

REPAIR PARTS CATALOG



FIELD CULTIVATOR

MODELS: FCF-2266 THRU FCF-3266
FCF-2339 THRU FCF-3239

IMPORTANT!

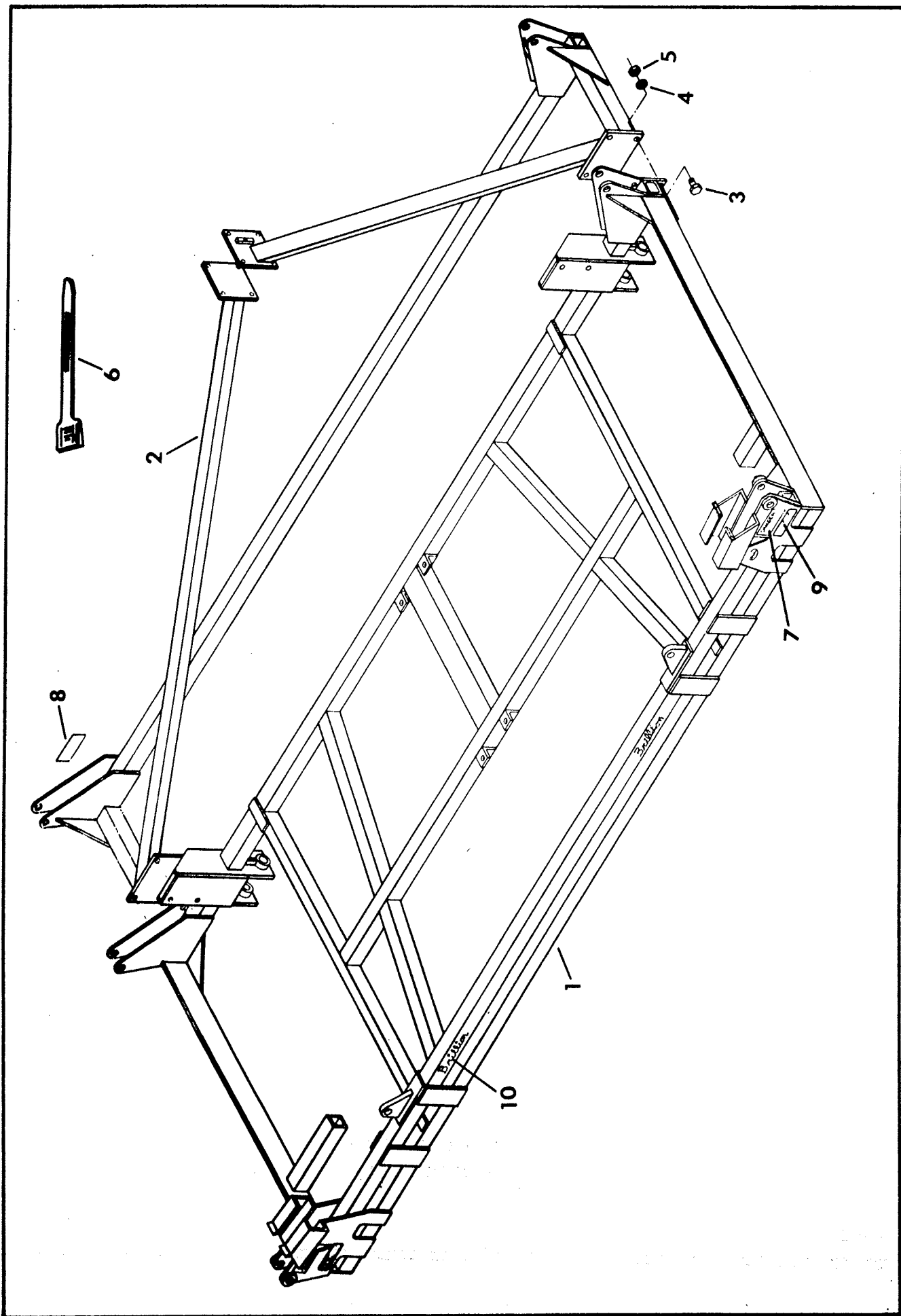
Repairs cannot be purchased retail direct from factory. Order through your Brillion dealer.

MODEL NO.

DATE PURCHASED

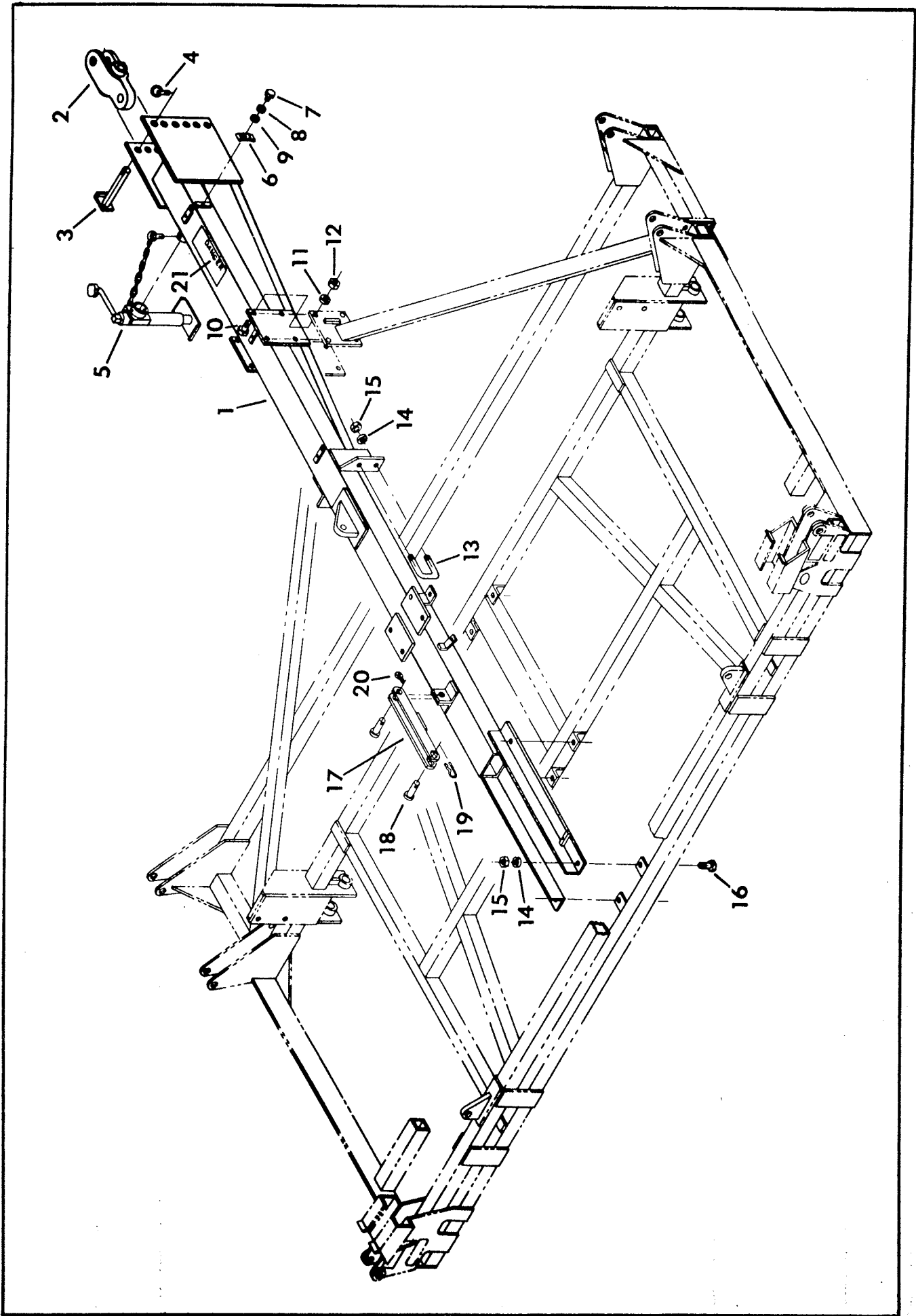


BRILLION IRON WORKS
BRILLION, WISCONSIN 54110

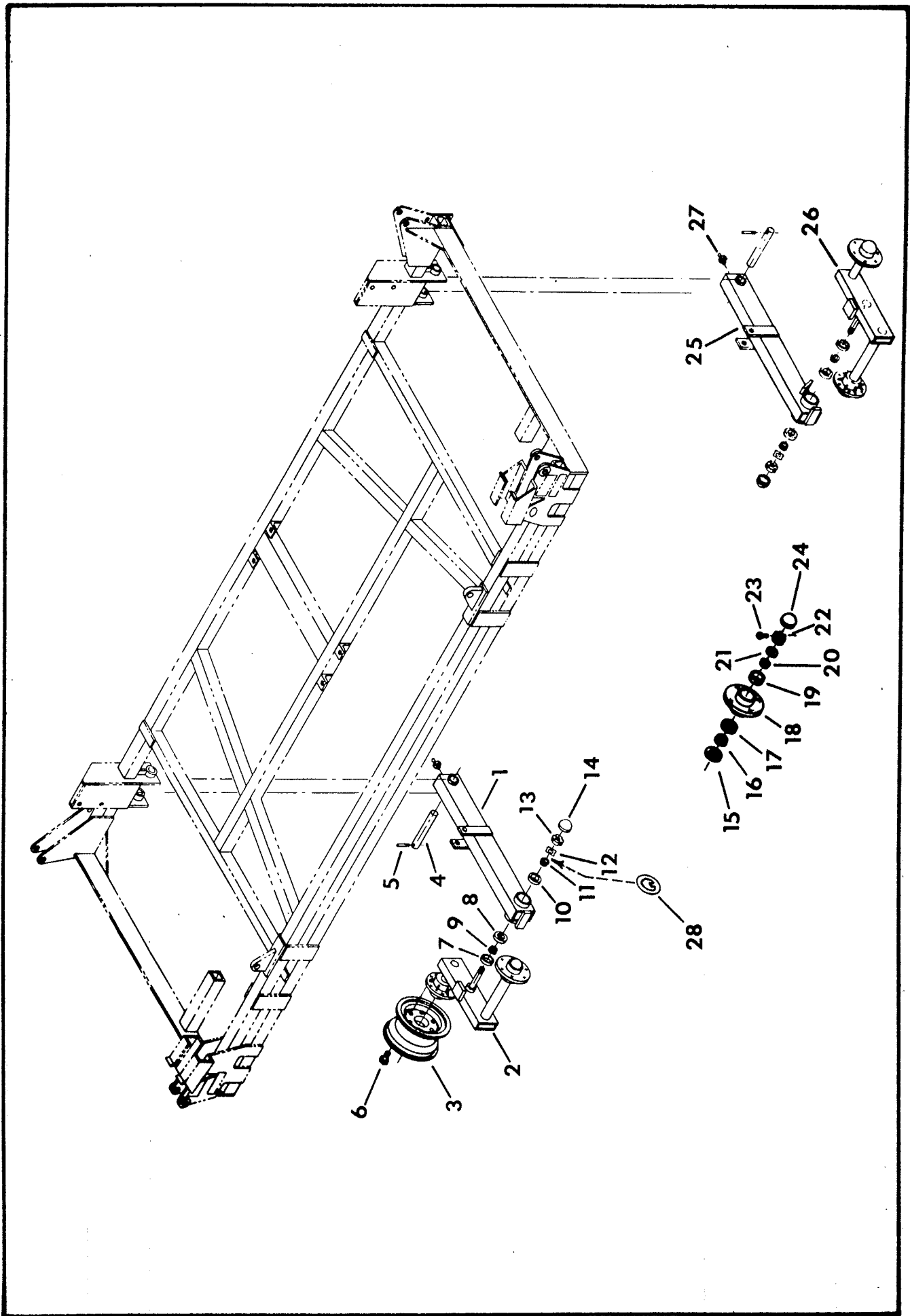


CENTER FRAME AND HITCH FRAME

Index No.	Part No.	Description	No. Used	Weight
1	4J-453	Center Frame	1	1190.0
2	4J-391	Hitch Frame	1	408.0
3	5C-460	Capscrew, 5/8-11 NC x 2", Grade 5	8	.23
4	1B-166	Lockwasher, 5/8 Med. Spring	8	.07
5	1C-392	Nut, 5/8-11 NC Regular Hex	8	.07
6	9D-851	Cable Tie	8	.07
7	3J-675	Decal, "Danger, Stand Clear When Raising Or Lowering Wings"	4	.07
8	2J-431	Reflective Decal (Amber)	2	.07
9	2J-430	Reflective Decal (Red)	2	.07
10	1J-910	Decal, "Brillion" Script	2	.07

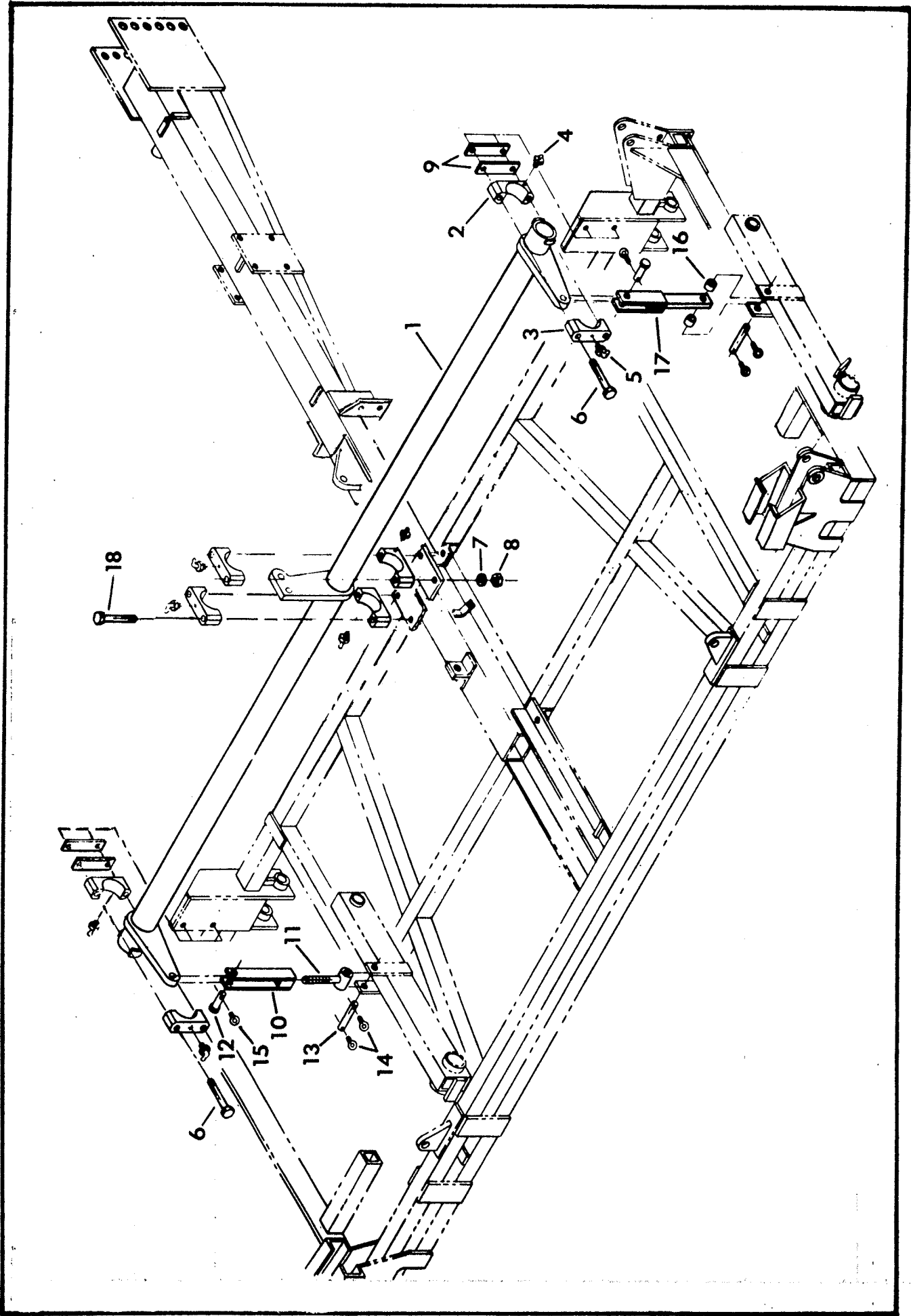


DRAWBAR				
Index No.	Part No.	Description	No. Used	Weight
1	4J-510	Drawbar	1	459.0
2	2J-858	Hitch	1	29.0
3	4J-485	Pin, 1-1/4" x 8-1/4"	1	3.5
4	1J-722	Lynch Pin	1	.14
5	3J-880	Jack (Extends 13-1/2" to 22-5/8")	1	14.0
	4J-867	Jack (Extends 18-1/2" to 33-1/2")	1	17.0
6	9D-283	Clamp	8	.62
7	6D-37	Capscrew, 5/16-18 NC x 1"	8	.03
	1C-385	Nut, 5/16-18 NC Regular Hex	3	
8	1C-362	Lockwasher, 5/16 Med. Spring	8	
9	3C-127	Flat Washer, 5/16 Std.	8	
10	5D-51	Capscrew, 1/2-13 NC x 1-3/4", Grade 5	8	.13
11	1C-109	Lockwasher, 1/2 Med. Spring	8	
12	1C-390	Nut, 1/2-13 NC Regular Hex	8	.04
13	4J-411	U-Bolt, 5/8"	2	1.8
14	1B-166	Lockwasher, 5/8 Med. Spring	10	
15	1C-392	Nut, 5/8-11 NC Regular Hex	10	.07
16	5C-460	Capscrew, 5/8-11 NC x 2", Grade 5	6	.23
17	4J-542	Transport Link	1	6.7
18	2D-799	Clevis Pin, 1" x 3"	2	.76
19	4C-856	Hairpin Cotter, .148 x 2-11/16	1	.03
20	1C-788	Cotter Pin, 3/16" x 1-1/2"	1	.01
21	3J-678	Decal, "Danger, Bleed The Air From Wing Lift Cylinders"	1	



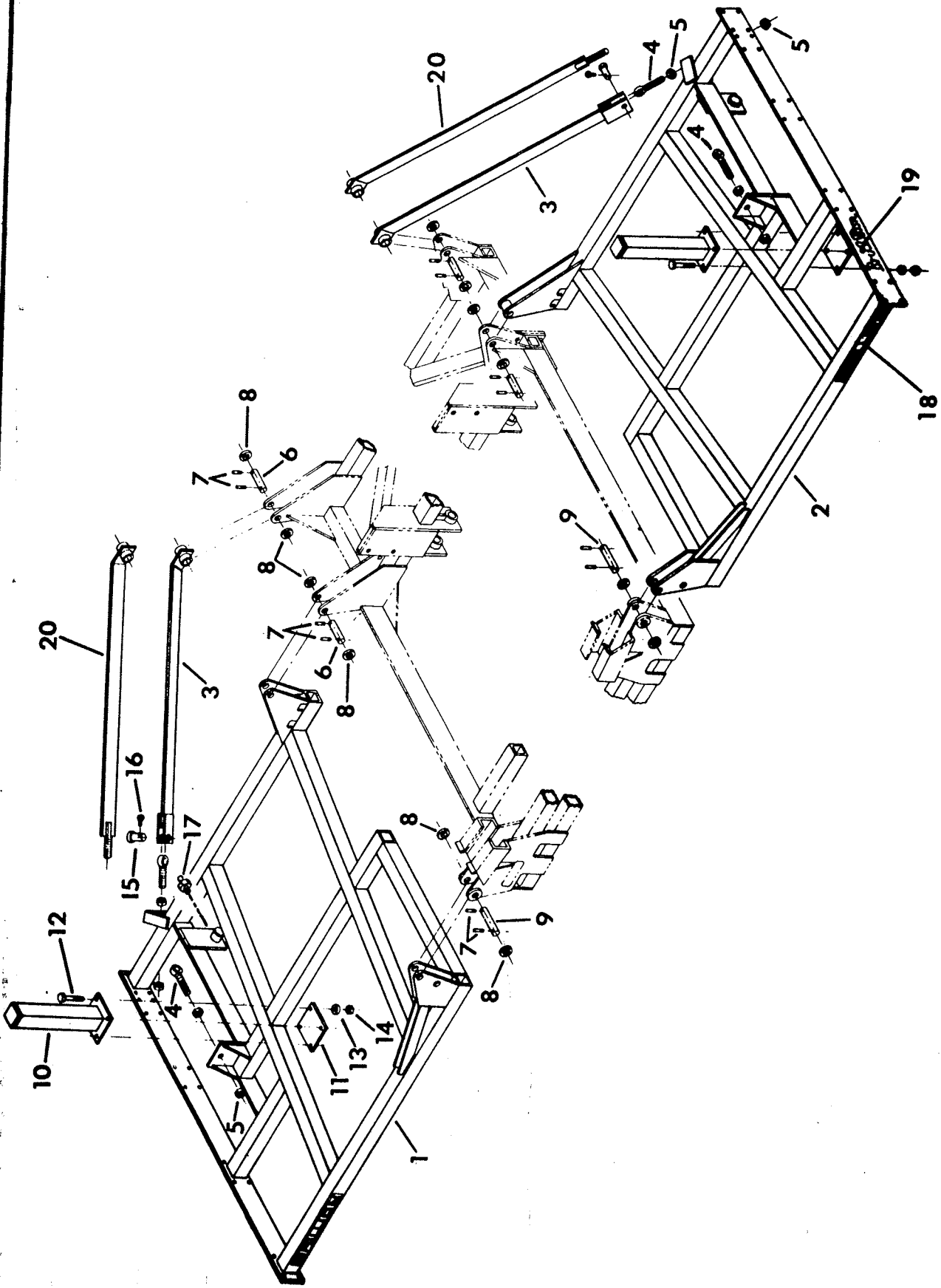
WALKING BEAM ASSEMBLIES

Index No.	Part No.	Description	No. Used	Weight
1	4J-385	Pivot Tube, Left	1	61.0
2	4J-366	Axle Beam, Left (Includes Items 15 through 24)	1	76.0
3	6D-312	Wheel, 15 x 8 LB, 6 Bolt	4	24.0
4	4J-551	Pin, 1-1/2" x 9-7/16"	2	4.7
5	4J-410	Roll Pin, 3/8" x 3"	2	.12
6	5C-100	Wheel Bolt, 1/2-20 NF	24	.20
7	4J-565	Seal	2	.09
8	7C-762	Bearing Cup #LM501310	2	.40
9	7C-763	Bearing Cone #LM501349	2	.55
10	1D-807	Bearing Cup #LM29710	2	.19
11	1D-808	Bearing Cone #LM29749	2	.38
12	9C-435	Lockwasher #TW107	2	.03
13	9C-434	Locknut #TN07	2	.22
14	4J-554	Hub Cap	2	.19
15	6D-338	Seal	4	.09
16	5C-480	Bearing Cone #LM48548	4	.30
17	5C-479	Bearing Cup #LM48510	4	.20
18	6D-336	Wheel Hub	4	10.5
19	5C-914	Bearing Cup #LM67010	4	.12
20	5C-913	Bearing Cone #LM67048	4	.25
21	1C-871	Flat Washer	4	
22	6D-284	Slotted Nut	4	.25
23	1C-788	Cotter Pin	4	
24	6D-337	Hub Cap	4	.8
25	4J-386	Pivot Tube, Right	1	61.0
26	4J-564	Axle Beam, Right (Includes Items 15 through 24)	1	76.0
27	7C-414	Grease Fitting, 1/4"-28 NF, Straight	2	
28	5J-336	Keyed Washer	2	
		Note: Entire walking beam assemblies (excluding items 3 through 6) may be ordered as follows:		
	4J-480	Left Walking Beam Assembly	1	139.0
	4J-566	Right Walking Beam Assembly	1	139.0



ROCKSHAFT

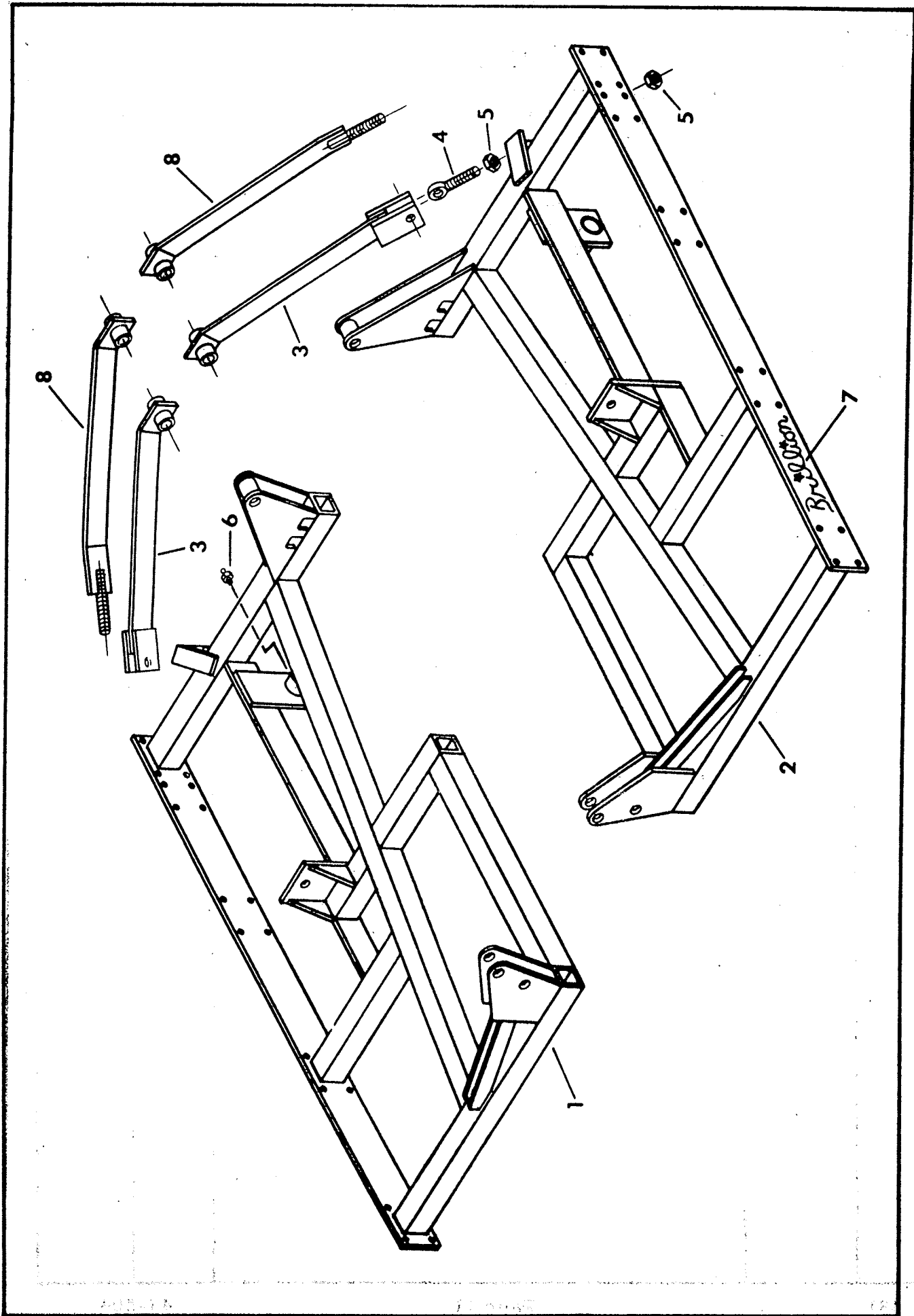
Index No.	Part No.	Description	No. Used	Weight
1	4J-530	Rockshaft	1	229.0
2	8D-734	Axle Bearing	4	4.5
3	7D-583	Axle Bearing Cap	4	5.25
4	7C-414	Grease Fitting, 1/4-28 NF, Straight	4	
5	3C-491	Grease Fitting, 3/8 Drive Thread, 67-1/2°	4	
6	9C-59	Machine Bolt, 5/8-11 NC x 7" Grade 5	4	0.62
7	1B-166	Lockwasher, 5/8 Med. Spring	8	
8	1C-392	Nut, 5/8-11 NC Regular Hex	8	
9	4J-552	Spacer	4	1.0
10	4J-483	Female Yoke	1	8.5
11	4J-491	Eye Bolt	1	3.32
12	2D-799	Clevis Pin, 1" x 3"	2	.76
13	9D-109	Pin, 1" x 5-1/4"	2	2.34
14	4C-446	Cotter Pin, 1/4" x 1-1/2"	4	
15	1C-788	Cotter Pin, 3/16" x 1-1/2"	2	
16	3D-961	Spacer	2	.1
17	4J-404	Lift Link	2	13.0
18	6D-301	Machine Bolt, 5/8"-11 NC x 6-1/2", Grade 5	4	0.62



WIDE WINGS

Index No.	Part No.	Description	No. Used	Weight
1	4J-317	Left Wing (Wide)	1*	471.0
2	4J-316	Right Wing (Wide)	1*	471.0
3	4J-433	Long Brace (Replaced by Item 20)	2*	41.0
4	4J-440	Eye Bolt	4	1.8
5	4D-414	Nut, 1-8 NC Regular Hex	8	.28
6	9D-299	Pin, 1-1/4" x 5-1/8"	4	1.74
7	2D-894	Roll Pin, 1/4" x 2"	12	.02
8	4J-548	Machinery Bushing, 1-7/8" O.D. x 1-1/4" I.D. x #14	12	.03
9	4J-575	Pin, 1-1/4" x 6-1/8"	2	2.17
10	4J-494	Wing Stop	2	19.0
11	5J-102	Plate	2	7.6
12	5D-142	Capscrew, 1/2-13 NC x 5", Grade 5	8	.31
13	1C-109	Lockwasher, 1/2 Med. Spring	8	
14	1C-390	Nut, 1/2-13 NC Regular Hex	8	.04
15	8D-99	Clevis Pin, 1" x 2-1/2"	2	.63
16	1C-788	Cotter Pin, 3/16" x 1-1/2"	2	.01
17	7C-414	Grease Fitting, 1/4"-28 NF, Straight	2	
18	4D-909	Decal, "Brillion" Block	2	
19	1J-910	Decal, "Brillion" Script	2	
20	5J-188	Long Brace (Replaces Items 3 and 4. Includes one 1" nut.)	2*	38.4

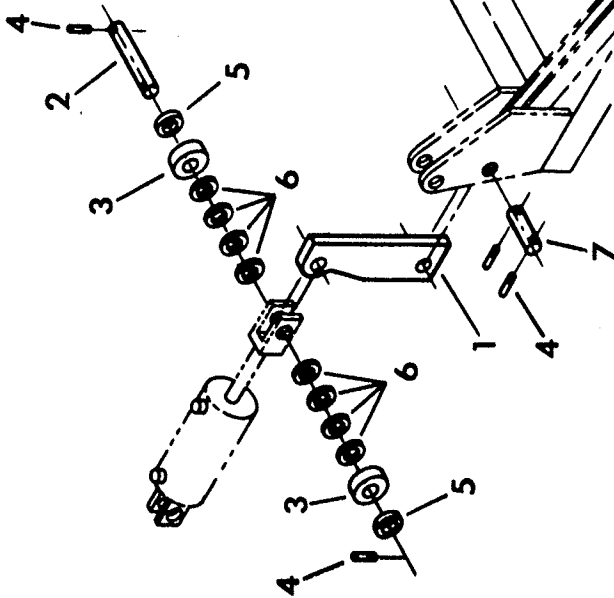
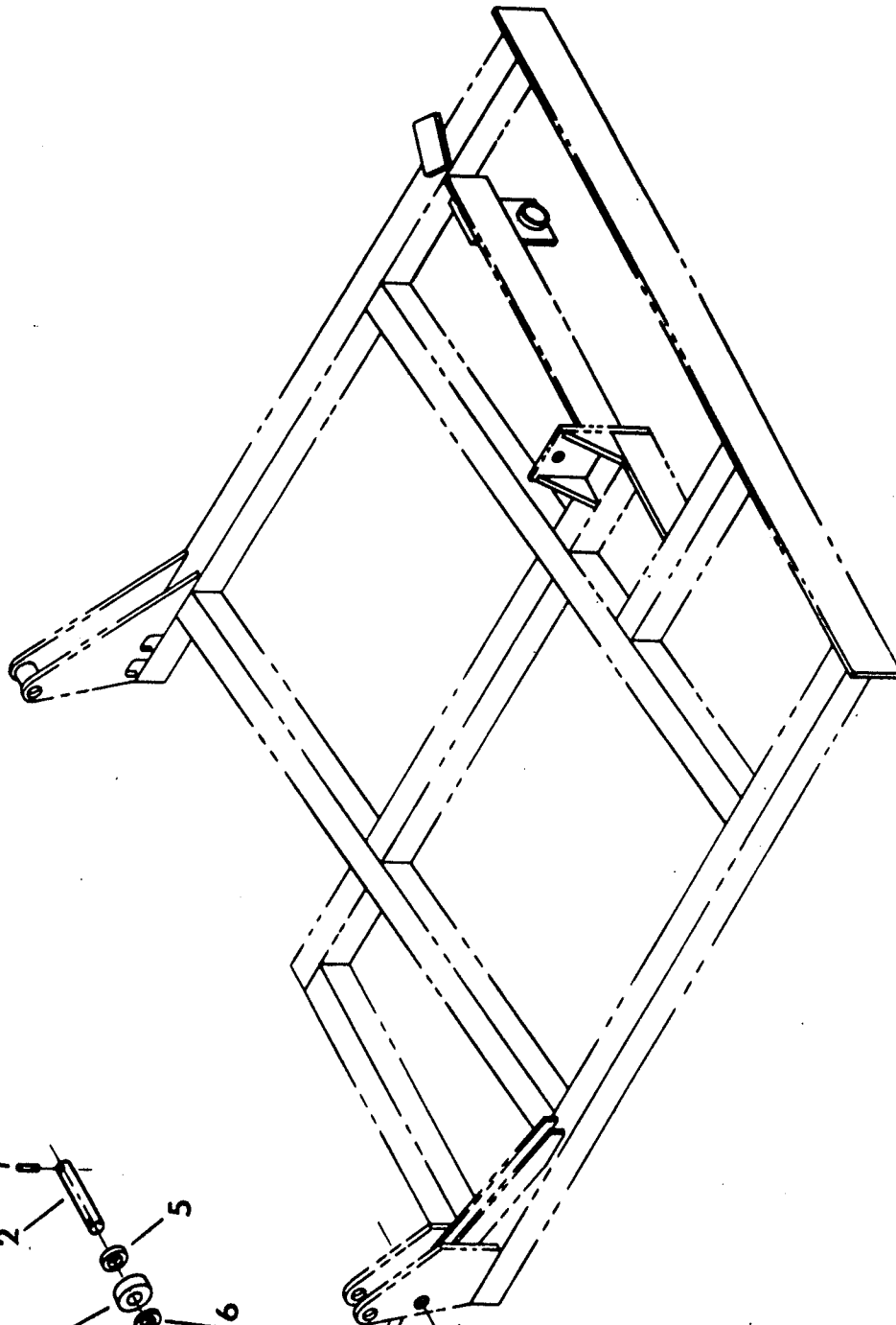
*These parts are used only on machines over 27'.



NARROW WINGS

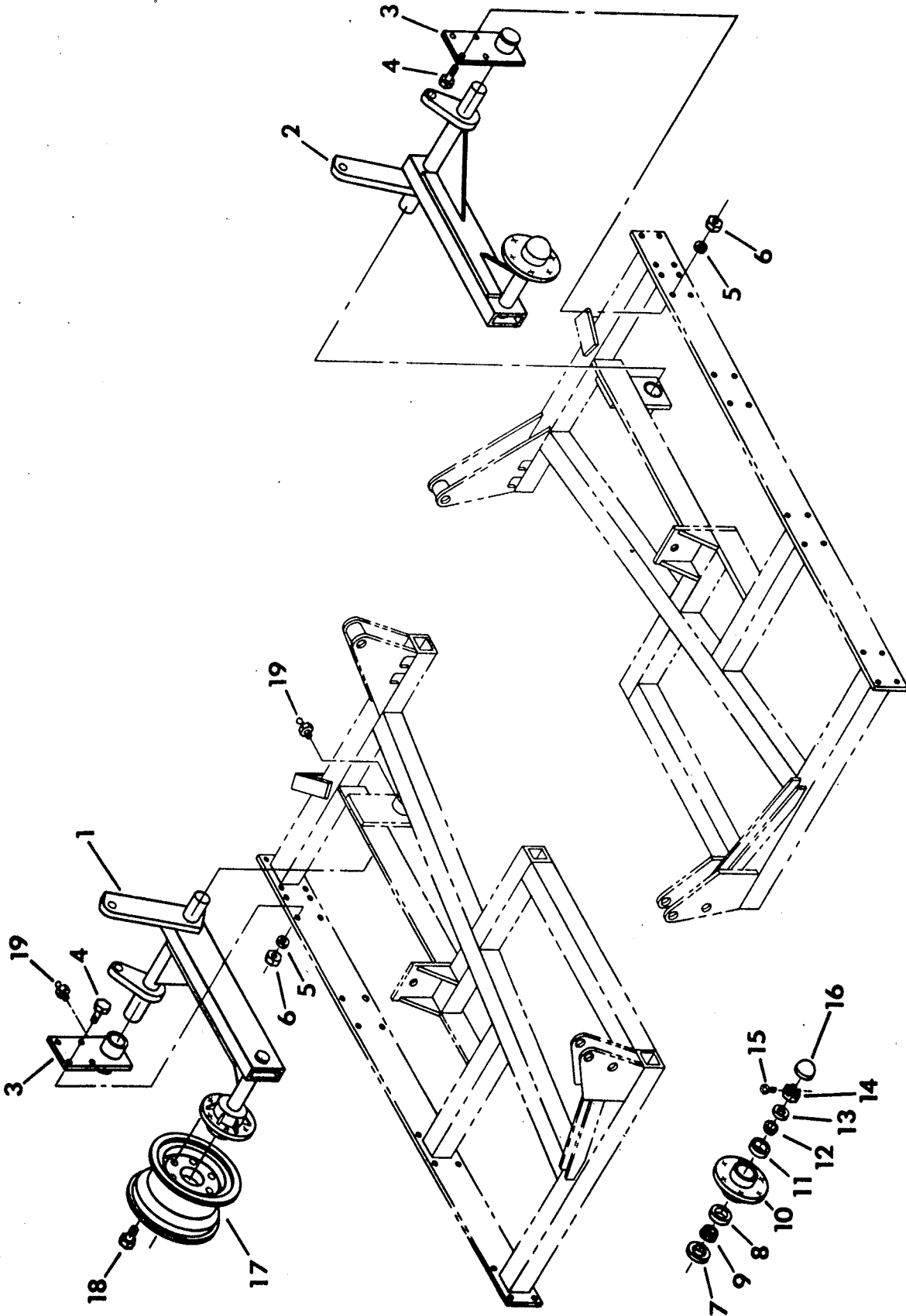
Index No.	Part No.	Description	No. Used	Weight
1	4J-319	Left Wing (Narrow)	1*	340.0
2	4J-318	Right Wing (Narrow)	1*	340.0
3	4J-438	Short Brace (Replaced by Item 8)	2*	26.0
4	4J-440	Eye Bolt	2	1.8
5	4D-414	Nut, 1-8 NC Regular Hex	4	.28
6	7C-414	Grease Fitting, 1/4-28 NF, Straight	2	
7	1J-910	Decal "Brillion" Script	2	
8	5J-189	Short Brace (Replaces Items 3 and 4. Includes one 1" nut.)	2*	22.8

*These parts are used only on machines under 27'.



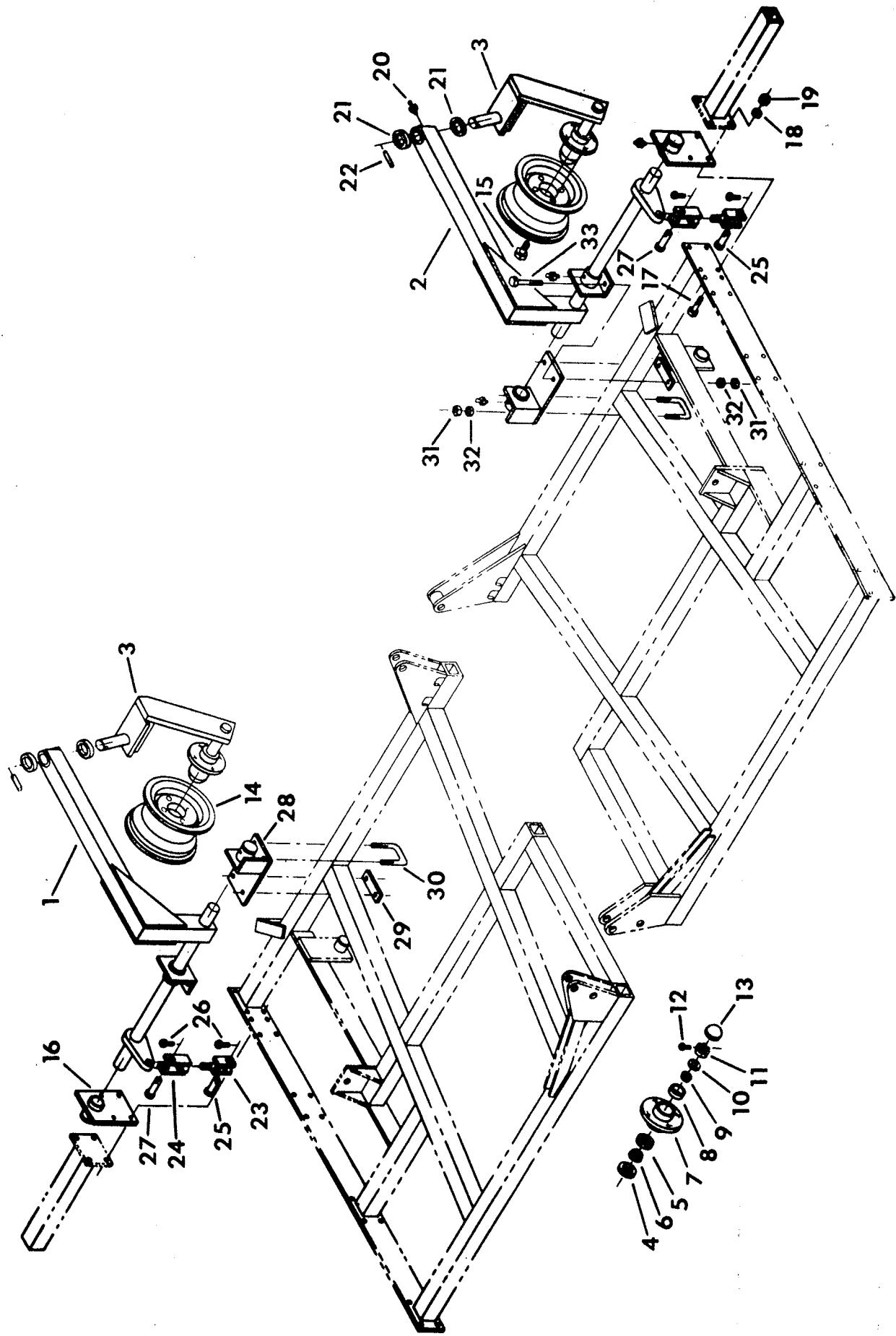
WING LIFT LINK

Index No.	Part No.	Description	No. Used	Weight
1	4J-534	Lift Link	2	15.0
2	4J-550	Pin, 1-1/4" x 6-13/16"	2	2.4
3	3J-512	Roller Assembly	4	1.6
4	2D-894	Roll Pin, 1/4" x 2"	8	.02
5	4J-548	Machinery Bushing, 1-7/8" O.D. x 1-1/4" I.D. x #14	4	.03
6	6C-406	Flat Washer, 1-1/4" SAE	16	
7	4J-549	Pin, 1-1/4" x 4"	2	1.4



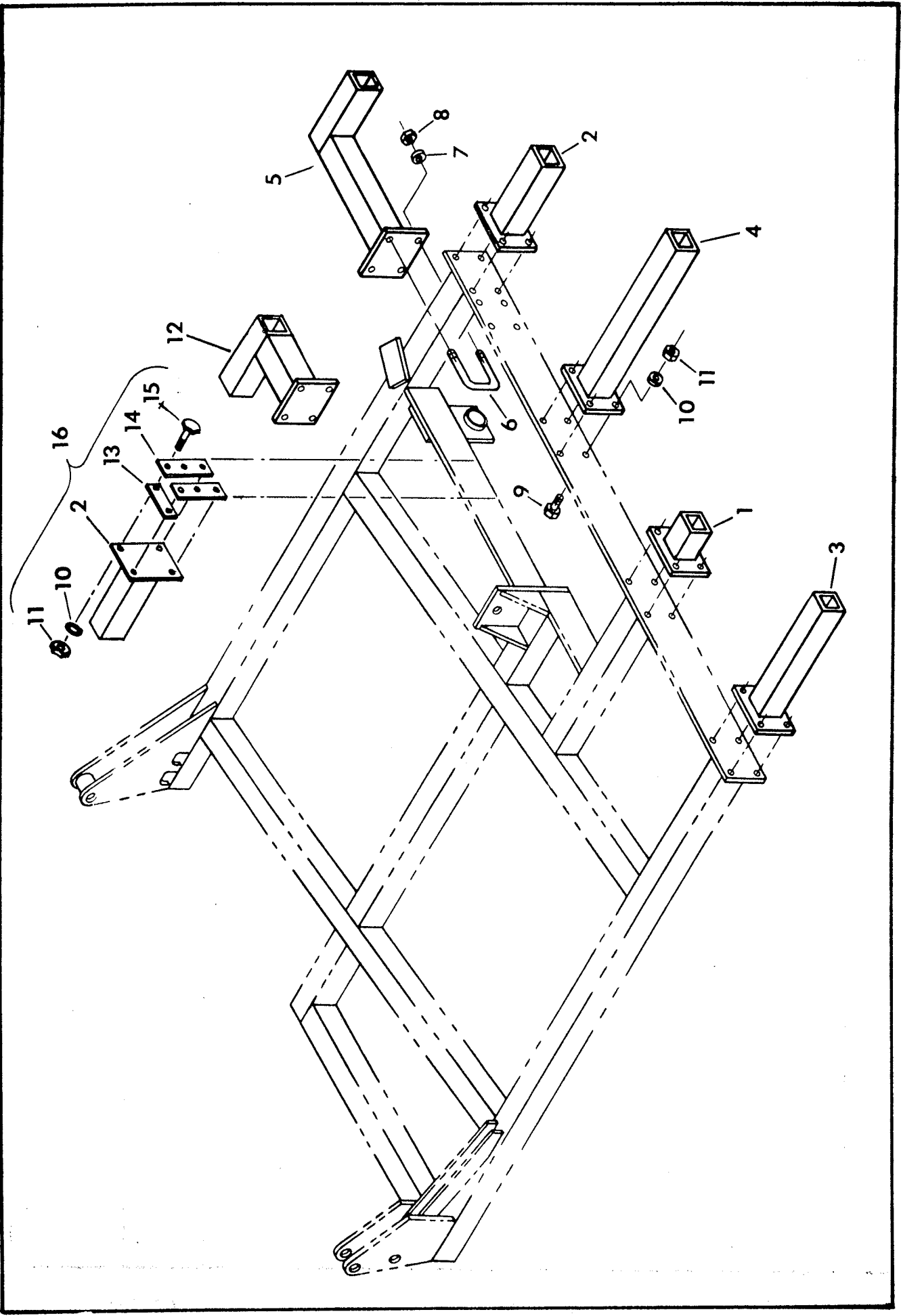
WING AXLES

Index No.	Part No.	Description	No. Used	Weight
1	4J-369	Left Wing Axle (Includes Items 7 through 16)	1	98.0
2	4J-370	Right Wing Axle (Includes Items 7 through 16)	1	98.0
3	4J-488	Pivot Beam Mount	2	9.2
4	1D-237	Capscrew, 1/2-13 NC x 2", Grade 5	8	.14
5	1C-109	Lockwasher, 1/2 Med. Spring	8	
6	1C-390	Nut, 1/2-13 NC Regular Hex	8	.04
7	6D-338	Seal	2	.09
8	5C-479	Bearing Cup #LM48510	2	.20
9	5C-480	Bearing Cone #LM48548	2	.30
10	6D-336	Wheel Hub	2	10.5
11	5C-914	Bearing Cup #LM67010	2	.12
12	5C-913	Bearing Cone #LM67048	2	.25
13	1C-871	Flat Washer	2	
14	6D-284	Slotted Nut	2	.25
15	1C-788	Cotter Pin	2	
16	6D-337	Hub Cap	2	.8
17	6D-312	Wheel, 15 x 8 LB, 6 Bolt	2	24.0
18	5C-100	Wheel Bolt, 1/2-20 N. F.	12	.2
19	7C-414	Grease Fitting, 1/4-28 N. F., Straight	4	



STABILIZER WHEELS

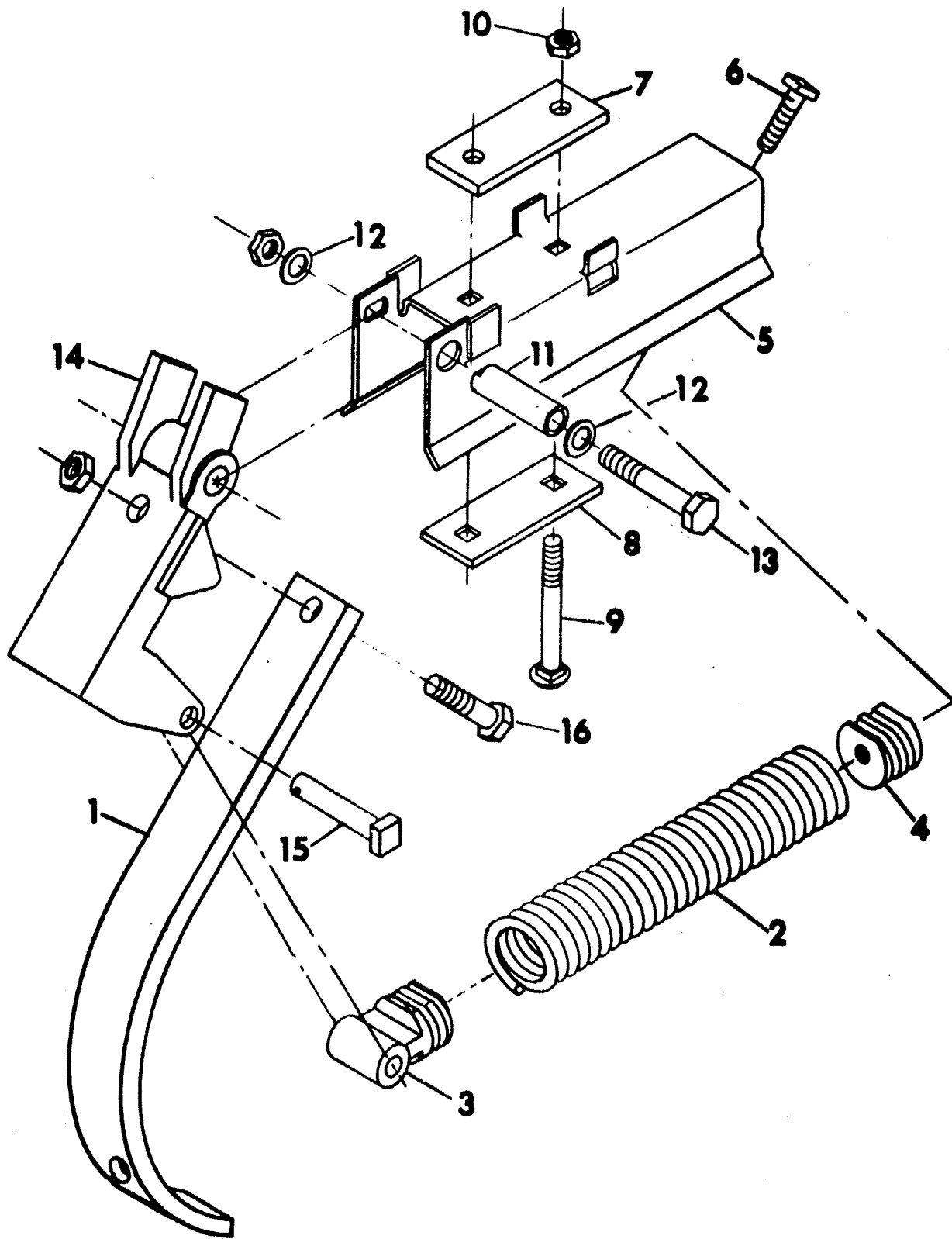
Index No.	Part No.	Description	No. Used	Weight
1	4J-350	Left Pivot Arm	1	95.0
2	4J-351	Right Pivot Arm	1	95.0
3	4J-378	Wheel Arm (Includes Items 4 Through 13)	2	50.0
4	5C-910	Seal	2	.06
5	5C-914	Bearing Cup #LM67010	2	.12
6	5C-913	Bearing Cone #LM67048	2	.25
7	5C-904	Wheel Hub	2	6.0
8	5C-912	Bearing Cup #LM11910	2	.12
9	5C-911	Bearing Cone #LM11949	2	.19
10	5C-907	Washer	2	
11	5C-909	Nut	2	.09
12	3C-350	Cotter Pin	2	
13	5C-908	Hub Cap	2	.12
14	5C-916	Wheel, 15 x 4-1/2 KB, 4 Bolt	2	16.0
15	5C-100	Wheel Bolt, 1/2-20 NF	8	.2
16	4J-419	Outside Pivot Mount	2	10.0
17	1C-330	Capscrew, 1/2-13 NC x 2-1/4, Grade 2	8	.16
18	1C-109	Lockwasher, 1/2 Med. Spring	8	
19	1C-390	Nut, 1/2-13 Regular Hex	8	.04
20	7C-414	Grease Fitting	8	
21	4J-409	Machinery Bushing, 3" O.D. x 2" I.D. x # 10	4	.14
22	4J-410	Roll Pin, 3/8" x 3"	2	.06
23	4J-416	Male Yoke	2	2.8
24	4J-413	Female Yoke	2	2.6
25	8D-99	Clevis Pin, 1" x 2-1/2"	2	.63
26	1C-788	Cotter Pin, 3/16" x 1-1/2"	4	.01
27	2D-799	Clevis Pin, 1" x 3"	2	.76
28	4J-421	Inside Pivot Mount	2	20.0
29	4J-412	Strap	2	1.2
30	4J-411	U-Bolt, 5/8"	2	.9
31	1C-392	Nut, 5/8-11 NC Regular Hex	4	
32	1B-166	Lockwasher, 5/8 Med. Spring	4	
33	4D-373	Capscrew, 5/8-11 NC x 5-1/2, Grade 5	4	.53



EXTENSIONS

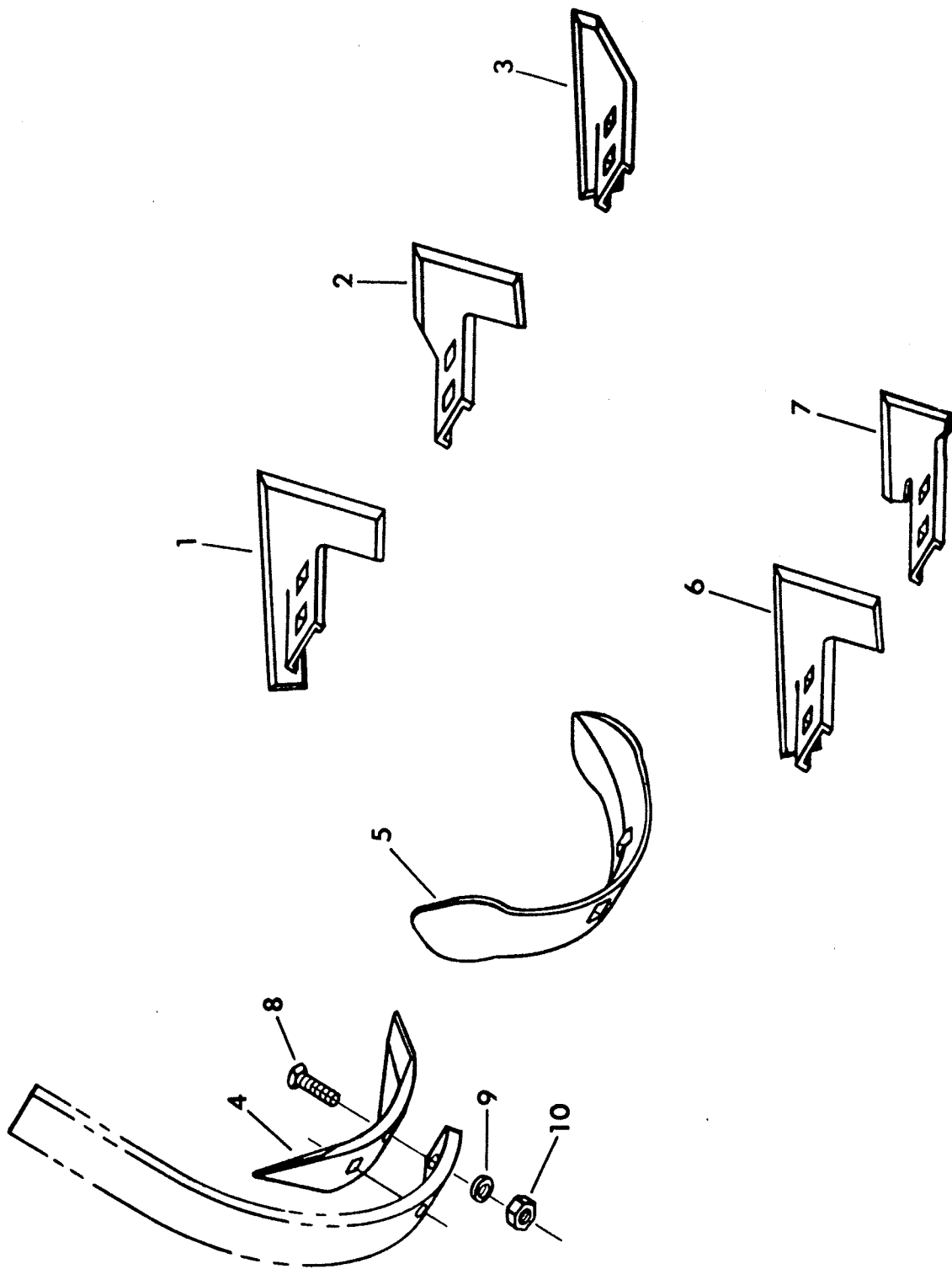
Index No.	Part No.	Description	Weight
1*	4J-424	4" Extension	
2*	4J-427	10" Extension	7.0
3*	4J-429	16" Extension	11.0
4*	4J-431	22" Extension	16.0
5	4J-320	Front Outside Extension	20.0
6	4J-411	U-Bolt, 5/8"	23.0
7	1B-166	Lockwasher, 5/8 Med. Spring	0.9
8	1C-392	Nut, 5/8-11 NC Regular Hex	
9	5D-51	Capscrew, 1/2-13 NC x 1-3/4", Grade 5	0.07
10	1C-109	Lockwasher, 1/2 Med. Spring	
11	1C-390	Nut, 1/2-13 Regular Hex	
12	4J-321	Front Inside Extension	0.04
13	5J-358	Strap	17.0
14	3J-916	Strap	0.95
15	1J-486	Capscrew, 1/2-13 NC x 2-1/4", Grade 5	1.2
16*	5J-359	Extension Assembly	0.16
			15.2

*See operator's manual for proper location of these extensions.



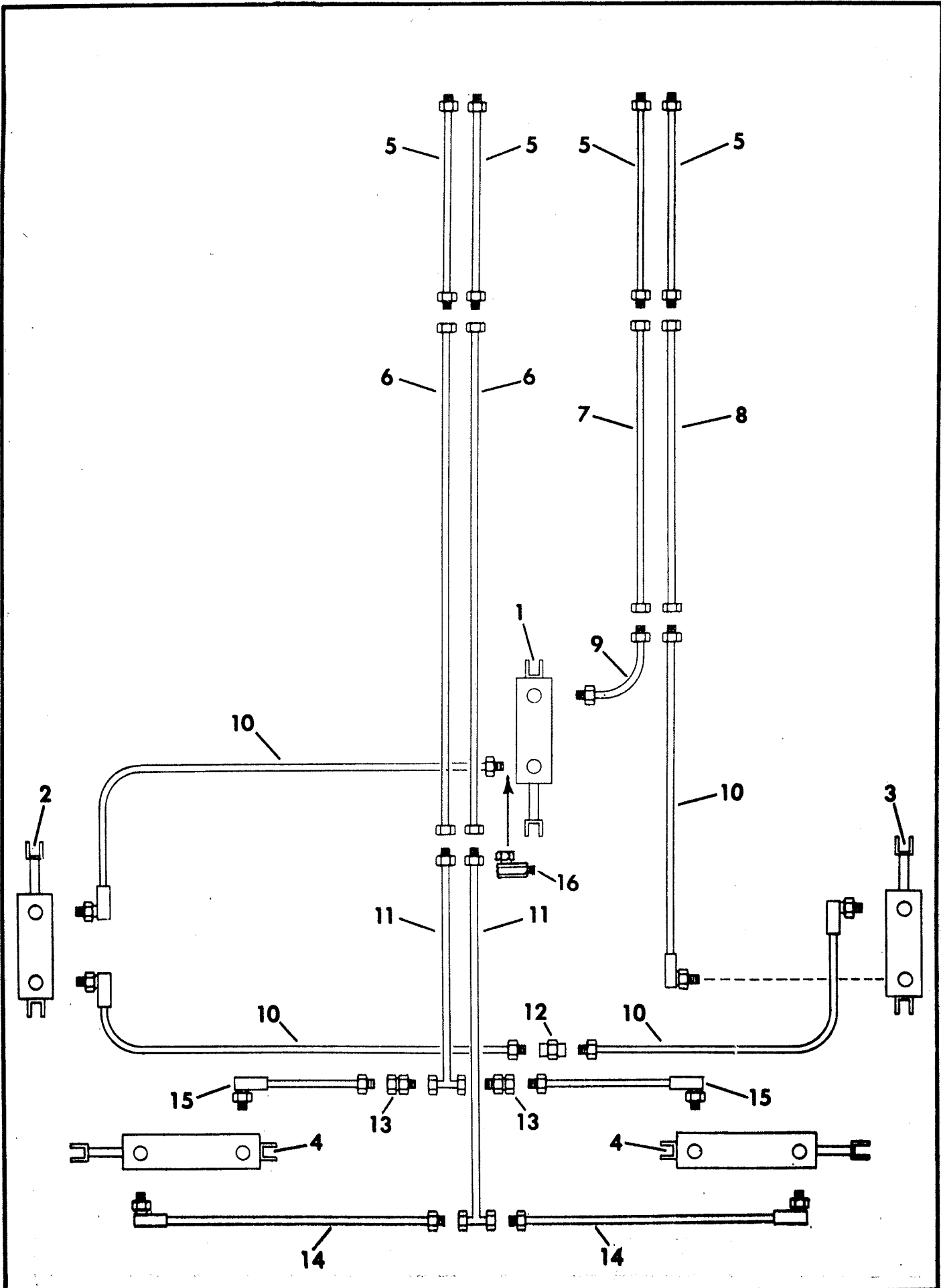
CULTIVATOR TOOTH ASSEMBLY

Index No.	Part No.	Description	No. Used	Weight
1	2J-143	Cultivator Tooth	1	6.2
2	8D-219	Extension Spring	1	4.6
3	8D-220	Spring Plug	1	1.1
4	8D-221	Spring Plug	1	.5
5	4J-578	Spring Holder	1	4.25
6	8D-349	Bolt, 1/2-13 NC x 3-1/4 Lg., Special Head	1	.25
7	5J-358	Strap	1	.95
8	4J-529	Strap	1	.42
9	4J-527	Carriage Bolt, 1/2-13 NC x 4-1/2 Lg., Grade 5	2	
10	5C-392	Locknut, 1/2-13 NC (Stover)	4	
11	9D-19	Bushing	1	.36
12	9C-134	Flat Washer, 1/2" SAE	2	
13	5D-871	Capscrew, 1/2-13 NC x 3-1/2 Long, Grade 5	1	.25
14	8D-223	Tooth Clamp	1	6.75
15	8D-302	Pin, 1/2" Dia. x 3" Lg. Sq. Hd.	1	
	2C-864	Cotter Pin, 1/8" Dia. x 1" Lg.	1	
16	1D-237	Capscrew, 1/2-13 NC x 2" Lg., Grade 5	2	



TOOTH POINTS AND SHOVELS

Index No.	Part No.	Description	Weight
1	4J-809	9" Full Sweep	1.5
2	4J-810	7" Half Sweep, R. H.	1.2
3	4J-811	7" Half Sweep, L. H.	1.2
4	8D-337	1-3/4" x 11 Reversible Point	1.0
5	2J-605	2" Heavy Duty Reversible Point	2.1
6	4J-808	7" Full Sweep	1.4
7	4J-807	4" Full Sweep	0.9
8	8D-301	Plow Bolt, 7/16-14 NC x 1-1/2" Lg., #3 Head	
9	1C-314	Lockwasher, 7/16" Medium Spring	
10	1C-179	Nut, 7/16-14 NC	



HYDRAULICS

Index No.	Part No.	Description	No. Used	Weight
1	3J-816	Hydraulic Cylinder, 4-1/2 x 8 master	1	48.0
2	3J-815	Hydraulic Cylinder, 4-1/2 x 8 Slave	1	43.0
3	3J-817	Hydraulic Cylinder, 4-3/4 x 8 Slave	1	44.0
4	3J-818	Hydraulic Cylinder, 4-1/2 x 16	2	51.0
5	4D-979	Hose, 60"	4	2.7
6	2J-569	Tube, 99-1/2"	2	3.5
7	4J-537	Tube, 69-1/2"	1	2.0
8	4J-538	Tube, 69"	1	1.9
9	1J-308	Hose, 30"	1	1.6
10	4J-541	Hose, 144" (Used With Narrow Wings)	4	5.6
	4J-540	Hose, 180" (Used With Wide Wings)	4	6.9
11	4J-536	Tube, 69-1/2"	2	2.0
12	4J-553	Pipe Coupling, 1/2" Pipe Thread	1	.3
13	6D-716	Flow Restrictor, 1/16" Orifice	2	.3
14	4J-539	Hose, 84"	2	3.5
15	2D-449	Hose, 62"	2	2.8
16	1J-131	90° Swivel Fitting (Used with Prince Cylinders)	1	.3

CYLINDER IDENTIFICATION

1. Determine style of cylinder. Welded construction or tie rod construction. Tie rod construction has four long bolts running the length of the cylinder to hold the cylinder together. Welded construction has base welded to the tube.
2. Determine size of cylinder - completely retract cylinder measure distance from center of one attaching pin to other attaching pin. Measure outside diameter of tube and subtract $3/8''$ or $1/2''$ to get even dimension. The cylinder diameter is in even sizes - $3''$, $3-1/2''$, $4''$. So a tube that measures $3-7/8''$ O.D. is a $3-1/2''$ cylinder. Series cylinders are an exception, and are usually sized in $1/4''$ increments such as $5''$, $4-3/4''$, $4-1/2''$, etc.
3. Measure rod size.
4. Look in index of this book to find machine used and location of cylinder on machine. Turn to the particular cylinder and find cylinder type. Check cylinder size, retracted length and rod size. When all these items check, the cylinder is identified.

Study cylinder construction, these drawings reflect as accurately as possible the actual construction of the cylinder.

HYDRAULIC CYLINDER USAGE INDEX

	<u>Page No.</u>	
6D-138	Wing Raising on STS & STR Harrows - - - - -	3
6D-724	Wing Raising on HSD-360 Harrow	
	Machine Raising WP-108, WPW-128 Pulverizer - - - - -	4
9D-137	Folding Toolbar BRSF & BSFF Ro-Crop Cultivator	
	Folding Toolbar BRCF-6402, BRCF-8302, BRCF-8402	
	Wing Raising on Soil Builder (15 & 17 Shank)	
	Folding Toolbar BCFF Ro-Crop Cultivator	
	Machine Raising X-108 Pulverizer - - - - -	5
9D-282	Hitch Cylinder WM-2601 & 3001, WM-2602 & 3002	
	Machine Raising Kit on SST-961, SST-1201 & SSLFT-120-	6
9D-327	Folding Toolbar BRSF-12302 Ro-Crop Cultivator - - - - -	7
9D-524	Wing Raising WM-2601	
	Machine Raising WM-2601 Beginning 8/1/76, WM-3002	
	Machine Raising on ML Mulcher	
	Wing Raising WP-108, WPW-128 Pulverizer	
	Machine Raising XL-144 Pulverizers	
	Wing Raising (SG-24 to SG-30) Soil Groomer - - - - -	8 - 9
9D-731	Wing Raising WM-3001, WM-3002 Mulcher	
	Machine Raising WM-3001, Beginning 8/1/76, WM-3002	
	Machine Raising WM-360 - - - - -	10
9D-762	SST-144 Seeder - - - - -	11
2J-674	Machine Raising on Soil Builder (5-11 Shank) - - - - -	12 - 13
3J-567	Hitch Cylinder WM-360 - - - - -	14
3J-568	Wing Raising WM-360 - - - - -	15
3J-603	Tooth Depth Control WM-360 - - - - -	16
	Machine Raising on Flail Shredder	
3J-815	Machine Raising on FCF Field Cultivator - - - - -	17 - 18
3J-816	Machine Raising on FCF Field Cultivator - - - - -	19 - 20
3J-817	Machine Raising on FCF Field Cultivator - - - - -	21 - 22
3J-818	Wing Raising on FCF Field Cultivator - - - - -	23
4J-657	Wing Raising on Cultivator-Incorporator - - - - -	24
4J-658	Machine Raising on Cultivator-Incorporator	
	Machine Raising on (SG-24 to SG-30) Soil Groomer - - -	25
4J-659	Machine Raising on Cultivator-Incorporator	
	Machine Raising on (SG-24 to SG-30) Soil Groomer- - -	26
4J-660	Machine Raising on Cultivator-Incorporator	
	Machine Raising on (SG-24 to SG-30) Soil Groomer- - -	27
4J-661	Machine Raising on Cultivator-Incorporator	
	Machine Raising on (SG-12 to SG-30 & SGH-24) Soil Groomer (Except SG-24) - - - - -	28
5J-128	Machine Raising on Soil Builder (13, 15 & 17 Shank) -	29
5J-280	Machine Raising on TPW Pulverizers - - - - -	30 - 31
	Hydraulic Coultler Depth Control Option for Soil Builder (7-11 Shank)	
5J-830	Wing Raising on (XLW-120 & XLW-144) Pulverizer - - -	32
5J-835	Same as 9D-524 BIW with Side Ports	
	Folding Tool Bar BCFF-1230 Ro-Crop Cultivator	
	Wing Raising WM-2602 Mulcher	
	Wing Raising (SG-18 to SG-21) Soil Groomer - - - - -	8 - 9
6J-11	Machine Raising on (SG-12 to SG-21) Soil Groomer- - -	33
6J-12	Machine Raising on (SG-12 to SG-30 & SGH-24) Soil Groomer	34
6J-216	Wing Raising on (XLW-84 to XLW-108) Pulverizer - - -	35
6J-811	Wing Raising on (XW-84 to XW-108) Pulverizer Wings- -	36
6J-812	Wing Raising on (XW-60 & XW-72) Pulverizer Wings - -	37

HYDRAULIC CYLINDER USAGE INDEX (cont'd)

	<u>Page No.</u>
7J-194 Machine Raising on (SGH-18 & SGH-21) Soil Groomer - - -	38
7J-195 Machine Raising on (SGH-18 & SGH-21) Soil Groomer - - -	39
7J-680 Machine Raising on Extended Frame Soil Builders - - -	40
8J-782 Machine Raising on (SG-121 to SG-211) Soil Groomers, after 1-25-88 - - - - -	41
8J-783 Machine Raising on (SG-121 to SG-301 & SGH-241) Soil Groomers, after 1-25-88 - - - - -	42
8J-784 Machine Raising on (SG-121 to SG-301 & SGH-241, except SG-241) Soil Groomers, after 1-25-88. - - - - -	43
Machine Raising, Cultivator-Incorporator after 1-25-88.	

<u>Code Letter</u>	<u>Manufacturer</u>
BIW	Brillion Iron Works
G	Hydraulic Gear
L	Lantex
P	Prince

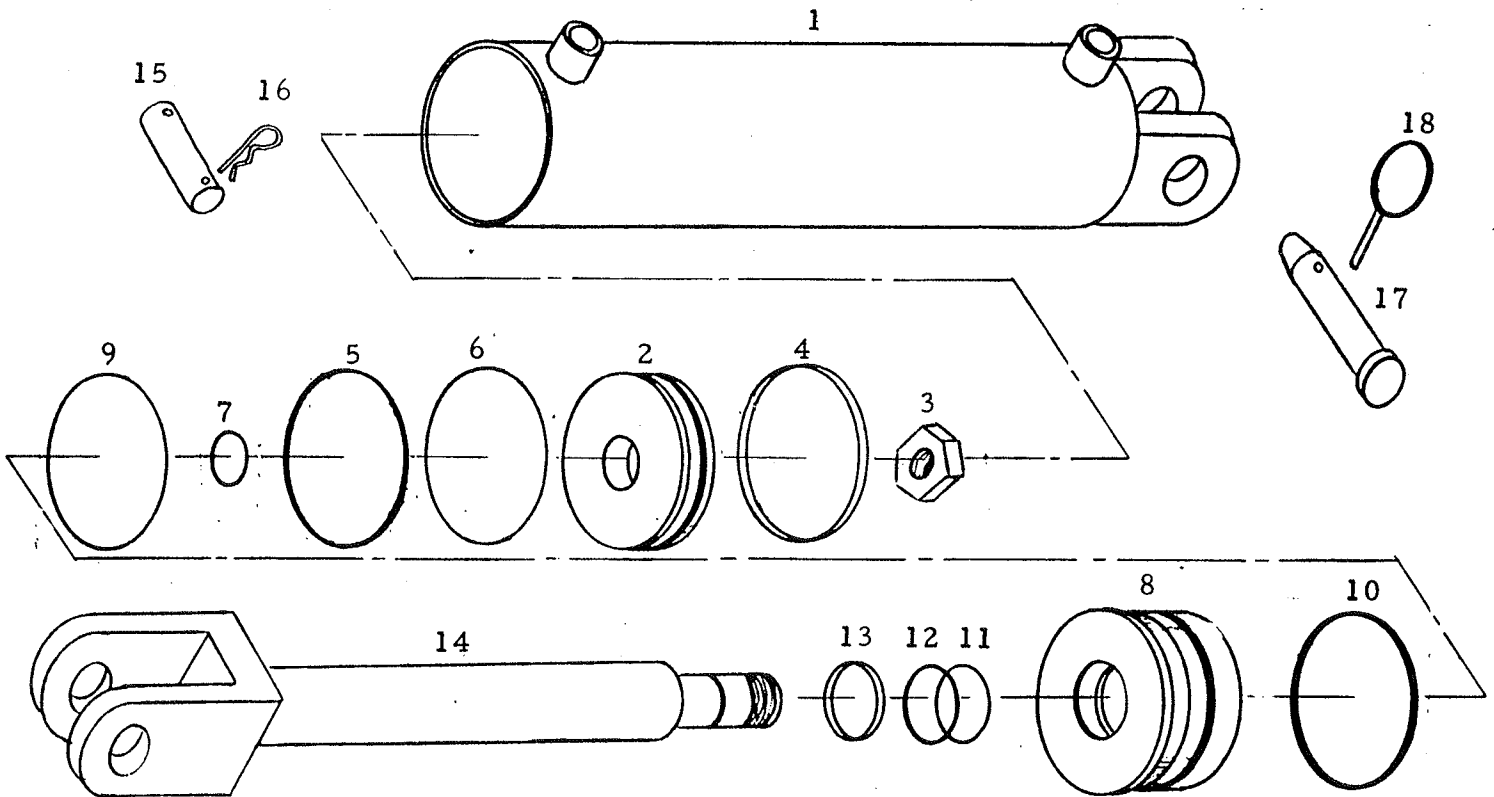
3J815 L Hydraulic Cylinder 4-1/2 x 8

Lantex #X4250-TM Painted Green

1-1/2 Rod Dia., 20-1/4 Retracted, 28-1/4 Extended

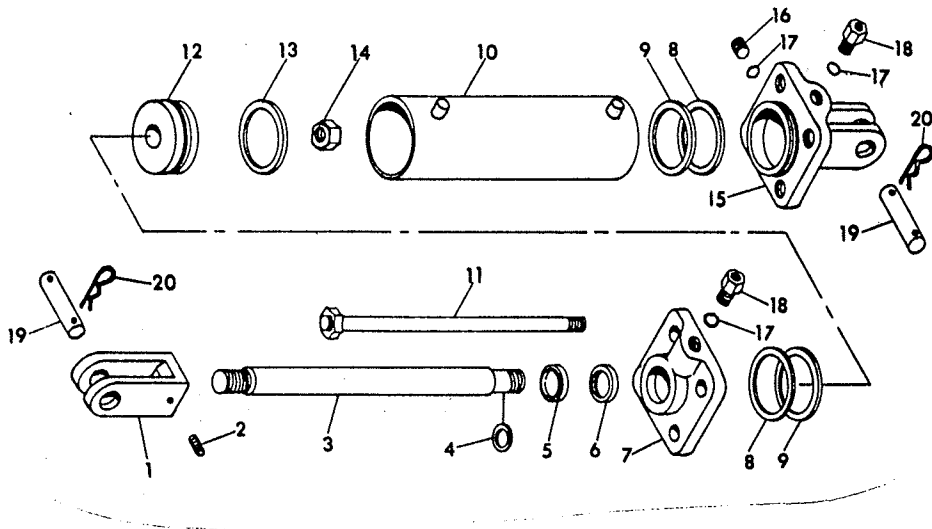
Item	Part No.	Description	Qty.
1	5J-56	Barrel Assembly	1
2	4J-780	Piston	1
3	5J-39	Locknut	1
*4	NSS	Wear Strip	1
*5	NSS	Piston Seal	1
*6	NSS	O-Ring	1
*7	NSS	Rod Static Seal	1
8	4J-779	Gland	1
*9	NSS	Gland Static Seal	1
*10	NSS	Lockwire	1
*11	NSS	Rod Seal	1
*12	NSS	Back-Up Ring	1
*13	NSS	Rod Wiper	1
14	4J-785	Rod Assembly	1
15	5J-650	Cylinder Pin	1
16	1D-594	Hairpin Cotter	2
17	5D-155	Clevis Pin	1
18	5D-110	Klik Pin	1
*	4J-786	Seal Kit (Items Marked "**")	1

NSS - Not Serviced Separately



3J-815 P Hydraulic Cylinder 4-1/2 x 8
 Prince #AA-39 Painted Green
 2" Rod Dia., 20-1/4" Retracted, 28-1/4" Extended

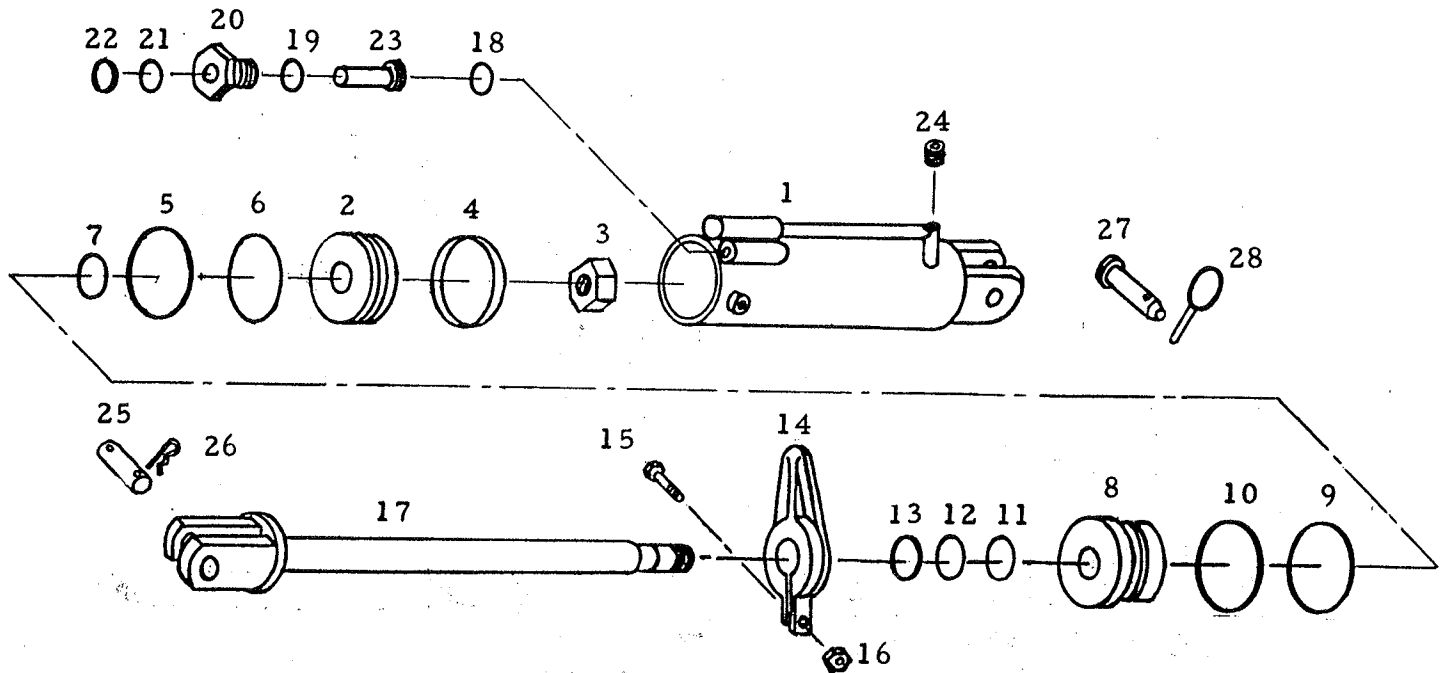
Item	Part No.	Description	Qty.
1	6J-291	Rod End Clevis	1
2	6J-345	Set Screw, 3/8-24 NF x 1/2	1
3	6J-287	Piston Rod	1
*4	NSS	O-Ring	1
*5	NSS	Rod Wiper	1
*6	NSS	U-Cup	1
7	7J-58	Gland (With Port Requiring O-Ring Fitting)	1
	5J-167	Gland (With Pipe Thread)	
		When this number is ordered you will receive (1) 7J-58, (1) 7J-24 and (1) 7J-26	
*8	NSS	Back Up Washer	2
*9	NSS	O-Ring	2
10	6J-288	Tube	1
11	6J-289	Tie Rod With Nut	4
12	6J-290	Piston	1
*13	NSS	Urethane Seal Assy.	1
14	1J-951	Locknut 1-1/4" - 12 NF	1
15	7J-59	Base (With Ports Requiring O-Ring Fittings)	1
	5J-166	Base (With Pipe Thread)	
		When this number is ordered you will receive (1) 7J59, (2) 7J-24, (1) 7J-25 and (1) 7J-26	
16	7J-25	Steel Plug, O-Ring Type (Without O-Ring)	1
	9C-853	Pipe Plug (Used Prior to 8/83)	
17	7J-24	O-Ring (Not a Part of 7J-25 & 7J-26)	3
18	7J-26	Adaptor (Without O-Ring)	2
19	7J-67	Clevis Pin 1" Dia. x 4" Long	2
20	1D-594	Hairpin Cotter	4
*	6J-292	PMCK-AA-39 Seal Kit	
		NSS - Not Serviced Separately	



3J816 L Hydraulic Cylinder 4-1/2 x 8
 Lantex #X4249-TM Painted Green
 1-1/2 Rod Dia., 20-1/4 Retracted, 28-1/4 Extended

Item	Part No.	Description	Qty.
1	4J-784	Barrel Assembly	1
2	4J-780	Piston	1
3	5J-39	Locknut	1
*4	NSS	Wear Ring	1
*5	NSS	Piston Seal	1
*6	NSS	O-Ring	1
*7	NSS	Rod Static Seal	1
8	4J-779	Gland	1
*9	NSS	Gland Static Seal	1
*10	NSS	Lockwire	1
*11	NSS	Rod Seal	1
*12	NSS	Back-Up Ring	1
*13	NSS	Rod Wiper	1
14	4J-781	Actuator Arm	1
15	7C-381	Capscrew	1
16	1C-385	Hex Nut	1
17	4J-785	Rod Assembly	1
**18	NSS	O-Ring	1
**19	NSS	O-Ring	1
20	4J-783	Cap	1
**21	NSS	O-Ring	1
**22	NSS	Wiper	1
23	4J-782	Spool	1
24	4J-788	Pipe Plug	1
25	5J-650	Cylinder Pin	1
26	1D-594	Hairpin Cotter	2
27	5D-155	Clevis Pin	1
28	5D-110	Klik Pin	1
*	4J-786	Seal Kit (Items marked "**")	
**	4J-787	Depth Stop Seal Kit (Items marked "***)	

NSS - Not Serviced Separately



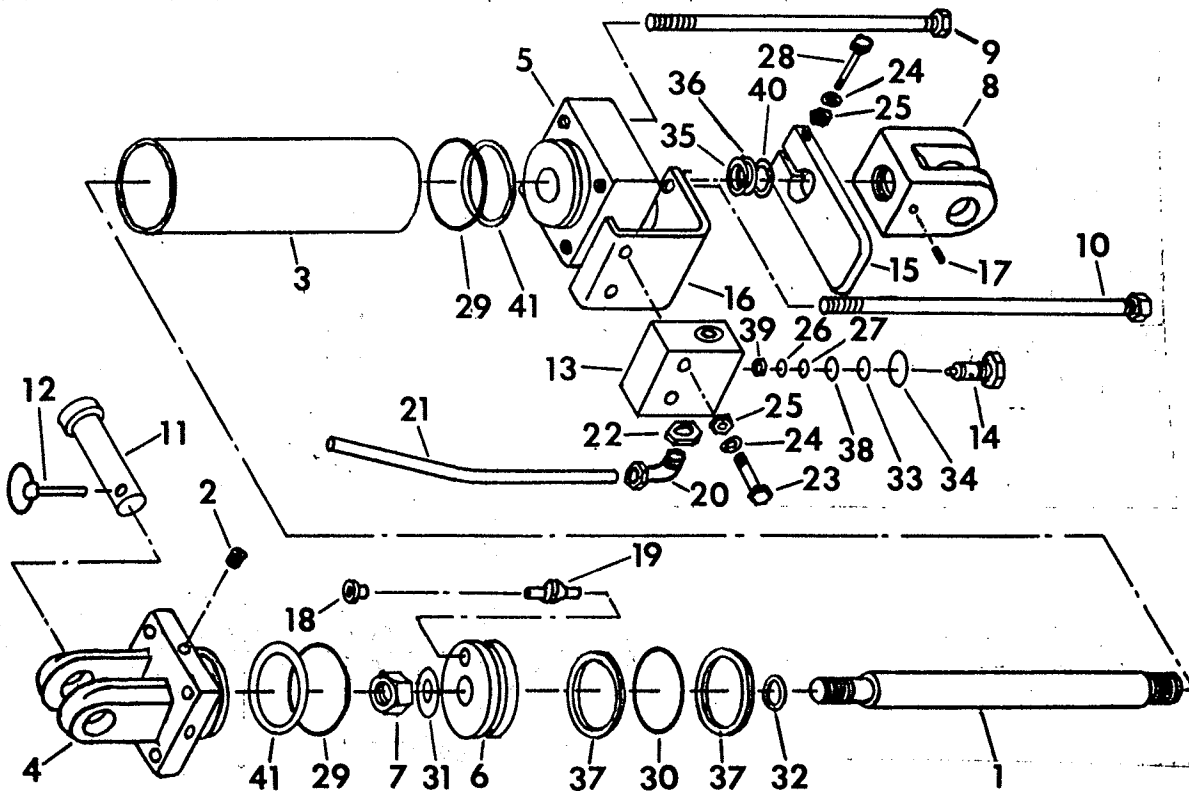
3J-816 P Hydraulic Cylinder 4-1/2 x 8

Prince #AB-19 Painted Green

2" Rod Dia., 20-1/4" Retracted, 28-1/4" Extended

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	6J-293	Piston Rod	1	24	1C-362	Lock Washer, 5/16	3
2	9C-853	Pipe Plug	2	25	1C-385	Nut, 5/16-18	3
3	5J-165	Tube	1	*26	NSS	O-Ring	1
4	5J-166	Butt Clevis	1	*27	NSS	BU-Washer	1
5	5J-167	Gland	1	28	1J-565	Cap Screw, 5/16-18 x 2-1/2	1
6	5J-168	Piston	1	*29	NSS	O-Ring	2
7	1J-951	Lock Nut 1-1/4-12	1	*30	NSS	O-Ring	1
8	1J-72	Clevis Assy. (Includes Item 17)	1	31	5J-169	Washer	1
9	5J-161	Tie Rod	2	*32	NSS	O-Ring	1
10	6J-295	Tie Rod	2	*33	NSS	O-Ring	1
11	5D-155	Clevis Pin	2	*34	NSS	O-Ring	1
12	5D-110	Klik Pin	2	*35	NSS	O-Ring	1
13	6J-296	Valve Block	1	*36	NSS	BU-Washer	1
14	3J-724	Valve Assy. (Includes items 26, 27, 33, 34, 38, 39)	1	*37	NSS	BU-Washer	2
15	6J-297	Striker Plate	1	*38	NSS	BU-Washer	1
16	6J-298	Mounting Plate	1	*39	NSS	U-Cup	1
17	6J-345	Set Screw, 3/8-24 x 1/2 (Included with Item 8)	1	*40	NSS	Wiper	1
18	5J-153	Seat	1	*41	NSS	BU-Washer	2
19	5J-154	Poppet	1	*	6J-303	PMCK-AB-19 Seal Kit (Items marked "**")	1
20	6J-300	Tube Fitting	2				
21	6J-301	Manifold Tube	1				
22	6J-302	Seal Nut	2				
23	9D-797	Cap Screw 5/16-18 x 2-1/4	2				

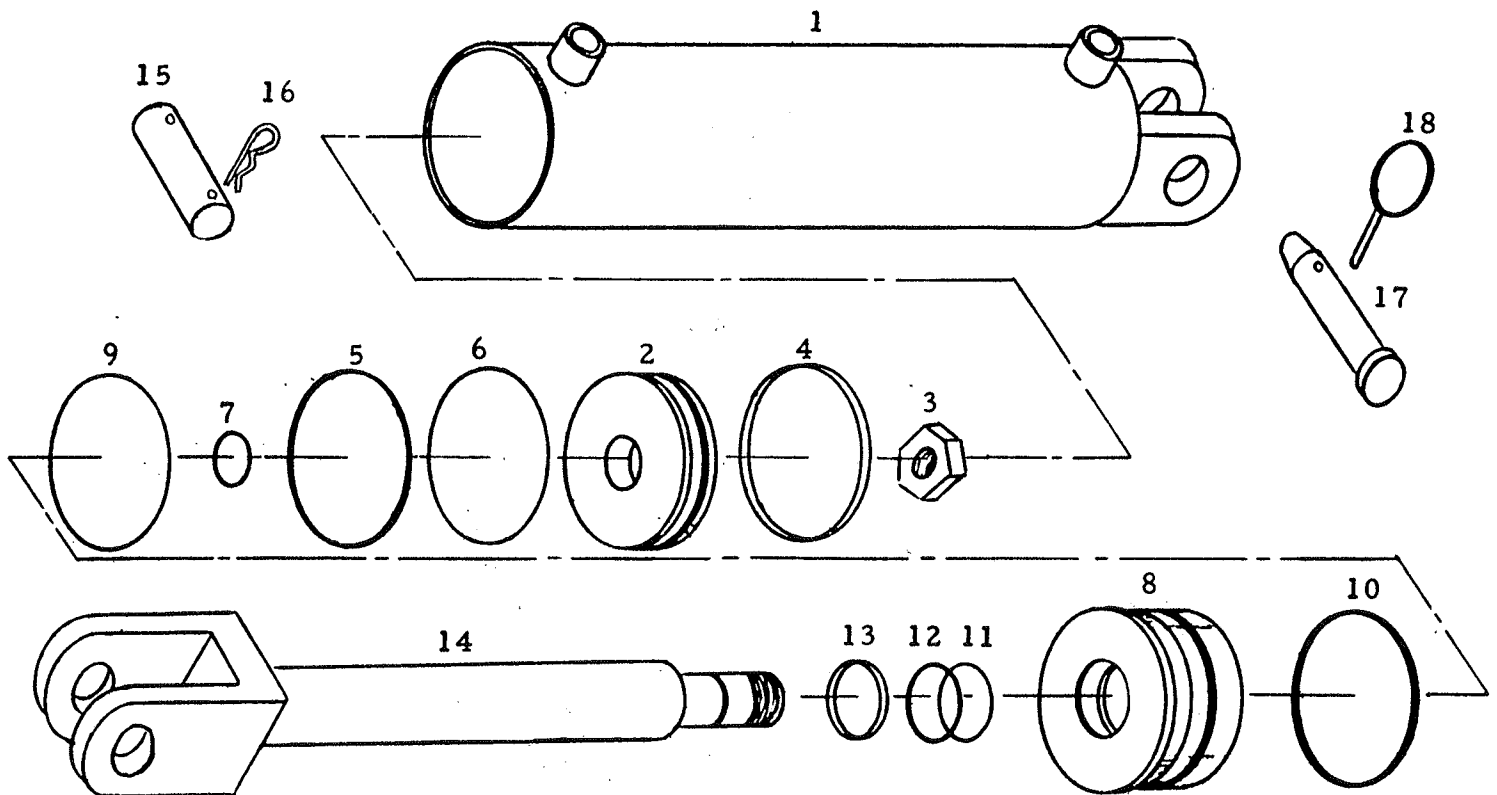
NSS - Not Serviced
Separately



3J817 L Hydraulic Cylinder 4-3/4 x 8
 Lantex #4261-TM Painted Green
 1-1/2 Rod Dia., 20-1/4 Retracted, 28-1/4 Extended

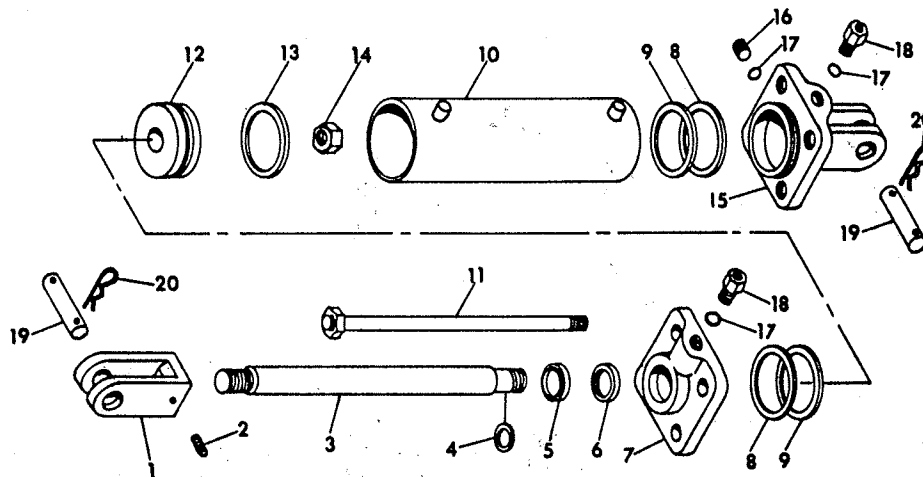
Item	Part No.	Description	Qty.
1	4J-885	Barrel Assembly	1
2	4J-886	Piston	1
3	5J-39	Locknut	1
*4	NSS	Wear Ring	1
*5	NSS	Piston Seal	1
*6	NSS	O-Ring	1
*7	NSS	Rod Static Seal	1
8	4J-887	Gland	1
*9	NSS	Gland Static Seal	1
*10	NSS	Lockwire	1
*11	NSS	Rod Seal	1
*12	NSS	Back-Up Ring	1
*13	NSS	Rod Wiper	1
14	4J-785	Rod Assembly	1
15	5J-650	Cylinder Pin	1
16	1D594	Hairpin Cotter	2
17	5D-155	Clevis Pin	1
18	5D-110	Klik Pin	1
*	4J-888	Seal Kit (Items marked "*")	1

NSS - Not Serviced Separately



3J-817 P Hydraulic Cylinder 4-3/4 x 8
 Prince #AA-38 Painted Green
 1-1/2" Rod Dia., 20-1/4" Retracted, 28-1/4" Extended

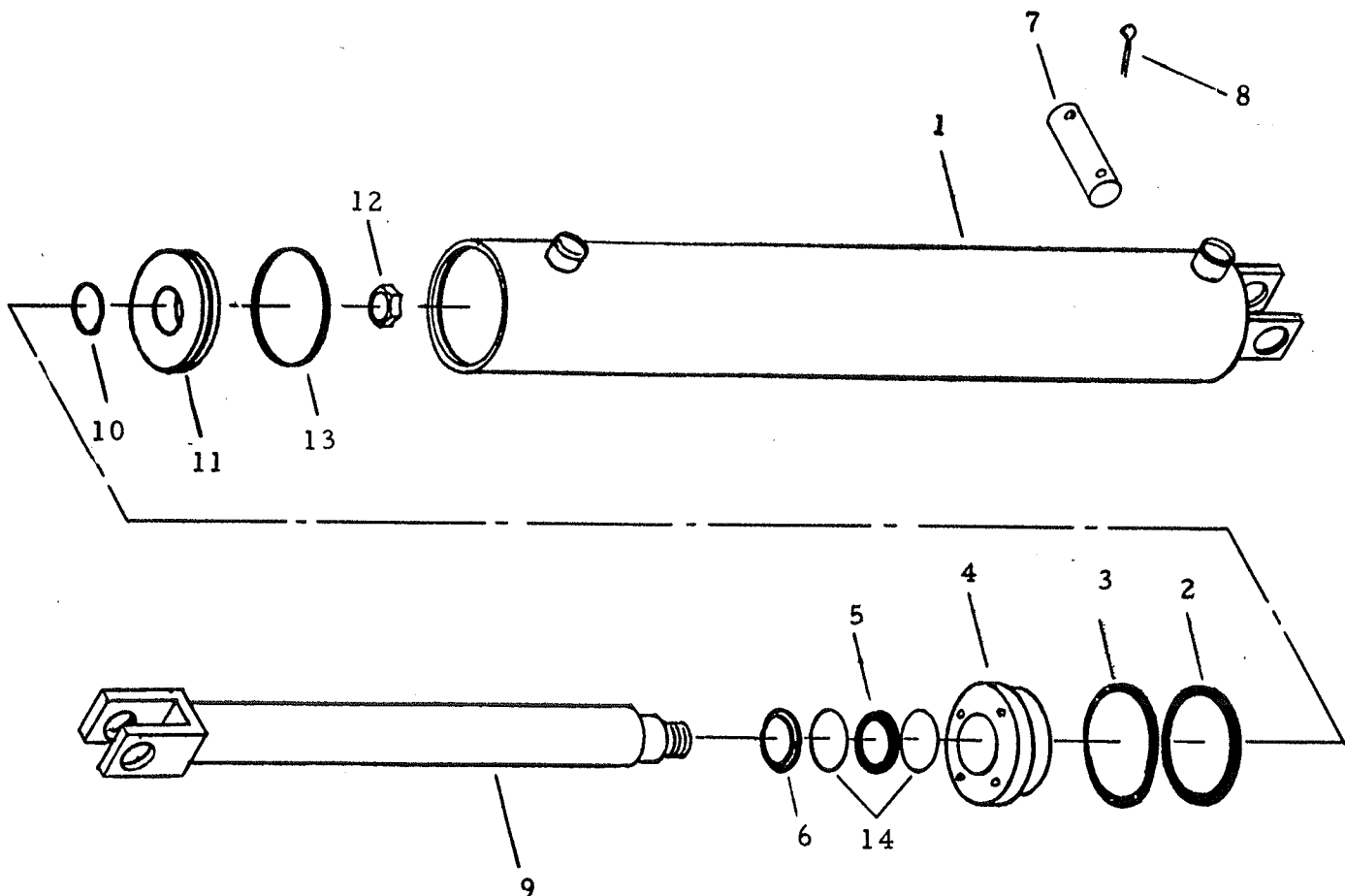
Item	Part No.	Description	Qty.
1	6J-291	Rod End Clevis	1
2	6J-345	Set Screw, 3/8-24 NF x 1/2	1
3	6J-304	Piston Rod	1
*4	NSS	O-Ring	1
*5	NSS	Rod Wiper	1
*6	NSS	U-Cup	1
7	7J-56	Gland (With Port Requiring O-Ring Fitting)	1
	5J-159	Gland (With Pipe Thread)	
		When this number is ordered you will receive (1) 7J-56, (1) 7J-24 and (1) 7J-26	
*8	NSS	Back Up Washer	2
*9	NSS	O-Ring	2
10	6J-305	Tube	1
11	6J-289	Tie Rod With Nut	4
12	6J-307	Piston	1
*13	NSS	Urethane Seal Assy.	1
14	9C-223	Locknut 1"-14 NF	1
15	7J-57	Base (With Ports Requiring O-Ring Fittings)	1
	5J-158	Base (With Pipe Thread)	
		When this number is ordered you will receive (1) 7J-57, (2) 7J-24, (1) 7J-25 and (1) 7J-26	
16	7J-25	Steel Plug, O-Ring Type (Without O-Ring)	1
	9C-853	Pipe Plug (Used Prior to 8/83)	
17	7J-24	O-Ring (Not a Part of 7J-25 & 7J-26)	3
18	7J-26	Adaptor (Without O-Ring)	2
19	7J-67	Clevis Pin 1" Dia. x 4" Long	2
20	1D-594	Hairpin Cotter	4
*	6J-308	PMCK-AA-38 Seal Kit NSS - Not Serviced Separately	



3J-818 G Hydraulic Cylinder 4-1/2 x 16
 Hydraulic Gear #4516-01 Painted Red
 1-3/4 Dia. Rod, 26-1/4 Retracted, 42-1/4 Extended Length

Item	Part No.	Description	Qty.
1	5J-136	Cylinder Barrel	1
*2	NSS	O Ring	1
*3	NSS	Back-Up Ring	1
4	5J-137	Packing Gland	1
*5	NSS	Rod Seal	1
*6	NSS	Wiper	1
7	3J-498	Cylinder Pin	1
8	1C-869	Cotter Pin	2
9	5J-138	Rod Assembly	1
*10	NSS	O Ring	1
11	5J-139	Piston	1
12	1J-951	Hex Nut, 1-1/4 - 12 N.F. Lock	1
*13	NSS	T-Seal	1
*14	NSS	Back-Up Ring	2
*	5J-140	Seal Kit (Items Marked "*")	

NSS - Not Serviced Separately



I N D E X

Breakdown of hydraulic cylinders is in special insert section from book 2J-124, pages 1, 2, and 17 through 23; and is located after page 27.

<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>	<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>
1B-166	3	4	2C-864	23	—
	5	14	3C-127	5	9
	9	7	3C-350	19	12
	19	32	3C-491	9	5
	21	7	4C-446	9	14
1C-109	5	11	4C-856	5	19
	11	13	5C-100	7	6
	17	5		17	18
	19	18		19	15
	21	10			
1C-179	25	10	5C-392	23	10
1C-314	25	9	5C-460	3	3
1C-330	19	17		5	16
1C-362	5	8	5C-479	7	17
	20 (2J-124)	24		17	8
1C-385	5	7	5C-480	7	16
	19 (2J-124)	16		17	9
	20 (2J-124)	25			
1C-390	5	12	5C-904	19	7
	11	14	5C-907	19	10
	17	6	5C-908	19	13
	19	19	5C-909	19	11
	21	11	5C-910	19	4
1C-392	3	5	5C-911	19	9
	5	15	5C-912	19	8
	9	8	5C-913	7	20
	19	31		17	12
	21	8		19	6
1C-788	5	20	5C-914	7	19
	11	16		17	11
	7	23		19	5
	9	15			
	17	15			
	19	26			
1C-869	23 (2J-124)	8	5C-916	19	14
1C-871	7	21	6C-406	15	6
	17	13	7C-381	19 (2J-124)	15

<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>	<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>
7C-414	7	27	5D-142	11	12
	9	4	5D-155	17 (2J-124)	17
	11	17		18 (2J-124)	18
	13	6		19 (2J-124)	27
	17	19		20 (2J-124)	11
	19	20		21 (2J-124)	17
7C-762	7	8		22 (2J-124)	18
7C-763	7	9	5D-871	23	13
9C-59	9	6	6D-37	5	7
9C-134	23	12	6D-284	7	22
9C-223	22 (2J-124)	2		17	14
9C-434	7	13	6D-301	9	18
9C-435	7	12	6D-312	7	3
9C-853	18 (2J-124)	14		17	17
	20 (2J-124)	2	6D-336	7	18
	22 (2J-124)	14		17	10
1D-237	17	4	6D-337	7	24
	23	16		17	16
1D-594	17 (2J-124)	16	6D-338	7	15
	19 (2J-124)	26		17	7
	21 (2J-124)	16	6D-716	27	13
1D-807	7	10	7D-583	9	3
1D-808	7	11	8D-99	11	15
2D-449	27	15		19	25
2D-799	5	18	8D-219	23	2
	9	12	8D-220	23	3
	19	27	8D-221	23	4
2D-894	11	7	8D-223	23	14
	15	4	8D-301	25	8
3D-961	9	16	8D-302	23	15
4D-373	19	33	8D-337	25	4
4D-414	13	4	8D-349	23	6
	11	5	8D-734	9	2
4D-909	11	18	9D-19	23	11
4D-979	27	5			
5D-51	5	10			
	21	9			
5D-110	17 (2J-124)	18			
	18 (2J-124)	17			
	19 (2J-124)	28			
	20 (2J-124)	12			
	21 (2J-124)	18			
	22 (2J-124)	17			

<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>	<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>
9D-109	9	13	3J-880	5	5
9D-283	5	6	3J-916	21	14
9D-299	11	6	4J-316	11	2
9D-797	20 (2J-124)	23	4J-317	11	1
9D-851	3	6	4J-318	13	2
1J-72	20 (2J-124)	8	4J-319	13	1
1J-131	27	16	4J-320	21	5
1J-308	27	9	4J-321	21	12
1J-486	21	15	4J-350	19	1
1J-565	20 (2J-124)	28	4J-351	19	2
1J-722	5	4	4J-366	7	2
1J-910	3	10	4J-369	17	1
	13	7	4J-370	17	2
	11	19	4J-378	19	3
1J-951	18 (2J-124)	2	4J-385	7	1
	20 (2J-124)	7	4J-386	7	25
	23 (2J-124)	12	4J-391	3	2
2J-143	23	1	4J-404	9	17
2J-430	3	9	4J-409	19	21
2J-431	3	8	4J-410	7	5
2J-569	27	6		19	22
2J-605	25	5	4J-411	5	13
2J-858	5	2		19	30
3J-274	20 (2J-124)	14		21	6
3J-498	23 (2J-124)	7	4J-412	19	29
3J-512	15	3	4J-413	19	24
3J-675	3	7	4J-416	19	23
3J-678	5	21	4J-419	19	16
3J-815	27	2	4J-421	19	28
	17 (2J-124)	--	4J-424	21	1
	18 (2J-124)	--	4J-427	21	2
3J-816	27	1	4J-429	21	3
	19 (2J-124)	--	4J-431	21	4
	20 (2J-124)	--	4J-433	11	3
3J-817	27	3	4J-438	13	3
	21 (2J-124)	--	4J-440	13	4
	22 (2J-124)	--		11	4
3J-818	27	4			
	23 (2J-124)	--			

<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>	<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>
4J-453	3	1	4J-780	17 (2J-124)	2
4J-480	7	--		19 (2J-124)	2
4J-483	9	10	4J-781	19 (2J-124)	14
4J-485	5	3	4J-782	19 (2J-124)	23
4J-488	17	3	4J-783	19 (2J-124)	20
4J-491	9	11	4J-784	19 (2J-124)	1
4J-494	11	10	4J-785	17 (2J-124)	14
4J-510	5	1		19 (2J-124)	17
4J-527	23	9		21 (2J-124)	14
4J-528	23	7	4J-786	17 (2J-124)	--
4J-529	23	8		19 (2J-124)	--
4J-530	9	1	4J-787	19 (2J-124)	--
4J-534	15	1	4J-788	19 (2J-124)	24
4J-536	27	11	4J-807	25	7
4J-537	27	7	4J-808	25	6
4J-538	27	8	4J-809	25	1
4J-539	27	14	4J-810	25	2
4J-540	27	10	4J-811	25	3
4J-541	27	10	4J-867	5	5
4J-542	5	17	4J-885	21 (2J-124)	1
4J-548	11	8	4J-886	21 (2J-124)	2
	15	5	4J-887	21 (2J-124)	8
4J-549	15	7	4J-888	21 (2J-124)	--
4J-550	15	2	5J-39	17 (2J-124)	3
4J-551	7	4		19 (2J-124)	3
4J-552	9	9		21 (2J-124)	3
4J-553	27	12	5J-56	17 (2J-124)	1
4J-554	7	14	5J-102	11	11
4J-564	7	26	5J-136	23 (2J-124)	1
4J-565	7	7	5J-137	23 (2J-124)	4
4J-566	7	--	5J-138	23 (2J-124)	9
4J-575	11	9	5J-139	23 (2J-124)	11
4J-578	23	5	5J-140	23 (2J-124)	--
4J-779	17 (2J-124)	8	5J-153	20 (2J-124)	18
	19 (2J-124)	8	5J-154	20 (2J-124)	19
			5J-158	22 (2J-124)	1
			5J-159	22 (2J-124)	15
			5J-161	20 (2J-124)	9

<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>	<u>Part Number</u>	<u>Page</u>	<u>Index Number</u>
5J-165	20 (2J-124)	3	6J-345	18 (2J-124)	19
5J-166	18 (2J-124)	1		20 (2J-124)	17
	20 (2J-124)	4		22 (2J-124)	19
5J-167	18 (2J-124)	15			
	20 (2J-124)	5			
5J-168	20 (2J-124)	6			
5J-169	20 (2J-124)	31			
5J-188	11	20			
5J-189	13	8			
5J-336	7	28			
5J-358	21	13			
	23	7			
5J-359	21	16			
5J-650	17 (2J-124)	15			
	19 (2J-124)	25			
	21 (2J-124)	15			
6J-287	18 (2J-124)	6			
6J-288	18 (2J-124)	7			
6J-289	18 (2J-124)	11			
	22 (2J-124)	11			
6J-290	18 (2J-124)	3			
6J-291	18 (2J-124)	16			
	22 (2J-124)	16			
6J-292	18 (2J-124)	--			
6J-293	20 (2J-124)	1			
6J-295	20 (2J-124)	10			
6J-296	20 (2J-124)	13			
6J-297	20 (2J-124)	15			
6J-298	20 (2J-124)	16			
6J-300	20 (2J-124)	20			
6J-301	20 (2J-124)	21			
6J-302	20 (2J-124)	22			
6J-303	20 (2J-124)	--			
6J-304	22 (2J-124)	6			
6J-305	22 (2J-124)	10			
6J-307	22 (2J-124)	3			
6J-308	22 (2J-124)	--			