

Diamond Chain Harrow 62 HDX Assembly & Parts Manual

Revision B - November 2016

Machine Serial Number:

Kelly Engineering PO Box 100 Booleroo Centre South Australia 5482 P +61 8 8667 2253 F +61 8 8667 2250 W kellyengineering.com.au

Thank you for choosing a Kelly Engineering product

We trust that you find the following manual clear and easy to follow. If you should require additional customer support or assistance, please do not hesitate to contact us.

Spare parts can be purchased, as required, through your local dealer or by contacting Kelly Engineering Australia or in the United States, Hood & Company.

Kelly Engineering welcomes feedback. Should you have any difficulties that you wish to raise, suggestions for improvement or modifications that you feel would enhance our products we look forward to hearing from you.

Australia Kelly Engineering PO Box 100 Booleroo Centre SA 5482 Phone: + 61 8 8667 2253 Fax: + 61 8 8667 2250 Email: sales@kellyengineering.com.au Spare Parts: parts@kellyengineering.com.au Website: www.kellyengineering.com.au

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Spare Parts Hood & Company Inc Springfield MO Phone: 417 865 2100

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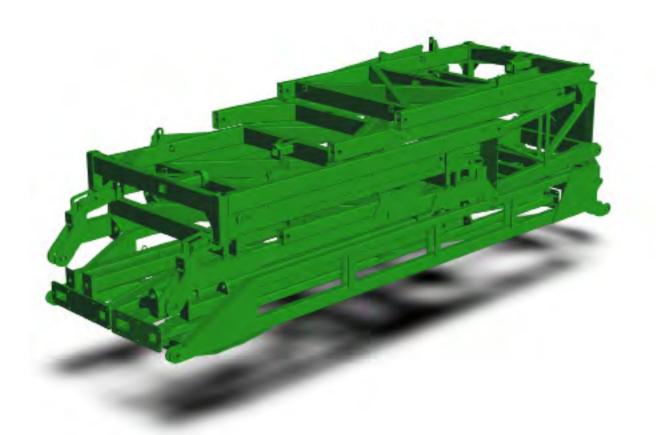
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This symbol indicates which bag the relevant fastners are in

Section 1 Unpacking









CAUTION

Before cutting straps attach slings or chains and take the weight of the frames to avoid them slipping or falling and causing injury.

CAUTION

Wear eye and hand protection when cutting straps. Sharp edges are exposed as straps separate and may cause injury.

CAUTION

To avoid falling or moving components, before cutting straps attach slings or chains to individual pieces and only cut the straps holding the piece to be lifted.

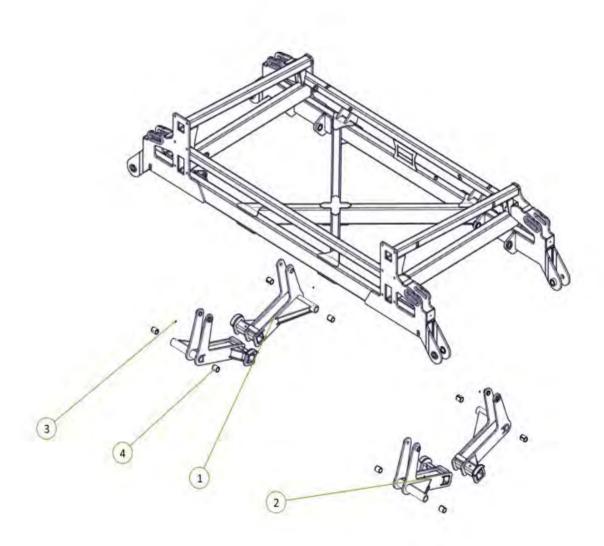
- Remove boxes from rear of container one at a time using a forklift truck. Each box weighs approximately 2600 lbs (1200 kg)
- Cut straps holding bundles and separate parts and place in assembly area
- Identify parts for each machine by serial no. or description and separate. Open parts box and check that all parts are accounted for against checklist
- Once all parts have been identified machines are ready for assembly
- Read assembly instructions before proceeding.

Section 2 Parts & Assembly

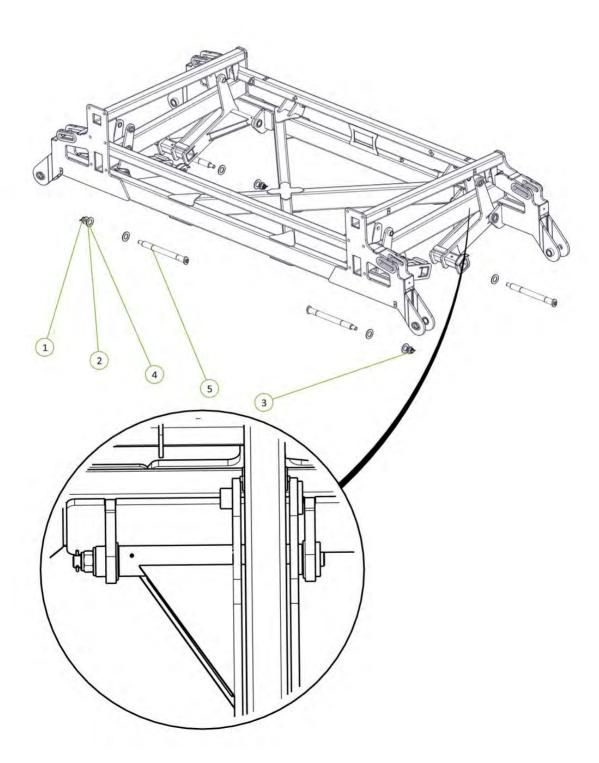
1265 - 01 - AS1

Item No.	Description	Qty	Number
1	RH Walking Axle Arm	2	1210-50
2	LH Walking Axle Arm	2	1210-51
3	Grease Nipple 1/4" UNF	4	0181-GN1-4
4	50 ID x 60mm DX Bush	8	0113-M8 5060DX

Please note - DX bushes are factory inserted

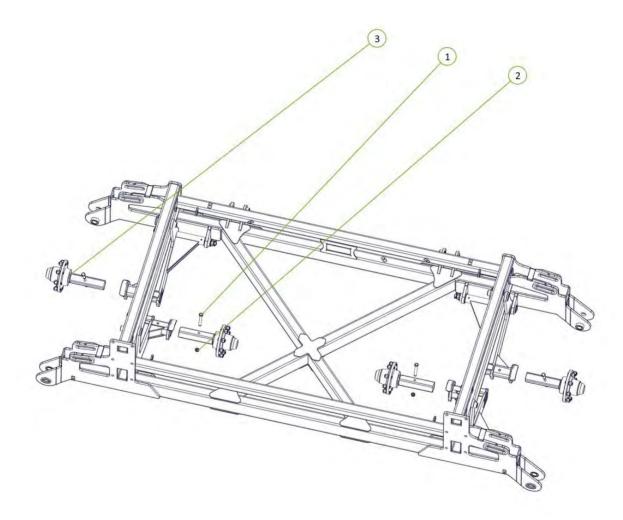


tem No.	Description	Qty	Number
1	Nyloc Nut M30	4	0221-NYL30
2	Washer High Tensile 2"	8	0232-HT2
3	Cotter Pin M6 x 50mm	4	0261-PINC650
4	50mm Pivot Pin Retaining Washer	4	1200-60
5	Oval Head 50mm Long Pivot Pin	4	1202-08



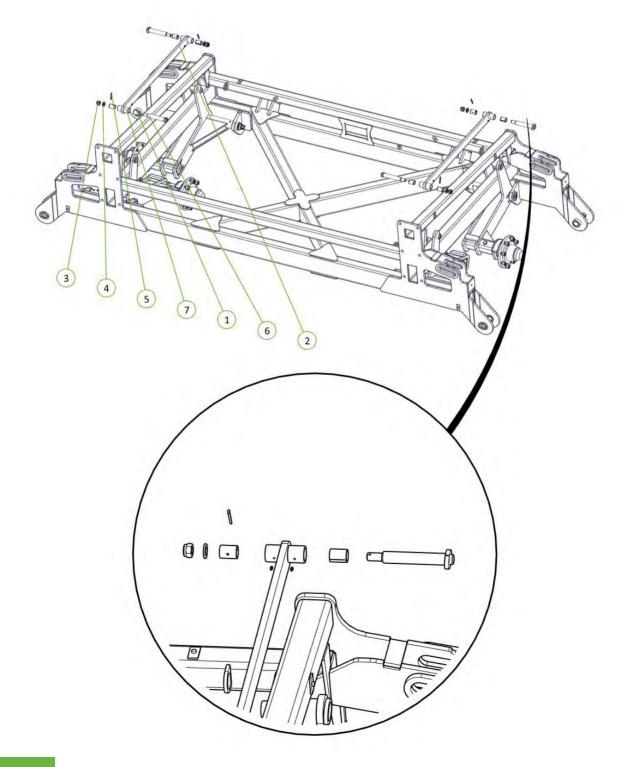
1265 - 01 - AS1

Item No.	Description	Qty	Number
1	M20 x 130 grade 8.8 ZP Bolt	4	0211-20130
2	Nyloc Nut M20	4	0221-NYL20
3	90 Series Stub Axle (Stub and Hub Complete)	4	0733-90

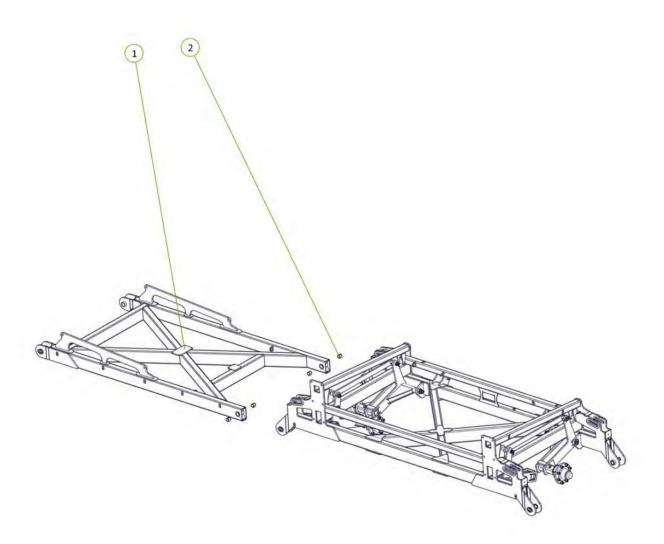


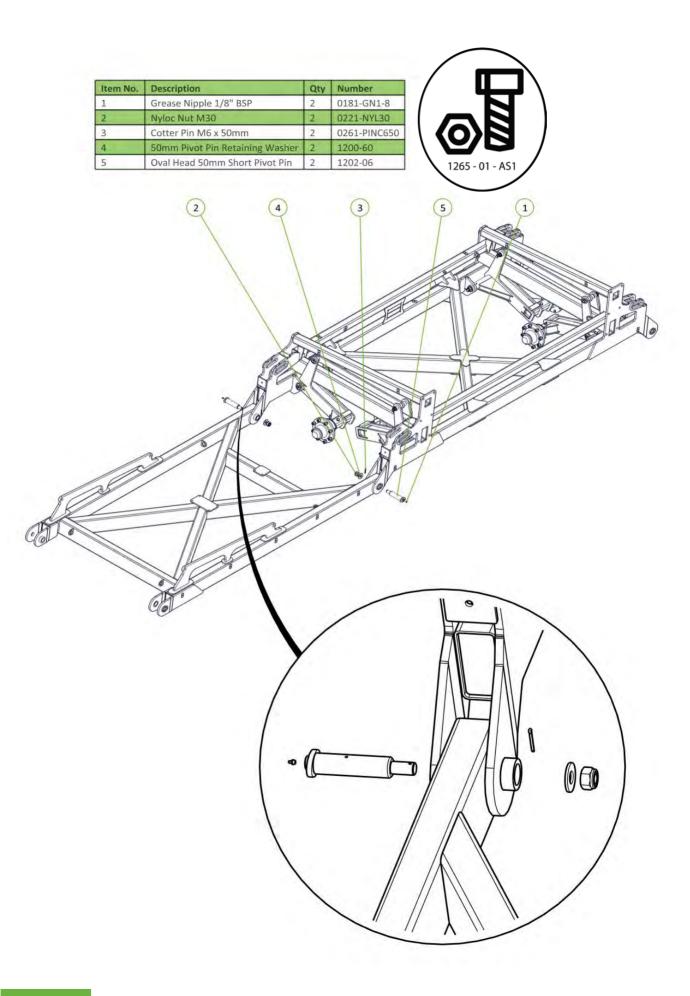
Item No.	Description	Qty	Number
1	35 ID x 50mm DX Bush	8	0113-MB 3550D>
2	Grease Nipple 1/4" UNF	8	0181-GN1-4
3	Nyloc Nut M24	4	0221-NYL24
4	Washer Flat M24	4	0231-F24
5	Cotter Pin M6 x 50mm	4	0261-PINC650
6	Oval Head 35mm Pivot Pin	4	1202-09
7	Walking Axle Linkage	2	1210-52





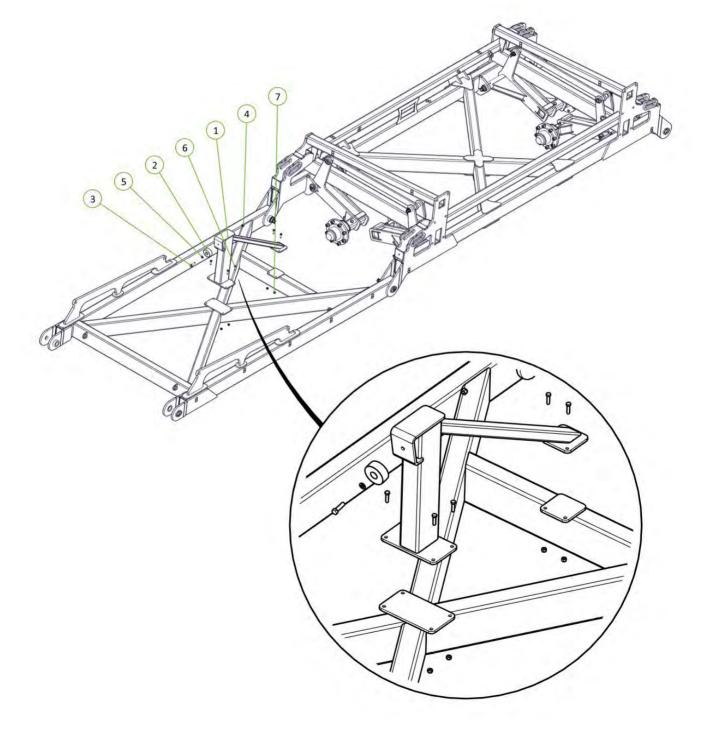
Item No.	Description	Qty	Number
1	62HDX RH Inner Wing Frame	1	1265-04
		4	0113-MB 5040DX



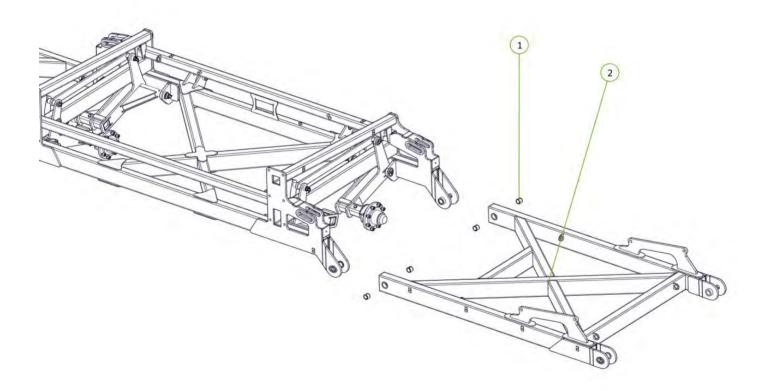


Item No.	Description	Qty	Number
1	62HDX Inner Wing Post	1	1265-04P
2	Wing Folding Buffer	1	1201-12
3	M16 x 55 grade 8.8 zp Bolt	1	0211-1655
4	Nyloc Nut M16	1	0221-NYL16
5	Washer Flat M16	1	0231-F16
6	M12 x 45 grade 8.8 ZP Bolt	6	0211-1245
7	Nyloc Nut M12	6	0221-NYL12

1265 - 04 - AS1

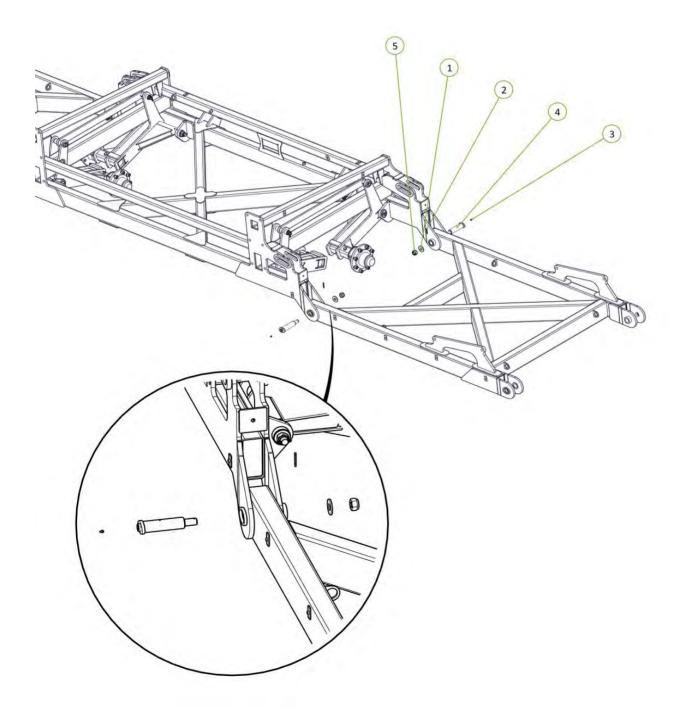


Item No.	Description	Qty	Number
1	50 ID x 40mm DX Bush	4	0113-MB 5040DX
2	62HDX LH Inner Wing	1	1265-05

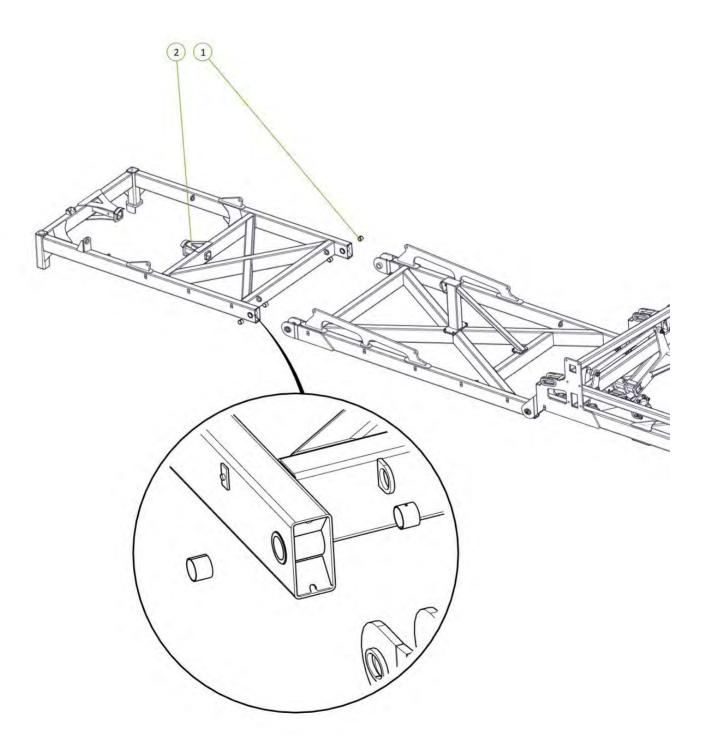


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Item No.	Description	Qty	Number
1	50mm Pivot Pin Retaining Washer	2	1200-60
2	Nyloc Nut M30	2	0261-PINC650
3	Cotter Pin M6 x 50mm	2	0181-GN1-8
4	50mm Pivot Pin Retaining Washer	2	1202-06
5	Cotter Pin M6 x 50mm	2	0221-NYL30



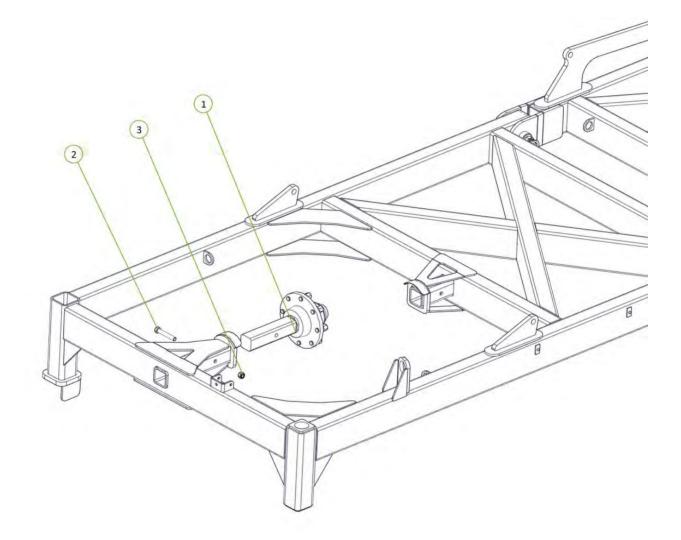
Item No.	Description	Qty	Number
1	50 ID x 40mm DX Bush	4	0113-MB 5040DX
2	62HDX RH Outer Wing	1	1265-06



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Item No.
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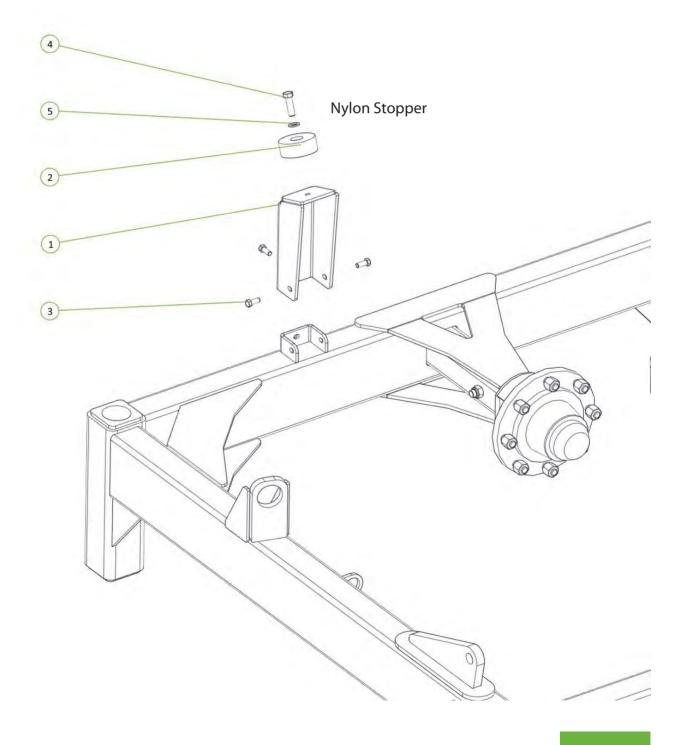
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1265 - 06 - AS1	

Item No.	Description	Qty	Number
1	90 Series Stub Axle (Stub and Hub Complete)	1	0733-90
2	M20 x 130 grade 8.8 ZP Bolt	1	0211-20130
3	Nyloc Nut M20	1	0221-NYL20

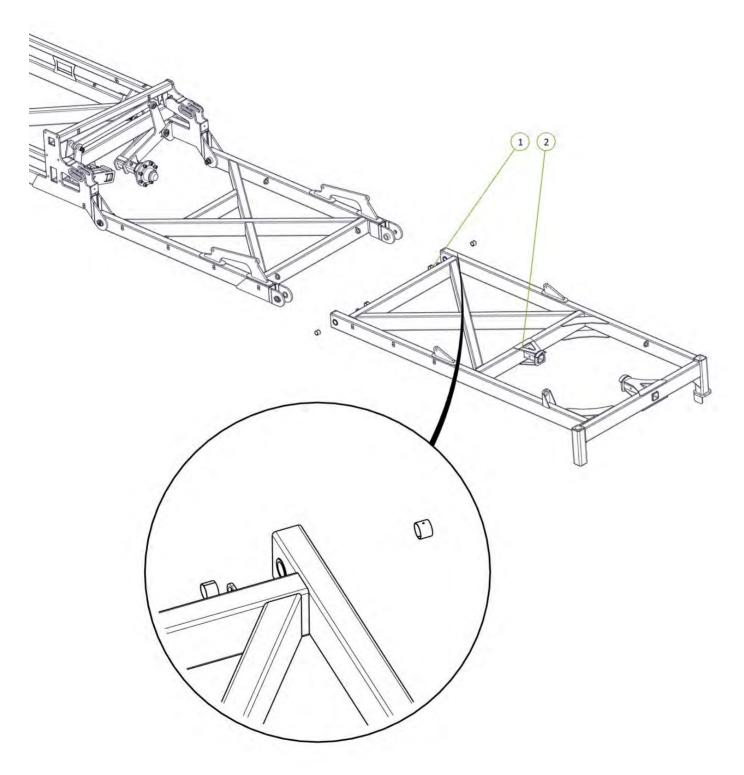


Item No.	Description	Qty	Number
1	65' Outer Wing Post	1	1262HDX-100
2	Wing Folding Buffer	1	1201-12
3	M12 x 30 grade 8.8 ZP Bolt	3	0211-1230
4	M16 x 55 grade 8.8 zp Bolt	1	0211-1655
5	Washer Flat M16	1	0231-F16



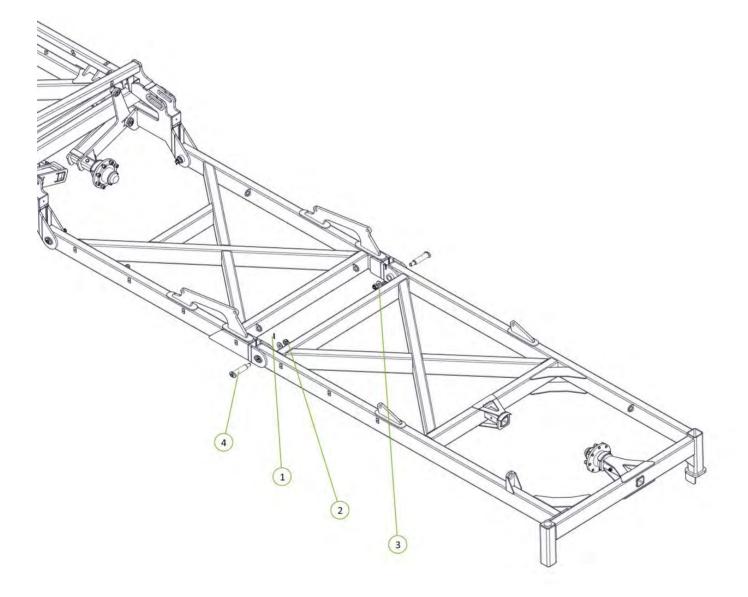


Item No.	Description	Qty	Number
1	50 ID x 40mm DX Bush	4	0113-MB 5040D
2	62HDX LH Outer Wing	1	1265-07



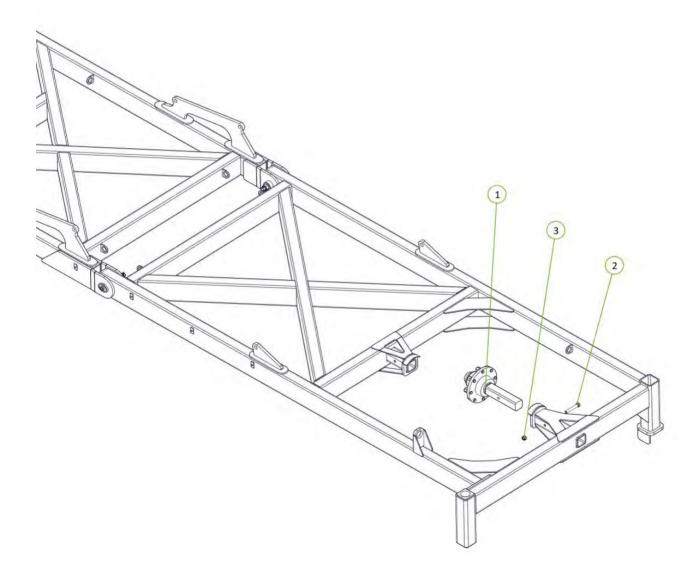
Item No.	Description	Qty	Number
1	Cotter Pin M6 x 50mm	2	0261-PINC650
2	Nyloc Nut M30	2	0221-NYL30
3	50mm Pivot Pin Retaining Washer	2	1200-60
4	Oval Head 50mm Short Pivot Pin	2	1202.06A



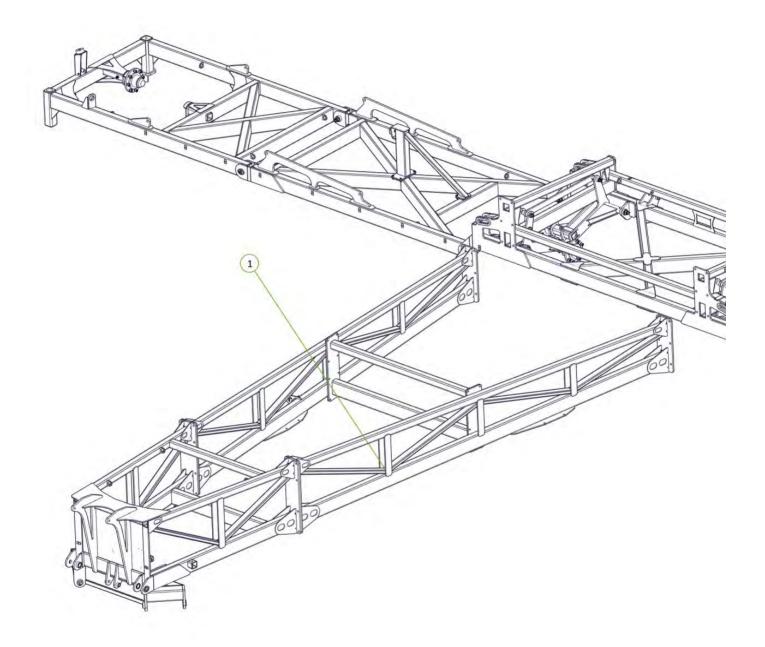


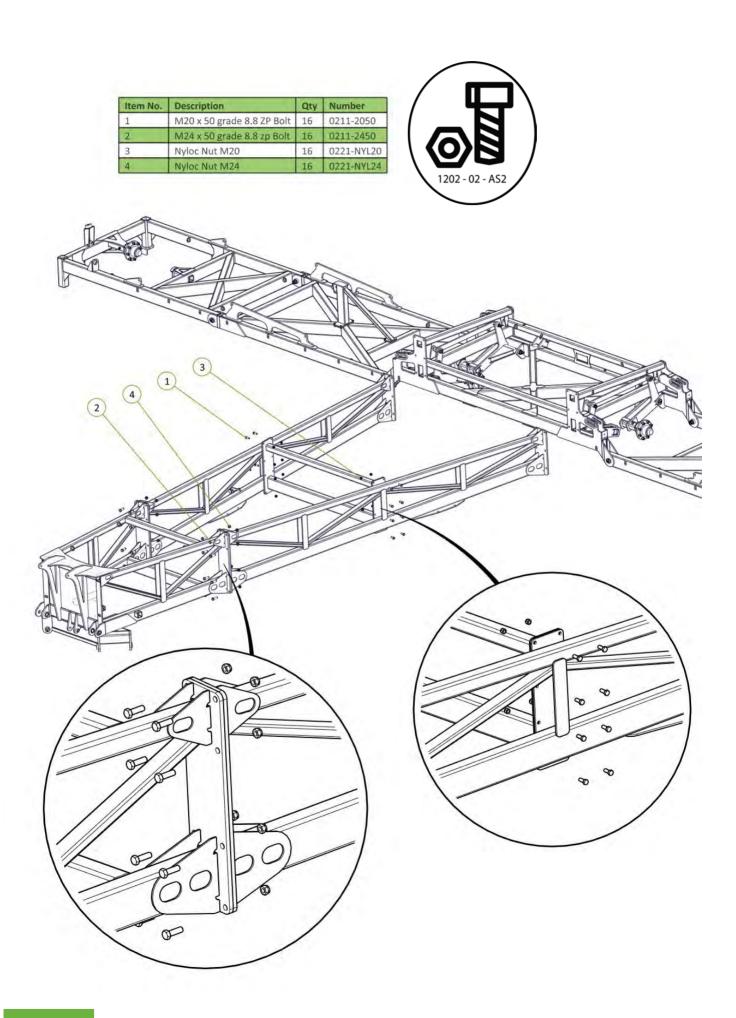
Item No.	Description	Qty	Number
1	90 Series Stub Axle (Stub and Hub Complete)	1	0733-90
2	M20 x 130 grade 8.8 ZP Bolt	1	0211-20130
3	Nyloc Nut M20	1	0221-NYL20



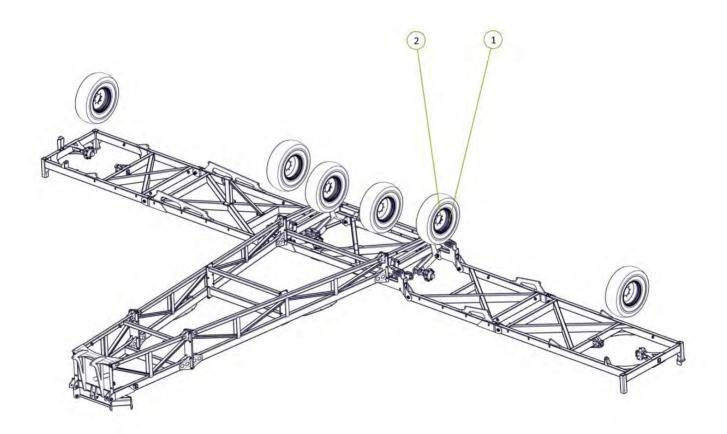


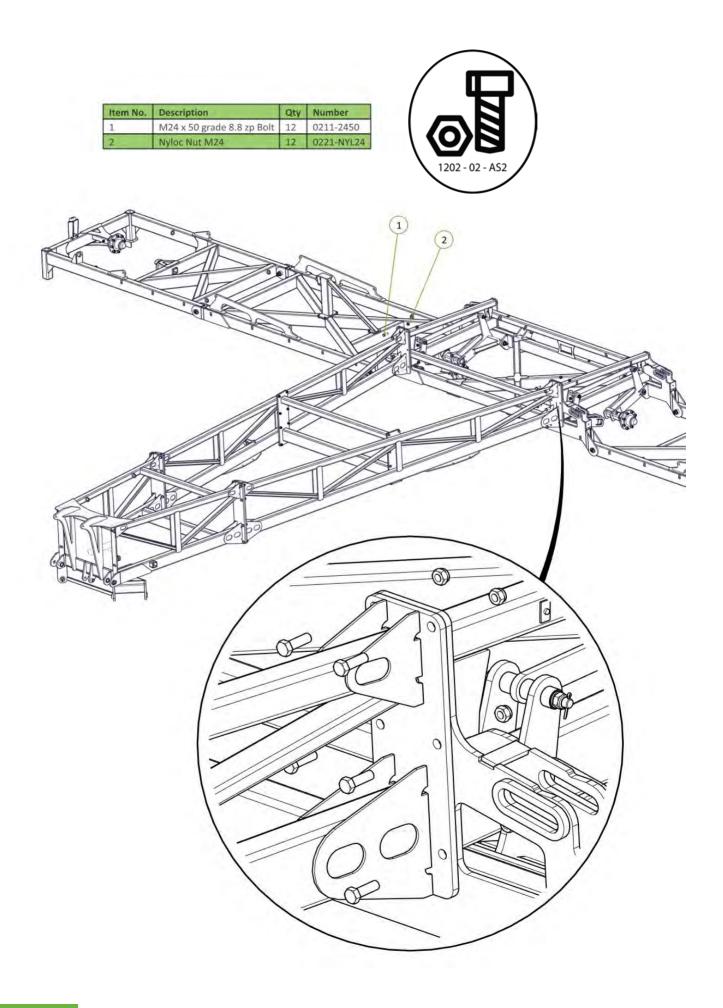
Item No.	Description	Qty	Number
1	62HDX Front A-Frame	1	1265-02



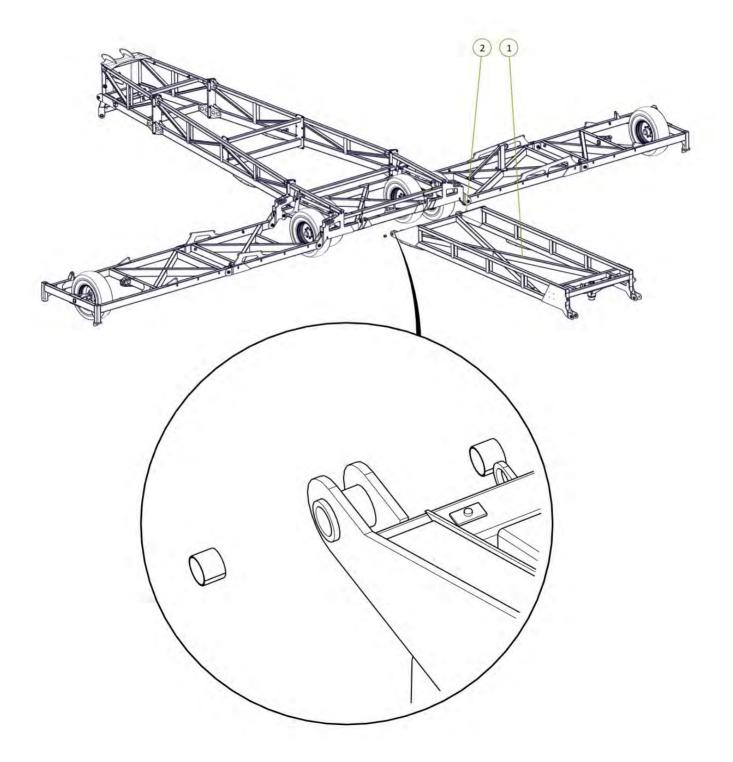


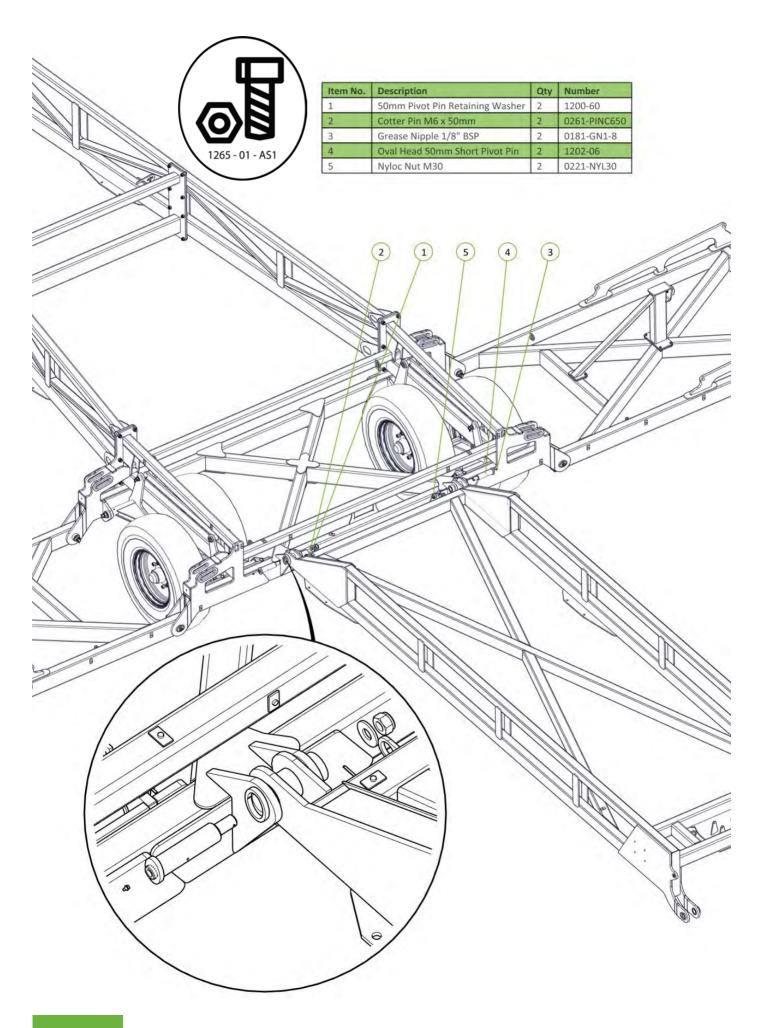
Item No.	Description	Qty	Number
1	Tyre Only 15.5/80-24 16 PLY AS504	6	0711-15.5-80-24
2	Rim Only 24"Diameter 12"Wide, 8 on 275 PCD, 221mm Bore,+20 Offset	6	0721-24X12



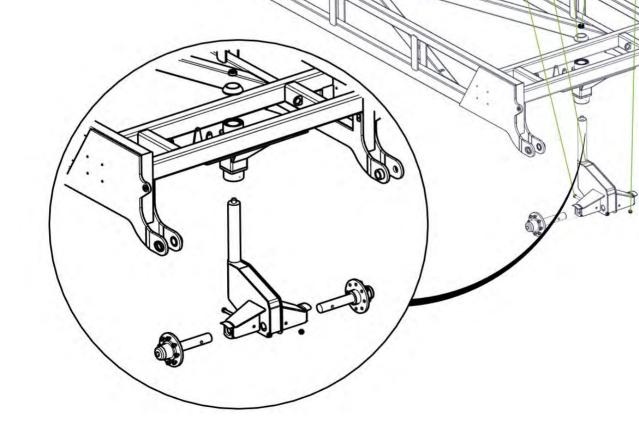


Item No.	Description	Qty	Number
1	65' Rear A-Frame	1	1265-03
2	50 ID x 40mm DX Bush	4	0113-MB 5040DX

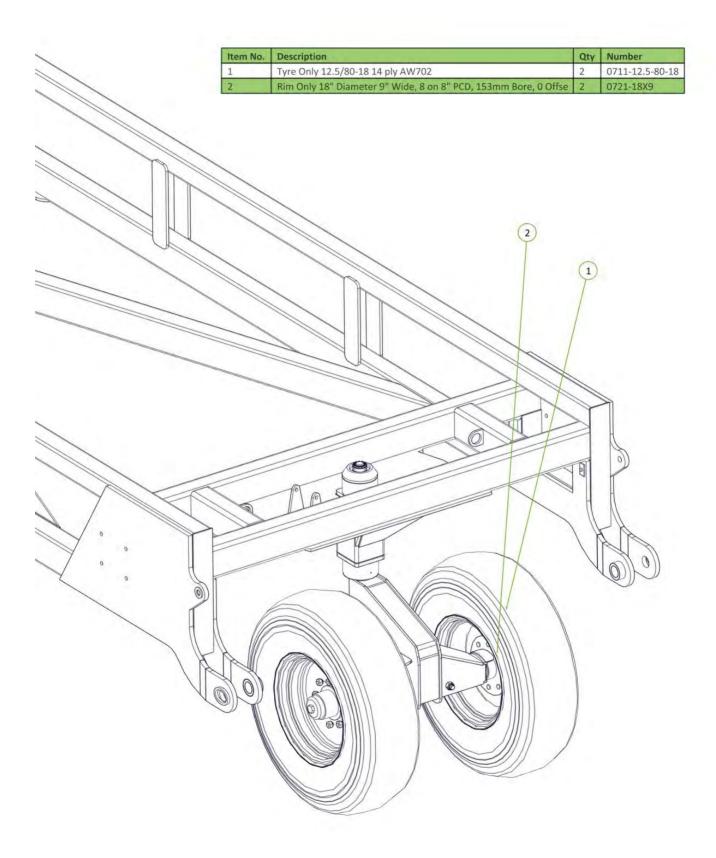


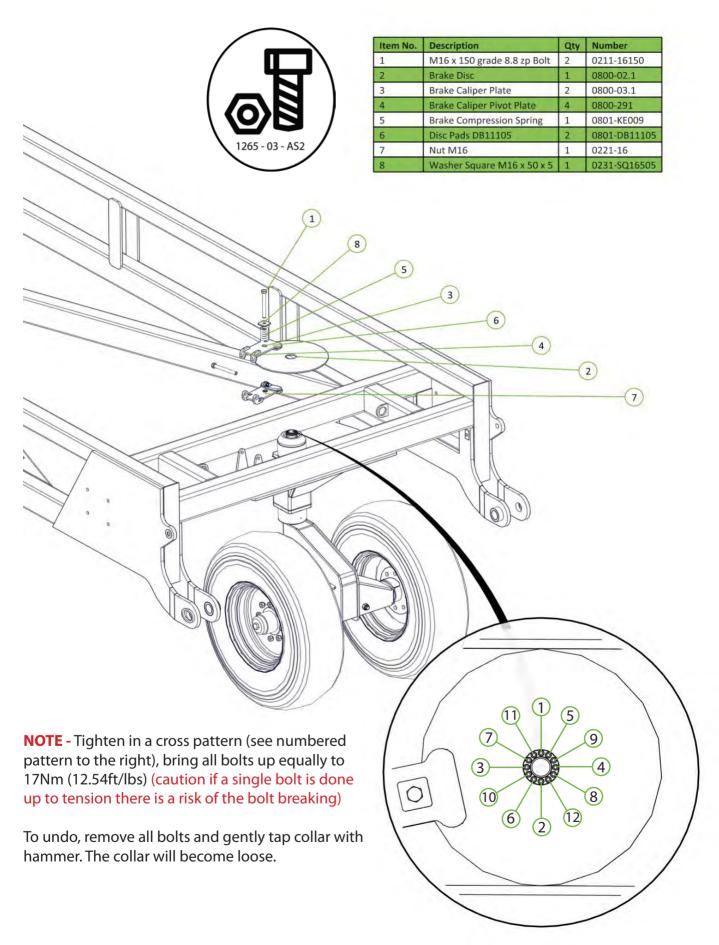


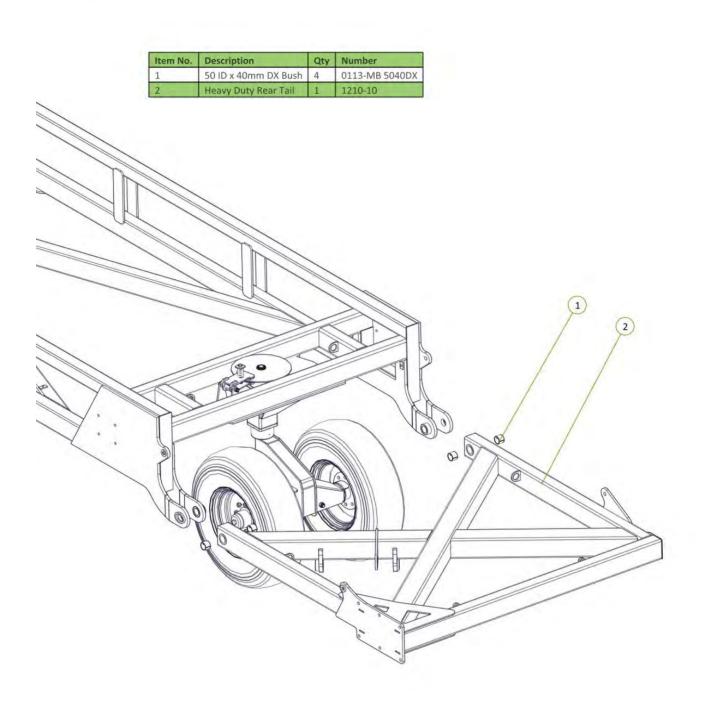
1 2.75"R 6 Tonne 8 on 8" PCH Hub 2 0733-SH27596880 2 35mm Shaft Lock Clamping Element 1 0801-LOCK01-35 3 90mm Nylon Jockey Wheel 16 1210-43 4 Heavy Duty Jockey Wheel 16 1210-80 5 M20 x 140 grade 8.8 ZP Bolt 2 0211-20140 6 Nyloc Nut M20 2 0221-NYL20	Item No.	Description	Qty	Number	
3 90mm Nylon Jockey Wheel Dust Cap 1 1201-43 4 Heavy Duty Jockey Wheel 16 1210-80 5 M20 x 140 grade 8.8 ZP Bolt 2 0211-20140	1	2.75"R 6 Tonne 8 on 8" PCH Hub	2	0733-SH27596880	
4 Heavy Duty Jockey Wheel 16 1210-80 5 M20 x 140 grade 8.8 ZP Bolt 2 0211-20140	2	35mm Shaft Lock Clamping Element	1	0801-LOCK01-35	
5 M20 x 140 grade 8.8 ZP Bolt 2 0211-20140	3	90mm Nylon Jockey Wheel Dust Cap	1	1201-43	
5 M20 x 140 grade 8.8 ZP Bolt 2 0211-20140 1265 - 03 - A52 6 Nyloc Nut M20 2 0221-NYL20 1265 - 03 - A52	4	Heavy Duty Jockey Wheel	16	1210-80	$\langle 0 \rangle N$
6 Nyloc Nut M20 2 0221-NYL20 1265-03-A52	5	M20 x 140 grade 8.8 ZP Bolt	2	0211-20140	
	6	Nyloc Nut M20	2	0221-NYL20	1265 - 03 - AS2



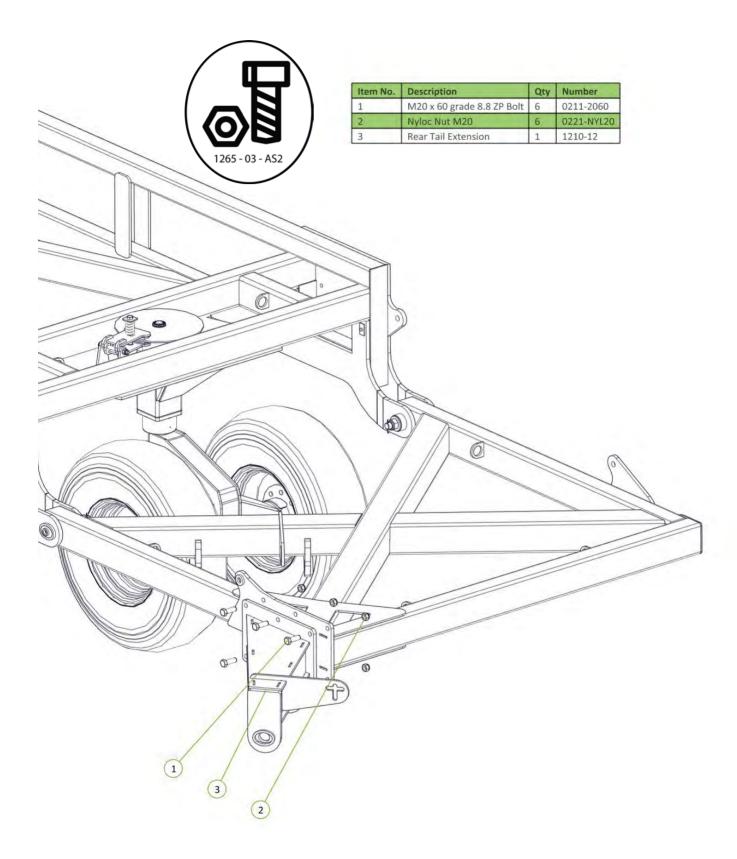
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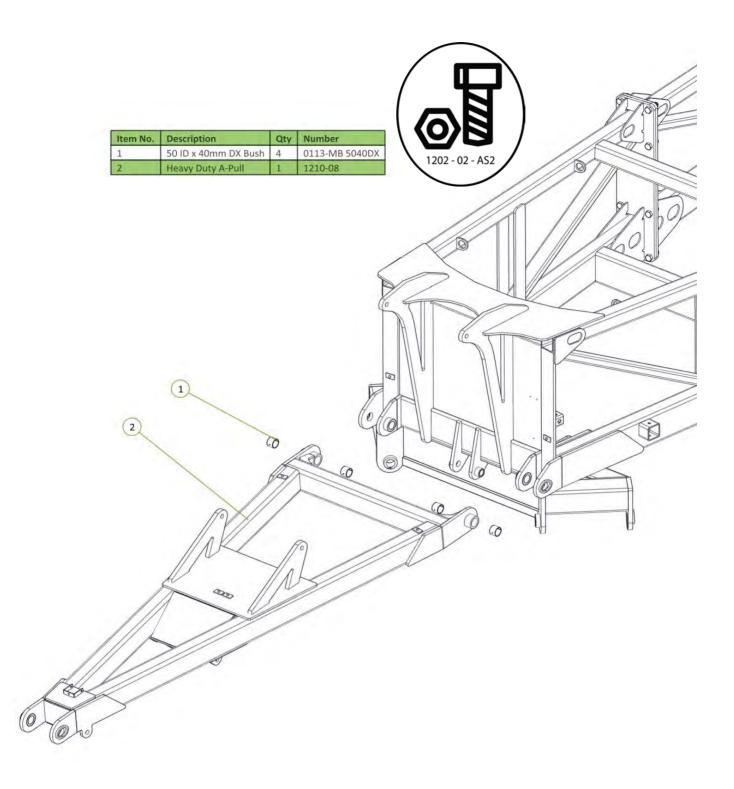






Item No.	Description	Qty	Number
1	Cotter Pin M6 x 50mm	2	0261-PINC650
2	Nyloc Nut M30	2	0221-NYL30
3	50mm Pivot Pin Retaining Washer		1200-60
4	Grease Nipple 1/8" BSP	2	0181-GN1-8
5	Oval Head 50mm Short Pivot Pin	2	1202-06 1265 - 03 - AS2
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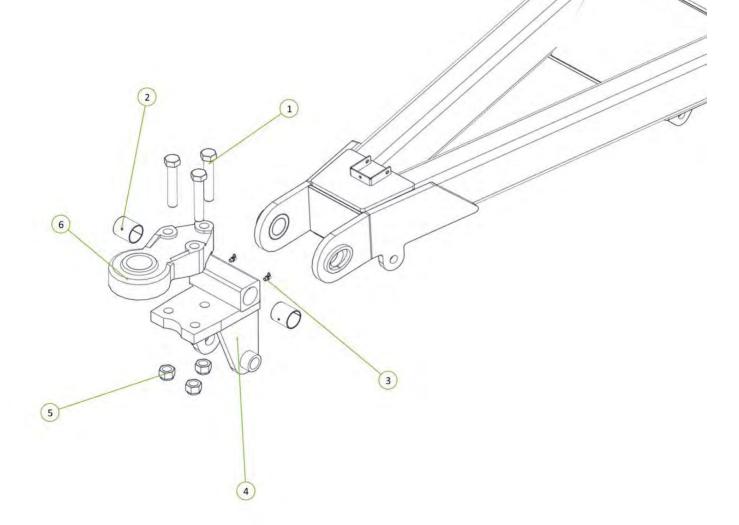
Item No.	Description	Qty	Number
1	50mm Pivot Pin Retaining Washer	2	1200-60
2	Cotter Pin M6 x 50mm	2	0261-PINC650
3	Grease Nipple 1/8" BSP	2	0181-GN1-8
4	Oval Head 50mm Short Pivot Pin	2	1202-06
5	Nyloc Nut M30	2	0221-NYL30

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1202 - 02 - AS2

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Item No.	Description	Qty	Number
1	1" UNF Grade 10.9 ZP Bol	3	0213-1 51-2
2	50 ID x 60mm DX Bush	2	0113-MB 5060DX
3	Grease Nipple 1/8" BSP 90 deg	2	0181-GN1-890
4	Heavy Duty Tow Hitch	1	1210-09
5	Nyloc Nut 1" UNF	3	0223-NYL1
6	Swivel Hitch Assy CAT 5	1	0801-HITCHCAT5

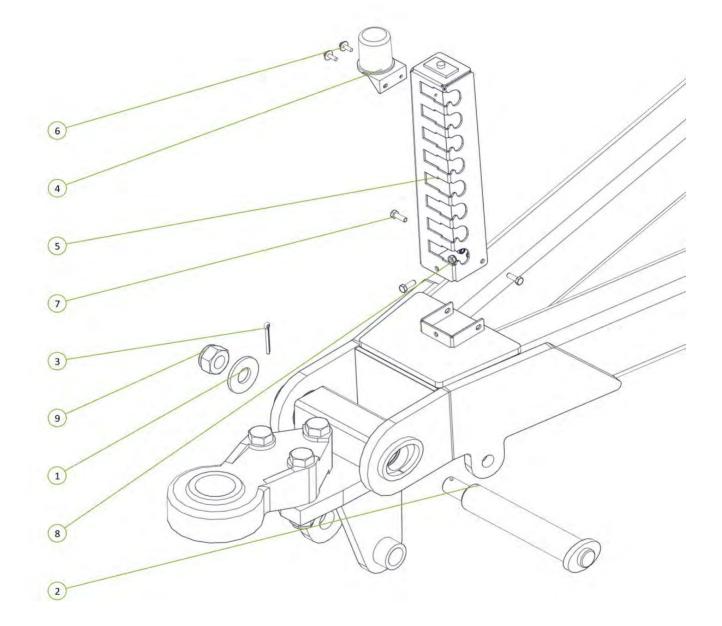


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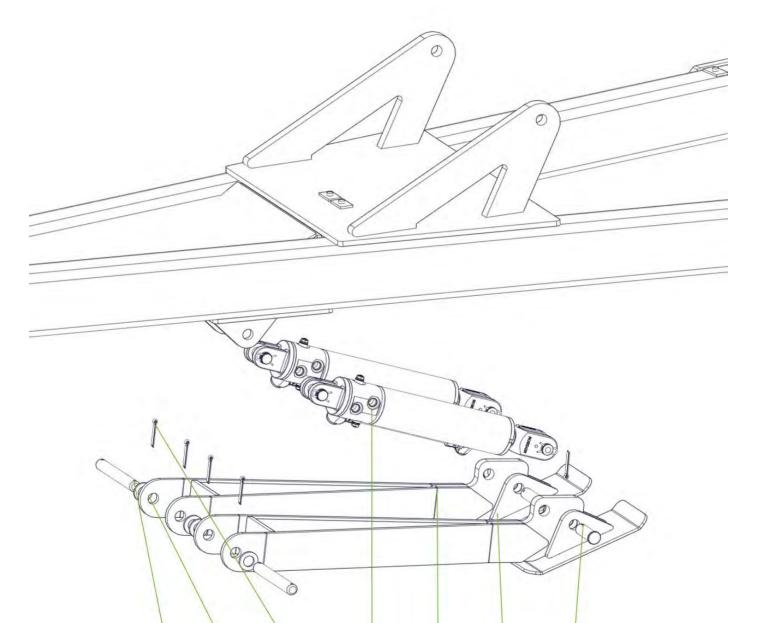
Item No.	Description	Qty	Number
1	50mm Pivot Pin Retaining Washer	1	1200-60
2	50mm Tow Hitch Pivot Pin	1	1202-11
3	Cotter Pin M6 x 50mm	1	0261-PINC650
4	Electrical Plug Keeper	1	0416-11750B
5	Hose Post	1	0810-151
6	M6 x 20 Trilobe Self Tapping Screw	2	0211-M620MZPHTF
7	M8 x 25 grade 8.8 ZP Bolt	3	0211-825
8	Nyloc Nut M8	3	0221-NYL8
9	Nyloc Nut M30	1	0221-NYL30





Item No.	Description	Qty	Number
1	3" Bore 8" Stroke NI Cylinder with Int DCBV Valve	2	0313-308SPOC-B
2	Hyd Jack Side Plate	4	1200-315
3	Hydraulic Jack Foot Plate	2	1200-305
4	Clevis Pin 25mm x 75mm	2	0801-KE0307-1
5	Cotter Pin M5 x 50	6	0261-PINC550
6	25mm Shaft 185mm Long	1	1201-44
8	Washer Flat M24	4	0231-F24





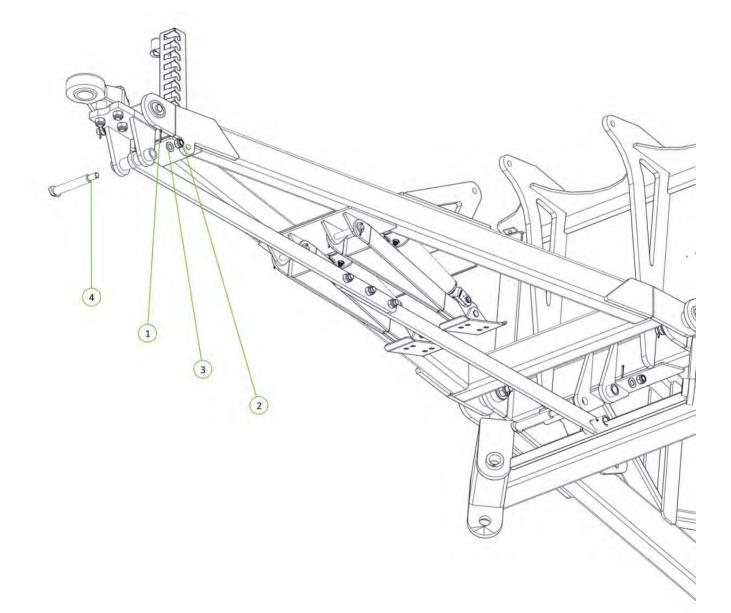
Item No.	Description	Qty	Number
1	35 ID x 50mm DX Bush	4	0113-MB 3550DX
2	Grease Nipple 1/4" UNF	4	0181-GN1-4
3	Parrallelogram Link Half	2	1210-22
4	M24 x 50 grade 8.8 zp Bolt	3	0211-2475
5	Nyloc Nut M24	3	0221-NYL24



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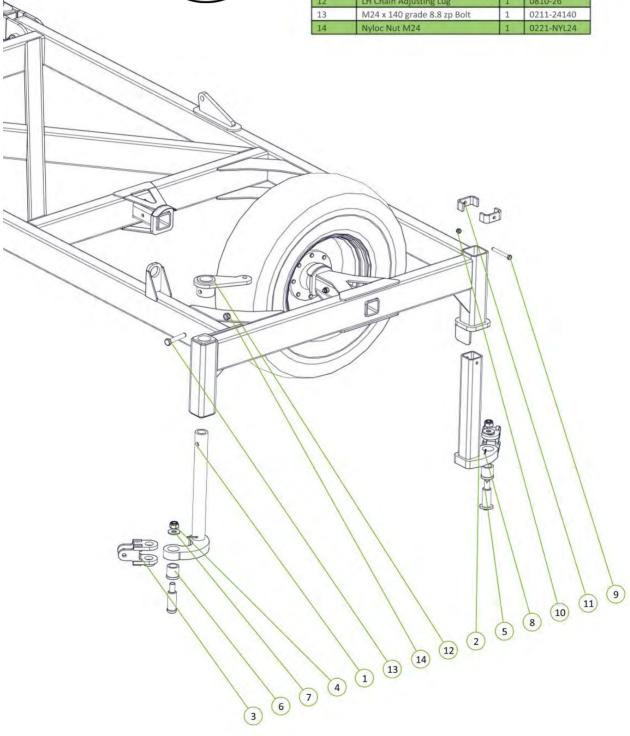
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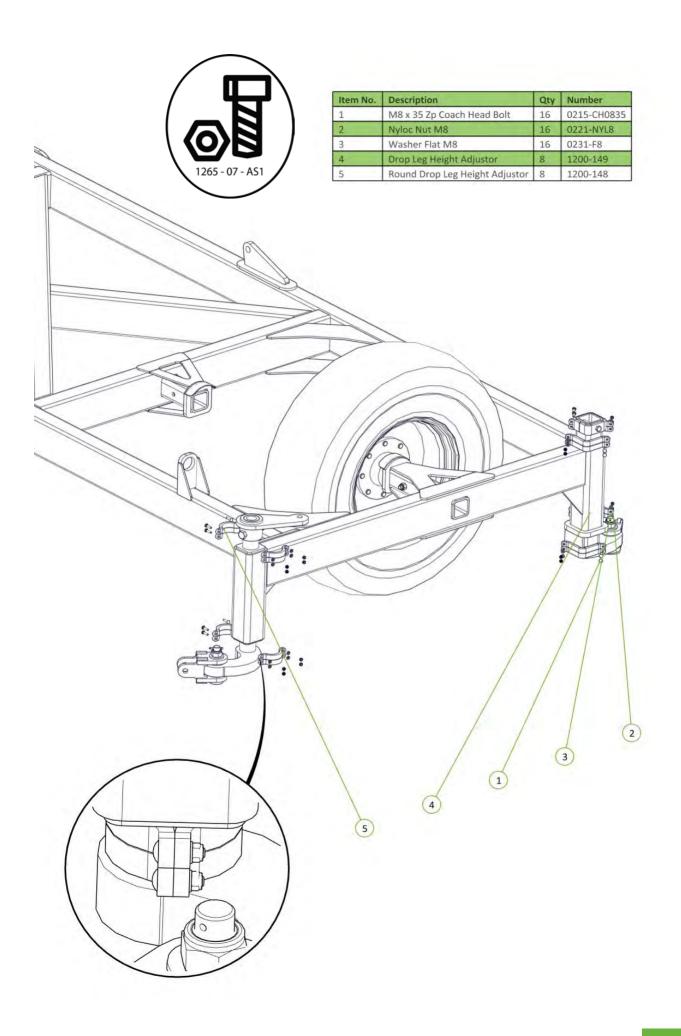
Item No.	Description	Qty	Number
1	Cotter Pin M6 x 50mm	2	0261-PINC650
2	Nyloc Nut M24	2	0221-NYL24
3	Washer Flat M24	2	0231-F24
4	Oval Head 35mm Pivot Pin	2	1202-09





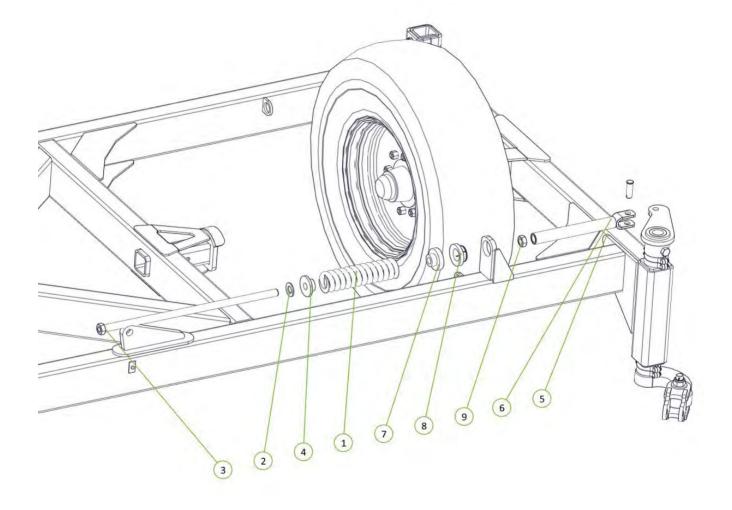
Item No.	Description	Qty	Number
1	Heavy Duty LH Drop Leg	1	1210-24
2	Heavy Duty LH Fixed Drop Leg	1	1210-55
3	PCHB553 Heavy Duty Mount Joint	2	1210-57
4	Nyloc Nut M30	2	0221-NYL30
5	Oval Head Swivel Mount Pivot Pin	2	1202-15
6	Swivel Mount Pivot Bush	2	1201-16
7	50mm Pivot Pin Retaining Washer	2	1200-60
8	Cotter Pin M6 x 50mm	2	0261-PINC650
9	M16 x 150 grade 8.8 zp Bolt	1	0211-16150
10	Nyloc Nut M16	1	0221-NYL16
11	Fixed Drop Leg Retaining Plate	2	1200-147
12	LH Chain Adjusting Lug	1	0810-26
13	M24 x 140 grade 8.8 zp Bolt	1	0211-24140
14	Nyloc Nut M24	1	0221-NYL24





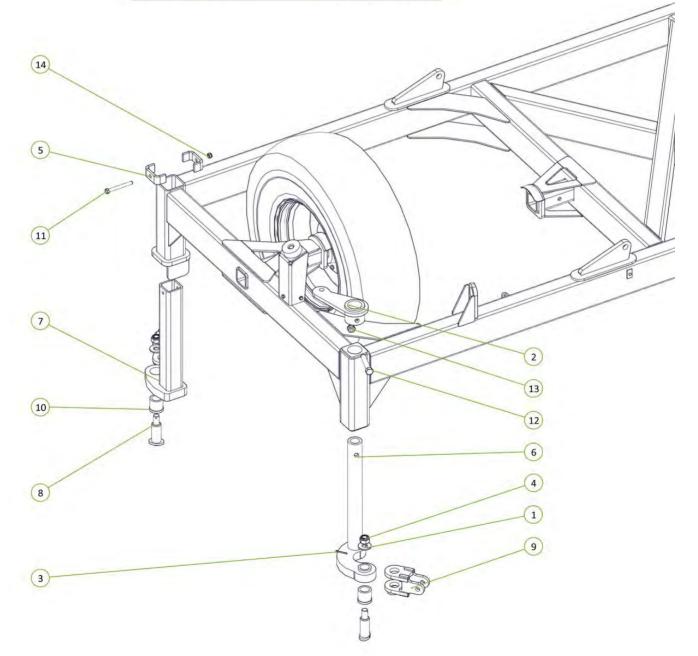
Item No.	Description	Qty	Number
1	20mm Compression Spring	1	0801-XK9261S
2	Washer High Tensile 1 1/4"	1	0232-HT11-4
3	Chain Tension Rod 1.25" 5tpi	1	0801-PCHTA-B6
4	Steel Spring Retaining Bush	1	0801-PCHTA-SE
5	Clevis Pin 25mm x 75mm	1	0801-KE0307-1
6	Tension Assembly Body with Clevis	1	0801-PCHTABC
7	Tensioner Cup - Male	1	0801-KE0805-3
8	Female Spring Locator	1	0801-KE0805-4
9	ACME Lock Nut 1 1/4 - 5NA - 2G	1	0801-PCHTA-N

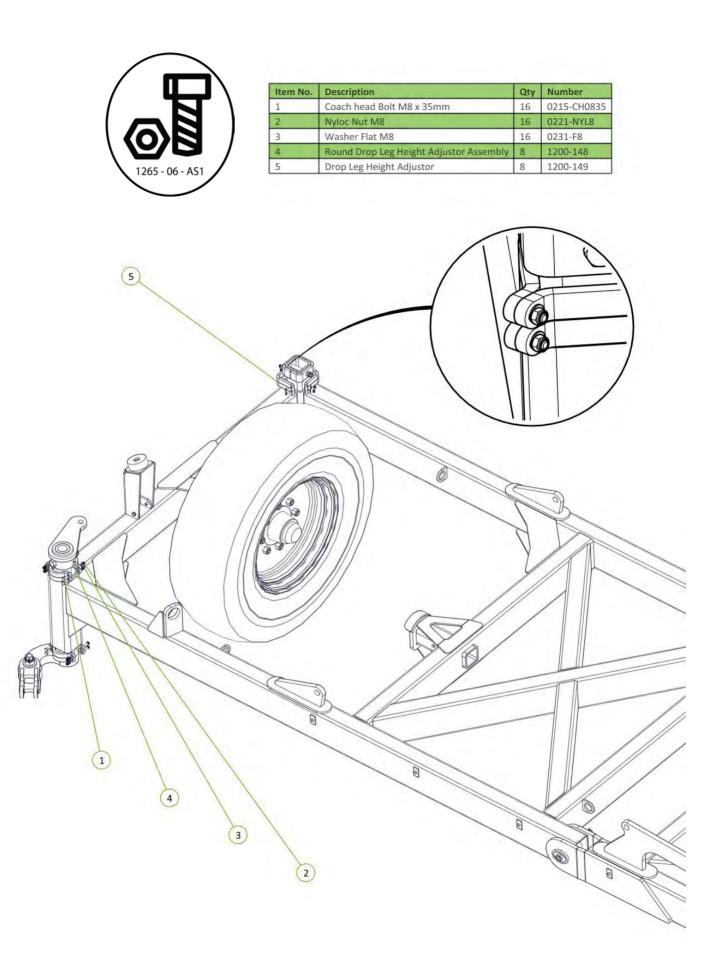


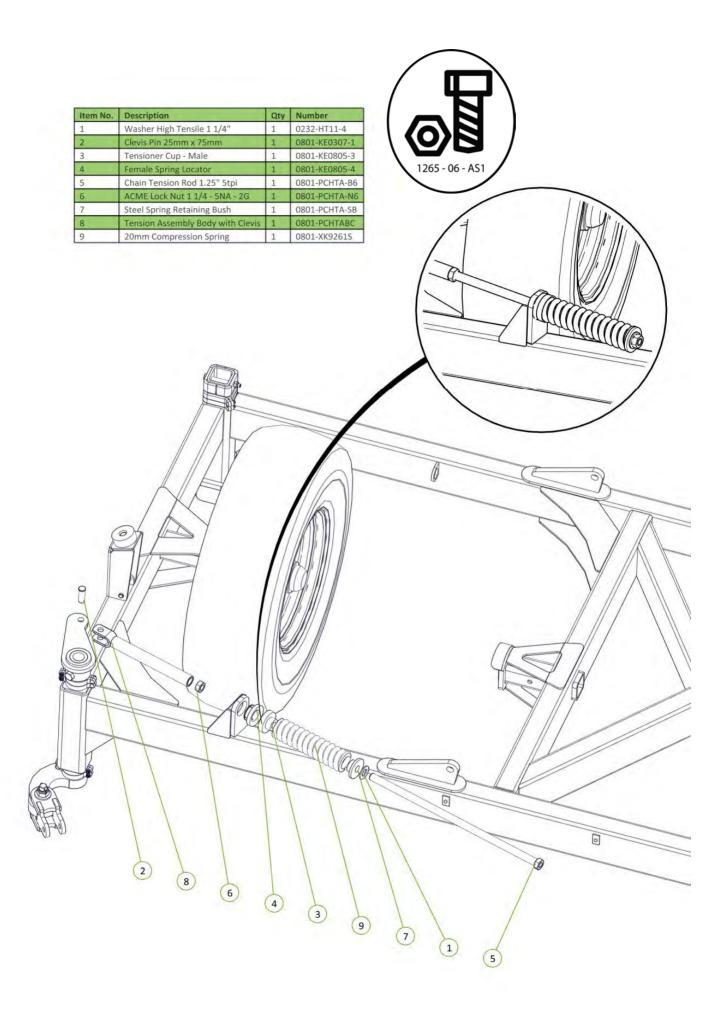


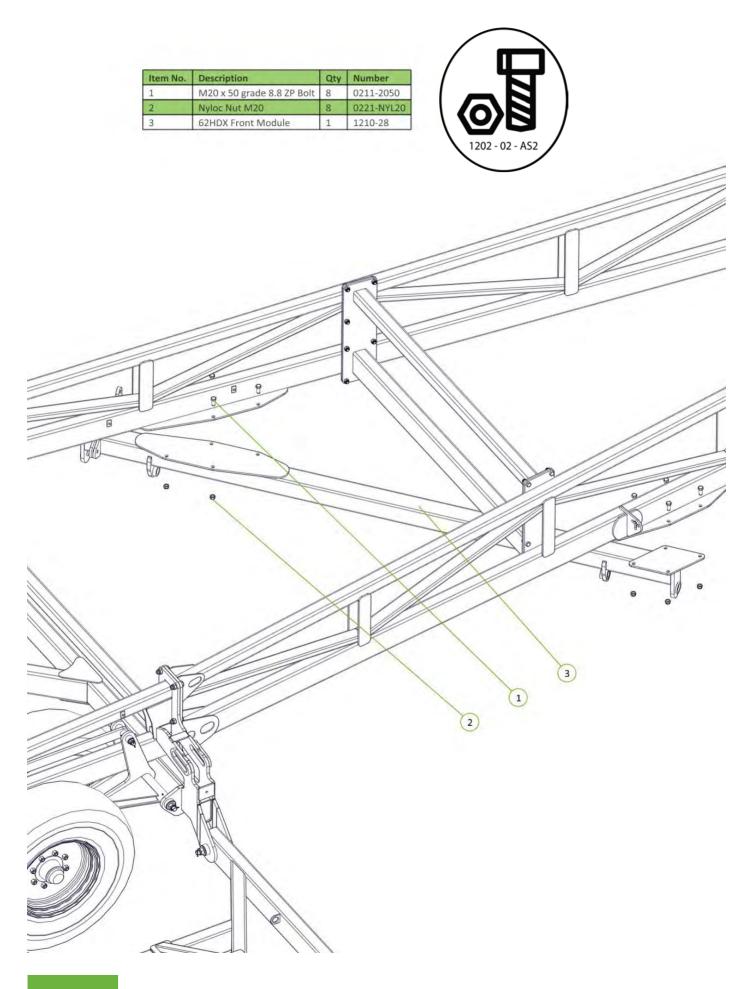
Item No.	Description	Qty	Number
1	50mm Pivot Pin Retaining Washer	2	1200-60
2	RH Chain Adjusting Lug	1	0810-27
3	Cotter Pin M5 x 50	2	0261-PINC550
4	Nyloc Nut M30	2	0221-NYL30
5	Fixed Drop Leg Retaining Plate	2	1200-147
6	Heavy Duty RH Drop Leg	1	1210-25
7	Heavy Duty RH Fixed Drop Leg	1	1210-56
8	Oval Head Swivel Mount Pivot Pin	2	1202-15
9	PCHB553 Heavy Duty Mount Joint	2	1210-57
10	Swivel Mount Pivot Bush	2	1201-16
11	M16 x 150 grade 8.8 zp Bolt	1	0211-16150
12	M24 x 140 grade 8.8 zp Bolt	1	0211-24140
13	Nyloc Nut M24	1	0221-NYL24
14	Nyloc Nut M16	1	0221-NYL16

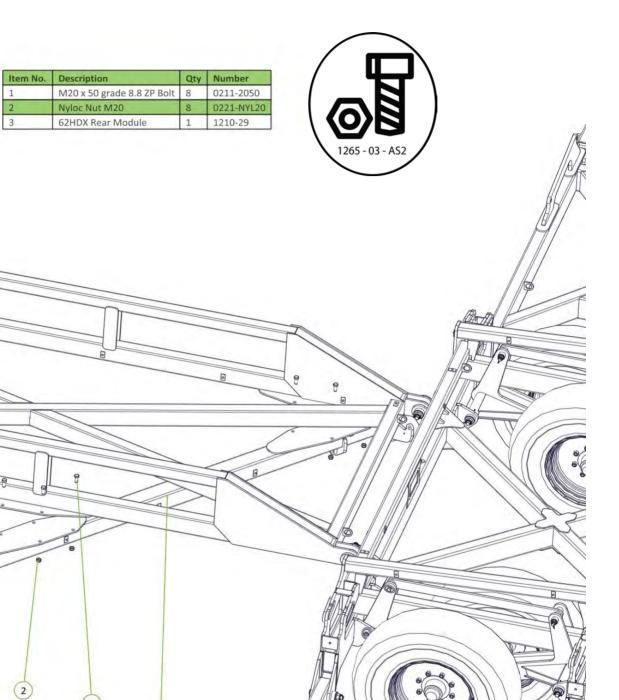


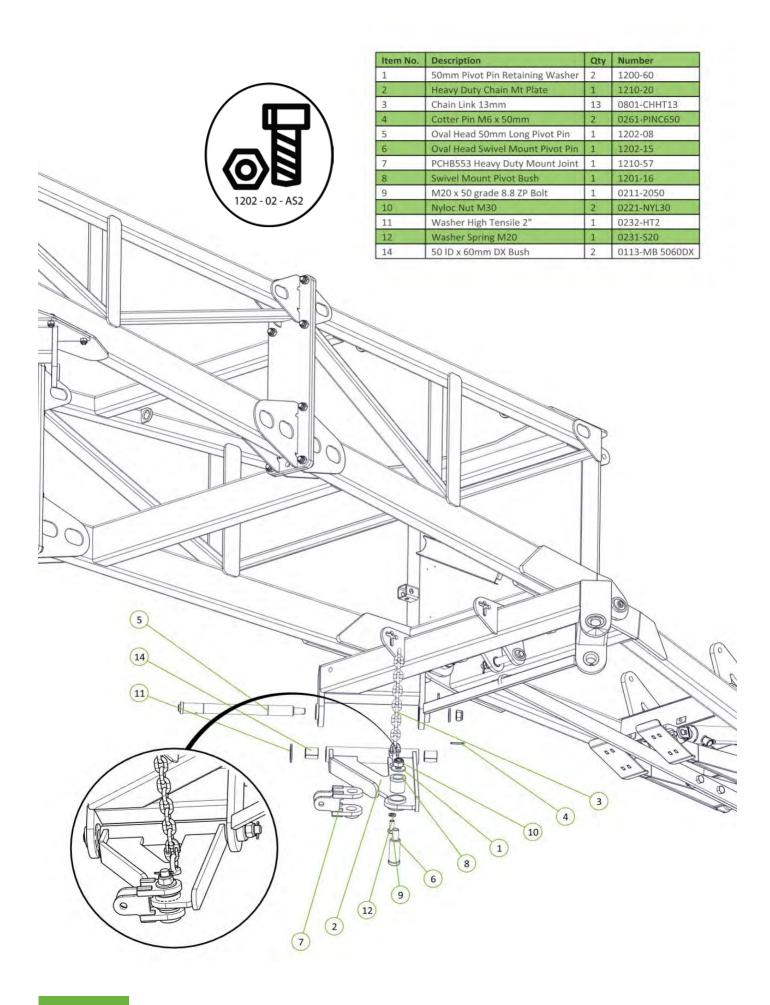


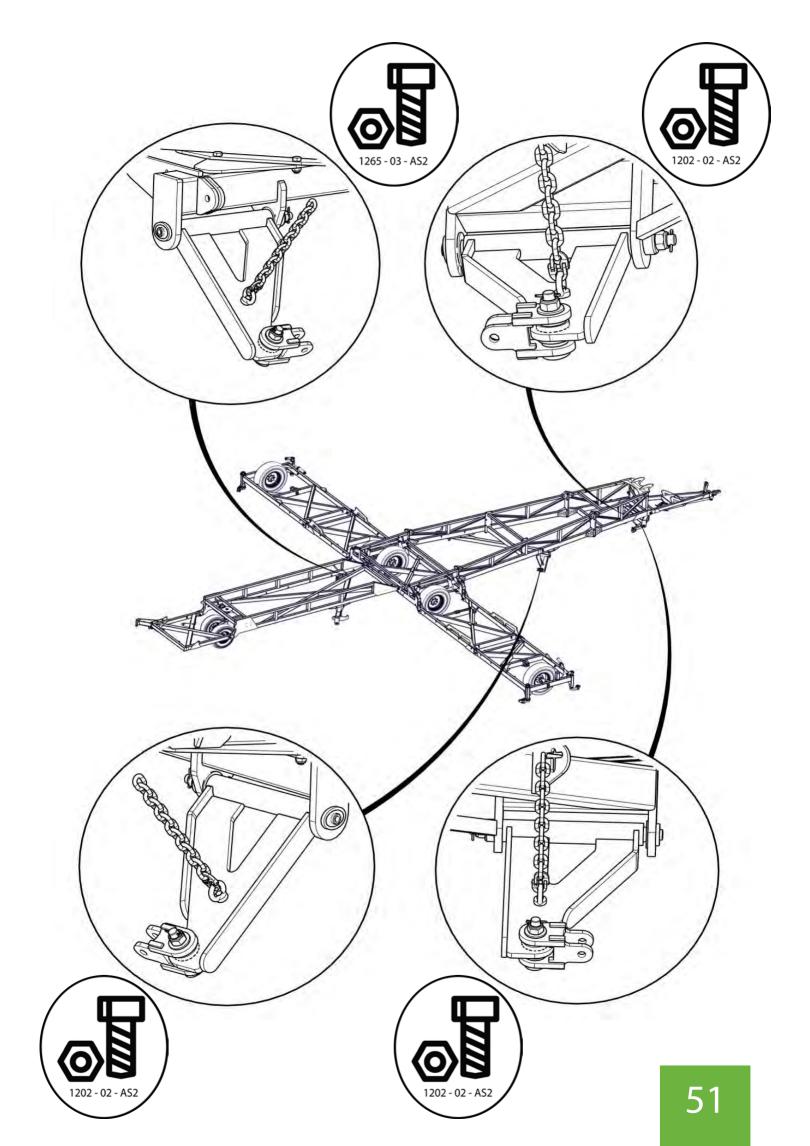


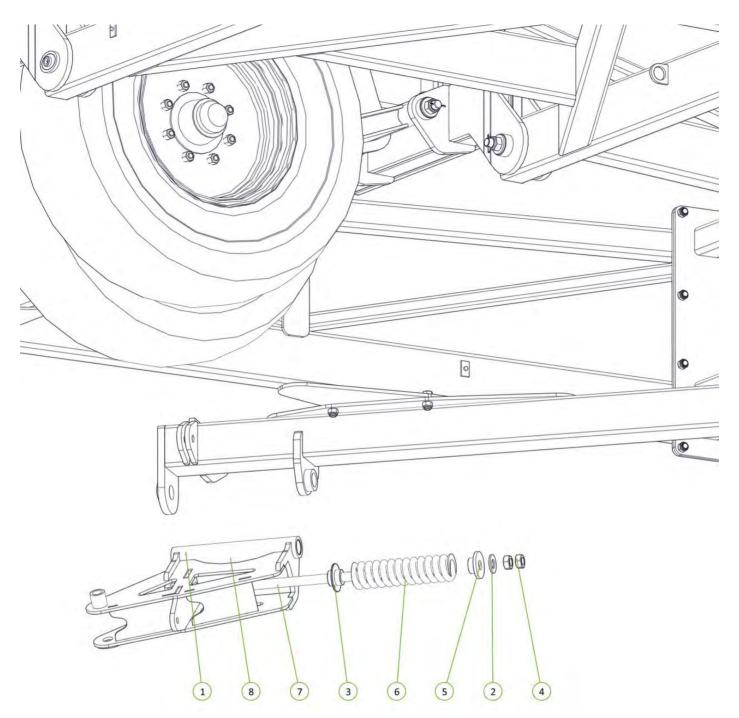






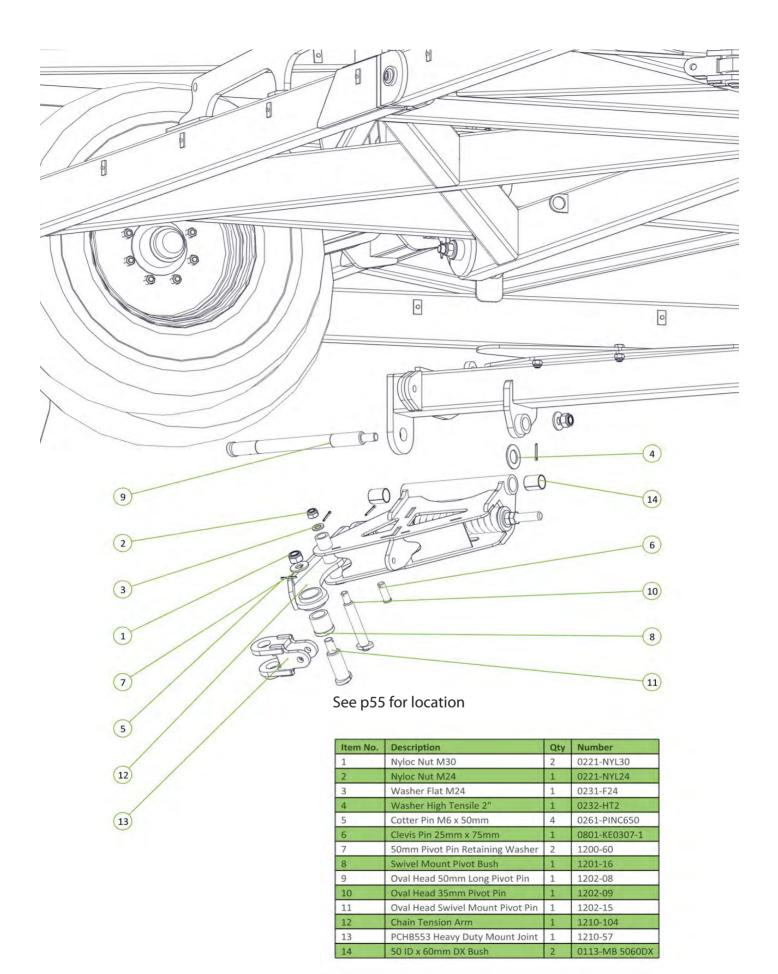


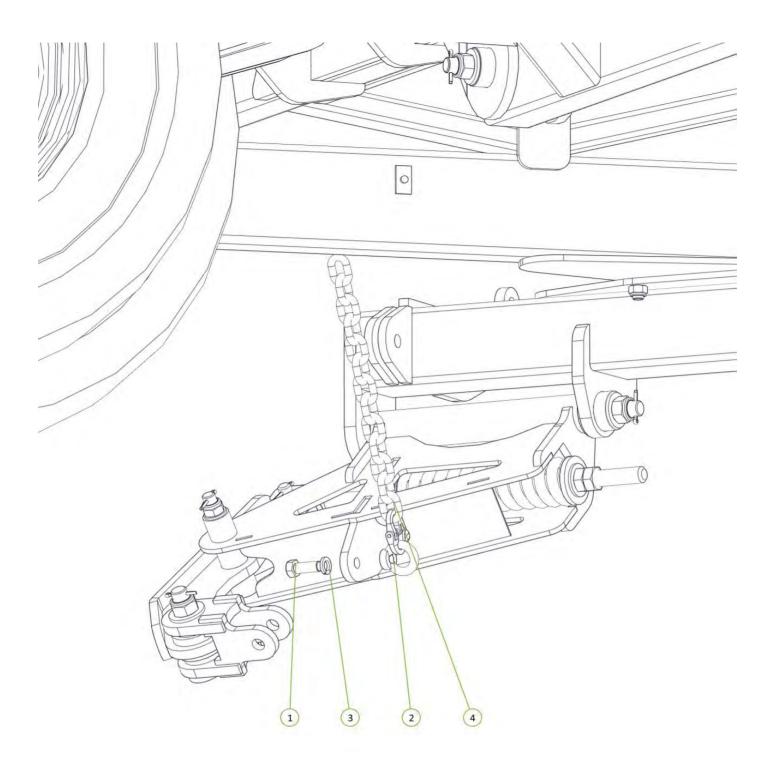




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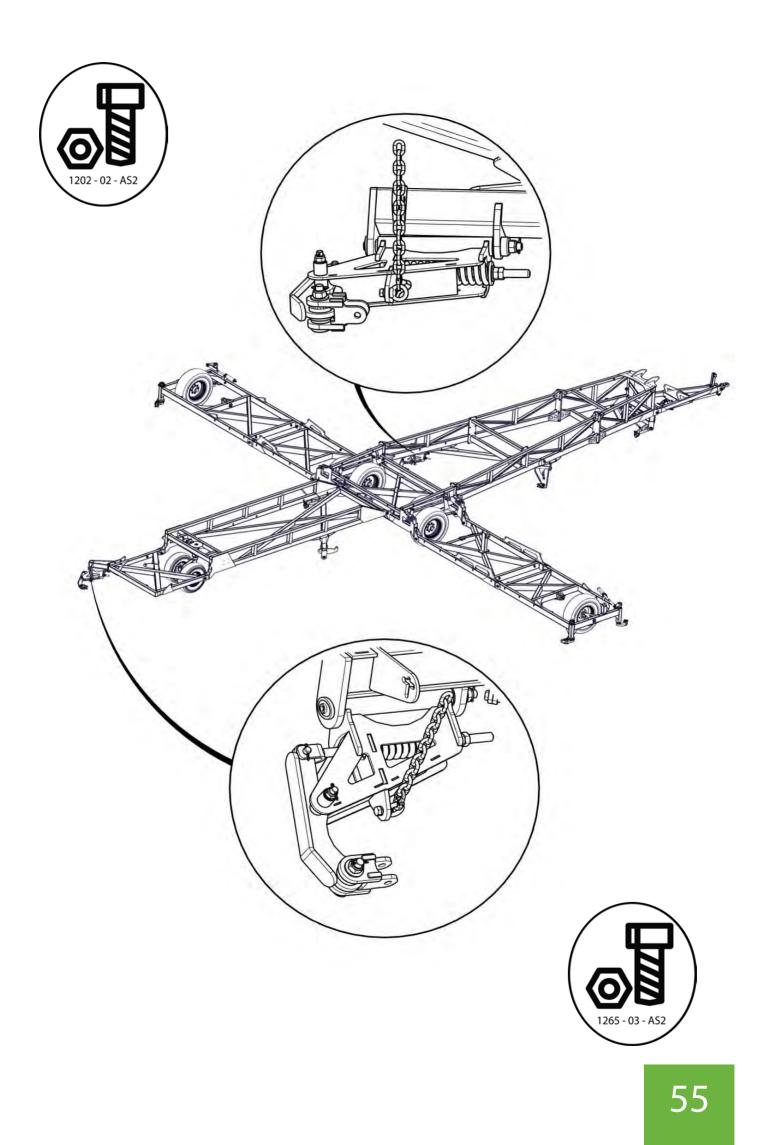
Item No.	Description	Qty	Number
1	Grease Nipple 1/4" UNF	2	0181-GN1-4
2	Washer High Tensile 1 1/4"	1	0232-HT11-4
3	Rigid Spring Locator	1	0801-10-S2L
4	ACME Lock Nut 1 1/4 - 5NA - 2G	2	0801-PCHTA-N6
5	Steel Spring Retaining Bush	1	0801-PCHTA-SB
6	20mm Compression Spring	1	0801-XK9261S
7	Module Tension Linkage	1	0810-105
8	Left Hand Chain Tension Box	1	1210-103

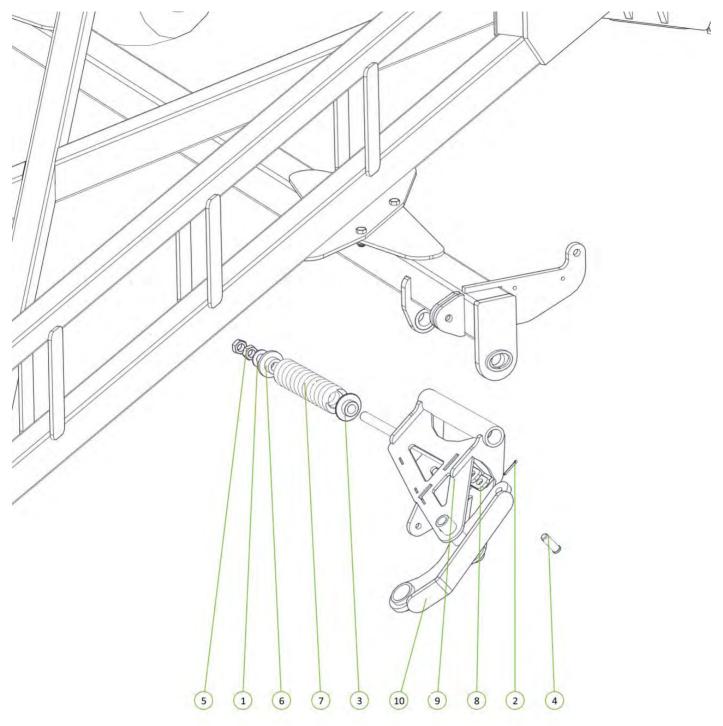




See p55 for location

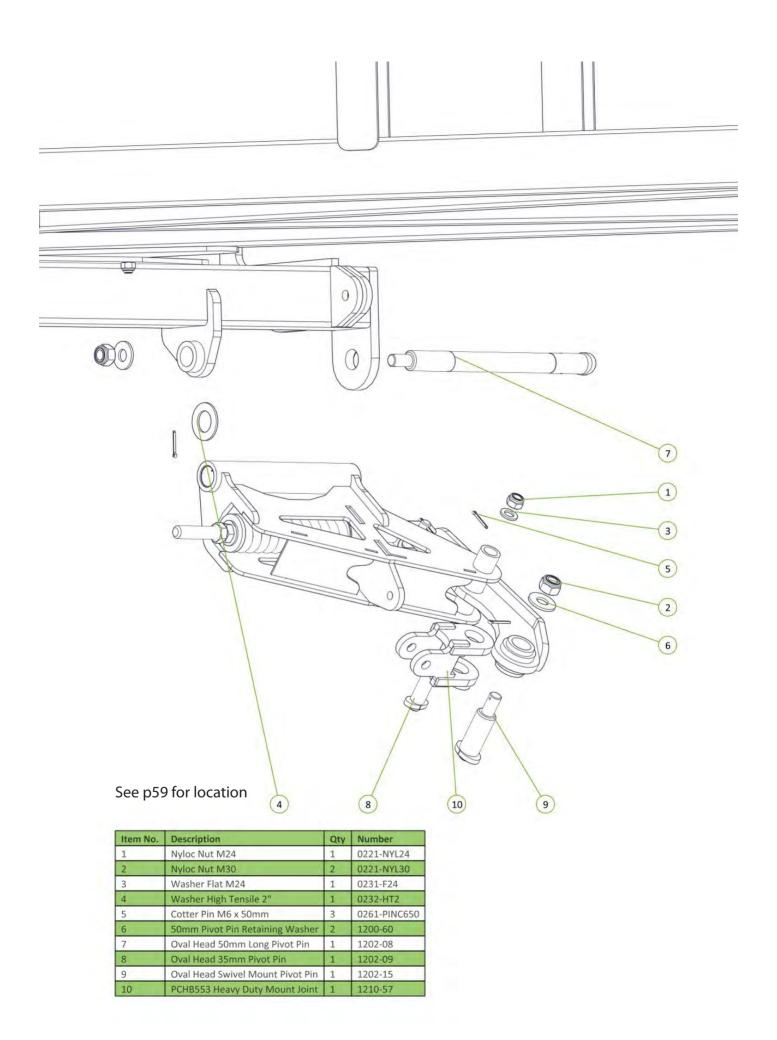
Item No.	Description	Qty	Number
1	M20 x 50 grade 8.8 ZP Bolt	1	0211-2050
2	M20 Eye Bolt	1	0221-EYE20
3	Washer Spring M20	1	0231-S20
4	Chain Link 13mm	13	0801-CHHT13

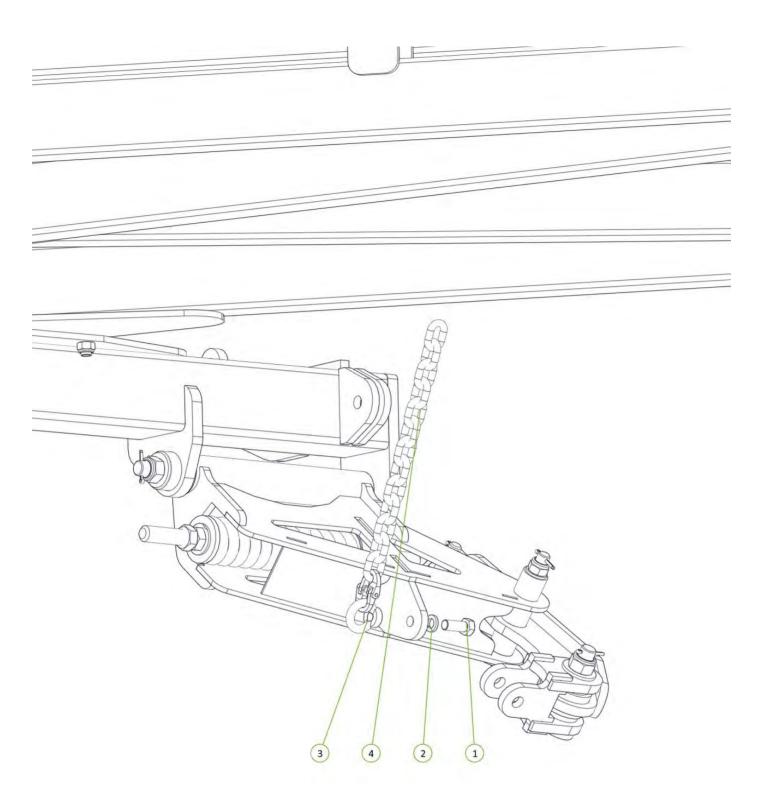




See p59 for location

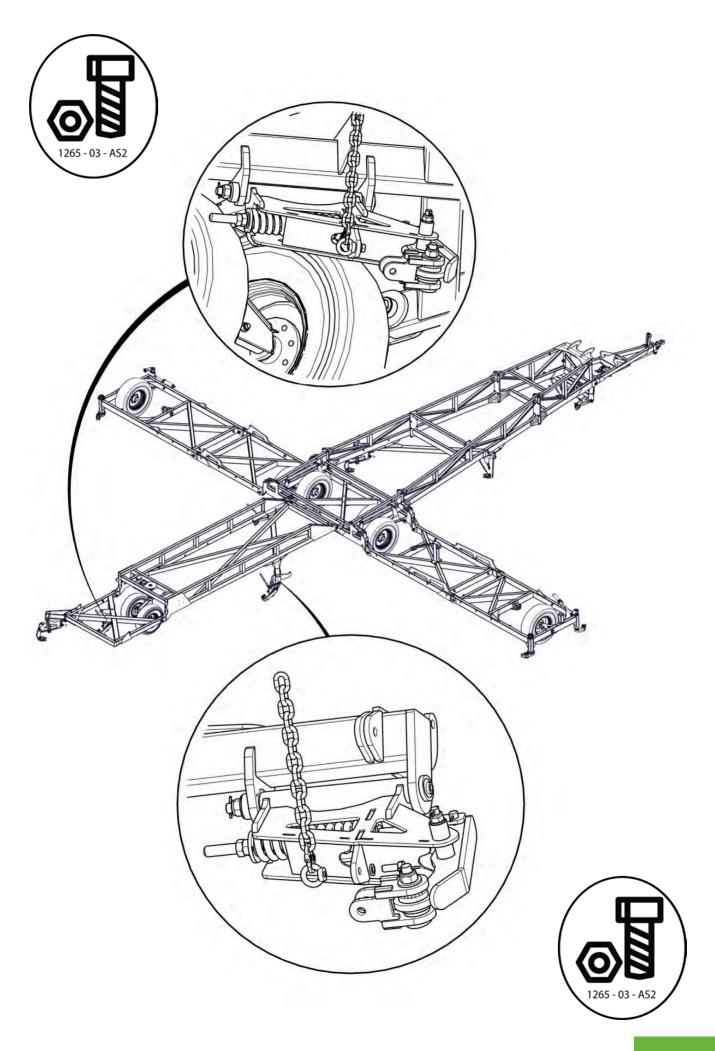
Item No.	Description	Qty	Number
1	Washer High Tensile 1 1/4"	1	0232-HT11-4
2	Cotter Pin M6 x 50mm	1	0261-PINC650
3	Rigid Spring Locator	1	0801-10-S2L
4	Clevis Pin 25mm x 75mm	1	0801-KE0307-1
5	ACME Lock Nut 1 1/4 - 5NA - 2G	2	0801-PCHTA-NE
6	Steel Spring Retaining Bush	1	0801-PCHTA-SB
7	20mm Compression Spring	1	0801-XK9261S
8	Module Tension Linkage	1	0810-105
9	Right Hand Chain Tension Box	1	1210-102
10	Chain Tension Arm	1	1210-104

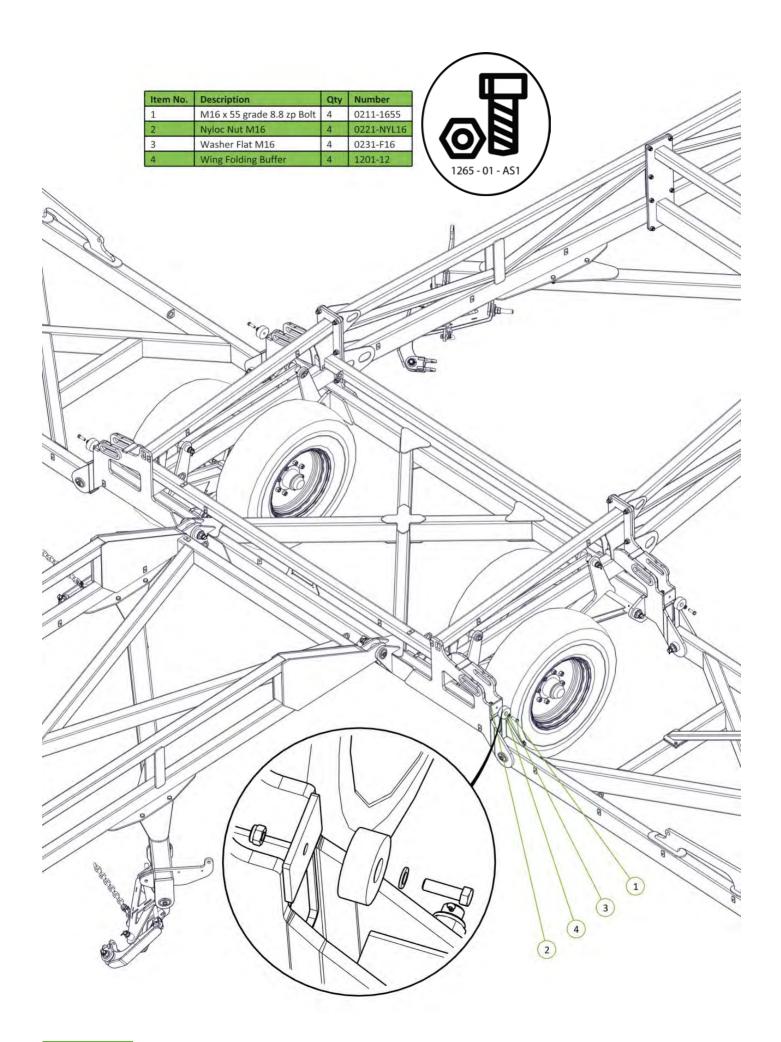


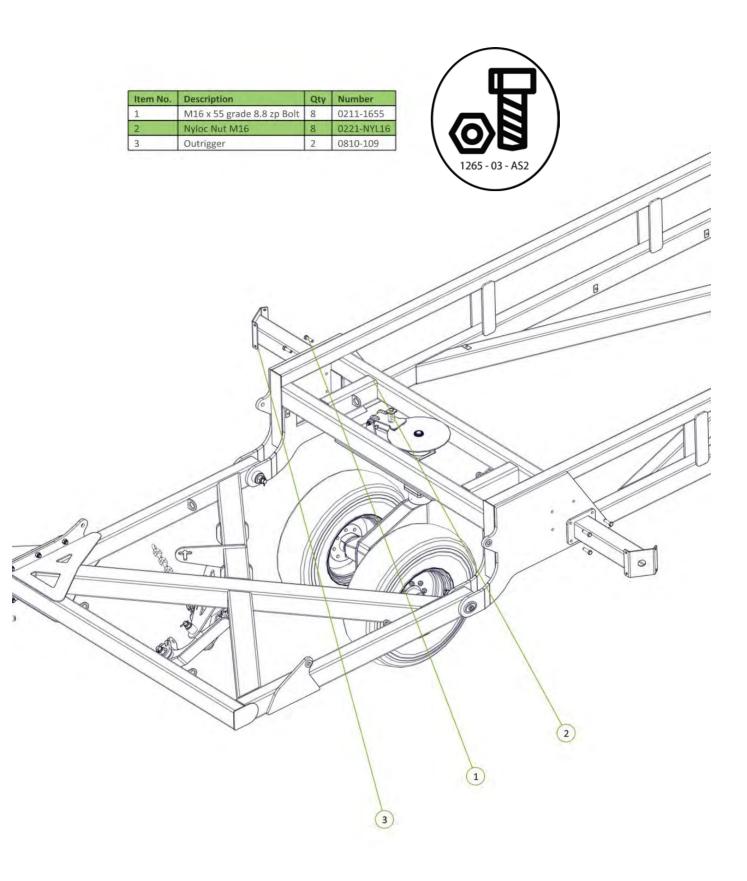


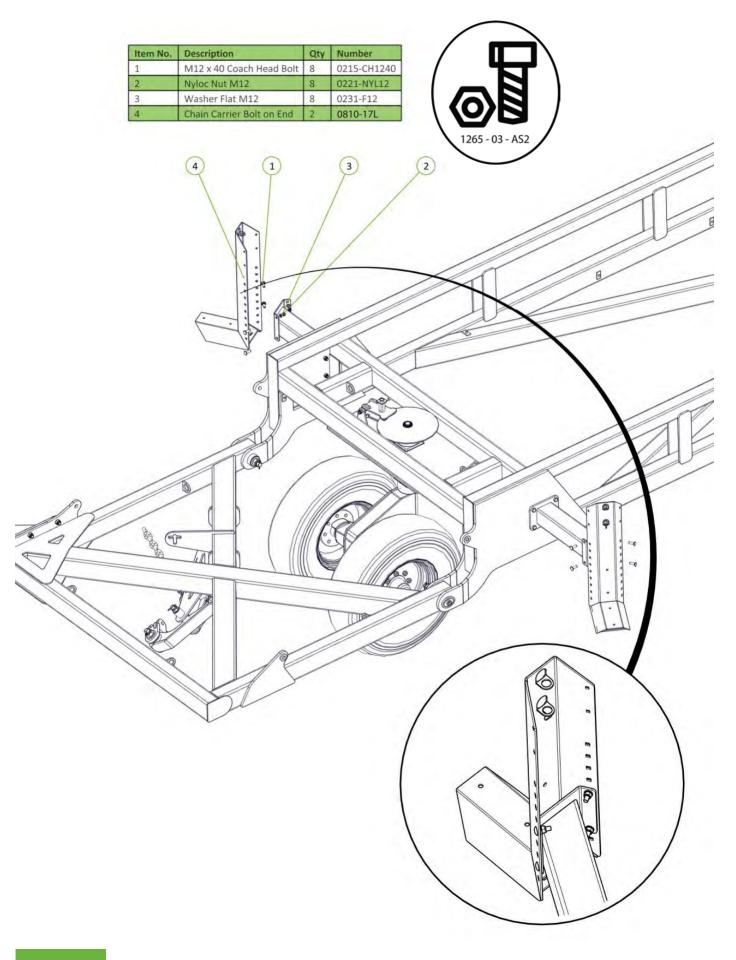
See p59 for location

Item No.	Description	Qty	Number
1	M20 x 50 grade 8.8 ZP Bolt	1	0211-2050
2	Washer Spring M20	1	0231-S20
3	M20 Eye Bolt	1	0221-EYE20
4	Chain Link 13mm	13	0801-CHHT13





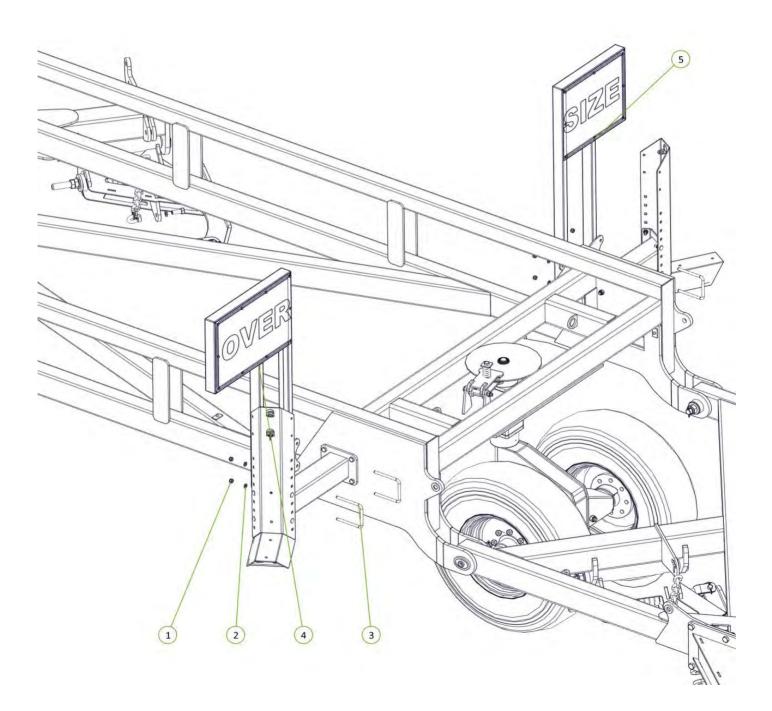




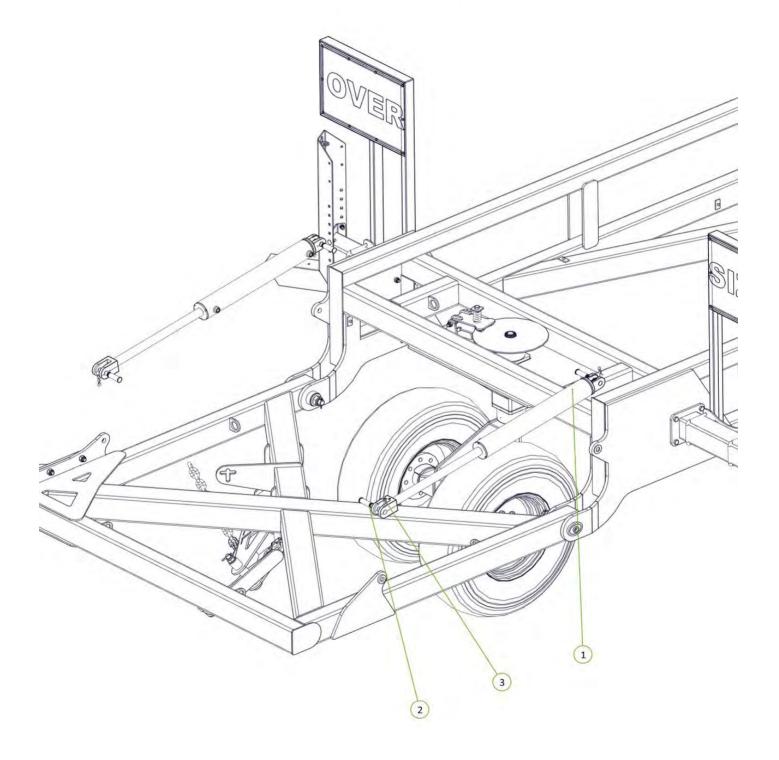
Item No.	Description	Qty	Number
1	Nyloc Nut M12	8	0221-NYL12
2	Washer Flat M12	8	0231-F12
3	U-Bolt M12 x 155 Deep x 127 Wide	4	0271-12155127
4	LH Oversize Sign Frame	1	0810-110
5	RH Oversize Sign Frame	1	0810-111



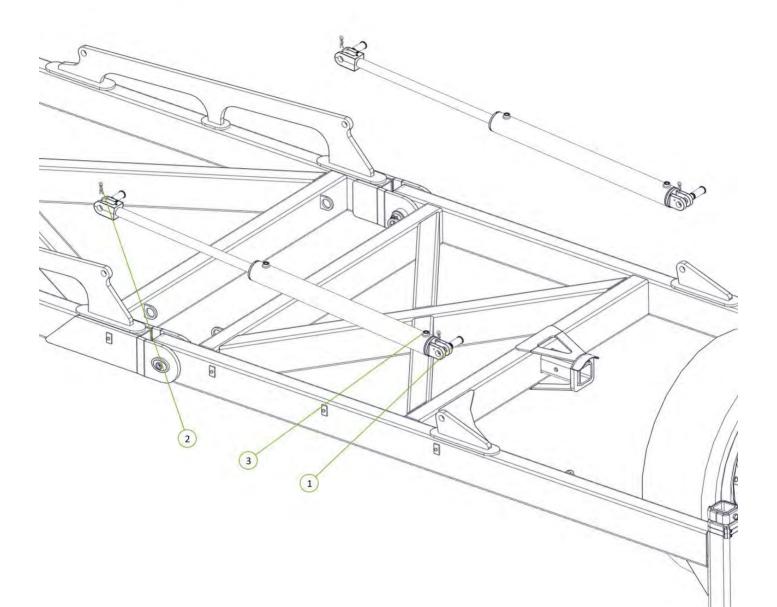
Signage may change according to local regulations



Item No.	Description	Qty	Number
1	3.5" Bore 24" Stroke 1.75" Rod Hydraulic Cylinder	2	0313-3524SP-B
2	Hydraulic Cylinder Pin 1" x 75mm	4	0313-NCP1X75
3	R Clip 3mm	4	0511-RCLIP3

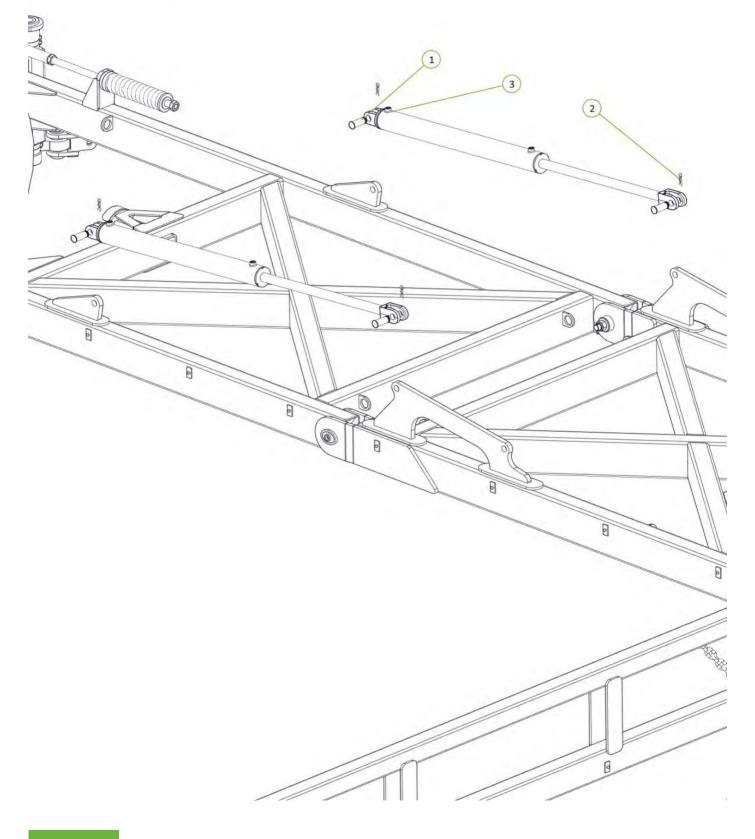


Item No.	Description	Qty	Number
1	Hydraulic Cylinder Pin 1 1/2" x 75mm	4	0313-NCP1 1-2X75
2	R Clip 3mm	4	0511-RCLIP3
3	3.5" Bore 32" Stroke 4" S/Tube 1.75" Rod Hydraulic Cylinder	2	0313-3532ST-B



R

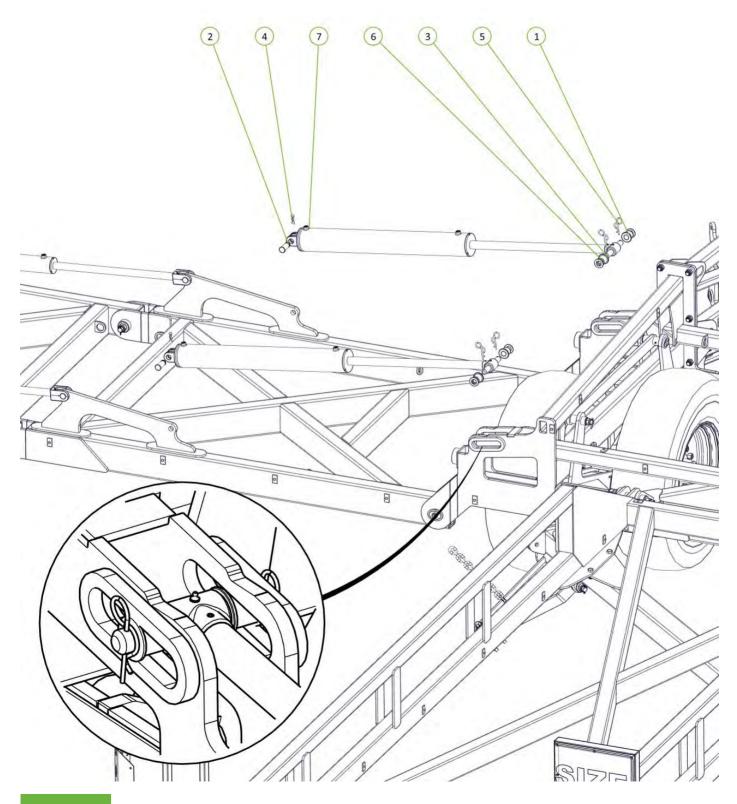
Item No.	Description	Qty	Number
1	Hydraulic Cylinder Pin 1 1/2" x 75mm	4	0313-NCP1 1-2X75
2	R Clip 3mm	4	0511-RCLIP3
3	3.5" Bore 32" Stroke 4" S/Tube 1.75" Rod Hydraulic Cylinder	2	0313-3532ST-B



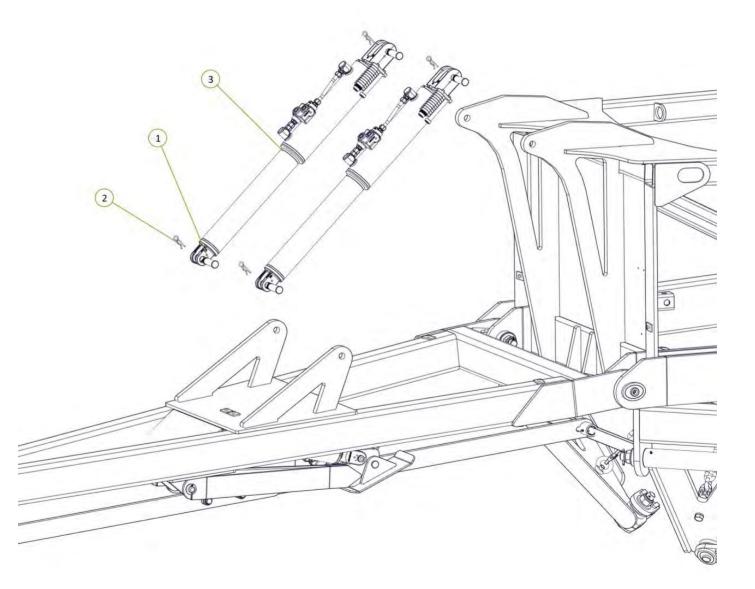
		1 const	and the second sec
	Item No. Description	Qty	Number 1201-19
	Long Cylinder Pin Bearing Bush Washer Flat 11/4"	4	0232-F11-4
	3 Hydraulic Cylinder Pin 1 1/2" x 75mm	2	0313-NCP1 1-2X75
	4 Cylinder Pin 1 1/4" x 230mm 4140	2	0313-NCP1 1-4X230
	5 R Clip 3mm	2	0511-RCLIP3
	6 S Locking Pin Clip Smm	4	0801-KE012
6	7 5" Bore 36" Stroke 3 1/8" S/Tube 2" Rod Hydraulic Cy	linder 2	0313-536ST-B
	The sure that clip is lo	3 ocated as	5 shown in detailed view

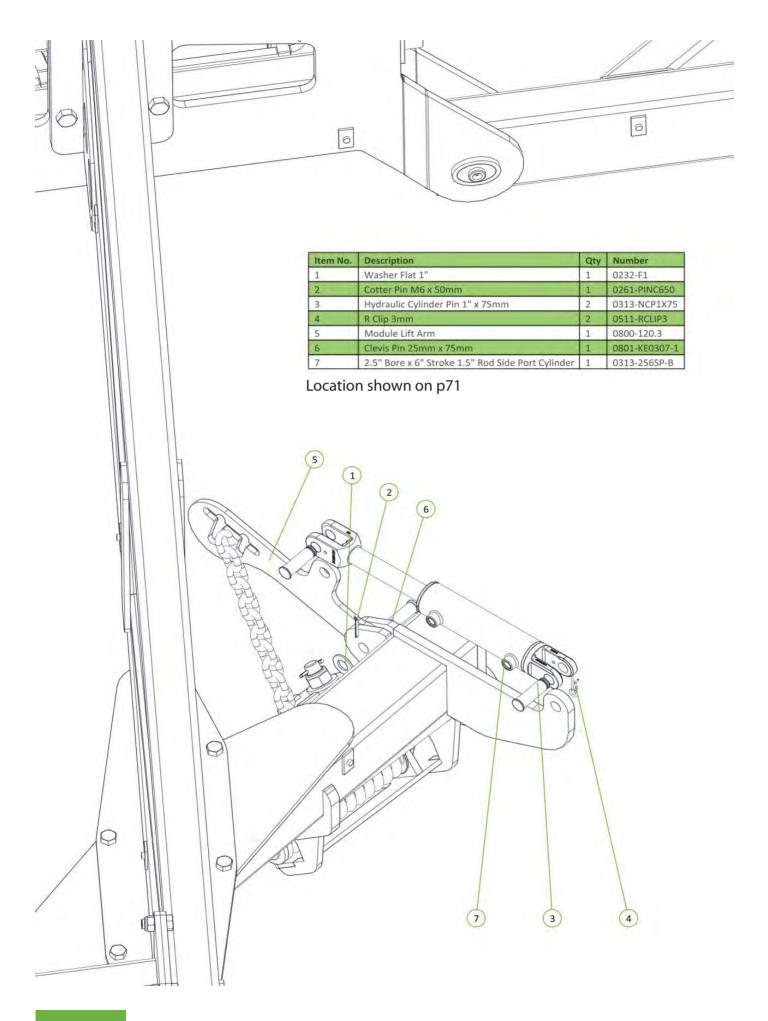
Item No.	Description	Qty	Number
1	Washer Flat 1 1/4"	4	0232-F11-4
2	Hydraulic Cylinder Pin 1 1/2" x 75mm	2	0313-NCP1 1-2X75
3	Cylinder Pin 1 1/4" x 230mm 4140	2	0313-NCP1 1-4X230
4	R Clip 3mm	2	0511-RCLIP3
5	S Locking Pin Clip 5mm	4	0801-KE012
6	Long Cylinder Pin Bearing Bush	4	1201-19
7	5" Bore 36" Stroke 3 1/8" S/Tube 2" Rod Hydraulic Cylinder	2	0313-536ST-B

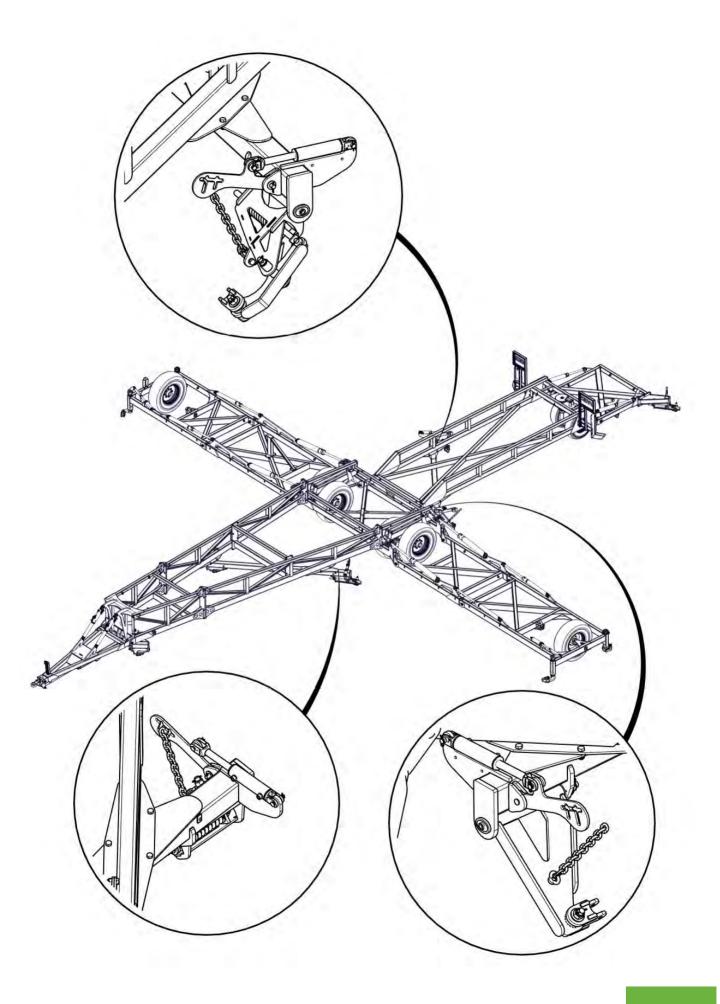
Ensure that clip is located as shown in detailed view



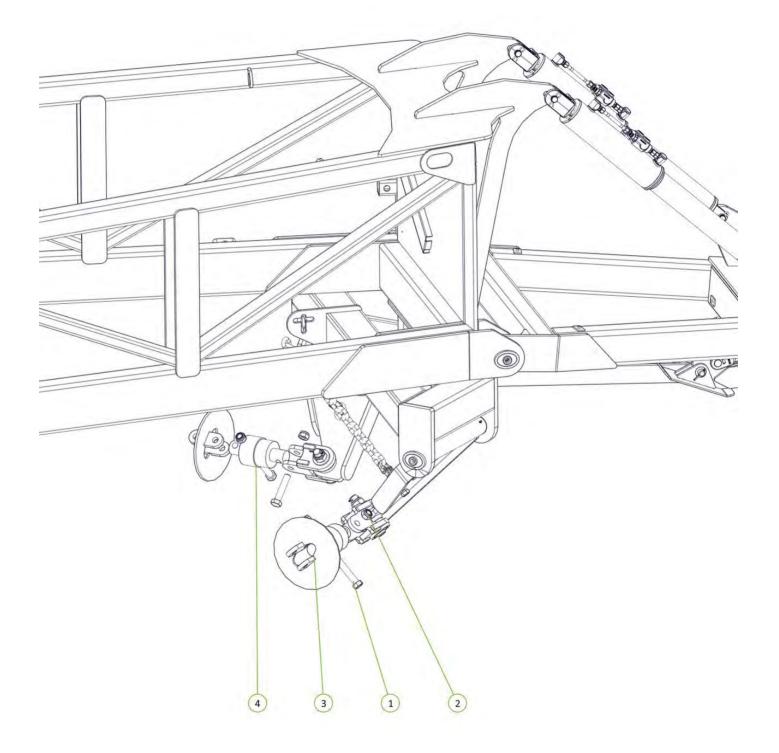
Item No.	Description	Qty	Number
1	Hydraulic Cylinder Pin 1" x 75mm	4	0313-NCP1X75
2	R Clip 3mm	4	0511-RCLIP3
3	4" Bore 12" Stroke 1.75" Rod Extended Hydraulic Cylinder	2	0313-412EXT-E

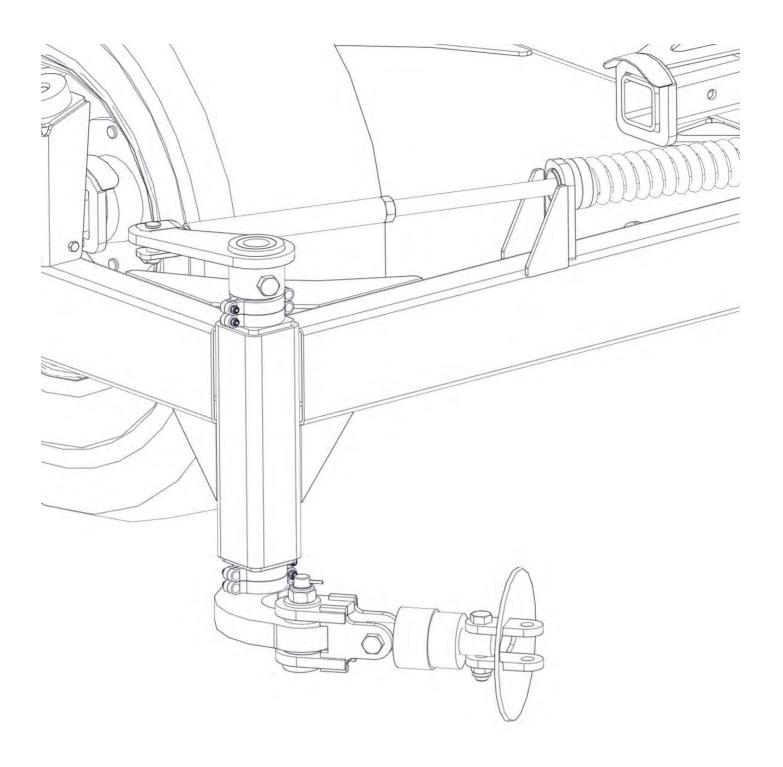






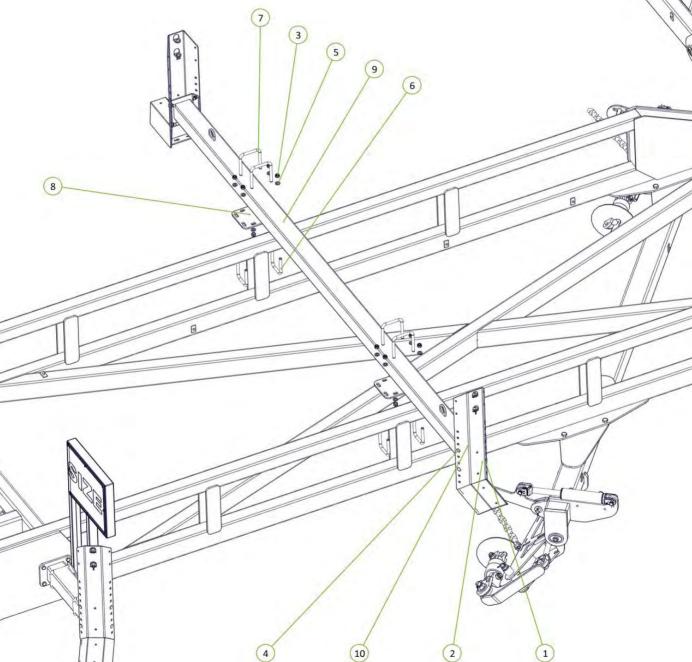
Item No.	Description	Qty	Number
1	M24 x 120 grade 10.9 zp Short Thread Bolt	4	0211-24120
2	Nyloc Nut M24	4	0221-NYL24
3	Disc Chain Tie Plate Link 24mm	2	0802-DCTP-24
4	24mm Bolt Swivel Unit	2	0802-PCHB553





Item No.	Description	Qty	Number
1	M12 x 40 Coach Head Bolt	8	0215-CH1240
2	Nyloc Nut M12	8	0221-NYL12
3	Nyloc Nut M16	16	0221-NYL16
4	Washer Flat M12	8	0231-F12
5	Washer Flat M16	16	0231-F16
6	U-Bolt M16 x 135 Deep x 104 Wide	4	0271-16135104
7	U-Bolt M16 x 160 Deep x 127 Wide	4	0271-16160127
8	Chain Carrier Mount Plate	2	0800-139.1
9	50/60' Chain Carrier Beam	1	0810-17-60
10	Chain Carrier Bolt on End	2	0810-17L

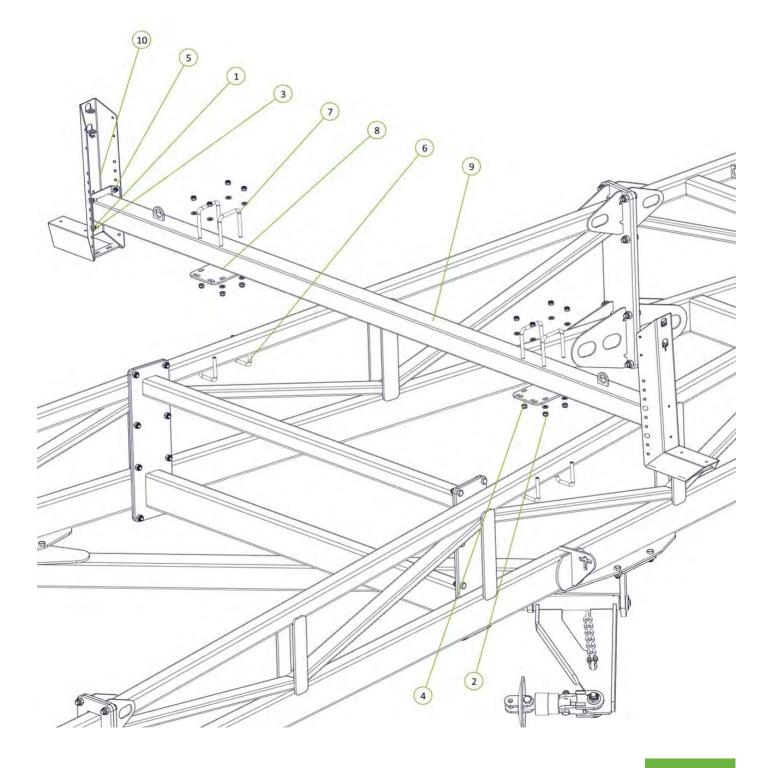
Note that chain carrier position may require slight modification to catch chain - adjust as necessary

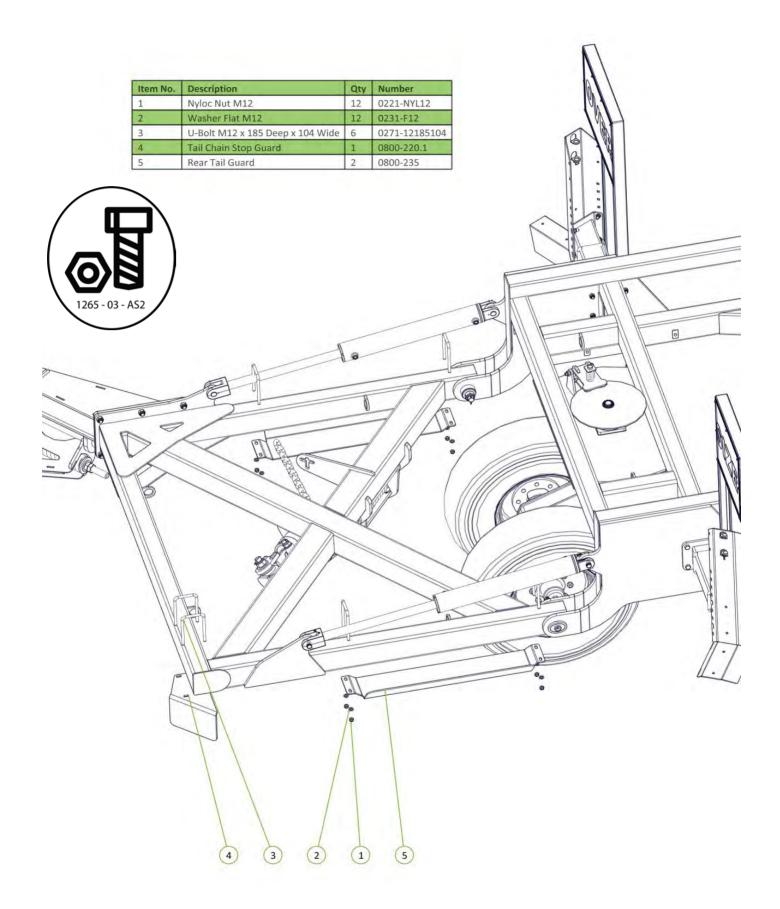


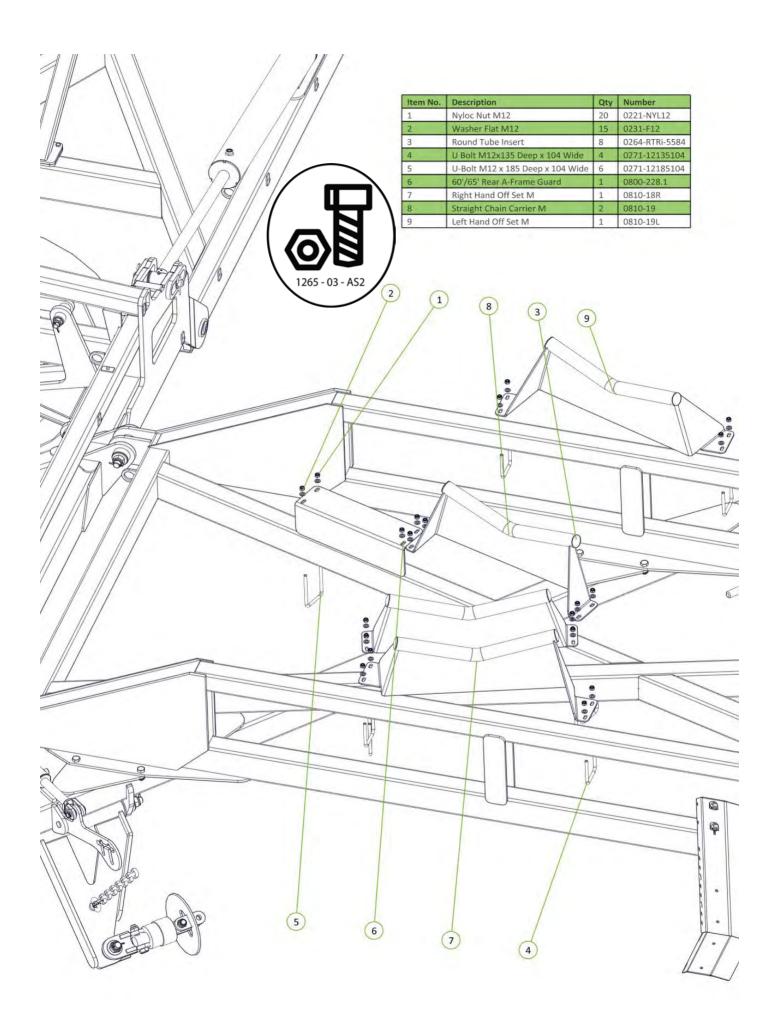
1265 - 03 - AS2

Item No.	Description	Qty	Number
1	M12 x 40 Coach Head Bolt	8	0215-CH1240
2	Nyloc Nut M16	16	0221-NYL16
3	Nyloc Nut M12	8	0221-NYL12
4	Washer Flat M16	16	0231-F16
5	Washer Flat M12	8	0231-F12
6	U-Bolt M16 x 135 Deep x 104 Wide	4	0271-16135104
7	U-Bolt M16 x 160 Deep x 127 Wide	4	0271-16160127
8	Chain Carrier Mount Plate	2	0800-139.1
9	50/60' Chain Carrier Beam	1	0810-17-60
10	Chain Carrier Bolt on End	2	0810-17L

1265 - 03 - AS2

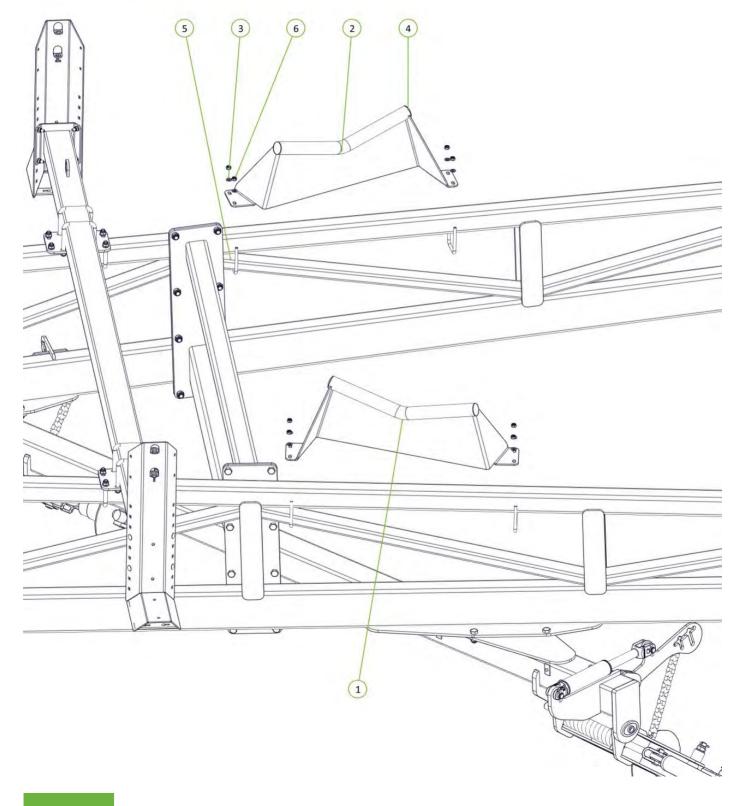


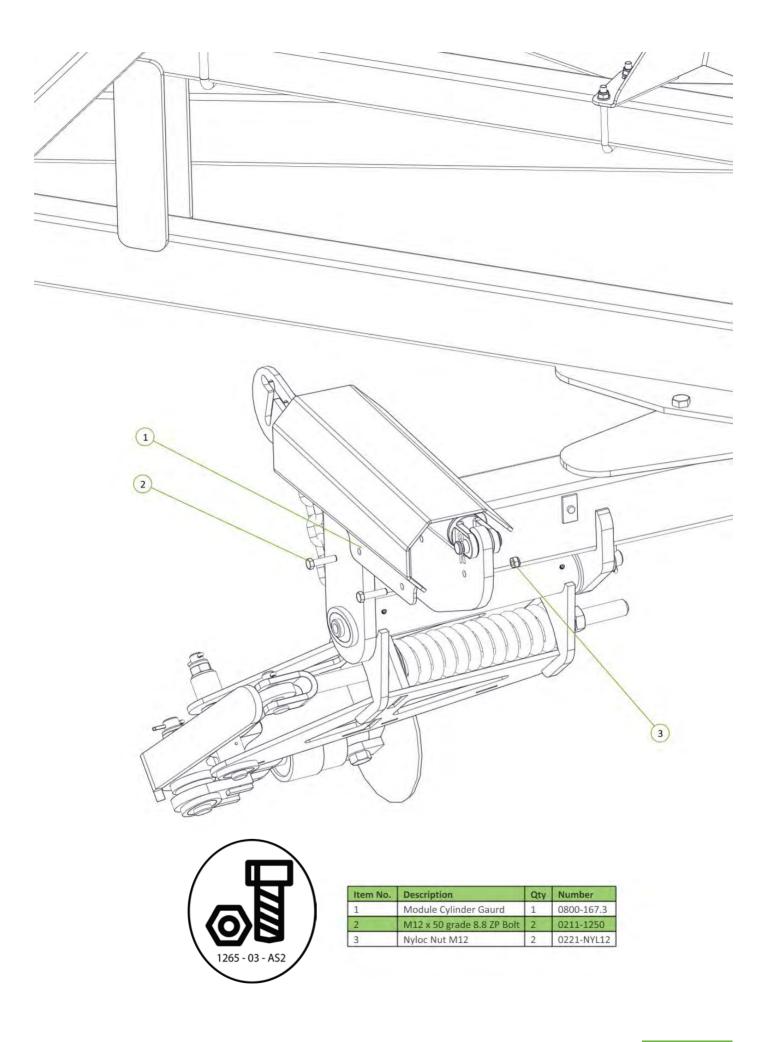




Item No.	Description	Qty	Number
1	Left Hand Off Set M	1	0810-19L
2	Right Hand Off Set M	1	0810-18R
3	Washer Flat M12	3	0231-F12
4	Round Tube Insert	4	0264-RTRi-5584
5	U Bolt M12x 135 Deep x 104 Wide	4	0271-12135104
6	Nyloc Nut M12	3	0221-NYL12

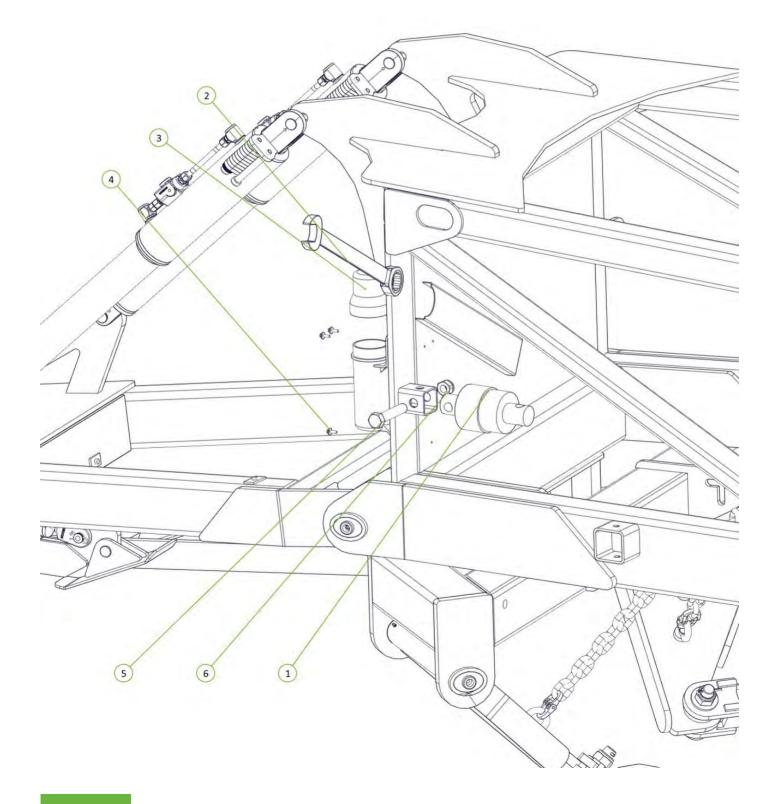
(0)B 1202 - 02 - A52)

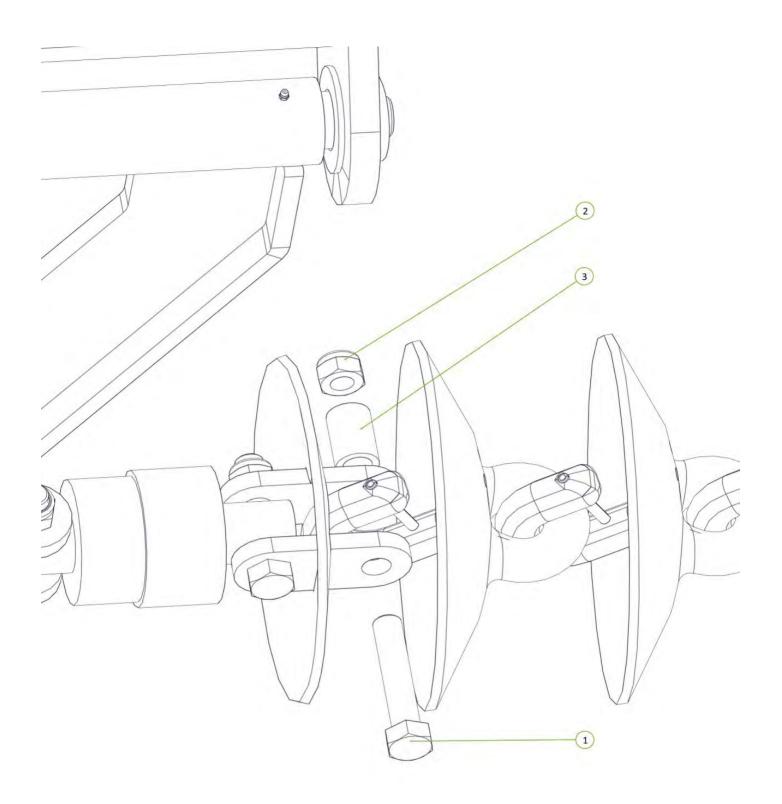




Item No.	Description	Qty	Number
1	24mm Bolt Swivel Unit	1	0802-PCHB553
2	Gear Wrench 1 3/4"	1	0802-GW1 3-4
3	Manual Canister	2	0801-OMC-1
4	M6x20 Trilobe Self Tapping Screw	3	0211-M620MZPHTF
5	M24 x 120 grade 10.9 zp Short Thread Bolt	1	0211-24120ST
6	Nyloc Nut M24	1	0221-NYL24

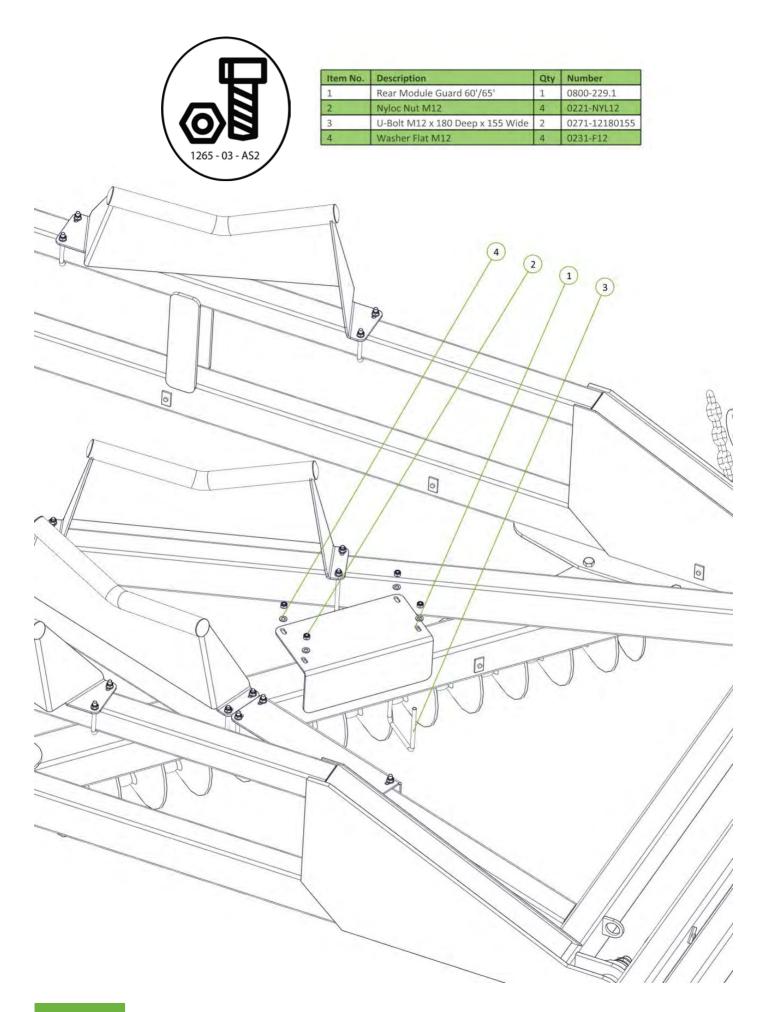


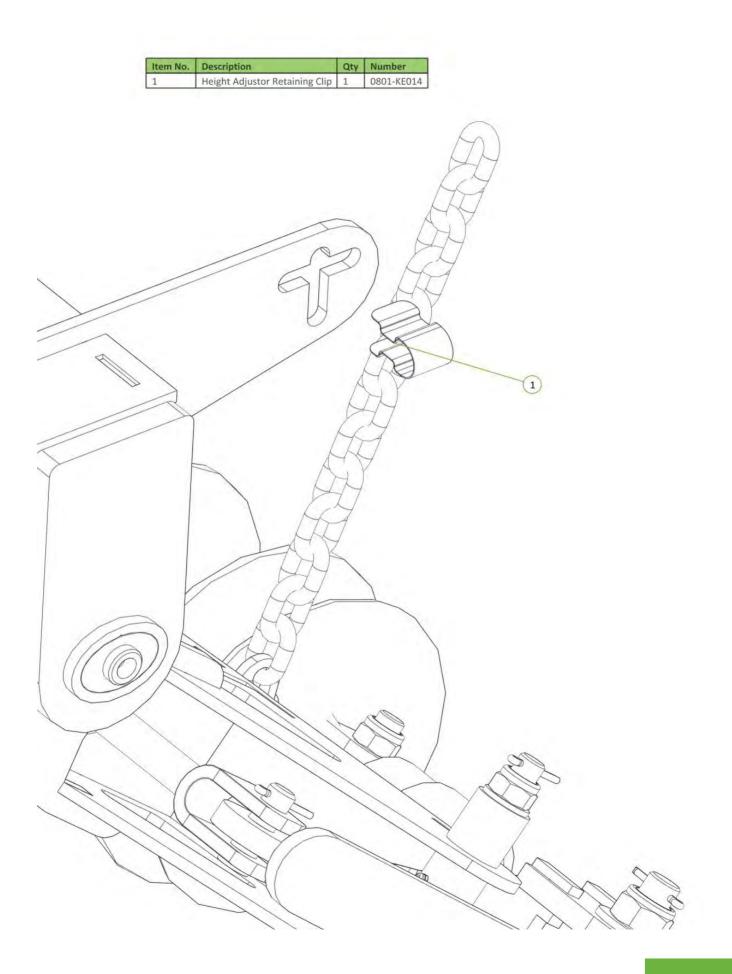


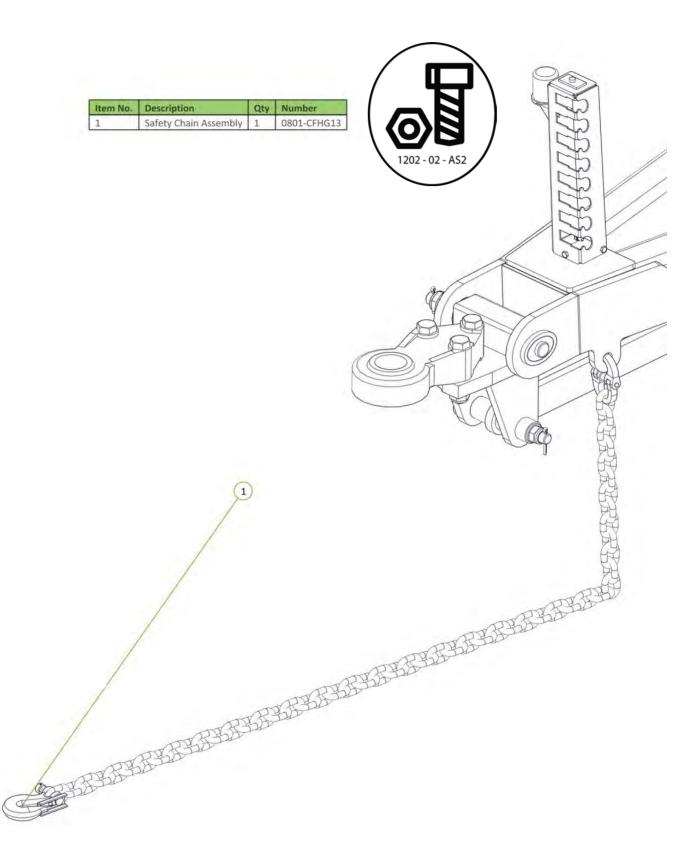


Item No.	Description	Qty	Number
1	M24 x 120 grade 10.9 zp Short Thread Bolt	1	0211-24120ST
2	Nyloc Nut M24	1	0221-NYL24
3	Tie Plate Bush	1	0801-PCDCS55





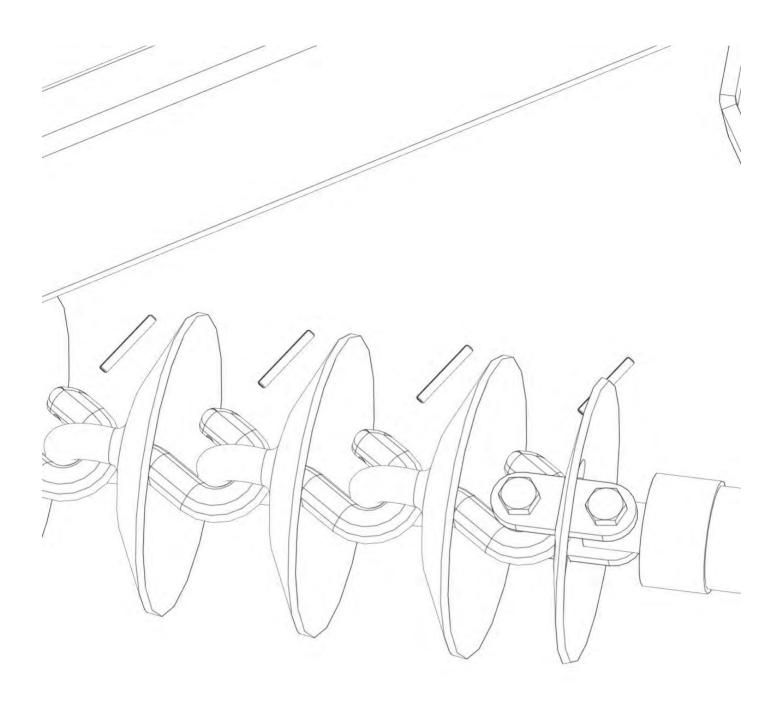


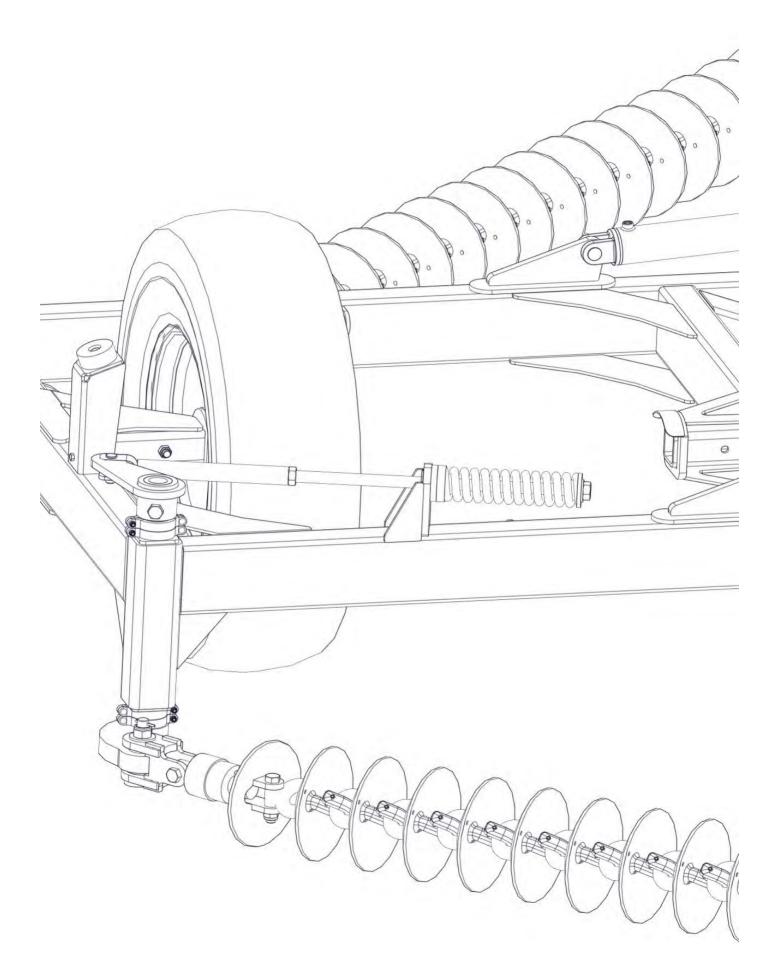


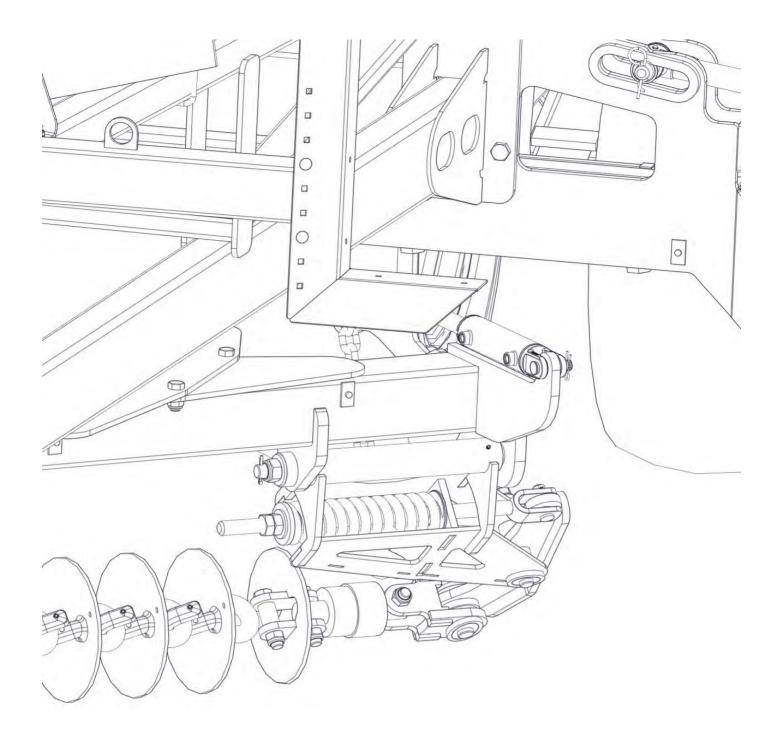
United States Only

Item No.	Description	Qty	Number
1	Rear Light Bracket	2	0800-295
2	SMV Sign Bracket	1	0800-195.1
3	Slow Moving Vehical Sign	1	0801-FBSMVTUF
4	110RM Rubber Grommet	2	0412-53101RG
5	LED Stop Tail Lamp	2	0412-LED110RM
6	M8 x 20 Coach Head Bolt	4	0215-CH0820
7	Nyloc Nut M8	4	0221-NYL8
8	Washer Flat M8	4	0231-F8

1265 - 03 - AS2 . (0)VER No. P Ca đ







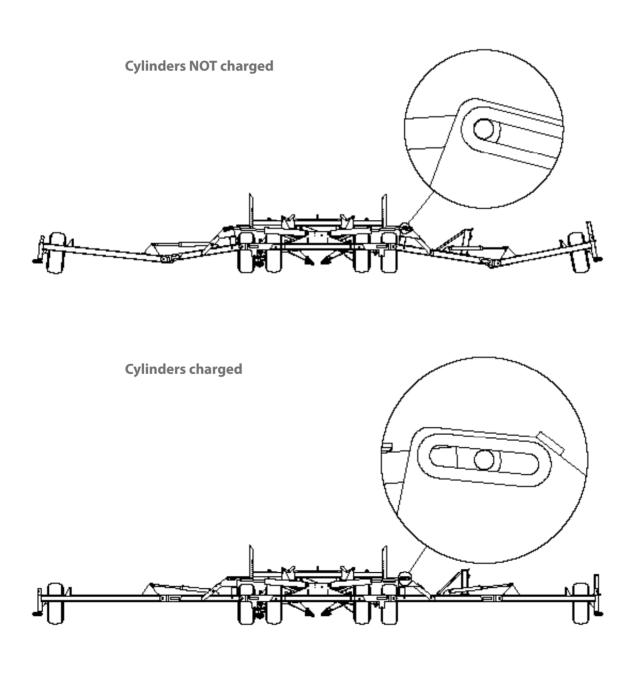
Section 3 Hydraulic Setup



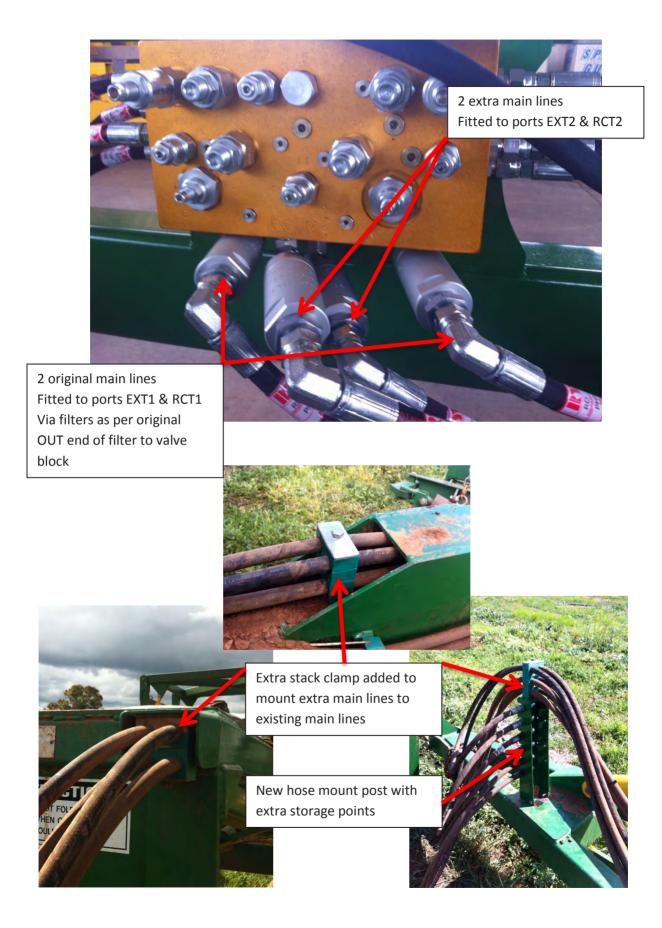
Before folding the machine for the first time, ensure all hydraulic cylinders are charged with oil.

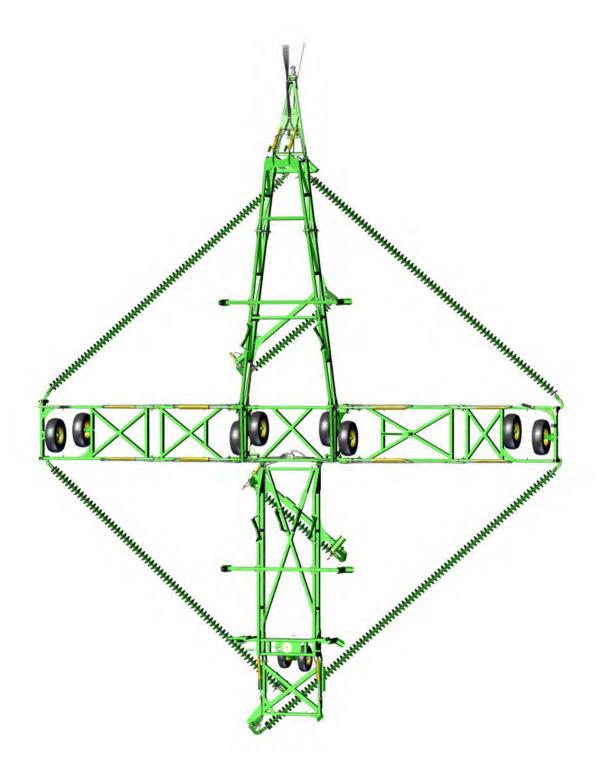
To do this, run the hydraulics through the unfold sequence until the outer wings are straight and the center cylinders are centered in the slots. (It may take a few minutes for the cylinders to charge completely).

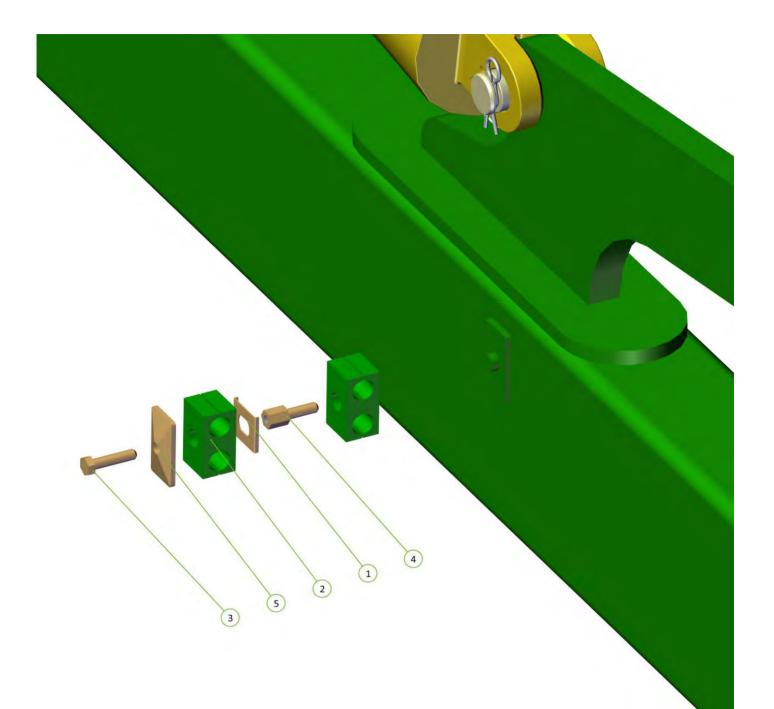
Failure to do this could result in severe personal injury and/or damage to the machine.



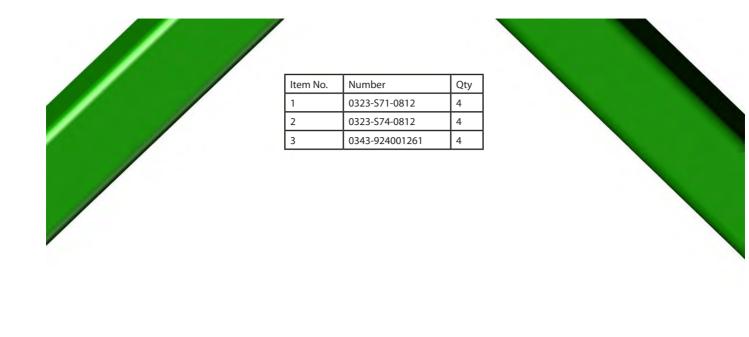
Hydraulic Valve Block

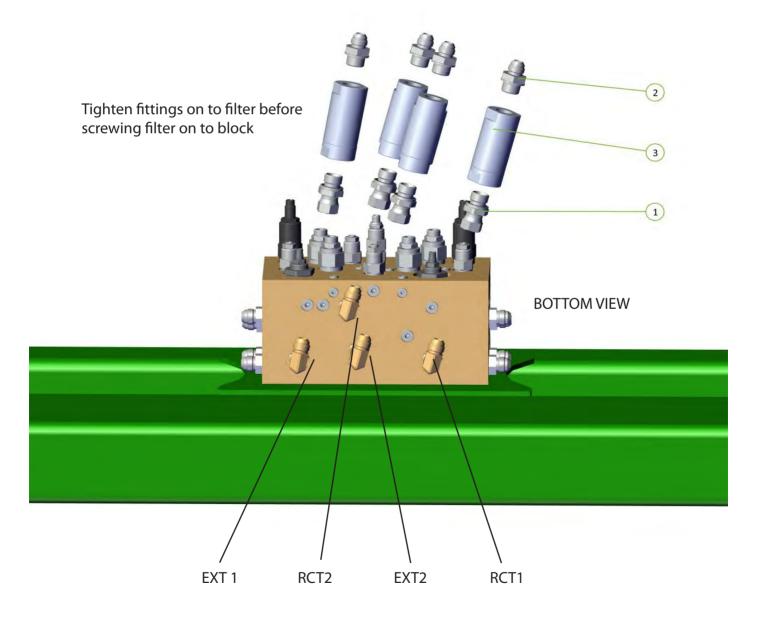


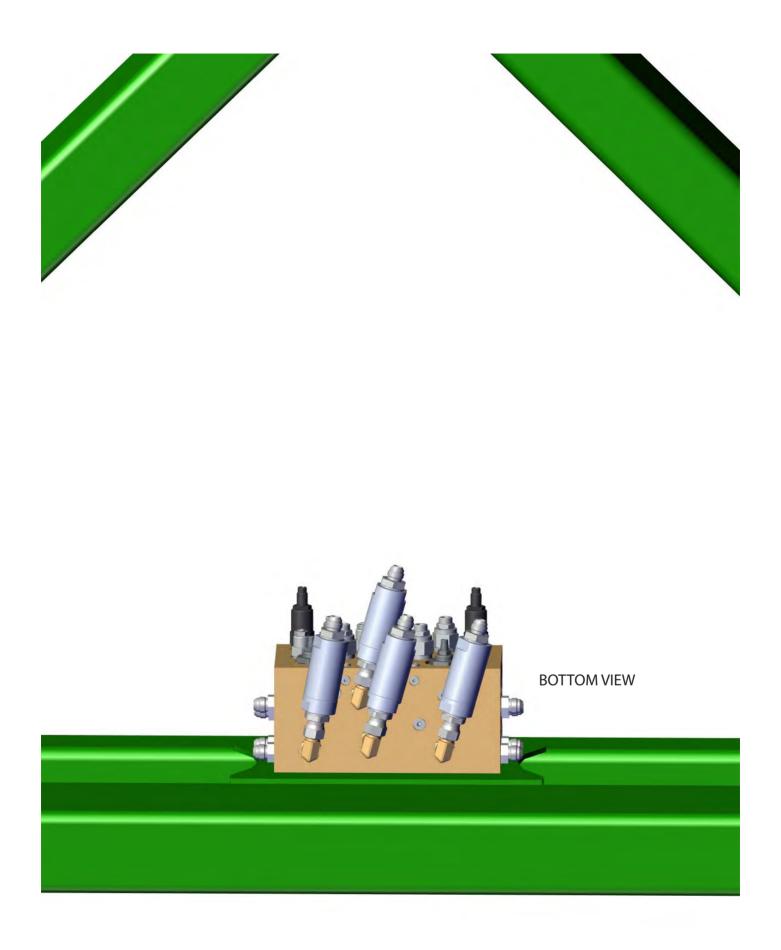


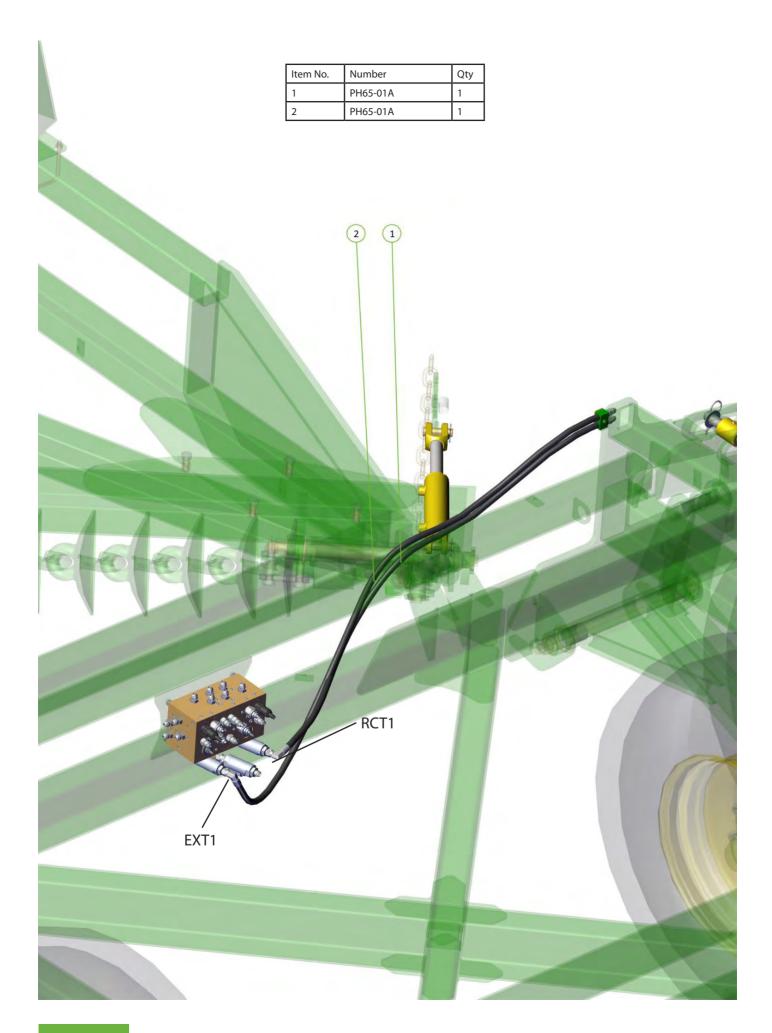


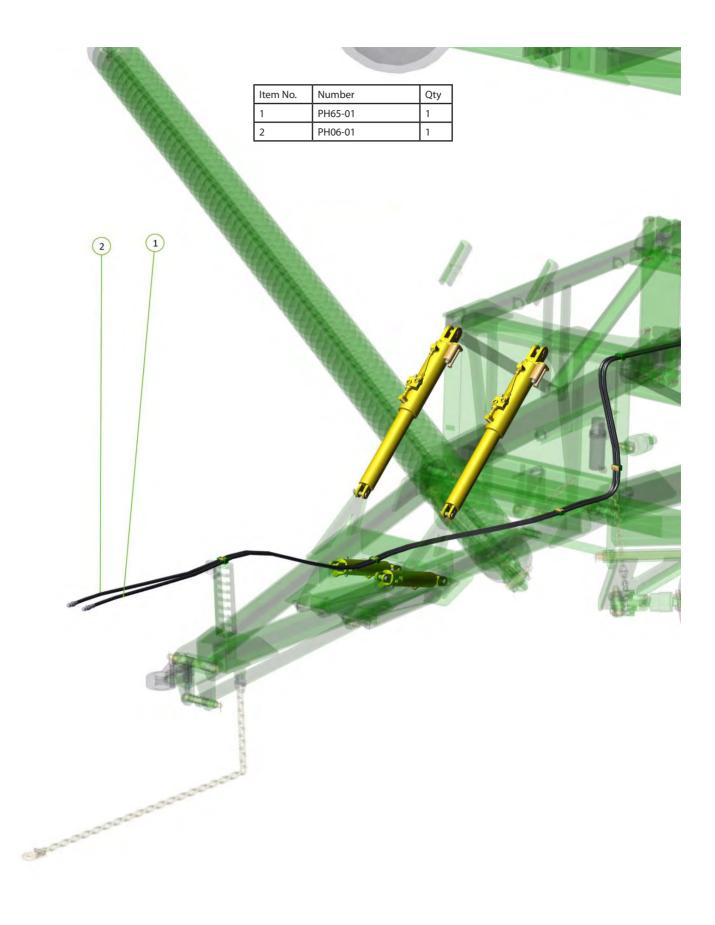
Item No.	Number	Qty
1	0325-RCD-2PS	1
2	0325-RCD-17J	2
3	0325-RCD-2BH	1
4	0325-RCD-2BS	1
5	0325-RCD29T	1

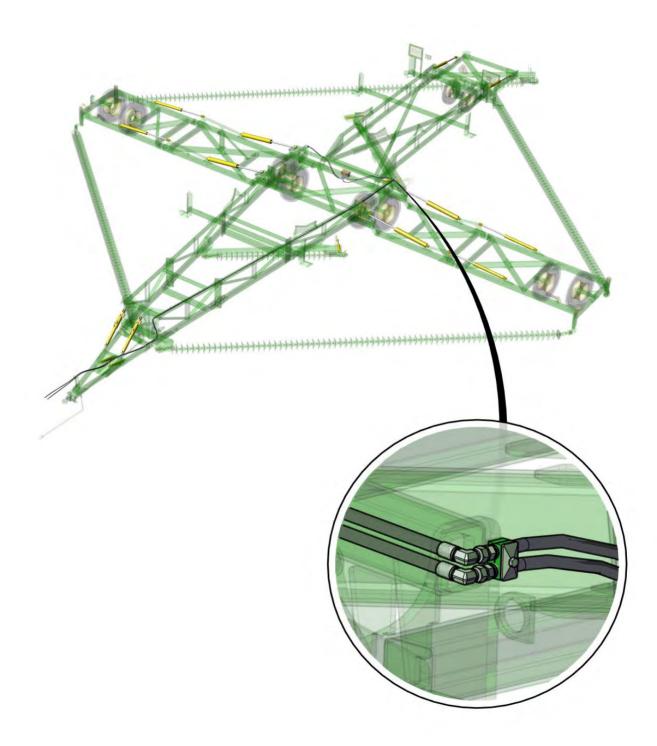




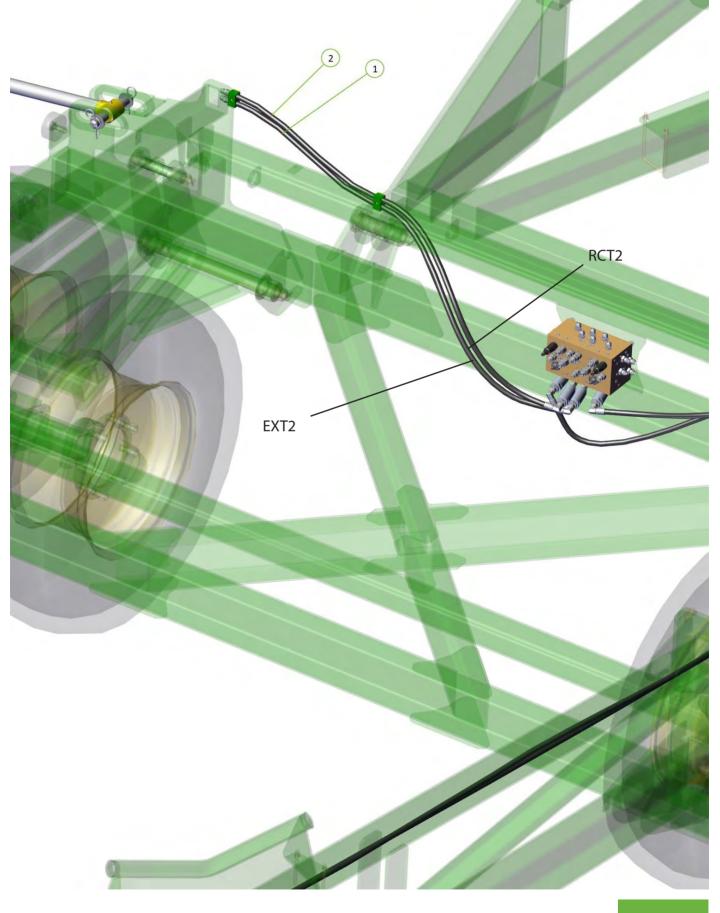


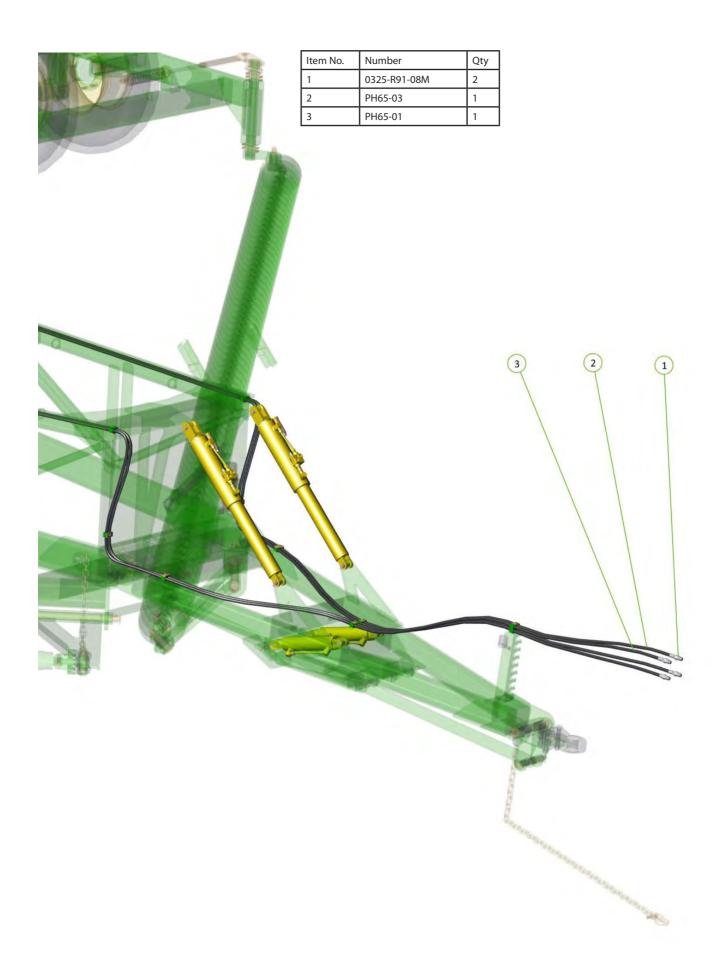




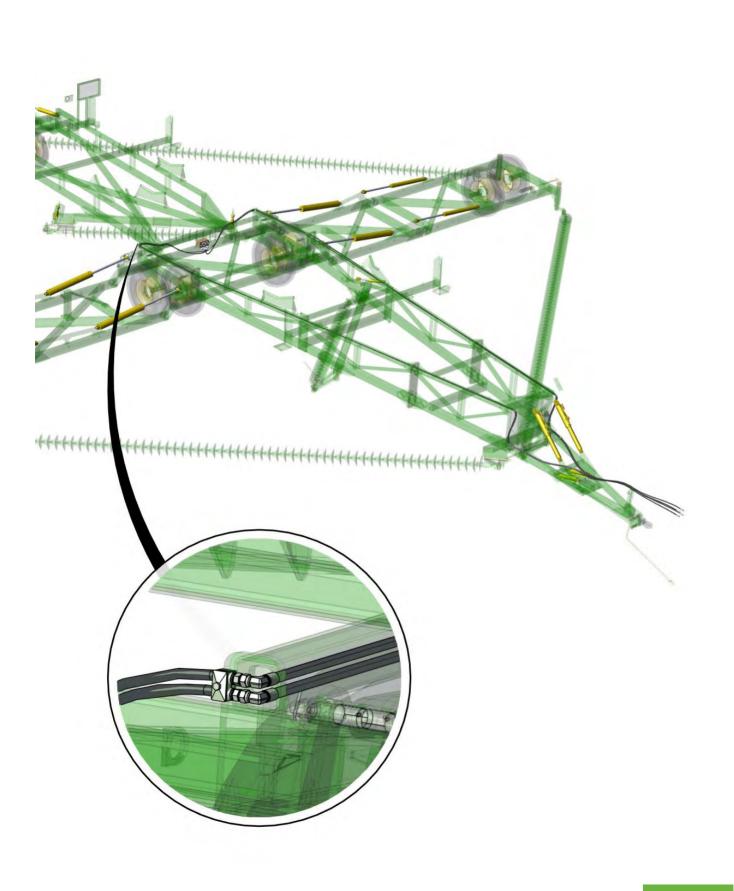


ltem No.	Number	Qty
1	PH65-01A	1
2	PH65-01A	1

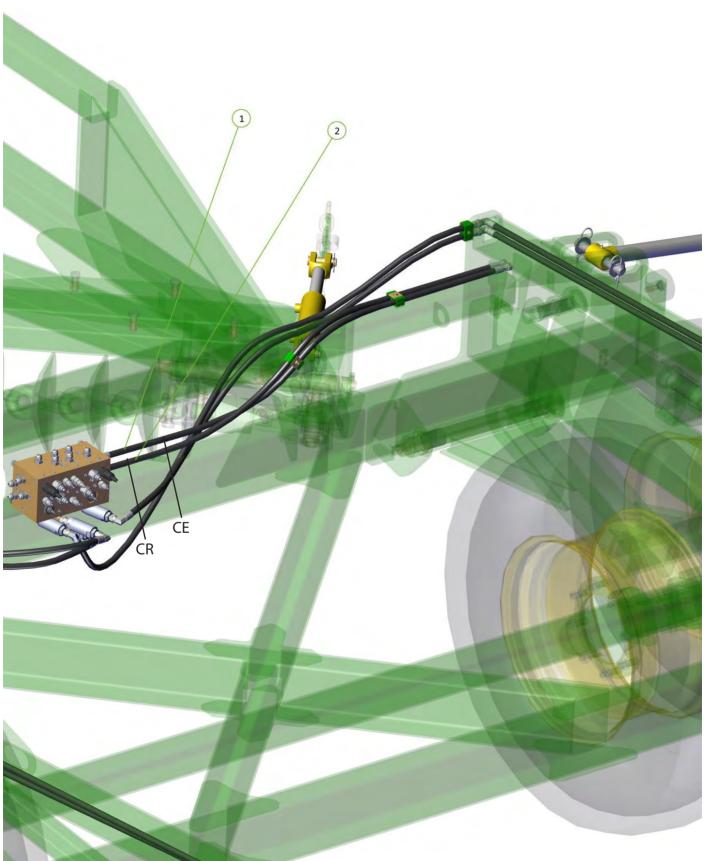


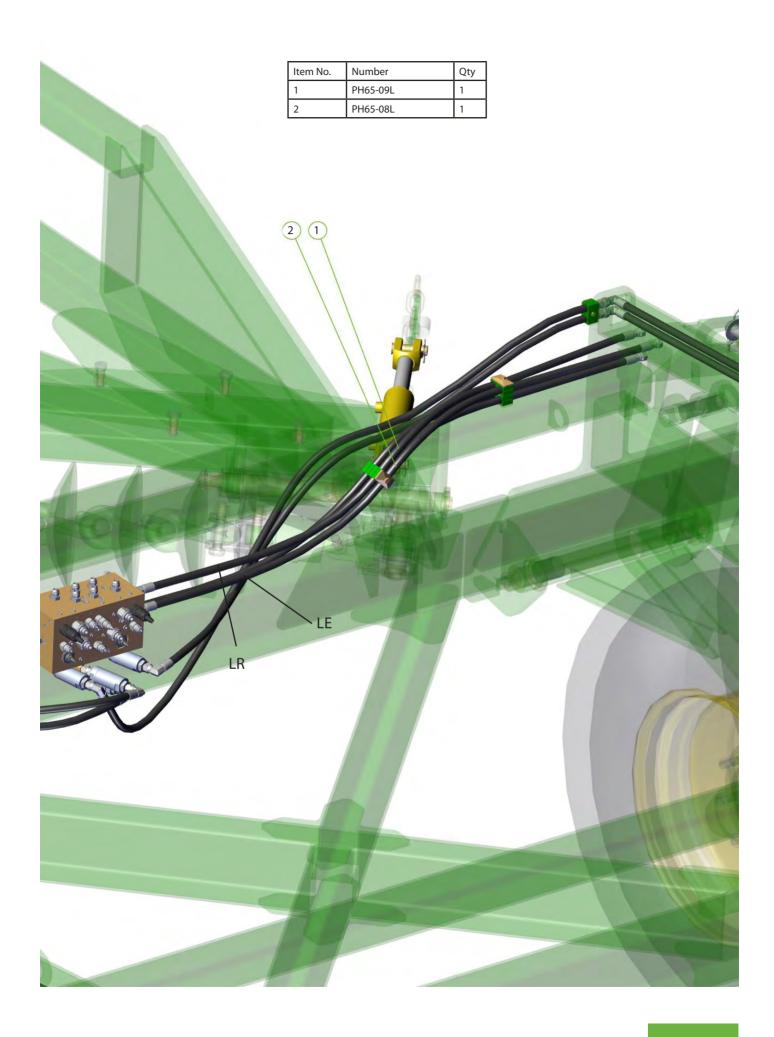




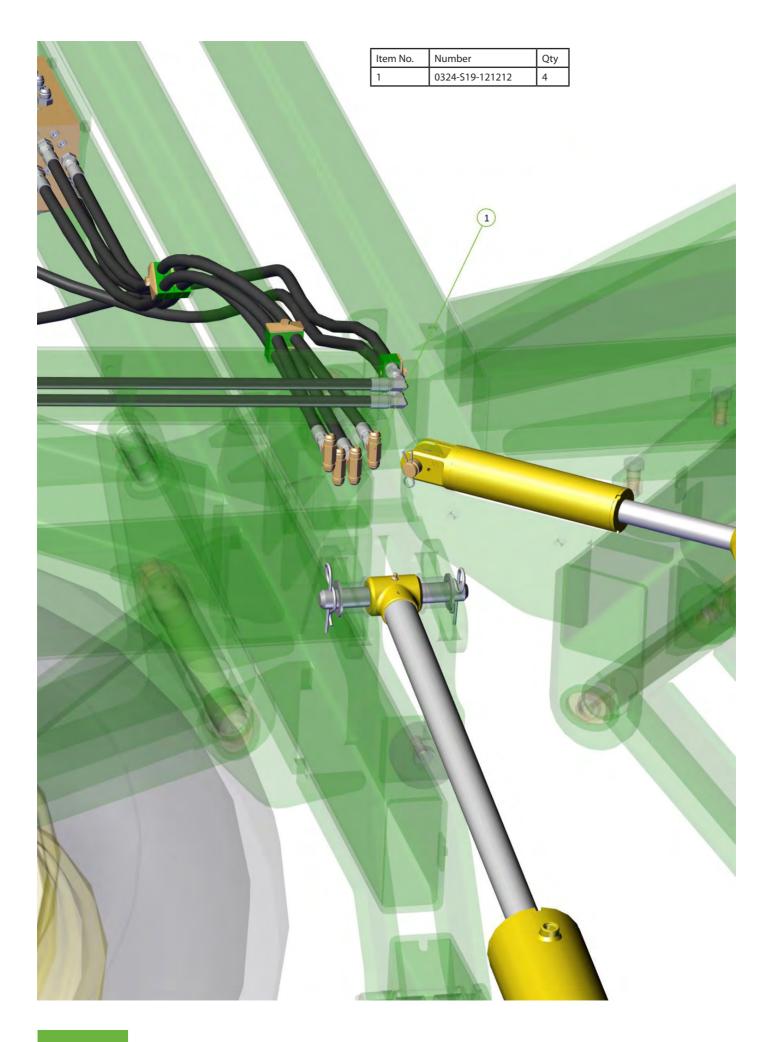


Item No.	Number	Qty
1	PH65-06L	1
2	PH65-07L	1

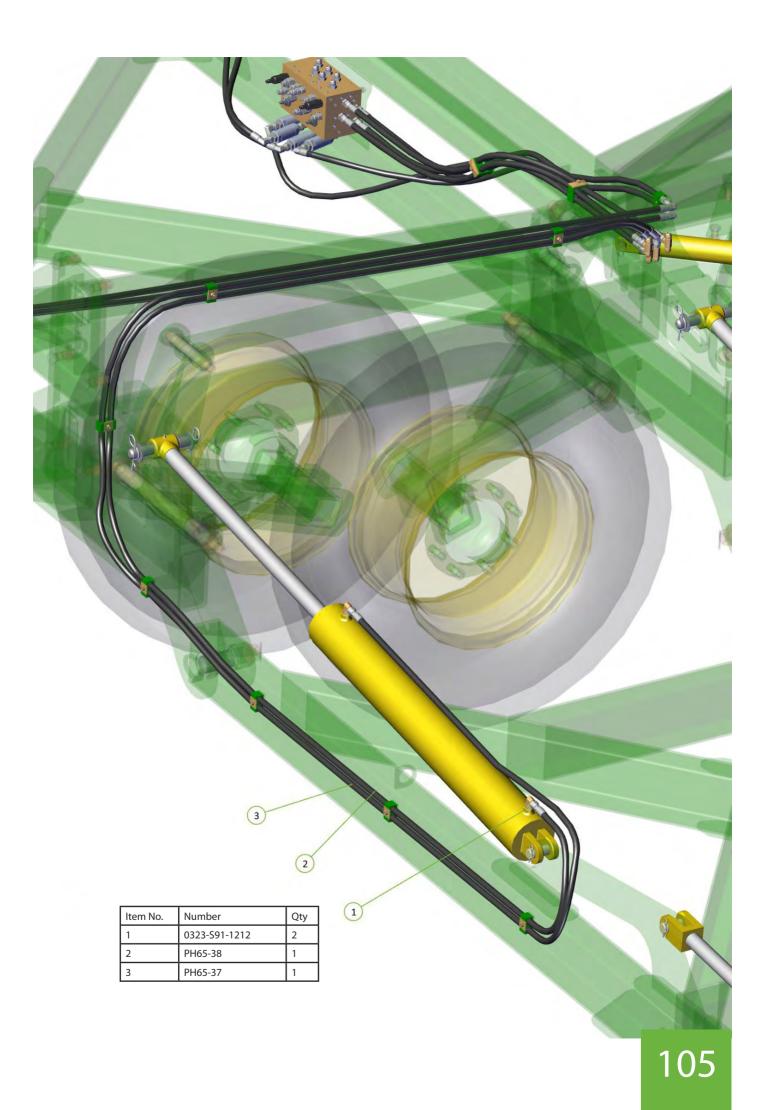


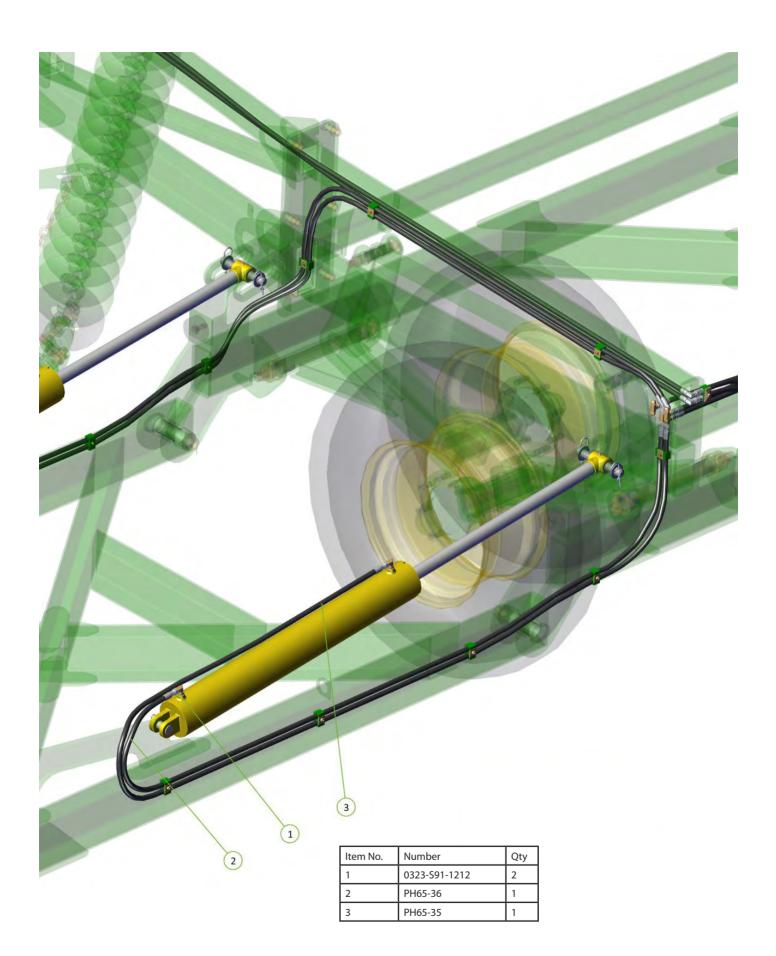




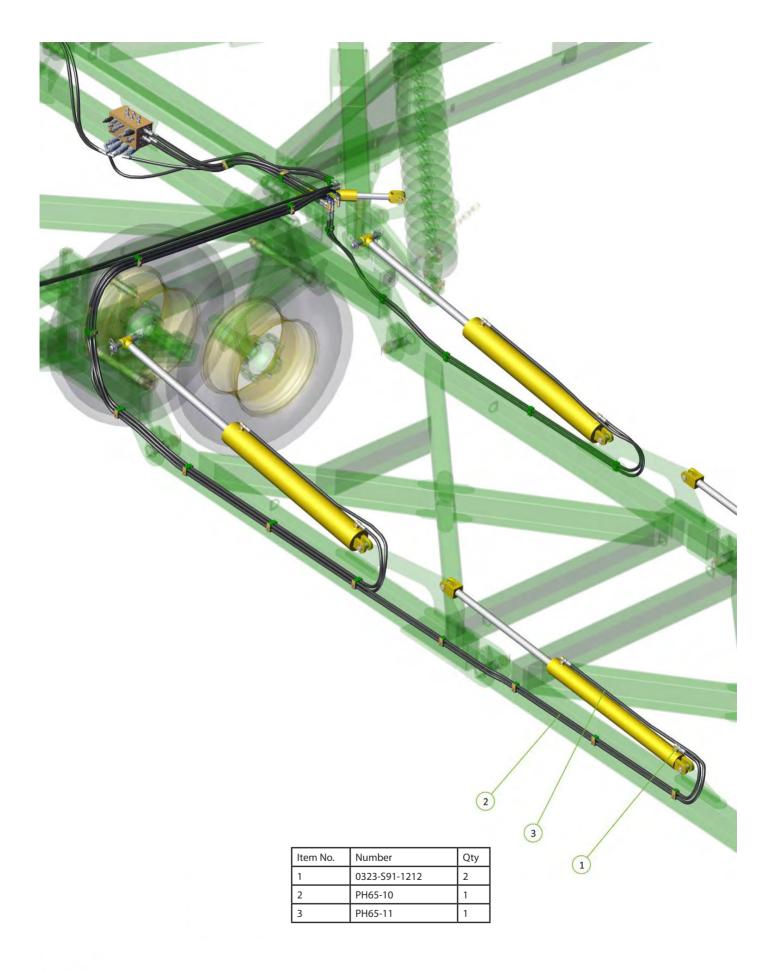




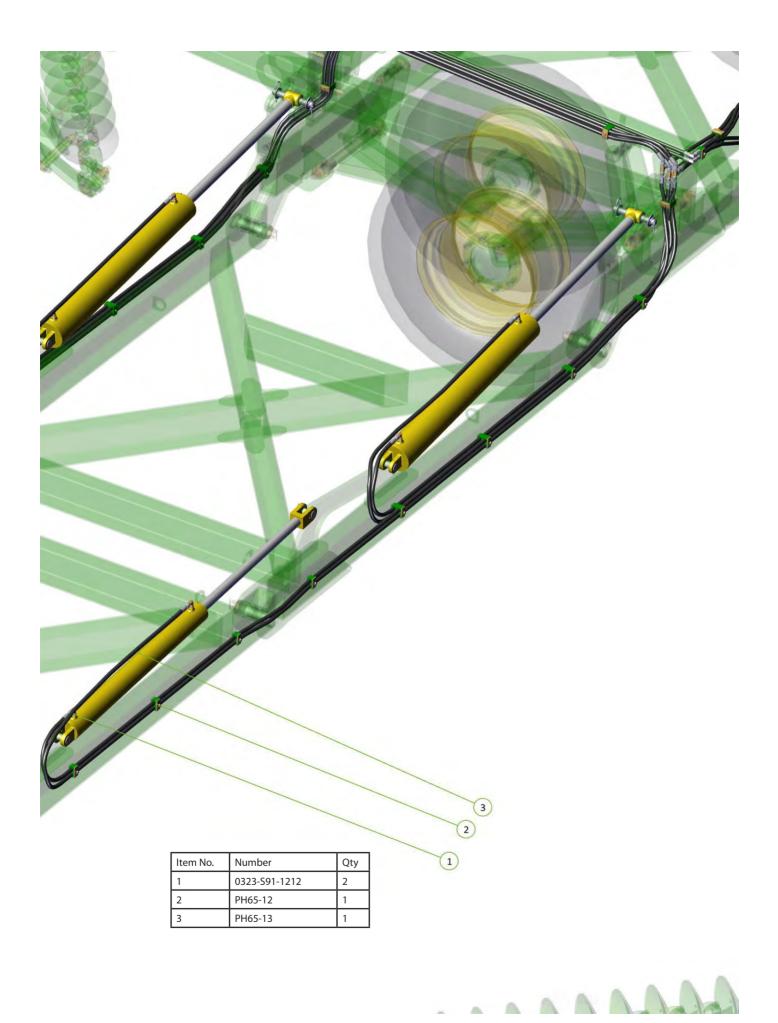




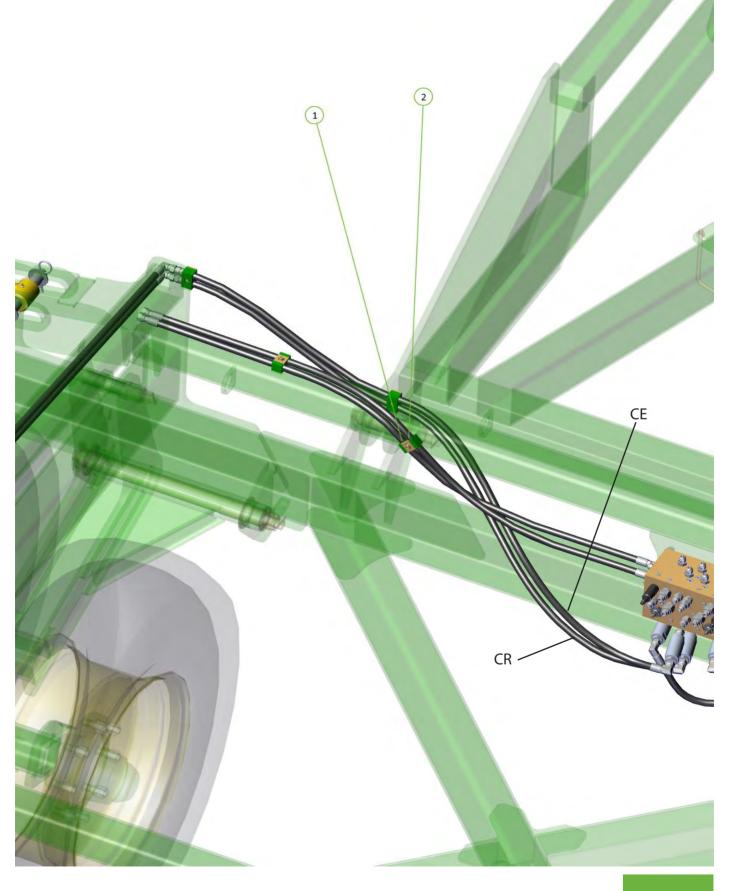








Item No.	Number	Qty
1	PH65-08	1
2	PH65-09	1



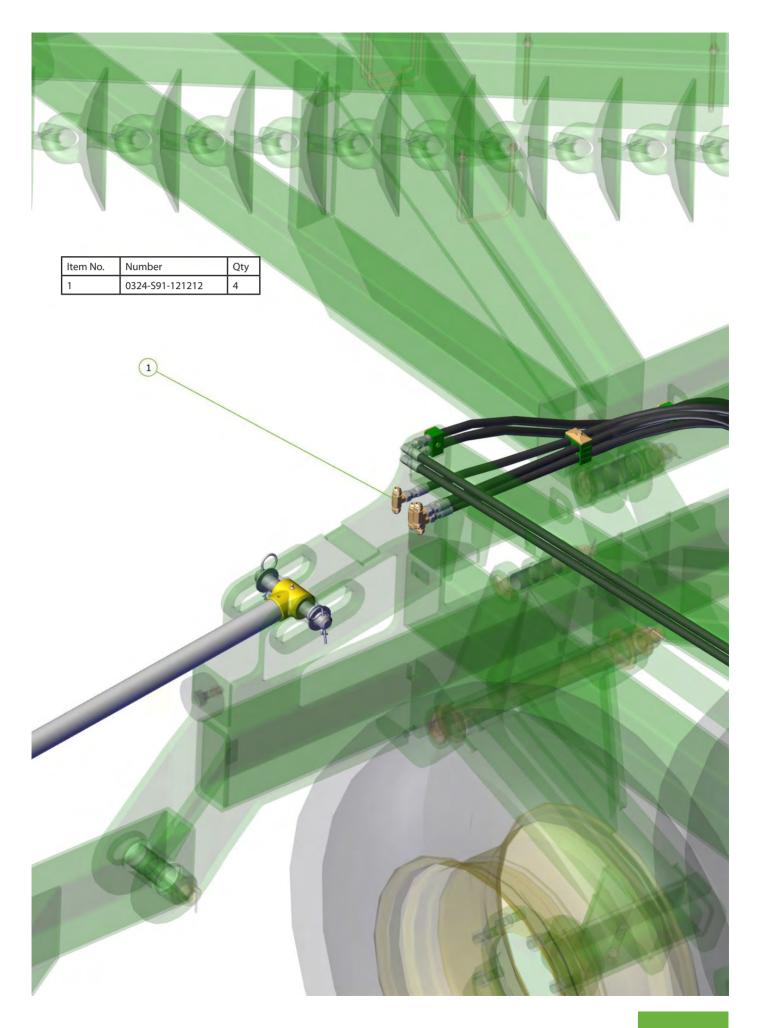


Item No.	Number	Qty
1	PH65-10	1
2	PH65-11	1

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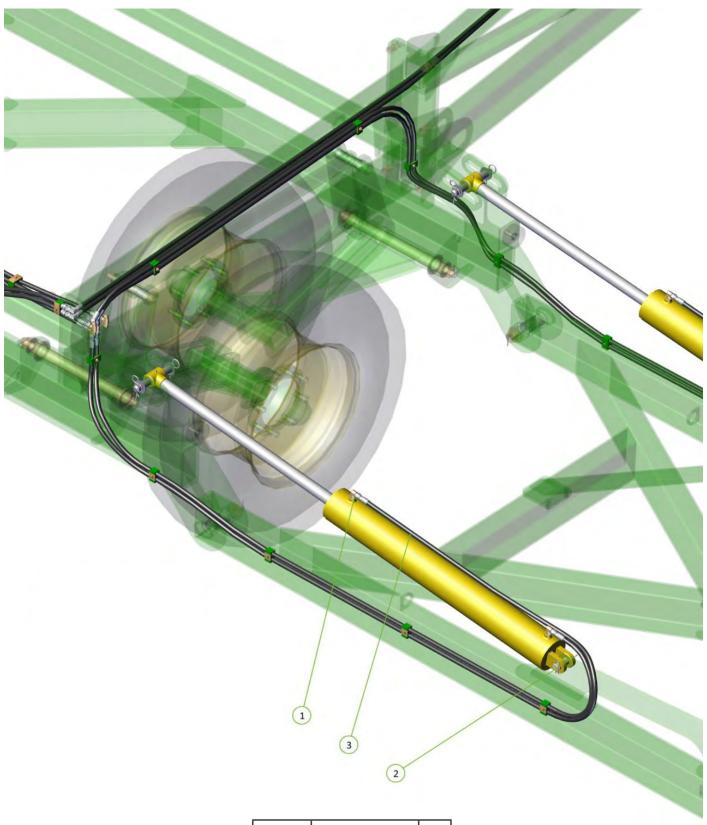
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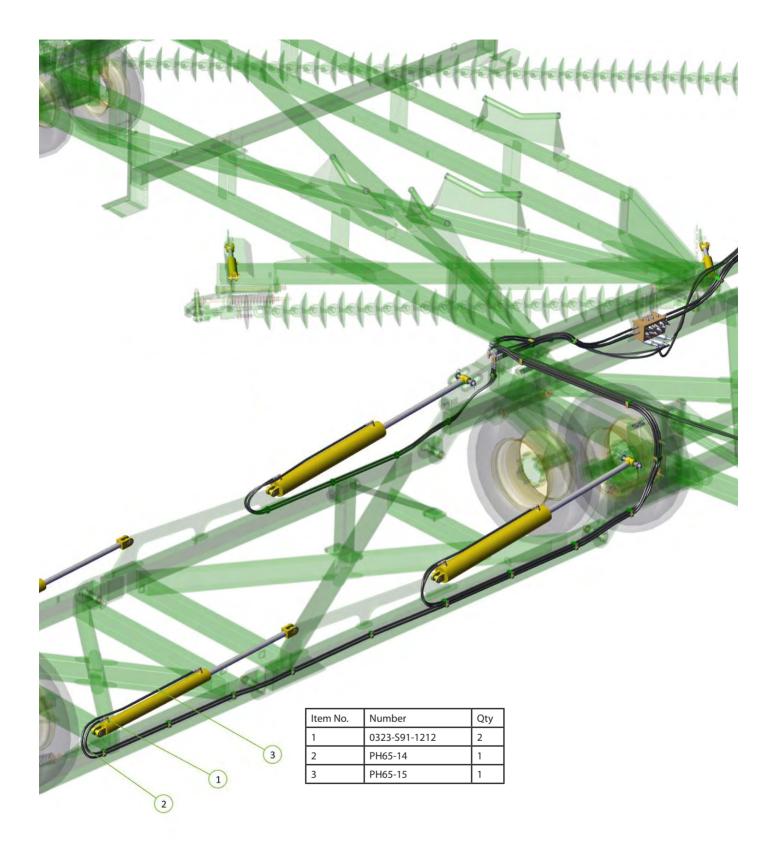


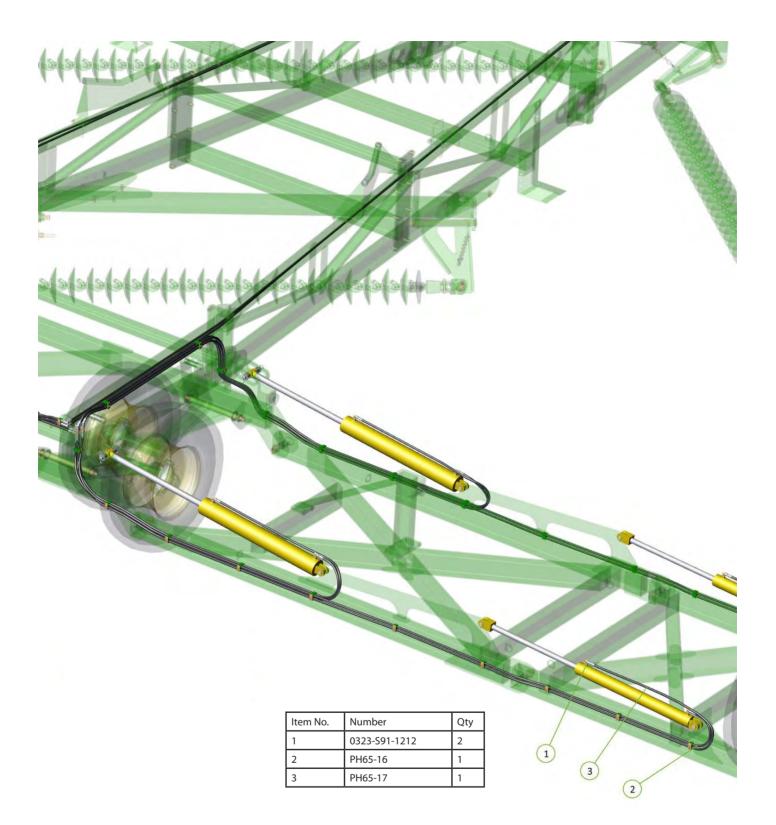
Item No.	Number	Qty
1	0323-S91-1212	2
2	PH65-42	1
3	PH65-41	1

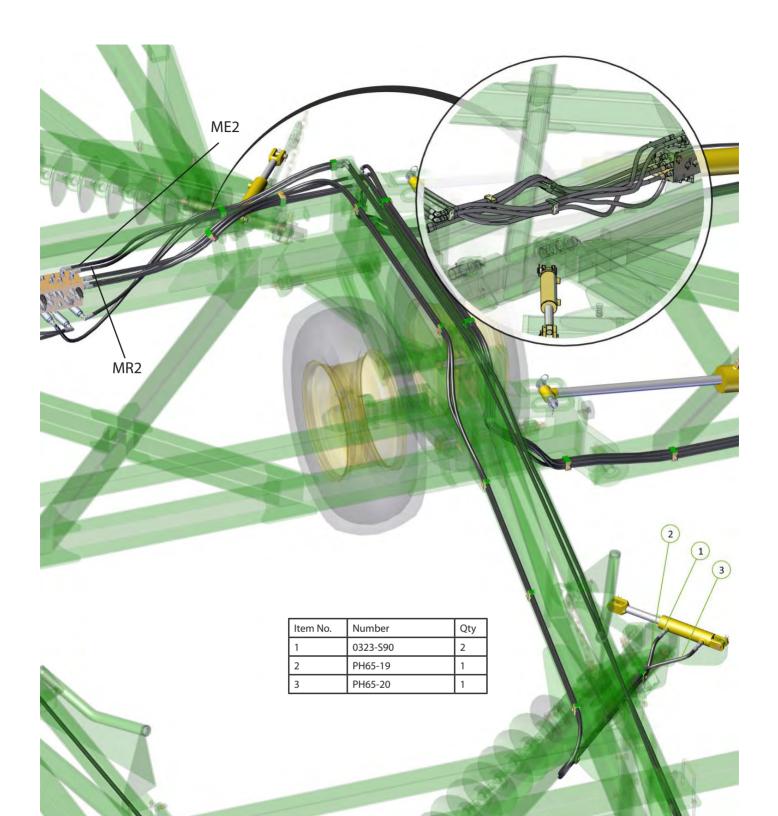


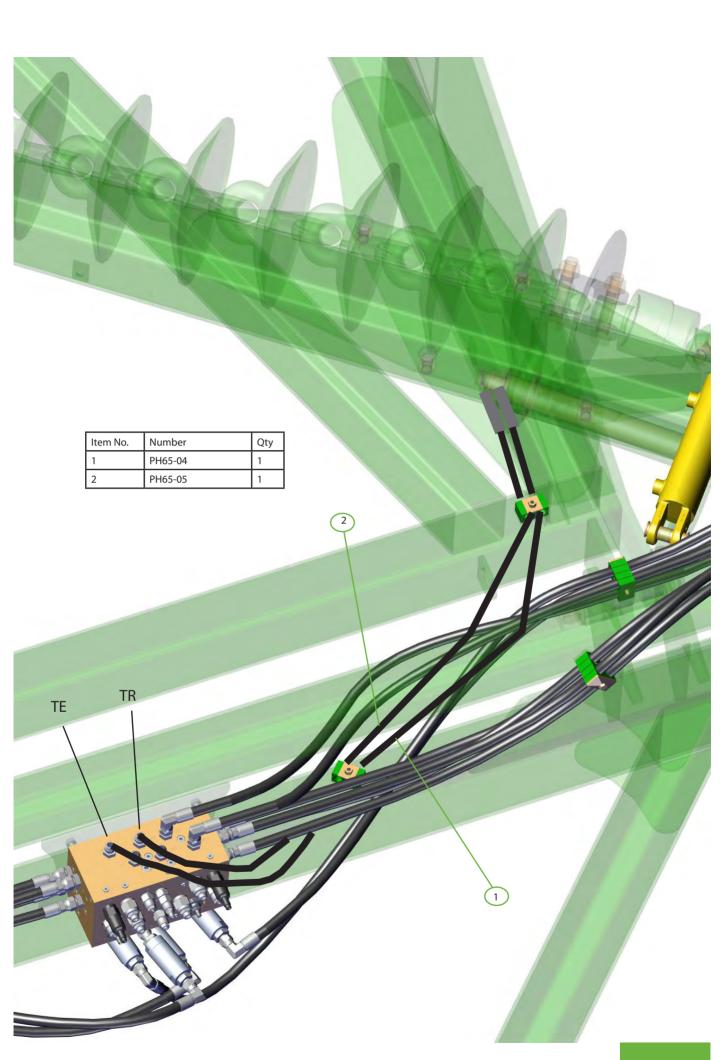


Item No.	Number	Qty
1	1265-HK	2
2	PH65-40	1
3	PH65-39	1









Item No.	Number	Qty
1	PH65-04	1
2	PH65-05	1
3	PH65-04A	1
4	PH65-05A	1
5	PH65-23	1
6	PH65-24	1

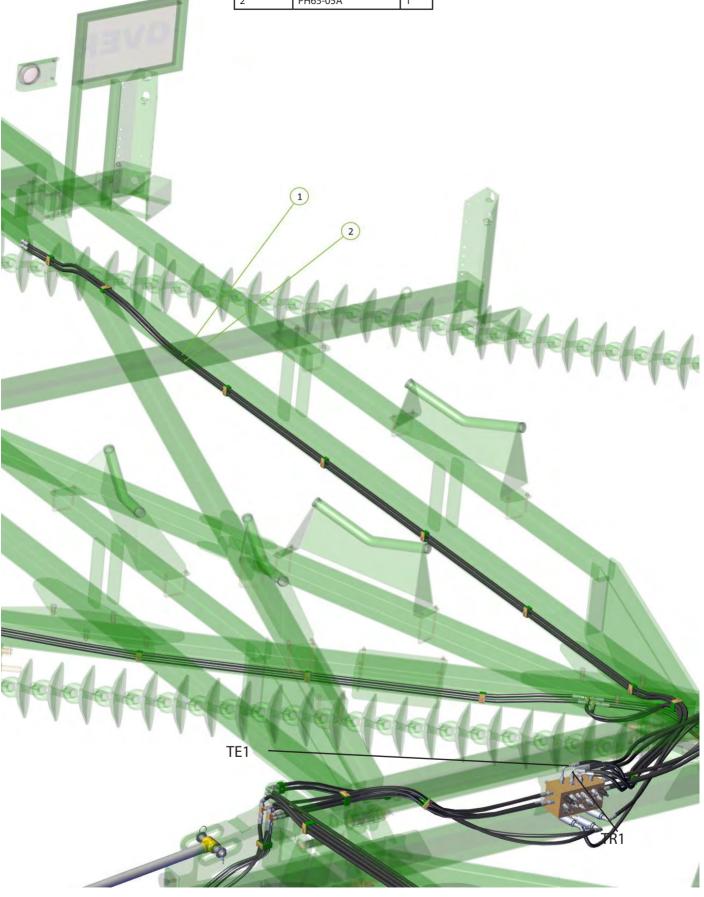
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Item No.	Number	Qty
1	PH65-21	1
2	PH65-22	1
3	PH65-23	1
4	PH65-24	1

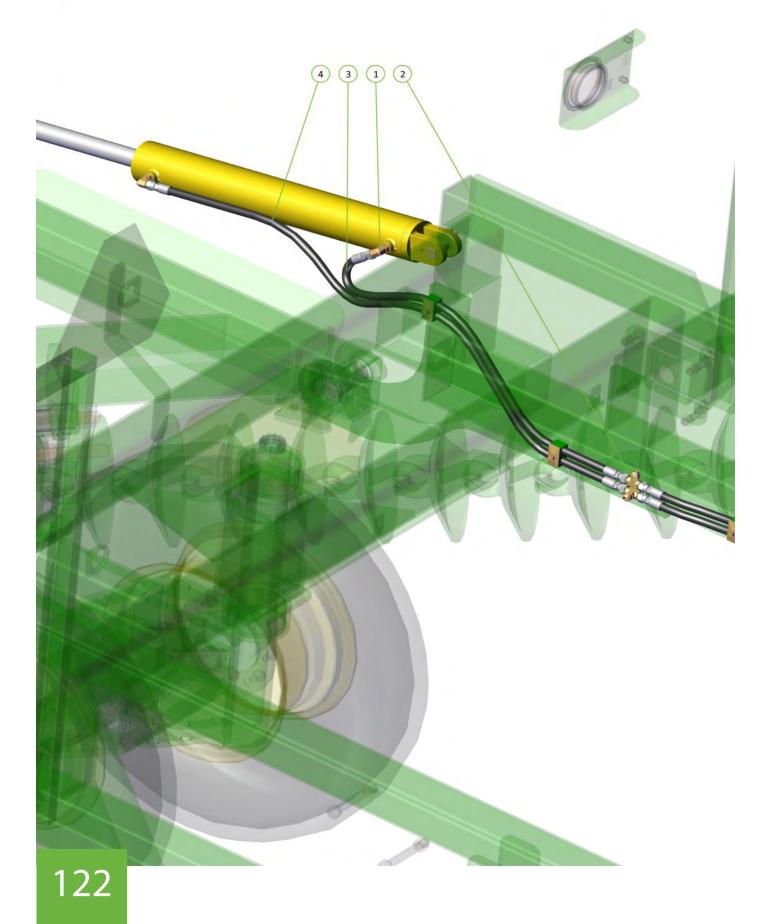


Item No. Number Qty 1 0323-588-1212 2 2 PH65-22 1 3 PH65-21 1	
A CONTRACT OF A	
120	

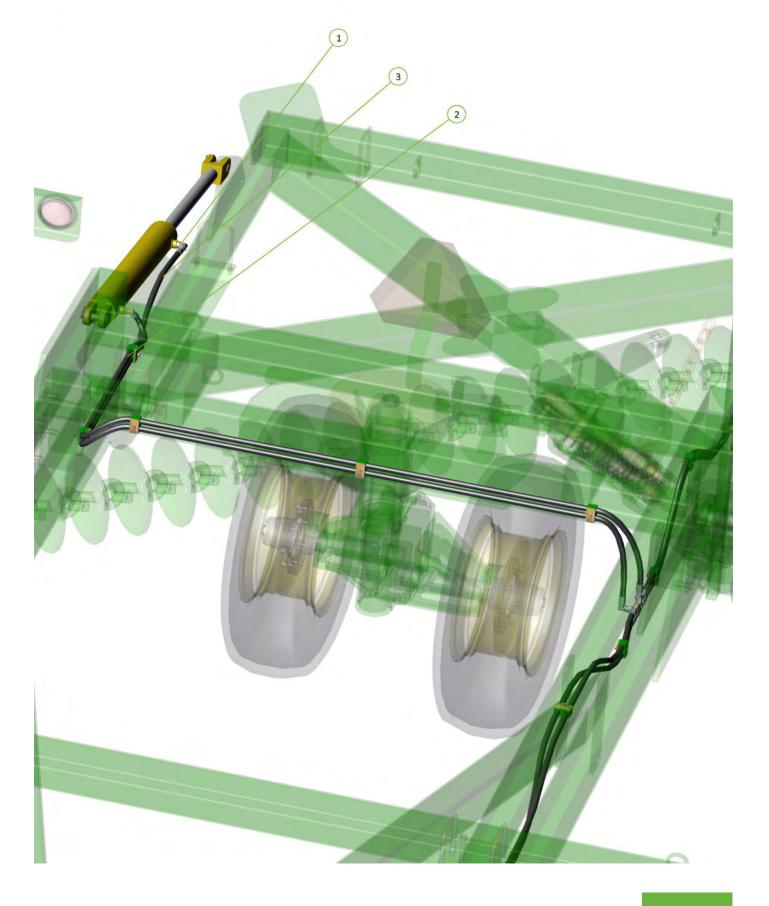
Item No.	Number	Qty
1	PH65-04A	1
2	PH65-05A	1

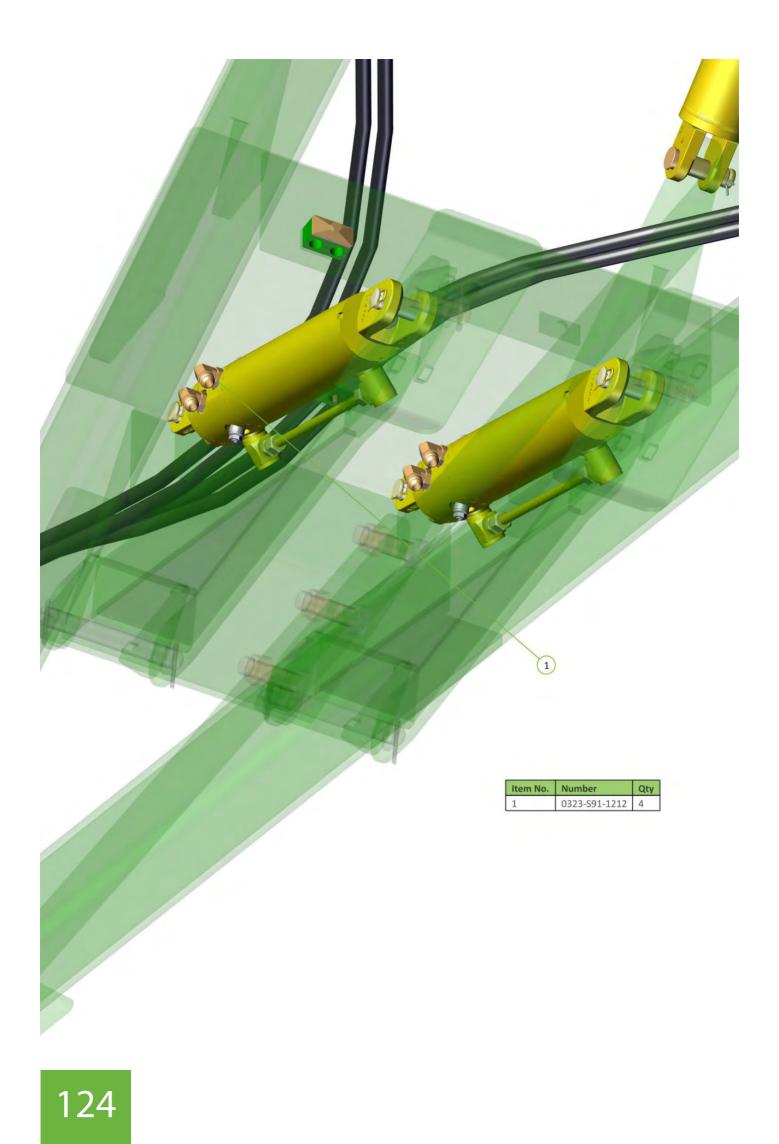


Item No.	Number	Qty
1	0323-S91-1212	2
2	0324-S19-121212	2
3	PH65-31	1
4	PH65-32	1

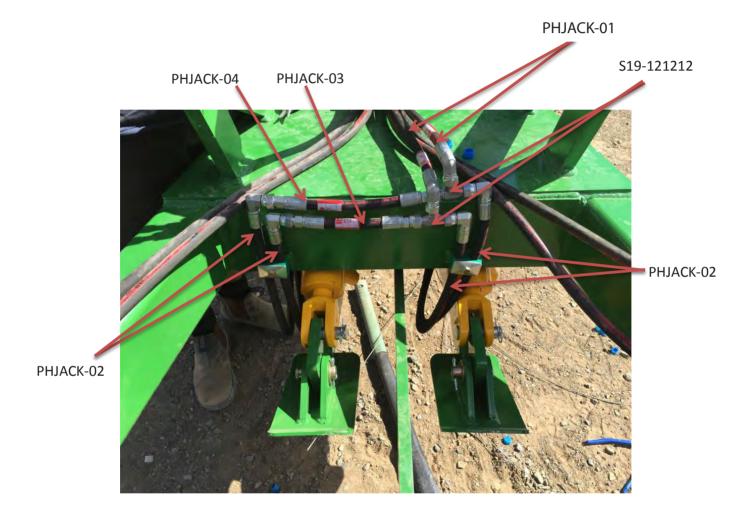


Item No.	Number	Qty
1	0323-S91-1212	2
2	PH65-33	1
3	PH65-34	1





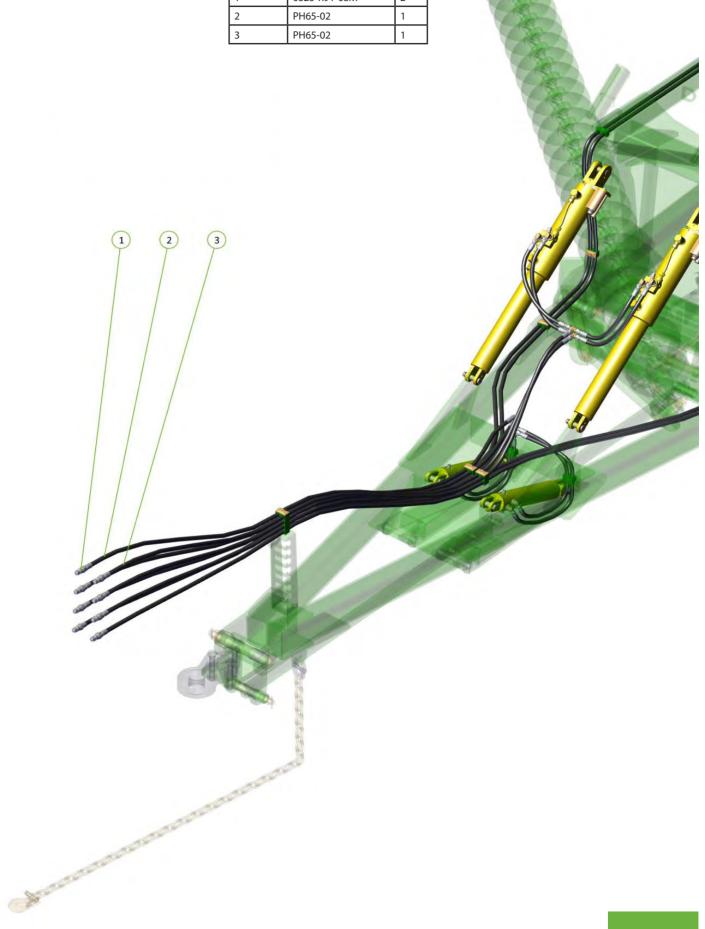
Item No.	Number	Qty
1	0323-S91-1212	2
2	PHJACK-01	2
3	PHJACK-02	4
4	PHJACK-03	1
5	PHJACK-04	1

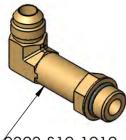


Item No.	Number	Qty
1	0323-S91-1212	4
2	0324-S19-121212	2
3	PH65-03A	1
4	PH65-03B	1

1.9

Item No.	Number	Qty
1	0325-R91-08M	2
2	PH65-02	1
3	PH65-02	1





0323-\$12-1212



0323-591-1212





0323-571-0812









0324-\$19-121212

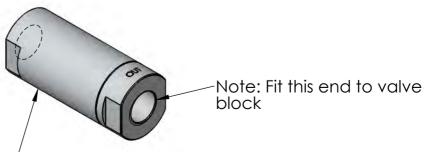






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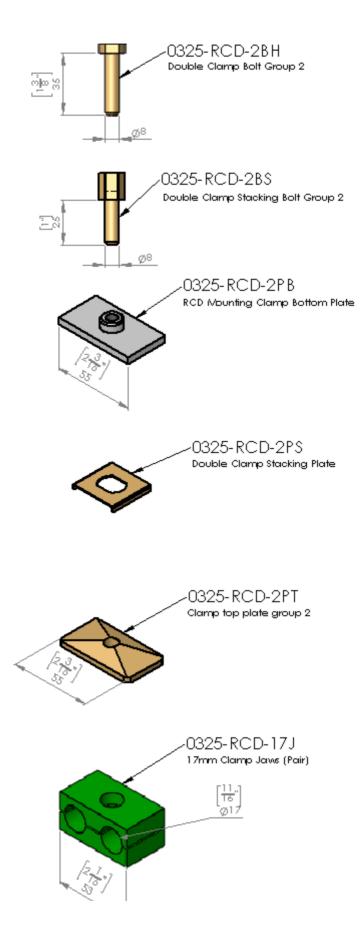




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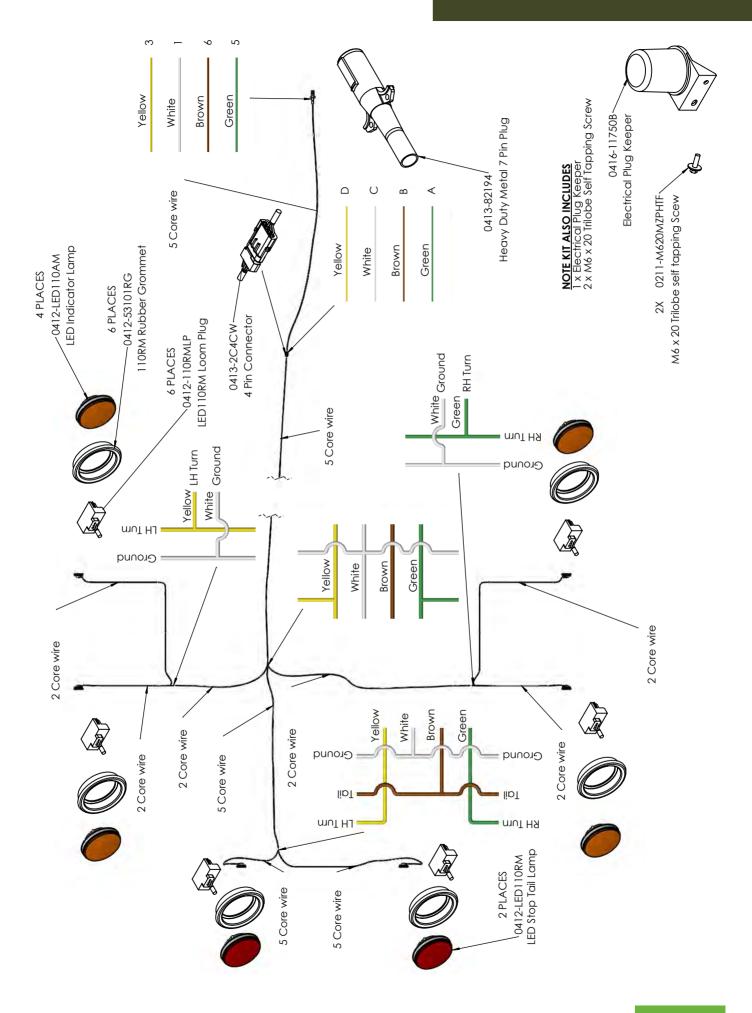


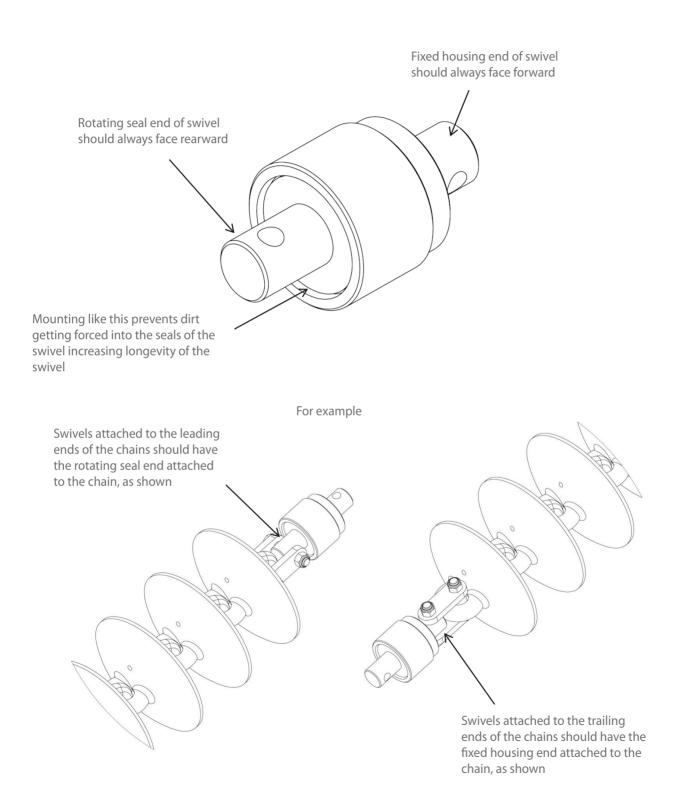


Section 4 Diagrams & Charts



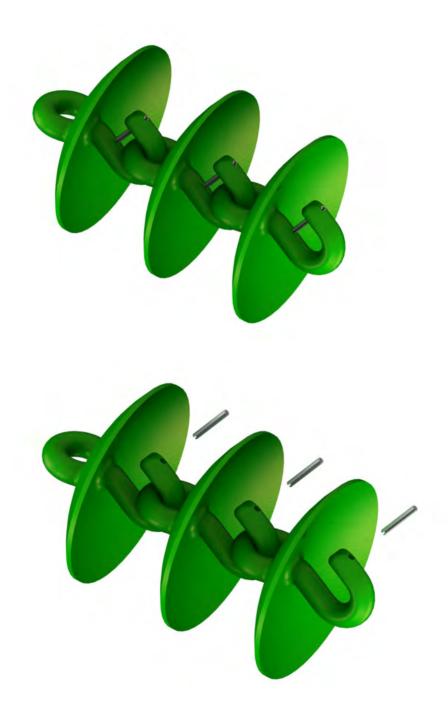
Wiring Diagram





Please install cast link retaining Pins (3/8" x 3" Roll Pin, part number 0262-3-8X3) on all cast disc links (CL1 & CL2).

Failure to do this could lead to the discs becoming dislodged during transport causing severe damage or injury.



Operating speeds

Operating speeds for normal conditions						
Chain type	Speed					
Prickle Chain	6-10 Mph / 10-16 kmph					
Disc Mulch Chain	6-8 Mph / 10-12 kmph					
Transport / towing on roads	15 Mph / 25 kmph					

Tire pressure

Tire size	Ply	PSI	КРА
16.5L x 16.1	14	36	250
H40 x 14.5-19	26	60	410
11L - 15	10	44	300
15.5/80/24	16	58	400
16.5/85/24	16	55	380
550/60/22.5	16	40	280
400/60/22.5	16	50	350
12.5/80/18	14	85	590
15.0/70/18	14	71	490

Chain Harrow specifications

Model	62′HDX			
Working width	62′/18.3m			
Transport width	16.3′/5.0m			
Transport height	14.6′/4.5m			
Transport length	72′/22.0m			

Bolt Torque Settings

Bolt Type	/pe Wheel nut			U Bolt			Grade 8.8 Bolt				Grade 10.9 Bolt			
Bolt Size	M18	M20	1/2″	9/16″	M10	M12	M16	M10	M12	M16	M20	M24	M20	M24
Ft lb	255	265	90	100	22	36	55	32	48	140	190	270	300	350
Nm	345	360	125	140	30	50	75	44	65	190	260	370	406	475

[1] When fitting a wheel & tire to a hub, tighten the wheel nuts in rotation to the correct tension. To achieve this choose a wheel nut & tighten, then proceed clockwise to the next wheel nut & tighten & so on until all wheel nuts are tight. Then repeat the procedure to check that all nuts are tight. Do not use impact tools to tighten wheel nuts. For a guide to the correct tension of the wheel nuts please use the appropriate tension for your size wheel nuts from the Bolt Torque Settings table.

Torque values are for dry threads and surfaces however it is permissible to apply a small amount of anti corrosive oil to the threads.



Model		Length	CL2	CL1	W36	R300	SD49	Prickle chain
			CL2 disc chain also requires CL1 disc chain					
62' HDX	Front right	37.1′/11.3m	CL2 - 52 CL1 - 2	71	70	93	93	129
	Front left	37.1′/11.3m	CL2 - 52 CL1 - 2	70	69	91	91	127
	Rear right	45.5′/13.9m	CL2 - 52 CL1 - 17	85	84	111	111	154
	Rear left	37.1′/11.3m	CL2 - 52 CL1 - 2	71	70	92	92	128
	Modules front	11.2′/3.4m	CL2 - 15 CL1 - 2	21	21	28	28	38

Section 5 Operation & Technical Bulletins

Basic Operation

Unfolding:

- 1. Walk around and inspect the machine.
 - a. Check that chains are not hooked on framework
 - b. Check swivel bolts are in place and not broken
 - c. Check that height adjusting chains have not fallen out of their slotted plates during transport.
- 2. Lower front A frame to working height.
- 3. Unfold wings holding the hydraulic lever until the tail is in working position and the main center cylinder pins have centerd in their slots.
- 4. Walk around and check that all chain links are straight and that working height of all swivels is correct for field conditions. Adjust if neccessary.
- 5. Move off with all chains in working position. If neccessary it is acceptabe to raise front A pull to transport height. This will lift the front chains off the ground and reduce the load on the tractor. Lower the front A pull once moving satisfactorily.

Folding:

- 1. Lower the front A frame to working height. (This is important to ensure that all chains locate correctly in their transport rests).
- 2. Fold the wings. They should move as follows; modules will raise, tail will raise, main center cylinders will retract, one or both, until the wings stand vertically. The left outer wing then the right outer wing will fold down.
- 3. Raise front A frame to transport height.
- 4. Walk around and check that chains have located correctly in transport rests.

Setting for correct chain tension

Wings

Use the spanner supplied. Loosen the lock nut adjacent to the tensioner assembly body. Turn the tension bolt clockwise to compress the coil spring. Correct tension is acheived when spring retains its set length when operator rolls the chain fore and aft on the ground. Retighten the lock nut.

See table below

Spring Compression Length

Model	inches	mm
60	12.4	315

When less than 4" (100mm) of thread remains visible on the adjustor bolt then a link must be removed from the chain



Modules

Loosen the lock nut on the draw bolt.

Tighten the adjusting nut clockwise until the outer face of the spring retaining washer is flush with the body of the module tensioning unit.

Retighten the lock nut.

If more than 8" (200mm) of thread is exposed then a link should be removed to maintain correct adjustment.





Importance of chain tension

Operational

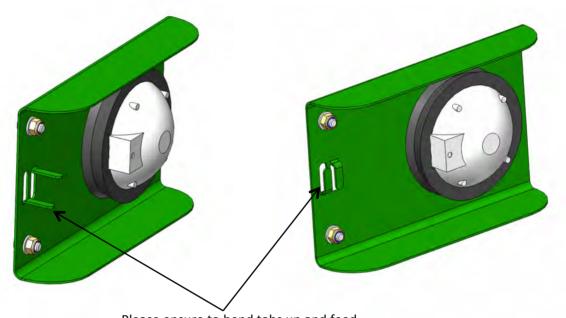
It is imperative that the correct adjustment be maintained. Only through correct adjustment can a smooth and level finish be achieved in field working.

Loose chains lead to :

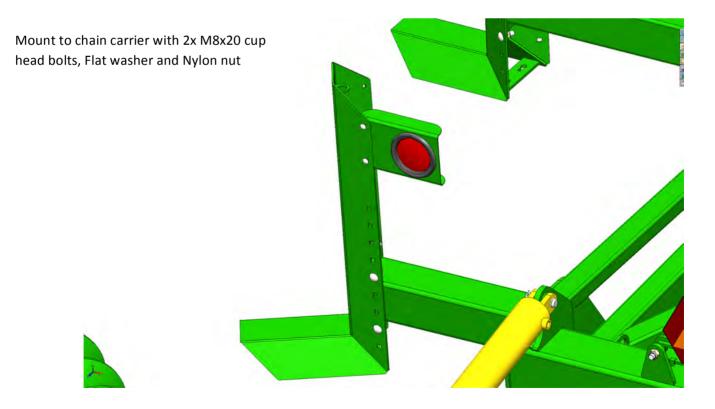
- Uneven performance across the width of the machine
- Uneven weed control
- Unsatisfactory incorporation
- Ineffective levelling
- Accelerated or premature chain wear
- Chains failing to engage with transport locators when folded
- Machine damage when folding or unfolding
- Uneven field surface with ridges and furrows being created. The leading 1/3rd of a loose chain is much more aggressive than the trailing 1/3rd and the center. This will mean that middle of the machine's front pair of chains will aggressively move soil outwards. The machine's rear pair of chains, if loose, have their aggressive 1/3rd near the wing extremity. It follows then that as the front discs push soil outwards, the least aggressive portion of the rear chain follows them and does not balance the soil movement. This is exacerbated at the wings, effectively creating a broad ridge about halfway out each wing. It won't be evident in one pass, but is possible if care is not taken over time.

A correctly adjusted machine will not cause this phenomenon.

Light Brackets



Please ensure to bend tabs up and feed wire through, so the light cable is secure

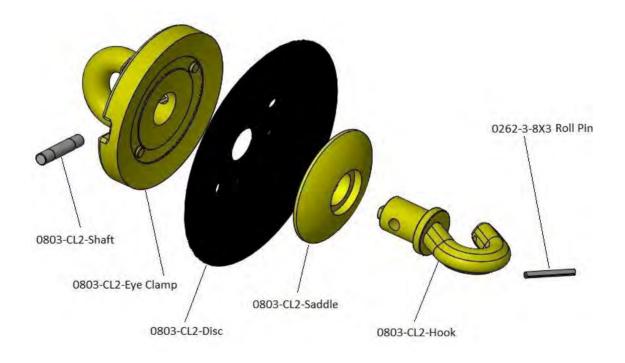




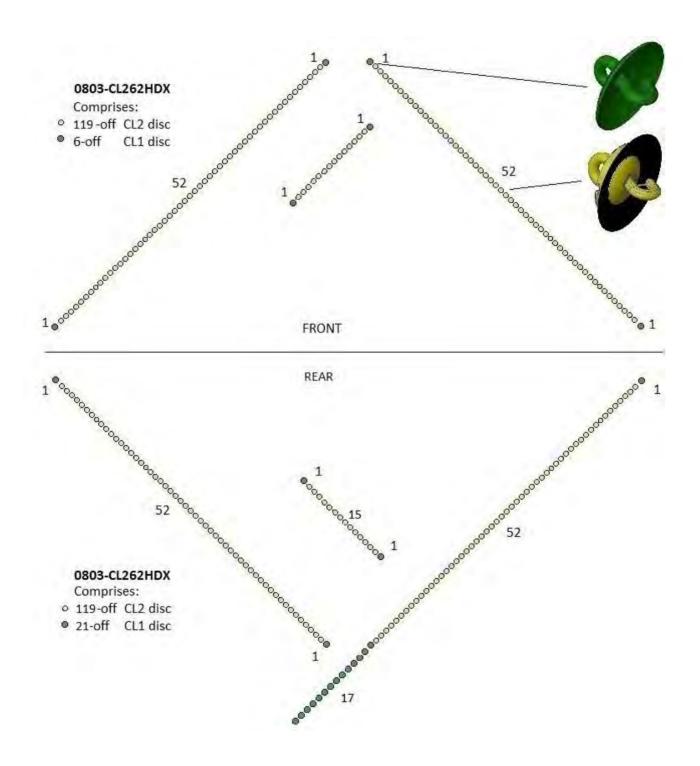
CL2 Chain Configuration



0803-CL2-Link Assembly

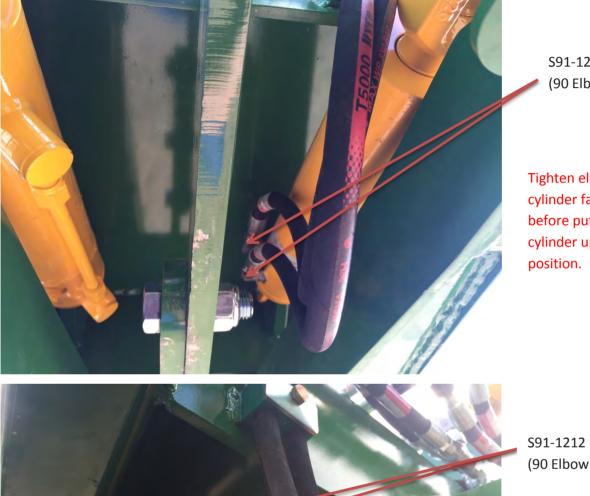


CL2 Chain Configuration



Assembly Update 044

Hydraulic Jack

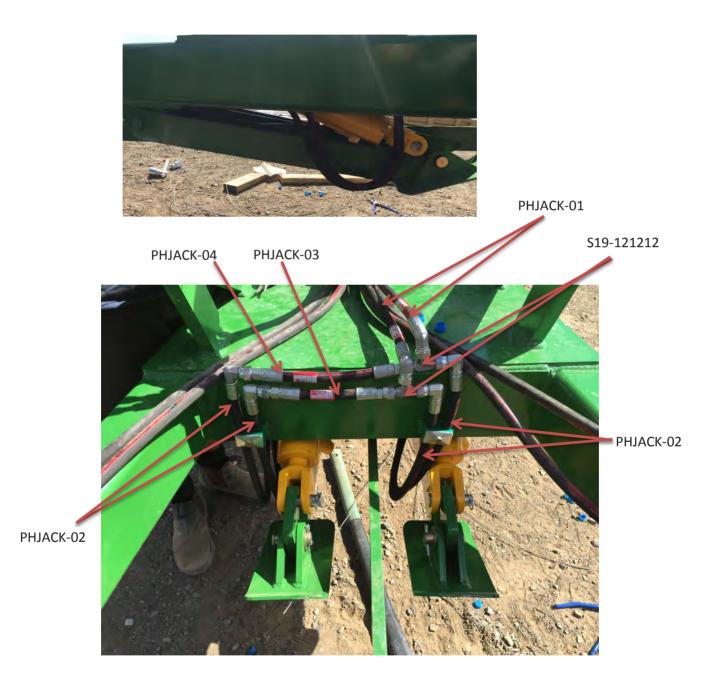


S91-1212 (90 Elbow)

Tighten elbow onto cylinder facing rod before putting cylinder up into position.

(90 Elbow)

Hydraulic Jack





CL2 Disc Change Procedure

This document describes a procedure for the safe changeover of CL2 discs.

NOTE: Each disc weighs 22kg (48lb). Appropriate care must be taken during manual handling

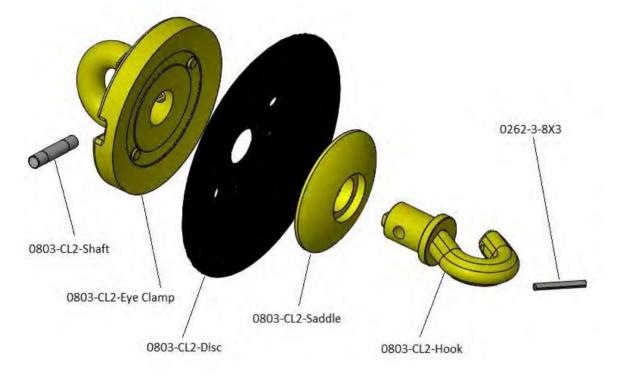


Figure 1: Exploded view of CL2 disc assembly

Changeover procedure as follows:

- 1. Locate press jig in press (see Figure 2 for orientation).
- 2. Load disc into press with Hook facing upwards ensure that Eye Clamp and Hook are secured within the jig with pins supplied
- 3. Close press, applying force to Saddle (see Figure 3). DO NOT exceed pressure of 6 Tonne (13,200lb)
- 4. With the clamping force applied, push or tap the shaft with a hammer & drift, and remove from the CL2 Disc assembly
- 5. Open the press and remove the Disc from the assembly
- 6. Ensure that all surfaces of the castings are free from debris

CL2 Disc Change Procedure

- 7. Place replacement disc on to Eye Clamp, ensuring that location holes align with casting lugs
- 8. Close press and re-apply clamping force. Visually confirm that Hook location hole is properly aligned with Eye Clamp location hole
- 9. Locate pin within hole and tap gently through both castings
- 10. Remove clamping force, and remove CL2 assembly from jig
- 11. CL2 disc is now ready for use. Repeat procedure as necessary

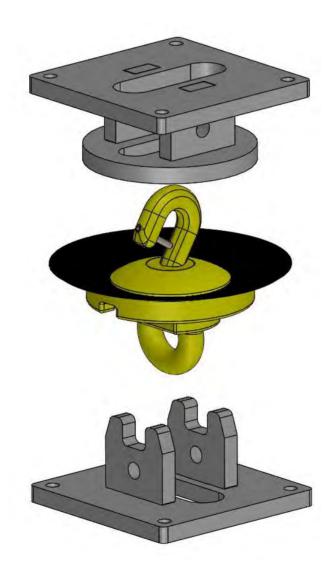


Figure 2: CL2 disc with press jig in Open position



CL2 Disc Change Procedure

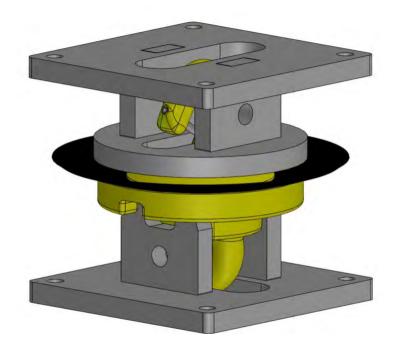


Figure 3: CL2 disc with press jig in Closed position

Notes

