

TUBE•LINE™

Tubeline Manufacturing Limited
6455 Reid Woods Drive RR #4
Elmira, Ontario, Canada N3B 2Z3

Email: sales@tubeline.ca

Fax: 519.669.5808

Tel: 519.669.9488

Toll-free (North America): 1.888.856.6613

www.tubeline.ca

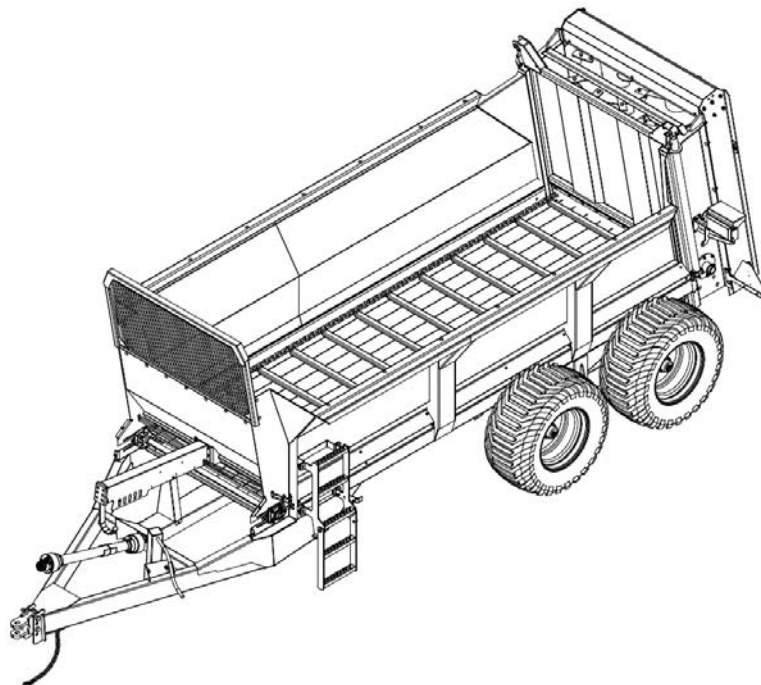
Parts Manual

Keep this manual with the machine at all times.

NITRO

Manure Spreader

Nitro 525RS



Parts Manual

Thank you for choosing the Tubeline 525RS Manure Spreader. Our hope is that it will give you many years of productive service. This machine is designed to wrap a continuous line of round bales in a film of plastic.

Warranty and Limitation of Liability

All equipment is sold subject to mutual agreement that it is warranted by the company to be free from defects of materials and workmanship. But the company shall not be liable for special, indirect or consequential, damages of any kind under this contract or otherwise. The company's liability shall be limited exclusively to replacing or repairing without charge, at its factory or elsewhere, at its discretion.

Any material, or workmanship defects which become apparent within one year from the date on which the equipment was purchased, and the company shall have no liability for damages of any kind. The buyer by the acceptance of the equipment will assume all liability for any damages, which may result from the use or misuse by his employees or others.

Nitro Apron Chain Warranty



Tubeline Manufacturing Ltd offers a limited lifetime non-transferable warranty to the original purchaser of a Nitro manure spreader. This warranty applies to chain link breakage and covers parts only. Should a connecting link fail, only it will be replaced. However, if a standard link breaks the complete chain will be provided. Freight and labor to install is the responsibility of the purchaser and is not covered under the terms of the limited warranty.

Tubeline Manufacturing Ltd reserves the right to request the return of the failed chain.

Warranty coverage is null and void unless Warranty Registration form has been completely filled in and is on file at Tubeline Manufacturing Ltd.

Manuals

Parts manuals are printed and shipped with machines as they leave the manufacturer. Your machine may include parts or features not yet included in the initially shipped manual. The latest manual version can be found at www.tubeline.ca/support.php. Tubeline reserves the right to update and change manuals as seen fit. Dealers are informed of any pressing changes/ modifications. They can help you with any questions regarding replacement parts.

Serial Number

The implement serial number is located above the front left apron drive bearing. This number helps us to track changes and improvements and must be mentioned when ordering parts or requesting service. For your convenience, a space has been provided inside the front cover of this manual to record the serial number, model number, purchase date, and dealer name.

Model No: _____

Serial No: _____

Date Purchased: _____

Dealer Name: _____



Table of Contents

Parts Manual	II
Warranty and Limitation of Liability	II
Nitro Apron Chain Warranty	II
Manuals	II
Serial Number	II
Safety Sign Locations	V
Safety Decals	VI
ISO Safety Decal Locations	VIII
ISO Safety Decals	IX
Section 2 - Parts Breakdowns & Lists	2-1
Tongue Components	2-2
Front Components	2-4
Front Apron Drive	2-6
Driveline	2-8
Side Shields	2-10
Endgate	2-12
Rear Apron Drive	2-14
Floor & Side Boards	2-16
Beaters	2-18
Walking Beams	2-20
Single Axle	2-22
Tandem Axle	2-24
Tandem Axle - Scale Ready	2-26
Apron Runners	2-28
Hydraulic Schematic	2-30
Section 3 - Optional Features	3-1
Optional Kit Numbers	3-1
Hitch Options	3-2
Mechanical Light Kit - 43673	3-4
Light Kit Base	3-6
Manual Light Kit	3-8
Hydraulic Light Kit	3-9
Light Kit Hydraulics	3-10
Light Kit Wiring Harness	3-12
N750LC (GT400) / N750LCNT460 Scales	3-14
N750LCNT8000 Scales	3-15
Flow Control Mounting	3-16
Flow Control Hydraulic Layout - Manual	3-17
Flow Control Hydraulic Layout - Electric (Original)	3-18
Flow Control Hydraulic Layout - Electric (Current)	3-19
Electric Flow Control Wiring	3-20
Flange Paddle Kit - 41504	3-22
Section 4 - Option - Poultry Beaters	4-1
Poultry Beaters - Frame	4-1
Poultry Beaters - Endgate	4-3
Poultry Beaters - Beaters	4-5
N450 Poultry Beaters - Drivelines	4-7
Poultry Beaters - Spinners	4-9

Section 5 - PTOs	5-1
39850 - PTO. 375,450,525,600,750 (V80-141P028359-028028-CV80-CLS)	5-2
39851 - PTO. 375,450,525,(T60-086P265011-306048-CLS(3500NM))	5-4
Torque Value Chart - Imperial	6-1
Torque Value Chart - Metric	7-1

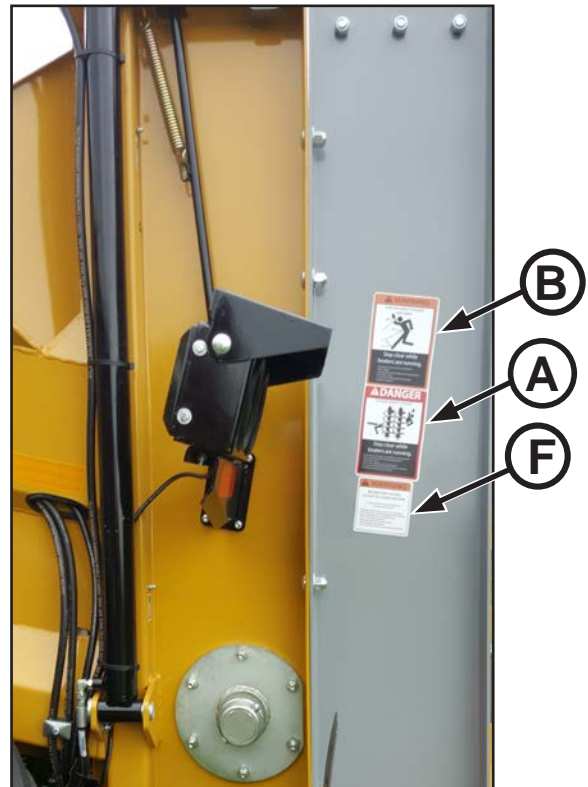
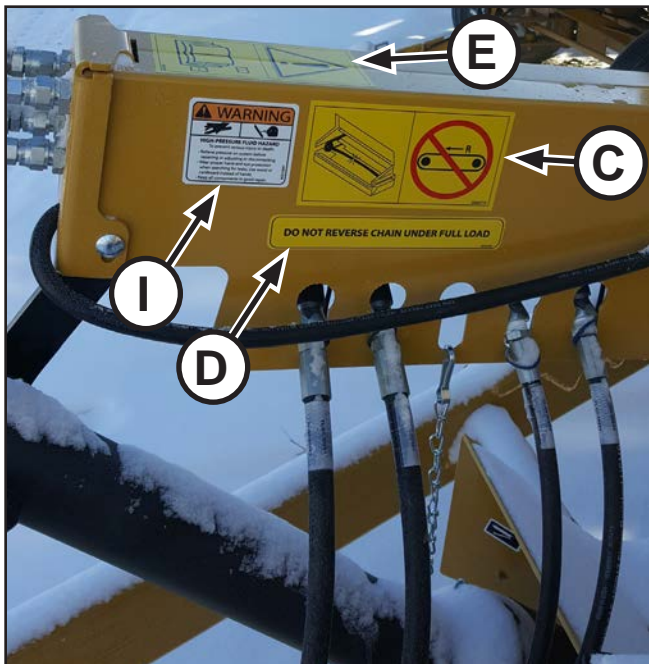
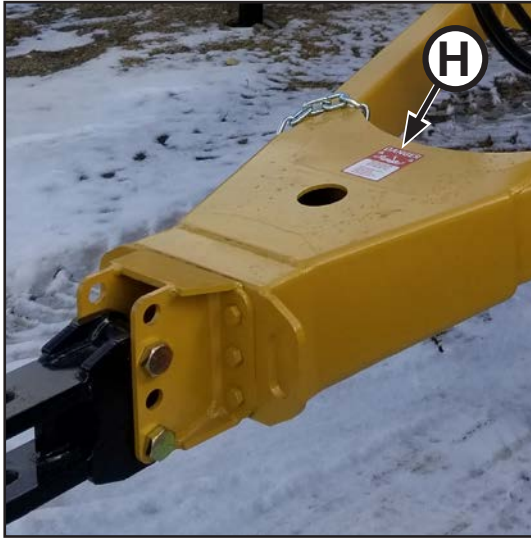
Safety Sign Locations

The types of safety signs and locations on the equipment are shown in the illustrations that follow. Good safety requires that you familiarize yourself with the various safety signs, the types of warning, and the area, or proper function related to that area, that requires your safety awareness.

Examples only - Actual decals may differ in text and graphic representation.

REMEMBER

If safety signs have been damaged, removed, become illegible or parts replaced without safety signs, new safety signs must be applied. New safety signs are available from your authorized dealer.



Safety Decals

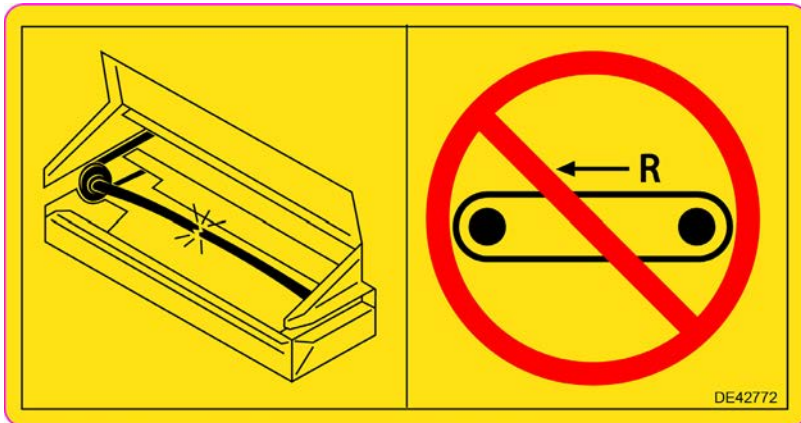
Item - A
Part No: DE39395



Item - B
Part No: DE39396



Item - C
Part No: DE42772
Reversing apron chain while spreader is fully loaded will cause front apron shaft breakage.



Item - E Part No: DE42784
See Operators Manual for decal explanation.



Item - D
Part No: DE42782 - Reversing apron chain while spreader is fully loaded will cause front apron shaft breakage.



Safety Decals

Item - F
Part No: DE23845



Item - G
Part No: DE23836



Item - H
Part No: DE39397



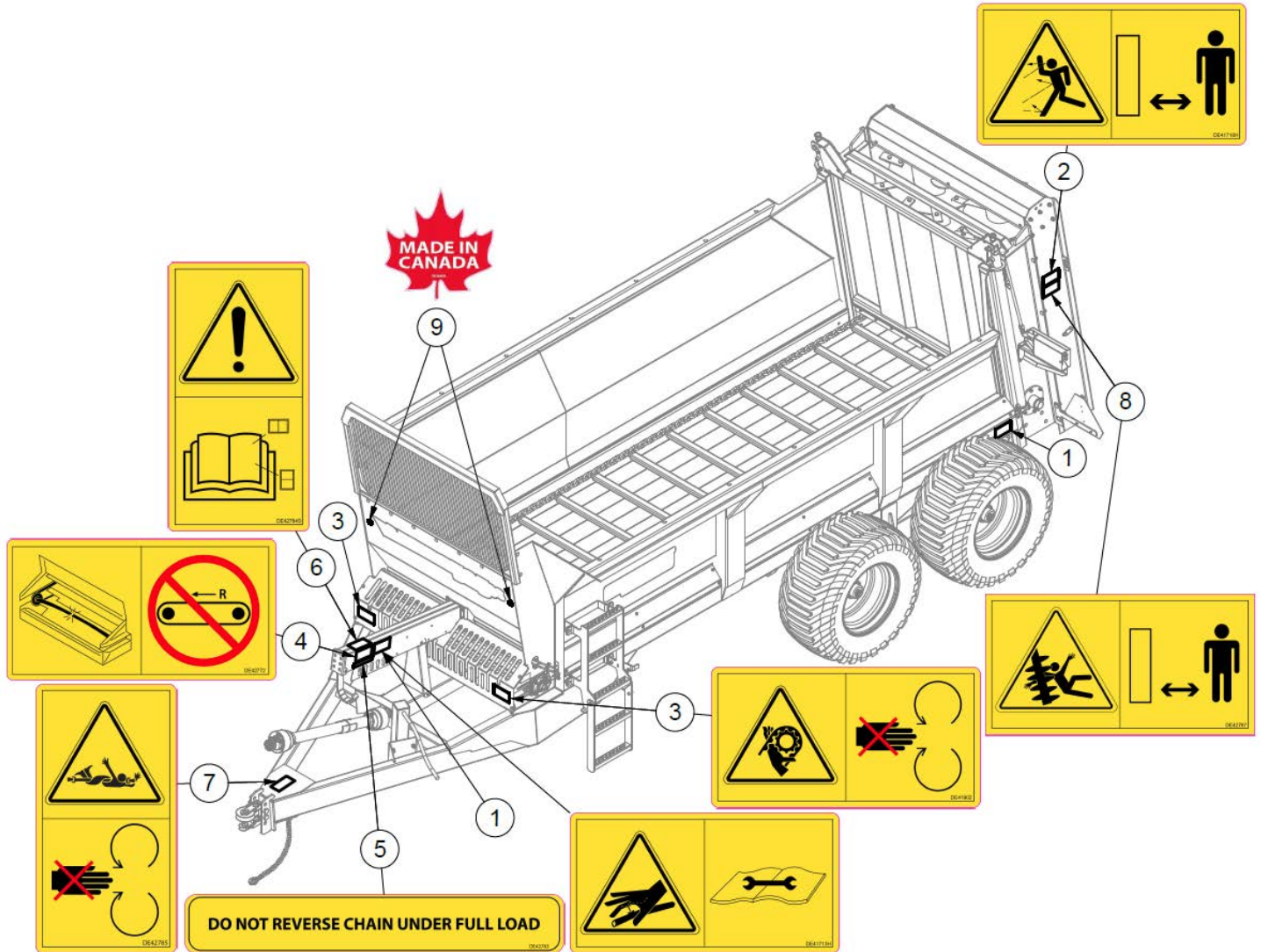
Item - I
Part No: DE23838



Item - J
Part No: DECANADA



ISO Safety Decal Locations



ITEM	QTY	PART NUMBER	DESCRIPTION
1	6	DE41713H	ISO Decal - High Pressure Fluid Horizontal
2	2	DE41718H	ISO Decal - Thrown Object Horizontal
3	2	DE41902	ISO Decal - Chain Entanglement
4	1	DE42772	ISO Decal - Nitro Reverse Chain
5	1	DE42783	Nitro Reverse Chain Text Decal
6	1	DE42784	ISO Decal - Read OM Decals Section
7	1	DE42785	ISO Decal - PTO Entanglement
8	2	DE42787	ISO Decal - Nitro Beater Entanglement
9	2	DECANADA	Decal Made In Canada

ISO Safety Decals



Item 1: DE41713H

Do not use hand to check for hydraulic leaks, alternatively use a piece of cardboard.



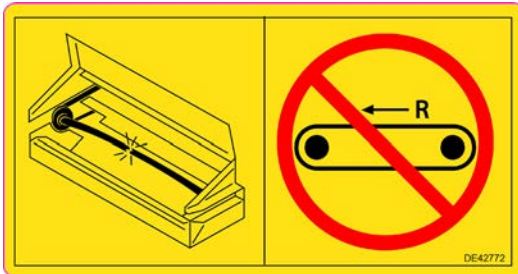
Item 2: DE41718H

Keep clear of machine while operating. Serious injury may occur.



Item 3: DE41902

Keep hands clear of rotating parts while machine running. Do not operate without shielding in place. Do not wear loose clothing while operating.



Item 4: DE42772

Reversing apron chain while spreader is fully loaded will cause front apron shaft breakage.



Item 5: DE42783



Item 6: DE42784

Read Operator's manual decal section to understand safety decals.



Item 7: DE42785

Do not use hand to check for hydraulic leaks, alternatively use a piece of cardboard.

Item 8: DE42787

Stand clear of rotating beaters to avoid entanglement. Serious injury or death hazard.



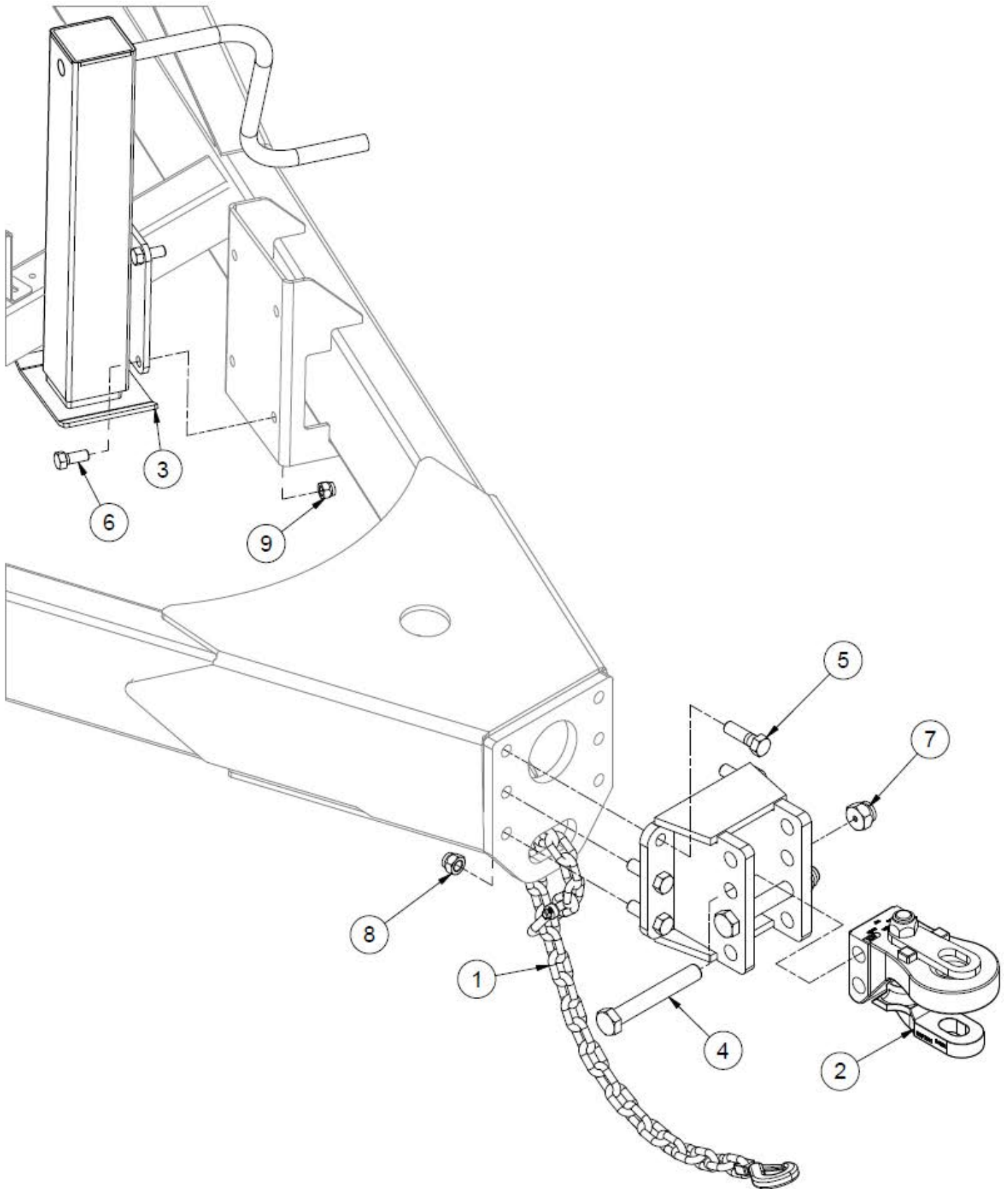
Item 9: DECANADA

Manufacturer's country of origin.



Section 2 - Parts Breakdowns & Lists

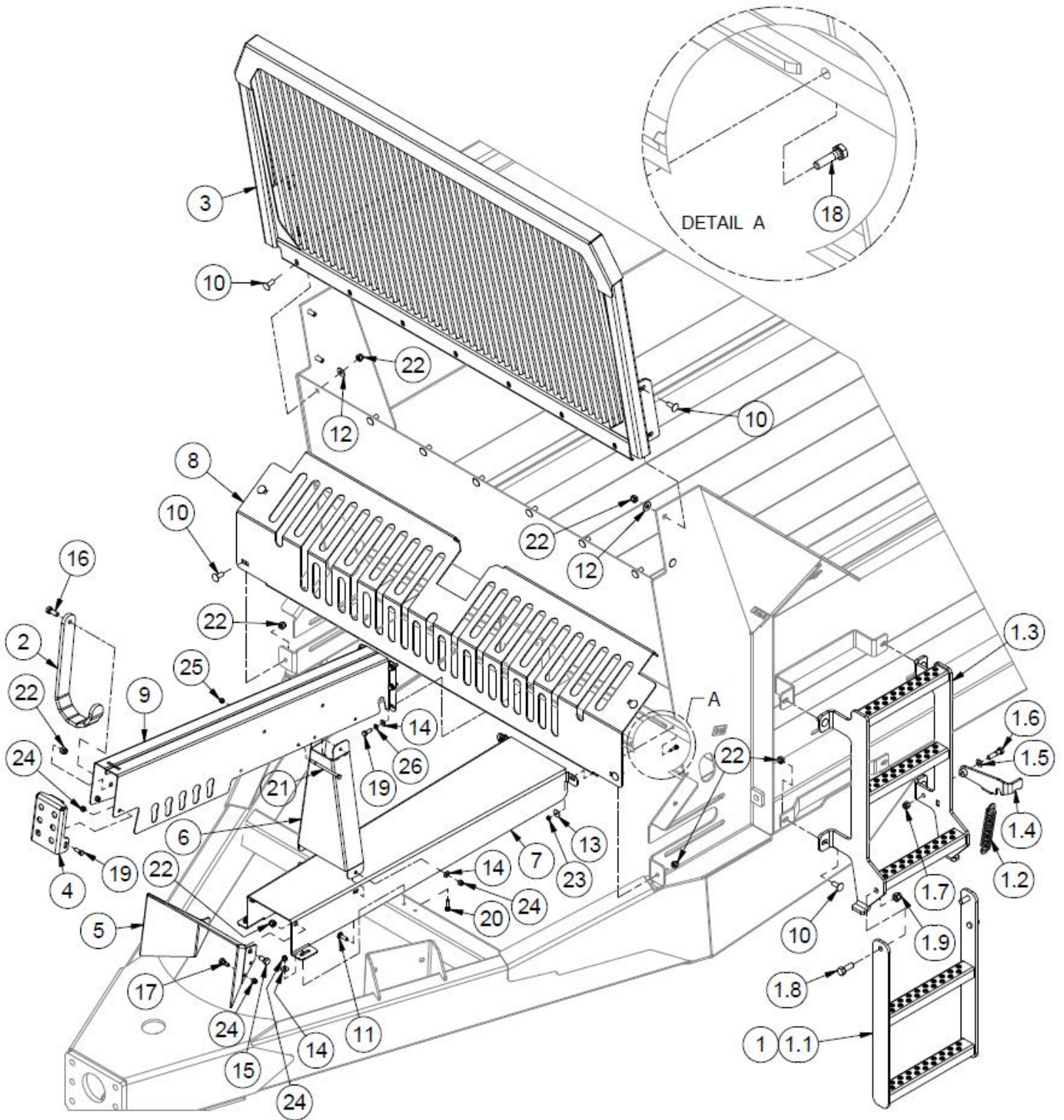
Tongue Components



Tongue Components

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	1	25262	Safety Chain 20000 # 60"	
2	1	30826	Clevis Hitch Assembly Cat.3	See Hitch Options
3	1	30850	Jack	
4	2	HB 1-14 X7 YZ8	Hex Bolt 1-14x7 Grade 8 Zinc Hex Cap Screw	
5	6	HB 3/4-10X2.5 Z5	Hex Bolt 3/4-10x2 1/2 Grade 5 Zinc Plated Hex Cap Screw	
6	4	HB 5/8-11X1.5 Z5	Hex Bolt 5/8-11x1 1/2 Grade 5 Zinc Plated Hex Cap Screw	
7	2	LN 1 F	Center Locknuts (1-14) 2-Way Fine Thread	
8	6	LN 3/4 N	LN 3/4-10 Zinc Plated Nylon Insert Lock Nut	
9	4	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut	

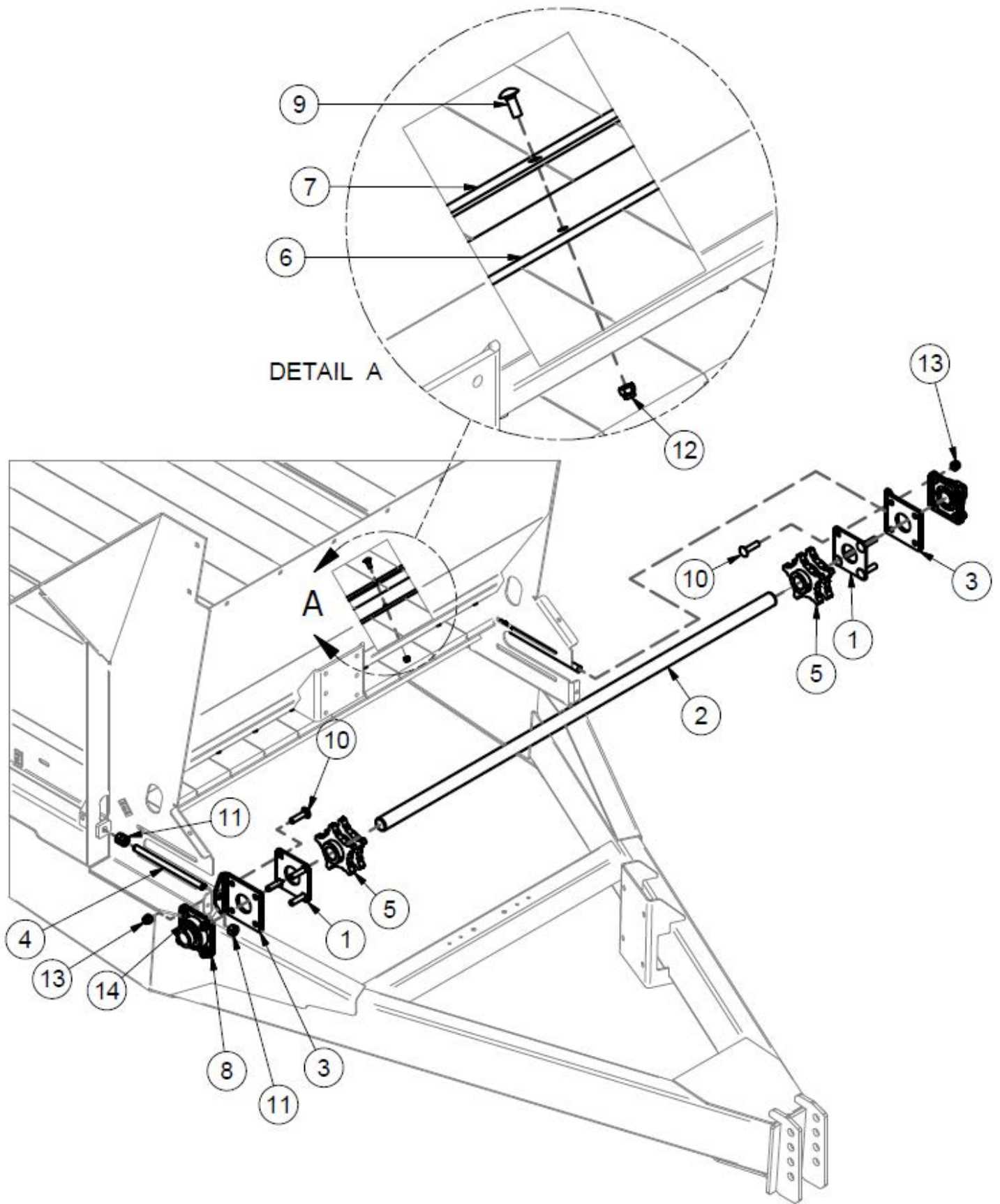
Front Components



Front Components

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	600-322	Complete Ladder
1.1	1	700-608	Bottom Ladder Section
1.2	1	700-127	Spring
1.3	1	600-323	Top Ladder Section
1.4	1	35389	Ladder Latch
1.5	1	FW 1/2	Flatwasher - 1/2" Zinc Plated USS
1.6	1	HB 1/2-13X2 Z5	Hex Bolt 1/2-13x2 Grade 5 Zinc Plated Hex Cap Screw
1.7	1	LN 1/2 N	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut
1.8	2	HB 5/8-11X1.75 Z5	Hex Bolt 5/8-11x1 3/4 Grade 5 Zinc Plated Hex Cap Screw
1.9	2	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut
2	1	35754	PTO Holder
3	1	37195	Stone Guard
4	1	39413	Hose Mount
5	1	39422	PTO Front Pivot Cover
6	1	39452	HRP 0.105 in
7	1	39455	Long PTO Cover
8	1	43472	Front Idler Shaft Cover
9	1	43902	Hydraulic Hose Hanger
10	15	CB 1/2-13 X1.25 Z5	Carriage Bolt - 1/2-13 x 1 1/4" Grade 5 Zinc
11	2	CB 3/8-16 X1.25 Z5	Carriage Bolt - 3/8-16 x 1 1/4" Grade 5 Zinc
12	11	FW 1/2	Flatwasher - 1/2" Zinc Plated USS
13	2	FW 1/4	Flatwasher - 1/4" Zinc Plated USS
14	10	FW 3/8	Flatwasher - 3/8" Zinc Plated USS
15	2	HB 1/2-13X1 Z5	Hex Bolt 1/2-13x1 Grade 5 Zinc Plated Hex Cap Screw
16	1	HB 1/2-13X1.25 Z5	Hex Bolt 1/2-13x1 1/4 Grade 5 Zinc Plated Hex Cap Screw
17	1	HB 1/2X3/8 SS	Socket Head Shoulder Screws - 1/2 Shldr x 3/8 x 3/8-16
18	2	HB 1/4-20X1 Z5	Hex Bolt 1/4-20x1 Grade 5 Zinc Plated Hex Cap Screw
19	8	HB 3/8-16X1 Z5	Hex Bolt 3/8-16x1 Grade 5 Zinc Plated Hex Cap Screw
20	2	HB 3/8-16X1.25 Z5	Hex Bolt 3/8-16x1 1/4 Grade 5 Zinc Plated Hex Cap Screw
21	1	HB 5/16-18X5 Z5	Hex Bolt 5/16-18x5 Grade 5 Zinc Plated Hex Cap Screw
22	20	LN 1/2 N	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut
23	2	LN 1/4 N	LN 1/4-20 Zinc Plated Nylon Insert Lock Nut
24	7	LN 3/8 N	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut
25	1	LN 5/16 N	LN 5/16-18 Zinc Plated Nylon Insert Lock Nut
26	6	LW 3/8	LW - 3/8" Zinc Plated Medium Split

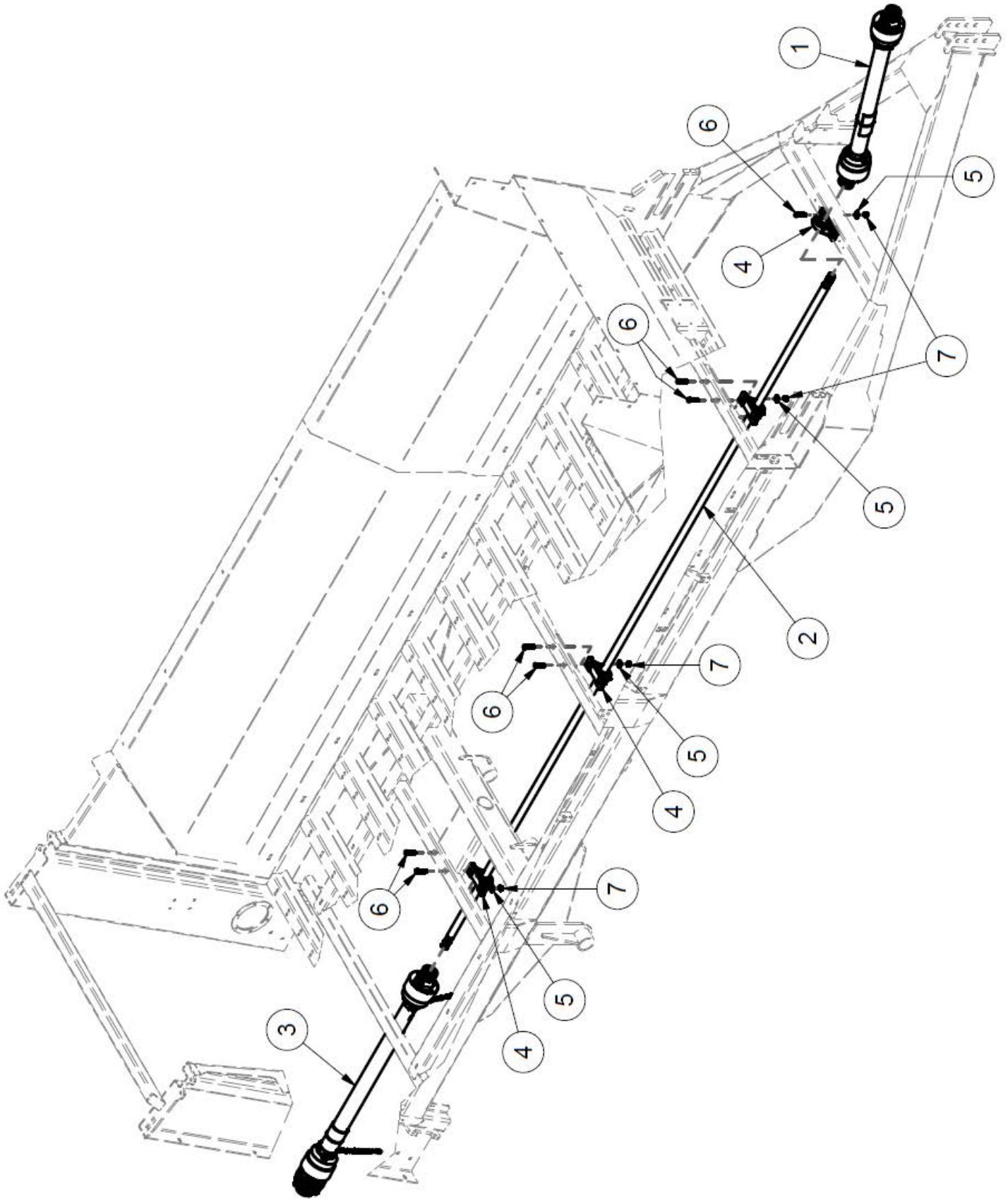
Front Apron Drive



Front Apron Drive

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	37720	Inside Bearing Plate
2	1	400-162	Front Apron Drive Shaft
3	2	400-169	Bearing Mount Plate
4	2	400-875	Threaded Tightener
5	2	400-916	Apron Sprocket (w/ Set Screws)
6	3	450-441	Rubber Seal
7	3	600-790	Rubber Hold Down
8	2	BEA UCF209-28R3	Flange Bearing, Triple Seal, Ductile Iron
9	10	CB 3/8-16 X1 Z5	Carriage Bolt - 3/8-16 x 1" Grade 5 Zinc
10	8	CB 5/8-11 X2.5 Z5	Carriage Bolt - 5/8-11 x 2 1/2" Grade 5 Zinc
11	6	HN 3/4	Hex Nut 3/4"-10 Grade 5 Zinc Plated Finished
12	10	LN 3/8 N	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut
13	8	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut
14	2	SS 516X38	Allan Head Set Screw, 5/16-24 x 3/8

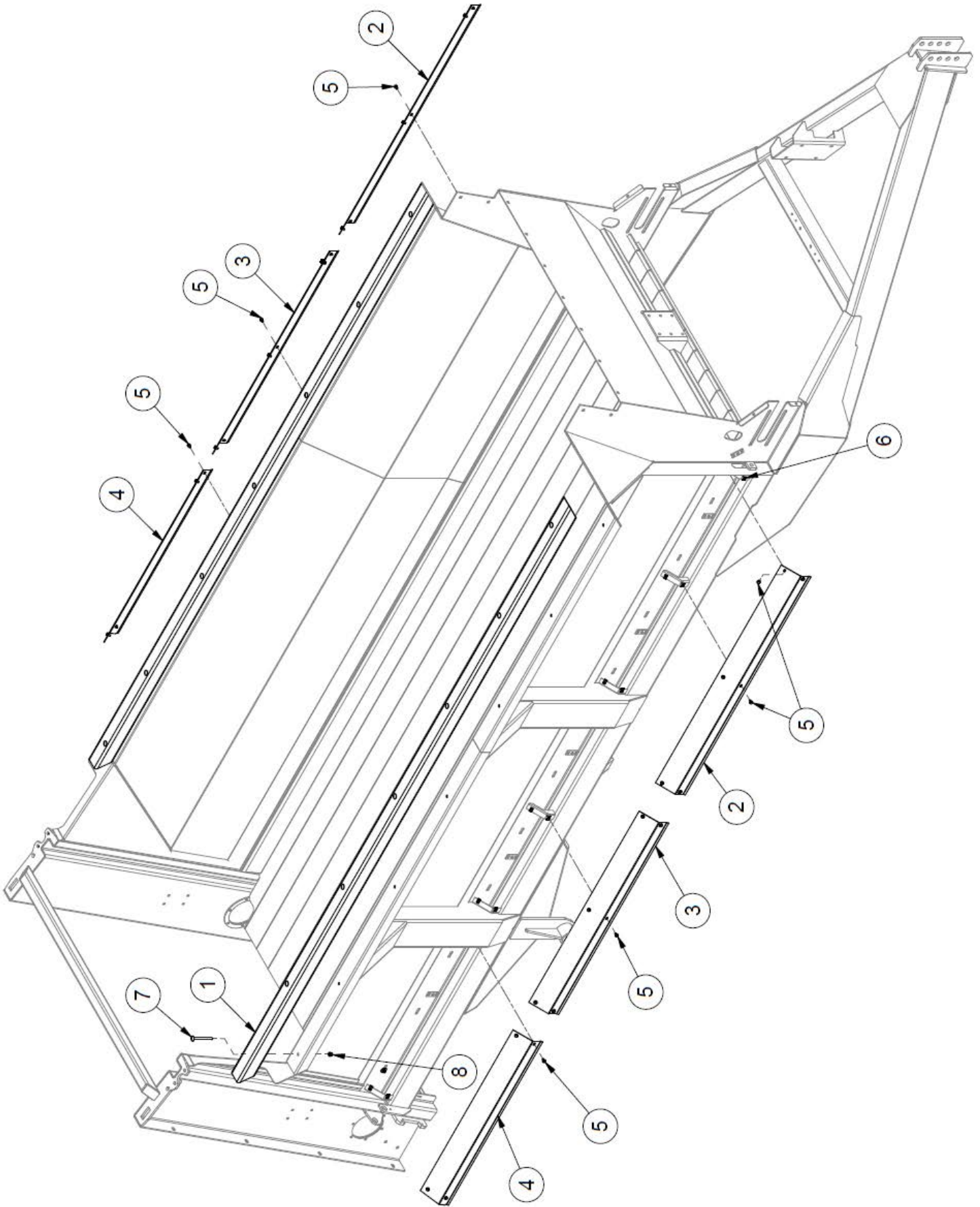
Driveline



Driveline

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	39850	PTO. 375,450,525,600,750 (V80-141P028359-028028-CV80-CLS)
2	1	39433	Spline Driveshaft
3	1	39851	PTO. 375,450,525,(T60-086P265011-306048-CLS(3500NM)
4	4	BEA UCP208-24R3	Pillow Block Bearing
5	8	FW 1/2	Flatwasher - 1/2" Zinc Plated USS
6	8	HB 1/2-13X2.0 Z5	Hex Bolt 1/2-13 x 2" Grade 5 Zinc Plated Hex Cap Screw NC
7	8	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut

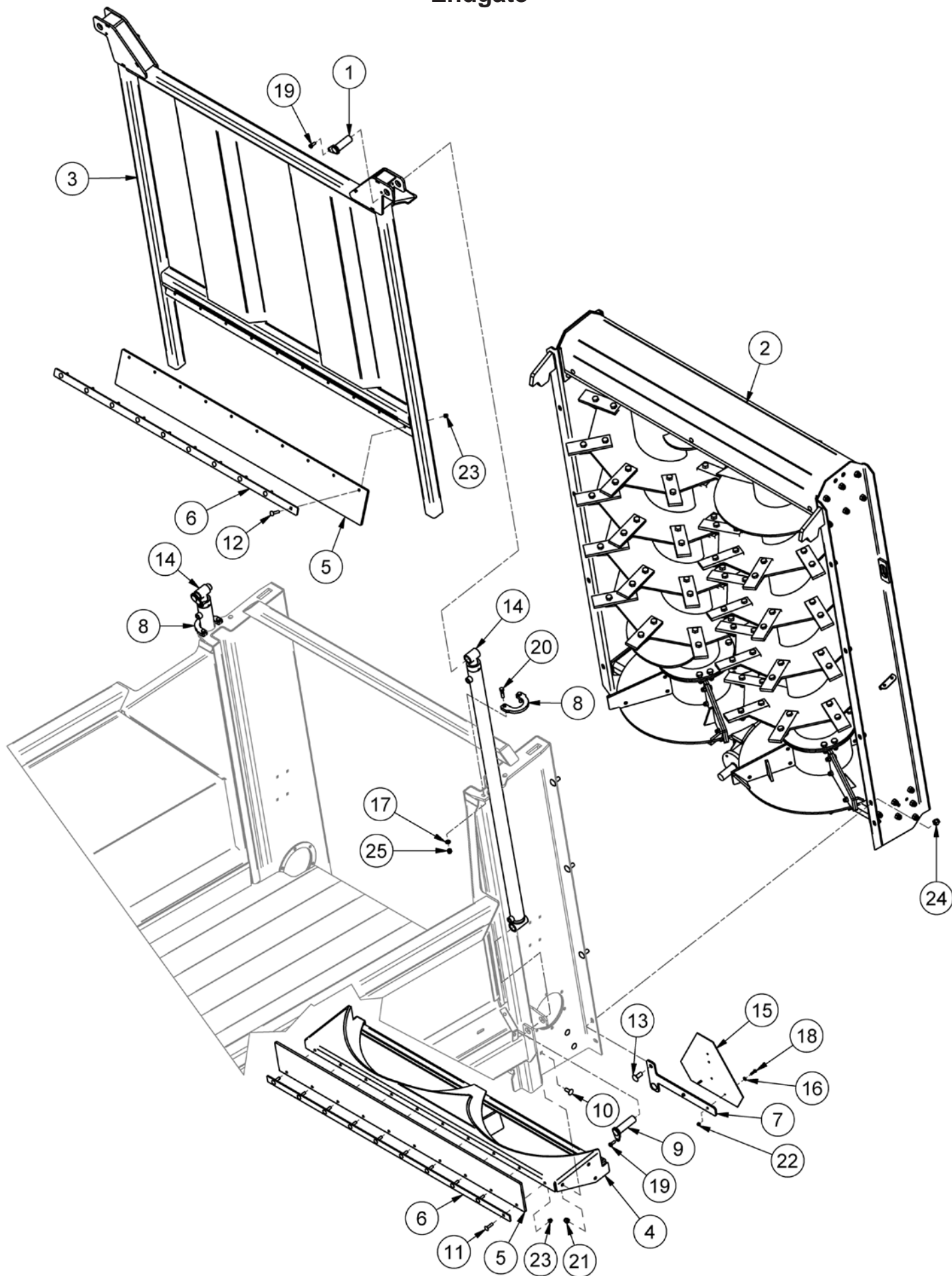
Side Shields



Side Shields

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	2	Obtain Locally	4" x 4" Pressure Treated Beam	
2	2	39427	Front Side Hydraulic Cover	Used until serial no. 19NRS311
3	2	39428	Middle Side Hydraulic Cover	Used until serial no. 19NRS311
4	2	39429	Back Side Hydraulic Cover	Used until serial no. 19NRS311
5	32	HBC5/16X0.5	Hex Bolt Cerrated 5/16-18 x 1/2 Zinc Flange Bolt	Used until serial no. 19NRS311
6	32	HNP 5/16	Panel Nut - 5/16" U-Type Spring	Used until serial no. 19NRS311
7	14	CB 1/2-13 X5 Z5	Carriage Bolt - 1/2-13 x 5" Grade 5 Zinc	
8	66	LN 1/2 N	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut	

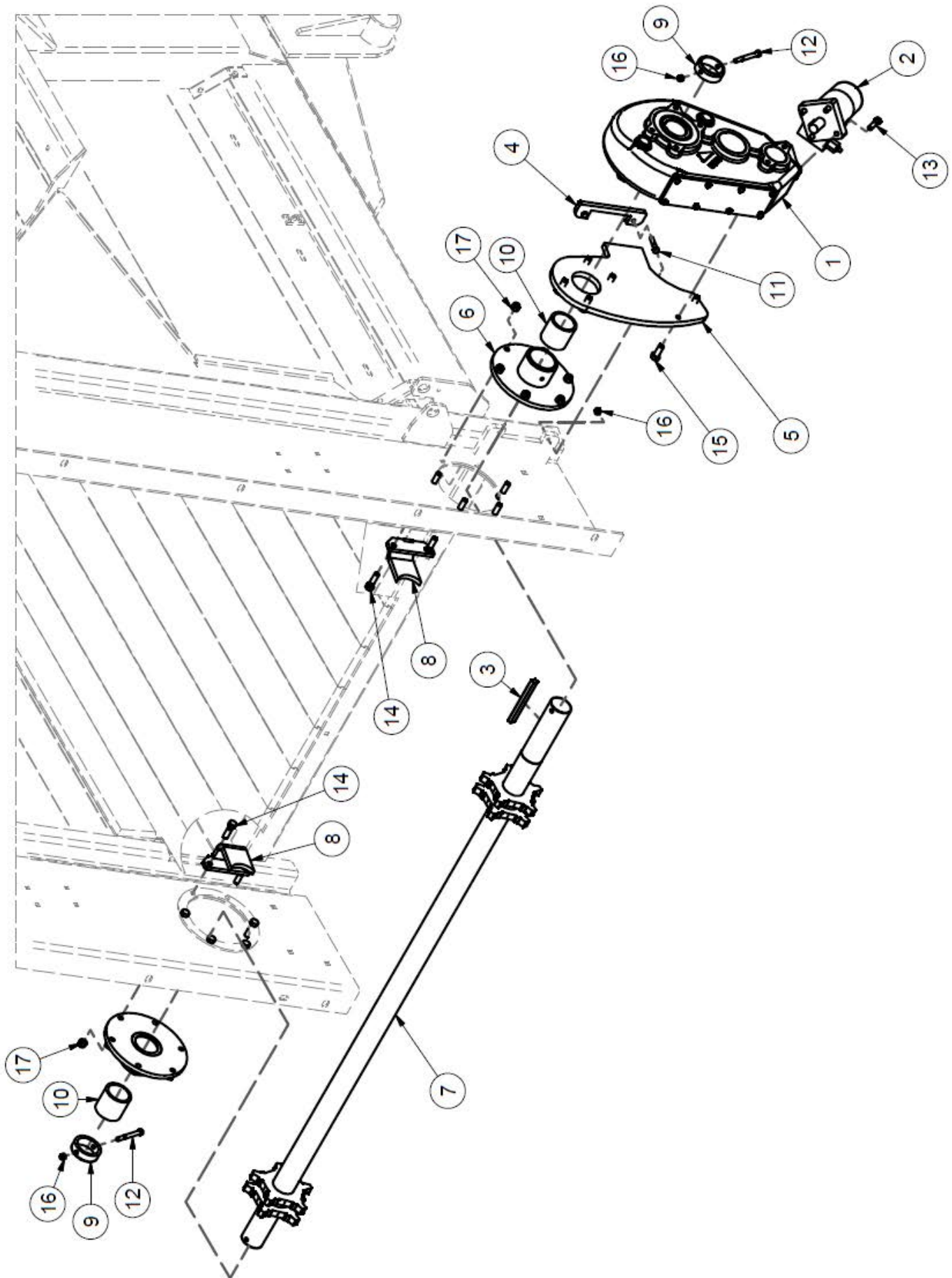
Endgate



Endgate

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	400-601	Top Cylinder Pin
2	1	450-106	450 Beater Assembly
3	1	450-126	Endgate
4	1	450-130	Pinner Shroud
5	2	450-441	Rubber Seal
6	2	600-790	Rubber Hold Down
7	1	700-108	SMV Sign Mount
8	2	700-142	Endgate Cylinder Support
9	2	700-619	Bottom Cylinder Pin
10	6	CB 1/2-13 X1.25 Z5	Carriage Bolt - 1/2-13 x 1 1/4" Grade 5 Zinc
11	10	CB 3/8-16 X1.5 Z5	Carriage Bolt - 3/8-16 x 1 1/2" Grade 5 Zinc
12	10	CB 3/8-16 X1.75 Z5	Carriage Bolt - 3/8-16 x 1 3/4" Grade 5 Zinc
13	9	CB 5/8-11 X1.5 Z5	Carriage Bolt - 5/8-11 x 1 1/2" Grade 5 Zinc
14	2	CYL31731	Cylinder 2.0x56.75x1.5 Nitro450
15	1	DESMV	SMV Sign
16	2	FW 1/4	Flatwasher - 1/4" Zinc Plated USS
17	4	FW 7/16	Flatwasher - 7/16" Zinc Plated USS
18	2	HB 1/4-20X1 Z5	Hex Bolt 1/4-20x1 Grade 5 Zinc Plated Hex Cap Screw
19	4	HB 3/8-16X1 Z5	Hex Bolt 3/8-16x1 Grade 5 Zinc Plated Hex Cap Screw
20	4	HB 7/16-14X1.75 Z5	Hex Bolt 7/16-14x1 3/4 Grade 5 Zinc Plated Hex Cap Screw
21	6	LN 1/2 N	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut
22	2	LN 1/4 N	LN 1/4-20 Zinc Plated Nylon Insert Lock Nut
23	20	LN 3/8 N	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut
24	9	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut
25	4	LN 7/16 N	LN 7/16-14 Zinc Plated Nylon Insert Lock Nut

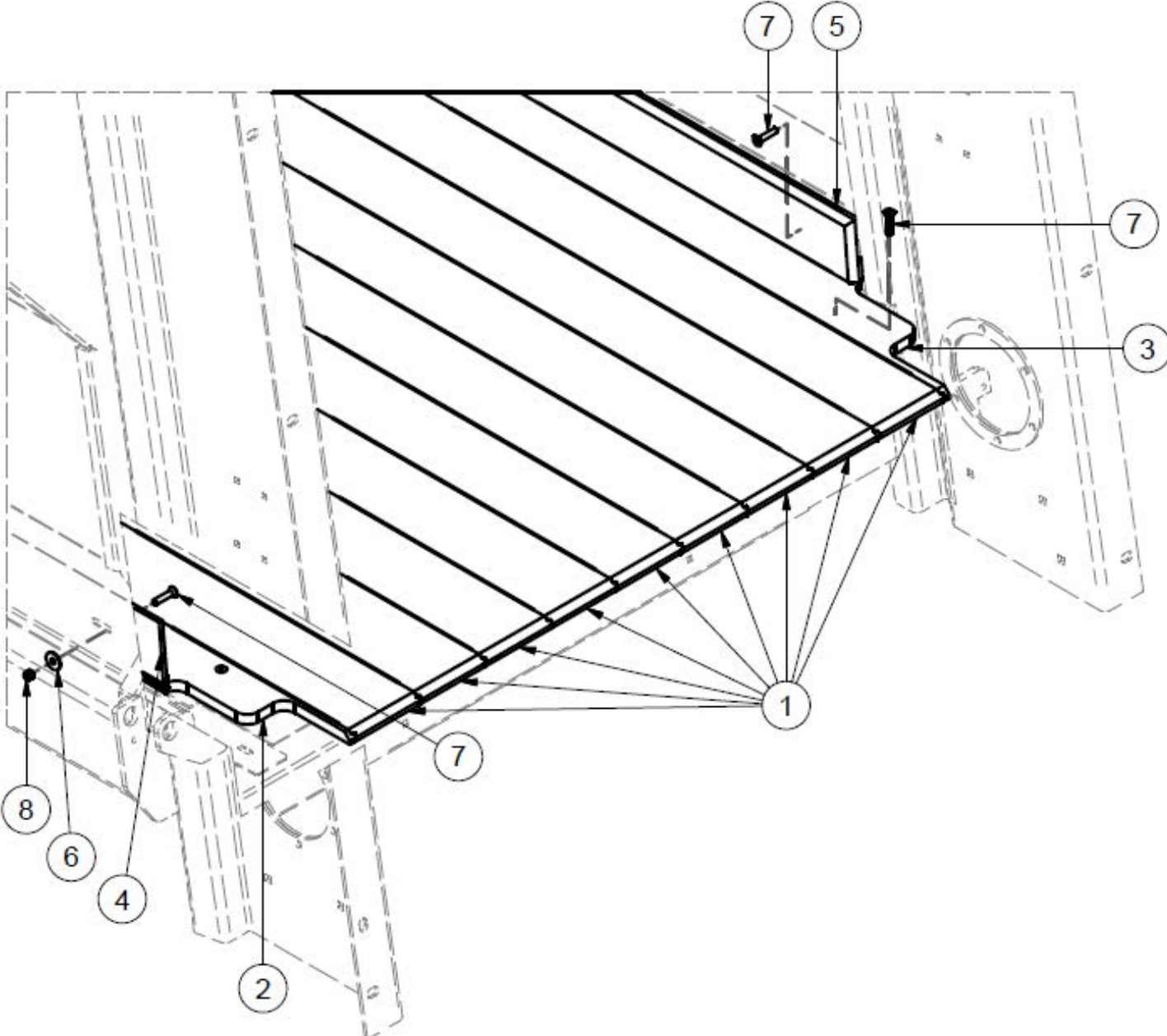
Rear Apron Drive



Rear Apron Drive

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	30842	Apron Drive Gearbox
2	1	30854	Hydraulic Motor
3	1	30859	Metric Key 18 x 11 x 150
4	1	375-424	Torque Arm Stop
5	1	39421	Gearbox Torque Arm
6	2	450-135	Bearing Housing
7	1	450-137	Apron Drive Shaft
8	2	450-138	Apron Drive Shaft
9	2	450-371	Apron Shaft Bushing
10	2	700-431	Apron Bushing
11	2	HB 3/8-16X1.3/4 Z5	Hex Bolt - 3/8-16 x 1 3/4" Socket Head Cap Screw
12	2	HB 3/8-16X3.1/2 Z5	Hex Bolt - 3/8-16X3.1/2 Z5 Plated Gr. 5 NC
13	4	HB 7/16-14X1.3/4 Z5	Hex Bolt Plated Gr. 5 N.C
14	4	HB 1/2-13X1.3/4 Z5	Hex Bolt Plated - 1/2"-13 x 1-3/4" Zinc Finish Gr.5 NC
15	6	M14X35X2.0	Metric Bolt
16	2	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
17	12	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut

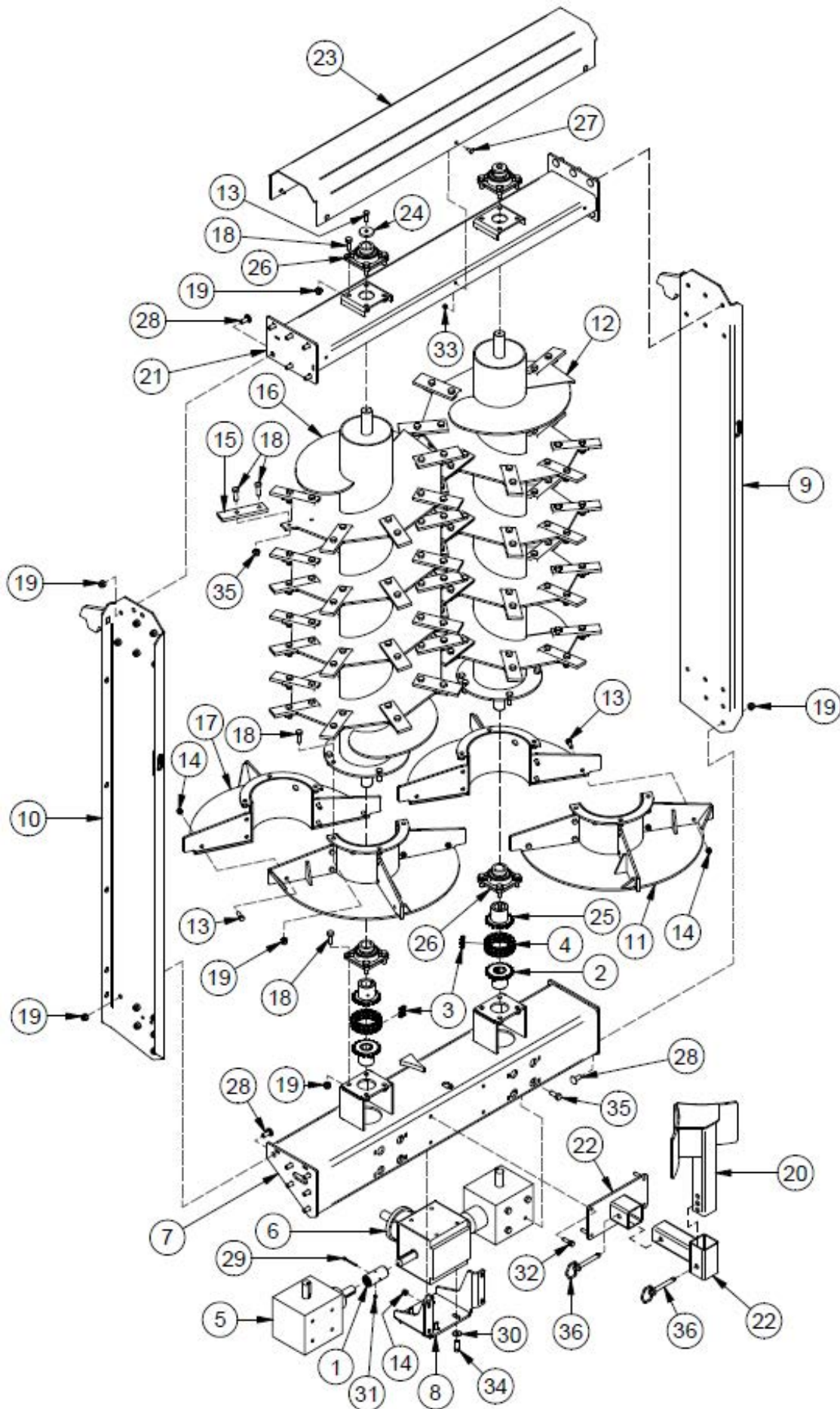
Floor & Side Boards



Floor & Side Boards

ITEM	QTY	PART NUMBER	DESCRIPTION
1	9	40265	Floor Board
2	1	40266	Left Edge Floor Panel
3	1	40267	Right Edge Floor Panel
4	1	40268	Left Vertical Board
5	1	40269	Right Vertical Board
6	132	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS
7	132	HB 3/8-16X1.3/4 Z5	Hex Bolt - 3/8-16 x 1 3/4" Socket Head Cap Screw
8	132	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut

Beaters



Beaters

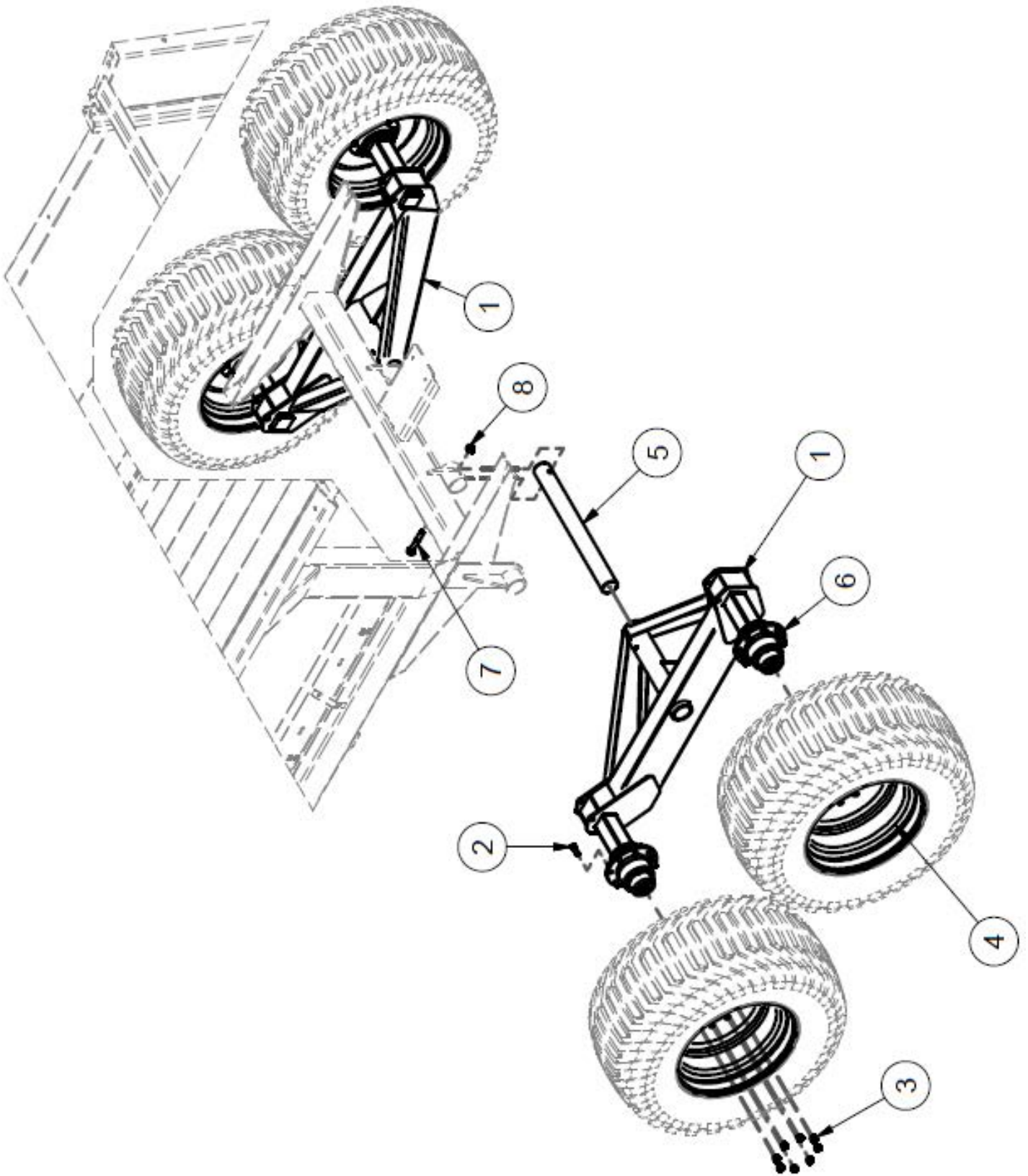
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	30849	Spline Coupler
2	2	37839	#80 Chain Sprocket
3	2	31516	#80 CHAIN Connector
4	2	31518	DOUBLE #80 CHAIN
5	2	30847	90 Degree GearBox
6	1	30848	Center Gearbox
7	1	40516	Bottom Beater Cross Beam
8	1	40517	Gearbox Mount Bracket
9	1	450-107	Right Beater Side Frame
10	1	450-108	Left Beater Side Frame
11	2	36966	WELDMENT
12	1	450-111	Right Beater
13	14	HB 1/2-13X1.5 Z5	Hex Bolt 1/2-13x1 1/2 Grade 5 Zinc Plated Hex Cap Screw
14	16	LN 1/2 N	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut
15	64	400-438	Beater Paddle
16	1	450-112	Left Beater
17	4	450-116	Beater Spinner
18	144	HB 5/8-11X1.3/4 Z5	Hex Bolt - 5/8"-11 x 1-3/4" Grade 5 Zinc Plated Hex Cap Screw NC
19	168	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut
20	1	450-131	Beater Deflector
21	1	450-133	Top Cross Beam
22	1	450-139	Beater Deflector Mount
23	1	450-405	Top Beater Cover
24	2	700-157	Load Bearing Washer
25	2	700-645	#80 Chain Sprocket
26	4	BEA UCF209-28R3	UCF209 Bearing
27	6	CB 3/8-16 X1 Z5	Carriage Bolt - 3/8-16 x 1" Grade 5 Zinc
28	24	CB 5/8-11 X1.5 Z5	Carriage Bolt - 5/8-11 x 1 1/2" Grade 5 Zinc
29	2	CP.188 X 2.5	Cotter Pin
30	4	FW 9/16	Flatwasher - 9/16" Zinc Plated USS
31	2	GR 1/4 X 28	Grease Fitting 1/4-28 Strght-Standrd Zerk
32	4	HB 1/2-13X1.75 Z5	Hex Bolt 1/2-13x1 3/4 Grade 5 Zinc Plated Hex Cap Screw
33	6	LN 3/8 N	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut
34	4	M14X40X2	Metric Bolt
35	8	M16X40X2	Metric Bolt
36	2	TL384804	3/4 X 4 1/4 Hitch Pin w/Chain and Lynch Pin

Order part no. **40684** for complete lower cross beam (Items.1,5,6,7,8,23,24,27,31,33).

Does **NOT** include sprockets or chain couplers.

Walking Beams

Used up to serial no. 19NRS311.



Walking Beams

Used up to serial no. **19NRS311**.

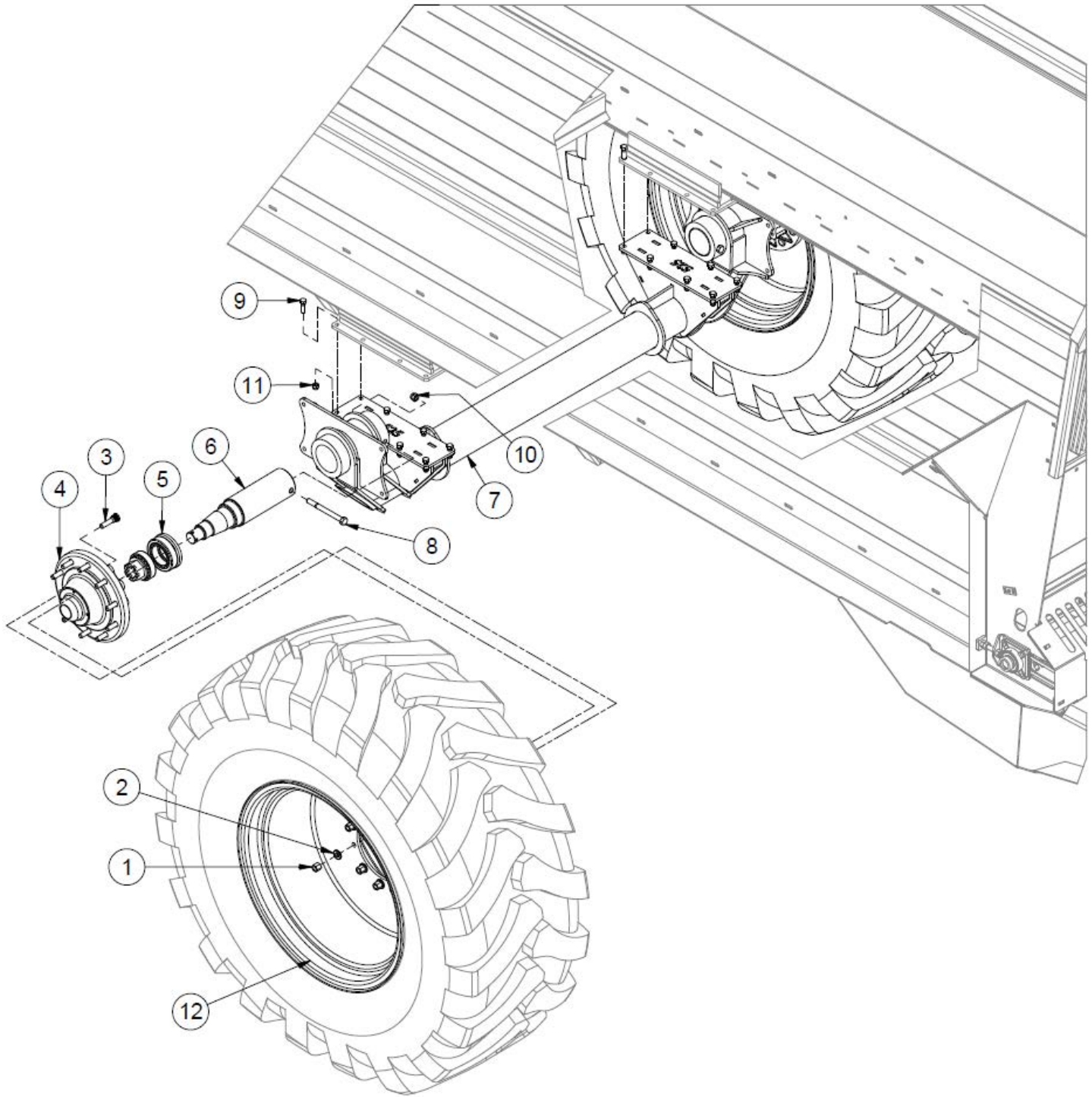
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	27583	Walking Beam
2	1	31531	.625 Wheel Stud
3	1	31532	.625 Wheel Nut
4	4	400-429	8 Bolt Rim
5	2	40293	Walking Beam Pin
6	1	HUB 8000	8000lb Hub
	1	HUB 8000-CCS	8000lb Hub Bearing & Seal Kit
7	2	HB 3/4-10X4.1/2 Z5	Hex Bolt - 3/4"-10 x 4-1/2" Grade 5 Zinc Plated Hex Cap Screw NC
8	2	LN 3/4 N	Locknuts - 3/4-10 Zinc Plated Nylon Insert

NITRO 525RS TIRE CHART		
Axle Type	Part Number	Tire Size
Single	WHE 710X70X38	710/70-38
Tandem	WHE 425X65X22.5L	425/22.5 Recap (Truck)
Tandem	WHE 550X45X22.5	550/45-22.5
Tandem	WHE 700X50X26.5	700/50-26.5

NOTE: Refer to Nitro Operator's Manual for wheel load capacity charts.

Single Axle

Used from serial no. 19NRS312 to current.



Single Axle

Used from serial no. **19NRS312** to current.

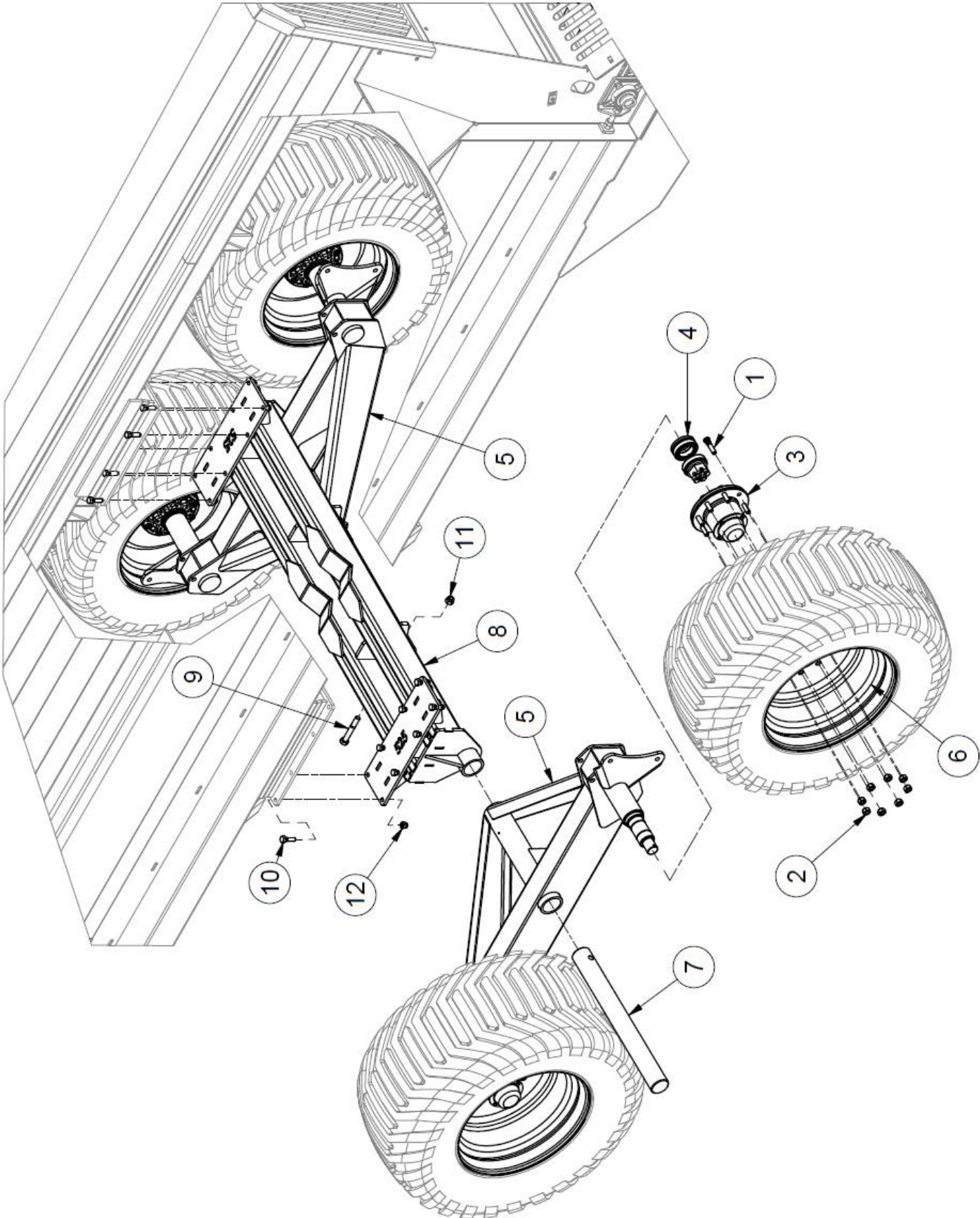
ITEM	QTY	PART NUMBER	DESCRIPTION
1	20	31539	3/4"-16 Wheel Nut
2	20	39600	W750 Washer
3	10	31529	3/4" Wheel Stud
4	2	HUB 20000	Spreader HUB20000
5	2	HUB 20000-CCS	Complete Bearing and Seals for HUB20000
6	2	SP 5.0 X 22	20000lb Hub Spindle
7	1	42841	525 Single Axle
8	2	HB 3/4-10X8 Z5	Hex Bolt 3/4-10x8 Grade 5 Zinc Plated Hex Cap Screw
9	16	HB 5/8-11X2 Z5	Hex Bolt 5/8-11x2 Grade 5 Zinc Plated Hex Cap Screw
10	2	LN 3/4 N	LN 3/4-10 Zinc Plated Nylon Insert Lock Nut
11	16	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut
12	2	600-723	N600 Rim WHE2338

NITRO 525RS TIRE CHART		
Axle Type	Part Number	Tire Size
Single	WHE 710X70X38	710/70-38
Tandem	WHE 425X65X22.5L	425/22.5 Recap (Truck)
Tandem	WHE 550X45X22.5	550/45-22.5
Tandem	WHE 700X50X26.5	700/50-26.5

NOTE: Refer to Nitro Operator's Manual for wheel load capacity charts.

Tandem Axle

Used from serial no. 19NRS312 to current.



Tandem Axle

Used from serial no. **19NRS312** to current.

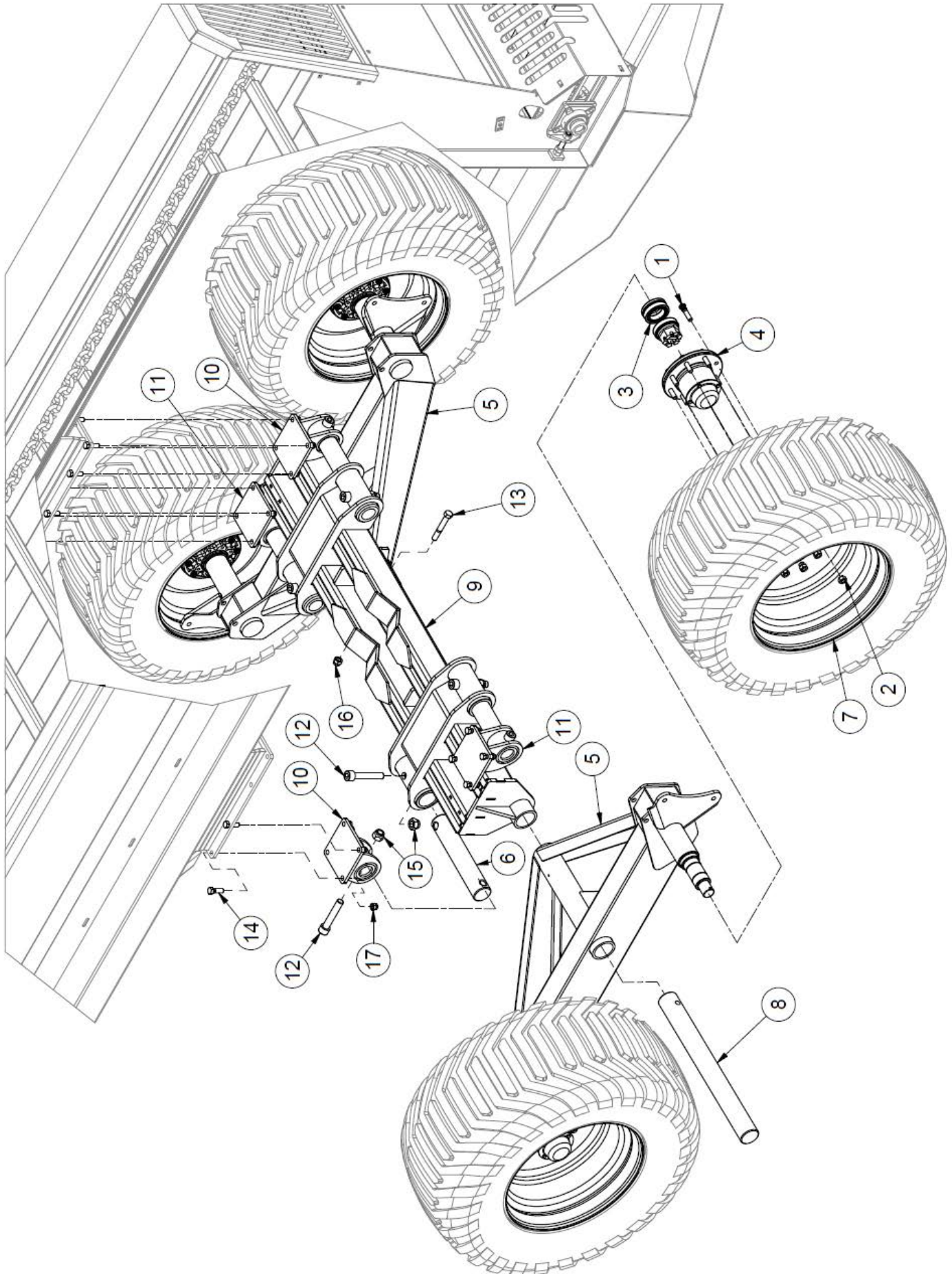
ITEM	QTY	PART NUMBER	DESCRIPTION
1	32	F58-225	Wheel Stud for 12000# Hub
2	32	F58-CONE NUT	Wheel Nut for 12000# Hub
3	4	HUB 12000	Spreader Hub Model 450-600 HUB12000
4	4	HUB 12000-CCS	Complete Bearing and Seals for HUB12000
5	2	27583-1	Walking Beam 505 (Nitro 525), Includes Brake Flanges
6	4	400-429	Tandem Rim WHE 1622.5
7	2	40293	Walking Beam Pin
8	1	42843	525 Walking Beam Axle
9	2	HB 3/4-10X5 Z5	Hex Bolt 3/4-10x5 Grade 5 Zinc Plated Hex Cap Screw
10	16	HB 5/8-11X2 Z5	Hex Bolt 5/8-11x2 Grade 5 Zinc Plated Hex Cap Screw
11	2	LN 3/4 N	LN 3/4-10 Zinc Plated Nylon Insert Lock Nut
12	16	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut

NITRO 525RS TIRE CHART		
Axle Type	Part Number	Tire Size
Single	WHE 710X70X38	710/70-38
Tandem	WHE 425X65X22.5L	425/22.5 Recap (Truck)
Tandem	WHE 550X45X22.5	550/45-22.5
Tandem	WHE 700X50X26.5	700/50-26.5

NOTE: Refer to Nitro Operator's Manual for wheel load capacity charts.

Tandem Axle - Scale Ready

Used from serial no. 19NRS312 to current.

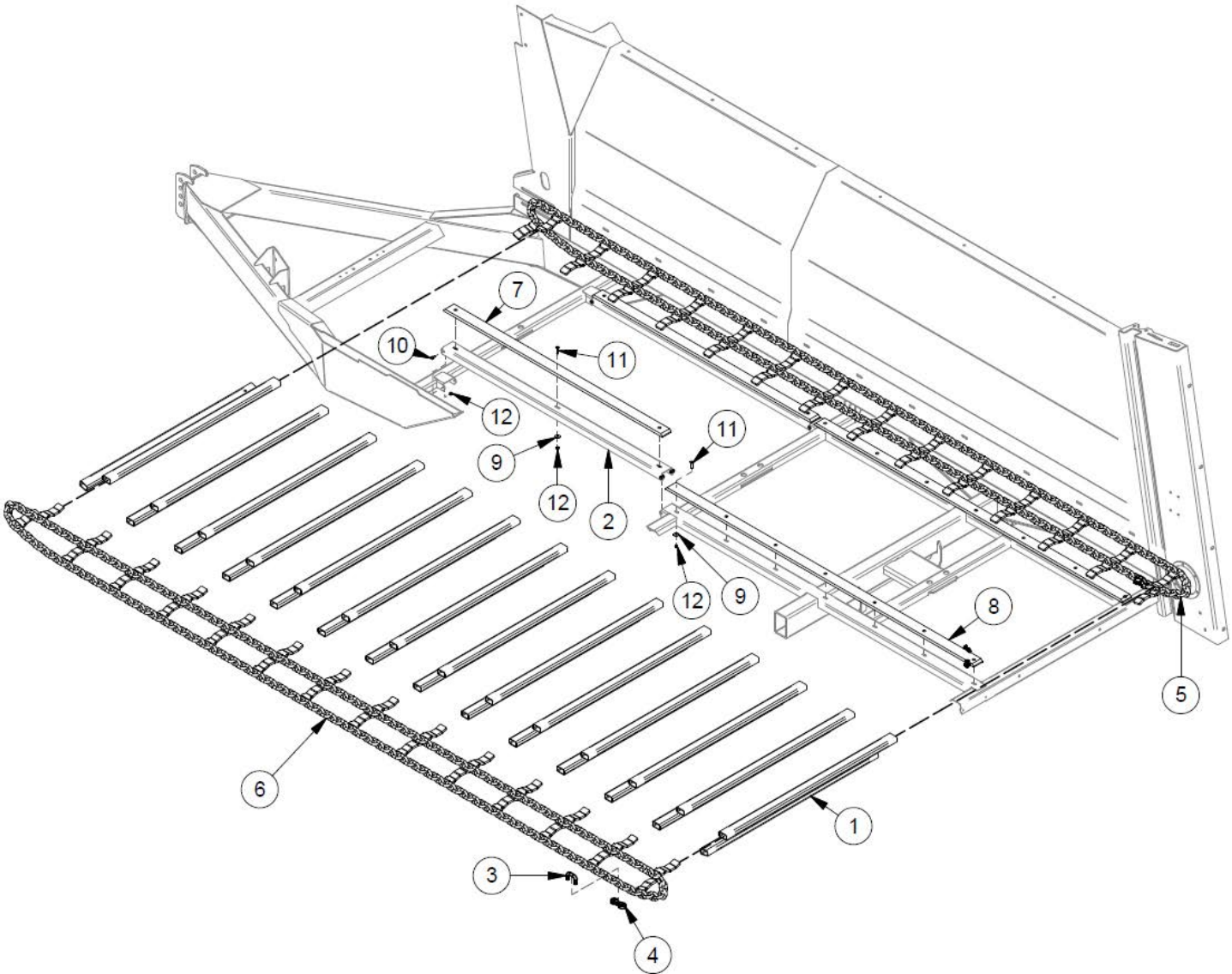


Tandem Axle - Scale Ready

Used from serial no. **19NRS312** to current.

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	32	F58-225	Wheel Stud for 12000# Hub	
2	32	F58-CONE NUT	Wheel Nut for 12000# Hub	
3	4	HUB12000-CCS	Complete Bearing and Seals for HUB12000	
4	4	HUB 12000	Spreader Hub Model 450-600 HUB12000	
5	2	27583-1	Walking Beam 505 (Nitro 525), Includes Brake Flanges	
6	4	35943	Load Cell 2.875" DB21	Refer to Pg.3-12,13
7	4	400-429	Tandem Rim WHE 1622.5	
8	2	40293	Walking Beam Pin	
9	1	43995	525 Scale Ready Tandem Axle	
10	2	43997	Left Frame Mount	
11	2	43999	Right Frame Mount	
12	8	HB 1-8X5.5 SHCS	Hex Bolt - 1-8 x 5 1/2 Socket Head Cap Screw	
13	2	HB 3/4-10X5 Z5	Hex Bolt 3/4-10x5 Grade 5 Zinc Plated Hex Cap Screw	
14	16	HB 5/8-11X2 Z5	Hex Bolt 5/8-11x2 Grade 5 Zinc Plated Hex Cap Screw	
15	8	LN 1 N	LN 1-8 Zinc Plated Nylon Insert Lock Nut	
16	2	LN 3/4 N	LN 3/4-10 Zinc Plated Nylon Insert Lock Nut	
17	16	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut	

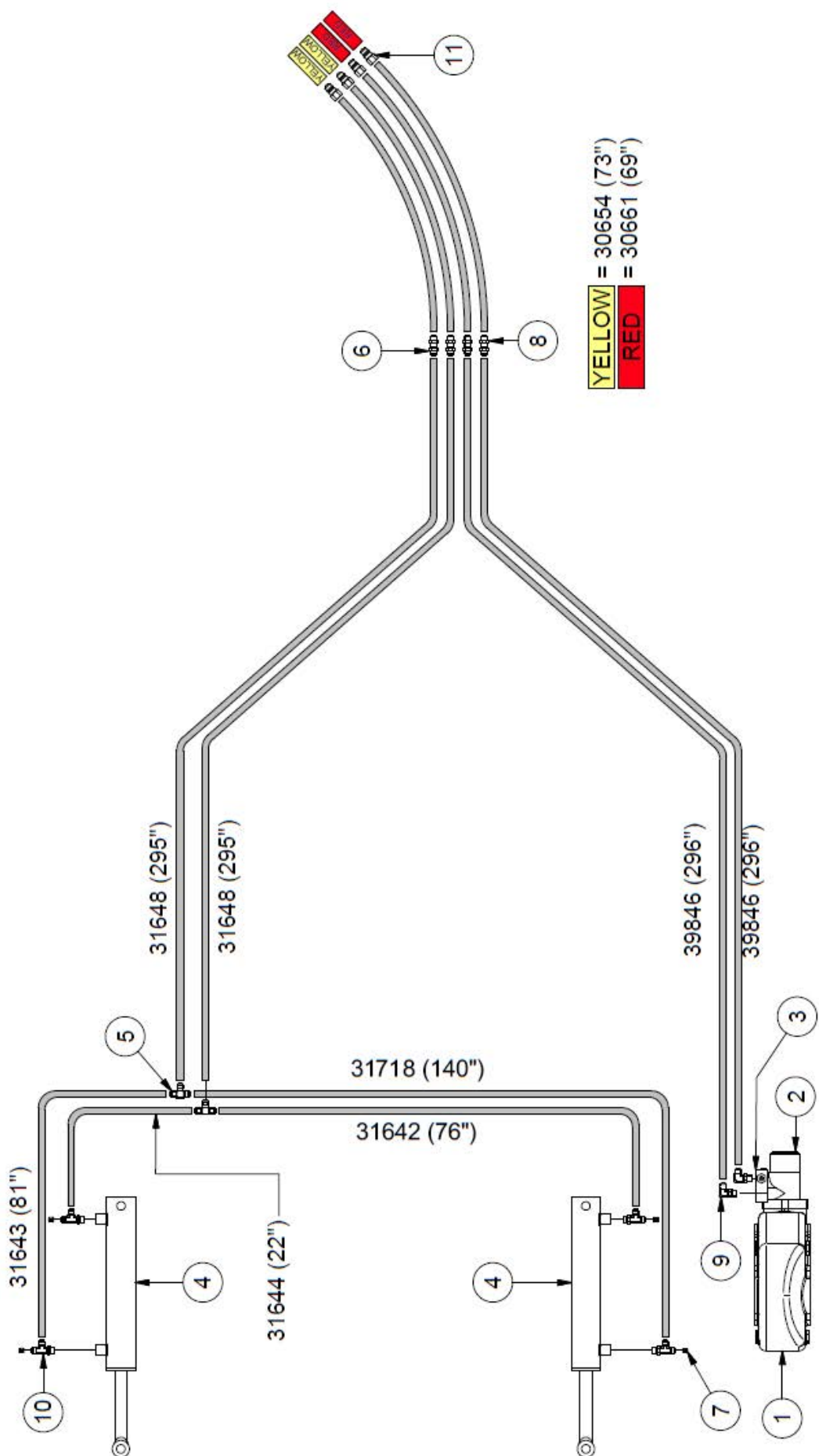
Apron Runners



Apron Runners

ITEM	QTY	PART NUMBER	DESCRIPTION
1	28	37820	Slats
2	2	39434	Chain Return Slide
3	2	400-889	Chain Connector Link
4	2	400-890	Chain Connector Tab
5	1	40295	Right Chain Side w/ Lugs
6	1	40296	Left Chain Side w/ Lugs
7	2	40444	Front Apron Runner
8	2	450-442	Rear Apron Runner
9	30	FW 3/8	Flatwasher - 3/8" Zinc Plated USS
10	10	HB 3/8-16X0.75 Z5	Hex Bolt 3/8-16x3/4 Grade 5 Zinc Plated Hex Cap Screw
11	24	HB 3/8-16X1.75 FHSCS	Hex Bolt - 3/8"-16 x 1 3/4" Flat Socket Cap Screw
12	34	LN 3/8 N	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut

Hydraulic Schematic



Hydraulic Schematic

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	30842	Berma RT500 Gearbox
2	1	30854	HMD Motor MLHPQ400C4B
3	1	30856	Hydraulic Cross Port Relief for Motor- Spreaders
4	2	CYL31731	Cylinder 2.0 X 56.75 X 1.5 Nitro 450
5	2	HF 2603-8-8-8	Hydraulic Tee Fitting
6	4	HF 2700LN-8-8	Hydraulic Bulkhead Fitting
7	4	HF 0304-C-06	Female JIC #6 Cap
8	4	HF 306-8	Bulkhead Fitting Nut
9	2	HF 6801-8-10	Hydraulic Elbow Fitting
10	4	HF 6804-6-6	Hydraulic Fitting - Male JIC - Male ORB Tee
11	4	HF 8010-4	Male Quick Coupler

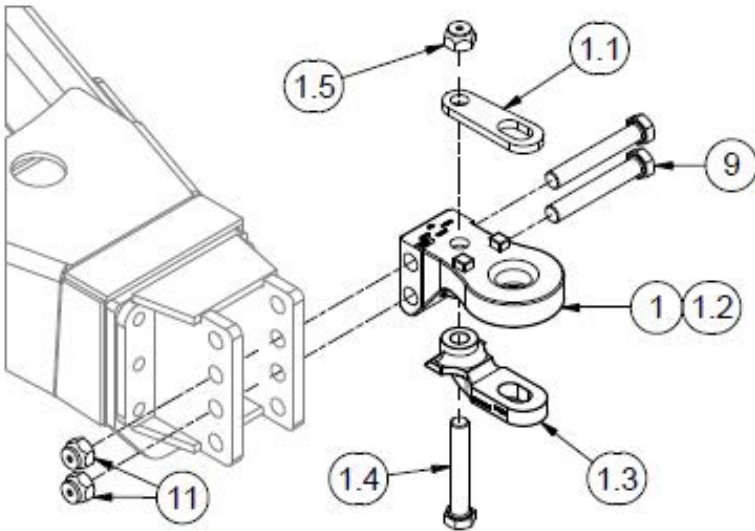
Intentionally Left Blank

Section 3 - Optional Features

Optional Kit Numbers

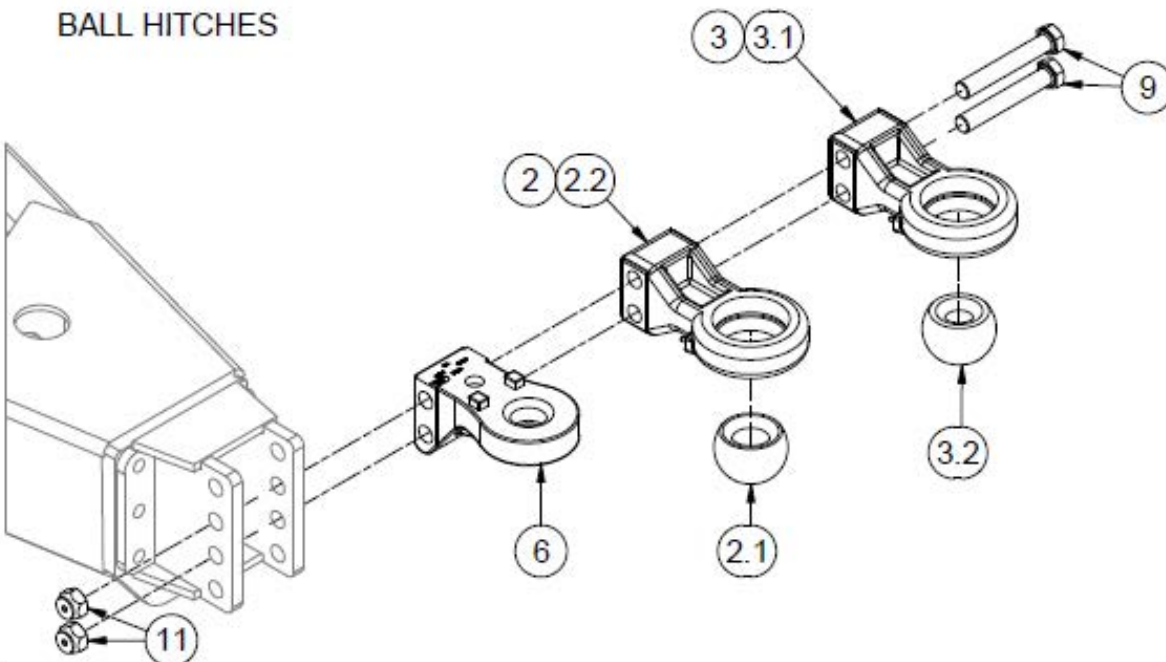
KIT NUMBER	DESCRIPTION	PAGE(S)	NOTE
	Hitches	<i>Pg.3-2,3</i>	
43673	Mechanical Light Kit	<i>Pg.3-4,5</i>	
TLVLK-525M	Manual Light Kit		
	Light Kit Base	<i>Pg.3-6,7</i>	
	Manual Light Kit	<i>Pg.3-8</i>	
	Wiring Harness	<i>Pg.3-12,13</i>	
TLVLK-525	Hydraulic Light Kit		
	Light Kit Base	<i>Pg.3-6,7</i>	
	Hydraulic Light Kit Cylinders	<i>Pg.3-9</i>	
	Hydraulic Light Kit Hoses	<i>Pg.3-10,11</i>	
	Wiring Harness	<i>Pg.3-12,13</i>	
N750LC	5 Point Scale System	<i>Pg.3-14</i>	
N750LCNT460	5 Point Scale System with GPS	<i>Pg.3-14</i>	
N750LCNT8000	Automatic Scale Rate Control Base System	<i>Pg.3-15</i>	
31797	Electric Flow Control		
	Flow Control Hydraulics	<i>Pg.3-16,17</i>	Minus Item 7
	Electric Flow Control Wiring	<i>Pg.3-18,19</i>	
31578	Manual Flow Control		
	Flow Control Hydraulics	<i>Pg.3-16,17</i>	Items 3-14
41504	525RS Flange Paddle Kit	<i>Pg.3-20,21</i>	

Hitch Options

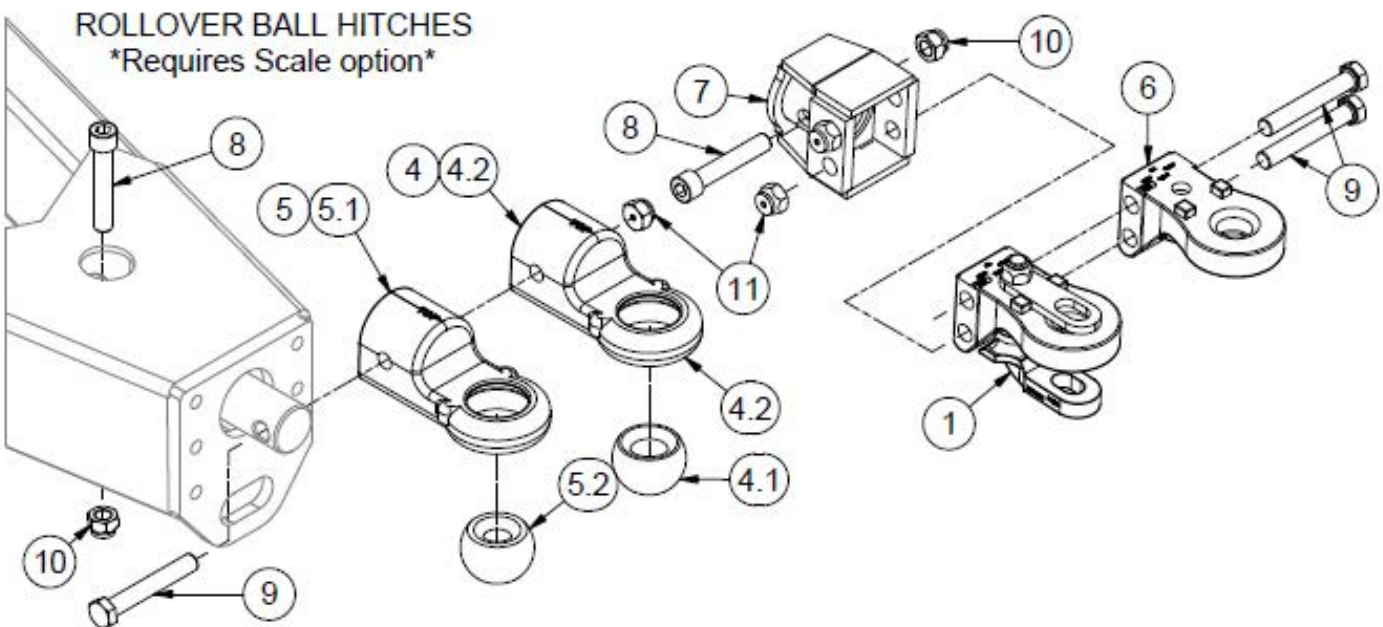


CLEVIS HITCH

BALL HITCHES



ROLLOVER BALL HITCHES *Requires Scale option*

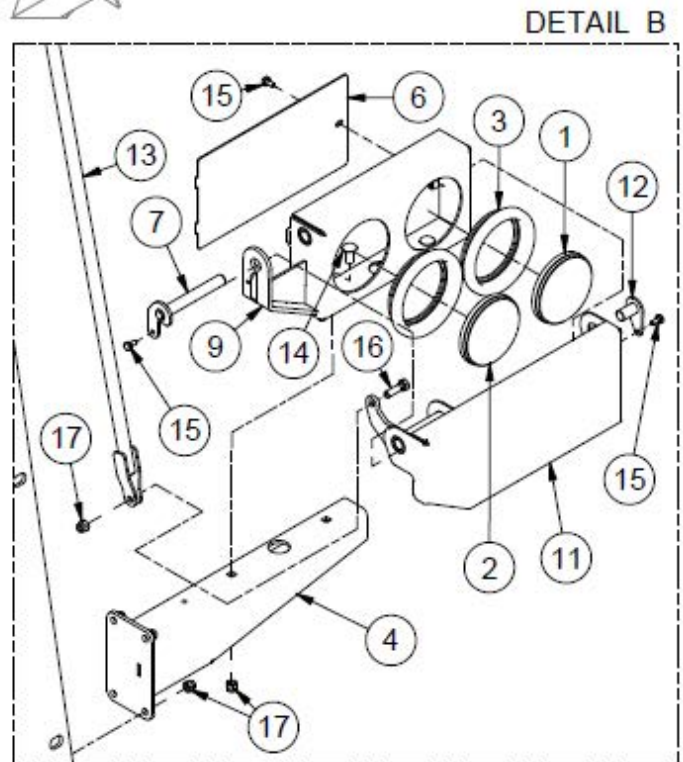
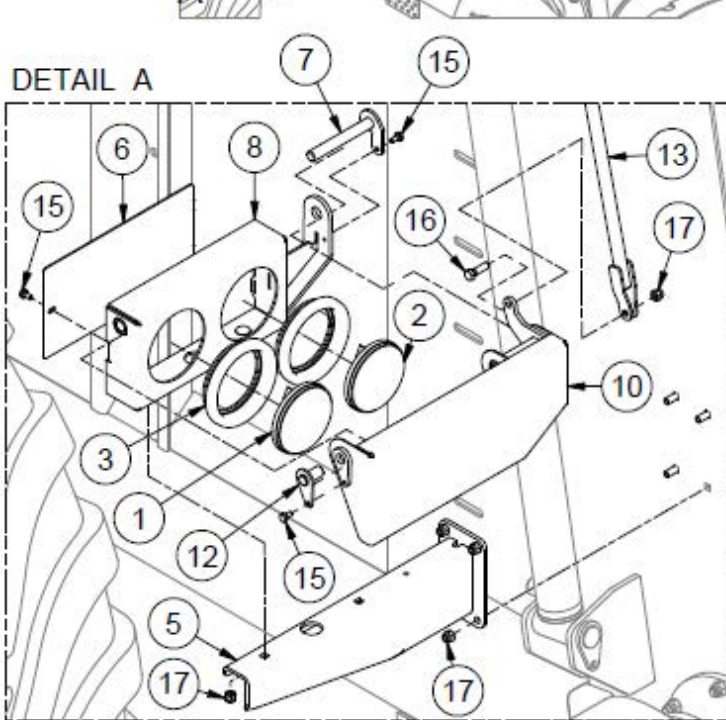
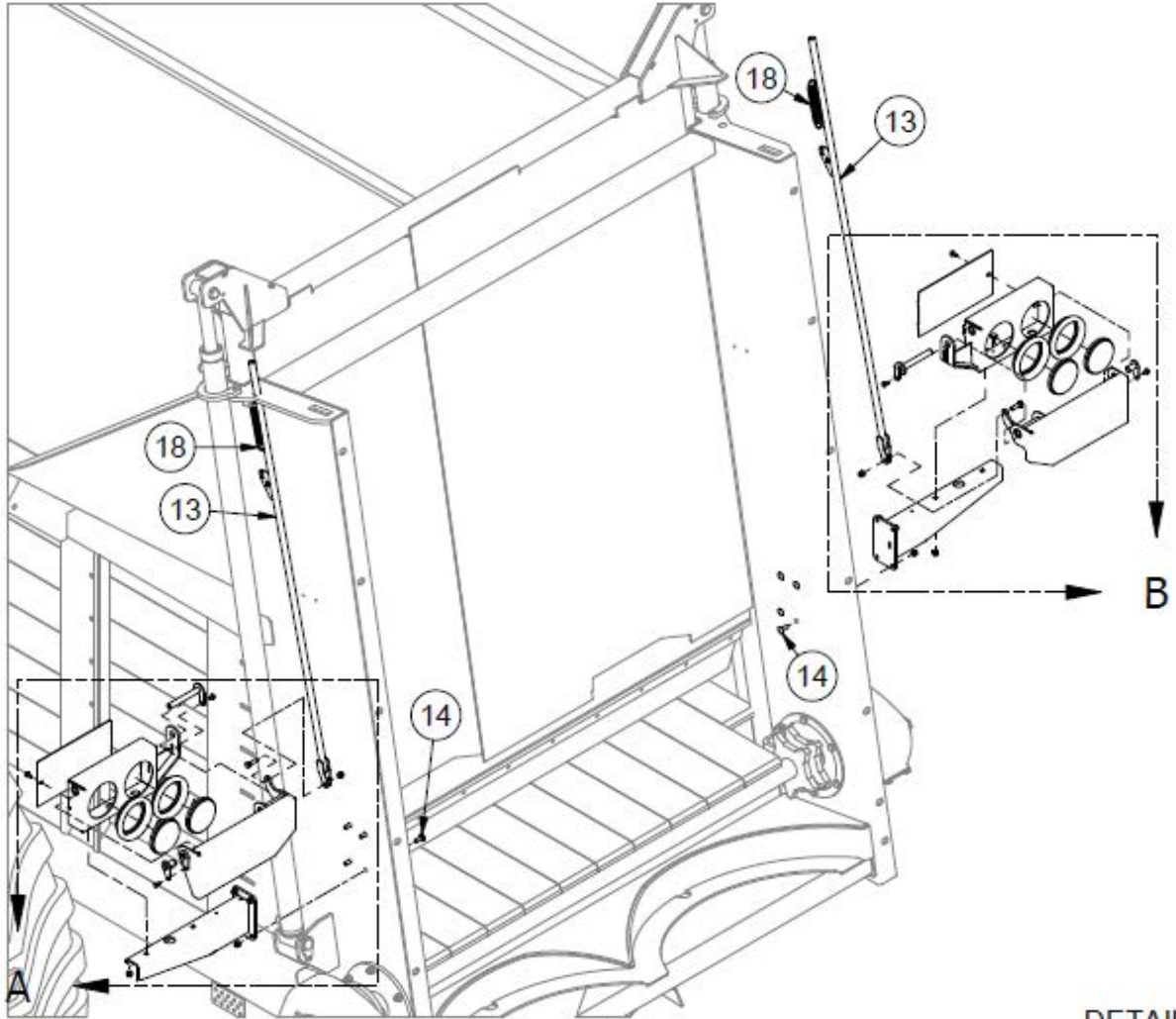


Hitch Options

ITEM	QTY	PART NUMBER	DESCRIPTION	WHERE USED	NOTE
1		30826	Clevis Hitch Assembly Cat.3	Up to N525RS	Standard
1.1	1	43062	Clevis Hitch Top Plate Cat.3		
1.2	1	43060	Clevis Hitch Base Cat.3		
1.3	1	30825	Clevis Hitch Cat.3		
1.4	1	HB 1-8X6YZ8	Hex Bolt 1-8x6 Grade 8 Zinc Hex Cap Screw		
1.5	1	LN 1-8TCZ8	1"-8 Grade 8 Zinc Finish Steel Top Lock Nut		
2		39290	Power Pin Cat 3 Ball Hitch Assembly 2" Pin	All Models	Option
2.1	1	39291	Power Pin 2" Ball Cat.3 Hitch		
2.2	1	44994	Power Pin Cat.3 Ball Hitch Base		
3		40865	Power Pin Cat 3 Ball Hitch Assembly 1.5" Pin	All Models	Option
3.1	1	44994	Power Pin Cat.3 Ball Hitch Base		
3.2	1	39994	Power Pin 1.5" Ball Cat.3 Hitch		
4		41956	Rollover Ball Hitch 2.0" ID Cat.4	All Models	Requires Scale Option
4.1	1	39291	Power Pin 2" Ball Cat.3 Hitch		
4.2	1	45033	Articulating Ball Hitch Base		
5		45034	Rollover Ball Hitch 1.5" ID Cat.4	All Models	Requires Scale Option
5.1	1	45033	Articulating Ball Hitch Base		
5.2	1	39994	Power Pin 1.5" Ball Cat.3 Hitch		
6		43060	Clevis Hitch Base Cat.3	N600 - N750	Standard
7	1	36241	Cell Hitch		Requires Scale Option
8		HB 1-8X5.5 SHCS	Hex Bolt - 1-8 x 5 1/2 Socket Head Cap Screw		
9		HB 1-14 X6.5 YZ8	Hex Bolt 1-14x6 1/2 Grade 8 Zinc Hex Cap Screw		
10		LN 1 N	LN 1-8 Zinc Plated Nylon Insert Lock Nut		
11		LN 1-14 F	Center Locknuts (1-14) 2-Way Fine Thread		

Mechanical Light Kit - 43673

Used from serial no. 19NRS301 to current.



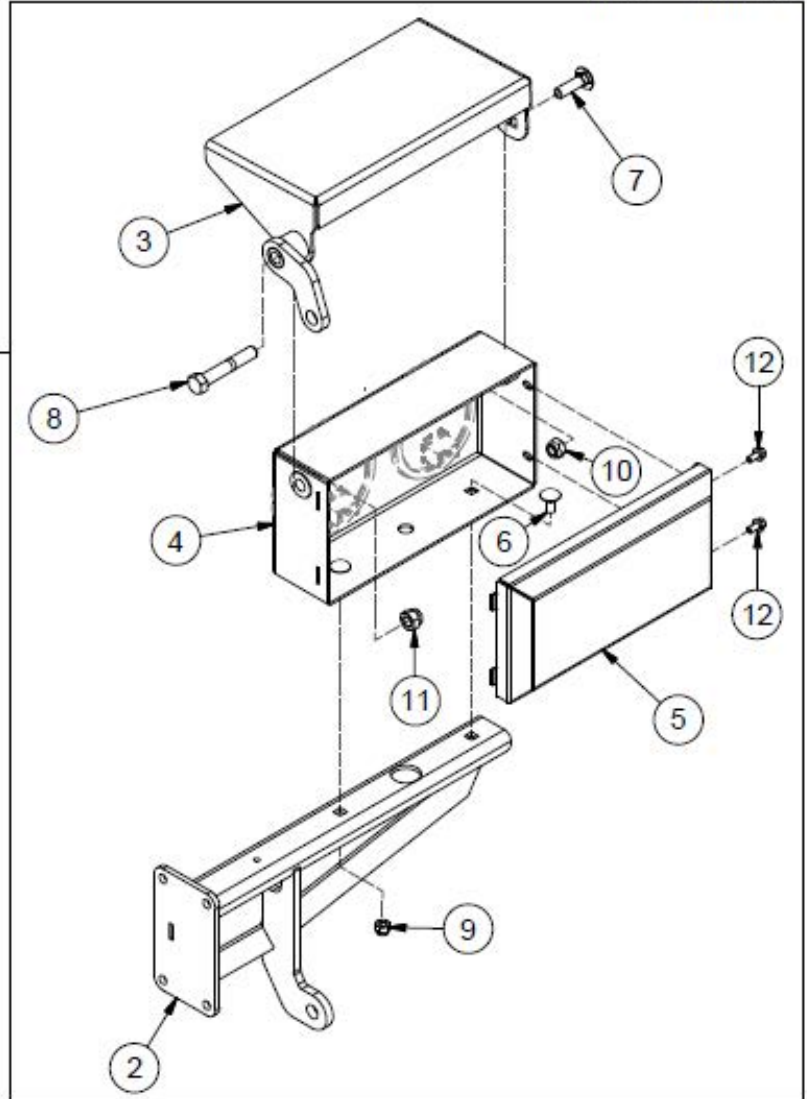
Mechanical Light Kit - 43673

Used from serial no. 19NRS301 to current.

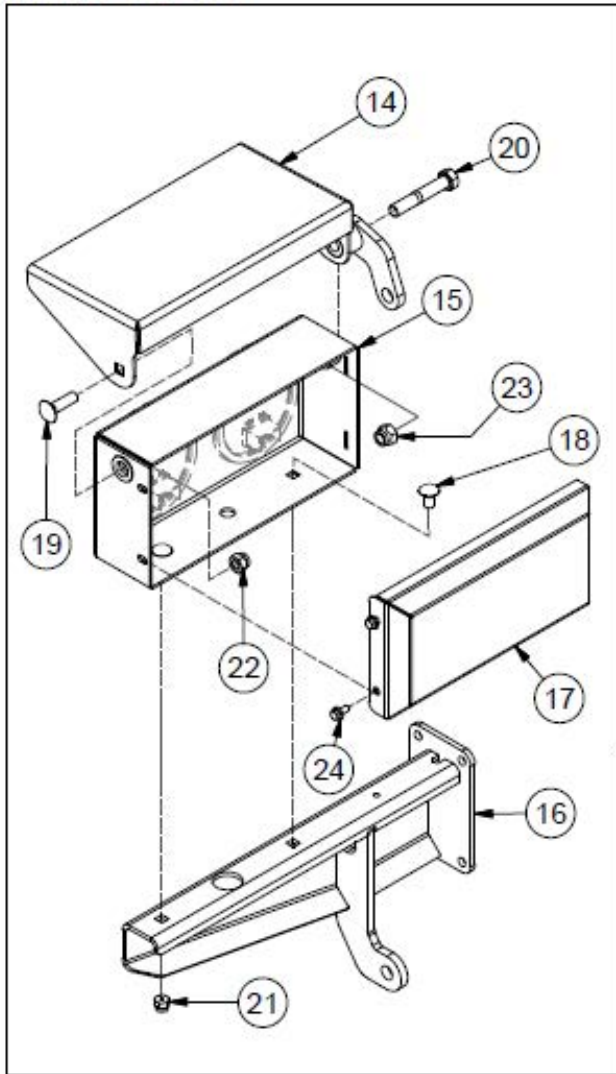
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	31788	Red LED Light for Nitro Spreader
2	2	31789	Amber LED Light for Nitro Spreader
3	4	31798	Grommet for LED Lights on Nitro
4	1	42139	Right Light Bracket
5	1	42140	Left Light Bracket
6	2	43178	Light Box Cover
7	2	43204	Inner Pin Assembly
8	1	43206	Left Light Box Assembly
9	1	43207	Right Light Box Assembly
10	1	43208	Left Light Cover
11	1	43209	Right Light Cover
12	2	43213	Outer Pin Assembly
13	2	43580	450/525RS Manual Light Push Arm
14	12	CB 3/8-16 X1 Z5	Carriage Bolt - 3/8-16 x 1" Grade 5 Zinc
15	6	HB 1/4-20X0.5 Z5	Hex Bolt 1/4-20x1/2 Grade 5 Zinc Plated Hex Cap Screw
16	2	HB 3/8-16X1.25 Z5	Hex Bolt 3/8-16x1 1/4 Grade 5 Zinc Plated Hex Cap Screw
17	14	LN 3/8 N	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut
18	2	PP00679	Spring 2-TE 86B (AC-08044)

Light Kit Base

Item 1 - 400-850



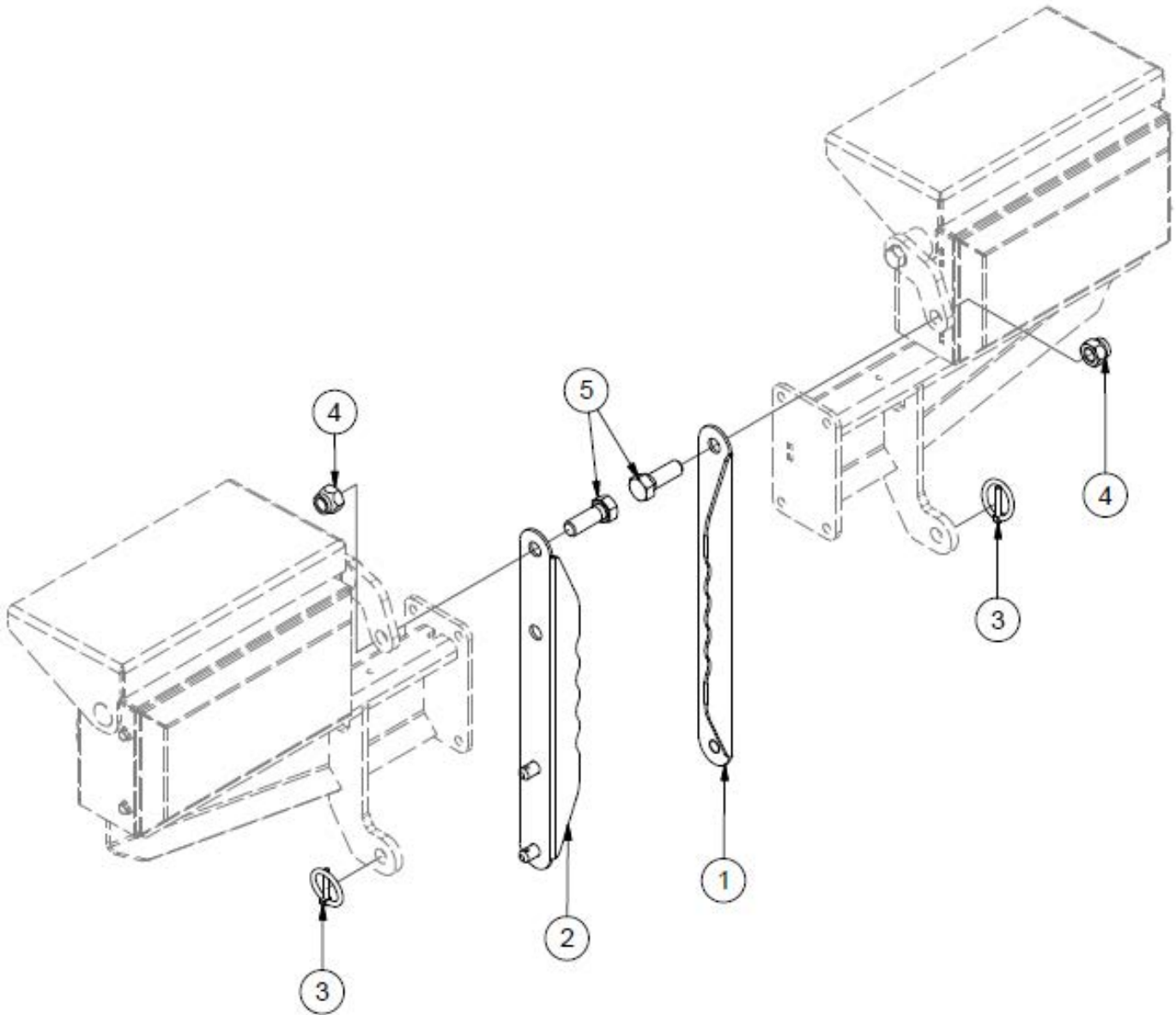
Item 13 - 400-855



Light Kit Base

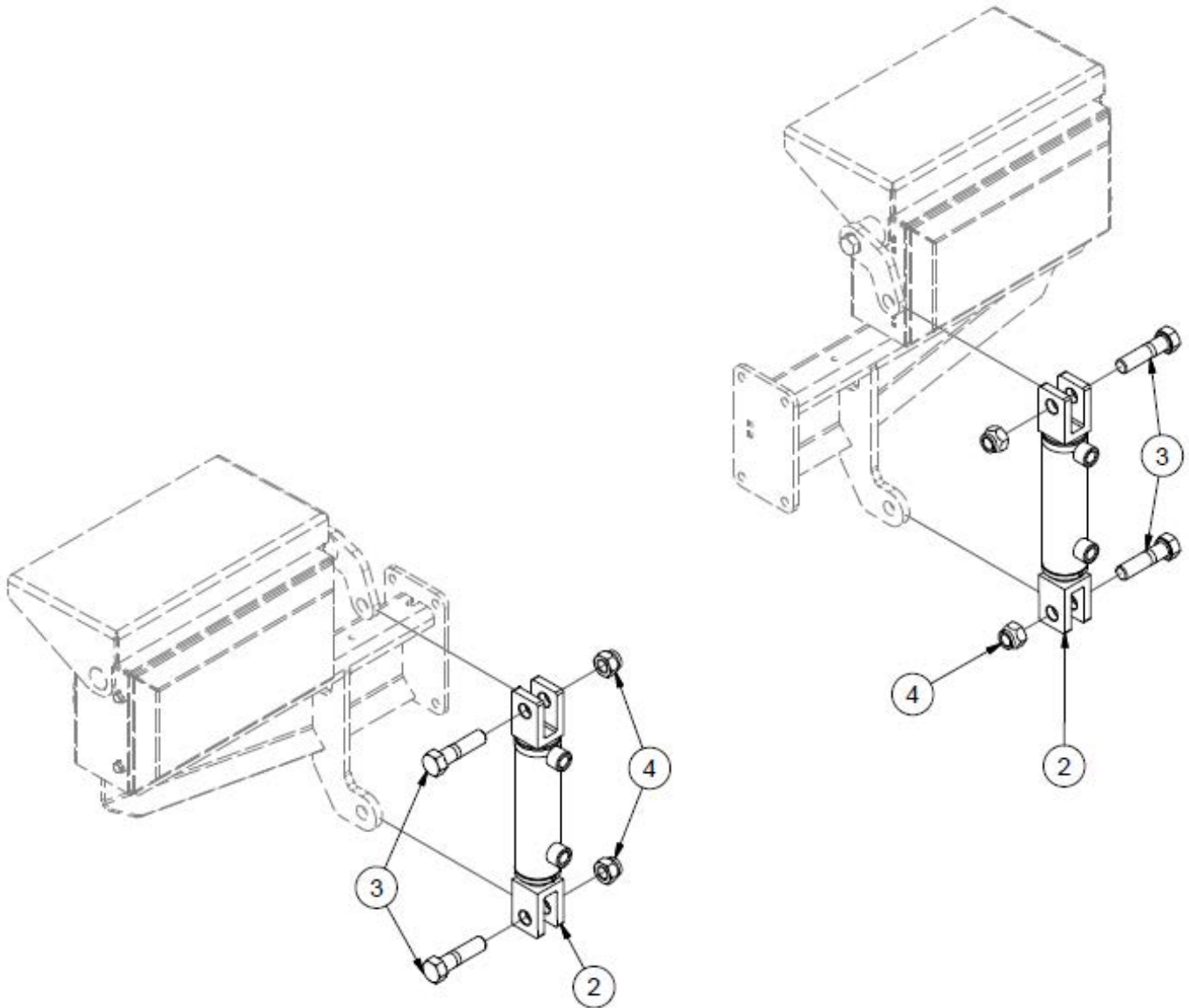
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	400-850	Left Light Assembly
2	1	400-354	Left Light Mount Bar
3	1	400-939	Left Light Cover
4	1	400-940	Left Light Housing
5	1	400-943	Light Housing Lid
6	2	CB 3/8-16X 3/4 Z5	Carriage Bolt - 3/8-16 x 3/4" Grade 5 Zinc
7	1	CB 7/16-14X1.1/2 Z5	Carriage Bolt - 7/16-14 x 1 1/2" Grade 5 Zinc
8	1	HB 1/2-13X3.0 Z5	Hex Bolt 1/2-13 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
9	2	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
10	1	LN 7/16	Center Locknuts - 7/16-14 Top Lock Nut
11	1	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
12	2	HBC14X12	Hex Bolt 1/4-20 x 1/2 Grade 8.2 Zinc Flange Bolt SAE
13	1	400-855	Right Light Assembly
14	1	400-355	Right Light Cover
15	1	400-356	Right Light Housing
16	1	400-941	Right Light Mounting Bar
17	1	400-943	Light Housing Lid
18	2	CB 3/8-16X 3/4 Z5	Carriage Bolt - 3/8-16 x 3/4" Grade 5 Zinc
19	1	CB 7/16-14X1.1/2 Z5	Carriage Bolt - 7/16-14 x 1 1/2" Grade 5 Zinc
20	1	HB 1/2-13X3.0 Z5	Hex Bolt 1/2-13 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
21	2	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
22	1	LN 7/16	Center Locknuts - 7/16-14 Top Lock Nut
23	1	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
24	2	HBC14X12	Hex Bolt 1/4-20 x 1/2 Grade 8.2 Zinc Flange Bolt SAE

Manual Light Kit



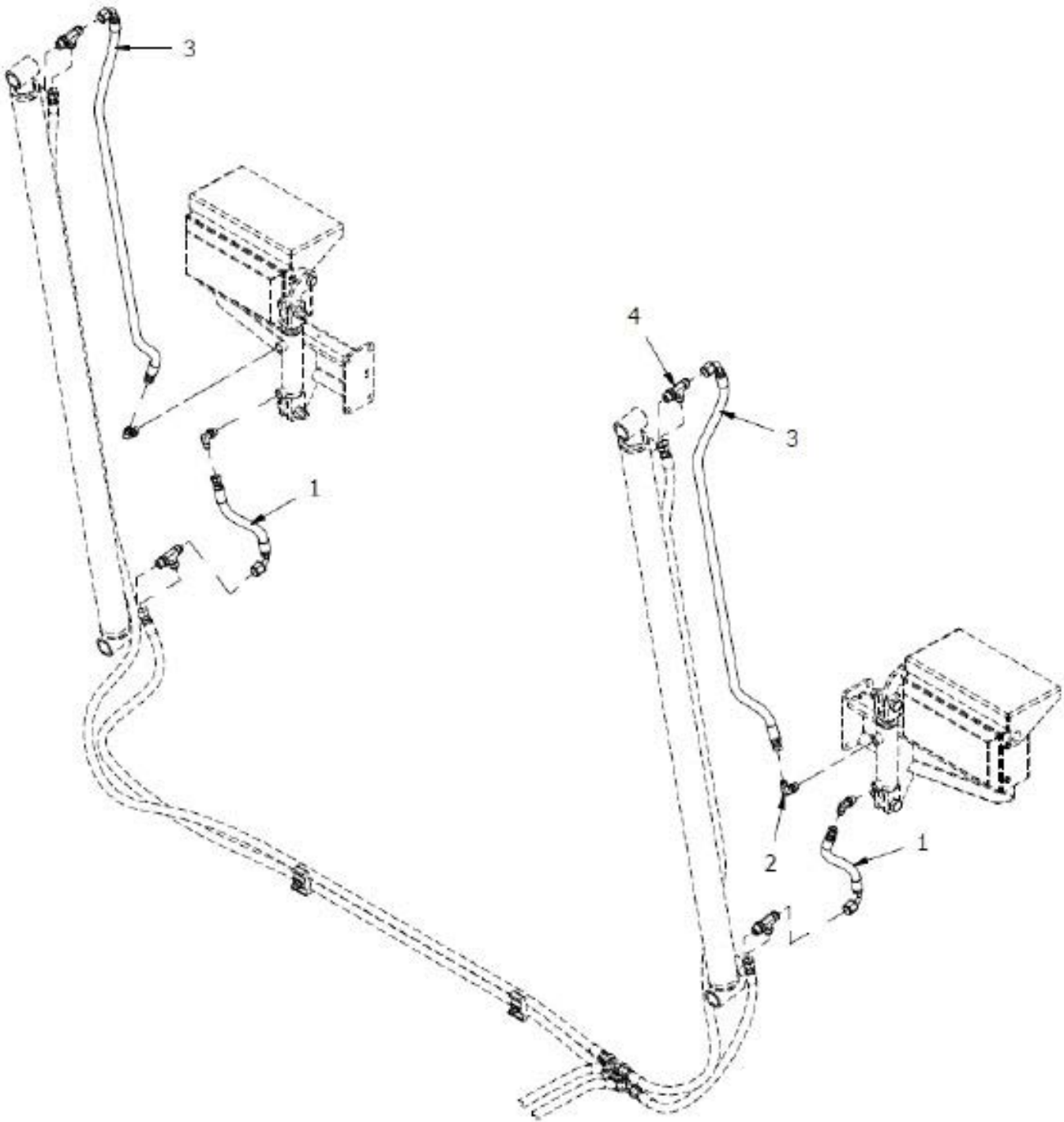
ITEM	QTY	PART NUMBER	DESCRIPTION
	1	37773	Manual Light Kit Assembly
1	1	37771	Left Light Lid Link
2	1	37772	Right Light Lid Link
3	2	25680	Lynch Pin 3/16 x 1.5
4	2	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut
5	2	HB 5/8-11X1.3/4 Z5	Hex Bolt - 5/8"-11 x 1-3/4" Grade 5 Zinc Plated Hex Cap Screw NC

Hydraulic Light Kit



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	37768	Complete Hydraulic Kit*
2	2	31326	Hydraulic Cylinder
3	4	HB 5/8-11X2.1/2 Z5	Hex Bolt 5/8-11 x 2 1/2" Grade 5 Zinc Plated Hex Cap Screw NC
4	4	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut

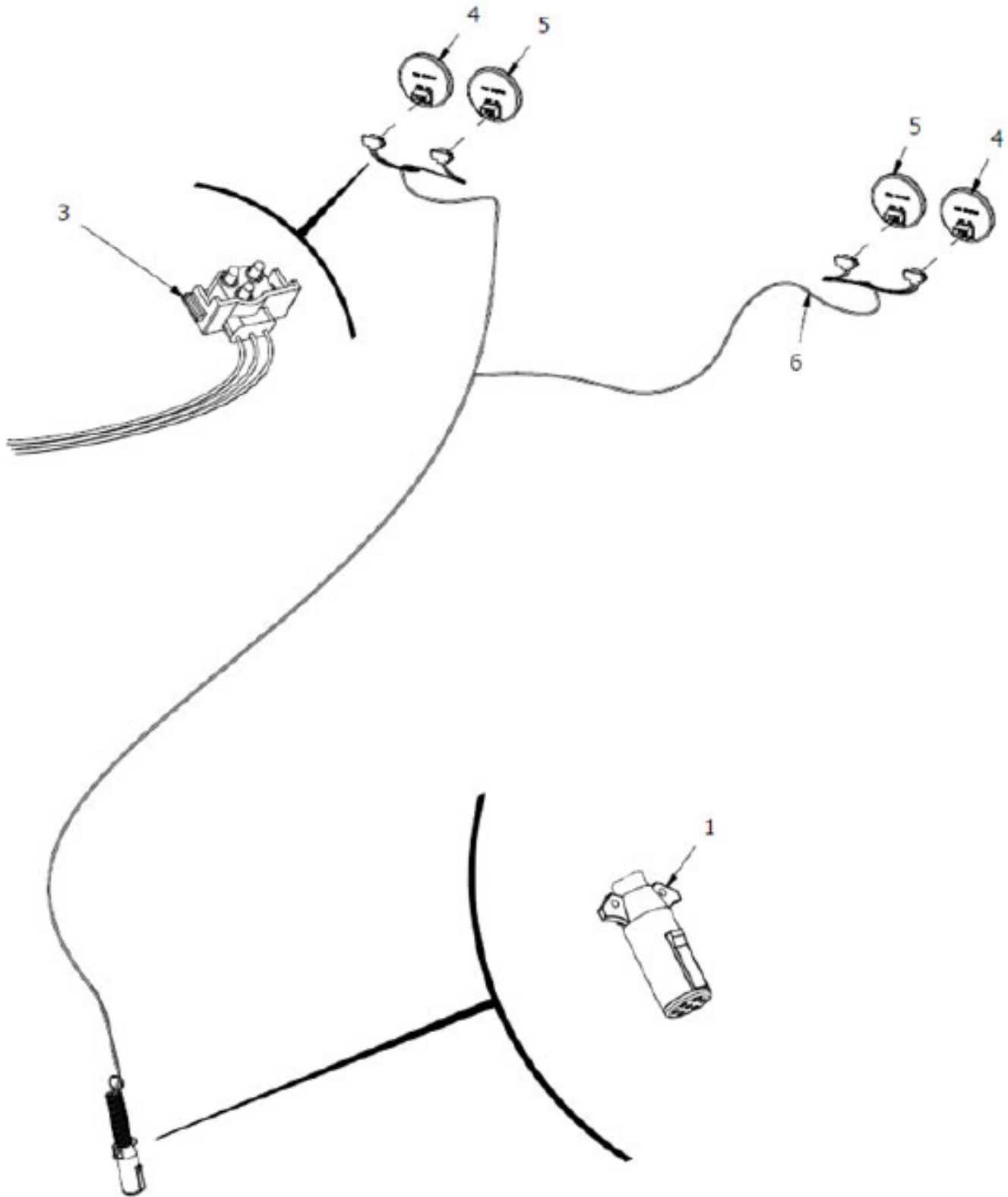
Light Kit Hydraulics



Light Kit Hydraulics

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	30801	Hose .375 (FJX-6, FJ90-6-8) 10"
2	4	HF 6801-6-6	Hydraulic Fitting - 90 Degree O-Ring to JIC
3	2	30800	Hose .375 (FJX-6, FJ90-6-8) 43"
4	4	HF 6804-8-8-8	Hydraulic Fitting - Male JIC - Male ORB Tee

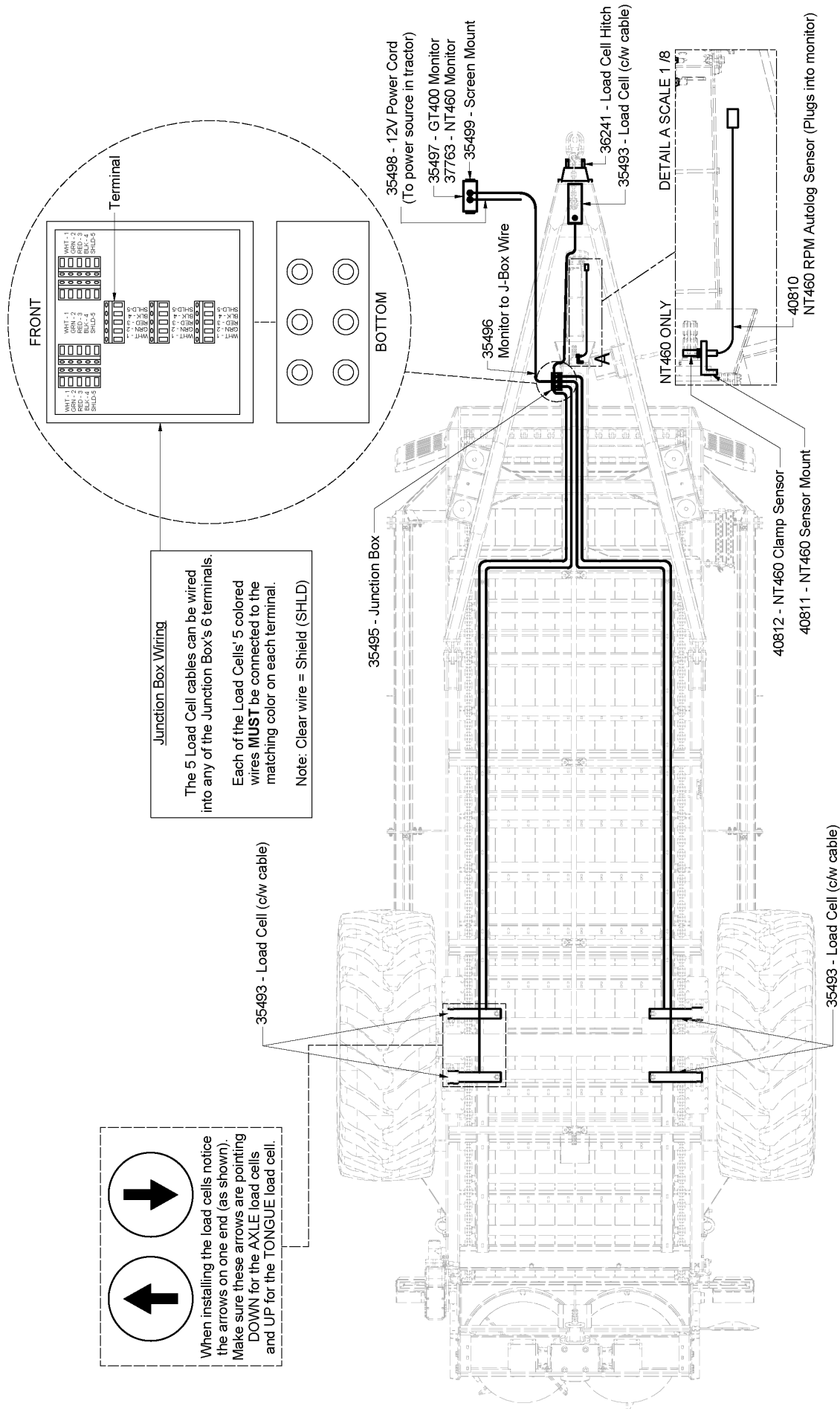
Light Kit Wiring Harness



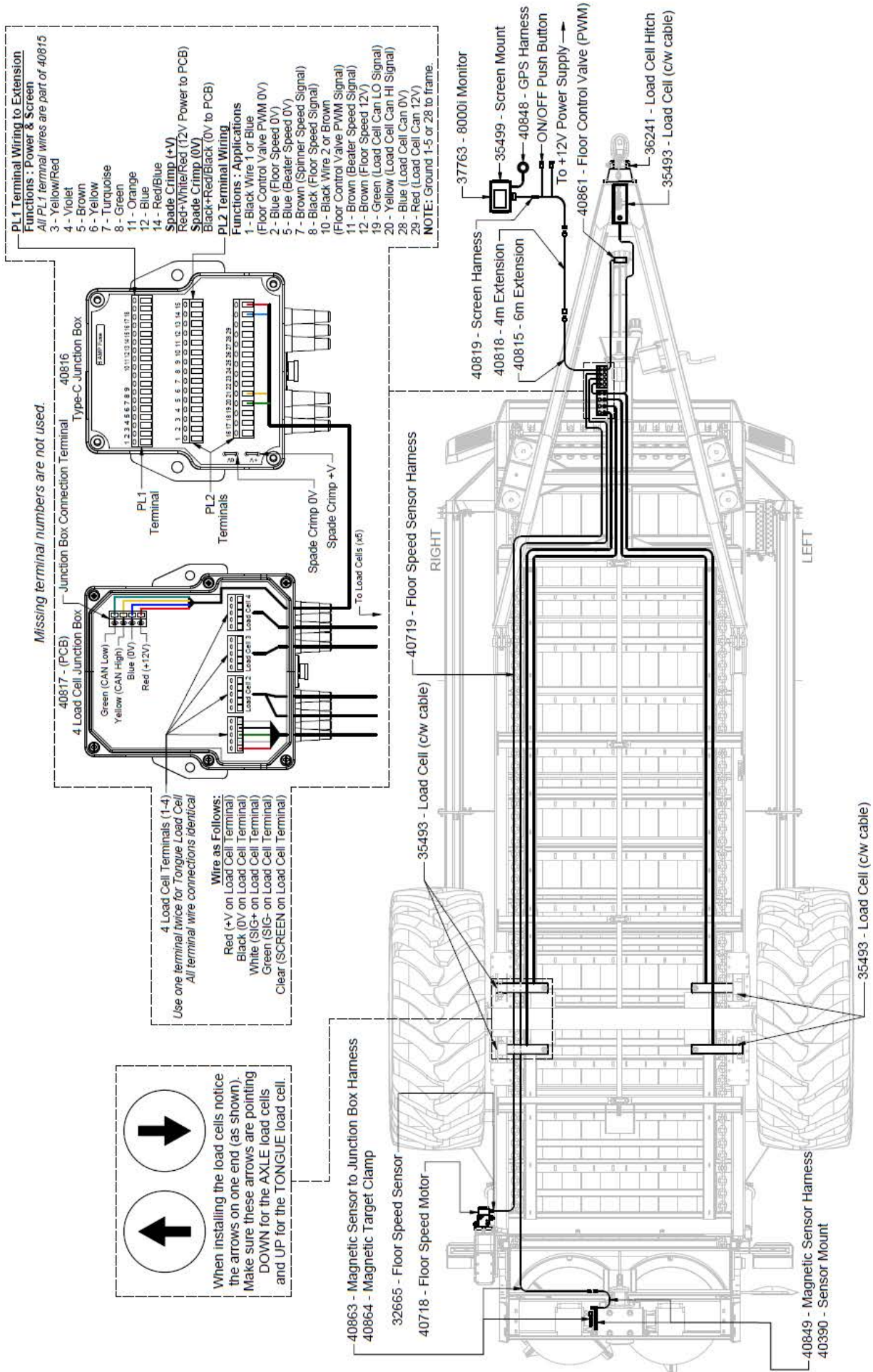
Light Kit Wiring Harness

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL550-200-117	Female 7 Pin Plug
	4	31798	Grommet
3	4	31790	Individual Light Harness
4	2	31788	Red Tail Light
5	2	31789	Amber Tail Light
6	1	36924	Nitro N375, N450 Light Wiring Harness
	1	31573	Complete Light Wiring Harness

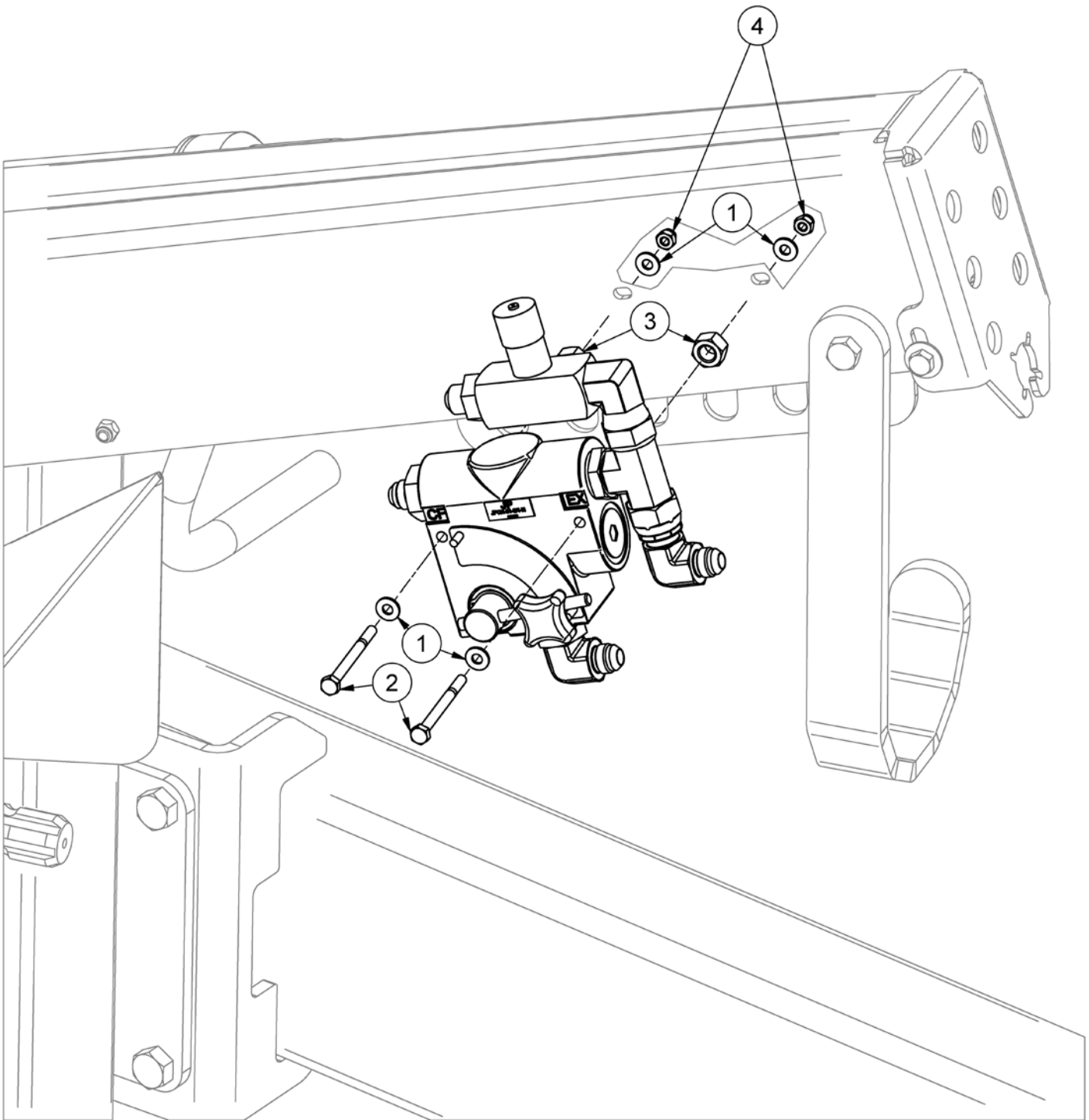
N750LC (GT400) / N750LCNT460 Scales



N750LCNT8000 Scales



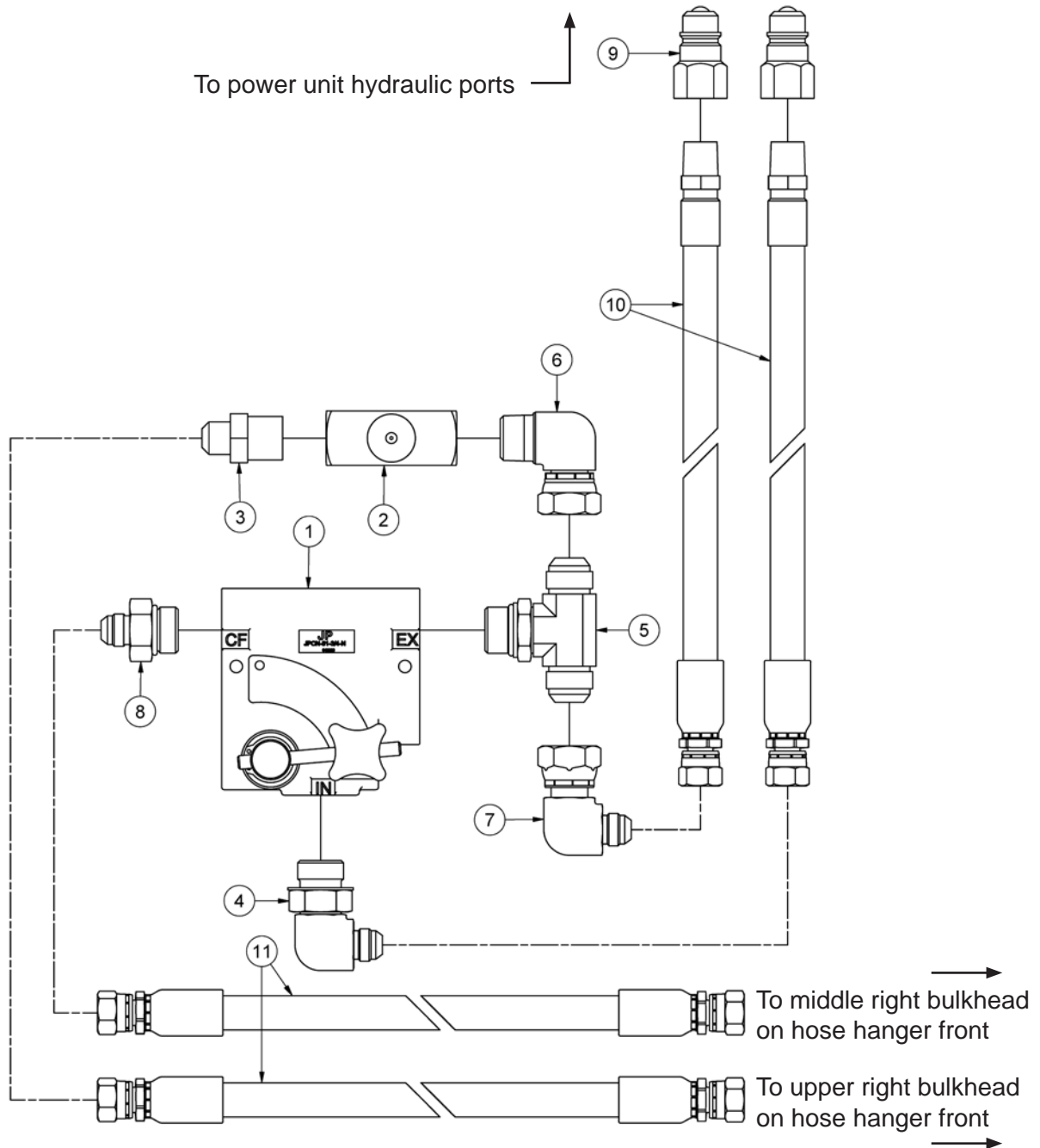
Flow Control Mounting



ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	FW 1/4	Flatwasher - 1/4" Zinc Plated USS
2	2	HB 1/4-20X3 Z5	Hex Bolt 1/4-20x3 Grade 5 Zinc Plated Hex Cap Screw
3	2	HN 1/2	Hex Nut 1/2"-13 Grade 5 Zinc Plated Finished
4	2	LN 1/4 N	LN 1/4-20 Zinc Plated Nylon Insert Lock Nut

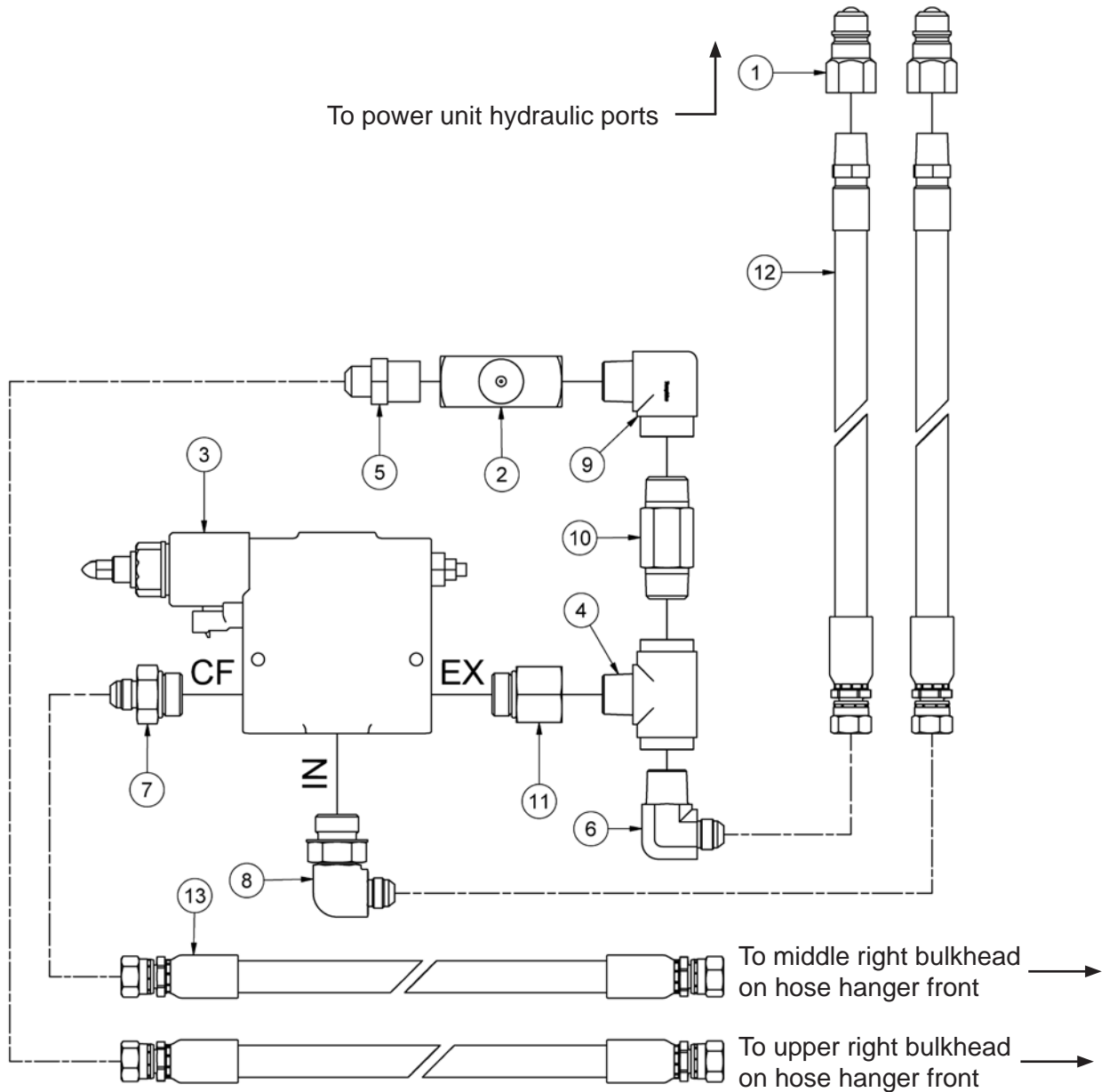
NOTICE: Manual flow control shown. Electric flow control option has same mounting hardware. See hydraulic layouts for flow control breakdowns.

Flow Control Hydraulic Layout - Manual



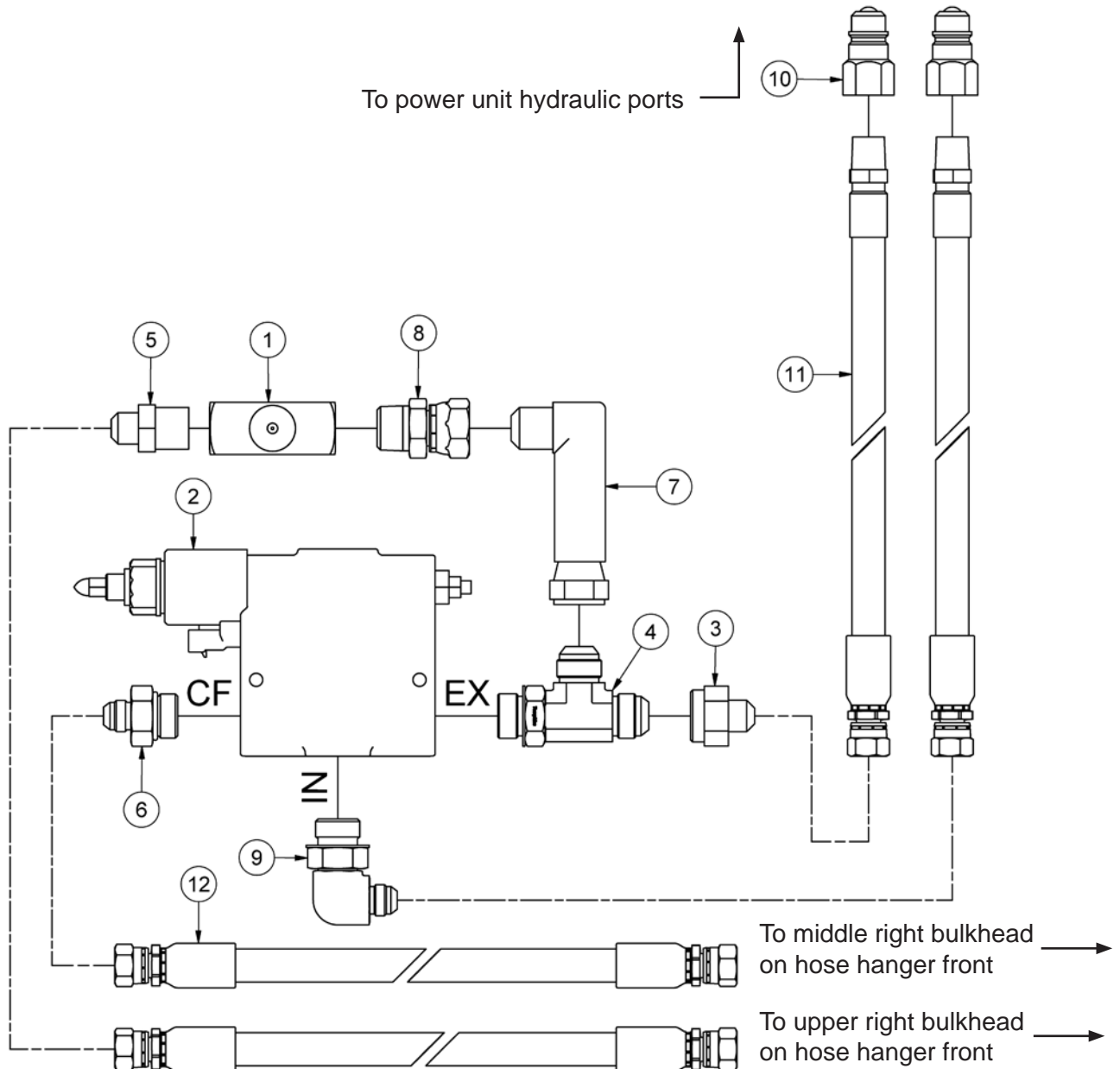
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	30855	Flow Control - Pressure Compensated 3/4
2	1	30857	Flow Control Valve - 3/4"
3	1	HF 2404-8-12	Hydraulic Fitting - Union
4	1	HF 6801-8-12	Hyd. Fitting - 1/2" JIC - 3/4" 90 Degree Elbow
5	1	HF 6803-12-12-12	Hyd. Fitting Male JIC Male JIC Male ORB Tee
6	1	HF 6501-12-12	Hyd. Fitting 90° 3/4 MNPT - 3/4 FJXH
7	1	HF 6500-8-12	Hyd. Fitting 1/2 Male JIC - 3/4 Female JIC 90°
8	1	HF 6400-8-12	Hyd. Fitting
9	2	HF 8010-4	Quickcoupler 1/2" Male Tip
10	2	30661	HH 1/2 72",8FJX,8MP
11	2	37987	HH 1/2 48",8FJX,8FJX

Flow Control Hydraulic Layout - Electric (Original)



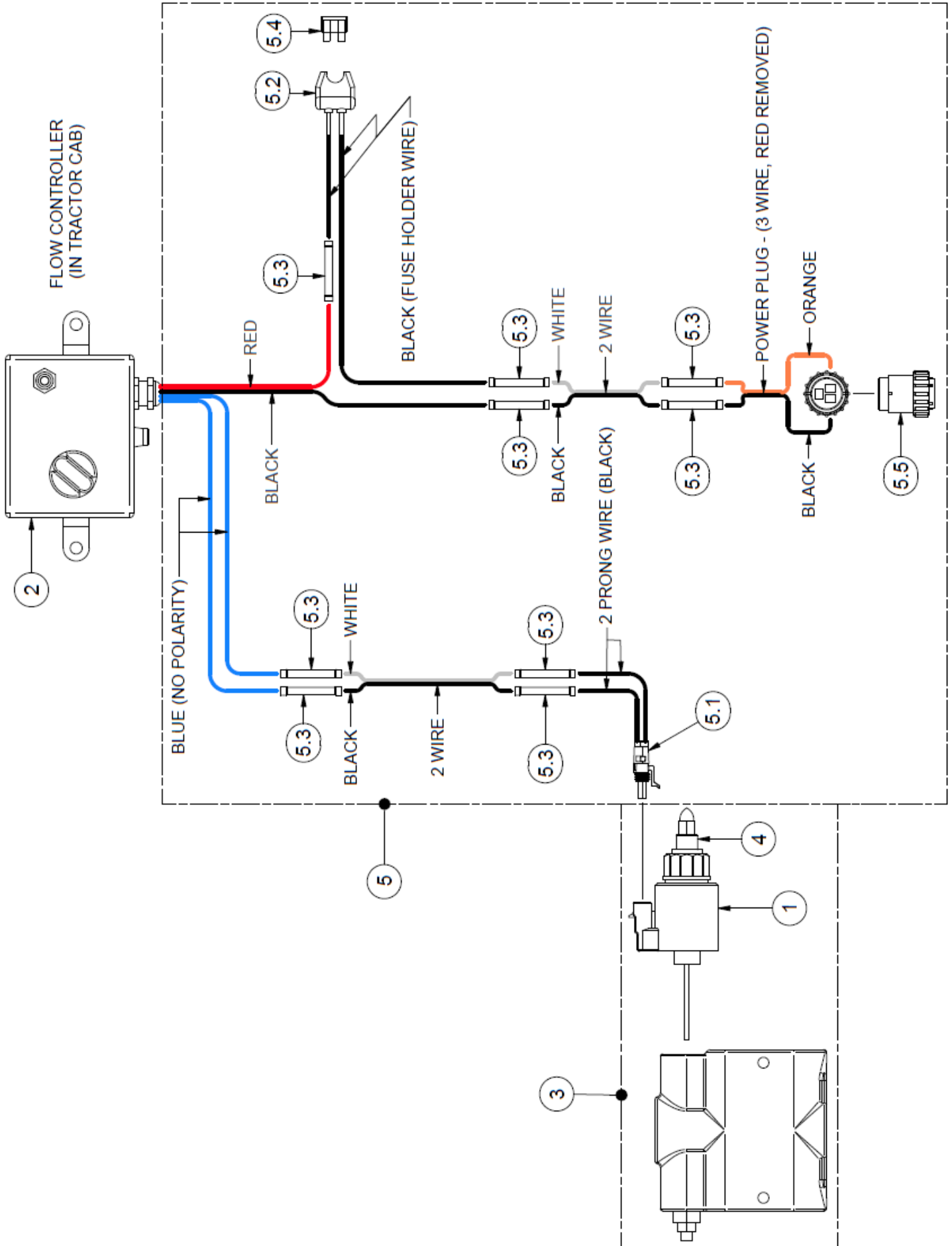
ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	2	HF 8010-4	Quickcoupler 1/2" Male Tip	
2	1	30857	Flow Control Valve - 3/4"	
3	1	37976	Electric Flow Control	Brkdwn on Pg.3-16
4	1	HF 5604-12-12	3/4 FNPT X 1/2 MNPT Branch Tee	
5	1	HF 2404-8-12	Hydraulic Fitting - Union	
6	1	HF 2501-8-12	Hydraulic Elbow Fitting - MJIC-MNPT	
7	1	HF 6400-8-12	Hyd. Fitting	
8	1	HF 6801-8-12	Hyd. Fitting - 1/2" JIC - 3/4" 90 Degree Elbow	
9	1	HF 5502-12-12	Hyd. Fitting - 90 Deg. Elbow 12-12	
10	1	HF 5404-L-12-12	Hyd. Fitting 3/4" X 3/4" MNPT Hex Nipple 3" Long	
11	1	HF 6405-12-12	Hydraulic Fitting - Male SAE-ORB to Female NPT	
12	2	30661	1/2" Hydraulic Hose (8FJX,8MP) - 69"	
13	2	37987	1/2" Hydraulic Hose (8FJX,8FJX) - 73"	

Flow Control Hydraulic Layout - Electric (Current)



ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	1	30857	Flow Control Valve - 3/4"	
2	1	37976	Electric Flow Control	Brkdwn on Pg.3-16
3	1	HF 2406-12-8	Hydraulic Adapter Fitting JIC	
4	1	HF 6804-12-12-12	Hydraulic Tee Fitting - SAE-ORB - MJICs	
5	1	HF 2404-8-12	Hydraulic Fitting - Union	
6	1	HF 6400-8-12	Hyd. Fitting	
7	1	HF 6500-L-12-12-FG	MJ-FJS 90° Elbow Long	
8	1	HF 6505-12-12	Male Pipe To Female JIC Swivel	
9	1	HF 6801-8-12	Hyd. Fitting - 1/2" JIC - 3/4" 90 Degree Elbow	
10	2	HF 8010-4	Quickcoupler 1/2" Male Tip	
11	2	30661	1/2" Hydraulic Hose (8FJX,8MP) - 69"	
12	2	37987	1/2" Hydraulic Hose (8FJX,8FJX) - 73"	

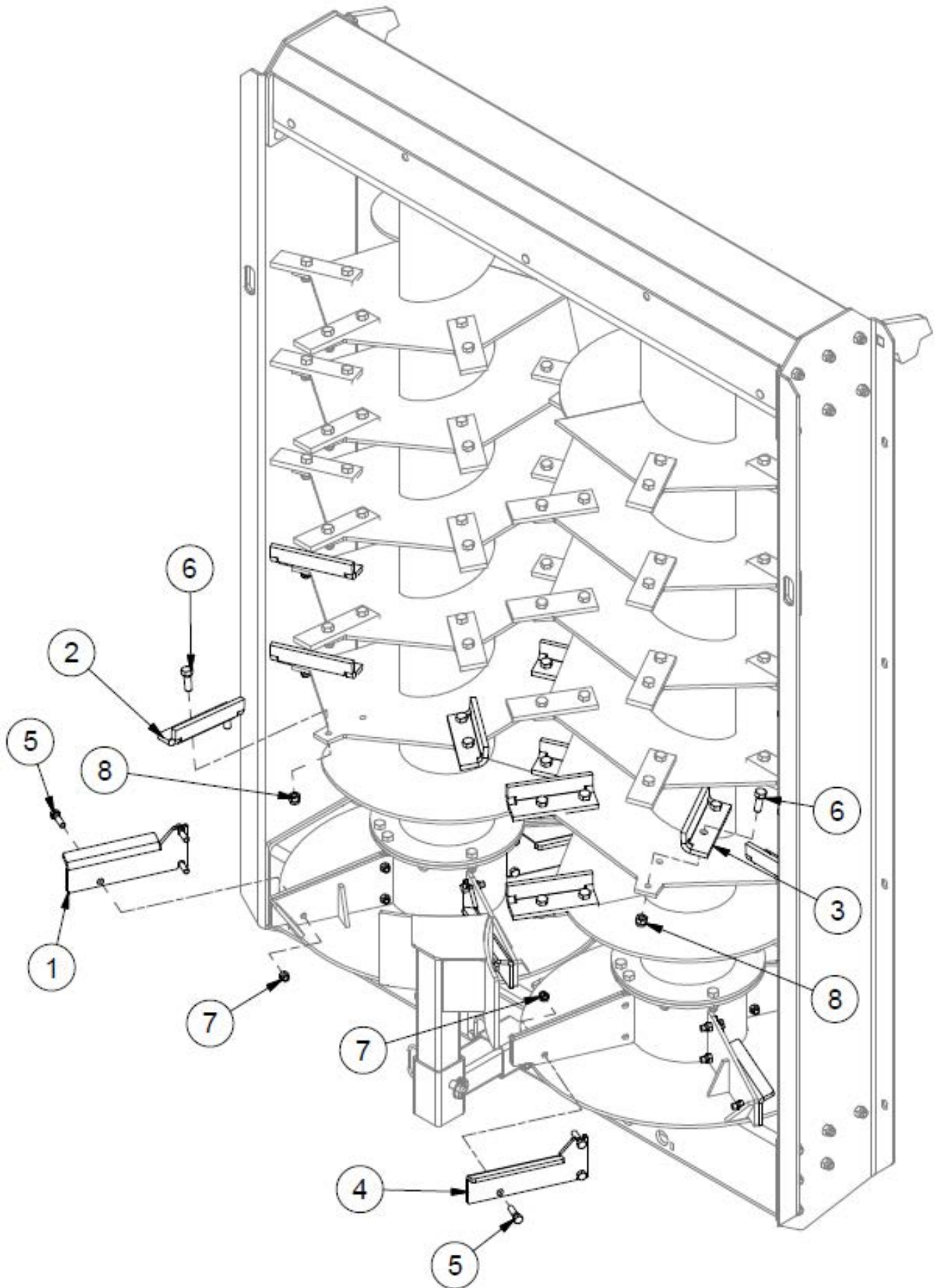
Electric Flow Control Wiring



Electric Flow Control Wiring

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	37968	Solenoid
2	1	45344	Electric Flow Controller
3	1	45345	Electric Flow Control
4	1	45346	Core Tube
5	1	43621	Electric Flow Control Wiring Harness
5.1	1	37970	2 Prong Plug
5.2	1	TL82-2164	Fuse Holder
5.3	9	EL23662	Wire Connector
5.4	1	TL550-100-079	15 AMP Fuse
5.5	1	TB109-110-307	Power Plug

Flange Paddle Kit - 41504

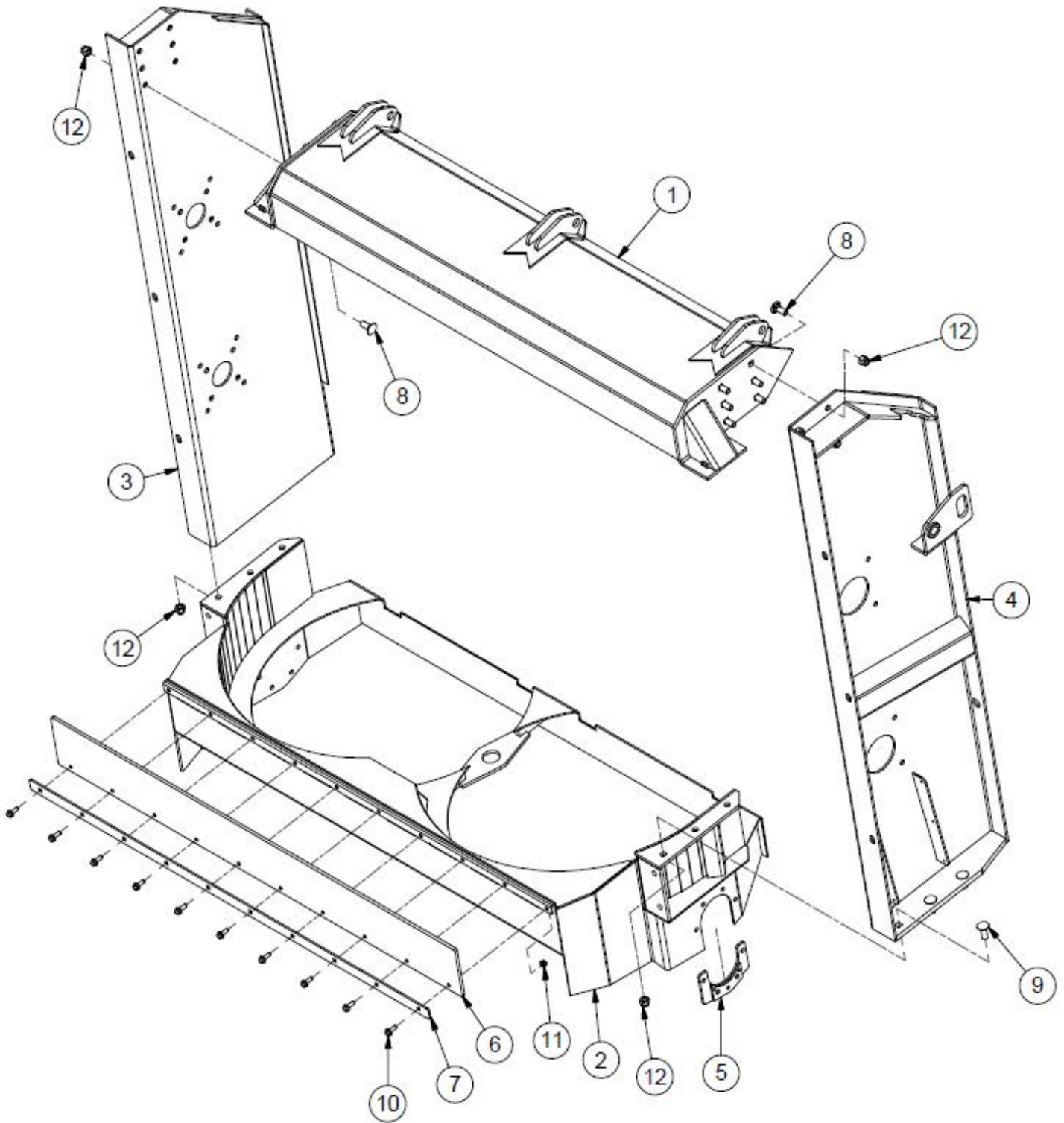


Flange Paddle Kit - 41504

ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	33321	Cupped Paddles - Left
2	10	36518	Beater Paddle (Cupped) Left
3	10	37718	Beater Paddle (Cupped) Right
4	4	37719	Cupped Paddles - Right
5	24	HB 1/2-13X1.75 Z5	Hex Bolt 1/2-13x1 3/4 Grade 5 Zinc Plated Hex Cap Screw
6	40	HB 5/8-11X1.75 Z5	Hex Bolt 5/8-11x1 3/4 Grade 5 Zinc Plated Hex Cap Screw
7	44	LN 1/2 N	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut
8	40	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut

Section 4 - Option - Poultry Beaters

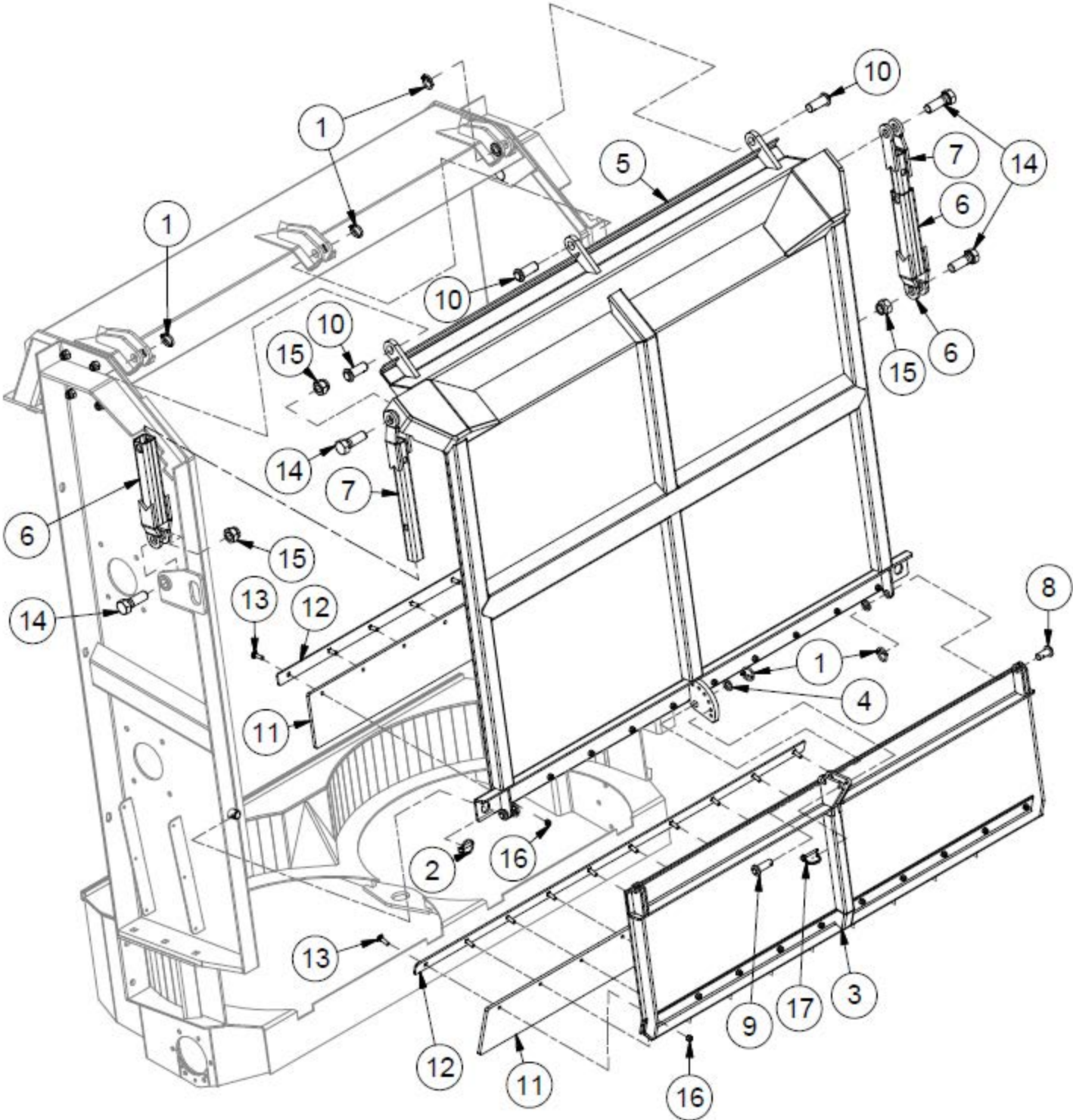
Poultry Beaters - Frame



Poultry Beaters - Frame

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	40334	Beater Gate Mount
2	1	40335	Spinner Mounting Assembly
3	1	40378	Beater Right Panel
4	1	40380	Beater Left Panel
5	1	42173	Bottom Gearbox Support
6	3	450-441	Rubber Seal
7	3	600-790	Rubber Hold Down
8	12	CB 5/8-11X1.1/2 Z5	Carriage Bolt - 5/8-11 x 1-1/2" Grade 5 Zinc
9	6	CB 5/8-11X1.3/4 Z5	Carriage Bolt - 5/8-11 x 1-3/4" Grade 5 Zinc
10	10	HBC38X1	Hex Bolt Cerrated
11	10	HNC38	Hex Nut Cerrated
12	138	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut

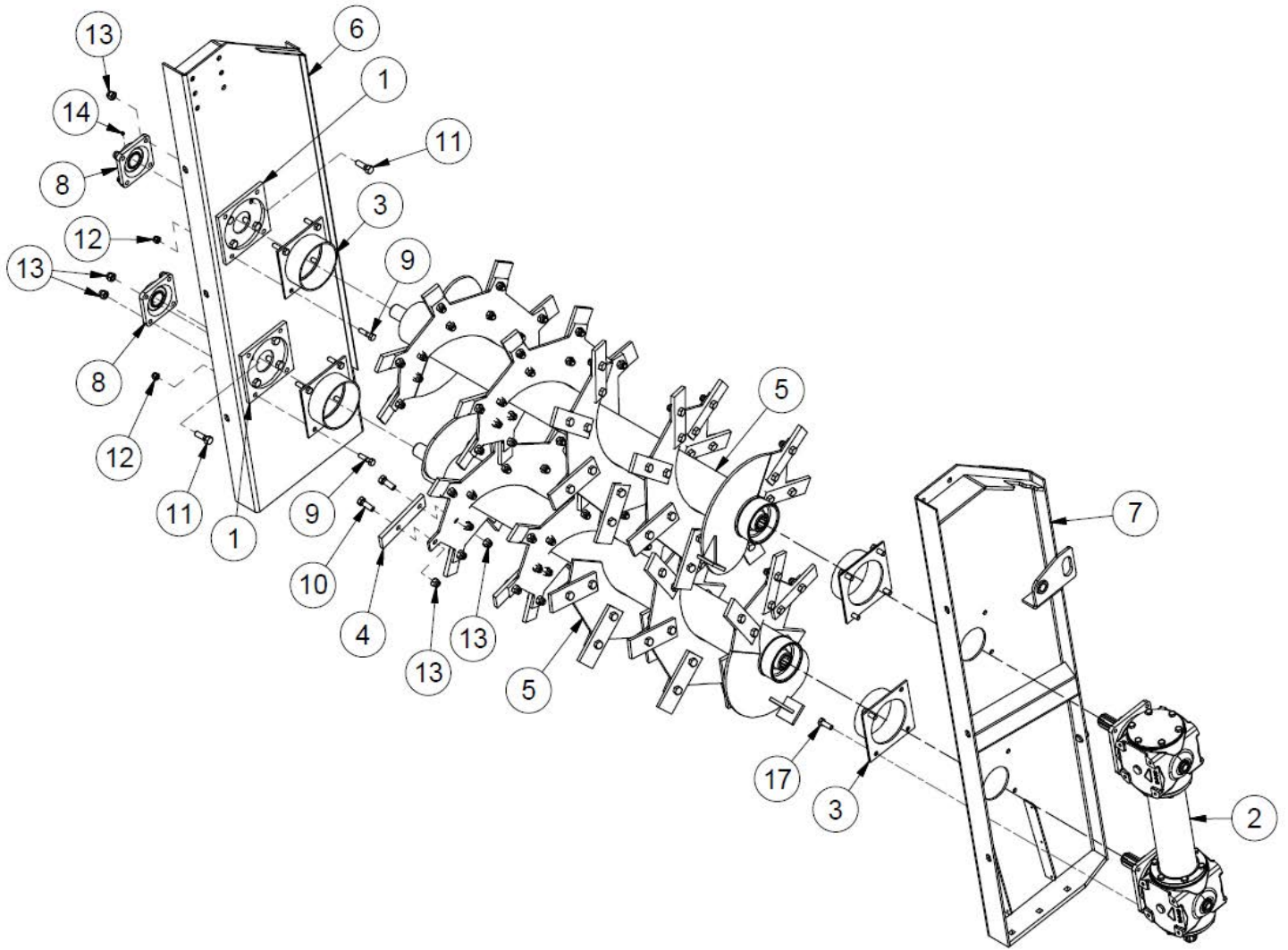
Poultry Beaters - Endgate



Poultry Beaters - Endgate

ITEM	QTY	PART NUMBER	DESCRIPTION
1	6	25680	Lynch Pin 3/16 x 1.5
2	2	28940	Lynch Pin - 3/8 X 1-3/4"
3	1	40332	Lower Gate
4	3	40365	Beater Gate Washer
5	1	40375	Upper Gate
6	2	40389	Sliding Hinge Clevice
7	2	40393	Sliding Hinge Arm
8	2	42175	Gate Pin
9	1	42176	Long Gate Pin
10	3	42177	Top Gate Pin
11	3	450-441	Rubber Seal
12	3	600-790	Rubber Hold Down
13	20	CB 3/8-16X1.1/4 Z5	Carriage Bolt - 3/8"-16 x 1-1/4" Zinc Finish SAE J429 Grade 5 Round Head
14	4	HB 1-8X3.0 Z5	Hex Bolt - 1"-8 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
15	4	LN 1.0 N	Locknuts - 1-8 Zinc Plated Nylon Insert
16	20	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
17	1	LP B1995	Pin - Lock Pin 1/4x1 3/4

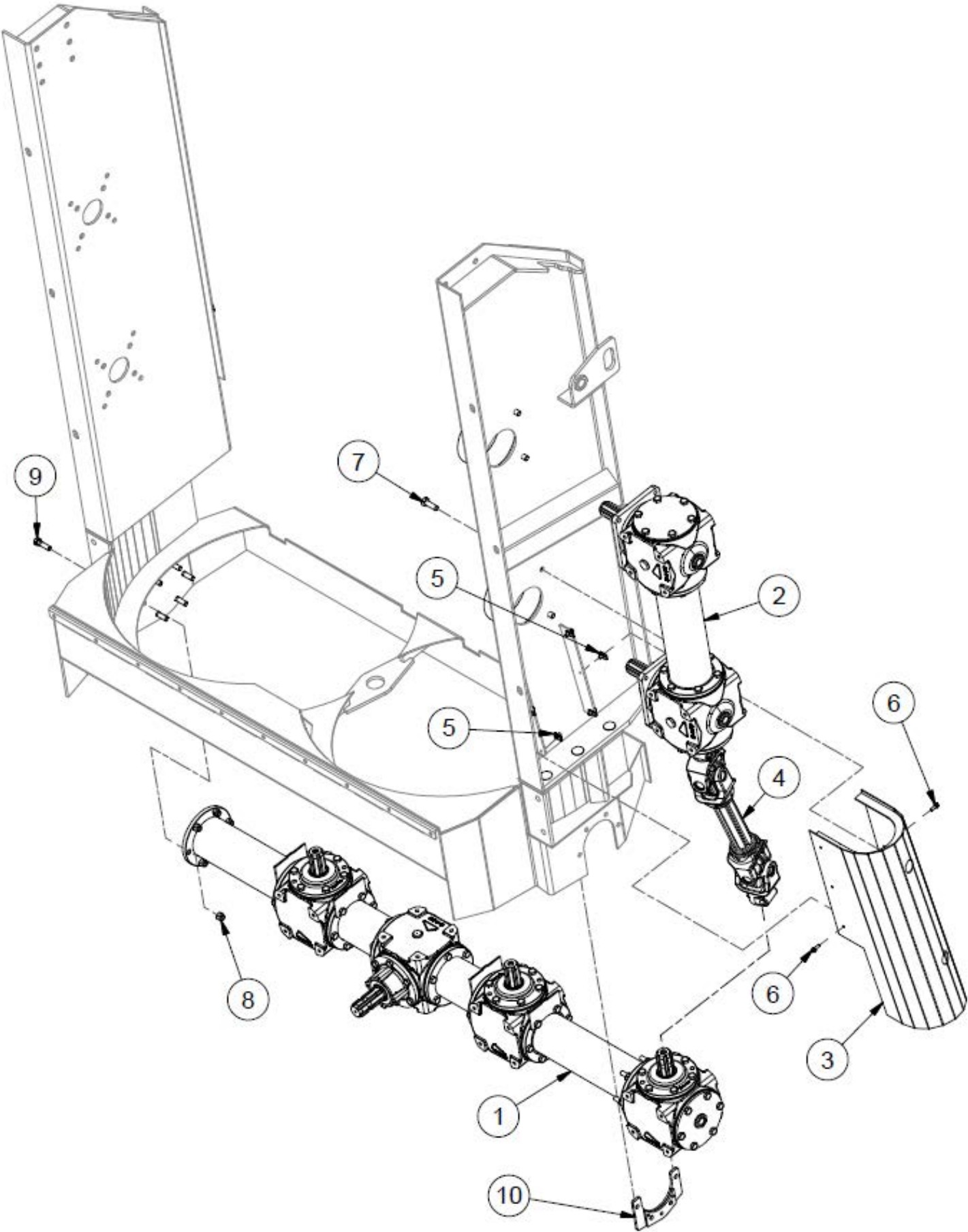
Poultry Beaters - Beaters



Poultry Beaters - Beaters

ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	36723	Inside Plate for Beaters
2	1	37827	Gear Box - Side Poultry
3	4	37936	Beater End Covers
4	58	400-438	Beater Paddle
5	2	40356	Beater
6	1	40378	Beater Right Panel
7	1	40380	Beater Left Panel
8	2	BEA UCF209-28R3	Flange Bearing -Triple Seal- Ductile Iron
9	16	HB 1/2-13X2.0 Z5	Hex Bolt 1/2-13 x 2" Grade 5 Zinc Plated Hex Cap Screw NC
10	112	HB 5/8-11X1.3/4 Z5	Hex Bolt - 5/8"-11 x 1-3/4" Grade 5 Zinc Plated Hex Cap Screw NC
11	8	HB 5/8-11X2.0 Z5	Hex Bolt 5/8-11 x 2 Grade 5 Zinc Plated Hex Cap Screw NC
12	36	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
13	138	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut
14	4	SS 516X38	Allan Head Set Screw, Cup Point Set Screw 5/16 x 3/8

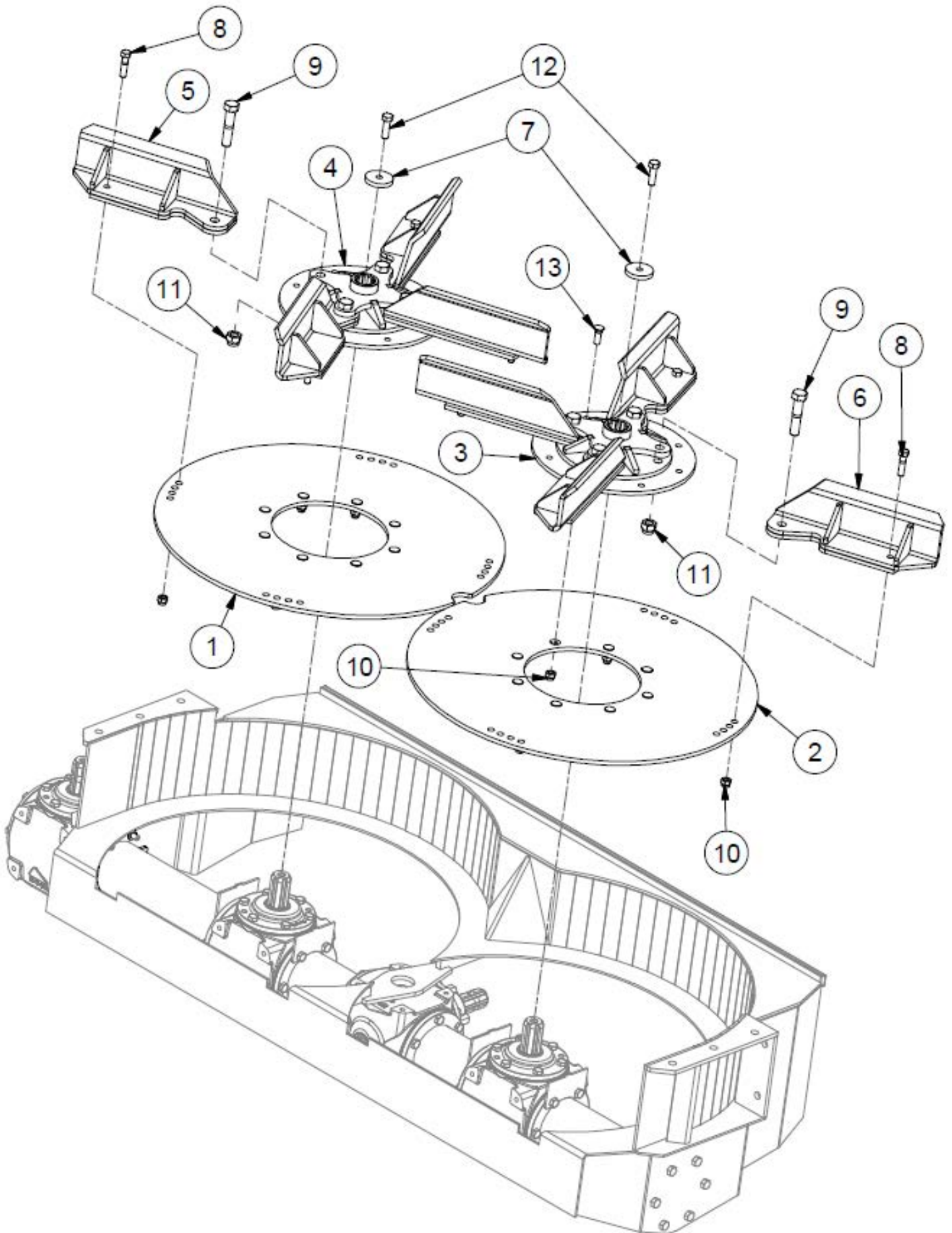
N450 Poultry Beaters - Drivelines



N450 Poultry Beaters - Drivelines

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	37828	Gear Box - Lower Poultry
2	1	37827	Gear Box - Side Poultry
3	1	40259	PTO Shield
4	1	39998	PTO Cross Drive Shaft
5	6	HNP 5/16	Panel Nut - 5/16" U-Type Spring
6	6	HBC14X34	Hex Bolt - 1/4-20 x 3/4 Grade 8.2 Zinc Flange Bolt SAE
7	8	M14X40X2.0	Metric Bolt
8	36	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
9	6	HB 1/2-13X1.3/4 Z5	Hex Bolt Plated - 1/2"-13 x 1-3/4" Zinc Finish SAE J429 Gr. 5 NC
10	1	42173	Bottom Gearbox Support

Poultry Beaters - Spinners



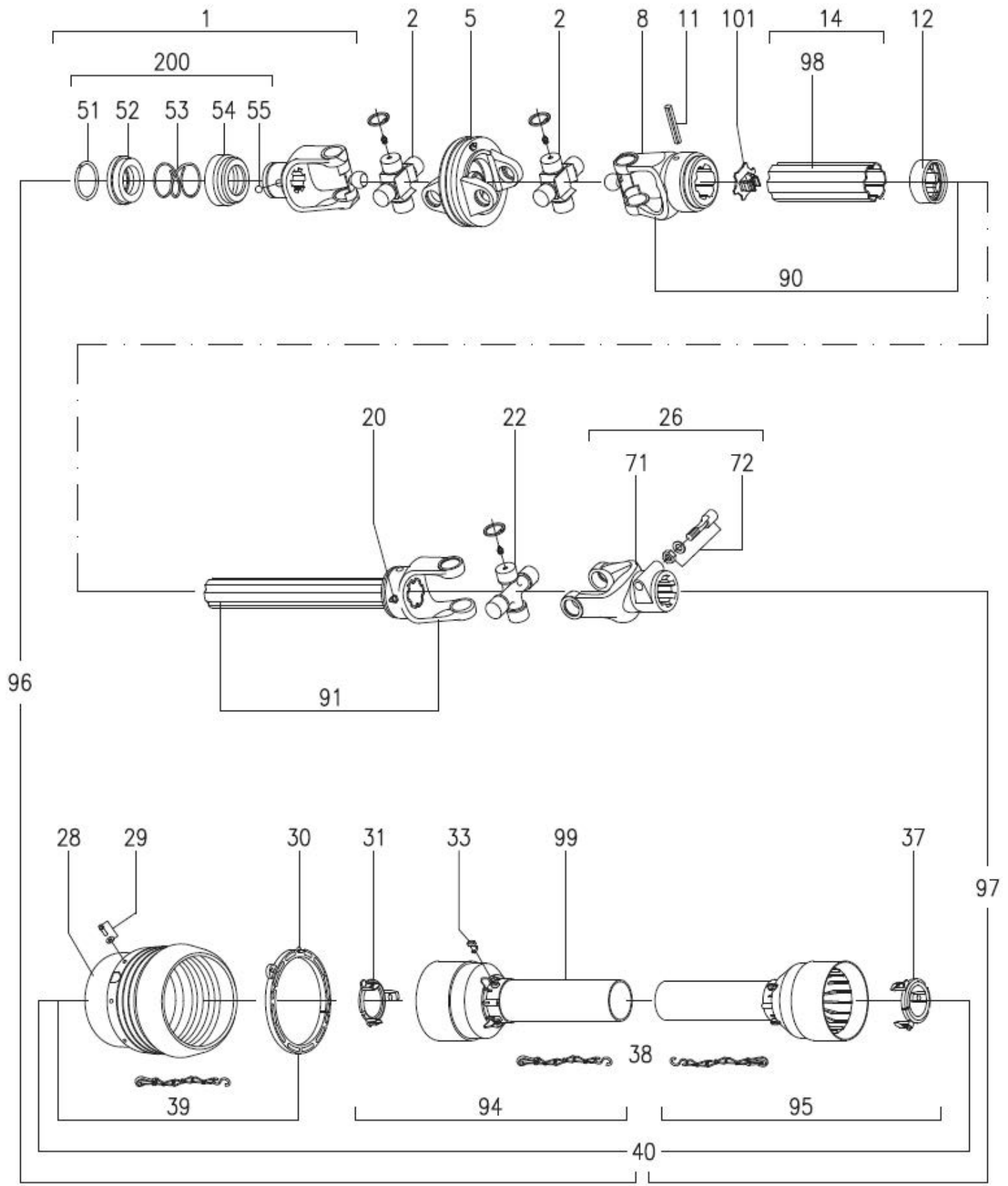
Poultry Beaters - Spinners

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	37881	Left Spinner Plate
2	1	37902	Right Spinner Plate
3	1	39843	Braced Spinner Hub
4	1	40298	Braced Spinner Hub
5	4	40310	Left Paddle
6	4	40311	Right Paddle
7	2	700-157	Load Bearing Washer
8	16	HB 1/2-13X2.0 Z5	Hex Bolt 1/2-13 x 2" Grade 5 Zinc Plated Hex Cap Screw NC
9	8	HB 3/4-10X3.1/2 Z5	Hex Bolt - 3/4-10 x 3 1/2" Grade 5 Zinc Plated Hex Cap Screw NC
10	36	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
11	8	LN 3/4 N	Locknuts - 3/4-10 Zinc Plated Nylon Insert
12	2	M14X45X2.0	Metric Bolt
13	16	PB 1/2X1.1/2	Plow Bolts Gr.5

Intentionally Left Blank

Section 5 - PTOs

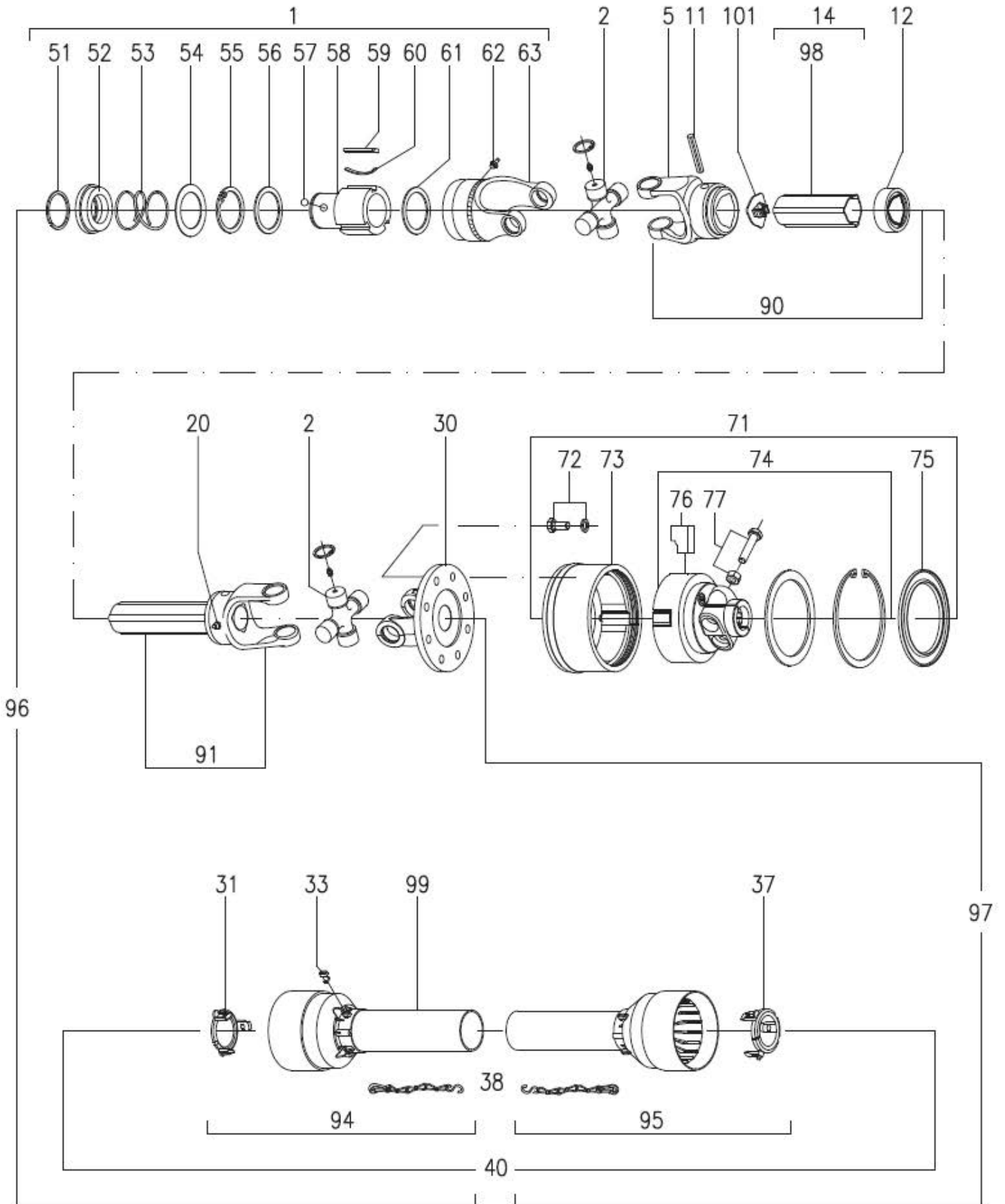
39850 - PTO. 375,450,525,600,750 (V80-141P028359-028028-CV80-CLS)



39850 - PTO. 375,450,525,600,750 (V80-141P028359-028028-CV80-CLS)

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PTO141.028.359.1	Complete Collar yoke C03 for CV-Joint
2	2	PTO180.018.580	Cross Journal Set for CV-Joint
5	1	PTO141.028.157.1	Wide Angle Double Yoke
8	1	PTO141.028.248.1	Outer Yoke
11	1	PTO190.000.243	Roll Pin for Outer Tube
12	1	PTO180.018.437	Wiper
14	1	PTO152.280.566.0720	Complete Outer Tube
20	1	PTO180.017.411	Grease Nipple for Lube
22	1	PTO180.018.641	Cross Journal Set
26	1	PTO141.028.028.1	Complete Yoke 132
28	1	PTO180.018.582	Guard Cone for Wide Angle CV-Joint
29	6	PTO165.000.694	Screw Kit
30	1	PTO158.018.582	Bearing Ring
31	1	PTO180.018.251	Guard Retaining Collar for Outer Tube
33	3	PTO180.014.240	Bolt
37	1	PTO180.018.252	Guard Retaining Collar for Inner Tube
38	1	PTO180.016.790	Safety Chains
39	1	PTO165.000.801	Guard Cone Set
40	1	PTO142.981.078.2821	Complete Guard with Instruction Manual
51	1	PTO190.000.451	Outer Circlip
52	1	PTO151.016.486	Sliding Sleeve Collar
53	1	PTO180.016.487	Spring
54	1	PTO180.016.483	Fixed Sleeve
55	3	PTO190.000.078	Ball Ø 1/2"
71	1	PTO151.018.028.1	Yoke 132
72	1	PTO165.000.502	Tapered Pin Set 1" 3/8
90	1	PTO122.981.049.1	Female Tube with Yoke and Lube System
91	1	PTO122.580.526.1	Male Tube with Yoke and Lube System
94	1	PTO142.283.260.2821	Half Female Guarding with Label
95	1	PTO142.287.230.2821	Half Male Guarding
96	1	PTO199811410F05006	Half Female Shaft with Guarding
97	1	PTO123.486.358.01	Half Male Shaft with Guarding
98	1	PTO190.000.216	DANGER Label for Outer Tube
99	1	PTO190.000.215	DANGER Label for Outer Guard Tube
100	1	PTO190.000.371	Instruction Manual
101	1	PTO180.018.393	Plastic Cap for Outer Tube
200	1	PTO165.000.628	Kit Collar for Yoke 1 3/8"

39851 - PTO. 375,450,525,(T60-086P265011-306048-CLS(3500NM))














39851 - PTO. 375,450,525,(T60-086P265011-306048-CLS(3500NM))

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PTO145.265.011.1	Complete Overrunningclutch R12
2	2	PTO180.016.780	Cross Journal Set
5	1	PTO151.016.028.1	Outer Yoke
11	1	PTO190.000.018	Roll Pin for Outer Tube
12	1	PTO180.016.572	Wiper
14	1	PTO152.160.435.0720	Complete Outer Tube
20	1	PTO180.017.411	Grease Nipple for Lube
30	1	PTO151.016.543.1	Flange FGL
31	1	PTO180.016.237	Guard Retaining Collar for Outer Tube
33	6	PTO180.014.240	Bolt
37	1	PTO180.016.238	Guard Retaining Collar for Inner Tube
38	2	PTO180.016.790	Safety Chains
40	1	PTO142.260.536.7621	Complete Guard for Instruction Manual
51	1	PTO190.000.451	Outer Circlip
52	1	PTO151.016.486	Sliding Sleeve Collar
53	1	PTO180.016.487	Spring
54	1	PTO180.015.143	Spring Push Ring
55	1	PTO190.000.183	Inner Circlip
56	1	PTO180.014.135	Retaining Washer
57	3	PTO190.000.078	Ball
58	1	PTO151.016.546	Hub R12 (1 3/8" Z6)
59	3	PTO151.014.136	Ratchet
60	3	PTO180.014.137	Leaf Spring
61	1	PTO190.000.199	Retaining Washer
62	1	PTO190.00.020	Grease Nipple M8x1
63	1	PTO141.026.210.1	Outer Casting with Yoke
71	1	PTO144.306.137.1	Automatic Torque Limiter (1 3/8" Z6)
72	8	PTO165.000.708	Special Screw M12x1.25x25 w/ Washers type "SCHNOOR"
73	1	PTO141.028.411.1	Outer Casing
74	1	PTO165.000.850	Complete Hub (2700Nm with Springs)
75	1	PTO180.018.400	Grease Retainer
76	4	PTO151.018.390	Ratchet
77	2	PTO165.000.752	Bolts M12x1.25x60 & Nuts
90	1	PTO122.360.088.1	Female Tube with Yoke and Lube System
91	1	PTO122.360.568.1	Male Tube with Yoke and Lube System
94	1	PTO142.266.311.7621	Half Female Guarding with Label
95	1	PTO142.267.286.7621	Half Male Guarding
96	1	PTO123.360.519.11	Half Female Shaft with Guarding
97	1	PTO123.460.1081.11	Half Male Shaft with Guarding
98	1	PTO190.000.216	DANGER Label for Outer Tube
99	1	PTO190.000.215	DANGER Label for Outer Guard Tube
100	1	PTO190.000.371	Instruction Manual
101	1	PTO180.016.468	Plastic Cap for Outer Tube

Torque Value Chart - Imperial

UNIFIED INCH BOLT AND CAP SCREW TORQUE VALUES

SAE Grade and Head Markings	1 or 2 ^b	5	5.1	5.2	8	8.2
	NO MARK 					
SAE Grade and Nut Markings	2	5		8		
	NO MARK 					

F81162 -19-04/16/09

Size	Grade 1				Grade 2 ^b				Grade 5, 5.1, or 5.2				Grade 8 or 8.2			
	Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a	
	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft
1/4	3.7	2.8	4.7	3.5	6	4.5	7.5	5.5	9.5	7	12	9	13.5	10	17	12.5
5/16	7.7	5.5	10	7	12	9	15	11	20	15	25	18	28	21	35	26
3/8	14	10	17	13	22	16	27	20	35	26	44	33	50	38	63	46
7/16	22	16	28	20	35	26	44	32	55	41	70	52	80	58	100	75
1/2	33	25	42	31	53	39	67	50	85	63	110	80	120	90	150	115
9/16	48	36	60	45	75	56	95	70	125	90	155	115	175	130	225	160
5/8	67	50	85	62	105	78	135	100	170	125	215	160	240	175	300	225
3/4	120	87	150	110	190	140	240	175	300	225	375	280	425	310	550	400
7/8	190	140	240	175	190	140	240	175	490	360	625	450	700	500	875	650
1	290	210	360	270	290	210	360	270	725	540	925	675	1050	750	1300	975
1-1/8	400	300	510	375	400	300	510	375	900	675	1150	850	1450	1075	1850	1350
1-1/4	570	425	725	530	570	425	725	530	1300	950	1650	1200	2050	1500	2600	1950
1-3/8	750	550	950	700	750	550	950	700	1700	1250	2150	1550	2700	2000	3400	2550
1-1/2	1000	725	1250	925	990	725	1250	930	2250	1650	2850	2100	3600	2650	4550	3350

DO NOT use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

^a "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without any lubrication.

^b Grade 2 applies for hex cap screws (not hex bolts) up to 152 mm (6-in.) long. Grade 1 applies for hex cap screws over 152 mm (6-in.) long, and for all other types of bolts and screws of any length.

Fasteners should be replaced with the same or higher grade. If higher grade fasteners are used, these should only be tightened to the strength of the original.

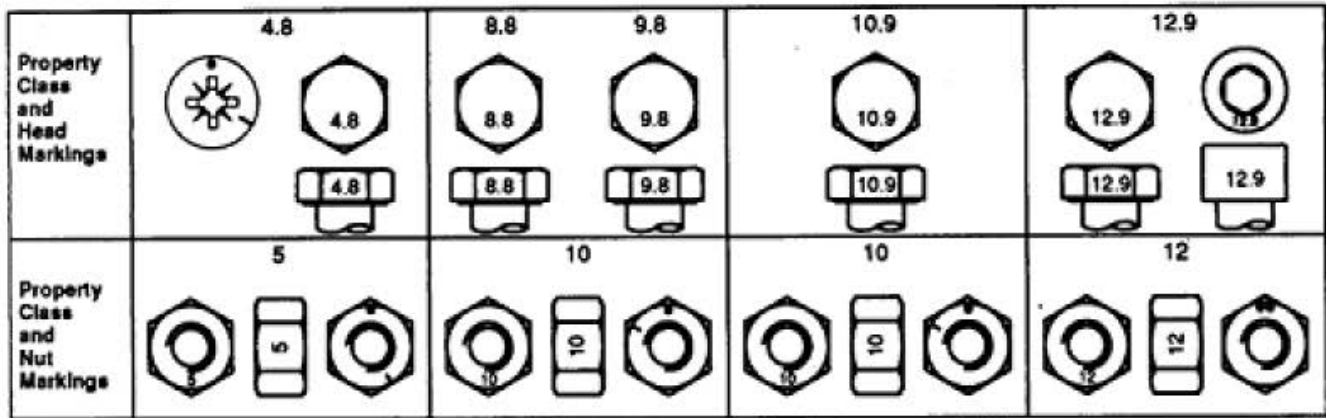
Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten plastic insert or crimped steel-type lock nuts to approximately 50 percent of the dry torque shown in the chart, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value.

DX.TOR01 -19-20JUL04

Torque Value Chart - Metric

METRIC BOLT AND CAP SCREW TORQUE VALUES



Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a	
	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft
M6	4.8	3.5	6	4.5	9	6.5	11	8.5	13	9.5	17	12	15	11.5	19	14.5
M8	12	8.5	15	11	22	16	28	20	32	24	40	30	37	28	47	35
M10	23	17	29	21	43	32	55	40	63	47	80	60	75	55	95	70
M12	40	29	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	47	80	60	120	88	150	110	175	130	225	165	205	150	260	190
M16	100	73	125	92	190	140	240	175	275	200	350	255	320	240	400	300
M18	135	100	175	125	260	195	330	250	375	275	475	350	440	325	560	410
M20	190	140	240	180	375	275	475	350	530	400	675	500	625	460	800	580
M22	260	190	330	250	510	375	650	475	725	540	925	675	850	625	1075	800
M24	330	250	425	310	650	475	825	600	925	675	1150	850	1075	800	1350	1000
M27	490	360	625	450	950	700	1200	875	1350	1000	1700	1250	1600	1150	2000	1500
M30	675	490	850	625	1300	950	1650	1200	1850	1350	2300	1700	2150	1600	2700	2000
M33	900	675	1150	850	1750	1300	2200	1650	2500	1850	3150	2350	2900	2150	3700	2750
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2750	4750	3500

DO NOT use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class.

Fasteners should be replaced with the same or higher property class. If higher property class fasteners are used, these should only be tightened to the strength of the original.

^a "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without any lubrication.

Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten plastic insert or crimped steel-type lock nuts to approximately 50 percent of the dry torque shown in the chart, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value.

Index

39850 - PTO. 375,450,525,600,750 (V80-141P028359-028028-CV80-CLS)	.5-2
39851 - PTO. 375,450,525,(T60-086P265011-306048-CLS(3500NM)	.5-4
Apron Runners	2-28
Beaters	2-18
Driveline	.2-8
Electric Flow Control Wiring	3-20
Endgate.	2-12
Flange Paddle Kit - 41504	3-22
Floor & Side Boards	2-16
Flow Control Hydraulic Layout - Electric (Current).	3-19
Flow Control Hydraulic Layout - Electric (Original)	3-18
Flow Control Hydraulic Layout - Manual.	3-17
Flow Control Mounting	3-16
Front Apron Drive.	.2-6
Front Components	.2-4
Hitch Options	.3-2
Hydraulic Light Kit	.3-9
Hydraulic Schematic.	2-30
ISO Safety Decal Locations	.VIII
ISO Safety Decals	. IX
Light Kit Base	.3-6
Light Kit Hydraulics	3-10
Light Kit Wiring Harness	3-12
Manual Light Kit	.3-8
Manuals	. II
Mechanical Light Kit - 43673	.3-4
N450 Poultry Beaters - Drivelines.	.4-7
N750LC (GT400) / N750LCNT460 Scales	3-14
N750LCNT8000 Scales	3-15
Nitro Apron Chain Warranty	. II
Optional Kit Numbers	.3-1
Parts Manual	. II
Poultry Beaters - Beaters	.4-5
Poultry Beaters - Endgate	.4-3
Poultry Beaters - Frame.	.4-1
Poultry Beaters - Spinners	.4-9
Rear Apron Drive	2-14
Safety Decals	. VI
Safety Sign Locations	. V
Section 2 - Parts Breakdowns & Lists	.2-1
Section 3 - Optional Features	.3-1
Section 4 - Option - Poultry Beaters	.4-1
Section 5 - PTOs	.5-1
Serial Number.	. II

Side Shields	2-10
Single Axle	2-22
Tandem Axle	2-24
Tandem Axle - Scale Ready	2-26
Tongue Components.2-2
Torque Value Chart - Imperial6-1
Torque Value Chart - Metric7-1
Walking Beams	2-20
Warranty and Limitation of Liability	II

TUBE•LINE™