

SUMO Multipress



Operators Manual and Parts List

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2.0 Summary

The Sumo Multipress is an extremely versatile device that offers exceptional soil movement and levelling ability combined with excellent consolidation and suits almost any type of cultivation system. Featuring heavy duty spring loaded tines complete with 310mm wide quick-fit points for stubble work or the option of narrow chisel points for working ploughing. The tines can be worked from a surface chit of 25mm down to 250mm. Chopped straw is no trouble with tine spacing at 300mm and a beam clearance of 750mm.

Before using the Multipress 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.

3.0 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 and 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.

3.1 Qualification and Training

- Reliable personnel may only perform any 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.
- Make sure that only authorized personnel work on or with the machine.
- 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.

3.2 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 folded height and/or the sideways force acting on the machine when turning or negotiating curves.

3.3 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 SUMO machine unless the tractor is secured against rolling away by means of parking brake and/or wheel chocks.
- During transport ensure the wing hydraulic taps are in the closed position.
- 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 stands are in position before commencing maintenance work.
- When making adjustments to the machine the tractor engine should be switched off to prevent the hydraulics from operating.
- When making adjustments to the machines care should be taken not to trap any body parts in moving or pivoting parts.

4.0 Operation and Adjustment

4.1 Operating

When transporting the Multipress on public roads the wings must be in the upright closed position with the taps on the rams in the closed position. The drawbar should be lowered to provide more stability.

To unfold the Sumo Multipress, the wing taps should be opened, the drawbar ram should then be fully extended at which point the wings can then be unfolded. The working depth can then be set and work can commence.

It is important to run the Multipress level to ensure the most effective results. The wings must be level with the ground not the chassis.

4.2 Adjustments

The angle of the paddles can be adjusted hydraulically. Having the paddles closer to the ground results in soil being held up longer consequently leaving a finer tilth in front of the packer. Alternatively the paddles may be lifted completely out of work.

Packer depth provides further control for the position of the levelling paddles. As the wings must work level to ensure optimum soil working conditions the depth must be adjusted accordingly. This is achieved via adjusting the depth pin position in the packer arms as well as the number of slices in the front drawbar ram. Adjustments in these two areas allow the spring tines to work between 25mm and 250mm deep.

Spring tine compression resistance can be increased or decreased by winding the bolt in or out respectively.

5.0 Maintenance

Wheel nuts should be regularly checked and tightened if necessary.

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

Wheel studs should be checked that they tight after the first 10hrs operation and again regularly every week when in use.

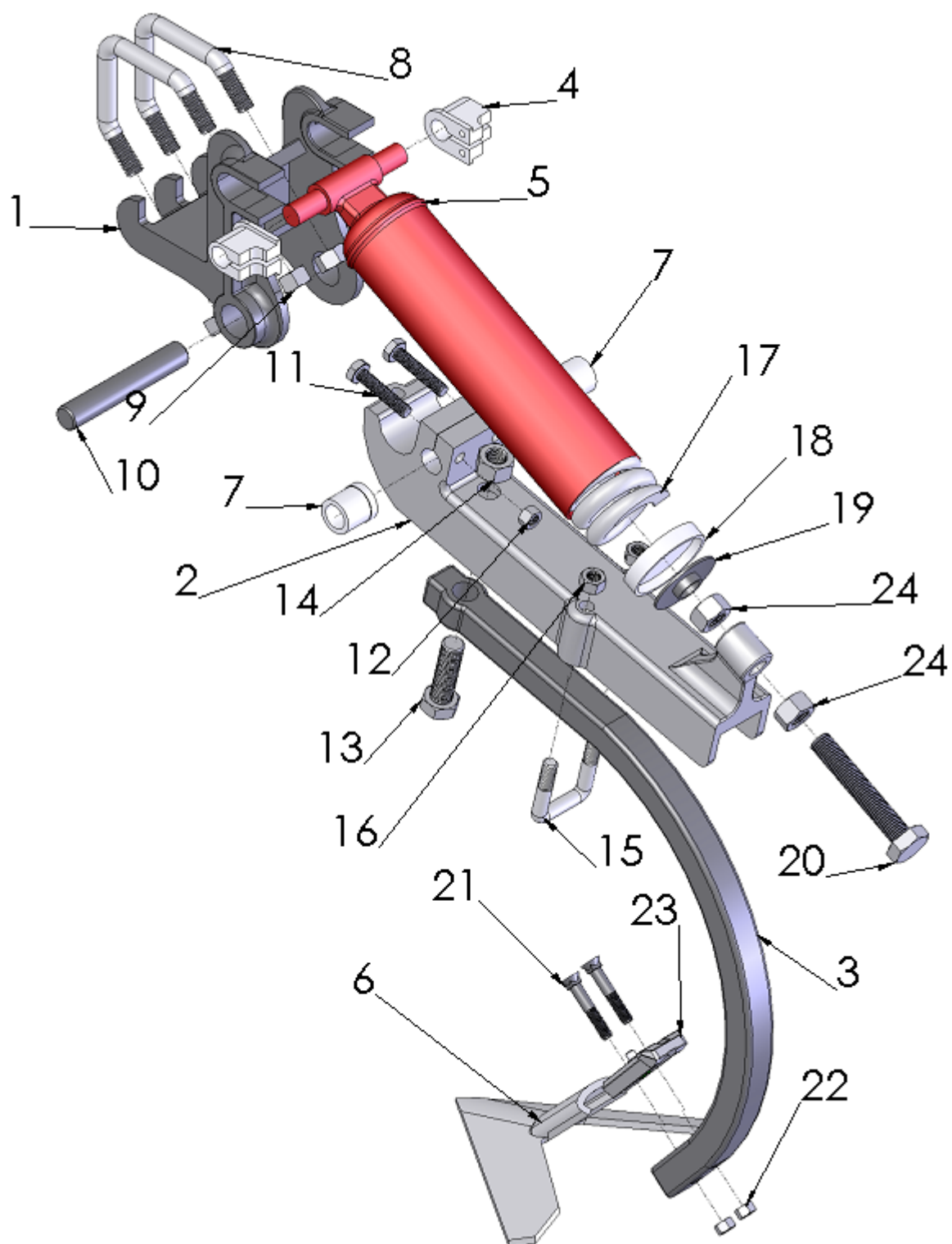
Pivot points throughout the machine should be greased until old grease is forced out once a week when in normal use and after washing off.

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.

5.1 Spares

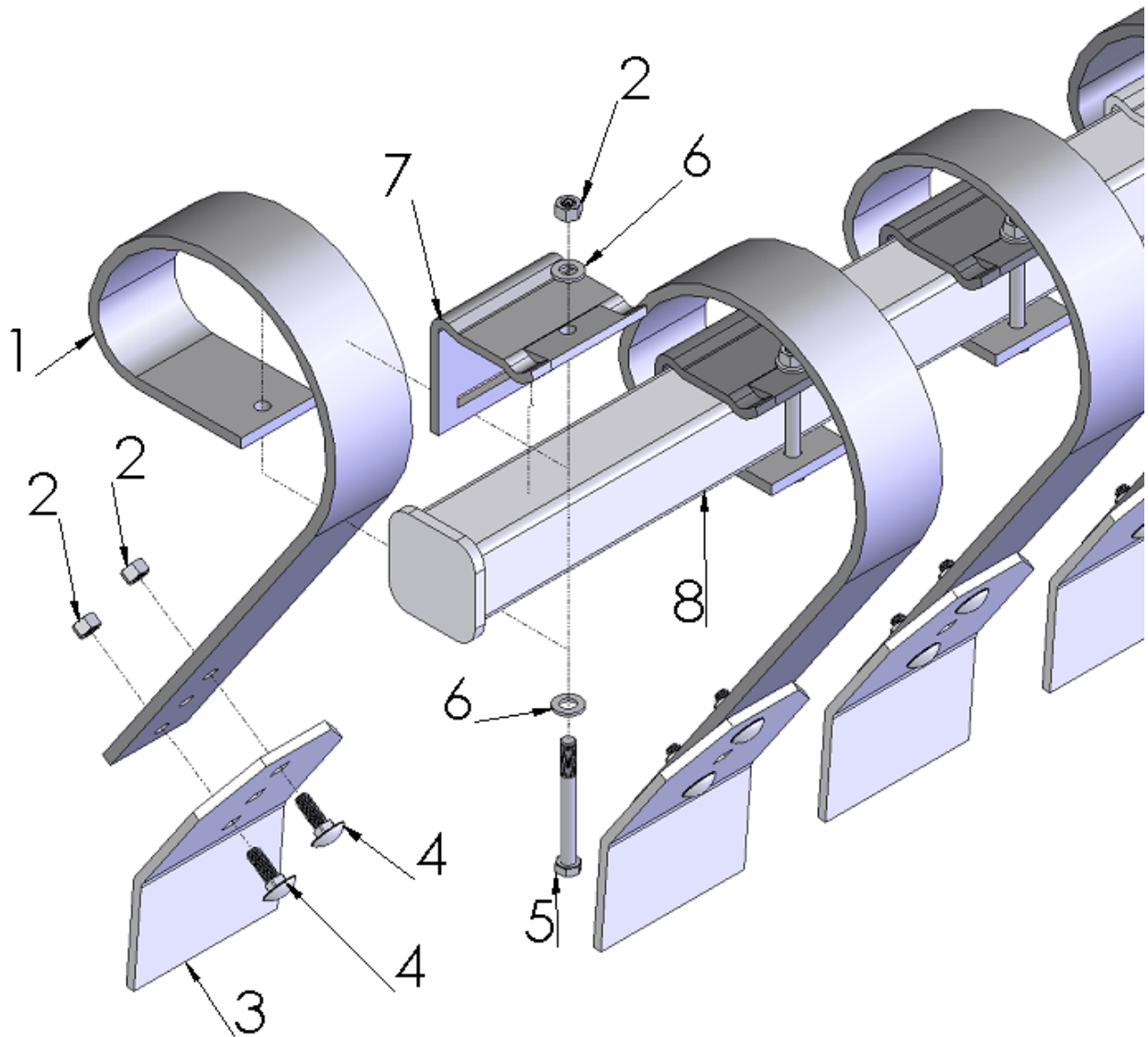
When ordering replacement parts please have your serial number, part numbers (listed in Section 6.0) and quantities at hand.

6.3 Spring tine



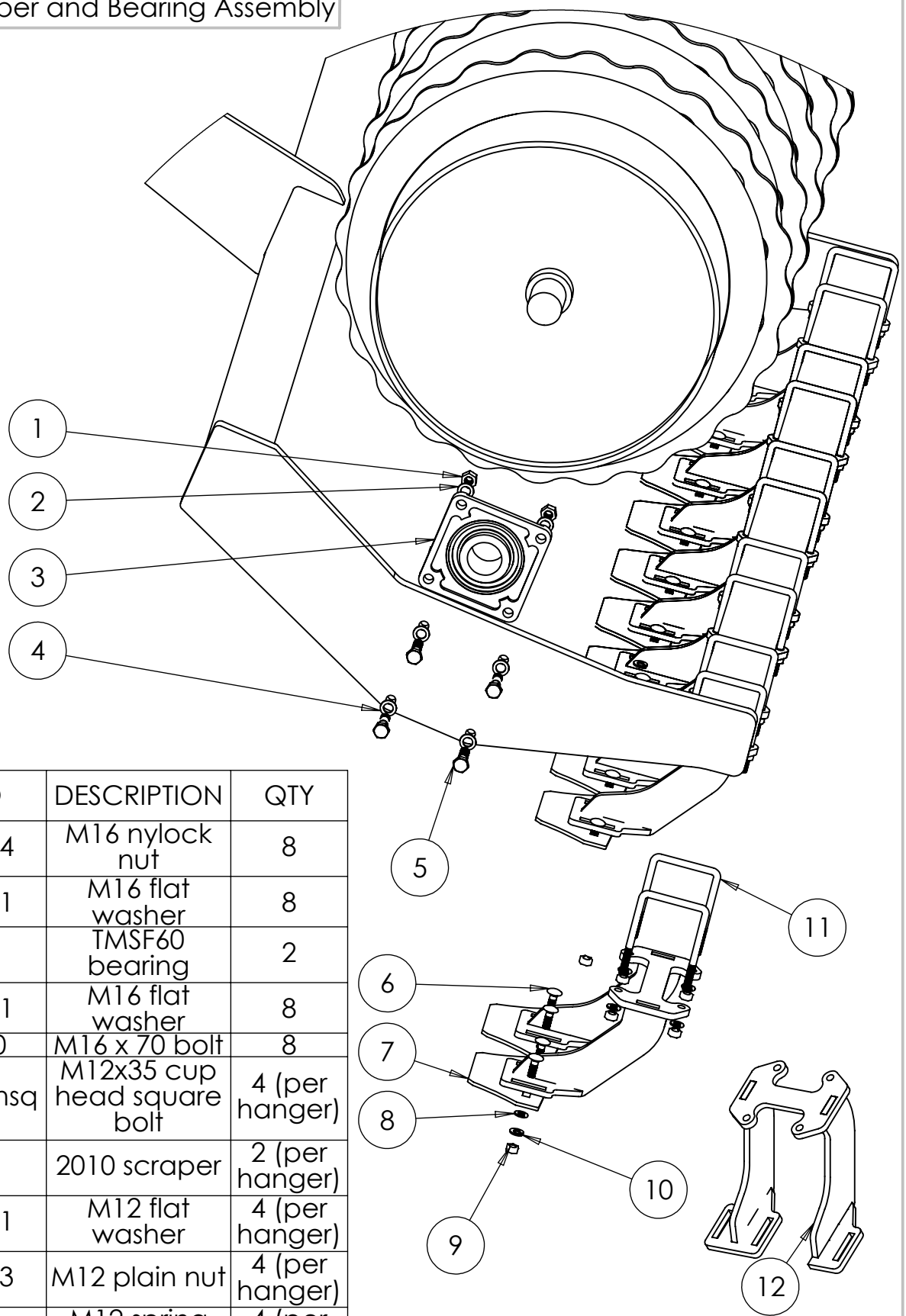
Item	Part No.	Description	Quantity per leg	Quantity/4.6m machine	Quantity/5.6m machine	Quantity/6.6m machine
1	SWB111	Box clamp	1	14	18	22
2	SWB112	Radius arm	1	14	18	22
3	SWB113	Leg	1	14	18	22
4	SWB114	Top bush	2	28	36	44
5	SWB115	Spring cover	1	14	18	22
6	SWB116	Wide knock-on point	1	14	18	22
	SWB138	Optional Narrow knock-on point (not shown)	1	14	18	22
7	SWB117	Bottom top hat bush	2	28	36	44
8	SWM20100wa	Wrap around M20 x 100 bolt	2	28	36	44
9	SWM20003	M20 plain nut	4	56	72	88
10	SWB124	28 x 170 straight pin	1	14	18	22
11	SWM1470	M14 x 70 bolt	2	28	36	44
12	SWM14003	M14 plain nut	2	28	36	44
13	SWM2480	M24 x 80 bolt	1	14	18	22
14	SWM24004	M24 Nylock nut	1	14	18	22
15	SWM1650ub	M16 x 50 U-bolt	1	14	18	22
16	SWM16004	M16 Nylock nut	2	28	36	44
17	SWB118	Spring	1	14	18	22
18	SWB119	Spring push nylon pad	1	14	18	22
19	SWB120	Compression bolt contact plate	1	14	18	22
20	SWM24140	M24 x 140 bolt	1	14	18	22
21	SWM1265cntsk	Cntsk M12 x 65 bolt	2	28	36	44
22	SWM12003	M12 nut	2	28	36	44
23	SWB110	Bourgault knock on base	1	14	18	22
24	SWM24003	M24 nut	2	28	36	44

6.4 Levelling Paddles



Item	Part No.	Description	Quantity/4.6m machine	Quantity/5.6m machine	Quantity/6.6m machine
1	SWB121	Paddle spring	19	23	29
2	SWM12004	M12 Nylock nut	57	69	87
3	SWB122	Paddle plate	19	23	29
4	SWM1235chsq	M12 x 35 cuphead square bolt	38	46	58
5	SWM12110	M12 x 110 bolt	76	92	116
6	SWM12001	M12 flat washer	38	46	58
7	SWB123	Paddle clamp bracket	19	23	29
8	SW148	5.6m Paddle box	N/A	2	N/A
	SW208	4.6m Paddle box (not shown)	2	N/A	N/A
	SW209	6.6m Paddle box (not shown)	N/A	N/A	2

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	SWM1235chsqa	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 Multipress

TITLE:

Packer, Scraper and Bearing Assembly



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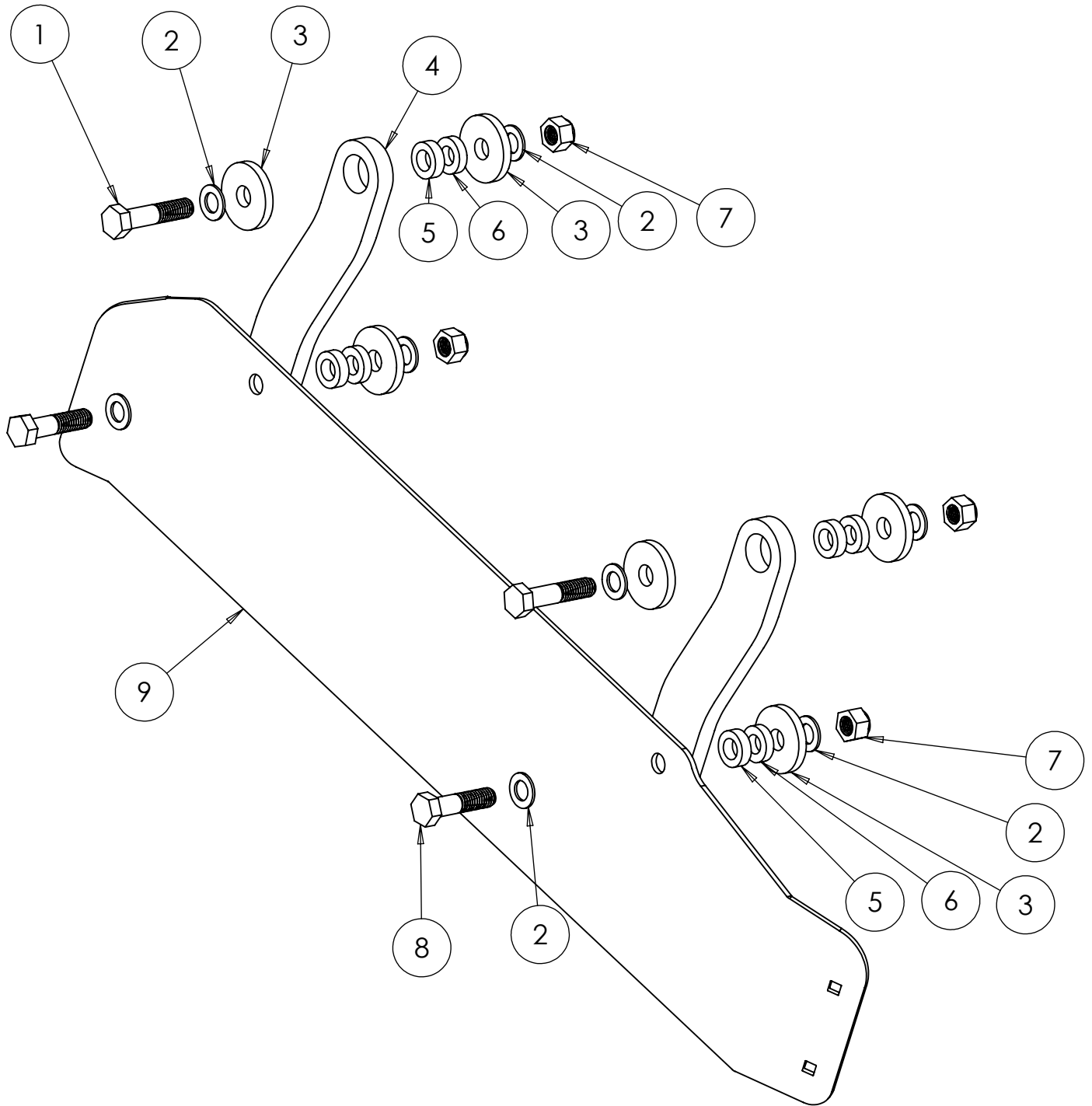
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DATE: 30/04/2013

INITIAL: MH

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

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MACHINE/COMPONENT:

Sumo Multipress

TITLE:

Active soil retainer



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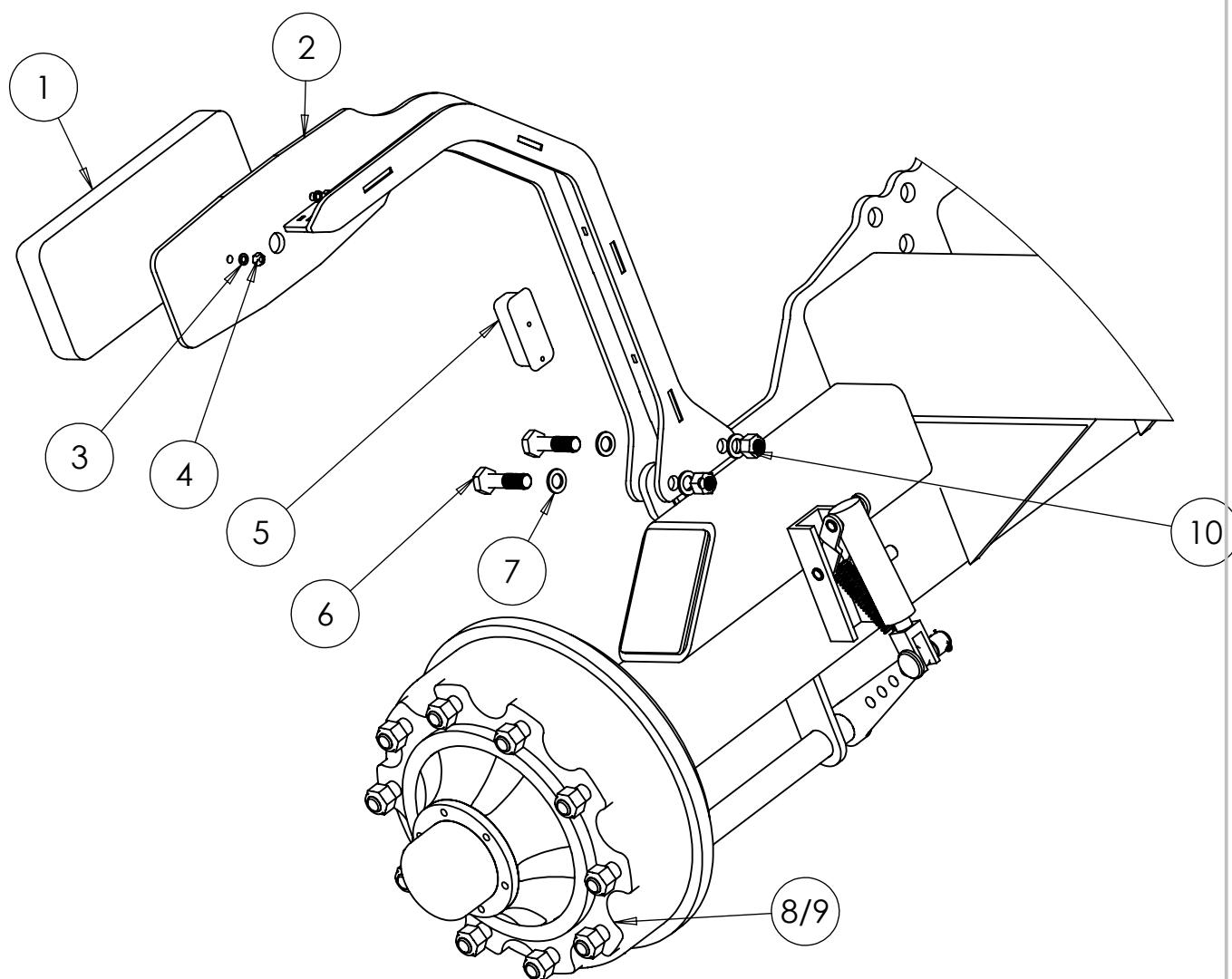
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DATE:31/ 05/ 2013


INITIAL:

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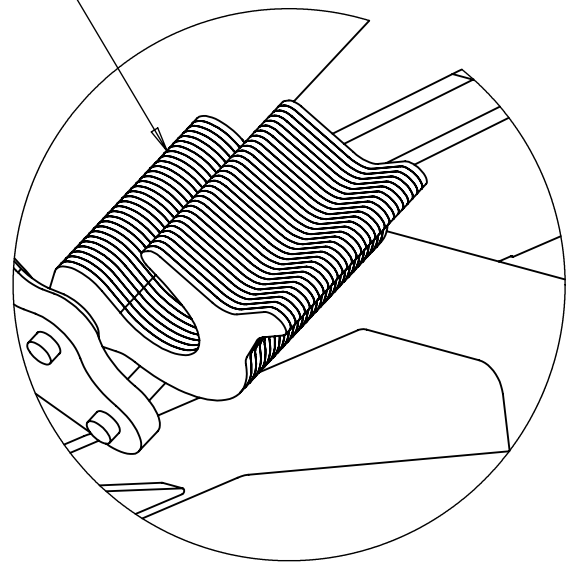
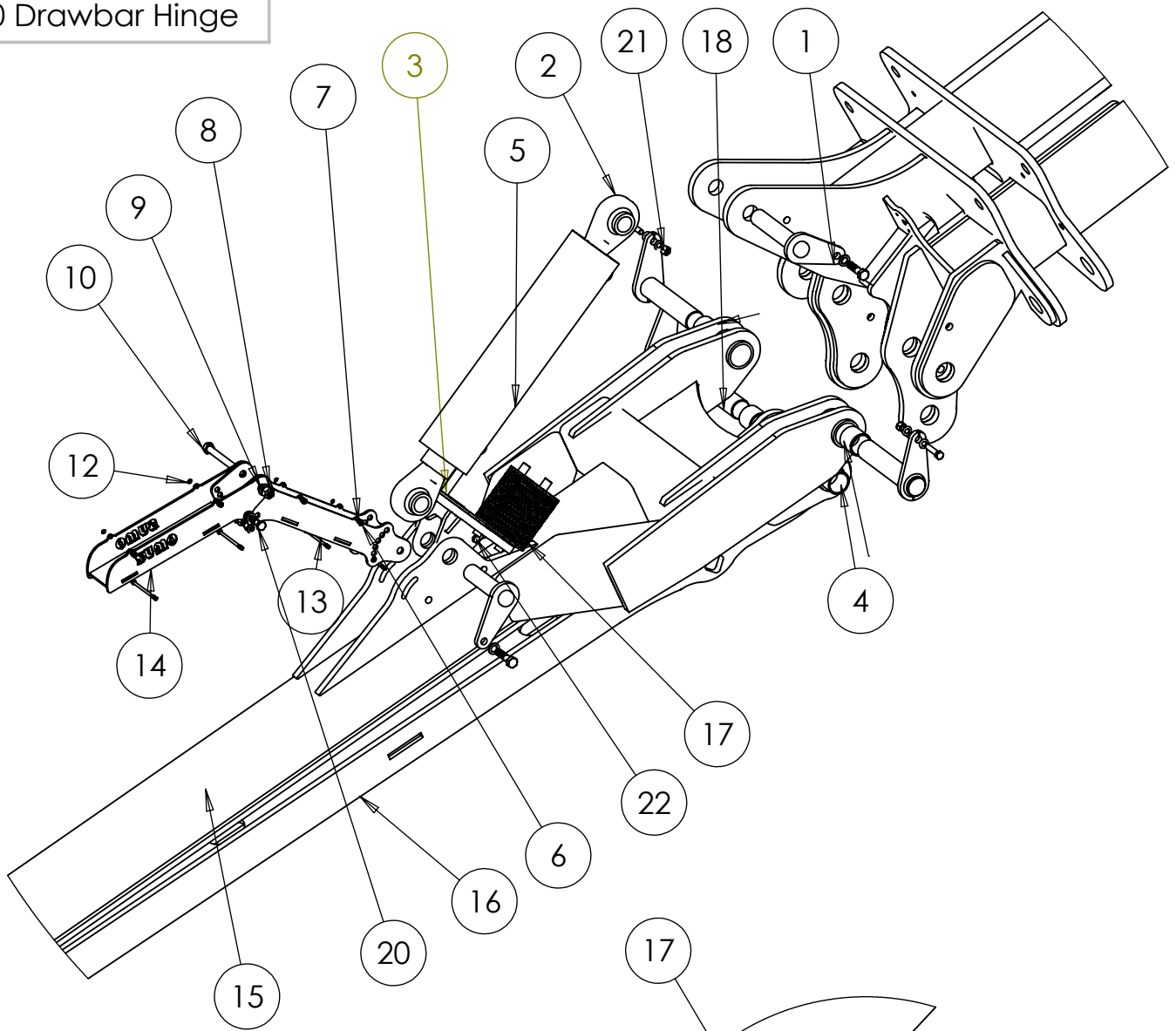
8.9 light Assembly



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

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MACHINE/COMPONENT:	Sumo Multipress
TITLE:	Light Assembly
	
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DATE:04/ 06/ 2013	INITIAL: MH

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

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MACHINE/COMPONENT:

Sumo Multipress

TITLE:

Drawbar Hinge



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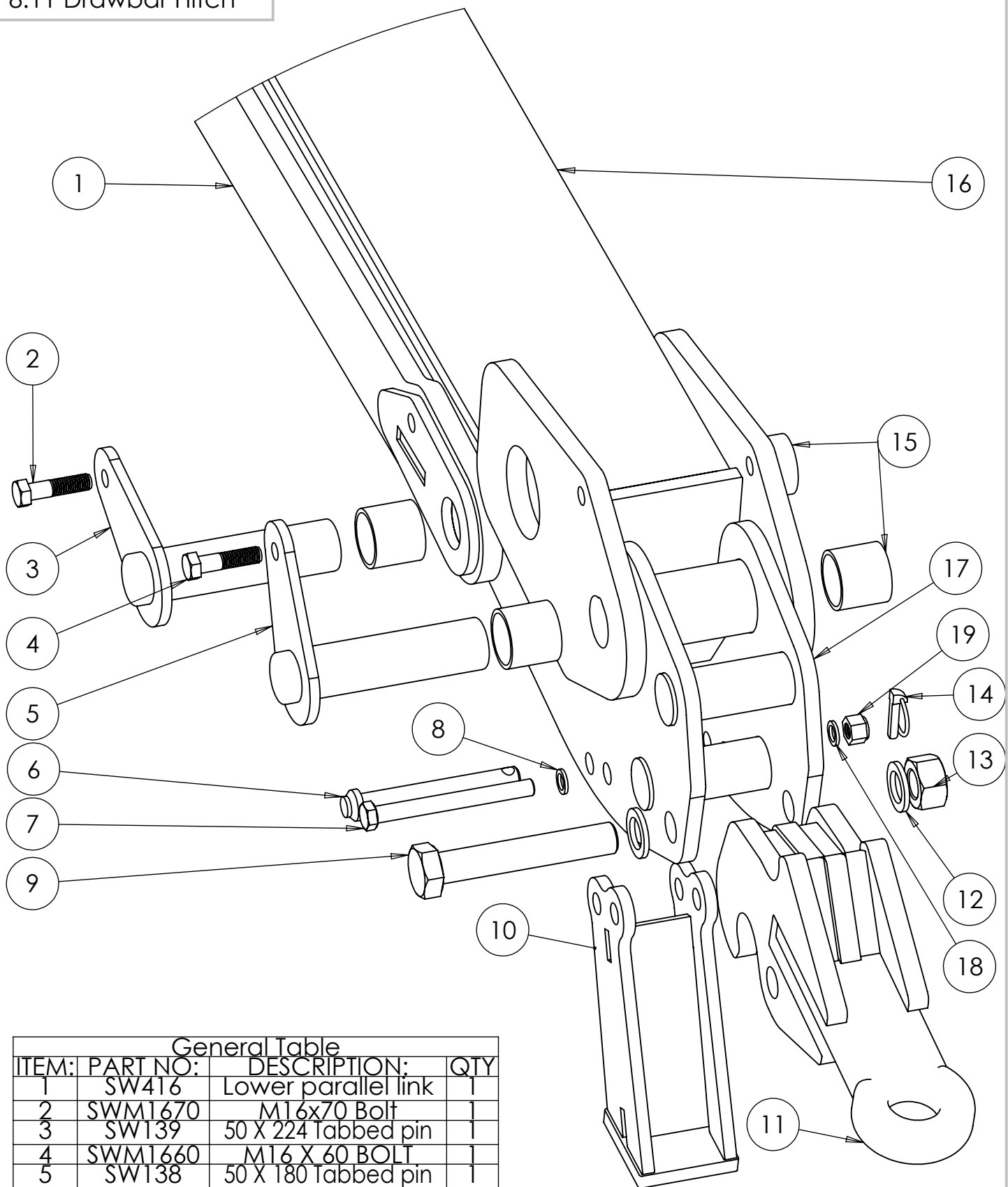
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INITIAL: MH

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

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MACHINE/COMPONENT:

Sumo Multipress

TITLE:

Drawbar Hitch



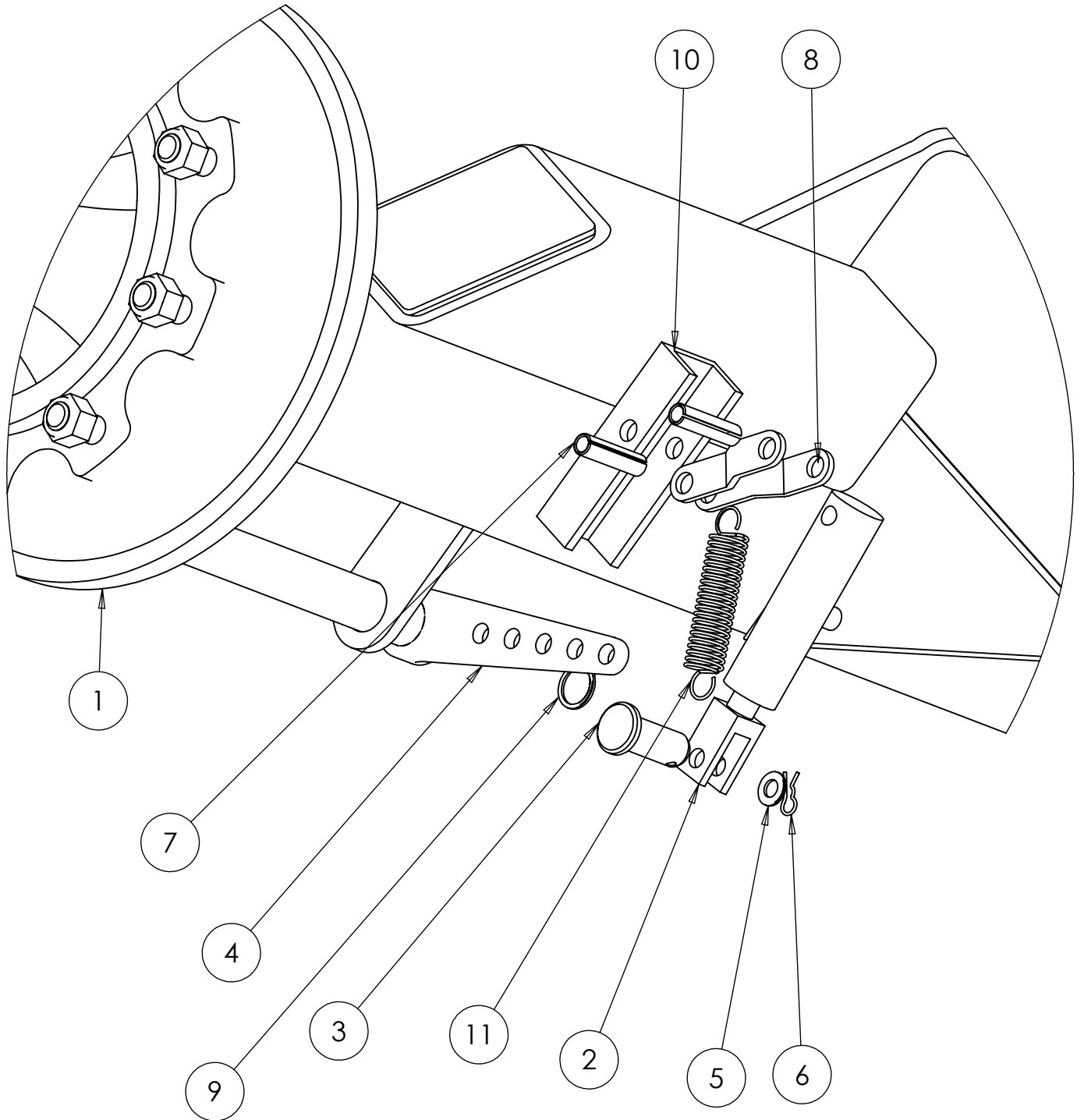
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DATE: 07/06/2013

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

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MACHINE/COMPONENT:

Sumo Multipress

TITLE:

Axle, wheels and Brakes

SUMO

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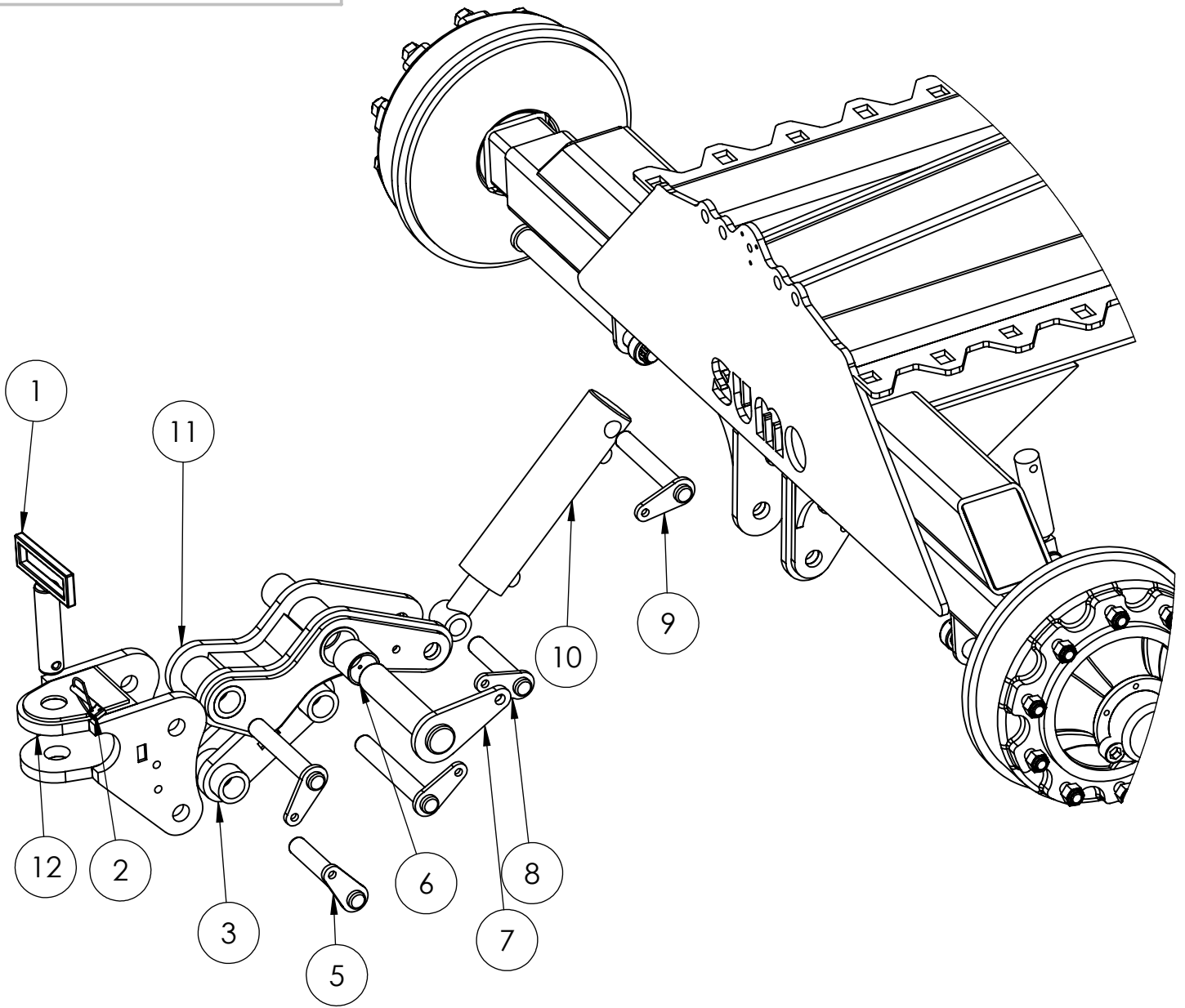
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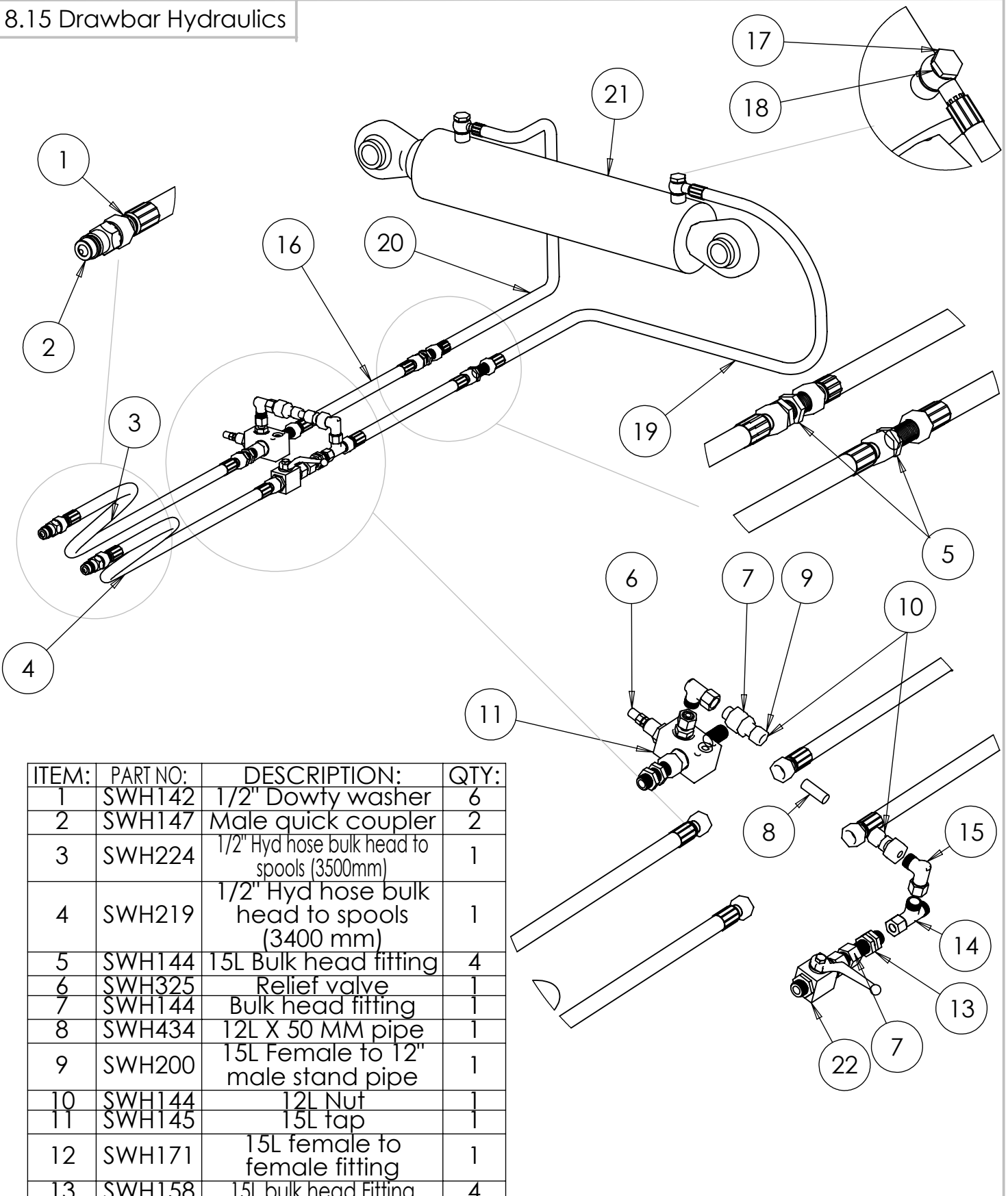
8.14 Oponal Rear Drawbar



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

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MACHINE/COMPONENT:	Sumo Multipress
TITLE:	Rear Drawbar
	
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DATE:19/4/2013	INITIAL: MH

8.15 Drawbar Hydraulics



ITEM:	PART NO:	DESCRIPTION:	QTY:
1	SWHT42	1/2" Dowty washer	6
2	SWHT47	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	SWHT44	15L Bulk head fitting	4
6	SWH325	Relief valve	1
7	SWHT44	Bulk head fitting	1
8	SWH434	12L X 50 MM pipe	1
9	SWH200	15L Female to 12" male stand pipe	1
10	SWHT44	12L Nut	1
11	SWHT45	15L tap	1
12	SWHT171	15L female to female fitting	1
13	SWHT158	15L bulk head Fitting	4
14	SWHT167	15L Tree branch	1
15	SWH265	12L Compact 90	1
16	SWH225	1/2" Hyd hose bulk head to bulk head	2
17	SWHT143	1/2" Banjo bolt	2
18	SWHT142	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	SWHT45	Ball valve tap	1

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MACHINE/COMPONENT:

Sumo Trailed trio

TITLE:

Drawbar Hydraulics



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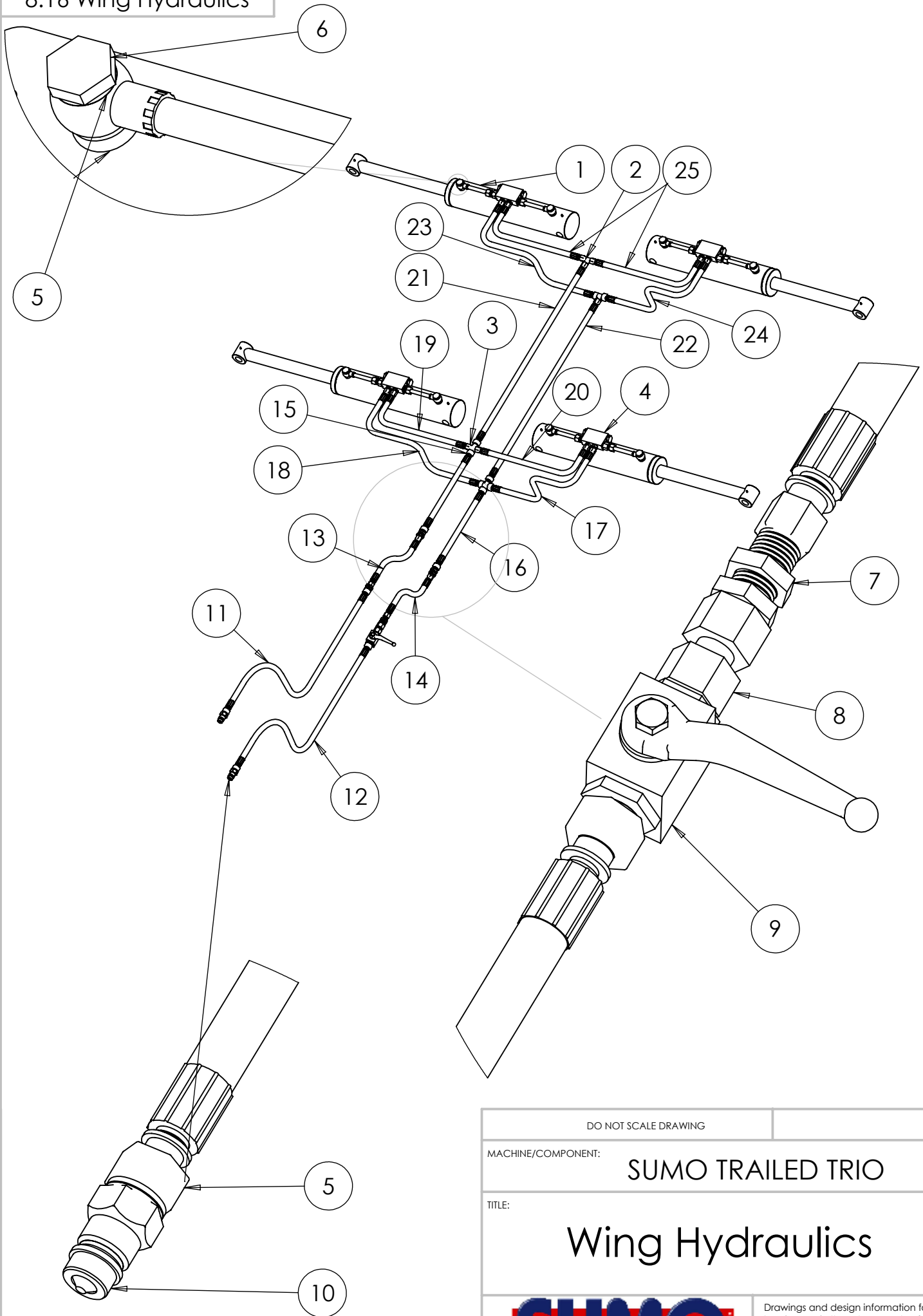
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8.16 Wing Hydraulics



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MACHINE/COMPONENT:	SUMO TRAILED TRIO
TITLE:	Wing Hydraulics
	
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DATE:17/05/2013	INITIAL: MH

8.16 Wing Hydraulics Continued

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

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MACHINE/COMPONENT:

Sumo Trailed Trio

TITLE:

Wing Hydraulics (Continued)



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8.18 stickers and paint

Sticker	Description	Quantity	Part No.
	Big Sumo horizontal sticker 450 x 125mm	2	SWB125
	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