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Diamond Chain Harrow 62 HDX Assembly & Parts Manual

Serial Number:

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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.

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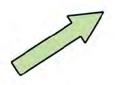
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This symbol indicates which bag the relevant fastners are in



This symbol indicates which bag the relevant hydraulics are in



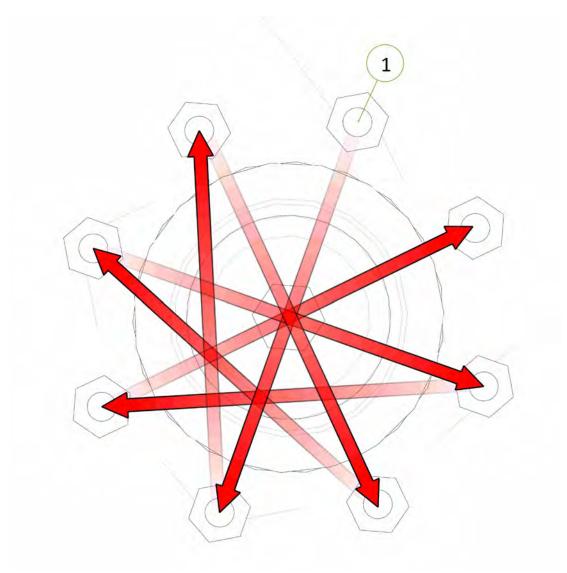
This symbol indicates which way the machine is travelling

Bolt Torque Settings

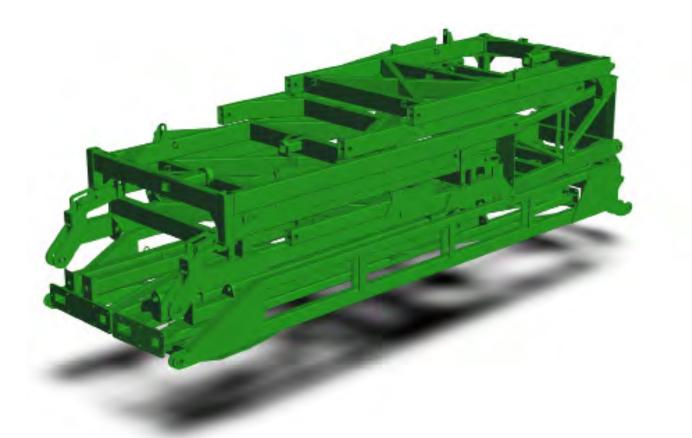
Bolt Type		Whee	el nut			U Bolt	t		Grad	de 8.8	Bolt		Gra 10.9	ade Bolt	Grade 8 Bolt
Bolt Size	M18	M20	1/2″	9/16″	M10	M12	M16	M10	M12	M16	M20	M24	M20	M24	1″ UNF
Ft lb	255	265	90	100	22	36	55	32	48	140	190	270	300	350	849
Nm	345	360	125	140	30	50	75	44	65	190	260	370	406	475	1151

[1] When fitting a wheel & tire to a hub, tighten the wheel nuts in a star pattern to the correct tension. To achieve this choose a wheel nut & tighten, then proceed to the opposite side of the hub 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.



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.



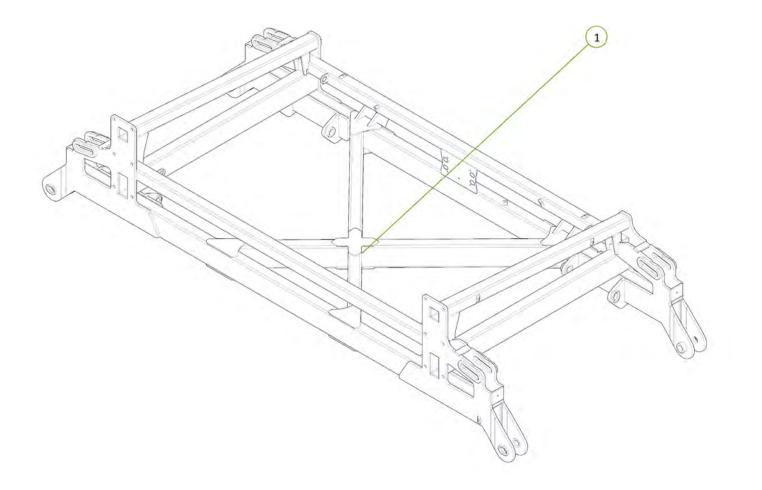
CAUTION

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

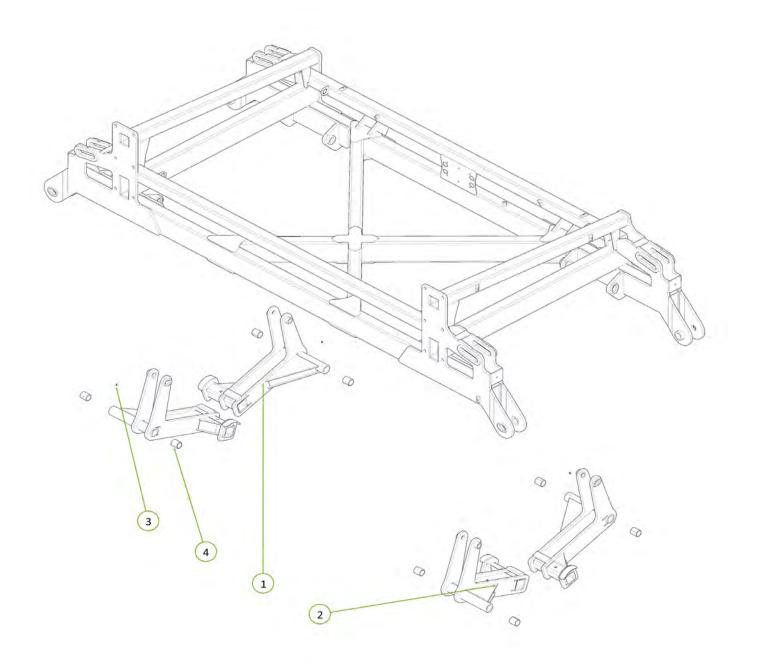
Item No.	Description	Qty	Number
1	62'HDX Centre Frame	1	1265-01

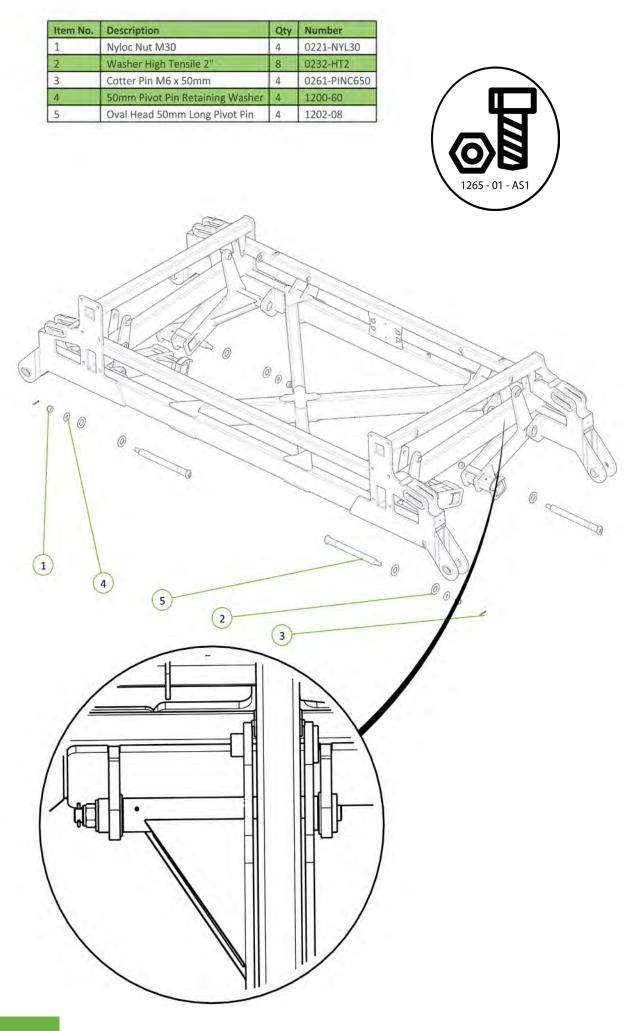


Item No.	Description	Qty	Number
1	RH Walking Axle Arm	2	1210-50
2	LH Walking Axle Arm	2	1210-51
3	Grease Nipple 1/4" UNF	4	0181-GN1-4
4	50 ID x 60mm DX Bush	8	0113-MB 5060DX

Please note - DX bushes are factory inserted

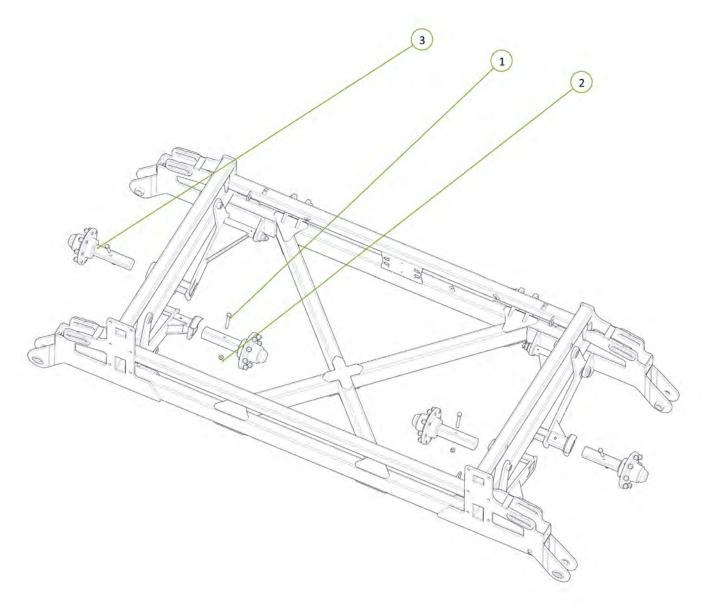






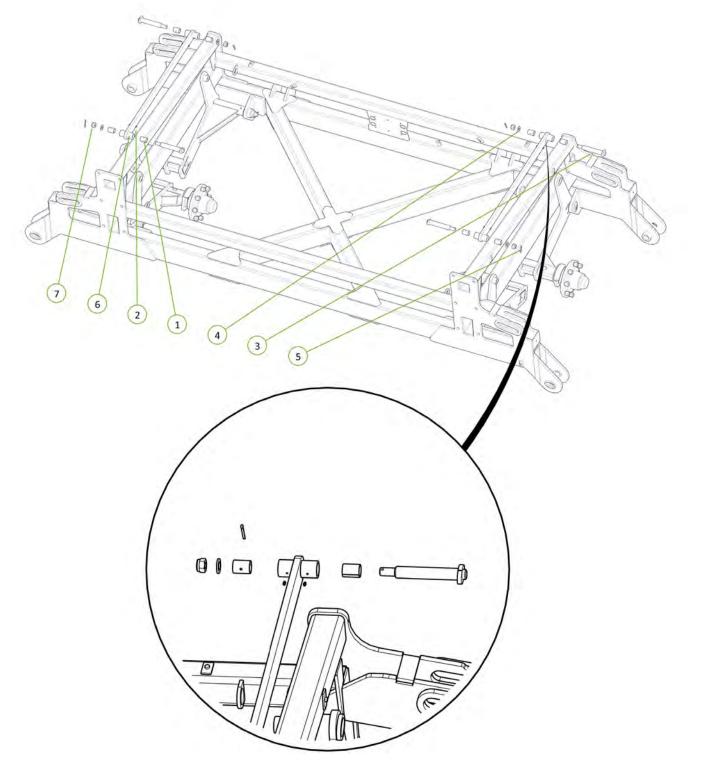
Item No.	Description	Qty	Number
1	M20 x 130 grade 8.8 ZP Bolt	4	0211-20130
2	Nyloc Nut M20	4	0221-NYL20
3	90 Series Stub Axle (Stub and Hub Complete)	4	0733-90





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



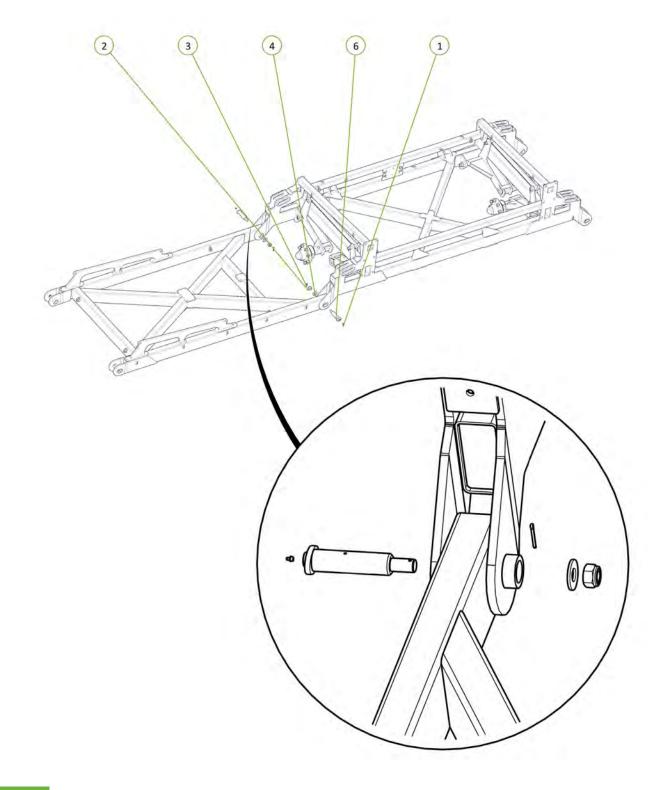


Item No.	Description	Qty	Number
1	62HDX RH Inner Wing Frame	1	1265-04
2	50 ID x 40mm DX Bush	4	0113-MB 5040DX

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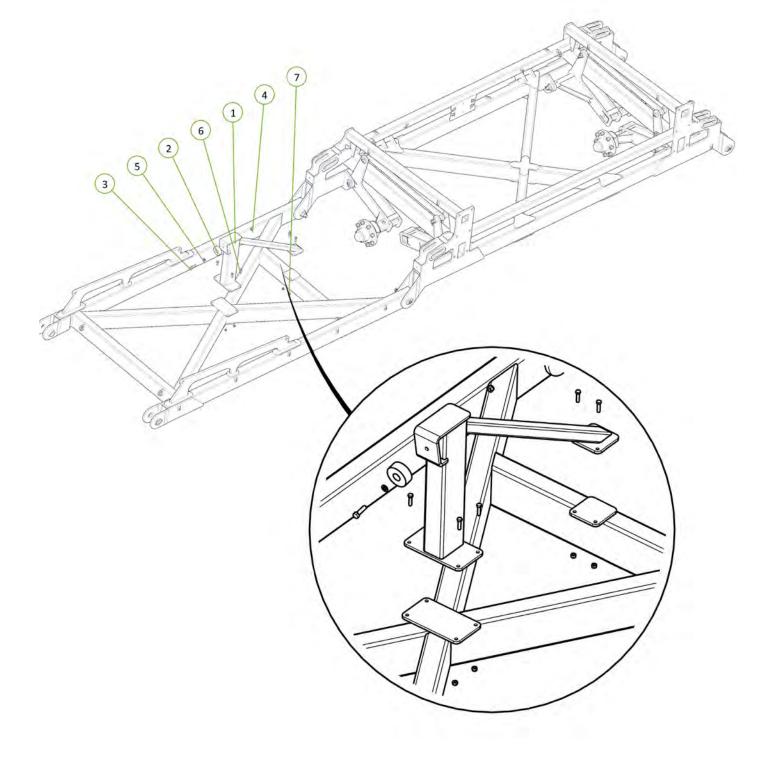
Item No.	Description	Qty	Number
1	Grease Nipple 1/8" BSP	2	0181-GN1-8
2	Nyloc Nut M30	2	0221-NYL30
3	Cotter Pin M6 x 50mm	2	0261-PINC650
4	50mm Pivot Pin Retaining Washer	2	1200-60
6	Oval Head 50mm Short Pivot Pin	2	1202-06



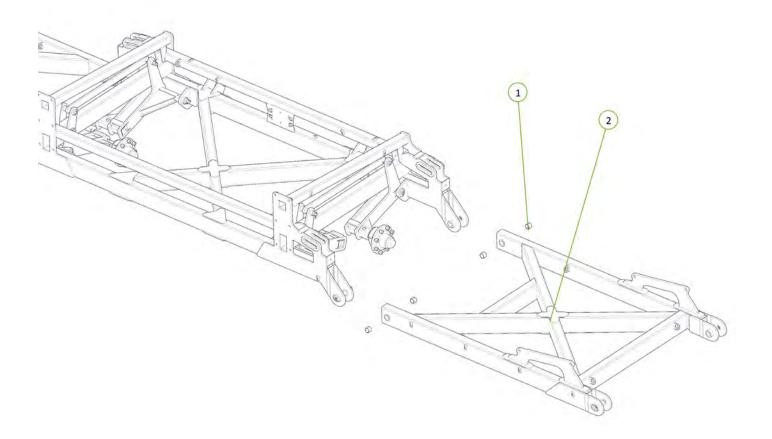


Item No.	Description	Qty	Number
1	62HDX Inner Wing Post	1	1265-04P
2	Nylon Wing Folding Buffer	1	1201-52
3	M16 x 55 grade 8.8 zp Bolt	1	0211-1655
4	Nyloc Nut M16	1	0221-NYL16
5	Washer Flat M16	1	0231-F16
6	M12 x 45 grade 8.8 ZP Boit	6	0211-1245
7	Nyloc Nut M12	6	0221-NYL12

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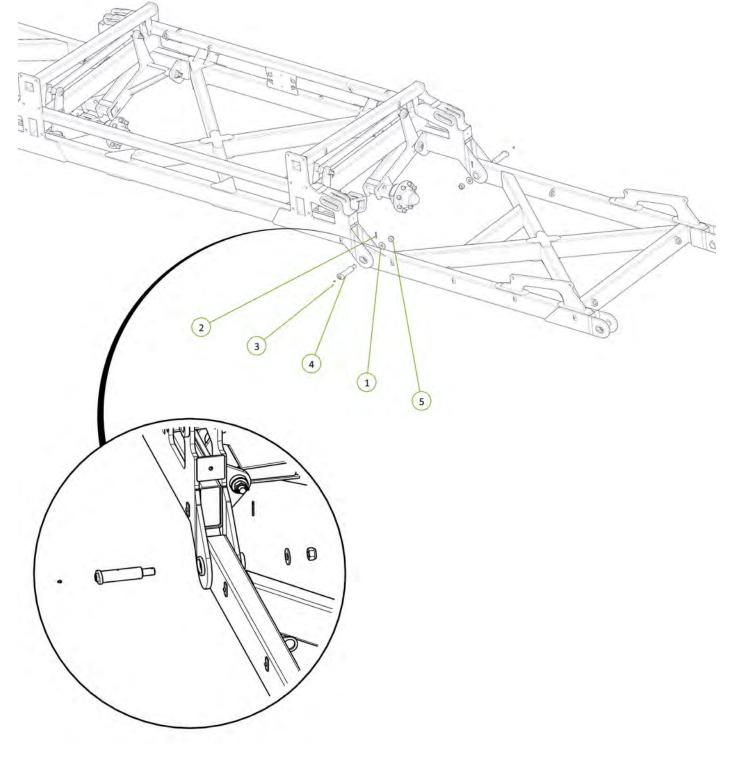


Item No.	Description	Qty	Number
1	50 ID x 40mm DX Bush	4	0113-MB 5040DX
2	62HDX LH Inner Wing	1	1265-05

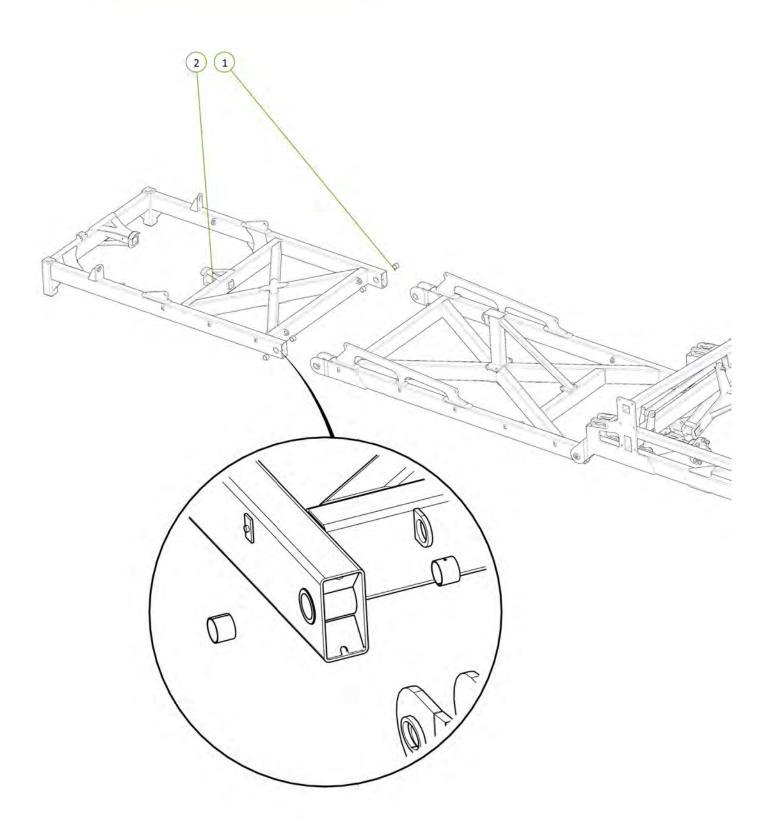


Item No.	Description	Qty	Number
1	50mm Pivot Pin Retaining Washer	2	1200-60
2	Cotter Pin M6 x 50mm	2	0261-PINC650
3	Grease Nipple 1/8" BSP	2	0181-GN1-8
4	Oval Head 50mm Short Pivot Pin	2	1202-06
5	Nyloc Nut M30	2	0221-NYL30





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

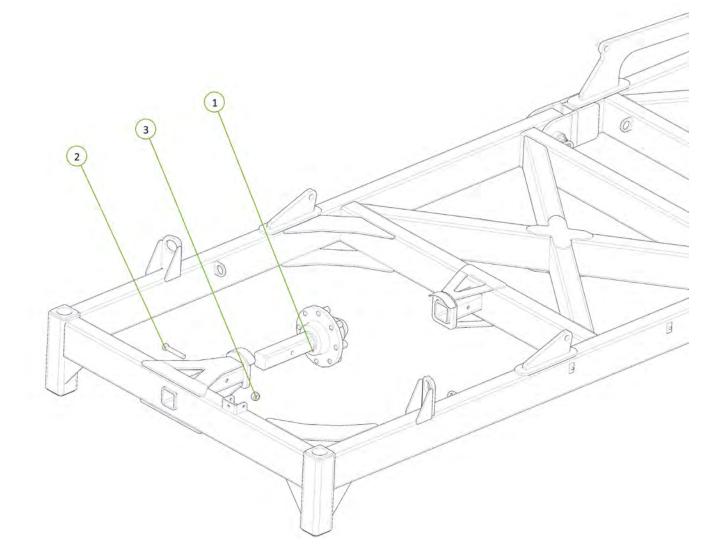


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Item No. Description Qty Number 1200-60 1 50mm Pivot Pin Retaining Washer 2 2 Cotter Pin M6 x 50mm 2 0261-PINC650 Grease Nipple 1/8" BSP 3 2 0181-GN1-8 4 Oval Head 50mm Short Pivot Pin 2 1202-06 Nyloc Nut M30 0221-NYL30 5 2 1265 - 06 - AS1 (4) 3 0 2 5 1 D Ô 0 0 0

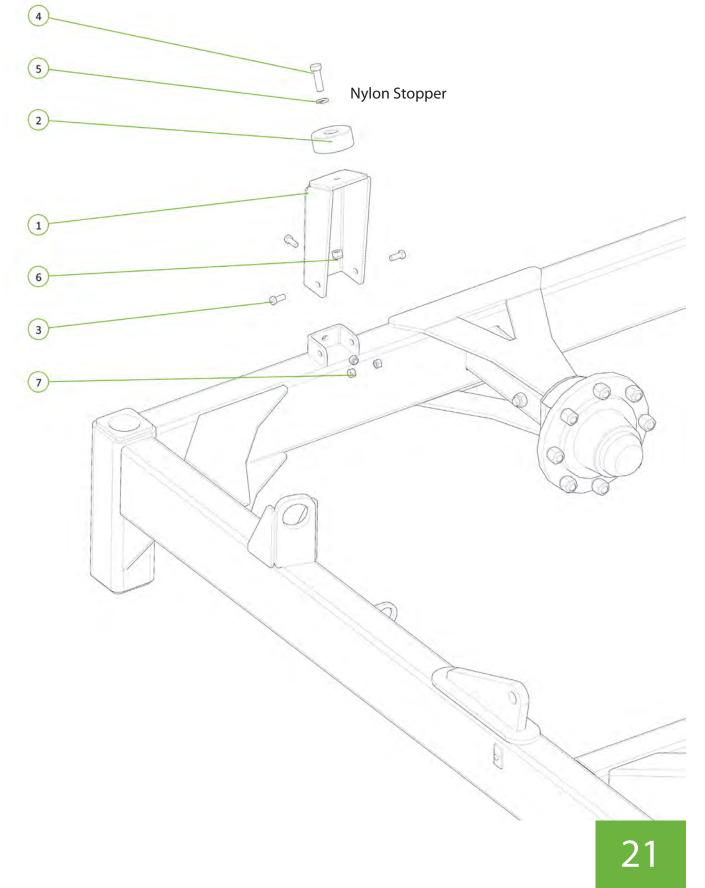
Item No.	Description	Qty	Number
1	90 Series Stub Axle (Stub and Hub Complete)	1	0733-90
2	M20 x 130 grade 8.8 ZP Bolt	1	0211-20130
3	Nyloc Nut M20	1	0221-NYL20



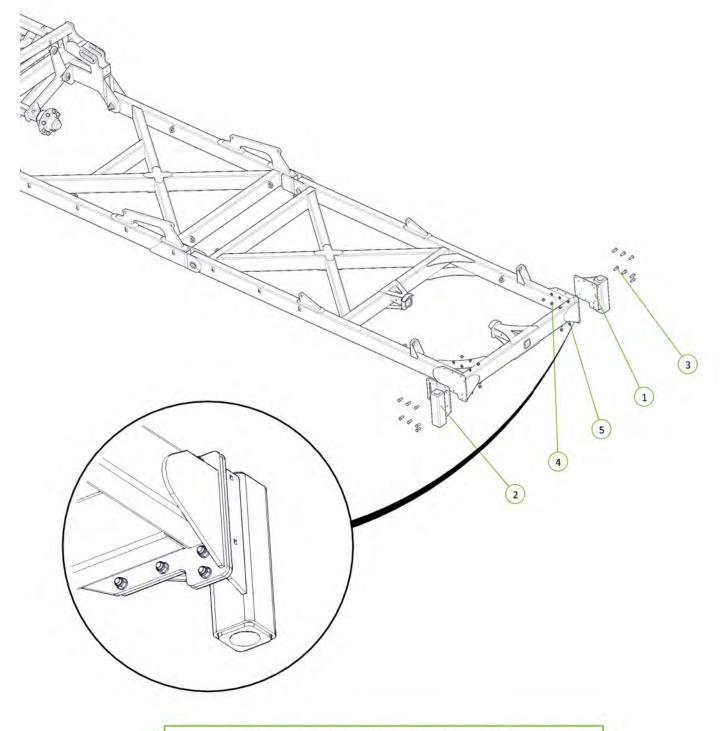


Item No.	Description	Qty	Number
1	65' Outer Wing Post	1	1200-154
2	Nylon Wing Folding Buffer	1	1201-52
3	M12 x 30 grade 8.8 ZP Bolt	3	0211-1230
4	M16 x 55 grade 8.8 zp Bolt	1	0211-1655
5	Washer Flat M16	1	0231-F16
6	Nyloc Nut M16	1	0221-NYL16
7	Nyloc Nut M12	3	0221-NYL12



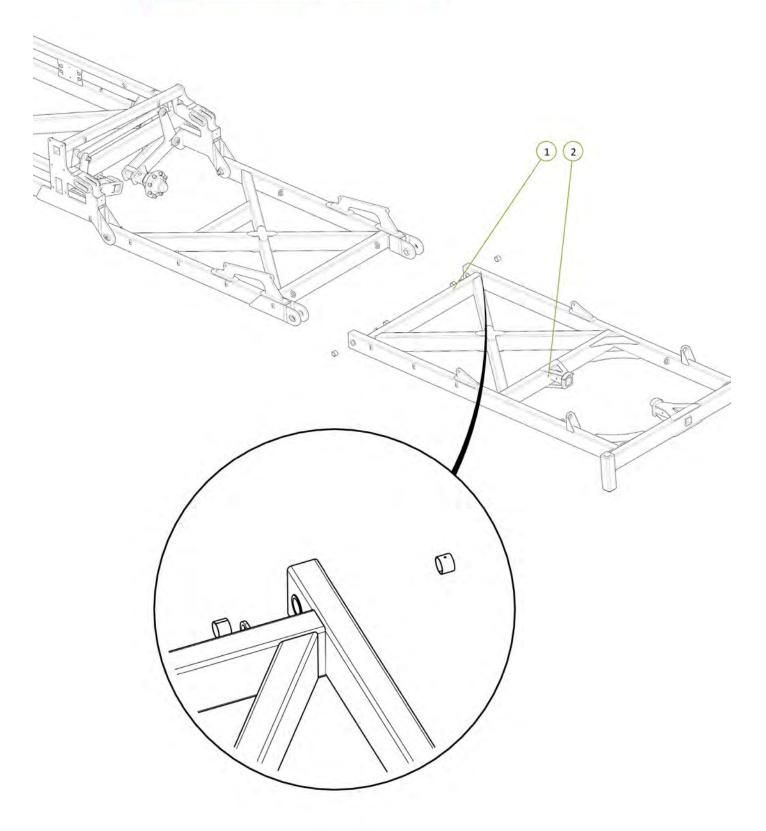


Item No.	Description	Qty	Number
1	62 HDX Outer Wing Left Drop Tube	1	1265-07EXL
2	62 HDX Outer Wing Right Drop Tube	1	1265-07EXR
3	M16 x 50 grade 8.8 zp Bolt	14	0211-1650
4	Nyloc Nut M16	14	0221-NYL16
5	Washer Flat M16	14	0231-F16

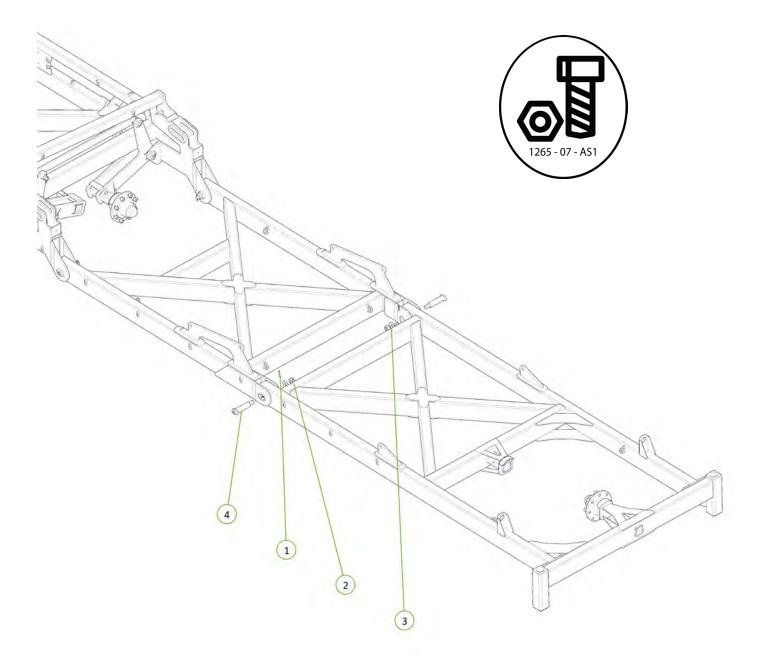


Please note this step is only required on machines outside of Australia

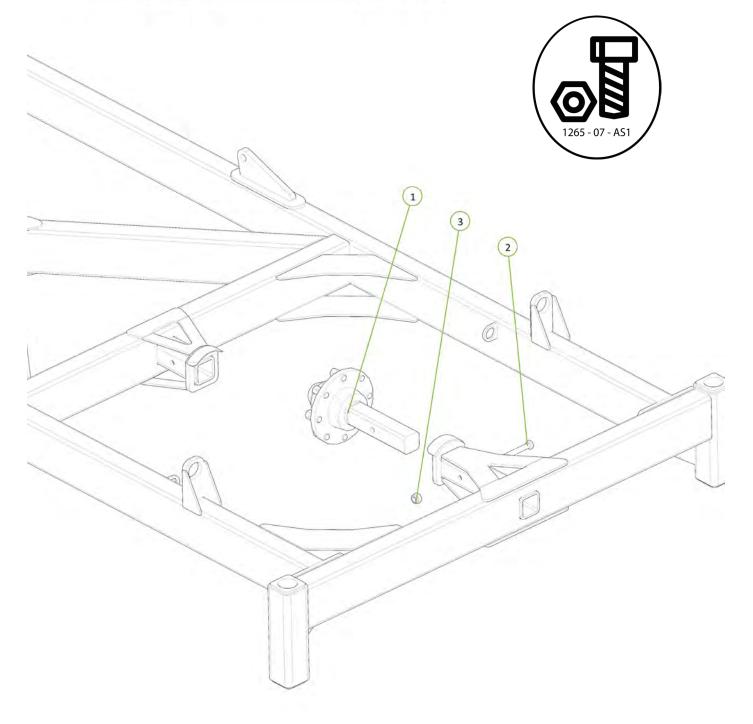
Item No.	Description	Qty	Number
1	50 ID x 40mm DX Bush	4	0113-MB 5040DX
2	62HDX LH Outer Wing	1	1265-07



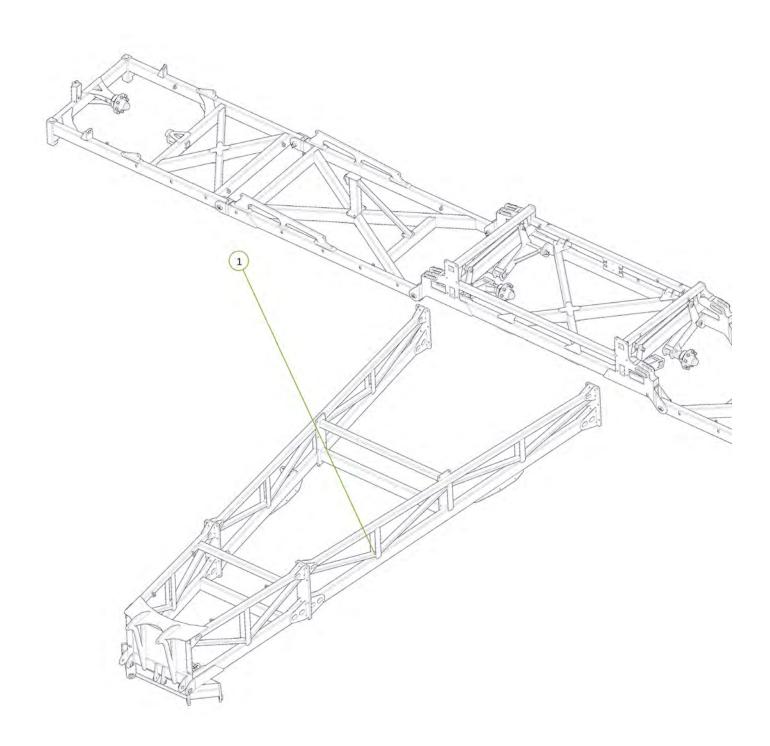
Item No.	Description	Qty	Number
1	Cotter Pin M6 x 50mm	2	0261-PINC650
2	Nyloc Nut M30	2	0221-NYL30
3	50mm Pivot Pin Retaining Washer	2	1200-60
4	Oval Head 50mm Short Pivot Pin	2	1202.06A

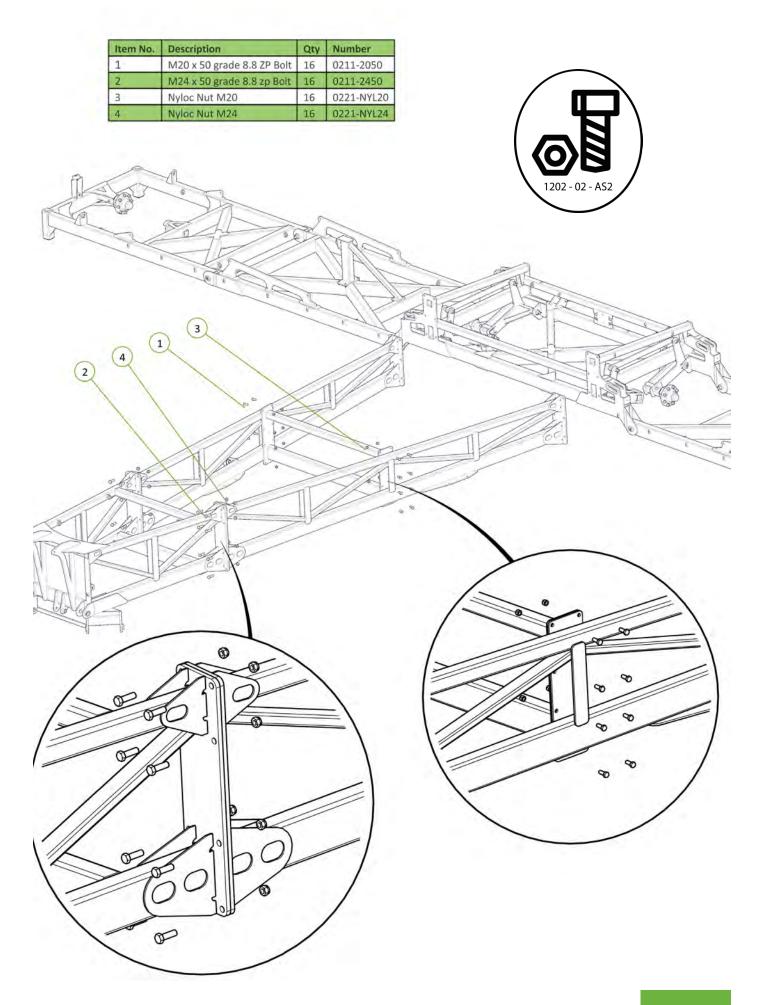


Item No.	Description	Qty	Number
1	90 Series Stub Axle (Stub and Hub Complete)	1	0733-90
2	M20 x 130 grade 8.8 ZP Bolt	1	0211-20130
3	Nyloc Nut M20	1	0221-NYL20

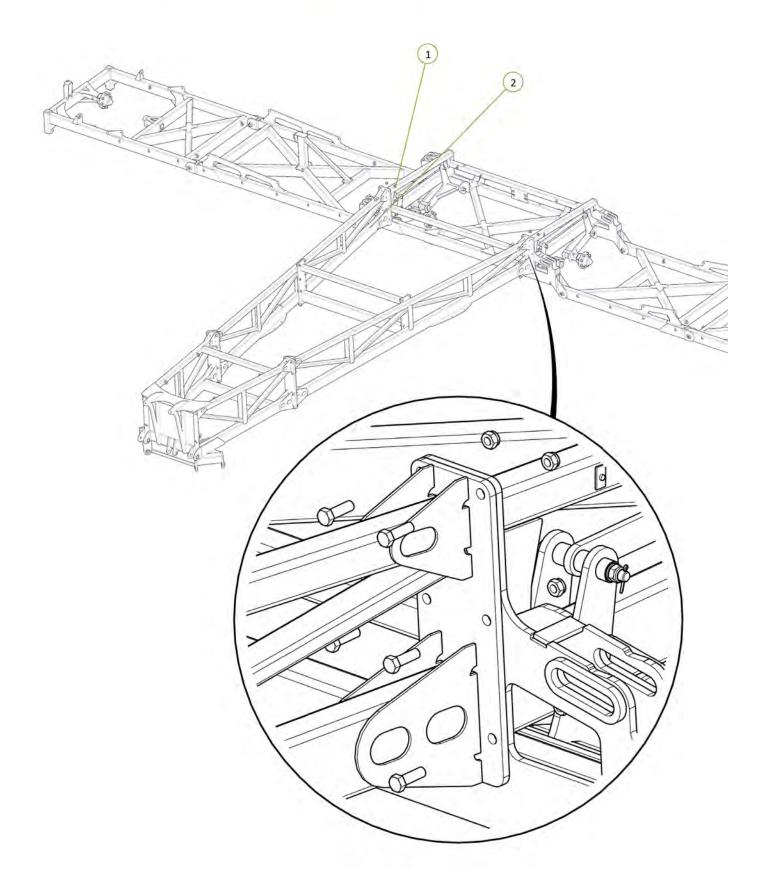


Item No.	Description	Qty	Number
1	62HDX Front A-Frame	1	1265-02

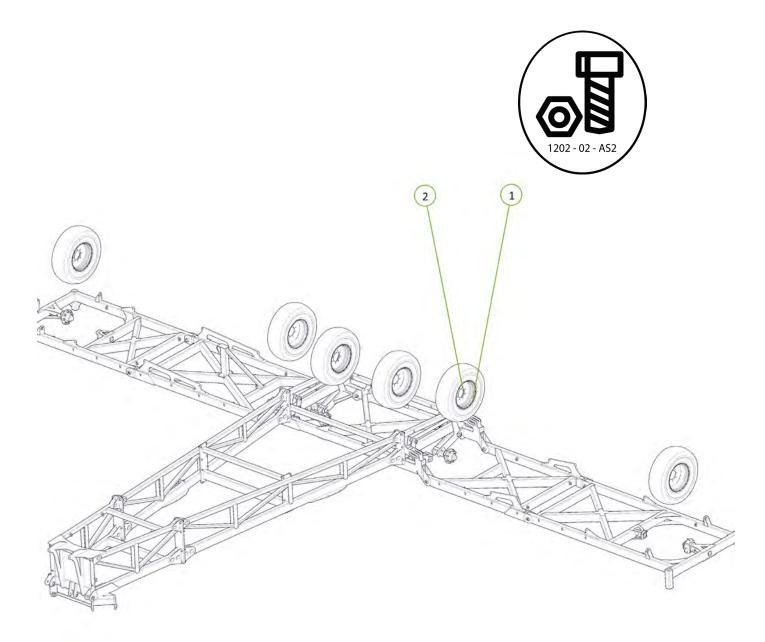




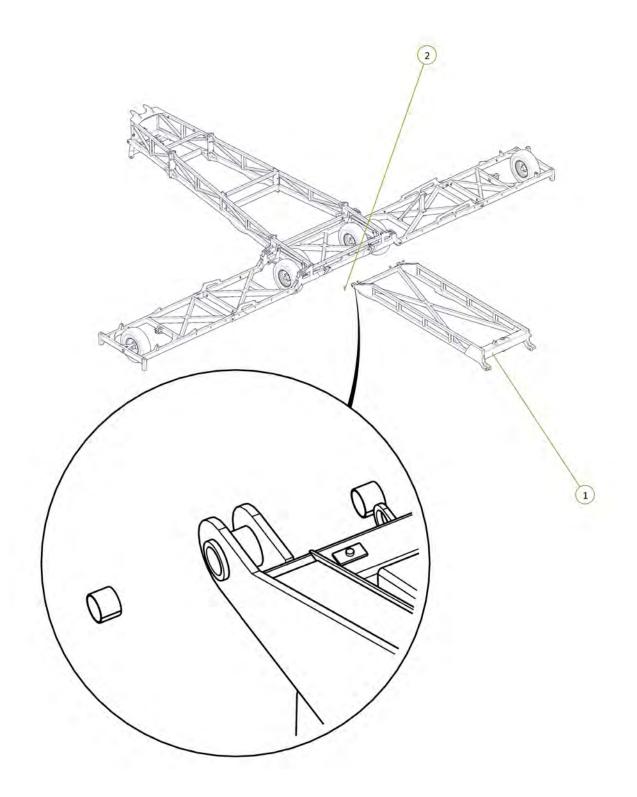
Item No.	Description	Qty	Number
1	Nyloc Nut M24	12	0221-NYL24
2	M24 x 75 grade 8.8 zp Bolt	12	0211-2475

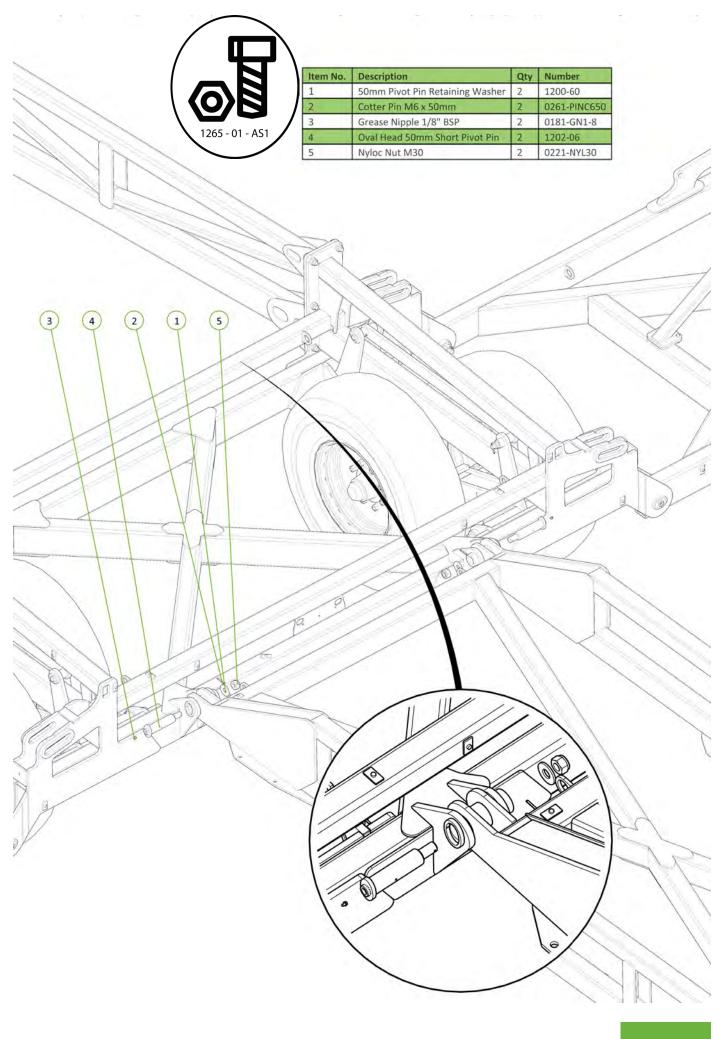


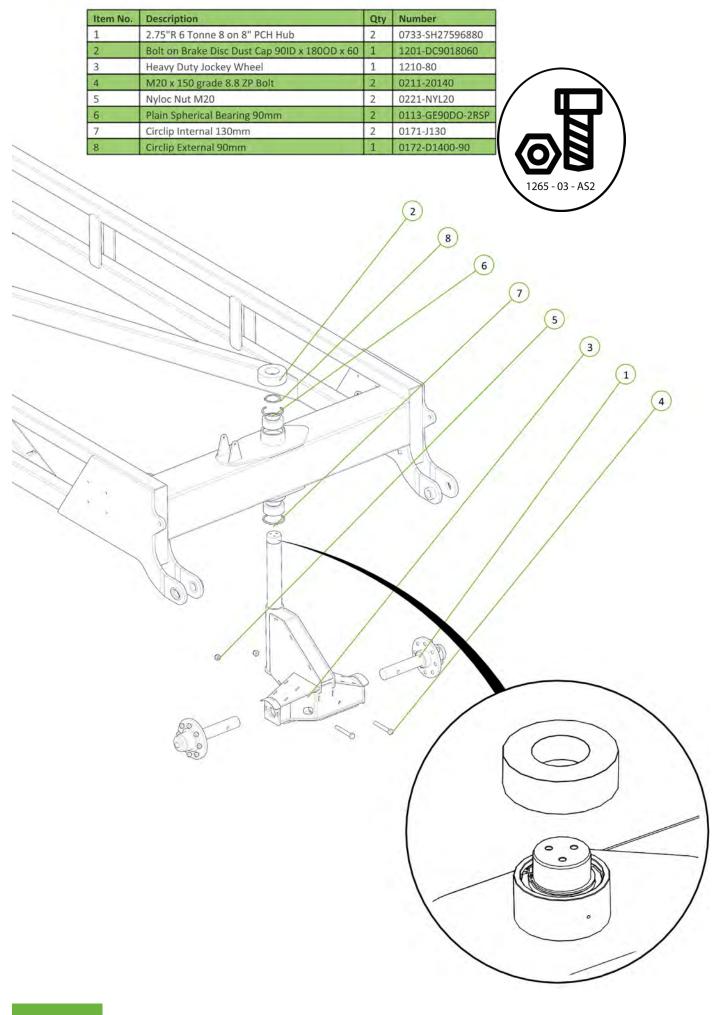
No.	Description	Qty	Number
	Tyre Only 15.5/80-24 16 PLY AS504	6	0711-15.5-80-24
	Rim Only 24"Diameter 12"Wide, 8 on 275 PCD, 221mm Bore,+20 Offset	6	0721-24X12

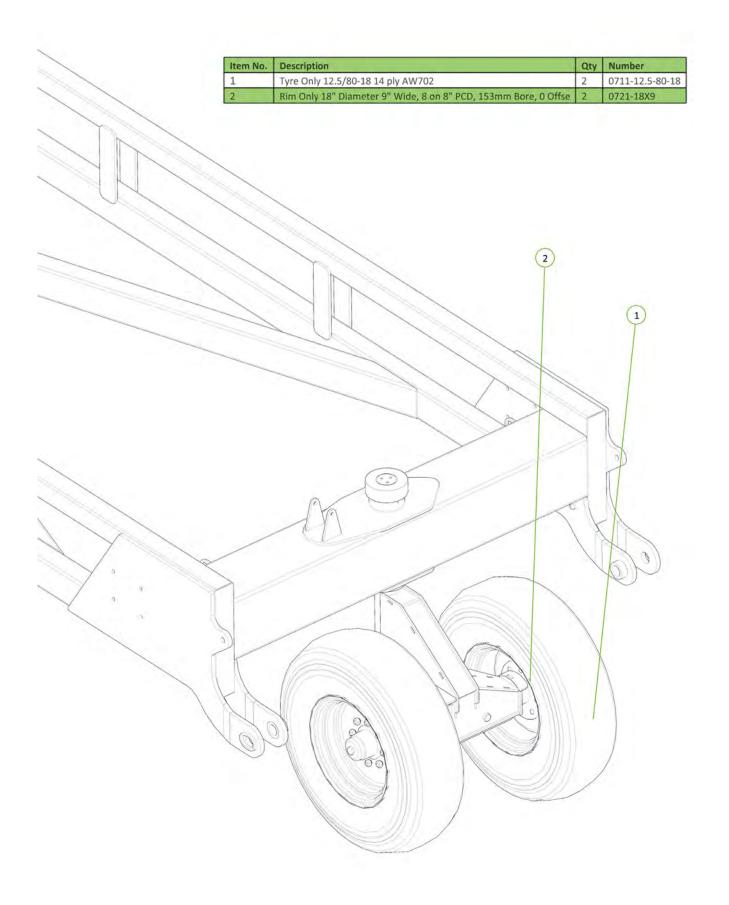


Item No.	Description	Qty	Number
1	62'HDX Rear A-Frame	1	1265-03
2	50 ID x 40mm DX Bush	4	0113-MB 5040DX

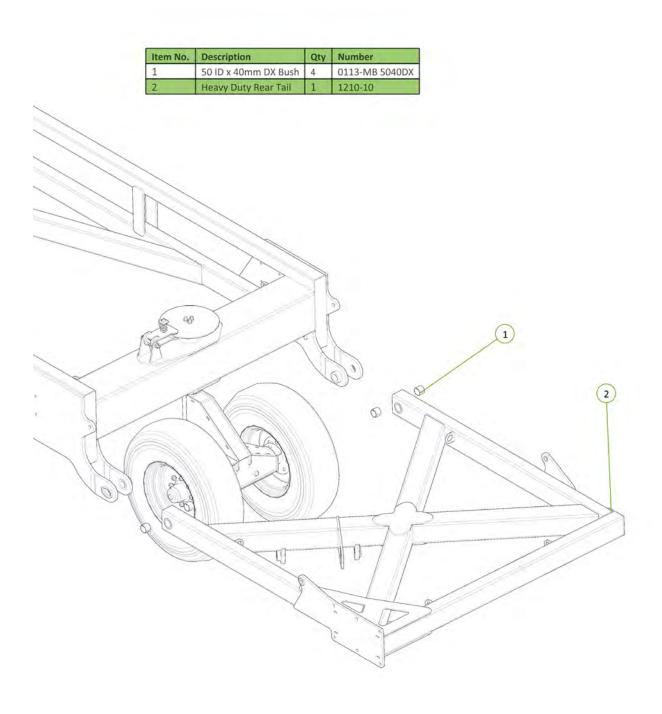


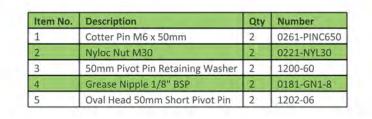






Item N	D. Description	in the second second	
		Qty	Number
	M16 x 150 grade 8.8 zp Bolt	2	0211-16150
2	Brake Disc	1	1600-405
3	Jockey Wheel Brake Caliper	1	0810-12CAL
5	Brake Compression Spring	1	0801-KE009
8	Washer Square M16 x 50 x 5	1	0231-SQ16505
9	M12 x 24 Wheel Bolt	3	0216-WB1224
10	Nyloc Nut M16	1	02210-WB1224 0221-NYL16
	9		55-03-A52
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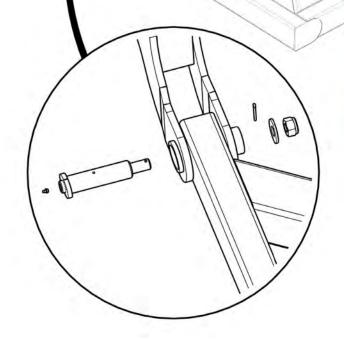


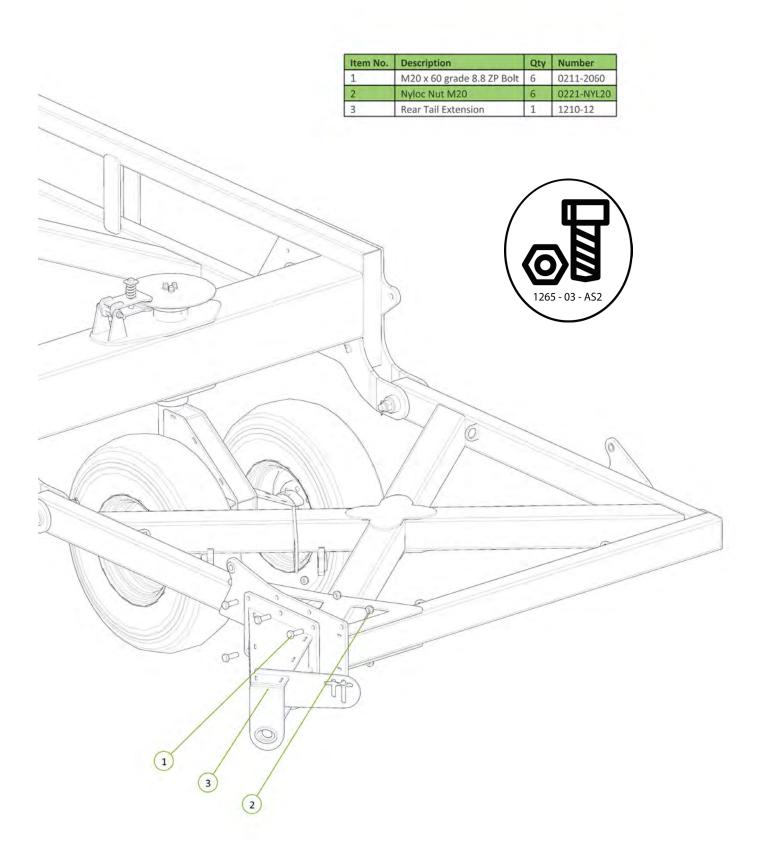
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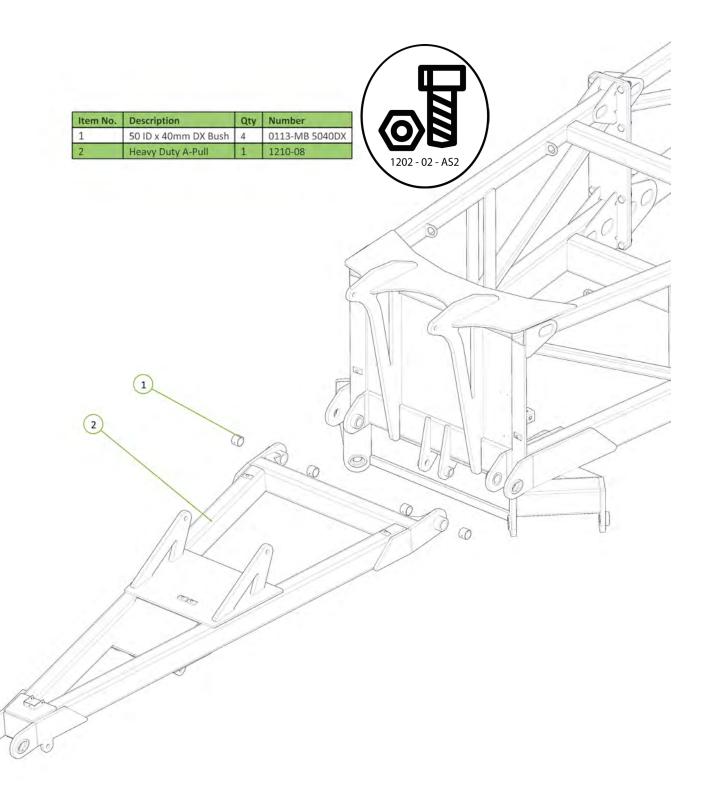
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Item No.	Description	Qty	Number
1	50mm Pivot Pin Retaining Washer	2	1200-60
2	Cotter Pin M6 x 50mm	2	0261-PINC650
3	Grease Nipple 1/8" BSP	2	0181-GN1-8
4	Oval Head 50mm Short Pivot Pin	2	1202-06
5	Nyloc Nut M30	2	0221-NYL30

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Item No.	Description	Qty	Number
1	Heavy Duty Drawbar Hitch	1	1210-09
2	50 ID x 60mm DX Bush	2	0113-MB 5060DX
3	Grease Nipple 1/8" BSP 90 deg	2	0181-GN1-890
4	2 3/4" Tow Hitch Bush	1	0801-KE-0905-1-D
5	Circlip External 105mm	1	0172-1400-105

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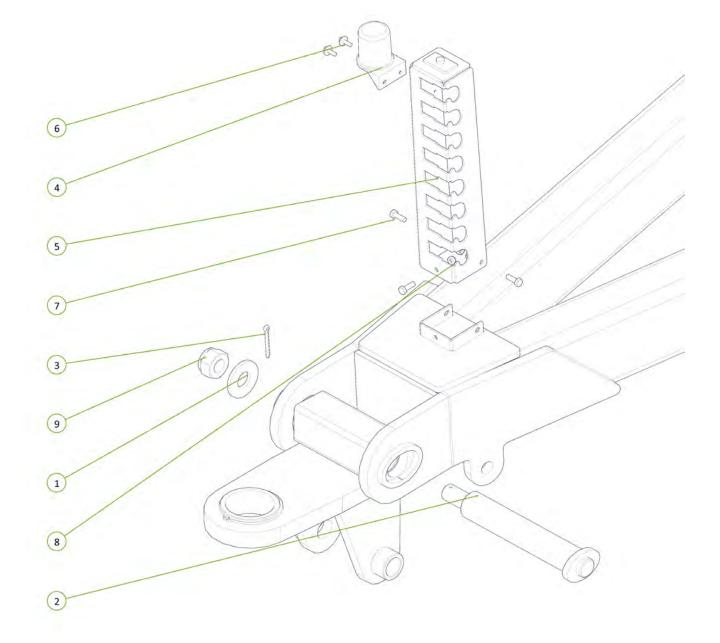
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Item No.	Description	Qty	Number
1	50mm Pivot Pin Retaining Washer	1	1200-60
2	50mm Tow Hitch Pivot Pin	1	1202-11
3	Cotter Pin M6 x 50mm	1	0261-PINC650
4	Electrical Plug Keeper	1	0416-11750B
5	Hose Post	1	0810-151
6	M6 x 20 Trilobe Self Tapping Screw	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

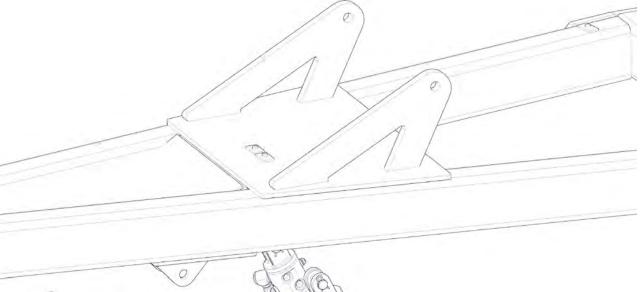


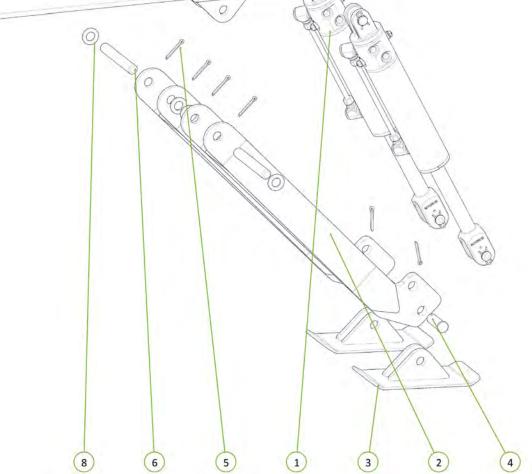


Item No.	Description	Qty	Number
1	3" Bore 8" Stroke NI Cylinder with Int DCBV Valve	2	0313-308SPOC-B
2	Hyd Jack Side Plate	4	1200-315
3	Hydraulic Jack Foot Plate	2	1200-305
4	Clevis Pin 25mm x 75mm	2	0801-KE0307-1
5	Cotter Pin M5 x 50	6	0261-PINC550
6	25mm Shaft 185mm Long	2	1201-44
8	Washer Flat M24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

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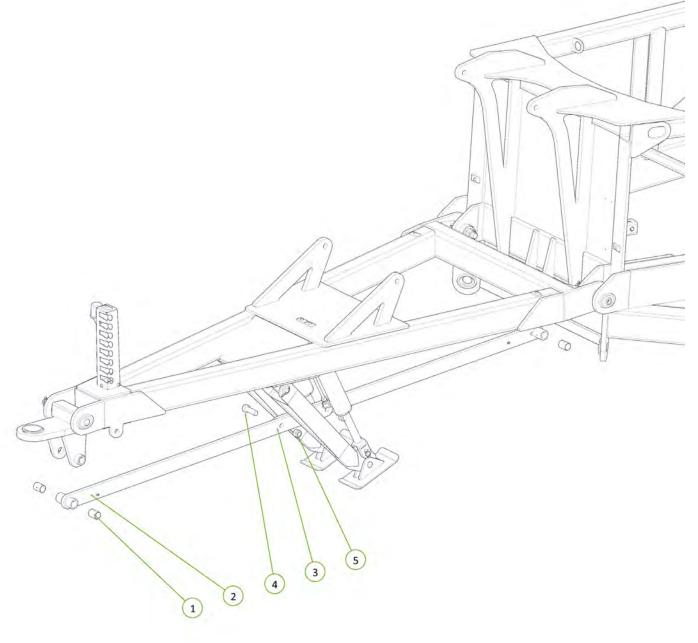






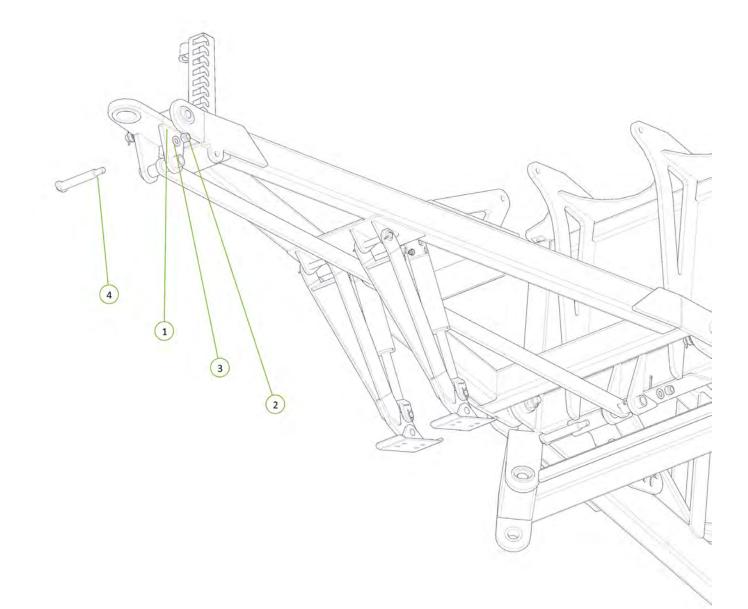
Item No.	Description	Qty	Number
1	35 ID x 50mm DX Bush	4	0113-MB 3550DX
2	Grease Nipple 1/4" UNF	4	0181-GN1-4
3	Parrallelogram Link Half	2	1210-22
4	M24 x 50 grade 8.8 zp Bolt	3	0211-2475
5	Nyloc Nut M24	3	0221-NYL24





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



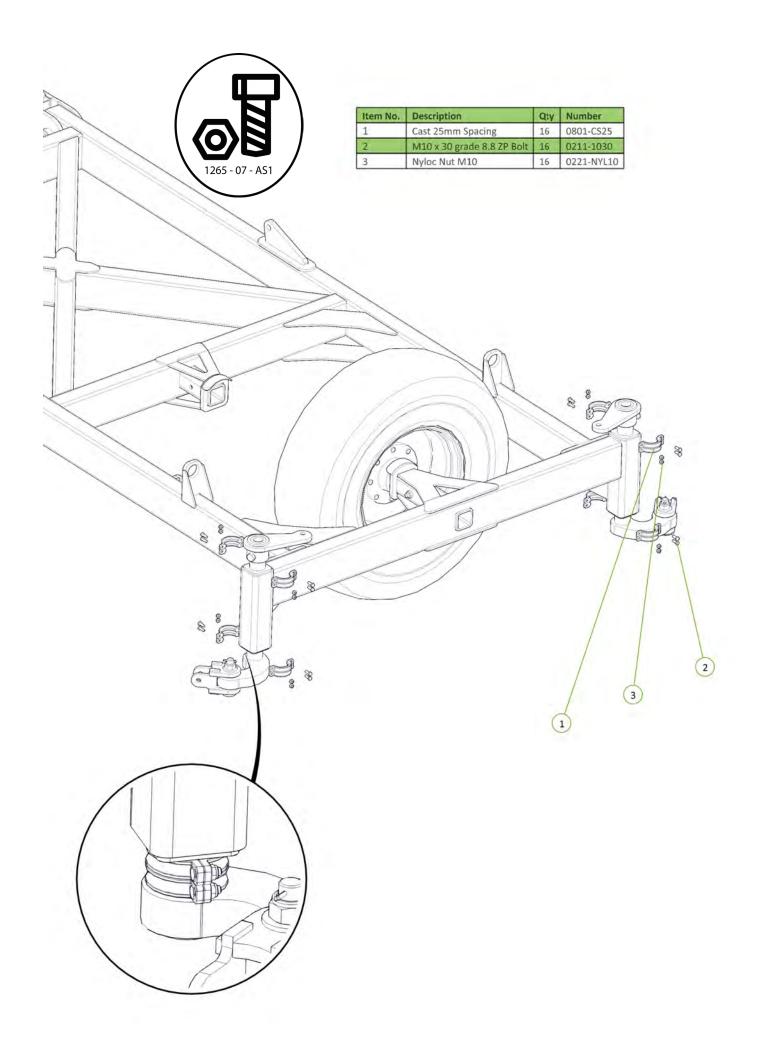


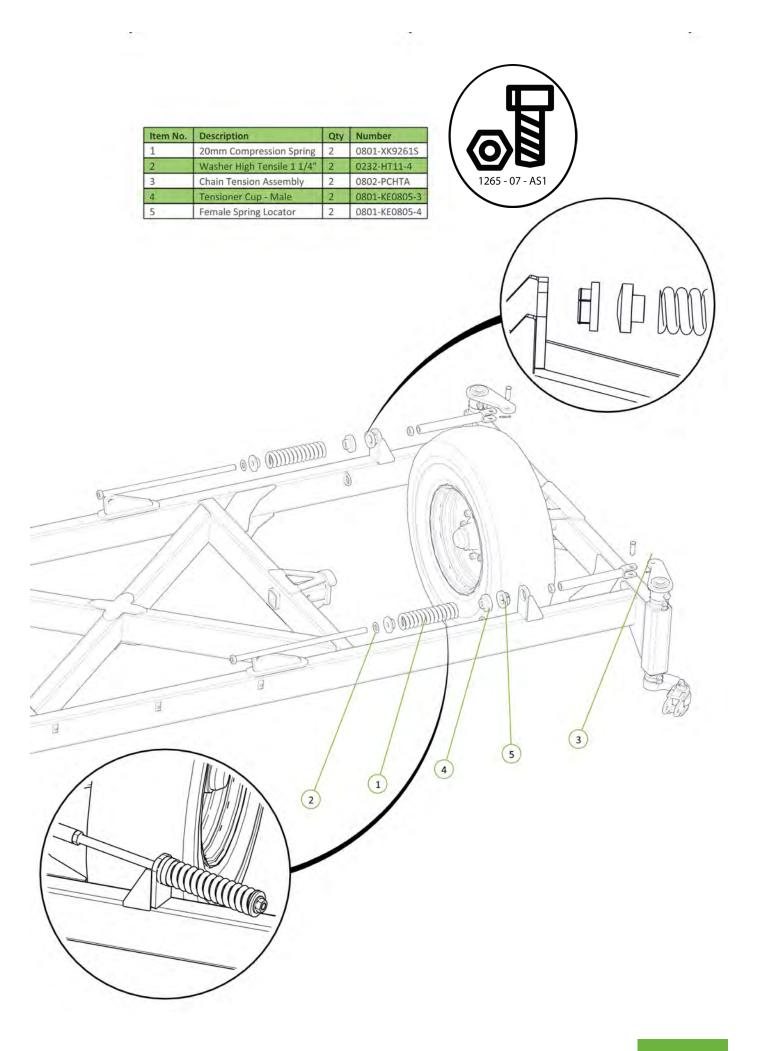


Item No.	Description	Qty	Number
1	Heavy Duty LH Drop Leg	1	1210-24
2	Heavy Duty RH Drop Leg	1	1210-25
3	PCHB553 Heavy Duty Mount Joint	2	1210-57
4	Nyloc Nut M24	2	0221-NYL24
5	M24 x 140 grade 8.8 zp Bolt	2	0211-24140
6	RH Chain Adjusting Lug	1	0810-27
7	LH Chain Adjusting Lug	1	0810-26
8	Oval Head Swivel Mount Pivot Pin	2	1202-15
9	Swivel Mount Pivot Bush	2	1201-16
10	50mm Pivot Pin Retaining Washer	2	1200-60
11	Cotter Pin M6 x 50mm	2	0261-PINC550
12	Nyloc Nut M30	2	0221-NYL

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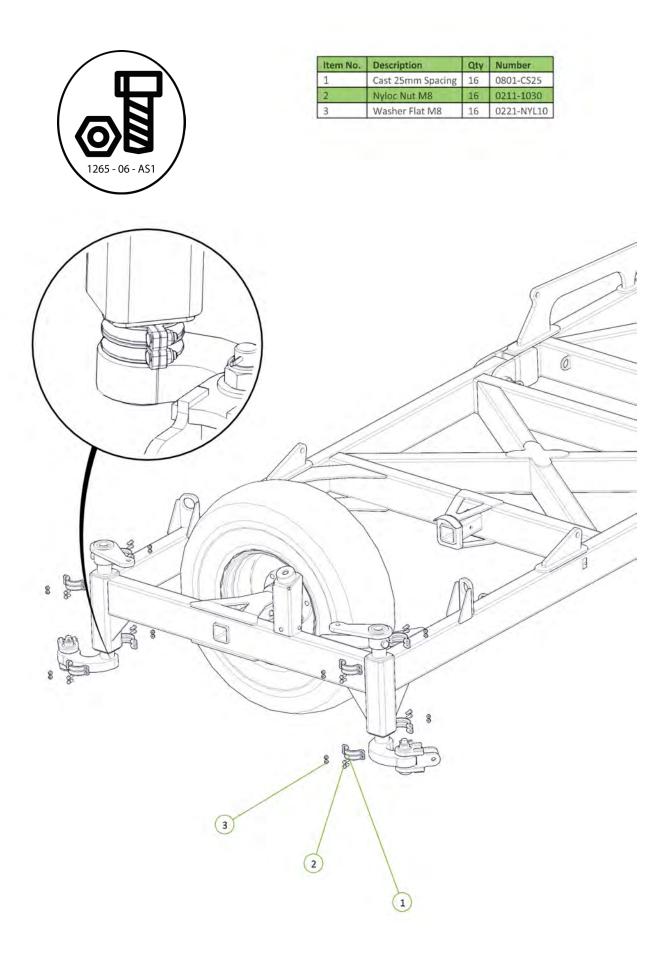


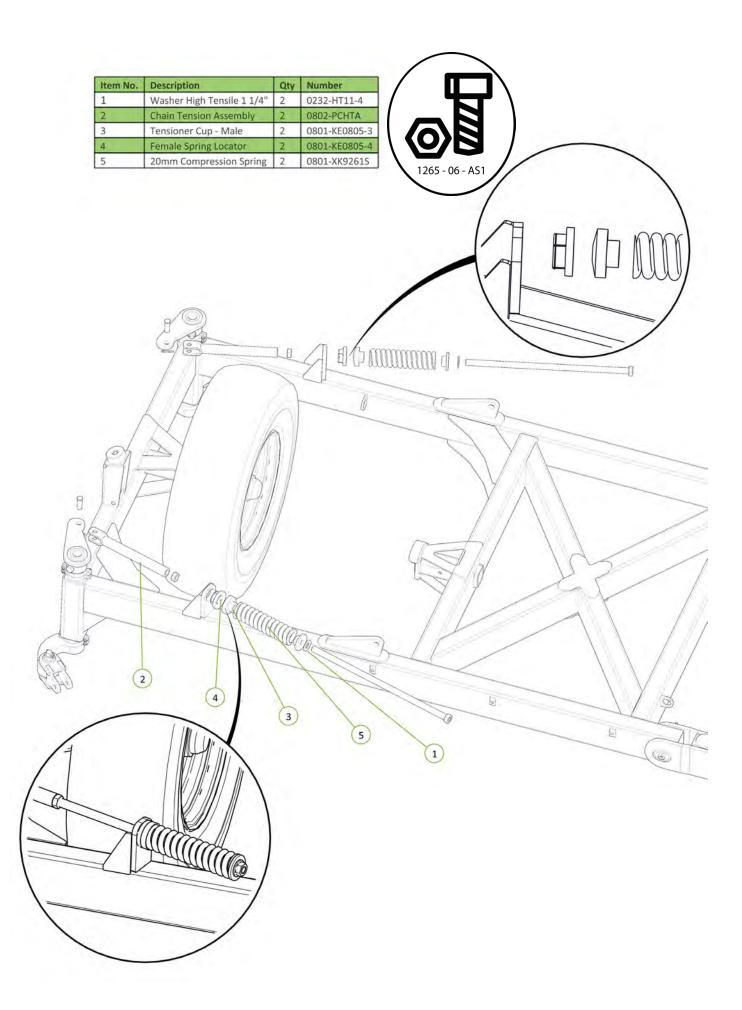


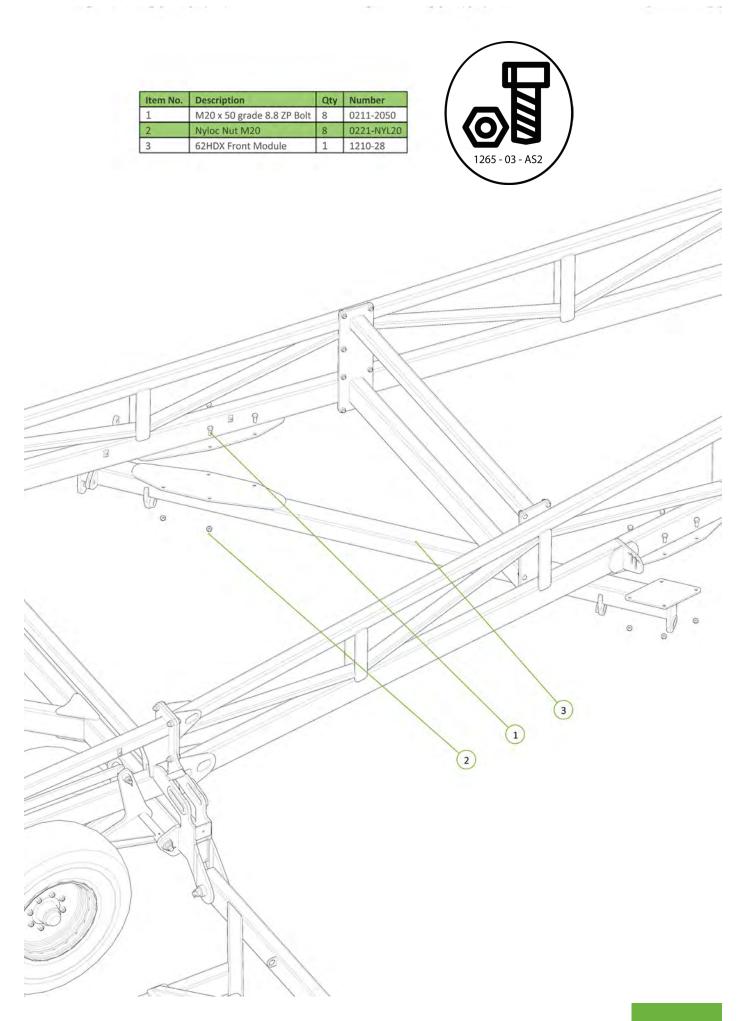
Item No.	Description	Qty	Number
1	50mm Pivot Pin Retaining Washer	2	1200-60
2	RH Chain Adjusting Lug	1	0810-27
3	Cotter Pin M5 x 50	2	0261-PINC550
4	Nyloc Nut M30	2	0221-NYL30
5	LH Chain Adjusting Lug	1	0810-26
6	Heavy Duty RH Drop Leg	1	1210-25
7	M24 x 140 grade 8.8 zp Bolt	2	0211-24140
8	Oval Head 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	Nyloc Nut M24	2	0221-NYL24
12	Heavy Duty LH Drop Leg	1	1210-24



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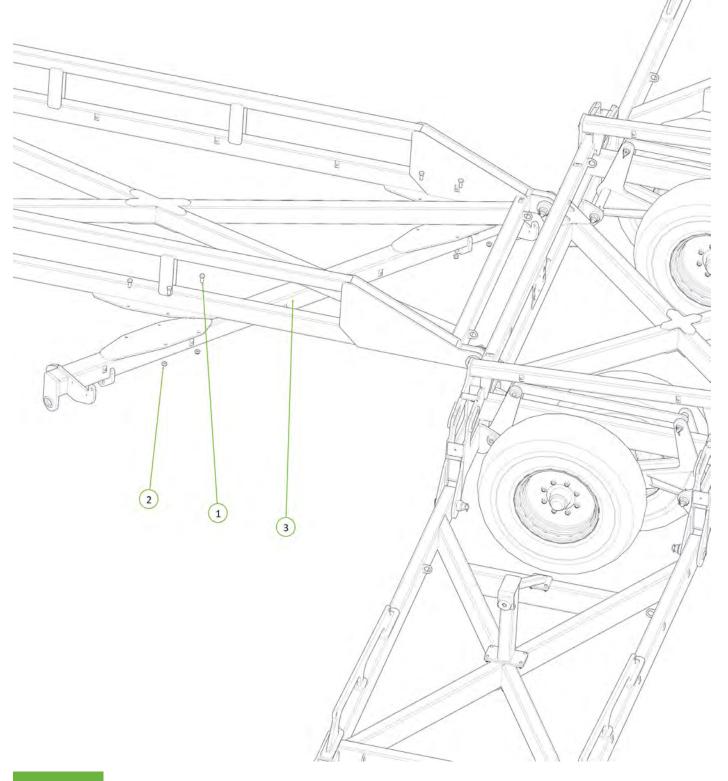


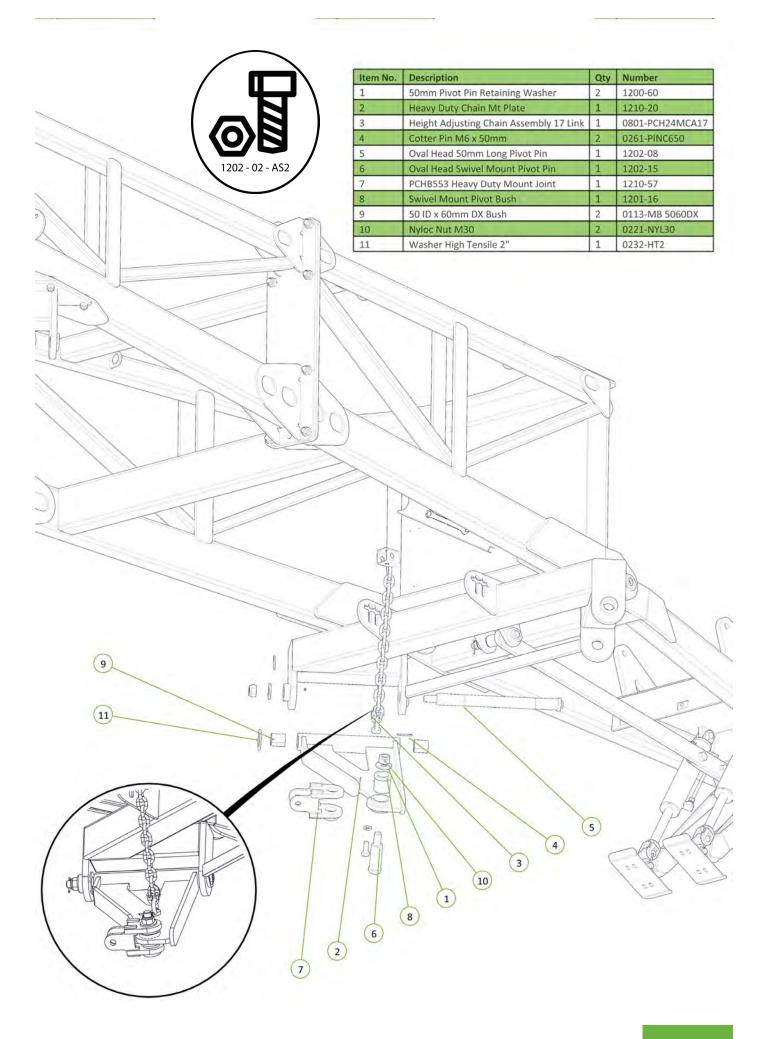


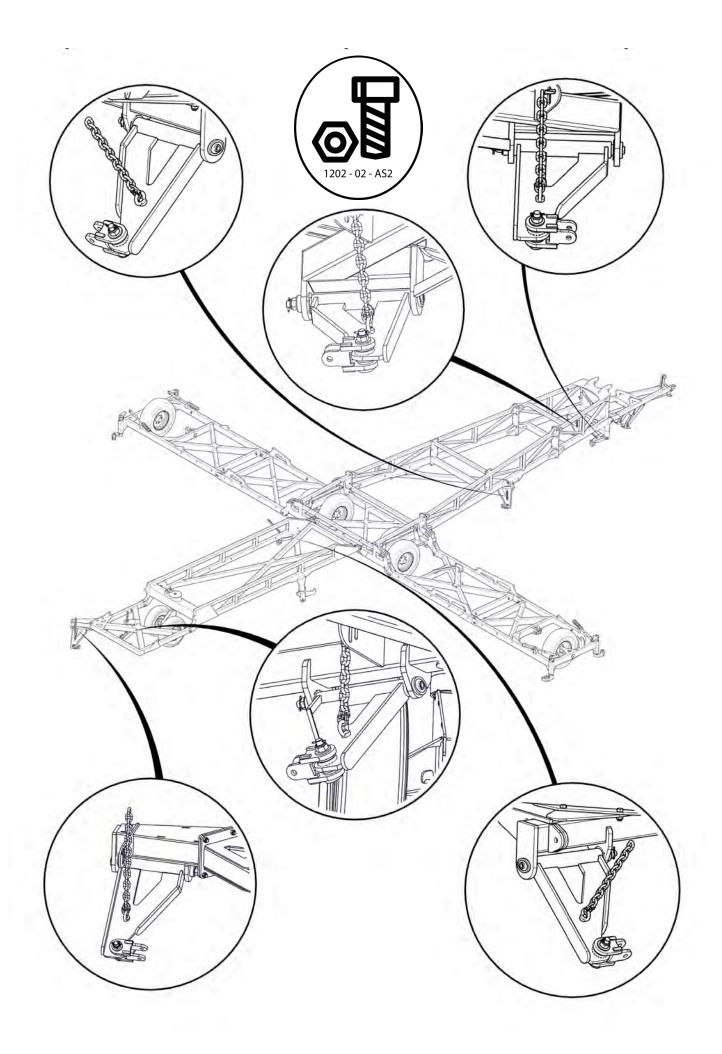


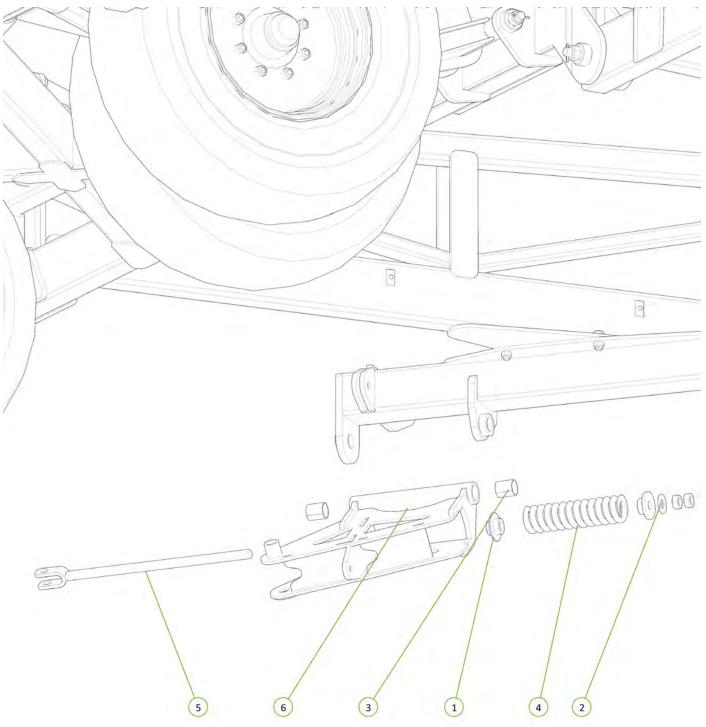


Item No.	Description	Qty	Number
1	M20 x 50 grade 8.8 ZP Bolt	8	0211-2050
2	Nyloc Nut M20	8	0221-NYL20
3	62HDX Rear Module	1	1210-29



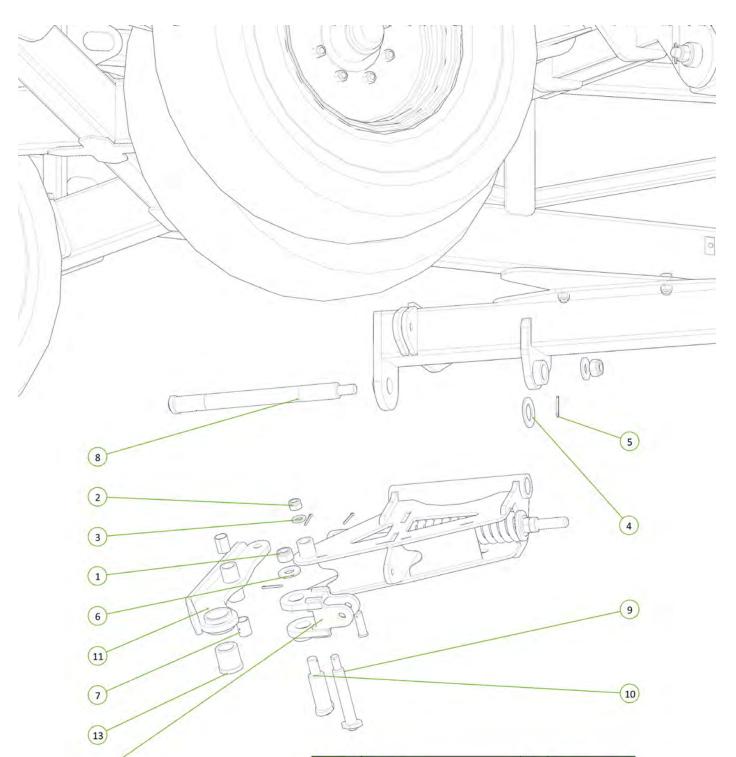






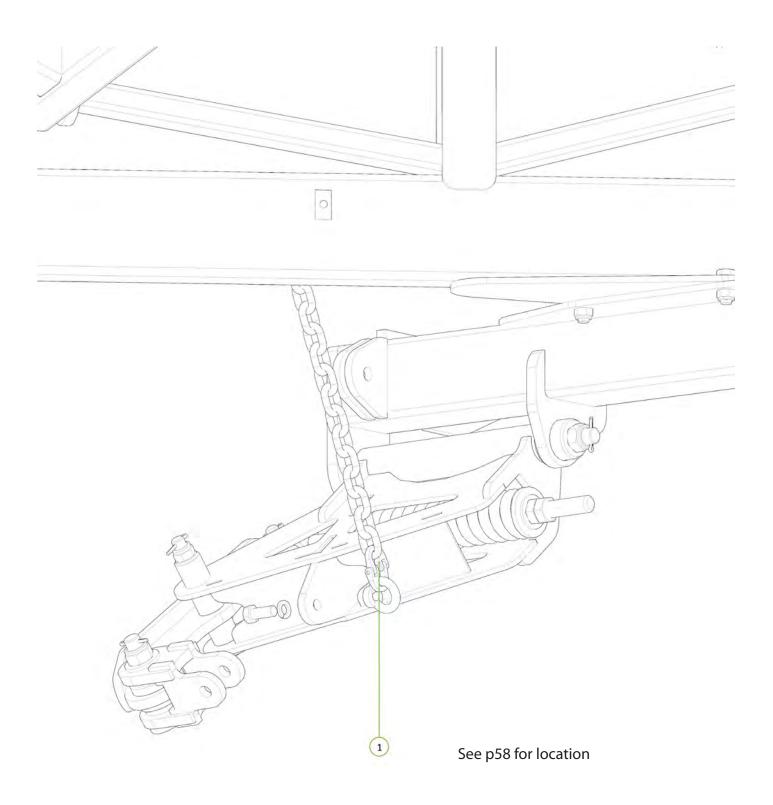
See p58 for location

Item No.	Description	Qty	Number
1	Rigid Spring Locator	1	0801-10-S2L
2	Washer High Tensile 1 1/4"	1	0232-HT11-4
3	50 ID x 60mm DX Bush	2	0113-MB 5060DX
4	20mm Compression Spring	1	0801-XK9261S
5	Module Tension Linkage	1	0810-105A
6	Left Hand Chain Tension Box	1	1210-103

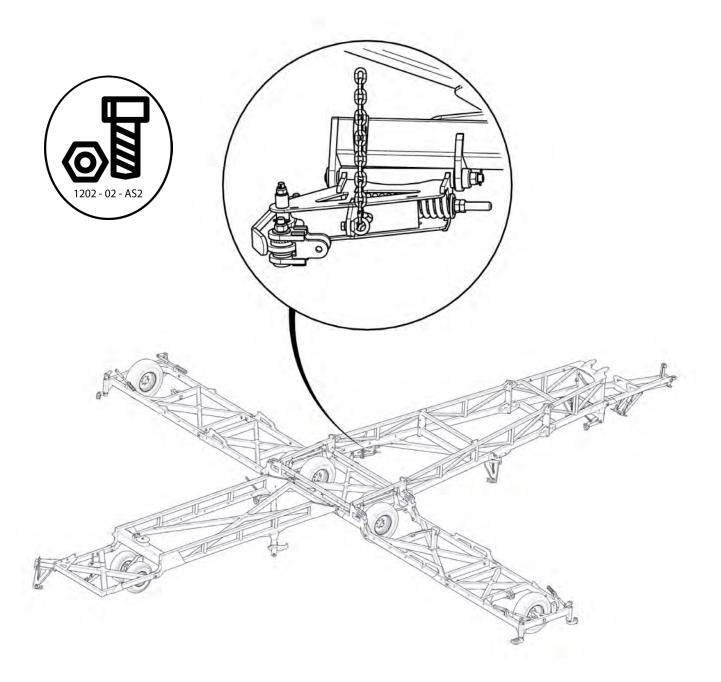


See p58 for location

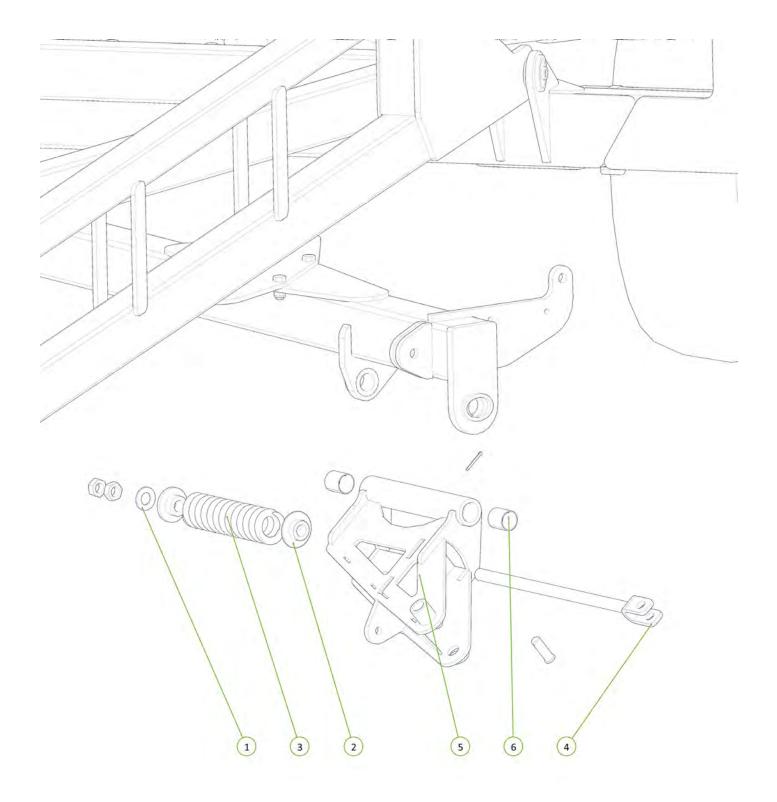
Item No.	Description	Qty	Number
1	Nyloc Nut M30	2	0221-NYL30
2	Nyloc Nut M24	1	0221-NYL24
3	Washer Flat M24	1	0231-F24
4	Washer High Tensile 2"	1	0232-HT2
5	Cotter Pin M6 x 50mm	3	0261-PINC650
6	50mm Pivot Pin Retaining Washer	2	1200-60
7	35 ID x 50mm DX Bush	2	0113-MB 3550DX
8	Oval Head 50mm Long Pivot Pin	1	1202-08
9	Oval Head 35mm Pivot Pin	1	1202-09
10	Oval Head Swivel Mount Pivot Pin	1	1202-15
11	Chain Tension Arm	1	1210-104
12	PCHB553 Heavy Duty Mount Joint	1	1210-57
13	Swivel Mount Pivot Bush	1	1201-16



Item No.	Description	Qty	Number
1	Height Adjusting Chain Assembly 17 Link	1	0801-PCH24MCA17

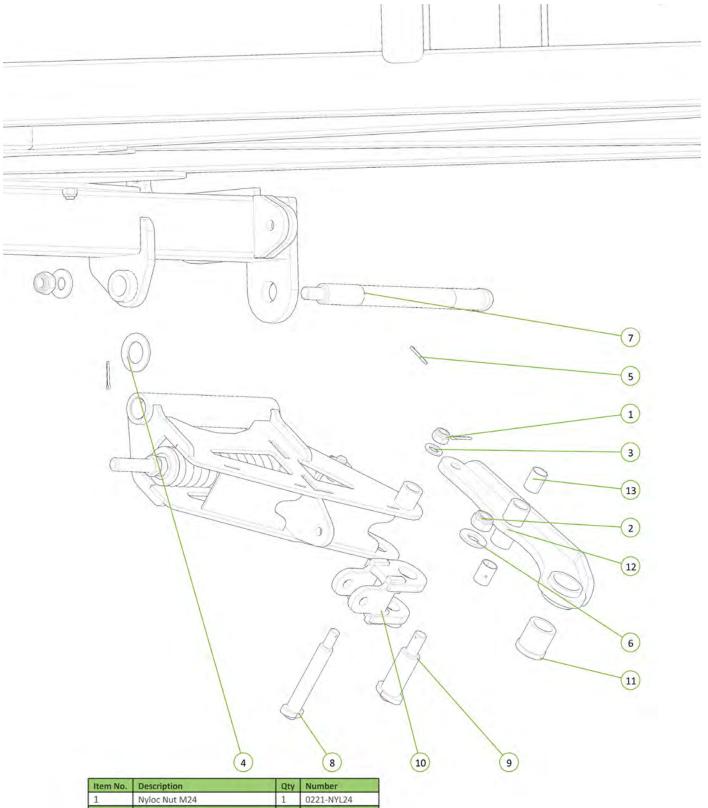






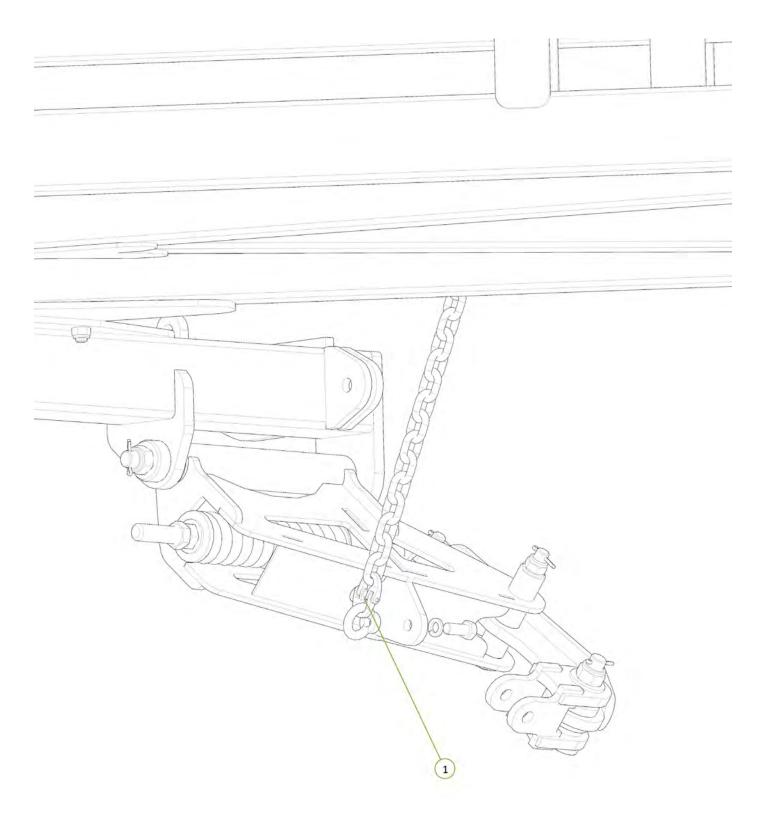
Item No.	Description	Qty	Number	
1	Washer High Tensile 1 1/4"	1	0232-HT11-4	
2	Rigid Spring Locator	1	0801-10-S2L	
3	20mm Compression Spring	1	0801-XK9261S	
4	Module Tension Linkage	1	0810-105A	
5	Right Hand Chain Tension Box	1	1210-102	
6	50 ID x 60mm DX Bush	2	0113-MB 5060DX	

See p62 for location



Item No.	Description	Qty	Number
1	Nyloc Nut M24	1	0221-NYL24
2	Nyloc Nut M30	2	0221-NYL30
3	Washer Flat M24	1	0231-F24
4	Washer High Tensile 2"	1	0232-HT2
5	Cotter Pin M6 x 50mm	3	0261-PINC650
6	50mm Pivot Pin Retaining Washer	2	1200-60
7	Oval Head 50mm Long Pivot Pin	1	1202-08
8	Oval Head 35mm Pivot Pin	1	1202-09
9	Oval Head Swivel Mount Pivot Pin	1	1202-15
10	PCHB553 Heavy Duty Mount Joint	1	1210-57
11	Swivel Mount Pivot Bush	1	1201-16
12	Chain Tension Arm	1	1210-104
13	35 ID x 50mm DX Bush	2	0113-MB 3550DX

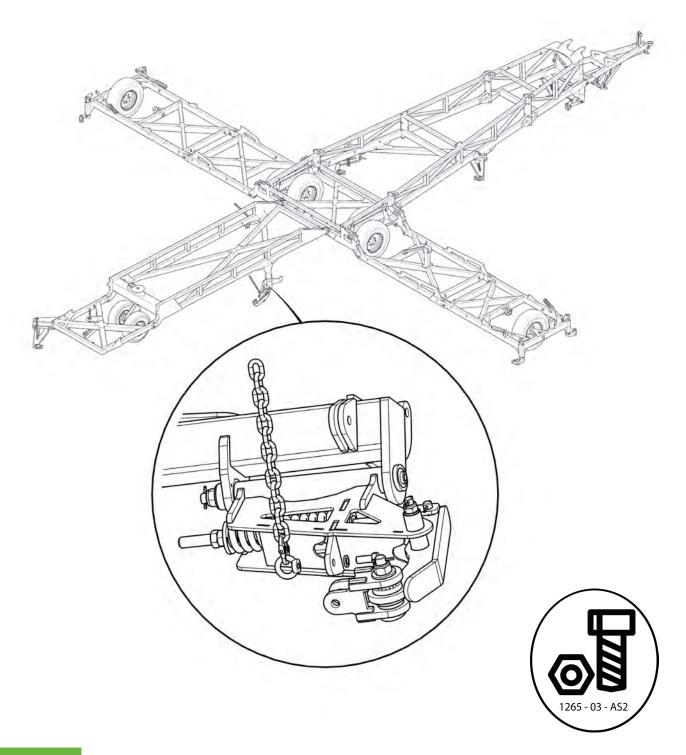
See p62 for location

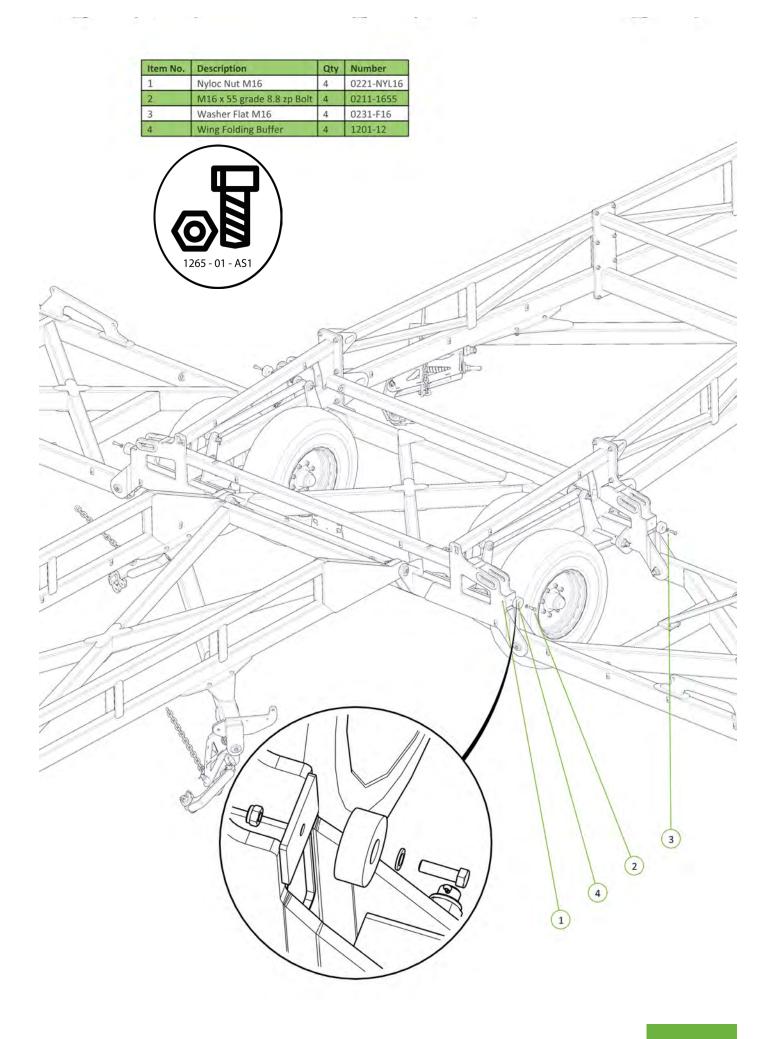


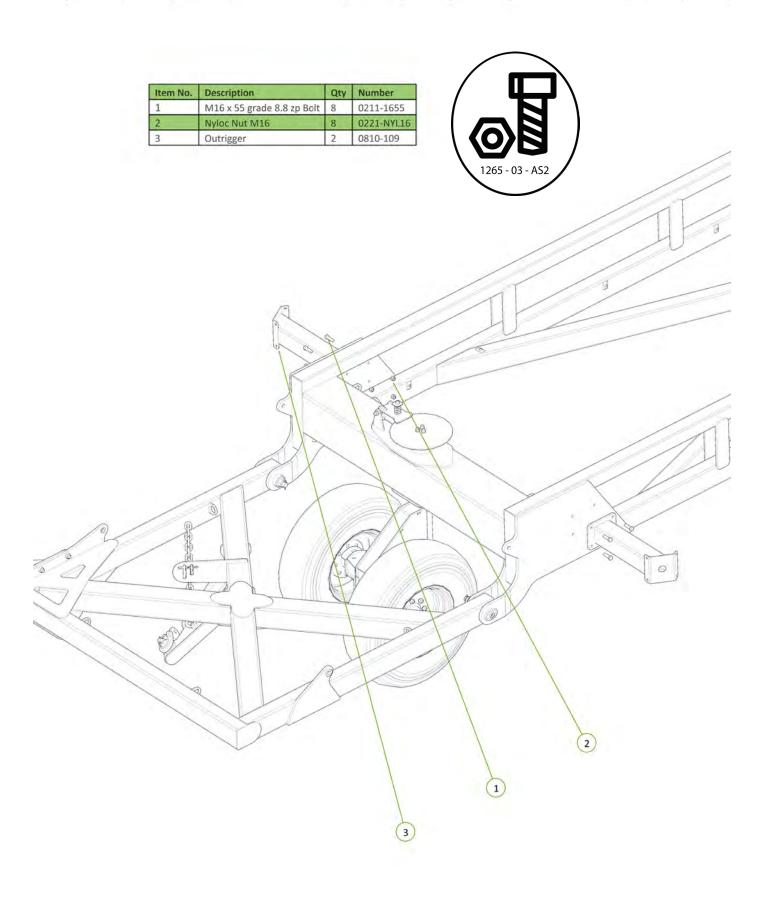
See p62 for location

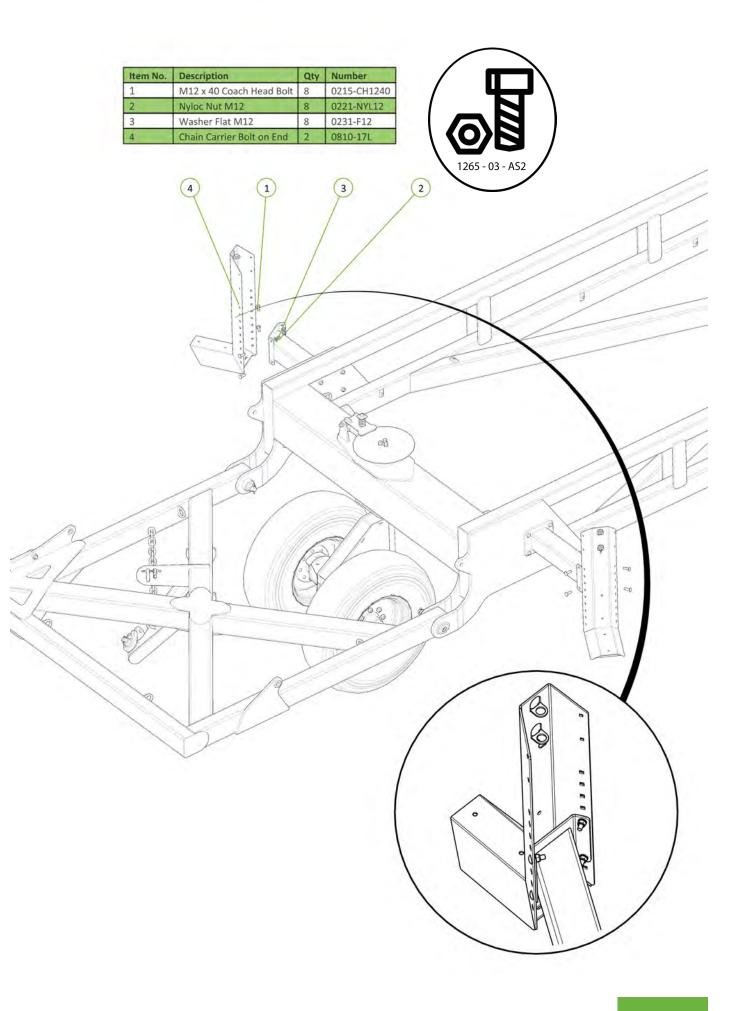
Item No.	Description	Qty	Number
1	Height Adjusting Chain Assembly 17 Link	1	0801-PCH24MCA17



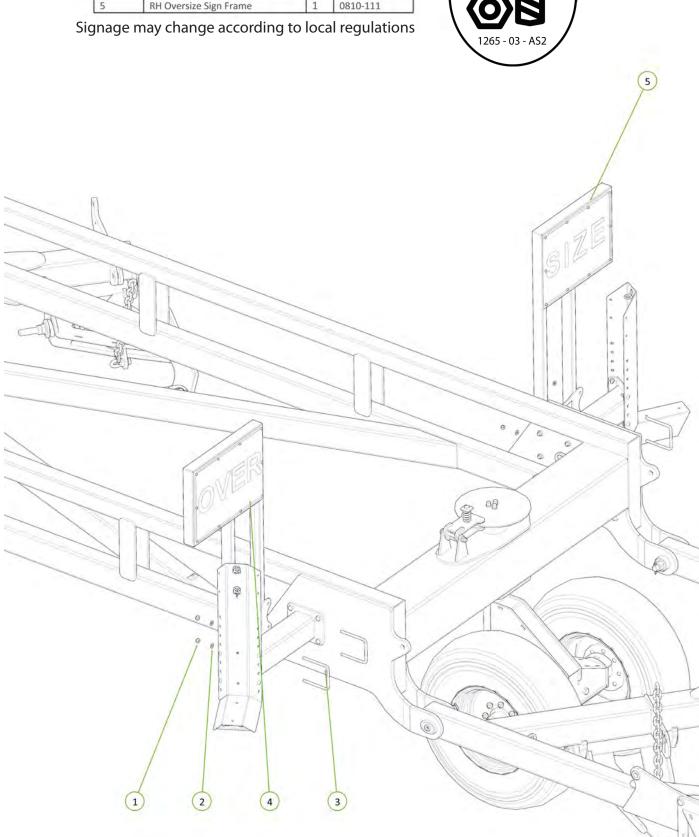




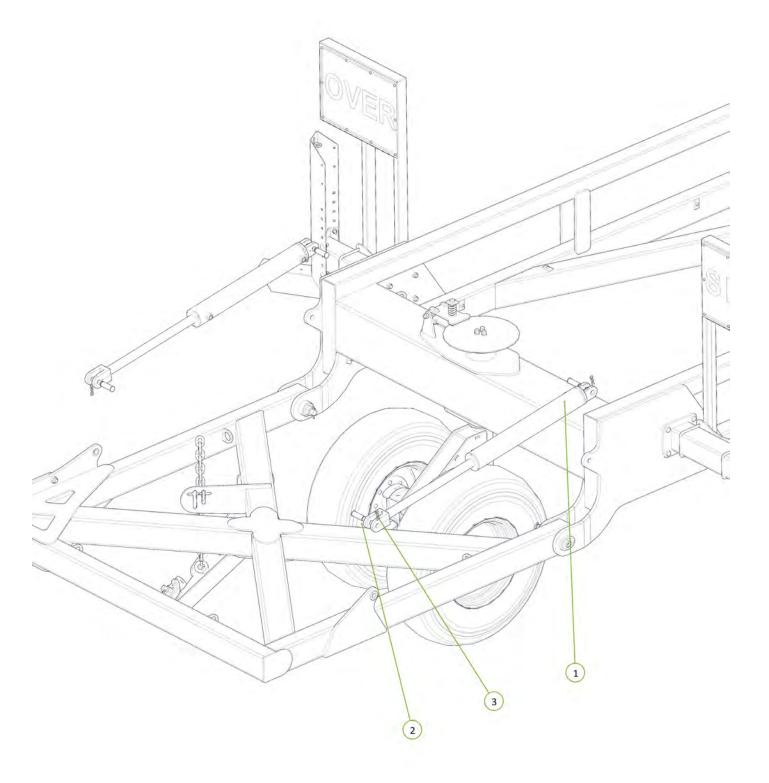




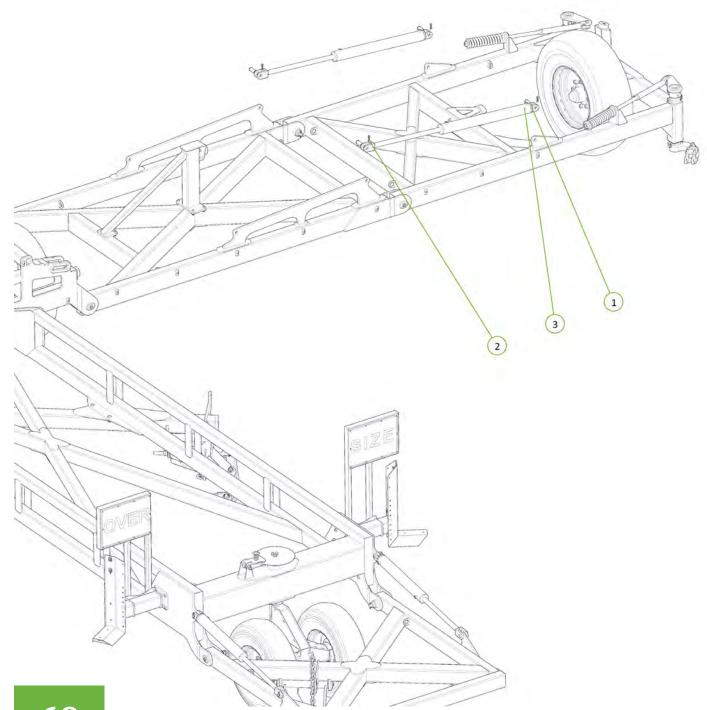
Item No.	Description	Qty	Number
1	Nyloc Nut M12	8	0221-NYL12
2	Washer Flat M12	8	0231-F12
3	U-Bolt M12 x 155 Deep x 127 Wide	4	0271-12155127
4	LH Oversize Sign Frame	1	0810-110
5	RH Oversize Sign Frame	1	0810-111



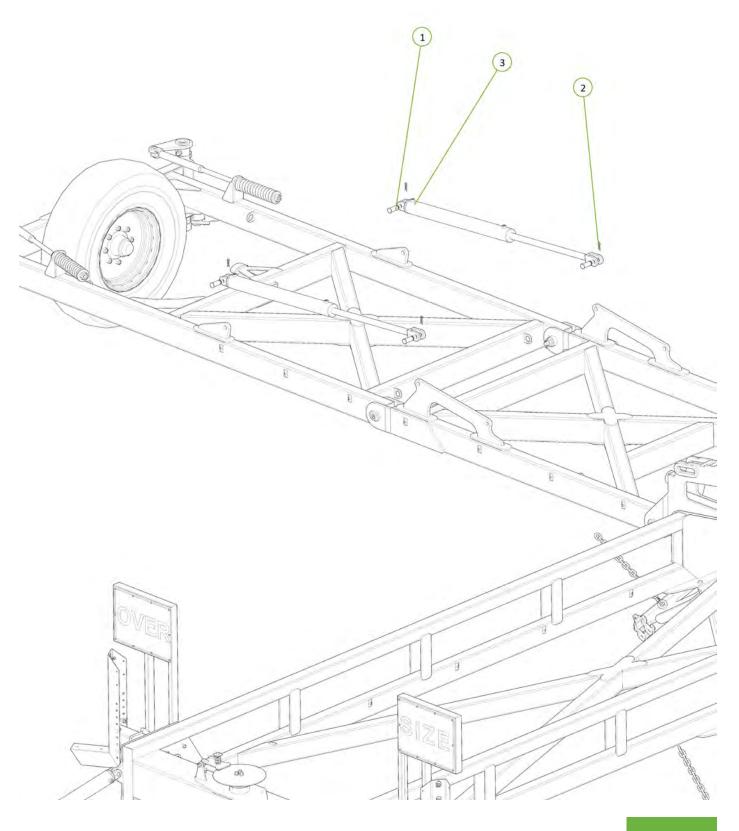
Item No.	Description	Qty	Number
1	3.5" Bore 24" Stroke 1.75" Rod Hydraulic Cylinder	2	0313-3524SP-B
2	Hydraulic Cylinder Pin 1" x 75mm	4	0313-NCP1X75
3	R Clip 3mm	4	0511-RCLIP3

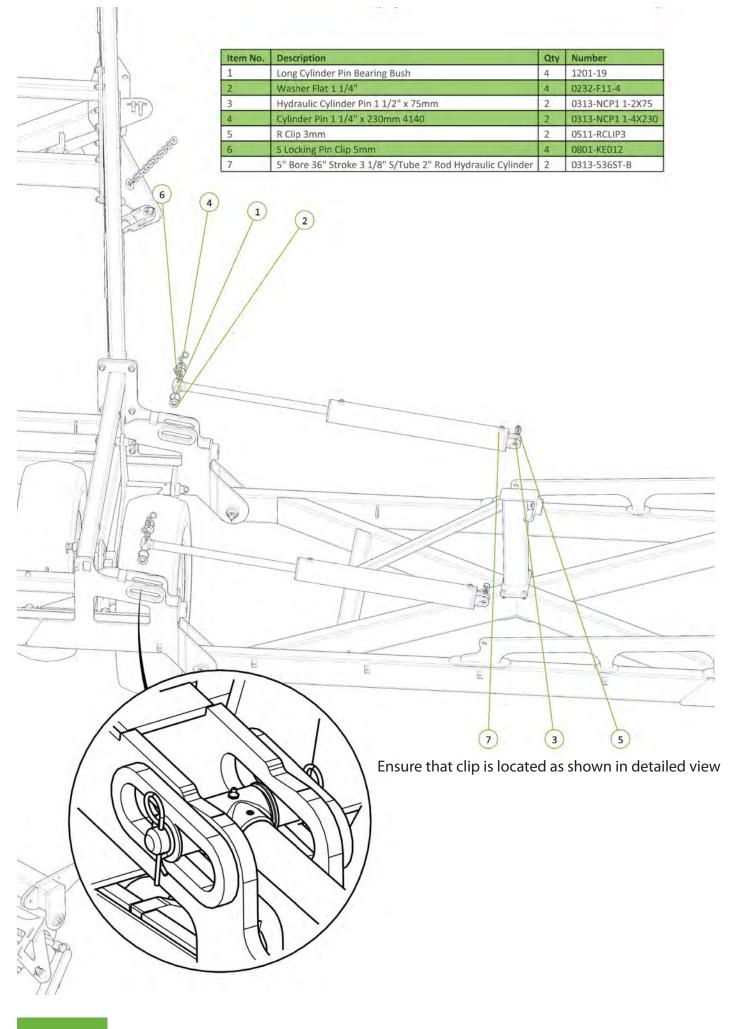


Item No.	Description	Qty	Number
1	Hydraulic Cylinder Pin 1 1/2" x 75mm	4	0313-NCP1 1-2X75
2	R Clip 3mm	4	0511-RCLIP3
3	3.5" Bore 32" Stroke 4" S/Tube 1.75" Rod Hydraulic Cylinder	2	0313-3532ST-B



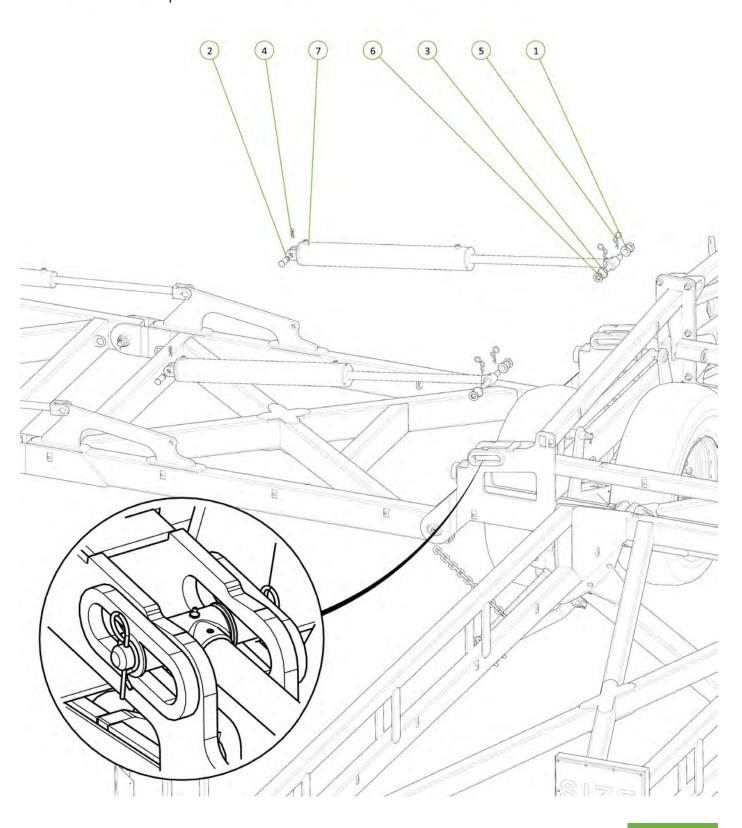
Item No.	Description	Qty	Number
1	Hydraulic Cylinder Pin 1 1/2" x 75mm	4	0313-NCP1 1-2X75
2	R Clip 3mm	4	0511-RCLIP3
3	3.5" Bore 32" Stroke 4" S/Tube 1.75" Rod Hydraulic Cylinder	2	0313-3532ST-B



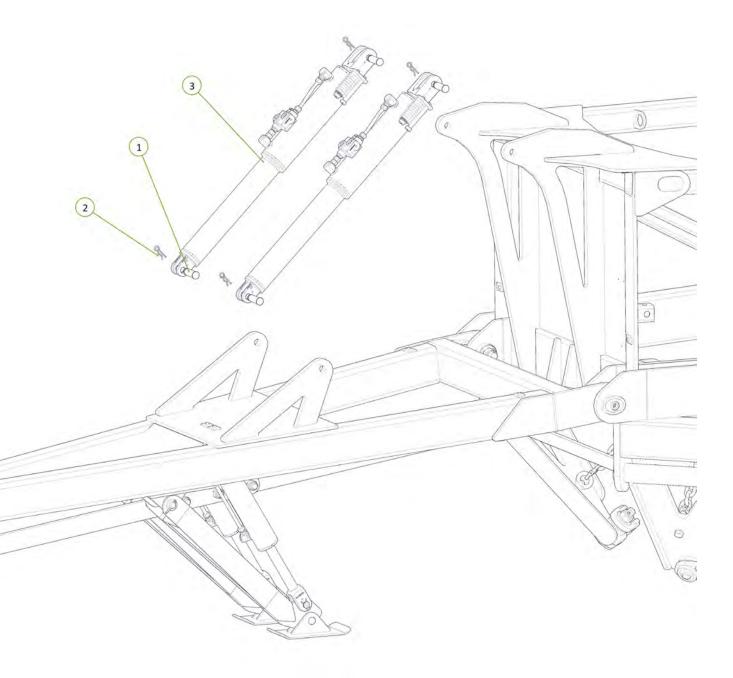


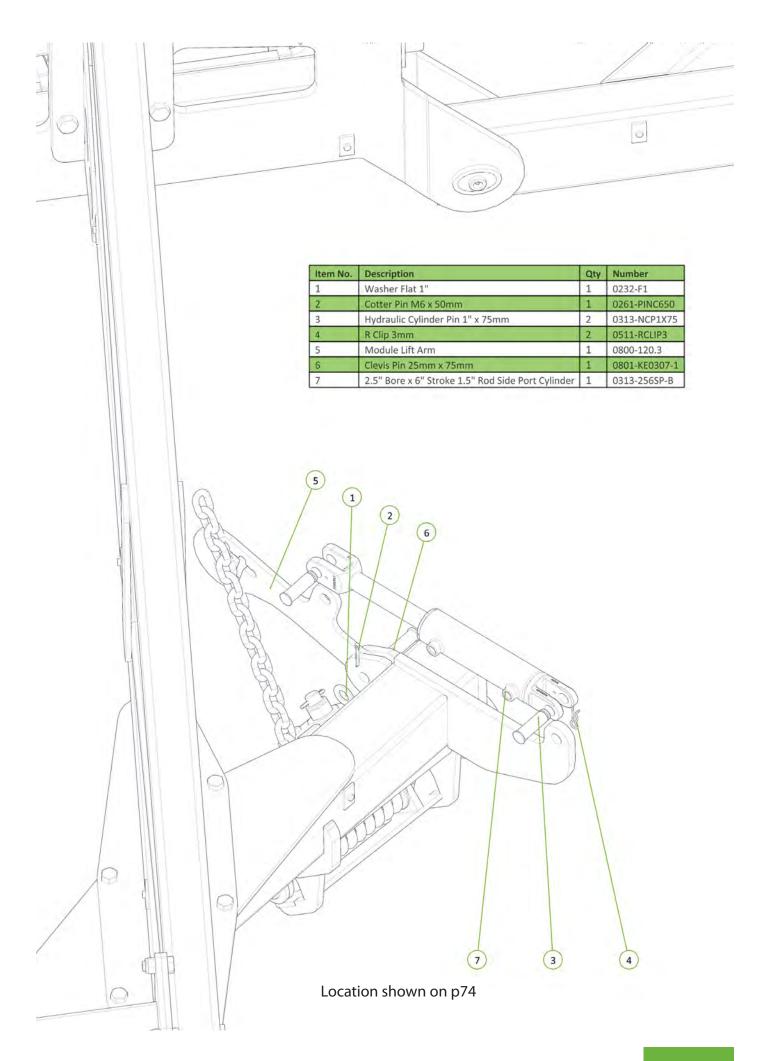
Item No.	Description	Qty	Number
1	Washer Flat 1 1/4"	4	0232-F11-4
2	Hydraulic Cylinder Pin 1 1/2" x 75mm	2	0313-NCP1 1-2X75
3	Cylinder Pin 1 1/4" x 230mm 4140	2	0313-NCP1 1-4X230
4	R Clip 3mm	2	0511-RCLIP3
5	S Locking Pin Clip 5mm	4	0801-KE012
6	Long Cylinder Pin Bearing Bush	4	1201-19
7	5" Bore 36"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

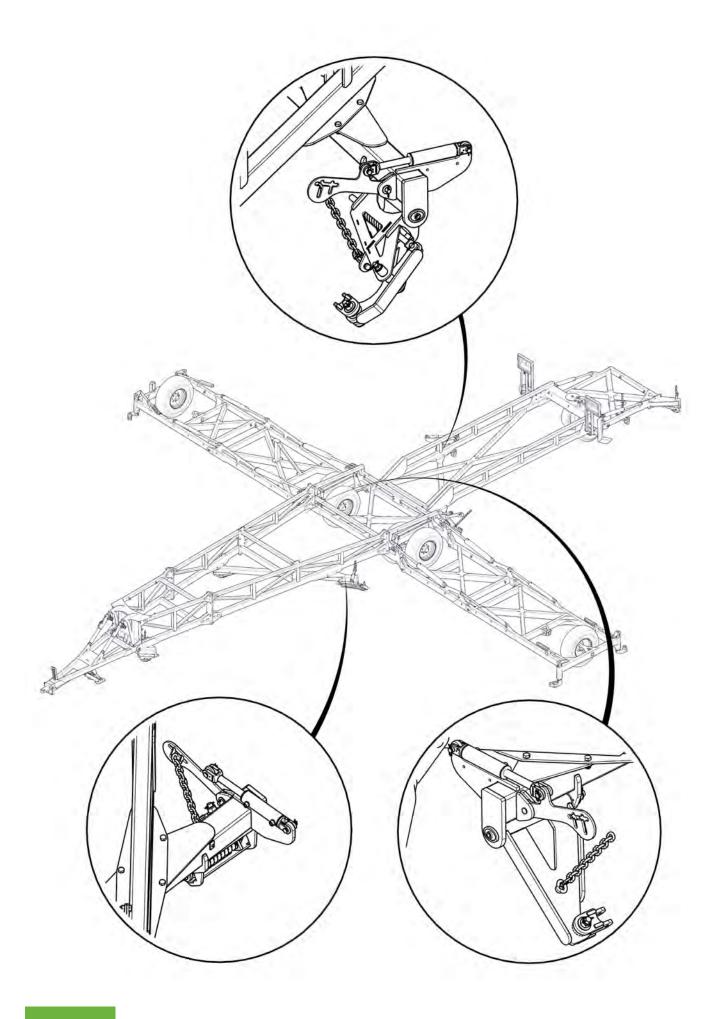
Ensure that clip is located as shown in detailed view



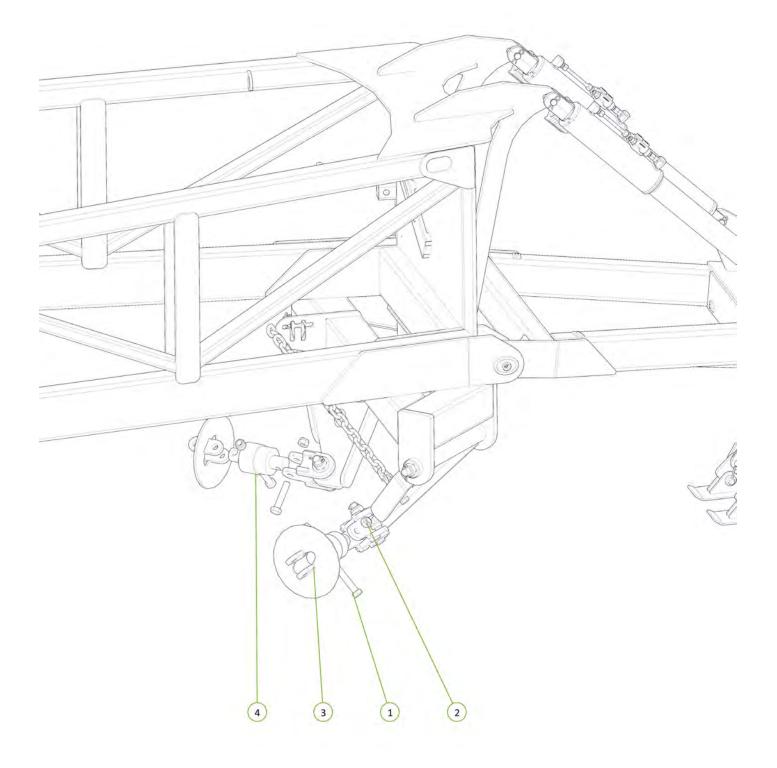
Item No.	Description	Qty	Number
1	Hydraulic Cylinder Pin 1" x 75mm	4	0313-NCP1X75
2	R Clip 3mm	4	0511-RCLIP3
3	4" Bore 12" Stroke 1.75" Rod Extended Hydraulic Cylinder	2	0313-412EXT-B

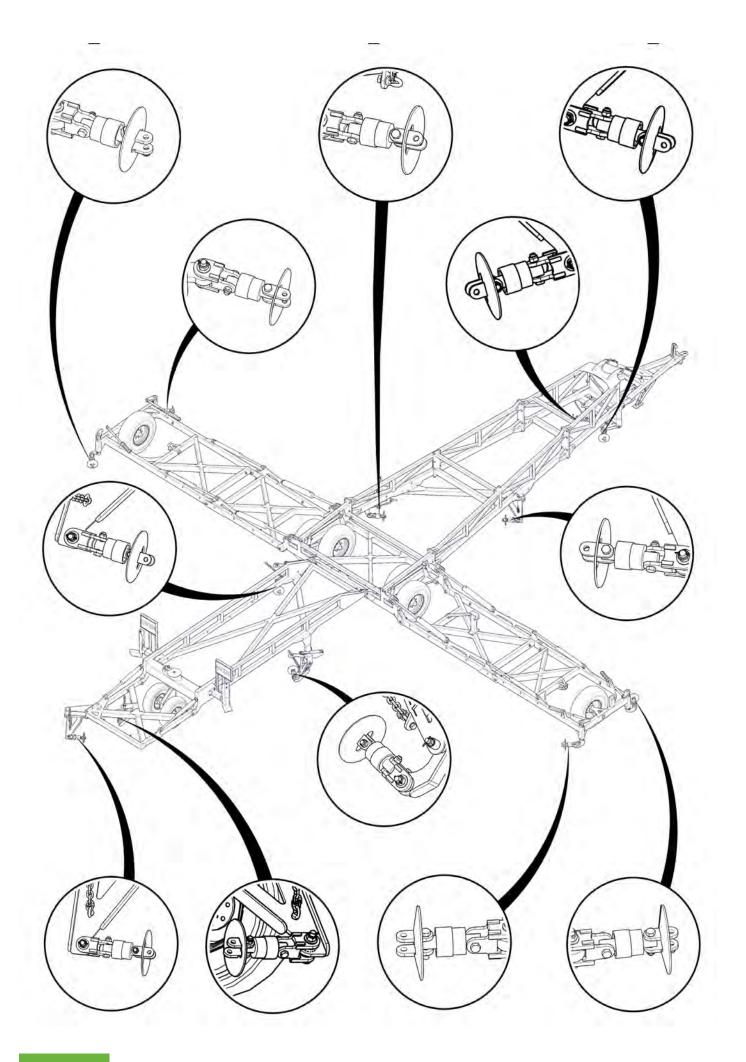






Item No.	Description	Qty	Number
1	M24 x 120 grade 10.9 zp Short Thread Bolt	4	0211-24120
2	Nyloc Nut M24	4	0221-NYL24
3	Disc Chain Tie Plate Link 24mm	2	0802-DCTP-24
4	24mm Bolt Swivel Unit	2	0802-PCHB553

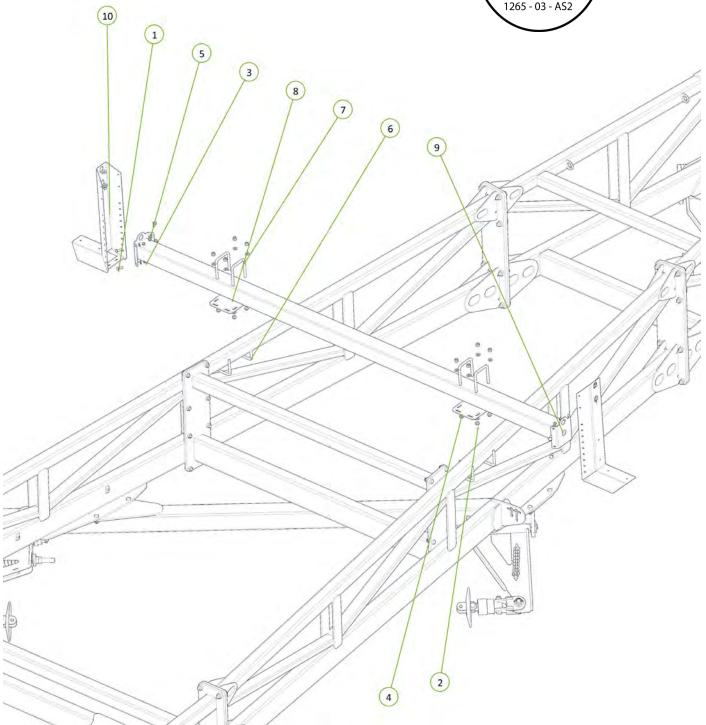




 	1. 2. C			
Item No.	Description	Qty	Number	
1	M12 x 40 Coach Head Bolt	8	0215-CH1240	
2	Nyloc Nut M12	8	0221-NYL12	6 Alter La
3	Nyloc Nut M16 Washer Flat M12	16	0221-NYL16 0231-F12	- A la P
4	Washer Flat M12 Washer Flat M16	8 16	0231-F12 0231-F16	
6	U-Bolt M16 x 135 Deep x 104 Wide	4	0271-16135104	la l
7	U-Bolt M16 x 160 Deep x 127 Wide	4	0271-16160127	
8 9	Chain Carrier Mount Plate 60'/62HDX Chain Carrier Beam	2	0800-139.1 0810-17-60/62HDX	
10	Chain Carrier Bolt on End	2	0810-17-60/62HDX	
Note t slight	Chain Carrier positi modification to catch cessary	ion	may require	

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	60'/62HDX Chain Carrier Beam	1	0810-17-60/62HDX
10	Chain Carrier Bolt on End	2	0810-17L

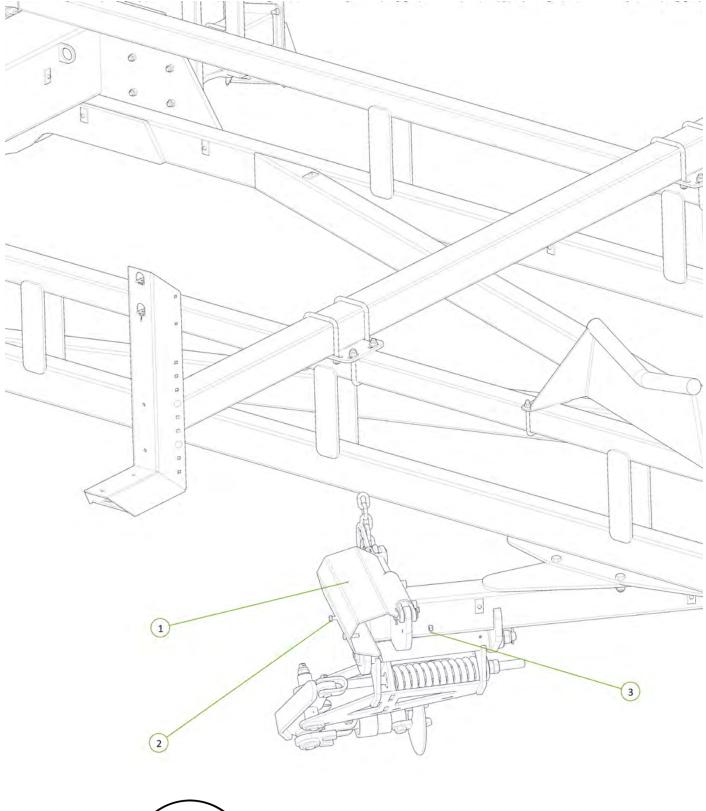




271 N.A.			7		~	
Item No.	Description Nyloc Nut M12	Qty 16	Number 0221-NYL12		UND S	
2	Washer Flat M12	16	0221-NYL12	e		
3	U-Bolt M12 x 185 Deep x 104 Wide	-	0271-12185104	â	NR I	
4	Tail Chain Stop Guard	1	0800-220.1	No.		
5	Rear Tail Guard	2	0800-235	ę.	· N	
6	Angled Chain Gaurd	1	0800-220.1			
		2				

A A A A	Item No.	Description	Qty	Number
	1	Nyloc Nut M12	20	0221-NYL12
	2	Washer Flat M12 Round Tube Insert	20 8	0231-F12 0264-RTRi-5584
YP/	4	U Bolt M12x135 Deep x 104 Wide	4	0271-12135104
	5	U-Bolt M12 x 185 Deep x 104 Wide	6	0271-12185104
	6	60'/65' Rear A-Frame Guard Right Hand Off Set M	1	0800-228.1 0810-18R
	8	Straight Chain Carrier M	2	0810-19
		Left Hand Off Set M		

Item No.
1
2
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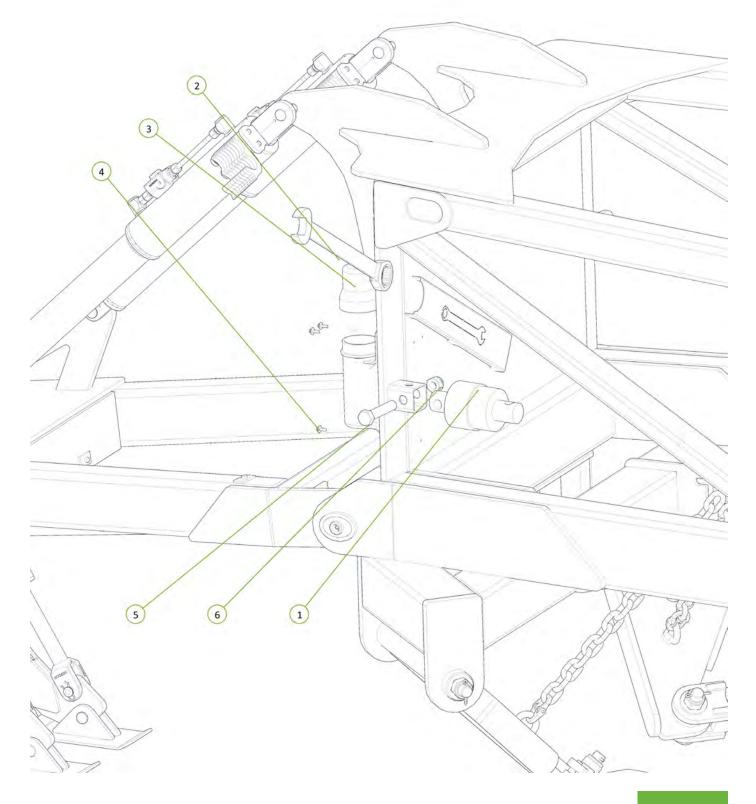


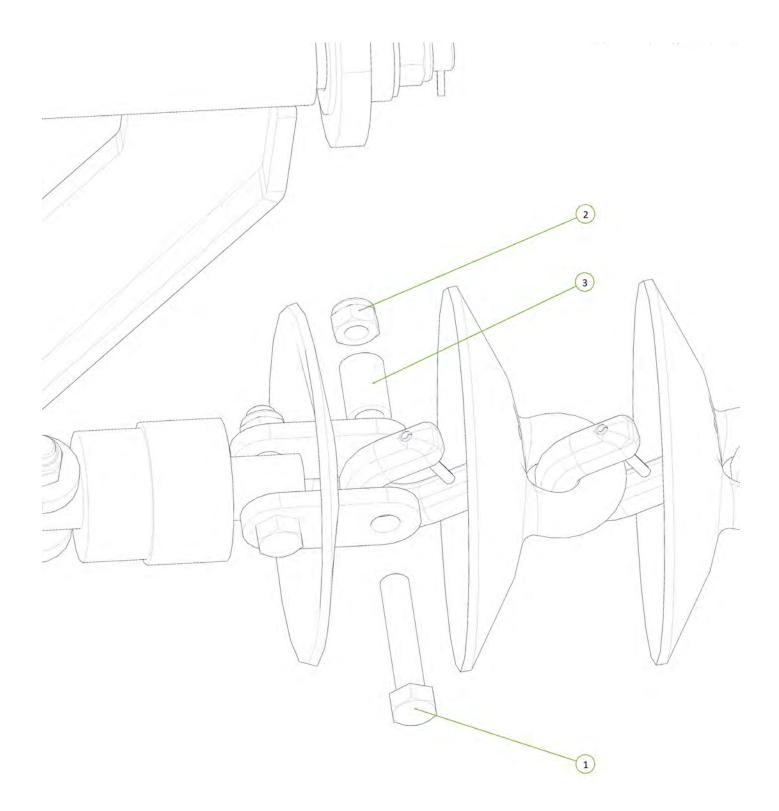
Item No.	Description	Qty	Number
1	Module Cylinder Gaurd	1	0800-167.3
2	M12 x 50 grade 8.8 ZP Bolt	2	0211-1250
3	Nyloc Nut M12	2	0221-NYL12



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

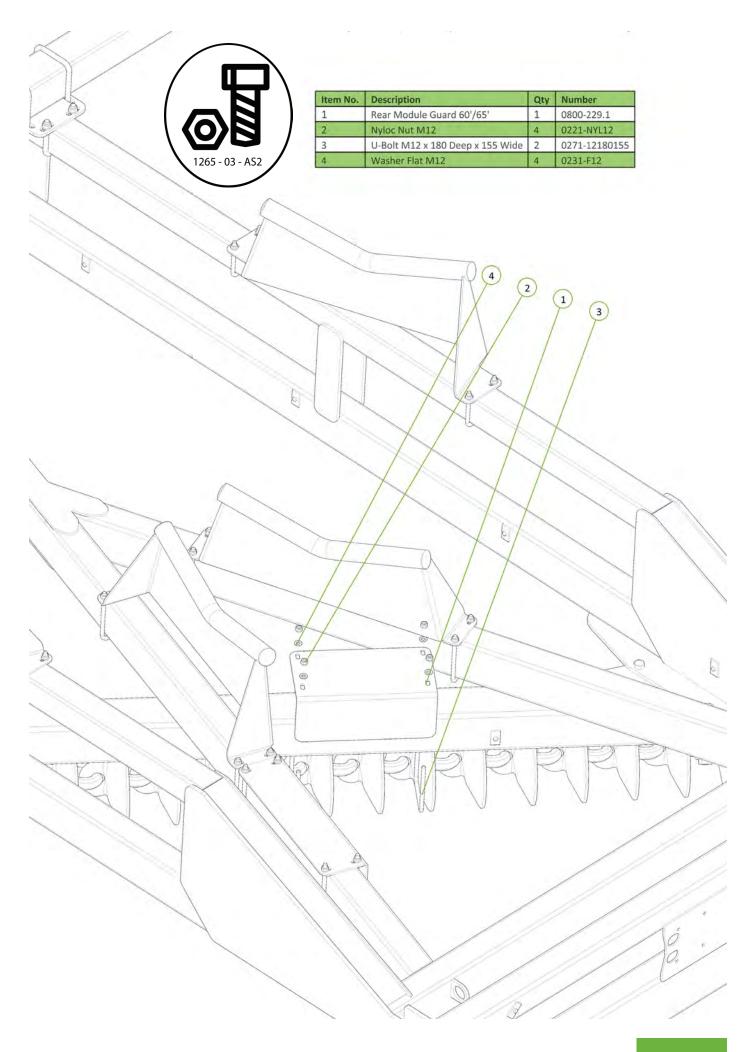


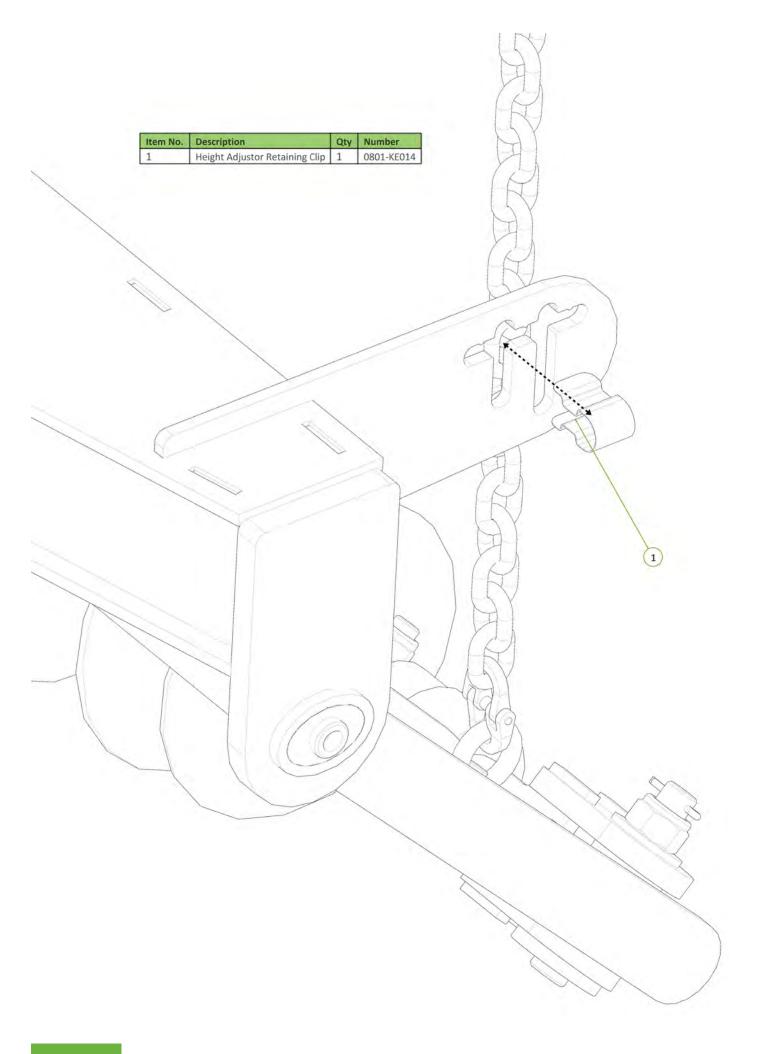


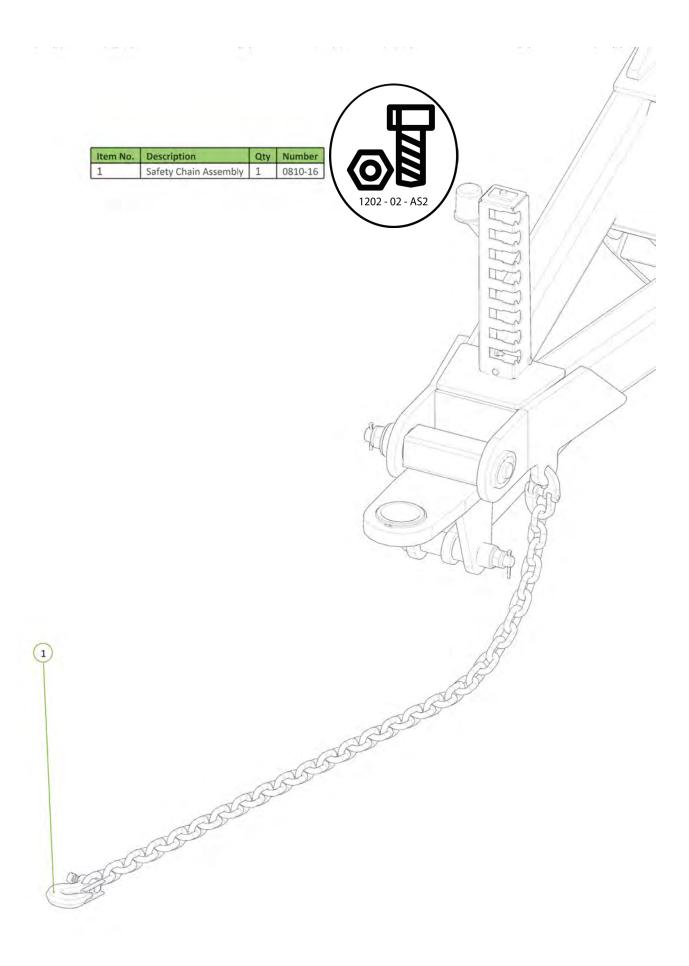


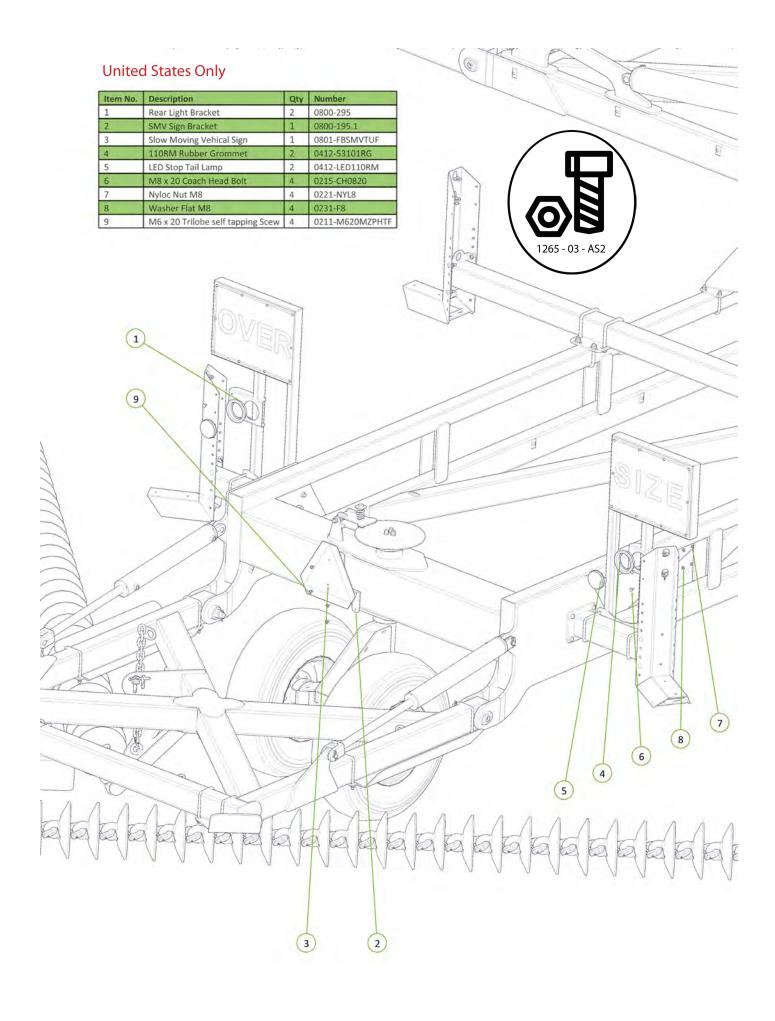
Item No.	Description	Qty	Number
1	M24 x 120 grade 10.9 zp Short Thread Bolt	1	0211-24120ST
2	Nyloc Nut M24	1	0221-NYL24
3	Tie Plate Bush	1	0801-PCDCS55

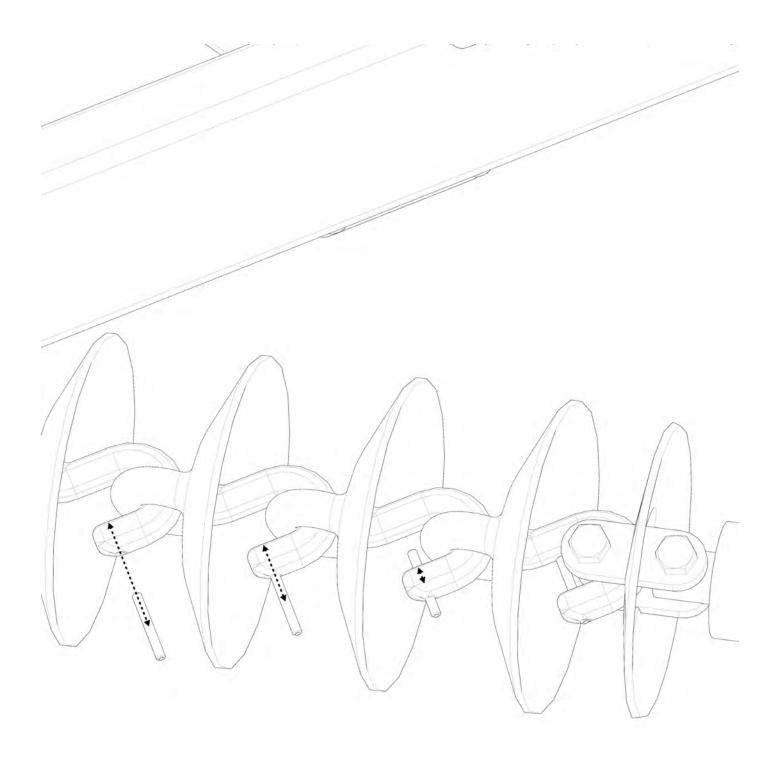


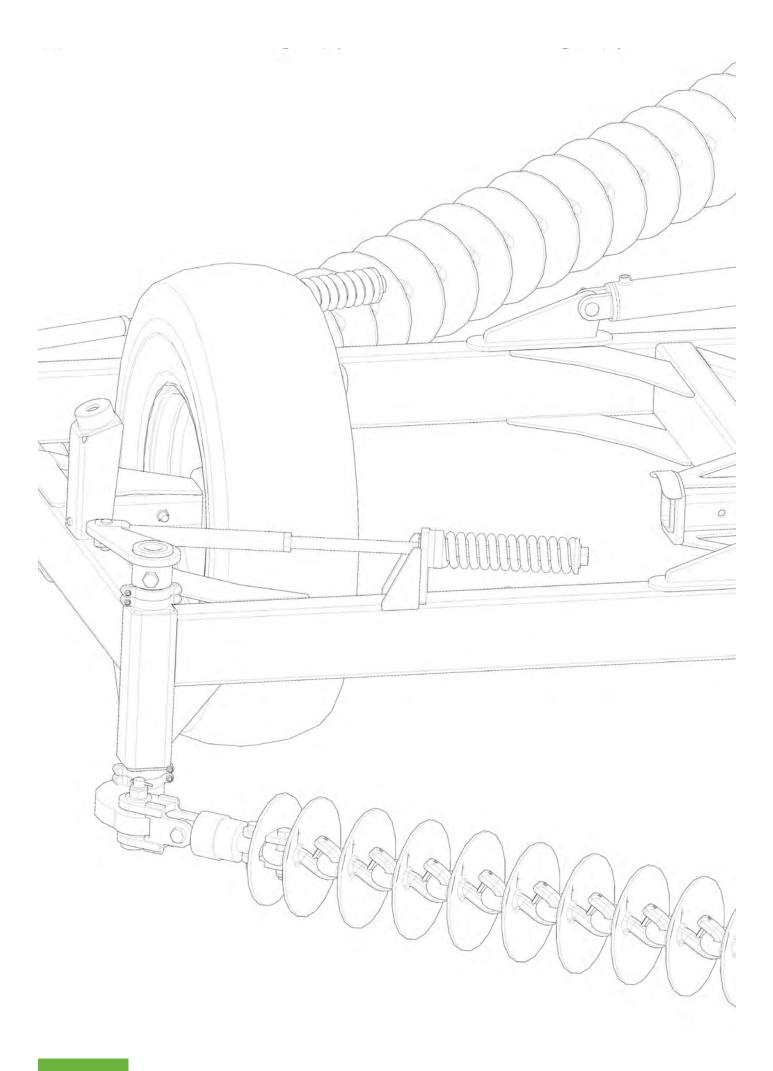


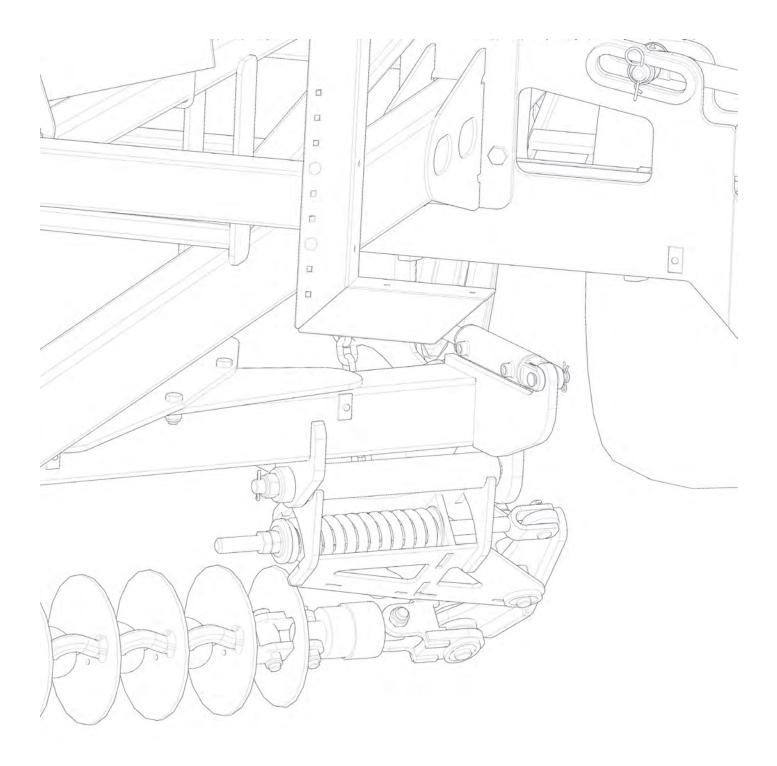












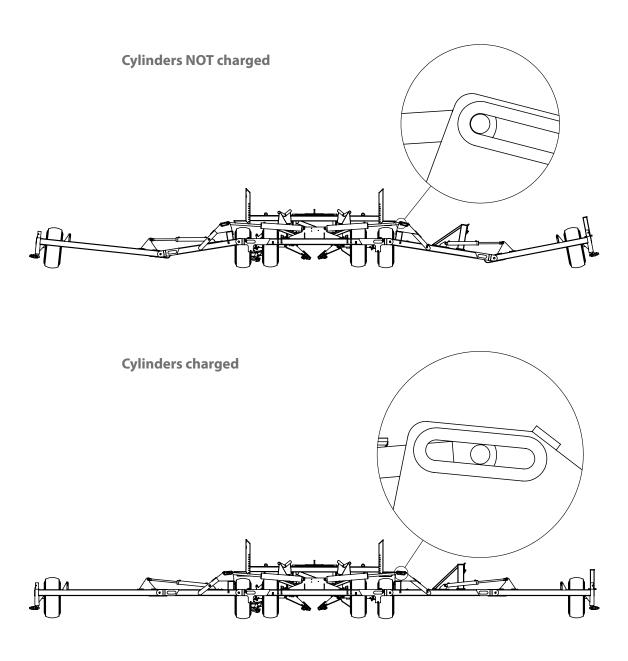
Section 3 Hydraulic Setup

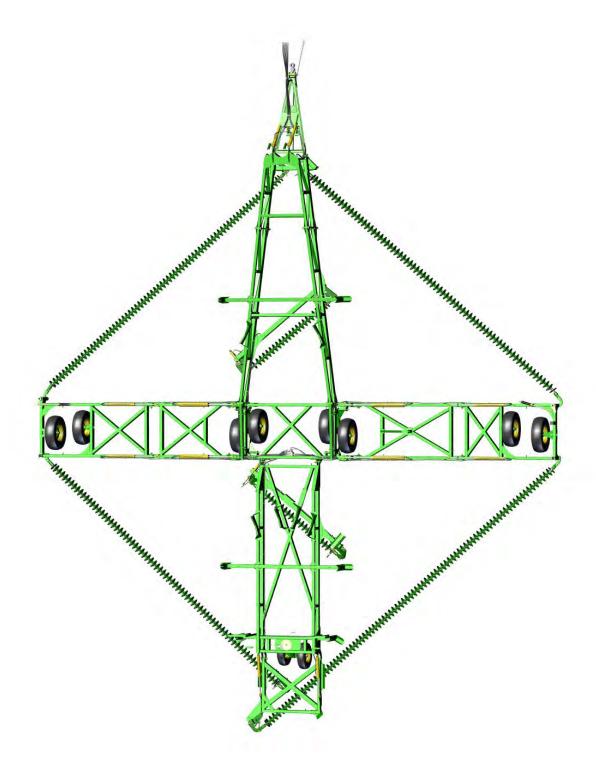


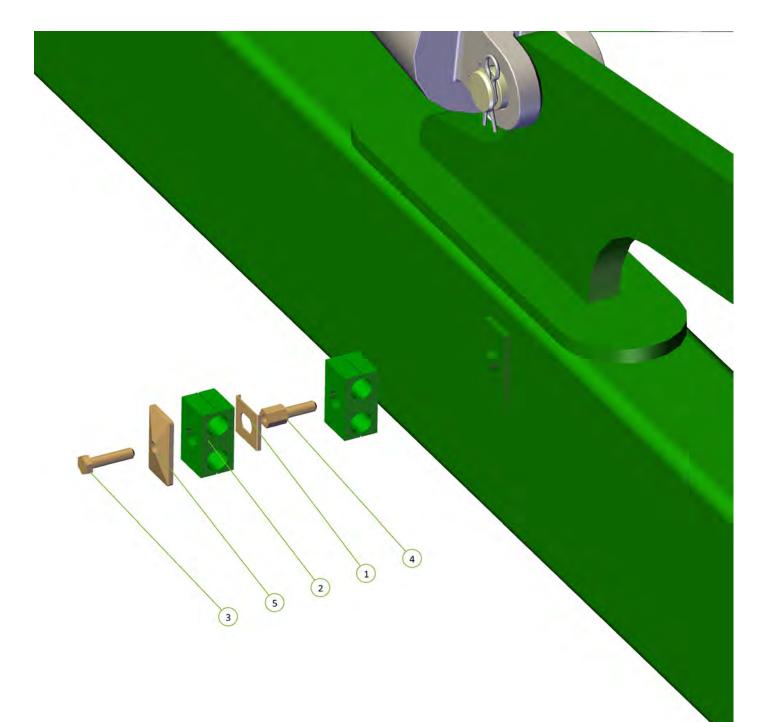
Before folding the machine for the first time, ensure all hydraulic cylinders are charged with oil.

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.

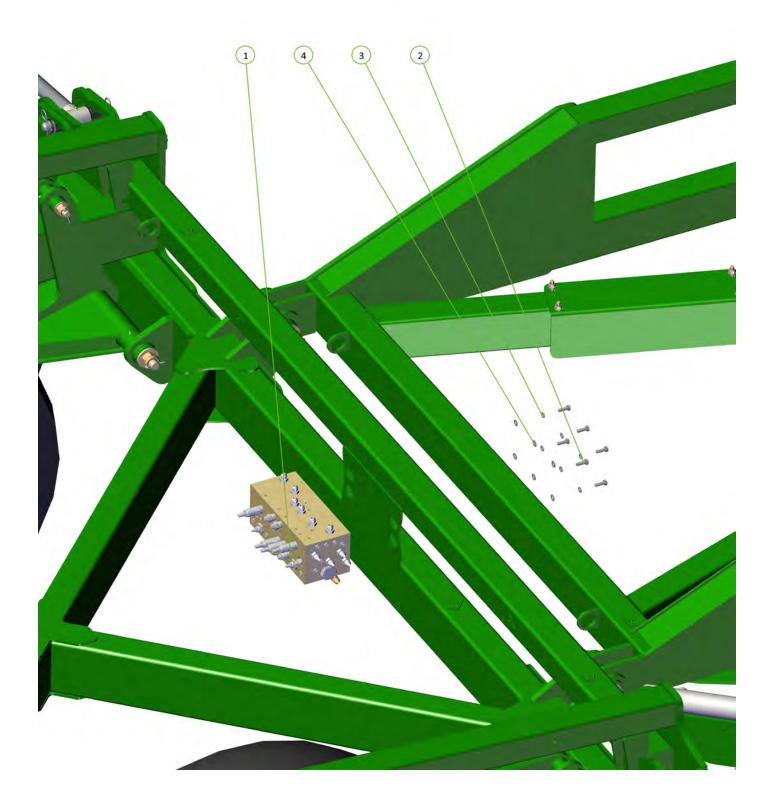


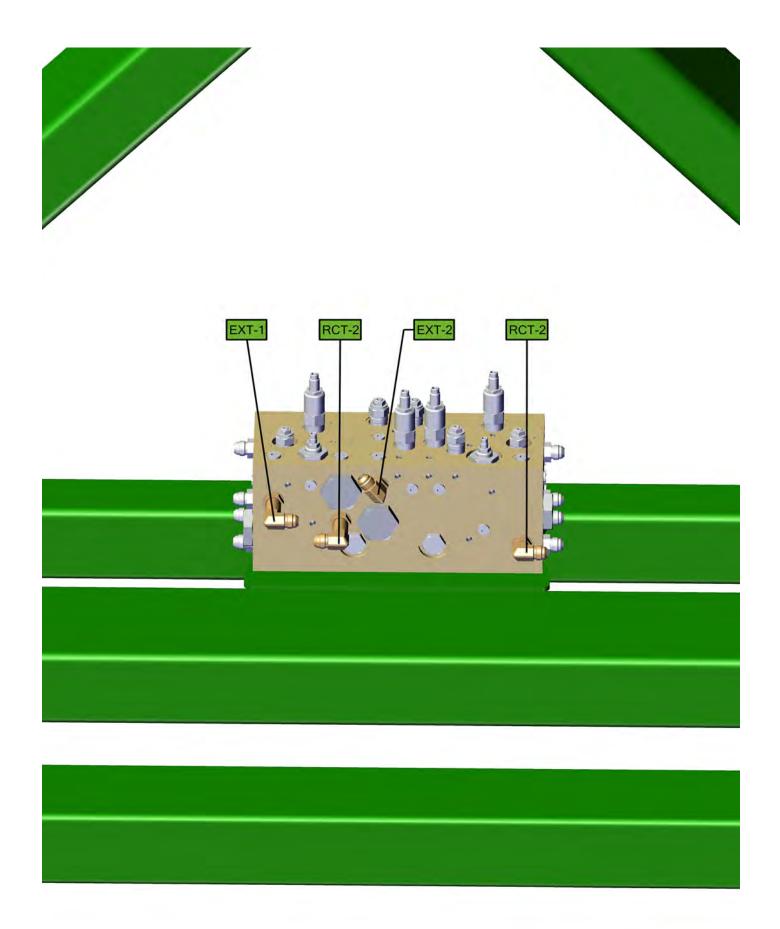


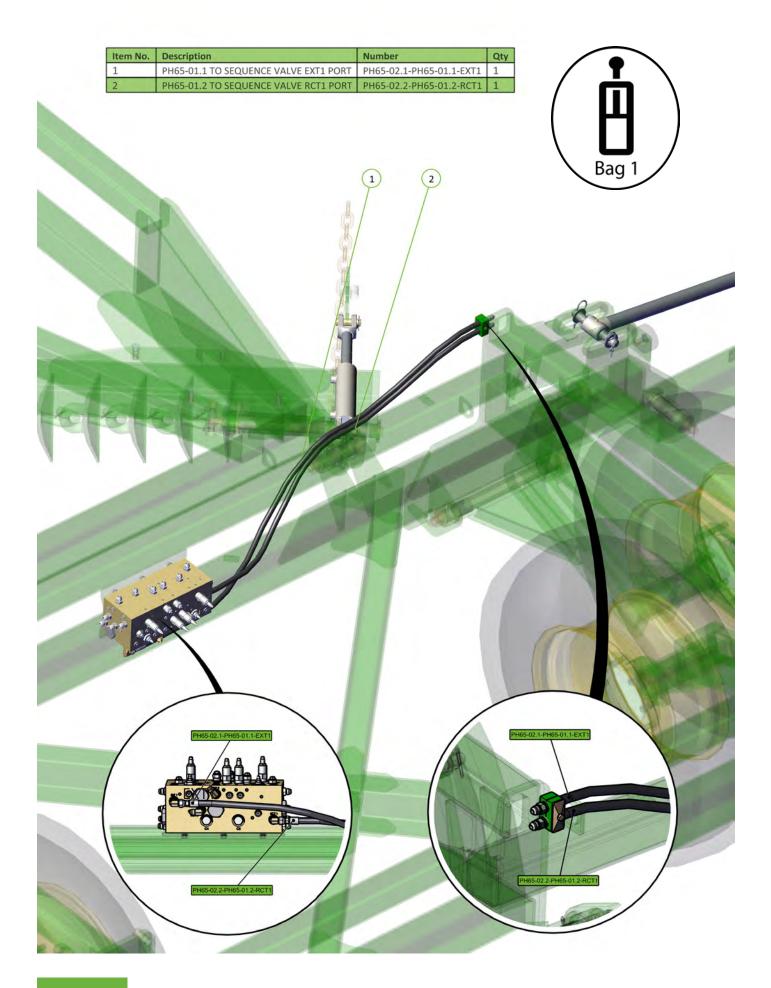


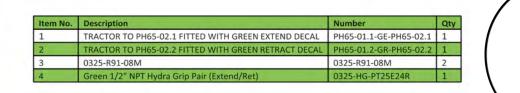
Item No.	Description	Number	Qty
1	Double Clamp Stacking Plate (Non Ryco)	0325-SI-2-5D-W3	1
2	17mm Clamp Jaws (Pair)	0325-RCD-17J	2
3	Double Clamp Bolt	0325-RCD-2BH	1
4	Double Clamp Stacking Bolt	0325-RCD-2BS	1
5	Clamp top plate	0325-RCD-2PT	1

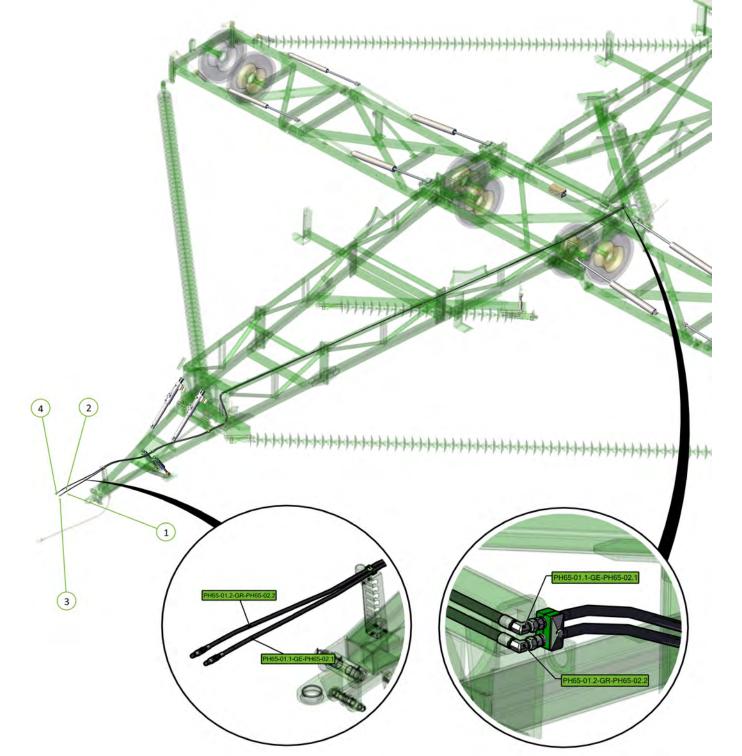
Item No.	Description	Number	Qty
1	Dual Circuit 3 Stage Sequence Manifold V12	0802-691033	1
2	M10 x 30 grade 8.8 ZP Bolt	0211-1030	6
3	Washer Spring M10	0231-S10	6
4	Washer Flat M10	0231-F10	6



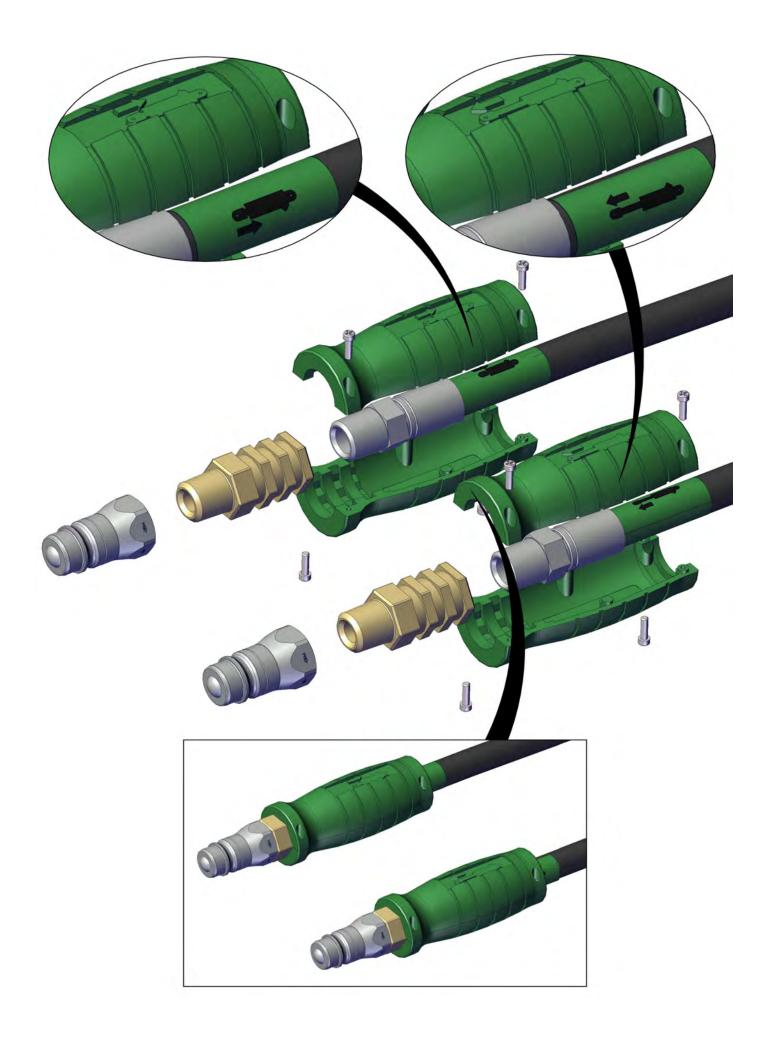




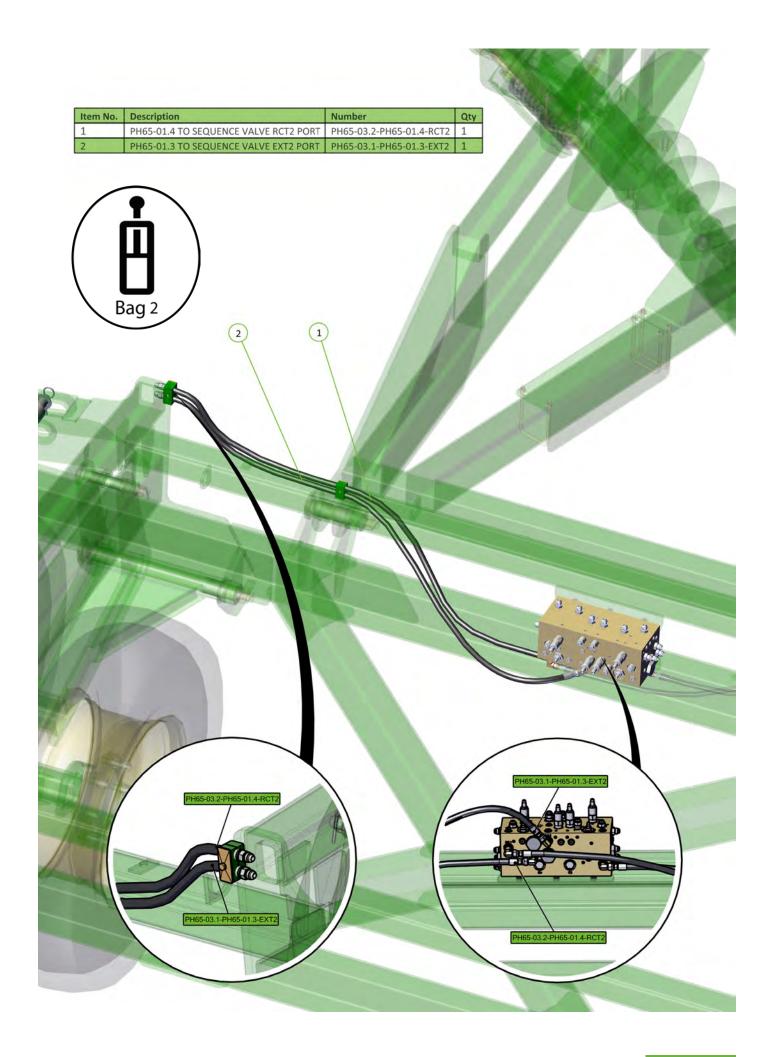


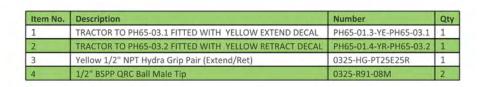


Bag 1

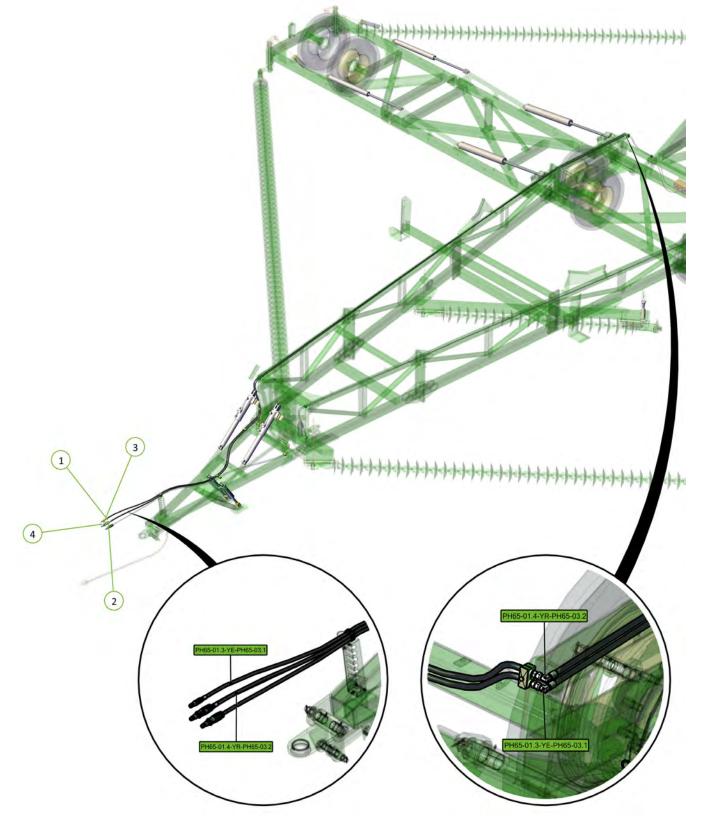


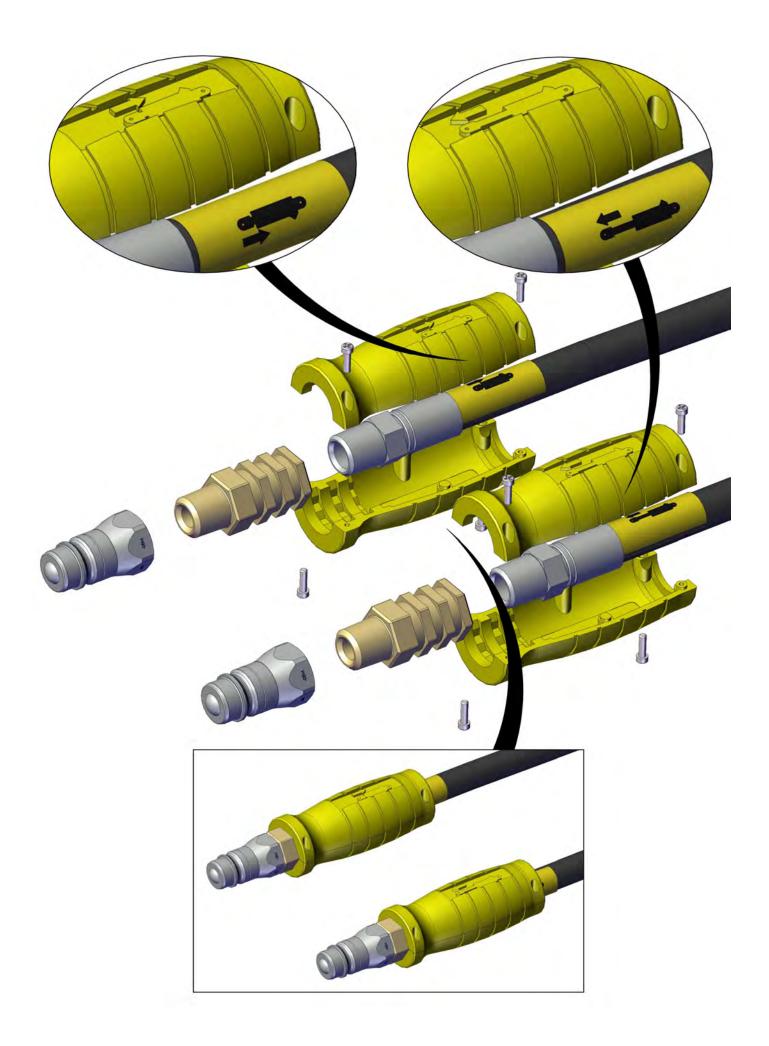


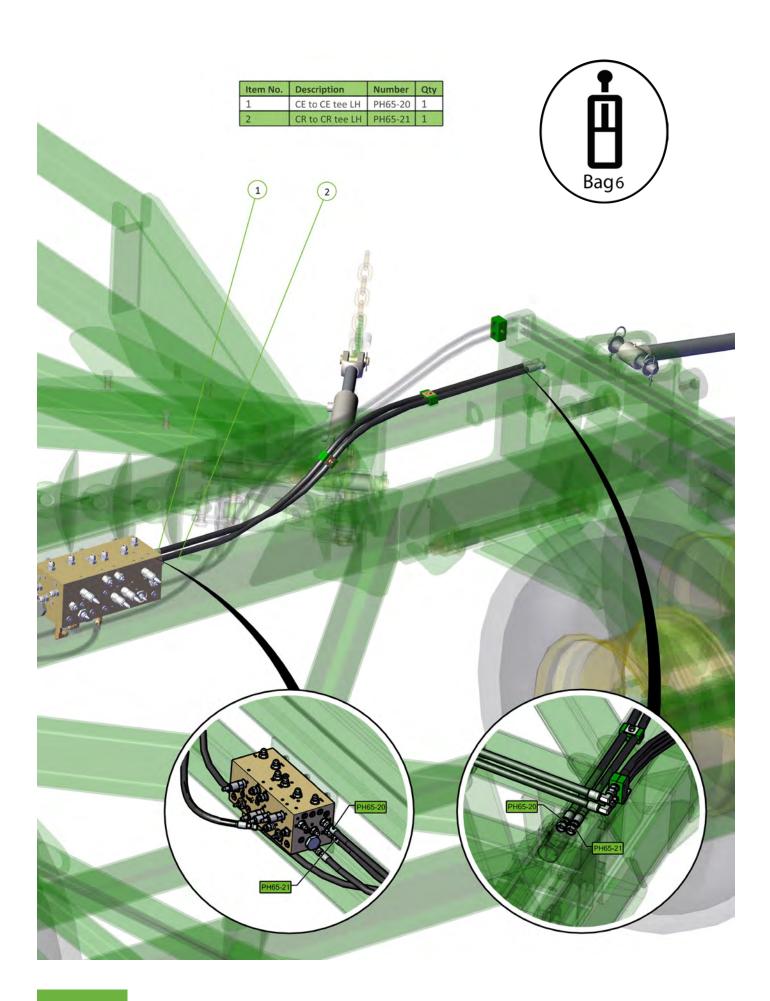


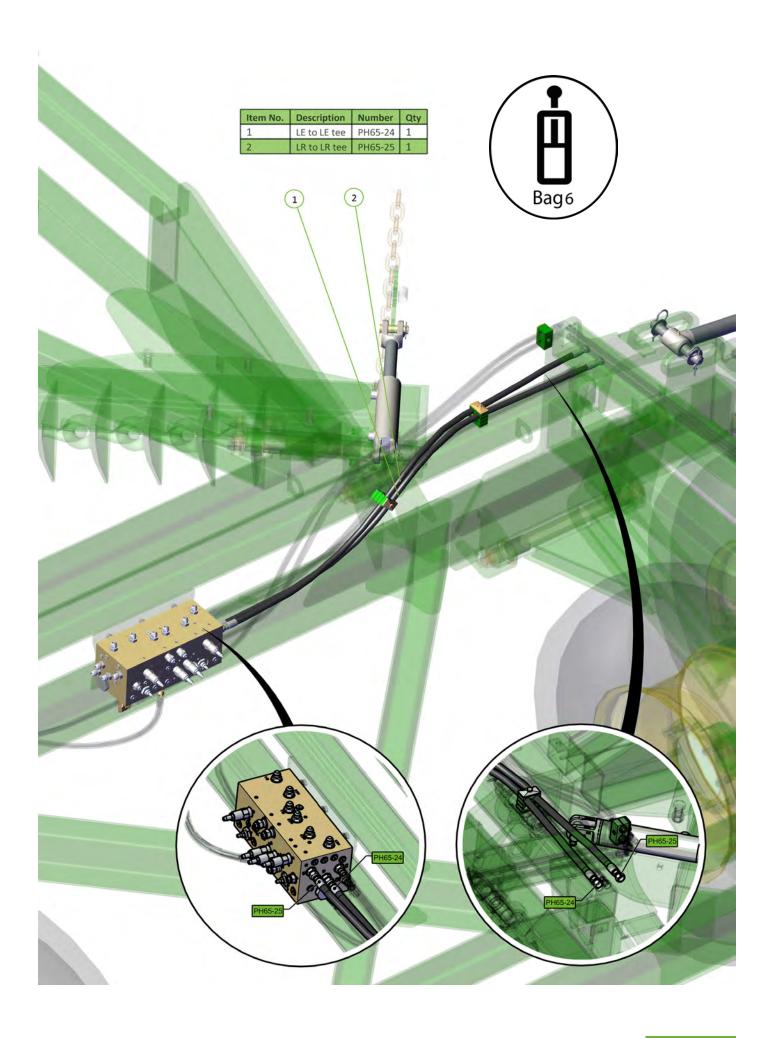


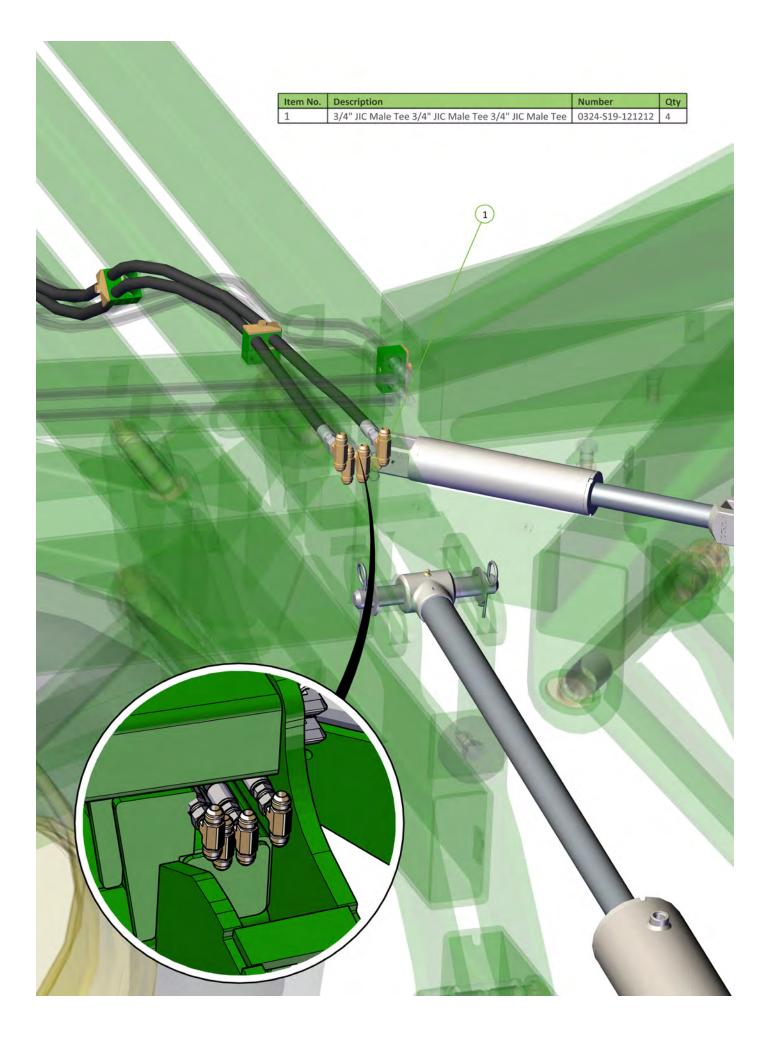




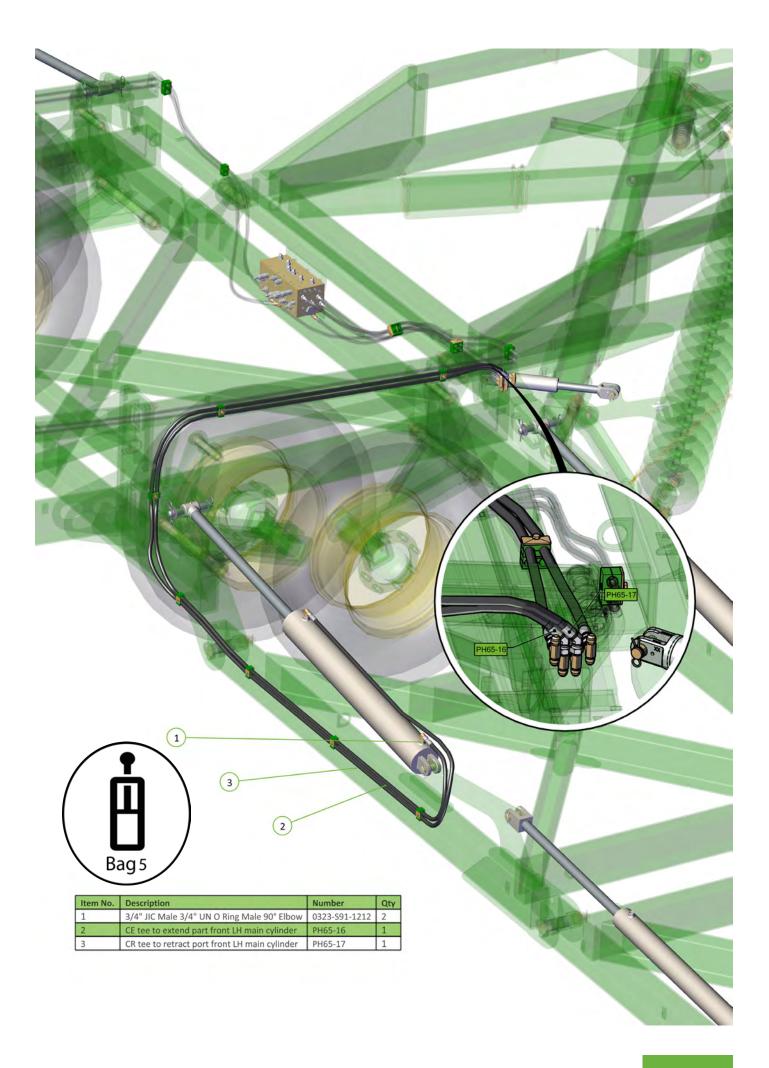


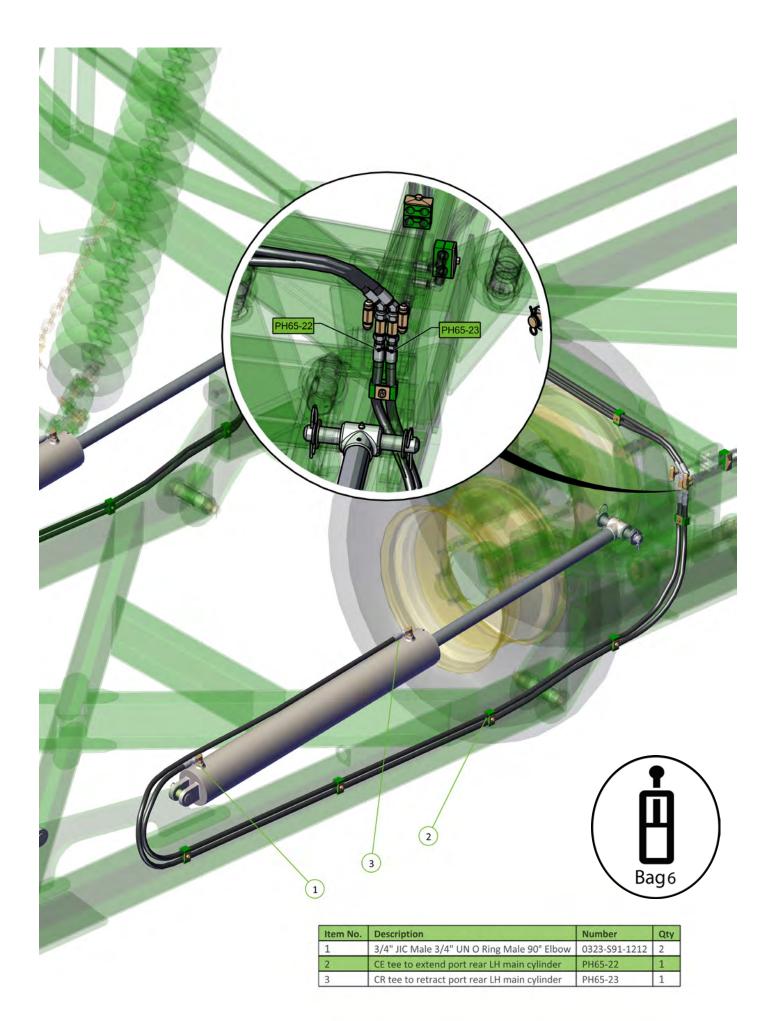


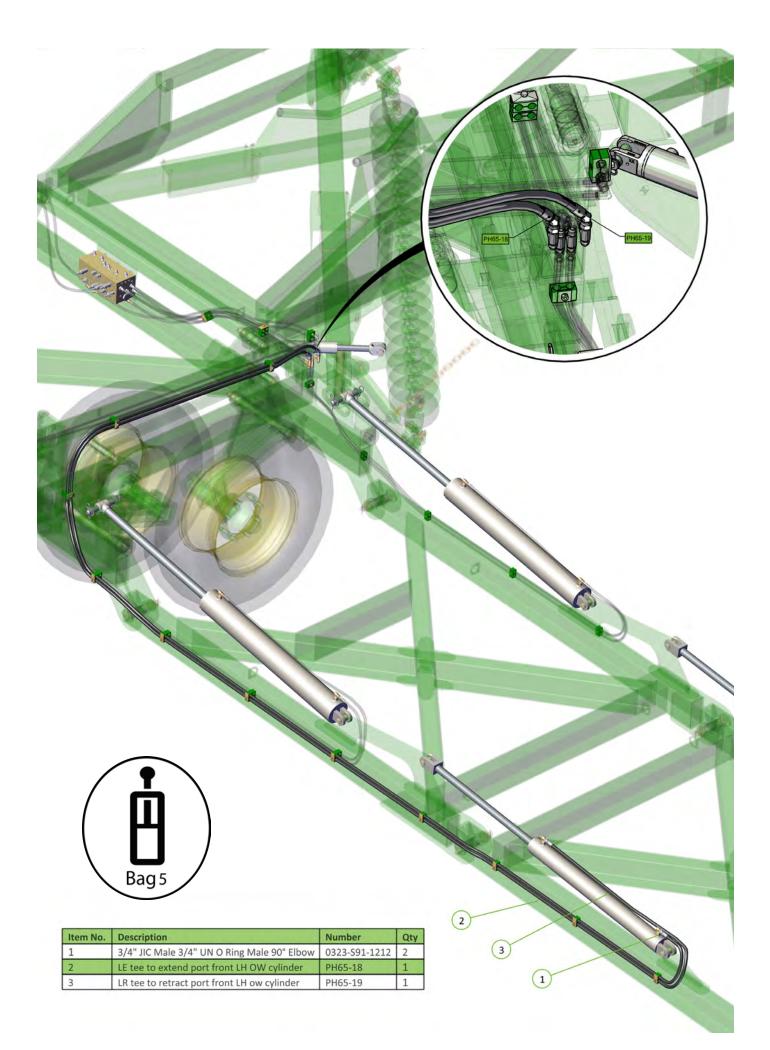


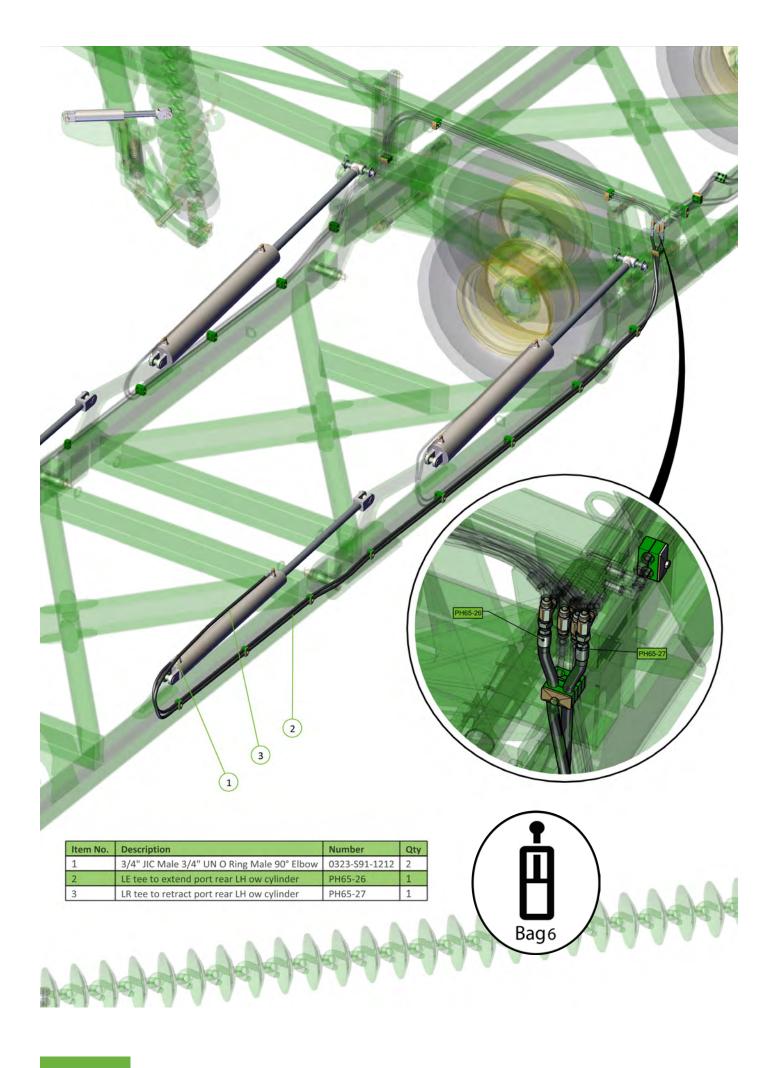


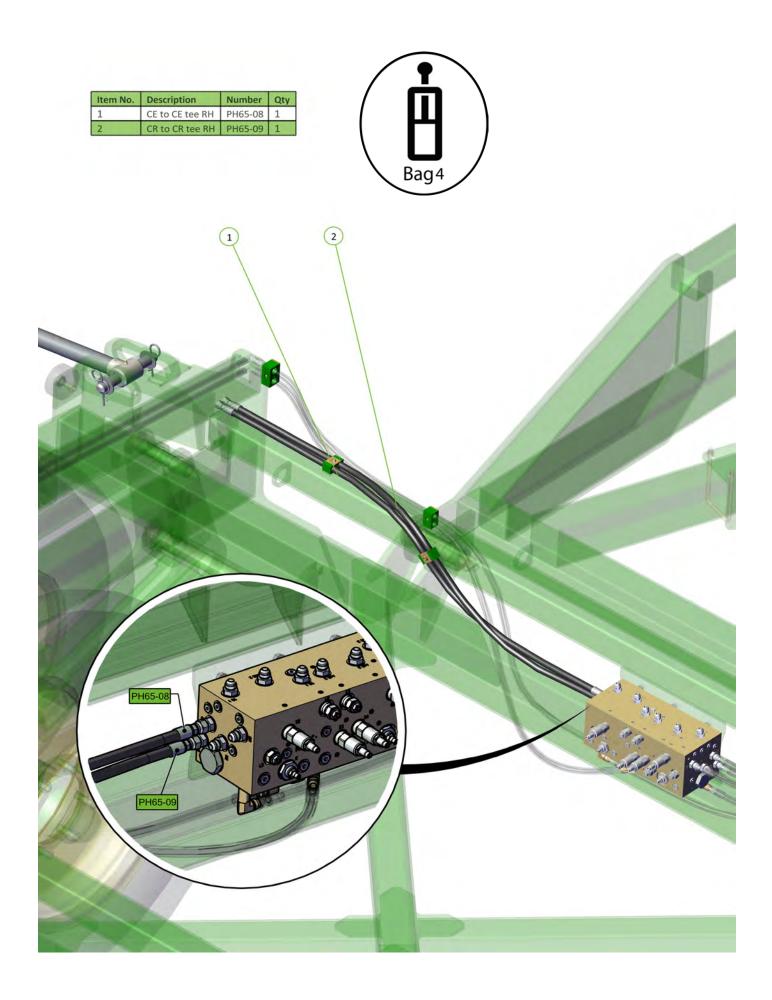


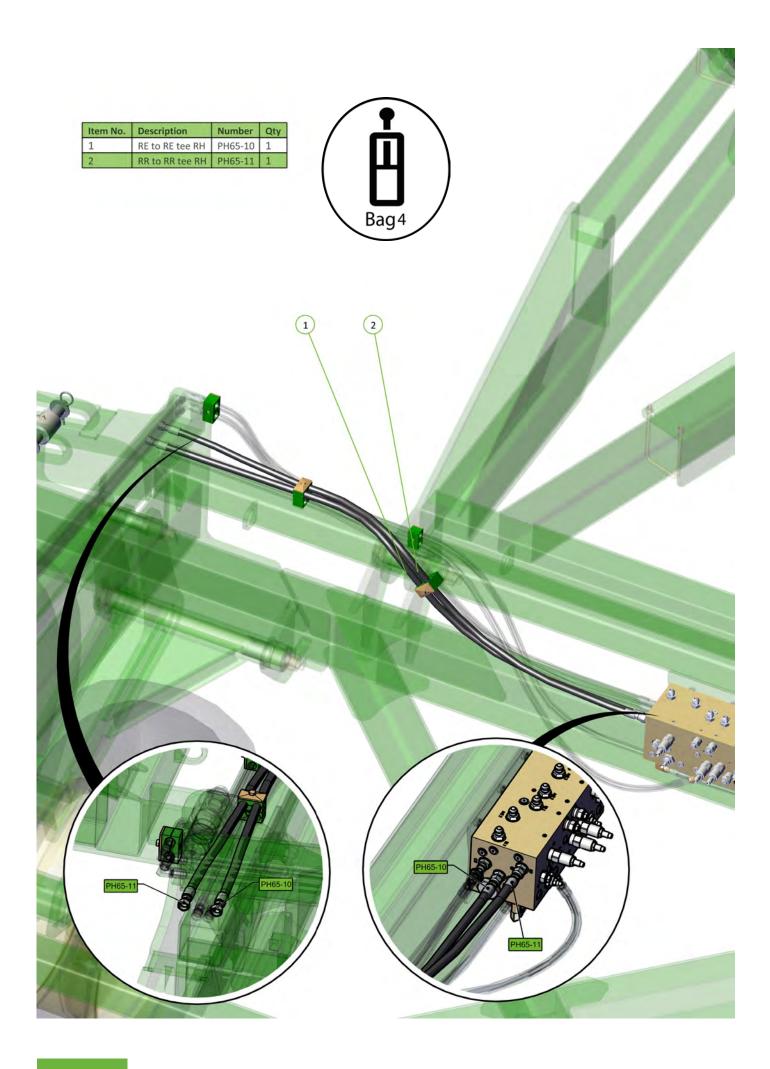




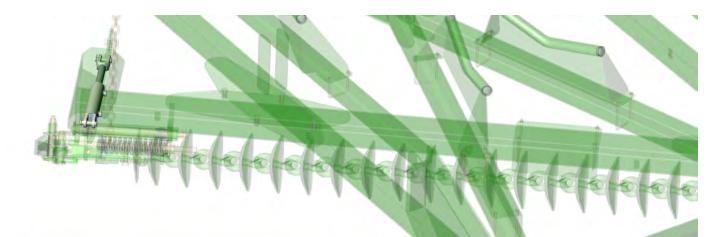




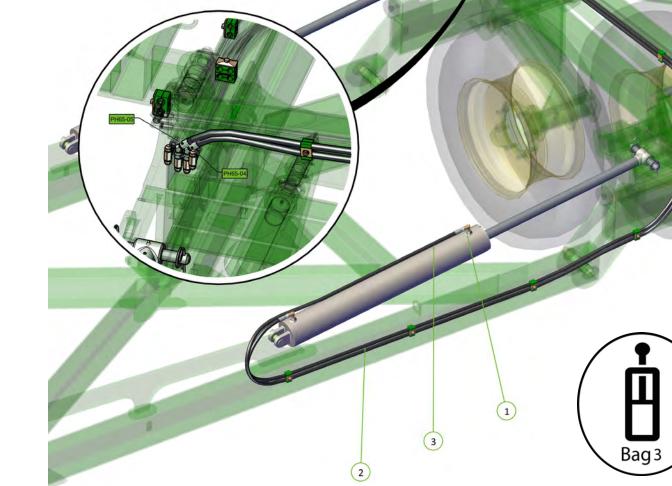


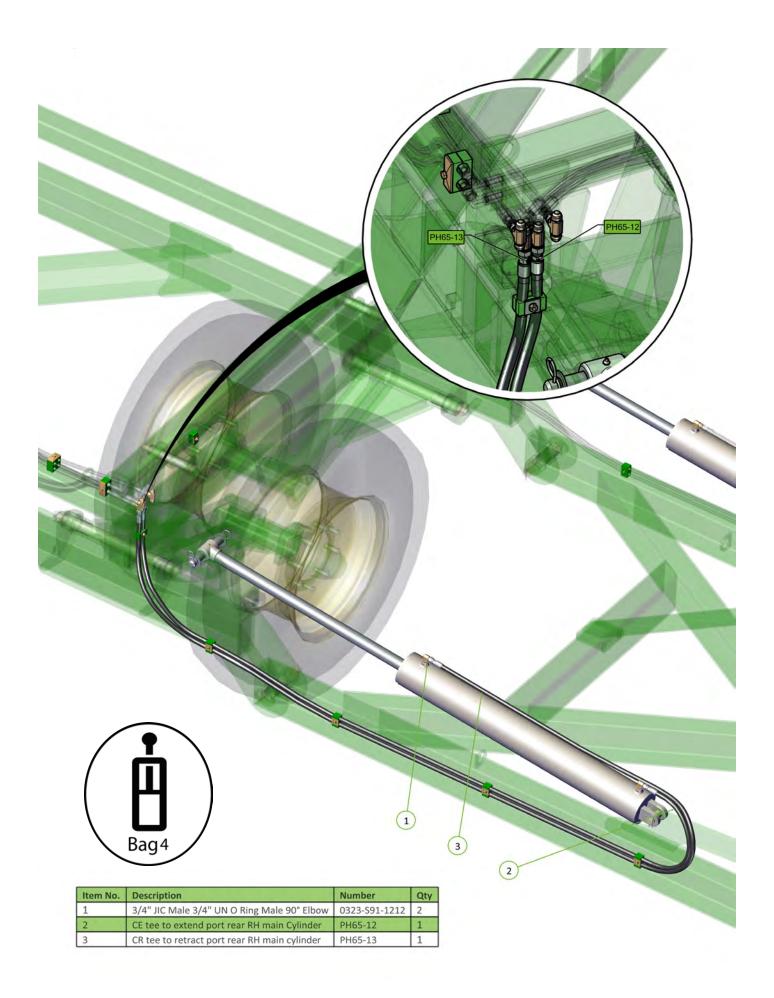






Item No.	Description	Number	Qty
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	0323-S91-1212	2
2	CE tee to extend port front RH main cylinder	PH65-04	1
3	Cr tee to retract port front RH main cylinder	PH-65-05	1







Item No.	Description	Number	Qty
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	0323-S91-1212	2
2	RE tee to extend port front RH OW cylinde	PH65-06	1
3	RR tee to retract port front RH OW Cylinder	PH65-07	1

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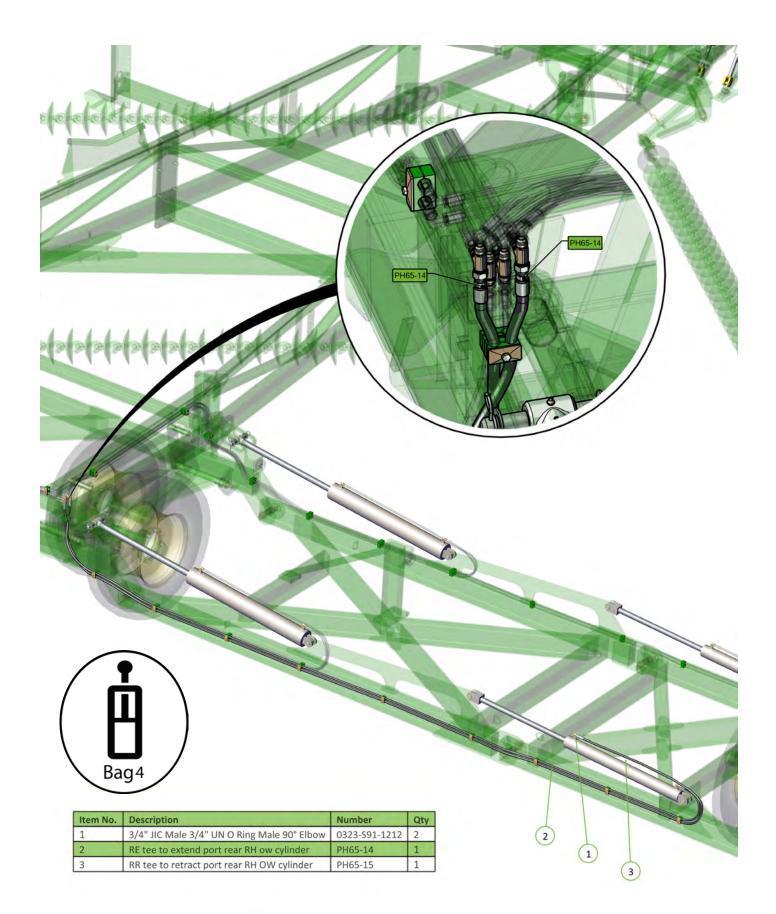
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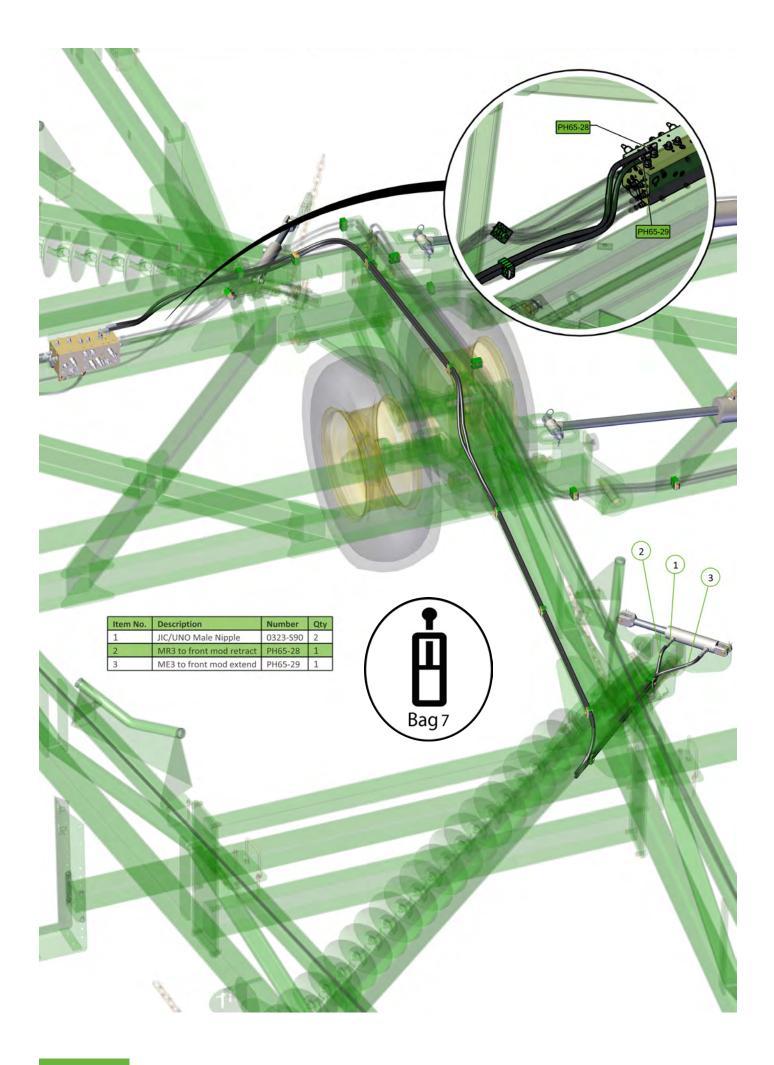
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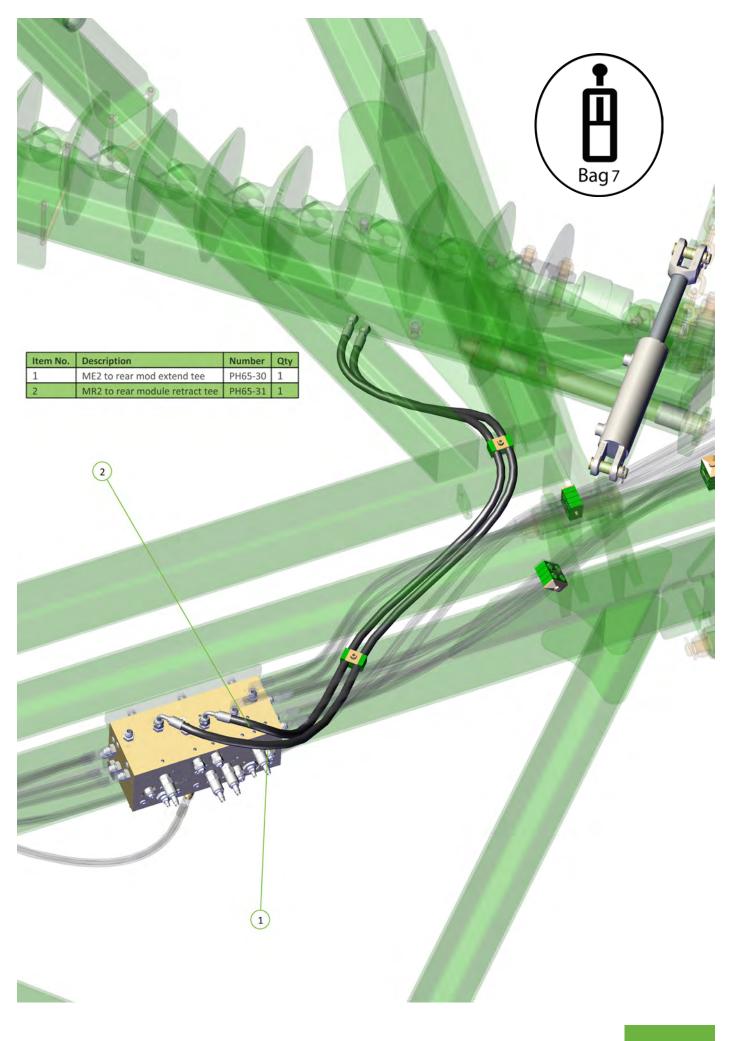
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PH65-06











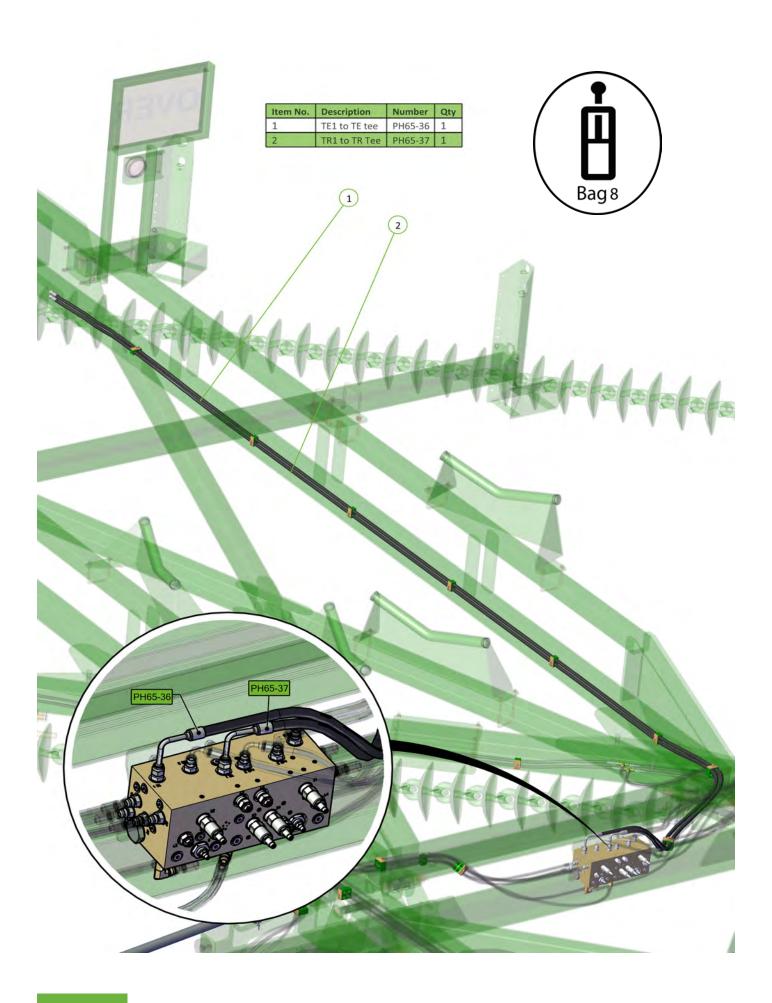
Item No.	Description	Number	Qty
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	0323-S91-1212	2
2	3/4" JIC Male Tee 3/4" JIC Male Tee 3/4" JIC Male Tee	0324-S19-121212	2
3	ME2 tee to mod cylinder extend port	PH65-32	1
4	MR2 tee to mod cylinder retract port	PH65-33	1

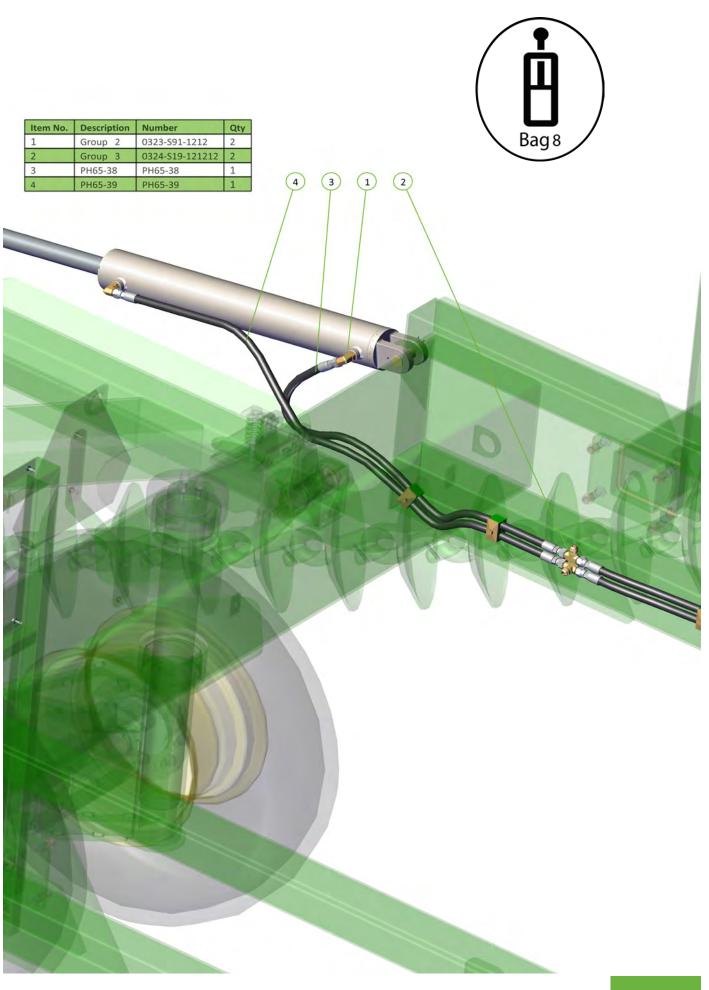
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Item No.	Description	Number	Qty	
1	3/4" JIC Male 3/4" UN O Ring Male 45° Elbow	0323-588-1212	2	
2	ME2 tee to mod cylinder extend port	PH65-34	1	
3	MR2 tee to mod cylinder retract port	PH65-35	1	

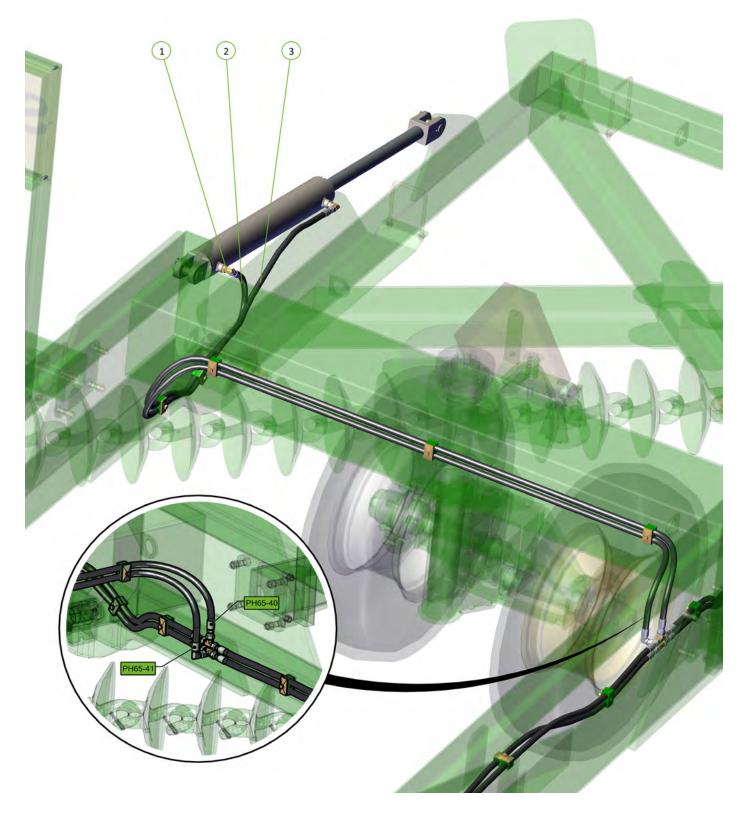


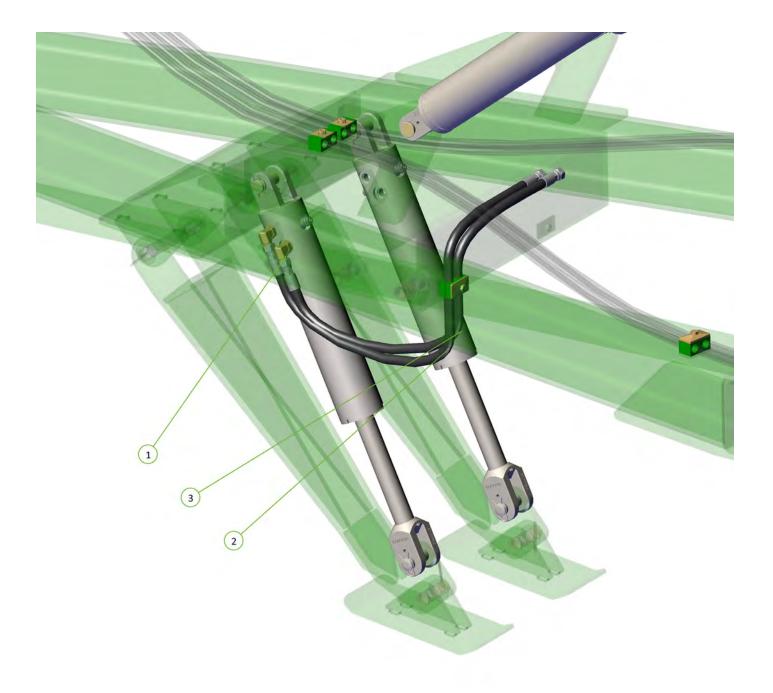




Item No.	Description	Number	Qty	
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	0323-S91-1212	2	
2	TE tee to RH tail cyl extend port	PH65-40	1	
3	TR tee to RH tail cyl retract port	PH65-41	1	

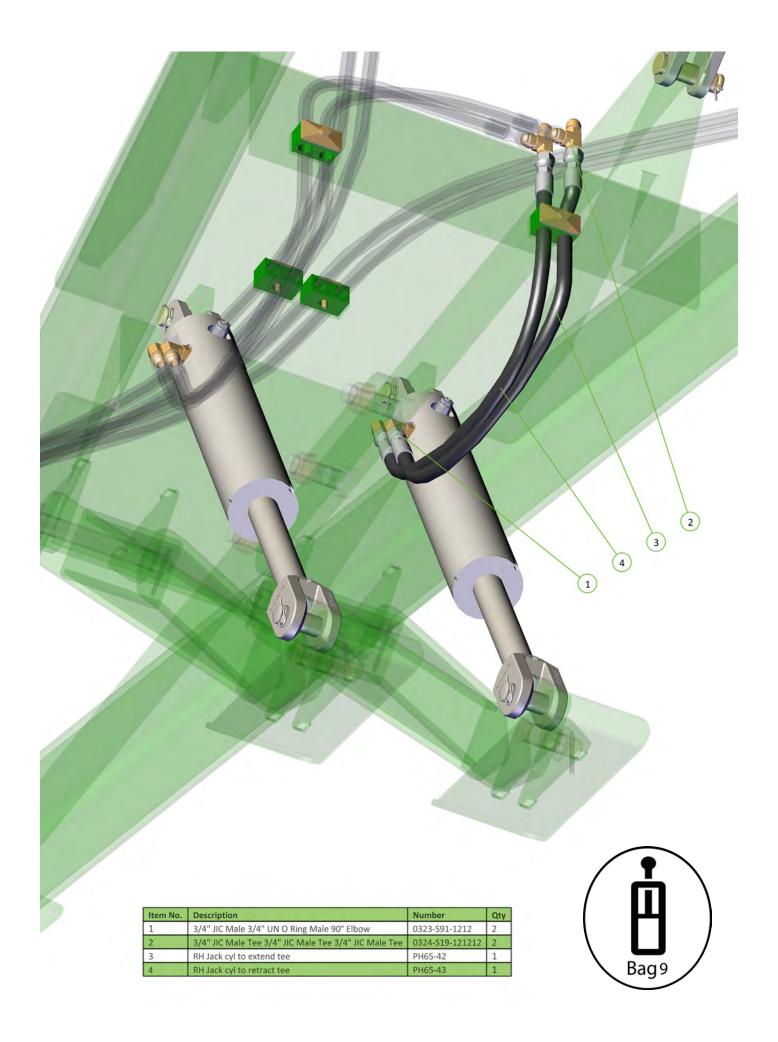




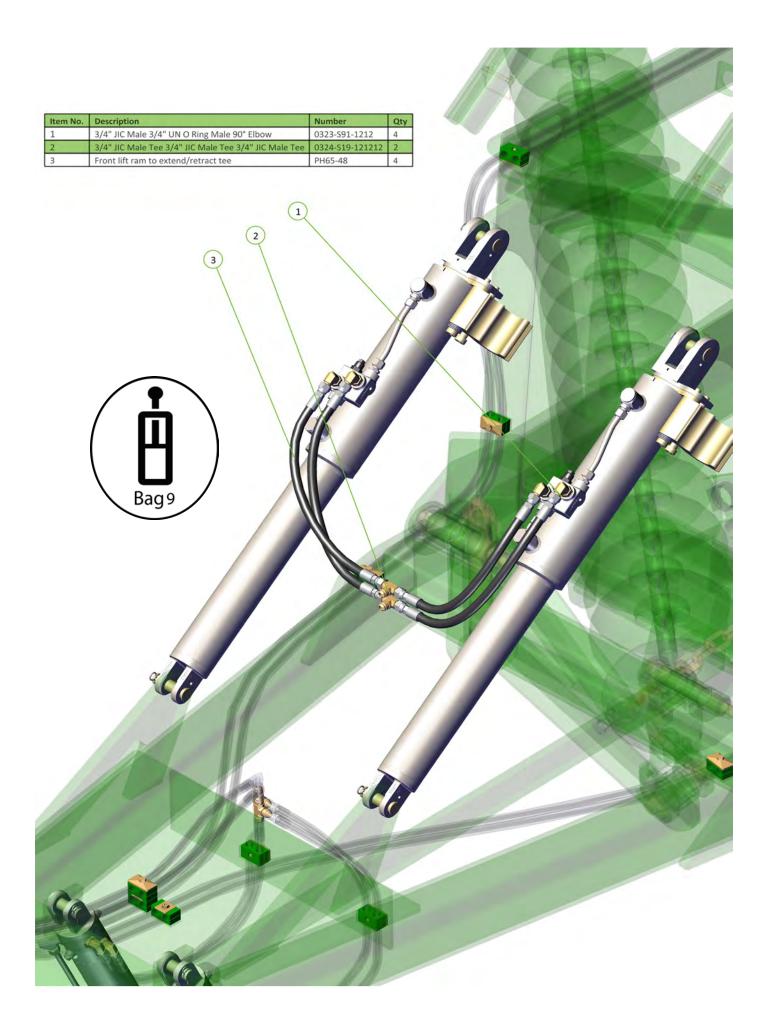


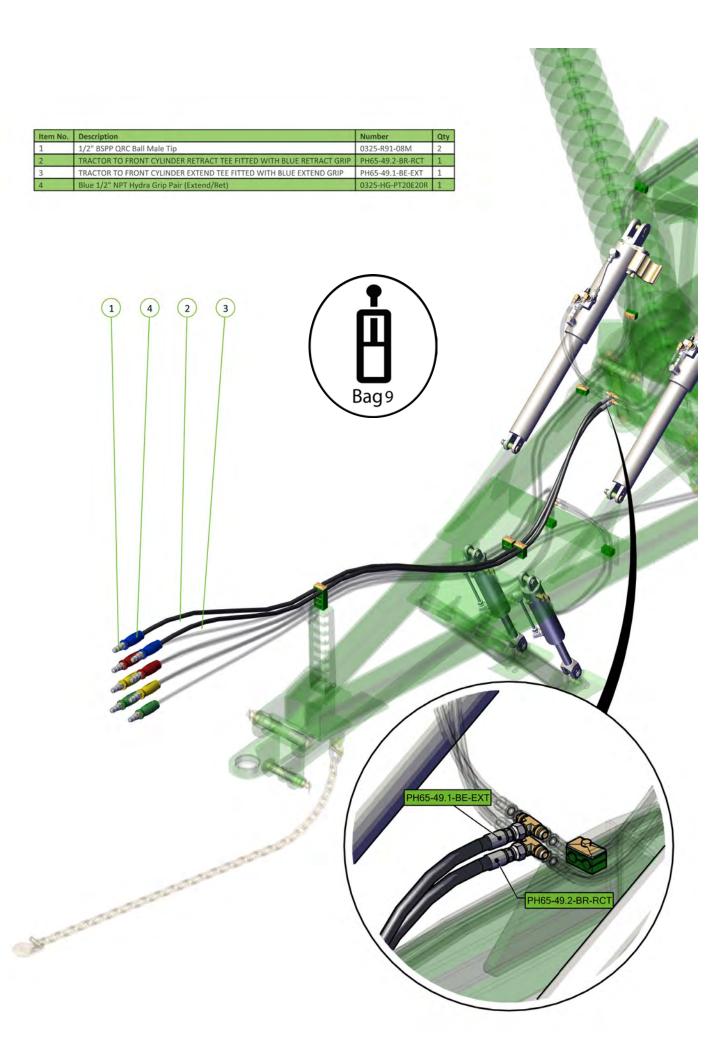
Item No.	em No. Description		Qty	
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	0323-S91-1212	2	
2	LH Jack cyl to retract tee	PH65-44	1	
3	LH Jack cyl to extend tee	PH65-45	1	





Item No. 1 2 3 4	Description 1/2" BSPP QRC Ball Male Tip Tractor to jack retract tee Fitted With Red Retract Grip Tractor to jack extend tee Fitted With Red Extend Grip Red 1/2" NPT Hydra Grip Pair (Extend/Ret)	Number Qty 0325-R91-08M 2 PH65-46-RR-RCT 1 PH65-47-RE-EXT 1 0325-HG-PT22E22R 1	Bag9	
	1 4 3 2			
			PH65-47-RE-EXT	
		PH65-46-RR-	RCT	-/









0323-\$15-1212



0323-871-0812











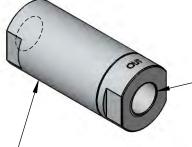




0324-\$68-121212



Note: Fit this end to valve block

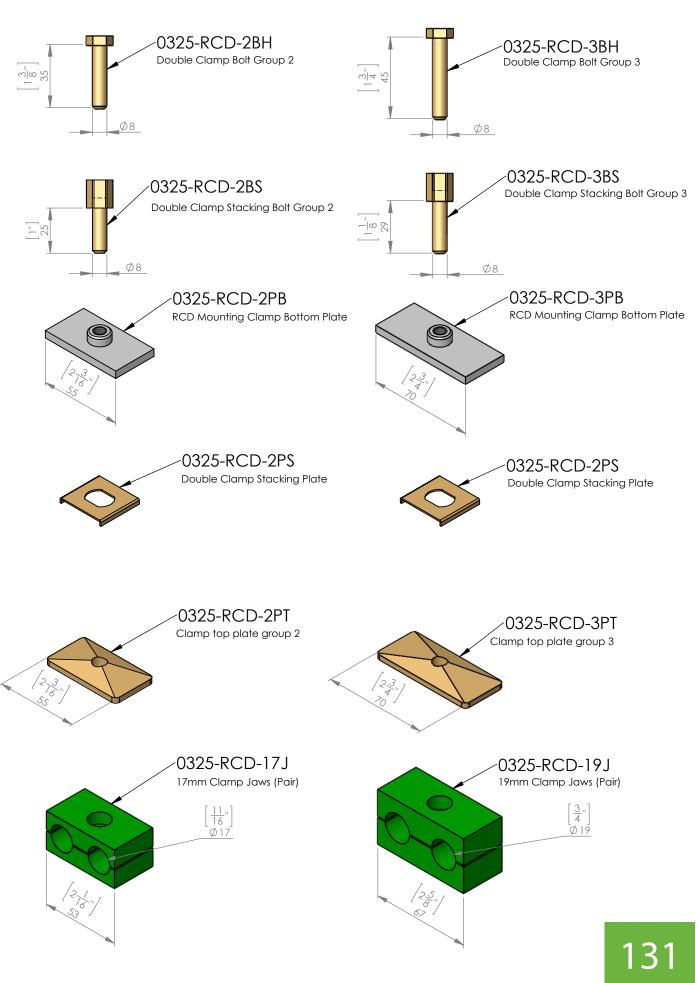


0343-924001261



New Style Hose Clamp Components Fits Hose T5006A

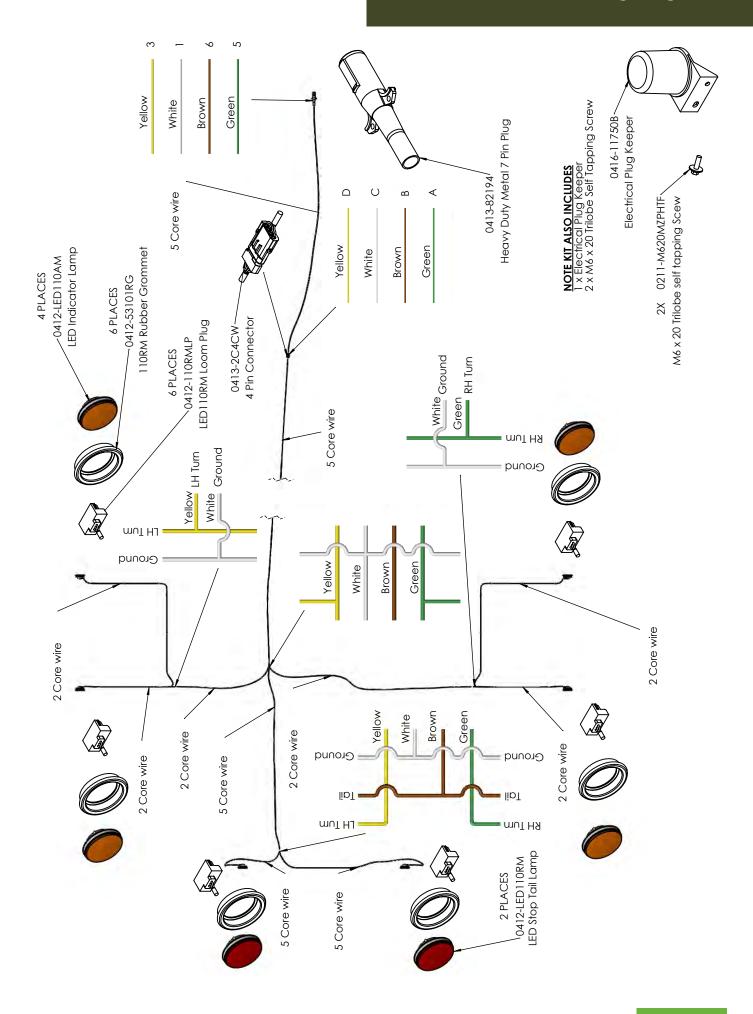


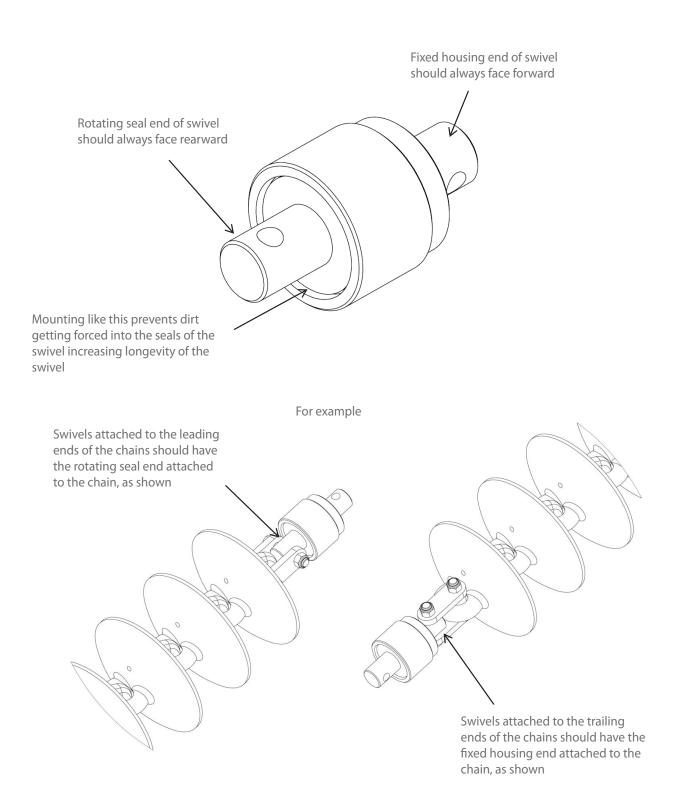


Section 4 Diagrams & Charts



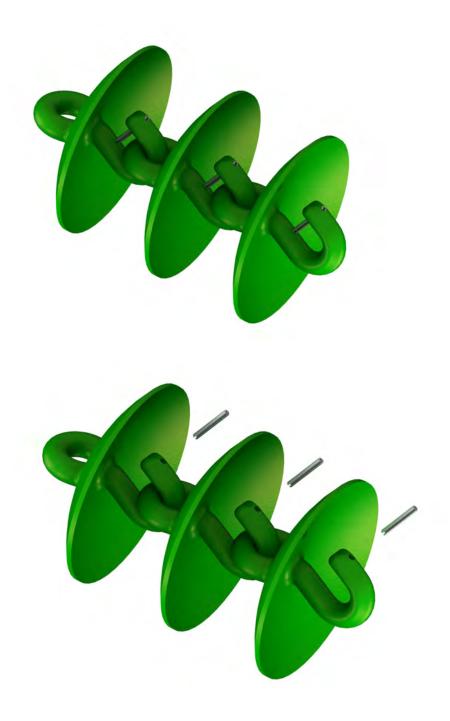
Wiring Diagram





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

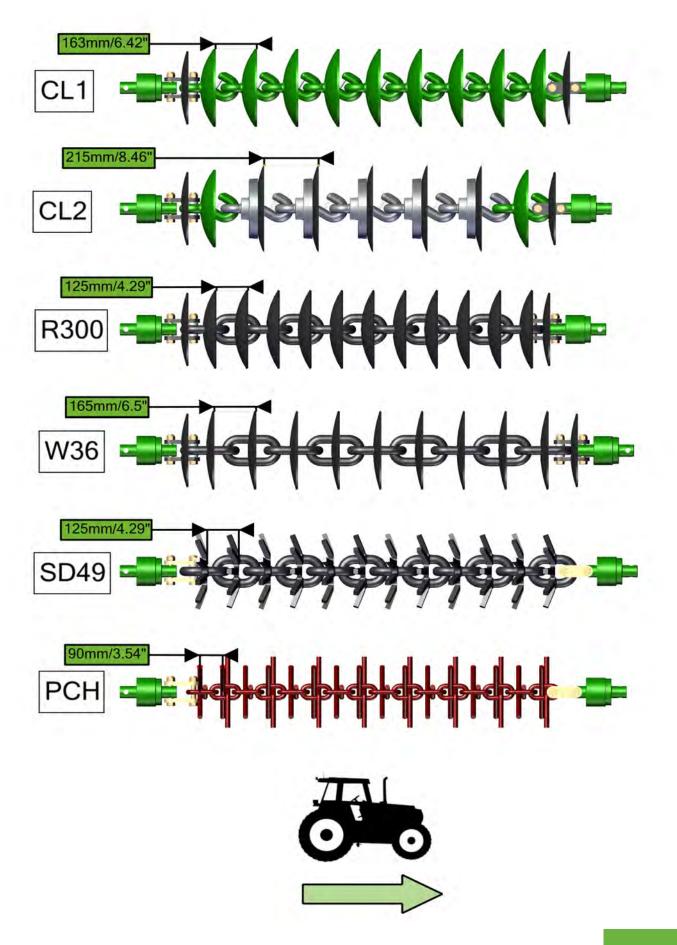
Chain Harrow specifications

Model	62'HDX
Working width	62′8″/19.1m
Transport width	16′5″/5.0m
Transport height	15'5"/4.7m
Transport length	73′10″/22.5m

Mode	el	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 - 51 CL1 - 16	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 - 13 CL1 - 3	21	21	28	28	38
	Modules rear	11.2′/3.4m	CL2 - 14 CL1 - 2	21	21	28	28	38

Section 5 Chain Assembly

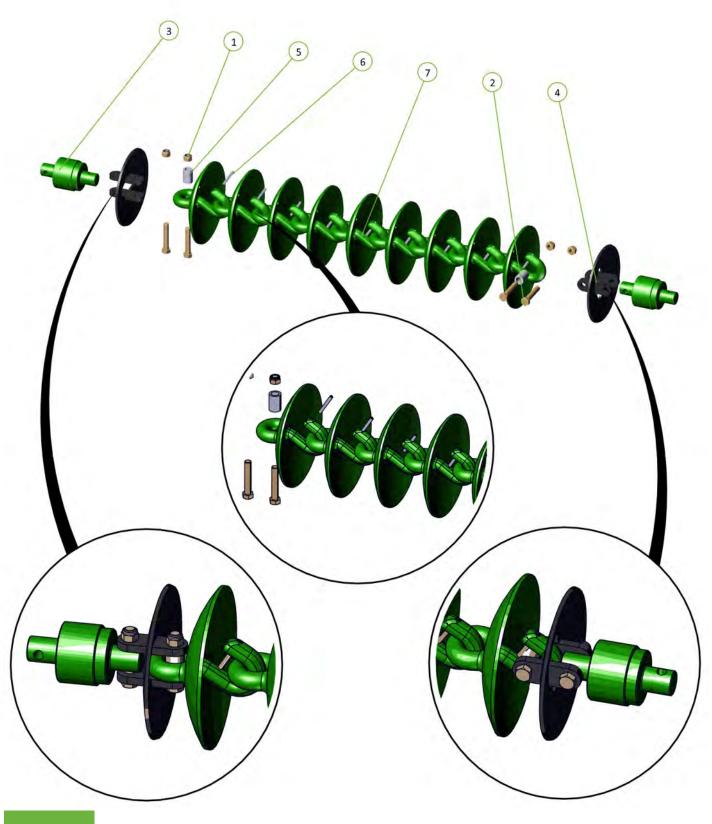




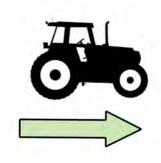
CL1 Disc Chain

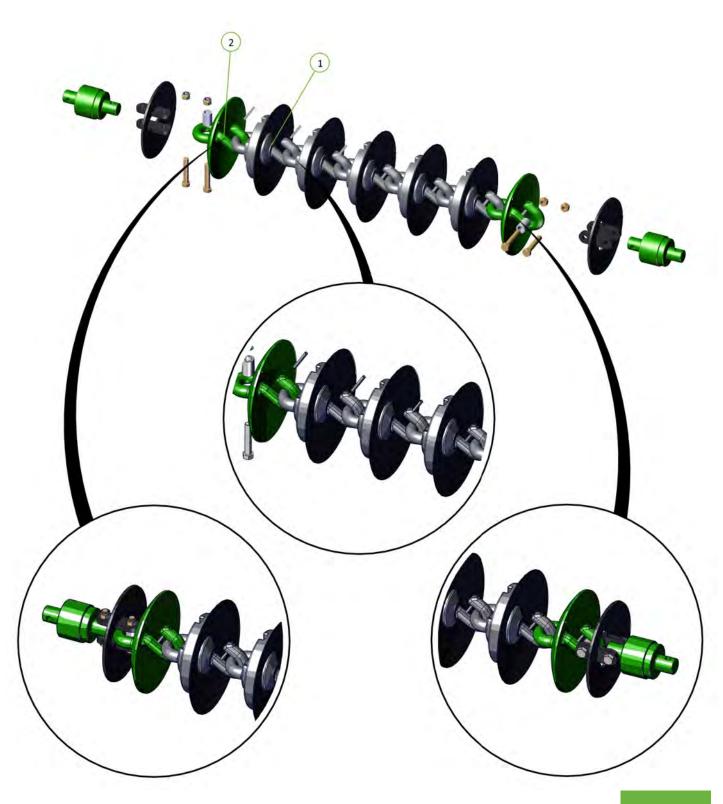
Item No.	Description	Number	
1	Nyloc Nut M20/24	0221-NYL20/24	4
2	M20 x 110 / M24 x 120 grade 10.9 ZP Short Thread Bolt	0211-20110ST/0211-24120ST	4
3	20/24mm Bolt Swivel Unit	0802-PCHB55 / 0802-PCHB553	2
4	Disc Chain Tie Plate Link 20mm / 24mm	0802-DCTP-20 / 0802-DCTP-24	2
5	Tie Plate Bush	0801-PCDCS55	2
6	Roll Pin Zinc Plated 3/8" x 3"	0262-3-8X3	1
7	CL1-B Chain Disc Link	0803-CL1	1

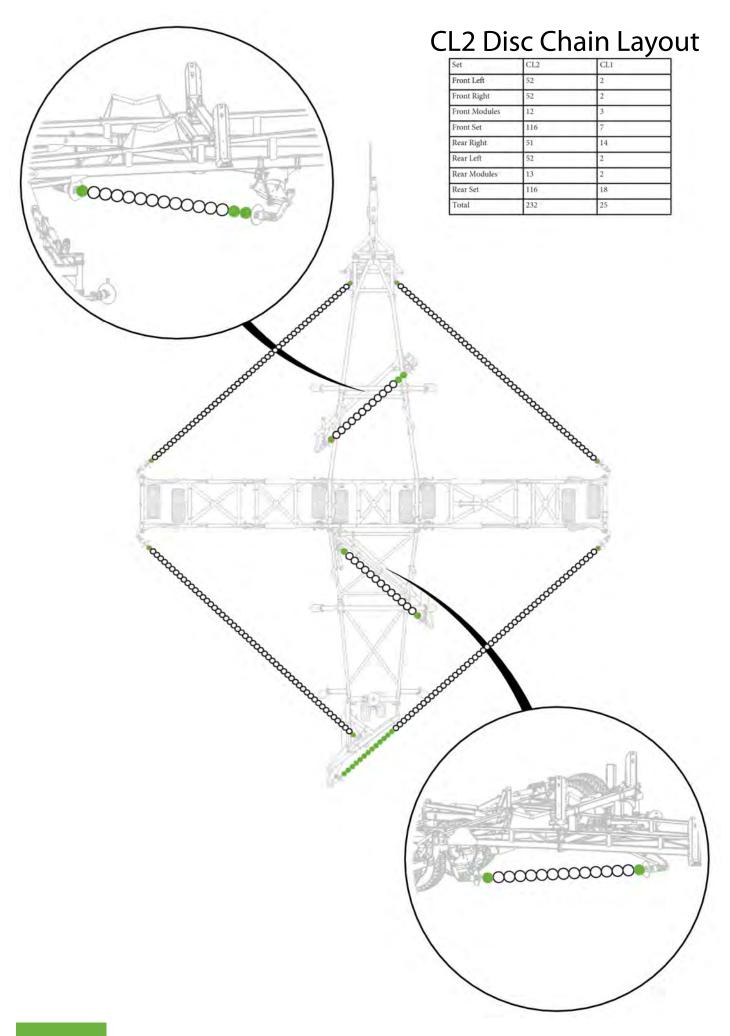


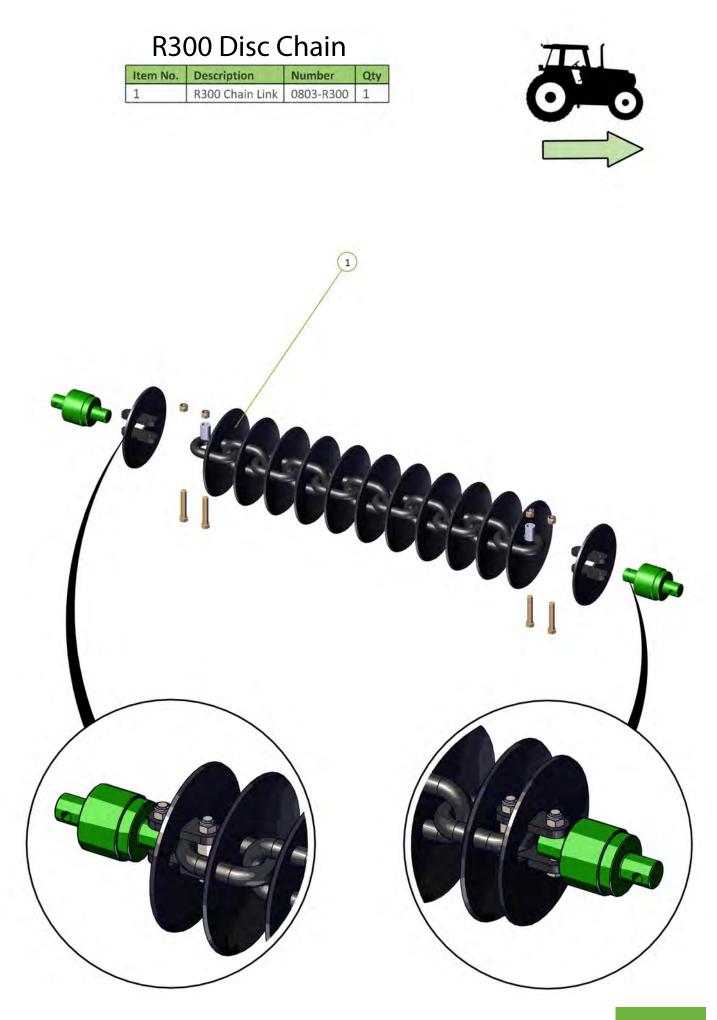


CL2 Disc Chain			
Item No.	Description	Number	Qty
1	0803-CL2-Link Assembly	0803-CL2	1
2	CL1-B Chain Disc Link	0803-CL1	1



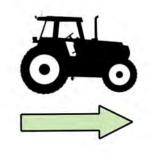






W36 Disc Chain			
Income Man	Description	Managhan	

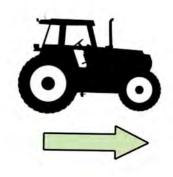
Item No.	Description	Number	Qty
1	W36/25 Chain Link	0803-W36	1

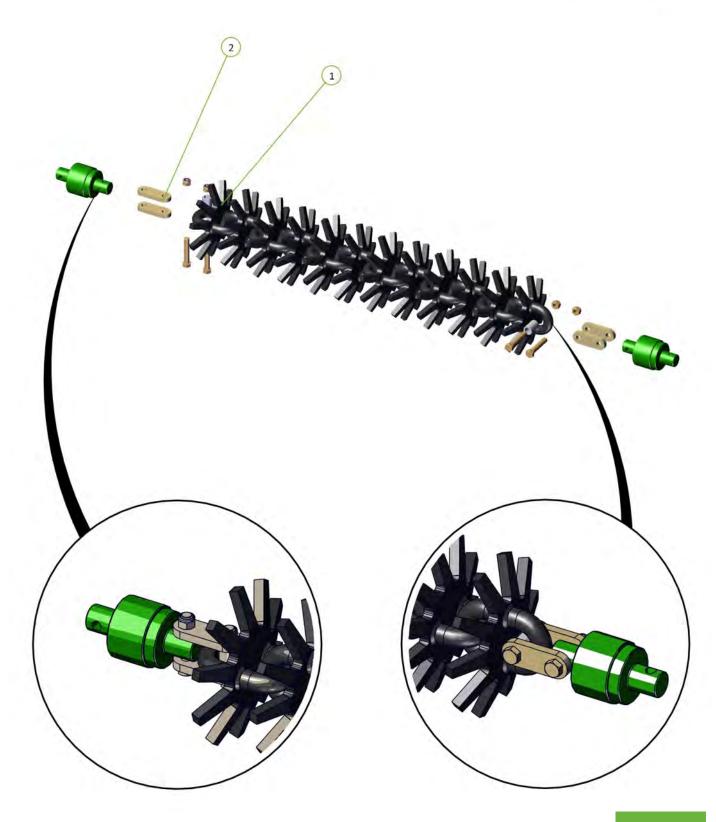




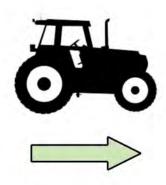
Spike Disc Chain

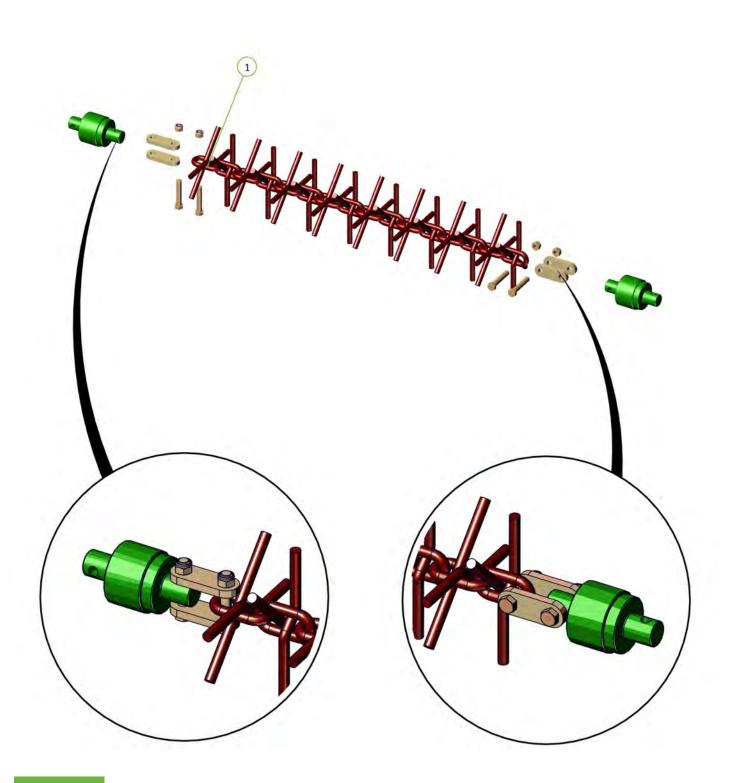
Item No.	Description	Number	Qty
1	10 Spike Disc Chain 49/27/5	0803-SD49	1
2	Tie Plate For 20mm Bolt/ Tie Plate For 24mm Bolt	0800-83.2 / 0800-83.3	4





Prickle Chain			
Item No.	Description	Number	Qty
	Prickle Chain Link	0803-PCH	1





Section 6 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 th at height adjusting chains have not fallen out of their slotted plates during transport.
 - d.Ensure front lift cylinder depth stops are fully engaged on cylinder shaft.
- 2. Lower front A frame to working height.
- 3. Unfold wings holding the hydraulic lever until both the main center cylinder pins have centered in their slots. (If chain pulls tight during unfold, stop and inspect if chain is hooked)
- 4. Lower rear tail by holding hydraulic lever until tail and modules are completely lowered to working position.
- 5. 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.
- 6. 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. Raise the Rear Tail and modules by holding the hydraulic lever until they come to a complete stop.
- 3. Fold the wings. They should move as follows; 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.
- 4. Raise front A frame to transport height.
- 5. Walk around and check that chains have located correctly in transport rests. (30' only, close wing transport lock valves).

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
40	12.4	330

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

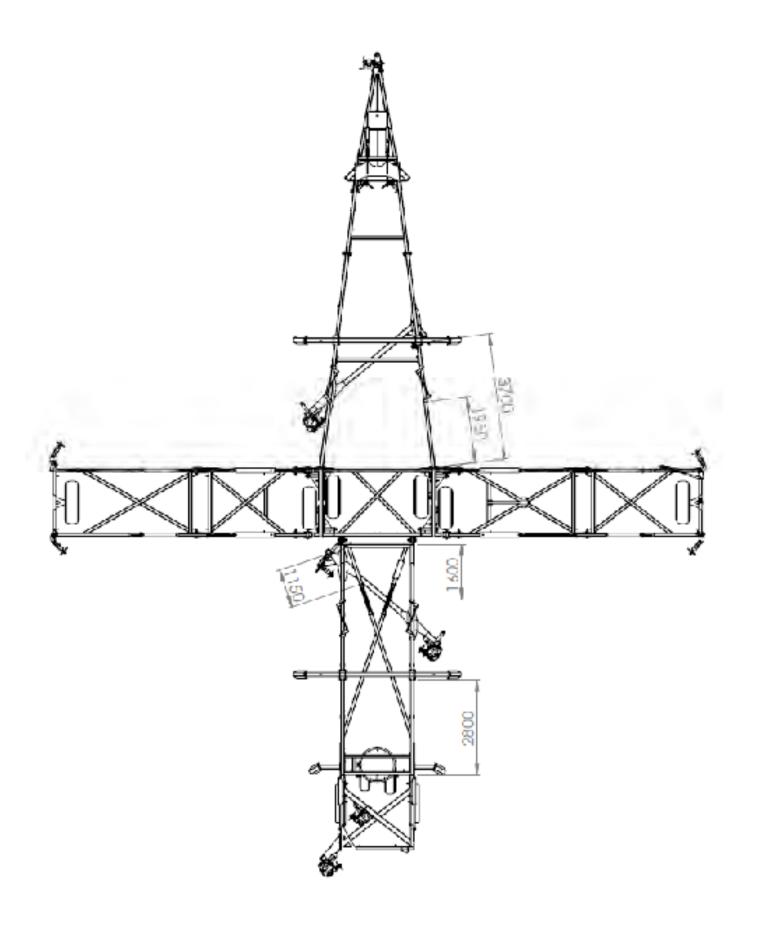
Operational

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.





Pre-delivery check list	Checked
Check tyre pressure (As per manual)	
Check wheel nuts are tight	
Hydraulic rams & hoses are sound	
Grease caster wheel kingpin bearing	
All bolts and nuts are tightened to the correct torque values	
All safety decals are on the machine in the correct locations as per the operator's manual	
Check the chain tension as per the operator's manual	
Assembly and operating manuals are in the manual canister	
Brake disc tension spring is tensioned for road transport (50-63mm)	
Roll pins are installed in the CL Discs (CL2 & CL1)	
Chains are resting correctly in their transport supports (chain carries)	
Machine is registered	



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