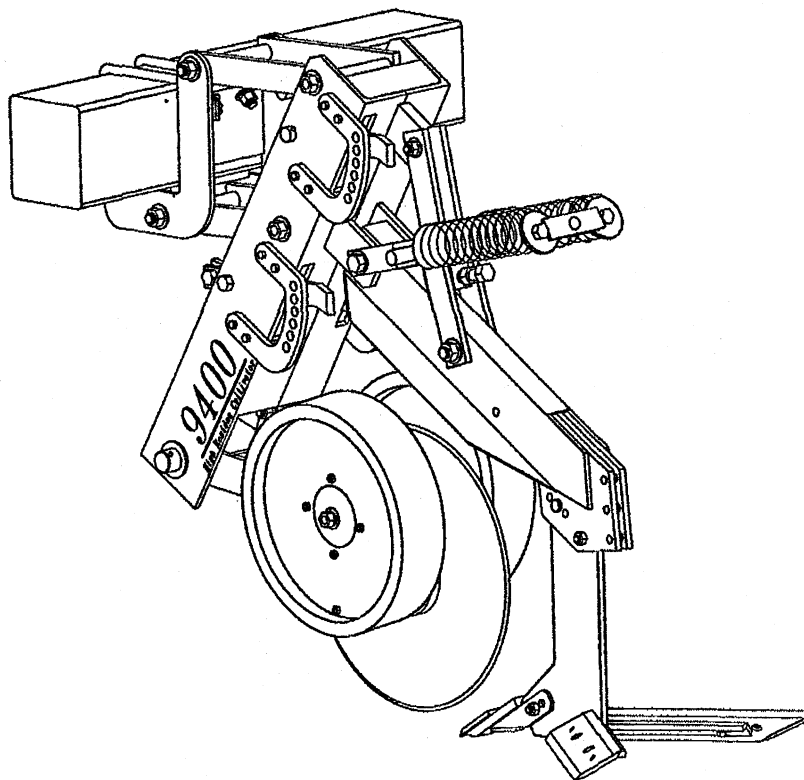




MODEL 9400 CULTIVATOR



Installation and Parts Manual

Remlinger Manufacturing Company, Inc.
16394 U. S. 224 • P.O. Box 299 • Kalida, Ohio 45853
Toll Free: 800.537.7370

www.remlingermfg.com

9400 HIGH RESIDUE CULTIVATOR

Thank you for purchasing a **9400 HIGH RESIDUE CULTIVATOR**, the finest high residue cultivator on the market today. The 9400 was designed at the request of farmers like yourself with a need to cultivate through adverse conditions while still maintaining a high amount of residue cover on the surface. This required that the design include a narrow shank, with flat, reversible share type sweeps. The residue cutting coulter was placed as close to the sweep as possible for minimum plugging and superior rock protection. Dual depth wheels were placed in the optimum position of coulter to ground contact for trash holding ability and still kept at a minimum distance from the sweep for accurate depth control. The high clearance shank is a trussed design for high strength while still offering room for trash flow.

Best of all, you can leave your toolbox at home. The major in-field adjustments can all be adjusted with only one tool, which is supplied and stored on the cultivator itself. No more digging through toolboxes! No lost wrenches in the field! You just remove the tool from its holder, slip it on the adjusting lever, reposition to the desired setting, and the spring loaded lever will do the rest. Cultivator adjusting has never been so easy!

This machine is designed to cultivate for maximum weed kill with minimum disturbance of surface residue for high erosion control. The cultivator kills by cutting the roots of the weeds but does not roll the top soil. This not only maintains the surface residue, but also allows for high speed cultivation with minimum shielding. The lower shank design also allows for pitch adjustment of the shares and/or the point itself. This arrangement is fashioned in a shear style so that when you catch the big one, the bolt is what gives, not the cultivator.

The options on this machine were also made with the farmer in mind. Open top rotary hoe and corrugated shield assemblies attach and detach with only one bolt. These shields are fully adjustable, spring loaded, and can also be flipped up out of the way. Anhydrous ammonia shanks or liquid fertilizer tubes also make this machine much more than just an ordinary cultivator.

We believe that we have designed a machine with enough strength and flexibility to carry you into the next phase of farming, the management of your residue. Try it out and we bet that you will agree.

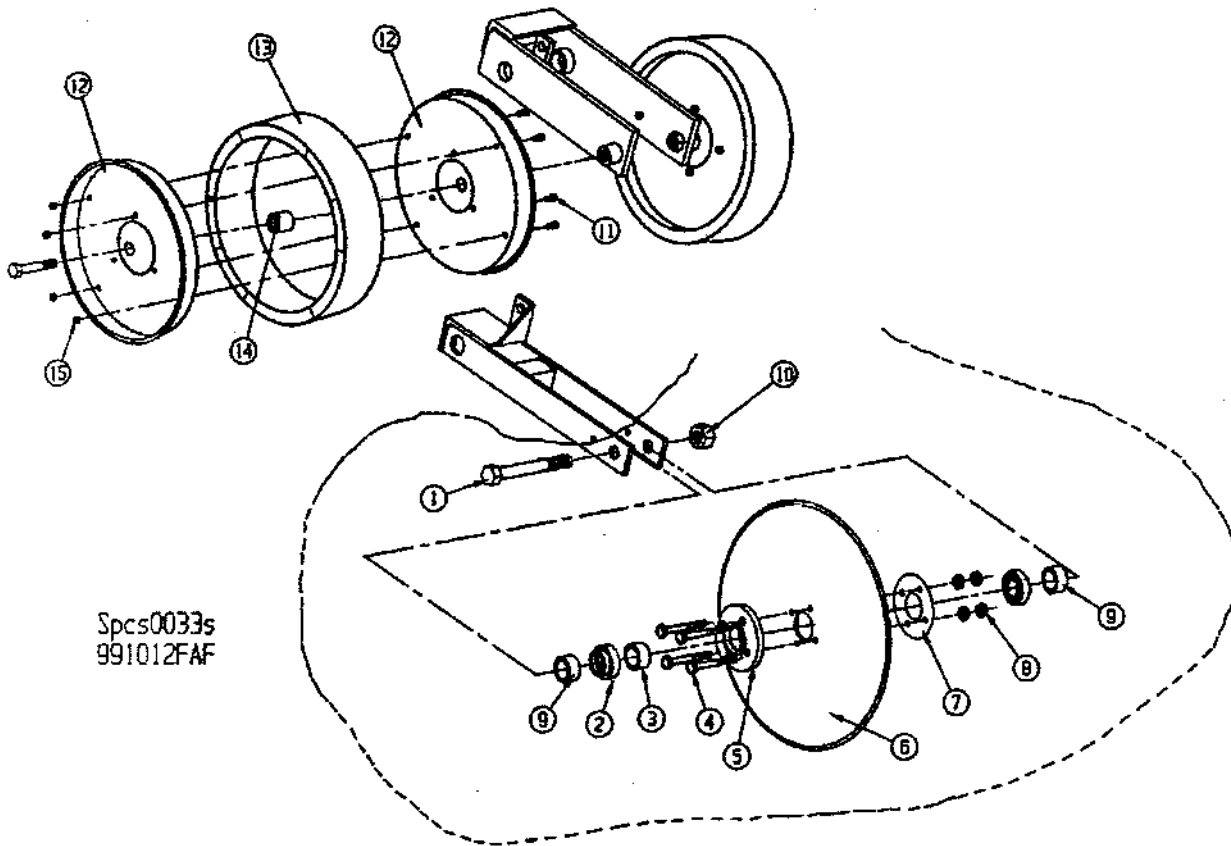
Read and study operator's manual carefully to learn how to safely service and operate your machine. Failure to do so could cause personal injury or equipment damage.

For your convenience write model and serial number in area provided below. Serial number is located on side end of tool bar.

Model Number : _____ Serial Number: _____

Date of Purchase: _____

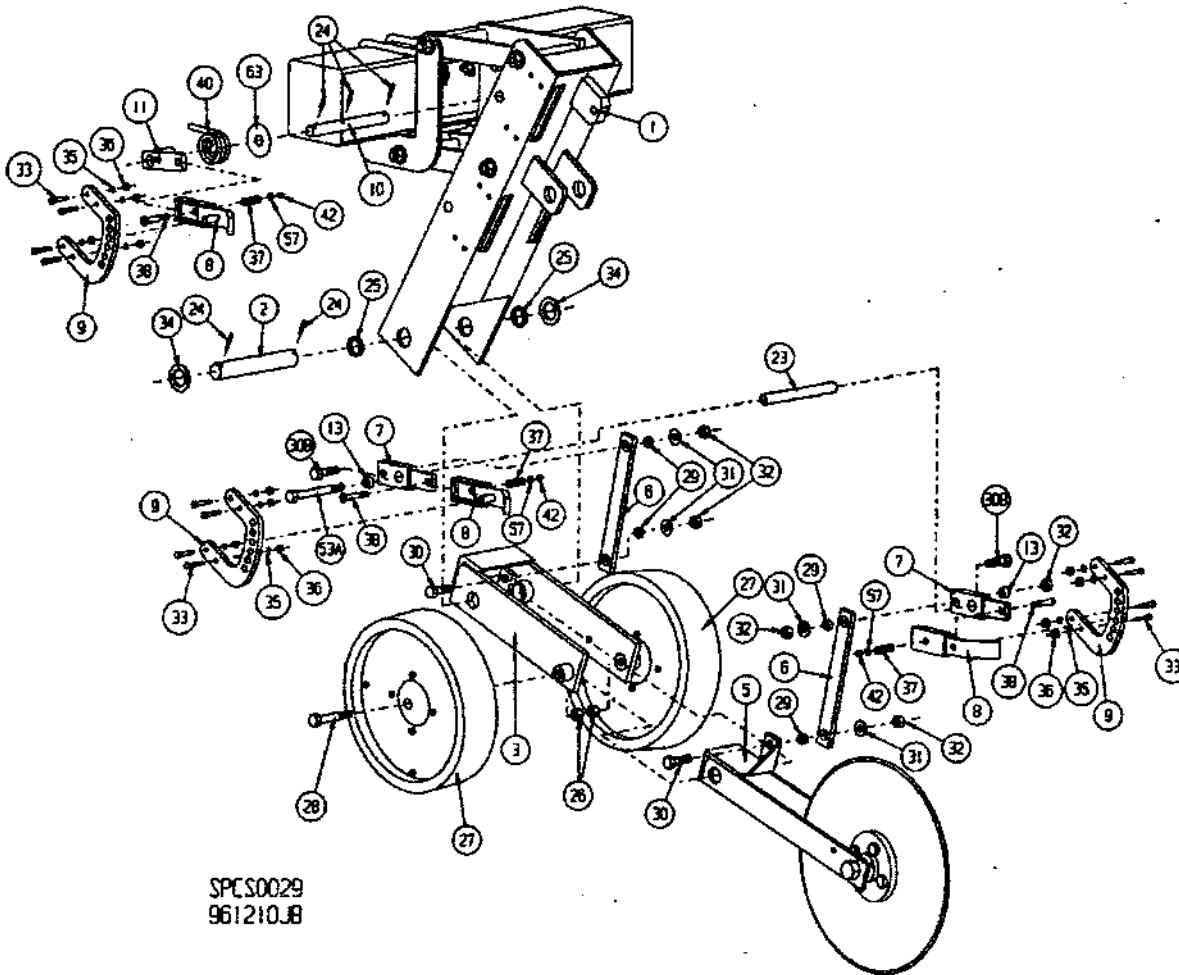
GAUGE WHEEL & COULTER ASSEMBLY (SEALED BEARING)



Spcs0033s
991012FAF

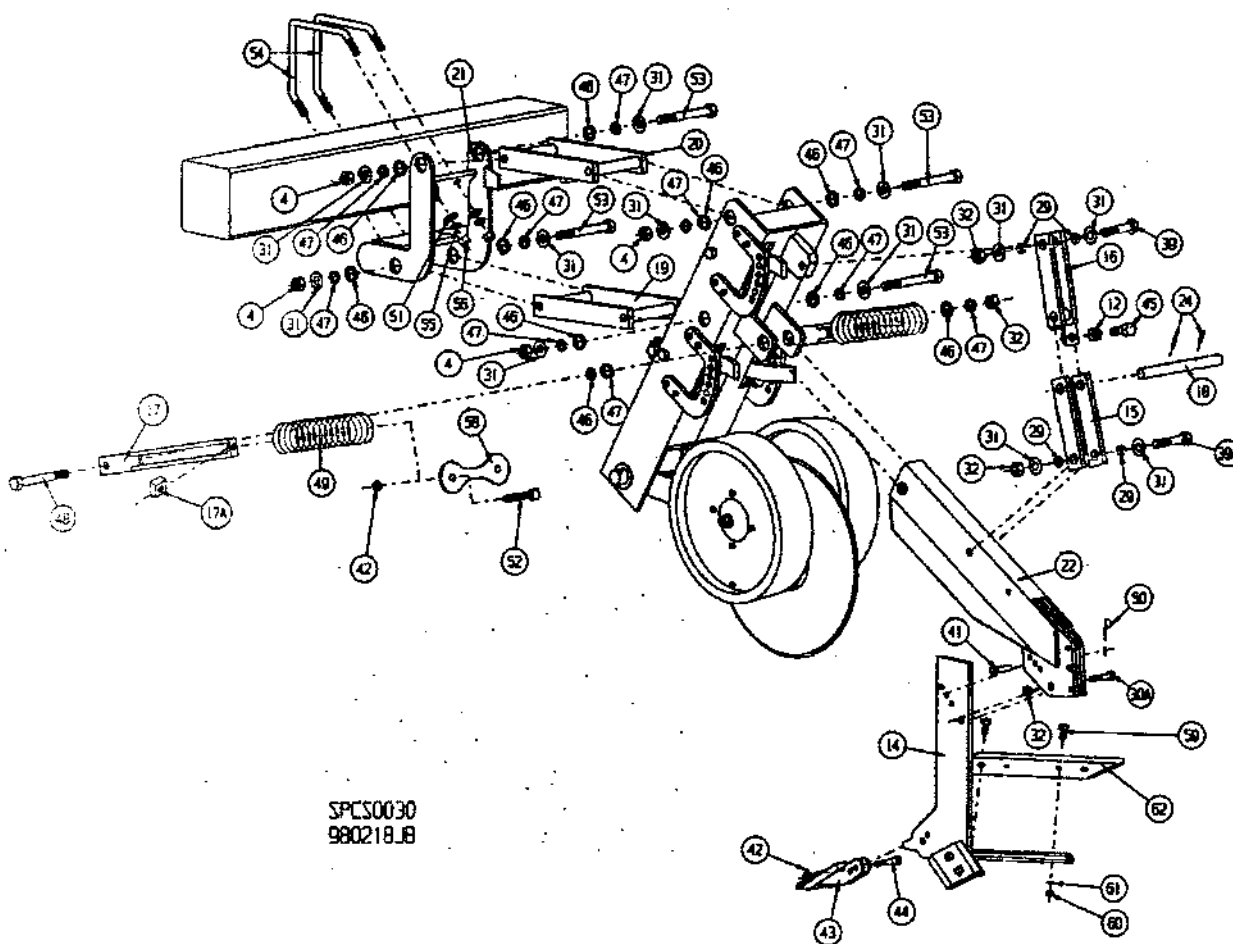
REF#	DESCRIPTION	QTY	COMP#
Complete Coultter Blade & Hub Assembly			
1	Bolt, 1-14 x 5, PLT Gr. 5 HHCS	1	J0915
2	Bearing, 1" Fafnir	2	J00302
3	Spacer, 1.25 OD, 1 I.D x 1	1	M3344
4	Bolt, 1/2-13 x 1-3/4 PLT Gr. 5 HHCS	4	J0733
5	Coultter Hub with sealed B Bearing	1	M3385M
6	Coultter Blade 20"	1	K5586
7	Coultter Backing Plate (4 hole)	1	M33851
8	Nut, Lock, 1/2-13 PLT Gr. 5	1	J1042
9	Spacer, Coultter hub sealed	2	M3200
10	Nut, Lock, 1-8, PLT, Thin Nylon	1	J1065
Tire, 4x16, W/Rims & Bearings, Nylon			
11	Bolt, 5/16 x 3/4	7	J0520
12	Rim, Split, Nylon, Clinch Rim, (1)	1	J7263
13	Tire	1	J7264
14	Bearing, FAFNIR - 40MM	1	J0107
15	Locknut, 5/16	7	J1010
Tire, 4x16, W/Rims & Bearings, Steel			
11	Bolt, 5/16 x 3/4	7	J0520
12	Rim, Split, Steel, Clinch Rim, (1)	1	J7257
13	Tire	1	J7258
14	Bearing, FAFNIR - 40MM	1	J0107
15	Locknut, 5/16	7	J1010

9400 GANG ASSEMBLIES



SPES0029
961210JB

Ref. #	Description	Qty	Comp. #
1	Gang	1	M5204
2	Gang Pivot Shaft	1	M5205
3	Gauge Wheel Bracket	1	M5208
4	Nut, Lock, 3/4, Thin, Toplock, Gr. C	4	J10571
5	Coulter Arm	1	M5207
6	Linkage Bar	2	M5219
7	Lever Linkage Bracket	2	M5216
8	Adjustable Lever Weldment	3	M5218
9	Adjusting Plate	3	M5221
10	Down Pressure Pivot Pin	1	M5215
11	Down Pressure Spring Bracket	1	M5217
12	Nut, Jam, 3/4-10	1	J1058
13	Bushing, 1" OD x 3/4" ID x 1.125" long	2	M5351
14	Sweep Mounting	1	M5222
15	Trip Linkage "Bottom"	1	M5210
16	Trip Linkage "Top"	1	M5211
17	Trip Linkage Spring Bracket	2	M5213
17A	Square lock nut, 5/8 - 11	2	J10472
18	Trip Linkage Pivot Shaft	1	M5212
19	Gang Linkage Bar "Bottom"	1	M5202
20	Gang Linkage Bar "Top"	1	M5203
21	Mounting Bracket	1	M5200
22	Shank	1	M5206
23	Lever Spacer	1	M5231
24	Roll Pin, 5/16 x 2-1/4, PLT	7	J1510
25	Bushing, 1-3/4 x 1-1/2 x 1/2, Split Dr. In	2	J00852
26	Nut, Lock, 5/8"	2	J1047
27	Gauge Tire, 4 x 16, w/rim & Brge.	2	J7262
28	Bolt, 5/8-11 x 4-1/2, PLT Gr. 5 HHCS	2	J0788
29	Bushing, 1" OD x 3/4 ID x 5/8 long	8	M3211
30	Bolt, 3/4-10 x 2-1/4, PLT Gr5 HHCS	2	J0807
30A	Bolt, 3/4-10 x 2-1/2, PLT Gr5 HHCS	1	J0815
30B	Bolt, 3/4-10 x 2-3/4, PLT Gr5 HHCS	2	J0804
31	Washer, Flat, 3/4 PLT	16	J1130
32	Nut, Lock, 3/4-10 Top Lock	9	J1057
33	Bolt, 3/8-16 x 1-1/2, PLT Gr5 HHCS	12	J0627
34	Machine Bushing, 1-1/2, 10GA, N-Rim	2	J1285
35	Washer, Lock, 3/8, PLT, Split	12	J1205
36	Nut, Hex 3/8-16 PLT	12	J1020



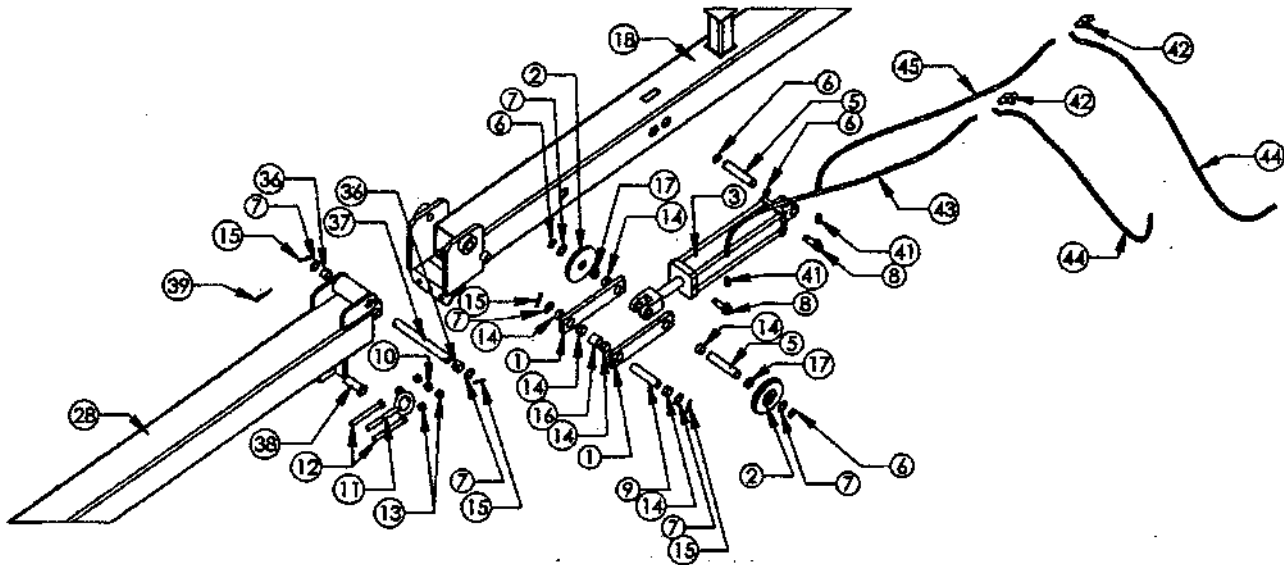
SPCS0030
980218JB

Ref. #	Description	Qty	Comp. #
37	Spring, Die, 1/2" ID x 1" OD, 1-1/4" long	3	J2364
38	Carriage Bolt, 1/2-13 x 3 PLT GR 5	3	J0751
39	Bolt, 3/4-10 x 3-1/2, PLT Gr5 HHCS	1	J0803
39A	Bolt, 3/4-10 x 5", PLT Gr5 HHCS	1	J0822
40	Torsion Spring, 1/2 W, 1997 and later	1	J23421
	Torsion Spring, 1/2 W, Prior 1997	1	J2342
41	Picker Pin, 1/2 x 2"	1	J1555
42	Nut, Lock, 1/2-13, PLT Gr.A	4	J1042
43	Point Model 9400 Cultivator	1	J8216
44	Bolt, 1/2-13 x 1.5 PLT Gr5	1	J0730
45	Bolt, 3/4 x 3 Fully Threaded	1	J0818
46	Bushing, 1-1/2 x 1-1/8 x 1/2 long, Split	10	J00850
47	Bushing, 1-1/8 x .182 w x 5/8 long	10	M33201
48	Bolt, 3/4-10 x 6, PLT Gr5 HHCS	1	J0819
49	Compression Spring, 3 x 3/8 x 12", 14 coils	2	J2372
50	Hair Pin Clip,	1	J5412
51	Washer, Flat, 5/8 PLT	4	J1127
52	Bolt, 5/8 x 4-1/2", Tap. Hex Bolt	2	J07844
53	Bolt, 3/4-10 x 10", Gr5 HHCS	4	J0826
53A	Bolt, 3/4-10 x 9-1/2", Gr5 HHCS	1	J0820
54	V-Bolt, 5/8-11 x 10-1/2	2	J07821
55	Washer, Lock, 5/8 PLT Split	4	J1218
56	Nut, 5/8-11, PLT	4	J1046
57	Flat Washer, 1/2 PLT	3	J1125
58	Spring Cap Casting	1	K5576
SHARES HARDWARE & OPTIONS			
59	Bolt, Plow, 3/8-16 x 1-1/4	4	J0608
60	Nut, Hex, 3/8-16 PLT	4	J1020
61	Washer, Lock, 3/8, PLT Split	4	J1205
62	Share 14" (Set)	1	M5278
	Share 17" (Set)	1	M5281
	Share 19" (Set)	1	M5282

SINGLE TOOL BAR - HIDDEN CYLINDER

#M3043 (COMPLETE BAR)

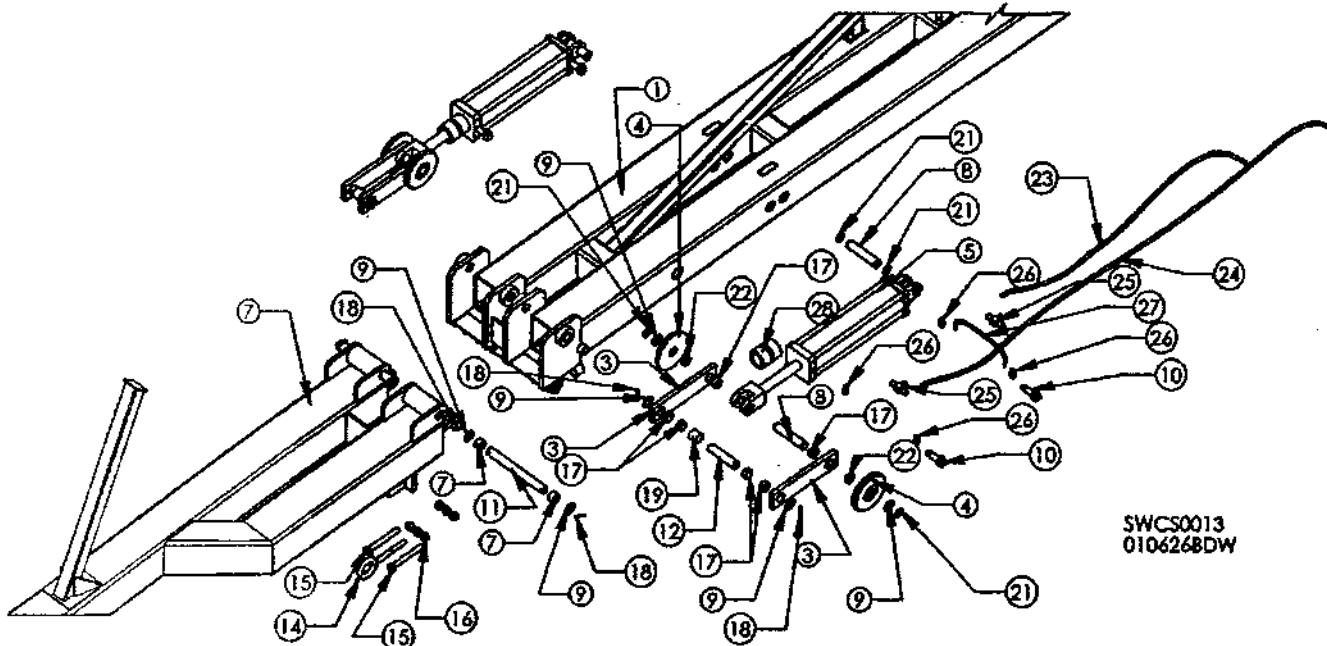
12 ROW - 30"



SWCS0012
010627BDW

REF. #	DESCRIPTION	QTY	COMP. #
1	Linkage Bar, 13-1/4" x 3" x 3/4"	4	M3049
2	Roller, Toolbar, 3/8"	4	M3043-02
3	Cylinder, 4" x 16" W/1.25 Pins	2	J71055
5	Cylinder Pin, 1.25 x 6	4	M3050
6	Snap Ring, 1.75, 5160-175, Truarc	8	J35981
7	Machine Bushing, 1-1/4, 14 Gauge	14	J1273
8	Elbow, Extra Long	4	J71046
9	Top, Fold Up & Lower Pin, 5.75"	2	M3186
10	Nut, Hex, 3/4-10, PLT	4	J1052
11	Eyebolt, 3/4 x 6 W/Nut	2	J0864
12	Screw, 3/4-10 x 6, PLT, Gr. 5	4	J0824
13	Nut, Hex, 3/4 - 10, PLT, Gr. 5	8	J1051
14	Bushing, Split, 1-1/2 x 1-1/4 x 3/4"	16	J00851
15	Pin, Roll, 5/16 x 2-1/4	8	J1510
16	Cylinder Spacer	2	M3044
17	Bushing, Split, 1-1/2 x 1-1/4 x 1/2"	4	J00841
18	Main Frame	1	M30432
28	Wing Bar, Flat Fold, 12R30	2	M30433
36	Bushing, 1-1/2 x 1-1/4 x 1", Split	8	J00847
37	Main Pivot Min	2	M3185
38	Clevis Pin, 1-1/2	2	J70992
39	Clip, Hair Pin, .09 x 2	2	J5416
41	Restrictor, 3/4"	2	J71028
42	Elbow 90° 1/2 MIP x 3/4-16 MJIC, 1208	2	J71026
43	Hydraulic Hose, 3/8" ID HFS 60-500	2	M3437
44	Hydraulic Hose, 3/8" ID HFS 60-500	2	M3445
45	Hydraulic Hose, 3/8" ID HFS 60-500	4	S6114

DOUBLE TOOL BAR WITH HIDDEN CYLINDER
M3052 (COMPLETE BAR)
16 ROW - 30"



SWCS0013
010626BDW

REF. #	DESCRIPTION	QTY	COMP.#
1	Main Frame, 16FD 30 Flat Fold TB	1	M3046
2	Wing, Left, 16FD 30 Flat Fold TB	1	M3047
3	Linkage Bar	8	M3049
4	Roller, Cylinder, 1/4W Toolbar, Flat Fold	8	M3088
5	Cylinder, 4x16 W, 1.25 Pins	4	J71055
7	Wing, Right, 16FD30 Flat Fold TB	1	M3048
8	Cylinder Pin, 1.25 x 6 Stressproof	8	M3050
9	Machine Bushing, 1-1/4, 14 Gauge, N Rim	22	J1273
10	Elbow, 90D 1/2MIP x 3/4 - 16 JIC long	8	J71046
11	Main Pivot Pin, 1.25 x 11.75	4	M3185
12	Top & Lower Pin, 5.75", 1-1/4" Stressproof Rod	4	M3186
13	Nut, 3/4-10, PLT	8	J1052
14	Eyebolt, 3/4 x 6 W/nut	4	J0864
15	Bolt, 3/4-10 x 6, Taper, PLT	8	J0824
16	Nut, 3/4-10, PLT	16	J1051
17	Split Bushing, 1-1/2 x 1-1/4 x 1/2	24	J00851
18	Pin, Roll, 5/16 x 2-1/4, PLT	16	J1510
19	Cylinder Spacer	4	M3044
20	Bushing, 1-1/2 x 1-1/4 x 1, split	8	J00847
21	Snap, Ring, 1.25, 5160-125, Truarc	12	J35981
22	Split Bushing, 1-1/2 x 1-1/4 x 1/2	8	J00841
23	Hydraulic Hose, 3/8" ID x 11' w/ends	1	S6104
24	Hydraulic Hose, 3/8" ID x 164" w/1/2MIPP x 3/4JIC	1	M7231
25	Tee, 3/4-16 FL 2033-8-8S	2	J71026
26	Restrictor, 3/4-16 JIC, .047	4	J71028
27	Hydraulic Hose, 3/8 x 18" w/ends	1	S6114
28	Cylinder Stop, Flat Fold ID	2	M3194

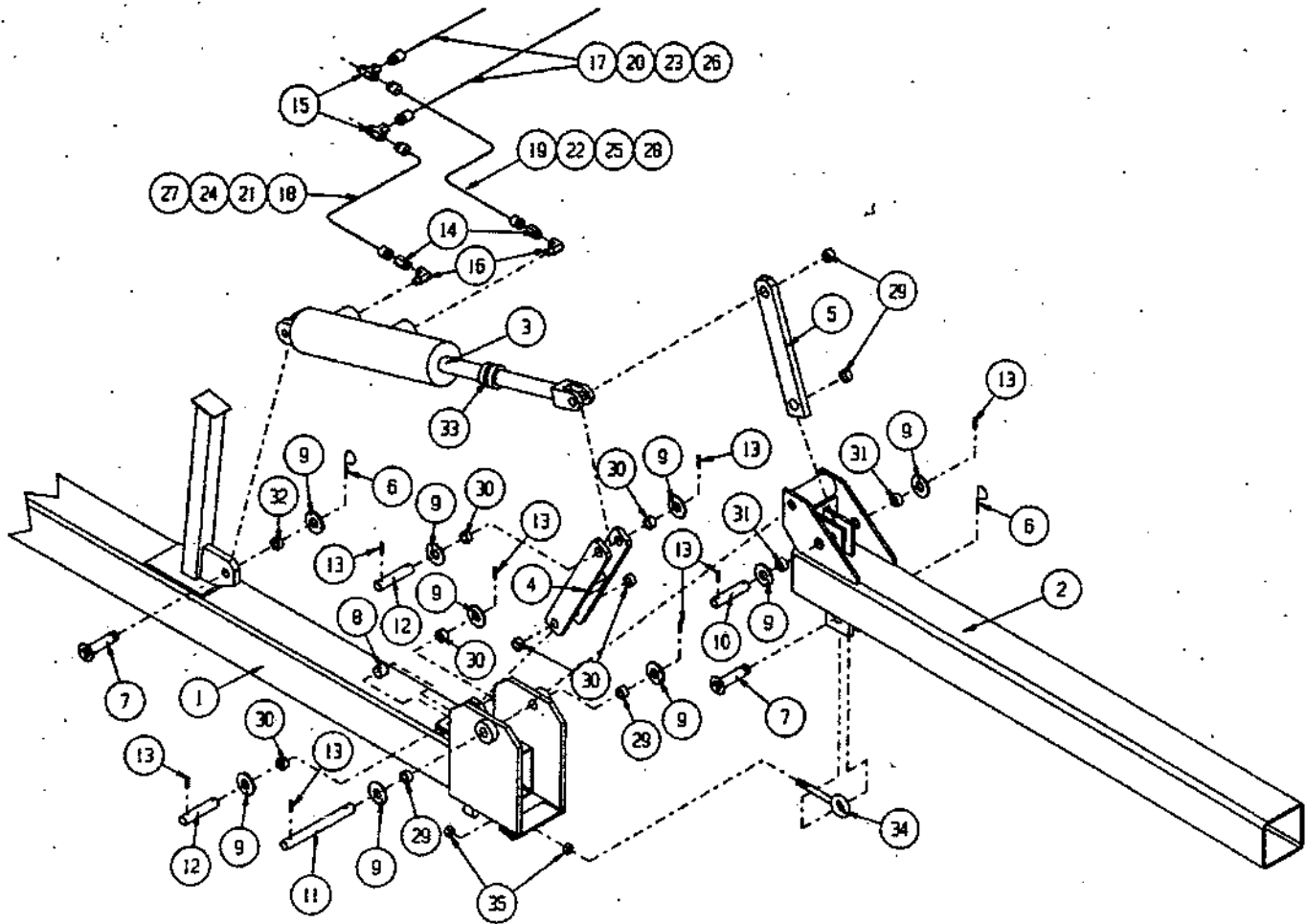
FLAT FOLD SINGLE TOOL BAR

M3095 - 6 Row - 36-40" — M3065 - 6 row - 48"

M3084 - 8 ROW - 30" — M3086 - 8 Row - 36-40"

M3091 - 10 Row 30"

M3071 - 12 Row - 28" --- M3089 - 12 Row - 30"



SPCS0008
960916JB

FLAT FOLD SINGLE TOOL BAR

M3095 - 6 Row - 36 - 40" --- M3065 - 6 Row - 48"

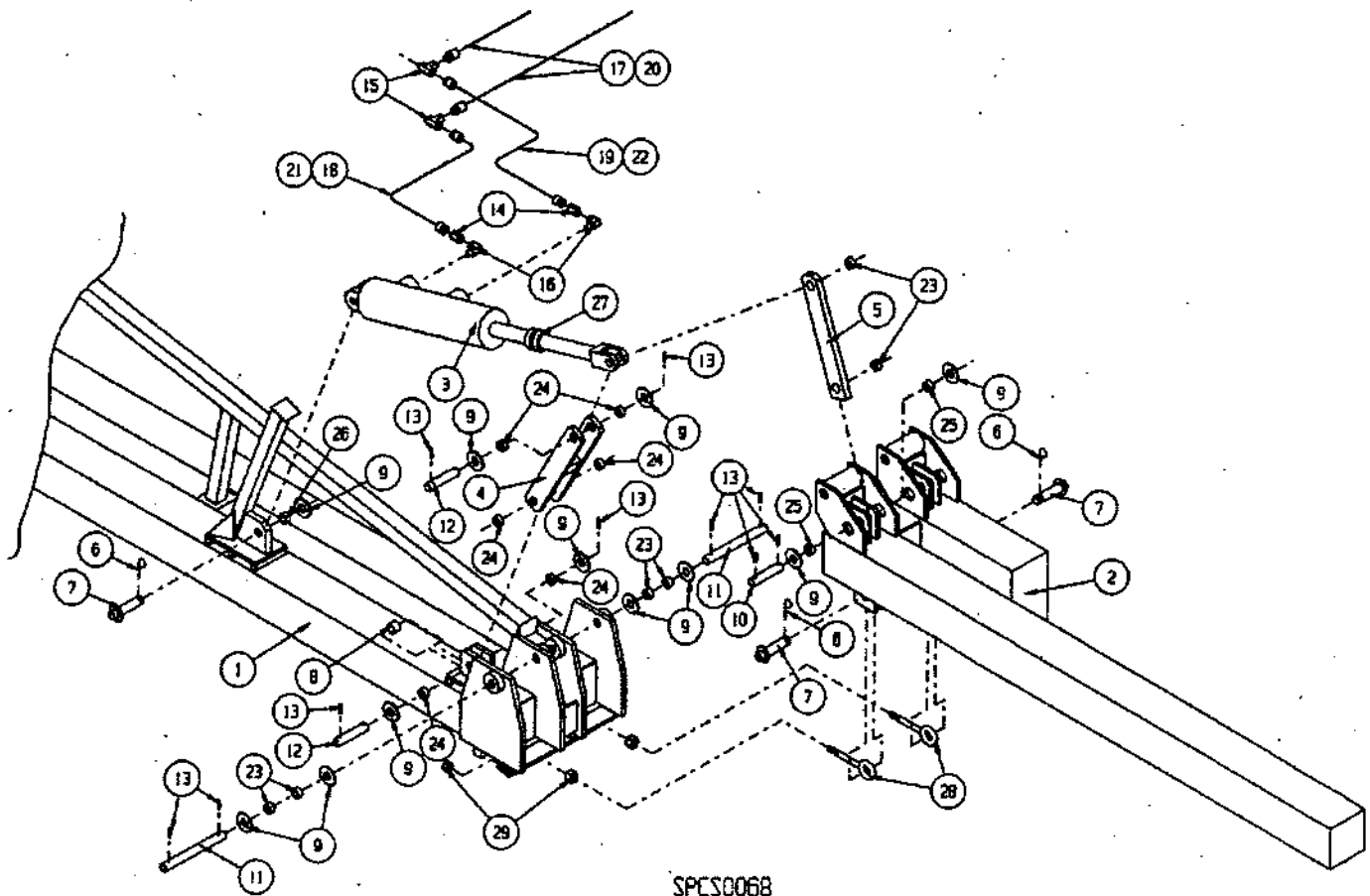
M3084 - 8 Row - 30" --- M3086 - 8 Row - 36 - 40"

M3091 - 10 Row 30"

M3071 - 12 Row - 28" - 30 --- M3089 - 12 Row - 30"

REF#	DESCRIPTION	QTY	COMP#
1	Main Frame, 6 row - 36 - 40" (122")	1	M30953
	" " " 6 row - 48" (160")	1	M31661
	" " " 8 row - 30" (150")	1	M3166
	" " " 8 row - 36, 38 & 40" (187")	1	M31662
	" " " 10 row 30" (210")	1	M3136
	" " " 12 row 30" (210")	1	M3136
	" " " 12 row 28" (198")	1	M31361
2	Fold up Arm, 6 row 36 - 40" (67")	2	M30952
	" " " 6 row 48" (67")	2	M30952
	" " " 8 row 30" (53")	2	M3165
	" " " 10 row 30" (56")	2	M3165
	" " " 12 row 30" (84")	2	M3134
	" " " 12 row 28" - 30 (90-1/4")	2	M31654
3	Hydraulic Cylinder, (5" x 16" stroke) 6 & 8 row	2	J7099
	" " (5" x 20" stroke) 10 & 12 row	2	J70991
4	"H" Bar 6-8 row	2	M3852
	"H" Bar 10-12 row	2	M3328
5	Lever Bar 6-8row	2	M3851
	Lever Bar 10-12 row	2	M3135
6	Hairpin Clip	4	J5416
7	Cylinder Pin, 1-1/4"	4	J70992
8	Tube Spacer, 1-3/16	2	M3403
9	Machine Bushing, 1- 1/4 x 14 gauge	12	J1273
10	Wing Pin, 3-3/8"	2	M3188
11	Main Pivot Pin, 11-3/4"	2	M3185
12	Top & Lower Pin, 5-3/4"	4	M3186
13	Roll Pin, 5/16 x 2-1/4"	14	J1510
14	Restrictor, 3/4 -16 JIC x .047	4	J71028
15	Tee, 3/4-16 GL 2033 - 88	2	J71026
16	Elbow, 1/2 MIP x 3/4 FL 90DE	4	J71021
6 Row Fold-up Hydraulic Hose (36-40" Row Spacing)			
17	Hydraulic hose, 3/8" ID x 5'	2	M3445
18	" " " 3/8" ID x 4'	2	M3439
19	" " " 3/8" ID x 2'	2	M7234
6 Row Fold-up Hydraulic Hose (48" Row Spacing)			
8 Row Fold-up Hydraulic Hose (30" Row Spacing)			
20	Hydraulic Hose, 3/8" ID x 5'	2	M3445
21	" " " 3/8" ID x 3'	2	M3437
22	" " " 3/8" ID x 6'	2	M3440
8 Row Fold-up Hyd. Hose (36, 38, 40" Row Spacing)			
23	Hydraulic Hose, 3/8" ID x 5'	2	M3445
24	" " " 3/8" ID x 4'	2	M3439
25	" " " 3/8" ID x 6'	2	M3440
10 Row Fold-up Hydraulic Hose (30" Row Spacing)			
12 Row Fold-up Hydraulic Hose (30" Row Spacing)			
12 Row Fold-up Hydraulic Hose (28" Row Spacing)			
26	Hydraulic Hose, 3/8" ID x 5'	2	M3445
27	" " " 3/8" ID x 5-1/2"	2	M3441
28	" " " 3/8" ID x 7-1/2"	2	M3442
29	Bushing, 1-1/2 x 1-1/4 x 1"	8	J00847
30	Bushing, 1-1/2 x 1-1/4 x 3/4"	12	J00851
31	Bushing, 1-1/2 x 1-1/4 x 1/2"	4	J00841
32	Bushing, 1-1/4 x 1 x 1" (Prior 1995)	2	J00846
33	Cylinder Stop 6-8 row	2	M3192
	" " 10-12 row	2	M31921
34	Eyebolt, 3/4 x 6"	2	J0864
35	Nut, Loose Fit, 3/4"	4	J1052

FLAT FOLD DOUBLE TOOL BAR
M3092 - 10 ROW 36" & 38"
M3090 - 12 ROW 36" & 38"
M3093 - 16 ROW 30"



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FLAT FOLD DOUBLE TOOL BAR

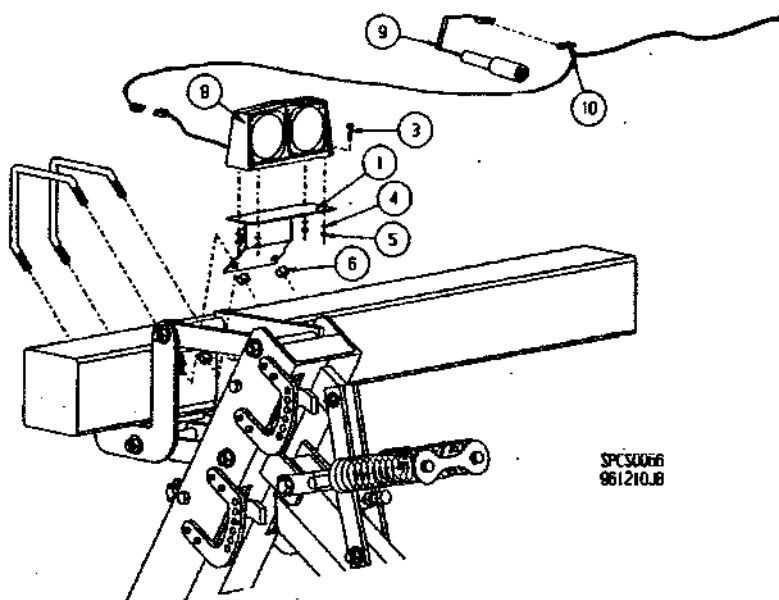
M3092 - 10 Row 36" & 38"

M3090 - 12 Row 36" & 38"

M3093 - 16 Row 30"

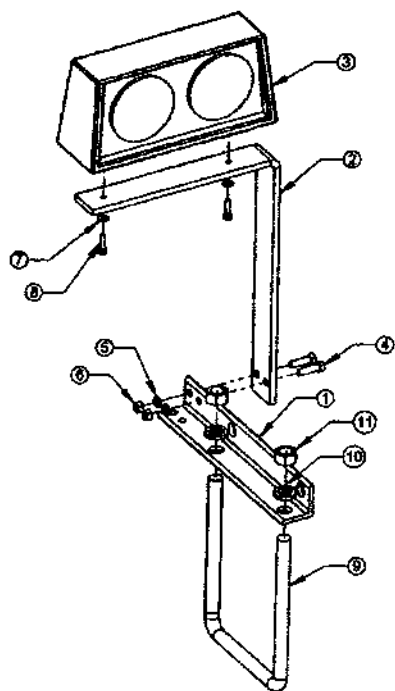
REF#	DESCRIPTION	QTY	COMP#
1	Main Frame, 12 row 36", 10 row 36 (258")	1	M3348
	" " " " " " 16 row 30" (270")	1	M3094
2	Fold-up arm, 10 row 36" (LEFT) (74")	1	M3415
	" " " " " " (RIGHT) (74")	1	M3416
	" " " " 12 row 36" (LEFT) (107")	1	M33491
	" " " " " " (RIGHT) (107")	1	M3349
	" " " " 16 row 30" (LEFT) (114")	1	M31631
	" " " " " " (RIGHT) (114")	1	M3163
3	Hydraulic Cylinder, (5" x 20" stroke)	2	J70991
4	H Bar	2	M3328
5	Lever Bar	2	M3135
6	Hairpin Clip	6	J5416
7	Cylinder Pin, 1-1/4"	6	J70992
8	Tube Spacer, 1-3/16"	2	M3403
9	Machine Bushing, 1-1/4" x 14 gauge	16	J1273
10	Wing Pin, 3-3/8"	2	M3188
11	Main Pivot Pin, 11-3/4"	4	M3185
12	Top & Lower Pin, 5-3/4"	4	M3186
13	Roll Pin, 5/16 x 2-1/4	16	J1510
14	Restrictor, 3/4 FL x .047FF	4	J71028
15	Tee, 3/4-16 FL 2033-8-8	4	J71026
16	Elbow, 1/2 MIP x 3/4 FL 90DE	4	J71021
10 Row Fold-up Hydraulic Hose 36" Row Spacing			
17	Hydraulic hose, 3/8" I.D. x 5'	2	M3445
18	" " " " 3/8" I.D. x 7'	2	M3443
19	" " " " 3/8" I.D. x 9'	2	M3444
12 Row 36" Spacing 16 Row 30" Spacing Fold Up Hydraulic Hose			
20	Hydraulic Hose, 3/8" I.D. x 5'	2	M3445
21	" " " " 3/8" I.D. x 5-1/2'	2	M3441
22	" " " " 3/8" I.D. x 7-1/2'	2	M3442
23	Bushing, 1-1/2 x 1-1/4 x 1"	12	J00847
24	Bushing, 1-1/2 x 1-1/4 x 3/4"	12	J00851
25	Bushing, 1-1/2 x 1-1/4 x 1/2"	4	J00841
26	Bushing, 1-1/4 x 1 x 1" (Prior 1995)	2	J00846
27	Cylinder Stop 12 row	2	M31921
28	Eyebolt, 3/4 x 6	4	J0864
29	Nut, Loose Fit, 3/4"	8	J1052

CULTIVATOR LIGHT KIT - M5248 - RIGID TOOLBARS



REF#	DESCRIPTION	QTY	COMP#
1	Light Mounting Bracket	2	M5249
2	Plastic Tie Wire 4" Lg. (Not shown)	10	J5637
3	Bolt, 1/4-20 x 1-1/4 PLT	8	J0510
4	Lockwasher, 1/4, Split	8	J1195
5	Nut, 1/4-20, PLT	8	J0990
6	Nut, 5/8-11 PLT	4	J1046
	LIGHT KIT COMPLETE	1	J5918
7	Light Fixture (Right Side, Not Shown)	1	J5914
8	Light Fixture (Left Side)	1	J5913
9	Cable, w/7 Pin 10' Long	1	J5919
10	Harness, Wishbone, 15'	1	J5916

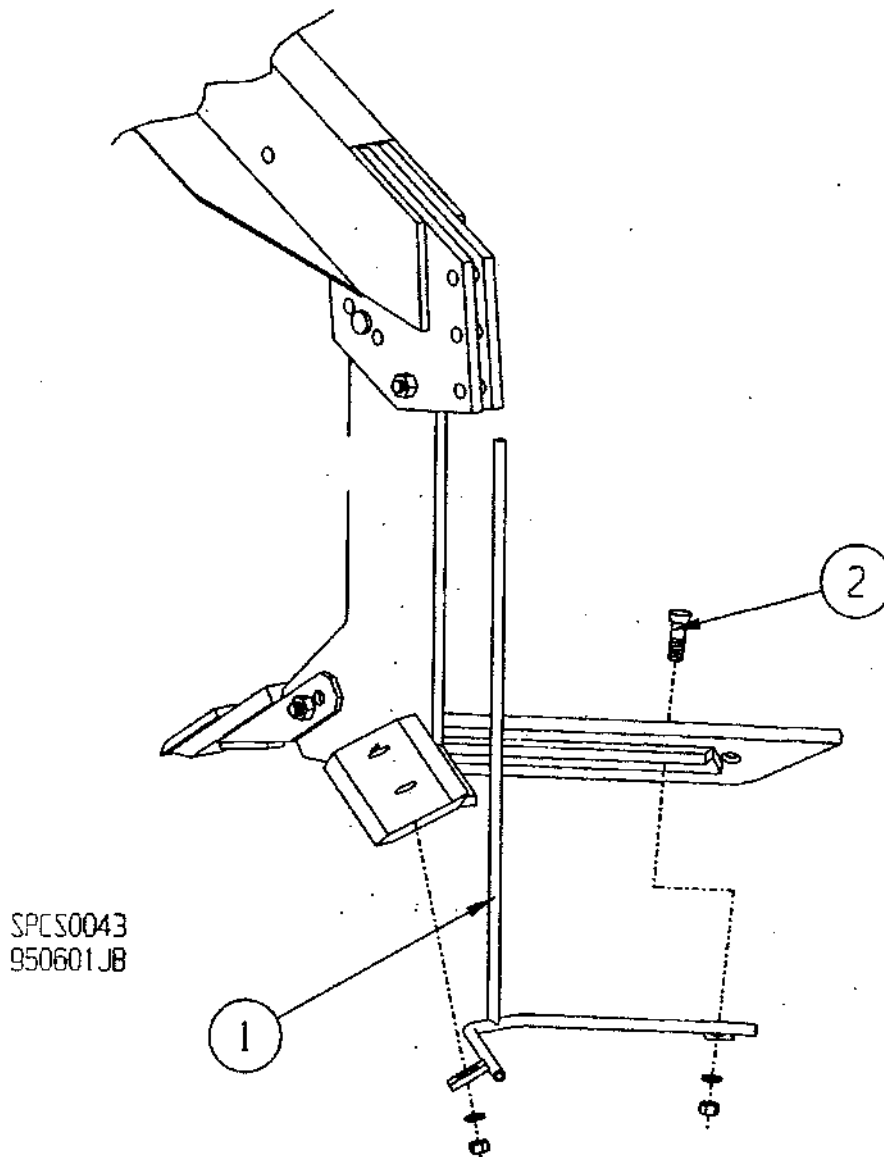
CULTIVATOR LIGHT KIT - M5450 - FOLDING TOOLBARS



REF. #	DESCRIPTION	QTY	COMP. #
1	Light Mount Angle	2	M5451
2	Light Mount Bracket	2	M5452
3	Light Kit	1	J5918
4	Screw, 3/8-16, 1.25", PLT	4	J0616
5	Washer, Lock, 3/8, PLT	4	J1205
6	Nut, Hex, 3/8-16, PLT	4	J1020
7	Washer, Flat, 1/4", PLT	4	J1105
8	Screw, 1/4-20, 1", PLT	4	J0508
9	U-Bolt, 3/4 x 7, Square	2	J0833
10	Washer, Lock, 3/4"	4	J1220
11	Nut, 3/4"- 10, PLT	4	J1051

LIGHT MOUNTING BRACKET FOR HIDDEN CYLINDER TOOLBARS - MOUNT SO THAT LIGHT IS IN FRONT OF THE TOOLBAR

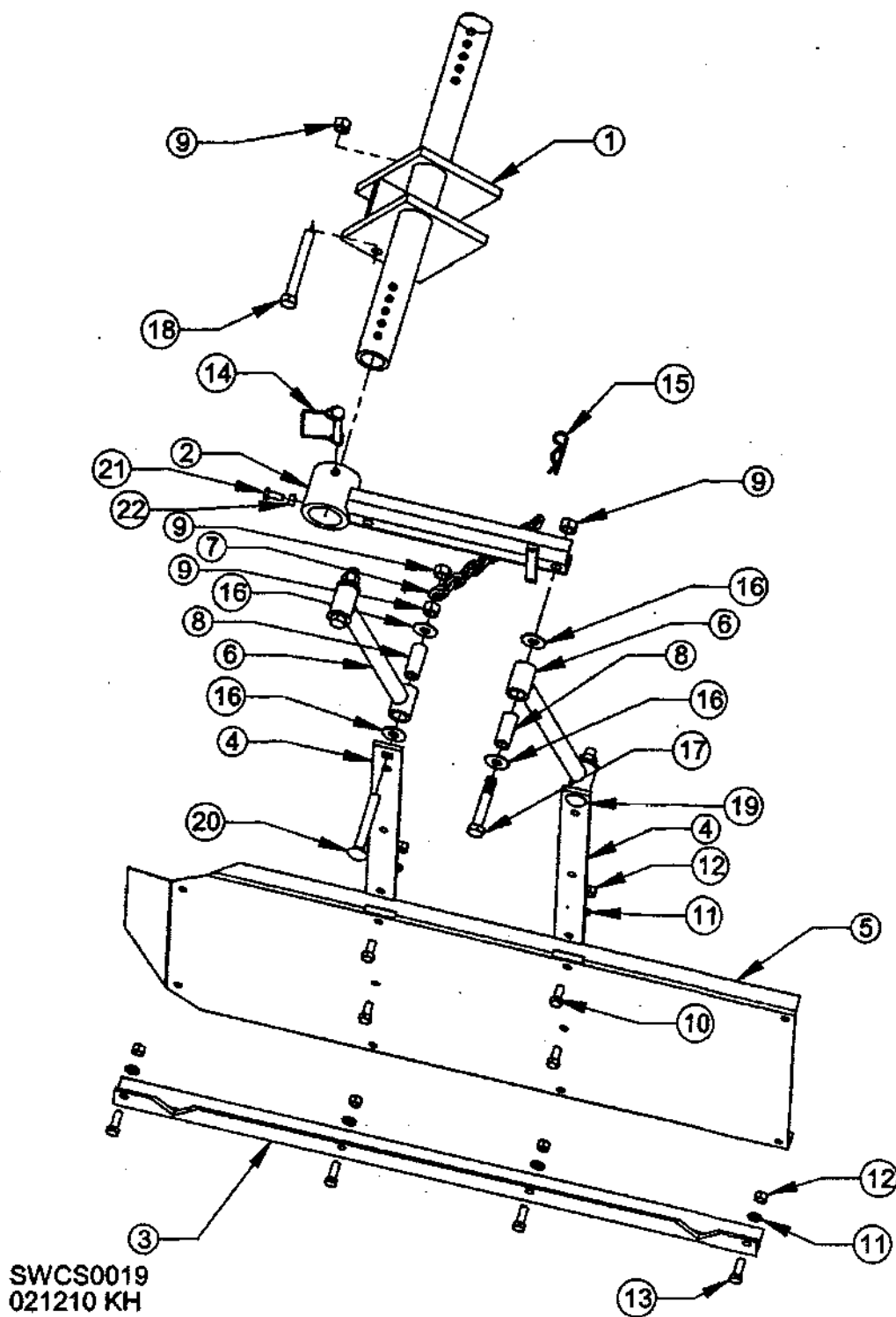
**LIQUID FERTILIZER TUBE
(OPTIONAL) WITH NARROW PROFILE
30" - M5290
36" - 40" M52901**



REF#	DESCRIPTION	QTY	COMP#
1	Fertilizer Tube Weldment for 30" rows M5290	1	M5234
	Fertilizer Tube Weldment for 36-40" row M52901	1	M52341
2	Bolt, Plow 3/8-16 x 1-1/2"	2	J0628

1. Remove rear bolts from shares.
2. Slip liquid tube (1) up from bottom of shank with vertical leg of tube following up rear of sweep mount and ahead of cross brace.
3. Bolt in place using 3/8 x 1-1/2" plow bolts, lockwashers, and nuts.

OPEN-TOP SHIELD ASSEMBLY 2003 (OPTIONAL)
M5590 - 20-22" M5390 - 30" M5391 - 36-40"



OPEN-TOP SHIELD ASSEMBLY 2003 (OPTIONAL)
M5590 - 20-22" M5390 - 30" M5391 - 36-40"

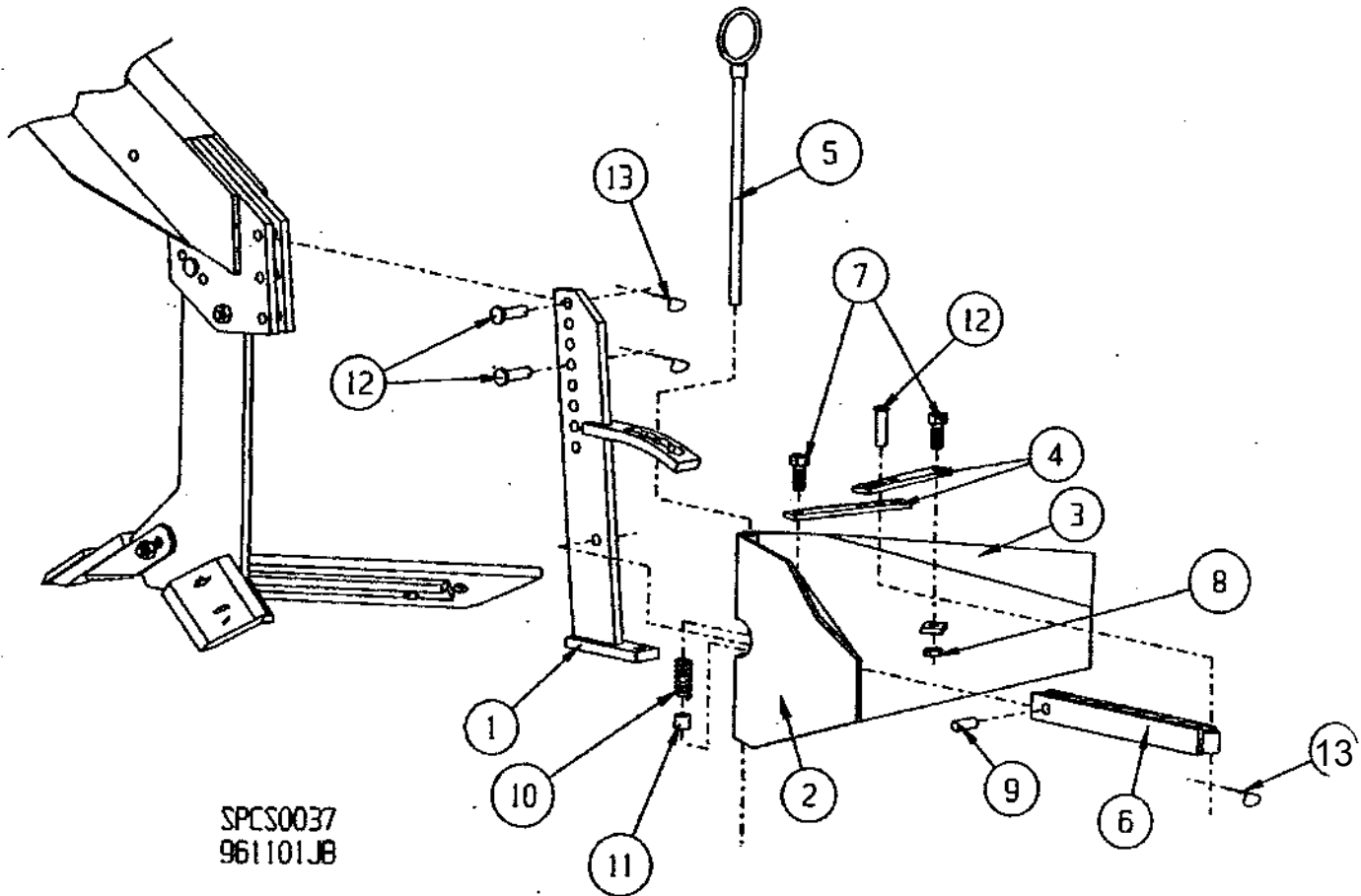
REF. #	DESCRIPTION	QTY	COMP. #
1	Shield Saddle Mount (20-22" Row)	1	M5443
1	Shield Saddle Mount (30" Row)	1	M5431
1	Shield Saddle Mount (36-40" Row)	1	M5432
2	Shield Pivot Mount Weldment	2	M5426
3	Shield Runner	2	M5435
4	Shield Vertical Strap	4	M5427
5	Shield, Skin Only	2	M5421
6	Long Pivot Arm Weldment	4	M5456
7	Chain, Link 16"	2	M5433
8	Bushing, .5 x .75 x 1.75L, Oilite BRZ	8	J00741
9	Lock Nut, 1/2 - 13, PLT, Gr. 8	11	J1042
10	Screw, 3/8-16, 3/4, PLT, Gr. 5, HHCS	8	J0605
11	Washer, Lock, 3/8, PLT, Split	18	J1205
12	Nut, Hex, 3/8 - 16, PLT	18	J1020
13	Screw, 3/8 - 16, 1, PLT, Gr. 5, HHCS	10	J0606
14	Pin, Snapper	2	J5431
15	Clip, Hair Pin, 120 x 2.50, 107-20	2	J5412
16	Washer, Flat, 7/16", PLT	16	J1120
17	Screw, 1/2 - 13, 3, PLT, Gr.5, HHCS	4	J0750
18	Screw, 1/2 - 13, 4, Gr. 5, HHCS	1	J0756
19	Bolt, Carriage, 1/2 - 13, 3 Gr. 5 Tap	2	J07480
20	Bolt, Carriage, 1/2 - 13, 3.5, PLT, Gr. 5	2	J0749
21	Screw, 5/16 - 18, 3/4" PLT, Gr. 5, HHCS	2	J0520
22	Nut, Hex, 5/16 - 18, PLT	2	J1002

**INSTALLATION INSTRUCTIONS FOR
SHIELD ASSEMBLY (M5590) - (M5390) - (M5391)**

1. Mount saddle mount (1) to shank of main gang, using 1/2 x 4" bolt (18) and locknut.
2. Slide pivot mount (2) on saddle as shown and pin in place with snapper pin (14). Lock pivot mount in place with 5/16 x 3/4" bolt (21) and nut. Arms should hang toward rear of cultivator.
3. Bolt pivot arms (6) to pivot mount using 1/2 x 3" bolts, (17) flat washer, oilite bushing (8), and lock nut (9). **NOTE: Do not over-tighten bolt. Bronze oilite bushing will swell and seize up pivot arm.**
4. Bolt shields and mounting straps (4, 5) to pivot arms using 1/2 x 3" carriage bolt (19) and a 1/2 x 3-1/2" (20) carriage bolt and an extra locknut are supplied to allow chain (7) to be attached to front shield bolt. Shields should swing free from front to rear **after** assembly.
5. Pull shield back and up to desired height and hook chain over chain stay on pivot mount. Pin in place with hairpin clip (15).

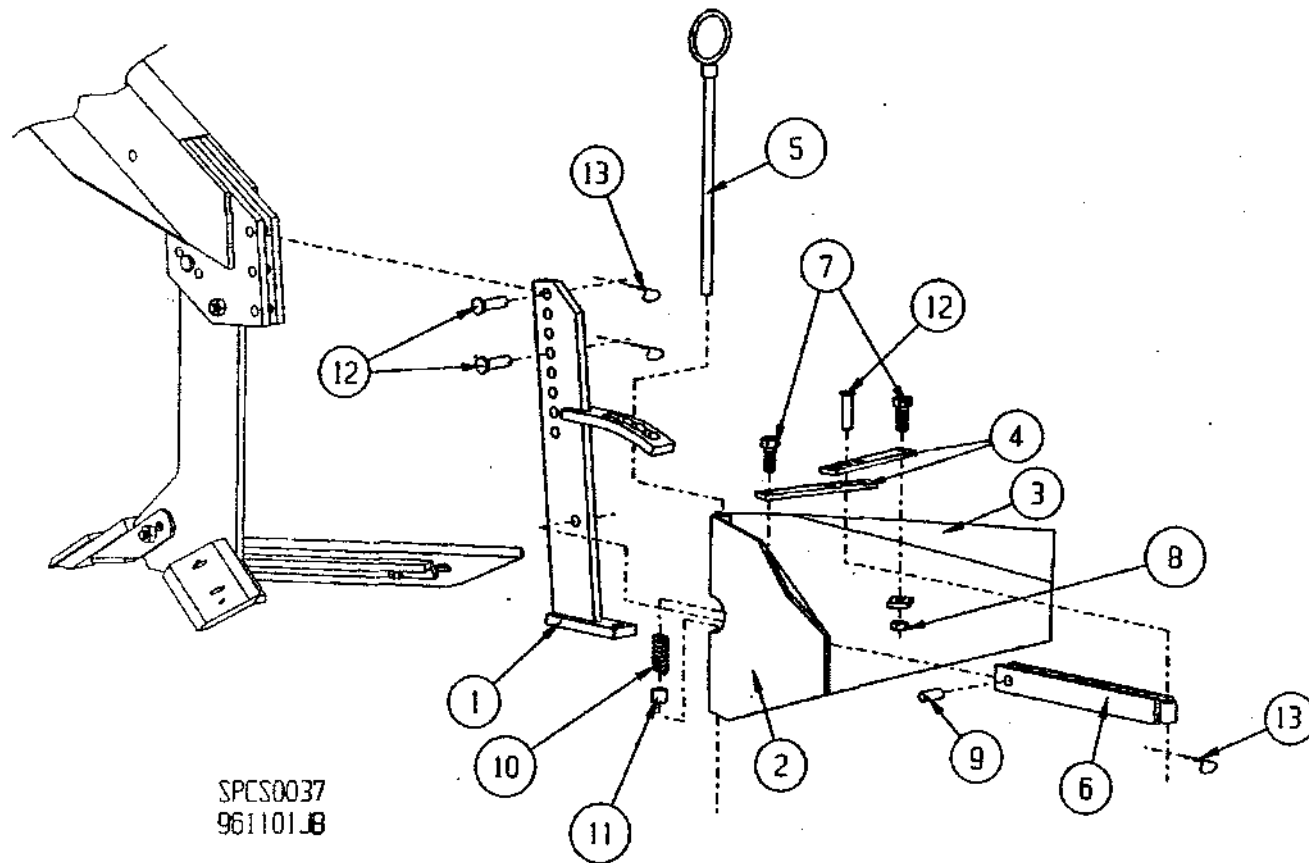
RIDGING WING ADJUSTMENT - M5370

(OPTIONAL) WITH NARROW PROFILE 28" - 40"



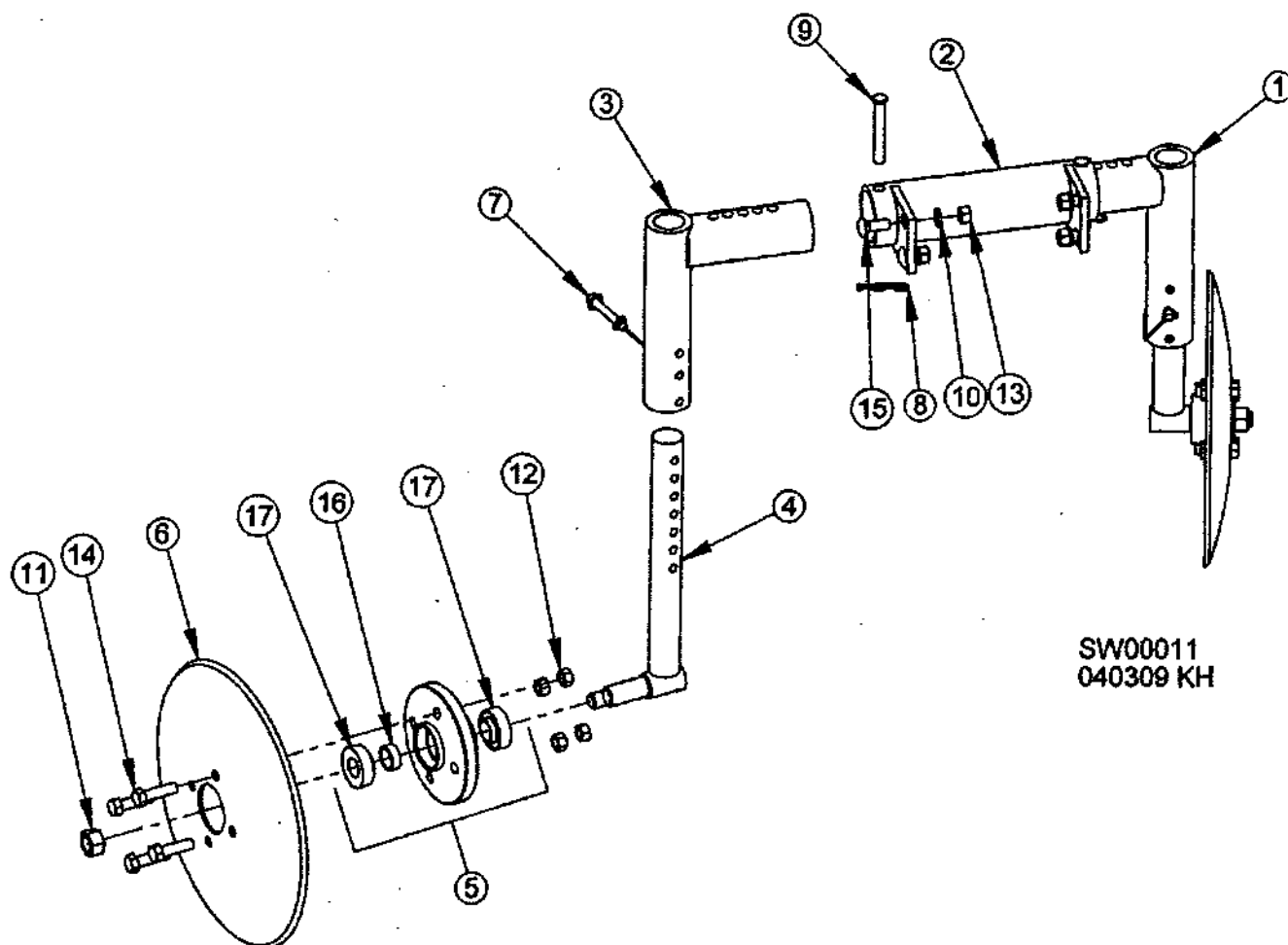
REF. #	DESCRIPTION	QTY	COMP. #
1	Frame, Ridger wing weldment	1	M52231
2	Ridger wing weldment, Left	1	M5224
3	Ridger wing weldment, Right	1	M5225
4	Bracket, wing adjustment narrow	2	M5395
5	Pivot pin, Silver PLT	1	M52271
6	Frame, Ridger wing, center weldment	1	M5229
7	Bolt, 1/2 - 13 x 1-1/4, PLT Gr. 5	2	J0728
8	Nut, Lock, 1/2 - 13, PLT Gr. A	2	J1042
9	Roll Pin, 1/2 x 1-1/4	1	J1473
10	Spring, compress	1	J23651
11	Shaft Collar - 1/2	1	M3709
12	Picker Pin, 1/2 x 2 PLT	3	J1555
13	Hair Pin Clip	3	J5412

RIDGING WING ADJUSTMENT M5375 **48" ROWS EXTRA WIDE (OPTIONAL)**



REF. #	DESCRIPTION	QTY	COMP. #
1	Frame, Ridger wing weldment	1	M52231
2	Ridger wing weldment, Left	1	M5376
3	Ridger wing weldment, Right	1	M5377
4	Bracket, wing adjusting (Wide)	2	M5378
	Bracket, wing adjusting (Narrow)	2	M5395
5	Pivot pin, clear gold PLT	1	M52271
6	Frame, Ridger wing, Center Weld.	1	M5229
7	Bolt, 1/2-13 x 1-1/4, PLT Gr5	2	J0728
8	Nut, Lock, 1/2-13, PLT Gr A	2	J1042
9	Roll Pin, 1/2 x 1-1/4	1	J1473
10	Spring Compress	1	J23651
11	Shaft Collar, 1/2"	1	M3709
12	Picker Pin, 1/2 x 2 PLT	3	J1555
13	Hair Pin Clip	3	J5412

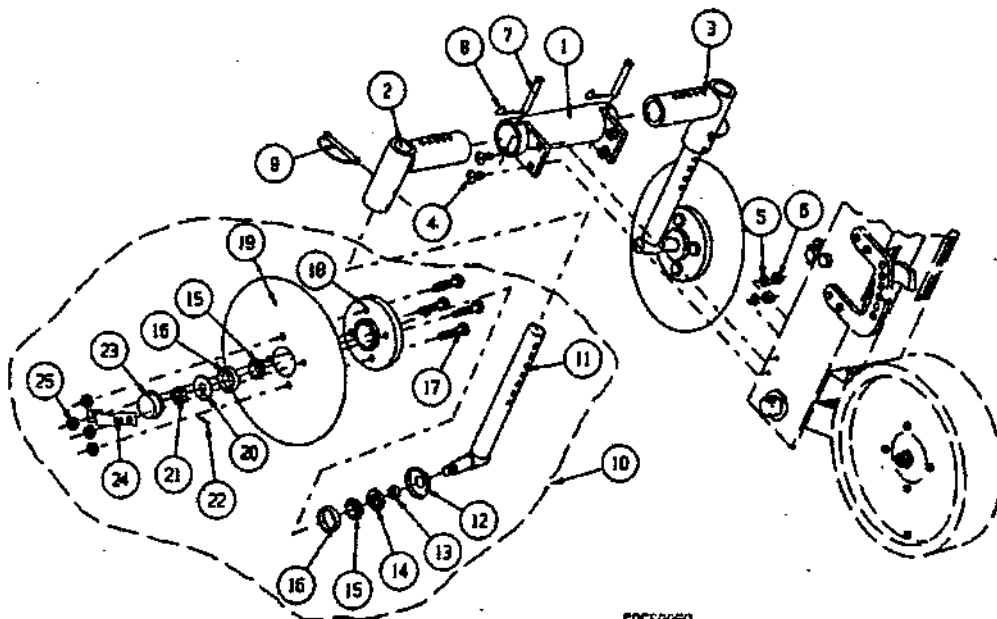
CUTAWAY DISC ASSEMBLY - SEALED BEARINGS



SW00011
040309 KH

REF. #	DESCRIPTION	QTY	COMP. #
1	Inner Sleeve Weldment, Right	1	M5258
2	Outer Sleeve Weldment - 30" Rows	1	M5257
2	Outer Sleeve Weldment - 36-40" Rows	1	M5269
3	Inner Sleeve Weldment, Left	1	M5256
4	Arm, Vertical Weldment	2	M5254
5	Hub Assembly, Cult. Cutaways	2	M3390M
6	Blade, Disc, 14 x .157"	2	K5579
7	Pin, Snapper	2	J5431
8	Clip, Hair Pin, .120 x 2.50, 107 - 20	2	J5412
9	Pin, Picker, 1/2, 3.5, PLT	2	J1561
10	Washer, Lock, 1/2", PLT	4	J1215
11	Nut, Top Lock, 3/4 - 16, PLT, Hex	2	J10501
12	Nut, Lock, 1/2" - 13	8	J1042
13	Nut, Hex, 1/2" - 13, PLT	4	J1040
14	Screw, 1/2" - 13 x 1.75 Gr. 5	8	J0733
15	Bolt, 1/2 - 13, 1.25", PLT, Gr. 5, Carriage	4	J0727
16	Bushing, 1.25 OD, 1" ID	1	J0086
17	Bearing, 1" Sealed	2	J00302

CUTAWAY DISC ASSEMBLY (TAPERED BEARINGS)



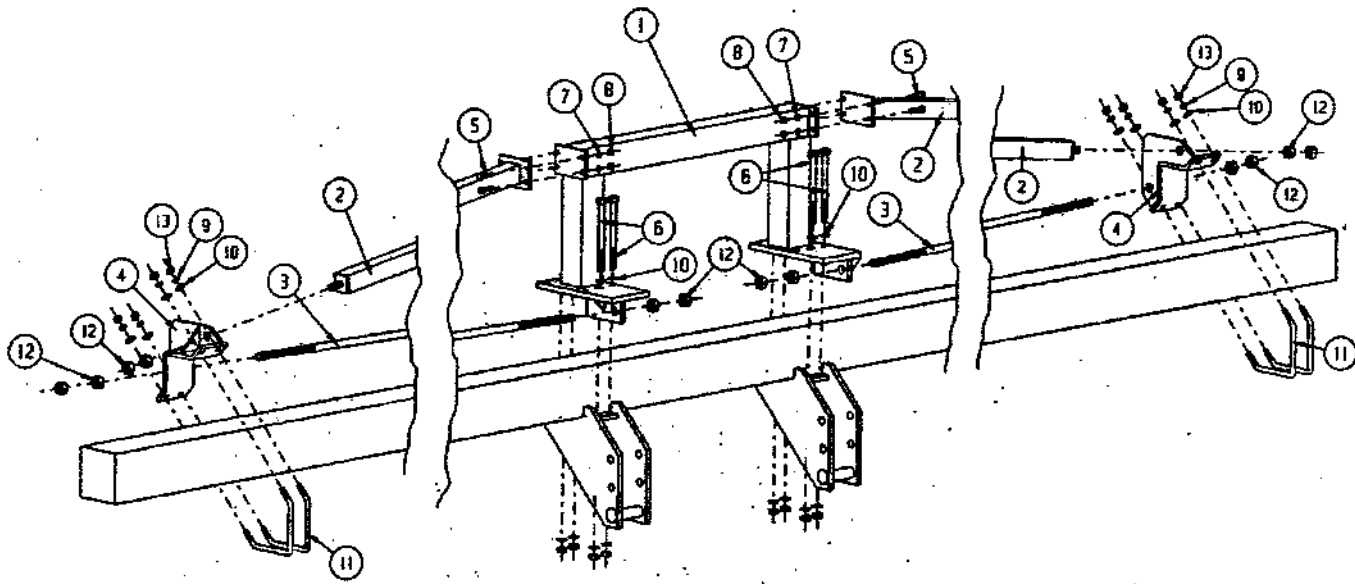
SPCS0060
960122JB

REF. #	DESCRIPTION	QTY	COMP. #
1	Telescoping Outer Sleeve 30" row	1	M5257
	Telescoping Outer sleeve 36-40" row	1	M5269
2	Telescoping Inner Sleeve (Left)	1	M5256
3	Telescoping Inner Sleeve (Right)	1	M5258
4	Carriage Bolt, 1/2-13 x 1-1/4 PLT	4	J0727
5	Lockwasher, 1/2, PLT Split	4	J1215
6	Nut, Hex, 1/2-13 PLT	4	J1040
7	Picker Pin 1/2 x 3-1/2 PLT	2	J1561
8	Hair Pin Clip, 1/8 x 2-1/2	2	J5412
9	Snapper Pin, 3/8 x 2-3/4	2	J5431
10	Disc with Quick Adjustable Bar Assembly	2	M5270
11	Vertical Arm	1	M5254
12	Dust Cover, 3" Diameter.	1	M3123
13	Bushing, 1-1/4 OD x 1" ID x .550 Lg.	1	M3198
14	Seal, 1-1/4 x 2.062 NAT. 471787	1	J7007
15	Tapered Bearing, 1" L-44643	2	J0110
16	Bearing Cup, L-44610	2	J0105
17	Bolt, 1/2-13 x 1-3/4, PLT Gr5	4	J0733
18	Cult. Disc. Hub w/cup & Grease Zerk	1	M3390
19	Disc. Blade, 14 x .157	1	K5579
20	Machine Bushing, 3/4-14 GA Reg. Rim	1	J1260
21	Slotted Hex Nut, 3/4-16 PLT	1	J1050
22	Cotter Pin, 1/16 x 3/4 PLT	1	J1419
23	Dust Cover, 2" #30-426	1	J7233
24	Bracket for Dust Cover	1	M3360
25	Locknut, 1/2-13, PLT	4	J1042

INSTALLATION INSTRUCTIONS FOR CUT AWAY DISC M5265, M5266, M5267, M5268 AND NARROW ROWS M5567, M5568

1. Mount outer sleeve (1) to front of gang using 4-1/2 x 1-1/4" carriage bolts, lockwashers, and nuts as shown.
2. Slip inner sleeve (2) & (3) into outer sleeve such that holes in drop are tapered narrower in the rear. Pin in place with 1/2 x 3-1/2" picker pin and hairpin clip.
3. Slide disc and bar assembly (10) up into inner sleeve and pin in position with snapper pin (9). Discs should be extending in front of the gang and toed into the rear.
4. Set depth and width by using pinned adjustments provided.
5. Inner sleeves and disc and bar assemblies are not included for the outside of end gangs.

TRUSS KIT 8 ROW 36", 38", & 40" (M3857)



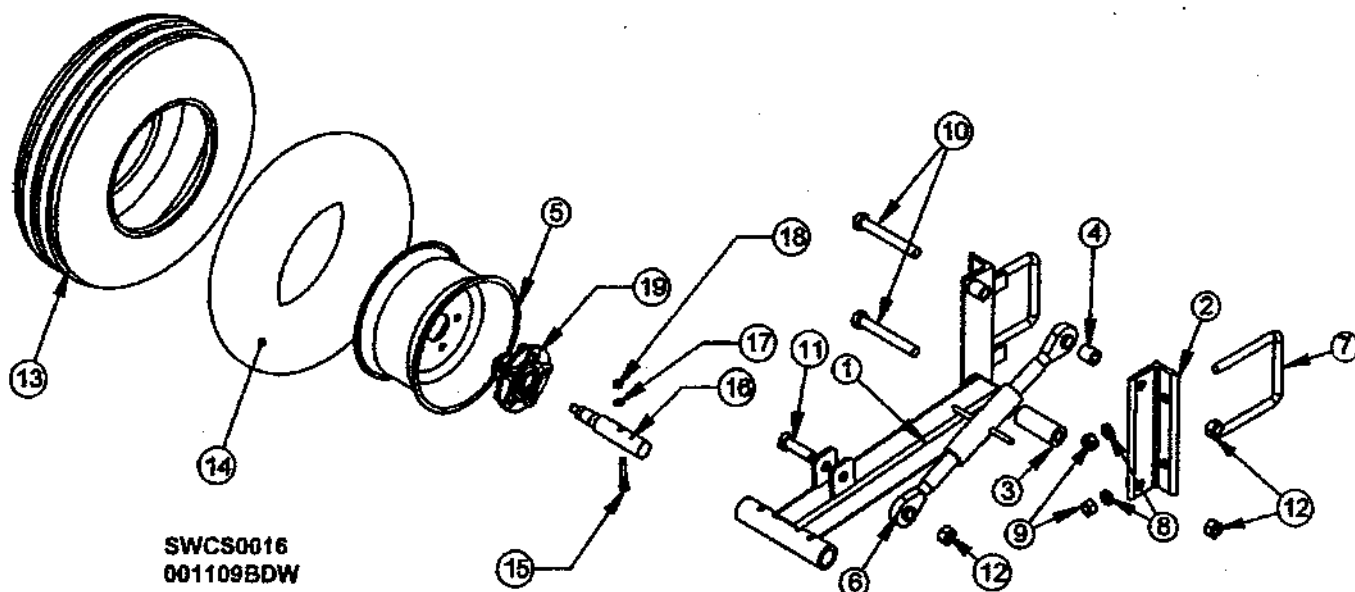
SPCS0061
971210JB

FOR 9400 CULT ONLY

REF #	DESCRIPTION	QTY	COMP#
1	Center Truss Frame	1	M3858
2	Top Brace Arm	2	M3854
3	Support Rod 1" x 130"	2	M3850
4	Truss kit Support	2	M3861
5	Bolt, 1/2-13 x 2 PLT Gr5 HHCS	8	J0737
6	Bolt, 3/4 - 10 x 9-1/2 PLT Gr. 8 HHCS	8	J0737
7	Washer, Lock, 1/2 PLT Split	8	J1215
8	Nut, 1/2 - 13 PLT	8	J1040
9	Washer, Lock, 5/8" PLT, Split	8	J1218
10	Washer, 5/8", PLT	8	J1127
11	V-Bolt, 5/8-11, 10-1/2"	4	J07821
12	Nut, 1-8 PLT	12	J1060
13	Nut, Hex, 5/8-11	8	J1046

USE NUTS AND LOCKWASHERS FROM CENTER HITCH ASSEMBLY TO BOLT ON CENTER TRUSS FRAME.

SINGLE GAUGE WHEEL (Optional)
W0120
(M3393 Contains 2 of W0120 Assemblies)

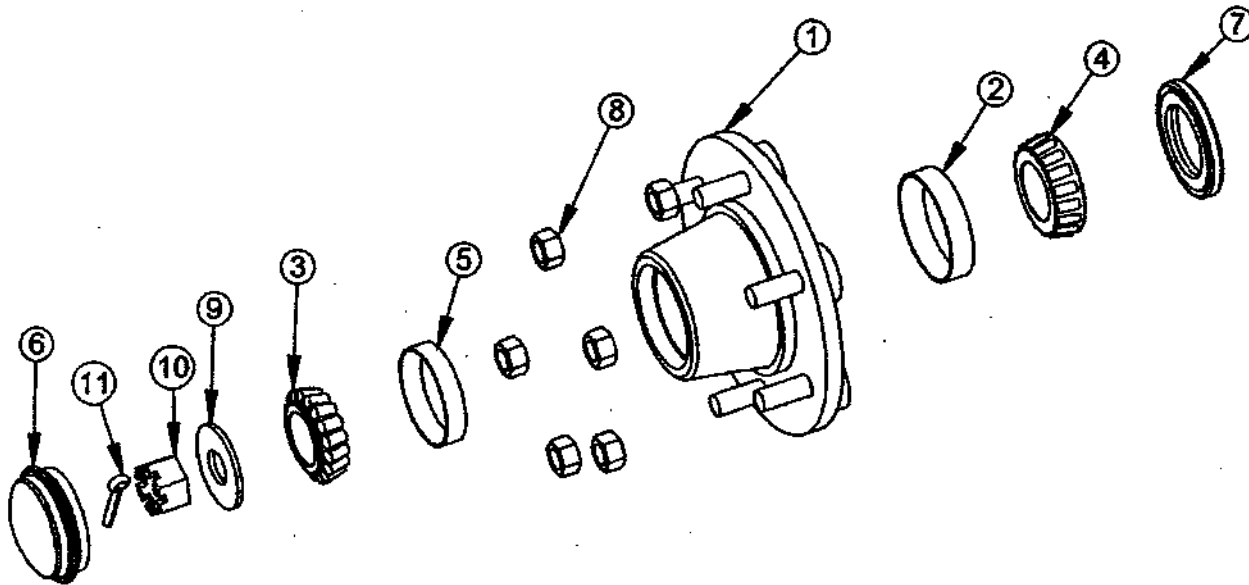


REF. #	DESCRIPTION	QTY	5 BOLT	6 BOLT
			COMP. #	COMP. #
1	Gauge Wheel Weldment	1	W20407	W20407
2	Mounting Angle Weldment	2	W20411	W20411
3	Pivot Bushing	1	W20527	W20527
4	Spacer, 1.25OD x 1.03 ID x 1.475	2	M3197	M3197
5	Rim, Wheel, 5 Hole, 14 x 8"	1	J7276	-----
	Rim, Wheel, 6 Hole, 15 x 8"	1	-----	J72783
6	Turnbuckle, 20. 5-30, Top Link	1	J0903	J0903
7	U-Bolt, 7/8-9 x 7 x 9	2	J0838	J0838
8	Lock Washer, 7/8", PLT	4	J1222	J1222
9	Hex Nut, 7/8" - 9, PLT	4	J1050	J1050
10	Screw, 1-8 x 7.5 HHCS, PLT	2	J0918	J0918
11	Screw, 1-8 x 3/5, Gr5, PLT, HHCS	1	J0910	J0910
12	Nut, Top Lock, 1-8	3	J1061	J1061
13	Tire, 9.5L x 14, 6 Ply, Tube Type	1	J7254	-----
	Tire, 9.5L x 15, 6 Ply, Tube Type	1	-----	J72545
14	Tube, 9.5 x 14	1	J7253	-----
	Tube, 9.5 x 15	1	-----	J72546
15	Screw, 1/2-13, 3.25"	1	J0752	J0752
16	Spindle	1	S15394	-----
	Spindle	1	-----	R305004
17	Lockwasher, 1/2" Split	1	J1215	J1215
18	Nut, 1/2-13	1	J1040	J1040
19	Hub Assembly W/Studs (5Bolt)	1	J7280	-----
	Hub Assembly W/Studs (6Bolt)	1	-----	J72352

HUB ASSEMBLY

6 BOLT - J72352

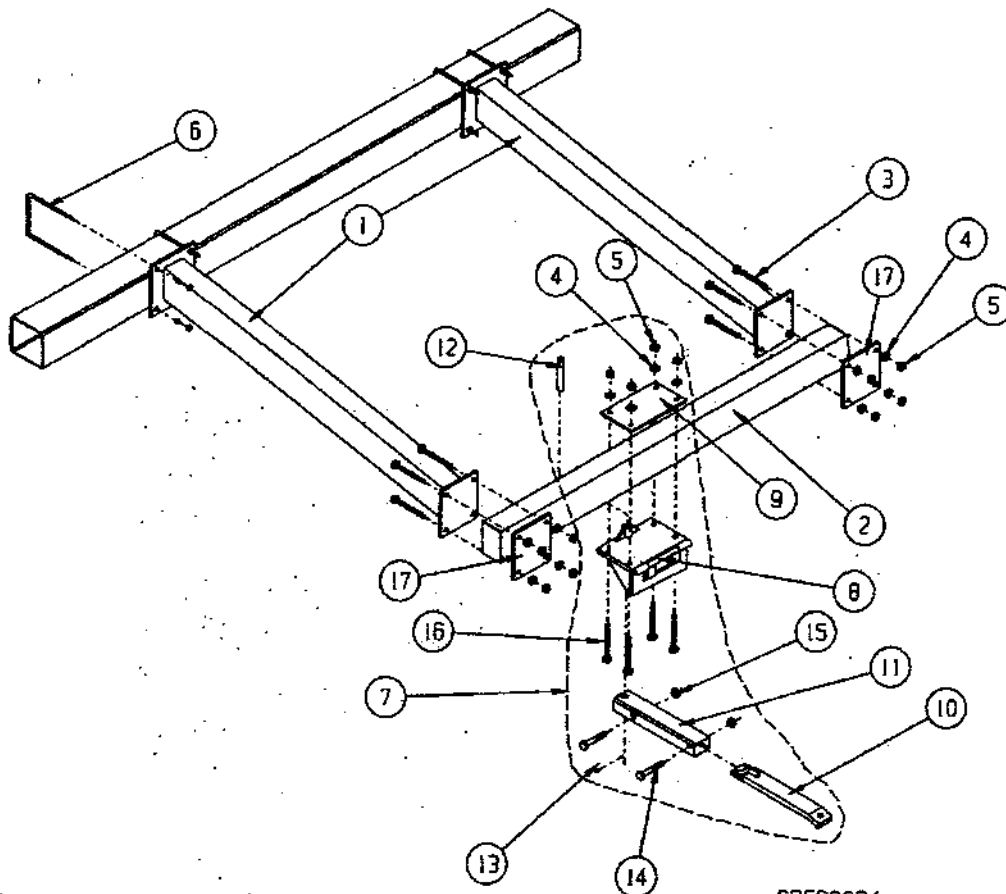
5 BOLT - J7280



SWSH072
7/1/03 JB

REF. #	DESCRIPTION	QTY	5 BOLT	6 BOLT
			COMP. #	COMP. #
1	Hub Assembly W/Studs, Includes Items 1-8	1	J7280	J72352
2	Cup, Bearing, LM 29710	1	J0114	J01255
3	Bearing, Tapered, 1.25" x .66"	1	J0140	J0140
4	Bearing, Tapered, Roller LM 29749	1	J0113	J01254
5	Cup, Bearing, 1.25"	1	J0141	J0141
6	Dust Cover, 2-7/16 OD	1	J72331	J72331
7	Seal, 1.75 x 2.722, C/R, 17617 HB18	1	J7018	J7018
8	Nut, Wheel, 1/2 - 20, PLT, 60	6	J1043	J1043
9	Washer, Flat, 3/4"	1	J1130	J1130
10	Nut, Hex, 3/4 - 16, Slotted	1	J1050	J1050
11	Pin, Cotter, 3/16, 1-1/2", PLT	1	J1432	J1432

CULTIVATOR HITCH KIT - M33761



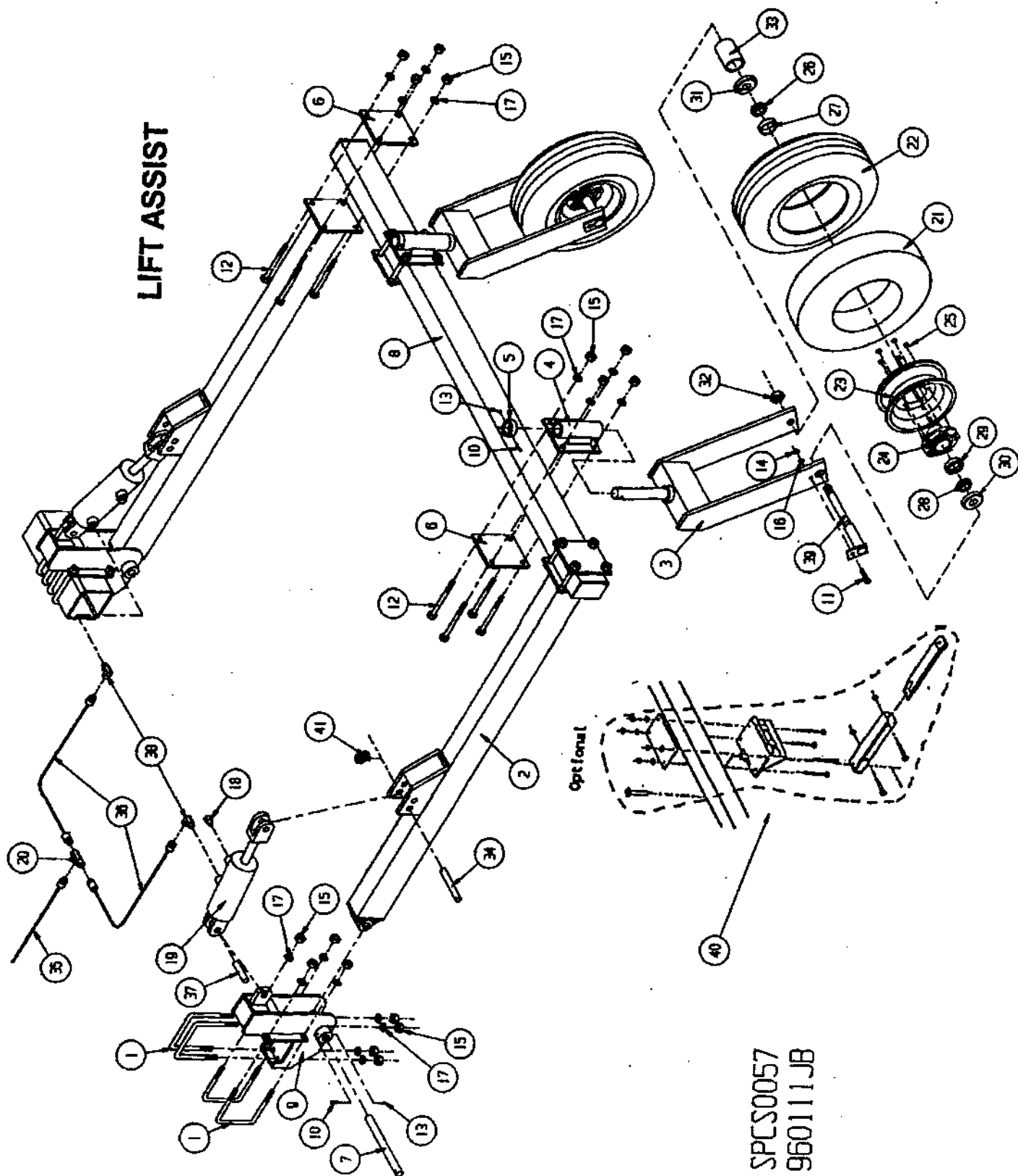
SPCS0024
070610 BA

REF #	DESCRIPTION	QTY	COMP #
1	Arm Weldment	2	M3550
2	Cross Arm Weldment	1	M3551
3	Bolt, 3/4-10x6 PLT Gr5 HHCS	8	J0819
4	Lockwasher, 3/4" PLT Split	20	J1220
5	Nut, Hex 3/4-10 PLT	20	J1051
6	U-Bolt, 3/4x7" Sq.	4	J0833
7	Center Hitch Assembly	1	M3552
8	Center Hitch Weldment	1	M3554
9	Top Clamp Plate	1	M3553
10	Tongue Weldment	1	M3374
11	Hitch Weldment	1	M3377
12	Hitch Pin 6" Long	1	M3378
13	Roll Pin 5/16 x 1-1/2 PLT	1	J1498
14	Bolt, 3/4-10 x 4-1/2" PLT Gr5 HHCS	2	J0817
15	Locknut, 3/4-10 Top Lock	2	J1057
16	Bolt, 3/4-10 x 8-1/2" PLT Gr5 HHCS	4	J0827
17	Clamp Plate	2	M3147

INSTALLATION INSTRUCTIONS FOR CULTIVATOR HITCH KIT FULL HITCH KIT M3376 CENTER HITCH ASSEMBLY M3552

1. If mounting center hitch assembly to lift assist, skip to step 5.
2. Find open area on tool bar which will miss lower three point brackets and wing stands.
3. Center between gangs and mount arm weldments (1) to tool bar using U-bolts (6), lockwashers and nuts.
4. Center rear cross arm and clamp in place using clamp plate (17), 3/4 x 6" bolts, lockwashers and nuts as shown.
5. Center the center hitch assembly (M3552) and clamp in place on cross arm weldment using top clamp plate (9), 3/4 x 8-1/2" bolts, lockwashers, and nuts.
6. To swivel from side to side, flip up block swing retainers and swing to desired side.
7. To extend hitch(10), push 3/4 bolt up in slot at front of telescoping tube (11) and pull back on tongue weldment(10).
8. To reset for field use, back cultivator up until 3/4" bolt drops in slot and pull forward until sway blocks can drop for centering.

LIFT ASSIST



SPCS0057
960111JB

LIFT ASSIST

M3130 - 2 Whl 10 Row 30"
12 Row 30"

M31302- 2Whl 10 Row 36-38"
12 Row 36-38"
12 Row 38-40"
16 Row 30"

M31304 - All 8 Row

Ref#	Description	Qty	Comp#
1	U-bolt 3/4" x 7" sq.	8	J0833
2	Assist arm	2	M31381
3	Assist wheel mount	2	M4126
4	Axle mounting	2	M3141
5	Lock collar	2	M3146
6	Clamp Plate	4	M3147
7	Lift assist pin, 8.25"	2	M31551
8	Cross arm, 8 Row 128" long	1	M3551
	" " , 10 Row & Up 170" long	1	M31566
9	Mounting bracket	2	M31571
10	Bolt, 5/16-18 x 3.5" GR5 HHCS	4	J0597
11	Bolt, Carriage, 1/2-13 x 1-3/4	2	J0731
12	Bolt, 3/4-10 x 6" GR 5 HHCS	16	J0819
13	Lock nut, 5/16"-18	4	J1010
14	Hex nut, 1/2"-13	2	J1040
15	Hex nut, 3/4"-10	32	J1051
16	Lock washer, 1/2" split	2	J1215
17	Lock washer, 3/4" split	32	J1220
18	Plug, vented, 1/2" cntr sunk ND	2	J2616
19	Cylinder, 3-1/2" x 8" S, TRA 3508	2	J7107
20	Tea, 3/4-16 FL 2033-8-8S	1	J71026
21	Tube, 9.5L x 14	2	J7253
22	Tire, 9.5L x 14, 6 ply	2	J7254
23	Rim, 5H-148, 106631 Wheel	2	J7276
24	Hub 5-5	2	J7280
25	Lugnut, 1/2"-20	10	J1043
26	Bearing, 1.25 x .66 tpr brg LM67048	2	J0140
27	Race, 1.25 brg cup LM67010	2	J0141
28	Bearing, wheel, tprd, LM48548-W	2	J0113
29	Race, wheel brg cup, LM48510-W	2	J0114
30	Seal, 17617 CR 1.750 x 2.722 HB18	2	J7018
31	Seal, NAT 430 71S 1-3/4 x 2.441	2	J70181
32	Nut, Lock, 1-1/4" - 12, 2 Way Lock	2	J10691
33	Assist Wheel Spacer	2	M4131
34	Witch Pin, 6" long	2	M3378
35	Nose hydr, 3/8"ID x 5' w/ends(common)	1	M3445
36	Nose hydr, 3/8"ID x 5' w/ends (8 & 16 row 30")	2	M3438
	Nose hydr, 3/8"ID x 6.25' w/ends(8 row 36-40";	2	M3446
	12 row 36")		
	Nose hydr, 3/8"ID x 7.5' w/ends(12 row-30")	2	M3442
37	Cylinder pin 1"	2	J71072
38	Elbow, 1/2 NIP x 3/4 FL 90 DE-1208-8-8	2	J71021
39	Assist Wheel Axle	2	M4127
40	Center Witch Assy (Optional)	1	M3552
41	Lynch Pin, 5/16 PLT	6	J1548

INSTALLATION INSTRUCTIONS FOR LIFT ASSIST (M3130, M31302, M31304)

1. Find an open area on tool bar where mounts can be centered between two gangs and mounts will not interfere with 3-Point lower arms or wing stands.
2. Center the mounting brackets (9) between 2 gangs and fasten in place using U-bolts, lockwashers and nuts.
3. Insert assist arms (2) into mounting brackets and pin in place. Using pin (7), 5/16 x 3-1/2" bolt and locknut.
4. Fasten cross arm (8) to rear of assist arms using clamp plate (6), 3/4 x 6" bolts, lockwashers and nuts. Rear cross arm should be centered and may extend past assist arms on certain row spacing.
5. Mark cross arm so that axle mount assembly (4) can be placed directly behind a gang. Tires may be placed inside the assist arms or outside depending on row spacing.
6. Mount axle mount assembly (4) using a clamp plate (6) and 3/4 x 6" bolts, lockwashers, and nuts.
7. Slide wheel mount up into sleeve of mount (4) and fasten in place using lock collar (5), 5/16 x 3-1/2" bolt and locknut.
8. Hook front end (ram end) of hydraulic cylinders (19) to mounting bracket (9) tab, using cylinder pin and clips.
9. Remove plugs from front and back ports on each cylinder.
10. Install vented plug (18) in rear port of cylinder.
11. Install elbows (38) and hoses (36) into front cylinder ports. Hook front ends of hoses to tee (20). Attach last hose (35) to front of tee. Install appropriate tractor coupler *(not included)* and hook to tractor remote.
12. Bleed air from cylinders and lines. **IMPORTANT!** Grease hinge points and swivels before use.
13. Hook rod end of cylinder to assist arm (2) in front hole.
14. **WARNING !! A Quick Hitch on tractor must be used.**
15. When using lift assist - *top pin must be removed to allow cultivator to be siml-mounted.*
16. Three point of tractor should be set to level tool bar when in working position with Quick Hitch pushing against top mast weldment. Lift assist should also be on float in operation position. When the three point is fully raised and lift assist is raised, quick hitch should be fully disengaged from mast hitch weldment. Adjustments can be made to the rear cylinder attachment points on lift assist to achieve clearance in fully raised transport position.

SPECIAL NOTES ON CULTIVATOR OPERATION WITH LIFT ASSIST

Use of a lift assist converts cultivator from being fully mounted on 3 point to being semi-mounted, using only the lower three-point links. A quick hitch or guidance system is required for operation with a lift assist to properly support the cultivator in operating position. The top three-point pin is removed from the cultivator when using a lift assist.

Operating position adjustments:

Three point height stop should be set on tractor so that the paralleled linkage of gangs are nearly level when cultivating.

Cylinder stops should be placed on lift assist cylinders so the rear of the tool bar is supported and is level front to rear when in operating position.

Top link on tractor should be adjusted so that the quick hitch or guidance system is pushing against cultivator top mast to support the front of the cultivator.

Transport position adjustments:

When cultivator is raised the quick hitch should be fully disengaged from the cultivator top mast. This can be achieved by adjusting the tractor top link, by adjusting the lift assist cylinder attaching points or by adjusting the cylinder rod clevis length on the cylinder.

There must be room for the top mast to "float" in transport position in order to prevent damage to the tractor or the cultivator.

TROUBLESHOOTING GUIDE

SYMPTOM	DESCRIPTION	SOLUTION
Cultivator will not penetrate ground	Tool Bar not Leveled	Level tool bar using 3 rd arm.
Gang will not go to depth of gauge wheels	Shares badly worn. Point worn or hard ground. Three point not lowering properly. Wing coming up. Lift assist holding cult. up out of ground. Gangs behind tires not penetrating.	Flip shares or replace Set point to aggressive setting or replace. Check tractor manual for proper draft control Pin wings down. Lift assist must be in float. Add more down pressure.
Cultivator is plugging on trash.	Point in ground, but tips of wing out of ground. Trash not getting cut in front of shank. Shank is partially tripping. Shear pin sheared at top of lower shank. Shears skimming in and out of ground.	Level tool bar with 3 rd arm. Set coulter deeper Increase spring trip tension or reduce spring trip over center adjustment. Replace picker pin. Set depth wheels for 1" deeper or lengthen 3 rd arm or increase down pressure.
Cultivator is tearing out crop.	Not pulling straight. Shares are too long. Guess rows too narrow.	Check for 3 point being centered or check for proper bushings in 3 point arm hookup or check for proper sway blocks or check 3 point arms for locked length. Replace with smaller shares. Cut outer leg of lower shank. Remove outer share.
Levers will not hold position on coulter or depth wheel.	Lack of spring pressure at lever Broken cross brace on adjusting lever.	Tighten spring setting to just allow lever to disengage. 1. Remove Lever (M5218) 2. Reweld 1/4" rod or replace lever. 3. Check that tool bar is level and parallel linkage is level. 4. Check that wings are pinned.
Shanks are tripping Unnecessarily.	Over center setting is too tight. Spring setting not tight enough. On Sweep Weldment shear pin sheared at top.	Back off setting on over center adjustment. WARNING! MUST MAINTAIN SOME OFFSET! Increase spring trip pressure. Replace shear pin.
Coulter hubs have wobble.	Coulter bolt loose or bearing bad	1. Remove nut. 2. Inspect bearings and spacers. 3. Replace necessary parts. 4. Reassemble and torque coulter nut to 120ft-lb.

MODEL 9400 ADJUSTMENTS AND MAINTENANCE

LUBRICATION

On Folding Bars, grease hinges 5 pumps every 12 hours. On Lift Assist, grease hinges and swivel brackets 5 pumps every 12 hours. All bearings on gangs are sealed and do not require additional lubrication.

INITIAL SETTINGS

There are several adjustments on the Sukup 9400 High Residue Cultivator that can be made before the cultivator is taken to the field. The suggested settings are a beginning point, and minor adjustments may need to be made for different field conditions.

COULTER

The coulters are easily adjusted with the special 9400 adjusting tool on the lower right lever on each gang. The coulters can be adjusted from 0 to 6 inches below ground level. Initial settings would put the coulters one to two inches below the point of the sweep. Initial setting would be bottom or 2nd hole from bottom. Note that this adjustment is made mainly to account for the wear in the coulters and that a new coulters may not be able to be adjusted deeper than 2 inches below the sweep point without interference.



DEPTH WHEELS

The depth wheel adjustment is also made with the 9400 adjusting tool on the lower left lever on each gang. The wheels can be adjusted for a one to six inch cutting depth. Initial setting would be in the 2nd or 3rd hole down from the top. Field variations such as ridges or beds may change these initial settings.



DOWN PRESSURE

The down pressure is adjusted with the 9400 adjusting tool on the upper lever on each gang. The lower the lever, the higher the down pressure, up to 1000 pounds per gang. The starting point for the down pressure springs is in top hole. The gangs behind the tractor tires will often need down pressure increased by one position over the other gangs. Other gangs may need less down pressure because those gangs are running in very loose, sometimes cultivated soil. In general, the down pressure springs should be adjusted so that the parallel linkage is running nearly level. If the down pressure is too great, the tool bar may be held too high for optimum performance. In rocky conditions use the least amount of pressure possible.



SWEEP

Sweeps should be as flat as possible for best conservation cultivation. There are two separate adjustments for each sweep. The entire sweep can be angled up to six degrees from horizontal. For maximum flatness, set picker pin in rear hole. The angled back positions are only recommended for those occasions when more dirt needs to be loosened, such as building ridges. Most sweeps have a double wear edge and can be flipped over for longer wear. The point can be individually adjusted from the rest of the sweep. The shallower position offers better rock protection and disturbs less soil. It may be necessary to go to the deeper position in some conditions in order to get better sweep penetration.

SPRING TRIP SHANK

The over center mechanism does most of the work so the trip springs do NOT have to be adjusted overly tight. The springs should be tightened so the distance between the bottom of the spring cap (50) and the top of the trip pivot shaft (18) is 10-1/2". The over center adjusting bolt should be tightened 1 turn in from the point where it first touches the lower trip linkage (15). If excessive tripping occurs, tighten the spring tension or loosen the adjusting bolt slightly. If there is a tendency to shear the lower shear sweep adjusting bolt before the shank trips, tighten the over center adjusting bolt and/or loosen the spring tension. SPCS0030

TOP LINK ADJUSTMENT

The top link should be adjusted so the tool bar is level when in cultivating position.

FOLDING TOOL BARS

The wing lock down pins must be installed when cultivating.

Model 9400 Cultivator Initial Settings

1. Remove float pins from lift arms of tractor.
2. Shorten tractor lift arms to the shortest setting.
3. If not using a quick hitch you will need spacers on 3-point pins.
4. If cultivator has lift assist, the top mast must be allowed to float. (Remove top pin.)
5. Set down stop for 3 point on tractor so cultivator parallel arms are level.
6. Adjust top link so tool bar is level.
7. If the ground is very hard, set point to the more aggressive setting.
8. There are three settings for pitching the shank. If you want to leave the ground level, you will have to be in the back hole.
9. Coulter adjusting should be started in the second hole from the bottom. Always be 1/2" below the point.
10. Down pressure should be started in the top hole on all gangs except behind the tractor tire. Behind the tire, set in third hole.
11. For depth adjustment start in second hole down. Now start by lowering cultivator to the ground and then lengthen the tractors top link until the shares are 2" in the ground.
12. Regarding speed - start off at a slower speed and as you get the cultivator adjusted for depth, increase your speed as ground conditions allow.

THINGS TO REMEMBER

- A. Pin the wings on folding bars.
- B. If using an Auto Guide you sometimes need to run the coulters deeper.
- C. On side hills you may need coulters deeper.
- D. If you run coulters too deep, they may cause slabbing.
- E. Don't cultivate any deeper than necessary because you may waste moisture. The deeper you go, the more slabbing. It takes less power at a more shallow setting. If you go too deep you under cut the weeds and they reroot & regrow.
- F. If you throw more dirt in the row than you like, lengthen the top link a turn and set the gauge wheels a hole more shallow.
- G. When the shares are worn out it is very difficult to set cultivator to go in the ground.