

62

Kelly

Diamond Chain Harrow 62 HDX Assembly & Parts Manual

Revision H March 2020

Serial Number:

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

Thank you for choosing a Kelly Engineering product

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

Spare parts can be purchased, as required, through your local dealer or by contacting Kelly Engineering Australia.

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

Australia

Kelly Engineering

PO Box 100

Boileroo Centre SA 5482

Phone: + 61 8 8667 2253

Fax: + 61 8 8667 2250

Email: sales@kellyengineering.com.au

Spare Parts: parts@kellyengineering.com.au

Website: www.kellyengineering.com.au

United States

Kelly Engineering

Email: sales@kellyharrows.com

Website: www.kellyharrows.com

Europe

Kelly Engineering

Email: sales@kellytillage.eu

Website: www.kellytillage.eu

Contents

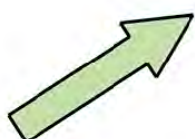
| | Page no |
|--|------------|
| Section 1: Unpacking | 5 |
| Section 2: Parts and Assembly | 7 |
| Section 3: Hydraulics Setup | 92 |
| Section 4: Diagrams & Charts | 133 |
| Wiring Diagram | 134 |
| Mounting Swivels | 135 |
| Cast Chain Link Retaining Specifications | 136 |
| Disc Chain Lengths | 137 |
| | 138 |
| Section 5: Chain Assembly | 139 |
| Section 6: Operation | 148 |
| Basic Operation and Chain Tension | 149 |
| Module and Chain Tension | 150 |
| Light Brackets | 151 |
| Hydraulic Jack | 152 - 153 |
| CL2 Disc Change procedure | 154 - 155 |
| Chain Carrier Locations | 156 |
| Pre-Delivery Check List | 157 |



This symbol indicates which bag the relevant fastners are in



This symbol indicates which bag the relevant hydraulics are in



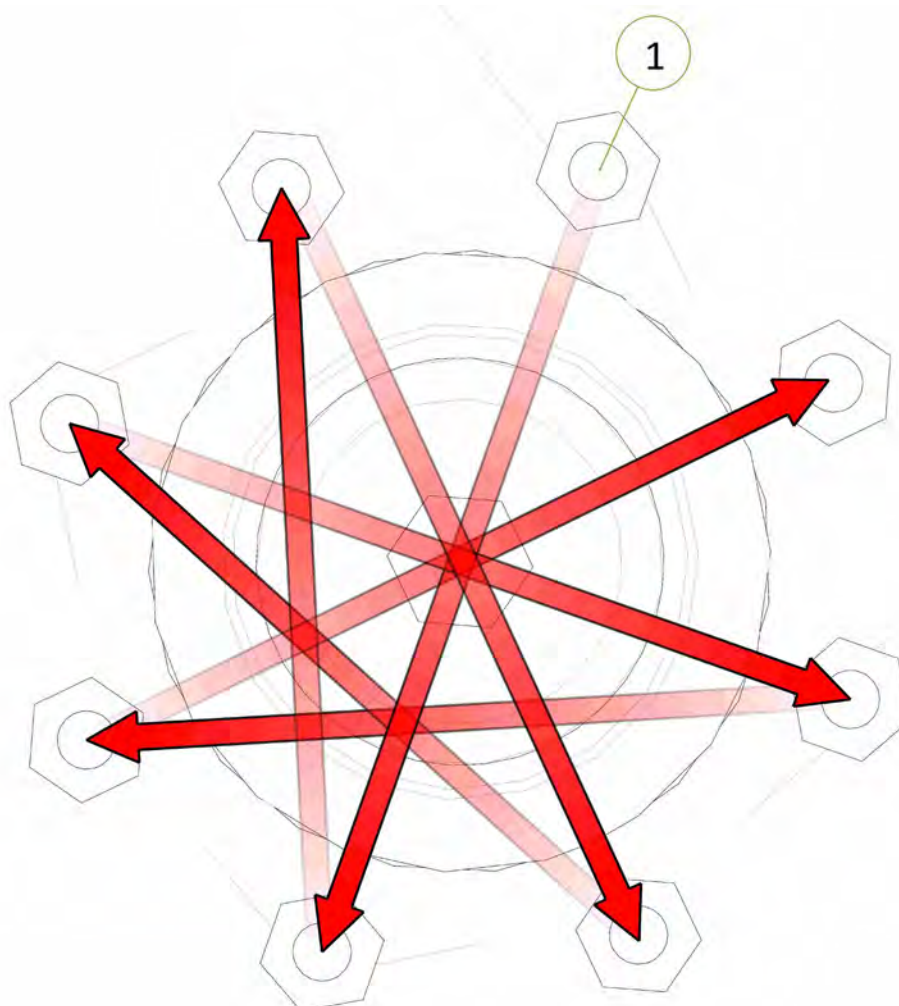
This symbol indicates which way the machine is travelling

Bolt Torque Settings

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

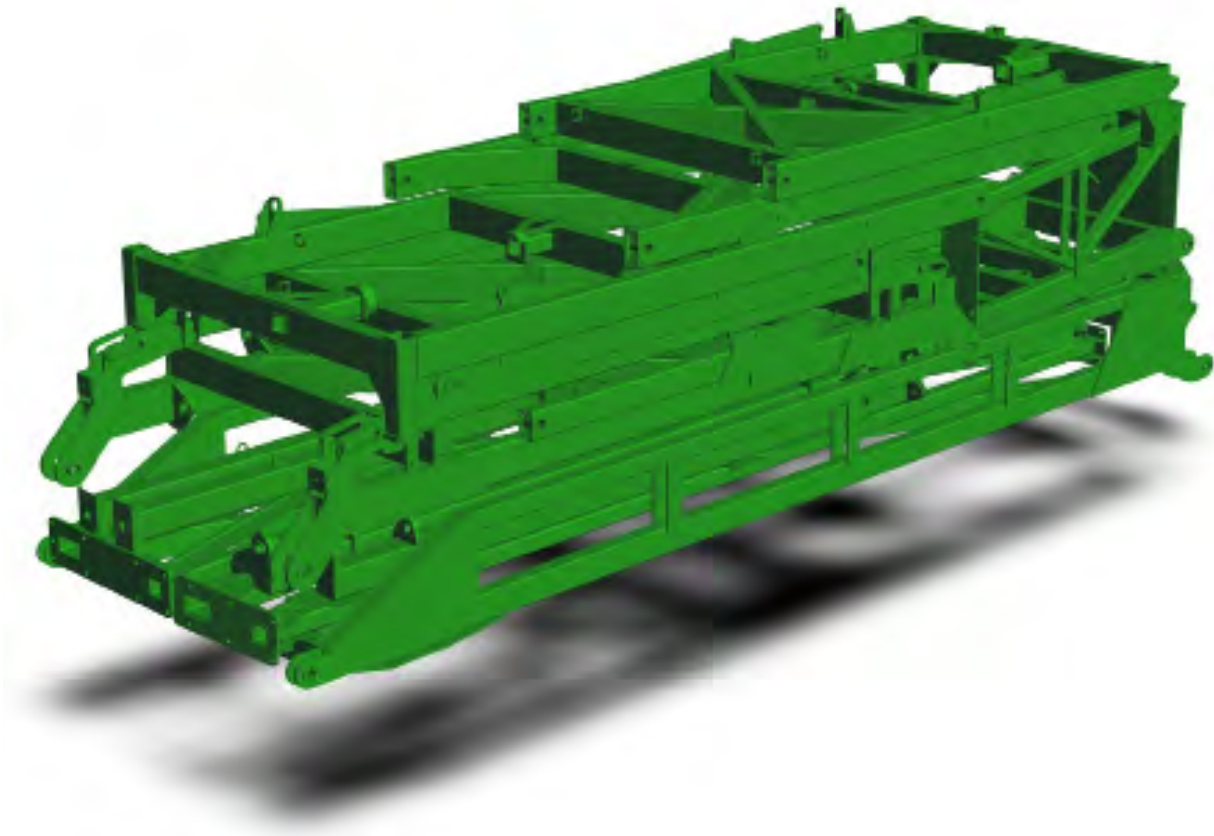
[1] When fitting a wheel & tire to a hub, tighten the wheel nuts in a star pattern to the correct tension. To achieve this choose a wheel nut & tighten, then proceed to the opposite side of the hub to the next wheel nut & tighten & so on until all wheel nuts are tight. Then repeat the procedure to check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

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



Section 1

Unpacking



CAUTION

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



CAUTION

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



CAUTION

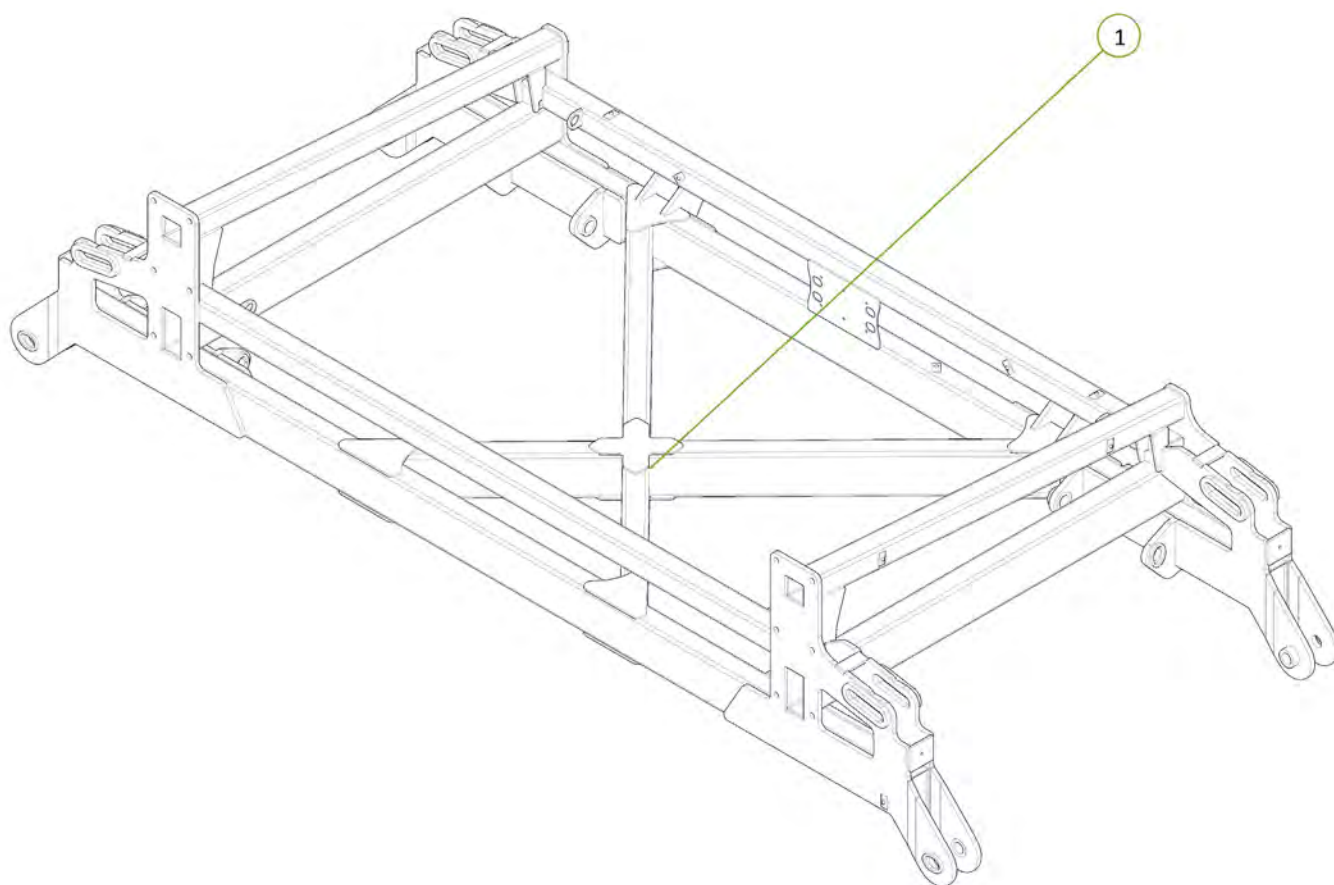
To avoid falling or moving components, before cutting straps attach slings or chains to individual pieces and only cut the straps holding the piece to be lifted.

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

Section 2

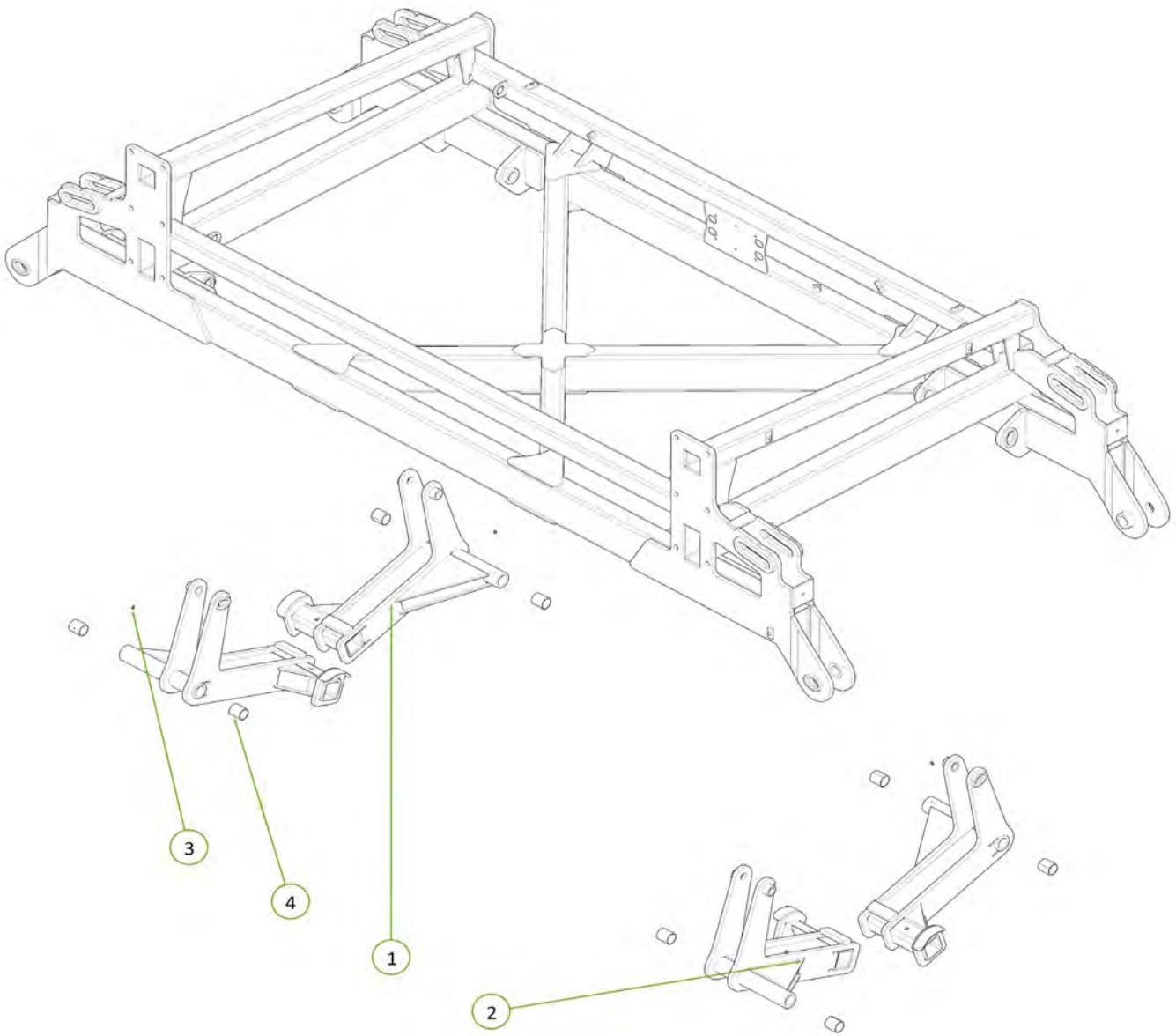
Parts & Assembly

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

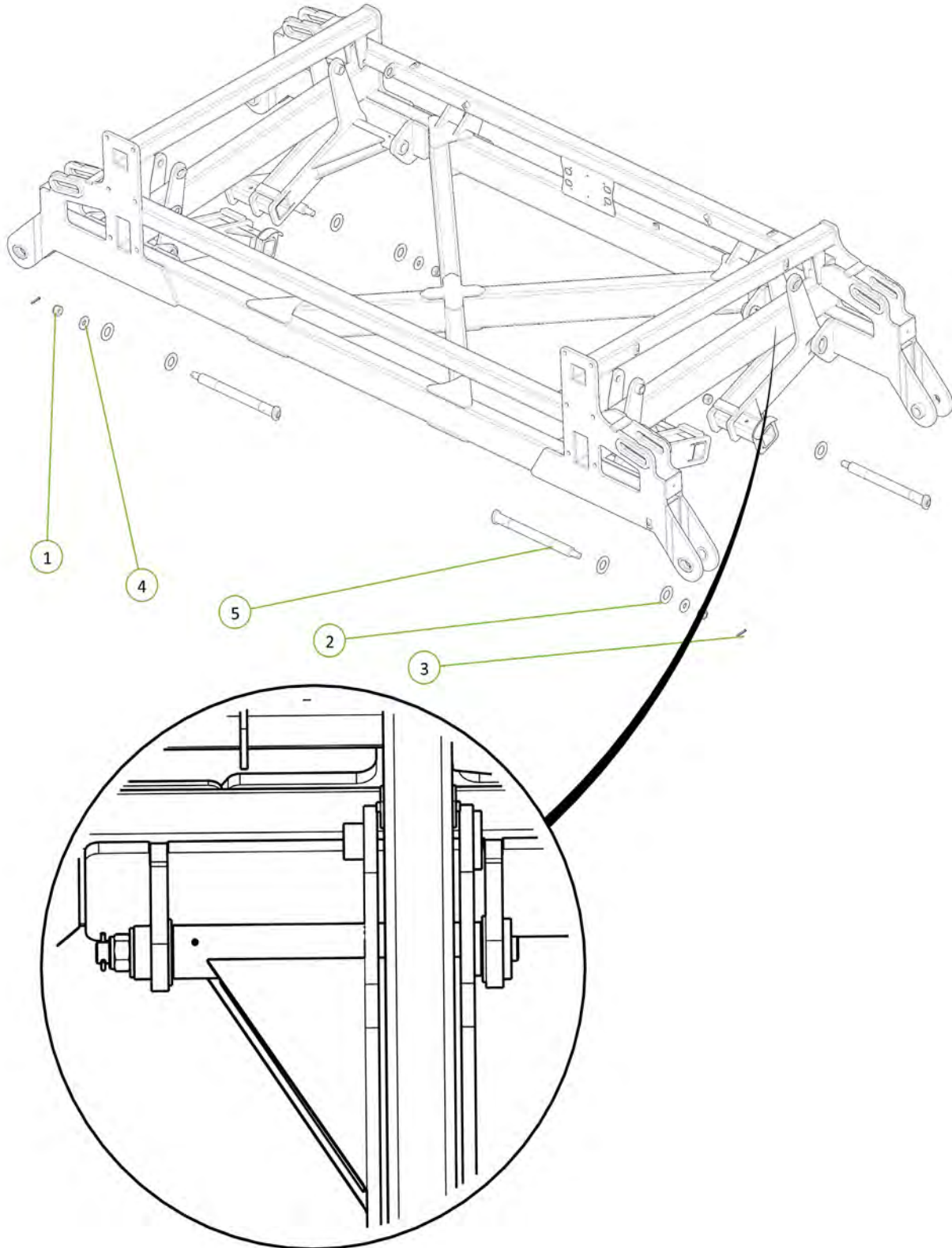


| Item No. | Description | Qty | Number |
|----------|------------------------|-----|----------------|
| 1 | RH Walking Axle Arm | 2 | 1210-50 |
| 2 | LH Walking Axle Arm | 2 | 1210-51 |
| 3 | Grease Nipple 1/4" UNF | 4 | 0181-GN1-4 |
| 4 | 50 ID x 60mm DX Bush | 8 | 0113-MB 5060DX |

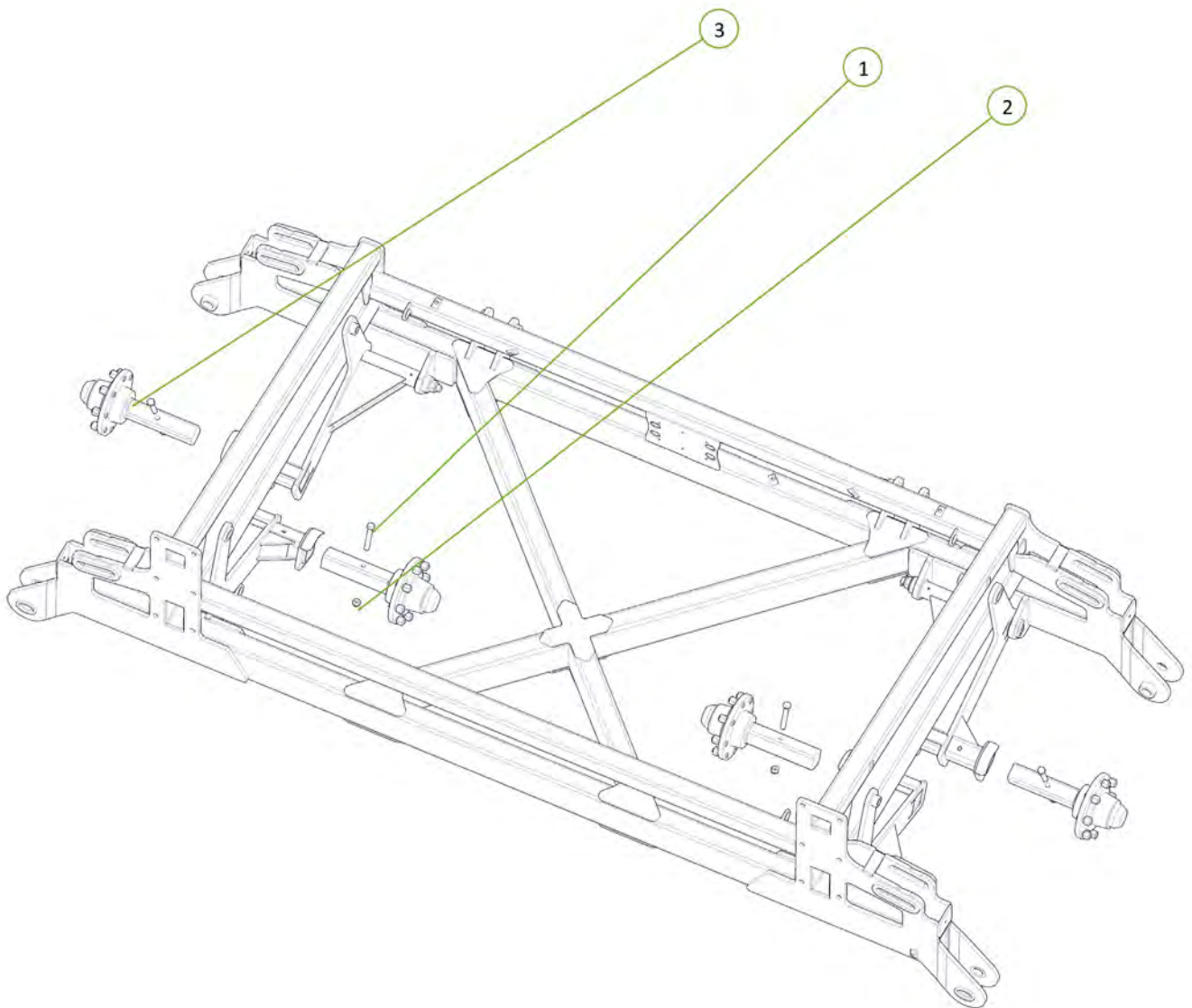
Please note - DX bushes are factory inserted



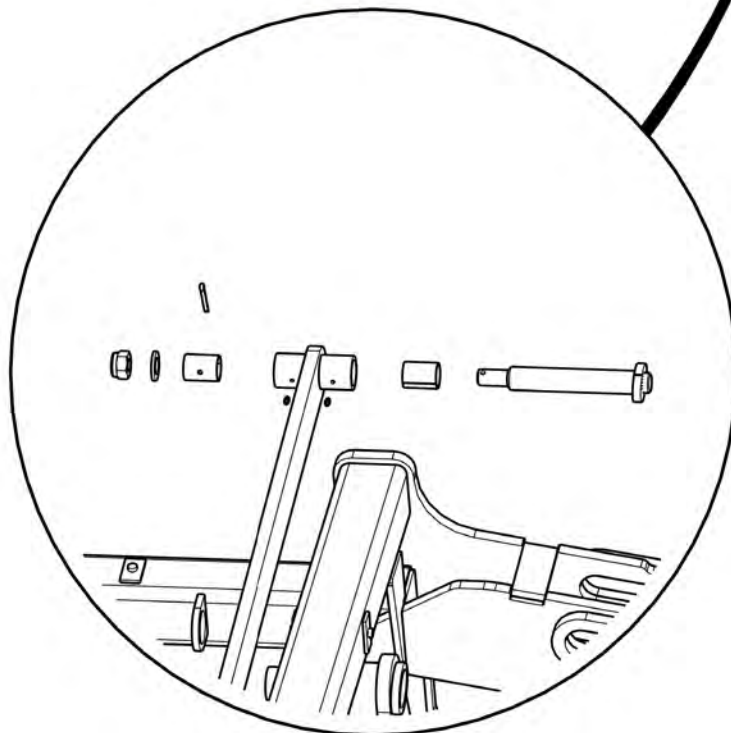
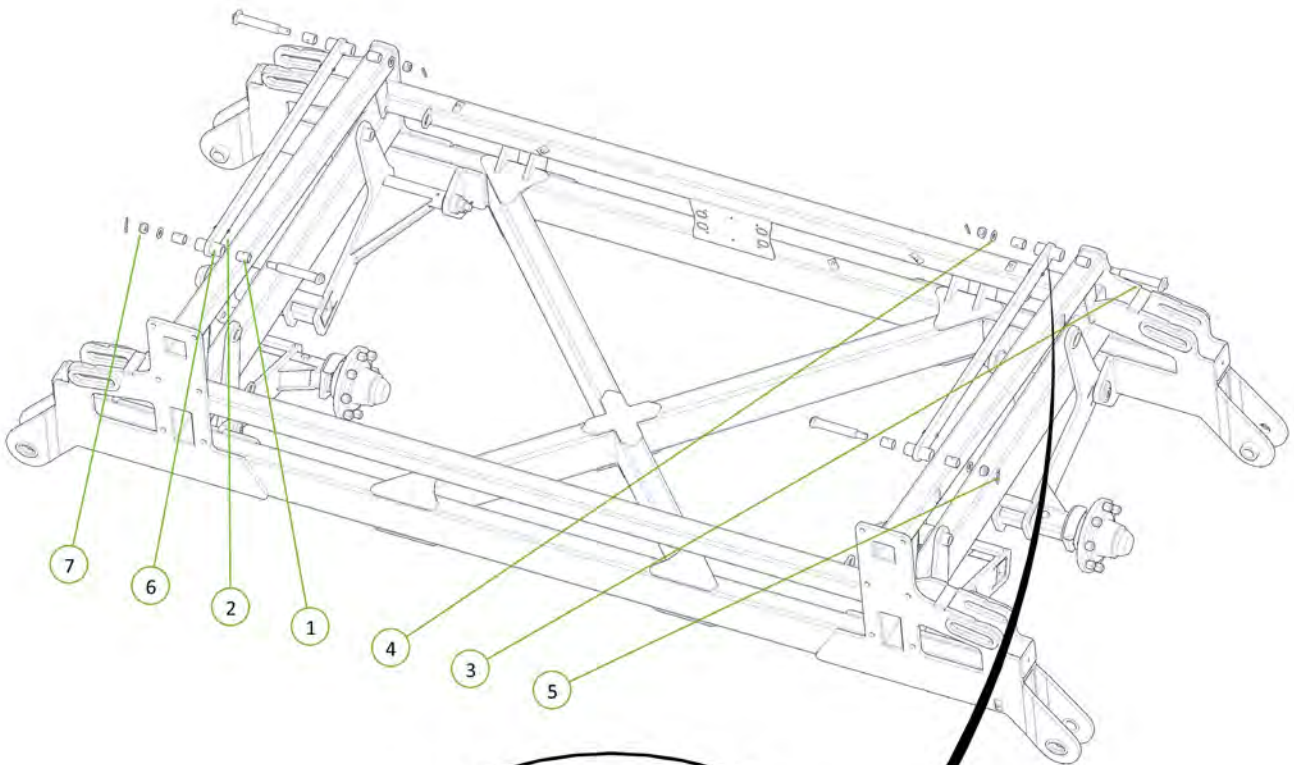
| Item No. | Description | Qty | Number |
|----------|---------------------------------|-----|--------------|
| 1 | Nyloc Nut M30 | 4 | 0221-NYL30 |
| 2 | Washer High Tensile 2" | 8 | 0232-HT2 |
| 3 | Cotter Pin M6 x 50mm | 4 | 0261-PINC650 |
| 4 | 50mm Pivot Pin Retaining Washer | 4 | 1200-60 |
| 5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



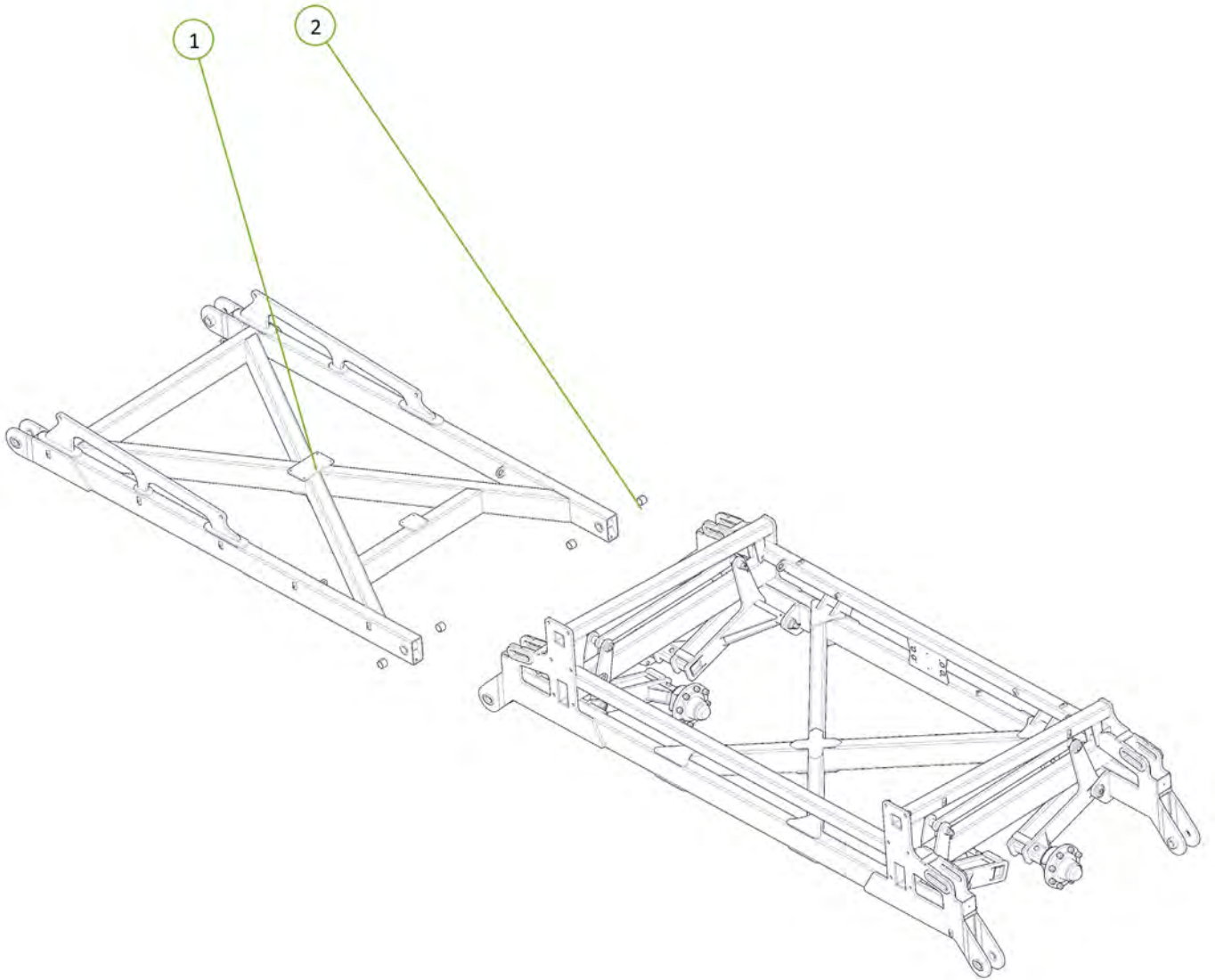
| Item No. | Description | Qty | Number |
|----------|---|-----|------------|
| 1 | M20 x 130 grade 8.8 ZP Bolt | 4 | 0211-20130 |
| 2 | Nyloc Nut M20 | 4 | 0221-NYL20 |
| 3 | 90 Series Stub Axle (Stub and Hub Complete) | 4 | 0733-90 |



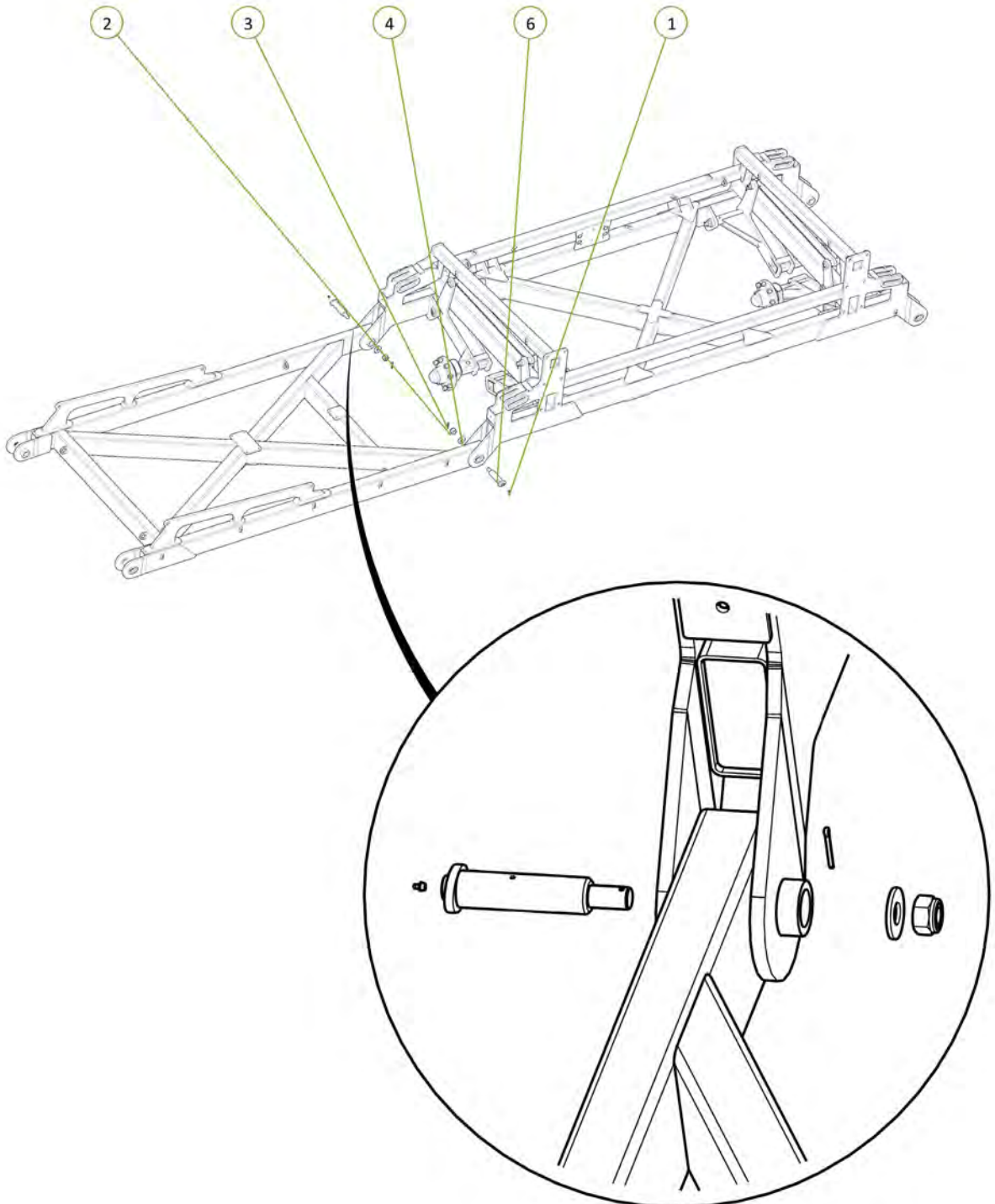
| Item No. | Description | Qty | Number |
|----------|--------------------------|-----|----------------|
| 1 | 35 ID x 50mm DX Bush | 8 | 0113-MB 3550DX |
| 2 | Grease Nipple 1/4" UNF | 8 | 0181-GN1-4 |
| 3 | Oval Head 35mm Pivot Pin | 4 | 1202-09 |
| 4 | Washer Flat M24 | 4 | 0231-F24 |
| 5 | Cotter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



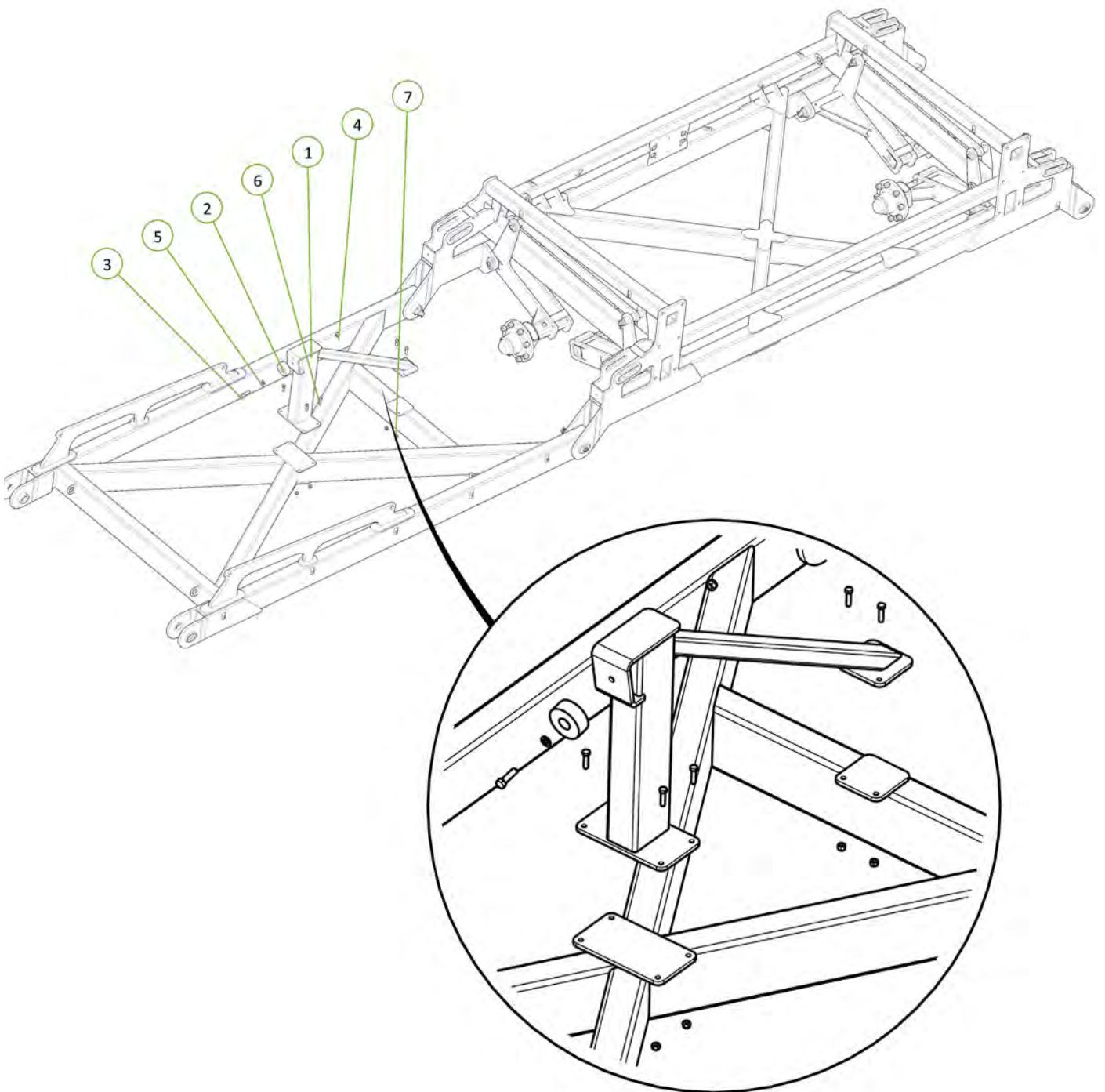
| Item No. | Description | Qty | Number |
|----------|---------------------------|-----|----------------|
| 1 | 62HDX RH Inner Wing Frame | 1 | 1265-04 |
| 2 | 50 ID x 40mm DX Bush | 4 | 0113-MB 5040DX |



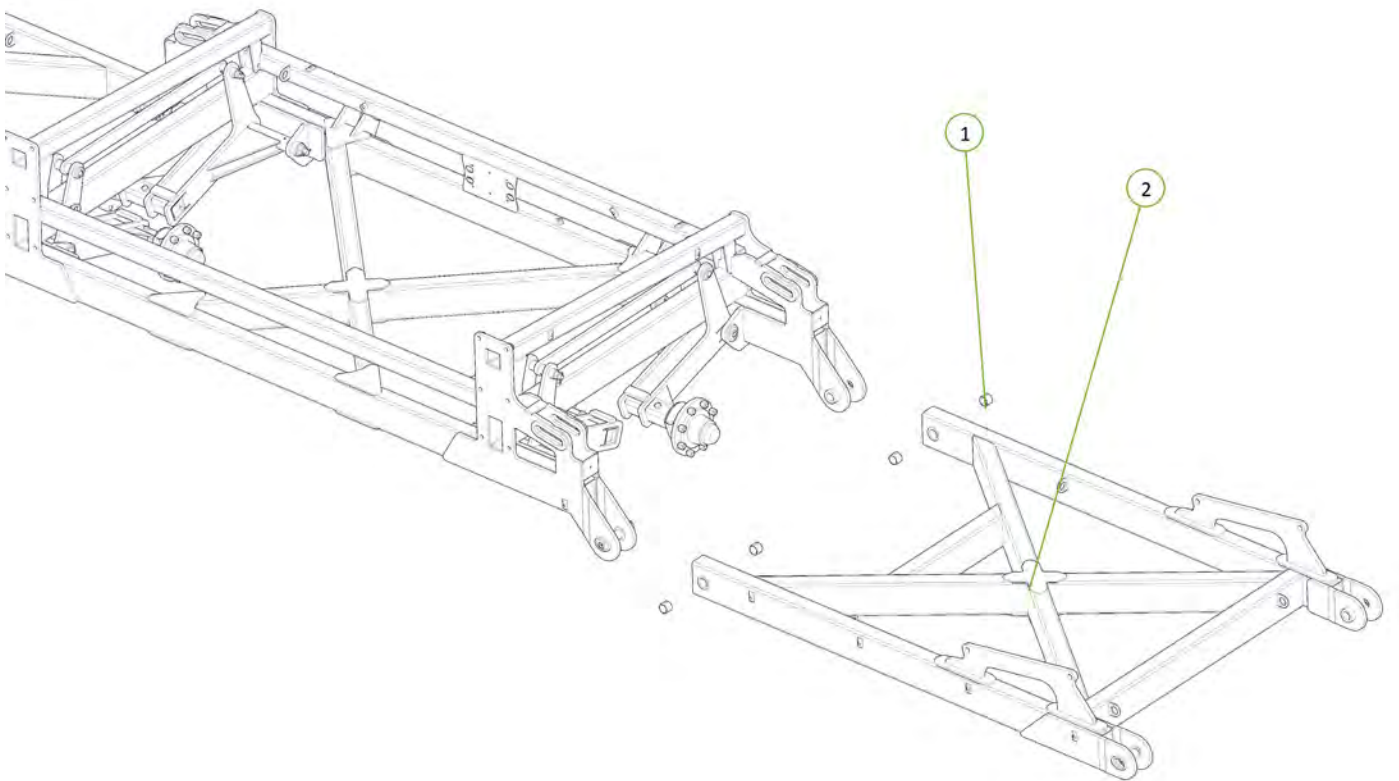
| Item No. | Description | Qty | Number |
|----------|---------------------------------|-----|--------------|
| 1 | Grease Nipple 1/8" BSP | 2 | 0181-GN1-8 |
| 2 | Nyloc Nut M30 | 2 | 0221-NYL30 |
| 3 | Cotter Pin M6 x 50mm | 2 | 0261-PINC650 |
| 4 | 50mm Pivot Pin Retaining Washer | 2 | 1200-60 |
|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



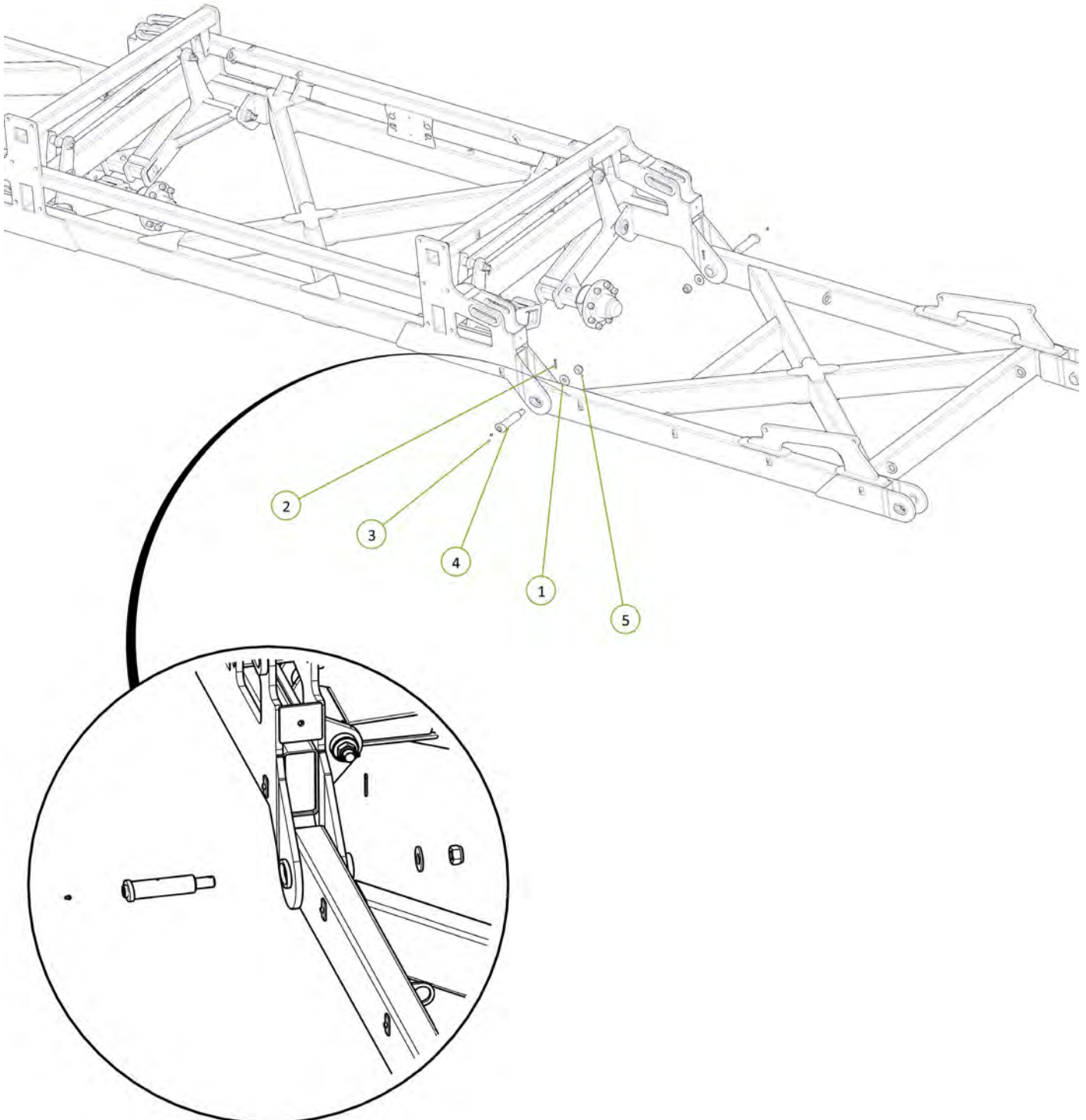
| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | 62HDX Inner Wing Post | 1 | 1265-04P |
| 2 | Nylon Wing Folding Buffer | 1 | 1201-52 |
| 3 | M16 x 55 grade 8.8 zp Bolt | 1 | 0211-1655 |
| 4 | Nyloc Nut M16 | 1 | 0221-NYL16 |
| 5 | Washer Flat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



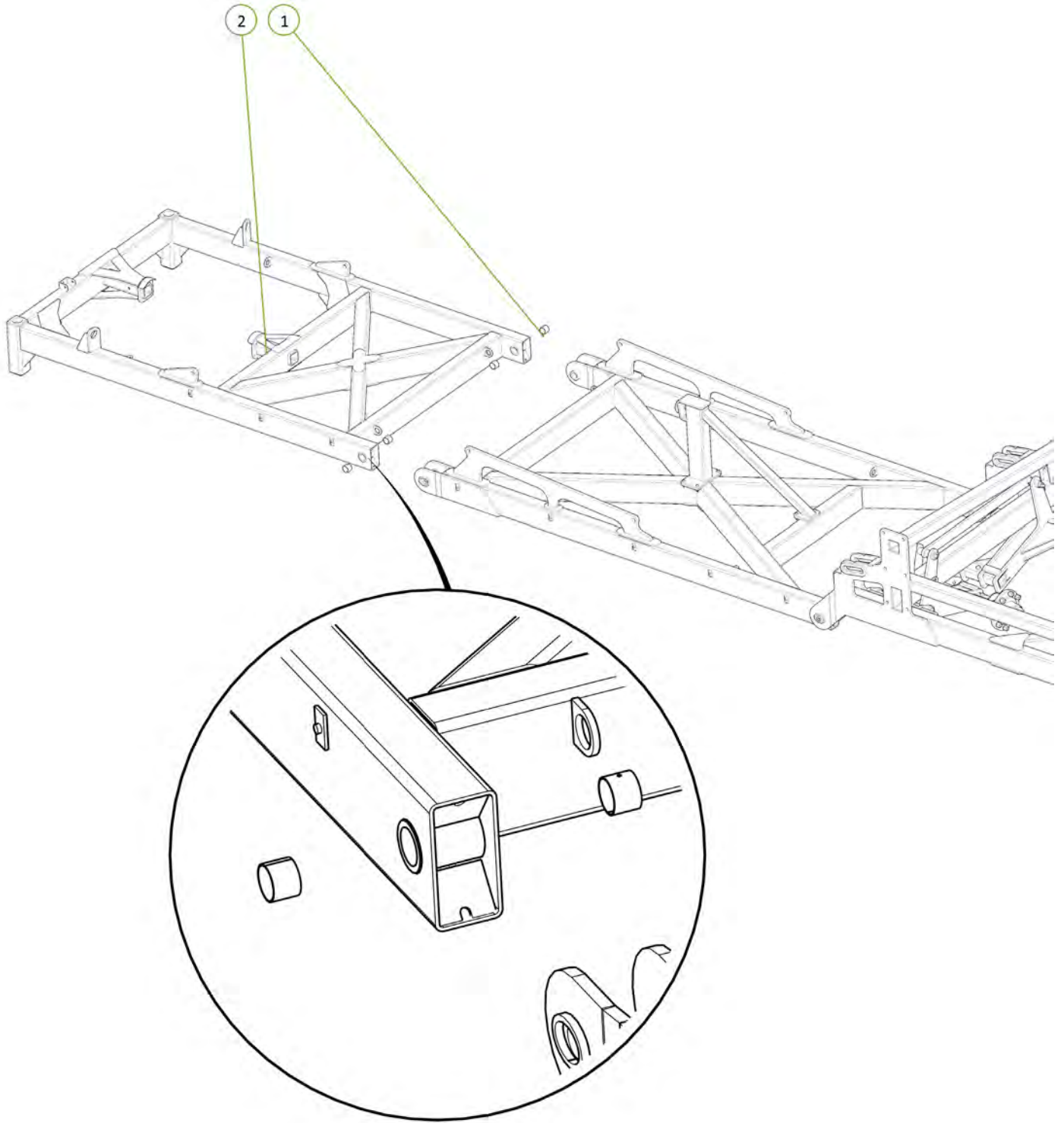
| Item No. | Description | Qty | Number |
|----------|----------------------|-----|----------------|
| 1 | 50 ID x 40mm DX Bush | 4 | 0113-MB 5040DX |
| 2 | 62HDX LH Inner Wing | 1 | 1265-05 |



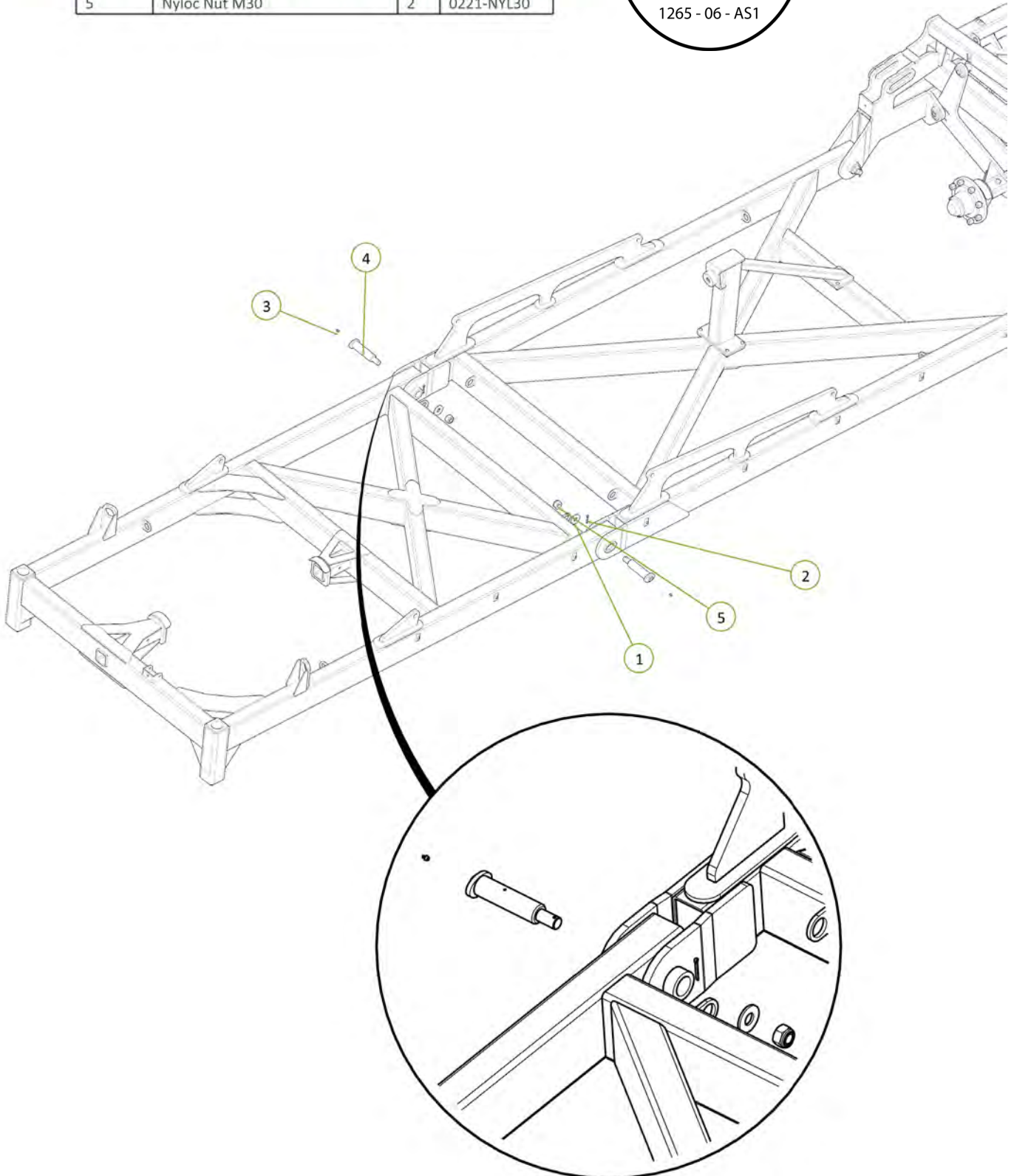
| Item No. | Description | Qty | Number |
|----------|---------------------------------|-----|--------------|
| 1 | 50mm Pivot Pin Retaining Washer | 2 | 1200-60 |
| 2 | Cotter Pin M6 x 50mm | 2 | 0261-PINC650 |
| 3 | Grease Nipple 1/8" BSP | 2 | 0181-GN1-8 |
| 4 | Oval Head 50mm Short Pivot Pin | 2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



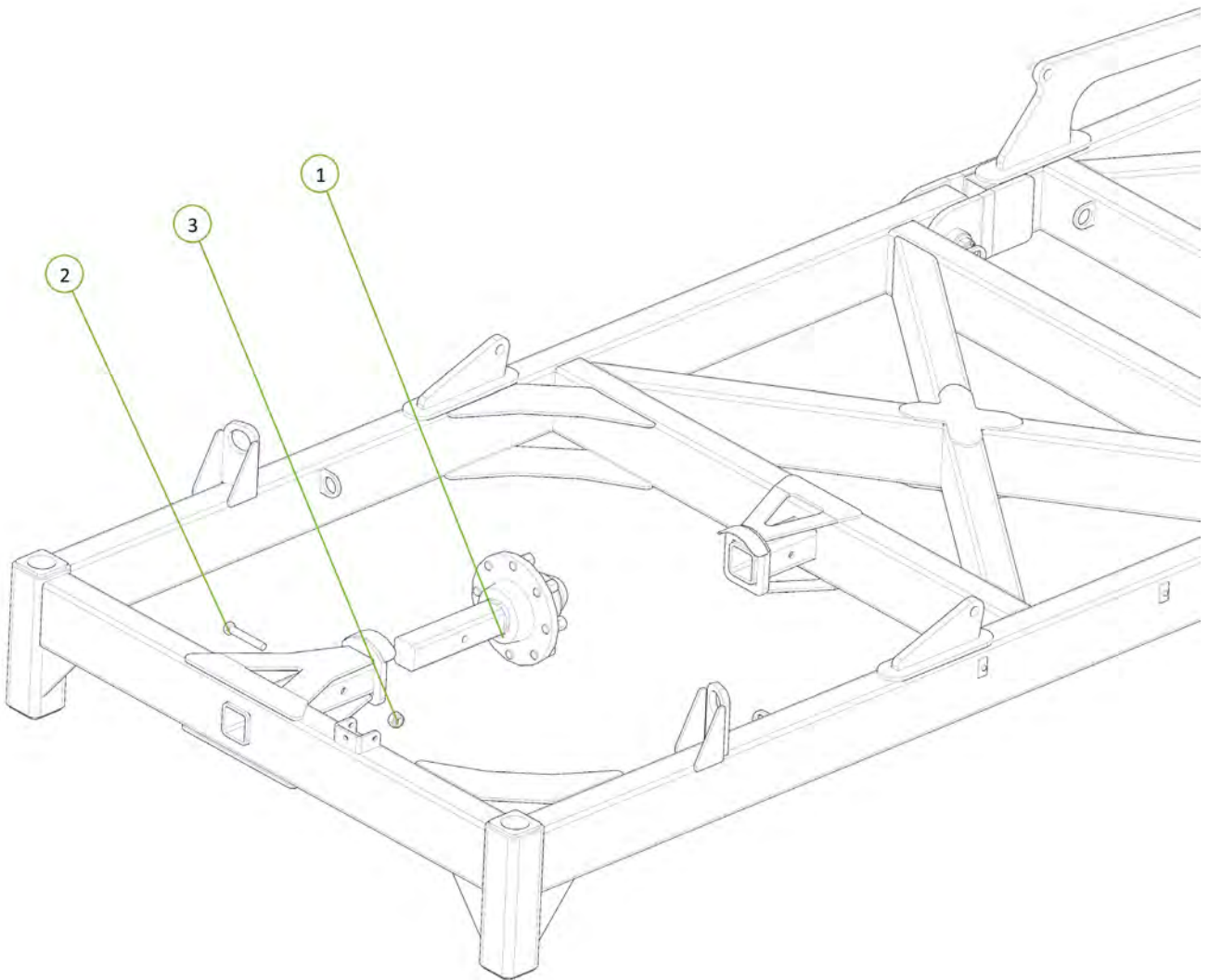
| Item No. | Description | Qty | Number |
|----------|----------------------|-----|----------------|
| 1 | 50 ID x 40mm DX Bush | 4 | 0113-MB 5040DX |
| 2 | 62HDX RH Outer Wing | 1 | 1265-06 |



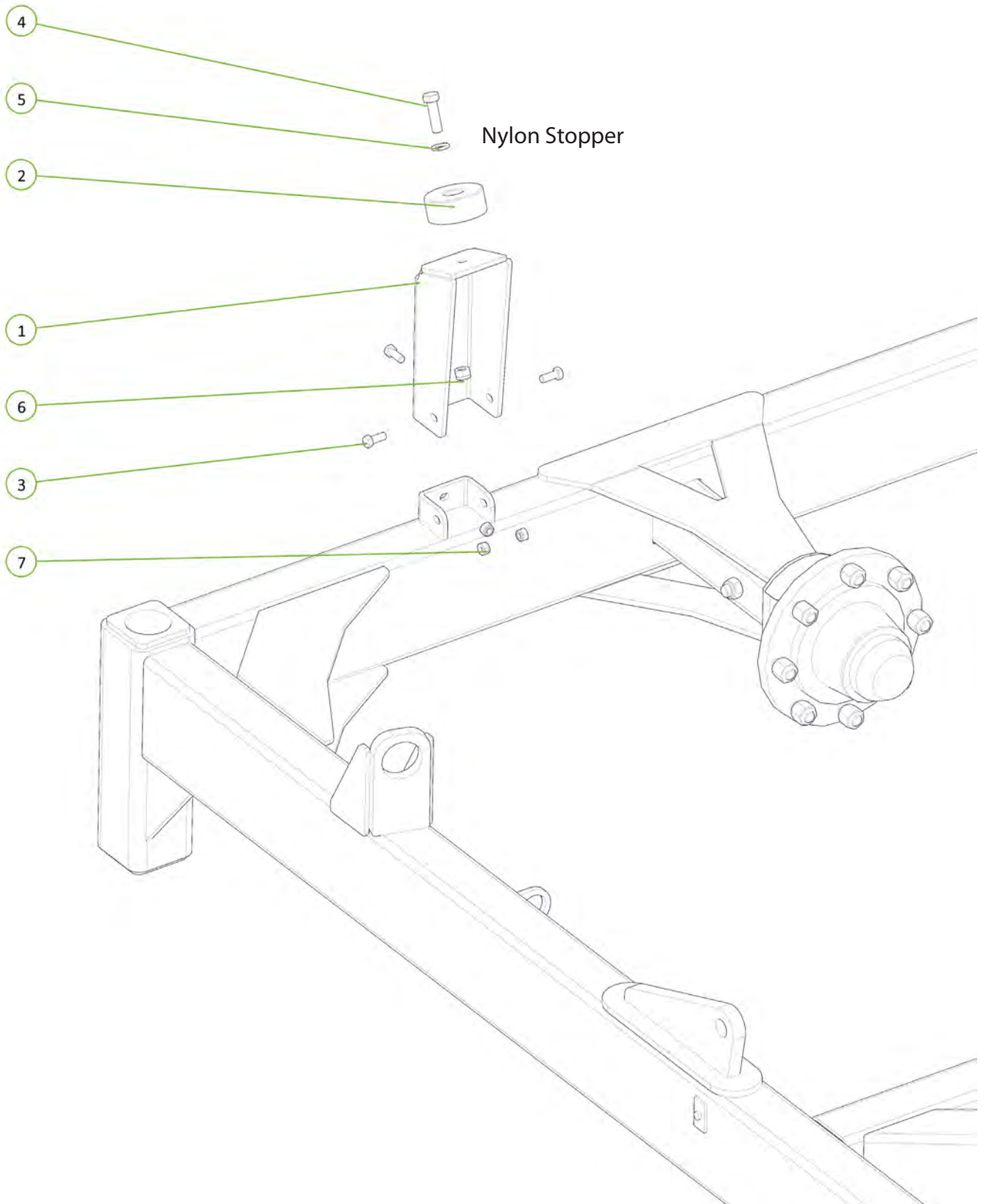
| Item No. | Description | Qty | Number |
|----------|---------------------------------|-----|--------------|
| 1 | 50mm Pivot Pin Retaining Washer | 2 | 1200-60 |
| 2 | Cotter Pin M6 x 50mm | 2 | 0261-PINC650 |
| 3 | Grease Nipple 1/8" BSP | 2 | 0181-GN1-8 |
| 4 | Oval Head 50mm Short Pivot Pin | 2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



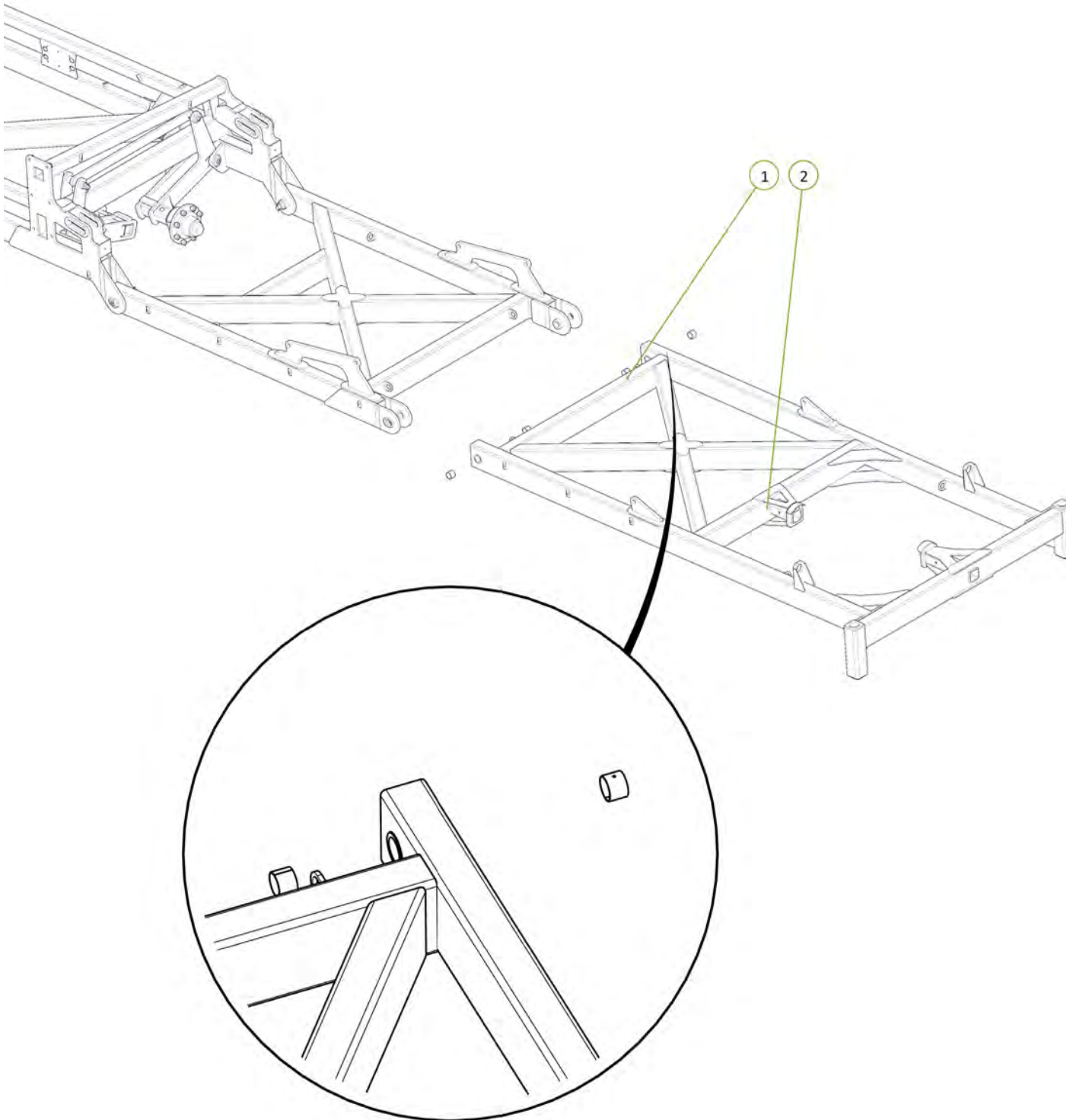
| Item No. | Description | Qty | Number |
|----------|---|-----|------------|
| 1 | 90 Series Stub Axle (Stub and Hub Complete) | 1 | 0733-90 |
| 2 | M20 x 130 grade 8.8 ZP Bolt | 1 | 0211-20130 |
| 3 | Nyloc Nut M20 | 1 | 0221-NYL20 |



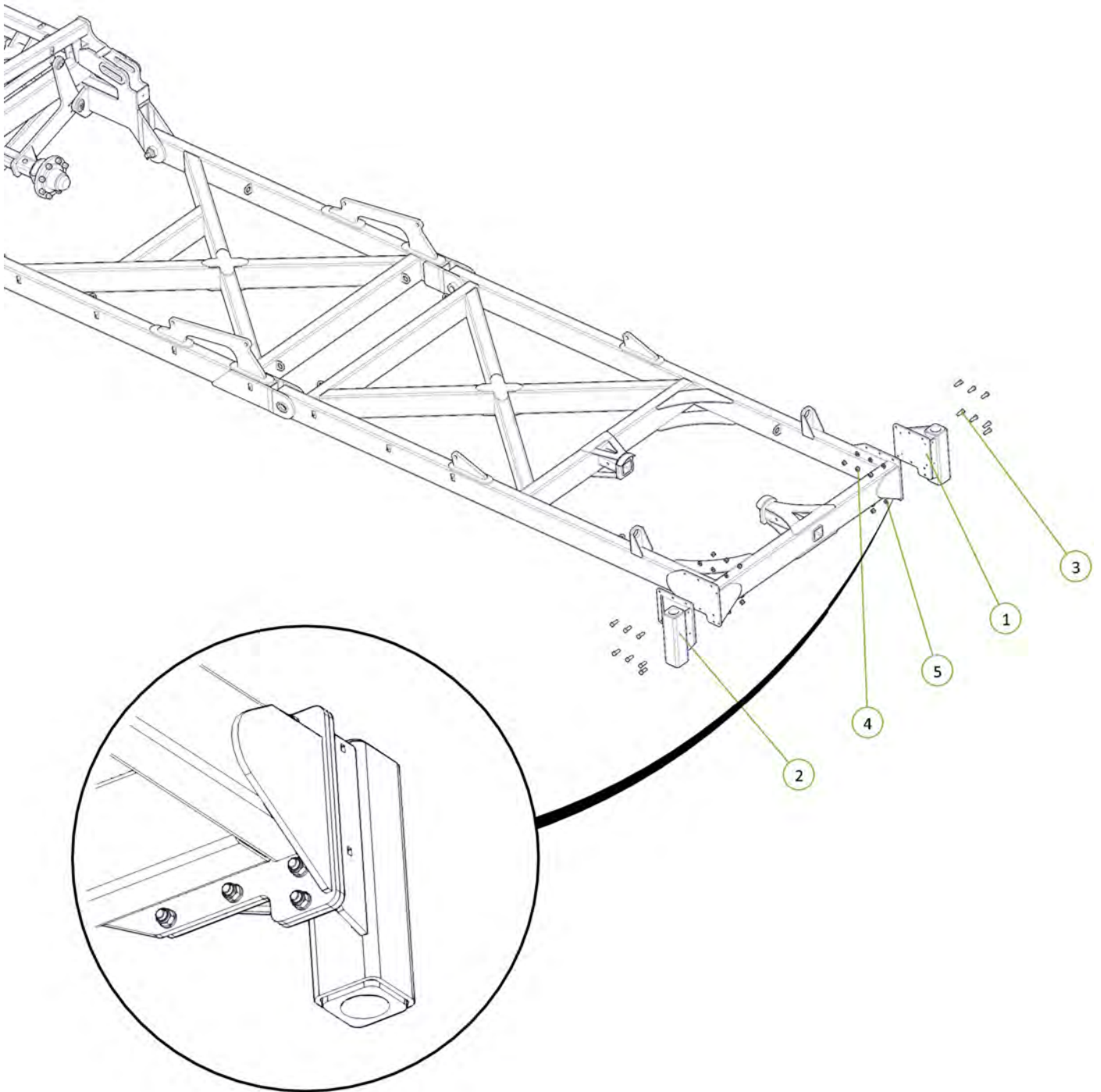
| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | 65' Outer Wing Post | 1 | 1200-154 |
| 2 | Nylon Wing Folding Buffer | 1 | 1201-52 |
| 3 | M12 x 30 grade 8.8 ZP Bolt | 3 | 0211-1230 |
| 4 | M16 x 55 grade 8.8 zp Bolt | 1 | 0211-1655 |
| 5 |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



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

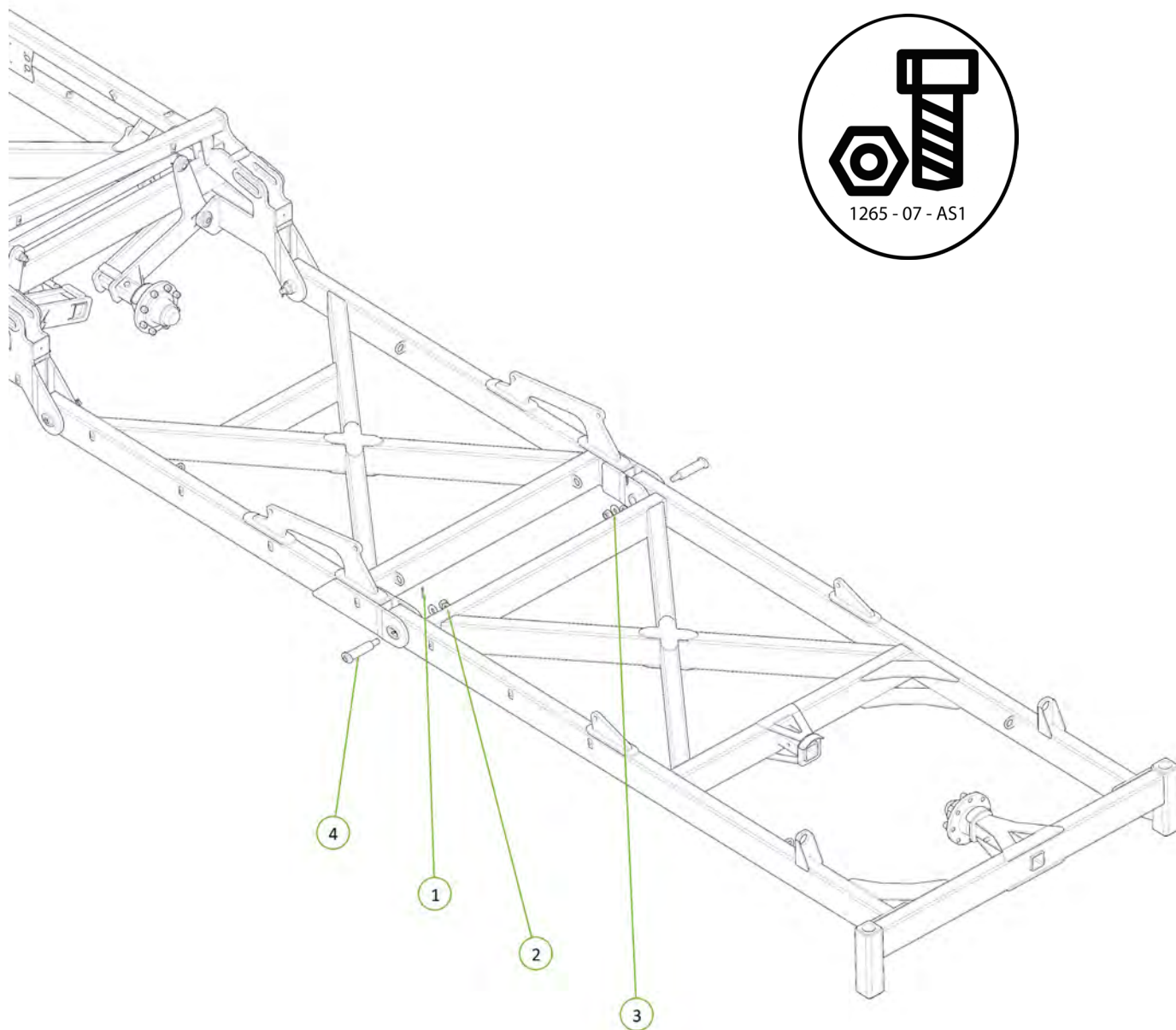


| Item No. | Description | Qty | Number |
|----------|-----------------------------------|-----|------------|
| 1 | 62 HDX Outer Wing Left Drop Tube | 1 | 1265-07EXL |
| 2 | 62 HDX Outer Wing Right Drop Tube | 1 | 1265-07EXR |
| 3 | M16 x 50 grade 8.8 zp Bolt | 14 | 0211-1650 |
| 4 | Nyloc Nut M16 |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

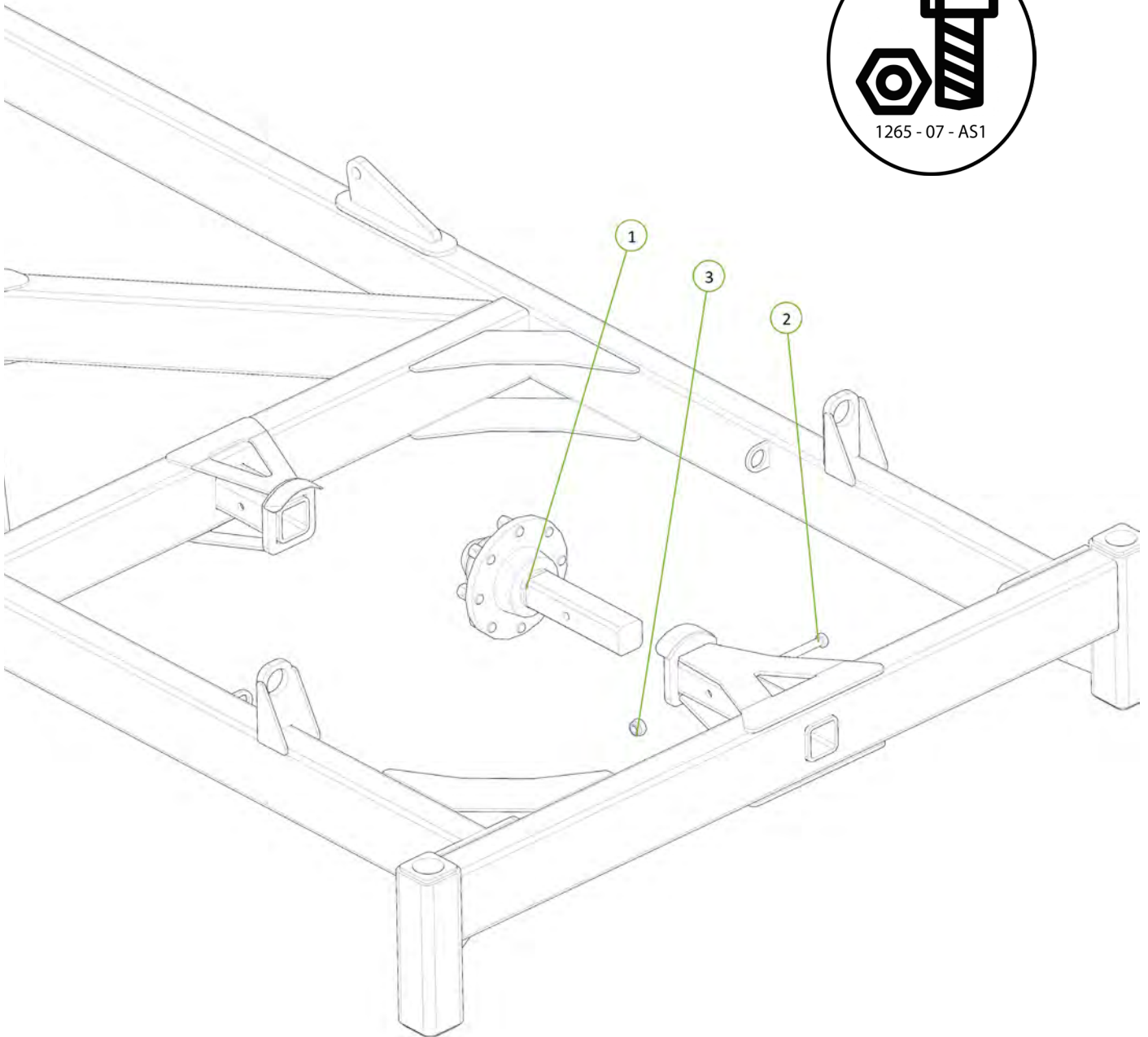


Please note this step is only required on machines outside of Australia

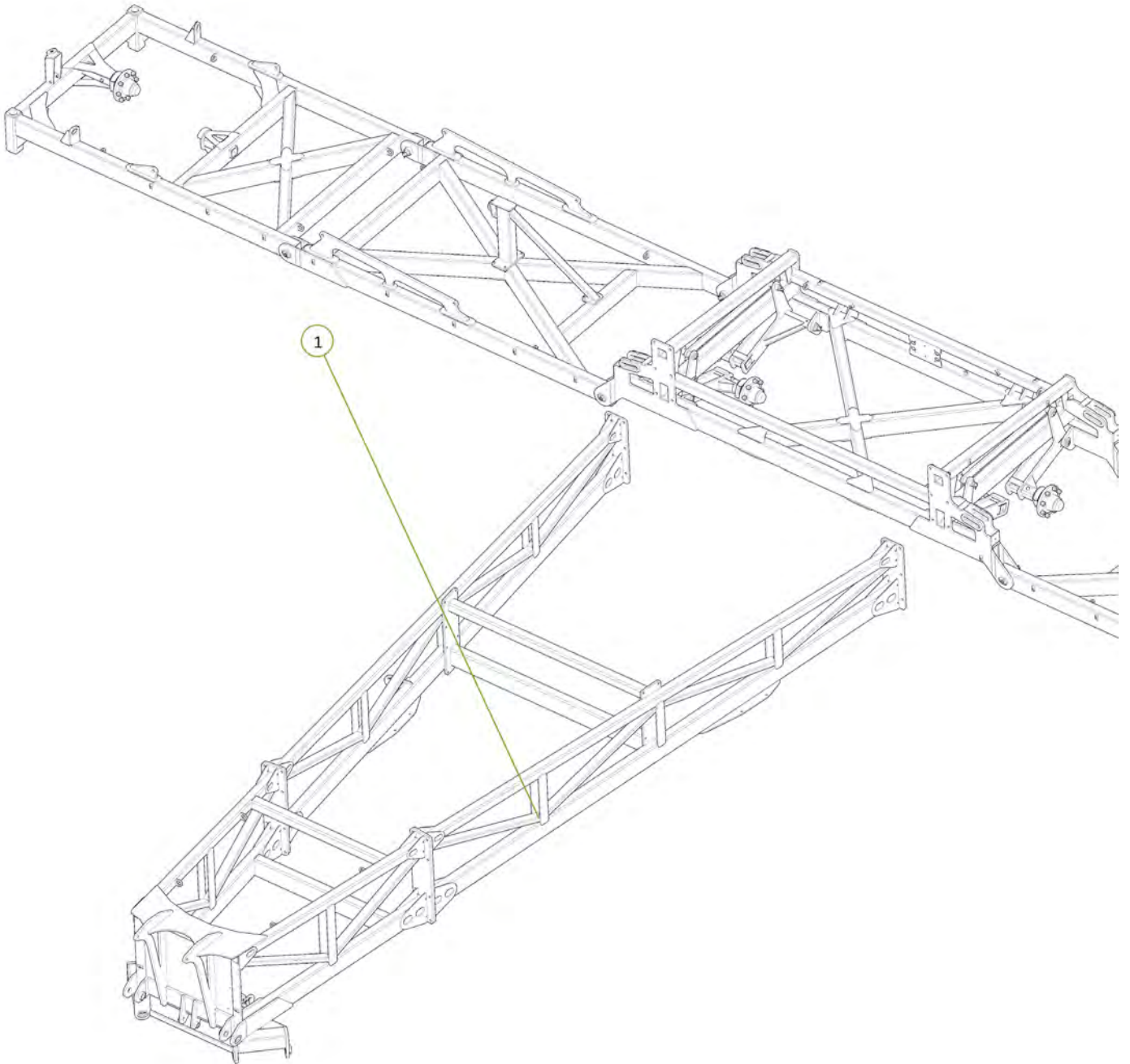
| Item No. | Description | Qty | Number |
|----------|---------------------------------|-----|--------------|
| 1 | Cotter Pin M6 x 50mm | 2 | 0261-PINC650 |
| 2 | Nyloc Nut M30 | 2 | 0221-NYL30 |
| 3 | 50mm Pivot Pin Retaining Washer | 2 | 1200-60 |
| 4 | Oval Head 50mm Short Pivot Pin | 2 | 1202.06A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



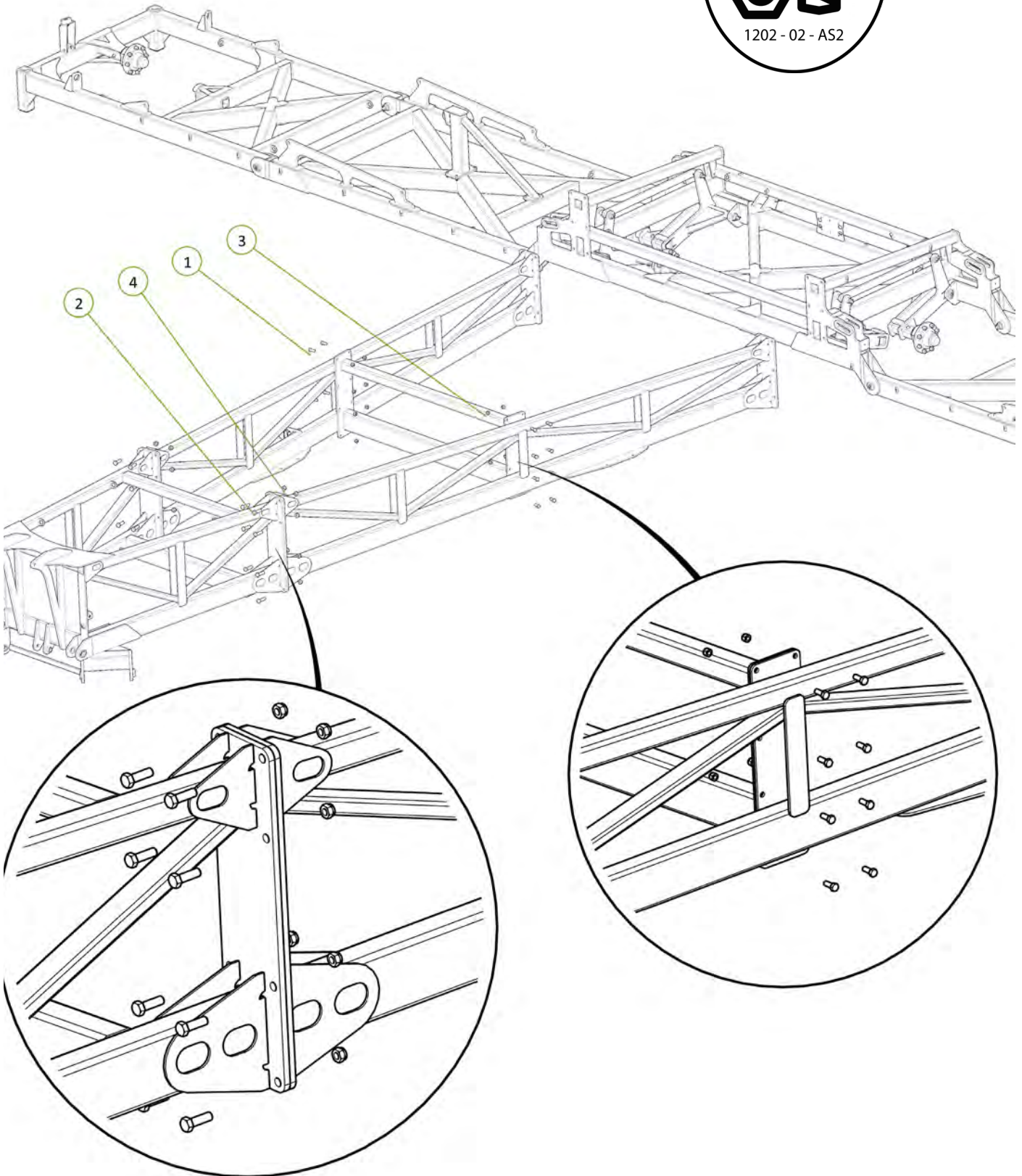
| Item No. | Description | Qty | Number |
|----------|---|-----|------------|
| 1 | 90 Series Stub Axle (Stub and Hub Complete) | 1 | 0733-90 |
| 2 | M20 x 130 grade 8.8 ZP Bolt | 1 | 0211-20130 |
| 3 | Nyloc Nut M20 | 1 | 0221-NYL20 |



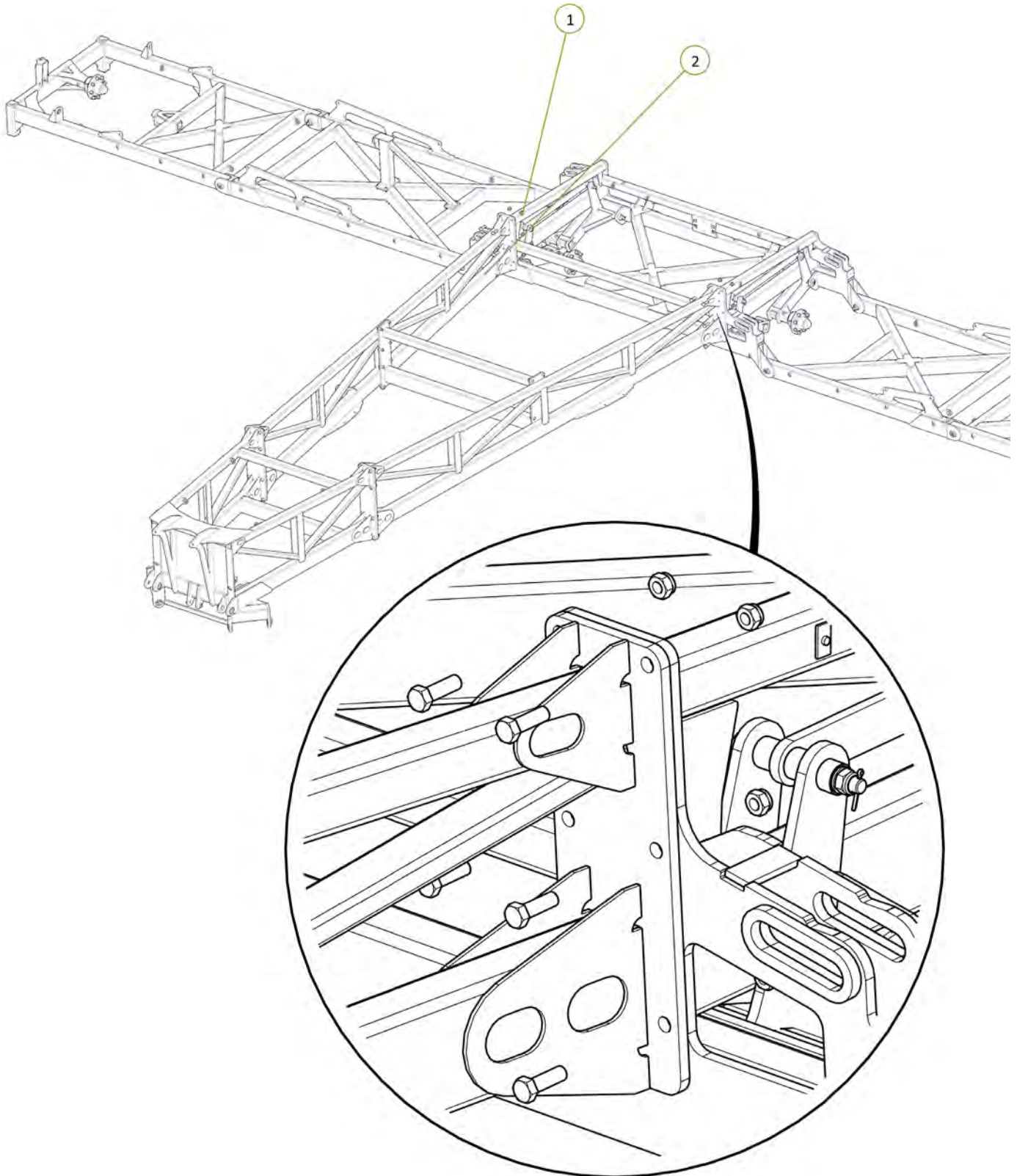
| Item No. | Description | Qty | Number |
|----------|---------------------|-----|---------|
| 1 | 62HDX Front A-Frame | 1 | 1265-02 |



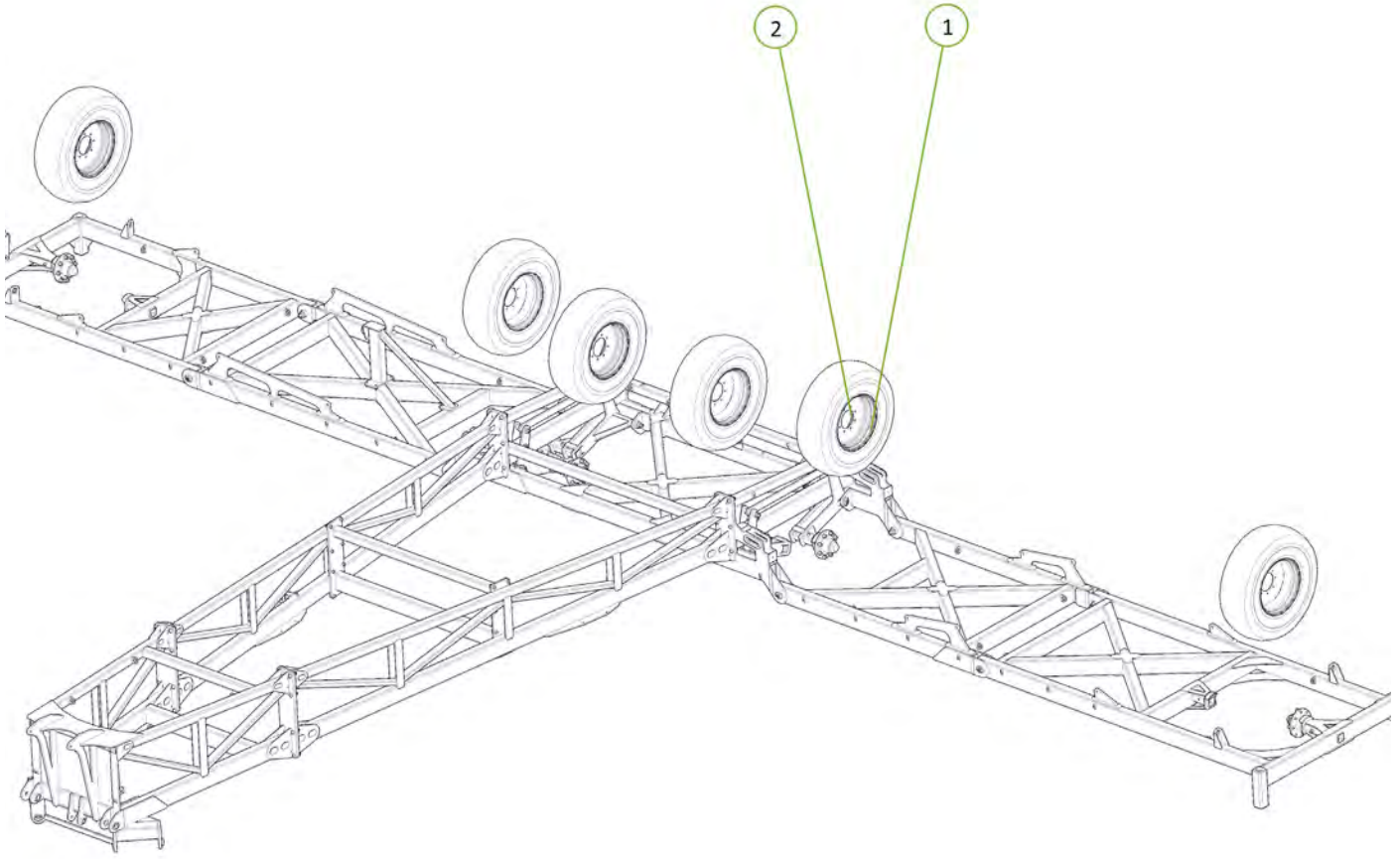
| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | M20 x 50 grade 8.8 ZP Bolt | 16 | 0211-2050 |
| 2 | M24 x 50 grade 8.8 zp Bolt | 16 | 0211-2450 |
| 3 | Nyloc Nut M20 | 16 | 0221-NYL20 |
| 4 | Nyloc Nut M24 | 16 | 0221-NYL24 |



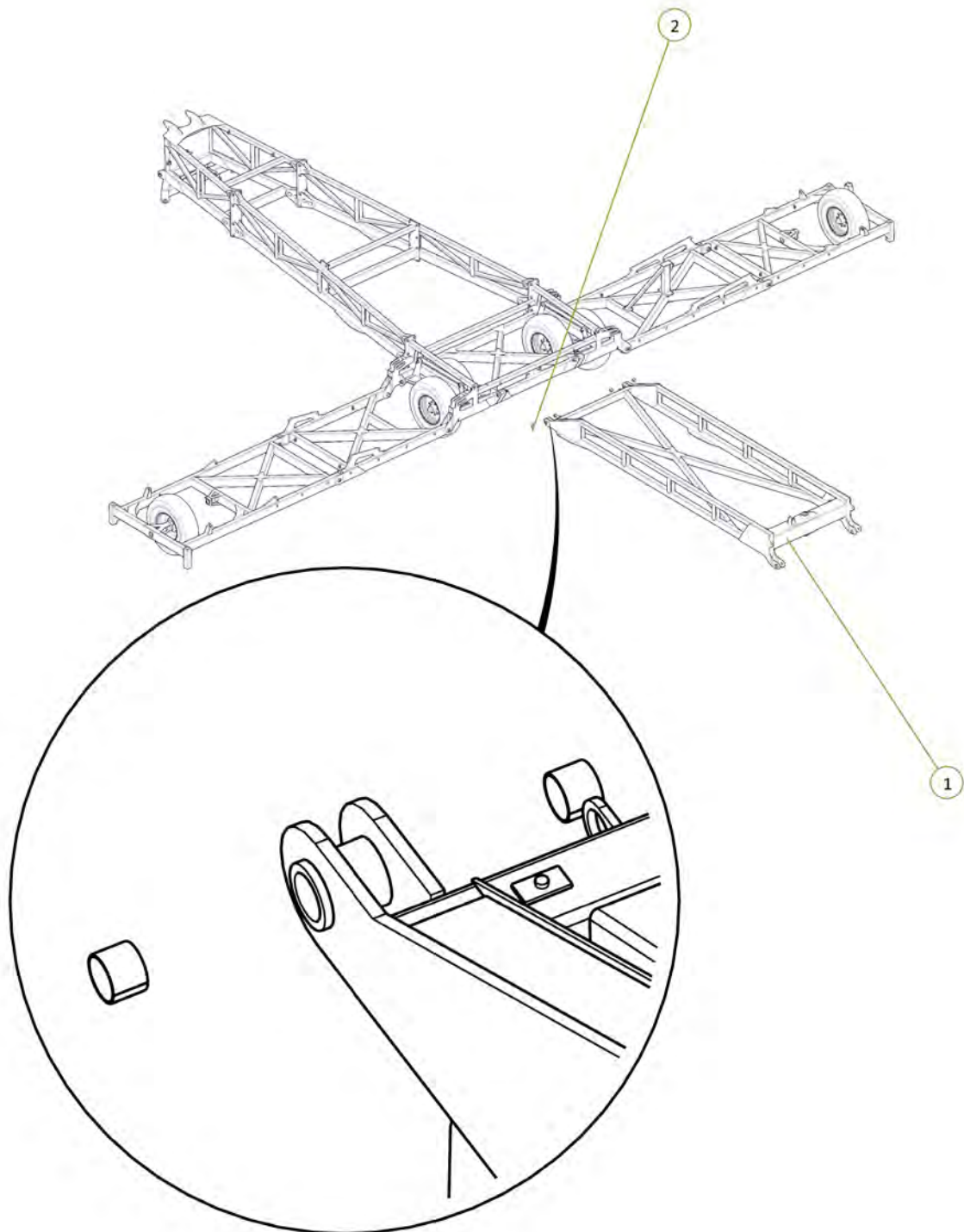
| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | Nyloc Nut M24 | 12 | 0221-NYL24 |
| 2 | M24 x 75 grade 8.8 zp Bolt | 12 | 0211-2475 |



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

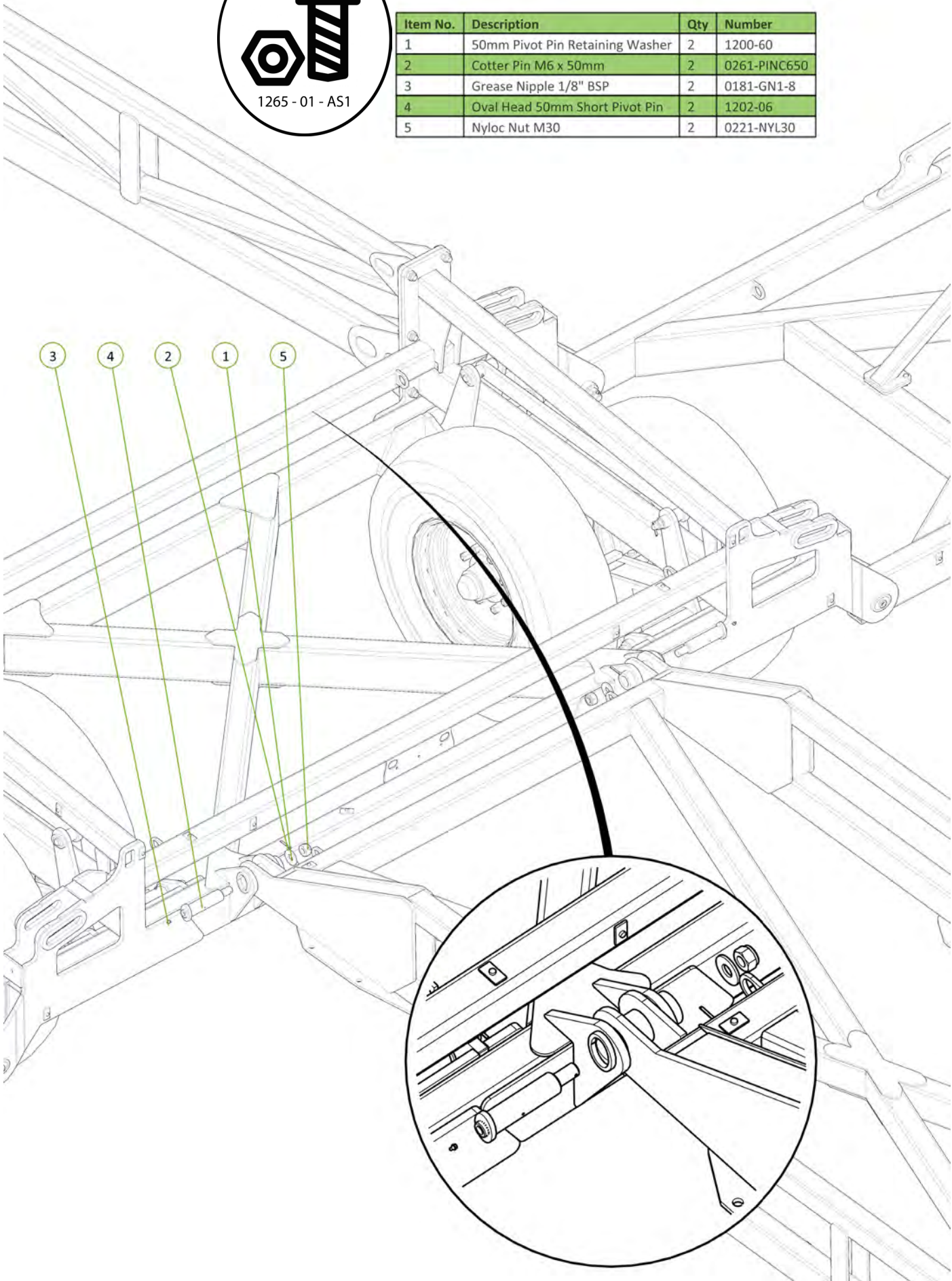


| Item No. | Description | Qty | Number |
|----------|----------------------|-----|----------------|
| 1 | 62'HDX Rear A-Frame | 1 | 1265-03 |
| 2 | 50 ID x 40mm DX Bush | 4 | 0113-MB 5040DX |

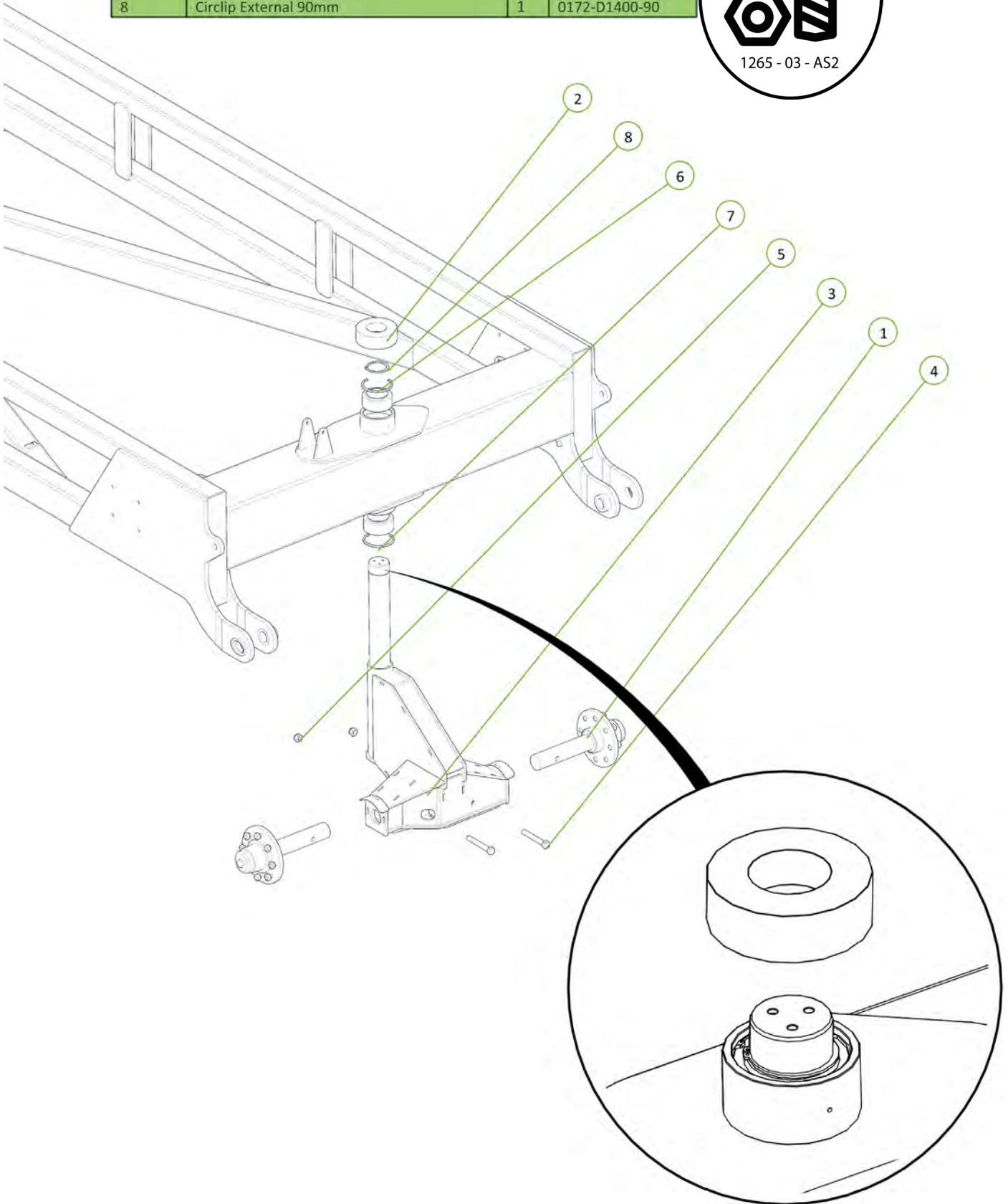




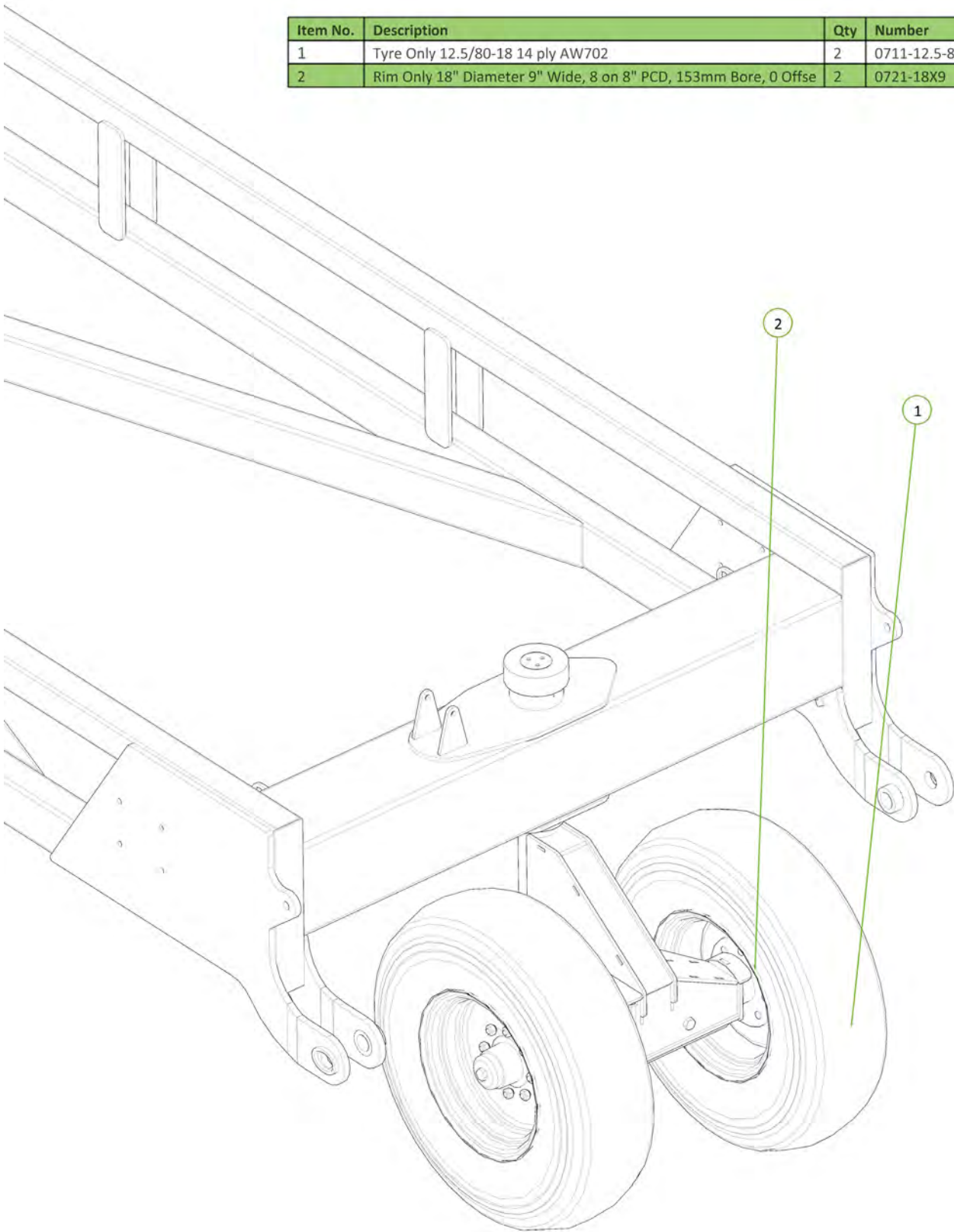
| Item No. | Description | Qty | Number |
|----------|---------------------------------|-----|--------------|
| 1 | 50mm Pivot Pin Retaining Washer | 2 | 1200-60 |
| 2 | Cotter Pin M6 x 50mm | 2 | 0261-PINC650 |
| 3 | Grease Nipple 1/8" BSP | 2 | 0181-GN1-8 |
| 4 | Oval Head 50mm Short Pivot Pin | 2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



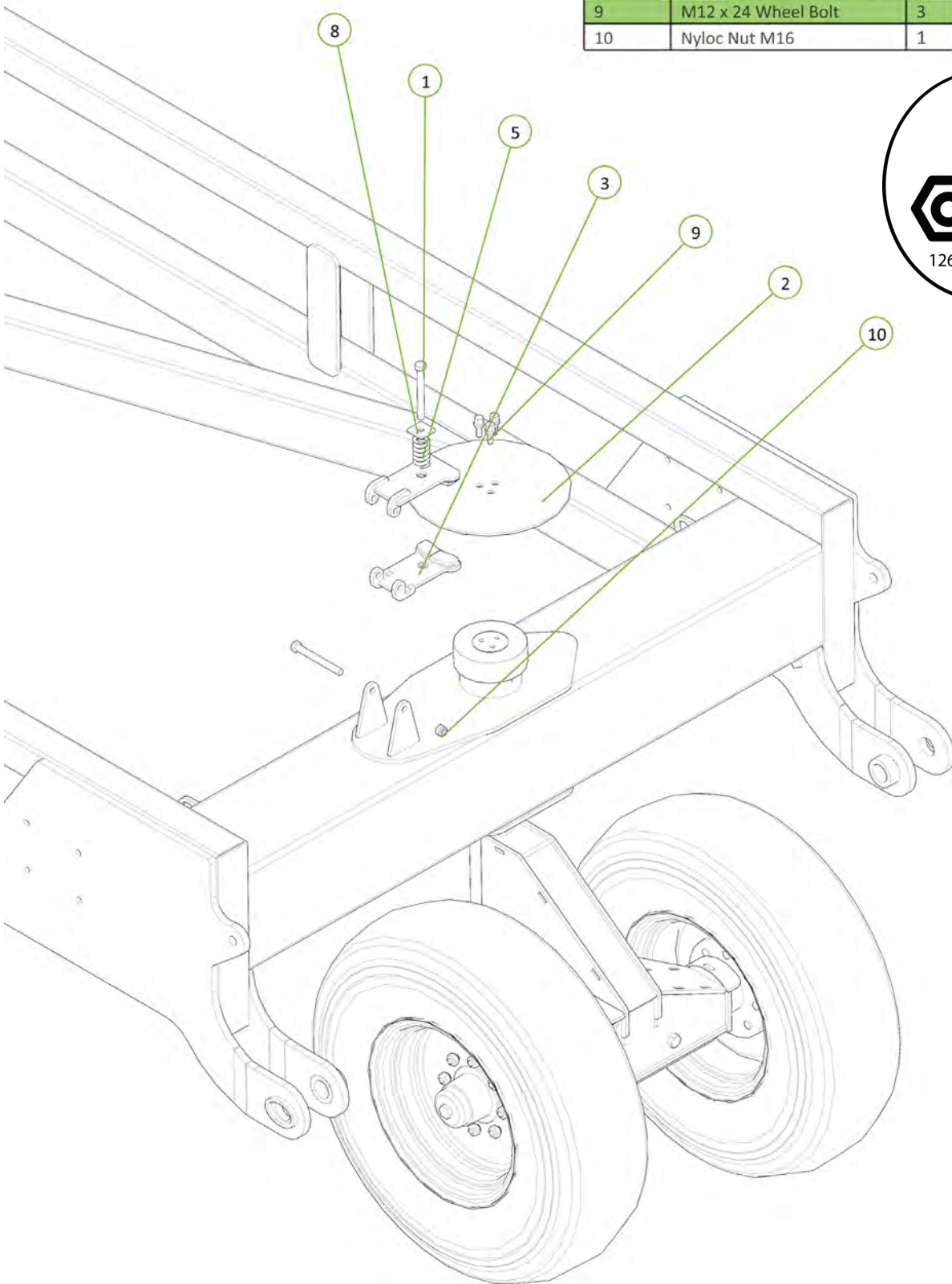
| Item No. | Description | Qty | Number |
|----------|---|-----|------------------|
| 1 | 2.75"R 6 Tonne 8 on 8" PCH Hub | 2 | 0733-SH27596880 |
| 2 | Bolt on Brake Disc Dust Cap 90ID x 180OD x 60 | 1 | 1201-DC9018060 |
| 3 | Heavy Duty Jockey Wheel | 1 | 1210-80 |
| 4 | M20 x 150 grade 8.8 ZP Bolt | 2 | 0211-20140 |
| 5 | Nyloc Nut M20 | 2 | 0221-NYL20 |
| 6 | Plain Spherical Bearing 90mm | 2 | 0113-GE90DO-2RSP |
| 7 | Circlip Internal 130mm | 2 | 0171-J130 |
| 8 | Circlip External 90mm | 1 | 0172-D1400-90 |



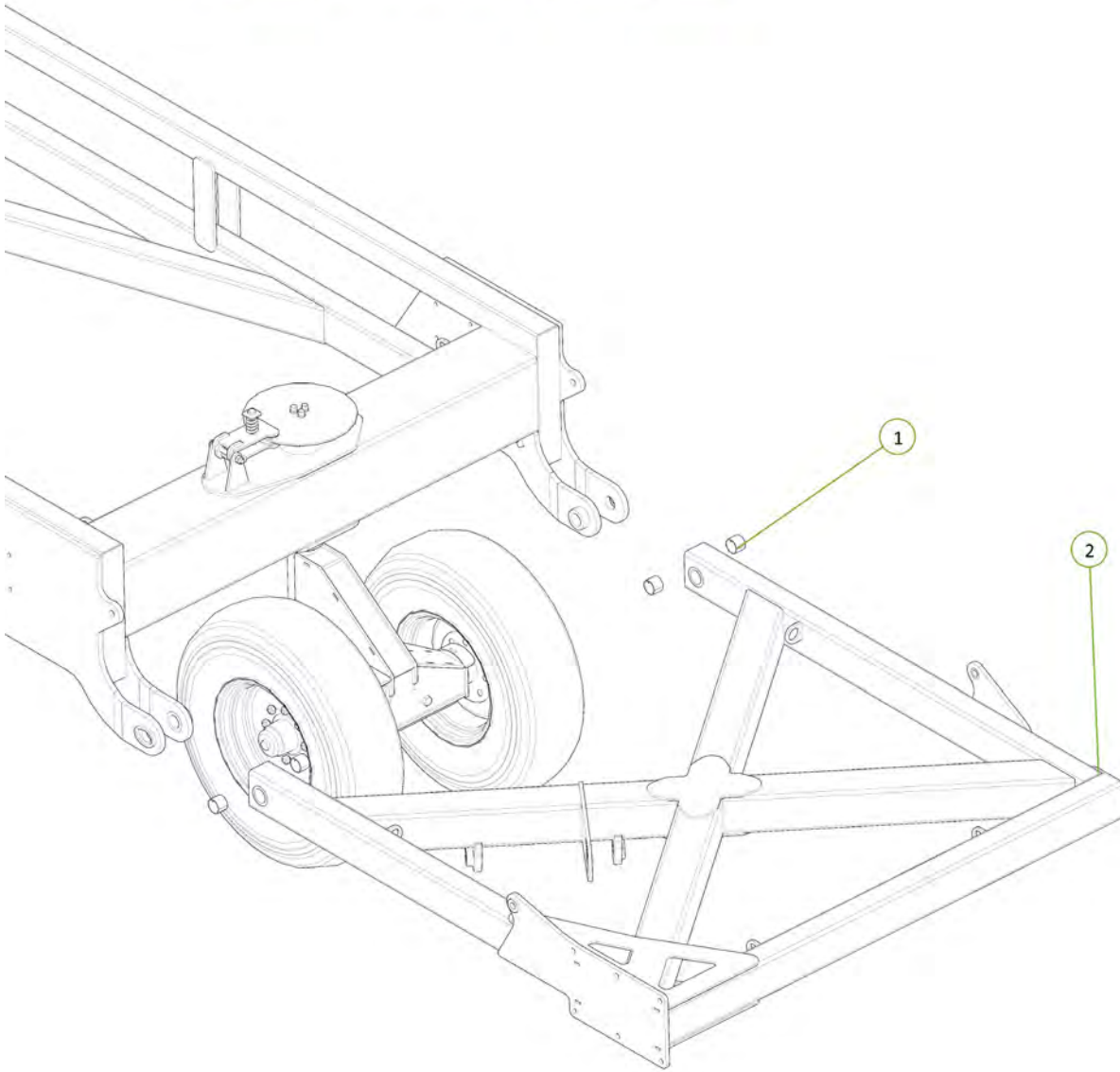
| Item No. | Description | Qty | Number |
|----------|---|-----|-----------------|
| 1 | Tyre Only 12.5/80-18 14 ply AW702 | 2 | 0711-12.5-80-18 |
| 2 | Rim Only 18" Diameter 9" Wide, 8 on 8" PCD, 153mm Bore, 0 Offse | 2 | 0721-18X9 |



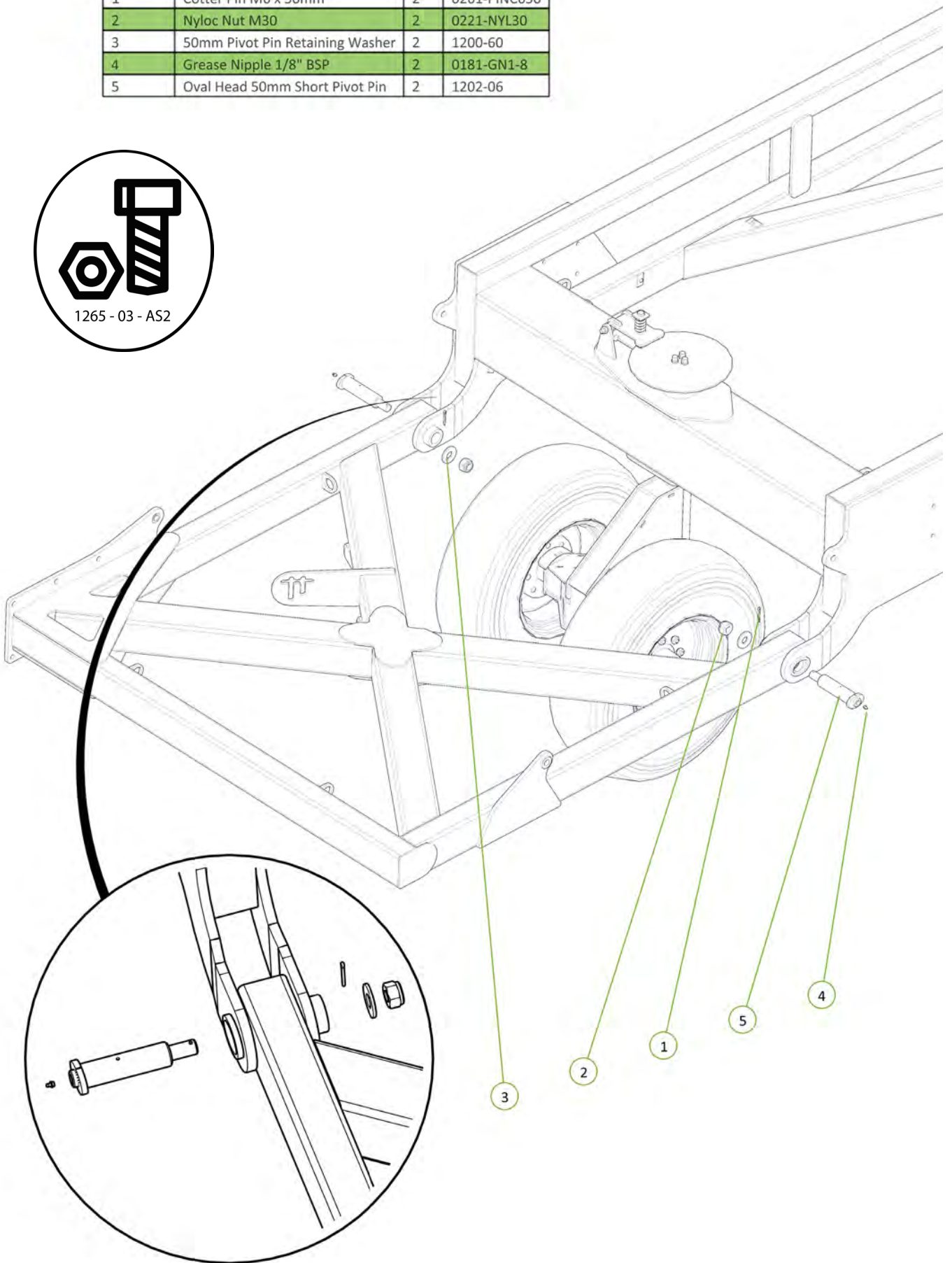
| Item No. | Description | Qty | Number |
|----------|-----------------------------|-----|--------------|
| 1 | M16 x 150 grade 8.8 zp Bolt | 2 | 0211-16150 |
| 2 | Brake Disc | 1 | 1600-405 |
| 3 | Jockey Wheel Brake Caliper | 1 | 0810-12CAL |
| 5 | Brake Compression Spring | 1 | 0801-KE009 |
| 8 | Washer Square M16 x 50 x 5 | 1 | 0231-SQ16505 |
| 9 | M12 x 24 Wheel Bolt | 3 | 0216-WB1224 |
| 10 | Nyloc Nut M16 | 1 | 0221-NYL16 |



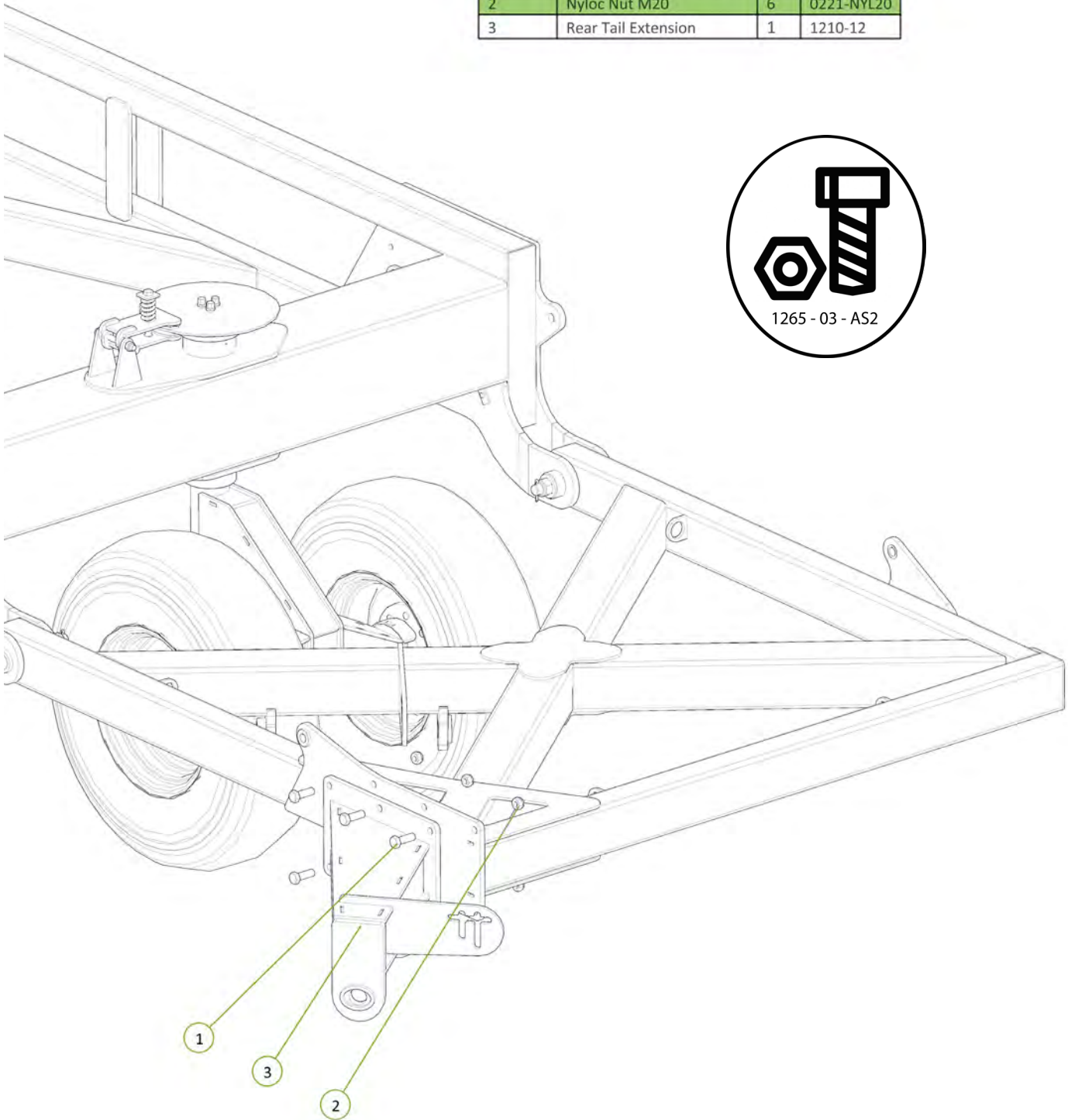
| Item No. | Description | Qty | Number |
|----------|----------------------|-----|----------------|
| 1 | 50 ID x 40mm DX Bush | 4 | 0113-MB 5040DX |
| 2 | Heavy Duty Rear Tail | 1 | 1210-10 |



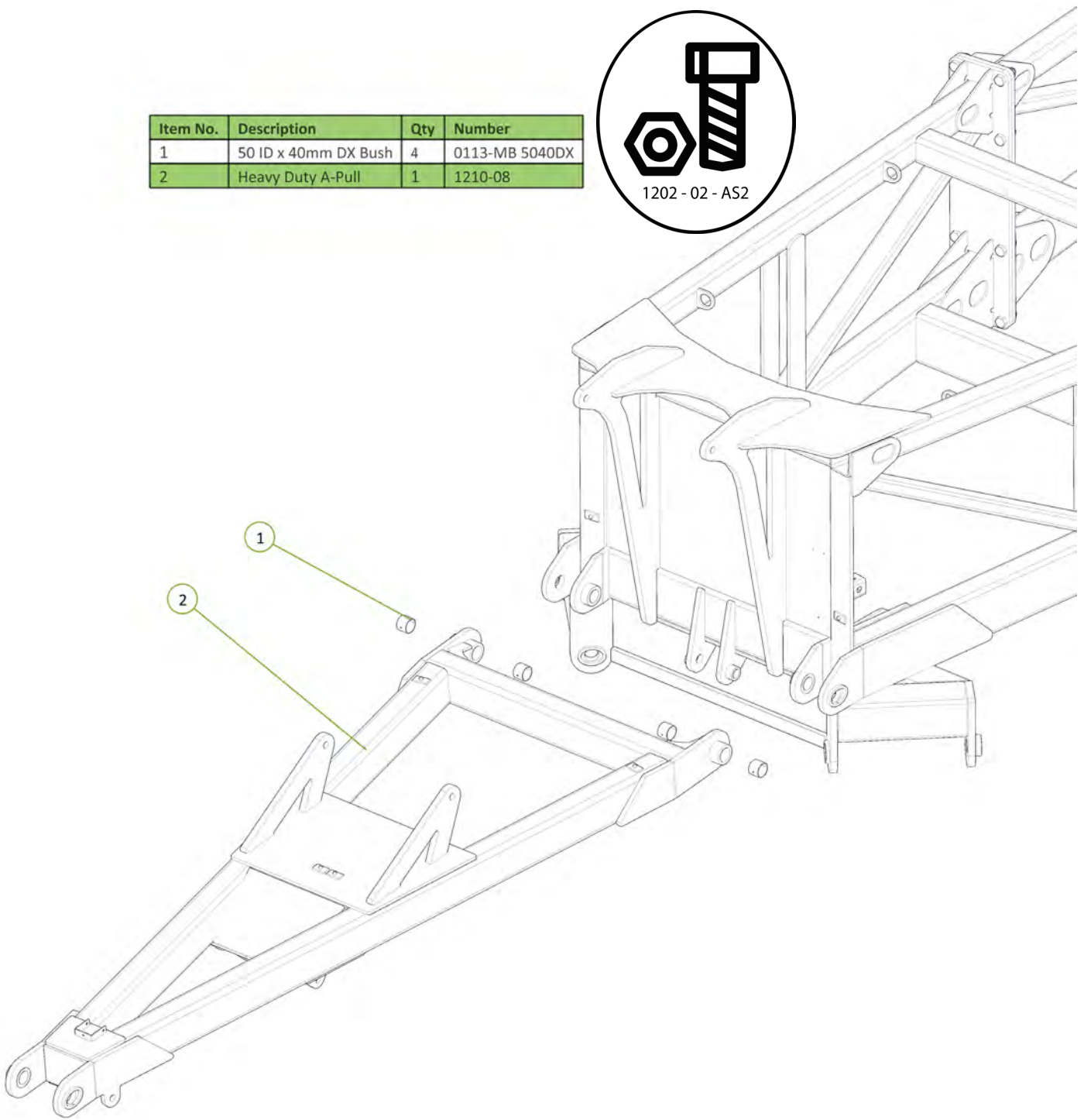
| Item No. | Description | Qty | Number |
|----------|---------------------------------|-----|--------------|
| 1 | Cotter Pin M6 x 50mm | 2 | 0261-PINC650 |
| 2 | Nyloc Nut M30 | 2 | 0221-NYL30 |
| 3 | 50mm Pivot Pin Retaining Washer | 2 | 1200-60 |
| 4 | Grease Nipple 1/8" BSP | 2 | 0181-GN1-8 |
|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



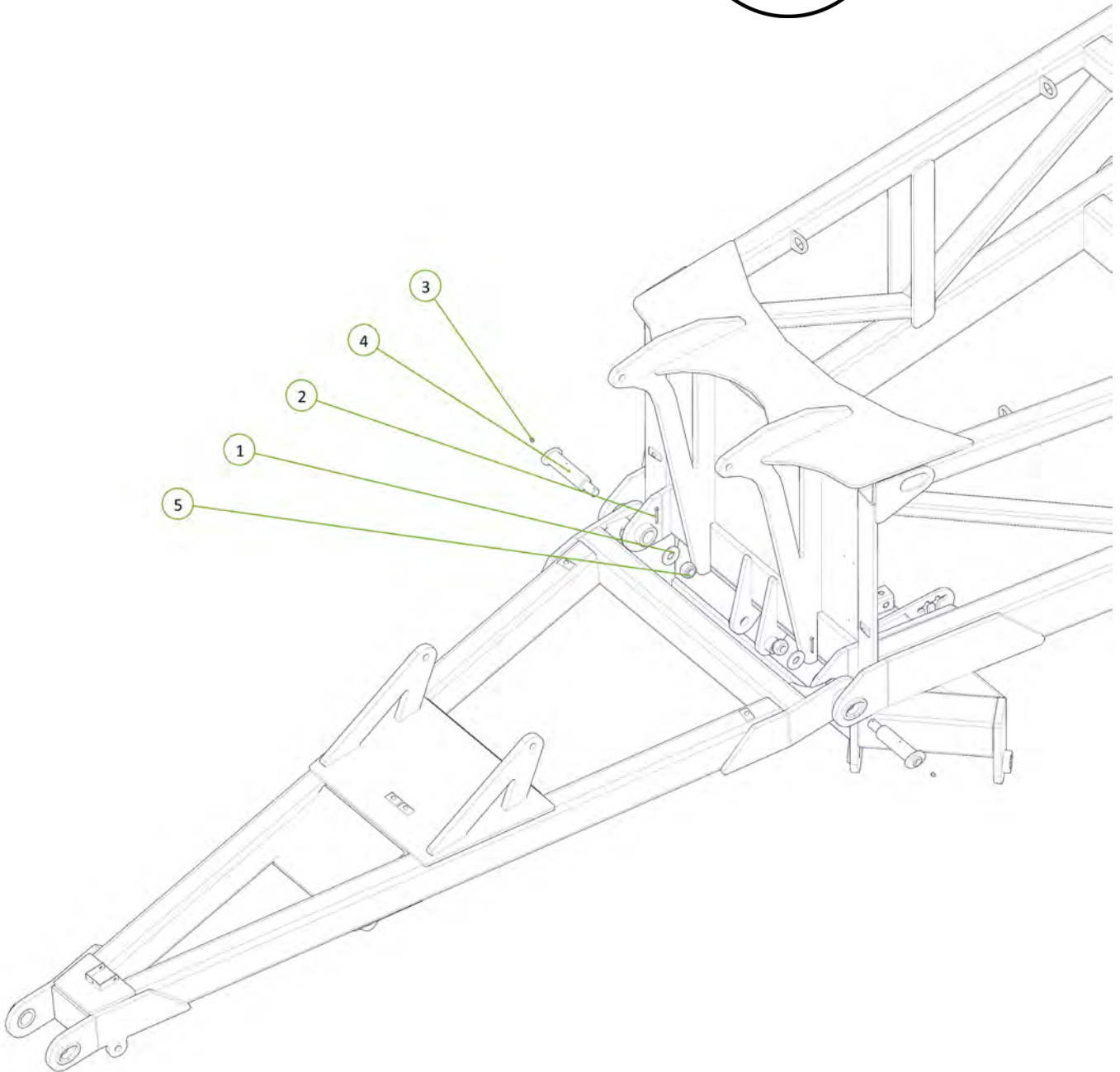
| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | M20 x 60 grade 8.8 ZP Bolt | 6 | 0211-2060 |
| 2 | Nyloc Nut M20 | 6 | 0221-NYL20 |
| 3 | Rear Tail Extension | 1 | 1210-12 |



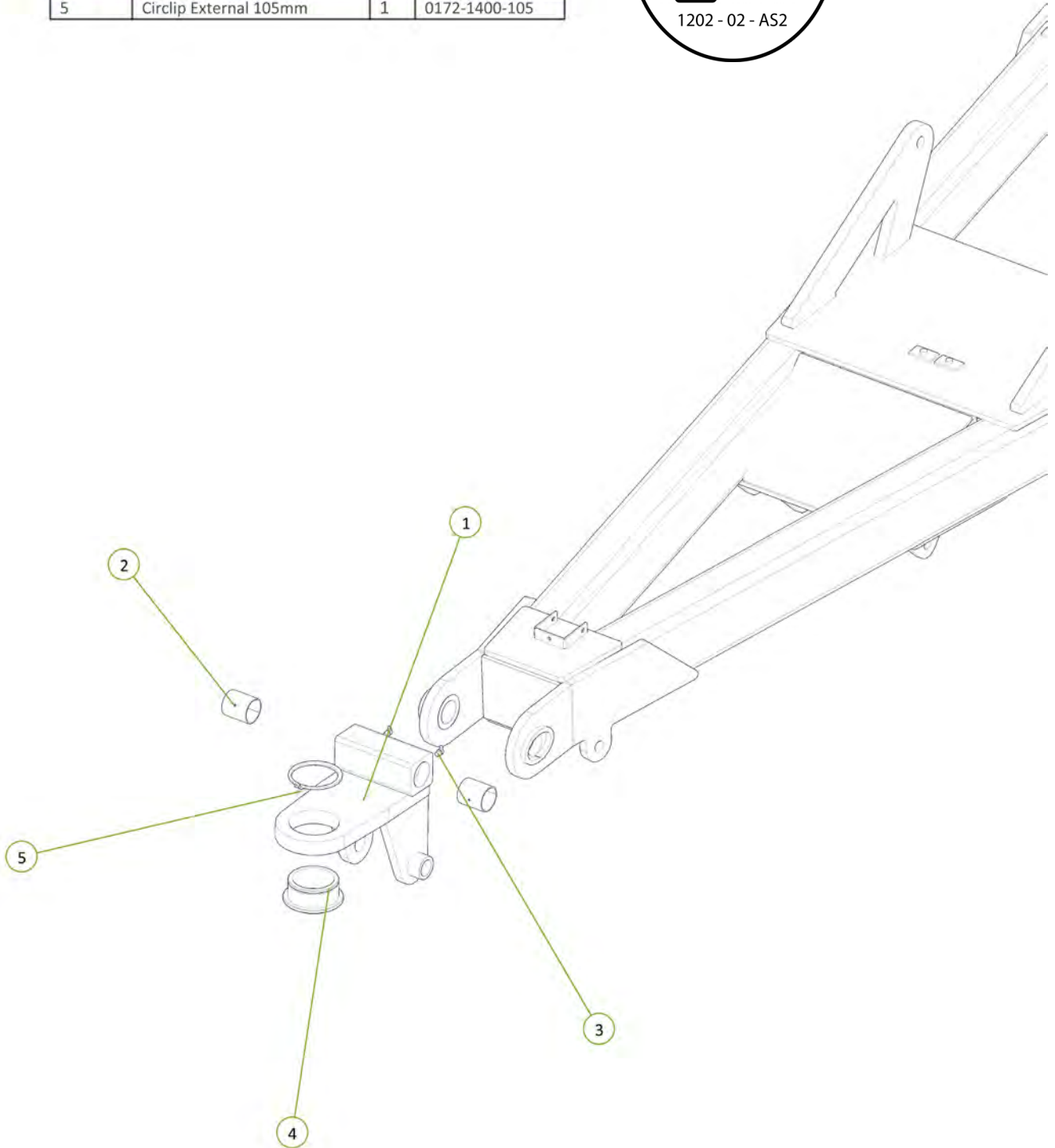
| Item No. | Description | Qty | Number |
|----------|----------------------|-----|----------------|
| 1 | 50 ID x 40mm DX Bush | 4 | 0113-MB 5040DX |
| 2 | Heavy Duty A-Pull | 1 | 1210-08 |



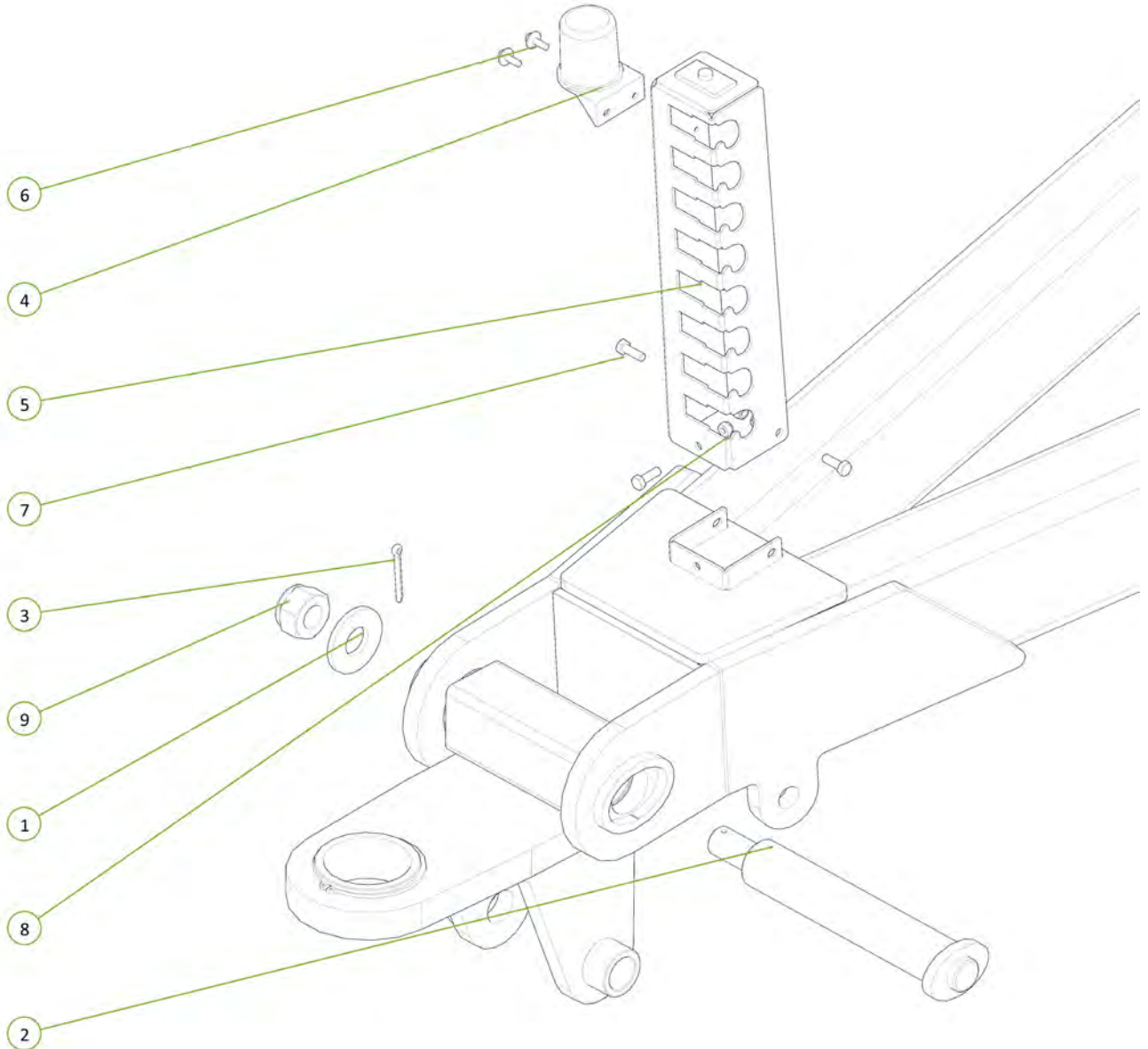
| Item No. | Description | Qty | Number |
|----------|---------------------------------|-----|--------------|
| 1 | 50mm Pivot Pin Retaining Washer | 2 | 1200-60 |
| 2 | Cotter Pin M6 x 50mm | 2 | 0261-PINC650 |
| 3 | Grease Nipple 1/8" BSP | 2 | 0181-GN1-8 |
| 4 | Oval Head 50mm Short Pivot Pin | 2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



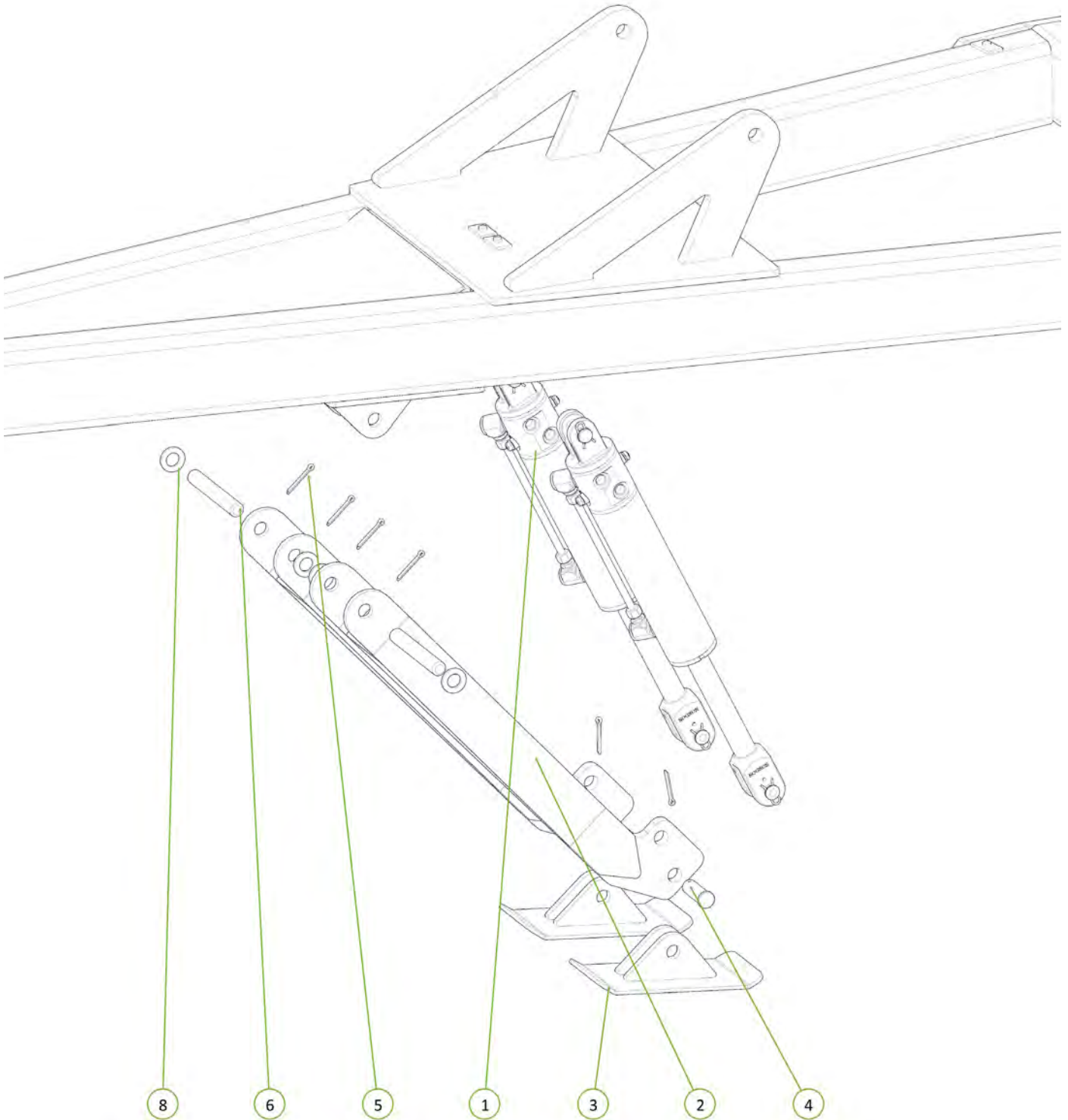
| Item No. | Description | Qty | Number |
|----------|-------------------------------|-----|------------------|
| 1 | Heavy Duty Drawbar Hitch | 1 | 1210-09 |
| 2 | 50 ID x 60mm DX Bush | 2 | 0113-MB 5060DX |
| 3 | Grease Nipple 1/8" BSP 90 deg | 2 | 0181-GN1-890 |
| 4 | 2 3/4" Tow Hitch Bush | 1 | 0801-KE-0905-1-D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



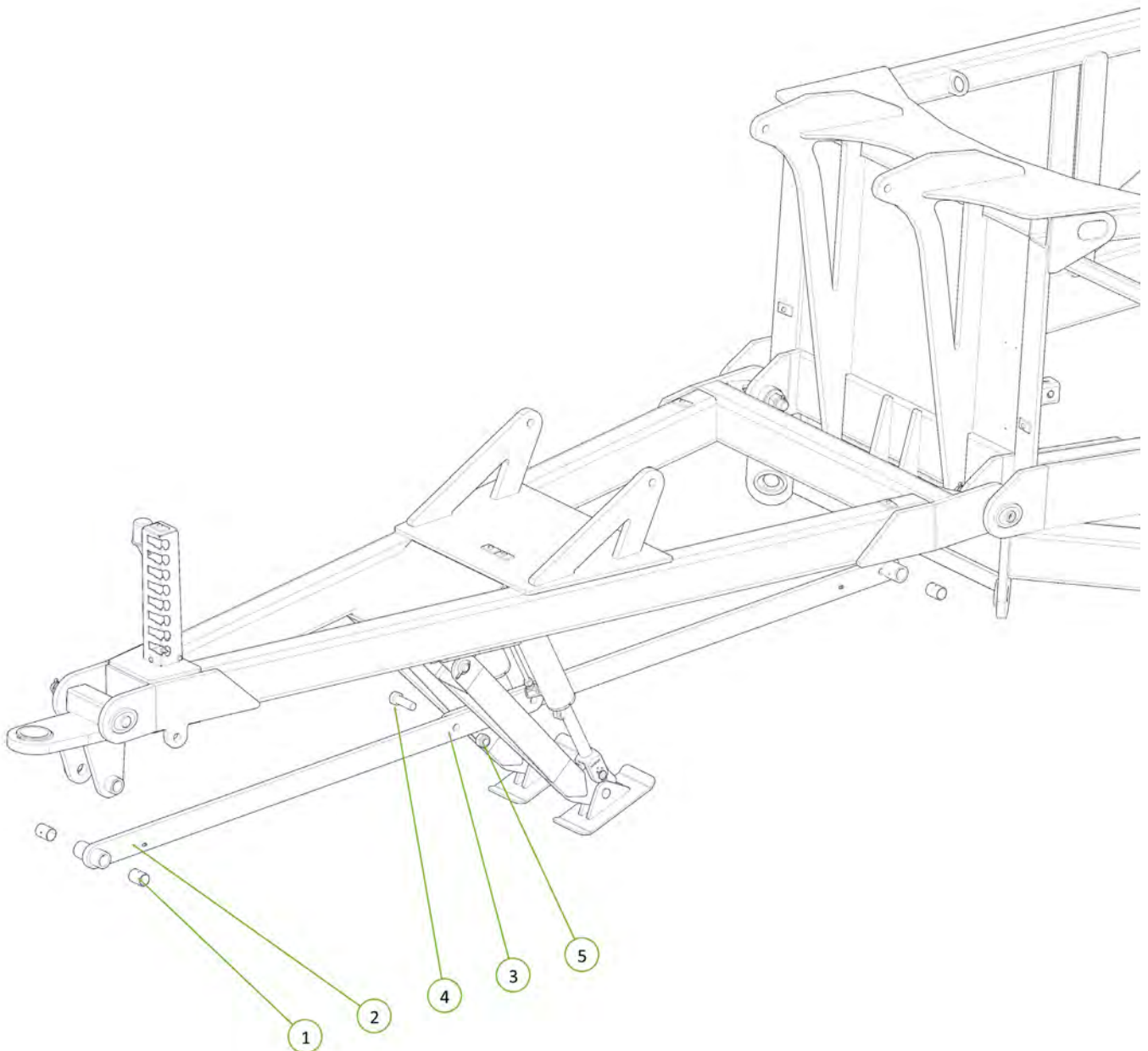
| Item No. | Description | Qty | Number |
|----------|------------------------------------|-----|-----------------|
| 1 | 50mm Pivot Pin Retaining Washer | 1 | 1200-60 |
| 2 | 50mm Tow Hitch Pivot Pin | 1 | 1202-11 |
| 3 | Cotter Pin M6 x 50mm | 1 | 0261-PINC650 |
| 4 | Electrical Plug Keeper | 1 | 0416-11750B |
| 5 | Hose Post | 1 | 0810-151 |
| 6 | M6 x 20 Trilobe Self Tapping Screw | 2 | 0211-M620M2PHTF |
| 7 | M8 x 25 grade 8.8 ZP Bolt | 3 | 0211-825 |
| 8 | Nyloc Nut M8 | 3 | 0221-NYL8 |
| 9 | Nyloc Nut M30 | 1 | 0221-NYL30 |



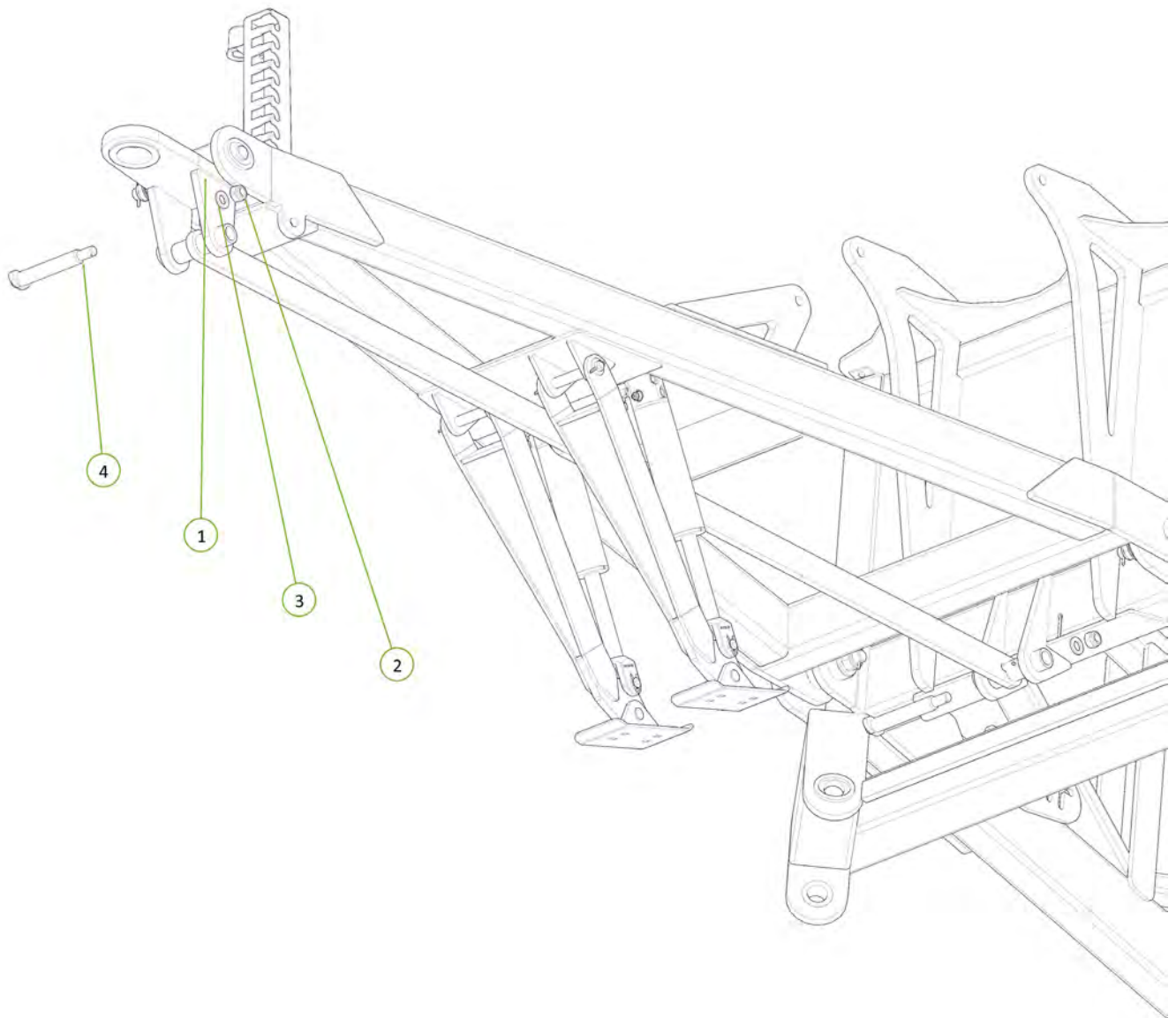
| Item No. | Description | Qty | Number |
|----------|---|-----|----------------|
| 1 | 3" Bore 8" Stroke NI Cylinder with Int DCBV Valve | 2 | 0313-308SPOC-B |
| 2 | Hyd Jack Side Plate | 4 | 1200-315 |
| 3 | Hydraulic Jack Foot Plate | 2 | 1200-305 |
| 4 | Clevis Pin 25mm x 75mm | 2 | 0801-KE0307-1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



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

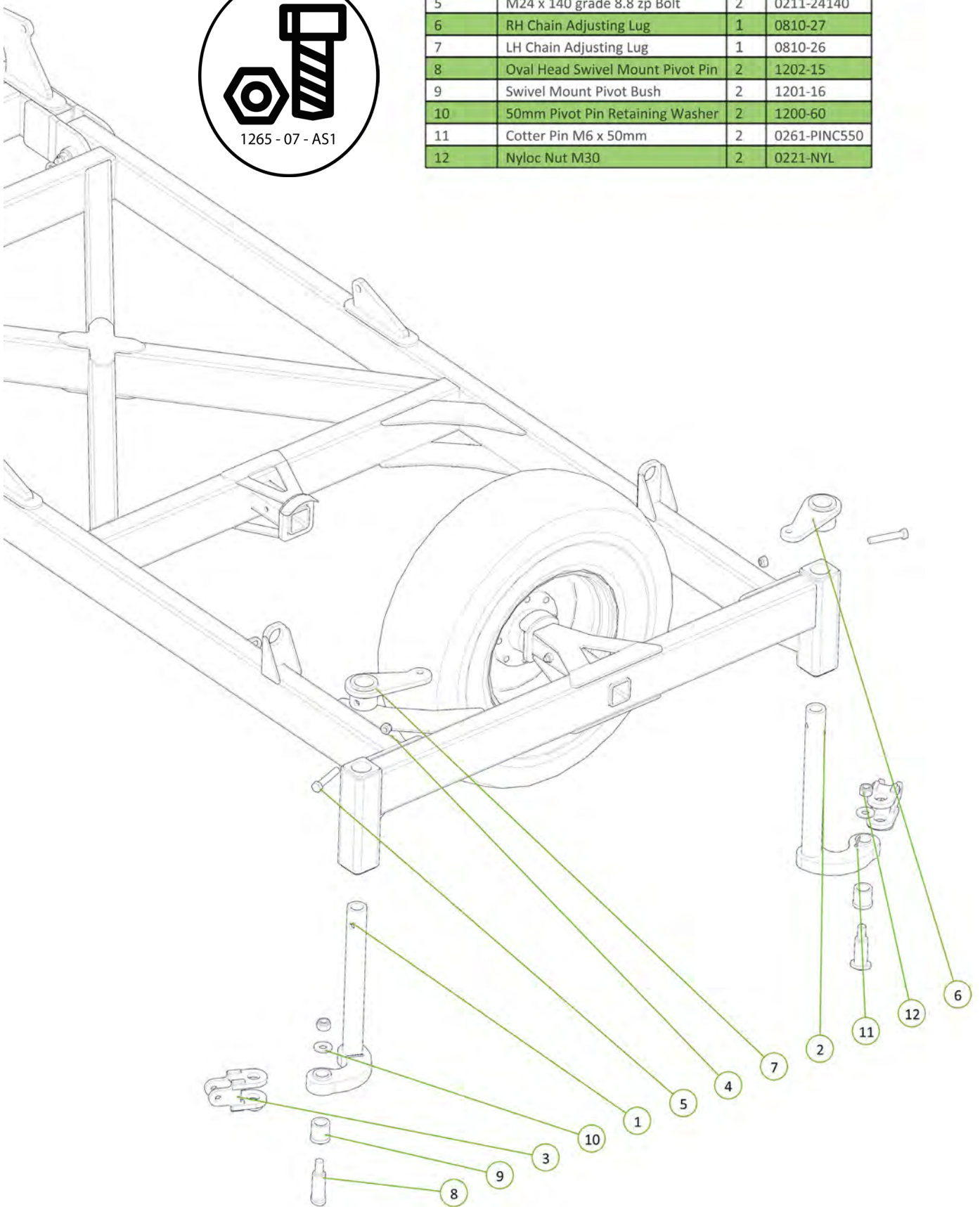


| Item No. | Description | Qty | Number |
|----------|--------------------------|-----|--------------|
| 1 | Cotter Pin M6 x 50mm | 2 | 0261-PINC650 |
| 2 | Nyloc Nut M24 | 2 | 0221-NYL24 |
| 3 | Washer Flat M24 | 2 | 0231-F24 |
| 4 | Oval Head 35mm Pivot Pin | 2 | 1202-09 |



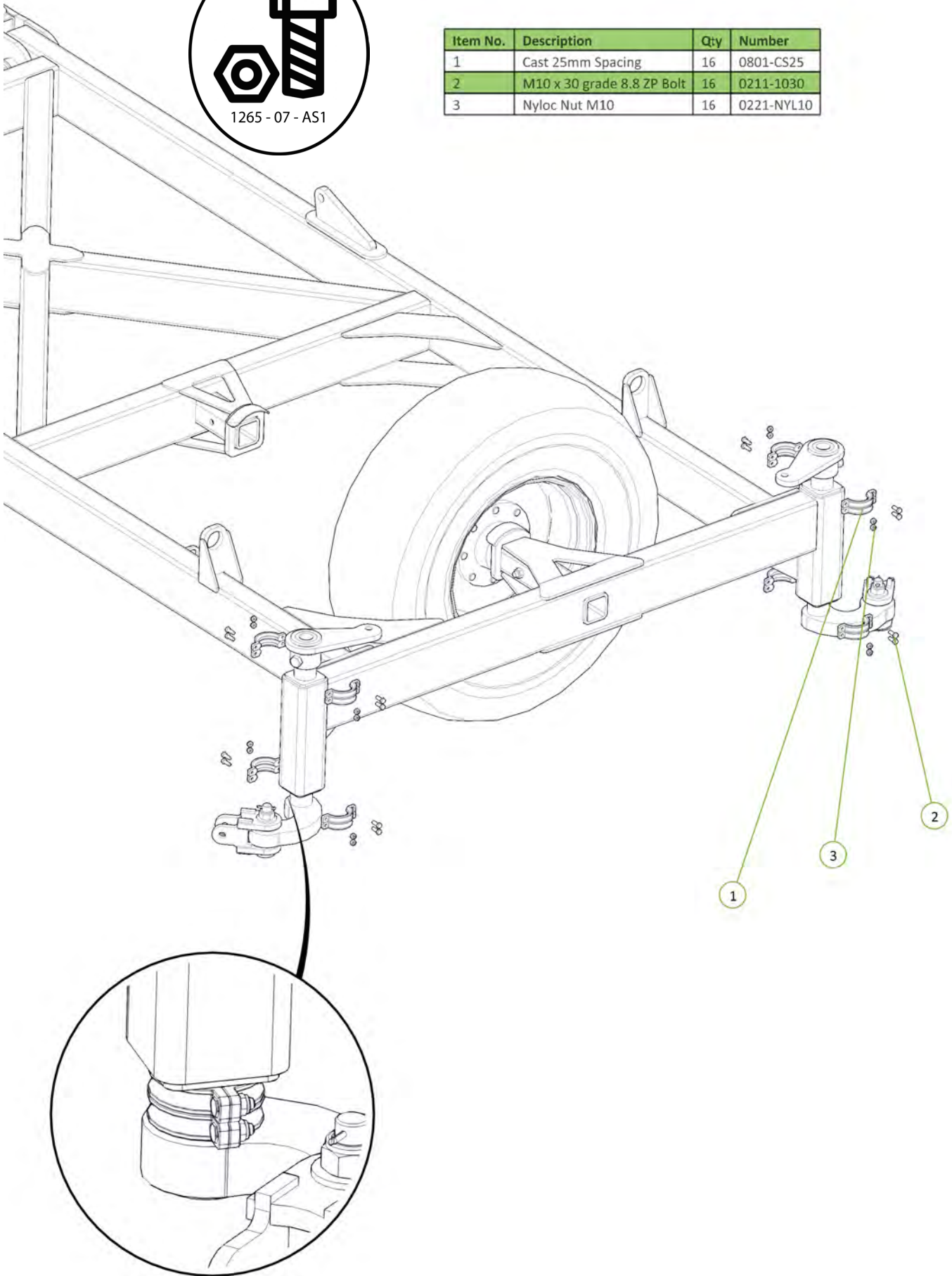


| Item No. | Description | Qty | Number |
|----------|----------------------------------|-----|--------------|
| 1 | Heavy Duty LH Drop Leg | 1 | 1210-24 |
| 2 | Heavy Duty RH Drop Leg | 1 | 1210-25 |
| 3 | PCHB553 Heavy Duty Mount Joint | 2 | 1210-57 |
| 4 | Nyloc Nut M24 | 2 | 0221-NYL24 |
| 5 | M24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

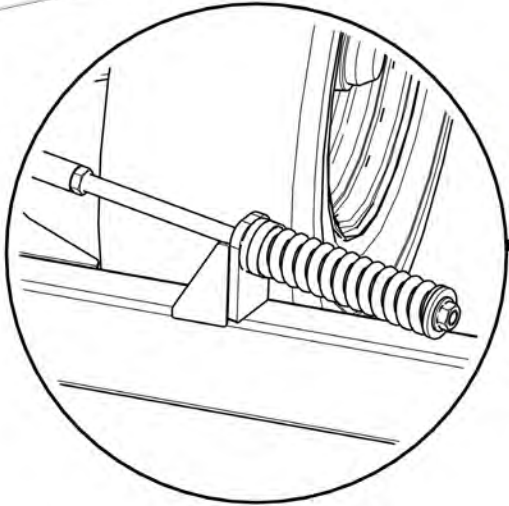
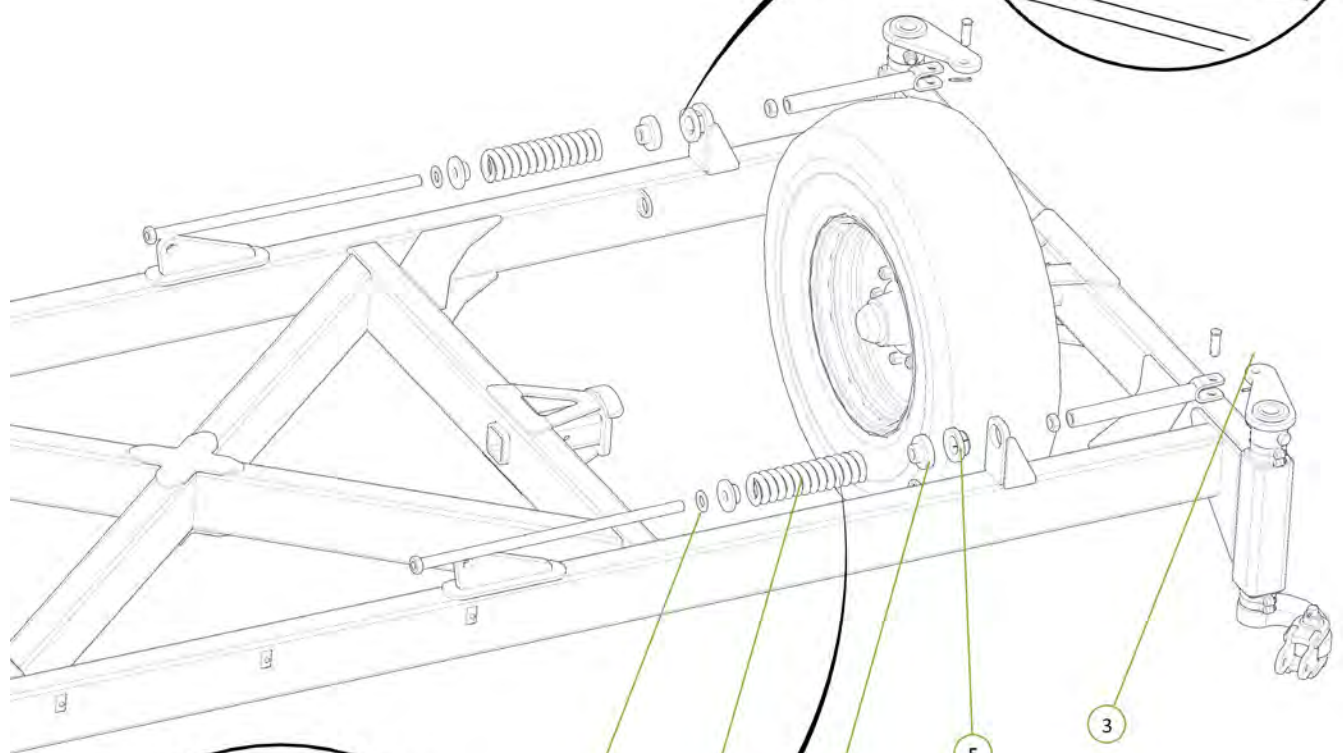
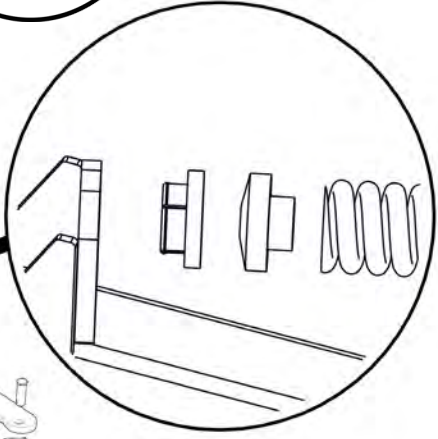




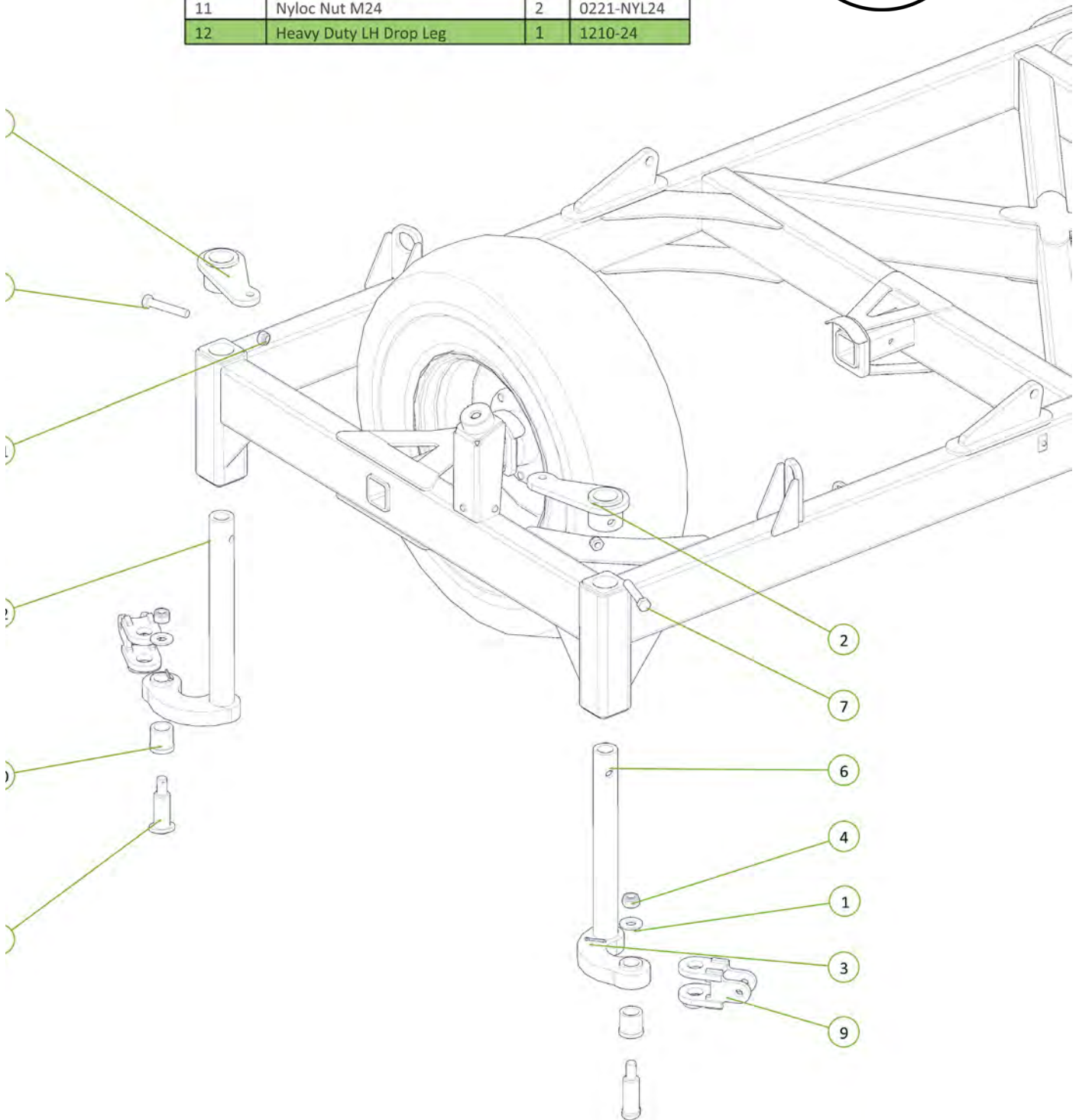
| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | Cast 25mm Spacing | 16 | 0801-CS25 |
| 2 | M10 x 30 grade 8.8 ZP Bolt | 16 | 0211-1030 |
| 3 | Nyloc Nut M10 | 16 | 0221-NYL10 |



| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|---------------|
| 1 | 20mm Compression Spring | 2 | 0801-XK92615 |
| 2 | Washer High Tensile 1 1/4" | 2 | 0232-HT11-4 |
| 3 | Chain Tension Assembly | 2 | 0802-PCHTA |
| 4 | Tensioner Cup - Male | 2 | 0801-KE0805-3 |
| 5 | Female Spring Locator | 2 | 0801-KE0805-4 |

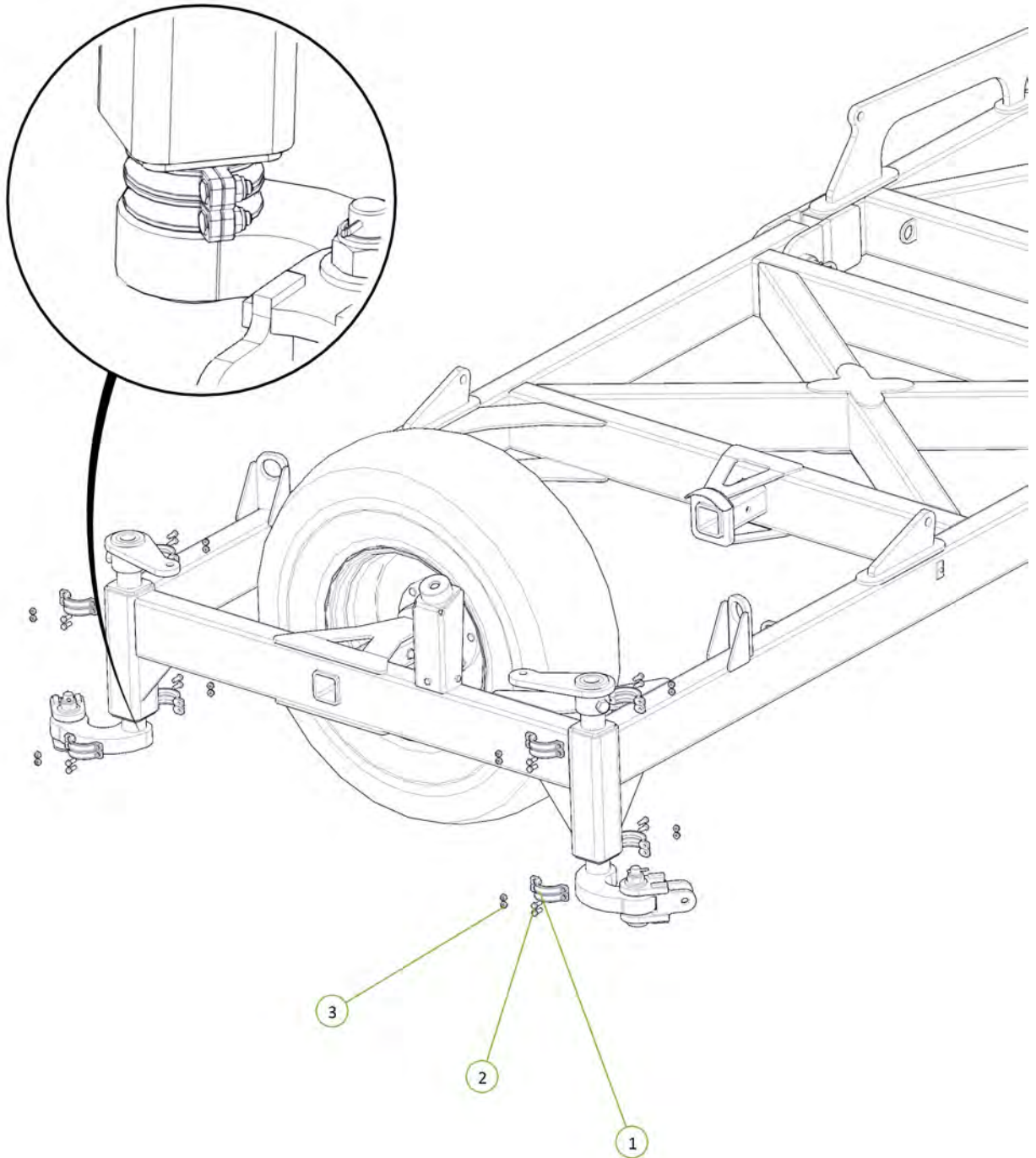


| Item No. | Description | Qty | Number |
|----------|----------------------------------|-----|--------------|
| 1 | 50mm Pivot Pin Retaining Washer | 2 | 1200-60 |
| 2 | RH Chain Adjusting Lug | 1 | 0810-27 |
| 3 | Cotter Pin M5 x 50 | 2 | 0261-PINC550 |
| 4 | Nyloc Nut M30 | 2 | 0221-NYL30 |
| 5 | LH Chain Adjusting Lug | 1 | 0810-26 |
| 6 | Heavy Duty RH Drop Leg | 1 | 1210-25 |
| 7 | M24 x 140 grade 8.8 zp Bolt | 2 | 0211-24140 |
| 8 | Oval Head Swivel Mount Pivot Pin | 2 | 1202-15 |
| 9 | PCHB553 Heavy Duty Mount Joint | 2 | 1210-57 |
| 10 | Swivel Mount Pivot Bush | 2 | 1201-16 |
| 11 | Nyloc Nut M24 | 2 | 0221-NYL24 |
| 12 | Heavy Duty LH Drop Leg | 1 | 1210-24 |

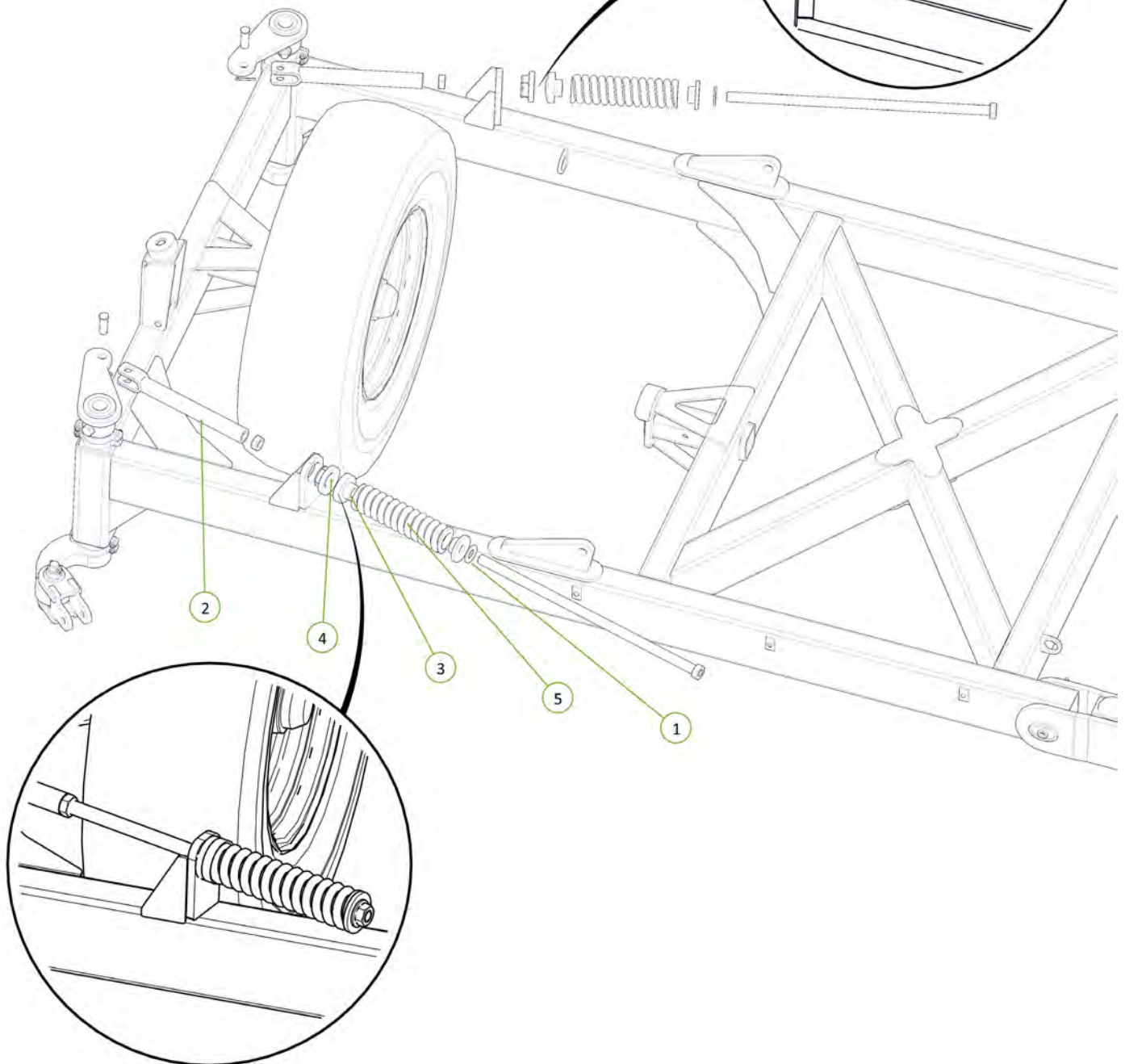
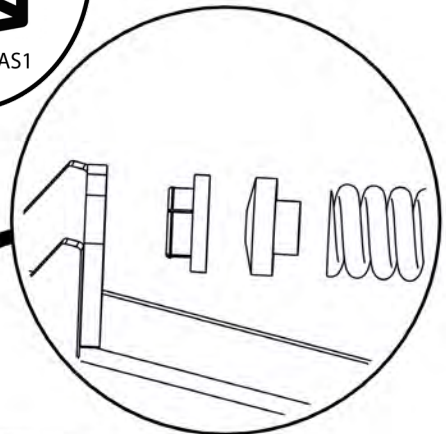




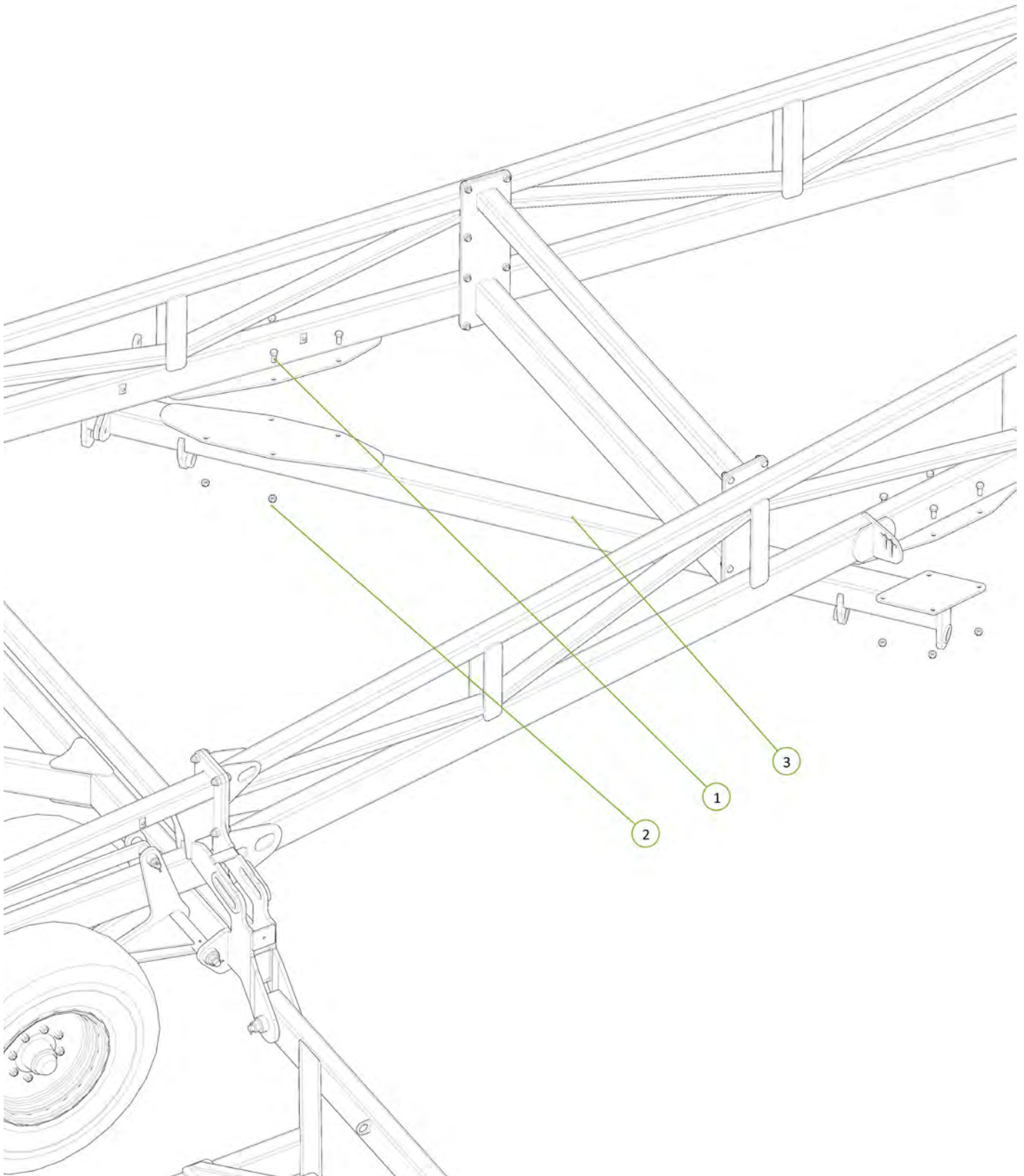
| Item No. | Description | Qty | Number |
|----------|-------------------|-----|------------|
| 1 | Cast 25mm Spacing | 16 | 0801-CS25 |
| 2 | Nyloc Nut M8 | 16 | 0211-1030 |
| 3 | Washer Flat M8 | 16 | 0221-NYL10 |



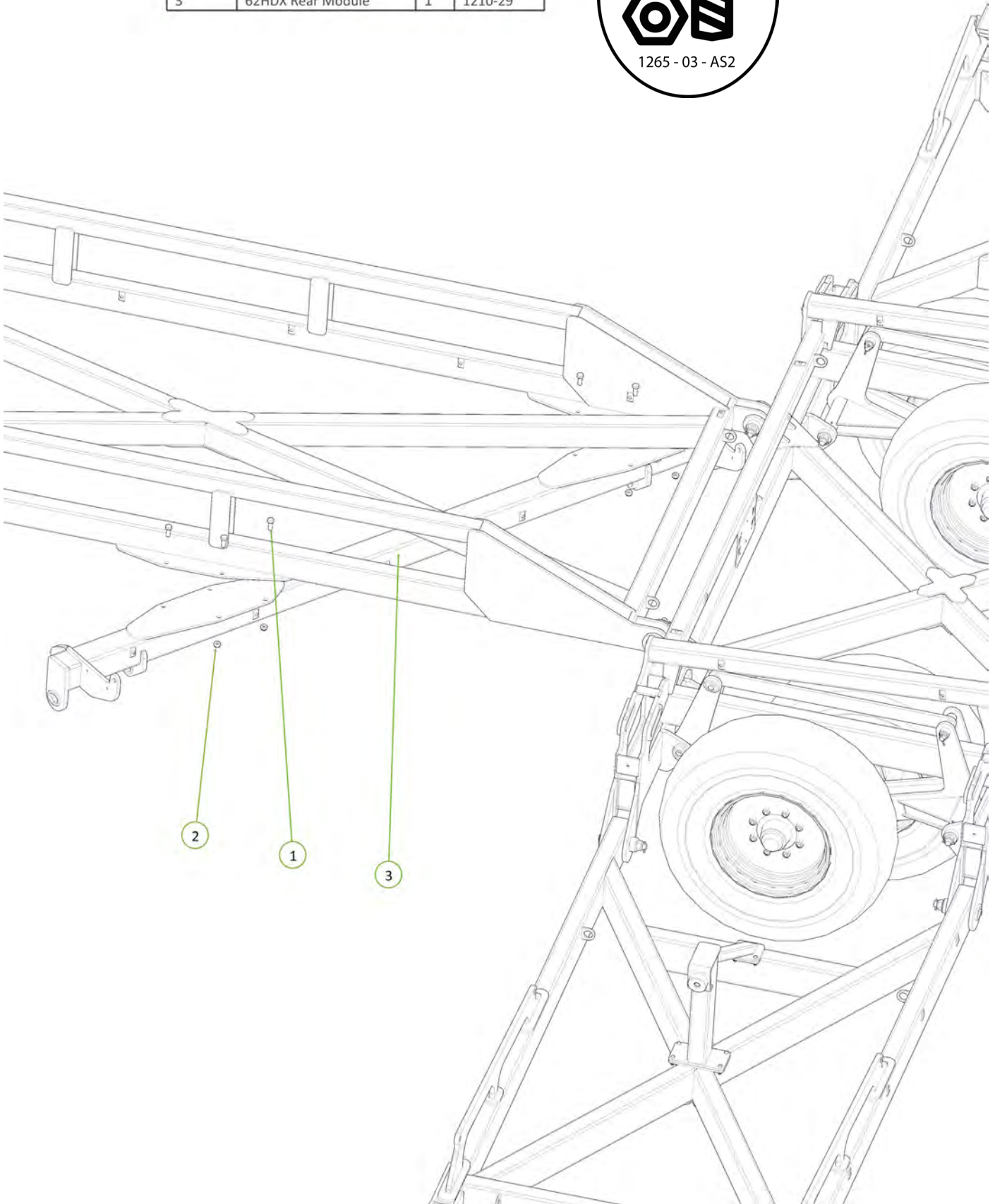
| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|---------------|
| 1 | Washer High Tensile 1 1/4" | 2 | 0232-HT11-4 |
| 2 | Chain Tension Assembly | 2 | 0802-PCHTA |
| 3 | Tensioner Cup - Male | 2 | 0801-KE0805-3 |
| 4 | Female Spring Locator | 2 | 0801-KE0805-4 |
| 5 | 20mm Compression Spring | 2 | 0801-XK9261S |



| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | M20 x 50 grade 8.8 ZP Bolt | 8 | 0211-2050 |
| 2 | Nyloc Nut M20 | 8 | 0221-NYL20 |
| 3 | 62HDX Front Module | 1 | 1210-28 |

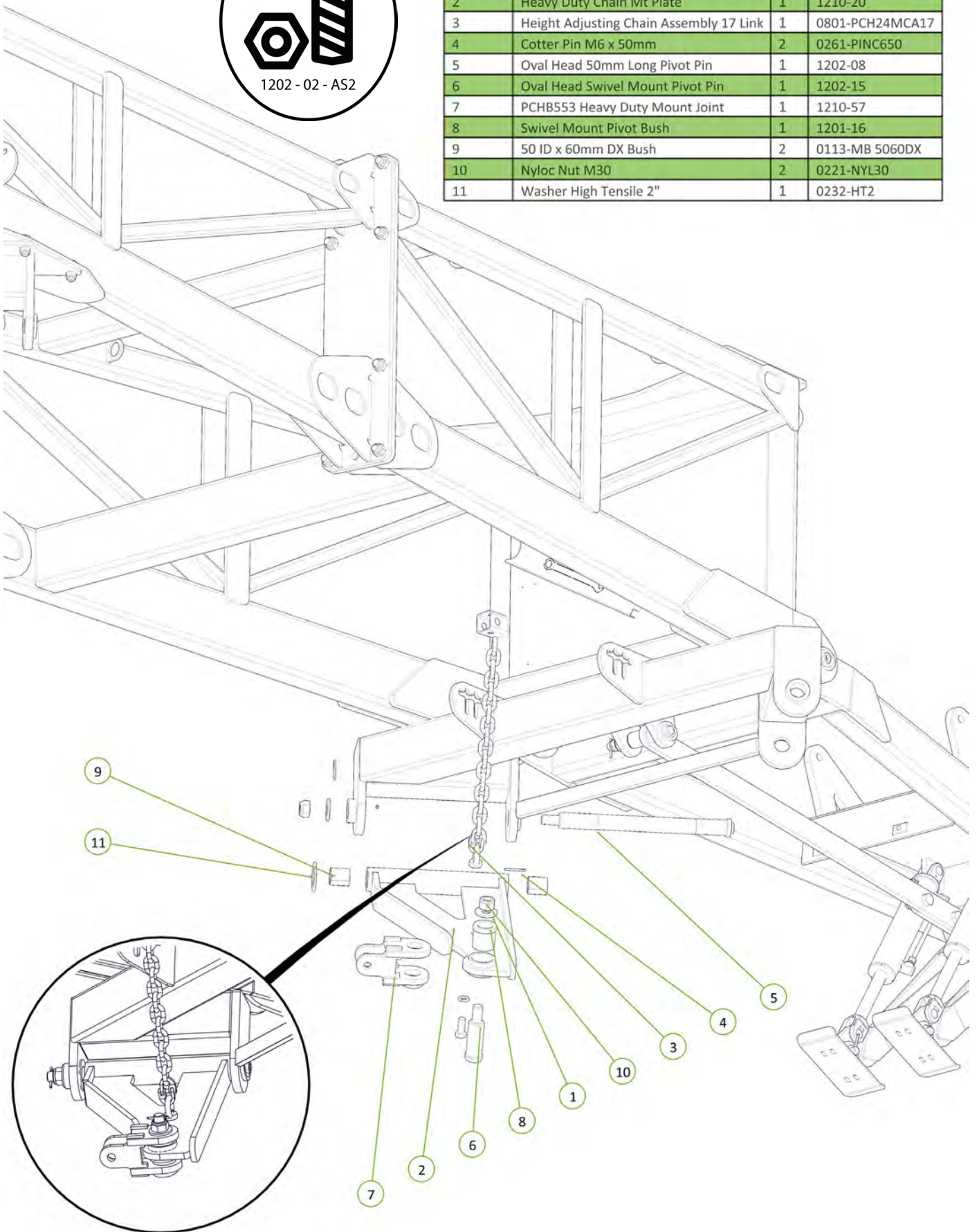


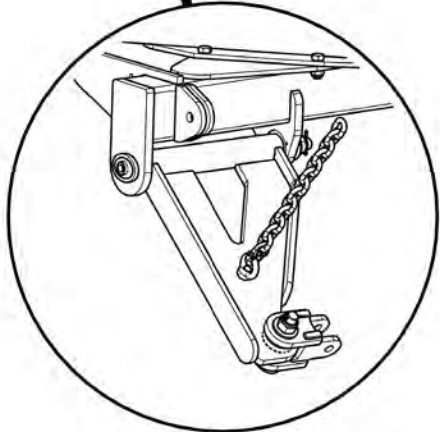
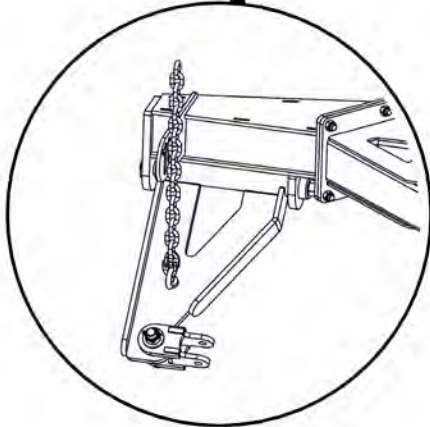
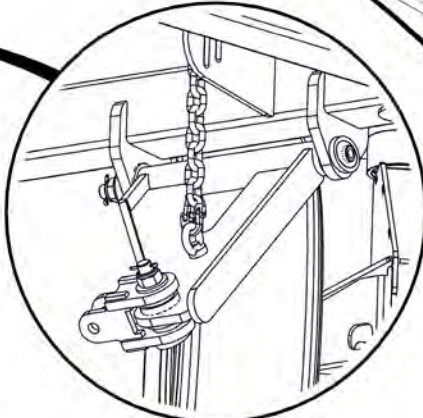
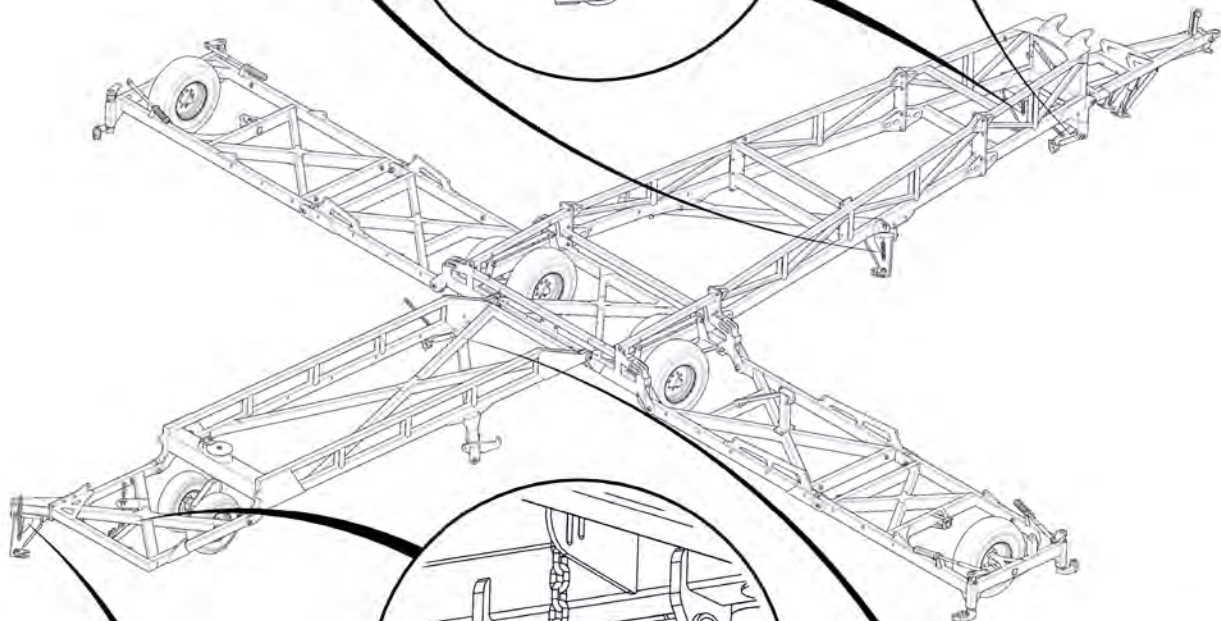
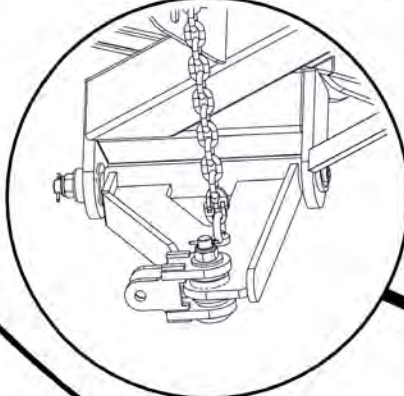
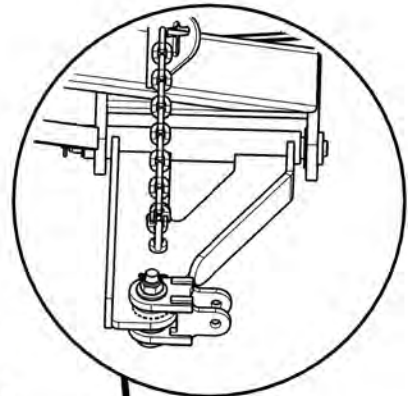
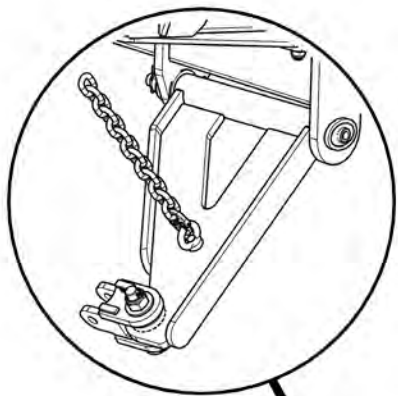
| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | M20 x 50 grade 8.8 ZP Bolt | 8 | 0211-2050 |
| 2 | Nyloc Nut M20 | 8 | 0221-NYL20 |
| 3 | 62HDX Rear Module | 1 | 1210-29 |

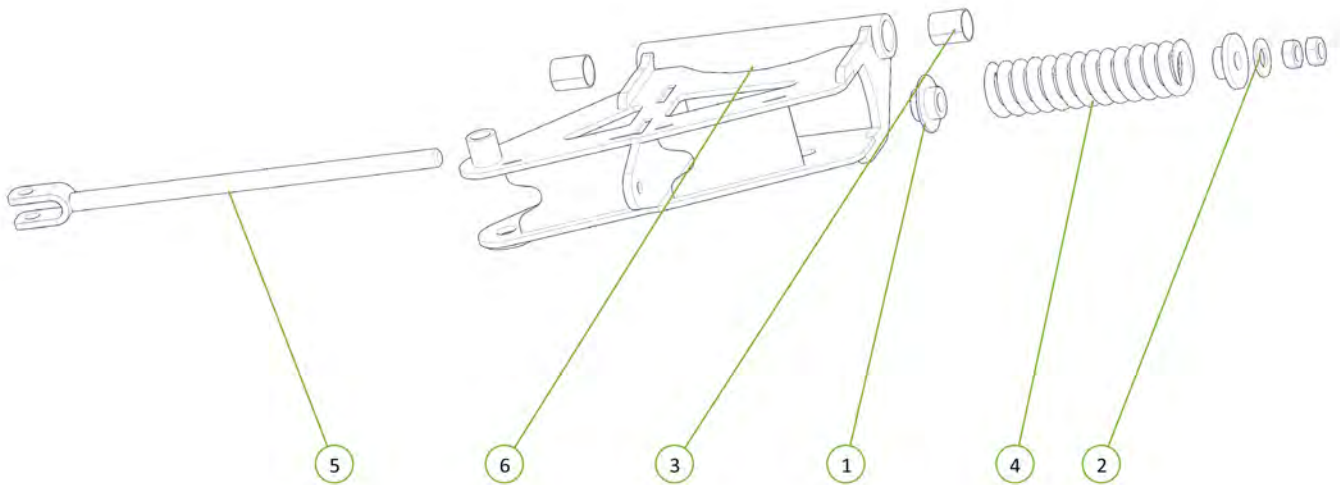
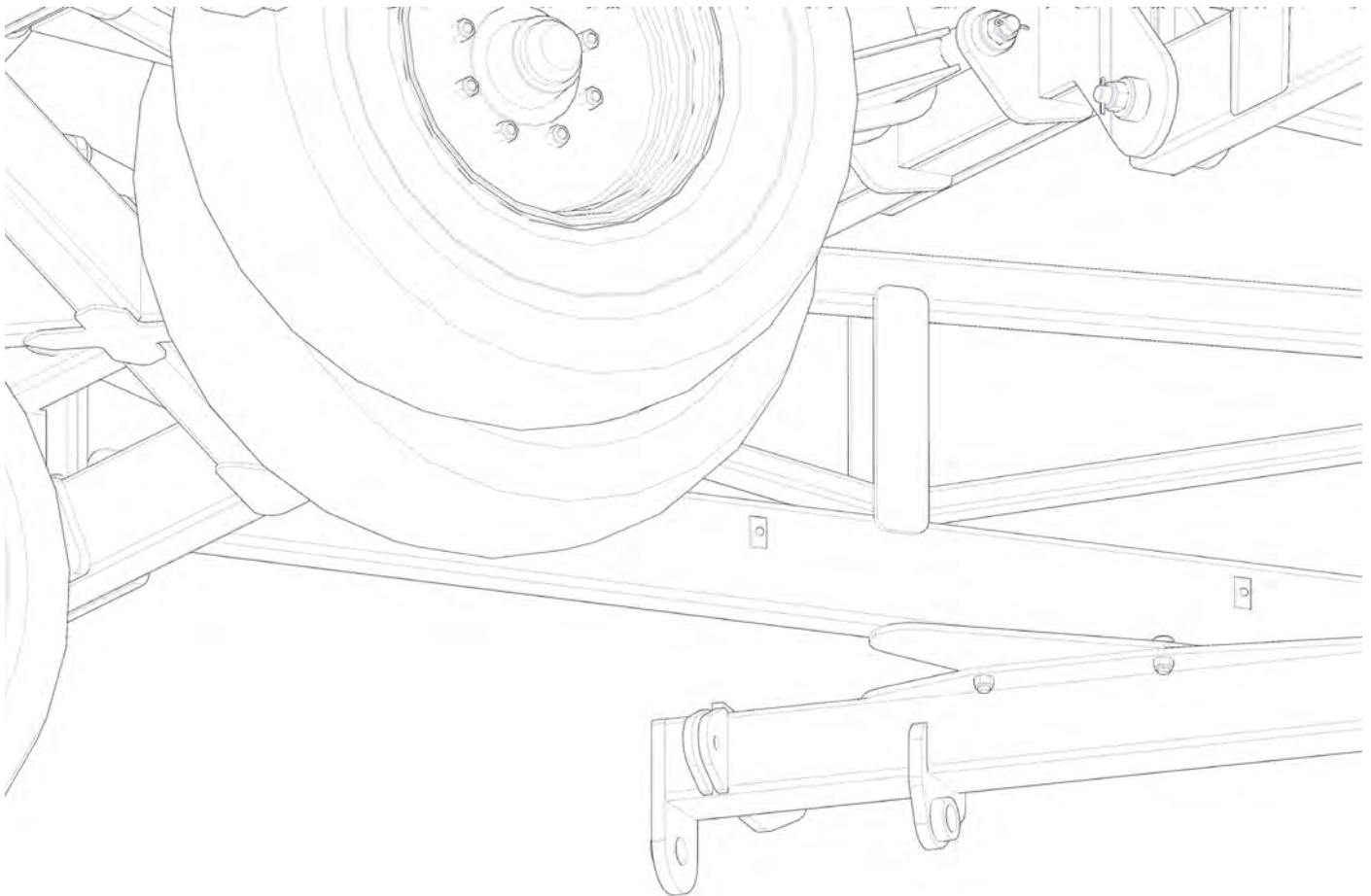




| Item No. | Description | Qty | Number |
|----------|---|-----|-----------------|
| 1 | 50mm Pivot Pin Retaining Washer | 2 | 1200-60 |
| 2 | Heavy Duty Chain Mt Plate | 1 | 1210-20 |
| 3 | Height Adjusting Chain Assembly 17 Link | 1 | 0801-PCH24MCA17 |
| 4 | Cotter Pin M6 x 50mm | 2 | 0261-PINC650 |
| 5 | Oval Head 50mm Long Pivot Pin | 1 | 1202-08 |
| 6 | Oval Head Swivel Mount Pivot Pin | 1 | 1202-15 |
| 7 | PCHB553 Heavy Duty Mount Joint | 1 | 1210-57 |
| 8 | Swivel Mount Pivot Bush | 1 | 1201-16 |
| 9 | 50 ID x 60mm DX Bush | 2 | 0113-MB 5060DX |
| 10 | Nyloc Nut M30 | 2 | 0221-NYL30 |
| 11 | Washer High Tensile 2" | 1 | 0232-HT2 |

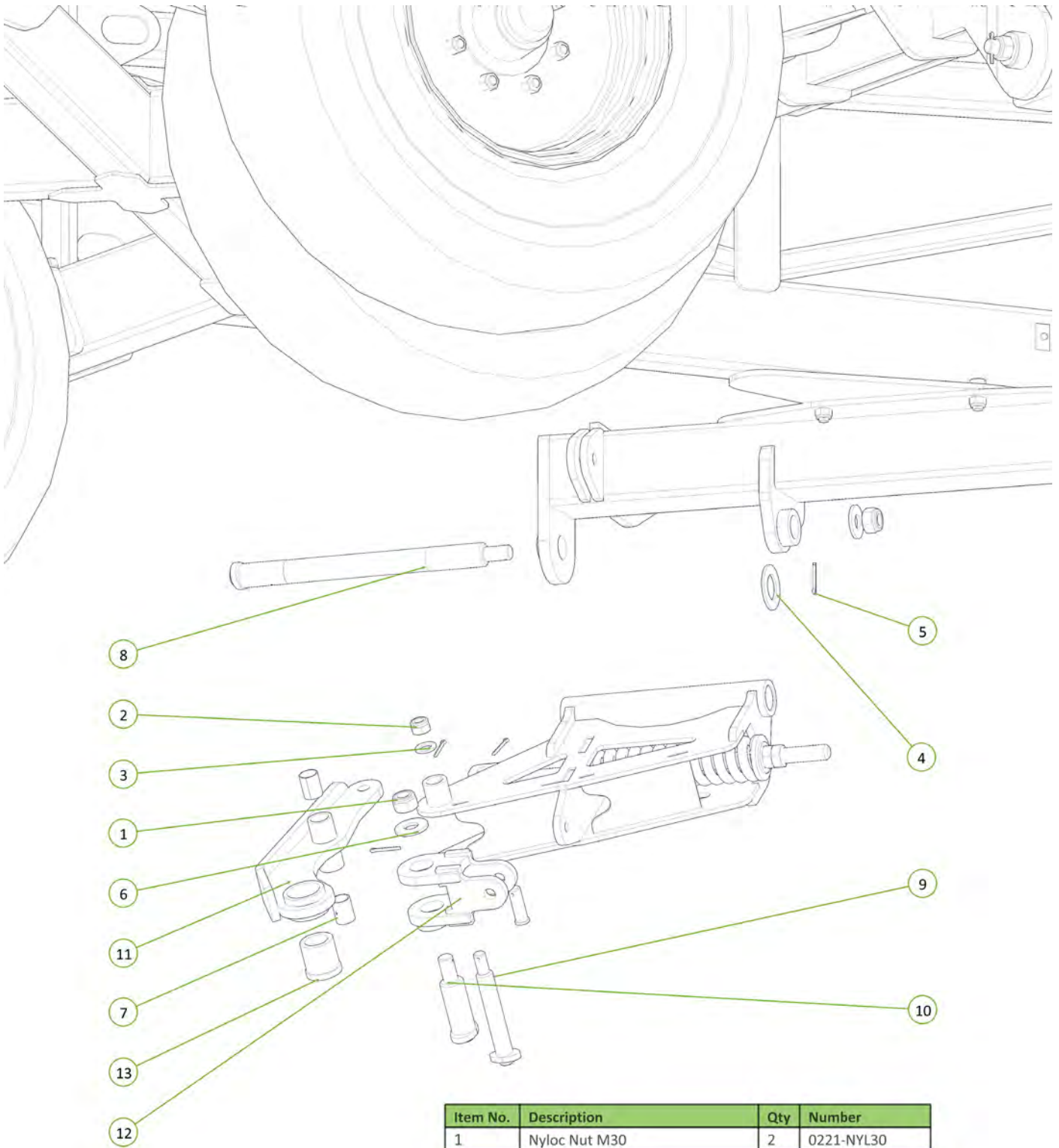






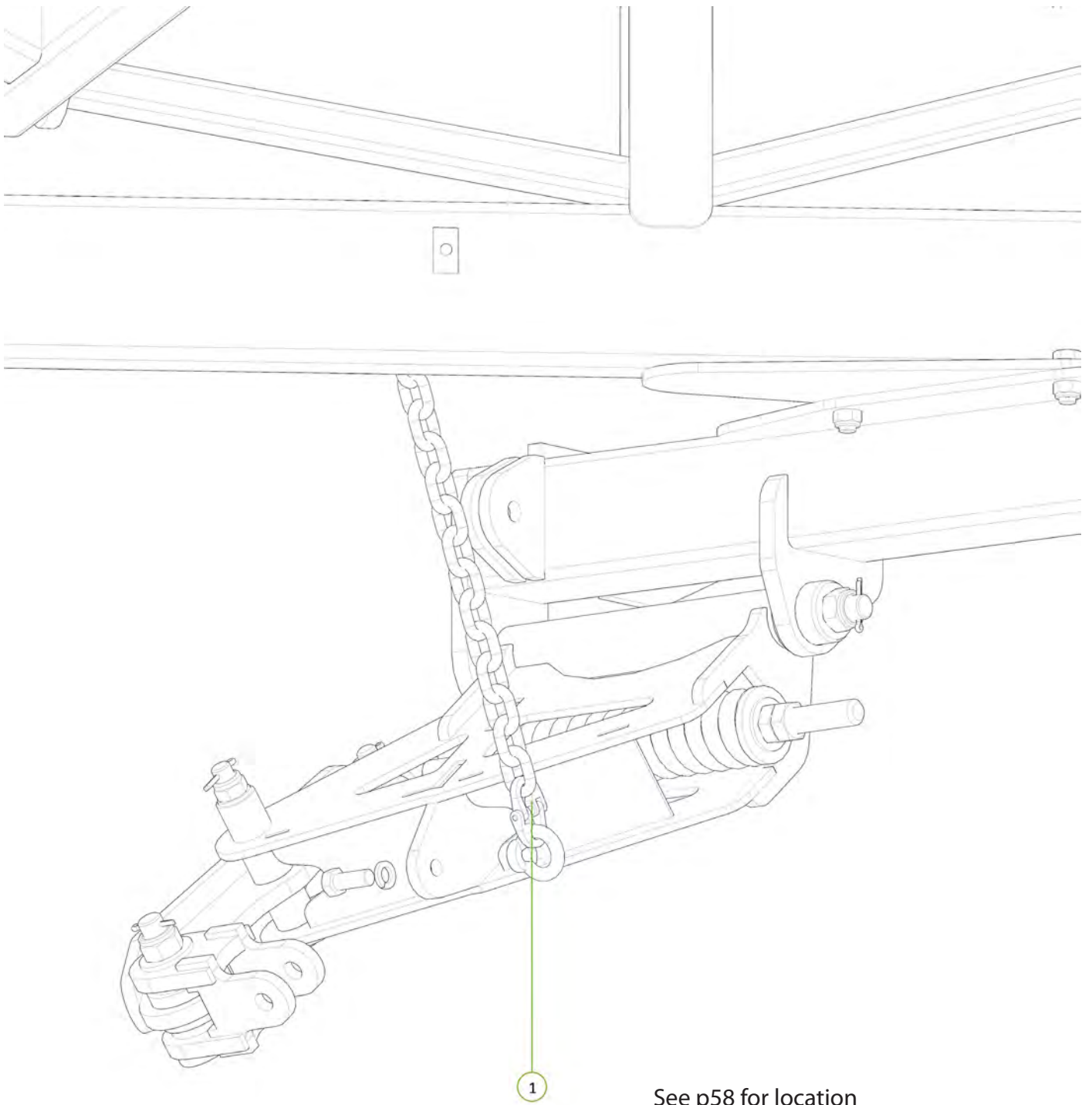
See p58 for location

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

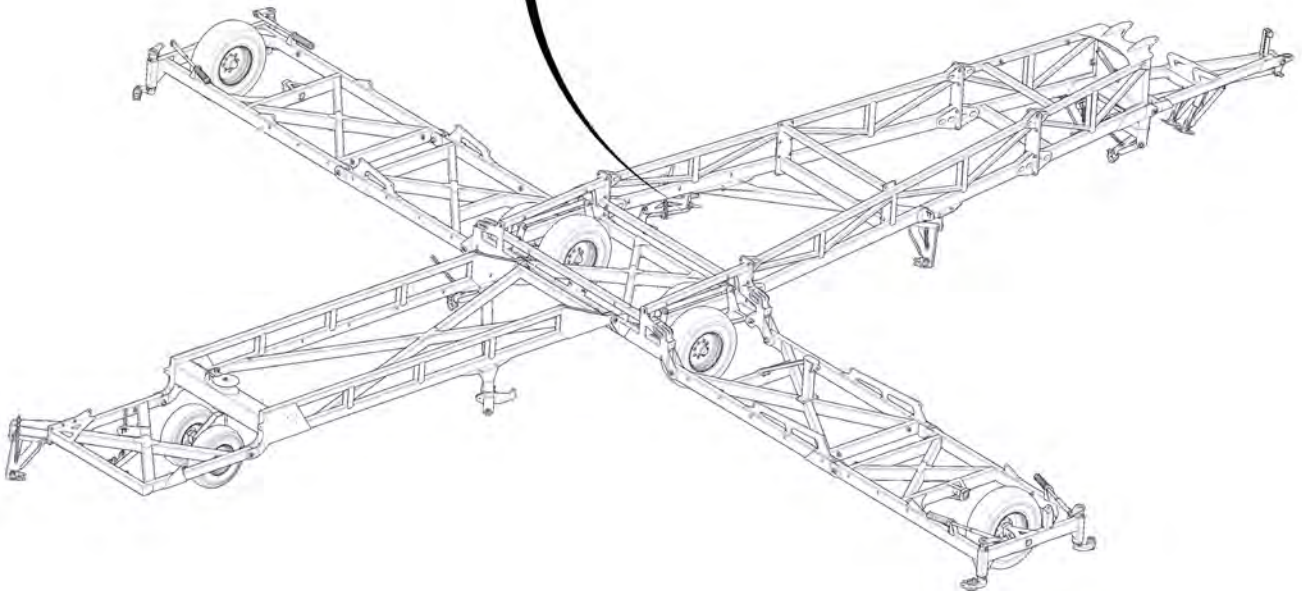
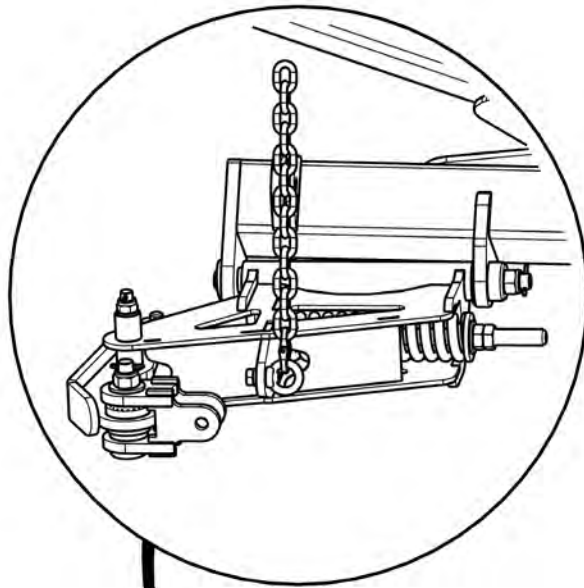


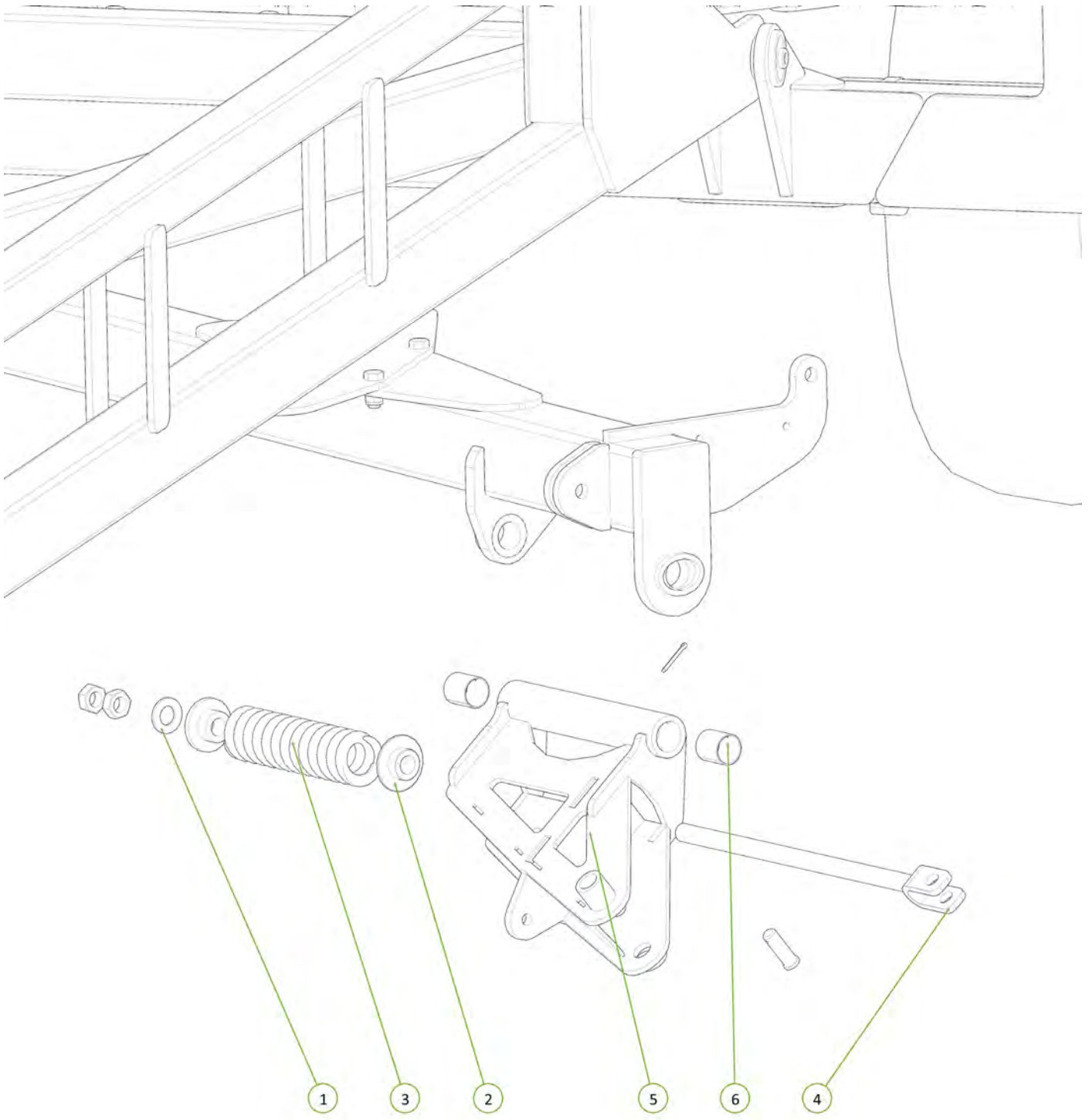
See p58 for location

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



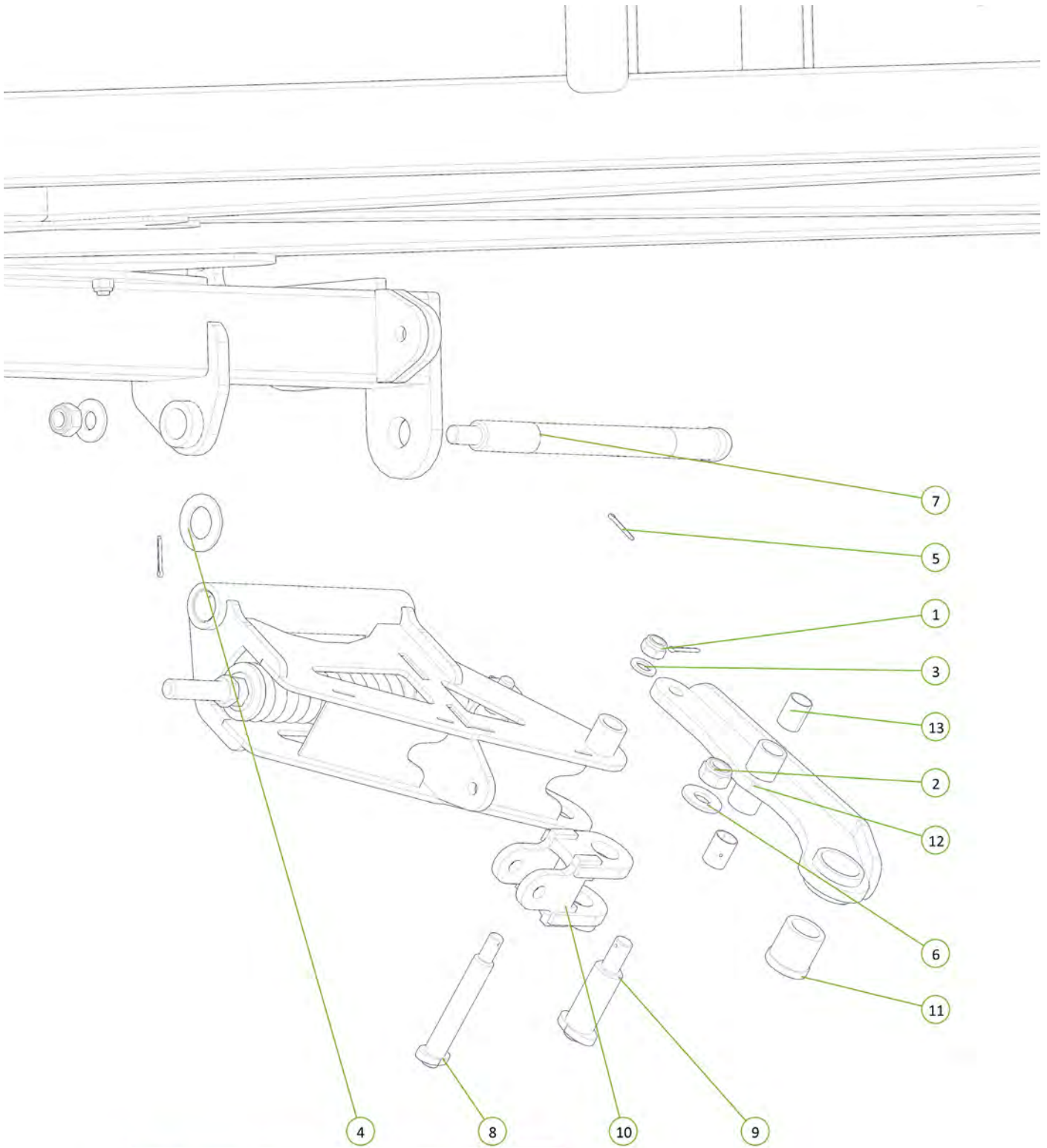
| Item No. | Description | Qty | Number |
|----------|---|-----|-----------------|
| 1 | Height Adjusting Chain Assembly 17 Link | 1 | 0801-PCH24MCA17 |





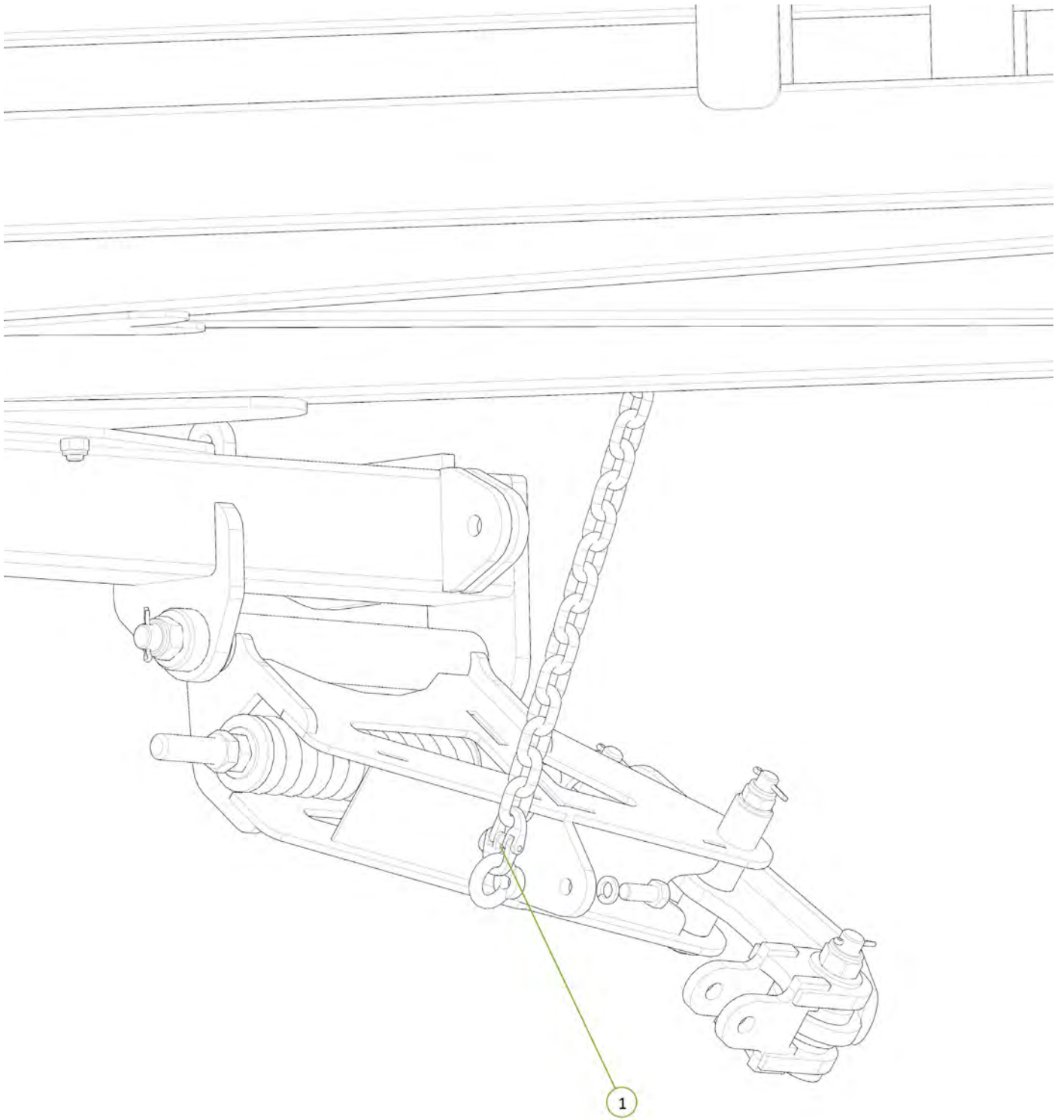
| Item No. | Description | Qty | Number |
|----------|------------------------------|-----|----------------|
| 1 | Washer High Tensile 1 1/4" | 1 | 0232-HT11-4 |
| 2 | Rigid Spring Locator | 1 | 0801-10-52L |
| 3 | 20mm Compression Spring | 1 | 0801-XK9261S |
| 4 | Module Tension Linkage | 1 | 0810-105A |
| 5 | Right Hand Chain Tension Box | 1 | 1210-102 |
| 6 | 50 ID x 60mm DX Bush | 2 | 0113-MB 5060DX |

See p62 for location



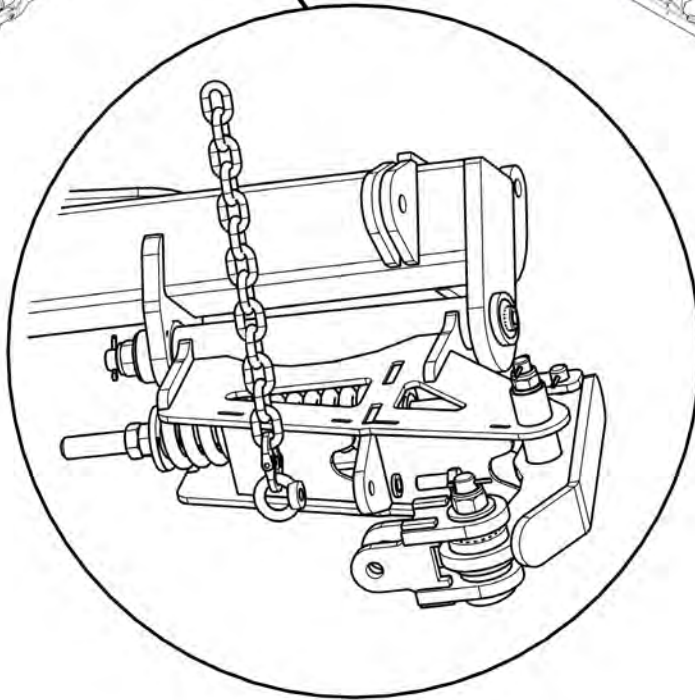
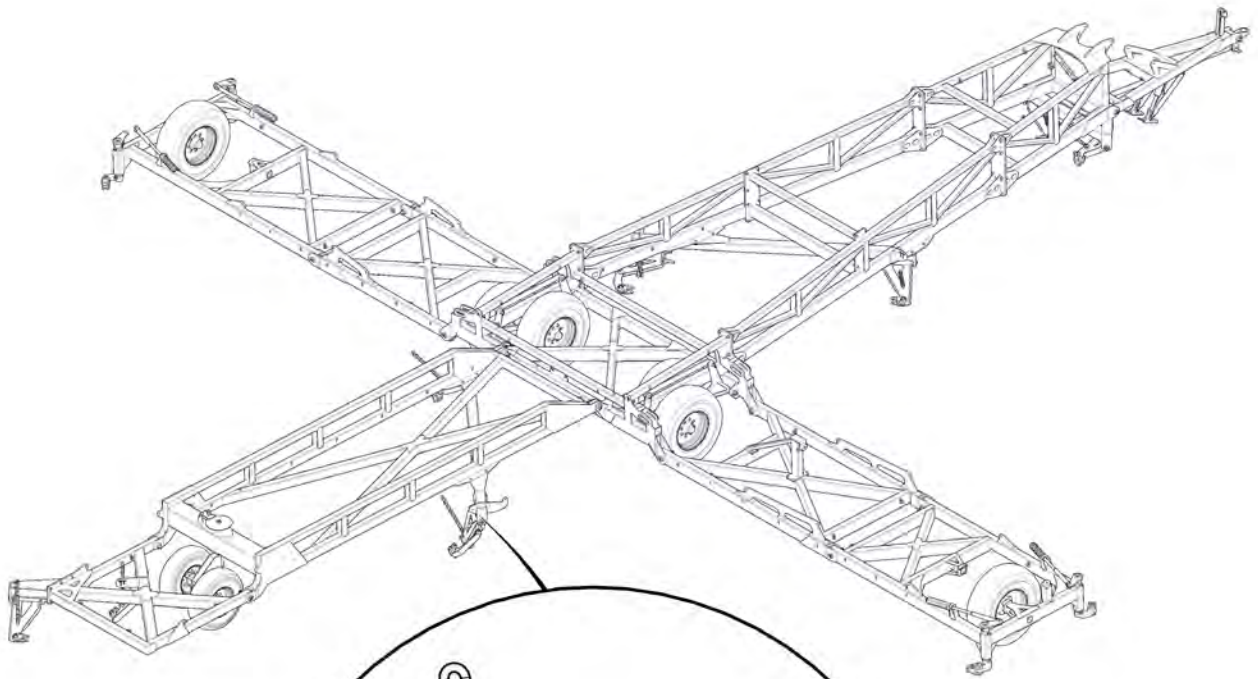
| Item No. | Description | Qty | Number |
|----------|----------------------------------|-----|----------------|
| 1 | Nyloc Nut M24 | 1 | 0221-NYL24 |
| 2 | Nyloc Nut M30 | 2 | 0221-NYL30 |
| 3 | Washer Flat M24 | 1 | 0231-F24 |
| 4 | Washer High Tensile 2" | 1 | 0232-HT2 |
| 5 | Cotter Pin M6 x 50mm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

See p62 for location

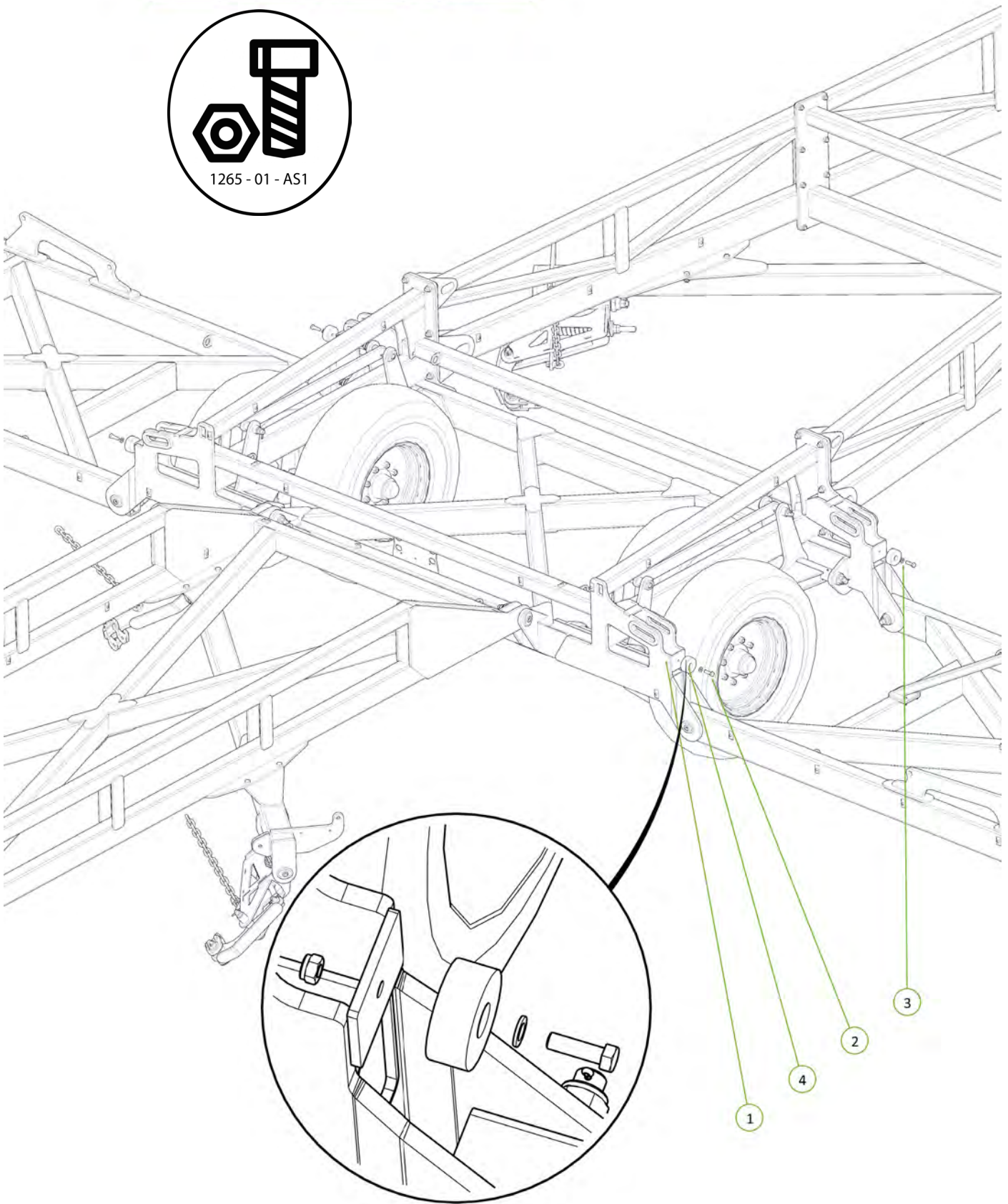


See p62 for location

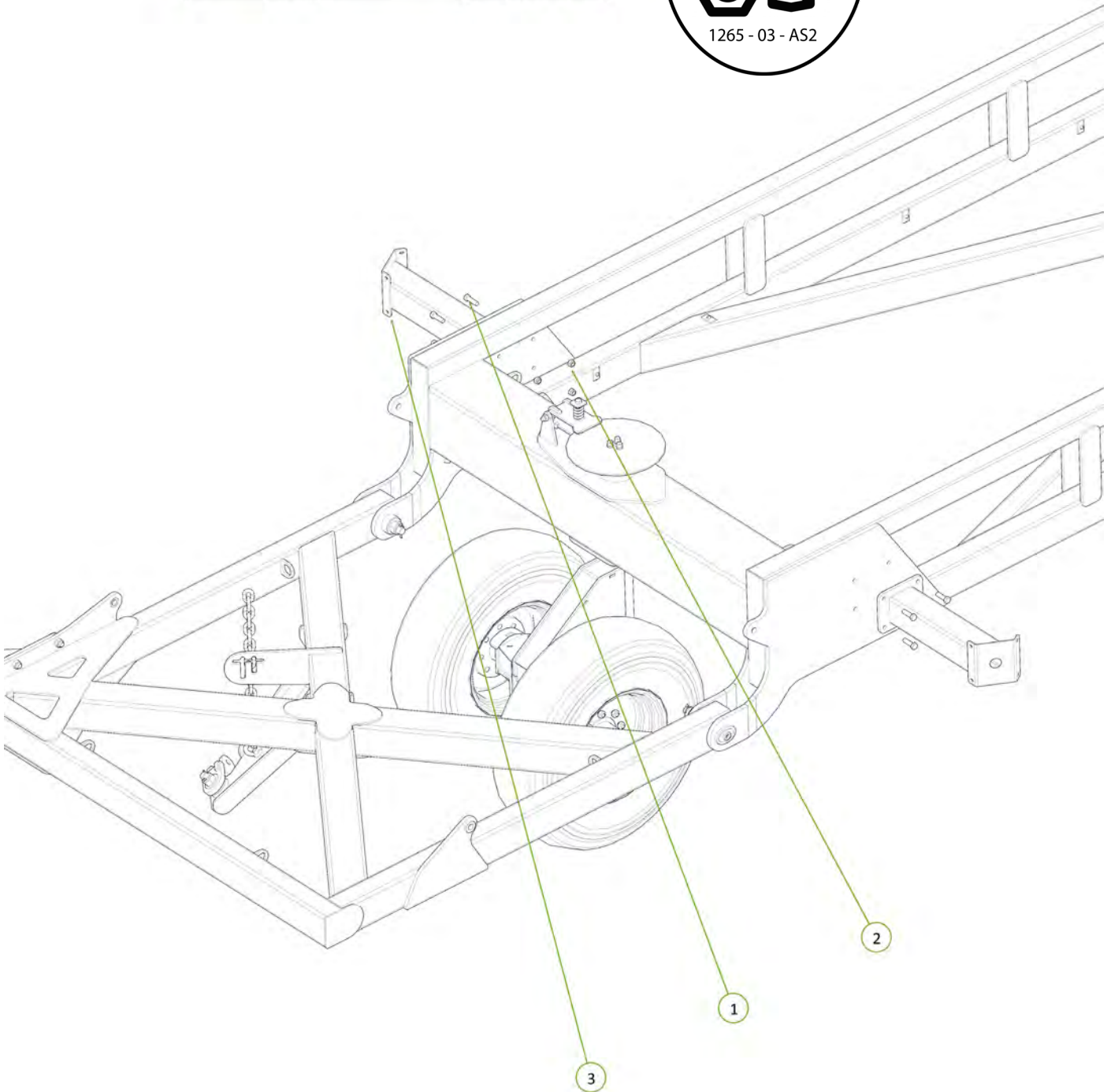
| Item No. | Description | Qty | Number |
|----------|---|-----|-----------------|
| 1 | Height Adjusting Chain Assembly 17 Link | 1 | 0801-PCH24MCA17 |



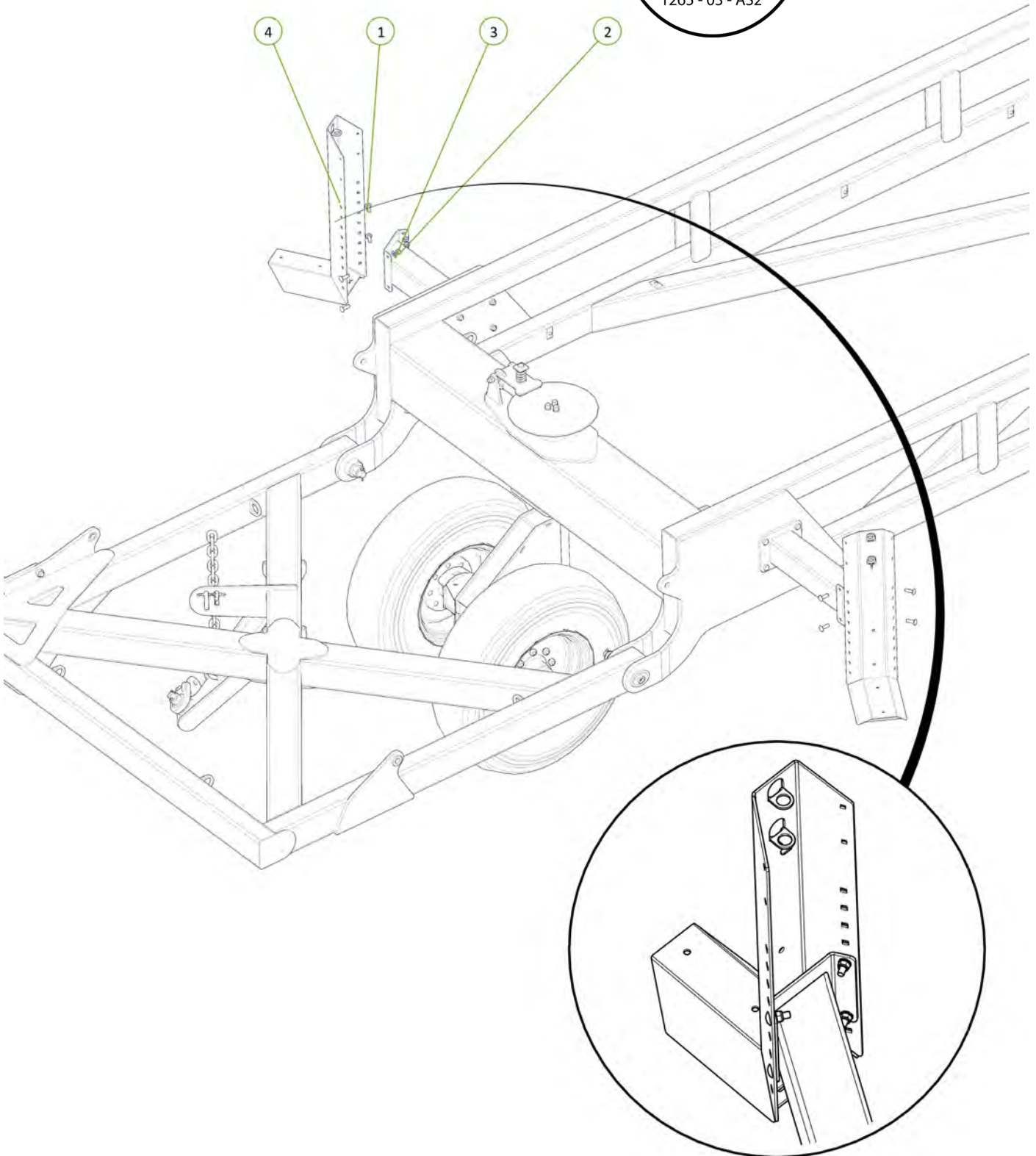
| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | Nyloc Nut M16 | 4 | 0221-NYL16 |
| 2 | M16 x 55 grade 8.8 zp Bolt | 4 | 0211-1655 |
| 3 | Washer Flat M16 | 4 | 0231-F16 |
| 4 | Wing Folding Buffer | 4 | 1201-12 |



| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | M16 x 55 grade 8.8 zp Bolt | 8 | 0211-1655 |
| 2 | Nyloc Nut M16 | 8 | 0221-NYL16 |
| 3 | Outrigger | 2 | 0810-109 |

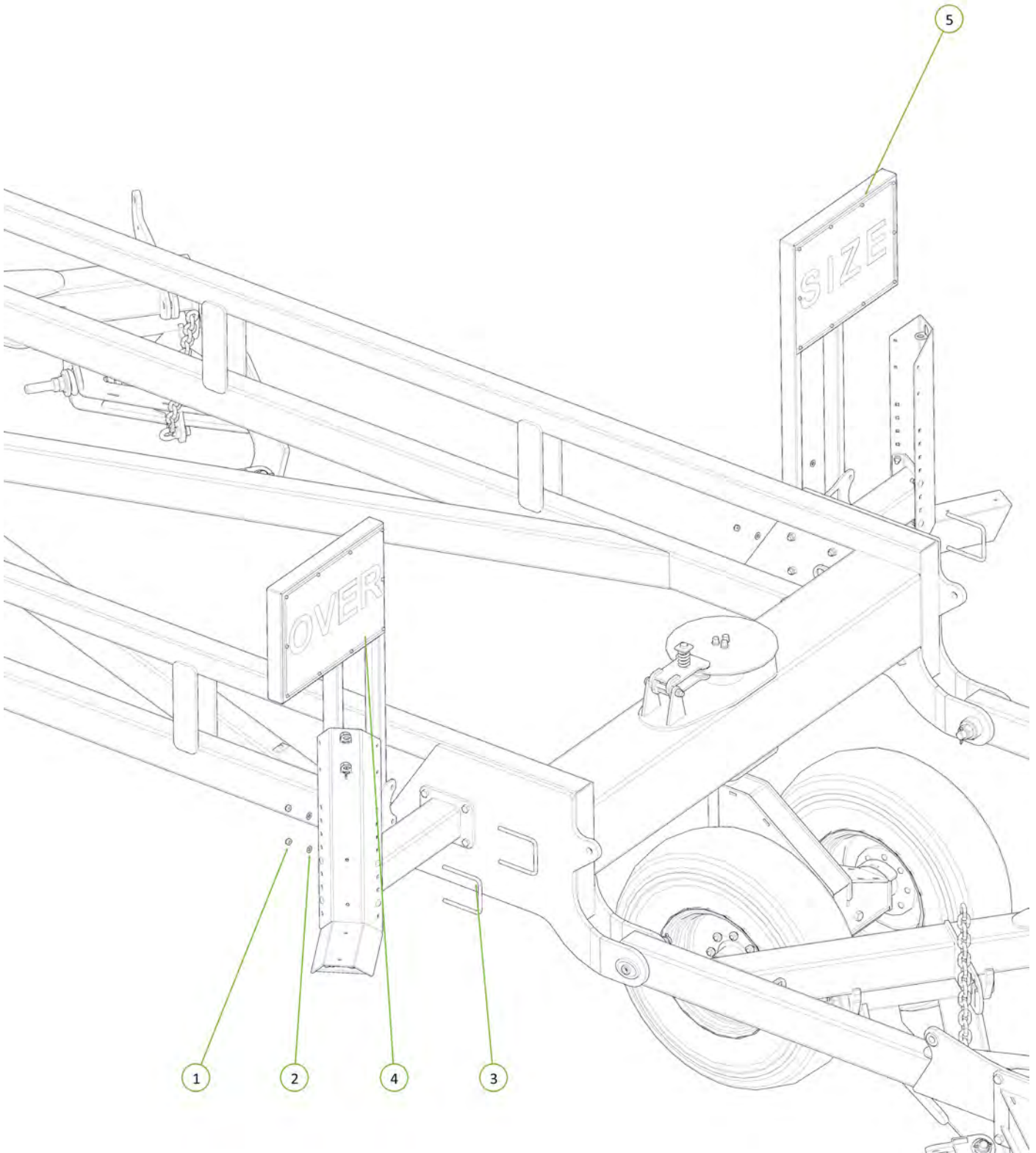


| Item No. | Description | Qty | Number |
|----------|---------------------------|-----|-------------|
| 1 | M12 x 40 Coach Head Bolt | 8 | 0215-CH1240 |
| 2 | Nyloc Nut M12 | 8 | 0221-NYL12 |
| 3 | Washer Flat M12 | 8 | 0231-F12 |
| 4 | Chain Carrier Bolt on End | 2 | 0810-17L |

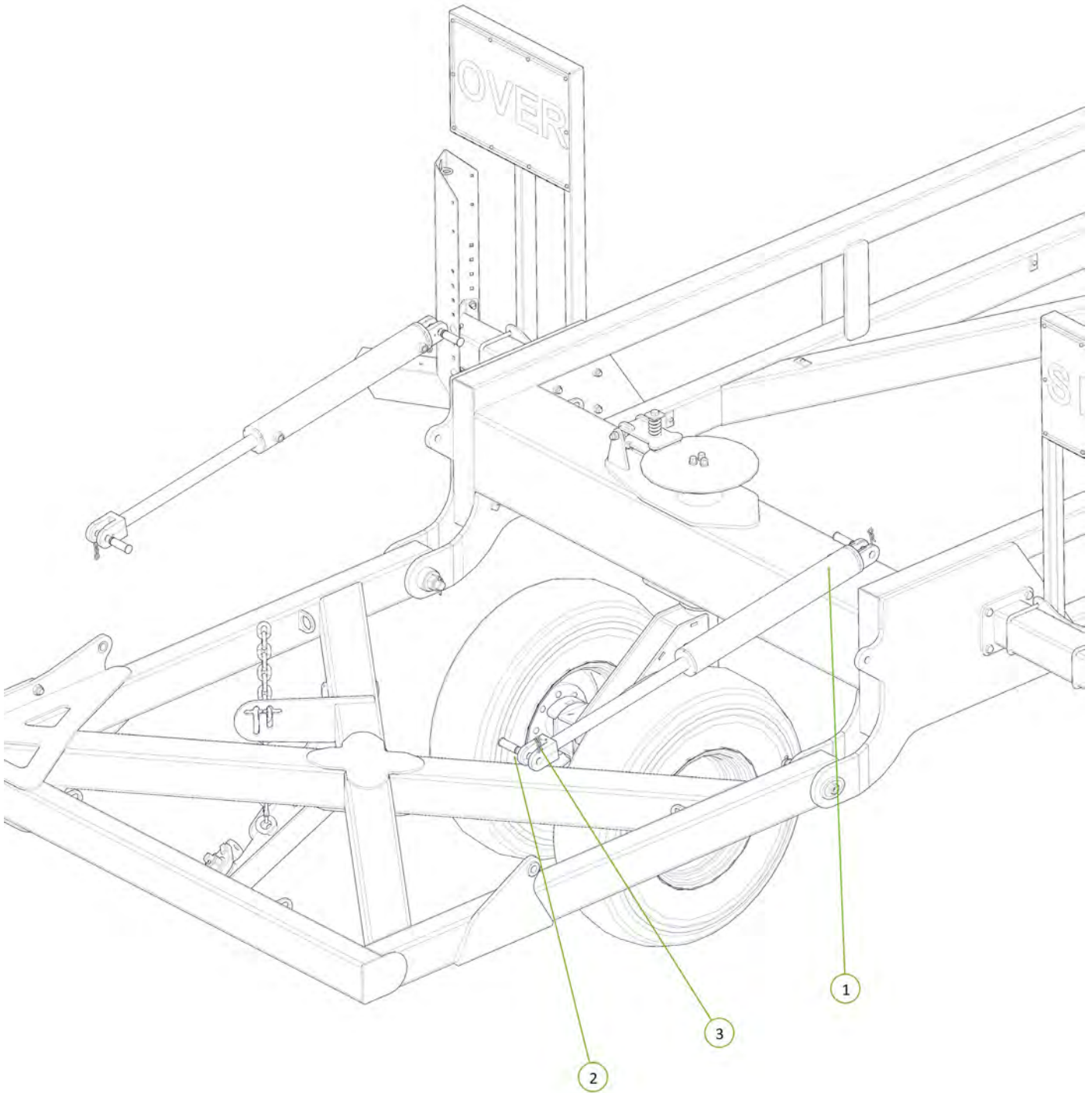


| Item No. | Description | Qty | Number |
|----------|----------------------------------|-----|---------------|
| 1 | Nyloc Nut M12 | 8 | 0221-NYL12 |
| 2 | Washer Flat M12 | 8 | 0231-F12 |
| 3 | U-Bolt M12 x 155 Deep x 127 Wide | 4 | 0271-12155127 |
| 4 | LH Oversize Sign Frame | 1 | 0810-110 |
| 5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

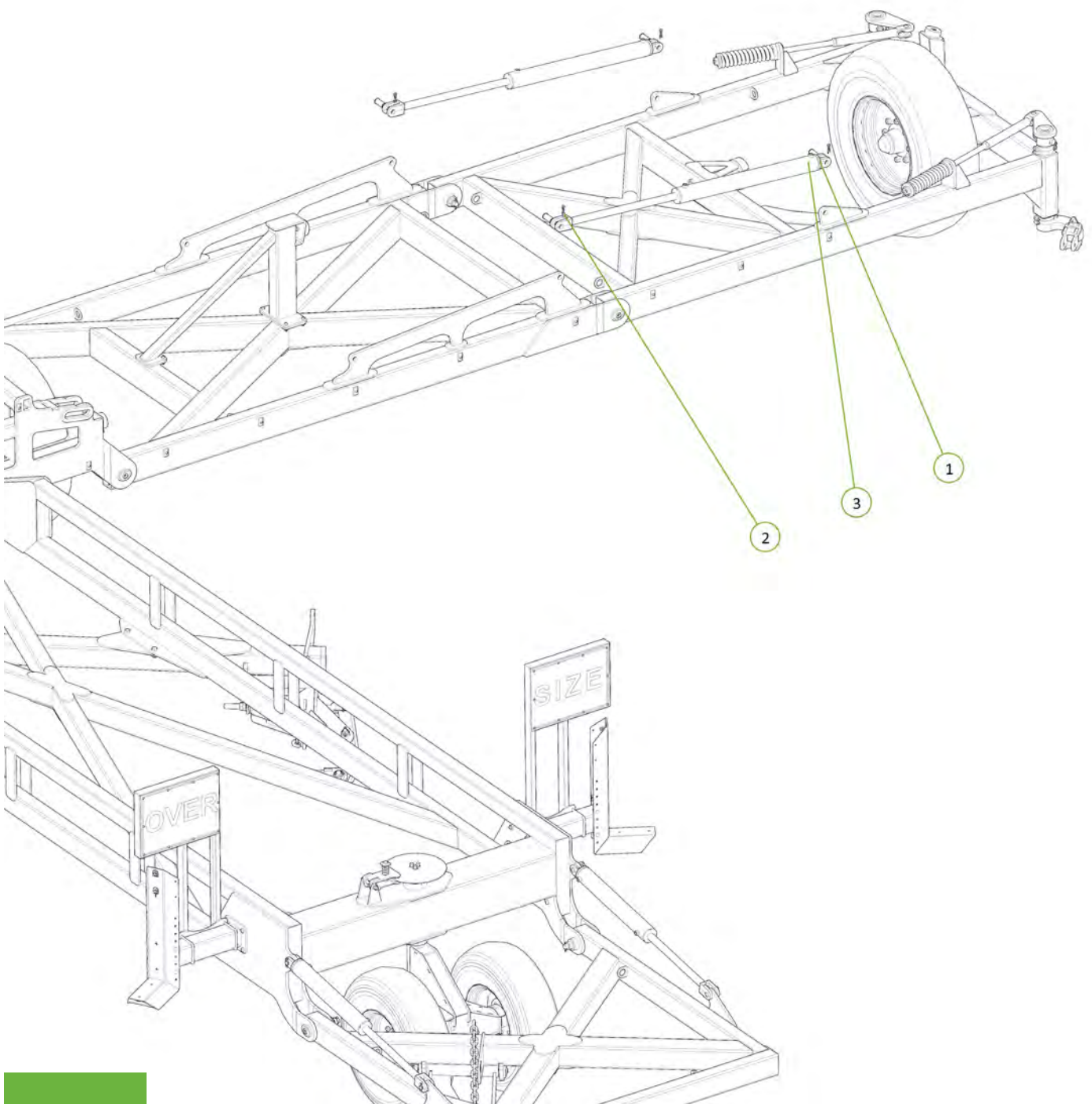
Signage may change according to local regulations



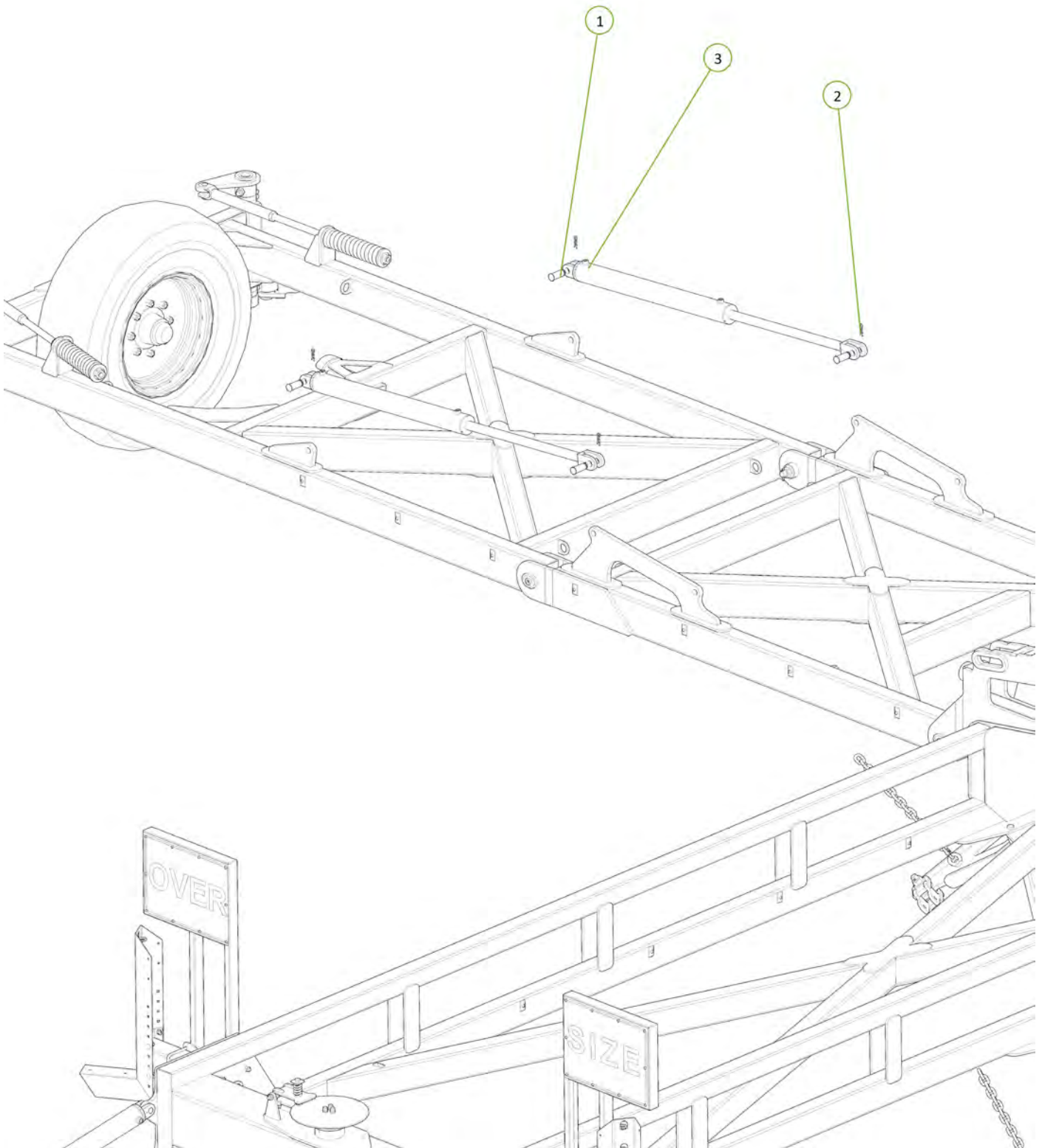
| Item No. | Description | Qty | Number |
|----------|---|-----|---------------|
| 1 | 3.5" Bore 24" Stroke 1.75" Rod Hydraulic Cylinder | 2 | 0313-3524SP-B |
| 2 | Hydraulic Cylinder Pin 1" x 75mm | 4 | 0313-NCP1X75 |
| 3 | R Clip 3mm | 4 | 0511-RCLIP3 |



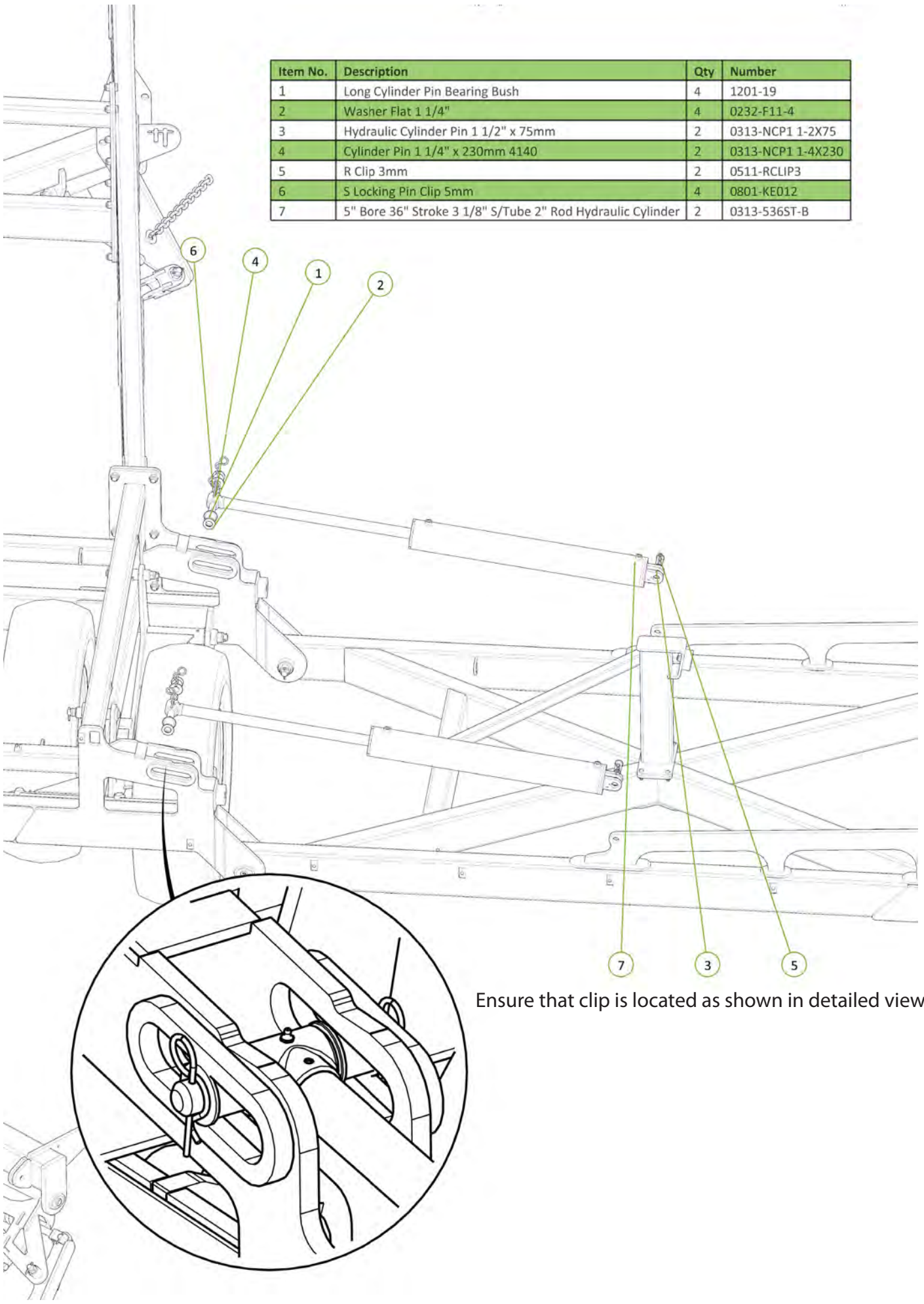
| Item No. | Description | Qty | Number |
|----------|---|-----|------------------|
| 1 | Hydraulic Cylinder Pin 1 1/2" x 75mm | 4 | 0313-NCP1 1-2X75 |
| 2 | R Clip 3mm | 4 | 0511-RCLIP3 |
| 3 | 3.5" Bore 32" Stroke 4" S/Tube 1.75" Rod Hydraulic Cylinder | 2 | 0313-3532ST-B |



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



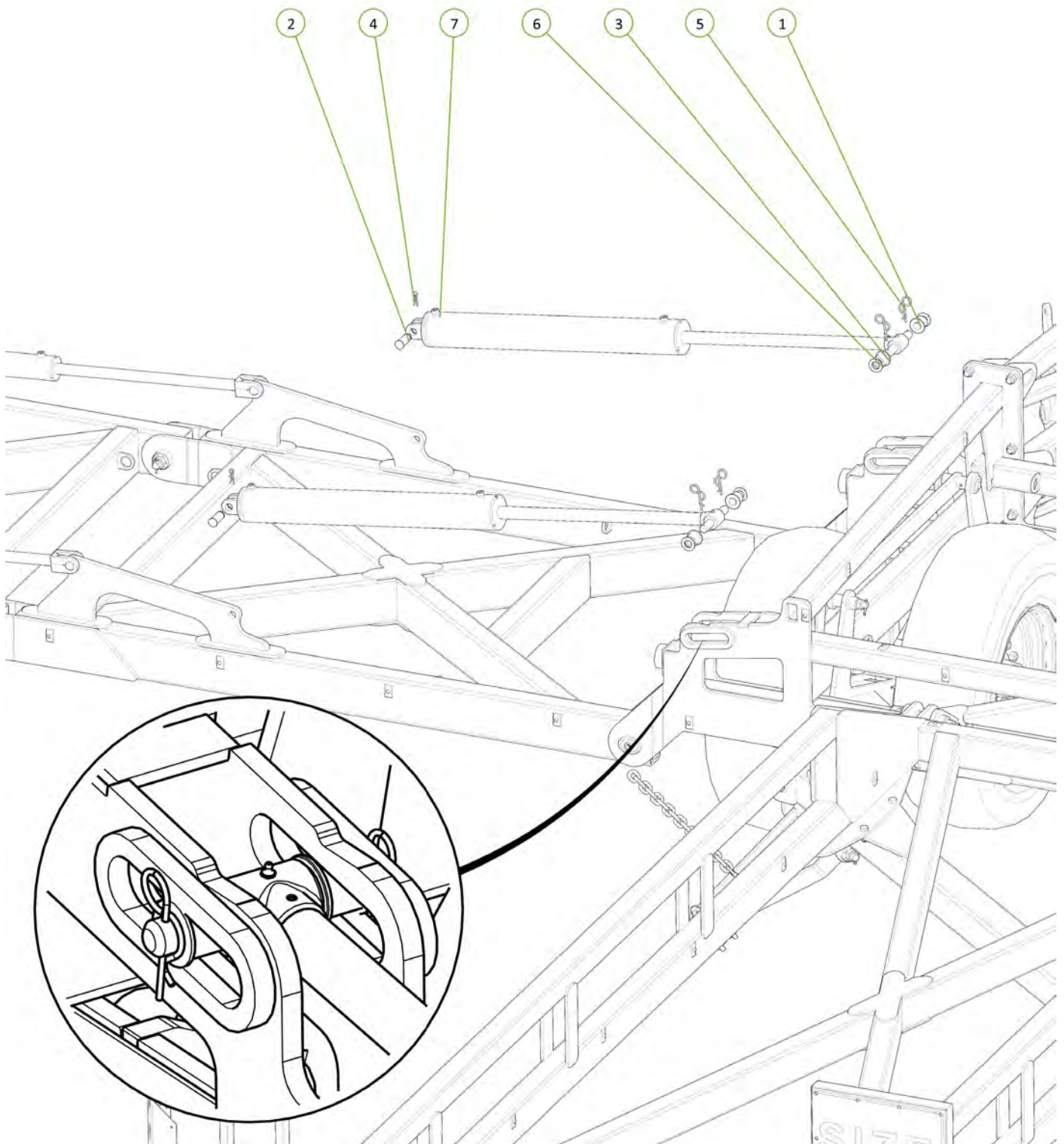
| Item No. | Description | Qty | Number |
|----------|--|-----|-------------------|
| 1 | Long Cylinder Pin Bearing Bush | 4 | 1201-19 |
| 2 | Washer Flat 1 1/4" | 4 | 0232-F11-4 |
| 3 | Hydraulic Cylinder Pin 1 1/2" x 75mm | 2 | 0313-NCP1 1-2X75 |
| 4 | Cylinder Pin 1 1/4" x 230mm 4140 | 2 | 0313-NCP1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



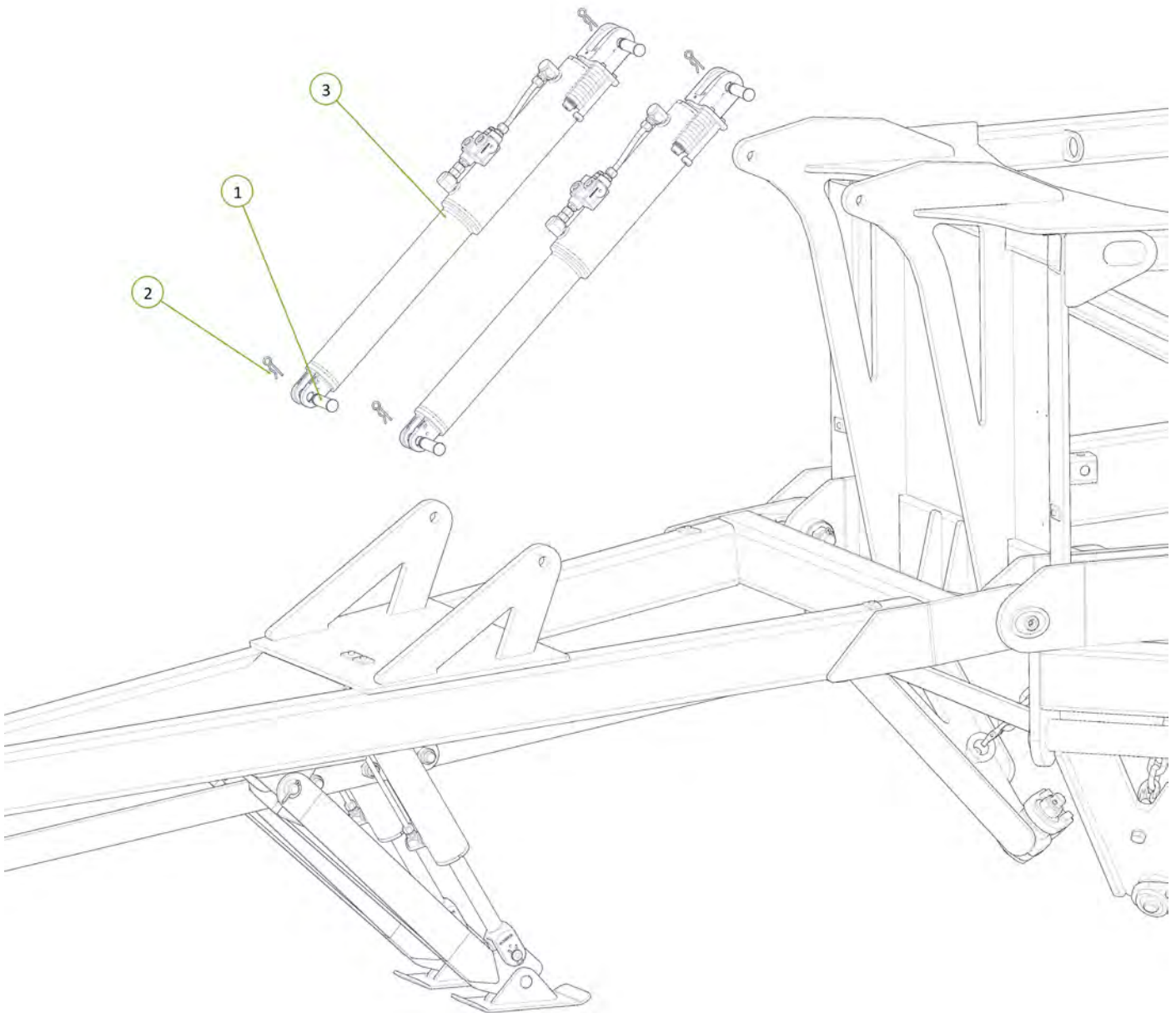
Ensure that clip is located as shown in detailed view

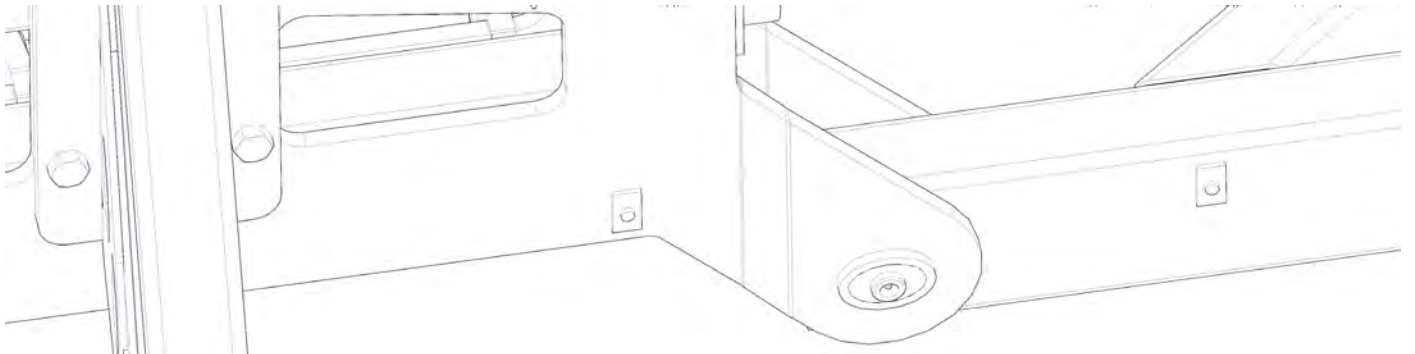
| Item No. | Description | Qty | Number |
|----------|--|-----|-------------------|
| 1 | Washer Flat 1 1/4" | 4 | 0232-F11-4 |
| 2 | Hydraulic Cylinder Pin 1 1/2" x 75mm | 2 | 0313-NCP1 1-2X75 |
| 3 | Cylinder Pin 1 1/4" x 230mm 4140 | 2 | 0313-NCP1 1-4X230 |
| 4 | R Clip 3mm | 2 | 0511-RCLIP3 |
| 5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

Ensure that clip is located as shown in detailed view

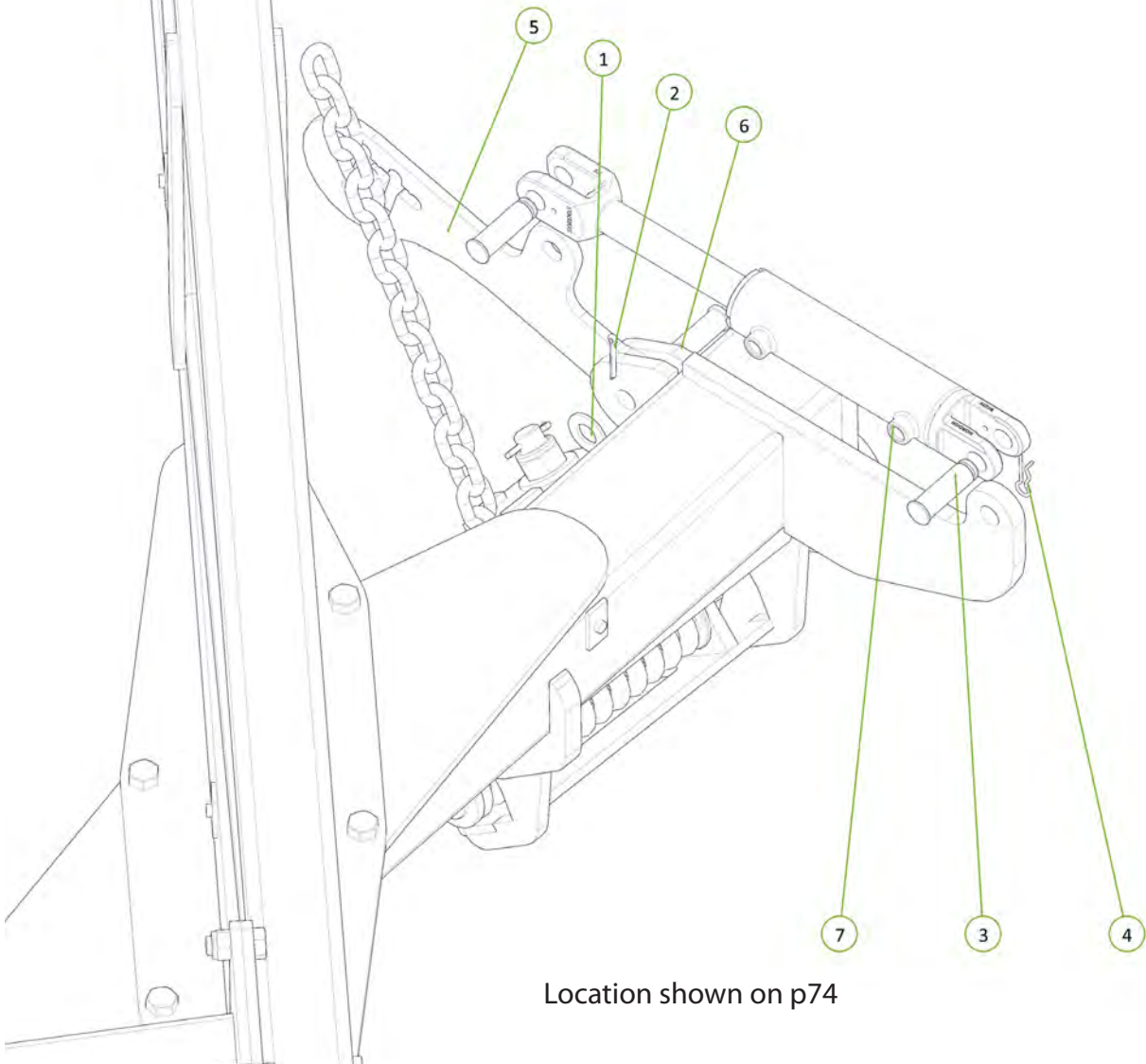


| Item No. | Description | Qty | Number |
|----------|--|-----|---------------|
| 1 | Hydraulic Cylinder Pin 1" x 75mm | 4 | 0313-NCP1X75 |
| 2 | R Clip 3mm | 4 | 0511-RCLIP3 |
| 3 | 4" Bore 12" Stroke 1.75" Rod Extended Hydraulic Cylinder | 2 | 0313-412EXT-B |

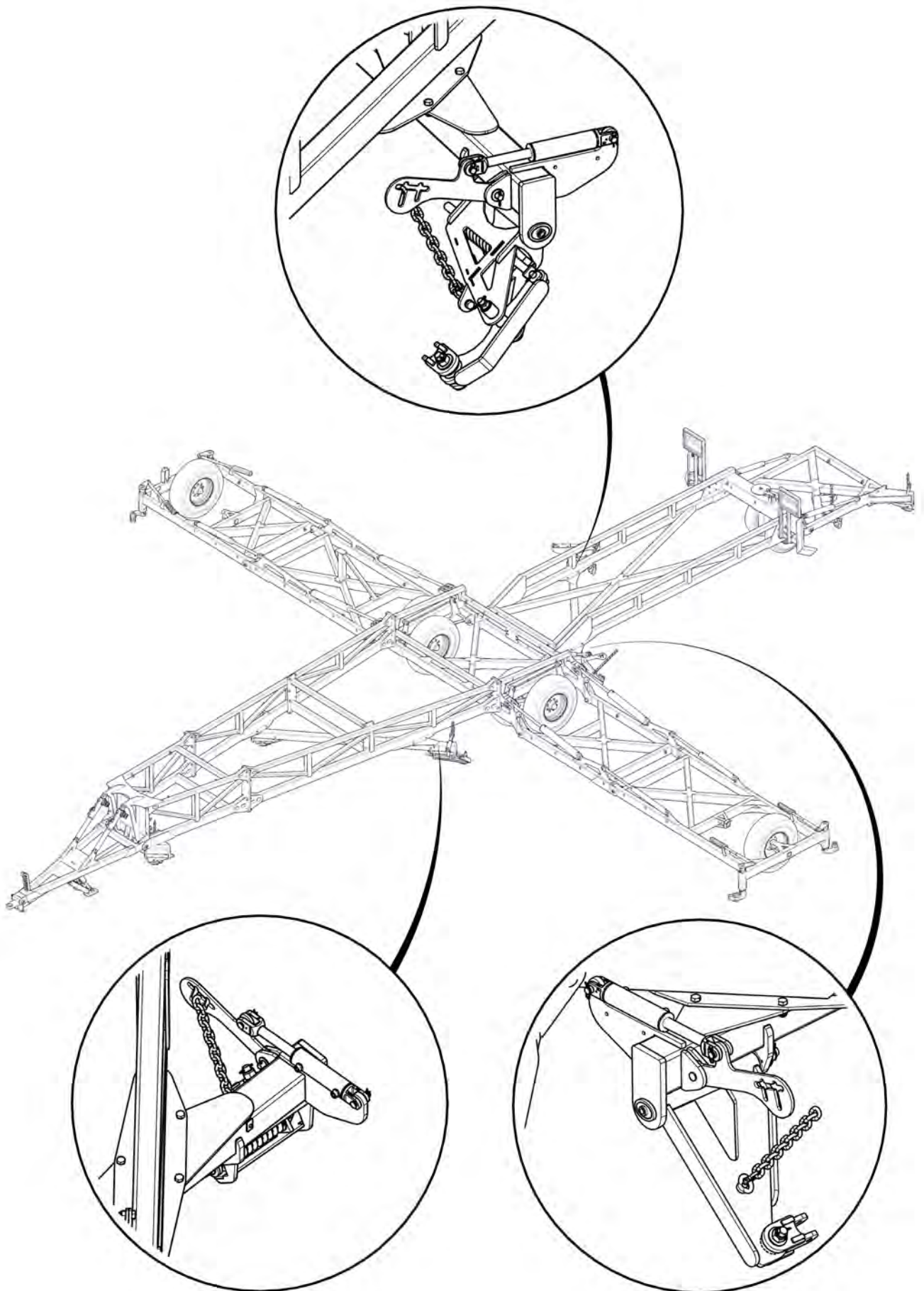




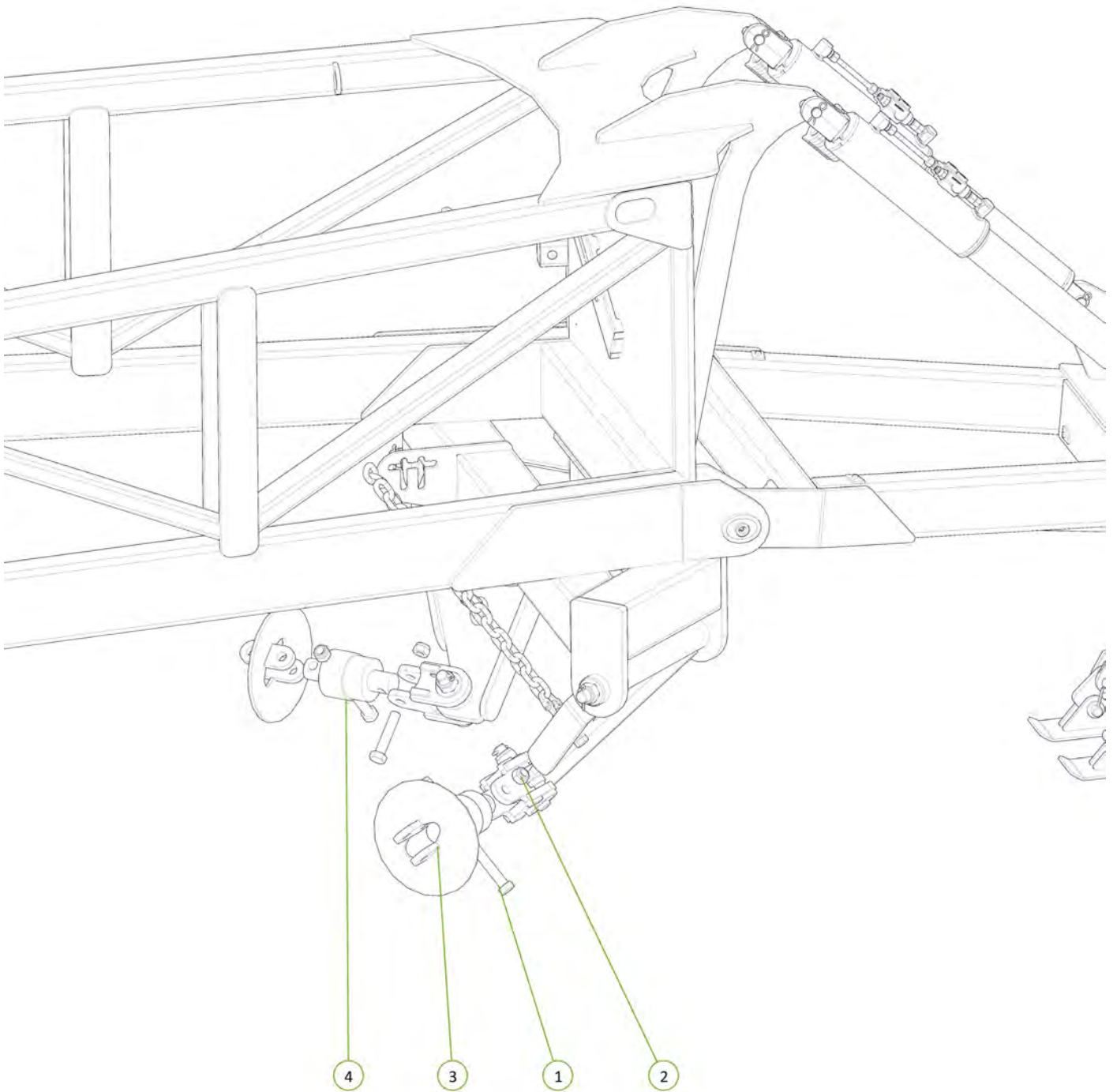
| Item No. | Description | Qty | Number |
|----------|---|-----|---------------|
| 1 | Washer Flat 1" | 1 | 0232-F1 |
| 2 | Cotter Pin M6 x 50mm | 1 | 0261-PINC650 |
| 3 | Hydraulic Cylinder Pin 1" x 75mm | 2 | 0313-NCP1X75 |
| 4 | R Clip 3mm | 2 | 0511-RCLIP3 |
| 5 | Module Lift Arm | 1 | 0800-120.3 |
| 6 | Clevis Pin 25mm x 75mm | 1 | 0801-KE0307-1 |
| 7 | 2.5" Bore x 6" Stroke 1.5" Rod Side Port Cylinder | 1 | 0313-256SP-B |

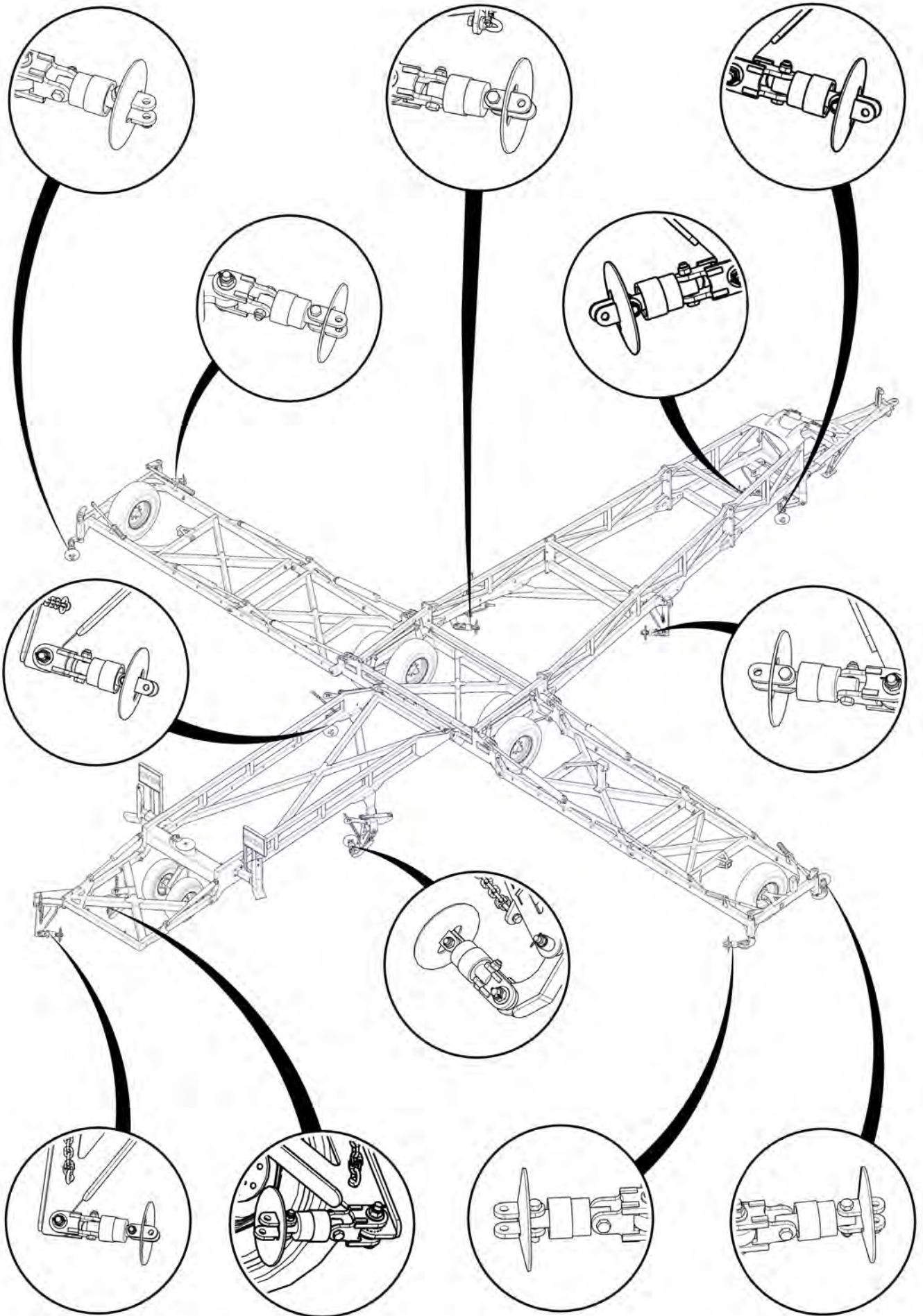


Location shown on p74



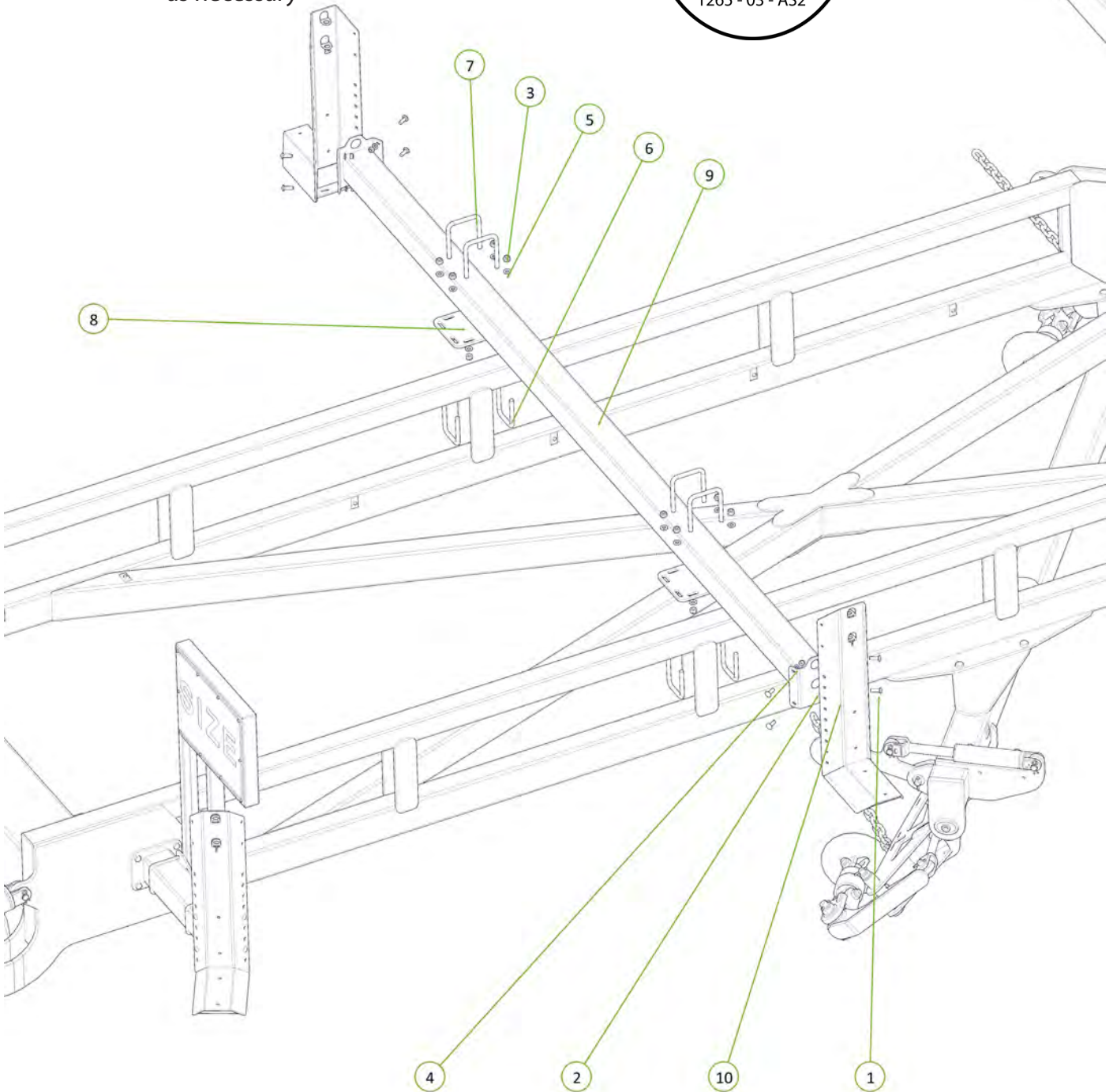
| Item No. | Description | Qty | Number |
|----------|---|-----|--------------|
| 1 | M24 x 120 grade 10.9 zp Short Thread Bolt | 4 | 0211-24120 |
| 2 | Nyloc Nut M24 | 4 | 0221-NYL24 |
| 3 | Disc Chain Tie Plate Link 24mm | 2 | 0802-DCTP-24 |
| 4 | 24mm Bolt Swivel Unit | 2 | 0802-PCHB553 |



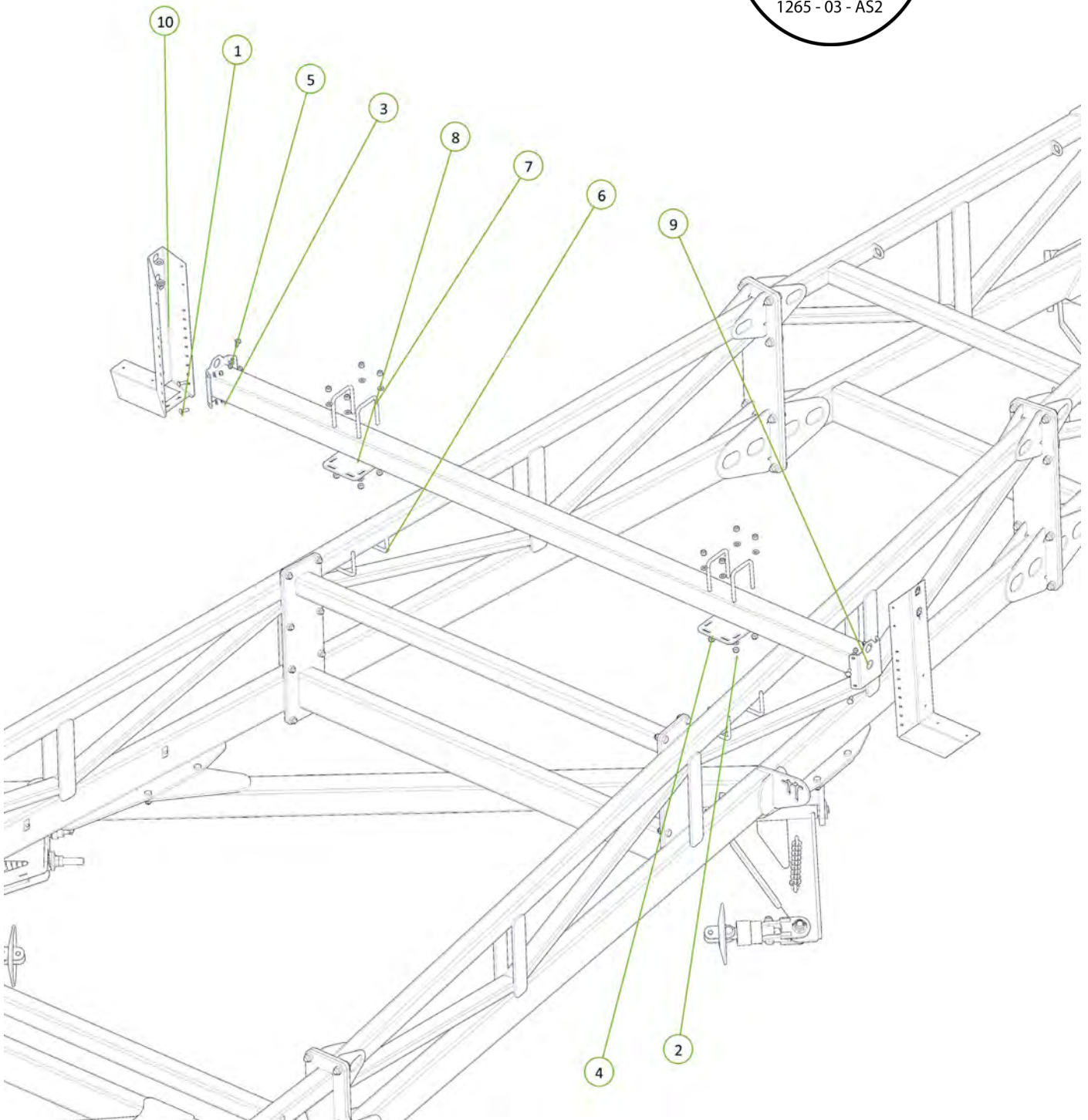


| Item No. | Description | Qty | Number |
|----------|----------------------------------|-----|------------------|
| 1 | M12 x 40 Coach Head Bolt | 8 | 0215-CH1240 |
| 2 | Nyloc Nut M12 | 8 | 0221-NYL12 |
| 3 | Nyloc Nut M16 | 16 | 0221-NYL16 |
| 4 | Washer Flat M12 | 8 | 0231-F12 |
| 5 | Washer Flat M16 | 16 | 0231-F16 |
| 6 | U-Bolt M16 x 135 Deep x 104 Wide | 4 | 0271-16135104 |
| 7 | U-Bolt M16 x 160 Deep x 127 Wide | 4 | 0271-16160127 |
| 8 | Chain Carrier Mount Plate | 2 | 0800-139.1 |
| 9 | 60'/62HDX Chain Carrier Beam | 1 | 0810-17-60/62HDX |
| 10 | Chain Carrier Bolt on End | 2 | 0810-17L |

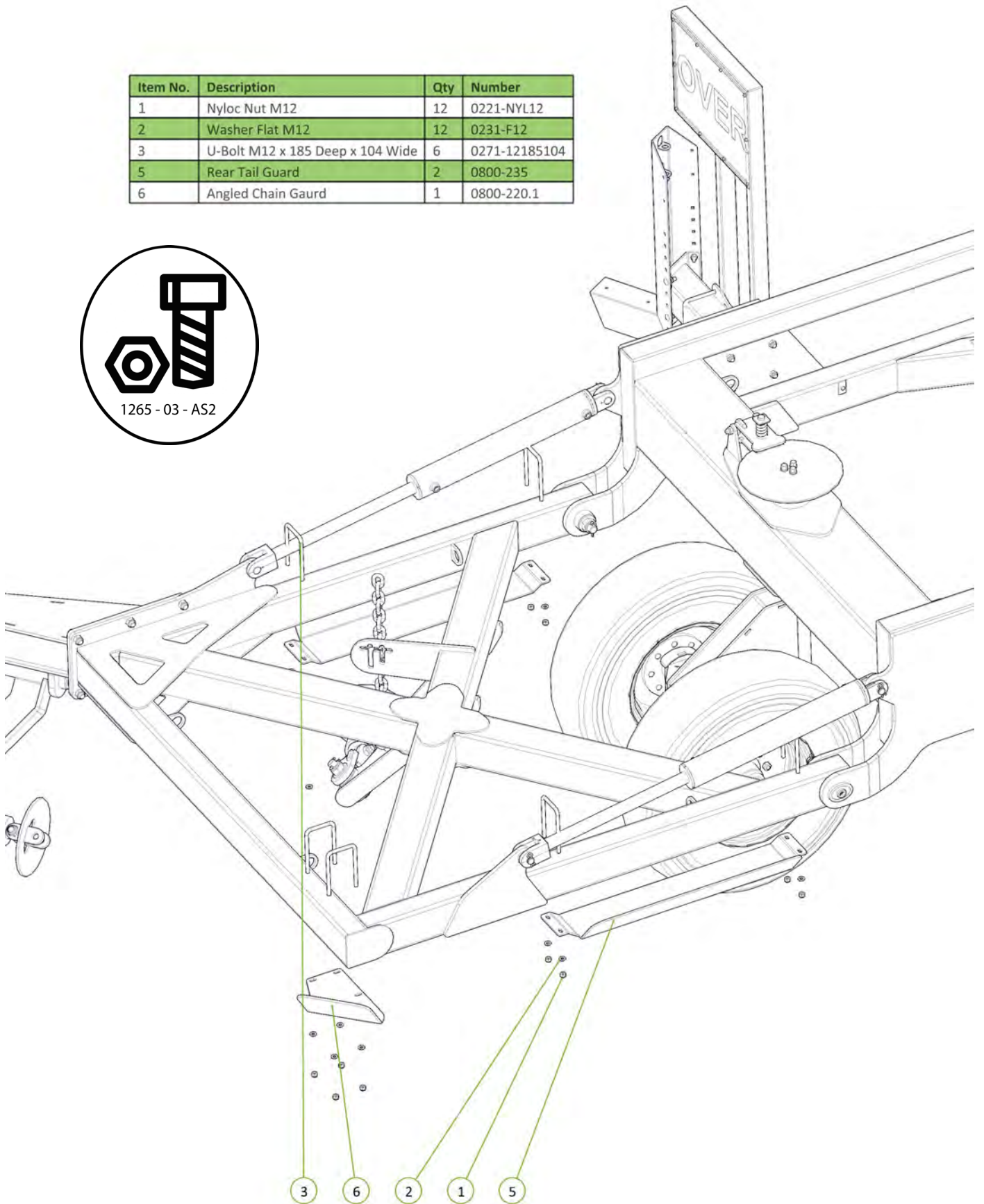
Note that chain carrier position may require slight modification to catch chain - adjust as necessary



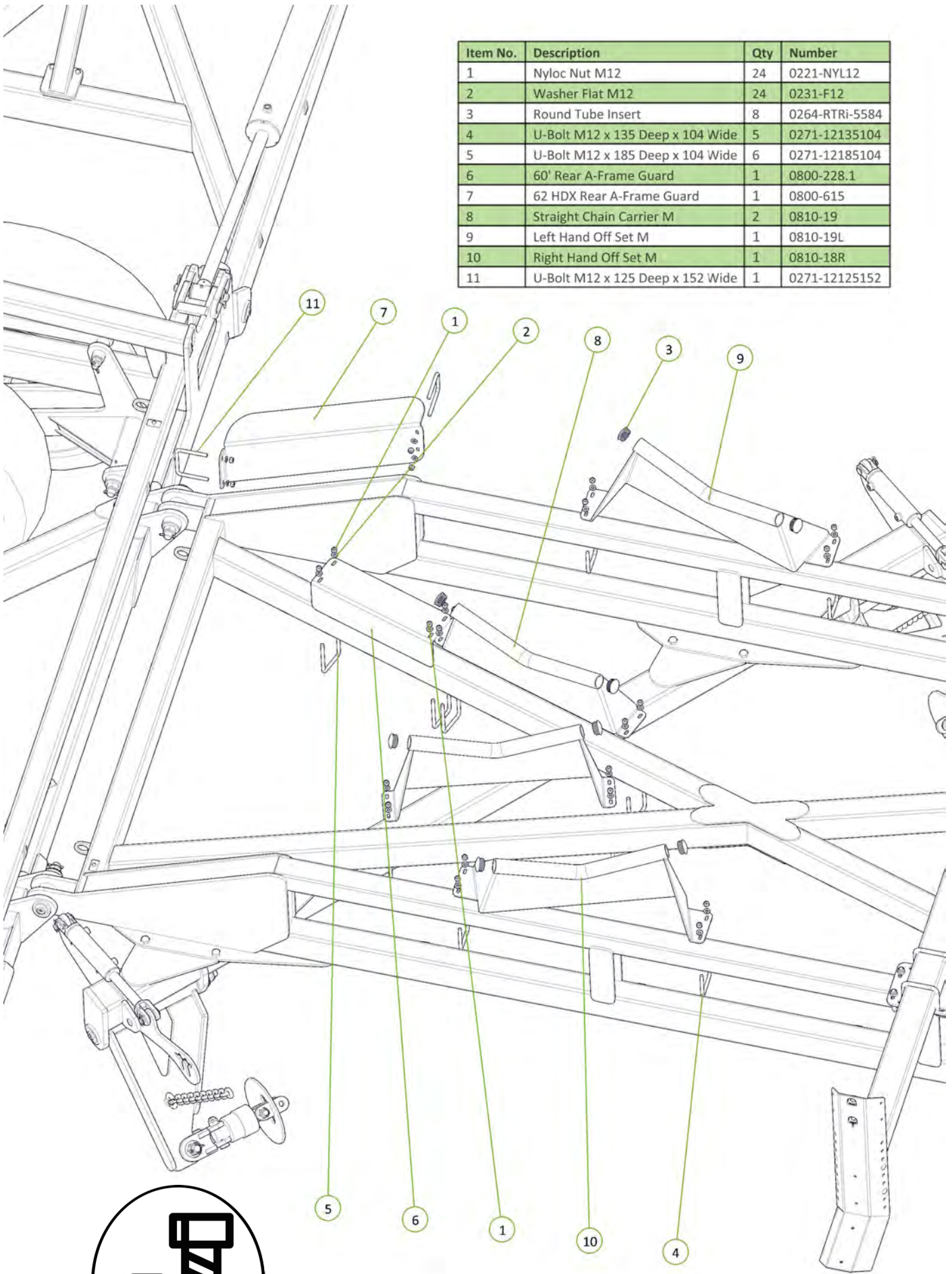
| Item No. | Description | Qty | Number |
|----------|----------------------------------|-----|------------------|
| 1 | M12 x 40 Coach Head Bolt | 8 | 0215-CH1240 |
| 2 | Nyloc Nut M16 | 16 | 0221-NYL16 |
| 3 | Nyloc Nut M12 | 8 | 0221-NYL12 |
| 4 | Washer Flat M16 | 16 | 0231-F16 |
| 5 | Washer Flat M12 | 8 | 0231-F12 |
| 6 | U-Bolt M16 x 135 Deep x 104 Wide | 4 | 0271-16135104 |
| 7 | U-Bolt M16 x 160 Deep x 127 Wide | 4 | 0271-16160127 |
| 8 | Chain Carrier Mount Plate | 2 | 0800-139,1 |
| 9 | 60'/62HDX Chain Carrier Beam | 1 | 0810-17-60/62HDX |
| 10 | Chain Carrier Bolt on End | 2 | 0810-17L |



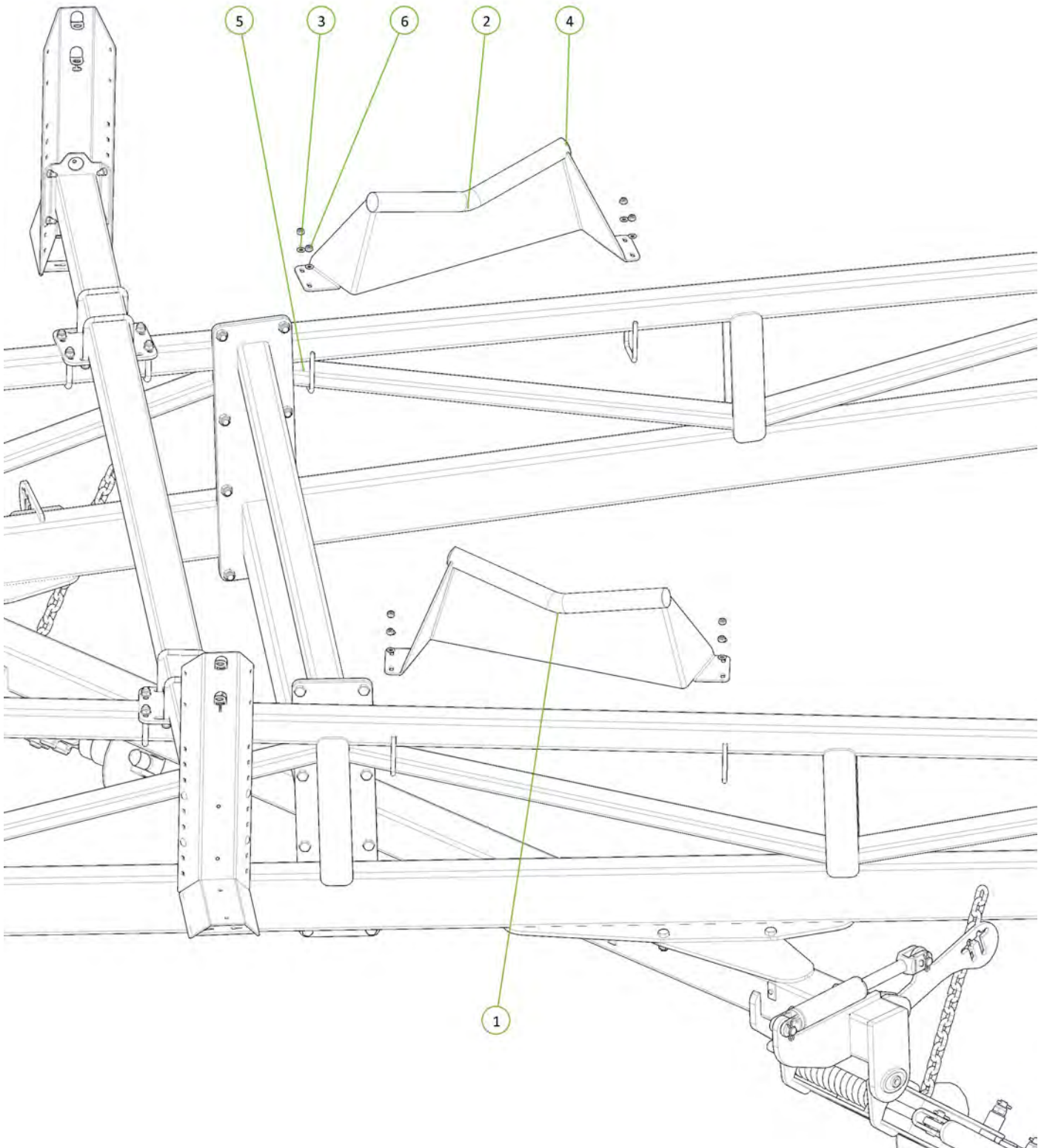
| Item No. | Description | Qty | Number |
|----------|----------------------------------|-----|---------------|
| 1 | Nyloc Nut M12 | 12 | 0221-NYL12 |
| 2 | Washer Flat M12 | 12 | 0231-F12 |
| 3 | U-Bolt M12 x 185 Deep x 104 Wide | 6 | 0271-12185104 |
| 5 | Rear Tail Guard | 2 | 0800-235 |
| 6 | Angled Chain Gaurd | 1 | 0800-220.1 |

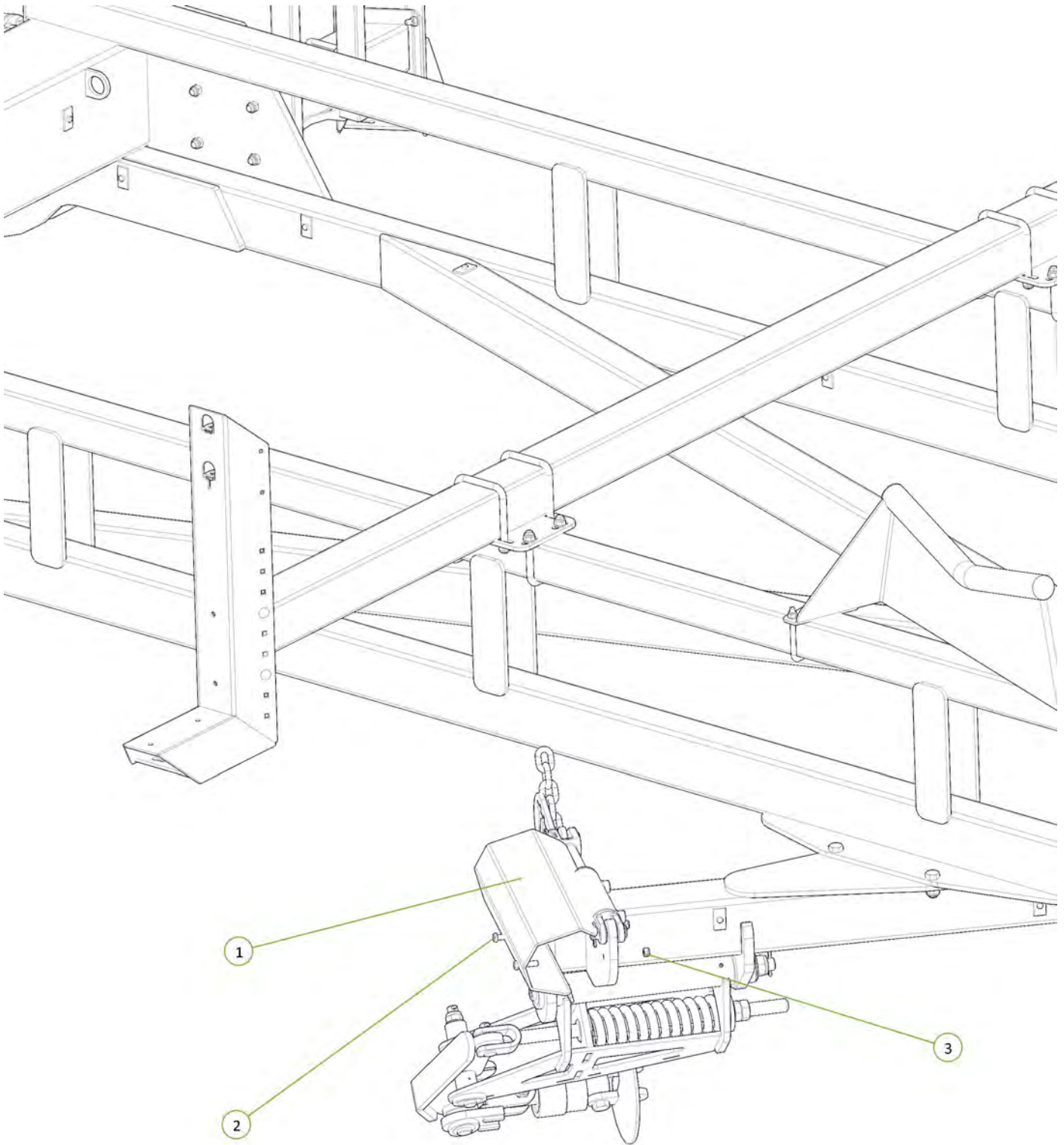


| Item No. | Description | Qty | Number |
|----------|----------------------------------|-----|----------------|
| 1 | Nyloc Nut M12 | 24 | 0221-NYL12 |
| 2 | Washer Flat M12 | 24 | 0231-F12 |
| 3 | Round Tube Insert | 8 | 0264-RTRi-5584 |
| 4 | U-Bolt M12 x 135 Deep x 104 Wide | 5 | 0271-12135104 |
| 5 | U-Bolt M12 x 185 Deep x 104 Wide | 6 | 0271-12185104 |
| 6 | 60" Rear A-Frame Guard | 1 | 0800-228.1 |
| 7 | 62 HDX Rear A-Frame Guard | 1 | 0800-615 |
| 8 | Straight Chain Carrier M | 2 | 0810-19 |
| 9 | Left Hand Off Set M | 1 | 0810-19L |
| 10 | Right Hand Off Set M | 1 | 0810-18R |
| 11 | U-Bolt M12 x 125 Deep x 152 Wide | 1 | 0271-12125152 |

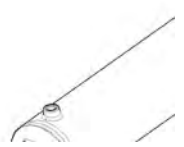


| Item No. | Description | Qty | Number |
|----------|---------------------------------|-----|----------------|
| 1 | Left Hand Off Set M | 1 | 0810-19L |
| 2 | Right Hand Off Set M | 1 | 0810-18R |
| 3 | Washer Flat M12 | 8 | 0231-F12 |
| 4 | Round Tube Insert | 4 | 0264-RTRI-5584 |
| 5 | U Bolt M12x 135 Deep x 104 Wide | 4 | 0271-12135104 |
| 6 | Nyloc Nut M12 | 8 | 0221-NYL12 |

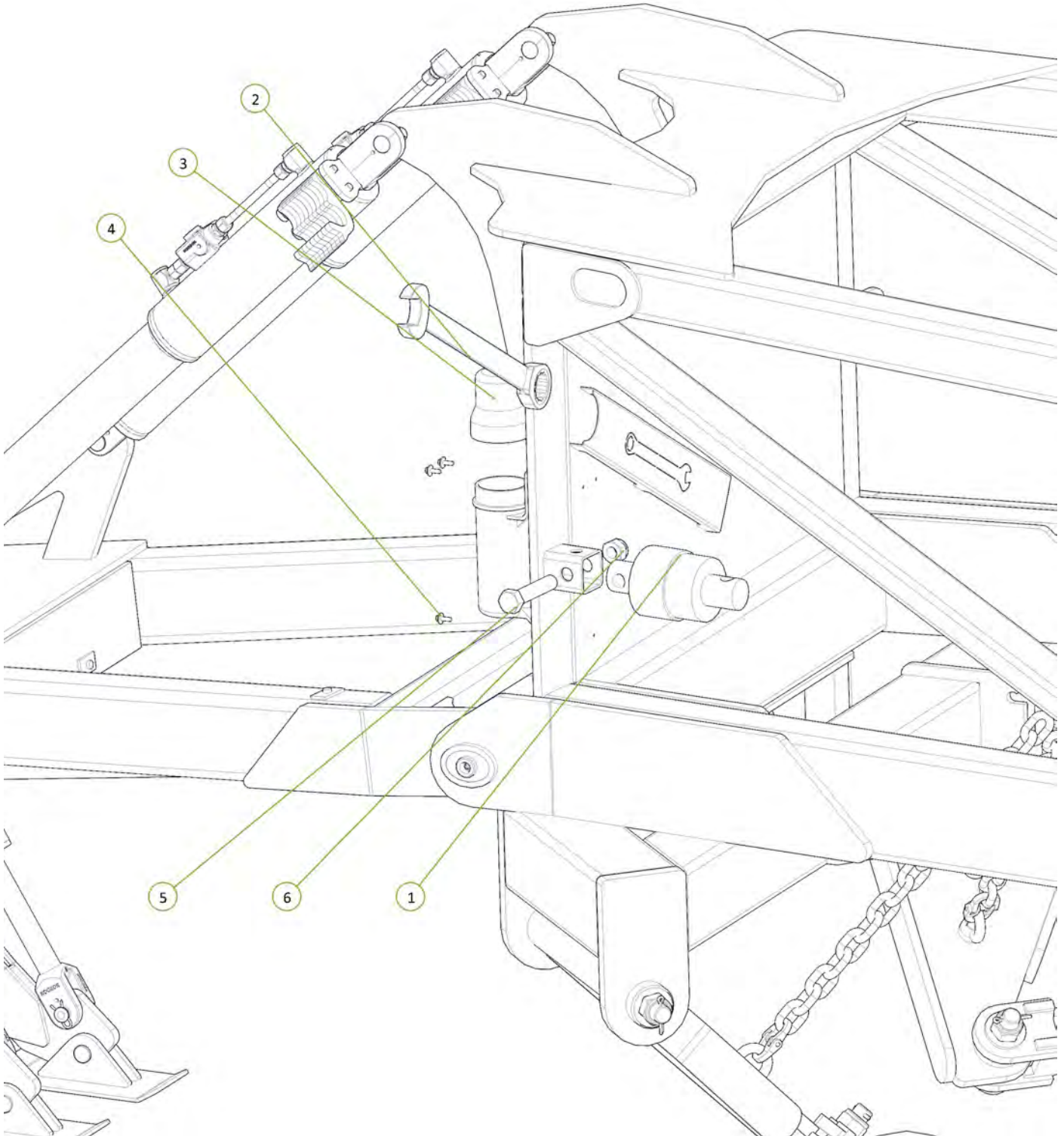


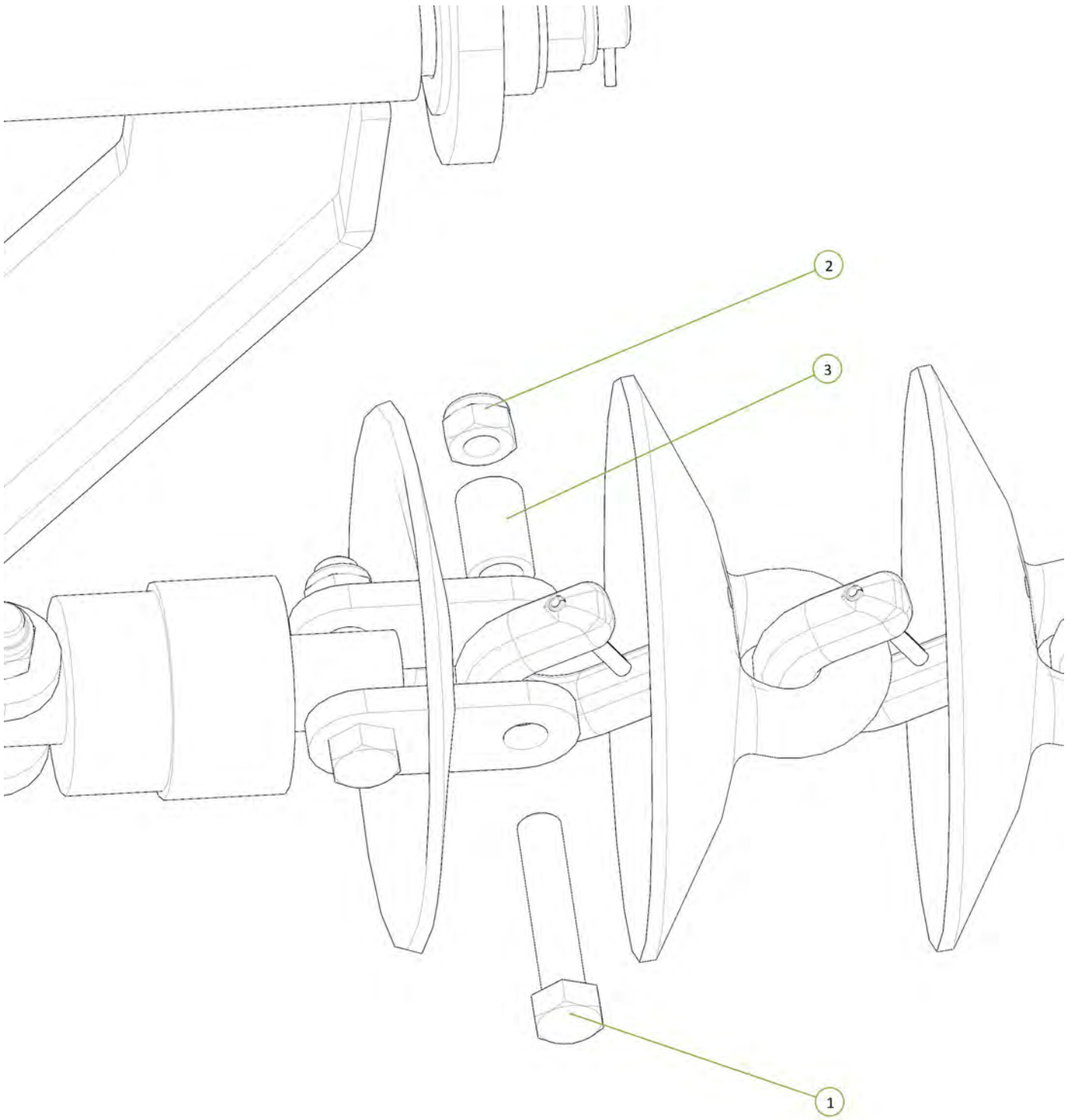


| Item No. | Description | Qty | Number |
|----------|----------------------------|-----|------------|
| 1 | Module Cylinder Gaurd | 1 | 0800-167.3 |
| 2 | M12 x 50 grade 8.8 ZP Bolt | 2 | 0211-1250 |
| 3 | Nyloc Nut M12 | 2 | 0221-NYL12 |



| Item No. | Description | Qty | Number |
|----------|---|-----|-----------------|
| 1 | 24mm Bolt Swivel Unit | 1 | 0802-PCHB553 |
| 2 | Gear Wrench 1 3/4" | 1 | 0802-GW1 3-4 |
| 3 | Manual Canister | 2 | 0801-OMC-1 |
| 4 | M6x20 Trilobe Self Tapping Screw | 3 | 0211-M620M2PHTF |
| 5 | M24 x 120 grade 10.9 zp Short Thread Bolt | 1 | 0211-24120ST |
| 6 | Nyloc Nut M24 | 1 | 0221-NYL24 |



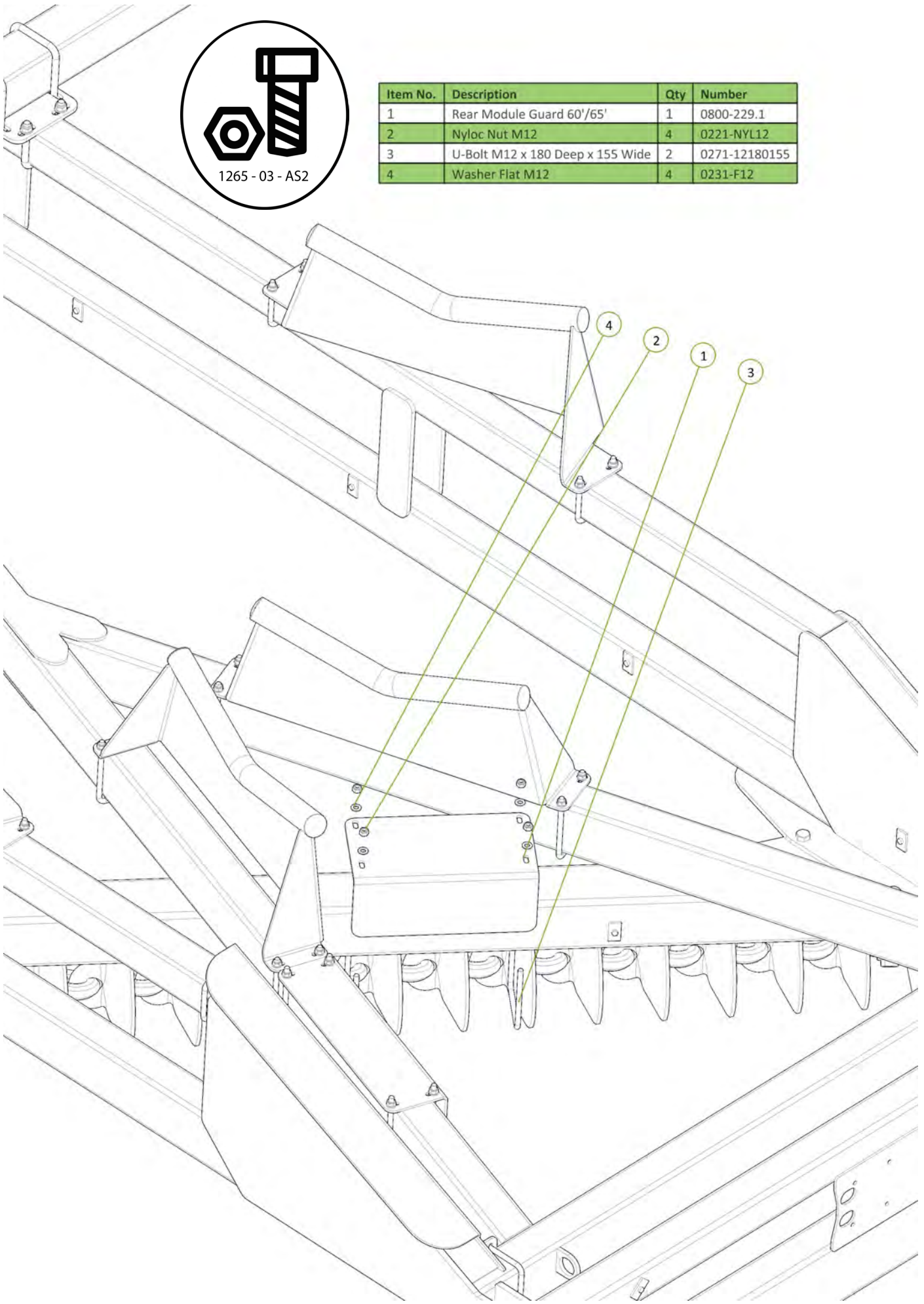


| Item No. | Description | Qty | Number |
|----------|---|-----|--------------|
| 1 | M24 x 120 grade 10.9 zp Short Thread Bolt | 1 | 0211-24120ST |
| 2 | Nyloc Nut M24 | 1 | 0221-NYL24 |
| 3 | Tie Plate Bush | 1 | 0801-PCDCS55 |

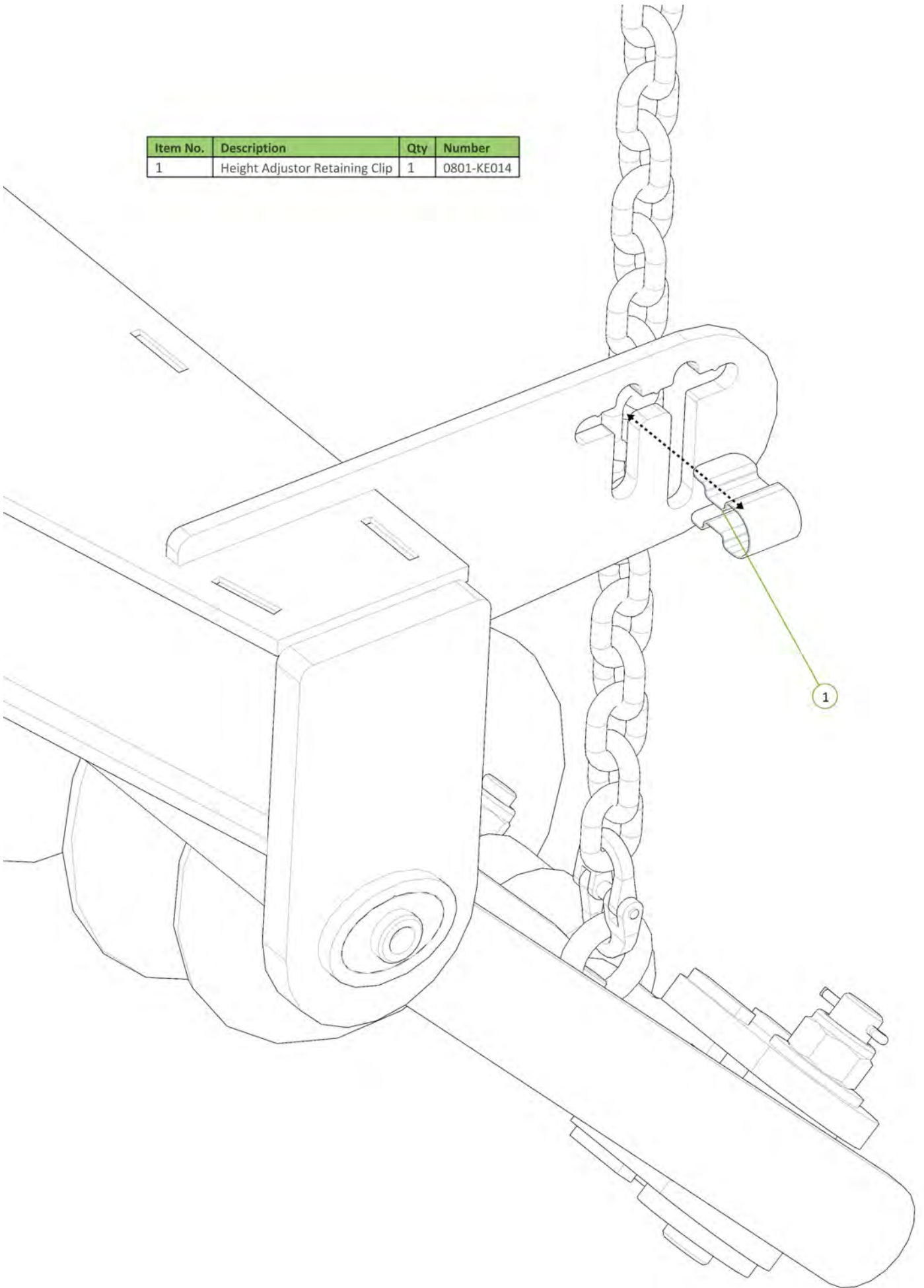




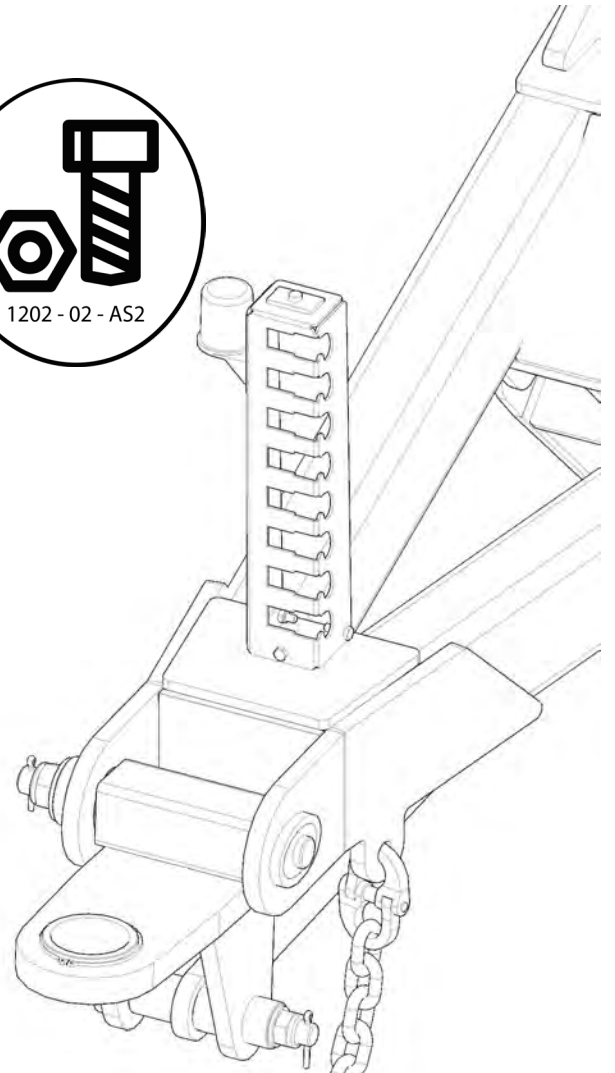
| Item No. | Description | Qty | Number |
|----------|----------------------------------|-----|---------------|
| 1 | Rear Module Guard 60'/65' | 1 | 0800-229.1 |
| 2 | Nyloc Nut M12 | 4 | 0221-NYL12 |
| 3 | U-Bolt M12 x 180 Deep x 155 Wide | 2 | 0271-12180155 |
| 4 | Washer Flat M12 | 4 | 0231-F12 |



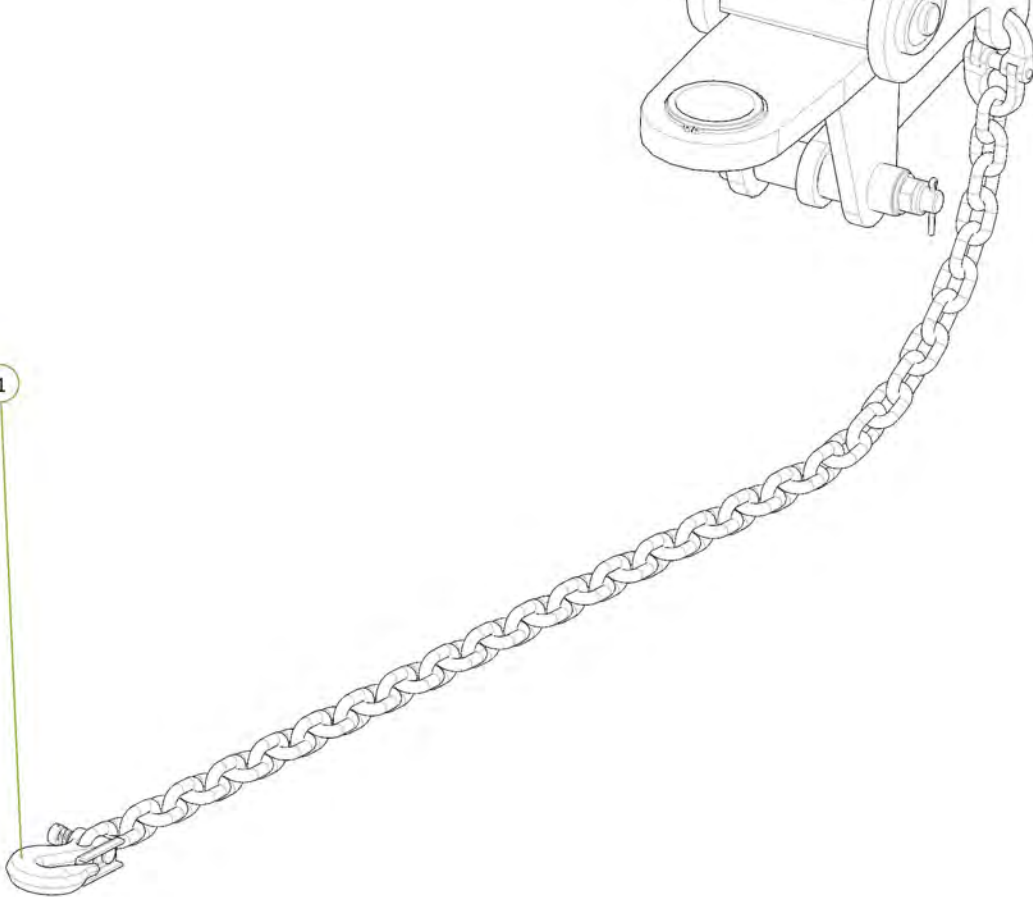
| Item No. | Description | Qty | Number |
|----------|--------------------------------|-----|------------|
| 1 | Height Adjustor Retaining Clip | 1 | 0801-KE014 |



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

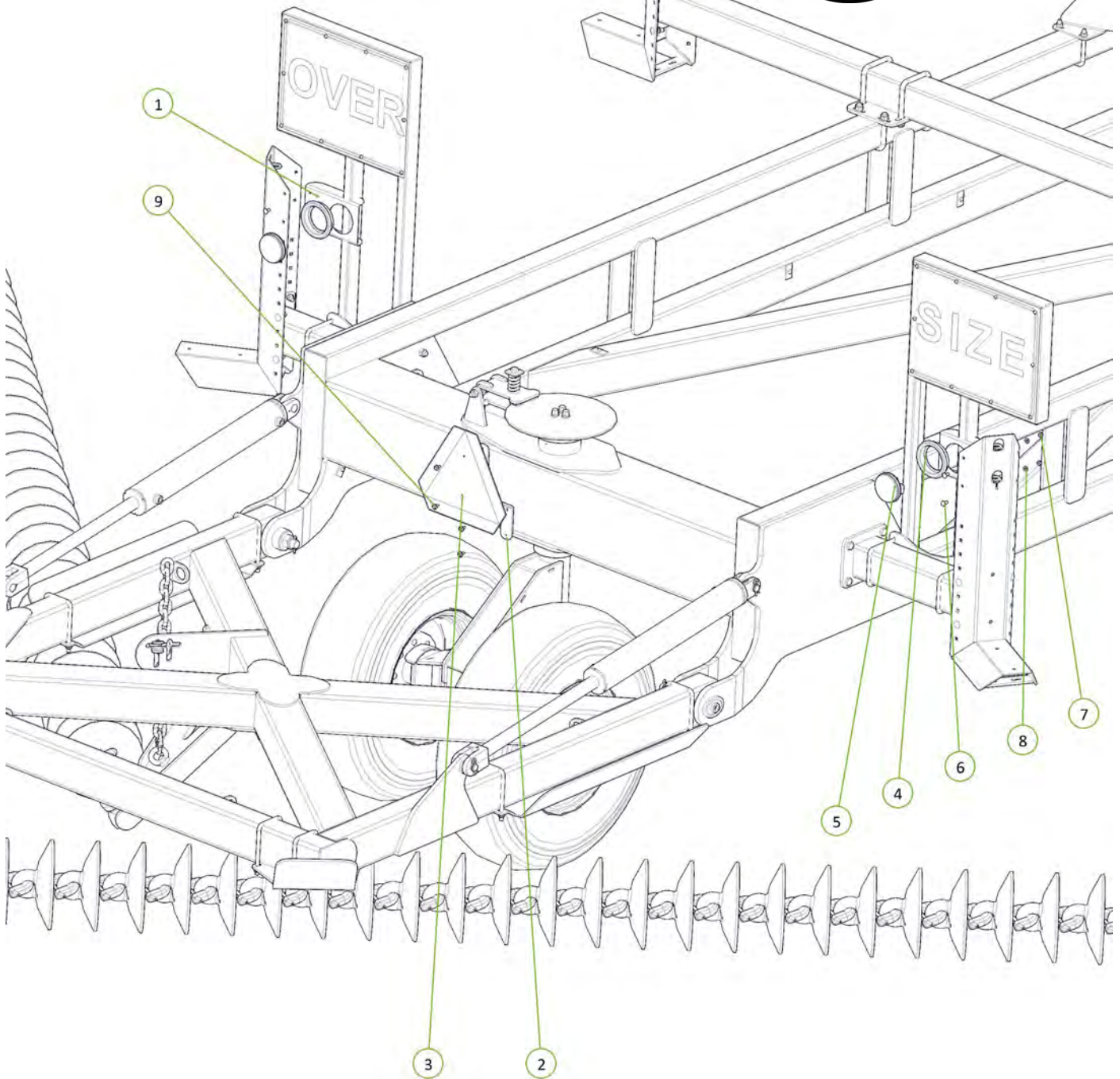


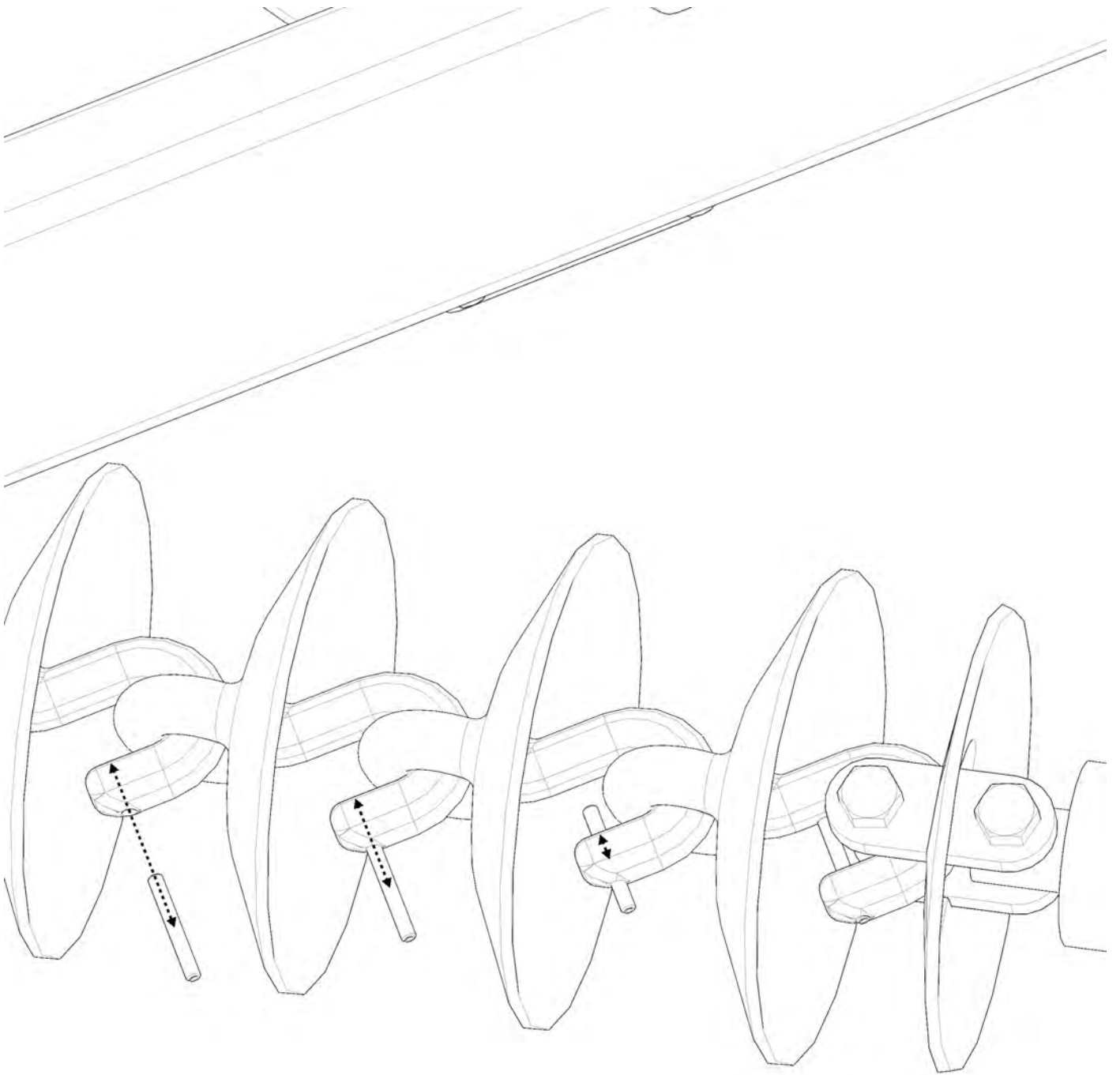
1

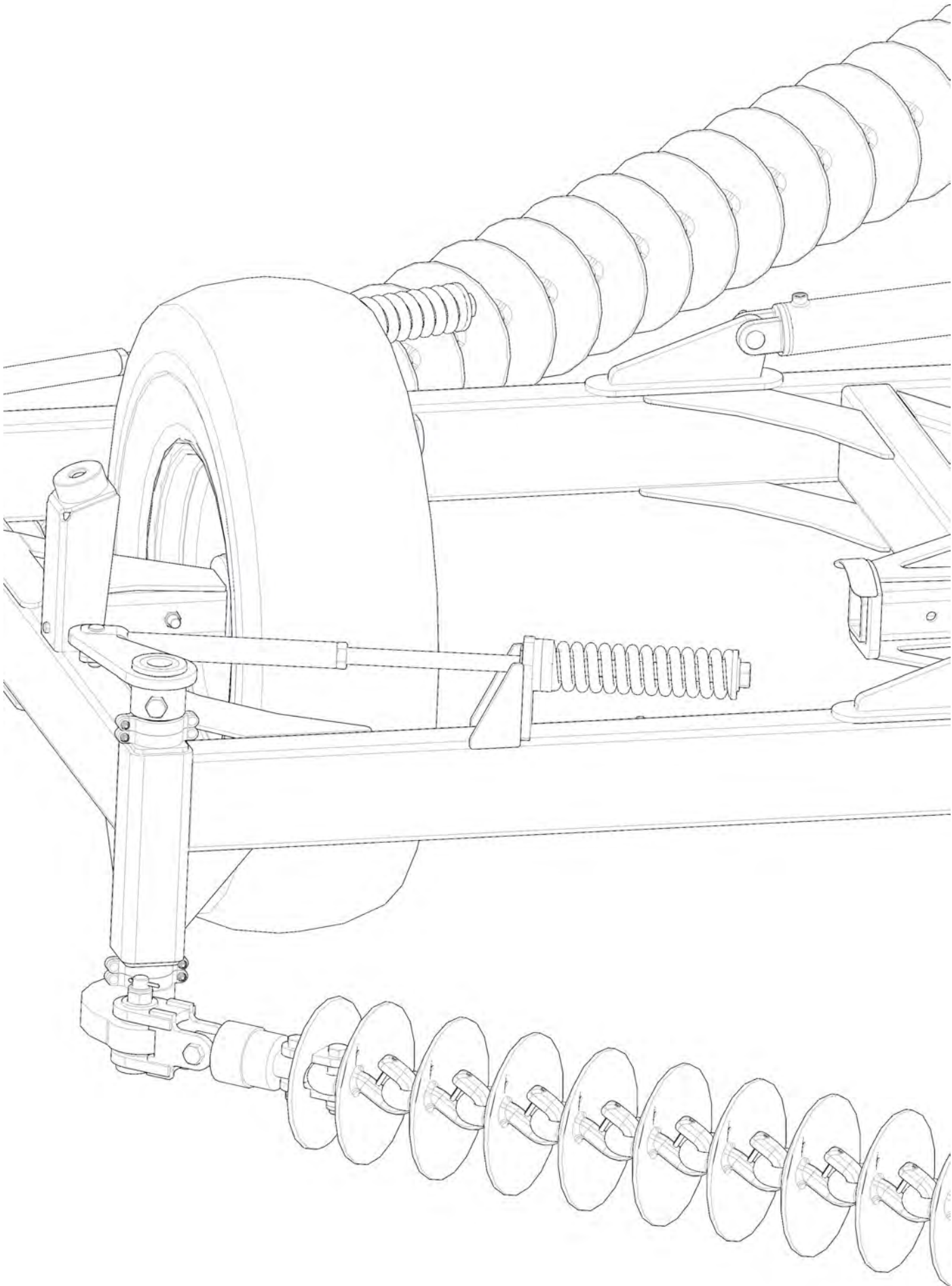


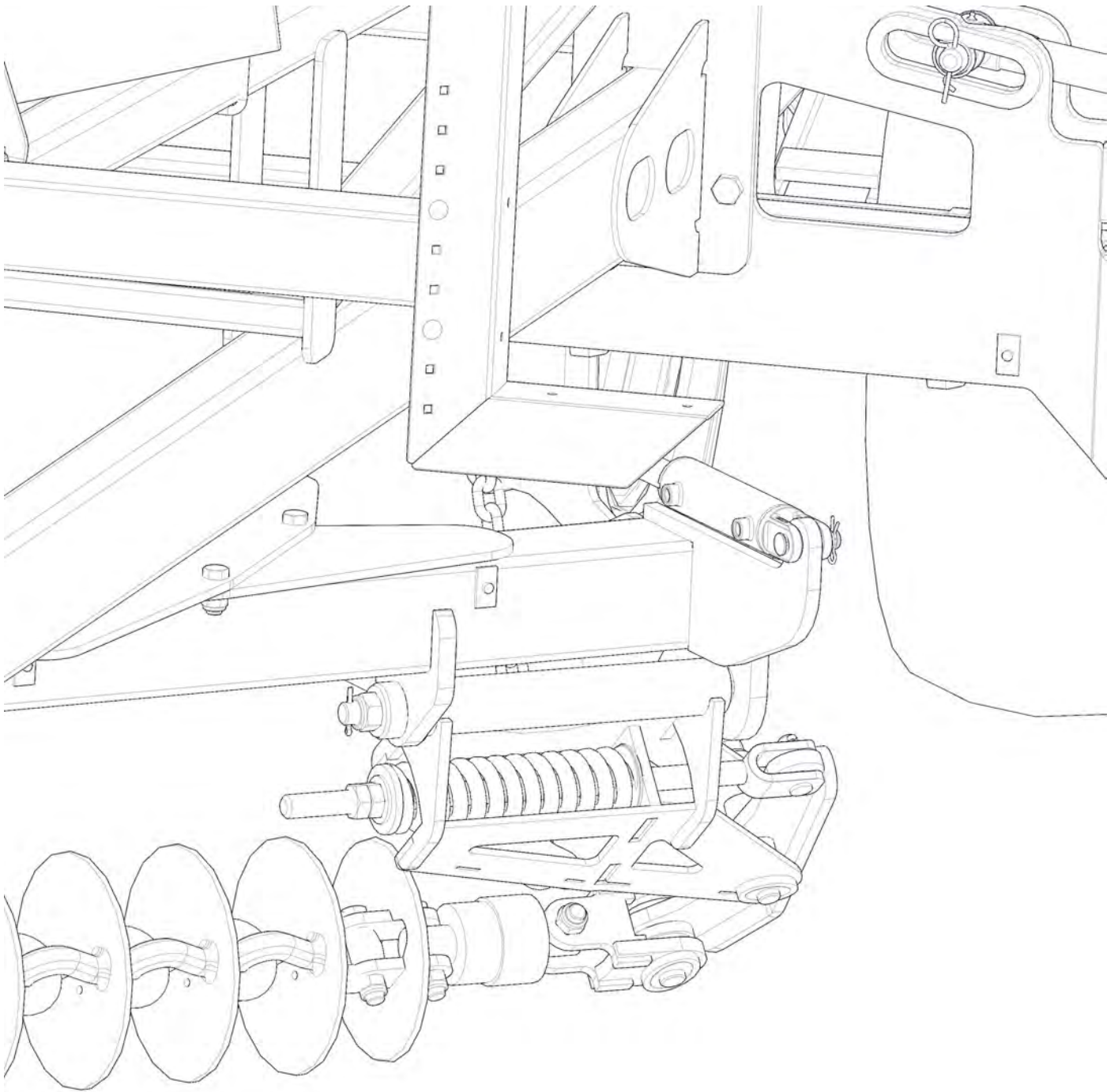
United States Only

| Item No. | Description | Qty | Number |
|----------|-----------------------------------|-----|-----------------|
| 1 | Rear Light Bracket | 2 | 0800-295 |
| 2 | SMV Sign Bracket | 1 | 0800-195.1 |
| 3 | Slow Moving Vehical Sign | 1 | 0801-FBSMVTUF |
| 4 | 110RM Rubber Grommet | 2 | 0412-53101RG |
| 5 | LED Stop Tail Lamp | 2 | 0412-LED110RM |
| 6 | M8 x 20 Coach Head Bolt | 4 | 0215-CH0820 |
| 7 | Nyloc Nut M8 | 4 | 0221-NYL8 |
| 8 | Washer Flat M8 | 4 | 0231-F8 |
| 9 | M6 x 20 Trilobe self tapping Scew | 4 | 0211-M620MZPHTF |









Section 3

Hydraulic Setup

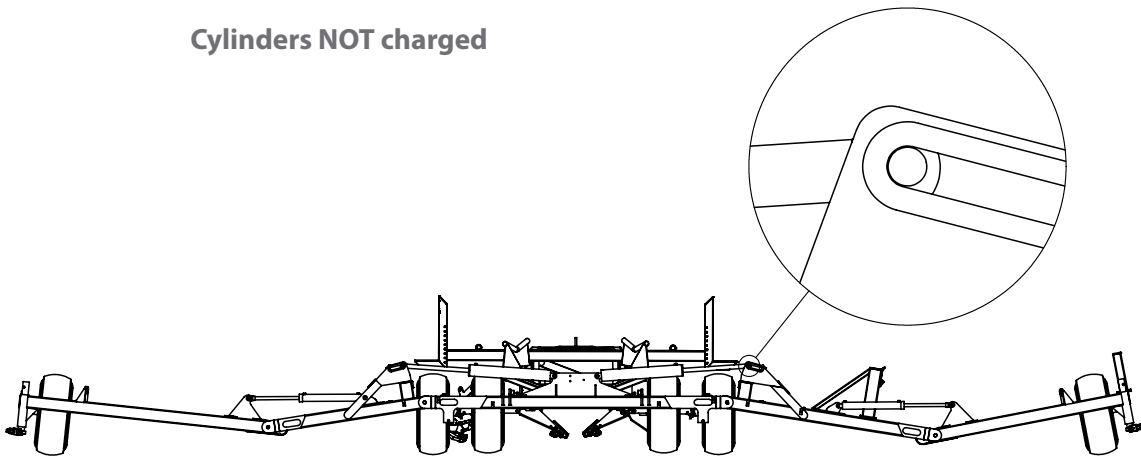


Before folding the machine for the first time, ensure all hydraulic cylinders are charged with oil.

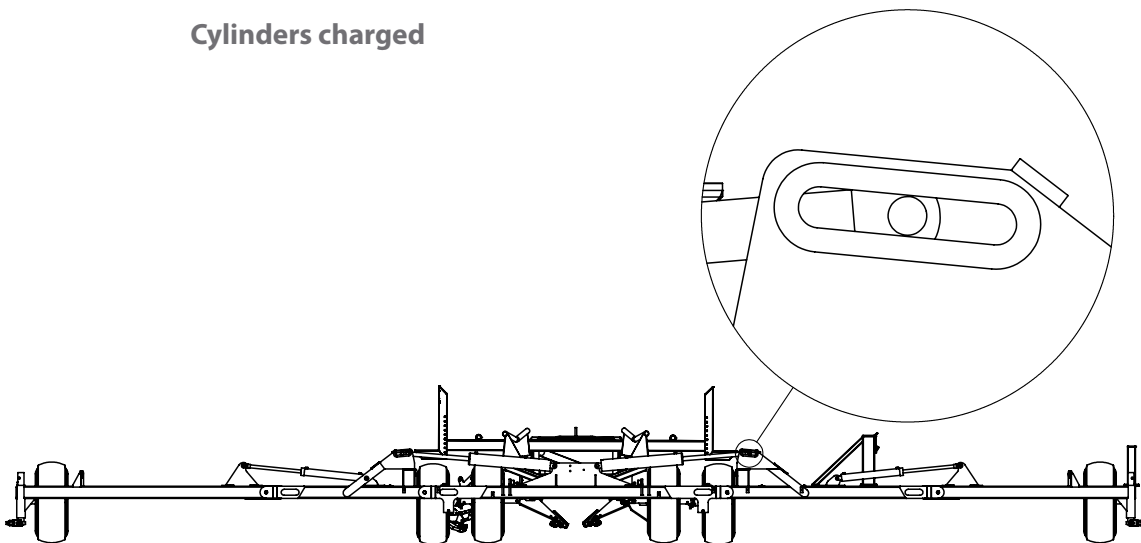
To do this, run the hydraulics through the unfold sequence until the outer wings are straight and the center cylinders are centered in the slots. (It may take a few minutes for the cylinders to charge completely).

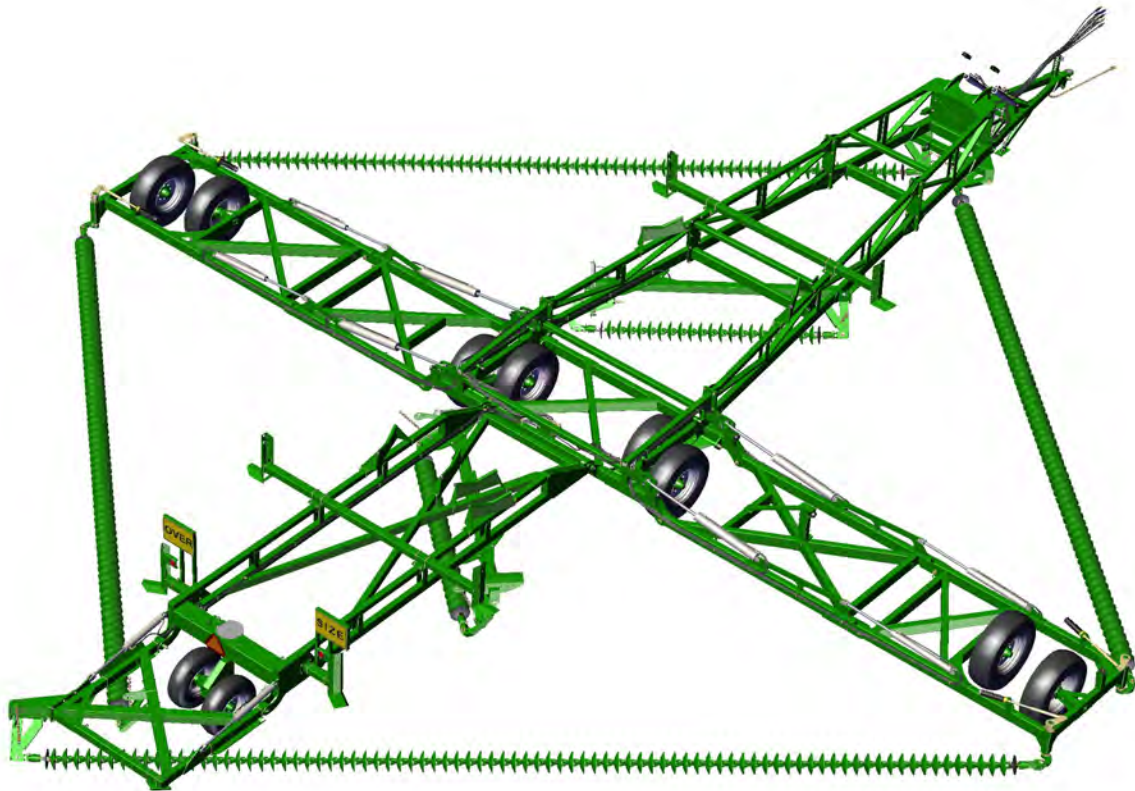
Failure to do this could result in severe personal injury and/or damage to the machine.

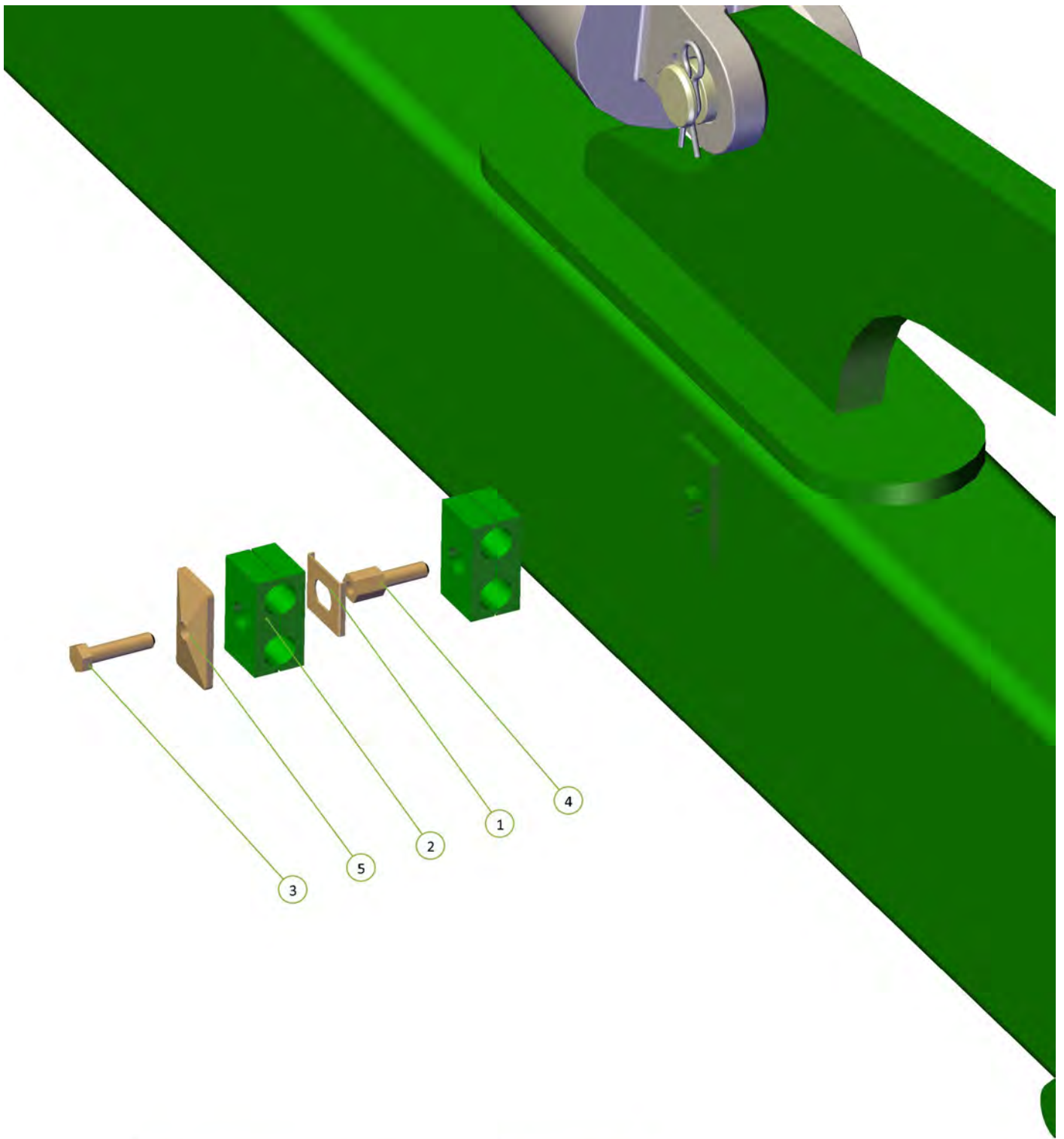
Cylinders NOT charged



Cylinders charged

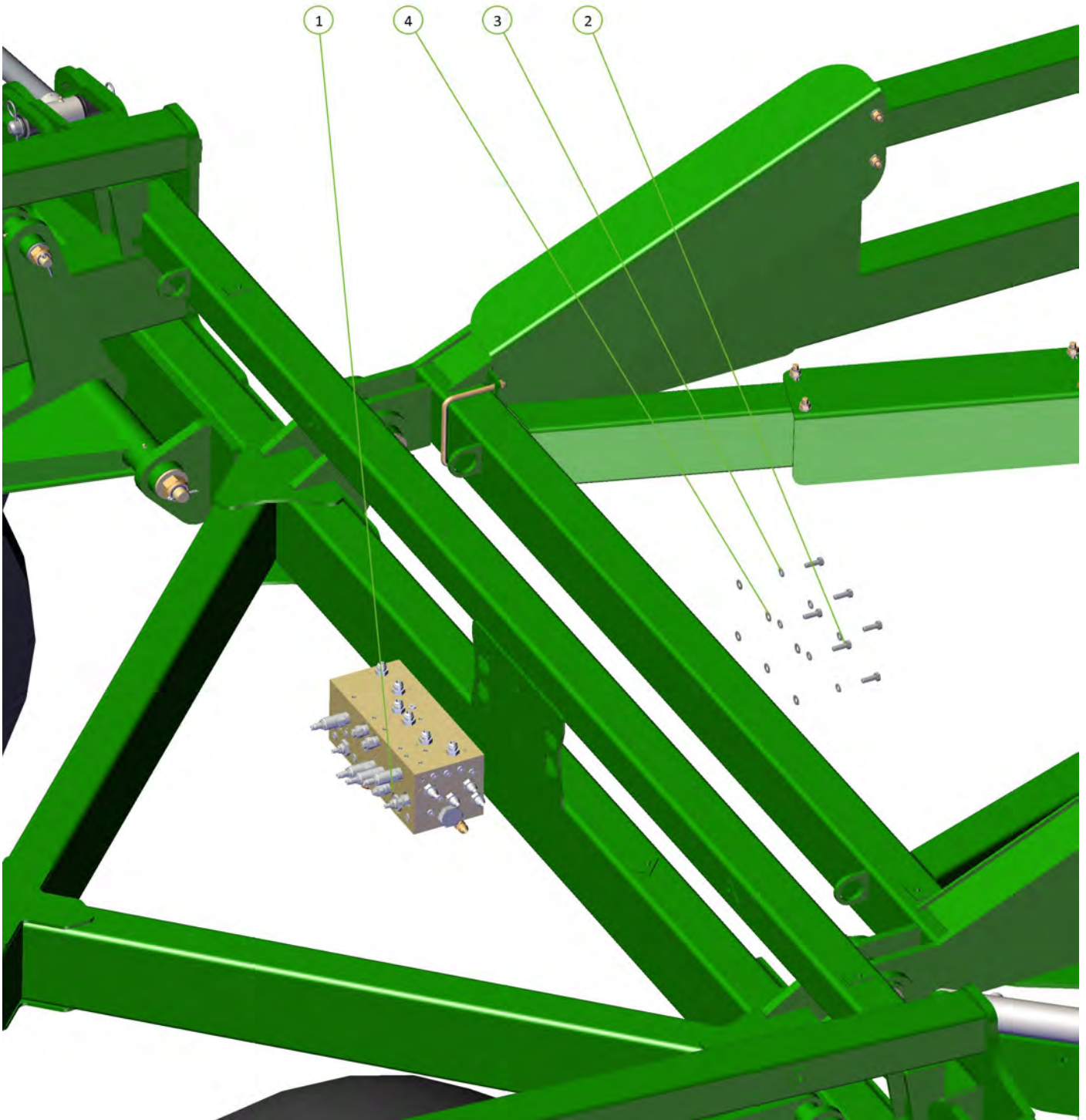


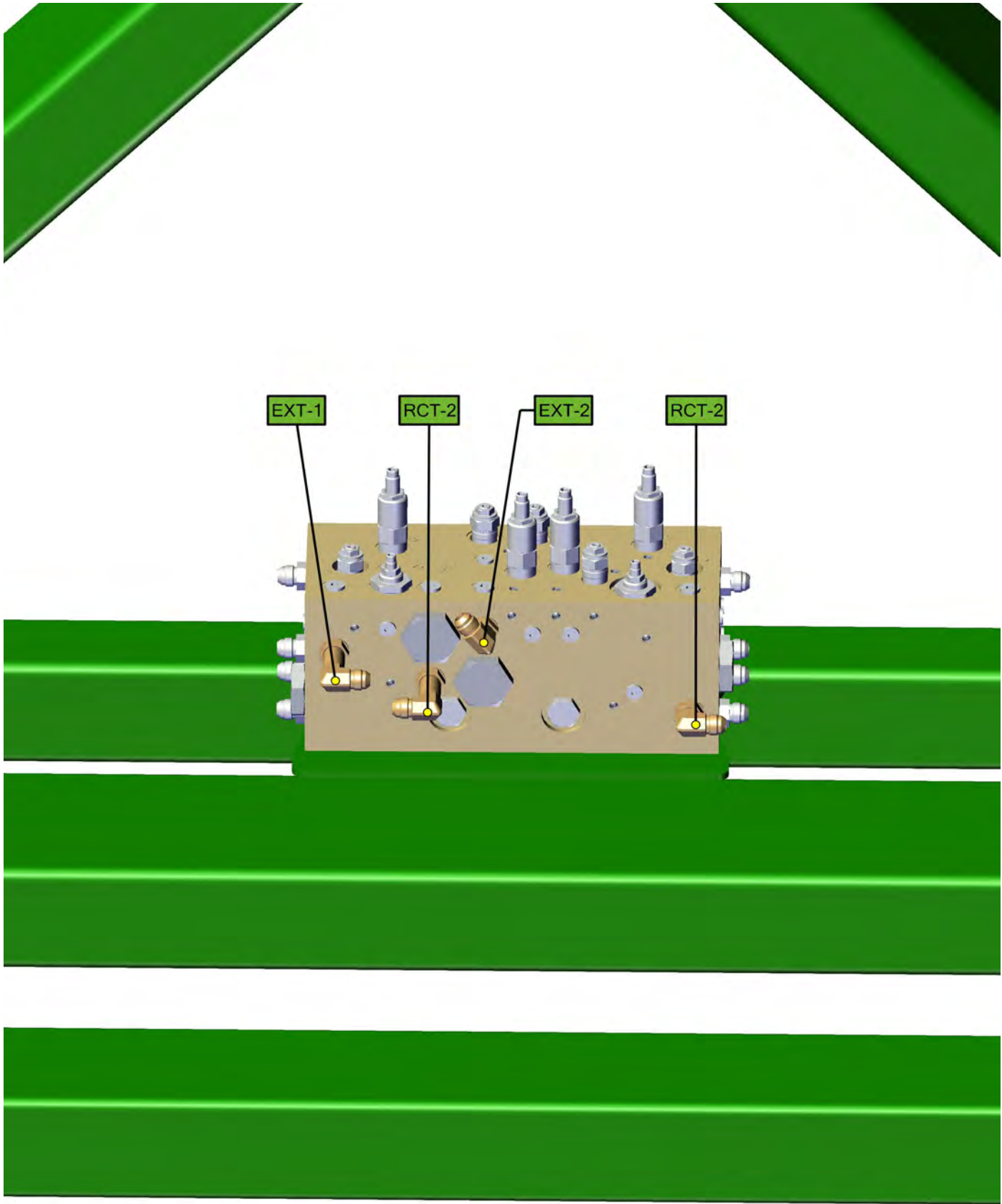




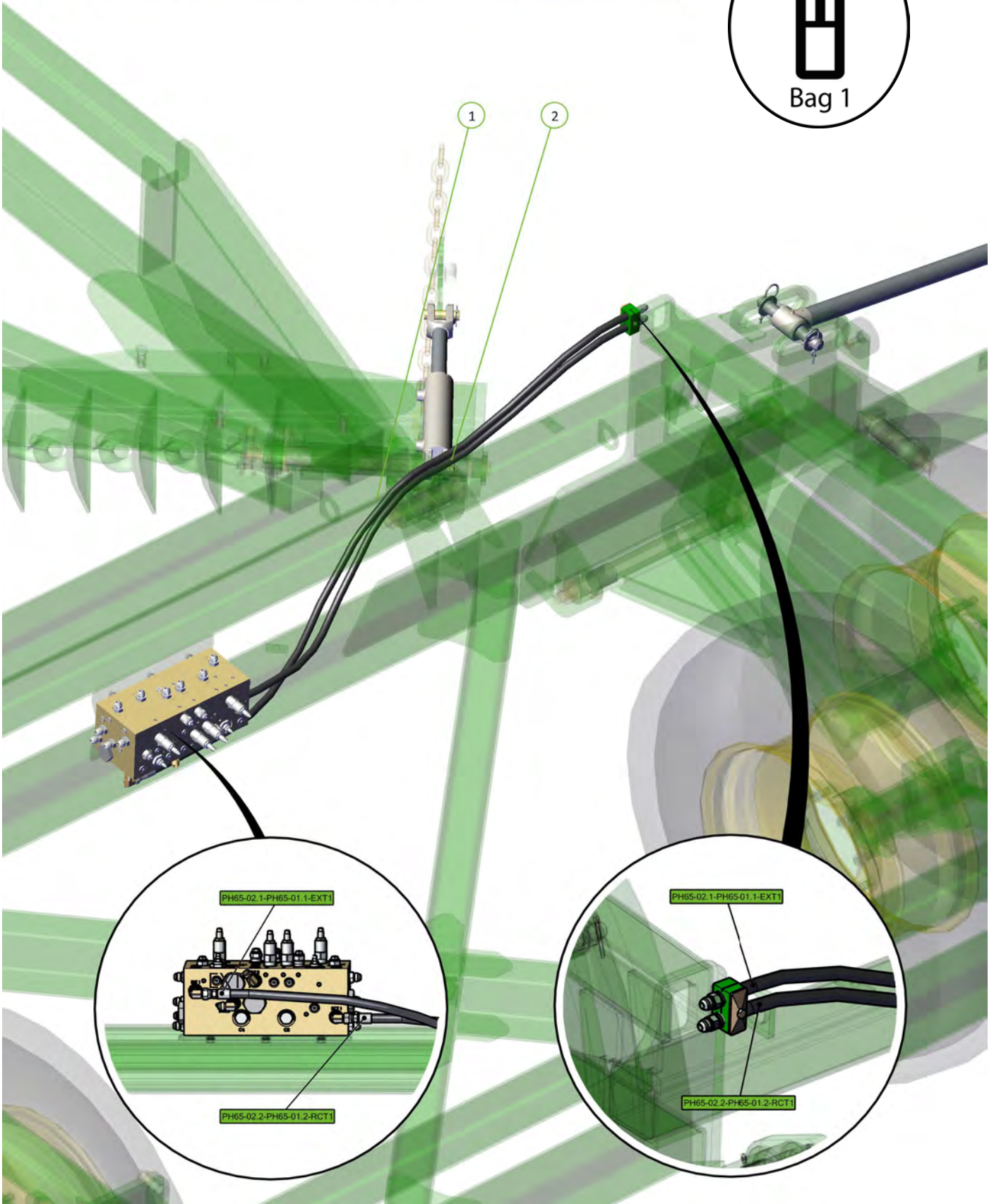
| Item No. | Description | Number | Qty |
|----------|--|-----------------|-----|
| 1 | Double Clamp Stacking Plate (Non Ryco) | 0325-SI-2-5D-W3 | 1 |
| 2 | 17mm Clamp Jaws (Pair) | 0325-RCD-17J | 2 |
| 3 | Double Clamp Bolt | 0325-RCD-2BH | 1 |
| 4 | Double Clamp Stacking Bolt | 0325-RCD-2BS | 1 |
|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

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

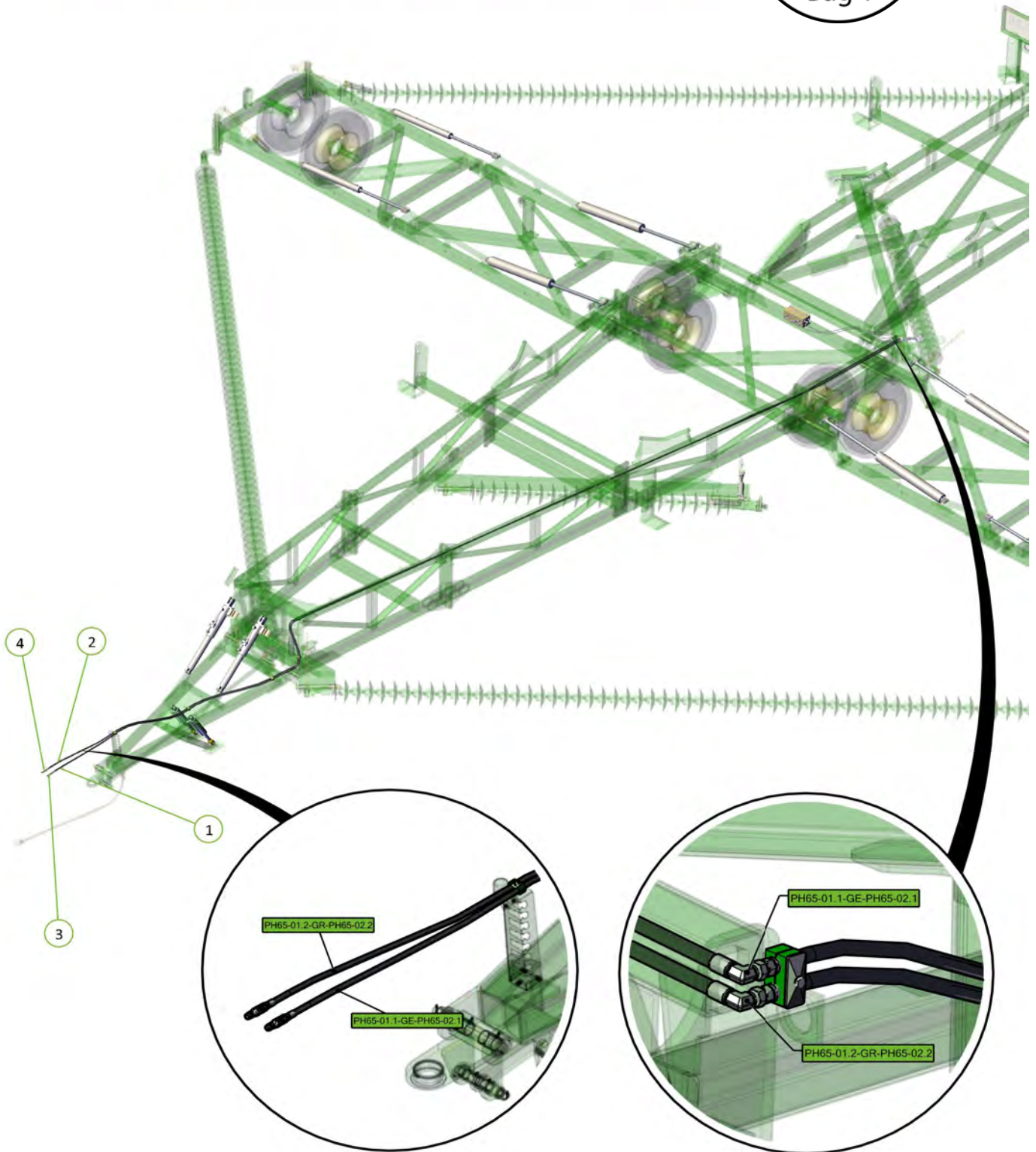


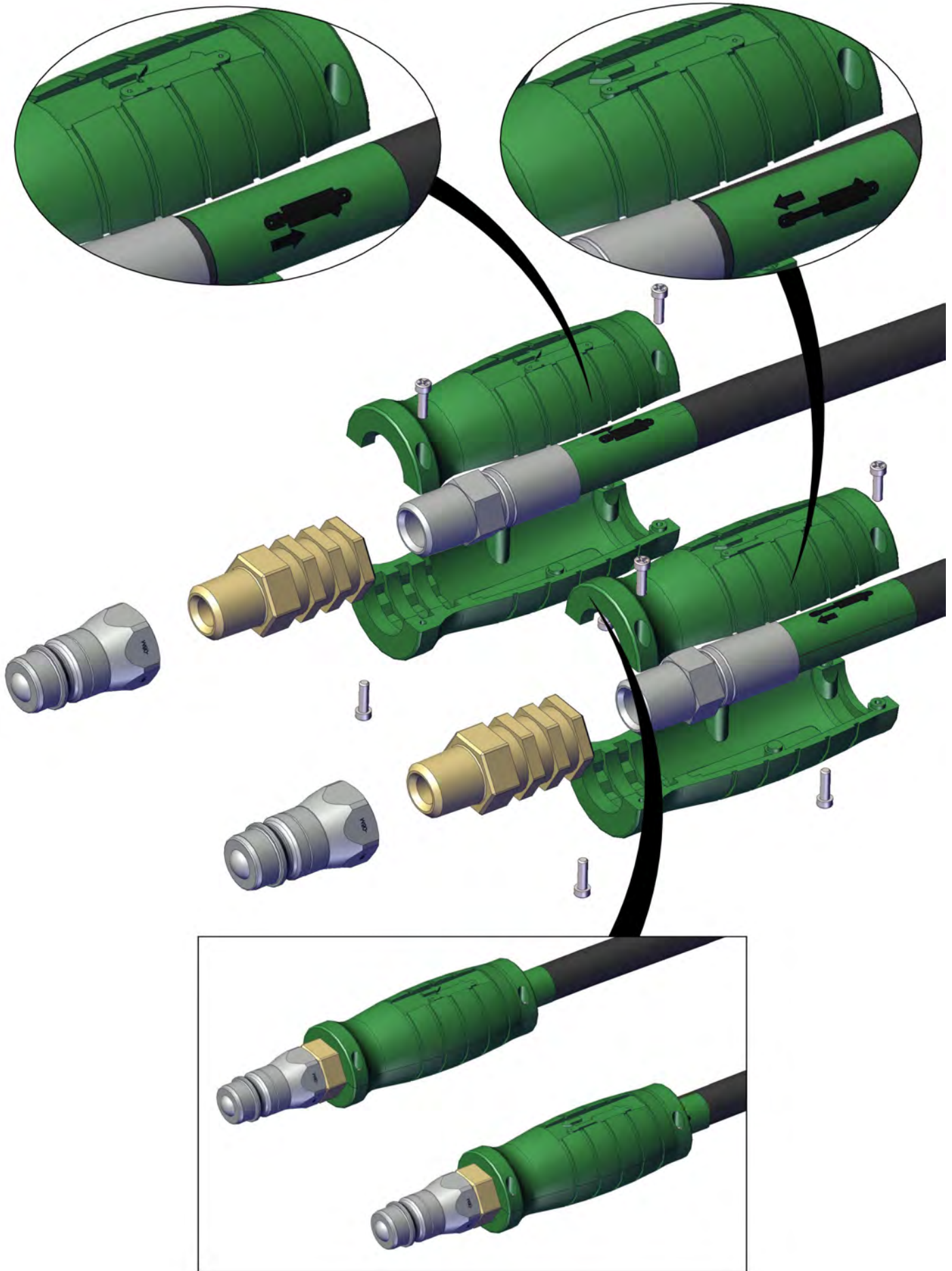


| Item No. | Description | Number | Qty |
|----------|---------------------------------------|--------------------------|-----|
| 1 | PH65-01.1 TO SEQUENCE VALVE EXT1 PORT | PH65-02.1-PH65-01.1-EXT1 | 1 |
| 2 | PH65-01.2 TO SEQUENCE VALVE RCT1 PORT | PH65-02.2-PH65-01.2-RCT1 | 1 |

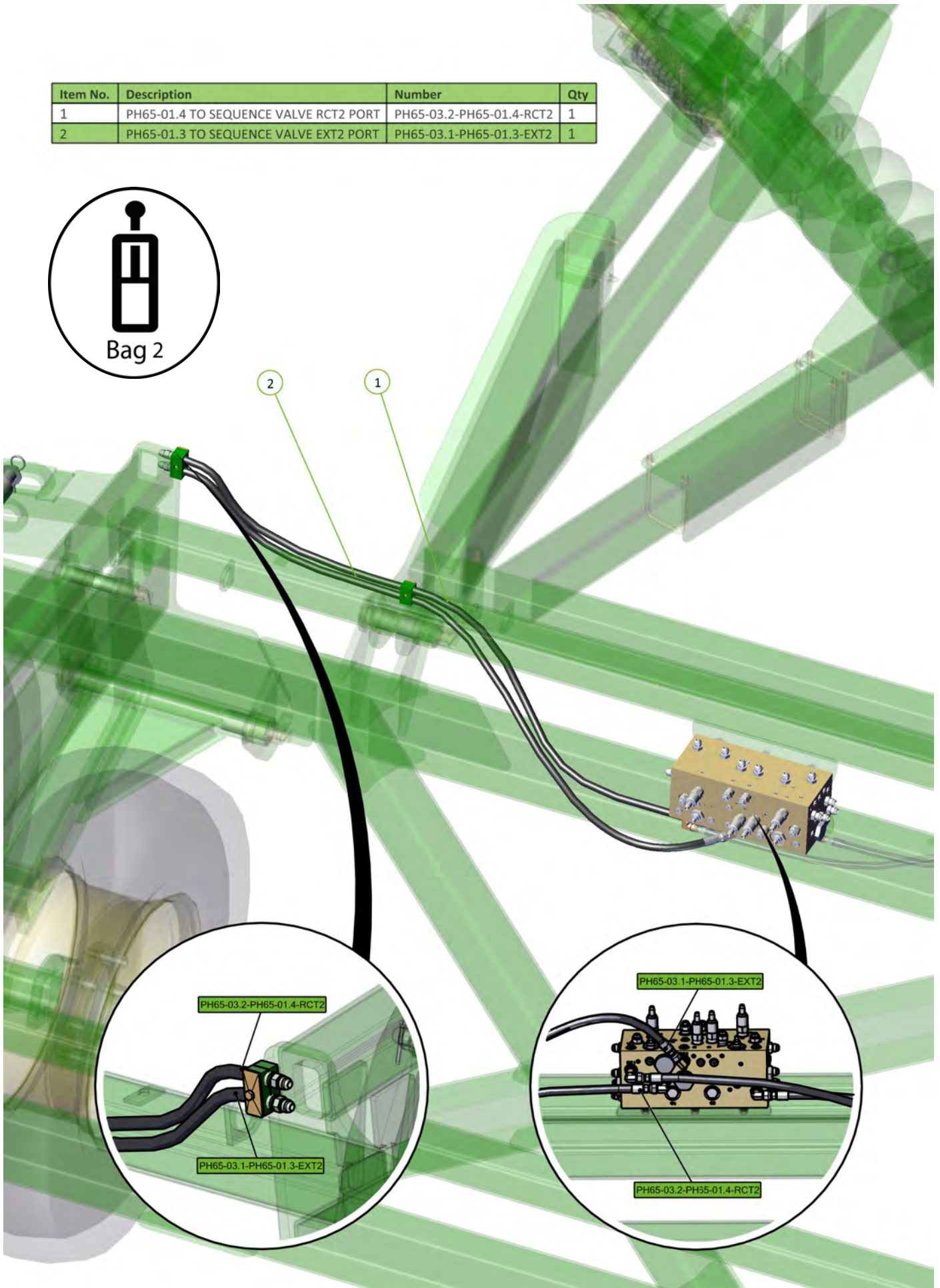


| Item No. | Description | Number | Qty |
|----------|--|------------------------|-----|
| 1 | TRACTOR TO PH65-02.1 FITTED WITH GREEN EXTEND DECAL | PH65-01.1-GE-PH65-02.1 | 1 |
| 2 | TRACTOR TO PH65-02.2 FITTED WITH GREEN RETRACT DECAL | PH65-01.2-GR-PH65-02.2 | 1 |
| 3 | 0325-R91-08M | 0325-R91-08M | 2 |
| 4 | Green 1/2" NPT Hydra Grip Pair (Extend/Ret) | 0325-HG-PT25E24R | 1 |

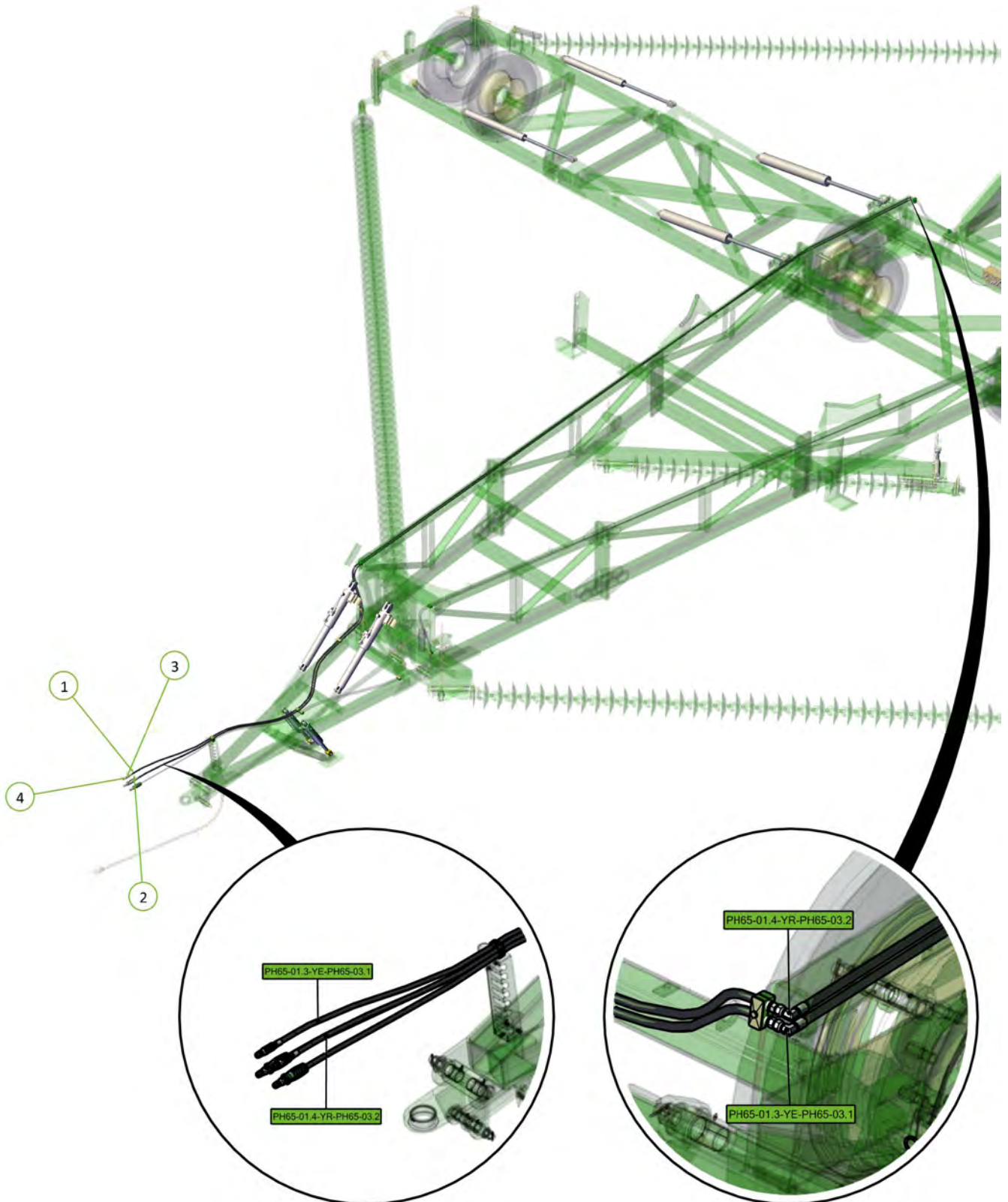


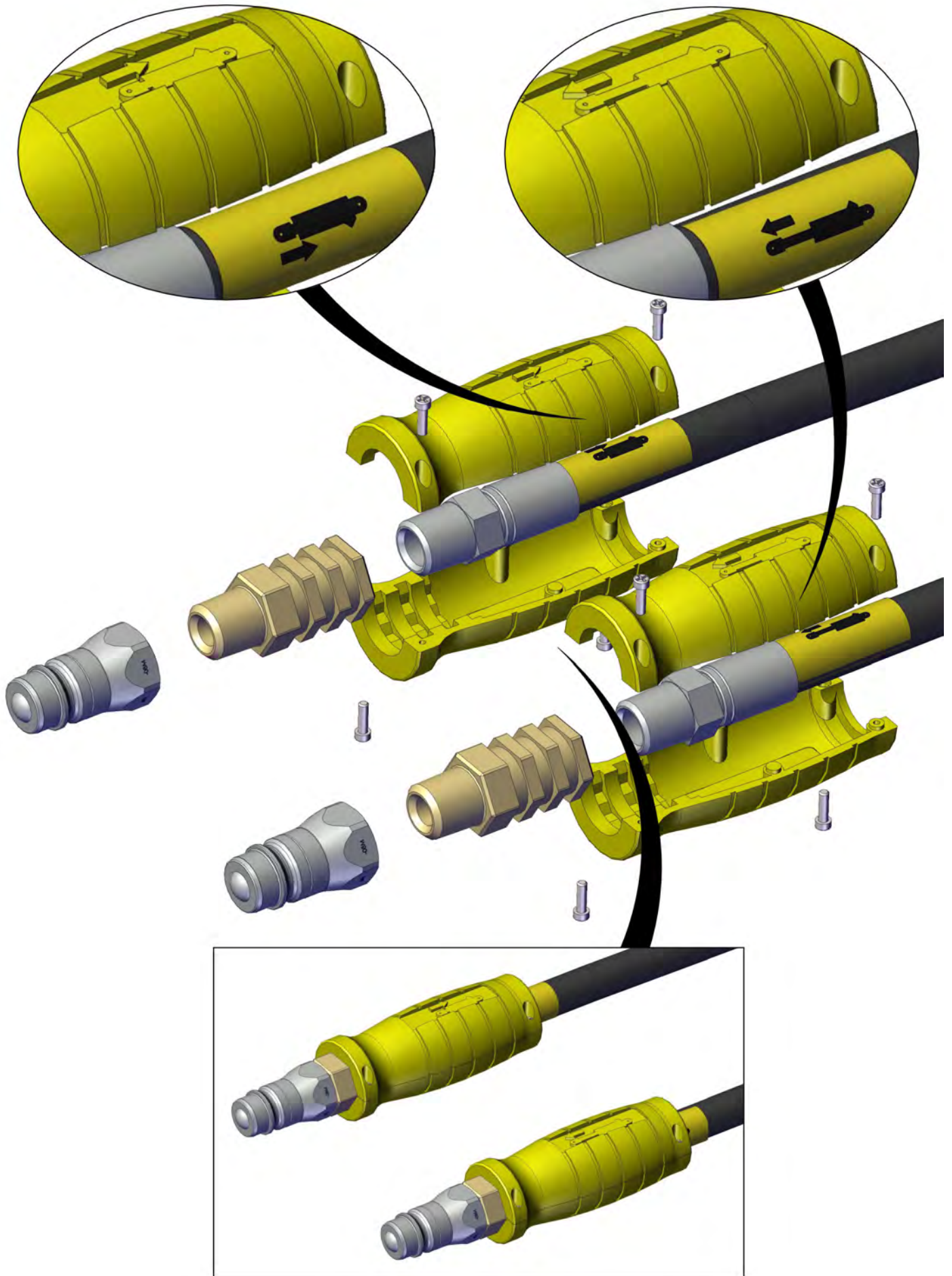


| Item No. | Description | Number | Qty |
|----------|---------------------------------------|--------------------------|-----|
| 1 | PH65-01.4 TO SEQUENCE VALVE RCT2 PORT | PH65-03.2-PH65-01.4-RCT2 | 1 |
| 2 | PH65-01.3 TO SEQUENCE VALVE EXT2 PORT | PH65-03.1-PH65-01.3-EXT2 | 1 |

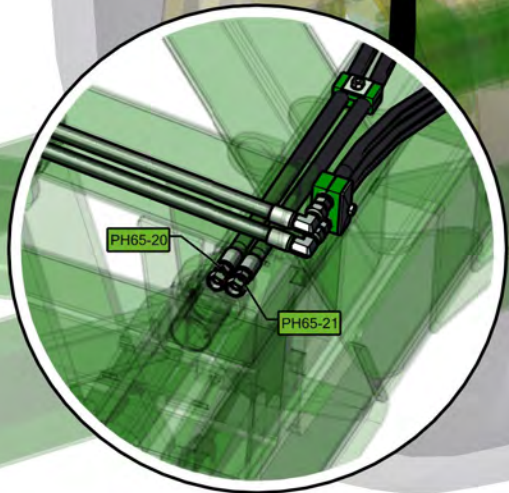
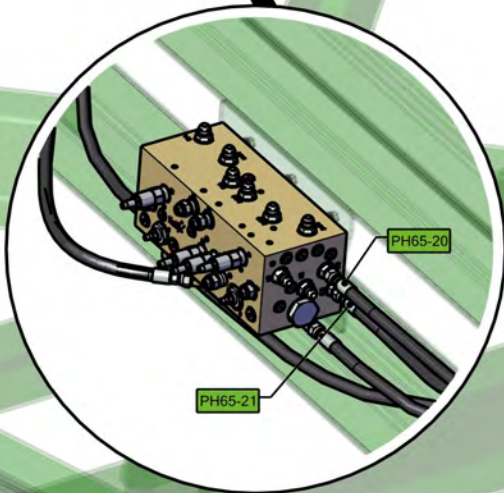
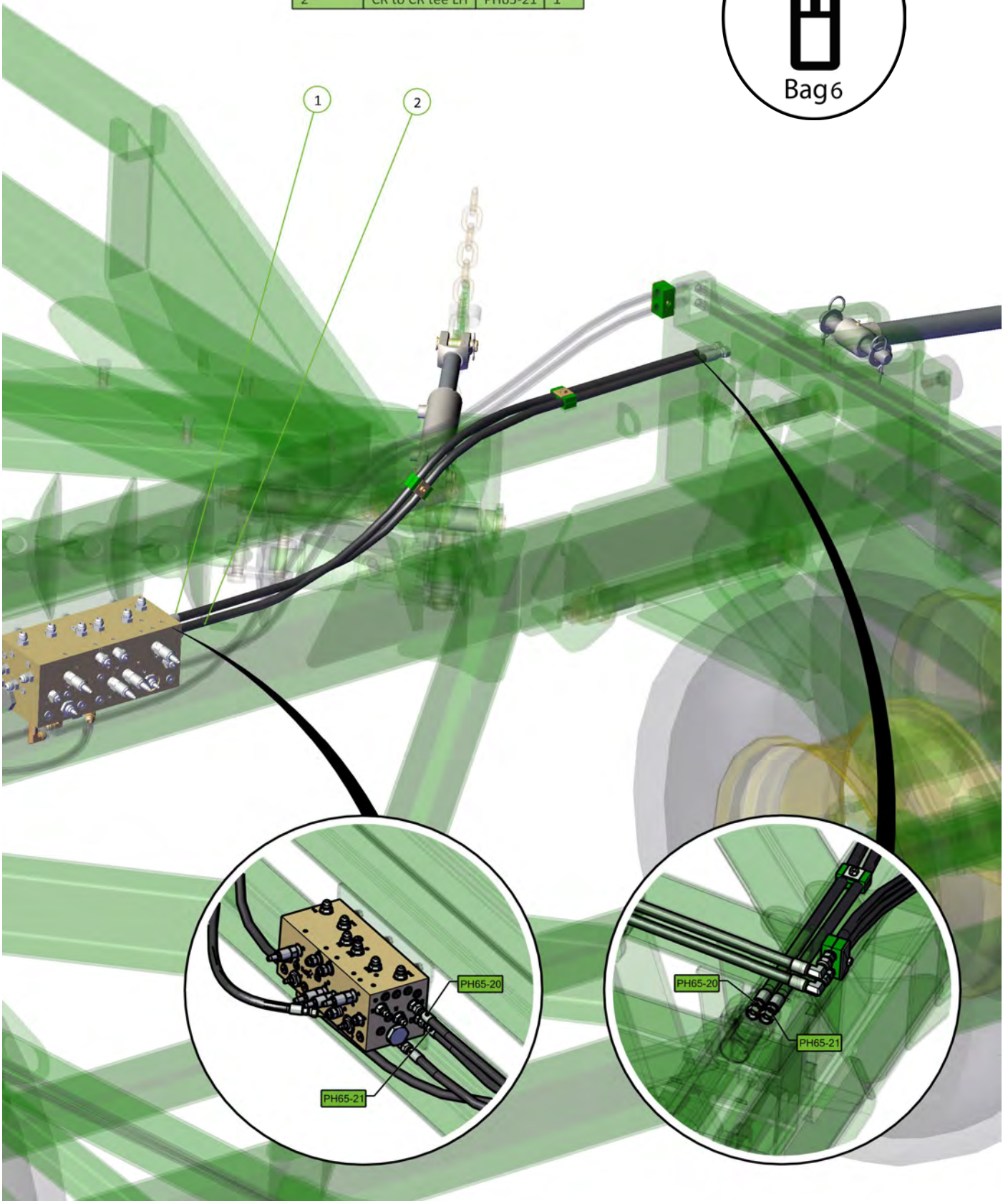


| Item No. | Description | Number | Qty |
|----------|---|------------------------|-----|
| 1 | TRACTOR TO PH65-03.1 FITTED WITH YELLOW EXTEND DECAL | PH65-01.3-YE-PH65-03.1 | 1 |
| 2 | TRACTOR TO PH65-03.2 FITTED WITH YELLOW RETRACT DECAL | PH65-01.4-YR-PH65-03.2 | 1 |
| 3 | Yellow 1/2" NPT Hydra Grip Pair (Extend/Ret) | 0325-HG-PT25E25R | 1 |
| 4 | 1/2" BSPP QRC Ball Male Tip | 0325-R91-08M | 2 |

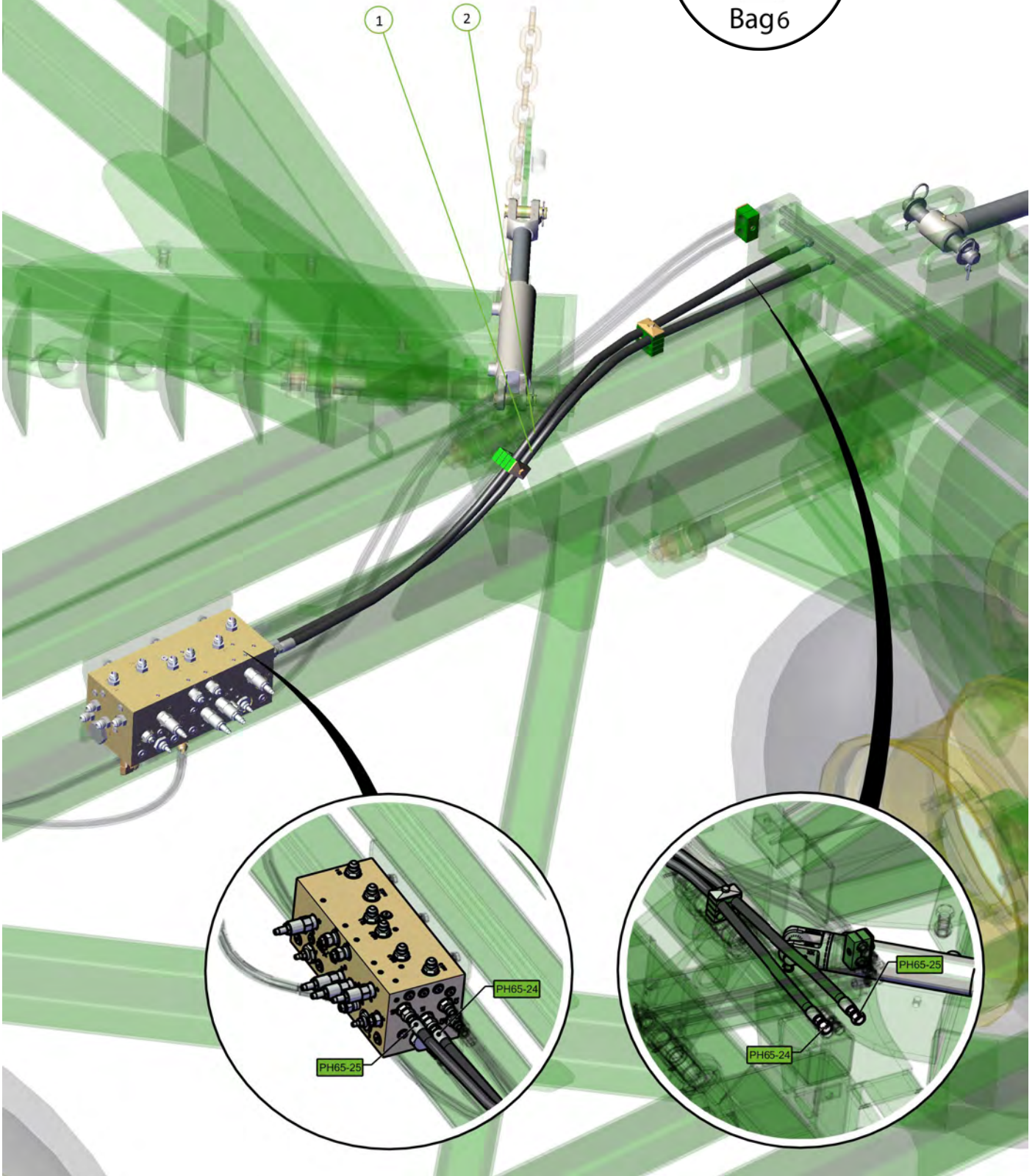




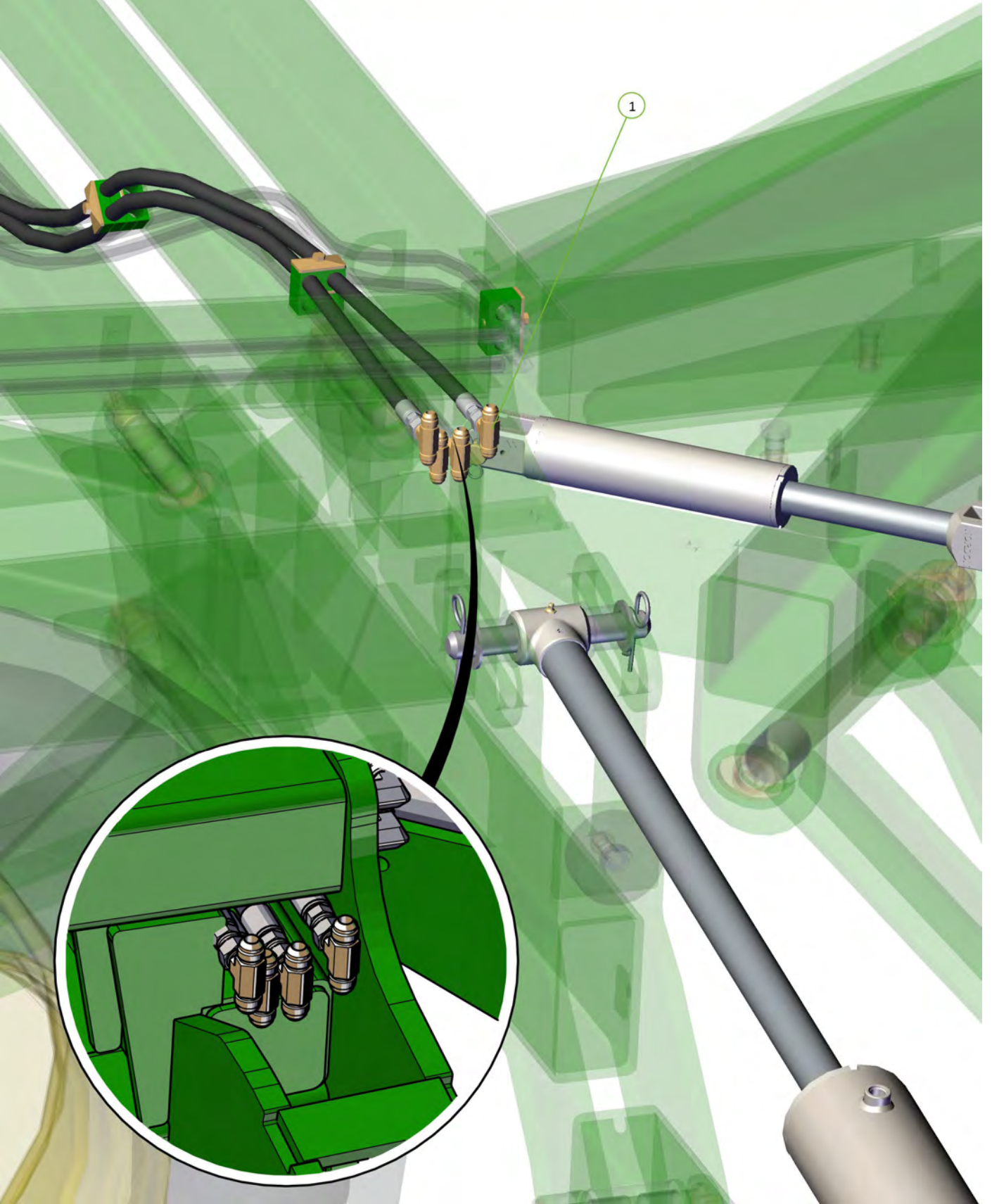
| Item No. | Description | Number | Qty |
|----------|-----------------|---------|-----|
| 1 | CE to CE tee LH | PH65-20 | 1 |
| 2 | CR to CR tee LH | PH65-21 | 1 |

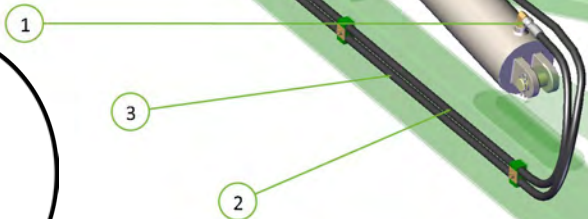
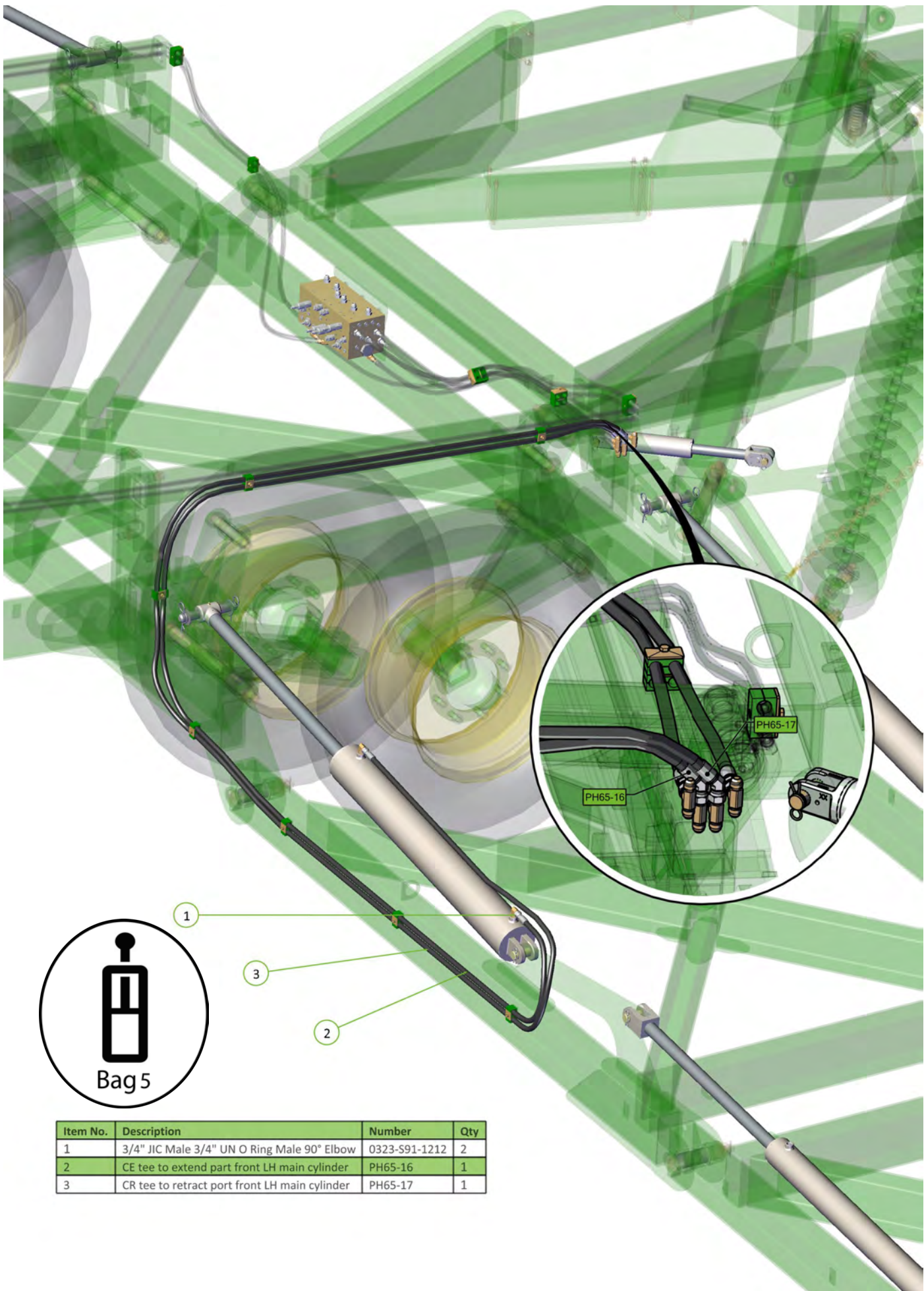


| Item No. | Description | Number | Qty |
|----------|--------------|---------|-----|
| 1 | LE to LE tee | PH65-24 | 1 |
| 2 | LR to LR tee | PH65-25 | 1 |

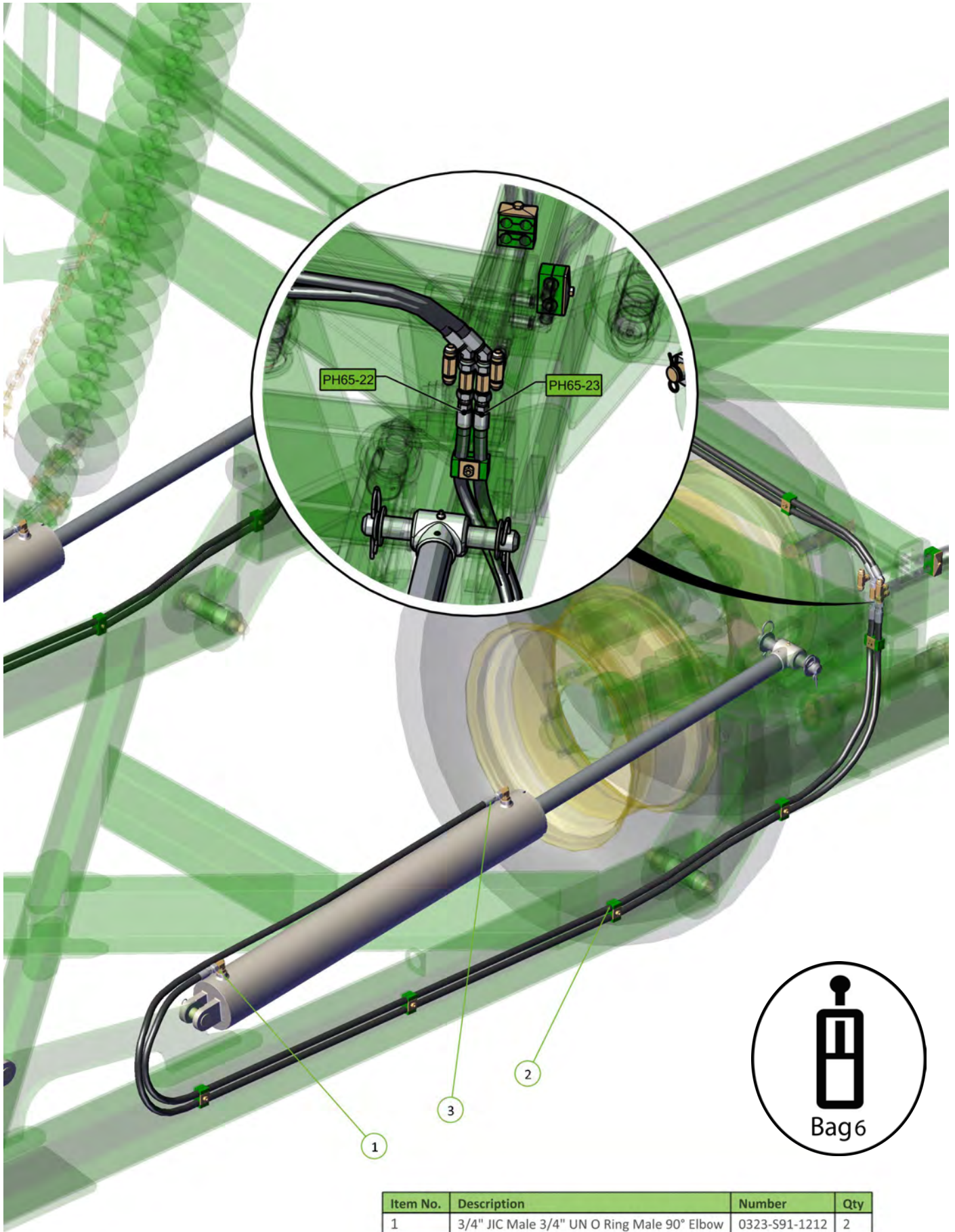


| Item No. | Description | Number | Qty |
|----------|---|-----------------|-----|
| 1 | 3/4" JIC Male Tee 3/4" JIC Male Tee 3/4" JIC Male Tee | 0324-S19-121212 | 4 |

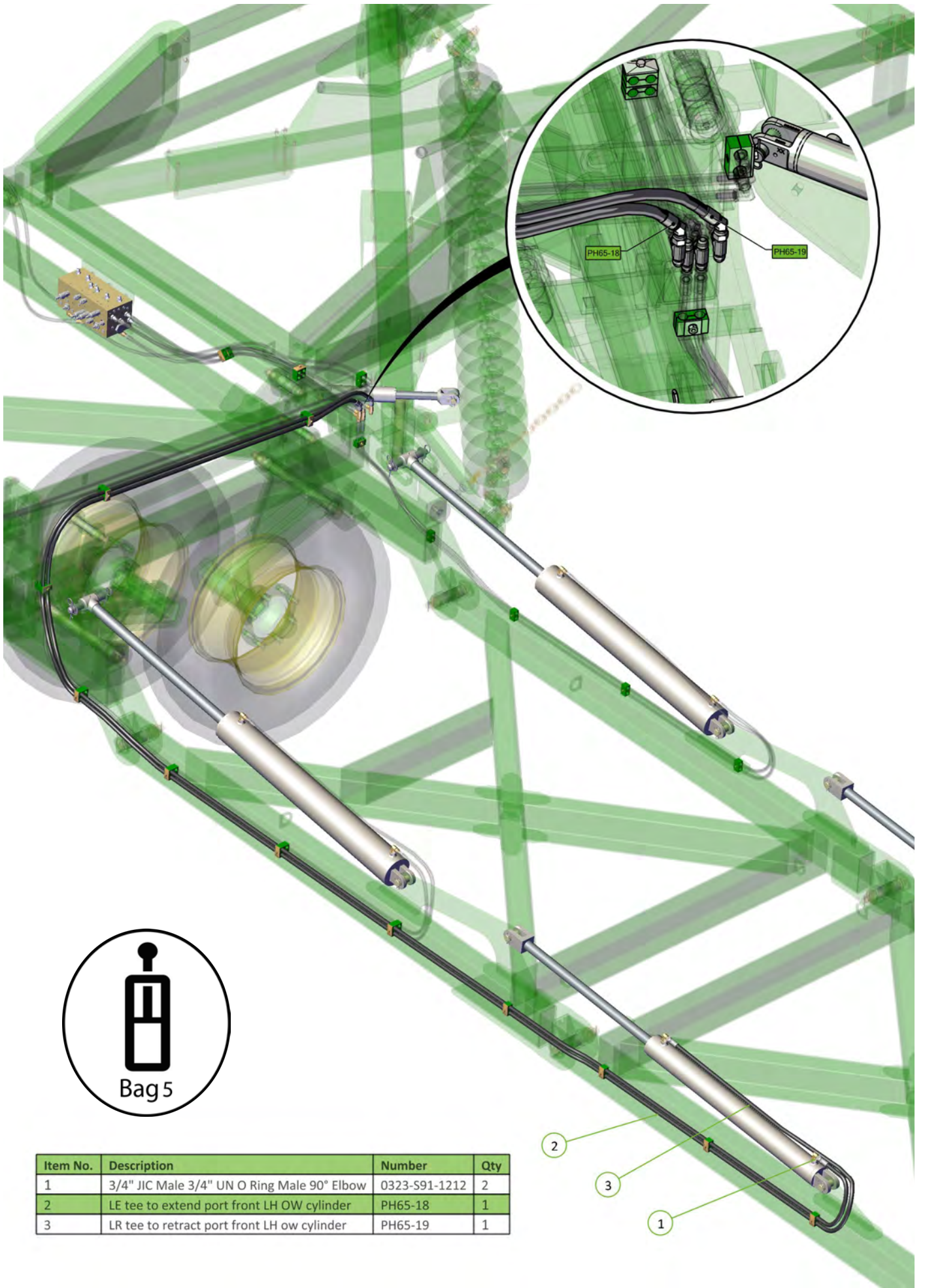




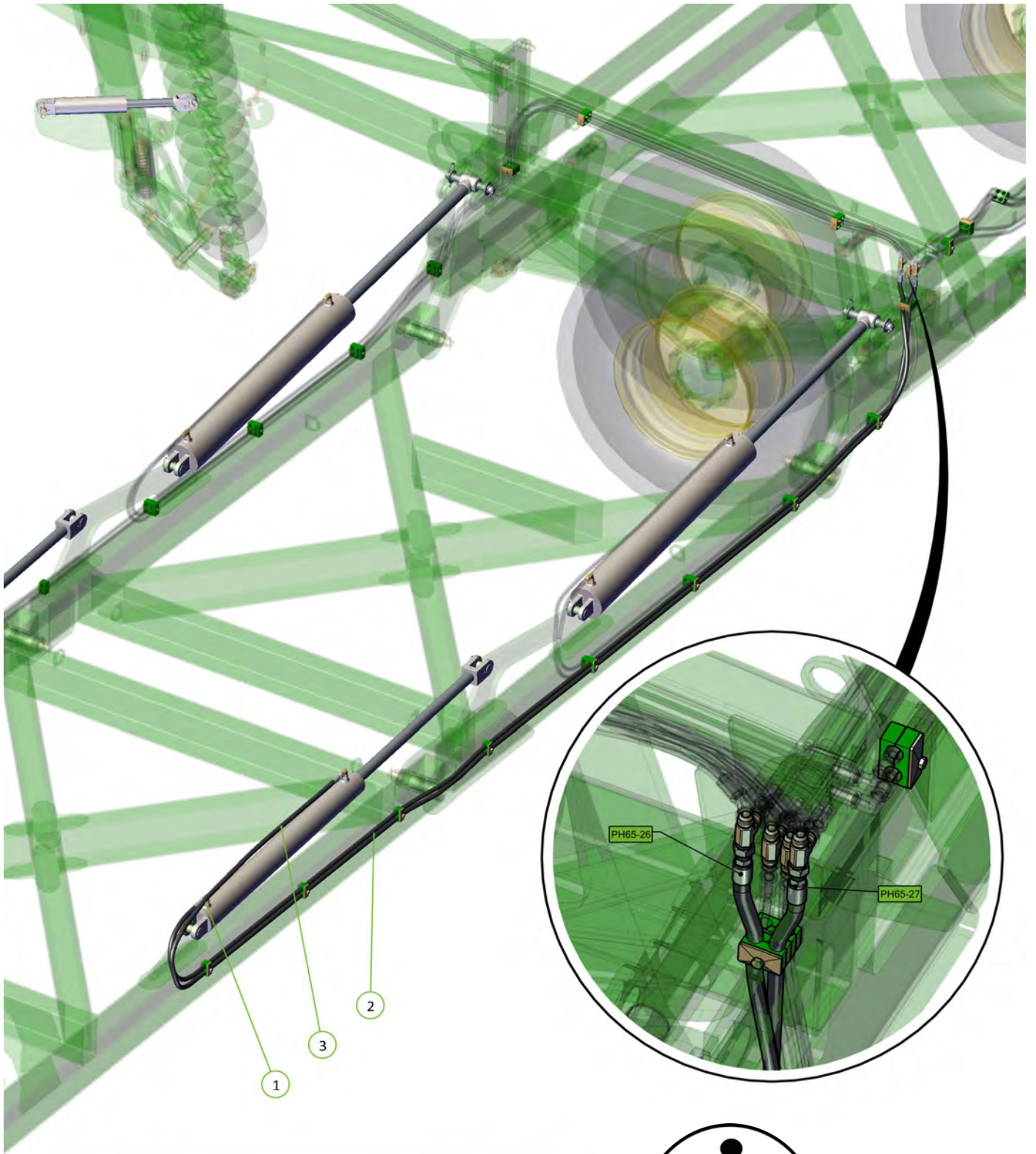
| Item No. | Description | Number | Qty |
|----------|---|---------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 90° Elbow | 0323-S91-1212 | 2 |
| 2 | CE tee to extend part front LH main cylinder | PH65-16 | 1 |
| 3 | CR tee to retract port front LH main cylinder | PH65-17 | 1 |



| Item No. | Description | Number | Qty |
|----------|--|---------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 90° Elbow | 0323-S91-1212 | 2 |
| 2 | CE tee to extend port rear LH main cylinder | PH65-22 | 1 |
| 3 | CR tee to retract port rear LH main cylinder | PH65-23 | 1 |



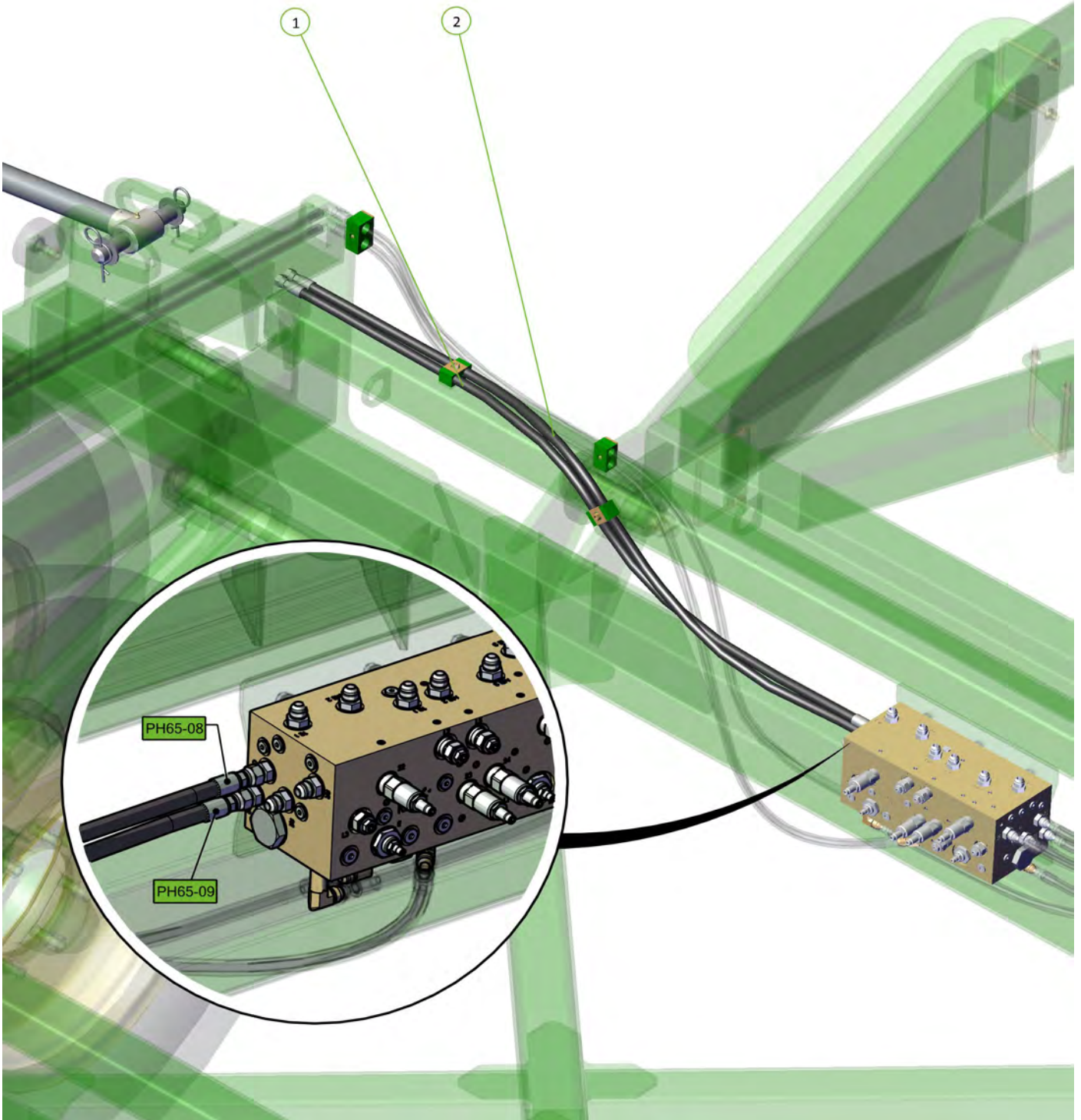
| Item No. | Description | Number | Qty |
|----------|---|---------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 90° Elbow | O323-S91-1212 | 2 |
| 2 | LE tee to extend port front LH OW cylinder | PH65-18 | 1 |
| 3 | LR tee to retract port front LH ow cylinder | PH65-19 | 1 |



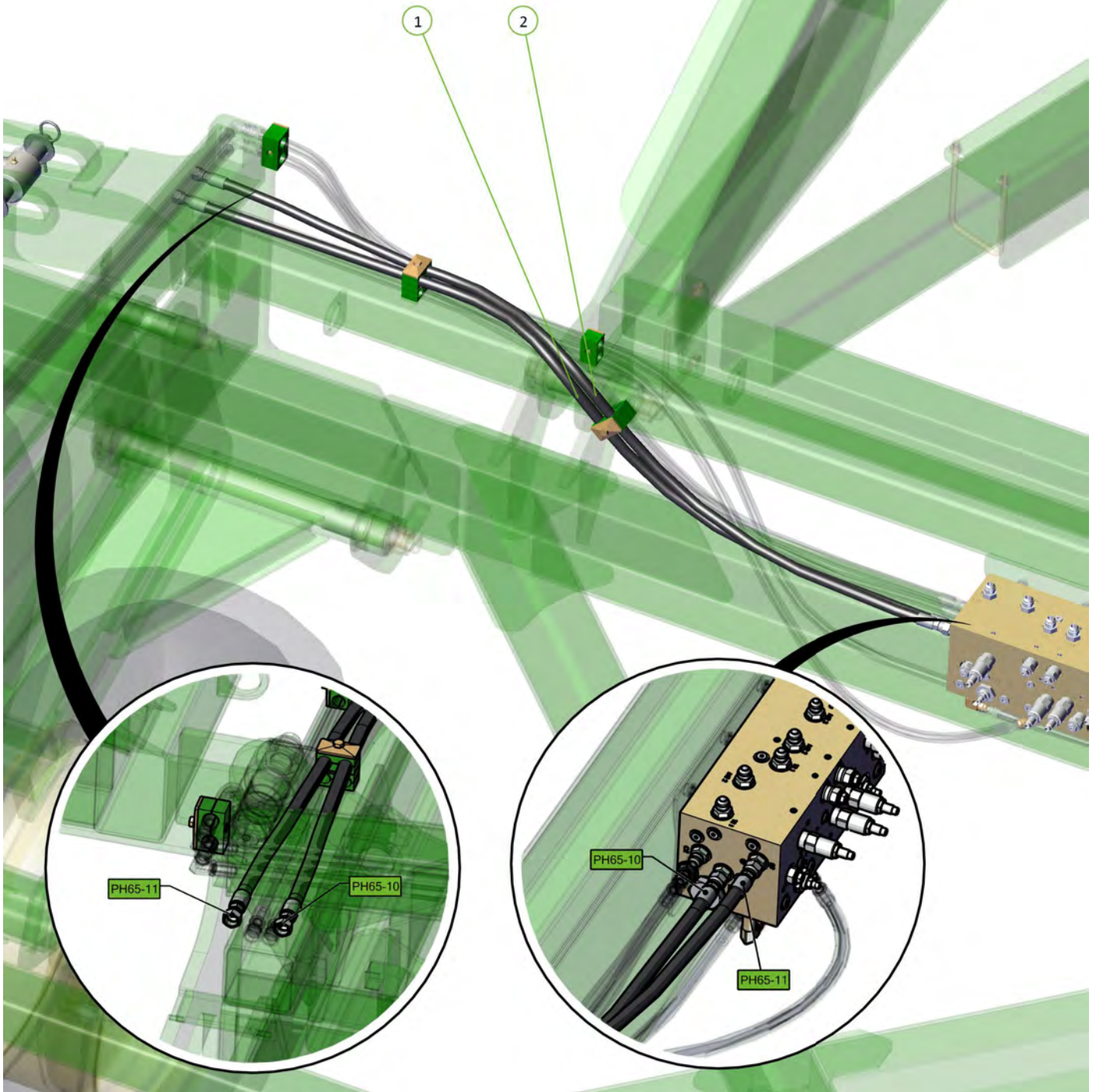
| Item No. | Description | Number | Qty |
|----------|---|---------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 90° Elbow | 0323-S91-1212 | 2 |
| 2 | LE tee to extend port rear LH ow cylinder | PH65-26 | 1 |
| 3 | LR tee to retract port rear LH ow cylinder | PH65-27 | 1 |



| Item No. | Description | Number | Qty |
|----------|-----------------|---------|-----|
| 1 | CE to CE tee RH | PH65-08 | 1 |
| 2 | CR to CR tee RH | PH65-09 | 1 |



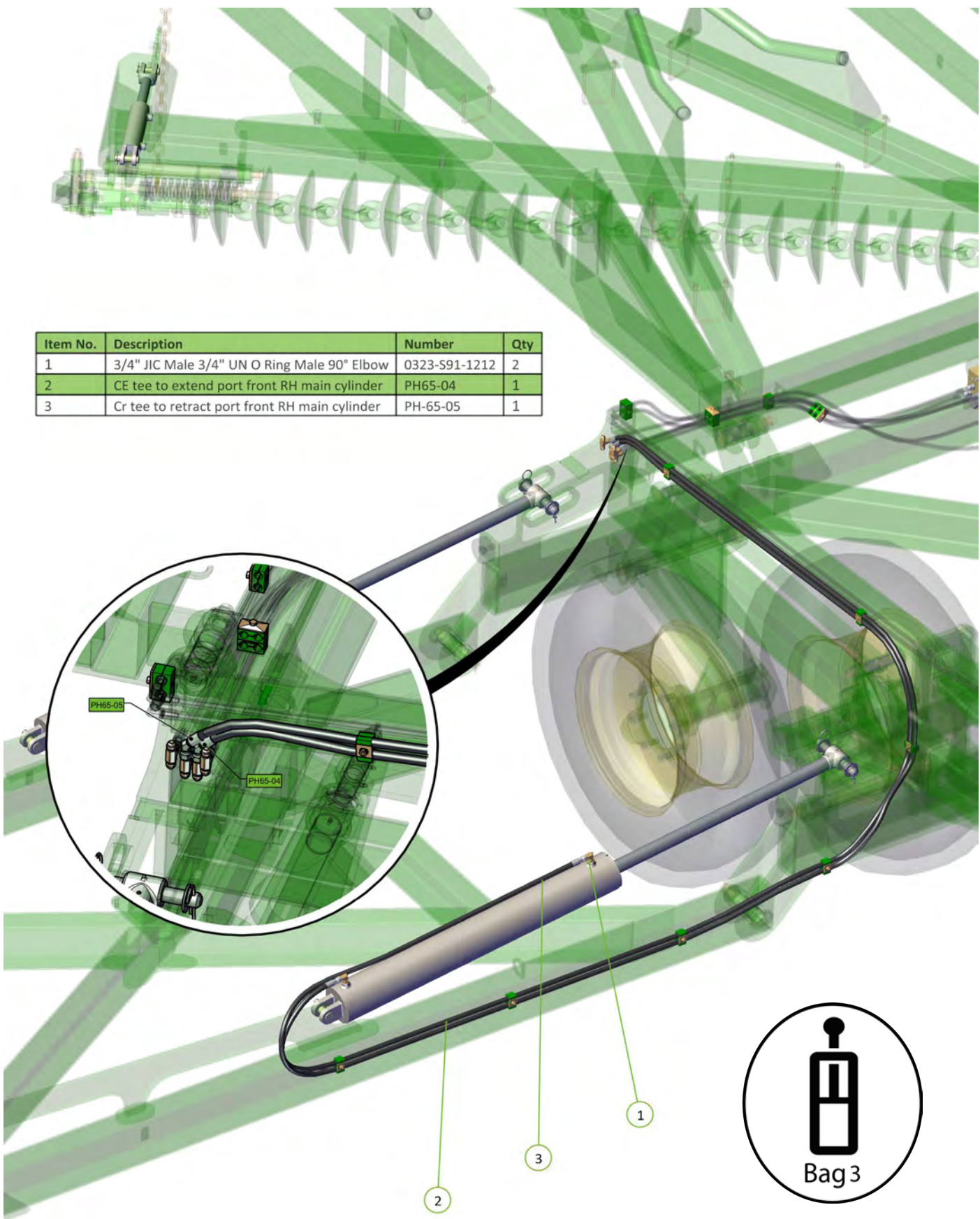
| Item No. | Description | Number | Qty |
|----------|-----------------|---------|-----|
| 1 | RE to RE tee RH | PH65-10 | 1 |
| 2 | RR to RR tee RH | PH65-11 | 1 |

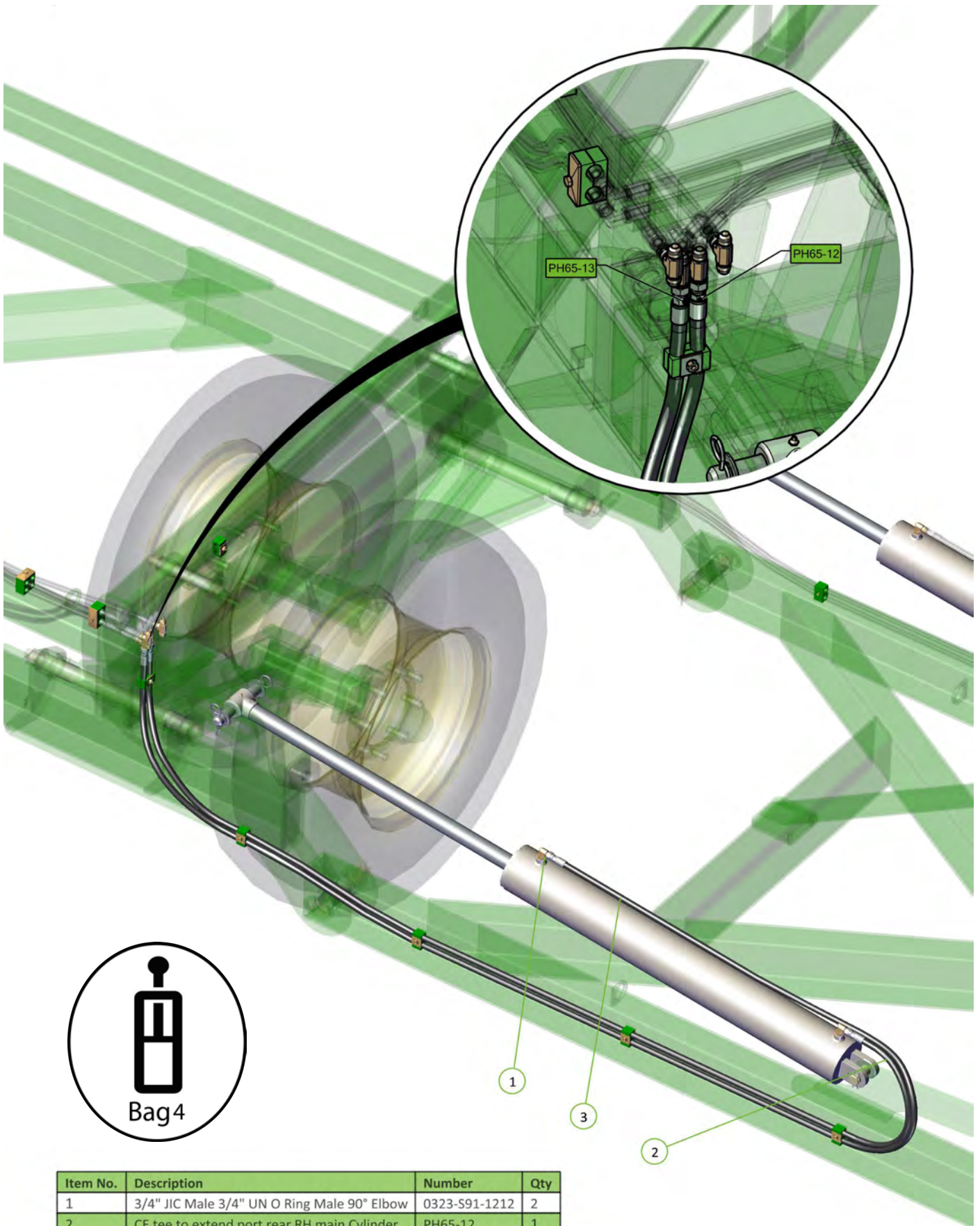


| Item No. | Description | Number | Qty |
|----------|---|-----------------|-----|
| 1 | 3/4" JIC Male Tee 3/4" JIC Male Tee 3/4" JIC Male Tee | 0324-S19-121212 | 4 |

1

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

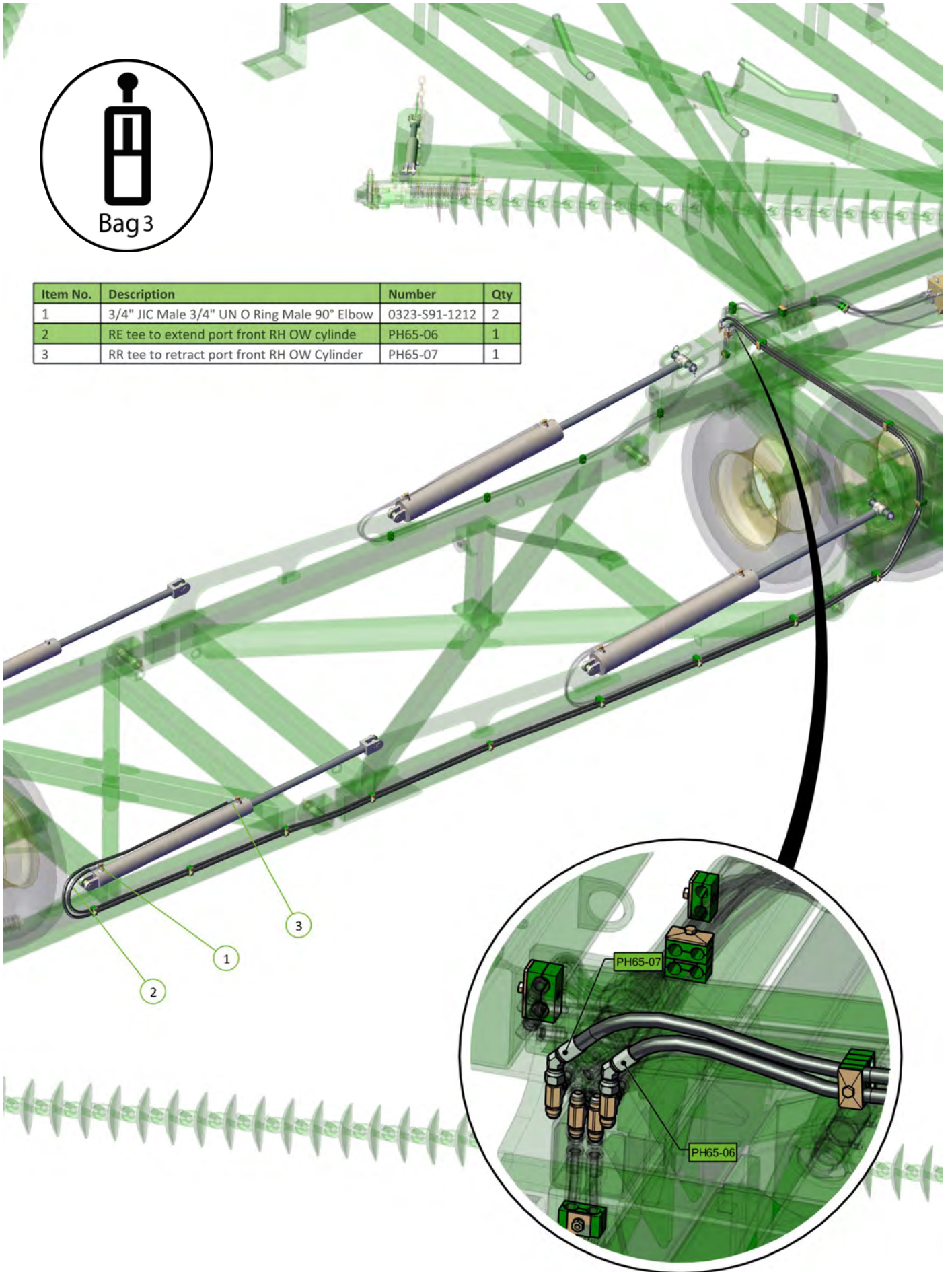


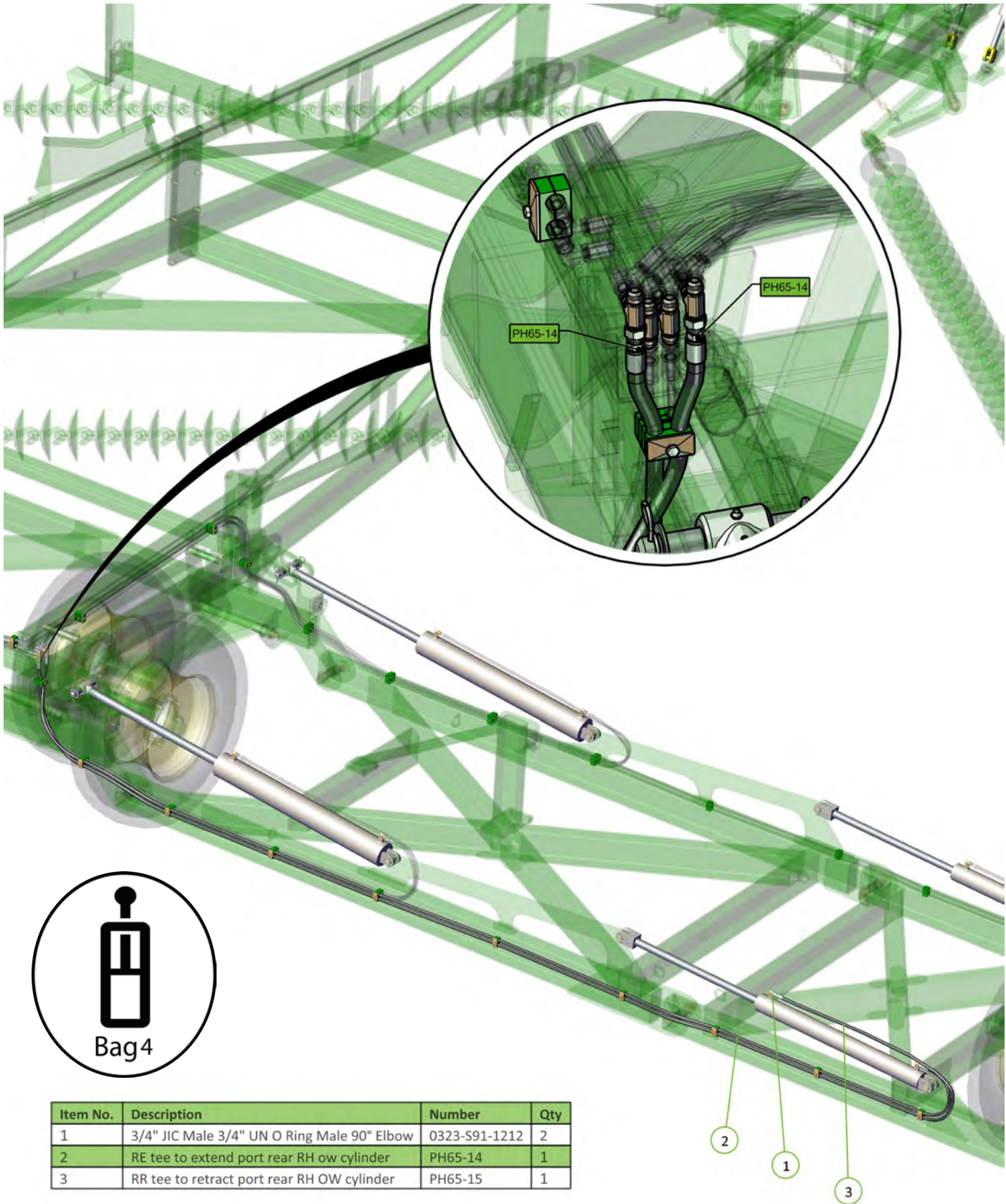


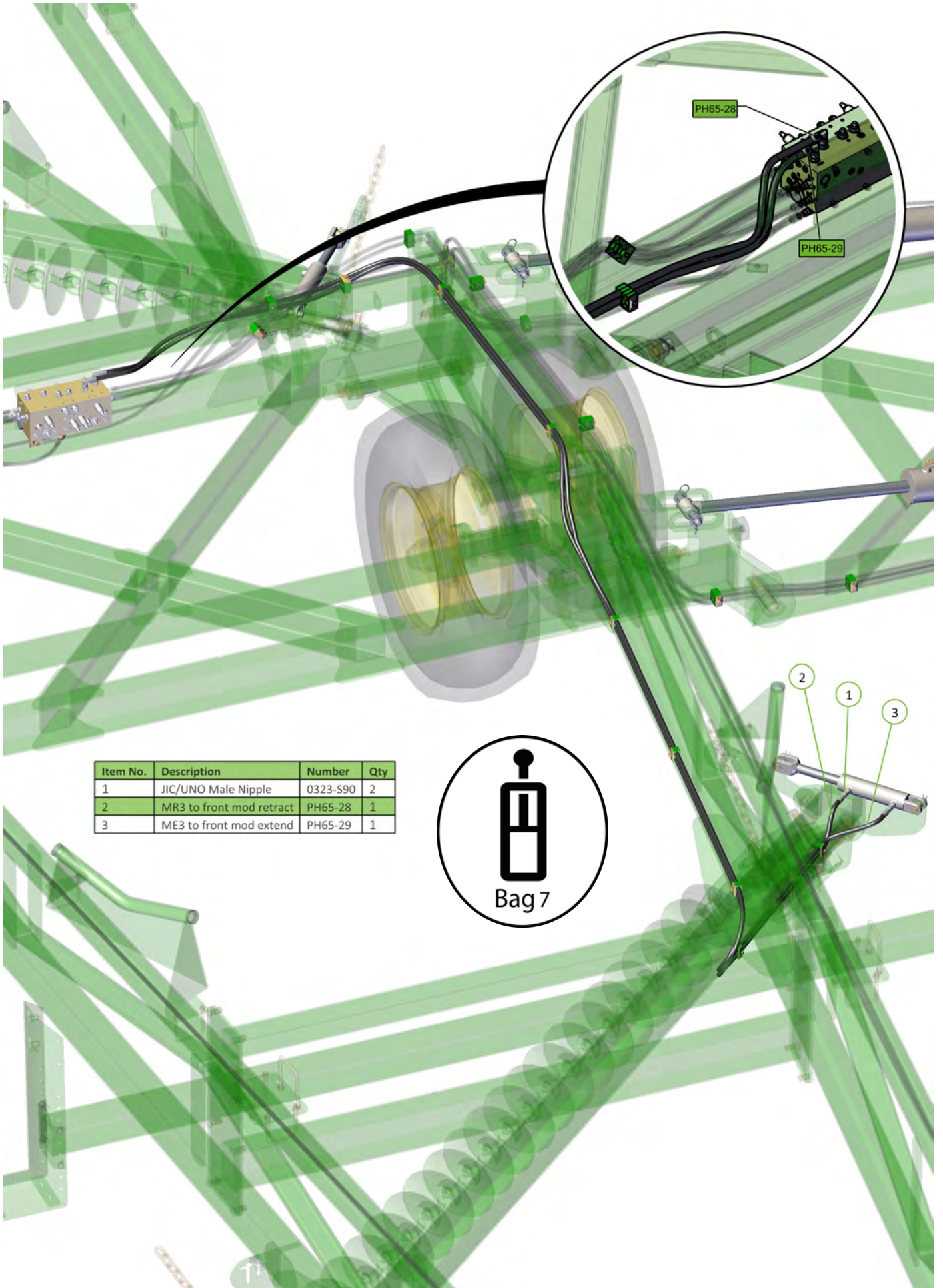
| Item No. | Description | Number | Qty |
|----------|--|---------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 90° Elbow | 0323-S91-1212 | 2 |
| 2 | CE tee to extend port rear RH main Cylinder | PH65-12 | 1 |
| 3 | CR tee to retract port rear RH main cylinder | PH65-13 | 1 |



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





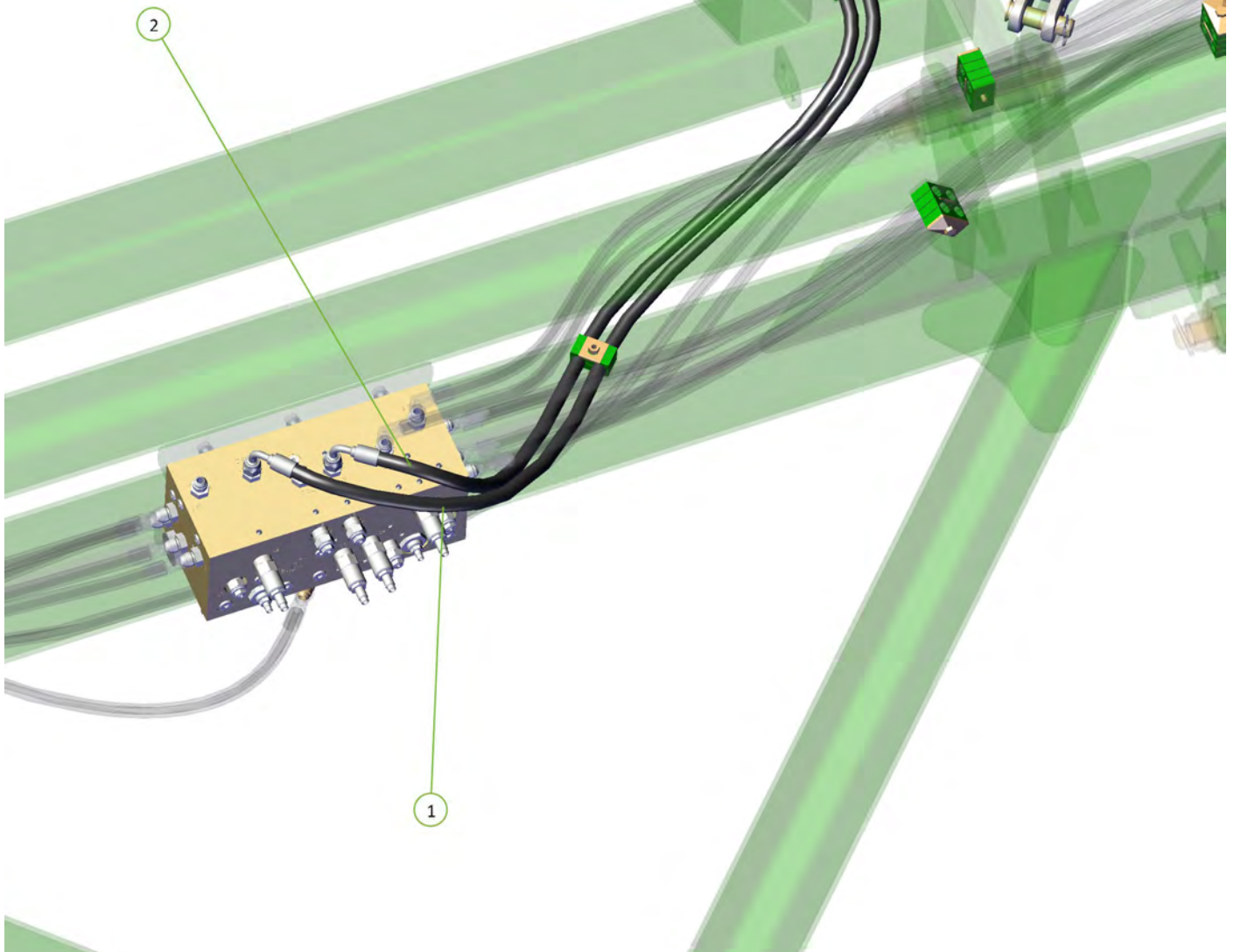


| Item No. | Description | Number | Qty |
|----------|--------------------------|----------|-----|
| 1 | JIC/UNO Male Nipple | 0323-S90 | 2 |
| 2 | MR3 to front mod retract | PH65-28 | 1 |
| 3 | ME3 to front mod extend | PH65-29 | 1 |



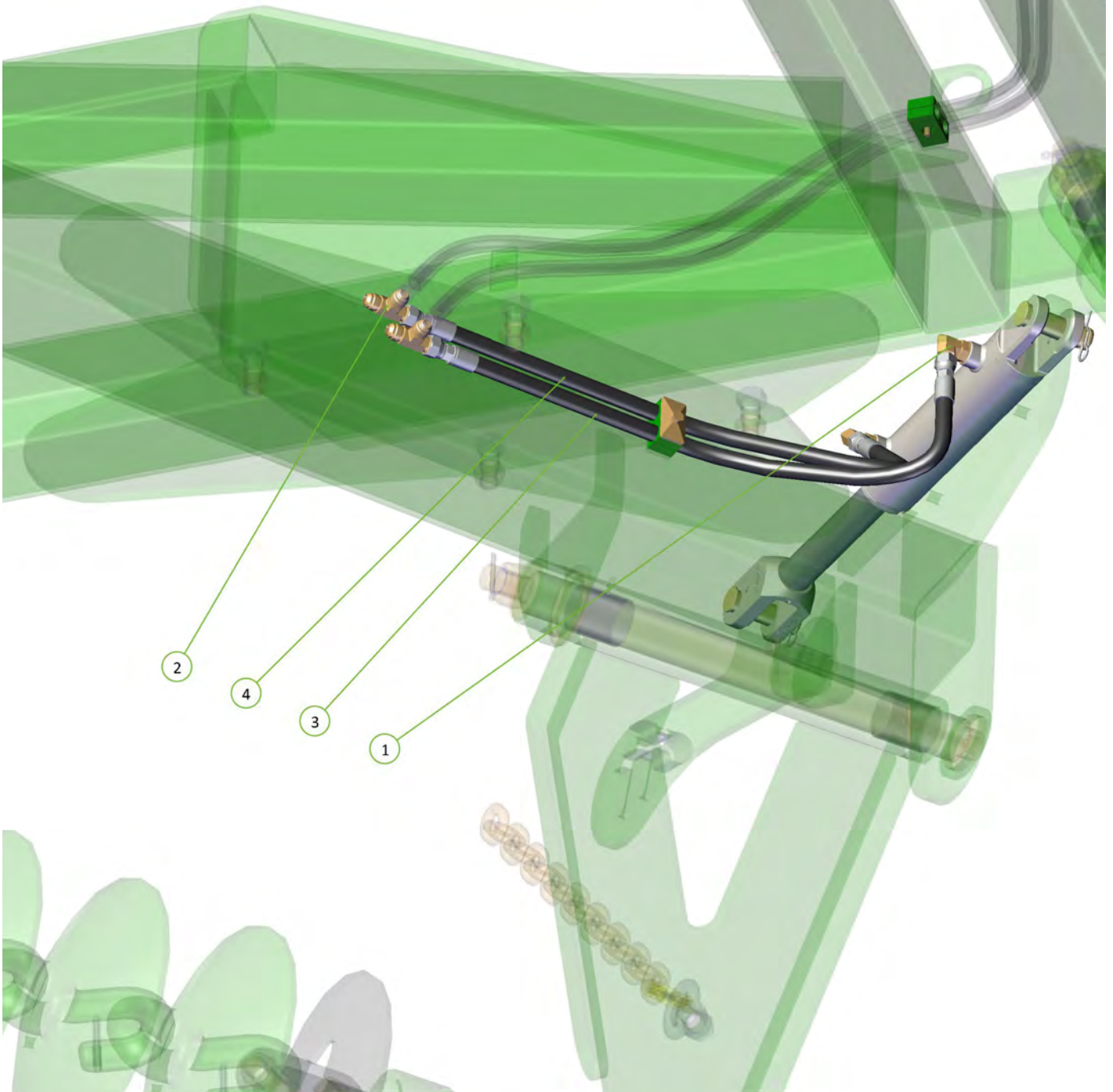


| Item No. | Description | Number | Qty |
|----------|--------------------------------|---------|-----|
| 1 | ME2 to rear mod extend tee | PH65-30 | 1 |
| 2 | MR2 to rear module retract tee | PH65-31 | 1 |

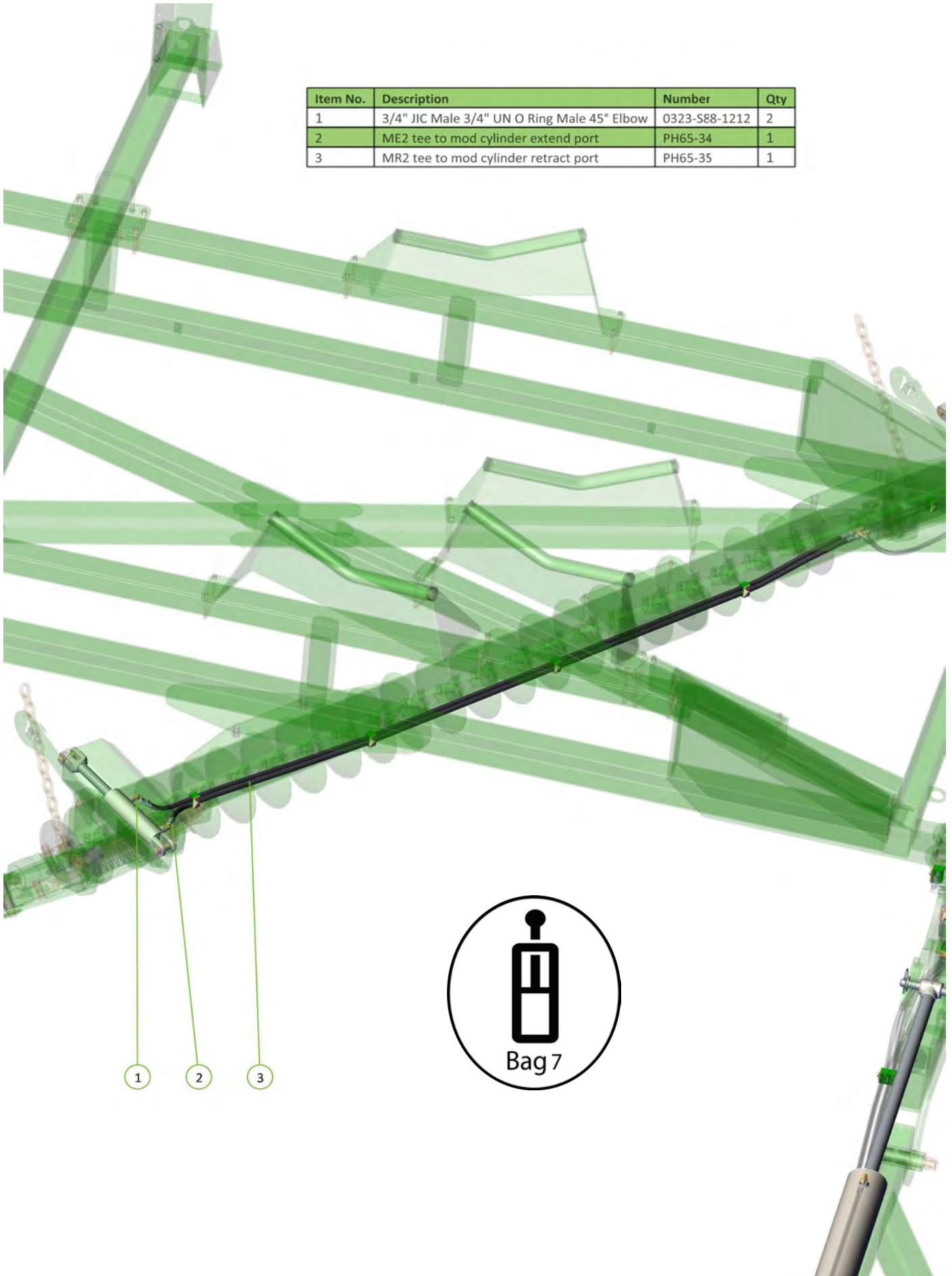




| Item No. | Description | Number | Qty |
|----------|---|-----------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 90° Elbow | 0323-S91-1212 | 2 |
| 2 | 3/4" JIC Male Tee 3/4" JIC Male Tee 3/4" JIC Male Tee | 0324-S19-121212 | 2 |
| 3 | ME2 tee to mod cylinder extend port | PH65-32 | 1 |
| 4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



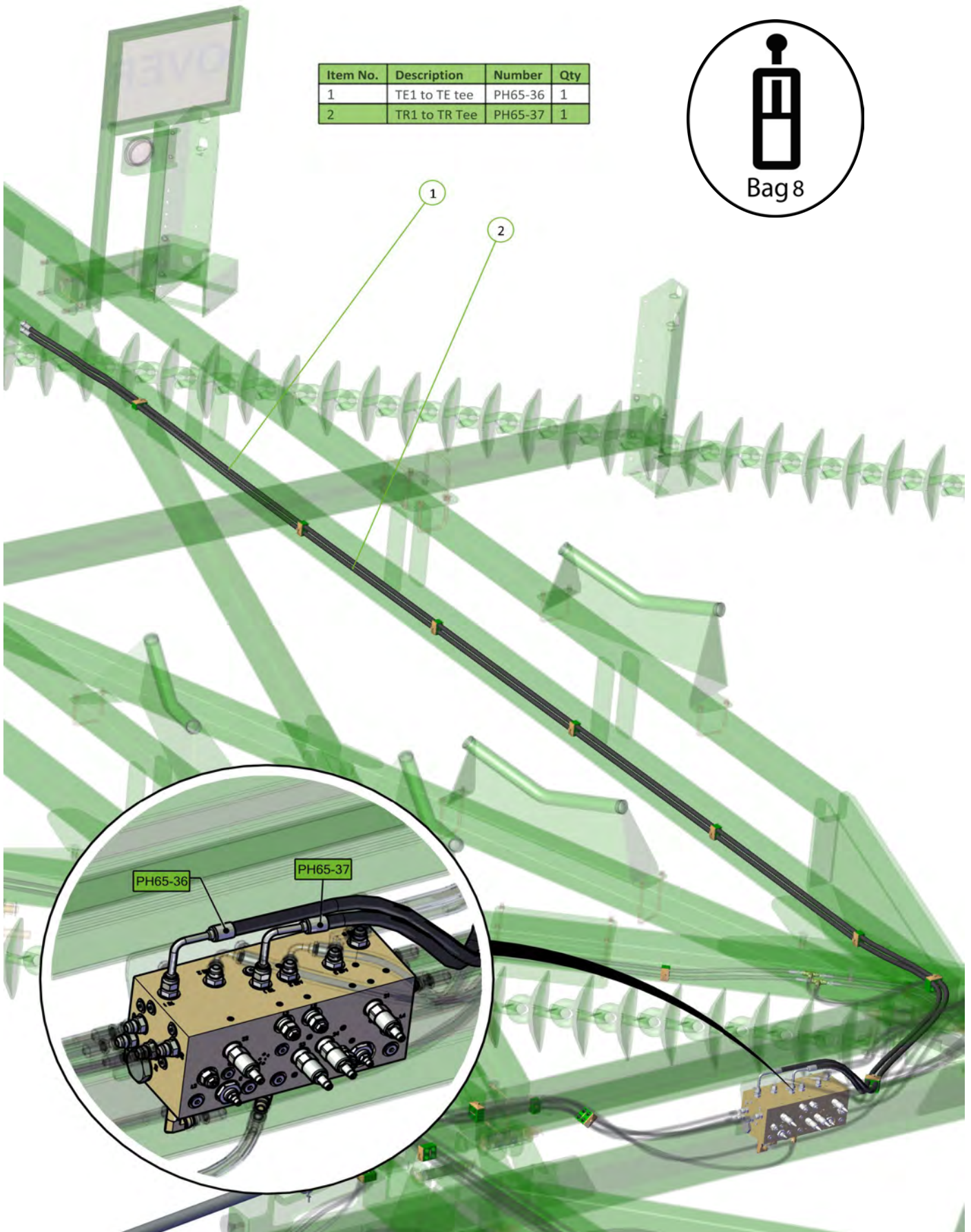
| Item No. | Description | Number | Qty |
|----------|---|---------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 45° Elbow | 0323-S88-1212 | 2 |
| 2 | ME2 tee to mod cylinder extend port | PH65-34 | 1 |
| 3 | MR2 tee to mod cylinder retract port | PH65-35 | 1 |



1 2 3

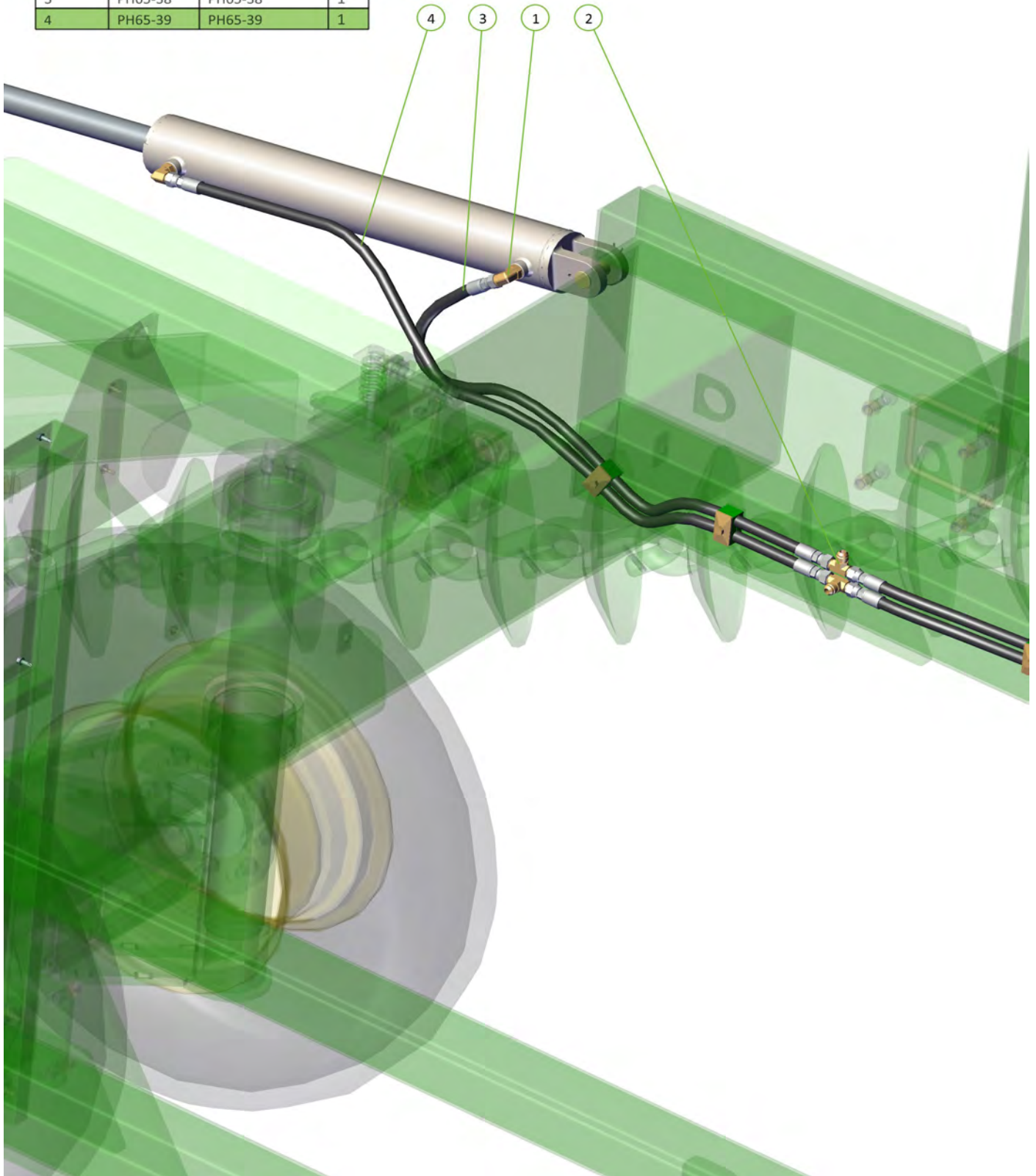


| Item No. | Description | Number | Qty |
|----------|---------------|---------|-----|
| 1 | TE1 to TE tee | PH65-36 | 1 |
| 2 | TR1 to TR Tee | PH65-37 | 1 |

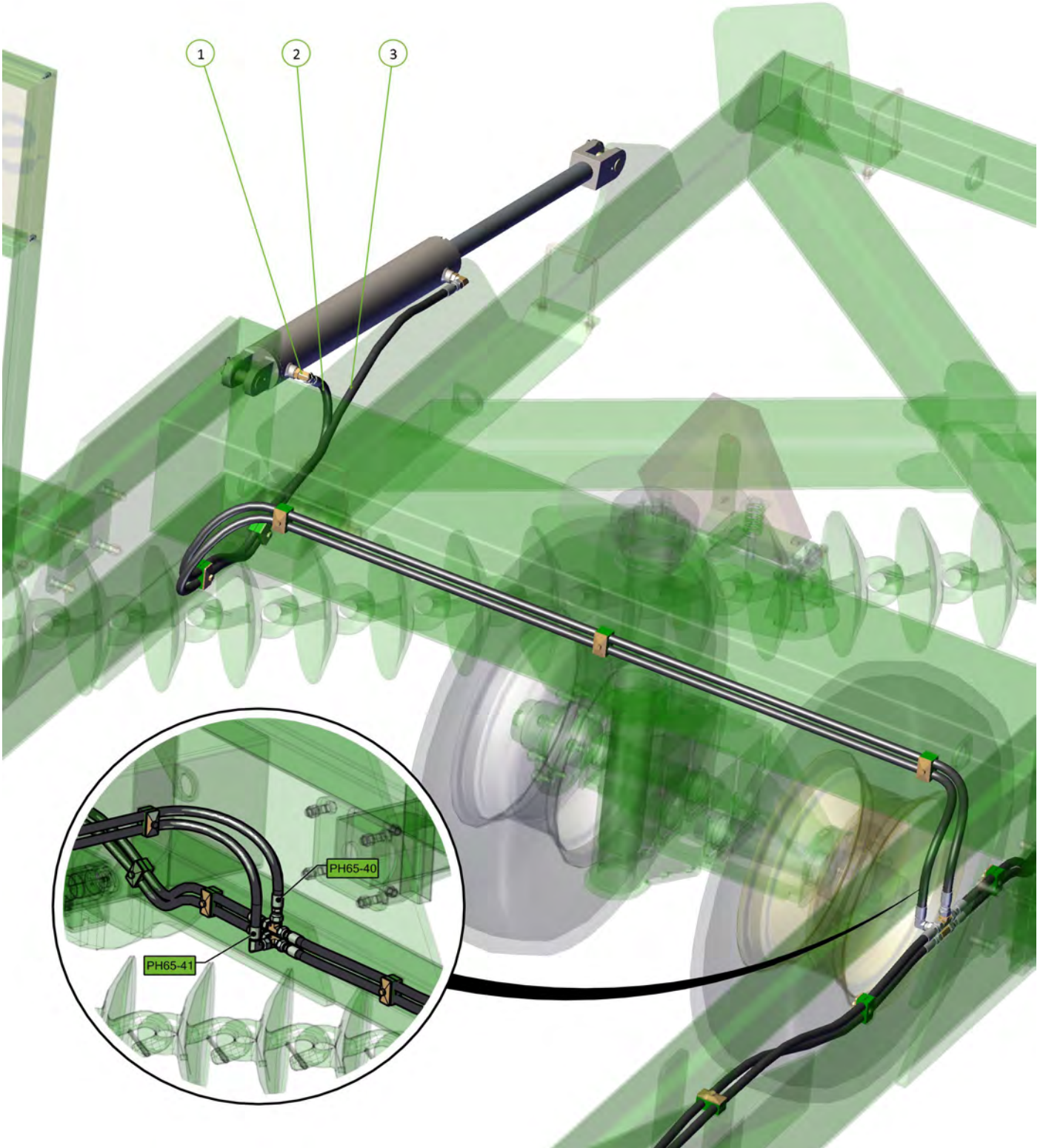


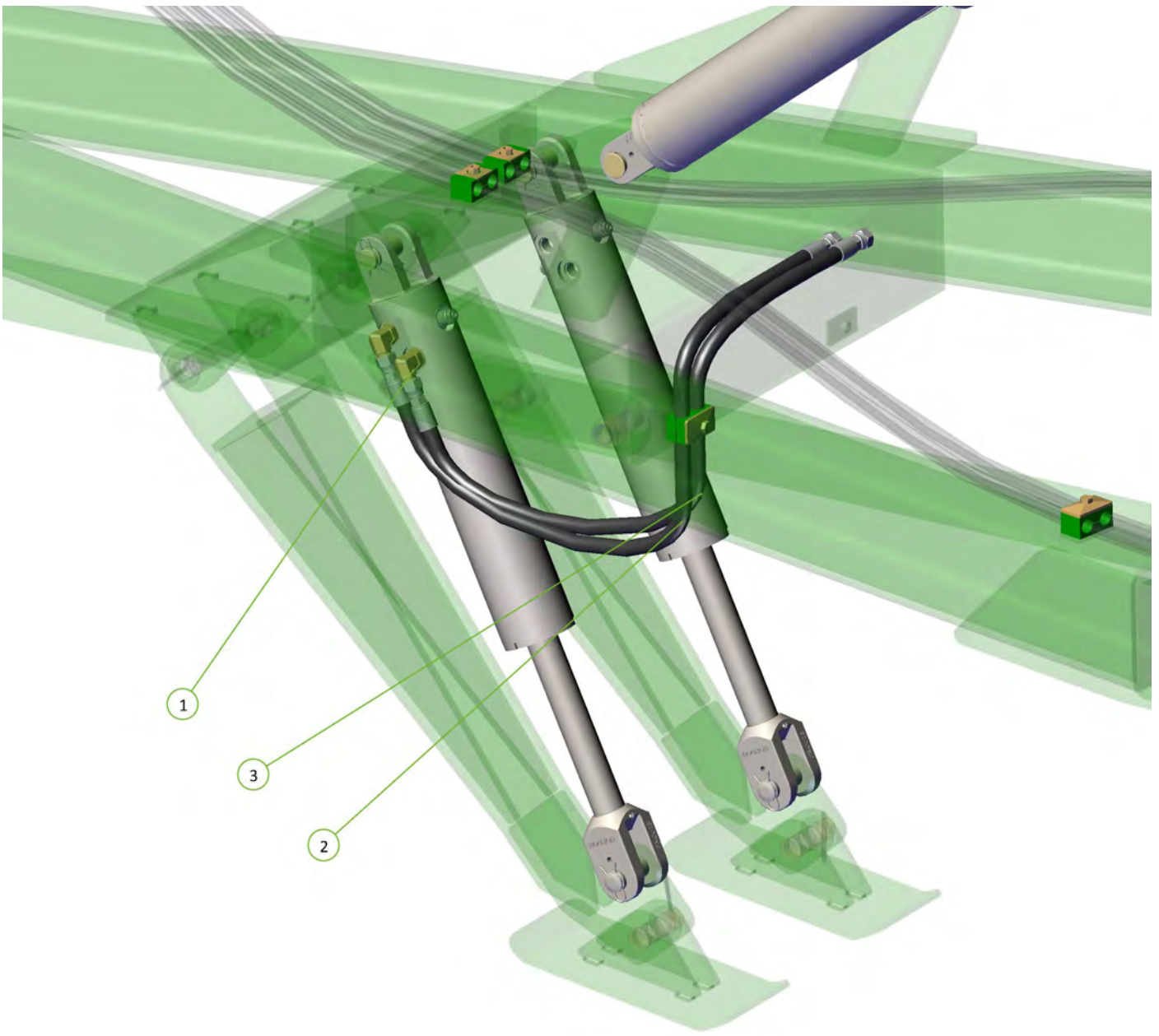


| Item No. | Description | Number | Qty |
|----------|-------------|-----------------|-----|
| 1 | Group 2 | 0323-S91-1212 | 2 |
| 2 | Group 3 | 0324-S19-121212 | 2 |
| 3 | PH65-38 | PH65-38 | 1 |
| 4 | PH65-39 | PH65-39 | 1 |



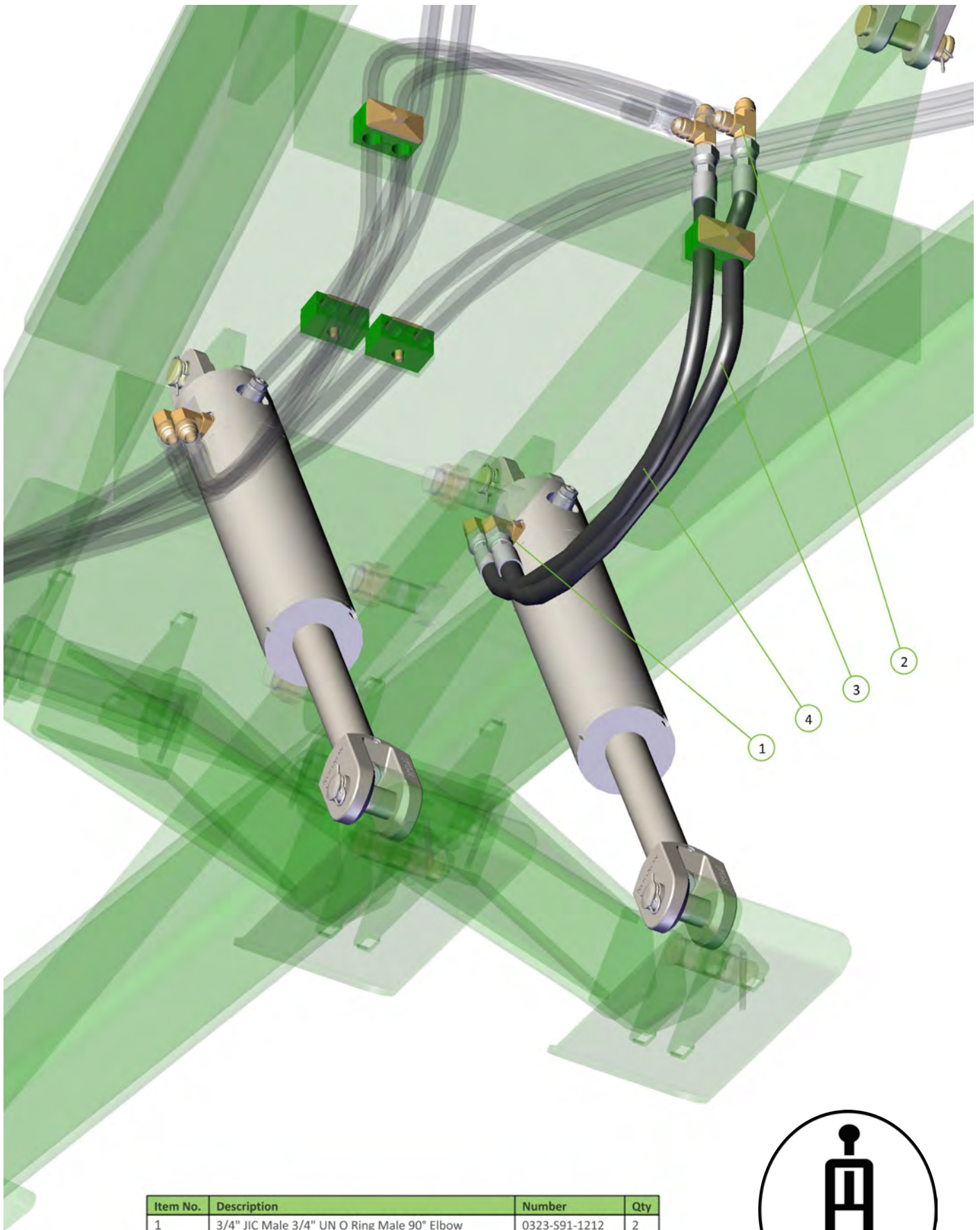
| Item No. | Description | Number | Qty |
|----------|---|---------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 90° Elbow | 0323-S91-1212 | 2 |
| 2 | TE tee to RH tail cyl extend port | PH65-40 | 1 |
| 3 | TR tee to RH tail cyl retract port | PH65-41 | 1 |





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

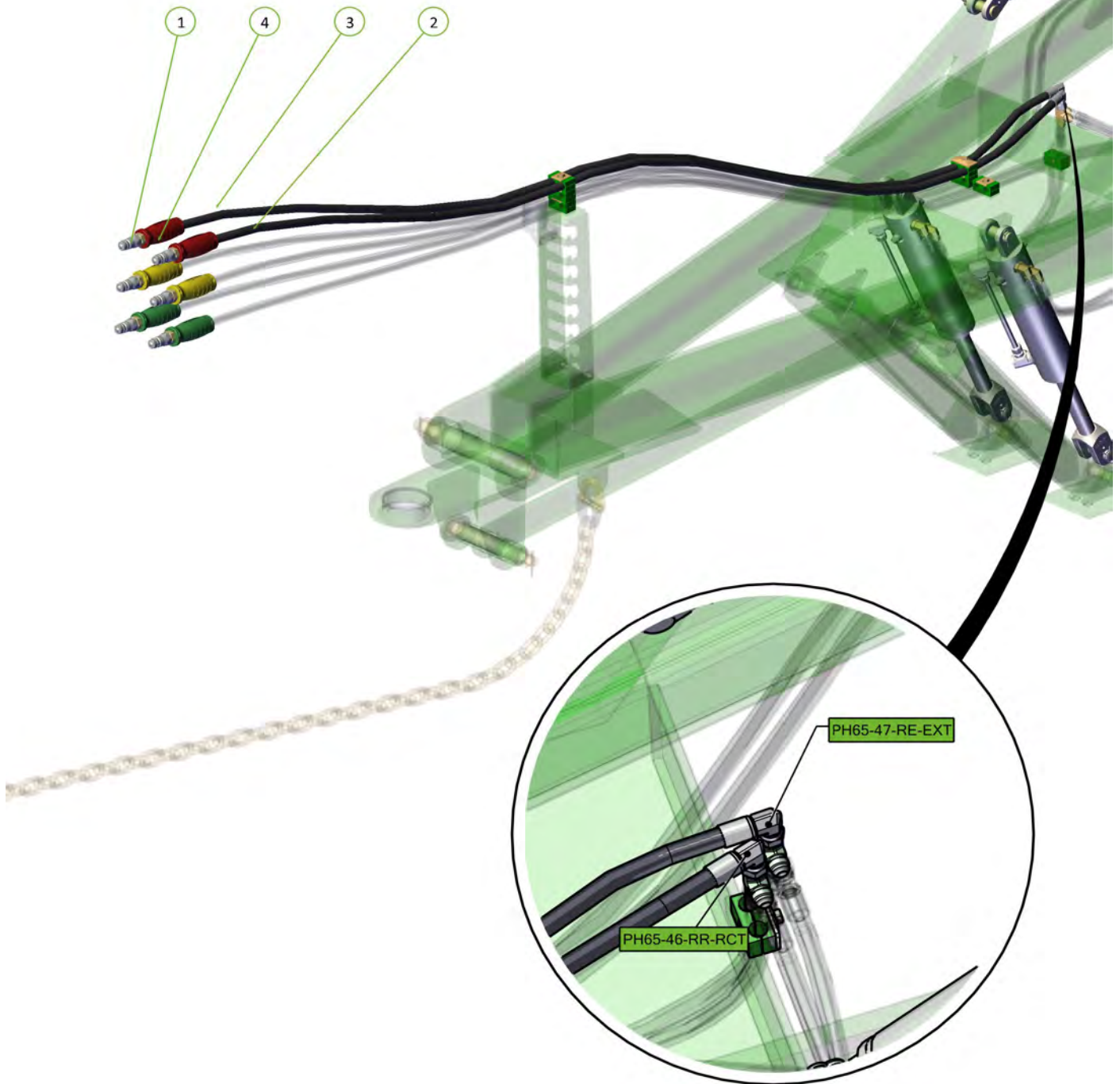




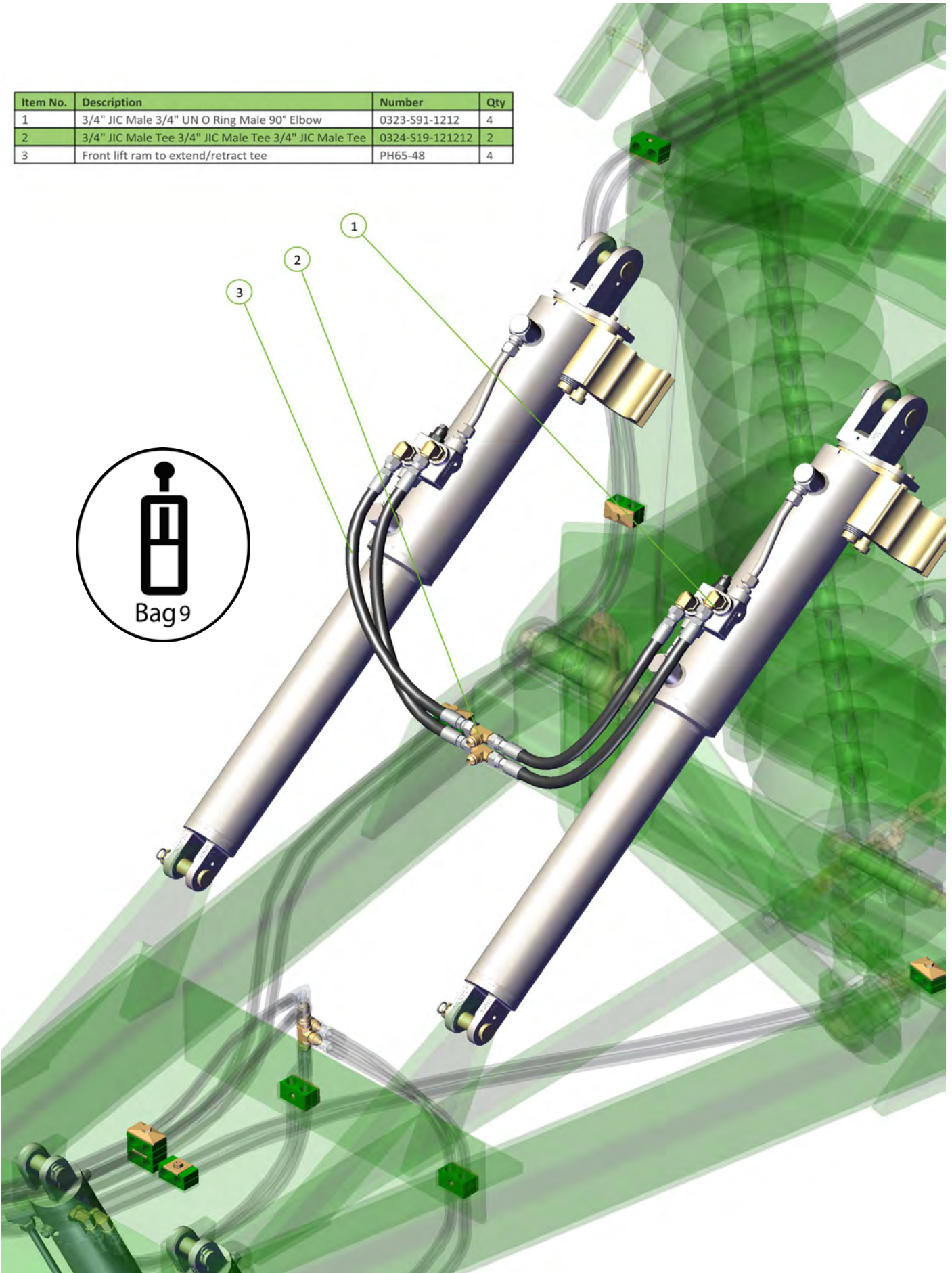
| Item No. | Description | Number | Qty |
|----------|---|-----------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 90° Elbow | 0323-S91-1212 | 2 |
| 2 | 3/4" JIC Male Tee 3/4" JIC Male Tee 3/4" JIC Male Tee | 0324-S19-121212 | 2 |
| 3 | RH Jack cyl to extend tee | PH65-42 | 1 |
| 4 | RH Jack cyl to retract tee | PH65-43 | 1 |



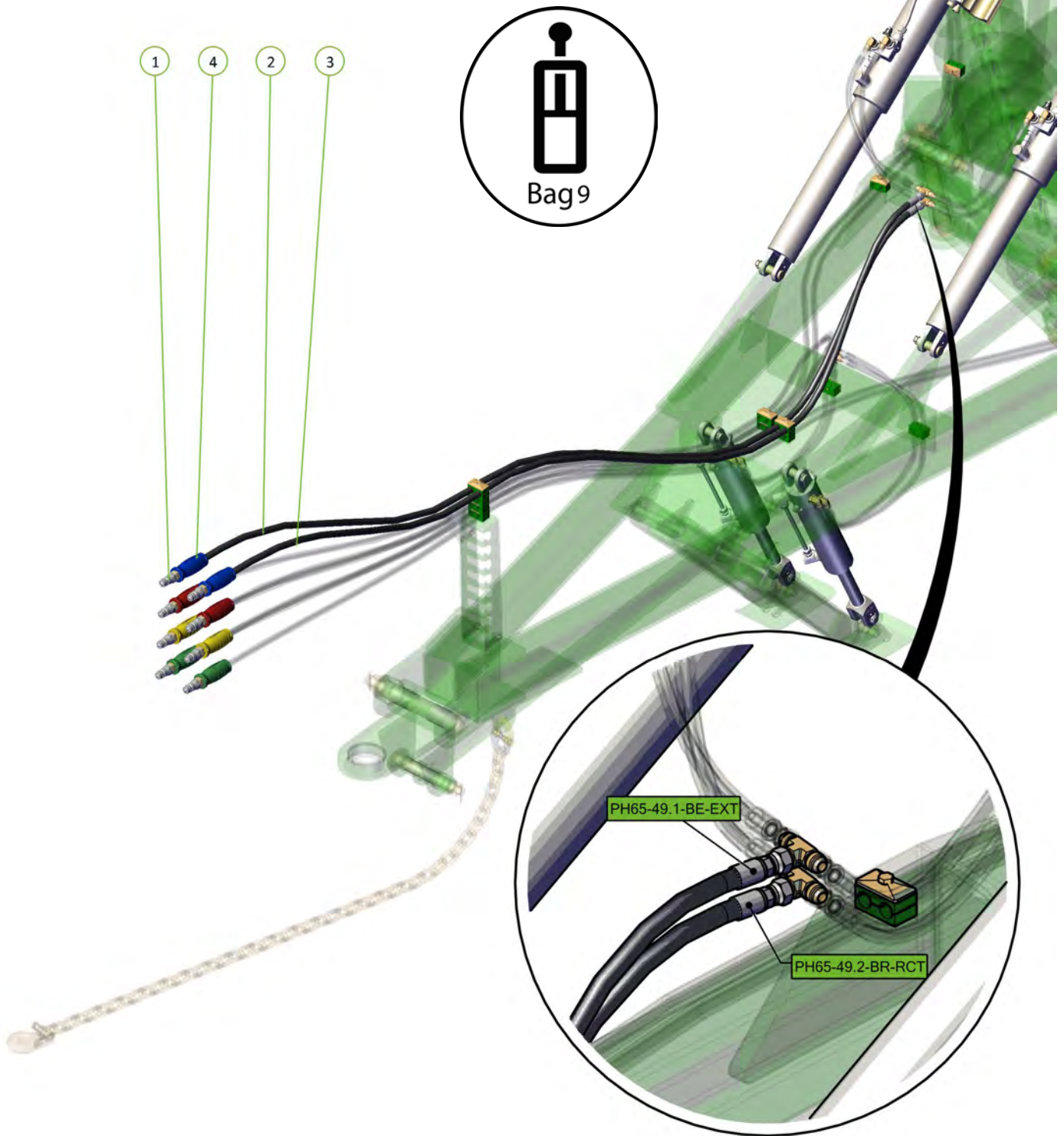
| Item No. | Description | Number | Qty |
|----------|--|------------------|-----|
| 1 | 1/2" BSPP QRC Ball Male Tip | 0325-R91-08M | 2 |
| 2 | Tractor to jack retract tee Fitted With Red Retract Grip | PH65-46-RR-RCT | 1 |
| 3 | Tractor to jack extend tee Fitted With Red Extend Grip | PH65-47-RE-EXT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

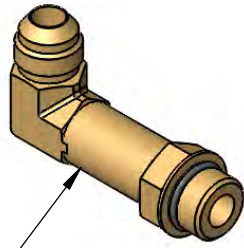


| Item No. | Description | Number | Qty |
|----------|---|-----------------|-----|
| 1 | 3/4" JIC Male 3/4" UN O Ring Male 90° Elbow | 0323-S91-1212 | 4 |
| 2 | 3/4" JIC Male Tee 3/4" JIC Male Tee 3/4" JIC Male Tee | 0324-S19-121212 | 2 |
| 3 | Front lift ram to extend/retract tee | PH65-48 | 4 |

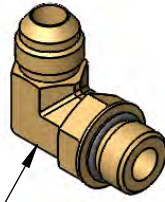


| Item No. | Description | Number | Qty |
|----------|---|------------------|-----|
| 1 | 1/2" BSPP QRC Ball Male Tip | 0325-R91-08M | 2 |
| 2 | TRACTOR TO FRONT CYLINDER RETRACT TEE FITTED WITH BLUE RETRACT GRIP | PH65-49.2-BR-RCT | 1 |
| 3 | TRACTOR TO FRONT CYLINDER EXTEND TEE FITTED WITH BLUE EXTEND GRIP | PH65-49.1-BE-EXT | 1 |
| 4 | Blue 1/2" NPT Hydra Grip Pair (Extend/Ret) | 0325-HG-PT20E20R | 1 |

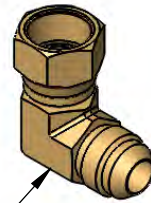




0323-S12-1212



0323-S91-1212



0323-S15-1212



0323-S71-0812



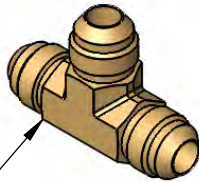
0323-S74-0812



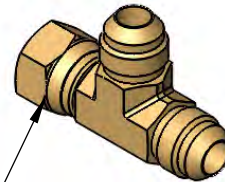
0323-S88-1212



0323-S90



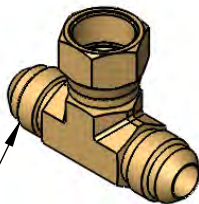
0324-S19-121212



0324-S67-121212



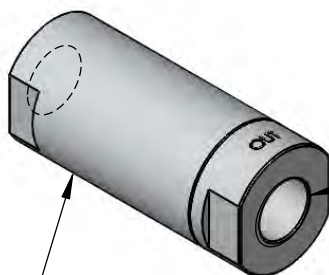
0324-S92-121212



0324-S68-121212



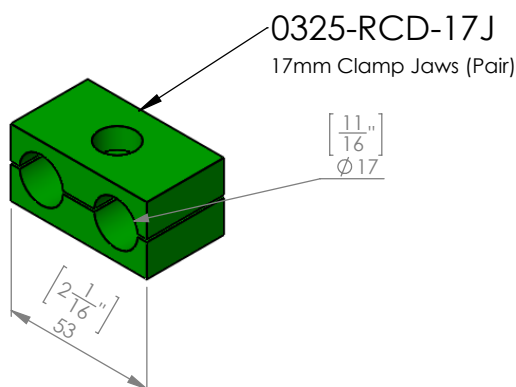
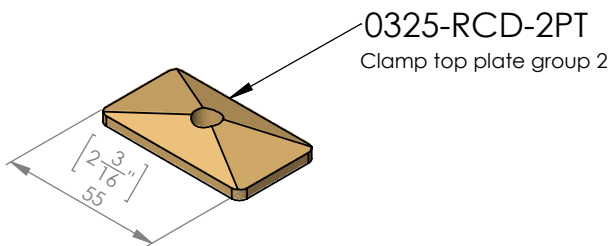
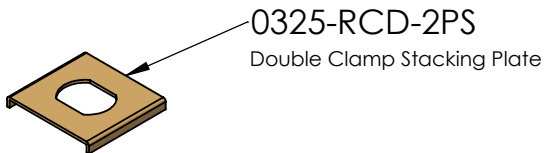
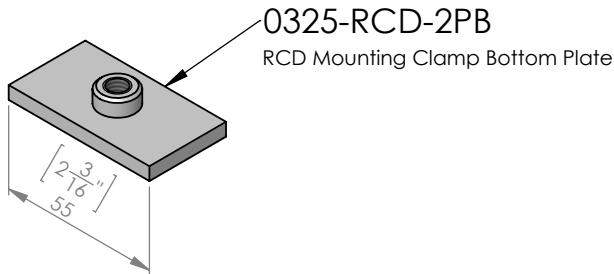
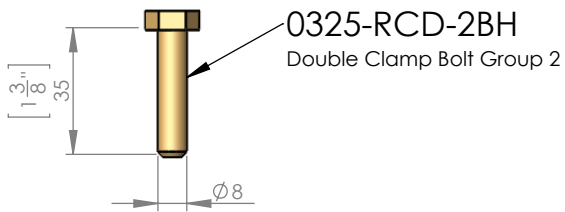
0325-R91-08M



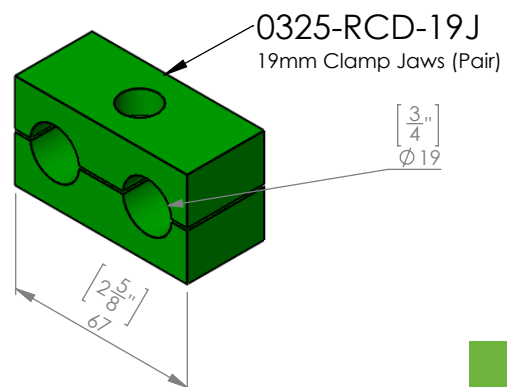
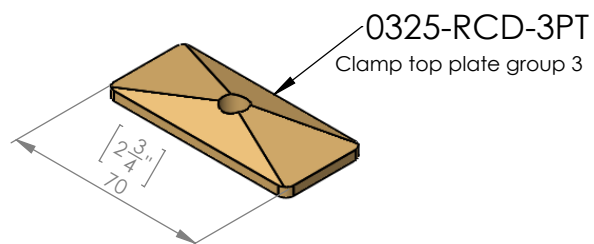
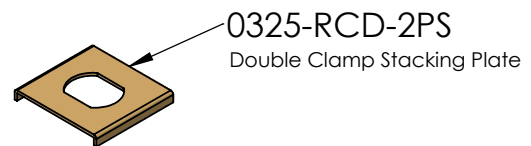
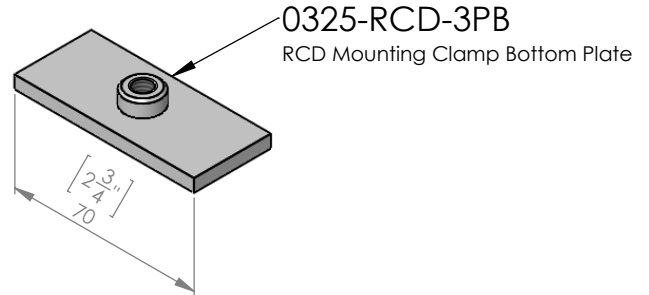
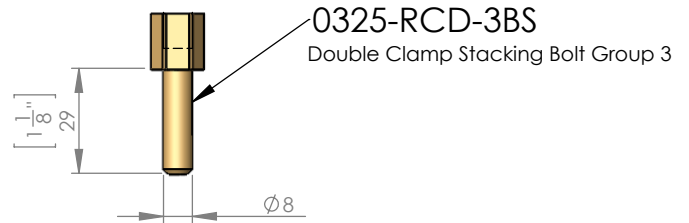
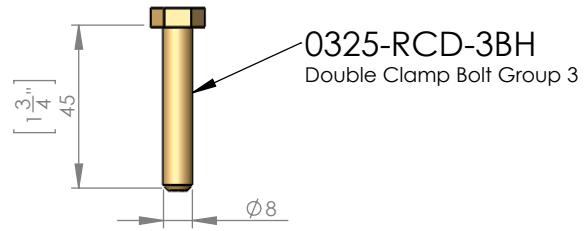
0343-924001261

Note: Fit this end to valve block

New Style Hose Clamp Components Fits Hose T5006A

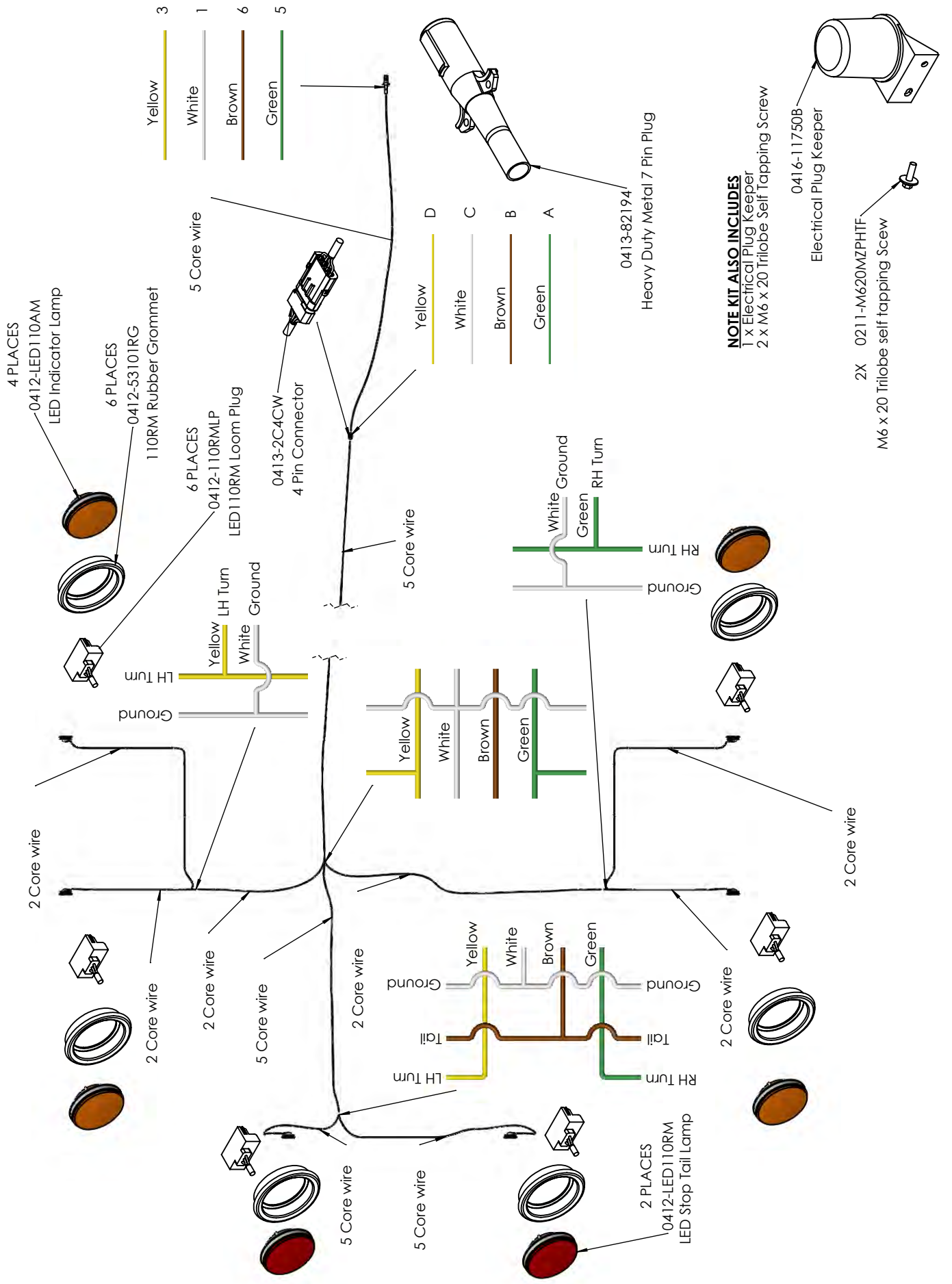


Old Style Hose Clamp Components Fits Hose T26A



Section 4

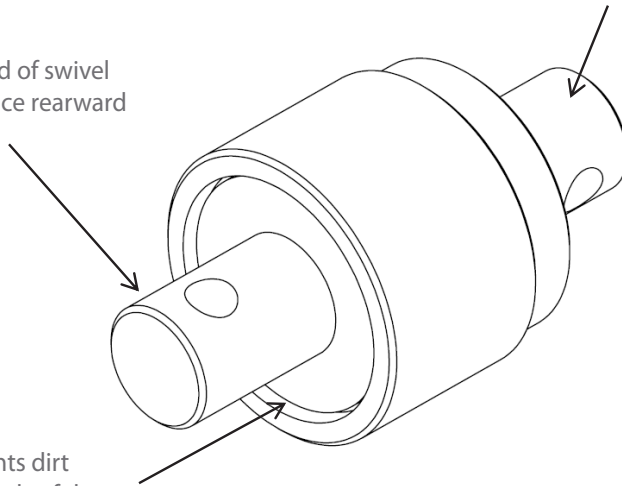
Diagrams & Charts



Mounting Swivels

Rotating seal end of swivel should always face rearward

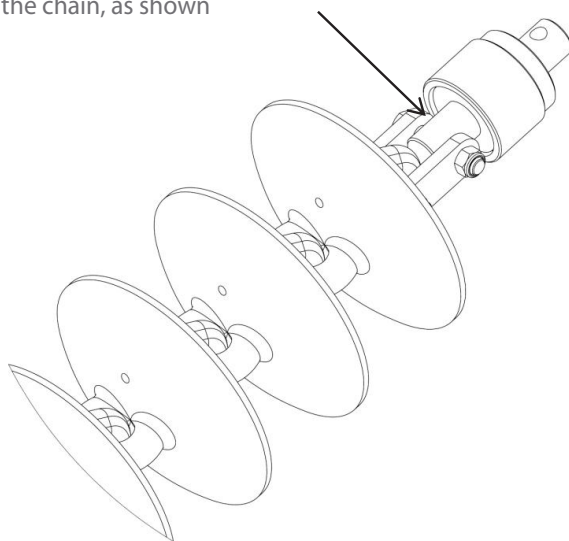
Fixed housing end of swivel should always face forward



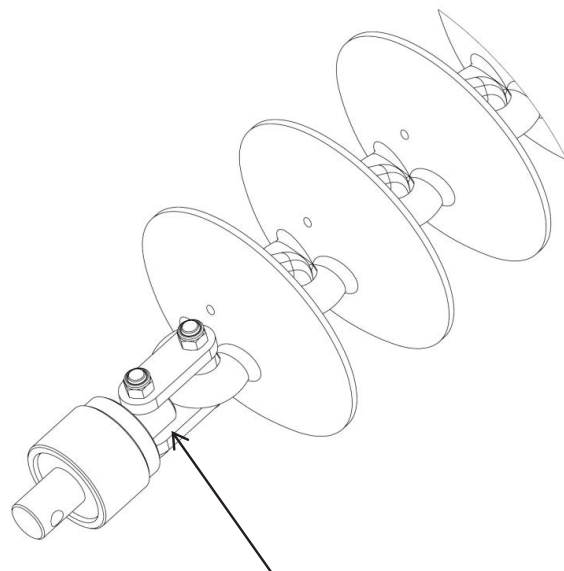
Mounting like this prevents dirt getting forced into the seals of the swivel increasing longevity of the swivel

For example

Swivels attached to the leading ends of the chains should have the rotating seal end attached to the chain, as shown

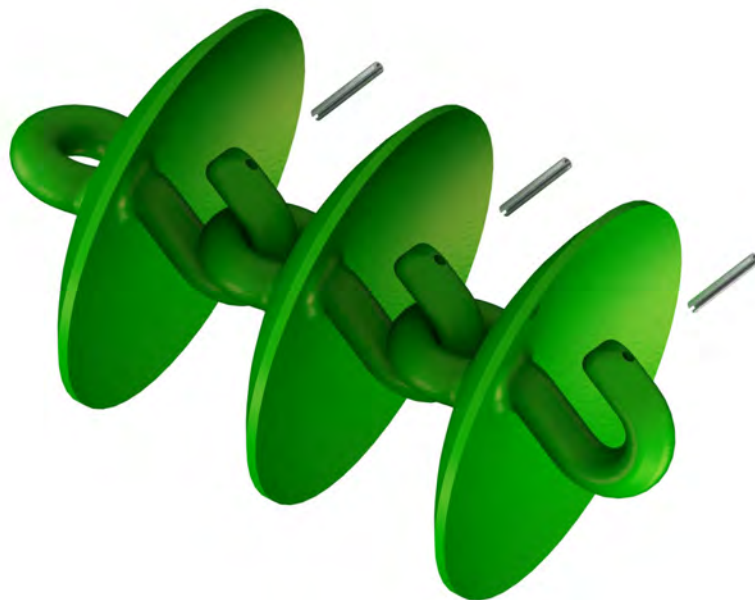
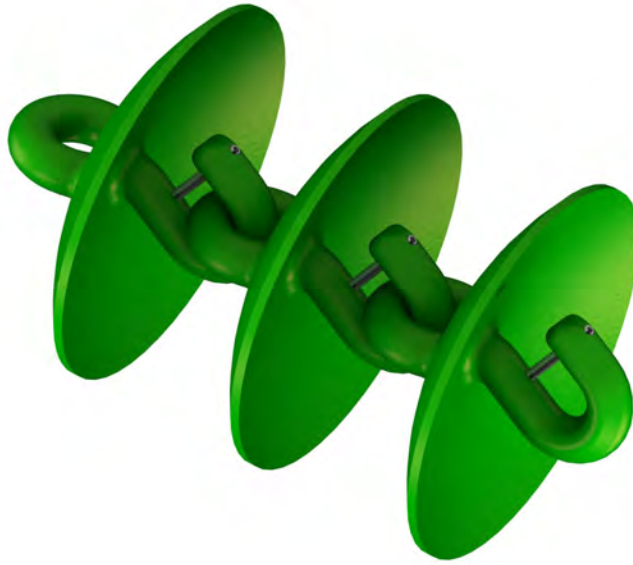


Swivels attached to the trailing ends of the chains should have the fixed housing end attached to the chain, as shown



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

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



Operating speeds

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

Tire pressure

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

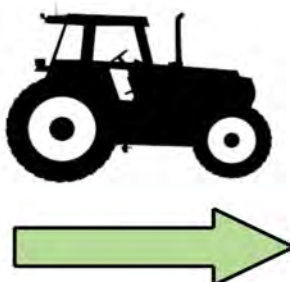
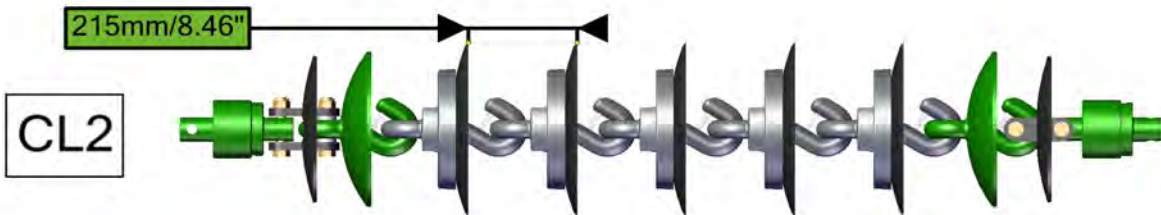
Chain Harrow specifications

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

| Model | | Length | CL2 | CL1 | W36 | R300 | SD49 | Prickle chain |
|----------------|---------------|-------------|---|-----|-----|------|------|---------------|
| | | | CL2 disc chain also requires CL1 disc chain | | | | | |
| 62' HDX | Front right | 37.1'/11.3m | CL2 - 52 CL1 - 2 | 71 | 70 | 93 | 93 | 129 |
| | Front left | 37.1'/11.3m | CL2 - 52 CL1 - 2 | 70 | 69 | 91 | 91 | 127 |
| | Rear right | 45.5'/13.9m | CL2 - 51 CL1 - 16 | 85 | 84 | 111 | 111 | 154 |
| | Rear left | 37.1'/11.3m | CL2 - 52 CL1 - 2 | 71 | 70 | 92 | 92 | 128 |
| | Modules front | 11.2'/3.4m | CL2 - 13 CL1 - 3 | 21 | 21 | 28 | 28 | 38 |
| | Modules rear | 11.2'/3.4m | CL2 - 14 CL1 - 2 | 21 | 21 | 28 | 28 | 38 |

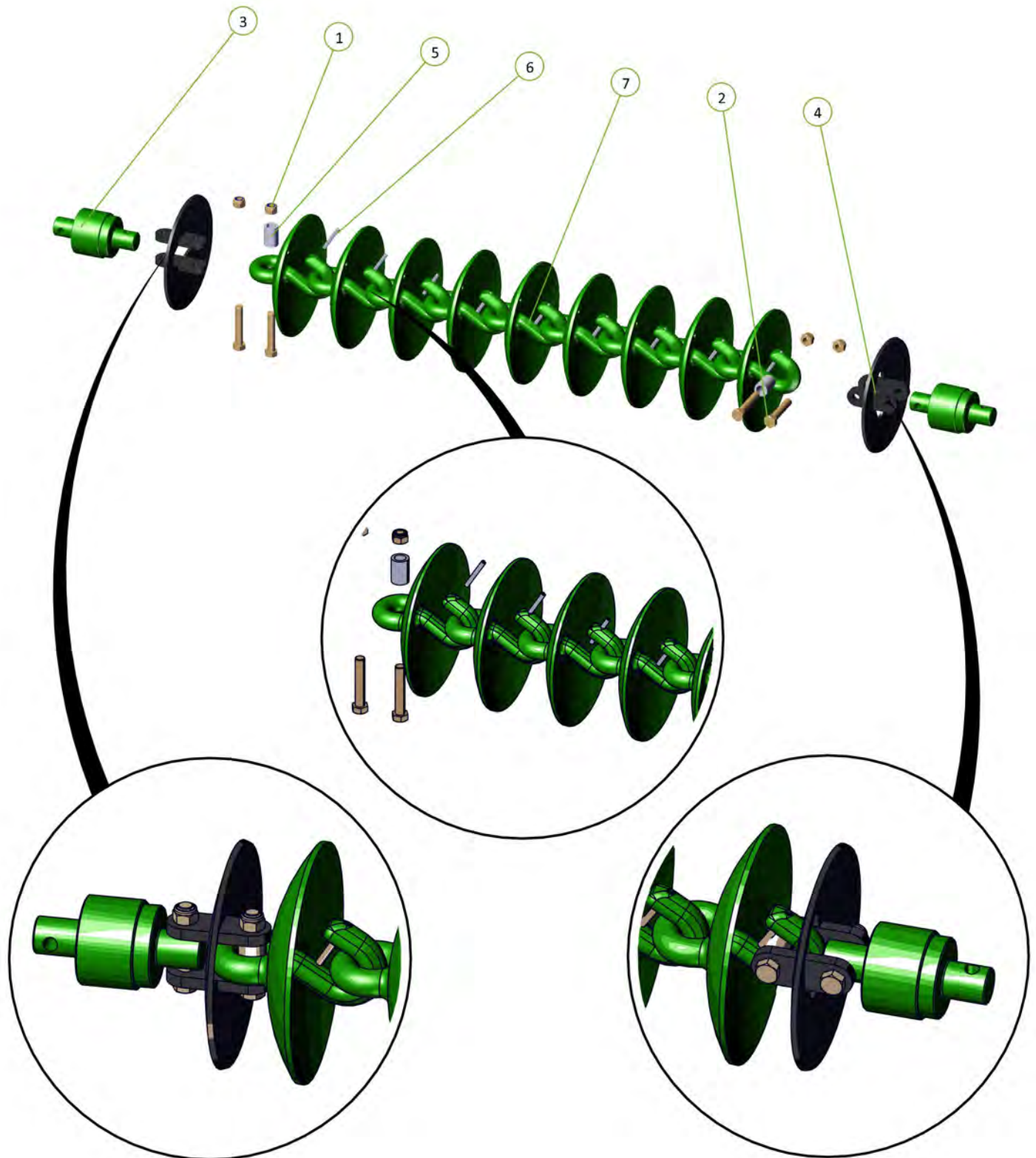
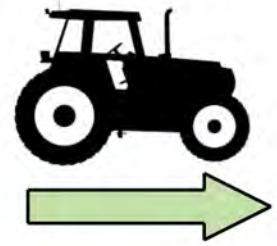
Section 5

Chain Assembly



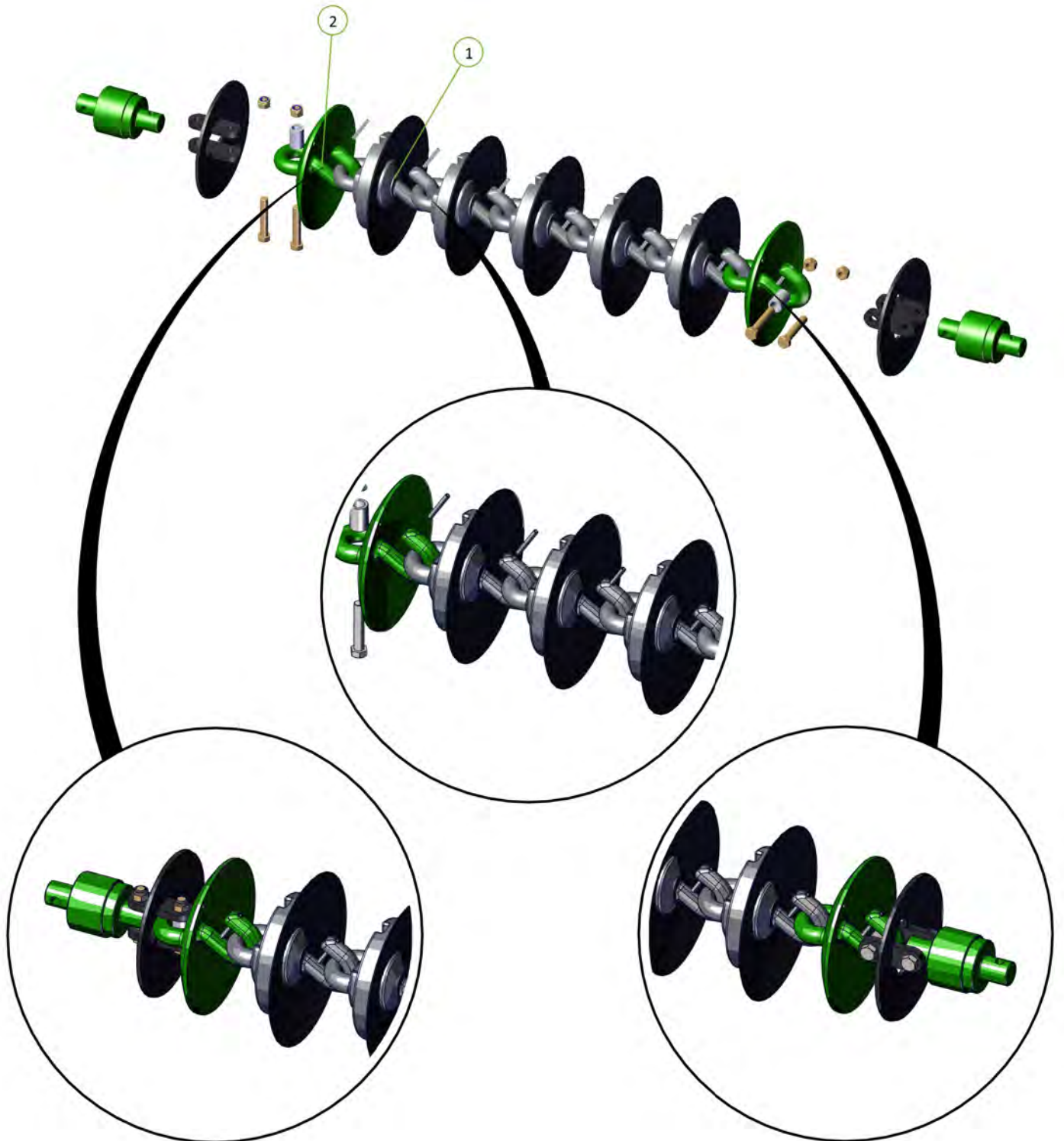
CL1 Disc Chain

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



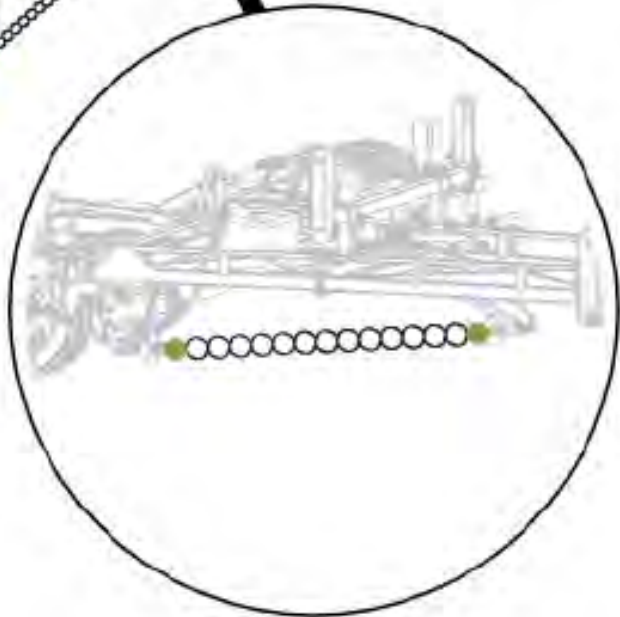
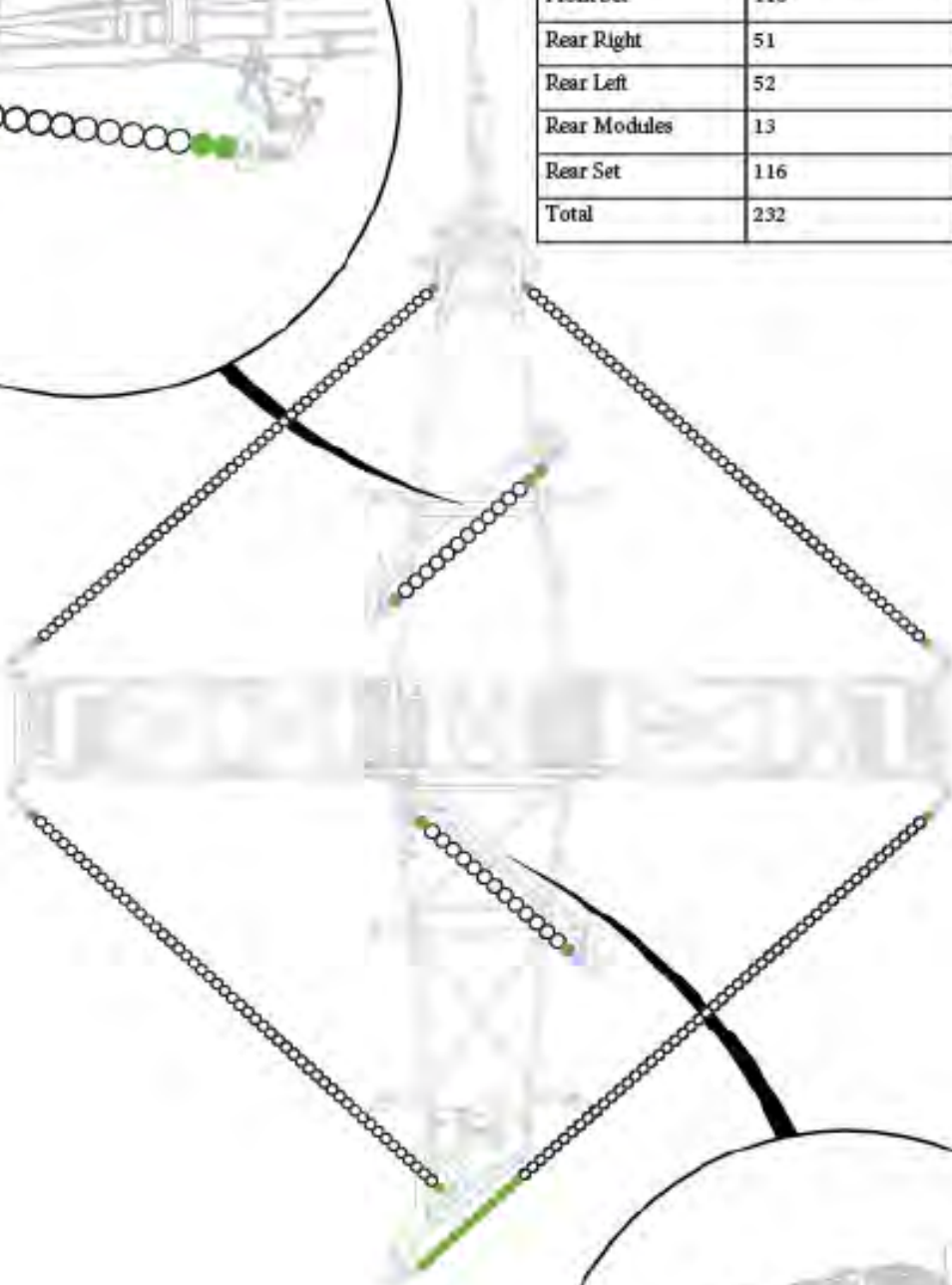
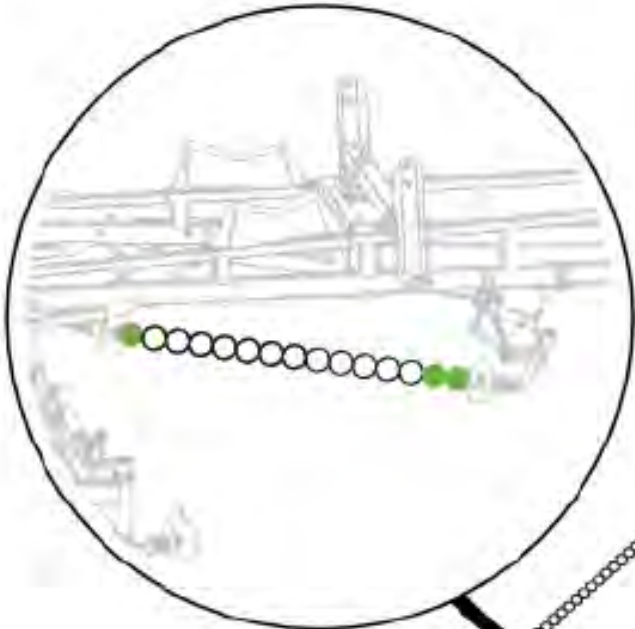
CL2 Disc Chain

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



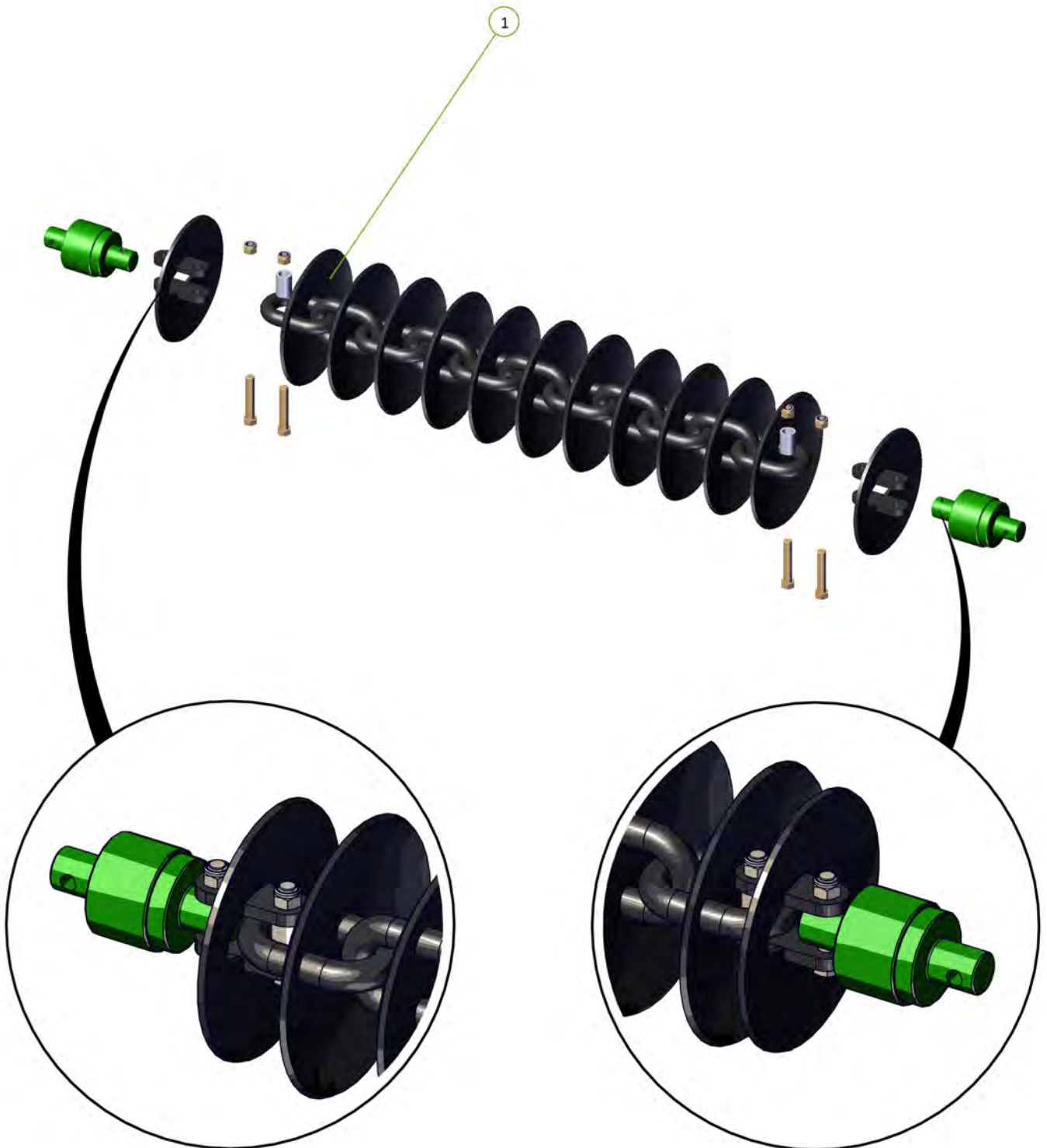
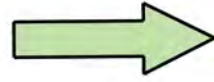
CL2 Disc Chain Layout

| Set | CL2 | CL1 |
|---------------|-----|-----|
| Front Left | 52 | 2 |
| Front Right | 52 | 2 |
| Front Modules | 12 | 3 |
| Front Set | 116 | 7 |
| Rear Right | 51 | 14 |
| Rear Left | 52 | 2 |
| Rear Modules | 13 | 2 |
| Rear Set | 116 | 18 |
| Total | 232 | 25 |



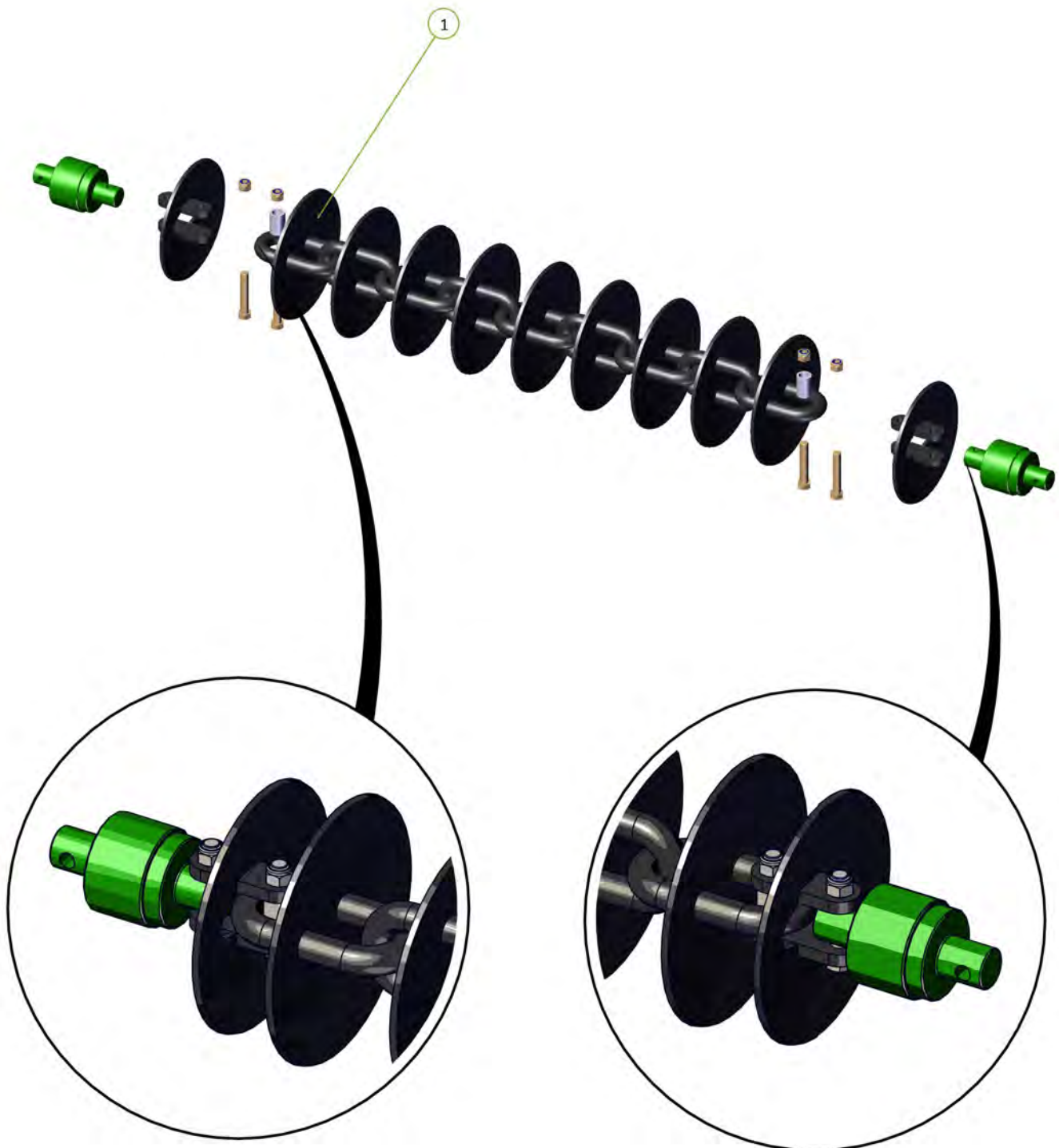
R300 Disc Chain

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



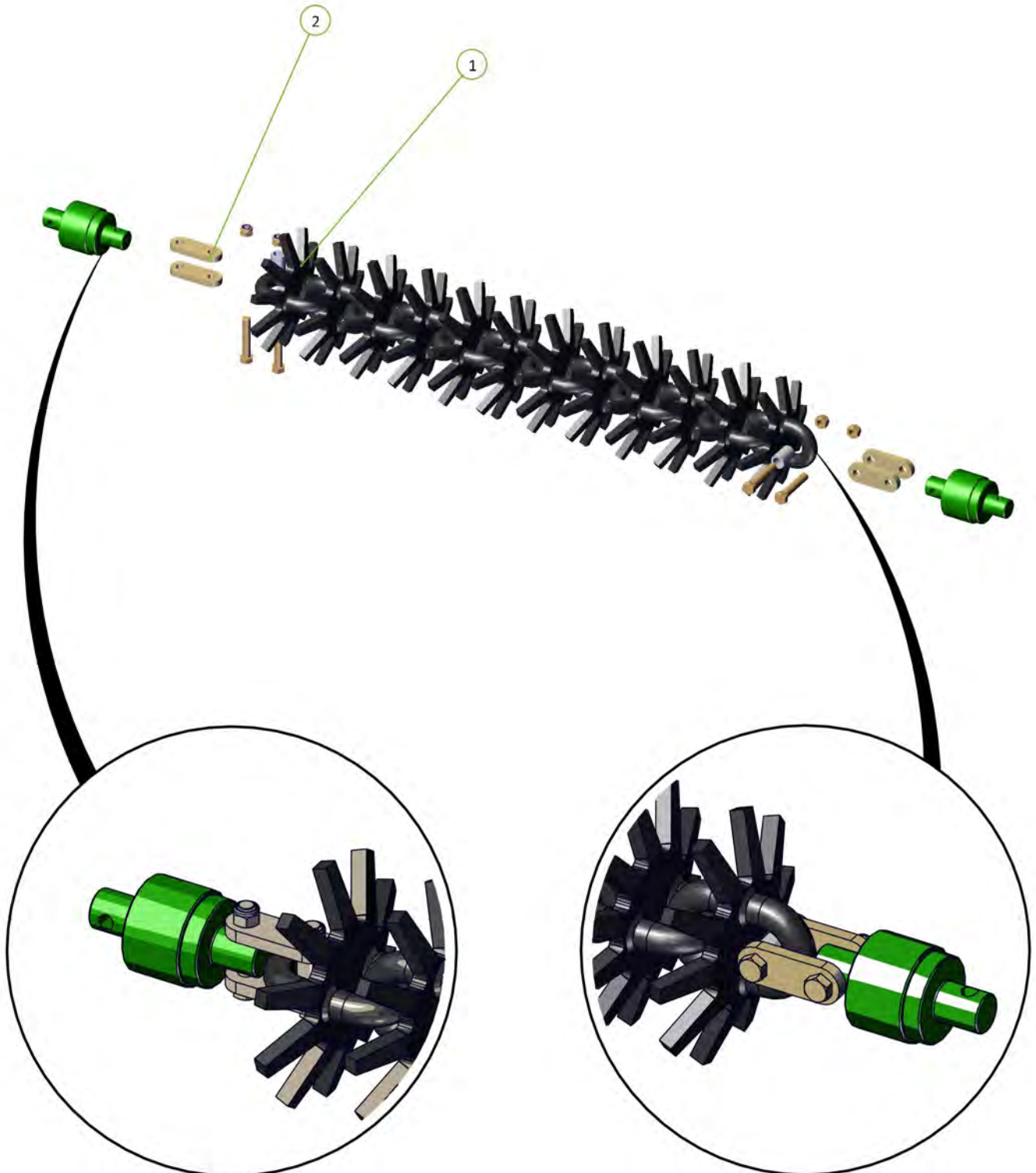
W36 Disc Chain

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



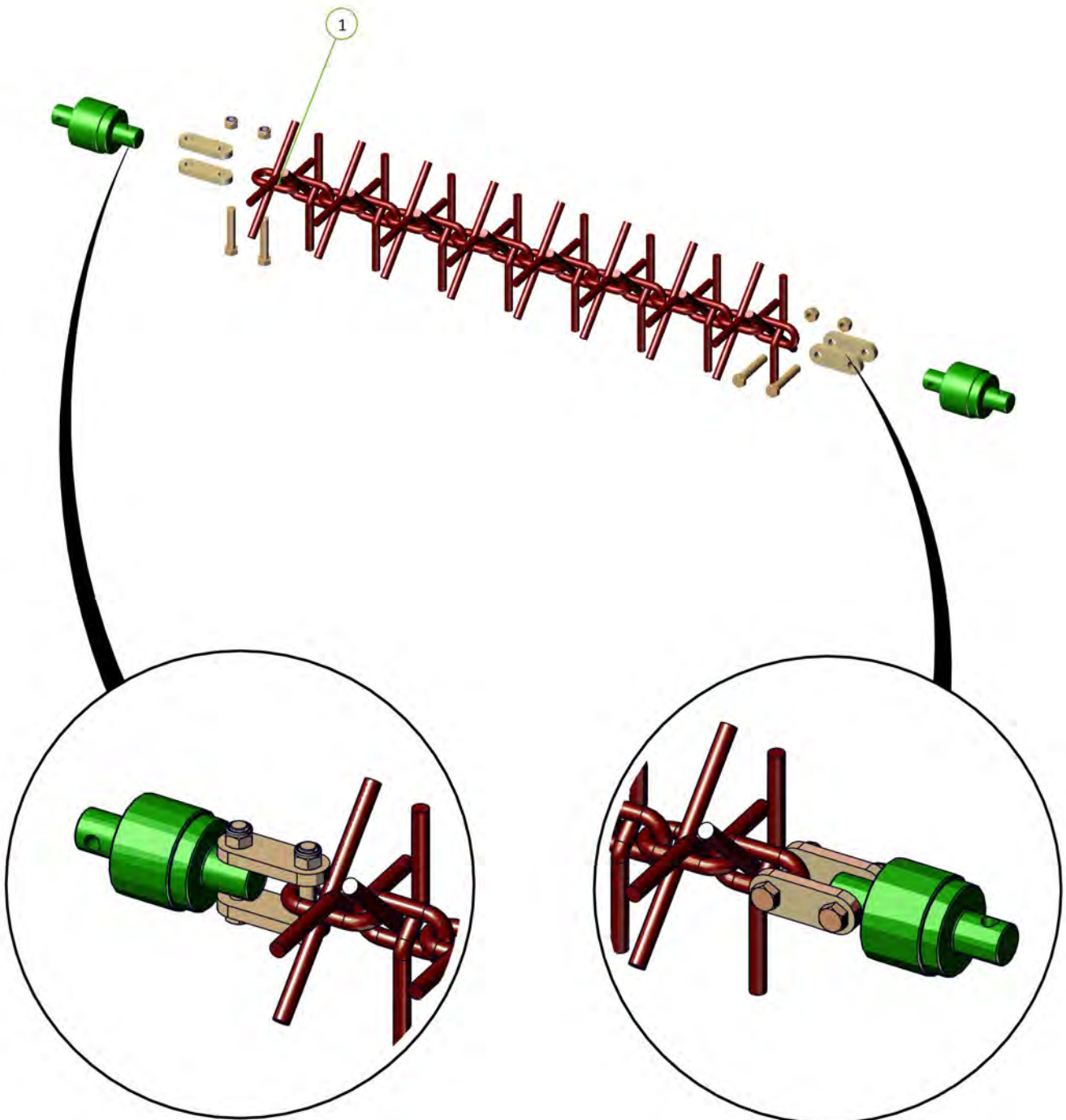
Spike Disc Chain

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



Prickle Chain

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



Section 6

Operation

Basic Operation

Unfolding:

1. Walk around and inspect the machine.
 - a. Check that chains are not hooked on framework
 - b. Check swivel bolts are in place and not broken
 - c. Check th at height adjusting chains have not fallen out of their slotted plates during transport.
 - d. Ensure front lift cylinder depth stops are fully engaged on cylinder shaft.
2. Lower front A frame to working height.
3. Unfold wings holding the hydraulic lever until both the main center cylinder pins have centered in their slots. (If chain pulls tight during unfold, stop and inspect if chain is hooked)
4. Lower rear tail by holding hydraulic lever until tail and modules are completely lowered to working position.
5. Walk around and check that all chain links are straight and that working height of all swivels is correct for field conditions. Adjust if necessary.
6. Move off with all chains in working position. If necessary it is acceptable to raise front A pull to transport height. This will lift the front chains off the ground and reduce the load on the tractor. Lower the front A pull once moving satisfactorily.

Folding:

1. Lower the front A frame to working height. (This is important to ensure that all chains locate correctly in their transport rests).
2. Raise the Rear Tail and modules by holding the hydraulic lever until they come to a complete stop.
3. Fold the wings. They should move as follows; main center cylinders will retract, one or both, until the wings stand vertically. The left outer wing then the right outer wing will fold down.
4. Raise front A frame to transport height.
5. Walk around and check that chains have located correctly in transport rests.
(30' only, close wing transport lock valves).

Setting for correct chain tension

Wings

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

See table below

Spring Compression Length

| Model | inches | mm |
|-------|--------|-----|
| 40 | 12.4 | 330 |

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



Modules

Loosen the lock nut on the draw bolt.

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

Retighten the lock nut.

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



Importance of chain tension

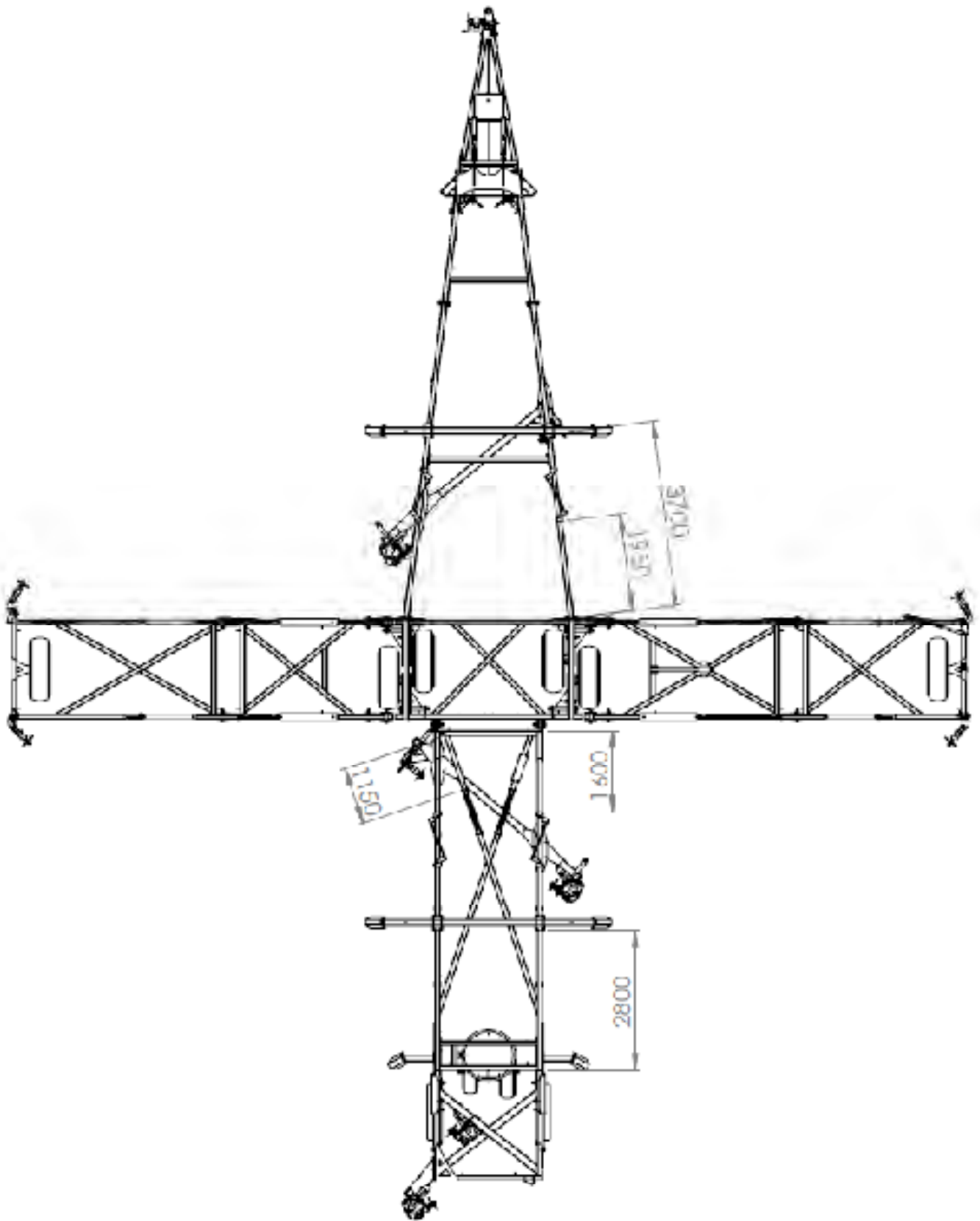
Operational

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

Loose chains lead to :

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

A correctly adjusted machine will not cause this phenomenon.



Name _____ Date _____ Location _____

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

Signature _____

