TRAILED TRIO

4.0m, 4.5m, 5.5m and 6.5m machines

2015
Operator Manual
and
Parts List

SUMO UK LIMITED
Agricultural Machinery Manufacturers

www.sumo1.com

Redgates
Melbourne
York
YO42 4RG
Tel. 01759 319900
Fax. 01759 319901

1.0 Registration

To activate your SUMO Warranty, you must complete this page and send it back to us at:

Sumo UK Ltd
Redgates
Melbourne
York
YO42 4RG
Tel. 01759 319900
Fax. 01759 319901

(NO REGISTRATION = NO WARRANTY)

SUMO SERIAL No:
For your own records.
(Serial plate on side of headstock)

Sumo Trailed Trio Registration Document

NAME:	
ADDRESS:	Postcode:
Telephone Number:	
DATE:	
SUMO SERIAL No. (Serial plate on side of headstock)	
DEALERSHIP NAME AND BRANCH:	
COMMENTS:	

order to obta

fill in this form and send back to us at:

Sumo UK Ltd
Redgates
Melbourne
York
YO42 4RG
Tel. 01759 319900
Fax. 01759 319901

SUMO SERIAL No:

Overall size:
tick where applicable

Small (38 chest)	
Medium (42 chest)	
Large (46 chest)	
Extra large (50 chest)	
XX Large (54 chest)	
XXX Large (58 chest)	

NAME:

ADDRESS:

2.0 Summary

The SUMO Trio, a unique one pass soil conditioning machine designed and manufactured in Britain, comprising as its name suggests of three parts, each of these tuned to comprehensively create the finish required.

Firstly

The ultra low draught shear bar protected Subsoiler legs are mounted in a staggered pattern on a heavy duty toolbar, adjusting to a maximum depth of 400mm (at the point) via pins. Due to the design of the legs and their mounting, when the shear bar does break, both the first and second rows of legs trip in a fashion which allows the point to come clear of the ground and to pass by the obstacle. These legs feature quick change points, shins and leg wear protectors.

Secondly

A double row of 500mm concave discs, mounted in pairs on independently suspended arms giving a shock-proof durable system with quality low maintenance triple sealed taper roller bearings. Double mounting gives unrivalled performance when working in adverse conditions.

Finally

The patented Multipacka is uniquely designed to fulfil a number of criteria, comprising, 609mm x 10mm tube mounted on heavy duty quality bearings fitted with notched cutting/ drive rings to keep turning in arduous conditions, giving a total diameter of 800mm. The ring shoulders feature a convex shape adjacent to the barrel, creating consolidation and cracking even on the top of the ridge. All these features make a packer which presses and firms to a higher quality with a lower power requirement than any other packer available.

Before using the SUMO Trio it is absolutely necessary that you read this Operators Manual and Safety Instructions attentively.

Specifications, descriptions and illustrations in this brochure are accurate, as known, at the time of publication but may be subject to change.

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4.0 Safety

This manual contains basic advice which should be observed during setting-up, operation and maintenance. Therefore, this operating manual must be read by the personnel concerned prior to starting up, using the machine and be available at all times.

If safety instructions are not complied with, then this can lead to the risk of injury to yourself and others as well as damage to the environment or the machine. Non-compliance to the safety instructions can also lead to claims for damages becoming invalid.

4.1 Qualification and Training

- Ensure that only reliable, authorized personnel work on or with the machine. Statutory minimum age limits must be observed.
- Employ only trained or instructed staff; the individual responsibilities of the personnel concerning operation, setting up, maintenance and repair must be clearly established.
- Define the machine operators' responsibilities – also with regard to observing traffic regulations. The operator must have the authority to refuse any instructions issued by third parties, which contravene safety.
- Persons undergoing training or instruction or taking part in a general training course should not be allowed to work on or with the machine unless they are under the constant supervision of an experienced person.
- The use of spare parts, accessories and ancillary equipment not supplied and/or not approved by SUMO could have detrimental effects to the construction of the SUMO machine or on its functions and hence impair the active and/or passive driving and/or operational safety (accident prevention).
- SUMO shall not be responsible for any damage caused by the use of spare parts, accessories and ancillary equipment not supplied and/or approved by SUMO.
- Conversions of or modifications to the machine may only be carried out after consultation with SUMO.

5.0 General safety

- Warning signs and other notices on the machine provide important information for the safe operation. Observing them will serve your safety.
- Before starting work, make yourself familiar with all the equipment and controls as well as their functions.
- The user should wear close-fitting clothing.
- Keep the machine and in particular the bearings clean to avoid risk of fire.
- Check around the machine before moving off or starting up (watch out for children!). Make sure you have adequate all-round visibility.
- Always match your speed to the local conditions. Avoid sudden turning manoeuvres when driving uphill or downhill or when travelling across a slope.
- Observe the respective regulations when using public roads.
- Take into account the length, the wide overhang, the folded height and the sideways force acting on the machine when turning or negotiating curves.

5.1 Special safety instructions

- Take extreme care when hitching up or unhitching machine to/from the tractor.
- Never allow persons to stand between the tractor and the machine unless the tractor is secured against rolling away by means of parking brake and/or wheel chocks.
- During transport, secure the packer (using both pins) to prevent shock loading when encountering road undulations.
- It is forbidden to allow persons to ride on the machine at any time. A safe distance should be maintained from the machine by observers when in work.
- Never stand or work beneath suspended loads.
- Ensure all persons are stood clear of the machine when folding or unfolding.
- When making adjustments to the machines care should be taken not to trap any body parts in moving or pivoting parts.
- When making adjustments to the machine the tractor engine should be switched off to prevent the hydraulics from operating.

6.0 Operation and Adjustment

6.1 Operating

Optimum soil conditioning will occur when the Trio wing frames are running horizontal (parallel with the ground). The recommended method to set up the machine to run level requires the desired working depth to be set via pin adjustment on the packer, and then to bring the wings level, add or remove slices from the drawbar ram. The chassis should run slightly nose end down.

Forward working speed should be governed by the local conditions as well as the finish produced by the Sumo Trio.

6.2 Adjustments

Depth adjustment of the Subsoiler legs is achieved by firstly removing the R-clip and the shear pin on a Shear pin machine or alternatively just the leg pin on a Auto reset . The leg can then be lifted or lowered to the required position and then the shear pin and clip should be replaced. The maximum leg depth is 400 mm. The easiest and most accessible way to change the leg depths (if available) is to fold the wings up and slide the legs in or out.

To adjust the disc working depth, the weight must first be taken off the packer arms before the lynch pins and depth pins are removed. A new depth position can then be selected by replacing the pins in higher or lower holes. The disc unit slices, mixes and cultivates the top 50 - 100mm of soil.

6.3 Auto-Reset Legs

The pressure in the hydraulic circuit controlling the auto-reset Subsoiler legs can be altered depending on circumstances and preference up to a maximum of 120 bar. (Exceeding this pressure may result in damage to the machine). The higher the hydraulic pressure, the more resistance the legs have to tripping.

To alter the pressure in the hydraulic circuit:

1. Fold wings down
2. Change line A of the Auto- Reset circuit.
3. The pressure is set according to the Auto-Reset valve block (mounted on the side of the chassis).
   The large gold/silver knob with lock-off ring can be adjusted in & out.
   Wind in for more resistance.
   Try one at at a time.
4. Once a change has been made to the pressure setting, cycle the legs up and down again to set the pressure in the circuit.
5. Even though the pressure is locked in the circuit, this system does remain active in that the legs work position
6. it is advisable that the legs are retracted when the machine is folded for transport; in order to make the machine narrower

DO NOT TIGHTEN POINTS UP WITH AIR RACHETS OR OVER TIGHTEN WITH SPANNERS. EXCESSIVE TIGHTENING WILL RESULT IN POINTS CRACKING

7.0 Maintenance

The packer bearings should be greased with one pump once a week and after washing off.

The disc bearings should be greased until old grease is forced out once a week when in normal use and after washing off.

The condition of the subsoiler legs, the points and the discs should be regularly monitored in order to maintain the most efficient use of the machine.

Wheel studs should be checked that they tight after the first 10hrs operation and again regularly every week when in use. They should be tightened to a torque setting of 450Nm.

Tyre pressures should be set to 20 PSI and regularly checked

The condition and position of the packer scrapers should also be observed in order to prevent soil building up on the packer. Ensure the scrapers are not touching the packer though, as this will add rolling resistance as well as causing premature wear of the packer.

Grease points requiring one pump every 50 hours are located on rams, wing hinge bushes, drawbar hinge bushes front and back, both top and bottom elements. Exposed chrome ram rods should also be greased weekly to prevent these valuable parts from rusting and causing costly oil leaks.

7.1 Spares

When ordering replacement parts please have your serial number, part numbers (listed in Section 6.0) and quantities at hand.

7.2 Winter storage

When machines are to be parked up for the winter period, correct storage techniques are an important part of protecting the machine to ensuring a hassle free season. When the machine has finished work it should be cleaned down and washed off to remove all traces of soil.

Following washing off, the packer bearings should be greased with one pump and the disc bearings should be greased until old grease is forced out. Other grease points are located on all rams, wing hinge bushes and drawbar hinge bushes, and these should receive two or three pumps of grease.

Wheel studs should be checked that they are tight. Tyre pressures should also be checked to ensure there is not a slow puncture before entering storage.

When the machine is parked up a note should be made of what wearing parts require replacing ready for the next seasons work. The wearing parts can then be ordered in time ready for the next season's work in good time to avoid delays when the machine is required earlier than expected!

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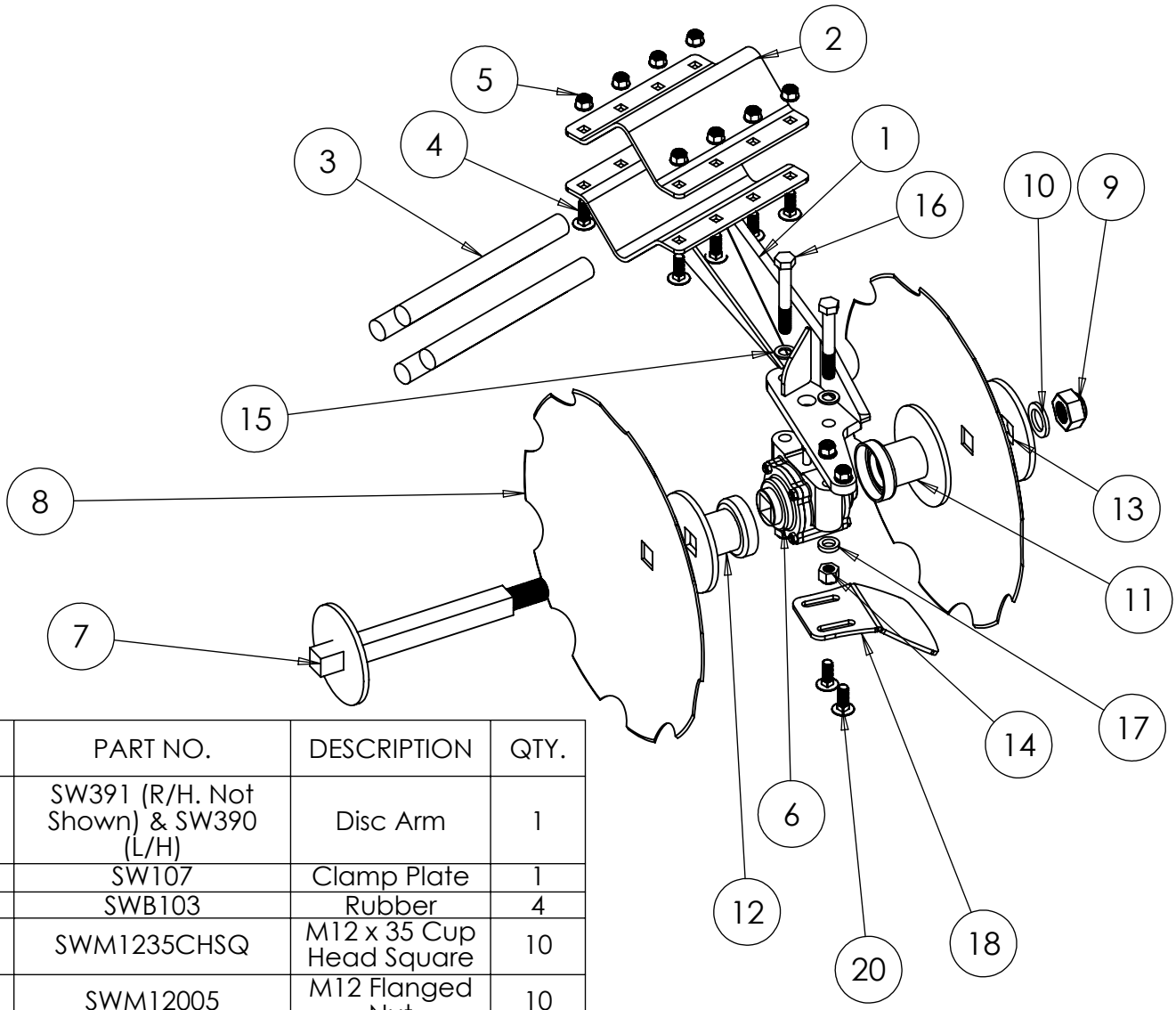
8.18 stickers and paint

Sticker	Description	Quantity	Part No.
	Big Sumo horizontal sticker 450 x 125mm	2	SWB125
	Big Trio sticker 320 x 125mm	2	SWB126
	Big Union Jack sticker 150 x 100mm	2	SWB127
	Vertical Sumo sticker 80 x 295mm	2	SWB128
	Small Union Jack sticker	2	SWB129
	Small Sumo Horizontal Sticker	4	SWB130
Sumo touch - up paint	Sumo Red	1/2 Litre	SWB131
	Sumo Black	1/2 Litre	SWB132

8.1 Twin Disc Unit



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	SW391 (R/H. Not Shown) & SW390 (L/H)	Disc Arm	1
2	SW107	Clamp Plate	1
3	SWB103	Rubber	4
4	SWM1235CHSQ	M12 x 35 Cup Head Square	10
5	SWM12005	M12 Flanged Nut	10
6	SWB102	Bearing	1
7	SW101	Twin Disc Axle	1
8	SWB101	20" Scalloped Disc	2
9	SWM3004	M30 Nylock Nut	1
10	SWM30001	M30 Washer	1
11	SW103	Dust Cover and Convexed Disc	1
12	SW102	Dust Cover and Concaved Disc	1
13	SW108	Disc Axle Washer	1
14	SWM16004	M16 Nylock Nut	2
15	SWM16001	M16 Washer	2
16	SWM16120	M16 x 120 Bolt	2
17	SW1153	M16 Washer (Thick)	2
18	SW646	Disc Scraper	1
19	SWB184	18" Scalloped Disc (end of disc row, Not Shown)	1
20	SWM1240CHSQ	M12 x 40 Cup Head Square	2

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trio

TITLE:

Twin Disc Unit Assembly

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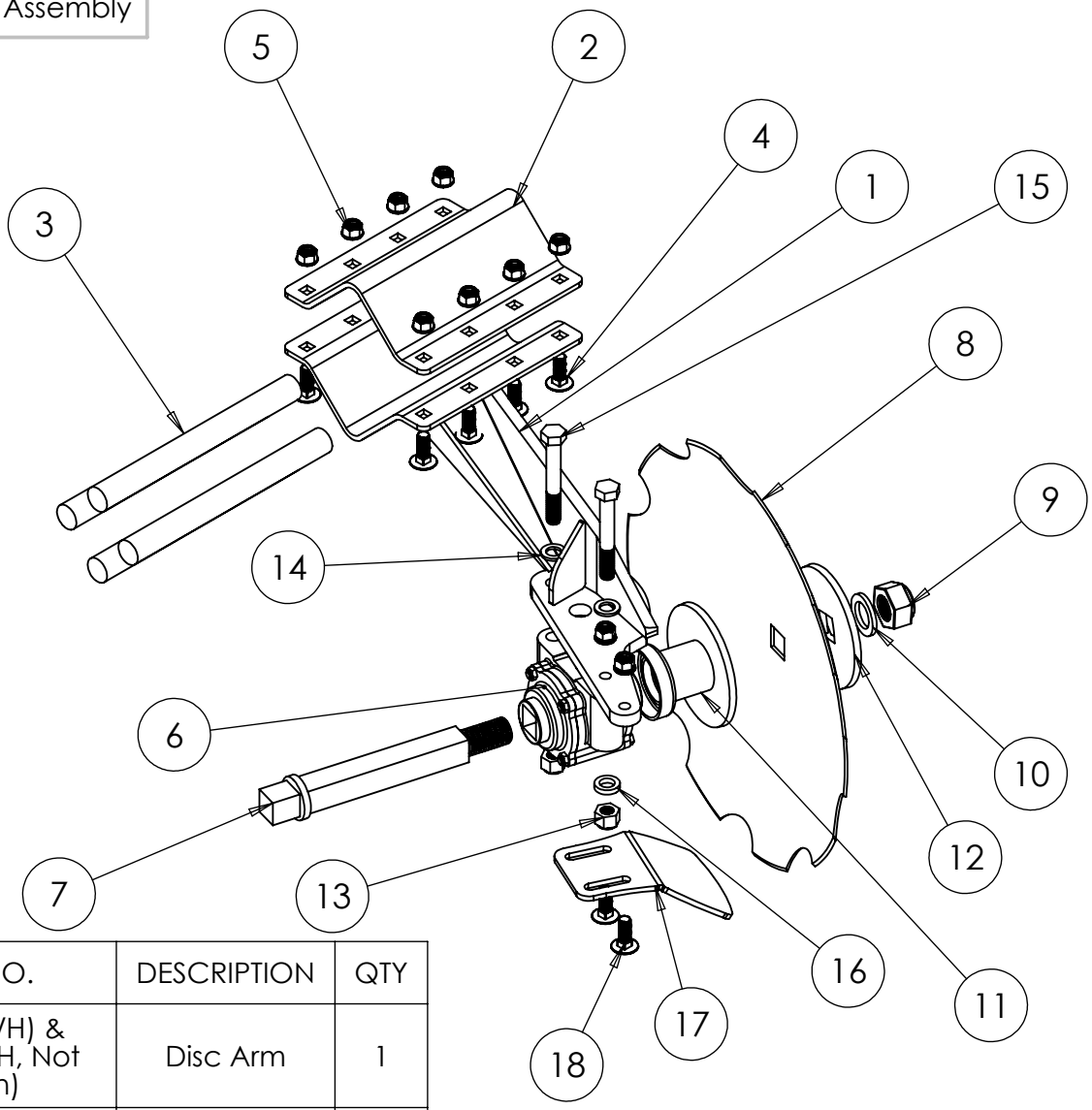
8.2 Single Disc Unit Assembly



ITEM NO.	PART NO.	DESCRIPTION	QTY
1	SW390 (L/H) & SW391 (R/H, Not Shown)	Disc Arm	1
2	SW107	Clamp Plate	1
3	SWB103	Rubber	4
4	SWM1235CHSQ	M12 x 35 Cup Head Square	10
5	SWM12005	M12 Flanged Nut	10
6	SWB102	Bearing	1
7	SW109	Single Disc Axle	1
8	SWB101	20" Scalloped Disc	1
9	SWM30004	M30 Nylock Nut	1
10	SWM30001	M30 Washer	1
11	SW103	Dust Cover and Convexed Disc	1
12	SW108	Disc Axle Washer	1
13	SWM16004	M16 Nylock Nut	2
14	SWM16001	M16 Washer	2
15	SWM16120	M16 x 120 Bolt	2
16	SW1153	M16 Washer (Thick)	2
17	SW646	Disc Scraper	1
18	SWM1240CHSQ	M12 x 40 Cup Head Square	2

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trio

TITLE:

Single Disc Unit Assembly

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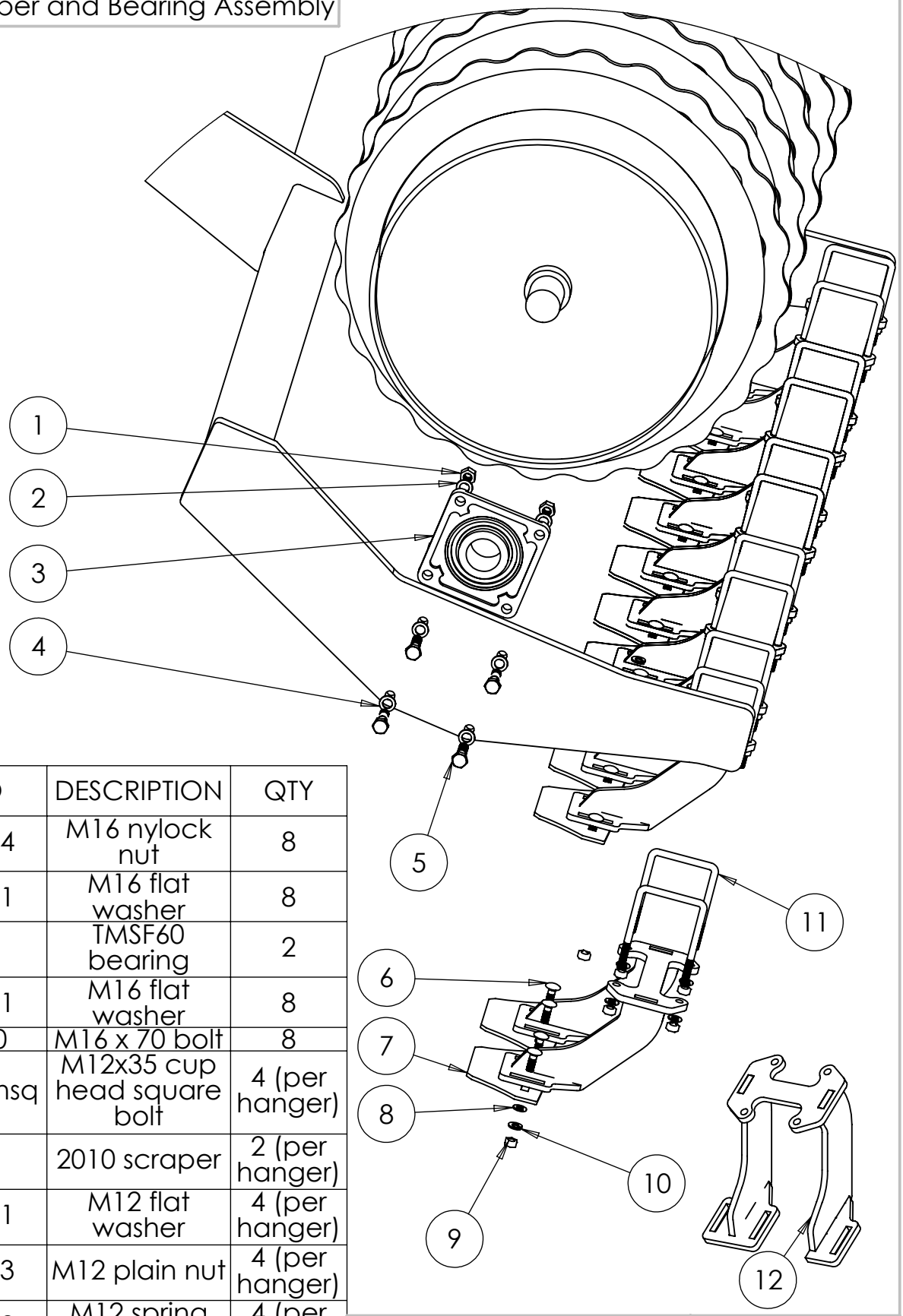
8.3 Packer, Scraper and Bearing Assembly



ITEM NO	PART NO	DESCRIPTION	QTY
1	SWM16004	M16 nylock nut	8
2	SWM16001	M16 flat washer	8
3	SWB104	TMSF60 bearing	2
4	SWM16001	M16 flat washer	8
5	SWM1670	M16 x 70 bolt	8
6	SWM1235chsq	M12x35 cup head square bolt	4 (per hanger)
7	SW651	2010 scraper	2 (per hanger)
8	SWM12001	M12 flat washer	4 (per hanger)
9	SWM12003	M12 plain nut	4 (per hanger)
10	SWM12002	M12 spring washer	4 (per hanger)
11	SWM12100UB	M12 x 100 U-Bolt	2 (per hanger)
12	SW962	2010 scraper mount (L/H)	1
13	SW963	2010 Scraper mount (R/H) Not Shown)	1
14	SW664	Middle Small Scraper (not shown)	2

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed Trio

TITLE: Packer, Scraper and Bearing Assembly

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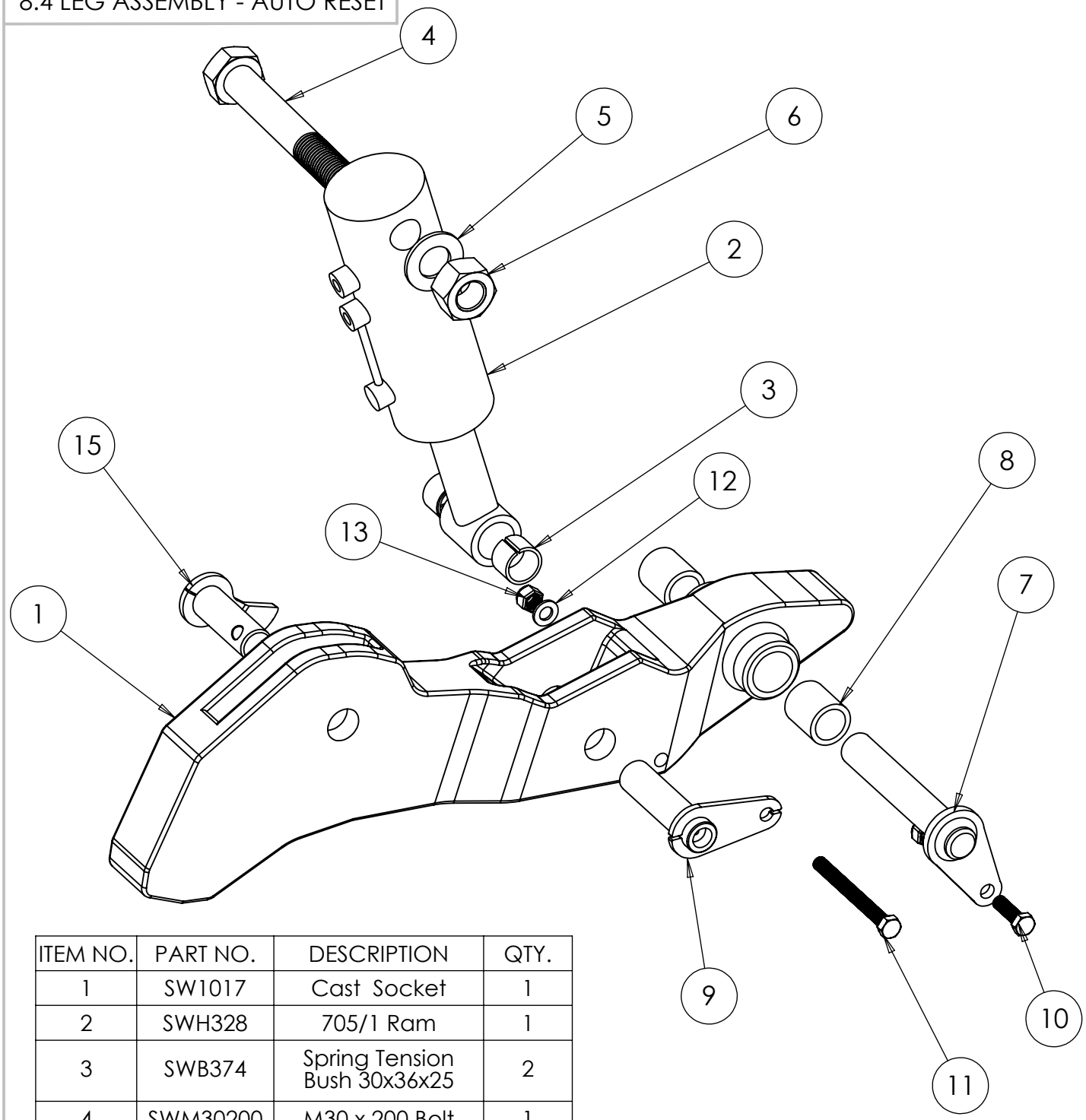
8.4 LEG ASSEMBLY - AUTO RESET



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	SW1017	Cast Socket	1
2	SWH328	705/1 Ram	1
3	SWB374	Spring Tension Bush 30x36x25	2
4	SWM30200	M30 x 200 Bolt	1
5	SWM30001	M30 Washer	1
6	SWM30004	M30 Nylock Nut	1
7	SW183	30mm x 170mm Tabbed Pin	1
8	SW188	30x40x45mm PB1 Bush	2
9	SW1192	30mm x 120mm Tabbed Pin c/w Grease Nipple (L/H & R/H)	1
10	SWM1240	M12 x 40 Bolt	1
11	SWM12130	M12 x 130 bolt	1
12	SWM12001	M12 Washer	2
13	SWM12004	M12 Nylock Nut	2
14	SWB105	Lynch Pin	1
15	SW451	Leg Depth Pin	1

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trio

TITLE:

Auto Reset Assembly

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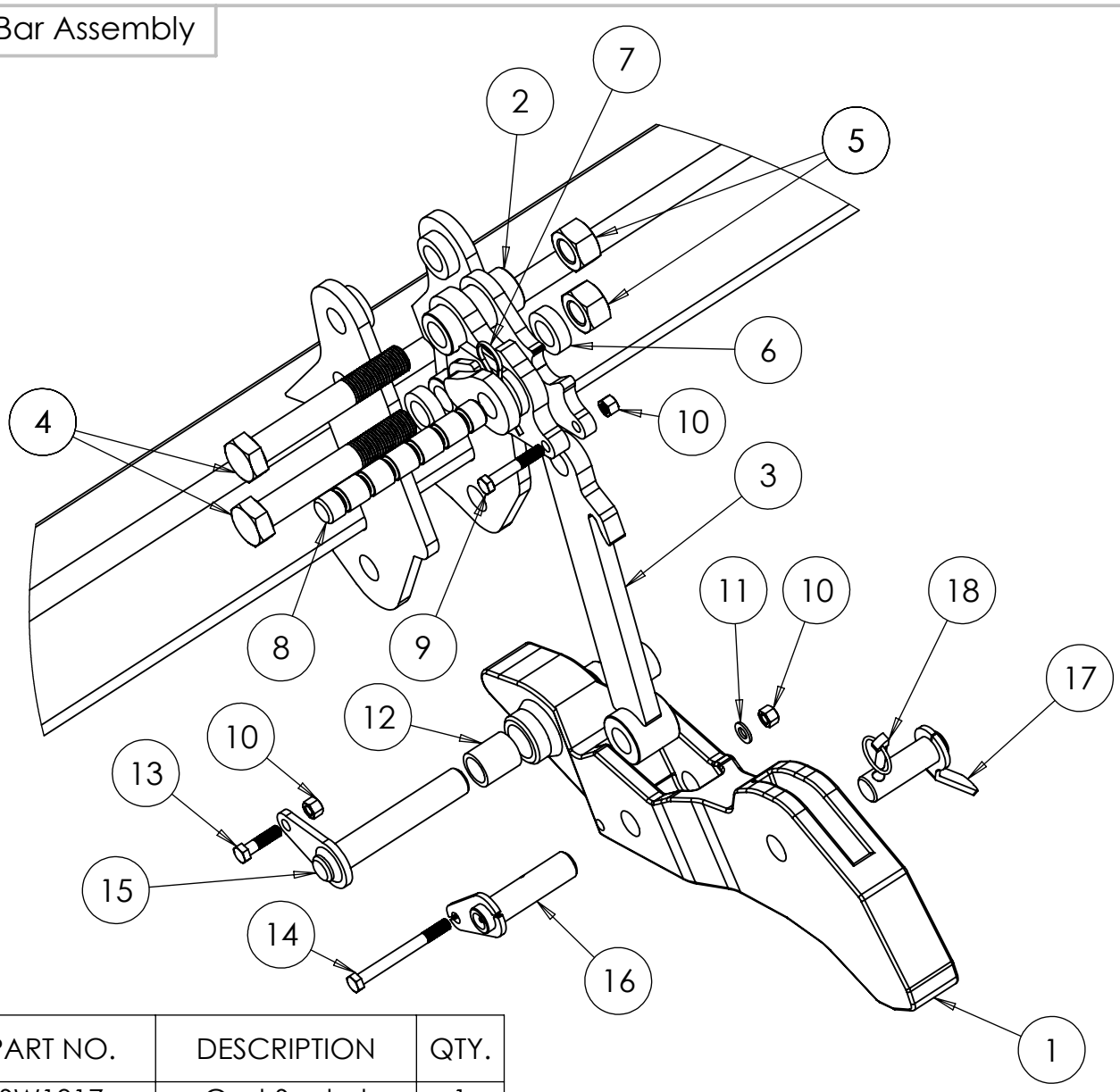
Scale 1:5 | REVISION: | DATE: 31/06/2013 | INITIAL: MH

8.5 Shear Bar Assembly



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	SW1017	Cast Socket	1
2	SW1196	Shear Bar Socket	1
3	SW1197	Shear Push Rod	1
4	SWM30200	M30 x 200 Bolt	2
5	SWM30004	M30 Nylock Nut	2
6	SW1198	50 x 30 x 15mm Spacer	2
7	SWB106	Shear Bar R-Clip	1
8	SWB160	Shear Bar	1
9	SWM1270	M12 x 70 bolt	1
10	SWM12004	M12 Nylock Nut	3
11	SWM120001	M30 Washer	2
12	SW188	30 x 40 x 45mm PB1 Bush	2
13	SWM1240	M12 x 40 Bolt	1
14	SWM12130	M12 x 130 Bolt	1
15	SW183	30 x 170mm Tabbed Pin	1
16	SW1192	30 x 120mm Pivot Pin c/w Grease Nipple (L/H)	1
17	SW451	Leg Depth Pin	1
18	SWB105	Lynch Pin	1

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trio

TITLE:

Shear Bar Assembly

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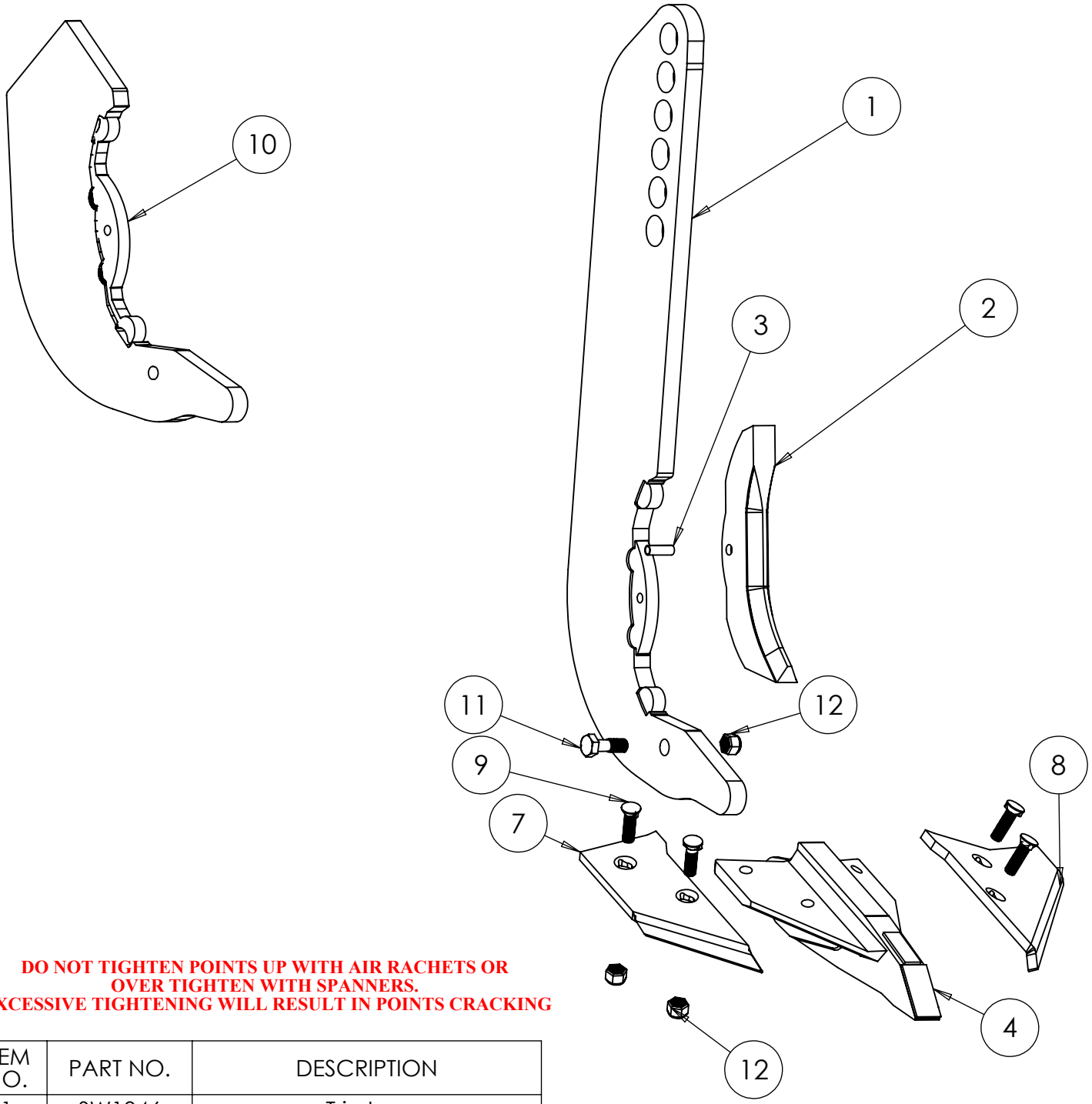
8.6 Leg Assembly Auto - Reset



DO NOT TIGHTEN POINTS UP WITH AIR RACHETS OR OVER TIGHTEN WITH SPANNERS.
EXCESSIVE TIGHTENING WILL RESULT IN POINTS CRACKING

ITEM NO.	PART NO.	DESCRIPTION
1	SW1046	Trio Leg
2	SW1048	Cast Shin
3	SWB183	M10 x 30 Roll Pin
4	SW1050	Concord Point
5	SWM1250	M12 x 50 Bolt
6	SWM12004	M12 Nylock Nut
7	SWB401/400	4" R/H Wing & L/H Wing (Not Shown)
8	SWB366/367	8" L/H Wing & R/H Wing (Not Shown)
9	SWM1235TN	M12 x 35 Twin Nibbed Bolt c/w Plain Nut
10	SW1047	Trio Weld on Leg Bottom
11	SWM1260	M12 X 60 Bolt
12	SWM12004	M12 Nylock nut

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo rigid trailed trio

TITLE: Trio Leg Assembly

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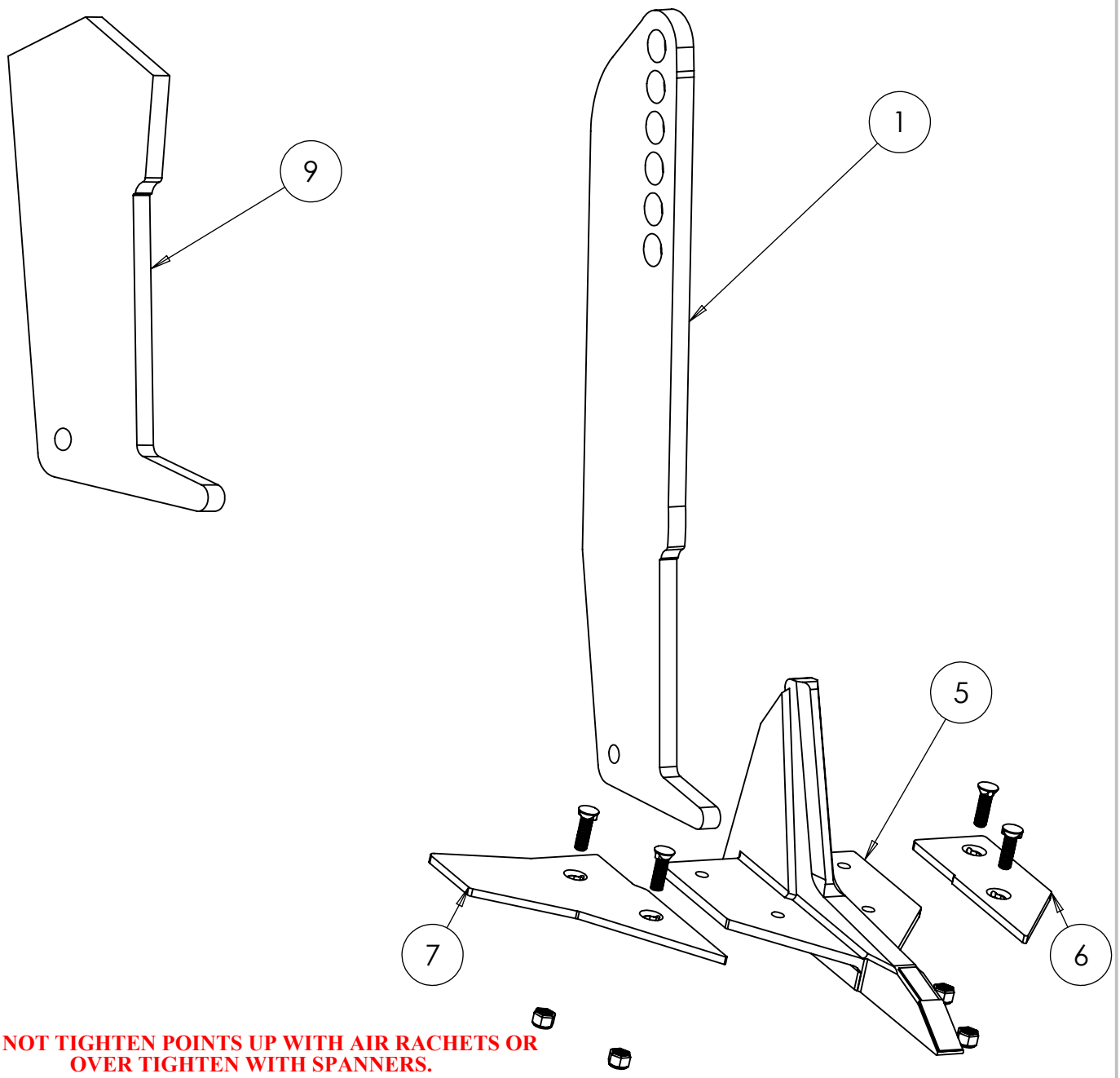
8.7 Alternate Leg Assembly



DO NOT TIGHTEN POINTS UP WITH AIR RACHETS OR OVER TIGHTEN WITH SPANNERS.
EXCESSIVE TIGHTENING WILL RESULT IN POINTS CRACKING

ITEM NO.	PART NO.	DESCRIPTION
1	SW777	Combi Trio Leg
2	SW159	Leg Protector
3	SWM1660	M16 x 60 Bolt
4	SWM16004	M16 Nylock Nut
5	SW1100	Combi Trio Point
6	SW165/164	4" L/H Wing & R/H Wing (Not Shown)
7	SW157/158	8" R/H Wing & L/H Wing (Not Shown)
8	SWM1235TN	M12 x 35 Twin Nibbed Bolt c/w Plain Nut
9	SW354	Trio Leg Weld on Bottom
10	SWM12004	M12 Nylock nut

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trio

TITLE:

Alternate Trio Leg Assembly

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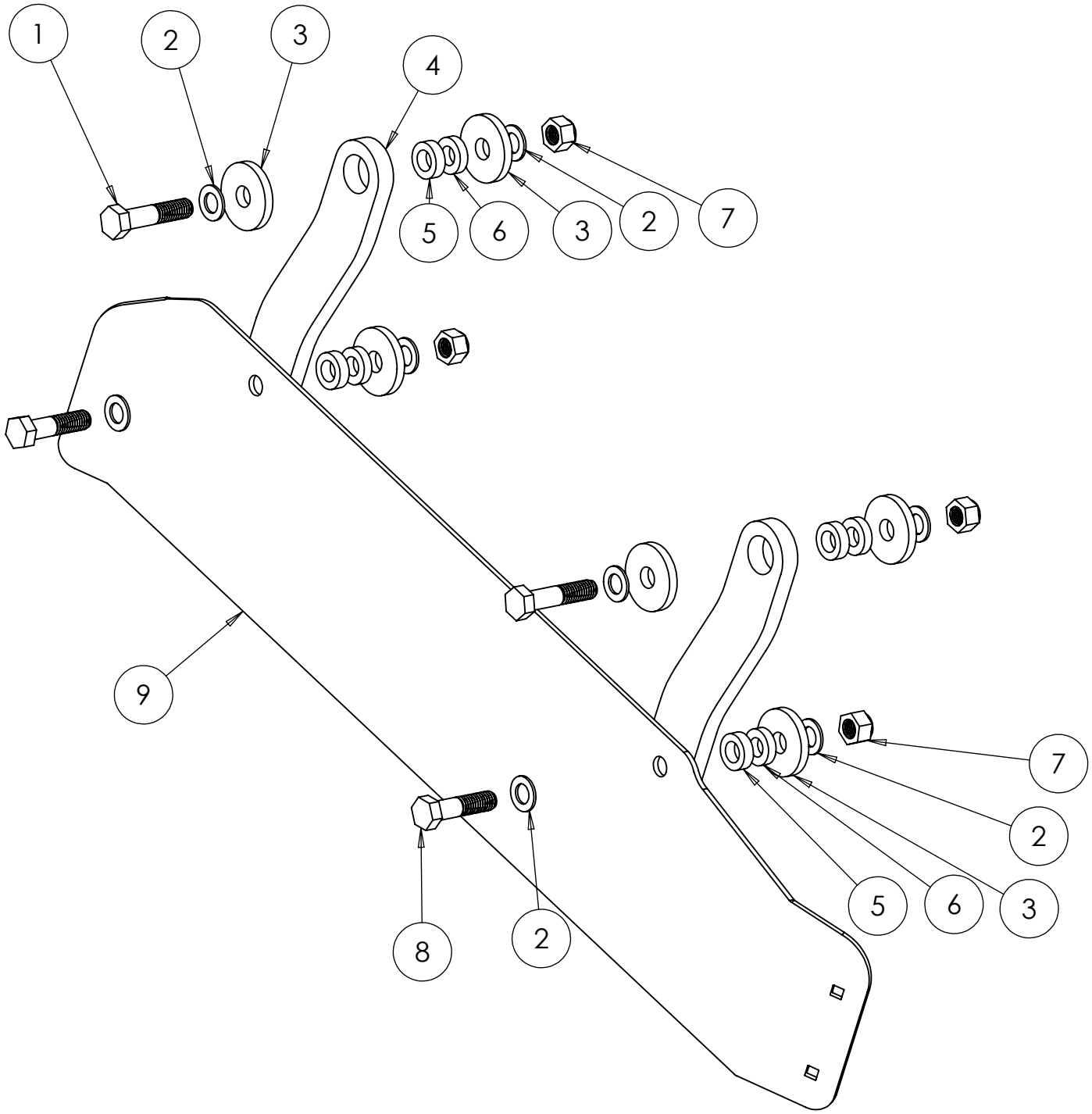
8.8 Active Soil Retainer



PART NO:	ITEM:	DESCRIPTION:	QTY:
SWM2090	1	M20 X 90 bolt	2
SWM20001	2	M20 flat washer	8
SW123	3	12mm large spacer	4
SW124	4	Crank arm	2
SW125	5	12mm spacer sm	4
SW126	6	10 MM spacer sm	4
SWM20004	7	M20 nylock nut	4
SWM2080	8	M20 X 80 bolt	2
SW418	9	Soil retainer left	1
SW419		Soil retainer right (not shown)	1

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed Trio

TITLE: Active soil retainer

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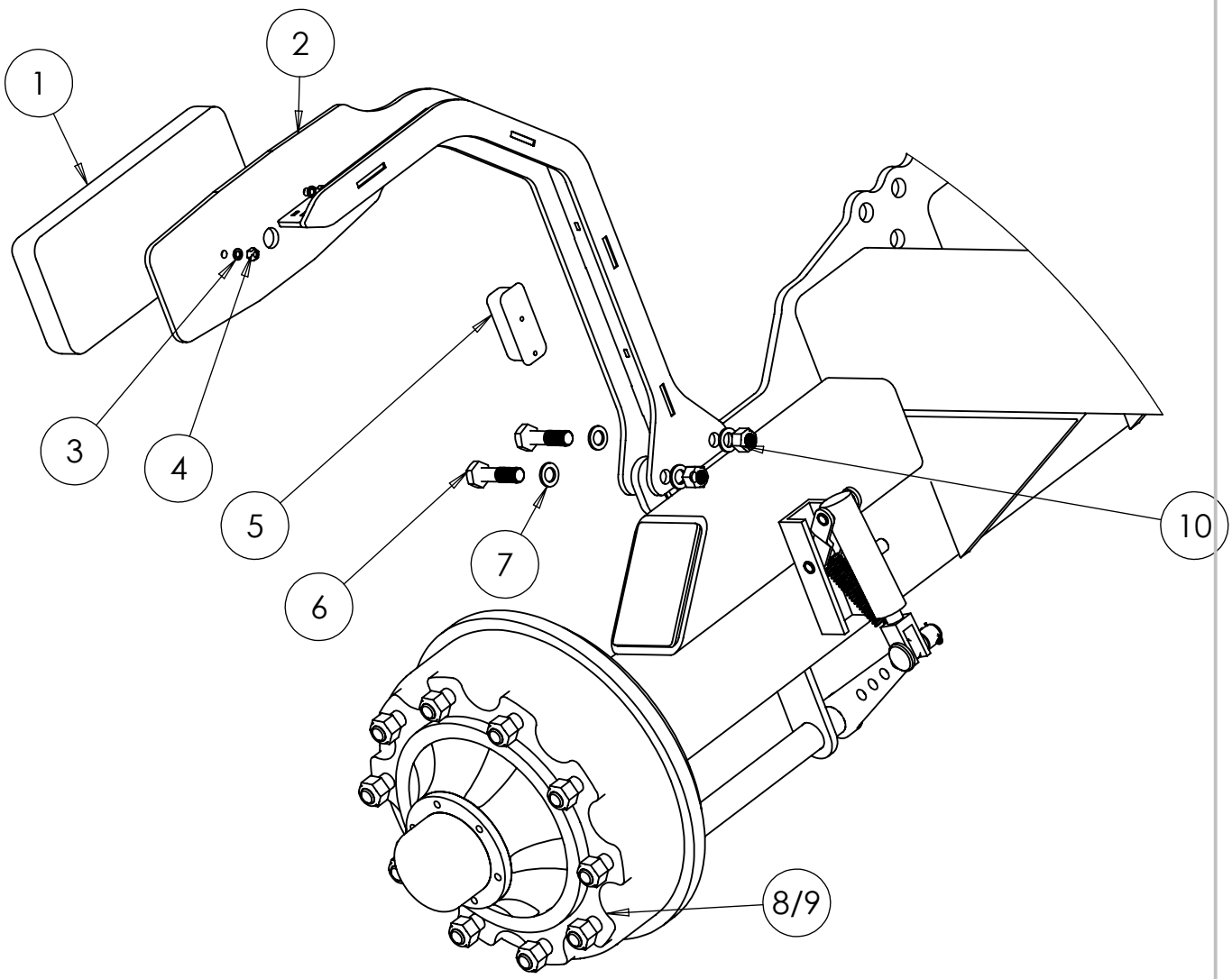
8.9 light Assembly



ITEM:	PART NO:	DESCRIPTION:	QTY:
1	SWB165	Rubberlite Rear light (L/H)	1
	SWB 165	Rubberlite Rear light (R/H) Not shown	1
2	SW1275	Light Bracket (L/H)	1
	SW1275	Light Bracket (R/H) Not shown	1
3	SWM8001	M8 Flat Washer	4
4	SWM8003	M8 Plain Nut	4
5	SWB274	L.E.D Warning Module	2
6	SWM1660	M16 X 60 MM Bolt	4
7	SWM1601	M16 Flat Washer	4
8	SWB418	Large Bearing (Not Shown)	2
9	SWB419	Small Bearing (Not Shown)	2
10	swm16004	M16 Nylock	4

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed Trio

TITLE: Light Assembly

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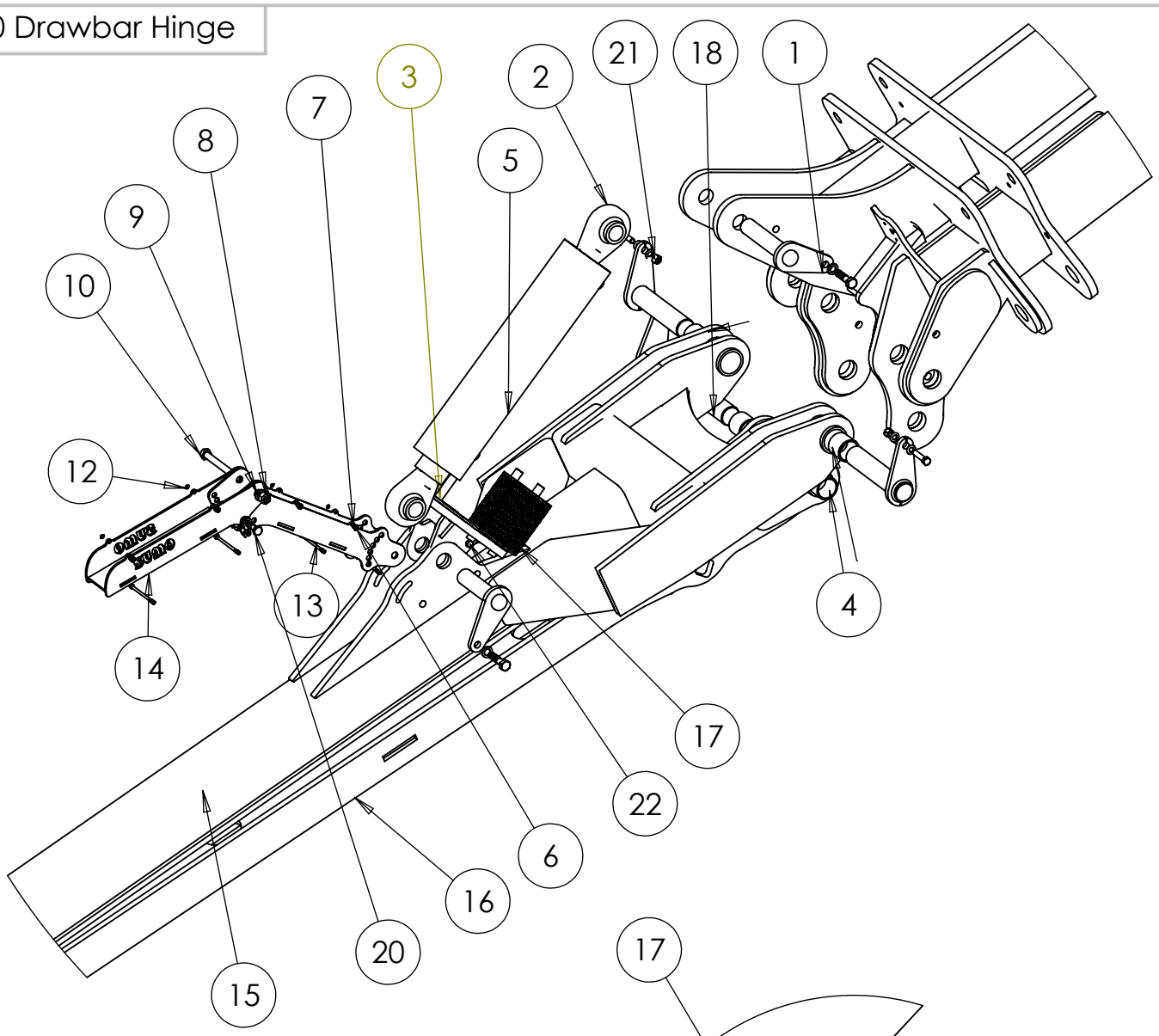
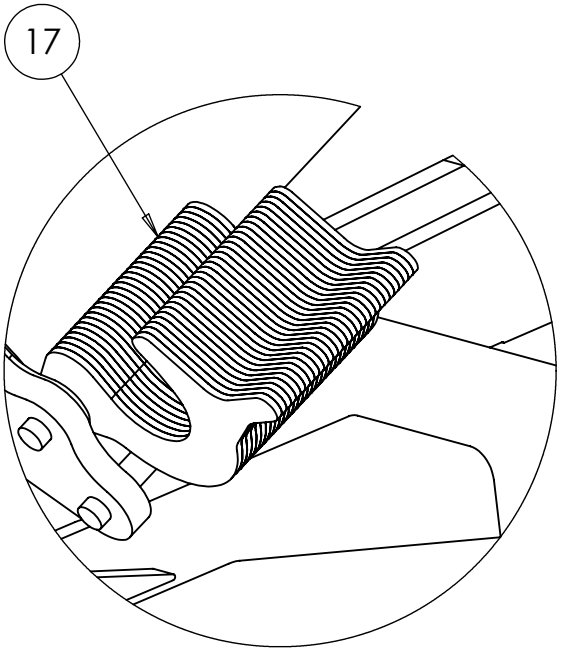
8.10 Drawbar Hinge





ITEM:	PART NO:	DESCRIPTION:	QTY:
1	SW142	40 X 210 Tabbed pin	1
2	SWH293	780.120 Ram	1
3	SW536	Drawbar ram stop frame	1
4	SWB108	50 X 58 X 50 PB1 bush	6
5	SWH293	780.120 Ram	1
6	SWM6004	M6 Nylock nut	4
7	SWM6001	M6 Flat washer	8
8	SWM16004	M16 Nylock nut	10
9	SWM16001	M16 Flat washer	20
10	SWM16130	M16 x 130mm bolt	1
11	SWM6130	M6 x 130mm bolt	4
12	SWM6001	M6 flat washer	8
13	SW380	2007 Quatro pipe holder lower section	1
14	SW379	2007 Quatro pipe holder top section	1
15	SW417	Drawbar box	1
16	SW416	Lower link	1
17	SW144	Ram slice	30
18	SW141	50 X 390 Tabbed pin	2
19	SW139	50 X 225 Tabbed pin	2
20	SWM1250	M12 X 50 bolt	2
21	SWM1004	M10 Nylock nut	1
22	SWM10140	M10 X 140	1

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed Trio

TITLE: Drawbar Hinge

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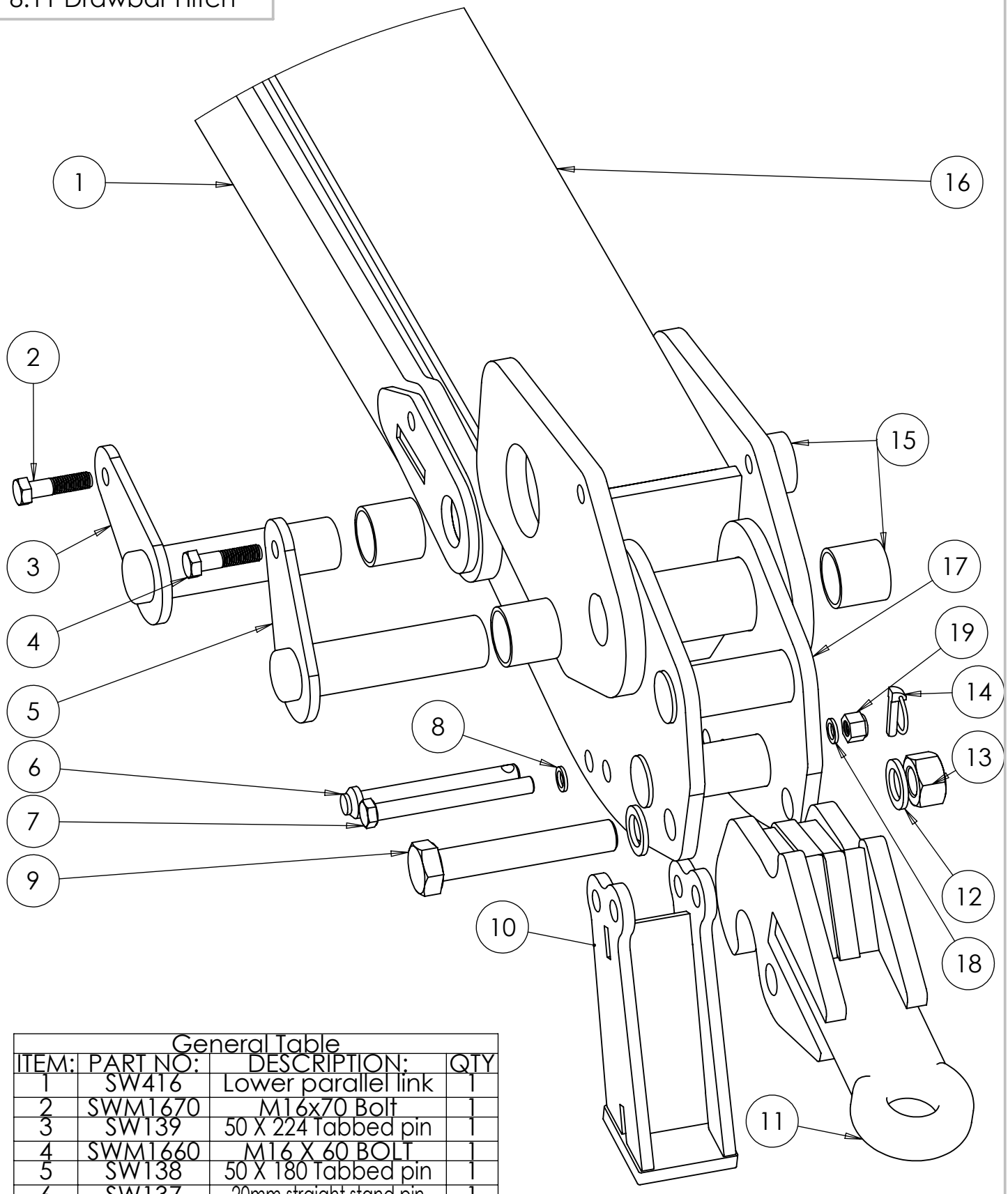
8.11 Drawbar Hitch



General Table			
ITEM:	PART NO:	DESCRIPTION:	QTY
1	SW416	Lower parallel link	1
2	SWM1670	M16x70 Bolt	1
3	SW139	50 X 224 Tabbed pin	1
4	SWM1660	M16 X 60 BOLT	1
5	SW138	50 X 180 Tabbed pin	1
6	SW137	20mm straight stand pin	1
7	SWM16160	M16 x 160 bolt	1
8	SWM16001	M16 flat washer	2
9	SWM30180	M30 x 180 bolt	1
10	SW136	Stand	1
11	SW135	Towing eye	1
12	SWM30001	M30 Flat washer	2
13	SWM30004	M30 nylock nut	1
14	SWB105	Lynch pin	1
15	SWB108	50 X 58 X 50 PB1 bush	4
16	SW417	Drawbar	1
17	SW134	Drawbar hitch unit	1
18	SWM16001	M16 Flat washer	1
19	SWM16004	M16 nylock nut	1

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumon Trailed Trio

TITLE: Drawbar Hitch

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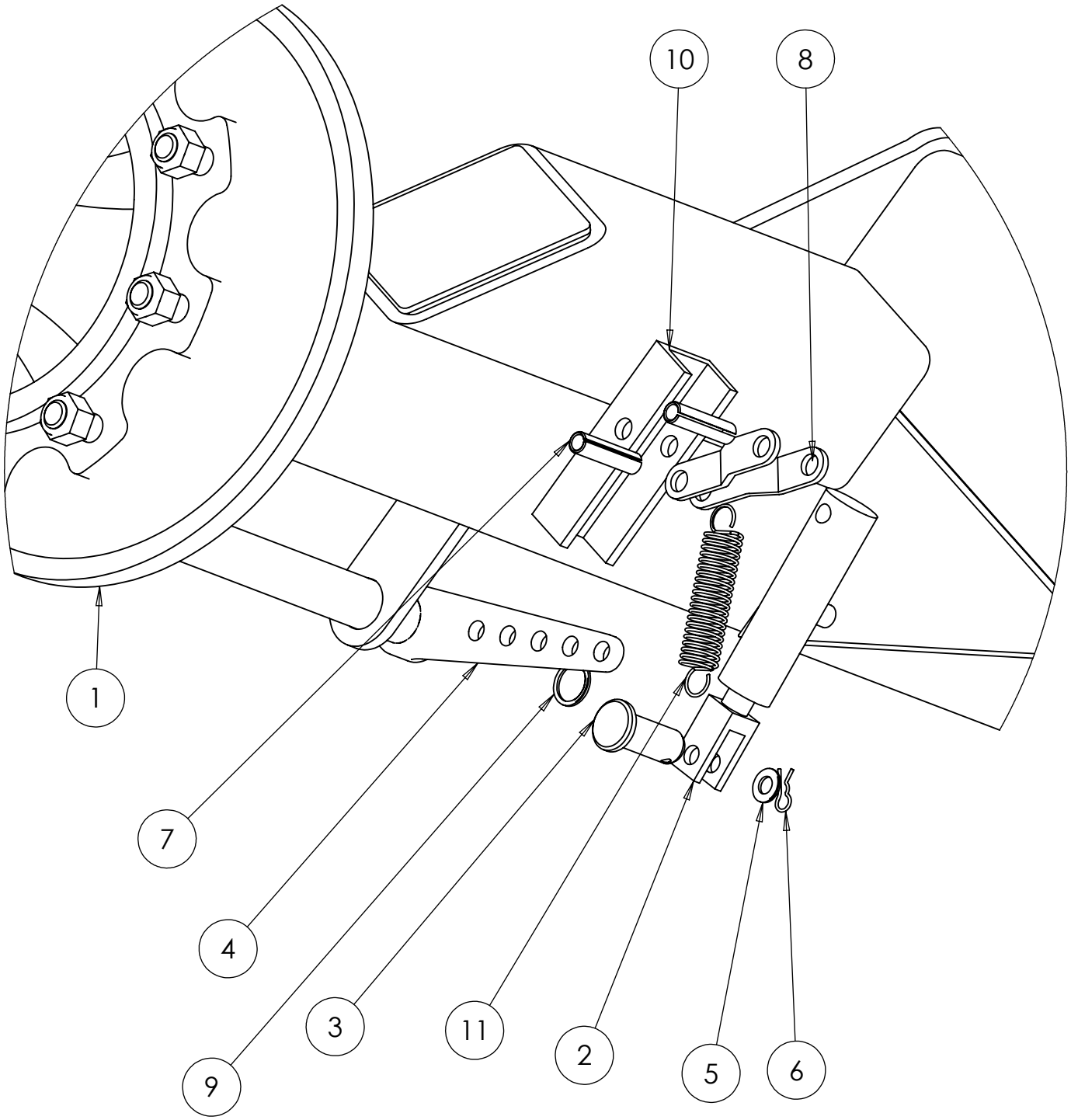
REVISION:

DATE: 07/06/2013

INITIAL: MH

8.12 Axle, wheels and Brakes



ITEM:	PART NO:	DESCRIPTION:	QTY:
1	SWB133	10 Stud braked hub	2
2	SWB134	Brake ram	2
3	SWB188	12mm Clevis pin	2
4	SWB189	Brake arm	2
5	SWM12001	M12 Flat washer	2
6	SWB190	Small R-clip	2
7	SWB191	14 x 60 Roll pin	4
8	SWB192	Ram mount/ adjuster	2
9	SWB193	Circlip	2
10	SWB194	Ram mount base	2
11	SWB195	Spring and clip	2

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed Trio

TITLE: Axle, wheels and Brakes

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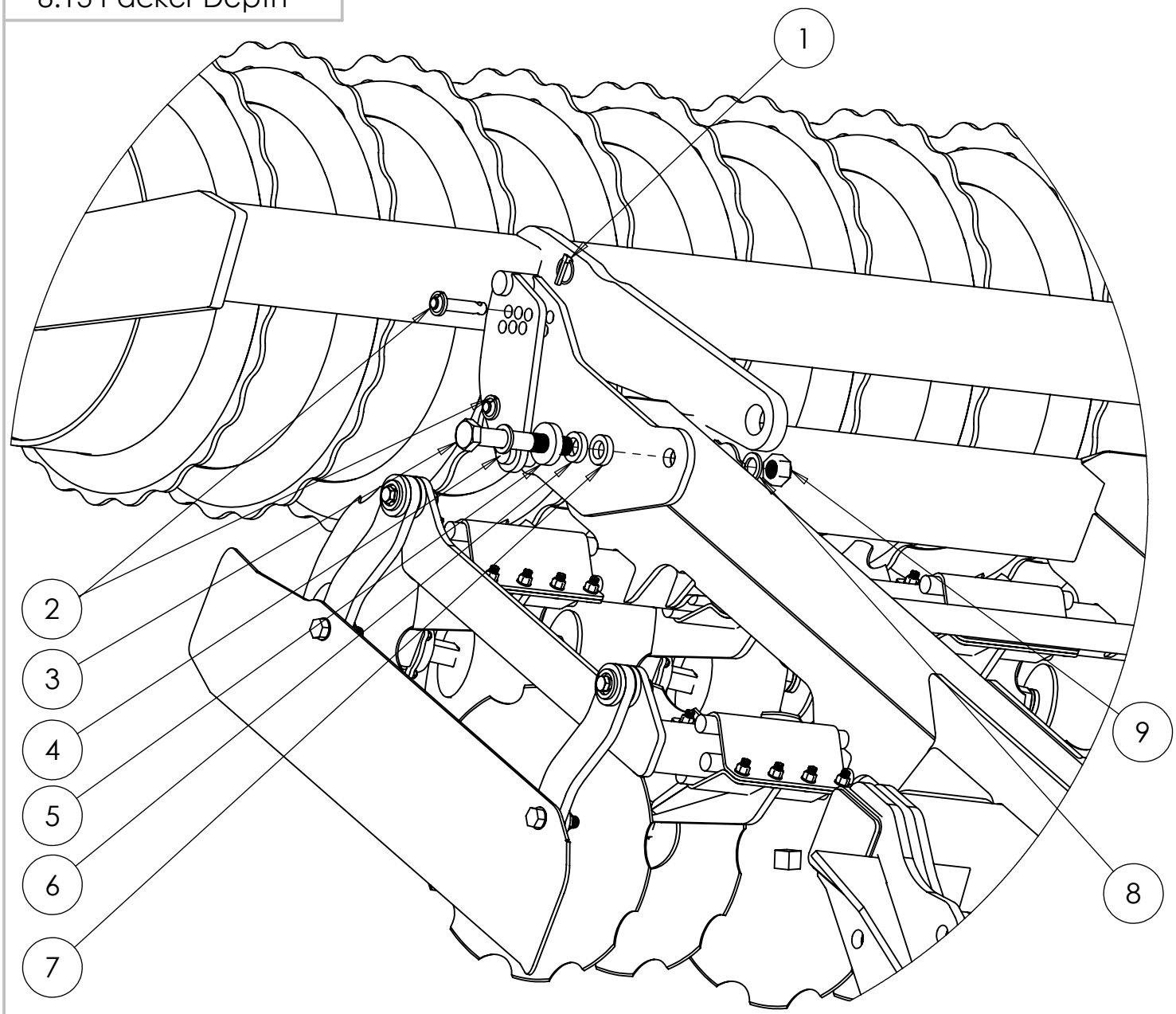
8.13 Packer Depth



ITEM:	PART NO:	DESCRIPTION:	QTY:
1	SW105	Lynch pin	4
2	SW130	Packer depth pin	4
3	SWM30110	M30 x 200 bolt	4
4	SWM30001	M30 washer	8
5	SW129	15mm x 75 outer washer	4
6	SW227	15 mm packer arm bush	4
7	SW723	12 mm packer arm bush	4
8	SWM30001	M30 washer	8
9	SWM30004	M30 Nylock nut	4

DO NOT SCALE DRAWING

MACHINE/COMPONENT:

SUMO TRAILED TRIO

TITLE:

Packer Depth

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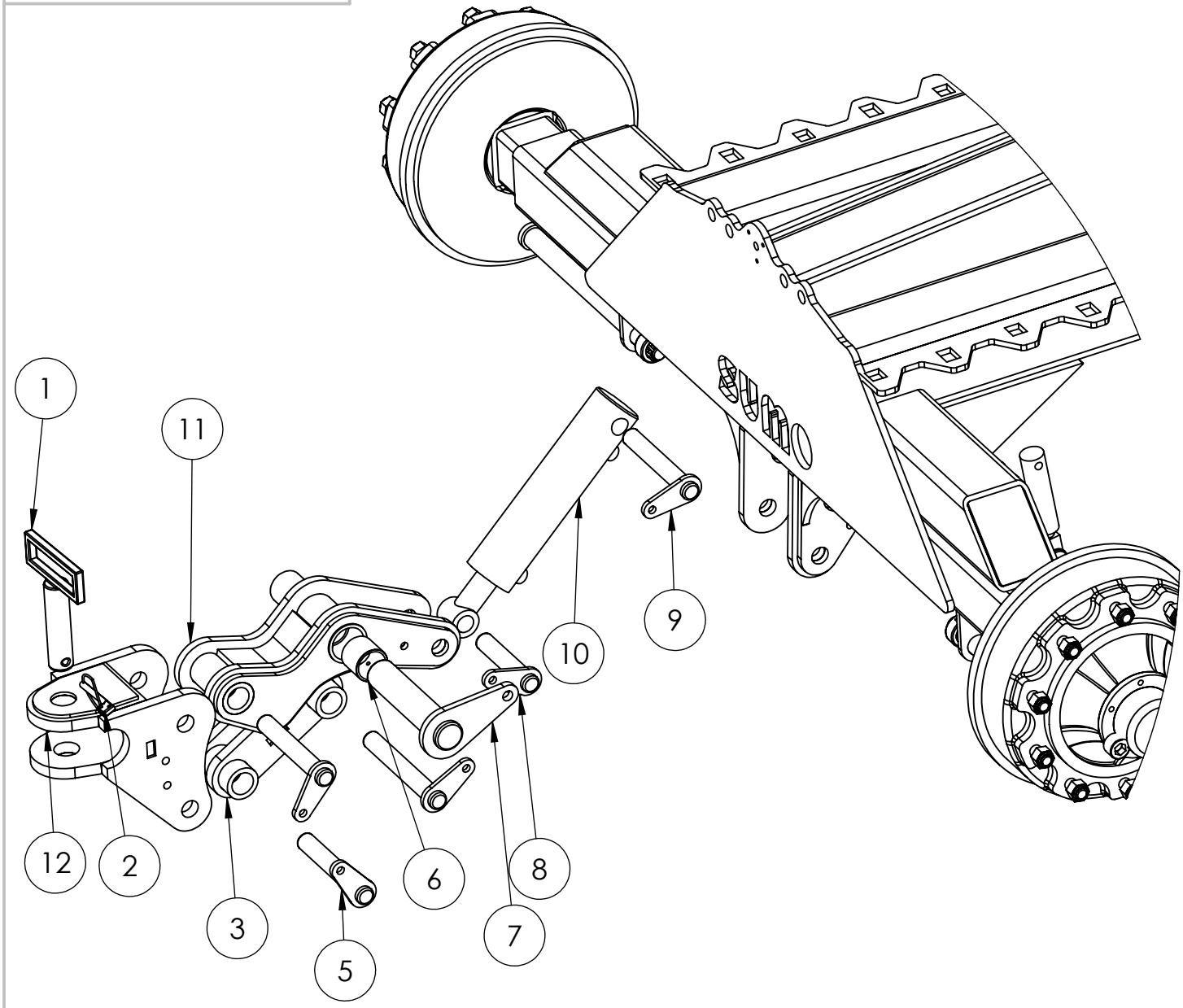
8.14 Opional Rear Drawbar



Item No	Part No	Description	Qty
1	SW1258	40mm Drawbar Pin	1
2	SW576	Safety Lynch Pin	1
3	SW1257	Pivot Arm	1
4	SWB176	30mmx40mmx45mm Oilite Bush	6
5	SW186	214mm x 30mm x Tabbed Pin	3
6	SWB142	50mmx50mmx58mm Oilite Bush	2
7	SW139	225mm x 50mm Tabbed Pin	1
8	SW185	145mm x 30mm Tabbed Pin	1
9	SW186	190mm x 30mm Tabbed Pin	1
10	SWH125	705/2 Ram	1
11	SW717	Pivot Arm	1
12	SW749	Rear Drawbar Jaws	1

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed Trio

TITLE: Rear Drawbar

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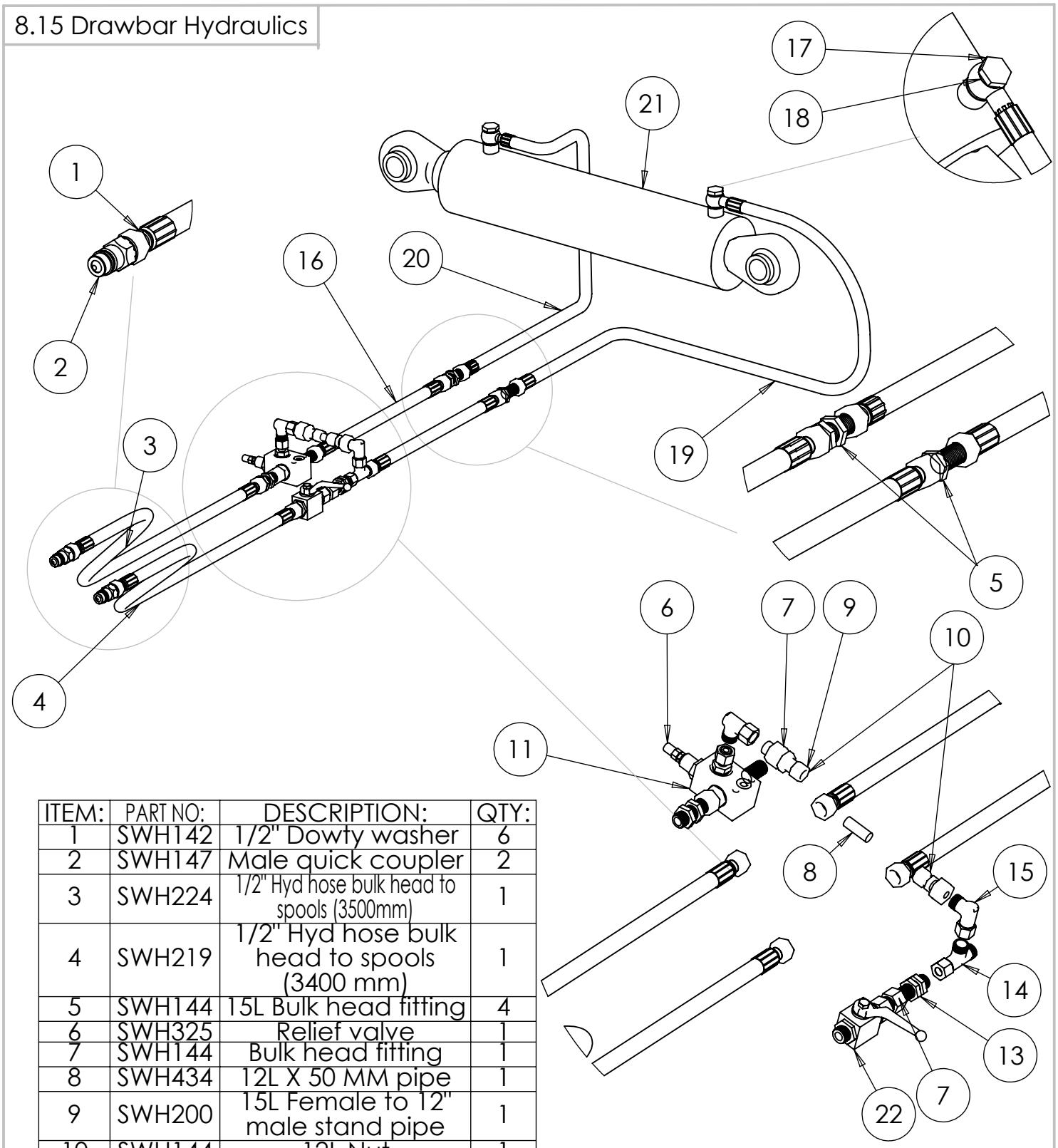
8.15 Drawbar Hydraulics



ITEM:	PART NO:	DESCRIPTION:	QTY:
1	SWH142	1/2" Dowty washer	6
2	SWH147	Male quick coupler	2
3	SWH224	1/2" Hyd hose bulk head to spools (3500mm)	1
4	SWH219	1/2" Hyd hose bulk head to spools (3400 mm)	1
5	SWH144	15L Bulk head fitting	4
6	SWH325	Relief valve	1
7	SWH144	Bulk head fitting	1
8	SWH434	12L X 50 MM pipe	1
9	SWH200	15L Female to 12" male stand pipe	1
10	SWH144	12L Nut	1
11	SWH145	15L tap	1
12	SWH171	15L female to female fitting	1
13	SWH158	15L bulk head Fitting	4
14	SWH167	15L Tree branch	1
15	SWH265	12L Compact 90	1
16	SWH225	1/2" Hyd hose bulk head to bulk head	2
17	SWH143	1/2" Banjo bolt	2
18	SWH142	1/2" Dowty washer	6
19	SWH227	1/2" Hyd hose top ram to bulk head	1
20	SWH226	1/2" Hyd hose bottom ram to bulk head	1
21	SWH293	780.120 Ram	1
22	SWH145	Ball valve tap	1

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed trio

TITLE: Drawbar Hydraulics

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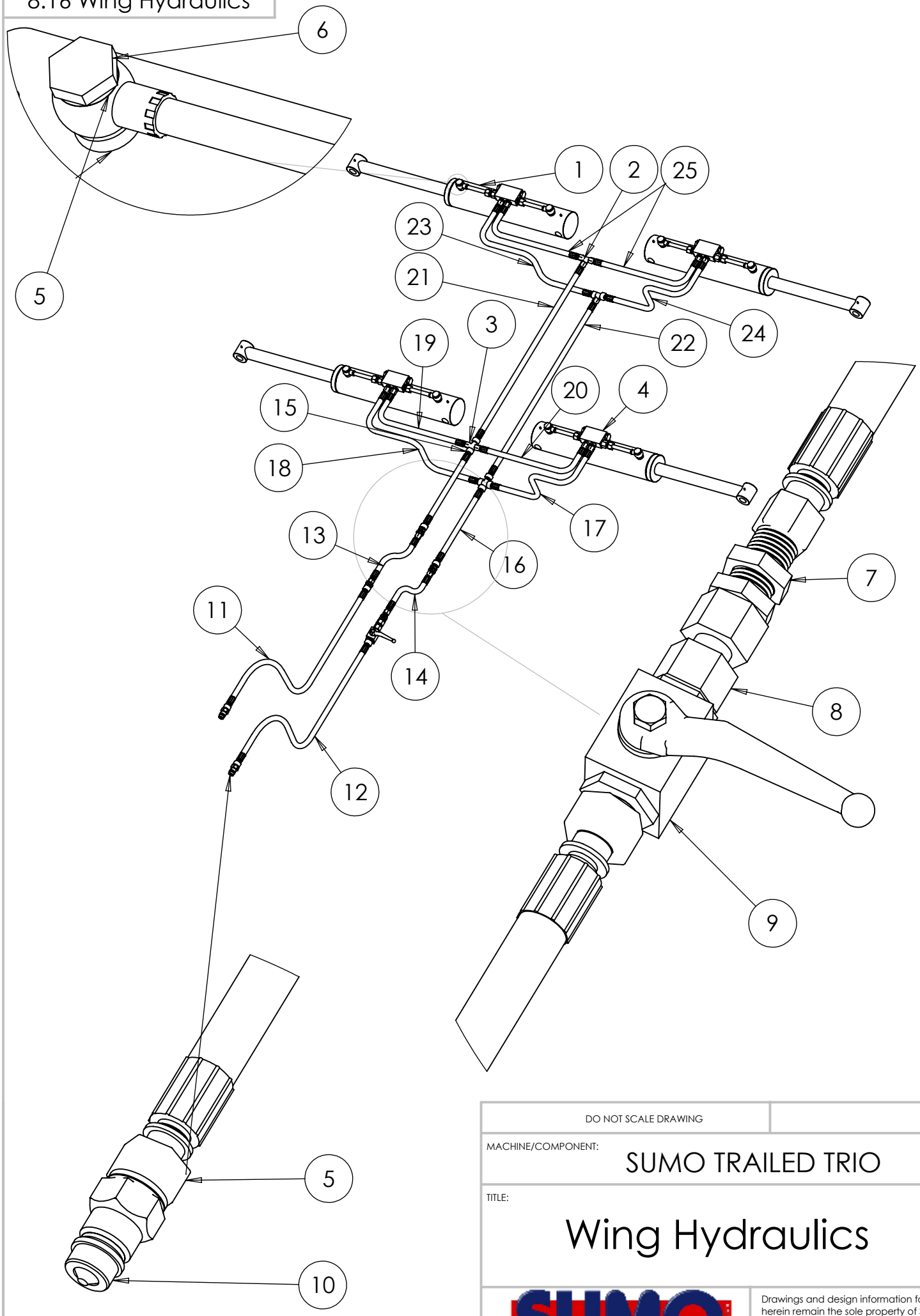
SCALE:1:50 | REVISION: | DATE: 17/07/13 | INITIAL: MH

8.16 Wing Hydraulics



DO NOT SCALE DRAWING

MACHINE/COMPONENT: SUMO TRAILED TRIO

TITLE: Wing Hydraulics

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ITEM:	PART NO:	DESCRIPTION:	QTY:
1	SWH132	706/4 ram	4
2	SWH167	15L tee branch	1
3	SWH199	15L cross	1
4	SWH154	pilot operated check valve	4
5	SWH142	1/2" dowty washer	18
6	SWH143	1/2" banjo bolt	8
7	SWH144	15L bulk head fitting	4
8	SWH171	15L female to female fitting	1
9	SWH205	12L tap	1
10	SWH147	male quick coupler	2
11	SWH437	12L female to 1/2"male 4000mm	1
12	SWH438	12L female to 1/2" male 3910mm	1
13	SWH439	12L female to female 510mm	1
14	SWH440	12L female to female 570mm	1
15	SWH441	12L female to female 690mm	1
16	SWH442	12L female to female 610mm	1
17	SWH443	12Lfemale to female 880mm	1
18	SWH443	12L female to female	1
19	SWH444	12L female to female 800mm	1
20	SWH444	12L female to female 800mm	1
21	SWH445	12L female to female 1340mm	1
22	SWH446	12L female to female 1300mm	1
23	SWH447	12L female to female 725mm	2
24	SWH448	12L female to female 690mm	2

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed Trio

TITLE: Wing Hydraulics (Continued)

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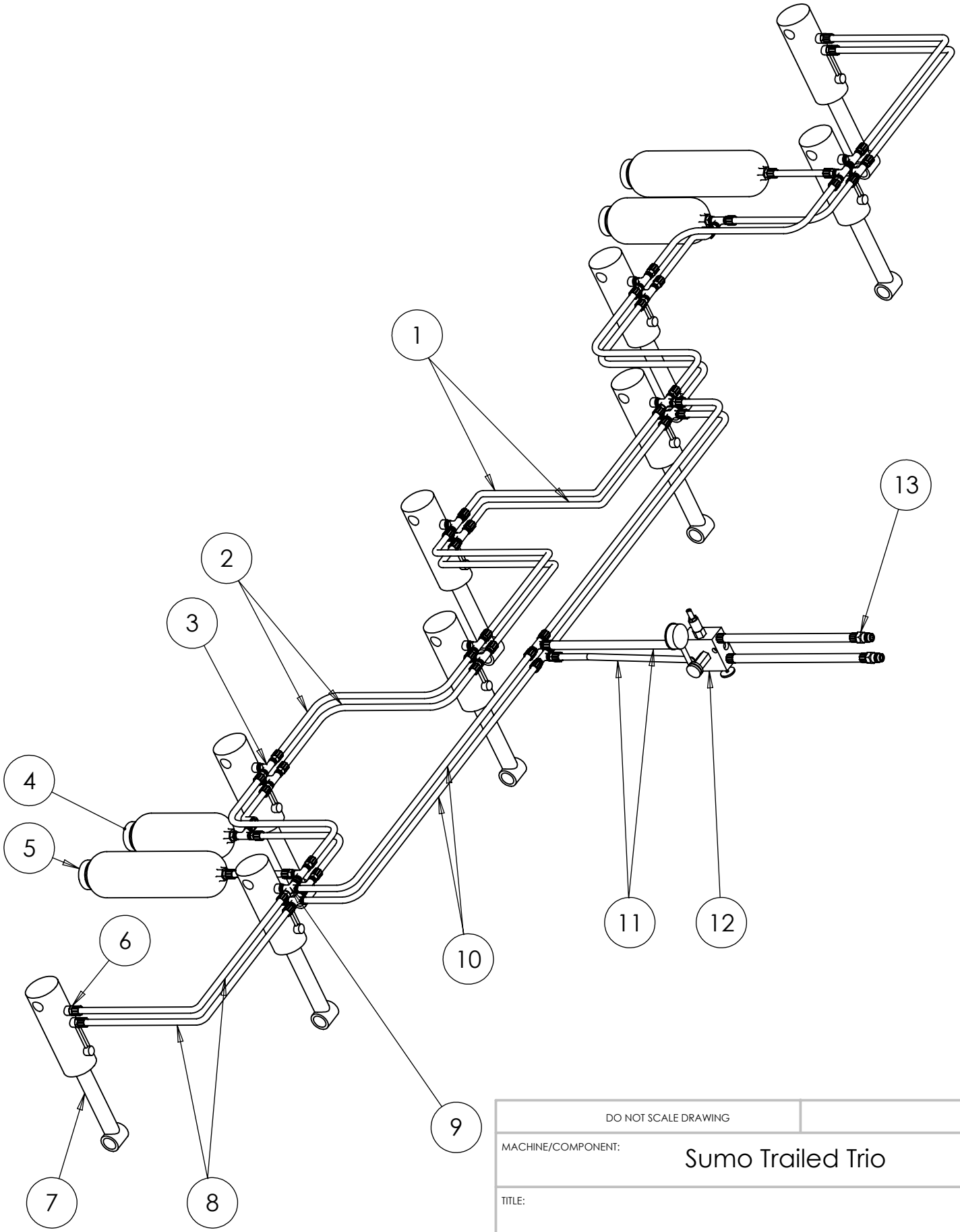
SCALE:1:1 | REVISION: | DATE: 07/06/2013 | INITIAL: MH

8.17 Leg Auto-Reset Hydraulics



DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed Trio

TITLE: Leg Auto-Reset Hydraulics

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ITEM:	PART NO:	DESCRIPTION:	QTY:
1	SWH451	12L to 3/8 Hydraulic pipe	4
2	SWH451	12L to 3/8 Hydraulic pipe	4
3	SWH156	12L tee branch	17
4	SWH331	MP Filtri 1.5L 80Bar Accumulater	2
5	SWH330	MP Filtri 3L 80 bar Accumulatar	2
6	SWH 303	3/8m -12L Adaptor	18
7	SWH286	705-1 ram	9
8	SWH468	12L to 3/8 Hydraulic pipe	4
9	SWH155	12L Cross junction	4
10	SWH467	12L Hydraulic pipe	4
11	SWH466	12L Hydraulic pipe	4
12	SWH426	Auto reset valve	1
13	SWH147	Male Hydraulic quick couple spool	2

DO NOT SCALE DRAWING

MACHINE/COMPONENT: Sumo Trailed Trio

TITLE: Leg Auto-Reset Hydraulics Continued

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