



X-Fold Pulverizer

**Models: X108, X108-1, XC108, XC108-1,
XH108, XH108-1, XD108, XD108-1, XO108,
and XO108-1**

Widths: 19', 21', 23', 25', and 27'
Parts Manual



LANDOLL CORPORATION

1900 North Street
Marysville, Kansas 66508
(785) 562-5381

800-428-5655 ~ WWW.LANDOLL.COM

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Illustrated Parts List

Instructions for Ordering Parts

**** Repair parts must be ordered through an authorized dealer ****

DEALER INSTRUCTIONS FOR ORDERING PARTS FROM LANDOLL PARTS DISTRIBUTION CENTER

PHONE #: 800-423-4320 OR 785-562-5381

FAX #: 888-527-3909

ORDER ONLINE: comnet.landoll.com

IDENTIFICATION PLATE

See Figure 1-1 for the Identification Plate, which lists the model and serial number of the equipment. It is located on the right side of the X-Fold Pulverizer.

SERIAL NUMBER NOMENCLATURE

The serial number for the Brillion X-Fold Pulverizer is located on the identification plate. The following information will help decode the Landoll serial number.

PXB1200101 = xxmysssss

xx	= model series (i.e. "PX" for all Pulverizers)
m	= month of year of manufacture (ex. "B" means February. The letter I is not used.)
yy	= last digit of the year manufactured (ex. "12" means 2012)
sssss	= Sequential number used to track warranty and service information.

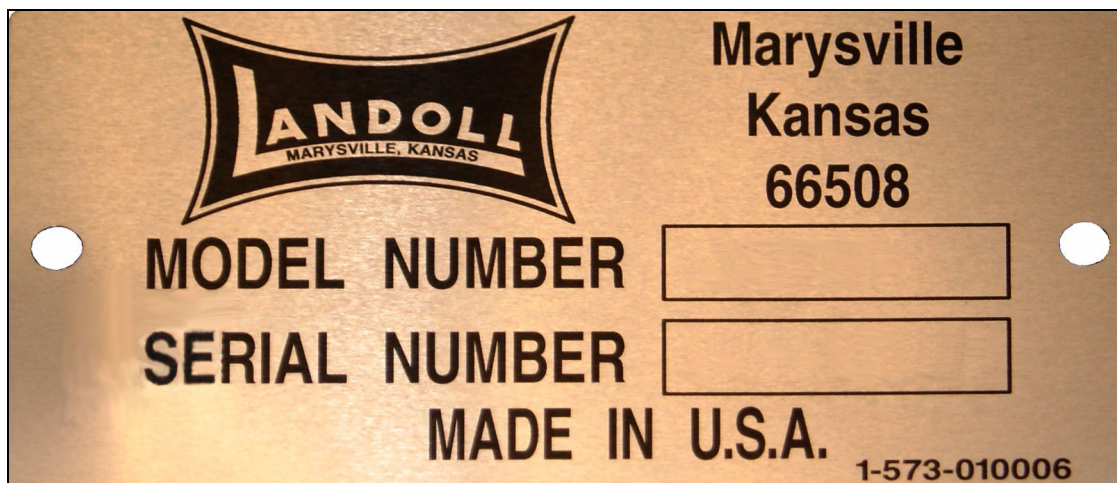


Figure 1-1: Identification Plate

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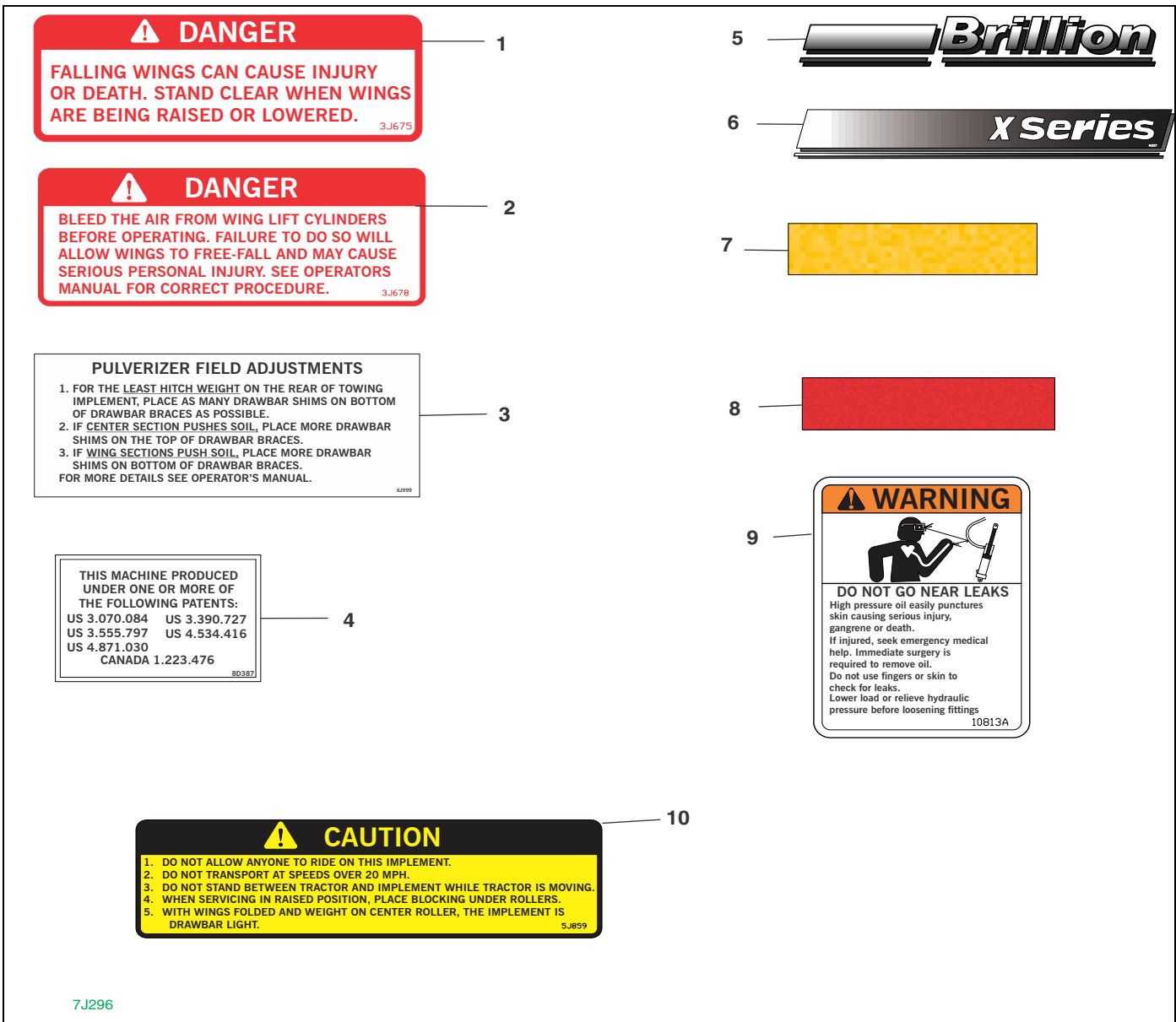


Figure 1-2: Decals - Non-Optimizer

Decals - Non-Optimizer

ITEM	PART NUMBER	DESCRIPTION	QTY
	7J296	DECAL PKG-X FOLD PULVERIZER	
1	3J675	'STAND CLEAR' DECAL	8
2	3J678	'DANGER' DECAL	1
3	6J999	'ADJUSTMENTS' DECAL	2
4	8D387	'PATENT' DECAL	1
5	4K036	DECAL-BRILLION (2 3/4 X 20)	7
6	4K156	DECAL - X PULVERIZER	2
7	2J431	DECAL - AMBER REFLECTIVE	6
8	2J430	DECAL - RED REFLECTIVE	2
9	3K706	DECAL - WARNING HYDRAULIC LEAKS	1
10	5J859	'WARNING' DECAL	1

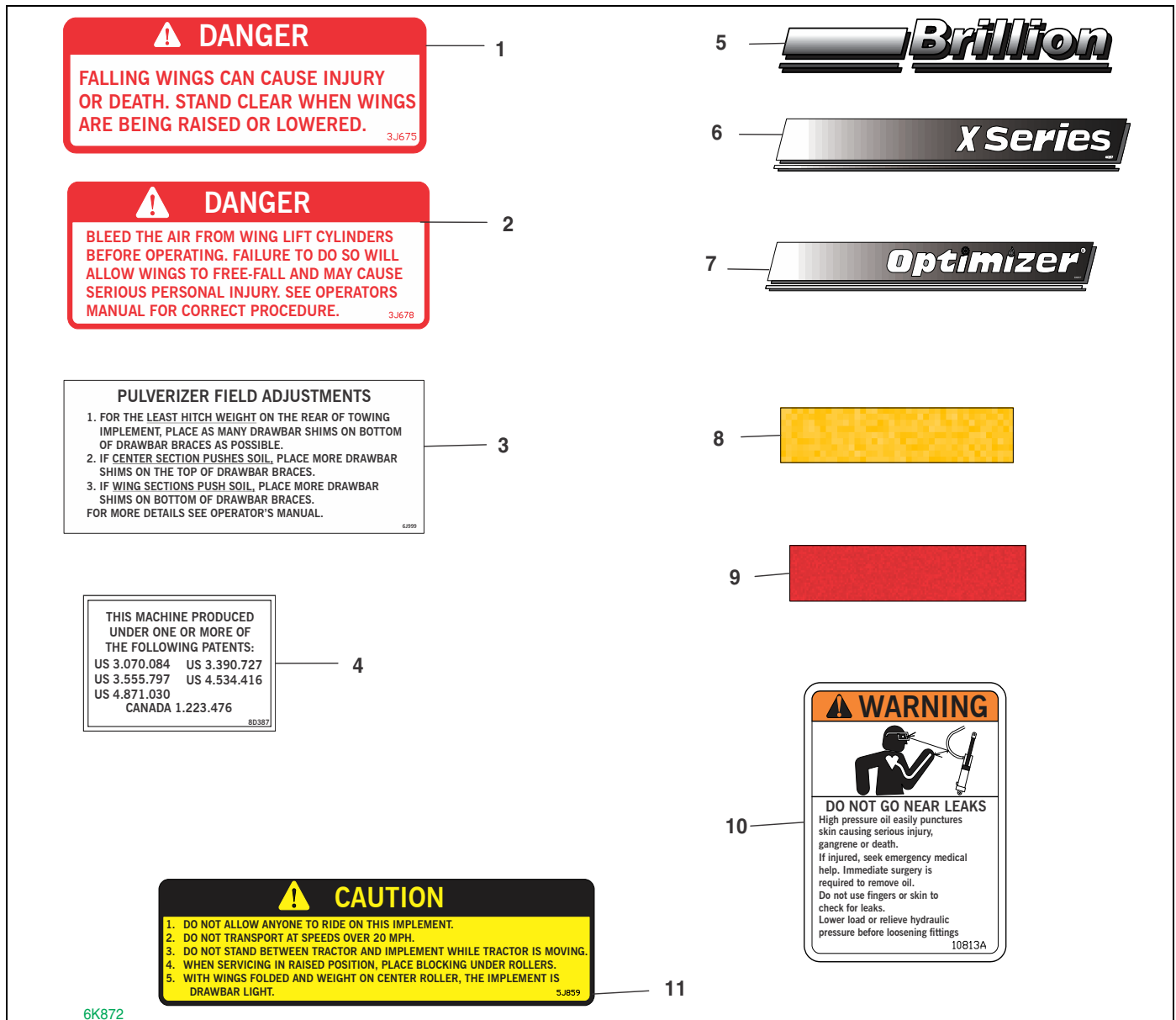
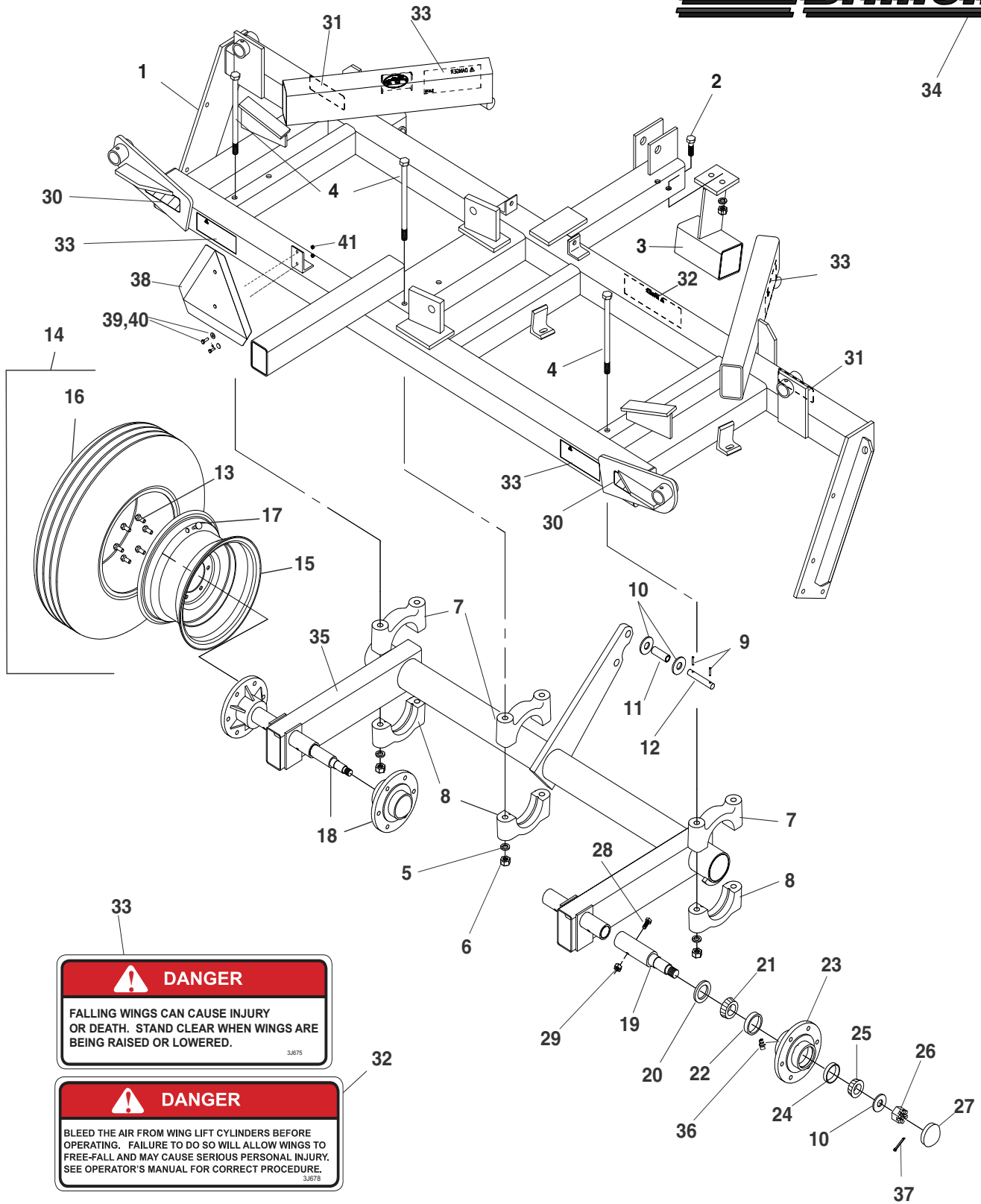


Figure 1-3: Decals - Optimizer

Decals - Optimizer

ITEM	PART NUMBER	DESCRIPTION	QTY
	6K872	DECAL PKG - XO PULVERIZERS	
1	3J675	'STAND CLEAR' DECAL	8
2	3J678	'DANGER' DECAL	1
3	6J999	'ADJUSTMENTS' DECAL	2
4	8D387	'PATENT' DECAL	1
5	4K036	DECAL-BRILLION (2 3/4 X 20)	7
6	4K156	DECAL - X PULVERIZER	2
7	6K657	DECAL - OPTIMIZER PULVERIZER	2
8	2J431	DECAL - AMBER REFLECTIVE	6
9	2J430	DECAL - RED REFLECTIVE	2
10	3K706	DECAL - WARNING HYDRAULIC LEAKS	1
11	5J859	'WARNING' DECAL	1
12	4K162	INST DECALS X PULVERIZERS (NOT SHOWN)	1

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DANGER
 FALLING WINGS CAN CAUSE INJURY OR DEATH. STAND CLEAR WHEN WINGS ARE BEING RAISED OR LOWERED.
 3.8675

DANGER
 BLEED THE AIR FROM WING LIFT CYLINDERS BEFORE OPERATING. FAILURE TO DO SO WILL ALLOW WINGS TO FREE-FALL AND MAY CAUSE SERIOUS PERSONAL INJURY. SEE OPERATOR'S MANUAL FOR CORRECT PROCEDURE.
 3.8678

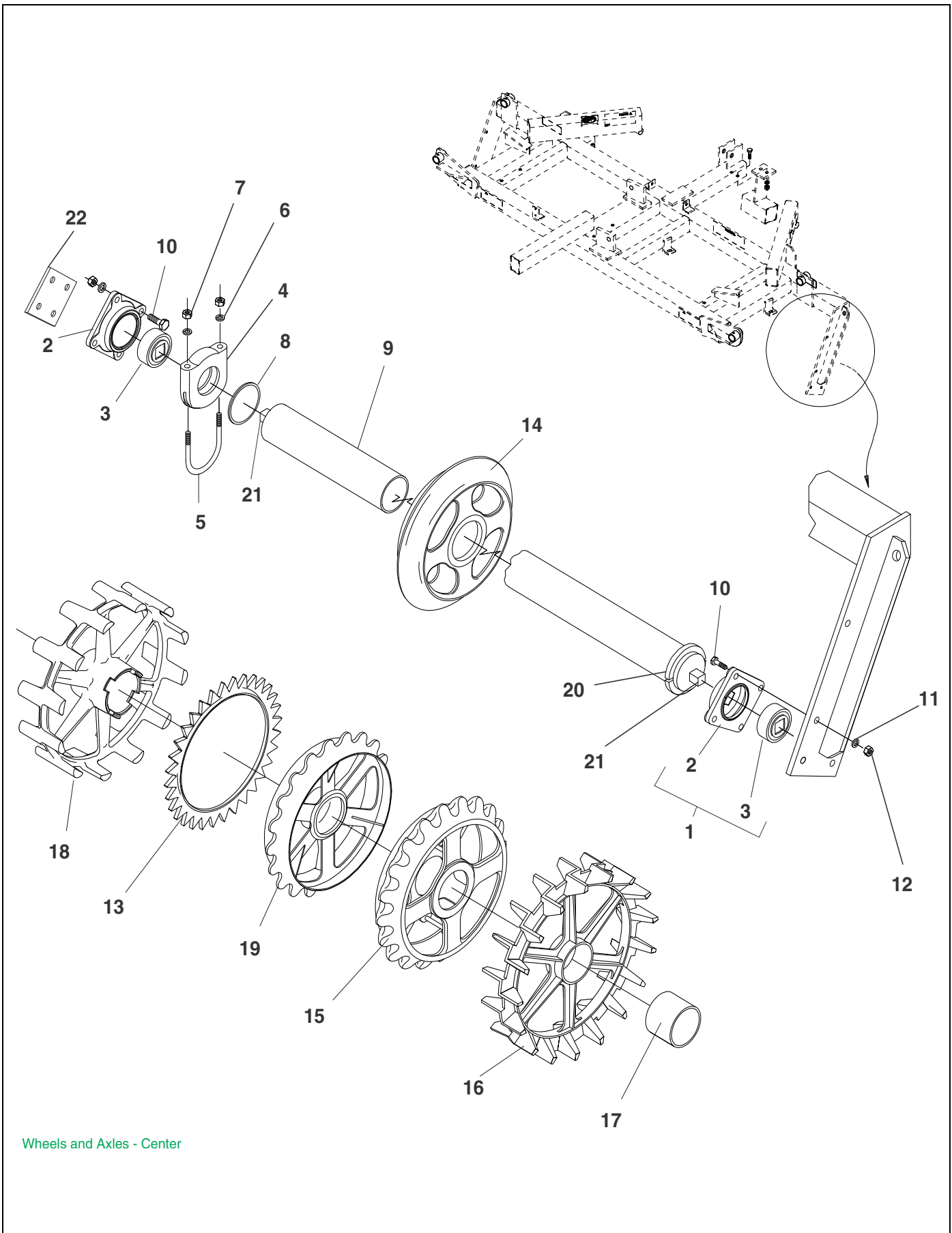
Center Frame and Transport Axle

Figure 1-4: Center Frame and Transport Axle

Center Frame and Transport Axle

ITEM	PART NUMBER	DESCRIPTION	QTY
1	6J745	9 FT CENTER FRAME	1
2	2D474	**CAPSCREW (5/8-11 NC X 1 3/4" GR5)	2
3	6J784	STOP (DRAWBAR)	1
4	8D400	**MACHINE BOLT (5/8-11 NC X 10 1/2" GR5)	6
5	1B166	**WASHER 5/8 SLW	8
6	1C392	NUT HEX 5/8-11 ZP	8
7	6D309	AXLE TOP BEARING ASSEMBLY	3
8	6D274	AXLE BEARING (7002558)	3
9	1C174	ROLL PIN, 3/16 X 2	4
10	1C871	**1" SAE FLAT WASHER	4
11	6J831	TUBE	2
12	6J817	PIN (1" DIA. X 7 7/8")	1
13	5C100	WHEEL BOLT 1/2-20X1 GR5 ZP	24
14	6K919	WHEEL 8J790/NO TUBE/6D312 (INCLUDES ITEMS 15-17)	4
15	6D312	WHEEL - 15 X 8LB - 6 BOLT	4
16	8J790	TIRE - 9.5 X 15 - 6PLY	4
17	8J792	VALVE STEM - TUBELESS	4
18	7J478	HUB & SPINDLE ASSEM (INCLUDES ITEMS 10, 19-26, AND 36)	4
19	7J477	SPINDLE	1
20	6D338	SEAL	1
21	5C480	** CONE, BEARING	1
22	5C479	** CUP, BEARING	1
23	6D336	WHEEL HUB - 6 BOLT (7002537)	1
24	5C914	BEARING CUP, TIMKEN	1
25	5C913	BEARING CONE, TIMKEN	1
26	6D284	**NUT (SLOTTED 1"-14 NF HEX)	1
27	6D337	HUB CAP	1
28	1-654-010051-13	SCREW, HX CP, 3/8-16UNCX3,GR5	4
29	1-512-010005-05	NUT, HEX, SLFLKG GRB 3/8-16	4
30	2J430	DECAL - RED REFLECTIVE	2
31	2J431	DECAL - AMBER REFLECTIVE	2
32	3J678	'DANGER' DECAL	1
33	3J675	'STAND CLEAR' DECAL	4
34	4K036	DECAL-BRILLION (2 3/4 X 20)	1
35	6J764	TRANSPORT AXLE W/O HUBS (AFTER 2/1/2012)	1
36	9D923	GREASE FITTING (1/8 NPT) (PRIOR TO 11/15/11)	1
36	1-298-010001-1	ZERK FITTING 1/4 SAE (AFTER 11/15/11)	1
37	1C788	**COTTER PIN	1
38	2P151	SMV W/BACKET	1
39	6D037	HHCS 5/16-18X1 GR5 ZP	2
40	3C127	WASHER FL 5/16 STD ZP	2
41	6C748	NUT NY-LOCK 5/16-18 ZP	2

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Wheels and Axles - Center

Figure 1-5: Wheels and Axles - Center

Wheels and Axles - Center

ITEM	PART NUMBER	DESCRIPTION	QTY
1	2J417	BEARING ASSEMBLY (INCLUDES ITEMS 2 AND 3)	2
2	2J515	FLANGED HOUSING (7002365)	2
3	2J516	**BEARING	2
4	0A087	CLAMP (7000037)	1
5	1C290	**U-BOLT .386 DIA. X 14-1/2 L.	1
6	1C314	**LOCKWASHER	2
7	1C179	**NUT	2
8	2J526	**SPACER RING	6
9	7J018	PIPE AXLE ASSY - 113 1/8" (INCLUDES ITEMS 20 AND 21)	1
10	5D051	**CAPSCREW (1/2-13NC X 1 3/4" LONG)	8
11	1C109	WASHER LOCK, 1/2" ZP	8
12	1C390	NUT, HEX 1/2-13 ZP	8
13	0A033	SPROCKET (7000026) (OPTIONAL) (USE WITH 0A046)	26
13	4K775	SPROCKET (7005873) (OPTIONAL) (USE WITH 3J619 AND 6J707)	26
14	0A046	18" SMOOTH WHEEL (7000027) (4 5/8" DIA. BORE)	25
14	0A086	18" END WHEEL (7000036) (4 5/8" DIA. BORE)	2
15	3J619	20" NOTCHED WHEEL (7003341) (GRAY IRON)	25
15	3J620	20" NOTCHED END WHEEL 7003342 (GRAY IRON)	2
15	6J707	WHEEL (7001221) *OBS* (20" NOTCHED, DUCTILE) (4 5/8" DIA. BORE)	25
15	6J708	END WHEEL (7001222) 20" (NOTCHED DUCTILE) (4 5/8" DIA. BORE)	2
16	1D938	20" CROWFOOT WHEEL (7000260) (GRAY IRON)	16
16	6K196	DUCTILE CROWFOOT WHEEL 7006090 (4 9/16" DIA. BORE)	16
17	3K735	SPACER - 3 11/16"	17
18	6K353	OPTIMIZER WHEEL (7006288) 4 1/ (4 5/8" DIA. BORE)	16
18	6K354	OPTIMIZER END WHEEL (7006289) (4 5/8" DIA. BORE)	2
19	9J808	20" DUCTILE WHEEL (7004644) (4 9/16" DIA. BORE)	27
20	2J438	RING (C)(DW)	1
21	9C129	STUB SHAFT MOUNTING	2
22	9J304	PLATE, SPACER (1/4")	AR

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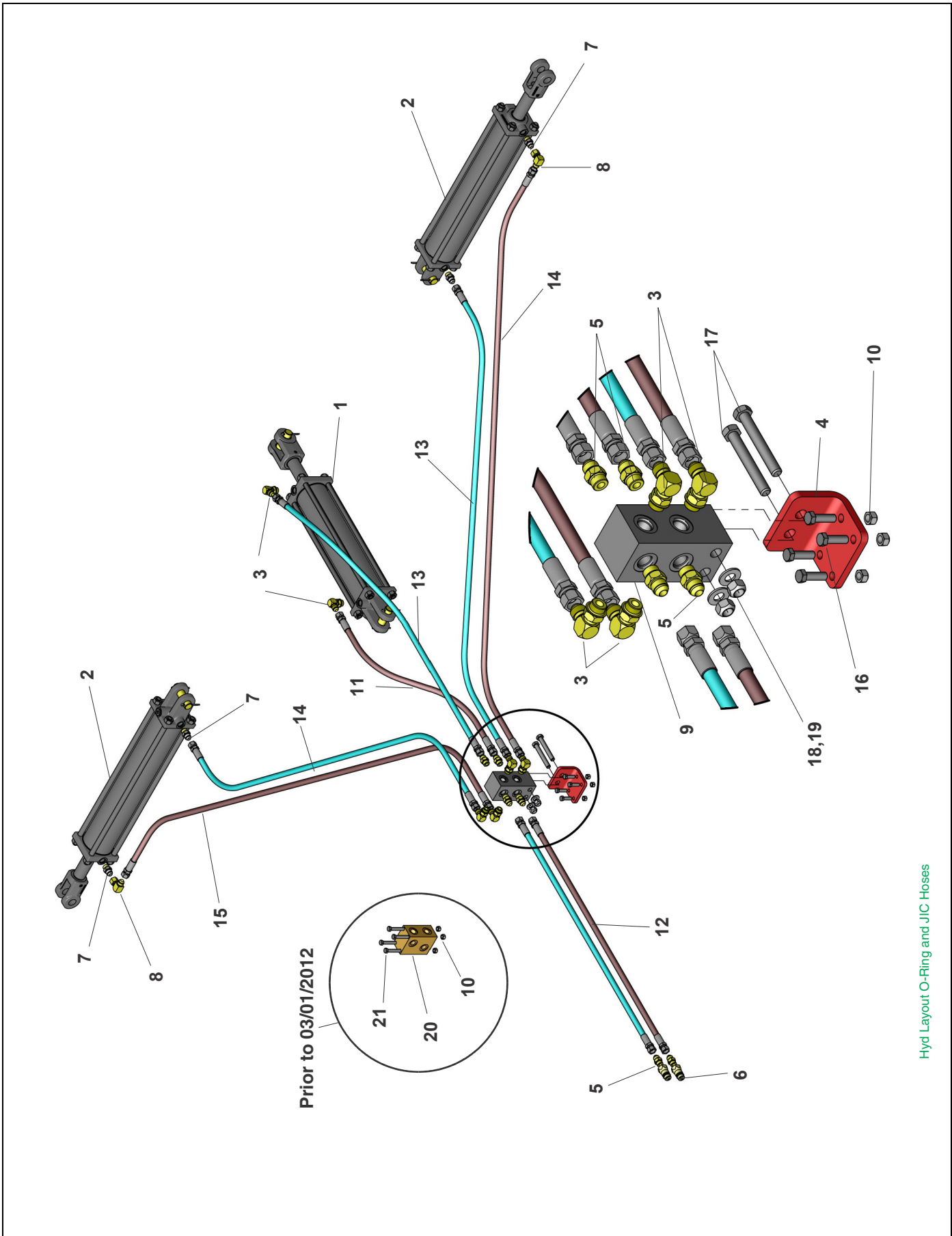
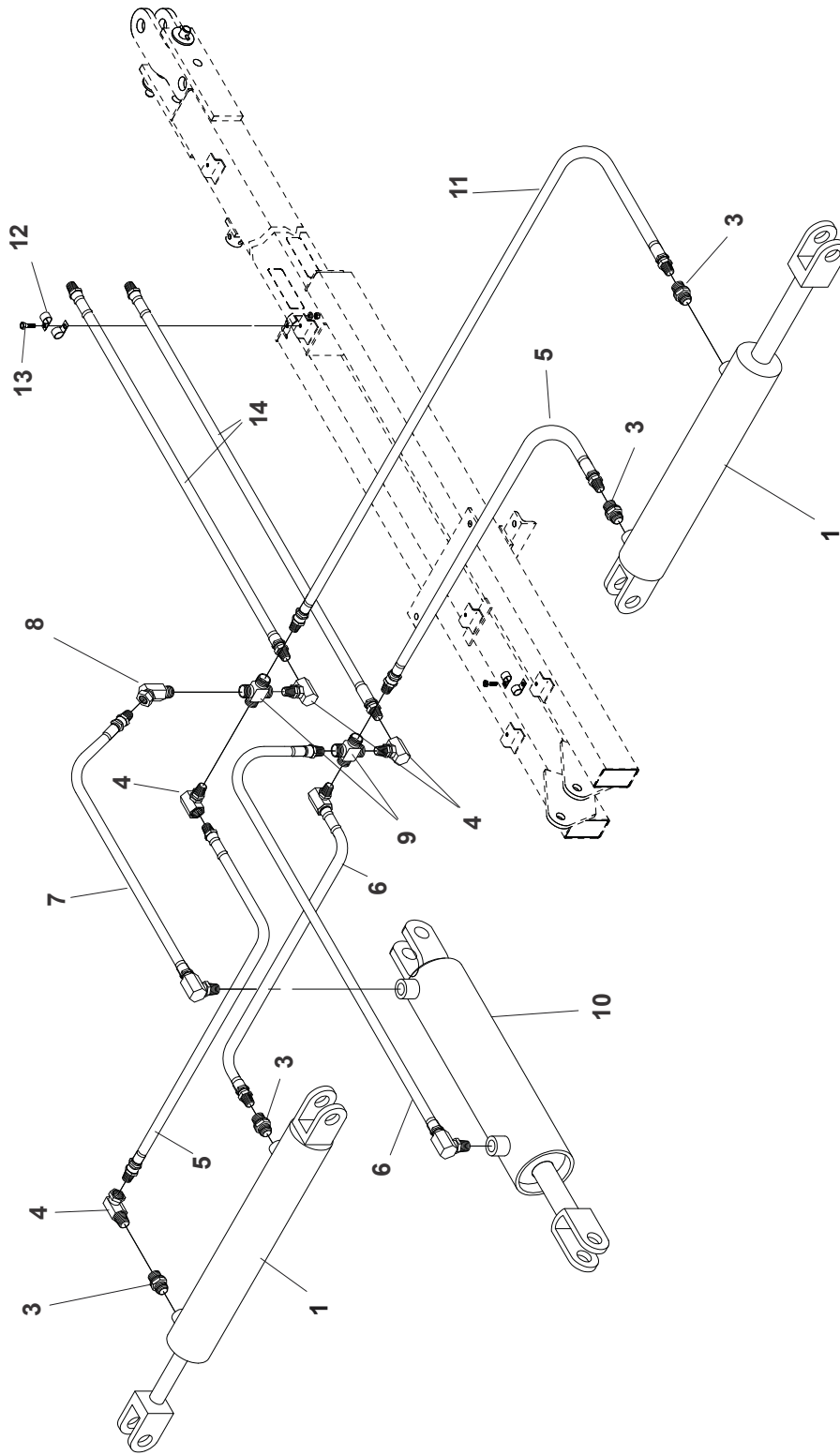


Figure 1-6: Hydraulic Layout, O-Ring Ports and JIC Hoses - After 11/15/2003

Hydraulic Layout, O-Ring Ports and JIC Hoses - After 11/15/2003

ITEM	PART NUMBER	DESCRIPTION	QTY
1	9D137	HYD CYLINDER 3 X 16 (AFTER 1/15/2008) (SEE PAGE 1-32)	1
2	6J812	HYD CYLINDER - 2-1/2 X 20 (AFTER 1/15/2008) (SEE PAGE 1-36)	2
2	6J811	HYD CYLINDER - 3-1/2 X 20 (AFTER 1/15/2008) (SEE PAGE 1-34)	2
3	4K603	90 DEGREE ADAPTOR (ELBOW, 08MJ X 08MOR X 90°)	6
4	168387	BRACKET, MANIFOLD MNT	1
5	4K602	STRAIGHT ADAPTER (08MJ X 08MOR)	6
6	4K912	MALE TRACTOR TIP (COUPLING, MALE TIP X 08FOR)	2
7	4K607	RESTRICTOR (08MJ X 08MOR X .078)	4
8	4K608	90 DEGREE ADAPTOR (08MJ X 08FJS X 90°)	2
9	2-474-010022	MANIFOLD HYDR ASSY, 8 HOSE (AFTER 3/01/2012)	1
10	5C954	NUT LOCK 3/8-16 GRB ZP	4
11	4K881	HYDRAULIC HOSE - 3/8 X 29" (3/4-16 SWIVEL FEMALE JIC 37°)	1
12	5K596	HYDRAULIC HOSE - 3/8 X 174 (3/4-16 SWIVEL FEMALE JIC 37°)	2
13	4K883	HYDRAULIC HOSE - 3/8 X 53" (3/4-16 SWIVEL FEMALE JIC 37°)	1
14	8K783	HYDRAULIC HOSE ASSY (3/8 X 72", 3/4-16 SWIVEL FEMALE JIC 37°)	2
15	4K617	HYDRAULIC HOSE - 3/8 X 75" (3/4-16 SWIVEL FEMALE JIC 37°)	1
16	1-654-010051-06	SCREW, HEX CAP 3/8-16UNCX1-1/4	4
17	1-654-010055-12	SCREW, CP, HX .50-13UNCX3.75 GR5	2
18	1-861-010032-14	WASHER, FLAT 1/2" N ZP/CD	2
19	1-512-010005-09	NUT, HEX, SLFLKG, 1/2-13 GRB	2
20	4K806	MANIFOLD, STEEL (PRIOR TO 3/01/2012)	1
21	8C909	**CAPSCREW (3/8-16 X 5, GR5 ZP) (PRIOR TO 3/01/2012)	4

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Hydraulic Layout, NPT Hoses

Figure 1-7: Hydraulic Layout, NPT Hoses - Prior to 11/15/2003

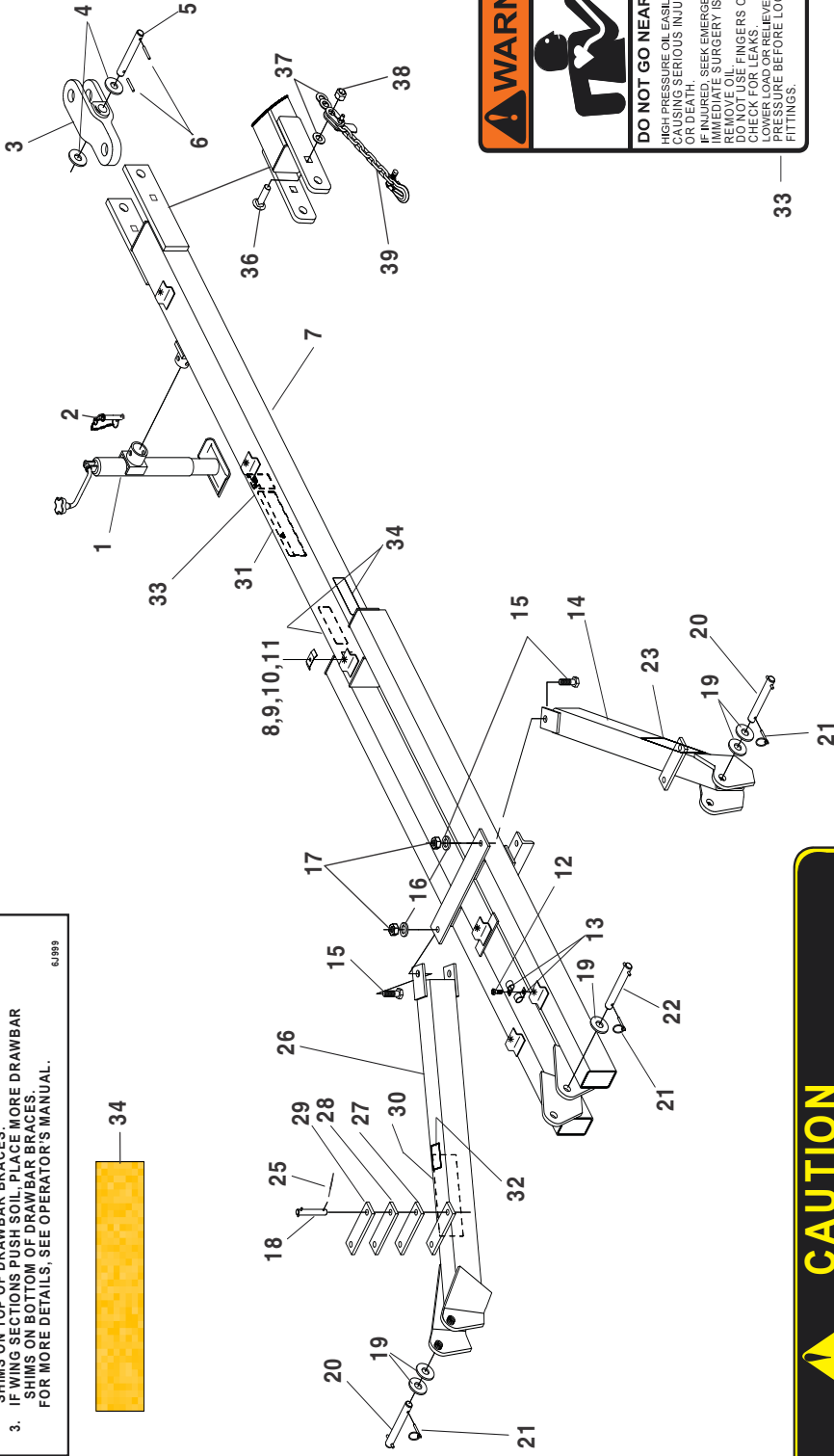
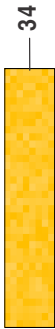
Hydraulic Layout, NPT Hoses - Prior to 11/15/2003

ITEM	PART NUMBER	DESCRIPTION	QTY
1	6J812	HYD CYLINDER - 2 1/2 X 20 (2 OF ITEM 2 PER CYLINDER MUST ALSO BE ORDERED) (SEE PAGE 1-36)	2
1	6J811	HYD CYLINDER - 3 1/2 X 20 (2 OF ITEM 2 PER CYLINDER MUST ALSO BE ORDERED) (SEE PAGE 1-34)	2
2	2218-8-8S	1/2-14 PIPE TO 3/4-16 O-RING (NOT SHOWN) (ADAPTOR)	REF
3	6D716	FLOW RESTRICTOR	4
4	1J131	90 DEGREE SWIVEL FITTING (OBS)	4
5		HYDRAULIC HOSE 56"	2
6		HYDRAULIC HOSE 38"	2
7		HYDRAULIC HOSE 18"	1
8		45 DEGREE SWIVEL FITTING	1
9	6D147	CROSS	2
10	9D137	HYD CYLINDER - 3 X 16 (2 OF ITEM 2 PER CYLINDER MUST ALSO BE ORDERED) (SEE PAGE 1-32)	1
11		HYDRAULIC HOSE 73 1/2"	1
12	3J614	HOSE CLAMP	4
13	6D037	HHCS 5/16-18 X 1 GR5 ZP	2
14		HYDRAULIC HOSE 180"	2

PULVERIZER FIELD ADJUSTMENTS

- FOR THE LEAST HITCH WEIGHT ON THE REAR OF TOWING IMPLEMENT, PLACE AS MANY DRAWBAR SHIMS ON BOTTOM OF DRAWBAR BRACES AS POSSIBLE.
- IF CENTER SECTION PUSHES SOIL, PLACE MORE DRAWBAR SHIMS ON TOP OF DRAWBAR BRACES.
- IF WING SECTIONS PUSH SOIL, PLACE MORE DRAWBAR SHIMS ON BOTTOM OF DRAWBAR BRACES.

FOR MORE DETAILS, SEE OPERATOR'S MANUAL.



WARNING

DO NOT GO NEAR LEAKS
 HIGH-PRESSURE OIL EASILY PUNCTURES SKIN CAUSING SERIOUS INJURY, GANGRENE OR DEATH. SEEK EMERGENCY MEDICAL HELP IMMEDIATELY. IF CONTACT WITH OIL OCCURS, IMMEDIATE SURGERY IS REQUIRED TO REMOVE OIL. DO NOT USE FINGERS OR SKIN TO CHECK FOR LEAKS. ALWAYS RELIEVE HYDRAULIC PRESSURE BEFORE LOOSENING FITTINGS.

CAUTION

- DO NOT ALLOW ANYONE TO RIDE ON THIS IMPLEMENT.
- DO NOT TRANSPORT AT SPEEDS OVER 20 MPH.
- DO NOT STAND BETWEEN TRACTOR AND IMPLEMENT WHILE TRACTOR IS MOVING.
- WHEN SERVICING IN RAISED POSITION, PLACE BLOCKING UNDER ROLLERS.
- WITH WINGS FOLDED AND WEIGHT ON CENTER ROLLER, THE IMPLEMENT IS DRAWBAR LIGHT.



Figure 1-8: Drawbar and Drawbar Braces

Drawbar and Drawbar Braces

ITEM	PART NUMBER	DESCRIPTION	QTY
1	4J867	DRAWBAR JACK	1
2	6K458	9/16 JACK PIN W/ CHAIN & SCREW	1
3	2J776	HITCH (7002821)	1
4	6C406	**WASHER (1 1/4" SAE)	2
5	6J779	PIN (1 1/4" DIA. X 8")	1
6	4C858	ROLL PIN 5/16" X 2"	2
7	6J752	DRAWBAR	1
8	7D077	**CAPSCREW (5/16-18 NC X 1 1/4" LONG)	1
9	1C362	WASHER LOCK, 5/16" ZP	1
10	1C385	NUT, HEX 5/16-18 ZP	1
11	9D283	CLAMP	1
12	6D037	HHCS 5/16-18 X 1 GR5 ZP	17
13	3J614	HOSE CLAMP	17
14	6J773	RH BRACE	1
15	2D474	**CAPSCREW (5/8-11 NC X 1 3/4" LONG, GR5)	4
16	1B166	**WASHER 5/8 SLW	4
17	1C392	NUT, HEX 5/8-11 ZP	4
18	6J782	PIN (5/8" DIA. X 10 5/8" LONG)	4
19	1C871	**1" SAE FLAT WASHER	6
20	5J858	PIN (1" DIA. X 6 3/4") (5 1/2" BETWEEN PIN CENTERS)	2
21	5D110	KLIK PIN 1/4 X 1-1/4	3
22	6J780	PIN ASSEMBLY (1" DIA. X 7") (5 3/4" BETWEEN PIN CENTERS)	1
23	6J849	STORAGE LOCK (NOT SHOWN)	12
24	8D382	CLEVIS PIN (1/2" X 4") (NOT SHOWN)	1
25	4C856	**HAIR PIN COTTER	5
26	6J772	LH BRACE	1
27	5J711	STOP (1/2")	12
28	5J709	STOP (1/4")	2
29	5J710	STOP (1/8")	2
30	4K036	DECAL - BRILLION (2 3/4 X 20)	2
31	5J859	'WARNING' DECAL	1
32	6J999	'ADJUSTMENTS' DECAL	2
33	3K706	DECAL - WARNING HYDRAULIC LEAKS	1
34	2J431	DECAL - AMBER REFLECTIVE	2
35	6K657	DECAL - OPTIMIZER PULVERIZER	2
36	169561	SCREW, RD HD, SQ NCK 1/8X3-1/4 GR5 (CARRIAGE BOLT) (AFTER 2/01/2012)	1
36	3J608	**CAPSCREW (1-8 X 3" GR5, ZP) (PRIOR TO 2/01/2012)	1
37	1-861-010032-24	WASHER, FLAT 1" SAE, ZP	3
38	1-512-010005-19	NUT, LOCK 1-8, GRB, ZP	1
39	141433	SAFETY CHAIN 11,000LB	1

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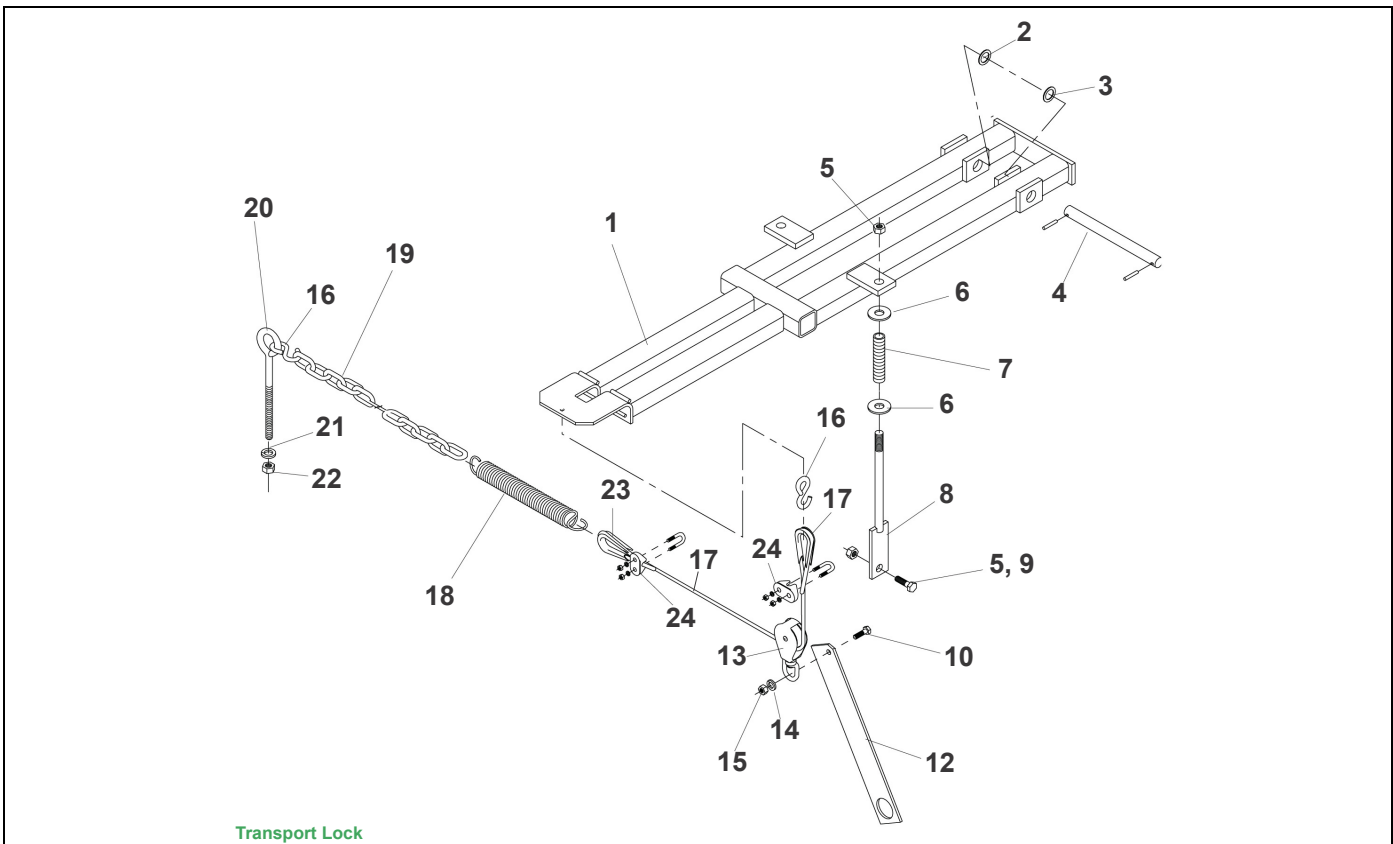


Figure 1-9: Transport Lock

Transport Lock

ITEM	PART NUMBER	DESCRIPTION	QTY
1	6J840	TRANSPORT LOCK	1
2	7C076	MACHINERY BUSHING (1" X 14 GA.)	2
3	7C120	MACHINERY BUSHING (1" X 18 GA.)	2
4	9D322	PIN (1" X 10")	1
5	5C392	**STOVER LOCK NUT (1/2-13 NC)	4
6	1C120	**WASHER (1/2")	4
7	6J825	COMPRESSION SPRING	2
8	6J816	SPRING HOLDER	2
9	8C527	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	2
10	6D037	HHCS 5/16-18 X 1 GR5 ZP	1
11	6J824	TRANSPORT LOCK LINKAGE (INCLUDES ITEMS 12-23)	1
12	6J818	STRAP	1
13	6J821	SWIVEL PULLEY	1
14	3C127	WASHER FL 5/16" STD ZP	1
15	6C748	NUT, NY-LOCK 5/16-18 ZP	1
16	6J820	**S-HOOK	2
17	7J001	CABLE (3/16" X 34" LONG)	1
18	7D062	SPRING	1
19	3J951	CHAIN (3/16" X 20 LINKS)	1
20	6J819	**EYE BOLT (5/16-18 NC)	1
21	1C362	WASHER LOCK, 5/16" ZP	1
22	1-512-010007-06	NUT, HEX 5/16-18 ZP	1
23	7J002	CABLE THIMBLE (3/16")	2
24	7J003	CABLE CLAMP (3/16")	2

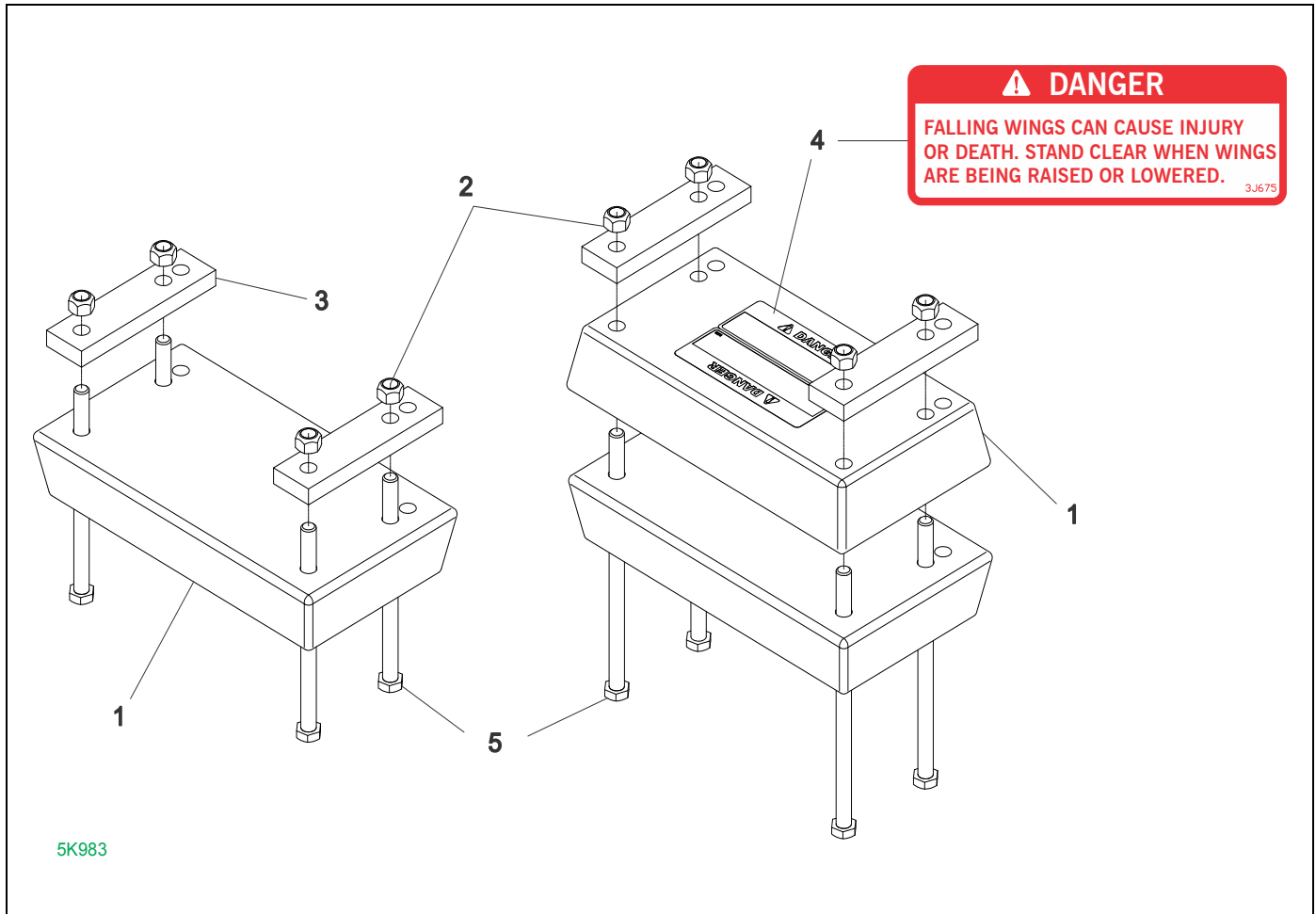


Figure 1-10: Weight Kit - Optional

Weight Kit - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY
	5K983	WEIGHT KIT FOR X/XL PULVERIZER	
1	5K982	WEIGHT (7006391)	4
2	1-861-010032-18	NUT LOCK 5/8-11 GR8 ZP	8
3	5K981	STRAP	4
4	3J675	DECAL 'STAND CLEAR'	4
5	5J912	**BOLT	8
6	5K980	INST WEIGHT KIT X/XL PULV (NOT SHOWN)	1

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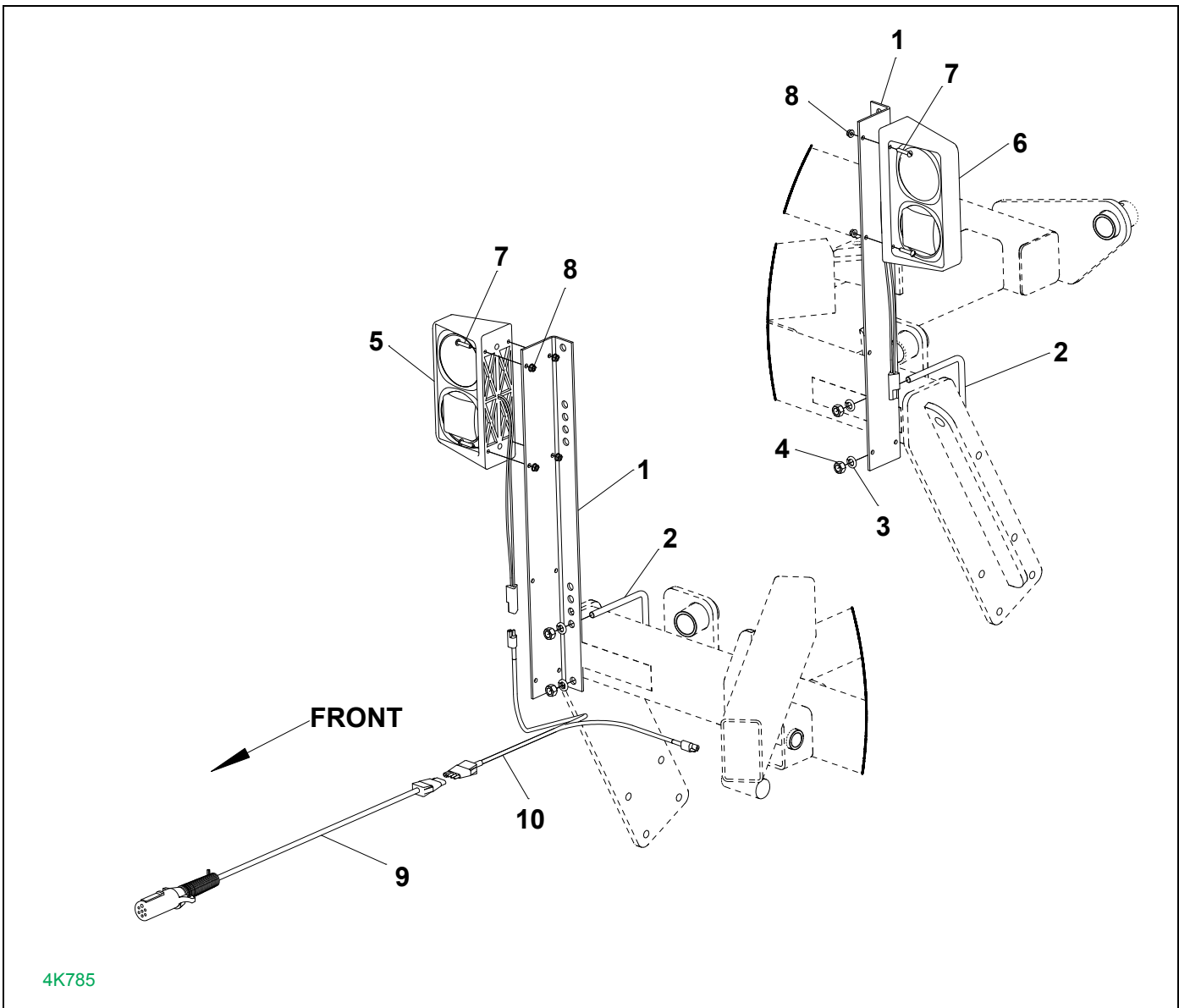


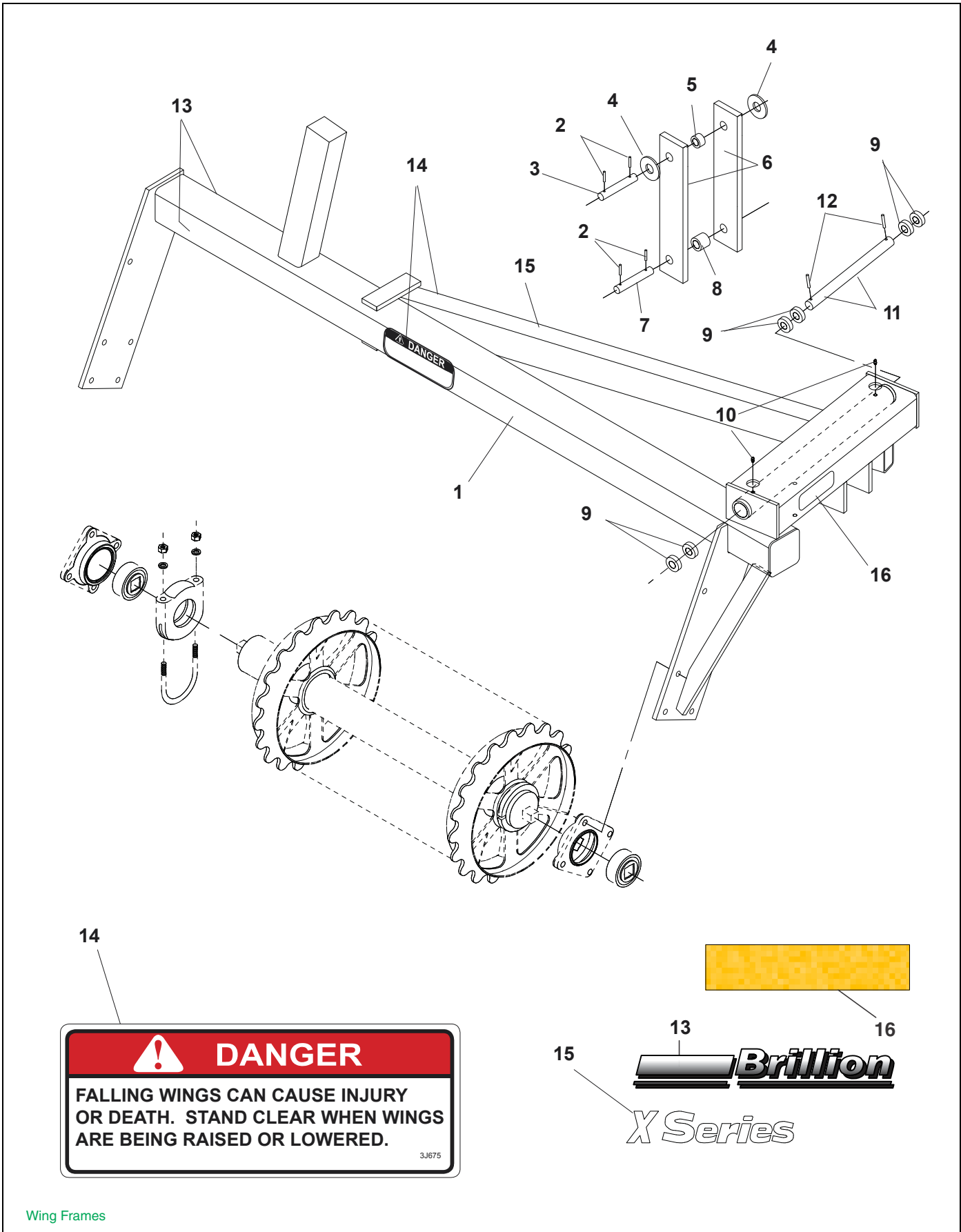
Figure 1-11: Warning Light

Warning Light

ITEM	PART NUMBER	DESCRIPTION	QTY
1	4K774	ANGLE	2
2	3J562	U-BOLT 1/2-13 X 4 9/16 X 5 1/2 (ZP)	2
3	1-861-010034-13	WASHER, LOCK 1/2, ZP	4
4	1-512-010007-09	NUT, HEX 1/2-13, ZP	4
5	4K772	LH DUAL LAMP (002600)	1
6	4K773	RH DUAL LAMP (002601)	1
7	4K782	**MACHINE SCREW (1/4-20 X 1-1/4, ZP)	8
8	6J150	NUT FLANGE LOCK 1/4-20 GRF ZP	8
9	4K781	AG HARNESS - 20' (002240)	1
10	4K780	10' WISHBONE AG HARNESS (2510)	1

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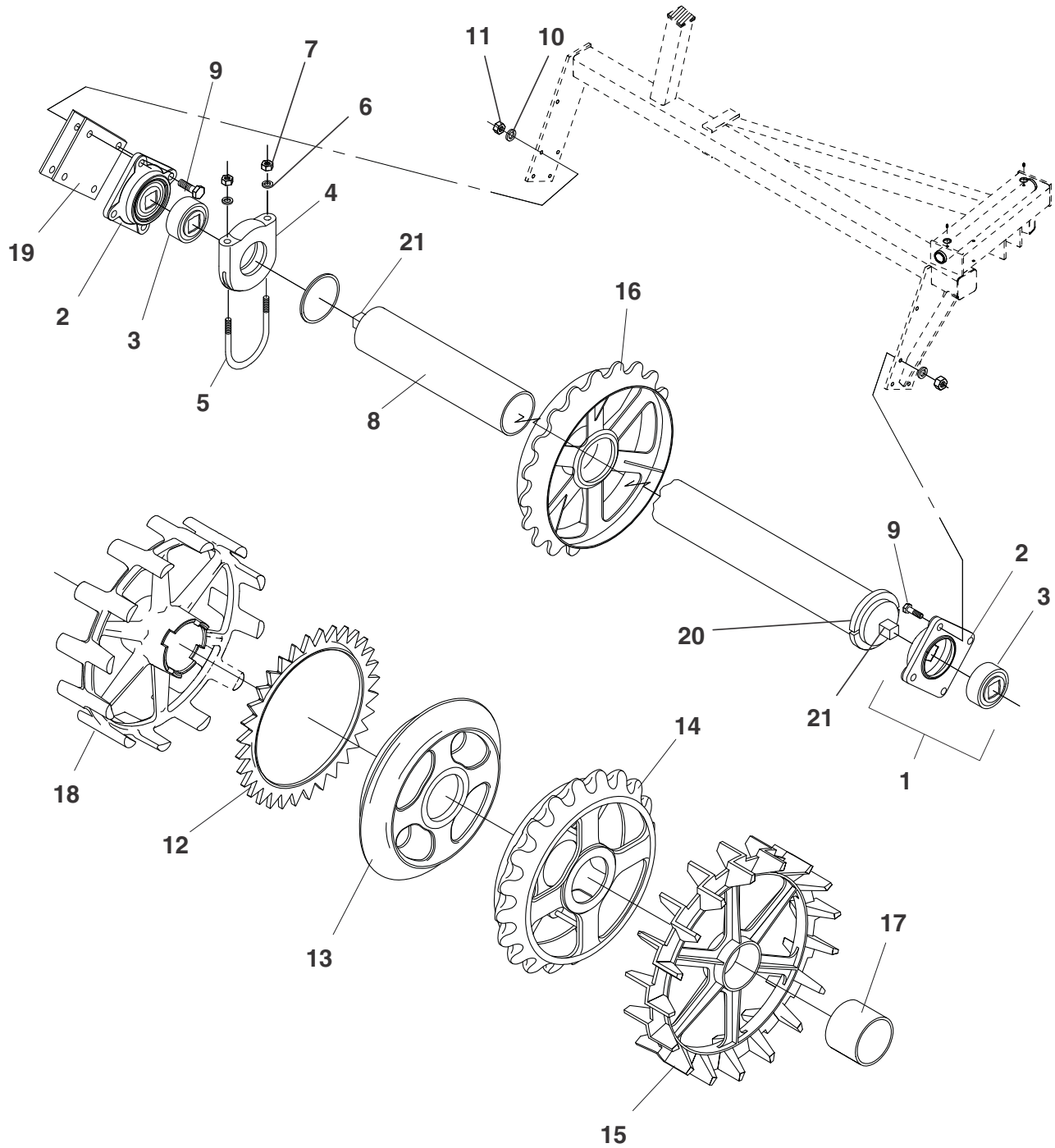
Wing Frames

Figure 1-12: Wing Frames

Wing Frames

ITEM	PART NUMBER	DESCRIPTION	QUANTITY USED PER MACHINE WING SIZE				
			5'	6'	7'	8'	9'
1	6J798	LH WING 5 FT	1				
1	6J799	RH WING 5 FT (NOT SHOWN)	1				
1	6J800	LH WING 6 FT		1			
1	6J801	RHWING 6 FT (NOT SHOWN)		1			
1	6J802	LH WING 7 FT			1		
1	6J803	RH WING 7 FT (NOT SHOWN)			1		
1	6J804	LH WING 8 FT				1	
1	6J805	RH WING 8 FT (NOT SHOWN)				1	
1	6J806	LH WING 9 FT					1
1	6J807	RH WING 9 FT (NOT SHOWN)					1
2	1C174	ROLL PIN, 3/16 X 2	8	8	8	8	8
3	2J525	PIN (1" DIA. X 4 5/8")	2	2	2	2	2
4	1C871	**1" SAE FLAT WASHER	12	12	4	4	4
5	5J535	ROLLER	2	2	2	2	2
6	6J774	LINK	4	4	4	4	4
7	6J850	PIN (1" DIA. X 5 7/8")	2	2	2	2	2
8	6J775	SPACER	2	2	2	2	2
9	6D966	MACHINERY BUSHING (1 1/2")	12	12	12	12	12
10	5J748	GREASE FITTING	4	4	4	4	4
11	6J776	HINGE PIN	2	2	2	2	2
12	4J410	**ROLL PIN (3/8" DIA. X 3")	4	4	4	4	4
13	4K036	DECAL-BRILLION (2 3/4 X 20)	4	4	4	4	4
14	3J675	'STAND CLEAR' DECAL	4	4	4	4	4
15	4K156	DECAL - "X" PULVERIZER	2	2	2	2	2
16	2J431	DECAL - AMBER REFLECTIVE	2	2	2	2	2

ILLUSTRATED PARTS LIST



Wheels and Axle - Wing

Figure 1-13: Wheels and Axle - Wing

Wheels and Axle - Wing

ITEM	PART NUMBER	DESCRIPTION	QUANTITY USED PER MACHINE WING SIZE				
			5'	6'	7'	8'	9'
1	2J417	BEARING ASSY (INCLUDES ITEMS 2 AND 3)	4	4	4	4	4
2	2J515	FLANGED HOUSING (7002365)	4	4	4	4	4
3	2J516	**BEARING	4	4	4	4	4
4	0A087	CLAMP (7000037)	2	2	2	2	2
5	1C290	**U-BOLT .386 DIA X 14-1/2 L.	2	2	2	2	2
6	1C314	**LOCKWASHER (7/16" MED)	4	4	4	4	4
7	1C179	**NUT (7/16-14 NC HEX)	4	4	4	4	4
8	2J379	PIPE AXLE ASSY 65 1/8" (PIPE O.D. 4 1/2") (INCLUDES ITEMS 20 AND 21)	2				
8	2J378	PIPE AXLE ASSY 77 1/8" (PIPE O.D. 4 1/2") (INCLUDES ITEMS 20 AND 21)		2			
8	2J377	PIPE AXLE ASSY 89 1/8" (PIPE O.D. 4 1/2") (INCLUDES ITEMS 20 AND 21)			2		
8	2J376	PIPE AXLE ASSY 101 1/8" (PIPE O.D. 4 1/2") (INCLUDES ITEMS 20 AND 21)				2	
8	2J375	PIPE AXLE ASSY 113 1/8" (PIPE O.D. 4 1/2") (INCLUDES ITEMS 20 AND 21)					2
9	5D051	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	16	16	16	16	16
10	1C109	WASHER LOCK, 1/2" ZP	16	16	16	16	16
11	1C390	NUT, HEX 1/2-13 ZP	16	16	16	16	16
12	0A033	SPROCKET (7000026) (OPTIONAL) (USE WITH 0A046)	28	34	40	46	52
12	4K775	SPROCKET (7005873) (OPTIONAL) (USE WITH 3J619 AND 6J707)	28	34	40	46	52
13	0A046	18" SMOOTH WHEEL (7000027) (USE WITH 3J619 AND 6J707) (4 5/8" DIA. BORE)	26	32	38	44	50
13	0A086	18" END WHEEL, (7000036) (SMOOTH) (4 5/8" DIA. BORE)	4	4	4	4	4
14	3J619	20" NOTCHED WHEEL (7003341) (GRAY IRON) (4 5/8" DIA. BORE)	26	32	38	44	50
14	6J707	WHEEL (7001221) *OBS* (20" NOTCHED, DUCTILE) (4 5/8" DIA. BORE)	26	32	38	44	50
14	3J620	20" NOTCHED END WHEEL 7003342 (GRAY IRON) (4 5/8" DIA. BORE)	4	4	4	4	4
14	6J708	END WHEEL (7001222) 20" (NOTCHED DUCTILE) (4 5/8" DIA. BORE)	4	4	4	4	4
15	1D938	20" CROWFOOT WHEEL (7000260) (GRAY IRON) (4 5/8" DIA. BORE)	16	20	24	28	32
15	6K196	DUCTILE CROWFOOT WHEEL 7006090 (4 9/16" DIA. BORE)	16	20	24	28	32
15	1D939	LH CTR 20" CROWFOOT 7000261 (4 5/8" DIA. BORE)	2	2	2	2	2
15	1D940	RH CTR 20" CROWFOOT 7000262 (4 5/8" DIA. BORE)	2	2	2	2	2
16	9J808	20" DUCTILE WHEEL (7004644) (4 9/16" DIA. BORE)	30	36	42	48	54
17	3K735	SPACER - 3 11/16"	18	22	26	30	34
18	6K353	OPTIMIZER WHEEL (7006288) 4 1/ (4 5/8" DIA. BORE)	16	20	24	28	32
18	6K354	OPTIMIZER END WHEEL (7006289) (4 5/8" DIA. BORE)	4	4	4	4	4
19	9J304	PLATE, SPACER	2	2	2	2	2
20	2J438	RING (C)(DW)	2	2	2	2	2
21	9C129	STUB SHAFT MOUNTING	4	4	4	4	4

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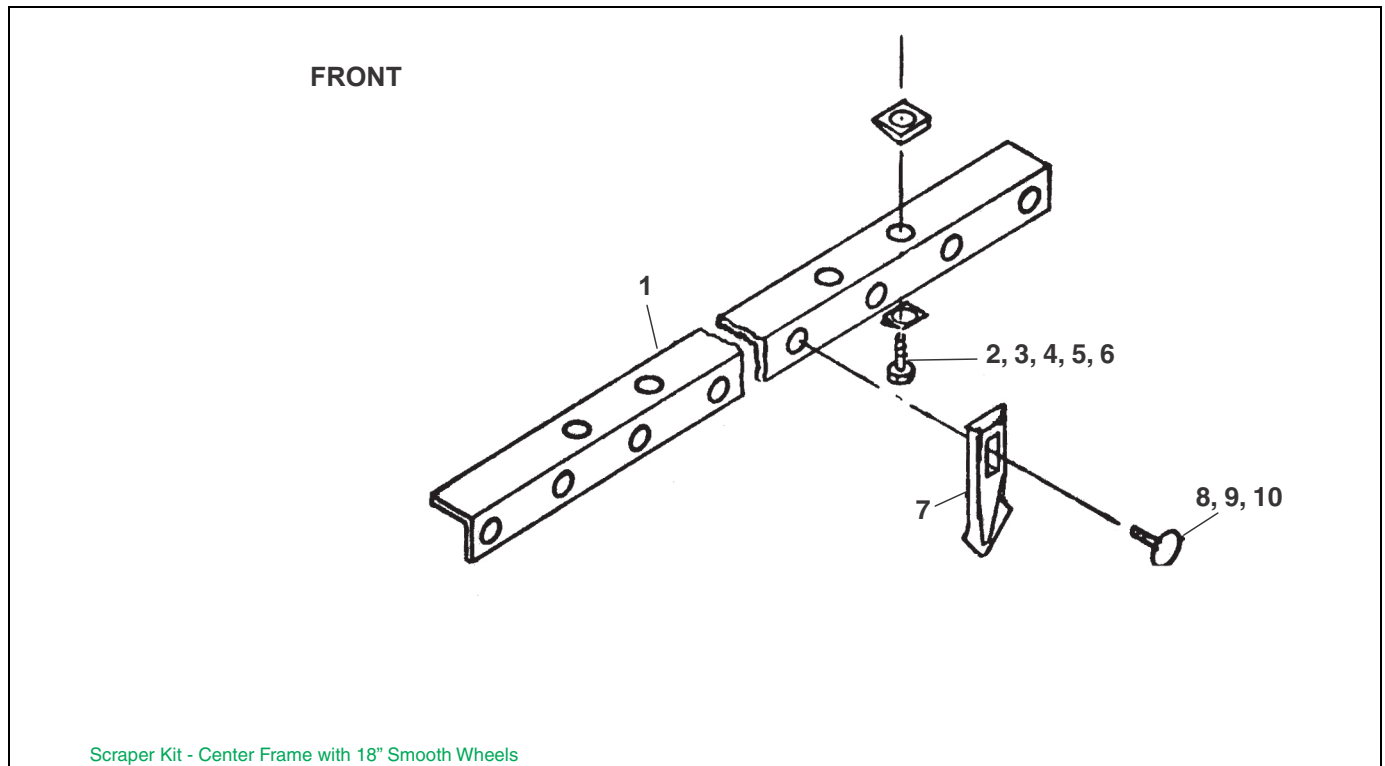


Figure 1-14: Scraper Kit - Center Frame with 18" Smooth Wheels - Optional

Scrapers Kit - Center Frame with 18" Smooth Wheels - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J860	SCRAPER KIT X108	
1	4C507	SCRAPER ANGLE (103" LONG)	1
2	5D051	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	2
3	7C022	**BEVEL WASHER	4
4	1C120	**WASHER (1/2")	2
5	1C109	WASHER LOCK, 1/2" ZP	2
6	1C390	NUT, HEX 1/2-13 ZP	2
7	3C533	SCRAPER (7000406)	26
8	3C734	**CARRIAGE BOLT (3/8-16 NC X 1-1/2" LONG)	26
9	1C183	WASHER LOCK, 3/8 ZP	26
10	1C277	NUT, HEX 3/8-16 ZP	26

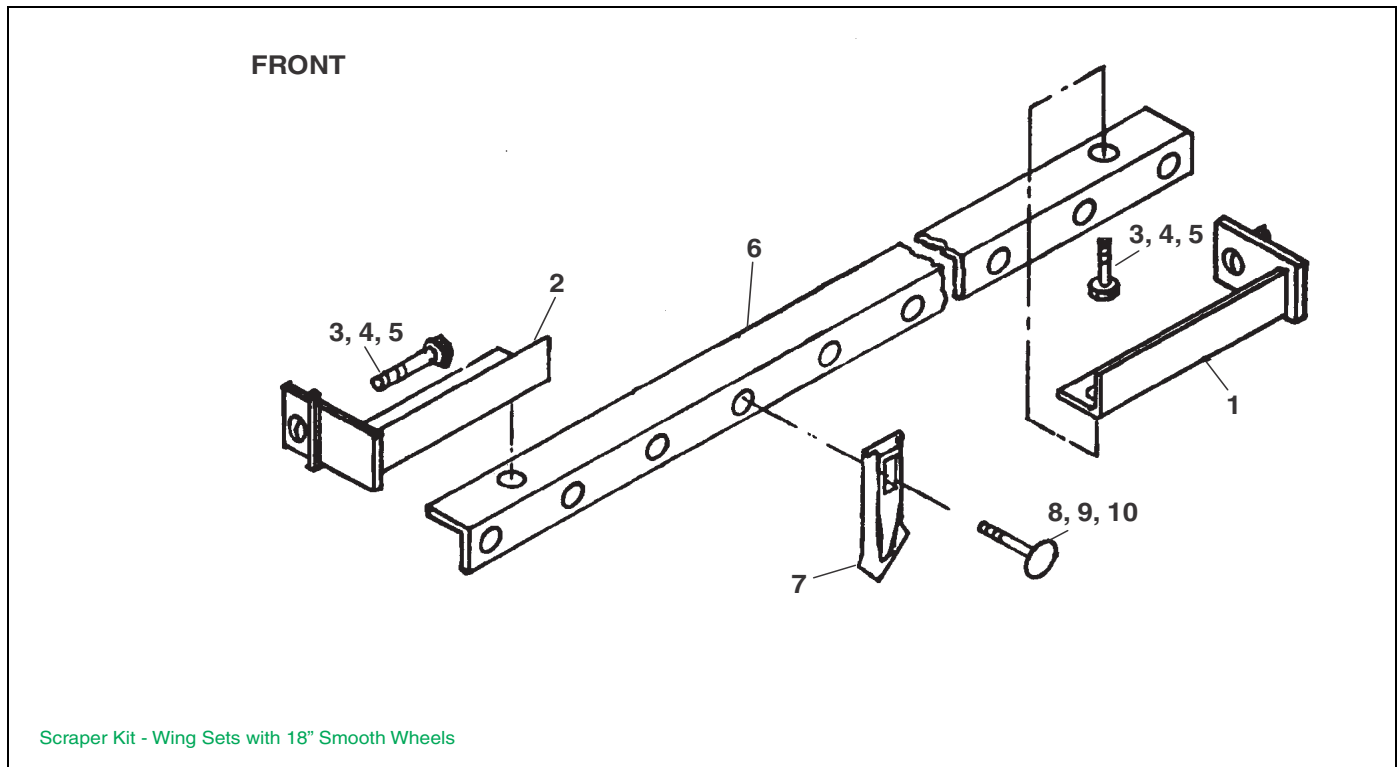


Figure 1-15: Scraper Kit - Wing Sets with 18" Smooth Wheels - Optional

Scrapers Kit - Wing Sets with 18" Smooth Wheels - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY
	2J558	SCRAPER KIT XW 60	
	2J557	SCRAPER KIT XW 72	
	2J556	SCRAPER KIT XW 84	
	2J555	SCRAPER KIT XW 96	
	2J554	SCRAPER KIT XW108	
1	2J533	R.H. ANGLE ASSEMBLY	2
2	2J534	L.H. ANGLE ASSEMBLY	2
3	5D051	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	8
4	1C109	WASHER LOCK, 1/2" ZP	8
5	1C390	NUT, HEX 1/2-13 ZP	8
6	4C503	SCRAPER ANGLE (55" LONG 5' WING)	2
6	4C504	SCRAPER ANGLE (67" LONG 6' WING)	2
6	4C505	SCRAPER ANGLE (79" LONG 7' WING)	2
6	4C506	SCRAPER ANGLE (91" LONG 8' WING)	2
6	4C507	SCRAPER ANGLE (103" LONG 9' WING)	2
7	3C533	SCRAPER (700406) (5' WING)	*28
7	3C533	SCRAPER (700406) (6' WING)	*34
7	3C533	SCRAPER (700406) (7' WING)	*40
7	3C533	SCRAPER (700406) (8' WING)	*46
7	3C533	SCRAPER (700406) (9' WING)	*52
8	3C734	**CARRIAGE BOLT (3/8-16 NC X 1-1/2" LONG)	AR
9	1C183	WASHER LOCK, 3/8 ZP	AR
10	1C277	NUT HEX 3/8-16 ZP	AR

*Quantity shown is the quantity needed for both wings.

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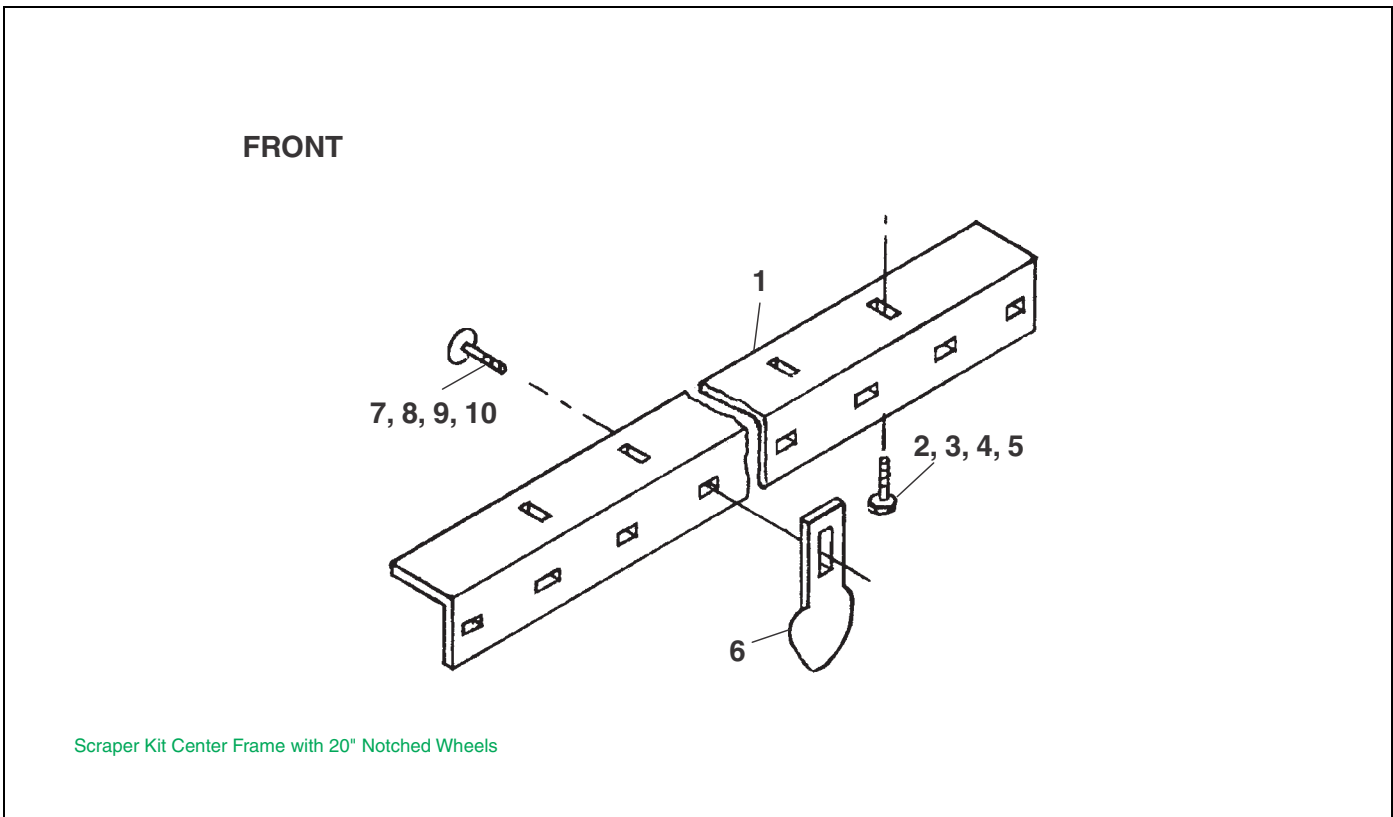


Figure 1-16: Scraper Kit - Center Frame with 20" Notched Wheels - Optional

Scraper Kit - Center Frame with 20" Notched Wheels - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J861	SCRAPER KIT XH108	
1	3J997	SCRAPER ANGLE (103" LONG)	1
2	5D051	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	2
3	1C120	**WASHER (1/2")	4
4	1C109	WASHER, LOCK 1/2 ZP	2
5	1C390	NUT, HEX 1/2-13 ZP	2
6	2D110	SCRAPER	26
7	3J595	**CARRIAGE BOLT (3/8-16 NC X 1-1/2" LONG)	26
8	1C182	WASHER FL 3/8 STD, ZP	26
9	1C183	WASHER LOCK 3/8 ZP	26
10	1C277	NUT, HEX 3/8-16 ZP	26

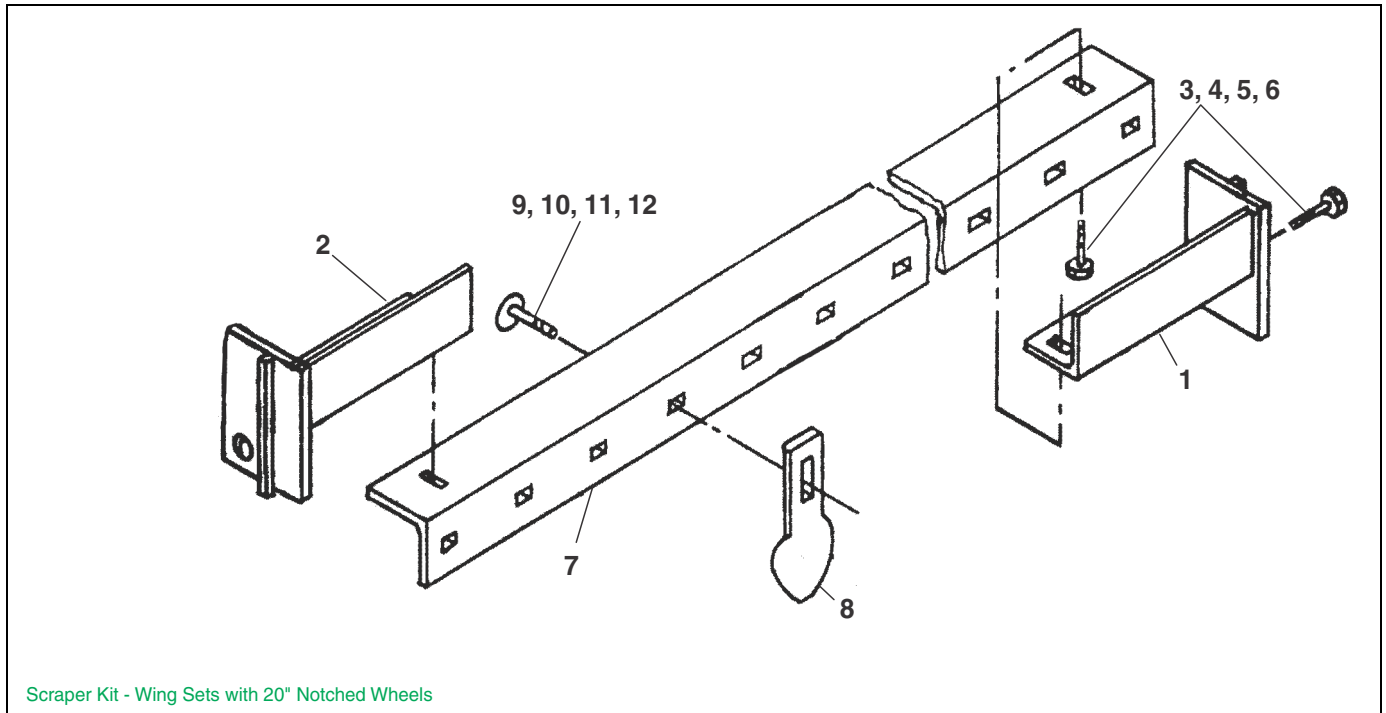


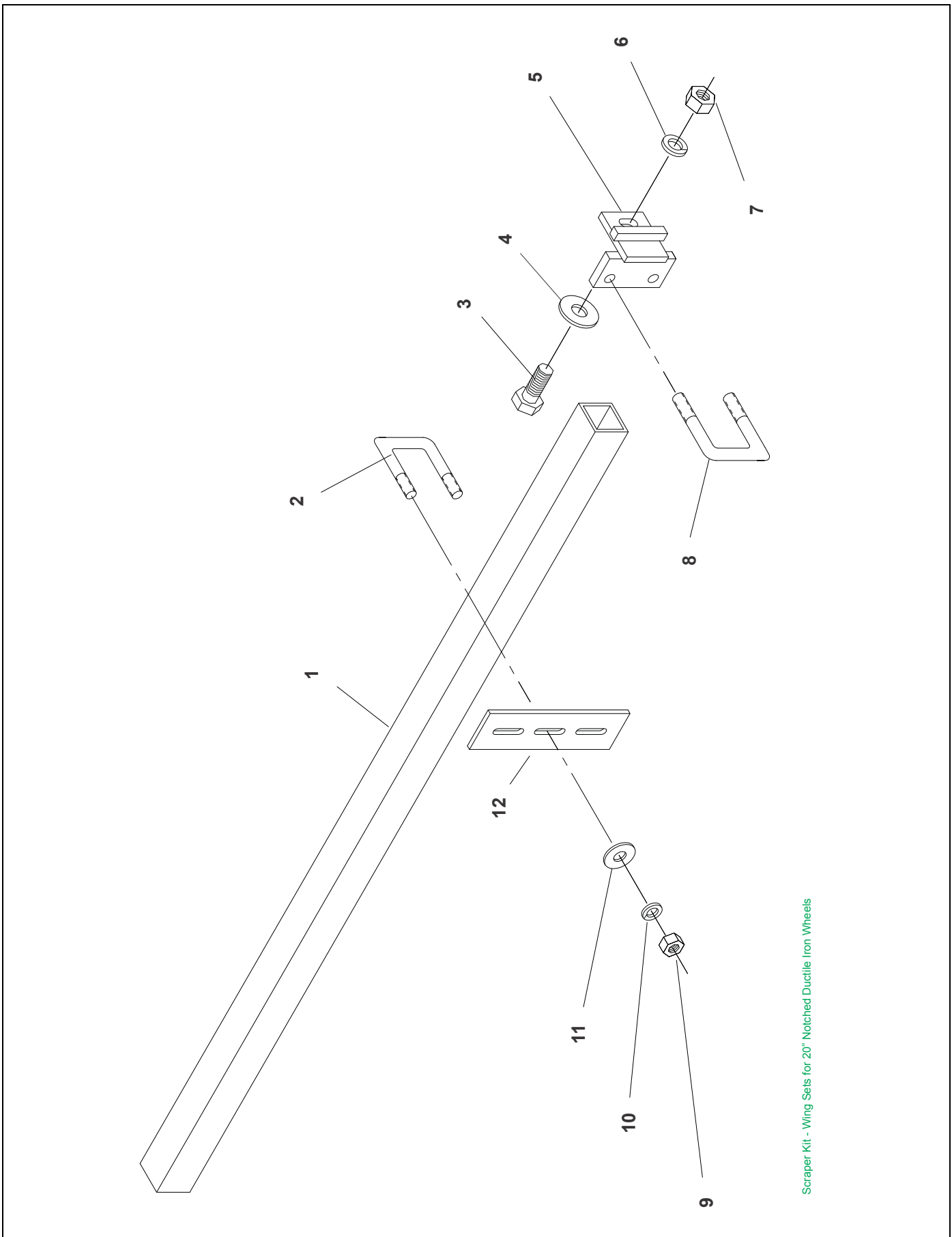
Figure 1-17: Scraper Kit - Wing Sets for 20" Notched Wheels - Optional

Scraper Kit - Wing Sets for 20" Notched Wheels - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY
	4J015	SCRAPER KIT XWH 60	
	4J016	SCRAPER KIT XWH 72	
	4J017	SCRAPER KIT XWH 84	
	4J018	SCRAPER KIT XWH 96	
	4J019	SCRAPER KIT XWH108	
1	4J259	L.H. ANGLE ASSEMBLY	2
2	4J260	R.H. ANGLE ASSEMBLY	2
3	5D051	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	8
4	1C120	WASHER (1/2")	8
5	1C109	WASHER LOCK, 1/2" ZP	8
6	1C390	NUT, HEX 1/2-13 ZP	8
7	4J001	SCRAPER ANGLE	2
7	4J002	SCRAPER ANGLE	2
7	4J003	SCRAPER ANGLE	2
7	4J005	SCRAPER ANGLE	2
7	3J997	SCRAPER ANGLE	2
8	2D110	SCRAPER (700339) (5' WING)	*28
8	2D110	SCRAPER (700339) (6' WING)	*34
8	2D110	SCRAPER (700339) (7' WING)	*40
8	2D110	SCRAPER (700339) (8' WING)	*46
8	2D110	SCRAPER (700339) (9' WING)	*52
9	3J595	**CARRIAGE BOLT (3/8-16 NC X 1-1/2" LONG)	AR
10	1C182	WASHER FL 3/8" STD ZP	AR
11	1C183	WASHER LOCK, 3/8 ZP	AR
12	1C277	NUT, HEX 3/8-16 ZP	AR

*Quantity shown is the quantity needed for both wings.

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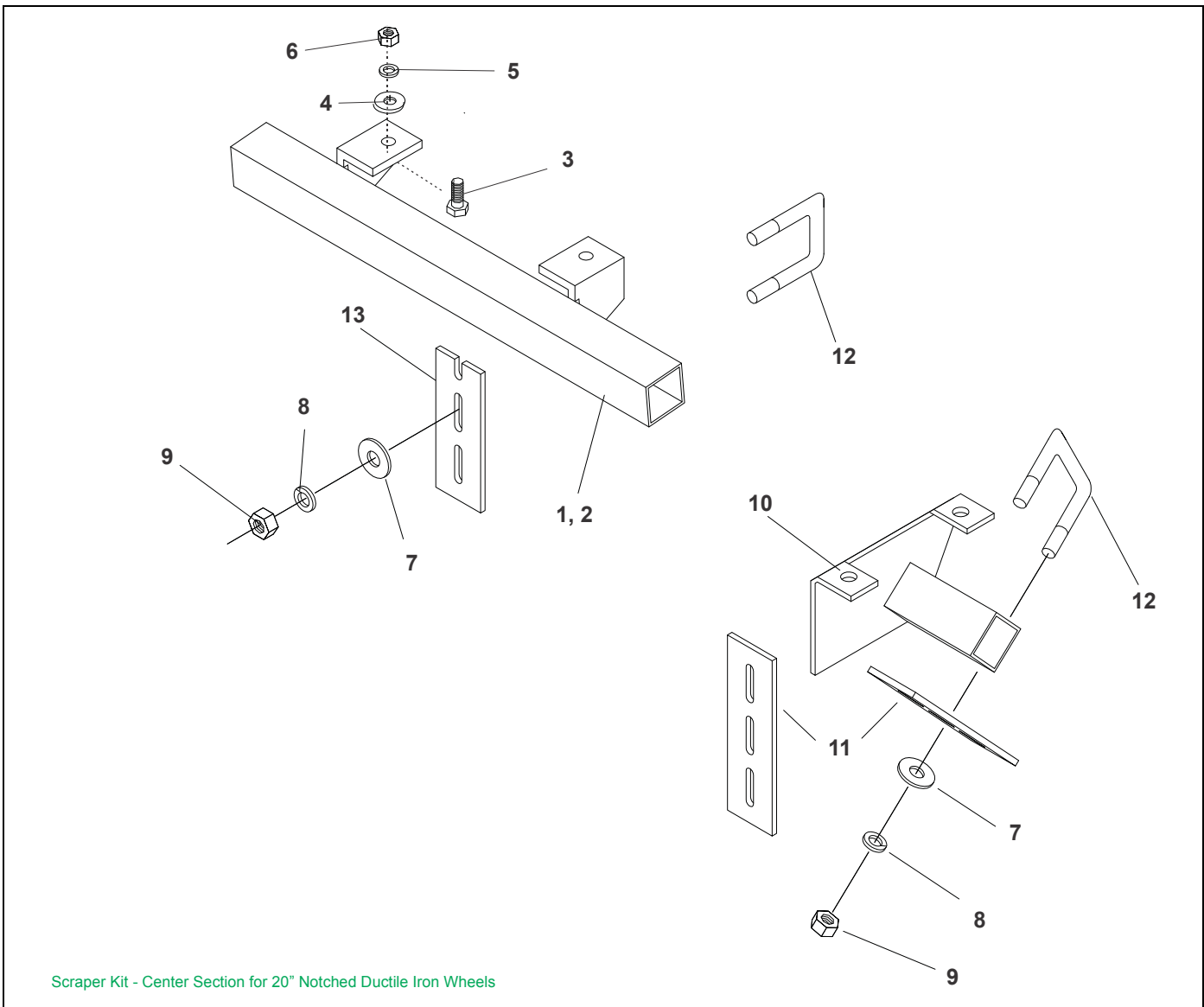
Scraper Kit - Wing Sets for 20" Notched Ductile Iron Wheels

Figure 1-18: Scraper Kit - Wing Sets for 20" Notched Ductile Iron Wheels -Optional

Scraper Kit - Wing Sets for 20" Notched Ductile Iron Wheels - Optional

ITEM	PART NUMBER	DESCRIPTION	QUANTITY USED PER MACHINE WING SIZE					
			5'	6'	7'	8'	9'	
	9J981	XWD60 SCRAPER KIT	1					
	9J982	XWD72 SCRAPER KIT		1				
	9J983	XWD84 SCRAPER KIT			1			
	9J984	XWD/XLWD96 SCRAPER KIT					1	
	9J985	XWD/XLWD108 SCRAPER KIT						1
1	9J956	SCRAPER TUBE	2					
1	9J957	TUBE		2				
1	9J958	TUBE			2			
1	9J959	TUBE					2	
1	9J960	TUBE						2
2	8J015	U-BOLT 3/8-16 X 3-1/4 X 2-7/16	26	34	40	46	52	
3	5D051	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	4	4	4	4	4	4
4	1C120	**WASHER (1/2")	4	4	4	4	4	4
5	9J952	SCRAPER END BRACKET	4	4	4	4	4	4
6	1C109	WASHER LOCK 1/2 ZP	12	12	12	12	12	12
7	1C390	NUT, HEX 1/2-13 ZP	12	12	12	12	12	12
8	5D921	U-BOLT 1/2-13 X 3-1/4 X 2-5/8	4	4	4	4	4	4
9	1C277	NUT HEX 3/8-16 ZP	56	68	80	92	104	
10	1C183	WASHER LOCK 3/8 ZP	56	68	80	92	104	
11	1C182	WASHER FL 3/8 STD ZP	56	68	80	92	104	
12	8J014	SCRAPER, 2-1/2"WIDE	28	34	40	46	52	
13	3K895	SCRAPER - 3 1/4" (USED WITH ITEM 16) (NOT SHOWN)	28	34	40	40	40	
14	3K427	SCRAPER - SPECIAL (USED WITH ITEM 15) (NOT SHOWN)	5	5	5	5	5	
15	3K887	XD108 HEAVY DUTY SCRAPER KIT (CENTER SECTION) (NOT SHOWN)	1	1	1	1	1	1
16	4K111	XWD60 HEAVYDUTY SCRAPER KIT (NOT SHOWN)	1					
16	4K112	XWD72 HEAVYDUTY SCRAPER KIT (NOT SHOWN)		1				
16	4K113	XWD84 HEAVYDUTY SCRAPER KIT (NOT SHOWN)			1			
16	4K114	XWD/XLWD96 HVY DTY SCRAPER KIT (NOT SHOWN)					1	
16	4K115	XWD/XLWD108 HVY DTY SCRAPER KIT (NOT SHOWN)						1

ILLUSTRATED PARTS LIST



Scraper Kit - Center Section for 20" Notched Ductile Iron Wheels

Figure 1-19: Scraper Kit - Center Section for 20" Notched Ductile Iron Wheels -Optional

Scraper Kit - Center Section for 20" Notched Ductile Iron Wheels - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY
	9J980	XD108 SCRAPER KIT (CENTER SECTION)	1
1	9J945	L.H. SCRAPER BAR X MODEL	1
2	9J950	R.H. SCRAPER BAR X MODEL	1
3	5D051	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	4
4	1C120	**WASHER (1/2")	4
5	1C109	WASHER LOCK 1/2 ZP	4
6	1C390	NUT, HEX 1/2-13 ZP	4
7	1C182	WASHER FL 3/8	52
8	1C183	WASHER, LOCK 3/8ZP	52
9	1C277	NUT HEX 3/8-16 ZP	52
10	1K168	CENTER SCRAPER BRKT.	1
11	8J014	SCRAPER, 2-1/2" WIDE	18
12	8J015	U-BOLT 3/8-16 X 3-1/4 X 2-7/16	26
13	9J930	SCRAPER	8

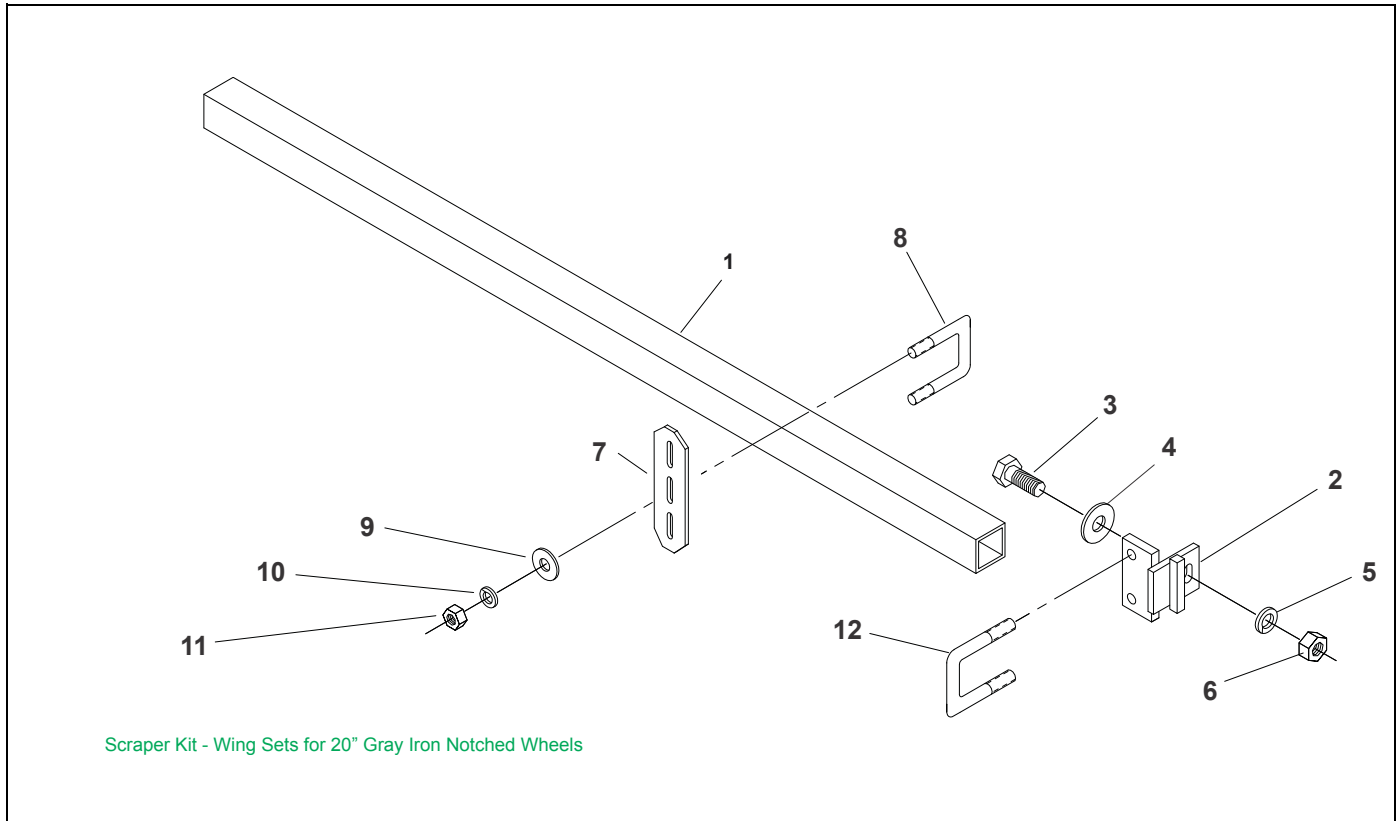


Figure 1-20: Scraper Kit - Wing Sets used with 20" Gray Iron Notched Wheels - Optional

Scraper Kit - Wing Sets for 20" Gray Iron Notched Wheels - Optional

ITEM	PART NUMBER	DESCRIPTION	QUANTITY USED PER MACHINE WING SIZE				
			5'	6'	7'	8'	9'
	2P828	SCRAPER KIT XLH-60	1				
	2P829	SCRAPER KIT XWH-72		1			
	2P830	SCRAPER KIT XWH-84			1		
	2P831	SCRAPER KIT X(L)WH-96				1	
	2P832	SCRAPER KIT X(L)WH-108					1
1	9J956	SCRAPER TUBE (WINGS)	2				
1	9J957	TUBE (WINGS)		2			
1	9J958	TUBE (WINGS)			2		
1	9J959	TUBE (WINGS)				2	
1	9J960	TUBE (WINGS)					2
2	9J952	SCRAPER END BRACKET	4	4	4	4	4
3	5D051	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	4	4	4	4	4
4	1C120	**WASHER (1/2")	4	4	4	4	4
5	1C109	WASHER LOCK, 1/2" ZP	12	12	12	12	12
6	1C390	NUT, HEX 1/2-13 ZP	12	12	12	12	12
7	2P804	SCRAPER, CHAMFERED	28	34	40	46	52
8	8J015	U-BOLT, 3/8"-16 X 3-1/4 X 2-7/16	28	34	40	46	52
9	1C182	WASHER FL 3/8 STD ZP	56	68	80	92	104
10	1C183	WASHER, LOCK 3/8 ZP	56	68	80	92	104
11	1C277	NUT HEX 3/8-16 ZP	56	68	80	92	104
12	5D921	U-BOLT, 1/2"-13 X 3-1/4 X 2-5/8	4	4	4	4	4

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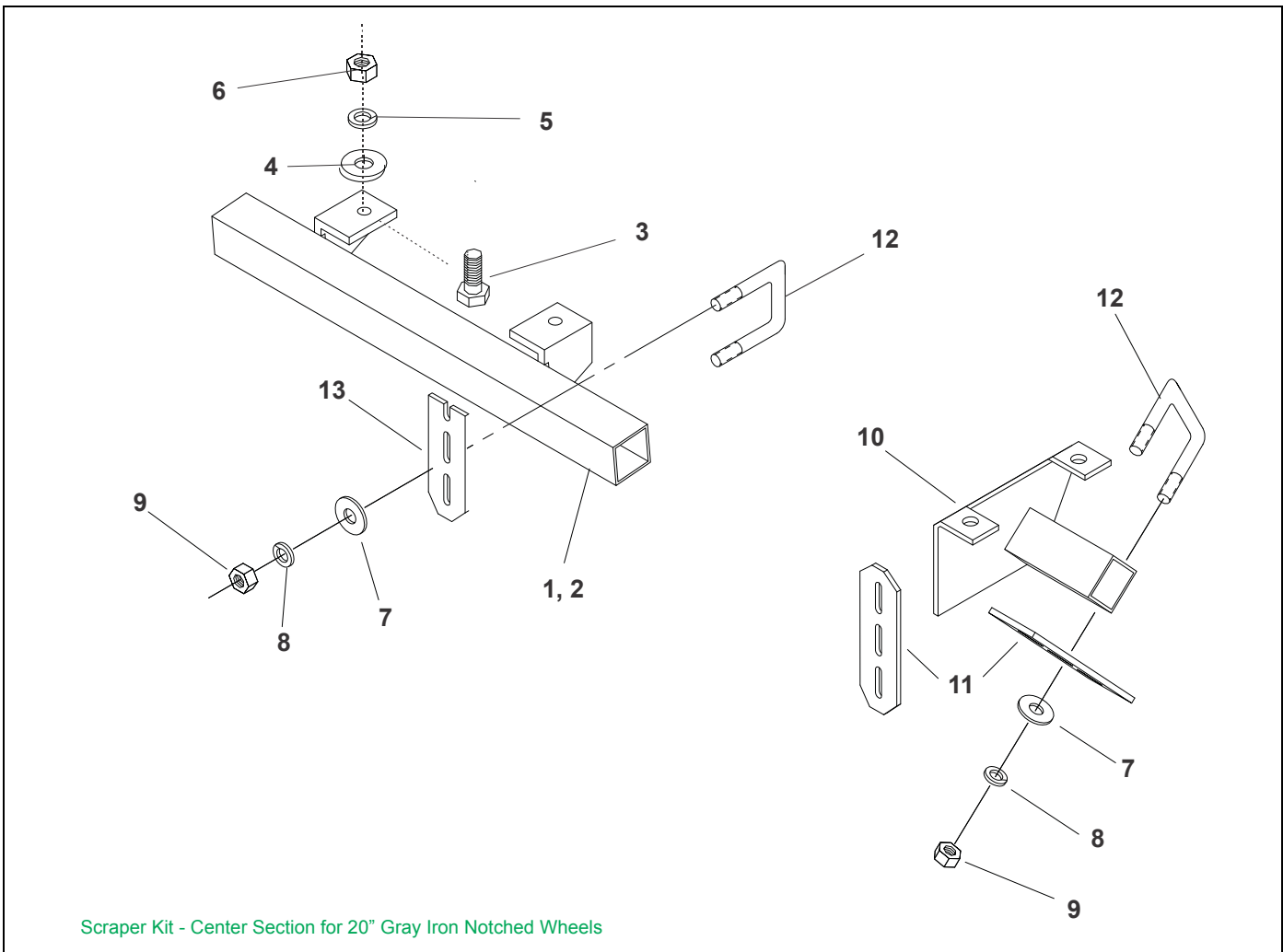


Figure 1-21: Scraper Kit - Center Section used with 20" Gray Iron Notched Wheels - Optional

Scrapers Kit - Center Section for 20" Gray Iron Notched Wheels - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY
	2P826	XH108 SCRAPER KIT (CENTER SECTION)	1
1	9J945	L.H. SCRAPER BAR X MODEL	1
2	9J950	R.H. SCRAPER BAR X MODEL	1
3	5D051	**CAPSCREW (1/2-13 NC X 1 3/4" LONG)	4
4	1C120	**WASHER (1/2")	4
5	1C109	WASHER LOCK 1/2 ZP	4
6	1C390	NUT, HEX 1/2-13 ZP	4
7	1C182	WASHER FL 3/8	52
8	1C183	WASHER, LOCK 3/8ZP	52
9	1C277	NUT HEX 3/8-16 ZP	52
10	1K168	CENTER SCRAPER BRKT.	1
11	2P804	SCRAPER, CHAMFERED	18
12	8J015	U-BOLT 3/8-16 X 3-1/4 X 2-7/16	26
13	2P818	SCRAPER, SPECIAL CHAMFERED	8

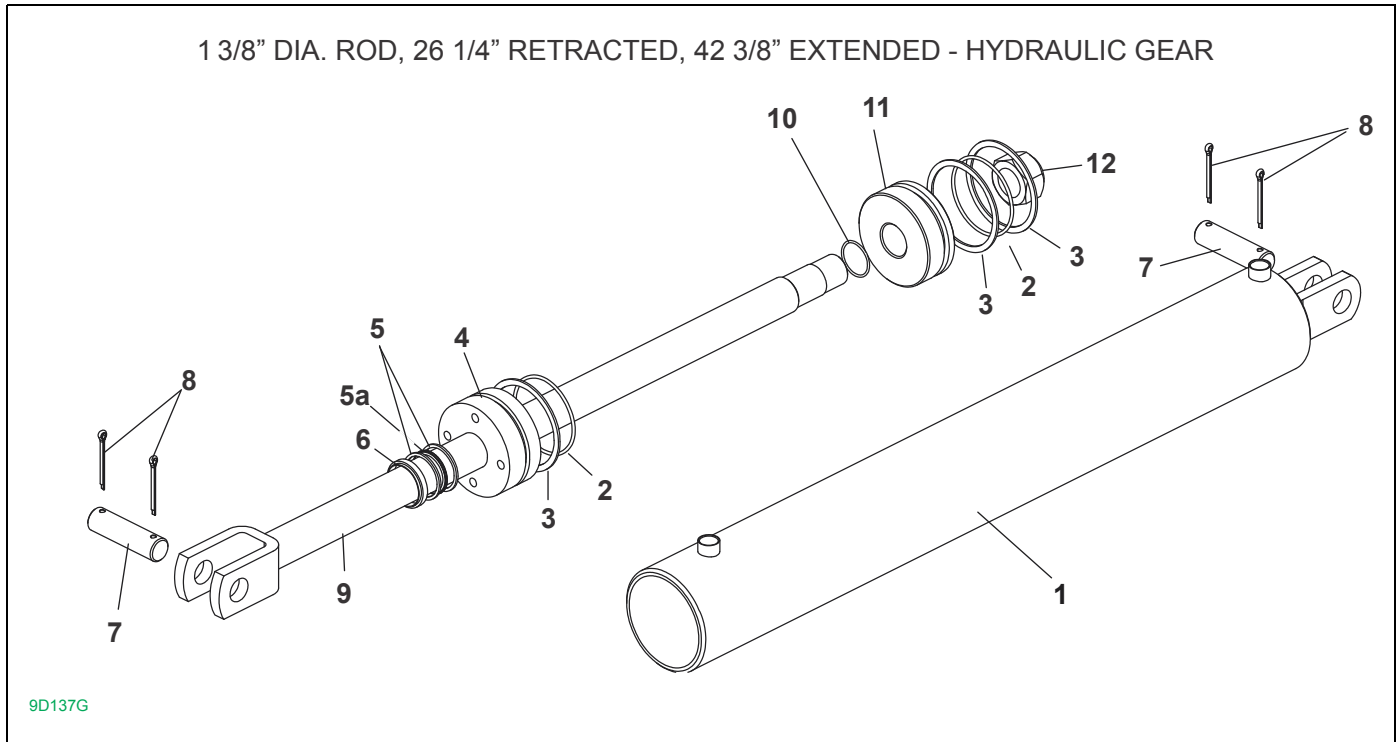


Figure 1-22: Hydraulic Cylinder Assembly, 3" X 16" - Prior to 1/15/2008

Hydraulic Cylinder Assembly, 3" X 16" - Prior to 1/15/2008

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D137G	HYD CYLINDER - 3 X 16	
1	1J962	TUBE ASSEMBLY FOR 9D137G	1
2		O RING	2
3		BACK UP RINGS	3
4	1J963	GLAND	1
5		BACK UP RINGS	1
5a		ROD SEAL	1
6		WIPER	1
7	5J650	CLEVIS PIN (1.0 x 3.625 H2)	2
8	6C468	**COTTER PIN (3/16" X 2" ZP)	4
9	1J964	ROD ASSEMBLY	1
10		O RING	1
11		PISTON	1
12	110990	LOCKNUT 7/8-14	1
13	1J966	SEAL KIT (INCLUDES ITEMS 2, 3, 5, 5a, 6 AND 10)	1

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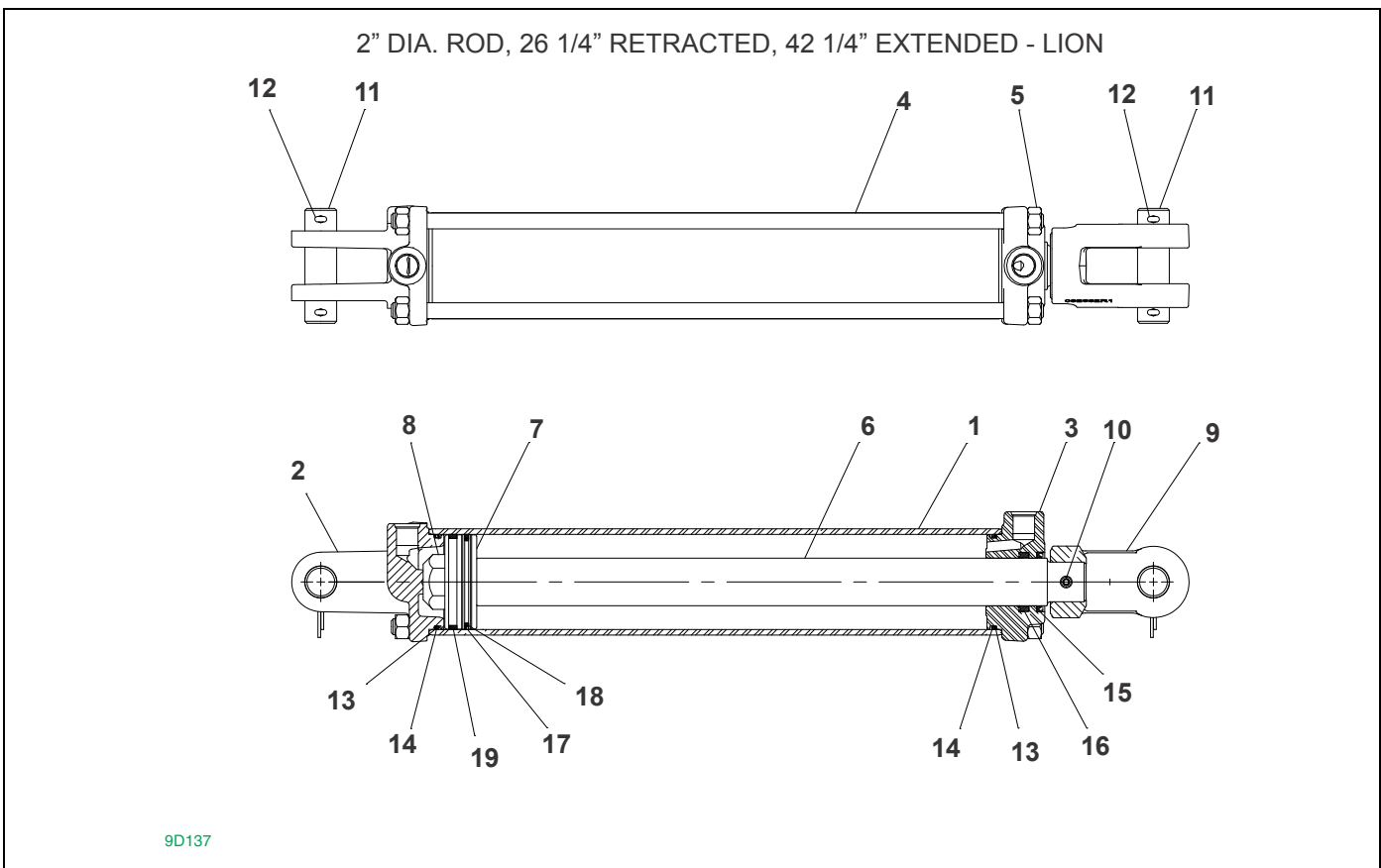
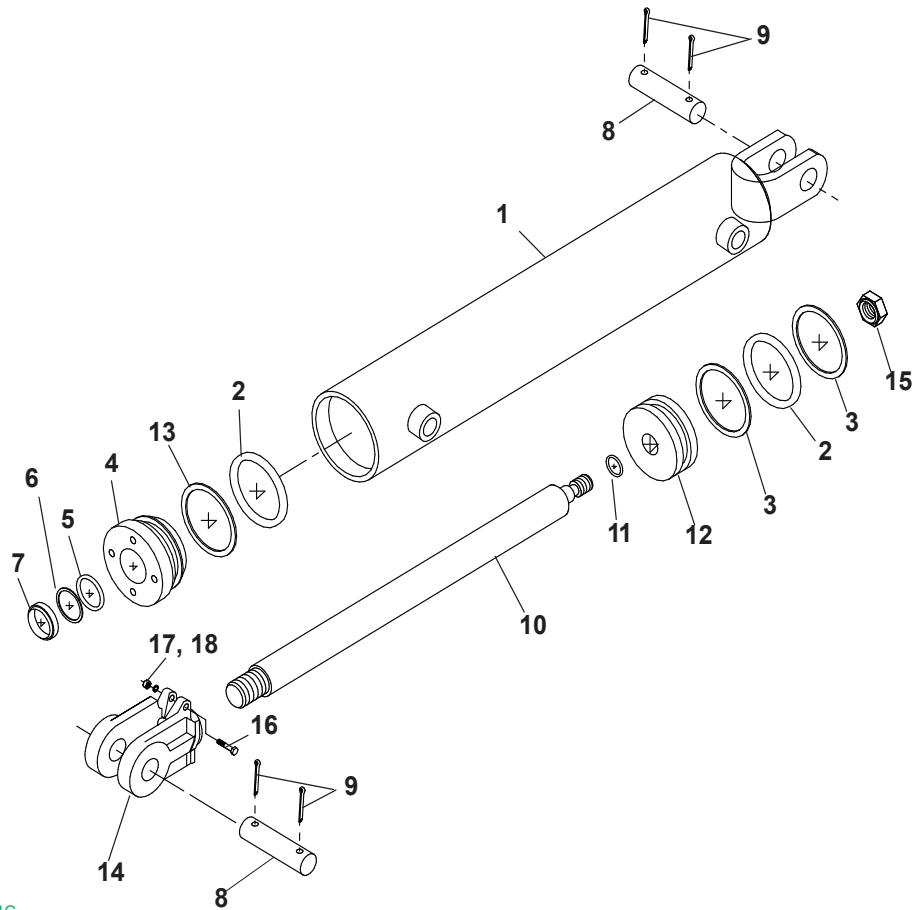


Figure 1-23: Hydraulic Cylinder Assembly, 3" X 16" - After 1/15/2008

Hydraulic Cylinder Assembly, 3" X 16" - After 1/15/2008

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D137	HYD CYLINDER - 3 X 16	
1		TUBE	1
2		CLEVIS CAP	1
3		ROD CAP	1
4		TIE ROD	4
5	1C390	NUT, HEX 1/2-13 ZP	8
6		ROD	1
7		PISTON	1
8	9C223	NUT, LOCK 1-14, GRB, ZP	1
9	2P737	CLEVIS, ROD END FOR 1 1/4" RO	1
10	1P443	**SET SCREW, 3/8-16 x 1/2 NYL	1
11	5J650	CLEVIS PIN (1.0 x 3.625 H2)	2
12	6C468	**COTTER PIN (3/16 x 2, ZP)	4
13		SEAL, BU#232 19PI-232	2
14		O-RING, 232 - 2.75 x 3 BUNA N D9	1
15		SEAL, NOK-AR2263-EO 1-1/2" BO	1
16		SEAL, HALLITE 605 ROD 1-1/2 D	1
17		SEAL, PTFE PISTION RING 3 DIA.	1
18		O-RING,145 - 2.562 x 2.75 DUR9	1
19		WEAR RING,3.00-2.75-.25-GFN	1
20	1P743	LION CYLINDER SEAL KIT (3.0") (INCLUDES ITEMS 13-19)	1

1 3/8" DIA. ROD, 30 1/4" RETRACTED, 50 1/4" EXTENDED - HYDRAULIC GEAR



6J811G

Figure 1-24: Hydraulic Cylinder Assembly, 3-1/2" X 20" - Prior to 1/15/2008

Hydraulic Cylinder Assembly, 3-1/2" X 20" - Prior to 1/15/2008

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J811G	HYD CYLINDER - 3 1/2 X 20	
1	7J689	TUBE ASSEMBLY	1
2		O RING	2
3		BACK-UP RING	2
4		PACKING GLAND	1
5		O RING	1
6		BACK-UP RING	1
7		ROD WIPER	1
8	5J650	CLEVIS PIN (1.0 x 3.625 H2)	2
9	6C468	**COTTER PIN (3/16" X 2")	4
10	7J688	ROD	1
11		O RING	1
12	1J959	PISTON	1
13		BACK-UP O RING	1
14	5J195	CLEVIS (7000215)	1
15	1D218	NUT (OBS) (7/8-14 UNF)	1
16	9D797	**CAPSCREW	1
17	1C385	NUT HEX 5/16-18 ZP	1
18	1C362	WASHER LOCK 5/16" ZP	1
19	1J961	SEAL KIT (INCLUDES ITEMS 2, 3, 5, 6, 7, 11, AND 13)	1

ILLUSTRATED PARTS LIST

2" DIA. ROD, 30 1/4" RETRACTED, 50 1/4" EXTENDED - LION

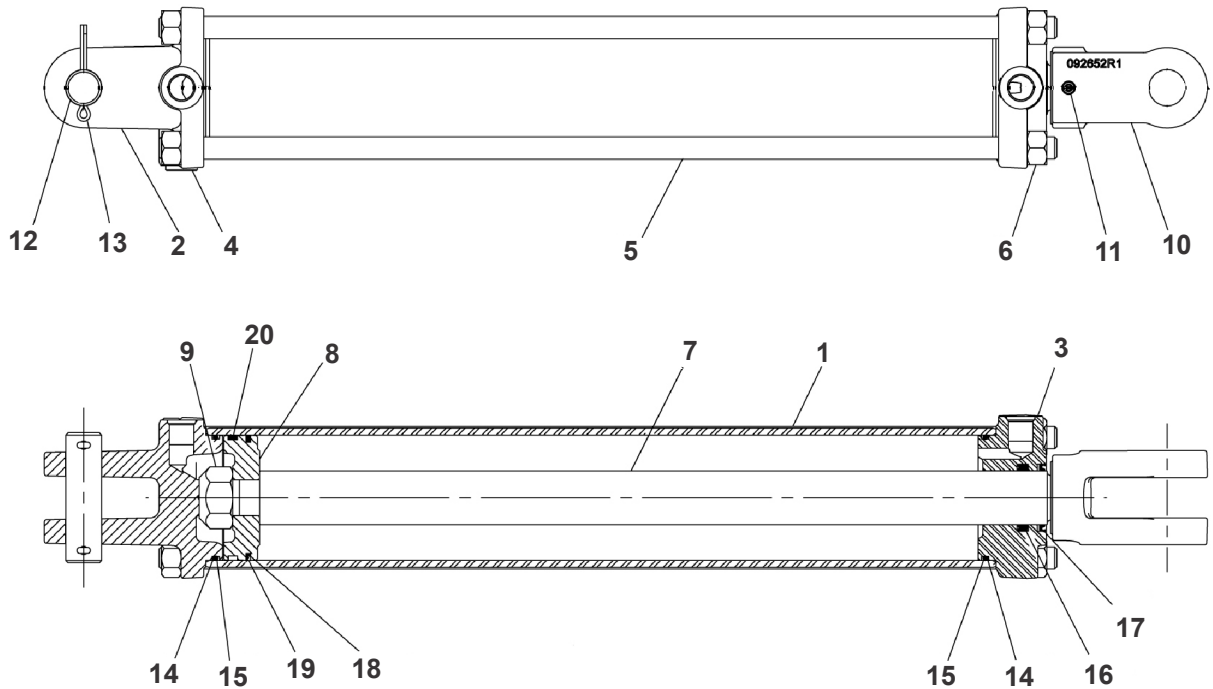


Figure 1-25: Hydraulic Cylinder Assembly, 3-1/2" X 20" - After 1/15/2008

Hydraulic Cylinder Assembly, 3-1/2" X 20" - After 1/15/2008

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J811	HYD CYLINDER - 3 1/2 X 20	
1		TUBE	1
2		CLEVIS CAP	1
3		ROD CAP	1
4		PLUG, SOCKET HEAD 3/4-16	1
5		TIE ROD	4
6		NUT, HEX 5/8-18, ZP	8
7		ROD	1
8		PISTON	1
9		NUT, LOCK 1-14, GRB, ZP	1
10	2P737	CLEVIS, ROD END FOR 1 1/4" RO	1
11	1P443	**SET SCREW, 3/8-16 X 1/2 NYL	1
12	5J650	CLEVIS PIN (1.0 X 3.625 H2)	1
13	6C468	**COTTER PIN (3/16 X 2, ZP)	2
14		SEAL, BU#236 19PI-236	2
15		O-RING, 236, 3.25X3.5 D90	2
16		SEAL, HALLITE 605 ROD 1-1/2 D	1
17		SEAL, NOK-AR2263-EO 1-1/2" BO	1
18		O-RING, 151 3.0X3.188 DUR90	1
19		SEAL, PTFE PISTON RING 3-1/2D	1
20		WEAR RING, 3.50-3.25-.25-GFN	1
21	1P744	LION CYLINDER SEAL KIT (3.5") (INCLUDES ITEMS 14-20)	1

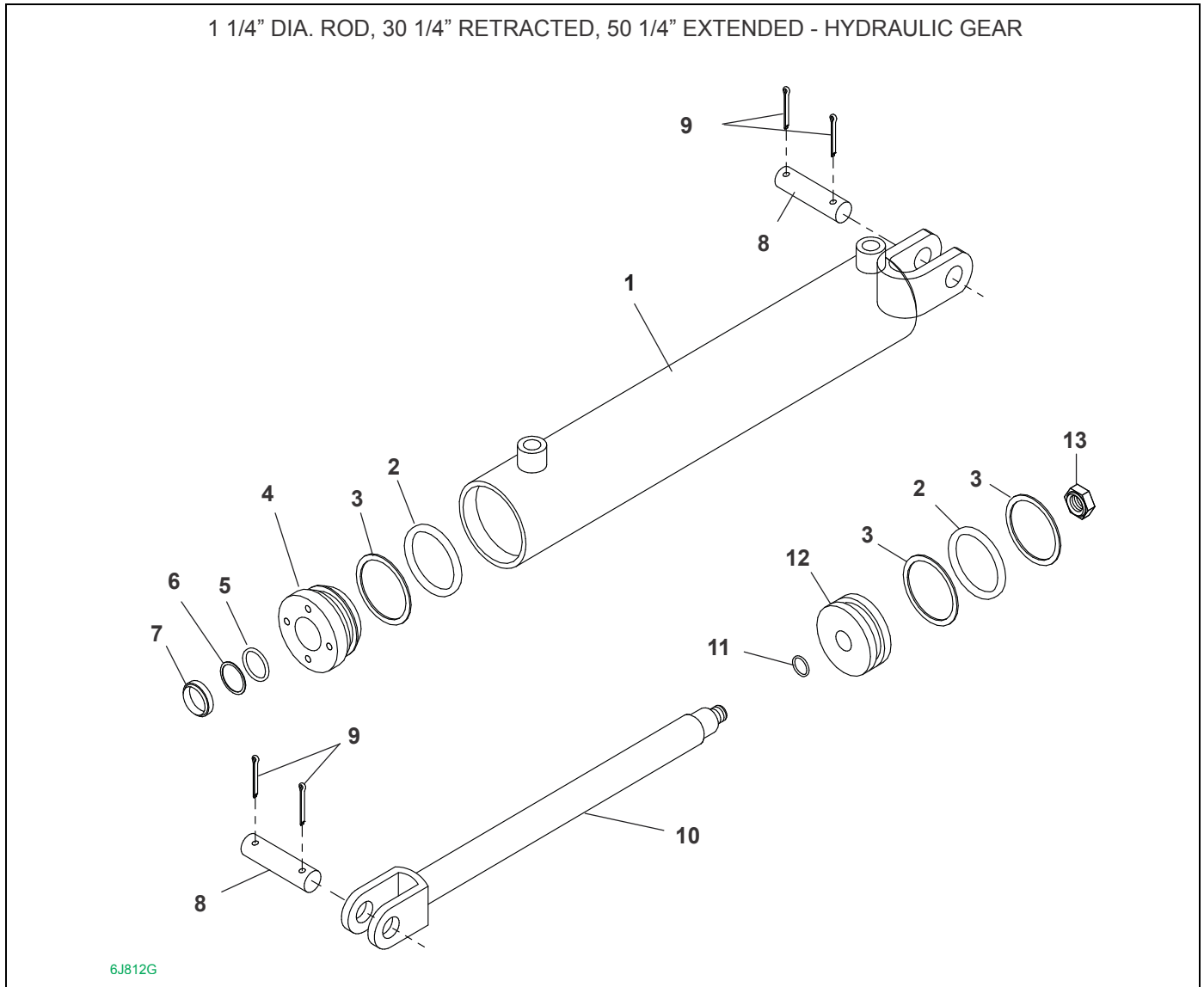


Figure 1-26: Hydraulic Cylinder Assembly, 2-1/2" X 20" - Prior to 1/15/2008

Hydraulic Cylinder Assembly, 2-1/2" X 20" - Prior to 1/15/2008

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J812G	HYD CYLINDER - 2 1/2 X 20	
1	7J030	TUBE ASSEMBLY	1
2		O RING	2
3		BACK-UP O RING	3
4	6J544	PACKING GLAND	1
5		O RING	1
6		BACK-UP O RING	2
7		WIPER	1
8	5J650	CLEVIS PIN (1.0 x 3.625 H2)	2
9	6C468	**COTTER PIN (3/16" X 2")	4
10	7J031	ROD ASSEMBLY	1
11		SEAL	1
12	6J546	PISTON	1
13	6D918	**LOCK NUT (3/4-16)	1
14	6J542	SEAL KIT (INCLUDES ITEMS 2, 3, 5, 6, 7 AND 11)	1

ILLUSTRATED PARTS LIST

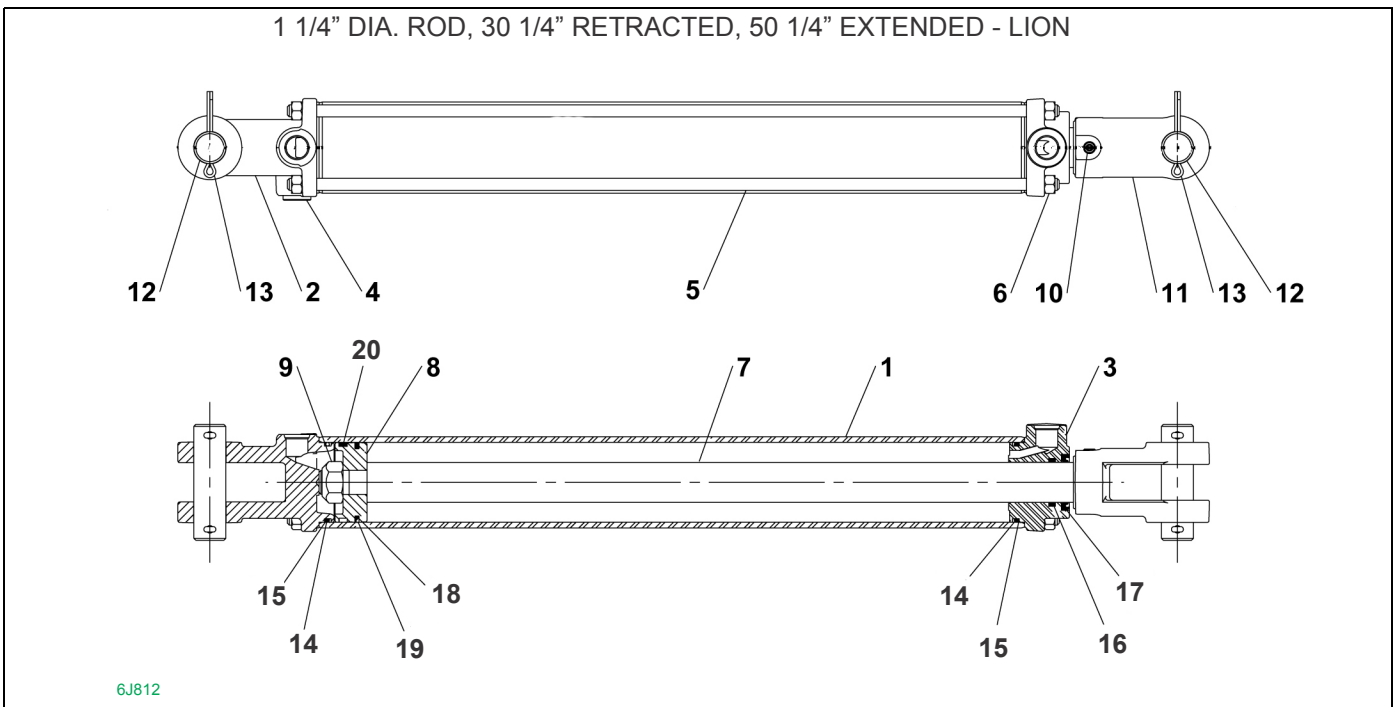


Figure 1-27: Hydraulic Cylinder Assembly, 2-1/2" X 20" - After 1/15/2008

Hydraulic Cylinder Assembly, 2-1/2" X 20" - After 1/15/2008

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J812	HYD CYLINDER - 2 1/2 X 20	
1		TUBE	1
2		CLEVIS CAP	1
3		ROD CAP	1
4		PLUG, SOCKET HEAD 3/4-16	1
5		TIE ROD	4
6	1C277	NUT HEX 3/8-16, ZP	8
7		ROD	1
8		PISTON	1
9	1P805	NUT, HEX SLFLKG GRB 3/4-16	1
10	1P443	**SET SCREW, 3/8-16 x 1/2 NYL	1
11	2P736	CLEVIS, ROD END FOR 1 1/4" RO	1
12	5J650	CLEVIS PIN (1.0 x 3.625 H2)	2
13	6C468	**COTTER PIN (3/16 x 2, ZP)	4
14		O-RING, 228 - 2.25 x 2.5 DURO	2
15		SEAL, BU#228 19PI-228	2
16		SEAL, HALLITE 605 ROD 1-1/4 D	1
17		SEAL WIPER ROD, 1.250 METAL E	1
18		O-RING, 137 - 2.063 x 2.25 DUR9	1
19		SEAL, PTFE PISTON RING 2-1/2D	1
20		WEAR RING, 2.50-2.25-.25-GFN	1
21	1P742	LION CYLINDER SEAL KIT (2.5") (INCLUDES ITEMS 14-20)	1

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Chapter 3

Glossary

For clarity this glossary of industry standard abbreviations and their definitions are provided.

A

ASSY Assembly
ASM Assembly
AR As Required

B

BATT Battery
BHSC Button Head Socket Cap
BLK Black
BRG Bearing

C

CB Carriage Bolt
CONN Connector
CRG Carriage
CTSK Countersunk
CTWT Counterweight
CVR Cover
CYD Cylinder

D

DBL Double
DIA Diameter

E

ENCLSD Enclosed

F

FHCS Flanged Head Cap Screw
FHHCS Flanged Hex Head Cap Screw
FL OR FLG Flange
FLT Flat
FPS Food Plot Seeder

G

GA Gauge
GR Grade

H

HHCS Hex Head Cap Screw
HCS High Carbon Steel
HD Head
HLCL Helical
HCSKT Hex Socket
HYD Hydraulic

I

ID Inside Diameter

L

LH Lefthand
LKG OR LOCK Locking
LWR Lower

M

MANF Manifold
MNT Mount

GLOSSARY

N

NPT National Pipe Thread
NRW Narrow

O

OD Outside Diameter
OHG Overhead Guard
ORFS OR ORS O-Ring Seal
ORP OR ORB O-Ring Boss

P

P-STEER Power Steering
PTFE Polytetrafluoroethylene (Teflon)

R

RH Righthand
RND Round

S

SER Series
SHCS Socket Head Cap Screw
SHLD Shield
SKT Socket
SLFLKG Selflocking
SOC Socket
SPDT Single Pole Double Throw
SPR Spring
SQ Square
SRTD Serrated
SSCR Setscrew
SST Stainless Steel
STD Standard

U

UPR Upper

W

WHL Wheel
WLD OR WLDMT Weldment

Z

ZP Zinc Plated

Document Control Revision Log:

Date	Revision	Improvement(s) Description and Comments
11/08/2007	290rev0306	Initial Release
02/2012	290rev0212	Improved Pictures, Translated to Landoll Format,



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Widths: 19', 21', 23', 25', and 27'

Parts Manual

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LANDOLL CORPORATION

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