

9m

Kelly

Tillage System 9m Assembly Manual

Revision G - December 2020

Serial Number:

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Thank you for choosing a Kelly Tillage 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 Tillage directly.

Kelly 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.

Contact Information

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Website: www.kellytillage.com

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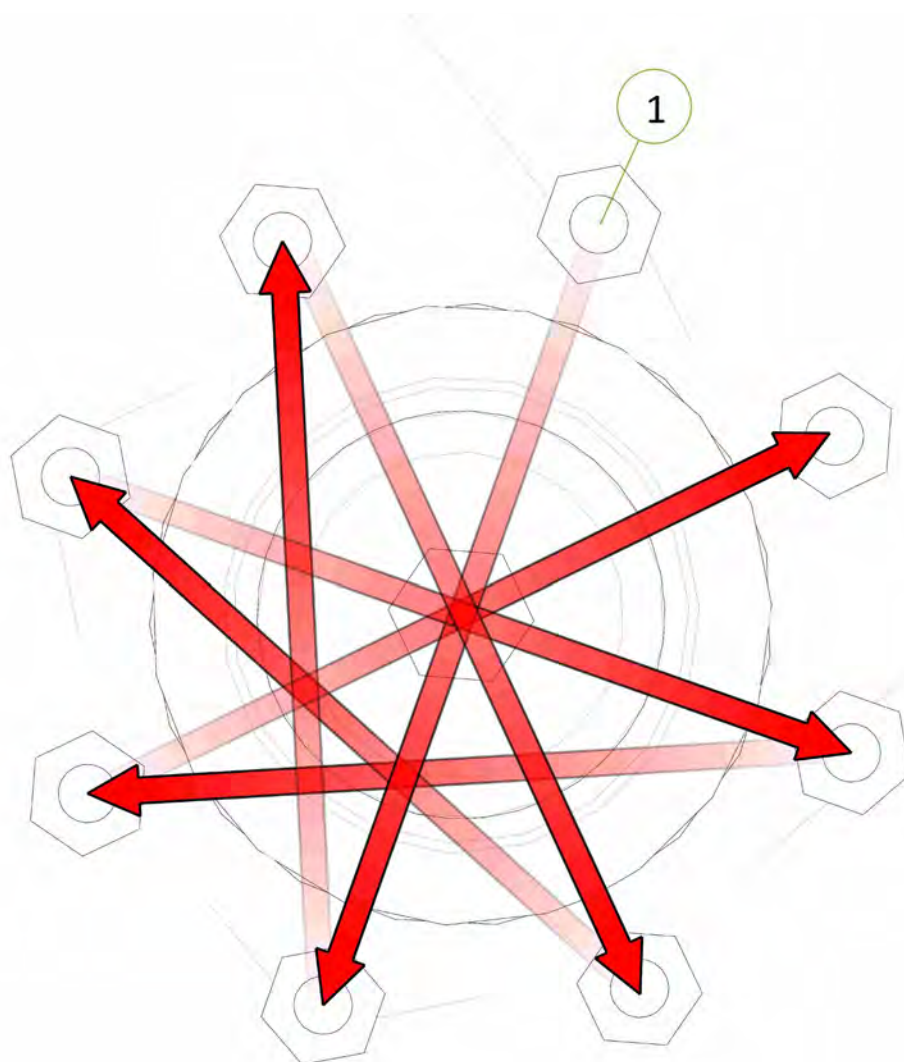
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Bolt Torque Settings

Bolt Type	Wheel nut	U Bolt			Class 8.8 Bolt							Class 10.9 Bolt
Bolt Size	M18	M12	M16	M20	M6	M8	M10	M12	M16	M20	M24	M20
Spanner	27	19	24	30	10	13	17	19	24	30	36	30
Nm (max)	270	50	75	260	9.9	18.1	28.8	41.9	78.8	127	183	181

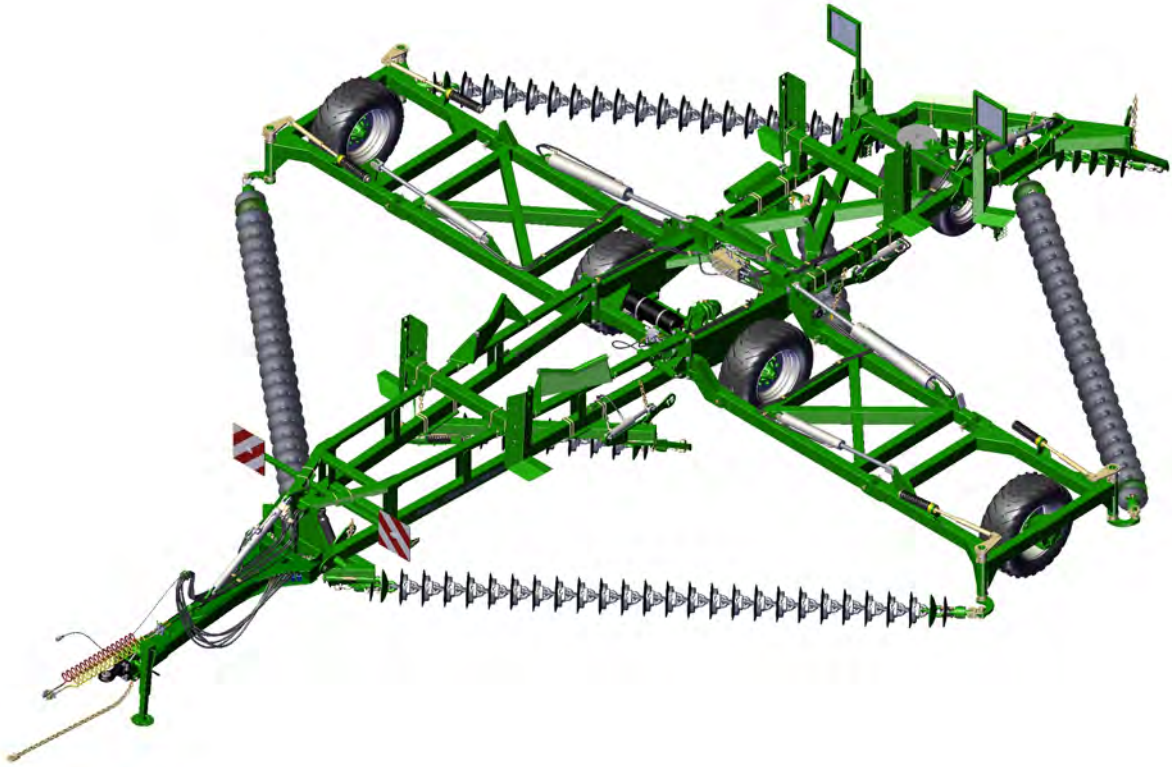
[1] When fitting a wheel & tire to a hub, tighten the wheel nuts in a star pattern to the correct tension. To achieve this choose a wheel nut & tighten, then proceed to the opposite side of the hub to the next wheel nut & tighten & so on until all wheel nuts are tight. Then repeat the procedure to check 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.

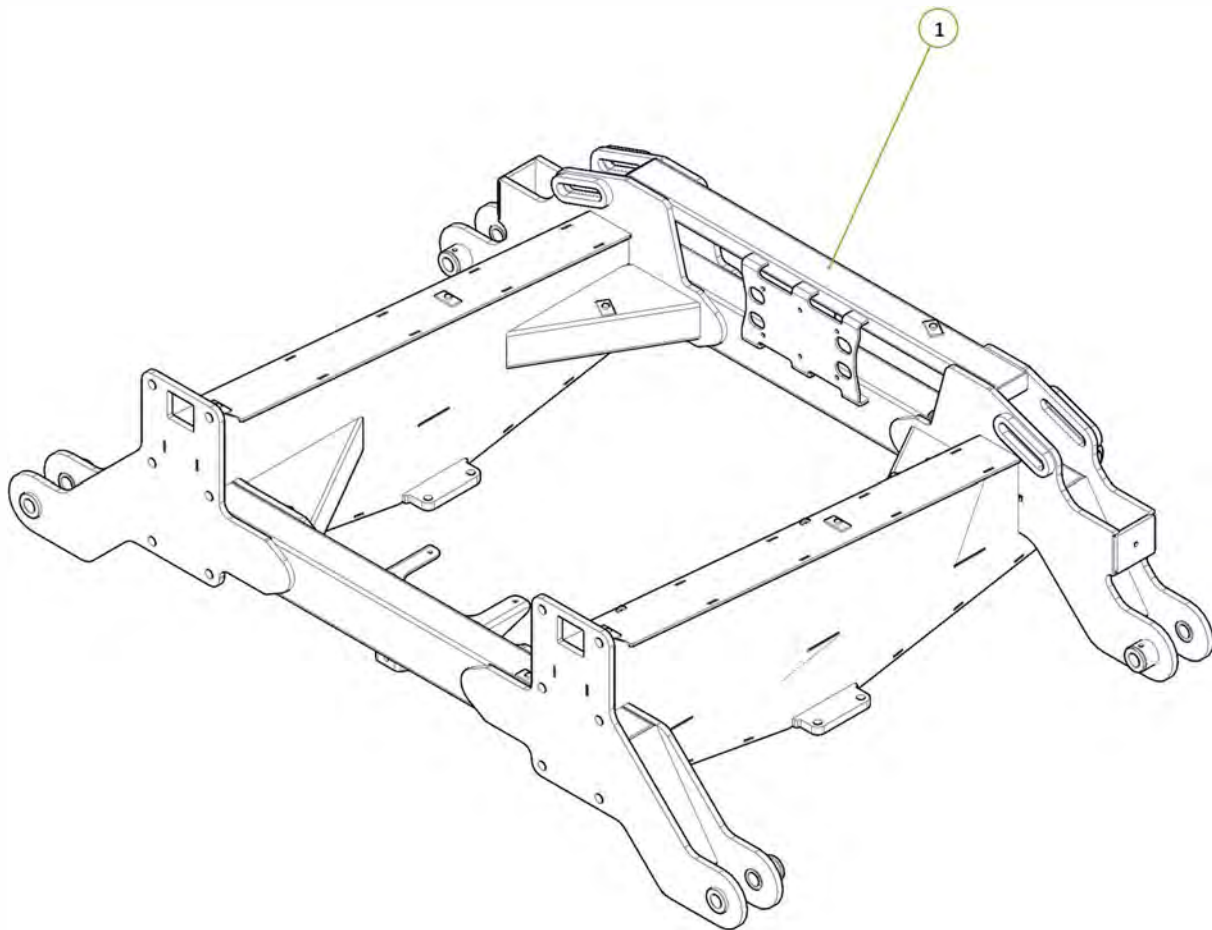
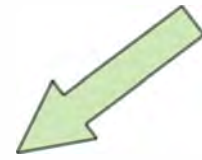


Section 1

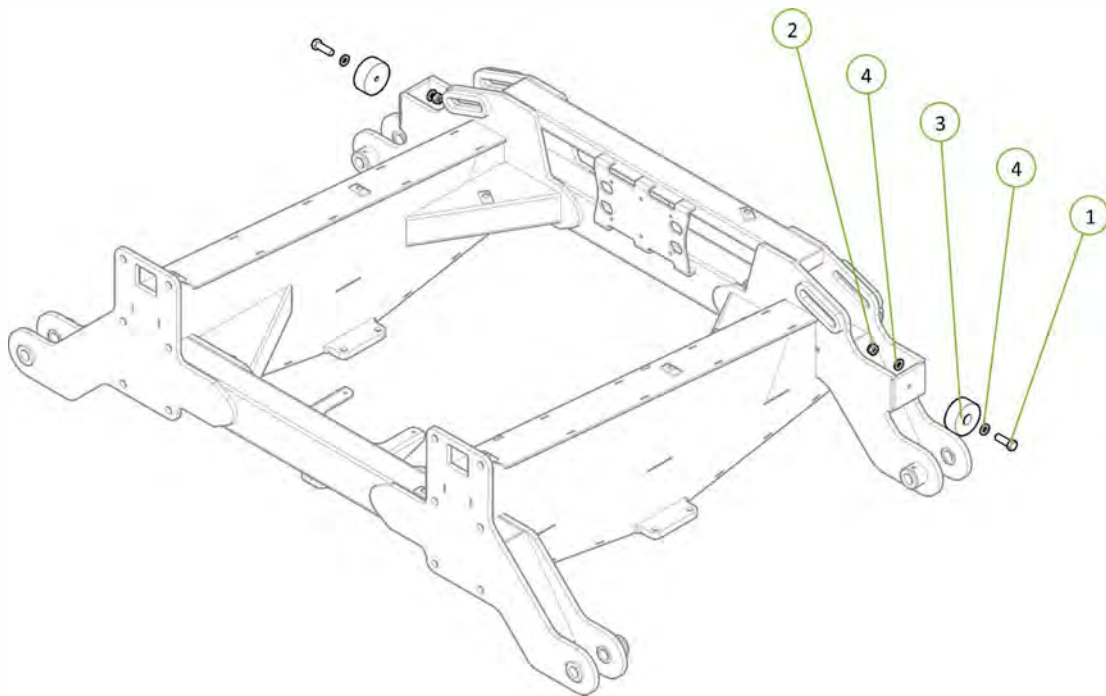
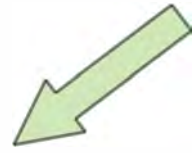
Assembly



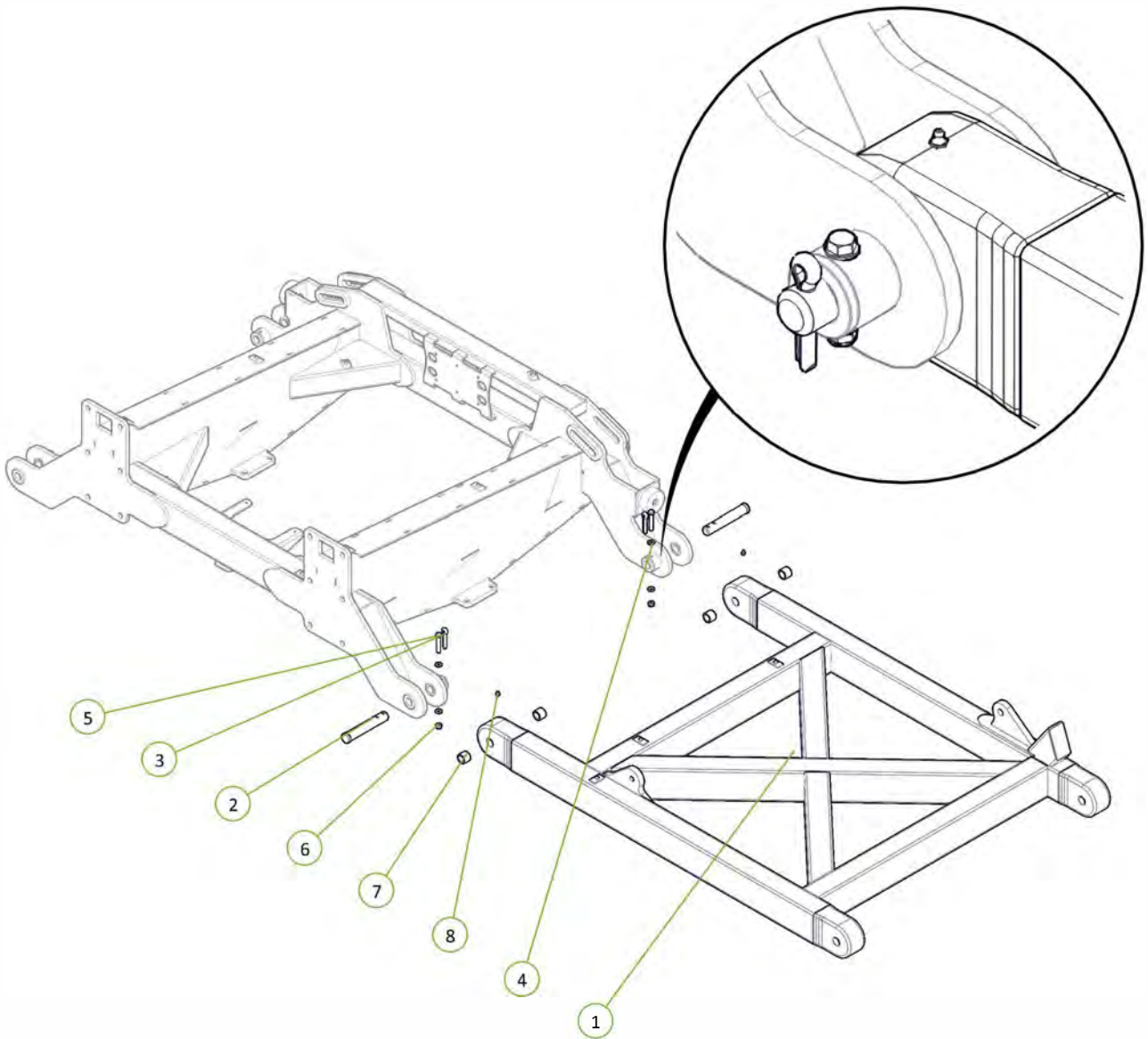
Item No.	Description	Qty	Number
1	Centre Frame	1	1532-01



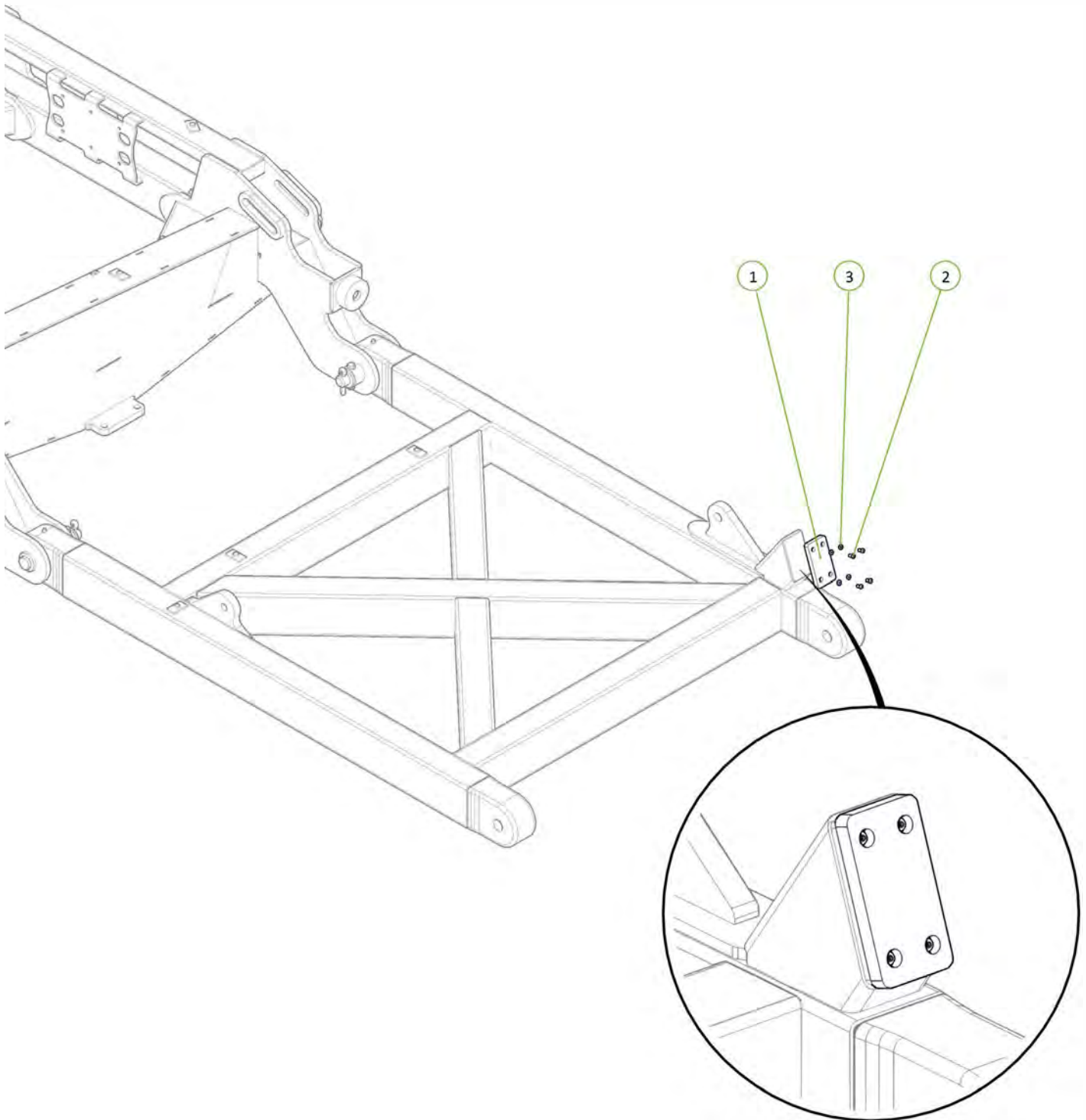
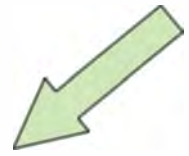
Item No.	Description	Qty	Number
1	M16 x 55 Grade 8.8 ZP Bolt	2	0211-1655
2	Nyloc Nut M16	2	0221-NYL16
3	Wing Folding Buffer	2	1201-12
4	Washer Flat M16	4	0231-F16



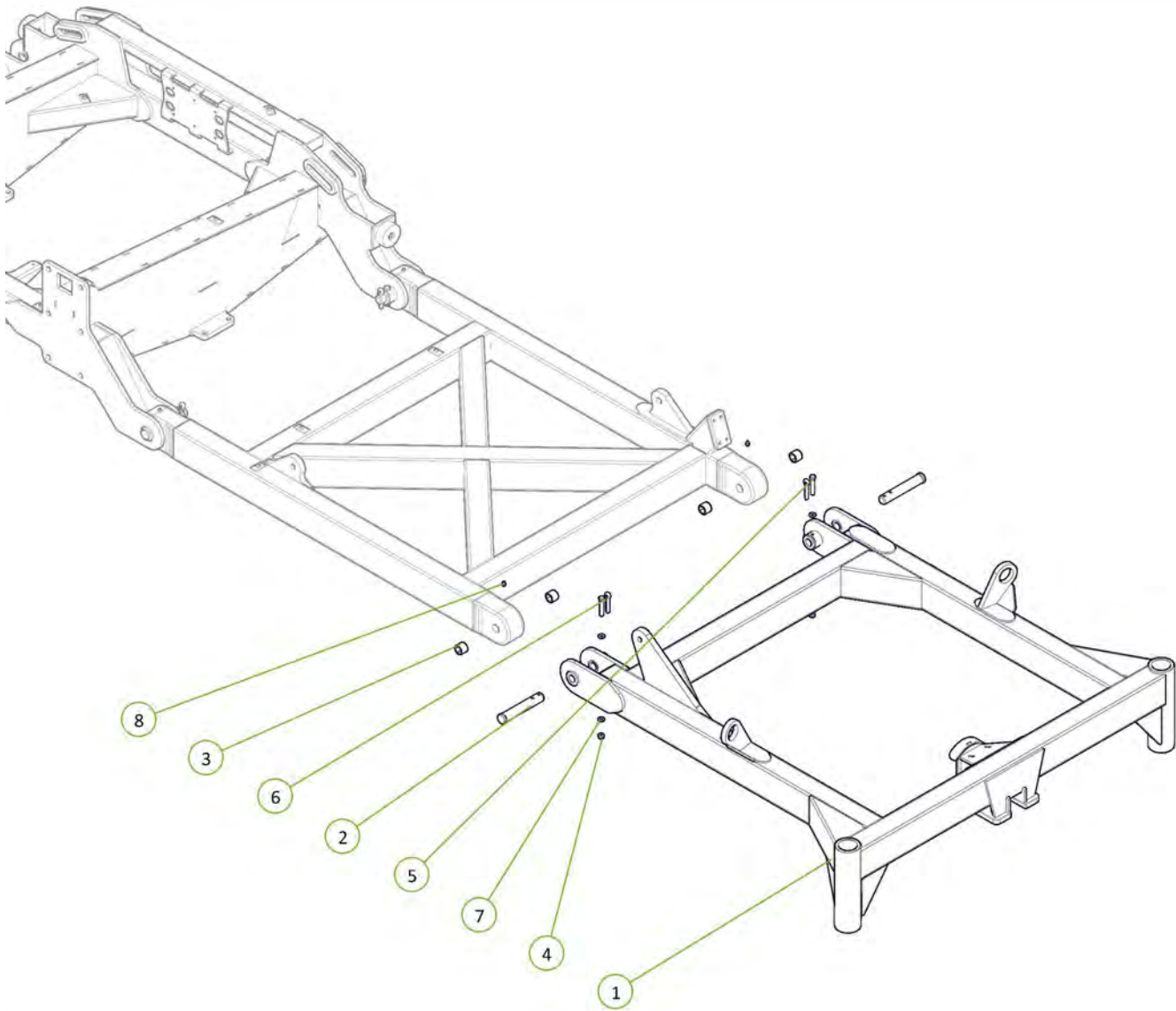
Item No.	Description	Qty	Number
1	Left Hand Inner Wing	1	1532-05-2
2	PCH Wing Pivot Pin	2	0801-10-08-235
3	Cotter Pin M13 x 63	2	0261-PINC1363
4	Washer Flat M12	4	0231-F12
5	M12 x 80 Grade 8.8 ZP Bolt	2	0211-1280
6	Nyloc Nut M12	2	0221-NYL12
7	35 ID x 30mm DX Bush	4	0113-3530DX
8	Grease Nipple M8 x 1	2	0181-GNM8



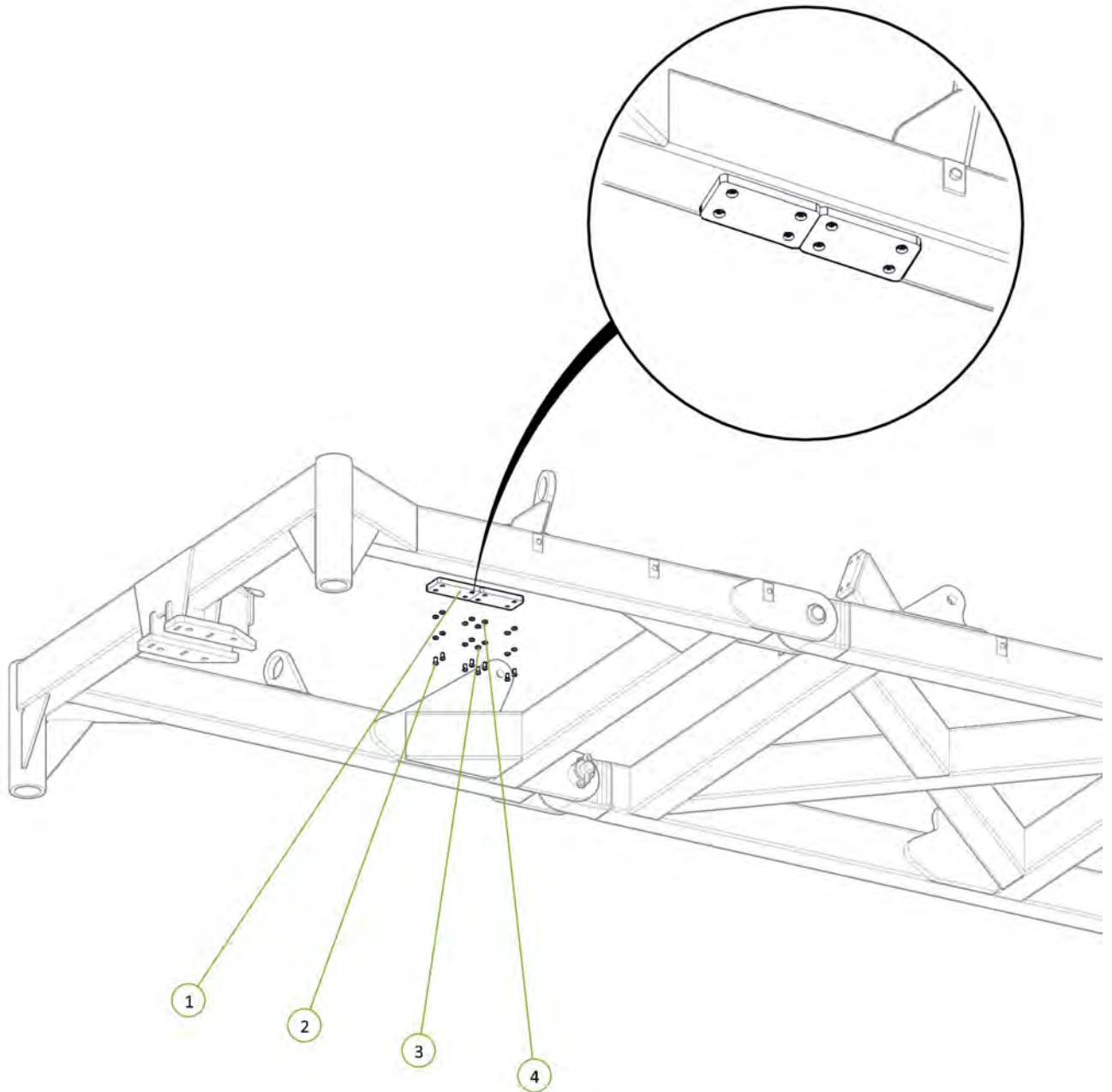
Item No.	Description	Qty	Number
1	Wing Buffer Pad	1	1501-27
2	Button Head Screw M6 x 16mm ZP	4	0211-616BH
3	Washer Spring M6	4	0231-S6



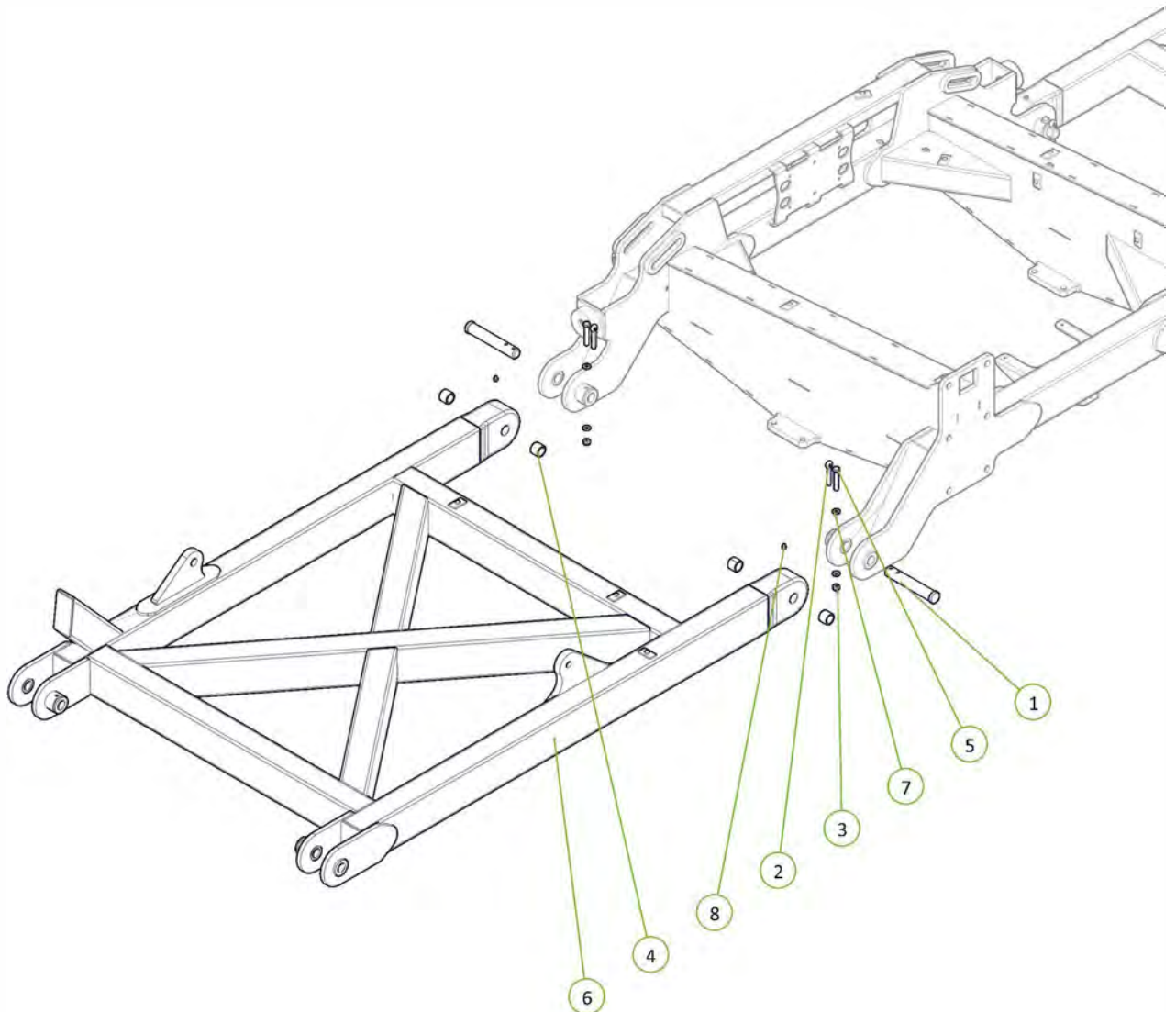
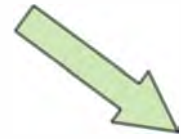
Item No.	Description	Qty	Number
1	Left Hand Outer Wing	1	1532-07-2
2	Wing Pivot Pin	2	0801-10-08-235
3	35 ID x 30mm DX Bush	4	0113-3530DX
4	Nyloc Nut M12	2	0221-NYL12
5	M12 x 80 Grade 8.8 ZP Bolt	2	0211-1280
6	Cotter Pin M13 x 63	2	0261-PINC1363
7	Washer Flat M12	4	0231-F12
8	Grease Nipple M8 x 1	2	0181-GNM8



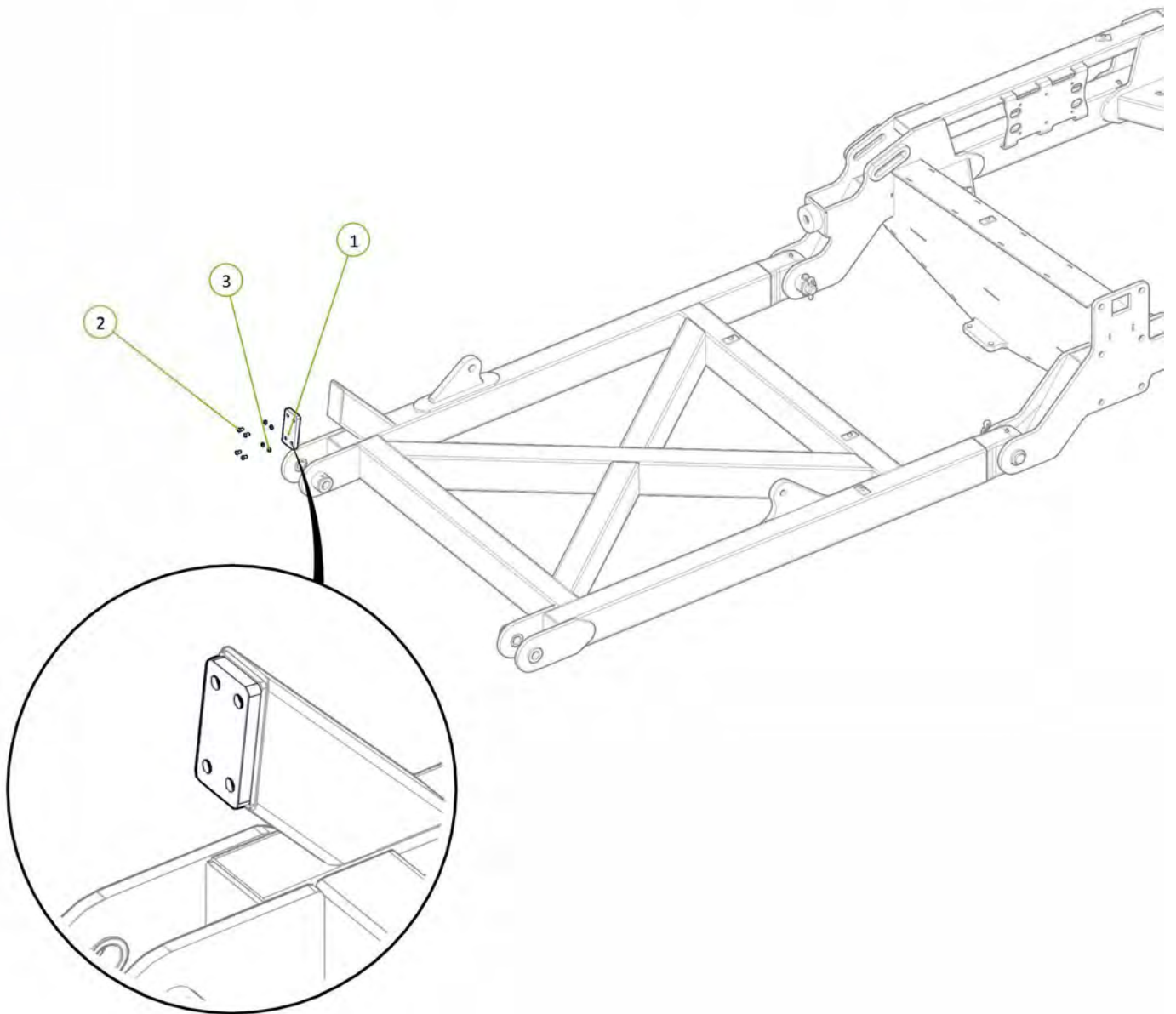
Item No.	Description	Qty	Number
1	Wing Buffer Pad	2	1501-27
2	Button Head Screw M6 x 16mm	8	0211-0616BH
3	Washer Spring M6	8	0231-S6
4	Washer Flat M6	8	0231-F6



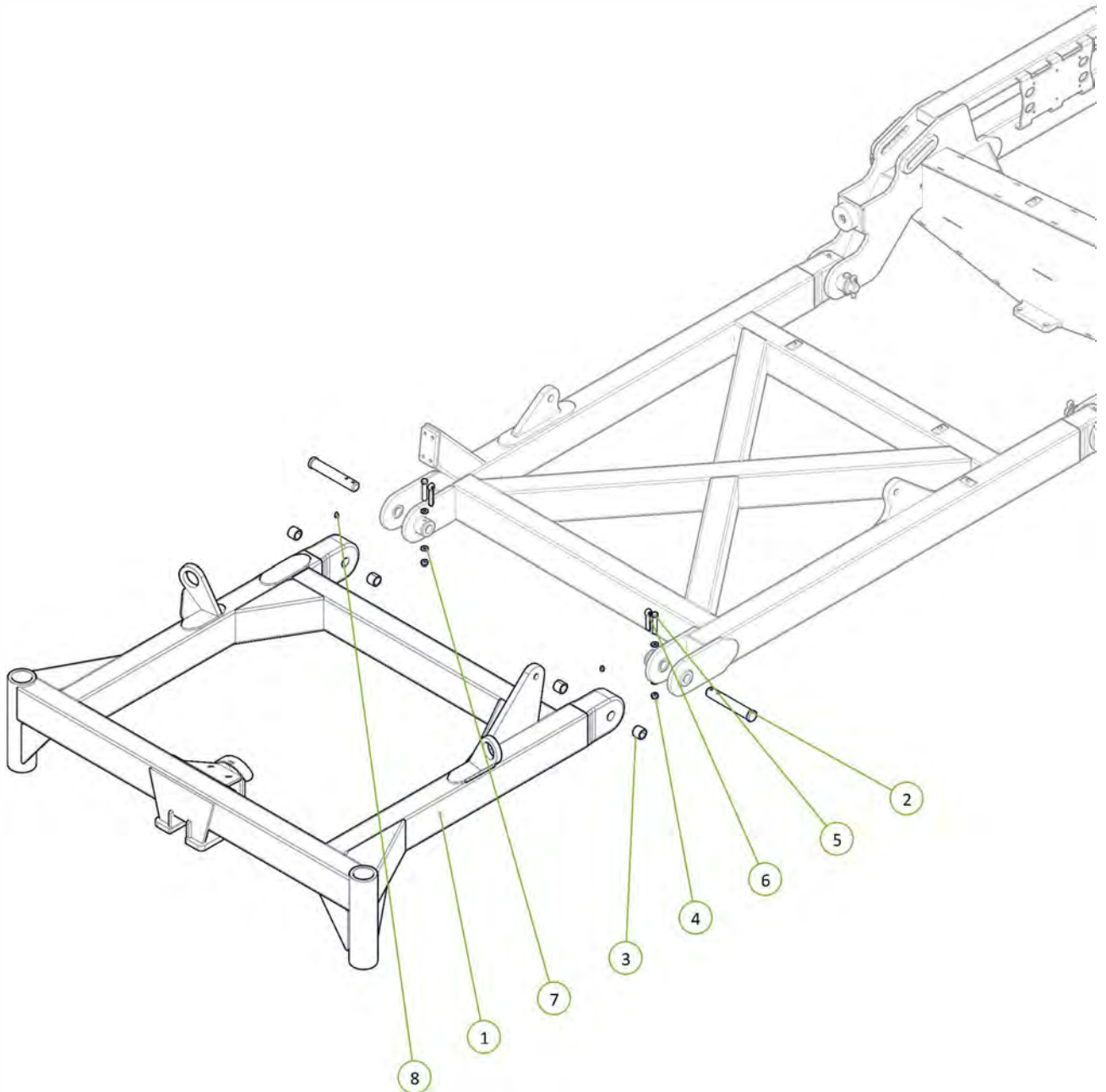
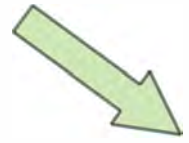
Item No.	Description	Qty	Number
1	Wing Pivot Pin	2	0801-10-08-235
2	Cotter Pin M13 x 63	2	0261-PINC1363
3	Nyloc Nut M12	2	0221-NYL12
4	35 ID x 30mm DX Bush	4	0113-3530DX
5	M12 x 80 Grade 8.8 ZP Bolt	2	0211-1280
6	Right Hand Inner Wing	1	1532-04-2
7	Washer Flat M12	4	0231-F12
8	Grease Nipple M8 x 1	2	0181-GNM8



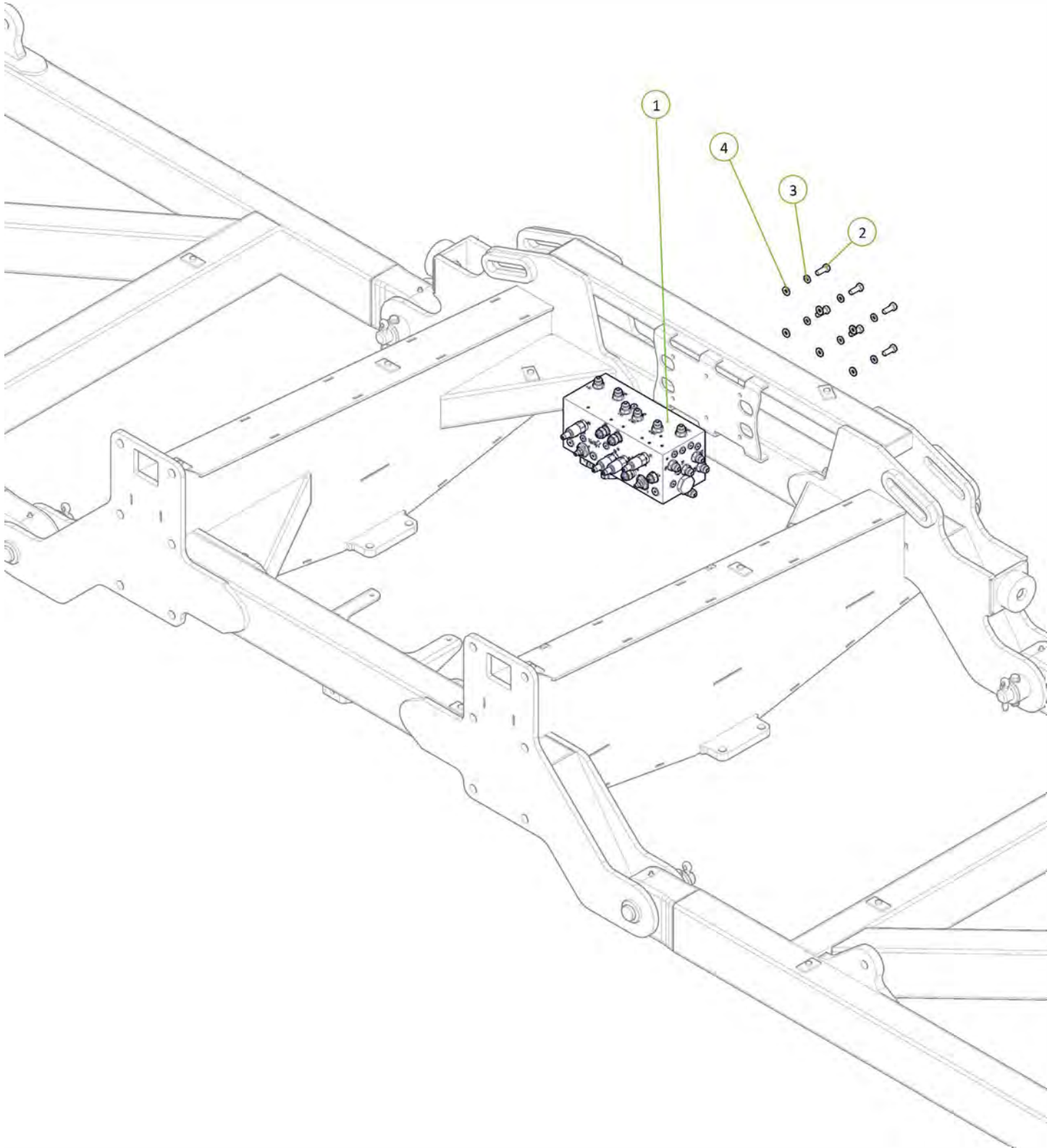
Item No.	Description	Qty	Number
1	Wing Buffer Pad	1	1501-27
2	Button Head Screw M6 x 16mm ZP	4	0211-616BH
3	Washer Spring M6	4	0231-S6



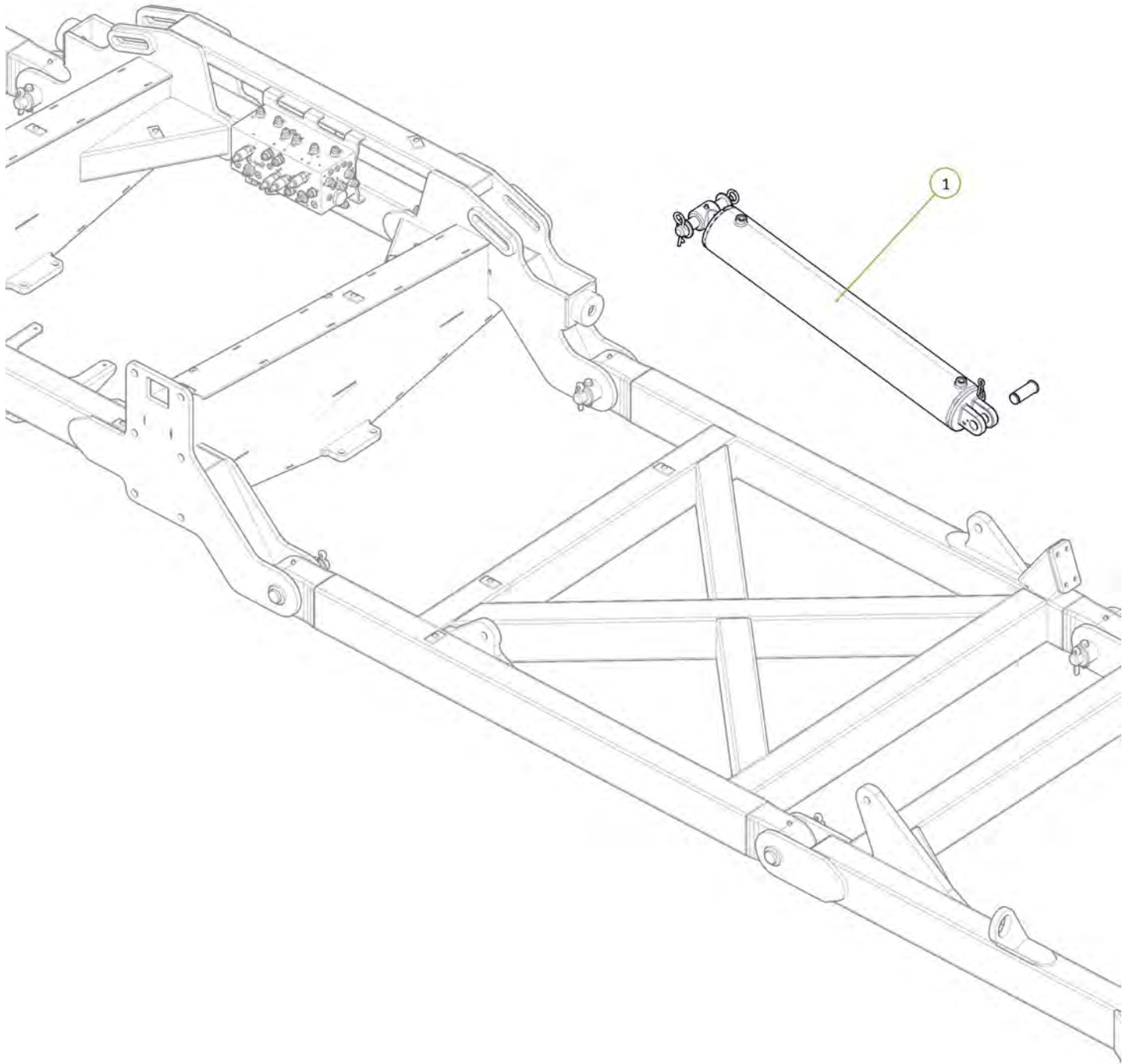
Item No.	Description	Qty	Number
1	Right Hand Outer Wing	1	1532-06-2
2	Wing Pivot Pin	2	0801-10-08-235
3	35 ID x 30mm DX Bush	4	0113-3530DX
4	Nyloc Nut M12	2	0221-NYL12
5	M12 x 80 grade 8.8 ZP Bolt	2	0211-1280
6	Cotter Pin M13 x 63	2	0261-PINC1363
7	Washer Flat M12	4	0231-F12
8	Grease Nipple M8 x 1	2	0181-GNM8

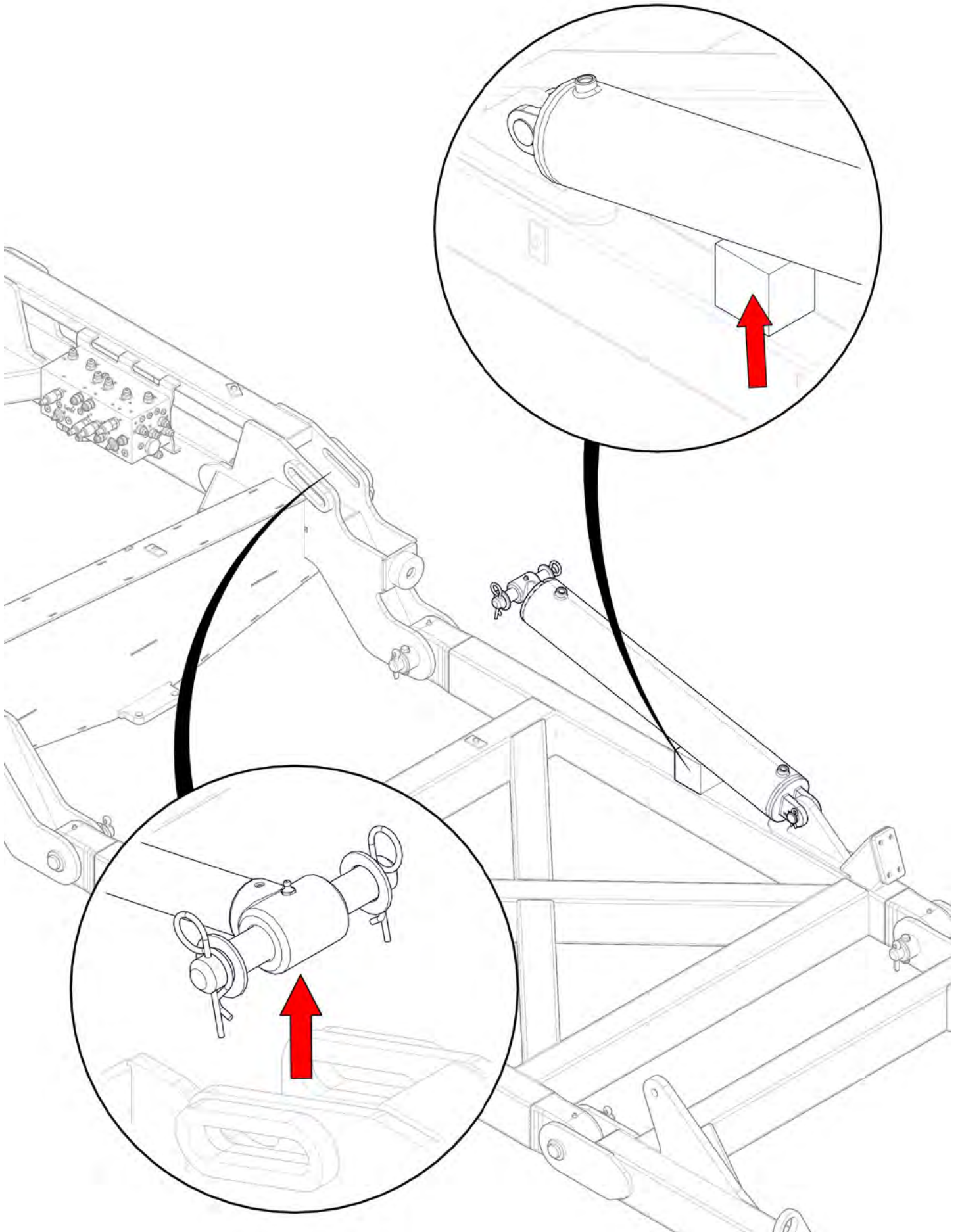


Item No.	Description	Qty	Number
1	Dual Circuit 3 Stage Sequence Manifold V12	1	0802-691033
2	M10 x 30 Grade 8.8 ZP Bolt	6	0211-1030
3	Washer Spring M10	6	0231-S10
4	Washer Flat M10	6	0231-F10

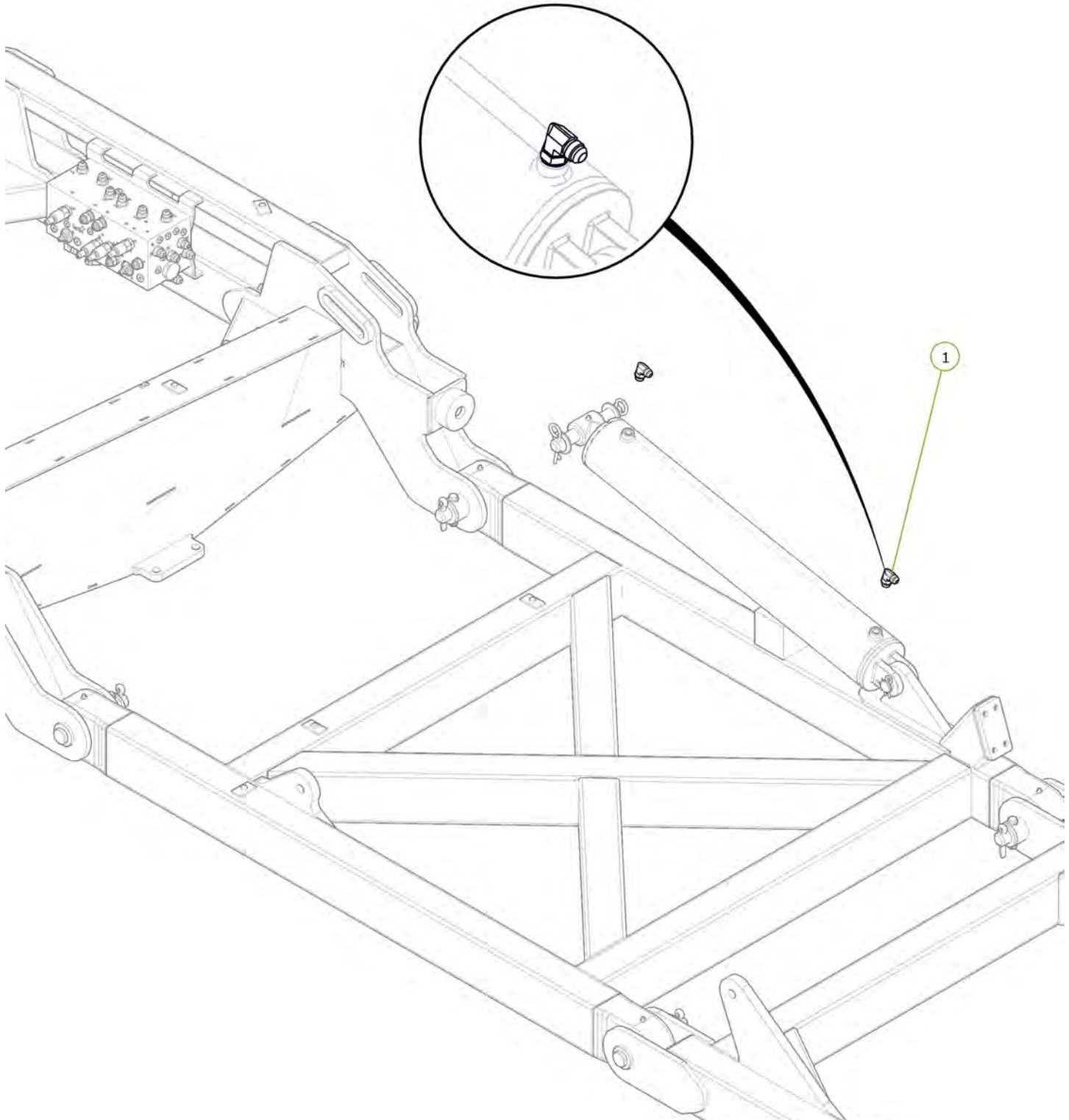


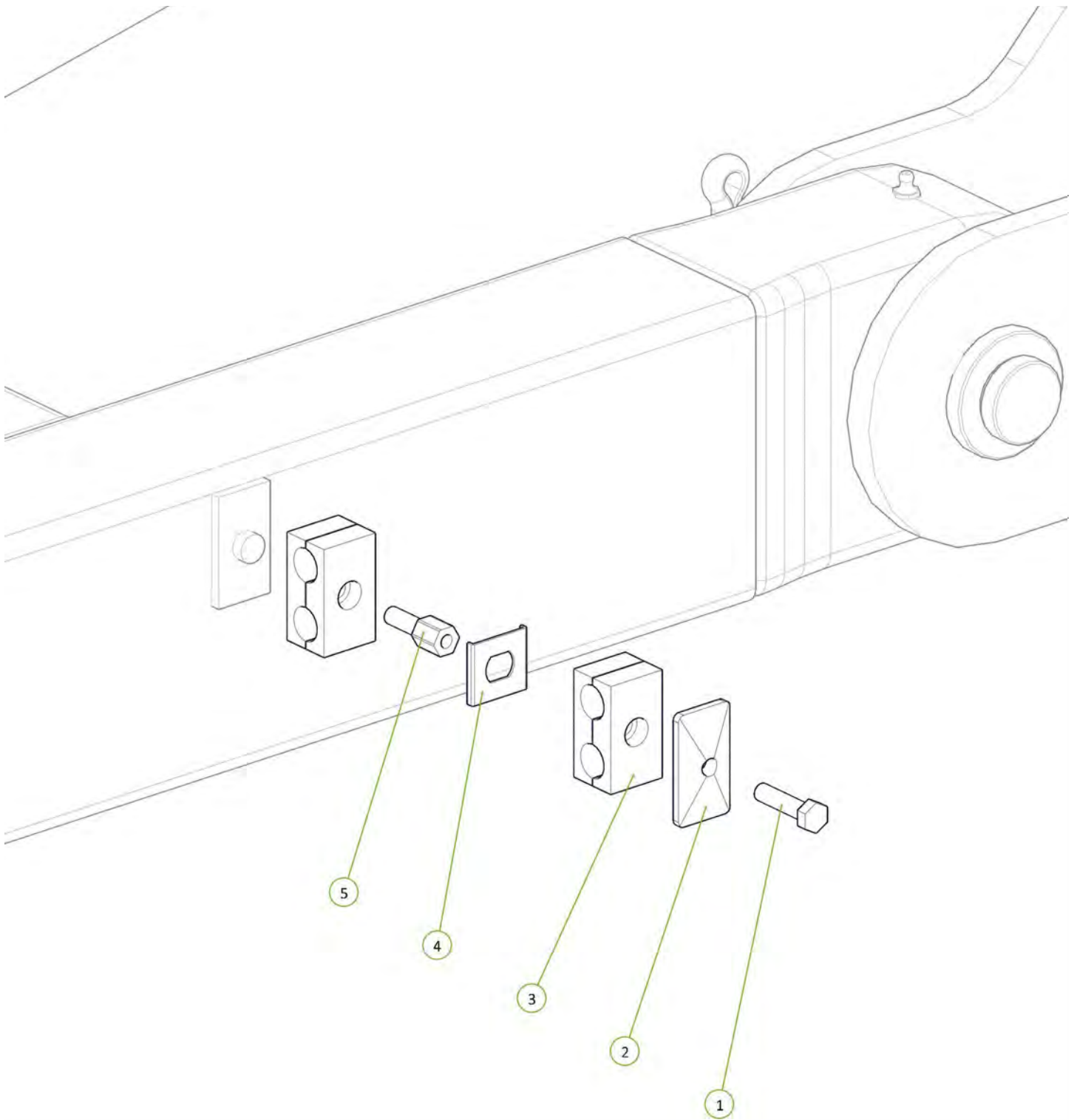
Item No.	Description	Qty	Number
1	5" Bore 30" Stroke 3 1/8" S/Tube 2" Rod Hydraulic Cylinder	1	0311-530ST





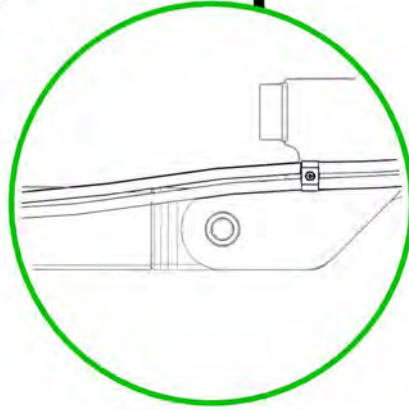
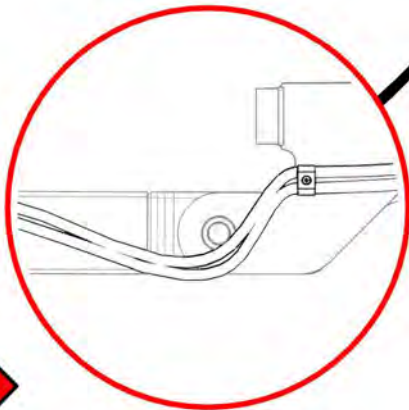
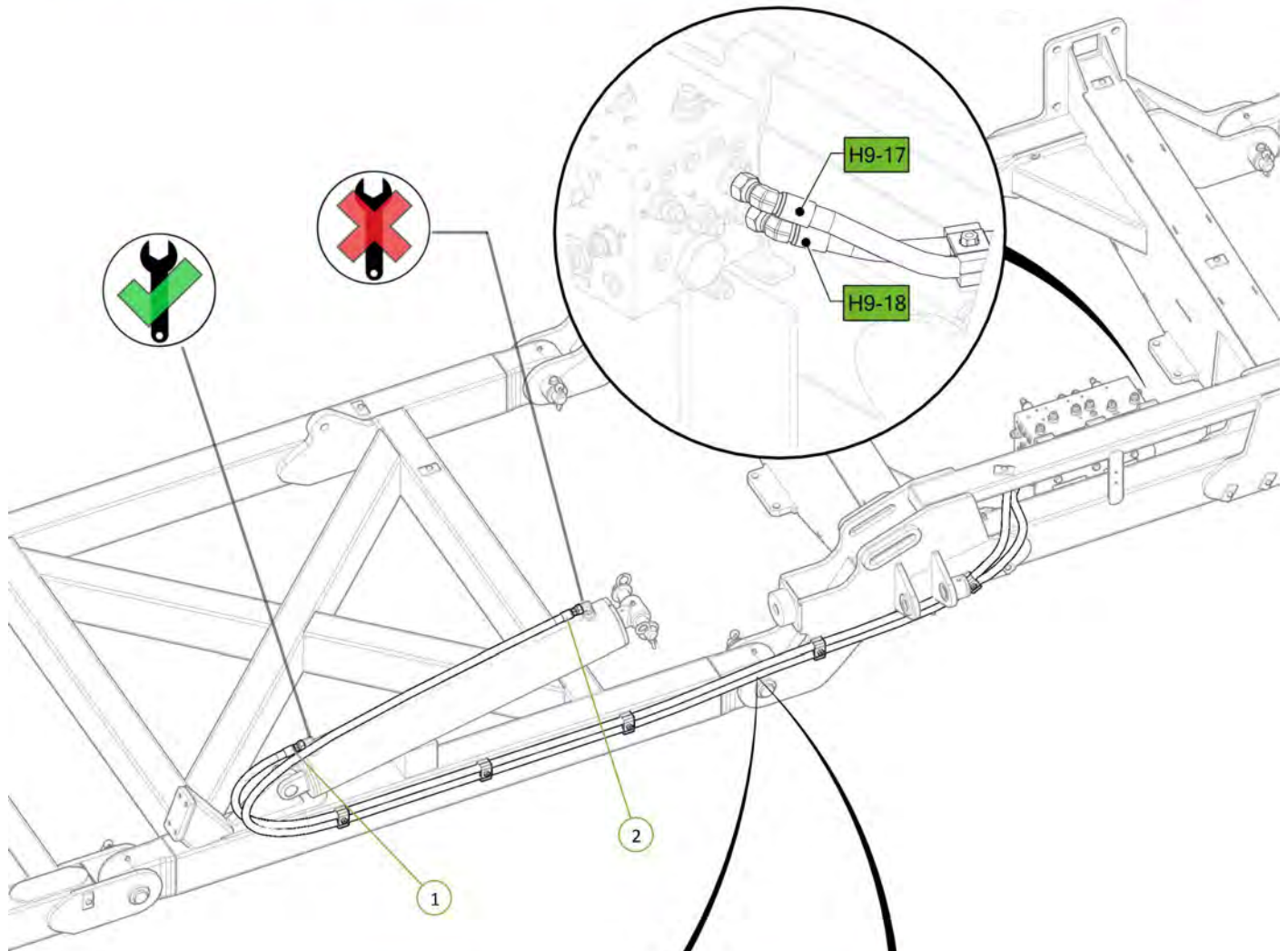
Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212



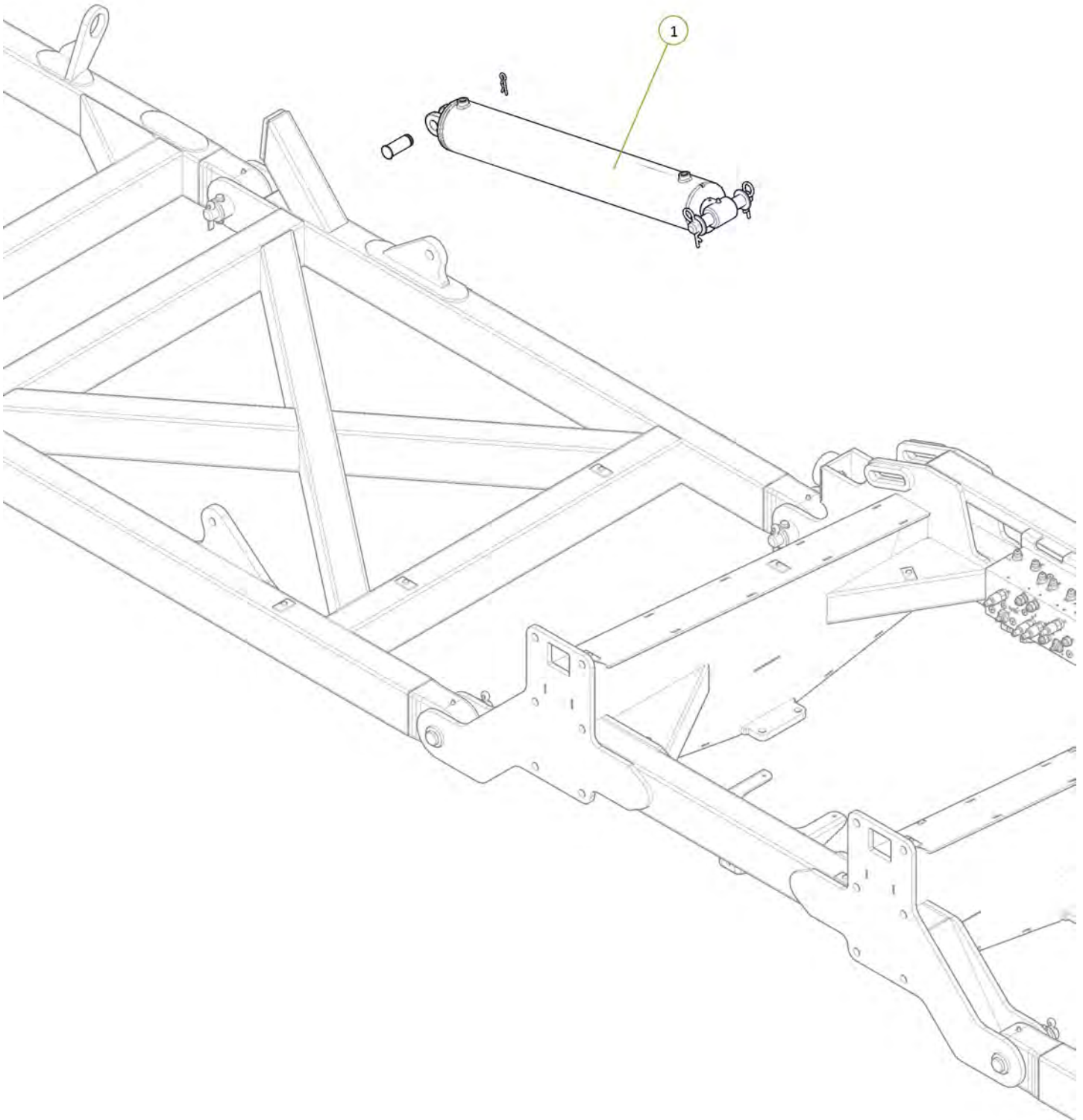


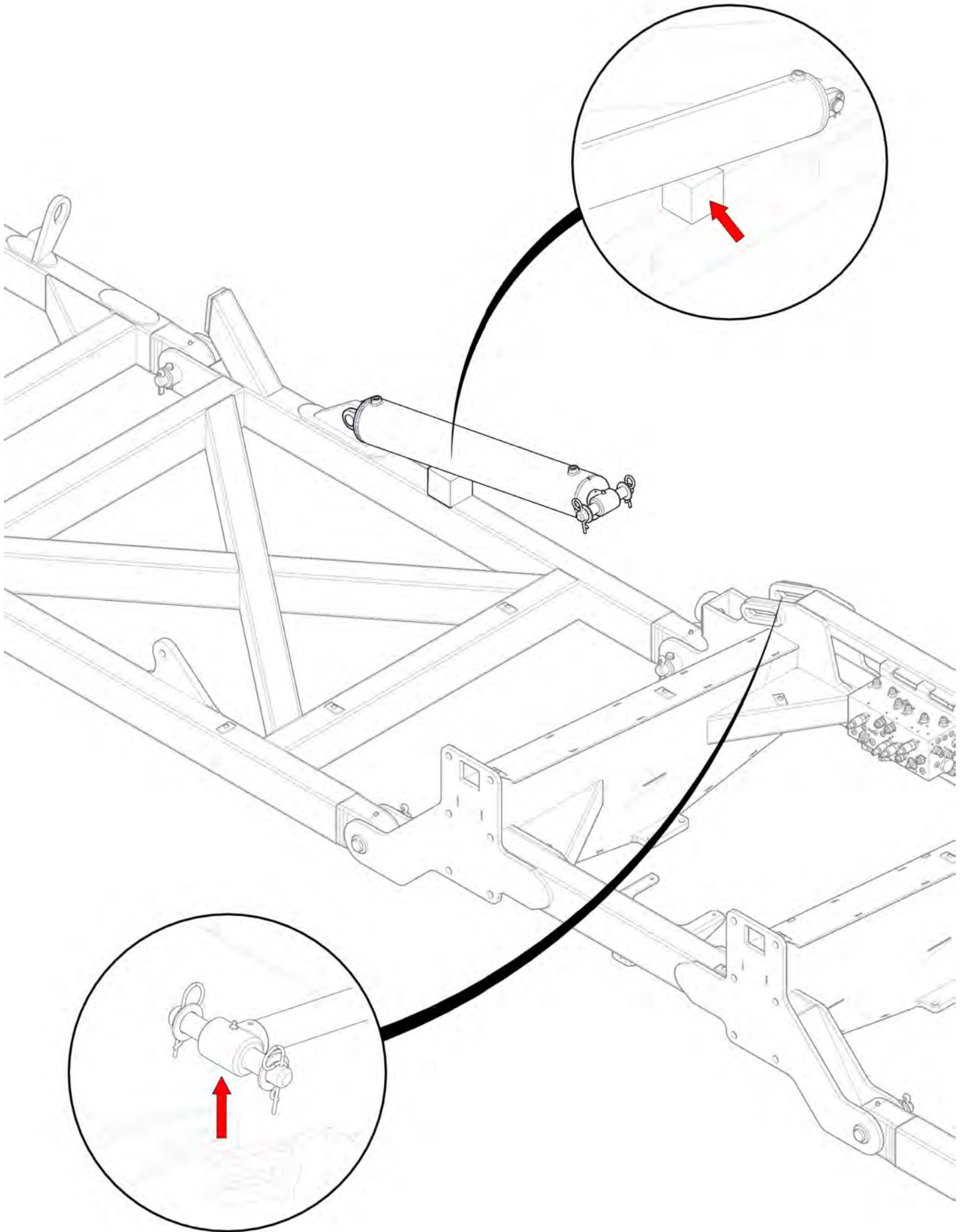
Item No.	Description	Qty	Number
1	Double Clamp Bolt No. 2	1	0325-RCD-2BH
2	Clamp top plate No. 2	1	0325-RCD-2PT
3	17mm Clamp Jaws (Pair)	2	0325-RCD-17J
4	Double Clamp Stacking Plate	1	0325-SI-2-5D-W3
5	Double Clamp Stacking Bolt No. 2	1	0325-RCD-2BS

Item No.	Description	Qty	Number
1	Left CE Port to Left Hand Main Wing Cylinder Extend Port	1	H9-17
2	Left CR Port to Left Hand Main Wing Cylinder Retract Port	1	H9-18

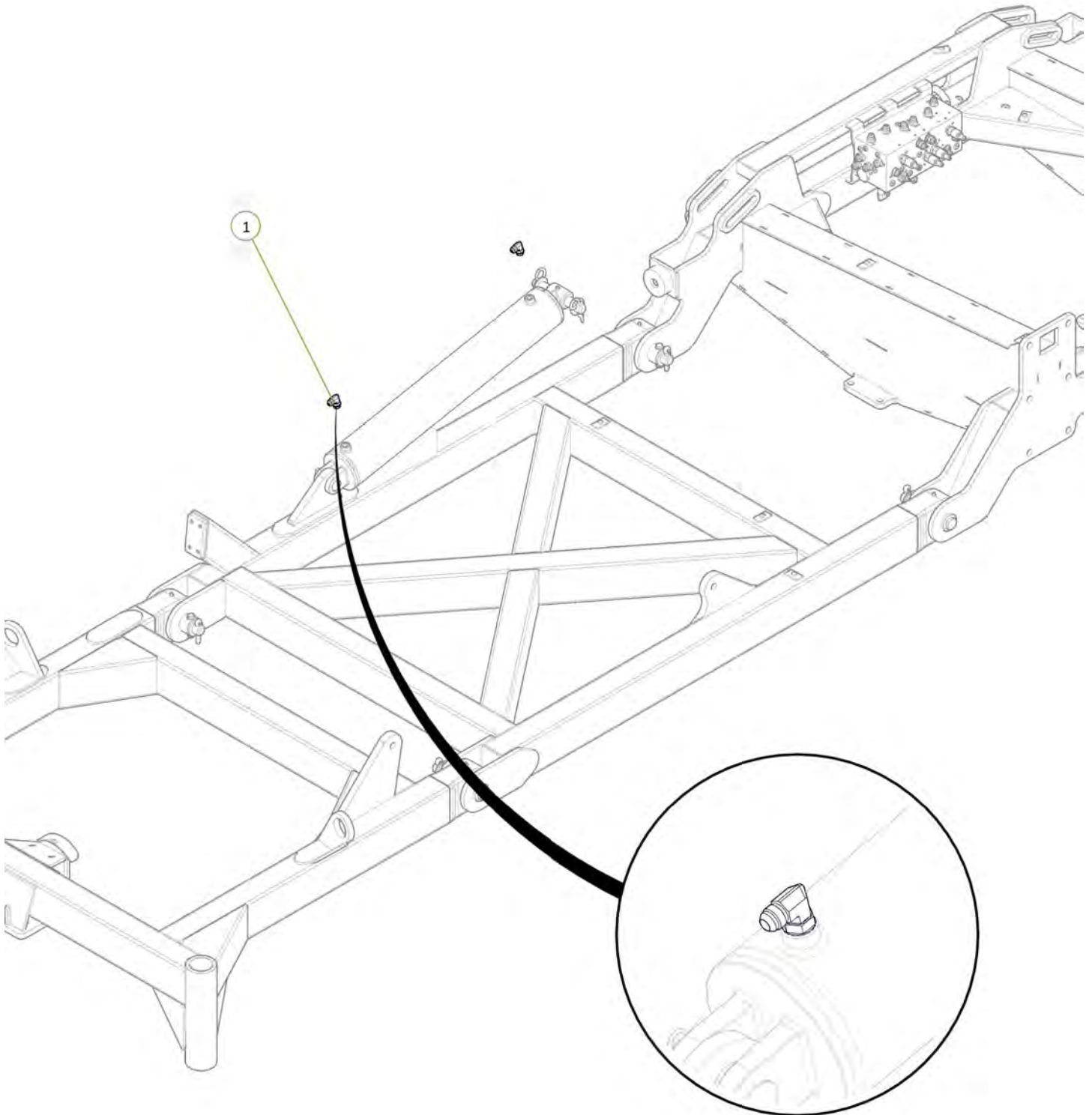
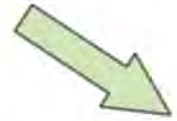


Item No.	Description	Qty	Number
1	5" Bore 30" Stroke 3 1/8" S/Tube 2" Rod Hydraulic Cylinder	1	0311-530ST

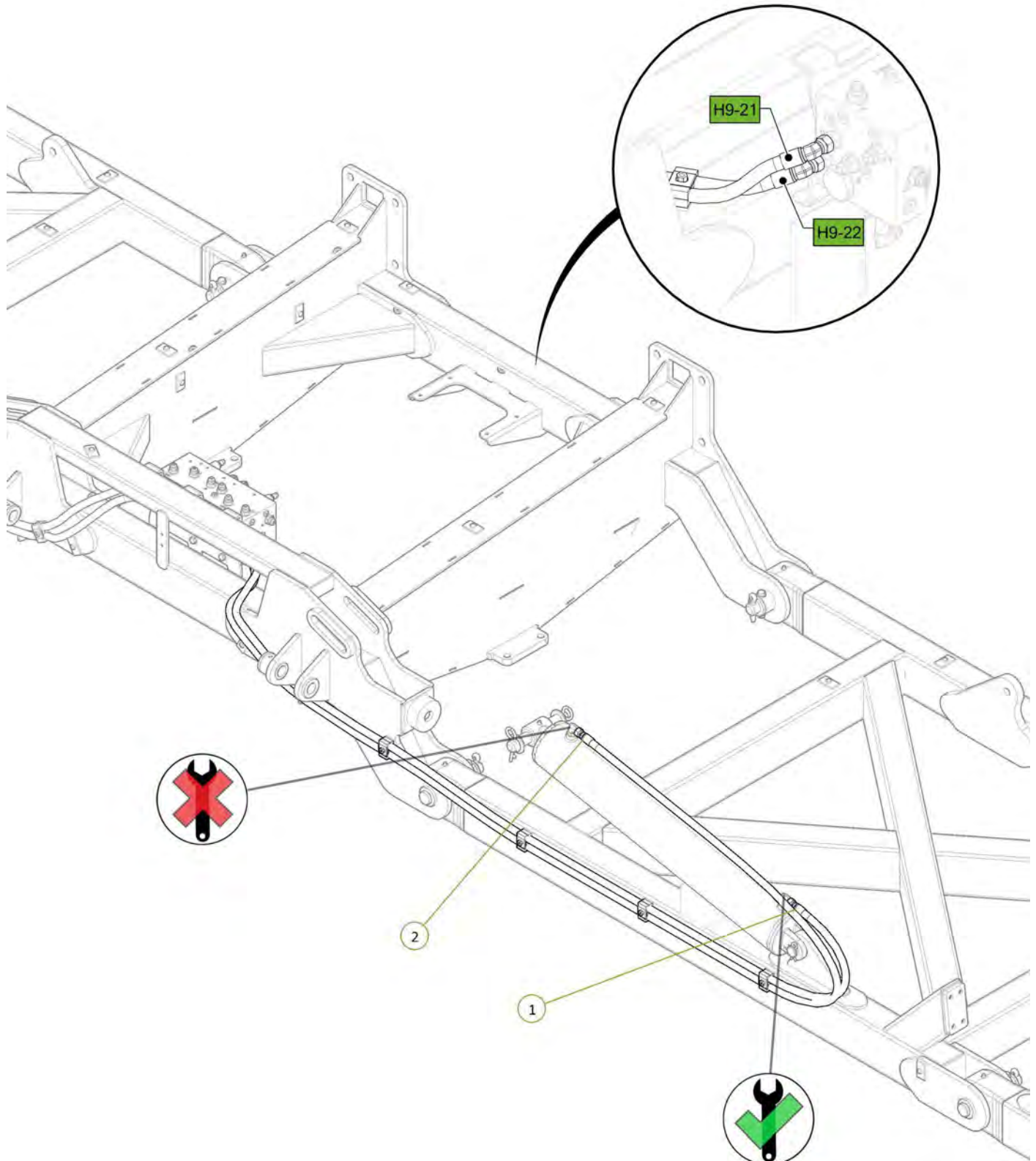
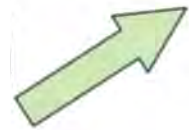




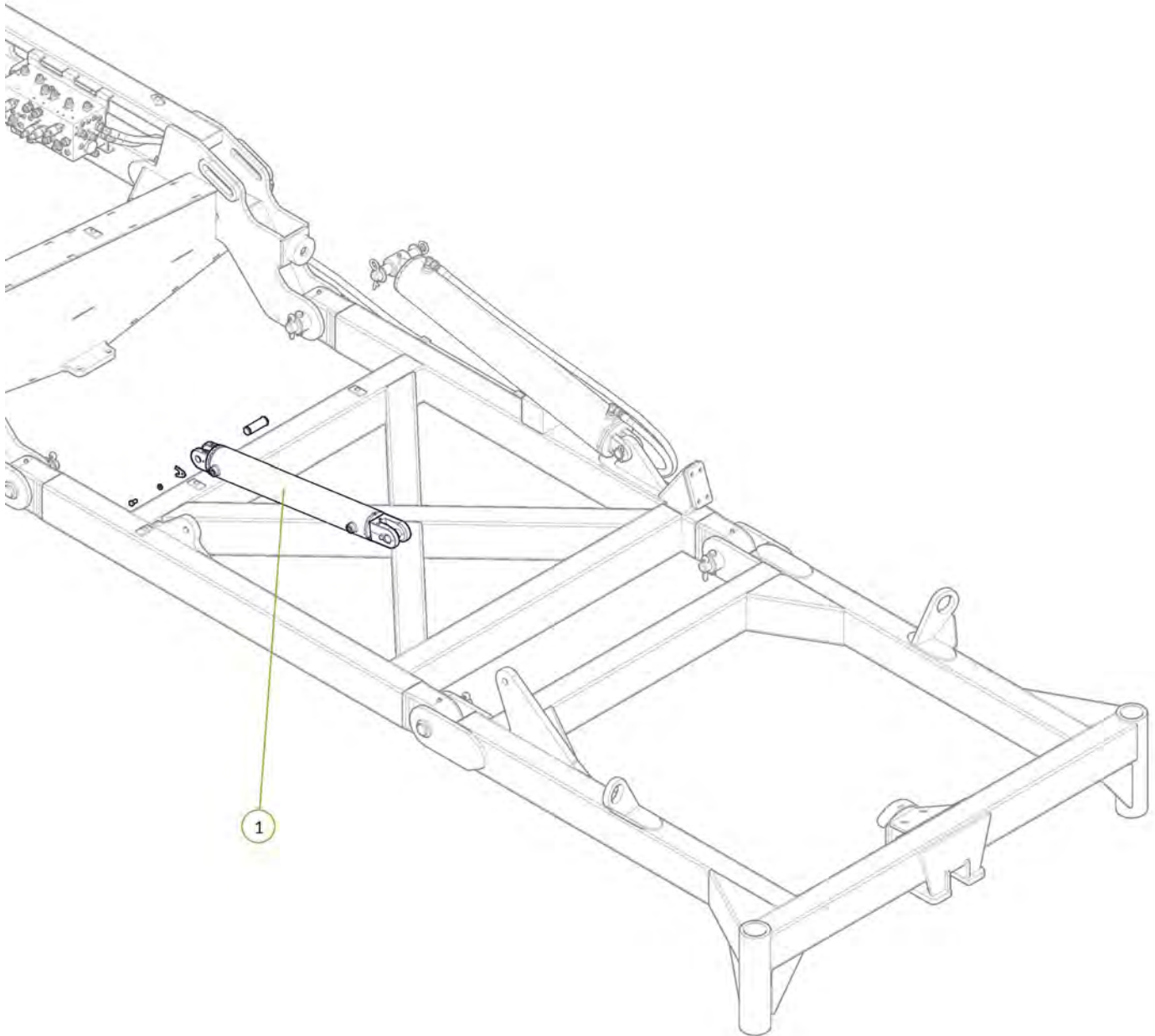
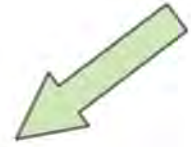
Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212

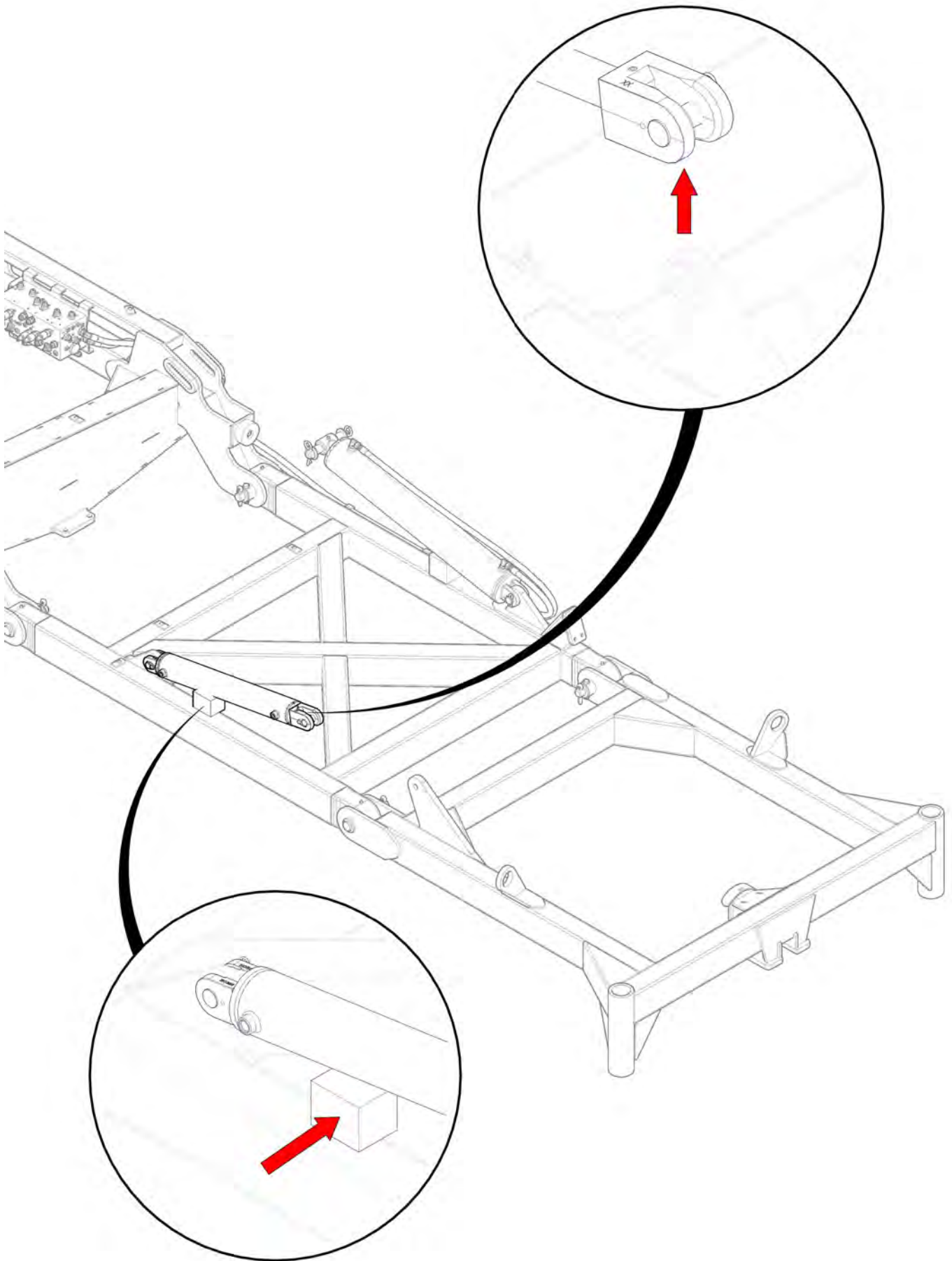


Item No.	Description	Qty	Number
1	Right CE Port to Right Hand Main Wing Cylinder Extend Port	1	H9-21
2	Right CR Port to Right Hand Main Wing Cylinder Retract Port	1	H9-22

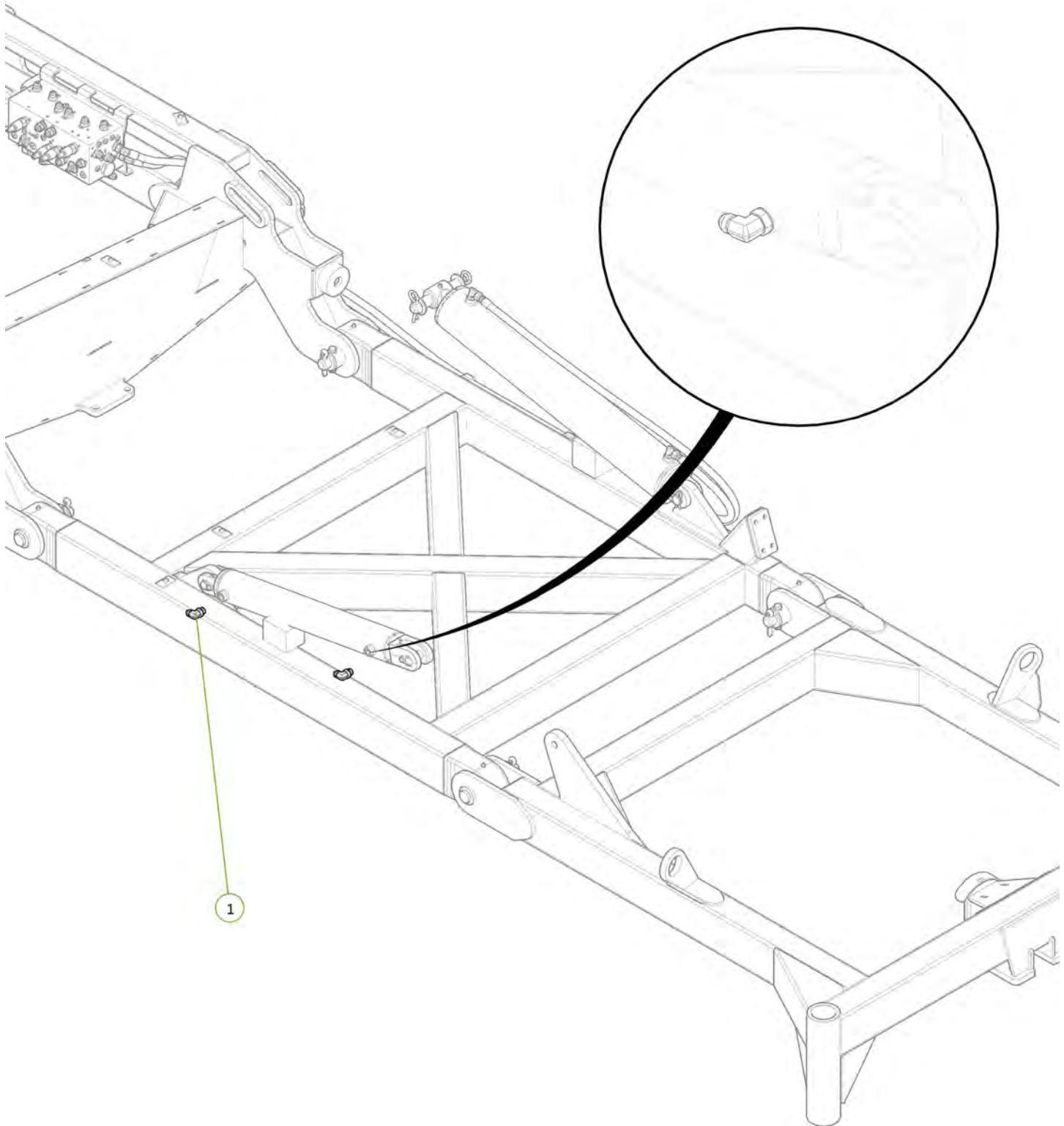
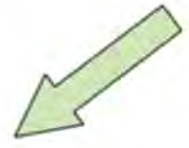


Item No.	Description	Qty	Number
1	3.5" Bore 24" Stroke 1.75" Rod Hydraulic Cylinder	1	0311-3524SP

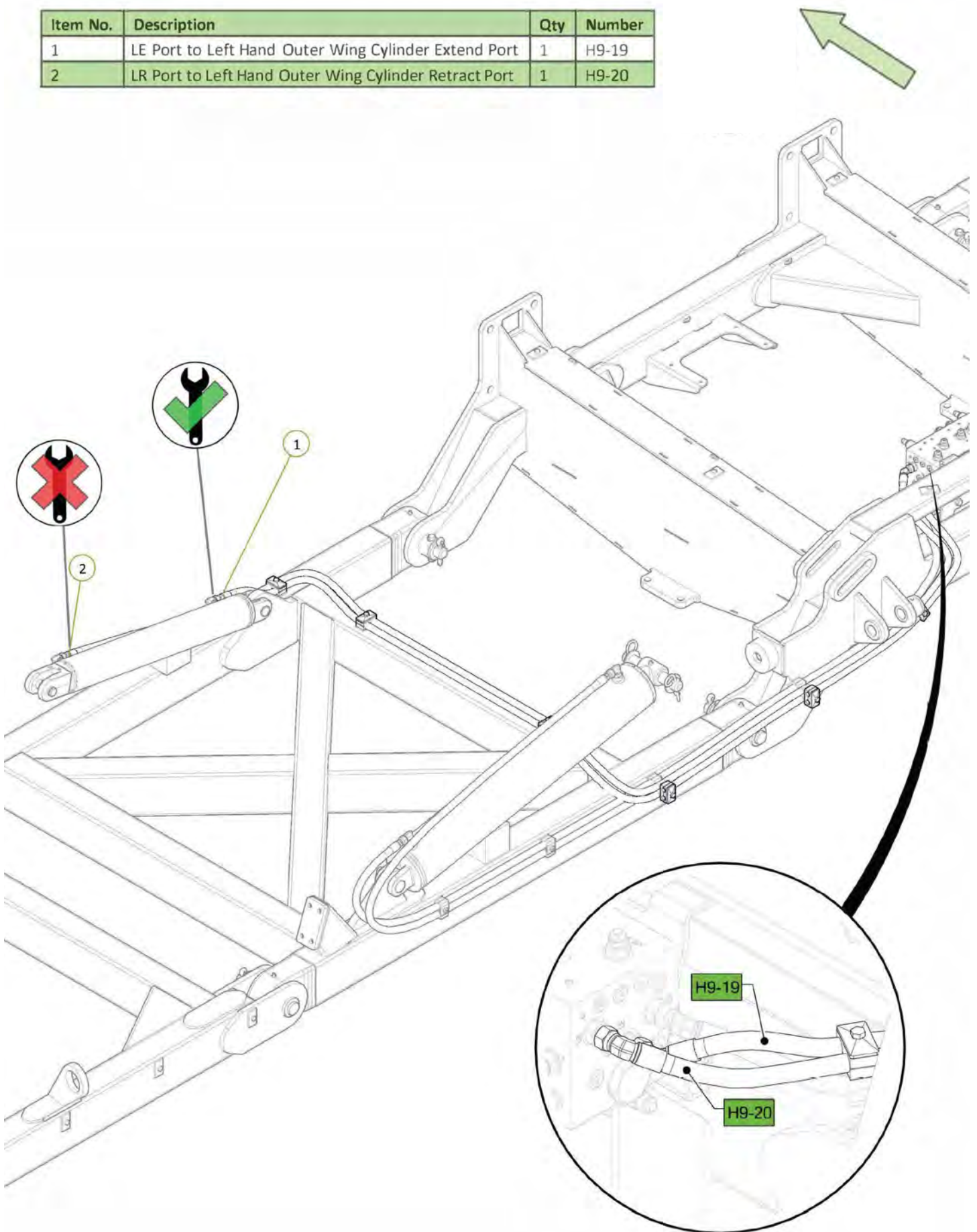




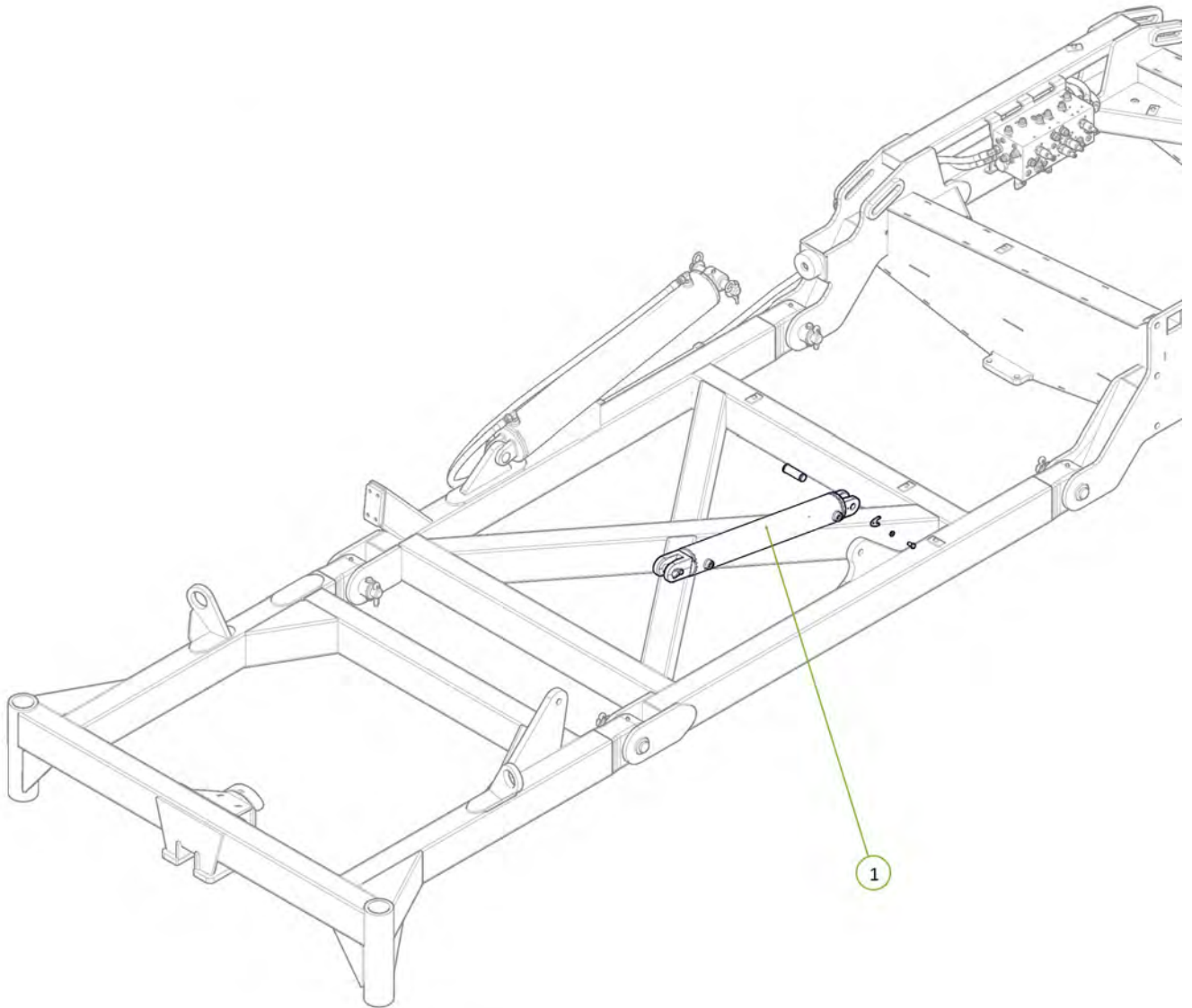
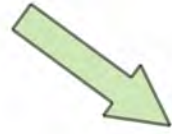
Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212

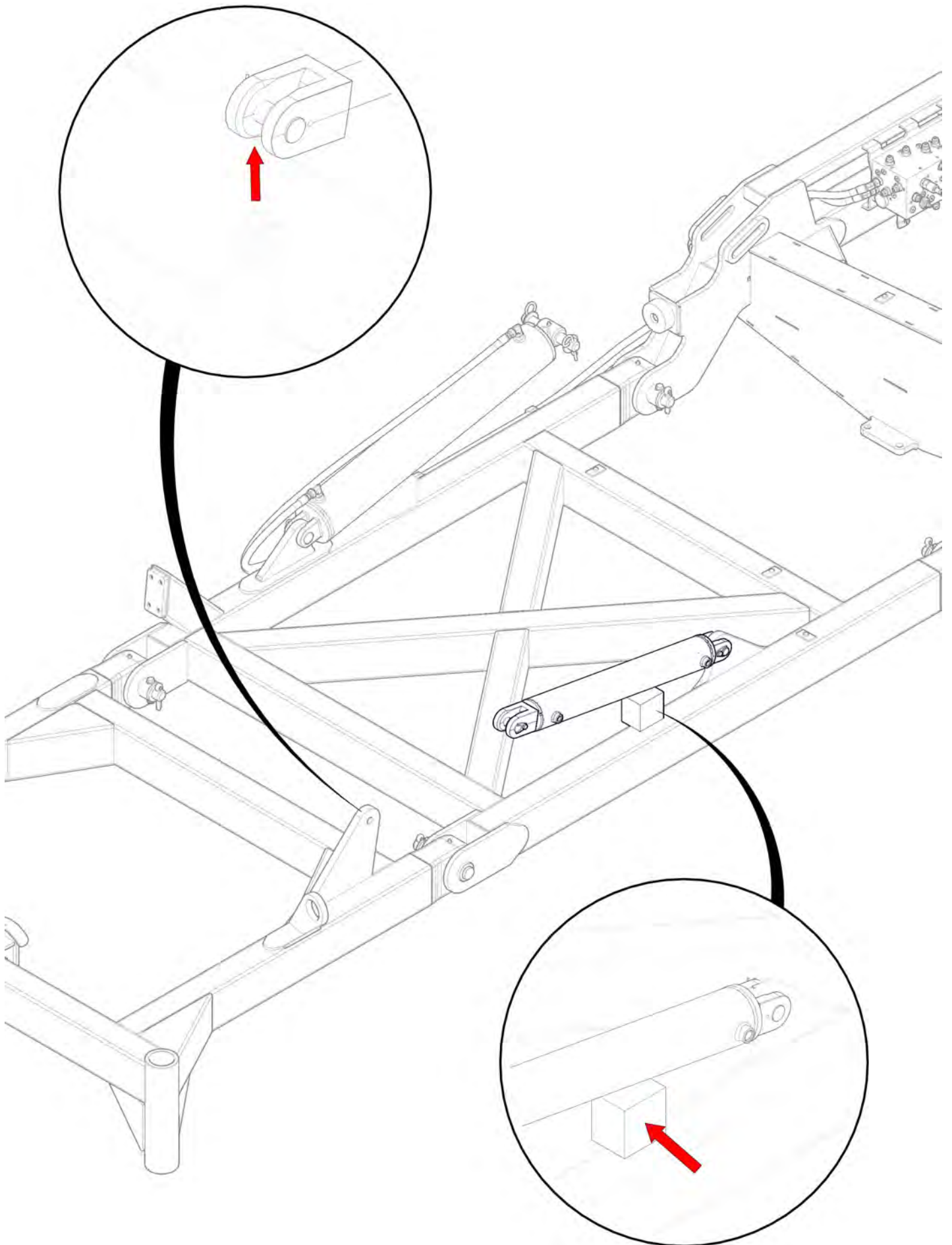


Item No.	Description	Qty	Number
1	LE Port to Left Hand Outer Wing Cylinder Extend Port	1	H9-19
2	LR Port to Left Hand Outer Wing Cylinder Retract Port	1	H9-20

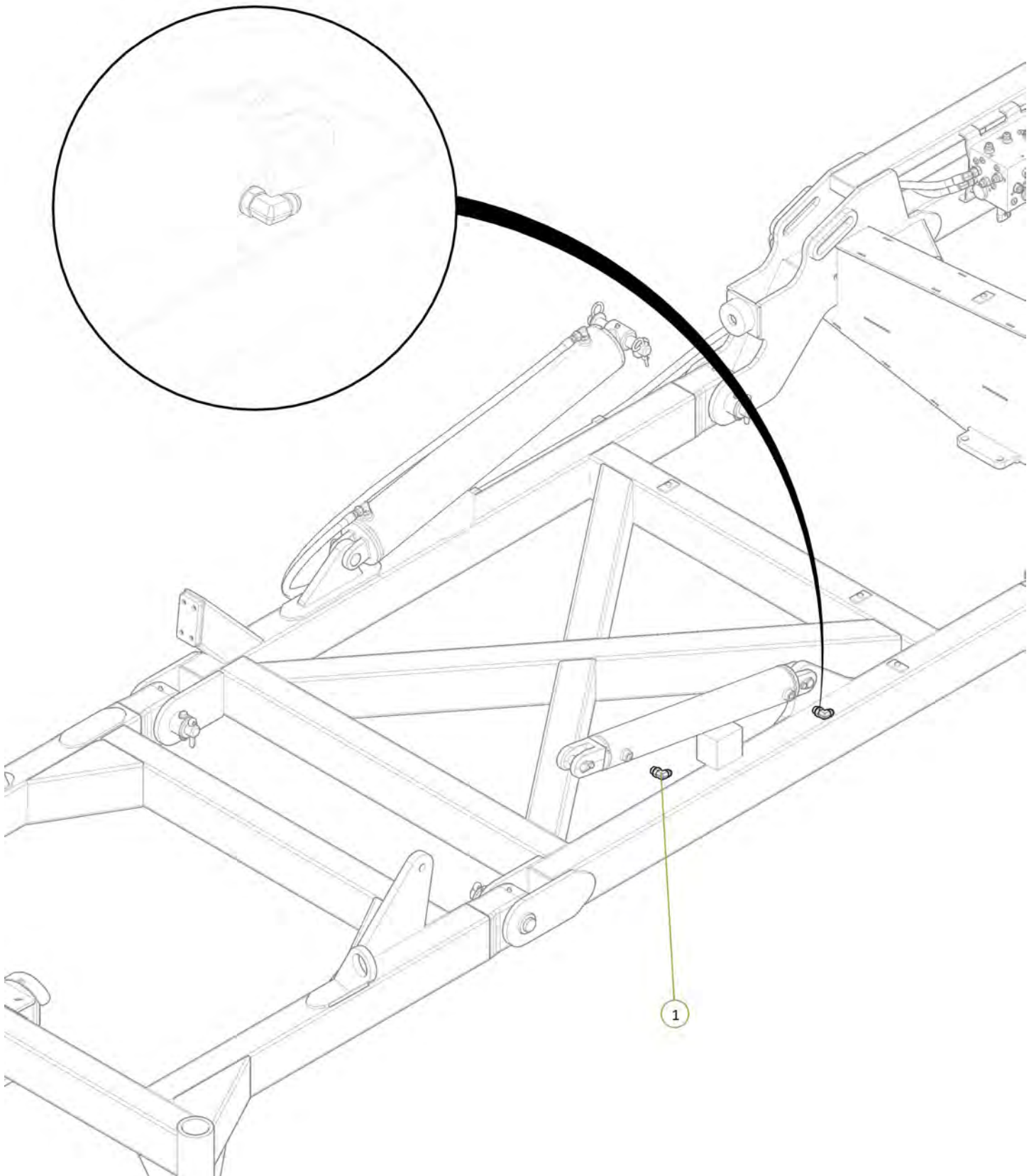


Item No.	Description	Qty	Number
1	3.5" Bore 24" Stroke 1.75" Rod Hydraulic Cylinder	1	0311-3524SP

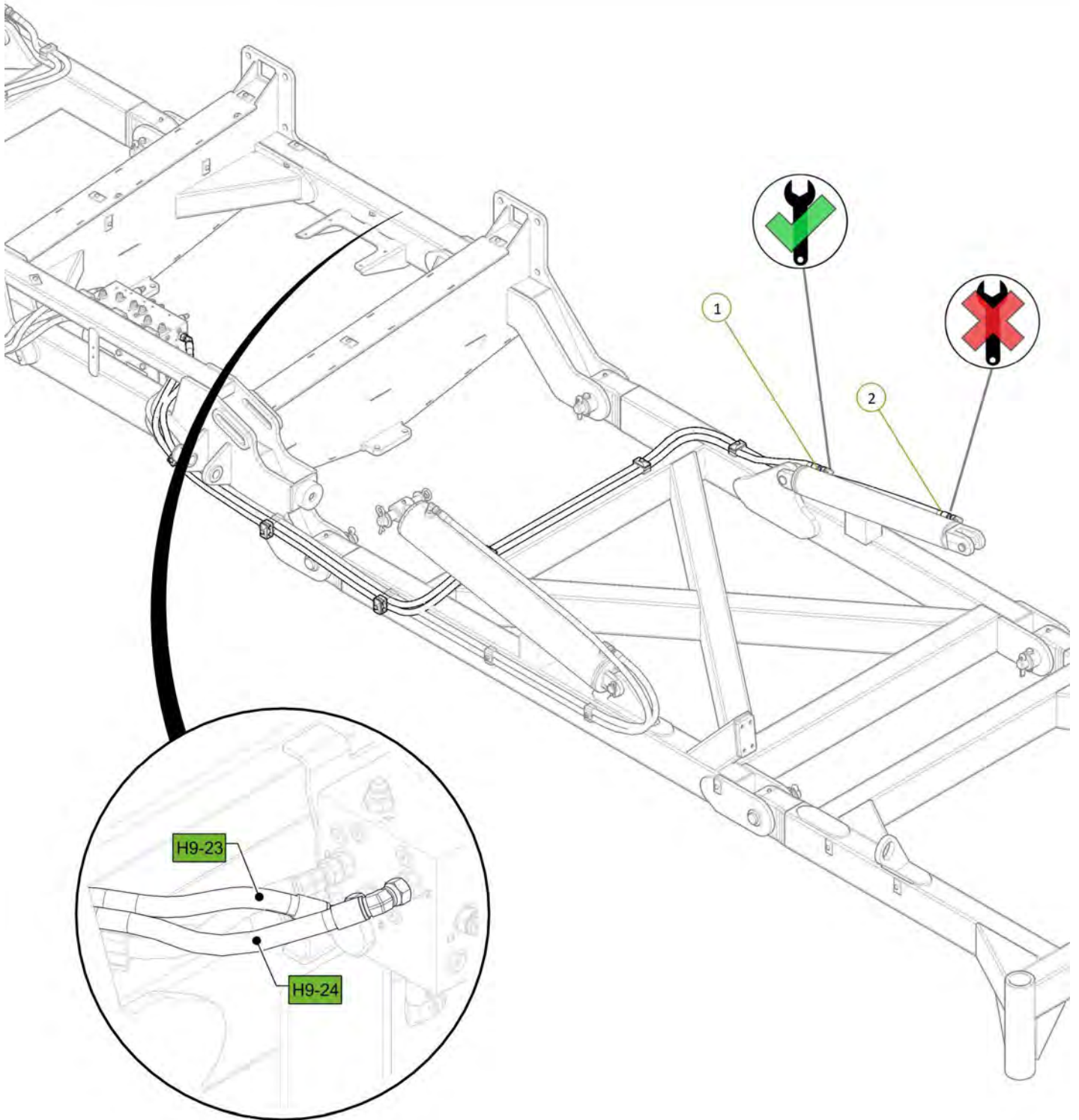
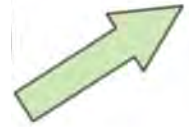




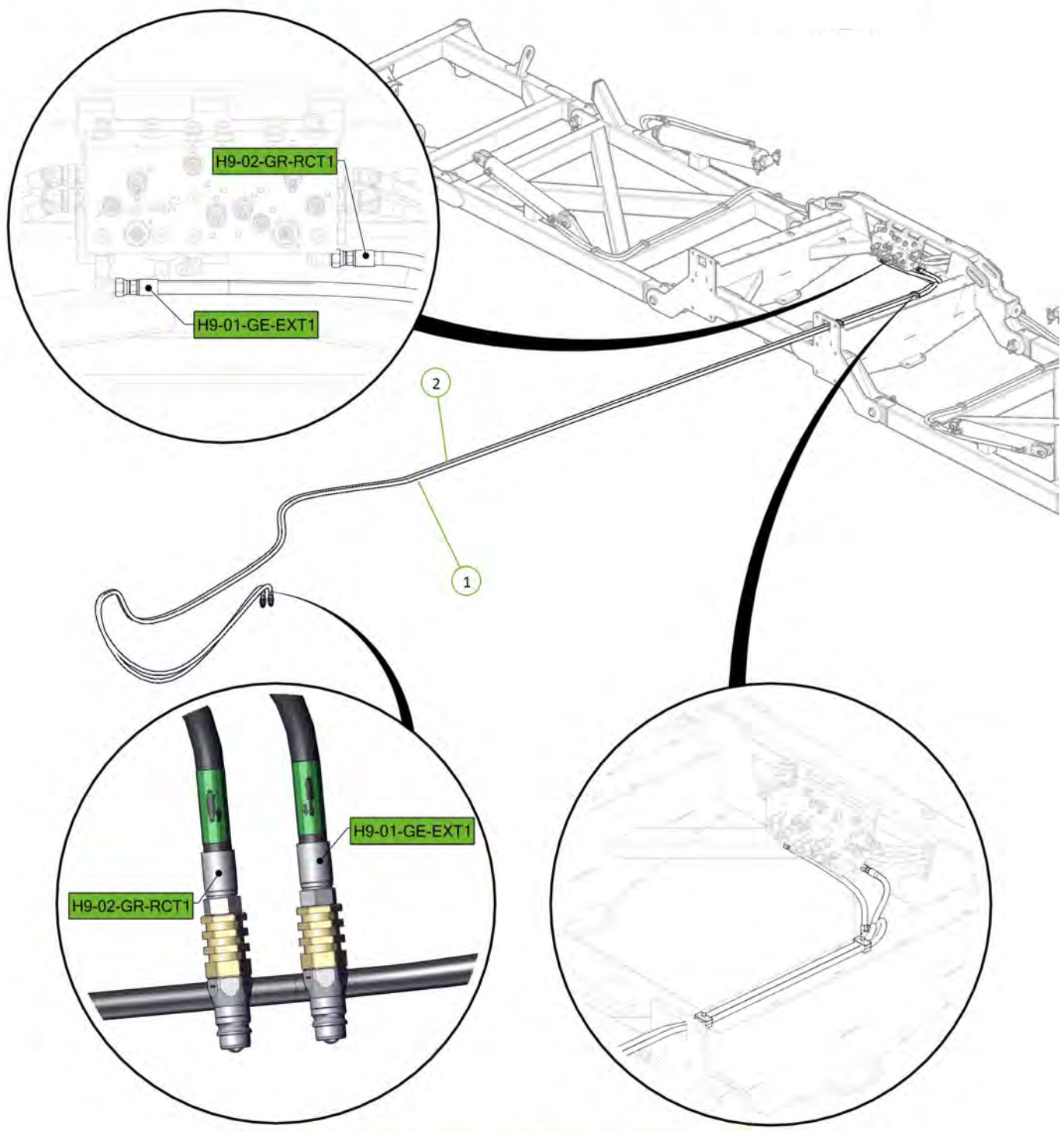
Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212



Item No.	Description	Qty	Number
1	RE Port to Right Hand Outer Wing Cylinder Extend Port	1	H9-23
2	RR Port to Right Hand Outer Wing Cylinder Retract Port	1	H9-24



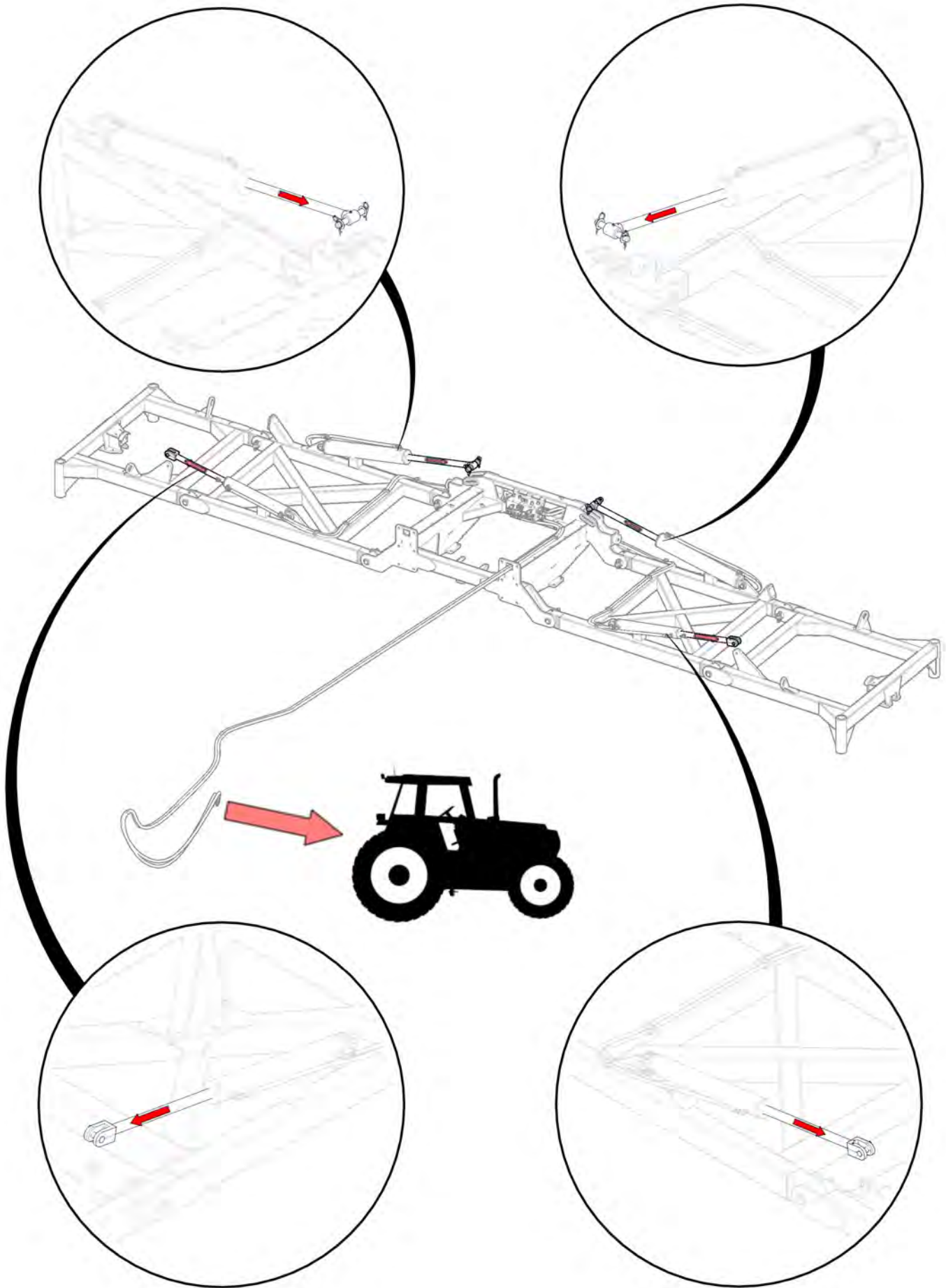
Item No.	Description	Qty	Number
1	Tractor to Sequence Valve EXT1 Port Fitted With Green EXT Decal	1	H9-01-GE-EXT1
2	Tractor to Sequence Valve RCT1 Port Fitted With Green RET Decal	1	H9-02-GR-RCT1

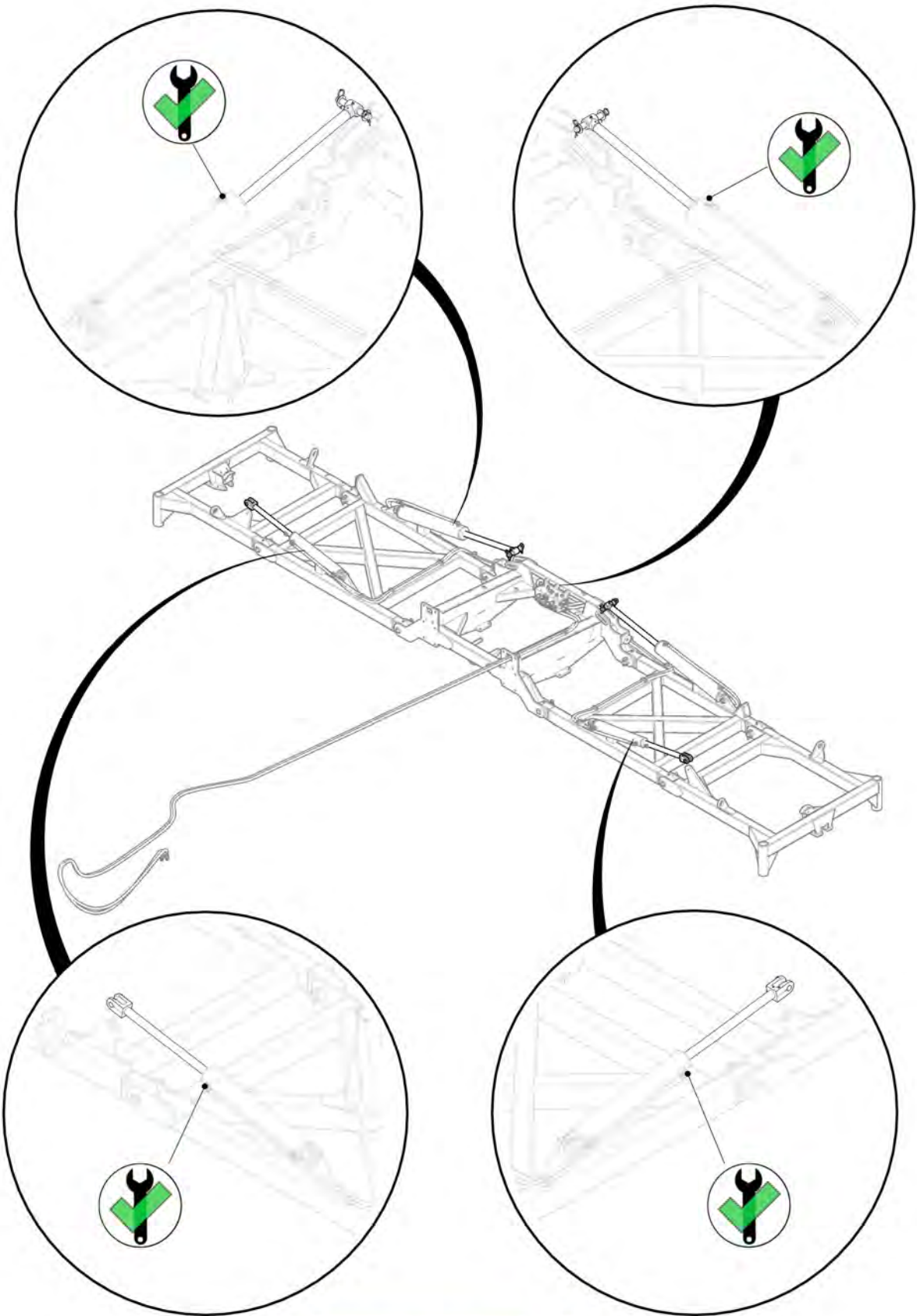


All retract hose fittings loose to allow air to escape

All cylinders chocked up to prevent clash during extend

Signed _____ Date __/__/__
 Unit Serial Number _____

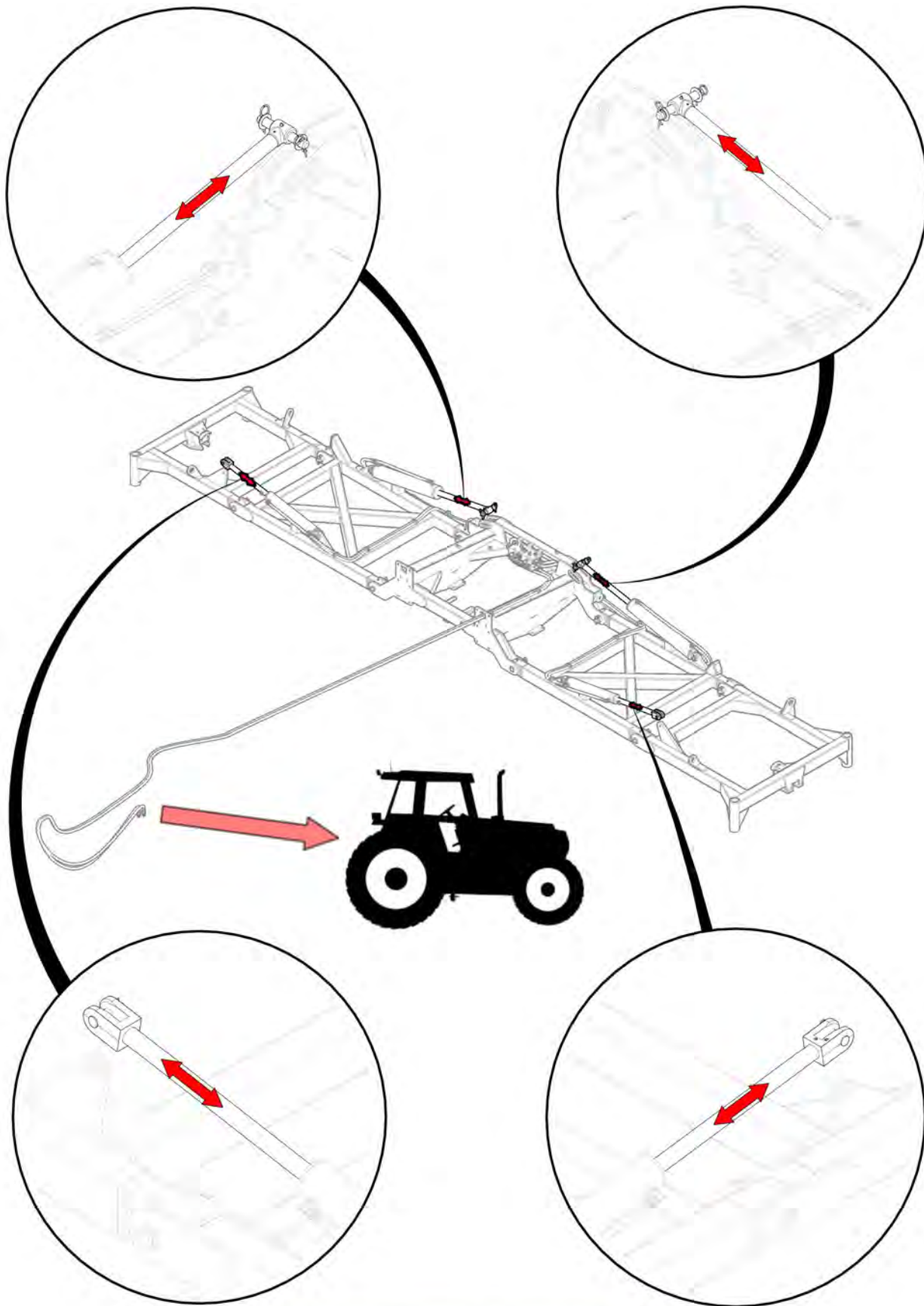




Retract fittings tightened

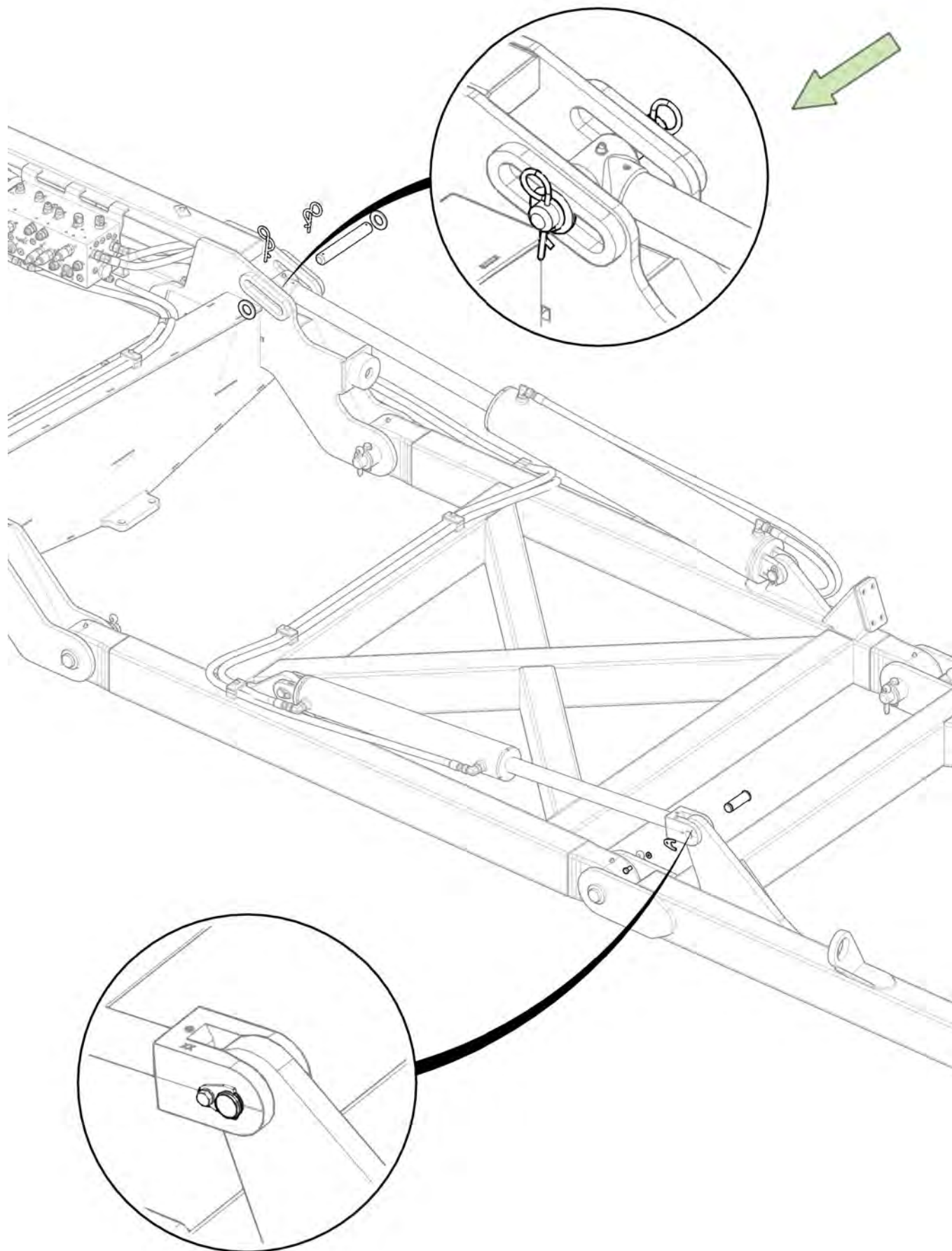


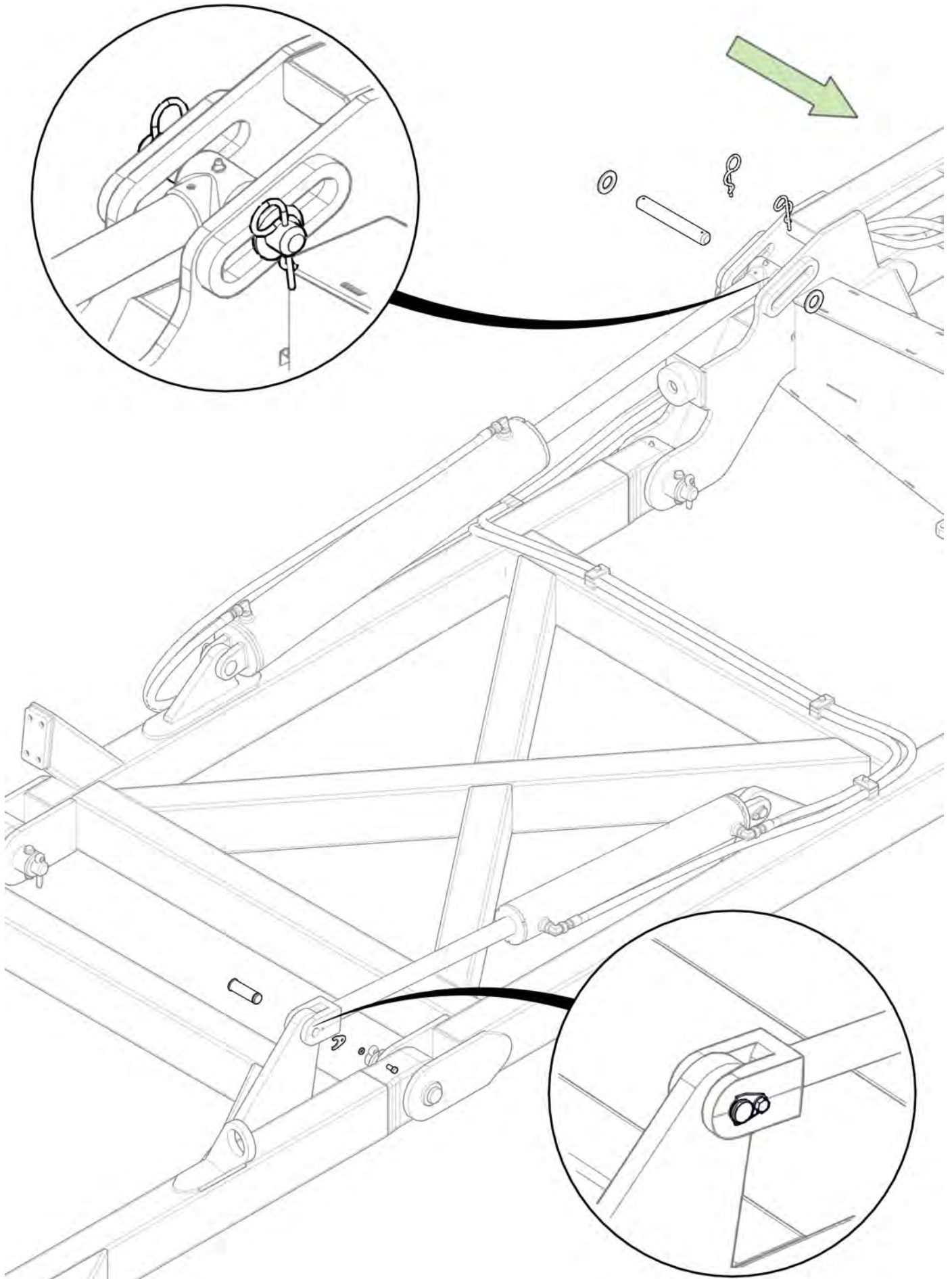
Signed _____ Date ____/____/____
Unit Serial Number _____



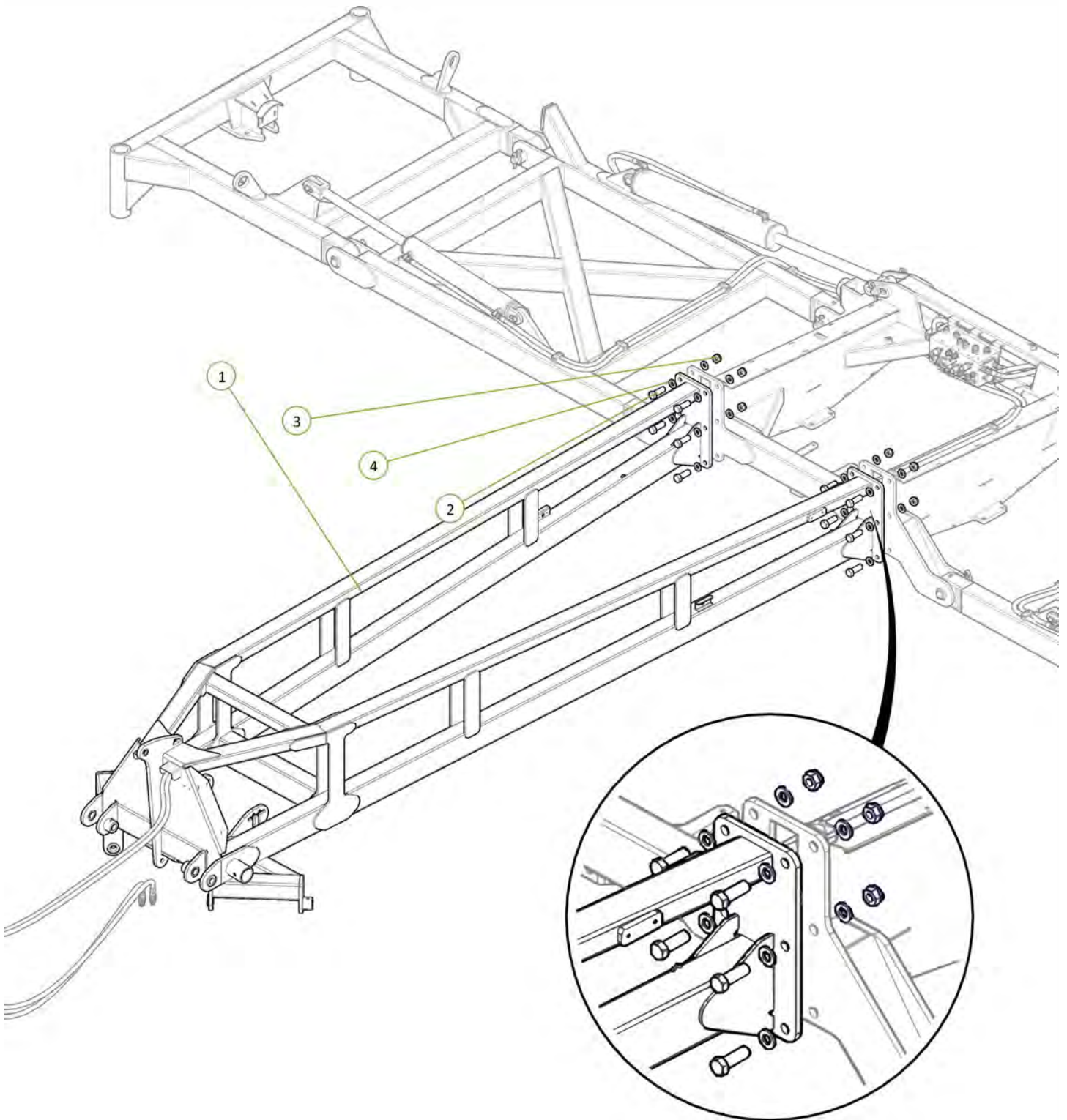
Cylinders cycled to expel air from system ○

Signed _____ Date __/__/__
 Unit Serial Number _____

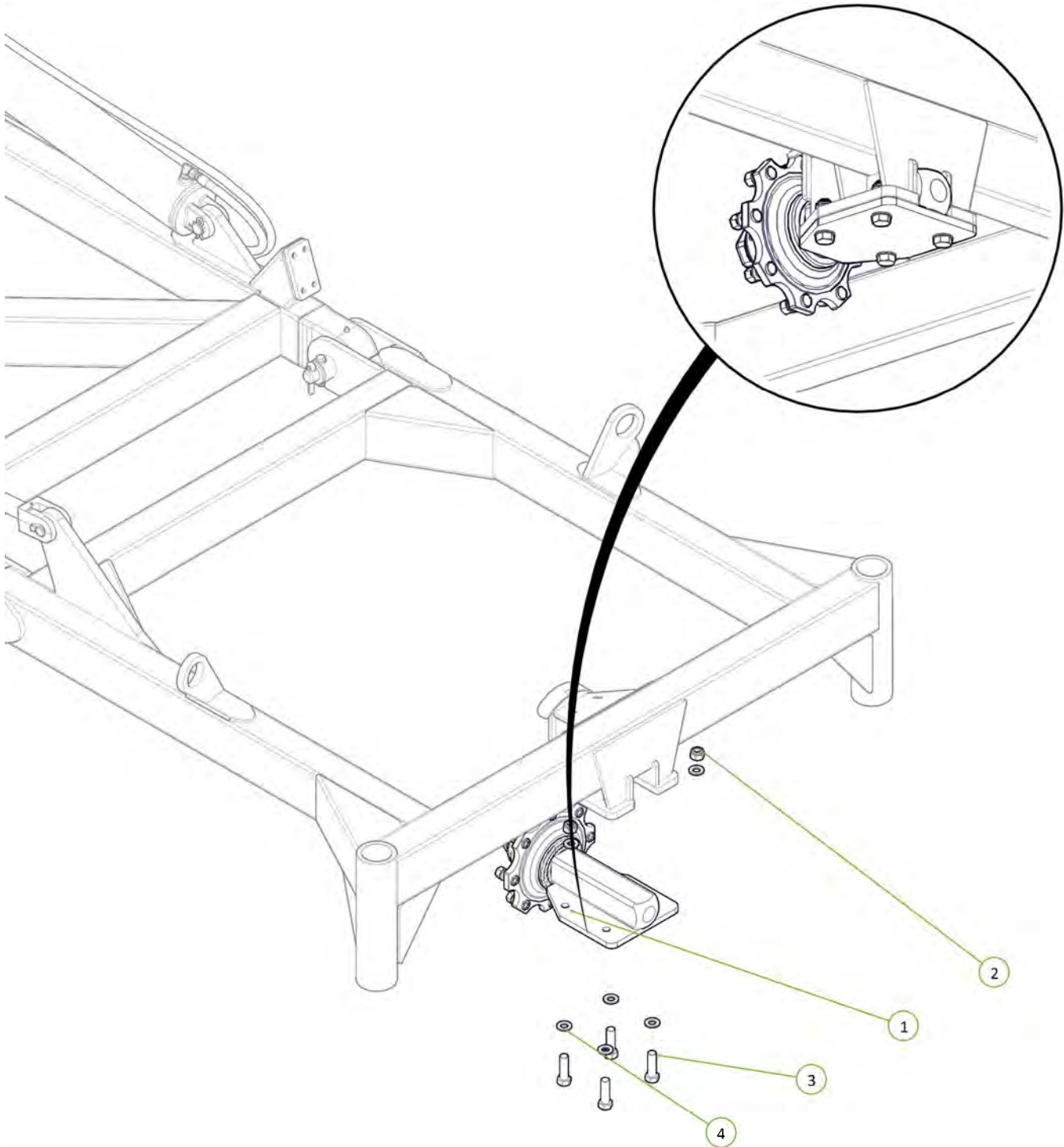




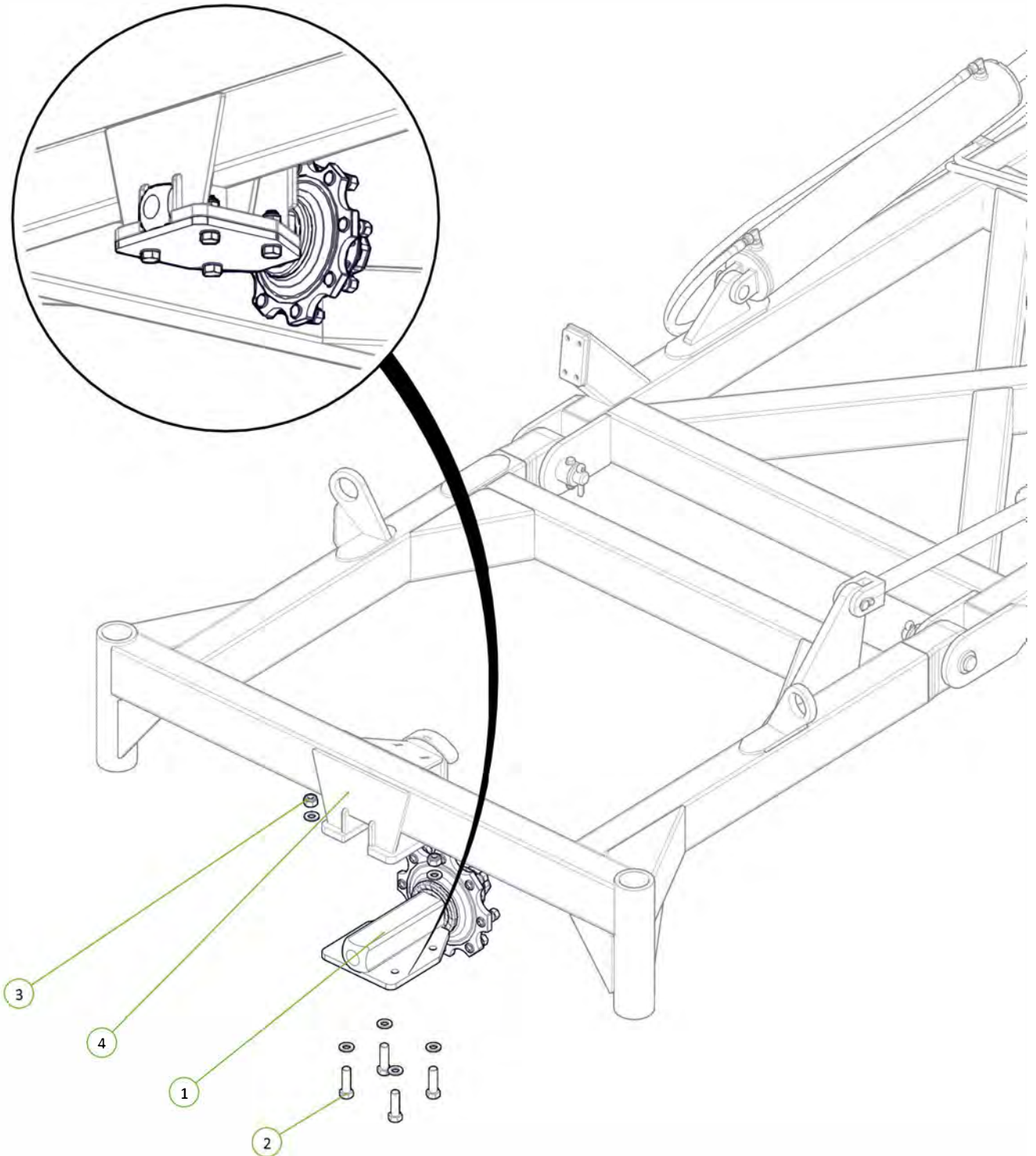
Item No.	Description	Qty	Number
1	Front A Frame	1	1532-02
2	M24 x 75 Grade 8.8 ZP Bolt	12	0211-2475
3	Nyloc Nut M24	12	0221-NYL24
4	Washer Flat M24	24	0231-F24



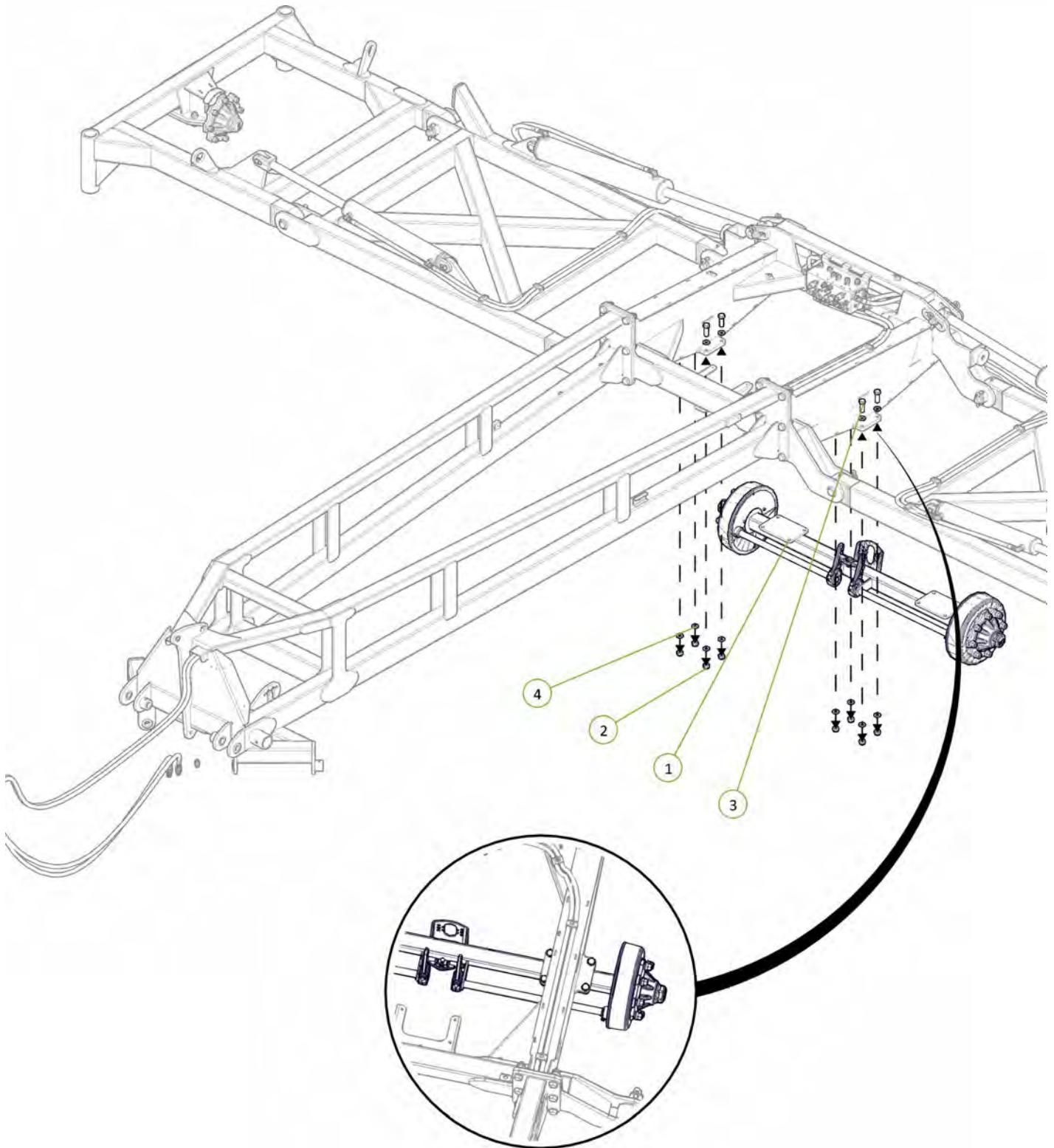
Item No.	Description	Qty	Number
1	Monroc 808X 80mm Square Stub Axle 315mm 8 on 275 PCD (Mounting Plate)	1	0733-808X-315
2	Nyloc Nut M20	4	0221-NYL20
3	M20 x 70 Grade 8.8 ZP Bolt	4	0211-2070
4	Washer Flat M20	8	0231-F20



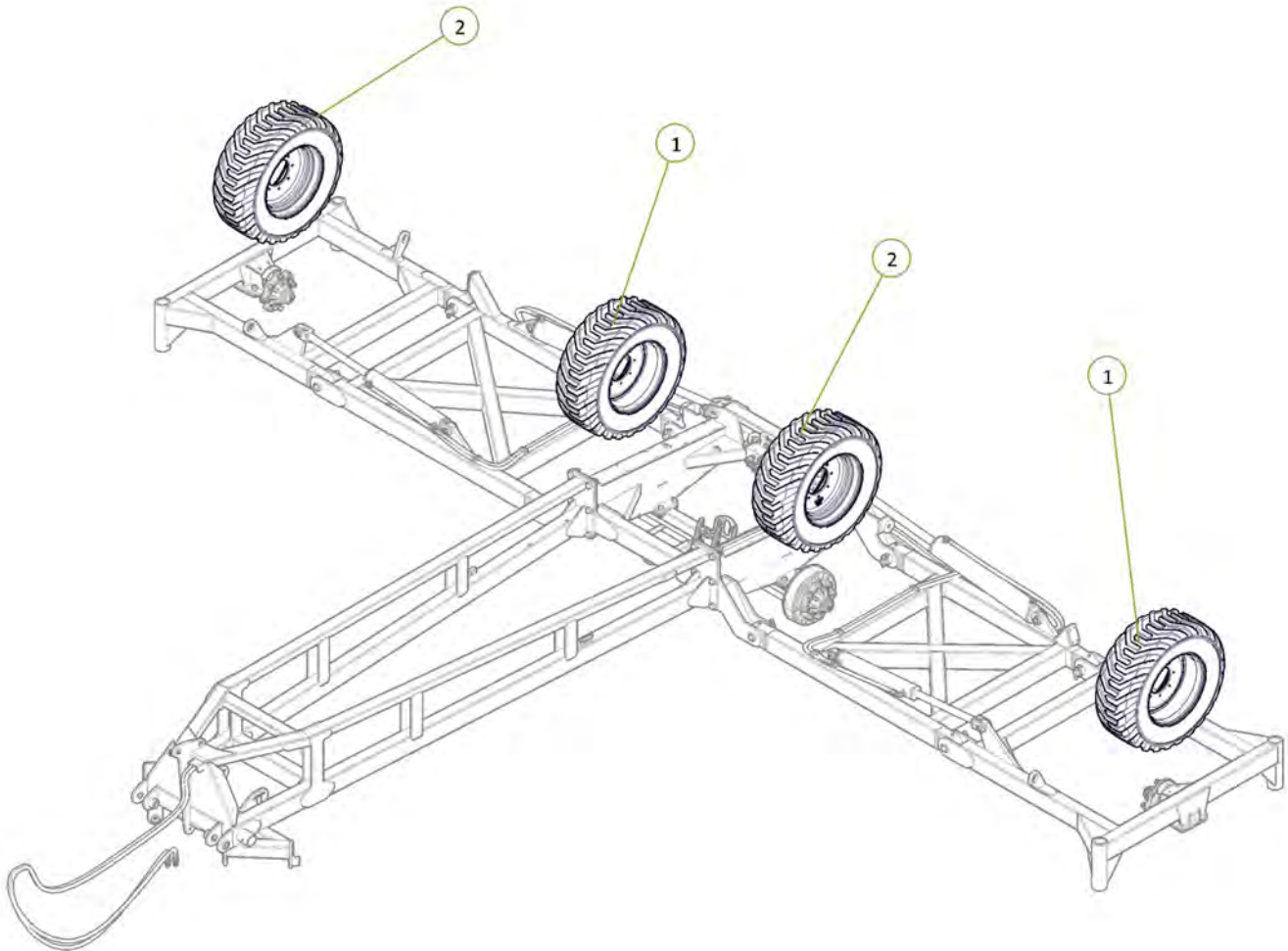
Item No.	Description	Qty	Number
1	Monroc 808X 80mm Square Stub Axle 315mm 8 on 275 PCD (Mounting Plate)	1	0733-808X-315
2	M20 x 70 Grade 8.8 ZP Bolt	4	0211-2070
3	Nyloc Nut M20	4	0221-NYL20
4	Washer Flat M20	8	0231-F20



Item No.	Description	Qty	Number
1	80mm Beam Axle 8 on 275 2006mm OHF	1	0733-808XF400X80C-V2006-MP
2	Nyloc Nut M20	8	0221-NYL20
3	M20 x 65 Grade 8.8 ZP Bolt	8	0211-2065
4	Washer Flat M20	16	0231-F20



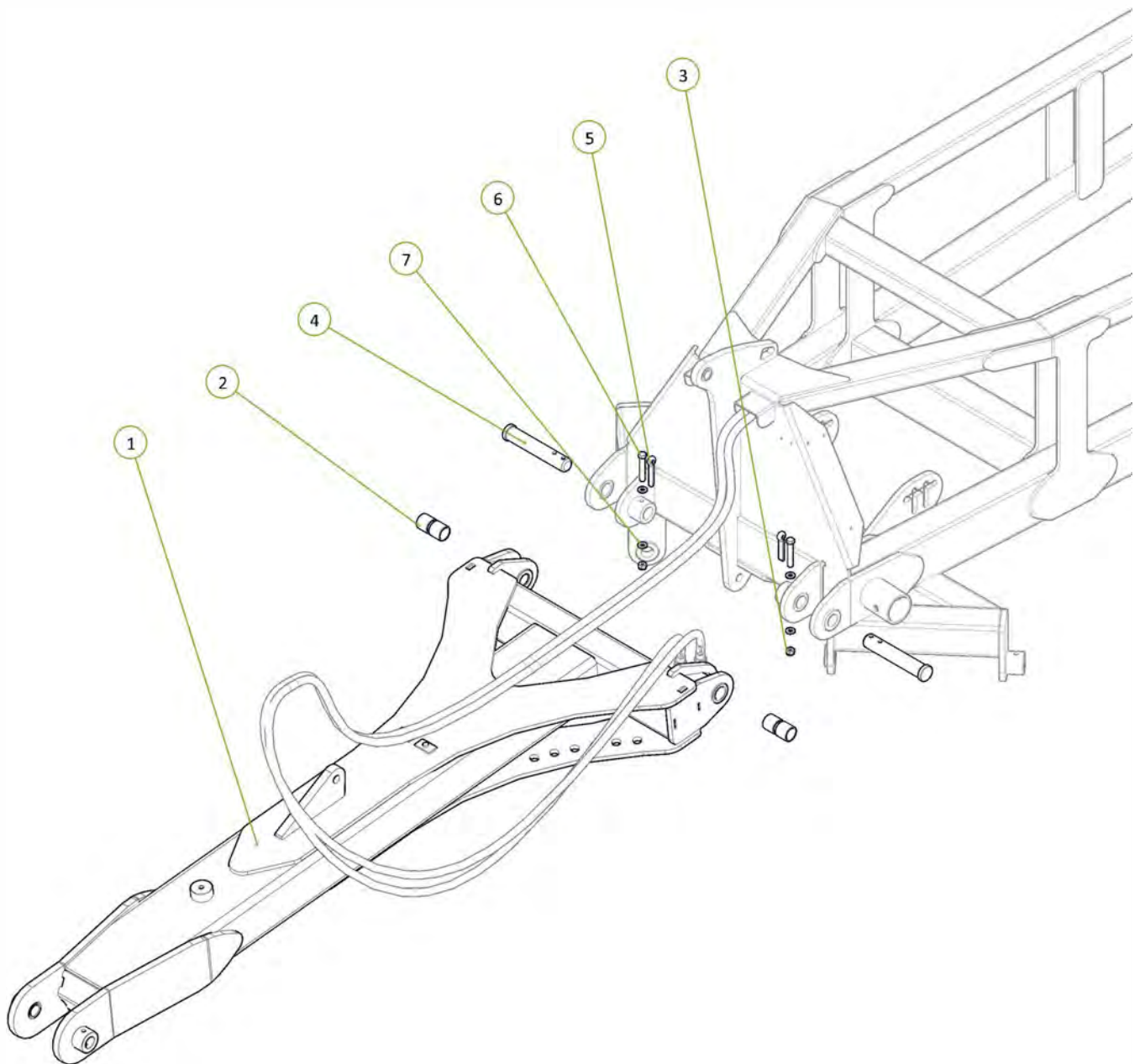
Item No.	Description	Qty	Number
1	400/55-22.5 Tyre on 8 on 275mm PCD Zero Offset Rim (Left Hand)	2	0751-400-55-22.5-8-275-0-L
2	400/55-22.5 Tyre on 8 on 275mm PCD Zero Offset Rim (Right Hand)	2	0751-400-55-22.5-8-275-0-R



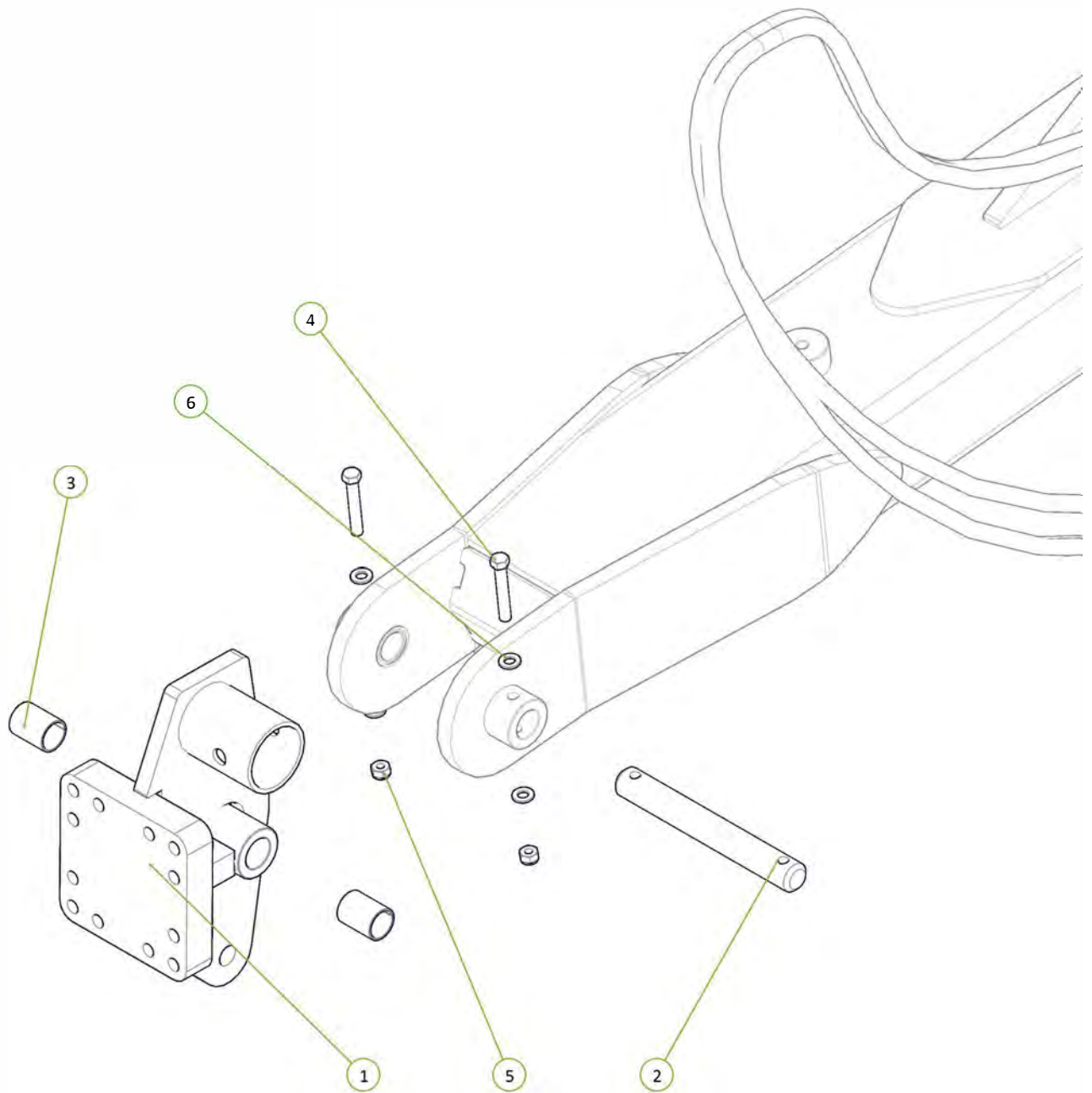
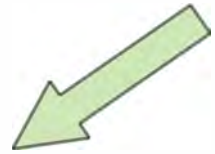
All wheel nuts tightened to 345Nm

Signed _____ Date __/__/__
 Unit Serial Number _____

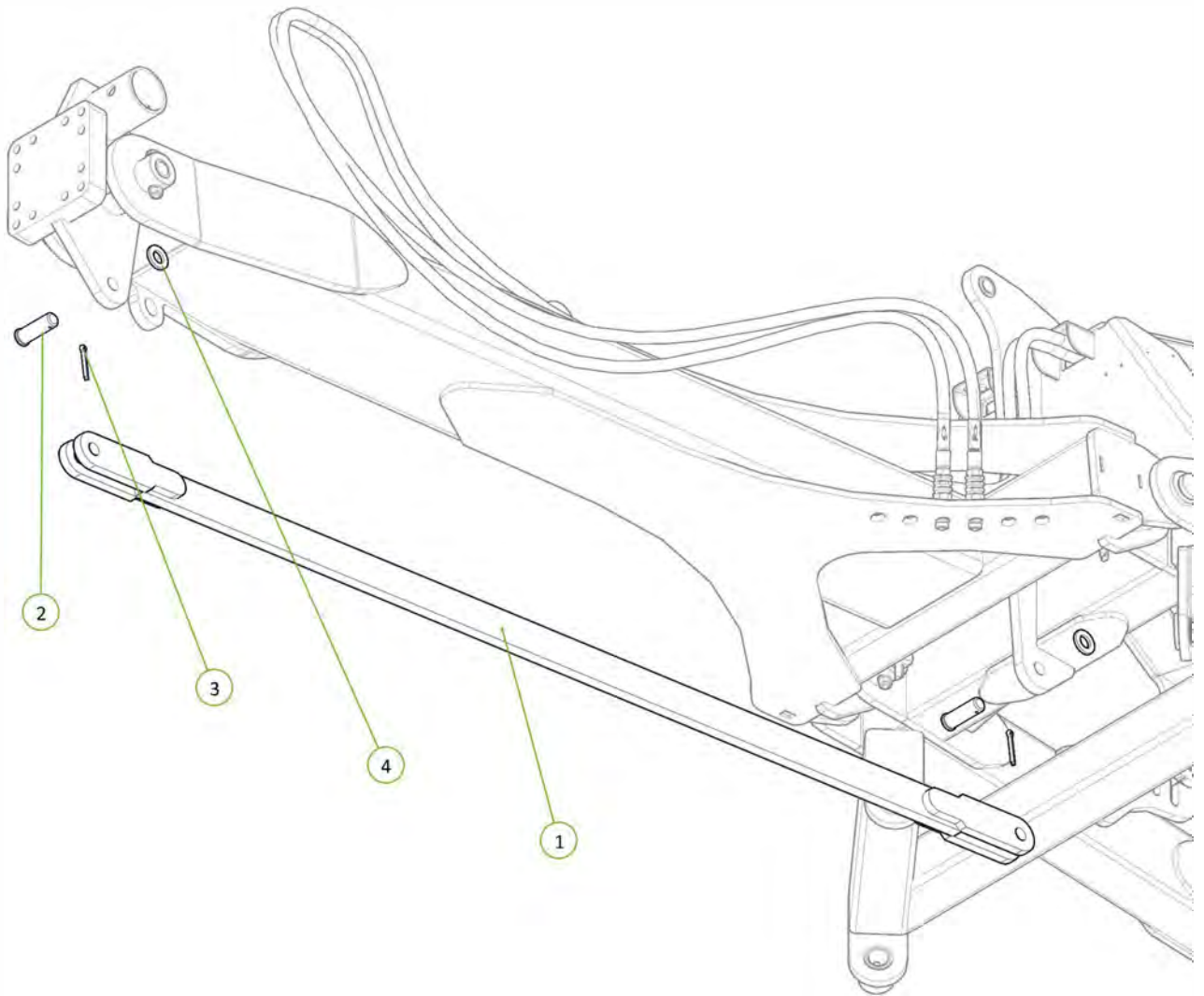
Item No.	Description	Qty	Number
1	Drawbar	1	1510-08-2
2	Drawbar Pivot Bush	4	0801-B423838
3	Nyloc Nut M12	2	0221-NYL12
4	Walking Axle Linkage Pivot Pin	2	1601-P38-220
5	Cotter Pin M13 x 63	2	0261-PINC1363
6	M12 x 75 Grade 8.8 ZP Bolt	2	0211-1275
7	Washer Flat M12	4	0231-F12



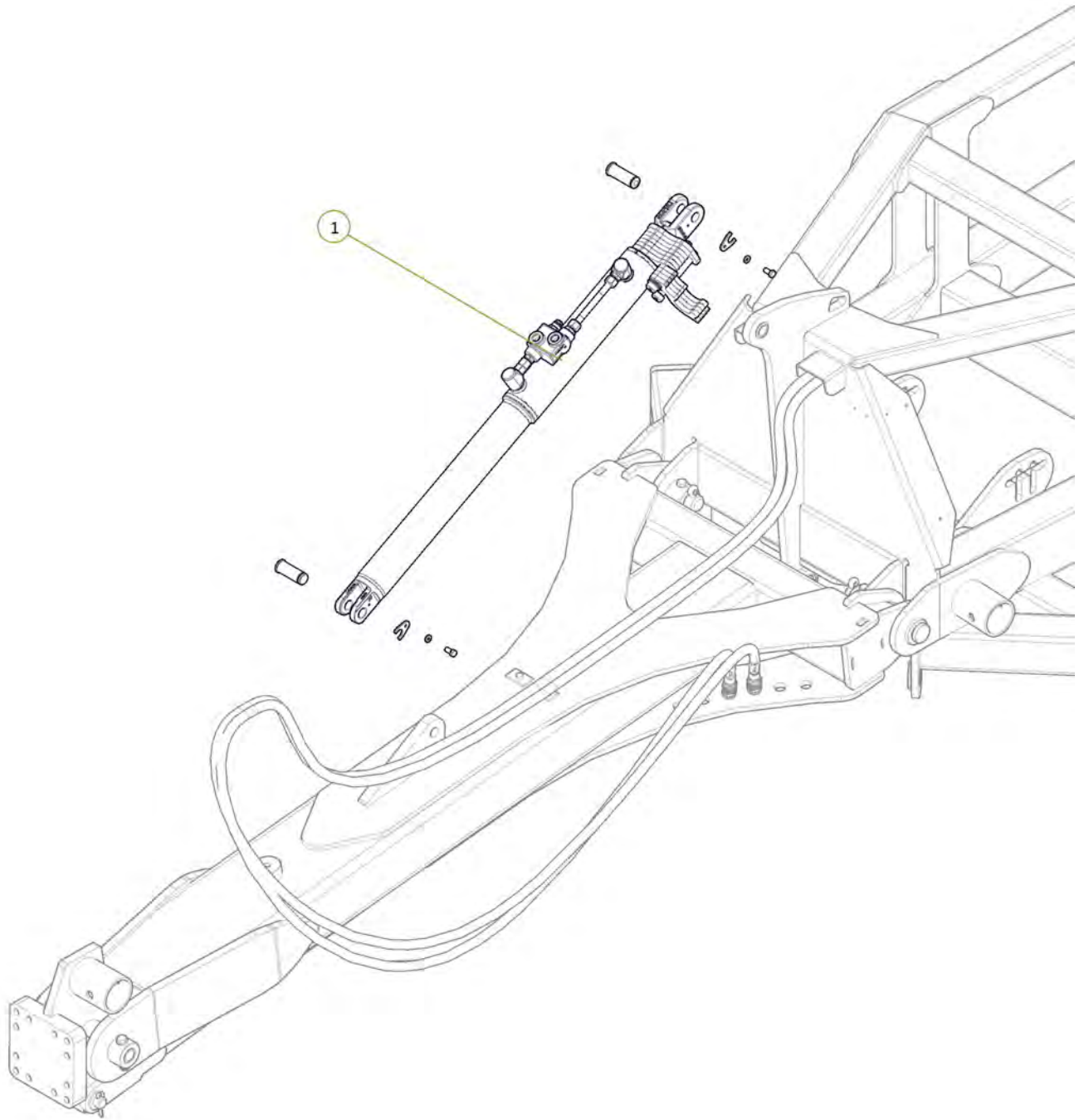
Item No.	Description	Qty	Number
1	Flange Mount Tow Hitch	1	1510-09
2	Tow Hitch Pivot Pin	1	0801-10-06
3	35 ID x 50mm DU Bush	2	0113-MB 3550DU
4	M12 x 80 Grade 8.8 ZP Bolt	2	0211-1280
5	Nyloc Nut M12	2	0221-NYL12
6	Washer Flat M12	4	0231-F12



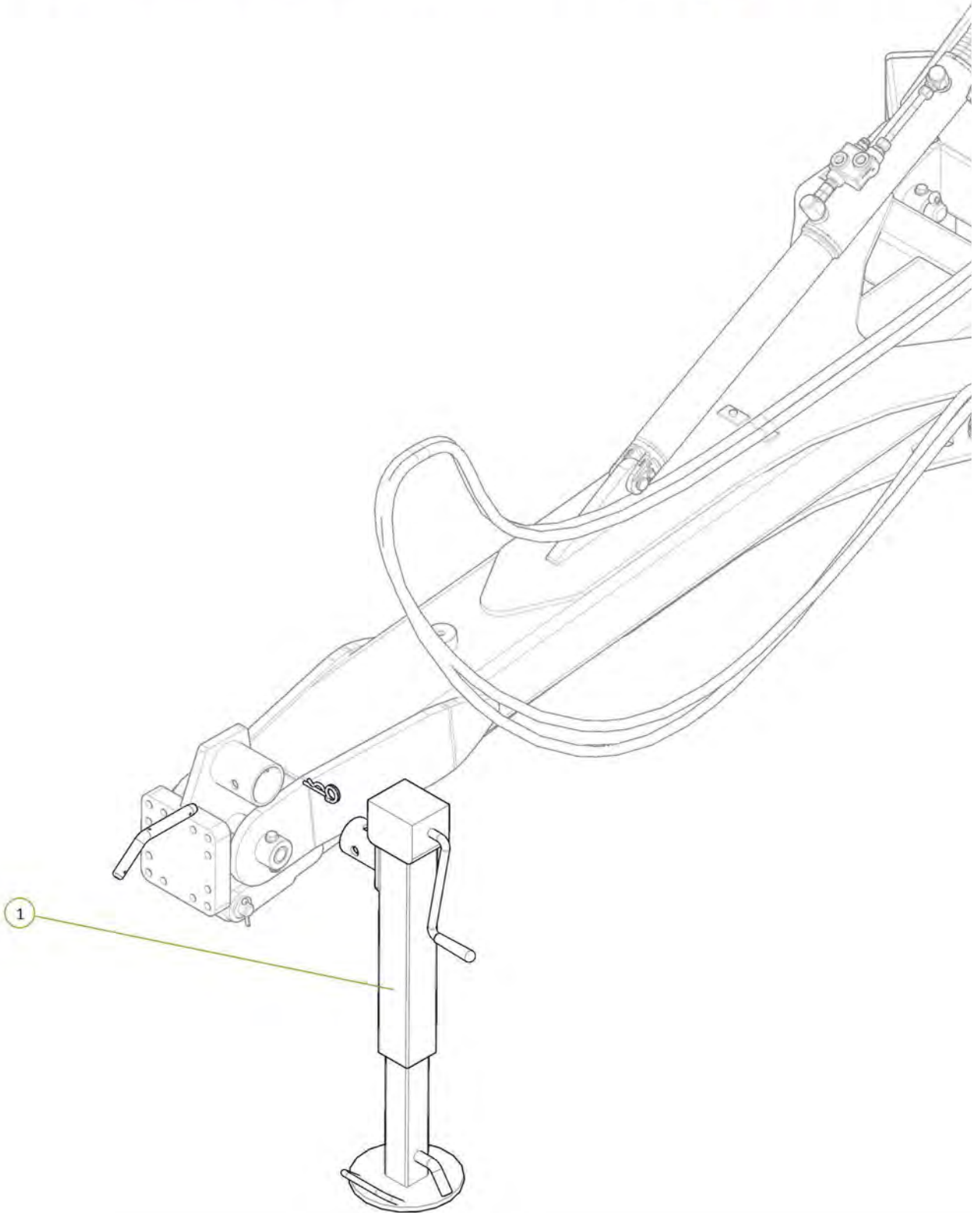
Item No.	Description	Qty	Number
1	Parallel Arm	1	0810-22
2	Clevis Pin 25mm x 75mm	2	0801-KE0307-1
3	Cotter Pin M6 x 50	2	0261-PINC650
4	Washer Flat M24	2	0231-F24



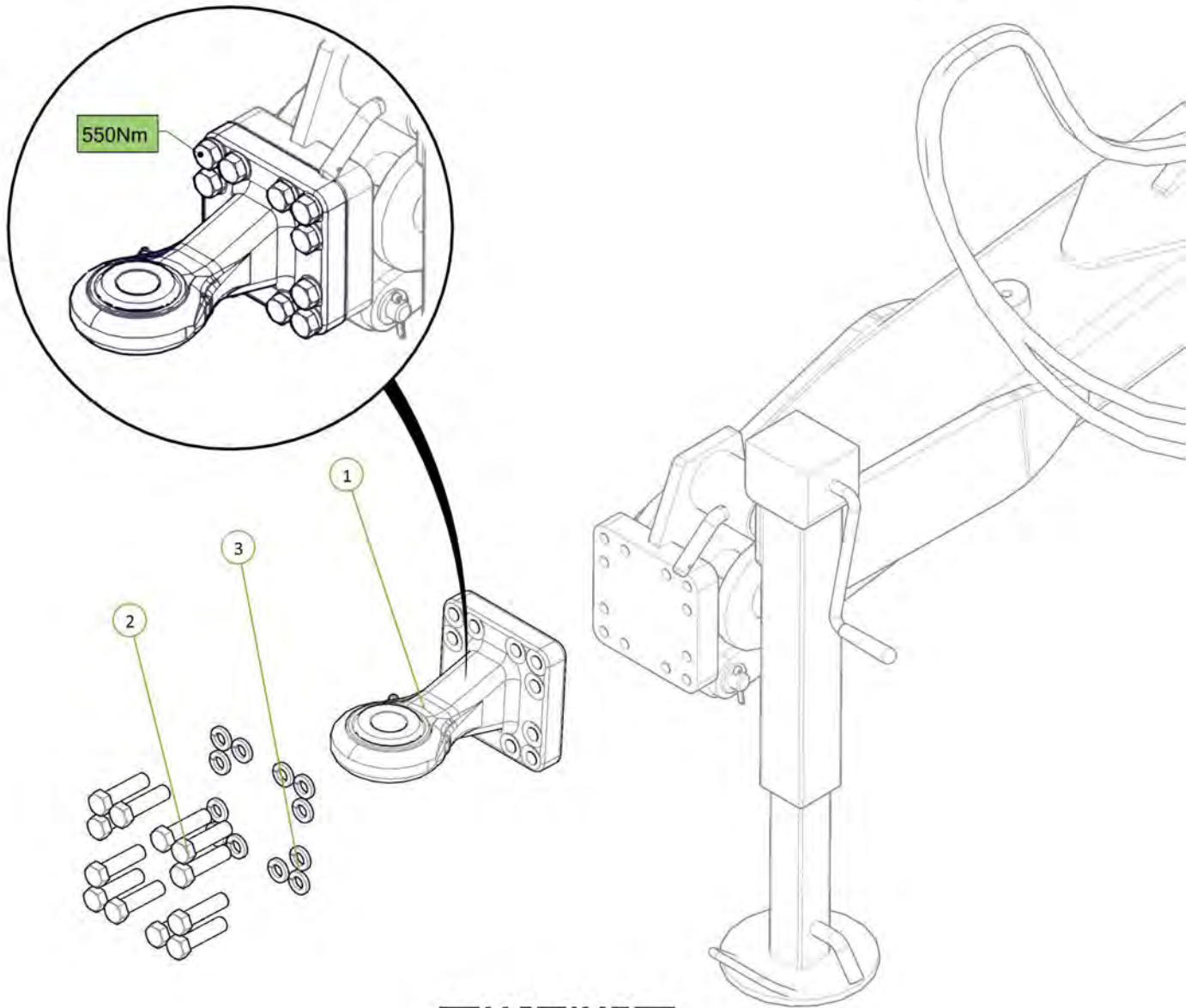
Item No.	Description	Qty	Number
1	3" Bore x 12" Stroke 1.5" Rod Extended Hydraulic Cylinder	1	0311-312EXT



Item No.	Description	Qty	Number
1	3T Dropleg Jack	1	0801-DG706/35FW





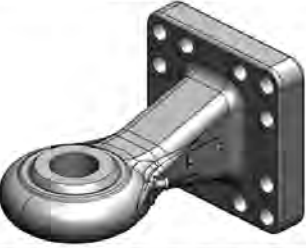
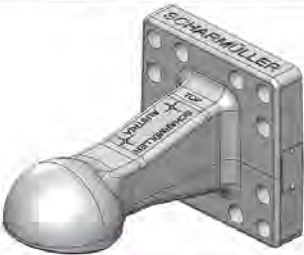


Item No.	Description	Qty	Number
1	Scharmueller CAT 4 51mm Flange Mount Tow Eye	1	1501-00.665.17.1
2	M20 x 80 Grade 10.9 ZP Bolt	12	0211-2080HT
3	Washer Spring M20	12	0231-S20



Hitch is fastened as per manufacturer specifications



Signed _____ Date __/__/__
 Unit Serial Number _____

<p>0801-00-665-15-0-A02 Ball Joint Flanged Eye CAT 2 Scharmüller</p>	<p>Flange Hole Pattern (mm): 160x160 Connection: Ball Joint Towing Eye Cat. 2 DØ33mm Thread: M20 Hole Pattern Holes: 12 Working Length (mm): 250 Max. Permissible D-Value (kN): 120 Max. Permissible Vertical Load (kg): 3000</p>	
<p>0801-00-665-16-0-A02 Ball Joint Flanged CAT 3 Scharmüller</p>	<p>Flange Hole Pattern (mm): 160x160 Connection: Ball Joint Towing Eye Cat. 3 DØ42mm Thread: M20 Hole Pattern Holes: 12 Working Length (mm): 250 Max. Permissible D-Value (kN): 120 Max. Permissible Vertical Load (kg): 3000</p>	
<p>0801-00-665-17-1-A02 Ball Joint Flange- Tensioned Scharmüller CAT 4</p>	<p>Flange Hole Pattern (mm): 160x160 Connection: Ball Joint Towing Eye Cat 4 DØ51mm Thread: M20 Hole Pattern Holes: 12 Working Length (mm): 246 Max. Permissible D-Value (kN): 120,2 Max. Permissible Vertical Load (kg): 3000</p>	
<p>0801-00-665-90-1-A02 Ball Coupling K80 with Flange Scharmüller</p>	<p>Flange Hole Pattern (mm): 160x160 Connection: K80® Towing Eye Ball Coupling System Thread: M20 Hole Pattern Holes: 12 Working Length (mm): 250 Max. Permissible D-Value (kN): 120 Max. Permissible Vertical Load (kg): 4000</p>	
<p>1510-54A 2 Point Hitch Cat 3</p>	<p>Flange Hole Pattern (mm): 160x160 Connection: Thread: M20 Hole Pattern Holes: 12 Working Length (mm): 285</p>	
<p>1510-55A 2 Point Hitch Cat 4</p>	<p>Flange Hole Pattern (mm): 160x160 Connection: Thread: M20 Hole Pattern Holes: 12 Working Length (mm): 276</p>	



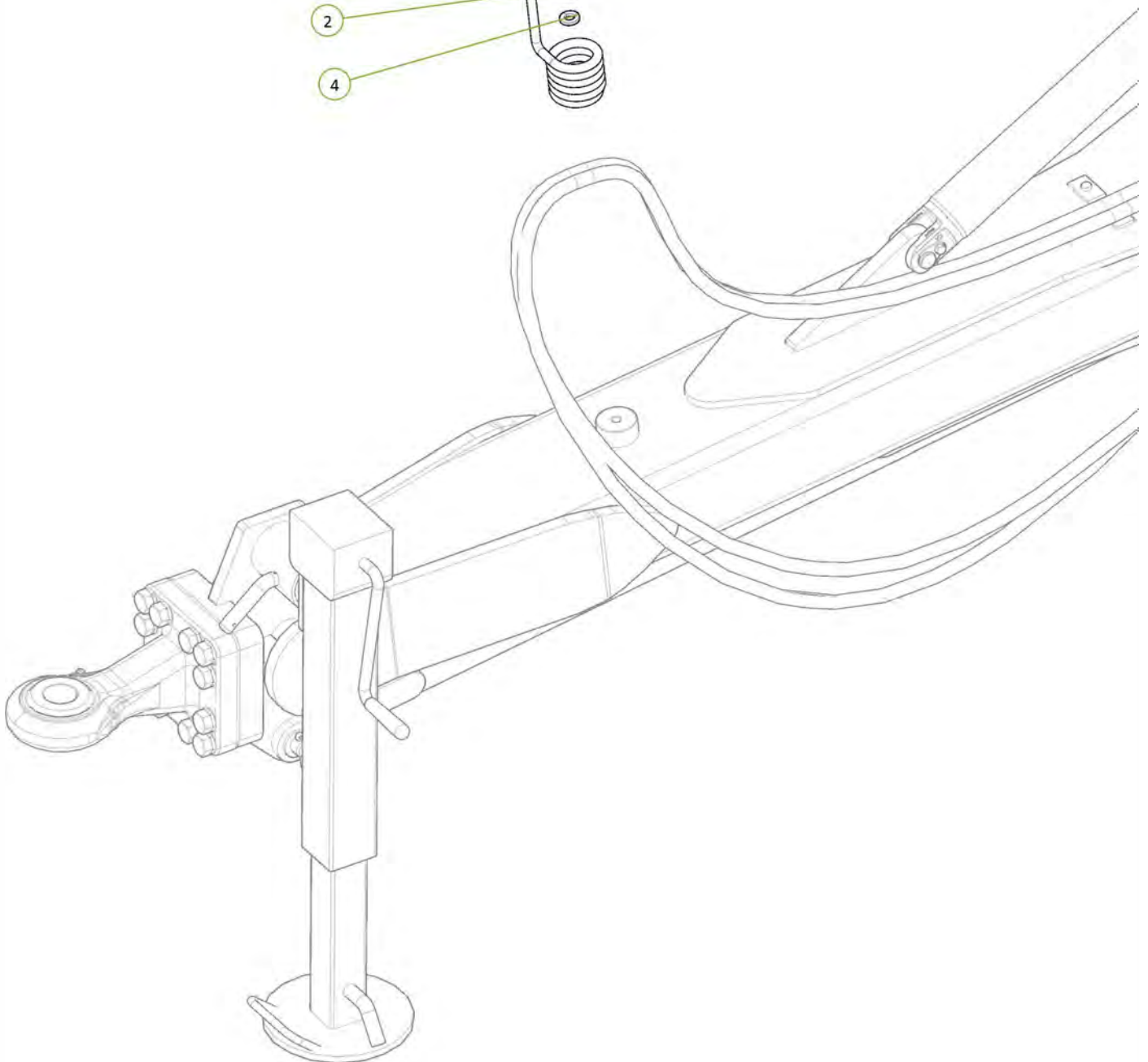
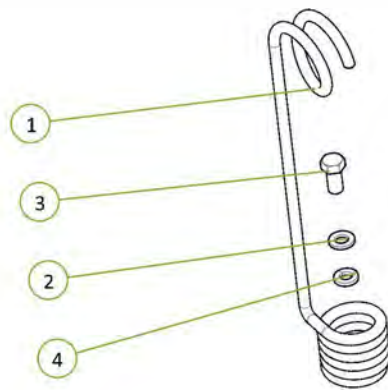
All hitch options are fitted with the same process.

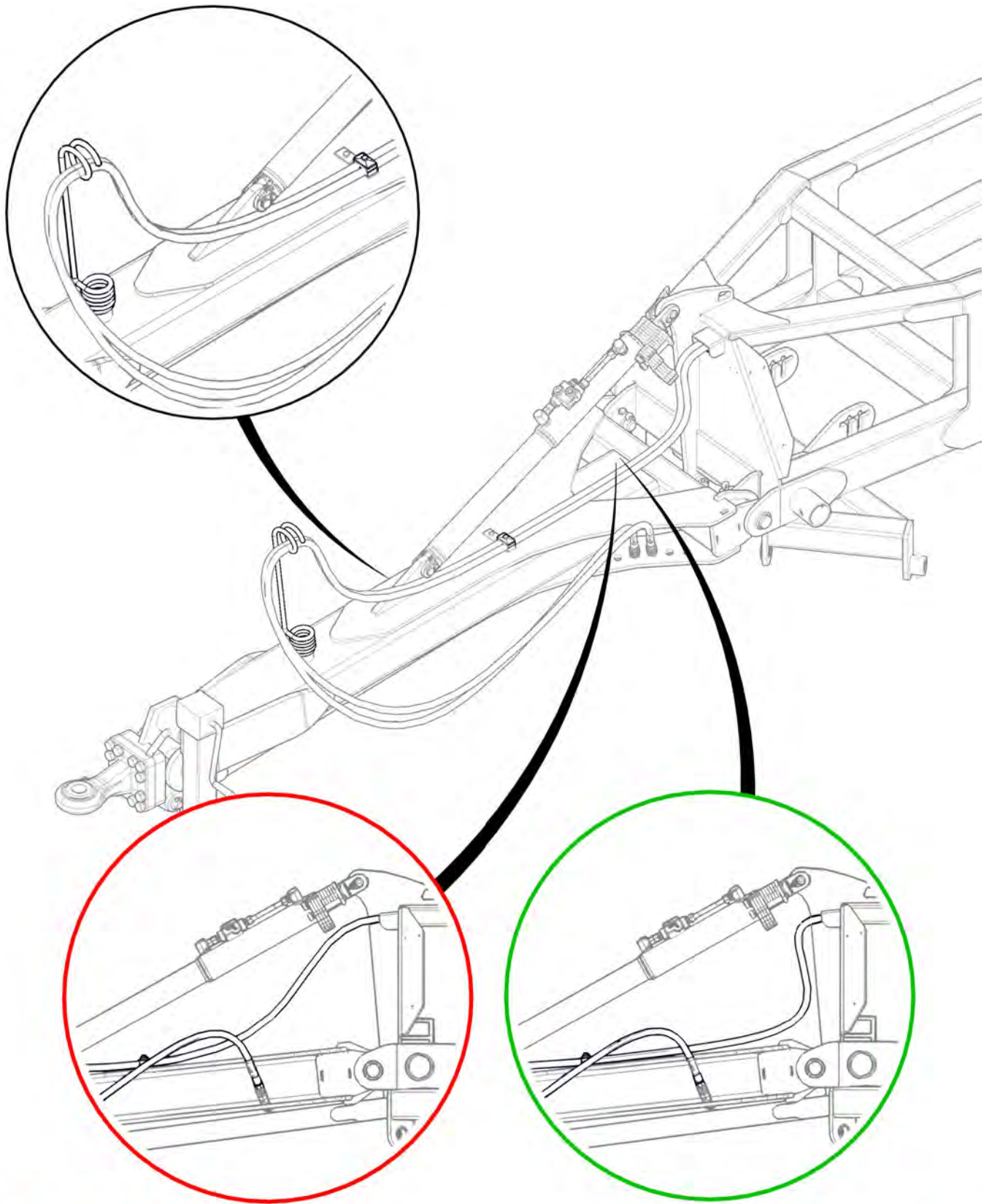
Hitch is fastened as per manufacturer specifications



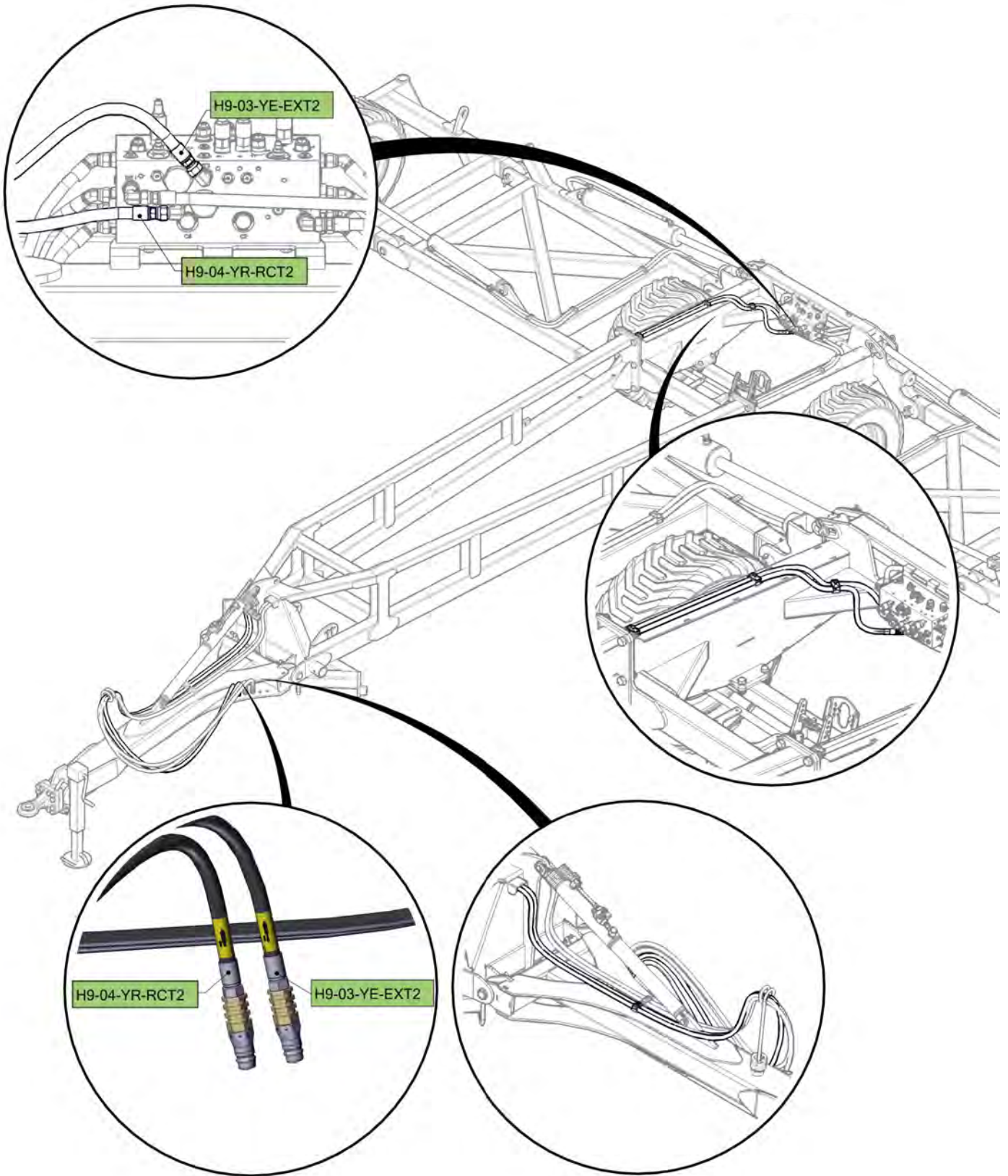
Signed _____ Date __/__/__
Unit Serial Number _____

Item No.	Description	Qty	Number
1	Hose Post Spring	1	1601-CDB-00-0012
2	Washer Flat M16	1	0231-F16
3	M16 x 35 Grade 8.8 ZP Bolt	1	0211-1635
4	Washer Spring M16	1	0231-S16

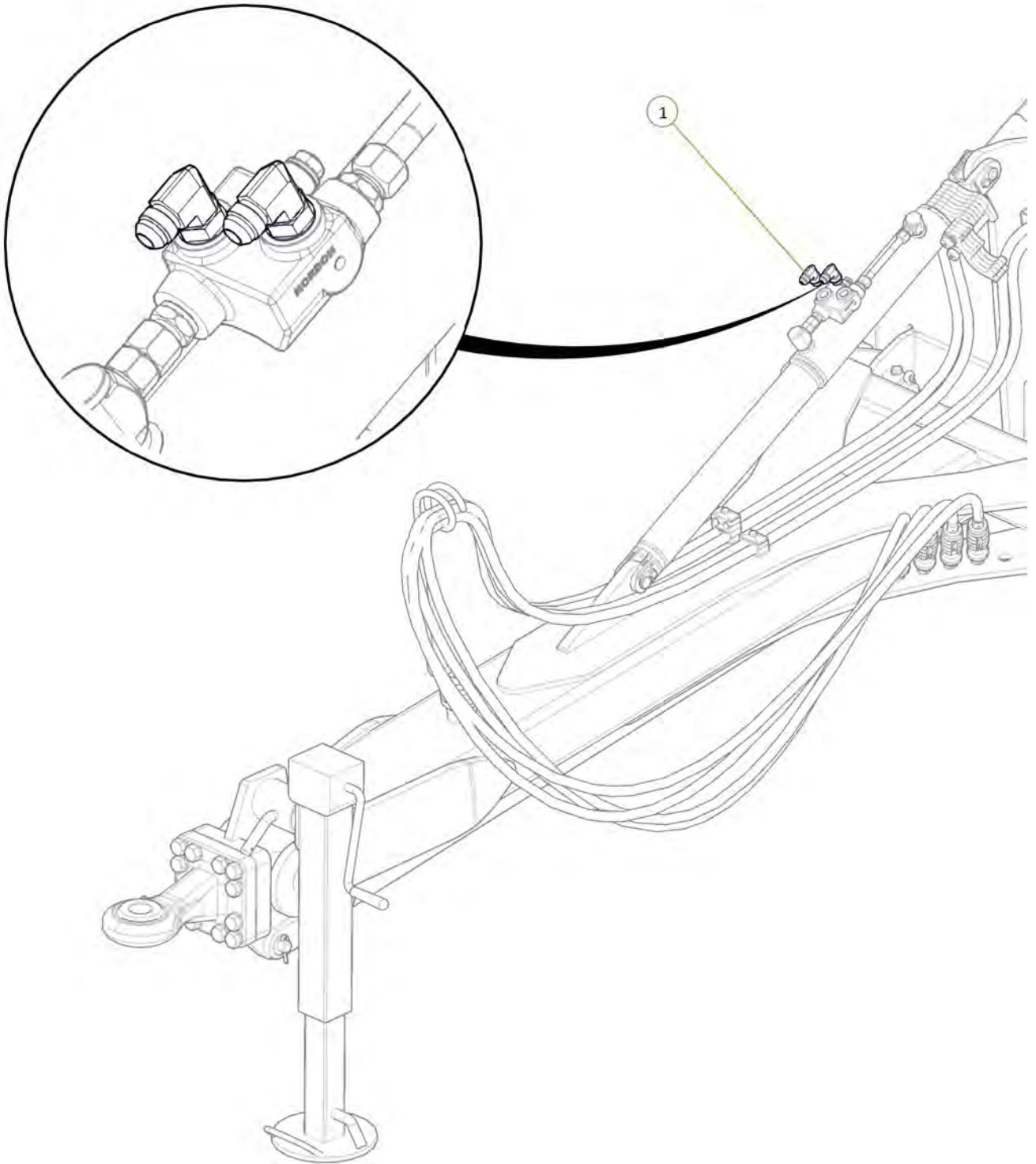
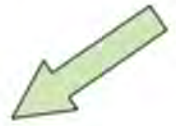




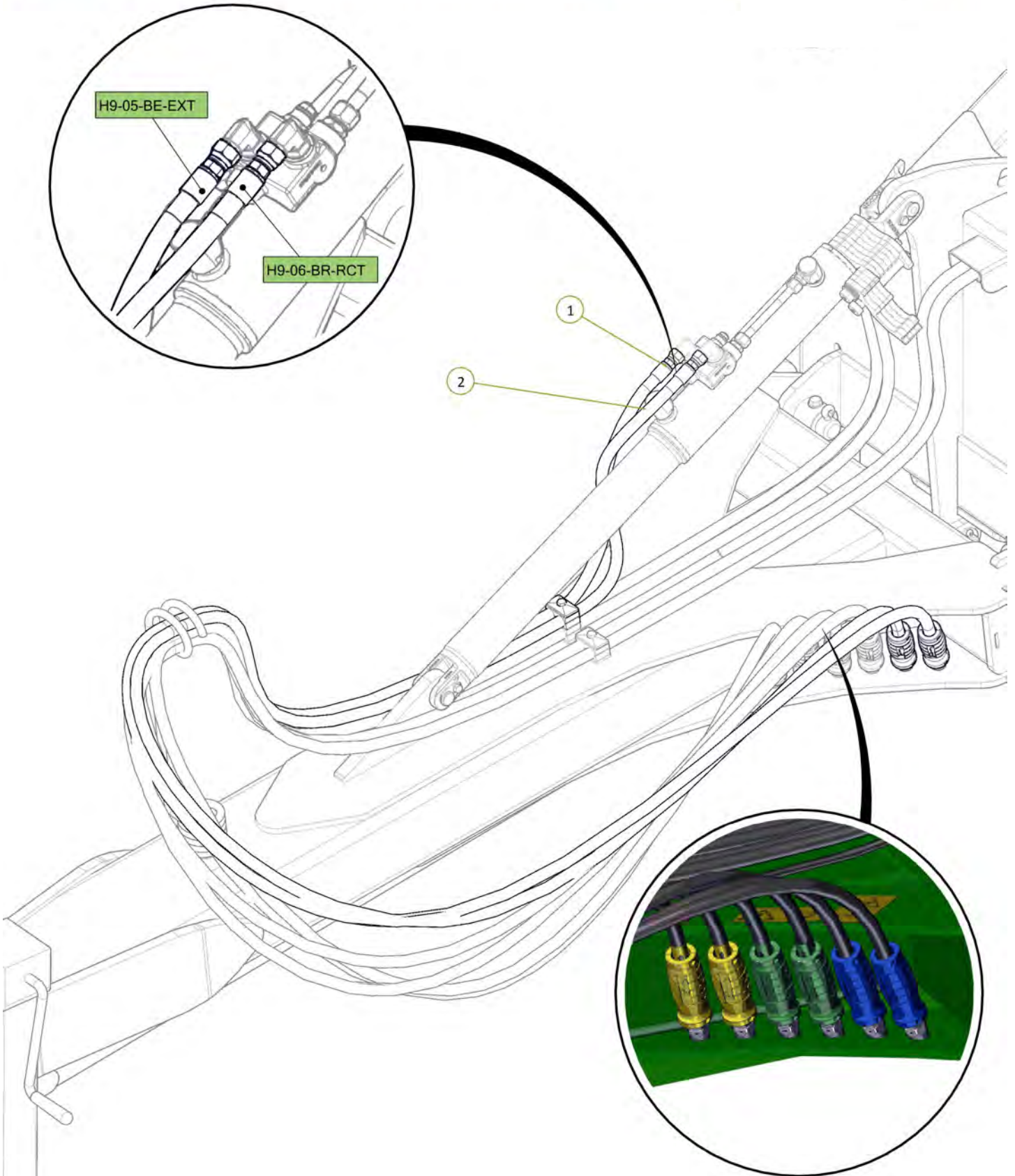
Item No.	Description	Qty	Number
1	Tractor to Sequence Valve EXT2 Port Fitted With Yellow EXT Decal	1	H9-03-YE-EXT2
2	Tractor to Sequence Valve RTC2 Port Fitted With Yellow RTC Decal	1	H9-04-YR-RCT2



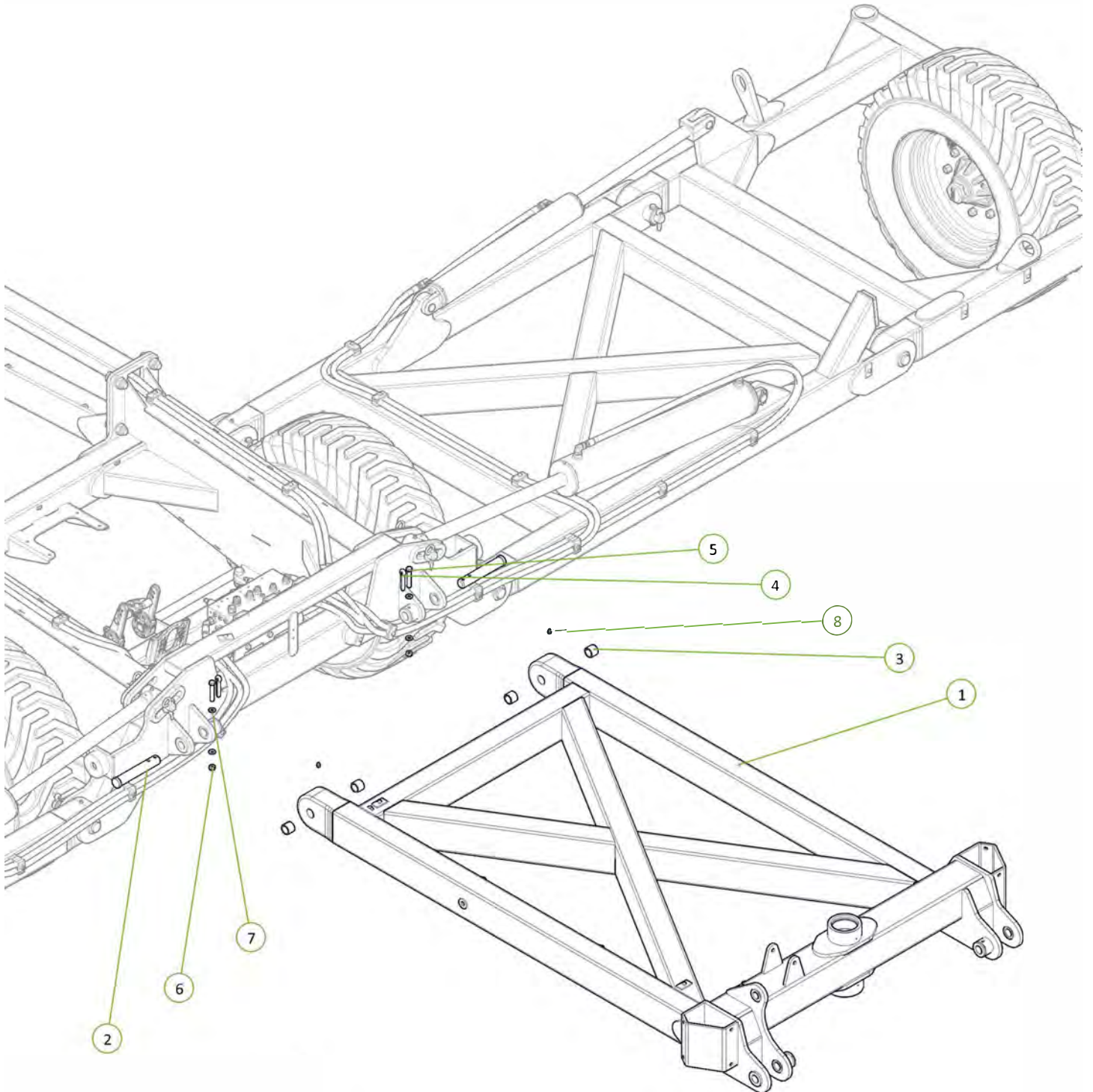
Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212

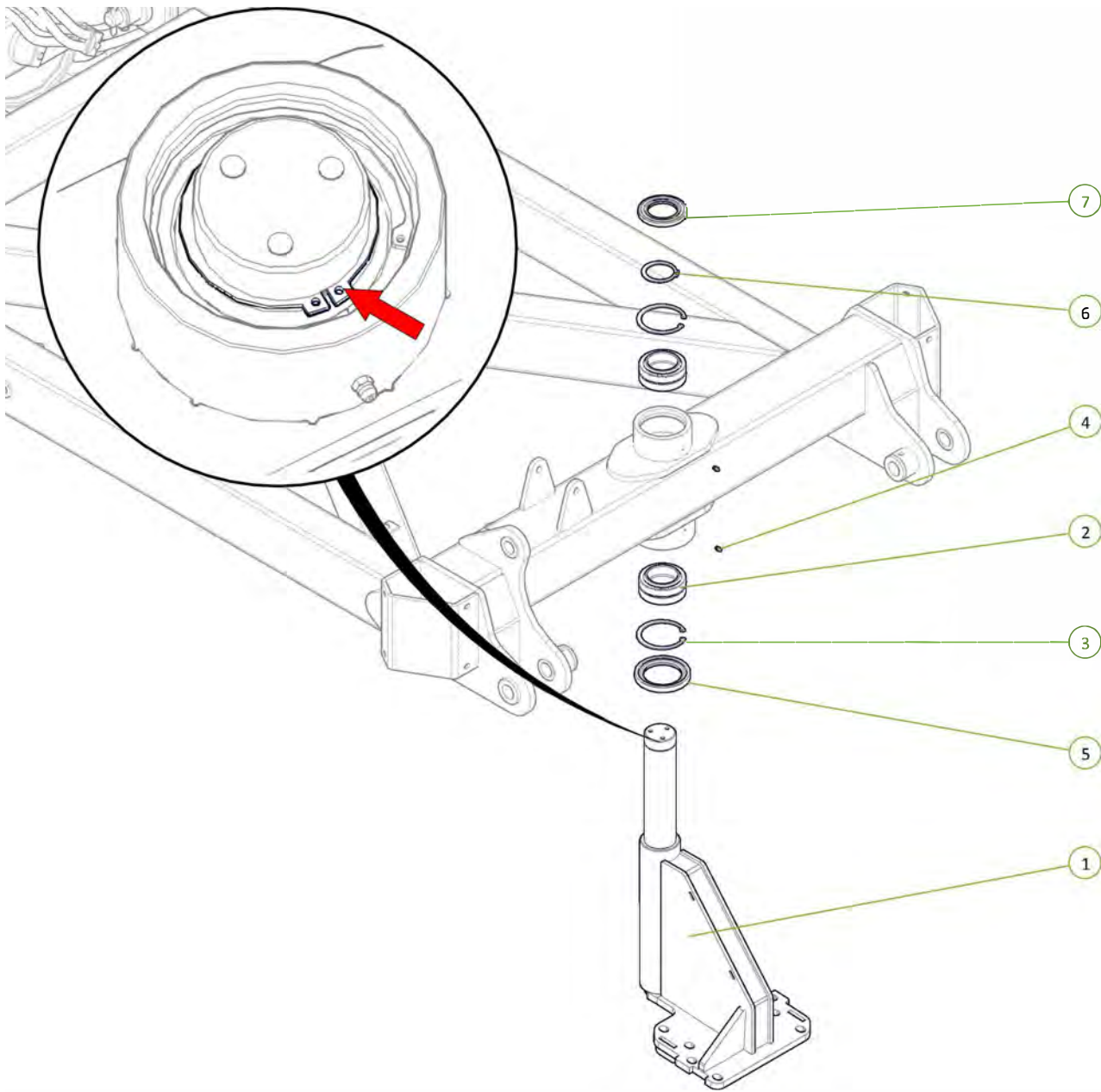


Item No.	Description	Qty	Number
1	Tractor to Front Lift Cylinder Extend Port Fitted With Blue EXT Grip	1	H9-05-BE-EXT
2	Tractor to Front Lift Cylinder Extend Port Fitted With Blue RTC Grip	1	H9-06-BR-RCT



Item No.	Description	Qty	Number
1	Rear A Frame	1	1532-03
2	Wing Pivot Pin	2	0801-10-08-235
3	35 ID x 30mm DX Bush	4	0113-3530DX
4	Cotter Pin M13 x 63	2	0261-PINC1363
5	M12 x 75 Grade 8.8 ZP Bolt	2	0211-1275
6	Nyloc Nut M12	2	0221-NYL12
7	Washer Flat M12	4	0231-F12
8	Grease Nipple M8 x 1	2	0181-GNM8



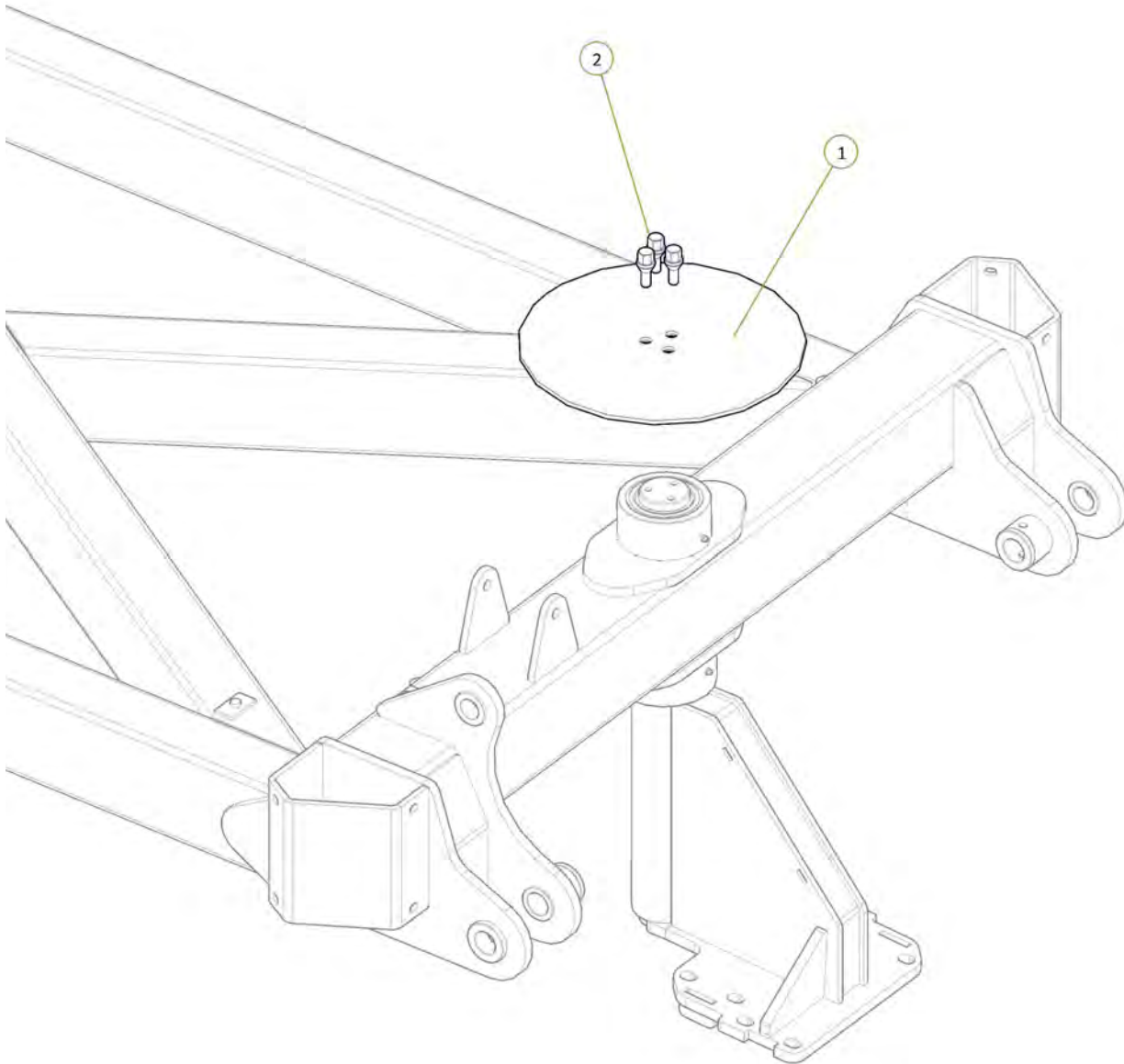


Item No.	Description	Qty	Number
1	Jockey Wheel	1	1610-12-70E
2	Plain Spherical Bearing 70mm	2	0113-GE70DO-2RS
3	Circlip Internal 105mm	2	0171-J105
4	Grease Nipple M6.75	2	0181-GNM8
5	TC Seal 90mm x 125mm x 13mm	1	0121-TC12681
6	Circlip External 70mm	1	0172-D1400-0700APP
7	TC Seal 70mm x 110mm x 10mm	1	0121-TC12654

Circlip fitted to Jockey Wheel shaft 

Signed _____ Date ___/___/___
 Unit Serial Number _____

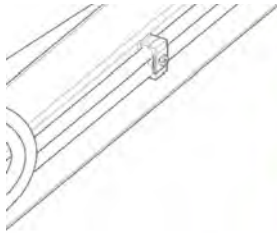
Item No.	Description	Qty	Number
1	Brake Disc	1	1600-405
2	M12 x 24 Wheel Bolt	3	0216-WB1224



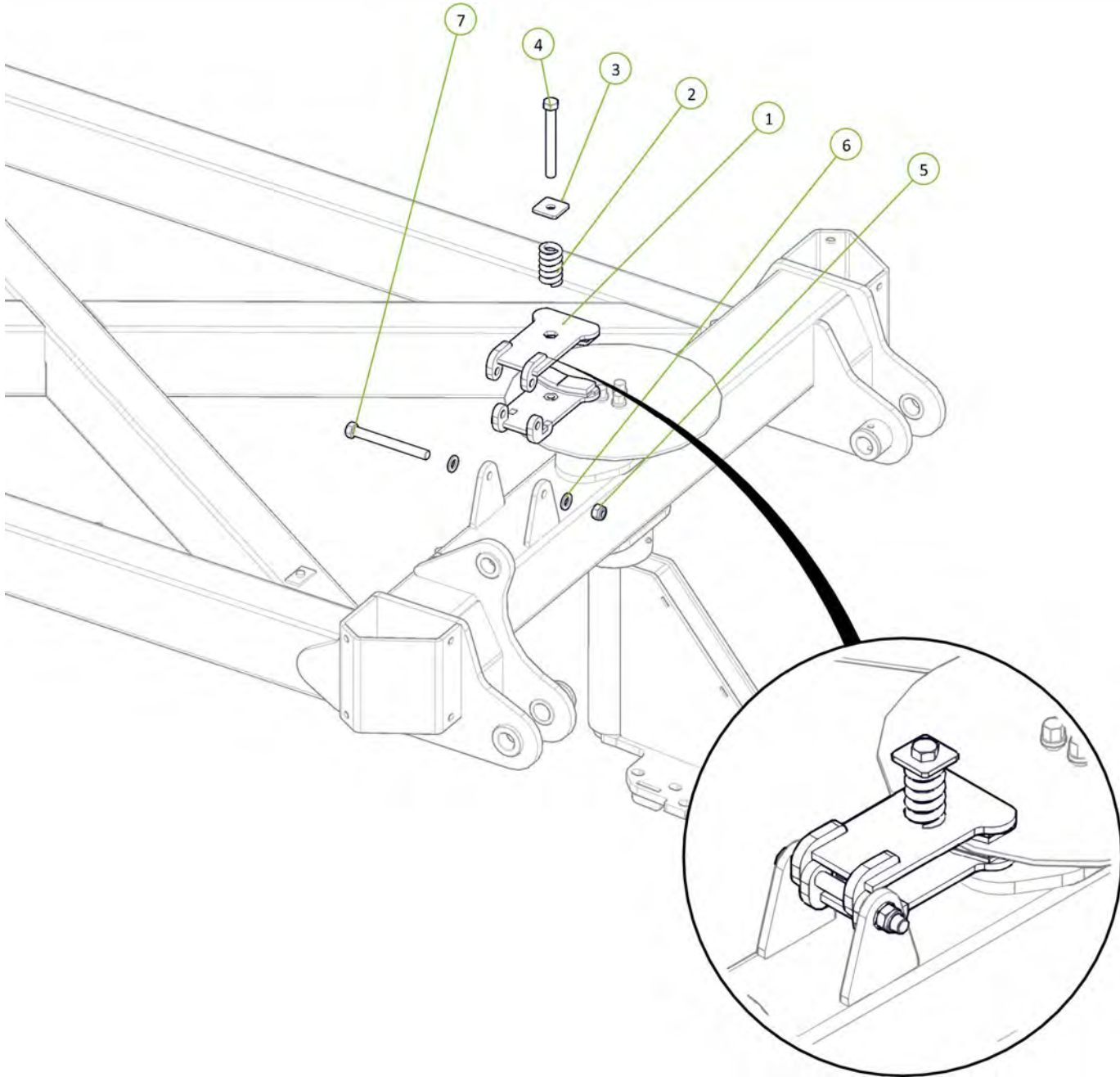
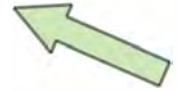
Wheel bolts torqued to 88Nm



Signed _____ Date _ / _ / _
 Unit Serial Number _____



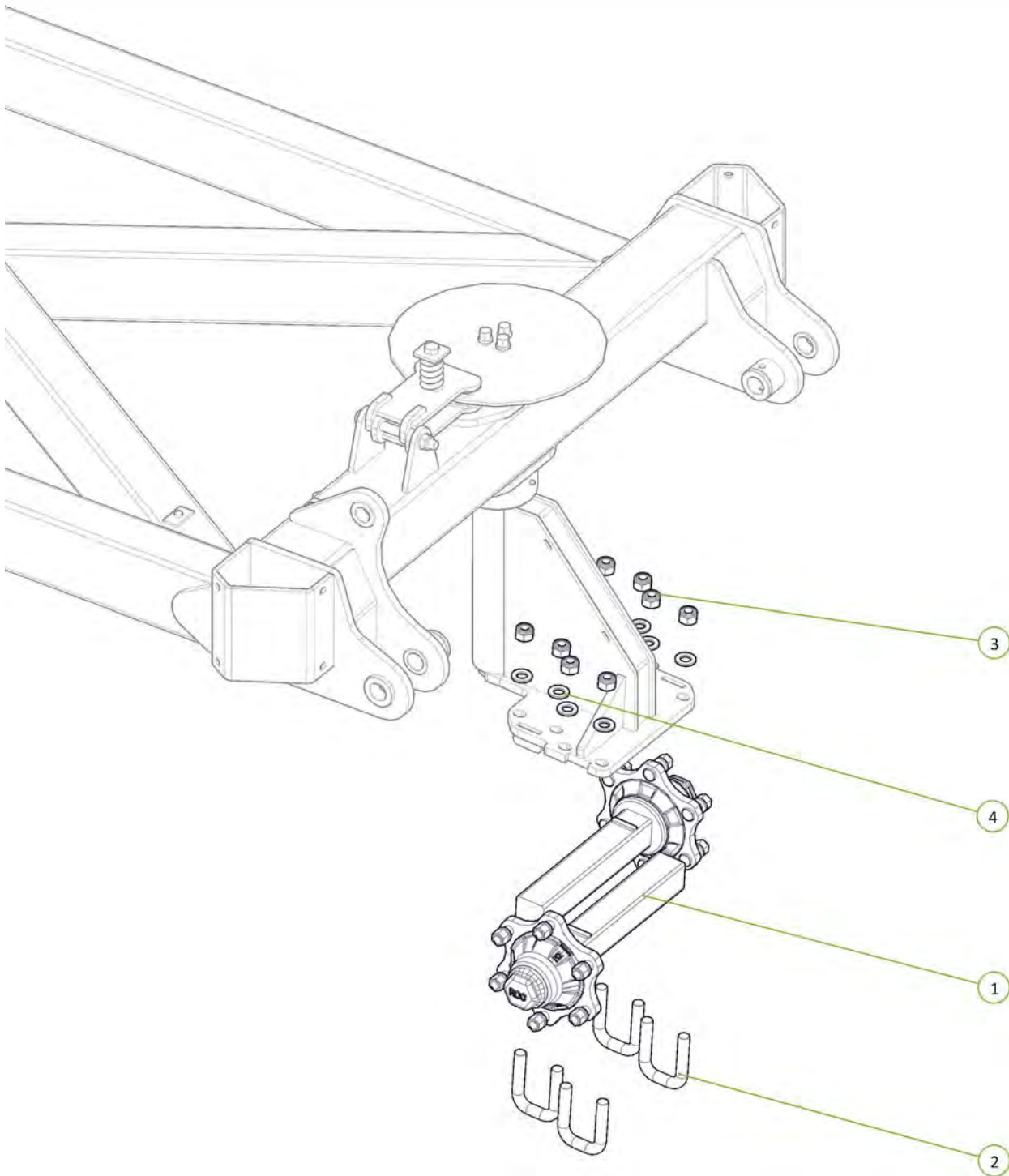
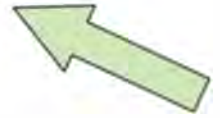
Item No.	Description	Qty	Number
1	Jockey Wheel Brake Caliper	1	0810-12CAL
2	Brake Compression Spring	1	0801-KE009
3	Washer Square M16 x 50 x 5	1	0231-SQ16505
4	M16 x 150 Grade 8.8 ZP Bolt	1	0211-16150
5	Nyloc Nut M16	1	0221-NYL16
6	Washer Flat M16	2	0231-F16
7	M16 x 160 Grade 8.8 ZP Bolt	1	0211-16160

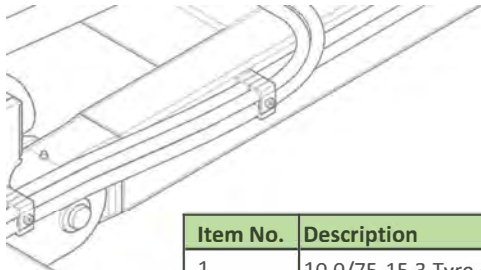


Check tension of brake caliper spring (50-63mm road transport) ○

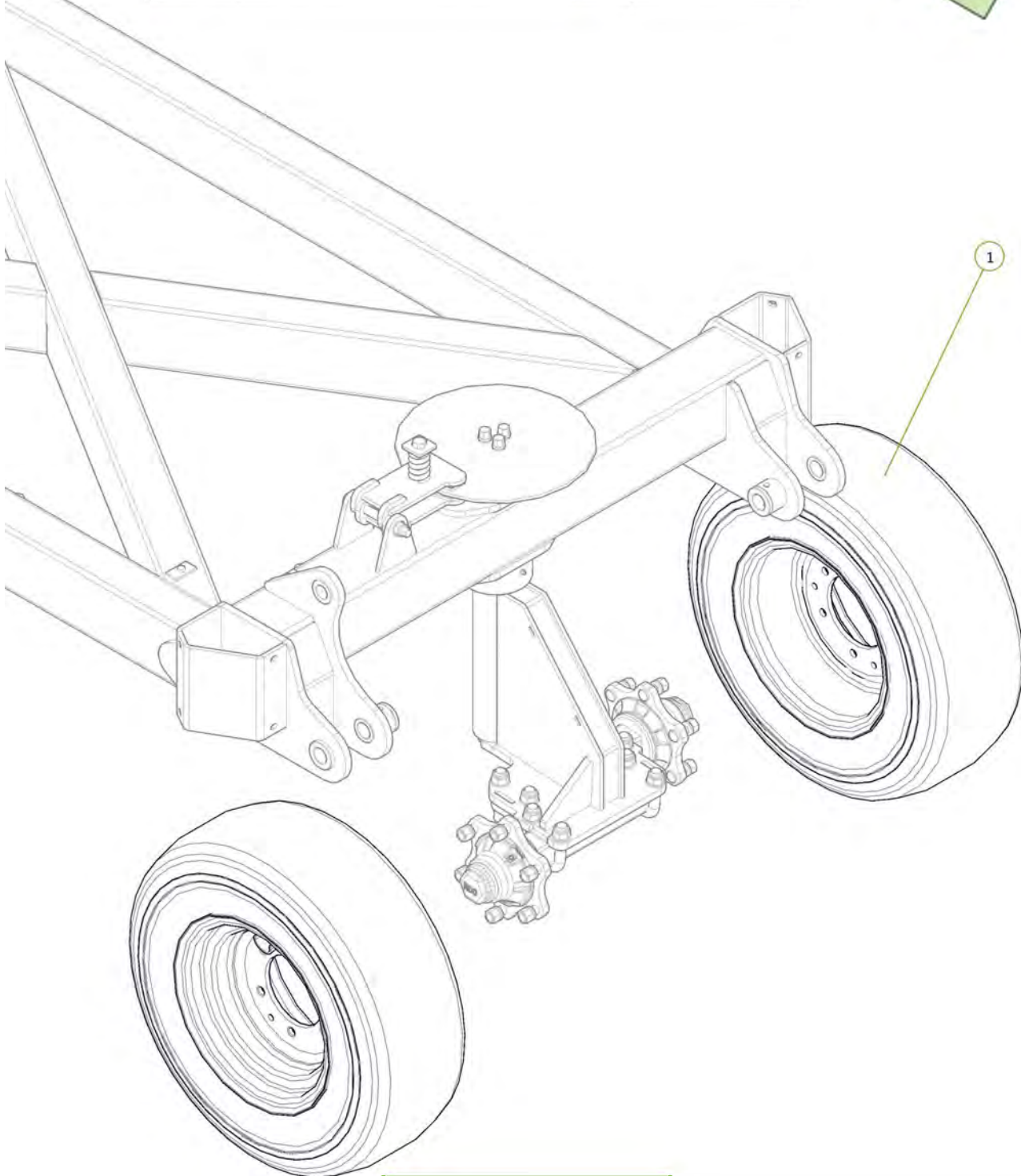
Signed _____ Date ___/___/___
 Unit Serial Number _____

Item No.	Description	Qty	Number
1	Monroc 606XR Stub Axle (VAR)	2	0733-606XRVAR
2	U-Bolt M20 x 105 Deep x 62 Wide	4	0271-2010562
3	Nyloc Nut M20	8	0221-NYL20
4	Washer Flat M20	8	0231-F20



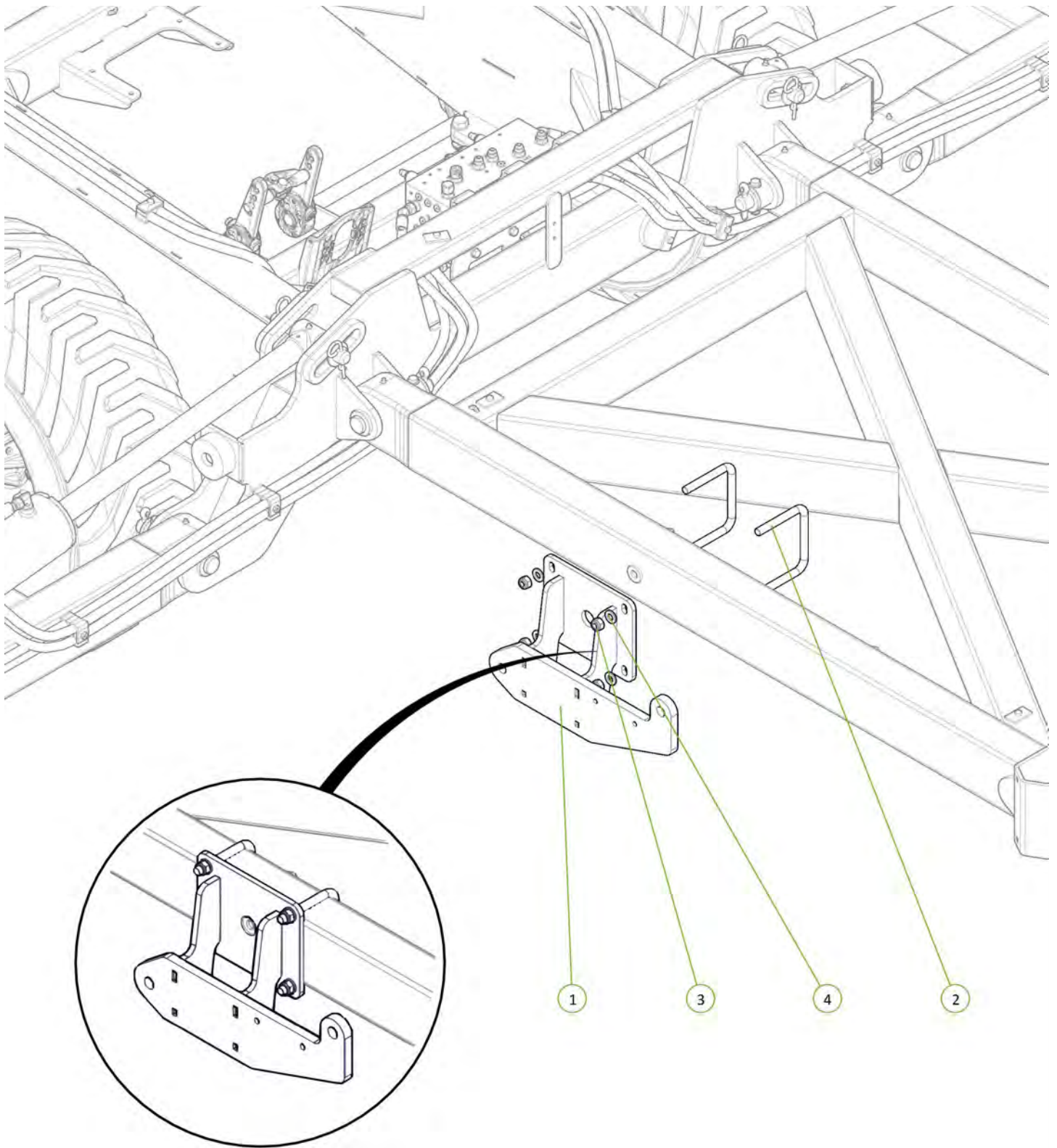


Item No.	Description	Qty	Number
1	10.0/75-15.3 Tyre on 6 on 205 O offset Rim	2	0751-10.0-75-15.3



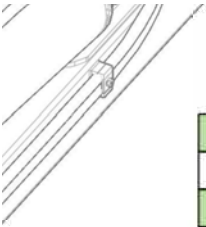
All wheel nuts tightened to 345Nm 

Signed _____ Date ___/___/___
Unit Serial Number _____

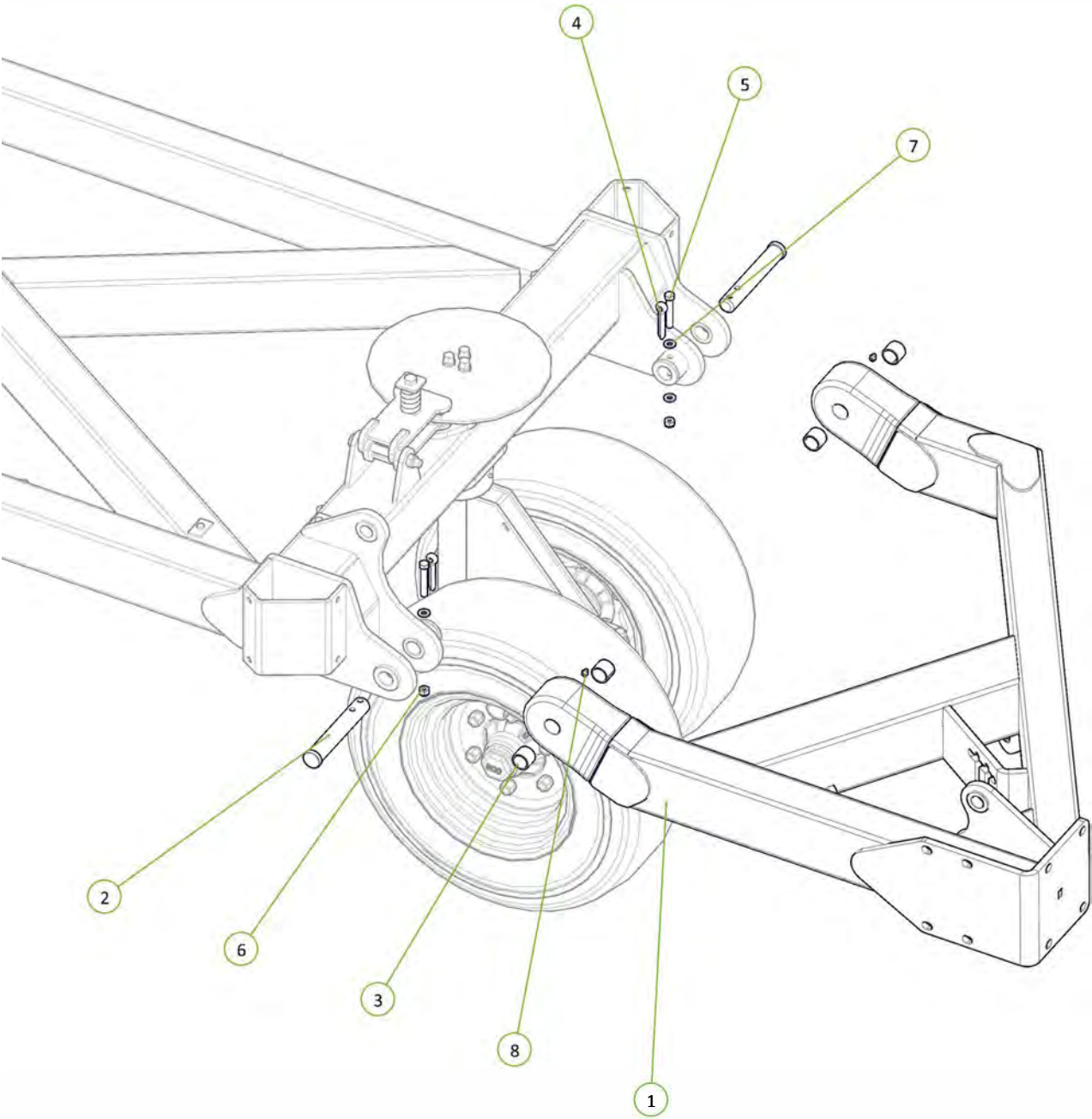
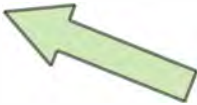


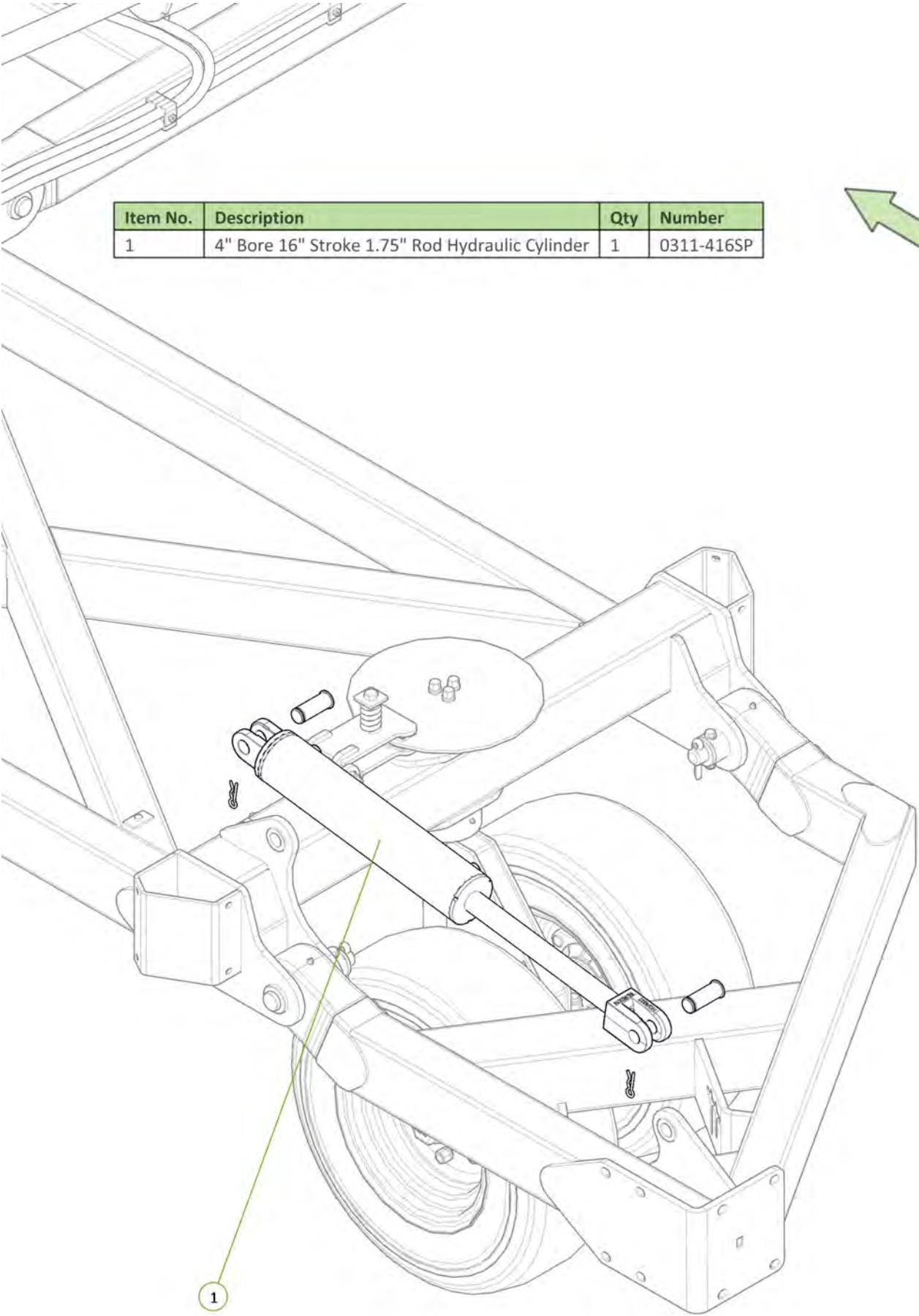
Item No.	Description	Qty	Number
1	U-Bolt Module Lift Bracket	1	1510-41
2	U-Bolt M16 x 140 Deep x 154 Wide	2	0271-16140154
3	Nyloc Nut M16	4	0221-NYL16
4	Washer Flat M16	4	0231-F16





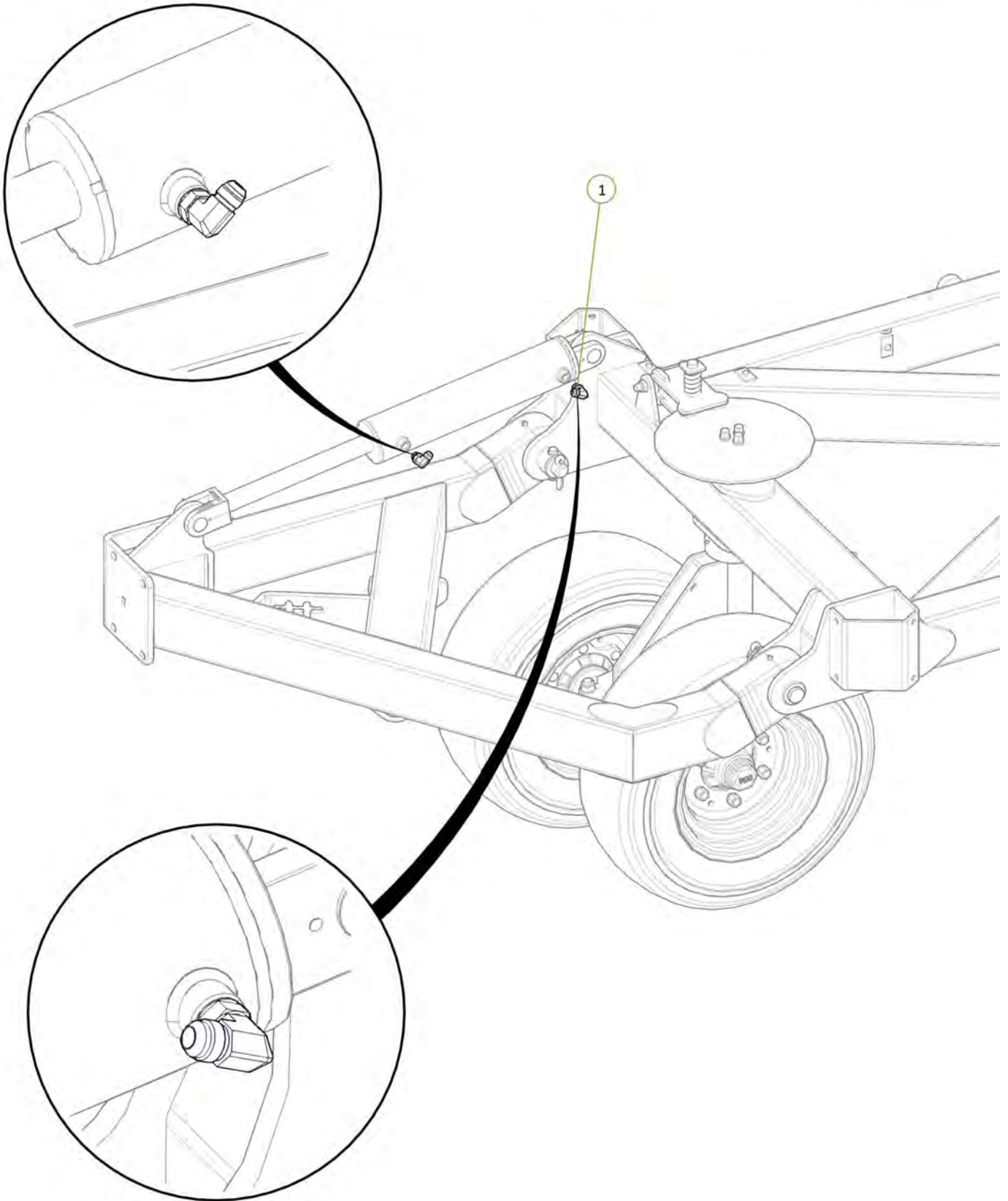
Item No.	Description	Qty	Number
1	Rear Tail	1	1532-10
2	Wing Pivot Pin	2	0801-10-08-235
3	35 ID x 30mm DX Bush	4	0113-3530DX
4	Cotter Pin M13 x 63	2	0261-PINC1363
5	M12 x 75 Grade 8.8 ZP Bolt	2	0211-1275
6	Nyloc Nut M12	2	0221-NYL12
7	Washer Flat M12	4	0231-F12
8	Grease Nipple M8 x 1	2	0181-GNM8



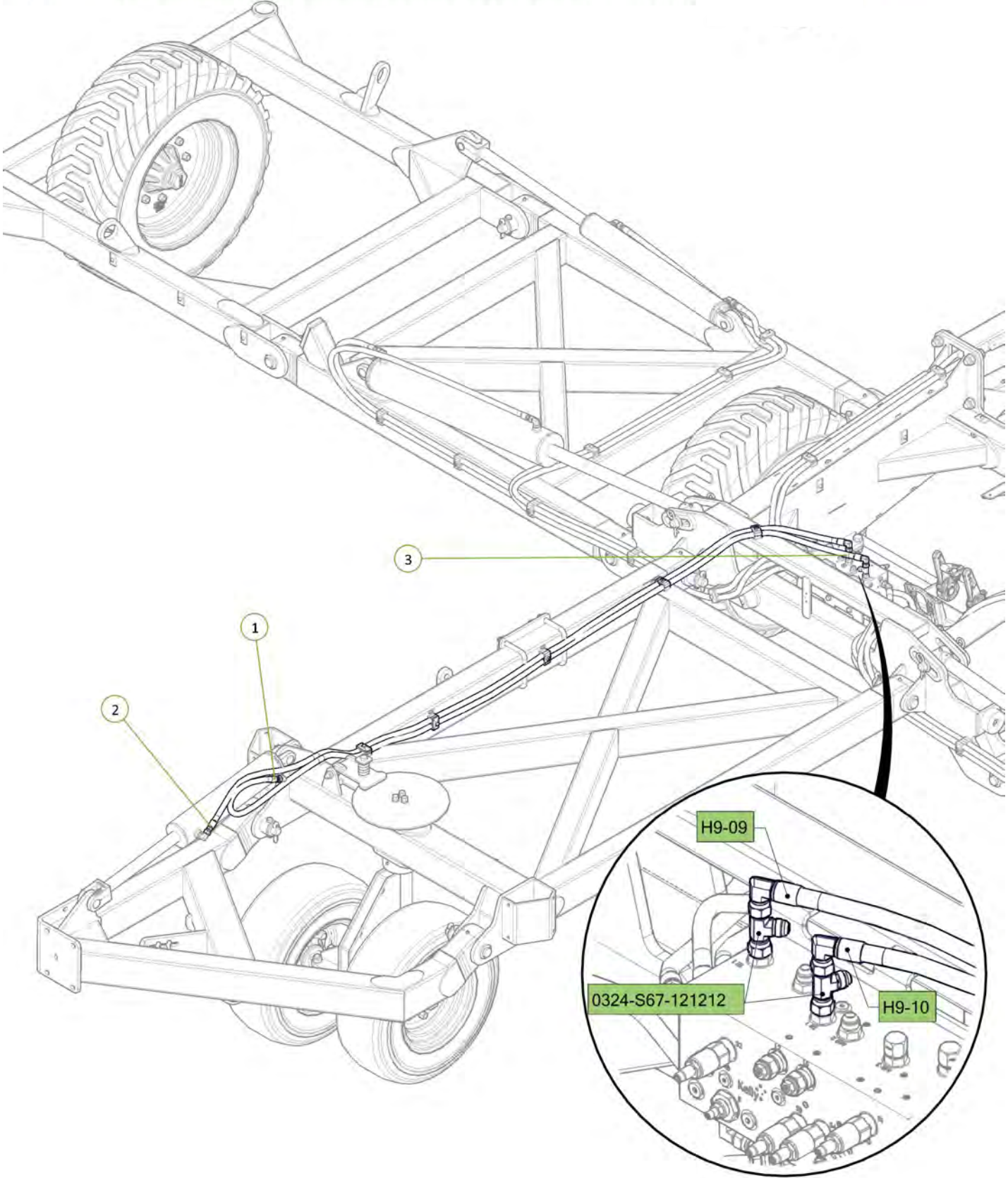


Item No.	Description	Qty	Number
1	4" Bore 16" Stroke 1.75" Rod Hydraulic Cylinder	1	0311-416SP

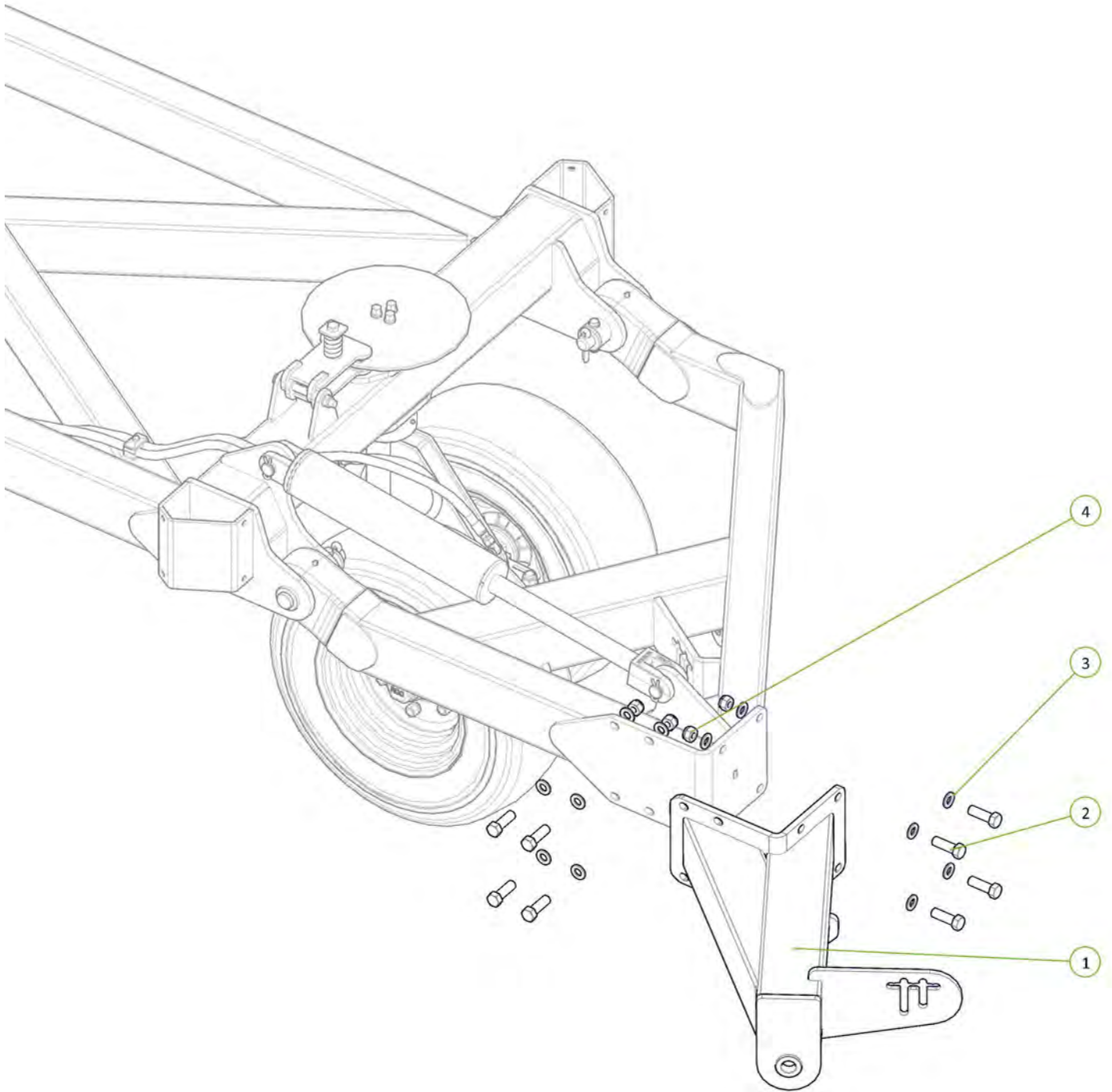
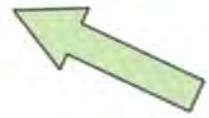
Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212



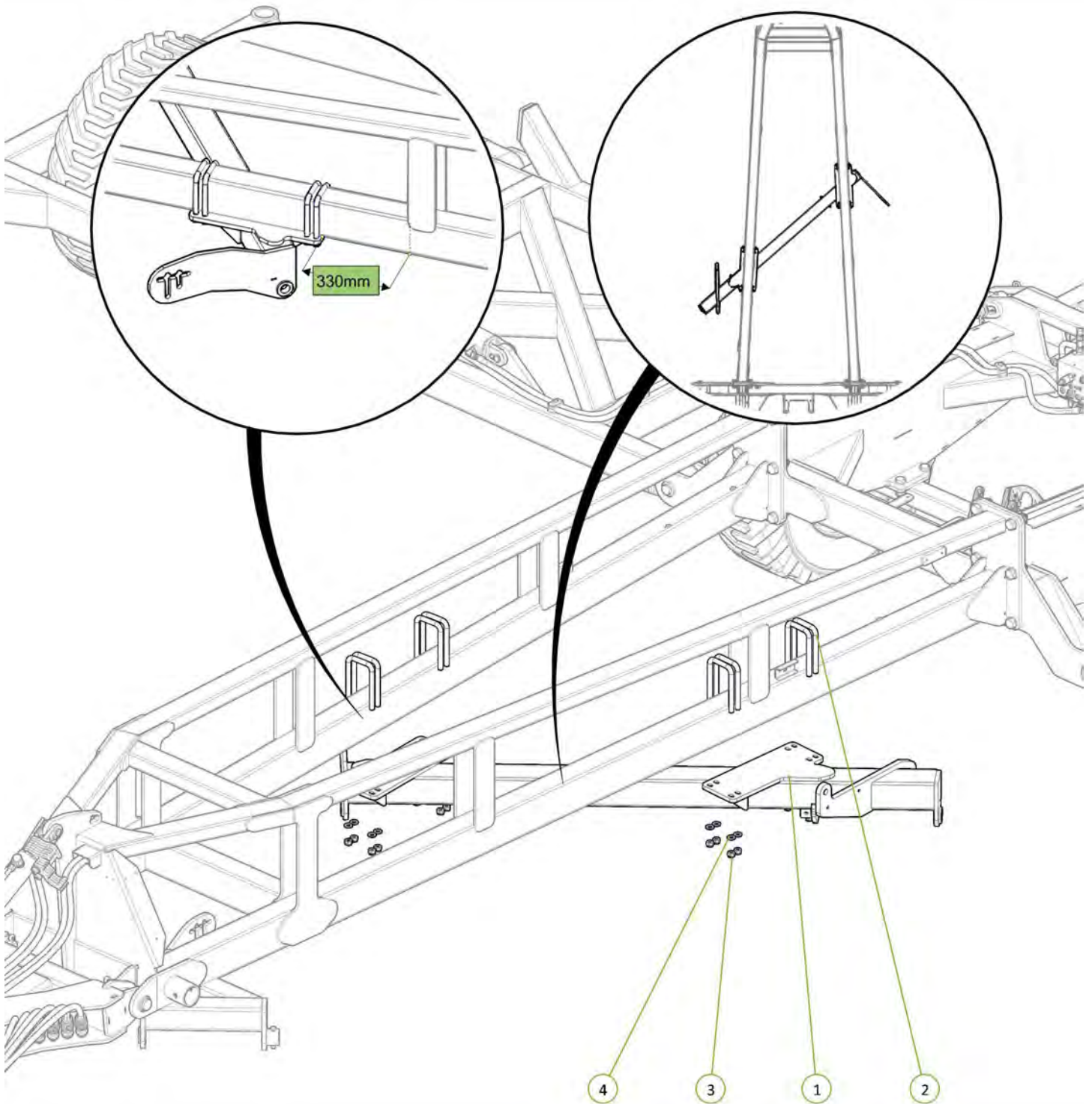
Item No.	Description	Qty	Number
1	TE1 Port to Tail Lift Cylinder Extend Port	1	H9-09
2	TR1 Port to Tail Lift Cylinder Retract Port	1	H9-10
3	3/4" JIC Male 3/4" JIC Female 3/4" JIC Male Tee	2	0324-S67-121212

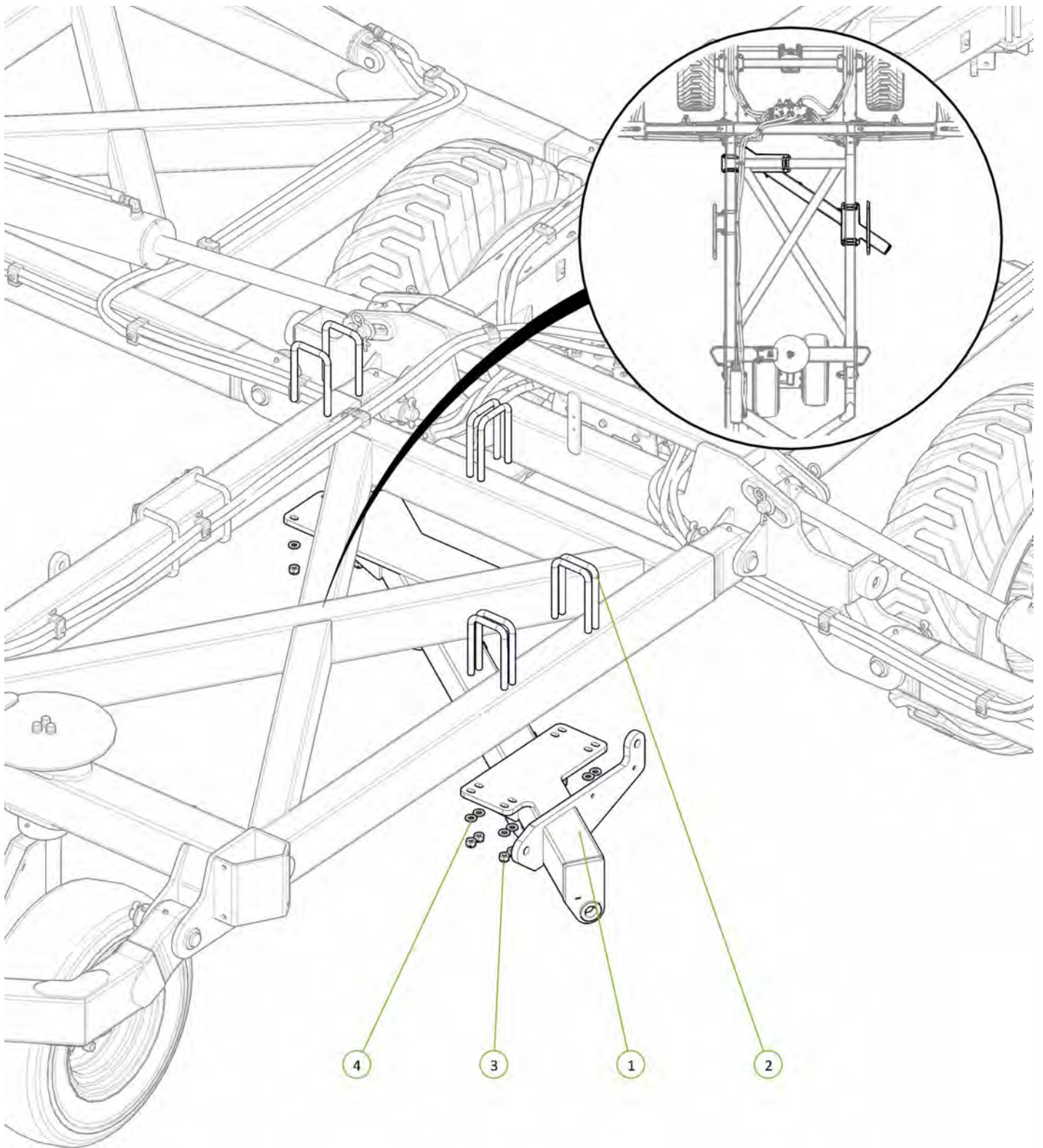


Item No.	Description	Qty	Number
1	Tail Extension	1	1532-10SE
2	M20 x 60 grade 8.8 ZP Bolt	8	0211-2060
3	Washer Flat M20	16	0231-F20
4	Nyloc Nut M20	8	0221-NYL20



Item No.	Description	Qty	Number
1	Front Module	1	1532-28-30
2	U-Bolt M16 x 185 Deep x 104 Wide	8	0271-16185104
3	Nyloc Nut M16	16	0221-NYL16
4	Washer Flat M16	16	0231-F16

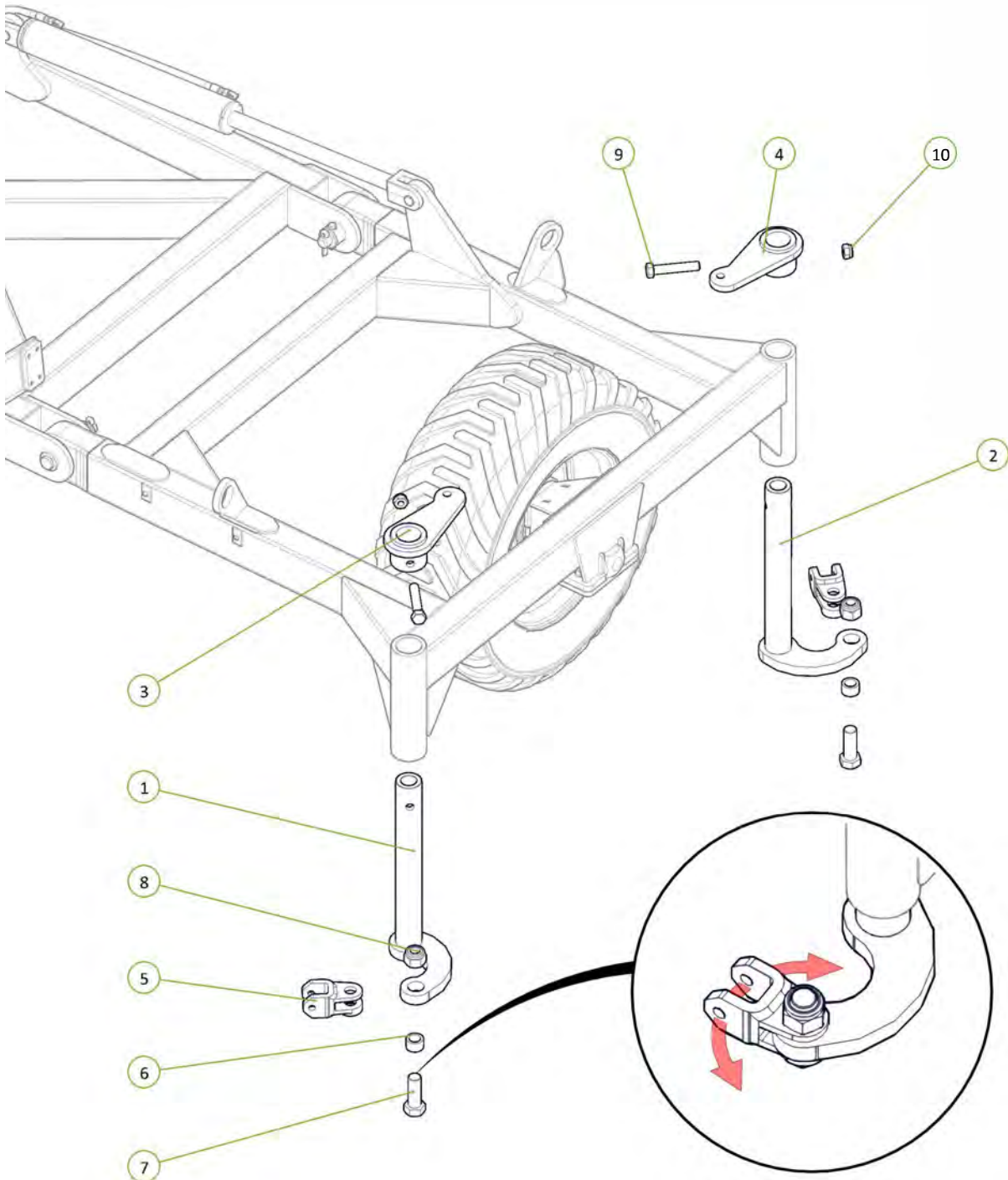




Item No.	Description	Qty	Number
1	Rear Module	1	1532-29-30
2	U-Bolt M16 x 185 Deep x 104 Wide	8	0271-16185104
3	Nyloc Nut M16	16	0221-NYL16
4	Washer Flat M16	16	0231-F16

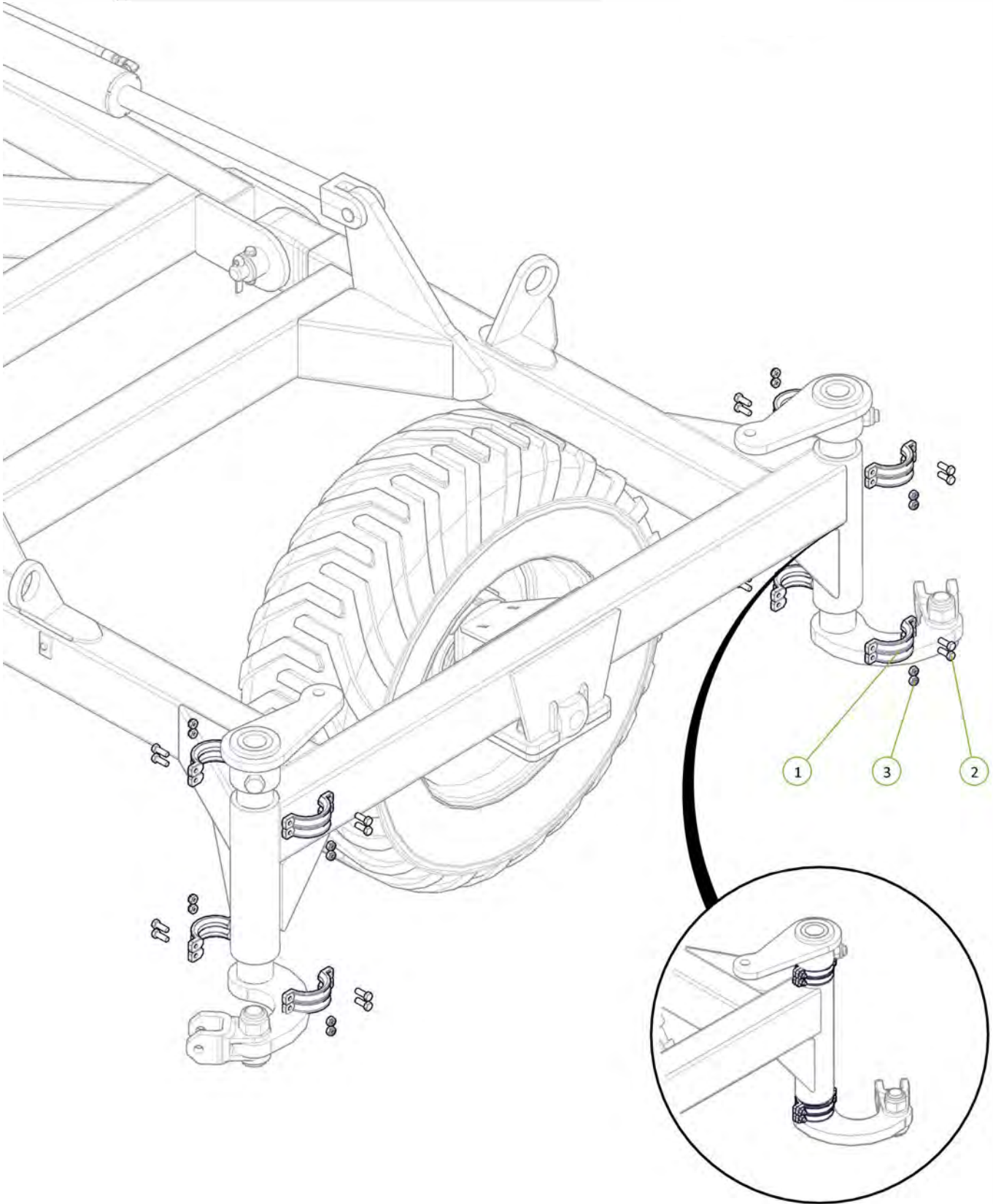
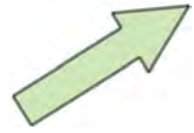


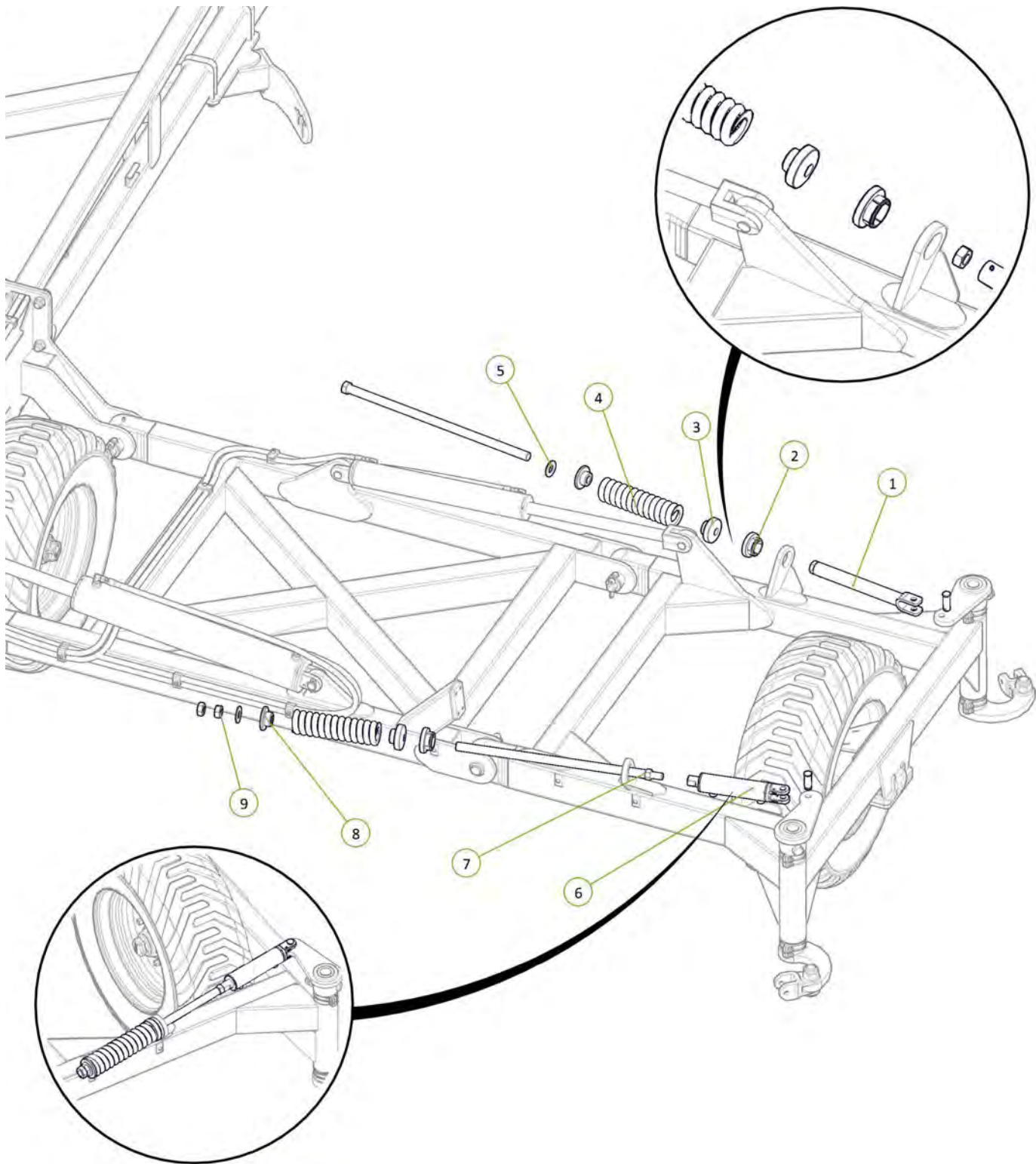
Item No.	Description	Qty	Number
1	Left Hand Dropleg No Clevis	1	0810-24F
2	Right Hand Dropleg No Clevis	1	0810-25F
3	Left Hand Chain Adjusting Lug	1	0810-26
4	Right Hand Chain Adjusting Lug	1	0810-27
5	Forged Clevis 21mm Bolt Hole	2	0801-FC21
6	Wear Bush	2	1501-365033-SS
7	M36 x 105 Grade 8.8 ZP Bolt	2	0211-36105
8	Nyloc Nut M36	2	0221-NYL36
9	M24 x 140 Grade 8.8 ZP Bolt	2	0211-24140
10	Nyloc Nut M24	2	0221-NYL24



Ensure ALL clevis's can pivot after installation

Item No.	Description	Qty	Number
1	Cast Spacer 25mm	16	0801-CS25
2	M10 x 30 Grade 8.8 ZP Bolt	16	0211-1030
3	Nyloc Nut M10	16	0221-NYL10

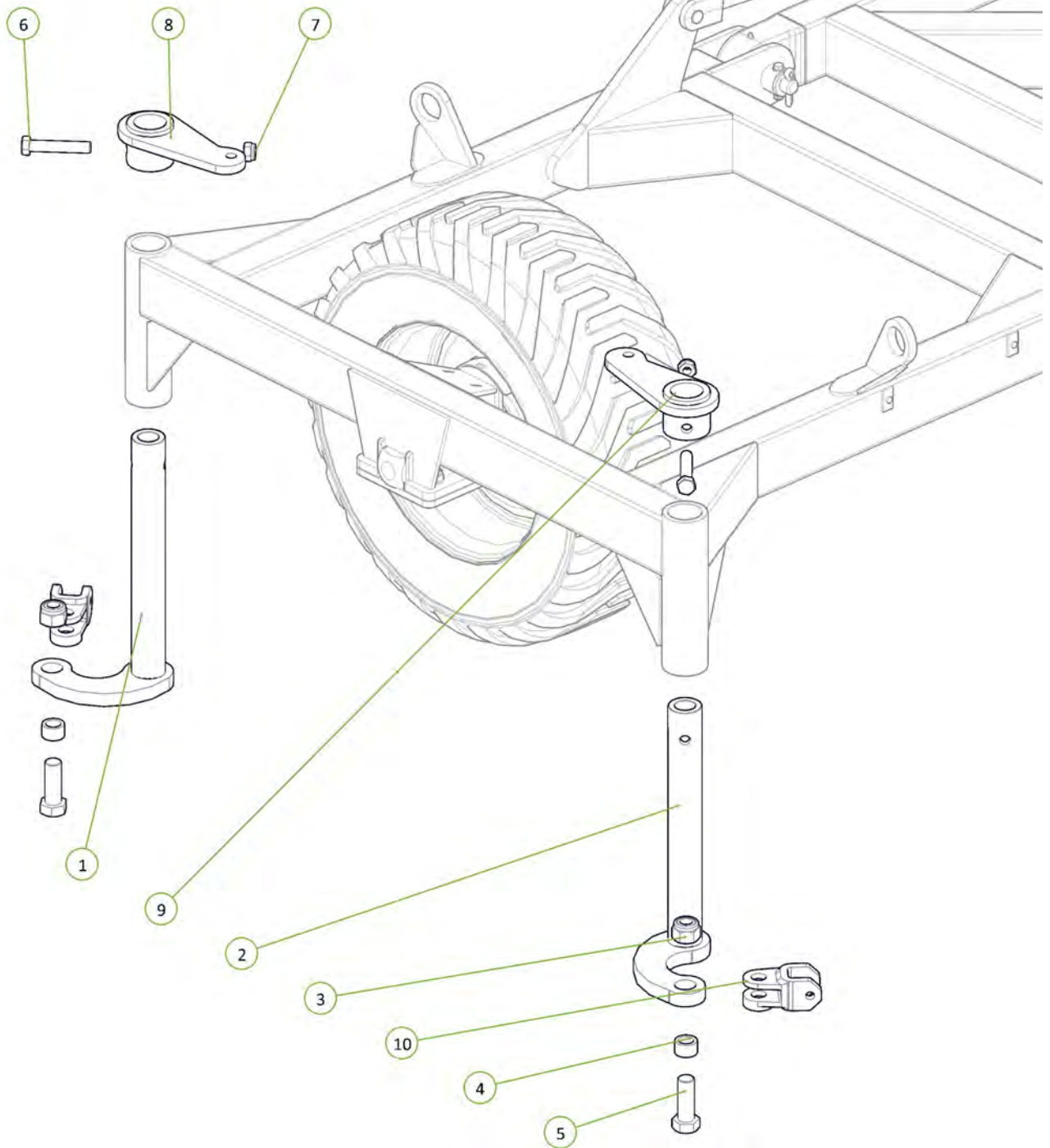




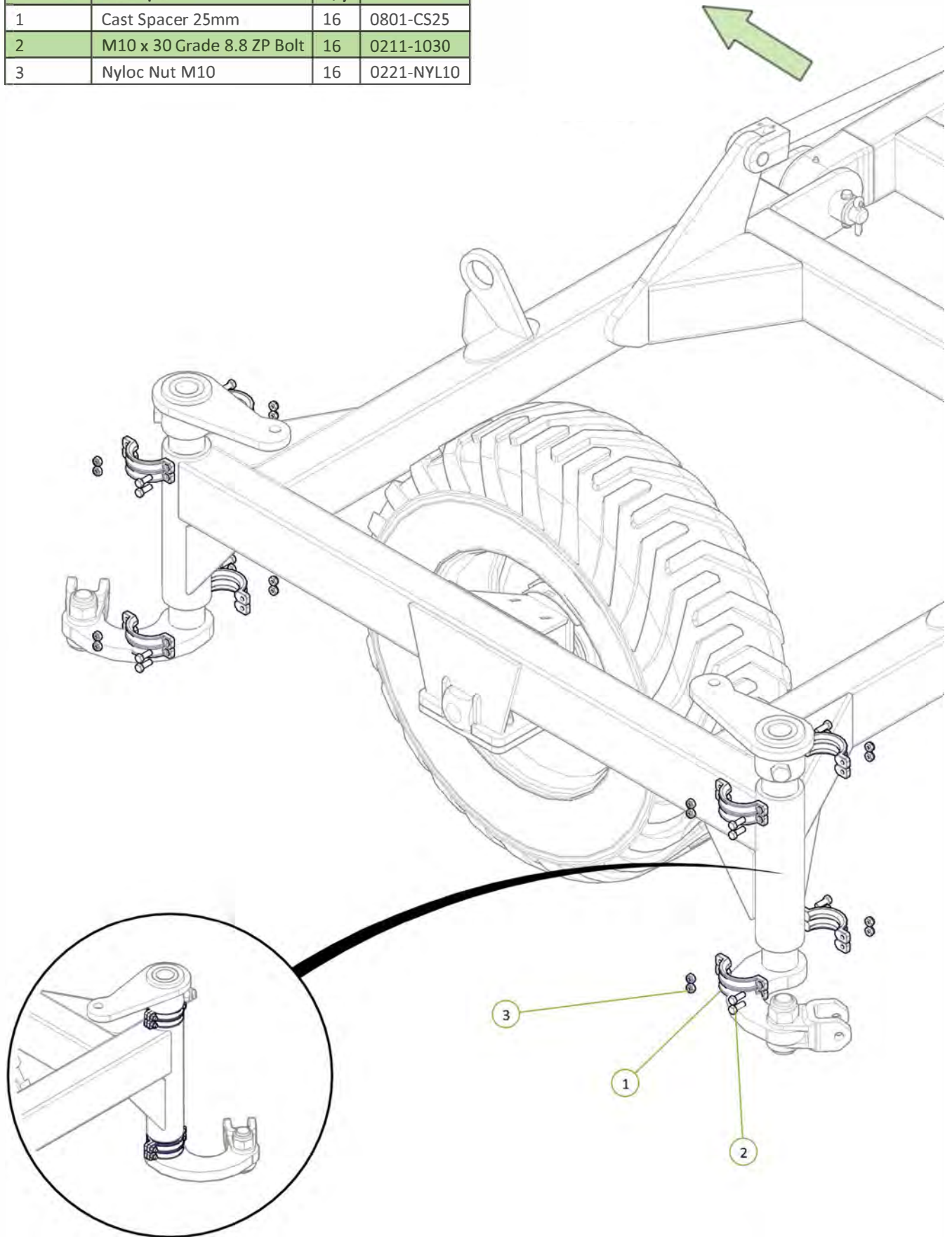
Item No.	Description	Qty	Number
1	Chain Tension Adjustor	1	0802-PCHTA
2	Tensioner Cup - Female	2	0801-KE0805-4
3	Tensioner Cup - Male	2	0801-KE0805-3
4	20mm Compression Spring	2	0801-XK9261S
5	Washer High Tensile 1 1/4"	2	0232-HT11-4
6	2.5" Bore x 6" Stroke x 1.5" Rod Side Port Wing Tensioner	1	0311-256SP-WT
7	ACME Threaded Rod	1	0810-06
8	Steel Spring Retaining Bush	1	0801-PCHTA-SB
9	ACME Lock Nut 1 1/4 - 5NA - 2G	2	0801-PCHTA-5N



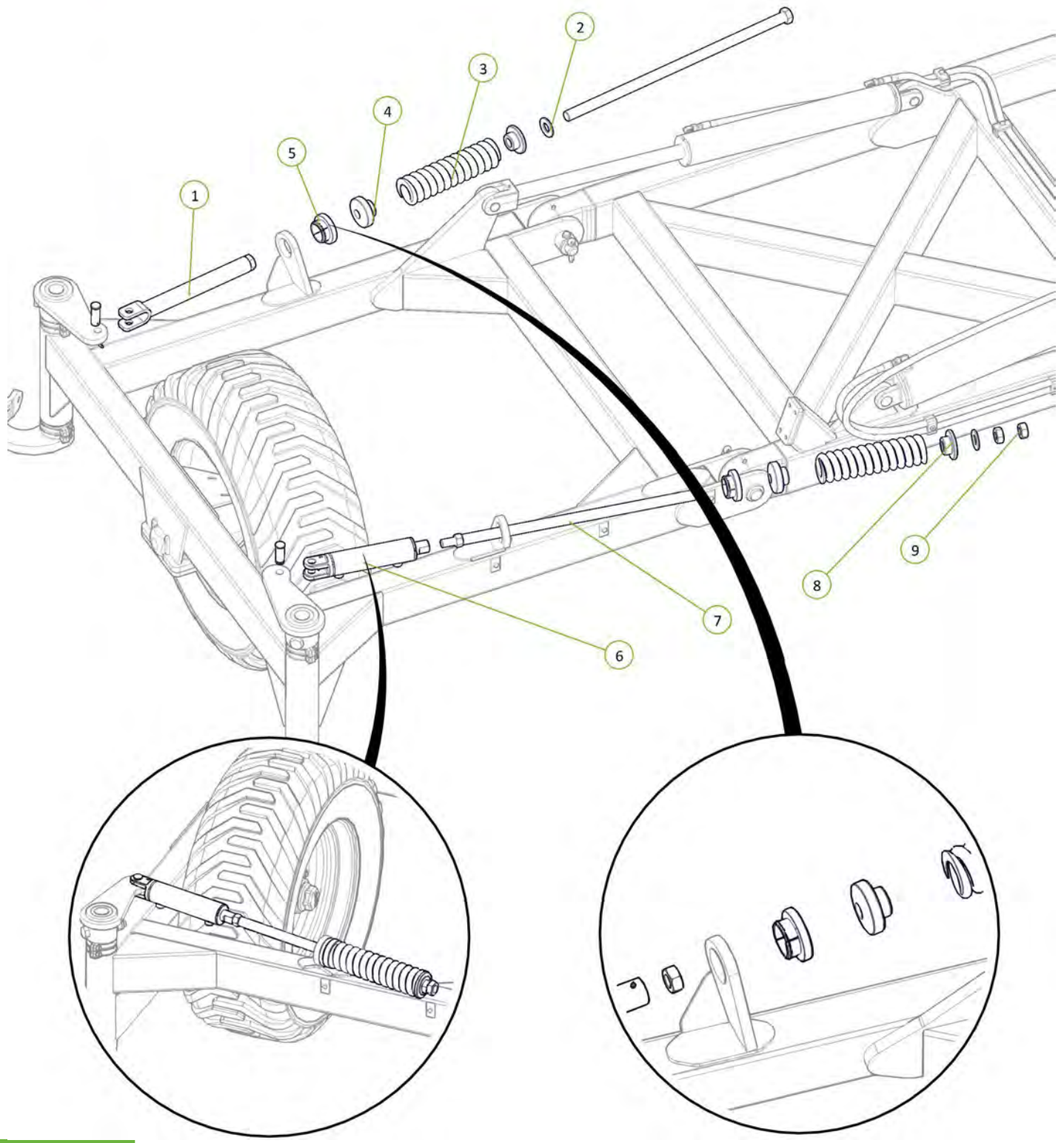
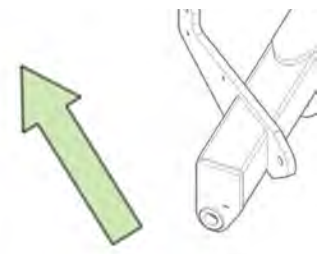
Item No.	Description	Qty	Number
1	Left Hand Dropleg No Clevis	1	0810-24F
2	Right Hand Dropleg No Clevis	1	0810-25F
3	Left Hand Chain Adjusting Lug	1	0810-26
4	Right Hand Chain Adjusting Lug	1	0810-27
5	Forged Clevis 21mm Bolt Hole	2	0801-FC21
6	Wear Bush	2	1501-365033-SS
7	M36 x 105 Grade 8.8 ZP Bolt	2	0211-36105
8	Nyloc Nut M36	2	0221-NYL36
9	M24 x 140 Grade 8.8 ZP Bolt	2	0211-24140
10	Nyloc Nut M24	2	0221-NYL24



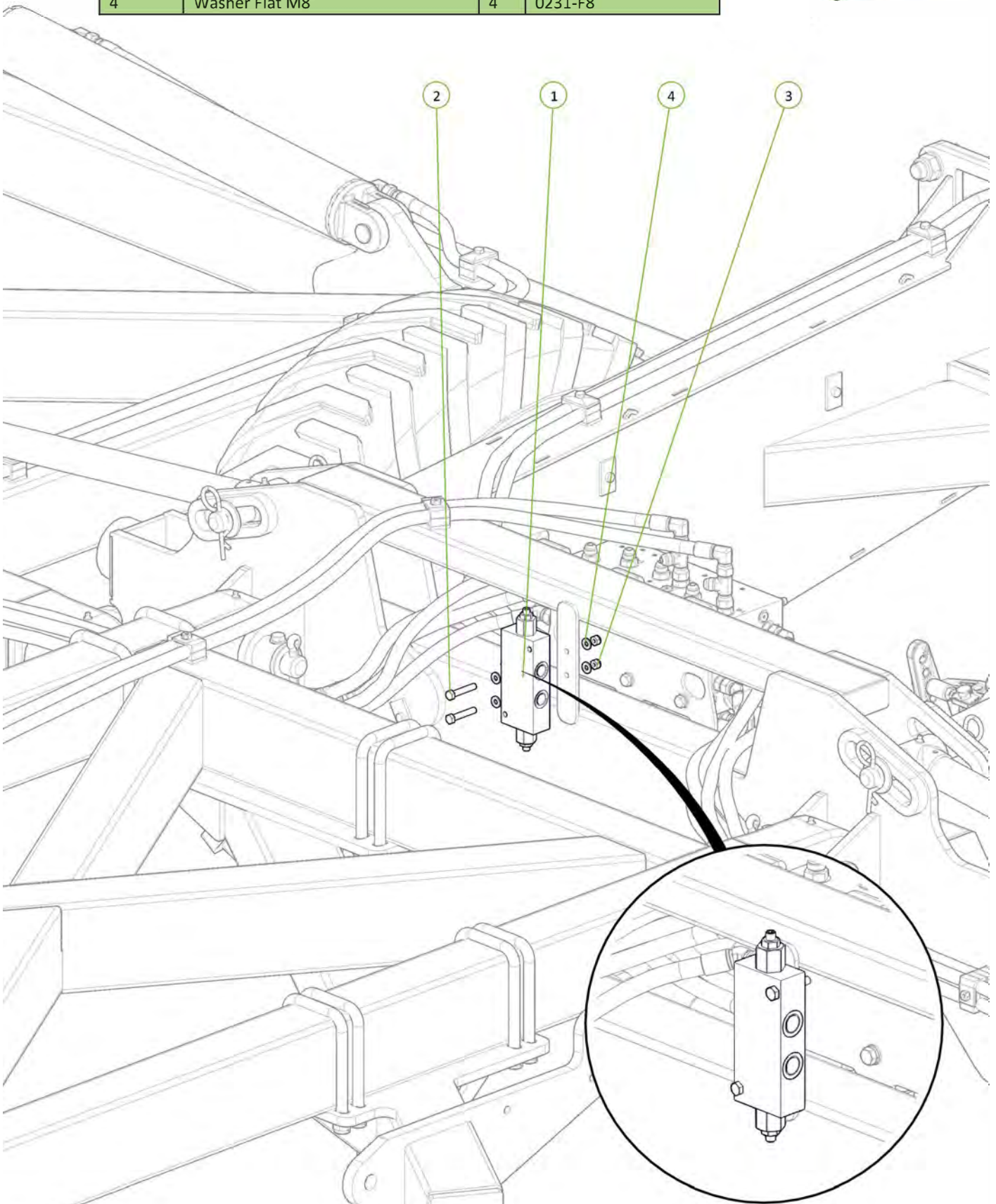
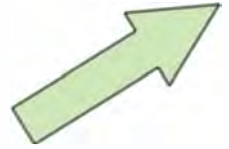
Item No.	Description	Qty	Number
1	Cast Spacer 25mm	16	0801-CS25
2	M10 x 30 Grade 8.8 ZP Bolt	16	0211-1030
3	Nyloc Nut M10	16	0221-NYL10



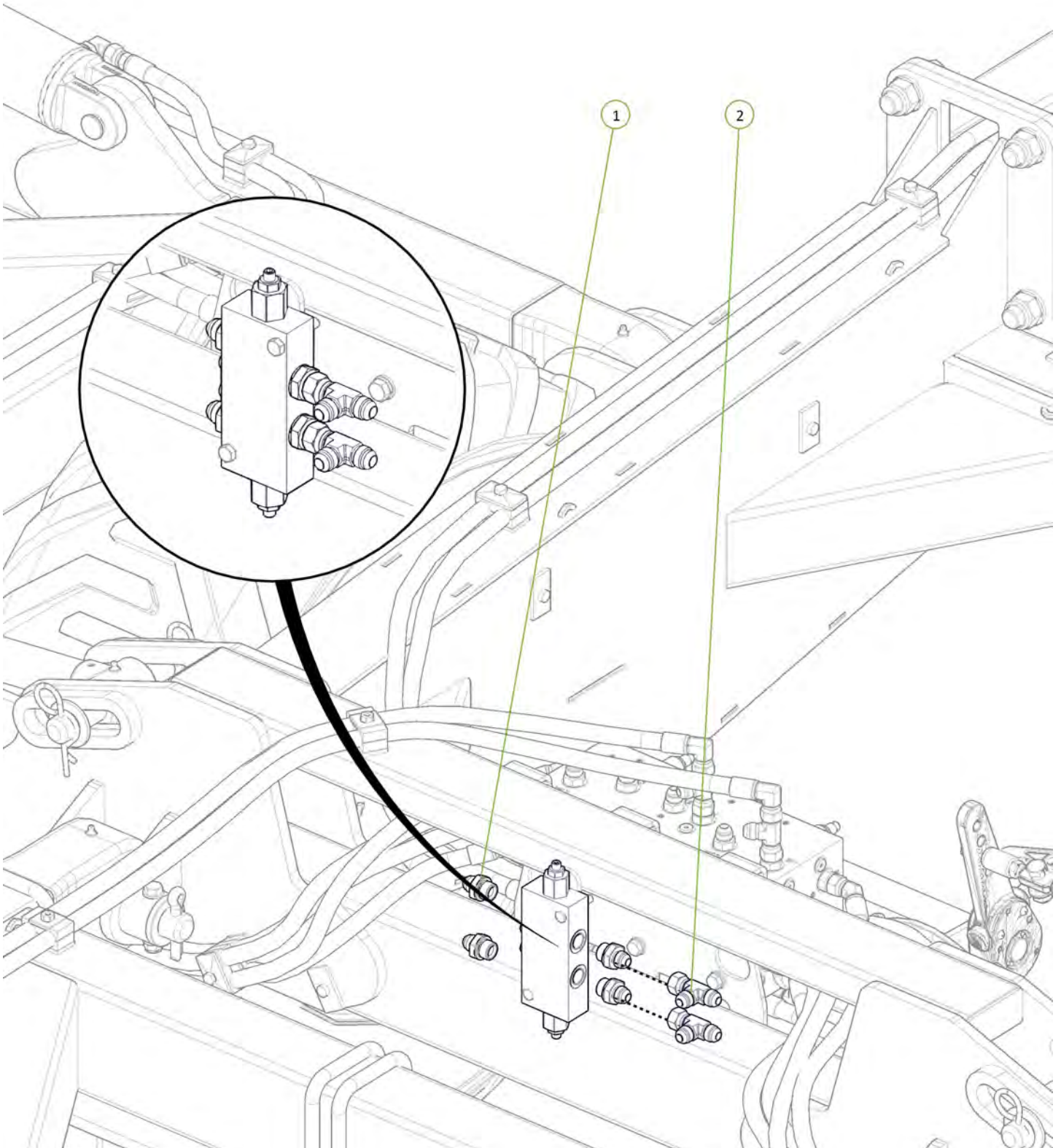
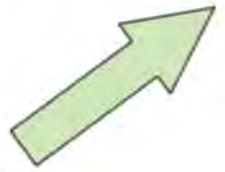
Item No.	Description	Qty	Number
1	Chain Tension Adjustor	2	0802-PCHTA
2	Washer High Tensile 1 1/4"	2	0232-HT11-4
3	20mm Compression Spring	2	0801-XK9261S
4	Tensioner Cup - Male	2	0801-KE0805-3
5	Tensioner Cup - Female	2	0801-KE0805-4
6	2.5" Bore x 6" Stroke x 1.5" Rod Side Port Wing Tensioner	1	0311-256SP-WT
7	ACME Threaded Rod	1	0810-06
8	Steel Spring Retaining Bush	1	0801-PCHTA-SB
9	ACME Lock Nut 1 1/4 - 5NA - 2G	2	0801-PCHTA-5N



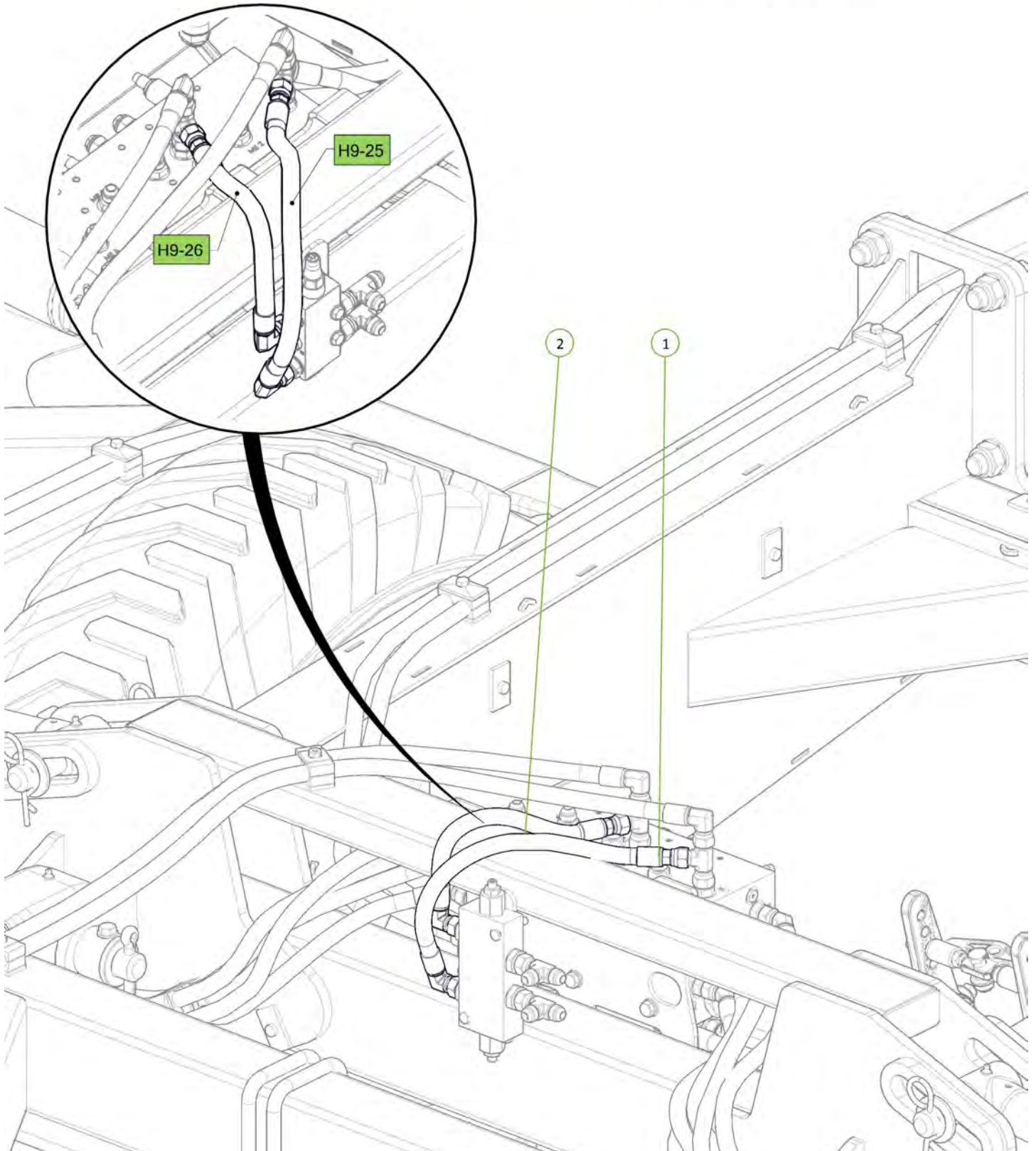
Item No.	Description	Qty	Number
1	Dual Overcentre Valve, Line Mounted	1	0341-FPOE70D12LA20B
2	M8 x 50 Grade 8.8 ZP Bolt	2	0211-850
3	Nyloc Nut M8	2	0221-NYL8
4	Washer Flat M8	4	0231-F8



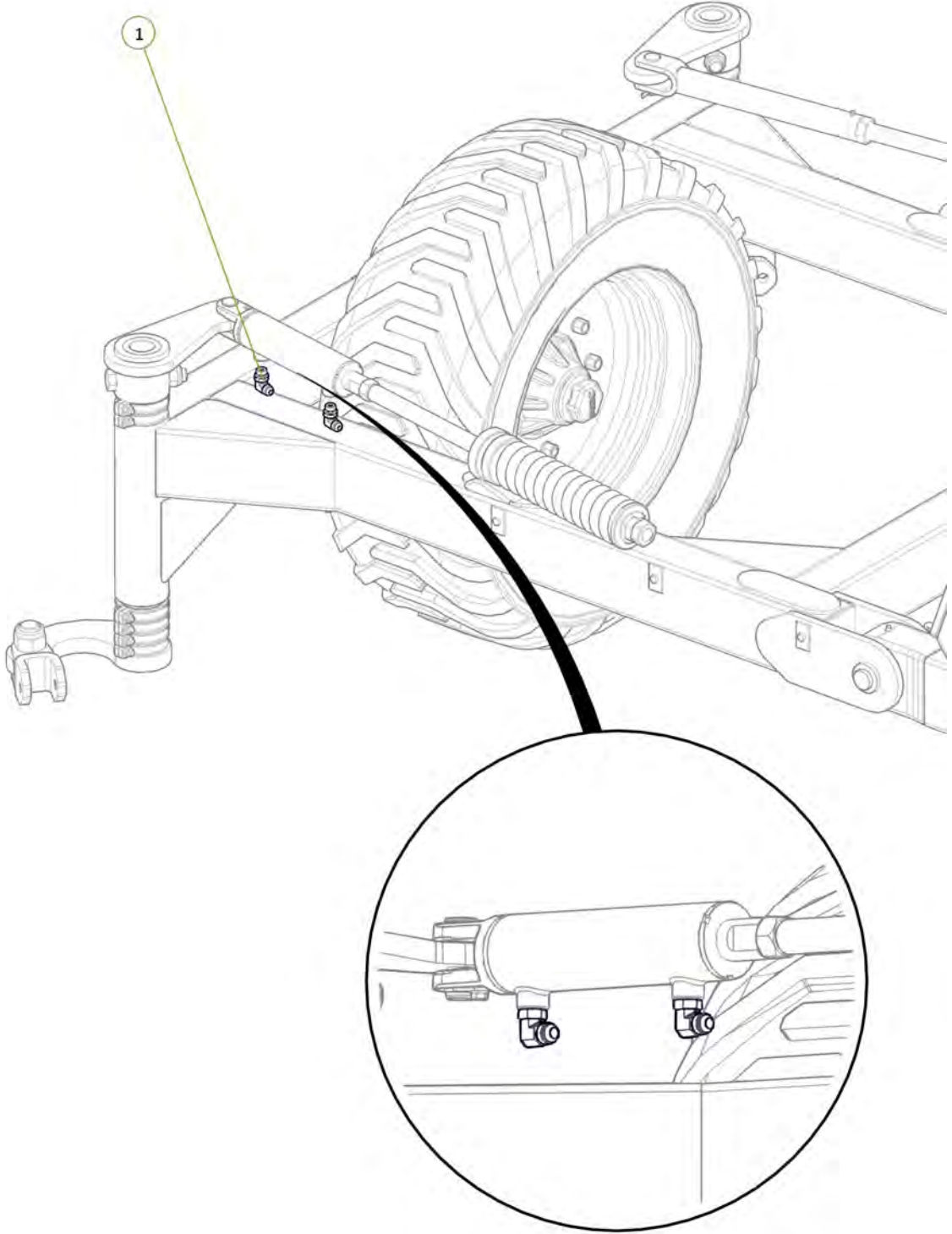
Item No.	Description	Qty	Number
1	1/2" BSPP Encapt Male 3/4" JIC Male Adaptor	4	0323-S74-0812
2	3/4" JIC Male 3/4" JIC Female 3/4" JIC Male Tee	2	0324-S67-121212



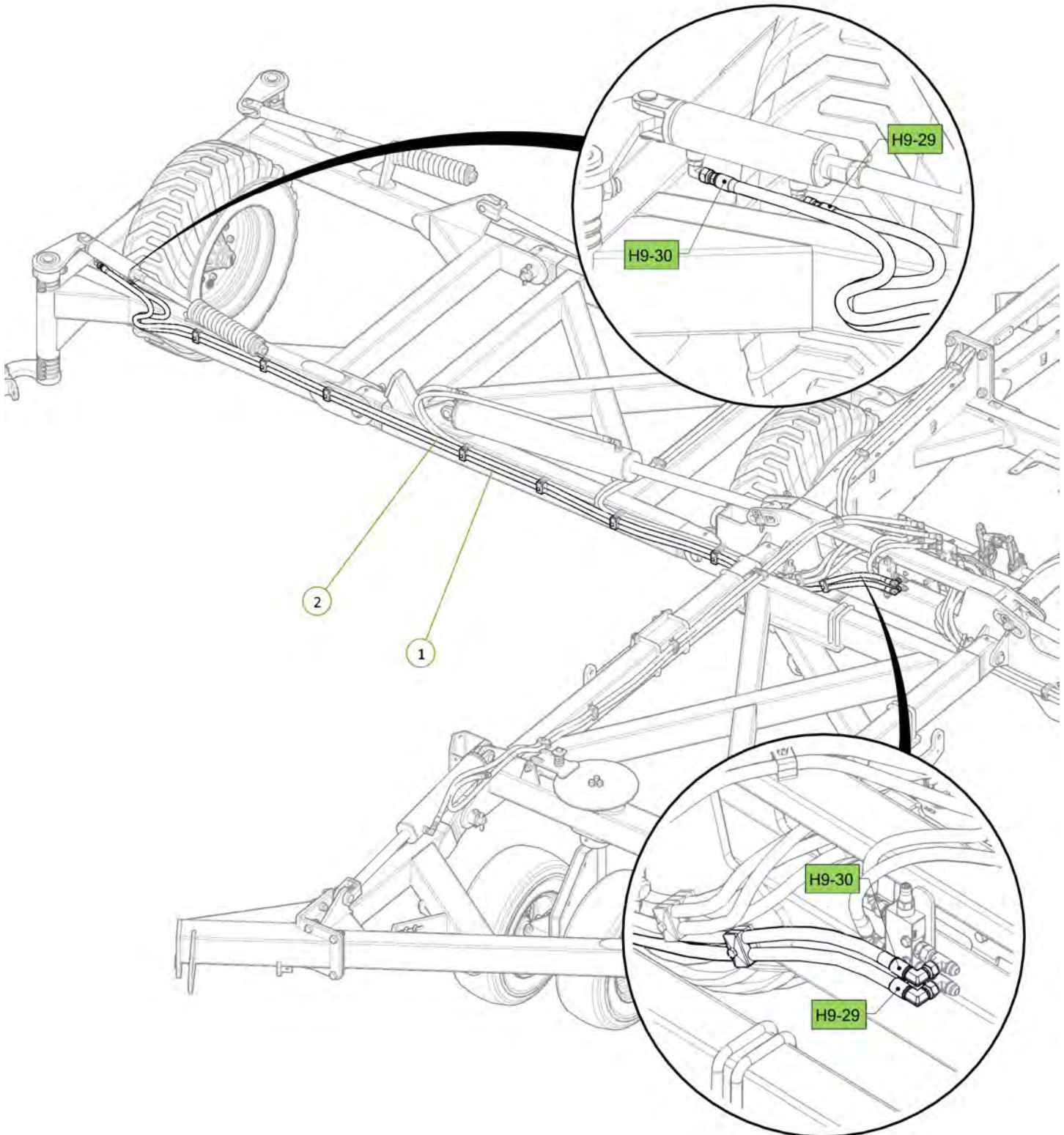
Item No.	Description	Qty	Number
1	TE1 Bridge to V1 Chain Tension Retract	1	H9-25
2	TR1 Bridge To V2 Chain Tension Extend	1	H9-26



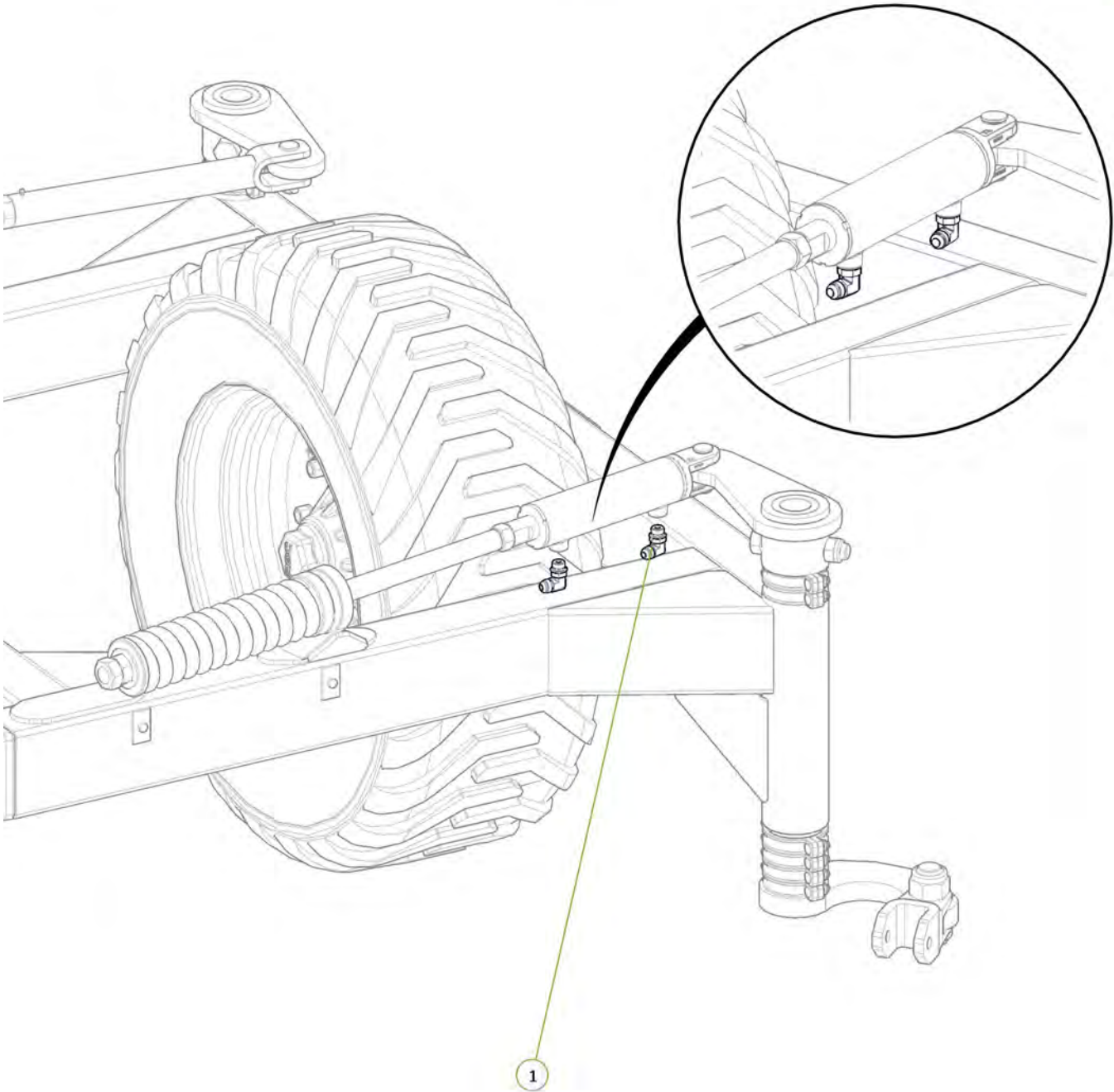
Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212



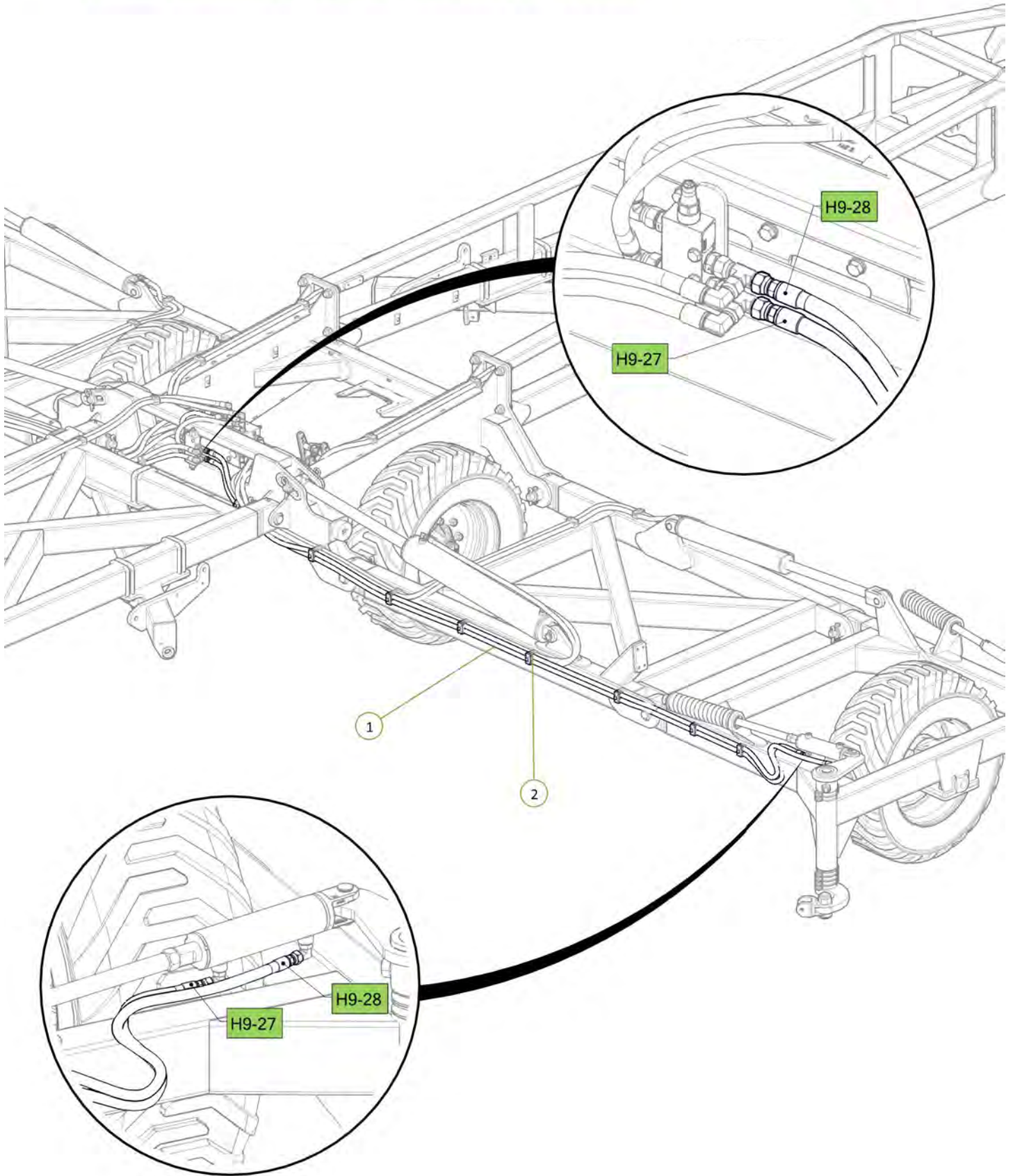
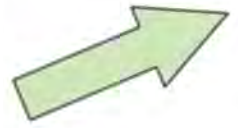
Item No.	Description	Qty	Number
1	C1 To Left Hand Wing Tension Retract	1	H9-29
2	C2 Tee To Left Hand Wing Tension Extend	1	H9-30

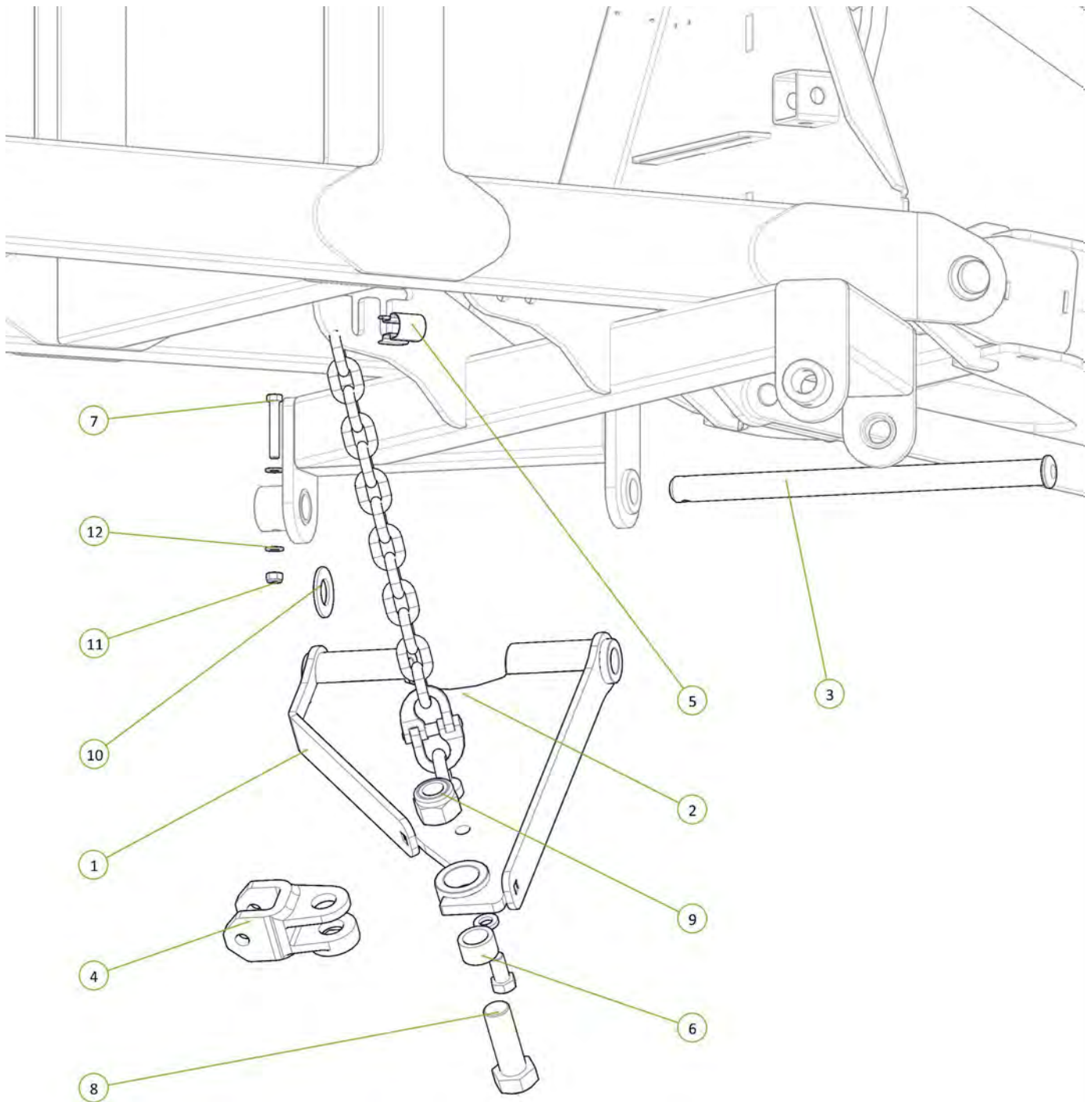


Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212



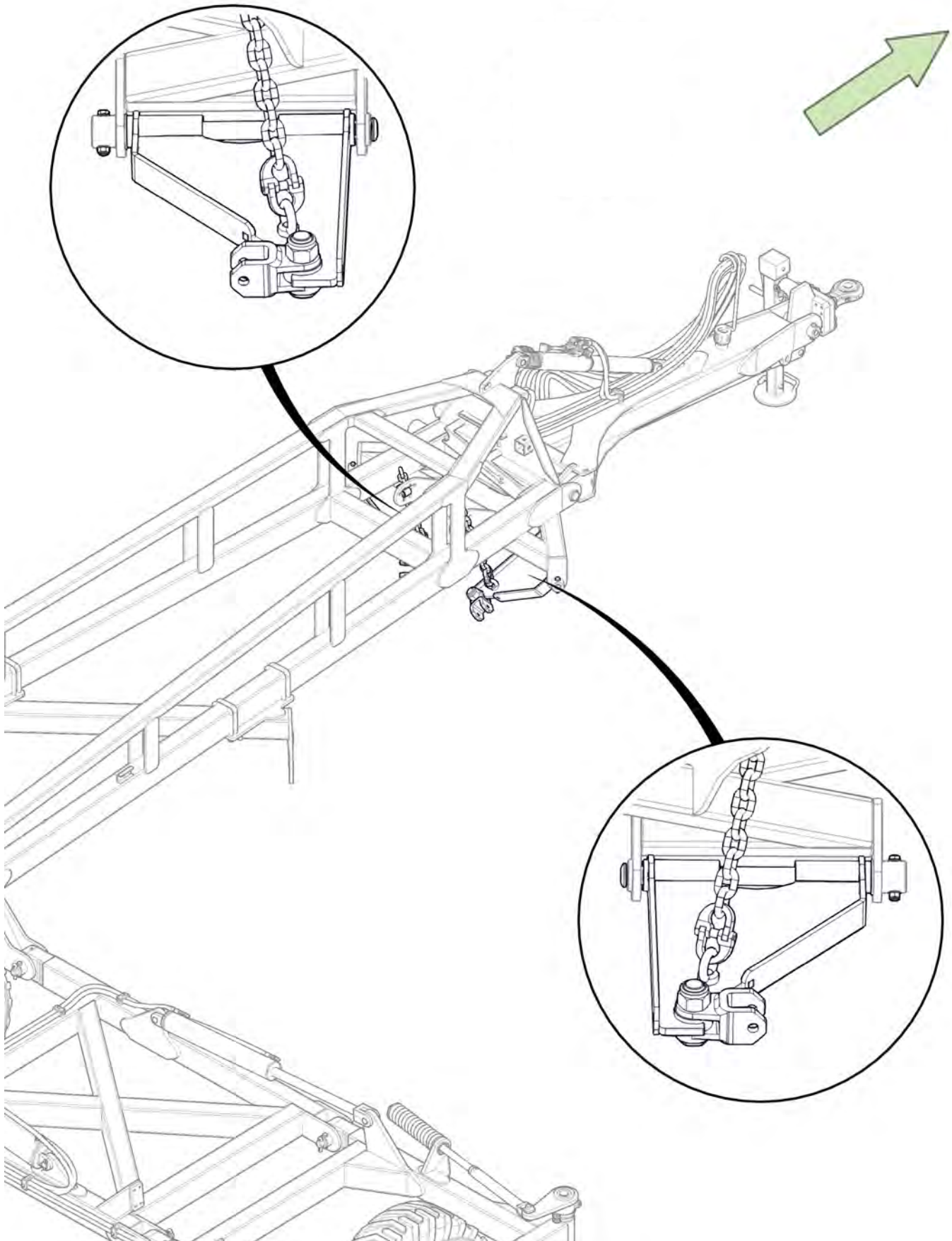
Item No.	Description	Qty	Number
1	C1 To Right Hand Wing Tension Retract	1	H9-27
2	C2 Tee To Right Hand Wing Tension Extend	1	H9-28



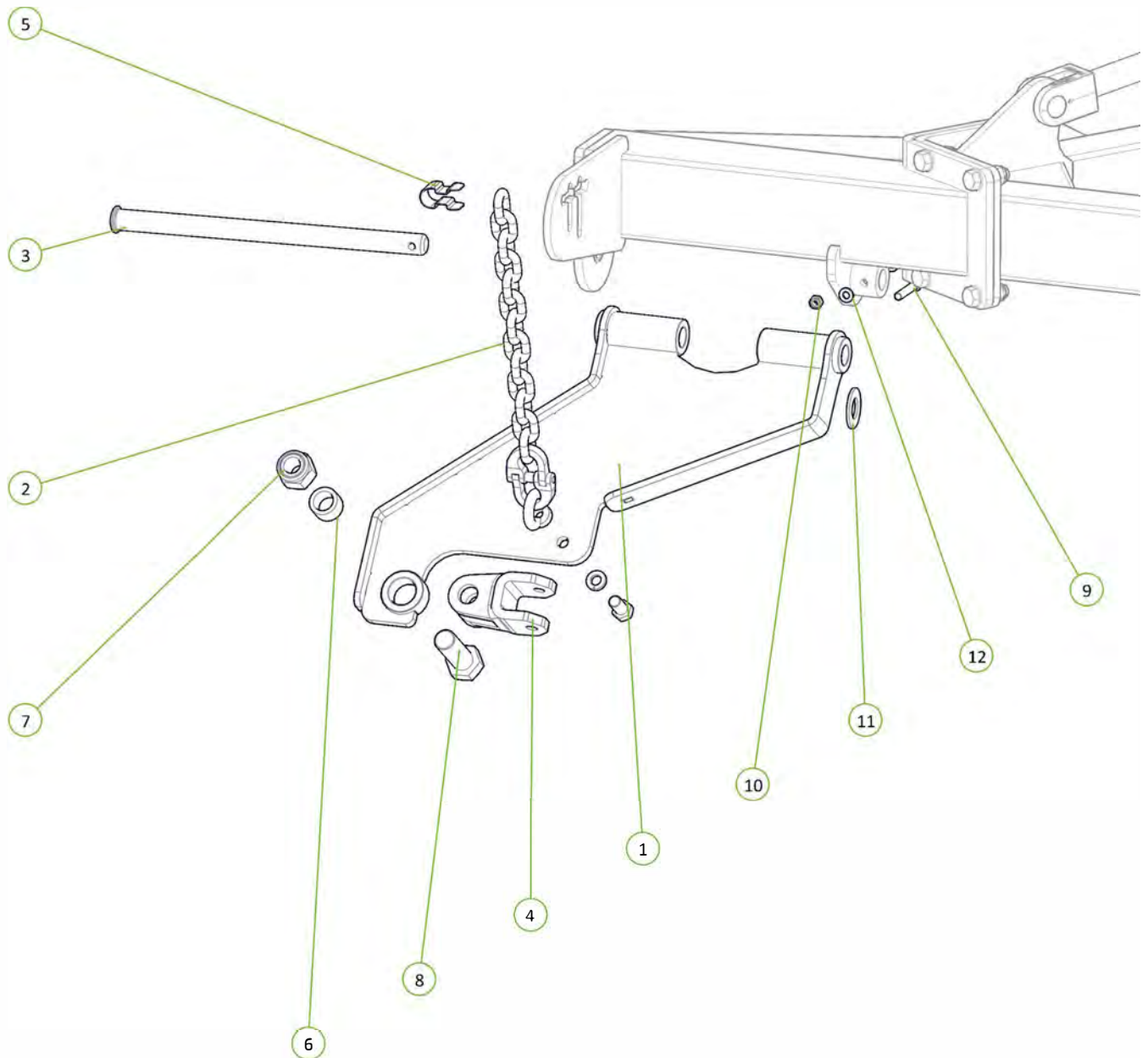
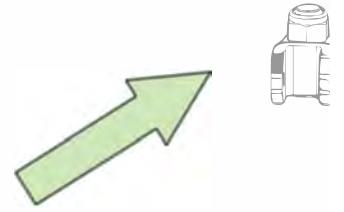


Item No.	Description	Qty	Number
1	Standard Chain Mount Plate	1	0810-20
2	Height Adjusting Chain Assembly 13 Link	1	0801-20MCA
3	Chain Mount Pivot Pin	1	0801-10-51
4	Forged Clevis 21mm Bolt Hole	1	0801-FC21
5	Height Adjustor Retaining Clip	1	0801-KE014
6	Wear Bush	1	1501-365033-SS
7	M12 x 80 Grade 8.8 ZP Bolt	1	0211-1280
8	M36 x 105 Grade 8.8 ZP Bolt	1	0211-36105
9	Nyloc Nut M36	1	0221-NYL36
10	Washer High Tensile 1 3/8"	1	0232-HT13-8
11	Nyloc Nut M12	1	0221-NYL12
12	Washer Flat M12	2	0231-F12

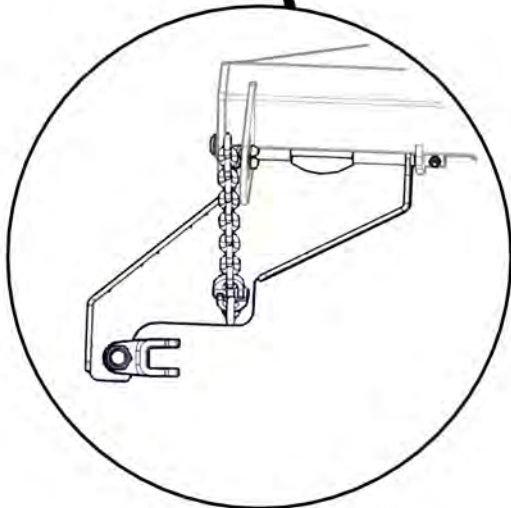
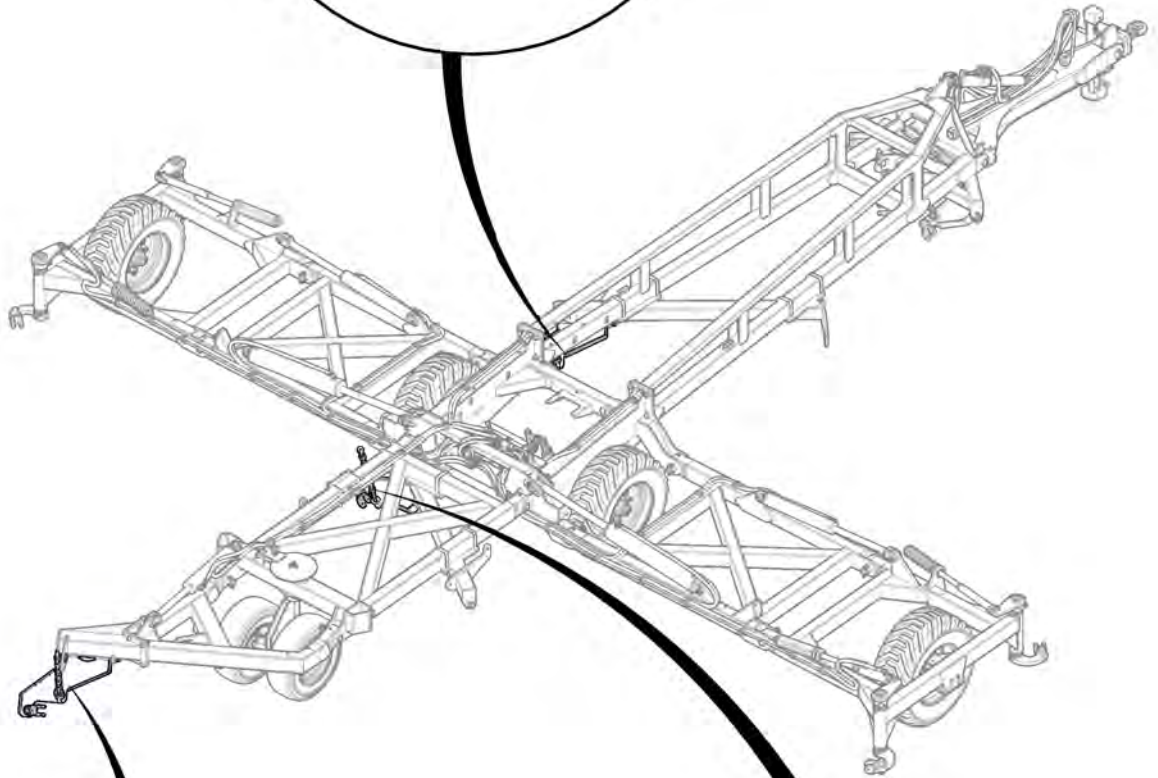
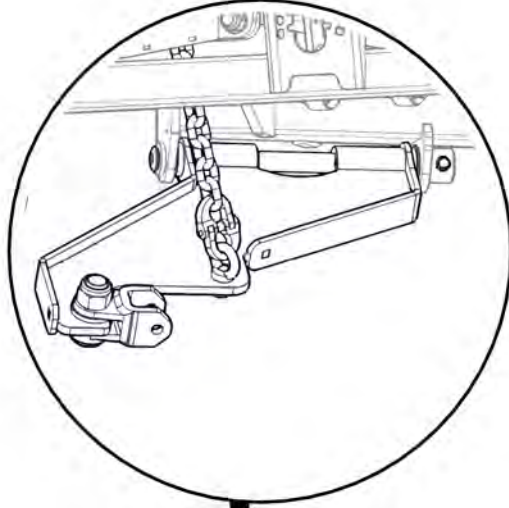




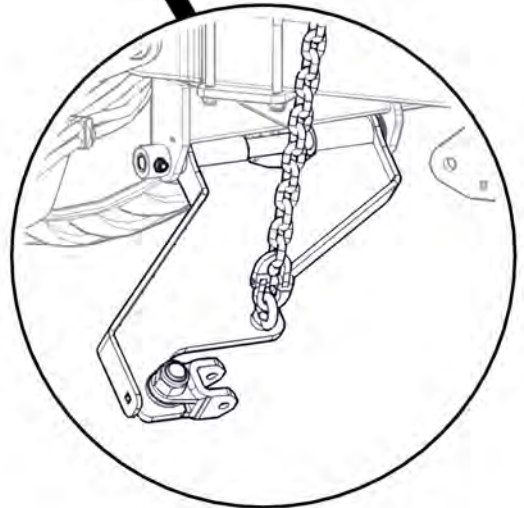
Item No.	Description	Qty	Number
1	Extended Chain Mount Plate	1	0810-21
2	Height Adjusting Chain Assembly 13 Link	1	0801-20MCA
3	Chain Mount Pivot Pin	1	0801-10-51
4	Forged Clevis 21mm Bolt Hole	1	0801-FC21
5	Height Adjustor Retaining Clip	1	0801-KE014
6	Wear Bush	1	1501-365033-SS
7	Nyloc Nut M36	1	0221-NYL36
8	M36 x 105 grade 8.8 zp Bolt	1	0211-36105
9	M12 x 80 grade 8.8 ZP Bolt	1	0211-1280
10	Nyloc Nut M12	1	0221-NYL12
11	Washer High Tensile 1 3/8"	1	0232-HT13-8
12	Washer Flat M12	2	0231-F12



1532-28-30A

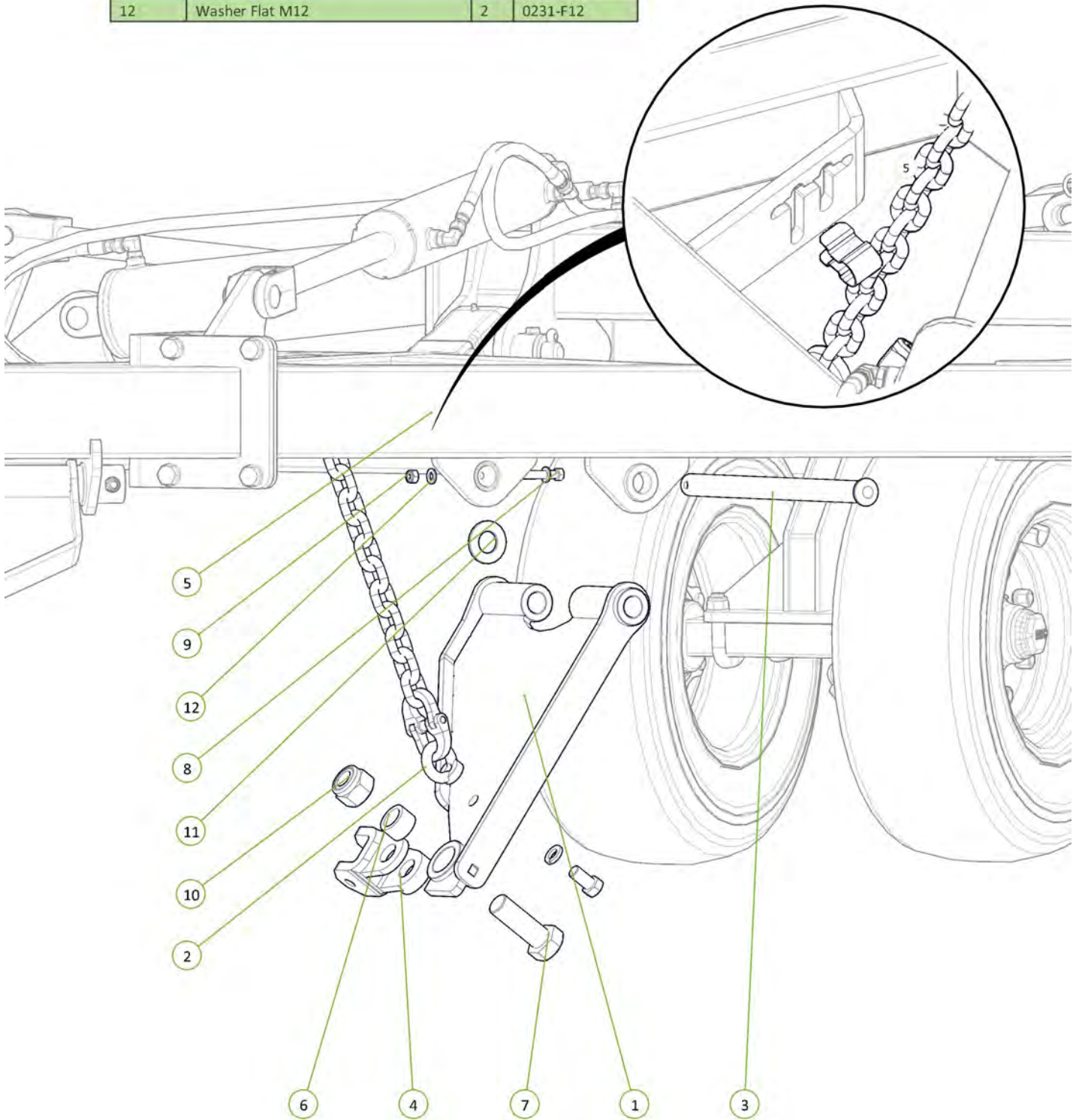


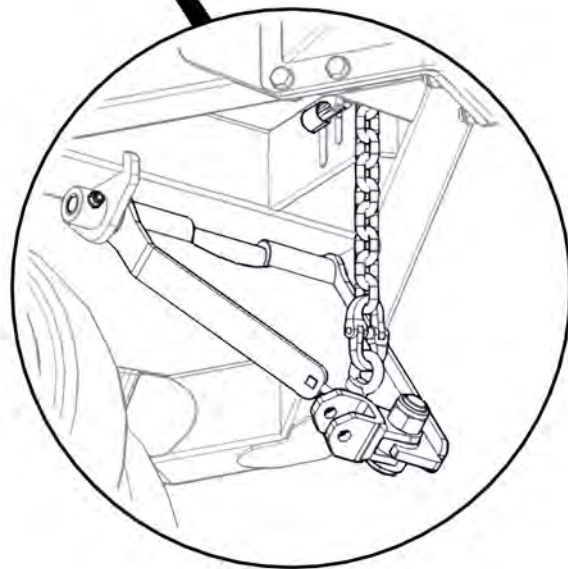
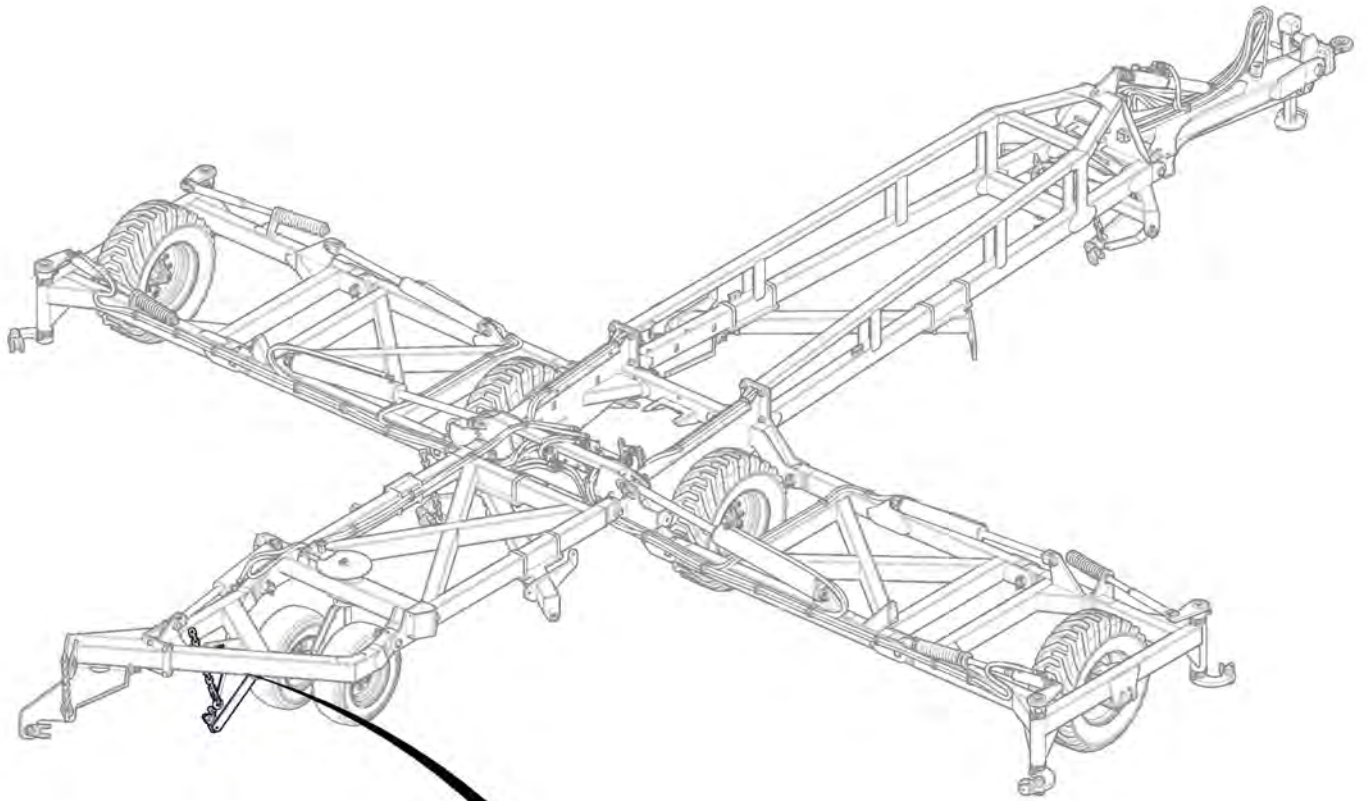
1532-10A



1532-29-30A

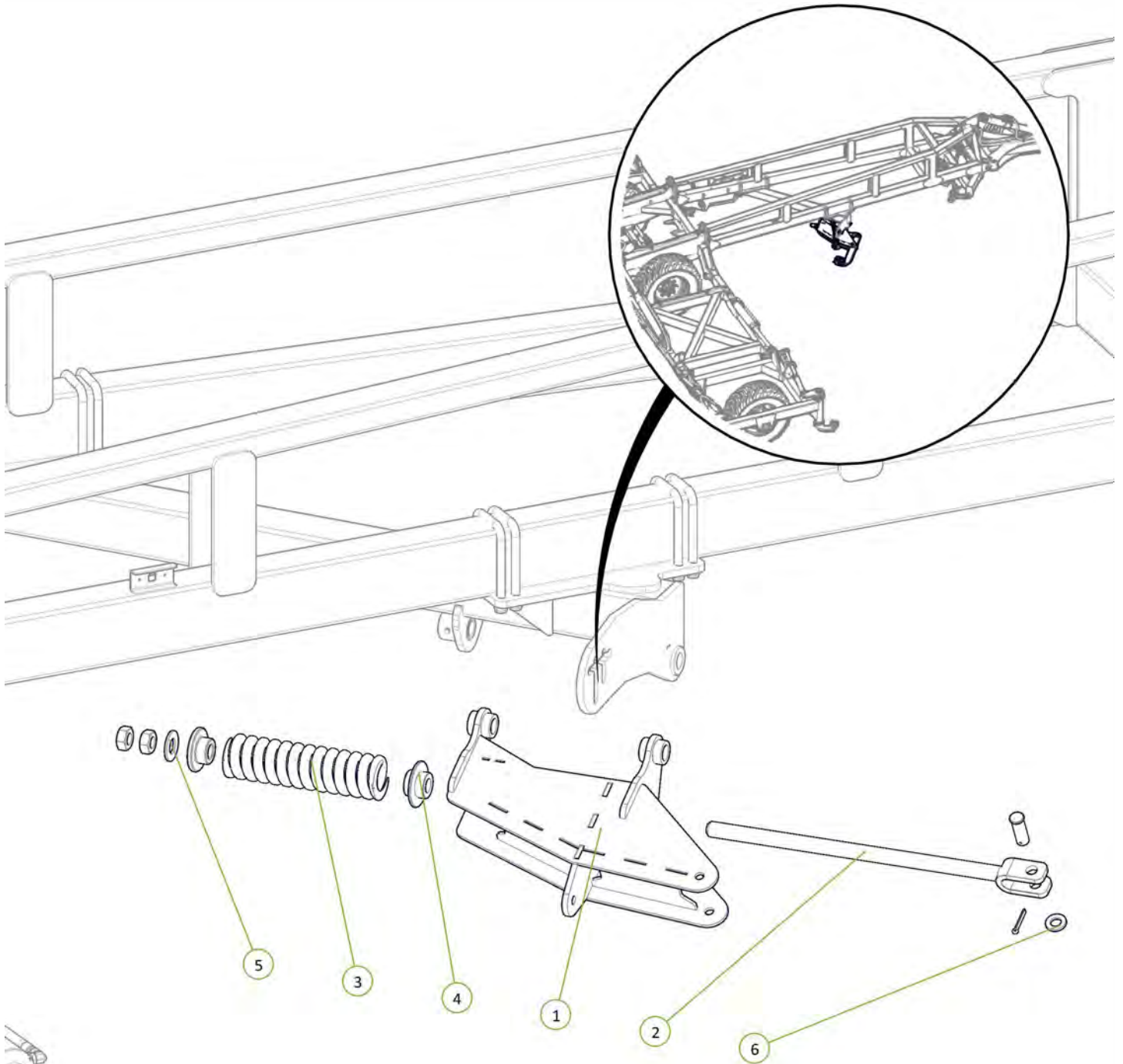
Item No.	Description	Qty	Number
1	Standard Chain Mount Plate	1	0810-20
2	Height Adjusting Chain Assembly 13 Link	1	0801-20MCA
3	Chain Mount Pivot Pin	1	0801-10-51
4	Forged Clevis 21mm Bolt Hole	1	0801-FC21
5	Height Adjustor Retaining Clip	1	0801-KE014
6	Wear Bush	1	1501-365033-SS
7	M12 x 80 grade 8.8 ZP Bolt	1	0211-1280
8	M36 x 105 grade 8.8 zp Bolt	1	0211-36105
9	Nyloc Nut M36	1	0221-NYL36
10	Washer High Tensile 1 3/8"	1	0232-HT13-8
11	Nyloc Nut M12	1	0221-NYL12
12	Washer Flat M12	2	0231-F12

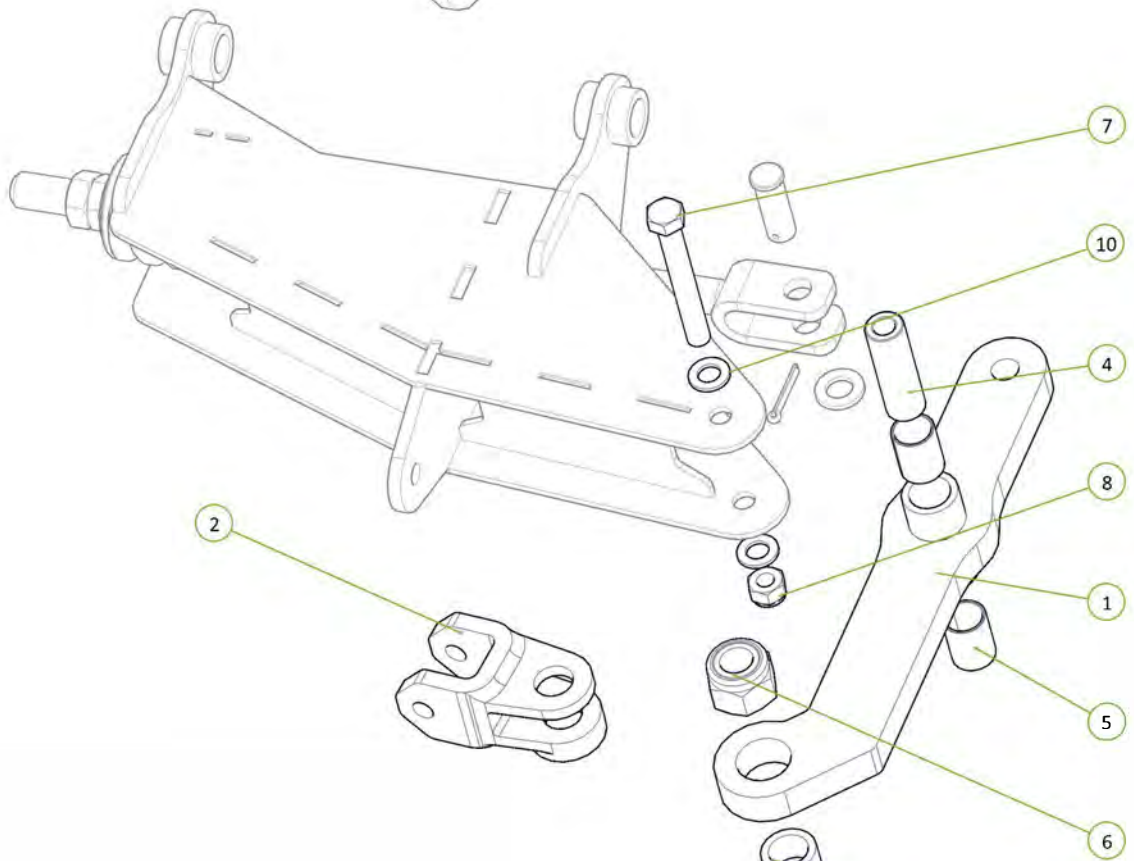
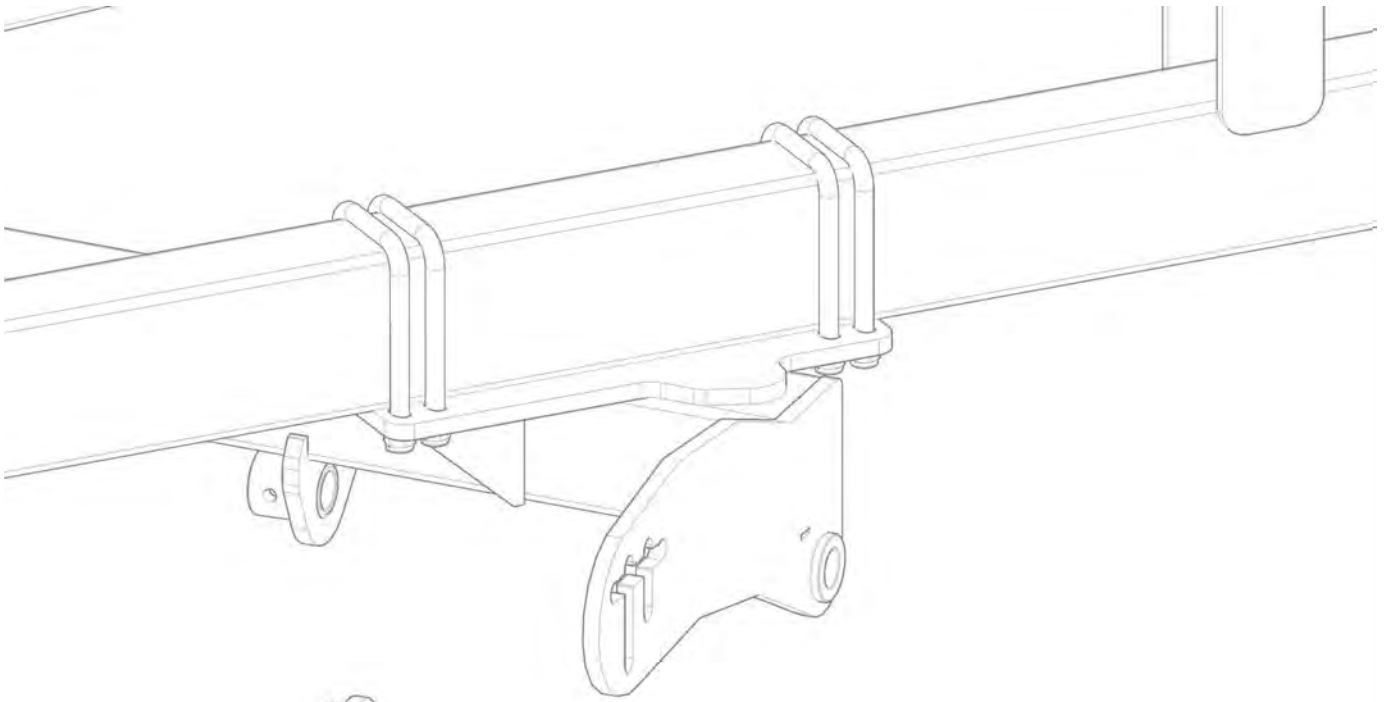




1532-10A

Item No.	Description	Qty	Number
1	Rear Module Tension Body	1	0810-103R
2	Module Tension Rod Assembly	1	0810-105A
3	20mm Compression Spring	1	0801-XK9261S
4	Rigid Spring Locator	1	0801-10-S2L
5	Washer High Tensile 1 1/4"	1	0232-HT11/4
6	Washer Flat M24	1	0231-F24

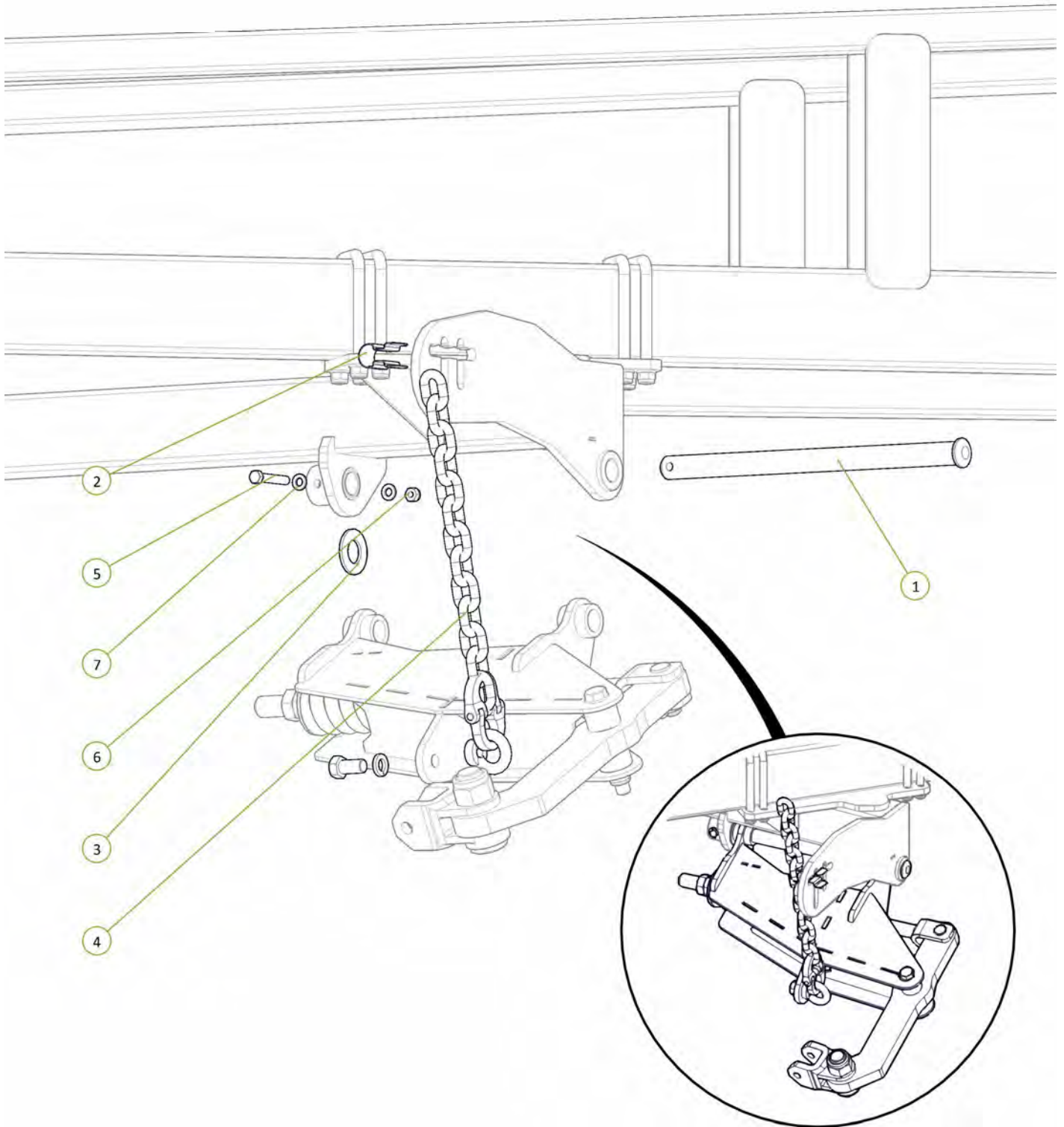
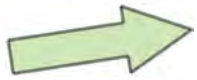


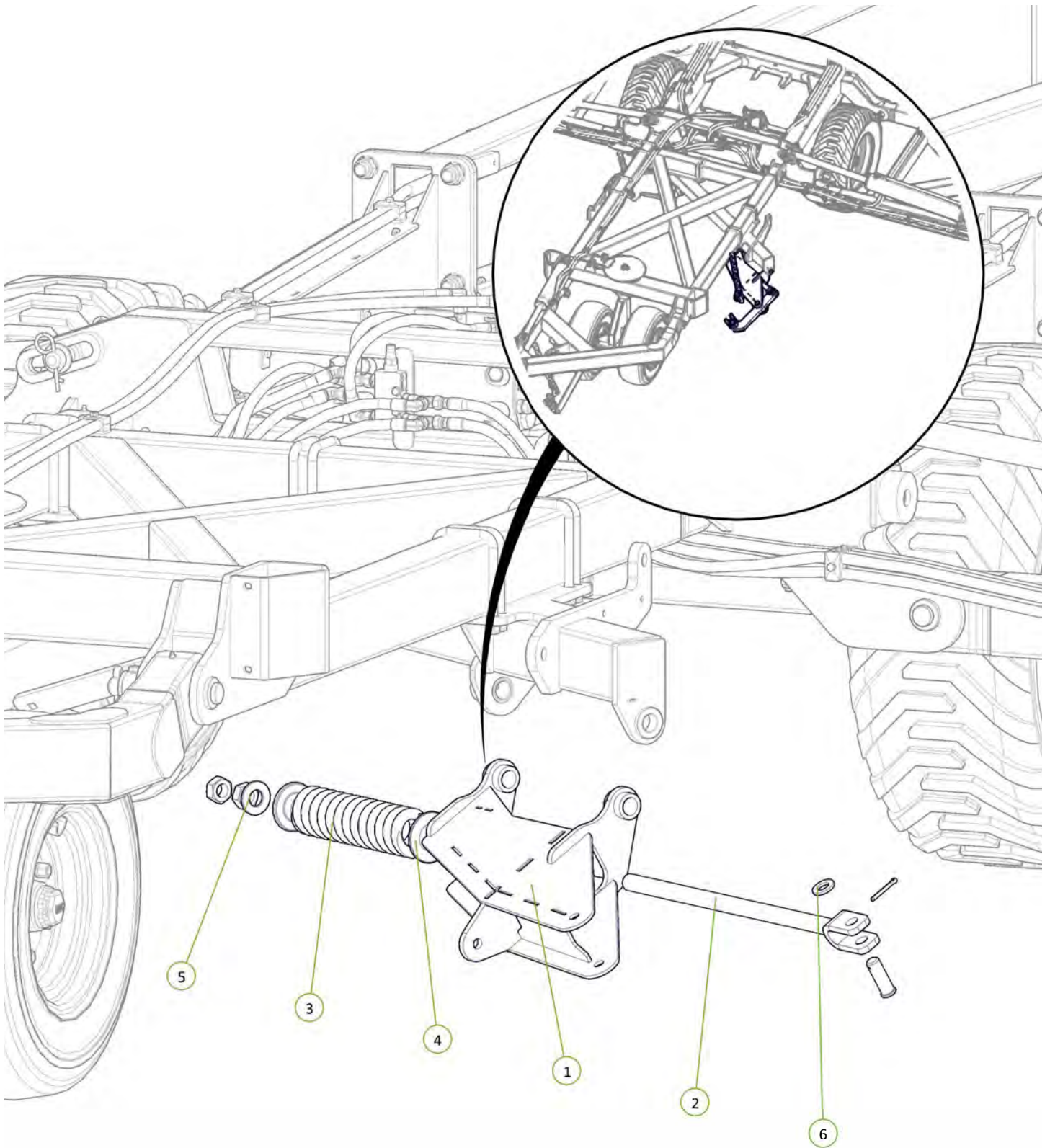


Item No.	Description	Qty	Number
1	Module Tension Arm No Clevis	1	0810-104F
2	Forged Clevis 21mm Bolt Hole	1	0801-FC21
3	Wear Bush	1	1501-365033-SS
4	Module Pivot Arm Bush	1	0801-10-110
5	35 ID x 50mm DU Bush	2	0113-3550DU
6	Nyloc Nut M36	1	0221-NYL36
7	M20 x 160 Grade 8.8 ZP Bolt	1	0211-20160
8	Nyloc Nut M20	1	0221-NYL20
9	M36 x 105 Grade 8.8 ZP Bolt	1	0211-36105
10	Washer Flat M20	2	0231-F20



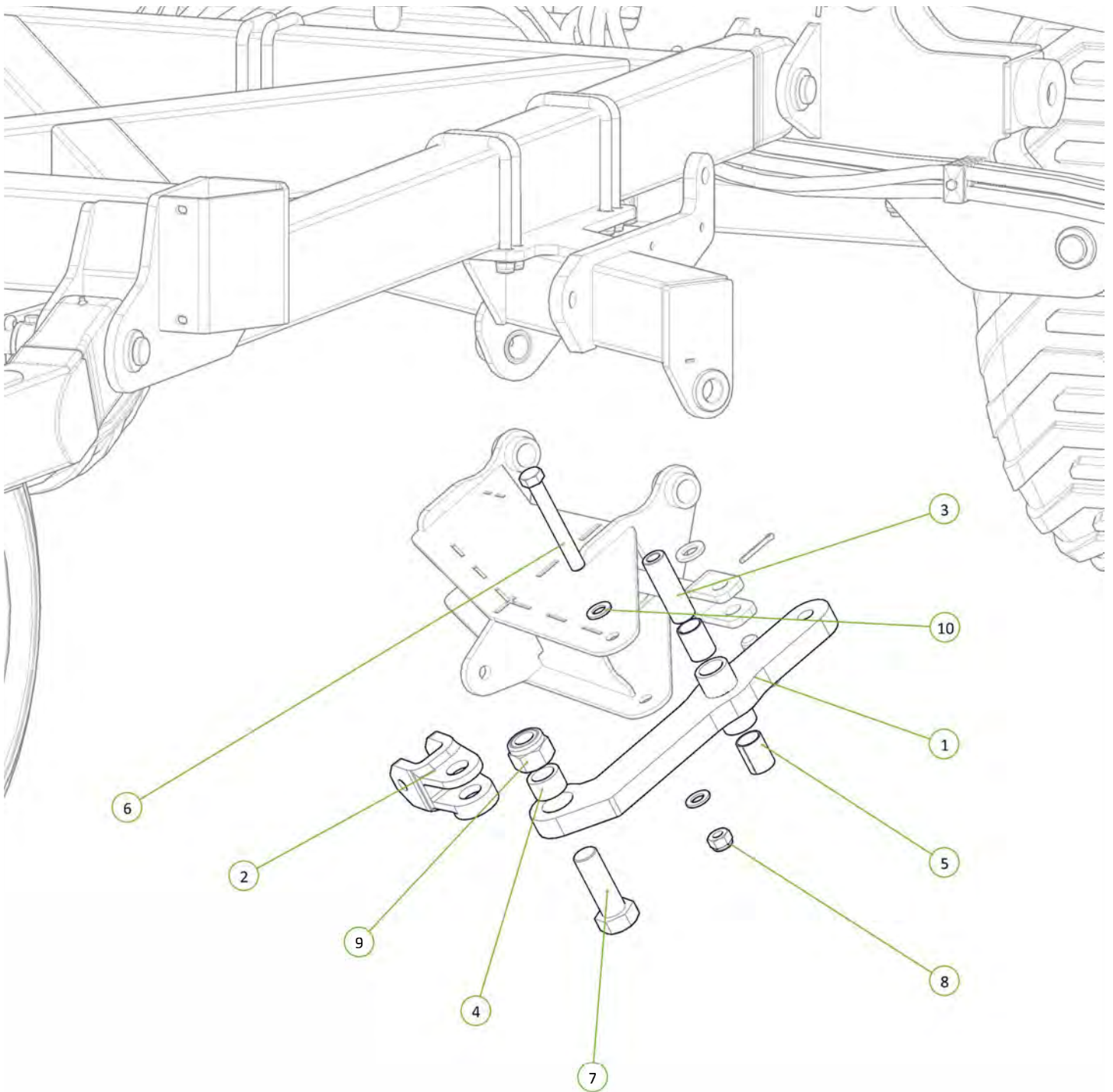
Item No.	Description	Qty	Number
1	Chain Mount Pivot Pin	1	0801-10-51
2	Height Adjustor Retaining Clip	1	0801-KE014
3	Washer High Tensile 1 3/8"	1	0232-HT13/8
4	Height Adjusting Chain Assembly 13 Link	1	0801-20MCA
5	M12 x 75 Grade 8.8 ZP Bolt	1	0211-1275
6	Nyloc Nut M12	1	0221-NYL12
7	Washer Flat M12	2	0231-F12





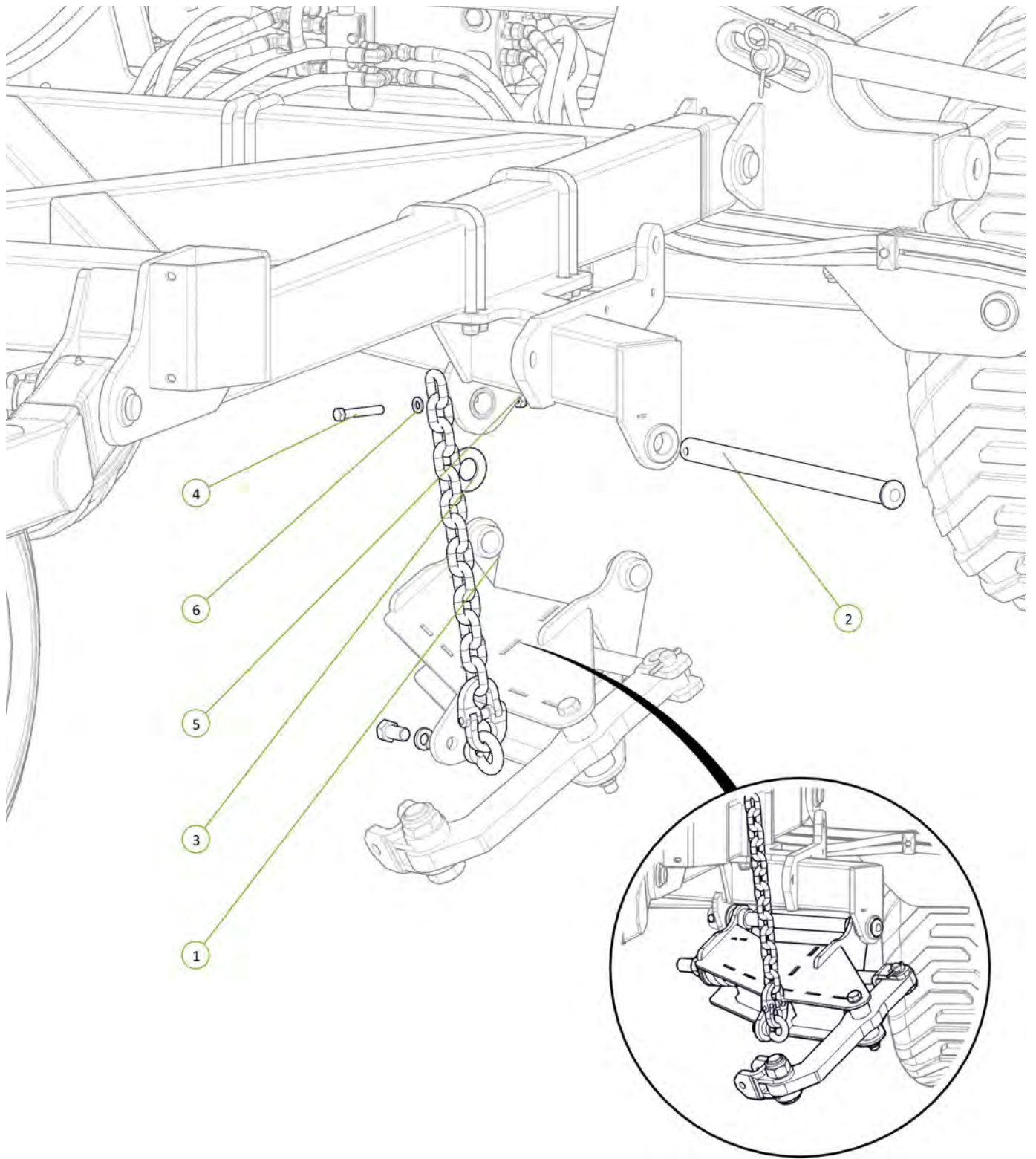
Item No.	Description	Qty	Number
1	Rear Module Tension Body	1	0810-103R
2	Module Tension Rod Assembly	1	0810-105A
3	20mm Compression Spring	1	0801-XK9261S
4	Rigid Spring Locator	1	0801-10-S2L
5	Washer High Tensile 1 1/4"	1	0232-HT11/4
6	Washer Flat M24	1	0231-F24





Item No.	Description	Qty	Number
1	Module Tension Arm No Clevis	1	0810-104F
2	Forged Clevis 21mm Bolt Hole	1	0801-FC21
3	Wear Brush	1	1501-365033-SS
4	Module Pivot Arm Bush	1	0801-10-110
5	35 ID x 50mm DU Bush	2	0113-3550DU
6	Nyloc Nut M36	1	0221-NYL36
7	M20 x 160 grade 8.8 ZP Bolt	1	0211-20160
8	Nyloc Nut M20	1	0221-NYL20
9	M36 x 105 grade 8.8 zp Bolt	1	0211-36105
10	Washer Flat M20	2	0231-F20

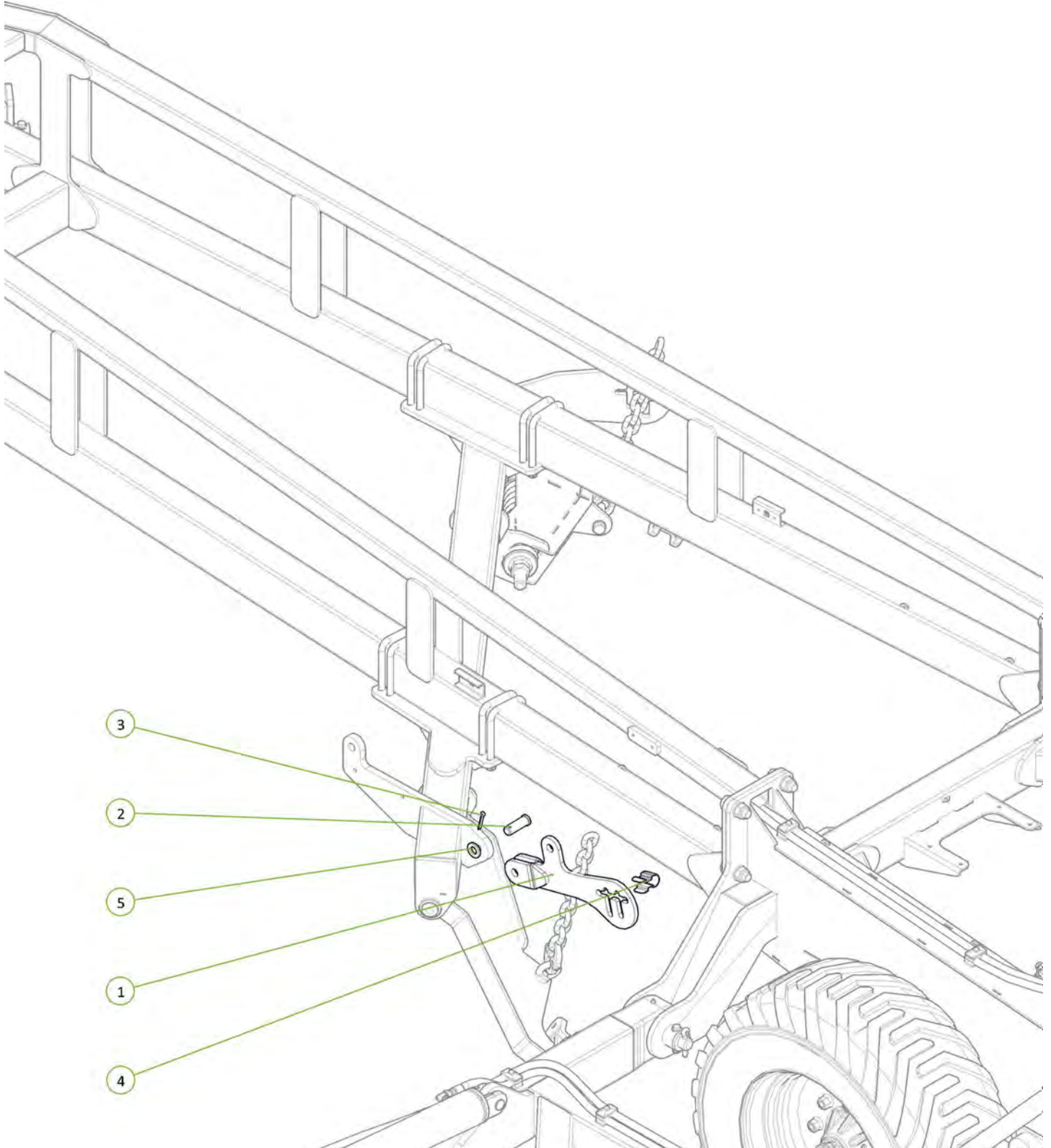
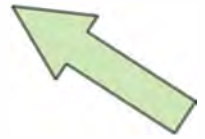




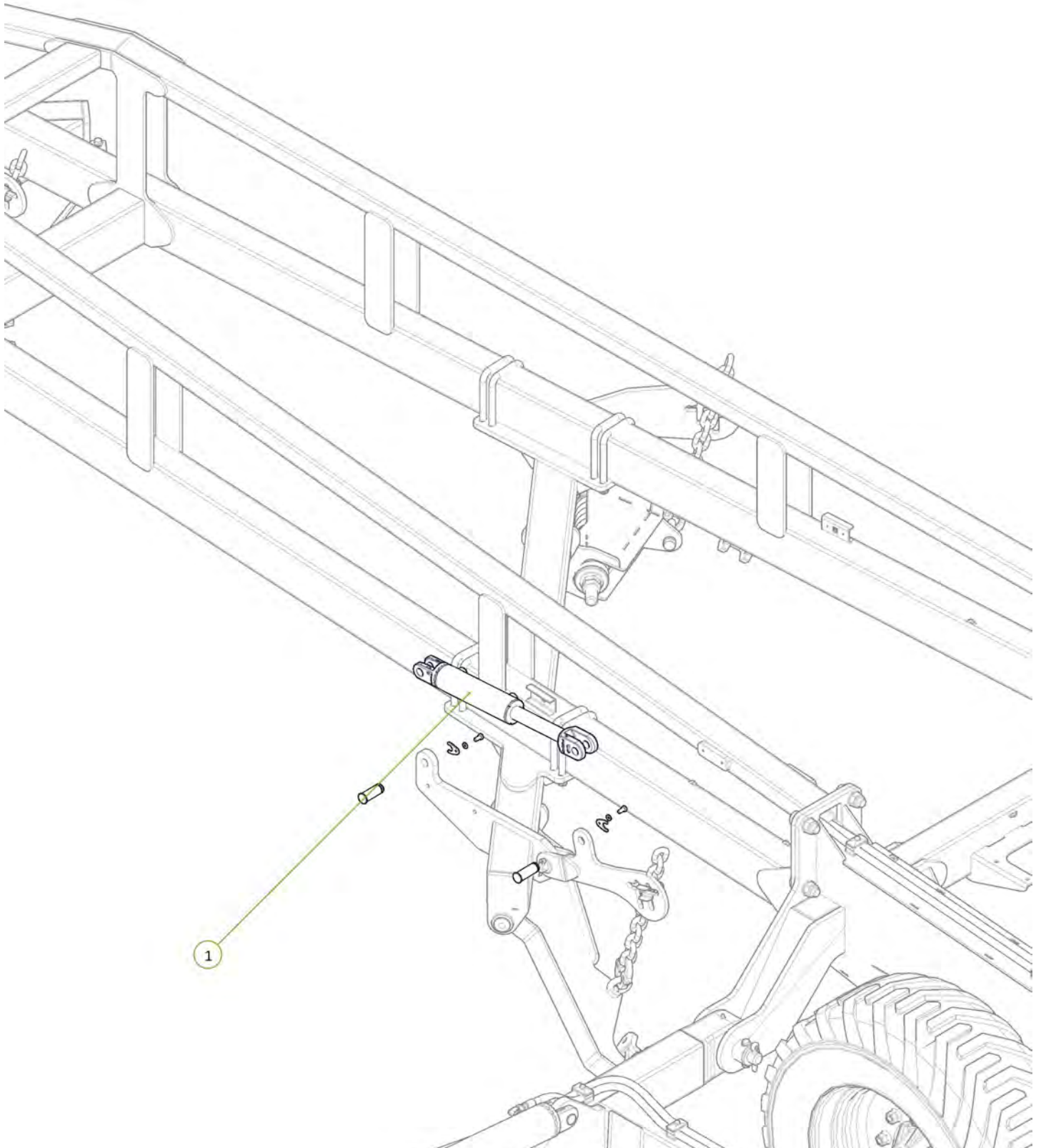
Item No.	Description	Qty	Number
1	Height Adjusting Chain Assembly 13 Link	1	0801-20MCA
2	Chain Mount Pivot Pin	1	0801-10-51
3	Washer High Tensile 1 3/8"	1	0232-HT13/8
4	M12 x 80 Grade 8.8 ZP Bolt	1	0211-1280
5	Nyloc Nut M12	1	0221-NYL12
6	Washer Flat M12	2	0231-F12



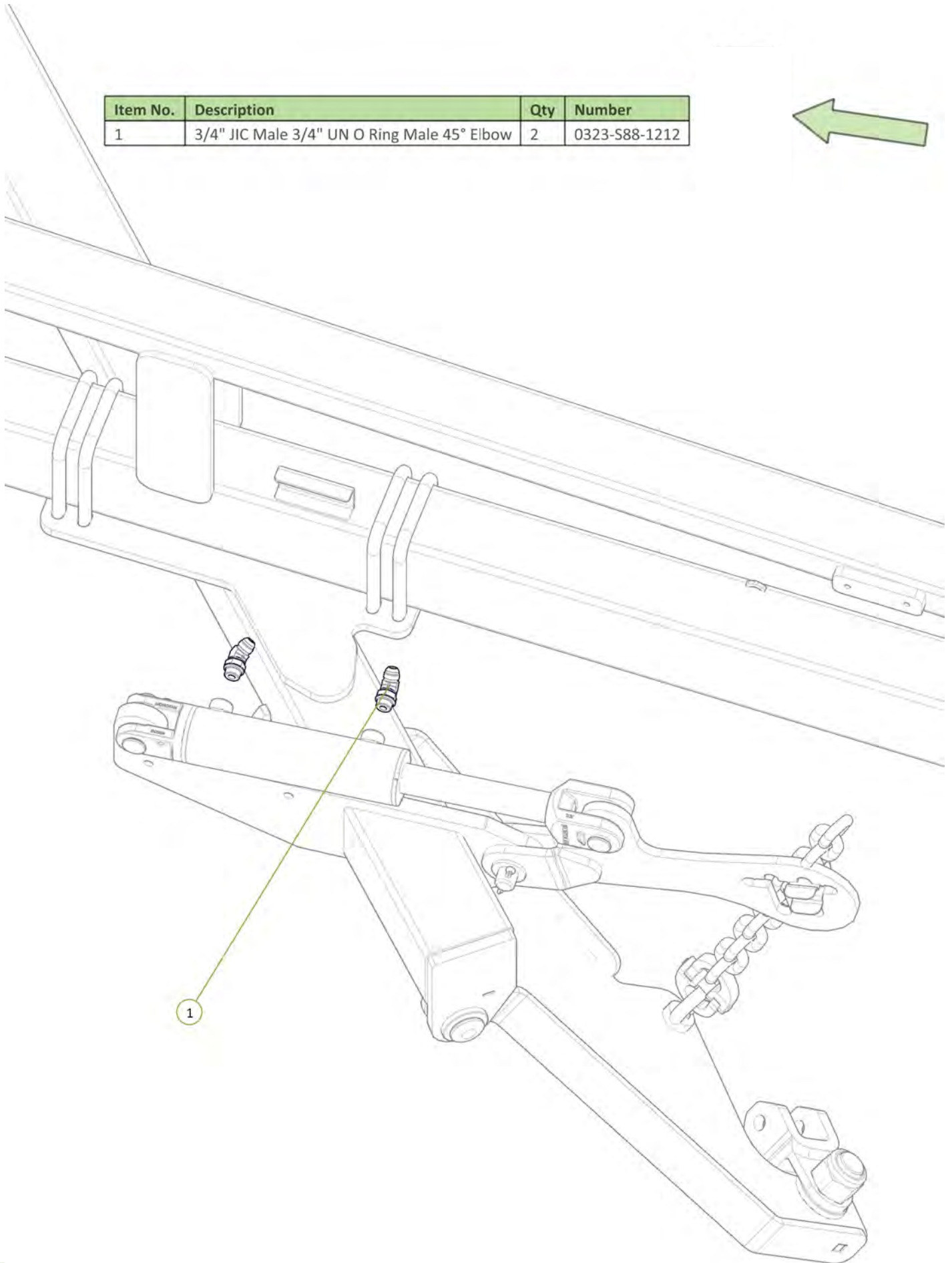
Item No.	Description	Qty	Number
1	Module Lift Plate	1	0810-106
2	Clevis Pin 25mm x 75mm	1	0801-KE0307-1
3	Cotter Pin M5 x 50	1	0261-PINC550
4	Height Adjustor Retaining Clip	1	0801-KE014
5	Washer Flat M24	1	0231-F24



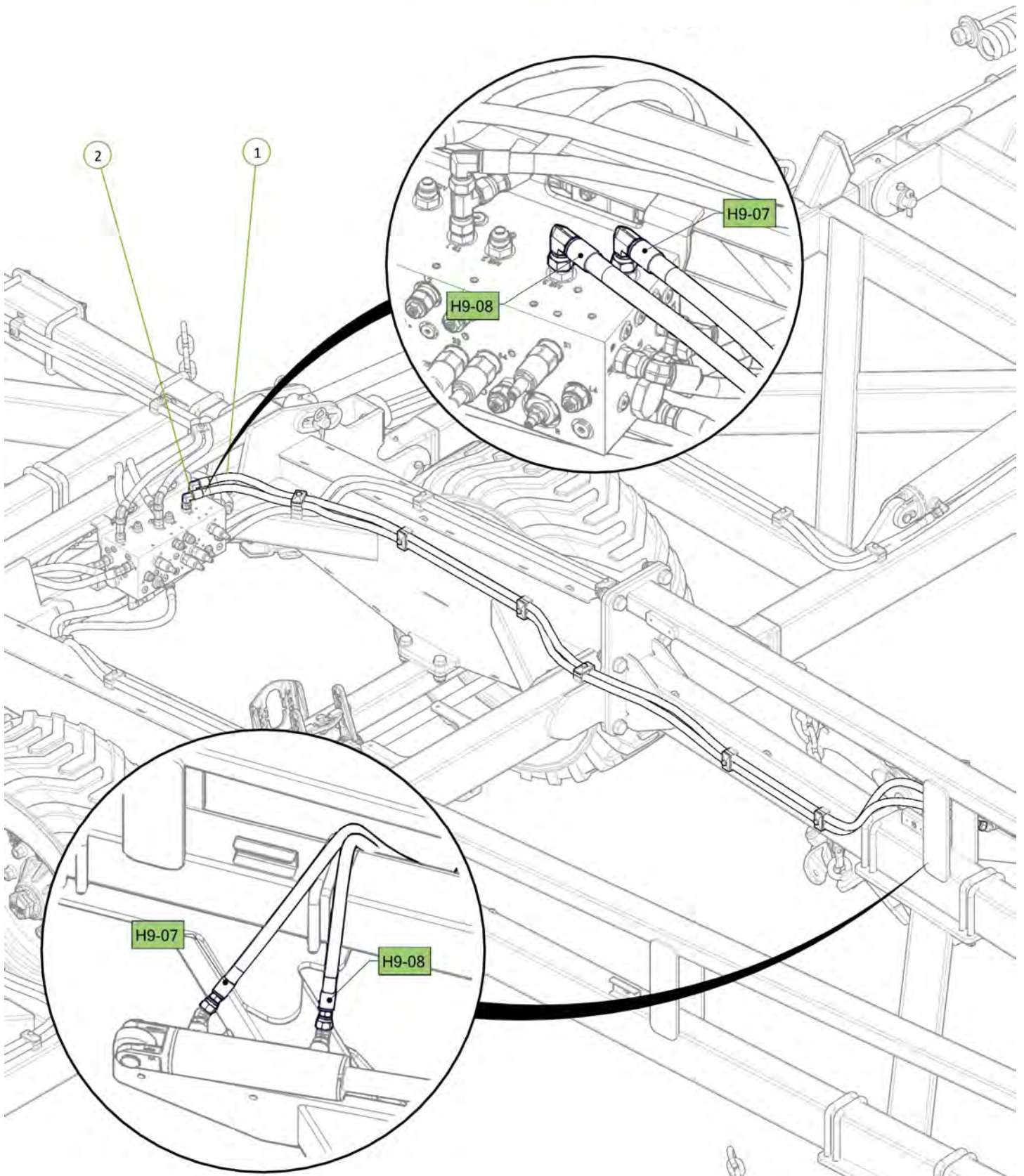
Item No.	Description	Qty	Number
1	2.5" Bore x 6" Stroke 1.5" Rod Side Port Cylinder	1	0311-256SP

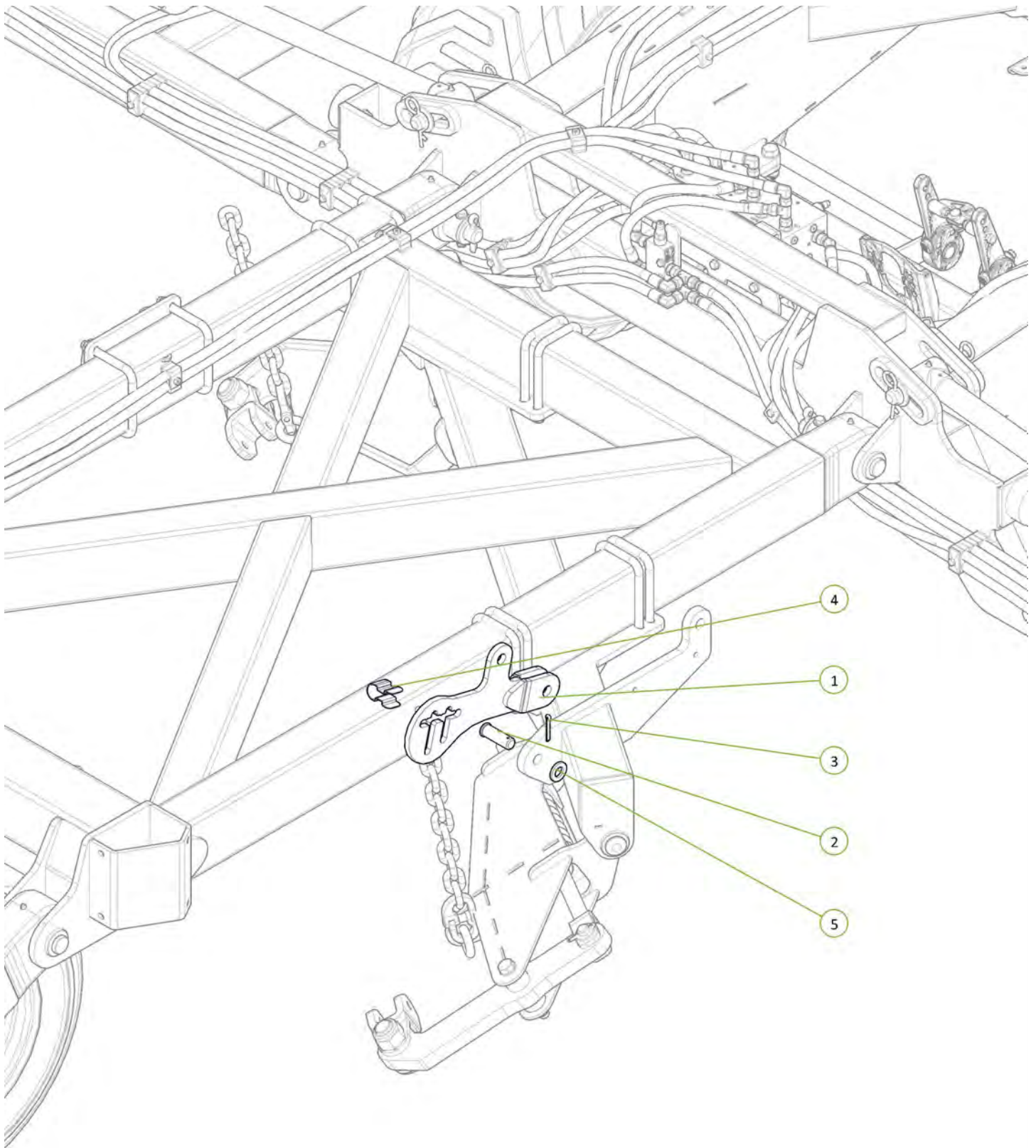


Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 45° Elbow	2	0323-S88-1212



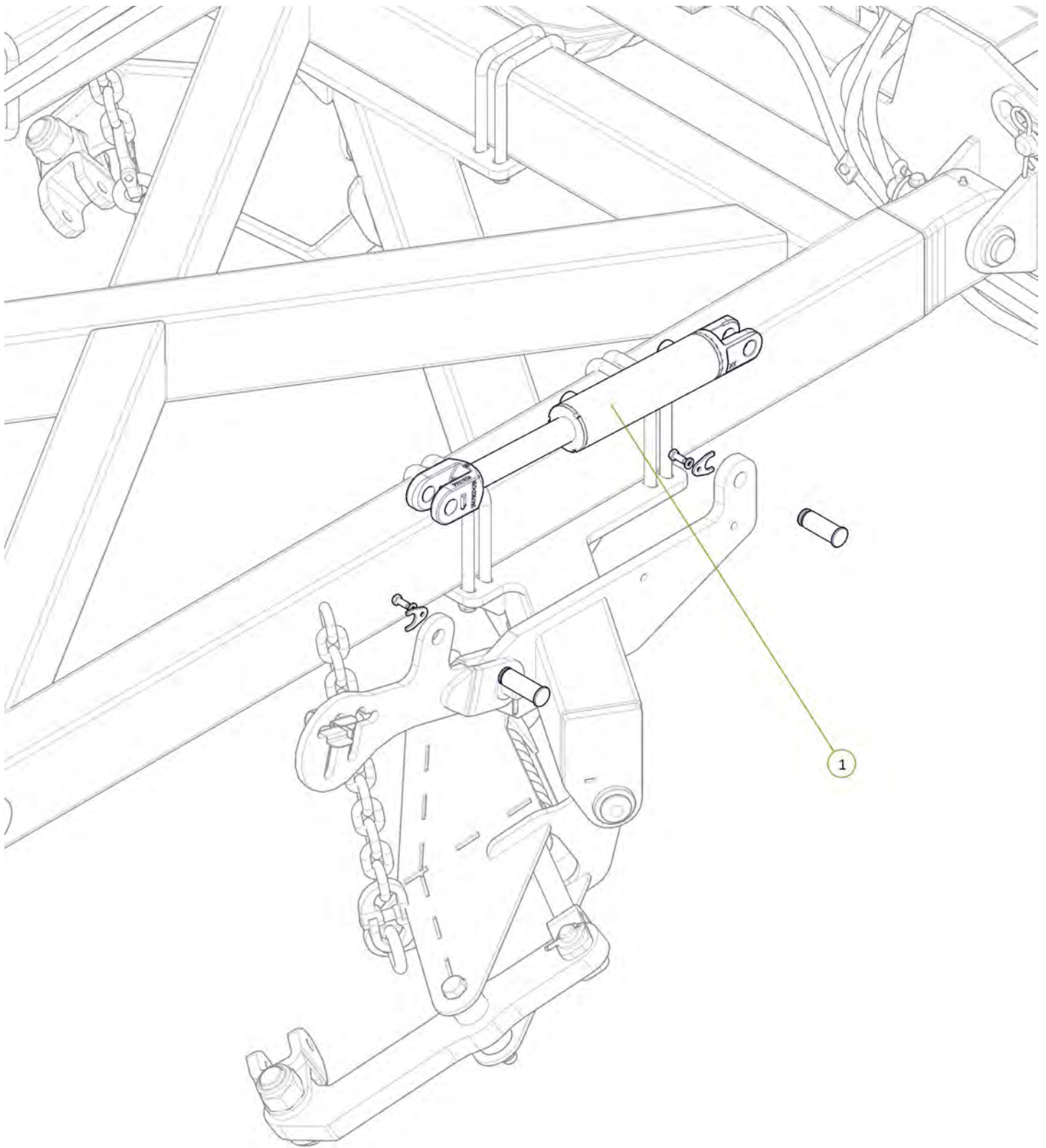
Item No.	Description	Qty	Number
1	ME3 to Front Cylinder Extend Port	1	H9-07
2	MR3 to Front Module Retract Port	1	H9-08





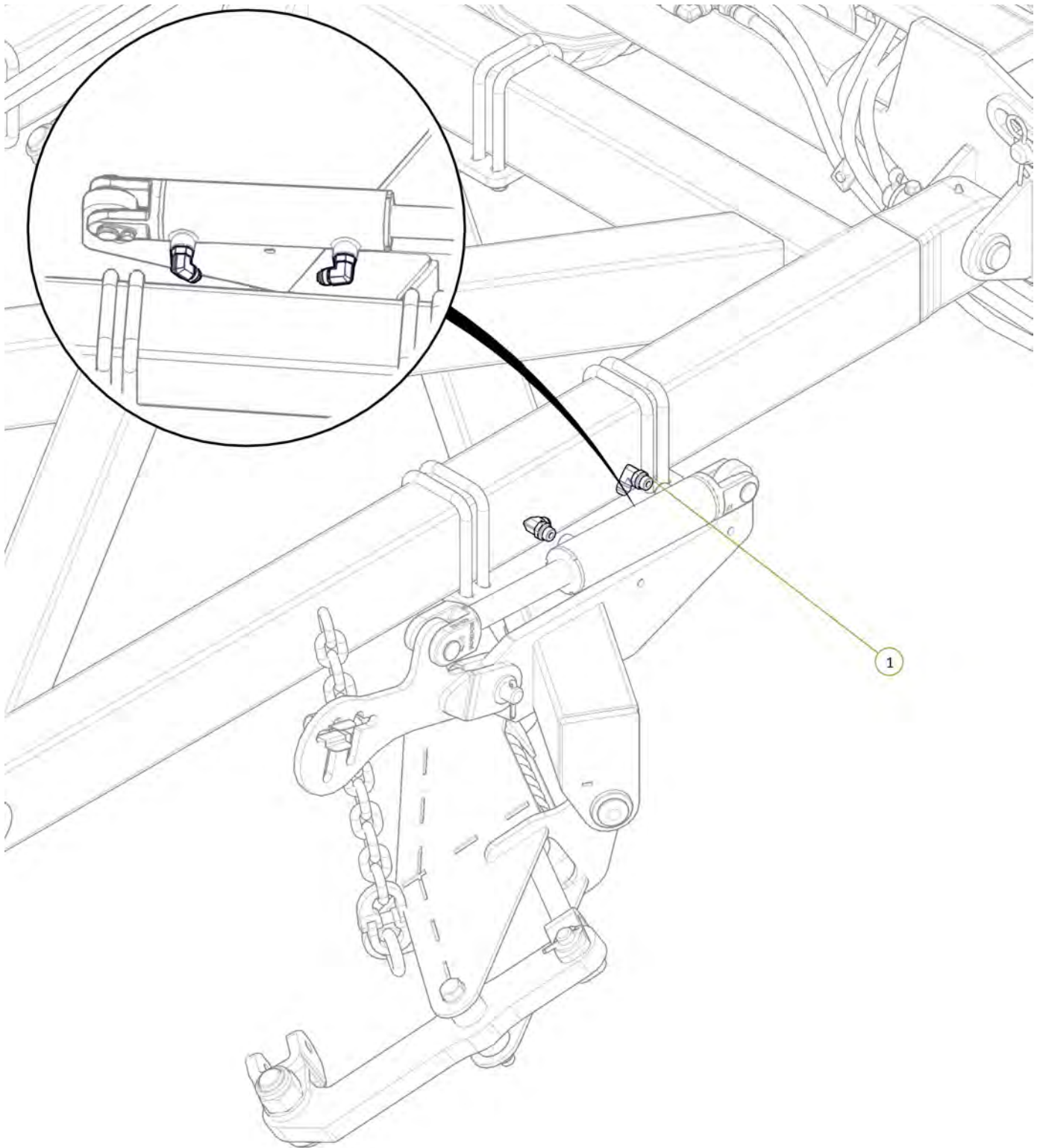
Item No.	Description	Qty	Number
1	Short Module Lift Arm	1	0810-107
2	Clevis Pin 25mm x 75mm	1	0801-KE0307-1
3	Cotter Pin M6 x 50mm	1	0261-PINC650
4	Height Adjustor Retaining Clip	1	0801-KE014
5	Washer Flat M24	1	0231-F24





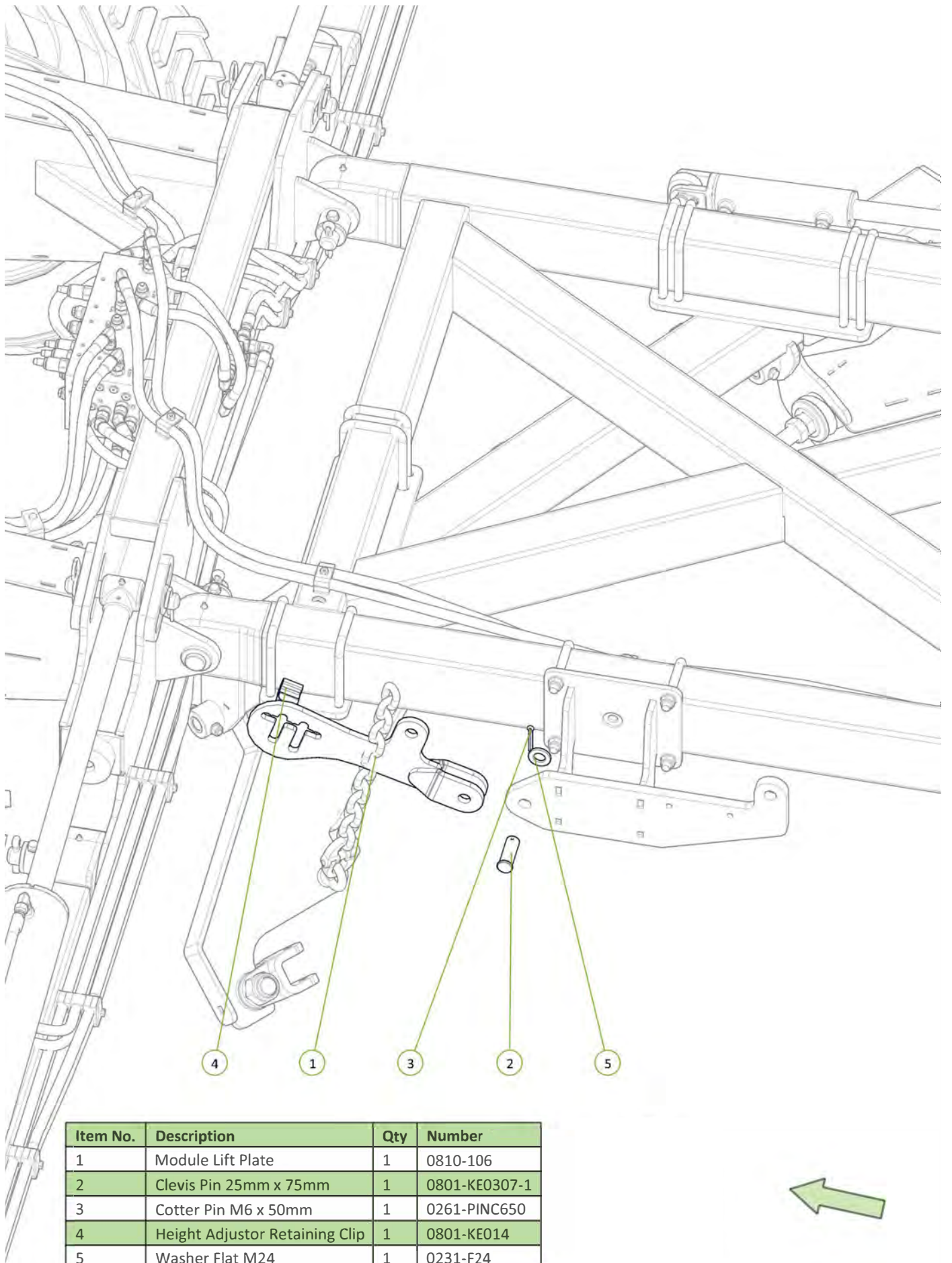
Item No.	Description	Qty	Number
1	2.5" Bore x 6" Stroke 1.5" Rod Side Port Cylinder	1	0311-256SP





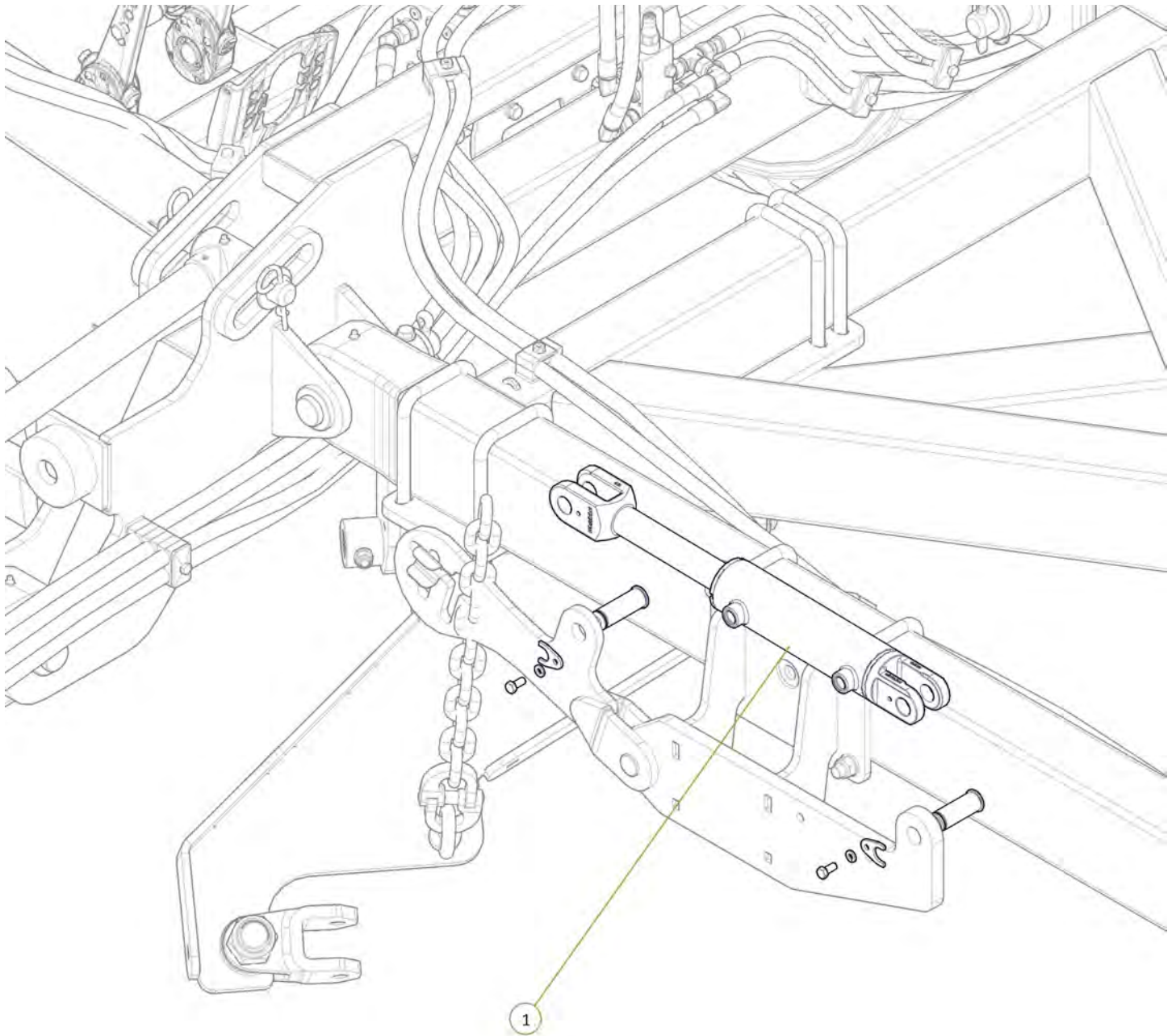
Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212





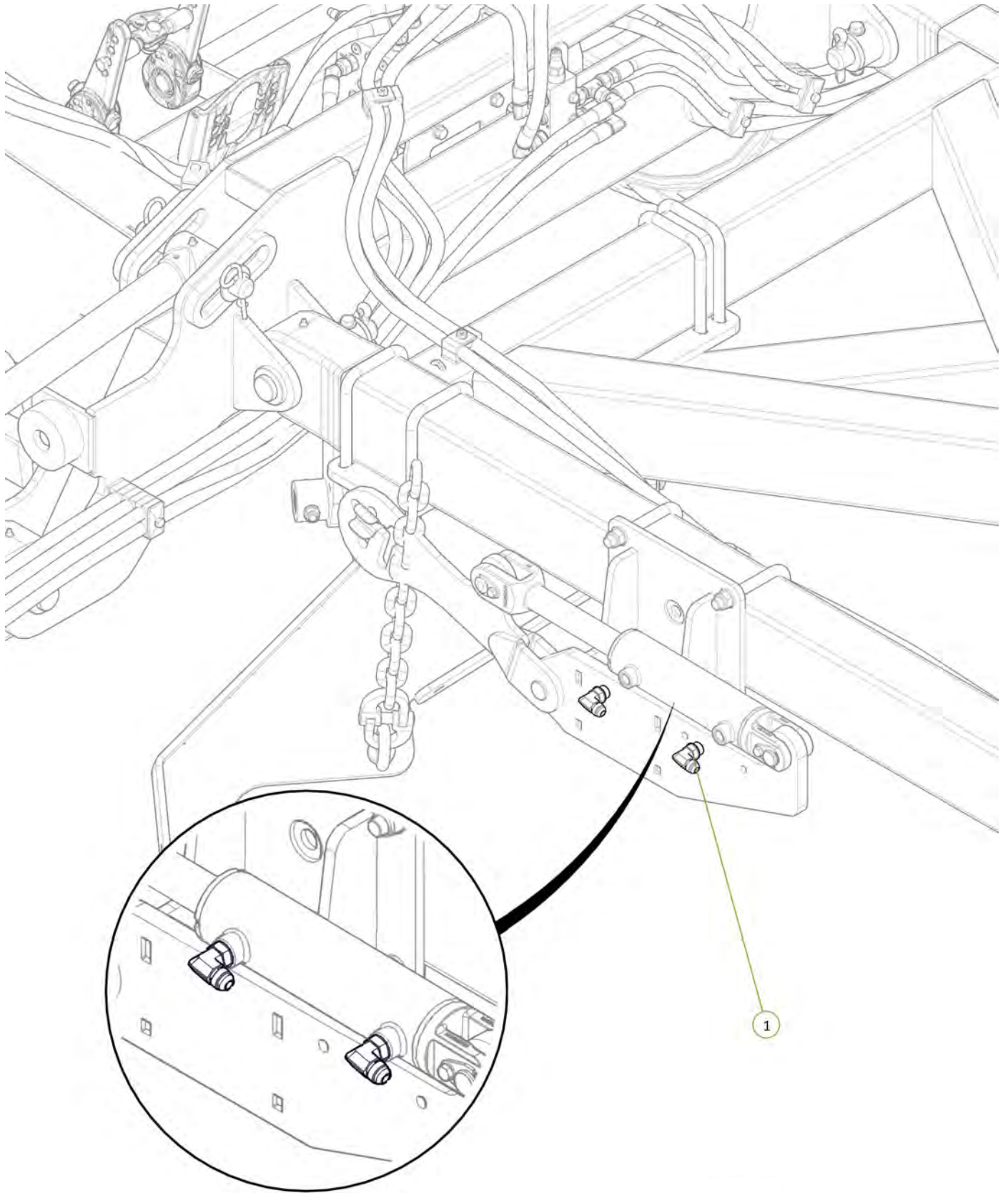
Item No.	Description	Qty	Number
1	Module Lift Plate	1	0810-106
2	Clevis Pin 25mm x 75mm	1	0801-KE0307-1
3	Cotter Pin M6 x 50mm	1	0261-PINC650
4	Height Adjustor Retaining Clip	1	0801-KE014
5	Washer Flat M24	1	0231-F24





Item No.	Description	Qty	Number
1	2.5" Bore x 6" Stroke 1.5" Rod Side Port Cylinder	1	0311-256SP

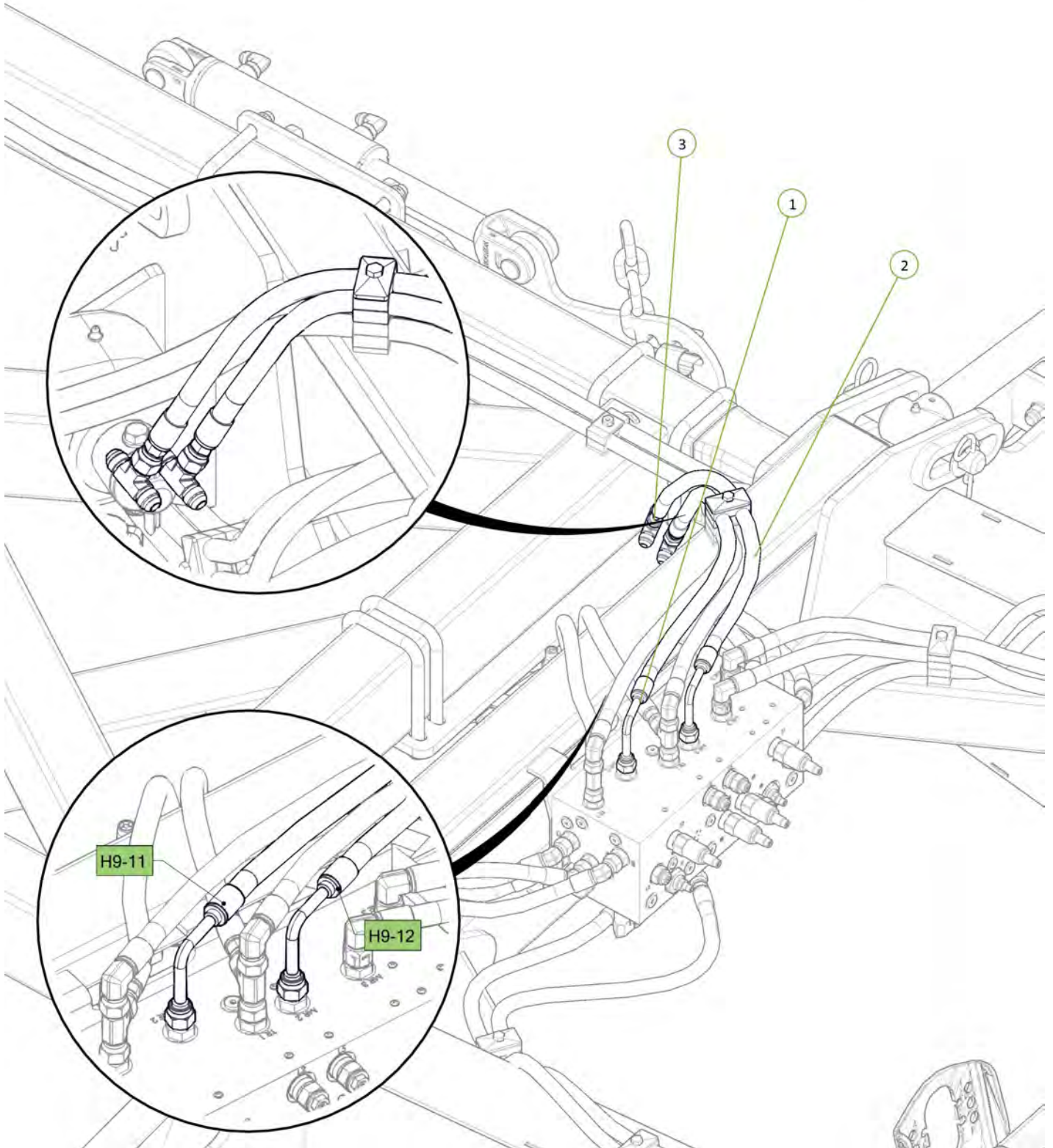
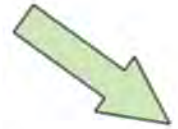


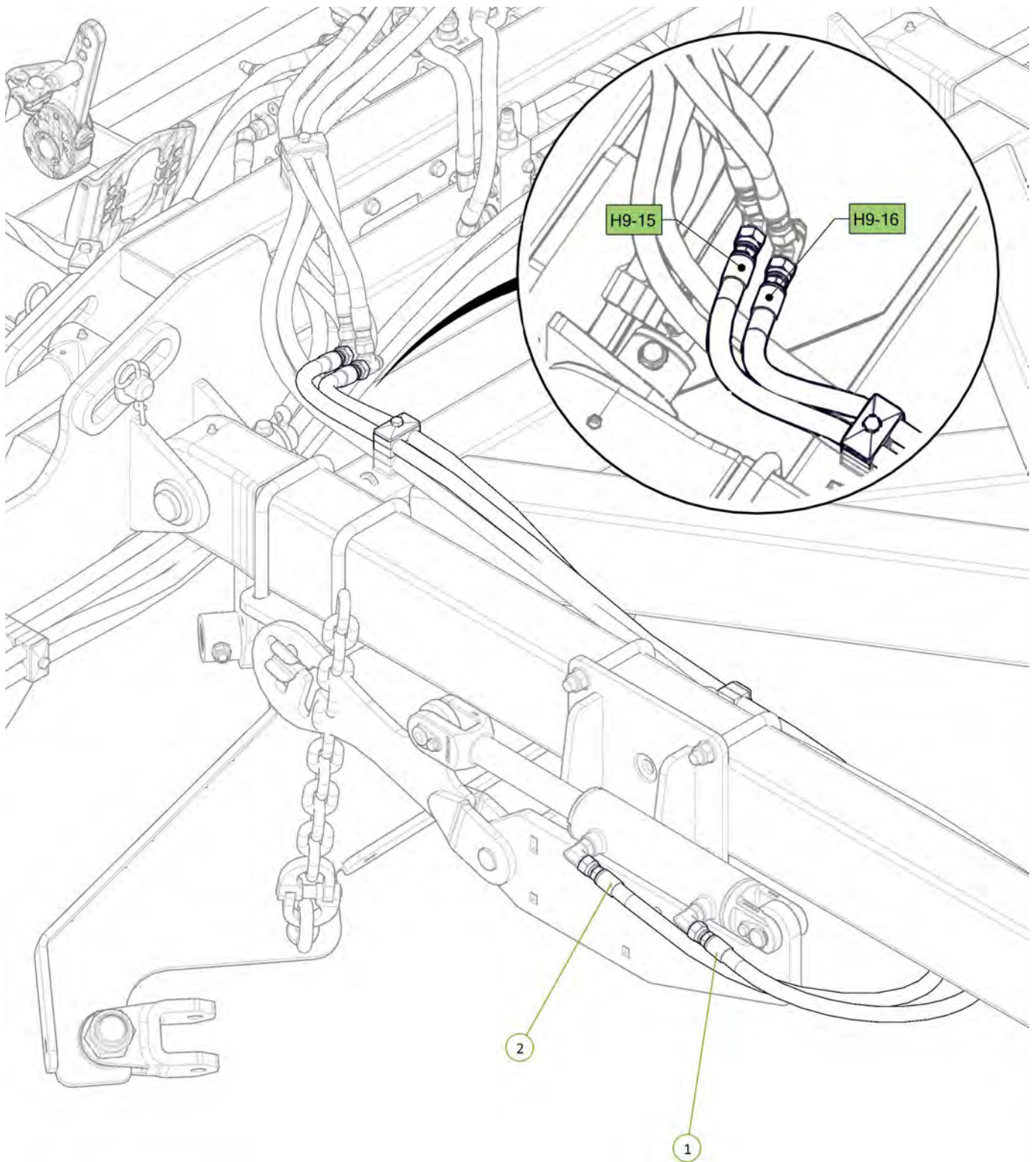


Item No.	Description	Qty	Number
1	3/4" JIC Male 3/4" UN O Ring Male 90° Elbow	2	0323-S91-1212



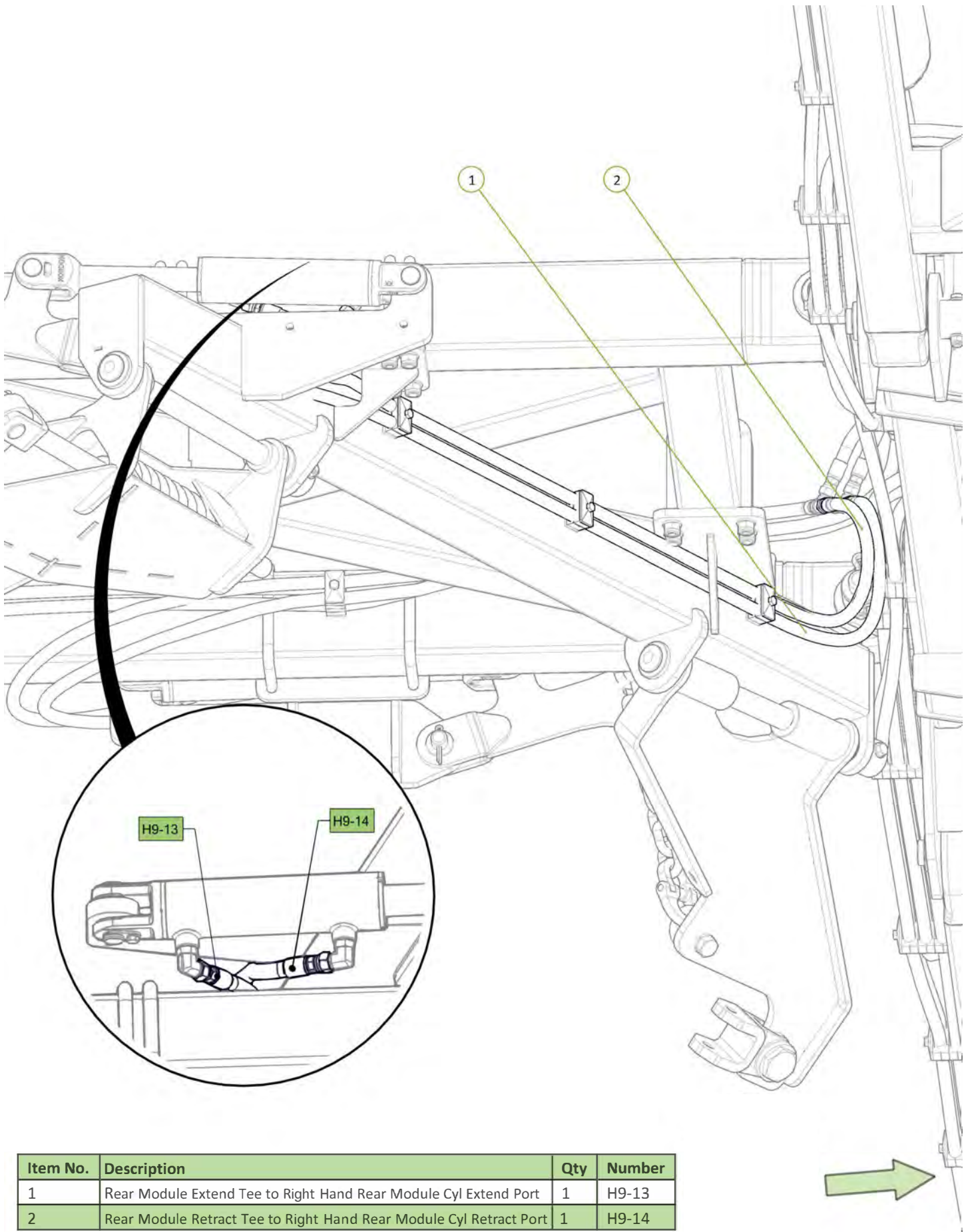
Item No.	Description	Qty	Number
1	ME2 Port to Rear Module Extend Tee	1	H9-11
2	MR2 Port to Rear Module Retract Tee	1	H9-12
3	3/4" JIC Male Tee	2	0324-S19-121212



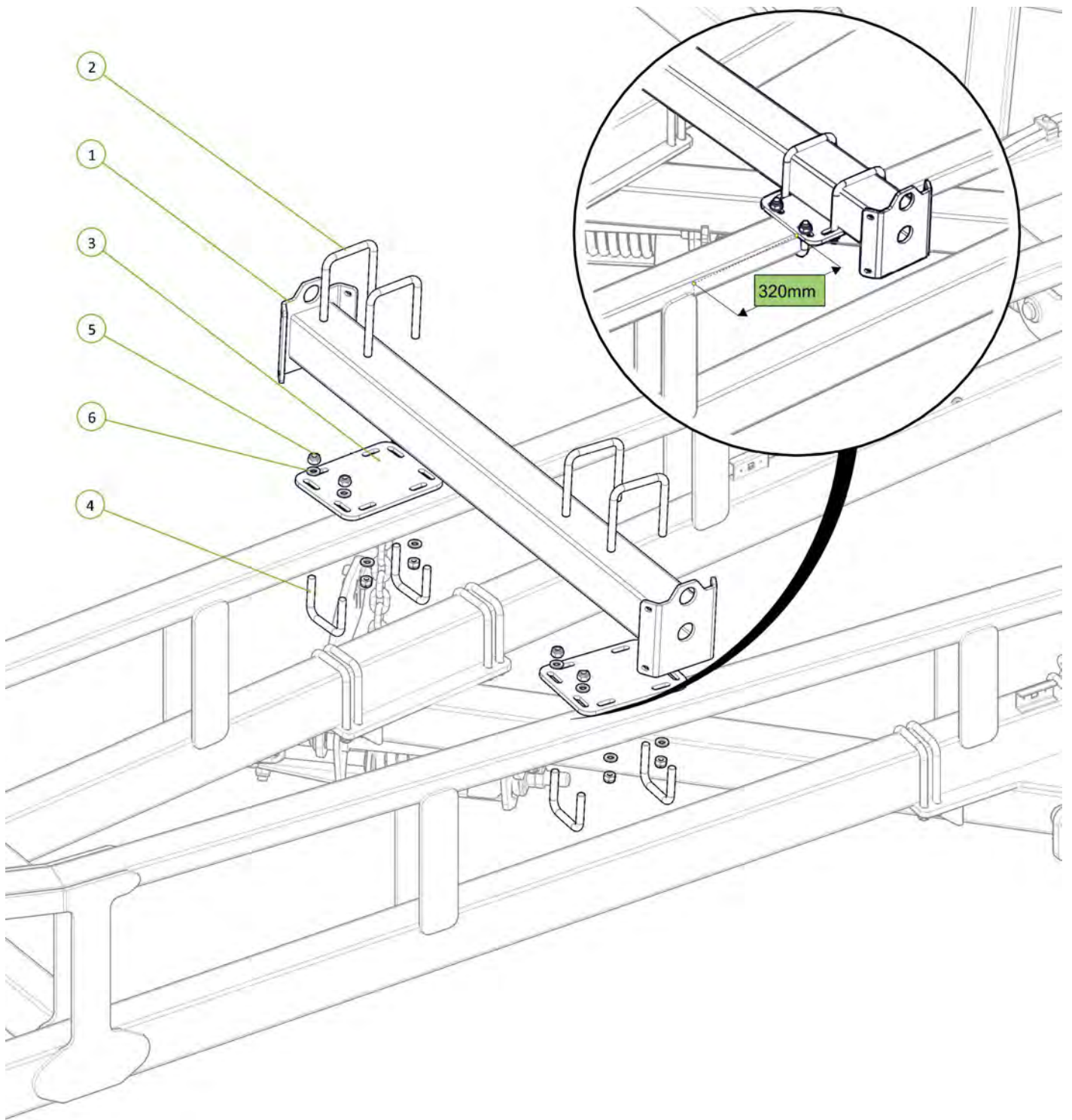


Item No.	Description	Qty	Number
1	Rear Module Extend Tee to Left Hand Rear Module Cyl Extend Port	1	H9-15
2	Rear Module Retract Tee to Left Hand Rear Module Cyl Retract Port	1	H9-16



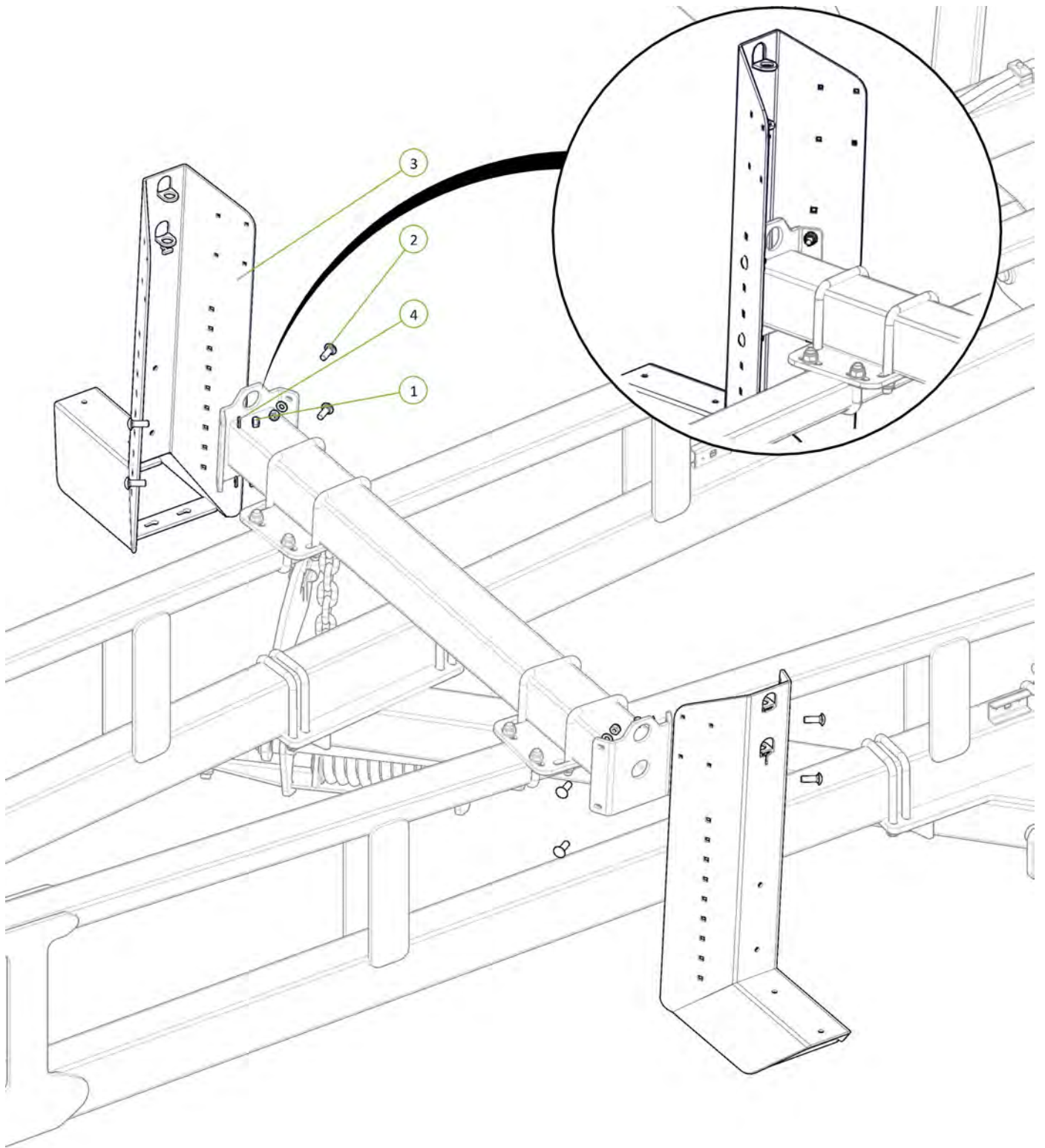


Item No.	Description	Qty	Number
1	Rear Module Extend Tee to Right Hand Rear Module Cyl Extend Port	1	H9-13
2	Rear Module Retract Tee to Right Hand Rear Module Cyl Retract Port	1	H9-14



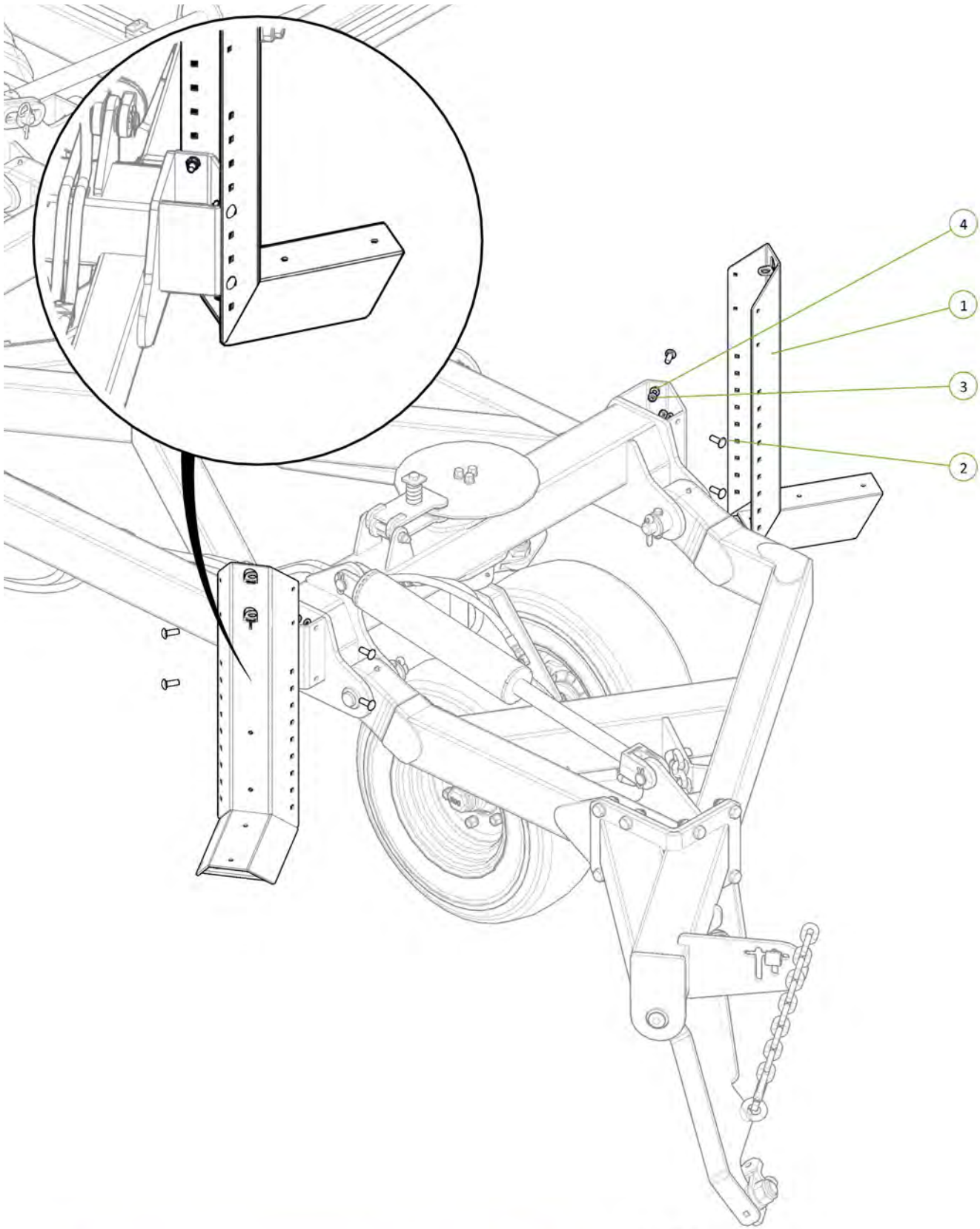
Item No.	Description	Qty	Number
1	Chain Carrier	1	1532-17-30
2	U-Bolt M16 x 160 Deep x 127 Wide	4	0271-16160127
3	Chain Carrier Mount Plate	2	0800-139.1
4	U-Bolt M16 x 95 Deep x 102 Wide	4	0271-1695102
5	Nyloc Nut M16	16	0221-NYL16
6	Washer Flat M16	16	0231-F16





Item No.	Description	Qty	Number
1	Nyloc Nut M12	8	0221-NYL12
2	M12 x 40 Coach Head Bolt	8	0215-CH1240
3	Extended Chain Carrier Bolt on End	2	0810-17L_SD
4	Washer Flat M12	8	0231-F12

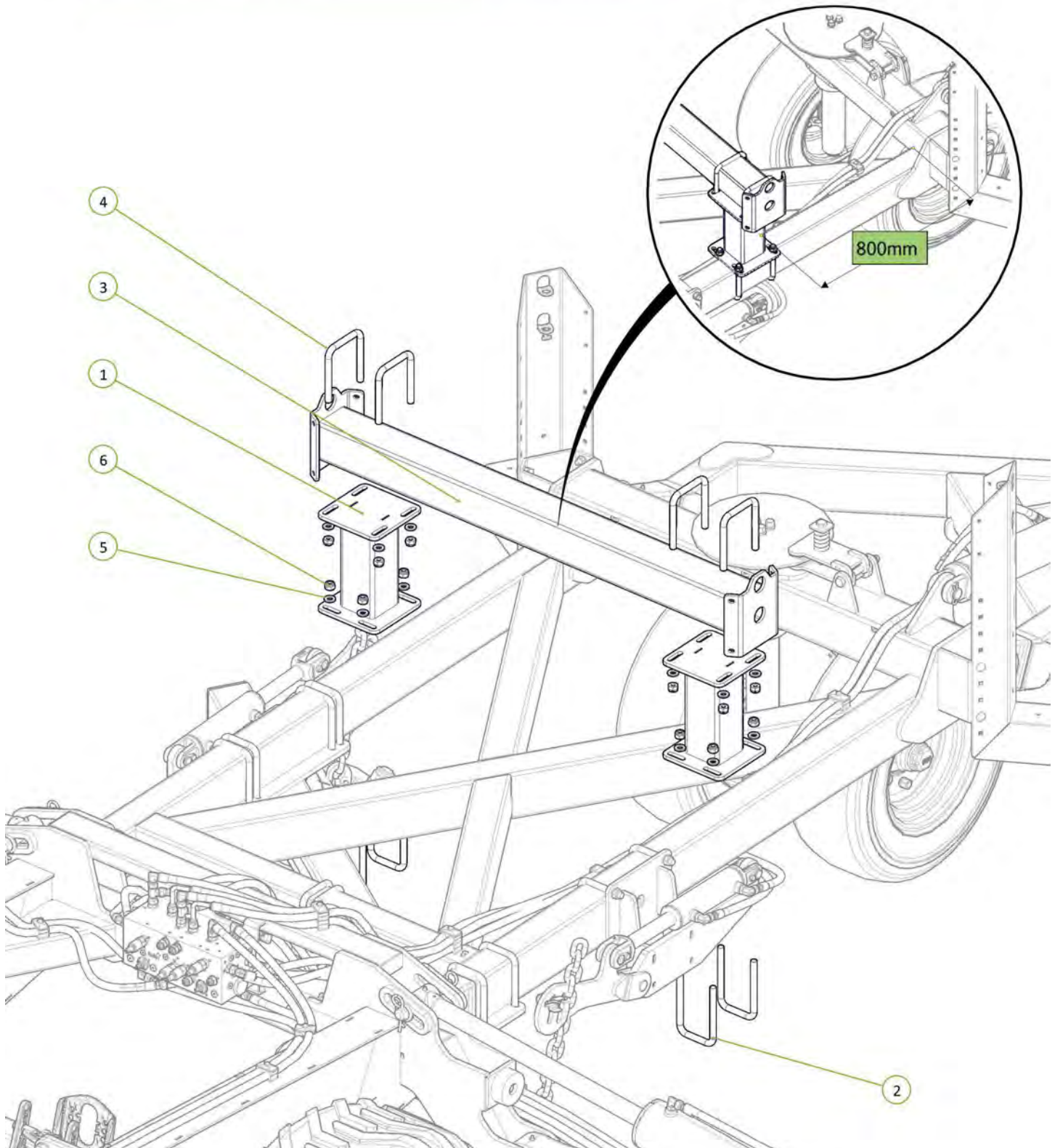




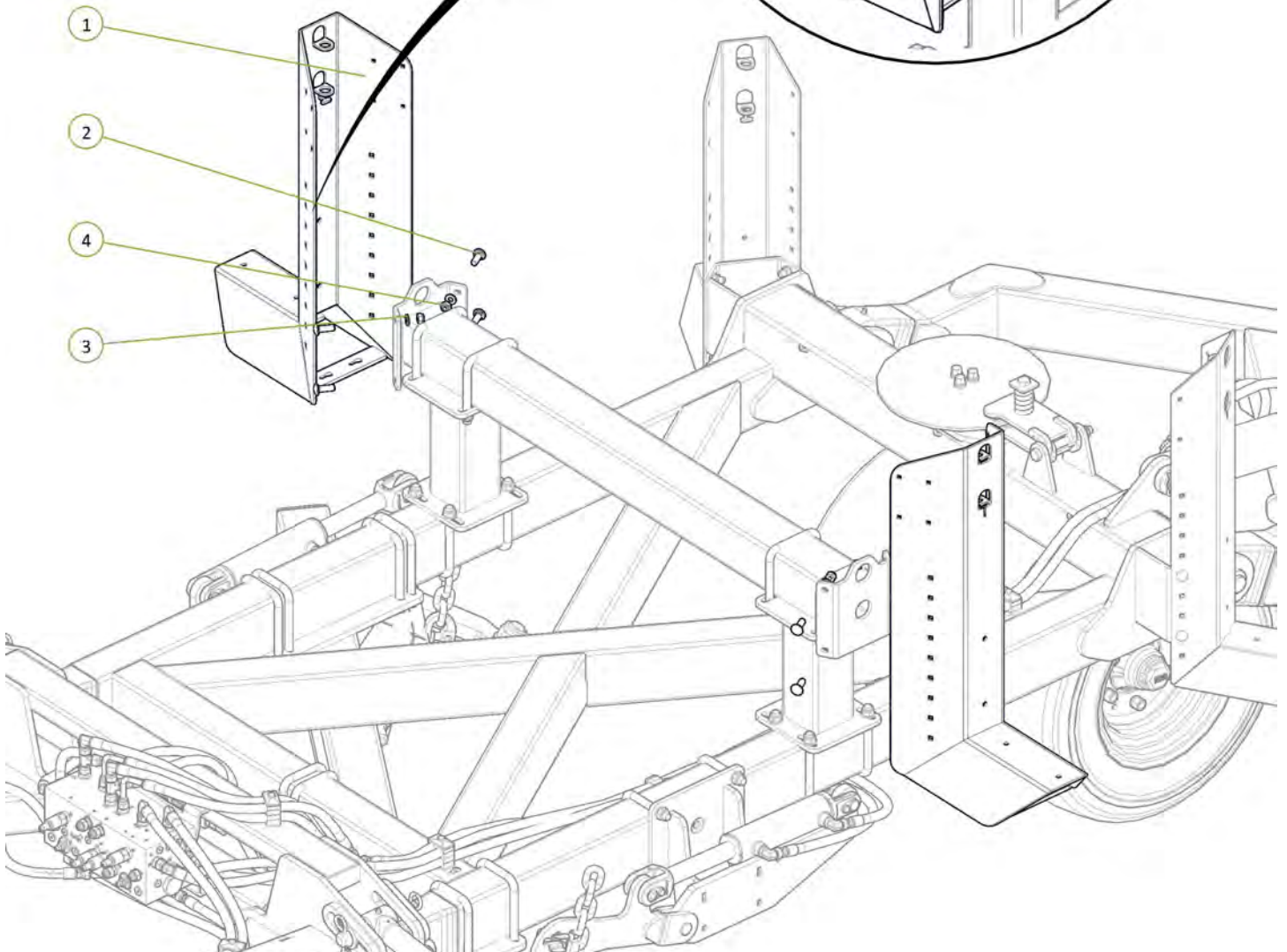
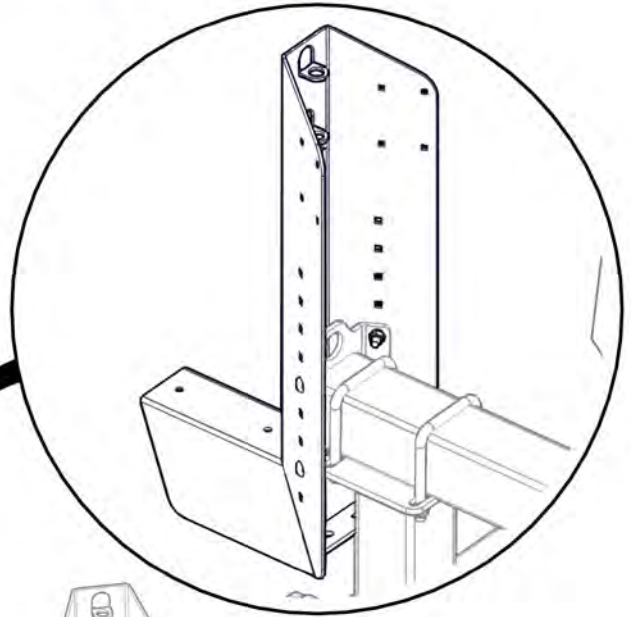
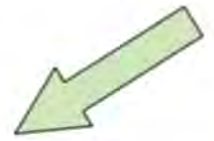
Item No.	Description	Qty	Number
1	Chain Carrier Bolt on End	2	0810-17L
2	M12 x 40 Coach Head Bolt	8	0215-CH1240
3	Nyloc Nut M12	8	0221-NYL12
4	Washer Flat M12	8	0231-F12



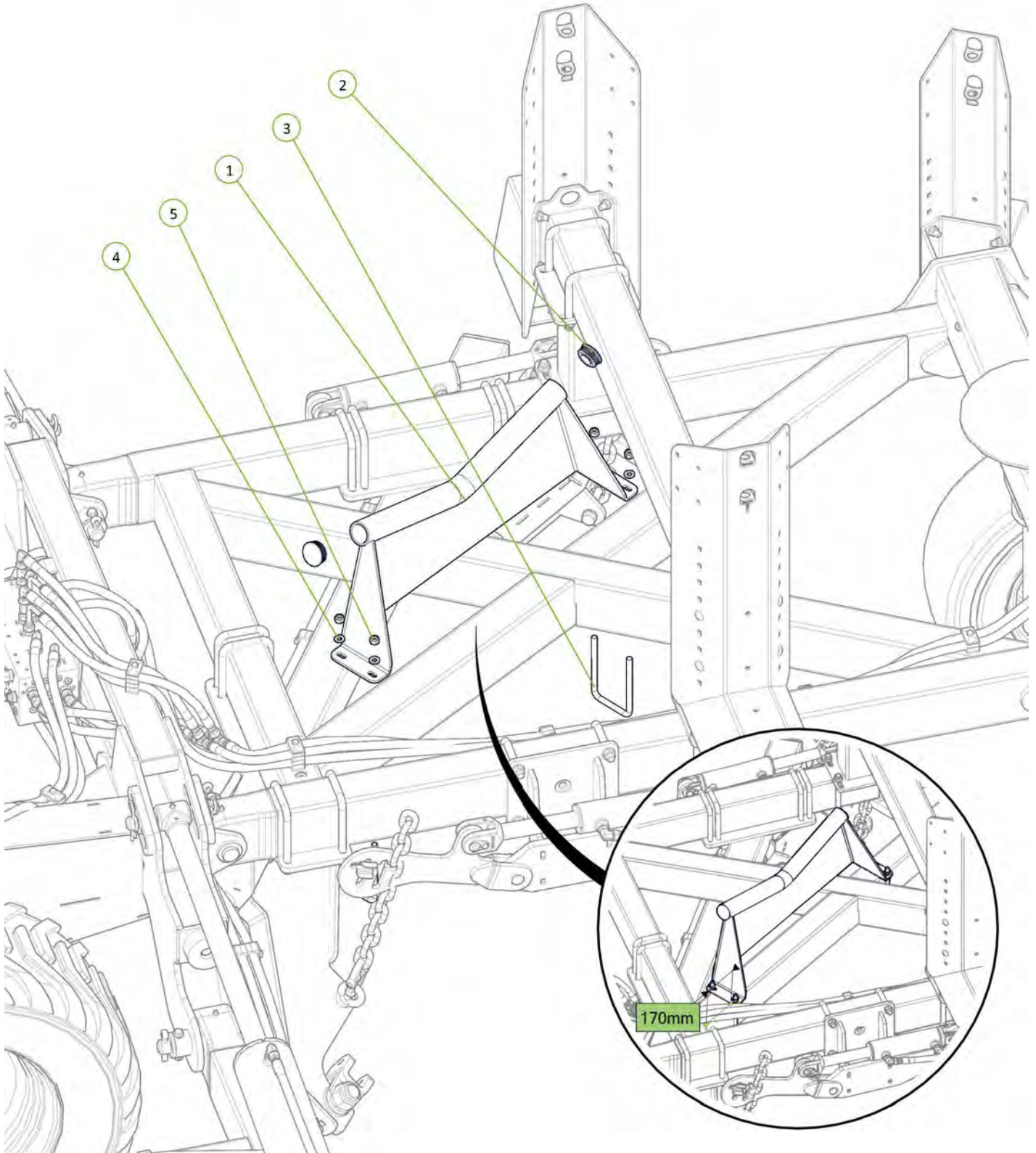
Item No.	Description	Qty	Number
1	Chain Carrier Pedestal 300mm	2	1510-43
2	U-Bolt M16 x 185 Deep x 104 Wide	4	0271-16185104
3	Chain Carrier	1	1532-17-30
4	U-Bolt M16 x 160 Deep x 127 Wide	4	0271-16160127
5	Washer Flat M16	16	0231-F16
6	Nyloc Nut M16	16	0221-NYL16



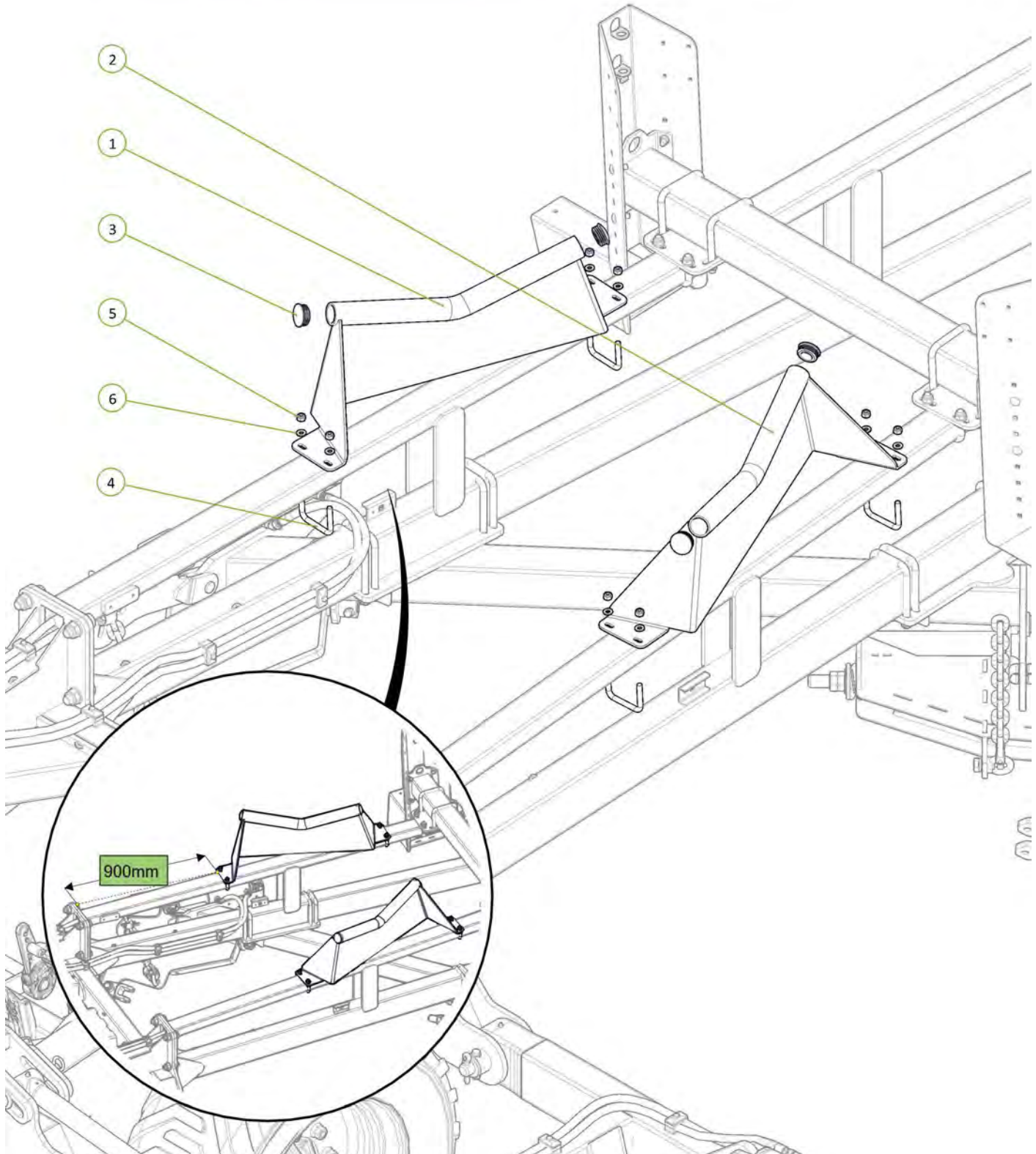
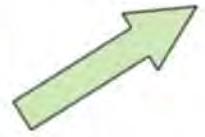
Item No.	Description	Qty	Number
1	Extended Chain Carrier Bolt on End	2	0810-17L_SD
2	M12 x 40 Coach Head Bolt	8	0215-CH1240
3	Washer Flat M12	8	0231-F12
4	Nyloc Nut M12	8	0221-NYL12



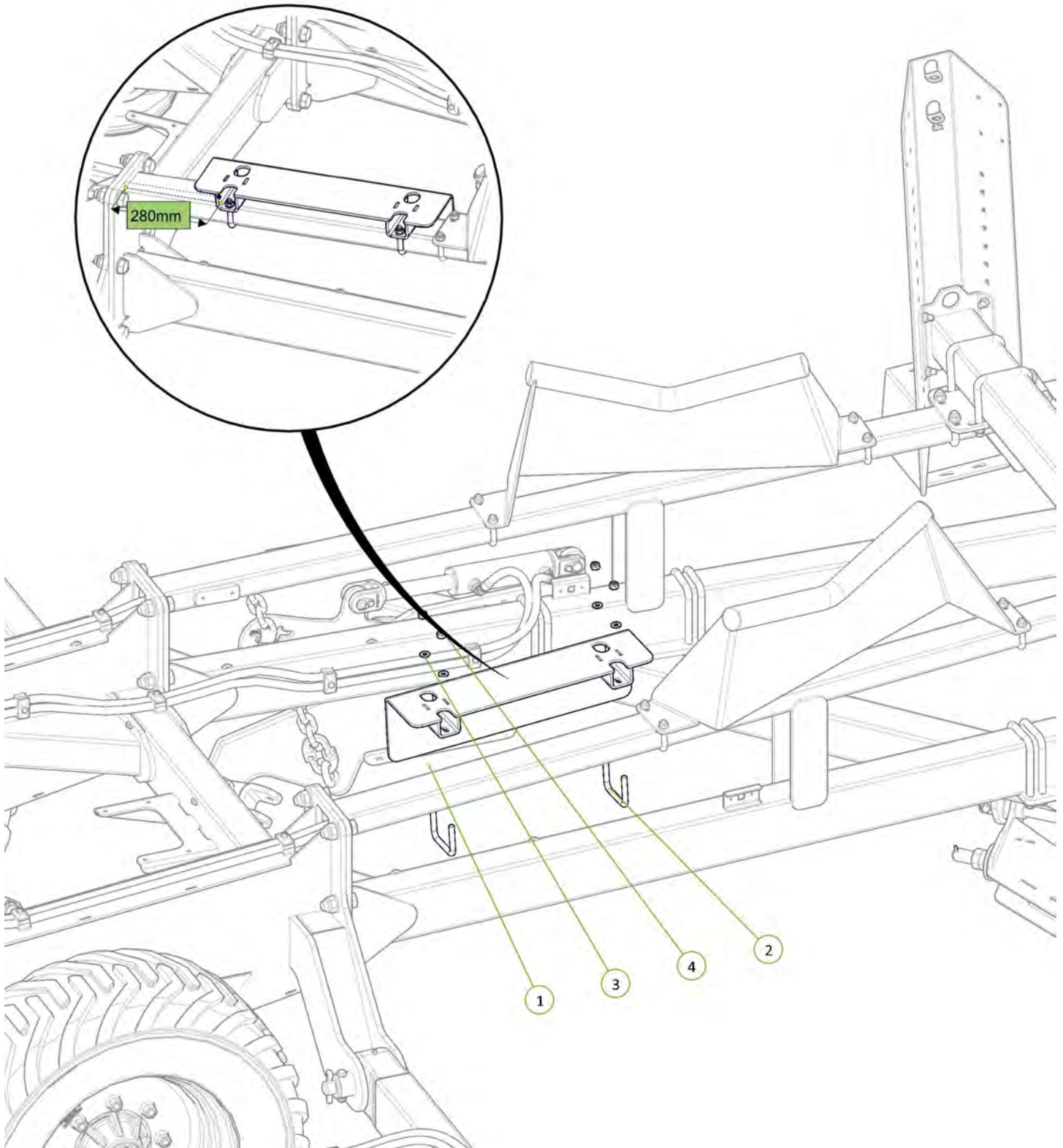
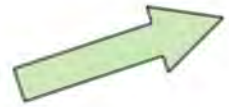
Item No.	Description	Qty	Number
1	Rear M	1	0810-19
2	Round Tube Insert 60.3 x 3.2-5mm	2	0264-RTRi-5584
3	U-Bolt M12 x 185 Deep x 104 Wide	2	0271-12185104
4	Washer Flat M12	4	0231-F12
5	Nyloc Nut M12	4	0221-NYL12



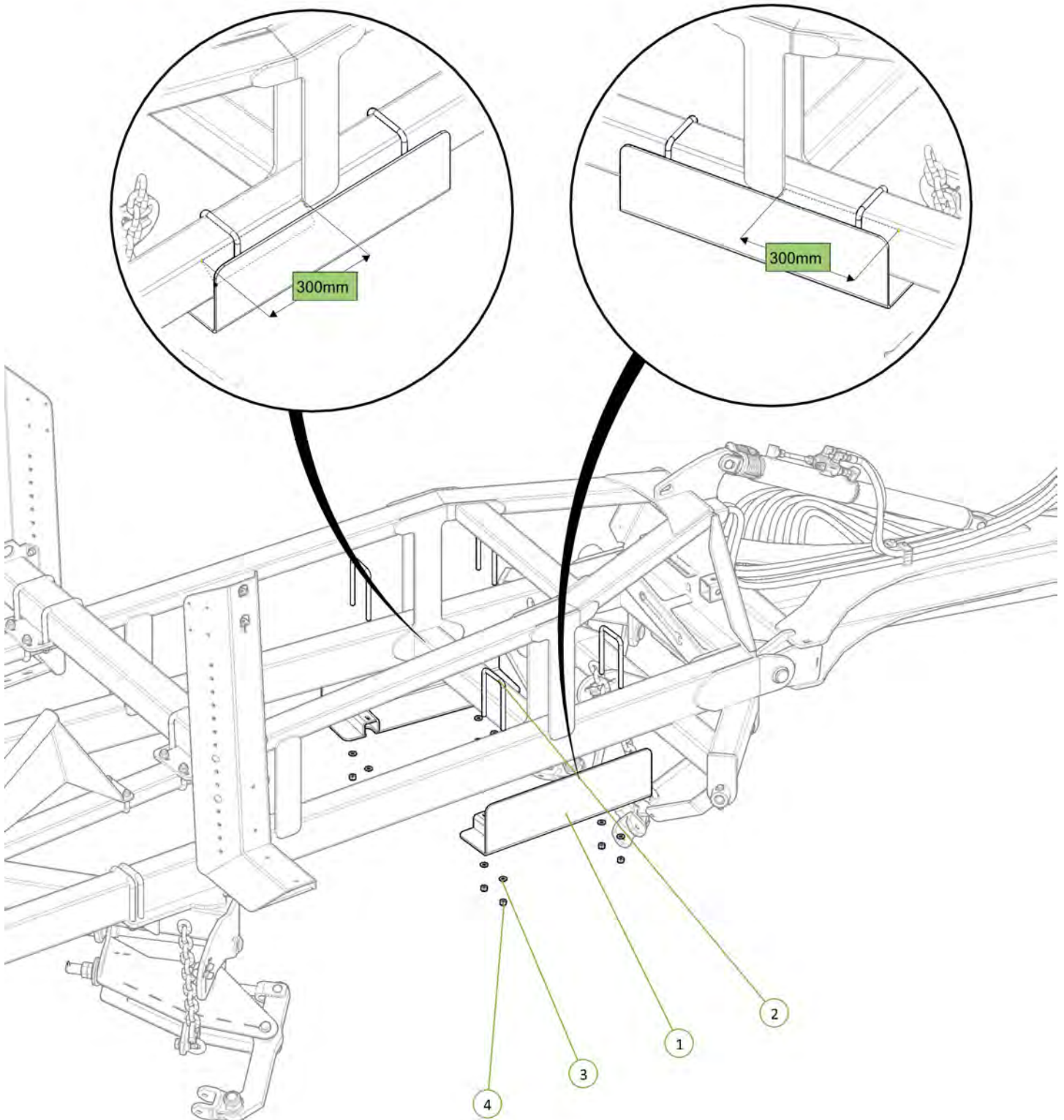
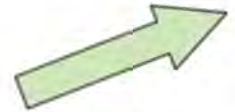
Item No.	Description	Qty	Number
1	Left Hand M	1	0810-19L
2	Right Hand M	1	0810-18R
3	Round Tube Insert 60.3 x 3.2-5mm	4	0264-RTRi-5584
4	U-Bolt M12 x 85 Deep x 102 Wide	4	0271-1285102
5	Nyloc Nut M12	8	0221-NYL12
6	Washer Flat M12	8	0231-F12



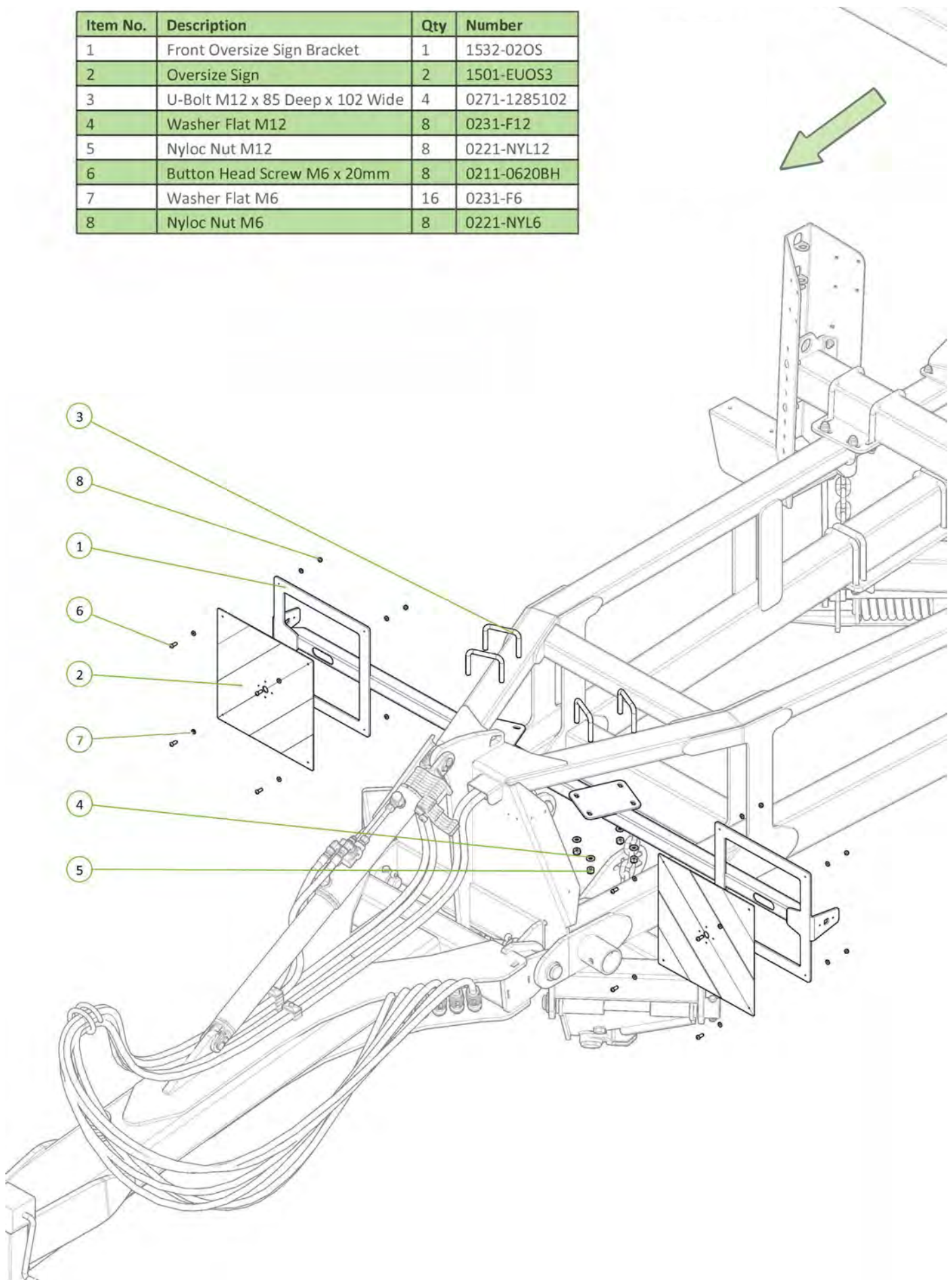
Item No.	Description	Qty	Number
1	Guard	1	1510-56
2	U-Bolt M12 x 85 Deep x 102 Wide	2	0271-1285102
3	Washer Flat M12	4	0231-F12
4	Nyloc Nut M12	4	0221-NYL12

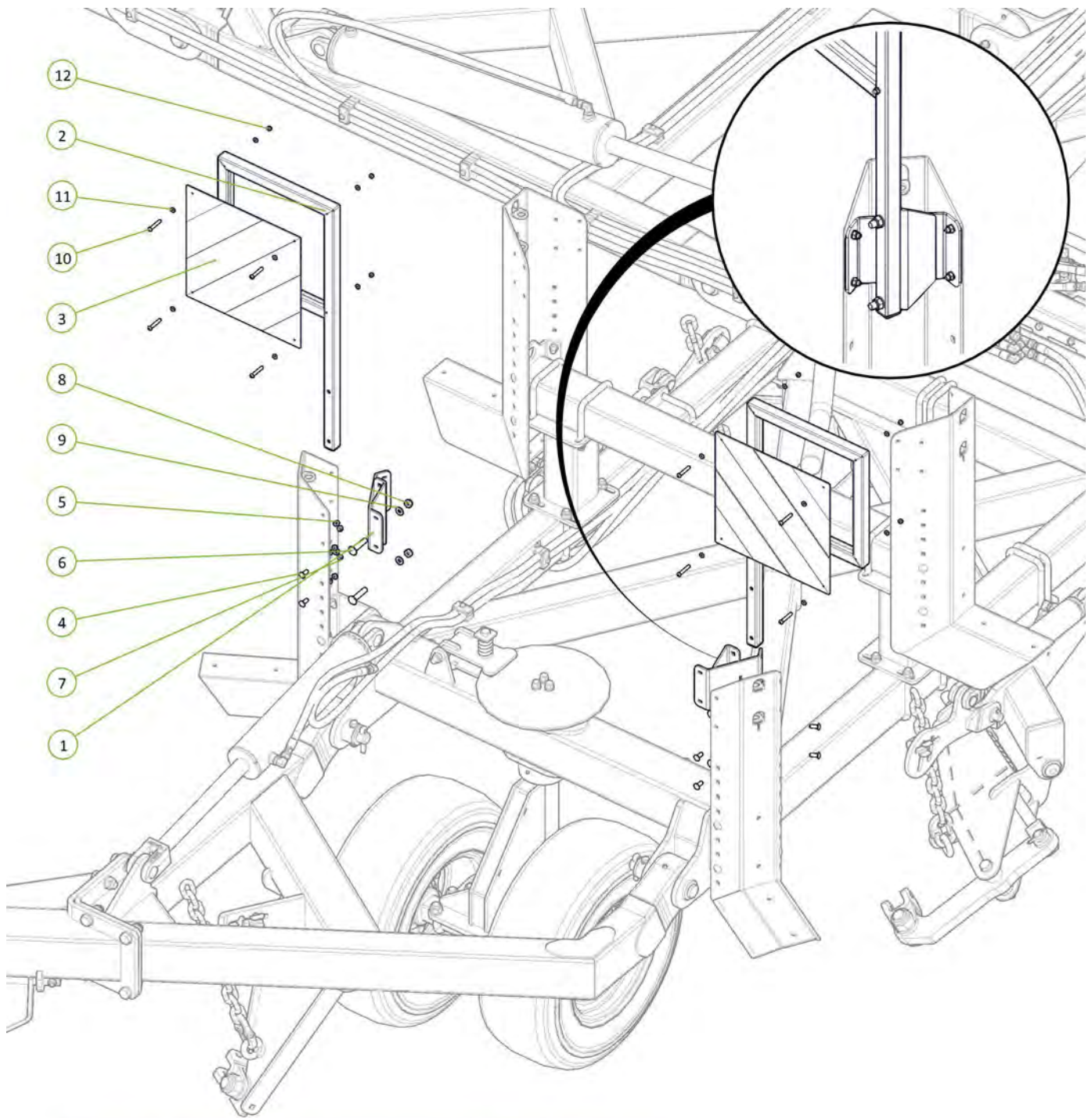


Item No.	Description	Qty	Number
1	Guard	2	1510-56
2	U-Bolt M12 x 185 Deep x 104 Wide	4	0271-12185104
3	Washer Flat M12	8	0231-F12
4	Nyloc Nut M12	8	0221-NYL12



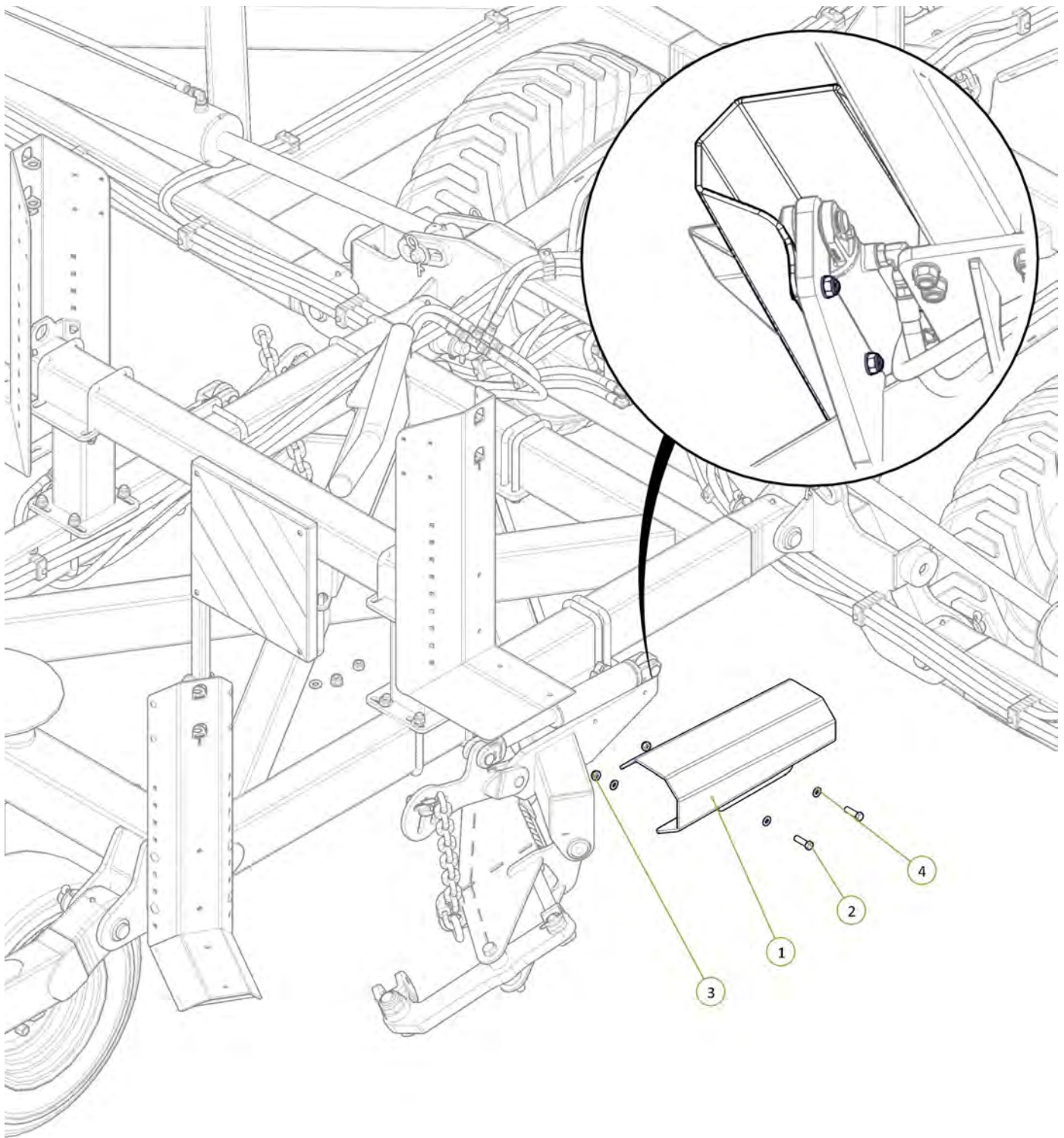
Item No.	Description	Qty	Number
1	Front Oversize Sign Bracket	1	1532-02OS
2	Oversize Sign	2	1501-EUOS3
3	U-Bolt M12 x 85 Deep x 102 Wide	4	0271-1285102
4	Washer Flat M12	8	0231-F12
5	Nyloc Nut M12	8	0221-NYL12
6	Button Head Screw M6 x 20mm	8	0211-0620BH
7	Washer Flat M6	16	0231-F6
8	Nyloc Nut M6	8	0221-NYL6





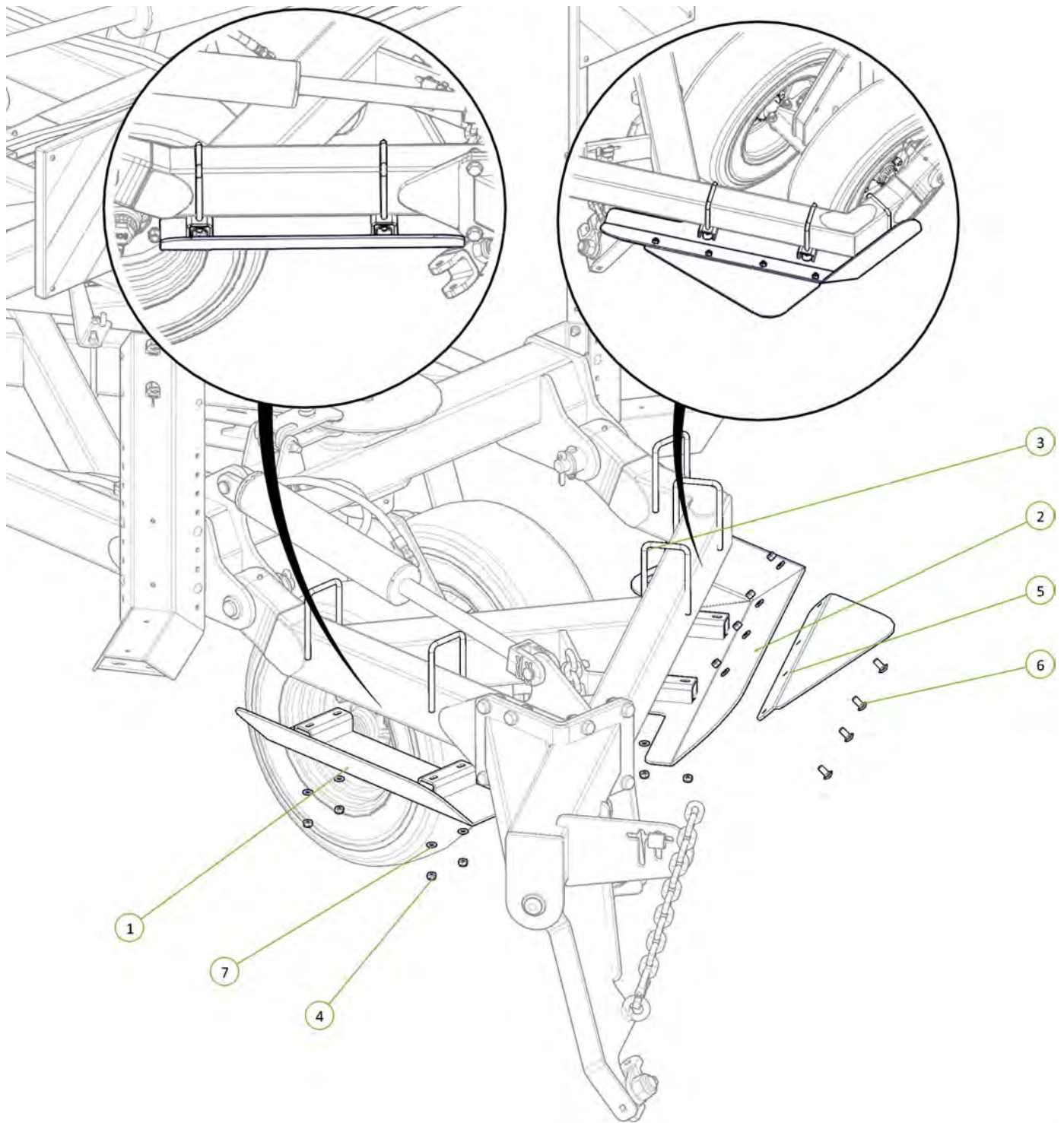
Item No.	Description	Qty	Number
1	Oversize Sign Mounting Bracket	2	1510-45
2	Rear Oversize Sign	2	1510-51
3	Oversize Sign	2	1501-EUOS2
4	M8 x 25 Coach Head ZP Bolt	8	0215-CH820
5	Washer Flat M8	8	0231-F8
6	M12 x 65 Coach Head ZP Bolt	4	0215-CH1265
7	Nyloc Nut M8	8	0221-NYL8
8	Nyloc Nut M12	4	0221-NYL12
9	Washer Flat M12	4	0231-F12
10	Button Head Screw M6 x 50mm	8	0211-0650BH
11	Washer Flat M6	16	0231-F6





Item No.	Description	Qty	Number
1	Module Cylinder Guard	1	0800-167.3
2	M12 x 45 grade 8.8 ZP Bolt	2	0211-1245
3	Nyloc Nut M12	2	0221-NYL12
4	Washer Flat M12	4	0231-F12

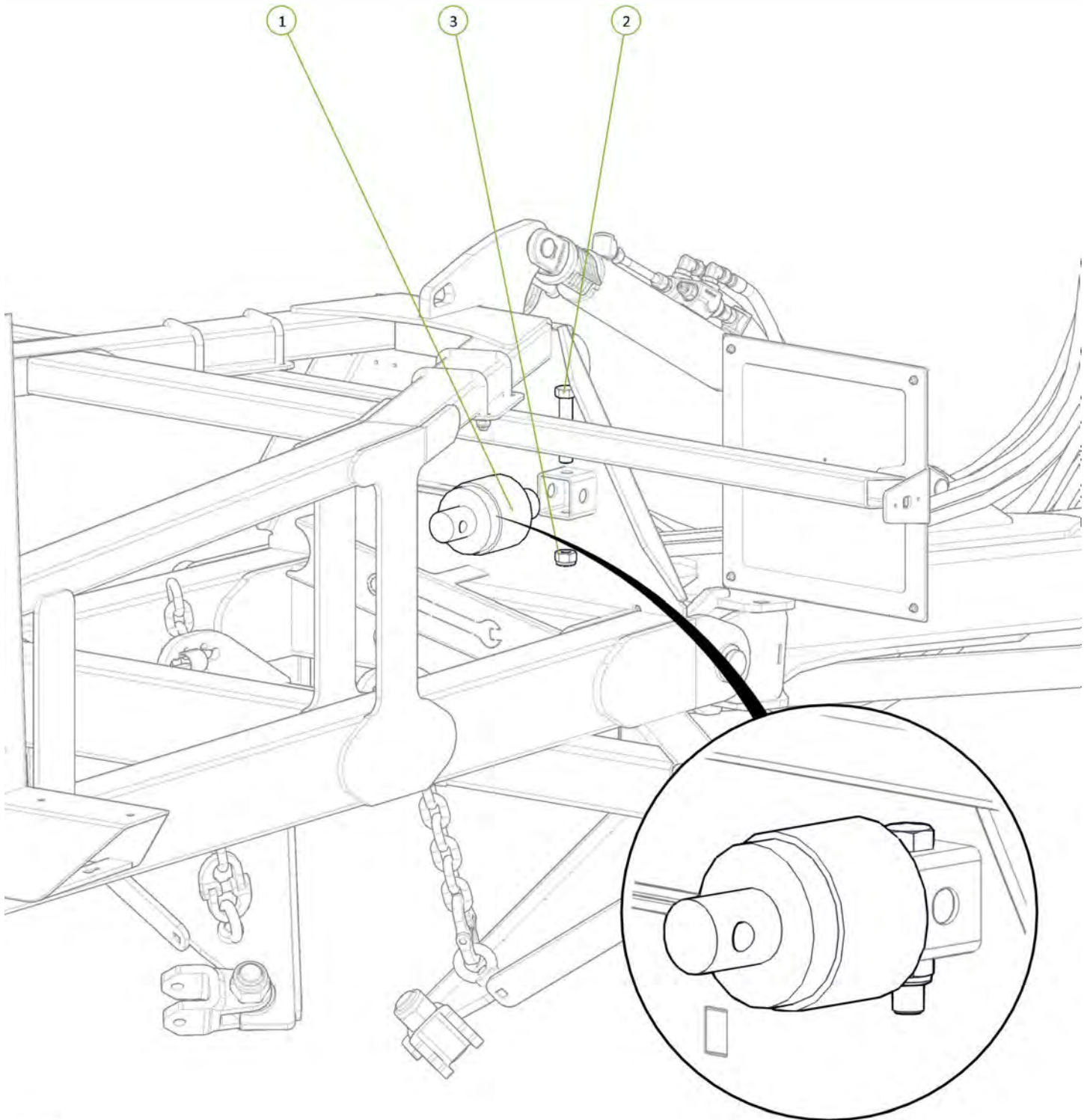




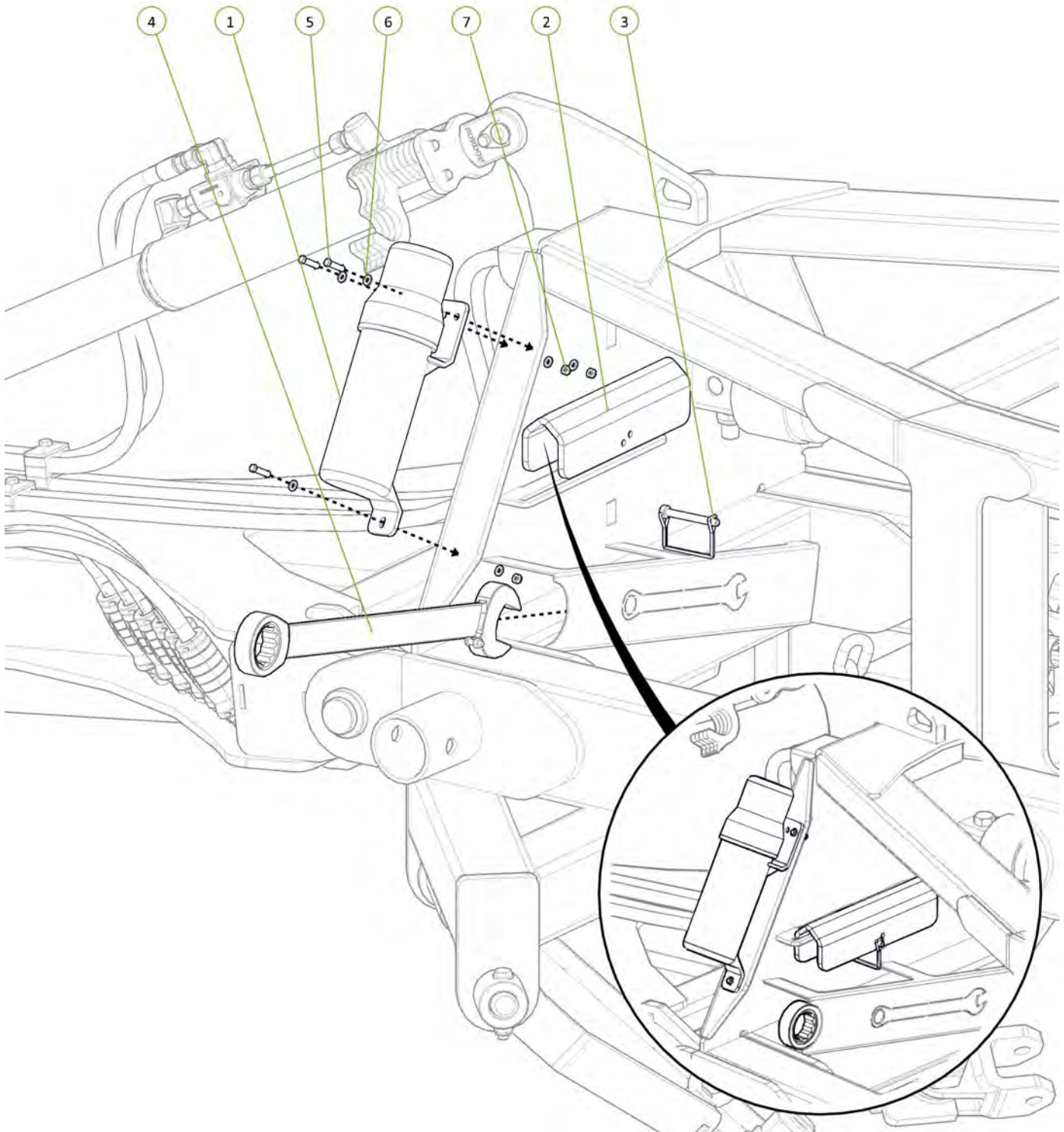
Item No.	Description	Qty	Number
1	Tail Guard Short	1	1510-242
2	Corner Tail Guard	1	1510-243
3	U-Bolt M12 x 185 Deep x 104 Wide	5	0271-12185104
4	Nyloc Nut M12	14	0221-NYL12
5	Tail Guard Extension	1	1500-512
6	M12 x 30 Coach Head Bolt	4	0215-CH1230
7	Washer Flat M12	14	0231-F12



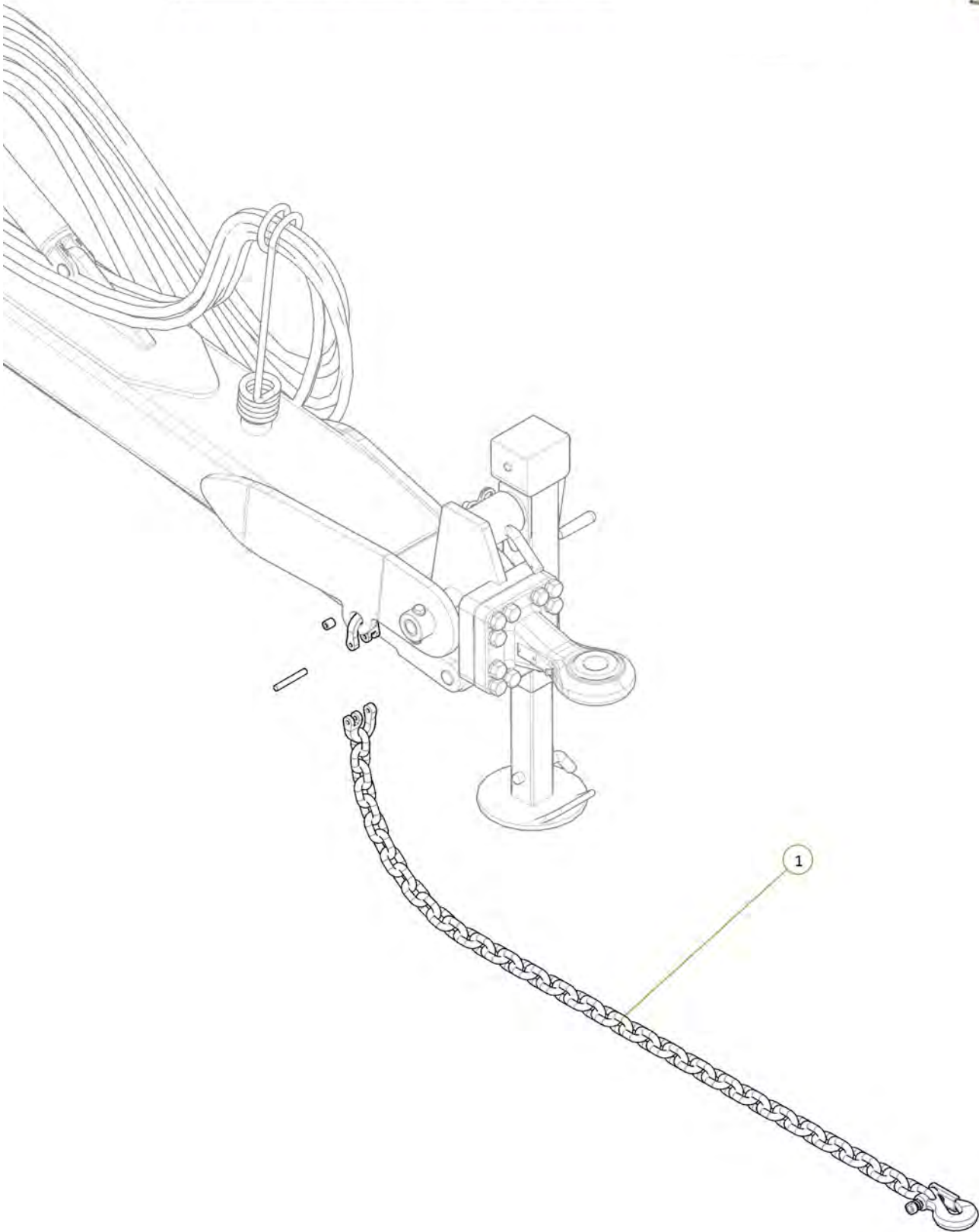
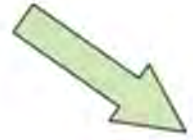
Item No.	Description	Qty	Number
1	20mm Bolt Swivel Unit	1	0802-PCHB55
2	M20 x 110 Grade 10.9 ZP Short Thread Bolt	1	0211-20110ST
3	Nyloc Nut M20	1	0221-NYL20

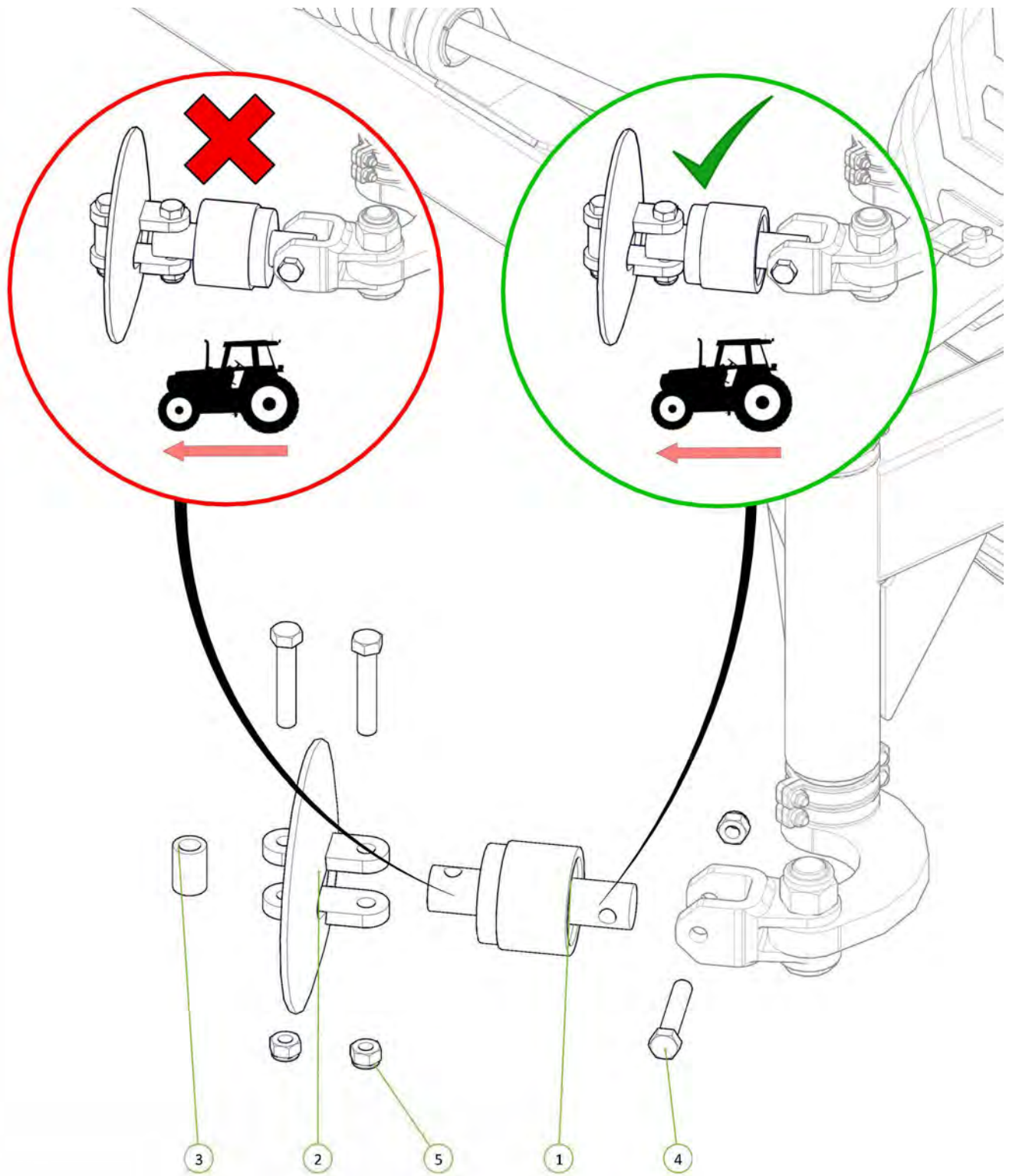


Item No.	Description	Qty	Number
1	Operator Manual Cannister	1	0801-OMC-1
2	Cylinder Safety Stop	1	0800-212.1
3	Square Loop Pin M8 x 63	1	0511-PINLOOPSQ863
4	Ratcheting Gear Wrench 1 3/4"	1	0802-GW1 3-4
5	M6 x 1 x 25mm Grade 4.6 ZP Bolt	3	0211-625
6	Washer Flat M6	6	0231-F6
7	Nyloc Nut M6	3	0221-NYL6



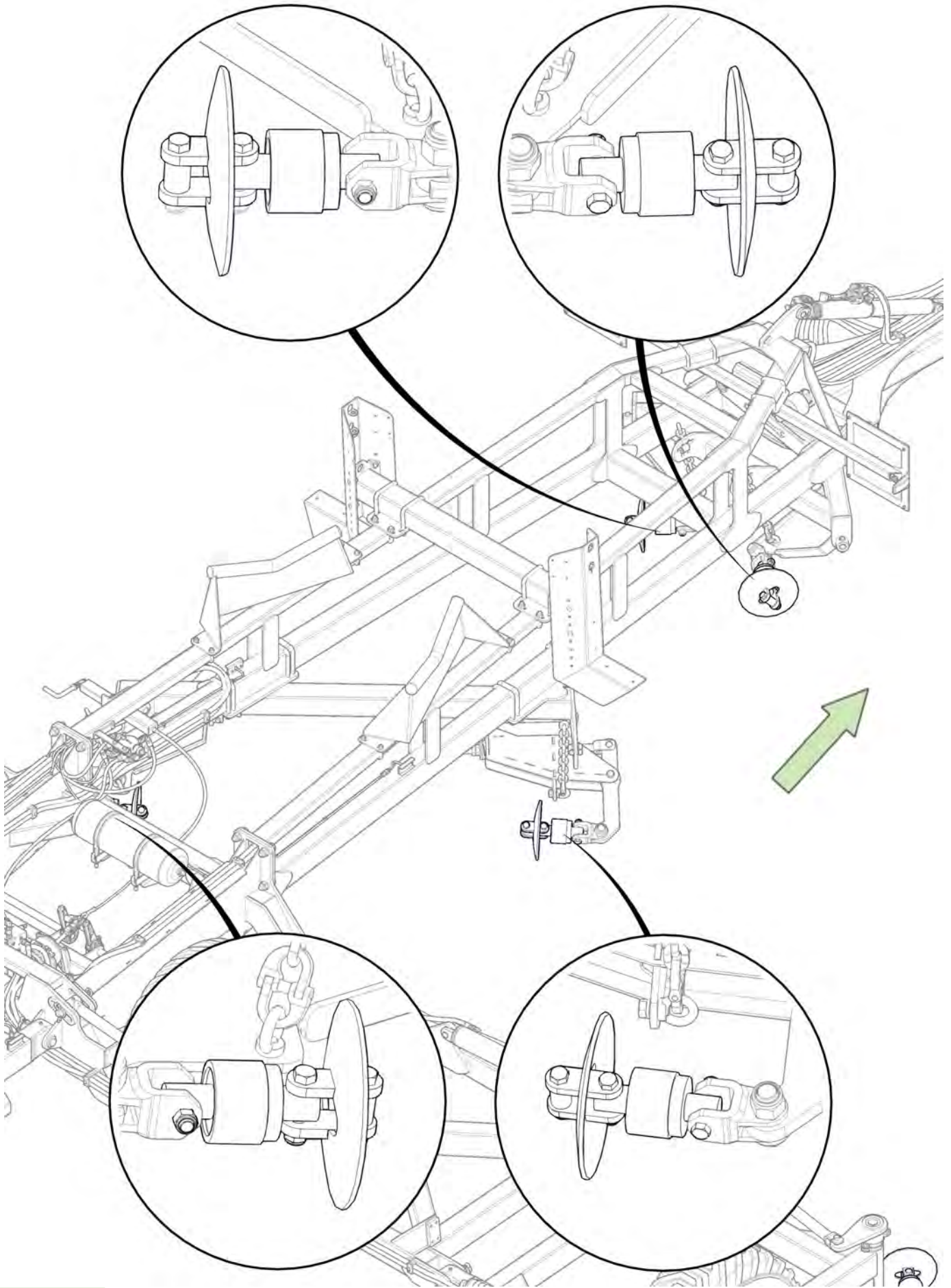
Item No.	Description	Qty	Number
1	Safety Chain Assembly	1	0810-16

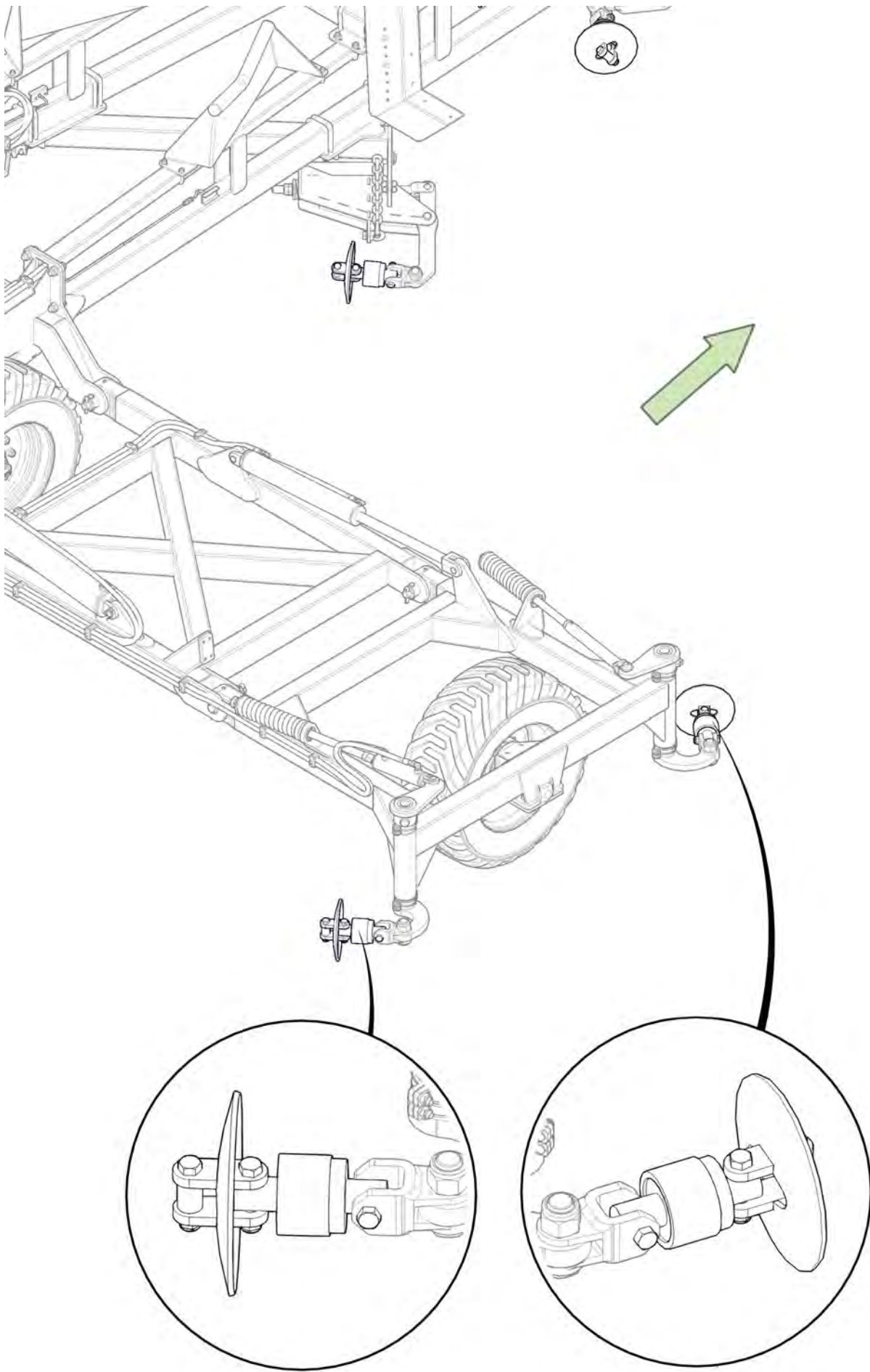


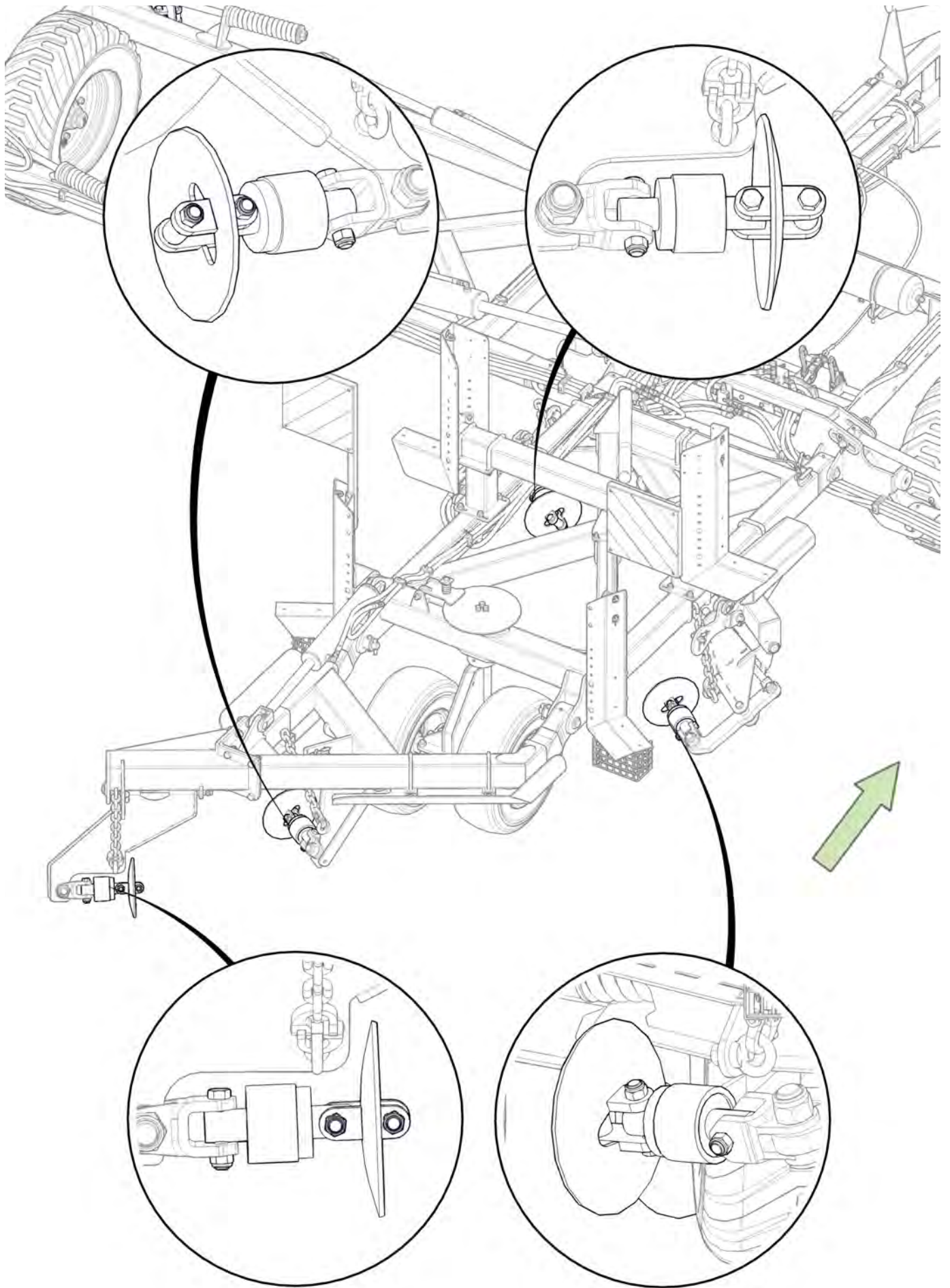


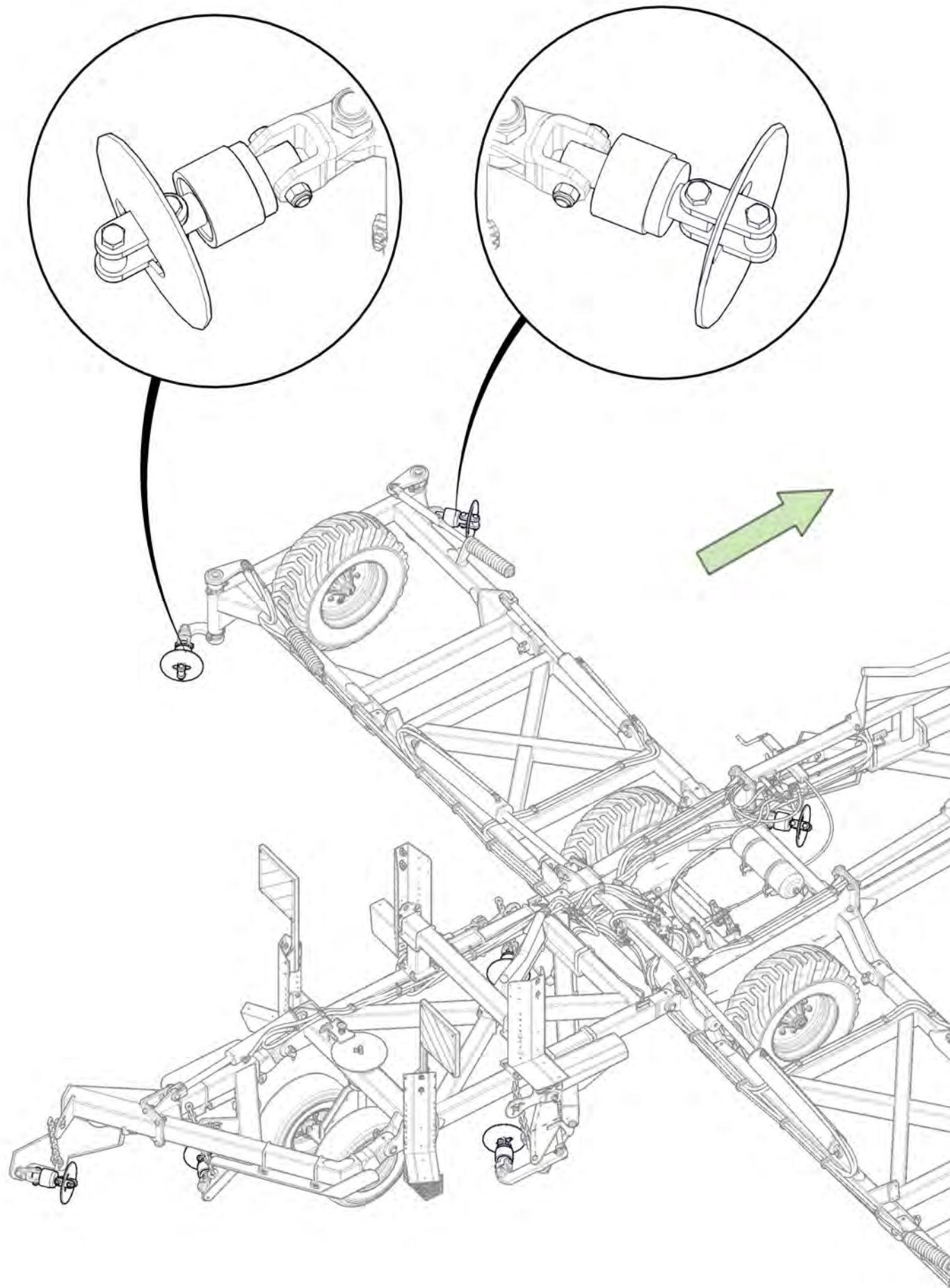
Item No.	Description	Qty	Number
1	20mm Bolt Swivel Unit	1	0802-PCHB55
2	Tie Plate Link 20mm	1	0802-DCTP-20
3	Disc Chain Spacer	1	0801-PCDCS55
4	M20 x 110 grade 10.9 ZP Short Thread Bolt	3	0211-20110ST
5	Nyloc Nut M20	3	0221-NYL20

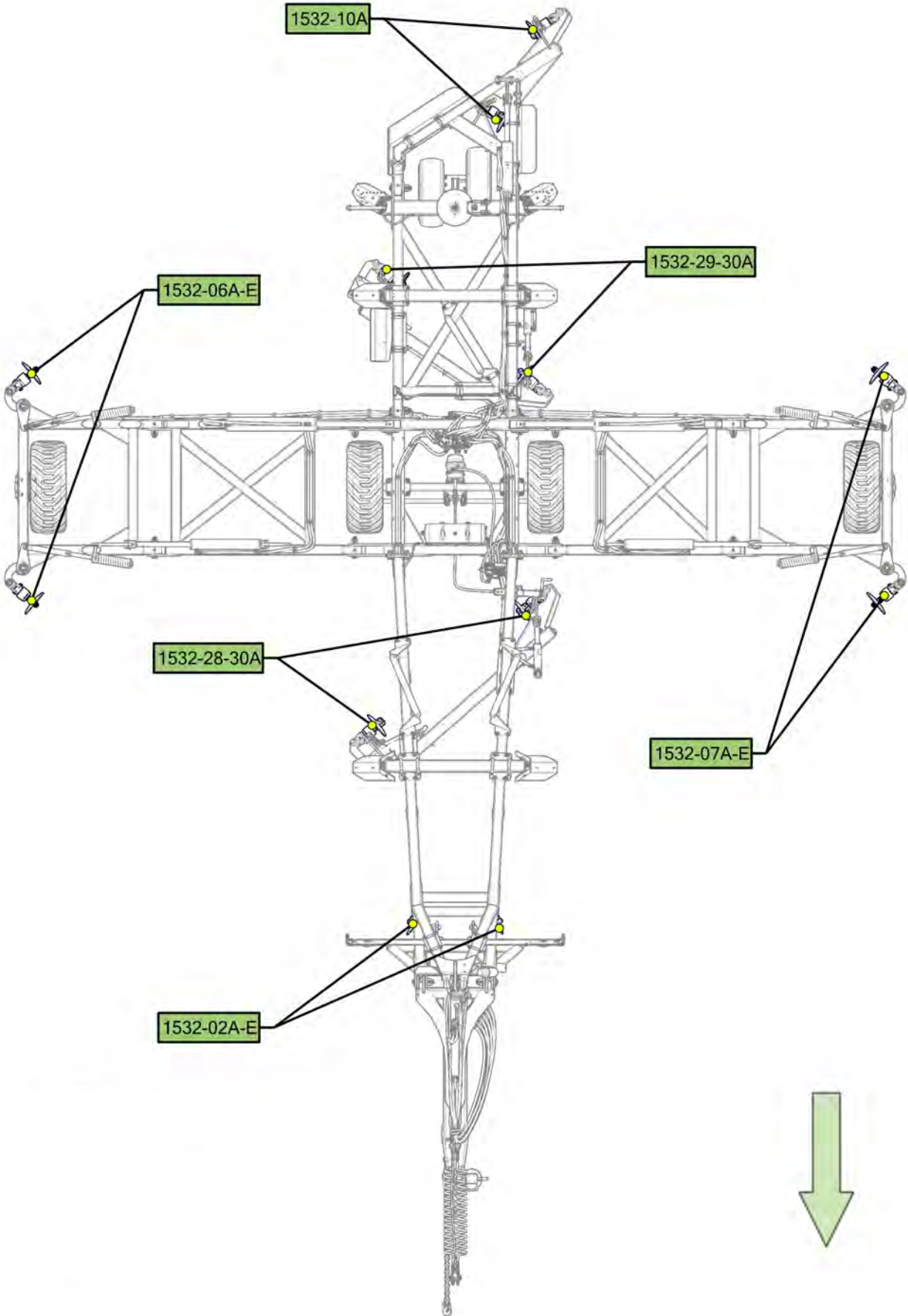


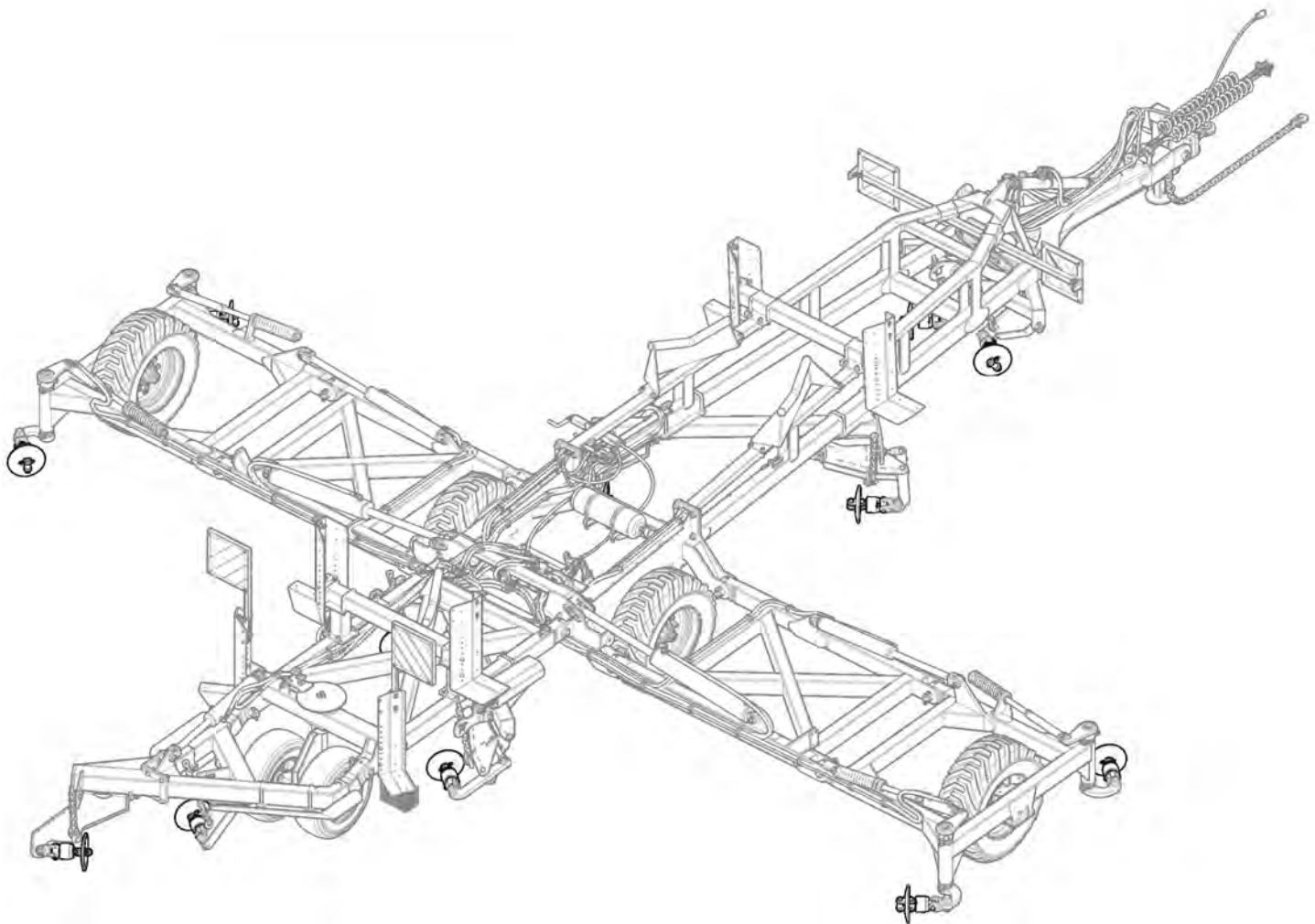








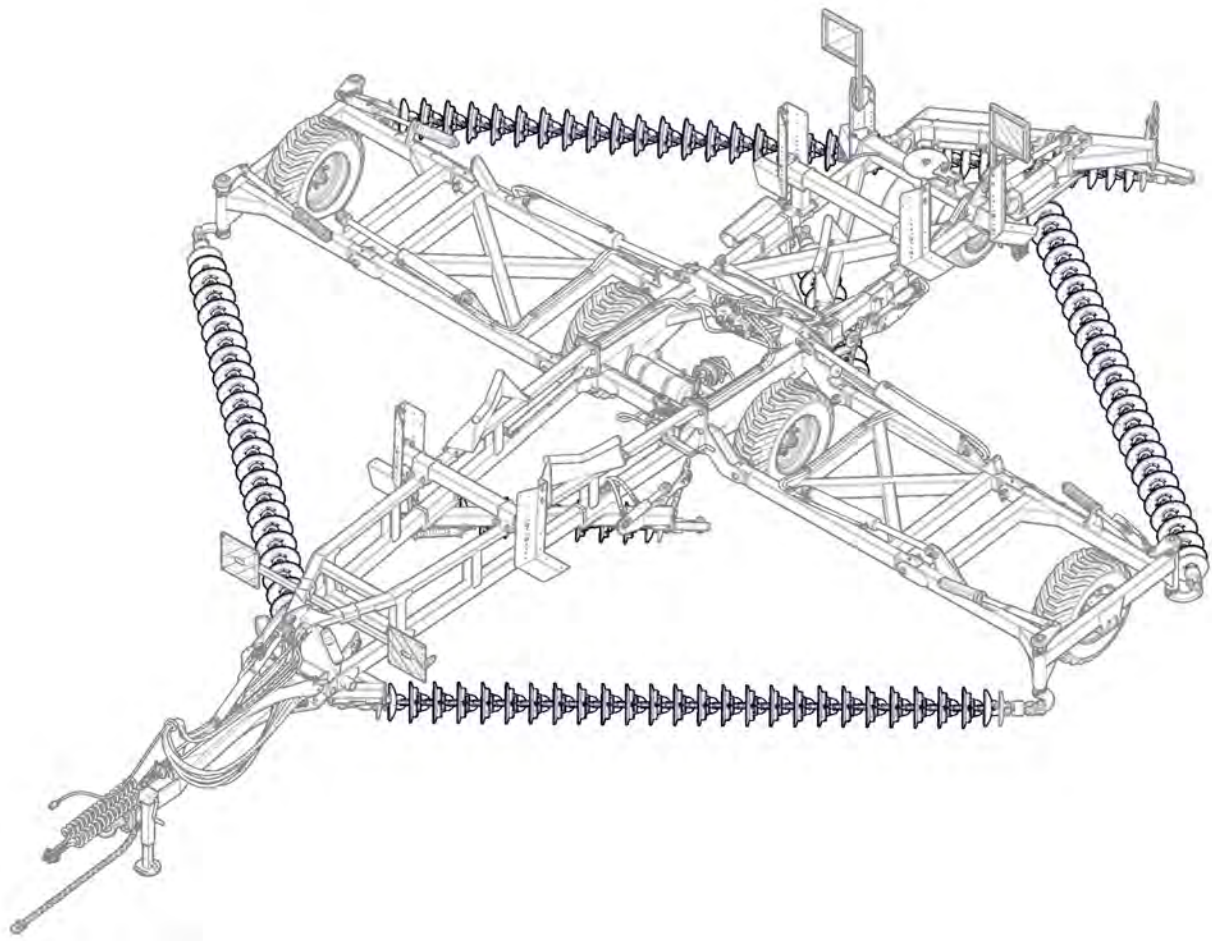




All bearings correctly orientated with seal facing rear of the machine

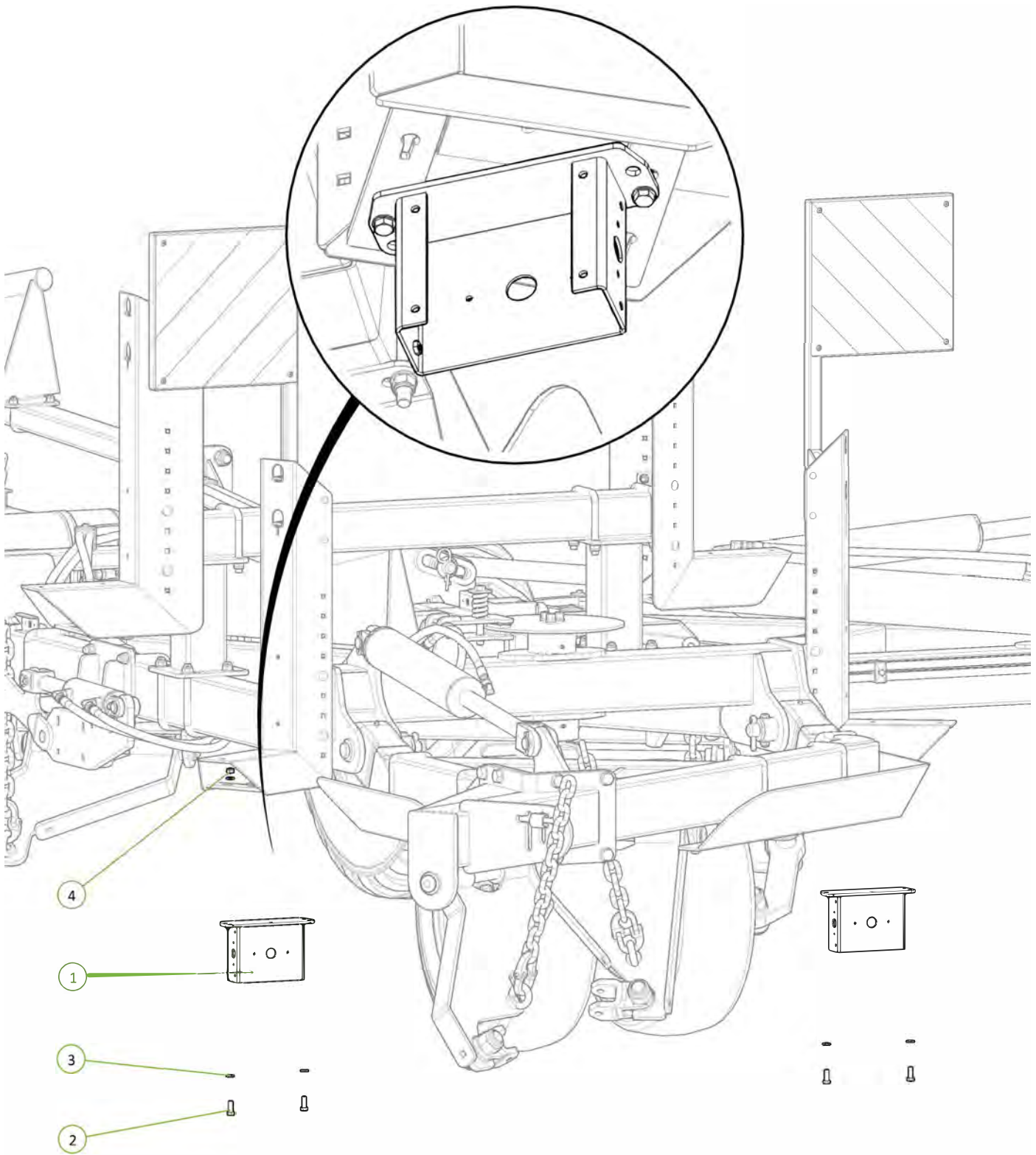


Signed _____ Date __/__/__
Unit Serial Number _____



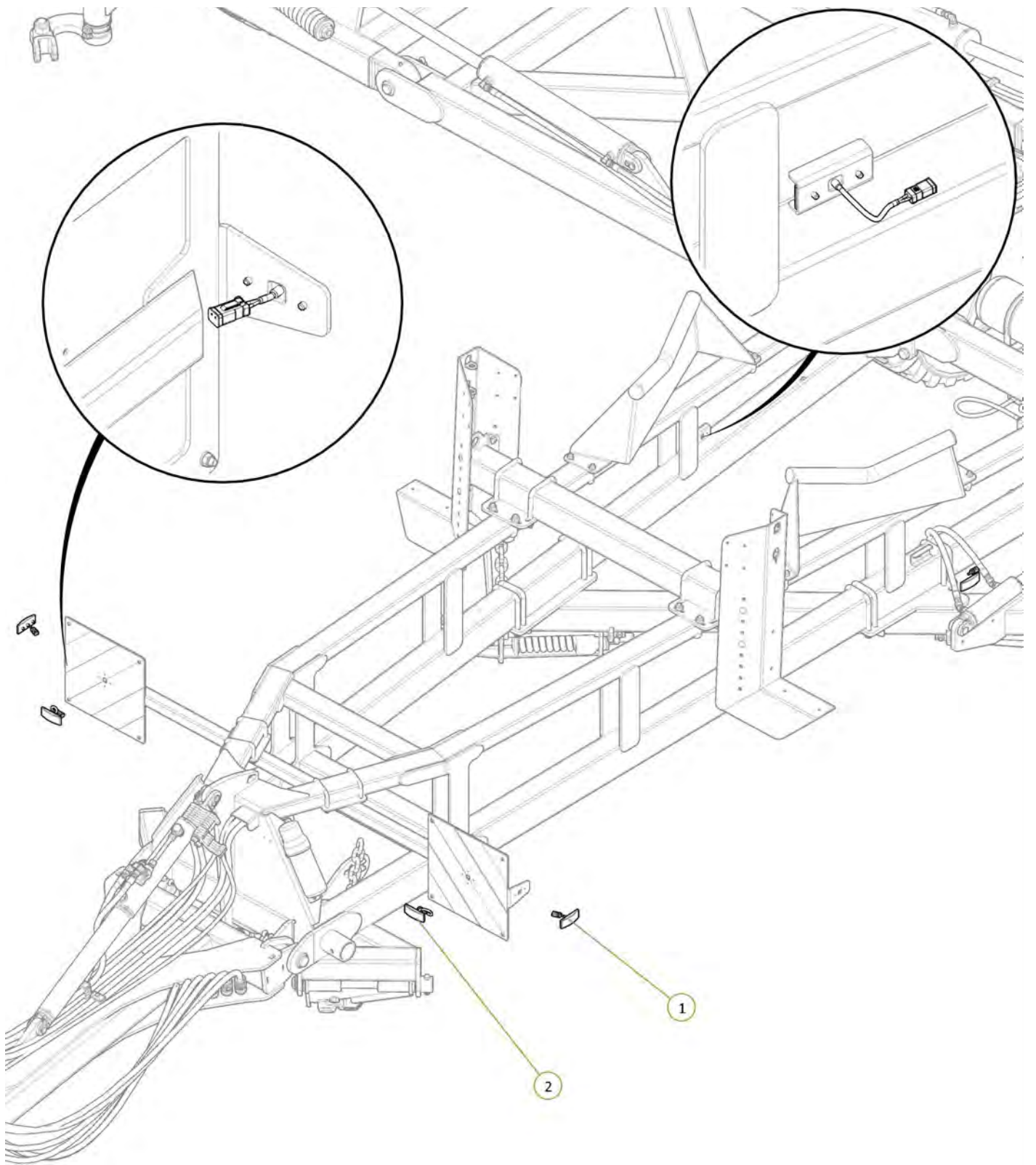
Section 2

Light Kits



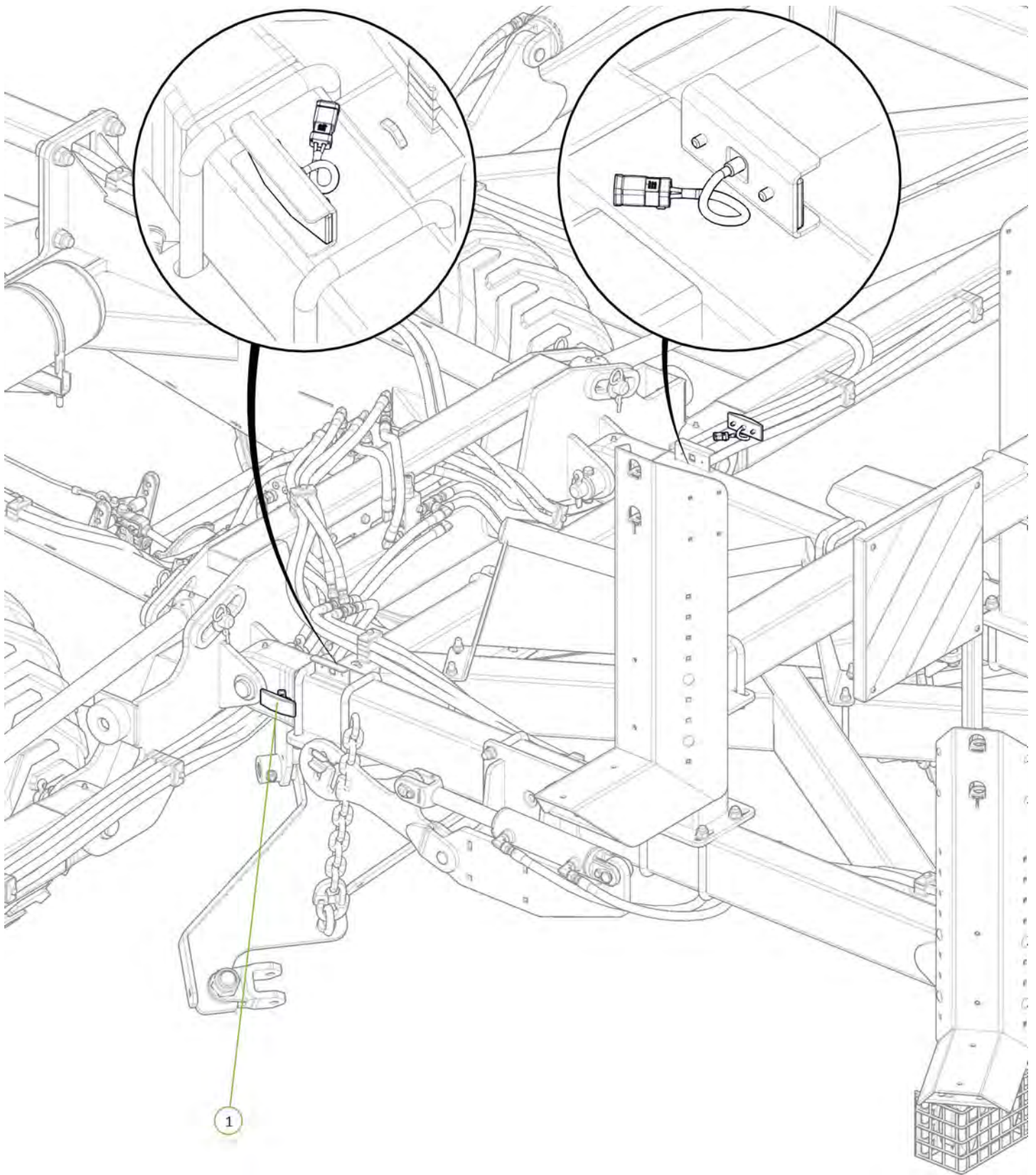
Item No.	Description	Qty	Number
1	Rear Light Bracket	2	1510-238
2	M10 x 30 Grade 8.8 ZP Bolt	4	0211-1030
3	Washer Flat M10	8	0231-F10
4	Nyloc Nut M10	4	0221-NYL10



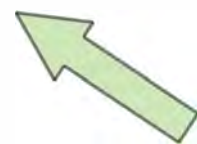


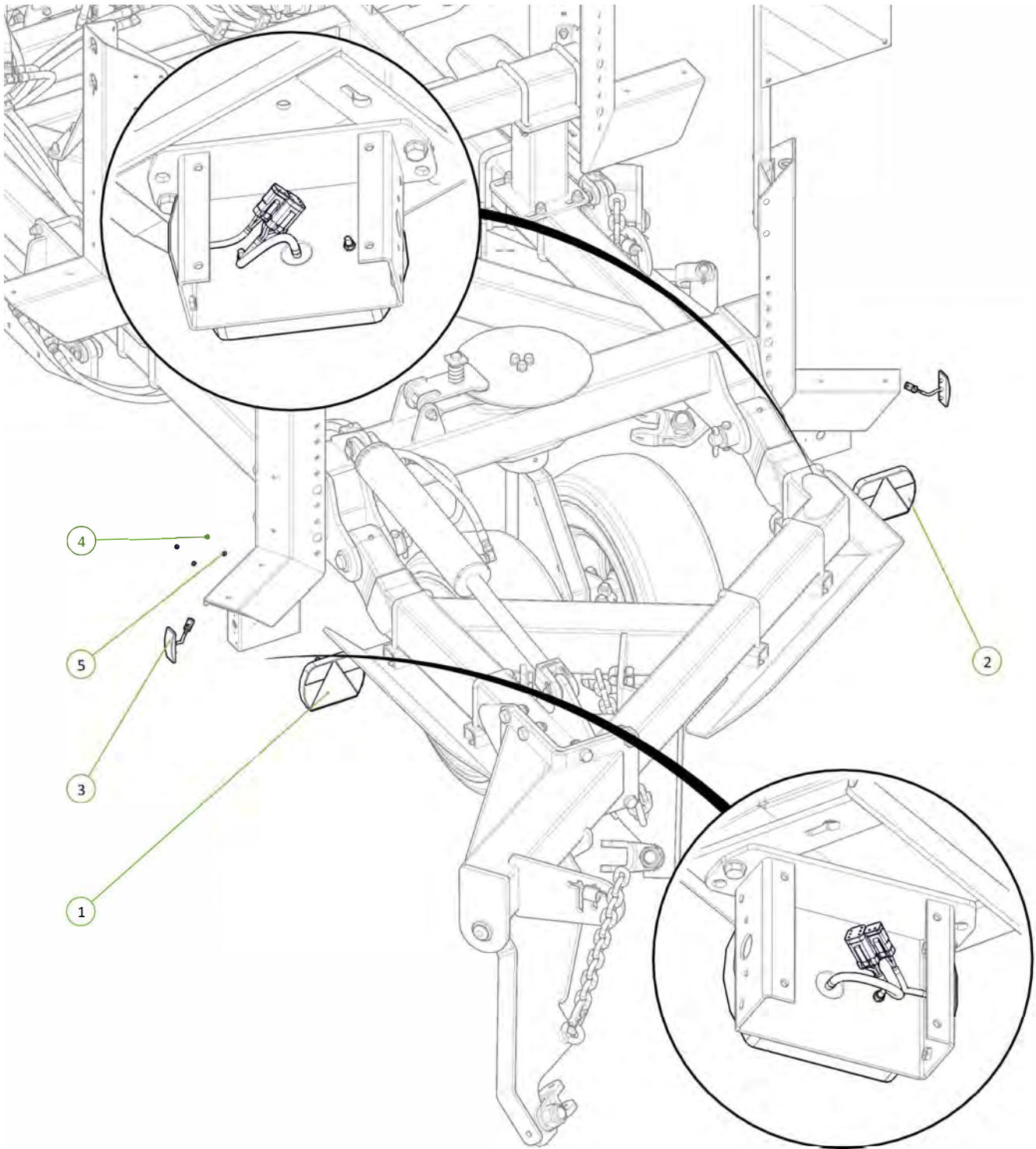
Item No.	Description	Qty	Number
1	Amber Position Marker Light	4	0412-LEDEU38AM
2	White Position Marker Light	2	0412-LEDEU38WM





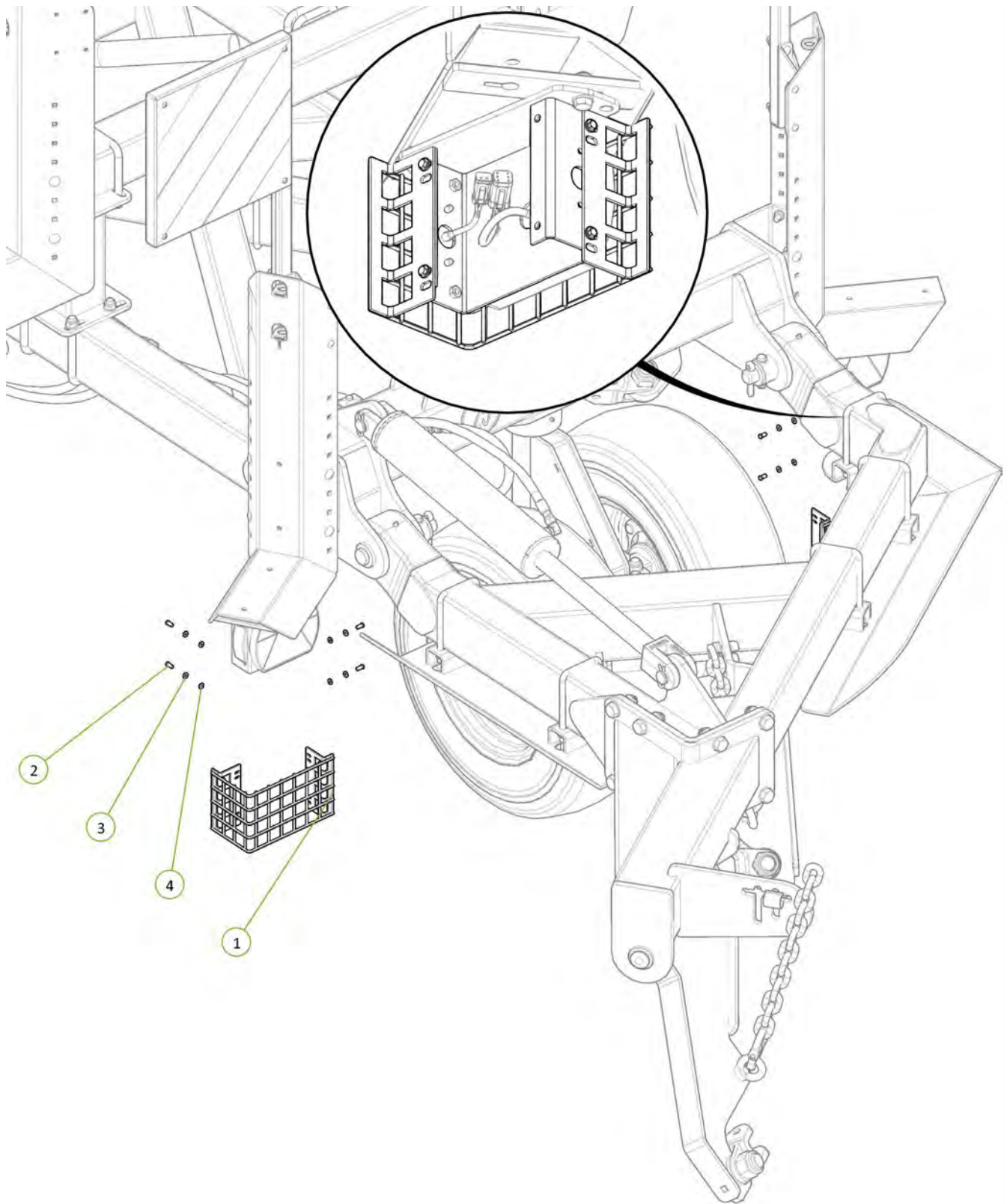
Item No.	Description	Qty	Number
1	Amber Position Marker Light	2	0412-LEDEU38AM





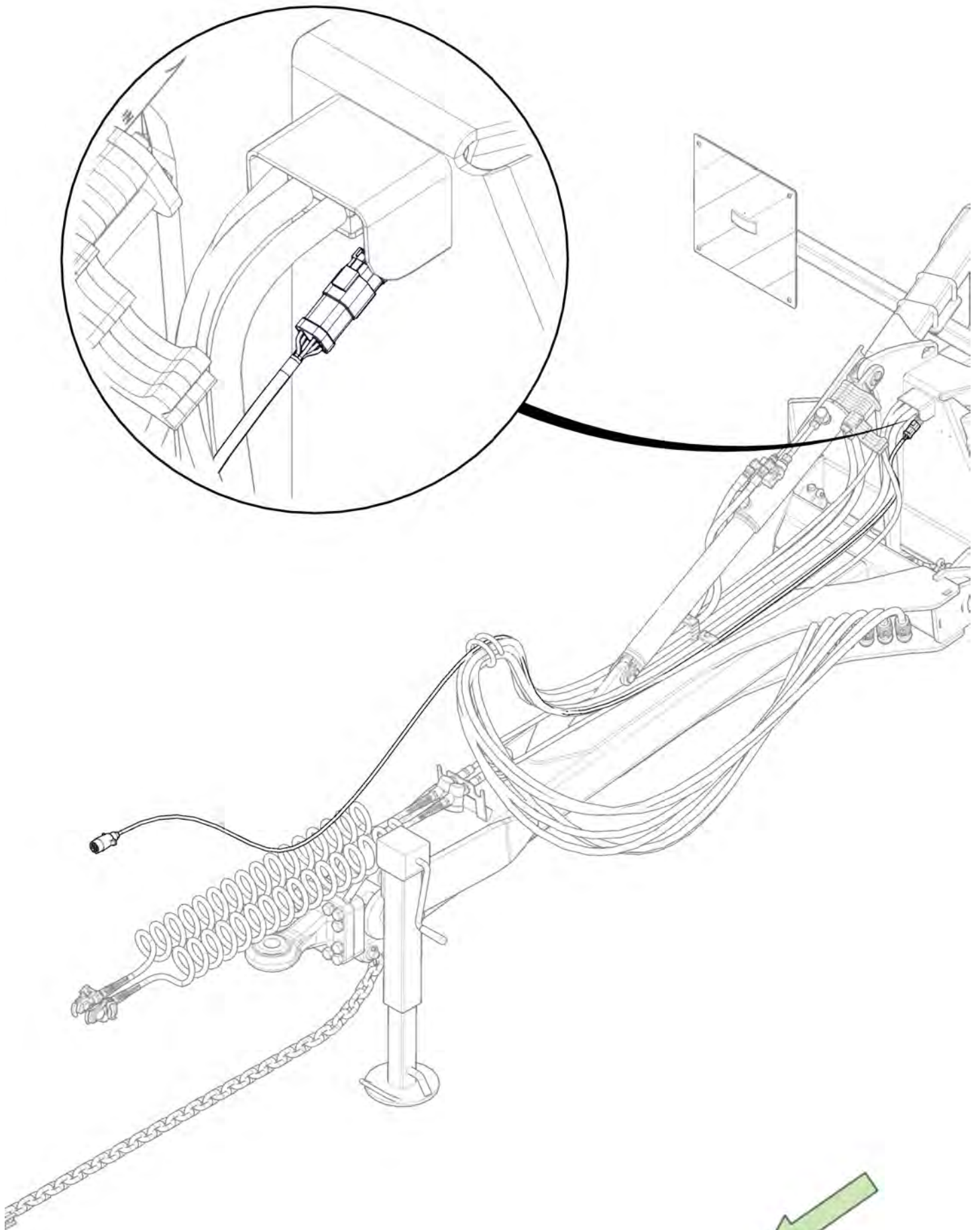
Item No.	Description	Qty	Number
1	LED Combination Tail Light Left	1	0412-EU200L
2	LED Combination Tail Light Right	1	0412-EU200R
3	Series Amber Position Marker Light	2	0412-LEDEU38AM
4	Nyloc Nut M5	4	0221-NYL5
5	Washer Flat M5	4	0231-F5

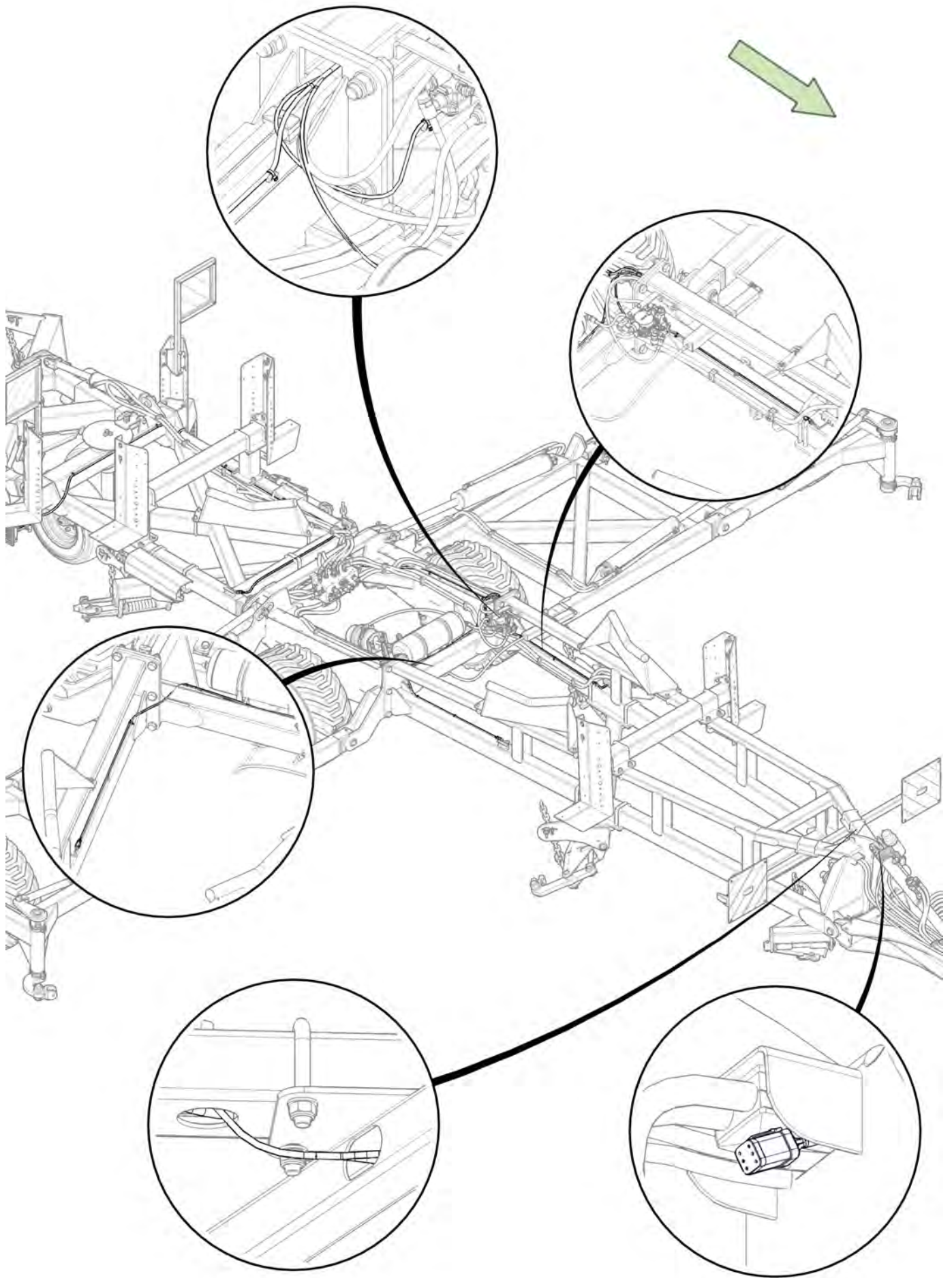


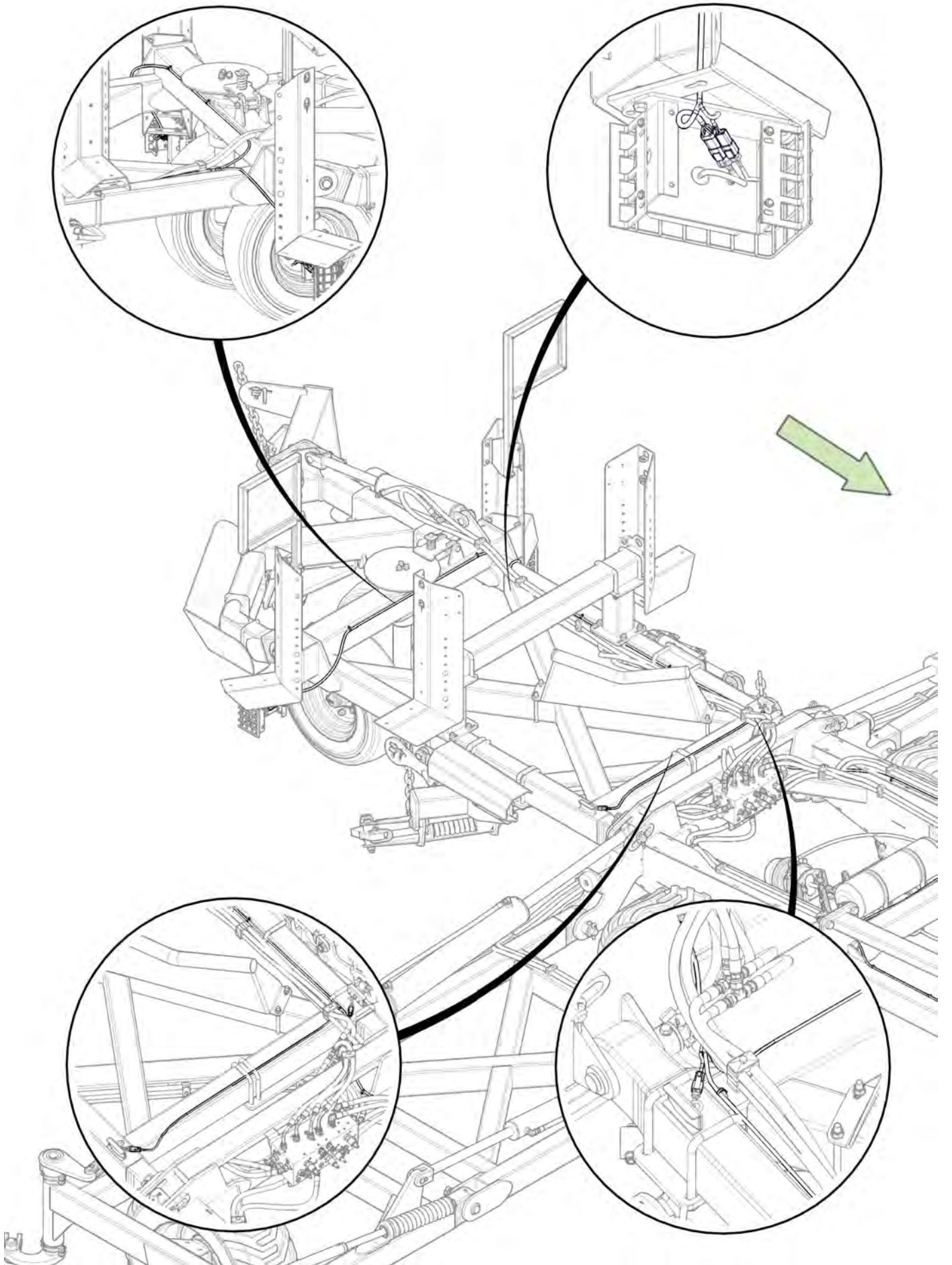


Item No.	Description	Qty	Number
1	Rear Light Bracket Guard	2	1510-239
2	M6 x 15mm Grade 4.6 ZP Bolt	8	0211-615
3	Washer Flat M6	8	0231-F6
4	Washer Spring M6	8	0231-S6





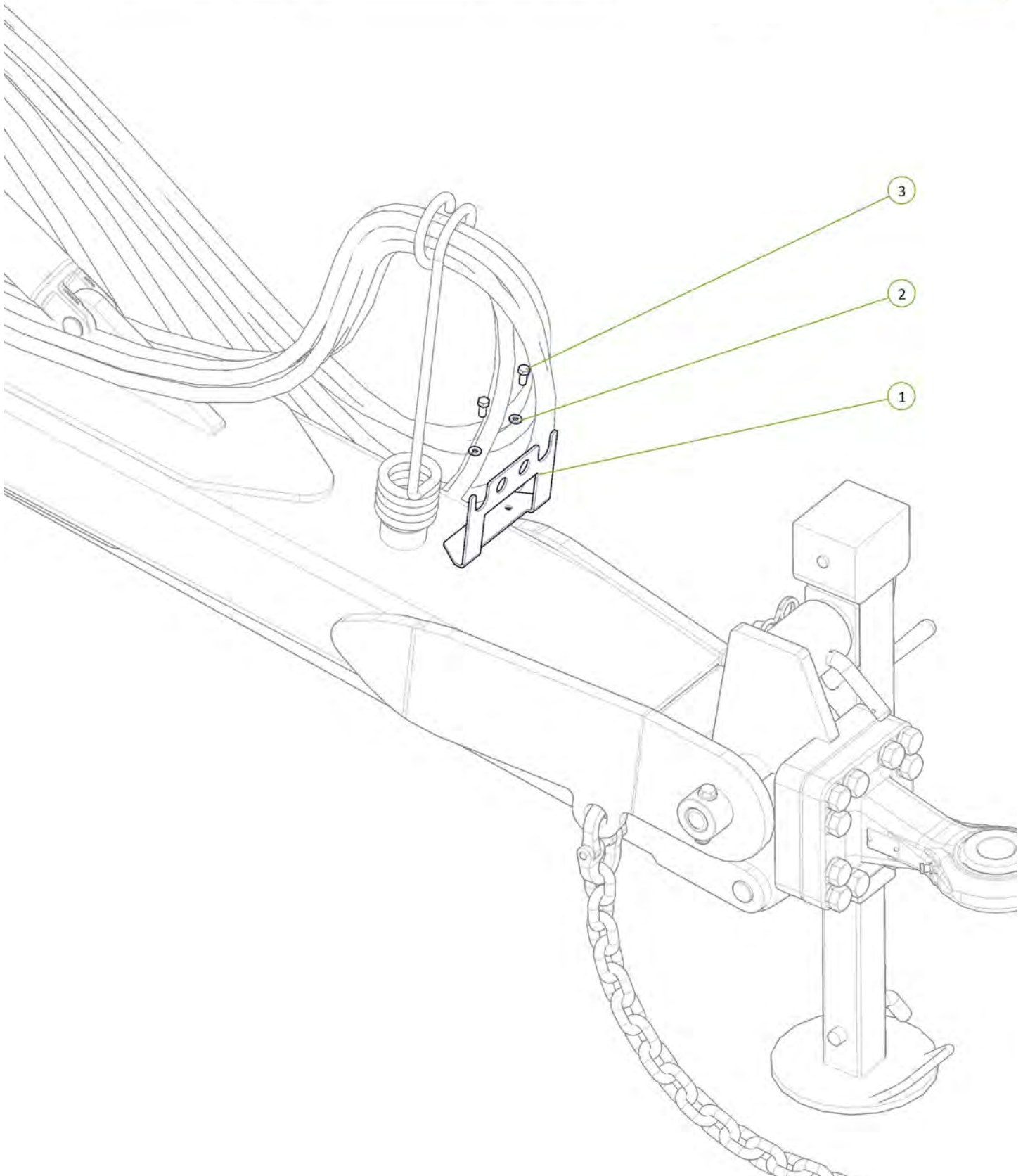
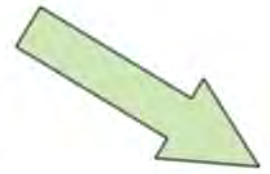


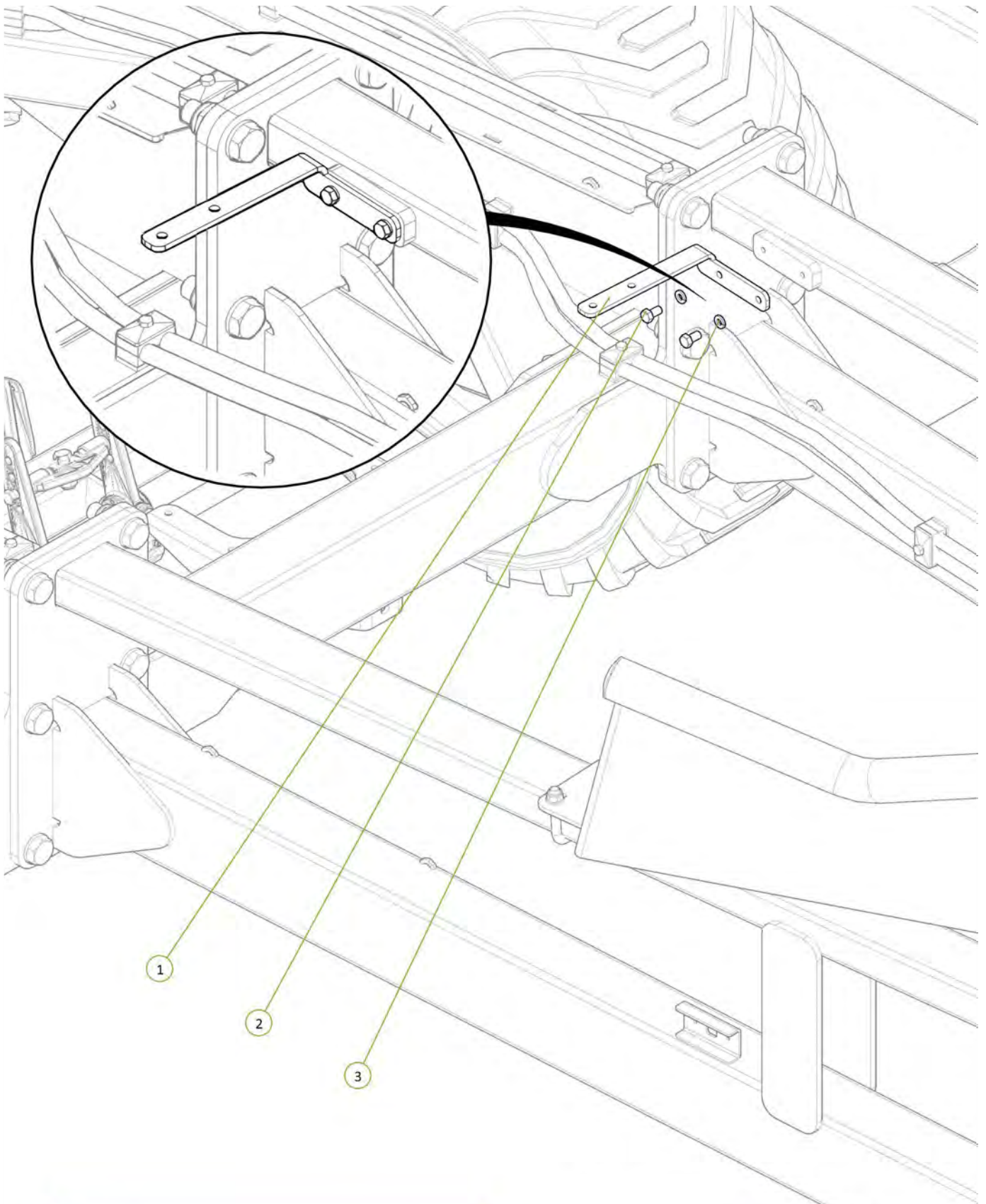


Section 3

Braking Components

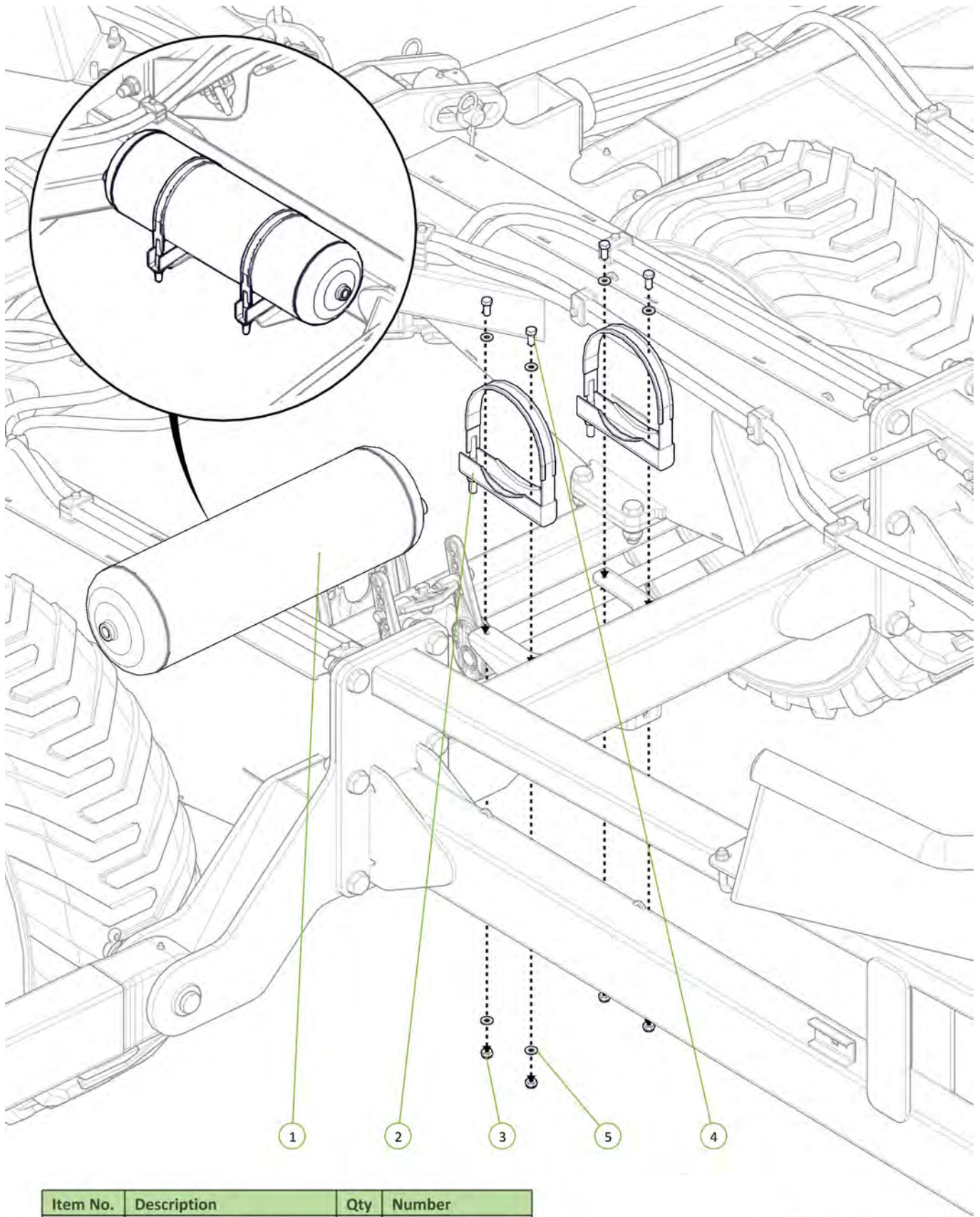
Item No.	Description	Qty	Number
1	9m Air Coupling Storage Bracket	1	1500-402
2	Washer Spring M8	2	0231-S8
3	M8 x 20 grade 8.8 ZP Bolt	2	0211-820



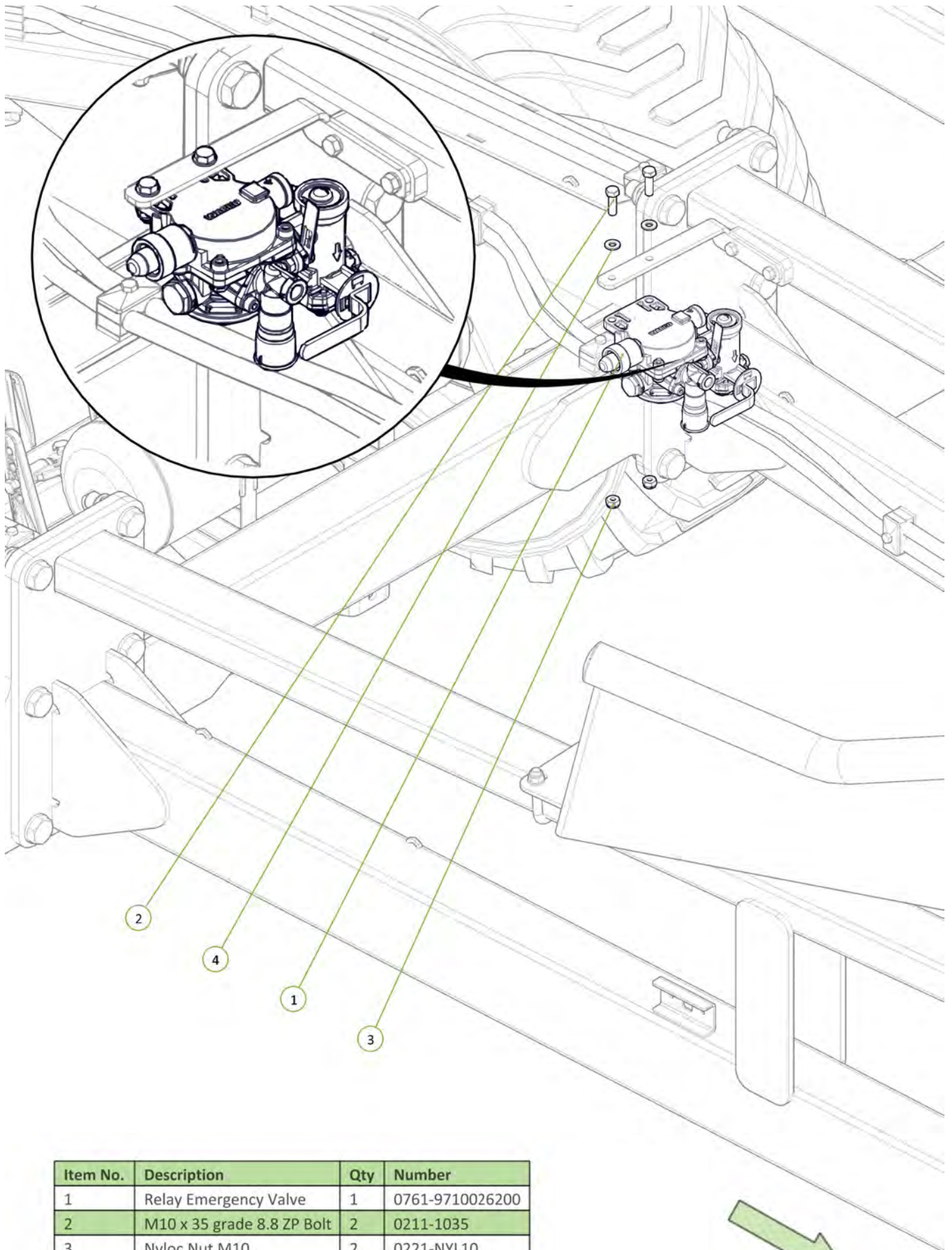


Item No.	Description	Qty	Number
1	Air Valve Bracket	1	1500-401
2	M10 x 20 Grade 8.8 ZP Bolt	2	0211-1020
3	Washer Spring M10	2	0231-510

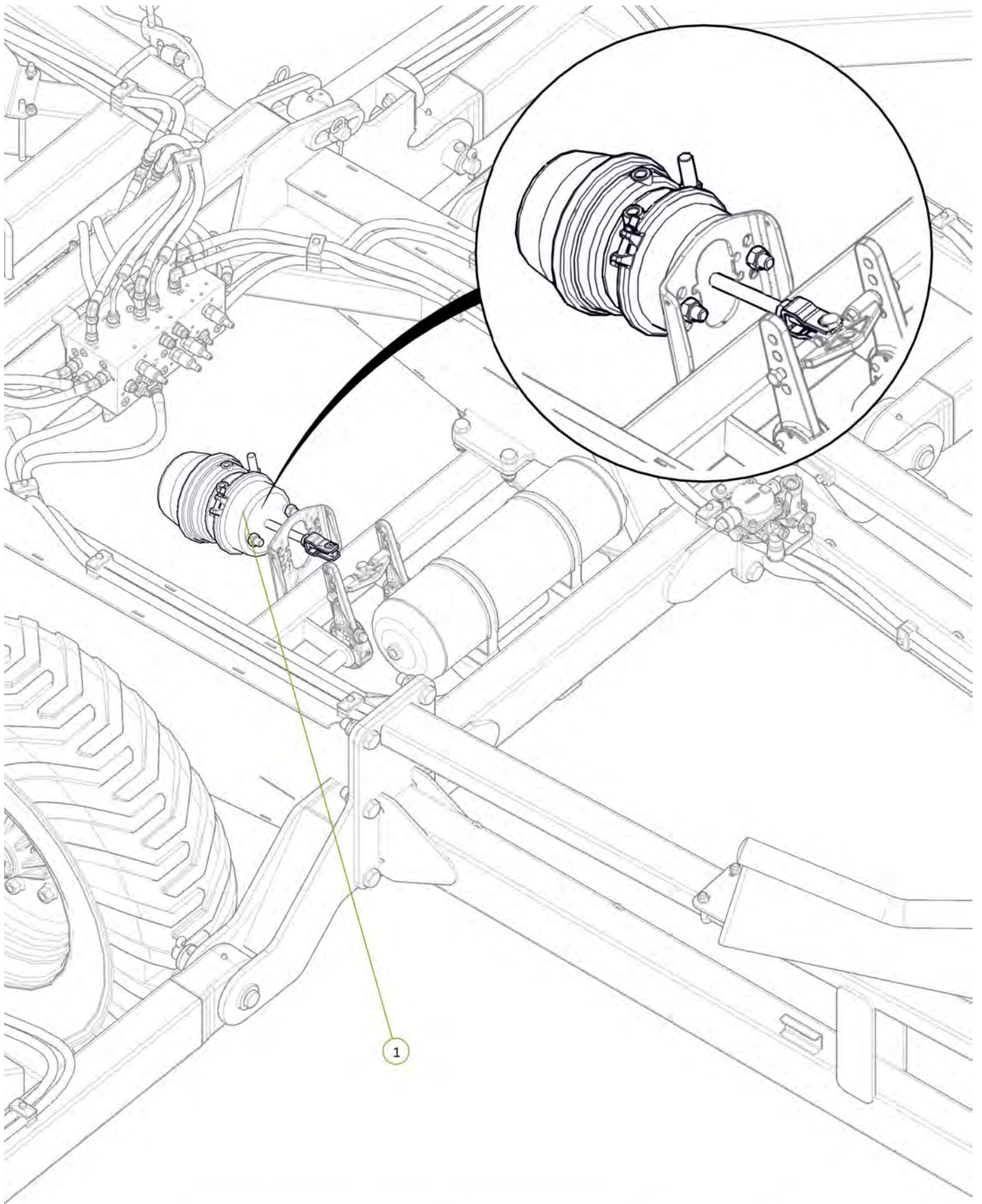




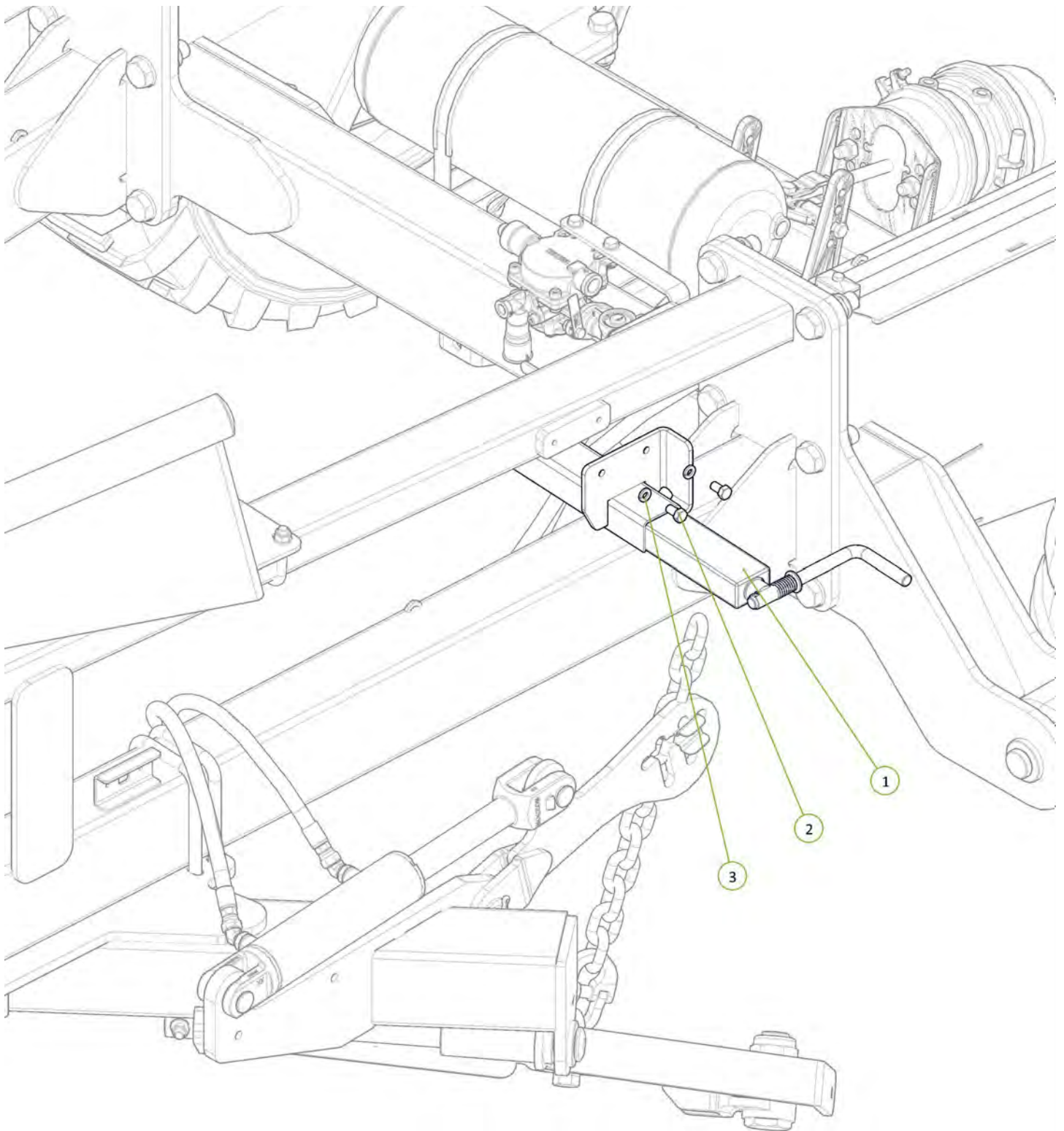
Item No.	Description	Qty	Number
1	Air Reservoir 20L	1	0761-9504200030
2	20L Air Reservoir Bracket	2	0761-9504053512
3	Nyloc Nut M10	4	0221-NYL10
4	M10 x 25 grade 8.8 ZP Bolt	4	0211-1025
5	Washer Flat M10	8	0231-F10



Item No.	Description	Qty	Number
1	Relay Emergency Valve	1	0761-9710026200
2	M10 x 35 grade 8.8 ZP Bolt	2	0211-1035
3	Nyloc Nut M10	2	0221-NYL10
4	Washer Flat M10	2	0231-F10

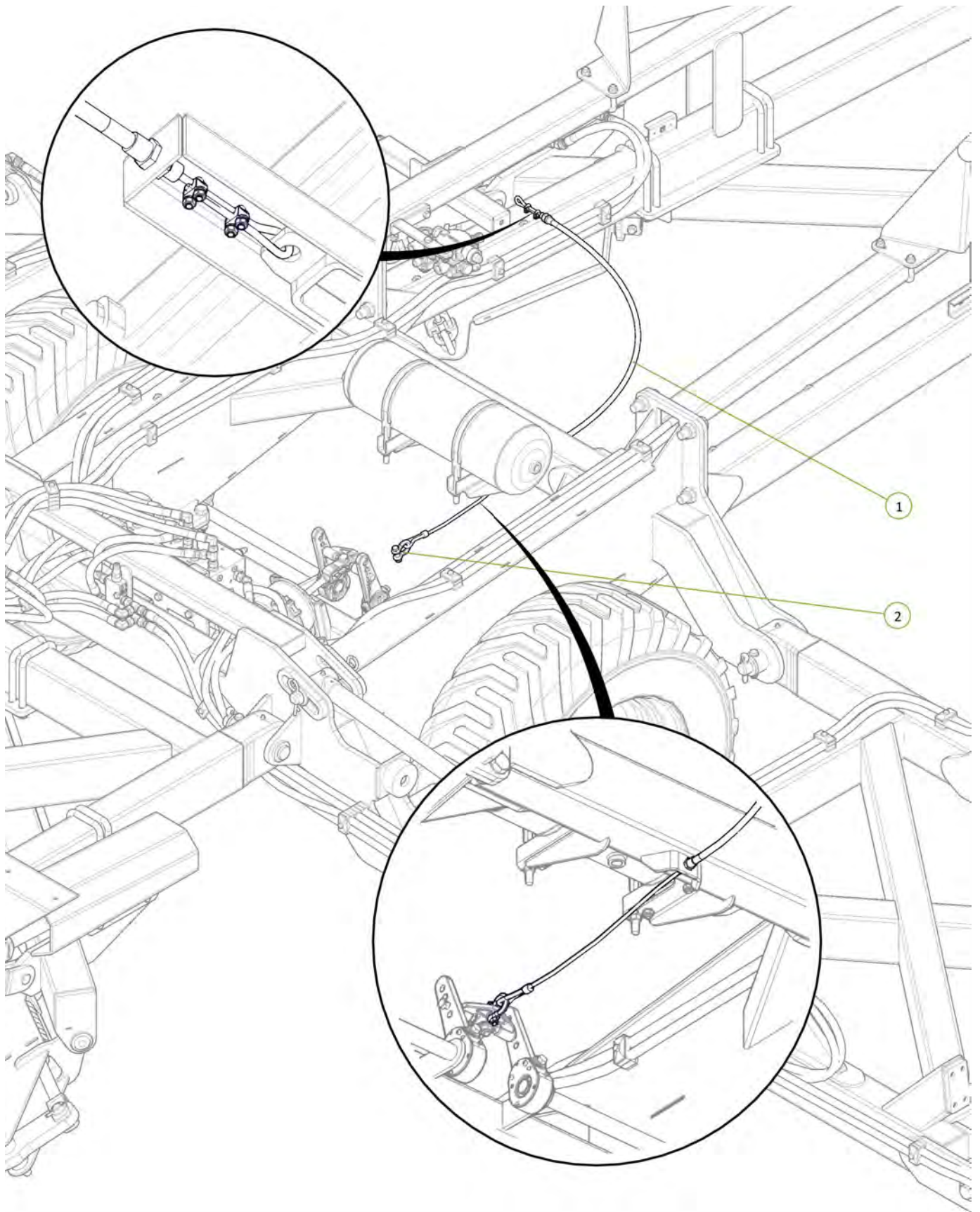


Item No.	Description	Qty	Number
1	Brake Chamber 24/30	1	0761-M357300053

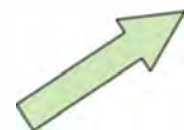


Item No.	Description	Qty	Number
1	Parking Brake Mechanism	1	0761-9MPB
2	M10 x 20 grade 8.8 ZP Bolt	2	0211-1020
3	Washer Spring M10	2	0231-S10

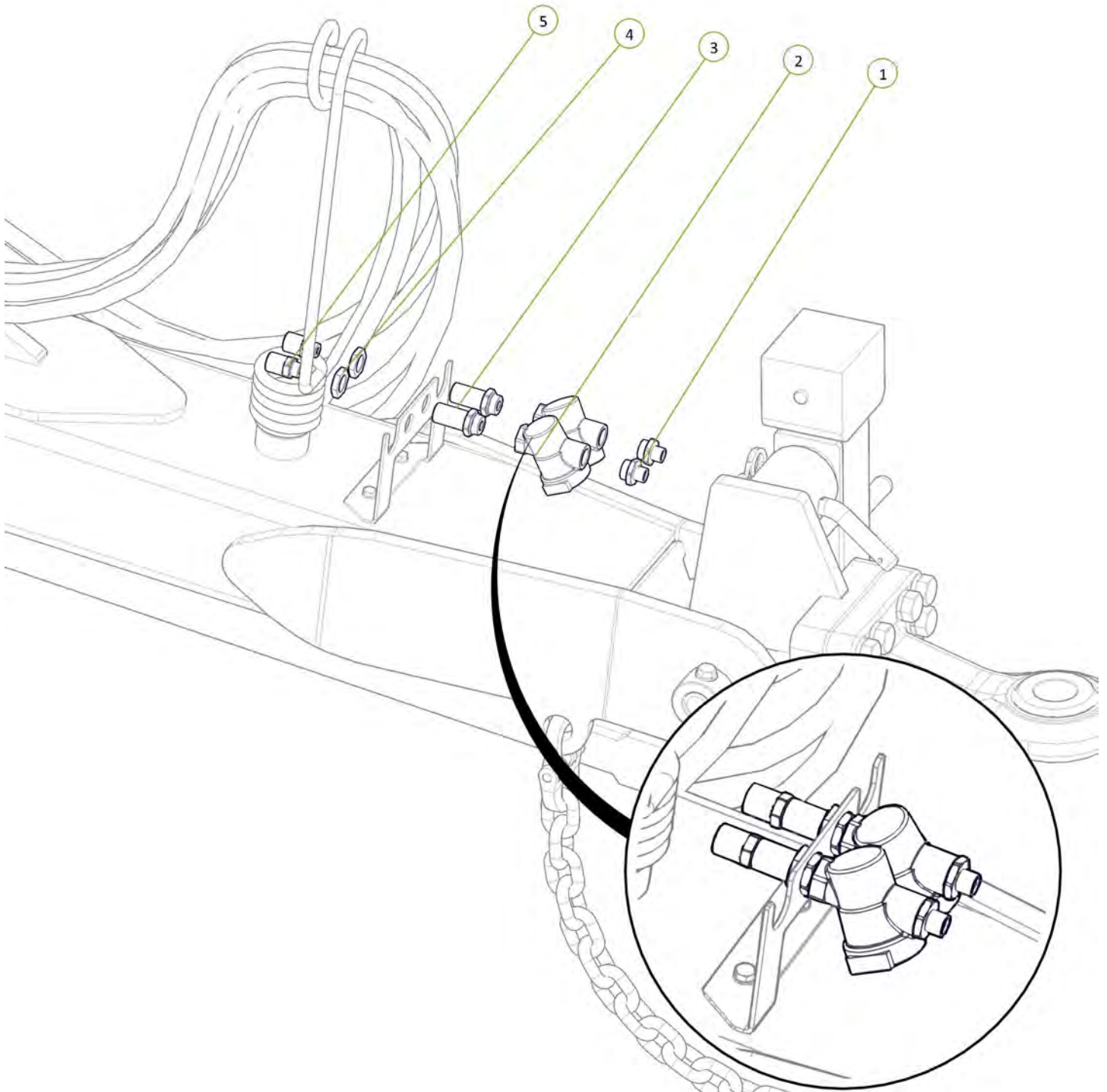


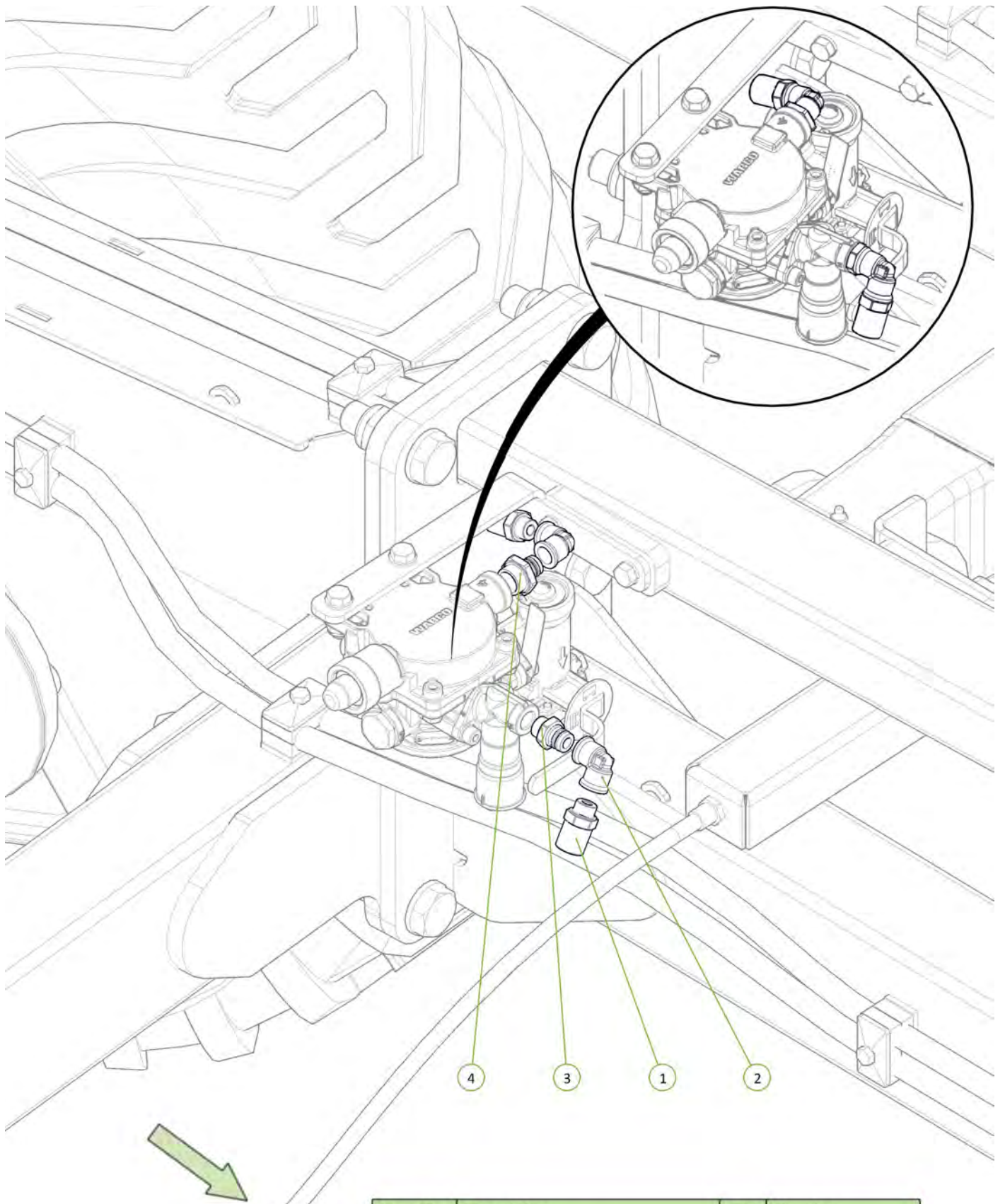


Item No.	Description	Qty	Number
1	Parking Brake Cable	1	0761-PARKCABLE-9M
2	Parking Brake Shackle	1	0761-BRAKESHACKLE



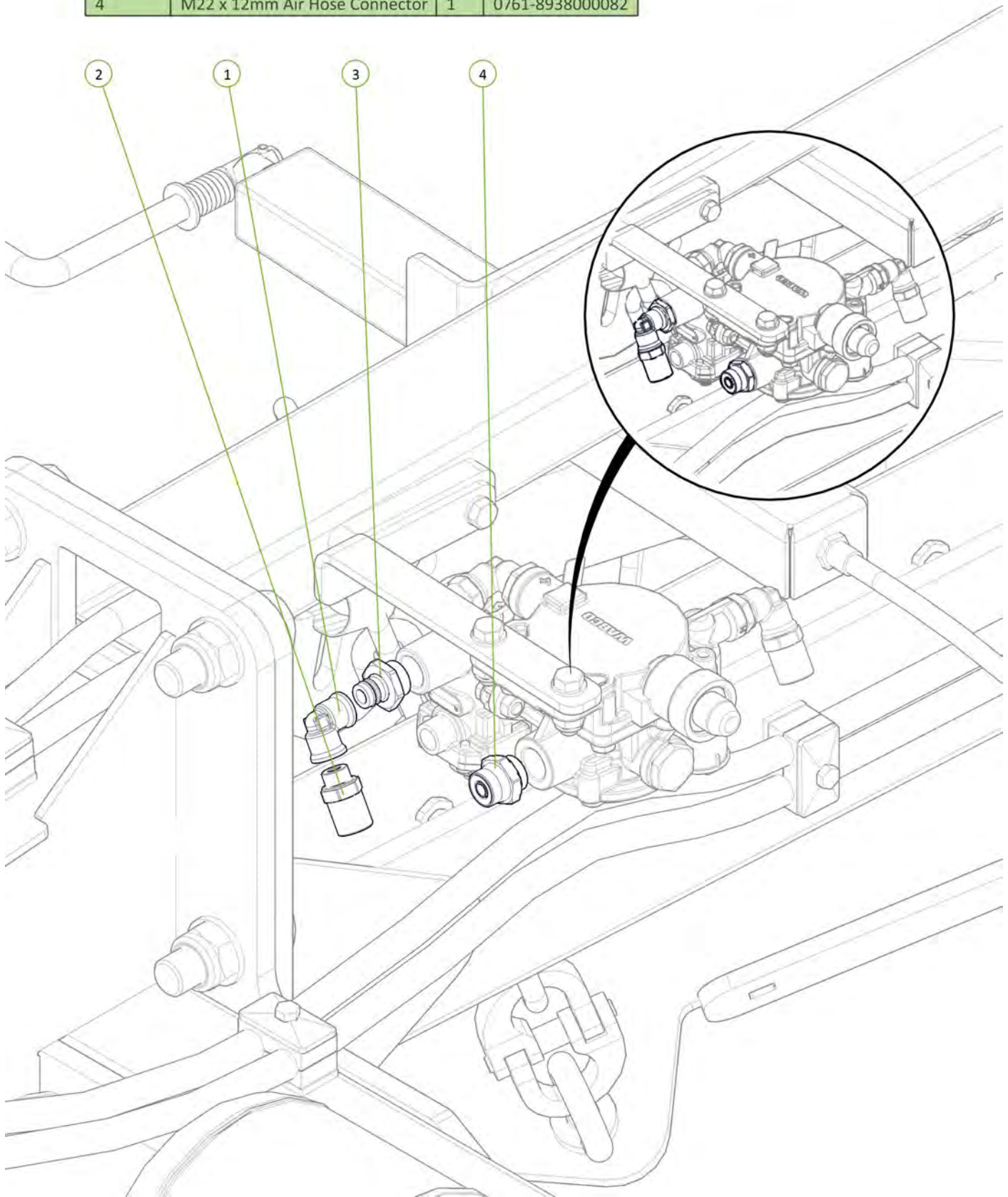
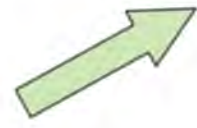
Item No.	Description	Qty	Number
1	M22/16 Straight Connector	2	0761-8931003404
2	Air Line Filter	2	0761-4325000200
3	Bulkhead Fitting	2	0761-8931042922
4	M22 Bulkhead Nut	2	0761-8915004544
5	M16 x 12mm Air Hose Connector	2	0761-8938000022



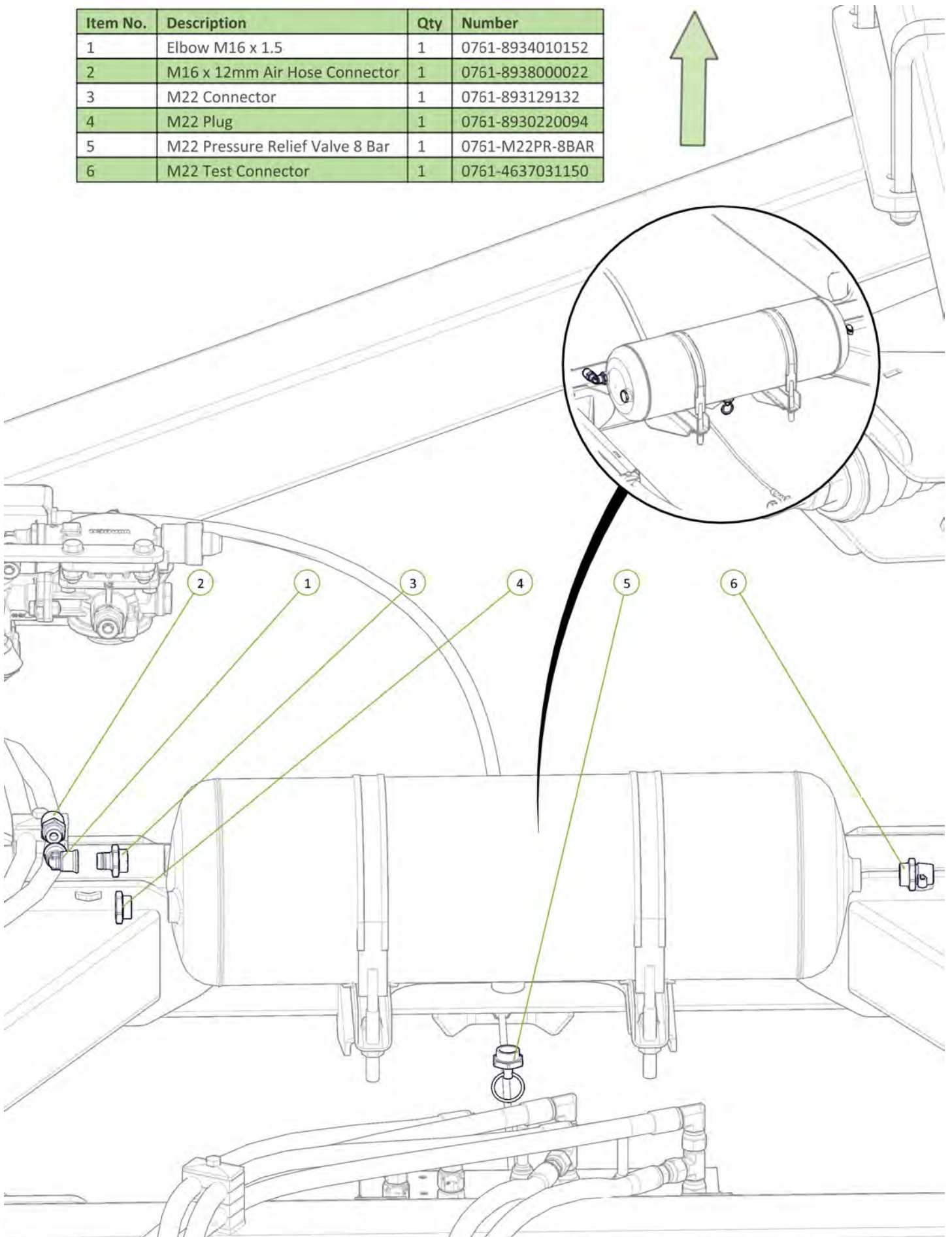


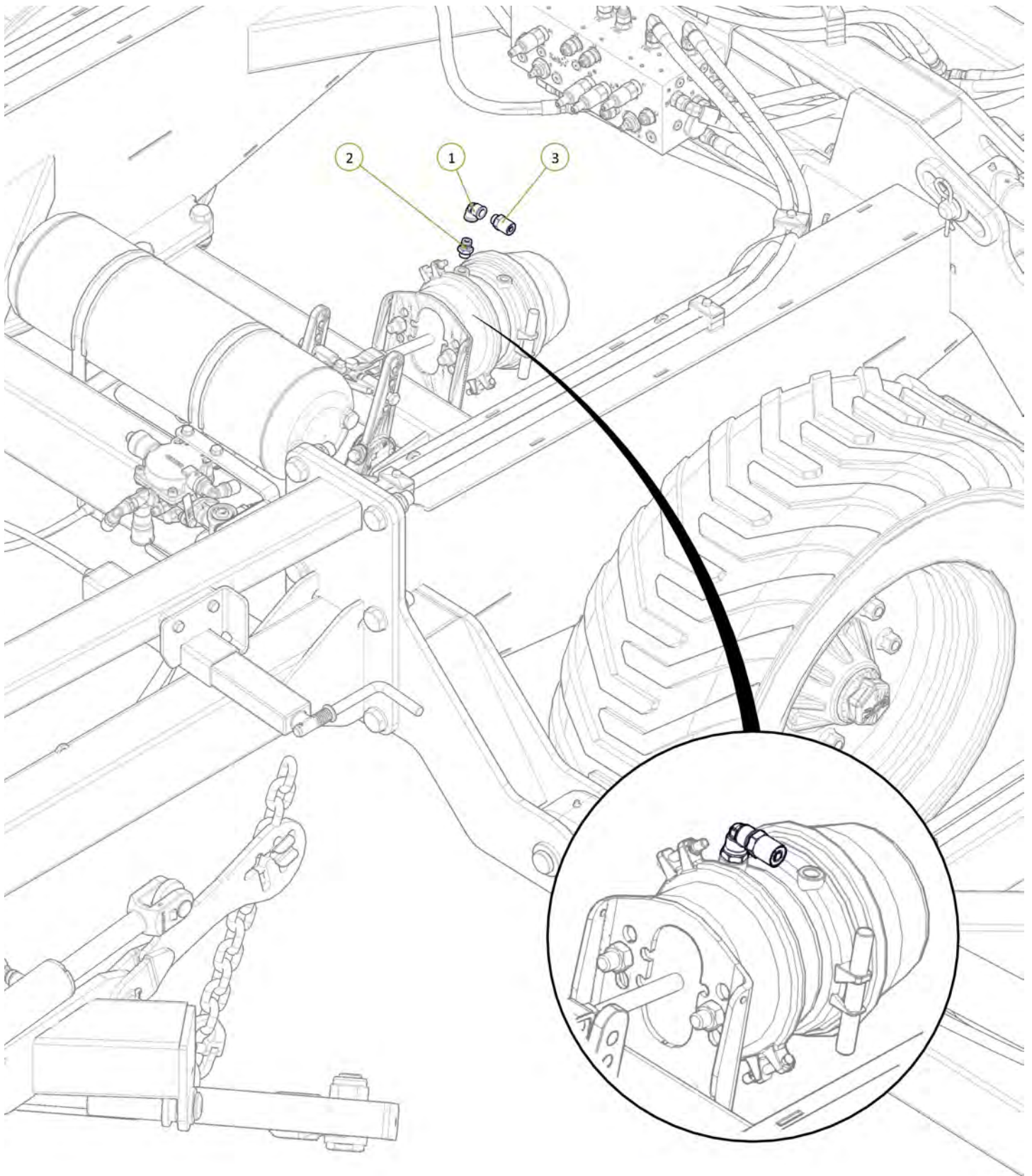
Item No.	Description	Qty	Number
1	M16 x 12mm Air Hose Connector	2	0761-8938000022
2	Elbow M16 x 1.5	2	0761-8934010152
3	M16 Connector	1	0761-8931291922
4	M22 Connector	1	0761-893129132

Item No.	Description	Qty	Number
1	Elbow M16 x 1.5	1	0761-8934010152
2	M16 x 12mm Air Hose Connector	1	0761-8938000022
3	M22 Connector	1	0761-893129132
4	M22 x 12mm Air Hose Connector	1	0761-8938000082



Item No.	Description	Qty	Number
1	Elbow M16 x 1.5	1	0761-8934010152
2	M16 x 12mm Air Hose Connector	1	0761-8938000022
3	M22 Connector	1	0761-893129132
4	M22 Plug	1	0761-8930220094
5	M22 Pressure Relief Valve 8 Bar	1	0761-M22PR-8BAR
6	M22 Test Connector	1	0761-4637031150

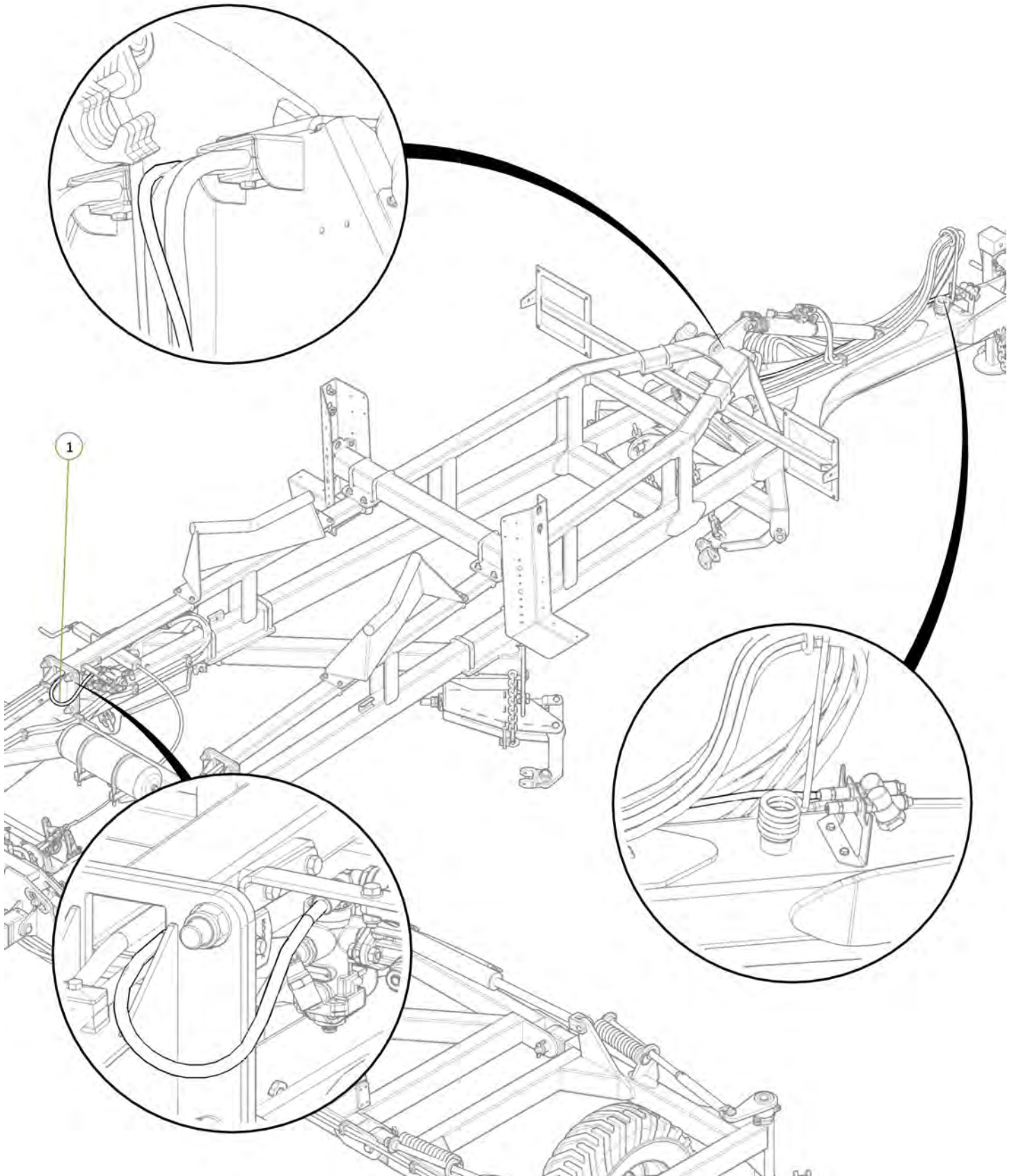




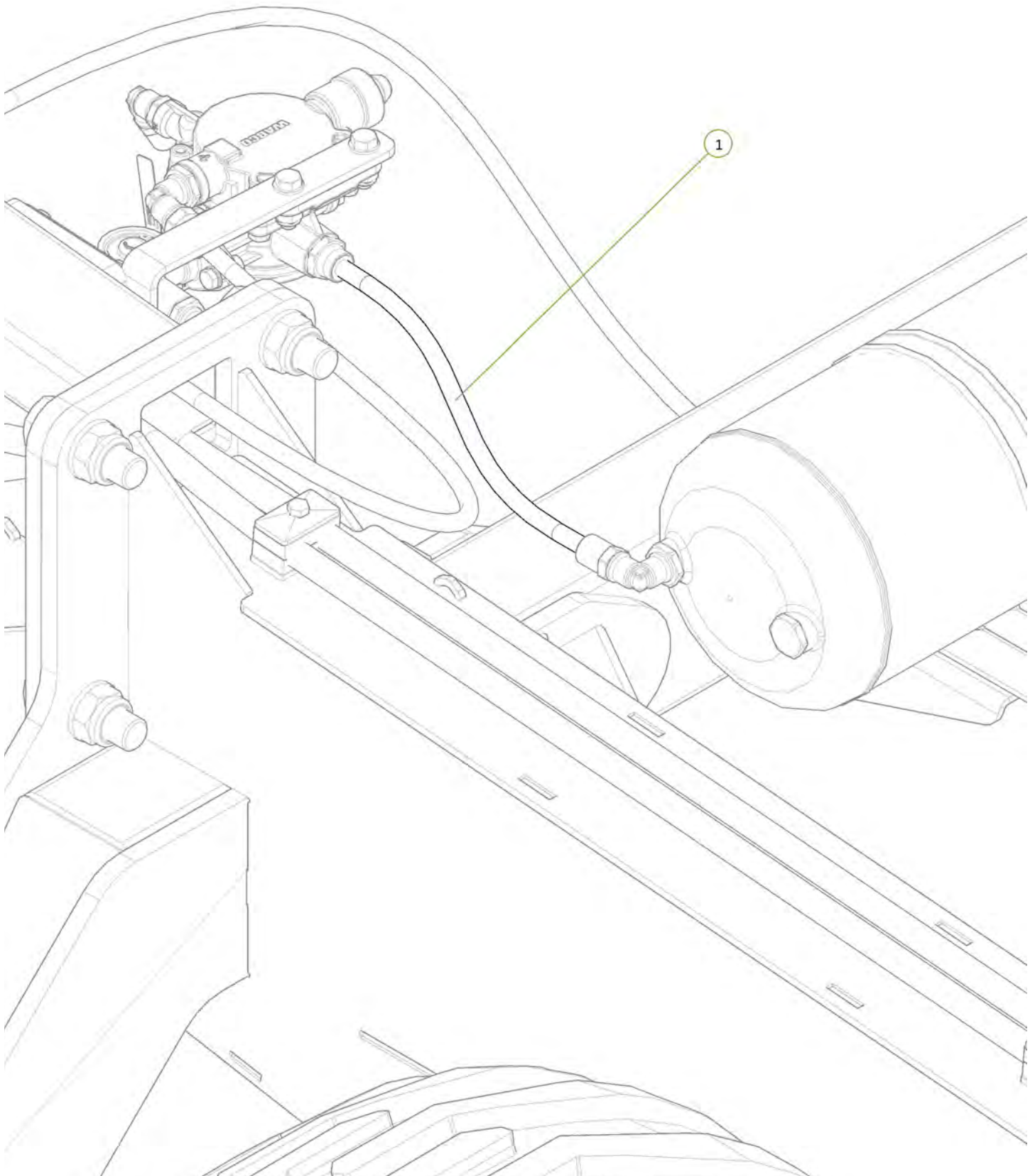
Item No.	Description	Qty	Number
1	Elbow M16 x 1.5	1	0761-8934010152
2	M16 Connector	1	0761-8931291922
3	M16 x 12mm Air Hose Connector	1	0761-8938000022

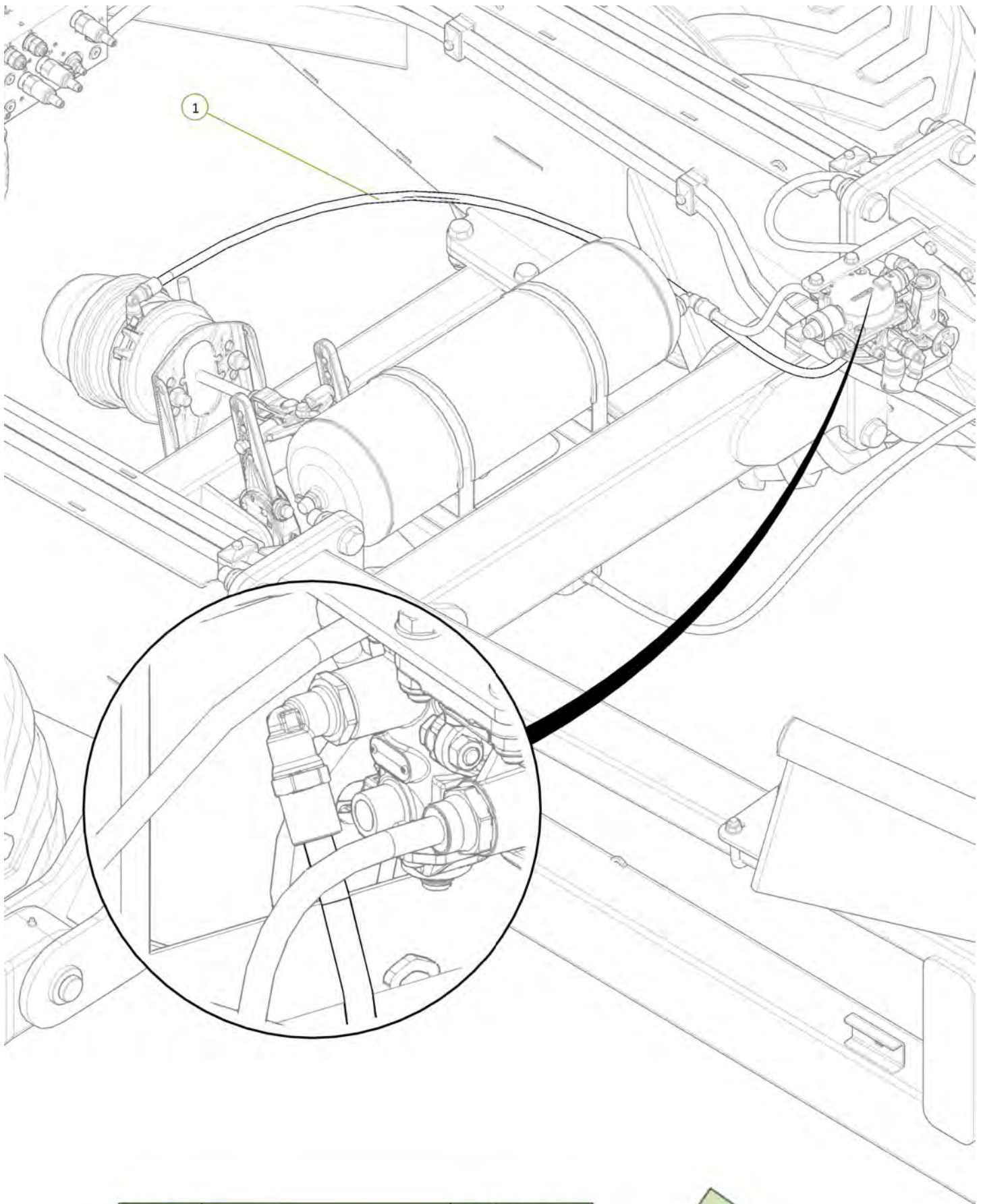


Item No.	Description	Qty	Number
1	Polyamide Air Brake Line 12mm	1	0761-TR12



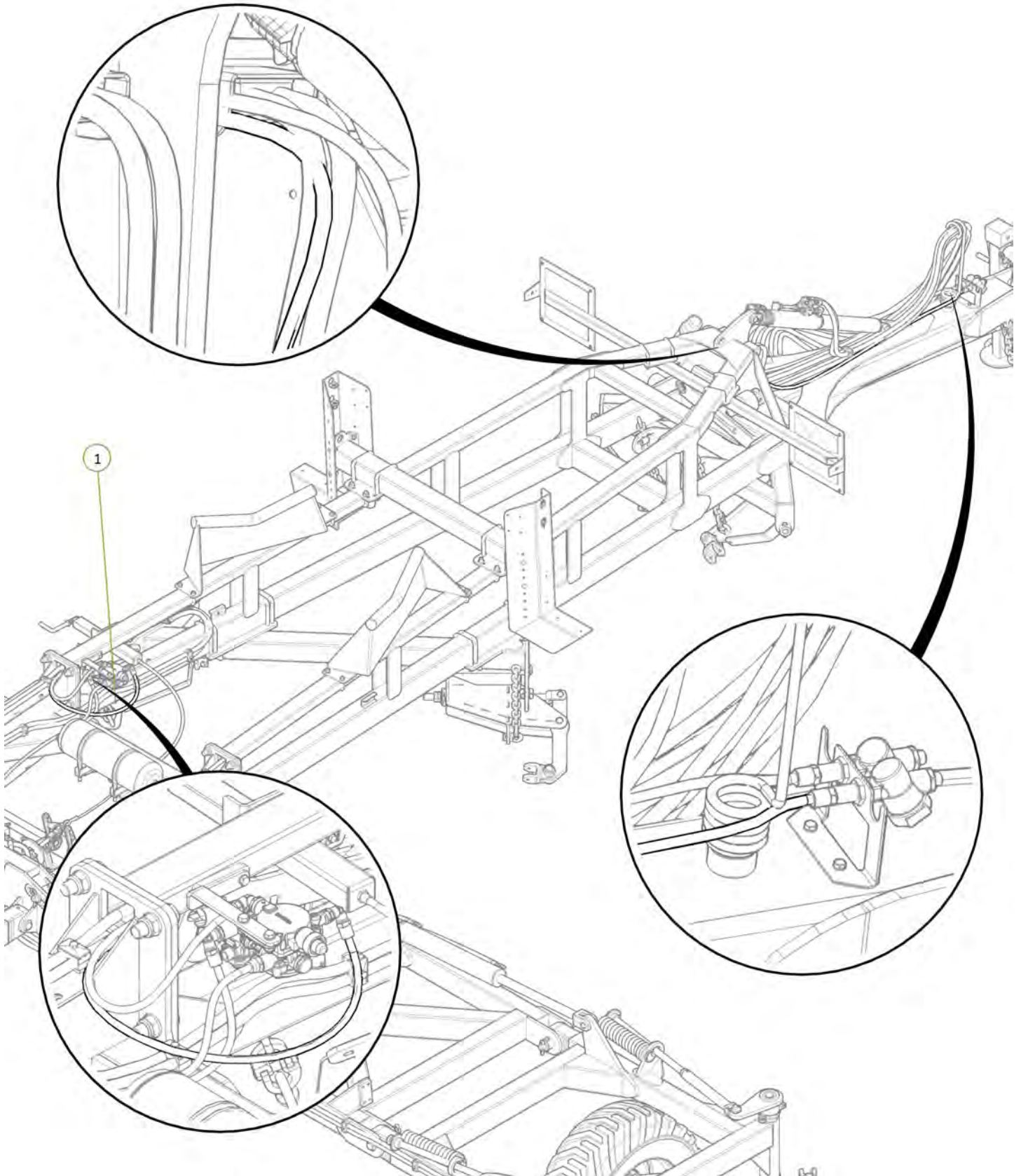
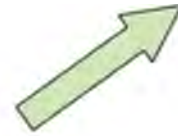
Item No.	Description	Qty	Number
1	Polyamide Air Brake Line 12mm	1	0761-TR12



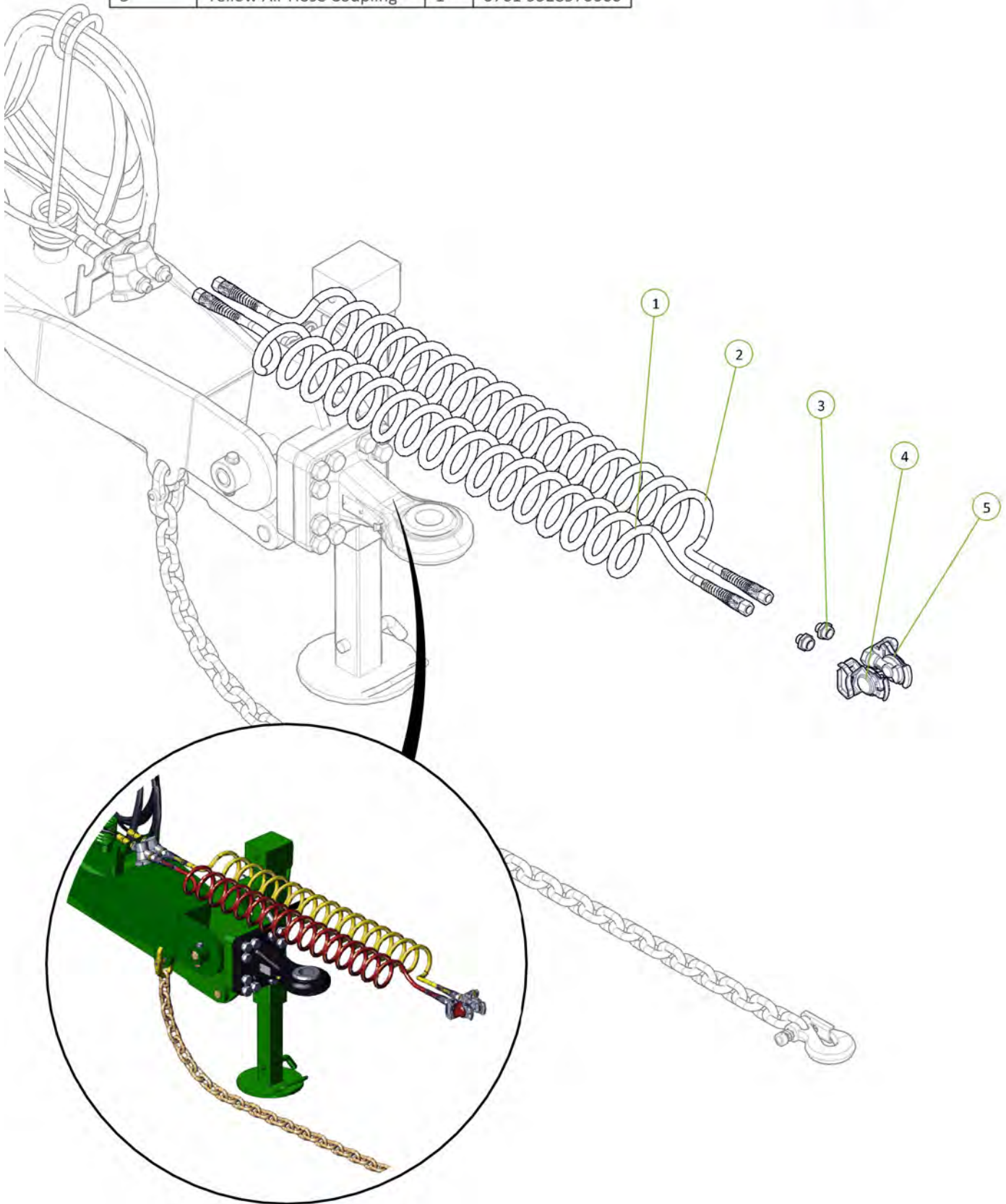


Item No.	Description	Qty	Number
1	Polyamide Air Brake Line 12mm	1	0761-TR12

Item No.	Description	Qty	Number
1	Polyamide Air Brake Line 12mm	1	0761-TR12

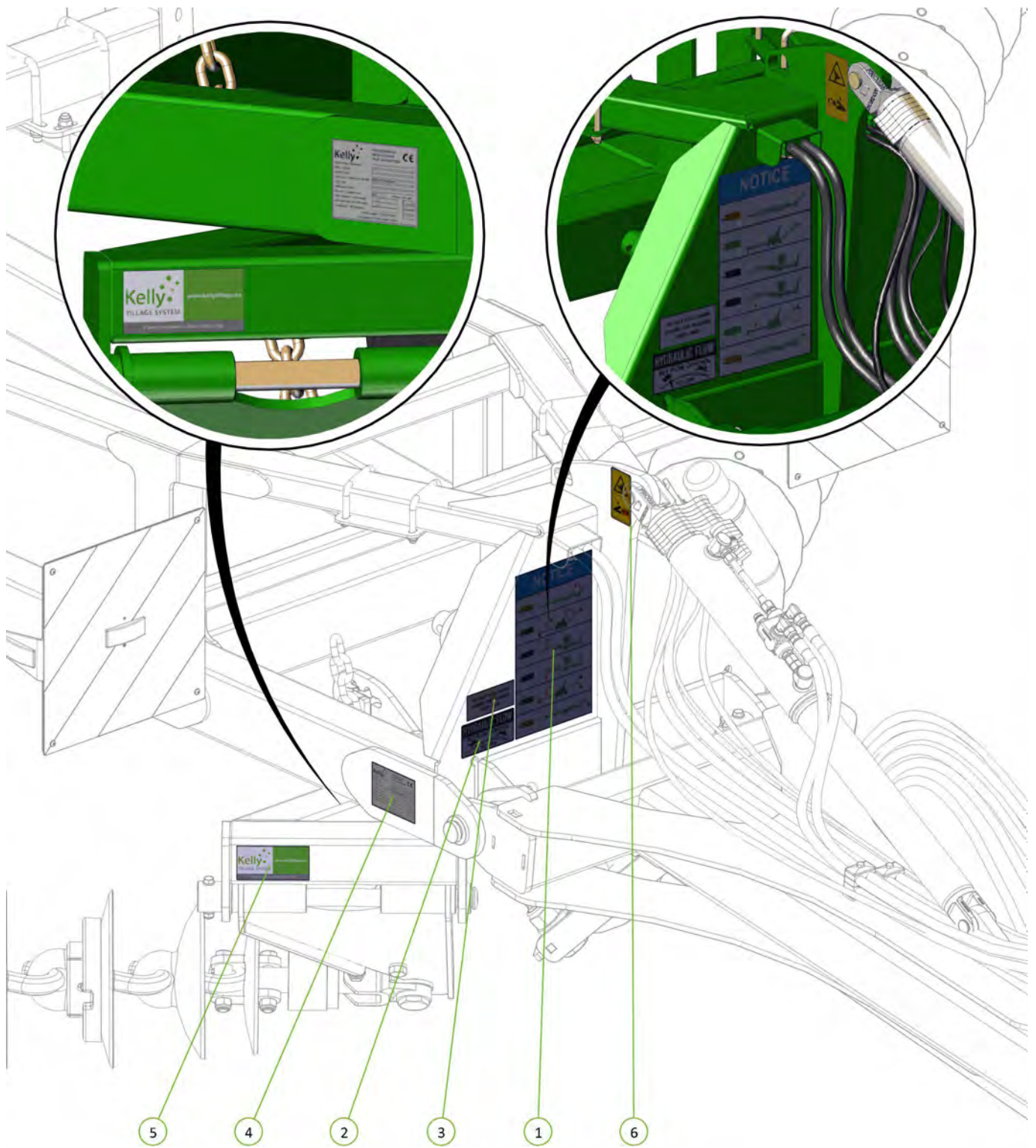


Item No.	Description	Qty	Number
1	Red Flexi Air Hose	1	0761-1555-033
2	Yellow Flexi Air Hose	1	0761-1555-032
3	M22/16 Straight Connector	2	0761-8931003404
4	Red Air Hose Coupling	1	0761-9528970070
5	Yellow Air Hose Coupling	1	0761-9528970060



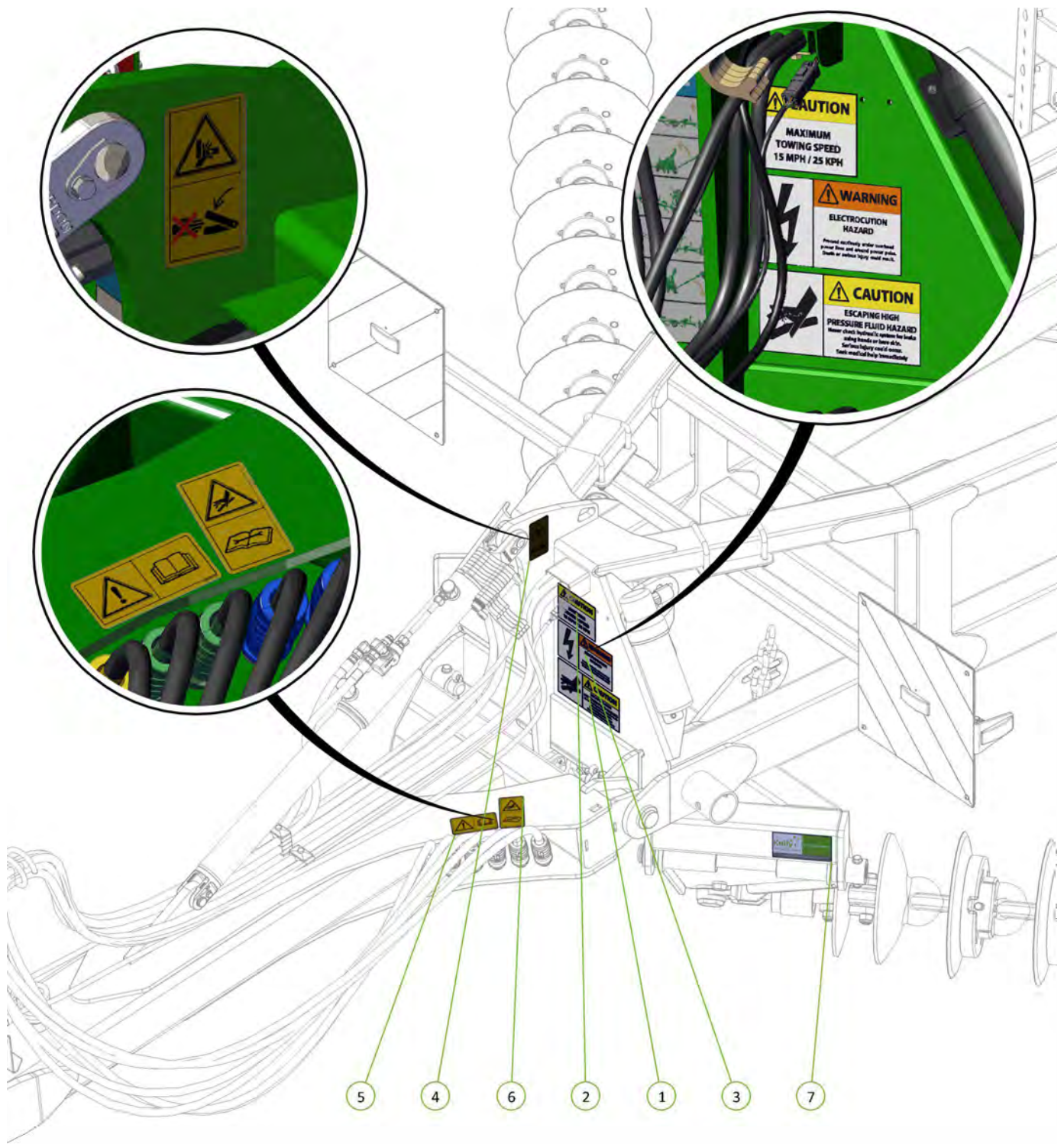
Section 4

Decal Application

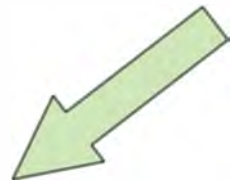


Item No.	Description	Qty	Number
1	'NOTICE' Hydra Grip Sequence Decal 200x360mm	1	0801-S20
2	Hydraulic Flow Decal	1	0801-S21
3	Mud Folding Warning Decal	1	0801-S22
4	MAFA Serial Decal	1	1501-S11
5	Kelly Tillage System Decal	1	1501-S14
6	Pinch Point Decal	1	1501-S1

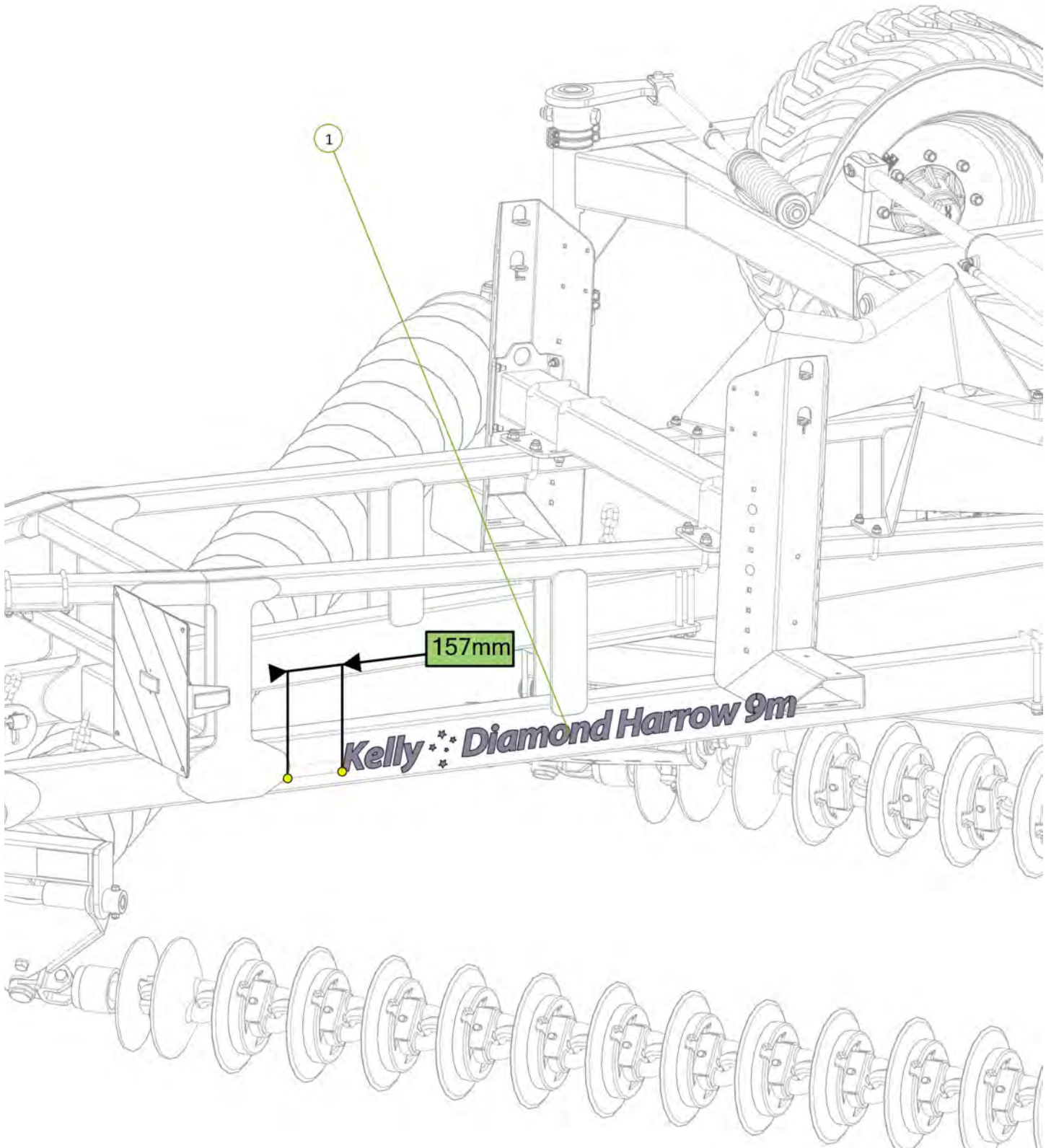




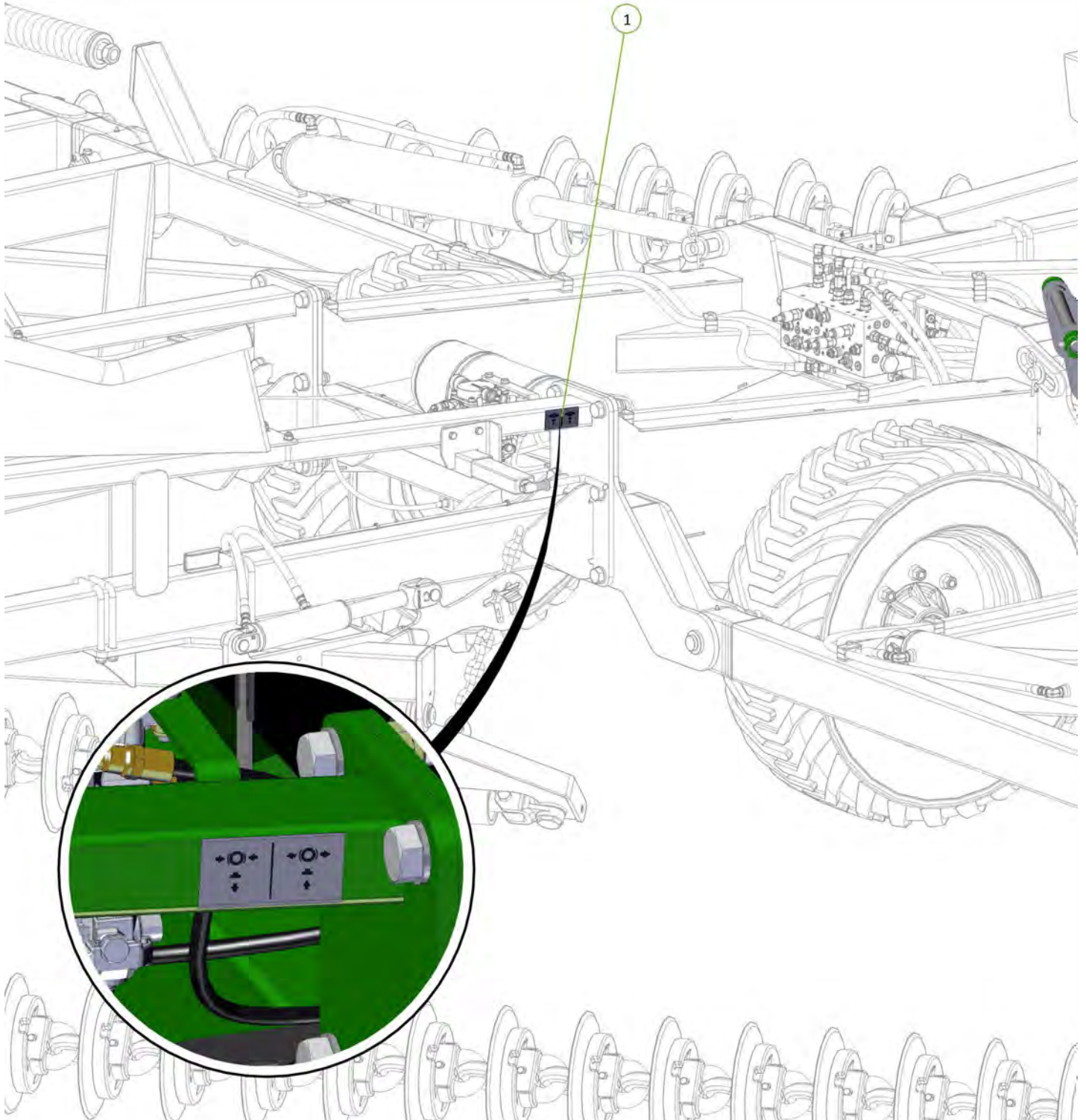
Item No.	Description	Qty	Number
1	Hydraulic Pressure Caution Decal	1	0801-S4
2	Towing Speed Decal	1	0801-S5
3	Electrocution Hazard Decal	1	0801-S6
4	Pinch Point Decal	1	1501-S1
5	Read Manual Decal	1	1501-S3
6	Hydraulic Pressure Hazard Decal	1	1501-S9
7	Kelly Tillage System Decal	1	1501-S14

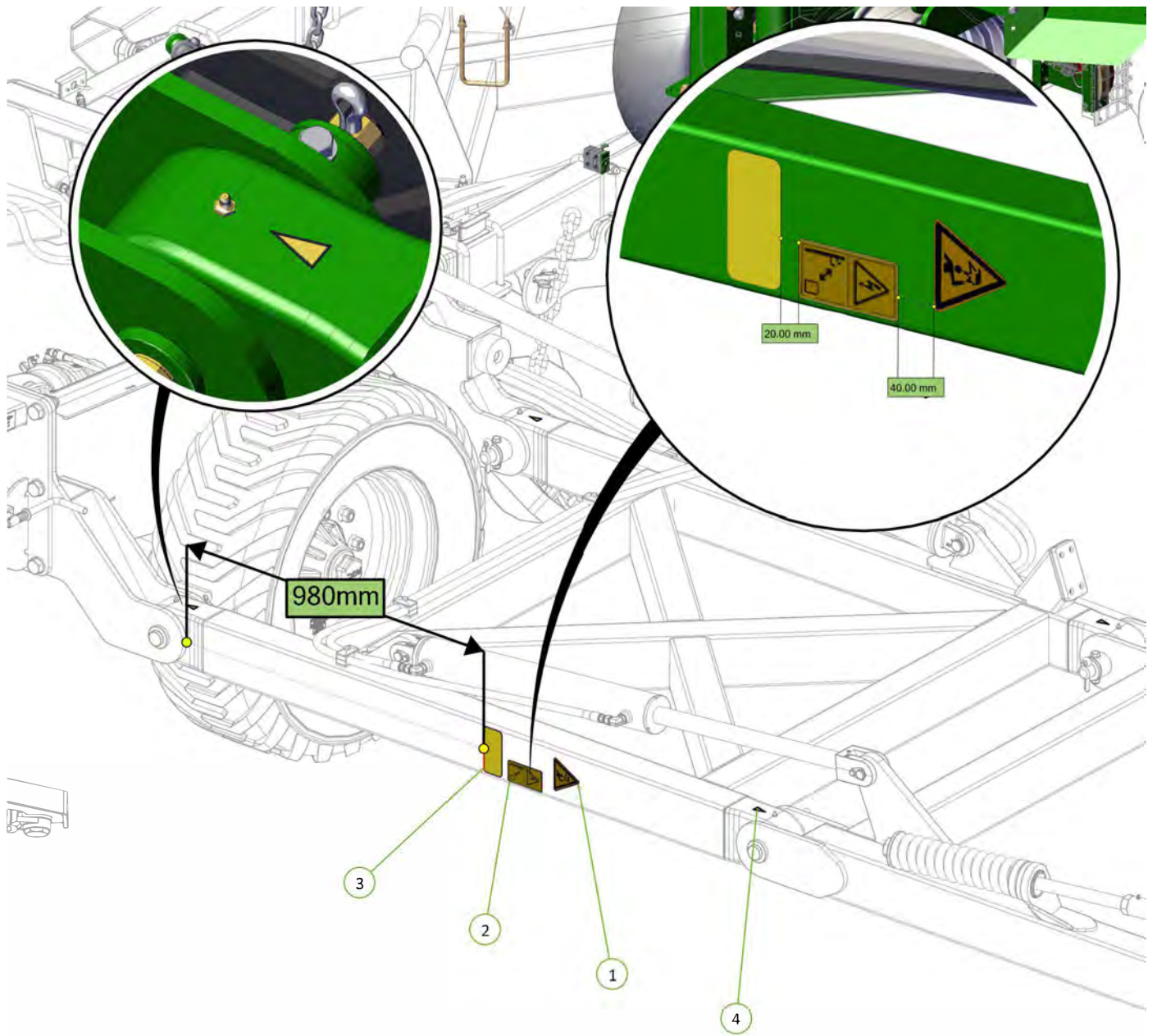


Item No.	Description	Qty	Number
1	Diamond Harrow 9m Decal	1	0801-SKDH9

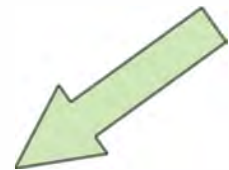


Item No.	Description	Qty	Number
1	Park Brake Decal	1	1501-S2

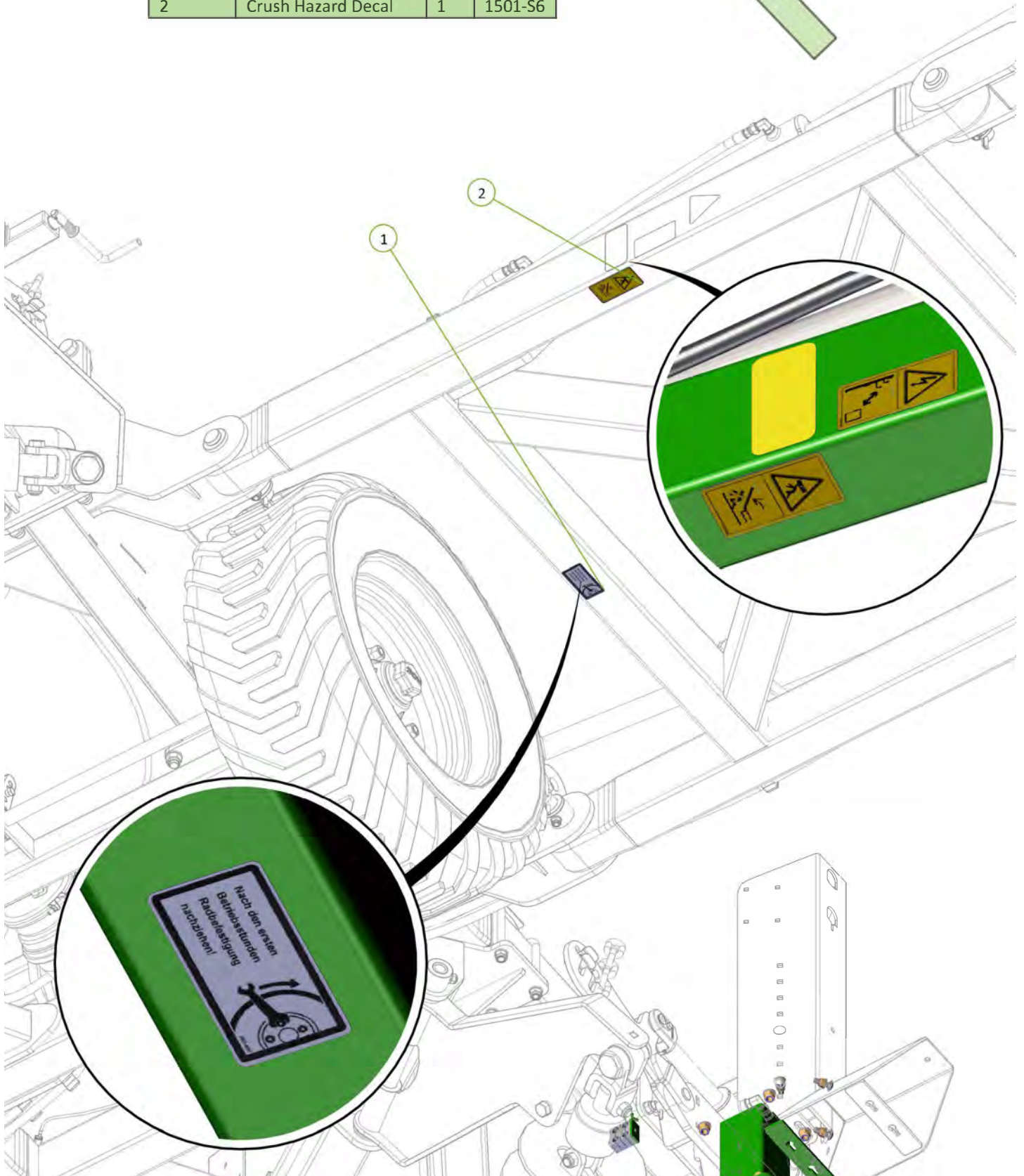


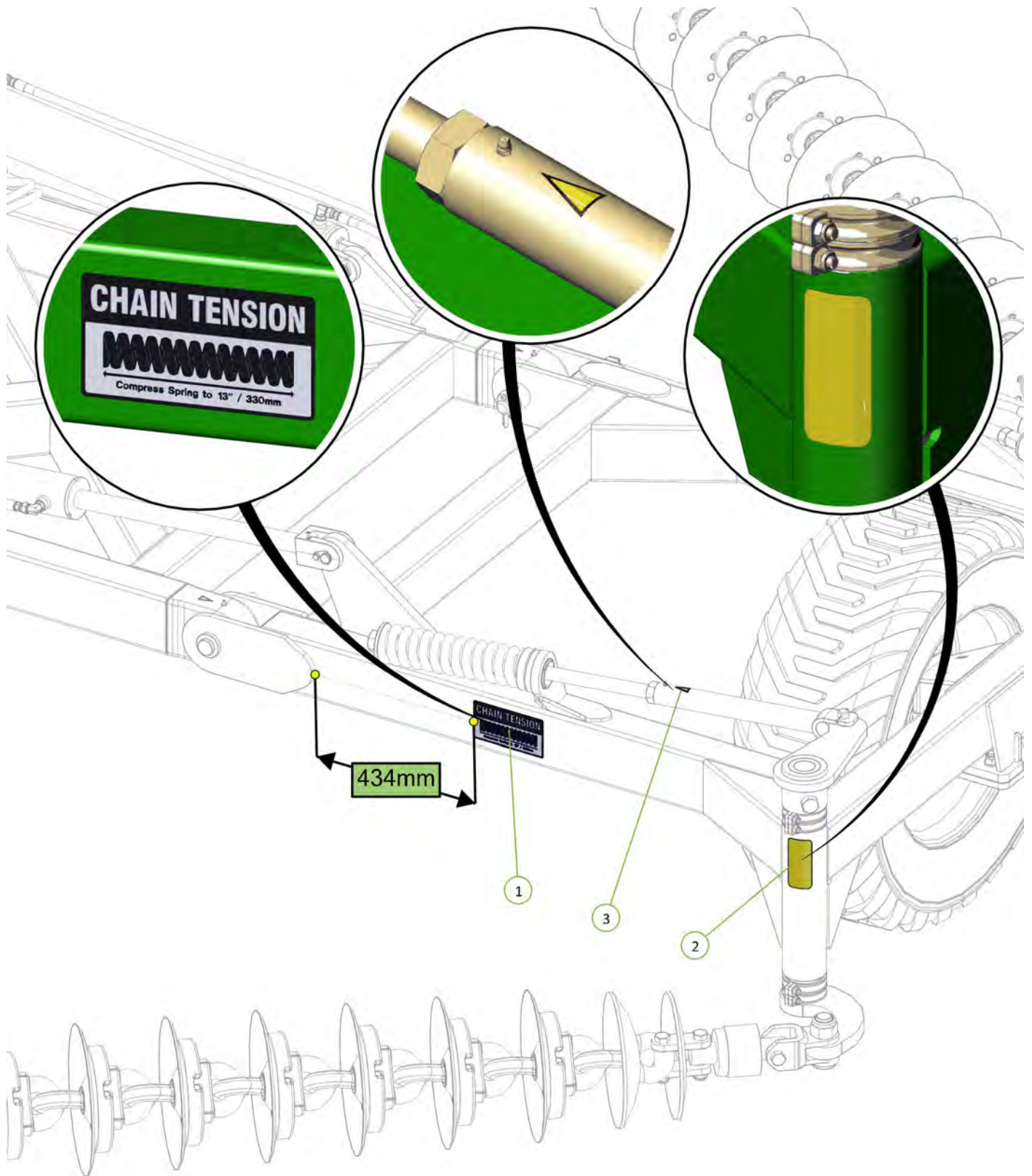


Item No.	Description	Qty	Number
1	Overhead Objects Decal	1	1501-S7
2	Power Line Hazard Decal	1	1501-S8
3	Yellow Reflective Decal	1	0801-SYRF
4	Grease Point Indicator	4	1501-S12



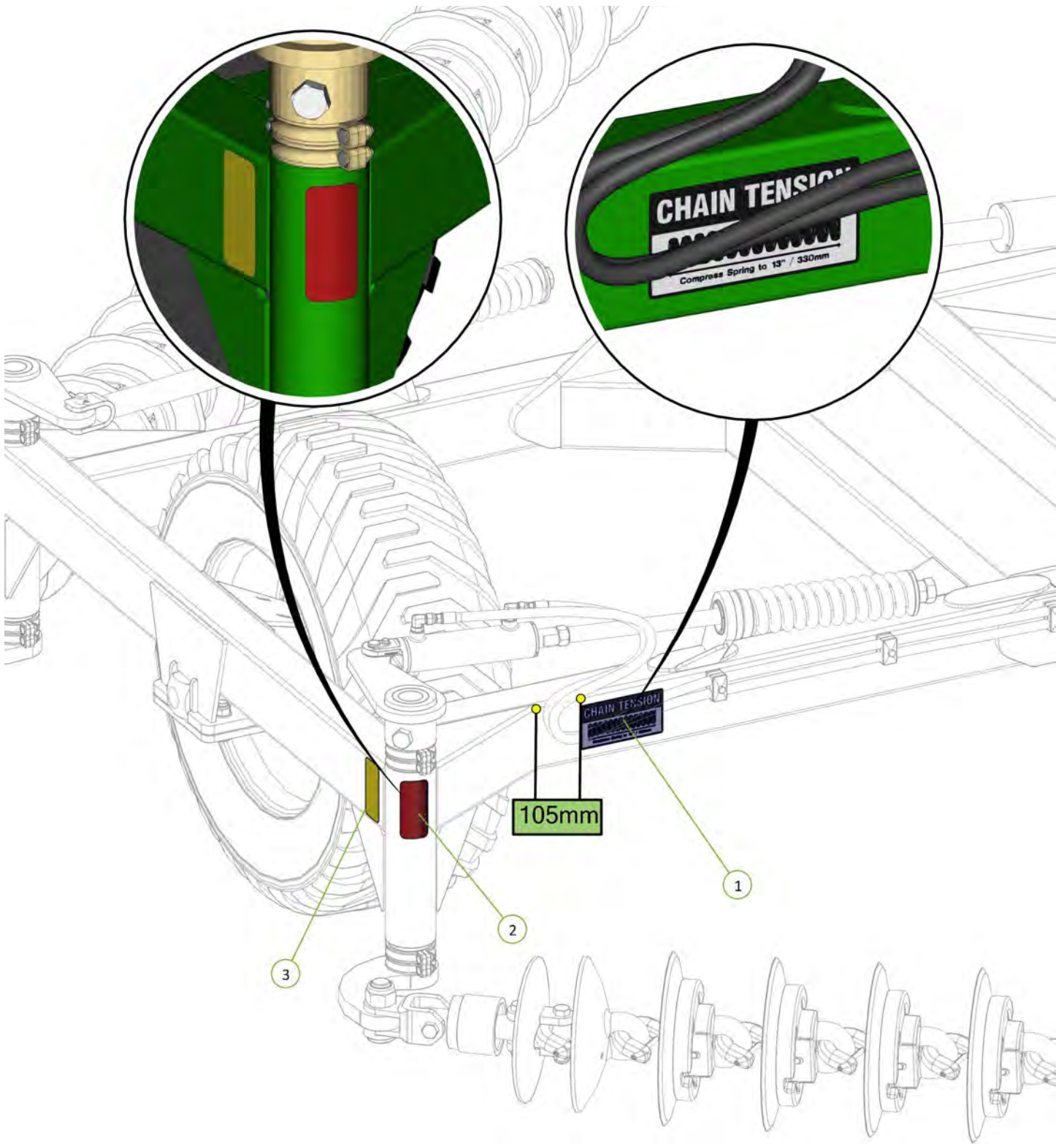
Item No.	Description	Qty	Number
1	Wheel Nut Decal	1	1501-S5
2	Crush Hazard Decal	1	1501-S6





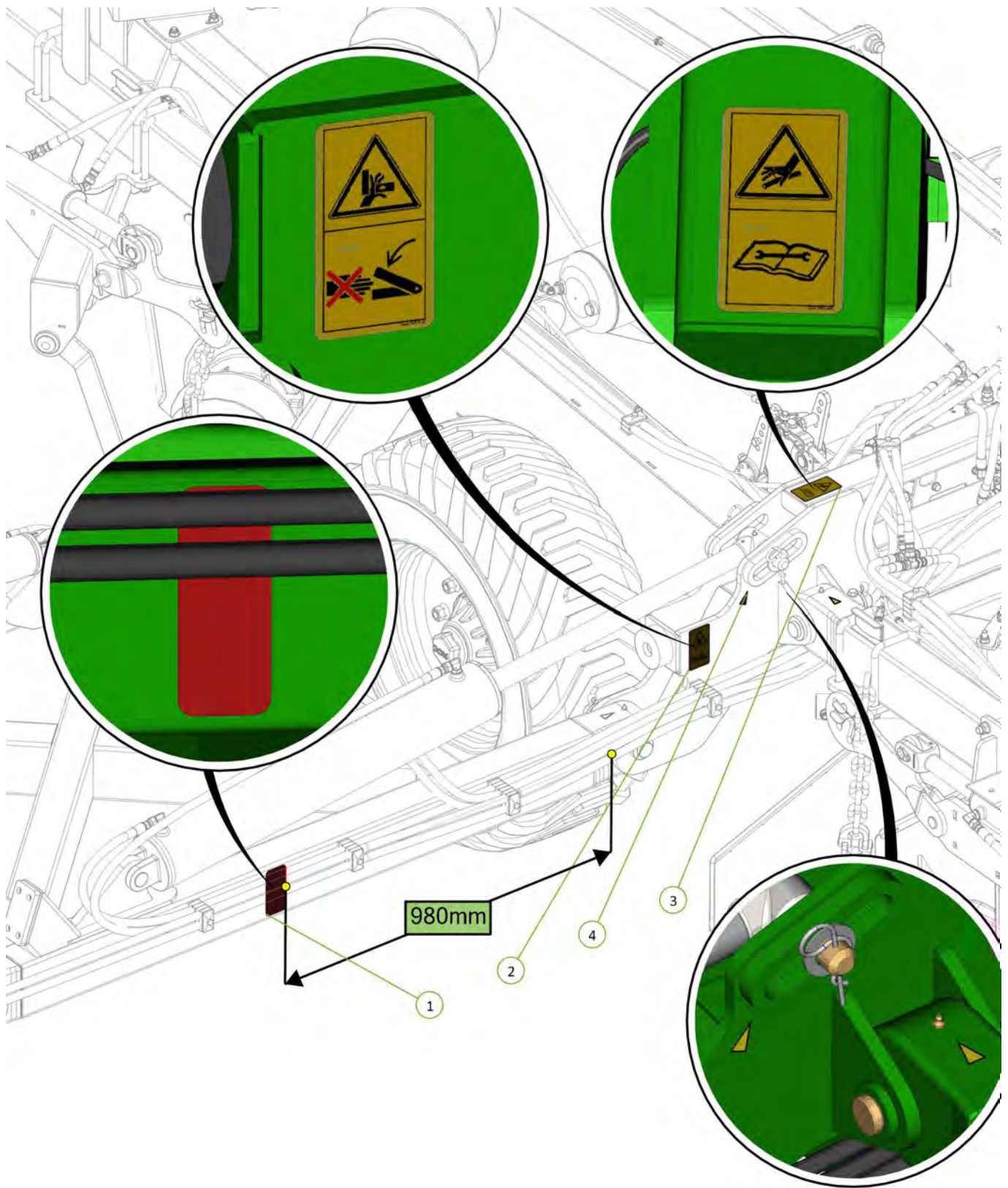
Item No.	Description	Qty	Number
1	Chain Tension 330mm Decal	1	0801-S15
2	Yellow Reflective Decal	1	0801-SYRF
3	Grease Point Indicator	1	1501-S12





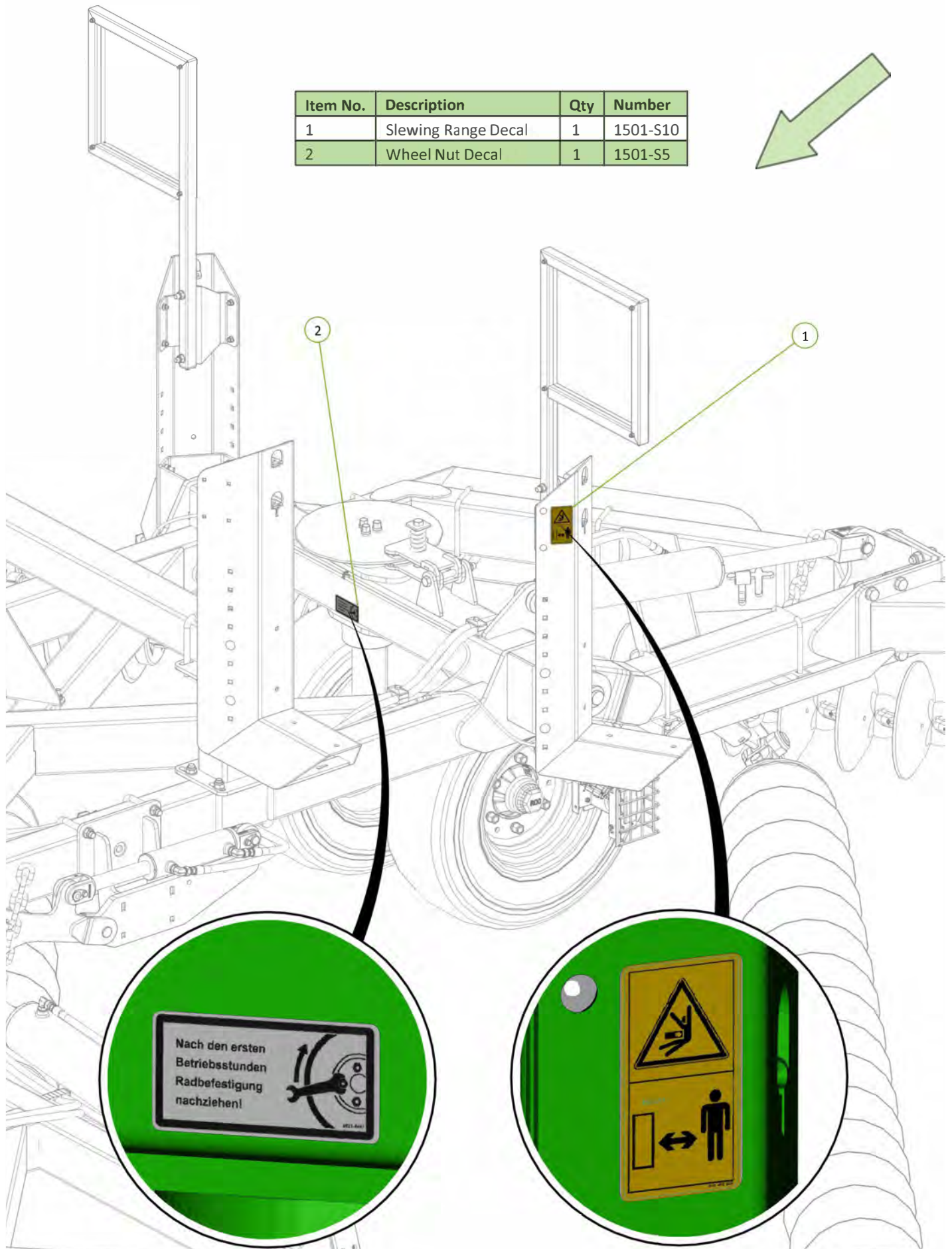
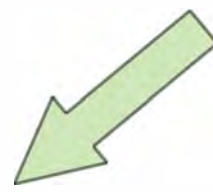
Item No.	Description	Qty	Number
1	Chain Tension 330mm Decal	1	0801-S15
2	Red Reflective Decal	1	0801-SRRF
3	Yellow Reflective Decal	1	0801-SYRF



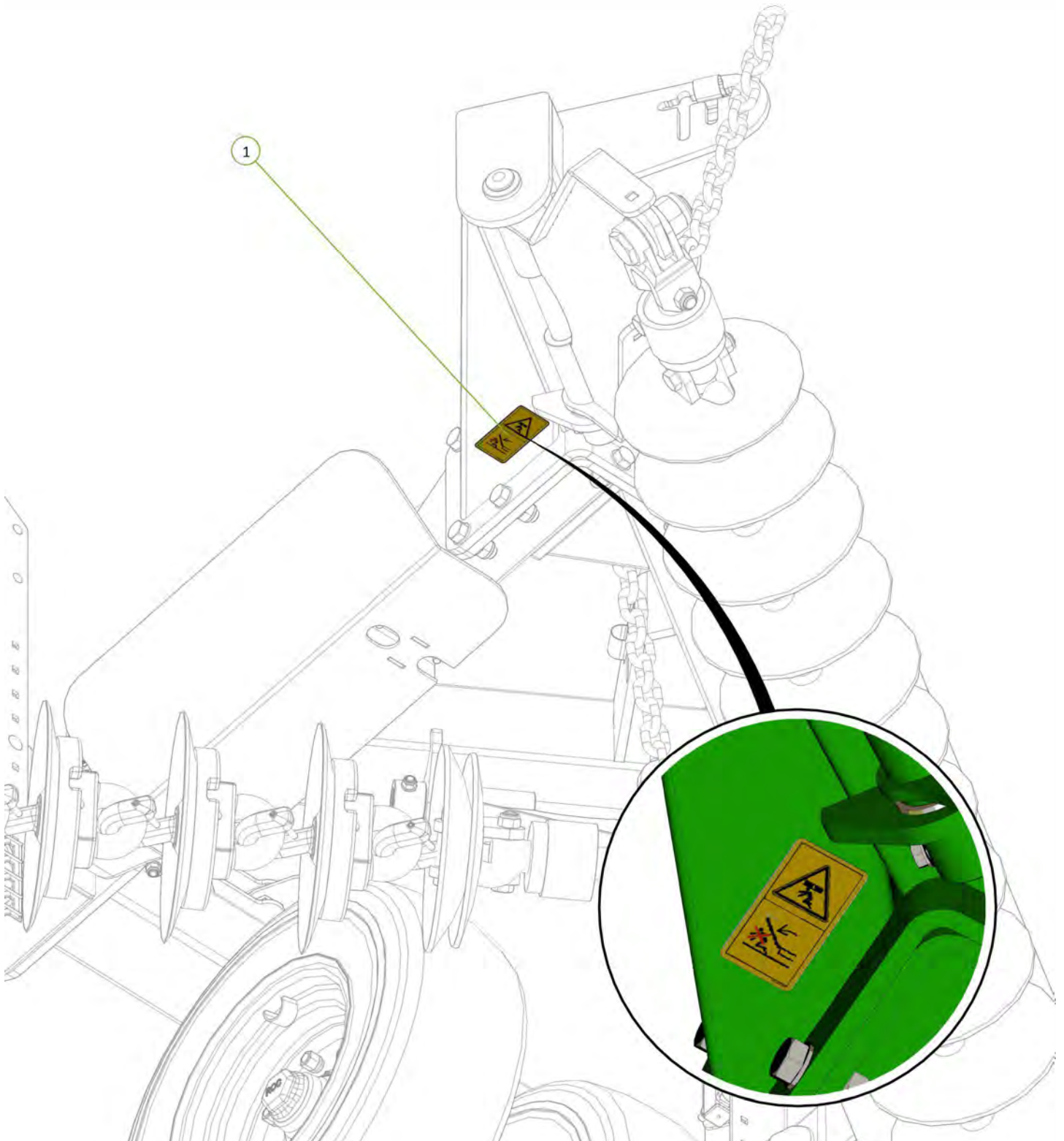


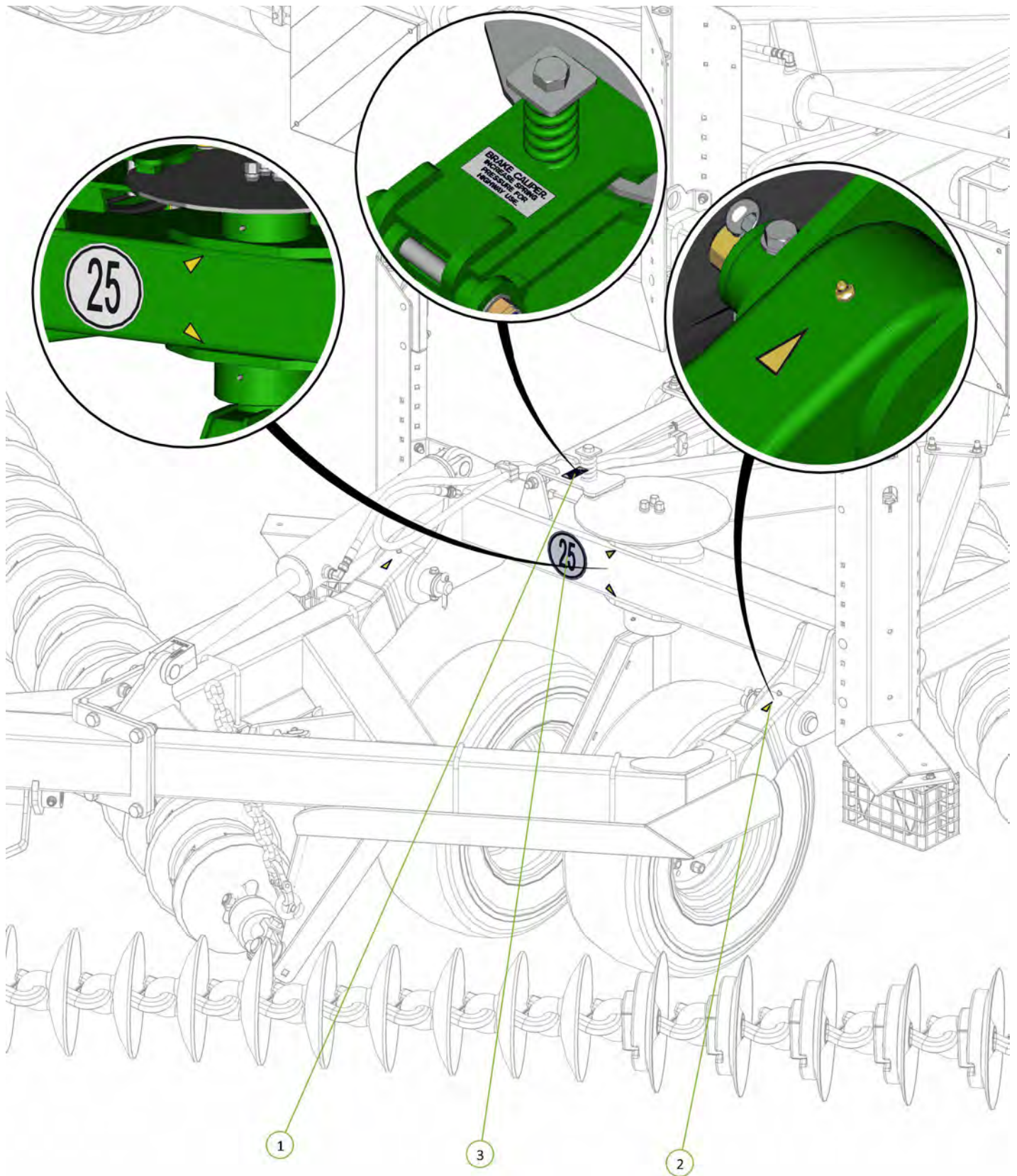
Item No.	Description	Qty	Number
1	Red Reflective Decal	1	0801-SRRF
2	Pinch Point Decal	1	1501-S1
3	Hydraulic Pressure Hazard Decal	1	1501-S9
4	Grease Point Indicator	2	1501-S12

Item No.	Description	Qty	Number
1	Slewing Range Decal	1	1501-S10
2	Wheel Nut Decal	1	1501-S5



Item No.	Description	Qty	Number
1	Crush Hazard Decal	1	1501-S6

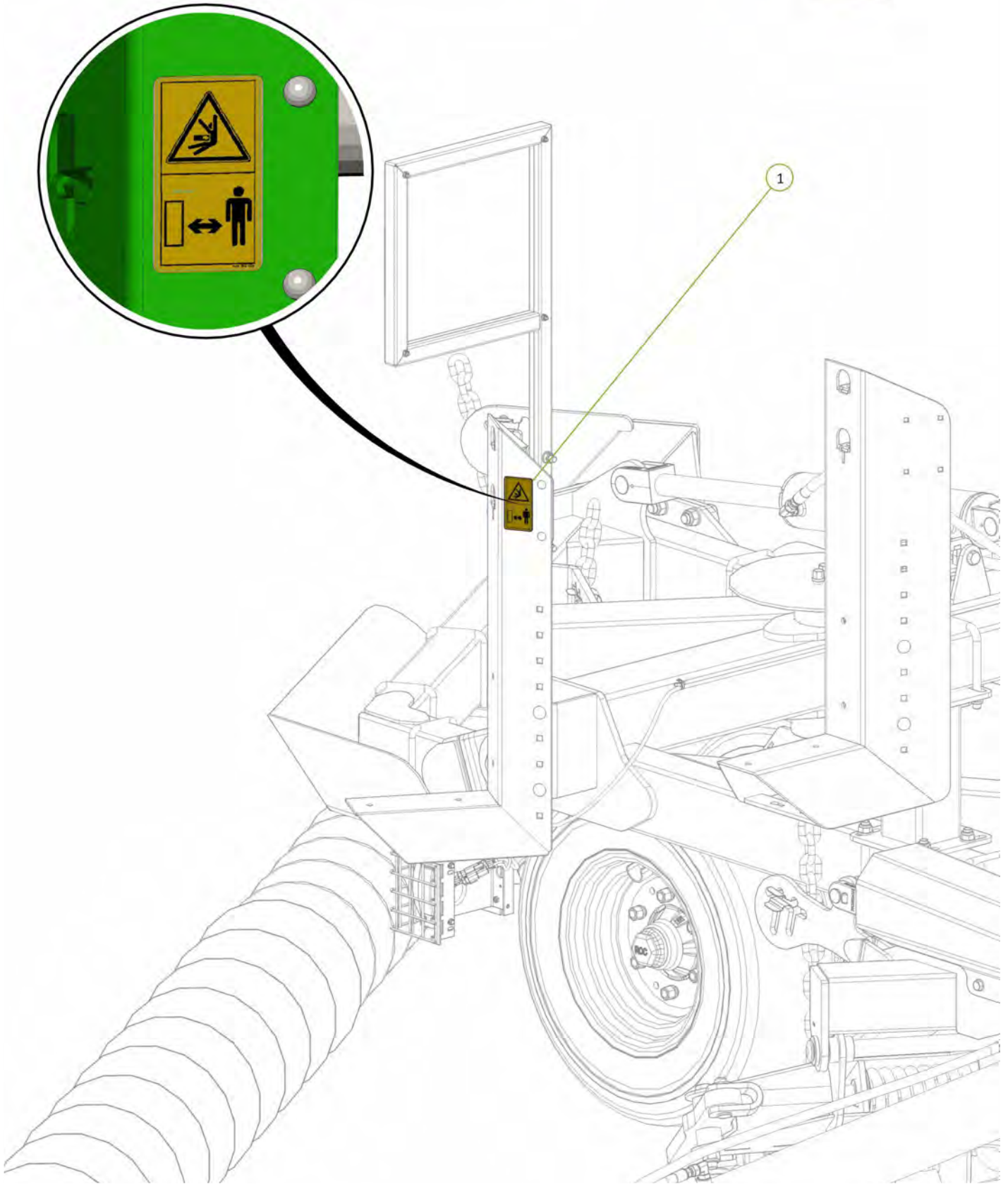
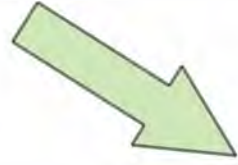


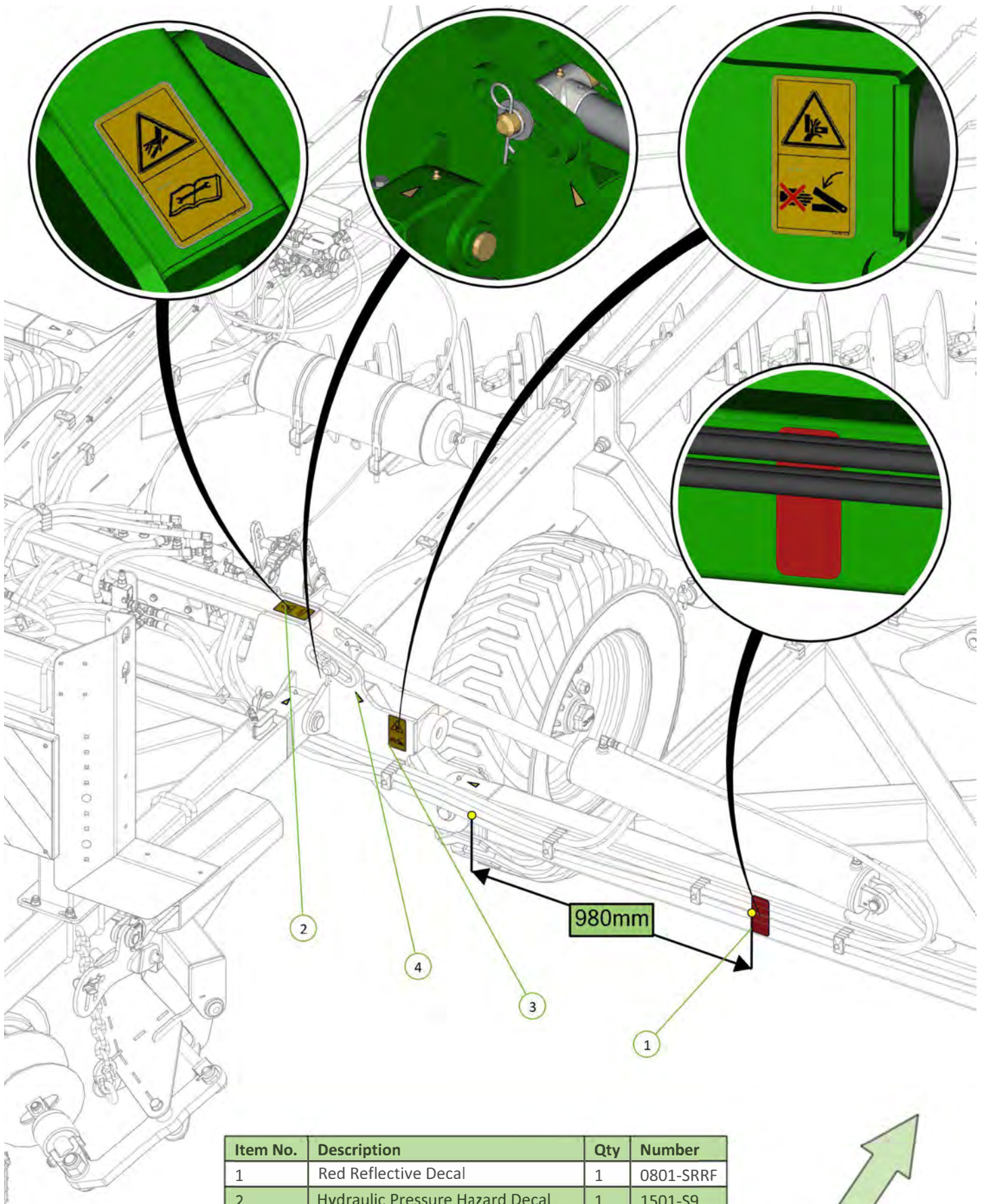


Item No.	Description	Qty	Number
1	Brake Caliper Decal	1	0801-S11
2	Grease Point Indicator	4	1501-S12
3	25kmh Speed Limit Decal	1	1501-S13



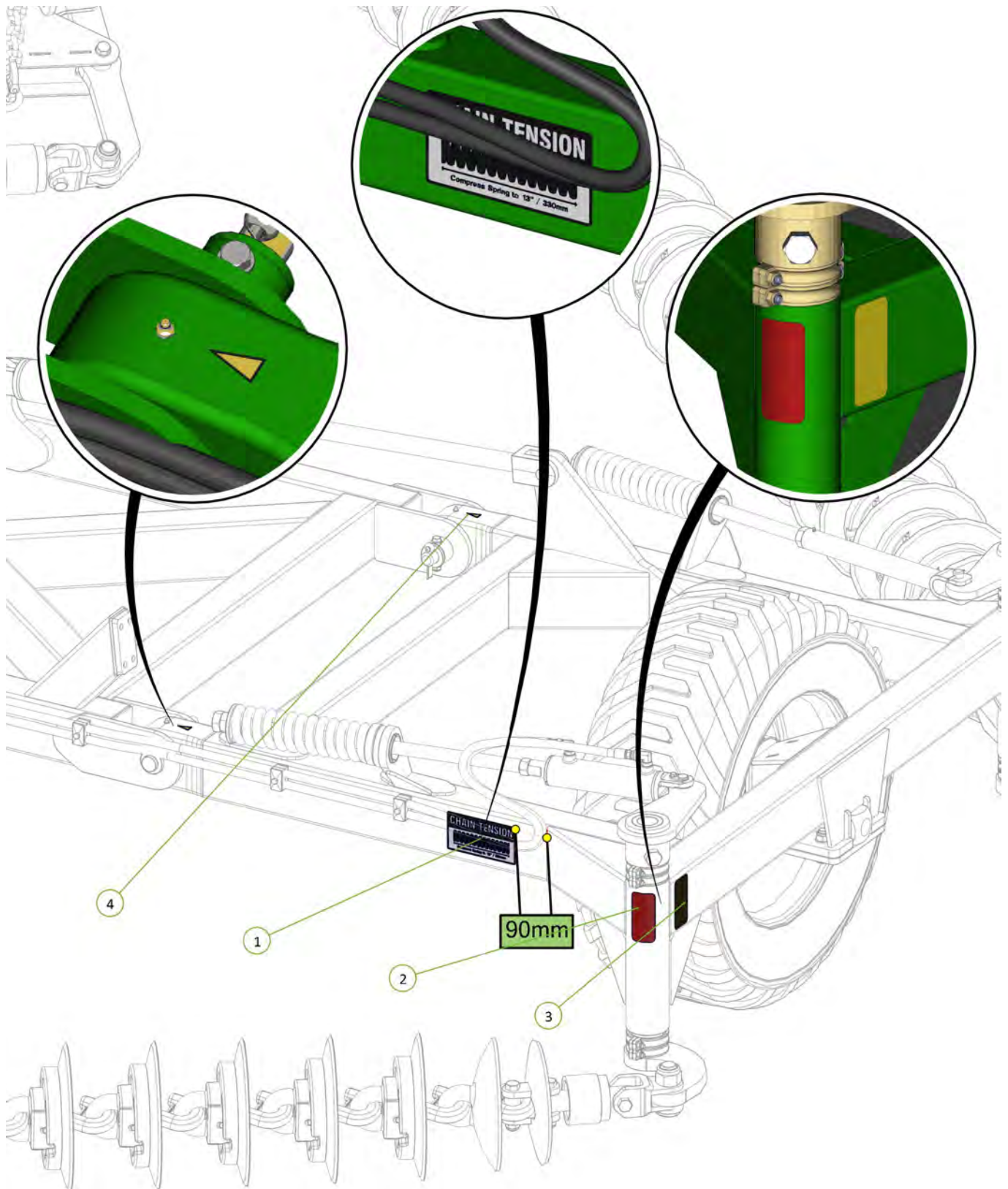
Item No.	Description	Qty	Number
1	Slewing Range Decal	1	1501-S10





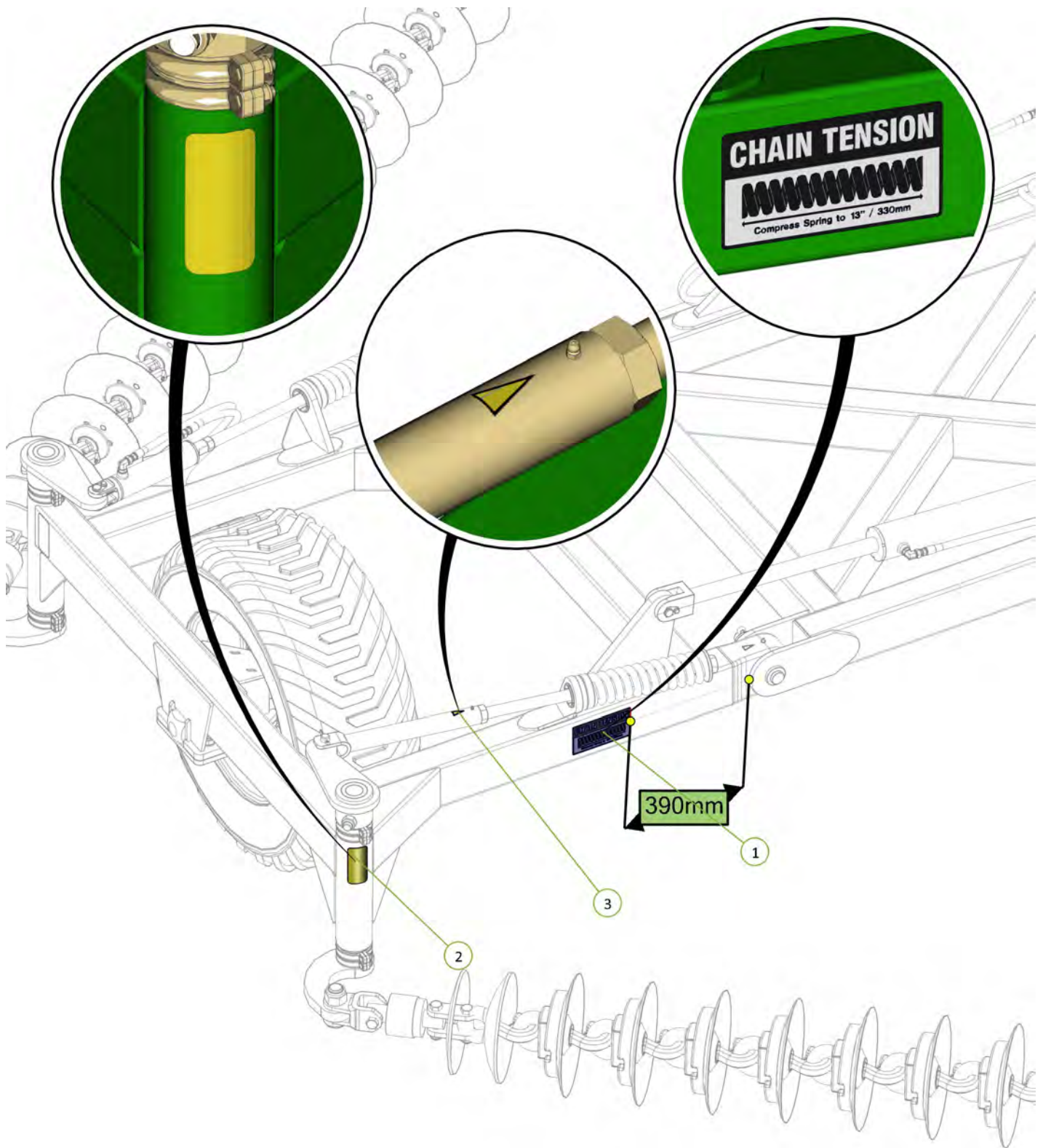
Item No.	Description	Qty	Number
1	Red Reflective Decal	1	0801-SRRF
2	Hydraulic Pressure Hazard Decal	1	1501-S9
3	Pinch Point Decal	1	1501-S1
4	Grease Point Indicator	3	1501-S12





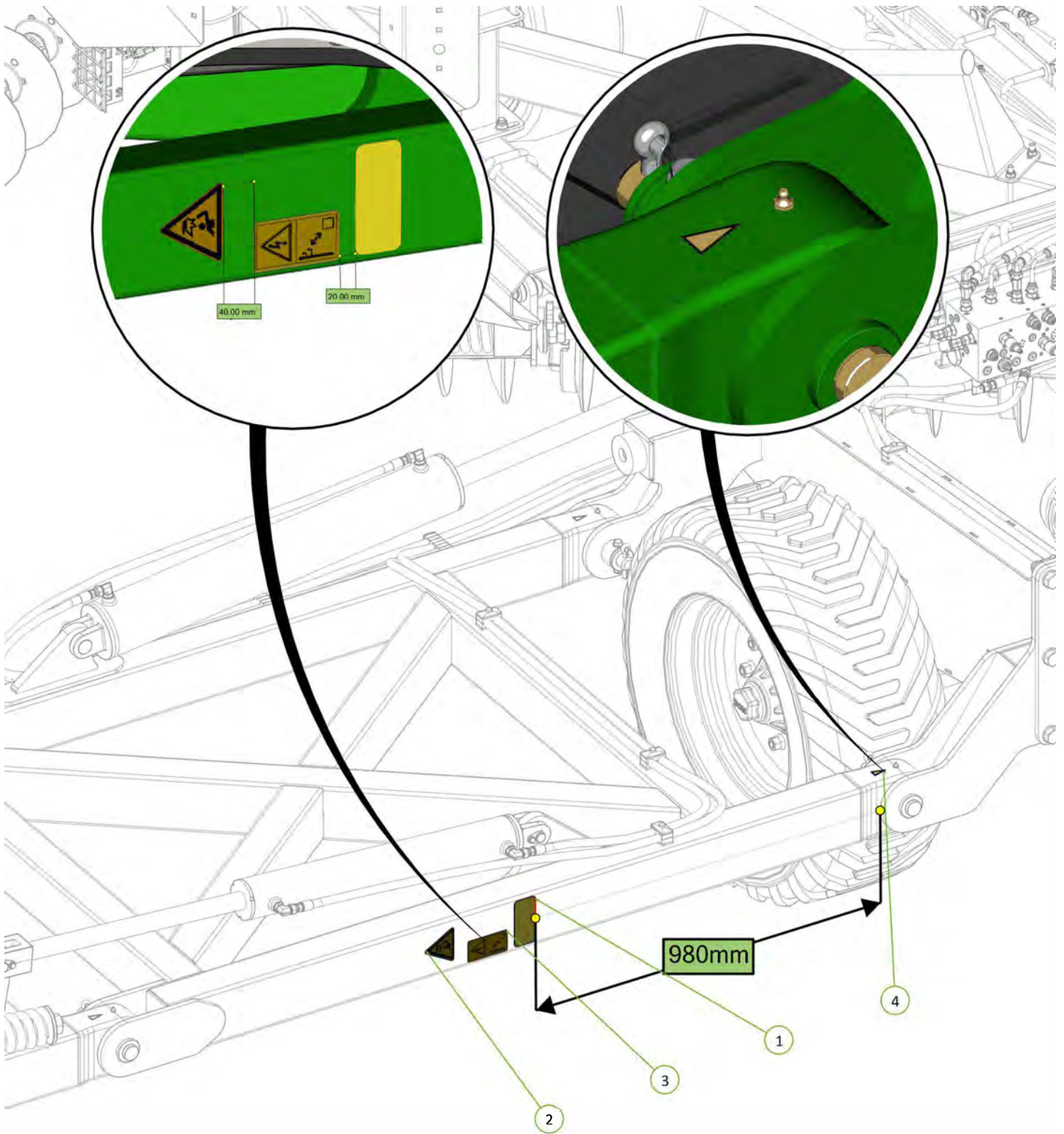
Item No.	Description	Qty	Number
1	Chain Tension 330mm Decal	1	0801-S15
2	Red Reflective Decal	1	0801-SRRF
3	Yellow Reflective Decal	1	0801-SYRF
4	Grease Point Indicator	2	1501-S12





Item No.	Description	Qty	Number
1	Chain Tension 330mm Decal	1	0801-S15
2	Yellow Reflective Decal	1	0801-SYRF
3	Grease Point Indicator	1	1501-S12



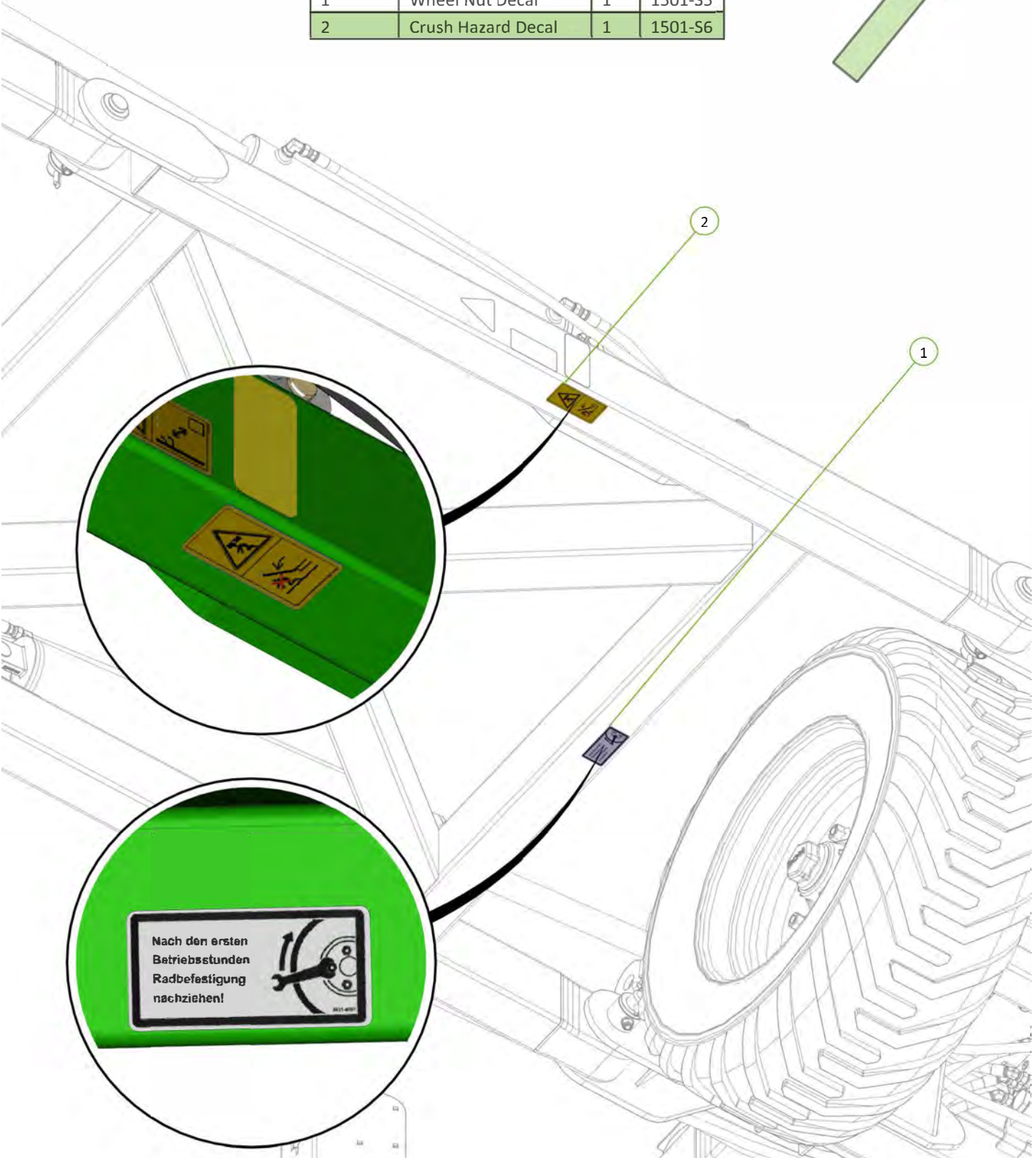


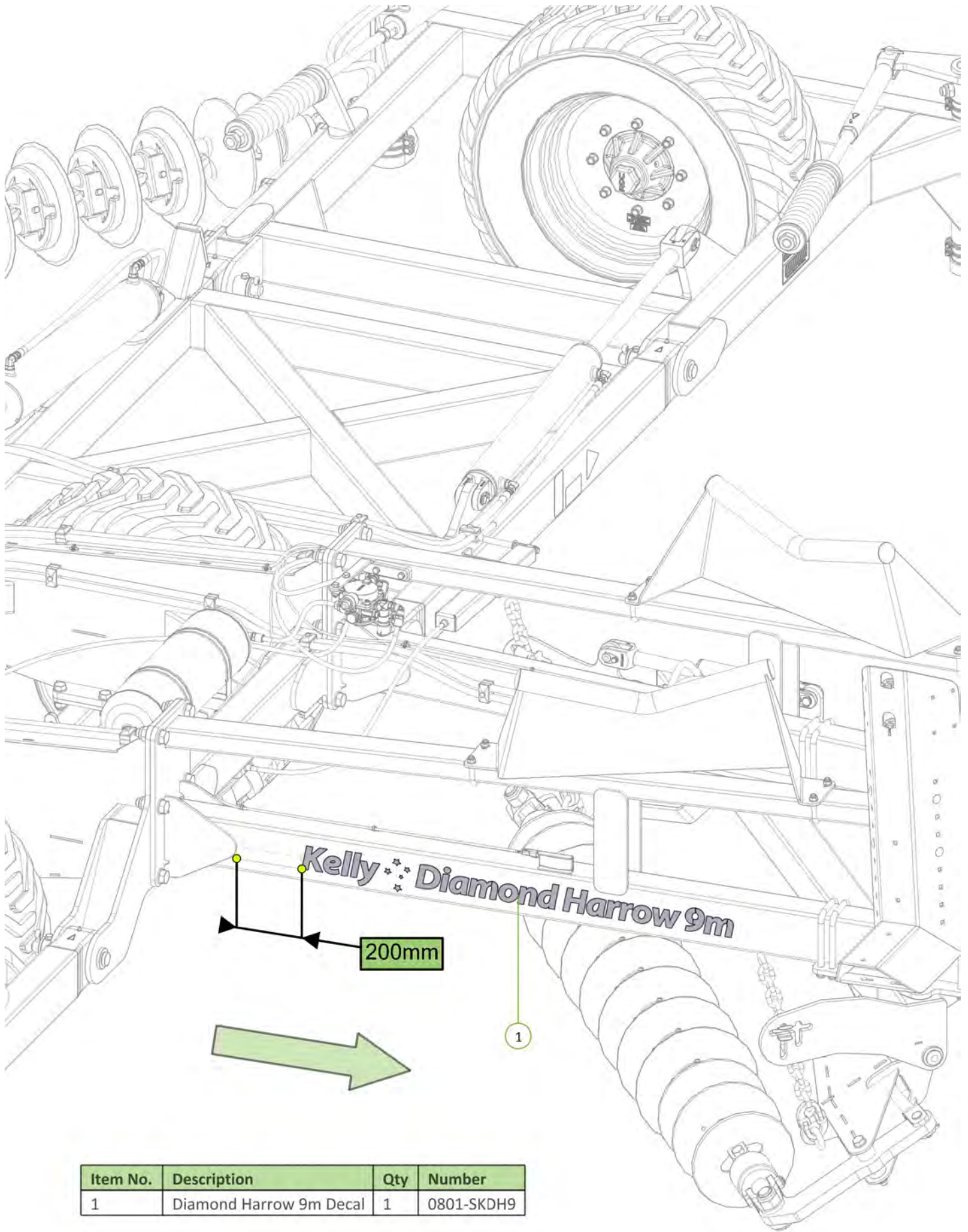
Item No.	Description	Qty	Number
1	Yellow Reflective Decal	1	0801-SYRF
2	Overhead Objects Decal	1	1501-S7
3	Power Line Hazard Decal	1	1501-S8
4	Grease Point Indicator	1	1501-S12



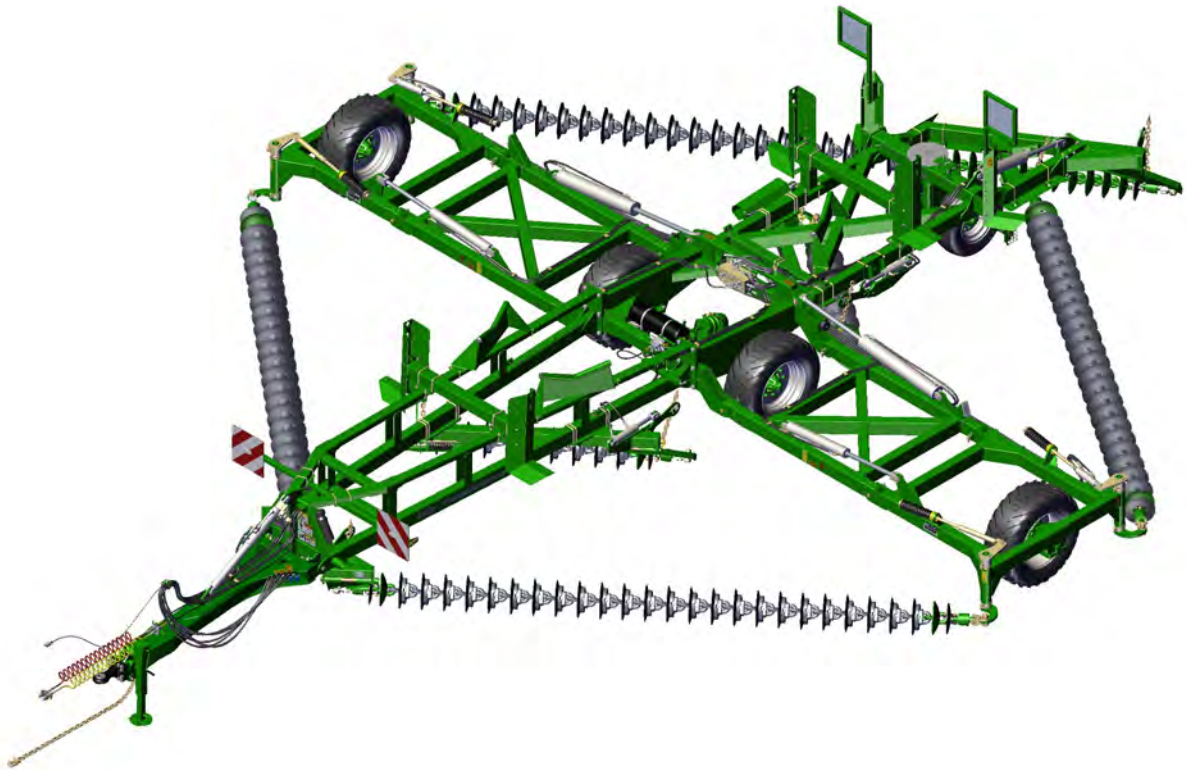


Item No.	Description	Qty	Number
1	Wheel Nut Decal	1	1501-S5
2	Crush Hazard Decal	1	1501-S6



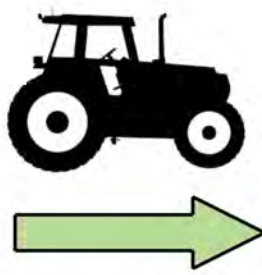
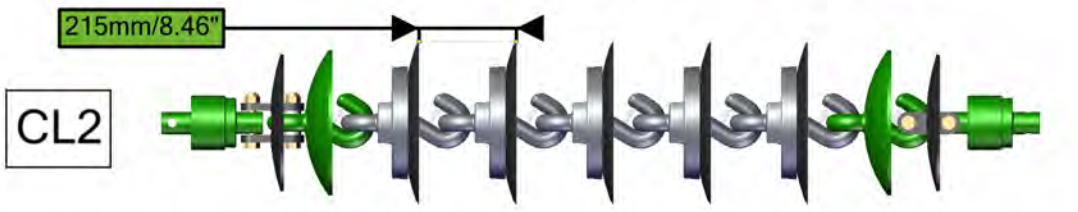


Item No.	Description	Qty	Number
1	Diamond Harrow 9m Decal	1	0801-SKDH9

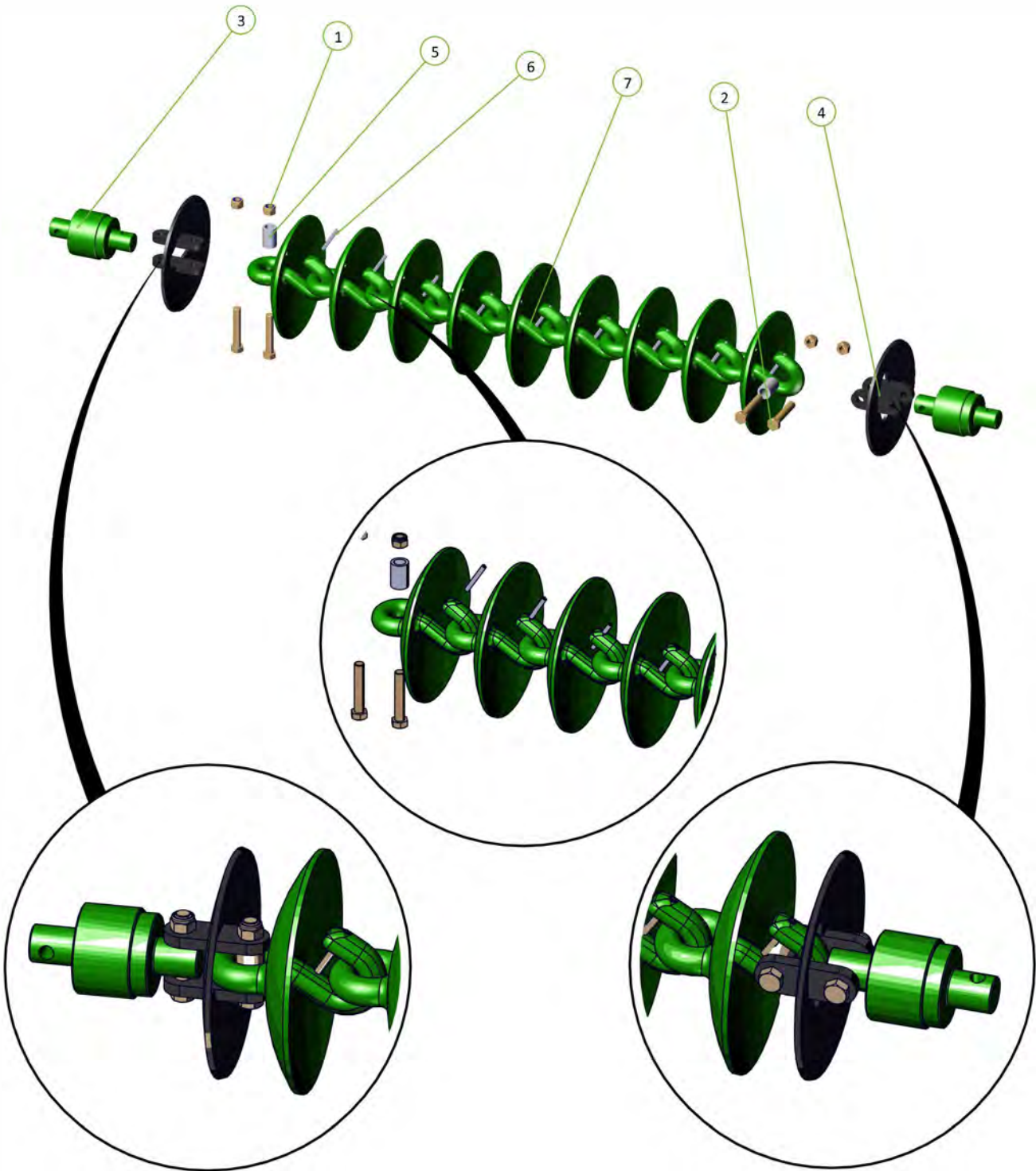
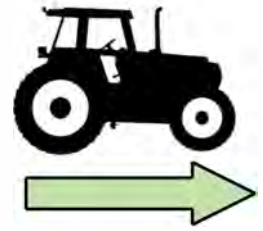


Section 5

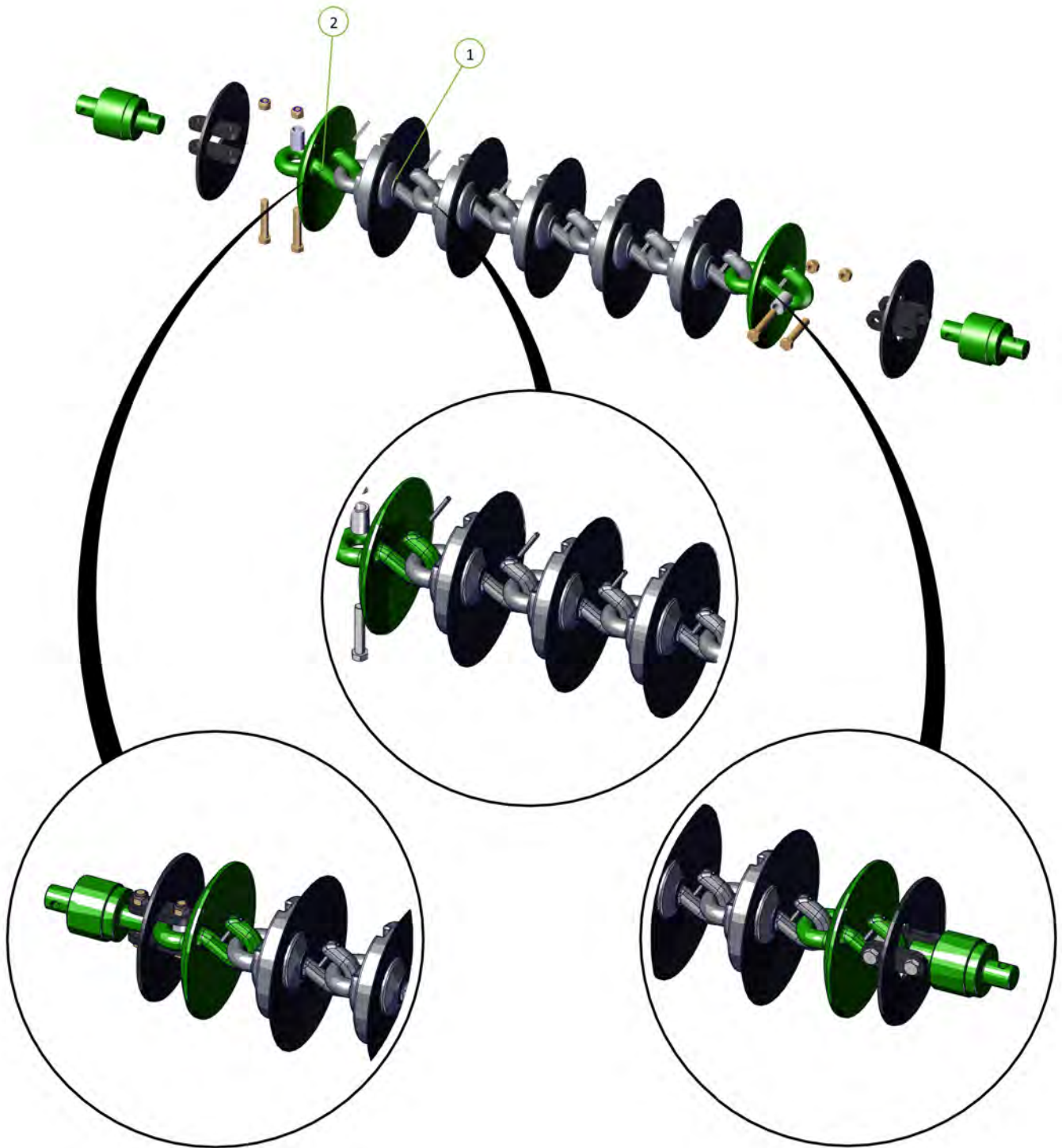
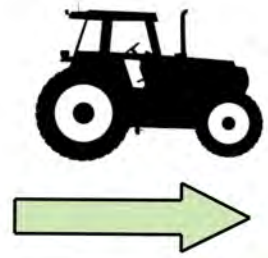
Chain Assembly



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

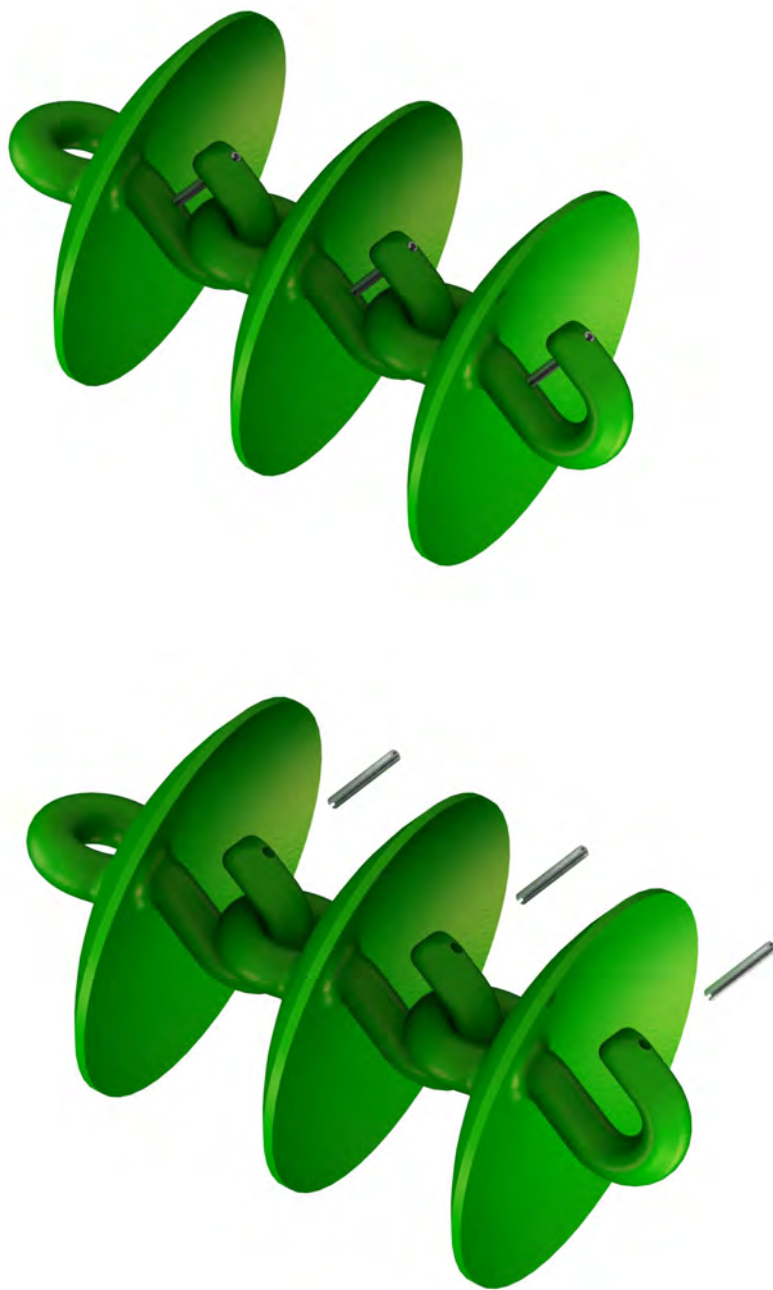


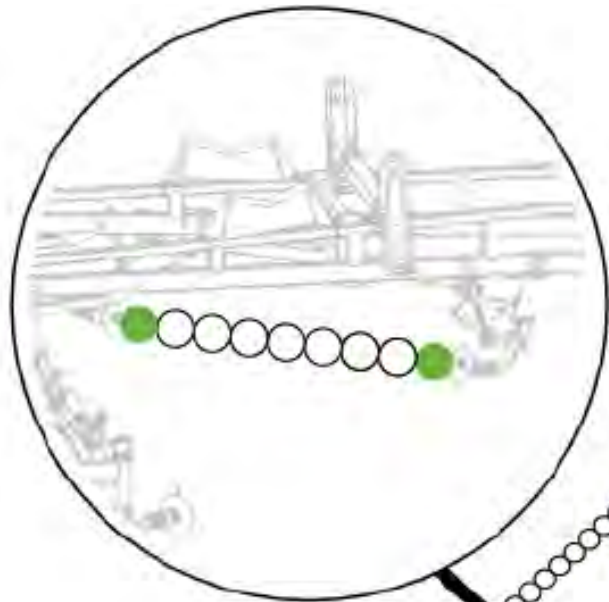
Item No.	Description	Qty	Number
1	0803-CL2-Link Assembly	1	0803-CL2
2	CL1-B Chain Disc Link	1	0803-CL1



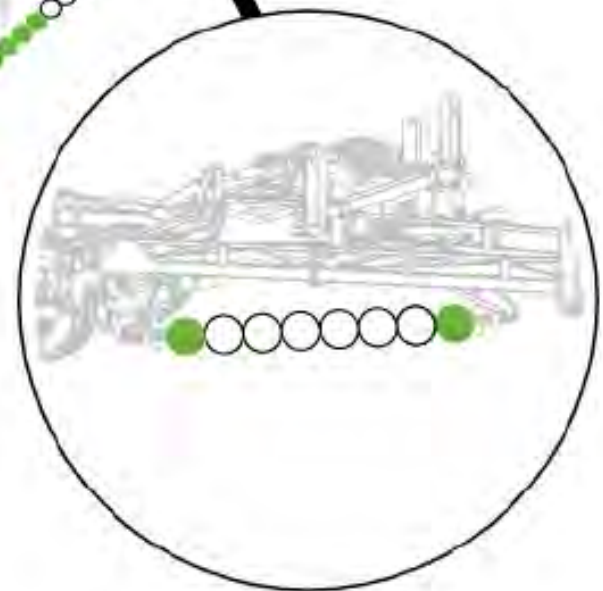
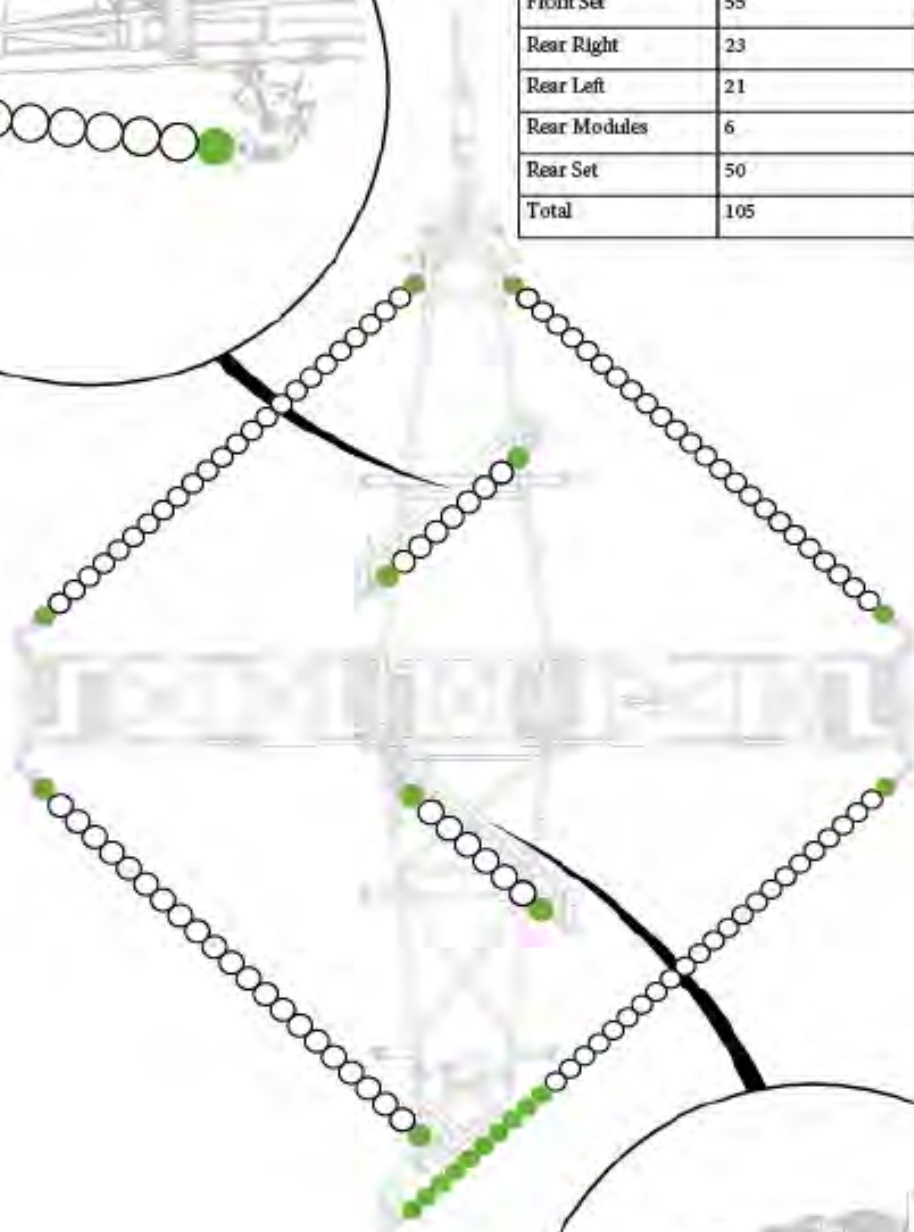
Fitting Cast Link Pins

Please install cast link retaining Pins (3/8" x 3" Roll Pin, part number 0262-3-8X3) on all cast disc links. Failure to do this could lead to the discs becoming dislodged during transport causing severe damage or injury.

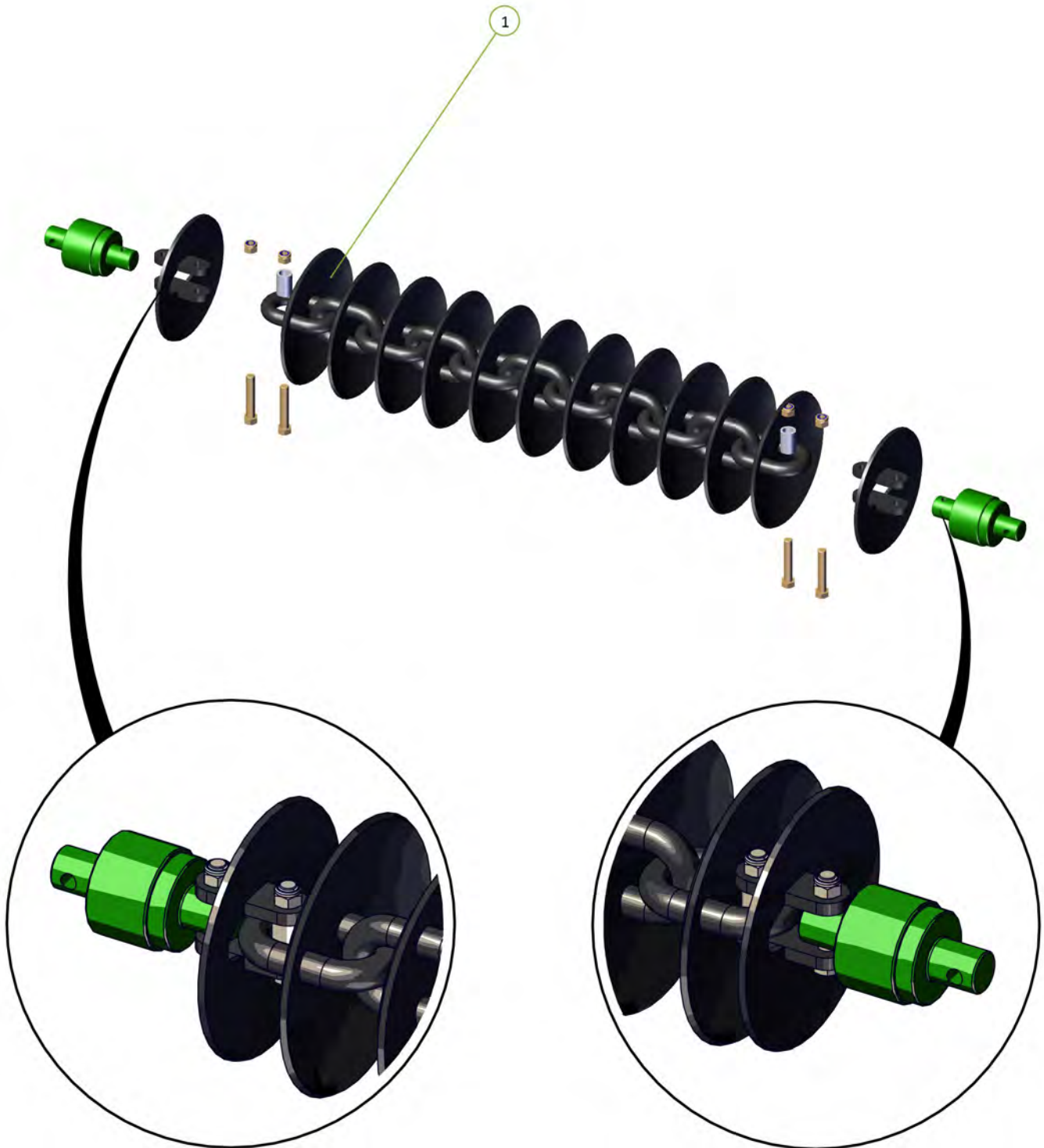
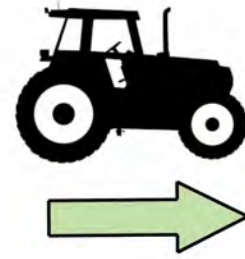




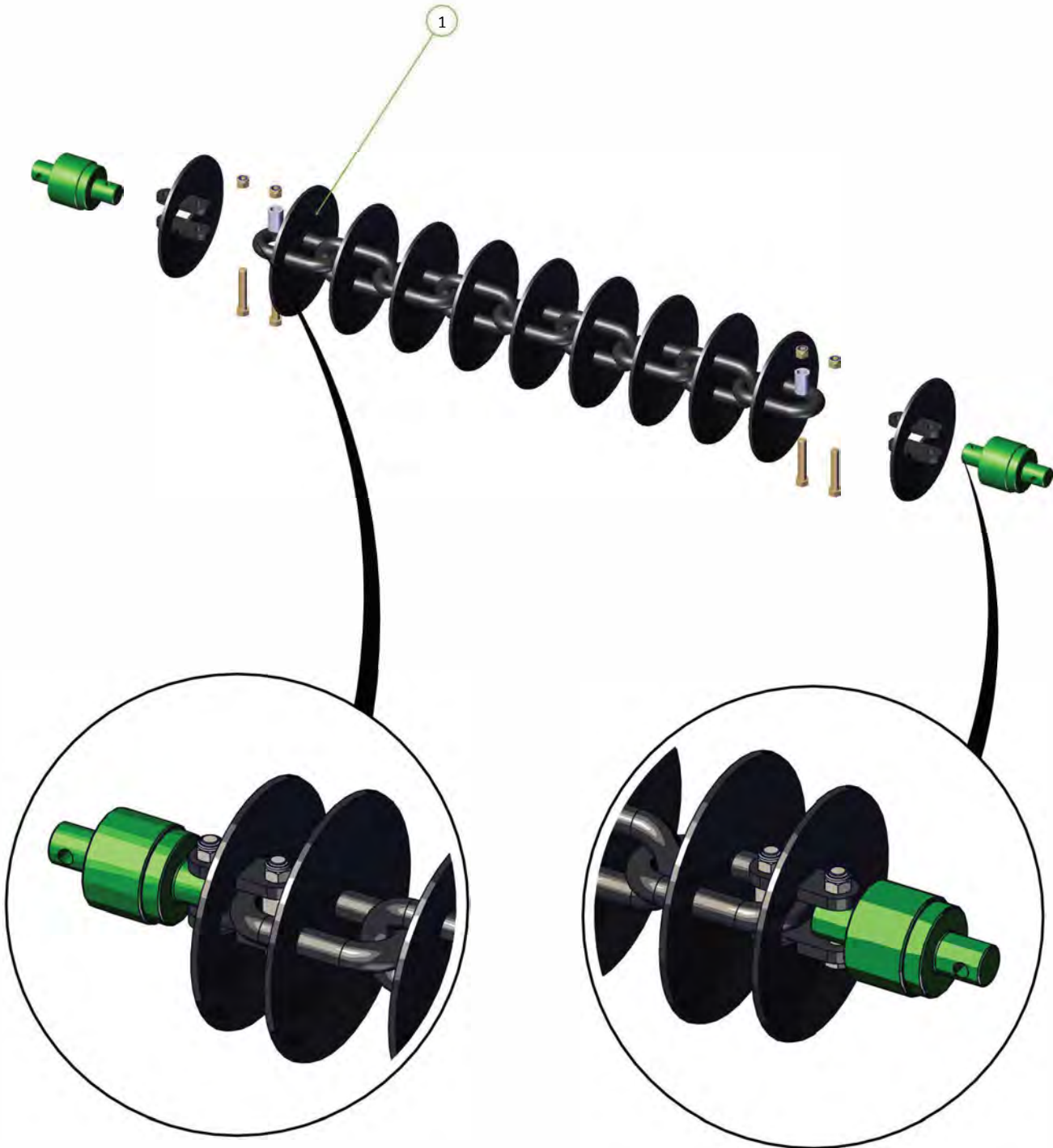
Set	CL2	CL1
Front Left	24	2
Front Right	24	2
Front Modules	7	3
Front Set	55	7
Rear Right	23	11
Rear Left	21	2
Rear Modules	6	2
Rear Set	50	15
Total	105	21



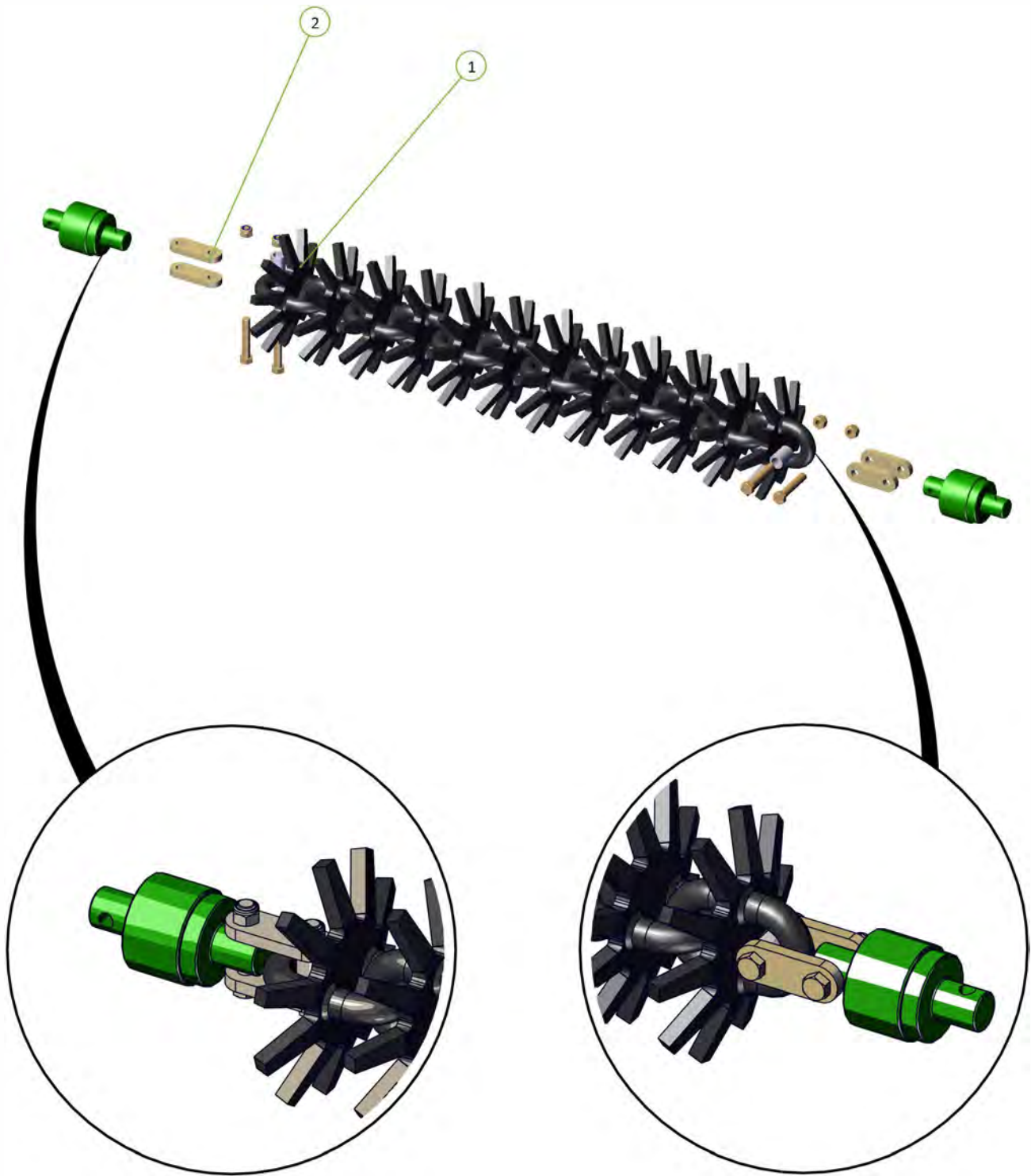
Item No.	Description	Qty	Number
1	R300 Chain Link	1	0803-R300



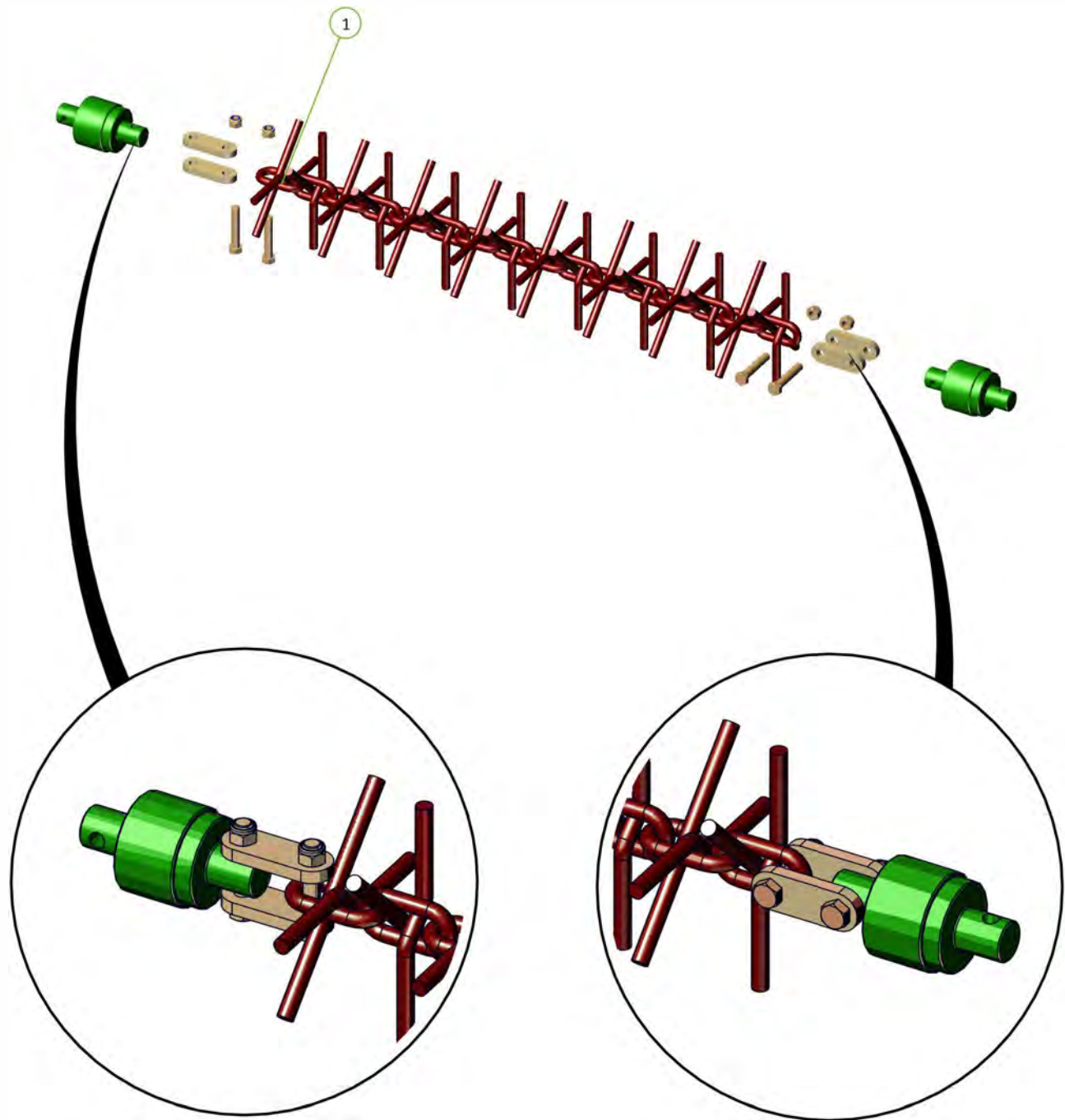
Item No.	Description	Qty	Number
1	36mm Welded Disc Chain	1	0803-W36



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



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



Section 6

Diagrams & Charts

Operating speeds

Operating speeds for normal conditions	
Chain type	Speed
Prickle Chain	10-16 kph
Disc Chain	10-12 kph
Transport / towing on roads	25 kph

Tyre pressure

Tyre size	Ply	KPA	PSI
400/55-22.5	18	350	50
10.0/75-15.3	14	300	44

Chain Harrow specifications

Model	9m
Working width	8.76m
Transport width	2.40m
Transport height	3.35m
Transport length	11.61m

Model		Length	CL2	CL1	W36	R300	SD49	Prickle chain
			CL2 disc chain also requires CL1 disc chain					
9m	Front right	5.48m	CL2 - 24 CL1 - 2	33	32	44	44	61
	Front left	5.48m	CL2 - 24 CL1 - 2	33	32	44	44	61
	Rear right	6.7m	CL2 - 23 CL1 - 11	41	39	53	53	74
	Rear left	4.97m	CL2 - 21 CL1 - 2	30	29	40	40	55
	Front module	1.99m	CL2 - 7 CL1 - 3	12	12	16	16	22
	Rear module	1.65m	CL2 - 6 CL1 - 2	10	10	13	13	18

For correct chain tension, chain links may need to be removed from the end of the chain as follows:

- CL2 Disc Chain - unhook disc chain link/s from end of the disc chain
- CL1 Disc Chain - unhook disc chain link/s from end of the disc chain
- K4 Disc Chain - unhook disc chain link/s from end of the disc chain
- Spiked Disc Chain - cut a disc chain link from the end of the disc chain
- R300 Disc Chain - cut a disc chain link from the end of the disc chain
- W36 Disc Chain - cut a disc chain link from the end of the disc chain
- Prickle Chain - cut a prickle chain link from the end of the prickle chain



Section 7

Operation

Basic Operation

Unfolding:

1. Remove transport safety stop.
2. Walk around and inspect the machine.
 - a. Check that chains are not hooked on framework
 - b. Check swivel bolts at end of each chain are in place and not broken
 - c. Check that 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.
3. Lower front drawbar to working height.
4. Unfold wings, holding the hydraulic lever until the main center cylinder pins have centered in their slots.
5. Lower rear tail by holding hydraulic lever until tail and modules are completely lowered to working position and the wing de-tensioning cylinders are fully retracted, tensioning the chain.
6. Walk around and check that all chain links are straight and that working height of all swivels are correct for field conditions. Adjust if necessary.
7. Move off with all chains in working position. If necessary it is acceptable to raise frame to transport height. This will lift the front chains off the ground and reduce the load on the tractor. Lower the frame once operating speed is reached.

Folding:

1. Lower the front drawbar 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 drawbar to transport height.
5. Walk around and check that chains have located correctly in transport rests.
6. Install transport safety stop.

Setting for correct chain tension

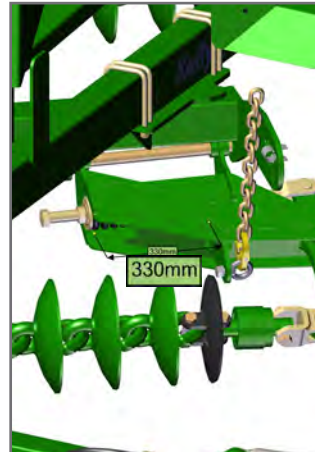
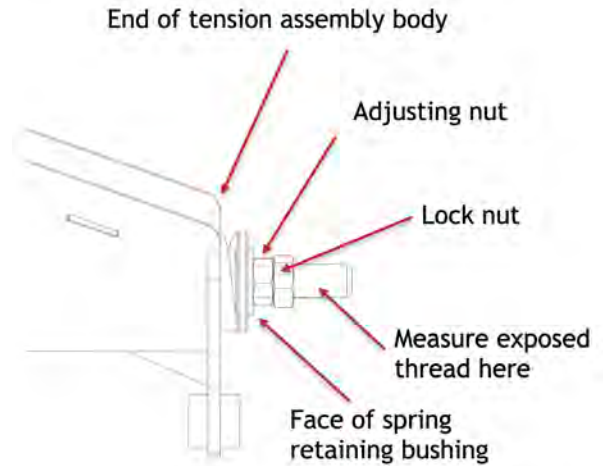
Wings

- Use the spanner supplied. Loosen the lock nut adjacent to the tensioner assembly body.
- Turn the tension bolt clockwise to compress the coil spring to 330mm. Correct tension is achieved when spring retains its set length when operator rolls the chain fore and aft on the ground. Retighten the lock nut.
- When less than 25mm of thread remains visible on the adjuster 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 flushed with the body of the module tensioning unit.
- Retighten the lock nut.
- After setting the tension assemblies to have the recommended thread showing (less than 200mm), move out to the wings of the machine and use the PCHTA adjusters to tension the gang of discs.

Modules



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.

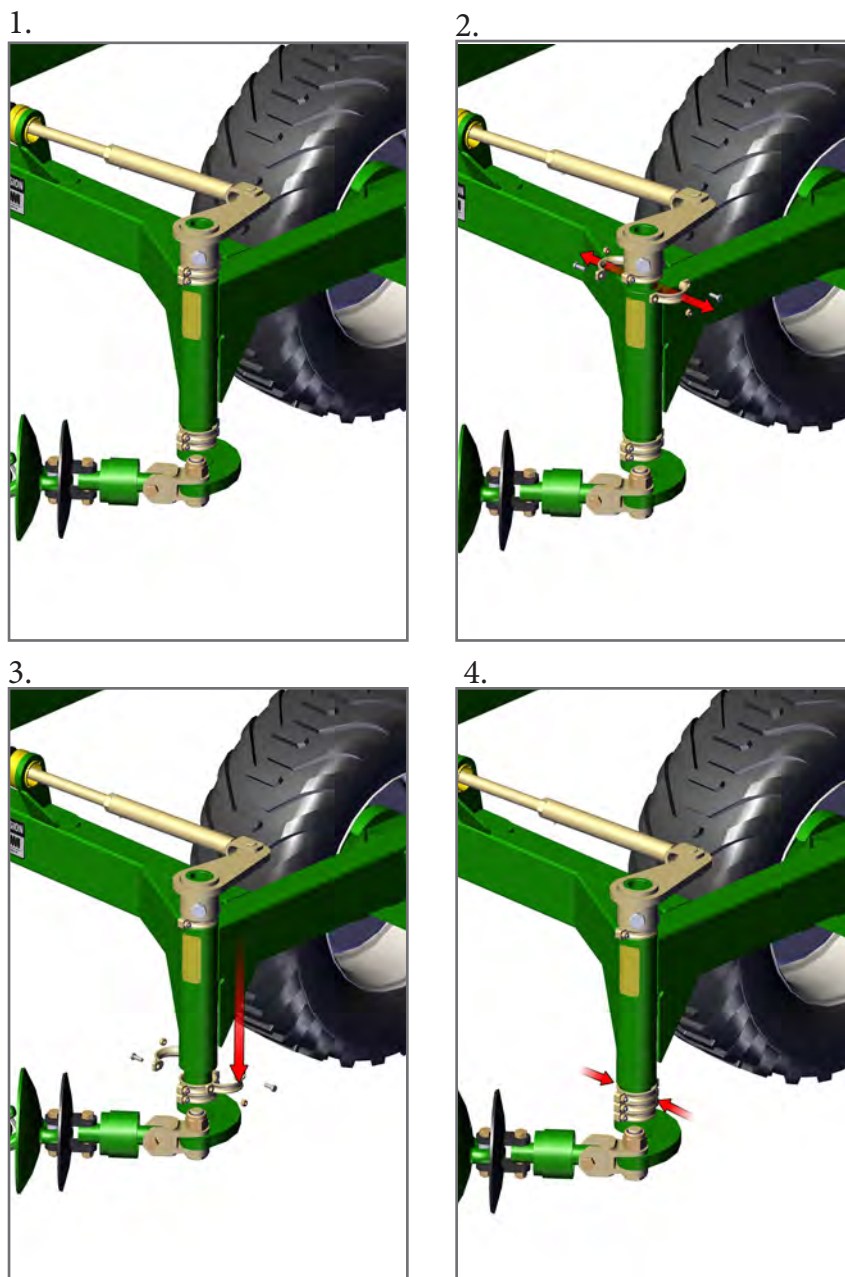
A correctly adjusted machine will not have this problem.

Correct chain height adjustment

To adjust the swivel height at the wings, relocate one of the spacers either above or below the fixed mounting tube. Each Dropleg has four pairs of 25mm cast spacers. The most common set up is to have two pairs of cast spacers on the bottom and two pairs of cast spacers on the top. Below is the process to adjust the Dropleg height.

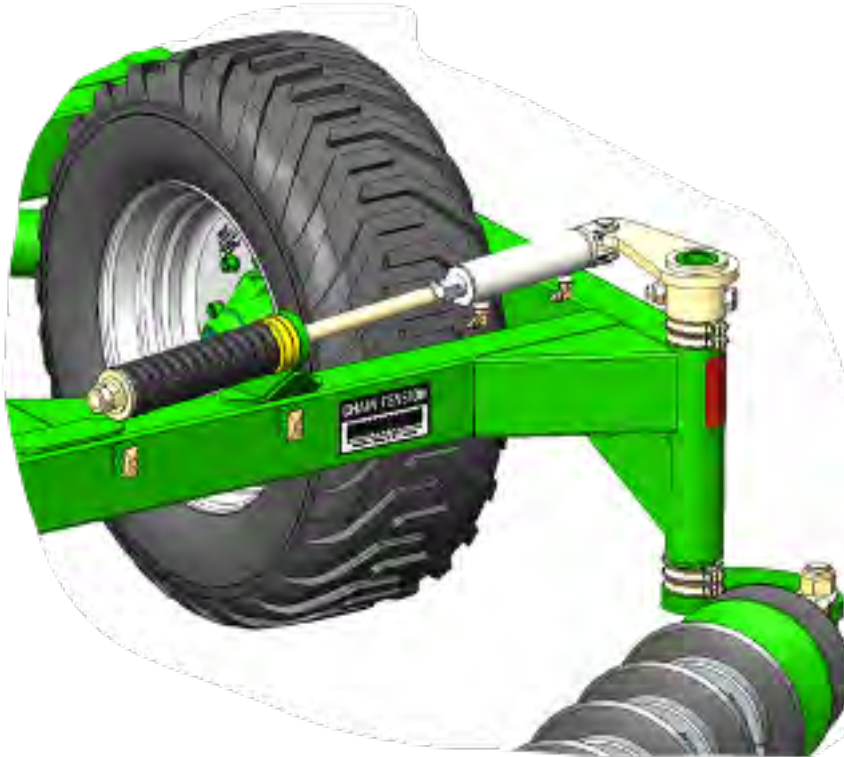
1. Loosen chain tension completely
2. Undo 2 x M10 bolts from corresponding spacer set and take the two halves off of the drop leg tube
3. Replace it in the selected position after raising or lowering the drop leg
4. Reinstall the M10 bolts and re-tension the chain

It is possible to install all spacers either above or below the mounting tube giving a maximum of 100mm of adjustment.



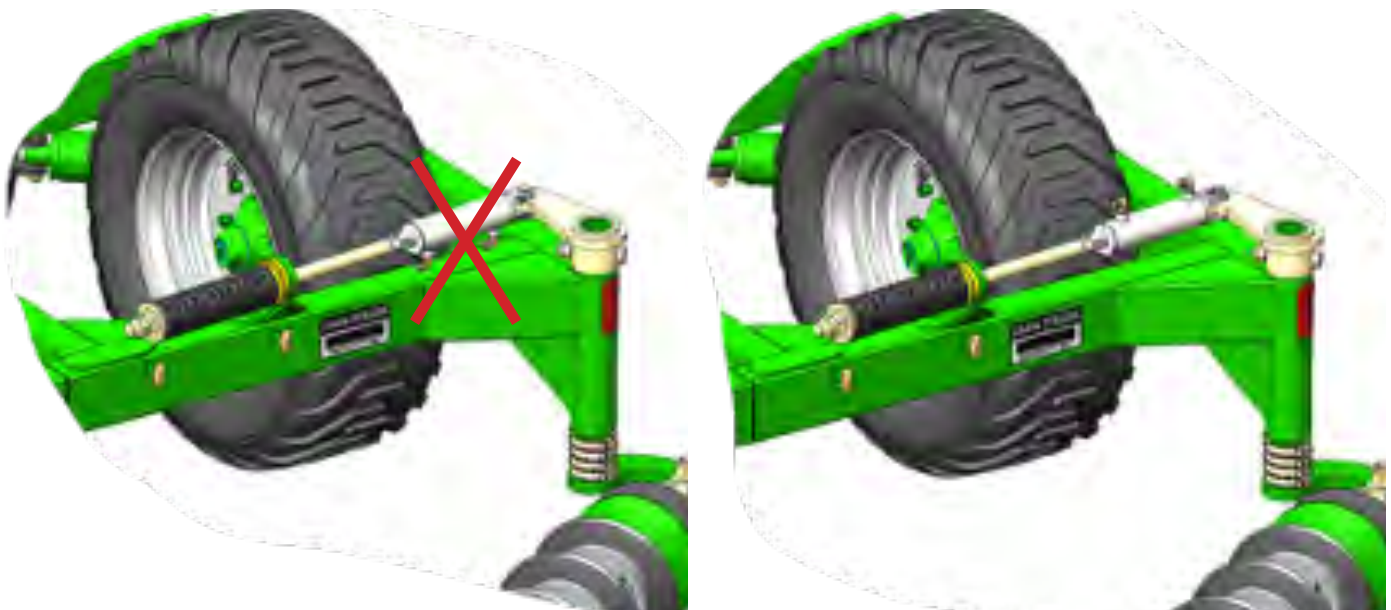
Height Adjustment for Rear Chain Wing Mounts

To adjust the swivel height at the wings on the rear chains follow steps 1-4 as above. From factory, the swivel height is set with two spacers above the fixed mounting tube.



In the unlikely event that your conditions require the swivels to be set as low a possible, you will need to reorient the cylinder such that the hydraulic ports point upward.

(Please note that if all the cast spacers are used on the bottom & the cylinder orientation is not flipped, then the hydraulic ports could clash with the framework as illustrated on the left, below)



Section 8

Pre-Delivery Checklist

Name _____ Date _____ Location _____

Check Item:	Checked by Initial
Tyres are fitted correctly	
Check wheel nuts are tightened to the correct torque and marked	
Check tyres are inflated to correct pressure	
Tow Hitch is fitted correctly with bolts tightened to correct torque and marked.	
All bolts and nuts are tightened to the correct torque values and marked.	
All retaining pins are inserted and engaged	
All hoses are correctly routed through holders	
Air brake hoses are sound with no leaks	
Air brake relay valve is correctly set for the load	
Hydraulic rams and hoses are sound	
Hydraulic Accumulator is charged correctly.(6M only)	
Drop legs are correctly orientated. (6M only)	
Swivel Units are correctly orientated	
Chains are resting correctly on their transport supports (chain carriers)	
Check the chain tension as per assembly manual	
All points are greased on the machine	
Roll pins are installed in the discs (CL1 and CL2)	
All safety decals are on the machine in the correct locations are per the Assembly/ Operators manual	
All safety signs are present & lights working	
Machine is registered for Warranty	
Customer has been shown the website and how to access parts information	
Operators manual has been provided with the machine	

Signature _____

