

This is a downloadable version of the manual. A partial download may not contain all pertinent information. Make Sure to read Chapter 1, Safety!
Due to ongoing upgrades specifications may change without notice, contact a Monosem Rep for current information.

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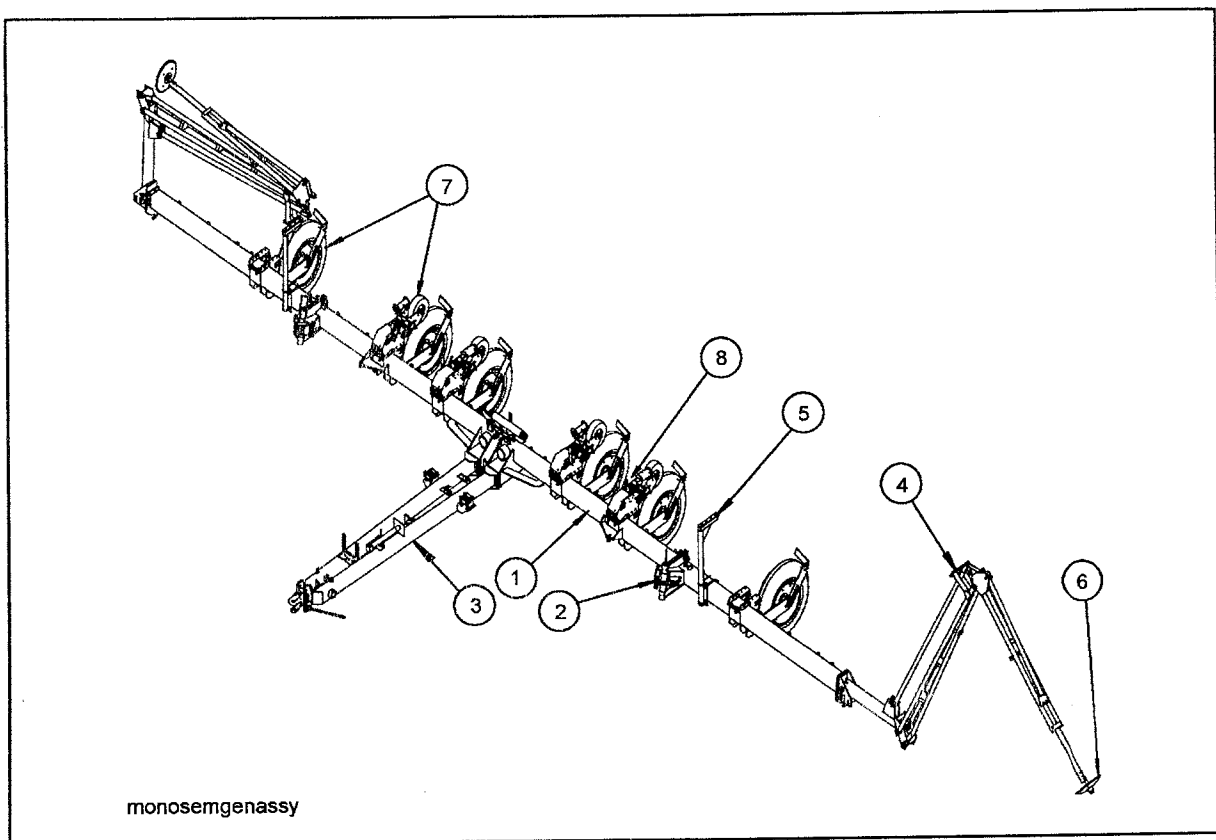
7. OPTIONAL EQUIPMENT

FRAME

Pull-Type 8-row Rigid, 12-row, 16-row, and 24-row Center Flex

GENERAL ASSEMBLY

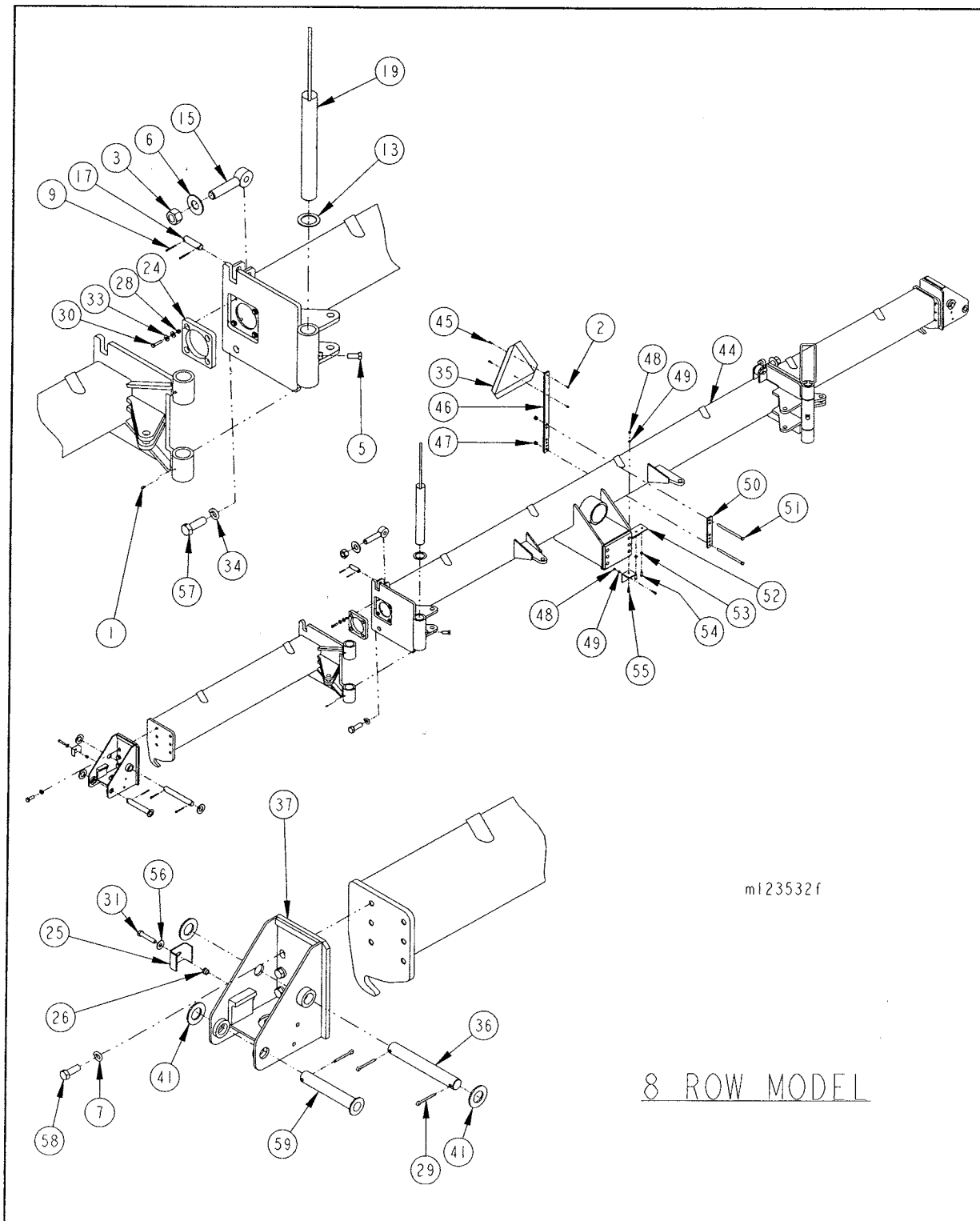
Item	Description
1	Frame assembly
2	Hydraulic wing fold assembly
3	Hitch assembly
4	Row marker assembly
5	Marker support assembly
6	Marker spindle/ Hub/ Blade assembly
7	Lift wheel and drive wheel assembly
8	Transmission



FRAME

Pull-Type Frame

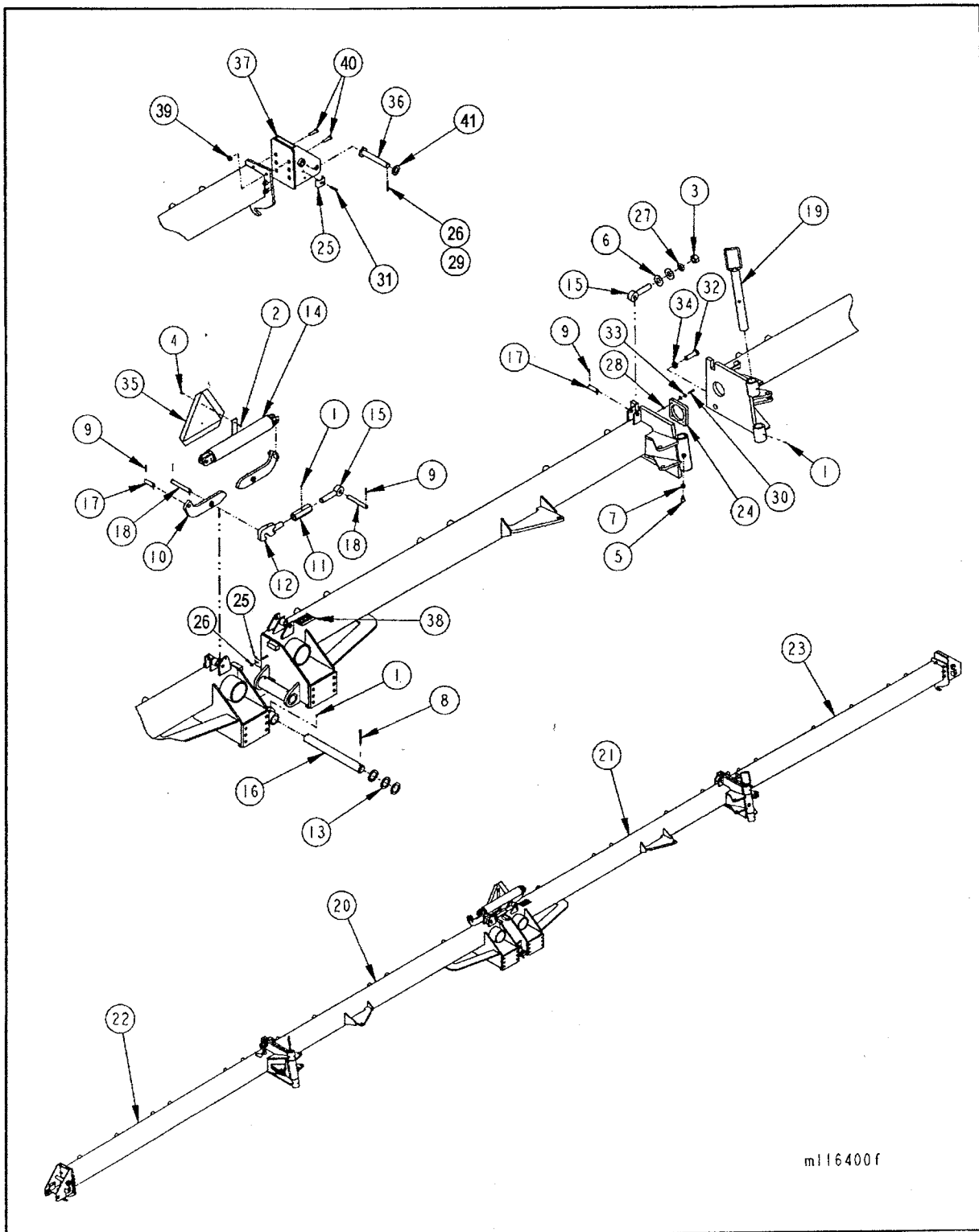
8-ROW 30" RIGID FRAME



FRAME

Pull-Type Frame

8-ROW 38", 12-ROW, 16-ROW, & 24-ROW CENTER FLEX FRAME



FRAME

Pull-Type Frame

FRAME ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	F58805	GREASE FITTING, 1/4-28
2	F37183	NYLON LOCKNUT, 1/4-20 GR 8
3	F36124	HEX NUT, 1-1/4-7 GR 8
4	F13033	SCREW, HEX HEAD CAP, 1/4-20 X 3/4 GR 5
5	F13309	SCREW, HEX HEAD CAP, 5/8-11 X 1-1/2 GR 5
6	F33026	WASHER, FLAT, 1-1/4 USS
7	F33630	WASHER, SPLIT LOCK, 5/8
8	F65191	COTTER PIN, 3/8 X 3
9	F65105	COTTER PIN, 5/32 X 1-1/2
10	L116076	SPRING LEVELING ARM WELDMENT
11	L116237	TURNBUCKLE, CONNECTOR WING TO MAIN FRAME
12	L116238	HOOK WELDMENT, 1-1/4-7
13	L116248	BUSHING, MACHINERY, 10GA
14	L116260	CENTER SPRING WELDMENT
15	L116351	EYEBOLT, 1-1/4-7
16	L116358	PIN, 2-1/8 X 20
17	L116359	PIN, 7/8 X 3-1/8
18	L116363	PIN, 7/8 X 6-9/16
19	L116365	WING HINGE PIN WELDMENT
20	L122608	MAIN FRAME WELDMENT, RH (8 ROW 38)
	L125721	MAIN FRAME WELDMENT, RH (12 ROW 28)
	L122799	MAIN FRAME WELDMENT, RH (12 ROW 30)
	L120346	MAIN FRAME WELDMENT, RH (16 ROW 30)
	L125540	MAIN FRAME WELDMENT, RH (24 ROW 22)
21	L122609	MAIN FRAME WELDMENT, LH (8 ROW 38)
	L125722	MAIN FRAME WELDMENT, LH (12 ROW 28)
	L122800	MAIN FRAME WELDMENT, LH (12 ROW 30)
	L120345	MAIN FRAME WELDMENT, LH (16 ROW 30)
	L125542	MAIN FRAME WELDMENT, LH (24 ROW 22)
22	L123226	WING WELDMENT, RH (8 ROW 30)
	L122610	WING WELDMENT, RH (8 ROW 38)
	L125723	WING WELDMENT, RH (12 ROW 28)
	L122801	WING WELDMENT, RH (12 ROW 30)
	L120348	WING WELDMENT, RH (16 ROW 30)
	L125544	WING WELDMENT, RH (24 ROW 22)
23	L123227	WING WELDMENT, LH (8 ROW 30)
	L122611	WING WELDMENT, LH (8 ROW 38)
	L125724	WING WELDMENT, LH (12 ROW 28)
	L122802	WING WELDMENT, LH (12 ROW 30)
	L120347	WING WELDMENT, LH (16 ROW 30)
	L125545	WING WELDMENT, LH (24 ROW 22)
24	L116367	GASKET SEAL, HINGE POINT
25	L2-181-010001	HOSE CLAMP BRACKET
26	F37212	REV LOCK NUT, 3/8-16
27	L100825	WASHER, SPLIT LOCK, 1-1/4
28	F37211	REV LOCK NUT, 5/16-18
29	F65147	COTTER PIN, 1/4 X 2
30	F13059	SCREW, HEX HEAD CAP, 5/16-18 X 1-1/2 GR 5
31	F13111	SCREW, HEX HEAD CAP, 3/8-16 X 2 GR 5
32	F15466	SCREW, HEX HEAD CAP, 1-8 X 3-1/4
33	F33006	WASHER, FLAT, 5/16 USS

ITEM	PART NO.	DESCRIPTION
34	F33674	WASHER, SPLIT LOCK, 1"
35		SMV EMBLEM
36	L116034	PIN, ROW MARKER PIVOT, 1-1/4 x 9-1/2"
37	L116070	ROW MARKER PIVOT WELDMENT (8/12/16 RO
	L117297	ROW MARKER PIVOT WELDMENT (24 ROW)
38	ST050	DECAL, WARNING
39	F36314	HEX NUT, 5/8-11
	F33630	WASHER, SPLIT LOCK, 5/8"
40	F15312	SCREW, HEX HEAD CAP, 5/8-11 X 2-1/4 GR 8
41	F33100	WASHER, FLAT 1-1/4 SAE
44	L123225	MAIN FRAME (8 ROW 30 ONLY))
45	F13005	SCREW, HEX HEAD CAP, 1/4-20 X 1 GR 5
46	L108830	BRACKET, MOUNTING SMV
47	F37214	REV LOCK NUT, 1/2-13
48	F36104	HEX NUT, 5/16-18
49	F33620	WASHER, SPLIT LOCK, 5/16"
50	L2-054-010461	BAR, WARNING LIGHTS
51	F13230	SCREW, HEX HEAD CAP, 1/2-13 X 8-1/2 GR 5
52	L116036	BRACKET, HITCH ANGLE
53	F33622	WASHER, SPLIT LOCK, 3/8"
54	F13105	SCREW, HEX HEAD CAP, 3/8-16 X 1 GR 5
55	F13055	SCREW, HEX HEAD CAP, 5/16-18 X 1 GR 5
56	F33082	WASHER, FLAT, 3/8 USS
57	F15465	SCREW, HEX HEAD CAP, 1-8 X 3 GR 8
58	F15310	SCREW, HEX HEAD CAP, 5/8-11 X 1-3/4 GR 8
59	L116032	PIN, W/WASHER WELDMENT, 1-1/4 X 7-1/2

FRAME

Pull-Type Frame

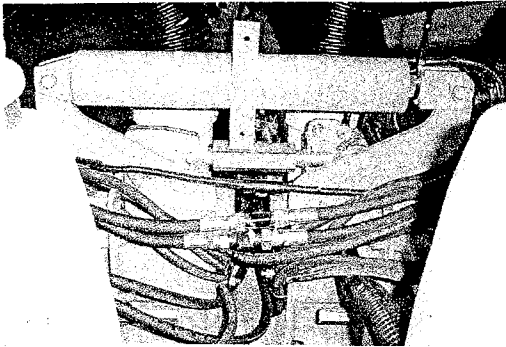
HYDRAULIC WING FOLD



WARNING Be sure the planter is on a level surface. Avoid standing between the wing and main frame when folding the planter. The wing may suddenly swing.

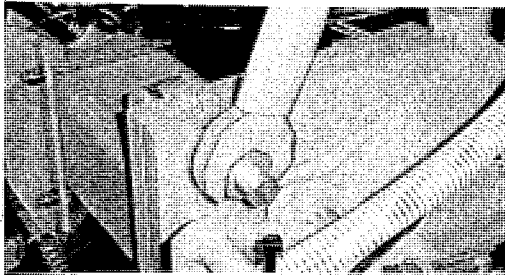
To fold from a field to transport position use the following 8 steps.

- 1) Fold the markers into transport position.



- 2) Swing the center turnbuckle into position and lower the planter to the ground.

- 3) Move the lever on the hand operated selector valve to the "fold" position. Remove any pressure from the hydraulic system before moving the selector handle.



- 4) Loosen the 1 1/4" hex nuts which secures the wing locking bolts. Swing the wing locking bolt on each wing over to release the planter wings.

- 5) Raise the planter.

- 6) Install cylinder lockups on the four center section lift cylinders

- 7) Place the tractor hydraulic lever in the lowering position and hold until the wing cylinders are fully retracted, raising the wing tires.

- 8) Move the tractor hydraulic lever to fold the wings forward into transport position and lock wings in place at the marker support and hitch.



WARNING Be sure the planter is on a level surface. Avoid standing between the wing and main frame when folding the planter. The wing may suddenly swing.

To fold from transport to field operation use the following 11 steps.

- 1) Retract the wing lift tires. With the cylinder lockups in place on the four center section lift cylinders, move the tractor hydraulic lever to the lowering position until the cylinders are fully retracted, thus raising the wing tires.

- 2) With the planter in a raised position and the cylinder lockups in place, release the wing lock pins at the marker support and hitch.

- 3) Position the selector handle on the manual selector valve in the "fold" position.

- 4) Move the tractor hydraulic lever and fold the wings out to operating position.

- 5) Swing the wing locking bolts into position to lock each wing.

- 6) Operate the hydraulic lever to extend all the lift cylinders.

- 7) Remove the cylinder lockups from the four center section lift cylinders and place them in the storage position on the wheel module.

- 8) Lower the planter.

- 9) Tighten the 1 1/4" hex nuts to secure the wing locking bolts.

- 10) Release the turnbuckle located in the center of the planter frame and fold it to one side.

- 11) Remove pressure from the hydraulic system. Move the selector handle on the manual selector valve to the "marker" position.

FRAME

Pull-Type Frame

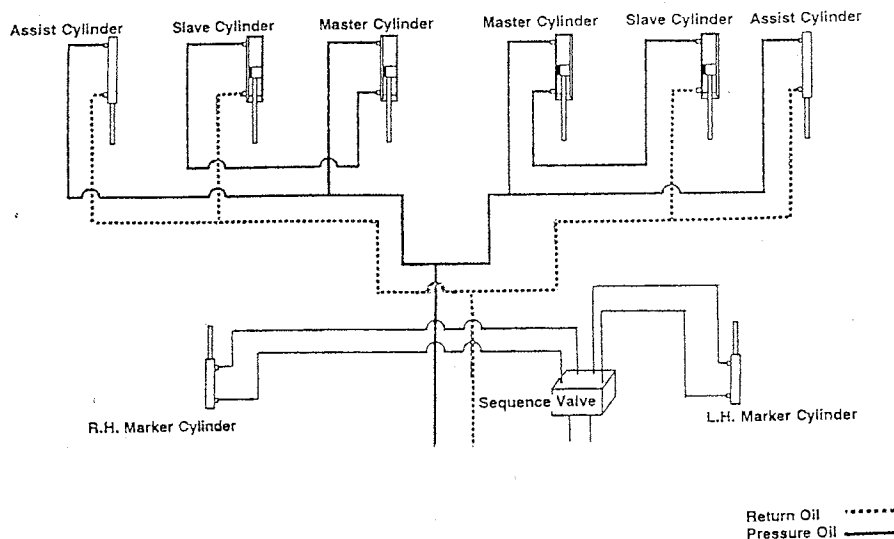
HYDRAULIC PLANTER LIFT OPERATION

The planter lift system consists of a master cylinder on one side of the planter, and a slave cylinder on the other side of the planter. On 6 row and larger models, lift assist cylinders are also used.

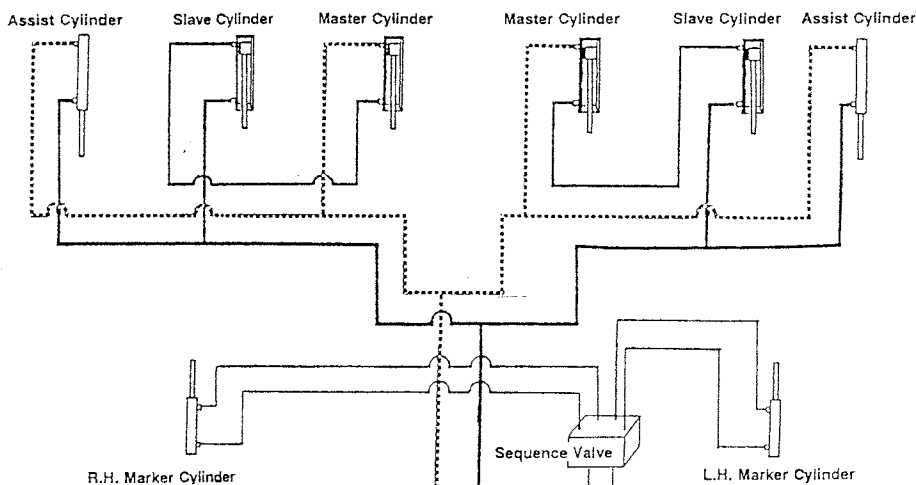
With the master/slave hydraulic lift system, oil is forced into the butt end of the master and lift assist cylinders when the hydraulic lever on the tractor is moved to the raise position.

As the master cylinder is extended, oil from the rod end of the master cylinder is forced into the butt end of the slave cylinder. This displacement on the rod end of the master cylinder is equal to the displacement on the butt end of the slave cylinder. This causes the two cylinders to move at the same rate so the planter will raise and lower evenly.

HYDRAULIC SYSTEM SCHEMATIC 24-ROW - PLANTER RAISING



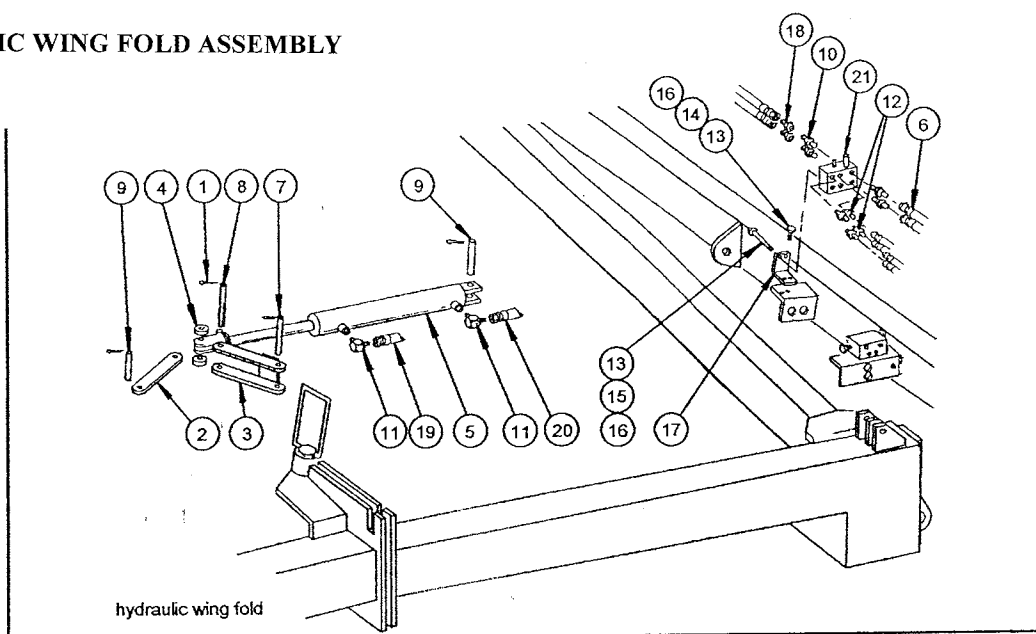
HYDRAULIC SYSTEM SCHEMATIC 24-ROW - PLANTER LOWERING



FRAME

Pull-Type Frame

HYDRAULIC WING FOLD ASSEMBLY

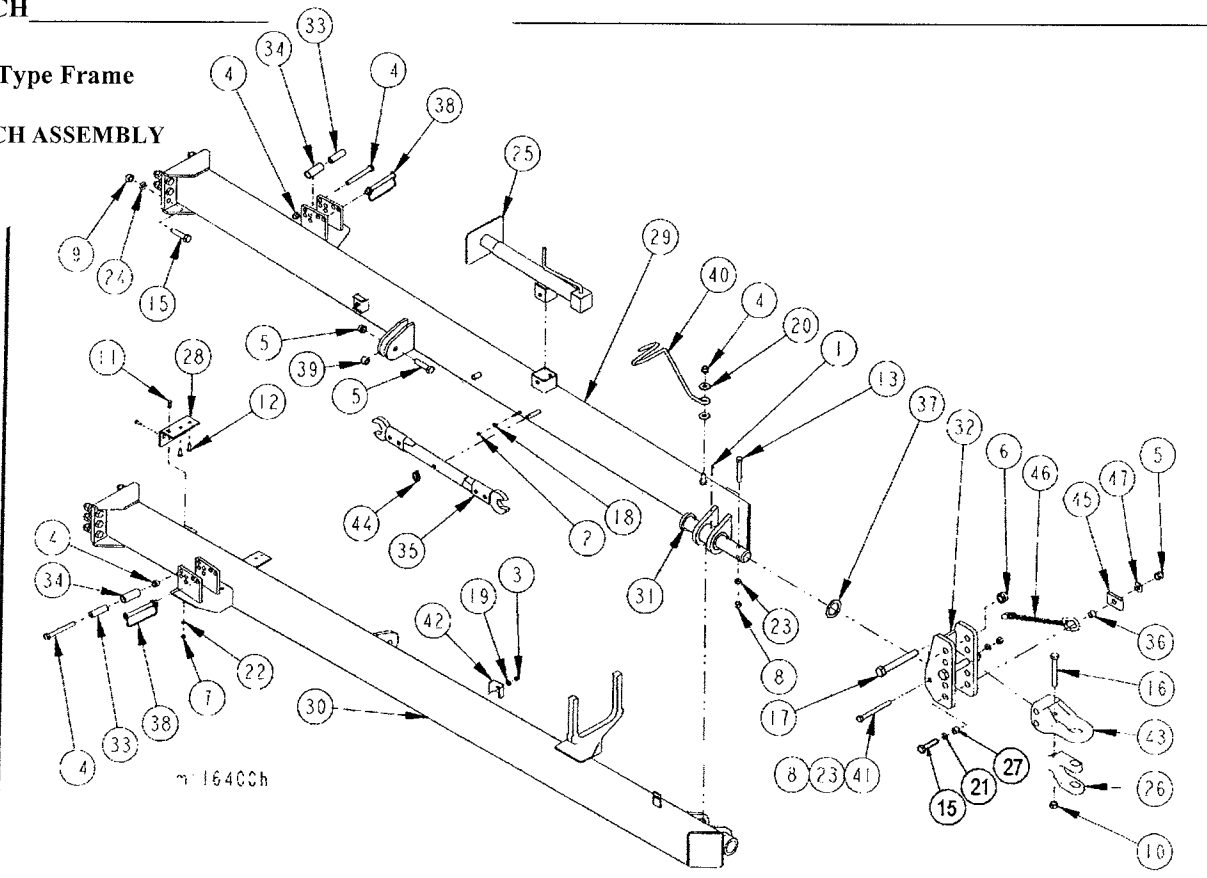


ITEM	PART NO.	DESCRIPTION
1	F65145	COTTER PIN, 1/4 X 1-1/2 (8 ROW 38, 12,16, & 24 ROW)
	F65144	COTTER PIN, 1/4 X 1-1/4 (8 ROW 30)
2	L116037	BAR, WING HINGE, PIVOT
3	L116256	ARM WELDMENT, WING HINGE
4	L116258	SPACER, WING HINGE
5	L116341	CYLINDER, 3 X 16
6		HOSE ASSEMBLY, 3/8 X 25
7	L116440	PIN, 1 X 7-3/16
8	L116441	PIN, 1 X 5-3/4
9	L116442	PIN, 1 X 3-1/8
10	J6400-8-6	CONNECTOR, 3/4"-16 MALE JIC TO 9/16"-18 O-RING
11	J6801-8	ELBOW, 9/16"-18 MALE TO 3/4"-16 O-RING
12	J6400-6	CONNECTOR, 9/16"-18 MALE JIC TO O-RING
13	F36102	HEX NUT, 1/4-20
14	F13005	SCREW, HEX HEAD CAP, 1/4-20 X 1 GR5
15	F13015	SCREW, HEX HEAD CAP, 1/4-20 X 3 GR5
16	F33618	WASHER, SPLIT LOCK, 1/4"
17	L116259	MOUNTING ANGLE
18	J2406-08-06	REDUCER, 3/4"-16 FEMALE JIC TO 9/16"-18 MALE JIC
19		HOSE ASSEMBLY, 3/8 X 113 (8 ROW 38)
		HOSE ASSEMBLY, 3/8 X 120 (12 ROW)
		HOSE ASSEMBLY, 3/8 X 158 (16 & 24 ROW)
20		HOSE ASSEMBLY, 3/8 X 124 (8 ROW 38)
		HOSE ASSEMBLY, 3/8 X 132 (12 ROW)
		HOSE ASSEMBLY, 3/8 X 136 (16 ROW)
		HOSE ASSEMBLY, 3/8 X 174 (24 ROW)
21	L116350	SELECTOR VALVE ASSEMBLY

HITCH

Pull-Type Frame

HITCH ASSEMBLY

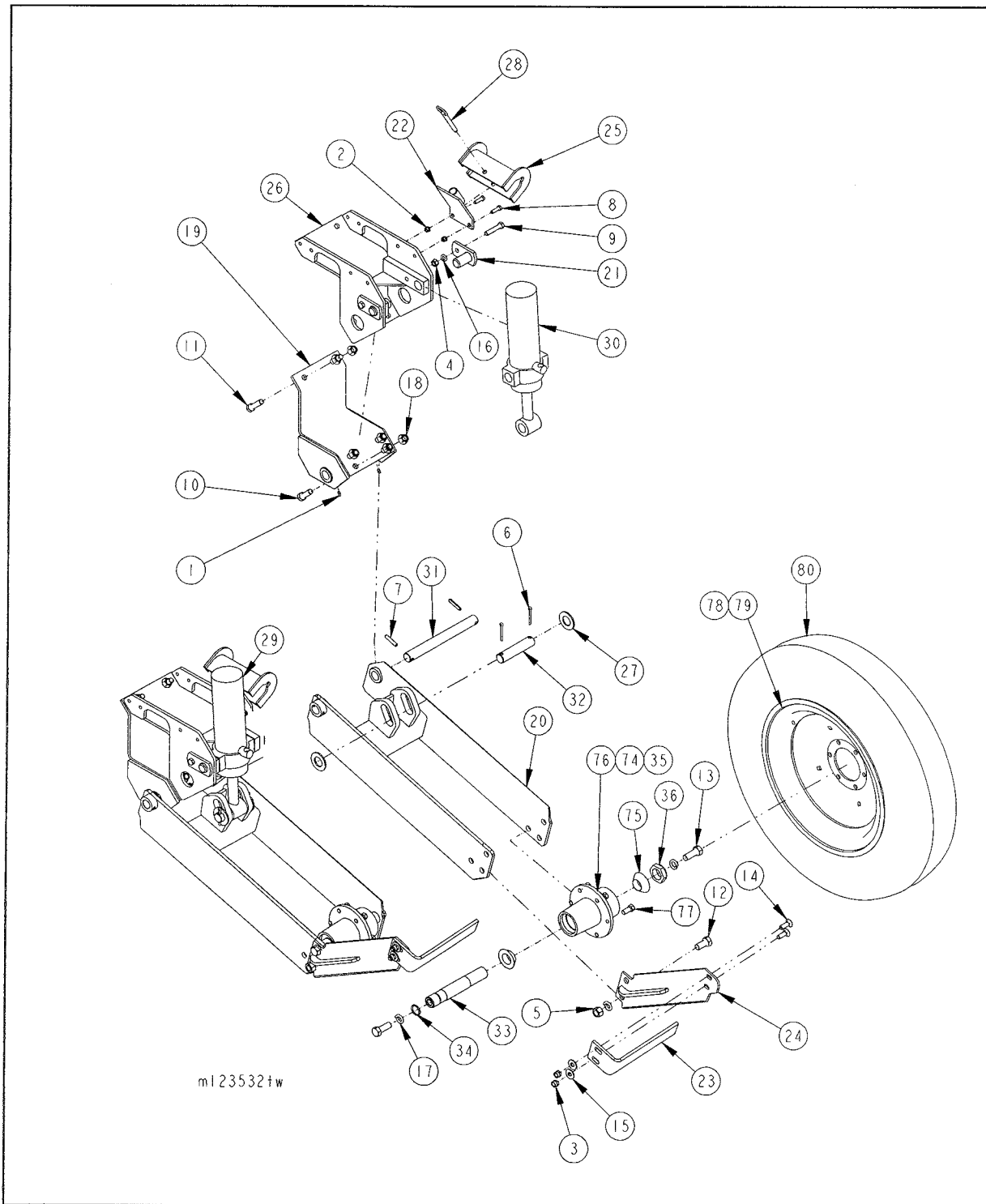


ITEM	PART No.	DESCRIPTION
1	F58805	GREASE FITTING, 1/4-28
2	F37210	REV LOCK NUT, 1/4-20
3	F37212	REV LOCK NUT, 3/8-16
4	F37216	REV LOCK NUT, 5/8-11
5	F37217	REV LOCK NUT, 3/4-10
6	F37219	REV LOCK NUT, 1-8
7	F36104	HEX NUT, 5/16-18
8	F36114	HEX NUT, 5/8-11
9	F36116	HEX NUT, 3/4-10
10	F36366	HEX NUT, 3/4-16
11	F13055	SCREW, HEX HEAD CAP, 5/16-18 X 1 GR5
12	F13105	SCREW, HEX HEAD CAP, 3/8-16 X 1 GR5
13	F13319	SCREW, HEX HEAD CAP, 5/8-11 X 4 GR5
14	F13324	SCREW, HEX HEAD CAP, 5/8-11 X 5-1/2 GR5
15	F13365	SCREW, HEX HEAD CAP, 3/4-10 X 3 GR5
16	F17939	SCREW, HEX HEAD CAP, 3/4-16 X 5-1/2 GR8
17	F15478	SCREW, HEX HEAD CAP, 1-8 X 7-1/2 GR8
18	F33004	WASHER, FLAT, 1/4 USS
19	F33008	WASHER, FLAT, 3/8 USS
20	F33016	WASHER, FLAT, 5/8 USS
21	F33018	WASHER, FLAT, 3/4 USS
22	F33620	WASHER, SPLIT LOCK, 5/16
23	F33630	WASHER, SPLIT LOCK, 5/8
24	F33632	WASHER, SPLIT LOCK, 3/4
25	L1A63478	JACK, 7000 LB
26	L100214	HITCH CLEVIS PPI-208V
27	L100676	BUSHING, 1.06 X .79 X .62
28	L116036	BRACKET
29	L116093	HITCH TUBE WELDMENT, LH (ALL MODELS EXCEPT 8 ROW 30)
30	L116106	HITCH TUBE WELDMENT, RH (8 ROW 38, 12 & 16 ROW 30)
	L117402	HITCH TUBE WELDMENT, RH (W/o TURBO MOUNT FOR 12 ROW 28 & 24 ROW 22)
31	L116113	PIN WELDMENT
32	L116183	HITCH CAP WELDMENT
33	L116184	SLEEVE, 3-3/16
34	L116185	SLEEVE, 3-1/8
35	L116196	WRENCH
36	L116211	SPACER, SAFETY CHAIN
37	L116248	BUSHING, MACHINERY 10GA
38	L116250	PIN, 5/8 W/LOCK
39	L116407	BUSHING, MIDDLE HINGE
40	L116445	HOSE HOLDER
41	F15326	SCREW, HEX HEAD, 5/8-11x6-1/2 GR8
42	L2-181-010001	HOSE CLAMP
43	L2-375-010601	HITCH, RING CAT III
44	6077	LYNCHPIN, 6MM
45	L70328064	PLATE, TO SECURE SAFETY CHAIN
46	L70594087	SAFETY CHAIN ASSEMBLY, 10,500#
47	L70927326	PLATE WASHER, .78 X 1.75 X 7GA
48	L123237	HITCH WELDMENT (8 ROW 30)

FRAME

8-row 30" Pull Type

LIFT AND DRIVE WHEEL

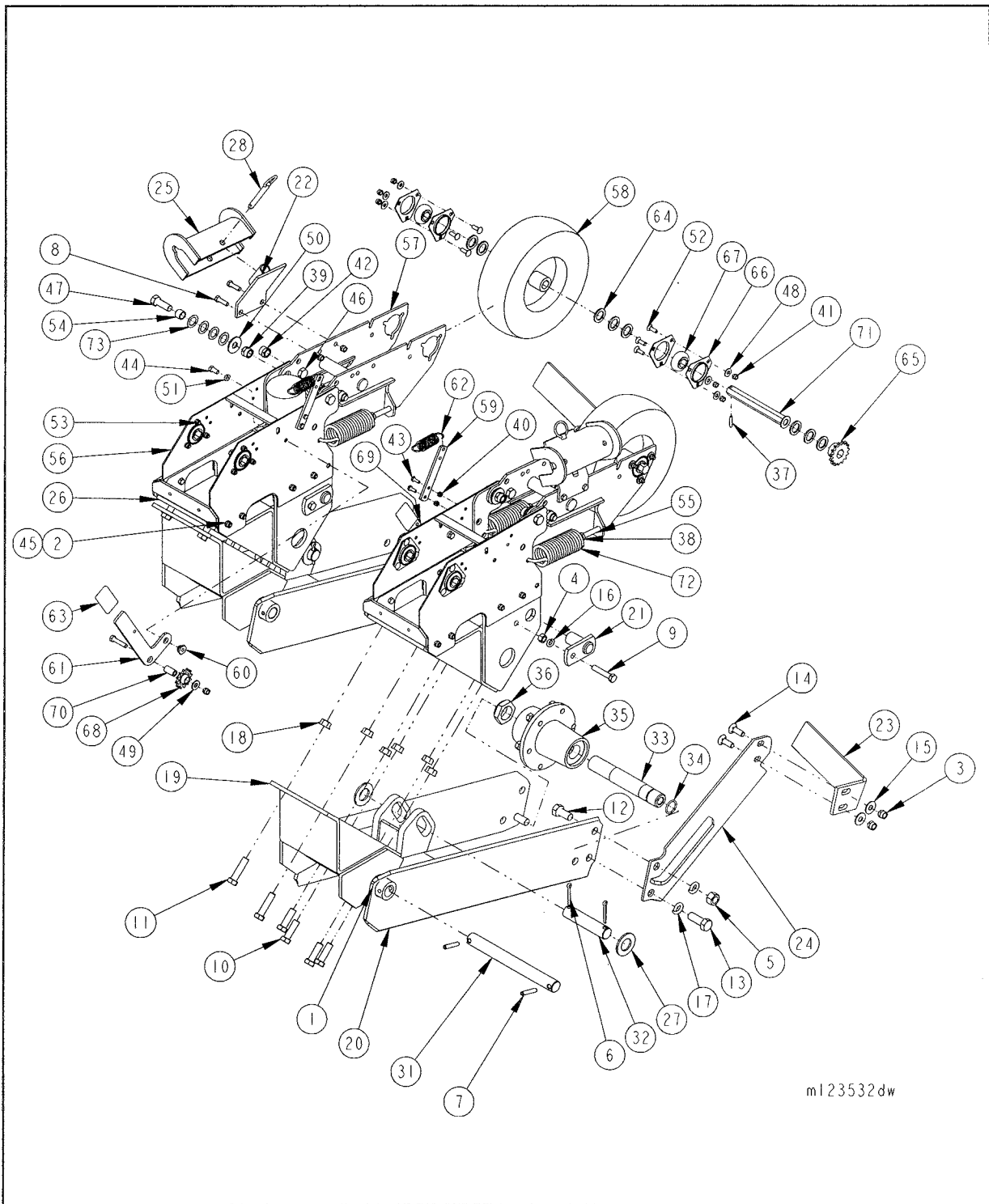


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FRAME

8-row 30" Pull Type

LIFT AND DRIVE WHEEL



FRAME

8-row 30" Pull Type

LIFT AND DRIVE WHEEL

ITEM	PART NO.	DESCRIPTION
1	F58805	GREASE FITTING, 1/4-28
2	F37212	REV LOCK NUT, 3/8-16
3	F37214	REV LOCK NUT, 1/2-13
4	F36110	HEX NUT, 1/2-13
5	F36116	HEX NUT, 3/4-10
6	F65145	COTTER PIN, 1/4 X 2
7	F64315	ROLL PIN, 3/8 X 2
8	F13107	SCREW, HEX HEAD CAP, 3/8-16 X 1-1/4 GR5
9	F13213	SCREW, HEX HEAD CAP, 1/2-13 X 2-1/2 GR5
10	F13311	SCREW, HEX HEAD CAP, 5/8-13 X 2 GR5
11	F13313	SCREW, HEX HEAD CAP, 5/8-11 X 2-1/2 GR5
12	F13359	SCREW, HEX HEAD CAP, 3/4-10 X 1-1/2 GR5
13	F13361	SCREW, HEX HEAD CAP, 3/4-10 X 2 GR5
14	F21824	CARRIAGE HEAD BOLT, 1/2-13 X 1-1/2
15	F33012	WASHER, FLAT, 1/2 USS
16	F33626	WASHER, SPLIT LOCK, 1/2
17	F33632	WASHER, SPLIT LOCK, 3/4
18	F37349	HEX FLANGE NUT, SERRATED, 5/8-11
19	L116018	DRIVE WHEEL CLAMP WELDMENT
20	L116023	DRIVE WHEEL ARM WELDMENT
21	L116041	RETAINING PIN WELDMENT
22	L116065	STORAGE BRACKET FOR LOCK-UP WELDMENT
23	L116068	SCRAPER
24	L116086	SCRAPER MOUNT WELDMENT
25	L116087	LOCK-UP WELDMENT W/PIN
26	L116090	DRIVE WHEEL CLAMP TOP WELDMENT
27	F33100	WASHER, FLAT, 1-1/4 SAE
28	L116251	PIN, 1/2 X 4-1/2
29	L116342	CYLINDER, SLAVE LIFT, 3-1/4 X 8
30	L116343	CYLINDER, SLAVE LIFT, 3-1/2 X 8
31	L116356	PIN, 1-1/4 X 12, 2 - 3/8" HOLES
32	L116360	PIN, 1-1/4 X 5-5/8, 2 - 1/4" HOLES
33	L116406	SPINDLE, TRANSPORT WHEEL
34	L116569	SNAP RING
35	L123879	HUB ASSEMBLY (ITEMS 74 - 77)
36	L70917835	NUT, HEX THIN NYLON LOCK
37	F64249	ROLL PIN, 1/4 X 1-1/4
38	F36210	NUT, HEX JAM, 1/2-13
39	F37312	HEX NUT, 5/8-18
40	F37210	REV LOCK NUT, 1/4-20
41	F37211	REV LOCK NUT, 5/16-18
42	F37216	REV LOCK NUT, 5/8-11
43	F13003	SCREW, HEX HEAD CAP, 1/4-20 X 3/4 GR5
44	F13103	SCREW, HEX HEAD CAP, 3/8-16 X 3/4 GR5
45	F13105	SCREW, HEX HEAD CAP, 3/8-16 X 1 GR5
46	F13307	SCREW, HEX HEAD CAP, 5/8-11 X 1-1/4 GR5
47	F13311	SCREW, HEX HEAD CAP, 5/8-18 X 2 GR5