



FERTILIZER APPLICATION EQUIPMENT

F810 Fertilizer Spreader

Parts Book (Originating w/Serial Number 105-101)

Model Number: _____
Serial Number: _____
Date of Purchase: _____





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Ordering Code

F810 Spreader (Example)

The ordering code will consist of a letter with four numbers (*Model*), one number or letter (*Spread Width*), one letter or number (*Tire Size*), one letter (*Apron Drive*), one letter (*Spinner Drive*), one number or letter (*Steering, Scale, and Brake Options*), and one or more letters or numbers (*Machine Options*). An example of a fertilizer spreader ordering code is shown below.

Example: **F8104BWH8.TRGM**

A
B
C
D
E
F
G

- A MODEL**
F810 = 8 Ton Fertilizer Spreader
- B SPREAD WIDTH**
4 = 40 ft. Driving Interval
5 = 50 ft. Driving Interval
6 = 60 ft. Driving Interval
B = 66 ft. Driving Interval
C = 72 ft. Driving Interval
8 = 80 ft. Driving Interval
A = 88 ft. Driving Interval
9 = 90 ft. Driving Interval
- C TIRE SIZE**
- | | |
|---|---|
| K = 14L-16.1 Flotation Tire
L = 19L-16.1 Flotation Tire
M = VF385/65R22.5 Radial Implement
<hr/> D = 320/90R50 Lugged Tire (Singles Only)
B = 380/90R46 Lugged Tire (Singles Only)
C = 480/80R42 Lugged Tire (Singles Only)
N = No Tires - 10 on 11.25 BC (Singles Only)
<hr/> 4 = 320/90R50 Lugged Tire (Dual Ready)
2 = 380/90R46 Lugged Tire (Dual Ready)
R = 480/80R42 Lugged Tire (Singles Only)
F = 710/70R38 Lugged Tire (Singles Only)
H = No Tires - 10 on 13.189 BC (Singles Only) | Walking Tandem
61"-105" Wheel Center
<hr/> Row Crop
11.25BC Hub
80"-150" Wheel Center
<hr/> Row Crop
13.189BC Hub
60"-144" Wheel Center |
|---|---|
- D APRON DRIVE**
M = Mechanical Ground Drive (MGD) w/ Hydraulic Shut Off (Requires Spinner Drive Code "H")
W = Hydraulic Drive Raven 22 Pin - Variable Rate Ready w/ Spinner Sensor (Requires Spinner Drive Code "H")
X = Hydraulic Drive Raven 37 Pin - Variable Rate Ready w/ Spinner Sensor
Z = Hydraulic Drive Raven 47 Pin - Variable Rate Ready w/ Spinner Sensor (JD Rate Controller 2000 Ready)
T = Hydraulic Drive ISO Ready - Variable Rate Ready w/ Spinner Sensor
K = Hydraulic Drive Ag Leader - Variable Rate Ready w/ Spinner Sensor
- E SPINNER DRIVE**
H = Hydraulic Spinner Drive (HSD) - Fixed Speed
C = Controlled Spinner Drive (CSD) - Compensated Speed - Requires VRR
- F STEERING/SCALE/BRAKES**
8 = Non-Steerable - No Scale - No Brakes
9 = Non-Steerable - 4pt Scale - No Brakes
2 = Non-Steerable - No Scale - 2 Brakes (Walking Tandem Only) (Requires Tire Code "J"-"M")
3 = Non-Steerable - 4pt Scale - 2 Brakes (Walking Tandem Only) (Requires Tire Code "J"-"M")
4 = Non-Steerable - No Scale - 4 Brakes (Walking Tandem Only) (Requires Tire Code "J"-"M")
5 = Non-Steerable - 4pt Scale - 4 Brakes (Walking Tandem Only) (Requires Tire Code "J"-"M")
D = Steerable - 4pt Scale - No Brakes
- G OPTIONS**
- | | |
|--|-------------------------------|
| 3 = 380/90R46 (14.9R46) Lugged Tire - 20" Spacing (Requires Tire Size Code "2")
2 = 380/90R46 (14.9R46) Lugged Tire - 22"/30" Spacing (Requires Tire Size Code "2")
5 = 320/90R50 (12.4R50) Lugged Tire - 20" Spacing (Requires Tire Size Code "4")
4 = 320/90R50 (12.4R50) Lugged Tire - 22"/30" Spacing (Requires Tire Size Code "4")
<hr/> T = Tarp (Installation not Included)
E = Extensions, 11.25" (Installation not Included)
I = Raven ISO CAN Node (Requires Apron Drive Code "T")
R = Raven SCS660 Rate Controller and Row Crop Tractor Harness (Requires Apron Drive Code "W")
G = GPS Speed Sensor (Requires Apron Drive Code "W")
D = Spinner RPM Display (Requires Apron Drive Code "M")
M = Scale Monitor (Requires Scale Code "3", "5", or "9")
L = Ladder | Row Crop
Dual Tires |
|--|-------------------------------|



Owner Information

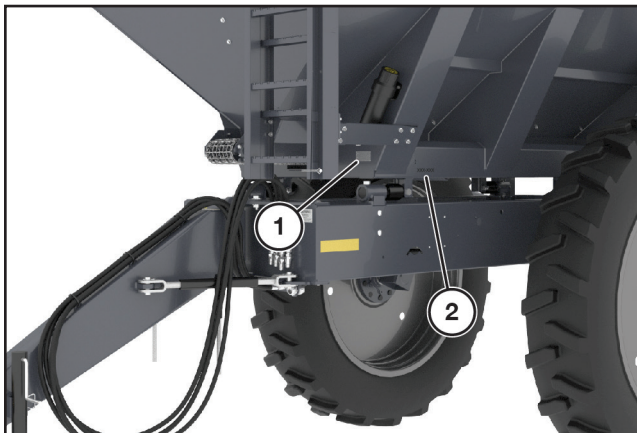
NOTE: *This parts book provides detailed parts lists and drawings for the Loftness F810 Fertilizer Spreader. Use this parts book when ordering replacement parts and as a reference for machine architecture, and assembly.*

For information on safety, setup, operation, and maintenance instructions for your spreader, refer to the Owner's Manual that is also shipped with your machine.

Make sure that all personnel have read the owner's manual for this machine and thoroughly understand safe and correct operating, installation, and maintenance procedures.

Continuous improvement and advancement of Loftness products may result in changes to your equipment that may not be reflected in this publication. Loftness reserves the right to make product improvements to the machine at any time. Although great care has been taken to ensure the accuracy of this publication, Loftness does not assume any liability for errors or omissions.

Serial Number Location



The machine serial number is shown in the tag (1), and is also stamped into the hopper frame (2) near the tag.

IMPORTANT: *Always use your model and serial number when requesting information or when ordering parts.*

Owner's Manual and Parts Book Access



To access a digital parts book and/or owner's manual, use a smart phone to scan the QR Code (1) located just above the serial number tag on the front of the hopper. This code will provide a link to machine documentation on the Loftness website.





PARTS IDENTIFICATION

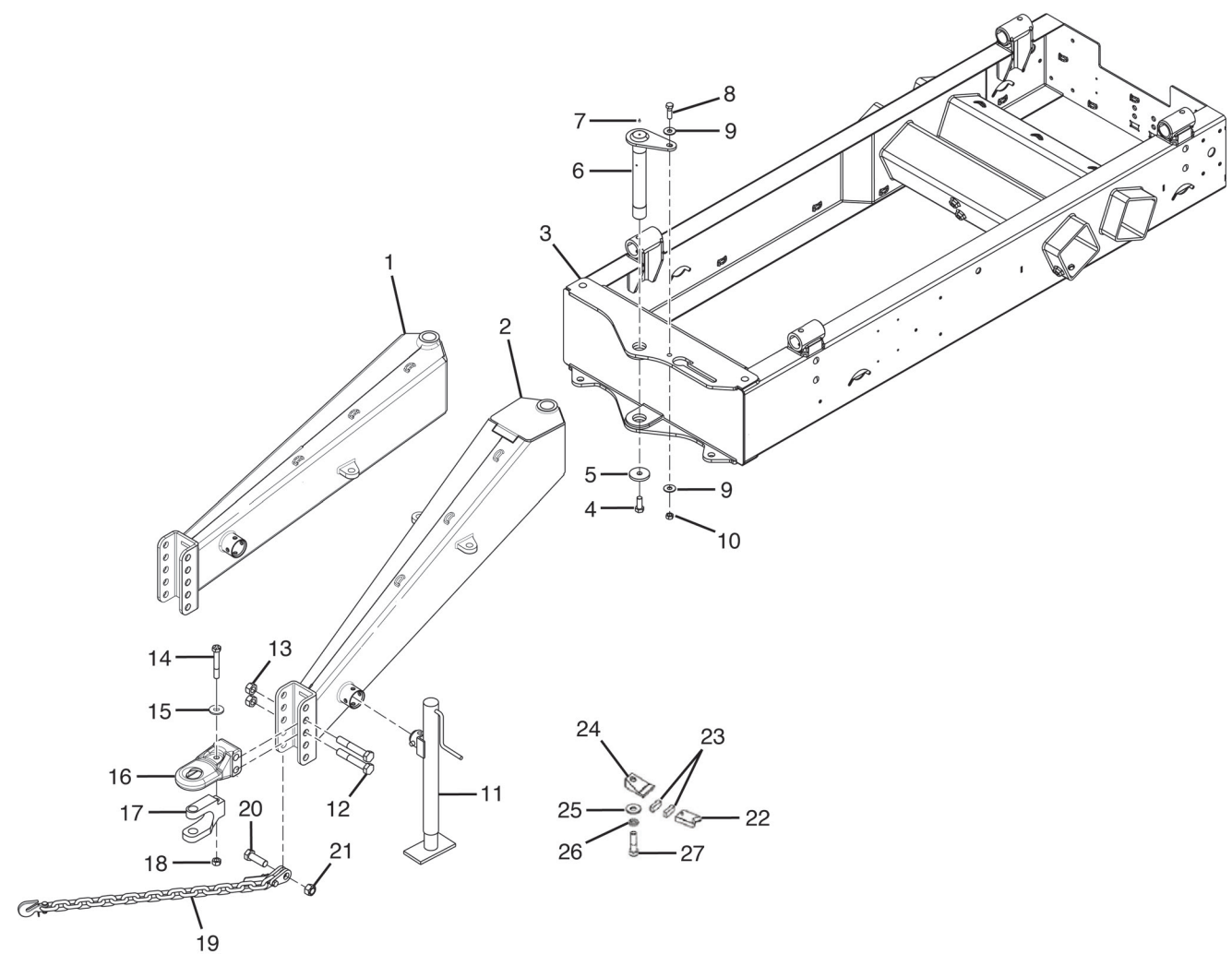
NOTE: To assist with identifying a correct part or assembly for your spreader, the far right column on the parts lists in this book will include a product code from any specific product group where applicable. In some parts lists, a column labeled “S/N” (serial number) may also be added to indicate the serial number range of a part or assembly when design changes have occurred. See example of both below.

Any code field that is blank will indicate that a particular part or assembly is common or standard to all F810 Spreader models.

#	QTY.	PART #	DESCRIPTION	S/N	CODE
1	1	203811	BRACKET	up to 105-156	W, X, Z, T
2	6	N41428	BOLT, CARRIAGE 5/16" X 1", SS		
3	1	204242	SHAFT, SPREADER CONVEYOR DRUM		
4	2	N33830	BEARING, 1" DODGE 3-BOLT FLG		
5	1	203810	BRACKET	up to 105-156	

Parts Identification

Chassis; Hitch Options



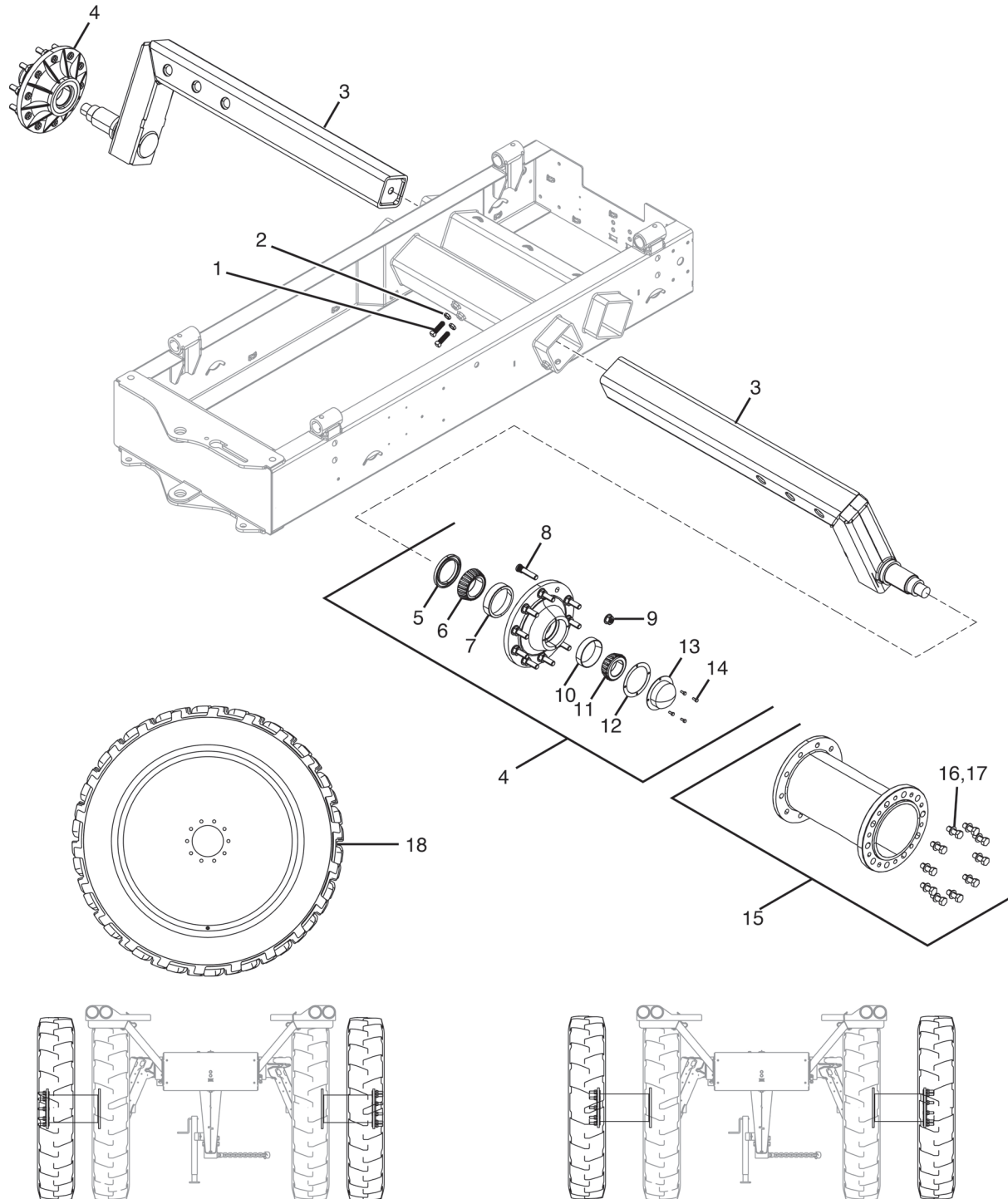
Chassis; Hitch Options

#	QTY.	PART #	DESCRIPTION	CODE
				TIRE
1	1	204822	HITCH WLDMT-WALKING TANDEM	K, L, M
2	1	204782	HITCH WLDMT-ROW CROP	D, B, C, H, 4, 2, R, F, H
3	1	210251	FRAME, 8 TON	
4	1	N16753	BOLT, 3/4" X 1-3/4" FN THD GR 8	
5	1	204191	WASHER, 3" OD X .75" ID X .375" THK	
6	1	203901	PIN-FLAG,2"X14.125"	
7	1	4105	GREASE-ZERK, 1/4" SCREW-IN	
8	1	4042	BOLT, 5/8" X 2" FINE THRD. GR.8	
9	2	4069	WASHER, FLAT 5/8"	
10	1	4057	NUT, 5/8" FINE THREAD TOP LOCK	
11	1	N84670	JACK, BULLDOG SWL 5K	
12	2	N28583	BOLT, 1 X 6" FN TH GR 8	
13	3	N16700	NUT, 1"-14GR.8 FINE THREAD TOP LOCK	
14	1	4577	BOLT, 3/4" X 5" FN TH GR 8	
15	1	N35327	WASHER, FLAT 3/4" SAE	
16	1	206230	BASE, CAT-3 HITCH	
	1	N37474	BASE, CAT-2 HITCH	
	1	206220	BASE, CAT-4 HITCH	
17	1	N37463	CLEVIS, CAT 2 BOLT-ON HITCH	
18	1	N16352	NUT, LOCK 3/4" GRADE 8 FINE	
19	1	206244	CHAIN, SAFETY 1/2" X 50" 41,000 LB	
20	1	N16499	BOLT, 1" X 3" FINE THREAD GRADE 8	
21	3	N16700	NUT, 1"-14GR.8 FINE THREAD TOP LOCK	
22	1	N37475	BLOCK, CAT 2 BOLT - ON REC V	
23	2	N37477	CUSHION, CAT 2 BOLT - ON REC	
24	1	N37476	PLATE, CAT 2 BOLT - ON REC TOP	
25	1	4071	WASHER, 3/4" FLAT	
26	1	4287	WASHER 3/4" LOCK	
27	1	4352	BOLT, 3/4" X 3" GR 5	

Parts Identification

Axles, Row Crop - 60" to 132"; 10 on 13.189" Bolt Center

(Tire Codes - 2, 4, R, F, H)



For Duals on 20 and 22 in. Center
Duals dished the same as inner wheels.
Duals paired as left/left and right/right.

For Duals on 30 in. Center
Duals dished the opposite of inner wheels.
Duals paired as right/left and right/left.

Axles, Row Crop - 60" to 132"; 10 on 13.189" Bolt Center

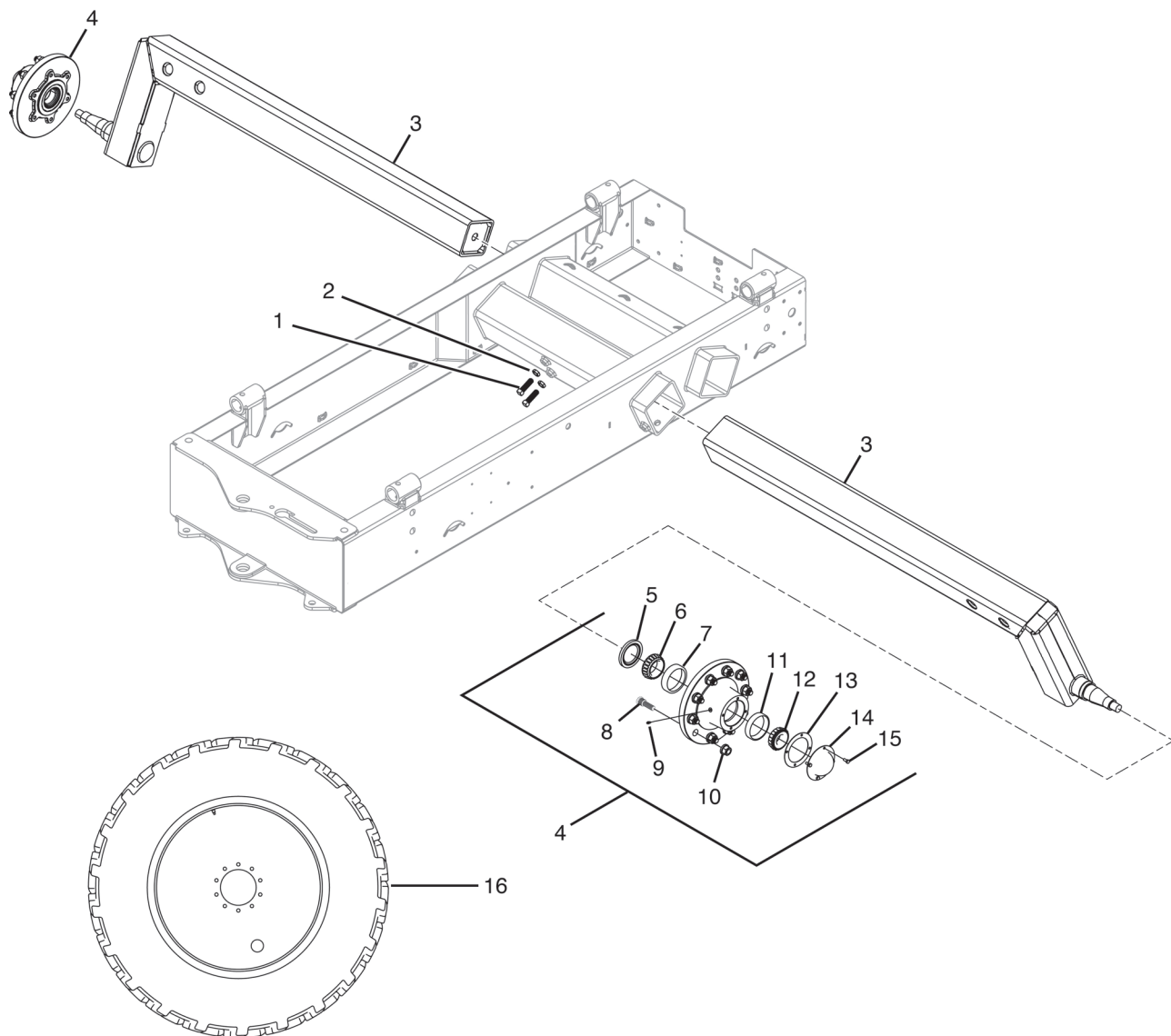
(Tire Codes - 2, 4, R, F, H)

#	QTY.	PART #	DESCRIPTION	CODE
				TIRE
1	12	N155856	SCREW, SQ HD SET 3/4IN X 2-1/2IN	
2	12	4954	NUT, 3/4" JAM	
3	2	210026	AXLE WLDMT, 60IN TO 132IN	
4	2	204393	HUB, 10 BOLT 13.19"BC 25,000LB	
5	1	204392	SEAL, 4.375 ID	
6	1	203698	CONE, INNER BEARING X33118XT-T2	
7	1	203700	CUP, INNER Y33118-T2	
8	10	204538	STUD, M22X1.5X101.6	
9	10	204539	NUT, M22X1.5 FLANGE	
10	1	203701	CUP, OUTER Y33215-T2	
11	1	203699	CONE, OUTER BEARING X33215XT-T2	
12	1	203705	GASKET, 881 HUB	
13	1	203706	CAP, 881 HUB	
14	4	4412	BOLT, 5/16" X 3/4" GRADE 5	
15	2	204677	EXTENSION ASM-20" HUB (Includes attaching hardware)	
	2	204676	EXTENSION ASM-22"/30" HUB (Includes attaching hardware)	
16	10	204678	WASHER, FLAT M22 10.9	
17	10	204679	BOLT, M22X2.5X60MM 10.9	
18	1	204590	WHEEL, 320/90R50 LEFT	4
	1	204591	WHEEL, 320/90R50 RIGHT	
	1	204350	WHEEL, 380/90R46 LEFT	2
	1	204351	WHEEL, 380/90R46 RIGHT	
	1	204741	WHEEL, 480/80R42 LEFT	R
	1	204740	WHEEL, 480/80R42 RIGHT	
	1	204611	WHEEL, 710/70R38 LEFT	F
	1	204612	WHEEL, 710/70R38 RIGHT	

Parts Identification

Axles, Row Crop - 80" to 150"; 10 on 11.25" Bolt Center

(Tire Codes - D, B, C, N)



Axles, Row Crop - 80" to 150"; 10 on 11.25" Bolt Center

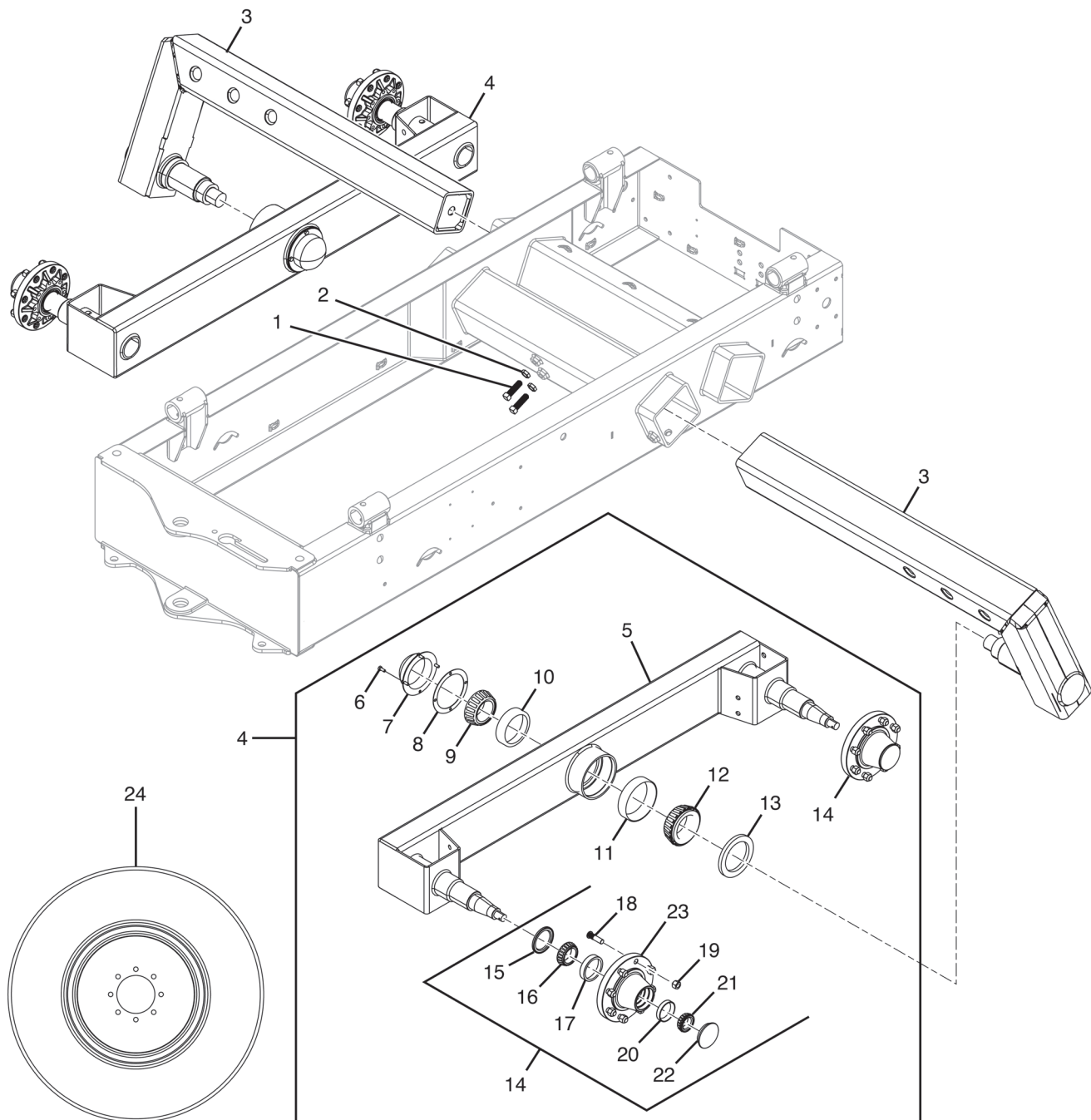
(Tire Codes - D, B, C, N)

#	QTY.	PART #	DESCRIPTION	CODE
				TIRE
1	12	N155856	SCREW, SQ HD SET 3/4IN X 2-1/2IN	
2	12	4954	NUT, 3/4" JAM	
3	2	204936	AXLE WLDMT, 80IN TO 150IN	
4	2	N84268	HUB ASM, 10 ON 11.25, 8.66 PILOT	
5	1	N87661	SEAL, GREASE	
6	1	N87457	BEARING, CONE	
7	1	N87658	CUP, BEARING OUTER	
8	10	N87454	STUD, WHEEL 3/4-16X3.00IN	
9	1	N25470	GREASE-ZERK, 1/4" SCREW-IN LONG	
10	10	N87456	NUT, WHEEL FLANGE 3/4-16	
11	1	N87660	CUP, BEARING INNER	
12	1	N87455	BEARING, CONE	
13	1	N87662	GASKET, 871 HUB CAP	
14	1	N87644	CAP, 871 HUB	
15	4	4412	BOLT, 5/16" X 3/4" GRADE 5	
16	1	N104728	WHEEL ASM, 320/90R50 161 LEFT	D
	1	N104727	WHEEL ASM, 320/90R50 161 RIGHT	
	1	N87289	WHEEL ASM, 380/90R46 LEFT	B
	1	N87291	WHEEL ASM, 380/90R46 RIGHT	
	1	N152372	WHEEL ASM, 480/80R42 LEFT	C
	1	N152371	WHEEL ASM, 480/80R42 RIGHT	

Parts Identification

Axles, Walking Tandem - 8 on 8" Bolt Center

(Tire Codes - K, L, M)



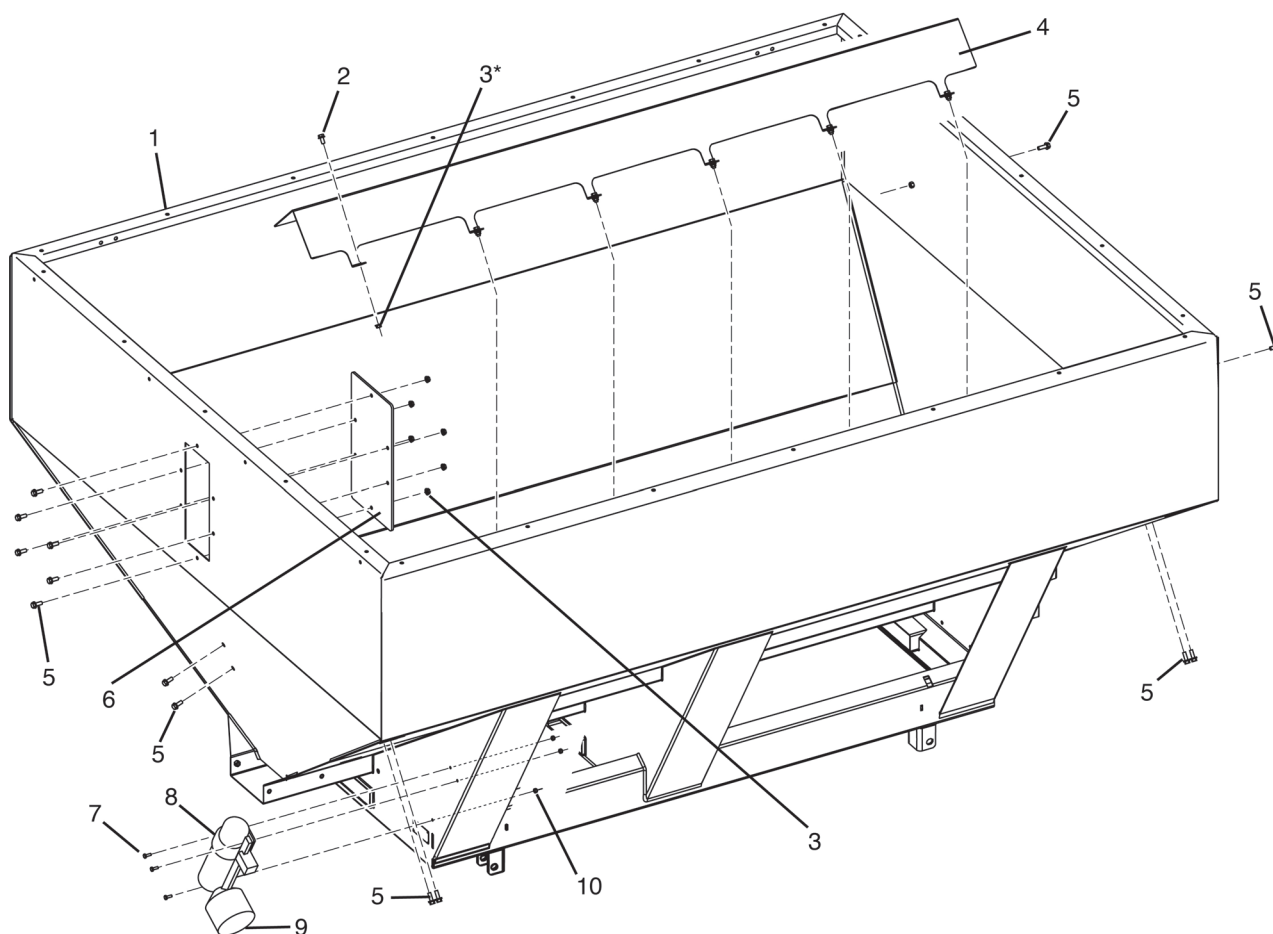
Axles, Walking Tandem - 8 on 8" Bolt Center

(Tire Codes - K, L, M)

#	QTY.	PART #	DESCRIPTION	CODE
				TIRE
1	12	N155856	SCREW, SQ HD SET 3/4IN X 2-1/2IN	K, L, M
2	12	4954	NUT, 3/4" JAM	
3	2	203714	AXLE, WLDMT WALKING TANDEM	
4	2	203712	BEAM, WALKING TANDEM	
5	1	203721	WLDMT, WALKING TANDEM BEAM	
6	4	4412	BOLT, 5/16" X 3/4" GRADE 5	
7	1	203706	CAP, 881 HUB	
8	1	203705	GASKET, 881 HUB	
9	1	203699	CONE, OUTER BEARING X33215XT-T2	
10	1	203701	CUP, OUTER Y33215-T2	
11	1	203700	CUP, INNER Y33118-T2	
12	1	203698	CONE, INNER BEARING X33118XT-T2	
13	1	203708	SEAL, 881 HUB	
14	2	N41447	HUB, 8 BOLT 4.0" BOLT CIRCLE	
15	1	N39118	SEAL, GREASE	
16	1	N39120	BEARING, CONE	
17	1	203718	CUP, BEARING JLM506810	
18	8	N39122	STUD, 5/8-18X2.25	
19	8	N39123	NUT, 5/8-18 60DEG	
20	1	203717	CUP, BEARING LM501310	
21	1	N39119	BEARING, CONE	
22	1	N39117	CAP, HUB	
23	1	N39121	HUB, 8 BOLT	
24	1	204714	WHEEL, 14L-16.1SL 1.50" OFFSET	K
	1	N33812	WHEEL, 19L16.1 -16" RIM - 10PLY	L
	1	204274	WHEEL, VF295/75R22.5 1.50" OFFSET	M

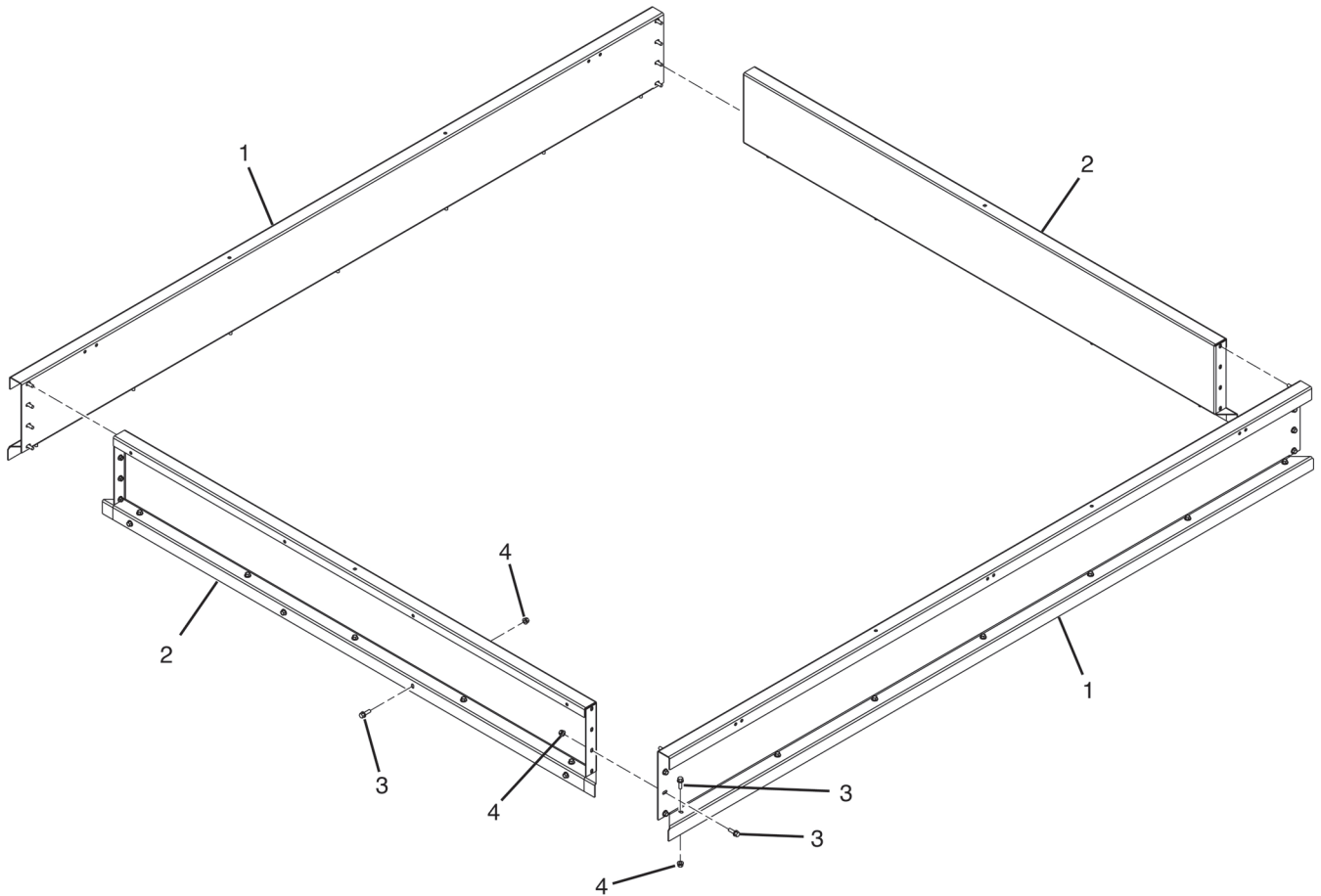
Parts Identification

Hopper; Apron Hood; Window



#	QTY.	PART #	DESCRIPTION	S/N
1	1	204861	BIN WLDMT-F810	
2	12	N36497	BOLT, 3/8" X 3/4" SER FLG	
3	22	N73940	NUT, LOCK 3/8" SER FLG SS	up to 105-156
	10	N73940	NUT, LOCK 3/8" SER FLG SS	from 105-157
4	1	N41898	HOOD, SRDR 6 & 8 FLOOR CHAIN	
5	22	N50815	BOLT, 3/8" X 1" SS SER FL GR 5	
6	1	N37022	WINDOW, SPREADER FRONT	
7	3	4340	BOLT, 1/4" X 3/4" GRADE 5	
8	1	N19600	HOLDER, 01-315A STND.MANUAL	
9	1	N105370	DENSITY SCALE, FERTILIZER	
10	3	4996	NUT, LOCK 1/4" NYLOCK	

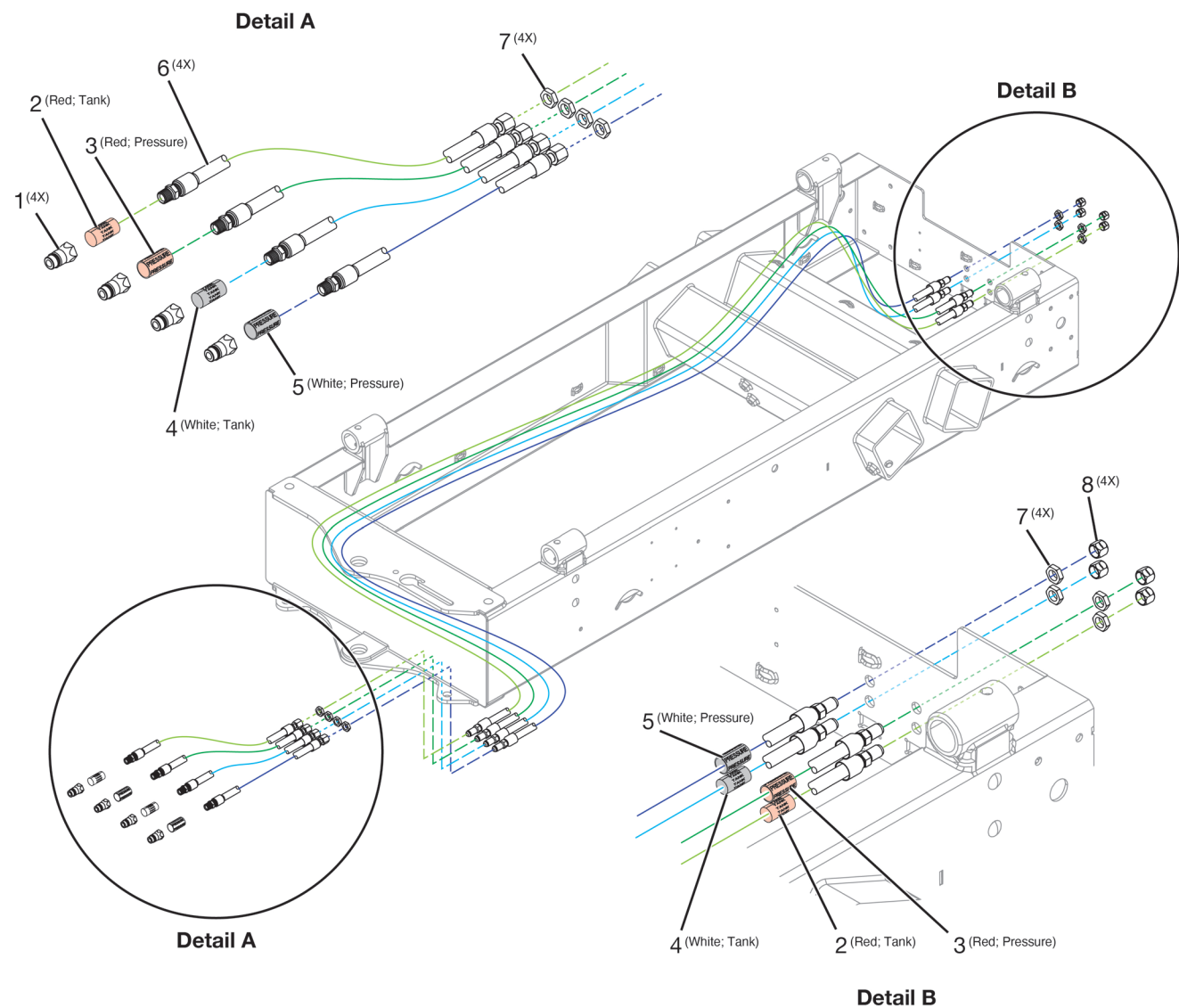
Bin Extensions (N62005)



#	QTY.	PART #	DESCRIPTION	CODE
				OPTIONS
1	2	N88892	EXTENSION, SIDE	E
2	2	N88930	EXTENSION, END	
3	48	N50815	BOLT, 3/8" X 1" SS SER FL GR 5	
4	48	N73940	NUT, LOCK 3/8" SER FLG SS	

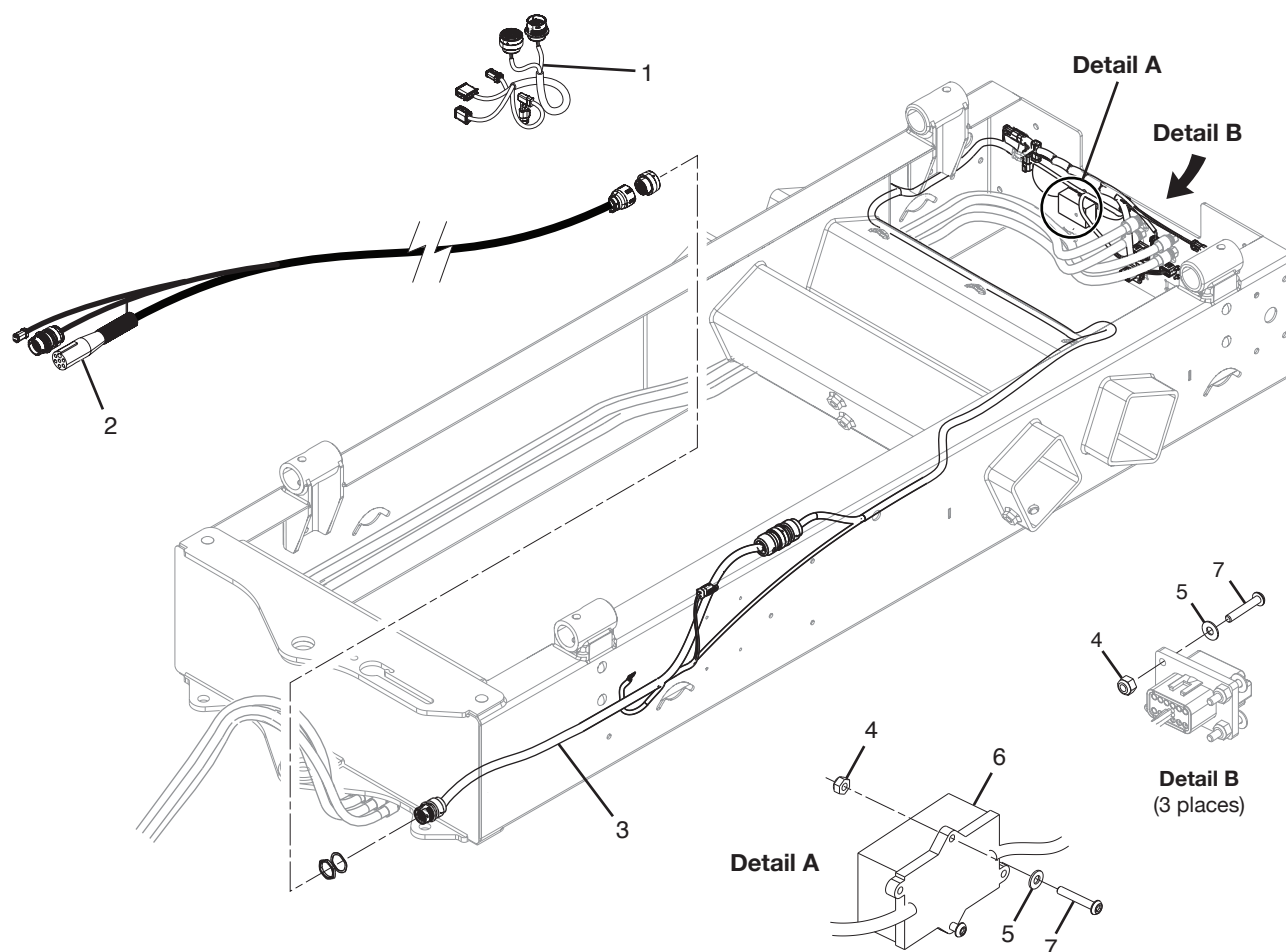
Parts Identification

Hydraulics, Chassis (Spinner and Apron Drive)



#	QTY.	PART #	DESCRIPTION	CODE
1	4	N11825	COUPLER, 1/2" MALE PIONEER	
2	2	N113698	DECAL, RED TANK	
3	2	N113696	DECAL, RED PRESSURE	
4	2	N24823	DECAL, TANK	
5	2	N24822	DECAL, PRESSURE	
6	4	206246	HOSE, 1/2" X 127" -8FJX -8MPT	
7	8	N26387	NUT, JAM; -08 BULKHEAD	
8	4	N21385	CAP, 8FJIC	

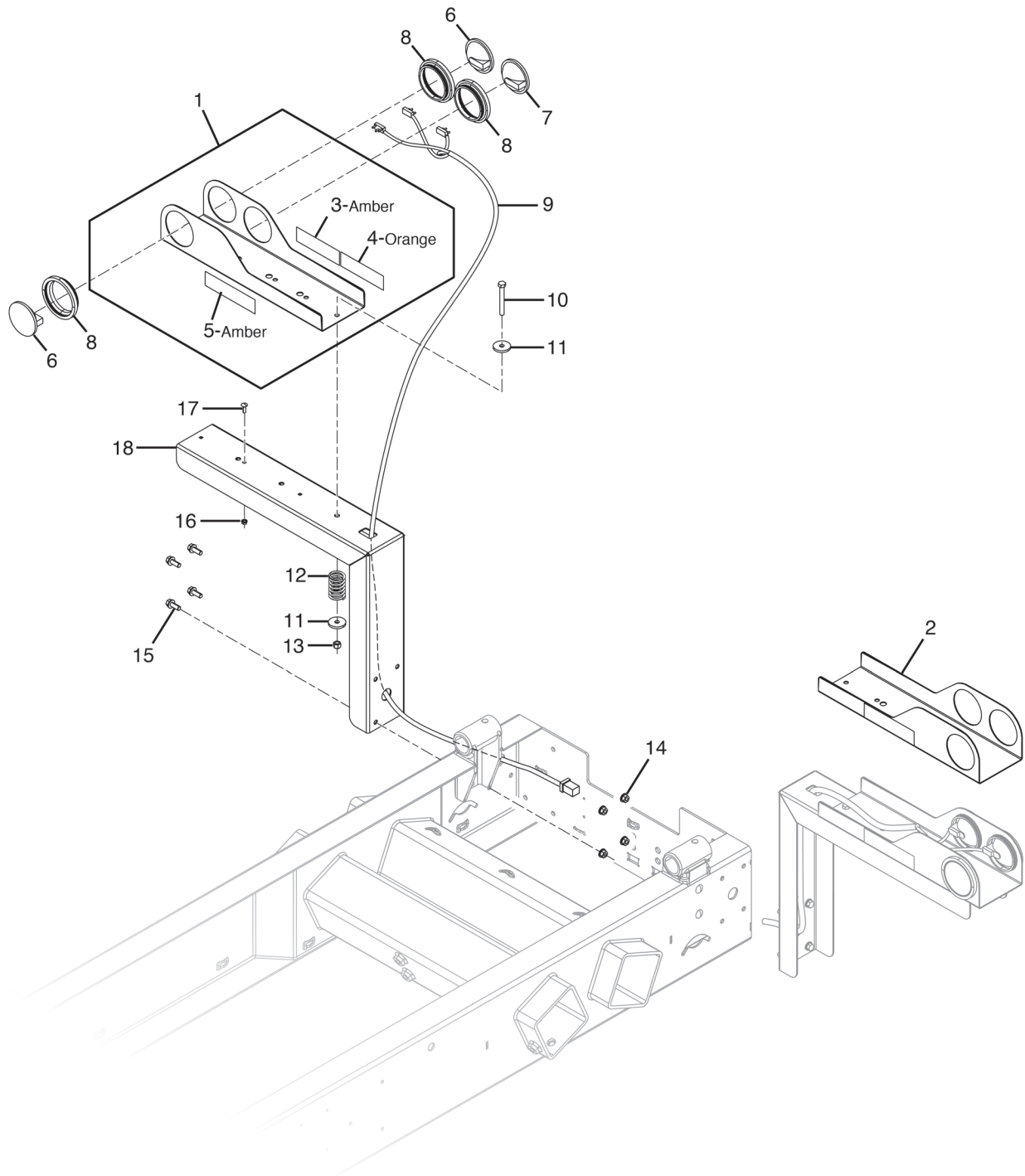
Wiring Harness, Chassis



#	QTY.	PART #	DESCRIPTION	CODE
				APRON
1	1	210324	HARNESS-MODULE, AGLEADER	K
2	1	210323	HARNESS-HITCH, AGLEADER	K
	1	204348	HARNESS-HITCH, RAVEN 22 PIN	W
	1	204347	HARNESS-HITCH, RAVEN 37 PIN	X
	1	204358	HARNESS-HITCH, ISO CONTROLLER	T
	1	204602	HARNESS-HITCH, RAVEN 47 PIN	Z
3	1	204357	HARNESS-12TON CHASSIS	
4	10	N16133	NUT, NYLON INSERT #8	
5	10	4576	WASHER, FLAT #8	
6	1	N62625	MODULE,LIGHTING	
7	10	N16132	BOLT, BHCS #8-32 X 1	

Parts Identification

Lights, Breakaway



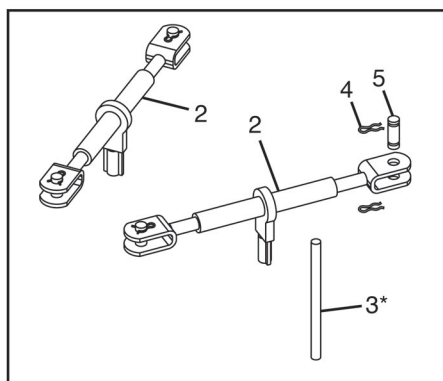
Lights, Breakaway

#	QTY.	PART #	DESCRIPTION	CODE
1	1	204746	LIGHT ARM ASM-RH	
2	1	204747	LIGHT ARM ASM-LH	
3	1	N35392	DECAL, RED REFLECTOR 9" X 2"	
4	1	204748	DECAL,RED-ORANGE REFLECTOR 6X2	
5	1	N35393	DECAL, RED REFLECTOR 9" X 2"	
6	4	N41423	LIGHT, 4" STTL AMBER	
7	2	N41422	LIGHT, 4" STTL RED	
8	6	N41426	GROMMET, 4" STTL	
9	2	204369	HARNESS-LIGHT ARM	
10	2	4357	BOLT, 1/2" X 4" GRADE 5	
11	4	4074	WASHER, 2" OD X 1/2" ID X 1/4"	
12	2	N19963	SPRING, COMP.; 234 LB/IN	
13	2	N149702	NUT, LOCK 1/2-13 NYLOCK	
14	8	N29075	NUT, LOCK 1/2" SERRATED FLANGE	
15	8	N18360	BOLT,1/2-13 X 1-1/4 SER FLG	
16	2	N41427	NUT, LOCK 5/16" SER FLG, SS	
17	2	N41428	BOLT, CARRIAGE 5/16" X 1", SS	
18	2	204980	ARM WLDMT, EXTREMITY	

Parts Identification

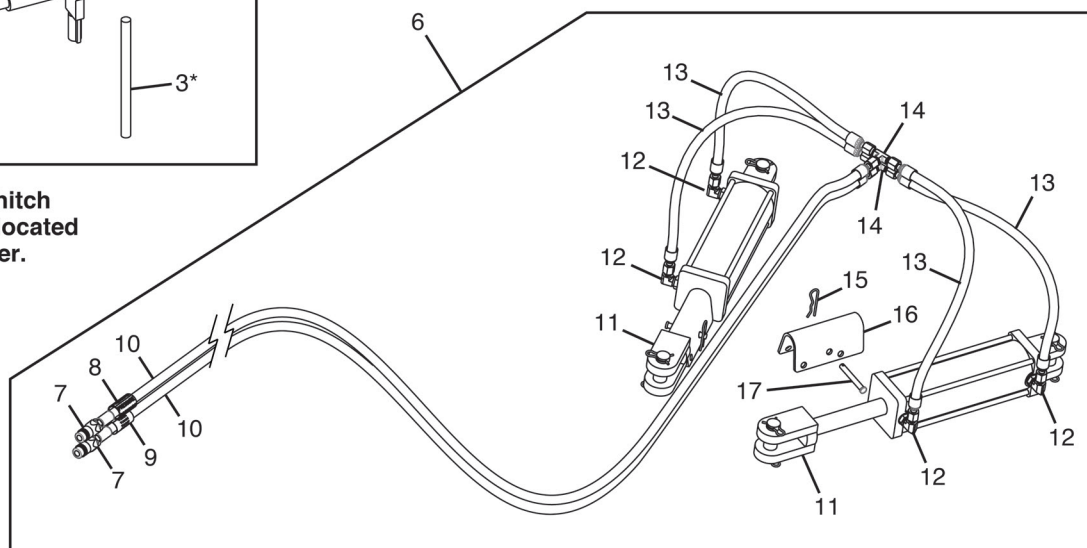
Hitch Positioning - Turnbuckle, Non-Steerable Hitch (206275); Steerable Hitch (206273)

Turnbuckles for Non-steerable Hitch



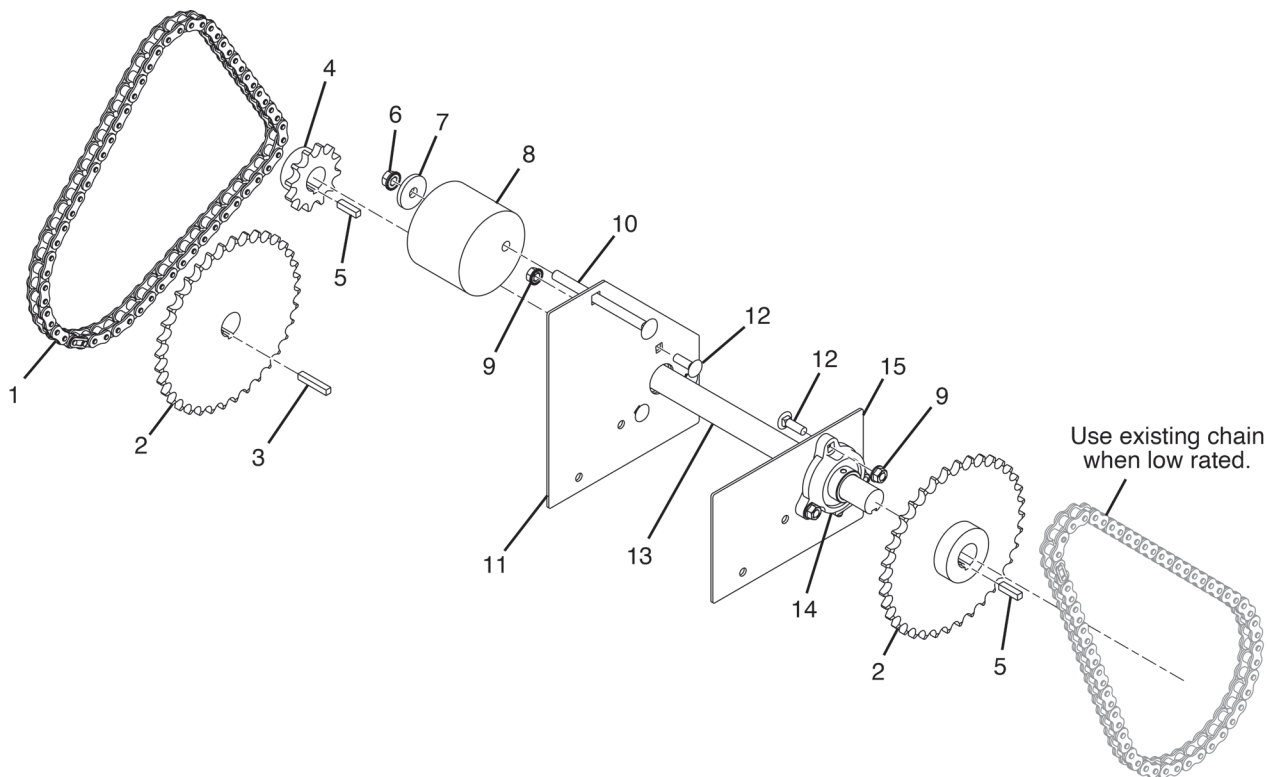
* Handle for the hitch turnbuckles is located in the tool holder.

Hydraulic-Driven Steerable Hitch



#	QTY.	PART #	DESCRIPTION	CODE
				STEERING
1	1	206275	ASSEMBLY, NON-STEERABLE HITCH	8, 9, 2, 3, 4, 5
2	2	8048	BODY, RATCHET JACK	
3	1	8048-30	HANDLE, RATCHET JACK	
4	8	8048-20	CLIP	
5	4	8048-10	PIN	
6	1	206273	ASSEMBLY, STEERABLE HITCH	D
7	2	N11825	COUPLER, 1/2" MALE PIONEER	
8	1	204355	DECAL, YELLOW PRESSURE	
9	1	204356	DECAL, YELLOW TANK	
10	2	204354	HOSE, 3/8" X 114" -6FJX -8MPT	
11	2	8042	CYLINDER, 3" X 8" REPHASING	
12	4	N20037	ELBOW, 90 -6MJIC-8MORB .031 OR	
13	4	204353	HOSE, 3/8" X 23" -6FJX -6FJX	
14	2	N24773	TEE, 6MJIC-6MJIC-6MJIC	
15	2	4336	CLIP, HAIRPIN 1/8" X 2-1/4"	
16	2	206274	SAFETY STOP, 6", CYLINDER	
17	2	4093	PIN, 3/8" X 3" (2.75" USEABLE)	

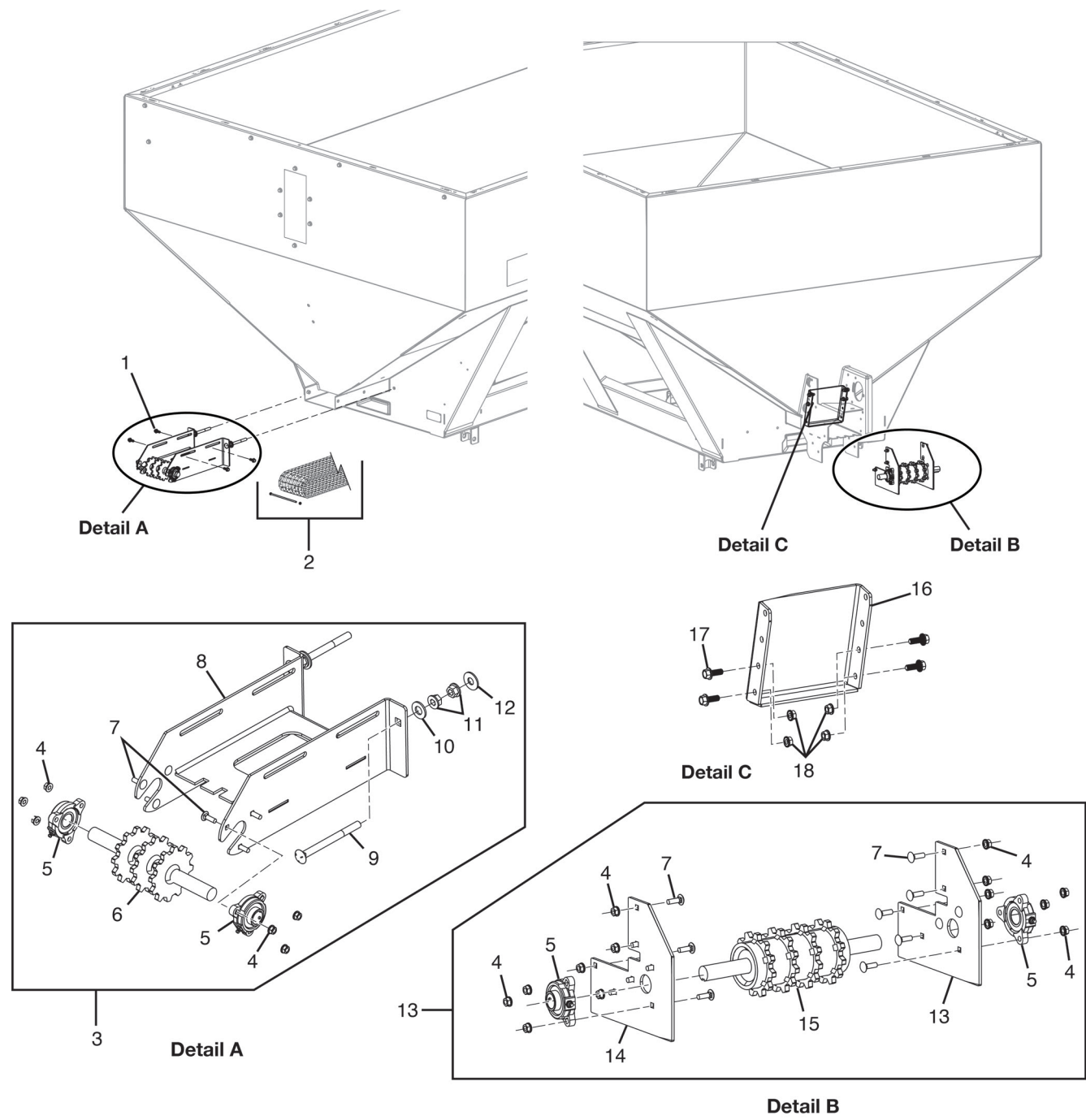
Kit, Cover Crop/Low Rate (203800)



#	QTY.	PART #	DESCRIPTION	S/N	CODE
					APRON
1	1	204152	CHAIN, #50 X 60 PITCH		W, X, Z, T
2	2	N87343	SPROCKET, 50B36-1.000		
3	1	7187-03	KEY, 1/4" X 1-1/2"		
4	1	8317	SPROCKET, 50B12H - 1IN RB		
5	2	7187-12	KEY, 1/4" X 1"		
6	1	N73940	NUT, LOCK 3/8" SER FLG SS		
7	1	4067	WASHER, 1-3/8" X 3/8" X 1/4" T		
8	1	N33889	TENSIONER, MOS2 3.5" DIA		
9	6	N41427	NUT, LOCK 5/16" SER FLG, SS		
10	1	4569	BOLT, CARRIAGE 3/8" X 5" SS FT		
11	1	203811	BRACKET	up to 105-156	
12	6	N41428	BOLT, CARRIAGE 5/16" X 1", SS		
13	1	204242	SHAFT, SPREADER CONVEYOR DRUM		
14	2	N33830	BEARING, 1" DODGE 3-BOLT FLG		
15	1	203810	BRACKET	up to 105-156	

Parts Identification

Apron; Apron Tensioners; Metering Gate



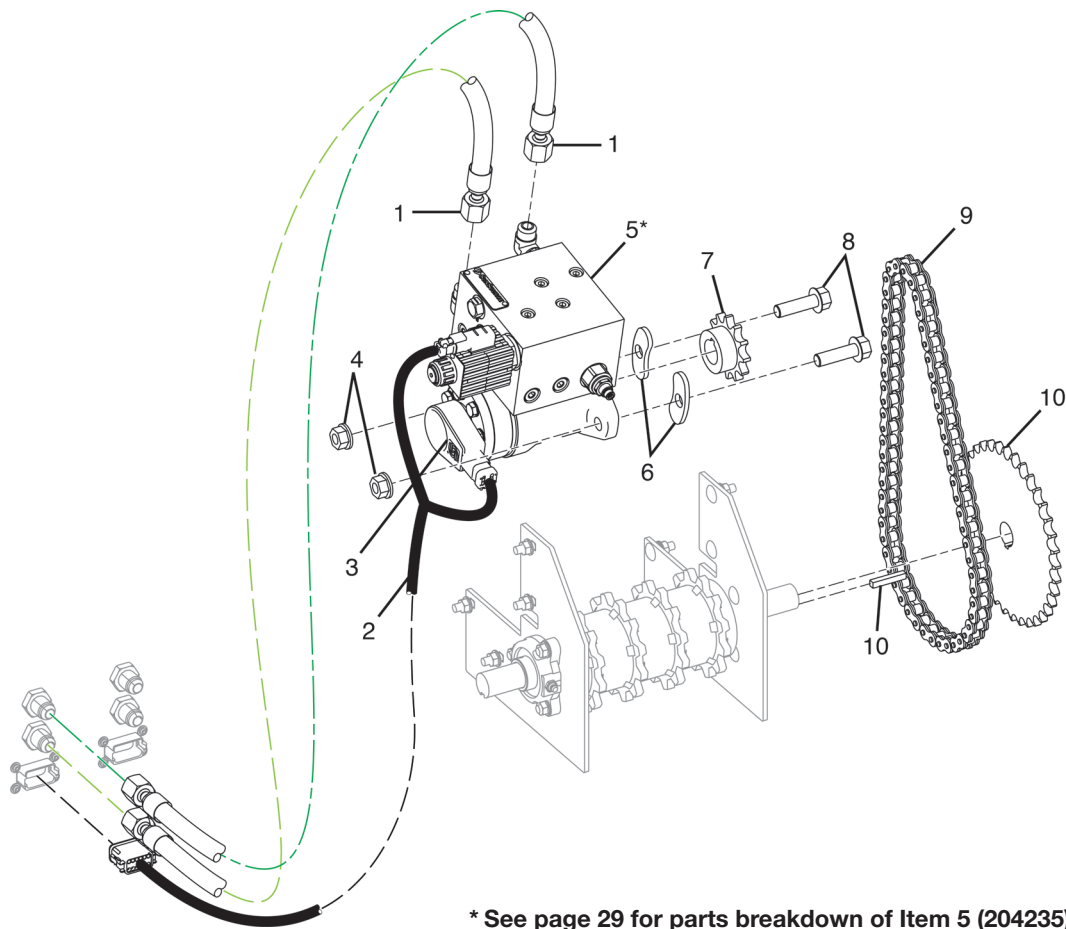
Apron; Apron Tensioners; Metering Gate

#	QTY.	PART #	DESCRIPTION	CODE
				APRON
1	4	4193	BOLT, 3/8 X 3/4 UNC GR5 PLT	
2*	1	N41429	BELT, FLATWIRE 7"X241"	
	As Required	204030	BOLT, 7" FLATWIRE BELT SPLICE (Included with N41429)	
	As Required	204031	NUT, LOCK #10-32 UNF NYLOCK SS (Included with N41429)	
3	1	204226	ASSEMBLY, TENSIONER	
4	22	N41427	NUT, LOCK 5/16" SER FLG, SS	
5	4	N33830	BEARING, 1" DODGE 3-BOLT FLG	
6	1	N43841	SPROCKET WLDMT,IDLER	
7	16	N41428	BOLT, CARRIAGE 5/16" X 1", SS	
8	1	204219	WLDMT, TENSIONER, CONVEYOR	
9	2	4988	BOLT, CARRIAGE 1/2" X 6" GR 5	
10	2	4997	WASHER, FLAT 5/8" SAE	
11	4	N29075	NUT, LOCK 1/2" SERRATED FLANGE	
12	2	4486	WASHER, 1/2" FLAT	
13	1	204644	ASSEMBLY, APRON DRIVE	
14	2	204643	EXTENSION, APRON SIDE	
15	1	204241	DRUM WLDMT,DRIVER	
16	1	204179	PLATE, GATE	W, X, T, Z
17	4	N50815	BOLT, 3/8" X 1" SS SER FL GR 5	
18	4	N73940	NUT, LOCK 3/8" SER FLG SS	

* Total belt length is 327.75 in. (832.5 cm).

Parts Identification

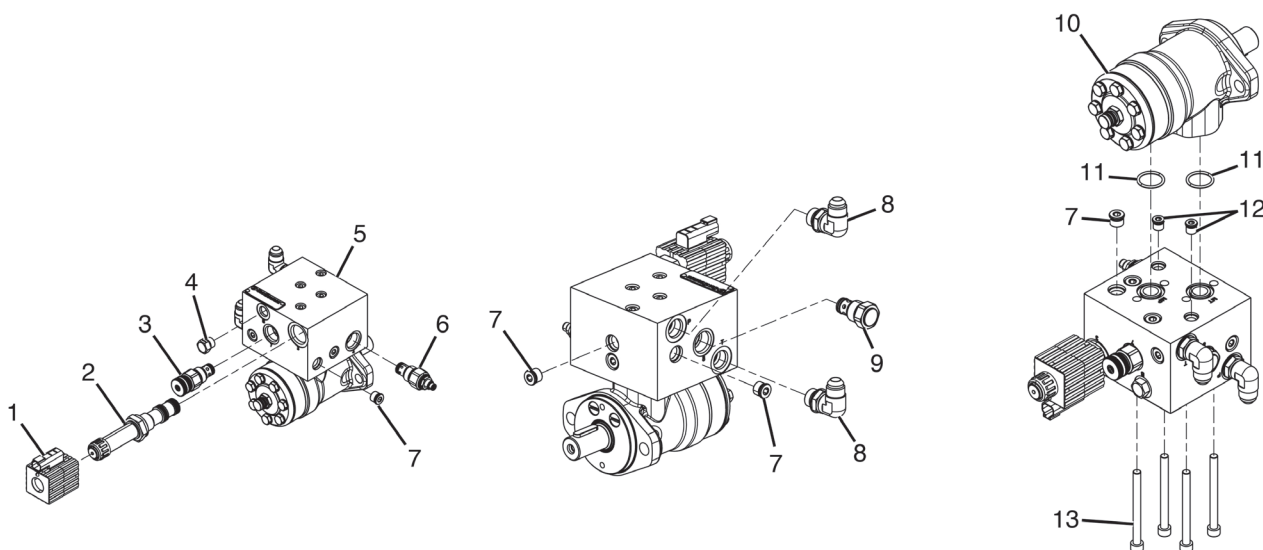
Apron Drive - with Hydraulics and Wiring Harness



* See page 29 for parts breakdown of Item 5 (204235).

#	QTY.	PART #	DESCRIPTION	CODE
				APRON
1	2	N26395	HOSE, 1/2" X 60" -8FJX -8FJX	W, X, T, Z
2	1	204737	HARNESS-PRODUCT, 1 BOOM	
3	1	N113376	SENSOR, APRON SPEED	W, X, T, Z, M
	As Required	N101187	SENSOR, SPEED (Dealer must program)	
4	2	N29075	NUT, LOCK 1/2" SERRATED FLANGE	W, X, T, Z
5	1	204235	MOTOR/VALVE ASM	
6	2	204589	WASHER, APRON MOTOR	
7	1	8317	SPROCKET, 50B12H - 1IN RB	
8	2	N18159	BOLT, 1/2" X 1-3/4" SER FLG	
9	1	204152	CHAIN, #50 X 37.50 SS	
10	1	7187-03	KEY, 1/4" X 1-1/2"	
11	1	N87343	SPROCKET, 50B36-1.000	

Apron Drive Motor and Valve Assembly (204235)



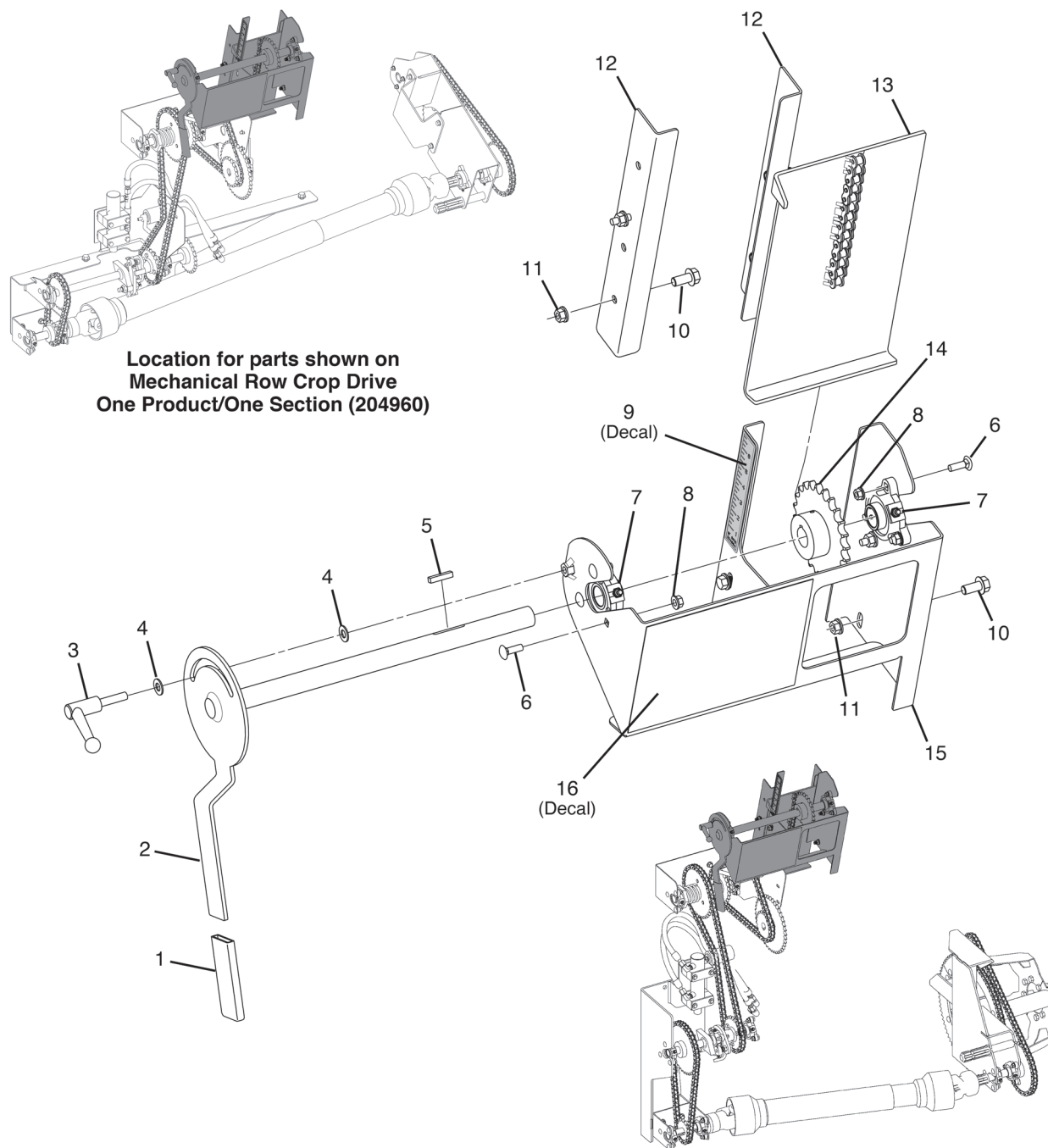
#	QTY.	PART #	DESCRIPTION	CODE
				APRON
1	1	N142518	COIL, 12VDC 3AMP DEUTSCH	W, X, T, Z
2	1	N142516	CARTRIDGE, PROPORTIONAL PCFC	
3	1	204086	CARTRIDGE, #10 NEEDLE VALVE	
4	1	N28286	PLUG, 6MOR HEX	
5	1	204236	MANIFOLD, APRON MOTOR	
6	1	N142510	CARTRIDGE, RELIEF VALVE ADJ	
7	9	N142494	PLUG, SAE -06	
8	2	N11952	ELBOW, 90 DEG - 08MJIC - 08MOR	
9	1	N142508	CARTRIDGE, CHECK VALVE 5PSI	
10	1	206257	MOTOR, 9.53 CI DANFOSS	
11	2	N142496	O-RING, SAE 568-119	
12	2	N139982	PLUG, SAE -04	
13	4	N142520	BOLT, SHCS M8X1.25X90	

Parts Identification

Gate Assembly, Mechanical Drive

Mechanical Row Crop Drive - One Product/One Section (204960)

Mechanical Drive - One Product/One Section (210040)



Gate Assembly, Mechanical Drive

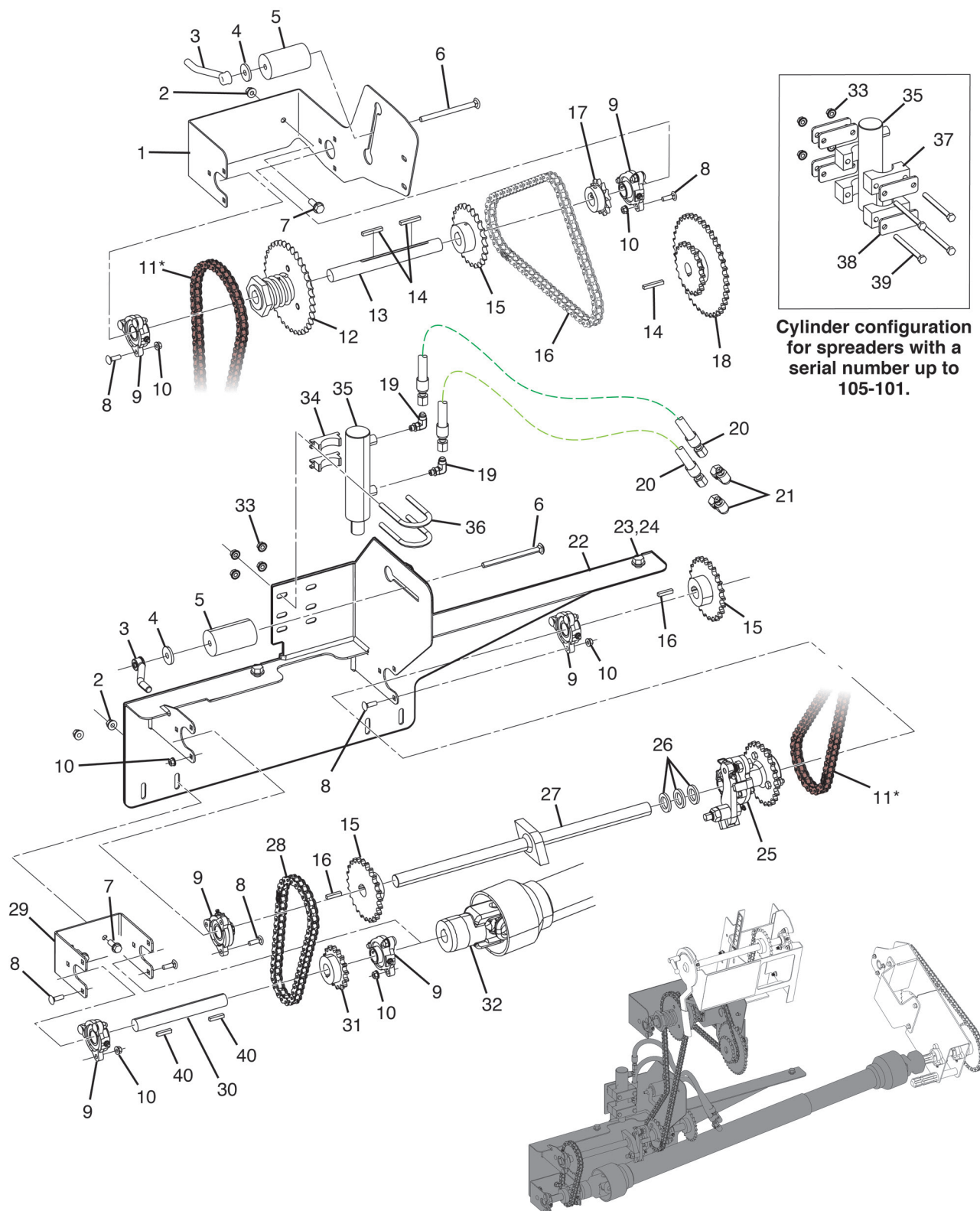
Mechanical Row Crop Drive - One Product/One Section (204960)

Drive, Mechanical - One Product/One Section (210040)

#	QTY.	PART #	DESCRIPTION	CODE	
				APRON	TIRE
1	1	N50757	COVER, PLASTIC HANDLE		
2	1	204971	ADJUSTER,GATE		
3	1	N128964	HANDLE, 3/8-16 X 1-9/16		
4	2	N31741	WASHER, FLAT 3/8" SAE		
5	1	7187-02	KEY, 1/4" X 1-1/4"		
6	6	N41428	BOLT, CARRIAGE 5/16" X 1", SS		
7	2	N33830	BEARING, 1" DODGE 3-BOLT FLG		
8	6	N41427	NUT, LOCK 5/16" SER FLG, SS		
9	1	204964	DECAL, VINYL RULER INCHES		
10	8	N50815	BOLT, 3/8" X 1" SS SER FL GR 5		
11	8	N73940	NUT, LOCK 3/8" SER FLG SS		
12	2	204959	BRACKET, METERING GATE		
13	1	204975	GATE WLDMT		
14	1	N114466	SPROCKET, 50B24-1.002 KW SS		
15	1	204976	SUPPORT-GATE		
16	REF	DECAL, FERTILIZER APPLICATION		M	K, L, M, D, B, C, N
		210000	F810 40FT 380/90R46 & 320/90R50		
		210001	F810 44FT 380/90R46 & 320/90R50		
		210002	F810 50FT 380/90R46 & 320/90R50		
		210003	F810 60FT 380/90R46 & 320/90R50		
		210004	F810 66FT 380/90R46 & 320/90R50		
		210005	F810 72FT 380/90R46 & 320/90R50		
		210006	F810 80FT 380/90R46 & 320/90R50		
		210007	F810 88FT 380/90R46 & 320/90R50		
		210008	F810 90FT 380/90R46 & 320/90R50		
		210009	F810 40FT 480/80R42		
		210010	F810 50FT 480/80R42		
		210011	F810 60FT 480/80R42		
		210012	F810 72FT 480/80R42		
		210013	F810 80FT 480/80R42		
		210014	F810 90FT 480/80R42		
		210060	F810 40FT 19L-16.1 VF295/75R22.5		
		210061	F810 50FT 19L-16.1 VF295/75R22.5		
		210062	F810 60FT 19L-16.1 VF295/75R22.5		
		210063	F810 72FT 19L-16.1 VF295/75R22.5		
		210064	F810 80FT 19L-16.1 VF295/75R22.5		
		210065	F810 90FT 19L-16.1 VF295/75R22.5		
		210090	F810 40FT 14L-16.1		
		210091	F810 50FT 14L-16.1		
		210092	F810 60FT 14L-16.1		
		210093	F810 72FT 14L-16.1		
		210094	F810 80FT 14L-16.1		
		210095	F810 90FT 14L-16.1		

Parts Identification

Drive, Mechanical Row Crop - One Product/One Section (204960)

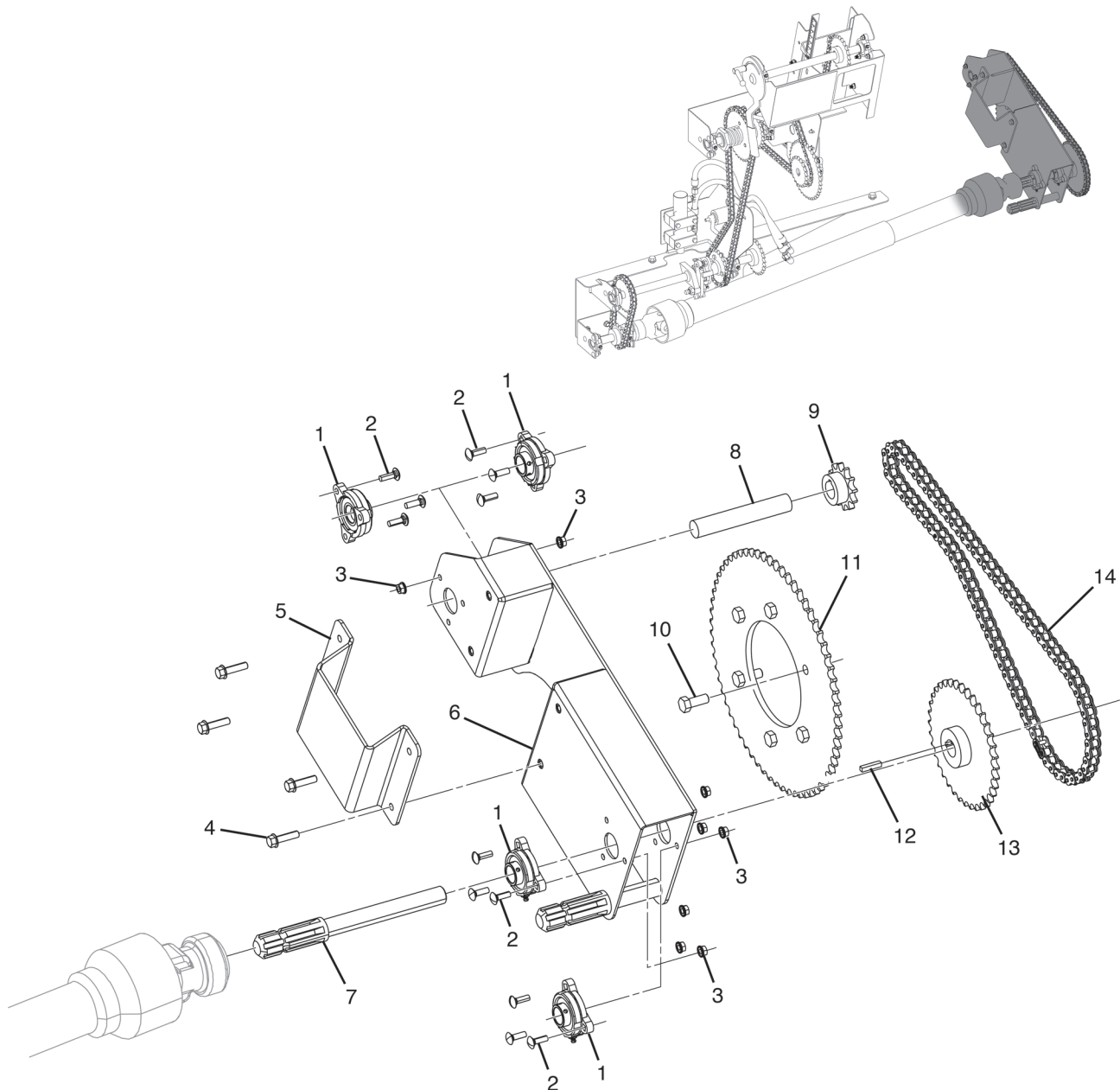


Drive, Mechanical Row Crop - One Product/One Section (204960)

#	QTY.	PART #	DESCRIPTION	CODE	
				APRON	TIRE
1	1	204988	SUPPORT, CLUTCH DRIVE	M	D, B, C, N
2	4	N73940	NUT, LOCK 3/8" SER FLG SS		
3	2	N144570	HANDLE, 3/8-16 THREADED		
4	2	4067	WASHER, 1-3/8" X 3/8" X 1/4" T		
5	2	N114840	TENSIONER, MOS2 2" DIA		
6	2	4569	BOLT, CARRIAGE 3/8" X 5" SS FT		
7	4	N50815	BOLT, 3/8" X 1" SS SER FL GR 5		
8	18	N41428	BOLT, CARRIAGE 5/16" X 1", SS		
9	6	N33830	BEARING, 1" DODGE 3-BOLT FLG		
10	18	N41427	NUT, LOCK 5/16" SER FLG, SS		
11	1	204983	CHAIN, #50 X 68.76 SS		
12	1	204518	CLUTCH, RATCHED SLIP SC-X4		
13	1	204993	SHAFT, INTERMEDIATE DRIVE		
14	3	7187-04	KEY, 1/4" X 1-3/4"		
15	4	N114466	SPROCKET, 50B24-1.002 KW SS		
16	1	N114839	CHAIN, #50 X 42.50 SS		
17	1	N22247	SPROCKET, 50B13 - 1" RB		
18	1	N47307	SPROCKET, COMBINATION #50X40/20		
19	2	N28907	ELBOW, 90DEG -6MJIC -4MOR		
20	2	N23834	HOSE, 3/8IN X 28IN -6FJX -6FJX		
21	2	N19068	ELBOW, 90 DEG - 6MJIC - 8FJIC		
22	1	204984	SUPPORT, GROUND DRIVE		
23	2	N18360	BOLT, 1/2-13 X 1-1/4 SER FLG		
24	2	N29075	NUT, LOCK 1/2" SERRATED FLANGE		
25	1	204770	CLUTCH ASM		
26	3	4158	WASHER, 1" ID THICK SPACER		
27	1	204977	SHAFT WLDMT		
28	1	204015	CHAIN, #50 SS X 27.50		
29	1	204982	SUPPORT, DRIVESHAFT		
30	1	204992	SHAFT, INTERMEDIATE DRIVE		
31	1	N114460	SPROCKET, 50B16-1.002 KW SS		
32	1	N109055	SHAFT, PTO 540x1.00RB KW SS		
33	4	4979	NUT, LOCK 3/8" SER FLG		
34	2	203871	BODY, CLAMP 1.75"		
35	1	N43516	CYLINDER, 1-1/2"x3"		
36	2	N19296	U-BOLT, 3/8 X 2 X 4 GR 5		
37	4	N43518	BODY, CLAMP 1.75"		
38	6	N43520	PLATE, SPREADER CYL CLAMP		
39	4	4456	BOLT, 3/8" X 4" GRADE 5		
40	2	7187-02	KEY, 1/4" X 1-1/4"		

Parts Identification

Drive, Mechanical Row Crop - One Product/One Section (204960) (Cont'd)

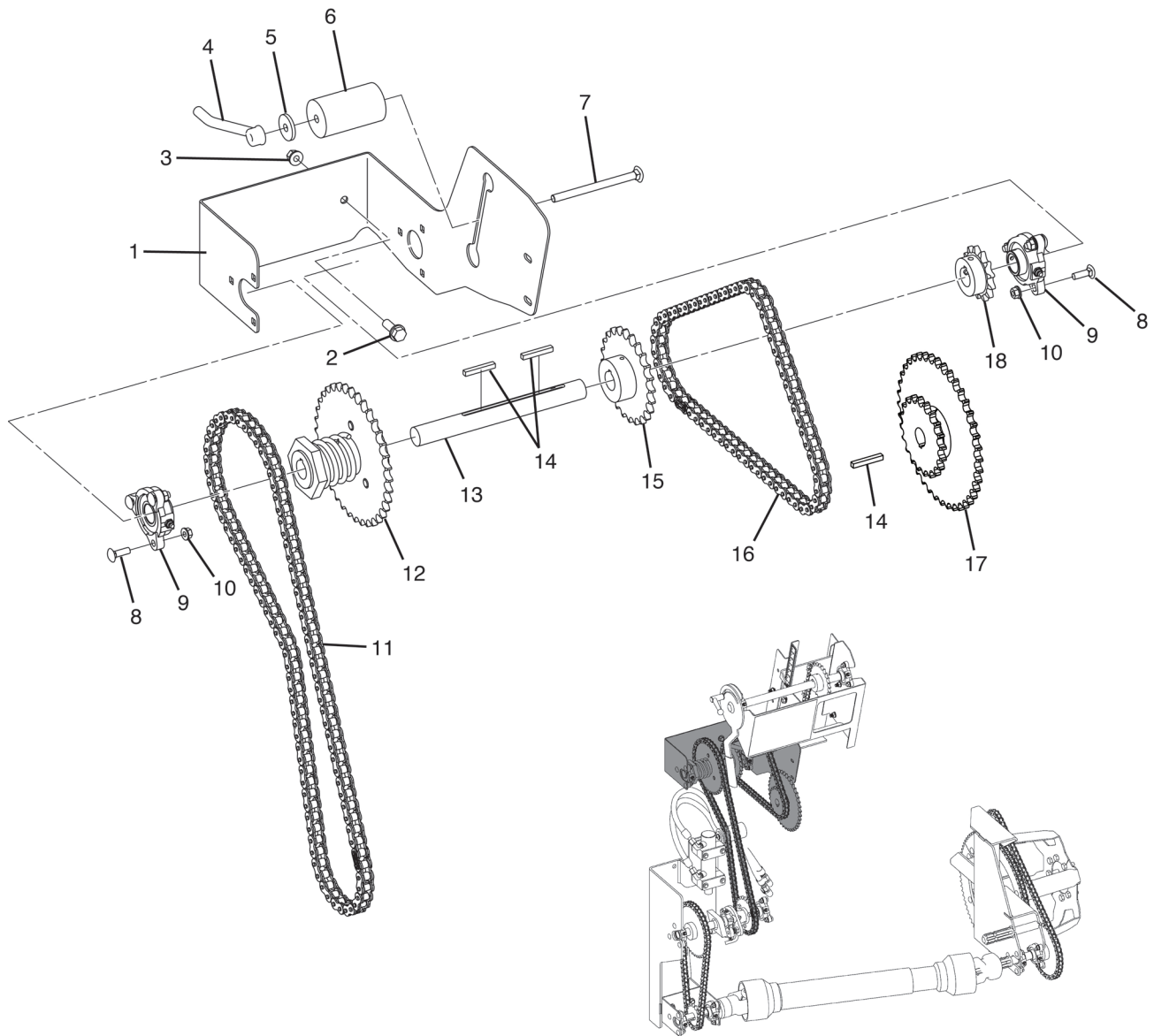


Drive, Mechanical Row Crop - One Product/One Section (204960) (Cont'd)

#	QTY.	PART #	DESCRIPTION	CODE	
				APRON	TIRE
1	4	N33830	BEARING, 1" DODGE 3-BOLT FLG	M	D, B, C, N
2	12	N41428	BOLT, CARRIAGE 5/16" X 1", SS		
3	12	N41427	NUT, LOCK 5/16" SER FLG, SS		
4	4	N37775	BOLT, 3/8" X 1-1/2" SER FLG		
5	1	204966	CLAMP		
6	1	204961	SUPPORT, HUB DRIVE		
7	1	N41458	SHAFT, SPREADER PTO DRIVE		
8	1	N114713	SHAFT, IDLER		
9	1	8317	SPROCKET, 50B12H - 1IN RB		
10	6	4012	BOLT, 1/2" X 1-1/4" GRADE 5		
11	2	N108893	SPROCKET, HALF 50A70-6.125		
12	1	7187-02	KEY, 1/4" X 1-1/4"		
13	1	N87343	SPROCKET, 50B36-1.000		
14	1	204527	CHAIN, #50 X 54.375 SS		

Parts Identification

Drive, Mechanical - One Product/One Section (210040)

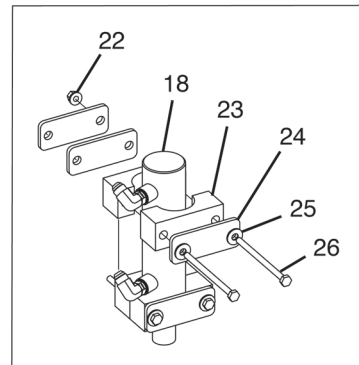
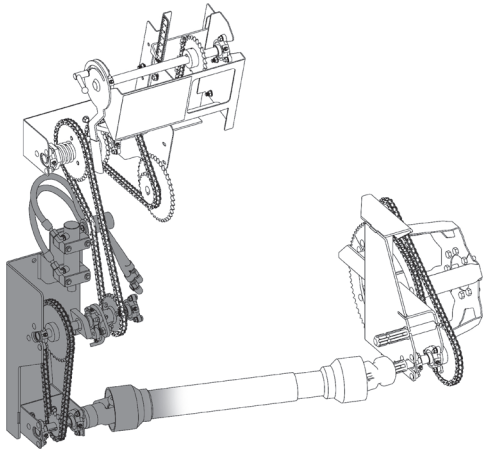


Drive, Mechanical - One Product/One Section (210040)

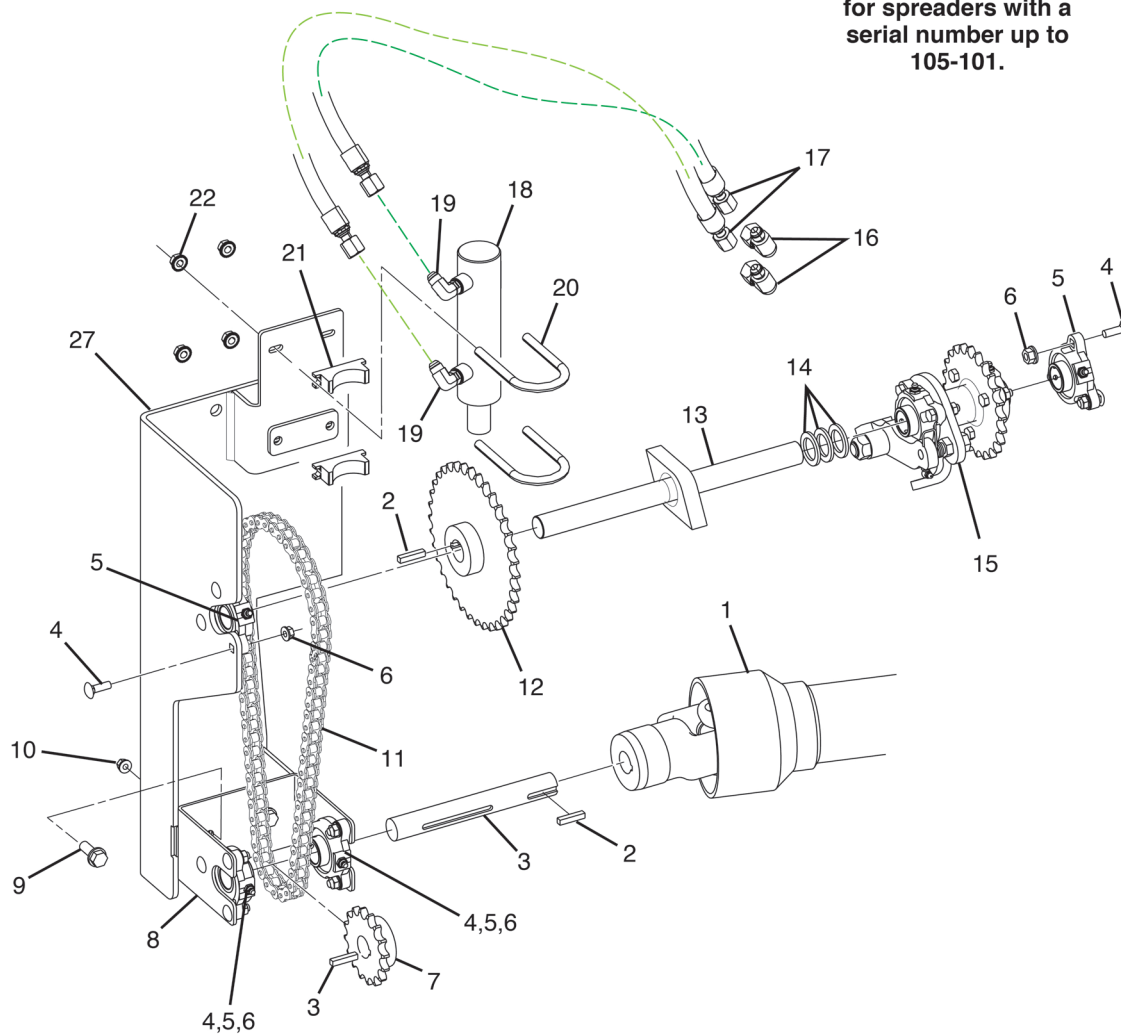
#	QTY.	PART #	DESCRIPTION	CODE	
				APRON	TIRE
1	1	204988	SUPPORT, CLUTCH DRIVE	M	K, L, M
2	2	N50815	BOLT, 3/8" X 1" SS SER FL GR 5		
3	2	N73940	NUT, LOCK 3/8" SER FLG SS		
4	2	N144570	HANDLE, 3/8-16 THREADED		
5	1	4067	WASHER, 1-3/8" X 3/8" X 1/4" T		
6	1	N114840	TENSIONER, MOS2 2" DIA		
7	1	4569	BOLT, CARRIAGE 3/8" X 5" SS FT		
8	6	N41428	BOLT, CARRIAGE 5/16" X 1", SS		
9	2	N33830	BEARING, 1" DODGE 3-BOLT FLG		
10	6	N41427	NUT, LOCK 5/16" SER FLG, SS		
11	1	210035	CHAIN, #50 X 60.00IN SS		
12	1	204518	CLUTCH, RATCHED SLIP SC-X4		
13	1	204993	SHAFT, INTERMEDIATE DRIVE		
14	3	7187-04	KEY, 1/4" X 1-3/4"		
15	1	N114466	SPROCKET, 50B24-1.002 KW SS		
16	1	N114839	CHAIN, #50 X 42.50 SS		
17	1	N47307	SPROCKET, COMBINATION #50X40/20		
18	1	N22247	SPROCKET, 50B13 - 1" RB		

Parts Identification

Drive, Mechanical - One Product/One Section (210040) - (Cont'd)



Cylinder configuration
for spreaders with a
serial number up to
105-101.

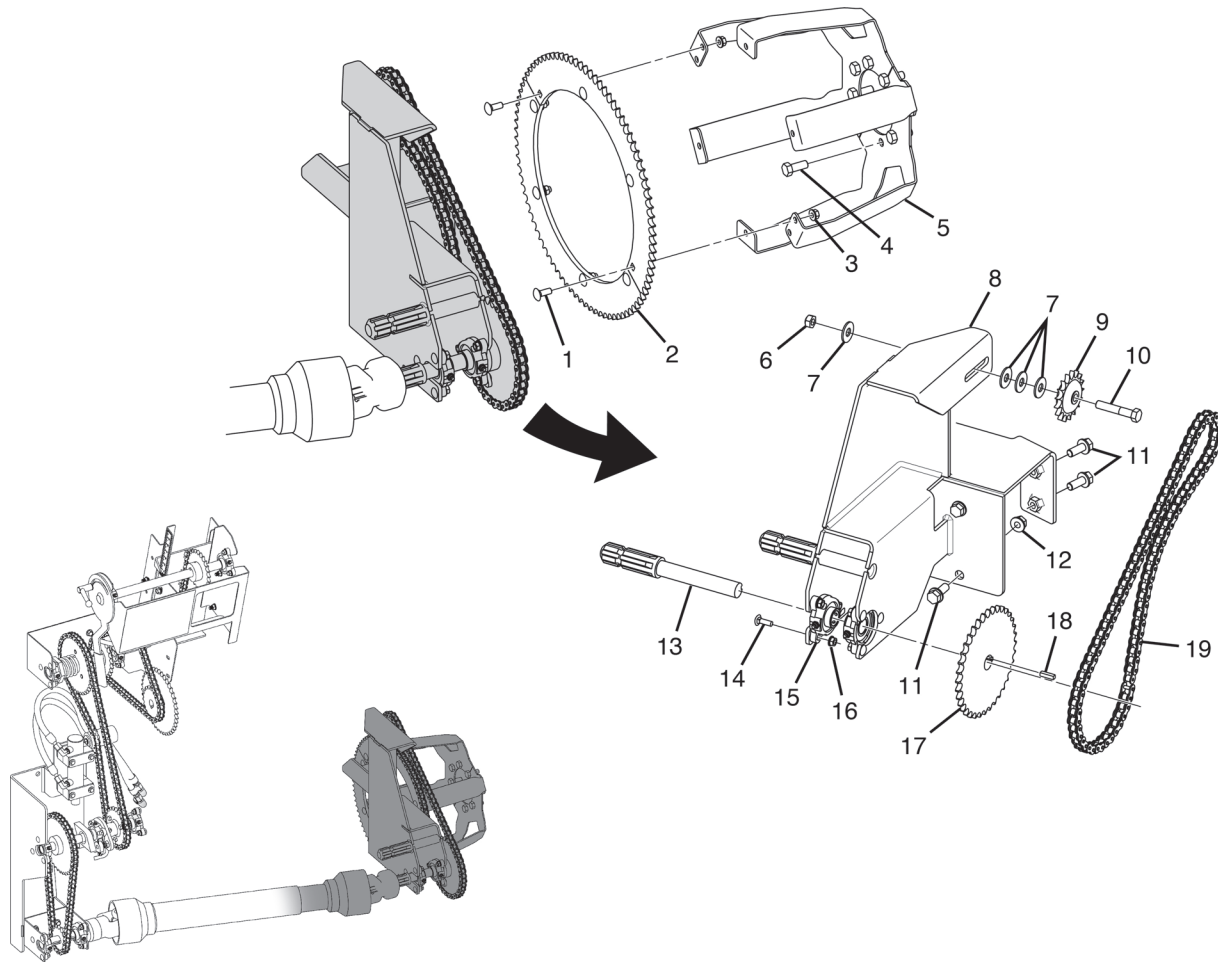


Drive, Mechanical - One Product/One Section (210040) - (Cont'd)

#	QTY.	PART #	DESCRIPTION	CODE	
				APRON	TIRE
1	1	210069	SHAFT,PTO 540X1.00RB KW SS	M	K, L, M
2	3	7187-02	KEY, 1/4" X 1-1/4"		
3	1	204992	SHAFT, INTERMEDIATE DRIVE		
4	12	N41428	BOLT, CARRIAGE 5/16" X 1", SS		
5	4	N33830	BEARING, 1" DODGE 3-BOLT FLG		
6	12	N41427	NUT, LOCK 5/16" SER FLG, SS		
7	1	N114460	SPROCKET, 50B16-1.002 KW SS		
8	1	204982	SUPPORT, DRIVESHAFT		
9	2	N50815	BOLT, 3/8" X 1" SS SER FL GR 5		
10	2	N73940	NUT, LOCK 3/8" SER FLG SS		
11	1	N114839	CHAIN, #50 X 42.50 SS		
12	1	N87343	SPROCKET, 50B36-1.000		
13	1	210059	SHAFT WLDMT		
14	3	4158	WASHER, 1" ID THICK SPACER		
15	1	204770	CLUTCH ASM		
16	2	N19068	ELBOW, 90 DEG - 6MJIC - 8FJIC		
17	2	N23834	HOSE, 3/8IN X 28IN -6FJX -6FJX		
18	1	N43516	CYLINDER, 1-1/2"x3"		
19	2	N28907	ELBOW, 90DEG -6MJIC -4MOR		
20	2	N19296	U-BOLT, 3/8 X 2 X 4 GR 5		
21	2	203871	BODY, CLAMP 1.75"		
22	4	N105230	NUT, LOCK 1/4" SER FLANGE		
23	4	N43518	BODY, CLAMP 1.75"		
24	6	N43520	PLATE, SPREADER CYL CLAMP		
25	4	3183	WASHER, FLAT 1/4"		
26	4	210088	BOLT, 1/4IN X 4IN GR5		
27	1	210068	BRACKET, GROUND DRIVE		

Parts Identification

Drive, Mechanical - One Product/One Section (210040) - (Cont'd)

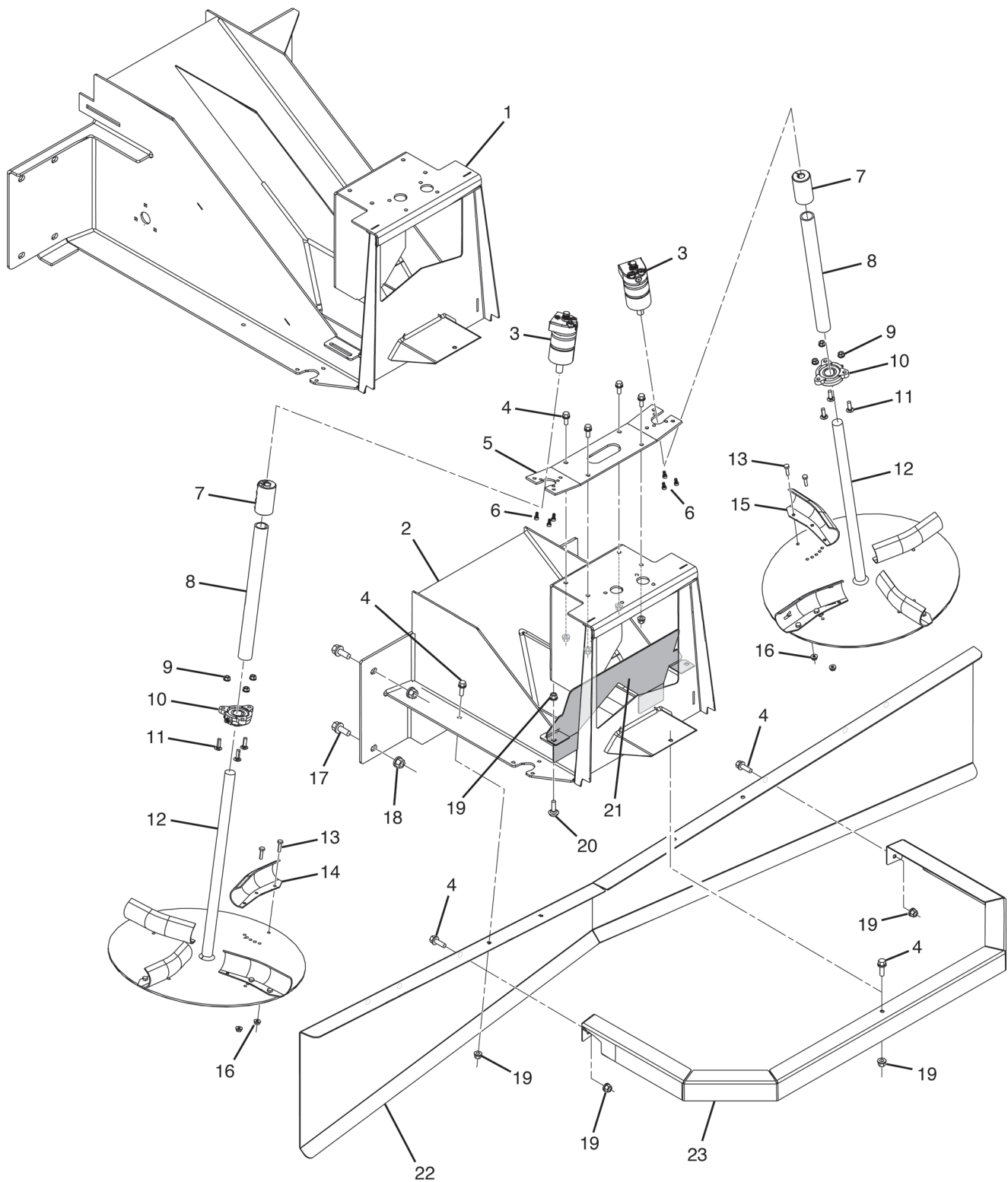


Drive, Mechanical - One Product/One Section (210040) - (Cont'd)

#	QTY.	PART #	DESCRIPTION	CODE	
				APRON	TIRE
1	8	4567	BOLT, CARRIAGE 3/8" X 1" SS	M	K, L, M
2	2	210033	SPROCKET, WHEEL DRIVE		
3	8	N73940	NUT, LOCK 3/8" SER FLG SS		
4	8	4012	BOLT, 1/2" X 1-1/4" GRADE 5		
5	2	210036	HUB,DRIVE		
6	1	4054	NUT, LOCK 1/2" TOP		
7	4	4486	WASHER, 1/2" FLAT		
8	1	210051	BRACKET, GROUND DRIVE WT		
9	1	8228	SPROCKET, IDLER 50 CHAIN 1/2" BORE		
10	1	4496	BOLT, 1/2" X 2-3/4" GRADE 5		
11	4	N18360	BOLT,1/2-13 X 1-1/4 SER FLG		
12	2	N29075	NUT, LOCK 1/2" SERRATED FLANGE		
13	1	210089	SHAFT		
14	18	N41428	BOLT, CARRIAGE 5/16" X 1", SS		
15	6	N33830	BEARING, 1" DODGE 3-BOLT FLG		
16	18	N41427	NUT, LOCK 5/16" SER FLG, SS		
17	2	N87343	SPROCKET, 50B36-1.000		
18	1	7187-12	KEY, 1/4" X 1"		
19	1	204527	CHAIN, #50 X 54.375 SS		

Parts Identification

20" Spinners, Spinner Mount, and Deflectors



20" Spinners, Spinner Mount, and Deflectors

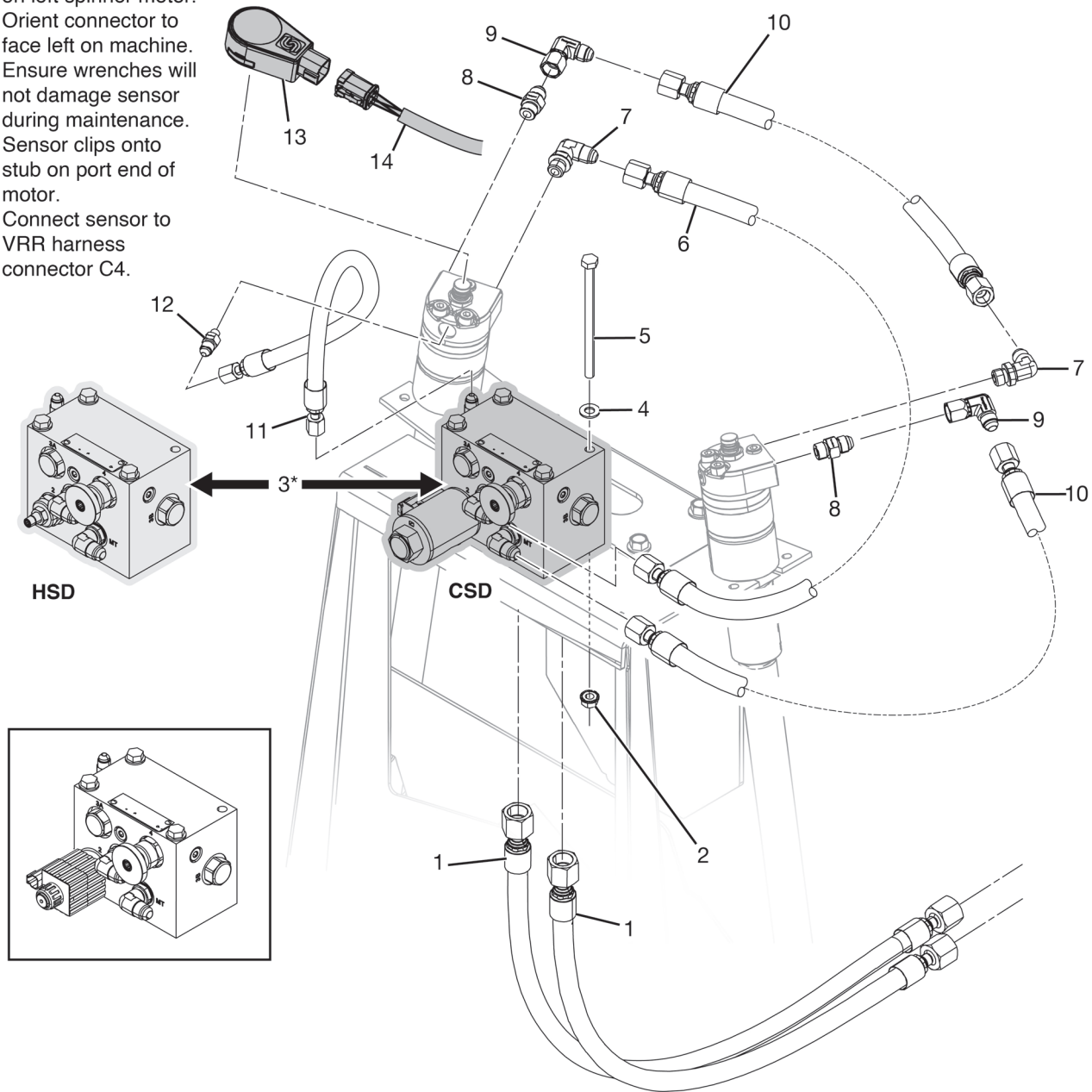
#	QTY.	PART #	DESCRIPTION	CODE
				TIRE
1	1	210053	MOUNT, SPREADER SPINNER - (WALKING TANDEM)	K, L, M
2	1	204903	MOUNT, SPREADER SPINNER	D, B, C, N
3	2	N101185	MOTOR, SPINNER DANFOSS	
4	9	N50815	BOLT, 3/8" X 1" SS SER FL GR 5	
5	1	206022	PLATE, SPINNER MOTOR 50'	
6	6	204731	BOLT, SHCS 1/4-28X0.500	
7	2	N55903	COUPLING, CLAMP-TYPE 1"x5/8"	
8	2	N62261	SHIELD, SPREADER SPINNER SHAFT	
9	6	N41427	NUT, LOCK 5/16" SER FLG, SS	
10	2	N33830	BEARING, 1" DODGE 3-BOLT FLG	
11	6	N41428	BOLT, CARRIAGE 5/16" X 1", SS	
12	2	N62257	SPINNER	
13	16	N68478	BOLT, 1/4" X 1" SS	
14	4	204732	SLINGER, LH	
15	4	204733	SLINGER, RH	
16	16	N68480	NUT, LOCK 1/4" SER FLG SS	
17	4	N18360	BOLT, 1/2-13 X 1-1/4 SER FLG	
18	4	N29075	NUT, LOCK 1/2" SERRATED FLANGE	
19	12	N73940	NUT, LOCK 3/8" SER FLG SS	
20	2	4567	BOLT, CARRIAGE 3/8" X 1" SS	
21	1	N43924	PLATE, SPRDR DUAL SPNR STOP	
22	1	204553	DEFLECTOR, SPREADER SPINNER	
23	1	203736	GUARD, 20 IN ASM	

Parts Identification

Spinner Drive and Mount - Controlled Spinner Drive (CSD); Hydraulic Spinner Drive (HSD)

Item 13 - Speed Sensor (N113354)

1. Install speed sensor on left spinner motor. Orient connector to face left on machine. Ensure wrenches will not damage sensor during maintenance.
2. Sensor clips onto stub on port end of motor.
3. Connect sensor to VRR harness connector C4.



* Item 3:

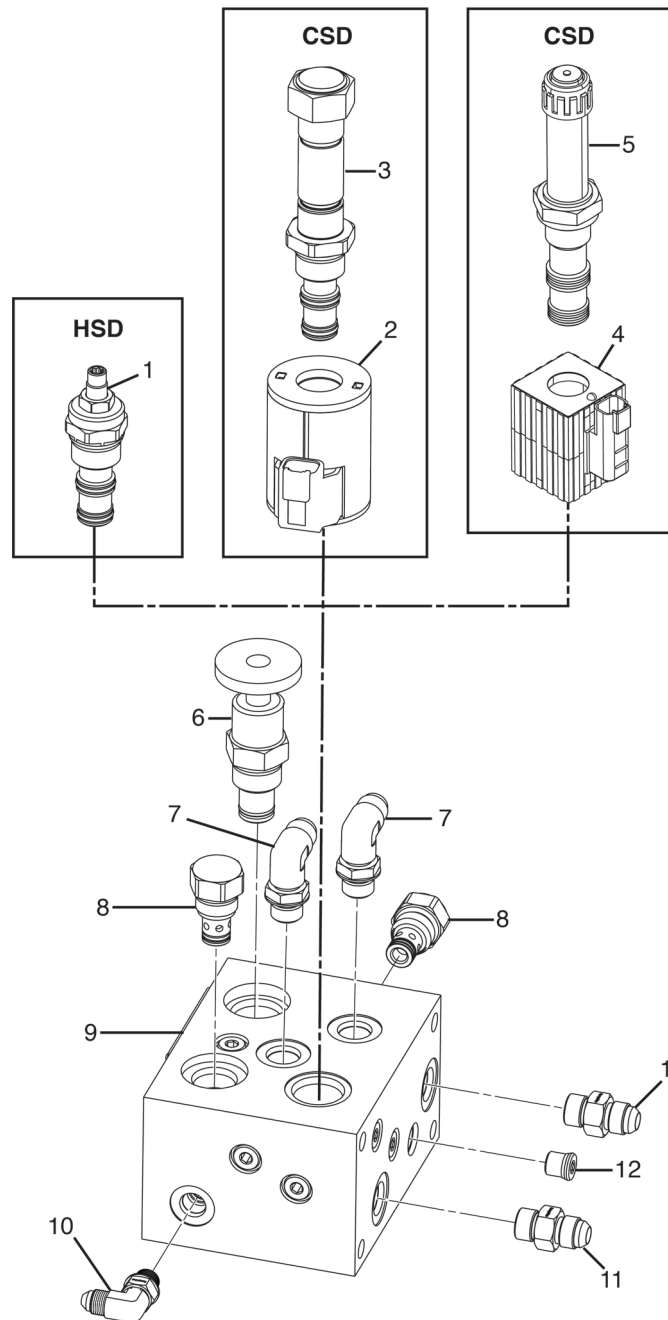
See page 46 for parts breakdown of manifold assemblies for Controlled Spinner Drive (CSD) - (N141475) and Hydraulic Spinner Drive (HSD) - (N113478).

Spinner Drive and Mount - Controlled Spinner Drive (CSD); Hydraulic Spinner Drive (HSD)

#	QTY.	PART #	DESCRIPTION	CODE		
				APRON	TIRE	SPINNER
1	2	N28449	HOSE, 3/8" X 34" -8FJC -6FJC		K, L, M	
	2	N26391	HOSE, 3/8IN x 60IN -6FJIC -8FJIC		D, B, C, N, 2, 4, R, F, H	
2	4	N26742	NUT, LOCK 5/16" SER FLG			
3	1	N141475	MANIFOLD ASM, SPINNER MTR CSD			C
	1	N113478	MANIFOLD ASM, SPINNER MTR HSD			D
4	4	N28927	WASHER, FLAT 5/16 SAE			
5	4	206019	BOLT, 5/16" X 5" GR 5			
6	1	N24839	HOSE, 3/8" X 34" -6FJIC -6FJIC			
7	2	N105368	ELBOW, 90 DEG -6MJIC -6MBSPP			
8	2	N28847	ADAPTER, -6MJIC -6MBSPP			
9	2	N29078	ELBOW, 90 DEG - 6MJIC - 6FJIC			
10	2	N26319	HOSE, 3/8 X 18 -6FJX -6FJX			
11	1	204373	HOSE, 1/4" X 16"-4FJIC-4FJIC			
12	1	N110162	ADAPTER. -4MJIC -2BSPP			
13	1	N113354	SENSOR, SPIN SPEED	W, K, T, Z		C, H
	As Required	N113354	SENSOR, SPIN SPEED	M		H
	As Required	N101187	SENSOR, SPEED <i>(Dealer must program)</i>	W, K, T, Z, M		
14	1	204737	HARNESS-PRODUCT, 1 BOOM	W, K, T, Z		C, H
	As Required	204737	HARNESS-PRODUCT, 1 BOOM	M		H

Parts Identification

**Manifold, Spinner Motor - Controlled Spinner Drive (CSD) (N141475);
Hydraulic Spinner Drive (HSD) (N113478)**

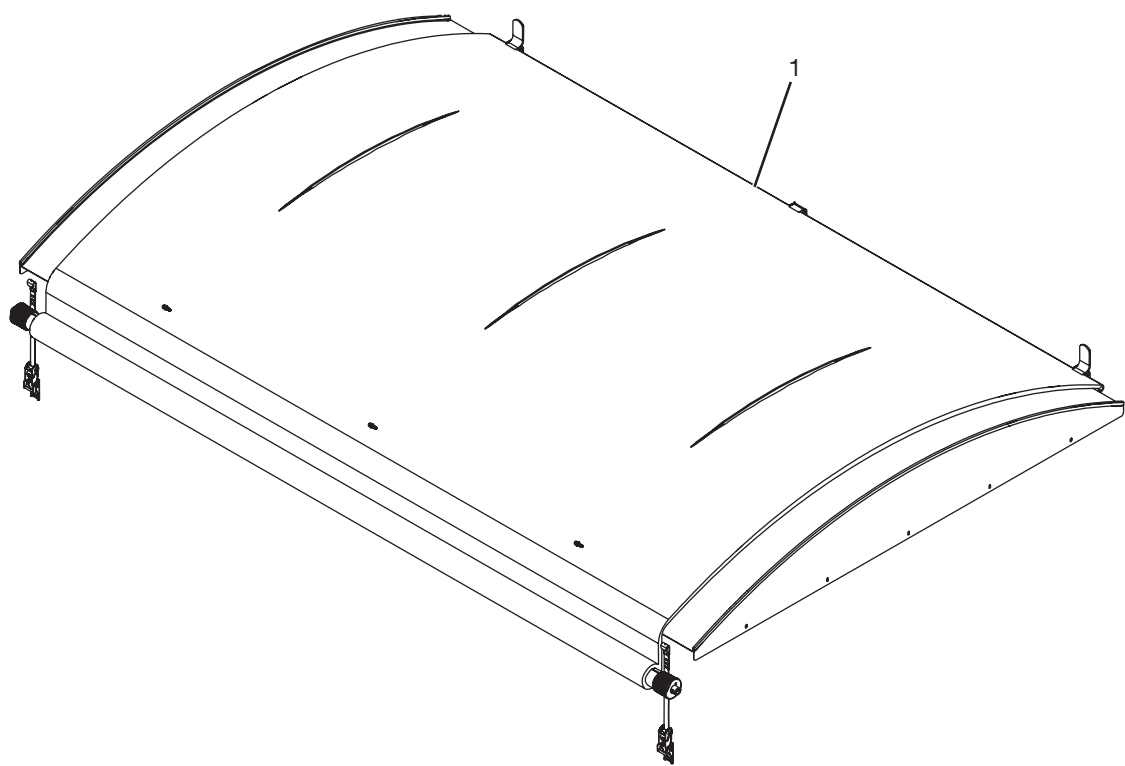


Manifold, Spinner Motor - Controlled Spinner Drive (CSD) (N141475); Hydraulic Spinner Drive (HSD) (N113478)

#	QTY.	PART #	DESCRIPTION	CODE
				SPINNER
1	1	N139980	CARTRIDGE, PCFC	H
2	1	N139978	COIL, 12V 2 PIN DEUTSCH	C
3	1	204900	CARTRIDGE, FLOW REGULATOR	C
4	1	N142518	COIL, 12VDC 3AMP DEUTSCH	C
5	1	NOT SERVICEABLE	SUB N139978 and 204900	C
6	1	204086	CARTRIDGE, TURN	C, H
7	2	N26204	ELBOW, 90 DEG - 6MJIC - 6MOR	
8	7	N139982	PLUG, SAE -04	
9	1	N139970	BLOCK, MANIFOLD	
10	1	N142378	ELBOW, 90 DEG -4MJIC -4MORB	
11	2	N24821	ADAPTER, 6MOR - 6MJIC	
12	7	N139982	PLUG, SAE -04	

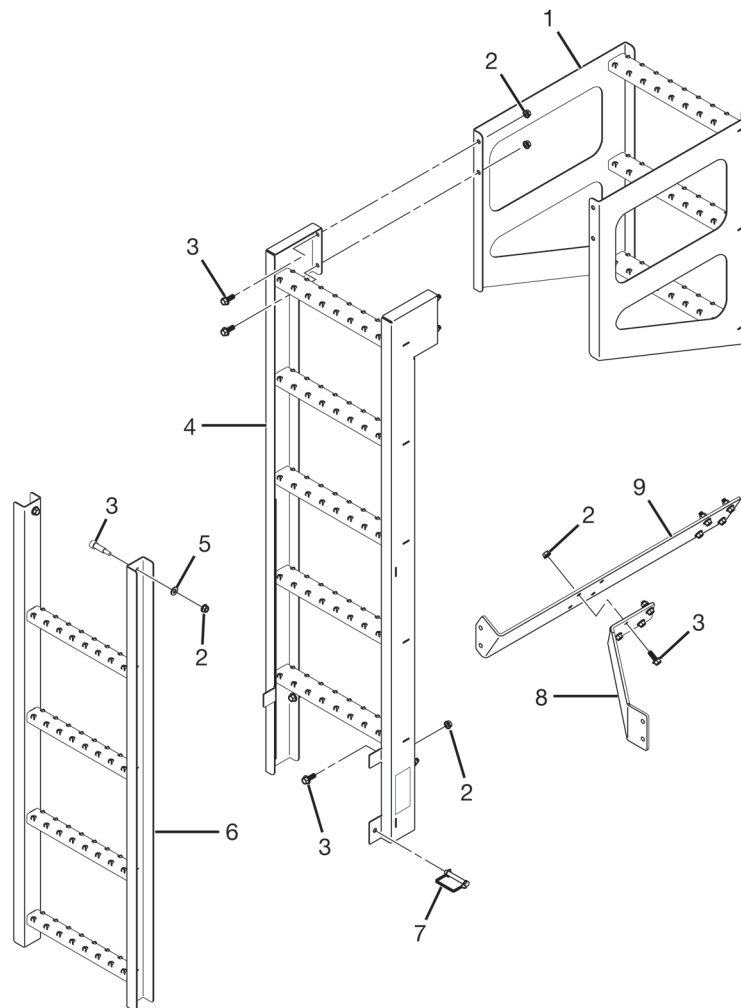
Parts Identification

Roll Tarp



#	QTY.	PART #	DESCRIPTION	CODE
				OPTIONS
1	1	N89415	TARP KIT BLUE	T

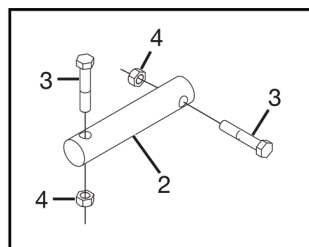
Ladder (203746)



#	QTY.	PART #	DESCRIPTION	CODE
				OPTION
1	1	203673	LADDER, HOPPER LG	L
2	18	N73940	NUT, LOCK 3/8" SER FLG SS	
3	2	4037	BOLT, SHOULDER 1/2" X 1/2" 3/8-16TH ZINC PLATED	
4	1	203658	LADDER, WLDMT SPRD	
5	2	N31741	WASHER, FLAT 3/8" SAE	
6	1	203669	LADDER, WLDMT SPRD EXT	
7	1	N31221	PIN, 3/8" X 2-1/4" RETAINER	
8	1	203745	SUPPORT, F810 LADDER ASM RH	
9	1	203744	SUPPORT, F810 LADDER ASM LH	

Parts Identification

Hopper Support System

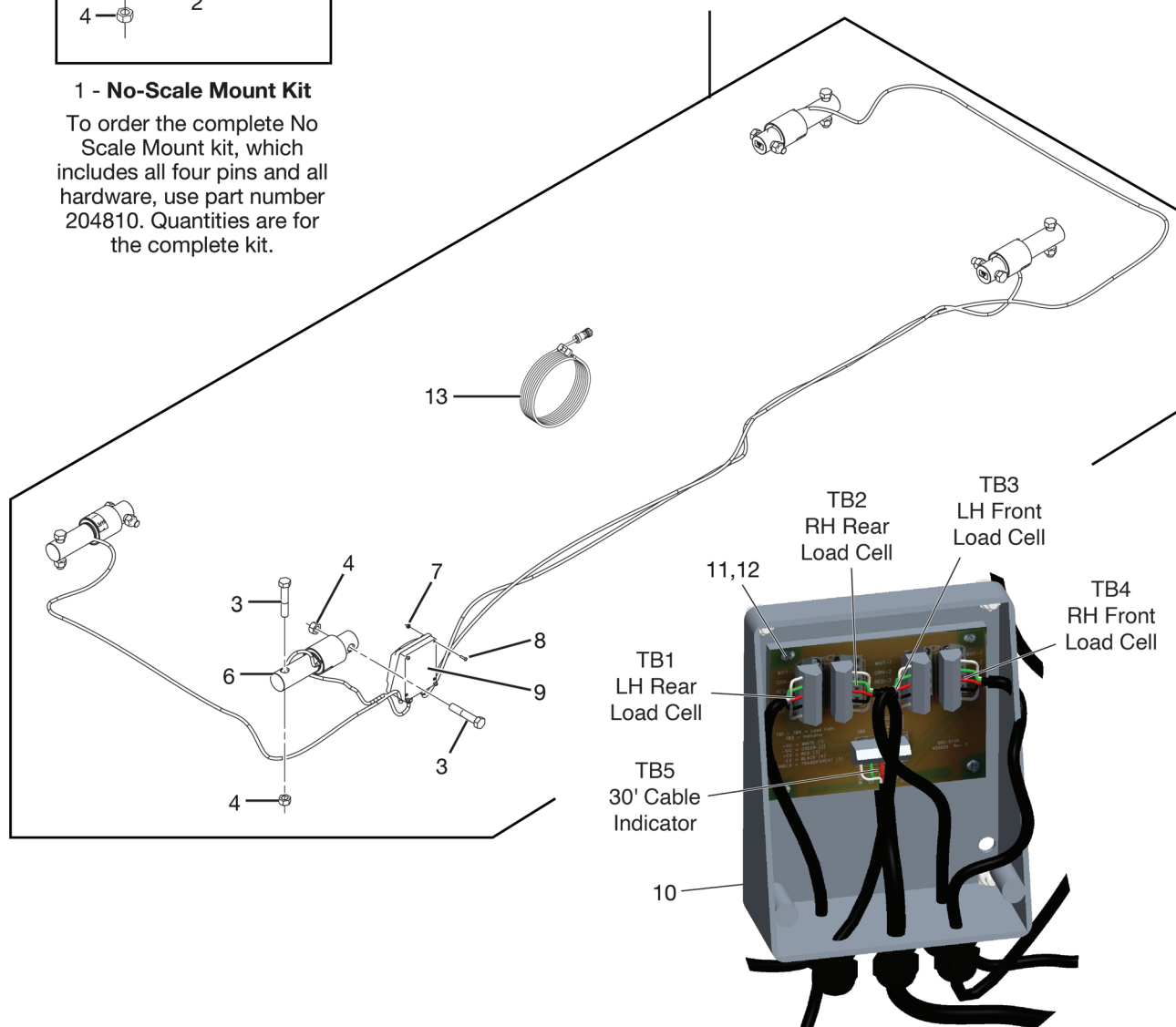


1 - No-Scale Mount Kit

To order the complete No Scale Mount kit, which includes all four pins and all hardware, use part number 204810. Quantities are for the complete kit.

5 - Scale Mount System

To order the complete No Scale Mount kit, which includes all four load cells, hardware, and J-Box kit, use part number 204809. Quantities are for the complete kit.



J-Box Connections

Load cell connection instructions

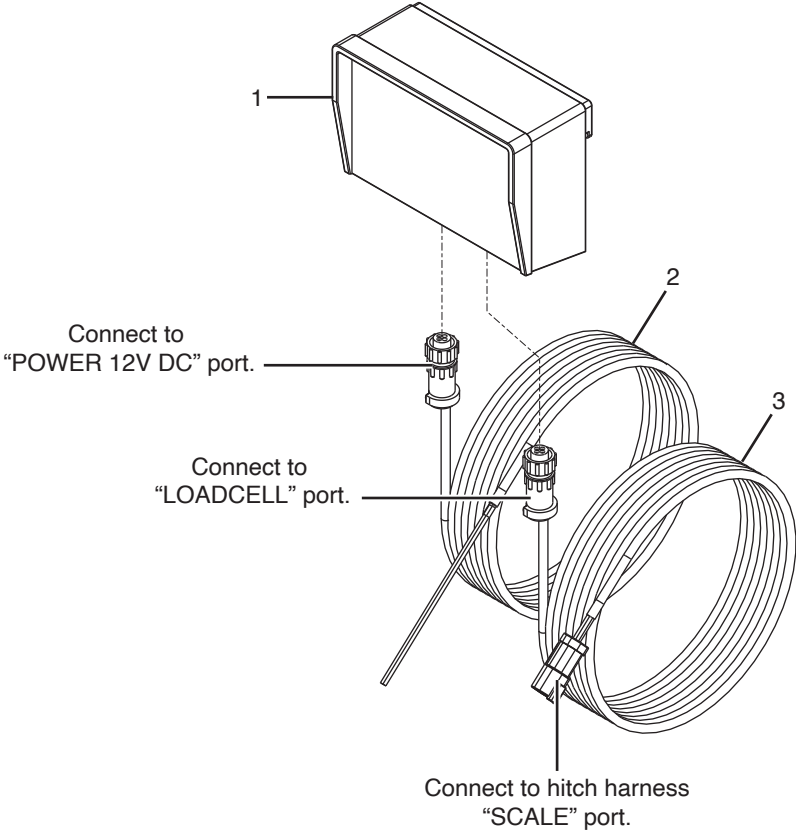
1. Connect indicator cable to J-box.
2. Connect indicator cable to scale display.
3. Connect load cells to J-box.
4. Test scale to verify that load stabilizes.
Load will increase with weight added to machine.
5. Install J-box cover.

Hopper Support System

#	QTY.	PART #	DESCRIPTION	CODE
				STEERING
1	4	204810	SCALE AR NONE	8, 2, 4
2	4	204799	BAR, DUMMY	8, 2, 4
3	8	N156046	BOLT, 3/4" X 4" FN GRD 8	
4	8	N16352	NUT, LOCK 3/4" GRADE 8 FINE	
5	1	204809	SCALE AR-4PT	9, D, 3, 5
6	4	204193	LOAD CELL - 2.125" DB-21'	9, D, 3, 5
7	4	N16334	NUT, NYLON INSERT #10	9, D, 3, 5
8	4	N22358	BOLT, #10-32 X 3/4" BHCS	9, D, 3, 5
9	1	204585	J-BOX 3PT/4PT	9, D, 3, 5
10	1	N124852	KIT, J-BOX 3PT/4PT-30FT CBL	9, D, 3, 5
11	4	N16334	NUT, NYLON INSERT #10	9, D, 3, 5
12	4	N22358	BOLT, #10-32 X 3/4" BHCS	9, D, 3, 5
13	1	204399	HARNESS, SCALE LEAD 15'	9, D, 3, 5

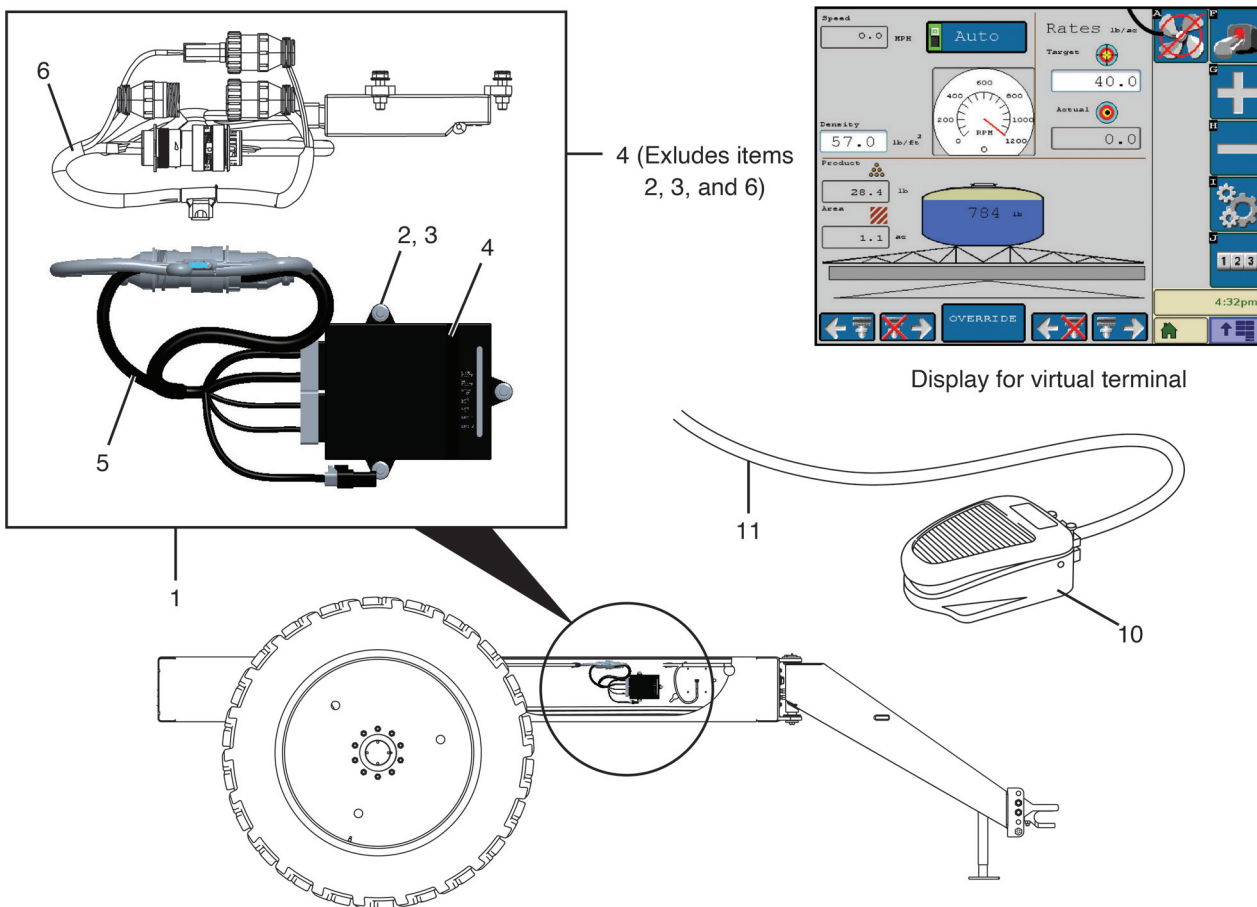
Parts Identification

Scale Electronics



#	QTY.	PART #	DESCRIPTION	CODE
				OPTIONS
1	1	N124848	GT400, SERIAL (J905) & REMOTE	M
2	1	N124850	CABLE, POWER 17' 2-WIRE	
3	1	204399	HARNESS, SCALE LEAD 15'	
	As Required	204899	HARNESS, SCALE LEAD 30'	

ISO Controller, AR Raven



Complete kit not shown.

#	QTY.	PART #	DESCRIPTION	CODE
				OPTIONS
1	1	204386	CONTROLLER AR-RAVEN ISO	I
2	3	4979	NUT, LOCK 3/8" SER FLG	
3	3	N47855	BOLT, 3/8" X 1-1/4" SER FLG	
4	1	N89557	ECU-RAVEN ISO (Included in Item 1)	
5	1	204603	HARNESS-ISO 37 PIN PRODUCT (Included in Item 4)	
6	1	204398	HARNESS,ISO CONTROLLER (Included in Item 1)	
7	1	204346	NODE-ISO CONTROLLER (Included in Item 4)	
8	1	204597	HARNESS, RAVEN TERMINATOR (Included in Item 4)	
9	1	204599	TERMINATOR, POWELL ACTIVE (Included in Item 4)	
10	1	204646	SWITCH ASM, FOOT (Included in Item 4)	
11	1	204647	HARNESS, FOOT SWITCH (Included in Item 4)	

Parts Identification

Raven 660 Controller (N89543)



Complete kit not shown.

#	QTY.	PART #	DESCRIPTION	CODE
				OPTIONS
*	1	N89543	CONTROLLER KIT RAVEN 660 (INCLUDES N89545, N89553, N90023)	R
*	1	N89545	CONSOLE, RAVEN 660M	
*	1	N89553	CABLE, 660 3'	
*	1	N90023	MANUAL, RAVEN 660 CONSOLE	
*	1	N89596	SENSOR-SPEED, GPS	G

Machine Decals and Signs

NOTE: All safety related decals are also shown in the Safety Instructions section of the Operator's Manual, along with their location on the machine.

Check and replace any worn, torn, hard to read or missing decals on your machine.

Part No. N35391



Part No. N35380



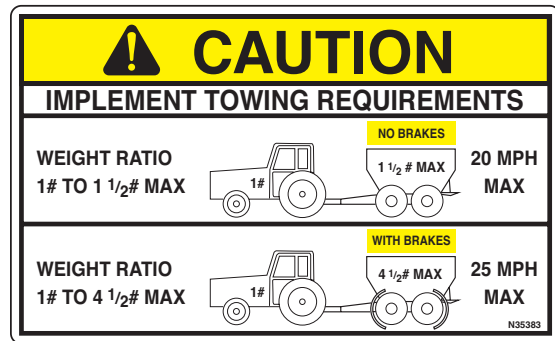
Part No. N23507



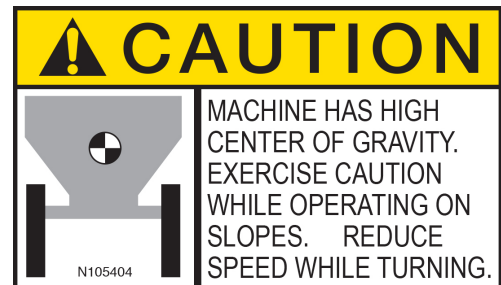
Part No. N35382



Part No. N35383



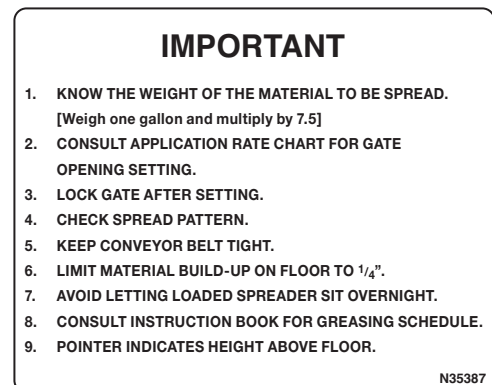
Part No. N105404



Part No. 203264



Part No. N35387



Parts Identification

Machine Decals and Signs (Cont'd)

Part No. 4132



Part No. N13517



Part No. 4138



Part No. 204748



Part No. N35393



Part No. N35392



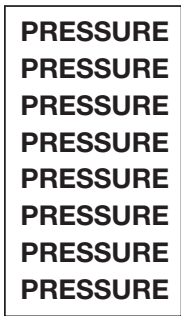
Part No. N13721



Part No. N47490



Part No.
N24822



Part No.
N113696



Part No.
204355



Part No. 204928



Part No. 209528



Part No.
N24823



Part No.
N113698



Part No.
204356



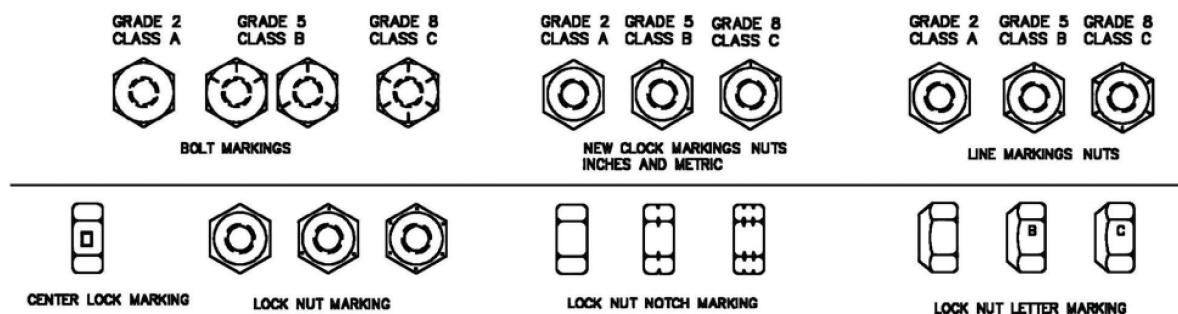
Appendix

Torque Specifications

Inches Hardware and Lock Nuts

TORQUE CHARTS
Minimum Hardware Tightening Torques
Normal Assembly Applications
(Standard Hardware and Lock Nuts)

SAE Gr. 2	SAE Grade 5		SAE Grade 8		LOCK NUTS			
Nominal Size	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Grade W / Gr. 5 Bolt	Grade W / Gr. 8 Bolt
1/4	55 in.-lb. (6.2 N•m)	72 in.-lb. (8.1 N•m)	86 in.-lb. (9.7 N•m)	112 in.-lb. (12.6 N•m)	121 in.-lb. (13.6 N•m)	157 in.-lb. (17.7 N•m)	61 in.-lb. (6.9 N•m)	86 in.-lb. (9.8 N•m)
5/16	115 in.-lb. (13 N•m)	149 in.-lb. (17 N•m)	178 in.-lb. (20 N•m)	229 in.-lb. (26 N•m)	250 in.-lb. (28 N•m)	324 in.-lb. (37 N•m)	125 in.-lb. (14 N•m)	176 in.-lb. (20 N•m)
3/8	17 ft.-lb. (23 N•m)	22 ft.-lb. (30 N•m)	26 ft.-lb. (35 N•m)	34 ft.-lb. (46 N•m)	37 ft.-lb. (50 N•m)	48 ft.-lb. (65 N•m)	19 ft.-lb. (26 N•m)	26 ft.-lb. (35 N•m)
7/16	27 ft.-lb. (37 N•m)	35 ft.-lb. (47 N•m)	42 ft.-lb. (57 N•m)	54 ft.-lb. (73 N•m)	59 ft.-lb. (80 N•m)	77 ft.-lb. (104 N•m)	30 ft.-lb. (41 N•m)	42 ft.-lb. (57 N•m)
1/2	42 ft.-lb. (57 N•m)	54 ft.-lb. (73 N•m)	64 ft.-lb. (87 N•m)	83 ft.-lb. (113 N•m)	91 ft.-lb. (123 N•m)	117 ft.-lb. (159 N•m)	45 ft.-lb. (61 N•m)	64 ft.-lb. (88 N•m)
9/16	60 ft.-lb. (81 N•m)	77 ft.-lb. (104 N•m)	92 ft.-lb. (125 N•m)	120 ft.-lb. (163 N•m)	130 ft.-lb. (176 N•m)	169 ft.-lb. (229 N•m)	65 ft.-lb. (88 N•m)	92 ft.-lb. (125 N•m)
5/8	83 ft.-lb. (112 N•m)	107 ft.-lb. (145 N•m)	128 ft.-lb. (174 N•m)	165 ft.-lb. (224 N•m)	180 ft.-lb. (244 N•m)	233 ft.-lb. (316 N•m)	90 ft.-lb. (122 N•m)	127 ft.-lb. (172 N•m)
3/4	146 ft.-lb. (198 N•m)	189 ft.-lb. (256 N•m)	226 ft.-lb. (306 N•m)	293 ft.-lb. (397 N•m)	319 ft.-lb. (432 N•m)	413 ft.-lb. (560 N•m)	160 ft.-lb. (217 N•m)	226 ft.-lb. (306 N•m)
7/8	142 ft.-lb. (193 N•m)	183 ft.-lb. (248 N•m)	365 ft.-lb. (495 N•m)	473 ft.-lb. (641 N•m)	515 ft.-lb. (698 N•m)	667 ft.-lb. (904 N•m)	258 ft.-lb. (350 N•m)	364 ft.-lb. (494 N•m)
1	213 ft.-lb. (289 N•m)	275 ft.-lb. (373 N•m)	547 ft.-lb. (742 N•m)	708 ft.-lb. (960 N•m)	773 ft.-lb. (1048 N•m)	1000 ft.-lb. (1356 N•m)	386 ft.-lb. (523 N•m)	545 ft.-lb. (739 N•m)



Appendix

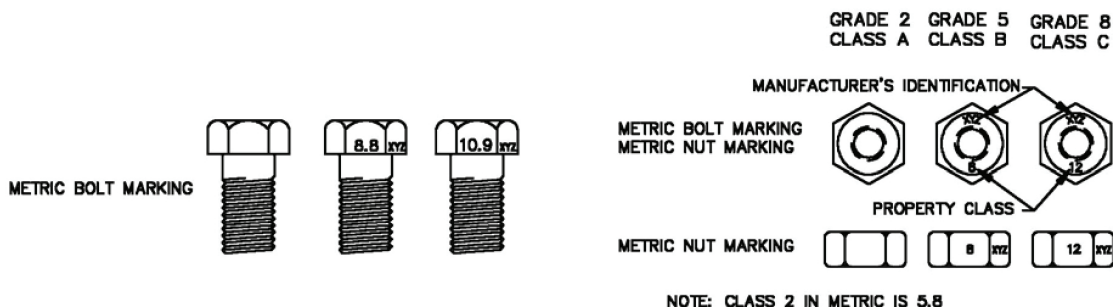
Torque Specifications (Cont'd)

Metric Hardware and Lock Nuts

TORQUE CHARTS Minimum Hardware Tightening Torques

Normal Assembly Applications
(Metric Hardware and Lock Nuts)

Nominal Size	Class 5,8		Class 8,8		Class 10,9		Lock nuts
	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Class 8 W / CL. 8,8 Bolt
M4	1.7 N•m (15 in.-lb.)	2.2 N•m (19 in.-lb.)	2.6 N•m (23 in.-lb.)	3.4 N•m (30 in.-lb.)	3.7 N•m (33 in.-lb.)	4.8 N•m (42 in.-lb.)	1.8 N•m (16 in.-lb.)
M6	5.8 N•m (51 in.-lb.)	7.6 N•m (67 in.-lb.)	8.9 N•m (79 in.-lb.)	12 N•m (102 in.-lb.)	13 N•m (115 in.-lb.)	17 N•m (150 in.-lb.)	6.3 N•m (56 in.-lb.)
M8	14 N•m (124 in.-lb.)	18 N•m (159 in.-lb.)	22 N•m (195 in.-lb.)	28 N•m (248 in.-lb.)	31 N•m (274 in.-lb.)	40 N•m (354 in.-lb.)	15 N•m (133 in.-lb.)
M10	28 N•m (21 ft.-lb.)	36 N•m (27 ft.-lb.)	43 N•m (32 ft.-lb.)	56 N•m (41 ft.-lb.)	61 N•m (45 ft.-lb.)	79 N•m (58 ft.-lb.)	30 N•m (22 ft.-lb.)
M12	49 N•m (36 ft.-lb.)	63 N•m (46 ft.-lb.)	75 N•m (55 ft.-lb.)	97 N•m (72 ft.-lb.)	107 N•m (79 ft.-lb.)	138 N•m (102 ft.-lb.)	53 N•m (39 ft.-lb.)
M16	121 N•m (89 ft.-lb.)	158 N•m (117 ft.-lb.)	186 N•m (137 ft.-lb.)	240 N•m (177 ft.-lb.)	266 N•m (196 ft.-lb.)	344 N•m (254 ft.-lb.)	131 N•m (97 ft.-lb.)
M20	237 N•m (175 ft.-lb.)	307 N•m (226 ft.-lb.)	375 N•m (277 ft.-lb.)	485 N•m (358 ft.-lb.)	519 N•m (383 ft.-lb.)	671 N•m (495 ft.-lb.)	265 N•m (195 ft.-lb.)
M24	411 N•m (303 ft.-lb.)	531 N•m (392 ft.-lb.)	648 N•m (478 ft.-lb.)	839 N•m (619 ft.-lb.)	897 N•m (662 ft.-lb.)	1160 N•m (855 ft.-lb.)	458 N•m (338 ft.-lb.)



LOFTNESS SPECIALIZED EQUIPMENT, INC.

LIMITED WARRANTY POLICY

The limited warranty policy begins upon delivery of the unit to the original customers.

The following Loftness products have a two (2) year limited warranty;

XLB10 Grain Bag Loader, Battle Ax L-series Skid Steer, Battle Ax S-series Skid Steer, Battle Ax H-series Skid Steer, Battle Ax Excavator 20-series, Battle Ax Excavator 30-series, Battle Ax Excavator 40-series, Battle Ax Excavator 50-series, Battle Ax Extreme, Bad Ax Skid Steer, Timber Ax Skid Steer.

All other Loftness products have a one (1) year limited warranty.

If any Loftness product is used as rental or leased equipment the limited warranty period is for only 30 days from the delivery date to the original customers.

Loftness Specialized Equipment, hereinafter referred to as LOFTNESS, a manufacturer of quality machinery since 1956, warrants new LOFTNESS machinery and/or attachments at the time of delivery to the original purchaser, to be free from defects in material and workmanship when properly set up and operated in accordance with the recommendations set forth in the LOFTNESS Operator's Manual.

LOFTNESS' liability for any defect with respect to accepted goods shall be limited to repairing the goods at an authorized dealer or other LOFTNESS designated location, or replacing them as LOFTNESS shall elect. The above shall be in accordance with LOFTNESS warranty adjustment policies.

WARRANTY REQUIREMENTS

Warranty registration form must be filled out and returned to Loftness Specialized Equipment to validate all warranty claims.

To receive a warranty claim, a return authorization from LOFTNESS must be obtained. The failed part may then be returned in an untampered status. This warranty does not include freight or delivery charges incurred when returning machinery for servicing. Dealer mileage, service calls and pick-up/delivery charges are the customer's responsibility.

LIMITATIONS OF WARRANTY

LOFTNESS products are designed to provide years of dependable service when proper use and maintenance is adhered to. The potential for misuse in many applications exists; therefore, a limited warranty is provided as follows.

This warranty shall not apply to any machine or attachment which shall have been repaired or altered outside the LOFTNESS factory or authorized LOFTNESS dealership or in any way so as in LOFTNESS' judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident, nor to any machine or attachment which shall not have been operated in accordance with LOFTNESS' printed instructions or beyond the company recommended machine rated capacity. LOFTNESS may elect to have an area representative evaluate the condition of the machine before warranty is considered.

In addition, this limited warranty provides no coverage for general wear or maintenance items, misuse, environmental conditions and/or contamination for which they were not designed or not intended, including but not limited to the following items;

Use of machine beyond its rated capacity, Conveyors, Improper knife replacement, Auger wear, Missing knives, Saw blades, Striking foreign objects, Brakes and brake pads, Lack of lubrication, Tires, Failures caused by running in an "out-of-balance" condition, Hydraulic hoses damaged by being caught in "pinch points" or by moving parts, and Damage caused by excessive force from the power unit.

EXCLUSIONS OF WARRANTY

Except as otherwise expressly stated herein, LOFTNESS makes no representation or warranty of any kind, expressed or implied. **The implied warranty of merchantability and fitness for a particular purpose are excluded from this limited warranty.** The remedies set forth in this warranty are the only remedies available to any person under this warranty. LOFTNESS shall have no liability to any person for incidental, consequential or special damages of any description, whether arising out of express or implied warranty or any other contract, negligence, or other tort or otherwise. This exclusion of consequential, incidental and special damages is independent from and shall survive any finding that the exclusive remedy failed of its essential purpose. Upon purchase, the buyer assumes all liability, all personal injury and property damage resulting from the handling, possession or use of the goods by the buyer.

No agent, employee or representative of LOFTNESS has any authority to bind LOFTNESS to any affirmation, representation or warranty concerning its machinery and/or attachments except as specifically set forth herein. (October 2022)



www.loftness.com

Loftness Specialized Equipment, Inc.
650 So. Main Street • PO Box 337 • Hector, MN 55342
Tel: 320.848.6266 • Fax: 320.848.6269 • Toll Free: 1.800.828.7624

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