

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

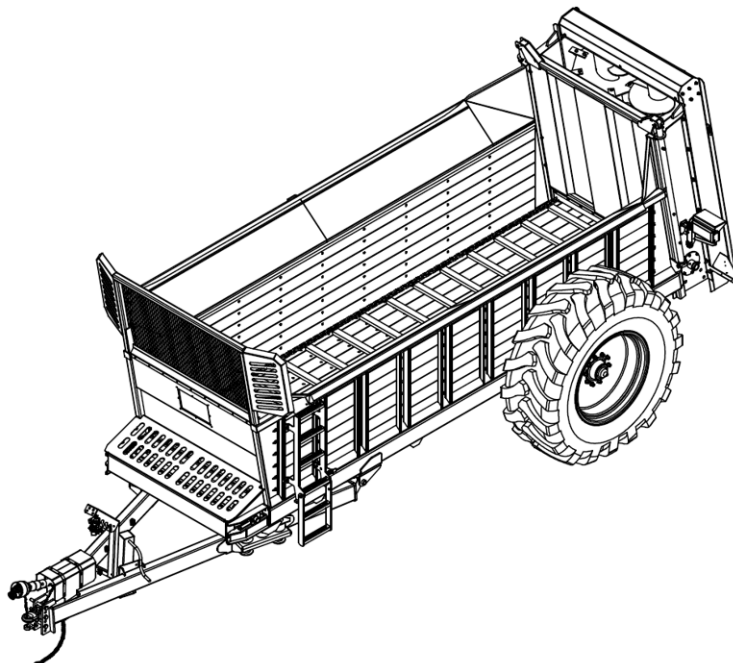
Parts Manual

Keep this manual with the machine at all times.

NITRO

Manure Spreader

Nitro 450



Parts Manual

Thank you for choosing the Tubeline 450 Manure Spreader. Our hope is that it will give you many years of productive service. This machine is designed to spread various types of manure evenly over a wide area.

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. 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 on the front of the frame. 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: _____ N450 _____

Serial No: _____

Date Purchased: _____

Dealer Name: _____

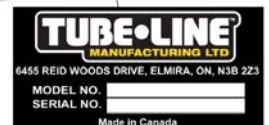
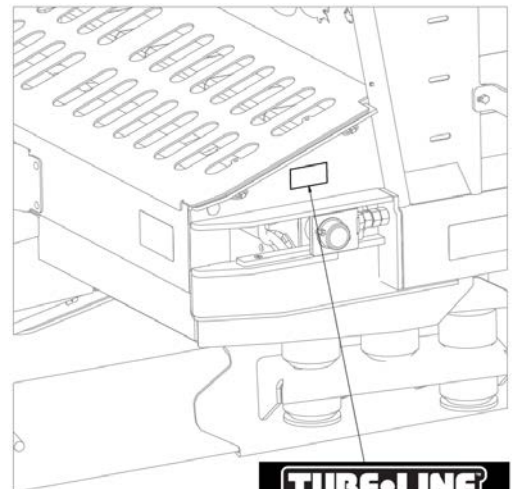


Table of Contents

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	VII
ISO Safety Decals	VIII
Model Decal Locations	IX
Section 2 - Parts Breakdowns & Lists	2-1
Front Components - Up to SN 15NS101	2-2
Front Components - SN 15NS102 to Current	2-4
Tongue - SN 15NS102 to Current	2-6
Front Scraper	2-8
Rear Components	2-10
Beaters - Up to SN 21NS105	2-12
Optional Flange Paddle Kit - 41504 - Up to SN 21NS105	2-14
Beater to Gearbox Connections	2-15
Beater Gearbox - 1 3/8" Keyway - Up to SN 15NS116	2-16
Beater Gearbox - 1 3/8" 6-Spline - SN 15NS117 to 16NS111	2-17
Beater Gearbox - 1 3/4" 6-Spline - SN 16NS112 to Current	2-18
Beaters - 49270 - SN 22NS101-Current	2-20
Optional Flange Paddle Kit - 47553 - SN 22NS101	2-22
44700 - Beater Greaselines	2-23
Front Apron Drive - Up to SN 15NS101	2-24
Front Apron Drive - SN 15NS102 to Current	2-25
Rear Apron Drive	2-26
Single Axle - Up to SN 13NS104	2-28
Single Axle - SN 14NS101 to Current	2-30
Tandem Axle - Up to SN 13NS104	2-32
Tandem Axle - SN 14NS101 to Current	2-34
Driveline - Up to SN 16NS106	2-36
Driveline - SN 16NS107 to Current	2-38
Apron Runners - Up to SN 15NS117	2-40
Apron Runners - Up to SN 15NS118 to Current	2-42
Hydraulic Layout	2-44
Grease Line Layout - Up to SN 15NS406	2-46
Grease Line Layout - SN 15NS407 to Current	2-48
Side - Floor Boards	2-50
Section 3 - Options	3-1
Optional Kit Numbers	3-1
Hitch Options	3-2
Mechanical Light Kit - 43673 - SN 19NS101 to Current	3-4
Light Kit Base	3-6
Manual Light Kit	3-8
Hydraulic Light Kit Cylinders	3-9
Hydraulic Light Kit Hoses	3-10
Light Kit Wiring	3-12
N450SB - Single Axle Brake Kit	3-14
N450TB - Tandem Axle Brake Kit	3-15

N750LC (GT400) / N750LCNT460 Scales	3-16
N750LCNT8000 Scales	3-17
Flow Control Mounting	3-18
Flow Control Hydraulic Layout - Manual	3-19
Flow Control Hydraulic Layout - Electric (Original)	3-20
Flow Control Hydraulic Layout - Electric (Current)	3-21
Electric Flow Control Wiring	3-22
Endgate Indicator Kit - 48216	3-24
Section 4 - Option - Poultry Beaters	4-1
Poultry Beaters - Frame	4-1
Poultry Beaters - Beaters	4-2
Poultry Beaters - Endgate	4-3
Poultry Beaters - Drivelines	4-5
Poultry Beaters - Spinners	4-7
Poultry Beaters - 37827 - Side Gearbox	4-9
Poultry Beaters - 37828 - Lower Gearbox (Original)	4-11
Poultry Beaters - 44836 - Lower Gearbox (Current)	4-13
Poultry Beaters - 39998 - PTO Cross Drive Shaft	4-15
Section 5 - PTOs	5-1
30839 - PTO Shaft - Primary Shaft for Manure Spreader N375-N600	5-1
30840 - PTO Slip Clutch for Manure Spreader	5-3
30841 - PTO Secondary Shaft - Manure Spreader	5-5
39850 - PTO. 375,450,525,600,750 (V80-141P028359-028028-CV80-CLS)	5-7
39851 - PTO. 375,450,525,(T60-086P265011-306048-CLS(3500NM))	5-9
Section 6 - Gearboxes	6-1
30842 - Apron Chain Gearbox	6-2
30847-2 - 1 3/4" Spline Shaft Gearbox (9.278.760.00)	6-4
30848 - Centre Gearbox (9.290.621.00)	6-6
49188 - One Piece Beater Gearbox - SN 22NS101-Current	6-8
Torque Values - Imperial	X
Torque Values - Metric	XI

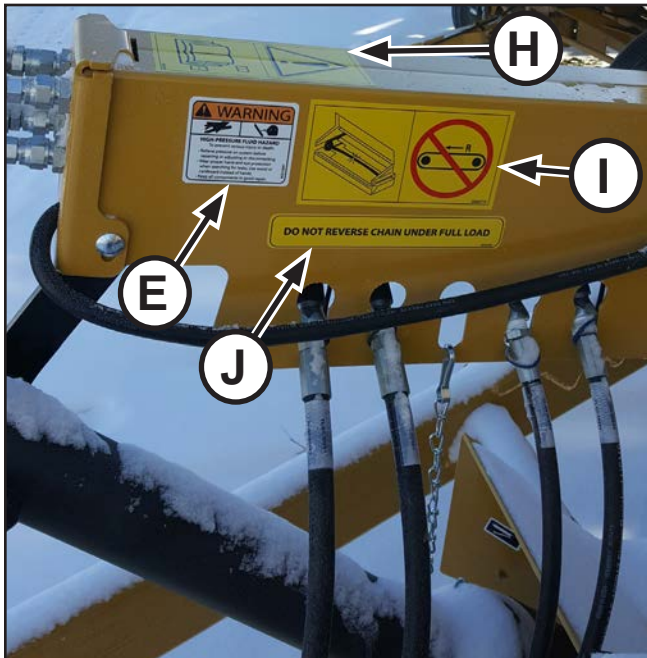
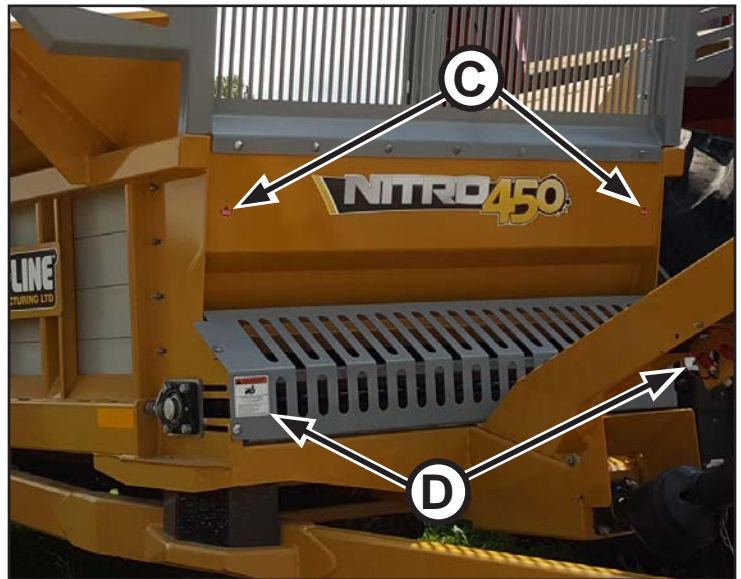
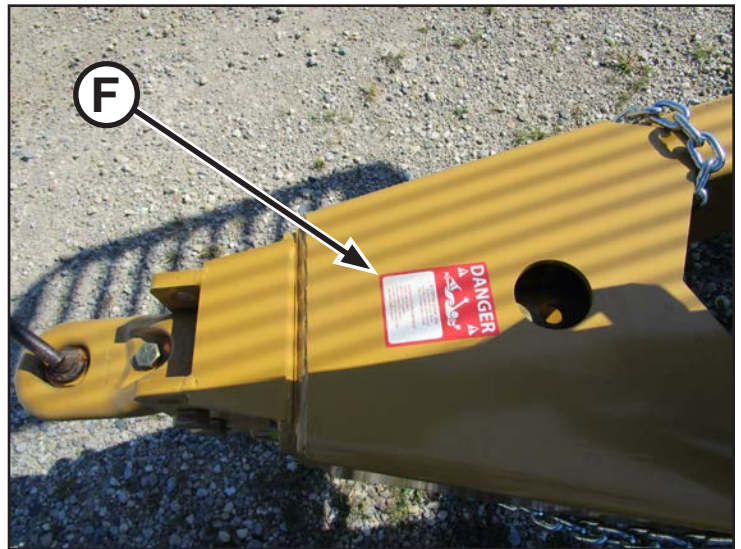
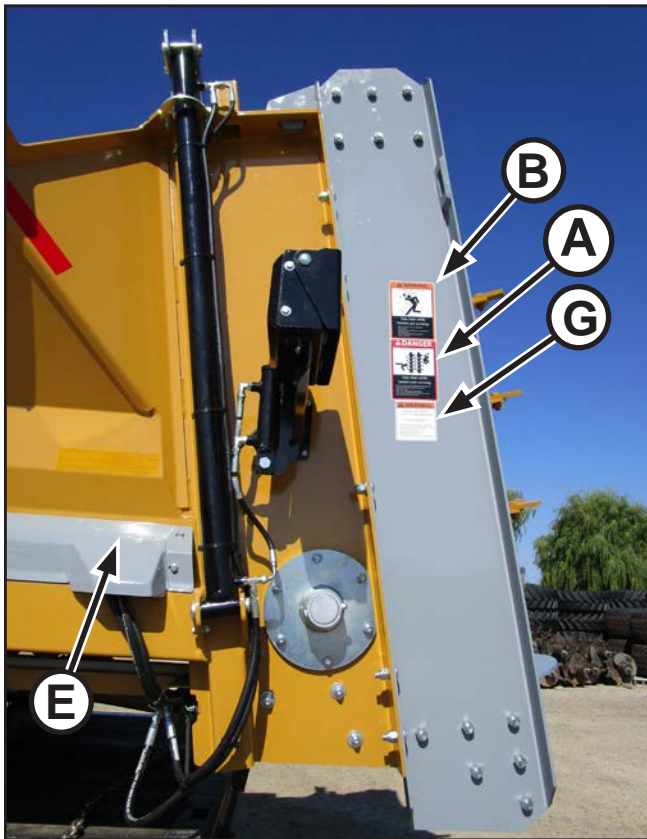
Safety Sign Locations

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: DECANADA



Item: D
Part No: DE23836



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

Item: E
Part No: DE23838



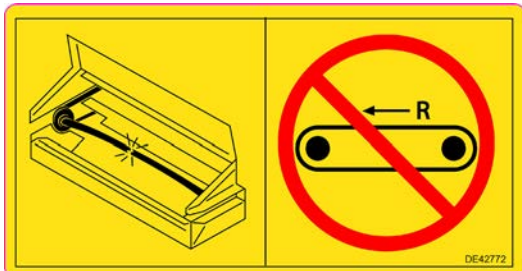
Item: F
Part No: DE39397



Item: G
Part No: DE23845



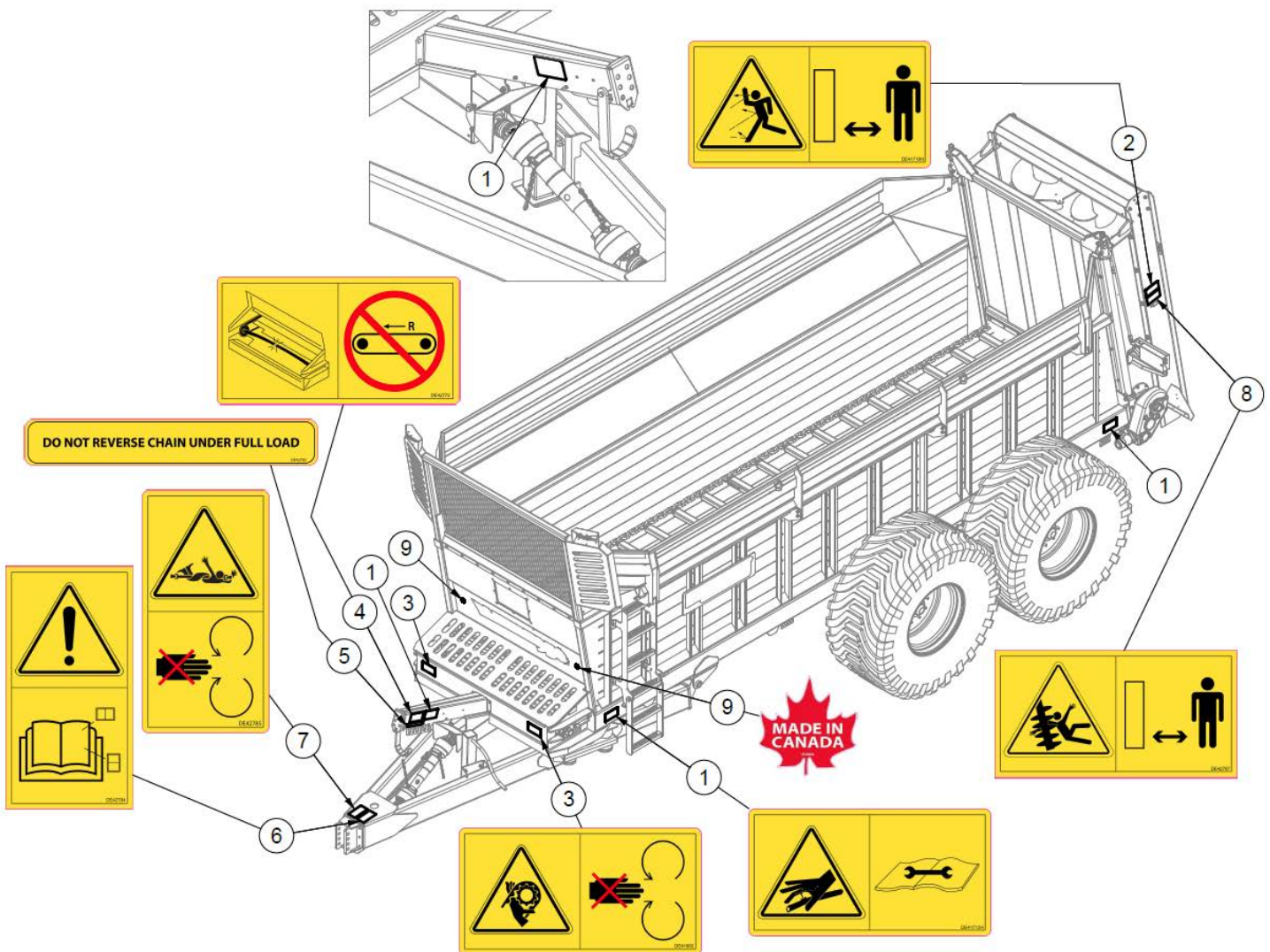
Item: I Part No: DE42772
Reversing apron chain while spreader is fully loaded will cause front apron shaft breakage.



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



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.

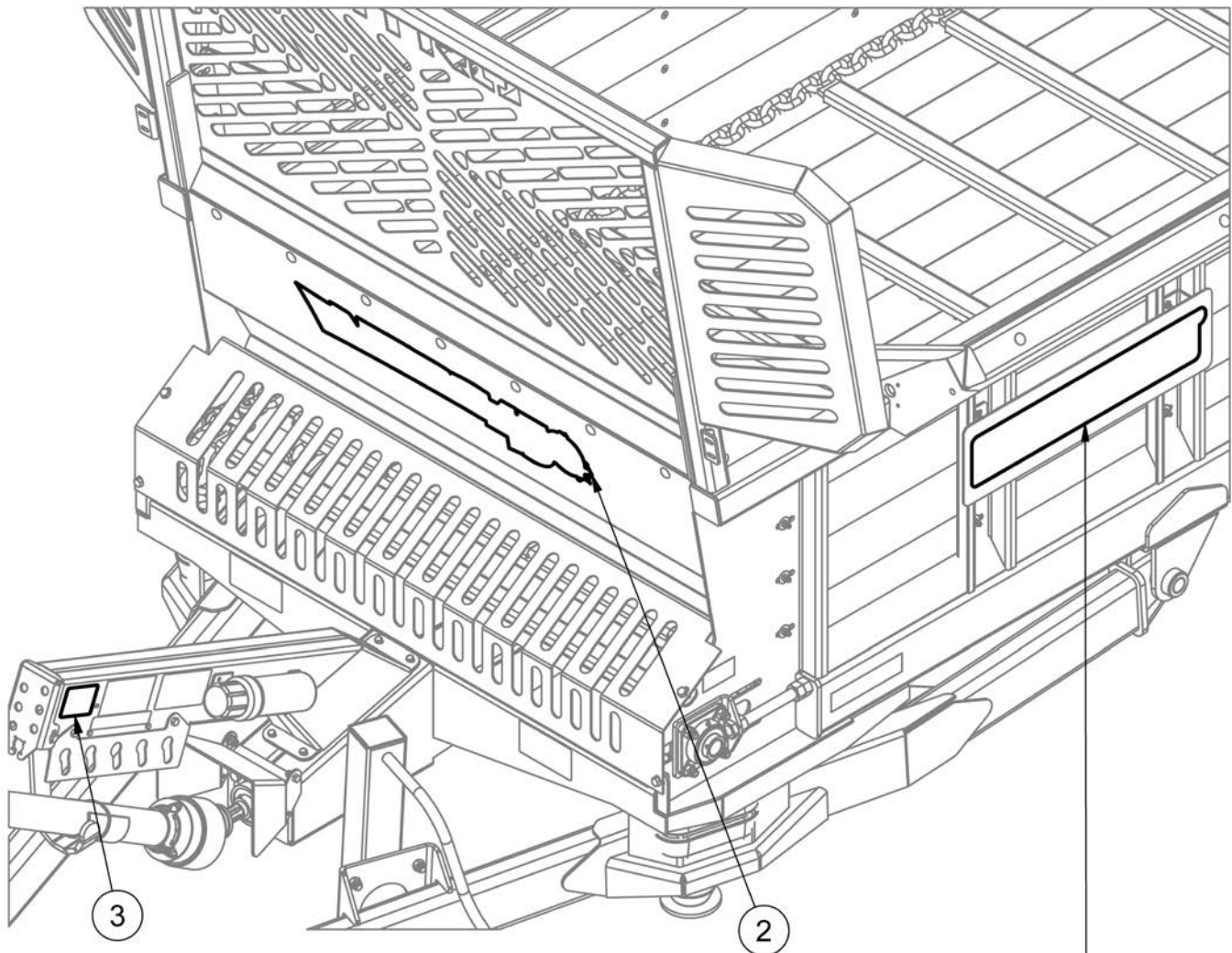


Item 9: DECANADA

Manufacturer's country of origin.



Model Decal Locations



NITRO 450

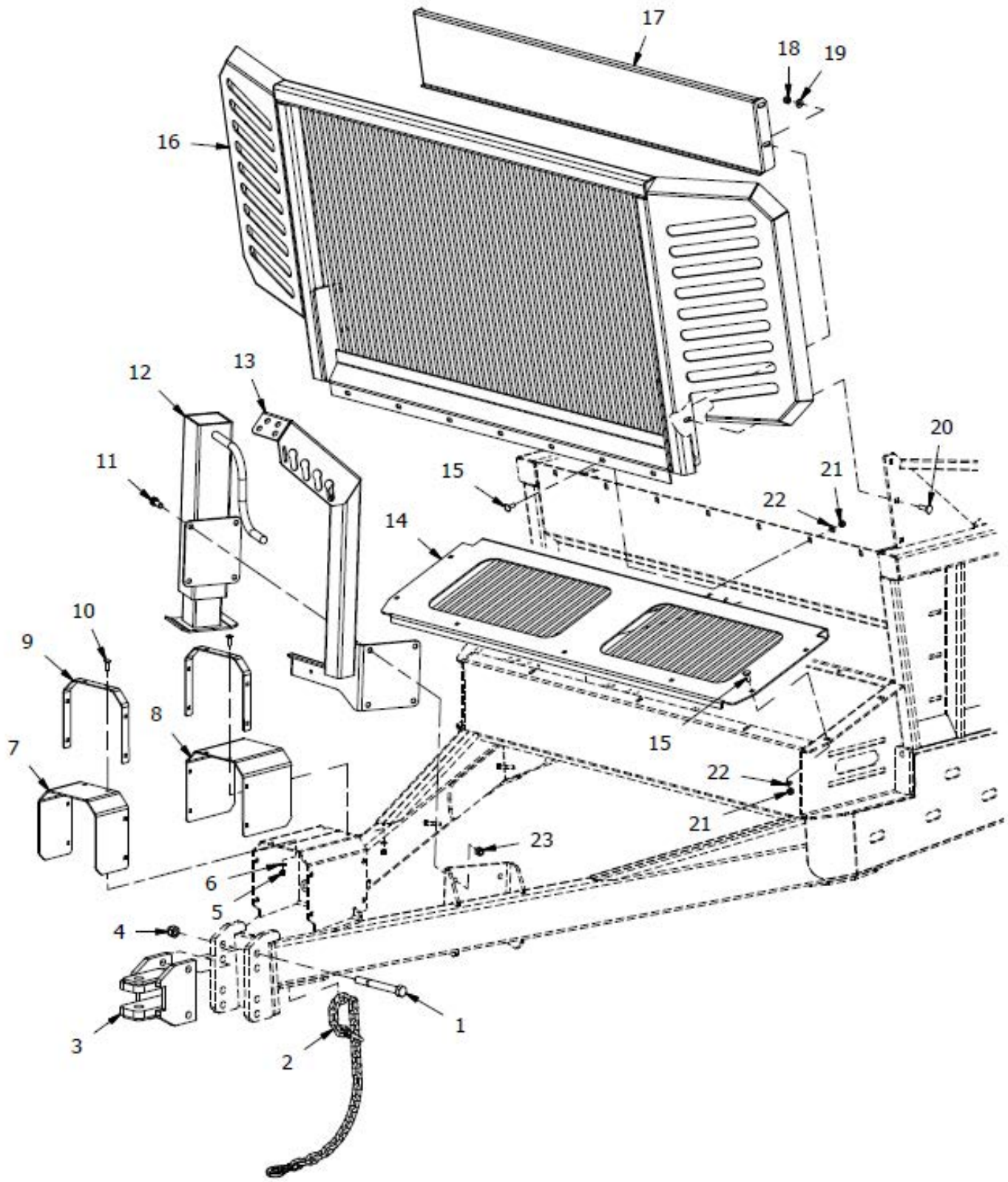
TUBE•LINE™

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	DE30837	Tubeline Decal 7.25" x 30"
2	1	DE31523	Nitro 450 Model Decal
3	1	DE50038	450 QR Code Decal

Section 2 - Parts Breakdowns & Lists

Illustrations may differ slightly from actual machine.

Front Components - Up to SN 15NS101

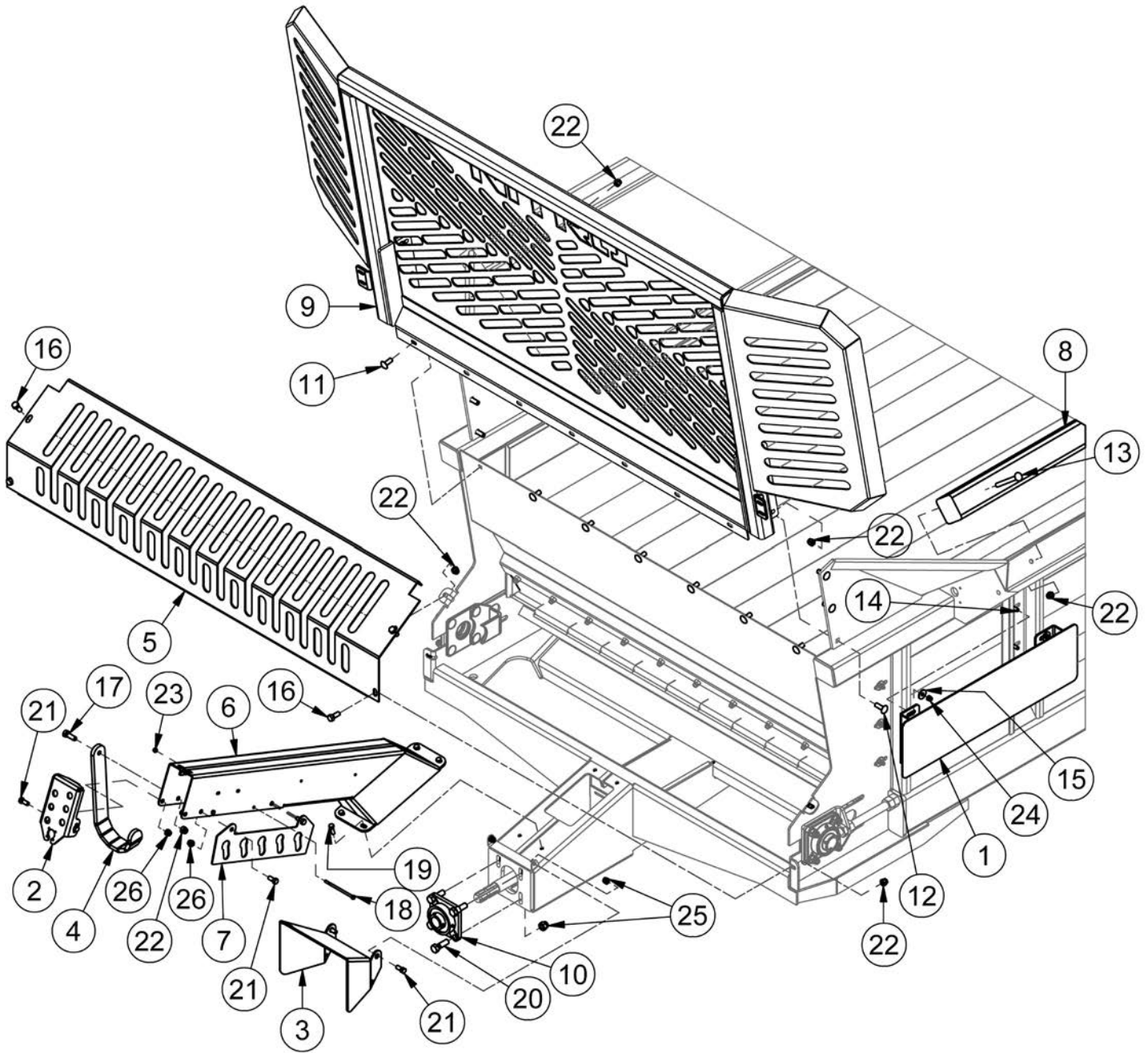


Front Components - Up to SN 15NS101

**Purchase two 4"x4"x16' pressure treated posts from your local hardware store and trim as needed.*

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	HB 1-8X8.0 Z5	Hex Bolt 1"-8 x 8" Grade 5 Zinc Plated Hex Cap Screw N.C
2	1	400-605	Safety Chain
3	1	30826	Hitch Base
	1	30825	Clevis
	1	30884	Hitch Cap Screw
	1	30669	Hitch Locknut
4	2	LN 1.0 N	Locknuts - 1-8 Zinc Plated Nylon Insert
5	12	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
6	8	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS (2984)
7	1	700-047	Rubber PTO Shield
8	1	600-819	Rubber PTO Shield
9	2	700-048	Front Shield Hold-down
10	12	CB 3/8-16X1.1/4 Z5	Carriage Bolt - 3/8"-16 x 1-1/4" Zinc Finish SAE J429 Gr 5 Round Head
11	4	HB 5/8-11X2.0 Z5	Hex Bolt 5/8-11 x 2 Grade 5 Zinc Plated Hex Cap Screw NC
12	1	30850	12000 lbs Jack
13	1	450-129	Hose Suspension Arm
14	1	450-122	Front Apron Drive Cover
15	14	CB 7/16-14X1.1/4Z5	Carriage Bolt - 7/16-14 x 1 1/4" Grade 5 Zinc
16	1	600-316	Stone Guard Shield
17	1	450-413	Optional Stone Guard Cover
18	6	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
19	6	FW 1/2	Flatwasher - 1/2" Zinc Plated USS (1096)
20	6	CB 1/2-13X1.3/4 Z5	Carriage Bolt Zinc
21	14	LN 7/16	Center Locknuts - 7/16-14 Top Lock Nut
22	14	FW 7/16	Flatwasher - 7/16" Zinc Plated USS
23	4	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut

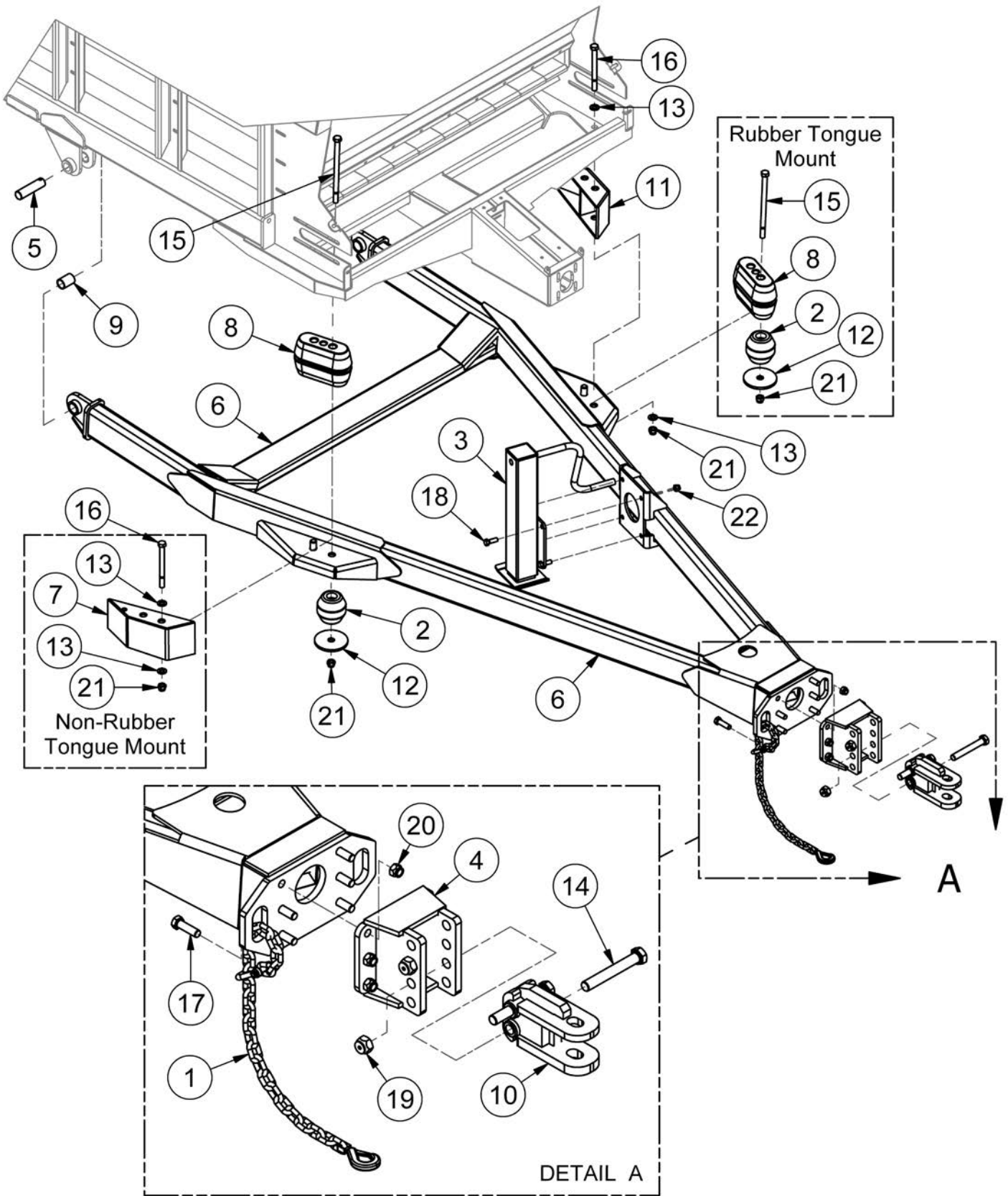
Front Components - SN 15NS102 to Current



Front Components - SN 15NS102 to Current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	30813	WELDMENT
2	1	35425	Hose Mount
3	1	35430	Shield Mount
4	1	35754	PTO Holder
5	1	39770	Front Shield
6	1	39776	Hose Mount
7	1	40257	Hose Hanger
8	2	450-372	PT 4X4X144
9	1	600-316	Shield Stone Guard
10	1	BEA UCF208-24-1.5	1.5" Flange Bearing
11	7	CB1/2-13X1.25CZ5	Carriage Bolt - 1/2-13 x 1 1/4" Grade 5 Zinc
12	6	CB1/2-13X1.5CZ5	Carriage Bolt - 1/2-13 x 1 1/2" Grade 5 Zinc
13	12	CB1/2-13X5CZ5	Carriage Bolt - 1/2-13 x 5" Grade 5 Zinc
14	8	FHSCS3/8-16X1.75	Hex Bolt - 3/8"-16 x 1 3/4" Flat Socket Cap Screw
15	8	FW 3/8	Flatwasher - 3/8" Zinc Plated USS
16	4	HB1/2-13X1.25Z5	Hex Bolt 1/2-13x1 1/4 Grade 5 Zinc Plated Hex Cap Screw
17	1	HB1/2-13X1.5Z5	Hex Bolt 1/2-13x1 1/2 Grade 5 Zinc Plated Hex Cap Screw
18	2	HB1/4-20X5Z5	Hex Bolt 1/4-20x5 Grade 5 Zinc Plated Hex Cap Screw
19	4	HB3/8-16X1.25Z5	Hex Bolt 3/8-16x1 1/4 Grade 5 Zinc Plated Hex Cap Screw
20	4	HB5/8-11X2Z5	Hex Bolt 5/8-11x2 Grade 5 Zinc Plated Hex Cap Screw
21	6	HB7/16-14X1Z5	Hex Bolt 7/16-14x1 Grade 5 Zinc Plated Hex Cap Screw
22	30	LN1/2-13NCZ5	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut
23	2	LN1/4-20NCZ5	LN 1/4-20 Zinc Plated Nylon Insert Lock Nut
24	12	LN3/8-16NCZ5	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut
25	4	LN5/8-11NCZ5	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut
26	6	LN7/16-14NCZ5	LN 7/16-14 Zinc Plated Nylon Insert Lock Nut

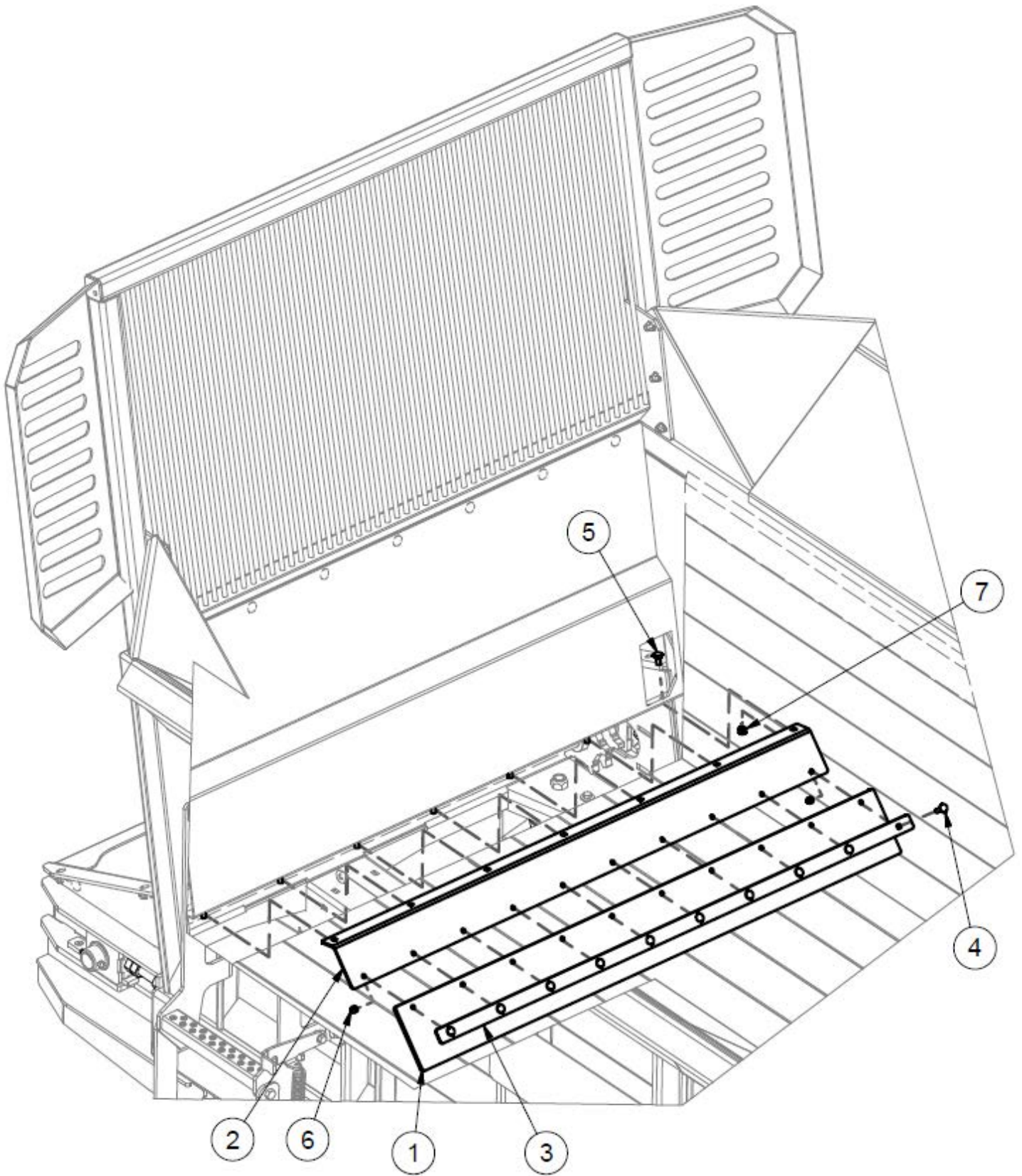
Tongue - SN 15NS102 to Current



Tongue - SN 15NS102 to Current

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	1	25262	Safety Chain 20000 # 60"	
2	2	30823	Small Timbren Bushing	Optional
3	1	30850	Implement Jack - 15" - 12000# Manure Spreaders	
4	1	35451	Pull Plate	
5	2	36811	Tongue Pivot Pin	
6	1	36830	Spring Tongue	
7	1	36837	Right Suspension Block	Standard
8	2	36949	Timbren Suspension Bushing	Optional
9	2	37845	Polygon 1.75 OD x1.52 ID x2.38 LG	
10	1	40471	Clevis Hitch Weldment	Pg.3-2 for Hitch Options
11	1	40869	Left Suspension Block	Standard
12	2	700-473	Timbren Pull Washer	Optional
13	4	FW 3/4	Flatwasher - 3/4" Zinc Plated USS	
14	2	HB1-14X7YZ8	Hex Bolt 1-14x7 Grade 8 Zinc Hex Cap Screw	
15	2	HB3/4-10X13Z5	Hex Bolt 3/4-10x13 Grade 5 Zinc Plated Hex Cap Screw	Optional
16	2	HB3/4-10X8.5Z5	Hex Bolt 3/4-10x8 1/2 Grade 5 Zinc Plated Hex Cap Screw	
17	6	HB3/4-16X2.5YZ8	Hex Bolt 3/4-16x2 1/2 Grade 8 Zinc Hex Cap Screw	
18	4	HB5/8-11X1.75Z5	Hex Bolt 5/8-11x1 3/4 Grade 5 Zinc Plated Hex Cap Screw	
19	2	LN 1 F	Center Locknuts (1-14) 2-Way Fine Thread	
20	8	LN 3/4 F	Center Locknuts (3/4-16) 2-Way Fine Thread	
21	4	LN3/4-10NCZ5	LN 3/4-10 Zinc Plated Nylon Insert Lock Nut	Optional
22	4	LN5/8-11NCZ5	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut	

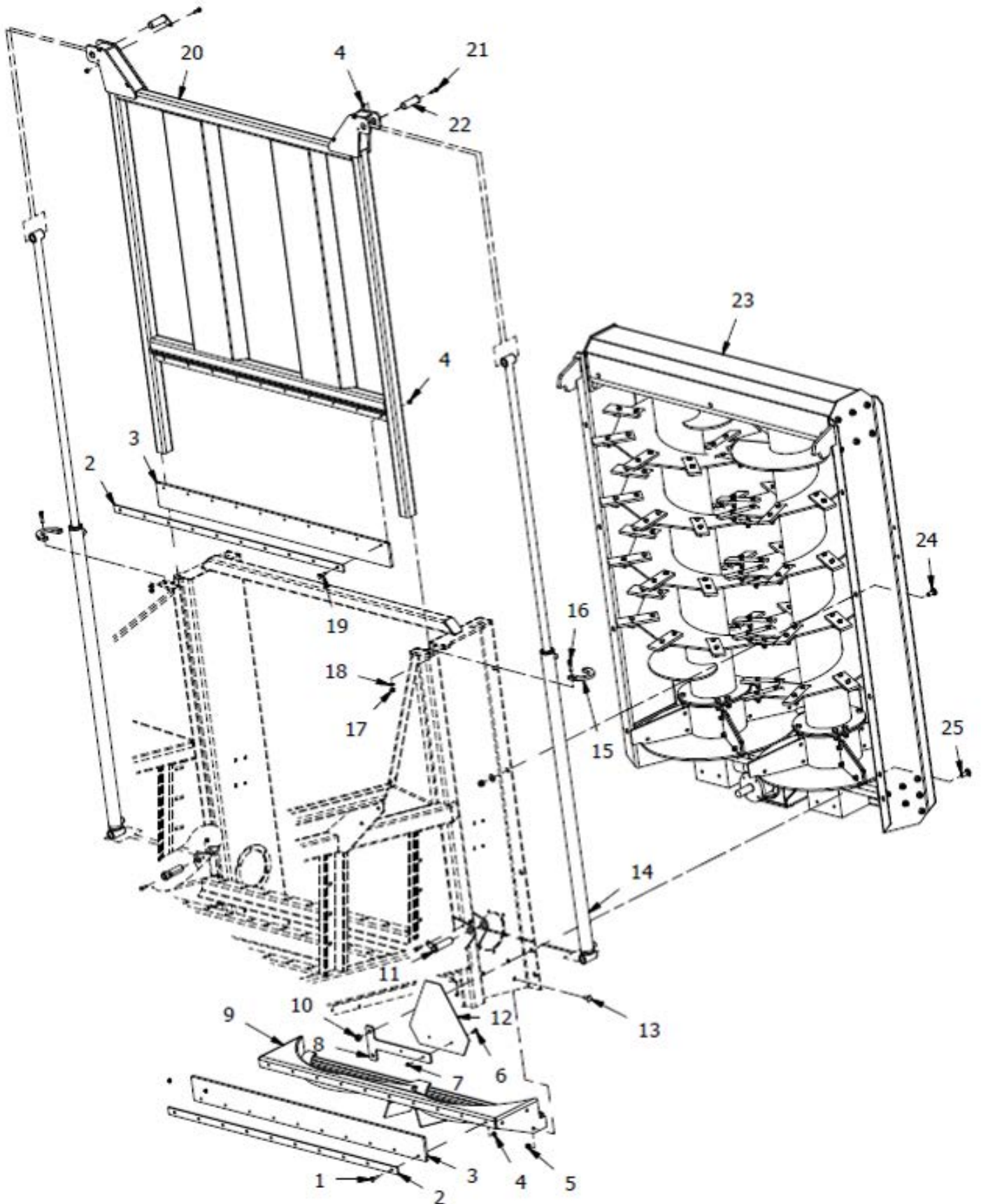
Front Scraper



Front Scraper

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	450-441	Rubber Seal
2	1	600-769	Rubber Seal Mount
3	1	600-790	Rubber Hold Down
4	10	CB 3/8-16X1.1/2 Z5	Carriage Bolt - 3/8-16 x 1 1/2" Grade 5 Zinc
5	7	CB 7/16-14X1.0 Z5	Carriage Bolt - 7/16-14 x 1" Grade 5 Zinc
6	10	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
7	7	LN 7/16 N	Center Locknuts - 7/16-14 Top Lock Nut

Rear Components

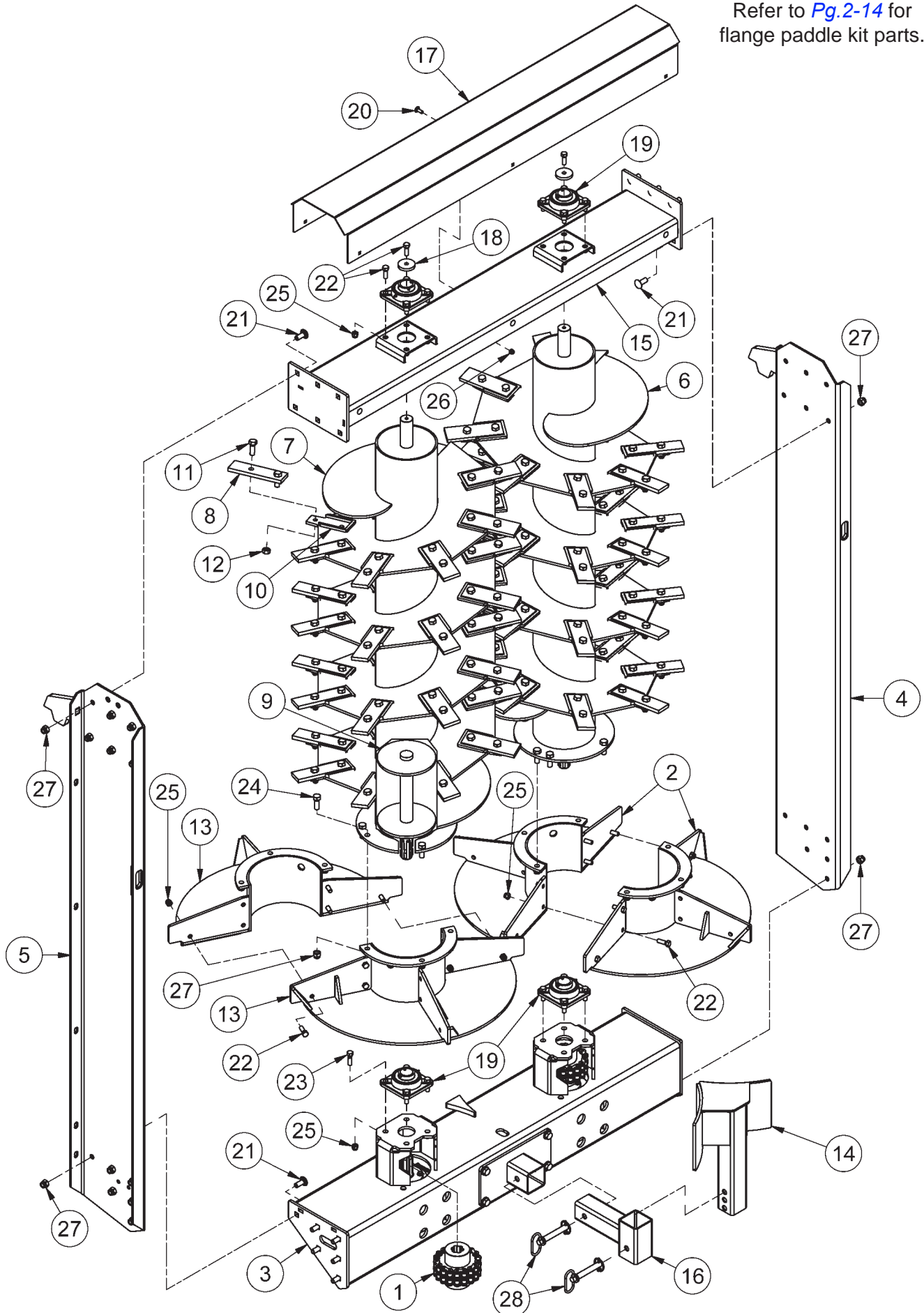


Rear Components

ITEM	QTY	PART NUMBER	DESCRIPTION
1	10	CB 3/8-16X1.1/2 Z5	Carriage Bolt - 3/8-16 x 1 1/2" Grade 5 Zinc
2	2	600-790	Rubber Hold-down
3	2	450-441	Rubber Seal
4	24	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
5	6	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
6	2	HB 5/16-18X 3/4 Z5	Hex Bolt - 5/16"-18 x 3/4" Grade 5 Zinc Plated Hex Cap Screw NC
7	2	LN 5/16 N	Locknut - 5/16-18 Type NE Zinc Plated Nylon Insert
8	1	700-108	SMV Mount
9	1	450-130	Spinner Shroud
10	9	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut
11	2	700-619	Pin
12	1	DESMV	Slow Moving Vehicle Sign
13	6	CB 1/2-13X1.1/4 Z5	Carriage Bolt Zinc
14	2	31328	Hydraulic Cylinder
15	2	700-142	Endgate Cyl. Support Plate
16	4	HB 7/16-14X1.3/4 Z5	Hex Bolt Plated Gr. 5 N.C
17	4	LN 7/16	Center Locknuts - 7/16-14 Top Lock Nut
18	4	FW 7/16	Flatwasher - 7/16" Zinc Plated USS (1620)
19	10	CB 3/8-16X1.3/4 Z5	Carriage Bolt - 3/8"-16 x 1-3/4" Zinc Finish SAE J429 Gr 5 Round Head
20	1	450-126	Endgate
21	4	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
22	2	400-601	Pin
23	1	450-106	Complete Beater
24	7	CB 5/8-11X1.1/2 Z5	Carriage Bolt - 5/8-11 x 1-1/2" Grade 5 Zinc
25	2	CB 5/8-11X1.3/4 Z5	Carriage Bolt - 5/8-11 x 1-3/4" Grade 5 Zinc

Beaters - Up to SN 21NS105

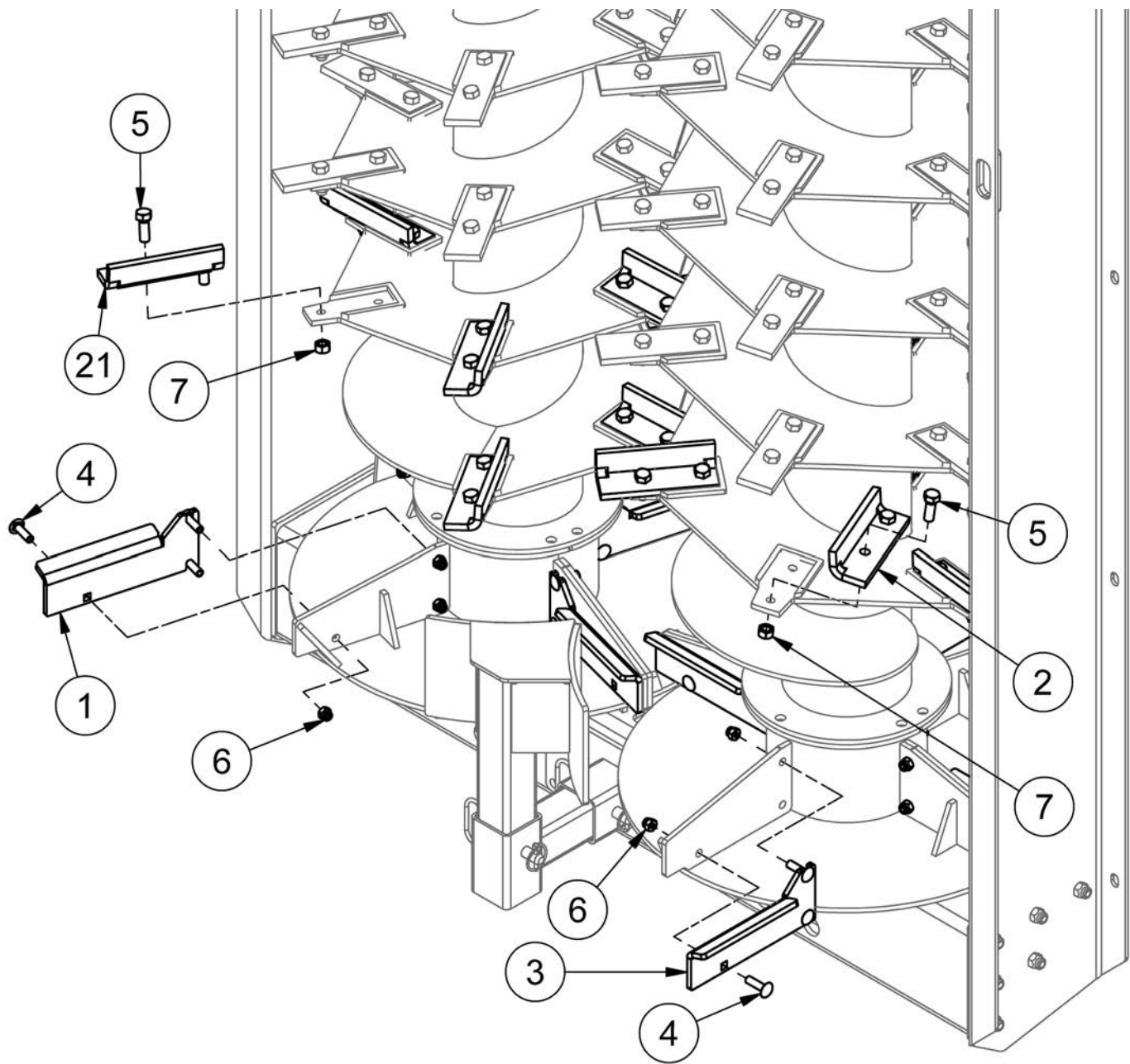
Refer to [Pg.2-14](#) for flange paddle kit parts.



Beaters - Up to SN 21NS105

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	2		Refer to Pg.2-15 for Beater - Gearbox Connections	
2	2	36966	450/600 Right Beater Spinner	
3	1	40684	Rear Drive Assembly T290A	See Pg.2-18
4	1	450-107	Side Frame Beater Right	
5	1	450-108	Side Frame Beater Left	
6	1	450-111	Right Beater	Items 8-12
7	1	450-112	Left Beater	Items 8-12
8	32	400-438	Beater Paddle	Qty=1 Beater
9	1	45098	Lower Shaft Assembly (375-525)	Qty=1 Beater
10	32	47476	Paddle Retainer	Qty=1 Beater
11	64	HB5/8-11X1.75Z5	Hex Bolt 5/8-11x1 3/4 Grade 5 Zinc Plated Hex Cap Screw	Qty=1 Beater
12	64	LN5/8-11TCZ5	LN5/8-11 Gr.C Zinc Top Lock Nut	Qty=1 Beater
13	2	450-116	450/600 Left Beater Spinner	
14	1	450-131	Beater Deflector	
15	1	450-133	Cross Beam Beater Top	
16	1	450-134	Deflector Mount Insert	
17	1	450-405	Top Beater Cover	
18	2	700-157	Load Bearing Washer	
19	4	BEA UCF209-28R3	Flange Bearing, Triple Seal, Ductile Iron	
20	6	CB3/8-16X1CZ5	Carriage Bolt - 3/8-16 x 1" Grade 5 Zinc	
21	24	CB5/8-11X1.5CZ5	Carriage Bolt - 5/8-11 x 1 1/2" Grade 5 Zinc	
22	22	HB1/2-13X1.5Z5	Hex Bolt 1/2-13x1 1/2 Grade 5 Zinc Plated Hex Cap Screw	
23	8	HB1/2-13X1.75Z5	Hex Bolt 1/2-13x1 3/4 Grade 5 Zinc Plated Hex Cap Screw	
24	12	HB5/8-11X1.75Z5	Hex Bolt 5/8-11x1 3/4 Grade 5 Zinc Plated Hex Cap Screw	
25	28	LN1/2-13NCZ5	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut	
26	6	LN3/8-16NCZ5	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut	
27	36	LN5/8-11NCZ5	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut	
28	2	TL550-100-050	Push Off Pin	

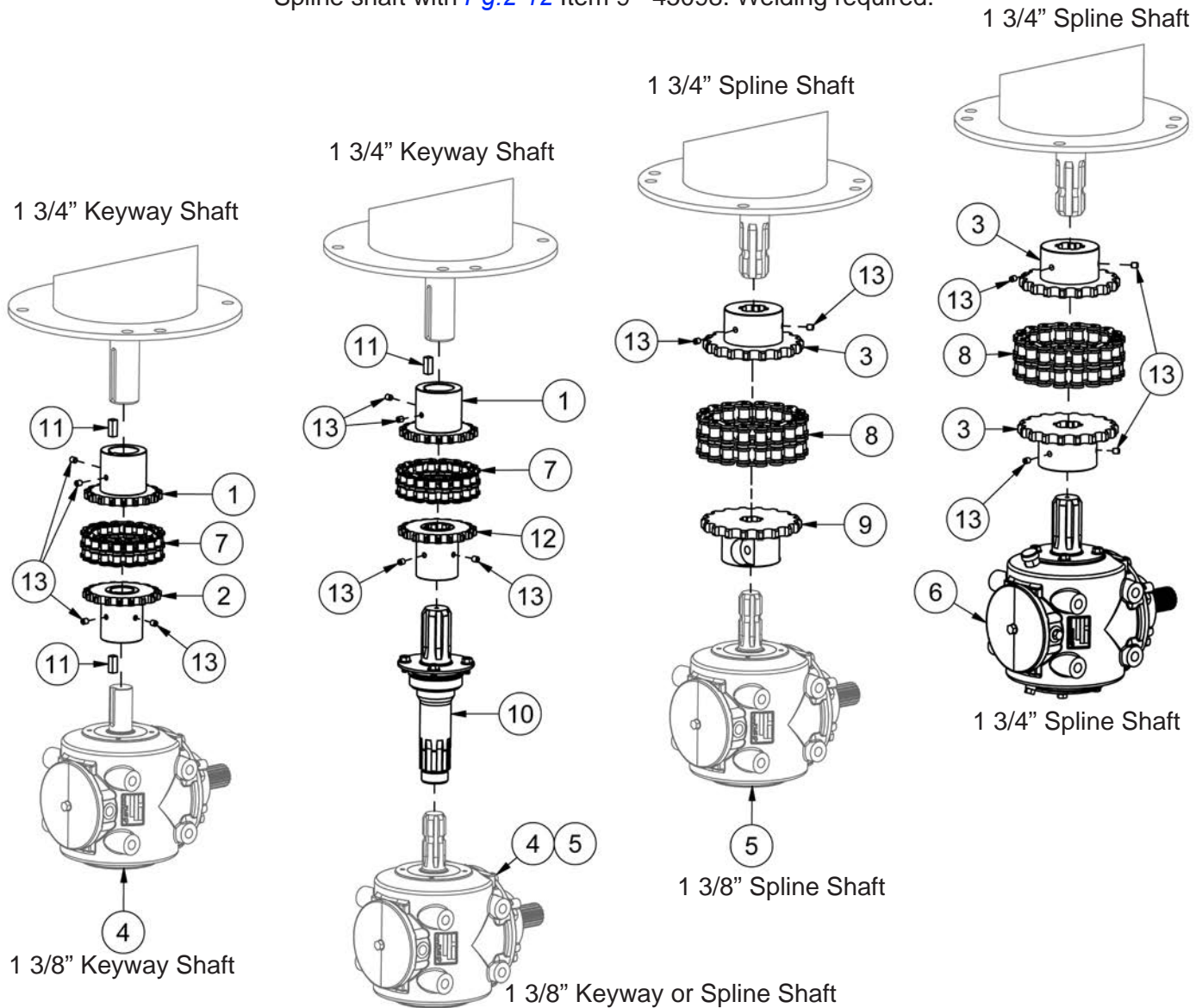
Optional Flange Paddle Kit - 41504 - Up to SN 21NS105



ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	33321	Cupped Paddles - Left
21	8	36518	Beater Paddle (Cupped) Left
2	8	37718	Beater Paddle (Cupped) Right
3	4	37719	Cupped Paddles - Right
4	24	CB1/2-13X1.75CZ5	Carriage Bolt - 1/2-13 x 1 3/4" Grade 5 Zinc
5	32	HB5/8-11X1.75Z5	Hex Bolt 5/8-11x1 3/4 Grade 5 Zinc Plated Hex Cap Screw
6	24	LN1/2-13NCZ5	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut
7	32	LN5/8-11TCZ5	LN5/8-11 Gr.C Zinc Top Lock Nut

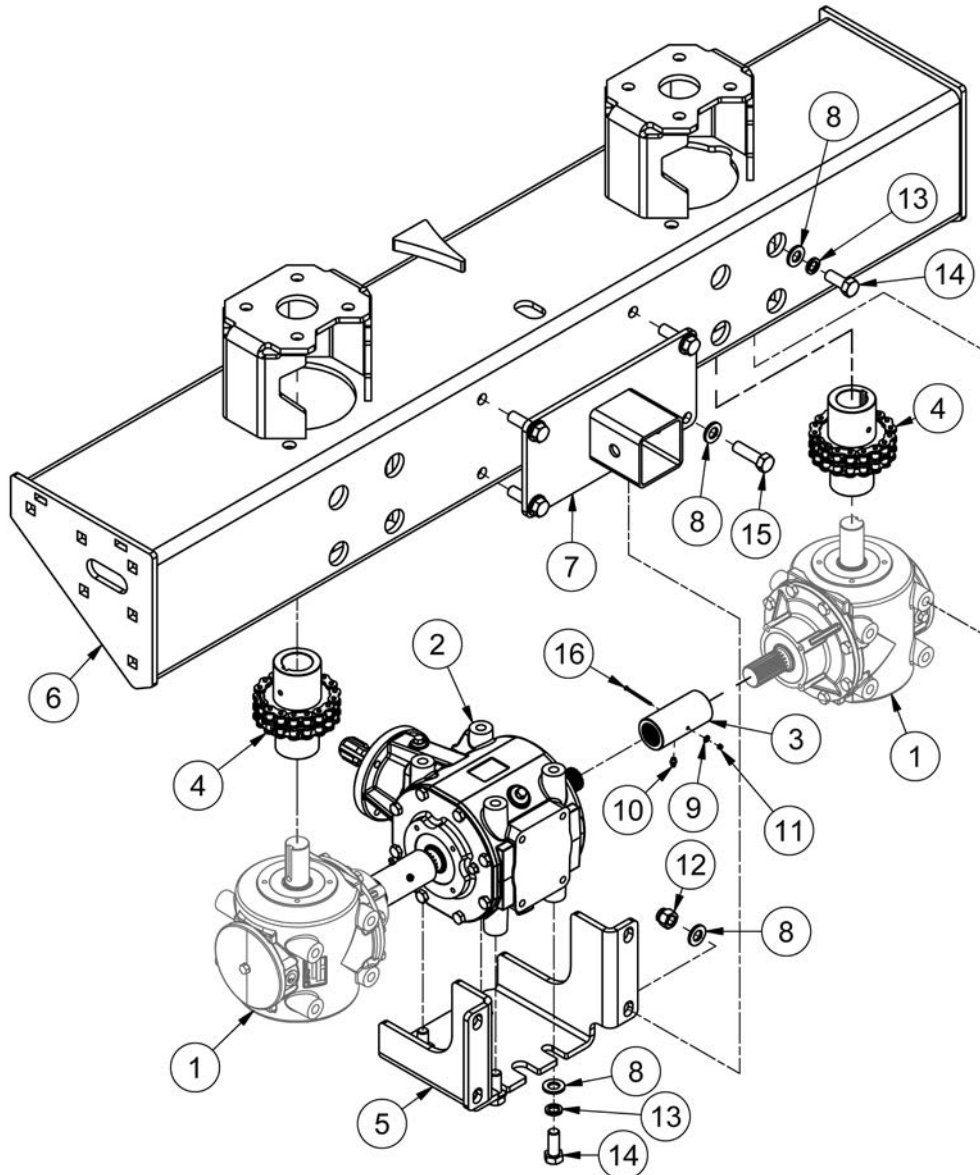
Beater to Gearbox Connections

NOTE: 1 3/4" keywayed beaters can be updated to 1 3/4" Spline shaft with [Pg.2-12](#) Item 9 - 45098. Welding required.



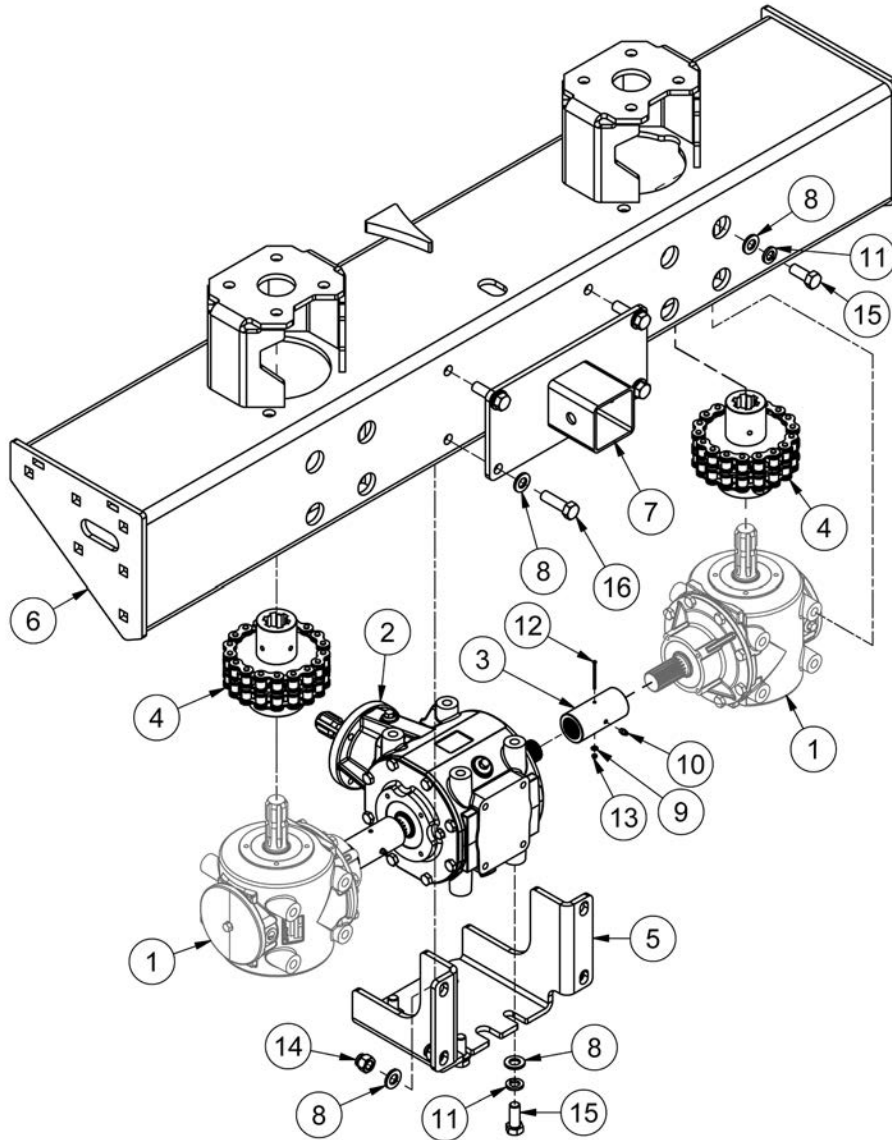
ITEM	PART NUMBER	DESCRIPTION	NOTE
1	400-905	Sprocket Weldment (1.75 keyed)#60	
2	402-906	Sprocket Weldment for Nitro Spreader (1.375 keyed)#60	
3	700-645	Sprocket 80T18-1.75 X 6 Spline	
4	30847	Gear Box Outside 1000 PTO w/ Keyway Output Shaft	Obsolete
5	30847-1	Gear Box (Outside) 1000 PTO w/ 540 - 1 3/8 Spline Output Shaft	Obsolete
6	30847-2	Gear Box 1000 PTO - 540 1 3/4 Spline Output	Brkdwn Pg.6-4
7	31515	connector - sprocket	
8	31518	#80 Coupling Chain	
9	37839	Sprocket Asm 80B18 w/ 1.38X6 Spline Hub	
10	45442	1 3/4 Shaft Kit Upgrade for T278	Replaces 1 3/8" shaft
11	KS39999	Keystock .375 X .375 X 1	
12	SPR60B18-1.75 X 6	Welded Sprocket 60B18-1.75 x 6 Spline	
13	SS5/16-18CX0.375CP	Allan Head Set Screw, 5/16-18 x 3/8	

Beater Gearbox - 1 3/8" Keyway - Up to SN 15NS116



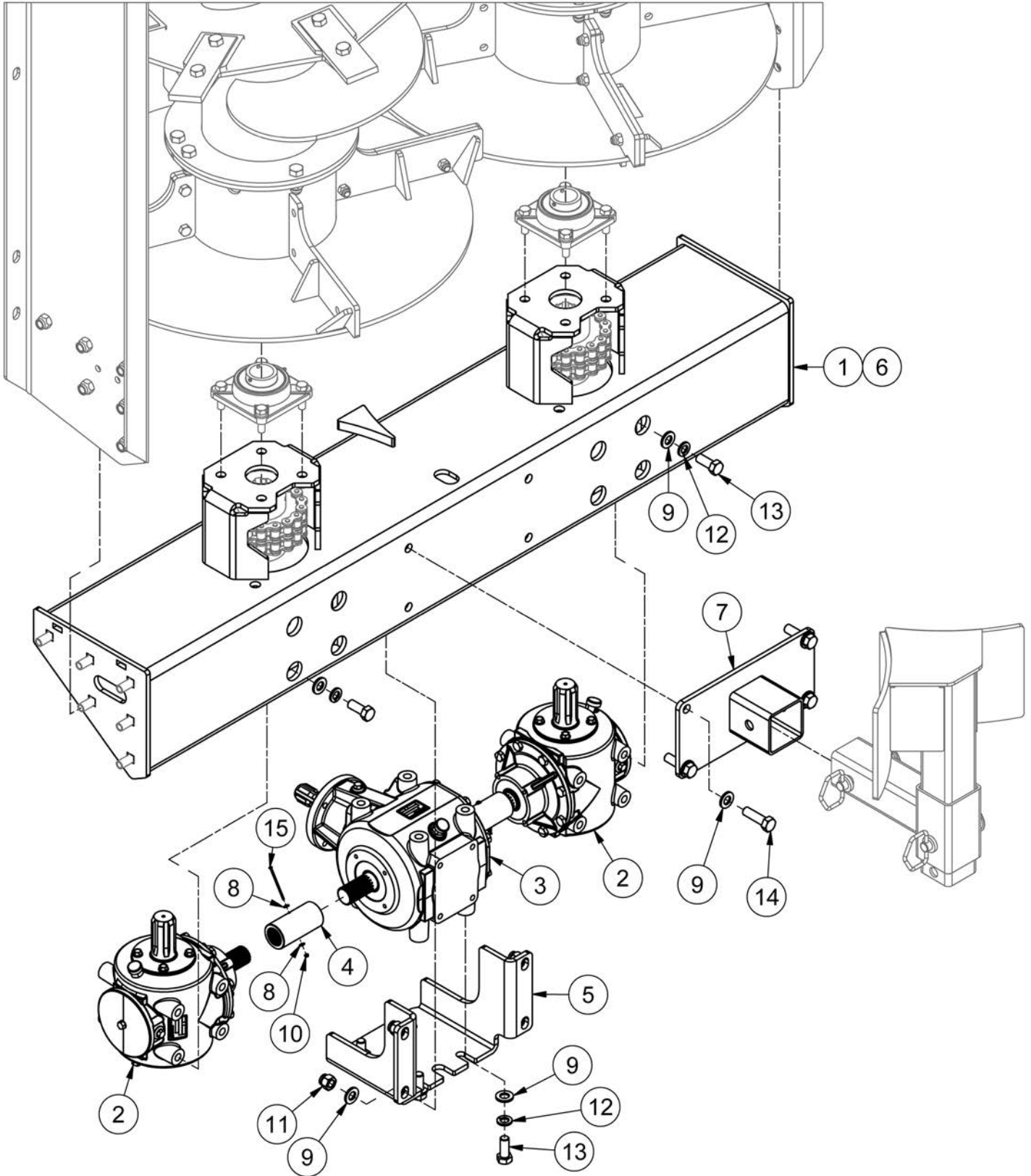
ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	2	30847	Gear Box Outside 1000 PTO w/ Keyway Output Shaft	Ref. to Pg.2-15
2	1	30848	Gear Box - Center - Spreaders	Ref. to Pg.6-8
3	2	30849	Sleeve- Gear box Spreaders- V450-V600	
4	2		Refer to Pg.2-15 for Beater - Gearbox Connections	
5	1	403-912	Gearbox Mount Bracket	
6	1	450-115	Bottom Cross Beam	
7	1	450-139	Deflector Mount Socket	
8	20	FW16MM	Metric Flat Washer	
9	2	FW4MM	Sealing Bonded Washer #4	
10	2	GR 1/4 X 28	Grease Fitting 1/4-28 Strght-Standrd Zerk	
11	2	LN#4-40NCZ5	LN 4-40 Zinc Plated Nylon Insert Lock Nut	
12	4	LN16-2CZ5	Locknut - M16-2 Zinc Plated Nylon Insert Lock Nut	
13	12	LWM16	Lockwasher - M16	
14	12	M16X40X2	Metric Bolt	
15	4	M16X55X2	Metric Bolt	
16	2	MS #4X40X2	Machine Screw - (Inch)	

Beater Gearbox - 1 3/8" 6-Spline - SN 15NS117 to 16NS111



ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	2	30847-1	Gear Box (Outside) 1000 PTO w/ 540 - 1 3/8 Spline Output Shaft	Ref. to Pg.2-15
2	1	30848	Gear Box - Center - Spreaders	Ref. Pg.6-4
3	2	30849	Sleeve- Gear box Spreaders- V450-V600	
4	2		Refer to Pg.2-15 for Beater - Gearbox Connections	
5	1	403-912	Mounting Bracket- Gearbox	
6	1	450-115	Cross Beam Beater Bottom	
7	1	450-139	Deflector Mount Socket	
8	20	FWMM16	Flatwasher - M16 Black DIN6916 Struct.	
9	2	FWMM4	Sealing Bonded Washer #4	
10	2	GR 1/4 X 28	Grease Fitting 1/4-28 Strght-Standrd Zerk	
11	12	LW 16MM	Lockwasher Metric	
12	2	MS #4X40X2	Machine Screw - (Inch)	
13	2	LN#4-40NCZ5	LN 4-40 Zinc Plated Nylon Insert Lock Nut	
14	4	LNM16-2CZ5	Locknut - M16-2 Zinc Plated Nylon Insert Lock Nut	
15	12	M16X40X2	Metric Bolt	
16	4	M16X55X2	Metric Bolt	

Beater Gearbox - 1 3/4" 6-Spline - SN 16NS112 to Current

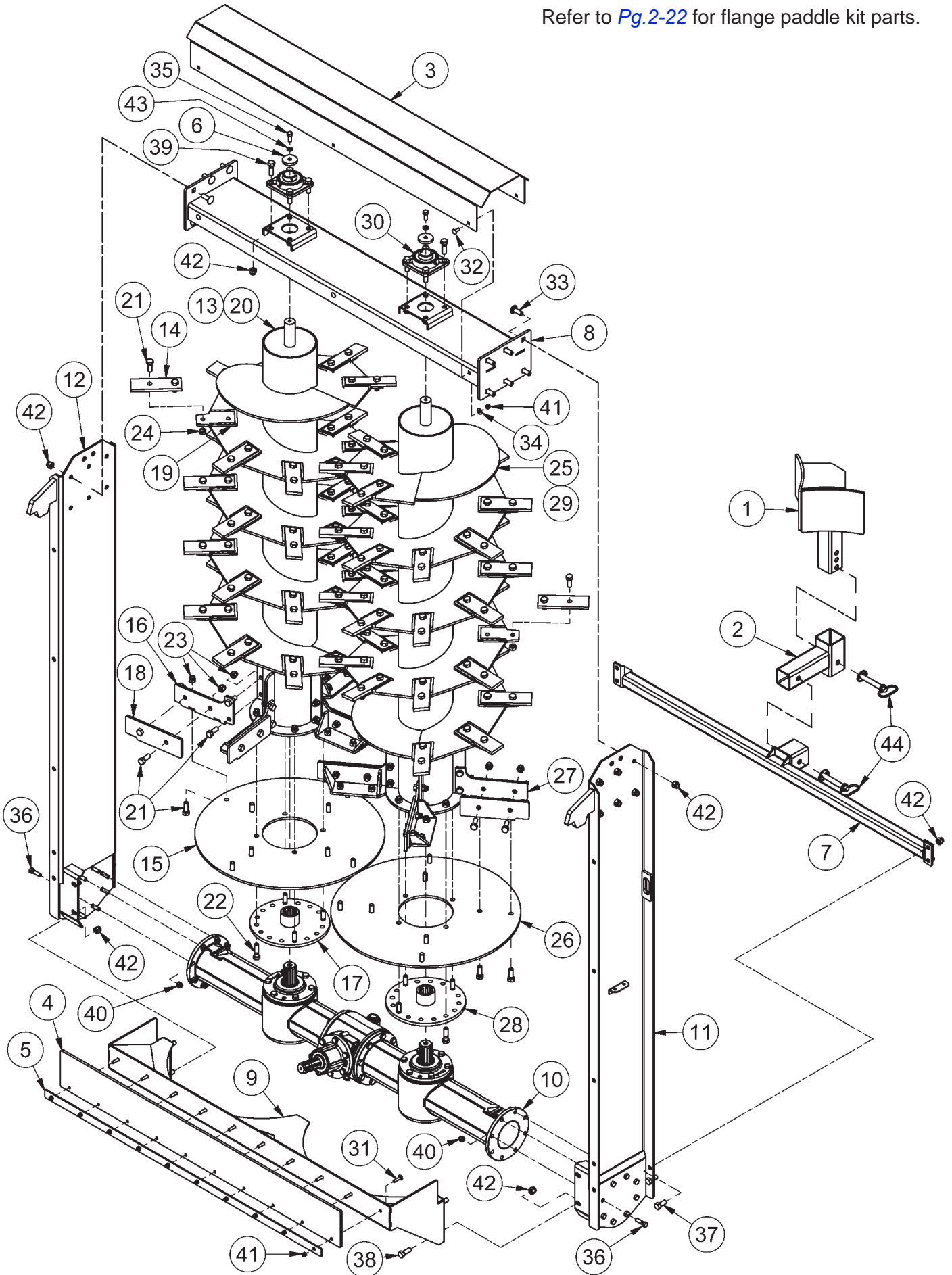


Beater Gearbox - 1 3/4" 6-Spline - NS 16NS112 to Current

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	1	40684	Rear Drive Assembly T290A	All Items
2	2	30847-2	Gear Box 1000 PTO - 540 1 3/4 Spline Output	See Pg.6-4
3	1	30848	Gear Box - Center - Spreaders	See Pg.6-6
4	2	30849	Sleeve - Gear Box Spreaders 1.38 x 18 Spline	
5	1	403-912	Mounting Bracket Gearbox	
6	1	450-115	Cross Beam Beater Bottom	
7	1	450-139	Deflector Mount Socket	
8	4	Bonded Washer - No.4		
9	20	FW16MM	Metric Flat Washer	
10	2	LN#4-40NCZ5	LN 4-40 Zinc Plated Nylon Insert Lock Nut	
11	4	LM16-2CZ5	Locknut - M16-2 Zinc Plated Nylon Insert Lock Nut	
12	12	LWM16	Lockwasher - M16	
13	12	M16X40X2	Metric Bolt	
14	4	M16X55X2	Metric Bolt	
15	2	MS #4X40X2.5	Machine Screw - (Inch)	

Beaters - 49270 - SN 22NS101-Current

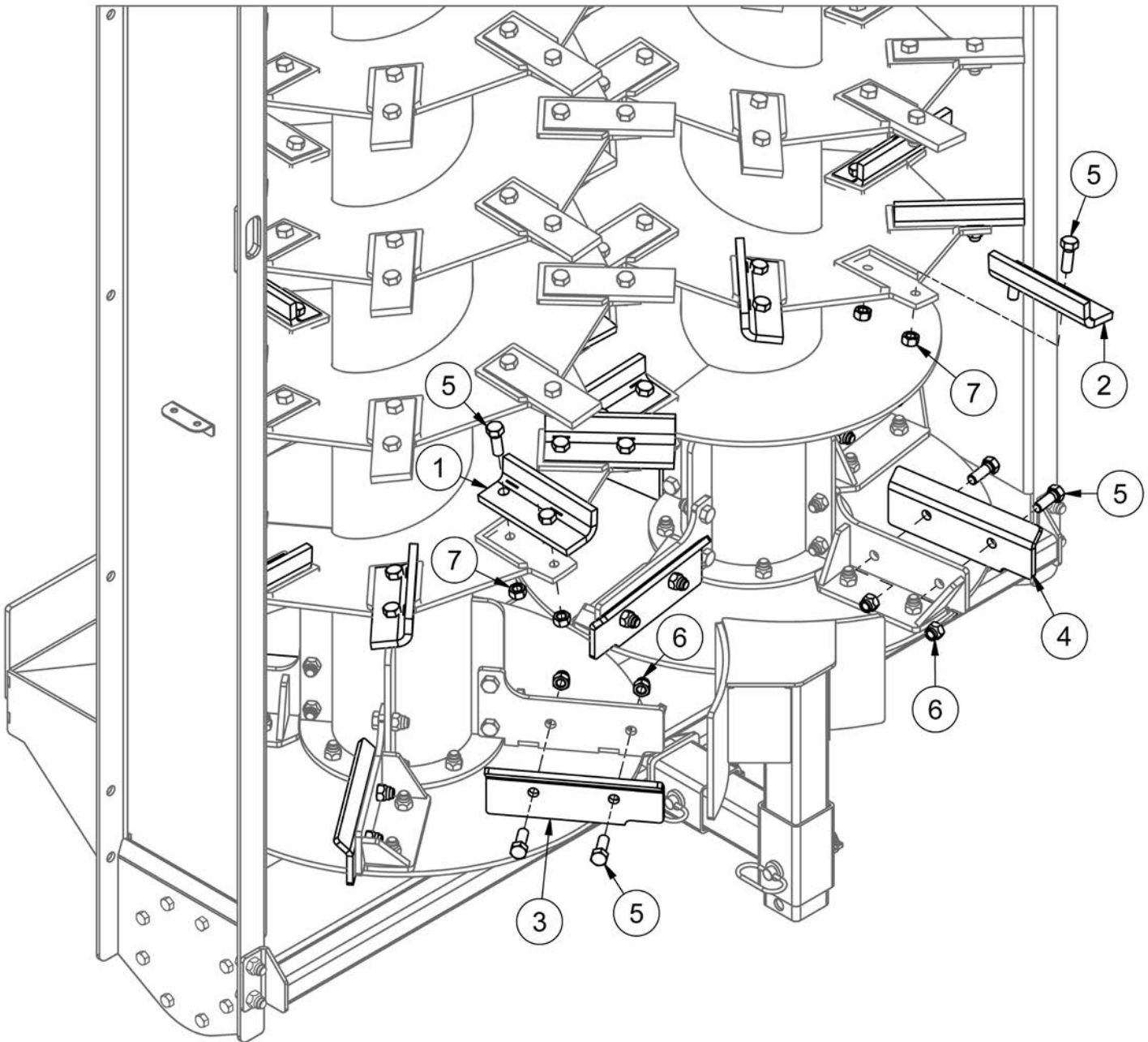
Refer to [Pg.2-22](#) for flange paddle kit parts.



Beaters - 49270 - SN 22NS101-Current

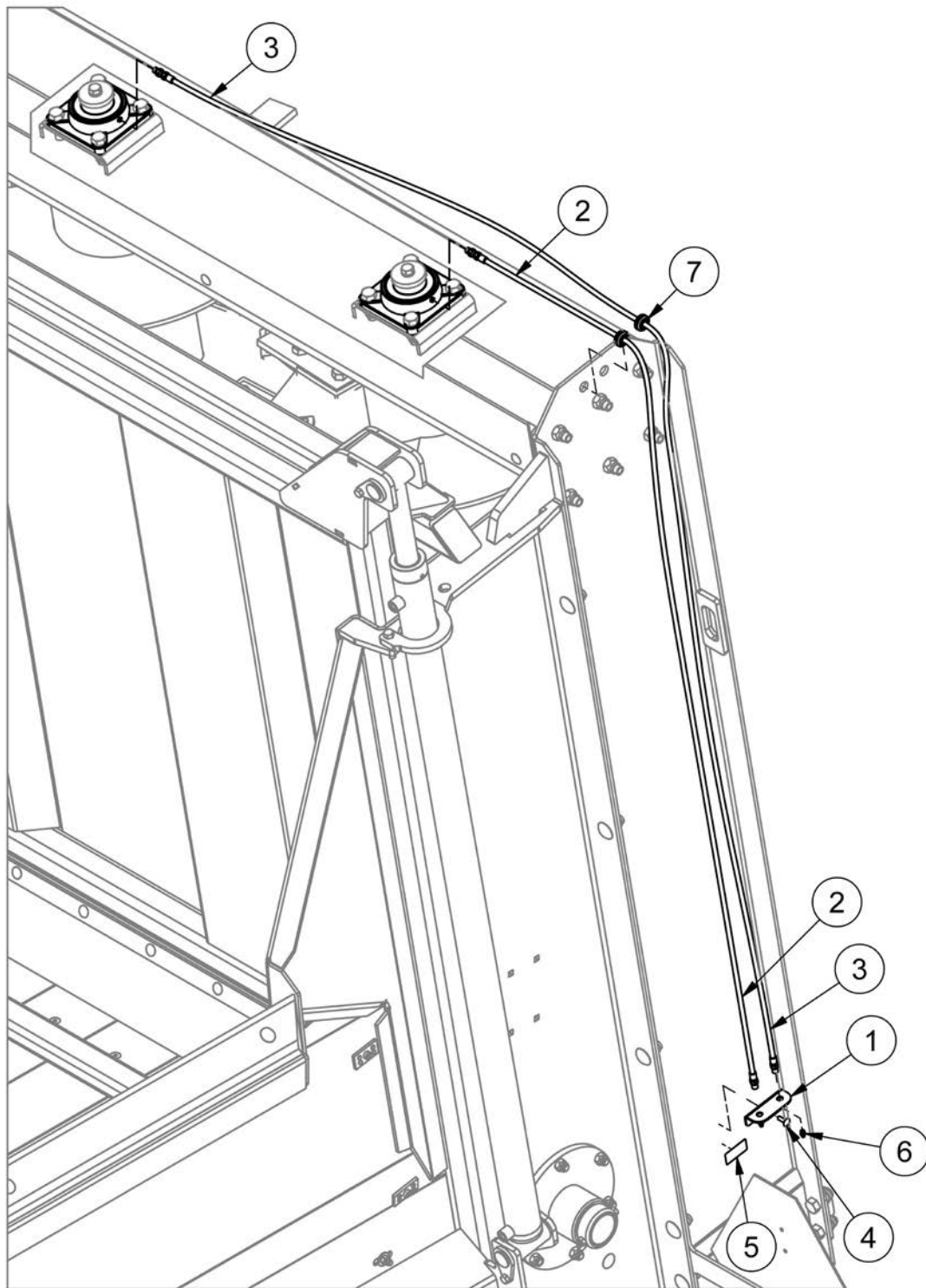
ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	1	450-131	Beater Deflector	
2	1	450-134	Deflector Mount Insert	
3	1	450-405	Top Beater Cover	
4	1	450-441	Rubber Seal	
5	1	600-790	Rubber Hold Down	
6	2	700-157	Load Bearing Washer	
7	1	42225	Receiver Assembly	
8	1	42226	Top Beater Crosser	
9	1	42227	Spinner Pan Asm	
10	1	49188	Gearbox	See Pg.6-8
11	1	49271	Left Side Beater Frame	
12	1	49273	Right Side Beater Frame	
13	1	49274	Nitro 450/575 RH Beater Assembly	Items 14-23
14	32	400-438	Beater Paddle	Qty/1 Beater
15	1	46924	375 Spinner Disc	
16	1	46927	Paddle Push Plate	
17	1	46932	375 Spline Hub	
18	4	46934	375 Spinner Paddle	Qty/1 Beater
19	32	47476	Paddle Retainer Plate	Qty/1 Beater
20	1	49277	450/575 Right Beater Weldment	
21	88	HB5/8-11X1.75Z5	Hex Bolt 5/8-11x1 3/4 Grade 5 Zinc Plated Hex Cap Screw	Qty/1 Beater
22	4	HB5/8-11X2.25Z5	Hex Bolt 5/8-11x2 1/4 Grade 5 Zinc Plated Hex Cap Screw	Qty/1 Beater
23	28	LN5/8-11NCZ5	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut	Qty/1 Beater
24	64	LN5/8-11TCZ5	LN5/8-11 Gr.C Zinc Top Lock Nut	Qty/1 Beater
25	1	49276	Left 450/575 Beater Assembly	Items 26-30
26	1	46924	375 Spinner Disc	
27	4	46930	375 Left Paddle	
28	1	46932	375 Spline Hub	
29	1	49278	Left 450/575 Beater Weldment	
30	2	BEA UCF209-28R3	Flange Bearing, Triple Seal, Ductile Iron	
31	10	CB3/8-16X1.5CZ5	Carriage Bolt - 3/8-16 x 1 1/2" Grade 5 Zinc	
32	6	CB3/8-16X1CZ5	Carriage Bolt - 3/8-16 x 1" Grade 5 Zinc	
33	12	CB5/8-11X1.75CZ5	Carriage Bolt - 5/8-11 x 1 3/4" Grade 5 Zinc	
34	6	FW 3/8	Flatwasher - 3/8" Zinc Plated USS	
35	2	HB1/2-13X1.25Z5	Hex Bolt 1/2-13x1 1/4 Grade 5 Zinc Plated Hex Cap Screw	
36	16	HB1/2-13X1.75Z5	Hex Bolt 1/2-13x1 3/4 Grade 5 Zinc Plated Hex Cap Screw	
37	4	HB5/8-11X1.5Z5	Hex Bolt 5/8-11x1 1/2 Grade 5 Zinc Plated Hex Cap Screw	
38	52	HB5/8-11X1.75Z5	Hex Bolt 5/8-11x1 3/4 Grade 5 Zinc Plated Hex Cap Screw	
39	8	HB5/8-11X2Z5	Hex Bolt 5/8-11x2 Grade 5 Zinc Plated Hex Cap Screw	
40	16	LN1/2-13NCZ5	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut	
41	16	LN3/8-16NCZ5	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut	
42	44	LN5/8-11NCZ5	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut	
43	2	LW 1/2	LW - 1/2" Zinc Plated Medium Split	
44	2	TL550-100-050	Push Off Pin	

Optional Flange Paddle Kit - 47553 - SN 22NS101



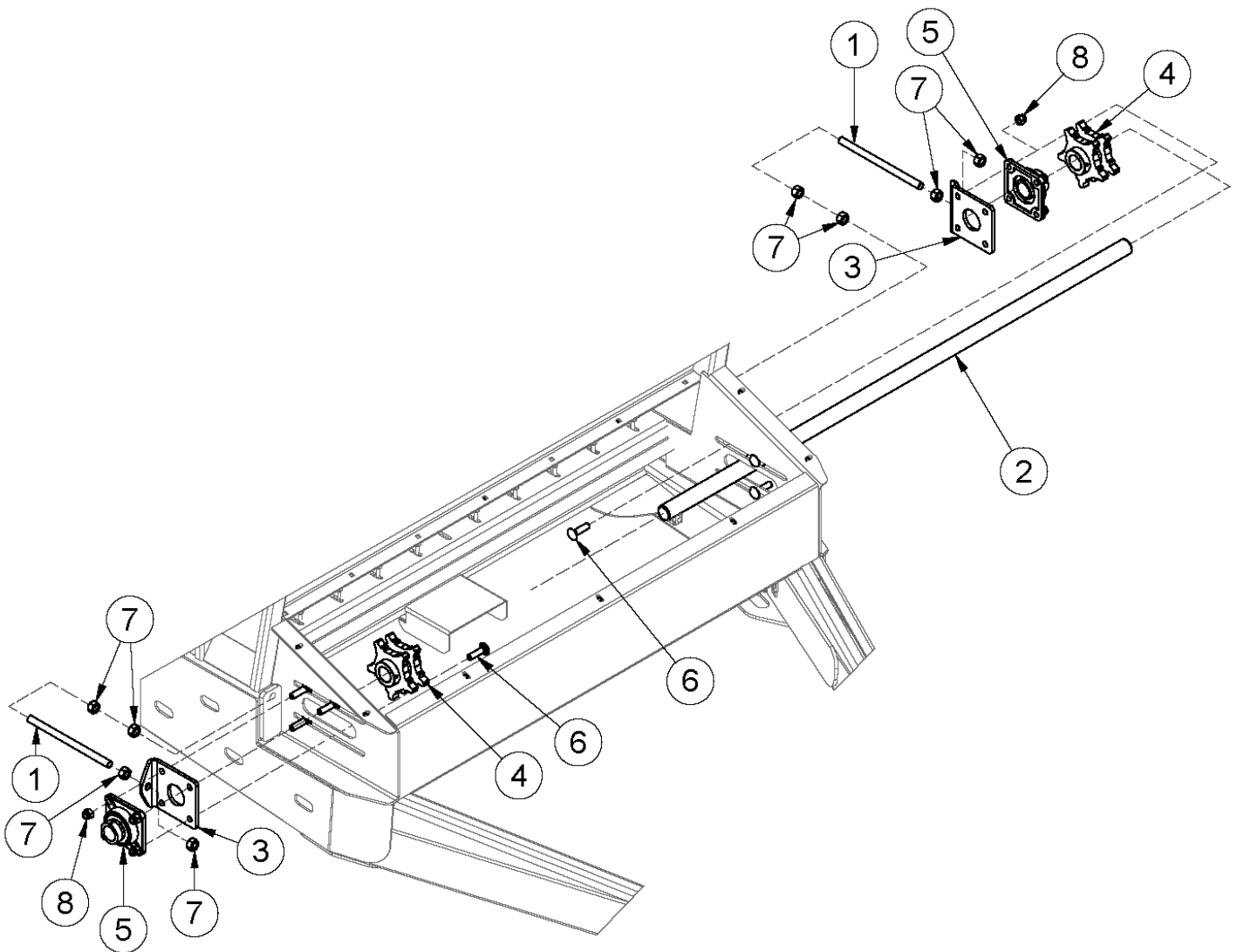
ITEM	QTY	PART NUMBER	DESCRIPTION
1	8	36518	Cupped Beater Paddle - Left
2	8	37718	Cupped Beater Paddle - Right
3	4	47551	375 Left Cupped Spinner Paddle
4	4	47552	375 Right Cupped Spinner Paddle
5	48	HB5/8-11X1.75Z5	Hex Bolt 5/8-11x1 3/4 Grade 5 Zinc Plated Hex Cap Screw
6	16	LN5/8-11NCZ5	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut
7	32	LN5/8-11TCZ5	LN5/8-11 Gr.C Zinc Top Lock Nut

44700 - Beater Greaselines



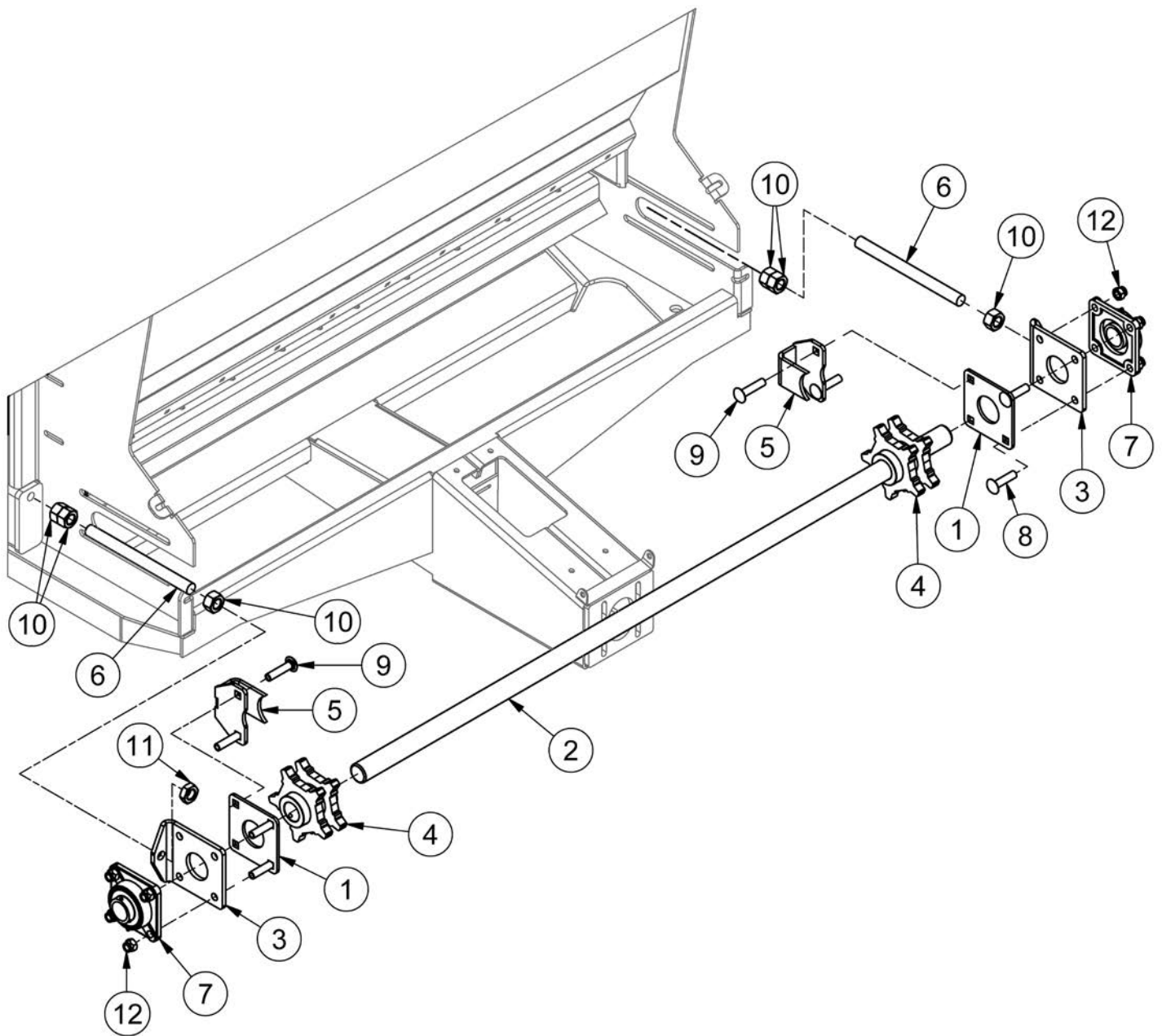
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	37849	Nitro grease Line Mount
2	1	36623	HH67 - 2R7(2MPX,2GKCY) HCL 67"
3	1	36624	HH99 - 2R7(2MPX,2GKCY) HCL 99"
4	1	CB1/4-20X0.75CZ5	Carriage Bolt - 1/4-20 x 3/4" Grade 5 Zinc
5	1	DE23979	Grease Decal
6	2	GR 1/4 X 28	Grease Fitting 1/4-28 Straight Standard Zerk
7	2	TL5X2-100-143	.625 Grommet

Front Apron Drive - Up to SN 15NS101



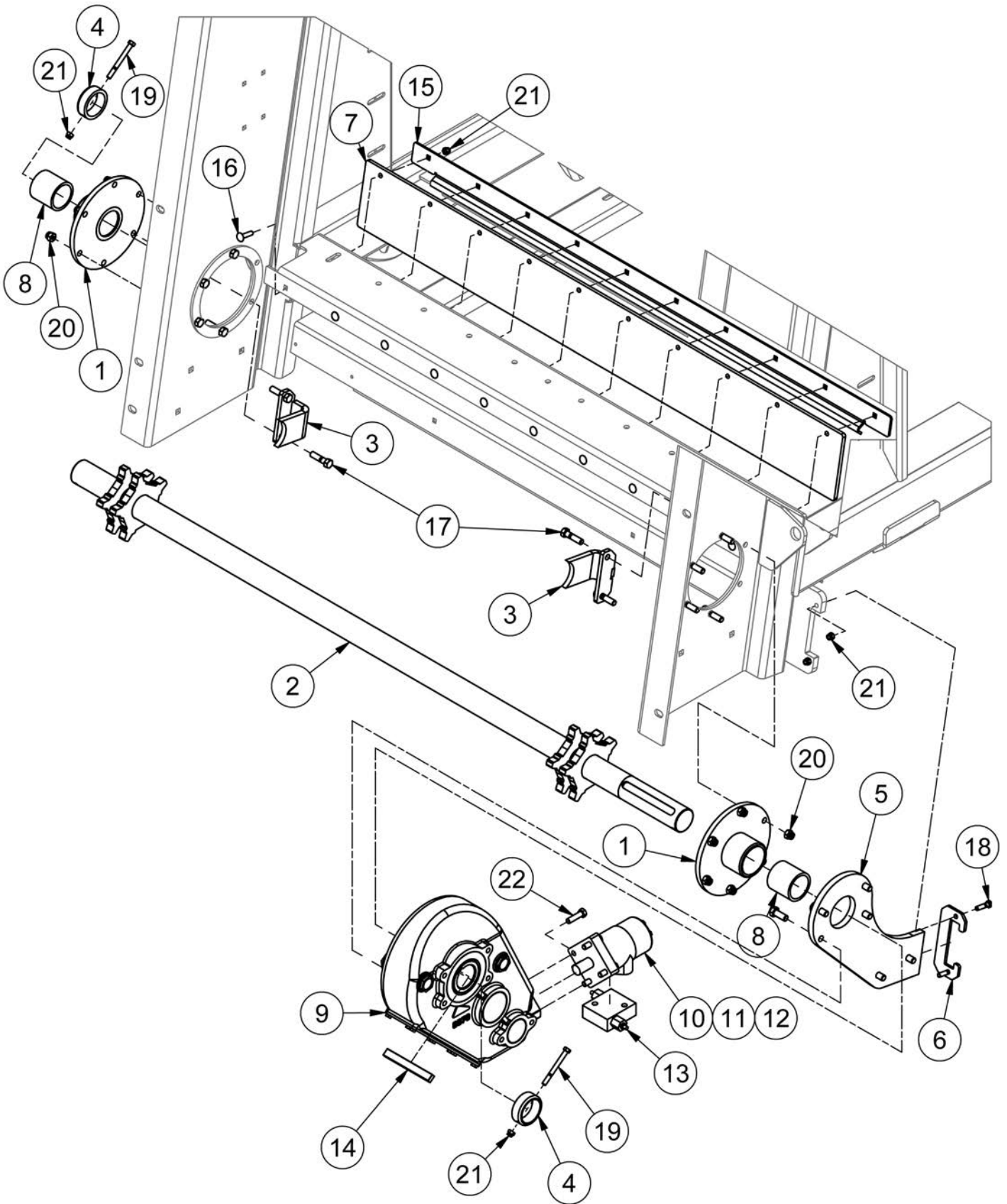
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	400-875	Threaded Tightener
2	1	400-162	1045 Front Apron Drive Shaft
3	2	400-169	Bearing Mount Plate
4	2	400-934	Apron Sprocket
5	2	BEA UCF209-28R3	Flange Bearing -Triple Seal- Ductile Iron
6	8	CB 5/8-11X2.1/4 Z5	Carriage Bolt - 5/8-11 x 2-1/4" Grade 5 Zinc
7	8	HN 3/4	Hex Nut - 3/4"-10 Grade 5 Zinc Plated Finished NC
8	8	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut

Front Apron Drive - SN 15NS102 to Current



ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	37720	Inside Bearing Plate
2	1	400-162	1045 Front Apron Drive Shaft
3	2	400-169	Bearing Mount Plate
4	2	400-934	Apron Sprocket
5	2	45443	450 Scraper Assembly
6	2	700-040	Threaded Rod Tightener
7	2	BEA UCF209-28R3	Flange Bearing -Triple Seal- Ductile Iron
8	4	CB5/8-11X2.5CZ5	Carriage Bolt - 5/8-11 x 2 1/2" Grade 5 Zinc
9	4	CB5/8-11X2.75CZ5	Carriage Bolt - 5/8-11 x 2 3/4" Grade 5 Zinc
10	6	HN 1	Hex Nut 1"-8 Grade 5 Zinc Plated Finished
11	2	HNJ1-8	Hex Nut - 1-8 Zinc Plated Hex Jam Nut
12	8	LN5/8-11NCZ5	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut

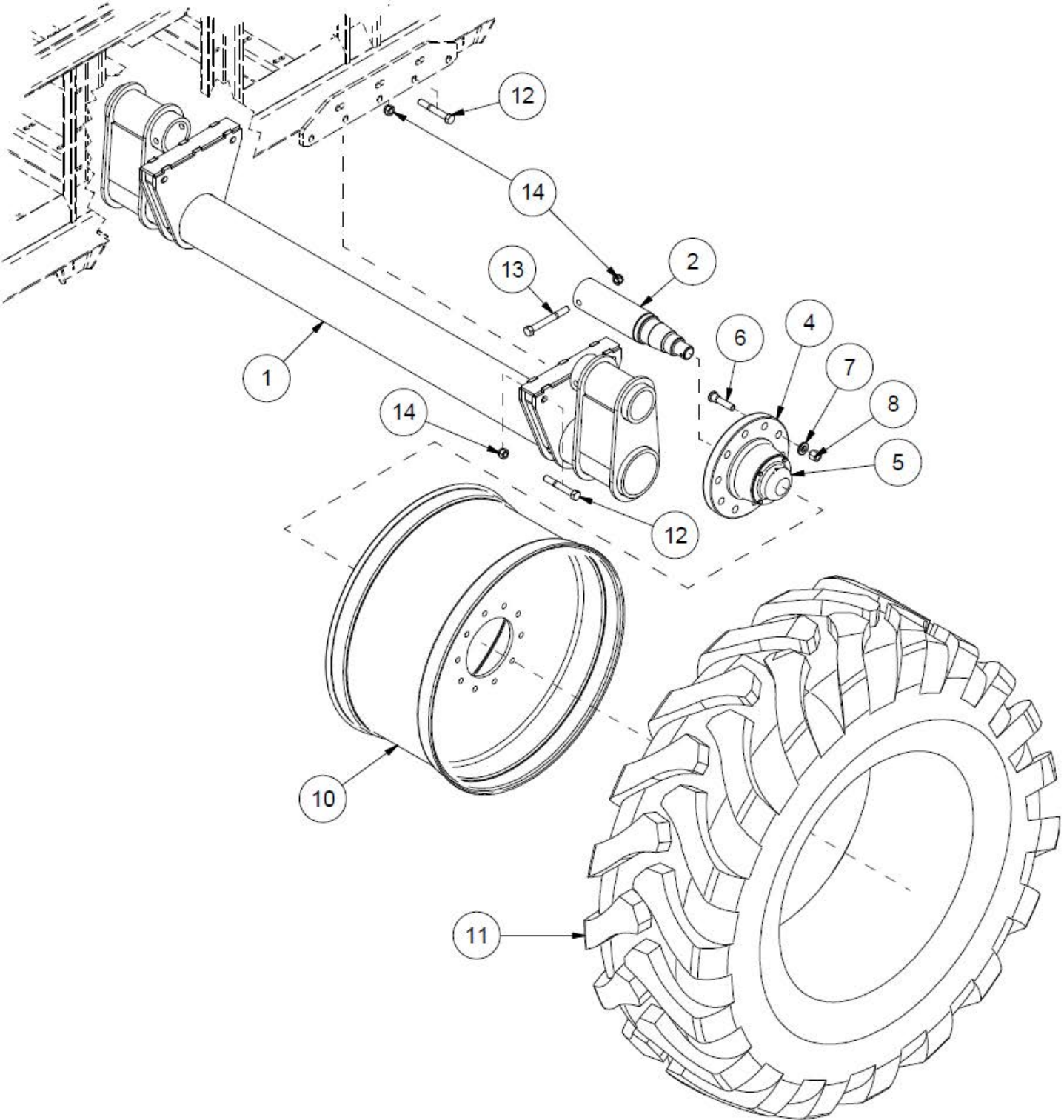
Rear Apron Drive



Rear Apron Drive

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	2	450-135	Bearing Housing	
2	1	450-137	Apron Drive Shaft	
3	2	450-138	Apron Shaft Scraper	
4	2	450-371	Apron Shaft Bushing	
5	1	450-428	Gearbox Torque Arm	
6	1	450-433	Torque Arm Retainer	
7	1	450-441	Rubber Seal	21NS101 -
8	2	700-431	Apron Bushing	
9	1	30842	Apron Drive Gearbox	
10	1	30854	Hydraulic Motor	Standard
11	1	40718	Hydraulic Motor w/ Speed Sensor & Relief	Req. Scale Option
12	1	SK-SMRS-SK	Seal Kit - Gear Box Motor	
13	1	30856	Hydraulic Cross Port Relief for Motor - Spreaders	
14	1	30859	Metric Key 18 x 11 x 150mm	
15	1	47567	Wiper Guide 62.5	21NS101 -
16	10	CB3/8-16X1.5CZ5	Carriage Bolt - 3/8-16 x 1 1/2" Grade 5 Zinc	
17	12	HB1/2-13X2Z5	Hex Bolt 1/2-13x2 Grade 5 Zinc Plated Hex Cap Screw	
18	2	HB3/8-16X1.5Z5	Hex Bolt 3/8-16x1 1/2 Grade 5 Zinc Plated Hex Cap Screw	
19	2	HB3/8-16X3.75Z5	Hex Bolt 3/8-16x3 3/4 Grade 5 Zinc Plated Hex Cap Screw	
20	12	LN1/2-13NCZ5	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut	
21	14	LN3/8-16NCZ5	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut	
22	4	M12X45X1.75	Metric Bolt	
23	6	M14X35X2	Metric Bolt	

Single Axle - Up to SN 13NS104



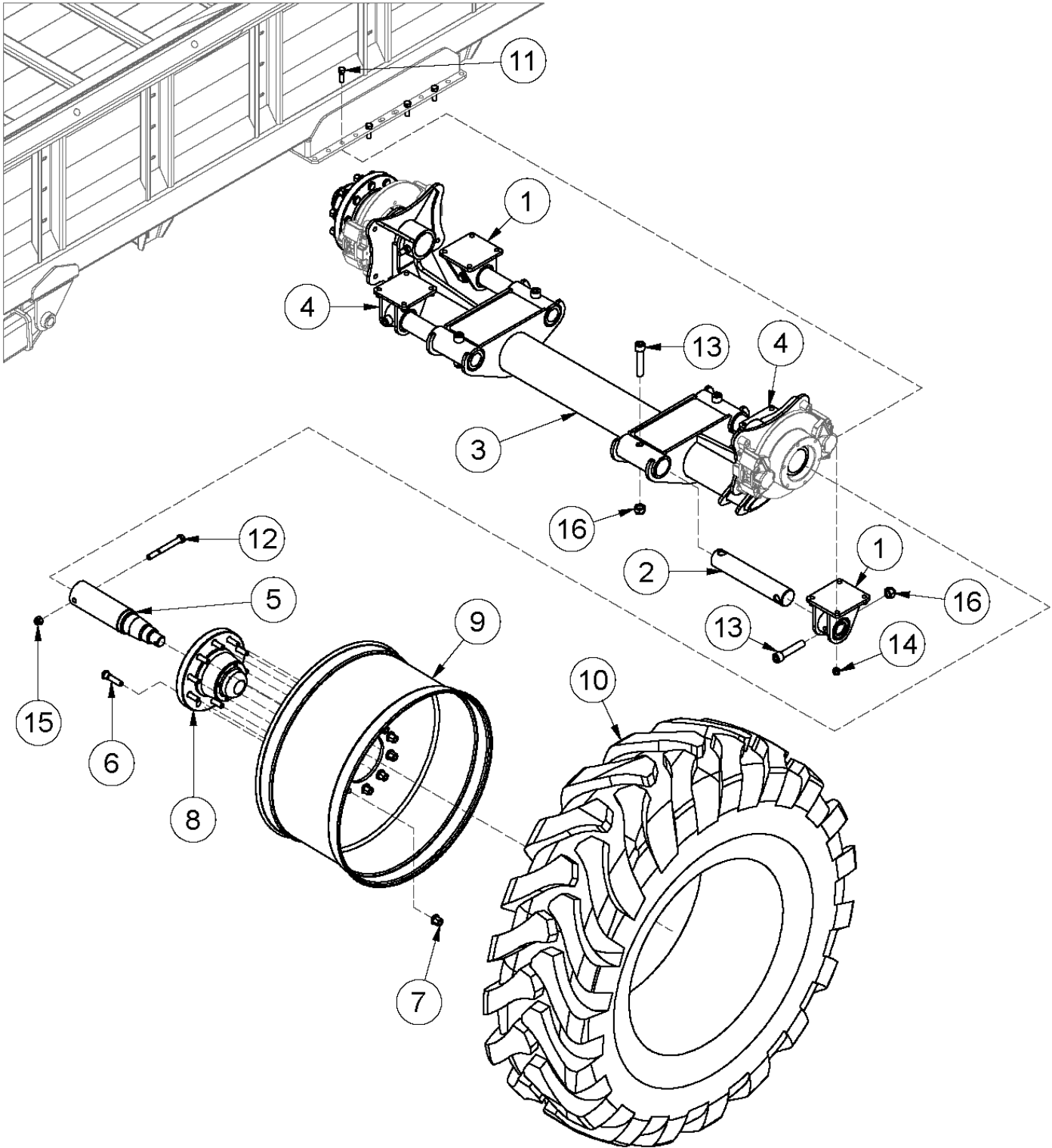
Single Axle - Up to SN 13NS104

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	450-120	Offset Axle
2	2	450-435	16000lb Spindle
3	2	HUB 16000	Complete 16000lb Hub
4	2	31522	16000lb Hub
5	2	HUB 16000-CCS	16000lb Hub Bearing & Seal Kit
6	20	31529	3/4 Wheel Stud
7	20	39600	W750 Washer
8	20	31530	3/4 Wheel Nut
9	2	450-118/450-119	Complete Tire (Left/Right)
10	2	450-338	Rim
11	2	450-339	Tire
12	4	HB 3/4-10X5.0 Z5	Hex Bolt - 3/4"-10 x 5" Grade 5 Zinc Plated Hex Cap Screw NC
13	2	HB 3/4-10X6.1/2 Z5	Hex Bolt - 3/4"-10 x 6 1/2" Grade 5 Zinc Plated Hex Cap Screw NC
14	6	LN 3/4 N	Locknuts - 3/4-10 Zinc Plated Nylon Insert

NITRO 450 TIRE CHART		
AXLE TYPE	PART NUMBER	TIRE SIZE
Single	WHE 600X65X34	600/65-34
Tandem	WHE 425X65X22.5L	425/22.5 Recap (Truck)
Tandem	WHE 550X45X22.5	550/45-22.5

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

Single Axle - SN 14NS101 to Current



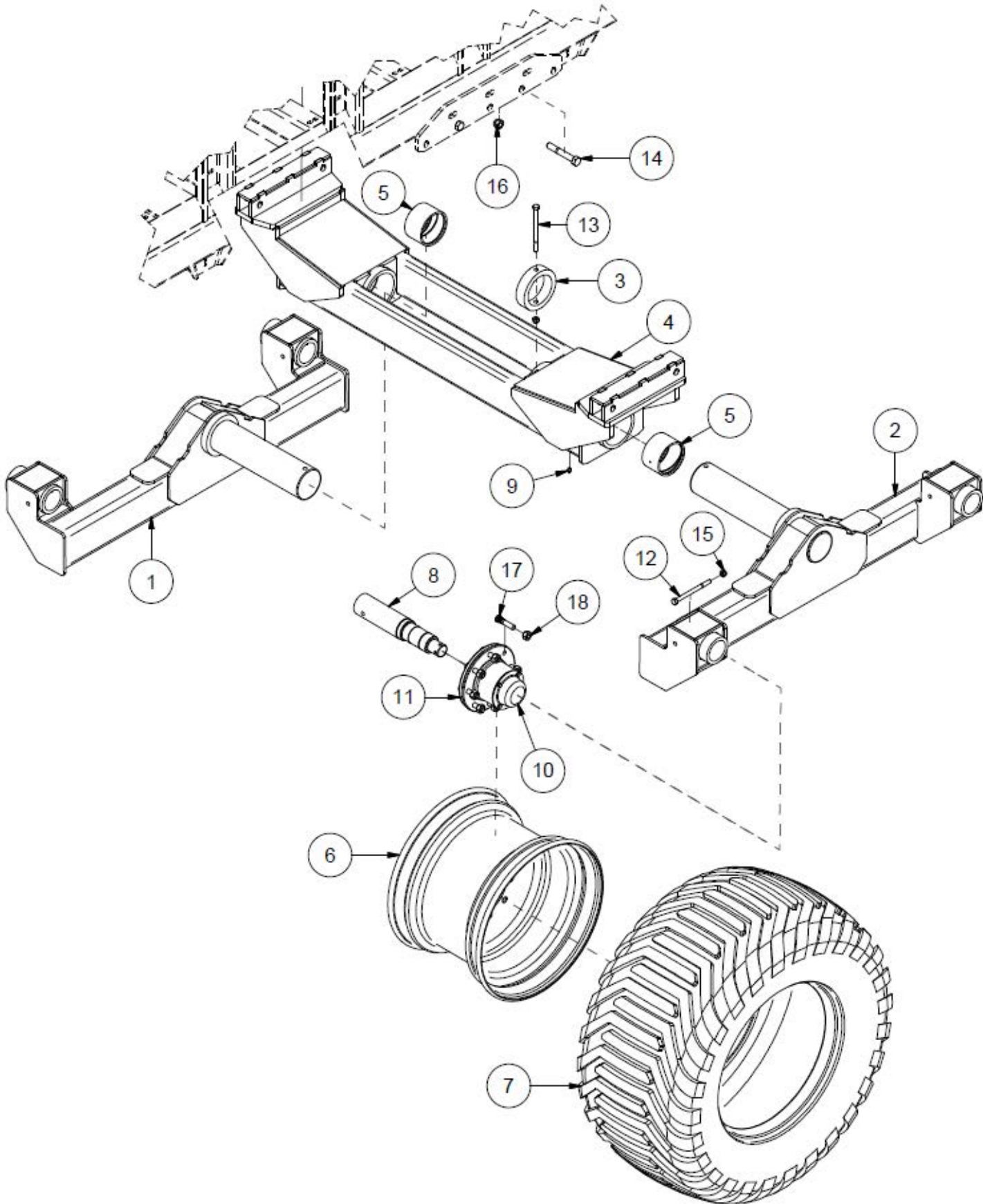
Single Axle - SN 14NS101 to Current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	35812	Left Frame Mount
2	4	36037	Axle Mount Pin
3	1	36835	Single Axle
4	2	36836	Right Frame Mount
5	2	450-435	16000lb Hub Spindle
6	20	31529	.75 Wheel Stud
7	20	31530	.75 Wheel Nut
8	2	HUB 16000	16000lb Hub
	2	HUB 16000-CCS	16000lb Hub Bearing & Seal Kit
9	1	*Varies*	*Rims vary on tire used, contact dealer or manufacturer
10	1	*Varies*	*See tire sidewall for size
11	20	HB 5/8-11X2.0 Z5	Hex Bolt 5/8-11 x 2 Grade 5 Zinc Plated Hex Cap Screw NC
12	2	HB 3/4-10X7.0 Z5	Hex Bolt - 3/4"-10 x 7" Grade 5 Zinc Plated Hex Cap Screw
13	8	HB 1-8X5.1/2 SHCS	Hex Bolt - 1"-8 x 5-1/2" Socket Head Cap Screw
14	33	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut
15	9	LN 3/4 N	Locknuts - 3/4-10 Zinc Plated Nylon Insert
16	14	LN 1.0 N	Locknuts - 1-8 Zinc Plated Nylon Insert

NITRO 450 TIRE CHART		
AXLE TYPE	PART NUMBER	TIRE SIZE
Single	WHE 600X65X34	600/65-34
Tandem	WHE 425X65X22.5L	425/22.5 Recap (Truck)
Tandem	WHE 550X45X22.5	550/45-22.5

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

Tandem Axle - Up to SN 13NS104



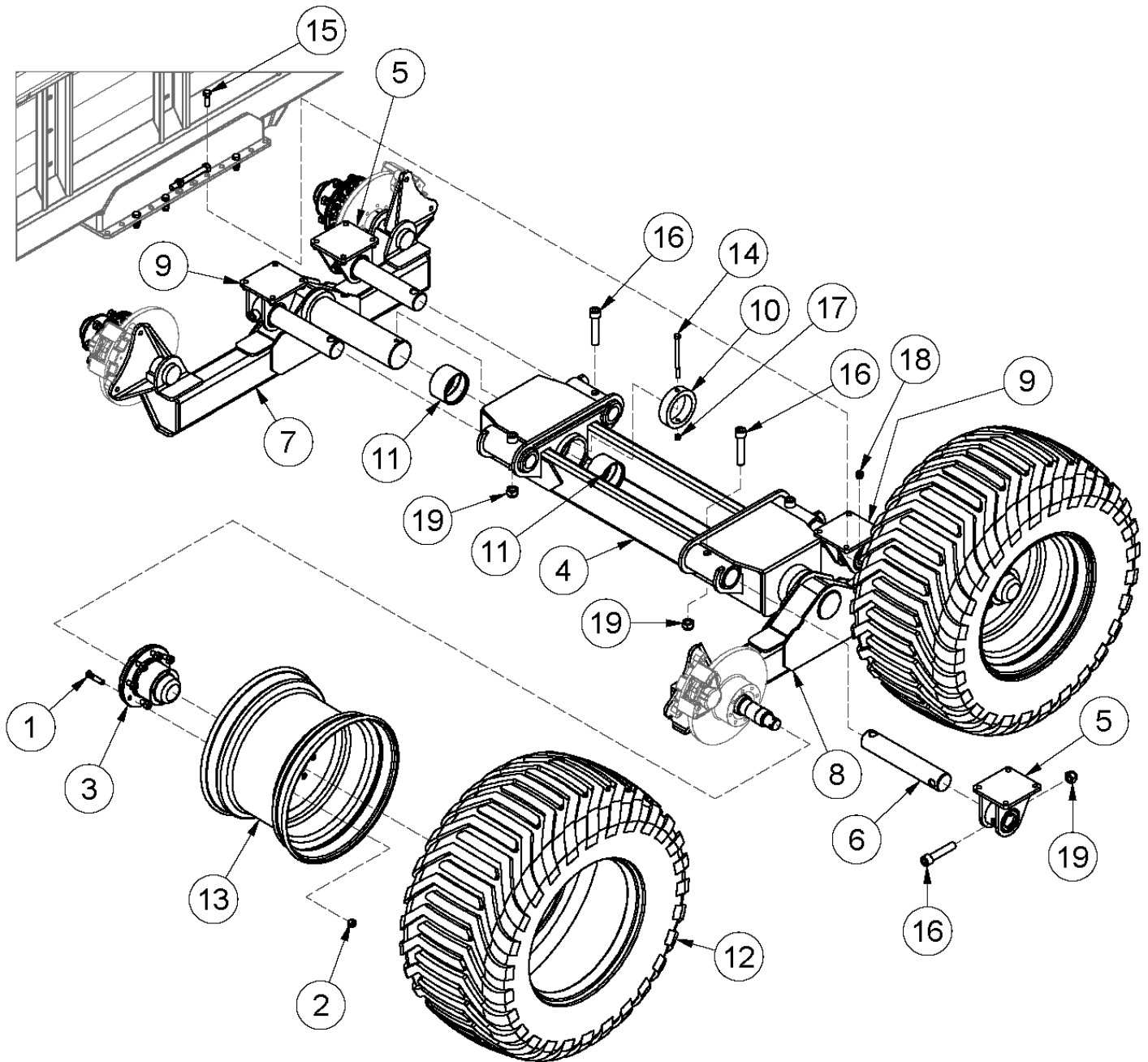
Tandem Axle - Up to SN 13NS104

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	450-113	Right Walking Beam
2	1	450-114	Left Walking Beam
3	2	400-118	Axle Bushing
4	1	450-128	Offset Axle
5	4	400-304	Walking Beam Bushing
6	4	400-429	Tandem Rim
7	4	400-430	Tandem Tire
8	4	450-12001	3 x 15 1/4 Spindle
9	4	GRNPT 1/8	Grease Fitting 1/8 Straight
10	4	HUB 12000-CCS	12000lbs Hub Bearing & Seal Kit
11	4	HUB 12000	Complete 12000lbs Hub
12	4	HB 1/2-13X6.1/2 Z5	Hex Bolt - 1/2"-13 x 6-1/2" Grade 5 Zinc Plated Hex Cap Screw
13	2	HB 1/2-13X7.0 Z5	Hex Bolt - 1/2"-13 x 7" Grade 5 Zinc Plated Hex Cap Screw
14	4	HB 3/4-10X5.0 Z5	Hex Bolt - 3/4"-10 x 5" Grade 5 Zinc Plated Hex Cap Screw NC
15	6	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
16	4	LN 3/4 N	Locknuts - 3/4-10 Zinc Plated Nylon Insert
17	32	31531	5/8 Wheel Stud
18	32	31532	5/8 Wheel Nut

NITRO 450 TIRE CHART		
AXLE TYPE	PART NUMBER	TIRE SIZE
Single	WHE 600X65X34	600/65-34
Tandem	WHE 425X65X22.5L	425/22.5 Recap (Truck)
Tandem	WHE 550X45X22.5	550/45-22.5

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

Tandem Axle - SN 14NS101 to Current



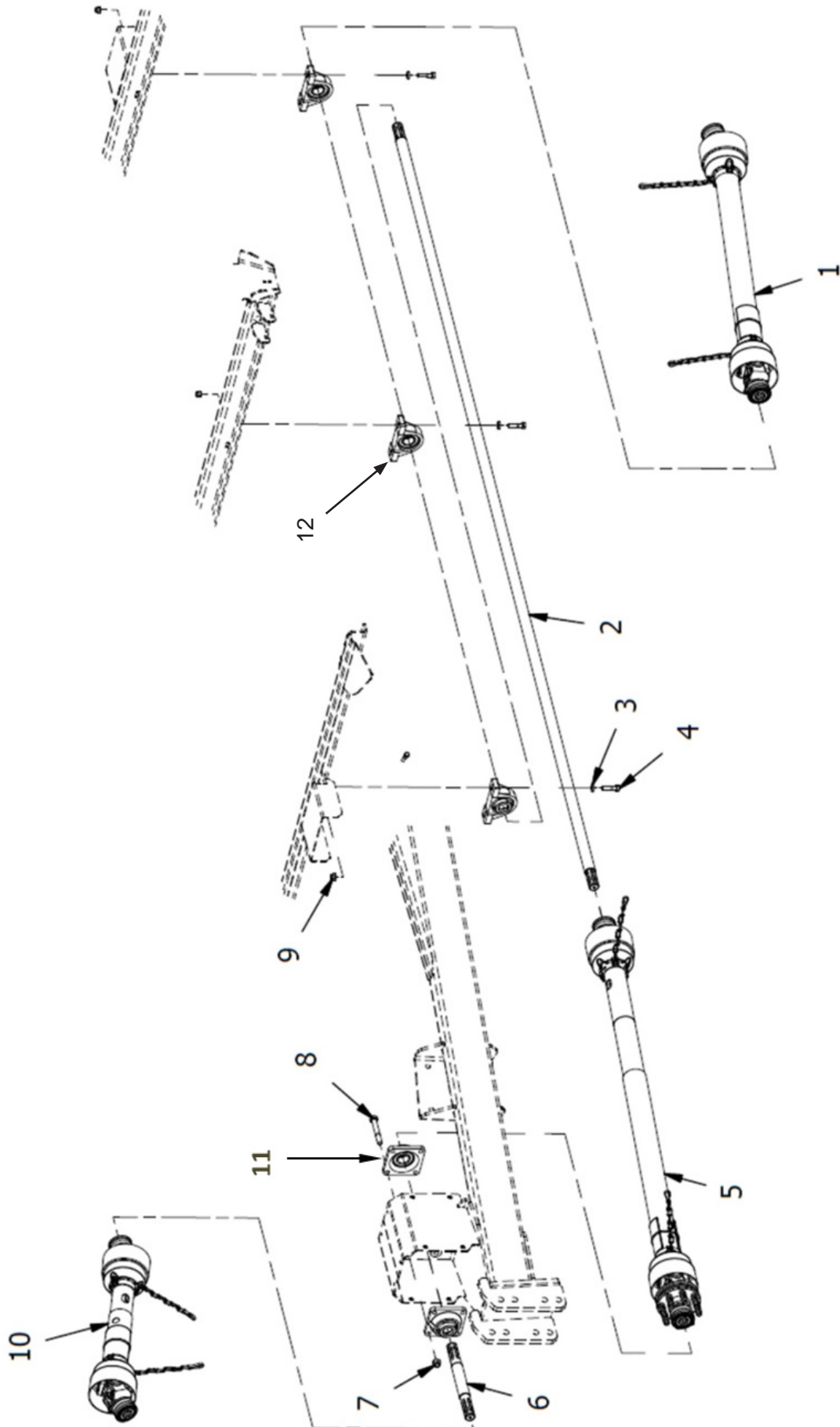
Tandem Axle - SN 14NS101 to Current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	32	31531	.625 Wheel Stud
2	32	31532	.625 Wheel Nut
3	4	HUB 12000	12000lb Hub
	4	HUB 12000-CCS	12000lb Hub Bearing & Seal Kit
4	1	35811	Tandem Axle
5	2	35812	Left Frame Mount
6	4	36037	Axle Mount Pin
7	1	36832	Right Walking Beam
8	1	36834	Left Walking Beam
9	2	36836	Right Frame Mount
10	2	400-118	Axle Bushing
11	4	400-304	Walking Beam Bushing
12	4	*Varies*	*See tire sidewall for size
13	4	*Varies*	*Rims vary on tire used, contact dealer or manufacturer
14	2	HB 1/2-13X7.0 Z5	Hex Bolt - 1/2"-13 x 7" Grade 5 Zinc Plated Hex Cap Screw
15	20	HB 5/8-11X2.0 Z5	Hex Bolt 5/8-11 x 2 Grade 5 Zinc Plated Hex Cap Screw NC
16	8	HB 1-8X5.1/2 SHCS	Hex Bolt - 1"-8 x 5-1/2" Socket Head Cap Screw
17	69	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
18	33	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut
19	14	LN 1.0 N	Locknuts - 1-8 Zinc Plated Nylon Insert

NITRO 450 TIRE CHART		
AXLE TYPE	PART NUMBER	TIRE SIZE
Single	WHE 600X65X34	600/65-34
Tandem	WHE 425X65X22.5L	425/22.5 Recap (Truck)
Tandem	WHE 550X45X22.5	550/45-22.5

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

Driveline - Up to SN 16NS106



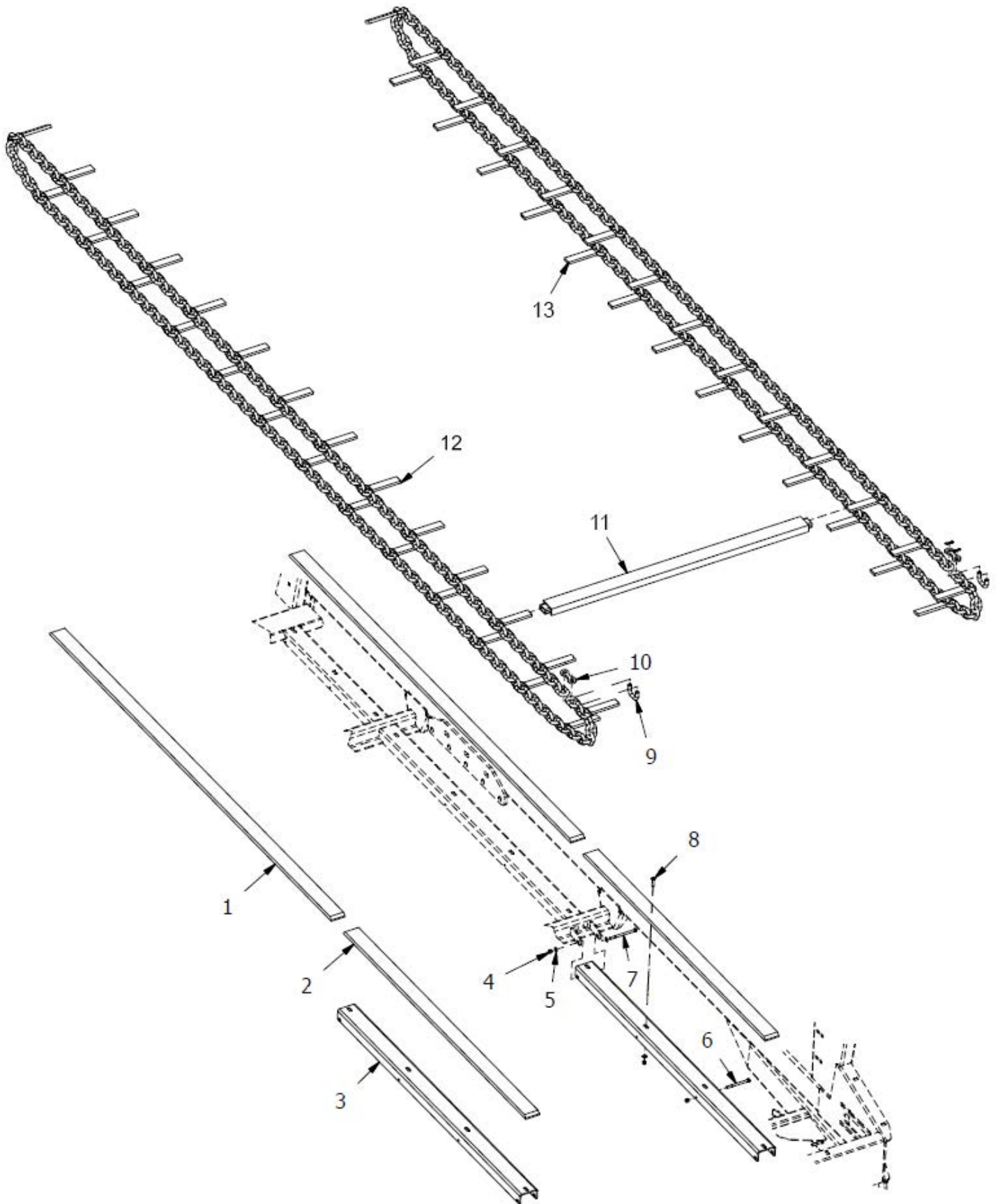
Driveline - Up to SN 16NS106

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	30839	Rear Drive Shaft PTO
2	1	450-354	Splined Drive Shaft
3	6	FW 1/2	Flatwasher - 1/2" Zinc Plated USS
4	6	HB 1/2-13X2.0 Z5	Hex Bolt 1/2-13 x 2" Grade 5 Zinc Plated Hex Cap Screw NC
5	1	30840	Over Running Slip Clutch PTO
6	1	400-994	Splined Drive Shaft
7	4	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut
8	4	HB 5/8-11X4.1/2 Z5	Hex Bolt Plated Gr. 5 NC
9	6	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
10	1	30841	Front Drive Shaft PTO
11	5	BEA UCF208-24R3	Flange Bearing 4 Bolt -Triple Seal- Ductile Iron
12	2	BEA UCP208-24R3	Pillow Block Bearing -Triple Seal- Ductile Iron

Driveline - SN 16NS107 to Current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	39850	PTO. 375,450,525,600,750 (V80-141P028359-028028-CV80-CLS)
2	1	39851	PTO. 375,450,525,(T60-086P265011-306048-CLS(3500NM)
3	1	39937	Drive Shaft- Center 1.5 "x 187" Long -450 Nitro
4	3	BEA P208-108DI	Pillow Block NTN 2B 1.5"
5	1	BEA UCF208-24-1.5	1 1/2" 4 Bolt Flange Bearing
6	6	FW 1/2	Flatwasher - 1/2" Zinc Plated USS
7	6	HB 1/2-13X2.0 Z5	Hex Bolt 1/2-13 x 2" Grade 5 Zinc Plated Hex Cap Screw NC
8	4	HB 5/8-11X2.0 Z5	Hex Bolt 5/8-11 x 2 Grade 5 Zinc Plated Hex Cap Screw NC
9	6	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
10	4	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut

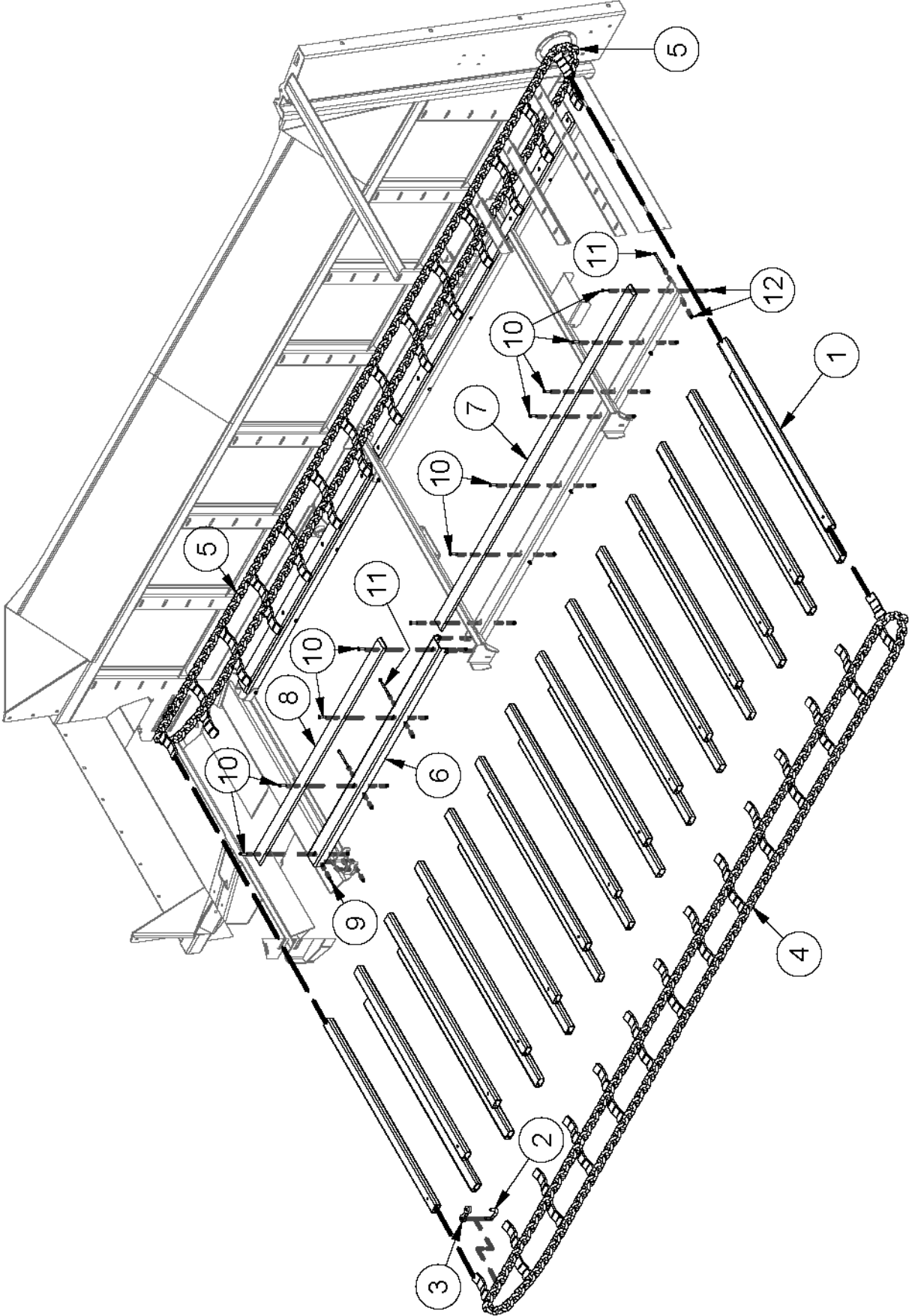
Apron Runners - Up to SN 15NS117



Apron Runners - Up to SN 15NS117

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	450-442	Rear Apron Runner
2	2	450-443	Front Apron Runner
3	2	450-361	Apron Runner Mount Bar
4	38	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
5	38	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS
6	12	HB 3/8-16X4.1/2 Z5	Hex Bolt 3/8"-16 x 4-1/2" Zinc Finish SAE J429 Grade 5 Hex Cap Screw NC
7	4	HB 3/8-16X5.1/4 Z5	Hex Bolt - 3/8"-16 x 5 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
8	22	HB 3/8-16X1.3/4 Z5	Hex Bolt - 3/8-16 x 1 3/4" Socket Head Cap Screw
9	2	400-889	Chain Connector Link
10	2	400-890	Chain Connector Tab
11	27	400-914	Apron Slat
12	1	450-124	Apron Chain w/ Lugs
13	1	450-125	Apron Chain w/ Lugs

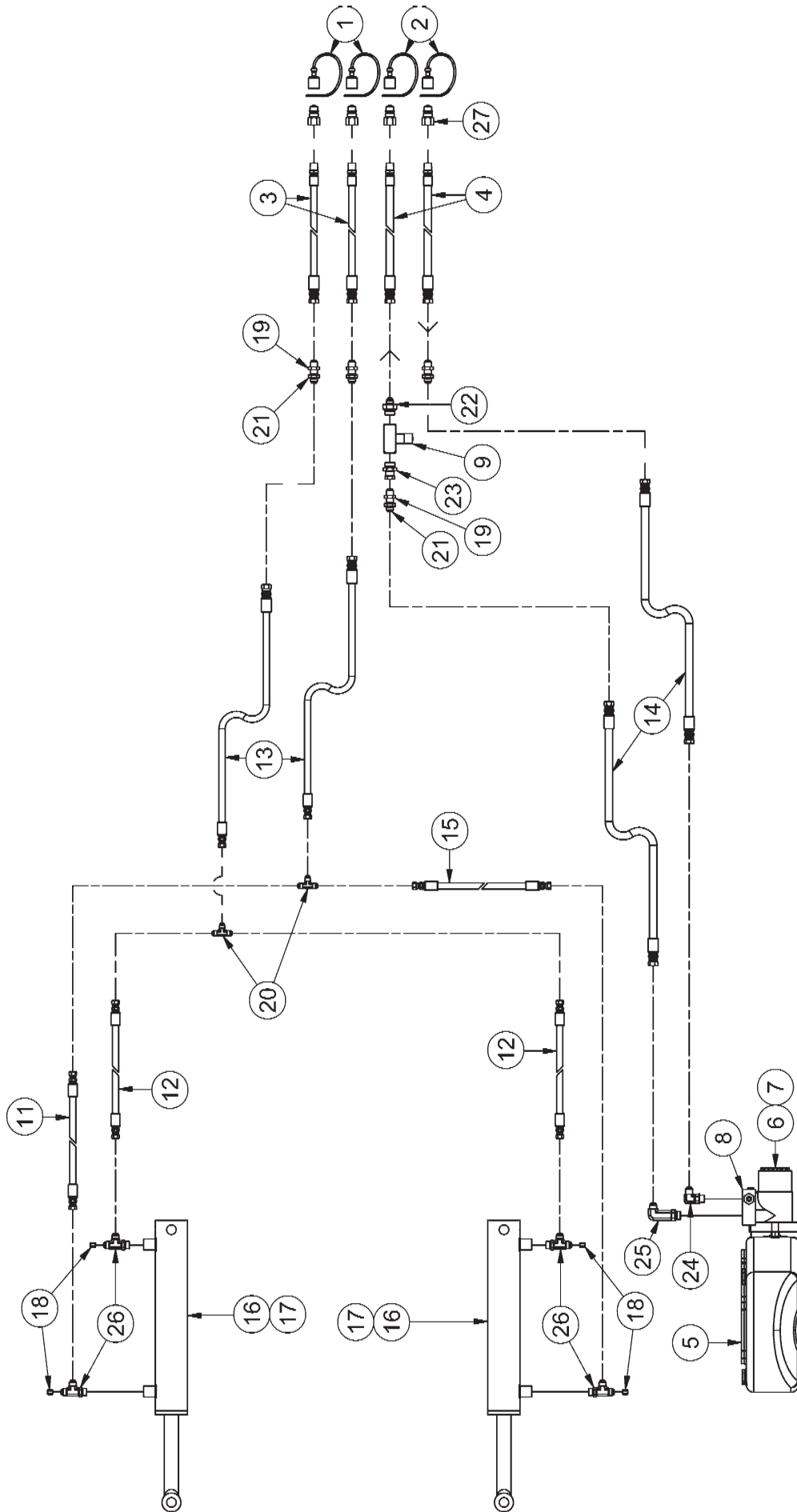
Apron Runners - Up to SN 15NS118 to Current



Apron Runners - SN 15NS118 to Current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	27	37820	Slat
2	2	400-889	Chain Connector Link
3	2	400-890	Chain Connector Link Tab
4	1	40866	Left Apron Chain w/ Lugs
5	1	40867	Right Apron Chain w/ Lugs
6	2	450-361	Apron Runner Mount Bar
7	2	450-442	Rear Apron Runner
8	2	450-443	Front Apron Runner
9	8	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
10	22	HB 3/8-16X1.3/4 FHSCS	Hex Bolt - 3/8-16 x 1 3/4" Flat Socket Head Cap Screw
11	10	HB 3/8-16X4.1/2 Z5	Hex Bolt 3/8"-16 x 4-1/2" Zinc Finish SAE J429 Gr.5 Hex Cap Screw NC
12	42	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut

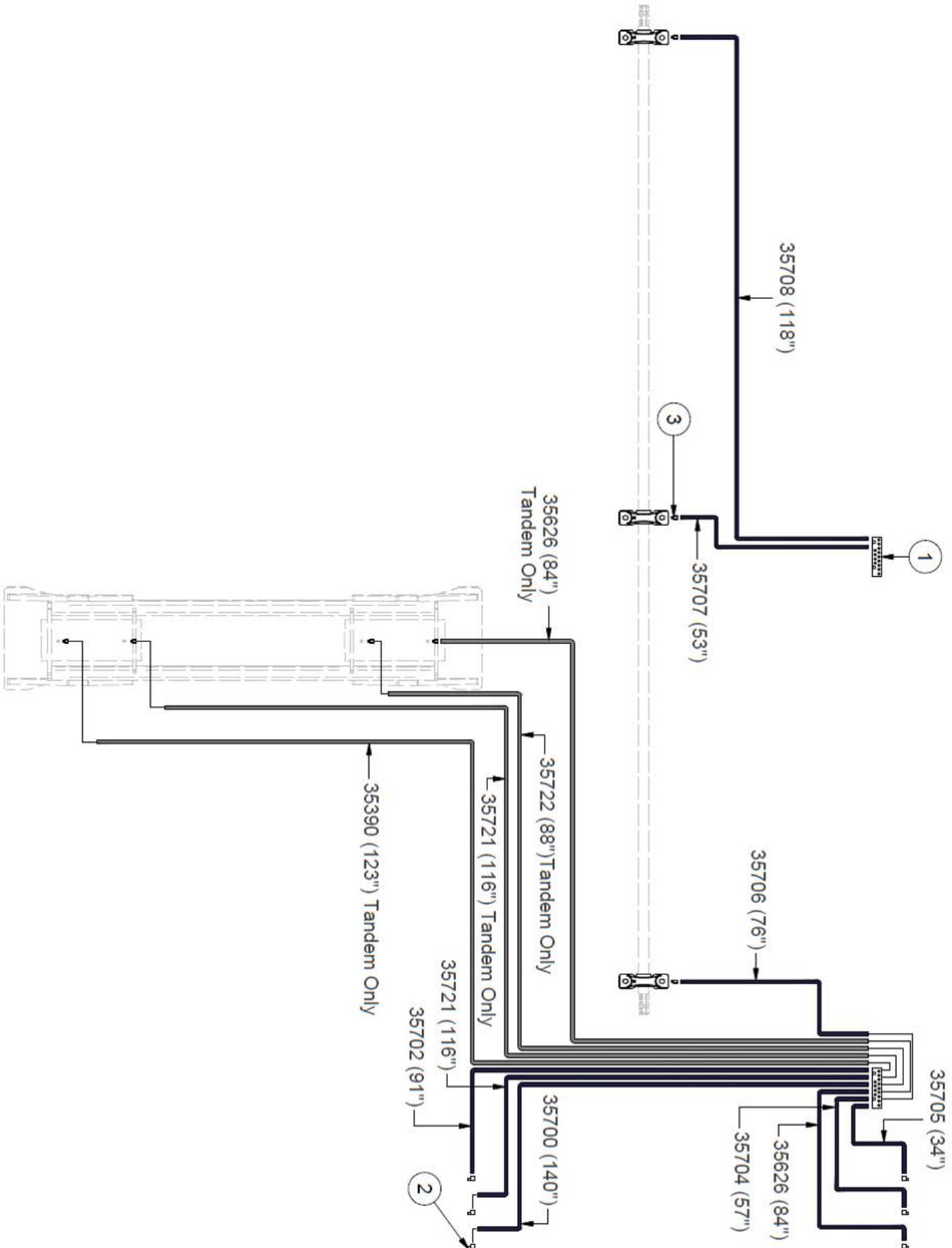
Hydraulic Layout



Hydraulic Layout

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	2	22946-2	Dust Cap, 1/2", Female, Yellow Colour	
2	2	22946-4	Dust Cap, 1/2", Female, Red Colour	
3	2	30654	Hose - HH73- 6AT1(8FJXH-8MP HCL 73"	
4	2	30661	Hose - HH69- 8AT1(8FJXH-8MP) HCL69"	
5	1	30842	Gear Box- Berma- V450,600 Spreaders (RT500)	
6	1	SK-SMRS-SK	Gearbox Motor Seal Kit	
7	1	30854	Hydraulic Motor	
8	1	30856	Cross Over Relief Valve	
9	1	30857	Flow Control Valve - 3/4"	
10	1	31642	Hose - HH76- 6AT1(6FJX-6FJX) HCL 76"	
11	1	31643	Hose - HH81- 6AT1(6FJX-6FJX) HCL 81"	
12	1	31644	Hose - HH22- 6AT1(6FJX-6FJX) HCL 22"	
13	2	31648	Hose - HH295- 6AT1(8FJX-6FJX) HCL 295"	
14	2	31649	Hose - HH316- 8AT1(8FJX-8FJX) HCL 316"	
15	1	31718	Hose - HH140- 6AT1(6FJX-6FJX) HCL 140"	
16	2	CYL31731	Cylinder 2.0x56.75x1.5 Nitro450	
17	1	SKFH20-15	Seal Kit for 2" Cylinder Bore (Frankor) w/ 1.5" Rod	
18	4	HF 0304C-06	JIC #6 Cap	
19	4	HF 306-8	Hyd Fitting 1/2 Adjustable Locknut	
20	2	HF 2603-6-6-6	Male JIC Tee	
21	4	HF 2700LN-08-08	Hydraulic Fitting - MJIC to MJIC	
22	1	HF 6400-8-12	Hyd. Fitting	Replaces HF2404-8-12
23	1	HF 6402-12-8	Hyd. Fitting #12 Male O-Ring to #8 F JIC	Replaces HF6505-12-8
24	1	HF 6801-8-10	Hyd. Fitting - 1/2" JIC - 5/8" 90° Elbow	
25	1	HF 6801-8-10-LL	Hyd. Fitting - 1/2" JIC - 5/8" 90 Degree Elbow	
26	4	HF 6804-8-8-8	Hydraulic Tee Fitting	
27	4	HF 8010-4	Quickcoupler 1/2" Male Tip	
28	1	40718	Hydraulic Motor - Speed Sensor	

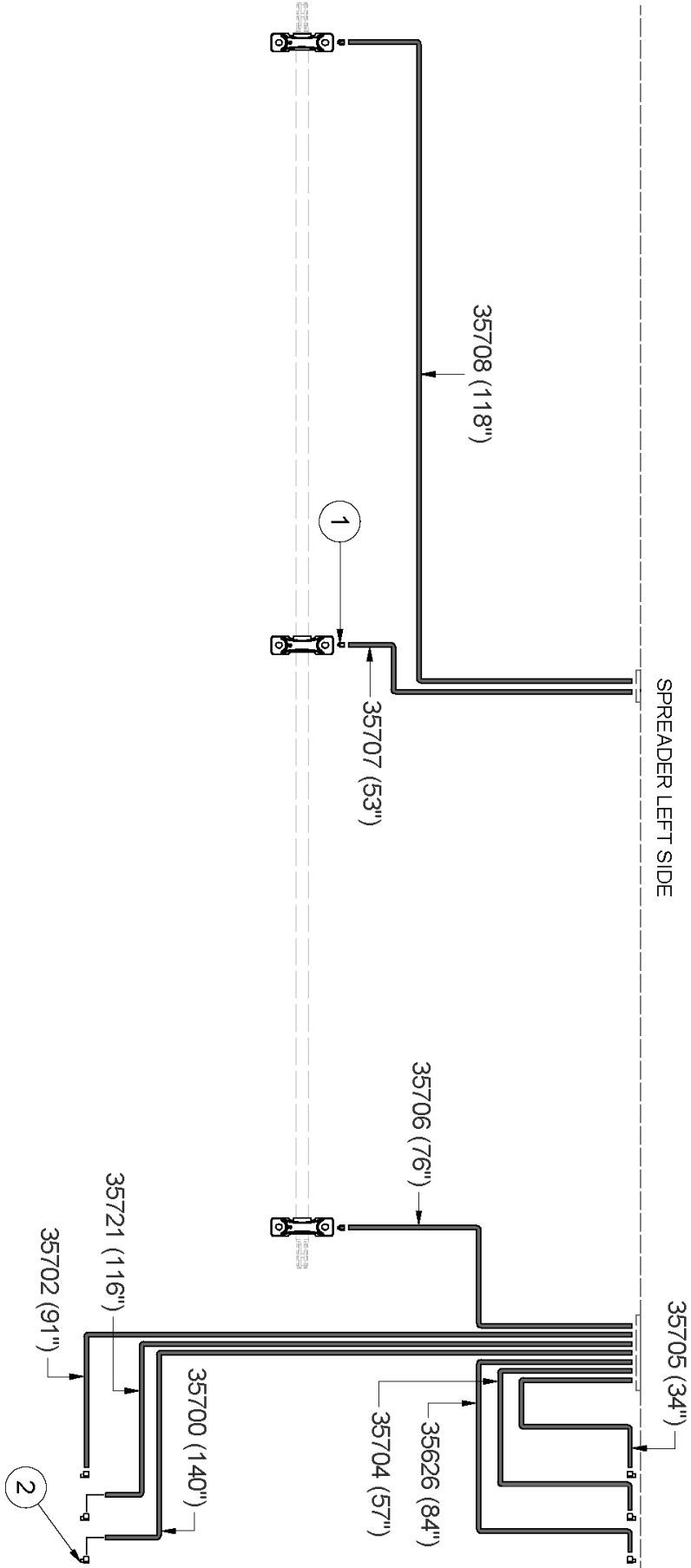
Grease Line Layout - Up to SN 15NS406



Grease Line Layout - Up to SN 15NS406

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	GR21999-0419	Block Grease Bank Manifold
2	8	35617	HF 5404-2-4 Hydraulic Fitting
3	6	35618	HF 5502-2-2 Hydraulic Fitting

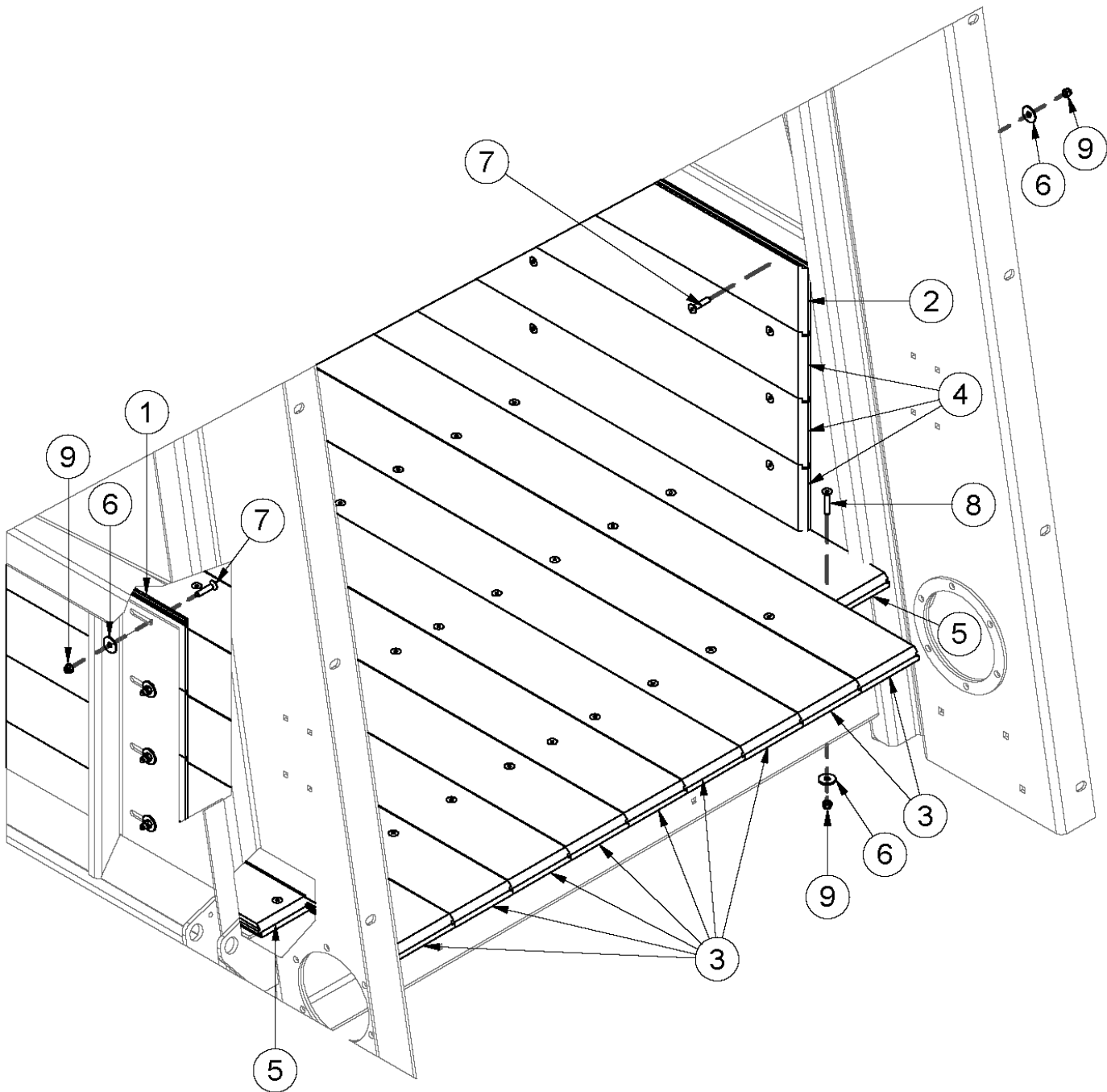
Grease Line Layout - SN 15NS407 to Current



Grease Line Layout - SN 15NS407 to Current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	3	35617	HF 5404-2-4 Hydraulic Fitting
2	6	35618	HF 5404-2-2 Hydraulic Fitting

Side - Floor Boards



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	36918	450 Left Side Top Board
2	1	36919	450 Right Side Top Board
3	8	450-355	Floor Board
4	6	450-356	Side Board
5	2	450-365	Trimmed Floor Board
6	196	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS (2984)
7	64	HB 3/8-16X1.3/4 FHSCS	Hex Bolt - 3/8-16 x 1 3/4" Flat Socket Head Cap Screw
8	132	HB 3/8-16X2.0 FHSCS	Hex Bolt - 3/8-16 x 2" Flat Socket Head Cap Screw
9	196	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut

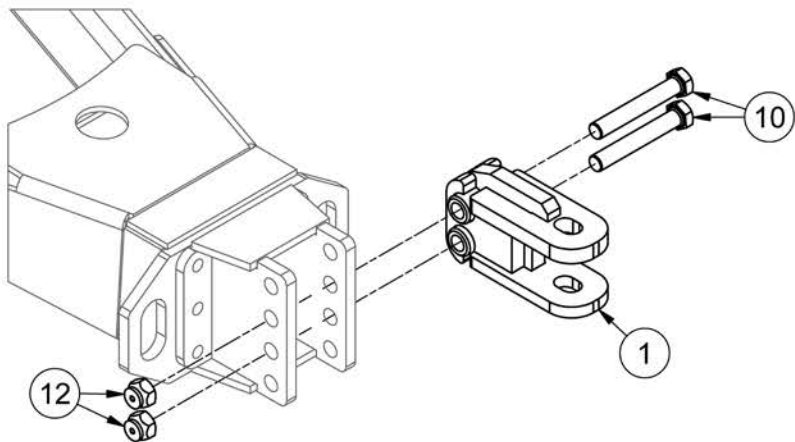
Section 3 - Options

Optional Kit Numbers

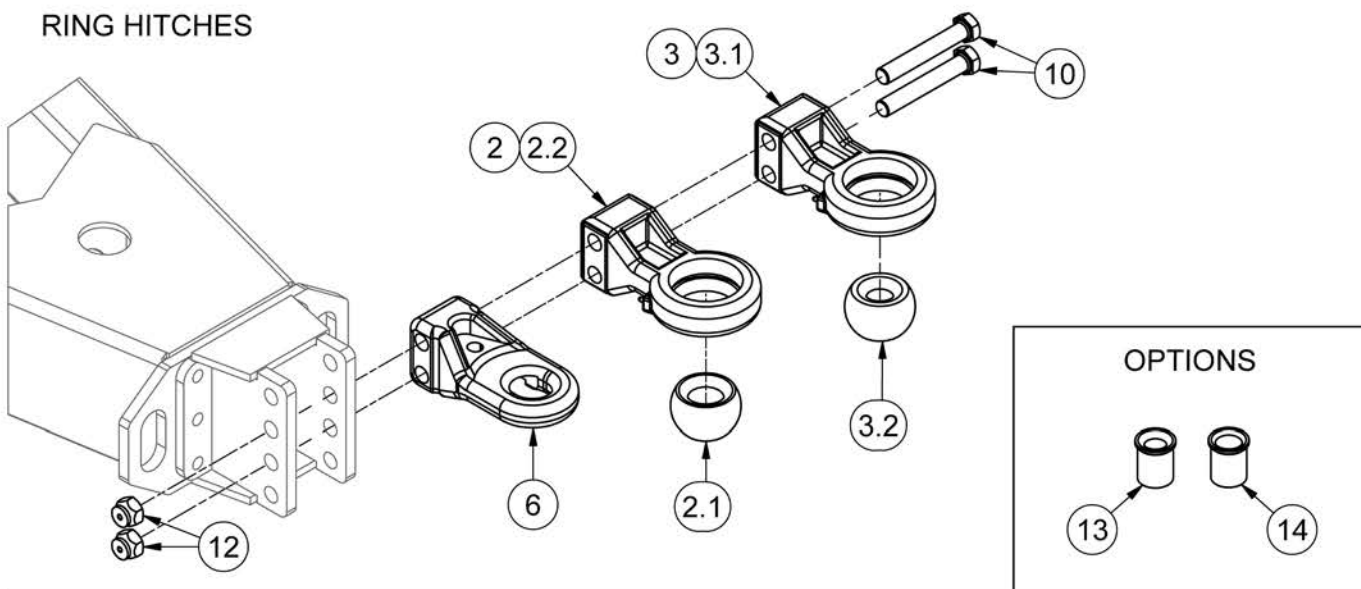
KIT NUMBER	DESCRIPTION	PAGE(S)	NOTE
	Hitches	Pg.3-2,3	
43673	Mechanical Light Kit	Pg.3-4,5	
TLVLK-450M	Manual Light Kit		
	Light Kit Base	Pg.3-6,7	
	Manual Light Kit	Pg.3-8	
	Wiring Harness	Pg.3-12,13	
TLVLK-450	Hydraulic Light Kit		
	Light Kit Base	Pg.3-6,7	
	Hydraulic Light Kit Cylinders	Pg.3-9	
	Hydraulic Light Kit Hoses	Pg.3-10,11	
	Wiring Harness	Pg.3-12,13	
N450SB	Single Brake System	Pg.3-14	
N450TB	Tandem Brake System	Pg.3-15	
N750LC	5 Point Scale System	Pg.3-16	
N750LCNT460	5 Point Scale System with GPS	Pg.3-16	
N750LCNT8000	Automatic Scale Rate Control Base System	Pg.3-17	
	Flow Control Mounting	Pg.3-18	
31578	Flow Control Hydraulic Layout - Manual	Pg.3-19	
31797	Flow Control Hydraulic Layout - Electric	Pg.3-20,21	
	Electric Flow Control Wiring	Pg.3-22,23	
45816	Endgate Indicator Kit	Pg.3-24,25	

Hitch Options

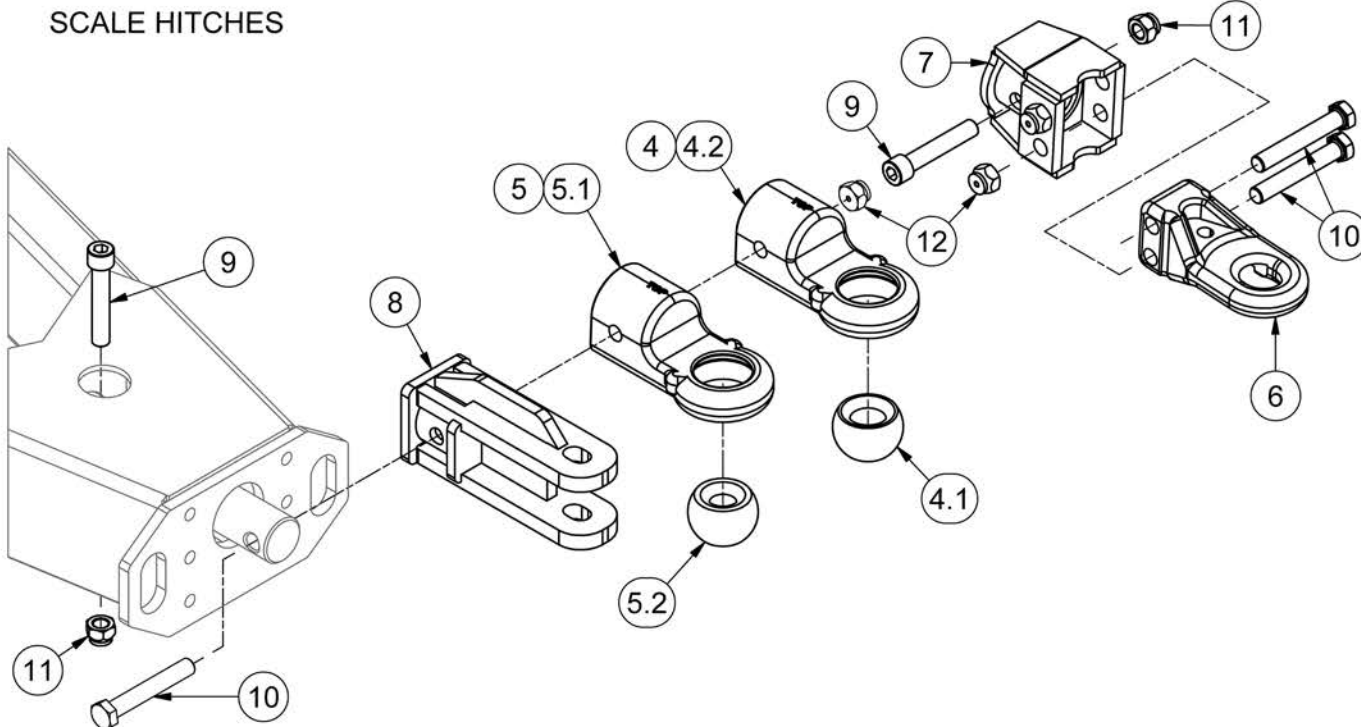
CLEVIS HITCH



RING HITCHES



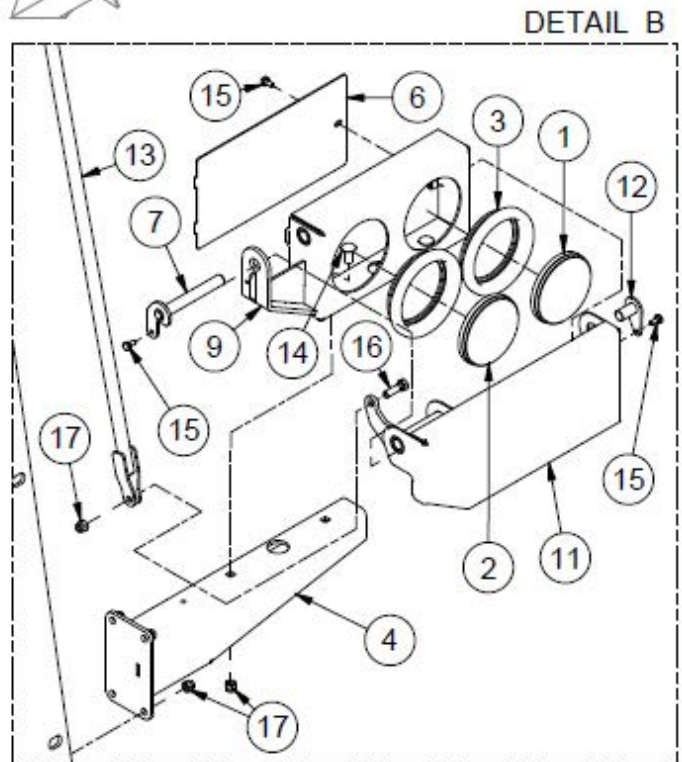
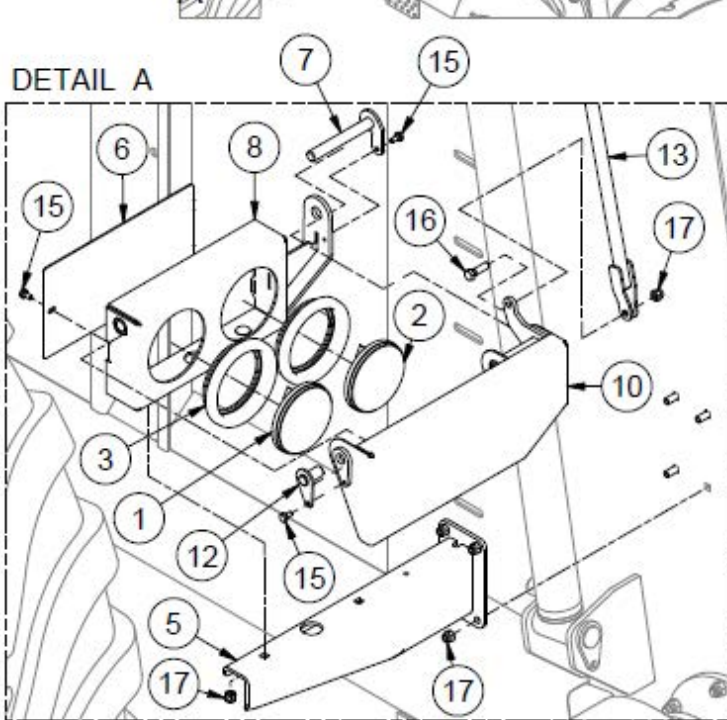
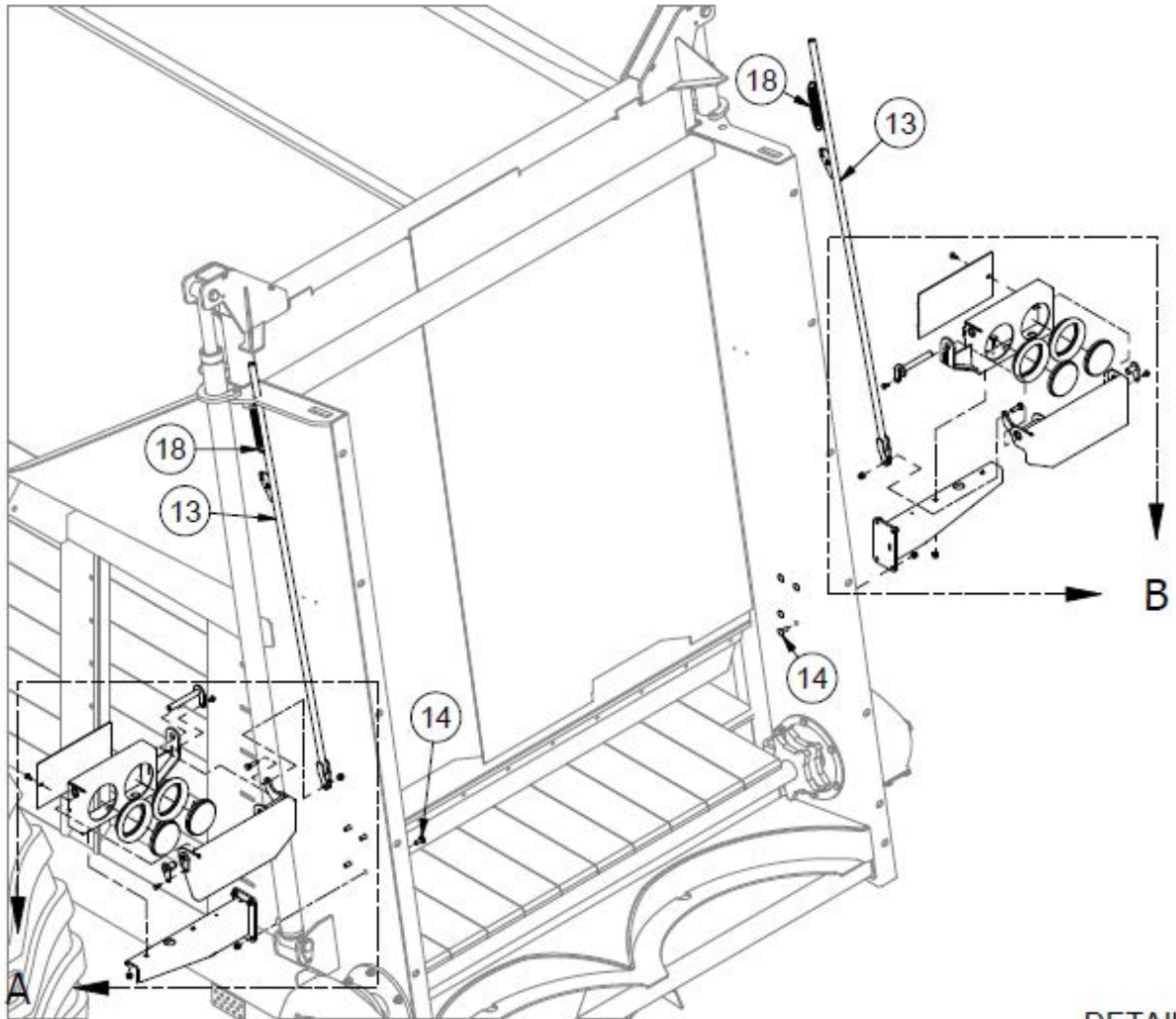
SCALE HITCHES



Hitch Options

ITEM	QTY	PART NUMBER	DESCRIPTION	WHERE USED	NOTE
1	1	40471	Clevis Hitch Weldment	Up to N575RS	Standard - Replaces 30826
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 Hitch		Category 3 & 4
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		32853	Cat.4 Hitch Base	N600 - N1050	Standard - Replaces 43060
7	1	36241	Cell Hitch		Requires Scale Option
8	1	42550	Cell Clevis Hitch	275RS - 575RS	Requires Scale Option
9		SHCS1-8X5.5	Hex Bolt - 1-8 x 5 1/2 Socket Head Cap Screw		
10		HB1-14X6.5YZ8	Hex Bolt 1-14x6 1/2 Grade 8 Zinc Hex Cap Screw		
11		LN1-8NCZ5	LN 1-8 Zinc Plated Nylon Insert Lock Nut		
12		LN1-14NFZ5	Center Locknuts (1-14) 2-Way Fine Thread		
13	1	45826	Hitch Insert Bushing (2.0"-1.25")	Optional	Requires hitch with 2" Ball
14	1	45827	Hitch Insert Bushing (2.0"-1.5")	Optional	Requires hitch with 2" Ball

Mechanical Light Kit - 43673 - SN 19NS101 to Current

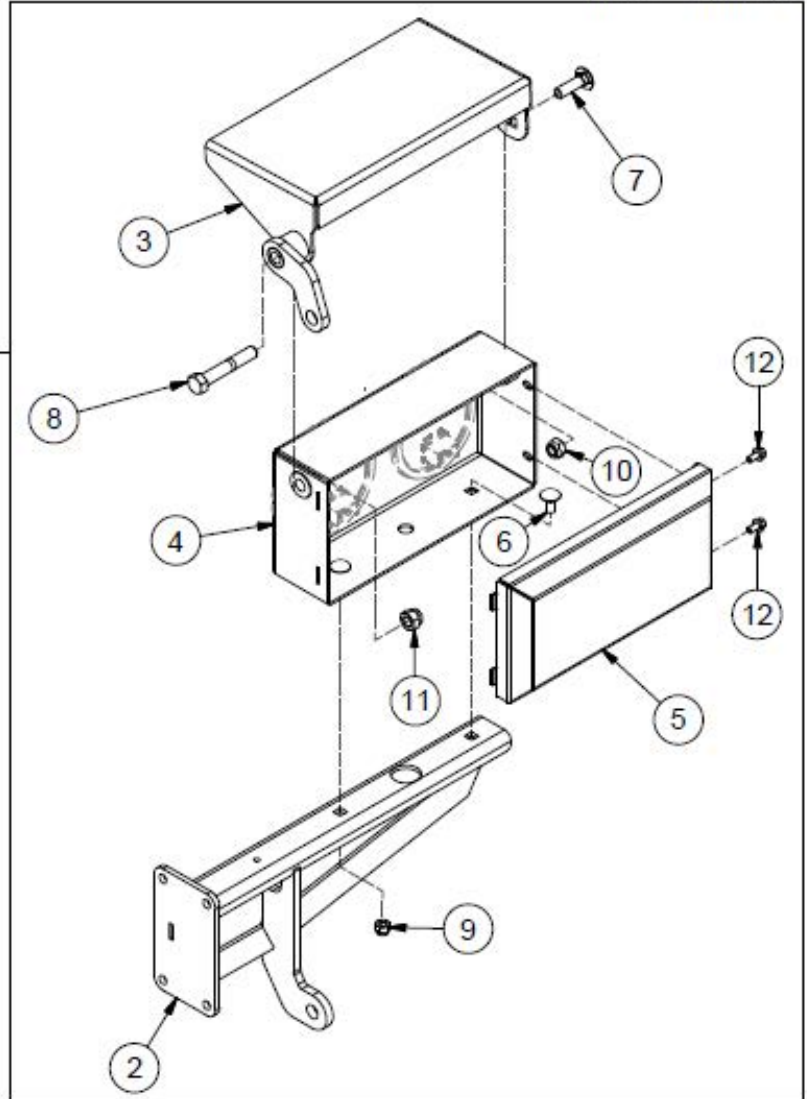


Mechanical Light Kit - 43673 - SN 19NS101 to Current

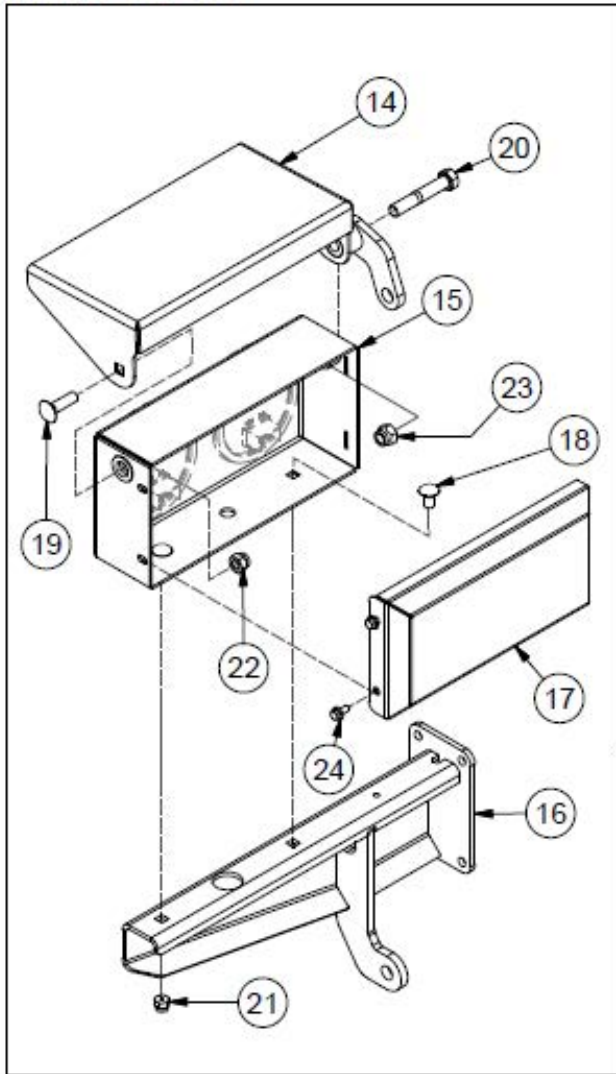
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	31788	Red LED Light for Nitro Spreader
2	2	31789	Amber LED Light for Nitro Spreader
3	4	31798	Grommet for LED Lights on Nitro
4	1	42139	Right Light Bracket
5	1	42140	Left Light Bracket
6	2	43178	Light Box Cover
7	2	43204	Inner Pin Assembly
8	1	43206	Left Light Box 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



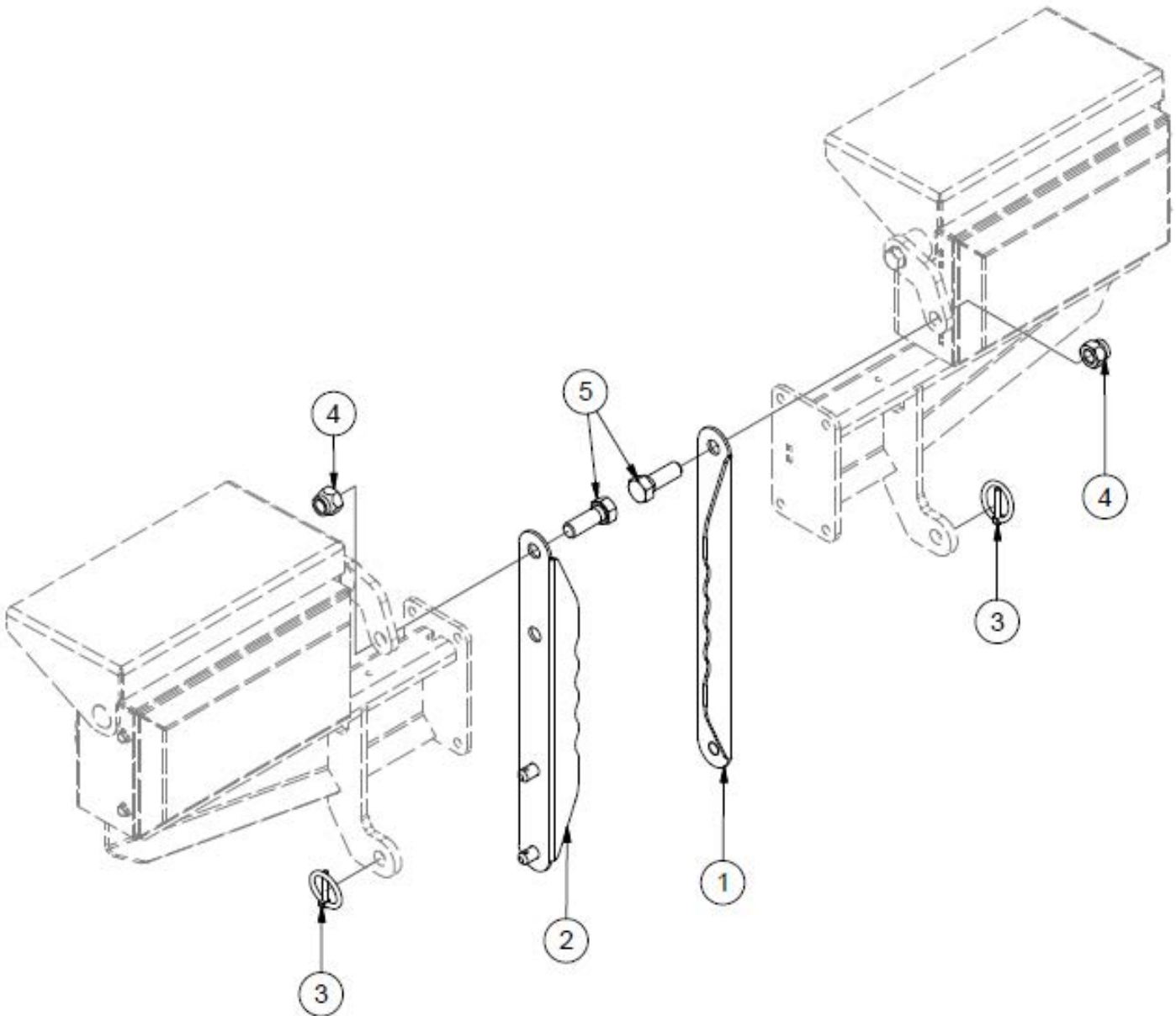
Item 13 - 400-855



Light Kit Base

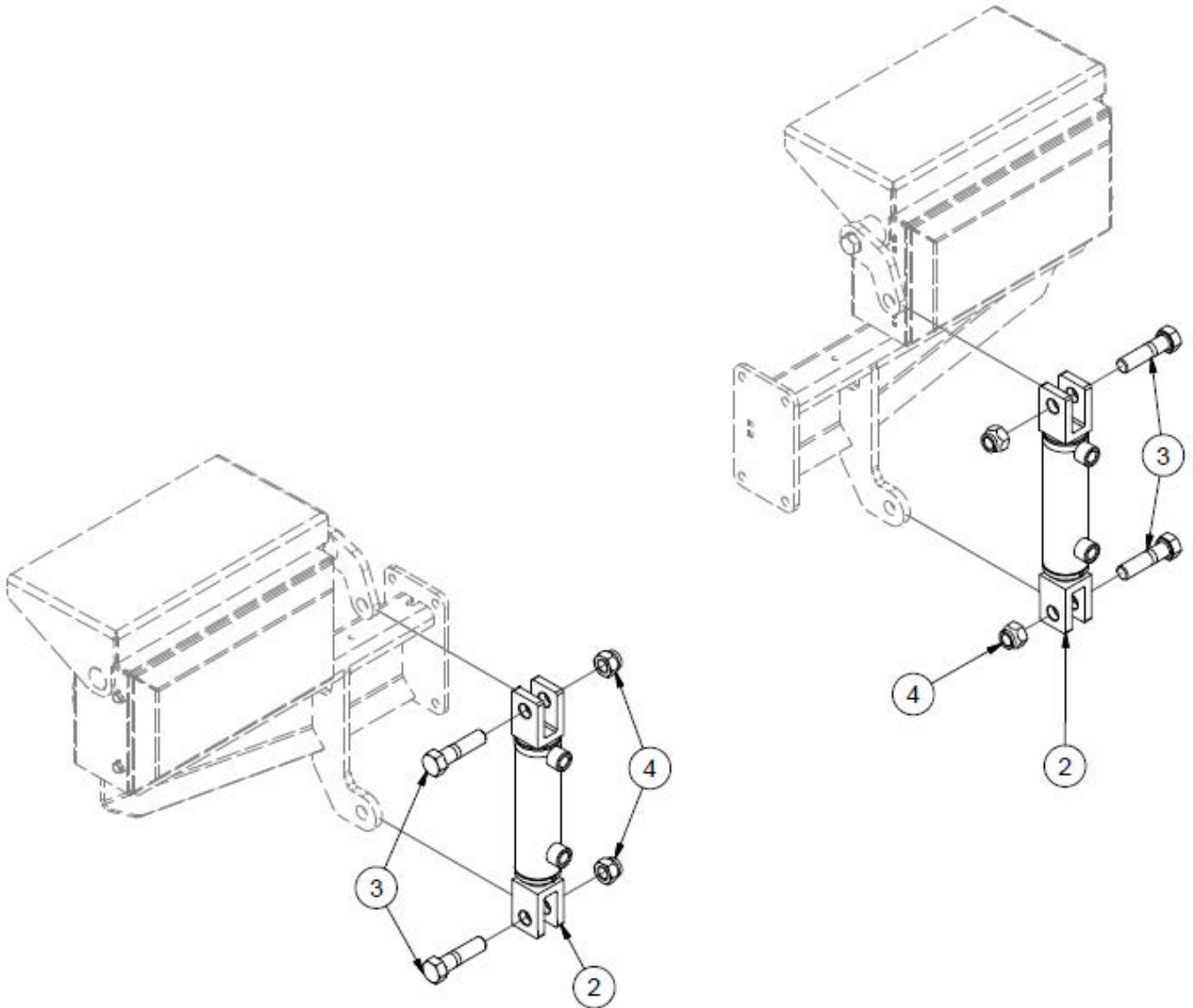
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	400-850	Left Light Assembly
2	1	400-354	Left Light Mount Bar
3	1	400-939	Left Light Cover
4	1	400-940	Left Light Housing
5	1	400-943	Light Housing Lid
6	2	CB 3/8-16X 3/4 Z5	Carriage Bolt - 3/8-16 x 3/4" Grade 5 Zinc
7	1	CB 7/16-14X1.1/2 Z5	Carriage Bolt - 7/16-14 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

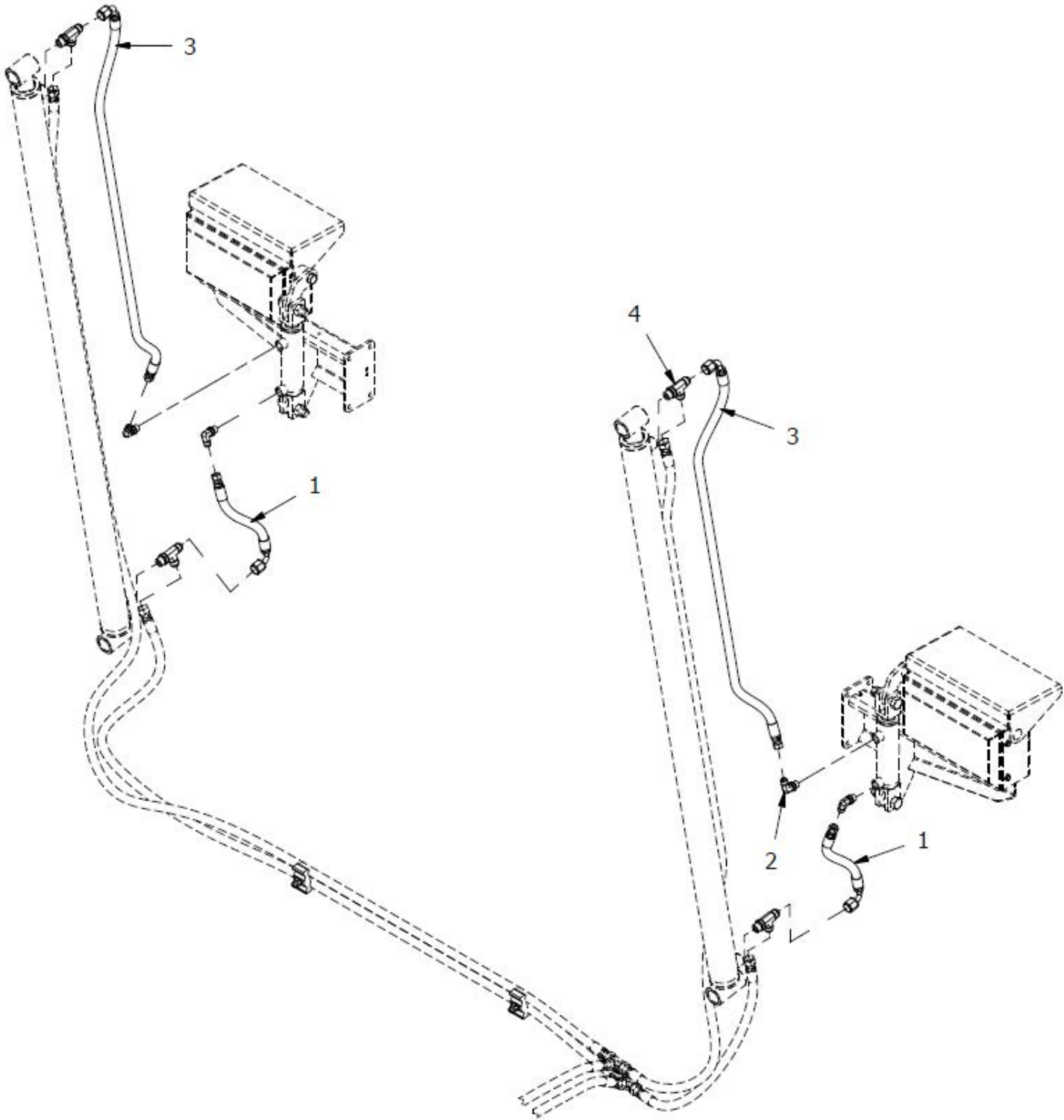
Hydraulic Light Kit Cylinders



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

*Includes hose kit on [pages 3-10,11](#).

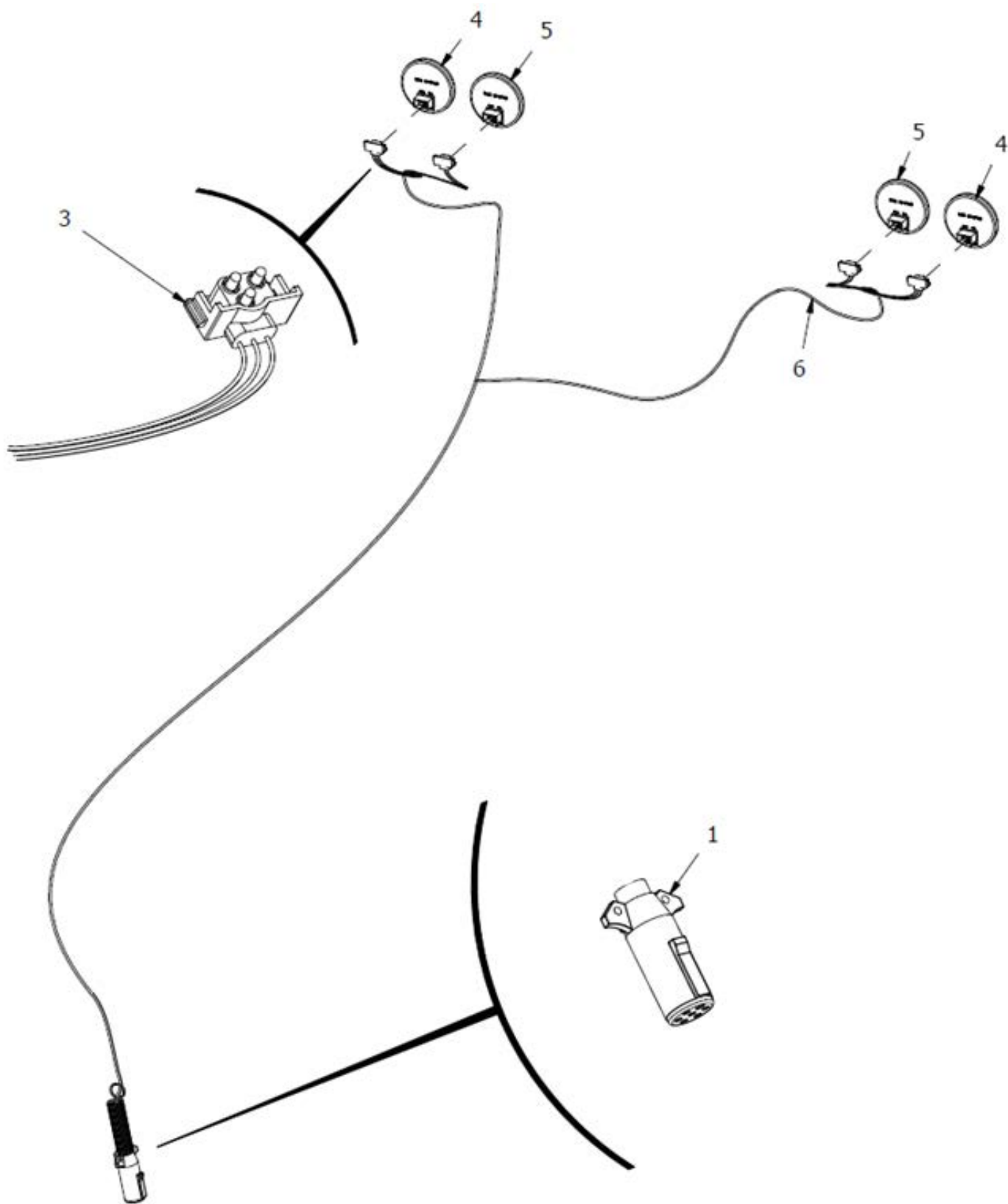
Hydraulic Light Kit Hoses



Hydraulic Light Kit Hoses

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	30800	HH43 - 4AT1(6FJX90,6FJX) HCL 43"
2	4	HF 6801-6-6	Hydraulic Fitting
3	2	30801	HH10 - 4AT1(6FJX90,6FJX) HCL 10"
4	4	HF 6804-8-8-8	Hydraulic Fitting

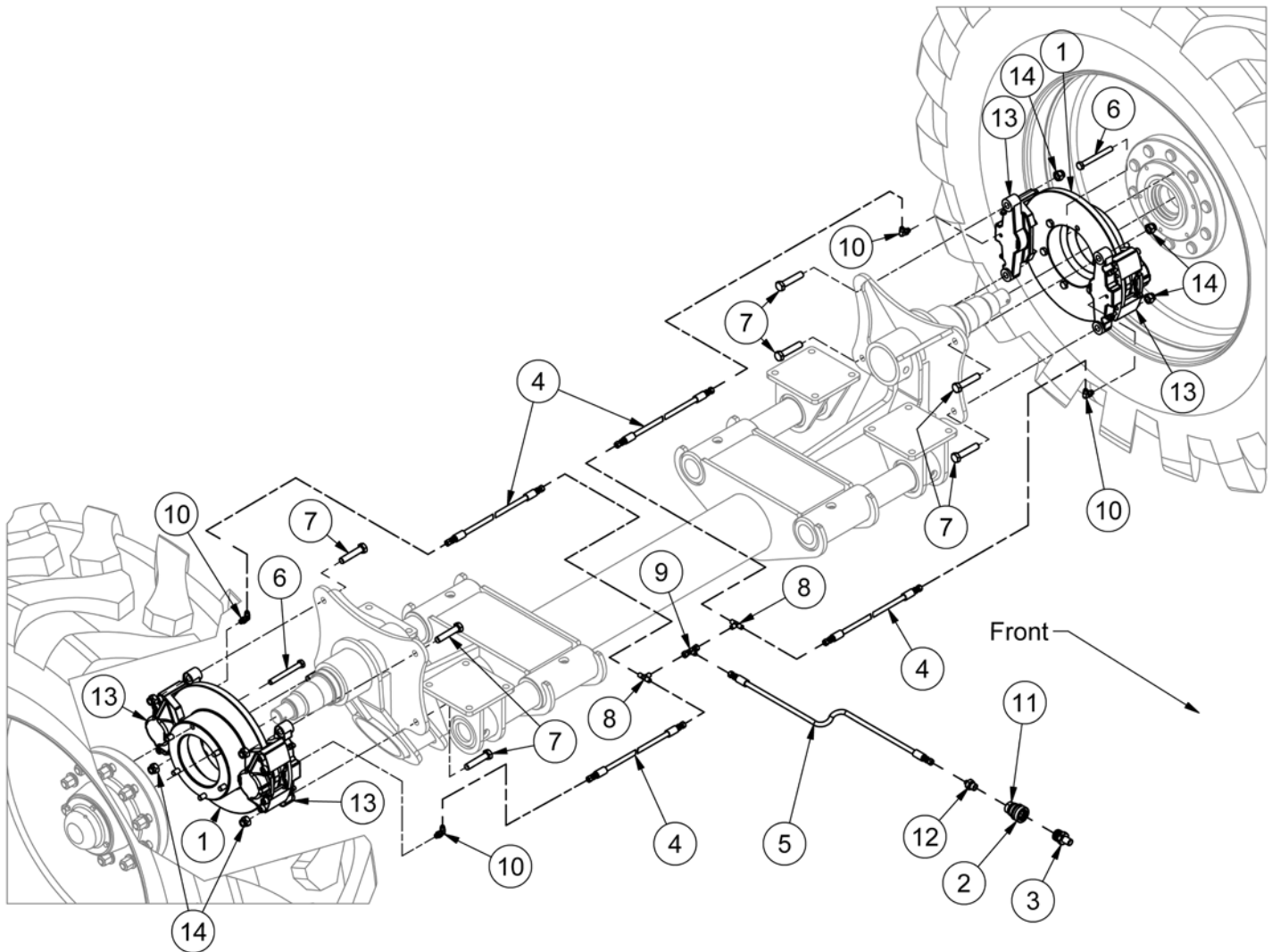
Light Kit Wiring



Light Kit Wiring

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

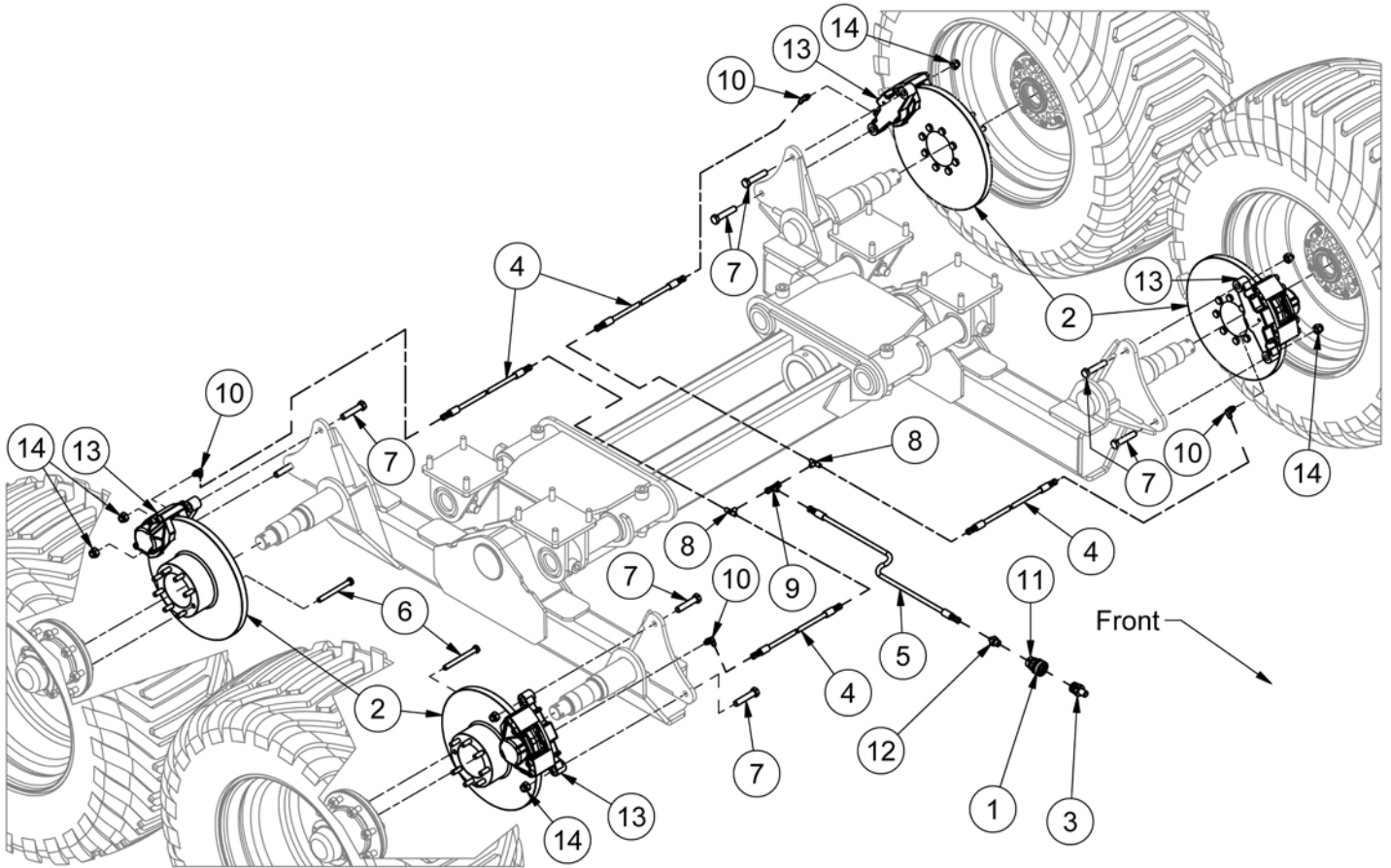
N450SB - Single Axle Brake Kit



*Scale ready axle shown.

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	2	31773	Rotor for 16000# Hub - 9 Bolt	
2	1	36022	Hyd. Quick Coupler- Female- For Nitro Brakes	Inc. Item 11
3	1	37846	Hyd. Quick Coupler- Male- For Nitro Brakes	
4	4	39500	Hose - HH76 4AT1(4G4FJX,4G4FJX)HCL76"	
5	1	39501	Hose - HH336 4AT1(4G4FJX,4G4FJX)HCL336"	
6	18	HB 1/2-20 X4.5 YZ8	Hex Bolt 1/2-20x4 1/2 Grade 8 Zinc Hex Cap Screw	
7	8	HB 5/8-18 X3 YZ8	Hex Bolt 5/8-18x3 Grade 8 Zinc Hex Cap Screw	
8	2	HF 2603-4	Hydraulic Fitting - Male JIC Tee	
9	1	HF 6603-4-4-4	T- Fitting JIC	
10	4	HF 6801-4-4	Hydraulic Fitting - 90° O-Ring to JIC	
11	1	HF 9500-18MM	Metric Thread Bonded Seal	
12	1	HF 9606-04-S18	Hydraulic Adaptor - 1/4" JIC/M18-1.5	
13	4	LA-11-1527	16000# Caliper	
14	8	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut	

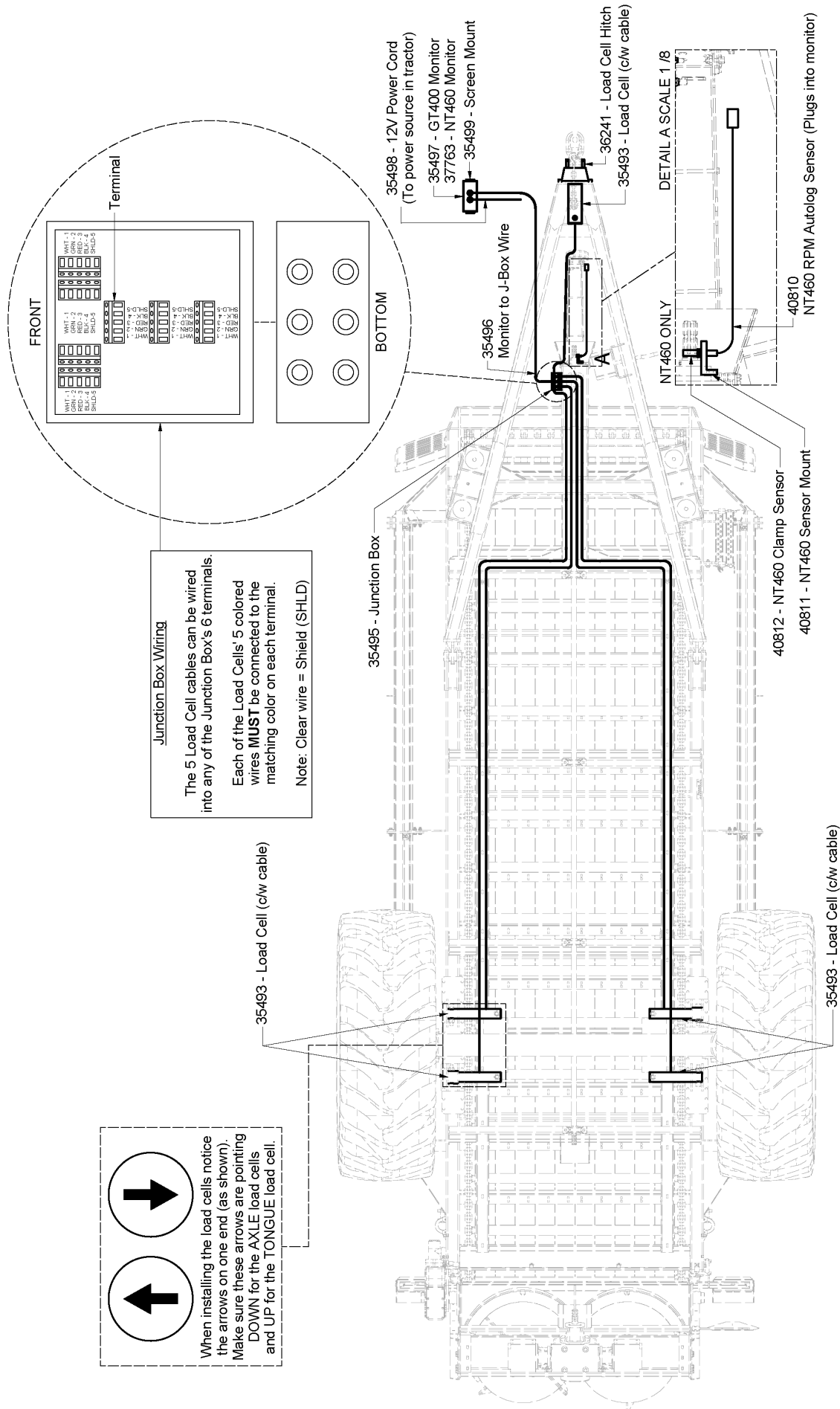
N450TB - Tandem Axle Brake Kit



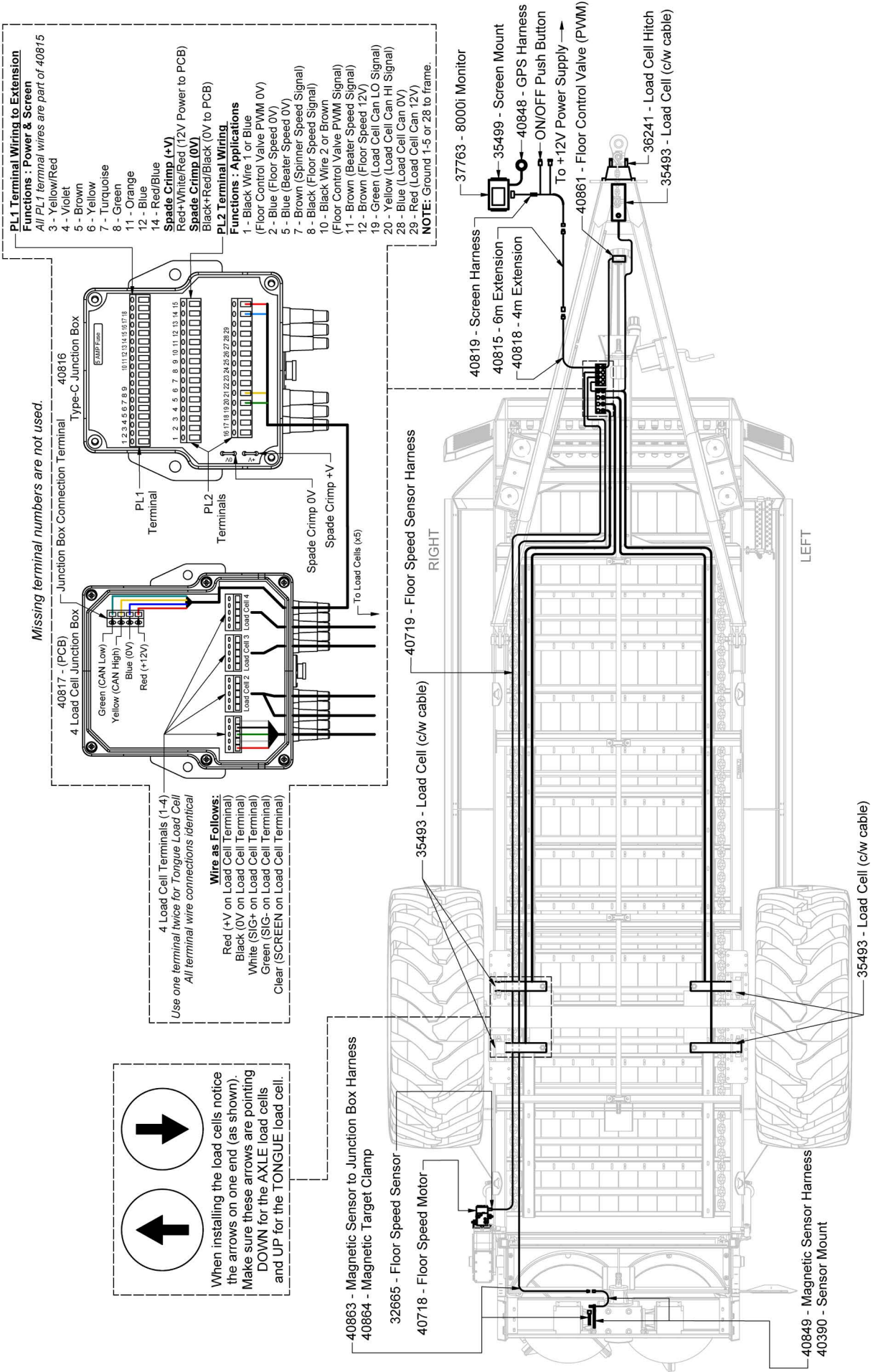
*Scale ready axle shown.

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	1	36022	Hyd. Quick Coupler- Female- For Nitro Brakes	Inc. Item 11
2	4	36042	12000# Hub Rotor	
3	1	37846	Hyd. Quick Coupler- Male- For Nitro Brakes	
4	4	39500	Hose - HH76 4AT1(4G4FJX,4G4FJX)HCL76"	
5	1	39501	Hose - HH336 4AT1(4G4FJX,4G4FJX)HCL336"	
6	32	HB 1/2-20 X5 YZ8	Hex Bolt 1/2-20x5 Grade 8 Zinc Hex Cap Screw	
7	8	HB 5/8-18 X3 YZ8	Hex Bolt 5/8-18x3 Grade 8 Zinc Hex Cap Screw	
8	2	HF 2603-4	Hydraulic Fitting - Male JIC Tee	
9	1	HF 6603-4-4-4	T- Fitting JIC	
10	4	HF 6801-4-4	Hydraulic Fitting - 90° O-Ring to JIC	
11	1	HF 9500-18MM	Metric Thread Bonded Seal	
12	1	HF 9606-04-S18	Hydraulic Adaptor - 1/4" JIC/M18-1.5	
13	4	LA-11-1527	16000# Caliper	
14	8	LN 5/8 F	Center Locknuts (5/8-18) 2-Way Fine Thread	

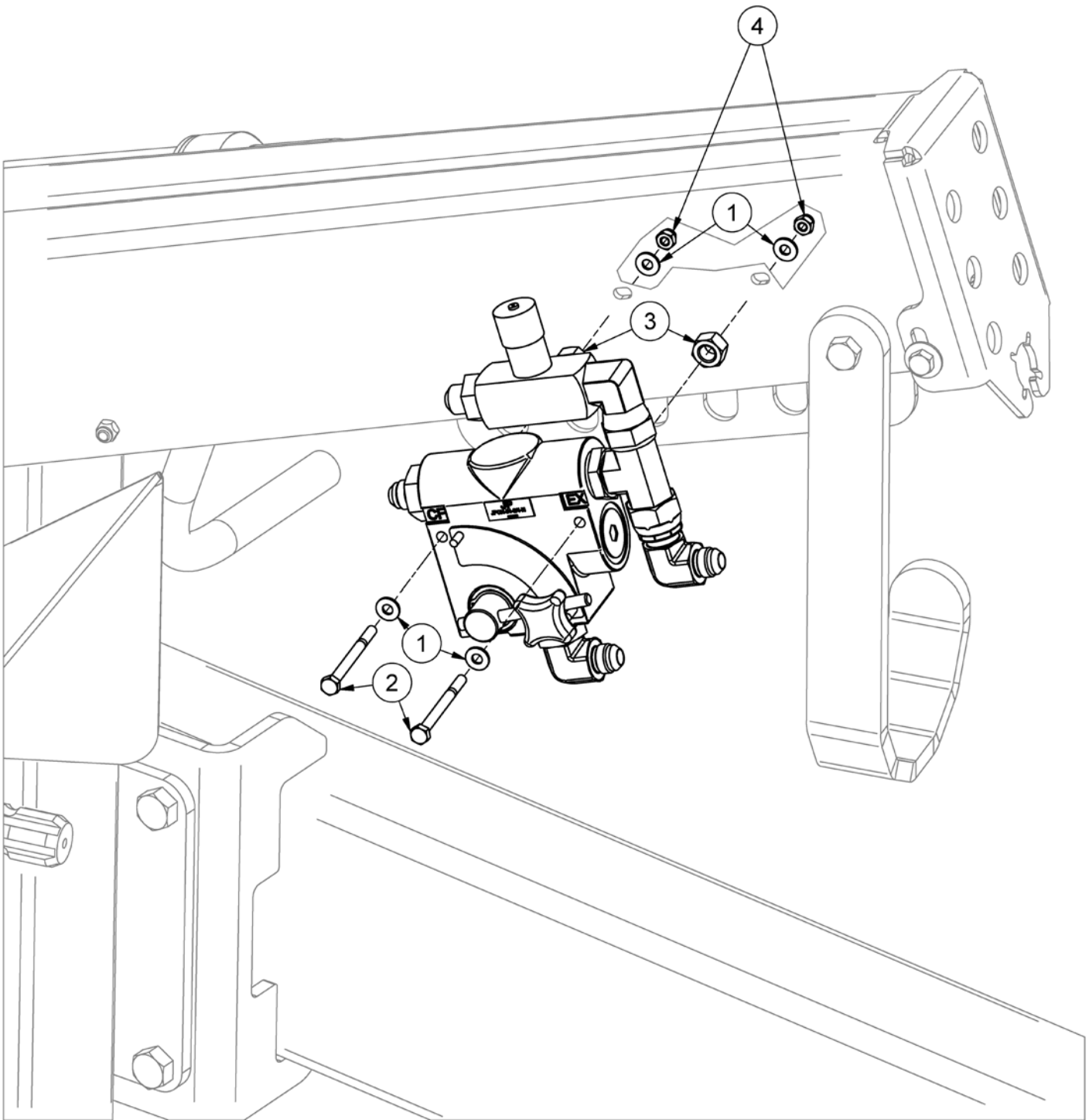
N750LC (GT400) / N750LCNT460 Scales



N750LCNT8000 Scales



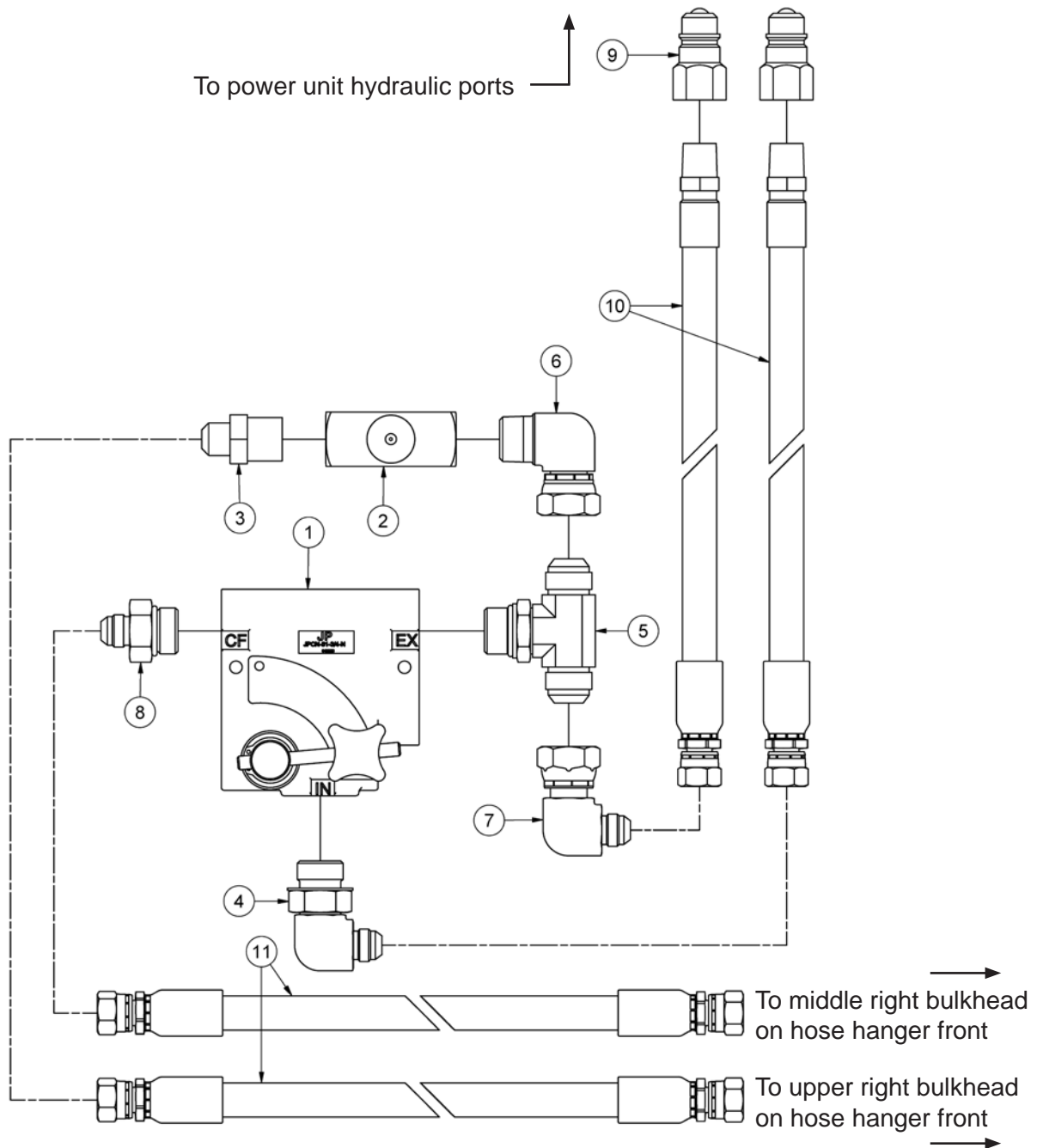
Flow Control Mounting



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

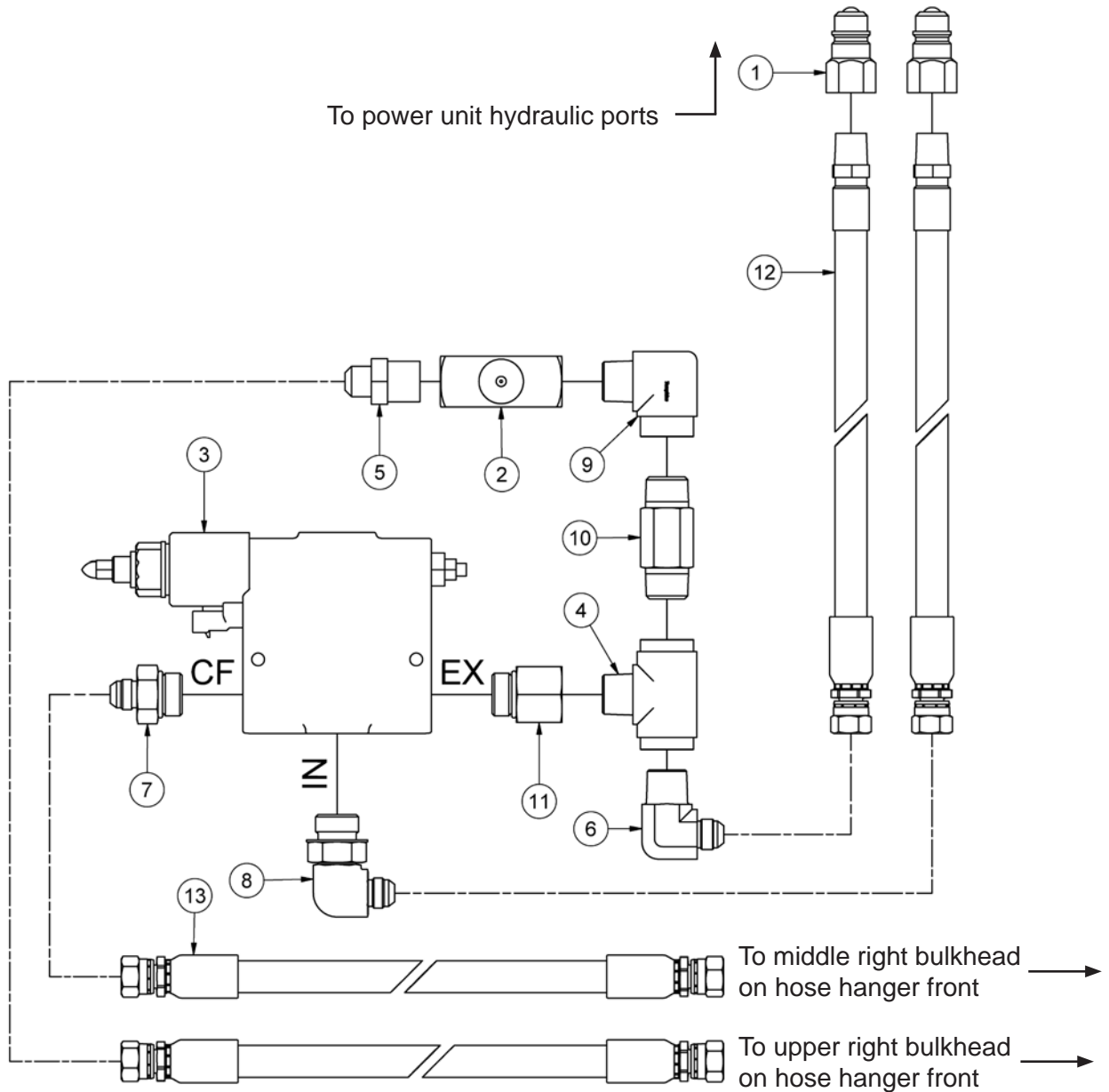
NOTICE: Manual flow control shown. Electric flow control option has same mounting hardware. See hydraulic layouts for flow control breakdowns.

Flow Control Hydraulic Layout - Manual



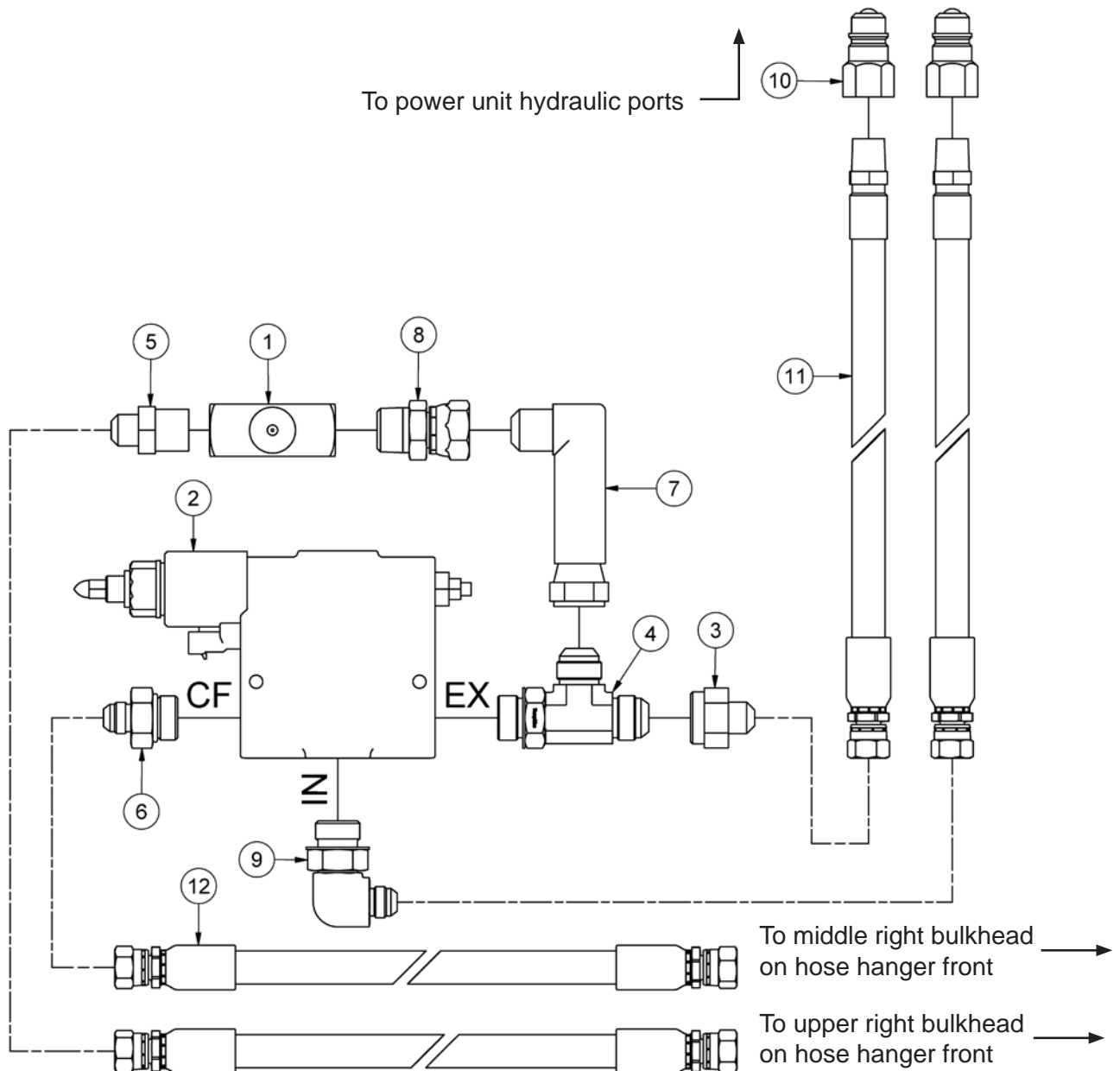
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	30855	Flow Control - Pressure Compensated 3/4
2	1	30857	Flow Control Valve - 3/4"
3	1	HF 2404-8-12	Hydraulic Fitting - Union
4	1	HF 6801-8-12	Hyd. Fitting - 1/2" JIC - 3/4" 90 Degree Elbow
5	1	HF 6803-12-12-12	Hyd. Fitting Male JIC Male JIC Male ORB Tee
6	1	HF 6501-12-12	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)



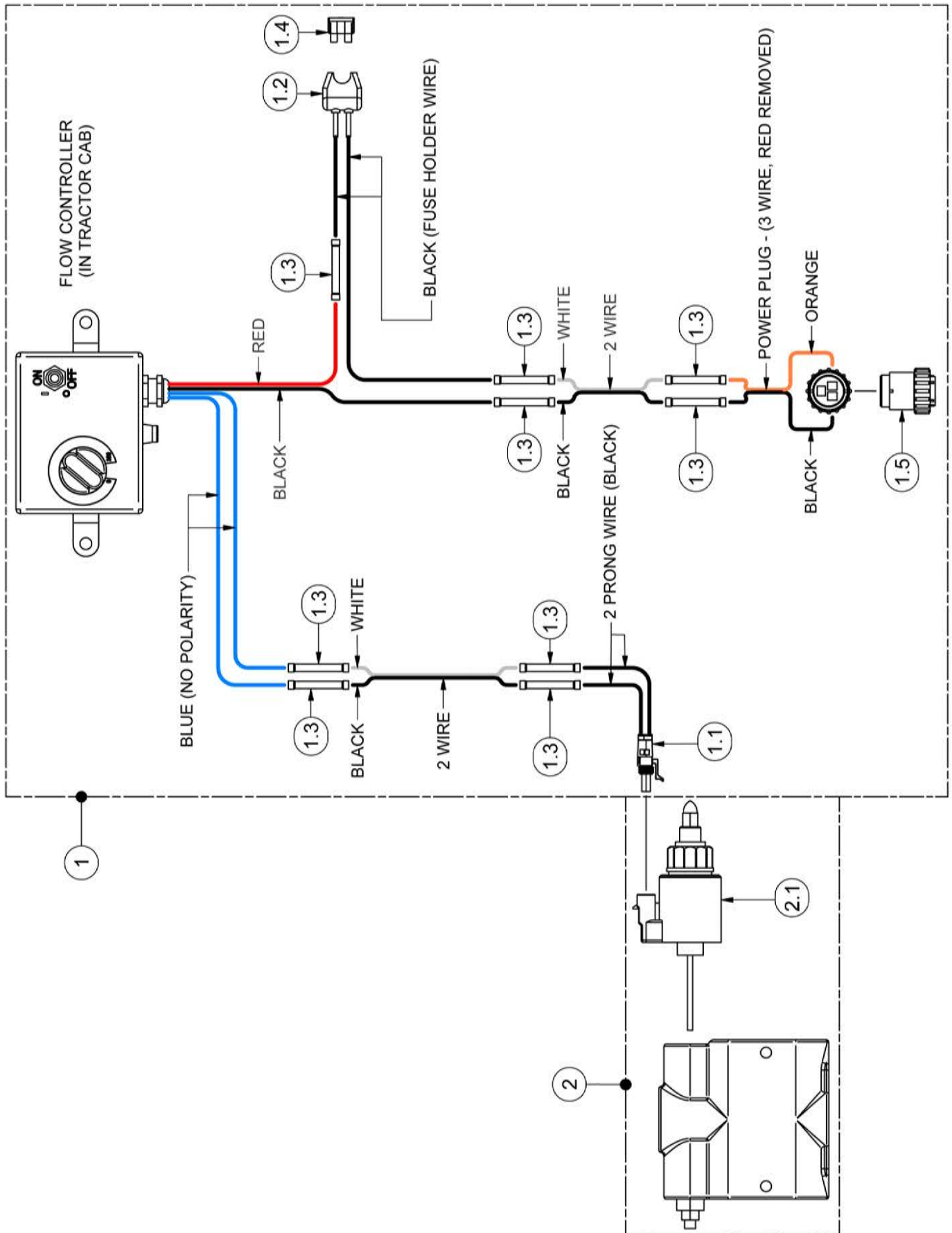
ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	2	HF 8010-4	Quickcoupler 1/2" Male Tip	
2	1	30857	Flow Control Valve - 3/4"	
3	1	37976	Electric Flow Control	Brkdwn Pg.3-22
4	1	HF 5604-12-12	3/4 FNPT X 1/2 MNPT Branch Tee	
5	1	HF 2404-8-12	Hydraulic Fitting - Union	
6	1	HF 2501-8-12	Hydraulic Elbow Fitting - 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 Pg.3-22
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"	

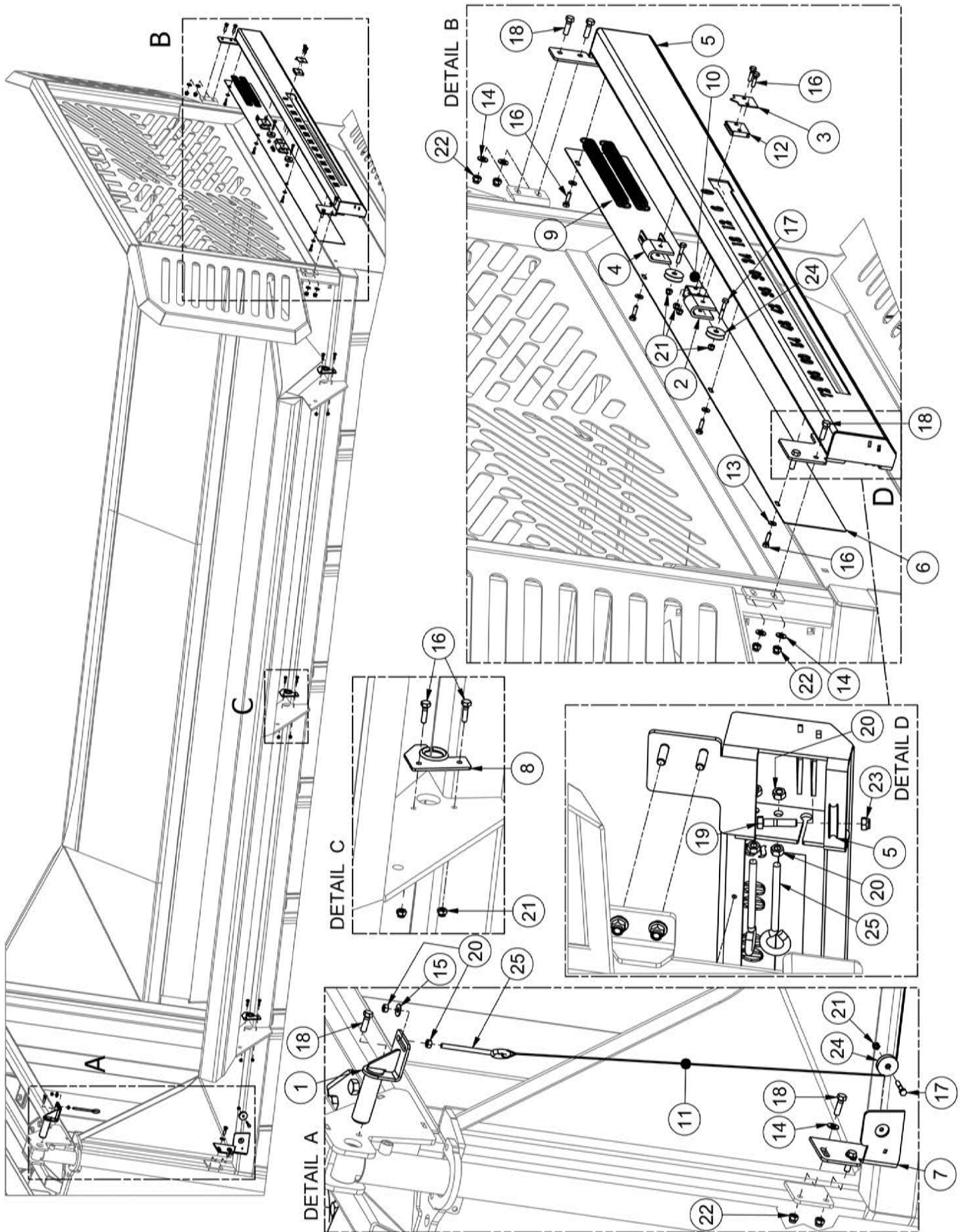
Electric Flow Control Wiring



Electric Flow Control Wiring

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	45344	Electric Flow Controller
1.1	1	37970	2 Prong Plug
1.2	1	TL82-2164	Fuse Holder
1.3	9	EL23662	Wire Connector
1.4	1	TL550-100-079	15 AMP Fuse
1.5	2	TB109-110-307	Power Plug
2	1	45345	Electric Flow Control
2.1	1	37968	Solenoid

Endgate Indicator Kit - 48216

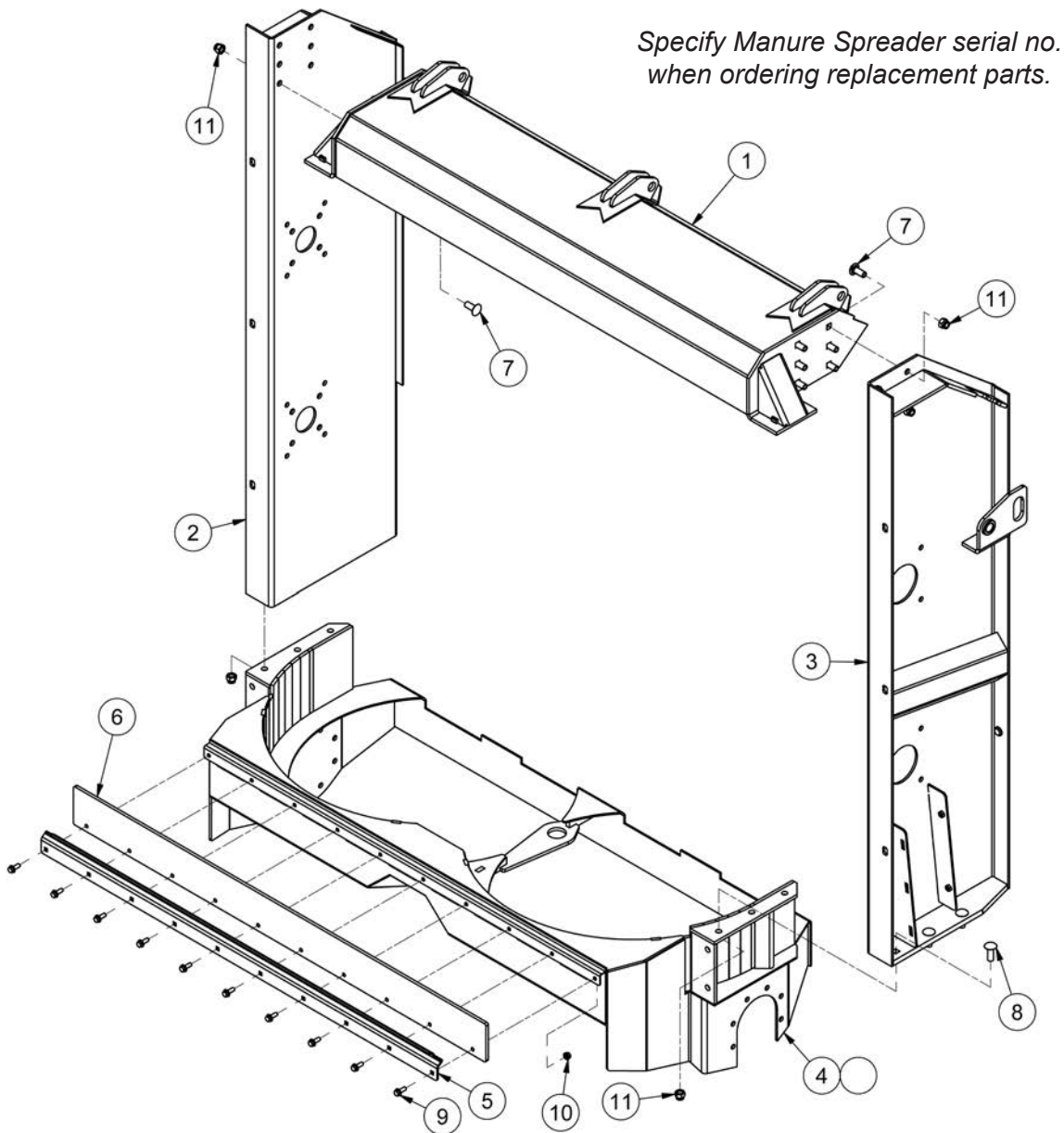


Endgate Indicator Kit - 48216

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	45314	Endgate Cable Pin
2	1	45407	Indicator Slider Mount
3	1	45409	Indicator Arrow
4	1	45410	Spring Tensioner Pulley
5	1	45578	Indicator
6	1	45582	Indicator Back Panel
7	1	45812	Rear Pulley
8	3	45898	Indicator Wire Plate
9	2	46086	Spring 12.0 X 1.0 X .105
10	1	48202	Front Indicator Cable - .125" x 65"
11	1	48741	Side Indicator Cable - .125 x 320"
12	1	BF5000-183	Indicator Slider
13	4	FW 1/4	Flatwasher - 1/4" Zinc Plated USS
14	6	FW 3/8	Flatwasher - 3/8" Zinc Plated USS
15	1	FW 5/16	Flatwasher - 5/16" Zinc Plated USS
16	12	HB1/4-20X1Z5	Hex Bolt 1/4-20x1 Grade 5 Zinc Plated Hex Cap Screw
17	3	HB1/4-20X1.5Z5	Hex Bolt 1/4-20x1 1/2 Grade 5 Zinc Plated Hex Cap Screw
18	7	HB3/8-16X1.25Z5	Hex Bolt 3/8-16x1 1/4 Grade 5 Zinc Plated Hex Cap Screw
19	1	HB 5/16-18X1.5 Z5	Hex Bolt 5/16-18x1 1/2 Grade 5 Zinc Plated Hex Cap Screw
20	6	HN 5/16	Hex Nut 5/16"-18 Grade 5 Zinc Plated Finished
21	11	LN1/4-20NCZ5	LN 1/4-20 Zinc Plated Nylon Insert Lock Nut
22	7	LN3/8-16NCZ5	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut
23	1	LN 5/16 N	LN 5/16-18 Zinc Plated Nylon Insert Lock Nut
24	3	PP00423	Pulley
25	3	PP00682	Eye Bolt - 5/16-18 x 4" Shank Zinc Plated Turned

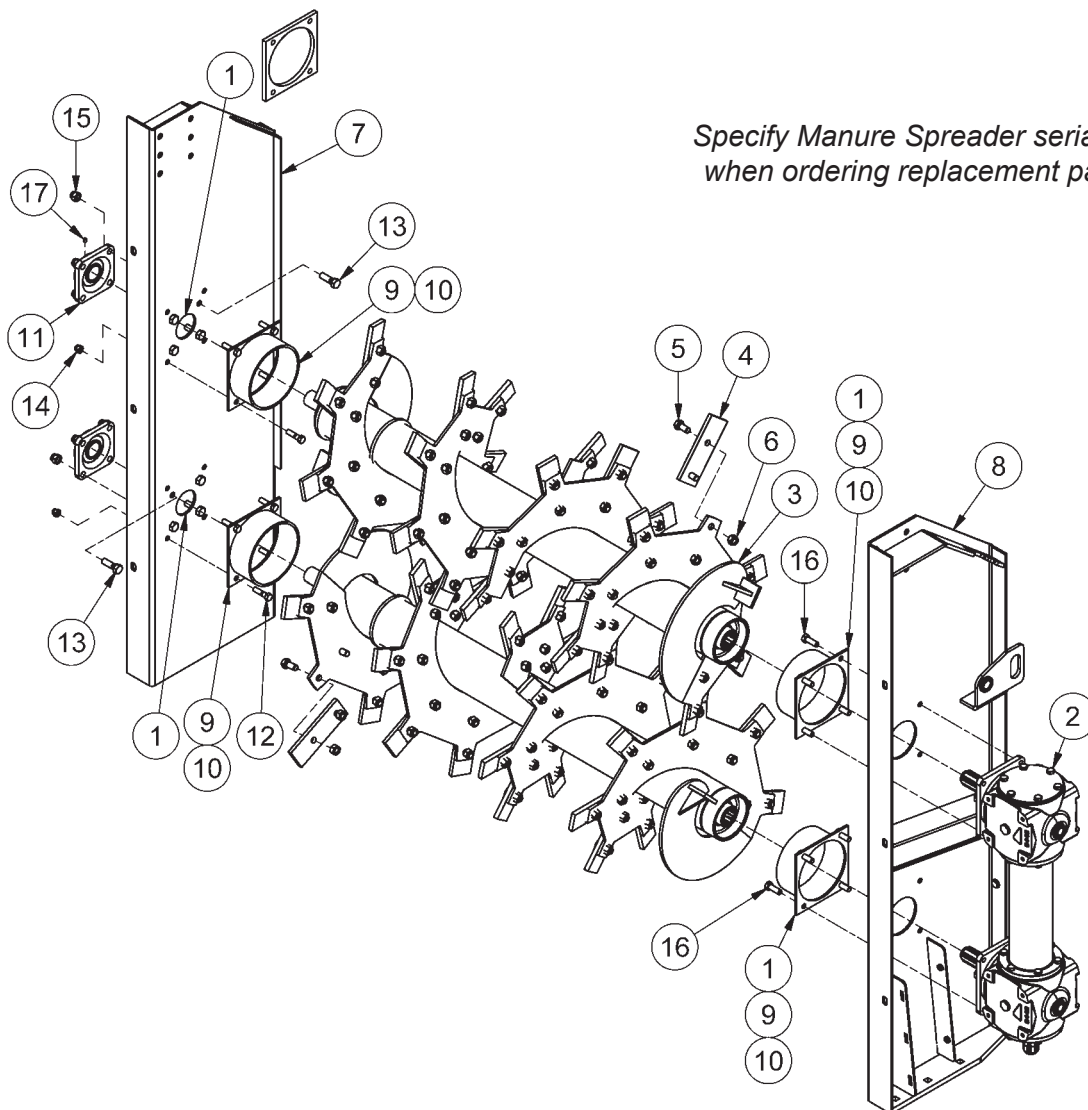
Section 4 - Option - Poultry Beaters

Poultry Beaters - Frame



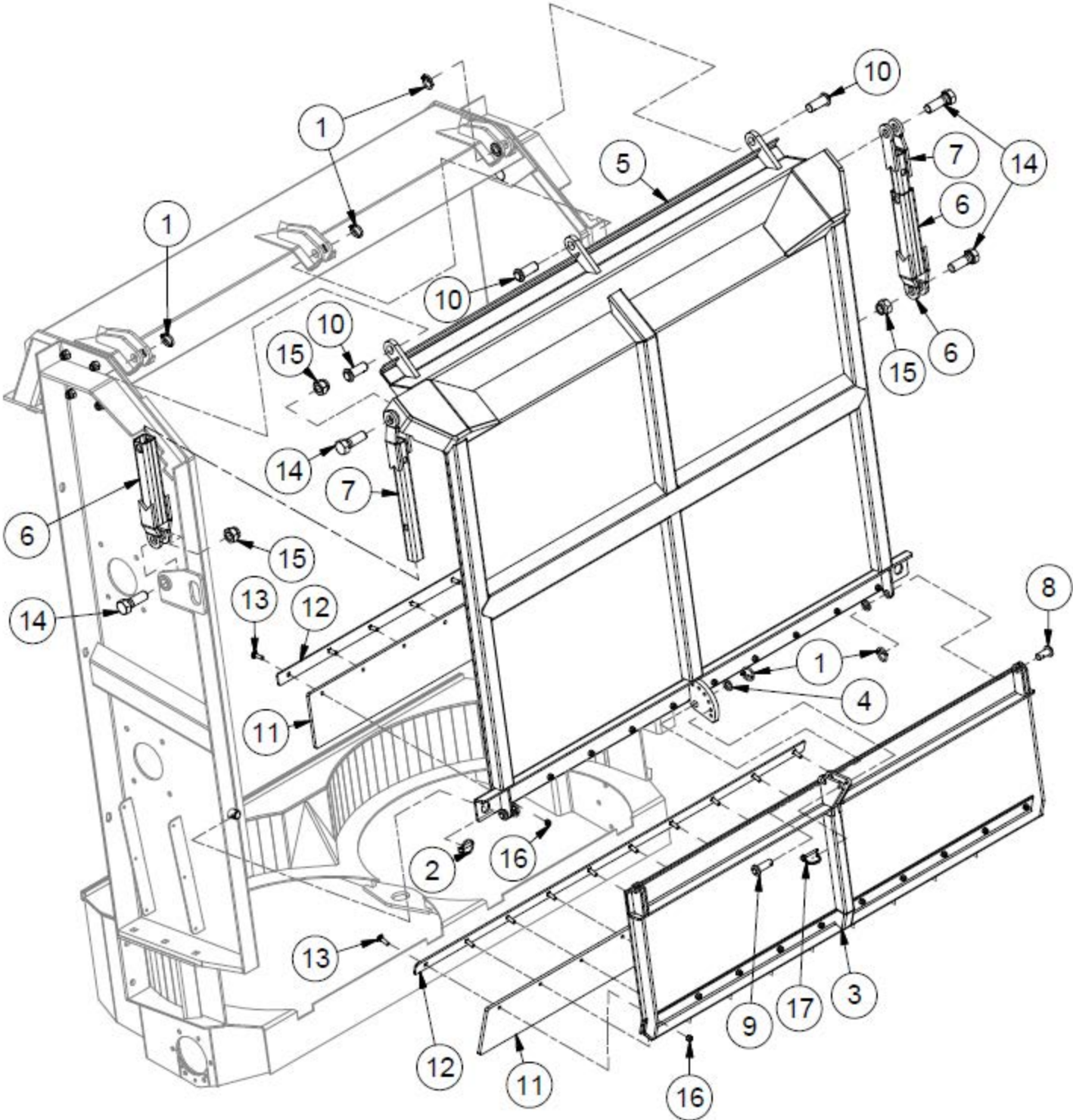
ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	1	40334	Beater Gate Mount	
2	1	40378	Beater Right Panel	
3	1	40380	Beater Left Panel	
4	1	44921	Spinner Mounting Assembly	Current
	1	40335	Spinner Mounting Assembly	Original
5	1	45367	Wiper Deflector	
6	1	46077	Rubber Seal	
7	12	CB5/8-11X1.5CZ5	Carriage Bolt - 5/8-11 x 1 1/2" Grade 5 Zinc	
8	6	CB5/8-11X1.75CZ5	Carriage Bolt - 5/8-11 x 1 3/4" Grade 5 Zinc	
9	10	HBC3/8X1	Hex Bolt Cerrated 3/8-16 x 1 Zinc Flange Bolt	
10	10	HNC3/8	Serrated Hex Nut	
11	18	LN5/8-11NCZ5	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut	

Poultry Beaters - Beaters



ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	4	36723	Inside Plate for Beaters	Original Style
2	1	37827	Gear Box - Side Poultry	
3	2	40356	Beater	
4	28	400-438	Beater Paddle	Qty/1 Beater
5	56	HB5/8-11X1.5Z5	Hex Bolt 5/8-11x1 1/2 Grade 5 Zinc Plated Hex Cap Screw	Qty/1 Beater
6	56	LN5/8-11CCZA	Center Lock Nut 5/8"-11 Grade A Zinc Plated	Qty/1 Beater
7	1	40378	Beater Right Panel	
8	1	40380	Beater Left Panel	
9	1	37936	Beater End Covers	Original Style
10	4	45663	Beater Shields	Current Style
11	2	F209-1.75-SET	Square Flange Housing	
12	16	HB1/2-13X2Z5	Hex Bolt 1/2-13x2 Grade 5 Zinc Plated Hex Cap Screw	
13	8	HB5/8-11X2Z5	Hex Bolt 5/8-11x2 Grade 5 Zinc Plated Hex Cap Screw	
14	40	LN1/2-13NCZ5	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut	
15	26	LN5/8-11NCZ5	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut	
16	8	M14X40X2	Metric Bolt	
17	4	SS5/16-18CX0.375CP	Allan Head Set Screw, 5/16-18 x 3/8	

Poultry Beaters - Endgate

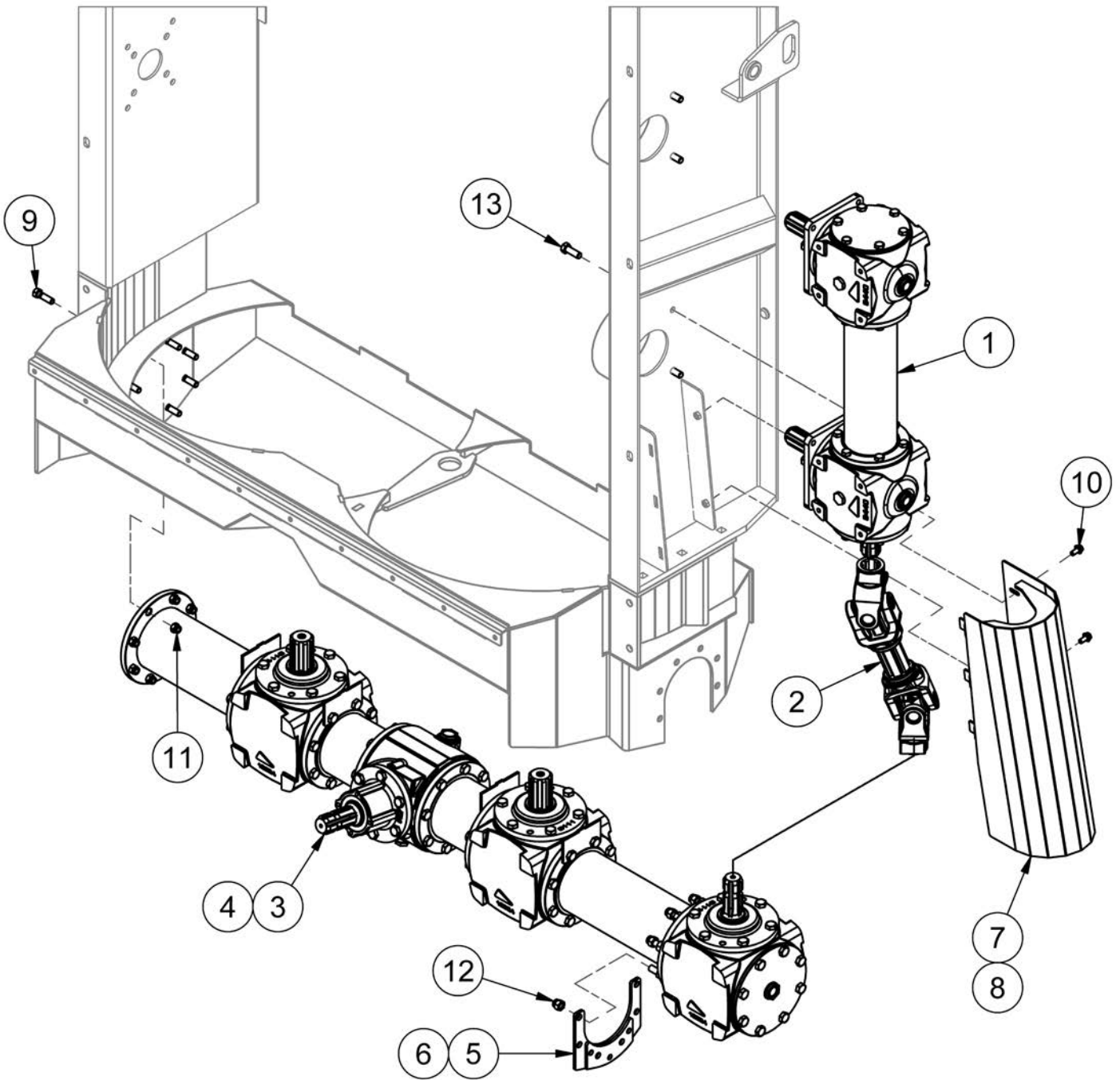


Poultry Beaters - Endgate

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 Gr.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 - Drivelines

Specify Manure Spreader serial no. when ordering replacement parts.

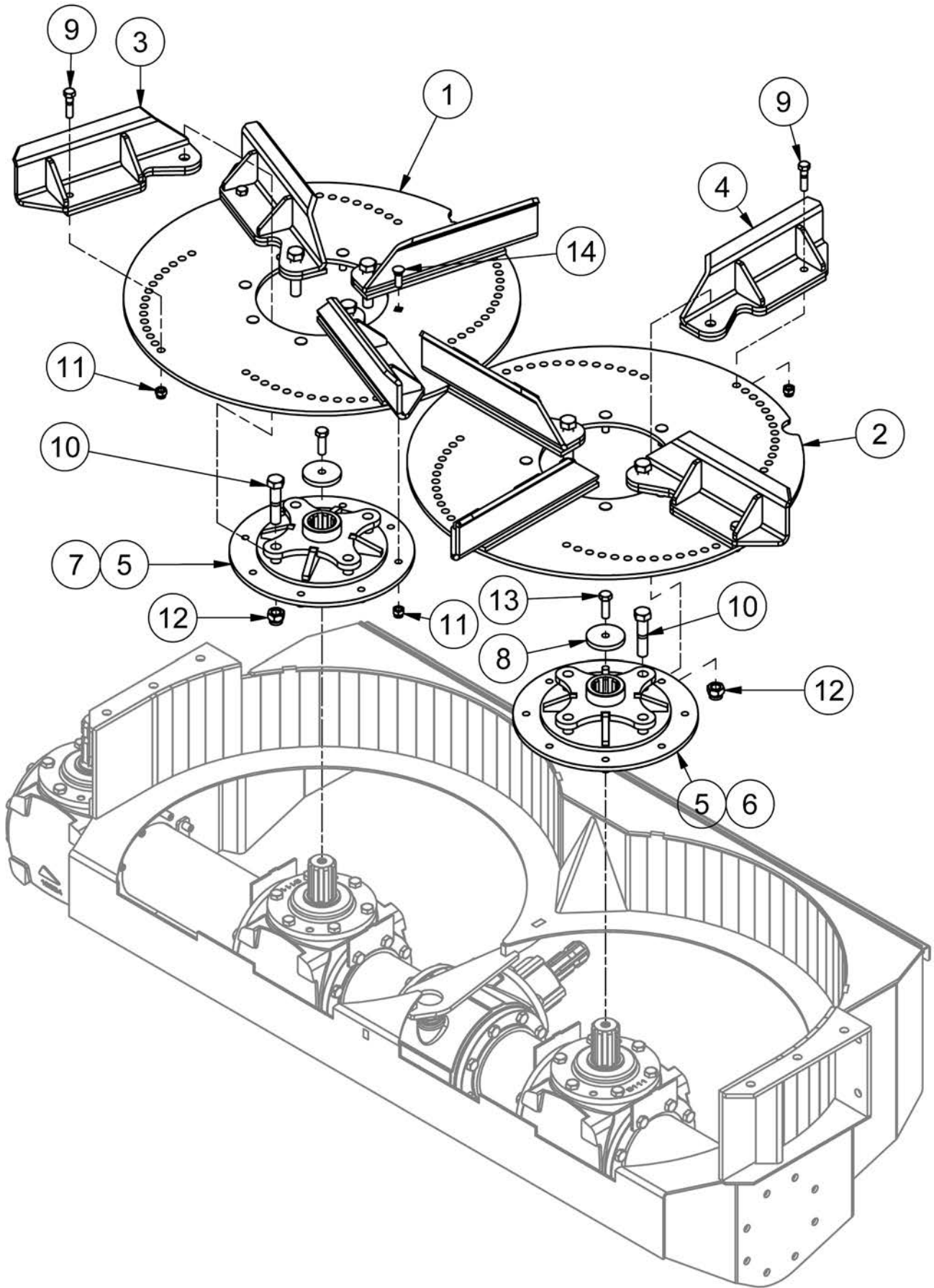


Poultry Beaters - Drivelines

Specify Manure Spreader serial no. when ordering replacement parts.

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	1	37827	Gear Box - Side Poultry	
2	1	39998	PTO Cross Drive Shaft	
3	1	44836	Gear Box SRT18/1710	Current
4	1	37828	Gear Box - Lower Poultry	Original
5	1	44926	Bottom Gearbox Support	Current
6	1	42173	Bottom Gearbox Support	Original
7	1	46038	PTO Shield	Current
8	1	40259	PTO Shield	Original
9	8	HB1/2-13X1.75Z5	Hex Bolt 1/2-13x1 3/4 Grade 5 Zinc Plated Hex Cap Screw	
10	2	HBC3/8X0.75	Hex Bolt Cerrated 3/8-16 x 3/4 Zinc Flange Bolt	
11	8	LN1/2-13NCZ5	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut	
12	8	LN14-2CZ5	Locknut - M14-2 Zinc Plated Nylon Insert Lock Nut	
13	8	M14X40X2	Metric Bolt	

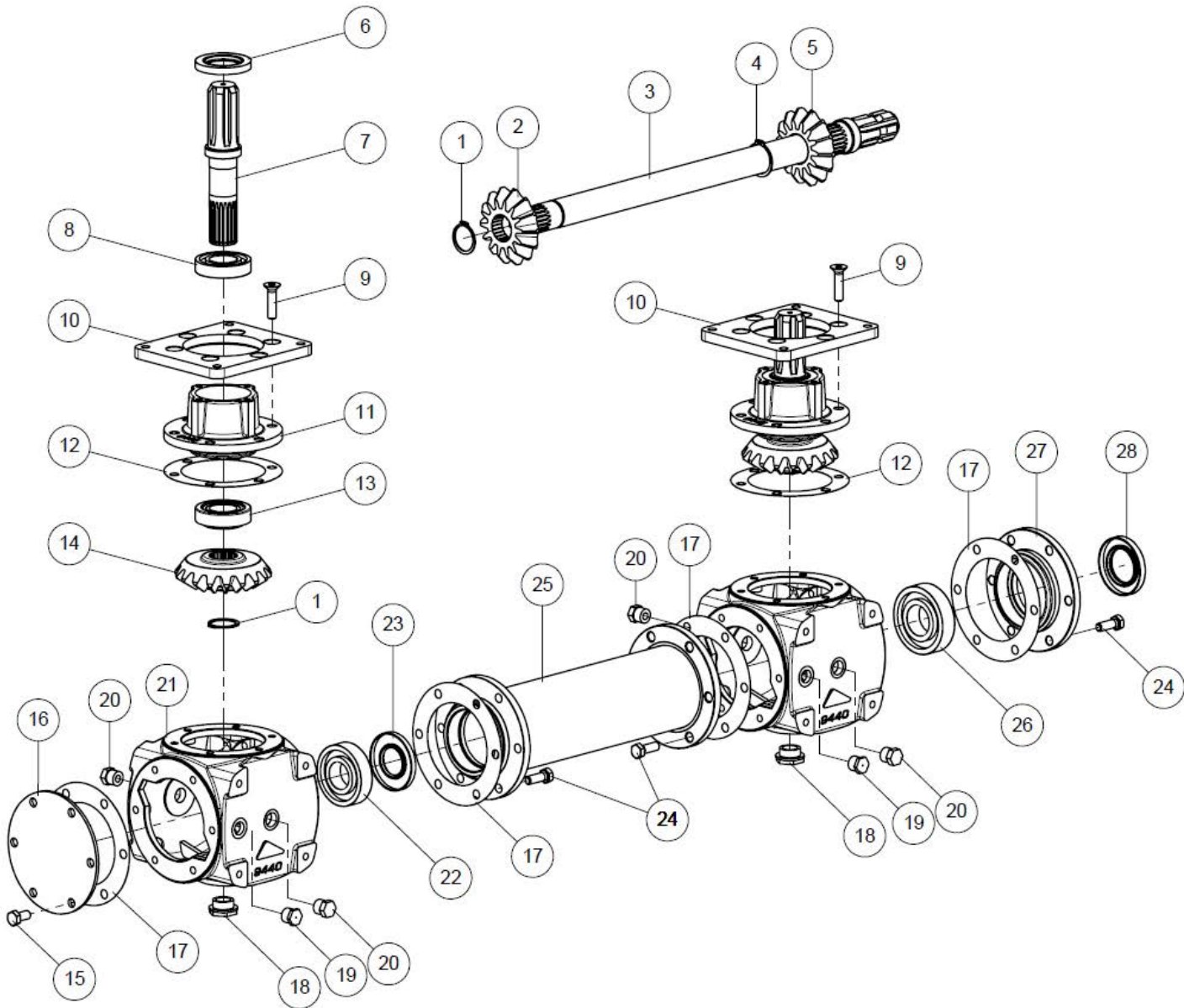
Poultry Beaters - Spinners



Poultry Beaters - Spinners

ITEM	QTY	PART NUMBER	DESCRIPTION	NOTE
1	1	37881	Left Spinner Plate	
2	1	37902	Right Spinner Plate	
3	4	40310	Left Paddle	
4	4	40311	Right Paddle	
5	2	44927	Spinner Hub SRT18	Current
6	1	39843	Braced Spinner Hub	Original
7	1	40298	Braced Spinner Hub	Original
8	2	44941	Hub Washer	
9	16	HB1/2-13X2Z5	Hex Bolt 1/2-13x2 Grade 5 Zinc Plated Hex Cap Screw	
10	8	HB3/4-10X3.5Z5	Hex Bolt 3/4-10x3 1/2 Grade 5 Zinc Plated Hex Cap Screw	
11	40	LN1/2-13NCZ5	LN 1/2-13 Zinc Plated Nylon Insert Lock Nut	
12	8	LN3/4-10NCZ5	LN 3/4-10 Zinc Plated Nylon Insert Lock Nut	
13	2	M14X45X2	Metric Bolt	
14	16	PB 1/2-13X1.5	Plow Bolts - 1/2-13 x 1 1/2 Flat Head Gr.5	

Poultry Beaters - 37827 - Side Gearbox

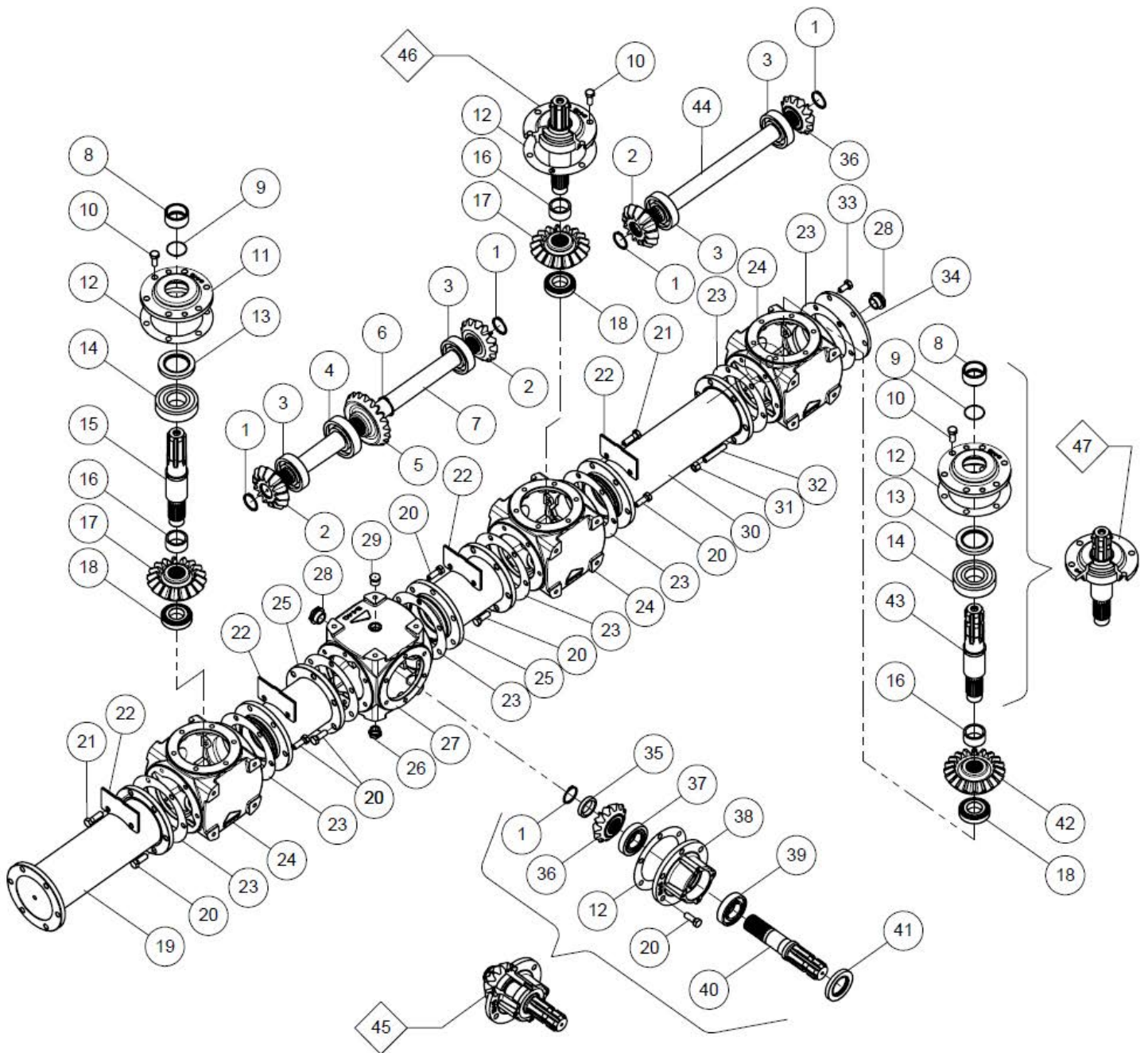


Poultry Beaters - 37827 - Side Gearbox

ITEM	QTY	PART NUMBER	DESCRIPTION
1	3	37827-3426	Circlip E40
2	1	37827-12041	Bevel Pinion Z=14
3	1	37827-15466	Shaft
4	1	37827-3427	Circlip E45
5	1	37827-15464	Bevel Pinion Z=14
6	2	37827-15481	Oil Seal 52/80/10-DL
7	2	37827-15463	Shaft
8	2	37827-3342	Bearing 6208
9	12	37827-15476	Screw M12x50
10	2	37827-15461	Fixing Plate
11	2	37827-9445	Hub
12	2	37827-9536	Gasket
13	2	37827-9013	Bearing 32208
14	2	37827-12042	Gear Z=18
15	6	37827-3301	Screw, Hex-HD M12x25
16	1	37827-12556	Cover
17	4	37827-9525	Gasket
18	2	37827-9179	Oil Level Indicator Ø1"Gas All.
19	2	37827-9706	Oil Breather Plug Ø1/2"Gas
20	4	37827-9707	Oil Plug Ø1/2"Gas
21	2	37827-15508	Lateral Housing
22	1	37827-3346	Bearing 6308
23	1	37827-15505	Oil Seal 40/85/9
24	18	37827-3768	Screw, Hex-HD M12x35
25	1	37827-15468	Spacer L=400
26	1	37827-7478	Bearing 6309
27	1	37827-15465	Calotte
28	1	37827-15480	Oil Seal 50/85/10-DL

Poultry Beaters - 37828 - Lower Gearbox (Original)

Specify Manure Spreader serial no. when ordering replacement parts.

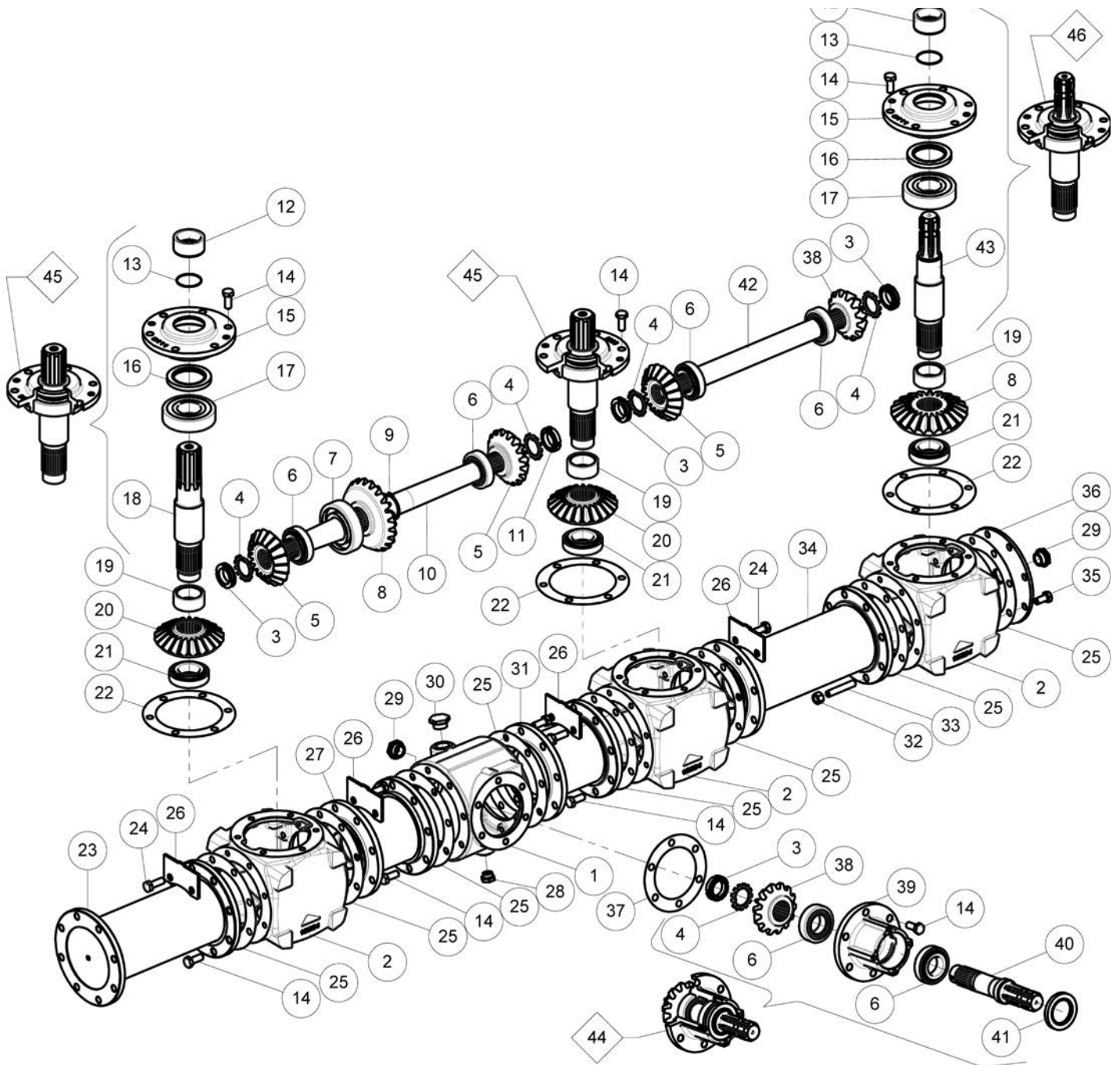


Poultry Beaters - 37828 - Lower Gearbox (Original)

ITEM	QTY	PART NUMBER	DESCRIPTION
1	5	37828-3426	Circlip E40
2	3	37828-12041	Bevel Pinion Z=14
3	4	37828-3346	Bearing 6308
4	1	37828-7478	Bearing 6309
5	1	37828-9502	Gear Z=20
6	1	37828-3427	Circlip E45
7	1	37828-9672	Shaft L=712
8	3	37828-9524	Spacer
9	3	37828-9926	O-ring 2175
10	18	37828-3302	Screw, Hex-HD M12x30
11	3	37828-9446	Calotte
12	4	37828-9536	Gasket
13	3	37828-7480	Oil Seal 55/85/10-DL
14	3	37828-13102	Bearing 6309-2RS
15	2	37828-9507	Shaft
16	3	37828-9516	Spacer 40/51/25
17	2	37828-12042	Gear Z=18
18	3	37828-3354	Bearing 30207
19	1	37828-9680	Spacer L=370
20	34	37828-3768	Screw, Hex-HD M12x35
21	8	37828-3303	Screw, Hex-HD M12x40
22	4	37828-12143	Support
23	8	37828-9525	Gasket
24	3	37828-9441	Housing
25	2	37828-9675	Spacer L=185
26	1	37828-9707	Oil Plug Ø1/2" Gas
27	1	37828-9440	Housing
28	2	37828-9179	Oil Level Indicator Ø1" Gas All.
29	1	37828-9706	Oil Breather Plug Ø1/2" Gas
30	1	37828-17644	Spacer L=403
31	6	37828-4478	Nut M12
32	6	37828-12853	Screw/ M12x70
33	6	37828-3301	Screw, Hex-HD M12x25
34	1	37828-12863	Cover
35	1	37828-12629	Spacer
36	2	37828-9476	Pinion Z=13
37	1	37828-4910	Bearing 30208
38	1	37828-9445	Hub
39	1	37828-3342	Bearing 6208
40	1	37828-9509	Shaft
41	1	37828-9537	Oil Seal 48/80/10-DL
42	1	37828-9477	Gear Z=20
43	1	37828-12558	Shaft
44	1	37828-12828	Lateral Shaft
45	1	37828-12150	Complete Hub
46	2	37828-9539	Complete Calotte
47	1	37828-12658	Complete Exterior Calotte

Poultry Beaters - 44836 - Lower Gearbox (Current)

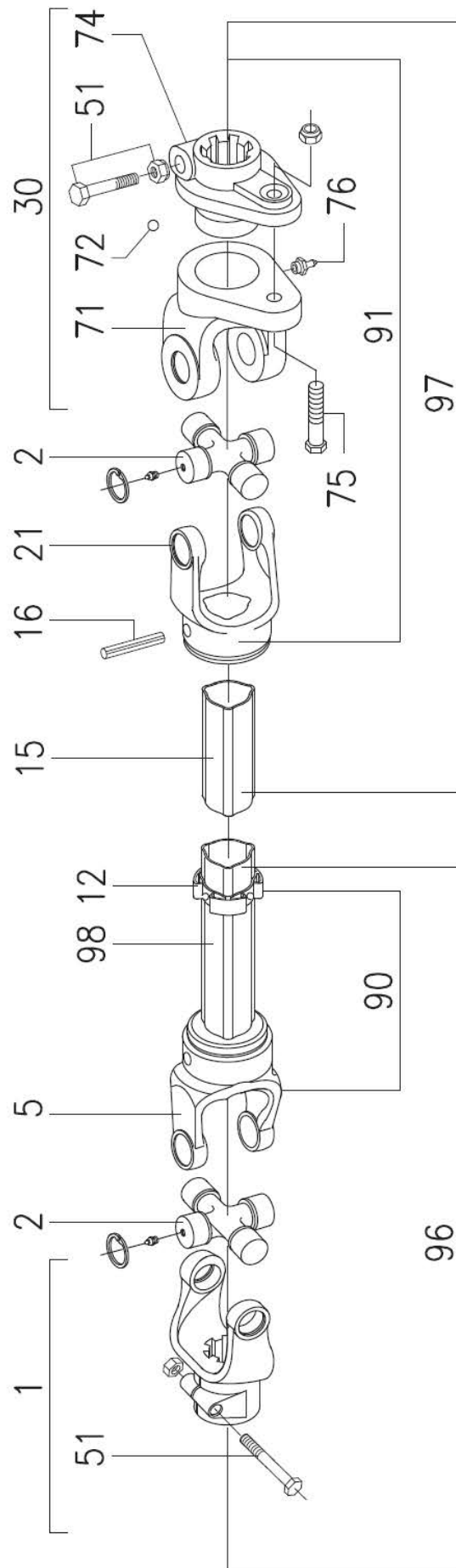
Specify Manure Spreader serial no. when ordering replacement parts.



Poultry Beaters - 44836 - Lower Gearbox (Current)

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	44836-9126	SRT18 Main Box
2	3	44836-12624	SRT18 Side Boxes
3	4	44836-9137	SRT18 Ferrule
4	5	44836-9011	SRT18 Rosette
5	3	44836-9631	SRT18 Pinion Conical
6	6	44836-1259	SRT18 Bearing 32209
7	1	44836-1531	SRT18 Bearing 6311
8	2	44836-9604	SRT18 Crown Conical
9	1	44836-3430	SRT18 Seeger E55
10	1	44836-10594	SRT18 Shaft L-690
11	1	44836-9138	SRT18 Ferrule M40x1.5
12	3	44836-9124	SRT18 Distance Shell
13	3	44836-9139	SRT18 Ring
14	64	44836-3549	SRT18 Bolt M14x35
15	3	44836-9111	SRT18 Shell
16	3	44836-7481	SRT18 Ring
17	3	44836-13103	SRT18 Bearing 6311-2RS
18	2	44836-12645	SRT18 Shaft
19	3	44836-9123	SRT18 Spacer Crown
20	2	44836-9632	SRT18 Crown Conical
21	3	44836-3349	SRT18 Bearing 32210
22	3	44836-9134	SRT18 Gasket
23	1	44836-15298	SRT18 Spacer
24	8	44836-22371	SRT18 Screw M14x40
25	8	44836-9135	SRT18 Gasket
26	4	44836-19365	SRT18 Bracket
27	1	44836-14426	SRT18 Spacer L-178
28	1	44836-9707	SRT18 Plug 1/2"
29	2	44836-9179	SRT18 Indicator Light
30	1	44836-9301	SRT18 Plug 1"
31	1	44836-14427	SRT18 Spacer L-178
32	8	44836-1799	SRT18 Nut M14
33	8	44836-22343	SRT18 Bolt M14x80
34	1	44836-19362	SRT18 Spacer L-393
35	8	44836-4138	SRT18 Bolt M14x30
36	1	44836-20011	SRT18 Cover
37	1	44836-9133	SRT18 Gasket Hub
38	2	44836-9603	SRT18 Pinion Conical
39	1	44836-9127	SRT18 Hub
40	1	44836-9053	SRT18 Shaft
41	1	44836-7480	SRT18 Ring 55x85x10
42	1	44836-19364	SRT18 Shaft L-541
43	1	44836-16422	SRT18 Shaft
44	1	44836-9571	SRT18 Complete Hub
45	2	44836-12657	SRT18 Complete LH & Mid Asm
46	1	44836-16424	SRT18 Complete RH Asm

Poultry Beaters - 39998 - PTO Cross Drive Shaft

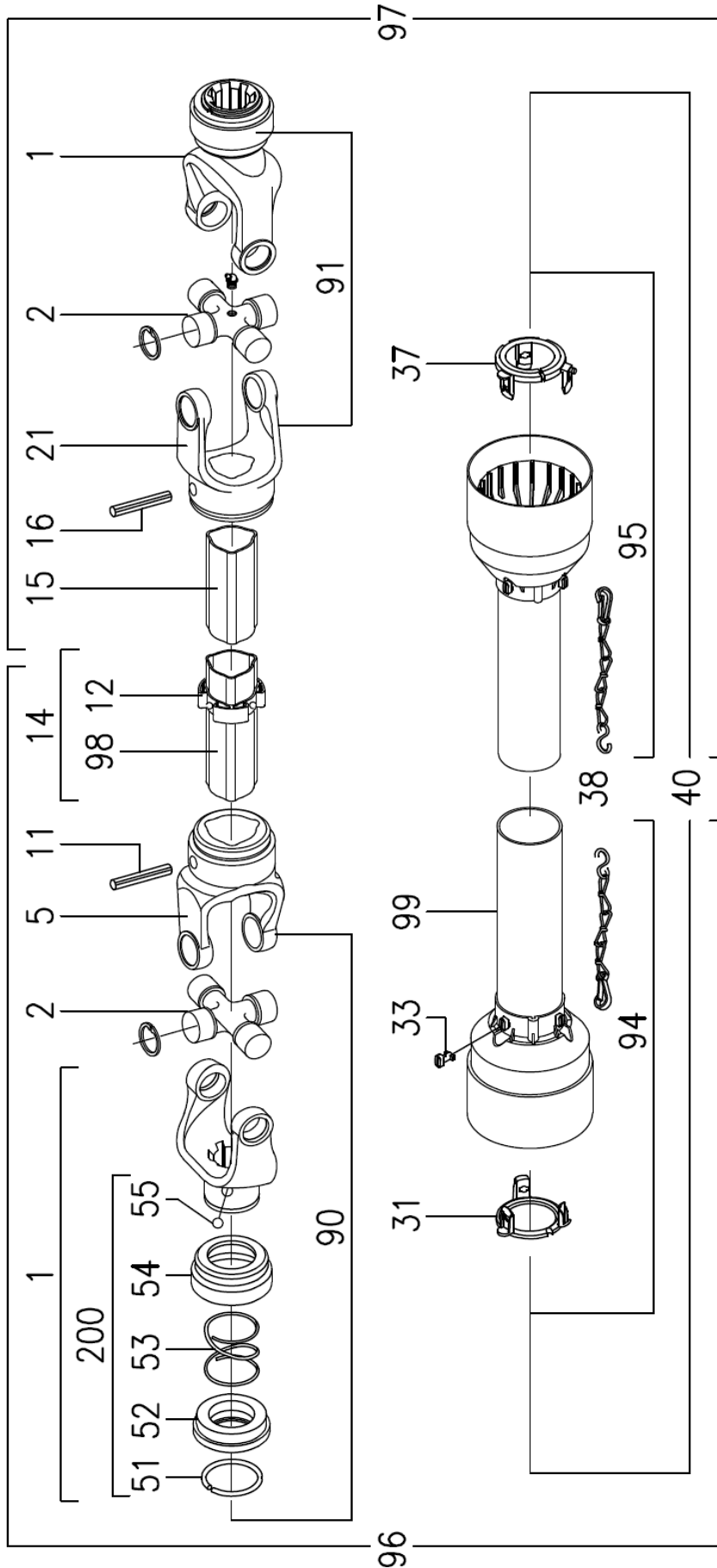


Poultry Beaters - 39998 - PTO Cross Drive Shaft

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PTO141.026.083.1	Interfering Clamp Bolt Yoke
2	2	PTO180.016.764	Cross Journal Set 30.2x92
5			Outer Yoke
11			Outer Tube Roll Pin
12	1	PTO180.016.316	Bushing with Grease Fitting
14			Complete Outer Tube L-130
15	1	PTO153.160.106	Inner Tube L-215
16	1	PTO190.000.016	Inner Tube Roll Pin
21	1	PTO151.016.029.1	Inner Yoke
30	1	PTO143.260.064.1	Complete Shear Bolt B35 (55xM8) 1.75Z20
51	3	PTO190.000.576	Bolt & Nut M16x2x80 cl.8.8
71	1	PTO151.016.176.1	Yoke for Hub B05 (55xM8)
72	24	PTO190.000.023	Ball 5/16" Dia
74	1	PTO151.016.937.1	Hub B35 (55xM8) 1.75Z20
75	6	PTO165.000.506	Bolt & Nut M8x1.25x60 cl.8.8
76	1	PTO190.000.021	Grease Fitting M10x1
90	1	PTO122.360.096.1	Female Tube Yoke w Label
91	1	PTO121.026.1418.11	U Joint for Inner Tube
96	1	PTO123.360.541.11	Half Female Shaft
97	1	PTO123.460.1108.11	Half Male Shaft
98	1	PTO190.000.216	DANGER Label for Outer Tube

Section 5 - PTOs

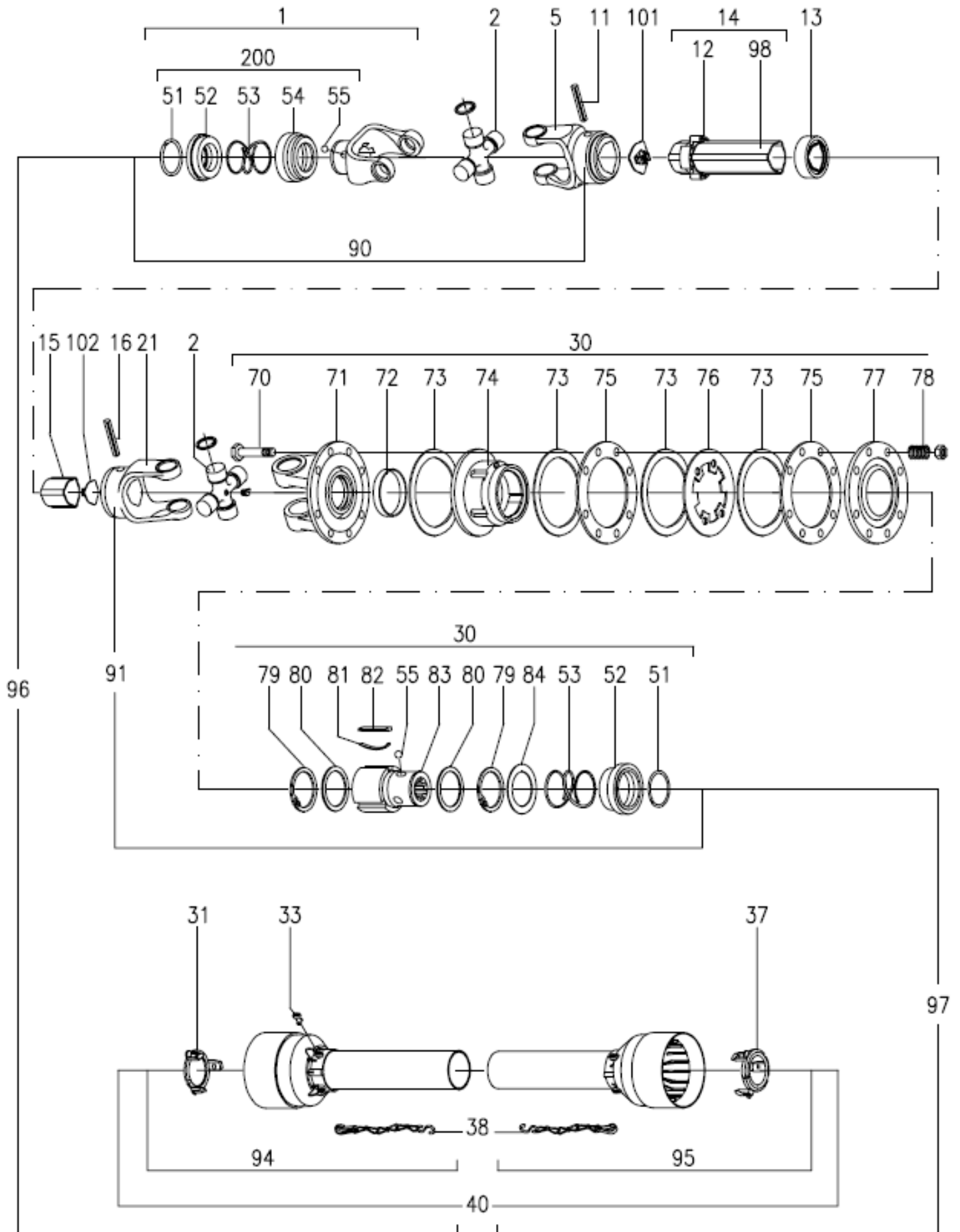
30839 - PTO Shaft - Primary Shaft for Manure Spreader N375-N600



30839 - PTO Shaft - Primary Shaft for Manure Spreader N375-N600

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	PTO141.026.544	Complete Collar Yoke C12 1 3/8" Z6
2	2	PTO180.016.130	Cross Journal Set 30.2x92
5	1	PTO151.016.028	Outer Yoke
11	1	PTO190.000.018	Roll Pin for Outer Tube
12	1	PTO180.016.316	Bush with Grease Nipple
14	1	PTO152.170.271.0720	Complete Outer Tube L=850
15	1	PTO153.160.112	Inner Tube L=865
16	1	PTO190.000.016	Roll Pin for Inner Tube
21	1	PTO151.016.029	Inner Yoke
31	1	PTO180.016.016	Guard Retaining Collar for Outer Tube
33	6	PTO190.000.019	Bolt
37	1	PTO180.016.015	Guard Retaining Collar for Inner Tube
38	2	PTO180.016.025	Safety Chains
40	1	PTO142.260.429.7620	Complete Guard with Instruction Manual
51	2	PTO190.000.451	Outer Circlip
52	2	PTO151.016.486	Sliding Sleeve Collar
53	2	PTO180.016.487	Spring
54	2	PTO180.016.483	Fixed Sleeve
55	6	PTO190.000.078	Ball Ø 1/2"
90	1	PTO121.026.899.10	U Joint for Outer Tube
91	1	PTO121.026.900.10	U Joint for Inner Tube
94	1	PTO142.266.203.7620	Half Female Guard
95	1	PTO142.261.305.7620	Half Male Guard
96	1	PTO123.360.334.10	Half Female Shaft with Guarding
97	1	PTO123.460.773.10	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
200	2	PTO165.000.628	Kit Collar 1 3/8"

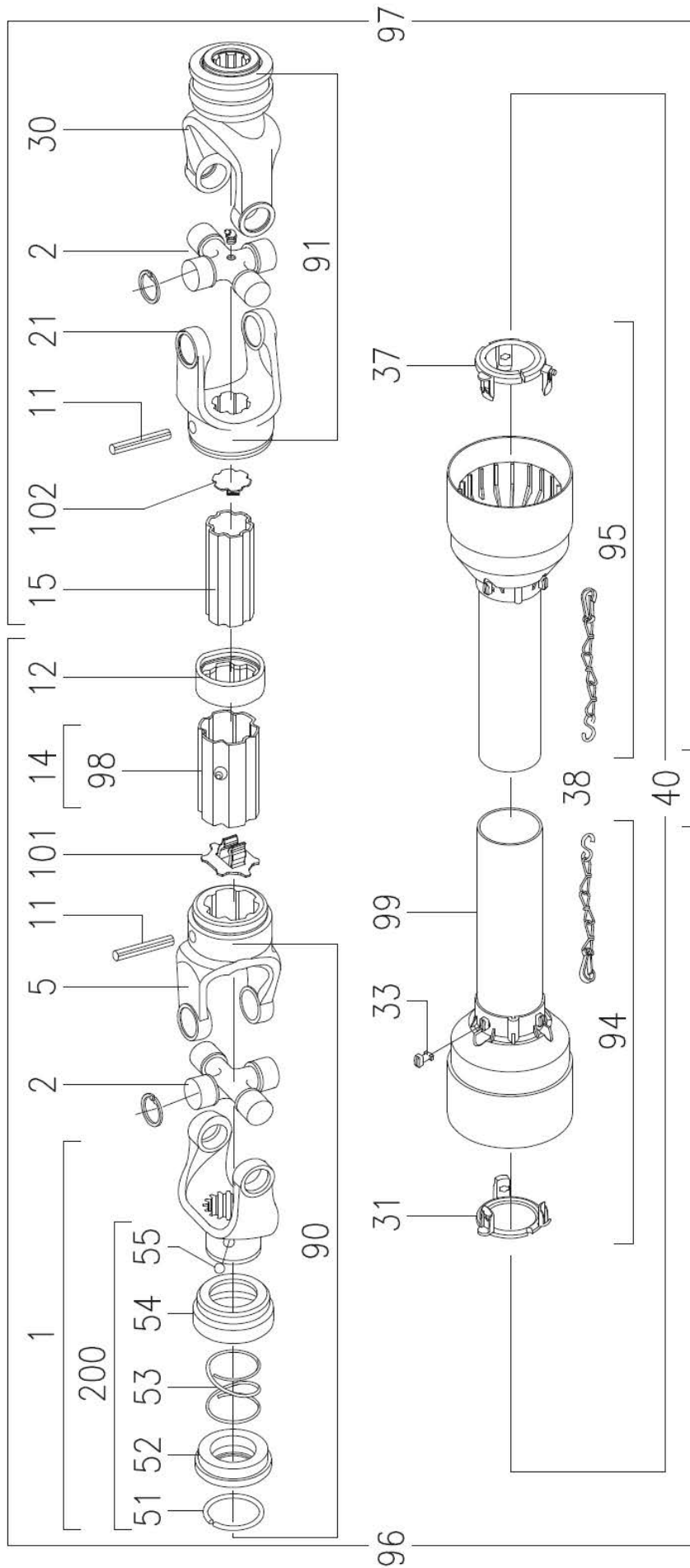
30840 - PTO Slip Clutch for Manure Spreader



30840 - PTO Slip Clutch for Manure Spreader

ITEM	QTY	PART NUMBER	DESCRIPTION				
1	1	PTO141.026.544	Complete Collar Yoke C12 1 3/8" Z6	76	1	PTO180.017.104	Intermediate Plate
				77	1	PTO180.017.114	Pressure Plate
2	2	PTO180.016.130	Cross Journal Set 30.2x92	78	8	PTO180.014.022	Spring
				79	2	PTO190.000.183	Inner Circlip
5	1	PTO151.016.028	Outer Yoke	80	2	PTO180.014.135	Retaining Washer
11	1	PTO190.000.018	Roll Pin for Outer Tube	81	3	PTO180.014.137	Carriage Spring
				82	3	PTO151.014.136	Tang
12	1	PTO180.016.316	Bush for Grease Fitting	83	1	PTO151.016.546	Hub R12
				84	1	PTO180.015.143	Spring Push Ring
13	1	PTO180.016.572	Wiper	90	1	PTO121.026.899.10	U Joint for Outer Tube
14	1	PTO152.170.366.0720	Complete Outer Tube L=1005	91	1	PTO121.026.747.10	U Joint for Inner Tube
15	1	PTO153.160.114	Inner Tube L=1065	94	1	PTO142.266.272.7620	Half Female Guard
16	1	PTO190.000.016	Roll Pin for Inner Tube				
21	1	PTO151.016.029	Inner Yoke	95	1	PTO142.267.239.7620	Half Male Guard
30	1	PTO146.364.001	Complete Disc Clutch RF6 (1400 Nm)	96	1	PTO123.360.465.10	Half Female Shaft with Guarding
				97	1	PTO123.460.1007.10	Half Male Shaft with Guarding
31	1	PTO180.016.016	Guard Retaining Collar for Outer Tube	98	1	PTO190.00.216	DANGER Label for Outer Tube
				99	1	PTO190.000.215	DANGER Label for Outer Guard Tube
33	6	PTO190.000.019	Bolt	100	1	PTO190.000.371	Instruction Manual
37	1	PTO180.016.015	Guard Retaining Collar for Inner Tube	101	1	PTO180.016.468	Outer Closing Cap
				102	1	PTO180.016.529	Inner Closing Cap
38	2	PTO180.016.636	Safety Chains	200	1	PTO165.000.628	Kit Collar 1 3/8"
40	1	PTO142.260.496.7620	Complete Guard with Instruction Manual				
51	2	PTO190.000.451	Outer Circlip				
52	2	PTO151.016.486	Sliding Sleeve Collar				
53	2	PTO180.016.487	Spring				
54	1	PTO180.016.483	Fixed Sleeve				
55	6	PTO190.000.078	Balls Ø1/2"				
70	8	PTO165.000.548	Bolt M10x100 & nut				
71	1	PTO.141.026.347	Flanged Yoke				
72	1	PTO180.017.112	Bush				
73	4	PTO180.017.106	Lining Ring				
74	1	PTO141.027.107	Body RF with Grease Nipple				
75	2	PTO180.017.105	Inner Plate				

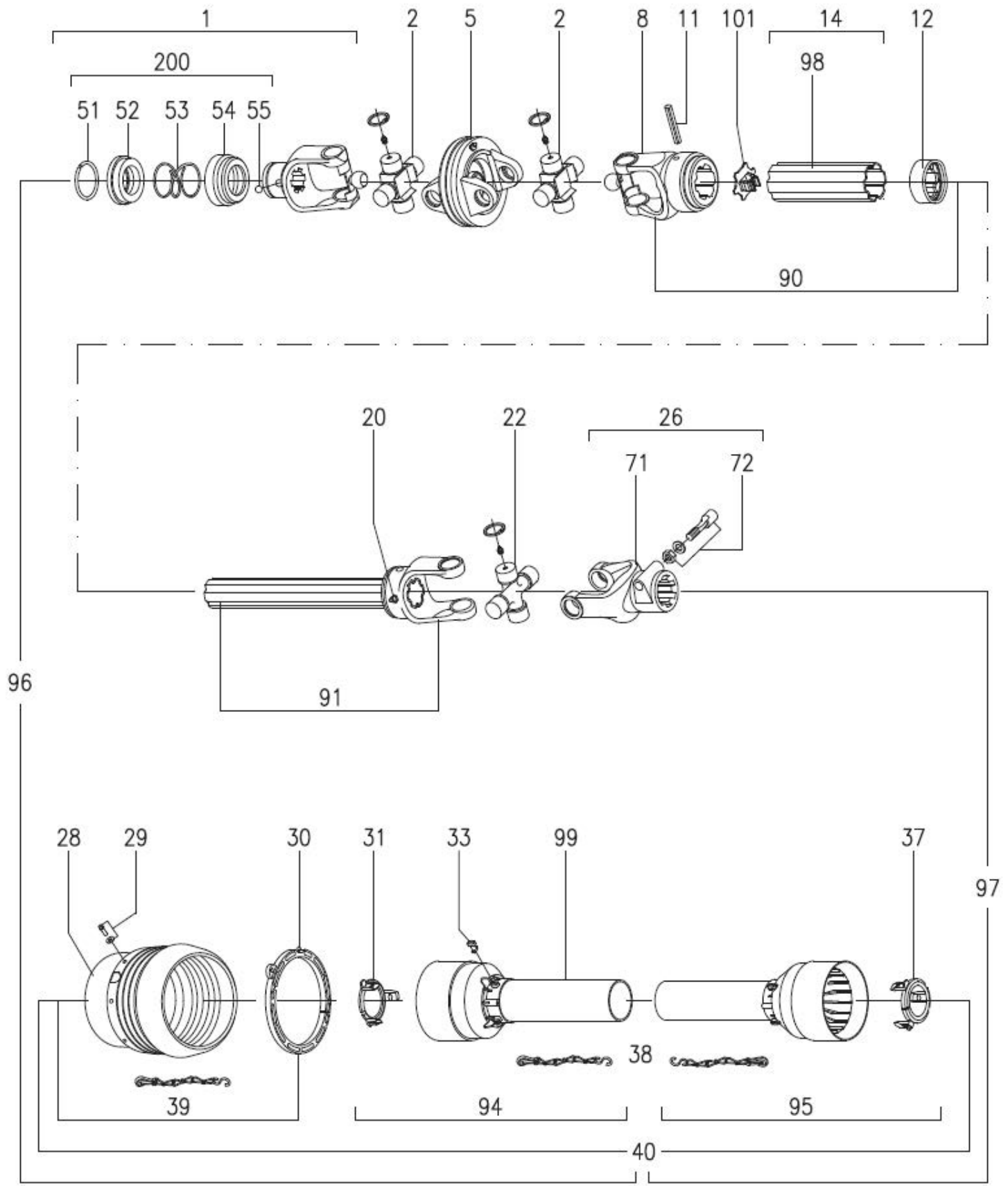
30841 - PTO Secondary Shaft - Manure Spreader



30841 - PTO Secondary Shaft - Manure Spreader

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PTO141.026.553	Complete Collar Yoke C13 1 3/8" Z21
2	2	PTO180.016.004	Cross Journal Set 30.2x92
5	1	PTO151.016.388	Outer Yoke
11	1	PTO8.4.5.02111	Roll Pin for Outer Tube
12	1	PTO180.016.573	Wiper
14	1	PTO150.260.014.0720	Complete Outer Tube L=355
15	1	PTO153.260.108	Inner Tube L=415
16	1	PTO190.000.018	Roll Pin for Inner Tube
21	1	PTO151.016.389	Inner Yoke
30	1	PTO141.026.544	Complete Collar Yoke C12 1 3/8" Z6
31	1	PTO180.016.016	Guard Retaining Collar for Outer Tube
33	6	PTO190.000.019	Bolt
37	1	PTO180.016.015	Guard Retaining Collar for Inner Tube
38	2	PTO180.016.790	Safety Chains
40	1	PTO142.260.505.9620	Complete Guard with Instruction Manual
51	2	PTO190.000.451	Outer Circlip
52	2	PTO151.016.486	Sliding Sleeve Collar
53	2	PTO180.016.487	Spring
54	2	PTO180.016.483	Fixed Sleeve
55	6	PTO190.000.078	Ball Ø 1/2"
90	1	PTO121.026.913.00	U Joint for Outer Tube
91	1	PTO121.026.912.00	U Joint for Inner Tube
94	1	PTO142.266.280.9620	Half Female Guard
95	1	PTO142.267.248.9620	Half Male Guard
96	1	PTO123.366.197.00	Half Female Shaft with Guard
97	1	PTO123.466.342.00	Half Male Shaft with Guard
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	PTO180.016.474	Outer Closing Cap
102	1	PTO180.016.575	Inner Closing Cap
200	2	PTO165.000.628	Kit Collar 1 3/8"

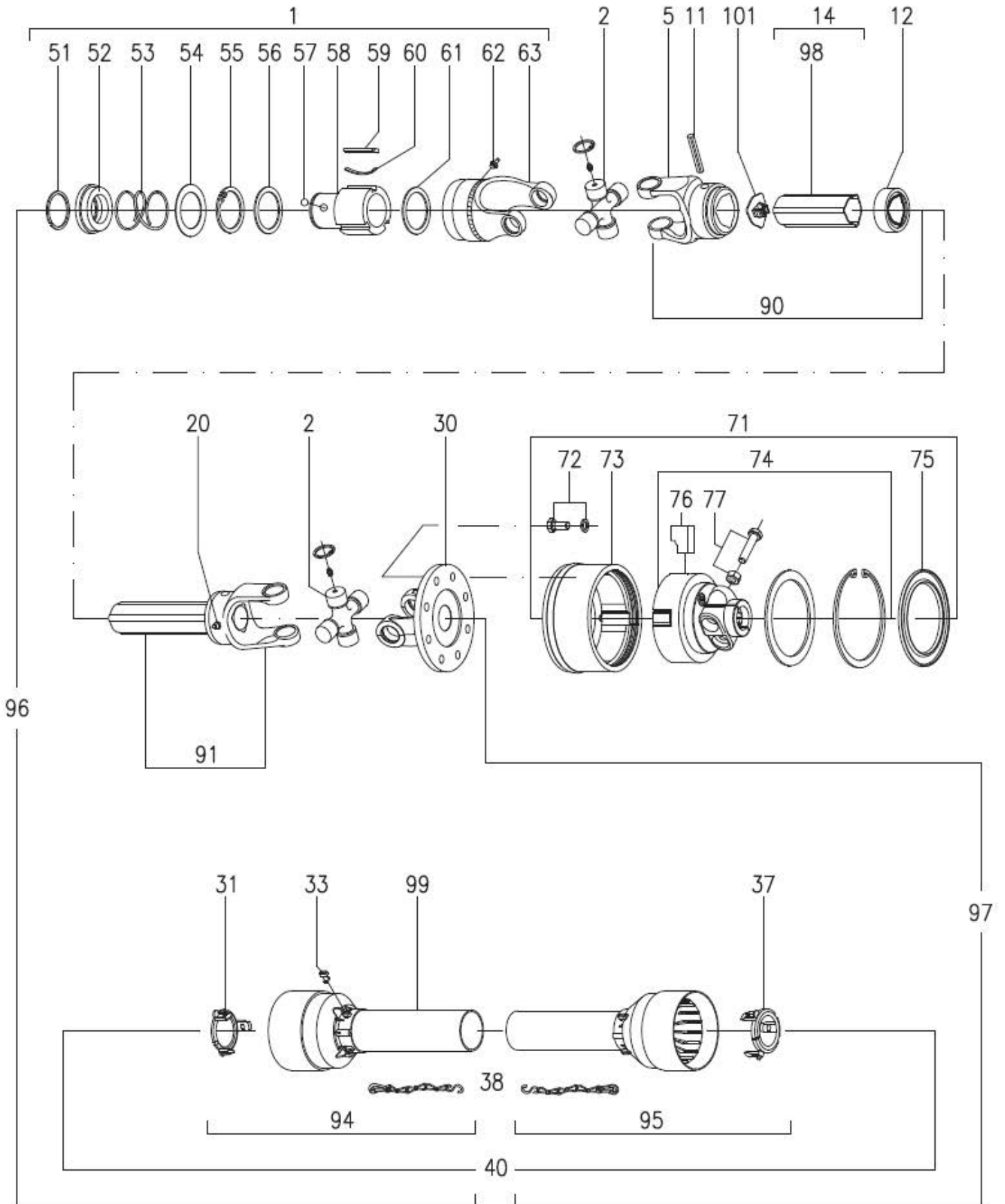
39850 - PTO. 375,450,525,600,750 (V80-141P028359-028028-CV80-CLS)



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

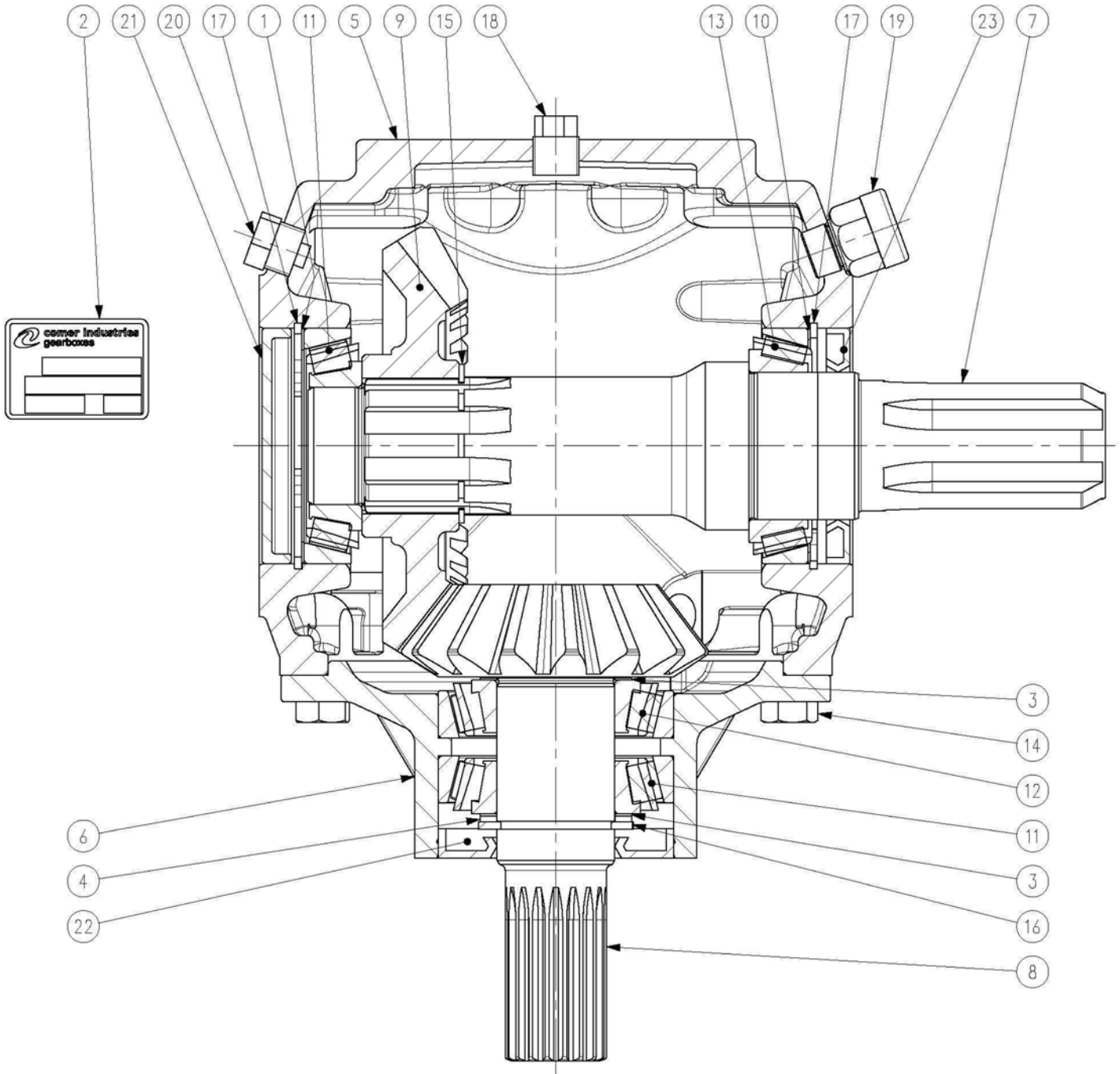
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Section 6 - Gearboxes

30842 - Apron Chain Gearbox

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	30842-08979	Box
2	1	30842-08995	Hub
3	1	30842-09066	Circlip
4	1	30842-08996	Gear
5	2	30842-09067	Ball Bearing
6	2	30842-09069	Circlip
7	1	30842-09009	Gear
8	2	30842-04174	Key
9	1	30842-09007	Gear
10	2	30842-10509	Ball Bearing
11	3	30842-03435	Circlip
12	1	30842-09008	Gear
13	1	30842-03396	Keystock
14	1	30842-8670-2	Gear
15	1	30842-09010	Spacer
16	2	30842-08596	Ball Bearing
17	2	30842-03433	Circlip
18	1	30842-8670-1	Gear
19	1	30842-01538	Ball Bearing
20	1	30842-03428	Circlip
21	2	30842-09175	Plug
22	2	30842-01831	Plug - Sight Glass
23	2	30842-08625	Seal
24	2	30842-08243	Seal
25	2	30842-09068	Seal
26	1	30842-09064	Gasket
27	1	30842-09065	Cover
28	8	30842-03284	Bolt
29	1	30842-08671	Gasket

30847-2 - 1 3/4" Spline Shaft Gearbox (9.278.760.00)

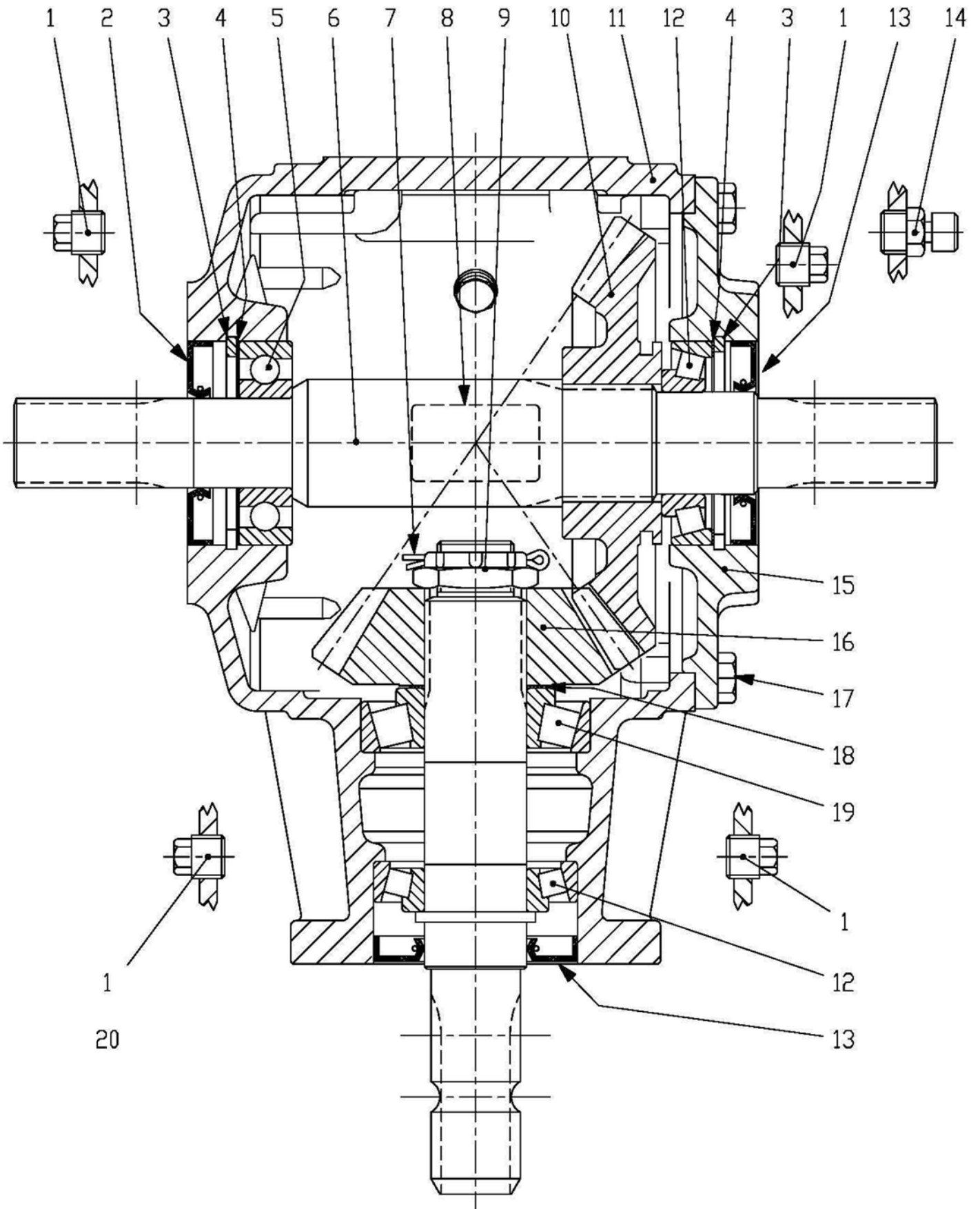


30847-2 - 1 3/4" Spline Shaft Gearbox (9.278.760.00)

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0.110.7500.00	Shim 65.3 X 79.7
2	1	0.124.7101.00	Plate "Comer"
3	2	0.244.7500.00	Shim Kit 40.3x51.5
4	1	0.244.7520.00	Shim 40.3x2.0
5	1	0.278.0304.00	Casing
6	1	0.278.1354.00	Extension
7	1	0.278.2218.00	Shaft 1"3/4 Z6
8	1	0.278.5240.00	Pinion Shaft Z15 M6.2
9	1	0.278.6004.00	Crown Wheel Z24 M6.2
10	1	0.660.7500.00	Shim 79.9
11	2	8.0.9.00024	Bearing 30208
12	1	8.0.9.01060	Bearing 30208
13	1	8.0.9.01241	Bearing 32010 X
14	8	8.1.1.00061	Bolt HH M10x25 UNI5739 8.8
15	1	8.5.1.00260	Snap Ring 46 UNI7435
16	1	8.5.1.00680	Snap Ring Shaft D40 UNI7436
17	2	8.5.2.00030	Snap Ring Hole D80 UNI7437
18	1	8.6.5.00006	Plug External 3/8" Gas
19	1	8.6.7.00161	Breather Plug 3/8" Gas
20	1	8.6.8.01975	Magnetic Plug 3/8" Gas
21	1	8.7.0.00790	Cap 80x10
22	1	8.7.3.00027	Oil Seal 40x80x10
23	1	8.7.3.02599	Dust Lip

NOTE: Order Part No. 45442 (Includes Items 7,13,23 and 43409) to update gearbox 30847 (1-3/8" Keywayed Gearbox), or 30847-1 (1-3/8" Spline Shaft Gearbox).

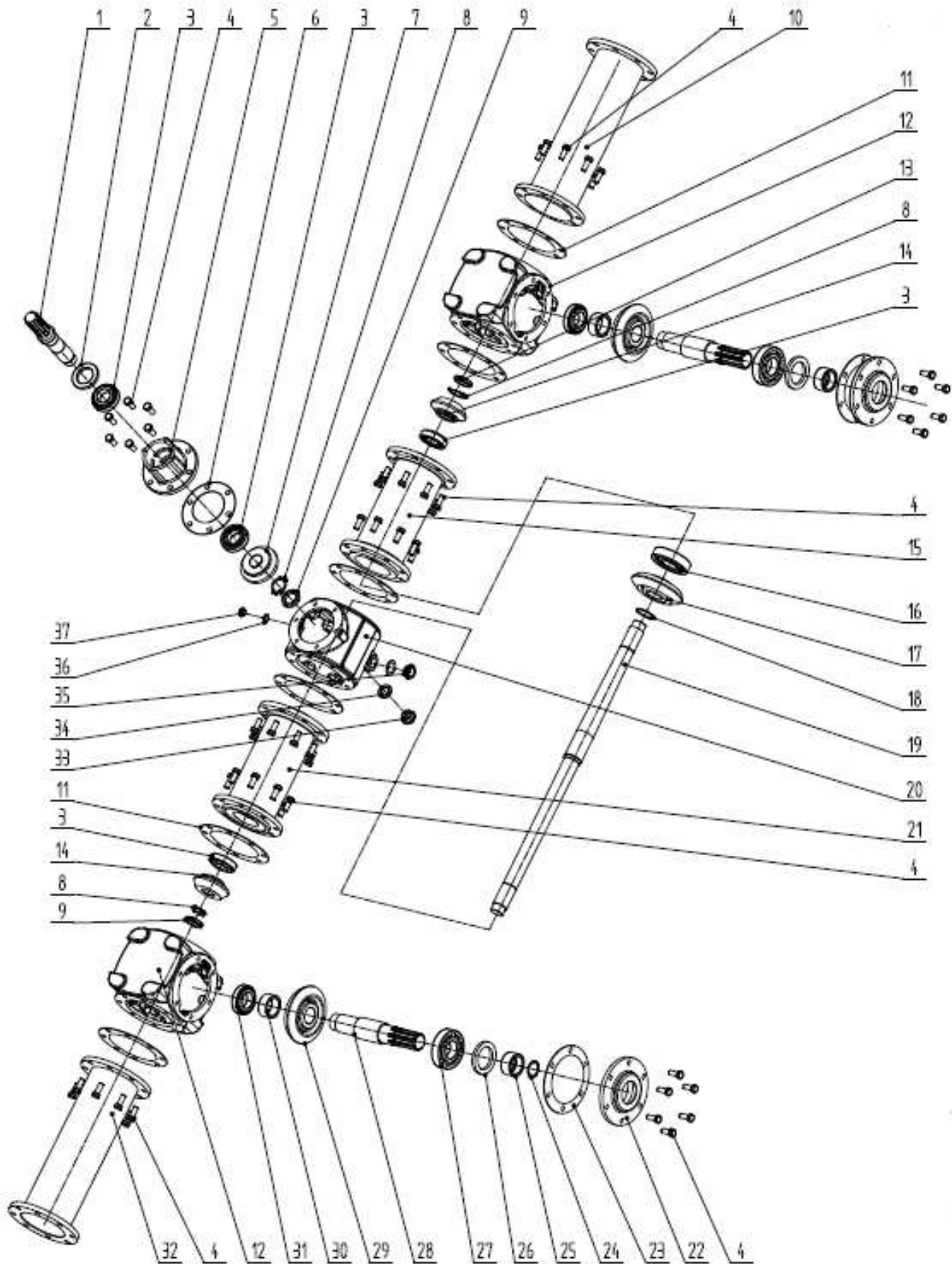
30848 - Centre Gearbox (9.290.621.00)



30848 - Centre Gearbox (9.290.621.00)

ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	8.6.5.00006	Plug 3/8" Gas
2	1	8.7.3.00081	Oil Seal 35x80x10
3	2	8.5.2.01370	Snap Ring 80 UNI7438
4	2	0.267.7500.00	Shim 79.9
5	1	8.0.1.00049	Ball Bearing 6307
6	1	0.290.3216.00	Shaft 35x31 DIN 5482
7	1	8.4.7.01111	Cotter Pin B4x55
8	1	0.124.7101.00	Plate
9	1	0.132.7106.00	Nut M30x1.5
10	1	0.272.5001.00	Crown Wheel Z28 M6.22
11	1	0.290.0308.00	Casing
12	2	8.0.9.00024	Bearing 30208
13	2	8.7.3.00027	Oil Seal 40x80x10
14	1	8.6.7.00161	Oil Filler Plug 3/8" Gas
15	1	0.290.1367.00	Cover
16	1	0.272.6001.00	Pinion Z19 M6.22
17	8	8.1.1.00061	Bolt M10x25 8.8
18	1	0.244.7500.00	Shim Kit 40.3x51.5
19	1	8.0.9.00128	Bearing 30308
20	1	0.290.2001.00	Shaft












49188 - One Piece Beater Gearbox - SN 22NS101-Current



49188 - One Piece Beater Gearbox - SN 22NS101-Current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	49188-01	Input Shaft
2	1	49188-02	Seal 55mmx85mmx10mm
3	4	49188-03	Bearing 32209
4	70	49188-04	Hex Bolt M14x35
5	1	49188-05	Flange
6	1	49188-06	Paper Spacer
7	1	49188-07	Gear M7-17
8	3	49188-08	Toothlock Washer
9	2	49188-09	Slotted Round Nuts LH
10	1	49188-10	Supporting Tube - Right
11	6	49188-11	Paper Spacer
12	2	49188-12	Side Housing
13	1	49188-13	Slotted Round Nuts LH
14	2	49188-14	Gear M8-13
15	1	49188-15	Supporting Tube - Right
16	1	49188-16	Bearing 6311
17	1	49188-17	Gear M7-124
18	1	49188-18	Circlips for 55mm Shafts
19	1	49188-19	Spline Shaft
20	1	49188-20	Middle Housing
21	1	49188-21	Supporting Tube - Left
22	2	49188-22	Bearing Support
23	2	49188-23	Paper Spacer
24	2	49188-24	O ring
25	2	49188-25	Bushing
26	2	49188-26	Seal 70mmx100mmx10mm
27	2	49188-27	Bearing 6311-2RS1
28	2	49188-28	Output Spline Shaft
29	2	49188-29	Gear M8-Z22
30	2	49188-30	Bushing
31	2	49188-31	Bearing 32210
32	1	49188-32	Supporting Tube - Left
33	1	49188-33	Level Plug G1
34	1	49188-34	Washer G1
35	1	49188-35	Oil Plug G1
36	1	49188-36	Washer G1/2
37	1	49188-37	Oil Plug G1/2
		49188-RK	Repair Kit

Torque Values - Imperial

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

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	36	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.

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

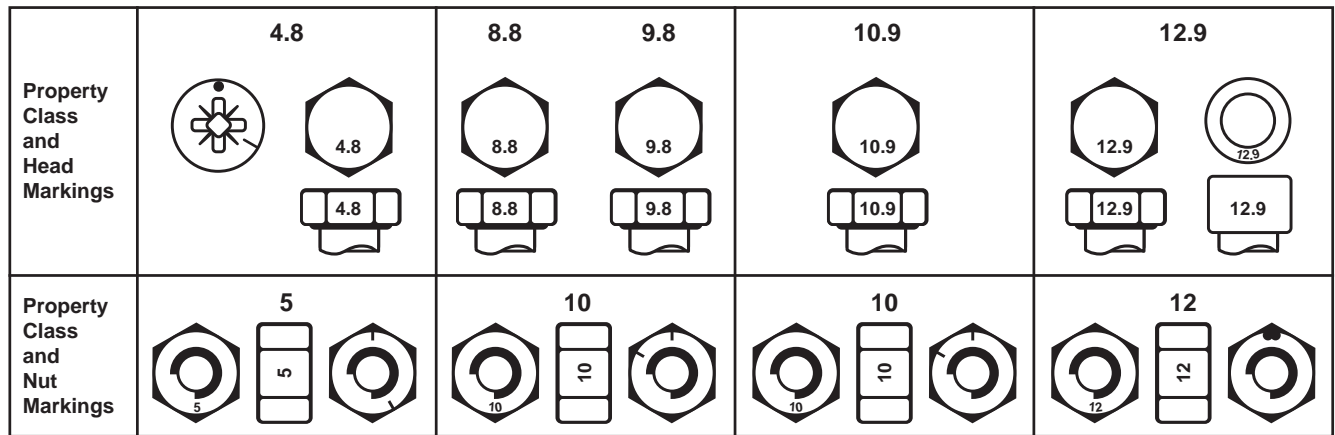
them from failing when tightening.

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.

^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.

Torque Values - Metric



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.

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.

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.

Index

30839 - PTO Shaft - Primary Shaft for Manure Spreader N375-N600 . . . . .	.5-1
30840 - PTO Slip Clutch for Manure Spreader . . . . .	.5-3
30841 - PTO Secondary Shaft - Manure Spreader . . . . .	.5-5
30842 - Apron Chain Gearbox . . . . .	.6-2
30847-2 - 1 3/4" Spline Shaft Gearbox (9.278.760.00) . . . . .	.6-4
30848 - Centre Gearbox (9.290.621.00). . . . .	.6-6
39850 - PTO. 375,450,525,600,750 (V80-141P028359-028028-CV80-CLS) . . . . .	.5-7
39851 - PTO. 375,450,525,(T60-086P265011-306048-CLS(3500NM) . . . . .	.5-9
44700 - Beater Greaselines	2-23
49188 - One Piece Beater Gearbox - SN 22NS101-Current . . . . .	.6-8
Apron Runners - Up to SN 15NS117	2-40
Apron Runners - Up to SN 15NS118 to Current	2-42
Beater Gearbox - 1 3/4" 6-Spline - SN 16NS112 to Current	2-18
Beater Gearbox - 1 3/8" 6-Spline - SN 15NS117 to 16NS111	2-17
Beater Gearbox - 1 3/8" Keyway - Up to SN 15NS116	2-16
Beaters - 49270 - SN 22NS101-Current.	2-20
Beaters - Up to SN 21NS105	2-12
Beater to Gearbox Connections	2-15
Driveline - SN 16NS107 to Current	2-38
Driveline - Up to SN 16NS106	2-36
Electric Flow Control Wiring	3-22
Endgate Indicator Kit - 48216	3-24
Flow Control Hydraulic Layout - Electric (Current).	3-21
Flow Control Hydraulic Layout - Electric (Original)	3-20
Flow Control Hydraulic Layout - Manual.	3-19
Flow Control Mounting	3-18
Front Apron Drive - SN 15NS102 to Current	2-25
Front Apron Drive - Up to SN 15NS101	2-24
Front Components - SN 15NS102 to Current . . . . .	.2-4
Front Components - Up to SN 15NS101 . . . . .	.2-2
Front Scraper . . . . .	.2-8
Grease Line Layout - SN 15NS407 to Current	2-48
Grease Line Layout - Up to SN 15NS406	2-46
Hitch Options . . . . .	.3-2
Hydraulic Layout	2-44
Hydraulic Light Kit Cylinders . . . . .	.3-9
Hydraulic Light Kit Hoses	3-10
ISO Safety Decal Locations . . . . .	.VII
ISO Safety Decals . . . . .	.VIII
Light Kit Base . . . . .	.3-6
Light Kit Wiring	3-12
Manual Light Kit . . . . .	.3-8
Manuals . . . . .	.II
Mechanical Light Kit - 43673 - SN 19NS101 to Current . . . . .	.3-4

Model Decal Locations	IX
N450SB - Single Axle Brake Kit	3-14
N450TB - Tandem Axle Brake Kit	3-15
N750LC (GT400) / N750LCNT460 Scales	3-16
N750LCNT8000 Scales	3-17
Nitro Apron Chain Warranty	II
Optional Flange Paddle Kit - 41504 - Up to SN 21NS105	2-14
Optional Flange Paddle Kit - 47553 - SN 22NS101	2-22
Optional Kit Numbers	3-1
Parts Manual	II
Poultry Beaters - 37827 - Side Gearbox	4-9
Poultry Beaters - 37828 - Lower Gearbox (Original)	4-11
Poultry Beaters - 39998 - PTO Cross Drive Shaft	4-15
Poultry Beaters - 44836 - Lower Gearbox (Current)	4-13
Poultry Beaters - Beaters	4-2
Poultry Beaters - Drivelines	4-5
Poultry Beaters - Endgate	4-3
Poultry Beaters - Frame	4-1
Poultry Beaters - Spinners	4-7
Rear Apron Drive	2-26
Rear Components	2-10
Safety Decals	VI
Safety Sign Locations	V
Section 2 - Parts Breakdowns & Lists	2-1
Section 3 - Options	3-1
Section 4 - Option - Poultry Beaters	4-1
Section 5 - PTOs	5-1
Section 6 - Gearboxes	6-1
Serial Number	II
Side - Floor Boards	2-50
Single Axle - SN 14NS101 to Current	2-30
Single Axle - Up to SN 13NS104	2-28
Tandem Axle - SN 14NS101 to Current	2-34
Tandem Axle - Up to SN 13NS104	2-32
Tongue - SN 15NS102 to Current	2-6
Torque Values - Imperial	X
Torque Values - Metric	XI
Warranty and Limitation of Liability	II



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