



WIL-RICH®

EXCEL Quadra Parts

3 & 5 SECTION CULTIVATORS

 WIL-RICH

PO Box 1030

Wahpeton, ND 58074

PH (701) 642-2621

Fax (701) 642-3372

Parts Fax (701) 642-3819

WARRANTY

The only warranty Wil-Rich gives and the only warranty the dealer is authorized to give is as follows:

We warrant products sold by us to be in accordance with our published specifications or those specifications agreed to by us in writing at time of sale. Our obligation and liability under this warranty is expressly limited to repairing, or replacing, at our option, within 12 months after date of retail delivery, any product not meeting the specifications. ***We make no other warranty, express or implied and make no warranty of merchantability or of fitness for any particular purpose.*** Our obligation under the warranty shall not include any transportation charges or costs or installation or any liability for direct, indirect or consequential damage or delay. If requested by us, products or parts for which a warranty claim is made are to be returned transportation prepaid to our factory. Any improper use, operation beyond rated capacity, substitution of parts not approved by us, or any alteration or repair by others in such manner as in our judgment affects the product materially and adversely shall void this warranty. ***No employee or representative is authorized to change this warranty in any way or grant any other warranty.***

Wil-Rich reserves the right to make improvement changes on any of our products without notice.

When warranty limited or not applicable: Warranty on hoses, cylinders, hubs, spindles, engines, valves, pumps or other trade accessories are limited to the warranties made by the respective manufactures of these components. Rubber tires and tubes are warranted directly by the respective tire manufacturer only, and not by Wil-Rich.

Warranty does not apply to any machine or part which has been repaired or altered in any way so as in the our judgment to affect its reliability, or which has been subject to misuse, negligence or accident.


A Warranty Validation and Delivery Report Form must be filled out and received by Wil-Rich to initiate the warranty coverage.

WARRANTY CLAIMS PROCEDURE

1. The warranty form must be returned to Wil-Rich within fifteen (15) working days from the repair date.
2. Parts returned to Wil-Rich without authorization will be refused. The parts must be retained at the dealership for ninety (90) days after the claim has been filed. If the Service Department would like to inspect the parts, a packing slip will be mailed to the dealer. The packing slip must be returned with the parts. The parts must be returned prepaid within thirty (30) days of receiving authorization. After the parts are inspected and warranty is verified, credit for the return freight will be issued to the dealer.
3. Parts that will be scrapped at the dealership will be inspected by a Wil-Rich Sales Representative, District Sales Manager or Service Representative within the ninety (90) day retaining period.

TO THE OWNER

The user is responsible for inspecting his/her machine and for having parts repaired or replaced when continued use of this product would cause damage or excessive wear to the other parts. The word NOTE is used to convey information that is out of context with the manual text; special information such as specifications, techniques, reference information of supplementary nature.

WIL-RICH LLC		
Wahpeton, ND		
Serial Number:	<input type="text"/>	Made in USA

When in need of parts, always specify the model and serial number. Write this number in the space provided. The serial number plate is located on the main frame in the front left corner.

MODIFICATIONS

It is the policy of Wil-Rich to improve its products whenever possible and practical to do so. We reserve the right to make changes, improvements and modifications at any time without incurring obligation to make such changes, improvements on any equipment sold previously.

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GENERAL INFORMATION

Remove all wires and/or banding material. The parts have been conveniently arranged on the pallet for ease of assembly.

NOTE: Always wear safety glasses or goggles and be careful when cutting wires and steel bands as they are under tension and will spring back when cut.

Wherever the terms "left" and "right" are used, it must be understood to mean from a position behind and facing the machine.

Lubricate all bearings and moving parts as you proceed and make sure they work freely.

Loosely install all bolts connecting mating parts before final tightening.

When tightening bolts, they must be torqued to the proper number of foot-pounds as indicated in the table unless specified. It is important that all bolts be kept tight.

On new machines, all nuts and bolts must be re-checked after a few hours of operation.


When replacing a bolt, use only a bolt of the same grade or higher. Except in shear bolt applications, where you must use the same grade bolt.

Bolts with no markings are grade 2

Grade 5 bolts furnished with the machine are identified by three radial lines on the head.

Grade 8 bolts furnished with the machine are identified by six radial lines on the head.

All U-bolts are grade 5.



THIS SYMBOL USED TO CALL YOUR ATTENTION TO INSTRUCTIONS CONCERNING YOUR PERSONAL SAFETY. BE SURE TO OBSERVE AND FOLLOW THESE INSTRUCTIONS

	GRADE 5			GRADE 8		
TORQUE IN FOOT POUNDS						
BOLT DIA	3/8	1/2	5/8	3/4	7/8	1
HEX HEAD	9/16	3/4	15/16	1-1/8	1-5/16	1-1/2
UNC GR2	18	45	89	160	252	320
UNC GR5	30	68	140	240	360	544
UNC GR8	40	100	196	340	528	792
UNF GR2	21	51	102	178	272	368
UNF GR5	32	70	168	264	392	572
UNF GR8	48	112	216	368	792	840

TORQUEPS

CAUTION

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY AND/OR EQUIPMENT DAMAGE.

- Just before and during operation be sure no one is on or around the implement.
- Before activating the hydraulic system, check hoses for proper connections.
- Before lowering the wings for the first time, make sure the entire system has been charged with oil.
- With wings down always install hydraulic cylinder channel lock(s) for transporting.

PERSONAL SAFETY IS IMPORTANT!

ALL PERSONNEL INVOLVED WITH THE ASSEMBLY AND/OR OPERATION OF THIS EQUIPMENT MUST BE INFORMED OF PROPER SAFETY PROCEDURES. OPERATOR'S/ASSEMBLY MANUALS PROVIDE THE NECESSARY INFORMATION. IF THE MANUAL IS LOST FOR A PARTICULAR IMPLEMENT, ORDER A REPLACEMENT AT ONCE. OPERATOR'S AND ASSEMBLY MANUALS ARE AVAILABLE AT NO CHARGE UPON REQUEST.

**This Safety Alert symbol means
ATTENTION! BECOME ALERT
YOUR SAFETY IS INVOLVED!**



The Safety Alert symbol identifies important safety messages on the Wil-Rich Quad X & eXcel Field Cultivator. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

3 Big Reasons

**Accidents Disable and Kill
Accidents Cost
Accidents Can Be Avoided**

SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guidelines:

DANGER

An immediate and specific hazard which **WILL** result in severe personal injury or death if the proper precautions are not taken.

WARNING

A specific hazard or unsafe practice which **COULD** result in severe personal injury or death if the proper precautions are not taken.

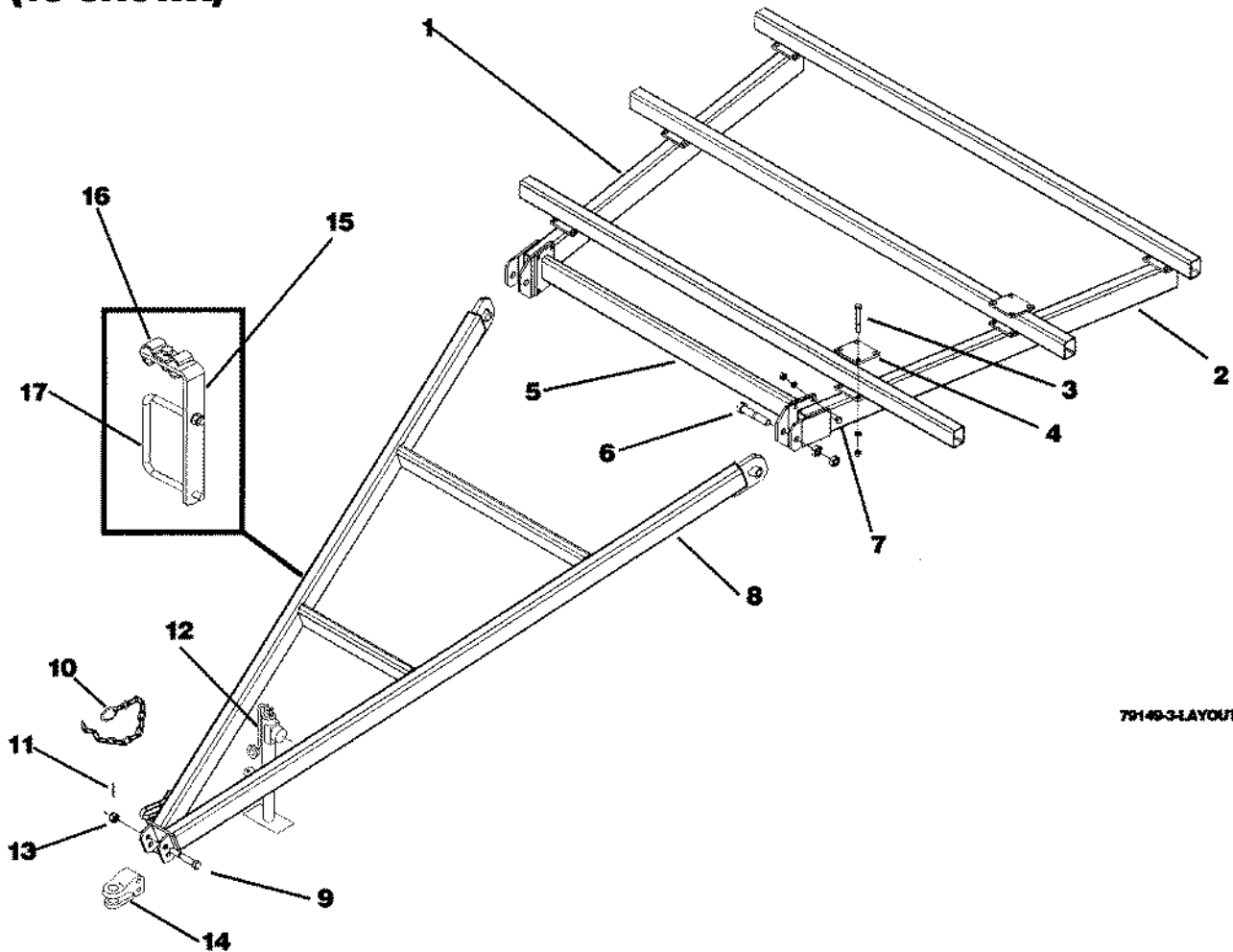
CAUTION

Unsafe practices which **COULD** result in personal injury if proper practices are not taken, or as a reminder of good safety practices.

**ADDRESS INQUIRIES TO: WIL-RICH PO BOX 1030
WAHPETON, ND 58074
PH (701) 642-2621 FAX (701) 642-3372**

QUADX 13' & 16' HITCH ASSEMBLY

(13' SHOWN)



79149-3-LAYOUT1

ITEM	PART NO	DESCRIPTION
1	220860	RIGHT HITCH TUBE (16')
	220795	RIGHT HITCH TUBE (13')
2	220796	LEFT HITCH TUBE (13')
	220859	LEFT HITCH TUBE (16')
3	88293	3/4NCx6 GR5 BOLT
4	68083	PLATE (16')
	68040	PLATE (13')
5	220858	16' HITCH TUBE
	220792	13' HITCH TUBE
6	88349	1-1/4NCx6-1/2 GR5 BOLT
7	88294	5/8NCx2 GR5 BOLT
8	220866	13' QX HITCH
	220901	16' QX HITCH
9	11638	1-1/4NCx6-1/2 HITCH BOLT
10	24459	SAFETY CHAIN
11	88133	3/16X2 COTTER PIN
12	24415	JACK
13	88350	1-1/4NC SLOTTED NUT

ITEM	PART NO	DESCRIPTION
14	68057	PERFECT HITCH
15	68351	5" HYD TUBE BRACKET
16	13215	TUBE CLAMP
17	89069	3/8NCx5x4 U-BOLT

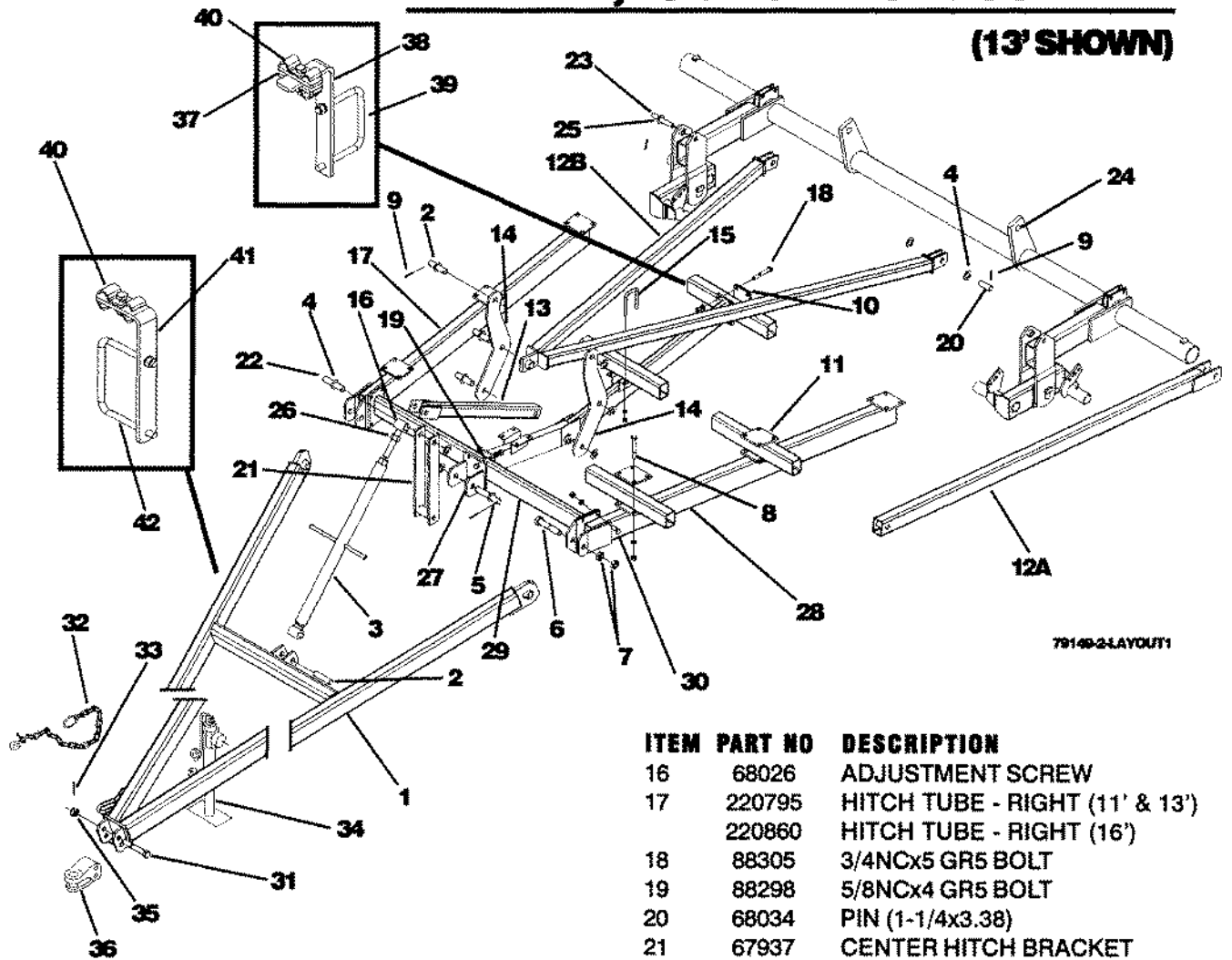
Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

EXCEL 11', 13' & 16' HITCH ASSEMBLY

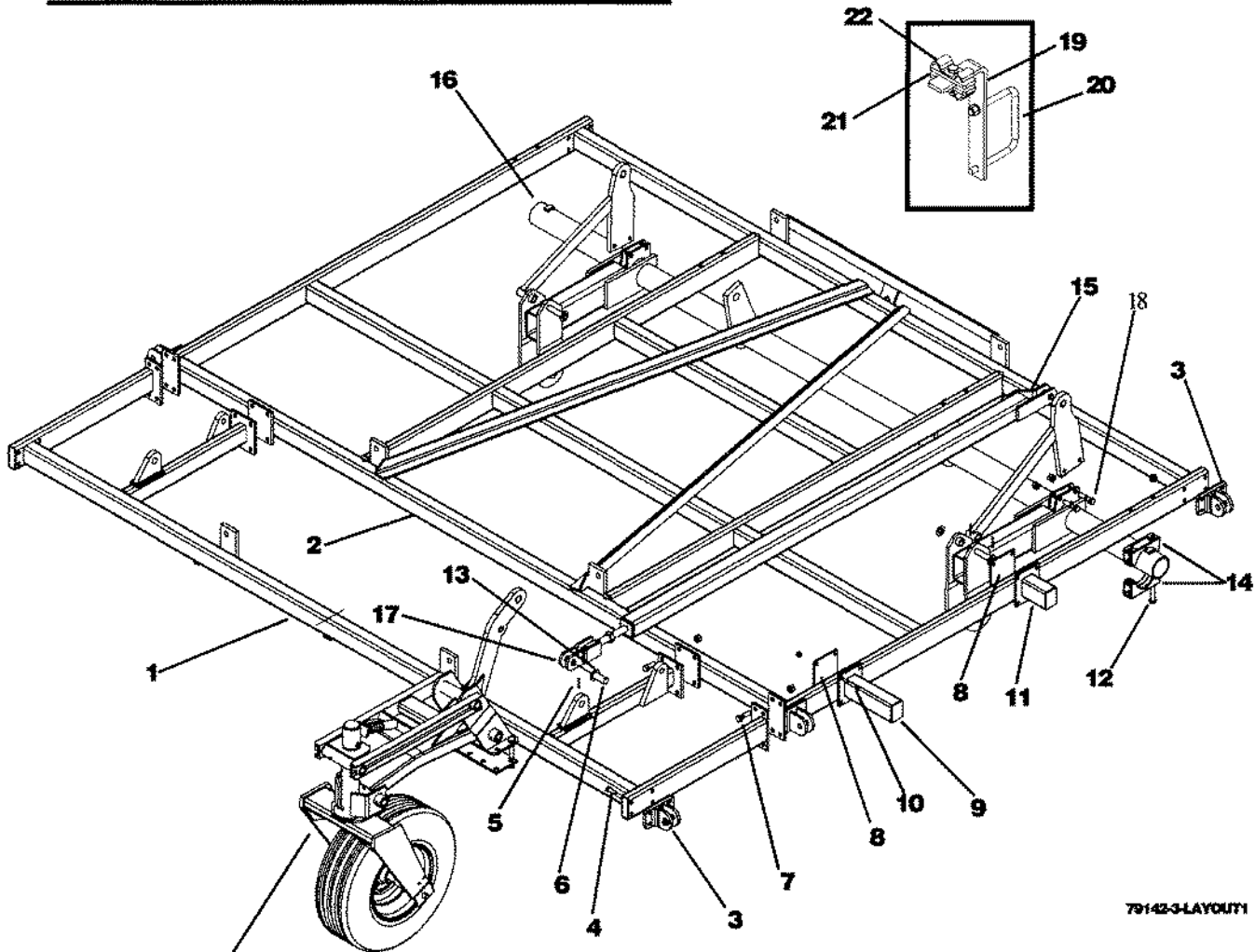
(13' SHOWN)



ITEM	PART NO	DESCRIPTION
1	68086	11 EXC MAIN FRAME HITCH
	67752	13 EXC MAIN FRAME HITCH
	68075	16 EXC MAIN FRAME HITCH
2	68031	PIN (1-1/4ODx5.13)
3	68036	ADJUSTER ASSEMBLY
4	88440	MACHINERY BUSHING 1-1/4x1-7/8x14 GA
5	68032	PIN (1-1/4ODx7.25)
6	88349	1-1/4NCx6-1/2 GR5 BOLT
7	88622	1-1/4NC JAM NUT
8	88293	3/4NCx6 GR5 BOLT
9	42484	SPIROL PIN 1/4x2-1/4
10	68354	4 HOLE BOLT PLATE(3.5x4.75)
11	68040	4 HOLE DIAMOND PLATE 65 °
	68083	4 HOLE DIAMOND PLATE 81 °
12A	68084	11 EXC CENTER LIFT TUBE BRACKET
12B	67743	13 EXC CENTER LIFT TUBE BRACKET
	68071	16 EXC CENTER LIFT TUBE BRACKET
13	67906	LINKAGE
14	67933	PLATE
15	88503	5/8NCx3x5-1/4 U-BOLT

ITEM	PART NO	DESCRIPTION
	16	68026 ADJUSTMENT SCREW
	17	220795 HITCH TUBE - RIGHT (11' & 13')
		220860 HITCH TUBE - RIGHT (16')
	18	88305 3/4NCx5 GR5 BOLT
	19	88298 5/8NCx4 GR5 BOLT
	20	68034 PIN (1-1/4x3.38)
	21	67937 CENTER HITCH BRACKET
	22	68030 PIN (1-1/4x6.13)
	23	68033 PIN (1x6.38)
	24	33535 SPRING TENSION BUSHING(1-1/4)
	25	88196 1" FLAT WASHER
	26	88622 1-1/4NC JAM NUT
	27	221062 CENTER HITCH BRACKET
	28	220796 HITCH TUBE - LEFT(11' & 13')
		220859 HITCH TUBE - LEFT (16')
	29	220791 HITCH TUBE (11')
		220792 HITCH TUBE (13')
		220858 HITCH TUBE (16')
	30	88294 5/8NCx2 GR5 BOLT
	31	11638 1-1/4NCx6-1/2 HITCH BOLT
	32	24459 SAFETY CHAIN
	33	88133 3/16X2 COTTER PIN
	34	24415 JACK
	35	88350 1-1/4NC SLOTTED NUT
	36	68057 PERFECT HITCH
	37	15543 BASE PLATE
	38	13270 4" POLE TUBE BRACKET
	39	88514 3/8NCx4x3-3/4 U-BOLT
	40	13215 TUBE CLAMP
	41	68351 5" HYD TUBE BRACKET
	42	89069 3/8NCx5x4 U-BOLT

13' & 16' QUADX MAIN FRAME



79142-3-LAYOUT1

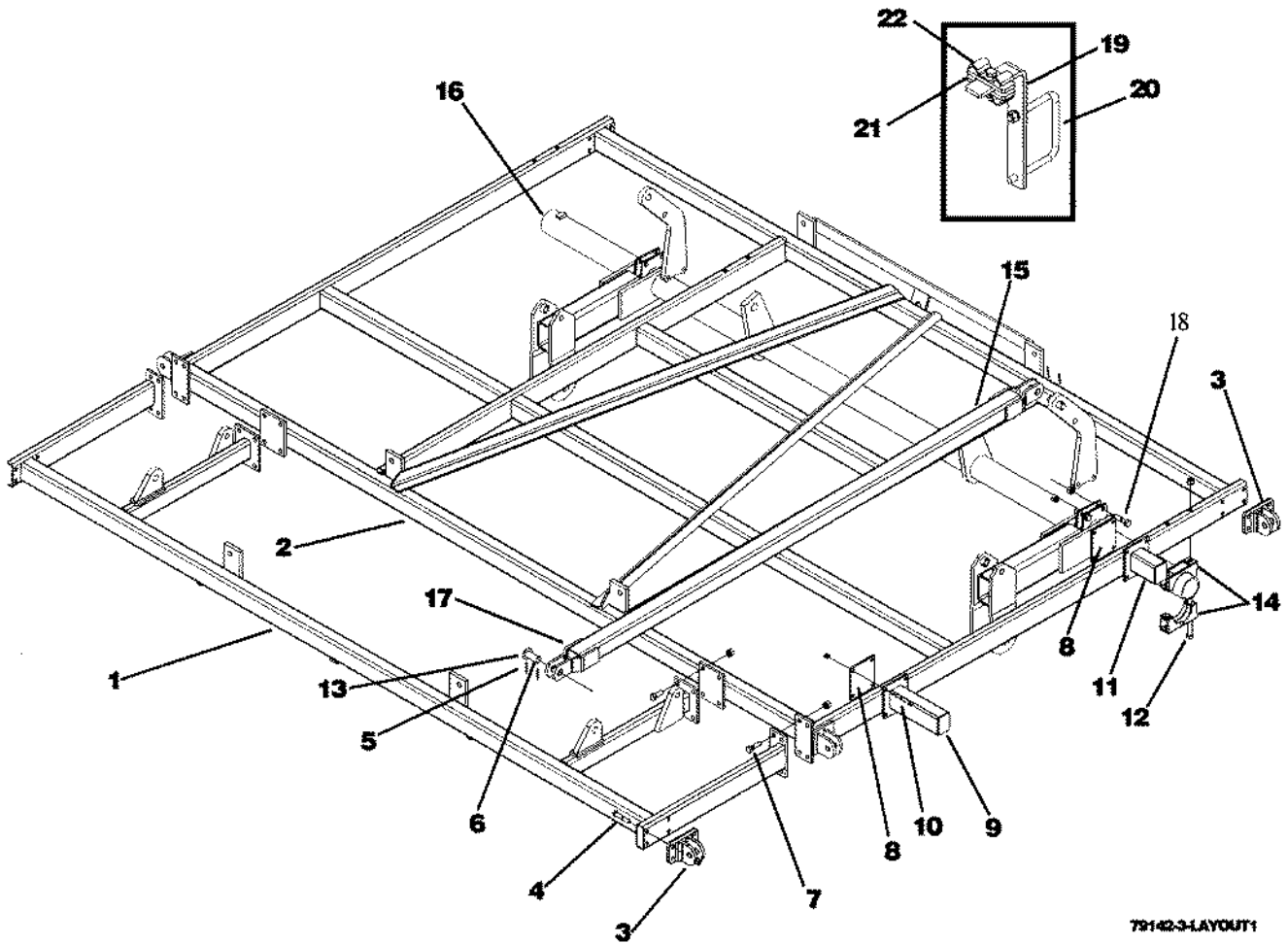
QUADX GAGE WHEEL (SEE PAGE 18 & 19)

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	220861	13 FRONT FRAME BAR	15	221461	MAIN MAST TUBE
	220862	16 FRONT FRAME BAR	16	221465	13 QX/XL MAIN AXLE ASSY
2	220777	13 MAIN FRAME		221325	16 QX/XL MAIN AXLE ASSY
	221074	16 MAIN FRAME	17	54800	CLEVIS ADJUST ROD
3	68067	WING HINGE	18	88841	3/4NC GR5 BOLT
4	88292	5/8NCx3-1/2 GR5 BOLT	19	13270	4" POLE TUBE BRACKET
5	42484	SPIROL LOCK PIN	20	88515	3/8NCx4x2-3/4 U-BOLT
6	68034	PIN (1-1/4x3.38)	21	15543	BASE PLATE
7	88290	3/4NCx2 GR8 BOLT	22	13215	TUBE CLAMP
8	65688	3/8 BOLT PLATE 5.5x4.75			
9	68020	12-1/2" SHANK STUB			
10	88507	1/2NCx3-1/2 GR5 BOLT			
11	68021	6-1/2" SHANK STUB			
12	89165	3/4NCx13 GR5 BOLT			
13	88440	1-1/4x1-7/8x 14 GA BUSHING			
14	34132	AXLE CLAMP ASSEMBLY			

Standard Nuts and Lock Washers			
88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out

11', 13' & 16' EXCEL MAIN FRAME



79142-3-LAYOUT1

ITEM	PART NO	DESCRIPTION
1	220861	13 FRONT FRAME BAR
	220862	16 FRONT FRAME BAR
2	220777	13 MAIN FRAME
	221074	16 MAIN FRAME
3	68067	WING HINGE
4	88292	5/8NCx3-1/2 GR5 BOLT
5	42484	SPIROL LOCK PIN
6	68034	PIN (1-1/4x3.38)
7	88290	3/4NCx2 GR8 BOLT
8	65688	3/8 BOLT PLATE 5.5x4.75
9	68020	12-1/2" SHANK STUB
10	88507	1/2NCx3-1/2 GR5 BOLT
11	68021	6-1/2" SHANK STUB
12	89165	3/4NCx13 GR5 BOLT
13	88440	1-1/4x1-7/8x 14 GA BUSHING
14	34132	AXLE CLAMP ASSEMBLY

ITEM	PART NO	DESCRIPTION
15	67707	MAIN MAST TUBE
16	221464	11 XL MAIN AXLE ASSY
	221465	13 QX/XL MAIN AXLE ASSY
	221325	16 QX/XL MAIN AXLE ASSY
17	54800	CLEVIS ADJUST ROD
18	88841	3/4NCx2-3/4 GR BOLT
19	13270	4" POLE TUBE BRACKET
20	88515	3/8NCx4x2-3/4 U-BOLT
21	15543	BASE PLATE
22	13215	TUBE CLAMP

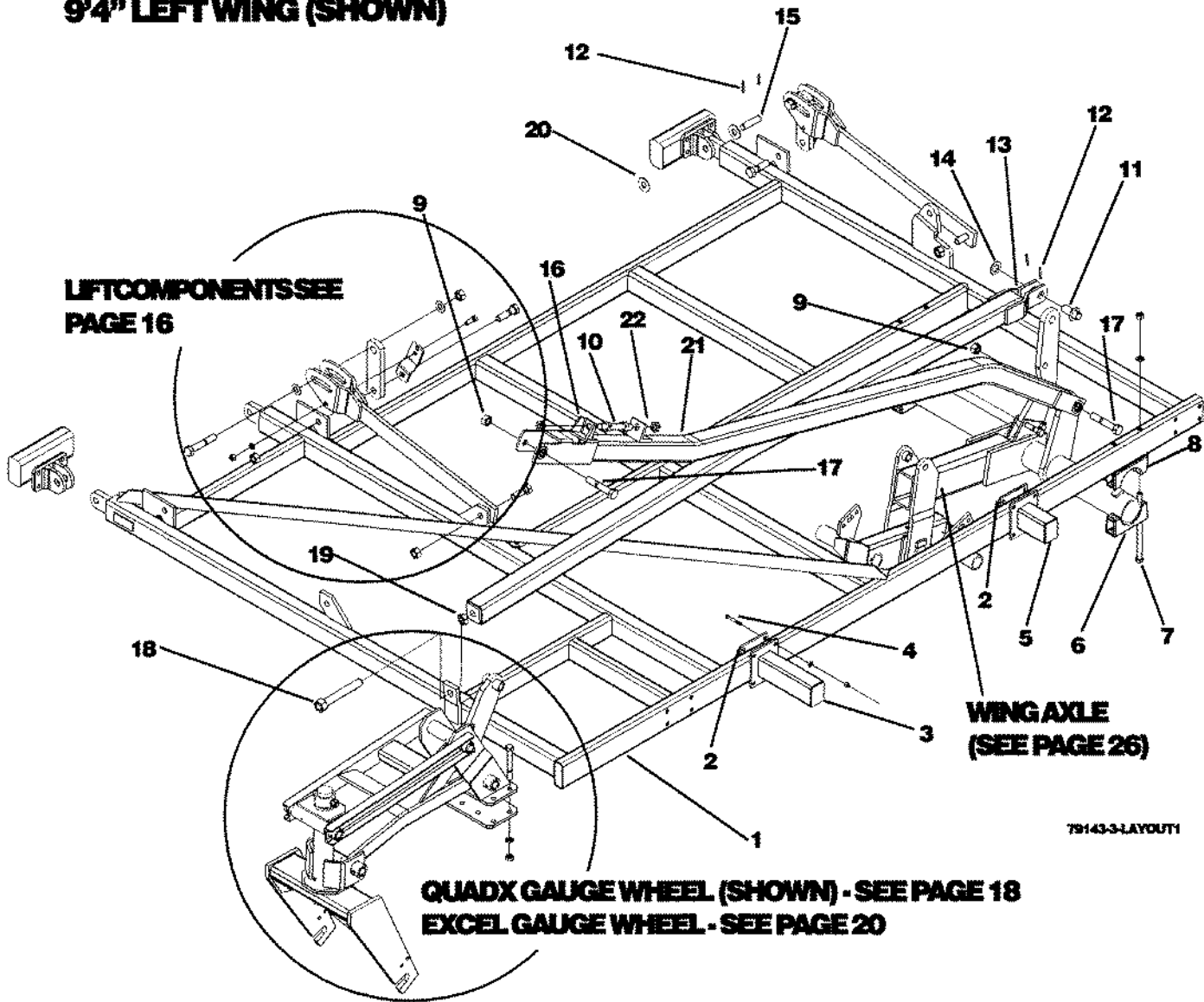
Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

7' & 9' 4" WING

9' 4" LEFT WING (SHOWN)



LIFT COMPONENTS SEE PAGE 16

WING AXLE (SEE PAGE 26)

QUADX GAUGE WHEEL (SHOWN) - SEE PAGE 18
 EXCEL GAUGE WHEEL - SEE PAGE 20

79143-3-LAYOUT1

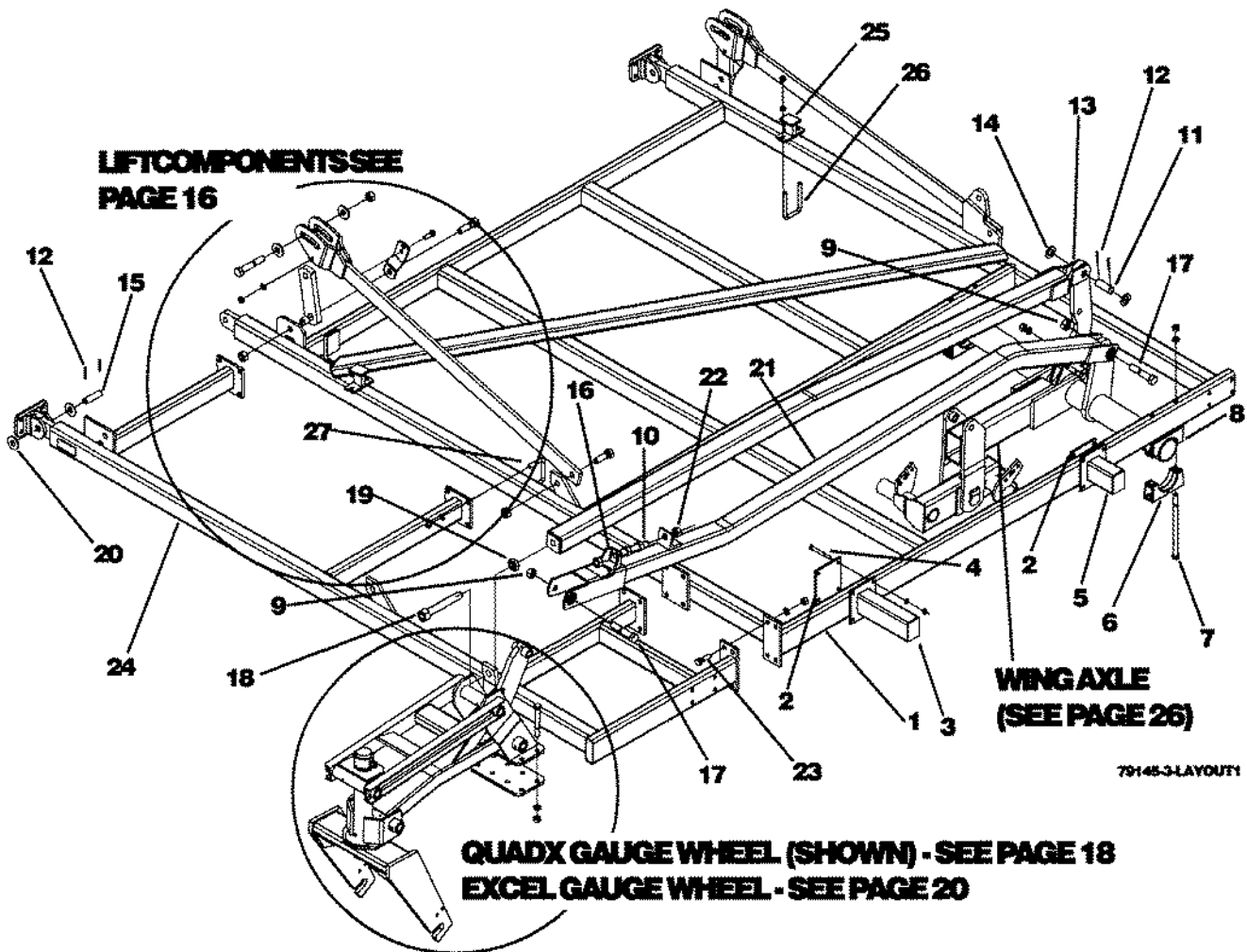
ITEM	PART NO	DESCRIPTION
1	68068	7' WING RIGHT
	68069	7' WING LEFT
	220779	9' 4" WING RIGHT
	220780	9' 4" WING LEFT (SHOWN)
2	65688	3/8 BOLT PLATE (5.5X4.75)
3	68020	12-1/2" SHANK STUB
4	88507	1/2NCx3-1/2 GR5 BOLT
5	68021	6-1/2" SHANK STUB
6	34131	AXLE CLAMP ASSY
7	89165	3/4NCx13 GR5 BOLT
8	34132	AXLE CLAMP ASSY
9	89075	1NC LOCK NUT
10	48890	ADJUSTMENT ROD
11	68034	PIN (1-1/4x3.38)
12	42484	SPIROL PIN
13	67709	WING ADJUST ARM
14	88440	MACHINERY BUSHING (1-1/4x1-7/8x14 GA.)

ITEM	PART NO	DESCRIPTION
15	221714	1x3-7/8 CYL PIN
16	220843	GAUGE TUBE ADJUST BRACKET
17	88264	1NCx6 GR5 BOLT
18	69799	ADJUSTER ROD (9.5)
19	88622	1-1/4NC JAM NUT
20	88196	1" FLAT WASHER
21	221504	QUAD X WING TUBE
	220776	EXCEL WING TUBE
22	88125	1NC NUT

Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.



ITEM	PART NO	DESCRIPTION
1	220783	11'8" WING RIGHT
	220784	11'8" WING LEFT (SHOWN)
2	65688	BOLT PLATE
3	68020	12-1/2" SHANK STUB
4	88507	1/2NCx3-1/2 GR5 BOLT
5	68021	6-1/2" SHANK STUB
6	34131	AXLE CLAMP ASSY
7	89165	3/4NCx13 GR5 BOLT
8	34132	AXLE CLAMP ASSY
9	89075	1NC LOCK NUT
10	48890	ADJUSTMENT ROD
11	68034	PIN (1-1/4x3.38)
12	42484	SPIROL PIN
13	67709	WING ADJUST ARM
14	88440	MACHINERY BUSHING (1-1/4x1-7/8x14 GA.)
15	221714	1x3-7/8 CYL PIN
16	220843	GAUGE TUBE ADJUST BRACKET
17	88264	1NCx6 GR5 BOLT
18	69799	ADJUSTER ROD (9.5)
19	88622	1-1/4NC JAM NUT

ITEM	PART NO	DESCRIPTION
20	88196	1" FLAT WASHER
21	221504	QUAD X WING TUBE
	220776	EXCEL WING TUBE
22	88125	1NC NUT
23	88290	3/4NCx2 GR8 BOLT
24	67760	11'8" FRONT WING BAR - RIGHT
	67761	11'8" FRONT WING BAR - LEFT
25	220874	(4.53") WING FOLD STUB
	220875	(3.50") WING FOLD STUB
26	88503	5/8NCx3x5-1/4 U-BOLT
27	88501	5/8NCx4x4-1/4 U-BOLT

Standard Nuts and Lock Washers

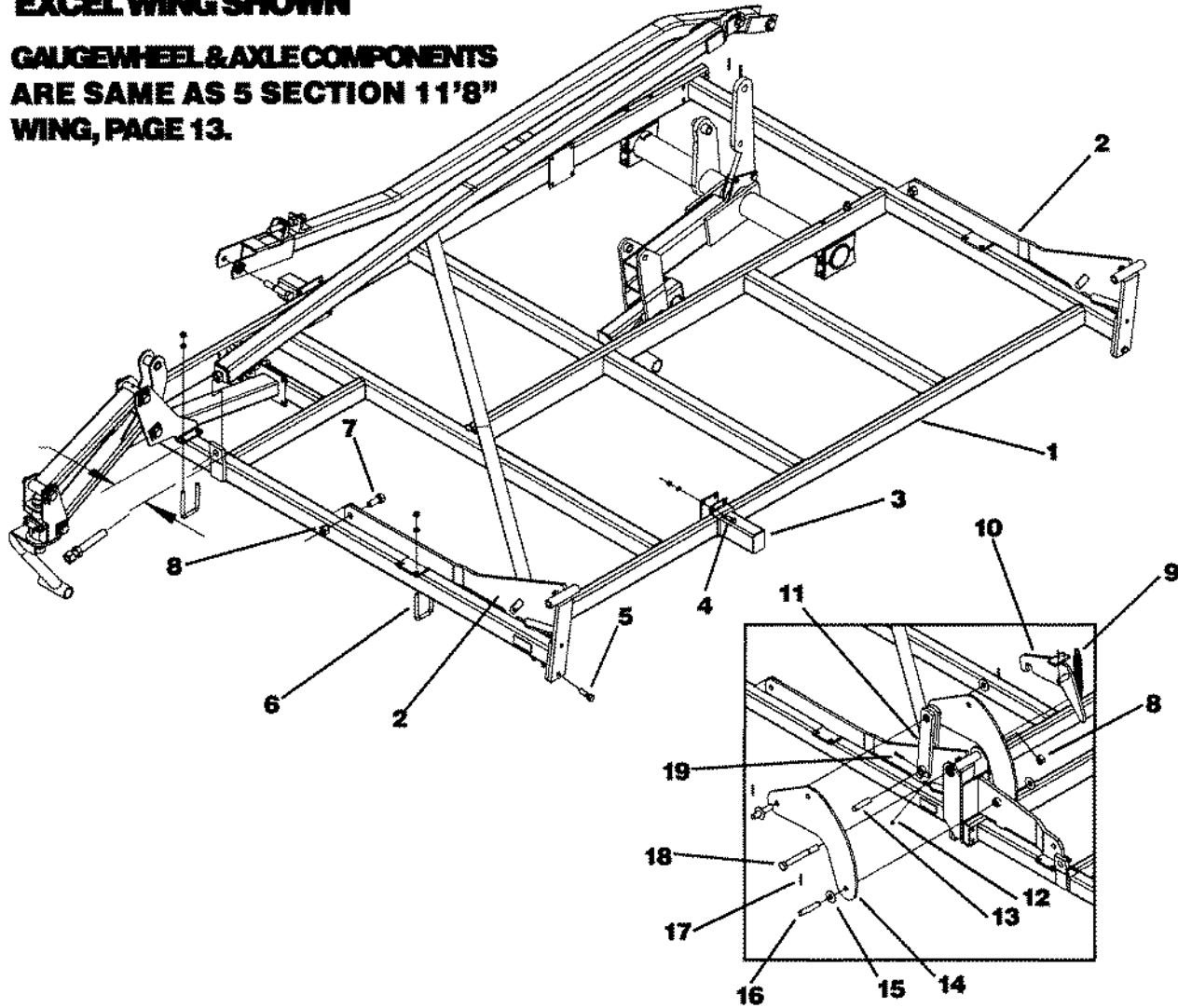
88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out

5 SECTION 7' & 9'4" WING

EXCEL WING SHOWN

Gaugewheel & Axle Components are same as 5 Section 11'8" Wing, Page 13.



ITEM	PART NO	DESCRIPTION
1	222851	7' WING RIGHT
	222850	7' WING LEFT
	222853	9'4" WING RIGHT
	222852	9'4" WING LEFT (SHOWN)
2	222848	5SEC XL/QX OUTER HINGE - R
	222849	5SEC XL/QX OUTER HINGE - L
3	68020	12-1/2" SHANK STUB
4	88507	1/2NCx3-1/2 GR5 BOLT
5	88404	3/4NCx2-1/2 GR5 BOLT
6	88503	5/8NCx3x5-1/4 U-BOLT
7	88393	1NCx2-1/2 GR5 BOLT
8	89075	1NC NYLON LOCK NUT
9	25863	SPRING(1-1/2x9-1/2)
10	221695	5SEC OUTER WING LATCH - R
	221696	5SEC OUTER WING LATCH - L
11	221189	5SEC OUTER WING LINK
12	88103	3/8NC NUT
13	221692	PIN (1ODx4-1/4)

ITEM	PART NO	DESCRIPTION
14	221260	9.3 MAST ANCHOR
15	88196	1 FLAT WASHER
16	221344	PIN (1ODx5-1/8)
17	42484	1/4x2-1/4 SPIROL PIN
18	88901	1NCx9-1/2 GR5 BOLT
19	89011	3/8NCx2 GR5 BOLT

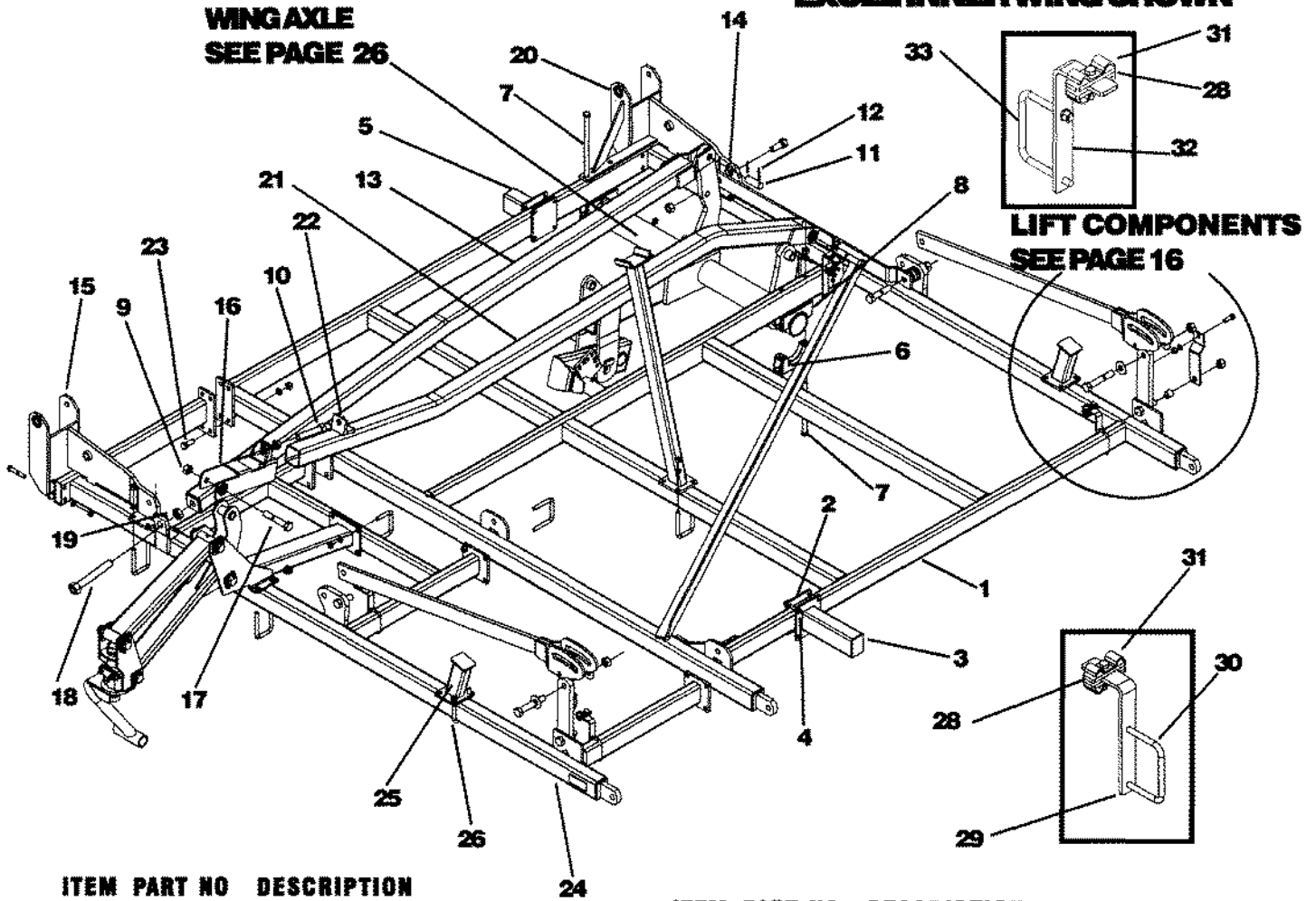
Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

5 SECTION 11'8" WING

EXCEL INNER WING SHOWN



ITEM	PART NO	DESCRIPTION
1	221508	11'8" WING RIGHT
	221509	11'8" WING LEFT (SHOWN)
2	65688	BOLT PLATE
3	68020	12-1/2" SHANK STUB
4	88507	1/2NCx3-1/2 GR5 BOLT
5	68021	6-1/2" SHANK STUB
6	34131	AXLE CLAMP ASSY
7	89165	3/4NCx13 GR5 BOLT
8	34132	AXLE CLAMP ASSY
9	89075	1NC LOCK NUT
10	48890	ADJUSTMENT ROD
11	68034	PIN (1-1/4x3.38)
12	42484	SPIROL PIN
13	67709	WING ADJUST ARM
14	88440	MACHINERY BUSHING (1-1/4x1-7/8x14 GA.)
15	221067	XL 5SEC HINGE ASSY RIGHT
16	220843	GAUGE TUBE ADJUST BRACKET
17	88264	1NCx6 GR5 BOLT
18	69799	ADJUSTER ROD (9.5)
19	88622	1-1/4NC JAM NUT
20	221498	XL 5SEC HINGE ASSY LEFT
21	221504	QUAD X WING TUBE
	220776	EXCEL WING TUBE

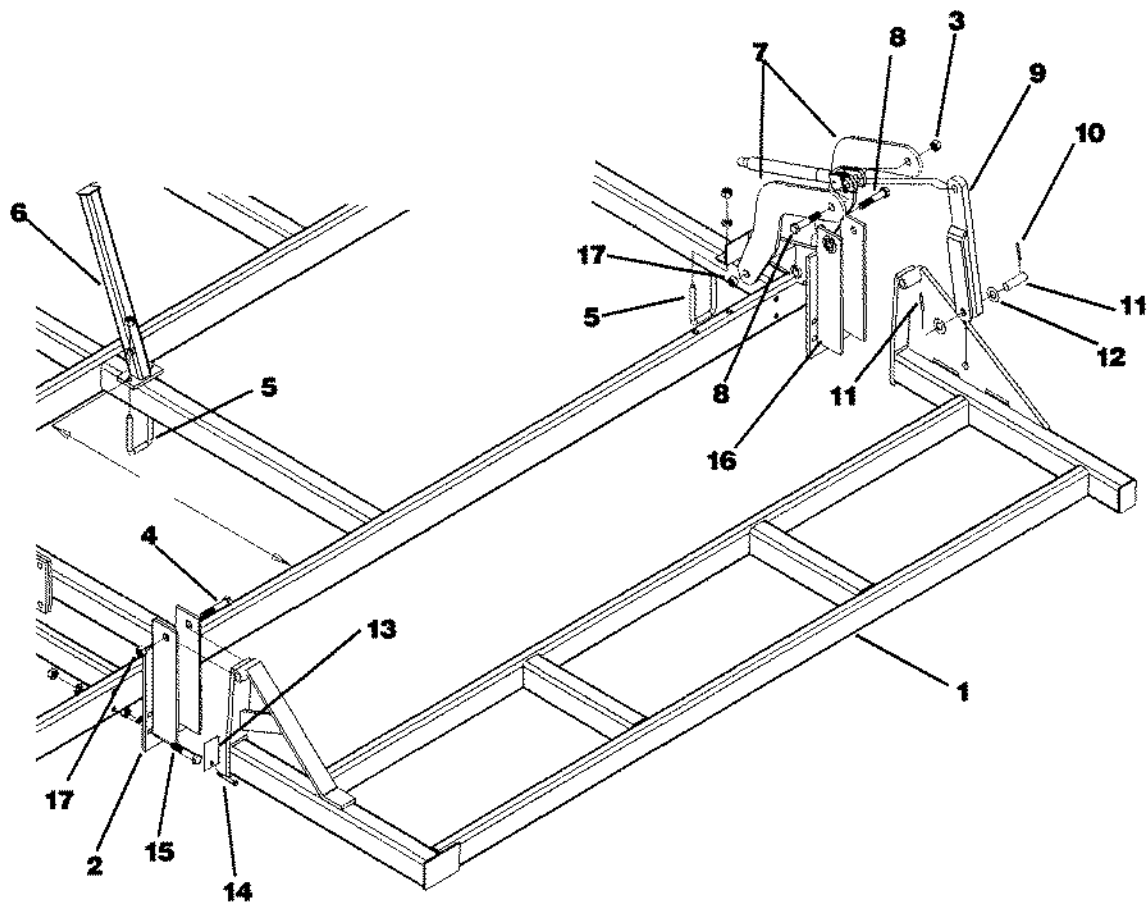
ITEM	PART NO	DESCRIPTION
22	88125	1NC NUT
23	88290	3/4NCx2 GR8 BOLT
24	221165	XL 5SEC 11'8" FRONT WING BAR -RH
	221166	XL 5SEC 11'8" FRONT WING BAR - LH
25	221358	(4.53") WING FOLD STUB
26	88503	5/8NCx3x5-1/4 U-BOLT
27	88501	5/8NCx4x4-1/4 U-BOLT
28	15543	BASE PLATE
29	13270	4" POLE TUBE BRACKET
30	88514	3/8NCx4x3-3/4 U-BOLT
31	13215	TUBE CLAMP
32	68351	5" HYD TUBE BRACKET
33	89069	3/8NCx5x4 U-BOLT

Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out

3' OUTER WING



79148

ITEM	PART NO	DESCRIPTION
1	67924	3FT OUTER WING - RIGHT
	67925	3FT OUTER WING - LEFT
2	67932	WING HINGE
3	89075	1NC NYLON TOPLOCK NUT
4	88264	1NCx6 GR5 BOLT
5	88503	5/8NCx3x5-1/4 U-BOLT
6	68066	OUTER WING REST
7	67934	PLATE
8	88312	1NCx5 GR5 BOLT
9	67903	LINKAGE ARM

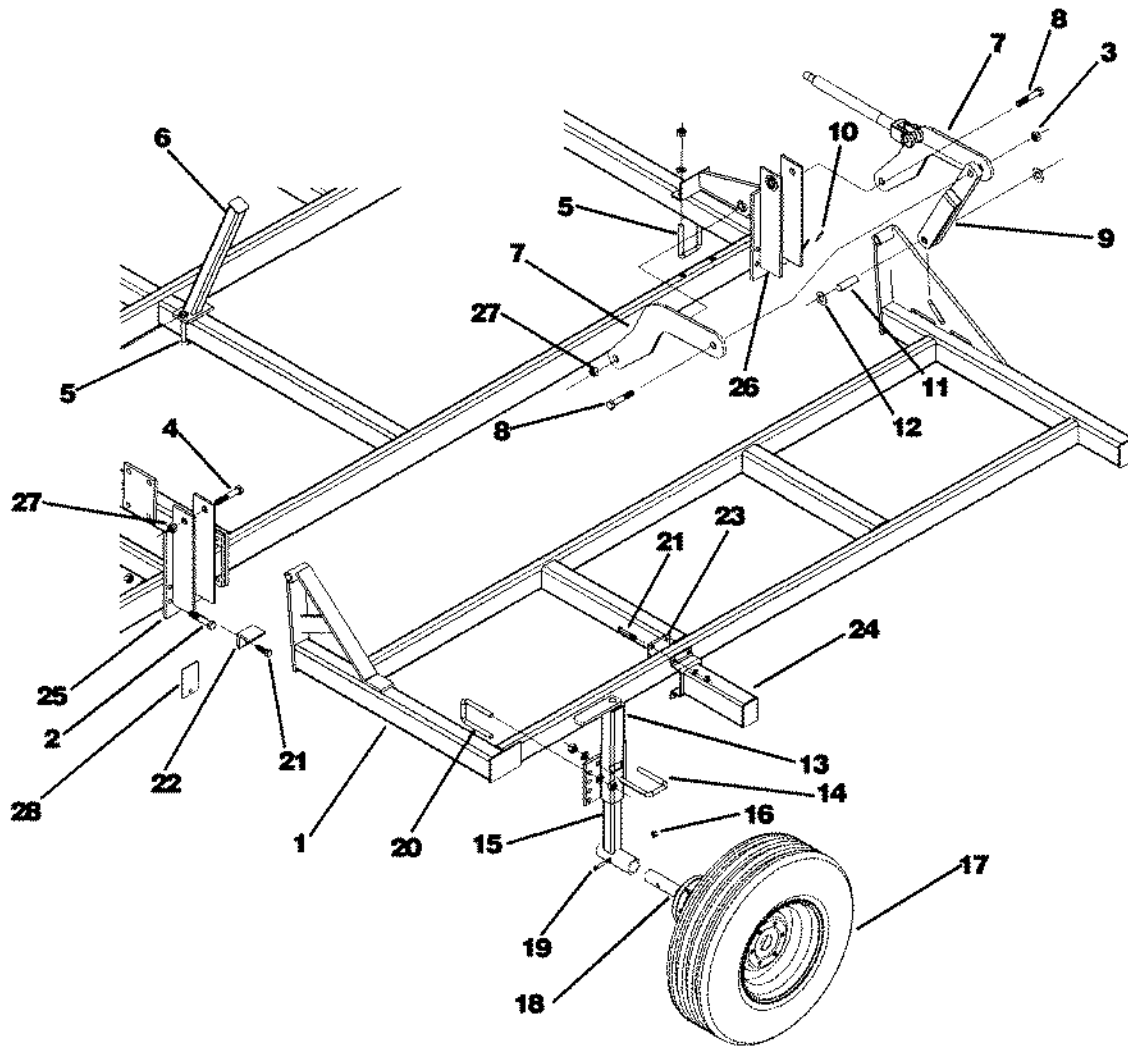
ITEM	PART NO	DESCRIPTION
10	42484	SPIROL PIN
11	42472	PIN (1x3-1/4)
12	88196	1 FLAT WASHER
13	51469	SHIM
14	88475	1/2NCx1-1/2 GR5 BOLT
15	88292	5/8NCx3-1/2 GR5 BOLT
16	68023	WING HINGE RIGHT
	68024	WING HINGE LEFT (SHOWN)
17	88348	1NC LOCK NUT

Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

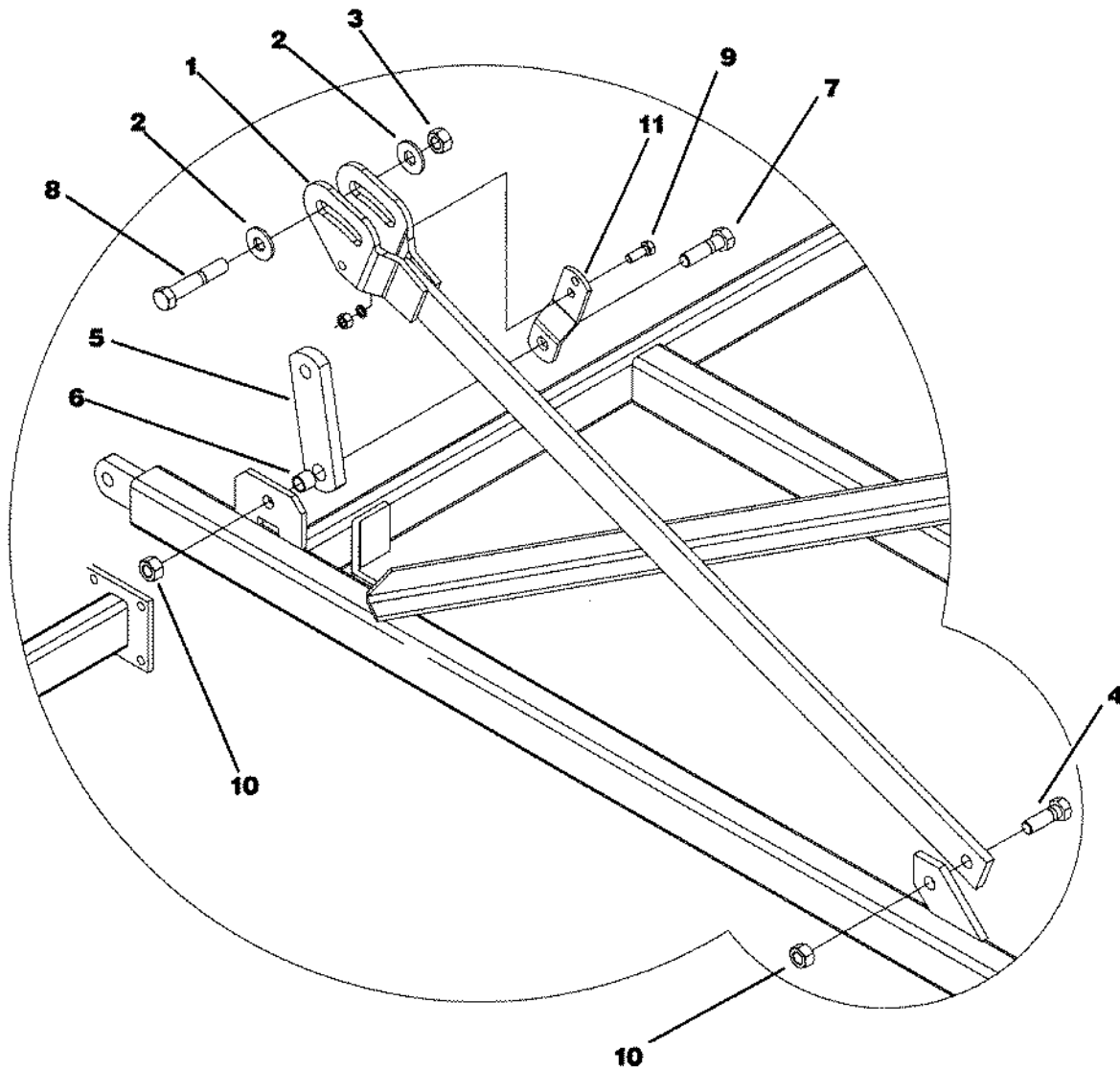
5' FLOATING OUTER WING W/GAUGE WHEEL



79147-LAYOUT1

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	67919	5FT OUTER WING - RIGHT	17	13142	95Lx15 6 BLT WHEEL ASSEMBLY
	67920	5FT OUTER WING - LEFT		10236	15x6 WHEEL RIM
2	88292	5/8NCx3-1/2 GR5 BOLT		16287	95Lx15 TUBELESS TIRE
3	89075	1NC NYLON TOPLOCK NUT		30784	VALVE STEM
4	88264	1NCx6 GR5 BOLT	18	41233	1-3/4" HUB & SPINDLE
5	88503	5/8NCx3x5-1/4 U-BOLT	19	88313	1/2NFx3 GR5 BOLT
6	68066	OUTER WING REST	20	88388	5/8NCx4x3-1/4 U-BOLT
7	67934	PLATE	21	88475	1/2NCx1-1/2 GR5 BOLT
8	88312	1NCx5 GR5 BOLT	22	222156	WING STOP FOLD
9	67903	LINKAGE ARM	23	26817	BACKING PLATE
10	42484	SPIROL PIN	24	49025	12" SADDLE STUB
11	42472	PIN (1x3-1/4)	25	67932	WING HINGE
12	88196	1 FLAT WASHER	26	68023	WING HINGE RIGHT
13	15485	TOP ADJUSTMENT ASSEMBLY		68024	WING HINGE LEFT (SHOWN)
14	88311	5/8NCx2-1/2x3-3/4 U-BOLT	27	88348	1NC LOCK NUT
15	15475	GAUGE WHEEL LEG	28	51469	SHIM
16	88304	1/2NF LOCK NUT			

WING LIFT COMPONENTS



78145

ITEM	PART NO	DESCRIPTION
1	220870	LIFT LINK ARM(7' & 9'4" WING)
	222082	LIFT LINK ARM - LONG(11'8" WING)
	221329	LIFT LINK ARM (5 SECTION)
2	88196	1 FLAT WASHER
3	89075	1NC NYLON TOPLOCK NUT
4	88399	1NCx3 GR5 BOLT (REAR)
	88393	1NCx2-1/2 GR5 BOLT(FRONT)
5	48522	WING LIFT LINK
	221267	WING LIFT LINK (5 SECTION)
6	48523	WING LIFT BUSHING (1.032ID x 1-1/4 OD x 1.06)
7	88447	1NCx3-1/2 GR5 BOLT

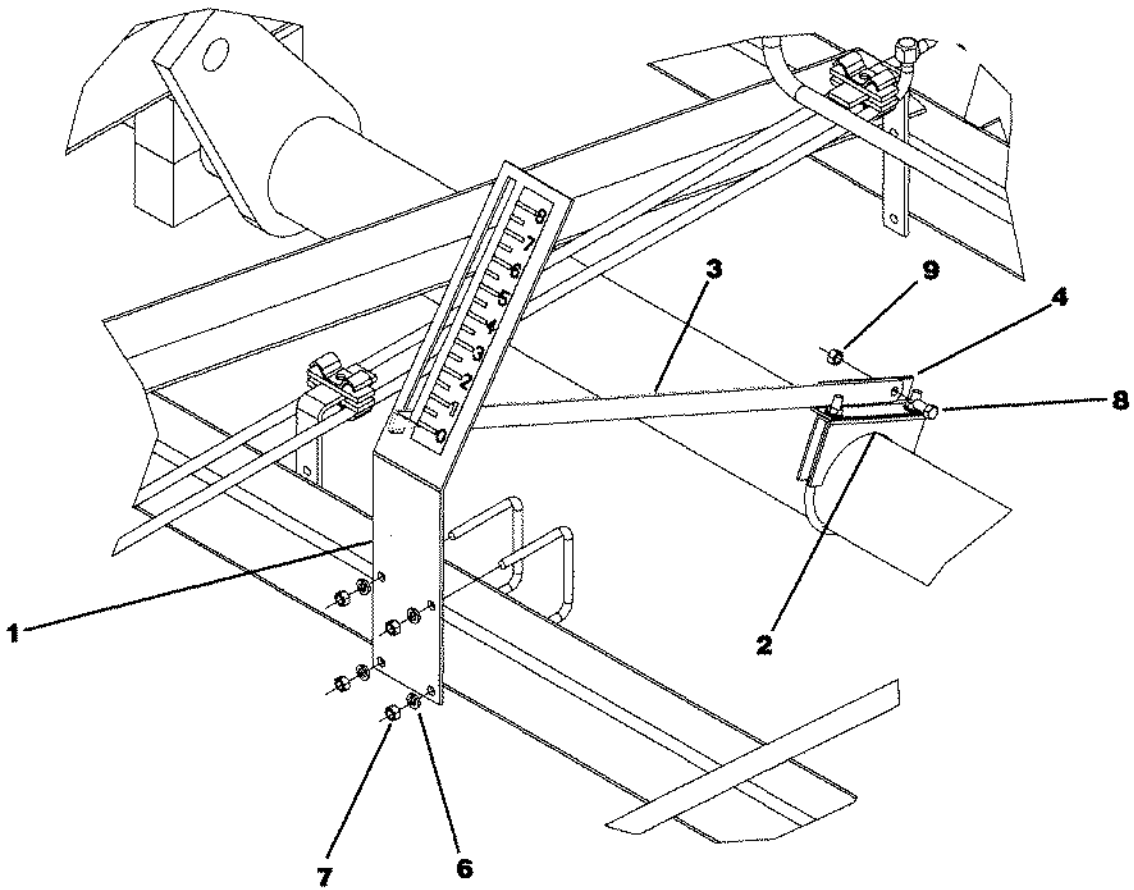
ITEM	PART NO	DESCRIPTION
8	88670	1NCx5-1/2 GR5 BOLT
9	88838	5/8NCx1-3/4 GR5 BOLT
10	88348	1NC LOCK NUT
11	220871	WING LINK STRAP
	221269	WING LINK STRAP (5 SECTION)

Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

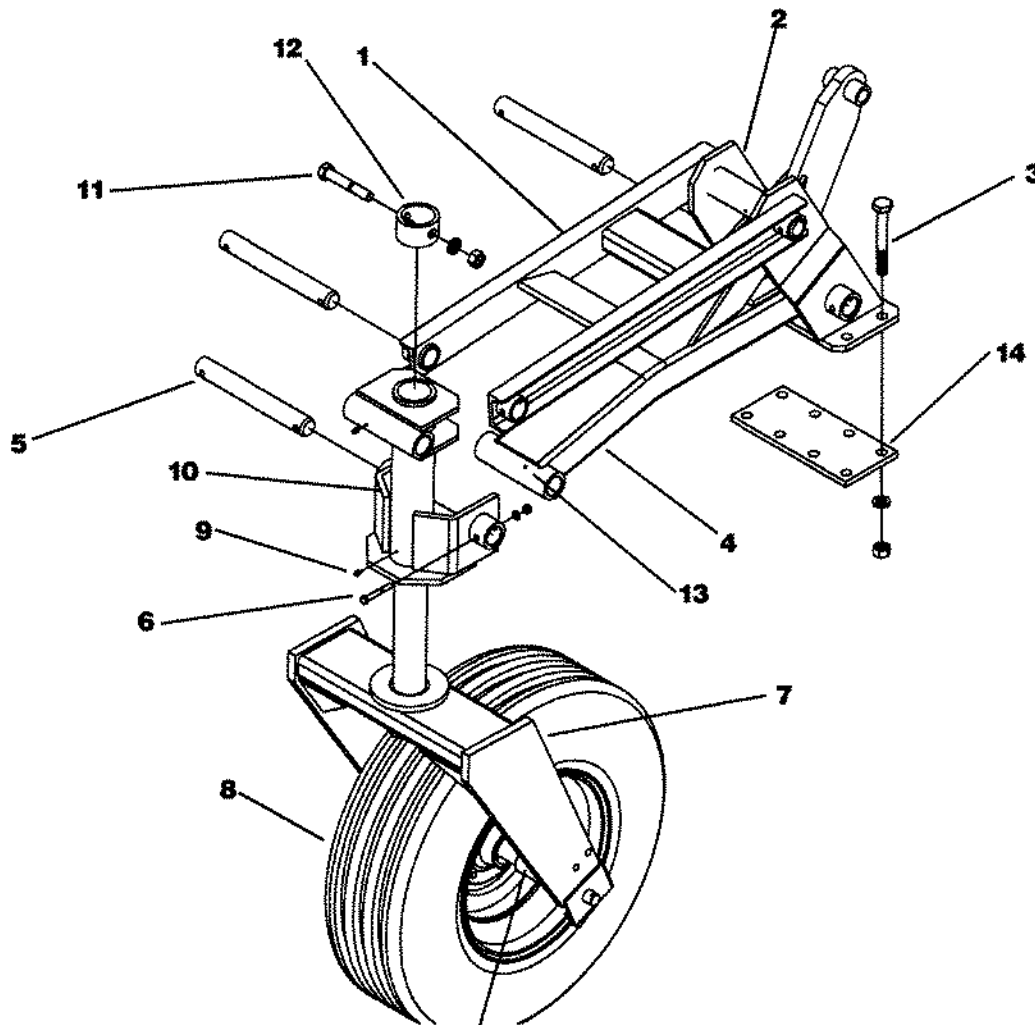
Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

DEPTH GAUGE



ITEM	PART NO	DESCRIPTION
1	69303	DEPTH GAUGE
2	69314	4-1/2 EXHAUST CLAMP
3	69309	DEPTH INDICATOR ARM
4	69310	ANGLE
5	88514	3/8NCx4x3-3/4 U-BOLT
6	88362	3/8 LOCK WASHER
7	88103	3/8NC NUT
8	88566	3/8NCx3/4 GR5 BOLT
9	88162	3/8NC LOCK NUT

QUADXWING GAUGE WHEELS



79148-4-LAYOUT1

See Page 28

ITEM	PART NO	DESCRIPTION
1	54559	TOP LINK ARM (8")
2	55659	GAUGE WHEEL MAST
3	88293	3/4NCx6 GR5 BOLT
4	221502	LOWER OUTER GAUGE ARM
5	54595	PIVOT PIN
6	88582	3/8NCx2-3/4 GR5 BOLT
7	58203	YOKE (18")
8	16290	95Lx 15 WHEEL ASSEMBLY
	10498	15x8 WHEEL RIM
	16287	95Lx15 TUBELESS TIRE
	30784	VALVE STEM ASSEMBLY

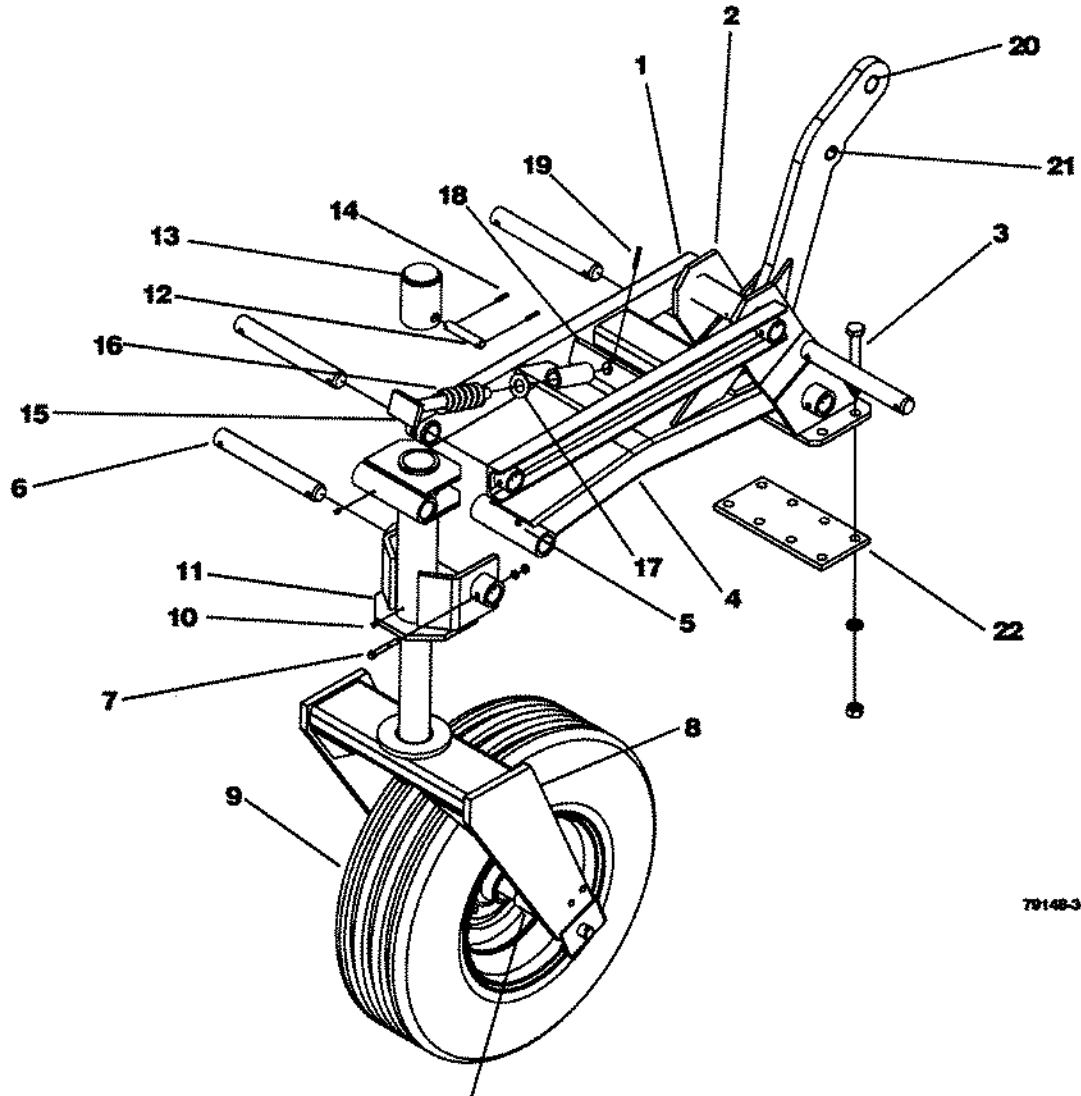
ITEM	PART NO	DESCRIPTION
9	88550	1/4NF GREASE FITTING
10	54571	GAUGE WHEEL PIVOT
11	88272	3/4NCx4 GR5 BOLT
12	16009	COLLAR
13	88778	1/4NF 45 GREASE FITTING
14	222353	LOWER MAST PLATE

Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

QUADX MAIN FRAME GAUGE WHEELS



79148-3-LAYOUT1

See Page 28

ITEM	PART NO	DESCRIPTION
1	54809	CENTER LINK ARM
2	55659	GAUGE WHEEL MAST
3	88293	3/4NCx6 GR5 BOLT
4	220773	CENTER LIFT ARM
5	88778	1/4NF 45 GREASE FITTING
6	54595	PIVOT PIN
7	88582	3/8NCx2-3/4 GR5 BOLT
8	58203	YOKE (18")
9	16290	95Lx 15 WHEEL ASSEMBLY
	10498	15x8 WHEEL RIM
	16287	95Lx15 TUBELESS TIRE
	30784	VALVE STEM ASSEMBLY
10	88550	1/4NF GREASE FITTING
11	54571	GAUGE WHEEL PIVOT
12	55152	3/4x4 Pin
13	55151	CENTERING TUBE
14	88648	1/4x1-1/4 ROLL PIN

ITEM	PART NO	DESCRIPTION
15	62805	SPRING PIN
16	54834	4-1/2" COMPRESSION SPRING
17	88738	1" SAE FLAT WASHER
18	62804	PIN GUIDE
19	88628	ROLL PIN
20	33535	SPRING TENSION BUSHING (1-1/4")
21	33515	SPRING TENSION BUSHING (1")
22	222353	LOWER MAST PLATE

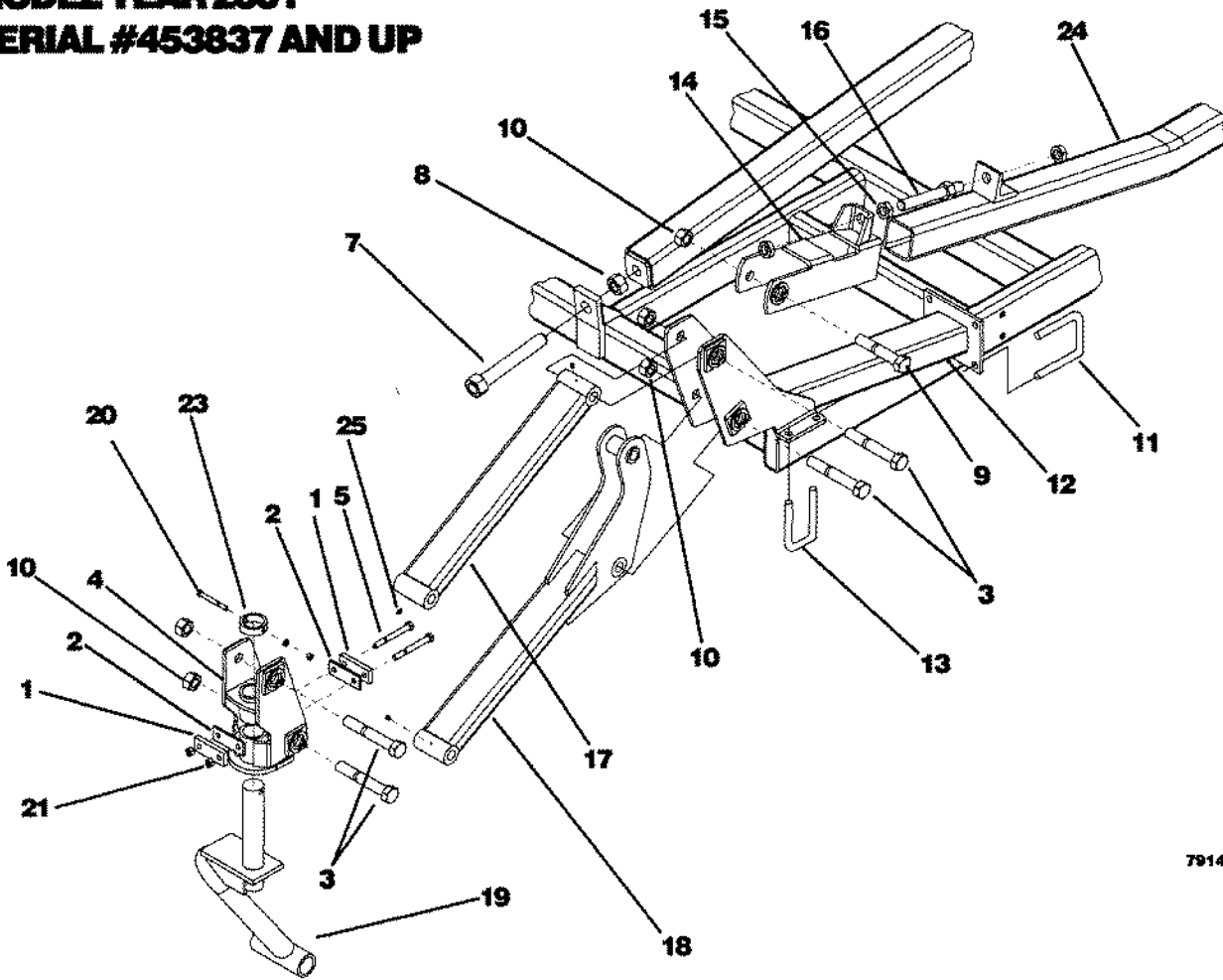
Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

EXCEL WING GAUGE WHEEL

**MODEL YEAR 2001
SERIAL #453837 AND UP**



79148-2

ITEM 22 (NOT SHOWN)

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	67791	DAMPER PLATE	20	88531	3/8NCx3 GR5 BOLT
2	67790	DAMPER PAD	21	88363	1/2NC LOCK NUT
3	221336	1NCx6-5/8 GR5 BOLT	22	16290	95Lx15 WHEEL ASSY 6B 8PLY
4	220850	GAUGE WHEEL PIVOT BRACKET		10498	15x8 RIM 6 BOLT
5	88382	1/2NCx4-1/2 GR5 BOLT		16287	95Lx15 TUBELESS TIRE 8PLY
6	88404	3/4NCx2-1/2 GR5 BOLT		30784	VALVE STEM ASSY TR415
7	69799	ADJUSTER ROD (9.5)	23	14189	STOP COLLAR
8	88622	1-1/4NC JAM NUT	24	220776	EXCEL WING TUBE
9	88264	1NCx6 GR5 BOLT	25	88550	1/4 GREASE FITTING
10	89075	1NC NYLON TOPLOCK NUT			
11	88388	5/8NCx4x3-1/4 U-BOLT			
12	220853	GAUGE WHEEL MOUNT			
13	88503	5/8NCx3x5-1/4 U-BOLT			
14	220843	GAUGE TUBE ADJUST BRACKET			
15	88125	1NC NUT			
16	48890	ADJUST ROD			
17	221100	UPPER GAUGE WHEEL ARM			
18	220840	LOWER GAUGE WHEEL ARM			
19	16312	CASTER WHEEL LEG			

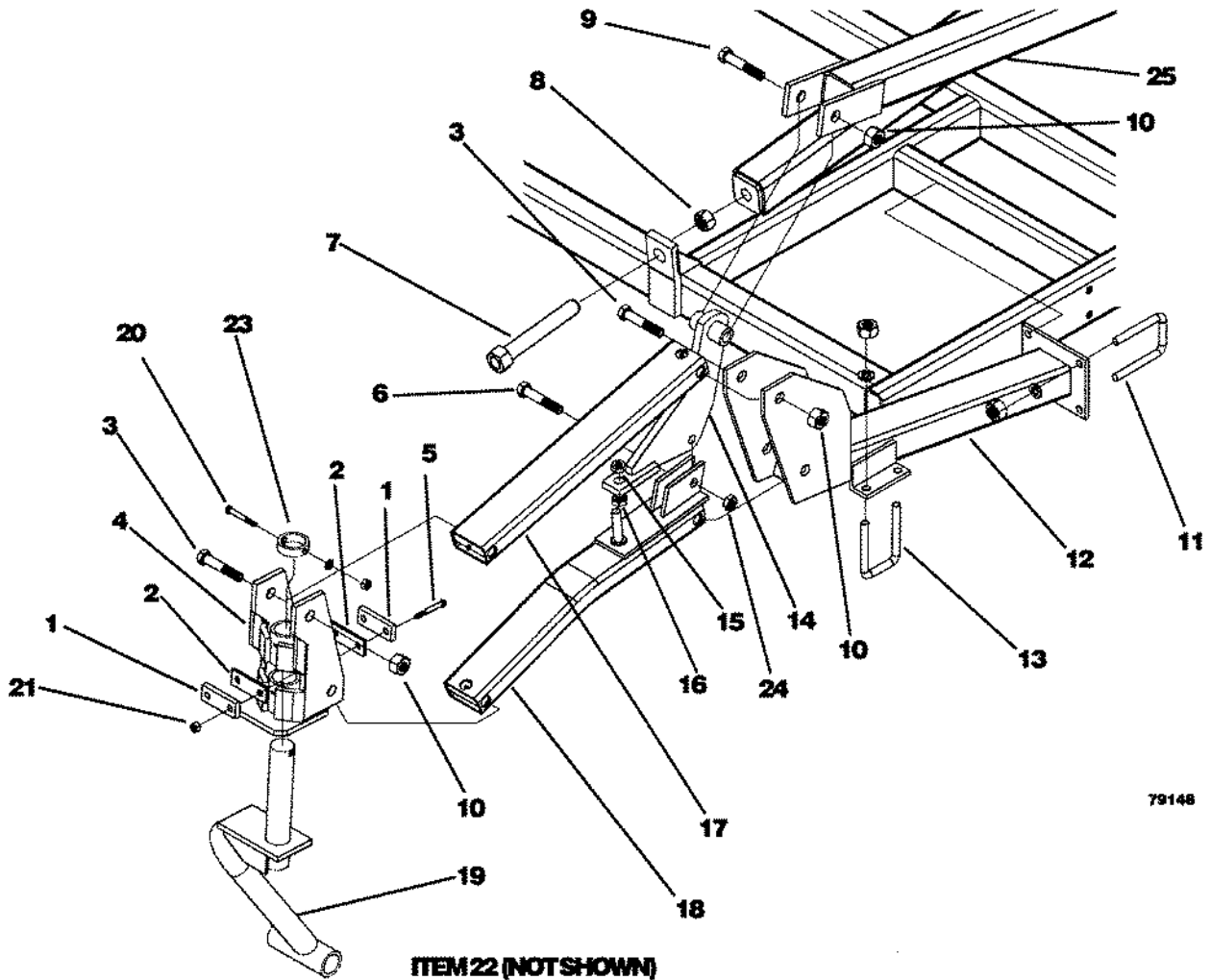
Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

EXCEL WING GAUGE WHEEL

**MODEL YEAR 2000
SERIAL #453836 AND BELOW**



79148

ITEM	PART NO	DESCRIPTION
1	67791	DAMPER PLATE
2	67790	DAMPER PAD
3	88666	1NCx6-1/2 GR5 BOLT
4	67792	GAUGE WHEEL PIVOT BRACKET
5	88382	1/2NCx4-1/2 GR5 BOLT
6	88404	3/4NCx2-1/2 GR5 BOLT
7	69799	ADJUSTER ROD (9.5)
8	88622	1-1/4NC JAM NUT
9	88264	1NCx6 GR5 BOLT
10	89075	1NC NYLON TOPLOCK NUT
11	88388	5/8NCx4x3-1/4 U-BOLT
12	67767	GAUGE WHEEL ANCHOR
13	88503	5/8NCx3x5-1/4 U-BOLT
14	67778	GAUGE WHEEL LEVER ARM
15	88562	3/4NC JAM NUT
16	88110	3/4NC NUT
17	67789	UPPER GAUGE WHEEL ARM
18	67787	LOWER GAUGE WHEEL ARM
19	16312	CASTER WHEEL LEG

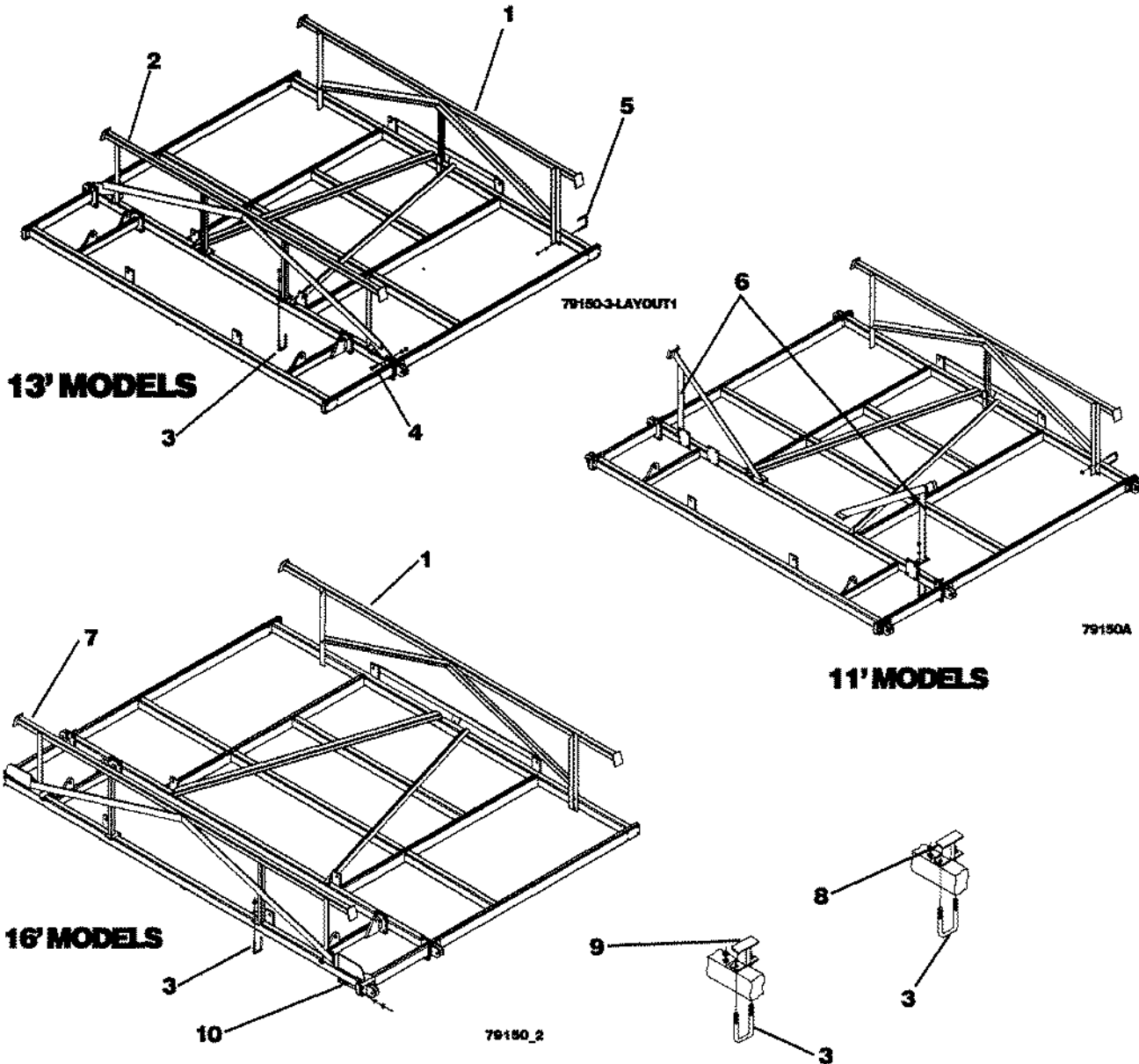
ITEM	PART NO	DESCRIPTION
20	88531	3/8NCx3 GR5 BOLT
21	88363	1/2NC LOCK NUT
22	16290	95Lx15 WHEEL ASSY 6B 8PLY
	10498	15x8 RIM 6 BOLT
	16287	95Lx15 TUBELESS TIRE 8PLY
	30784	VALVE STEM ASSY TR415
23	14189	STOP COLLAR
24	88306	3/4NC LOCK NUT
25	67931	AXLE TUBE - GA. WHEEL LINK

Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

11', 13' & 16' EXCEL WING REST



ITEM	PART NO	DESCRIPTION
1	65683	11' WING REST
	67900	13' WING REST
	55776	16' WING REST
2	222085	13' TRUSS WING REST
3	88503	5/8NCx3x5-1/4 U-BOLT
4	88404	3/4NCx2-1/2 GR5 BOLT
5	88501	5/8NCx4x4-1/4 U-BOLT
6	67794	11' FRONT WING REST(9' WING)
7	68094	16' FRONT WING REST(11' WING)
8	220875	WING FOLD STUB (3.50 REF) USED W/#1 11' & 13' MF ONLY

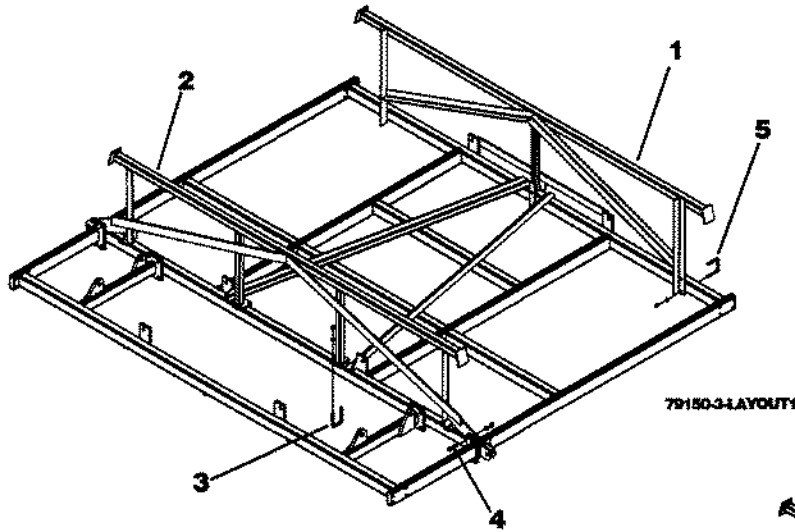
ITEM	PART NO	DESCRIPTION
9	220874	WING FOLD STUB (4.53 REF) USED W/#6 11' MF ONLY
10	88292	5/8NCx3-1/2 GR5 BOLT

Standard Nuts and Lock Washers

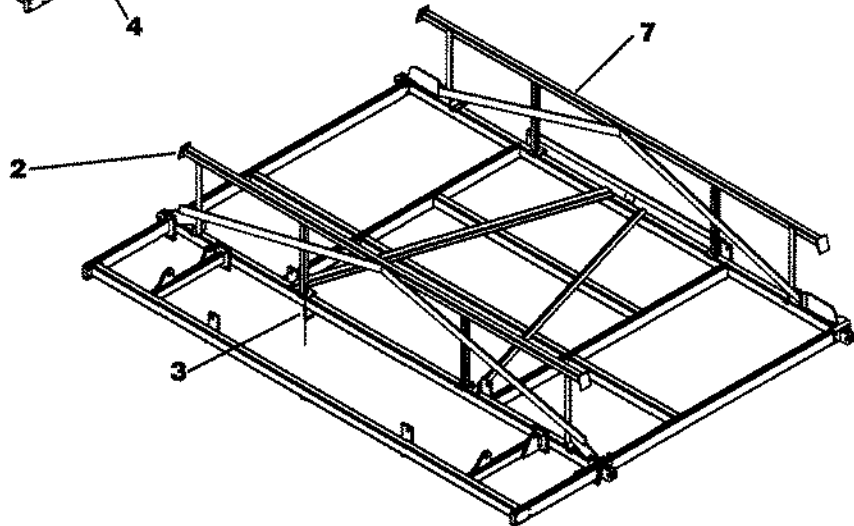
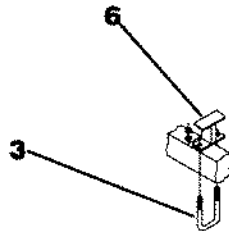
88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

13' & 16' QUADX WING REST



13' MODELS



16' MODELS

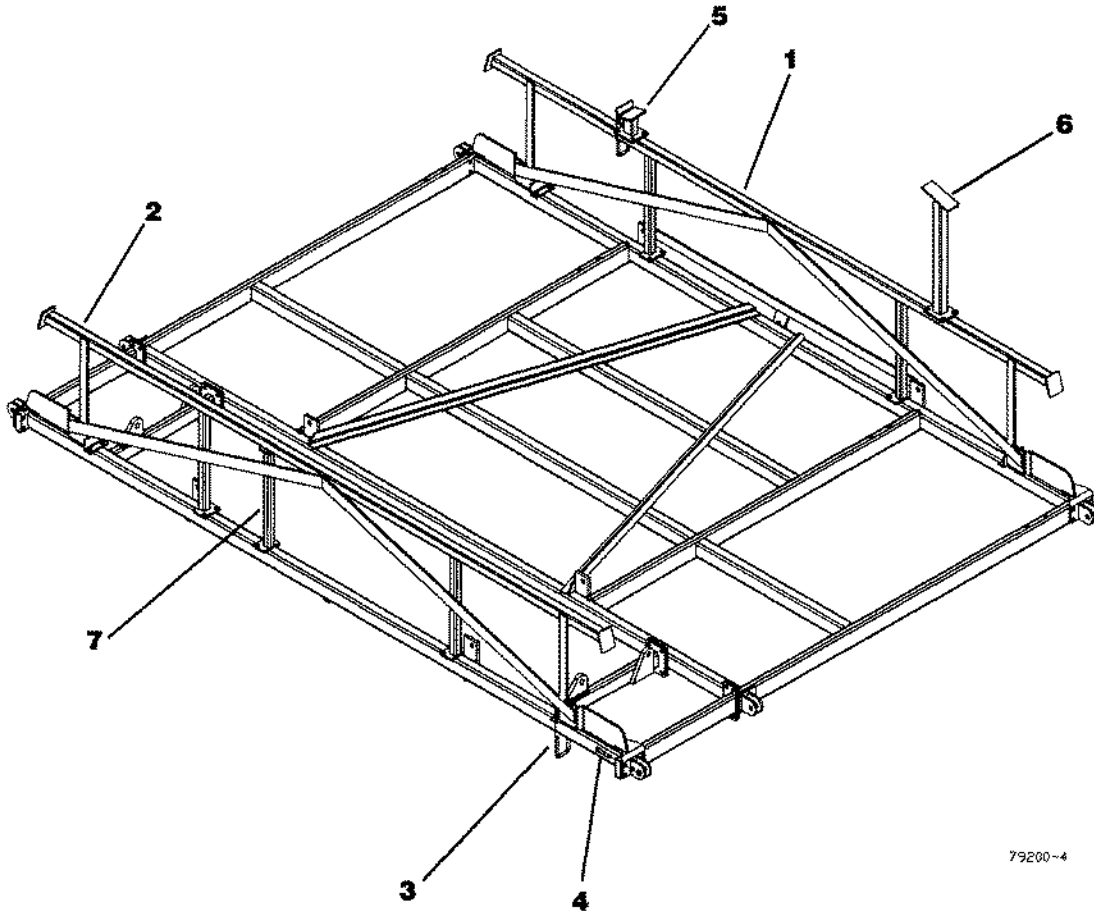
ITEM	PART NO	DESCRIPTION
1	67900	13' WING REST
2	222085	13' TRUSS WING REST
	221993	16' TRUSS WING REST
3	88503	5/8NCx3x5-1/4 U-BOLT
4	88404	3/4NCx2-1/2 GR5 BOLT
5	88501	5/8NCx4x4-1/4 U-BOLT
6	220875	WING FOLD STUB (3.50 REF) USED W/#1 13' MF ONLY
7	68094	16 FRONT WING REST

Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

5 SECTION EXCEL WING REST



79200-4

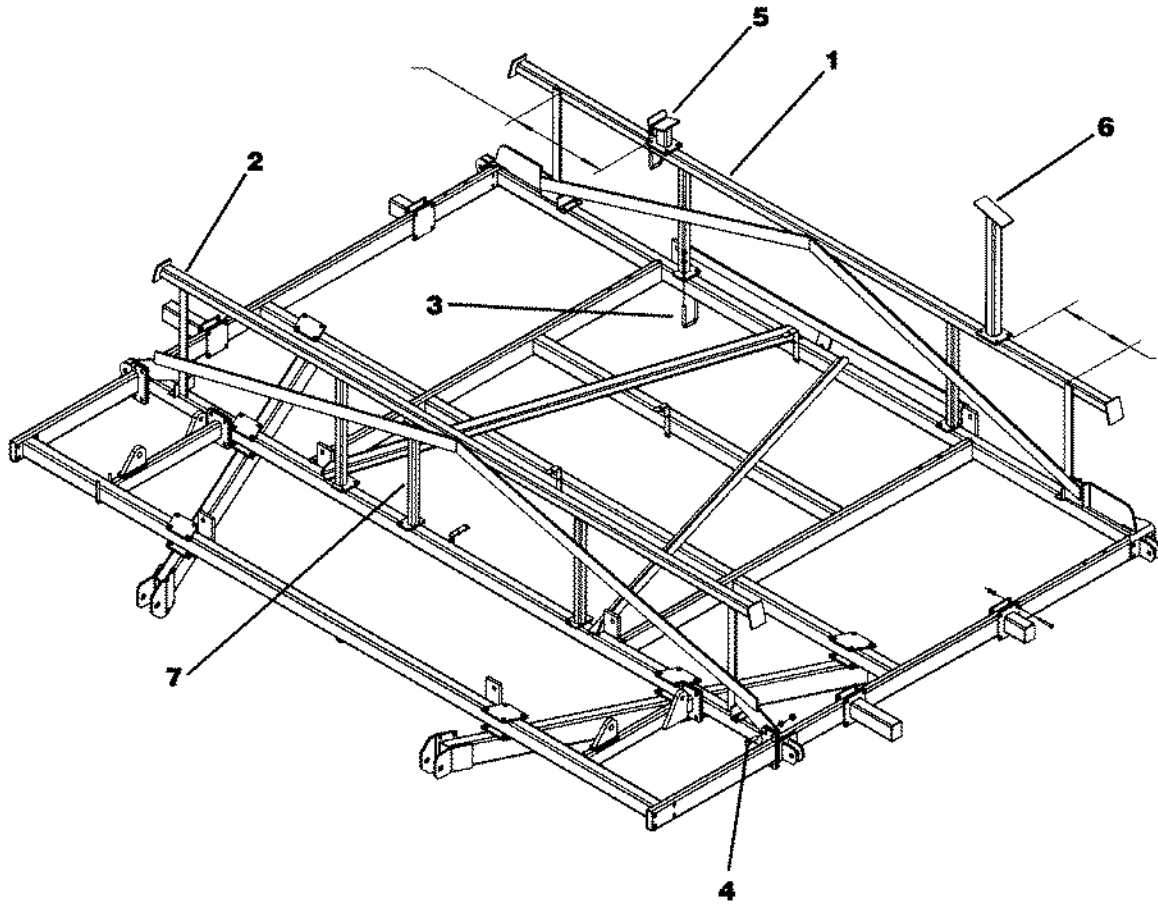
ITEM	PART NO	DESCRIPTION
1	67900	13' WING REST (13 5SEC QX/XL)
	68094	16' WING REST (16 5SEC XL/QX)
2	222085	13' TRUSS WING REST
	68094	16' WING REST
3	88503	5/8NCx3x5-1/4 U-BOLT
4	88292	5/8NCx3-1/2 GR5 BOLT
5	221381	5SEC WING STOP REST (9'4" OUTER WING ONLY)
6	221578	WING REST 7FT 5SEC WING (7' OUTER WING ONLY)
7	221980	REST STUB (16' ONLY)

Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

5 SECTION QUADX WING REST



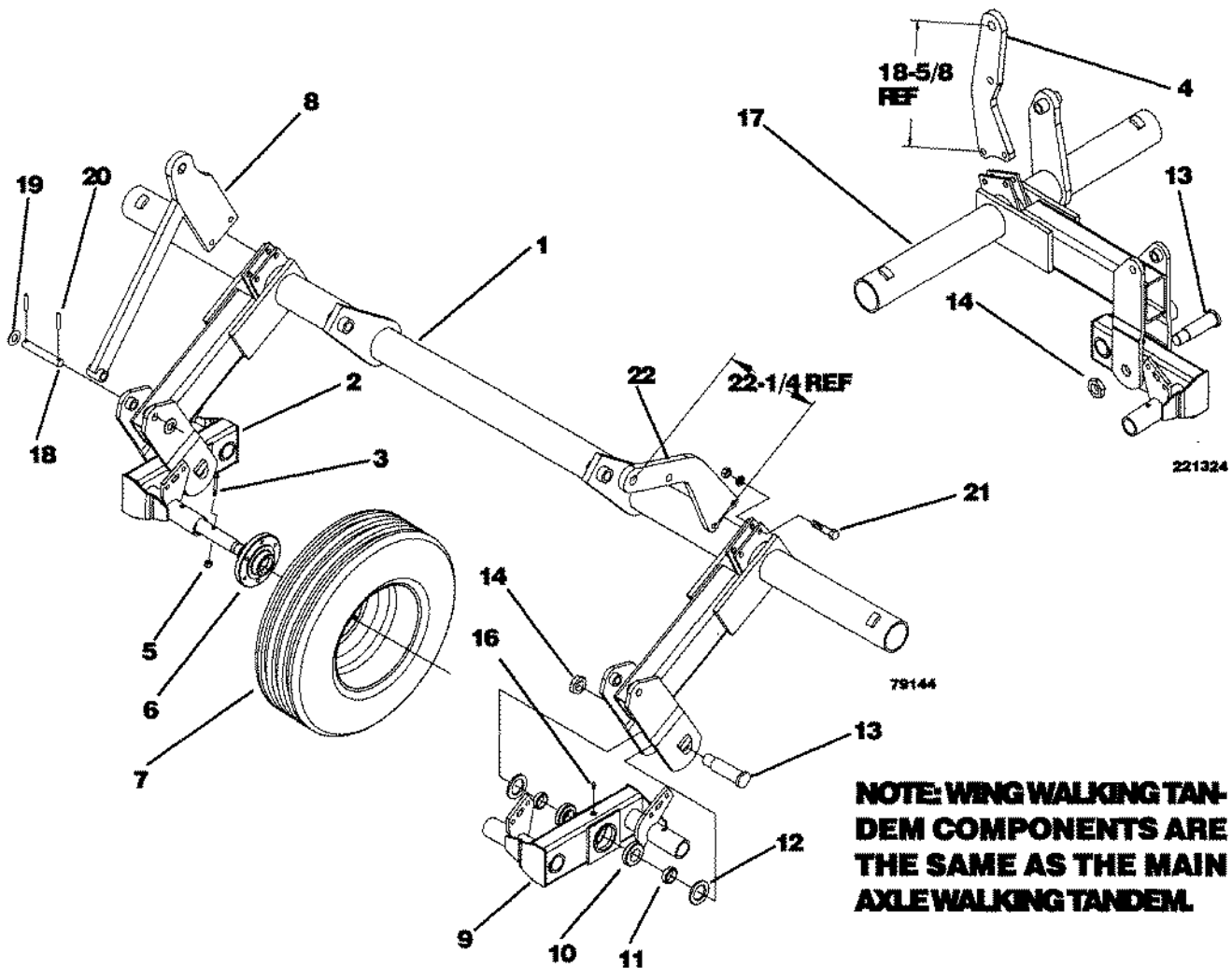
ITEM	PART NO	DESCRIPTION
1	67900	13' WING REST
	68094	16' WING REST (16 5SEC XL/QX)
2	222085	13' TRUSS WING REST
	221993	16' TRUSS WING REST
3	88503	5/8NCx3x5-1/4 U-BOLT
4	88404	3/4NCx2-1/2 GR5 BOLT
5	221381	5SEC WING STOP REST (9'4" OUTER WING ONLY)
6	221578	WING REST 7FT 5SEC WING (7' OUTER WING ONLY)
7	221980	REST STUB (16' ONLY)

Standard Nuts and Lock Washers

88172	1/4NC Nut	88262	1/4 Lock Washer
88103	3/8NC Nut	88362	3/8 Lock Washer
88104	1/2NC Nut	88303	1/2 Lock Washer
88126	5/8NC Nut	88129	5/8 Lock Washer
88110	3/4NC Nut	88130	3/4 Lock Washer
88371	7/8NC Nut	88341	7/8 Lock Washer

Note: Standard nuts and lock washers are not called out. Anything other than standard will be called out.

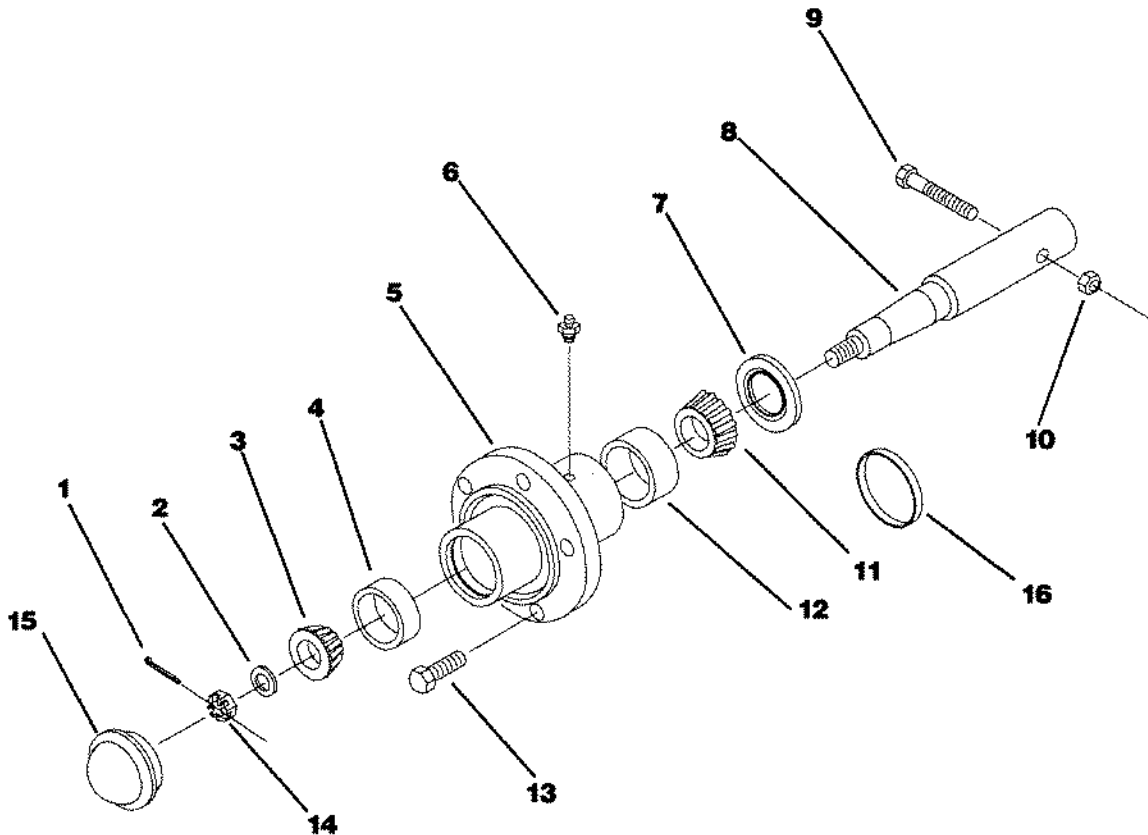
AXLES, TIRES & WALKING TANDEM



NOTE: WING WALKING TANDEM COMPONENTS ARE THE SAME AS THE MAIN AXLE WALKING TANDEM.

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	221396	11 EXCEL MAIN FRAME AXLE	8	220769	AXLE ANCHOR (QUAD X)
	220778	13 MAIN FRAME AXLE (SHOWN)	9	221347	LEFT 5 SECTION HD WALKER ASSY (INCLUDES ITEM #15 & 16)
	220759	16 MAIN FRAME AXLE	10	12103	1.75 BORE BRG CONE (25580)
2	221348	RIGHT 5 SECTION HD WALKER ASSY (INCLUDES ITEM 15 & 16)	11	16278	BEARING BUSHING
3	88429	1/2NFx3-1/4 GR5 BOLT	12	26120	SEAL
4	221261	10.8 MAST ANCHOR	13	16277	TANDEM PIN
5	88304	1/2NF LOCK NUT	14	42082	1-1/2NF HYDRA LOCK NUT
6	14131	2" HUB & SPINDLE (SEE PAGE 23)	15	12104	3.265 OD BEARING CUP (NOT SHOWN)
7	16290	95Lx15 WHEEL ASSY 6B 8PLY	16	88550	1/4NF GREASE FITTING
	10498	15x8 RIM 6 BOLT	17	220781	RIGHT WING AXLE
	16287	95Lx15 TUBELESS TIRE 8PLY		220782	LEFT WING AXLE (SHOWN)
	30784	VALVE STEM ASSY TR415	18	68033	PIN (1x6.38)
	61667	11Lx15 WHEEL ASSY 6B 8PLY	19	88196	1" FLAT WASHER
	46714	15x10 RIM 6 BOLT	20	42484	1/4x2-1/4 SPIROL PIN
	29066	11Lx15 TUBELESS TIRE 8PLY	21	88841	3/4NCx2-3/4 GR5 BOLT
	57908	VALVE STEM ASSY	22	221262	12.6 MAST ANCHOR (EXCEL)
	222087	31x13.50-15 WHEEL ASSY 8PLY			
	46714	15 x10 RIM 6 BOLT			
	57907	31x13.50-15 TIRE 8PLY			
	57908	VALVE STEM ASSY			

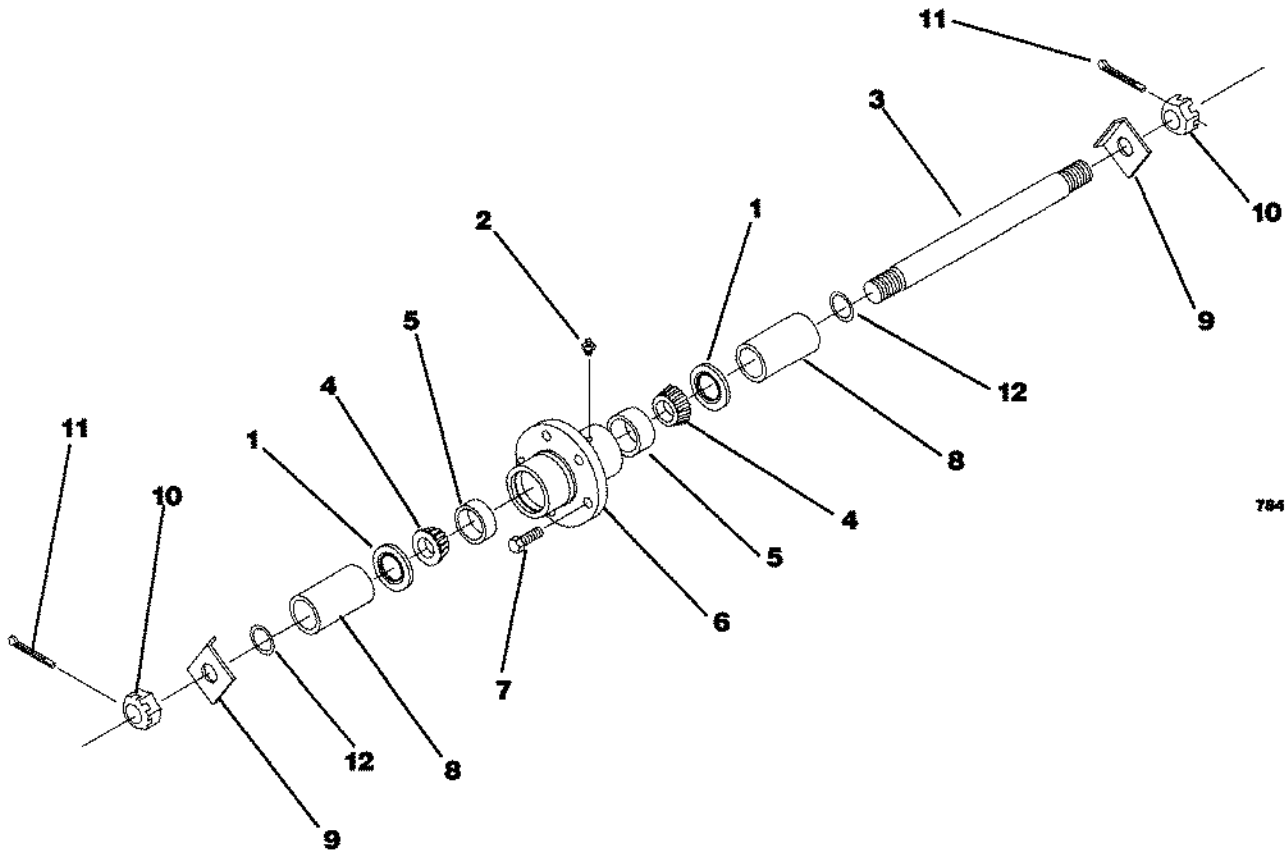
1-3/4", 2" & 2-1/2" HUB & SPINDLE



77836

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	41233	1-3/4" HUB & SPINDLE (INCLUDES ITEMS 1-8 & 11-15)	8	16156	2-1/2" SPINDLE
	14131	2" HUB & SPINDLE (INCLUDES ITEMS 1-8 & 11-15)		14251	2" AXLE SPINDLE
	16154	2-1/2" HUB & SPINDLE (INCLUDES ITEMS 1-8 & 11-15)	9	88298	5/8NCx4 GR5 BOLT (2-1/2")
1	88301	3/16x1-1/2 COTTER PIN		88429	1/2NFx3-1/4 GR5 BOLT (2")
	88133	3/16x2 COTTER PIN (2-1/2")		88313	1/2NFx3 GR5 BOLT (1-3/4")
2	16094	7/8 SPINDLE WASHER	10	88304	1/2NF LOCK NUT
	88196	1" FLAT WASHER (2-1/2")		88369	5/8NC LOCK NUT
3	10345	OUTER BEARING CONE	11	16083	INNER BEARING CONE (2-1/2")
	16081	OUTER BEARING CONE (2-1/2")		14248	INNER BEARING CONE (2")
4	10344	OUTER BEARING CUP		11378	INNER BEARING CONE (1-3/4")
	16082	OUTER BEARING CUP (2-1/2")	12	16084	INNER BEARING CUP (2-1/2")
5	24097	2" PRESSED HUB (INCLUDES ITEMS 4, 6 & 12)		14249	INNER BEARING CUP (2")
	30405	6 BOLT HUB 1-3/4" (INCLUDES ITEMS 4, 6, 12 & 16)		11379	INNER BEARING CUP (1-3/4")
	41054	8 BOLT HUB 2-1/2" (INCLUDES ITEMS 4, 6, 12 & 16)	13	88142	1/2NFx1 90° WHEEL BOLT
6	88263	1/8NPT GREASE FITTING		88456	9/16NFx1 WHEEL BOLT (2-1/2")
	88143	1/4 GREASE FITTING (2-1/2")	14	88340	7/8NF SLOTTED NUT
7	58546	2" TRIPLE LIP SEAL		88299	1NF SLOTTED NUT (2-1/2")
	26121	WEAR SLEEVE & SEAL KIT(1-3/4") (INCLUDES ITEM 16)	15	11381	DUST CAP
	16080	2-1/2 SPINDLE SEAL		16077	HUB CAP
			16	25588	WEAR SLEEVE (1-3/4") NO WEAR SLEEVE (2" & 2-1/2")

GAUGE WHEEL HUB & SPINDLE

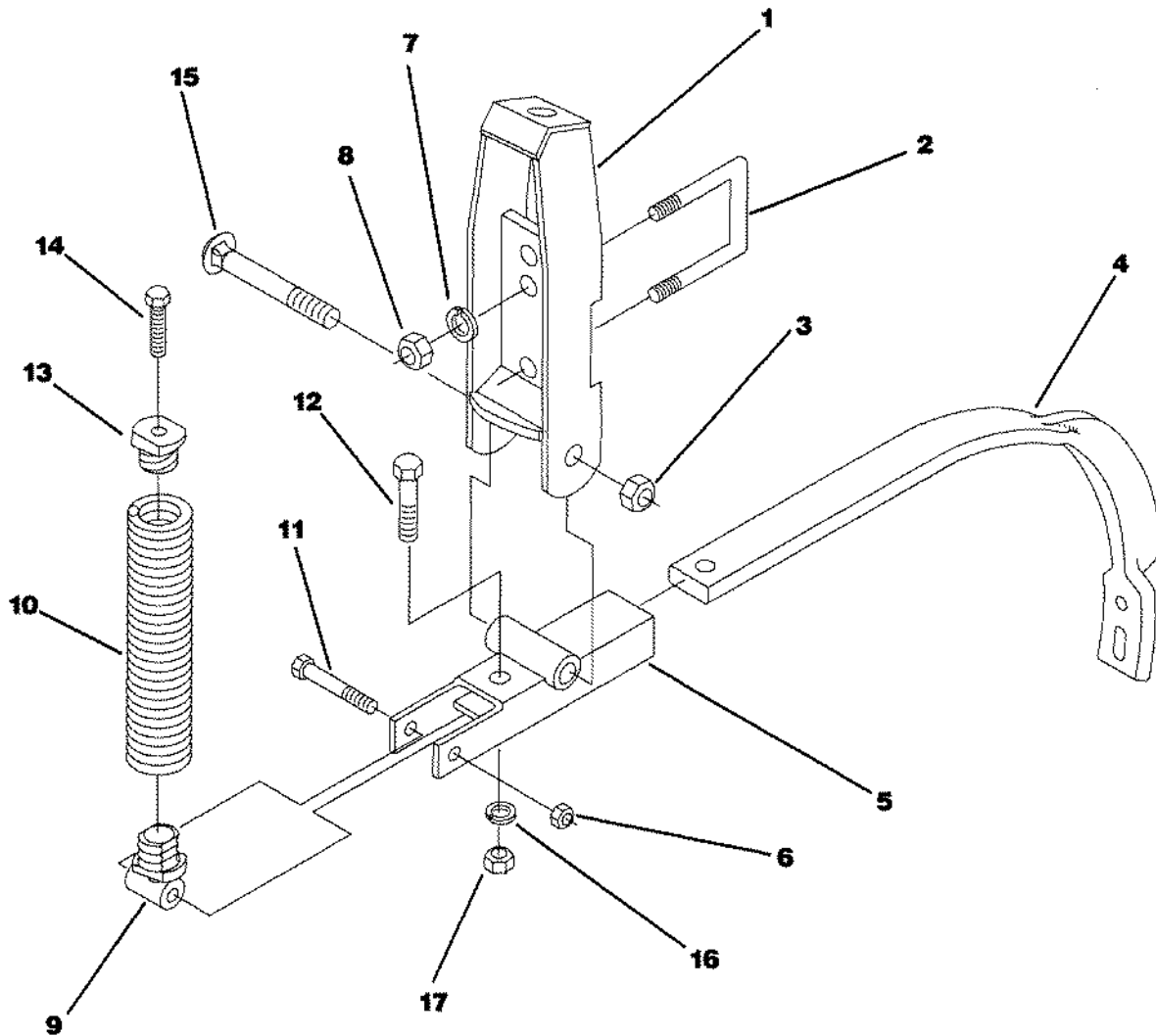


78475

ITEM	PART NO	DESCRIPTION
	58294	YOKE HUB ASSEMBLY (22" SPINDLE)
1	208981	2" INTERNAL TRIPLE LIP SEAL
2	88263	1/8NPT Grease Fitting
3	58204	1-1/2 DIAx22 Spindle
4	54731	Bearing Cone
5	16082	Bearing Cup
6	62389	HUB W/CUPS (INCLUDES ITEM 5)

ITEM	PART NO	DESCRIPTION
7	63831	9/16NFx1-1/8 Wheel Bolt
8	62400	2ODx6 Sealed Spindle Tube
9	55150	Spindle Lock
10	88299	1NF Slotted Nut
11	88133	3/16x2 Cotter Pin
12	12456	O-RING (REQ. W/62400)

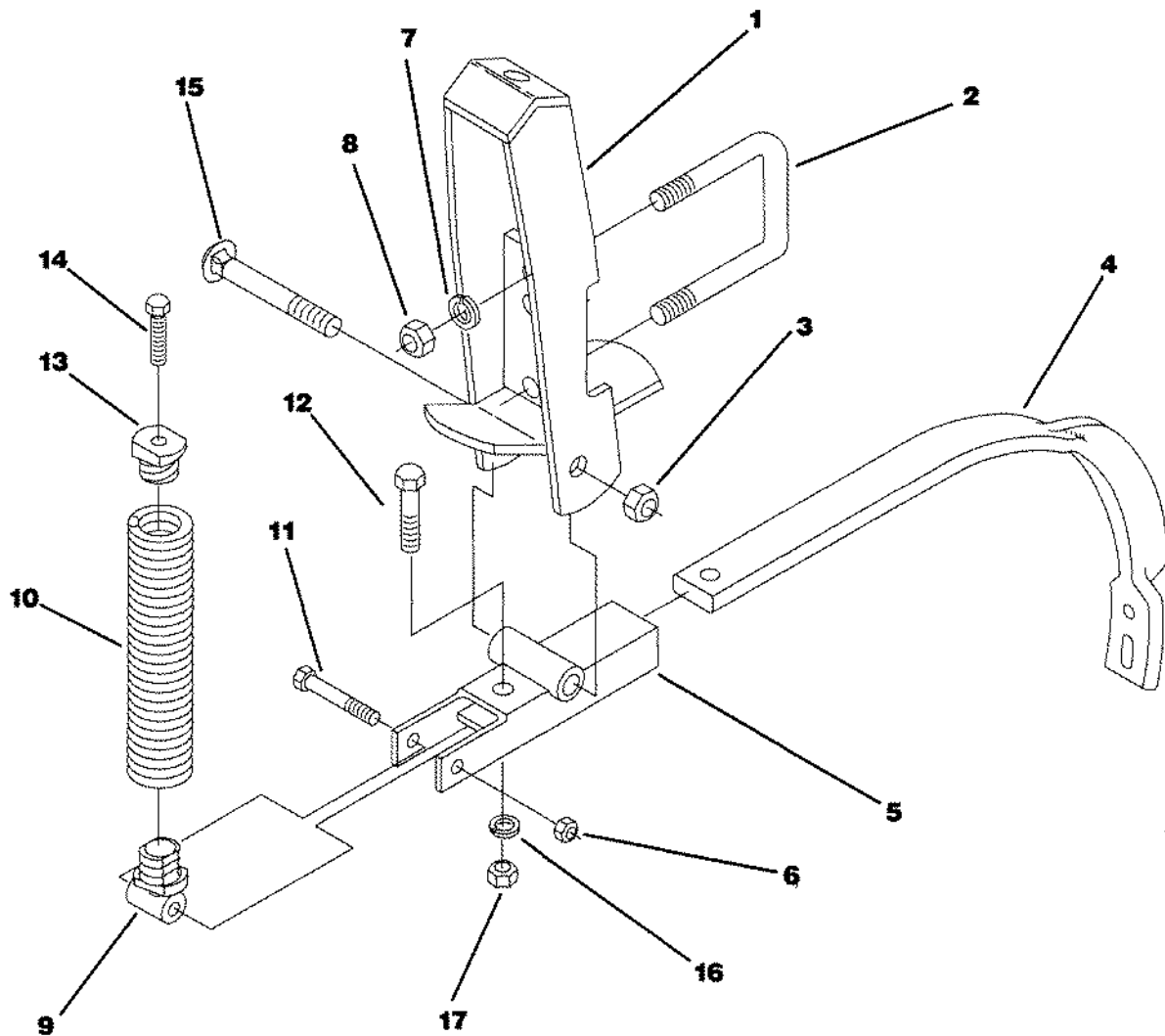
EDGE FORMED C-SHANK ASSEMBLY



78230

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	53405	FC SHANK ASSEMBLY (4") (INCLUDES ITEMS 1, 3-6,9-17)	8	88126	5/8NC NUT
	11540	SPRING PLUG ASSEMBLY (INCLUDES 9-10 & 13)	9	11397	SPRING HANDLE (PLAIN)
1	20569	SHANK TO FRAME BRACKET (4")	10	11510	SPRING
2	88501	5/8NCx4x4-1/4 U-BOLT	11	20637	1/2NFx3 GR5 BOLT
3	22463	3/4NF LOCK NUT	12	88294	5/8NCx2 GR5 BOLT
4	53408	EDGE FORMED FC SHANK	13	11398	SPRING PLUG (PLAIN)
5	11509	SHANK HOLDER ASSEMBLY	14	23153	1/2NCx2 GR5 BOLT
6	88304	1/2NF LOCK NUT	15	15579	SHANK CARRIAGE BOLT
7	88129	5/8 LOCK WASHER	16	88129	5/8 LOCK WASHER
			17	88126	5/8NC NUT

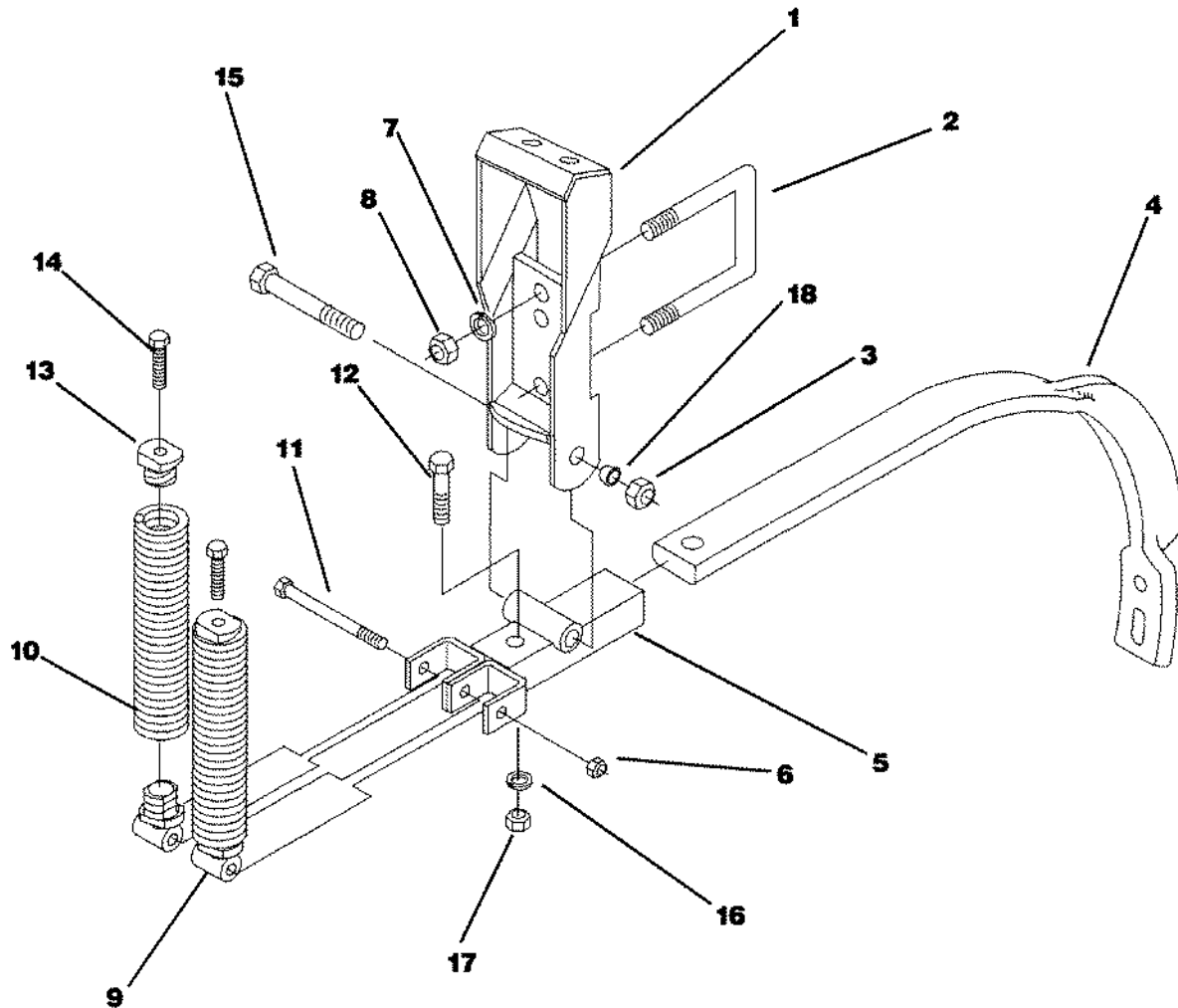
EDGE FORMED HI-TORQUE SHANK ASSEMBLY



78231

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	53406	HI-TORQUE FC SHANK ASSEMBLY (INCLUDES ITEMS 1, 3-6,9-17)	8	88126	5/8NC NUT
	11540	SPRING PLUG ASSEMBLY (INCLUDES 9-10 & 13)	9	11397	SPRING HANDLE (PLAIN)
1	41891	SHANK TO FRAME BRACKET (4")	10	11510	SPRING
2	88501	5/8NCx4x4-1/4 U-BOLT	11	20637	1/2NFx3 GR5 BOLT
3	22463	3/4NF LOCK NUT	12	88294	5/8NCx2 GR5 BOLT
4	53408	EDGE FORMED FC SHANK	13	11398	SPRING PLUG (PLAIN)
5	27050	SHANK HOLDER ASSEMBLY	14	23153	1/2NCx2 GR5 BOLT
6	88304	1/2NF LOCK NUT	15	15579	SHANK CARRIAGE BOLT
7	88129	5/8 LOCK WASHER	16	88129	5/8 LOCK WASHER
			17	88126	5/8NC NUT

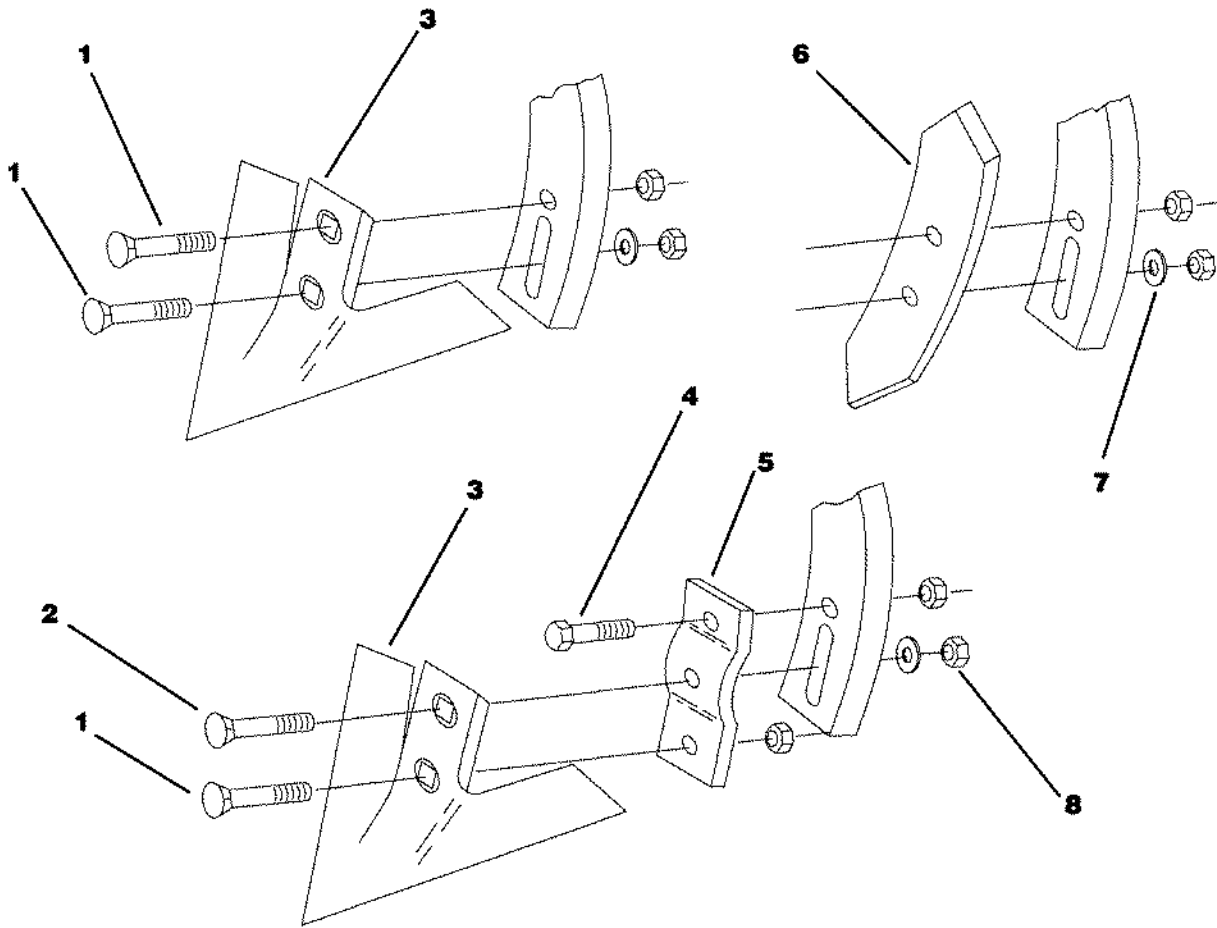
TWIN SPRING SHANK ASSEMBLY



77912

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	55658	TWIN SPRING SHANK ASSEMBLY (INCLUDES ITEMS 1, 3-6, 9-17)	8	88126	5/8NC NUT
	11540	SPRING PLUG ASSEMBLY (INCLUDES 9-10 & 13)	9	11397	SPRING HANDLE (PLAIN)
1	22047	SHANK TO FRAME BRACKET (4")	10	11510	SPRING
2	88501	5/8NCx4x4-1/4 U-BOLT	11	88574	1/2NCx5-1/2 GR5 BOLT
3	22463	3/4NF LOCK NUT	12	88294	5/8NCx2 GR5 BOLT
4	55655	HEAVY DUTY SHANK	13	11398	SPRING PLUG (PLAIN)
5	22051	SHANK HOLDER ASSEMBLY	14	23153	1/2NCx2 GR5 BOLT
6	88363	1/2NC LOCK NUT	15	22933	3/4NFx4-1/2 GR5 BOLT
7	88129	5/8 LOCK WASHER	16	88129	5/8 LOCK WASHER
			17	88126	5/8NC NUT
			18	41452	CENTERING WASHER

SHOVELS & SPIKES

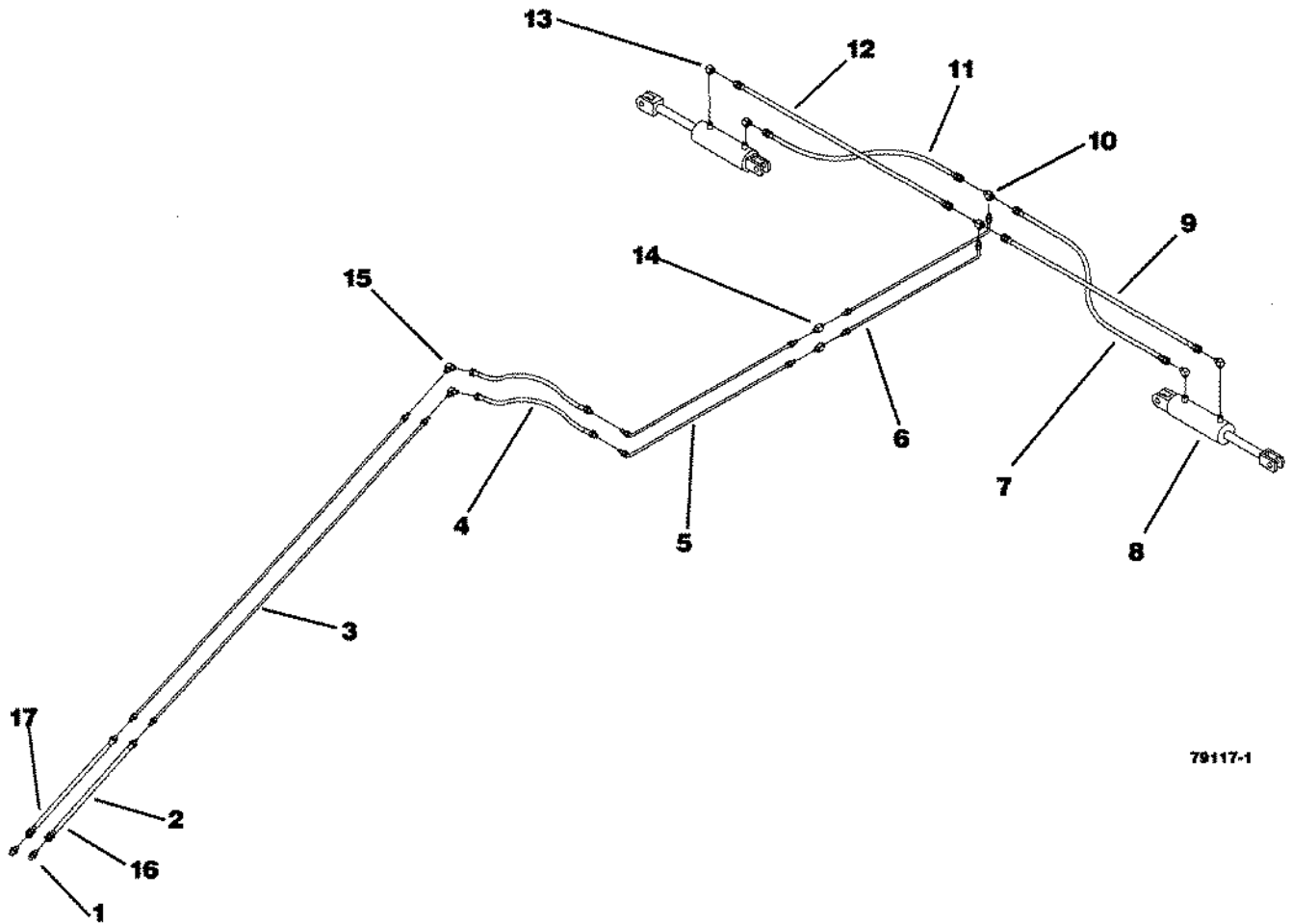


77905

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	14685	HK 7/16x1-1/2 FC SHOVEL KIT (25) (REF. ITEMS 1, 7-8 CONTAINS HARDWARE FOR 25 SHOVELS)	3	19802	7" HIGH CROWN SHOVEL
	16339	FC SHOVEL EXTENSION KIT (REF ITEMS 1,2,4,5,7 & 8 KIT CONTAINS HDWE FOR 4 SHOVELS)		19803	9" HIGH CROWN SHOVEL
1	88599	PLOW BOLT 7/16NCx1-1/2 GR5		15221	9" DURA-CROWN SHOVEL (924)
	88632	PLOW BOLT 7/16NCx1-3/4 GR5 (REPAIR HEAD)		21488	7" LOW CROWN SHOVEL (924)
2	88464	PLOW BOLT 7/16NCx2-1/4 GR5		21489	9" LOW CROWN SHOVEL(924)
				21490	10" LOW CROWN SHOVEL(924)
				21491	12" LOW CROWN SHOVEL(924)
				21492	10" HIGH CROWN FC SHOVEL
				21493	12" HIGH CROWN FC SHOVEL
				41638	4" SWEEP (41) S-SHANK
				41639	7" SWEEP (41) S-SHANK
				41640	9" SWEEP (41) S-SHANK
			4	88392	7/16NCx1-1/2 BOLT
			5	41575	FC SHOVEL EXTENSION
			6	11952	2" REVERSIBLE SPIKE
			7	88152	7/16 FLAT WASHER
			8	88344	7/16NC NUT

EXCEL 11' MF W/7' WING

WING FOLD HYDRAULICS

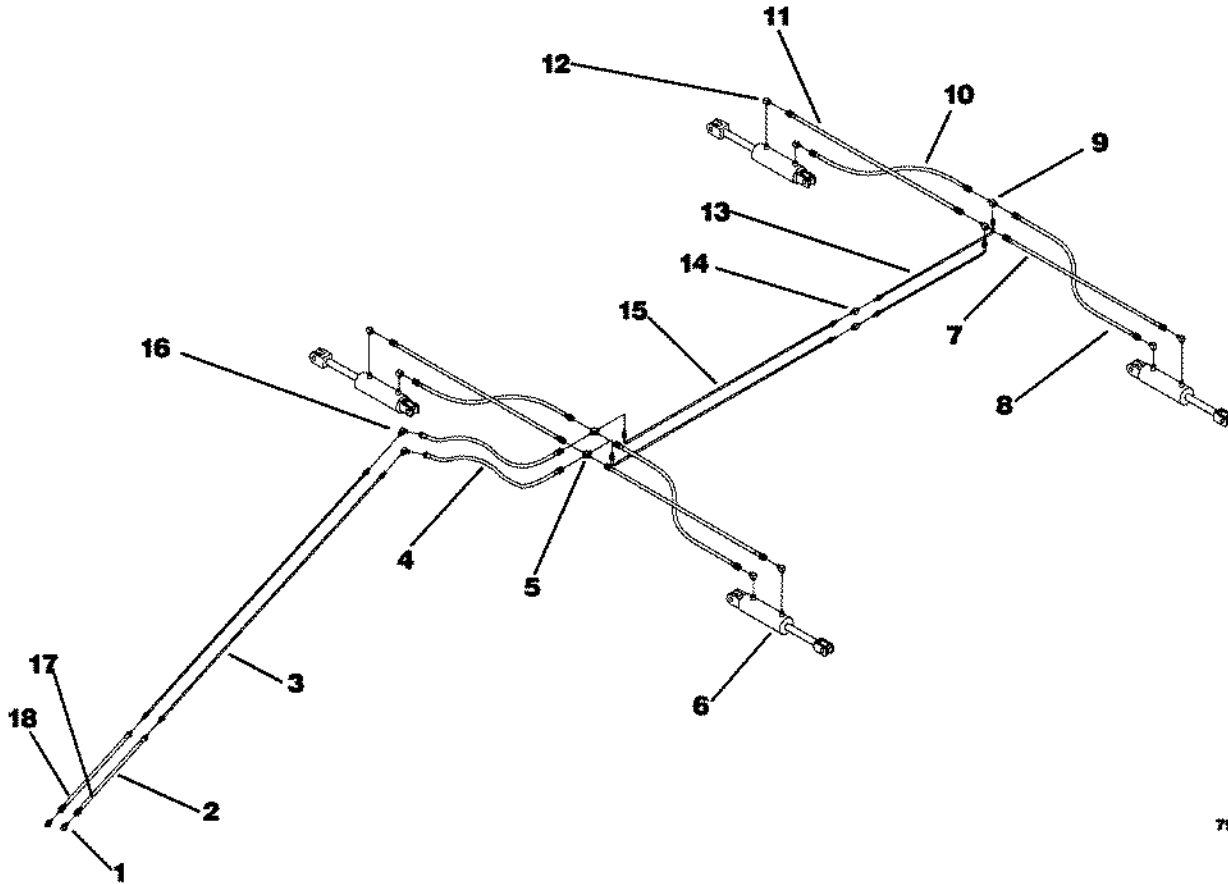


79117-1

ITEM	PART NO	DESCRIPTION
1	13234	3/4JICx1/2NPT ADAPTER
2	13267	3/8x72 HOSE (MF)
3	13254	1/2x80 HYD TUBE (11')
4	13264	3/8x48 HOSE (MF)
5	21084	1/2x82+2 HYD TUBE
6	13258	1/2x60+2 HYD TUBE
7	25595	3/8x26 HOSE (FF)
8	51229	4x30 CYLINDER
9	13265	3/8x56 HOSE (FF)
10	13238	3/4JIC TEE
11	13423	3/8x24 HOSE (FF)
12	56539	3/8x50 HOSE (FF)
13	13235	3/4JICx3/8NPT PORT ELBOW
14	13239	3/4JIC UNION
15	40215	3/4JIC ELBOW
16	54900	WING UP DECAL (NOT SHOWN)
17	54901	WING DOWN DECAL (NOT SHOWN)

EXCEL 11', 13' & 16' MF W/9'4" & 11'8" WINGS

WING FOLD HYDRAULICS



79117-2

ITEM PART NO DESCRIPTION

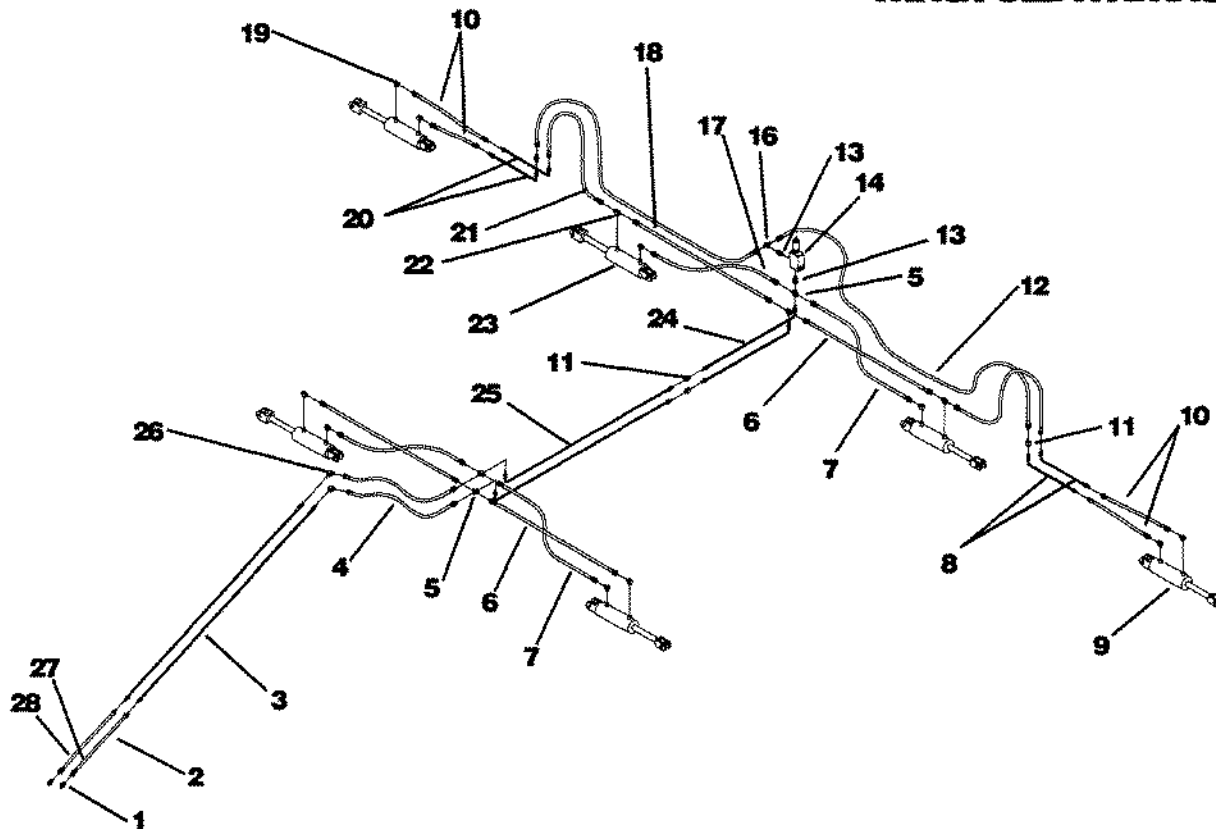
1	13234	3/4JICx1/2NPT ADAPTER
2	13267	3/8x72 HOSE (MF)
3	13255	1/2x110 HYD TUBE (13' & 16')
	13254	1/2x80 HYD TUBE (11')
4	14851	3/8x42 HOSE (FF)
5	15910	3/4JIC CROSS
6	51229	4x30 CYLINDER
7	13265	3/8x56 HOSE (FF) 11' MF
	67636	3/8x72 HOSE (FF) 13' MF
	56540	3/8x89 HOSE (FF) 16' MF
8	25595	3/8x26 HOSE (FF) 11' MF
	25597	3/8x40 HOSE (FF) 13' MF
	13265	3/8x56 HOSE (FF) 16' MF
9	13238	3/4JIC TEE

ITEM PART NO DESCRIPTION

10	13423	3/8x24 HOSE (FF) 11' MF
	14644	3/8x36 HOSE (FF) 13' MF
	56539	3/8x50 HOSE (FF) 16' MF
11	56539	3/8x50 HOSE (FF) 11' MF
	25602	3/8x65 HOSE (FF) 13' MF
	25064	3/8x83 HOSE (FF) MF
12	13235	3/4JICx3/8NPT PORT ELBOW
13	13258	1/2x60+2 HYD TUBE
14	13239	3/4JIC UNION
15	21084	1/2x82+2 HYD TUBE
16	40215	3/4JIC ELBOW
17	54900	WING UP DECAL (NOT SHOWN)
18	54901	WING DOWN DECAL (NOT SHOWN)

EXCEL 11', 13' & 16' MF W/9'4" & 11'8" WINGS & W/3' OR 5' OUTER WINGS

WING FOLD HYDRAULICS

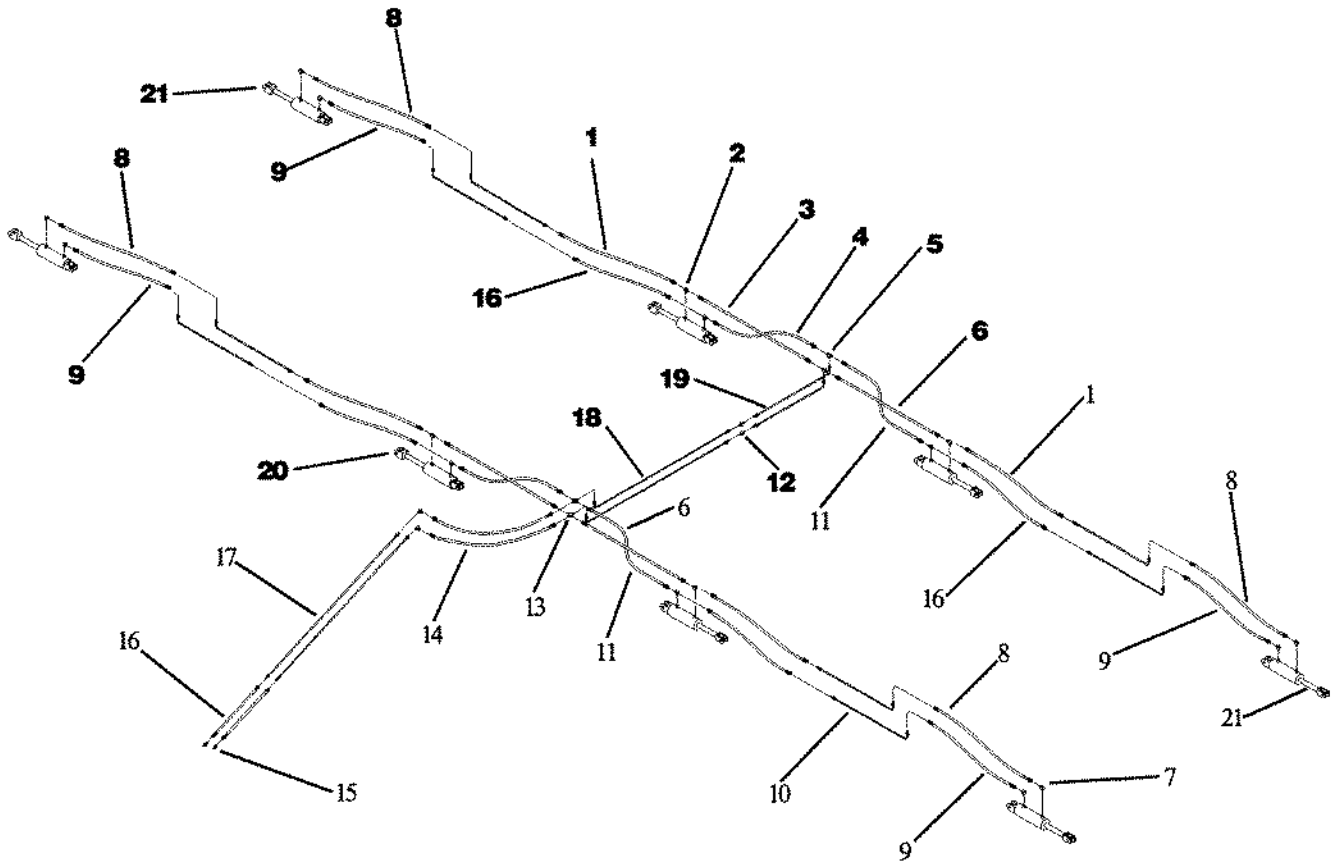


79117-4

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	13234	3/4JICx1/2NPT ADAPTER	16	13238	3/4 JIC TEE
2	13267	3/8x72 HOSE (MF)	17	13423	3/8x24 HOSE (FF) 11' MF
3	13255	1/2x110 HYD TUBE(13' & 16')	14644	3/8x36 HOSE (FF) 13' MF	
	13254	1/2x80 HYD TUBE (11')	56539	3/8x50 HOSE (FF) 16' MF	
4	14851	3/8x42 HOSE (FF)	18	56539	3/8x50 HOSE (FF) 11' MF
5	15910	3/4JIC CROSS	25602	3/8x65 HOSE (FF) 13' MF	
6	13265	3/8x56 HOSE (FF) 11' MF	25064	3/8x83 HOSE (FF) 16' MF	
	67636	3/8x72 HOSE (FF) 13' MF	19	13235	3/4JICx3/8NPT PORT ELBOW
	56540	3/8x89 HOSE (FF) 16' MF	20	68926	1/2x48+2 HYD TUBE 9'4" WING
7	25595	3/8x26 HOSE (FF) 11' MF	13257	1/2x75+2 HYD TUBE 11'8" WING	
	25597	3/8x40 HOSE (FF) 13' MF	21	13264	3/8x48 HOSE (MF)
	13265	3/8x56 HOSE (FF) 16' MF	22	13237	3/8 PORT TEE
8	68696	1/2x48+2 HYD TUBE 9'4" WING	23	51229	4x30 CYLINDER
	13257	1/2x75+2 HYD TUBE 11'8" WING	24	13258	1/2x60+2 HYD TUBE
9	51242	3x30 HYD CYLINDER	25	21084	1/2x82+2 HYD TUBE
10	13263	3/8x36 HOSE (MF)	26	40215	3/4JIC ELBOW
11	13239	3/4JIC UNION	27	54900	WING UP DECAL (NOT SHOWN)
12	56540	3/8x89 HOSE (FF) 11' MF	28	54901	WING DOWN DECAL (NOT SHOWN)
	13482	3/8x108 HOSE (FF) 13' MF			
	13483	3/8x120 HOSE (FF) 16' MF			
13	24004	3/4 JIC/ORB ADAPTER			
14	65870	SEQUENCE VALVE			

EXCEL 5 SECTION

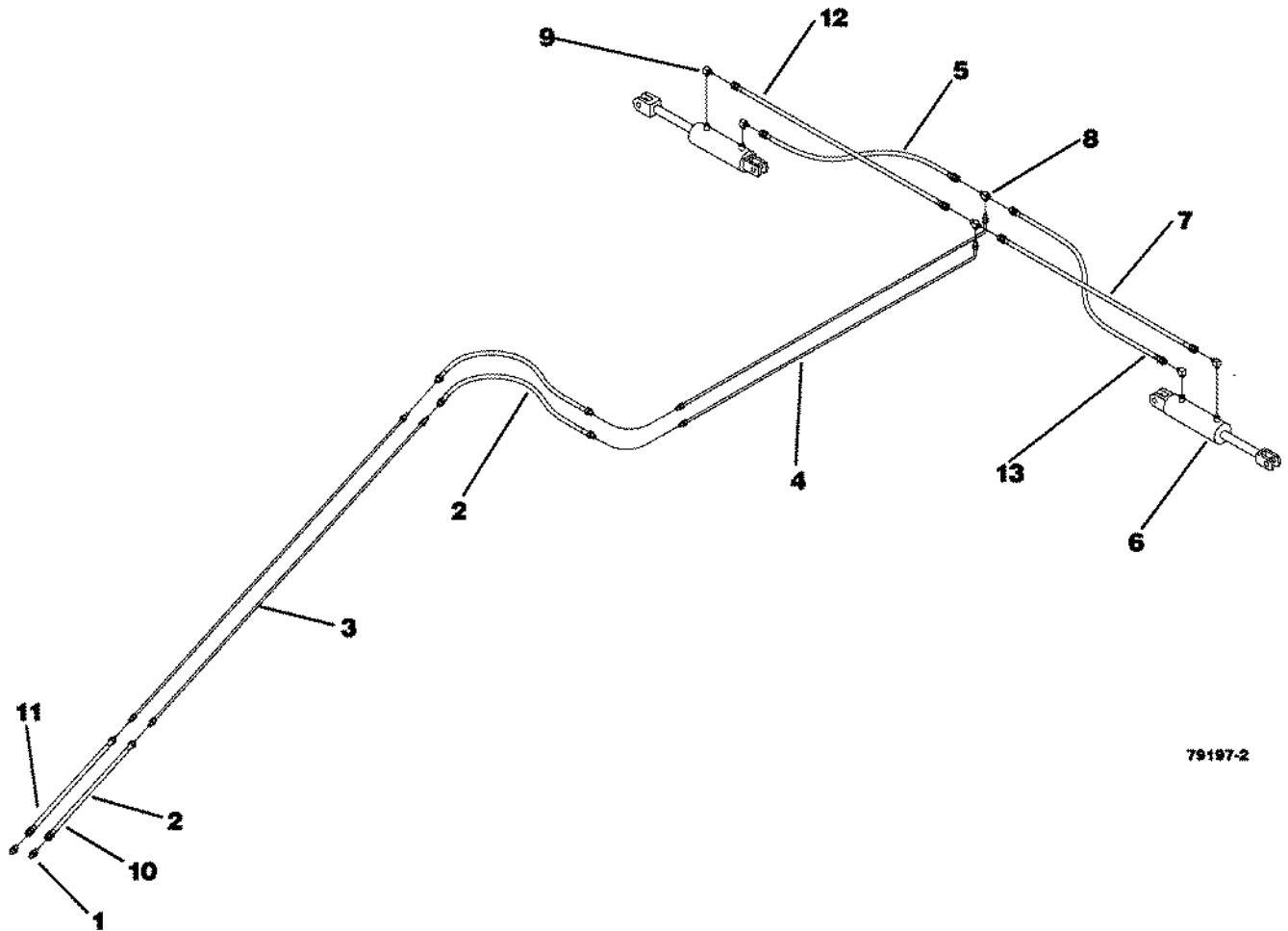
WING FOLD HYDRAULICS



ITEM	PART NO	DESCRIPTION
1	13264	3/8x48 HOSE (MF)
2	13237	3/8 CYLINDER PORT TEE
3	25604	3/8x83 HOSE (FF)
4	56539	3/8x50 HOSE (FF)
5	13238	3/4JIC TEE
6	56540	3/8x89 HOSE (FF)
7	13235	3/4JICx3/8NPT PORT ELBOW
8	13263	3/8x36 HOSE (MF)
9	13260	3/8x24 HOSE (MF)
10	13257	1/2x75+2 HYD TUBE
11	13265	3/8x56 HOSE (FF)
12	13239	3/4JIC UNION
13	15910	3/4JIC CROSS
14	13264	3/8x48 HOSE (MF)
15	13234	3/4JICx1/2NPT COUPLER ADAPTER
16	13267	3/8x72 HOSE (MF)
17	13255	1/2x110 HYD TUBE
18	21084	1/2x82+2 HYD TUBE
19	13258	1/2x60+2 HYD TUBE
20	20966	5x30 CYLINDER
21	51229	4x30 CYLINDER

QUADX 13MF w/7' WING

WING FOLD HYDRAULICS

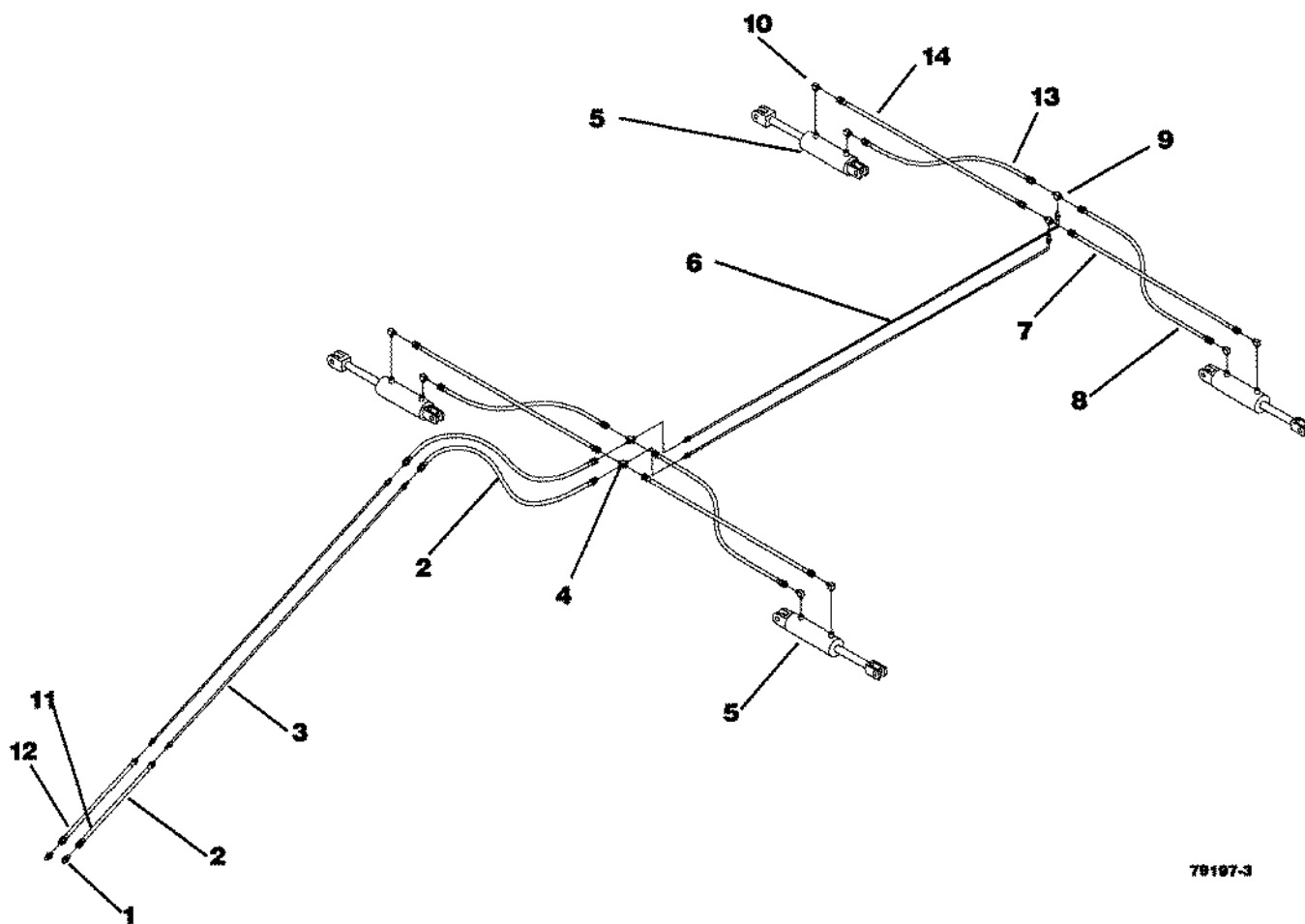


79197-2

ITEM	PART NO	DESCRIPTION
1	13234	3/4JICx1/2NPT ADAPTER
2	13267	3/8x72 HOSE (MF)
3	13255	1/2x110 HYD TUBE
4	13286	1/2x94+2 HYD TUBE
5	13263	3/8x36 HOSE (MF)
6	51229	4x30 CYLINDER
7	25602	3/8x65 HOSE (FF)
8	13238	3/4JIC TEE
9	13235	3/4JICx3/8NPT PORT ELBOW
10	54900	WING UP DECAL (NOT SHOWN)
11	54901	WING DOWN DECAL (NOT SHOWN)
12	15515	3/8x62 HOSE (FF)
13	25597	3/8x40 HOSE (FF)

QUADX 13' & 16' MF w/9'4" & 11'8" WINGS

WING FOLD HYDRAULICS



79197-3

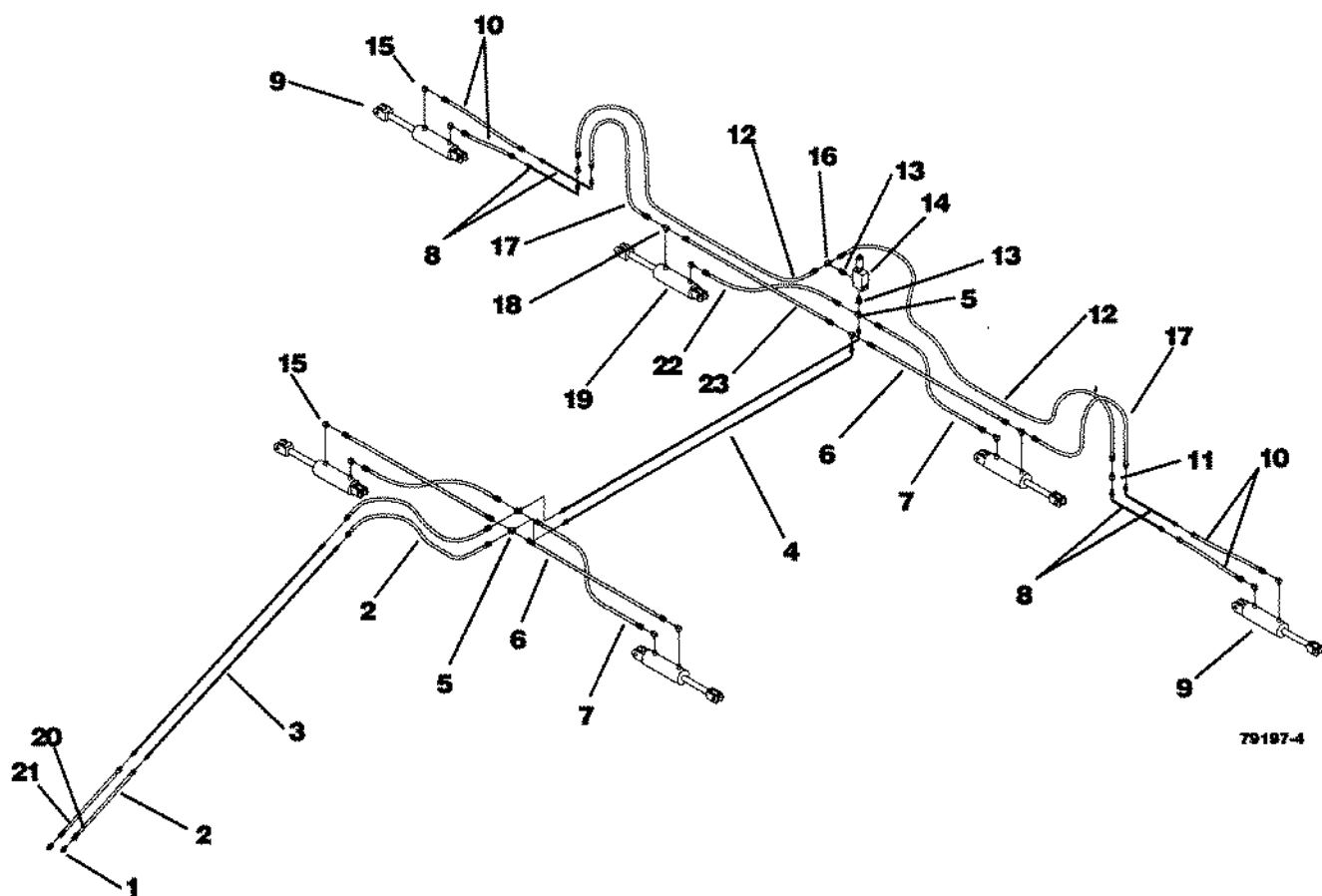
ITEM	PART NO	DESCRIPTION
1	13234	3/4JICx1/2NPT ADAPTER
2	13267	3/8x72 HOSE (MF)
3	13255	1/2x110 HYD TUBE
4	15910	3/4JIC CROSS
5	51229	4x30 CYLINDER
6	13286	1/2x94+2 HYD TUBE
7	67636	3/8x72 HOSE (FF) 13' MF
	56540	3/8x89 HOSE (FF) 16' MF

ITEM	PART NO	DESCRIPTION
8	25597	3/8x40 HOSE (FF) 13' MF
	13265	3/8x56 HOSE (FF) 16' MF
9	13238	3/4JIC TEE
10	13235	3/4JICx3/8NPT PORT ELBOW
11	54900	WING UP DECAL (NOT SHOWN)
12	54901	WING DOWN DECAL (NOT SHOWN)
13	14644	3/8x36 HOSE (FF) 13' MF
	56539	3/8x50 HOSE (FF) 16' MF
14	25602	3/8x65 HOSE (FF) 13' MF
	25604	3/8x83 HOSE (FF) 16' MF

QUADX 13' & 16' MF w/9'4" & 11'8" WINGS

w/3' OR 5' OUTER WING

WING FOLD HYDRAULICS



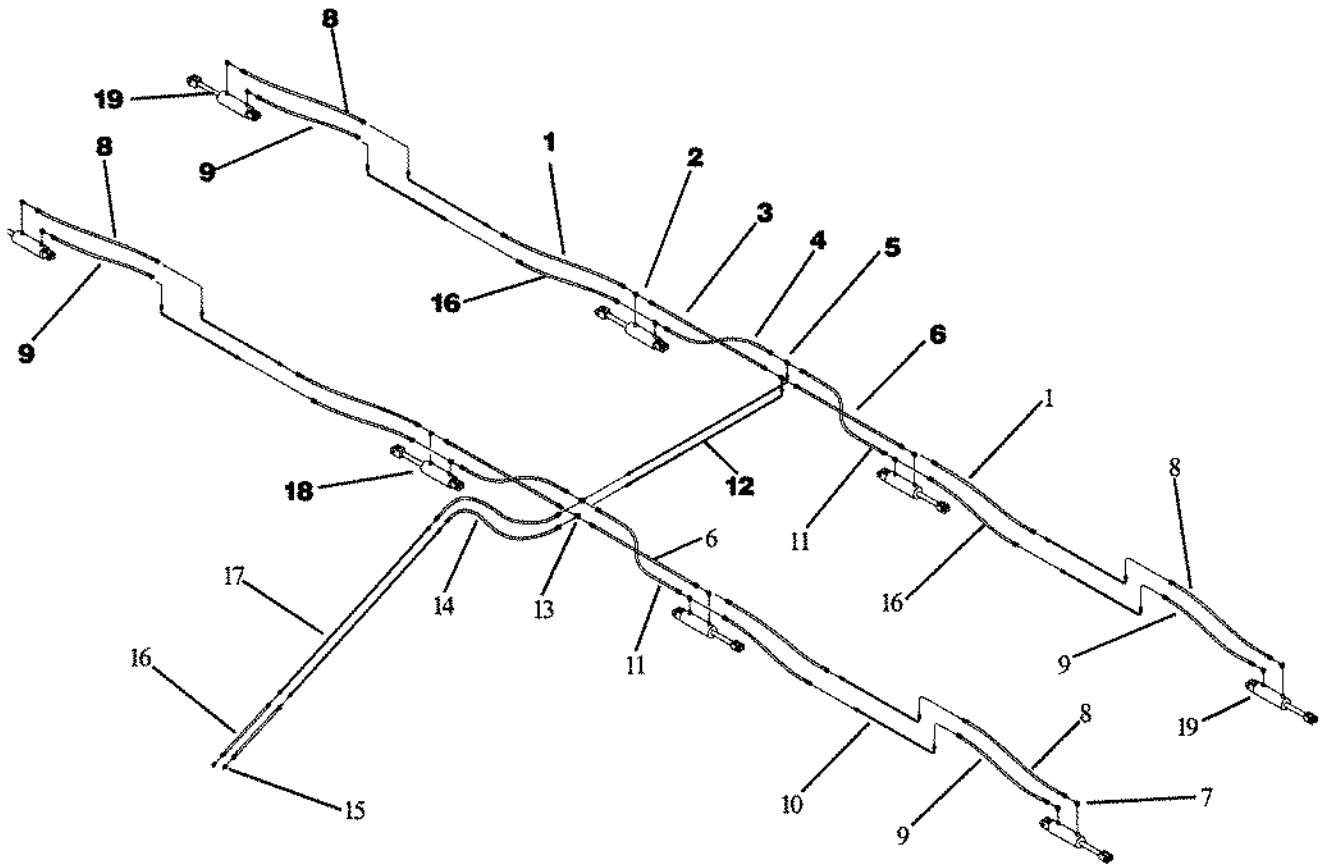
79197-4

ITEM	PART NO	DESCRIPTION
1	13234	3/4JICx1/2NPT ADAPTER
2	13267	3/8x72 HOSE (MF)
3	13255	1/2x110 HYD TUBE
4	13258	1/2x60+2 HYD TUBE
5	15910	3/4JIC CROSS
6	67636	3/8x72 HOSE (FF) 13' MF
	56540	3/8x89 HOSE (FF) 16' MF
7	25597	3/8x40 HOSE (FF) 13' MF
	13265	3/8x56HOSE (FF) 16' MF
8	68926	1/2x48+2 HYD TUBE 9'4" WING
	13257	1/2x75+2 HYD TUBE 11'8" WING
9	51242	3x30 HYD CYLINDER
10	13263	3/8x36 HOSE (MF)

ITEM	PART NO	DESCRIPTION
11	13239	3/4JIC UNION
12	13482	3/8x108 HOSE (FF) 13' MF
	13483	3/8x120 HOSE (FF) 16' MF
13	24004	3/4 JIC/ORB ADAPTER
14	65870	SEQUENCE VALVE
15	13235	3/4JICx3/8NPT PORT ELBOW
16	13238	3/4 JIC TEE
17	13264	3/8x48 HOSE (MF)
18	13237	3/8 PORT TEE
19	51229	4x30 CYLINDER
20	54900	WING UP DECAL (NOT SHOWN)
21	54901	WING DOWN DECAL (NOT SHOWN)
22	14644	3/8x36 HOSE (FF) 13' MF
	56539	3/8x50 HOSE (FF) 16' MF
23	25602	3/8x65 HOSE (FF) 13' MF
	25064	3/8x83 HOSE (FF) 16' MF

QUADX5 SECTION

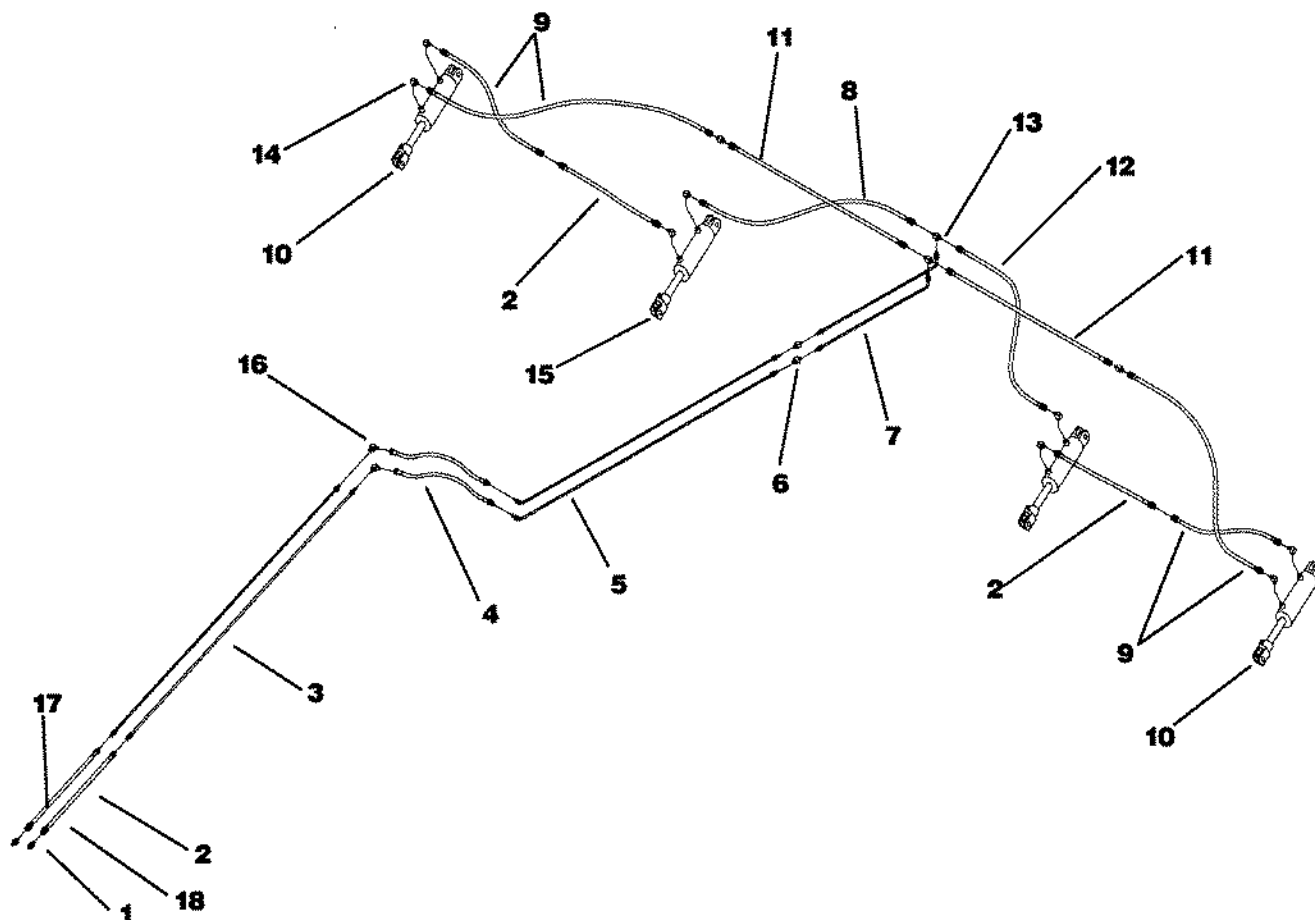
WING FOLD HYDRAULICS



ITEM	PART NO	DESCRIPTION
1	13264	3/8x48 HOSE (MF)
2	13237	3/8 CYLINDER PORT TEE
3	25604	3/8x83 HOSE (FF)
4	56539	3/8x50 HOSE (FF)
5	13238	3/4JIC TEE
6	56540	3/8x89 HOSE (FF)
7	13235	3/4JICx3/8NPT PORT ELBOW
8	13263	3/8x36 HOSE (MF)
9	13260	3/8x24 HOSE (MF)
10	13257	1/2x75+2 HYD TUBE
11	13265	3/8x56 HOSE (FF)
12	13286	1/2x94+2 HYD TUBE
13	15910	3/4JIC CROSS
14	13267	3/8x72 HOSE (FF)
15	13234	3/4JICx1/2NPT COUPLER ADAPTER
16	13267	3/8x72 HOSE (MF)
17	13255	1/2x110 HYD TUBE
18	20966	5x30 CYLINDER
19	51229	4x30 CYLINDER

EXCEL 11' MF W/7' WING

DEPTH CONTROL HYDRAULICS



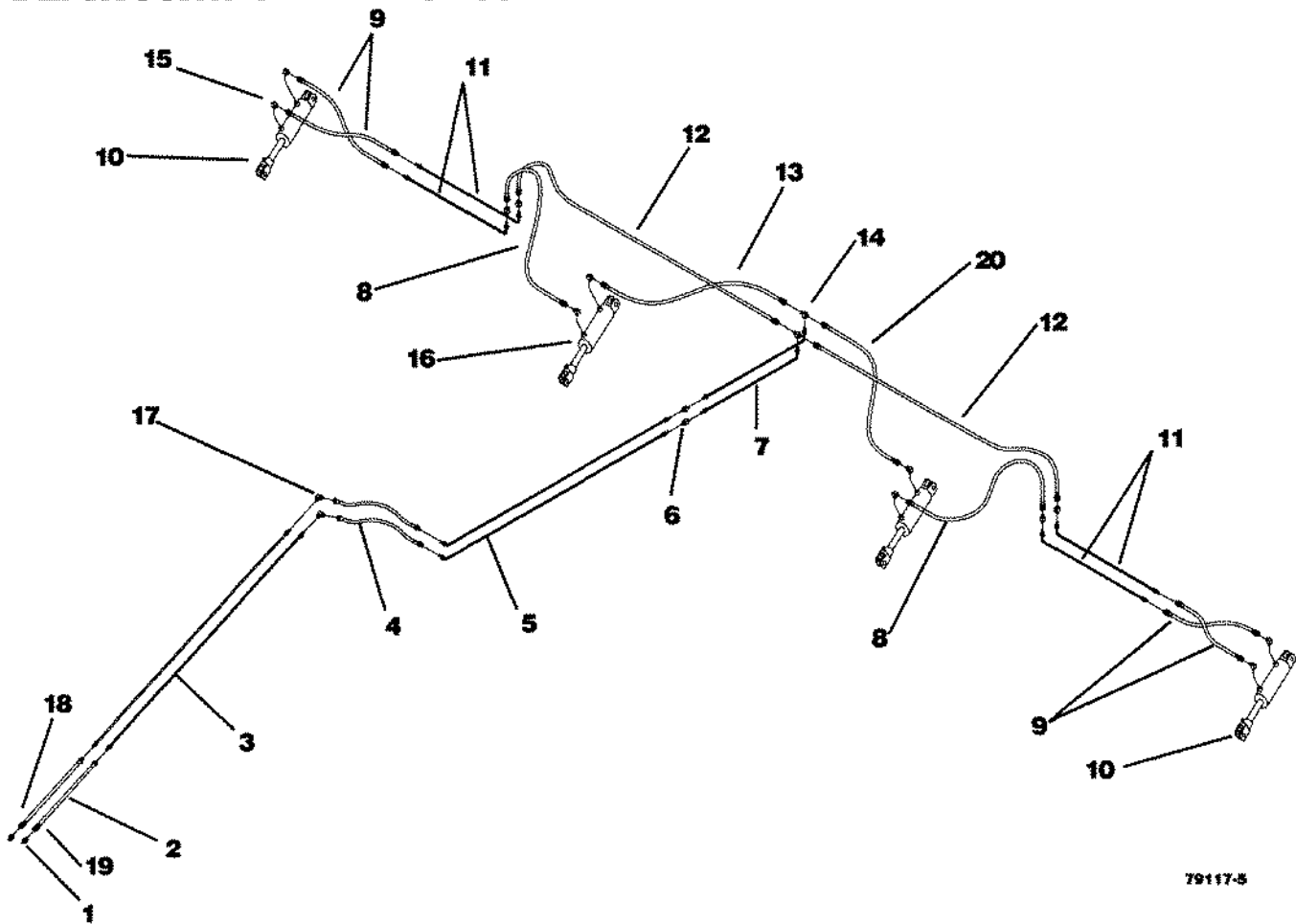
79117-3

ITEM	PART NO	DESCRIPTION
1	13234	3/4 JICx1/2 NPT ADAPTER
2	13267	3/8x72 HOSE (MF)
3	13254	1/2x80 HYD TUBE
4	13264	3/8x48 HOSE (MF)
5	21084	1/2x82+2 HYD TUBE
6	13239	3/4 JIC UNION
7	13258	1/2x60+2 HYD TUBE
8	56539	3/8x50 HOSE (FF)
9	25603	3/8x75 HOSE (FF)
10	67688	4x10.8 TOP BYPASS CYLINDER
11	56540	3/8x89 HOSE (FRF) 11' MF
	13482	3/8x108 HOSE (FF) 13' MF
	13483	3/8x120 HOSE (FF) 16' MF

ITEM	PART NO	DESCRIPTION
12	13265	3/8x56 HOSE (FF)
13	13238	JIC TEE
14	25580	3/4 JICx3/4 ORB ELBOW
15	67683	4x12.6 TOP BYPASS CYLINDER
16	40215	3/4 JIC ELBOW
17	54902	MAIN UP DECAL (NOT SHOWN)
18	54903	MAIN DOWN DECAL (NOT SHOWN)

EXCEL 11', 13' & 16' MF W/9'4" & 11'8" WINGS

DEPTH CONTROL HYDRAULICS

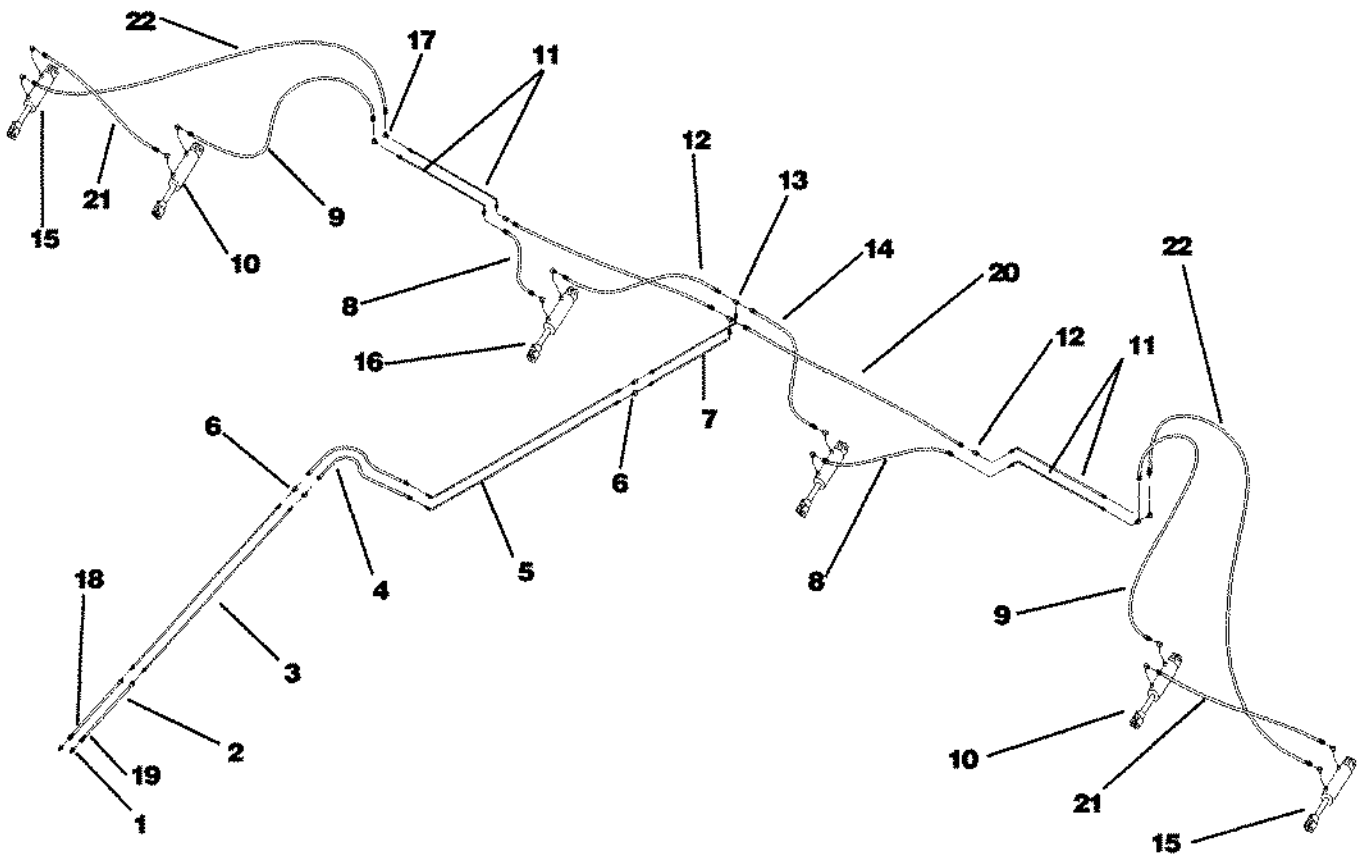


79117-5

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	13234	3/4JICx1/2NPT ADAPTER	12	56540	3/8x89 HOSE (FF) 11' MF
2	13267	3/8x72 HOSE (MF)		13482	3/8x108 HOSE (FF) 13' MF
3	13255	1/2x110 HYD TUBE (13' & 16')		13483	3/8x120 HOSE (FF) 16' MF
	13254	1/2x80 HYD TUBE (11')	13	56539	3/8x50 HOSE (FF) 11' MF
4	13264	3/8x48 HOSE (FF)		15515	3/8x62 HOSE (FF) 13' MF
5	21084	1/2x82+2 HYD TUBE		25064	3/8x83 HOSE (FF) 16' MF
6	13239	3/4JIC UNION	14	13238	JIC TEE
7	13258	1/2x60+2 HYD TUBE	15	25580	3/4JICx3/4ORB ELBOW
8	25604	3/8x83 HOSE (FF)	16	67683	4x12.6 TOP BYPASS CYLINDER
9	13263	3/8x36 HOSE (MF)	17	40215	3/4 JIC ELBOW
10	67688	4x10.8 TOP BYPASS CYLINDER	18	54902	MAIN UP DECAL (NOT SHOWN)
11	68926	1/2x48+2 HYD TUBE (9'4" WING)	19	54903	MAIN DOWN DECAL (NOT SHOWN)
	13257	1/2x75+2 HYD TUBE (11'8" WING)	20	13265	3/8x56 HOSE (FF) 11' MF
				25602	3/8x65 HOSE (FF) 13' MF
				56540	3/8x89 HOSE (FF) 16' MF

EXCEL 5 SECTION

DEPTH CONTROL HYDRAULICS

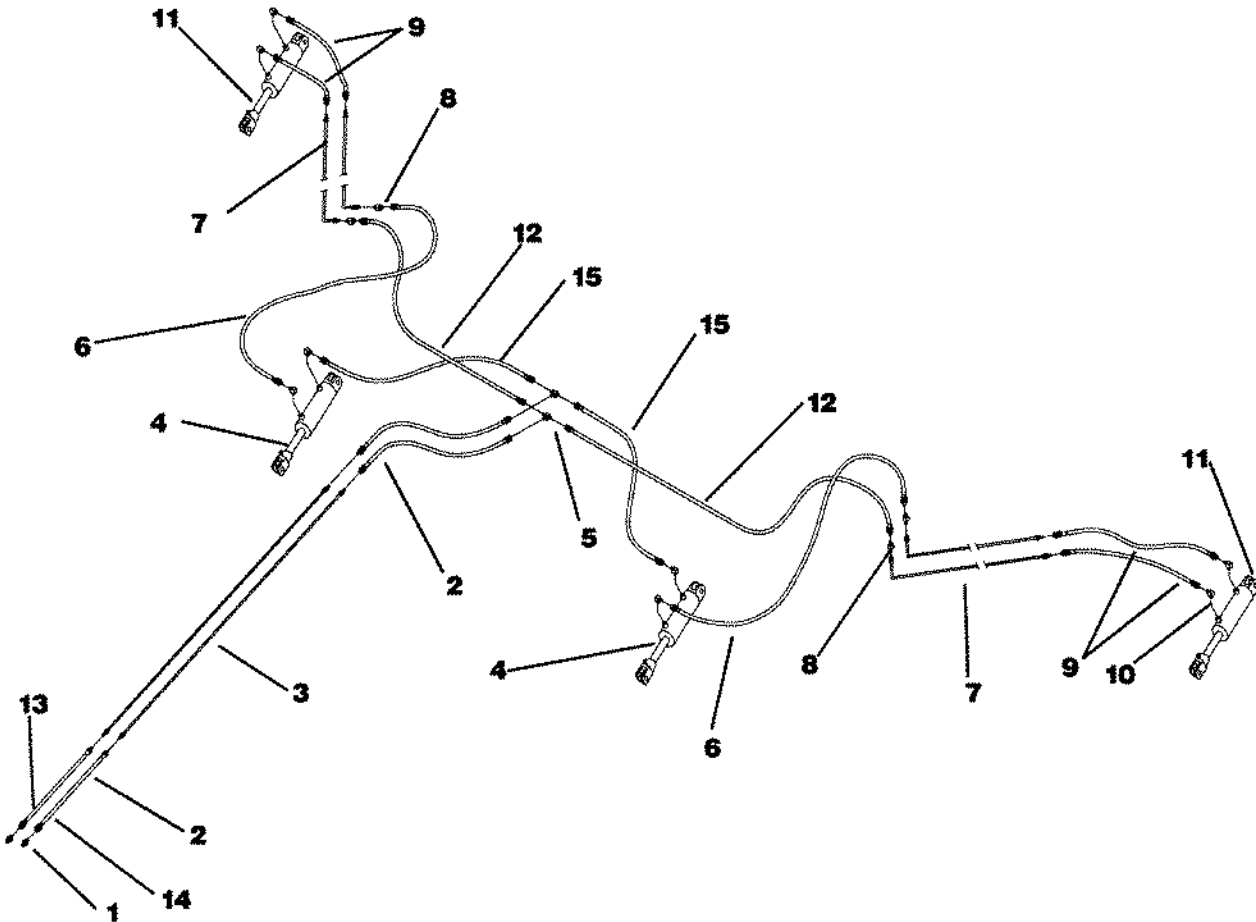


ITEM	PART NO	DESCRIPTION
1	13234	3/4JICx1/2NPT ADAPTER
2	13267	3/8x72 HOSE (MF)
3	13255	1/2x110 HYD TUBE
4	13264	3/8x48 HOSE (FF)
5	21084	1/2x82+2 HYD TUBE
6	13239	3/4JIC UNION
7	13258	1/2x60+2 HYD TUBE
8	13269	3/8x84 HOSE (MF)
9	13263	3/8x36 HOSE (MF)
10	67688	4x10.8 TOP BYPASS CYLINDER
11	68926	1/2x48+2 HYD TUBE (9'4" WING)
	13257	1/2x75+2 HYD TUBE (11'8" WING)
12	13482	3/8x108 HOSE (FF) 13' MF
	13483	3/8x120 HOSE (FF) 16' MF
13	15515	3/8x62 HOSE (FF) 13' MF
	25064	3/8x83 HOSE (FF) 16' MF
14	13238	JIC TEE

ITEM	PART NO	DESCRIPTION
15	67867	4x9.3 TOP BYPASS CYLINDER
16	67683	4x12.6 TOP BYPASS CYLINDER
17	40215	3/4 JIC ELBOW
18	54902	MAIN UP DECAL (NOT SHOWN)
19	54903	MAIN DOWN DECAL (NOT SHOWN)
20	25602	3/8x65 HOSE (FF) 13' MF
	56540	3/8x89 HOSE (FF) 16' MF
21		7FT OUTER WING
	13483	3/8x120 HOSE (FF) 9'4" OUTER WING
	13483	3/8x120 HOSE (FF)
	13262	3/8x30 HOSE (MF)
22		7FT OUTER WING
	13484	3/8x156 HOSE (FF) 9'4" OUTER WING
	13484	3/8x156 HOSE (FF)
	13262	3/8x30 HOSE (MF)

QUADX 13' MF w/7' WINGS

DEPTH CONTROL HYDRAULICS

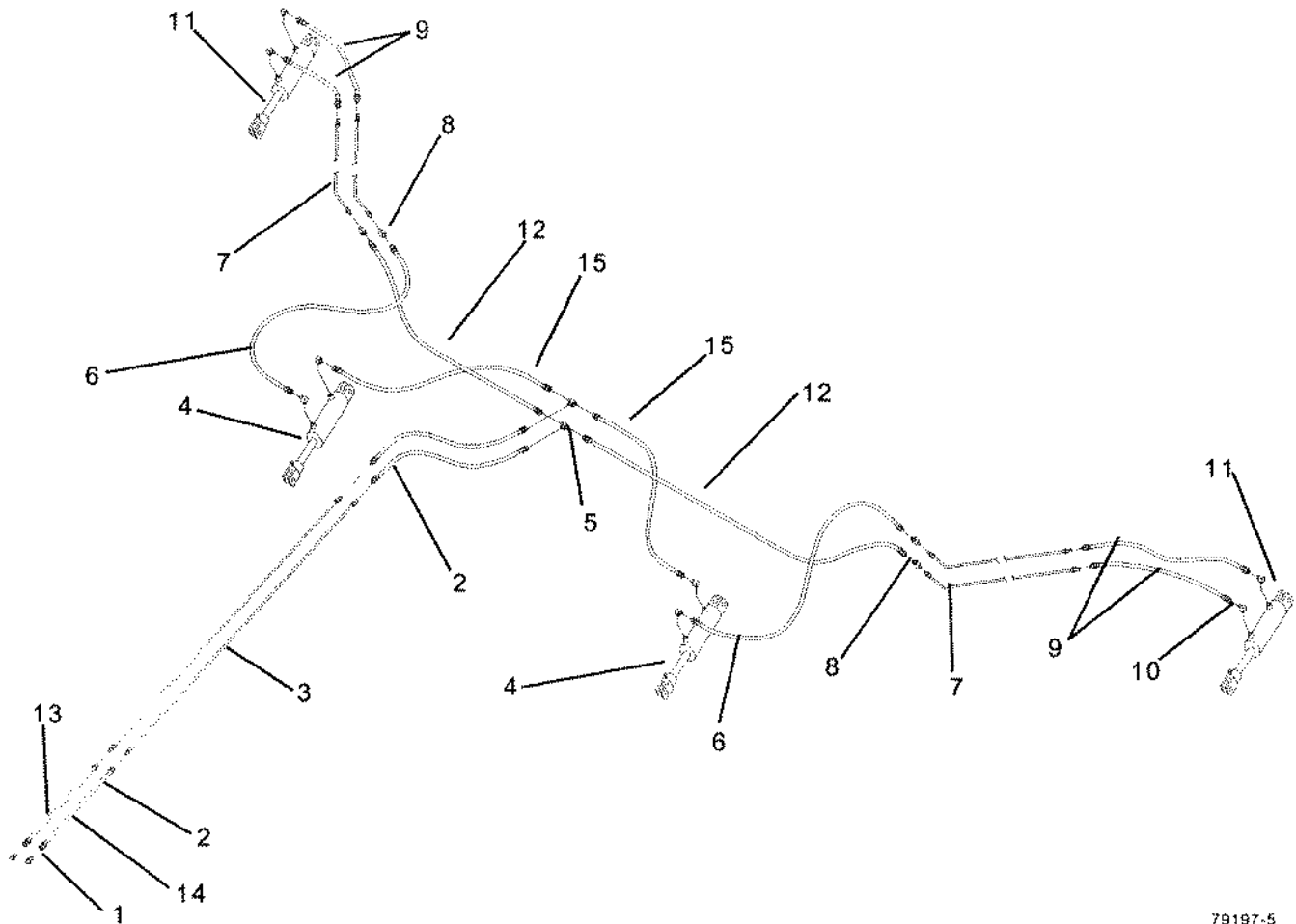


79197-1

ITEM	PART NO	DESCRIPTION
1	13234	3/4 JIC x 1/2 NPT ADAPTER
2	13267	3/8 x 72 HOSE (MF)
3	13255	1/2 x 110 HYD TUBE
4	67683	4x12.6 HYD CYL
5	13238	JIC TEE
6	25602	3/8 x 65 HOSE (FF)
7	21084	1/2 x 82 + 2 HYD TUBE
8	13239	3/4 JIC UNION
9	13263	3/8 x 36 HOSE (MF)
10	25580	3/4 JIC x 3/4 ORB ELBOW
11	67688	4x10.8 TOP BYPASS CYLINDER
12	13482	3/8 x 108 HOSE (FF) 13' MF
	13483	3/8 x 120 HOSE (FF) 16' MF
13	54902	MAIN UP DECAL (NOT SHOWN)
14	54903	MAIN DOWN DECAL (NOT SHOWN)
15	13268	3/8 x 78 HOSE (FF)

QUADX 13' & 16' MF w/9'4" & 11'8" WINGS

DEPTH CONTROL HYDRAULICS

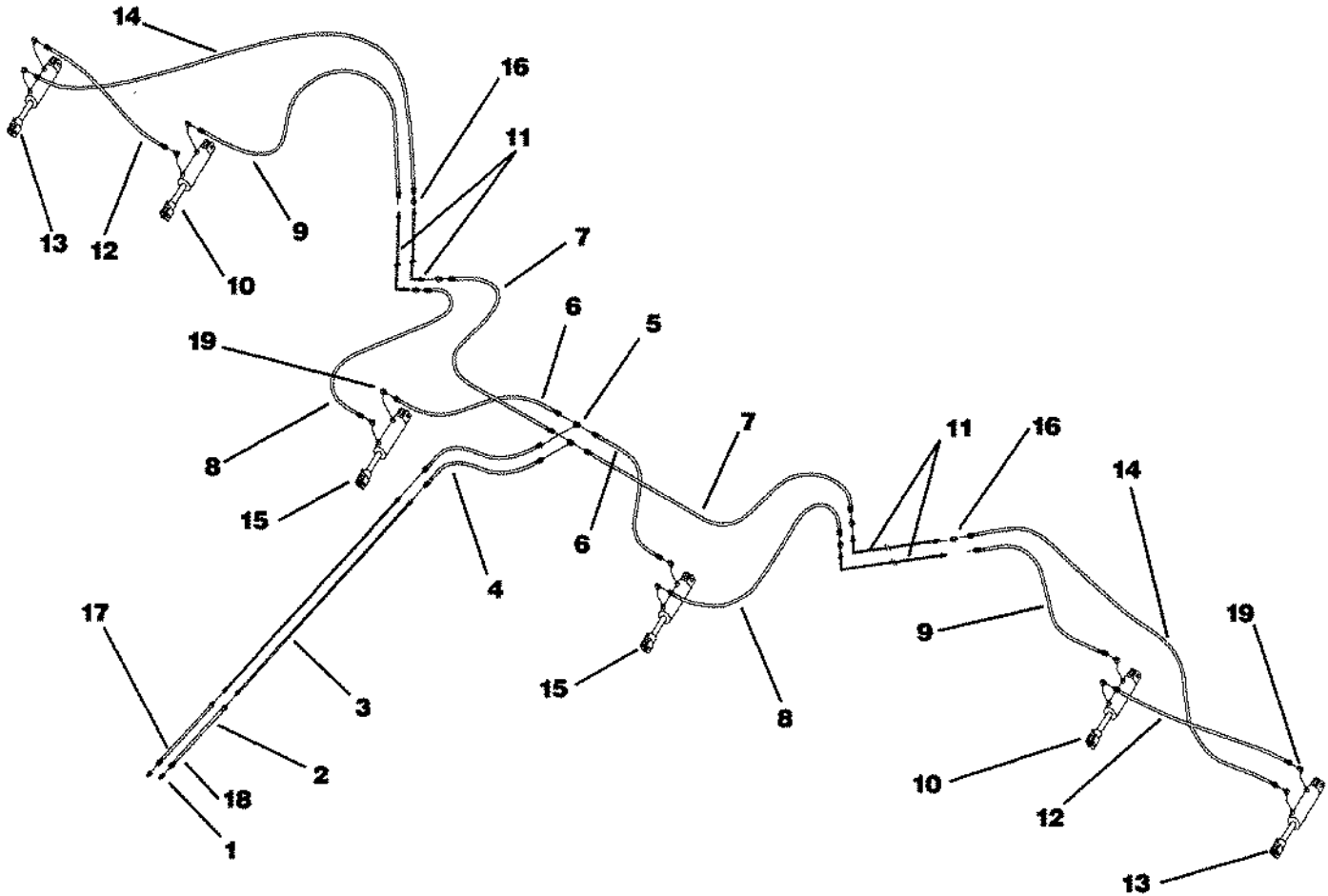


79197-5

ITEM	PART NO	DESCRIPTION
1	13234	3/4JICx1/2NPT ADAPTER
2	13267	3/8x72 HOSE (MF)
3	13255	1/2x110 HYD TUBE
4	67683F	4x12.6 TOP BYPASS CYLINDER
5	13238	JIC TEE
6	25602	3/8x65 HOSE (FF)
7	222356	1/2x104+6 HYD TUBE
8	13239	3/4JIC UNION
9	13263	3/8x36 HOSE (MF)
10	25580	3/4JICx3/4ORB ELBOW
11	67688F	4x10.8 TOP BYPASS CYLINDER
12	13482	3/8x108 HOSE (FF) 13' MF
	13483	3/8x120 HOSE (FF) 16' MF
13	54902	MAIN UP DECAL (NOT SHOWN)
14	54903	MAIN DOWN DECAL (NOT SHOWN)
15	13268	3/8x78 HOSE (FF) 13' MF
	56540	3/8x89 HOSE (FF) 16' MF

QUADX5 SECTION

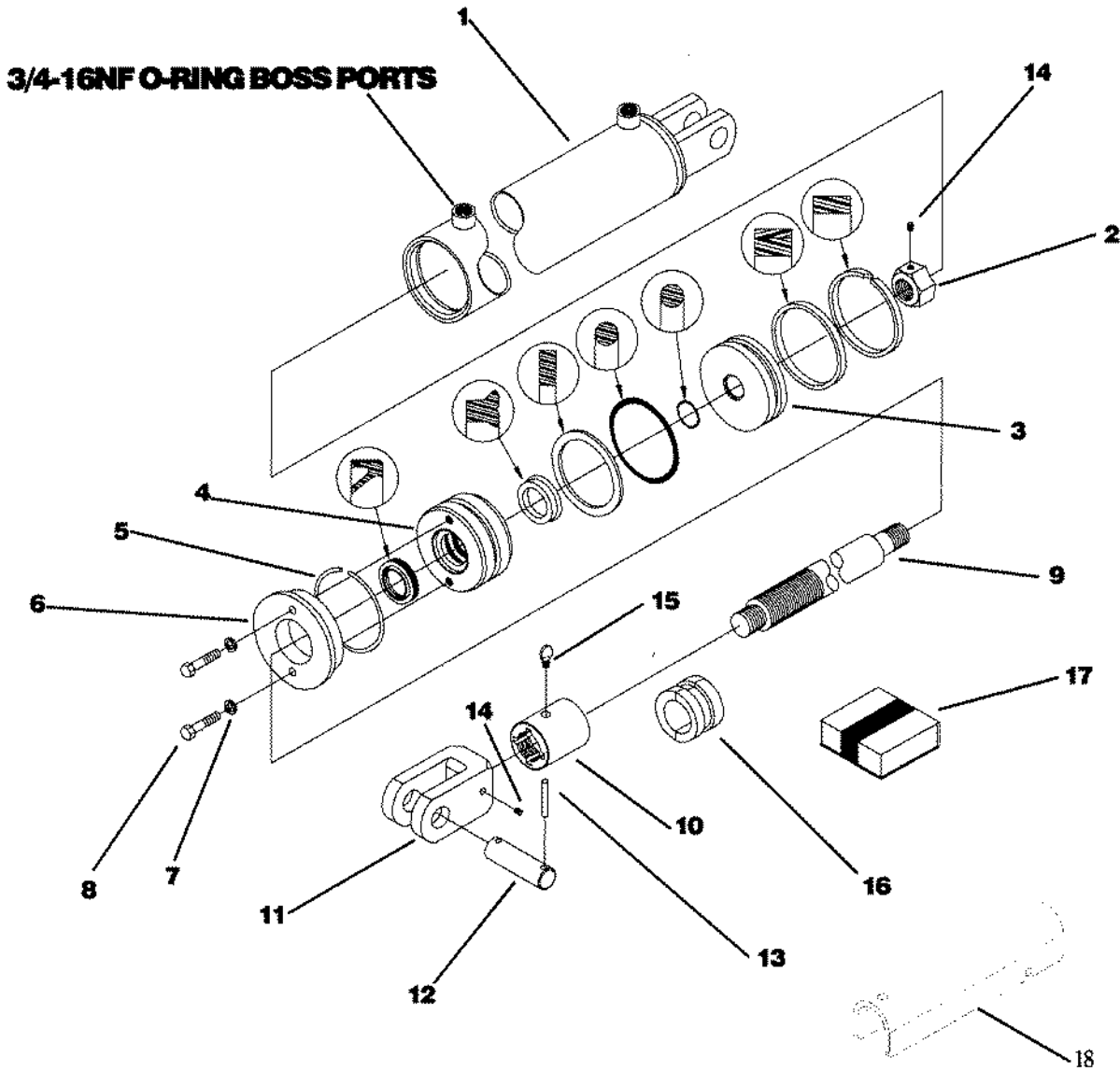
DEPTH CONTROL HYDRAULICS



ITEM	PART NO	DESCRIPTION
1	13234	3/4JICx1/2NPT ADAPTER
2	13267	3/8x72 HOSE (MF)
3	13255	1/2x110 HYD TUBE
4	13269	3/8x84 HOSE (MF)
5	13238	JIC TEE
6	13268	3/8x78 HOSE (FF)
7	13483	3/8x120 HOSE (FF)
8	25602	3/8x65 HOSE (FF)
9	13263	3/8x36 HOSE (MF)
10	67688	4x10.8 TOP BYPASS CYLINDER
11	222356	1/2x104+6 HYD TUBE
12		7FT OUTER WING
	13483	3/8x120 HOSE (FF)
		9'4" OUTER WING
	13483	3/8x120 HOSE (FF)
	13262	3/8x30 HOSE (MF)

ITEM	PART NO	DESCRIPTION
13	67867	4x9.3 TOP BYPASS CYLINDER
14		7FT OUTER WING
	13484	3/8x156 HOSE (FF)
		9'4" OUTER WING
	13484	3/8x156 HOSE (FF)
	13262	3/8x30 HOSE (MF)
15	67683	4x12.6 TOP BYPASS CYLINDER
16	13239	3/4JIC UNION
17	54902	MAIN UP DECAL (NOT SHOWN)
18	54903	MAIN DOWN DECAL (NOT SHOWN)
19	25580	3/4JICx3/4ORB HYD ELBOW

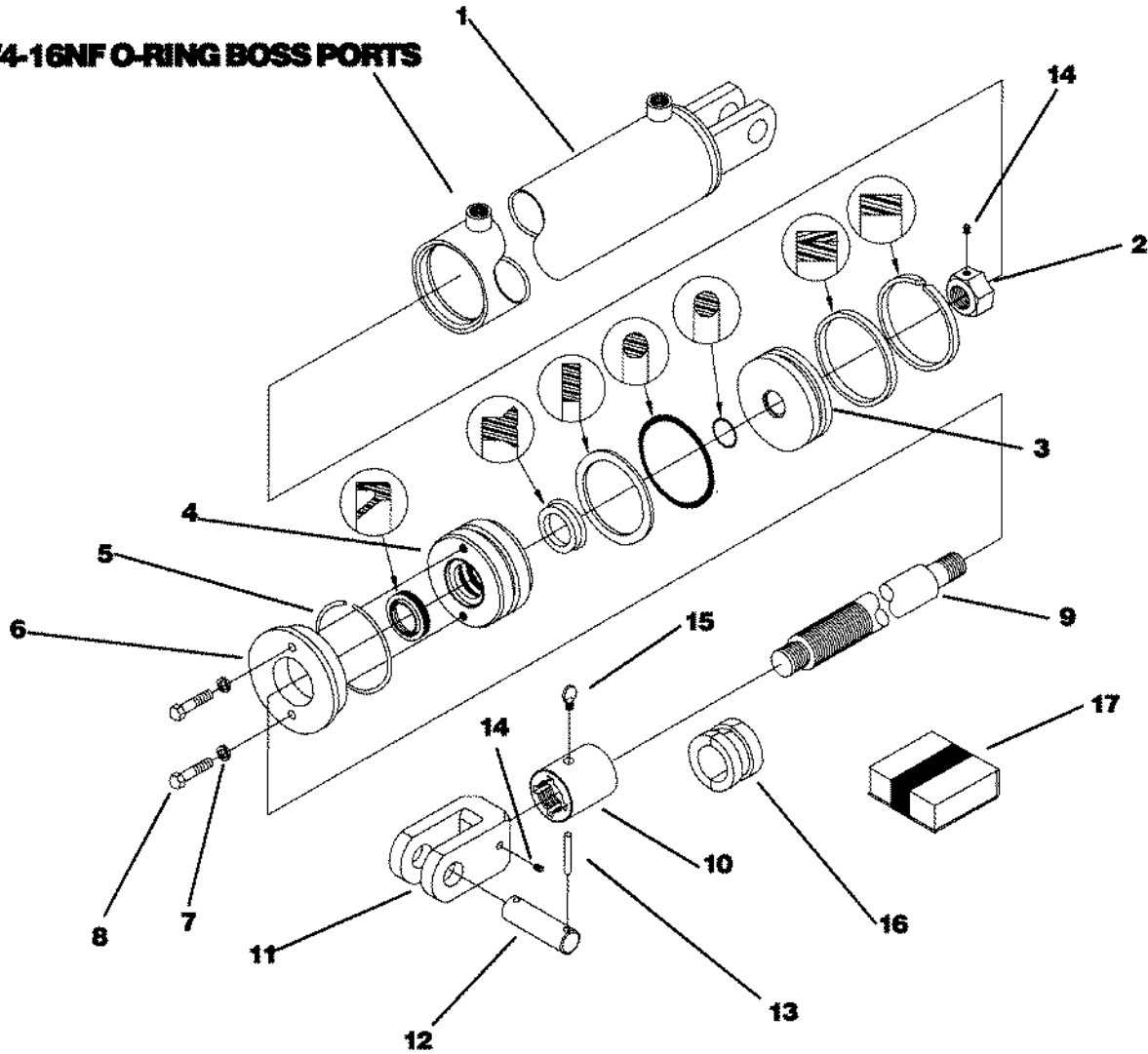
4x12.6 TOP BYPASS CYLINDER



ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	67683	4x12.6 TOP BYPASS CYLINDER	10	55665	1-1/2x2.42 SCREW STOP COLLAR
1	67659	4x12.6 CYLINDER TUBE ASSY TBP	11	67658	ADJ.CYLINDER YOKE - SMALL
2	14824	PISTON LOCK NUT	12	42473	Cylinder Pin (H)
3	67684	4" TOP BYPASS PISTON	13	42484	1/4x2-1/4 SPIROL PIN
4	42576	END GLAND	14	88706	5/16NCx5/16 Set Screw
5	12286	4" CYLINDER SNAP RING	15	88387	3/8NCx3/4 Thumb Screw
6	13851	STOP PLATE 4x8	16	15113	1-1/2 Stop Collar
7	88362	LOCK WASHER 3/8	17	220749	Seal Kit
8	88553	3/8NCx1-1/2 GR5 BOLT	18	220061	1-1/2" Channel Lock 10"
9	68350	4x12.6 TBP CYLINDER ROD		42505	CYLINDER PIN KIT(H) (INCLUDES ITEMS 12, 13)

4x10.8 TOP BYPASS CYLINDER

3/4-16NF O-RING BOSS PORTS

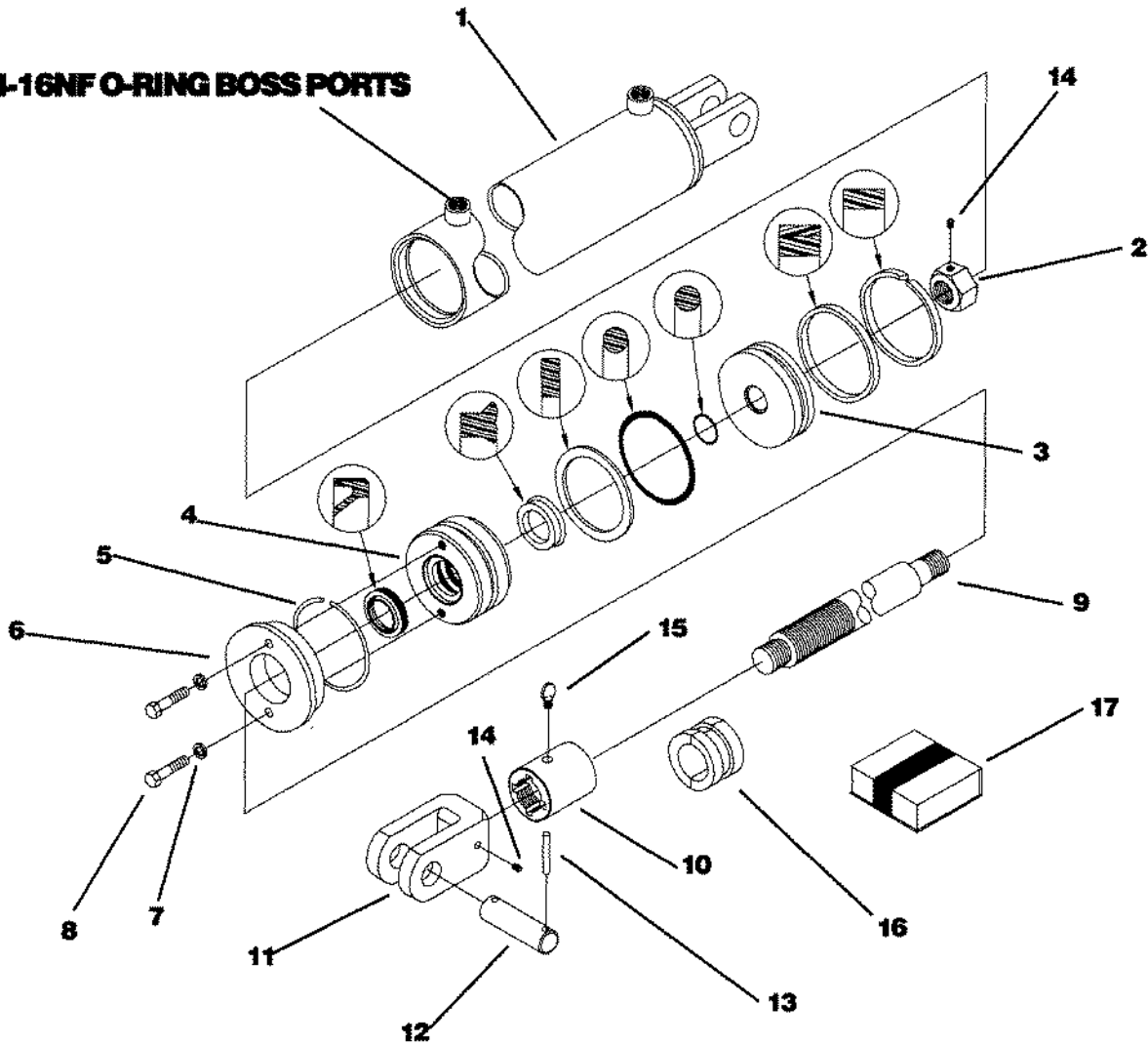


78716

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	67688	4x10.8 TOP BYPASS CYLINDER	10	55665	1-1/2x2.42SCREW STOP COLLAR
1	67686	4x10.8 CYLINDER TUBE ASSY TBP	11	67658	ADJ.CYLINDER YOKE - SMALL
2	14824	PISTON LOCK NUT	12	42473	CYLINDER PIN (H)
3	67684	4" TOP BYPASS PISTON	13	42484	1/4X2-1/4 SPIROL PIN
4	42576	END GLAND	14	88706	5/16NCx5/16 SET SCREW
5	12286	4" CYLINDER SNAP RING	15	88387	3/8NCx3/4 THUMB SCREW
6	13851	STOP PLATE 4x8	16	15113	1-1/2 STOP COLLAR
7	88362	LOCK WASHER 3/8	17	220749	SEAL KIT
8	88553	3/8NCx1-1/2 GR5 BOLT			
9	16225	4x10.8 TBP CYLINDER ROD		42505	CYLINDER PIN KIT(H) (INCLUDES ITEMS 12, 13)

4x9.3 TOP BYPASS CYLINDER

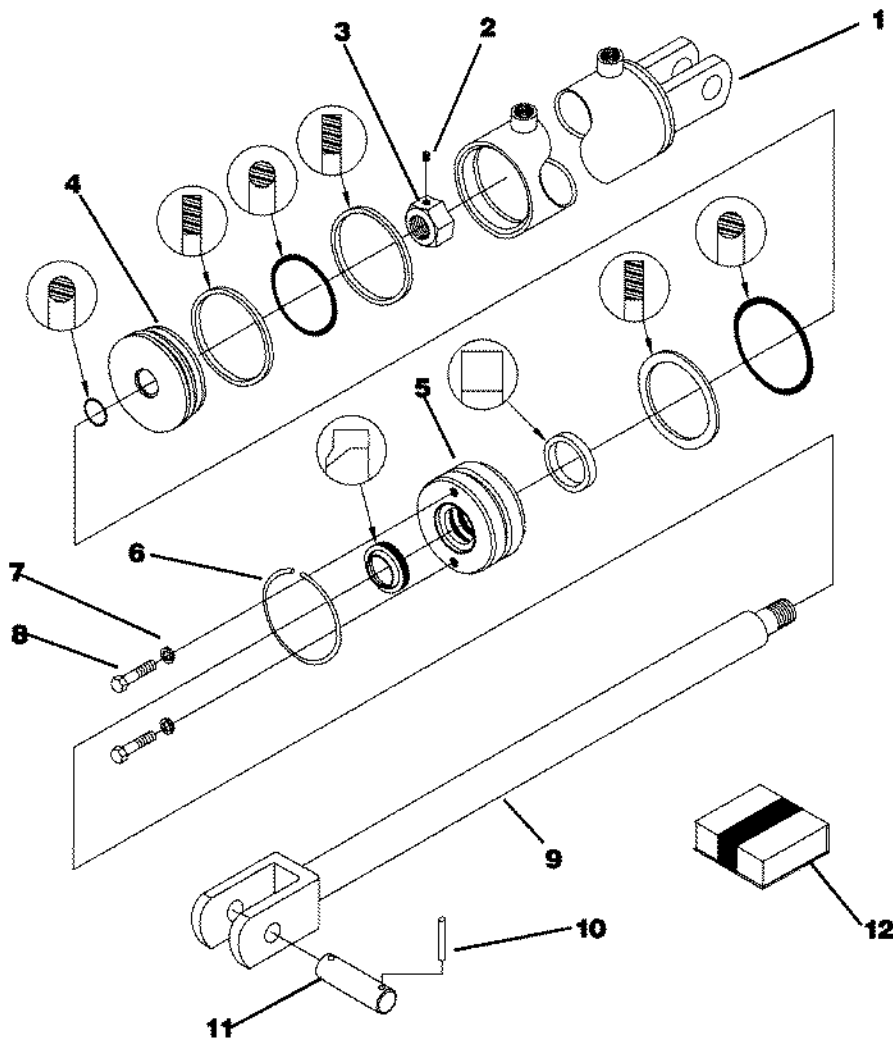
3/4-16NF O-RING BOSS PORTS



78716

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	67687	4x9.3 TOP BYPASS CYLINDER	10	55665	STOP COLLAR SCREW STOP
1	67685	4x9.3 CYLINDER TUBE ASSY TBP	11	67657	CYLINDER YOKE
2	14824	PISTON LOCK NUT	12	42473	CYLINDER PIN (H)
3	67684	PISTON	13	42484	CYLINDER LOCK PIN
4	42576	END GLAND	14	88706	5/16NCx5/16 SET SCREW
5	12286	4" CYLINDER SNAP RING	15	88387	3/8NCx3/4 THUMB SCREW
6	13851	STOP PLATE 4x8	16	15113	1-1/2 STOP COLLAR
7	88362	LOCK WASHER 3/8	17	220906	SEAL KIT
8	88553	3/8NCx1-1/2 GR5 BOLT			
9	16221	4x9.3 CYLINDER ROD		42505	CYLINDER PIN KIT(H)

3x30 HYDRAULIC CYLINDER

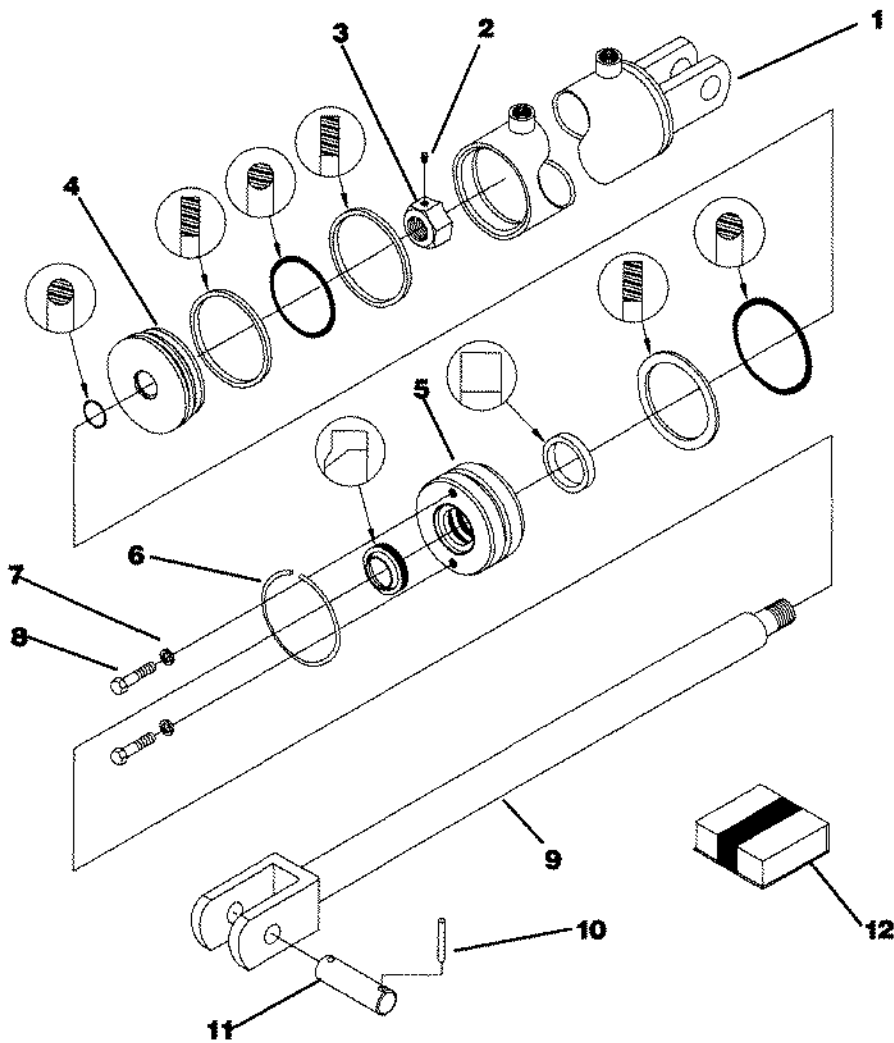


787168

ITEM	PART NO	DESCRIPTION
	51242	3x30 HYDRAULIC CYLINDER
1	55694	3x30 CYLINDER TUBE ASSEMBLY
2	88706	5/16NCx5/16 SET SCREW
3	14824	PISTON LOCK NUT
4	12308	PISTON
5	51206	END GLAND
6	12303	3" CYLINDER SNAP RING

ITEM	PART NO	DESCRIPTION
7	88855	1/4 SAE FLAT WASHER
8	88190	1/4NCx1/2 GR5 BOLT
9	55723	CYLINDER ROD WLDMNT
10	42484	CYLINDER LOCK PIN
11	42473	CYLINDER PIN (H)
12	51210	3" SEAL KIT
	42505	CYLINDER PIN PACKAGE (H) (INCLUDES ITEMS 10 & 11)

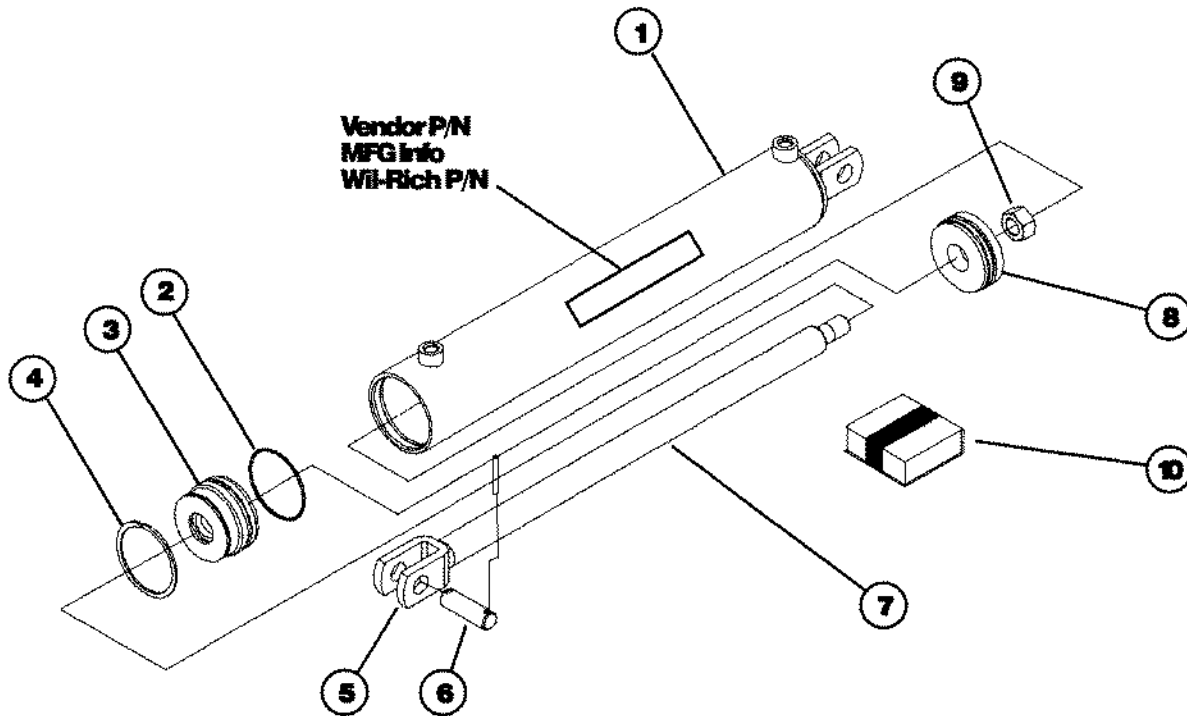
4x30 HYDRAULIC CYLINDER



787168

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	51229	4x30 HYDRAULIC CYLINDER	7	88278	5/16 FLAT WASHER
1	55704	4x30 CYLINDER TUBE ASSEMBLY	8	88566	3/8NCx3/4 GR5 BOLT
2	88706	5/16NCx5/16 SET SCREW	9	55723	CYLINDER ROD ASSEMBLY
3	14824	PISTON LOCK NUT	10	42484	CYLINDER LOCK PIN
4	12282	PISTON	11	42472	CYLINDER PIN
5	42576	End Gland	12	51212	4" SEAL KIT
6	12286	4" CYLINDER SNAP RING		42504	CYLINDER PIN PACKAGE (INCLUDES ITEMS 10, & 11)

WING FOLD CYLINDERS



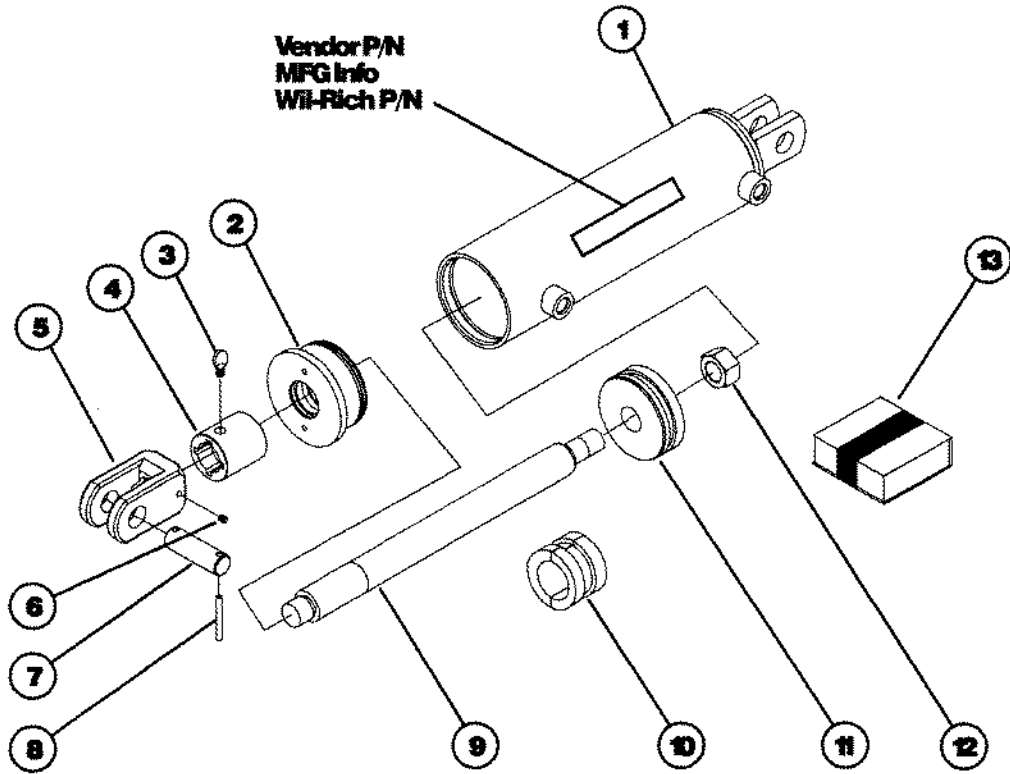
FGS STANDARD CYL. ILL.PLT

COLUMN	WIL-RICH PART NO.	SIZE	ROD DIA.	PIN DIA.
A	51242F	3x30	1-1/2"	1"
B	51235F	3.5x24	1-1/2"	1"
C	51226F	4x24	1-1/2"	1"
D	51229F	4x30	1-1/2"	1"
E	12062F	5x24	2"	1"
F	20966F	5x30	2"	1"
G	51241F	3x24	1-1/2"	1"

ITEM	DESCRIPTION	REQ.	A	B	C	D	E	F
1	Barrel	1	233709	233812	233818	233716	233817	233723
2	Retainer Ring	1	233711	233814	233718	233718	233724	233724
3	Ext. Snap Ring	1	233712	233816	233720	233720	233727	233727
4	Snap Ring Head	1	233713	233815	233719	233719	233726	233726
5	Rod	1	233710	233813	233813	233717	233819	233725
6	Clevis Pin	2	42472	42472	42472	42472	42472	42472
7	Roll Pin 1/4x2-1/4	2	42484	42484	42484	42484	42484	42484
8	Piston	1	233714	233811	233715	233715	233722	233722
9	Lock Nut	1	233700	233700	233700	233700	233721	233721
10	Stop Collars	1	233729	233810	233730	233730	233731	233731
11	Seal kit	1	15113	15113	15113	15113	15116	15116

**THOUGH IDENTIFIED, ALL PARTS MAY NOT BE SERVICEABLE.
CHECK WITH WIL-RICH LLC SERVICE PARTS FOR AVAILABILITY.**

MAIN LIFT TOP BYPASS CYLINDER

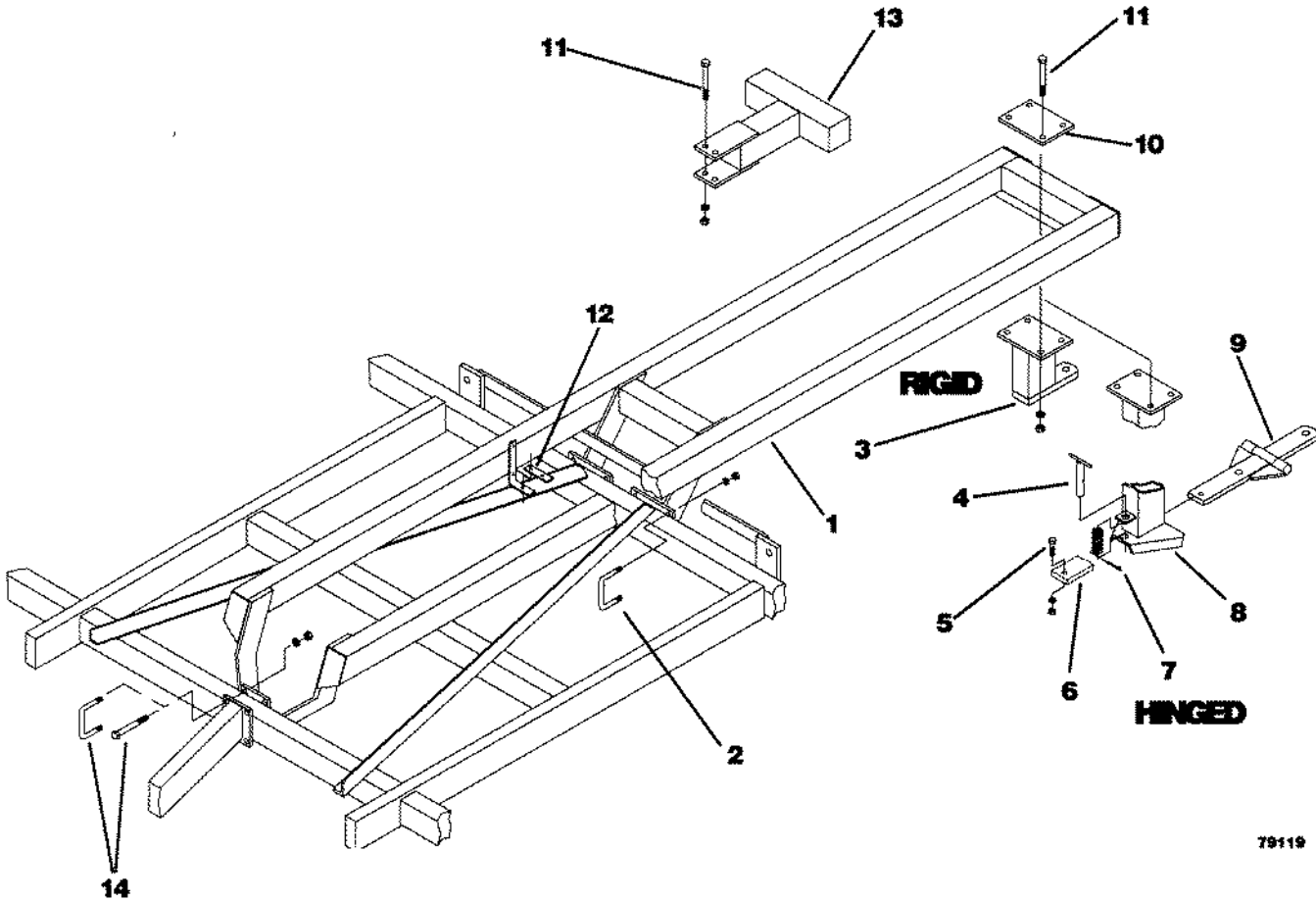


FGS STANDARD CYL ILL.PLT

COLUMN	WIL-RICH PART NO.	SIZE	ROD DIA.	PIN DIA.
A	67687F	4x9.3	1-1/2"	1"
B	67688F	4x10.8	1-1/2"	1"
C	67683F	4x12.6	1-1/2"	1"

ITEM	DESCRIPTION	REQ.	A	B	C
1	Barrel	1	233702	233705	233707
2	Internal Head	1	233704	233704	233704
3	Thumb Screw	1	88387	88387	88387
4	Screw Collar	1	55665	55665	55665
5	Rod End Clevis	1	67657	67657	67657
6	Set Screw	1	88706	88706	88706
7	HDLS Pin 1x2-3/8	2	42473	42473	42473
8	Roll Pin 1/4x3.12	4	42484	42484	42484
9	Cylinder Rod	1	233703	233706	233708
10	Stop Collars	1	15113	15113	15113
11	Piston	1	233701	233701	233701
12	Rod Nut	1	233700	233700	233700
13	Seal Kit	1	233728	233728	233728

HD AUXILIARY HITCH

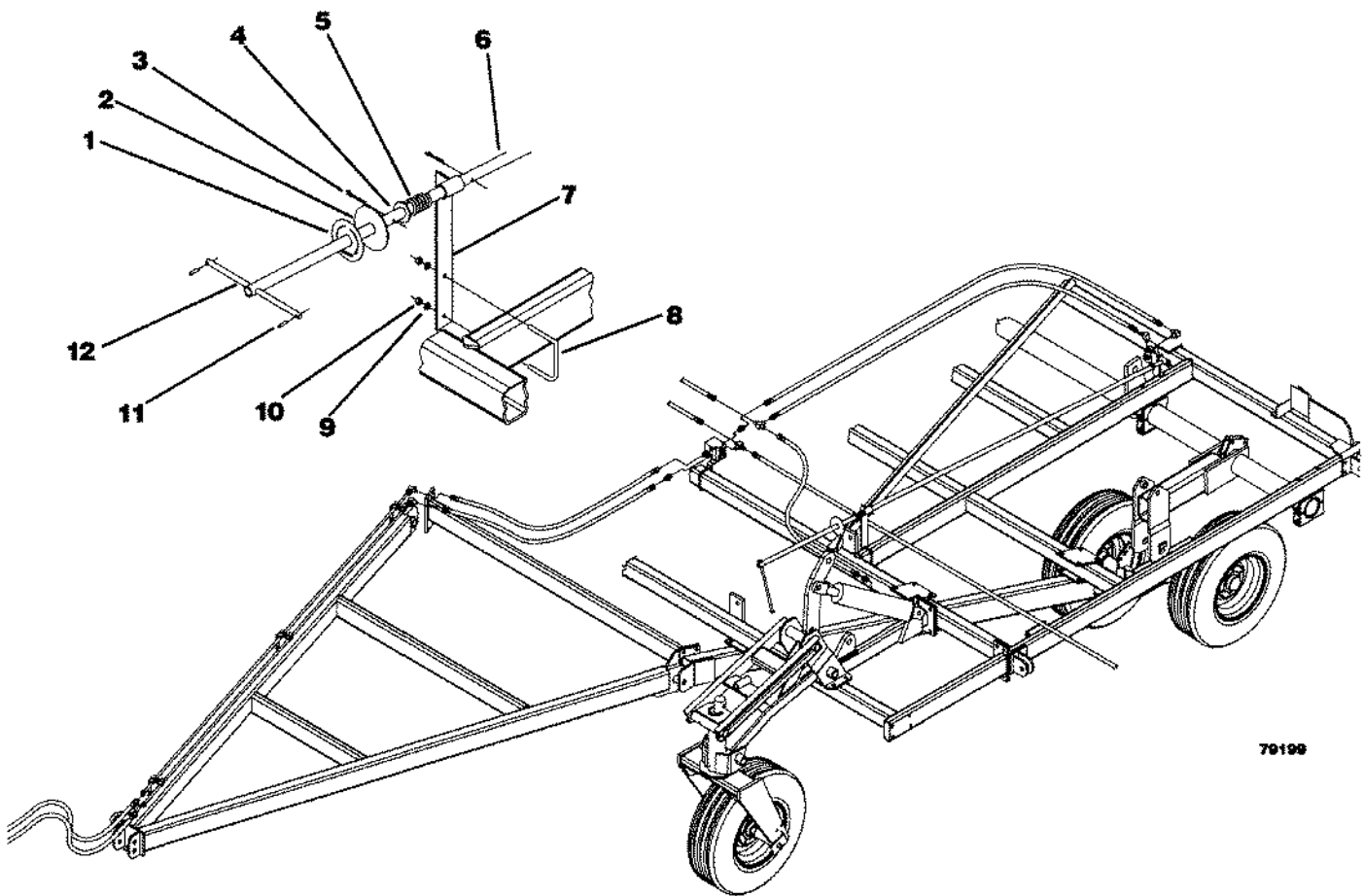


79119

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
	69455	REAR HITCH W/HINGED TONGUE (INCLUDES ITEMS 1,2, 4-11)	6	15940	SPRING
	69456	REAR HITCH W/RIGID TONGUE (INCLUDES ITEMS 1,2,3, 10 & 11)	7	88101	1/4x2-1/2 COTTER PIN
1	69442	HD IMPLEMENT HITCH	8	69454	HINGED HITCH MOUNT
2	88453	5/8NCx4x4-1/2 U-BOLT	9	18443	HINGED TONGUE ASSEMBLY
3	69453	RIGID TONGUE MOUNT	10	69447	PLATE
4	58284	PIN ASSEMBLY	11	88293	3/4NCx6 GR5 BOLT
5	88294	5/8NCx2 GR5 BOLT	12	69549	CLAMP STRAP
			13	222493	HD HITCH EXTENSION
			14	88305	3/4NCx5 GR5 BOLT (EXCEL)
				88453	5/8NCx4x4-1/2 U-BOLT (QUAD X)

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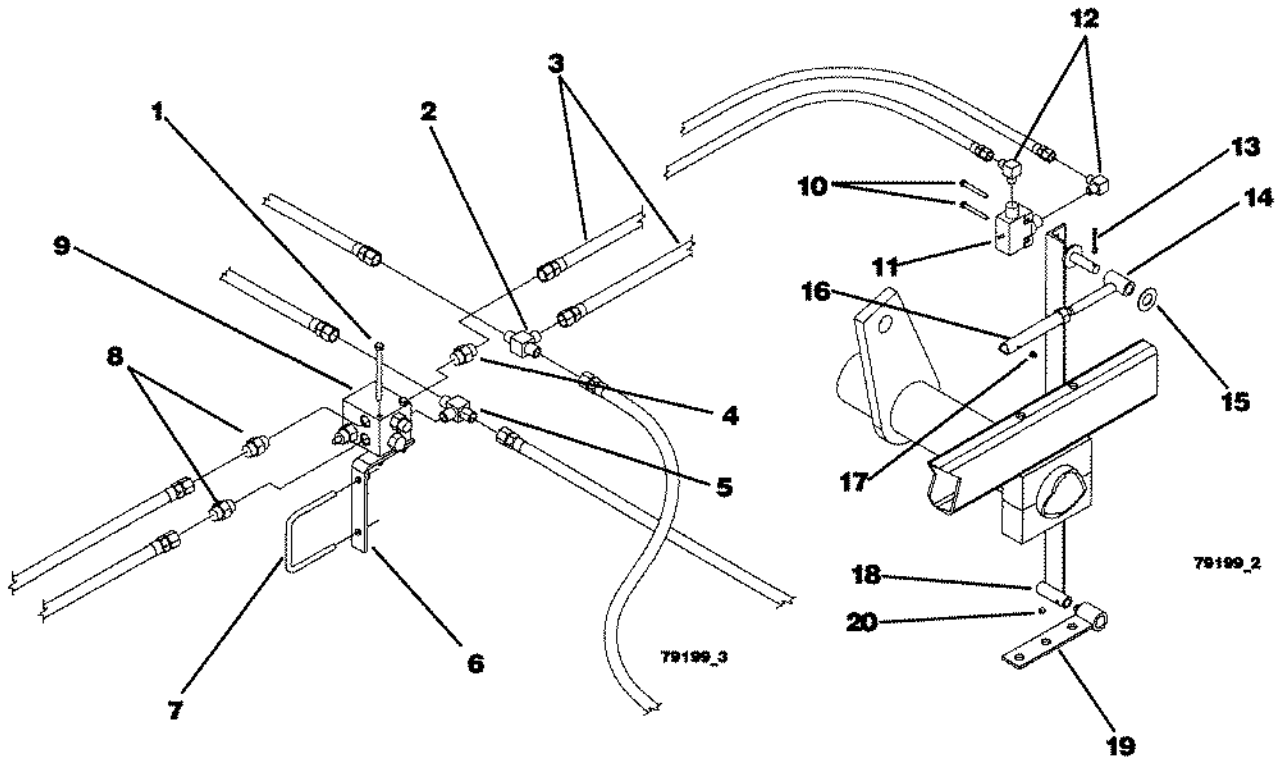
QUADX SINGLE POINT DEPTH CONTROL



70199

ITEM	PART NO	DESCRIPTION
1	69077	DEPTH ADJUSTMENT DECAL
2	69323	DECAL DONUT
3	88133	3/16DIAx2 COTTER PIN
4	88738	1" FLAT WASHER
5	69302	COMPRESSION SPRING
6	69301	ADJUSTMENT TUBE
7	69317	FRONT SUPPORT
8	88514	3/8NCx4x3-3/4 U-BOLT
9	88362	3/8 LOCK WASHER
10	88103	3/8NC NUT
11	88649	1/4x1 ROLL PIN
12	69308	ROD

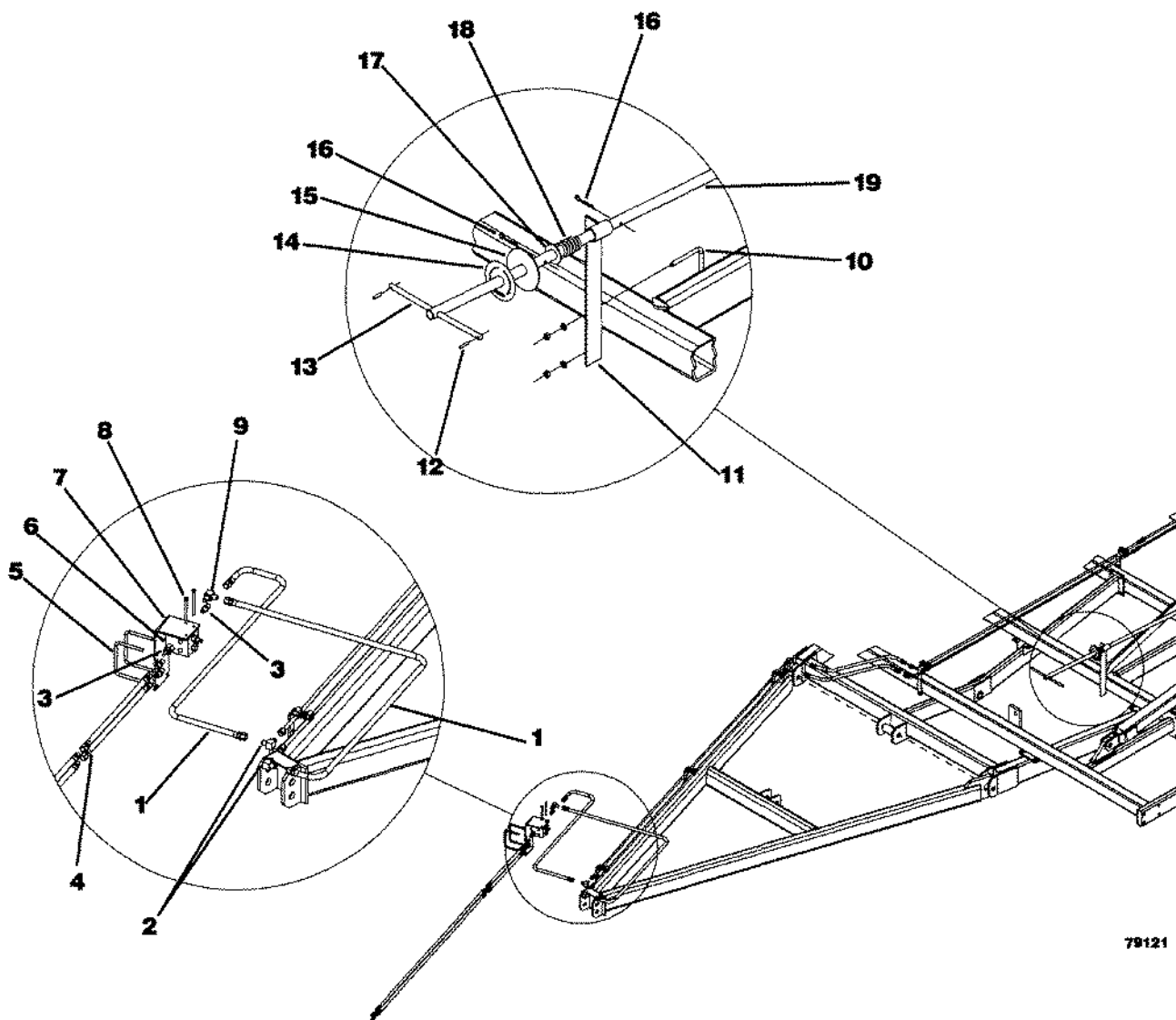
QUADX SINGLE POINT DEPTH CONTROL (CONT)



ITEM	PART NO	DESCRIPTION
1	88811	5/16X4 GR5 BOLT
2	13238	3/4JIC TEE
3	67634	3/8x132 HOSE (FF)
4	24024	3/4JICx3/4ORB ADAPTER
5	56534	3/4JICx3/4ORBx3/4JIC TEE
6	222254	QUADX REBOUND VALVE MOUNT
7	89069	3/8NCx5x4 U-BOLT
8	24024	3/4JICx3/4ORB ADAPTER
9	66889	REBOUND VALVE
10	89004	5/16NCx2-1/2 BOLT

ITEM	PART NO	DESCRIPTION
11	51975	DCV VALVE
12	13236	3/4JICx1/2NPT ELBOW
13	88133	3/16x2 COTTER PIN
14	69318	THREADED ADJUSTMENT ARM
15	88131	3/4 FLAT WASHER
16	69301	ADJUSTMENT TUBE
17	88550	1/4NF GREASE FITTING
18	69316	ARM
19	69319	ARM WELDMENT
20	88709	3/8NCx3/8 SET SCREW

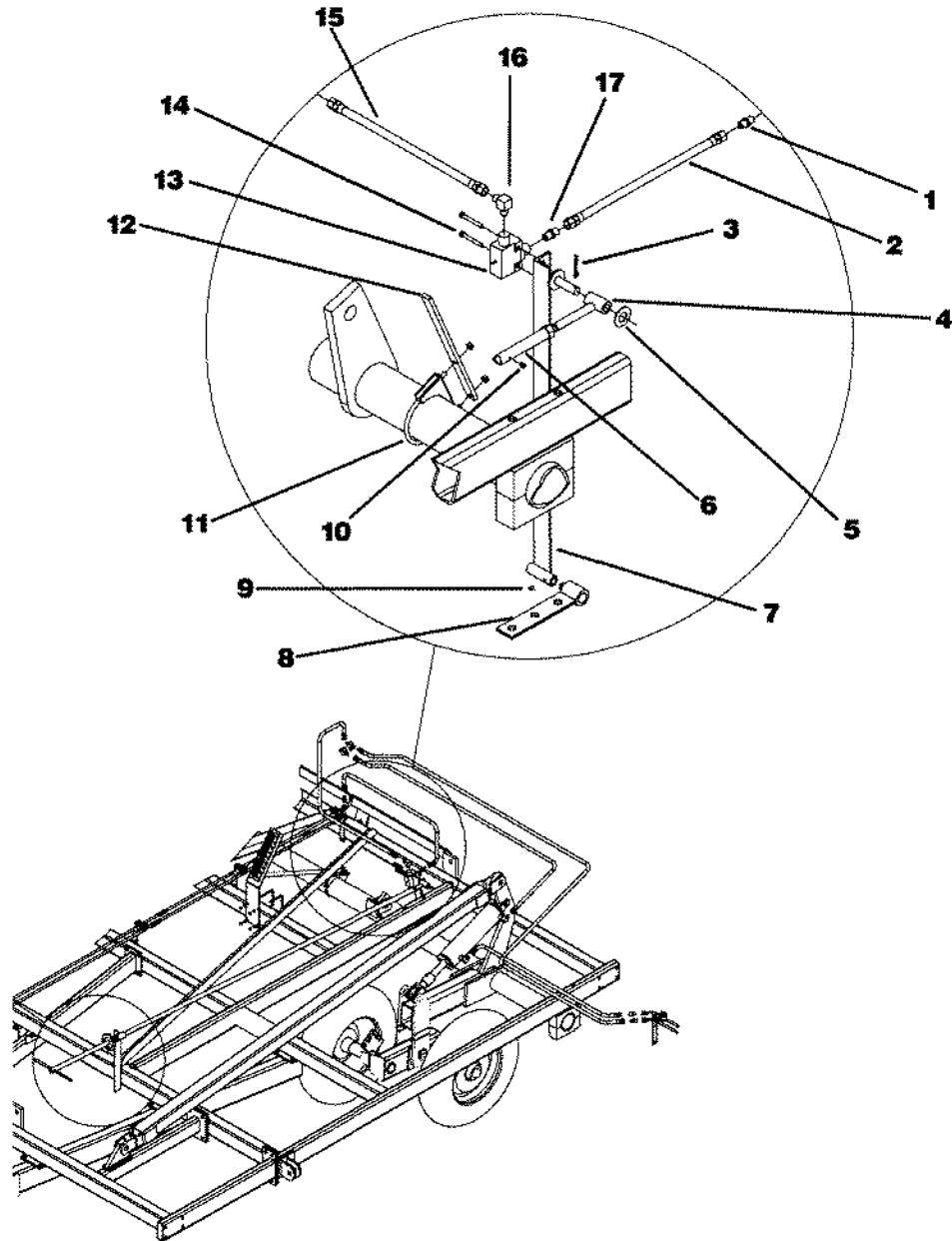
EXCEL SINGLE POINT DEPTH CONTROL (FRONT)



79121

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	13423	3/8x24 HOSE (FF)	10	88514	3/8NCx4x3-3/4 U-BOLT
2	40215	3/4JIC ELBOW (MM)	11	69317	FRONT SUPPORT
3	24024	3/4JICx3/4ORB ADAPTER	12	88649	1/4DIAx1 ROLL PIN
4	14850	3/8x18 HOSE (FF)	13	69308	ROD
5	89069	3/8NCx5x4 U-BOLT	14	69077	DEPTH ADJUSTMENT DECAL
6	66889	REBOUND VALVE	15	69323	DECAL MOUNT
7	66953	BRACKET	16	88133	3/16x2 COTTER PIN
8	88811	5/16NCx4 BOLT	17	88738	1 FLAT WASHER
9	25580	3/4JICx3/4ORB ELBOW	18	69302	COMPRESSION SPRING
			19	69301	ADJUSTMENT TUBE

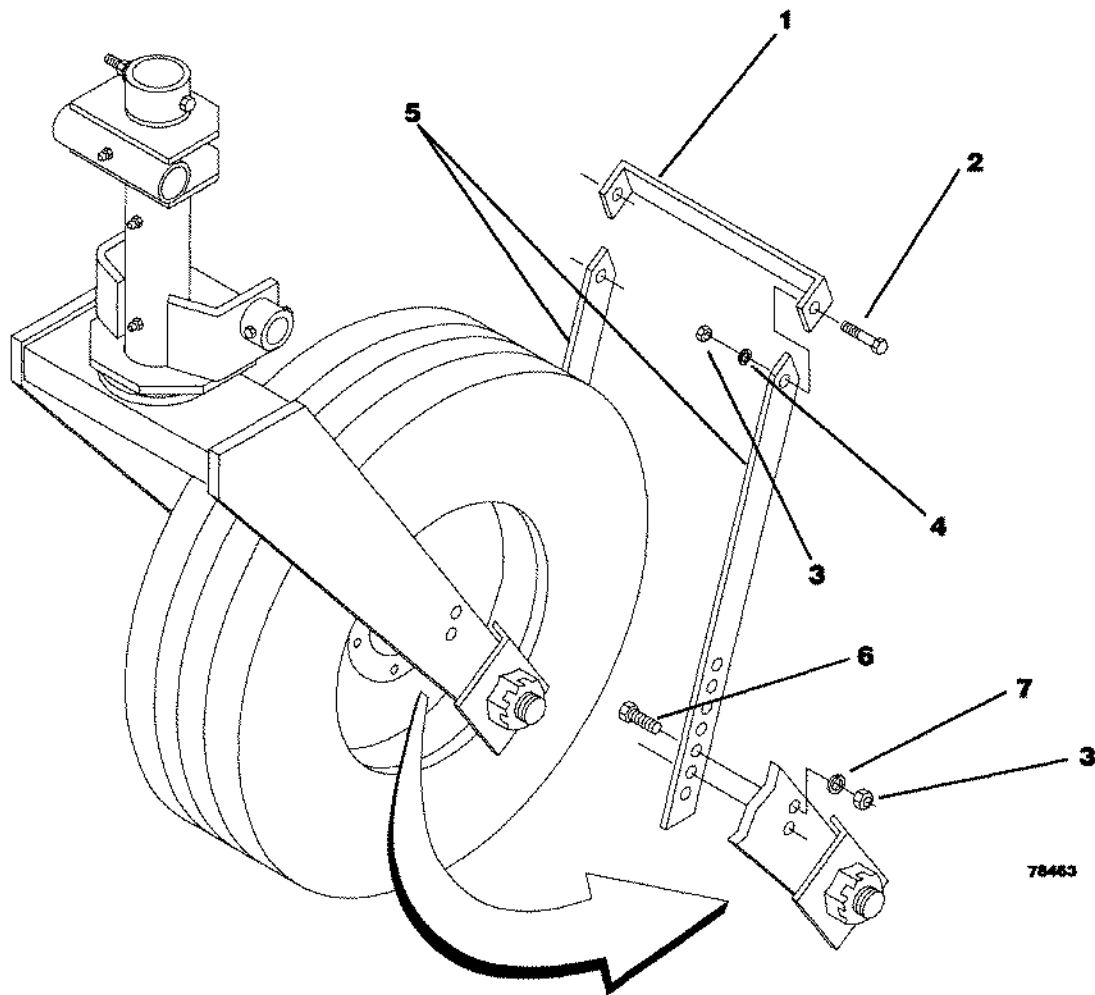
EXCEL SINGLE POINT DEPTH CONTROL (BACK)



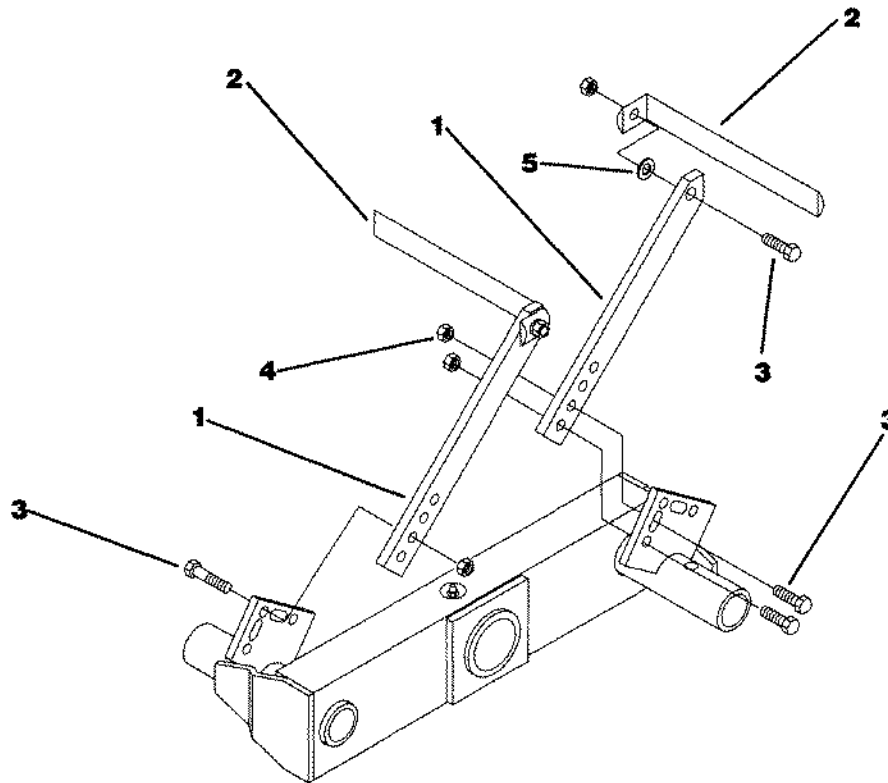
78121

ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	13239	3/4JIC HOSE UNION	9	89129	3/8NCx3/8 SET SCREW
2	14644	3/8x36 HOSE (FF)(11' EXC)	10	88550	1/4NF GREASE FITTING
	56539	3/8x50 HOSE (FF)(13' & 16' EXC)	11	69314	4-1/2 EXHAUST CLAMP
3	88133	3/16DIAx2 COTTER PIN	12	69322	DEPTH ARM
4	69318	THREADED ADJUSTMENT ROD	13	51975	DCV ASSEMBLY
5	88131	3/4 FLAT WASHER	14	89004	5/16NCx2-1/2 GR5 BOLT
6	69301	ADJUSTMENT TUBE	15	14644	3/8x36 HOSE (FF) 11' EXC
7	69316	ARM		56539	3/8x50 HOSE (FF) 13' & 16' EXC
8	69319	ARM MOUNT WITH BEARING	16	13236	3/4JICx1/2NPT ELBOW
			17	13234	3/4JICx1/2NPT ADAPTER

GAUGE WHEEL SCRAPER



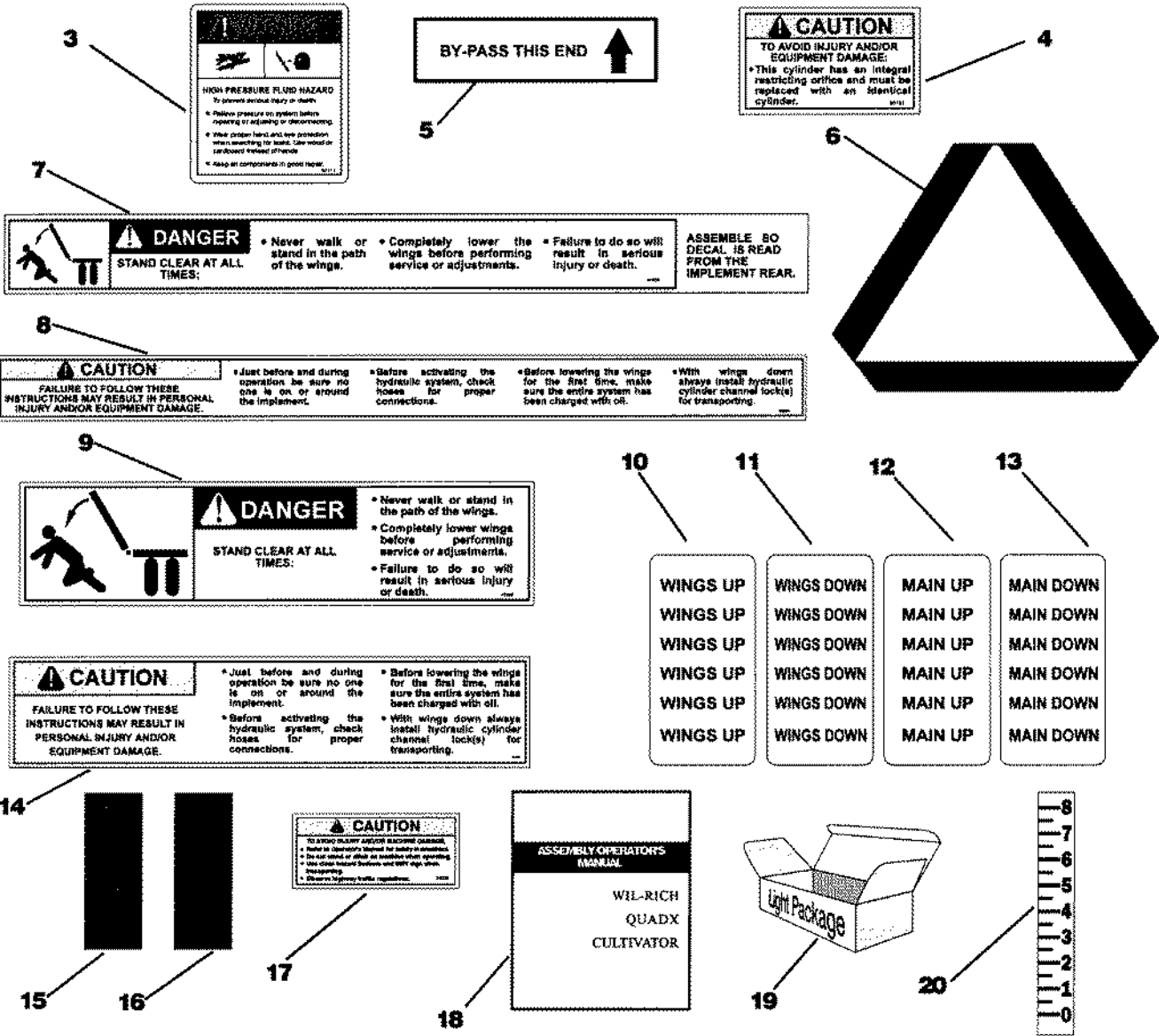
ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	58800	SCRAPER BLADE - 18"	5	40915	SCRAPER BAR
	55773	SCRAPER BLADE - 16"	6	88517	1/2NCX1-3/4 GR5 BOLT
2	88475	1/2X1-1/2 GR5 BOLT	7	88303	1/2 LOCK WASHER
3	88104	1/2NC NUT			
4	88303	1/2 LOCK WASHER			



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ITEM	PART NO	DESCRIPTION
	61851	TIRE SCRAPER KIT (PR)
1	61835	SCRAPER BAR
2	61837	5/8 DIAx13-1/2 SCRAPER BAR
3	88294	5/8NCx2 GR5 BOLT
4	88845	5/8NC LOCK NUT
5	88277	5/8 FLAT WASHER

NOTE: 1 Kit does two (2) tires.



ITEM	PART NO	DESCRIPTION
1	65342	WIL-RICH DECAL
1A	69378	EXCEL DECAL KIT
2	222339	QUADX DECAL
3	60711	HIGH PRESSURE FLUID HAZARD
4	20121	INTEGRAL RESTRICTOR DECAL
5	20339	BYPASS DECAL
6	41345	SMV KIT
7	41508	WING LOCK DANGER DECAL
8	53334	CAUTION DECAL
9	49163	WING LOCK DANGER DECAL
10	54900	WINGS UP DECAL

ITEM	PART NO	DESCRIPTION
11	54901	WINGS DOWN DECAL
12	54902	MAIN UP DECAL
13	54903	MAIN DOWN DECAL
14	49165	CAUTION DECAL
15	22372	AMBER REFLECTOR
16	22371	RED REFLECTOR
17	23325	CAUTION DECAL - READ
18	74231	QX ASSY/OPERATOR'S MANUAL
	74223	EXCEL ASSY/OPERATORS MANUAL
19	64594	CLEARANCE LIGHT PACKAGE
20	69304	DEPTH GAUGE DECAL