PARTS & INSTRUCTION MANUAL



MODELS 917 and 950



Manufactured by NIKKEL IRON WORKS SHAFTER, CA

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Use Only Genuine DARF Parts

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THIS BOOK COVERS ALL 917, 917WIDE & 950 MODELS - BEGINNING WITH MAY, 2001 PRODUCTION.

Note: Right & Left are as viewed from the rear of the DARF RAKE

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DARF 15 AND 17-WHEEL OVERHEAD RAKES

MODEL 917BRWB ------ STANDARD OVERHEAD FRAME

STANDARD WALKING BEAM AXLES, 6" WHEELS, STANDARD HUBS, BEARING CRANKS, 17 RAKE WHEELS, RUBBER MOUNTED TEETH,

BALL HITCH OR CLEVIS HITCH

REQUIRES 2 REMOTES FROM TRACTOR

MODEL 917FDB-00 ------ STANDARD OVERHEAD FRAME

FASSE 6-FUNCTION CONTROL VALVE STANDARD WALKING BEAM AXLES, 6" WHEELS, STANDARD HUBS, BEARING CRANKS RUBBER MOUNTED TEETH, 17 RAKE WHEELS,

BALL HITCH OR CLEVIS HITCH

REQUIRES 1 REMOTE & 12-VOLT ACCESS

MODEL 917BRWBW------ HEAVY DUTY WIDE OVERHEAD FRAME

(cover picture) HEAVY DUTY WALKING BEAM AXLES,

5' REPHASING CYLINDERS, 6" WHEELS, HEAVY DUTY HUBS, BEARING CRANKS, 17 RAKE WHEELS, RUBBER MOUNTED TEETH

BALL HITCH OR CLEVIS HITCH

REQUIRES 2 REMOTES FROM TRACTOR

MODEL 917FDWB-01 ------ HEAVY DUTY WIDE OVERHEAD FRAME

FASSE 6-FUNCTION CONTROL VALVE 5' REPHASING CYLINDERS, HEAVY DUTY WALKING BEAM AXLES, 6" WHEELS, HEAVY DUTY HUBS, BEARING CRANKS, RUBBER MOUNTED TEETH 17 RAKE WHEELS, BALL HITCH OR CLEVIS HITCH

REQUIRES 1 REMOTE & 12-VOLT ACCESS

MODEL950BRWB ------ STANDARD OVERHEAD FRAME

STANDARD WALKING BEAM AXLES, 6" WHEELS, STANDARD HUBS, BEARING CRANKS 15 RAKE WHEELS, RUBBER MOUNTED TEETH

BALL HITCH OR CLEVIS HITCH

REQUIRES 2 REMOTES FROM TRACTOR

MODEL950FDB-00 ------ STANDARD OVERHEAD FRAME

FASSE 6-FUNCTION CONTROL VALVE STANDARD WALKING BEAM AXLES, 6" WHEELS, STANDARD HUBS, BEARING CRANKS 15 RAKE WHEELS, RUBBER MOUNTED TEETH

BALL HITCH OR CLEVIS HITCH REQUIRES 1 REMOTE & 12-VOLT ACCESS

SAFETY PRECAUTIONS

AVOID INJURY OR FATAL ACCIDENTS. READ THESE SAFETY PRECAUTIONS COMPLETELY AND CAREFULLY! UTILIZE THESE INSTRUCTIONS WHEN OPERATING YOUR MACHINE.

This machine is inherently dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this machine's operations. Do not allow persons to operate or assemble this machine until they have read this manual & have developed a thorough understanding of the safety precautions and of how the machine works.

To prevent injury or death, use a tractor equipped with a roll-over protection system (ROPS). Do not paint over, remove or deface any safety or warning decals on your equipment. Observe all decals and practice the instructions on them.

REMEMBER! Your best insurance against accidents is a careful and responsible operator. If there is any portion of this manual or of the machine's operation you do not understand, contact your local authorized dealer.

BEFORE OPERATING:

- Carefully study and understand your manual.
- Give the machine a "once-over" for any loose bolts, worn parts, cracked welds, hydraulic leaks, frayed hoses, etc. make necessary repairs. Follow the Performing Maintenance guidelines.
- > Be sure the hydraulic lines do not conflict with moving parts.
- > Be sure the machine is hitched properly to the tractor.
- > Do not allow others to be careless near this equipment, or to ride in or on.
- > Do not clean, lubricate or adjust your equipment while it is running.
- > Be extra careful on inclines.

DURING OPERATION:

- Avoid loose fill, rocks & holes; they can be dangerous to the machines operation or movement.
- Do not back up with rake wheels lowered to raking position. Tooth breakage may result.
- > Rake teeth can cause injury. Use special caution when lowering and raising, rake wheels will drop.
- Periodically clear machine of hay or other materials to prevent build-up of dry flammable materials.
- > Always drive at a reasonable speed to maintain control of the situation at hand.

HIGHWAY OPERATION:

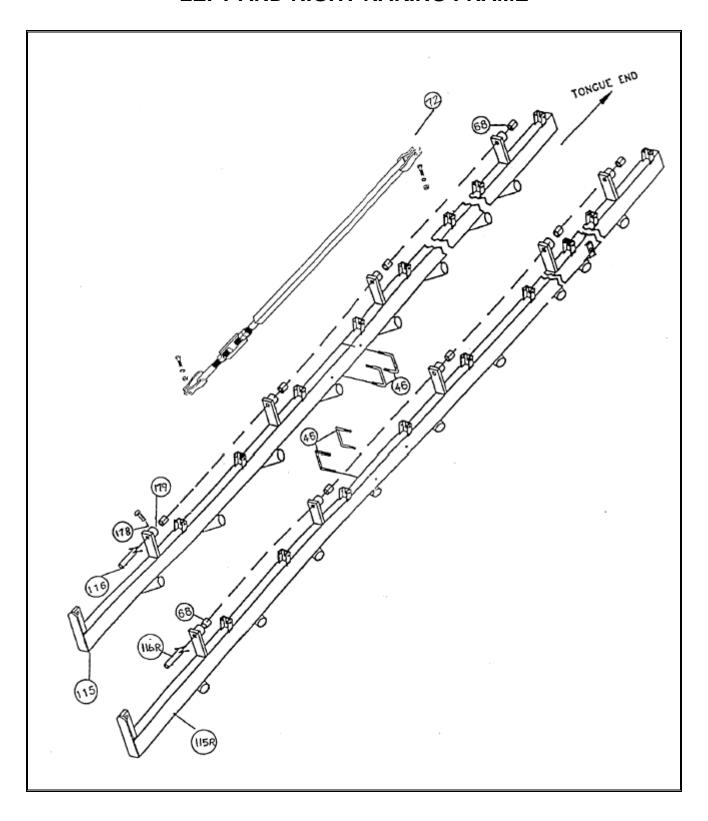
- > Comply with your state and local laws governing highway safety and movement of farm machinery on public roads.
- > Be a safe, courteous operator. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- > Watch for obstructions overhead and to the side while transporting.

Good maintenance is your responsibility. A poorly maintained machine is an invitation to trouble.

PERFORMING MAINTENANCE:

- > Always use proper tools or equipment for the job at hand.
- Never use your hands to locate a hydraulic leak. Use a small piece of cardboard or wood.
- > Hydraulic fluid escaping under pressure can penetrate the skin.
- > Never replace hex bolts with less than Grade 5 bolts, unless otherwise specified.
- If the DARF rake is altered or modified from the original design, or if genuine replacement parts or teeth are not used and properly installed, NIKKEL IRON WORKS, INC. will not accept any responsibility or liability for injury or warranty.

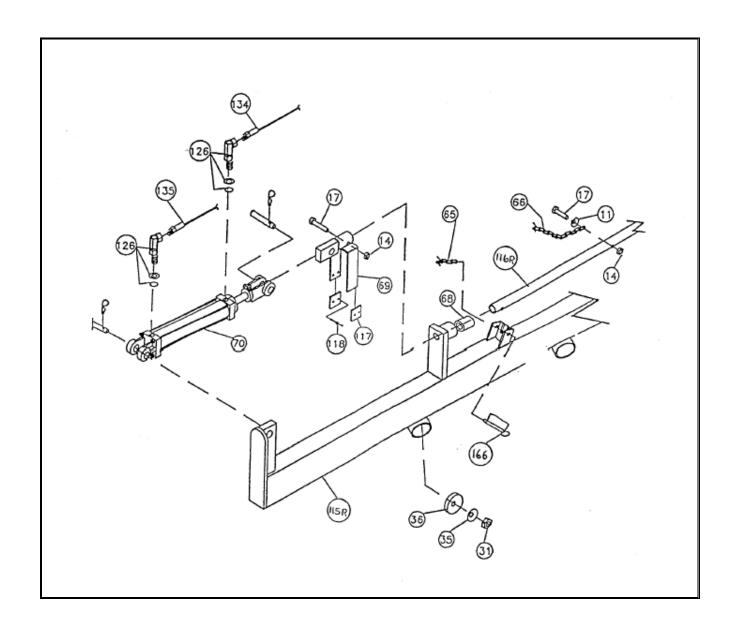
LEFT AND RIGHT RAKING FRAME



LEFT AND RIGHT RAKING FRAME

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
46	9028	U-BOLT LEG STRUT TO FRAME	4	Х	Х	Х	Х	Х	Х
68	9047	UHMW BUSHING	AR	Х	Х	Χ	Х	Х	Х
72	9099	HEAVY ADJ. RAKE FRAME BRACE	2	Х	Х	Χ	Х	Х	Х
115	91792	LEFT RAKE FRAME WELDMENT	1			Χ	Х	Х	Х
115	95092	LEFT RAKE FRAME WELDMENT	1	Х	Х				
115R	91793	RIGHT RAKE FRAME WELDMENT	1			Χ	Х	Х	Х
	95093	RIGHT RAKE FRAME WELDMENT	1	Х	Х				
116	91790	LEFT SIDE LIFT TUBE, 9 HOLES	1			Χ	Х	Х	Х
116	95090	LEFT SIDE LIFT TUBE, 8 HOLES	1	Х	Х				
116R	91791	RIGHT SIDE LIFT TUBE, 10 HOLES	1			Χ	Х	Х	Х
116R	95091	RIGHT SIDE LIFT TUBE, 9 HOLES	1	Х	Х				
178	SMPAN12X06	#12X3/8 PHILIPS PAN SCREW	AR	Х	Х	Χ	Х	Х	Х
179	INTLW10	5/8 INTERNAL LOCK WASHER	AR	Х	Х	Χ	Х	Х	Х
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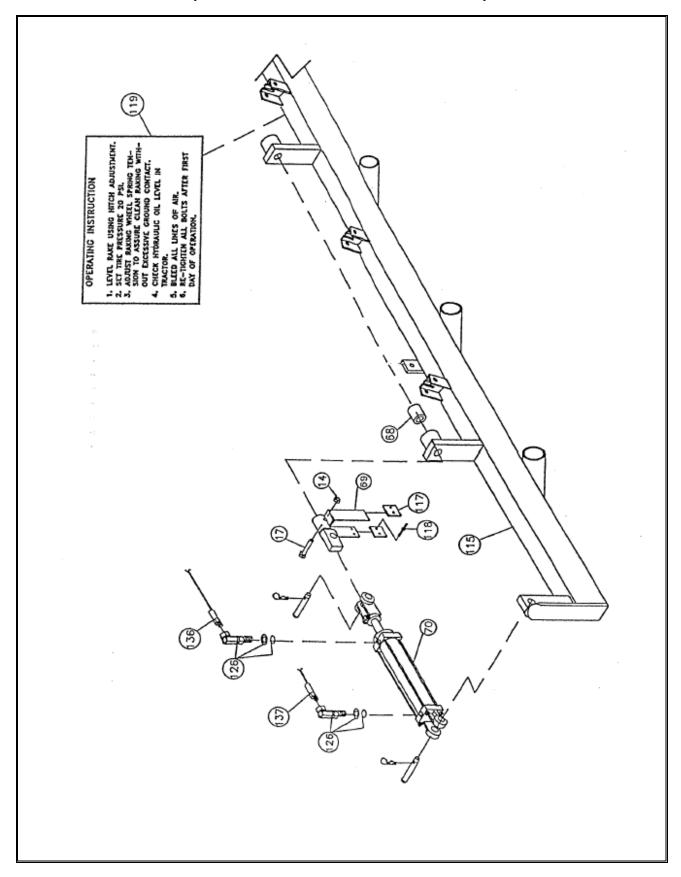
RIGHT RAKE FRAME (REAR VIEW WITH HYDRAULICS)



RIGHT RAKE FRAME (REAR VIEW WITH HYDRAULICS)

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
11	FLTWA06	3/8" USS WASHER	AR	Х	Х	Х	Х	Х	Х
14	NUT06NCLK	3/8" NC LOCK NUT, GRD C	AR	Х	Х	Χ	Х	Х	Х
17	CSNC06X32	3/8"X2" NC CAP SCREW, GRD 5	AR	Х	Х	Χ	Х	Х	Х
31	NUT12NC	3/4" NC HEX NUT	AR	Х	Х	Χ	Х	Х	Х
35	95044	INTERNAL LOCK WASHER	AR	Х	Х	Χ	Х	Х	Х
36	95045	RETAINER (95019 SPINDLE, gold)	AR	Х	Х	Χ	Х	Х	Х
65	03PCHAIN17	3/16" PROOF COIL CHAIN, 17 LINKS	AR	Х	Х	Χ	Х	Х	Х
66	03PCHAIN29	3/16" PROOF COIL CHAIN, 29 LINKS	AR	Х	Х	Χ	Х	Х	Х
68	9047	UHMW BUSHING	AR	Х	Х	Χ	Х	Х	Х
69	92193	LIFT TUBE HYD CLEVIS W/PART#117,#118	2	Х	Х	Х	Х	Х	Х
70	N201028	2X8 ASAE HYD CYLINDER W/PINS	2	Х	Х	Χ	Х	Х	Х
		(use SKAR12104A, univ.2" repair kit)		Х	Х	Х	Х	Х	Х
115R	91793	RIGHT RAKE FRAME WELDMENT	1			Х	Х	Х	Х
	95093	RIGHT RAKE FRAME WELDMENT	1	Х	Х				
	91791	RIGHT SIDE LIFT TUBE, 10 HOLES	1			Х	X	Х	x
	95091	RIGHT SIDE LIFT TUBE, 9 HOLES	1	Х	Х				
	92196-02	DRILLED UHMW PAD FOR 92193	4	Х	X	Х	X	Х	Х
	92196-03	NYLON RIVET	8	X	X	X	X	Х	X
126	HMBFP9064	O'RING TO PIPE X 90 DEGREE ADAPTER	4	X	X	X	X	Х	X
134	04X2272	1/4"X11'10" HOSE, 1/4" ENDS	1	X	X	X	X	Х	X
135	04X2464	1/4"X12'10" HOSE, 1/4" ENDS	1	X	X	X	X	Х	X
166	P7966	PTO LOCK PIN, 3/8"X3"	AR	X	X	X	X	Х	X
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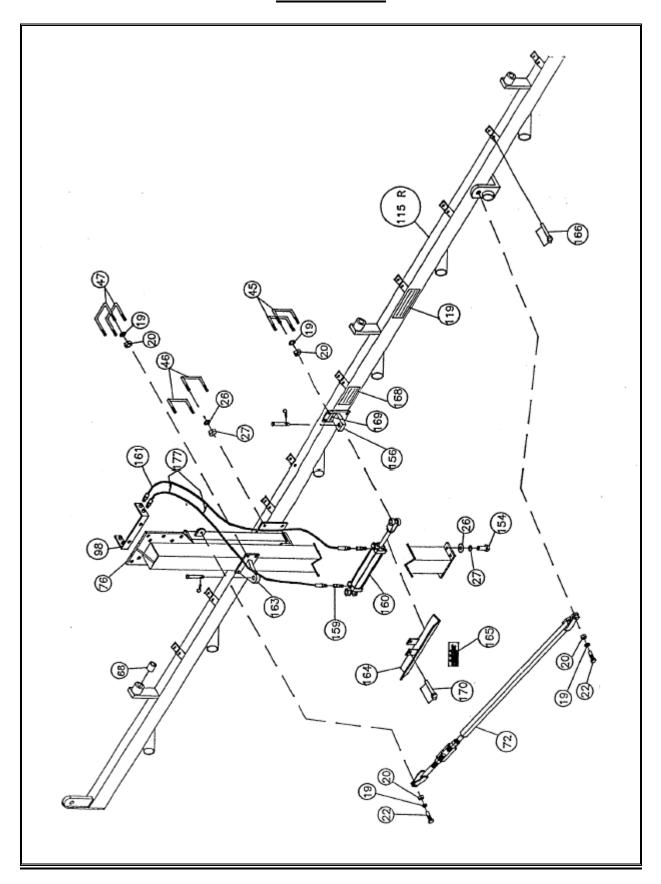
LEFT RAKE FRAME (REAR VIEW WITH HYDRAULICS)



LEFT RAKE FRAME (REAR VIEW WITH HYDRAULICS)

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
14	NUT06NCLK	3/8" NC LOCK NUT, GRD C	AR	Х	Х	Х	Х	Х	Х
17	CSNC06X32	3/8"X2" NC CAP SCREW, GRD 5	AR	Х	Х	X	Х	Х	Х
68	9047	UHMW BUSHING	AR	Х	Х	X	Х	Х	Х
69	92193	LIFT TUBE HYD CLEVIS W/PART#117,#118	2	Х	Х	X	Х	Х	Х
70	N201028	2X8 ASAE HYD CYLINDER W/PINS	2	Х	Х	X	Х	Х	Х
		(use SKAR12104A, univ.2" repair kit)		Х	Х	Χ	Х	Х	Х
115	91792	LEFT RAKE FRAME WELDMENT	1	1		Х	Х	Х	Х
115	95092	LEFT RAKE FRAME WELDMENT	1	Х	Х				
117	92196-02	DRILLED UHMW PAD FOR 92193	4	Х	Х	Х	Х	Х	Х
118	92196-03	NYLON RIVET	8	Х	Х	Х	Х	Х	Х
119	NIWDEC4X10	DECAL - OPERATING INSTRUCTIONS	2	Х	Х	Х	Х	Х	Х
126	HMBFP9064	O'RING TO PIPE X 90 DEGREE ADAPTER	4	Х	Х	Х	Х	Х	Х
136	04X1664	1/4"X8'8" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Х
137	04X1856	1/4"X9'8" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Х
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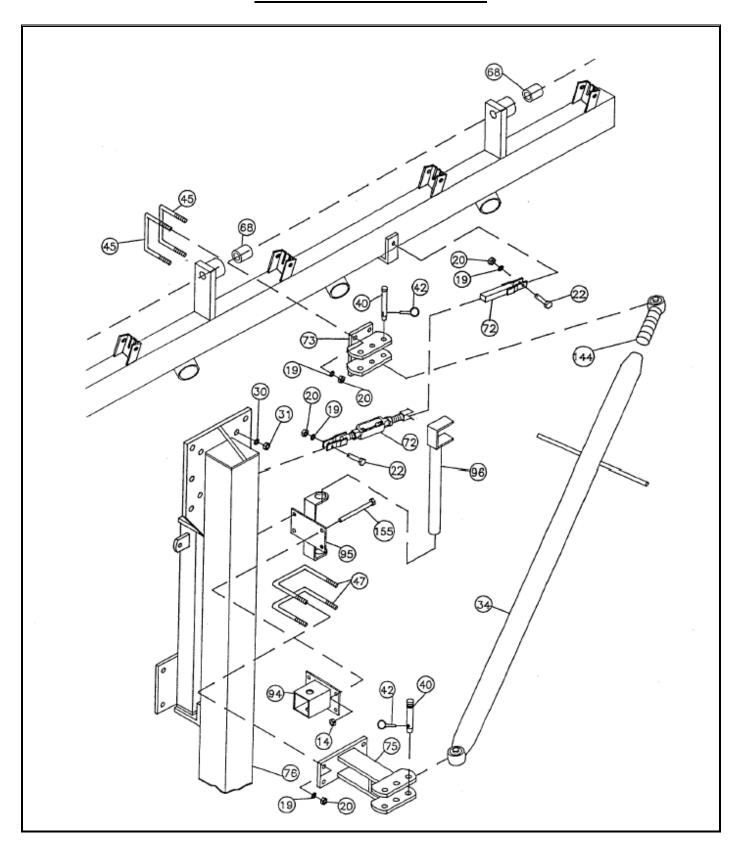
RAKE FRAME AND RELATED PARTS FD MODELS



RAKE FRAME AND RELATED PARTS FD MODELS

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
19	LW08SP	1/2" SPLIT LOCK WASHER	AR	Х	Х	Х	Х	Х	Х
20	NUT08NC	1/2" NC HEX NUT	AR	Х	Х	Χ	Х	Х	Х
22	CSNC08X32	1/2"X2" NC CAP SCREW, GRD 5	AR	Х	Х	Χ	Х	Х	Х
26	LW10SP	5/8" SPLIT LOCK WASHER	AR	Х	Х	Χ	Х	Х	Х
27	NUT10NC	5/8" NC HEX NUT	AR	Х	Х	Χ	Х	Х	Х
45	9027	U-BOLT, TO FRAME BRACKET	4	Х	Х	Χ	Х	Х	Х
46	9028	U-BOLT, LEG STRUT TO FRAME	4	Х	Х	Χ	Х	Х	Х
47	9029	U-BOLT, LEG STRUT/ANGLE BRACKET	4	Х	Х	Χ	Х	Х	Х
68	9047	UHMW BUSHING	AR	Х	Х	Χ	Х	Х	Х
72	9099	HEAVY ADJ. RAKE FRAME BRACE	2	Х	Х	Χ	Х	Х	Х
76	92581C	LEG STRUT, RIGHT OR LEFT	2	Х	Х	Χ	Х	Х	Х
98	9018B	4-HOSE COUPLER	2	Х	Х	Χ	Х	Х	Х
115R	91793	RIGHT RAKE FRAME WELDMENT	1			Χ	Х	Х	Х
115R	95093	RIGHT RAKE FRAME WELDMENT	1	Х	Х				
115	91792	LEFT RAKE FRAME WELDMENT (not shown)	1			Χ	Х	Х	Х
115	95092	LEFT RAKE FRAME WELDMENT (not shown)	1	Х	Х			1	
119	NIWDEC4X10	DECAL - OPERATING INSTRUCTIONS	2	Х	Х	Χ	Х	Х	Х
154	CSNC10X32	5/8"X2" NC CAP SCREW, GRD 5	8	Х	Х	Χ	Х	Х	Х
156	922990	HYDRAULIC CYL BRACKET, FRAME END	2		Х			Х	Х
159	HMBFPX84	O-RING HYDRAULIC ADAPTER	4	Х	Х	Χ	Х	Х	Х
160	N301060	3X8 ASAE HYD. CLYLINDER	2		Х			Х	Х
		use SKAR14106 3" repair kit							
161	04X800	1/4"X4'2" HOSE, 1/4" ENDS	4		Х			Х	Х
163	9173	LEG STRUT/HYD CYL BRACKET	2		Х			Х	Х
164	9189	HYDRAULIC CYLINDER STOP W/PIN	2		Х			Х	Х
165	NIWFD20X96	DECAL FOR TRANSPORT LOCK	2		Х			Х	Х
166	P7966	PTO LOCK PIN, 3/8"X3"	17	Х	Х	Χ	Х	Х	Х
168	NIWFD96X52	DECAL, SAFETY BLOCK STORAGE	2		Х			Х	Х
169	NIWFD56X24	DECAL, TRANSPORT SAFETY	2		Х			Х	Х
170	WIRE7SQ	WIRE LOCK PIN ONLY	2		Х			Х	Х
177	9629	PLASTIC WIRE TIES, 7-1/2"	4	Х	Х	Χ	Х	Х	Х

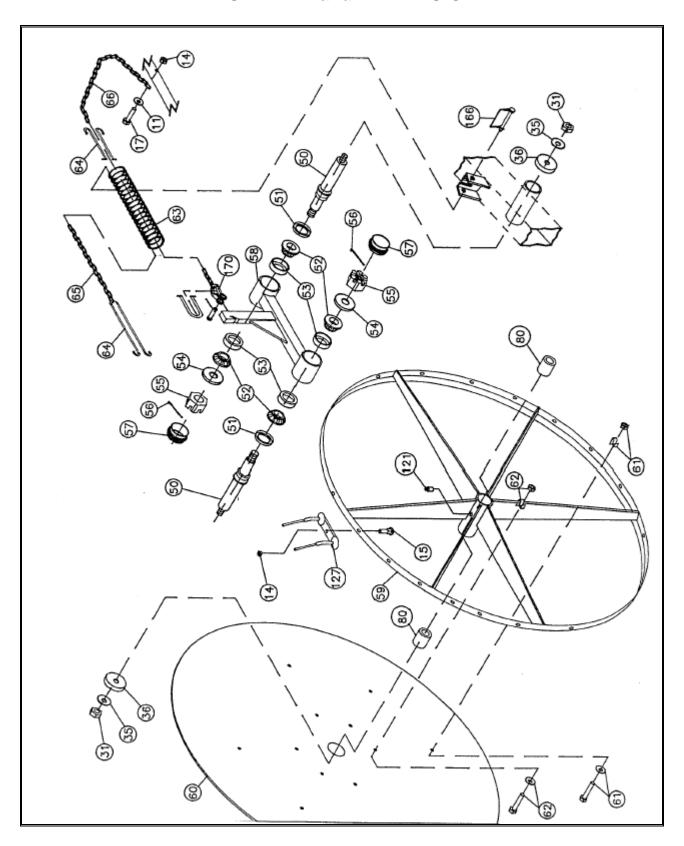
RAKE FRAME AND RELATED PARTS STANDARD HYDRAULICS



RAKE FRAME AND RELATED PARTS STANDARD HYDRAULICS

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
14	NUT06NCLK	3/8" NC LOCK NUT, GRD C	AR	Х	Х	Х	Х	X	Х
19	LW08SP	1/2" SPLIT LOCK WASHER	AR	Х	Х	X	Х	Х	Х
20	NUT08NC	1/2" NC HEX NUT	AR	Х	Х	X	Х	Х	Χ
22	CSNC08X32	1/2"X2" NC CAP SCREW, GRD 5	AR	Х	Х	X	Х	Х	Х
30	LW12SP	3/4" SPLIT LOCK WASHER	AR	Х	Х	X	Х	Х	Х
31	NUT12NC	3/4" NC HEX NUT	AR	X	Х	Χ	Х	Х	Х
34	9172	MANUAL ADJ. TUBE	1			X	Х		Х
34	TL165P	TOP LINK, 16"	1	Х					
40	P772	TOP LINK PIN, 3-5/8"	4	Х		Х	Х		Х
42	P791	LYNCH PIN, 7/16"	6	Х		Х	Х		Х
45	9027	U-BOLT, TO FRAME BRACKET	4	Х	Х	Х	Х	Х	Х
47	9029	U-BOLT, LEG STRUT/ANGLE BRACKET	4	Х	Х	Х	Х	Х	Х
68	9047	UHMW BUSHING	AR	Х	Х	Х	Х	Х	Х
72	9099	HEAVY ADJ. RAKE FRAME BRACE	2	Х	Х	Х	Х	Х	Х
73	922994	3-HOLE ADJ. BRACKET	2	Х		Х			
73	92206	5-HOLE ADJ. BRACKET	2				X		
75	922996	LEG STRUT ADJ. BRACKET	2			Х	X	-	Х
76	92581C	LEG STRUT, RIGHT OR LEFT	2	Х	X	X	X	Х	X
94	9012	JACK STOW BRACKET	1	X	X	X	X	X	X
95	9013	CLAMP PLATE FOR 9012	1	X	X	X	X	X	X
96	9229930	WHEEL ADJUST LEVER	1	X	X	X	$\frac{x}{x}$	X	X
144	9171	THREADED END FOR 9172 ROD	2			X	$\frac{\lambda}{X}$		$\frac{x}{x}$
155	CSNC06X96	3/8"X6" NC CAP SCREW, GRD 5	4	X	Х	X	X	X	X
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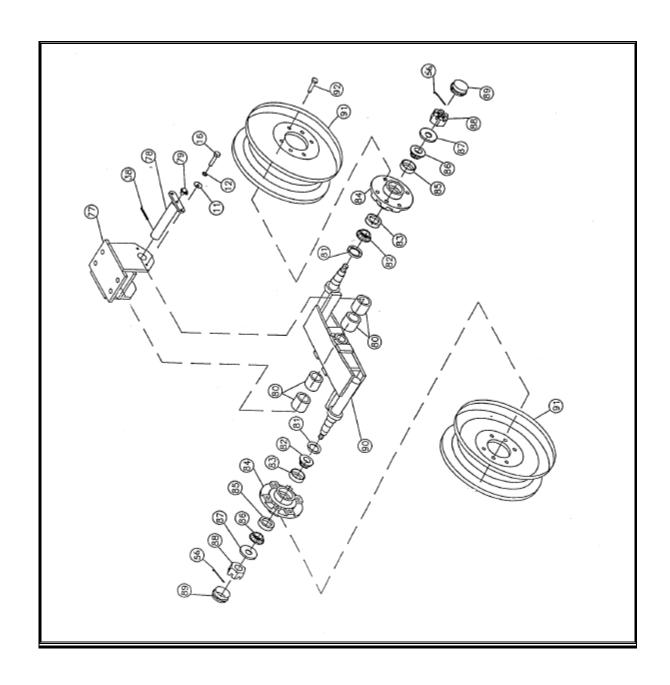
RAKING WHEEL and BEARING CRANK



RAKING WHEEL and BEARING CRANK

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
11	FLTWA06	3/8" USS WASHER	1	Х	Х	Х	Х	Х	Х
14	NUT06NCLK	3/8" NC LOCK NUT, GRD C	18	Х	Х	Χ	Х	Х	Х
15	92133-01	OVAL HEAD TOOTH BOLT	18	Х	Х	Χ	Х	Х	Х
17	CSNC06X32	3/8"X2" NC CAP SCREW, GRD 5	1	Х	Х	Χ	Х	Х	Х
31	NUT12NC	3/4" NC HEX NUT	2	X	Х	Χ	Х	Х	Х
35	95044	INTERNAL LOCK WASHER	2	Х	Х	Χ	Х	Х	Х
36	95045	RETAINER (95019 SPINDLE,gold)	2	X	Х	Χ	Х	Х	Х
50	95019	SPINDLE W/NUTS	2	Х	Х	Χ	Х	Х	Х
51	95022	SEAL (95019 SPINDLE, 471504)	2	Х	Х	Χ	Х	Х	Х
52	9220	CONE (15123)	4	X	Х	Χ	Х	Х	Х
53	9221	CUP (15245)	4	Х	Х	Χ	Х	Х	Х
54	95043	SPINDLE WASHER (A235)	2	Х	Х	Χ	Х	Х	Х
55	NUT16NFSLT	1" NF SLOTTED NUT	2	Х	Х	Χ	Х	Х	Х
56	COT32P	5/32"X1-1/2" COTTER PIN	22	Х	Х	Χ	Х	Х	Х
57	9041	GREASE CAP (NIW EMBOSSED)	1	Х	Х	Χ	Х	Х	Х
58	92219H	SUPPORT SECTION	1	Х	Х	Х	Х	Х	Х
	95019HOO	BRG CRANK KIT W/ALL PARTS READY TO ASSY							
59	92114	RAKE WHEEL W/BUSHING	1	Х	Х	Χ	Х	Х	Х
00	92154C	WIND SHIELD (S2S TEMPERED)	1	Х	Х	Χ	Х	Х	Х
60	92155	WIND SHIELD (POLY - 6 PIECE)	1	Х	Х	Χ	Х	Х	Х
61	92175	SHIELD FASTENER ASSY (SHORT)	6	Х	Х	Χ	Х	Х	Х
62	92175A	SHIELD FASTENER ASSY (LONG)	6	Х	Х	Х	Х	Х	Х
63	92221	COMPRESSION SPRING ONLY	1	Х	Х	Х	Х	Х	Х
64	92221A	WIRE FORM	2	Х	Х	Х	Х	Х	Х
	92121A	COMPRESSION SPRING W/2 WIRE FORMS							
65	03PCHAIN17	3/16" PROOF COIL CHAIN, 17 LINKS	1	Х	Х	Χ	Х	Х	Х
66	03PCHAIN29	3/16" PROOF COIL CHAIN, 29 LINKS	1	Х	Х	Χ	Х	Х	Х
80	92115	BUSHING	AR	Х	Х	Χ	Х	Х	Х
121	B511ZERK	3/16" DRIVE IN ZERK	AR	Х	Х	Х	Х	Х	Х
127	92117RL	RIGHT OR LEFT RUBBER MTD TOOTH	18	Х	Х	Х	Х	Х	Х
166	P7966	PTO LOCK PIN, 3/8"X3"	1	Х	Х	Χ	Х	Х	Х
170	3559T44	CLEVIS	1	Х	Х	Х	Х	Х	Х

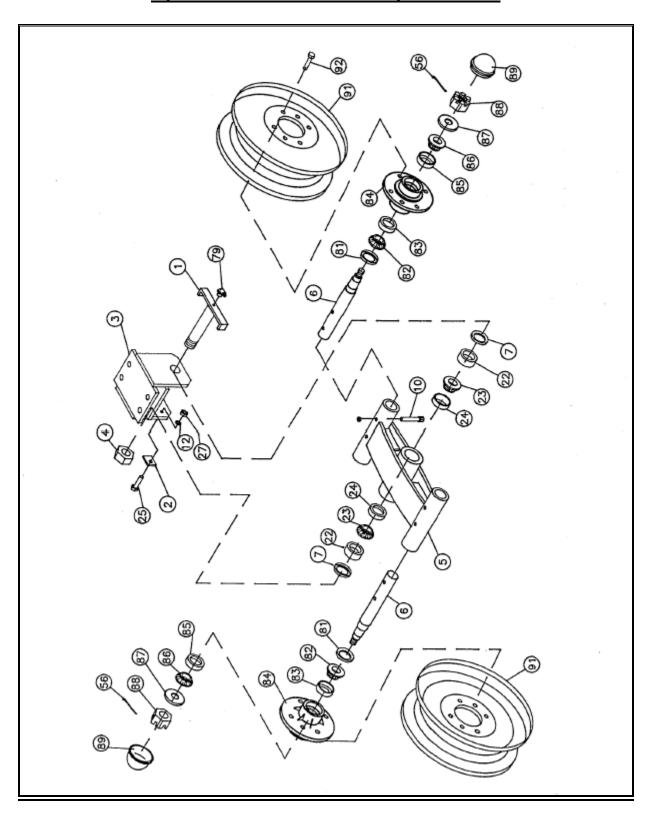
WALKING BEAM ASSEMBLY STANDARD – Right or Left



WALKING BEAM ASSEMBLY STANDARD – Right or Left

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
11	FLTWA06	3/8" USS WASHER	AR	Х	Х	Х		Х	
12	LW06SP	3/8" SPLIT LOCK WASHER	AR	Х	Х	Χ		Х	
16	CSNC06X16	3/8"X1" NC CAP SCREW, GRD 5	4	Х	Х	Х		Х	
38	ROLLP04X40	1/4"X2-1/2" SPRING PIN	2	Х	Х	Х		Х	
56	COT32P	5/32"X1-1/2" COTTER PIN	4	Х	Х	Χ		Х	
77	9017	CRADLE WELDMENT	2	Х	Х	Χ		Х	
78	92591	W.B.PIN w/#38, #79	2	Х	Х	Χ		Х	
79	B911	1/4-28X90 DEGREE GREASE ZERK	2	Х	Х	Χ		Х	
80	92115	BUSHING	8	Х	Х	Χ		Х	
81	9038	SEAL, CR16289	4	Х	Х	Χ		Х	
82	9039	BEARING CONE INNER, JL69349	4	Х	Х	Х		Х	
83	9037	INNER CUP, JL69310	4	Х	Х	Х		Х	
84	9035	3500# HUB w/cups installed (Red)	4	Х	Х	Х		Х	
85	9042	OUTER CUP, LM67010	4	Х	Х	Х		Х	
86	9040	BEARING CONE OUTER, LM67048	4	Х	Х	Х		Х	
87	9043	7/8" SPINDLE WASHER	4	Х	Х	Х		Х	
88	92125	SPINDLE NUT 7/8" SLOTTED	4	Х	Х	Х		Х	
89	1513	GREASE CAP FOR 9035	4	Х	Х	Х		Х	
90	9016	SPINDLE WELDMENT	AR	Х	Х	Х		Х	
91	92148	GROUND WHEEL, 15X6 (6on6)	4	Х	Х	Х		Х	
92	9036	WHEEL BOLT, ½"-20	24	Х	Х	Х		Х	
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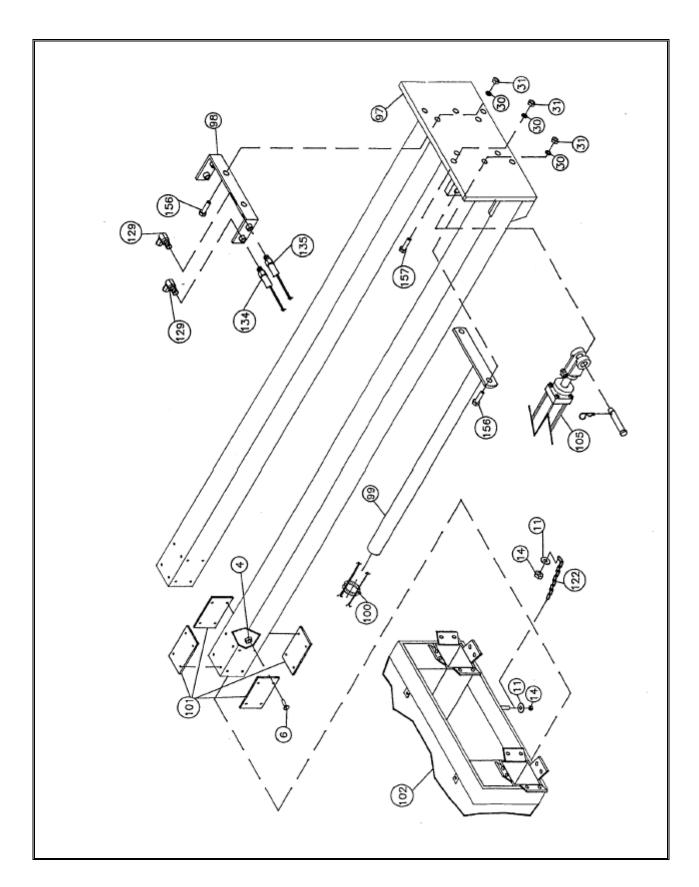
HEAVY DUTY WALKING BEAM ASSEMBLY (Right or Left) Optional On All Rakes Except As Noted



HEAVY DUTY WALKING BEAM ASSEMBLY (Right or Left) Optional On All Rakes Except As Noted

1 9082 PIVOT PIN W/NUT & GREASE FITTING	REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
3 9079 WALKING BEAM CRADLE	1	9082	PIVOT PIN W/NUT & GREASE FITTING	1				Х		Х
A	2	9108		1	1					
5 9078 WALKING BEAM WELDMENT W/CUPS 1 6 90801 17-1/2" SPINDLE (replaceable) for 90803 Hub 2 6 9170 16-1/2" SPINDLE (replaceable) for 9035 Hub 2 7 471138 SEAL 2 10 SOCKHD08X48 I/2"X3" SOCKET HEAD CAP SCREW w/lock nut 4 12 LW06SP 3/8" SPLIT LOCK WASHER 1 21 LW06SP 3/8" SPLIT LOCK WASHER 1 22 9174 SEAL COLLAR 2 23 18685 CENTER PIN CONE 2 24 18620 PIVOT PIN CUP 2 25 CSNC06X20 3/8"X1-1/4" CAP SCREW, GRD 5 1 27 NUT06NC 3/8 NC STD NUT 1 36 COT32P 5/32"X1-1/2" COTTER PIN 2 79 B911 1/4-28X90 DEGREE GREASE ZERK 2 84 90803 4910# HUB w/cups installed (Yellow) 2 12 25520 Inner Cup 2 381 204506 Seal, CR20148	3	9079	WALKING BEAM CRADLE	1				Х		Х
6 90801 17-1/2" SPINDLE (replaceable) for 90803 Hub 2 X X 6 9170 16-1/2" SPINDLE (replaceable) for 9035 Hub 2 X X 7 471138 SEAL 2 X X X 10 SOCKHD08X48 1/2"X3" SOCKET HEAD CAP SCREW w/lock nut 4 X X X 12 LW06SP 3/8" SPLIT LOCK WASHER 1 X X X X 22 9174 SEAL COLLAR 2 2 X	4	NUT28NFJAM	1-3/4" NF JAM NUT	1				Х		Х
6 9170 16-1/2" SPINDLE (replaceable) for 9035 Hub 2 7 471138 SEAL 2 10 SCOKHD08X48 1/2"X3" SOCKET HEAD CAP SCREW w/lock nut 4 12 LW06SP 3/8" SPLIT LOCK WASHER 1 22 9174 SEAL COLLAR 2 23 18685 CENTER PIN CONE 2 24 18620 PIVOT PIN CUP 2 25 CSNC06X20 3/8"X1-1/4" CAP SCREW, GRD 5 1 27 NUT06NC 3/8 NC STD NUT 1 76 COT32P 5/32"X1-1/2" COTTER PIN 2 79 B911 1/4-28X90 DEGREE GREASE ZERK 2 84 90803 4910# HUB w/cups installed (Yellow) 2 12 25520 Inner Cup 2 81 204506 Seal, CR20148 2 82 25590 Bearing Cone, Inner 2 84 9050 Seal, CR20148 2 85 P502001 Grease Cap 2 9 P101	5	9078	WALKING BEAM WELDMENT W/CUPS	1				Х		Х
T	6	90801	17-1/2" SPINDLE (replaceable) for 90803 Hub	2						Х
10	6	9170	16-1/2" SPINDLE (replaceable) for 9035 Hub	2				Х		Х
12	7	471138	SEAL	2				Х		Х
22 9174 SEAL COLLAR 2 2	10	SOCKHD08X48	1/2"X3" SOCKET HEAD CAP SCREW w/lock nut	4				Х		Х
23	12	LW06SP	3/8" SPLIT LOCK WASHER	1				Х		Х
24	22	9174	SEAL COLLAR	2				Х		Х
25	23	18685	CENTER PIN CONE	2				Х		Х
27	24	18620	PIVOT PIN CUP	2				Х		Х
56 COT32P 5/32"X1-1/2" COTTER PIN 2 79 B911 1/4-28X90 DEGREE GREASE ZERK 2 84 90803 4910# HUB w/cups installed (Yellow) 2 12 25520 Inner Cup 2 13 25821 Outer Cup 2 81 204506 Seal, CR20148 2 82 25590 Bearing Cone, Inner 2 86 25877 Bearing Cone, Outer 2 89 P502001 Grease Cap 2 92 P101303 Wheel bolt, 9/16x1-1/2" 12 84 9035 3500# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 <	25	CSNC06X20	3/8"X1-1/4" CAP SCREW, GRD 5	1				Х		Х
To be compared to the compar	27	NUT06NC	3/8 NC STD NUT	1				Х		Х
84 90803 4910# HUB w/cups installed (Yellow) 2 12 25520 Inner Cup 2 13 25821 Outer Cup 2 81 204506 Seal, CR20148 2 82 25590 Bearing Cone, Inner 2 86 25877 Bearing Cone, Outer 2 89 P502001 Grease Cap 2 92 P101303 Wheel bolt, 9/16x1-1/2" 12 84 9035 3500# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 91 W50334 GROUND WHEEL, 15X8 (60n6) 4	56	COT32P	5/32"X1-1/2" COTTER PIN	2				Х		Х
12 25520 Inner Cup 2 13 25821 Outer Cup 2 81 204506 Seal, CR20148 2 82 25590 Bearing Cone, Inner 2 86 25877 Bearing Cone, Outer 2 89 P502001 Grease Cap 2 92 P101303 Wheel bolt, 9/16x1-1/2" 12 84 9035 350# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	79	B911	1/4-28X90 DEGREE GREASE ZERK	2				Х		Х
12 25520 Inner Cup 2 13 25821 Outer Cup 2 81 204506 Seal, CR20148 2 82 25590 Bearing Cone, Inner 2 86 25877 Bearing Cone, Outer 2 89 P502001 Grease Cap 2 92 P101303 Wheel bolt, 9/16x1-1/2" 12 84 9035 350# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (60n6) 4	84	90803	4910# HUB w/cups installed (Yellow)	2				Х		Х
81 204506 Seal, CR20148 2 82 25590 Bearing Cone, Inner 2 86 25877 Bearing Cone, Outer 2 89 P502001 Grease Cap 2 92 P101303 Wheel bolt, 9/16x1-1/2" 12 84 9035 3500# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	12	25520	• • • • • • • • • • • • • • • • • • • •	2				Х		Х
82 25590 Bearing Cone, Inner 2 86 25877 Bearing Cone, Outer 2 89 P502001 Grease Cap 2 92 P101303 Wheel bolt, 9/16x1-1/2" 12 84 9035 3500# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	13	25821	Outer Cup	2				Х		Х
82 25590 Bearing Cone, Inner 2 86 25877 Bearing Cone, Outer 2 89 P502001 Grease Cap 2 92 P101303 Wheel bolt, 9/16x1-1/2" 12 84 9035 3500# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 X X 88 92125 SPINDLE NUT 7/8" SLOTTED 2 X X 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	81	204506	Seal, CR20148	2				Х		Х
89 P502001 Grease Cap 2 92 P101303 Wheel bolt, 9/16x1-1/2" 12 84 9035 3500# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	82	25590		2				Х		Х
92 P101303 Wheel bolt, 9/16x1-1/2" 12 84 9035 3500# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	86	25877	Bearing Cone, Outer	2				Х		Х
84 9035 3500# HUB w/cups installed (Red) 2 83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	89	P502001	Grease Cap	2				Х		Х
83 9037 Inner Cup, JL69310 2 85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	92	P101303	Wheel bolt, 9/16x1-1/2"	12				Х		Х
85 9042 Outer Cup, LM67010 2 81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	84	9035	3500# HUB w/cups installed (Red)	2						
81 9038 Seal, CR16289 2 82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	83	9037	Inner Cup, JL69310	2						
82 9039 Bearing Cone Inner, JL69349 2 86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	85	9042	Outer Cup, LM67010	2						
86 9040 Bearing Cone Outer, LM67048 2 89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 X X 88 92125 SPINDLE NUT 7/8" SLOTTED 2 X X 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	81	9038	Seal, CR16289	2	1					
89 1513 Grease Cap 2 92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 X X 88 92125 SPINDLE NUT 7/8" SLOTTED 2 X X 91 W50334 GROUND WHEEL, 15X8 (6on6) 4	82	9039	Bearing Cone Inner, JL69349	2	1					
92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (60n6) 4	86	9040	Bearing Cone Outer, LM67048	2	1					
92 9036 Wheel bolt, 1/2x1-1/2" 12 87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (60n6) 4	89	1513		2						
87 9043 7/8" SPINDLE WASHER 2 88 92125 SPINDLE NUT 7/8" SLOTTED 2 91 W50334 GROUND WHEEL, 15X8 (60n6) 4										
88 92125 SPINDLE NUT 7/8" SLOTTED 2 X X 91 W50334 GROUND WHEEL, 15X8 (6on6) 4 4		9043		2				Х		Х
91 W50334 GROUND WHEEL, 15X8 (6on6) 4				2						
		W50334								
					Х	X	Х	Х	Х	Х
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OVERHEAD SLIDE SECTION RIGHT SIDE

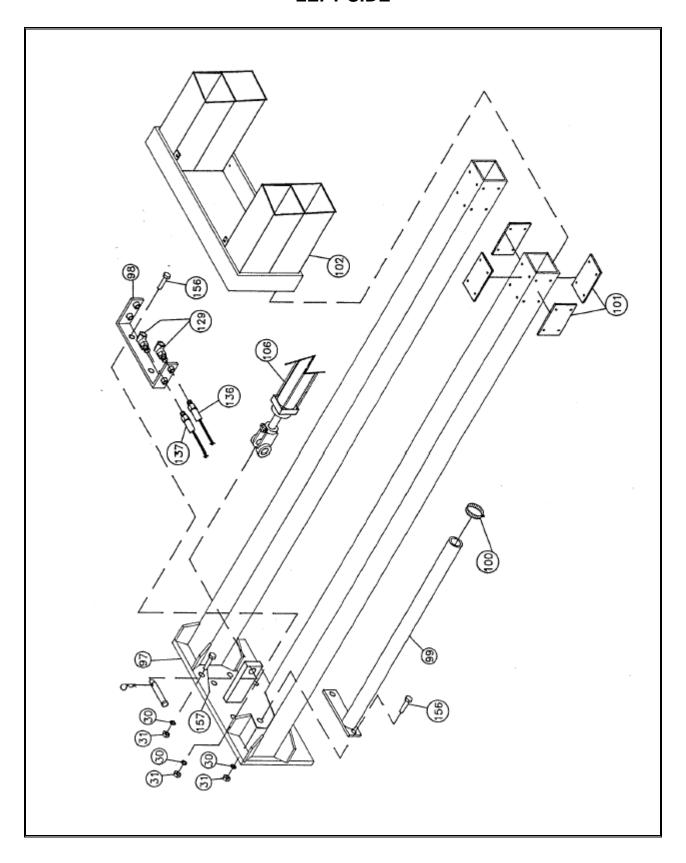


OVERHEAD SLIDE SECTION RIGHT SIDE

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
4	NUT04NCNYL	1/4" NC NYLON LOCK NUT	AR	Х	Х	Х	Х	Х	Х
6	PHMS04X16	1/4"X1" NC FLAT HEAD PHILLIPS	AR	Х	Х	Х	Х	Х	Х
11	FLTWA06	3/8" USS WASHER	AR	X	Х	X	Х	Х	Х
14	NUT06NCLK	3/8" NC LOCK NUT, GRD C	AR	Х	Х	Х	Х	Х	Х
30	LW12SP	3/4" SPLIT LOCK WASHER	AR	Х	Х	X	Х	Х	Х
31	NUT12NC	3/4" NC HEX NUT	AR	Х	Х	Х	Х	Х	Х
97	9071	MALE EXT. WELDMENT, RT OR LT	2				Х		Х
97	93285	MALE EXT. WELDMENT, RT OR LT	2	Х	Х	Х		Х	
98	9018B	4-HOSE COUPLER	2	Х	Х	Х	Х	Х	Х
99	91787	HOSE GUIDE	1	Х	Х	Х	Х	Х	Х
100	B24H	HOSE CLAMP	AR	Х	Х	Х	Х	Х	Х
101	93100	3/16"X6" BEARING PLATE	AR	Х	Х	Х	Х	Х	Х
101	93101	1/4"X6" BEARING PLATE	AR	Х	Х	Х	Х	Х	Х
102	9070	MAIN FRAME WELDMENT	1				Х		Х
102	93286	MAIN FRAME WELDMENT	1	Х	Х	Х		Х	
105	N325349	3.25X60 SLAVE CYLINDER, RIGHT SIDE, LOWER	1				Х		Х
105	N325277	3.25X48 SALVE CYLINDER, RIGHT SIDE, LOWER	1	Х	Х	Х		Х	
		1 Valve Cap at Rod end (use 4A2105 repair kit)		Х	Х	Х	Х	Х	Х
122	03PCCHAIN	3/16" PROOF COIL CHAIN, 10 LINKS	2	Х	Х	Х	Х	Х	Х
129	HMPFP4544	45 DEGREE ADAPTER	AR	Х	Х	Х	Х	Х	Х
134	04X2272	1/4"X11'10" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Х
135	04X2464	1/4"X12'10" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Х
156	CSNC12X48	3/4"X3" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Х
157	CSNC12X40	3/4"X2-1/2" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Х
									Щ_

See Pages 38, 40, 42, and 44 for Complete Hose Listings

OVERHEAD SLIDE SECTION LEFT SIDE

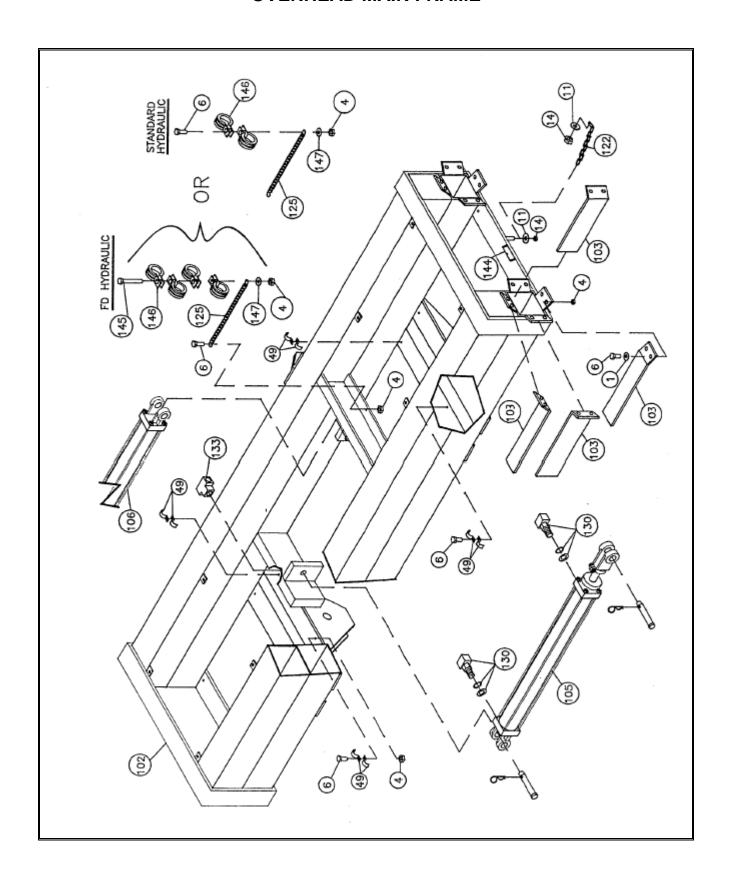


OVERHEAD SLIDE SECTION LEFT SIDE

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
30	LW12SP	3/4" SPLIT LOCK WASHER	AR	Х	Х	Х	Х	Х	Х
31	NUT12NC	3/4" NC HEX NUT	AR	Х	Х	Х	Х	Х	Х
97	9071	MALE EXT. WELDMENT, RT OR LT	2				Х		Х
97	93285	MALE EXT. WELDMENT, RT OR LT	2	Х	Х	Х		Х	
98	9018B	4-HOSE COUPLER	2	Х	Х	Х	Х	Х	Χ
99	91787	HOSE GUIDE	2	Х	Х	Х	Х	Х	Χ
100	B24H	HOSE CLAMP	AR	Х	Х	Х	Х	Х	Χ
101	93100	3/16"X6" BEARING PLATE	AR	Х	Х	Х	Х	Х	Χ
101	93101	1/4"X6" BEARING PLATE	AR	Х	Х	Х	Х	Х	Х
102	9070	MAIN FRAME WELDMENT	1				Х		Х
102	93286	MAIN FRAME WELDMENT	1	Х	Х	Х		Х	
106	N353249	3.5X60 MASTER CYLINDER, LEFT SIDE, UPPER	1				Х		Х
106	N353177	3.5x48 MASTER CYLINDER, LEFT SIDE, UPPER	1	Х	Х	Х		Х	
		2 valve caps, 1 each end (use 4A3105) repair kit		Х	Х	Х	Х	Х	Х
129	HMPFP4544	45 DEGREE ADAPTER	4	Х	Х	Х	Х	Х	Х
136	04X1664	1/4"X8'8" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Х
137	04X1856	1/4"X9'8" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Х
156	CSNC12X48	3/4"X3" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Х
157	CSNC12X40	3/4"X2-1/2" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Х
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See Pages 38, 40, 42, and 44 for Complete Hose Listings

OVERHEAD MAIN FRAME

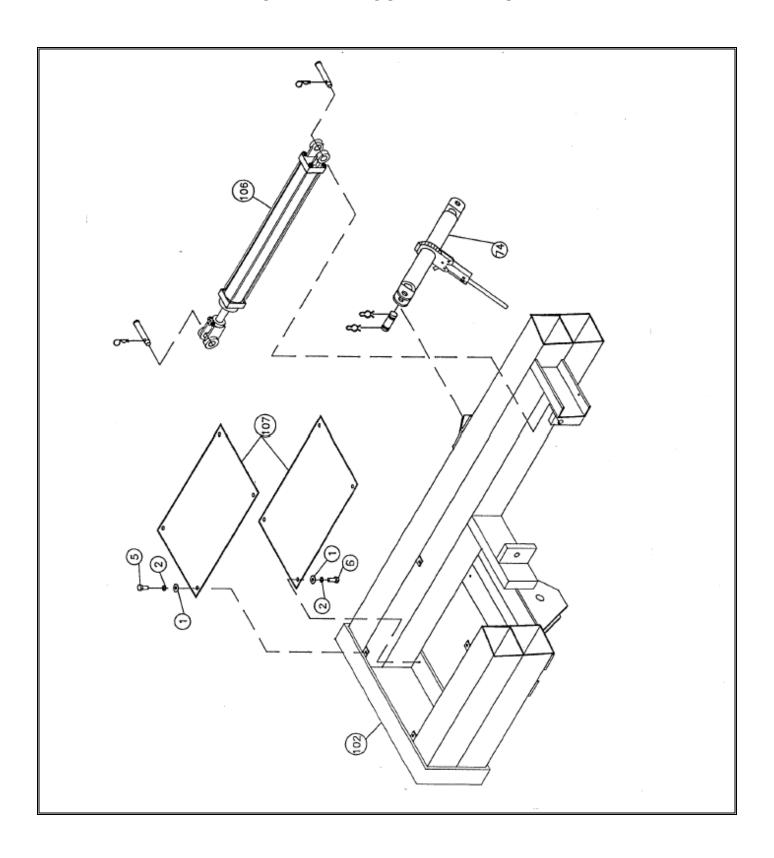


OVERHEAD MAIN FRAME

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
1	FLTWA04	1/4" USS WASHER	AR	Х	Х	Х	Х	Х	Х
4	NUT04NCNYL	1/4" NC NYLON LOCK NUT	AR	Х	Х	Х	Х	Х	Х
6	CSNC04X16	1/4"X1" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Х
11	FLTWA06	3/8" USS WASHER	AR	Х	Х	Х	Х	Х	Χ
14	NUT06NCLK	3/8" NC LOCK NUT, GRD C	AR	Х	Х	Χ	Х	Х	Χ
49	MIN-E28	HOSE CLAMP	23	Х	Х	Х	Х	Х	Χ
102	9070	MAIN FRAME WELDMENT	1				Х		Χ
102	93286	MAIN FRAME WELDMENT	1	Х	Х	Χ		Х	
103	92283A	1/4" FORMED BEARING PLATE	AR	Х	Х	Х	Х	Х	Х
103	92284A	3/16" FORMED BEARING PLATE	AR	Х	Х	Х	Х	Х	Х
105	N325349	3.25X60 SLAVE CYLINDER, RIGHT SIDE, LOWER	1				Х		Х
105	N325277	3.25X48 SLAVE CYLINDER, RIGHT SIDE, LOWER	1	Х	Х	Х		Х	
		1 Valve cap at rod end (use 4A2105 repair kit)							
106	N353249	3.5X60 MASTER CYLINDER, LEFT SIDE, UPPER	1				Х		Х
106	N353177	3.5X48 MASTER CYLINDER, LEFT SIDE, UPPER	1	Х	Х	Х		Х	
		2 valve caps, 1 each end (use 4A3105 repair kit)		1					
122	03PCCHAIN	3/16" PROOF COIL CHAIN, 10 LINKS	2	Х	Х	Х	Х	Х	Х
125	615	RETRACT SPRING	2	Х	Х	Х	Х	Х	Х
130	HMBFP9086	O'RING 90 ADAPTER	4	Х	Х	Х	Х	Х	Х
133	HFPT4	1/4" FEMALE TEE	AR	Х		Х	Х		
144	9110	HOSE CLAMP	2	Х	Х	Χ	Х	Х	Х
145	CSNC04X24	1/4"X1-1/2" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Х
146	2006LC	3/8" HOSE CLAMP	AR	Х	Х	Х	Х	Х	Х
147	FLTWA03	3/16 USS WASHER	AR	Х	Х	Х	Х	Х	Х

See Pages 38, 40, 42, and 44 for Complete Hose Listings

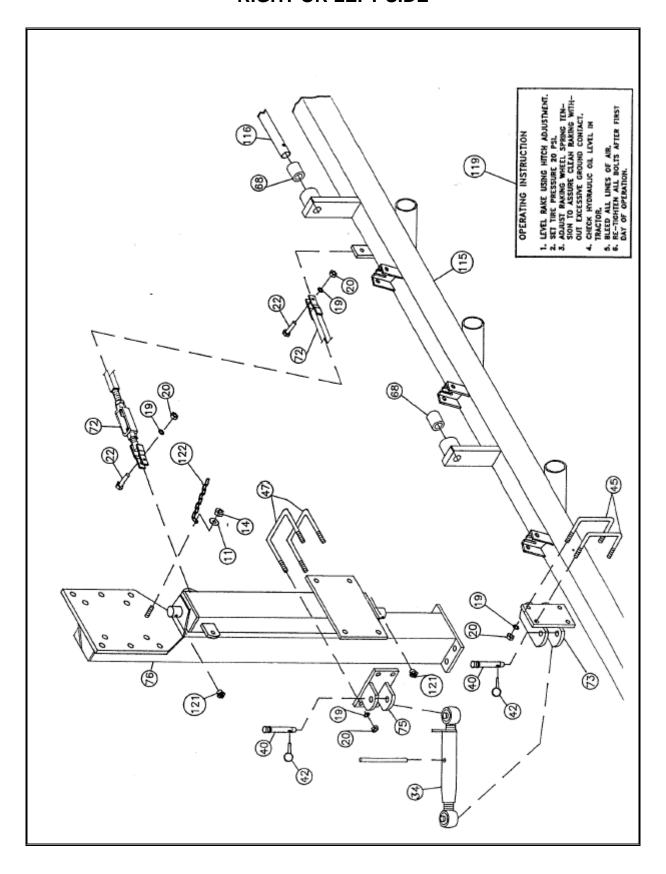
OVERHEAD COVER PLATES



OVERHEAD COVER PLATES

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
1	FLTWA04	1/4" USS WASHER	AR	Х	Х	Х	Х	Х	Х
2	LW04SP	1/4" SPLIT LOCK WASHER	AR	Х	Х	Х	Х	Х	Х
5	CSNC04X10	1/4"X5/8" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Х
6	CSNC04X16	1/4"X1" NC CAP SCREW, GRD 5	AR						
74	SL1541	RATCHET JACK	1	Х	Х	Х	Х	Х	Х
102	9070	MAIN FRAME WELDMENT	1				Х		Х
102	93286	MAIN FRAME WELDMENT	1	Х	Х	Х		Х	
106	N353249	3.5X60 MASTER CYLINDER, LEFT SIDE, UPPER	1				Х		Х
		2 Valve caps, 1 each end (use 4A3105 repair kit)							
106	N353177	3.5X48 MASTER CYLINDER, LEFT SIDE, UPPER	1	Х	Х	Х		Х	
		(use 4A3105 repair kit)							
107	93288	COVER PLATE	4	Х	Х	Х	Х	Х	Х

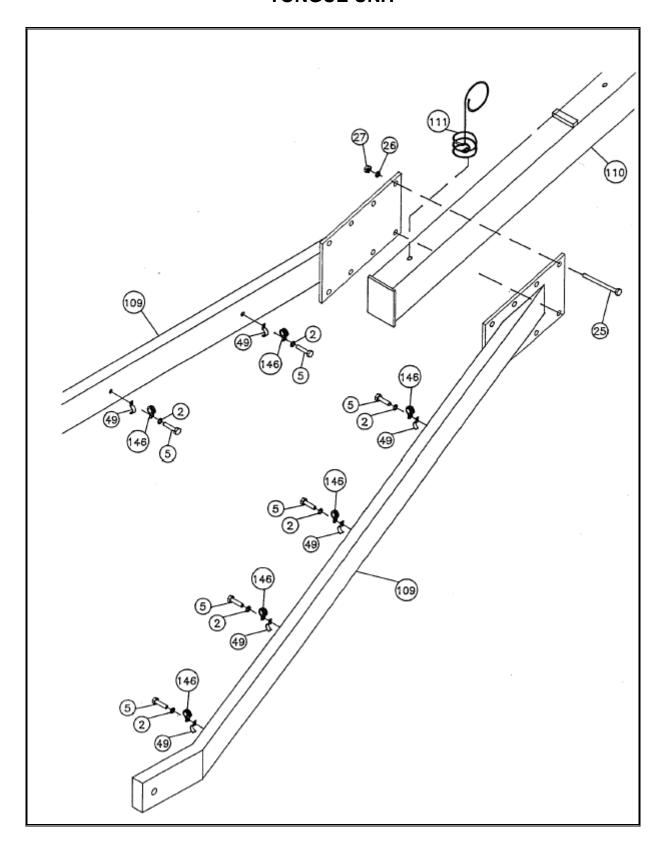
LEG STRUT RIGHT OR LEFT SIDE



LEG STRUT RIGHT OR LEFT SIDE

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
11	FLTWA06	3/8" USS WASHER	AR	Х	Х	Х	Х	Х	Х
14	NUT06NCLK	3/8" NC LOCK NUT, GRD C	AR	Х	Х	Х	Х	Х	Х
19	LW08SP	1/2" SPLIT LOCK WASHER	AR	Х	Х	Х	Х	Х	Х
20	NUT08NC	1/2" NC HEX NUT	AR	Х	Х	Х	Х	Х	Х
22	CSNC08X32	1/2"X2" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Χ
34	TL165P	TOP LINK, 16"	2	Х					
40	P772	TOP LINK PIN, 3-5/8"		Х					
42	P791	LYNCH PIN, 7/16"		Х					
45	9027	U-BOLT TO FRAME BRACKET	4	Х	Х				
47	9029	U-BOLT, LEG STRUT/ANGLE BRACKET	4	Х					
68	9047	UHMW BUSHING	AR	Х	Х	Х	Х	Х	Х
72	9099	HEAVY ADJ. RAKE FRAME BRACE	2	Х	Х	Х	Х	Х	Х
73	92206	5-HOLE ADJ. BRACKET	2				Х		Х
73	922994	3-HOLE ADJ. BRACKET	2	Х		Х			
75	922993	SINGLE HOLE ADJ. BRACKET	2	Х					
76	92581C	LEG STRUT, RIGHT OR LEFT	2	Х	Х	Х	Х	Х	Х
115	91792	LEFT RAKE FRAME WELDMENT	1			Х	Х	Х	Х
115R	91793	RIGHT RAKE FRAME WELDMENT	1			Х	Х	Х	Х
115	95092	LEFT RAKE FRAME WELDMENT	1	Х	Х				
115R	95093	RIGHT RAKE FRAME WELDMENT	1	Х	Х				
116	91790	LEFT SIDE LIFT TUBE, 9 HOLES	1			Х	Х	Х	Х
116R	91791	RIGHT SIDE LIFT TUBE, 10 HOLES	1			Х	Х	Х	Х
116	95090	LEFT SIDE LIFT TUBE, 8 HOLES	1	Х	Х				
116R	95091	RIGHT SIDE LIFT TUBE, 9 HOLES	1	Х	Х				
119	NIWDEC4X10	DECAL - OPERATING INSTRUCTIONS	2	Х	Х	Х	Х	Х	Х
121	B511ZERK	3/16" DRIVE IN ZERK	4	Х	Х	Х	Х	Х	Х
122	O3PCCHAIN	3/16" PROOF COIL CHAIN, 10 LINKS	2	Х	Х	Х	Х	Х	X

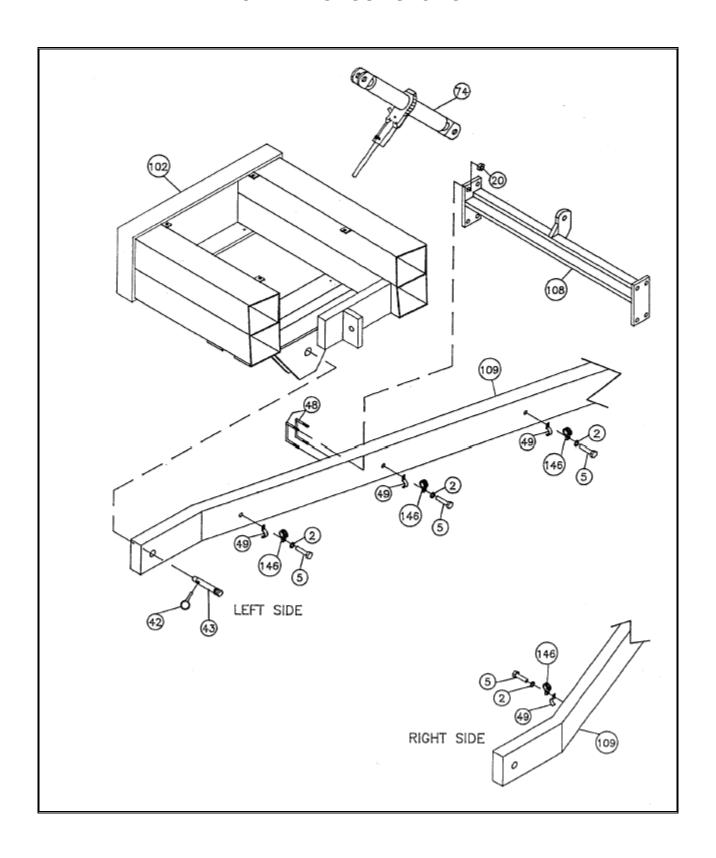
TONGUE UNIT



TONGUE UNIT

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
2	LW04SP	1/4" SPLIT LOCK WASHER	AR	Х	Х	Х	Х	Х	Х
5	CSNC04X10	1/4"X5/8" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Х
25	CSNC20X96	5/8X6" NC CAP SCREW, GRD 5	8	Х	Х	Х	Х	Х	Х
26	LW10SP	5/8" SPLIT LOCK WASHER	8	Х	Х	Х	Х	Х	Х
27	NUT10NC	5/8" NC HEX NUT	8	Х	Х	Х	Х	Х	Χ
49	MIN-E28	HOSE CLAMP	AR	Х	Х	Х	Х	Х	Х
109	91796	TOP YOKE TUBE FOR TONGUE	2	Х	Х	Х	Х	Х	Х
110	91794	LOWER TONGUE MEMBER (917 Models)	1			Х	Х	Х	Х
110	95094	LOWER TONGUE MEMBER (950 Models)	1	Х	Х				
111	91798A	HYDRAULIC HOSE HOLDER	AR	Х	Х	Х	Х	Х	Х
146	2006LC	3/8" HOSE CLAMP	AR	Х	Х	Х	Х	Х	Х
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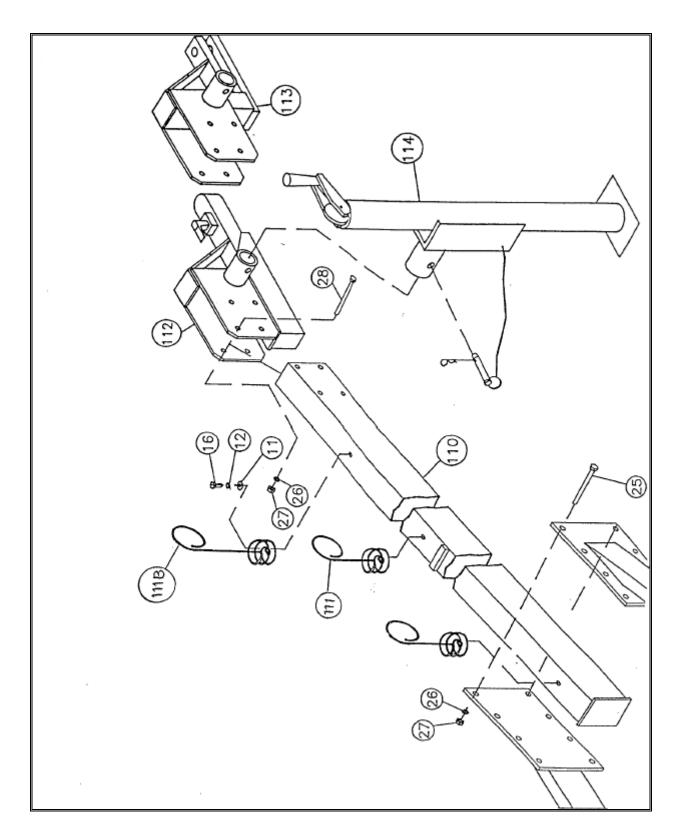
UPPER TONGUE SECTION



UPPER TONGUE SECTION

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
2	LW04SP	1/4" SPLIT LOCK WASHER	AR	Х	Х	Х	Х	Х	Х
5	CSNC04X10	1/4"X5/8" NC CAP SCREW, GRD 5	AR	Х	Х	Х	Х	Х	Х
20	NUT08NCLK	1/2" LOCK NUT	AR	Х	Х	Х	Х	Х	Х
42	P791	LYNCH PIN, 7/16	6	Х	Х	Х	Х	Х	Х
43	P774	TOP LINK PIN	2	Х	Х	Х	Х	Х	Х
48	9032	U-BOLT, TONGUE CROSS BAR	4	Χ	Х	Х	Х	Х	Х
	MIN-E28	HOSE CLAMP	AR	Χ	Х	Х	Х	Х	Х
74	SL1541	RATCHET JACK	1	Х	Х	Х	Х	Х	Х
102	93286	MAIN FRAME WELDMENT	1	Х	Х	Х		Х	
102	9070	MAIN FRAME WELDMENT	1				Х		Х
108	9107A	TONGUE CROSS BAR	1	Х	Х	Х	Х	Х	Х
109	91796	TOP YOKE TUBE FOR TONGUE	2	Х	Х	Х	Х	Х	Х
146	2006LC	3/8" HOSE CLAMP	AR	Х	Х	Х	Х	Х	Х

LOWER TONGUE UNIT HITCH and JACK

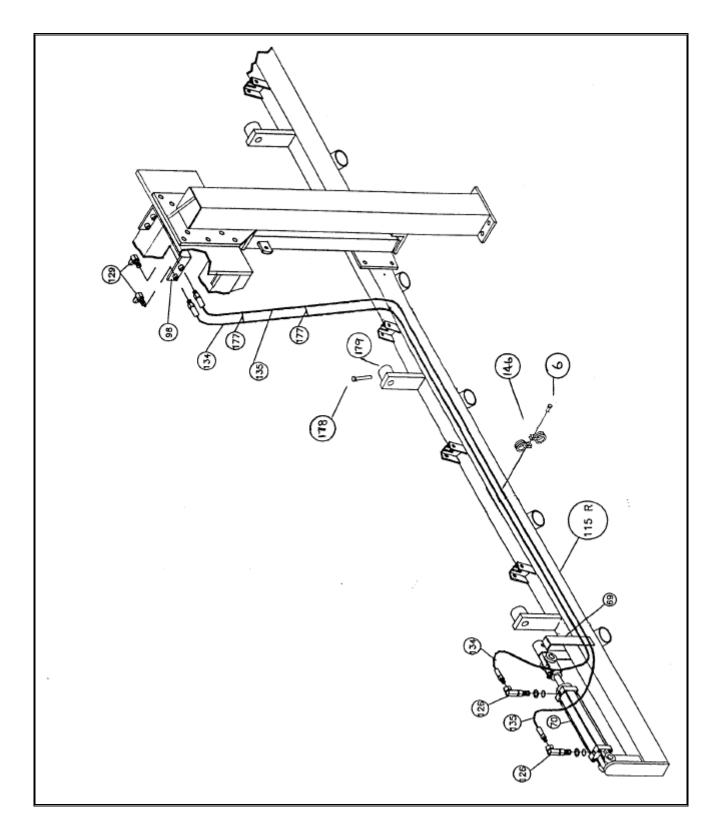


LOWER TONGUE UNIT HITCH and JACK

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
11	FLTWA06	3/8" USS WASHER	AR	Х	Х	Х	Х	Х	Х
12	LW06SP	3/8" SPLIT LOCK WASHER	AR	Х	Х	Χ	Х	Х	Х
16	CSNC06X16	3/8"X1" NC CAP SCREW, GRD 5	AR	Х	Х	Χ	Х	Х	Χ
25	CSNC10X96	5/8X6" NC CAP SCREW, GRD 5	8	Х	Х	Χ	Х	Х	Х
26	LW10SP	5/8" SPLIT LOCK WASHER	12	Х	Х	Χ	Х	Х	Χ
27	NUT10NC	5/8" NC HEX NUT	12	Х	Х	Χ	Х	Х	Х
28	CSNC10X88	5/8"X5-1/2" NC CAP SCREW, GRD 5	4	Х	Х	Χ	Х	Х	Х
110	91794	LOWER TONGUE MEMBER	1			Χ	Х	Х	Х
110	95094	TONGUE DRAW BAR MEMBER LOWER	1	Х	Х				
111	91798A	HYDRAULIC HOSE HOLDER	AR	Х	Х	Χ	Х	Х	Х
111B	91798B	HYDRAULIC HOSE HOLDER - LONG	1	Х	Х	Χ	Х	Х	Х
	91799B	BALL HITCH 2-5/16"	1	Х	Х	Χ	Х	Х	Х
113	91799C	CLEVIS STYLE HITCH	1	Х	Х	Χ	Х	Х	Х
114	82471	TONGUE JACK	1	Х	Х	Х	Х	Х	Х

See Pages 38, 40, 42, and 44 for Complete Hose Listings

STANDARD HYDRAULIC LAYOUT RIGHT SIDE

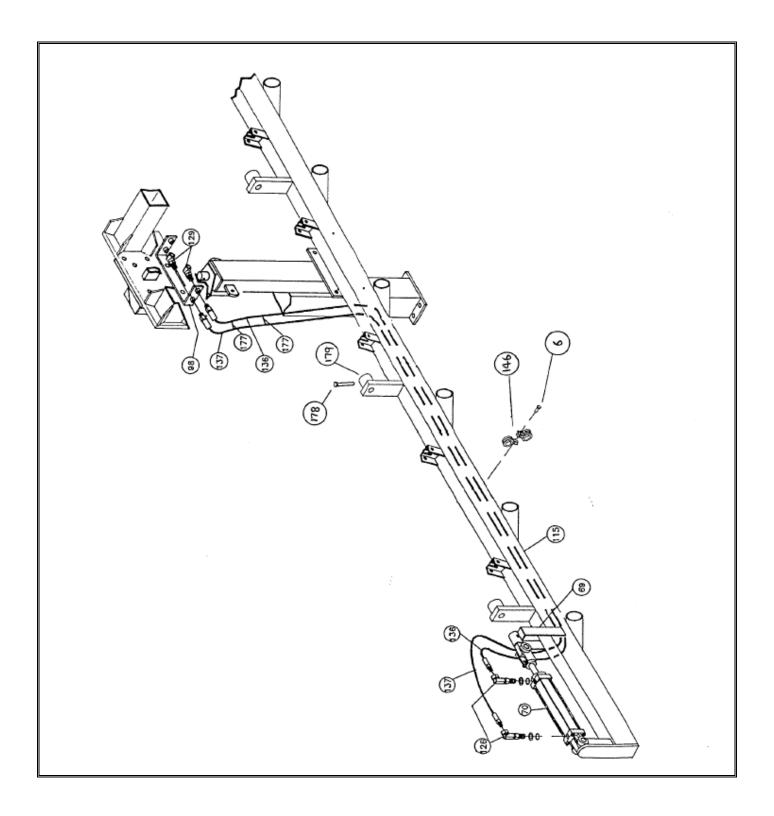


STANDARD HYDRAULIC LAYOUT RIGHT SIDE

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
6	TYPEF04X12	HEX WASHER HD, 1/4X3/4	3	Х	Х	Х	Х	Х	Х
69	92193	LIFT TUBE HYD. CLEVIS	2	Х	Х	Х	Х	Х	Х
70	N201028	2X8 ASAE HYD.CYLINDER W/PINS	2	Х	Х	Х	Х	Х	Х
		(use SKAR12104A, univ.2" repair kit)		1					
98	9018B	4-HOSE COUPLER	2	Х	Х	Х	Х	Х	Х
115R	91793	RIGHT RAKE FRAME WELDMENT	1	1		Х	Х	Х	Х
115R	95093	RIGHT RAKE FRAME WELDMENT	1	Х	Х				
126	HMBFP9064	O'RING TO PIPE X 90 DEGREE ADAPTER	4	Х	Х	Х	Х	Х	Х
129	HMPFP4544	45 DEGREE ADAPTER	4	Х	Х	Х	Х	Х	Х
134	04X2272	1/4"X11'10" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Х
135	04X2464	1/4"X12'10" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Х
146	2006LC	3/8 HOSE CLAMP	3	Х	Х	Х	Х	Х	Х
177	9629	PLASTIC WIRE TIES, 7-1/2"	2	Х	Х	Х	Х	Х	Х
178	SMPAN12X06	#12X3/8 PHILIPS PAN SCREW	AR	Х	Х	Х	Х	Х	Х
179	INTLW10	5/8 INTERNAL LOCK WASHER	AR	Х	Х	Х	Х	Х	Х
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See Pages 38, 40, 42, and 44 for Complete Hose Listings

STANDARD HYDRAULIC LAYOUT LEFT SIDE

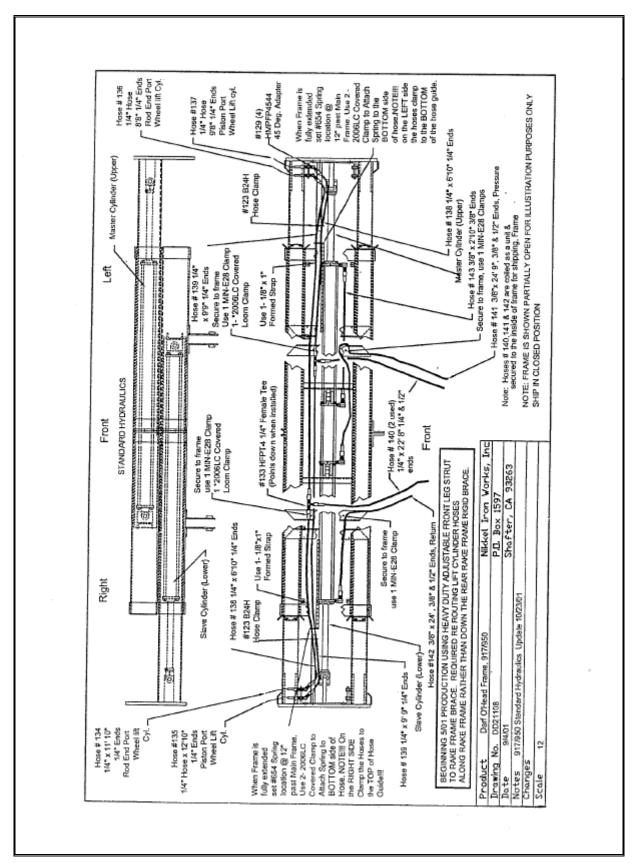


STANDARD HYDRAULIC LAYOUT LEFT SIDE

REF	PART NO.	DESCRIPTION	QTY	950	950FD	917	917W	917FD	917FDW
6	TYPEF04X12	HEX WASHER HD, 1/4X3/4	3	Х	Х	Х	Х	Х	Х
69	92193	LIFT TUBE HYD. CLEVIS	2	Х	Х	Х	Х	Х	Χ
70	N201028	2X8 ASAE HYD.CYLINDER W/PINS	2	Х	Х	Х	Х	Х	Χ
		(use SKAR12104A, univ.2" repair kit)							
98	9018B	4-HOSE COUPLER	2	Х	Х	Х	Х	Х	Χ
115	91792	LEFT RAKE FRAME WELDMENT	1			Х	Х	Х	Χ
115	95092	LEFT RAKE FRAME WELDMENT	1	Х	Х			1	
126	HMBFP9064	O'RING TO PIPE X 90 DEGREE ADAPTER	4	Х	Х	Χ	Х	Х	Х
129	HMPFP4544	45 DEGREE ADAPTER	4	Х	Х	Х	Х	Х	Χ
136	04X1664	1/4"X8'8" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Χ
137	04X1856	1/4"X9'8" HOSE, 1/4" ENDS	1	Х	Х	Х	Х	Х	Х
146	2006LC	3/8 HOSE CLAMP	3	Х	Х	Х	Х	Х	Χ
177	9629	PLASTIC WIRE TIES, 7-1/2"	2	Х	Х	Х	Х	Х	Х
178	SMPAN12X06	#12X3/8 PHILIPS PAN SCREW	AR	Х	Х	Х	Х	Х	Χ
179	INTLW10	5/8 INTERNAL LOCK WASHER	AR	Х	Х	Х	Х	Х	Χ
			1						

See Pages 38, 40, 42, and 44 for Complete Hose Listings

HOSE ROUTING MODEL 917 and 950 STANDARD HYDRAULICS

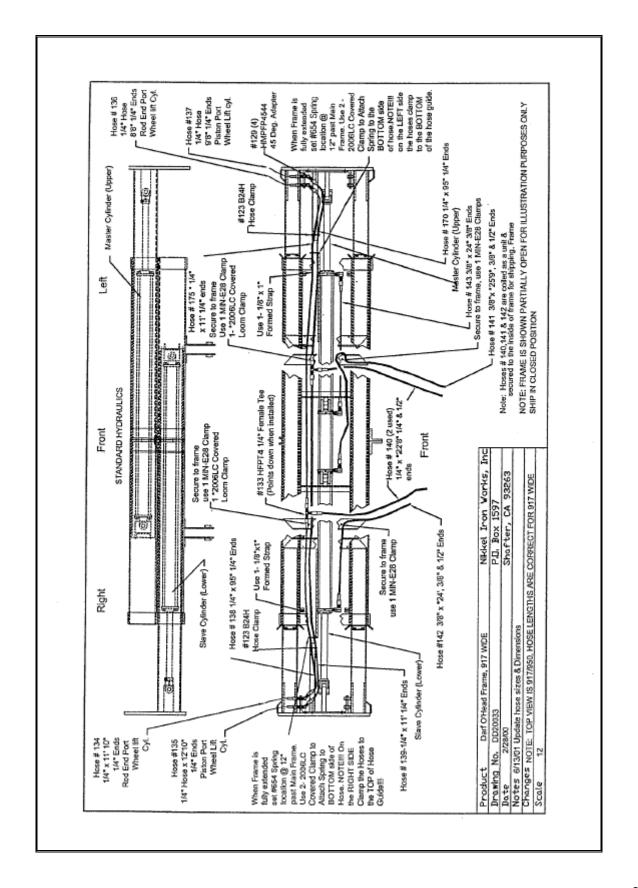


HOSE ROUTING MODEL 917 and 950 STANDARD HYDRAULICS

Drawing #DD21108, Page 37

REF	PART	DESCRIPTION	ROUTING/FUNCTION
134	04X2272	1/4"X11'10" HOSE, 1/4" ENDS	RIGHT SIDE, INNER REAR COUPLER TO ROD END PORT WHEEL LIFT CYL
135	04X2464	1/4"X12'10" HOSE, 1/4" ENDS	RIGHT SIDE OUTER REAR COUPLER TO PISTON PORT WHEEL LIFT CYL
136	04X1664	1/4"X8'8" HOSE, 1/4" ENDS	LEFT SIDE INNER REAR COUPLER TO ROD END PORT WHEEL LIFT CYL
137	04X1856	1/4"X9'8" HOSE, 1/4" ENDS	LEFT SIDE OUTER REAR COUPLER TO PISTON PORT WHEEL LIFT CYL
138	04X1312	1/4"X6'10" HOSE, 1/4" ENDS	RIGHT SIDE FROM RIGHT HFPT4 TEE TO RIGHT REAR OUTER COUPLER
138	04X1312	1/4"X6'10" HOSE, 1/4" ENDS	LEFT SIDE FROM LEFT HFPT4 TEE TO LEFT REAR OUTER COUPLER
139	04X1872	1/4"X9'9" HOSE, 1/4" ENDS	RIGHT SIDE FROM LEFT HFPT4 TEE TO RIGHT REAR INNER COUPLER
139	04X1872	1/4"X9'9" HOSE, 1/4" ENDS	LEFT SIDE FROM RIGHT HFPT4 TEE TO LEFT REAR INNER COUPLER
140	04X4352	1/4"X22'8" HOSE, 1/4" & 1/2" ENDS	FROM HFPT4 TEE TO TRACTOR VALVE (2 used)
141	06X4608	3/8"X24'9" HOSE, 3/8" & 1/2" ENDS	PRESSURE HOSE TO TRACTOR VALVE
142	06X4752	3/8"X24' HOSE, 3/8" & 1/2" ENDS	RETURN HOSE TO TRACTOR VALVE
143	06X544	3/8"X2'10" HOSE, 3/8" ENDS	PISTON PORT SLAVE CYL TO ROD END PORT MASTER CYL

HOSE ROUTING FOR REPHASING CYLINDERS MODEL 917 WIDE, STANDARD HYDRAULICS

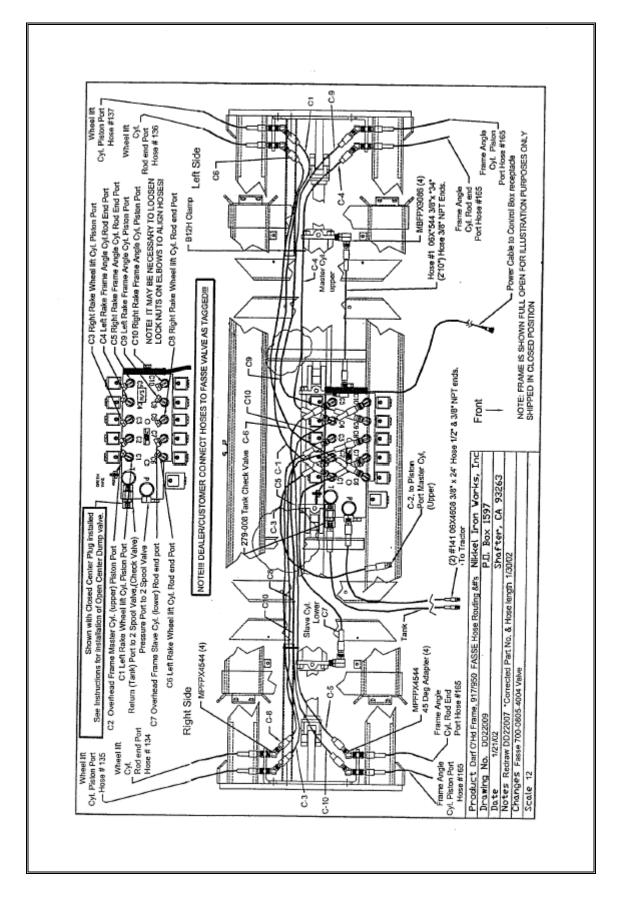


HOSE ROUTING FOR REPHASING CYLINDERS MODEL 917 WIDE, STANDARD HYDRAULICS

Drawing #DD20033, Page 39

REF	PART	DESCRIPTION	ROUTING/FUNCTION
105	N325349	3.25 X 60" SLAVE CYLINDER	LOWER CYLINDER, RIGHT, 1 VALVE CAP AT ROD END
106	N353249	3.5 X 60" MASTER CYLINDER	UPPER CYLINDER, LEFT, 2 VALVE CAPS, 1 AT EACH END
134	04X2272	1/4"X11'10" HOSE, 1/4" ENDS	COUPLER TO RIGHT WHEEL LIFT CYLINDER, ROD END PORT
135	04X2464	1/4"X12'10" HOSE, 1/4" ENDS	COUPLER TO RIGHT WHEEL LIFT CYLINDER, PISTON PORT
136	04X1664	1/4"X8'8" HOSE, 1/4" ENDS	COUPLER TO LEFT WHEEL LIFT CYLINDER, ROD END PORT
137	04X1856	1/4"X9'8" HOSE, 1/4" ENDS	COUPLER TO LEFT WHEEL LIFT CYLINDER, PISTON PORT
138	04X1520	1/4"X7'11" HOSE, 1/4" ENDS	1/4" TEE TO COUPLER, WHEEL LIFT, RIGHT SIDE (inside frame)
139	04X2112	1/4"X11' HOSE, 1/4" ENDS	1/4" TEE TO COUPLER, WHEEL LIFT, RIGHT SIDE (inside frame)
140	04X4352	1/4"X22'8" HOSE, 1/4" ENDS	1/4" TEE TO TRACTOR (raise and lower rake wheels)
141	06X4944	3/8"X25'9" HOSE, 3/8" & 1/2" ENDS	PISTON PORT OF MASTER CYLINDER TO TRACTOR
142	06X4608	3/8"X24' HOSE, 3/8" & 1/2" ENDS	ROD END OF SLAVE CYLINDER TO TRACTOR
143	06X384	3/8"X2' HOSE, 3/8" ENDS	ROD END OF MASTER CYLINDER TO PISTON PORT OF SLAVE CYL
170	04X1520	1/4"X7'11" HOSE, 1/4" ENDS	1/4" TEE TO COUPLER, WHEEL LIFT, LEFT SIDE
175	04X2112	1/4"X11' HOSE, 1/4" ENDS	1/4" TEE TO COUPLER, WHEEL LIFT, LEFT SIDE (inside frame)
			+
			+

HOSE ROUTING MODEL 917 and 950 with FASSE VALVE



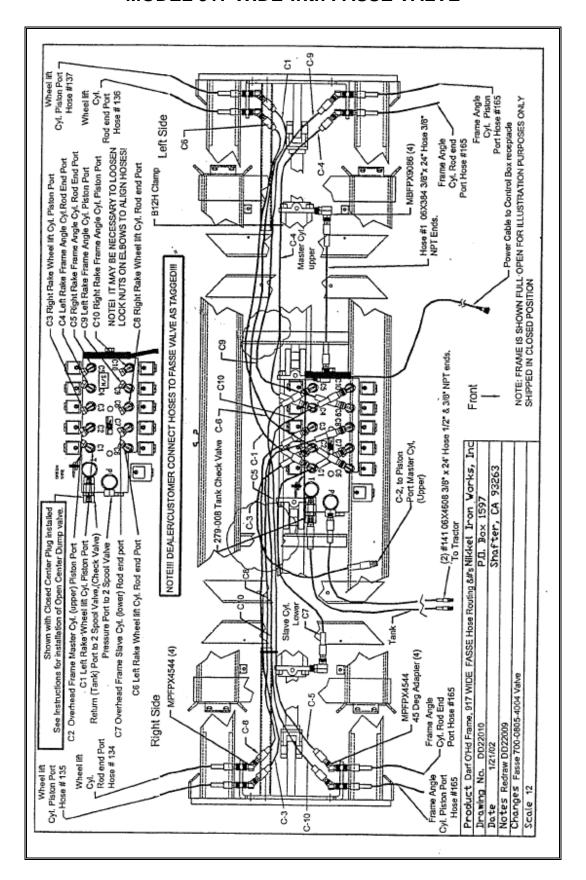
HOSE ROUTING

MODEL 917 and 950 with FASSE VALVE

Drawing #DD22009, Page 41

REF	PART	DESCRIPTION	ROUTING/FUNCTION
<u> </u>			2022012022 01.05 01.05 02.05 02.05 02.05
1	06x544	3/8x2'10" HOSE, 3/8" ENDS	PISTON PORT, SLAVE CYL, TO ROD PORT OF MASTER CYL
134	04X2272	1/4"X11'10" HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYL. ROD END PORT, RIGHT SIDE
135	04X2464	1/4"X12'10" HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYL. PISTON PORT, RIGHT SIDE
136	04X1664	1/4"X8'8" HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYL. ROD END PORT, LEFT SIDE
137	04X1856	1/4"X9'8" HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYL. PISTON PORT, LEFT SIDE
141	06X4608	3/8"X24' HOSE, 3/8" & 1/2" ENDS	PRESSURE & RETURN HOSE, TRACTOR TO FASSE VALVE (2 USED)
165	04X800	1/4"X4'2" HOSE, 1/4" ENDS	FOR FRAME ANGLE CYLINDERS (4 USED)
C1	04X1728	1/4"X9' HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYL. PISTON PORT, LEFT SIDE
C2	06X304	3/8"X1'7" HOSE, 1/4" ENDS	OVERHEAD FRAME MASTER CYL. (Upper) PISTON PORT
СЗ	04X1728	1/4"X9' HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYL. PISTON PORT, RIGHT SIDE
C4	04X1728	1/4"X9' HOSE, 1/4" ENDS	RAKE FRAME ANGLE CYL. ROD END PORT, LEFT SIDE
C5	04X1824	1/4"X9'6" HOSE, 1/4" ENDS	RAKE FRAME ANGLE CYL. ROD END PORT, RIGHT SIDE
C6	04X1728	1/4"X9' HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYL. ROD END PORT, LEFT SIDE
C7	06X800	3/8"X4'2" HOSE, 3/8" ENDS	OVERHEAD FRAME SLAVE CYL. (lower) ROD END PORT
C8	04X1728	1/4"X9' HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYL. ROD END PORT, RIGHT SIDE
C9	04X1728	1/4"X9' HOSE, 1/4" ENDS	RAKE FRAME ANGLE CYL. PISTON PORT, LEFT SIDE
C10	04X1824	1/4"X9'6" HOSE, 1/4" ENDS	RAKE FRAME ANGLE CYL. PISTON PORT, RIGHT SIDE

HOSE ROUTING MODEL 917 WIDE with FASSE VALVE



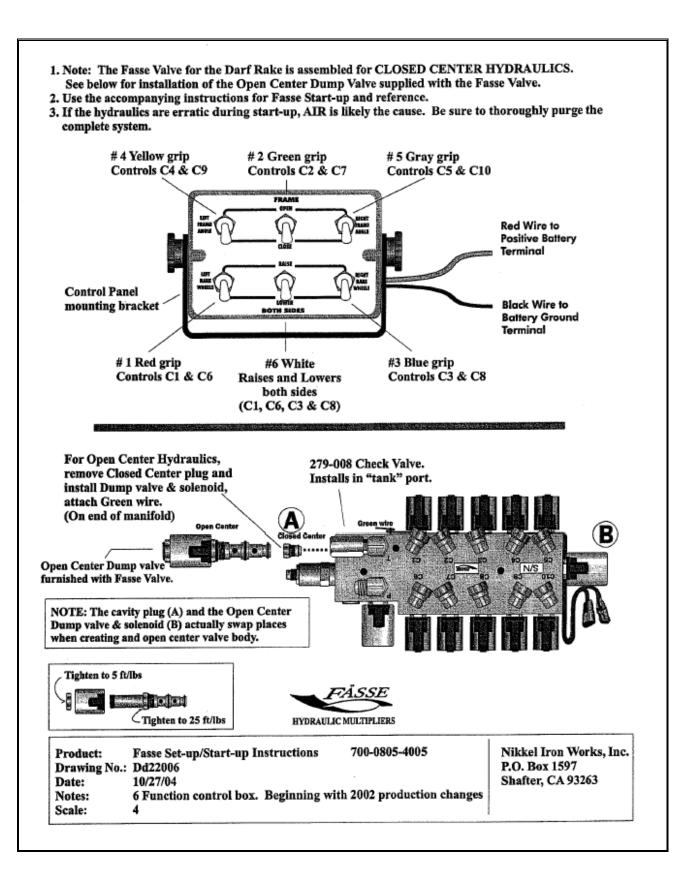
HOSE ROUTING

MODEL 917-WIDE with FASSE VALVE

Drawing #DD22010, Page 43

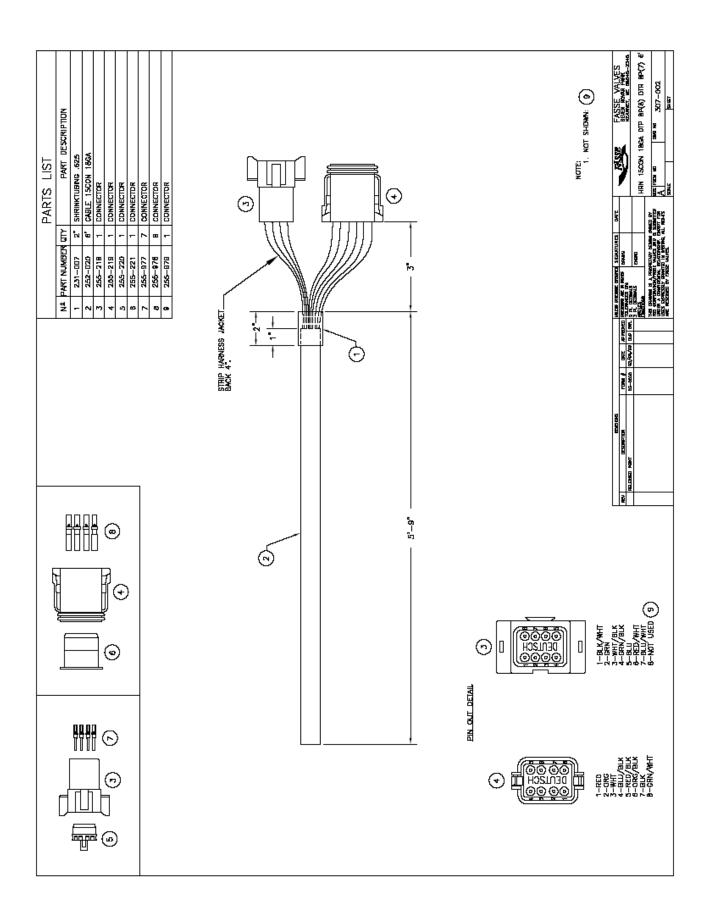
REF	PART	DESCRIPTION	ROUTING/FUNCTION
1	06x384	3/8"x2' HOSE, 3/8" ENDS	PISTON PORT, SLAVE CYLINDER TO ROD PORT OF MASTER CYL
134	04X2272	1/4"X11'10" HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYLINDER ROD END PORT, RIGHT SIDE
135	04X2464	1/4"X12'10" HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYLINDER PISTON PORT, RIGHT SIDE
136	04X1664	1/4"X8'8" HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYLINDER ROD END PORT, LEFT SIDE
137	04X1856	1/4"X9'8" HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYLINDER PISTON PORT, LEFT SIDE
141	06X4608	3/8"X24' HOSE, 3/8" & 1/2" ENDS	PRESSURE & RETURN HOSE, TRACTOR TO FASSE VALVE (2 used)
165	04X800	1/4"X4'2" HOSE, 1/4" ENDS	FOR FRAME ANGLE CYLINDERS (4 used)
C1	04X1920	1/4"X10' HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYLINDER PISTON PORT, LEFT SIDE
C2	06X352	3/8"X1'10" HOSE, 3/8" ENDS	OVERHEAD FRAME MASTER CYLINDER, PISTON PORT (upper)
C3	04X1920	1/4"X10' HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYLINDER PISTON PORT, RIGHT SIDE
C4	04X1920	1/4"X10' HOSE, 1/4" ENDS	RAKE FRAME ANGLE CYLINDER, ROD END PORT, LEFT SIDE
C5	04X2016	1/4"X10'6" HOSE, 1/4" ENDS	RAKE FRAME ANGLE CYLINDER, ROD END PORT, RIGHT SIDE
C6	04X1920	1/4"X10' HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYLINDER, ROD END PORT, LEFT SIDE
C7	06X800	3/8"X4'2" HOSE, 3/8" ENDS	OVERHEAD FRAME SLAVE CYLINDER, ROD END PORT (Lower)
C8	04X1920	1/4"X10' HOSE, 1/4" ENDS	RAKE WHEEL LIFT CYLINDER, ROD END PORT, RIGHT SIDE
C9	04X1920	1/4"X10' HOSE, 1/4" ENDS	RAKE FRAME ANGLE CYLINDER, PISTON PORT, LEFT SIDE
C10	04X2016	1/4"X10'6" HOSE, 1/4" ENDS	RAKE FRAME ANGLE CYLINDER, PISTON PORT, RIGHT SIDE

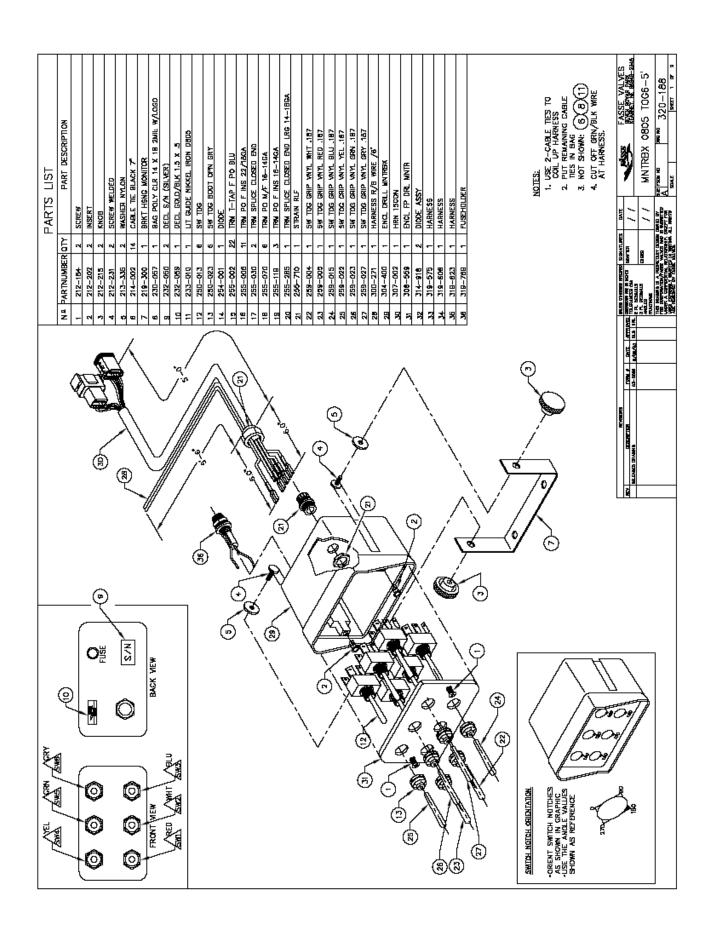
FASSE SET UP – START UP INSTRUCTIONS

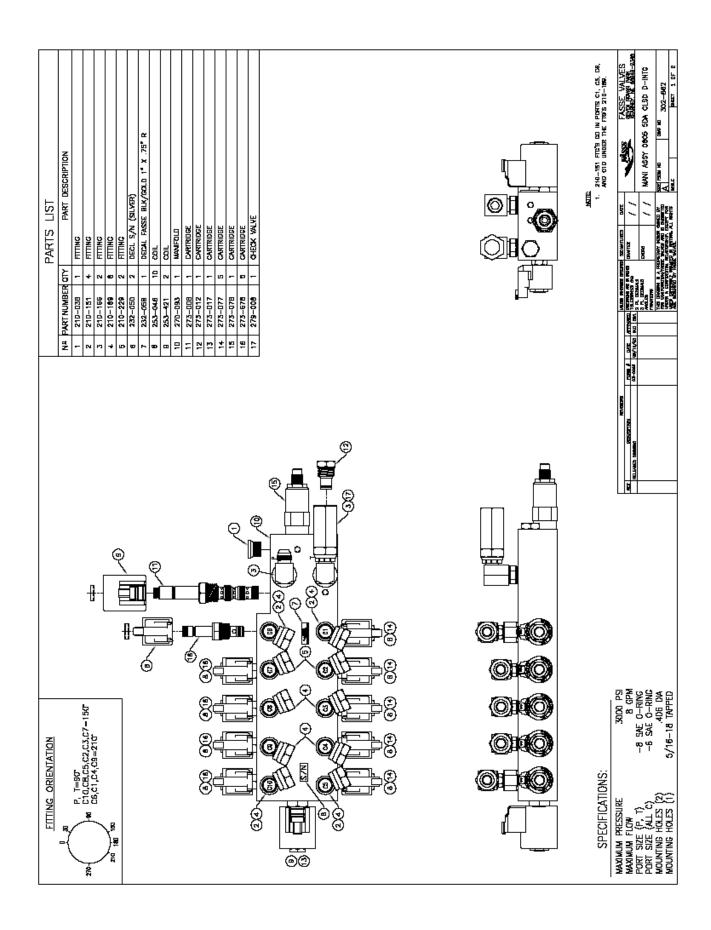


700-0805-4005

Switch No.	Boot Color	Switch No. Boot Color Switch Position	Hot Wires	Pressure Ports Iank Ports	lank Ports	Function
		ΩD	Red & Org & Gm	-01	90	L Rake Wheel Raise
1	Ked	Down	Red & Org & Grn & Blk/Wht	90	C1	L Rake Wheel Lower
		OD	Red & Org & Org/Blk & Red/Blk & Gm	C1 & C3	C6 & C8	L & R Rake Wheel Raise
7	Wnite	Down	Red & Org & Org/Blk & Red/Blk & Grn & Blk/Wht	C6 & C8	C1 & C3	L & R Rake Wheel Lower
•		Up	Red/Blk & Org/Blk & Grn	C3	C8	R Rake Wheel Raise
7)	pine	Down	Red/Blk & Org/Blk & Gm & Blk/Wht	68	C3	R Rake Wheel Lower
		Op	Blue & WhyBlk & Grn	C7	60	L Rake Frame Angle
4	Yellow	Down	Blue & Wht/Blk & Gm & Blk/Wht	C9	77	L Rake Frame Angle
		Up	Blu/Blk & Wht & Gm	C2	C2	Frame Master Raise
o	Creen	Down	Blu/Blk & Wht & Grn & Blk/Wht	C)	C2	Frame Master Lower
		Up.	Grn/Wht & Red/Wht & Grn	CS	C10	R Rake Frame Angle
9	Grey	Down	Gm/Mht & Red/Mht & Gro & Bik/Mht	C10	90	R Rake Frame Angle







FASSE SET UP-START UP INSTRUCTIONS

THE CORRECT START-UP IS THE RESPONSIBILITY OF THE DEALER AND/OR OPERATOR !! PLEASE FOLLOW THESE INSTRUCTIONS

- Mount control box on tractor in a location easily accessible for the operator.
 Attach RED wire to positive battery lead ------------ Attach Black wire to negative lead.
 Connect Control Cable from rake to Control Box cable with threaded coupler.
 12-Volt DC Negative Ground Only. Consult Factory for Positive Ground option.
- 2. Install correct tips on the 2 hydraulic hoses routed down the tongue. Locate hydraulic hose from the "P" port on the valve. Insert into one of the remote valve couplings. DO NOT INSERT RETURN LINE AT THIS TIME. Operate the control valve to determine which position it must be in to supply oil to the pressure hose. You may have a detent that allows the valve to remain in this position, or you may have to tie the valve handle with a bracket, wire or twine. Return the valve to neutral and install the return hose in the return coupler.
- 3. Remove the 1" pins on the rod end of the Frame Angle Cylinders, as well as the angle iron cylinder safety stop. Swing cylinders out to clear rake frame tab.
- 4. With the tractor moving operate the Tractor valve control handle to supply oil to the pressure hose.
- 5. You will likely see the overhead frame begin to move as a rule the right side frame will extend first, then the left side frame. Until the air is purged from the system this may take place without using the white "Frame switch in the center of the control panel.
- 6. Until the system is fully purged, it is possible that any one or all of the 6 functions may cause the cylinders to extend or retract with the control switches in the neutral position.
- 7. Operate the 4 remaining switches until the air is completely purged. Extend the rake frame cylinders fully and re-insert the 1" pins.
- 8. Check the tractor transmission/hydraulic oil level before completing the start-up. About 4-5 gallons may be required to replenish the system.
- 9. On occasion it is necessary to extend and retract the overhead frame 2-3 times in order that the hoses take a "set" so they will fold as intended.
- 10. REMEMBER !! The rake must be moving at anytime you extend or retract the overhead frame.

PURGING THE OVERHEAD FRAME REPHASING CYLINDERS

To properly purge the air from the system, cylinders should be fully extended to the rephasing mode. (You will note that one side will extend first until the cylinders are fully purged) Hold the cylinders in the fully extended mode for approximately 30 seconds, retract the cylinders until the air is purged from the system. Make sure tractor RPM is moderate so the hydraulic pump is at its full capacity. During initial startup the seals may need a few cycles to seat themselves for a good seal.

PATIENCE is the key and air is the worst enemy. NEVER loosen a fitting to bleed off the system. **This can be dangerous!**

OPERATING INSTRUCTIONS

FULL HYDRAULIC MODELS

Use with FASSE Valve instructions

- Maintain tire pressure: 20 PSI front and rear.
- Adjust spring tension to allow crop to rotate raking wheels.
- Do not operate raking wheels in the ground.
- Install suitable hose couplers on the 3/8" hoses from the valve. Insert in tractor couplers. Lock tractor remote handle in position so oil is entering at the correct valve "in" port. If your tractor is closed center, install the closed center adapter furnished with the rake valve.
- Remove the two dealer installed safety transport chains-03PCCHAIN08

TO OPEN FROM TRANSPORT POSITION TO RAKING POSITION

- 1. Operate the FASSE control switch as indicated on the valve decal to raise the raking wheels to the "up" position.
- 2. Operate the FASSE control switch to open the overhead frame, WHILE MOVING. Pull forward slowly until the main frame is fully open, then close about 4" to 6".
- 3. Using the FASSE control switch indicated on the valve decal, adjust the raking wheel frames to the required angle.
- 4. Level raking frames to the ground by alternately adjusting the main frame to drawbar adjusting links.
- 5. Operate the FASSE control switch as indicated on the valve decal to lower the raking wheels.
- 6. Check hydraulic fluid in your tractor. You will likely need to add approx. 4-5 gallons for initial start up.
- 7. Adjust the raking wheel crop contact (spring tension) by using the supplied rake crank handle and position chain in slot so the raking wheel will move the crop with minimum or no ground contact. The 2 slots in the chain bracket allow for 1/2 link adjustment. Replace handle in storage bracket.

NOW YOU ARE READY TO RAKE

TO CLOSE TO TRANSPORT POSITION FROM RAKING POSITION

- 1. Operate the FASSE control switch as indicated on the valve decal to raise the raking wheels to the "up" position.
- 2. Return raking frames to straight position.
- 3. Operate the FASSE control switch to close the overhead frame WHILE MOVING. Pull forward slowly until main frame if fully closed.

NOW YOU ARE READY TO TRANSPORT

DRIVE CAUTIOUSLY, GIVE ONCOMING AND PASSING TRAFFIC AMPLE ROOM

OPERATING INSTRUCTIONS

STANDARD & WIDE MODELS

Maintain tire pressure @20 PSI Adjust spring tension to allow crop to rotate raking wheels. Do not operate raking wheels in the ground.

STANDARD HYDRAULICS

- 1. Install suitable hose couplers on the 4 hoses supplied. You will need one double acting valve to open and close the main frame and one double acting valve for raising and lowering the raking wheels.
- 2. Remove the 2 dealer installed 03PCCHAIN08 safety transport chains.

TO OPEN FROM TRANSPORT POSITION TO RAKING POSITION

- 1. Operate the tractor valve to raise the raking wheels to the "up" position.
- 2. To open the overhead frame, operate the tractor valve while moving. Pull forward slowly until the frame is fully open, or to the width suitable for your raking conditions.
- 3. Use the adjusting links on the raking wheel frames to adjust raking angle as required.
- Level raking frames to the ground by alternately adjusting the main frame to drawbar adjusting links.
- Operate the tractor valve to lower the raking wheels, check each raking wheel for proper crop contact.
- 6. Check hydraulic fluid in your tractor. You will need to add approximately 2 gallons for initial start up.

NOW YOU ARE READY TO RAKE

TO CLOSE TO TRANSPORT POSITION FROM RAKING POSITION

- 1. Operate the tractor valve to raise raking wheels to the "up" position.
- 2. Return raking frames to straight position.
- 3. To close the overhead frame, operate the tractor valve while moving. Pull forward slowly until the frame is fully closed.

NOW YOU ARE READY TO TRANSPORT

DRIVE CAUTIOUSLY, GIVE ONCOMING AND PASSING TRAFFIC AMPLE ROOM

PARTS LIST

PARTS LIST