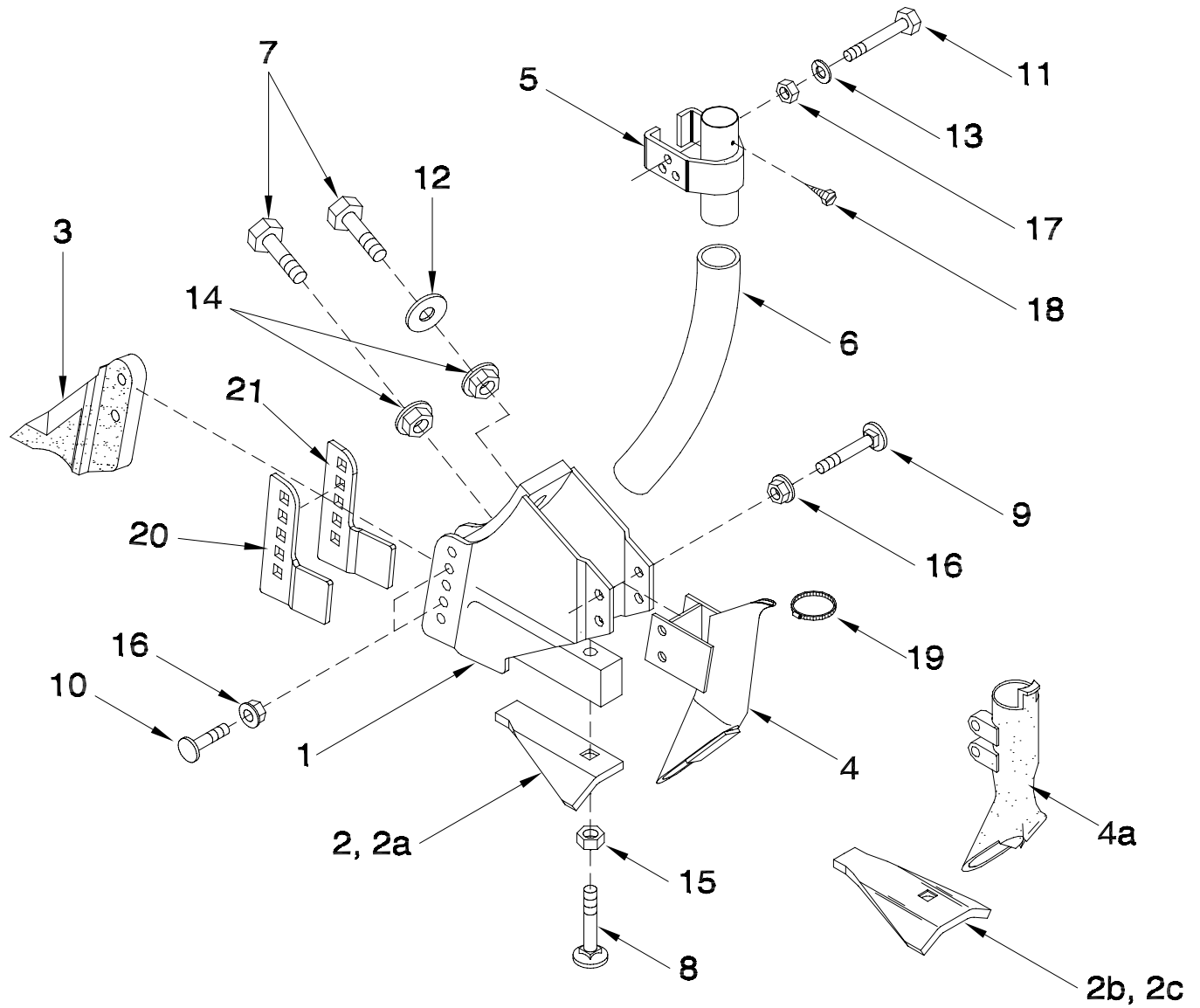


Note: Item 15 & 16 required on trips located behind transport wheels of the Maxim Air Drill.
See Assembly Bulletin 21.

Openers - Forged Shank - Dual Shoot Opener

Item	Part No.	Description	Qty
1	S32100	Forged Shank - 1 x 2	1
2	S28005	Dual Shoot Edge-on Paired Row Boot	1
3	S28517	Deflector - Single	1
3a	S34173	Deflector - Single with Carbide	1
3b	S28004	Deflector - Double	1
3c	S34172	Deflector - Double with Carbide	1
4	S27986	Point - Triangle Replaceable	1
4a	S31610	Point - With Carbide	1
5	S28657	Side Band Seed Opener	1
5a	S28911	Seed Boot - Paired Row - Cast	1
6	S32945	Plow Bolt - 7/16 x 2 3/8 lg Grade 8	1
7	S28159	Carriage Bolt - 3/8 x 2 1/2 lg (Short Neck)	2
8	S31980	Carriage Bolt - 3/8 x 1 3/4 lg (Short Neck)	2
9	D-5261	Carriage Bolt - 3/8 x 1 1/2 lg (Standard)	2
9a	D12821	Carriage Bolt - 3/8 x 2 lg (Side Plate)	2
10	S32944	Locknut - 7/16 Grade C	1
11	S27987	Flange Locknut - 3/8	6
12	N11470	Hose Clamp - HS-20	2
13	S29001	NH3/Liquid Grommet (Optional)	1
14	S27509	"Y" Union (Optional - used to quick change dual shoot to single shoot)	1
15	C31925	Shank Extension	2
16	C-3016	Hex Bolt - 5/8 x 3 lg	2
17	S32152	Side Plate - Left	1
18	S32239	Side Plate - Right	1
	S30928	Side Plate Kit (includes items 9a, 11, 17, and 18) Order through Parts	
		Order the following Kits Through Wholegoods Order Desk	
	S29000	Forged Shank - Dual Shoot Side Band - Kit Standard (includes all of the above items, except items 1, 3a-3c, 4a, 5a, 9a, 13, 14, 15, 16, 17 & 18)	
	S29000-SP	Forged Shank - Dual Shoot Side Band - Kit with Side Plates (includes all of the above items, except items 1, 3a, 3b, 3c, 4a, 5a, 9, 13, 14, 15 & 16)	
	S29000C	Forged Shank - Dual Shoot Side Band - Kit with Carbide Point (includes all of the above items, except items 1, 3, 3b, 3c, 4, 5a, 9a, 13, 14, 15, 16, 17 & 18)	
	S29000C-SP	Forged Shank - Dual Shoot Side Band - Kit with Carbide Point & Side Plates (includes all of the above items, except items 1, 3, 3b, 3c, 4, 5a, 9, 13, 14, 15 & 16)	
	S28158	Forged Shank - Dual Shoot Paired Row - Kit Standard (includes all of the above items, except items 1, 3, 3a, 3c, 4a, 5, 9a, 13, 14, 15, 16, 17 & 18)	
	S28158-SP	Forged Shank - Dual Shoot Paired Row - Kit with Side Plates (includes all of the above items, except items 1, 3, 3a, 3c, 4a, 5, 9, 13, 14, 15 & 16)	
	S28158C	Forged Shank - Dual Shoot Paired Row - Kit with Carbide Point (includes all of the above items, except items 1, 3, 3a, 3b, 4, 5, 9a, 13, 14, 15, 16, 17 & 18)	
	S28158C-SP	Forged Shank - Dual Shoot Paired Row - Kit with Carbide Point & Side Plates (includes all of the above items, except items 1, 3, 3a, 3b, 4, 5, 9, 13, 14, 15 & 16)	

Openers **Conventional Shank - Dual Shoot Opener**



Openers - Conventional Shank - Dual Shoot Opener

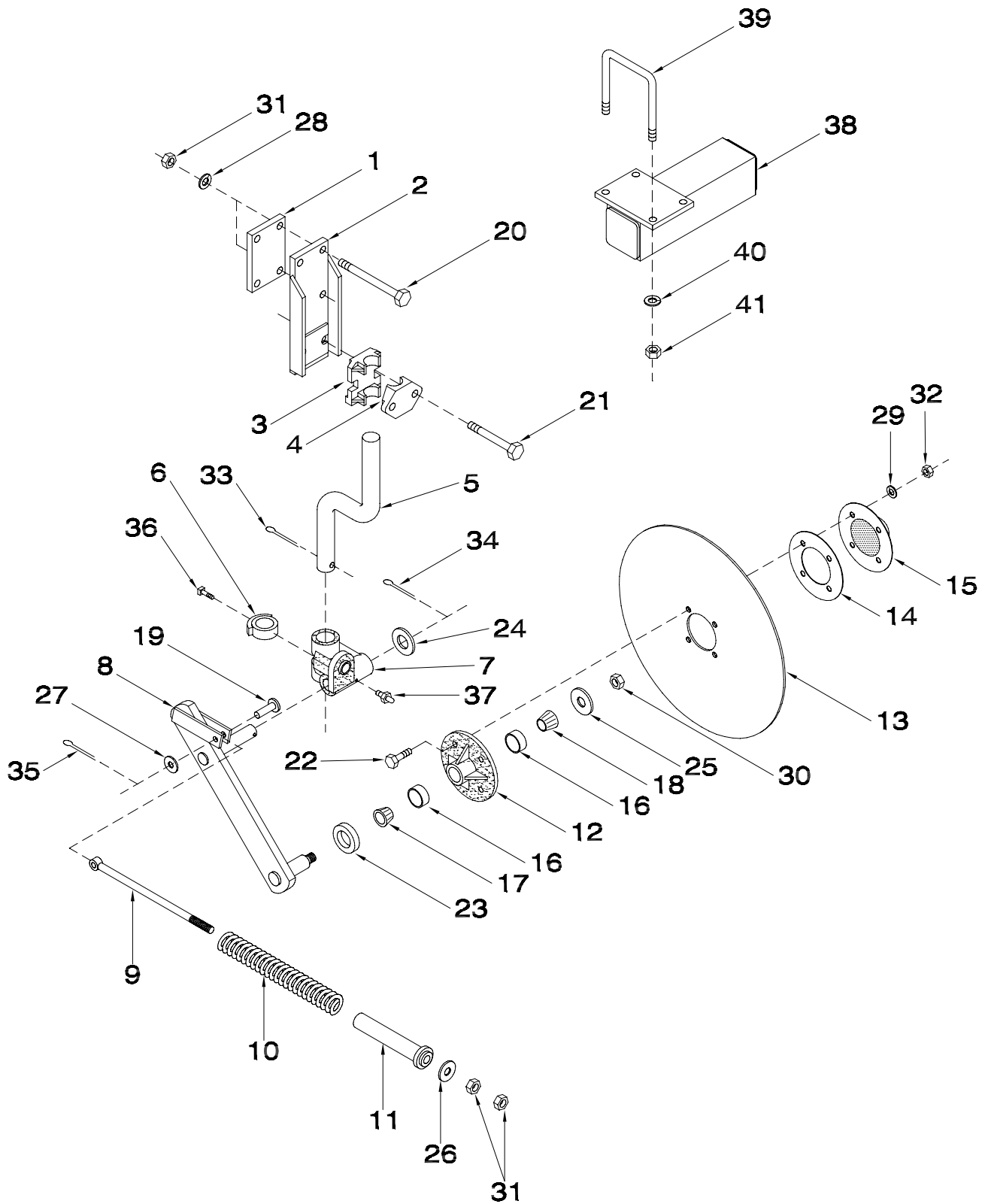
Item	Part No.	Description	Qty
1	C29017	Main Body - "C" Shank	1
2	S28517	Deflector - Single	1
2a	S34173	Deflector - Single with Carbide	1
2b	S28004	Deflector - Double	1
2c	S34172	Deflector - Double with Carbide	1
3	S27986	Point - Triangle Replaceable	1
3a	S31610	Point - With Carbide	1
4	S28657	Side Band Seed Opener	1
4a	S28911	Seed Boot - Paired Row - Cast	1
5	N10571	Boot Union	1
6	R480034	Hose - 1.169 OD x .929 ID x 18 Lg	1
7	W-490	Hex Bolt - 1/2 x 2 1/2 lg	2
7a	W-488	Hex Bolt - 1/2 x 2 lg	2
8	S32945	Plow Bolt - 7/16 x 2 3/8 lg Grade 8	1
9	S28159	Carriage Bolt - 3/8 x 2 1/2 lg (Short Neck)	2
10	S31981	Carriage Bolt - 3/8 x 1 1/4 lg (Short Neck) (Standard)	2
10a	S31980	Carriage Bolt - 3/8 x 1 3/4 lg (Short Neck) (Side Plates)	2
11	N19459	Hex Bolt - 5/16 x 3 lg	1
12	W-539	Flatwasher - 1/2	1
13	W-522	Lockwasher - 5/16	1
14	D14565	Serrated Flange Nut - 1/2	2
15	S32944	Locknut - 7/16 Grade C	1
16	S27987	Flange CenterLocknut - 3/8	4
17	W-513	Hex Nut - 5/16	2
18	D17725	Self Tapping Screw - #10 x 1/2 lg	1
19	N11470	Hose Clamp - HS-20	1
20	S32201	Side Plate - Left	1
21	S32202	Side Plate - Right	1
	S30927	Side Plate Kit (includes items 10a, 16, 20, and 24) Order through Parts	
		Order the following Kits Through Wholegoods Order Desk	
	S29140	Conventional Shank - Dual Shoot Side Band - Kit Standard (includes all above items, except items 2a, 2b, 2c, 3a, 4a, 10a, 20 & 21)	
	S29140-SP	Conventional Shank - Dual Shoot Side Band - Kit with Side Plates (includes all above items, except items 2a, 2b, 2c, 3a, 4a & 10)	
	S29140C	Conventional Shank - Dual Shoot Side Band - Kit with Carbide Point (includes all above items, except items 2, 2b, 2c, 3, 4a, 10a, 20 & 21)	
	S29140C-SP	Conventional Shank - Dual Shoot Side Band - Kit with Carbide Point & Side Plates (includes all above items, except items 2, 2b, 2c, 3, 4a & 10)	
	S25962	Conventional Shank - Dual Shoot Paired Row - Kit Standard (includes all above items, except items 2, 2a, 2c, 3a, 4, 10a, 20 & 21)	
	S25962-SP	Conventional Shank - Dual Shoot Paired Row - Kit with Side Plates (includes all above items, except items 2, 2a, 2c, 3a, 4 & 10)	
	S25962C	Conventional Shank - Dual Shoot Paired Row - Kit with Carbide Point (includes all above items, except items 2, 2a, 2b, 3, 4, 10a, 20 & 21)	
	S25962C-SP	Conventional Shank - Dual Shoot Paired Row - Kit with Carbide Point & Side Plates (includes all above items, except items 2, 2a, 2b, 3, 4 & 10)	

Section 2: Coulters

Section Contents

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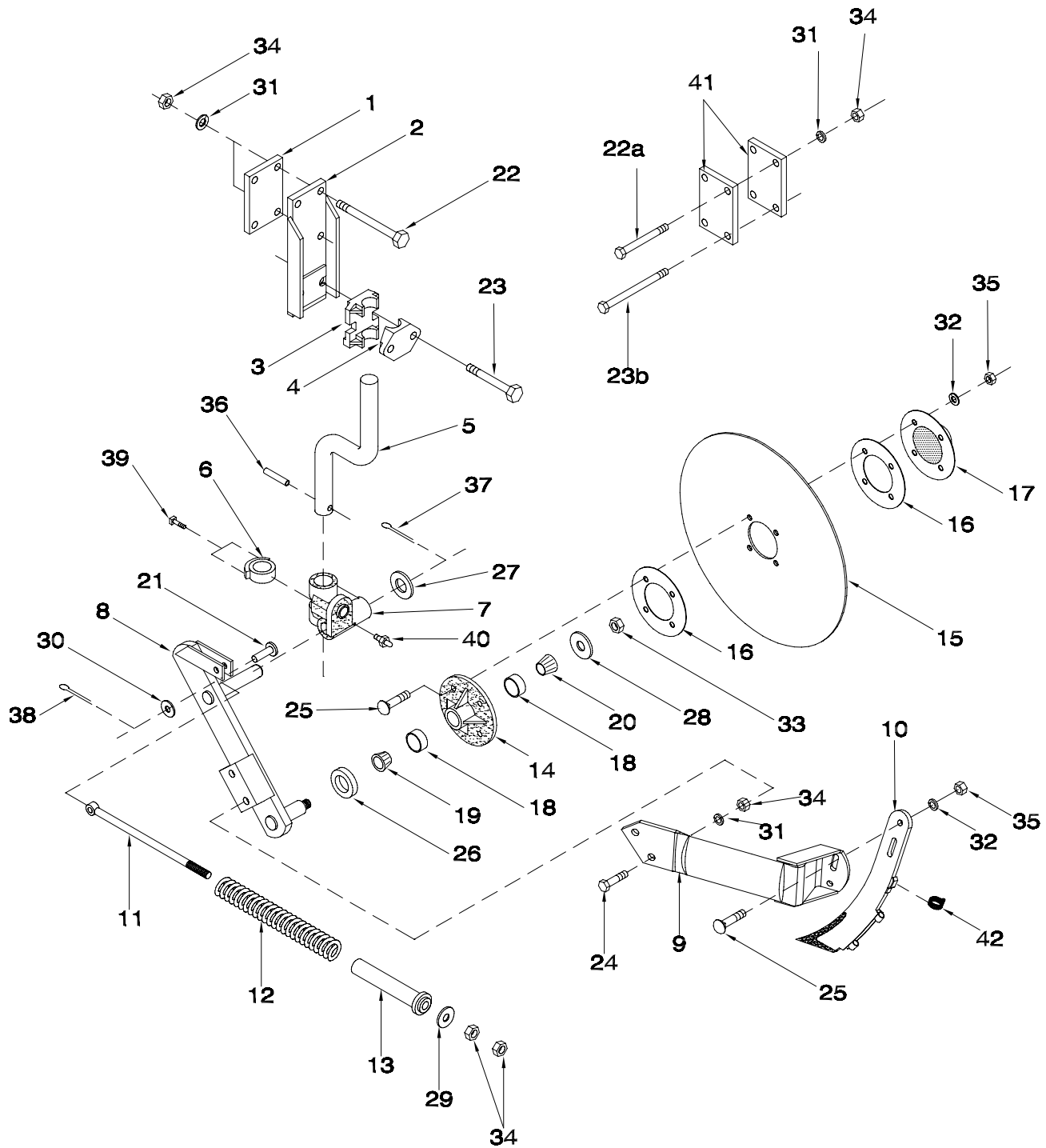
Coulters Coulters Assembly



Coulters - Coulter Assembly

Item	Part No.	Description	Qty
1	S28476	Mounting Clamp Plate	1
2	S28477	Mounting Bracket	1
3	P6525916	Inner Clamp - Cast	1
4	P6525738	Outer Clamp - Cast	1
5	P6527289	Shank - 5 1/2 Offset	1
6	P6521824	Collar - Stop	1
7	P6525740	Pivot Bracket	1
8	P6525732	Arm	1
9	P6525736	Eyebolt	1
10	P6525727	Spring	1
11	P6526080	Spring Guide Collar	1
12	P6521834	Hub (includes #16)	1
13	P6521837	Blade - Coulter 18" Plain	1
13A	P6521838	Blade - Coulter 20" Plain	1
13B	P6523683	Blade - Coulter 18" Ripple	1
13C	P6521839	Blade - Coulter 20" Ripple	1
14	P6529030	Gasket	2
15	P6521842	Dust Cap	1
16	W-90	Bearing cup	2
17	P6512898	Bearing Roller Cone 1 1/4 w/seal	1
18	W-89	Bearing Roller Cone 1 1/4	1
19	P6523331	Pin Clevis - 1/2 dia x 1 3/4 UL	1
20	C-507	Hex Bolt - 5/8 x 6 Lg	2
20A	C-3683	Hex Bolt - 5/8 x 9 Lg	2
21	W-504	Hex Bolt - 5/8 x 4 Lg	2
22	H-4584	Carriage Bolt - 1/2 x 1 1/2 Lg	4
23	P6521841	Spacer	1
24	P774595	Flatwasher - 1.156 ID x 0.17OD	1
25	P6528769	Flatwasher - 0.8125 ID x 1.75 OD	1
26	W-540	Flatwasher - 5/8 ID	4
27	W-539	Flatwasher - 1/2 ID	1
28	W-526	Lockwasher - 5/8	10
29	W-525	Lockwasher - 1/2	4
30	P66D12	Locknut - 3/4 UNF Thread	1
31	W-517	Hex Nut - 5/8	6
32	W-516	Hex Nut - 1/2	4
33	W-4181	Cotter Pin - 1/4 x 2 Lg	1
34	P1F828	Cotter Pin - 1/4 x 1 3/4 Lg	1
35	P1F412	Cotter Pin - 1/8 x 3/4 Lg	1
36	P13G820	Set Screw - 1/2 x 1 1/4 Lg	1
37	S-752	Grease Fitting - 1/4 straight	2
38	S28474	Stub - Main	2
39	C-219	U-Bolt - 5/8	4
40	W-526	Lockwasher - 5/8	8
41	W-517	Hex Nut - 5/8	8
	S28475	Coulter Kit 20" - Plain (Includes Items 1-12, 13A, 14, 15, 17-37)	
	S28480	Coulter Kit 20" - Ripple (Includes Items 1-12, 13C, 14, 15, 17-37)	
	S28483	Coulter Stub Kit (Includes Items 38 to 41) (Order through wholegoods order desk only)	

Coulters Anhydrous Coulter Assembly

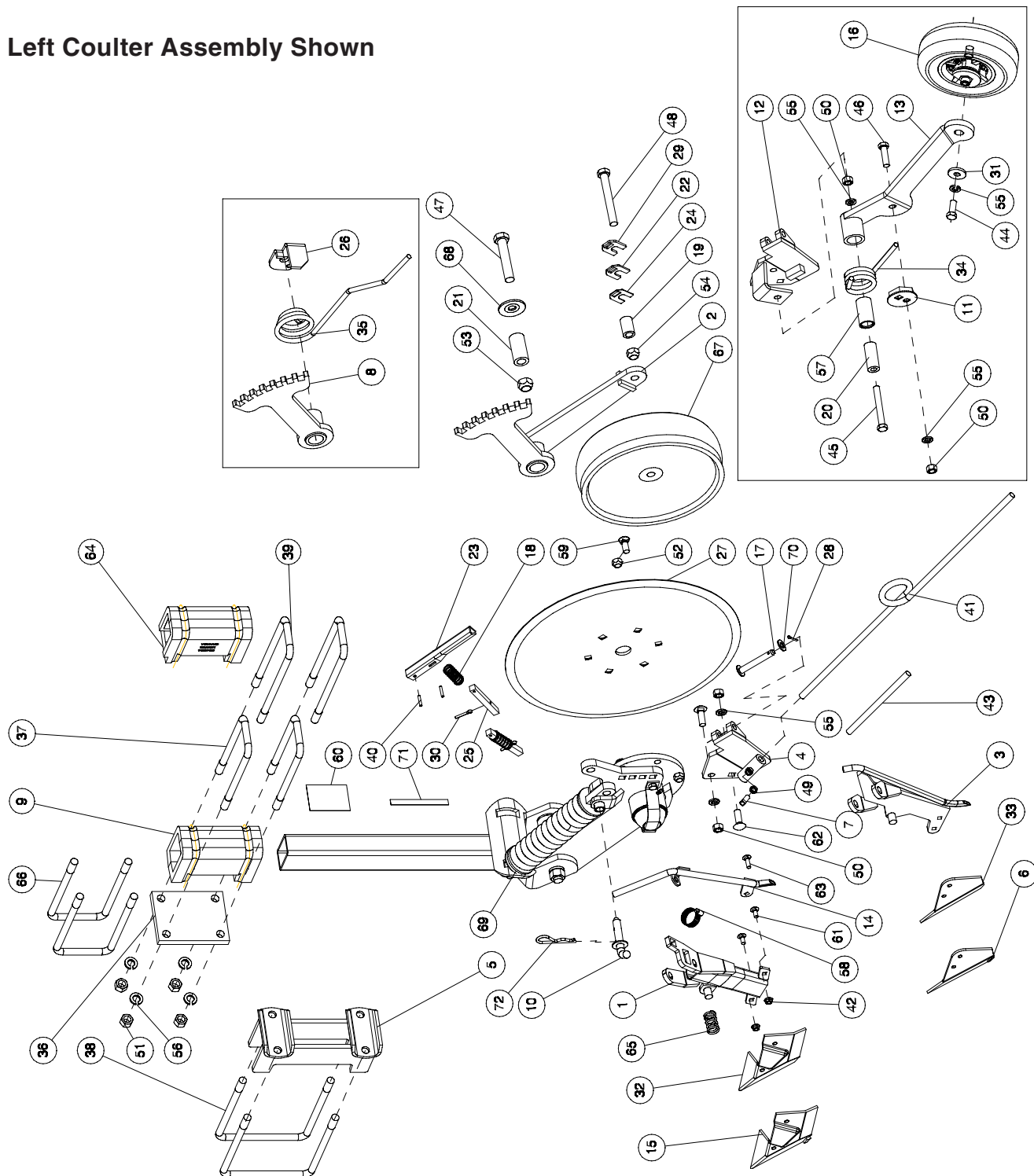


Coulters - Anhydrous Coulter Assembly

Item	Part No.	Description	Qty
1	S28476	Mounting Clamp Plate	1
2	S28477	Mounting Bracket Long	1
2a	S29133	Mounting Bracket Short	1
3	P6525916	Inner Clamp - Cast	1
4	P6525738	Outer Clamp - Cast	1
5	P6527289	Shank - 5 1/2 Offset	1
5a	S29134	Shank - Straight	1
6	P6521824	Collar - Stop	1
7	P6525740	Pivot Bracket	1
8	S30418	Arm	1
9	S29084	Bracket - Coulter Knife	1
10	S31405	NH3 Wiese Knife	1
11	S31014	Eyebolt	1
12	S27985	Spring	1
13	P6526080	Spring Guide Collar	1
14	P6521834	Hub (includes #18)	1
15	P6521838	Blade - Coulter 20" Plain	1
16	P6529030	Gasket	2
17	P6521842	Dust Cap	1
18	W-90	Bearing Cup	2
19	P6512898	Bearing Roller Cone 1 1/4 w/seal	1
20	W-89	Bearing Roller Cone 1 1/4	1
21	P6523331	Pin, Clevis - 1/2 dia x 1 3/4 UL	1
22	C-507	Hex Bolt - 5/8 x 6 Lg	4
22a	J12181	Hex Bolt - 5/8 x 7 Lg	4
23	C-852	Hex Bolt - 5/8 x 4 1/2 Lg	2
23a	C-3683	Hex Bolt - 5/8 x 9 Lg	2
23b	S28648	Hex Bolt - 5/8 x 10 Lg	4
24	W-497	Hex Bolt - 5/8 x 1 1/2 Lg	2
25	H-4584	Carriage Bolt - 1/2 x 1 1/2 Lg	6
26	P6521841	Spacer - Coulter Spindle	1
27	P774595	Flatwasher - 1.156 ID x 1.75 OD	1
28	P6528769	Flatwasher - 0.8125 ID x 1.75 OD	1
29	W-539	Flatwasher - 9/16 ID x 1 3/8 OD	1
30	W-540	Flatwasher - 0.688 ID x 1.75 OD x 0.134 Thick	4
31	W-526	Lockwasher - 5/8	12
32	W-525	Lockwasher - 1/2	6
33	P66D12	Locknut - 3/4 UNF Thread	1
34	W-517	Hex Nut - 5/8	14
35	W-516	Hex Nut - 1/2	6
36	P730131	Spiral Pin - 1/2 x 2 1/2 Lg	1
37	P1F828	Cotter Pin - 1/4 x 1 3/4 Lg	1
38	P1F412	Cotter Pin - 1/8 x 3/4 Lg	1
39	W-571	Set Screw - 1/2 x 1 1/4 Lg	2
40	S-752	Grease Fitting - 1/4 straight	2
41	S28476	Spacer Plates	4
42	S31745	Hose Clamp (Nominal)	1
	S30417	Coulter Assembly - Offset - Wiese Knife (5,6-17, 19-21, 24-40)	
	S30441	Coulter Assembly - Straight - Weise Knife (5a-17, 19-21, 24-40)	
	S30442	Kit - Short Mounting Bracket (includes items 1, 2a, 3, 4, 22, 23a, 31 & 34)	
	S30443	Kit - Long Mounting Bracket (includes items 1, 2, 3, 4, 22, 23 & 34)	
	S30444	Kit - Spacer 40 ft Maxim - 10" spacing (includes items 22a, 23b & 41)	
		(Order through wholegoods order desk only)	

Coulters Fertilizer Coulter Assembly

Left Coulter Assembly Shown



IMPORTANT: Item 1 & 14 Dry/NH3 Opener

The dry/NH3 opener is intended to allow the operator the flexibility to switch between granular fertilizer and NH3 without having to change openers. The dry/NH3 opener is not intended to apply granular fertilizer and NH3 in the same operation. Excessive gassing off of the NH3 will occur in such an operation.

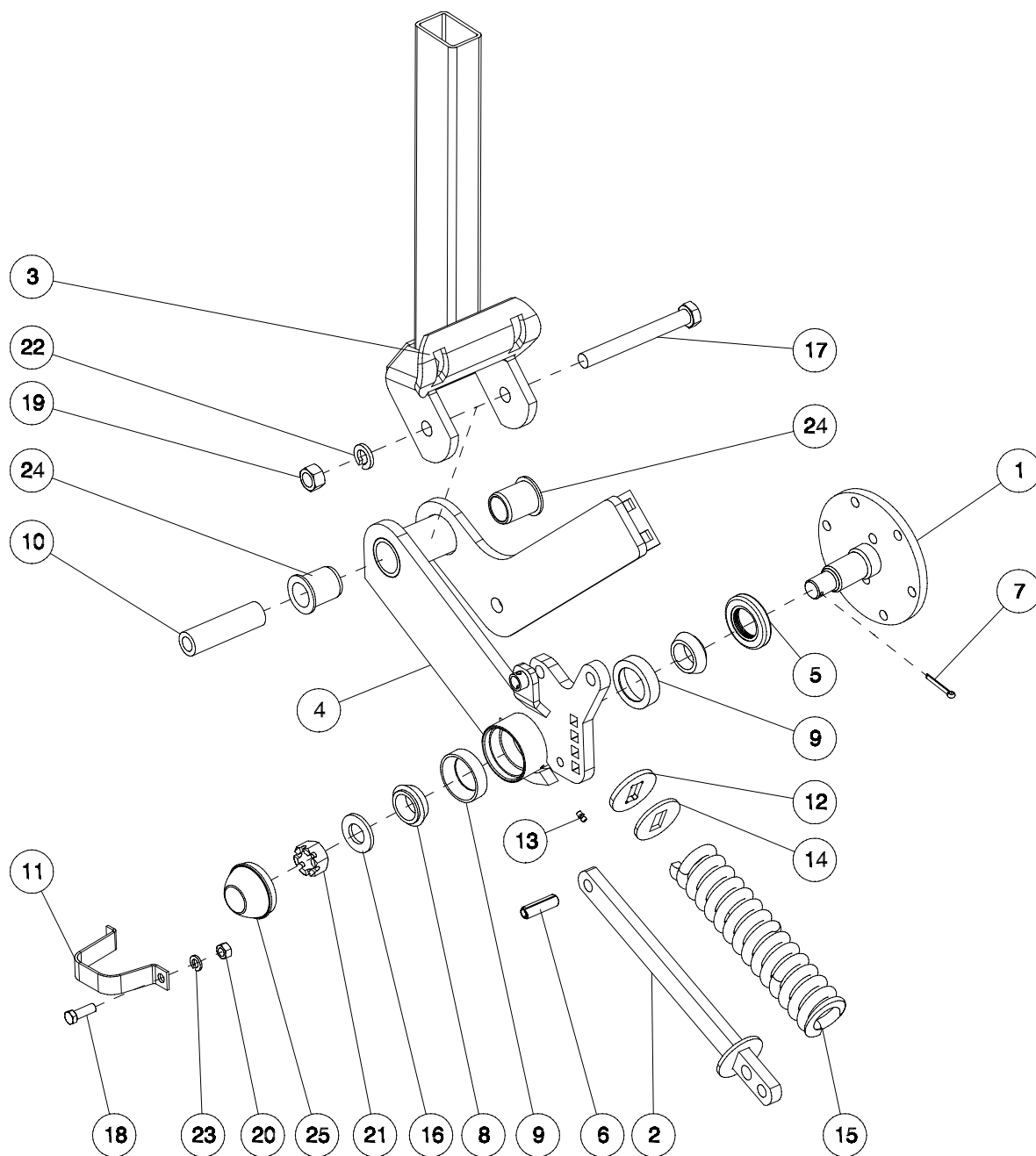
Morris Industries shall have no obligation or liability of any kind on account of end user incorrectly using the Dry/NH3 Opener.

Coulters - Fertilizer Coulters Assembly - Left Shown

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	S32265	Scraper/Seed Tube - Left	1	38	S33332	U-Bolt - 5/8 x 7 x 9 1/4 (5 x 7 Tube)	2
2	S32356	Scraper/Seed Tube - Right	1	39	S39100	U-Bolt - 5/8 x 2 13/16 x 11 (4 x 6 Tube)	2
3	S32912	Adjusting Arm - Left	1	40	S-3001	Spring Pin - 3/16 x 1	2
4	S32915	Adjusting Arm - Right	1	41	S33461	Closing Tine - Left	1
5	S33127	NH3 Scraper Arm - Left	1	42	S33538	Closing Tine - Right	1
6	S33142	NH3 Scraper Arm - Right	1	43	D-5278	Flange Locknut - 5/16	2
7	S33145	Mounting Plate - Left	1	44	S33543	Leverage Assist Bar	1
8	S32978	Mounting Plate - Right	1	45	W-485	Hex Bolt - 1/2 x 1 1/4 Lg Full Thread	1
9	S33347	Slide Mounting Plate (5 x 7 Tube)	1	46	W-494	Hex Bolt - 1/2 x 3/4 Lg	1
10	S42355	Scraper NH3 - Carbide - Left	1	47	W-487	Hex Bolt - 1/2 x 1 3/4 Lg	1
11	S42304	Scraper NH3 - Carbide - Right	1	48	D-5256	Hex Bolt - 3/4 x 4 Lg	1
12	S33693	Set Screw - 3/8 x 1 1/4 Lg	1	49	W-506	Hex Bolt - 5/8 x 5 Lg	1
13	S34189	Disc Tine Adjusting Arm	1	50	S-748	Hex Jam Nut - 3/8	1
14	S34524	Slide Mounting Bracket	1	51	W-516	Hex Nut - 1/2	6
15	S34545	Pin - Spring Rod	1	52	W-517	Hex Nut - 5/8	4
16	S34653	Adjusting Block	1	53	F-3405	Locknut - 1/2 Unitorque	6
17	S34772	Mounting Plate Closing Wheel - Left	1	54	D-5273	Locknut - 3/4 Unitorque	1
18	S34773	Mounting Plate Closing Wheel - Right	1	55	S-1197	Locknut - 5/8 Unitorque	1
19	S34780	Closing Wheel Arm - Left	1	56	W-525	Lockwasher - 1/2	7
20	S34781	Closing Wheel Arm - Right	1	57	W-526	Lockwasher - 5/8	4
21	S37507	Bolt On Liquid/NH3 Adaptor - Left	1	58	S34786	Bushing	1
22	S37508	Bolt On Liquid/NH3 Adaptor - Right	1	59	S33599	Hose Clamp	1
23	S39551	Scraper Dry - Left - Carbide	1	60	S31930	Plow Bolt - 1/2 x 1 1/4 Lg	6
24	S39552	Scraper Dry - Right - Carbide	1	61	S33341	Set Up Decal	1
25	S39560	Pincher Wheel	1	62	D-5259	Carriage Bolt - 5/16 x 3/4 Lg	2
26	W15513	Lock Pin	1	63	H-4584	Carriage Bolt - 1/2 x 1 1/2 Lg	2
27	S31446	Spring Compression	2	64	S33420	Carriage Bolt - 5/16 x 1 Lg	1
28	S31477	Bushing - 1 OD x .627 ID	1	65	S34661	Cast Slide Bracket Trimmed	1
29	S31478	Bushing - 1 OD x .510 ID	1	66	S33146	Scraper Spring	1
30	S32751	Bushing - 1 1/4 OD x .75 ID	1	67	S33786	U-Bolt - 5/8 x 4 x 9	2
31	S34529	Shim - 1/8	1	68	S31943	Soil Retaining Wheel	1
32	S32115	Adjusting Lever	1	69	S32745	Spring Washer - 3/4	1
33	S34528	Shim - 1/16	1	70	S-1925	Sub Assembly #2 Left (See Next Page)	1
34	S32985	Push Rod	2	71	S33340	Flatwasher - 1/2	1
35	S34187	Tine Retainer - Left	1	72	BW-11	Decal Depth Indicator	1
36	S34186	Tine Retainer - Right	1			Hairpin - 3/16	1
37	S34199	Coulter Disc - 20 Dia	1			Coulter Blade Tine Kit - Left (Includes items 8, 26 & 35)	
38	W-528	Cotter Pin - 1/8 x 1 Lg	1			Coulter Blade Tine Kit - Right (Includes items 7, 26A, & 35A)	
39	S34530	Shim - 3/16	1			Closing Tine Kit - Left (Includes items 7, 41 & 49)	
40	S-531	Cotter Pin - 3/16 x 1 Lg	2			Closing Tine Kit - Right (Includes items 7, 41A & 49A)	
41	C-333	Hose Holder Washer	1			Closing Wheel Kit - Left (See index for parts page)	
42	S32998	Scraper Dry - Left	1			Closing Wheel Kit - Right (See index for parts page)	
43	S32988	Scraper Dry - Right	1			Coulter - Left - NH3	
44	S33141	Scraper NH3 - Left	1			Coulter - Right - NH3	
45	S33140	Scraper NH3 - Right	1			Coulter - Left - Dry	
46	S31484	Torque Spring Left Hand	1			Coulter - Right - Dry	
47	S34183	Disc Tine - Left	1			Kit - Bolt On Liquid/NH3 Adaptor - Left (Includes items 14 and 63)	
48	S34184	Disc Tine - Right	1			Kit - Bolt On Liquid/NH3 Adaptor - Right (Includes items 14 and 63)	
49	S32987	Plate	1			(Order through wholesalers order desk only)	
50	S32986	U-Bolt - 5/8 x 2 13/16 x 9 (4 x 4 Tube)	2				

Coulters

Fertilizer Coulter Sub-Assembly

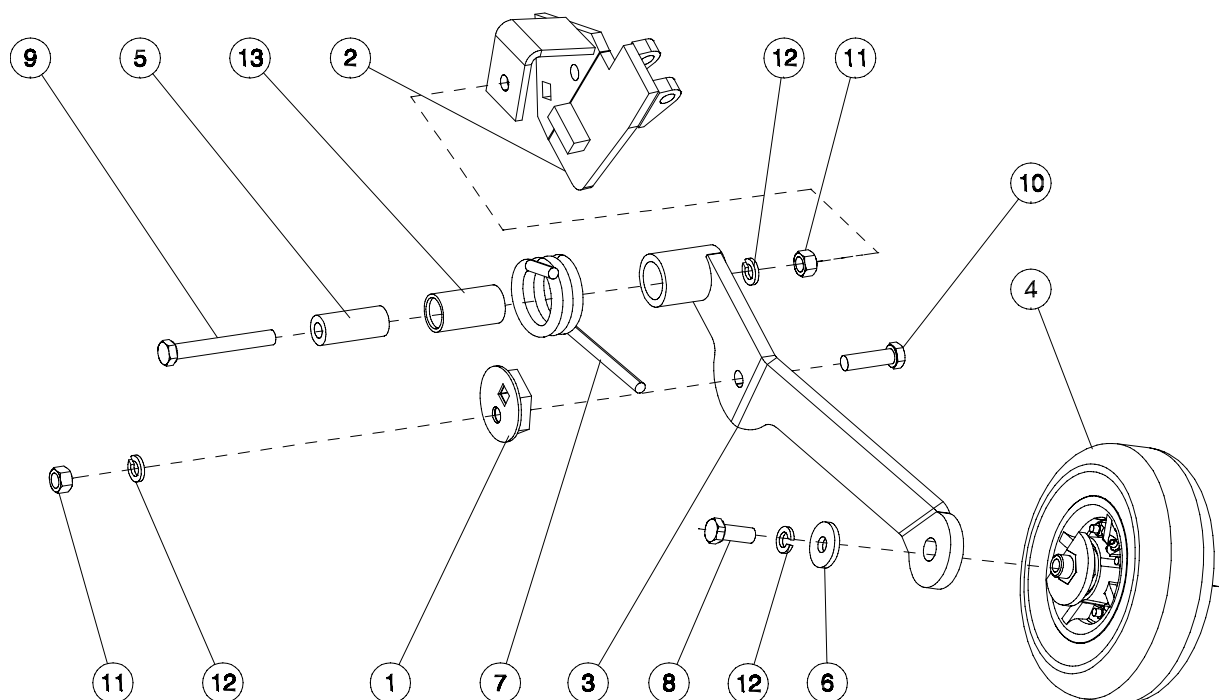


Coulter - Fertilizer Coulter Sub-Assembly

Item	Part No.	Description	Qty
1	S32909	Spindle	1
2	S33106	Spring Rod	1
3	S33134	Main Pivot Bracket	1
4	S33139	Pivot Bracket - Left	1
4A	S33129	Pivot Bracket - Right	1
5	S34533	Triple Lip Seal - 1 5/8	1
6	S34544	Spiral Pin - 5/8 x 2	1
7	W-1416	Cotter Pin - 3/16 x 1	1
8	W-1474	Bearing Cone - LM48548	2
9	W-1537	Bearing Cup - LM48510	2
10	S32971	Spacer Bushing	1
11	S33470	Dust Cap Retainer	1
12	S33138	Wear Washer	1
13	S-752	Grease Fitting - 1/4 Straight	1
14	S33112	Backing Plate	1
15	S27985	Coulter Spring	1
16	C-3258	Flatwasher - 1	1
17	C-3525	Hex Bolt - 3/4 x 6 1/2 Lg	1
18	W-483	Hex Bolt - 7/16 x 1 1/4 Lg - Full Thread	1
19	W-518	Hex Nut - 3/4	1
20	W-515	Hex Nut - 7/16	1
21	S-1311	Hex Slotted Nut - 1	1
22	W-527	Lockwasher - 3/4	1
23	W-524	Lockwasher - 7/16	1
24	C18510	Bushing - Nylon	2
25	C-1522	Dust Cap	1

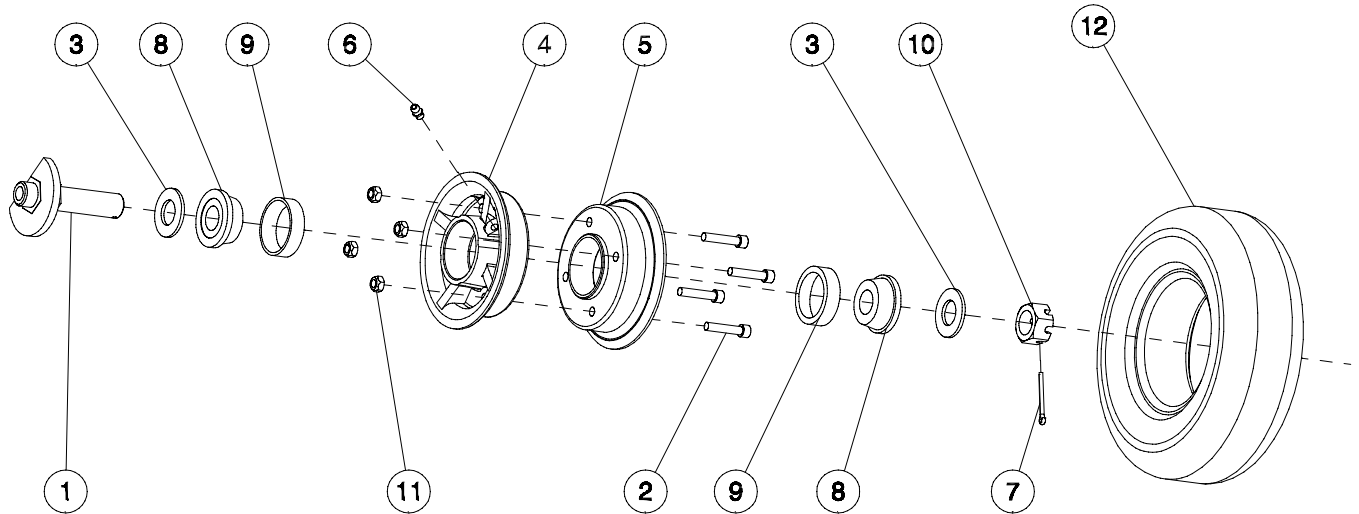
Coulters

Fertilizer Coulter - Optional Closing Wheel Assembly



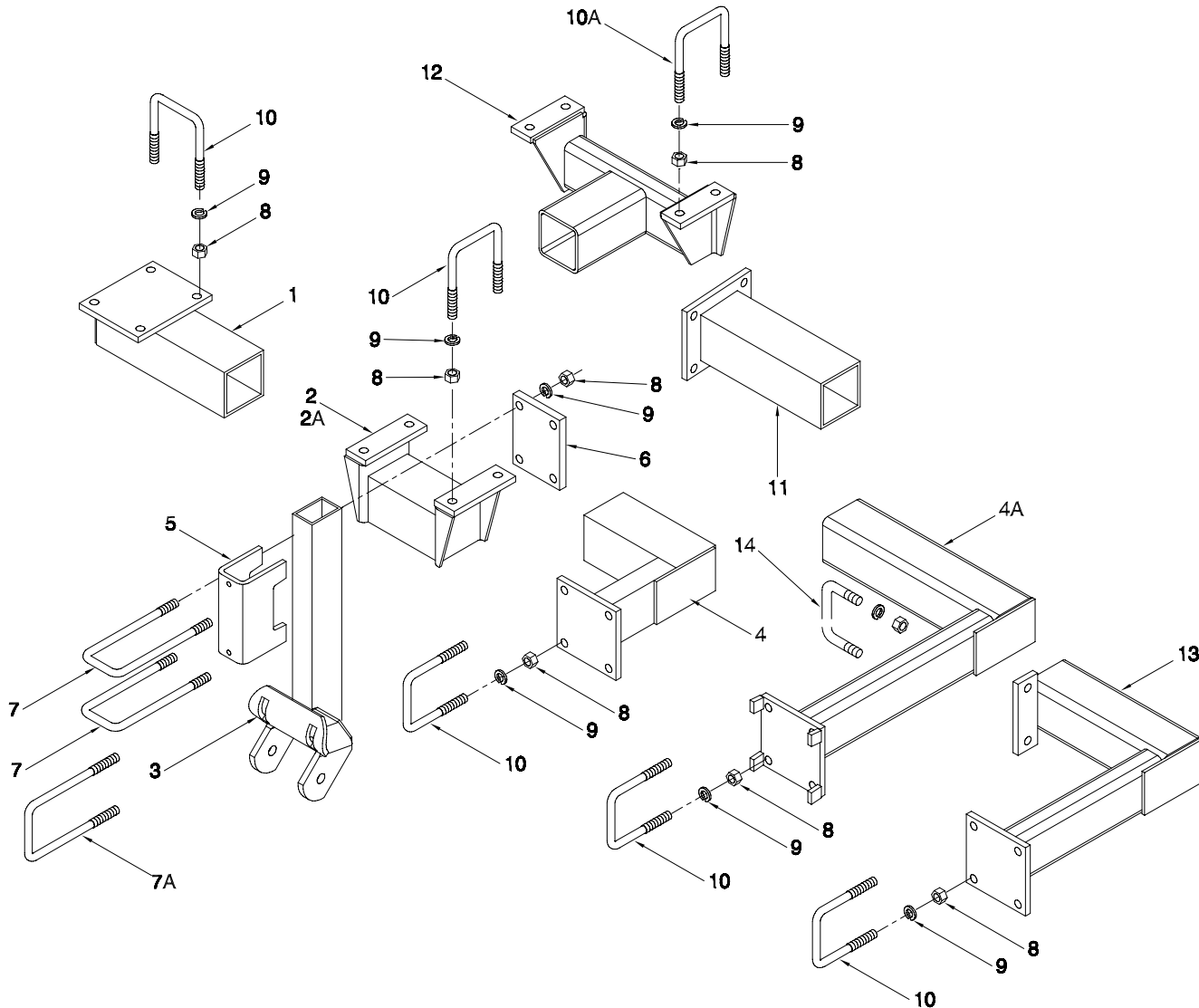
Item	Part No.	Description	Qty
1	S34653	Adjusting Block	1
2	S34772	Mounting Plate - Left	1
2A	S34773	Mounting Plate - Right	1
3	S34780	Closing Wheel Arm - Left	1
3A	S34781	Closing Wheel Arm - Right	1
4	S39560	Pincher Wheel Assembly (see next Page for parts list)	1
5	S34785	Bushing - 1 OD x 0.510 ID	1
6	C-333	Washer - 33/64 ID x 1 1/2 x 3/16 Thick	1
7	S31484	Torque Spring - Left Hand	1
7A	S31921	Torque Spring - Right Hand	1
8	W-485	Hex Bolt - 1/2 x 1 1/4 Lg - Full Thread	1
9	W-494	Hex Bolt - 1/2 x 3 3/4 Lg	1
10	W-487	Hex Bolt - 1/2 x 1 3/4 Lg	1
11	W-516	Hex Nut - 1/2	2
12	W-525	Lockwasher - 1/2	3
13	S34786	Bushing - Nylatron	1
	S38678	Kit - Closing Wheel - Left	
	S38679	Kit - Closing Wheel - Right	
		(Order through wholegoods order desk only)	

Coulters Pincher Wheel Assembly



Item	Part No.	Description	Qty
1	S39558	Spindle Weldment	1
2	S40511	Socket Head Capscrew - 1/4 x 1 1/4 Lg	4
3	S39559	Washer	2
4	S34522	Split Rim - Pincher Wheel	1
5	S34523	Split Rim - Pincher Wheel	1
6	S-752	Grease Fitting - 1/4 Straight	1
7	W-529	Cotter Pin - 1/8 x 1 1/4 Lg	1
8	S33449	Bearing Cone W/ Seal C/W Cup	2
9	W-88	Bearing Cup	2
10	W-94	Hex Slotted Nut - 3/4-16 UNF	1
11	N22778	Locknut - 1/4 Nylon Insert	4
12	S31935	Tire - 8 1/4 x 2 3/4 Solid	1
	S39560	Pincher Wheel Assembly (Order through wholegoods order desk only)	

Coulters Fertilizer Coultter Sub - Frames



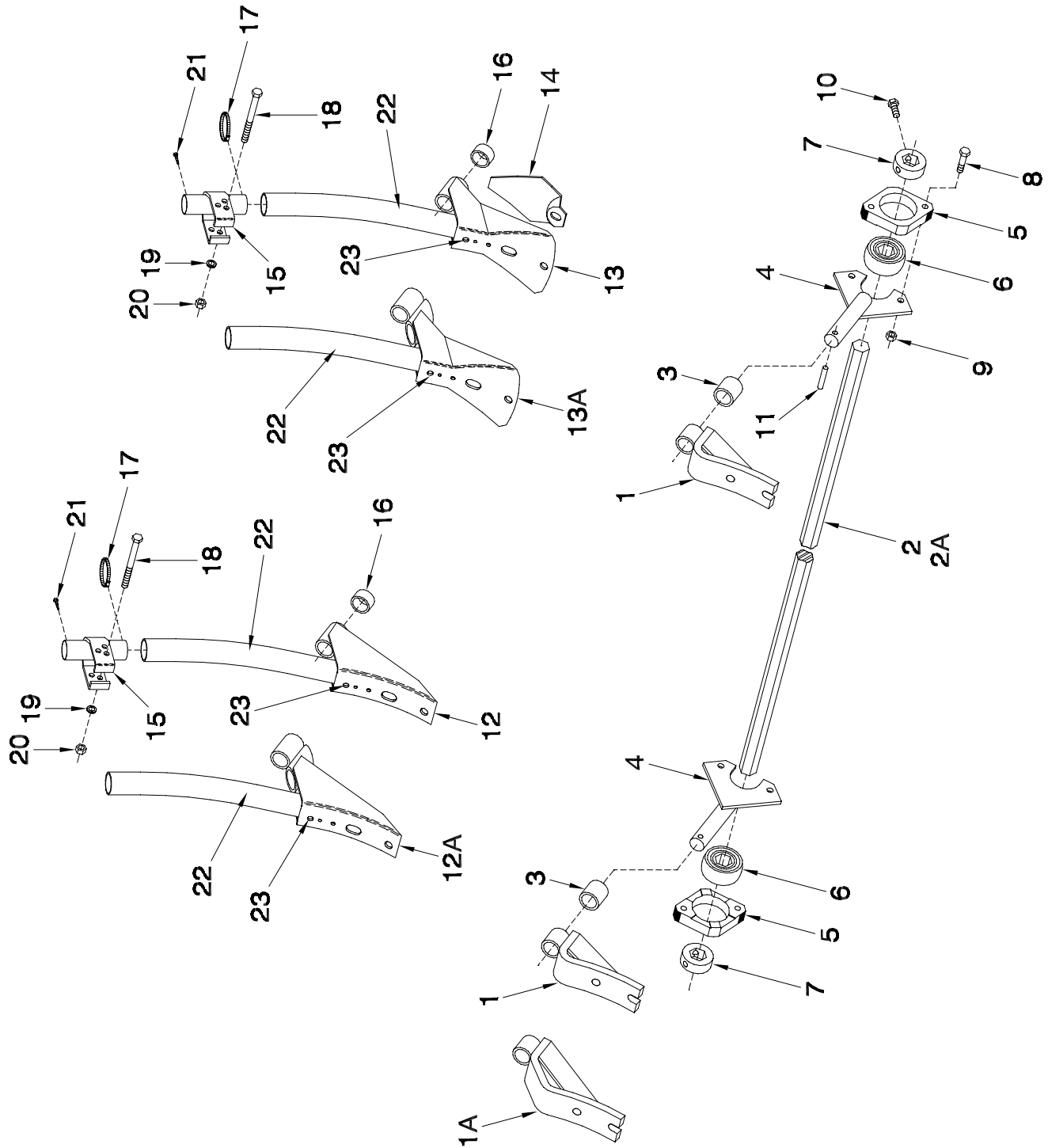
Item	Part No.	Description	Qty
1	S28474	Stub - Coultter	As req
2	S33116	Subframe - Short	As req
2A	S33117	Subframe - Long	As req
3	S33134	Bracket - Main Pivot	As req
4	S33561	Extention Stub - Short	As req
4A	S22219	Extention Stub - Long	As req
5	S34524	Bracket - Slide Mounting	As req
6	S32987	Mounting Plate	As req
7	S32986	U-Bolt - 5/8 x 2 13/16 x 9	As req
7a	F-4544	U-Bolt - 5/8 x 4 5/8 x 9	As req
8	W-517	Hex Nut - 5/8	As req
9	W-526	Lockwasher - 5/8	As req
10	C-219	U-Bolt - 5/8 x 4 x 5 1/2	As req
10a	F-4543	U-Bolt - 5/8 x 3 x 5 1/2	As req
11	S33467	Stub - Angle Mount	As req
12	S34148	Subframe - 90 degree	As req
13	S34613	Stub Extension - Main	As req
14	C-4569	U-Bolt - 5/8 x 4 x 3 (Mounts item 13 to 4A)	As req

Section 3: Shank Mounted Ground Rod

Section Contents

2-Shank with Optional Seedboot	3-2
3-Shank with Optional Seedboot	3-4

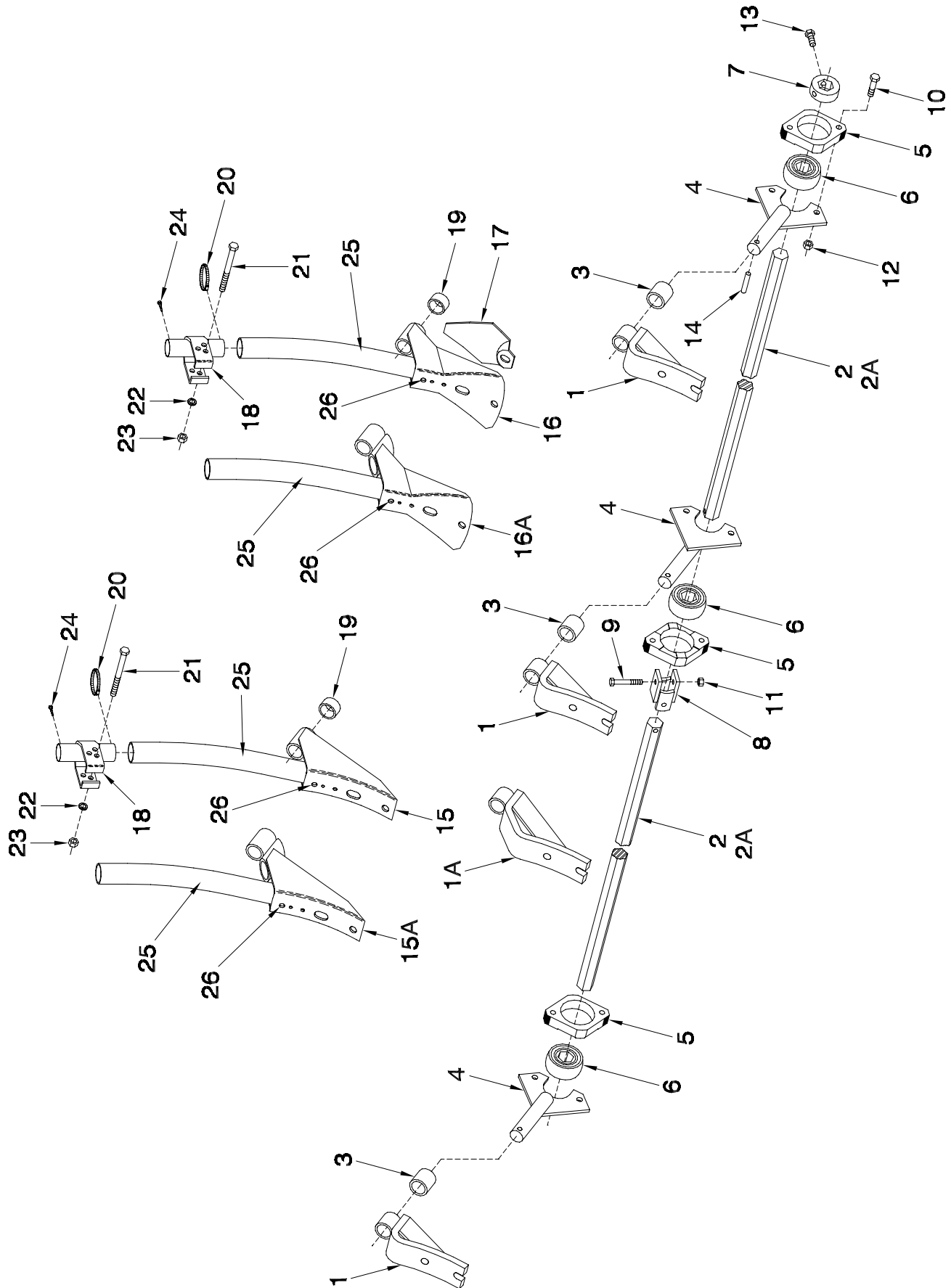
Shank Mounted Ground Rod 2-Shank with Optional Seedboot



Shank Mounted Ground Rod - 2-Shank with Optional Seedboot

Item	Part No.	Description	Qty
		Ground Rod	
1	W19936	Rod Support - Short - Regular	2
1A	W19937	Rod Support - Long - Offset.....	2
2	W19941	Ground Rod - Hex - 84" Lg	1
2A	W26737	Ground Rod - Hex - 89" Lg	1
3	W19929	Spacer - 1 3/8 OD x 1 1/16 ID x 1 3/8 Lg	2
4	W19932	Plate - Holder	2
5	W21027	Casting - Flange - W-311 - Hard Face	2
6	W14555	Hex Bearing #206KPPB3-AH03	2
7	W-5745	Collar - Steel - Hex Locking	2
8	W-477	Hex Bolt - 3/8 x 1 1/2 Lg	4
9	W21476	Locknut - 3/8-16 Two-Way	4
10	W22764	Square Head Setscrew - 3/8 x 5/8 Lg	4
11	W21776	Spiral Pin - 5/16 x 1 3/8 Lg	2
		Seed Boots	
12	C21661	Band Boot - Narrow - Regular	2
12A	C21662	Band Boot - Narrow - Offset.....	2
13	C21664	Seed Boot - Wide - Regular	2
13A	C21665	Seed Boot - Wide - Offset	2
14	N10987	Back Plate - Seeding Boot - Wide Boot Only	2
15	N10571	Boot Union	2
16	C21667	Spacer - Seed Boot - 3/4 Lg	2
17	N11470	Hose Clamp - HS-20	2
18	N19459	Hex Bolt - 5/16 x 3 Lg	2
19	W-522	Lockwasher - 5/16	2
20	W-513	Hex Nut - 5/16.....	2
21	D17725	Self Tapping Screw - #10 x 1/2 Lg - Slotted Hex Head	2
22	N10567	Rubber Hose	2
23	N10569	Pop Rivot - 3/16 x 3/4	4
24	N10564	Rivet Reinforcement	2
	C21681	Band / Seed Boot Assembly - Narrow - Regular	
	C21682	Band / Seed Boot Assembly - Narrow - Offset	
	C21683	Seed Boot Assembly - Wide - Regular	
	C21684	Seed Boot Assembly - Wide - Offset	
		Kits - Ground Rod	
		(Order through wholegoods order desk only)	
	C20741	Kit - 2 Shank Gr Rod - Regular - 84" (Includes Items #1, 2, 3-11)	
	C20742	Kit - 2 Shank Gr Rod - Offset - 84" (Includes Items #1A, 2, 3-11)	
	C26739	Kit - 2 Shank Gr Rod - Regular - 89" (Includes Items #1, 2A, 3-11)	
	C26740	Kit - 2 Shank Gr Rod - Offset - 89" (Includes Items #1A, 2A, 3-11)	
		Kits - Ground Rod with Band/Seed Boots - Narrow	
		(Order through wholegoods order desk only)	
	C23025	Kit - 2 Shk w/Band/Seed Boot-Narrow - Regular - 84" (Includes #2, 4-11, 13, 14-24)	
	C23021	Kit - 2 Shk w/Band/Seed Boot-Narrow - Offset - 84" (Includes #2, 4-11, 13A, 14-24)	
	C30118	Kit - 2 Shk w/Band/Seed Boot-Narrow - Regular - 89" (Includes #2A, 4-11, 13, 14-24)	
	C30116	Kit - 2 Shk w/Band/Seed Boot-Narrow - Offset - 89" (Includes #2A, 4-11, 13A, 14-24)	
		Kits - Ground Rod with Seed Boots - Wide	
		(Order through wholegoods order desk only)	
	C23027	Kit - 2 Shk w/Seed Boot-Wide - Regular - 84" (Includes #2, 4-11, 12, 15-24)	
	C23023	Kit - 2 Shk w/Seed Boot-Wide - Offset - 84" (Includes #2, 4-11, 12A, 15-24)	
	C30112	Kit - 2 Shk w/Seed Boot-Wide - Regular - 89" (Includes #2A, 4-11, 12, 15-24)	
	C30120	Kit - 2 Shk w/Seed Boot-Wide - Offset - 89" (Includes #2A, 4-11, 12A, 15-24)	
		Kits - Seed Boots Only	
		(Order through wholegoods order desk only)	
	C23019	Kit - Band/Seed Boot-Narrow - Regular (Includes #11, 12, 15-24 - Qty 1 for all Items)	
	C23018	Kit - Band/Seed Boot-Narrow - Offset (Includes #11, 12A, 15-24 - Qty 1 for all Items)	
	C23017	Kit - Seed Boot-Wide - Regular (Includes #11, 13, 14-21 - Qty 1 for all Items)	
	C23016	Kit - Seed Boot-Wide - Offset (Includes #11, 13A, 14-21 - Qty 1 for all Items)	

Shank Mounted Ground Rod 3-Shank with Optional Seedboot



Shank Mounted Ground Rod - 3-Shank with Optional Seedboot

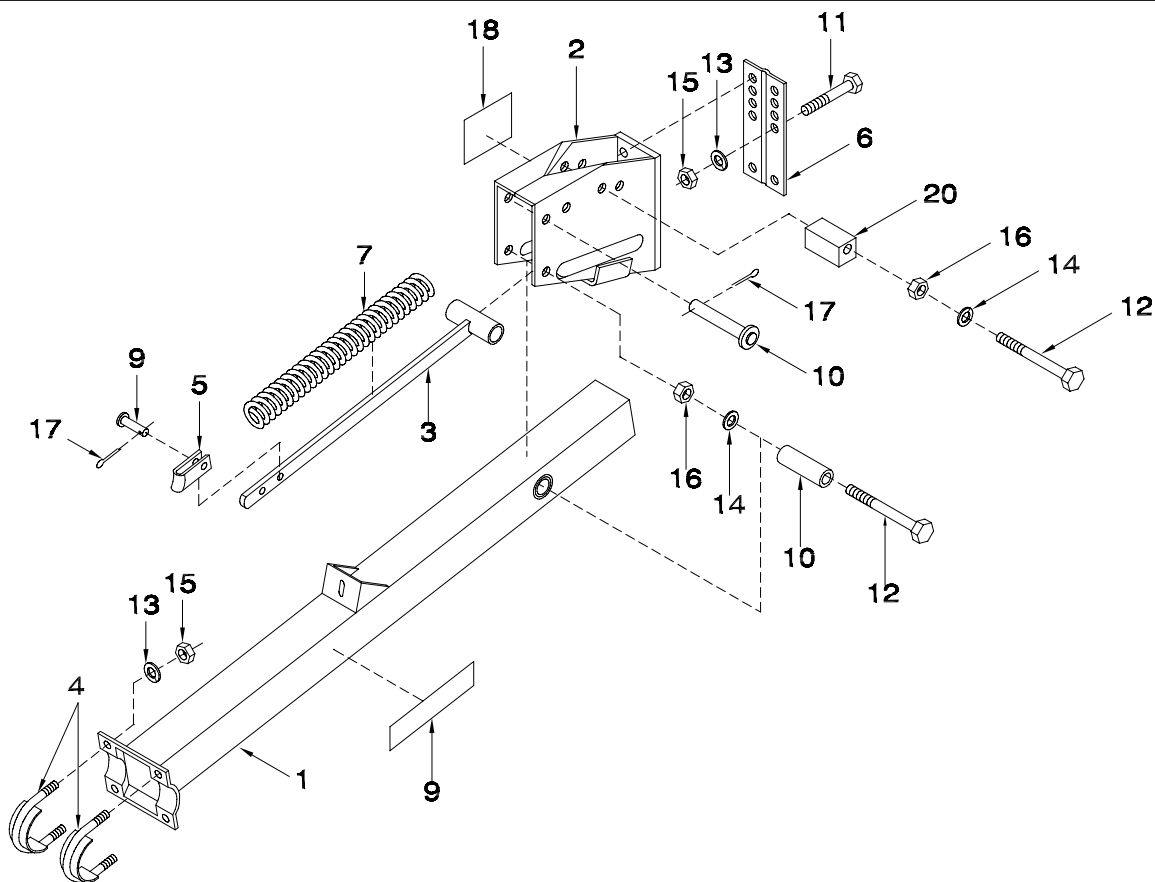
Item	Part No.	Description	Qty
Ground Rod			
1	W19936	Rod Support - Short - Regular	3
1A	W19937	Rod Support - Long - Offset	3
2	W19942	Ground Rod - Hex - 55" Lg	2
2A	W26738	Ground Rod - Hex - 64" Lg	2
3	W19929	Spacer - 1 3/8 OD x 1 1/16 ID x 1 3/8 Lg	3
4	W19932	Plate - Holder	3
5	W21027	Casting - Flange - W-311 - Hard Face	3
6	W14555	Hex Bearing #206KPPB3-AH03	3
7	W-5745	Collar - Steel - Hex Locking	1
8	W21006	Universal Coupler	1
9	S-1303	Hex Bolt - 5/16 x 2 Lg	2
10	W-477	Hex Bolt - 3/8 x 1 1/2 Lg	6
11	D-5272	Locknut - 5/16 Unitorque	2
12	W21476	Locknut - 3/8-16 Two-Way	6
13	W22764	Square Head Setscrew - 3/8 x 5/8 Lg	2
14	W21776	Spiral Pin - 5/16 x 1 3/8 Lg	3
Seed Boots			
15	C21661	Band / Seed Boot - Narrow - Regular	3
15A	C21662	Band / Seed Boot - Narrow - Offset	3
16	C21664	Seed Boot - Wide - Regular	3
16A	C21665	Seed Boot - Wide - Offset	3
17	N10987	Back Plate - Seeding Boot - Wide Boot Only	3
18	N10571	Boot Union	3
19	C21667	Spacer - Seed Boot - 3/4 Lg	3
20	N11470	Hose Clamp - HS-20	3
21	N19459	Hex Bolt - 5/16 x 3 Lg	3
22	W-522	Lockwasher - 5/16	3
23	W-513	Hex Nut - 5/16	3
24	D17725	Self Tapping Screw - #10 x 1/2 Lg - Slotted Hex Head	3
25	N10567	Rubber Hose	3
26	N10569	Pop Rivet - 3/16 x 3/4	3
27	N10564	Rivet Reinforcement	3
	C21681	Band / Seed Boot Assembly - Narrow - Regular	
	C21682	Band / Seed Boot Assembly - Narrow - Offset	
	C21683	Seed Boot Assembly - Wide - Regular	
	C21684	Seed Boot Assembly - Wide - Offset	
Kits - Ground Rod (Order ground rod kits through wholegoods order desk only)			
	C20743	Kit - 3 Shank Gr Rod - Regular - 55" (Includes Items #1, 2, 3-14)	
	C20744	Kit - 3 Shank Gr Rod - Offset - 55" (Includes Items #1A, 2, 3-14)	
	C26741	Kit - 3 Shank Gr Rod - Regular - 64" (Includes Items #1, 2A, 3-14)	
	C26742	Kit - 3 Shank Gr Rod - Offset - 64" (Includes Items #1A, 2A, 3-14)	
Kits - Ground Rod with Seed Boots - Narrow			
(Order ground rod kits through wholegoods order desk only)			
	C23026	Kit - 3 Shk w/Band/Seed Boot-Narrow - Regular - 55" (Includes #2, 4-14, 15, 18-24)	
	C23022	Kit - 3 Shk w/Band/Seed Boot-Narrow - Offset - 55" (Includes #2, 4-14, 15A, 18-24)	
	C30121	Kit - 3 Shk w/Band/Seed Boot-Narrow - Regular - 64" (Includes #2A, 4-14, 15, 18-24)	
	C30119	Kit - 3 Shk w/Band/Seed Boot-Narrow - Offset - 64" (Includes #2A, 4-14, 15A, 18-24)	
Kits - Ground Rod with Seed Boots - Wide			
(Order ground rod kits through wholegoods order desk only)			
	C23024	Kit - 3 Shk w/Seed Boot-Wide - Regular-55" (Includes #2, 4-14, 16, 17-24)	
	C23020	Kit - 3 Shk w/Seed Boot-Wide - Offset-55" (Includes #2, 4-14, 16A, 17-24)	
	C30117	Kit - 3 Shk w/Seed Boot-Wide - Regular-64" (Includes #2A, 4-14, 16, 17-24)	
	C30115	Kit - 3 Shk w/Seed Boot-Wide - Offset-64" (Includes #2A, 4-14, 16A, 17-24)	
Kits - Seed Boots Only (Order through parts order desk only)			
	C23019	Kit - Band/Seed Boot-Narrow - Regular (Includes #15, 18-24 - Qty 1 for all Items)	
	C23018	Kit - Band/Seed Boot-Narrow - Offset (Includes #15A, 18-24 - Qty 1 for all Items)	
	C23017	Kit - Seed Boot-Wide - Regular (Includes #16, 17-24 - Qty 1 for all Items)	
	C23016	Kit - Seed Boot-Wide - Offset (Includes #16A, 17-24 - Qty 1 for all Items)	

Section 4: Mounted Harrows/Packers

Section Contents

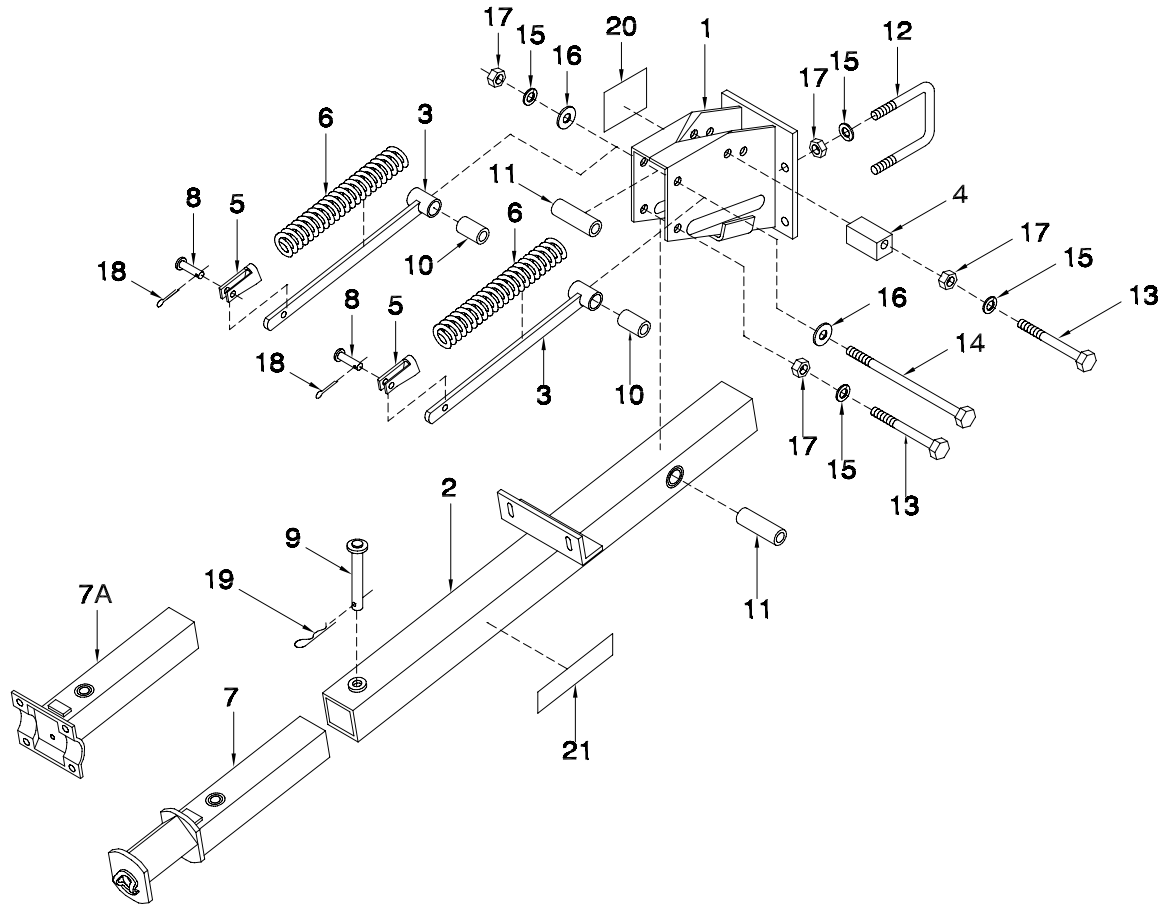
Standard Harrow Arm - Pre 1997	4-2
Heavy Harrow Arm - Pre 1997	4-3
Regular Carrier Arm	4-4
Universal Carrier Arm	4-6
Packer Gang 9" Spacing Plastic Wheels	4-8
Packer Gang 10" Spacing Plastic Wheels	4-10
Packer Gang 12" Spacing Plastic Wheels	4-12
3 Bar Harrow Head	4-14
4 Bar Harrow Head	4-15

Mounted Harrows/Packers Standard Harrow Arm - Pre 1997



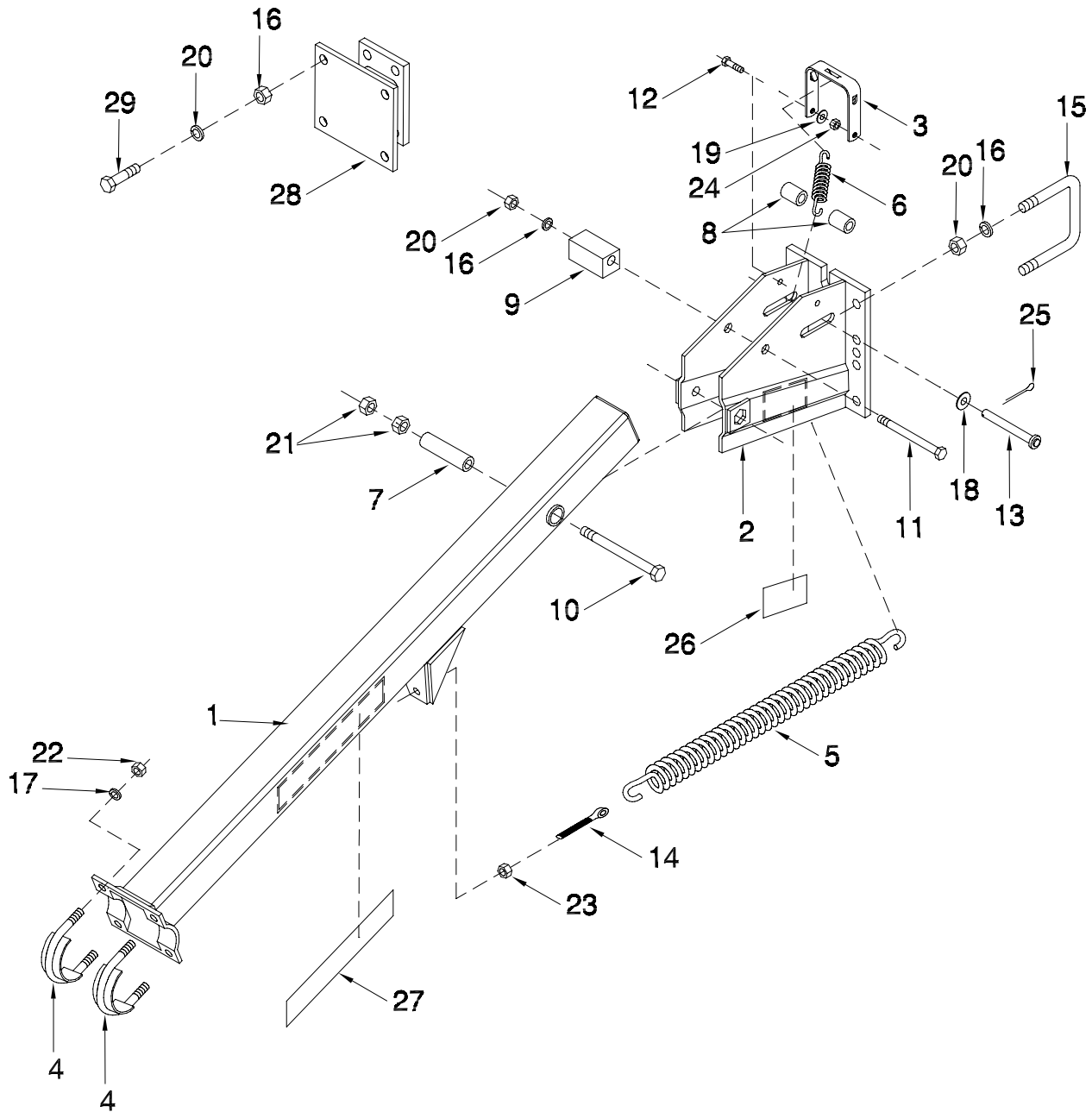
Item	Part No.	Description	Qty
1	H10452	Carrier Arm - 41.25 Long	1
2	H10446	Mounting Bracket	1
3	H10459	Spring Rod	1
4	H10463	Clamp - U-Bolt	2
5	H10458	Transport Stop	1
6	H10445	Front Plate	1
7	H10457	Spring - 1 11/16 OD x 20 5/8 - Compression	1
8	H10467	Bushing - Pivot - 1 OD x 3 1/16 Lg	1
9	H10530	Button Head Pin - 0.436 x 31/32 UL	1
10	H10462	Clevis Pin - 0.621 x 3 23/32 UL	1
11	W-496	Hex Bolt - 1/2 x 5 1/2 Lg	4
12	H10721	Hex Bolt - 5/8 x 4 1/2 Lg	2
13	W-525	Lockwasher - 1/2	8
14	W-526	Lockwasher - 5/8	2
15	W-516	Hex Nut - 1/2	8
16	W-517	Hex Nut - 5/8	2
17	W-530	Cotter Pin - 0.156 x 1 Lg	2
18	H11125	Decal - Instructions	1
19	H-1813	Decal - "MORRIS"	1
20	M24964	Stop - Nylon Block	1
	H10468	Carrier Arm Assembly - Standard (Includes All Above Items) (Order Through Wholegoods)	
	C18068	Extension - Harrow Arm (Not Shown)	1
	S-776	Hex Bolt - 1/2 x 1 1/2 Lg (Required to mount Extension)	4

Mounted Harrows/Packers Heavy Harrow Arm - Pre 1997



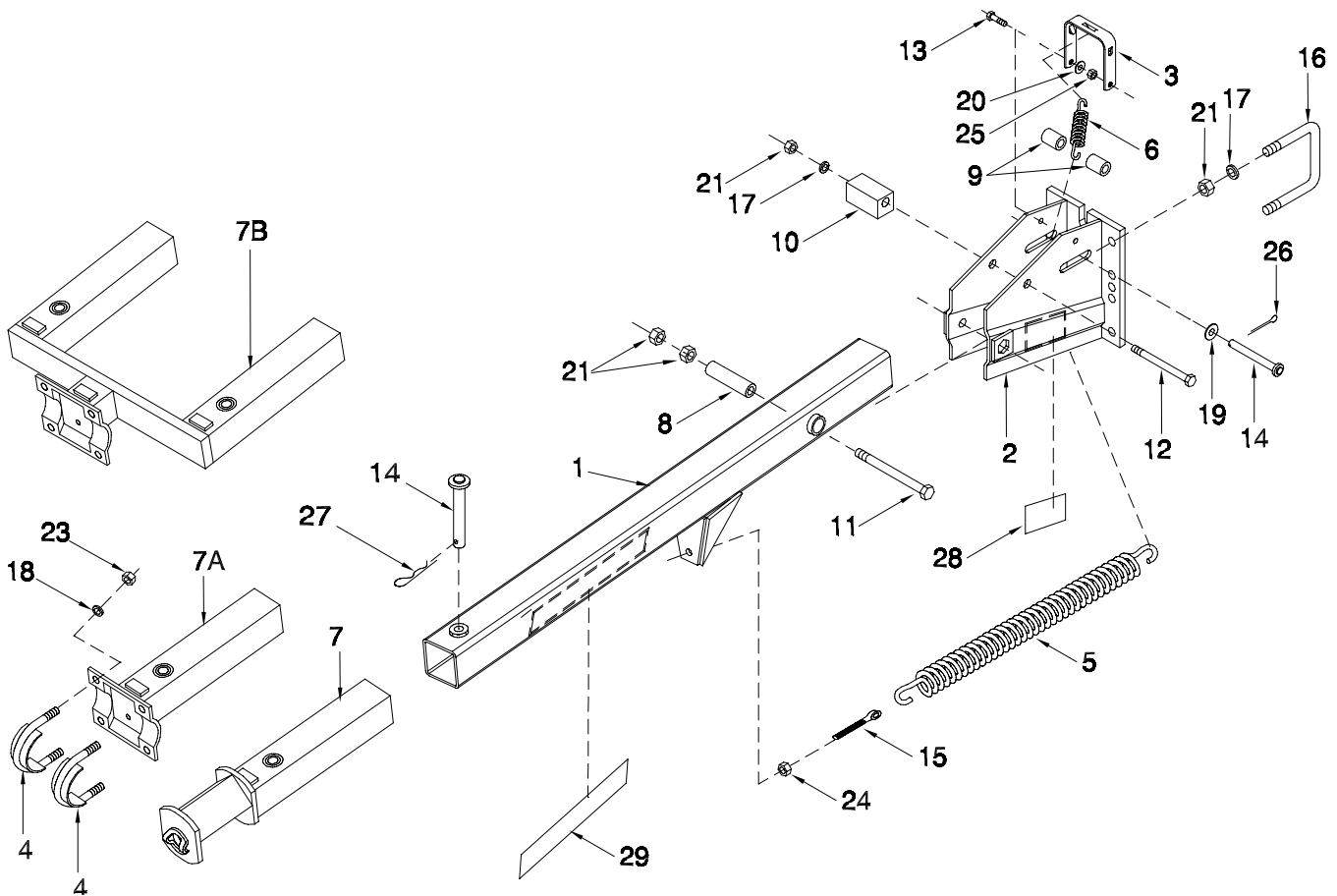
Item	Part No.	Description	Qty
1	M25553	Mounting Bracket	1
2	M24991	Carrier Arm	1
3	M24998	Spring Bar	2
4	M24964	Stop - Nylon Block	1
5	H10458	Transport Stop	2
6	F-3404	Spring - 1 7/8 OD x 13 1/8 - Compression	2
7	M24962	Mounting Bracket - Pivot - Packer	1
7A	M25557	Mounting Bracket - Pivot - Harrow	1
8	H10530	Button Head Pin - 0.436 x 31/32 UL	2
9	H10462	Clevis Pin - 0.621 x 3 23/32 UL	1
10	M24999	Pivot Bushing - 1 OD x 2 1/16 LG	2
11	H10467	Pivot Bushing - 1 OD x 3 1/16 LG	2
12	C-219	U-Bolt - 5/8 x 4 x 5 9/16	2
13	H10721	Hex Bolt - 5/8 x 4 1/2	2
14	C-3683	Hex Bolt - 5/8 x 9	1
15	W-526	Lockwasher - 5/8	7
16	W-540	Flatwasher - 5/8	2
17	W-517	Hex Nut - 5/8	7
18	W-530	Cotter Pin - 5/32 x 1	2
19	W-131	Hair Pin - 5/32 x 3 1/16	1
20	M25959	Decal - "ADJUSTMENT"	1
21	H-1813	Decal - "MORRIS"	1
	M25555	Carrier Arm Assembly - Heavy (Includes All Above Items Except #7 & 7A) (Order Through Wholegoods)	

Mounted Harrows/Packers Regular Carrier Arm



Mounted Harrows/Packers - Regular Carrier Arm			
Item	Part No.	Description	Qty
1	H29040	Carrier Arm - Regular - 45.25 Long	1
2	H29042	Mounting Bracket	1
3	H29030	Lever - Transport Lock	1
4	H10463	Clamp - U-Bolt	2
5	S-83	Main Spring	1
6	H29046	Spring - Transport Lock	1
7	H29036	Main Pivot Bushing	1
8	H29044	Bushing - Transport Lock	2
9	M24964	Stop Block - nylon	1
10	H29462	Special Bolt - 5/8 x 5 1/2 lg	1
11	H10721	Hex Bolt - 5/8 x 4 1/2 lg	1
12	W-471	Hex Bolt - 5/16 x 1 lg	2
13	H18565	Button Head Pin - 5/8	1
14	S22666	Eye Bolt - 1/2	1
15	C-219	U-Bolt - 5/8	2
16	W-526	Lockwasher - 5/8	5
17	W-525	Lockwasher - 1/2	4
18	W-629	Flatwasher - 5/8	1
19	D-5488	Flatwasher - 11/32 ID x 11/16 OD x 16 Gauge	2
20	W-517	Hex Nut - 5/8	5
21	C-1472	Jam Nut - 5/8	2
22	W-516	Hex Nut - 1/2	4
23	F-3405	Locknut - 1/2	1
24	D-5272	Locknut - 5/16	2
25	S-531	Cotter Pin - 3/16 x 1 lg	1
26	H30350	Decal - Information	1
27	H-1813	Decal - "MORRIS"	1
	H29045	Regular Harrow Carrier Arm Assembly includes all of the above (order through wholegoods order desk only)	
	C32114	Harrow Spacer Kit includes all items listed below (order through wholegoods order desk only)	
28	C32113	Spacer - Harrow	1
29	W-498	Hex Bolt - 5/8 x 4 1/2 lg	1
16	W-526	Lockwasher - 5/8	4
20	W-517	Hex Nut - 5/8	4

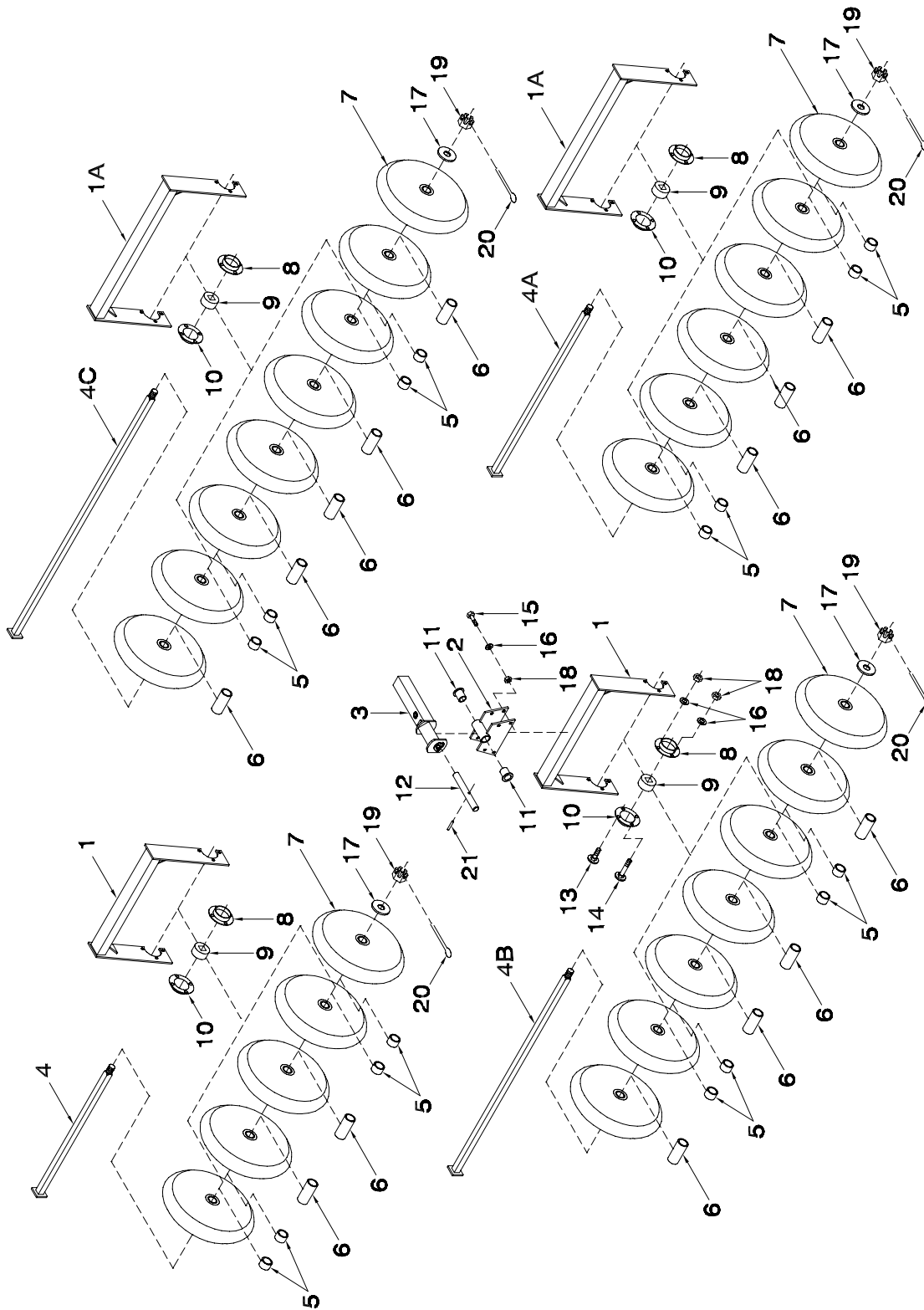
Mounted Harrows/Packers Universal Carrier Arm



Mounted Harrows/Packers - Universal Carrier Arm

Item	Part No.	Description	Qty
1	H29032	Carrier Arm - Universal - 43.75" Long	1
2	H29042	Mounting Bracket	1
3	H29030	Lever - Transport Lock	1
4	H10463	Clamp - U Bolt	2
5	W-65	Main Spring	1
6	H29046	Spring - Transport Lock	1
7	M24962	Packer Mounting Pivot Bracket.....	1
7A	M25557	Harrow Mounting Bracket	1
7B	M29469	Harrow Mounting Bracket - Double Arm for 4 1/2 ft Harrow	2
8	H29036	Main Pivot Bushing.....	1
9	H29044	Bushing - Transport Lock	2
10	M24964	Stop Block - nylon	1
11	H29462	Special Bolt - 5/8 x 5 1/2 lg	1
12	H10721	Hex Bolt - 5/8 x 4 1/2 lg	1
13	W-471	Hex Bolt - 5/16 x 1 lg	2
14	H18565	Button Head Pin - 5/8	2
15	S22666	Eye Bolt - 1/2	1
16	C-219	U-Bolt - 5/8	2
17	W-526	Lockwasher - 5/8	5
18	W-525	Lockwasher - 1/2	4
19	W-629	Flatwasher - 5/8	1
20	D-5488	Flatwasher - 11/32 ID x 11/16 OD x 16 Gauge	2
21	W-517	Hex Nut - 5/8	5
22	C-1472	Jam Nut - 5/8	2
23	W-516	Hex Nut - 1/2	4
24	F-3405	Lock Nut - 1/2	1
25	D-5272	Lock Nut - 5/16	2
26	S-531	Cotter Pin - 3/16 x 1 lg	1
27	W-131	Hair Pin	1
28	H30350	Decal - Information	1
29	H-1813	Decal - "MORRIS"	1
	H29035	Universal Harrow Carrier Arm Assembly includes all of the above items,except items 4, 7, 7A, 7B,18 & 23 (order through whole goods order desk)	
	M25573	Packer Pivot Assembly includes item 7 (See parts pages on Packer Gang Assemblies) (order through whole goods order desk)	
	M25574	Harrow Mounting Assembly includes items 4, 7A, 18, and 23 (order through whole goods order desk)	

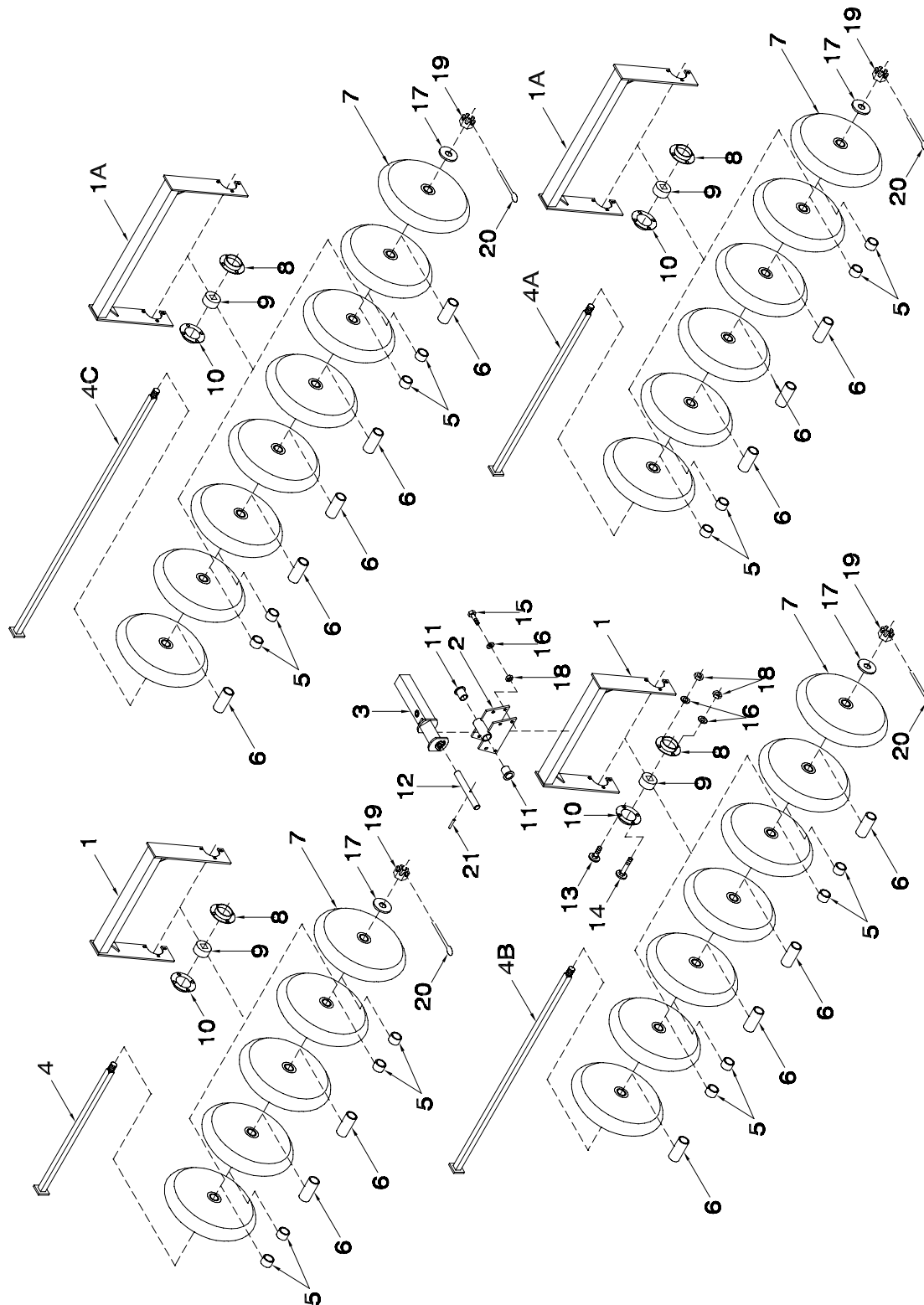
Mounted Harrows/Packers Packer Gang 9" Spacing Plastic Wheels



Mounted Harrows/Packers -Packer Gang 9" Spacing Plastic Wheels

Item	Part No.	Description	No: Used			
			5Wh	6Wh	7Wh	8Wh
1	M25572	Evener - 5 & 7 Wheel	1	-	1	-
1A	M24967	Evener - 6 & 8 Wheel	-	1	-	1
2	M24959	Pivot Bracket	1	1	1	1
3	M24962	Packer Mounting Pivot Bracket	1	1	1	1
4	C15630	Gang Shaft - 5 Wheel	1	-	-	-
4A	C15636	Gang Shaft - 6 Wheel	-	1	-	-
4B	C15638	Gang Shaft - 7 Wheel	-	-	1	-
4C	M25563	Gang Shaft - 8 Wheel	-	-	-	1
5	M25560	Spacer Bushing - 1 3/4 Lg	4	4	4	4
6	C15702	Spacer Bushing - 5 Lg	2	3	4	5
7	M24973	Packer Wheel - 3 1/2	5	6	7	8
8	D-5022	Flangette	2	2	2	2
9	D-4938	Bearing	2	2	2	2
10	D11174	Flangette	2	2	2	2
11	C18510	Nylon Bushing - 1 7/8 Lg	2	2	2	2
12	M24955	Pin - 1 1/4	1	1	1	1
13	D-5265	Carriage Bolt - 1/2 x 1	2	2	2	2
14	T-5266	Carriage Bolt - 1/2 x 1 1/4	6	6	6	6
15	S-951	Hex Bolt - 1/2 x 4 1/2	4	4	4	4
16	W-525	Lockwasher - 1/2	12	12	12	12
17	D-5499	Flatwasher - 1 1/4	2	2	2	2
18	W-516	Hex Nut - 1/2	12	12	12	12
19	N19484	Castle Nut - 1 1/4	1	1	1	1
20	D-5239	Cotter Pin - 1/4 x 2 1/4	1	1	1	1
21	P106023	Roll Pin - 3/8 x 2	1	1	1	1
	M25573	Order through wholegoods order desk Packer Pivot Assembly (includes items 2, 3, 11, 12, 15, 16-qty 4,18-qty 4 & 21)				

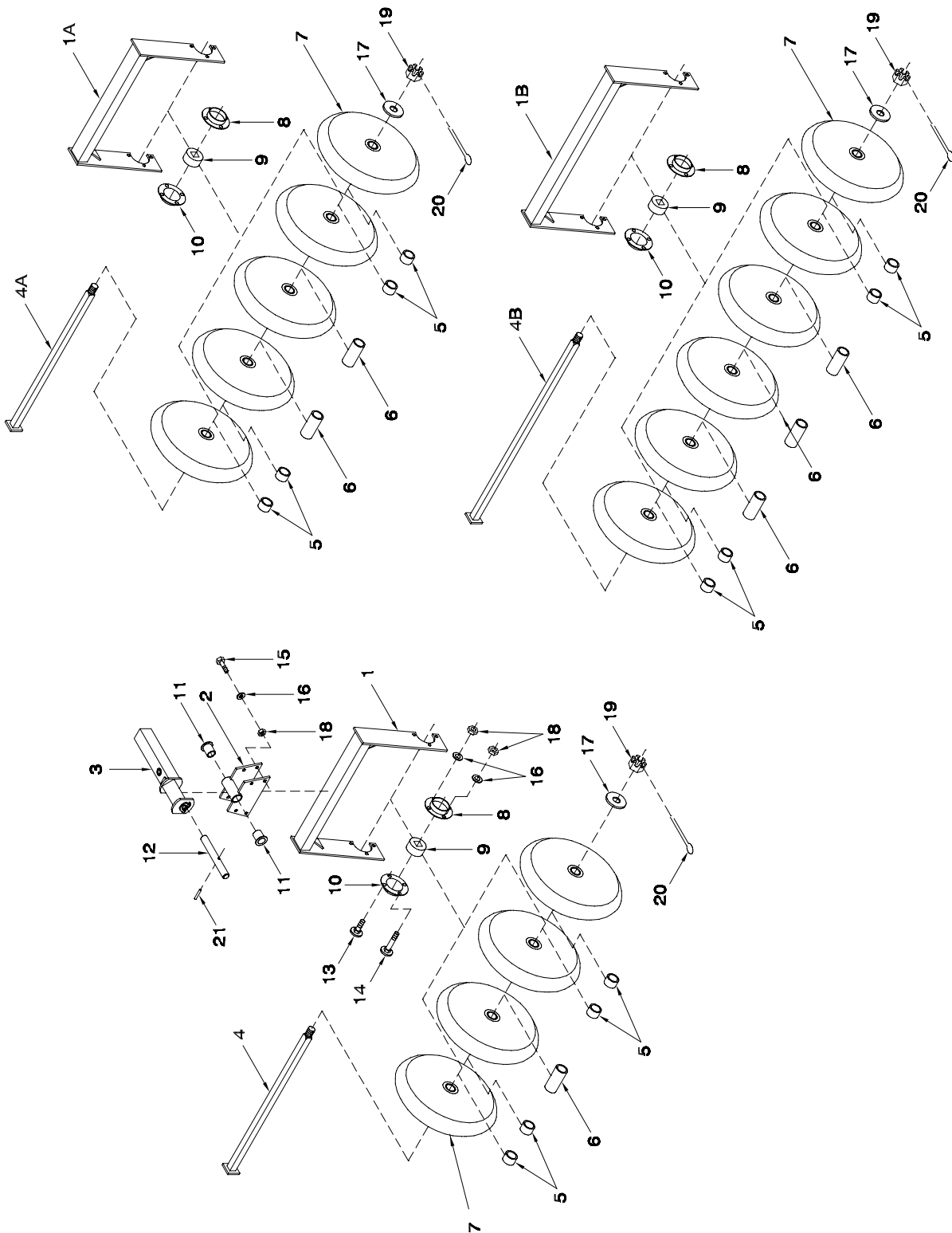
Mounted Harrows/Packers Packer Gang 10" Spacing Plastic Wheels



Mounted Harrows/Packers -Packer Gang 10" Spacing Plastic Wheels

Item	Part No.	Description	No: Used			
			5Wh	6Wh	7Wh	8Wh
1	M29072	Evener - 5 & 7 Wheel	1	-	1	-
1A	M29074	Evener - 6 & 8 Wheel	-	1	-	1
2	M24959	Pivot Bracket	1	1	1	1
3	M24962	Packer Mounting Pivot Bracket	1	1	1	1
4	M29076	Gang Shaft - 5 Wheel	1	-	-	-
4A	M29180	Gang Shaft - 6 Wheel	-	1	-	-
4B	M25584	Gang Shaft - 7 Wheel	-	-	1	-
4C	M29182	Gang Shaft - 8 Wheel	-	-	-	1
5	M29188	Spacer Bushing - 2 1/4 Lg	4	4	4	4
6	M29189	Spacer Bushing - 6 Lg	2	3	4	5
7	M24973	Packer Wheel - 3 1/2	5	6	7	8
8	D-5022	Flangette	2	2	2	2
9	D-4938	Bearing	2	2	2	2
10	D11174	Flangette	2	2	2	2
11	C18510	Nylon Bushing - 1 7/8	2	2	2	2
12	M24955	Pin - 1 1/4	1	1	1	1
13	D-5265	Carriage Bolt - 1/2 x 1	2	2	2	2
14	T-5266	Carriage Bolt - 1/2 x 1 1/4	6	6	6	6
15	S-951	Hex Bolt - 1/2 x 4 1/2	4	4	4	4
16	W-525	Lockwasher - 1/2	12	12	12	12
17	D-5499	Flatwasher - 1 1/4	2	2	2	2
18	W-516	Hex Nut - 1/2	12	12	12	12
19	N19484	Castle Nut - 1 1/4	1	1	1	1
20	D-5239	Cotter Pin - 1/4 x 2 1/4	1	1	1	1
21	P106023	Roll Pin - 3/8 x 2	1	1	1	1
	M25573	Order through wholegoods order desk Packer Pivot Assembly (includes items 2, 3, 11, 12, 15, 16-qty 4, 18-qty 4 & 21)				

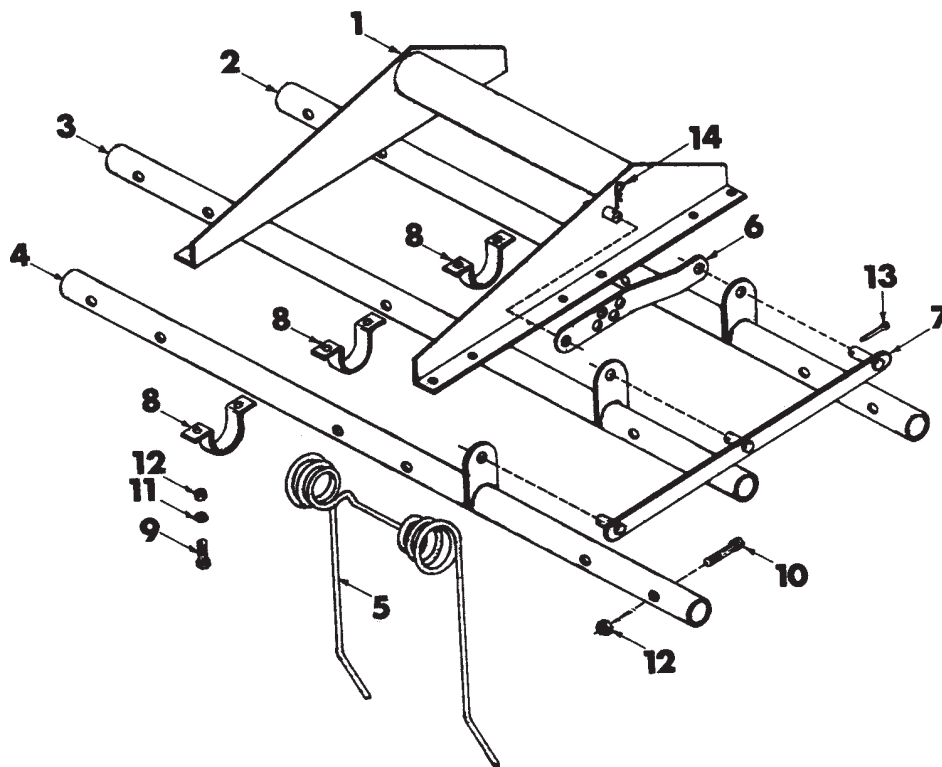
Mounted Harrows/Packers Packer Gang 12" Spacing Plastic Wheels



Mounted Harrows/Packers -Packer Gang 12" Spacing Plastic Wheels

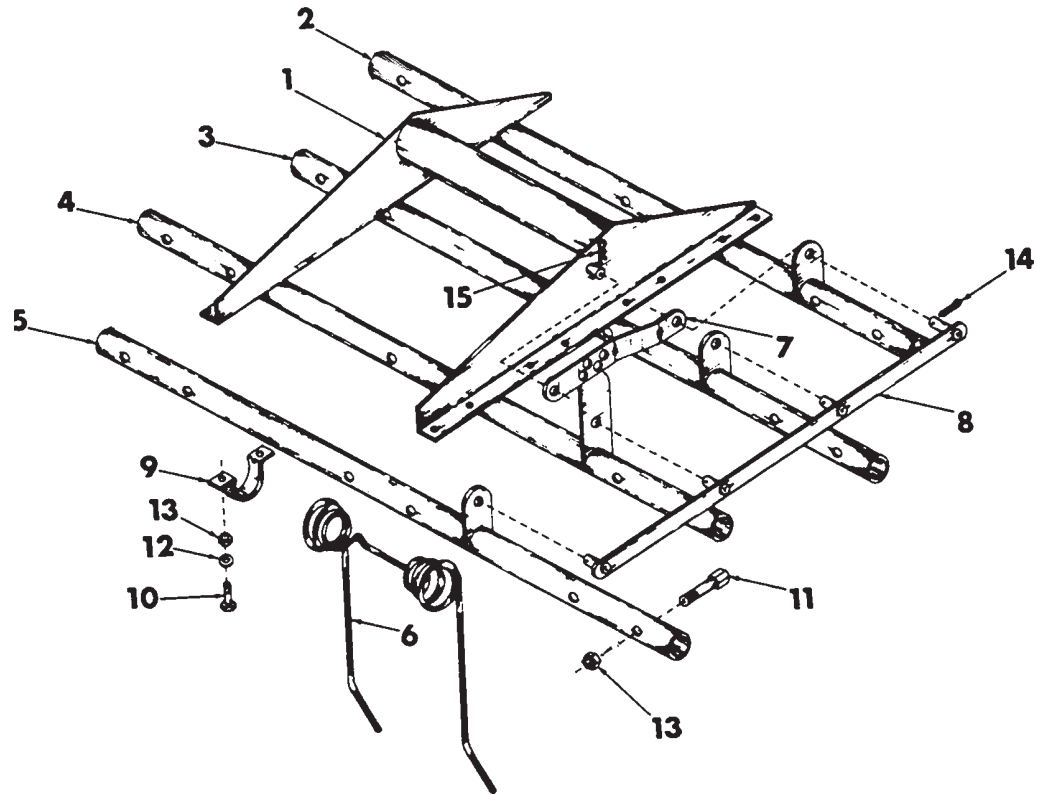
Item	Part No.	Description	No: Used		
			4Wh	5Wh	6Wh
1	M25566	Evener - 4 Wheel	1	-	-
1A	M24967	Evener - 5 Wheel	-	1	-
1B	M24969	Evener - 6 Wheel	-	-	1
2	M24959	Pivot Bracket	1	1	1
3	M24962	Packer Mounting Pivot Bracket	1	1	1
4	M29070	Gang Shaft - 4 Wheel	1	-	-
4A	M25568	Gang Shaft - 5 Wheel	-	1	-
4B	M25584	Gang Shaft - 6 Wheel	-	-	1
5	M25588	Spacer Bushing - 3 1/4 Lg	4	4	4
6	M25587	Spacer Bushing - 8 Lg	1	2	3
7	M24973	Packer Wheel - 3 1/2	5	6	7
8	D-5022	Flangette	2	2	2
9	D-4938	Bearing	2	2	2
10	D11174	Flangette	2	2	2
11	C18510	Nylon Bushing - 1 7/8	2	2	2
12	M24955	Pin - 1 1/4	1	1	1
13	D-5265	Carriage Bolt - 1/2 x 1	2	2	2
14	T-5266	Carriage Bolt - 1/2 x 1 1/4	6	6	6
15	S-951	Hex Bolt - 1/2 x 4 1/2	4	4	4
16	W-525	Lockwasher - 1/2	12	12	12
17	D-5499	Flatwasher - 1 1/4	2	2	2
18	W-516	Hex Nut - 1/2	12	12	12
19	N19484	Castle Nut - 1 1/4	1	1	1
20	D-5239	Cotter Pin - 1/4 x 2 1/4	1	1	1
21	P106023	Roll Pin - 3/8 x 2	1	1	1
	M25573	Order through wholegoods order desk Packer Pivot Assembly (includes items 2, 3, 11, 12, 15, 16-qty 4, 18-qty 4 & 21)			

Mounted Harrows/Packers 3 Bar Harrow Head



Item	Part No.	Description	No: Used	
			4 1/2 ft	6 ft
1	H-1585	Harrow Head - 6 ft	-	1
	H-1584	Harrow Head - 4-1/2 ft	1	-
2	H-1587	Front Carrier Pipe - 6 ft	-	1
	H-1586	Front Carrier Pipe - 4-1/2 ft	1	-
3	H-1744	Center Carrier Pipe - 6 ft	-	1
	H-1742	Center Carrier Pipe - 4-1/2 ft	1	-
4	H-1745	Rear Carrier Pipe - 6 ft	-	1
	H-1743	Rear Carrier Pipe - 4-1/2 ft	1	-
5	H-4087	Harrow Tine - Kinked	9	12
5A	H-1791	Harrow Tine - Straight	9	12
6	H-1596	Adjustment Lever	1	1
7	H-1595	Connecting Bar	1	1
8	H-1593	Clamp	6	6
9	W-475	Hex Head Bolt - 3/8 x 1	12	12
10	H-3024	Hex Head Bolt - 3/8 x 2 w/Special Head	18	24
11	W-523	Lockwasher - 3/8	30	36
12	W-514	Hex Nut - 3/8	30	36
13	W-907	Cotter Pin - 5/32 x 3/4	3	3
14	W-131	Hairpin - 0.148	1	1
		Order Assembly Through Wholegoods Order Desk		
	H20902	Harrow Assembly - 4-1/2 ft - Straight Tines (Includes all items except 5)		
	H20703	Harrow Assembly - 6 ft - Straight Tines (Includes all items except 5)		
	H-3093	Harrow Assembly - 4-1/2 ft - Kinked Tines (Includes all items except 5A)		

Mounted Harrows/Packers 4 Bar Harrow Head



Item	Part No.	Description	No: Used	
			4 1/2 ft	6 ft
1	H-4348	Harrow Head - 4-1/2 ft	1	-
	H-4412	Harrow Head - 6 ft	-	1
2	H-4349	Front Carrier Pipe - 4-1/2 ft.....	1	-
	H-4413	Front Carrier Pipe - 6 ft	-	1
3	H-1743	Front Inner Carrier Pipe - 4-1/2 ft.....	1	-
	H-1745	Front Inner Carrier Pipe - 6 ft.....	-	1
4	H-4409	Rear Inner Carrier Pipe - 4-1/2 ft	1	-
	H-4414	Rear Inner Carrier Pipe - 6 ft	-	1
5	H-4411	Rear Carrier Pipe - 4-1/2 ft	1	-
	H-4415	Rear Carrier Pipe - 6 ft	-	1
6	H-4087	Harrow Tine - Kinked	12	16
6A	H-1791	Harrow Tine - Straight.....	12	16
7	H-1596	Adjustment Lever	1	1
8	H-4416	Connecting Bar	1	1
9	H-1593	Clamp	8	8
10	W-475	Hex Head Bolt - 3/8 x 1	16	16
11	H-3024	Hex Head Bolt - 3/8 x 2 w/Special Head	24	32
12	W-523	Lockwasher - 3/8.....	16	16
13	W-514	Hex Nut - 3/8	40	48
14	W-907	Cotter Pin - 3/8.....	4	4
15	W-131	Hairpin - 0.148.....	1	1
		Order Assembly Through Wholegoods Order Desk		
	H20903	Harrow Assembly - 4-1/2 ft - Straight Tines (Includes all items except 6)		
	H20689	Harrow Assembly - 6 ft - Straight Tines (Includes all items except 6)		
	H-4417	Harrow Assembly - 4-1/2 ft - Kinked Tines (Includes all items except 6A)		
	H-4418	Harrow Assembly - 6 ft - Kinked Tines (Includes all items except 6A)		

Section 5: Tillage Tools

Section Contents

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Tillage Tools 50 Degree Tillage Tools - 1/2" Holes

Machines: 8900, Magnum II & III, Concept 2000

Used on the Following Trips and Shanks:

Trips:

650 lb. Spring cushion Trip

750 Automatic Trip

1250 Automatic Trip

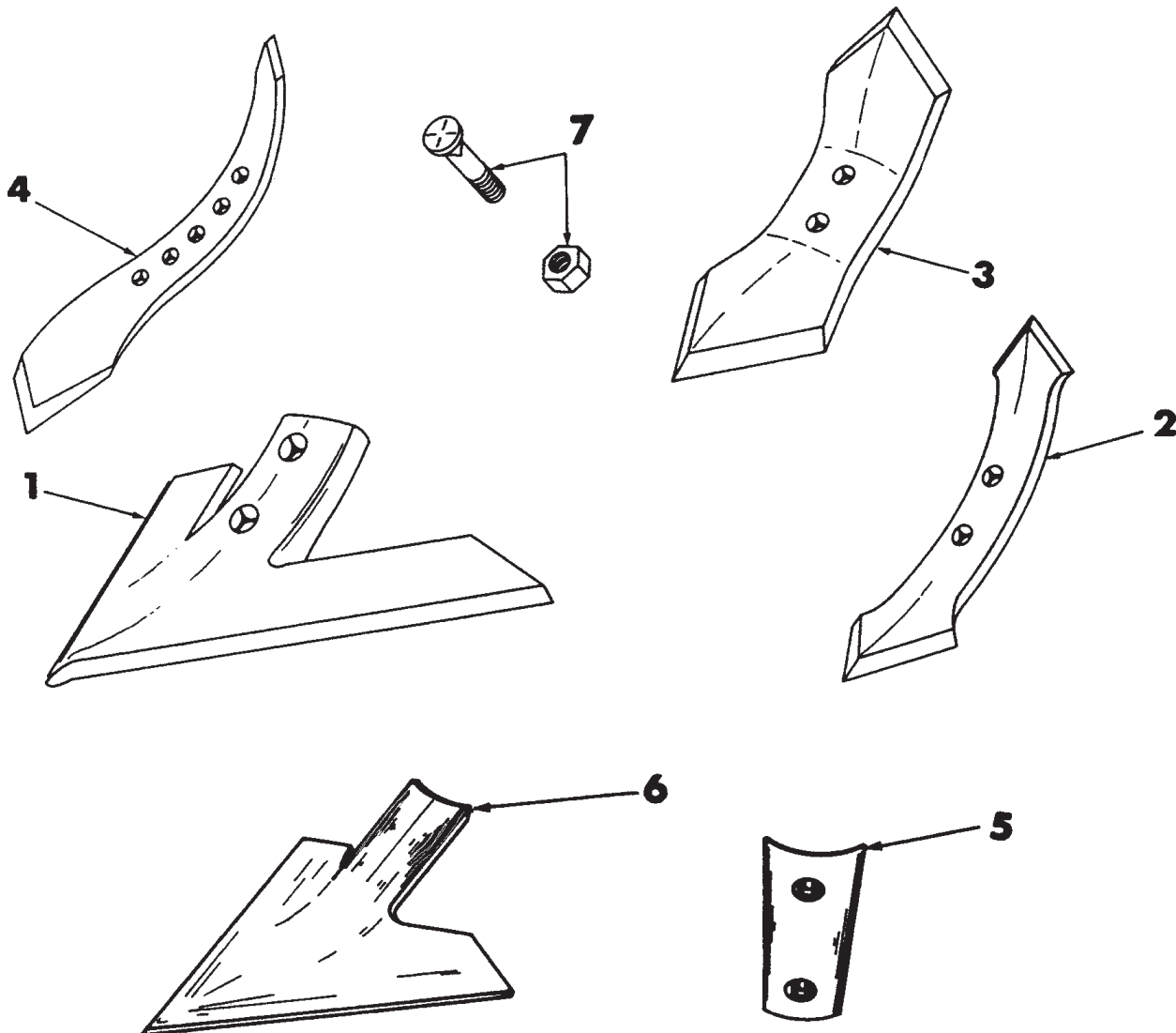
LH 755 Trip

Shanks:

C13156 Shank

C13168 Shank

C18620 Shank



Tillage Tools - 50 Degree Tillage Tools

Item	Part No.	Description	Qty
1	C22755	McKay Sweep - 6" Penetrator x .25" thick	As Req
	C13107	McKay Sweep - 8" Dart x .25" thick	As Req
	C13108	McKay Sweep - 8" Standard x .25" thick	As Req
	C14843	McKay Sweep - 8" Standard x .313" thick	As Req
	C18744	McKay Sweep - 8" Penetrator x .25" thick	As Req
	C13114	McKay Sweep - 10" Dart x .25" thick	As Req
	C13115	McKay Sweep - 10" Standard x .25" thick	As Req
	C18742	McKay Sweep - 10" Penetrator x .25" thick	As Req
	C13120	McKay Sweep - 12" Dart x .25" thick	As Req
	C13121	McKay Sweep - 12" Standard x .25" thick	As Req
	C18740	McKay Sweep - 12" Penetrator x .25" thick	As Req
	C13126	McKay Sweep - 14" Dart x .25" thick	As Req
	C28294	McKay Sweep - 14" Dart Parallel Wing x .25" thick	As Req
	C13127	McKay Sweep - 14" Standard x .25" thick	As Req
	C18738	McKay Sweep - 14" Penetrator x .25" thick	As Req
	C28295	McKay Sweep - 14" Penetrator Parallel Wing x .25" thick	As Req
	C13130	McKay Sweep - 16" Dart x .25" thick	As Req
	C24953	McKay Sweep - 16" Dart Parallel Wing x .25" thick	As Req
	C13131	McKay Sweep - 16" Standard x .25" thick	As Req
	C16566	McKay Sweep - 16" Penetrator x .25" thick	As Req
	C21259	McKay Sweep - 16" Penetrator x .313" thick	As Req
	C24954	McKay Sweep - 16" Penetrator Parallel Wing x .25" thick	As Req
	C13135	McKay Sweep - 18" Dart x .25" thick	As Req
	C13136	McKay Sweep - 18" Standard x .25" thick	As Req
	C18868	McKay Sweep - 18" Standard x .25" thick	As Req
	C18735	McKay Sweep - 18" Penetrator x .25" thick	As Req
2	C10634	McKay Spike - 2" Reversible x .625" thick	As Req
3	C10635	McKay Spike - 4" Reversible x .25" thick	As Req
4	C10637	McKay Right Twist - 3" Reversible x .375" thick	As Req
	C10638	McKay Left Twist - 3" Reversible x .375" thick	As Req
5	C26708	McKay Slim Wedge for Knock-On	As Req
6	F26746	McKay Sweep - 2" Slim Wedge x .25" thick	As Req
	F26711	McKay Sweep - 3" Slim Wedge x .25" thick	As Req
	F26746	McKay Sweep - 9" Slim Wedge x .25" thick	As Req
	F26712	McKay Sweep - 11" Slim Wedge x .25" thick	As Req
	F30439	McKay Sweep - 12" Slim Wedge x .25" thick	As Req
	F30440	McKay Sweep - 14" Slim Wedge x .25" thick	As Req
7	C10523	Sweep Bolt w/nut - 1/2" x 1 3/4" (Gr 5) 1/2" Head	As Req
	C10525	Sweep Bolt w/nut - 1/2" x 2" (Gr 5) 1/2" Head	Std
	C10526	Sweep Bolt w/nut - 1/2" x 2 1/4" thick (Gr 5) 1/2" Head	As Req
	C15606	Sweep Bolt w/nut - 1/2" x 2 1/2" (Gr 5) 1/2" Head	As Req
	C21459	Sweep Bolt w/nut - 1/2" x 2 3/4" (Gr 5) 1/2" Head	As Req
	C21460	Sweep Bolt w/nut - 1/2" x 3" (Gr 5) 1/2" Head	As Req
	C21461	Sweep Bolt w/nut - 1/2" x 3 1/2" (Gr 5) 1/2" Head	As Req
	C21462	Sweep Bolt w/nut - 1/2" x 4" (Gr 5) 1/2" Head	As Req
	C24300	Sweep Bolt w/nut - 1/2" x 4 1/2" (Gr 5) 1/2" Head	As Req
Only some McKay illustrated - Check with Morris Parts Department for other Tillage Tools Order Through Parts Order Desk			

Tillage Tools 47 Degree Tillage Tools - 1/2" Holes

Machines: 9000, Concept 2000

Used on the Following Trips and Shanks:

Trips:

400 lb. Spring Cushion Trip

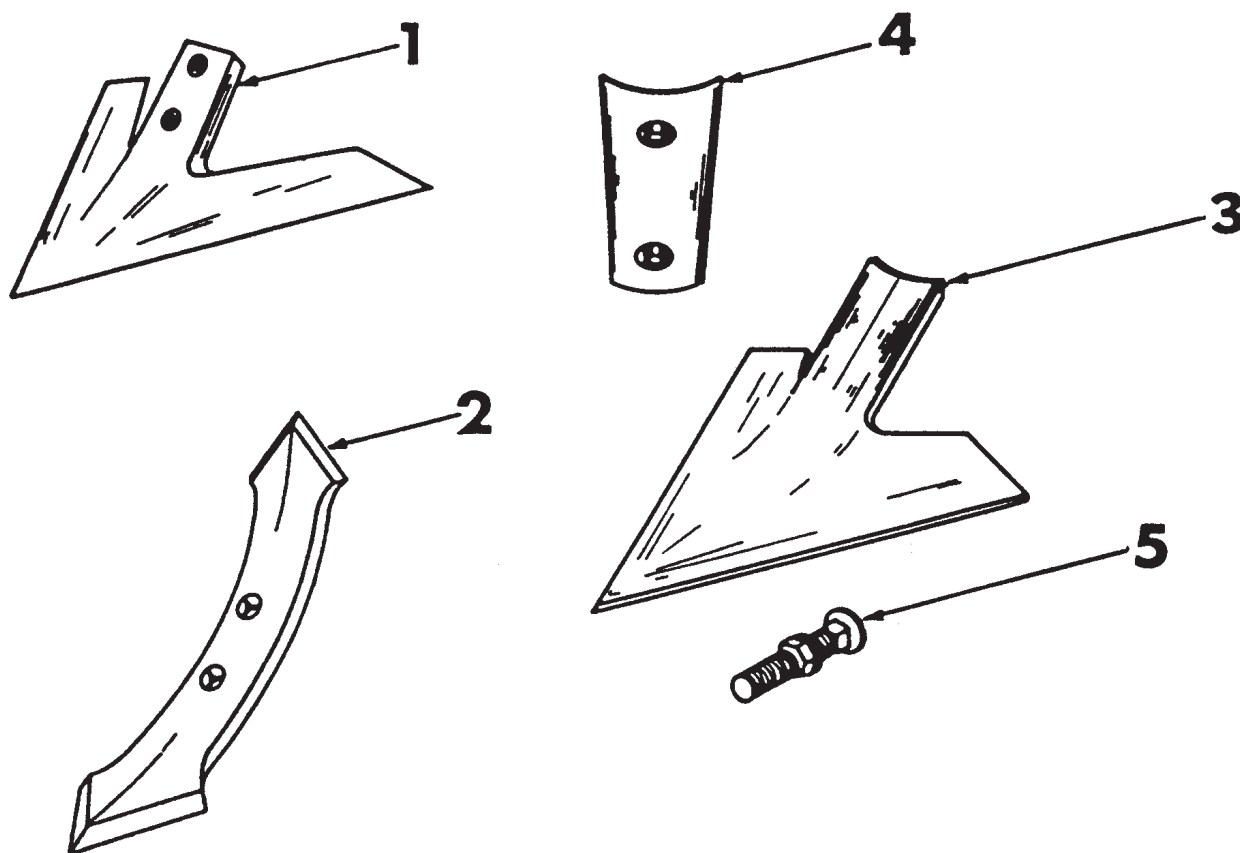
Shanks:

C18607 Shank

C26523 Shank

S22340 Shank

S31400 Shank



Tillage Tools - 47 Degree Tillage Tools - 1/2" Holes

Item	Part No.	Description	Qty
1	F21340	McKay Sweep - 4" x .25" Thick - .5" Holes	As req
	F22780	McKay Sweep - 6" x .25" Thick - .5" Holes	As req
	F22781	McKay Sweep - 8" x .25" Thick - .5" Holes	As req
	F22782	McKay Sweep - 9" x .25" Thick - .5" Holes	As req
	F22783	McKay Sweep - 10" x .25" Thick - .5" Holes	As req
	F18861	McKay Sweep - 11" x .25" Thick - .5" Holes	As req
	F22784	McKay Sweep - 12" x .25" Thick - .5" Holes	Std
2	F17201	McKay Spike - 2" x .625" Thick x 14" Long - .5" Holes	As req
	F24358	McKay Spike - 2" x .313" Thick x 12" Long - .5" Holes	As req
3	F26746	McKay Sweep - 2" Slim Wedge x .25" Thick	As req
	F26711	McKay Sweep - 3" Slim Wedge x .25" Thick	As req
	F26745	McKay Sweep - 9" Slim Wedge x .25" Thick	As req
	F26712	McKay Sweep - 11" Slim Wedge x .25" Thick	As req
	F30439	McKay Sweep - 12" Slim Wedge x .25" Thick	As req
	F30440	McKay Sweep - 14" Slim Wedge x .25" Thick	As req
	F12323	McKay Sweep - 4" Nok-On x .188" Thick	As req
	F19848	McKay Sweep - 7" Nok-On x .188" Thick	As req
	F15538	McKay Sweep - 9" Nok-On x .188" Thick	As req
	F-4592	McKay Sweep - 10" Nok-On x .188" Thick	As req
	F-5645	McKay Sweep - 11" Nok-On x .188" Thick	As req
	F27588	McKay Sweep - 2" Nok-On x .25" Thick	As req
	F18862	McKay Sweep - 4" Nok-On x .25" Thick	As req
	F17247	McKay Sweep - 9" Nok-On x .25" Thick	As req
	F17428	McKay Sweep - 10" Nok-On x .25" Thick	As req
	F17249	McKay Sweep - 11" Nok-On x .25" Thick	As req
	F18982	McKay Sweep - 12" Nok-On x .25" Thick	As req
4	F18874	Nok-On Clip - .5" Holes	As req
	F26707	Nok-On Clip for Slim Wedge System	As req
5	C10523	Sweep Bolt w/nut - .5" x 1.75" - .5" Head	Std
	C10525	Sweep Bolt w/nut - .5" x 2" - .5" Head	As req
	C10526	Sweep Bolt w/nut - .5" x 2.25" - .5" Head	As req
	C15606	Sweep Bolt w/nut - .5" x 2.5" - .5" Head	As req
	C21459	Sweep Bolt w/nut - .5" x 2.75" - .5" Head	As req
	C21460	Sweep Bolt w/nut - .5" x 3" - .5" Head	As req
	C21461	Sweep Bolt w/nut - .5" x 3.5" - .5" Head	As req
	C21462	Sweep Bolt w/nut - .5" x 4" - .5" Head	As req
	C24300	Sweep Bolt w/nut - .5" x 4.5" - .5" Head	As req
Note: McKay Penetrator Sweeps and Nichols Tillage Tools are available on request			
Order Through Parts Order Desk			

Tillage Tools
47 Degree Tillage Tools - 3/8" Holes

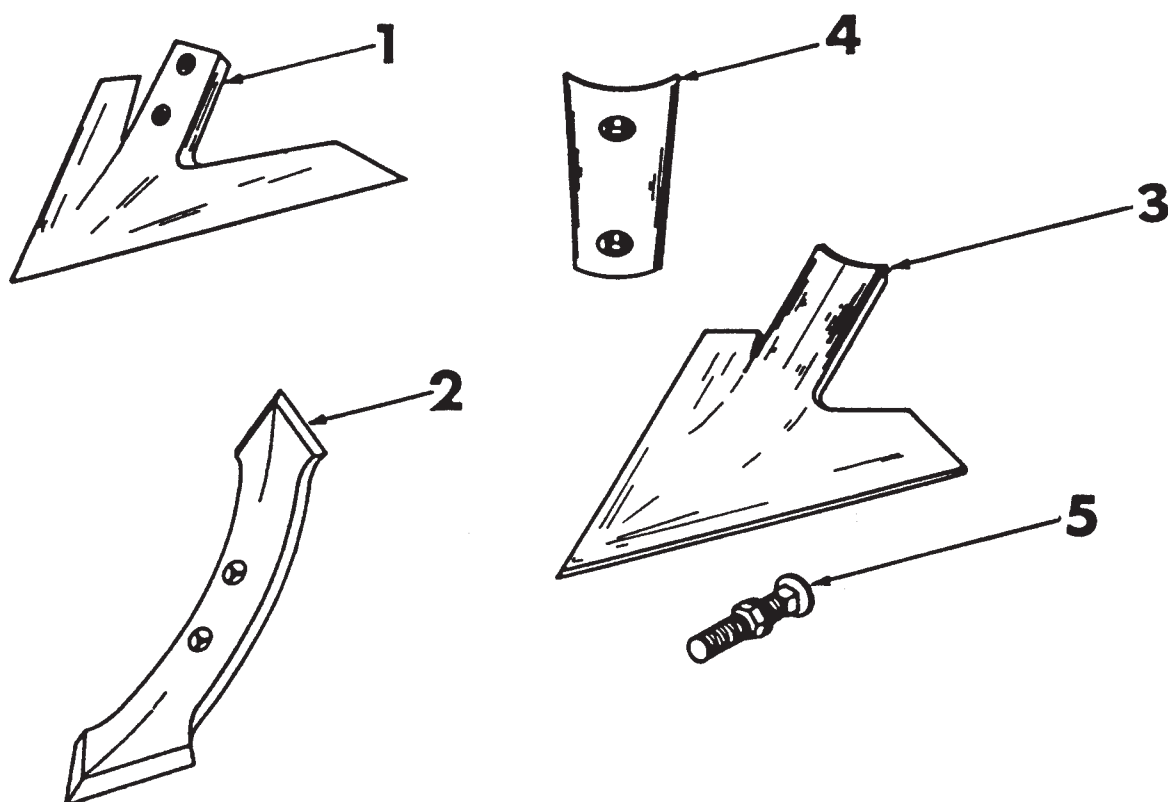
Machines: Challenger II, 9100 Floating Hitch Cultivator

Used on the Following Shanks:

F-4609 Shank

F10946 Shank

M-799 Shank



Tillage Tools - 47 Degree Tillage Tools - 3/8" Holes

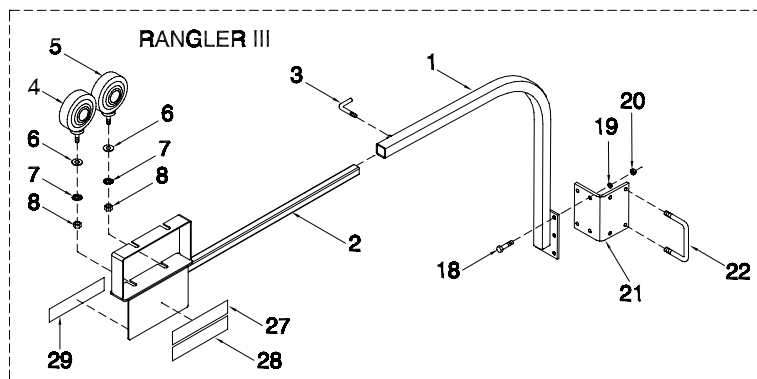
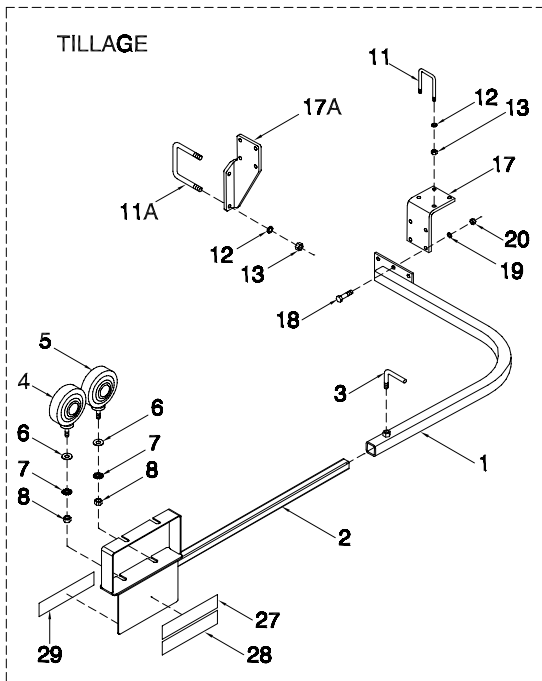
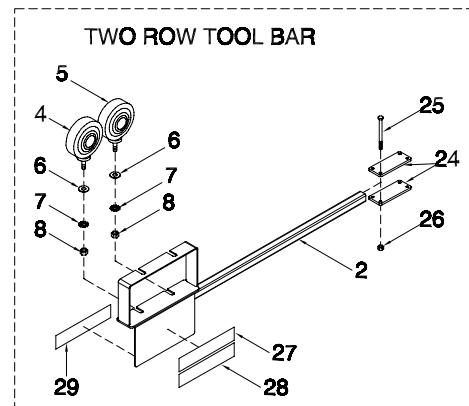
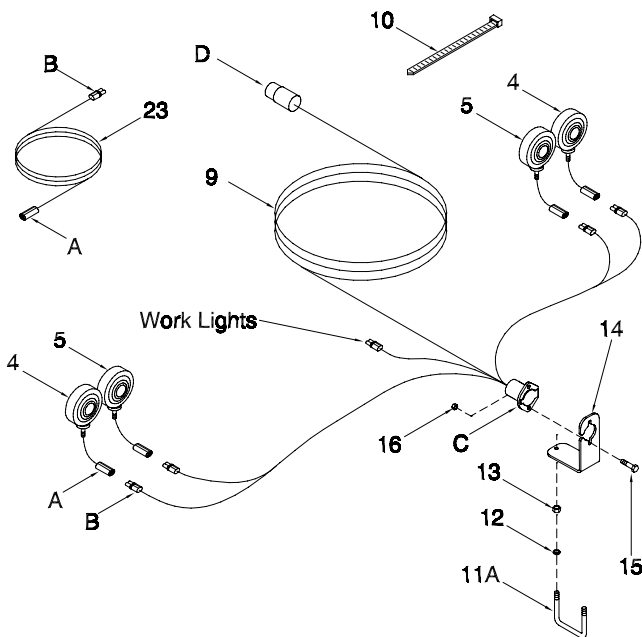
Item	Part No.	Description	Qty
1	F-4707	McKay Sweep - 4" x .188" thick - .375" Holes	As req
	M-842	McKay Sweep - 6" x .188" thick - .375" Holes	As req
	M-841	McKay Sweep - 8" x .188" thick - .375" Holes	As req
	M-840	McKay Sweep - 9" x .188" thick - .375" Holes	As req
	F12974	McKay Sweep - 9" x .25" thick - .375" Holes	As req
	M-1838	McKay Sweep - 10" x .188" thick - .375" Holes	As req
	F12975	McKay Sweep - 10" x .25" thick - .375" Holes	As req
	F-4678	McKay Sweep - 11" x .188" thick - .375" Holes	As req
	F12976	McKay Sweep - 11" x .25" thick - .375" Holes	As req
	F17205	McKay Sweep - 12" x .188" thick - .375" Holes	As req
	F17206	McKay Sweep - 12" x .25" thick - .375" Holes	As req
2	F12174	McKay Spike - 2" x .313" thick x 12" long - .375" Holes	As req
3	F12323	McKay Sweep - 4" Nok-On x .188" Thick	As req
	F19848	McKay Sweep - 7" Nok-On x .188" Thick	As req
	F15538	McKay Sweep - 9" Nok-On x .188" Thick	As req
	F-4592	McKay Sweep - 10" Nok-On x .188" Thick	As req
	F-5645	McKay Sweep - 11" Nok-On x .188" Thick	As req
	F27588	McKay Sweep - 2" Nok-On x .25" Thick	As req
	F18862	McKay Sweep - 4" Nok-On x .25" Thick	As req
	F17247	McKay Sweep - 9" Nok-On x .25" Thick	As req
	F17428	McKay Sweep - 10" Nok-On x .25" Thick	As req
	F17249	McKay Sweep - 11" Nok-On x .25" Thick	As req
	F18982	McKay Sweep - 12" Nok-On x .25" Thick	As req
4	F-4593	Nok-On Clip - .375" Holes	As req
5	M-843	Sweep Bolt w/nut - .375" x 1.25" - .375" Head	As req
	F-4594	Sweep Bolt w/nut - .375" x 1.50" - .375" Head	As req
	F-5565	Sweep Bolt w/nut - .375" x 1.75" - .375" Head	As req
	F11243	Sweep Bolt w/nut - .375" x 2.50" - .375" Head	As req
Order Through Parts Order Desk			
Only some McKay illustrated - Check with Morris Parts Department for other Tillage Tools			
Note: Sweeps and Spikes with 7/16" holes can also be used with special sweep bolts - 3/8" sweep bolts with 7/16" heads.			

Section 6: Safety Lights

Section Contents

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7000 Series Air Cart	6-10
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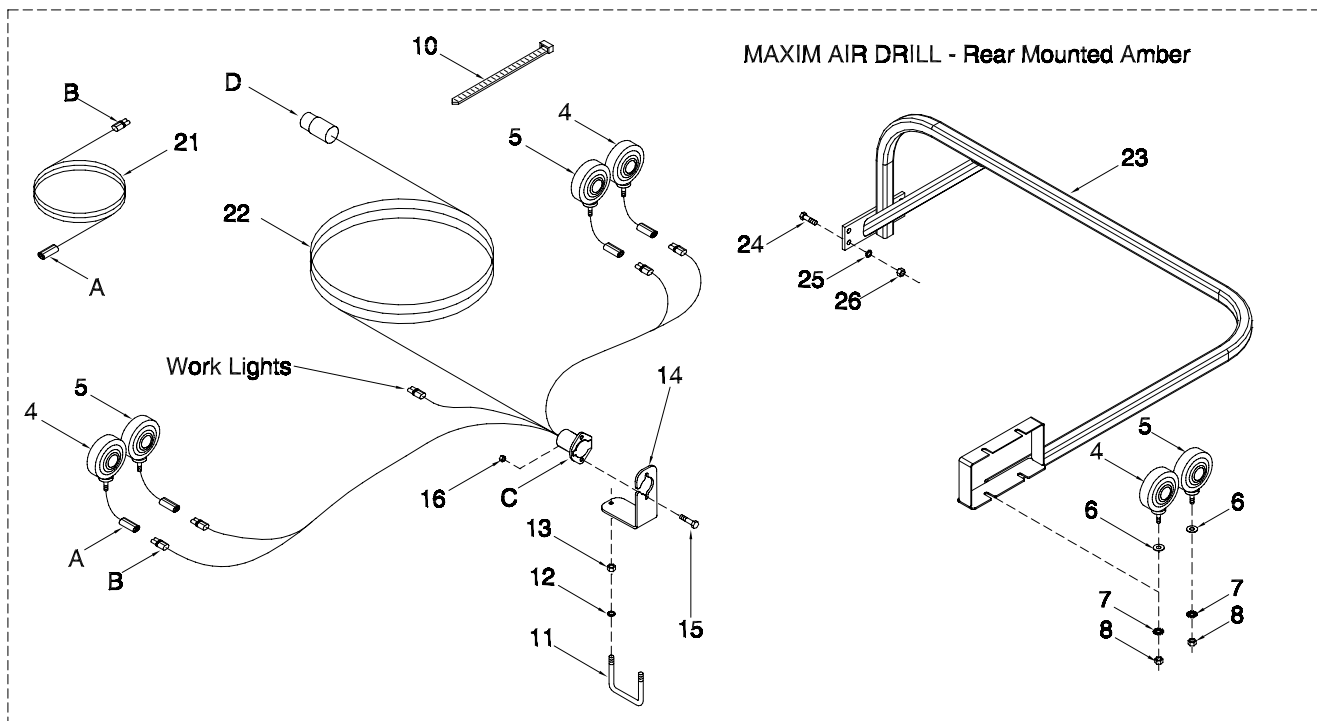
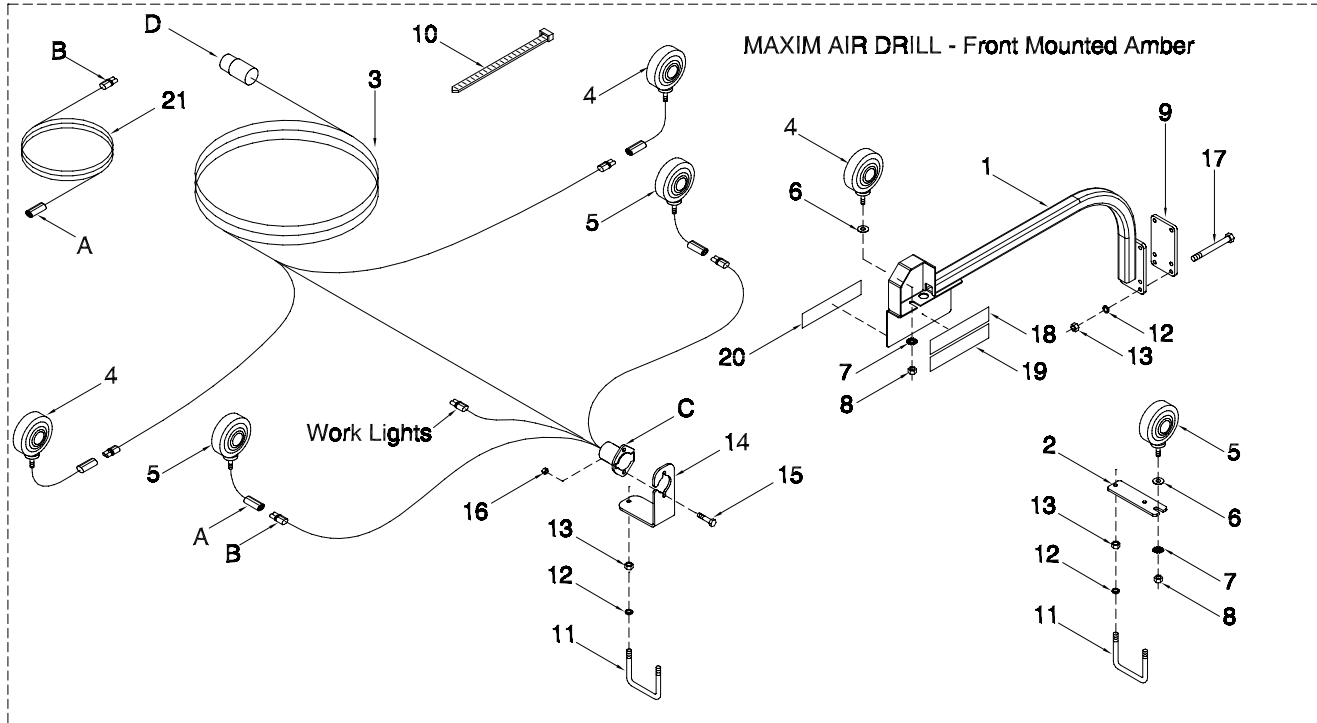
Safety Lights Tillage



Safety Lights - Tillage

Item	Part No.	Description	Qty
1	C31435	Arm - Extension	2
2	C31498	Tube - Extension	2
3	D10553	Handle	2
4	C32765	Light - Amber	2
5	C32766	Light - Red	2
6	W-539	Flatwasher - 1/2	1
7	D-5280	Star Washer - 1/2	2
8	W-516	Hex Nut - 1/2	1
9	C31438	Wiring Harness - Main	1
10	D-4951	Nylon Tie Strap - 7 3/8 lg	10
11	D12714	U-Bolt - 3/8	4
11A	N15098	U-Bolt - 3/8 x 4 x 5	1
12	W-523	Lockwasher - 3/8	8
13	W-514	Hex Nut - 3/8	8
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	C31427	Bracket - Mounting	2
17A	C32213	Bracket - Mounting	2
18	W-187	Hex Bolt - 3/8 x 1 1/4 lg	8
19	W-523	Lockwasher - 3/8	8
20	W-514	Hex Nut - 3/8	8
21	H31433	Bracket - Mounting	2
22	D-4932	U-Bolt - 3/8 x 4 1/2 x 3	4
23	C31439	Wiring Extension - 2 Pin - 10 ft	2
24	S31998	Bracket - Mounting	4
25	W-1847	Hex Bolt - 1/4 x 5 lg	8
26	D-5277	Hex Nut - 1/4	8
27	N34476	Reflector - Red	2
28	N34478	Reflector - Orange	2
29	N34477	Reflector - Amber	2
	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	
		ORDER KITS THROUGH WHOLEGOODS ONLY	
	C30740	Concept 2000 Safety Light Kit - Includes items 1 - 16 and 27 - 29	
	C30742	Magnum III, 8900 & 9000 Safety Light Kit	
		- Includes items 1 - 20 and 27 - 29 except item 11A & 17A	
	C32215	Magnum II Safety Light Kit - Includes items 1 - 20 except items 11, 17 and 27 - 29	
	H30755	Ranger III Safety Light Kit - Includes items 1 - 10, 11A - 16, 18 - 22 and 27 - 29	
	S32000	Aero Tool Bar Safety Light Kit - Includes items 2, 4 - 10, 11A - 16 and 25 - 29	

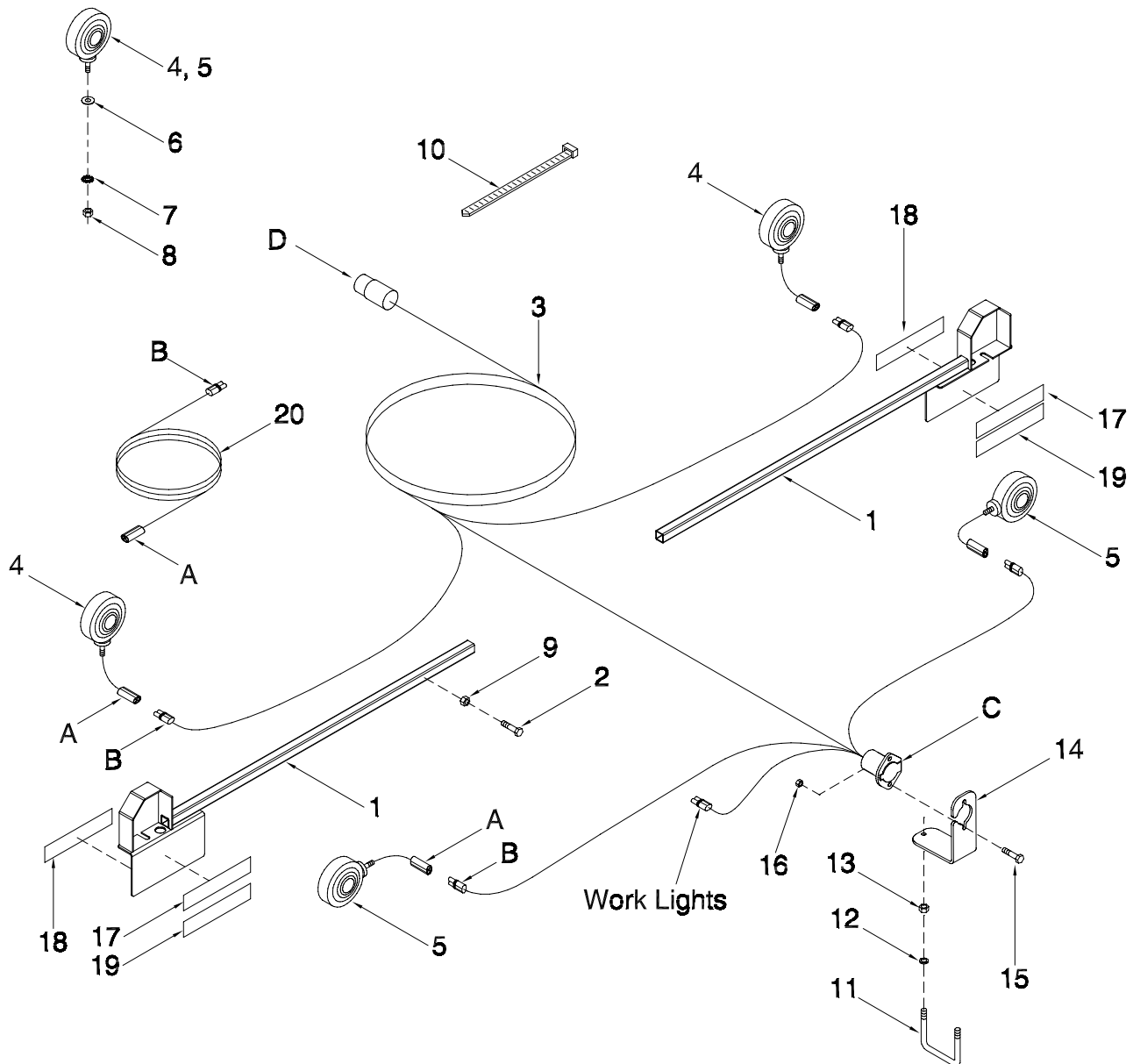
Safety Lights Maxim Air Drill



Safety Lights - Maxim Air Drill

Item	Part No.	Description	Qty
1	S34460	Tube - Mounting - Main - Lighting	2
2	S34465	Plate - Mounting	2
3	S34466	Wiring Harness - Safety Lights	1
4	C32765	Light - Amber	2
5	C32766	Light - Red	2
6	W-539	Flatwasher - 1/2	1
7	D-5280	Star Washer - 1/2	2
8	W-516	Hex Nut - 1/2	1
9	S34458	Plate - Mounting	2
10	D-4951	Nylon Tie Strap - 7 3/8 lg	10
11	N15098	U-Bolt - 3/8 x 4 x 5	3
12	W-523	Lockwasher - 3/8	14
13	W-514	Hex Nut - 3/8	14
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	S-1299	Hex Bolt - 3/8 x 4 1/2	8
18	N34476	Reflector - Red	2
19	N34478	Reflector - Orange	2
20	N34477	Reflector - Amber	2
21	C31439	Wiring Extension - 2 Pin - 10 ft	2
Rear Mount			
22	C31438	Wiring Harness - Main	1
23	S34169	Arm - Extension - Left (Shown)	1
23A	S34168	Arm - Extension - Right (NOT Shown)	1
24	W-488	Hex Bolt - 1/2 x 2 lg	8
25	W-525	Lockwasher - 1/2	8
26	W-516	Hex Nut - 1/2	8
	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	
ORDER KITS THROUGH WHOLEGOODS ONLY			
	S30744	Maxim Air Drill Safety Light Kit - Front Mounted amber lights - Includes items 1 - 21	
	S35668	Maxim Air Drill Safety Light Kit - Rear Mounted amber lights - Includes items 4 - 8, 11 - 16 and 21 - 26	

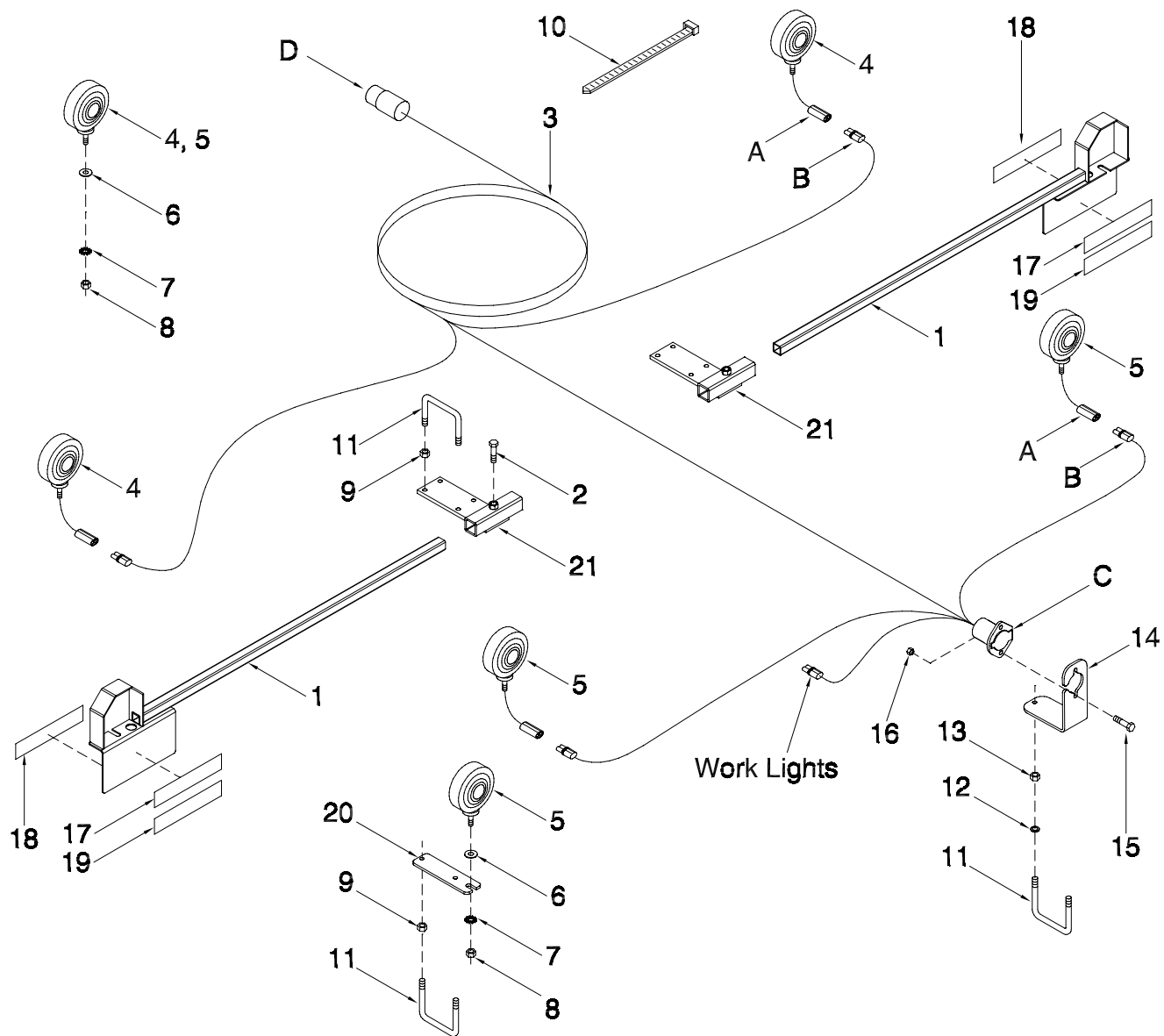
Safety Lights Maxim III and Never Pin



Safety Lights - Never Pin

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	Star Washer - 1/2	4
8	W-516	Hex Nut - 1/2	4
9	S-1292	Jam Nut - 1/2	2
10	D-4951	Nylon Tie Strap - 7 3/8 lg	10
11	N15098	U-Bolt - 3/8 x 4 x 5	1
12	W-523	Lockwasher - 3/8	8
13	W-514	Hex Nut - 3/8	8
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	C31439	Wiring Extension - 2 Pin - 10 ft	2
	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	
	N34413	Kit Lighting - Never Pin Tool Bar	
		ORDER KIT THROUGH WHOLEGOODS ONLY	

Lighting Contour Air Drill

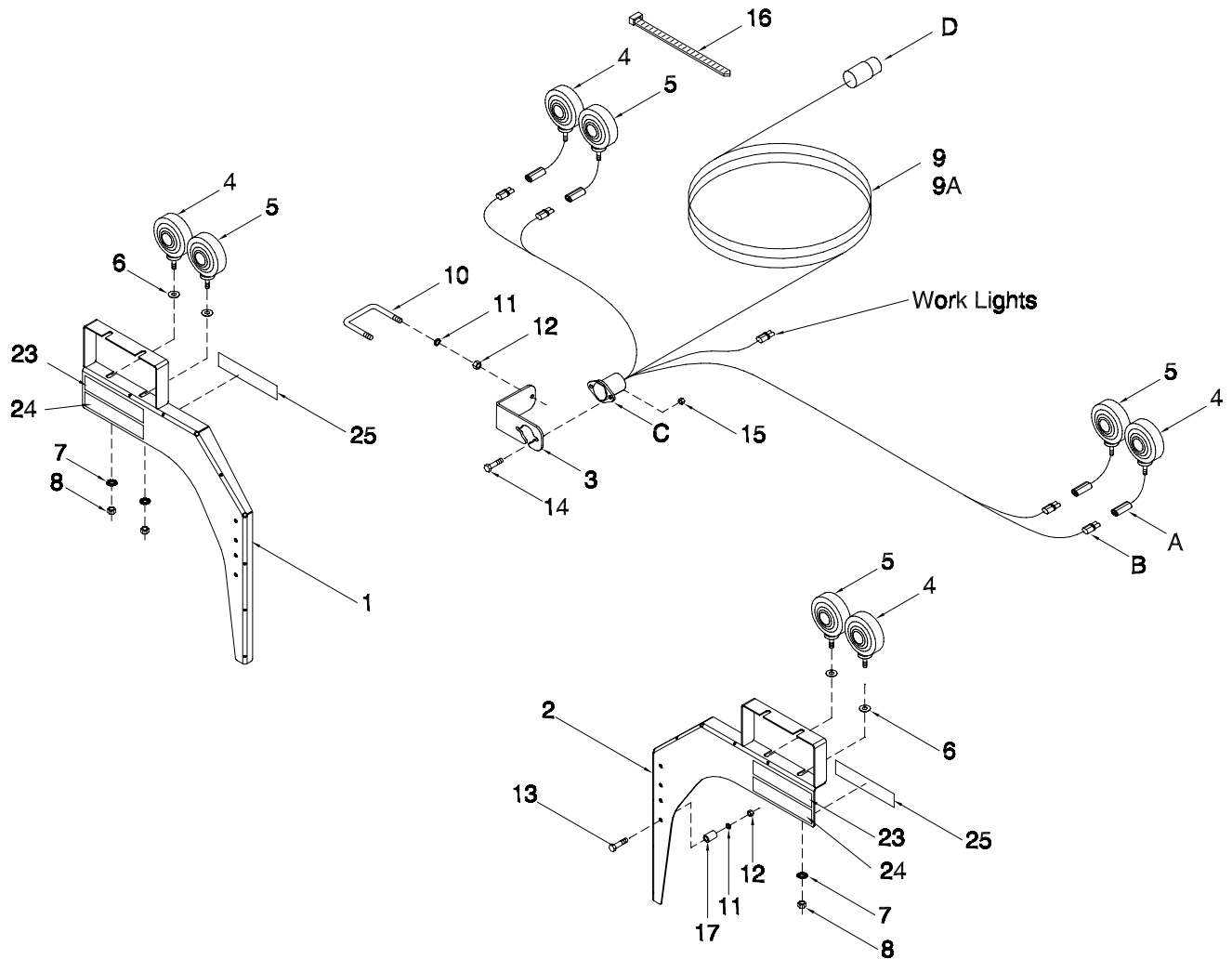


Lighting - Contour Air Drill

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	N15098	U-Bolt - 3/8 x 4 x 5	7
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
	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	
	N43681	Kit Lighting - Contour Air Drill ORDER KIT THROUGH WHOLE GOODS ONLY	

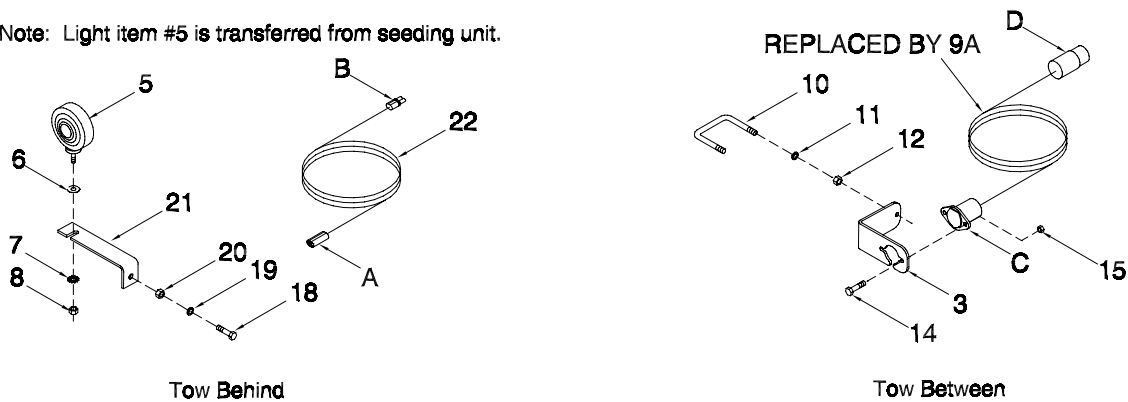
Safety Lights 7000 Series Air Cart

AIR CARTS 2001 TO PRESENT



AIR CARTS PRIOR TO 2001

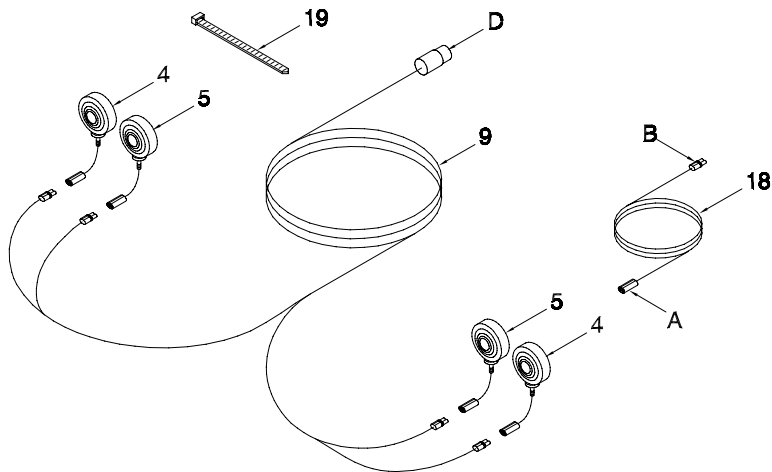
Note: Light item #5 is transferred from seeding unit.



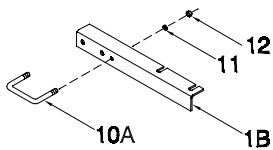
Safety Lights - 7000 Series Air Cart

Item	Part No.	Description	Qty
1	N32041	Bracket - Mounting Left	1
2	N32040	Bracket - Mounting Right	1
3	N32001	Bracket - Mounting	1
4	C32765	Light - Amber	2
5	C32766	Light - Red	2
6	W-539	Flatwasher - 1/2	3
7	D-5280	Star Washer - 1/2	3
8	W-516	Hex Nut - 1/2	3
9	C32051	Wiring Harness - Main Tow Behind	1
9A	C31497	Wiring Harness - Main Tow Between	1
10	N15098	U-Bolt - 3/8 x 4 x 5	1
11	W-523	Lockwasher - 3/8	6
12	W-514	Hex Nut - 3/8	6
13	W-475	Hex Bolt - 3/8 x 1 lg	4
	W-1854	Hex Bolt - 3/8 x 3 lg (Used with item 17)	4
14	N29048	Carriage Head Bolt - 5/16 x 1 lg	2
15	D-5278	Serrated Nut - 5/16	2
16	D-4951	Nylon Tie Strap - 7 3/8 lg	14
17	N19058	Spacer Bushing	4
18	W-485	Hex Bolt - 1/2 x 1 1/4 lg	4
19	W-525	Lockwasher - 1/2	4
20	W-516	Hex Nut - 1/2	4
21	N31426	Bracket - Mounting	1
22	C31439	Wiring Extension - 2 Pin - 10 ft	3
23	N34476	Reflector - Red	2
24	N34478	Reflector - Orange	2
25	N34477	Reflector - Amber	2
	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	
		ORDER KITS THROUGH WHOLEGOODS ONLY	
	N30746	Air Cart Light Kit (Tow Between) Includes item 1-16 except 9	
	N32053	Air Cart Light Kit (Tow Behind) Includes item 1-16 except 9A	

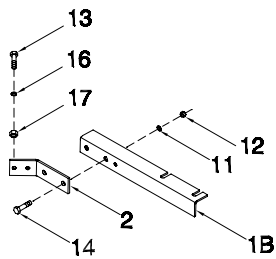
Safety Lights Harrow Bars & Hay Hikers



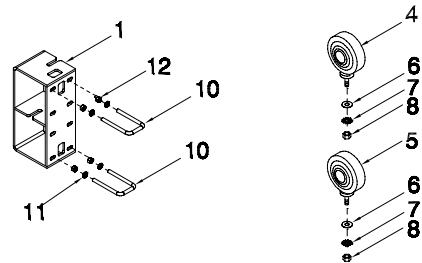
**RANGLER II
HEAVY HARROW**



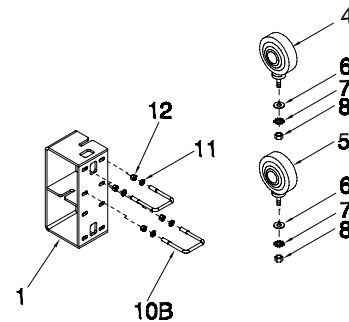
HARROW BAR



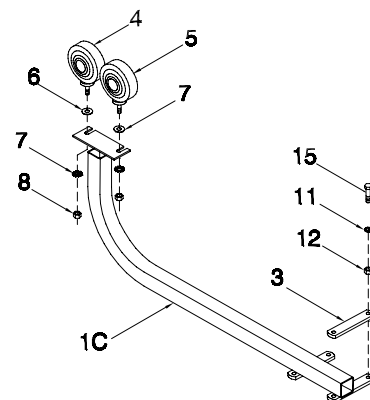
1400 HAY HIKER



881 HAY HIKER with SIDE RAILS



881 HAY HIKER without SIDE RAILS



Safety Lights - Harrow Bars & Hay Hikers

Item	Part No.	Description	Qty
1	K37581	Bracket - Mounting	2
1B	H31430	Bracket - Mounting	2
1C	K31994	Bracket - Mounting	2
2	H31428	Plate - Mounting	2
3	N19109	Strap - Mounting	4
4	C32765	Light - Amber	2
5	C32766	Light - Red	2
6	W-539	Flatwasher - 1/2	1
7	D-5280	Star Washer - 1/2	2
8	W-516	Hex Nut - 1/2	1
9	C31437	Wiring Harness - Main	1
10	N29065	U-Bolt - 3/8 x 2 x 4	4
10A	D-4932	U-Bolt - 3/8 x 4 x 3	2
10B	N34950	U-Bolt - 3/8x 2 1/2 x 3 1/2 UL	4
11	W-523	Lockwasher - 3/8	8
12	W-514	Hex Nut - 3/8	8
13	W-485	Hex Bolt - 1/2 x 1 1/4 lg	4
14	W-475	Hex Bolt - 3/8 x 1 lg	4
15	W-481	Hex Bolt - 3/8 x 3 1/2 lg	8
16	W-525	Lockwasher - 1/2	4
17	W-516	Hex Nut - 1/2	4
18	C31439	Wiring Extension - 2 Pin - 10 ft	3
19	D-4951	Nylon Tie Strap - 7 3/8 lg	15
19A	D-4838	Nylon Tie Strap - 14 1/2 lg	50
19B	S13336	Nylon Tie Strap - 28 1/2 lg	4
	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	
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	
		ORDER KITS THROUGH WHOLEGOODS ONLY	
	K30753	881 Hay Hiker with Side Rails Light Kit-Includes items 1B, 4-9, 10B, 16, 17 and 19	
	K31995	881 Hay Hiker without Side Rails Light Kit-Includes items 1C, 3, 4-9, 15 and (Qty 8) of 11 & 12	
	K30754	1400 Hay Hiker Light Kit-Includes items 1, 4-9, 10, 11, 12, 19 and (Qty 1) of 18	
	H30756	50' Heavy Harrow Light Kit-Includes items 1B, 4-9, 10A, 11, 12, 19A, 19B, and (Qty 7) of 19	
	H30750	70' Heavy Harrow Light Kit-Includes items 1B, 4-9, 10A, 11, 12, 18 and 19, 19A, 19B	
	H30758	50' Harrow Bar Light Kit-Includes items 1B, 2, 4-9, 11, 12, 13, 14, 16, 17 and 19, 19A, 19B	
	H30752	60' and 70' Harrow Bar Light Kit-Includes items 1B, 2, 4-9, 11, 12, 13, 14, 16, 17, 18 and 19, 19A, 19B	
	H30757	50' Rangler II Light Kit-Includes items 1B, 4-9, 10B, 11, 12, 17 and 19, 19A, 19B	
	H30751	60' and 70' Rangler II Light Kit-Includes items 1B, 4-9, 10B, 11, 12, 17, 18 and 19, 19A, 19B	

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