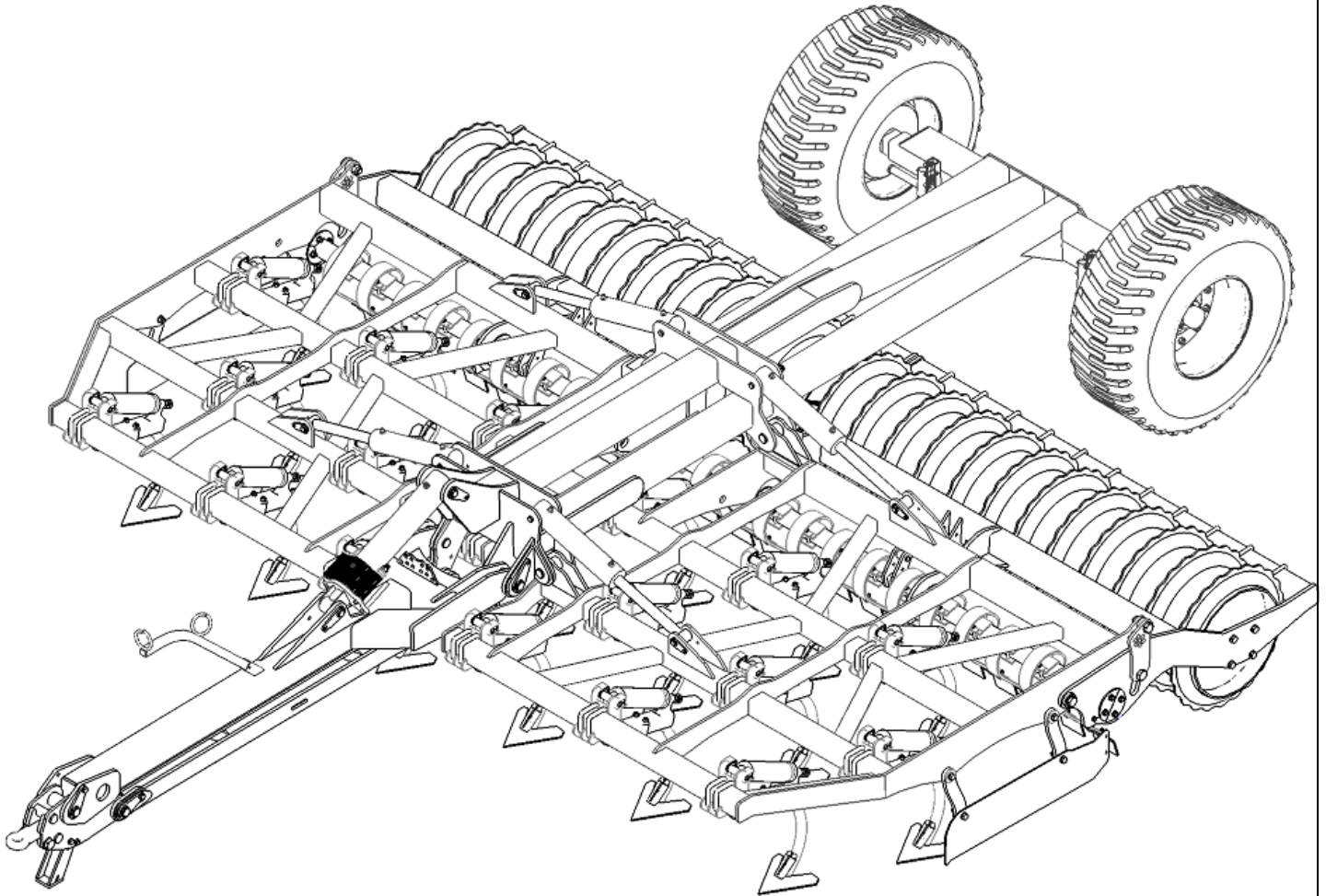


SUMO Multipress

4.6m, 5.6m and 6.6m



Operators Manual
and
Parts List 2009

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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 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.

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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. The angle and effect of the levelling paddles should be monitored by noting the location of the arrow on the indicator scale. If the marker arrow appears at the top of the scale the paddles are out of work and when the marker appears at the lowest extreme is when the paddles are at their most aggressive.

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.

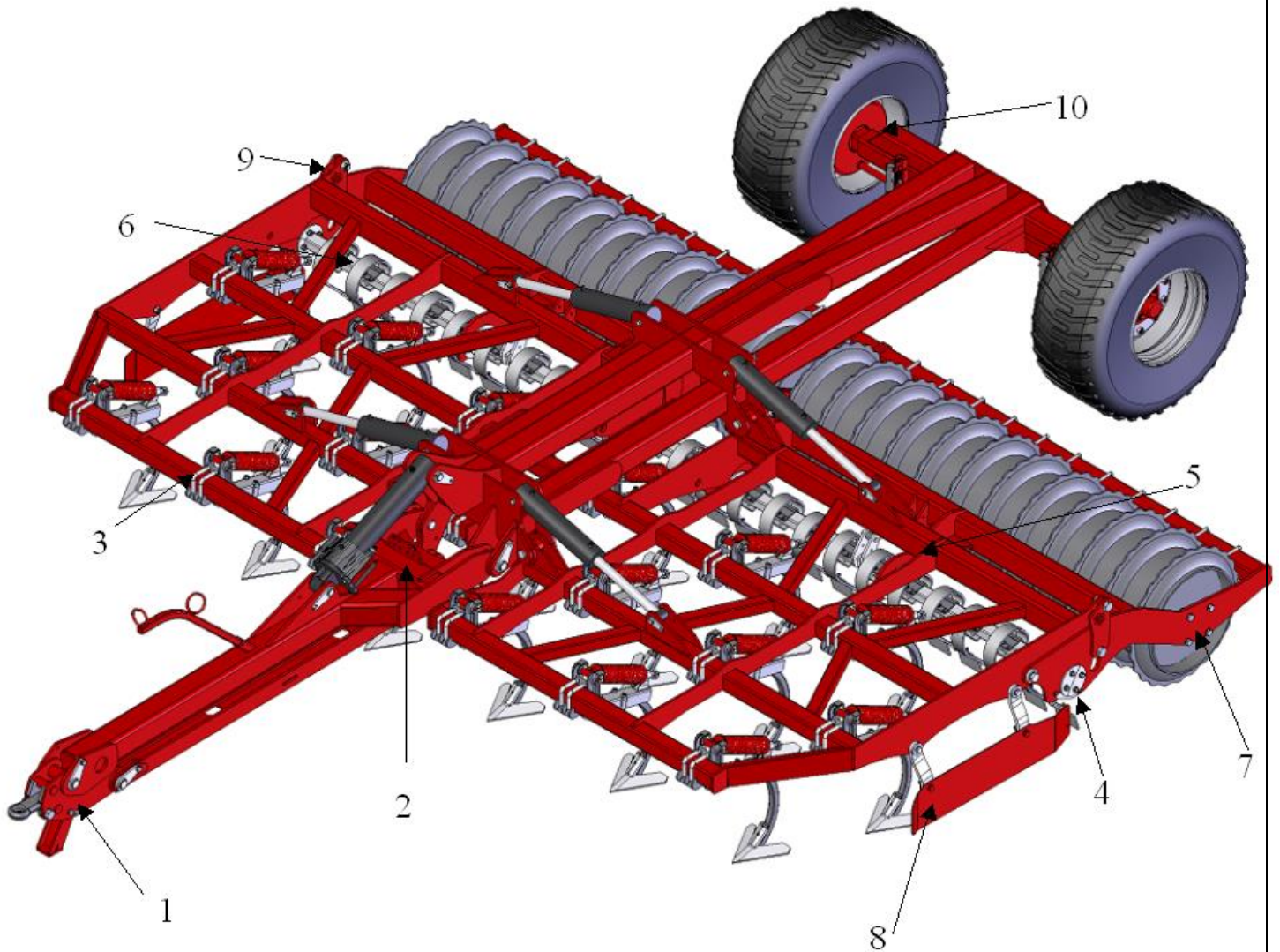
The condition and position of the packer scrapers should also be observed in order to prevent soil building up on the packer. Ensure the scrapers are not touching the packer though, as this will add rolling resistance as well as causing premature wear of the packer.

5.1 Spares

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

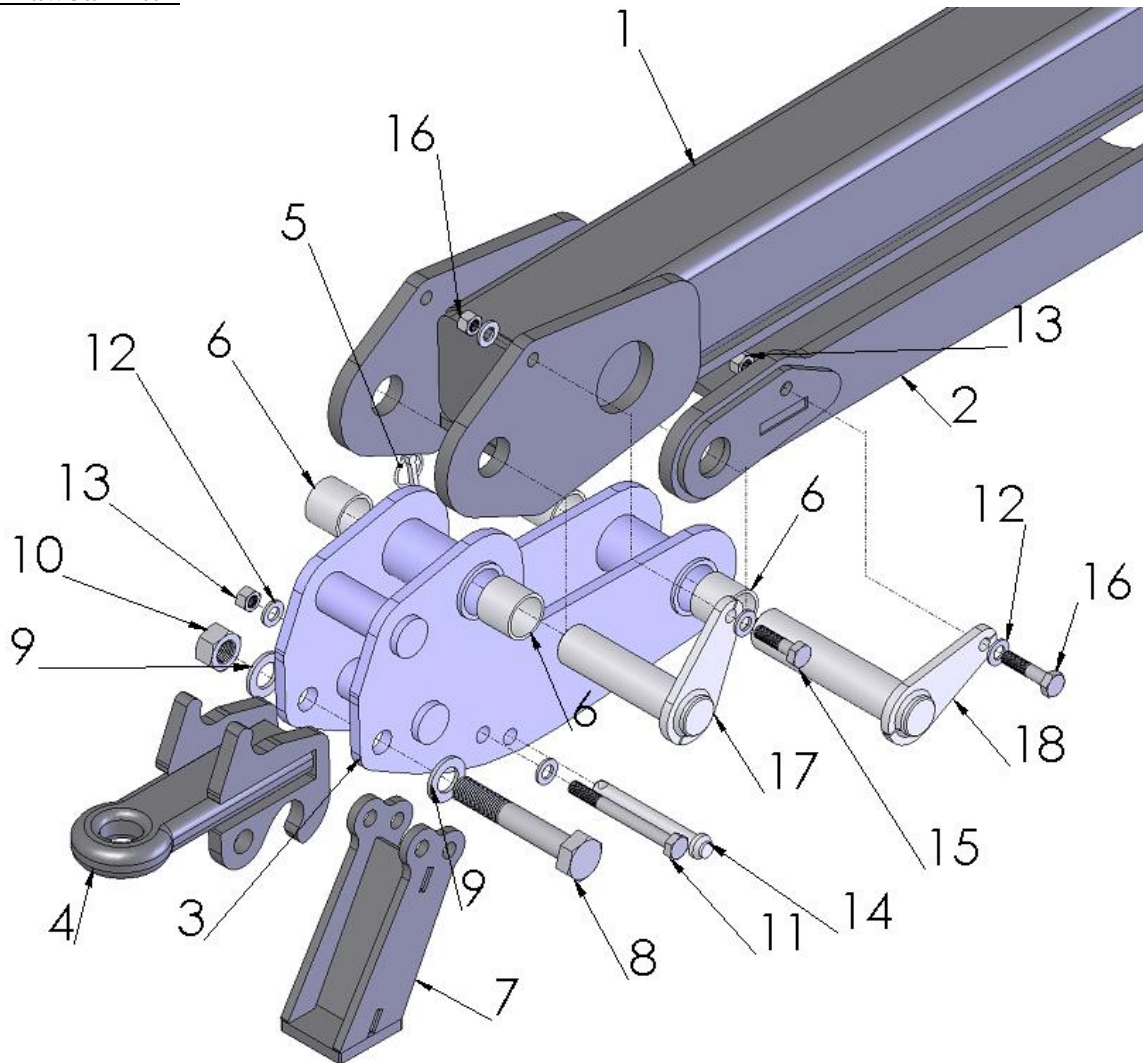
6.0 Parts and Assembly

6.1 Overview



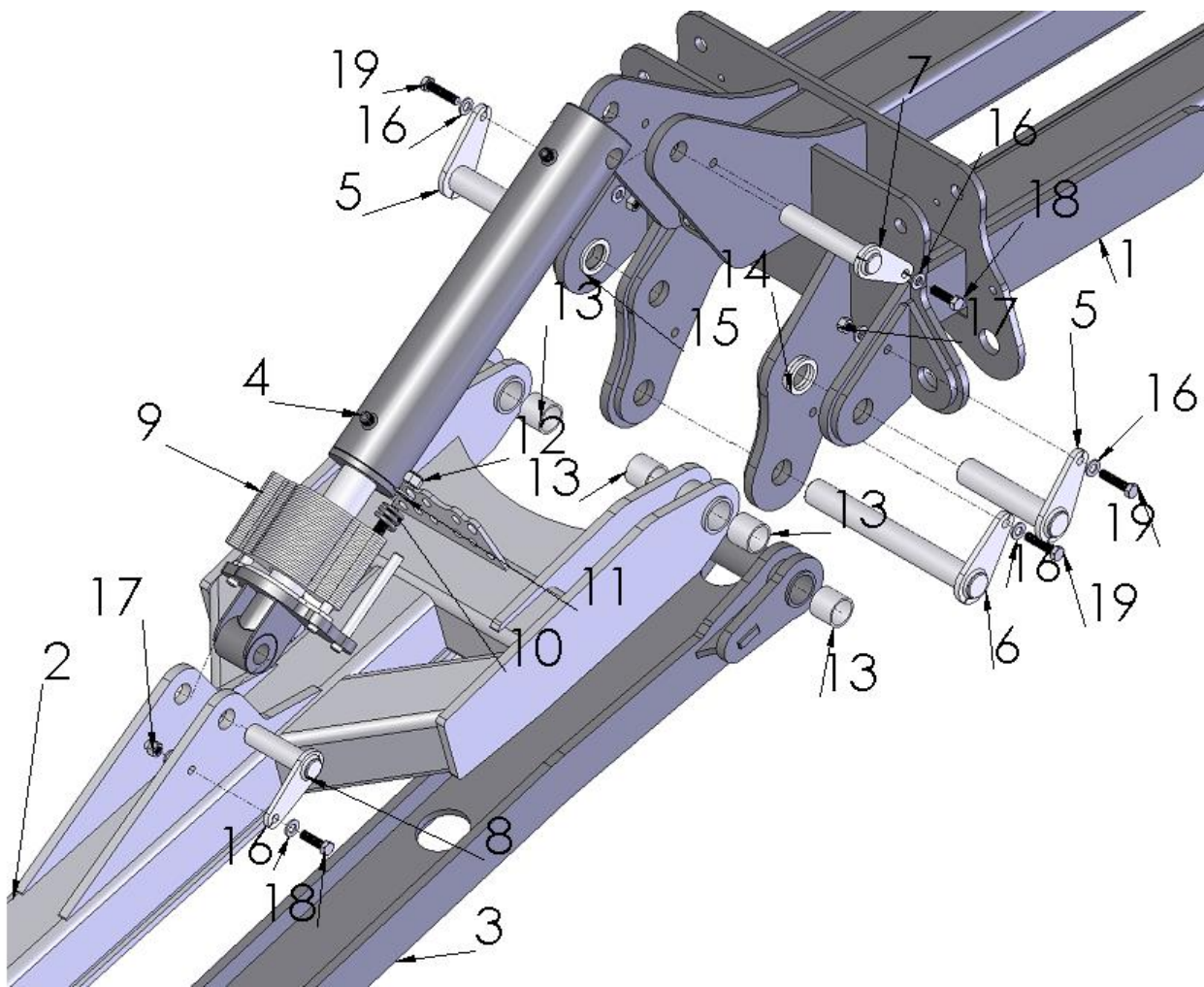
Item	Description	Page No.
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6.2 Drawbar hitch



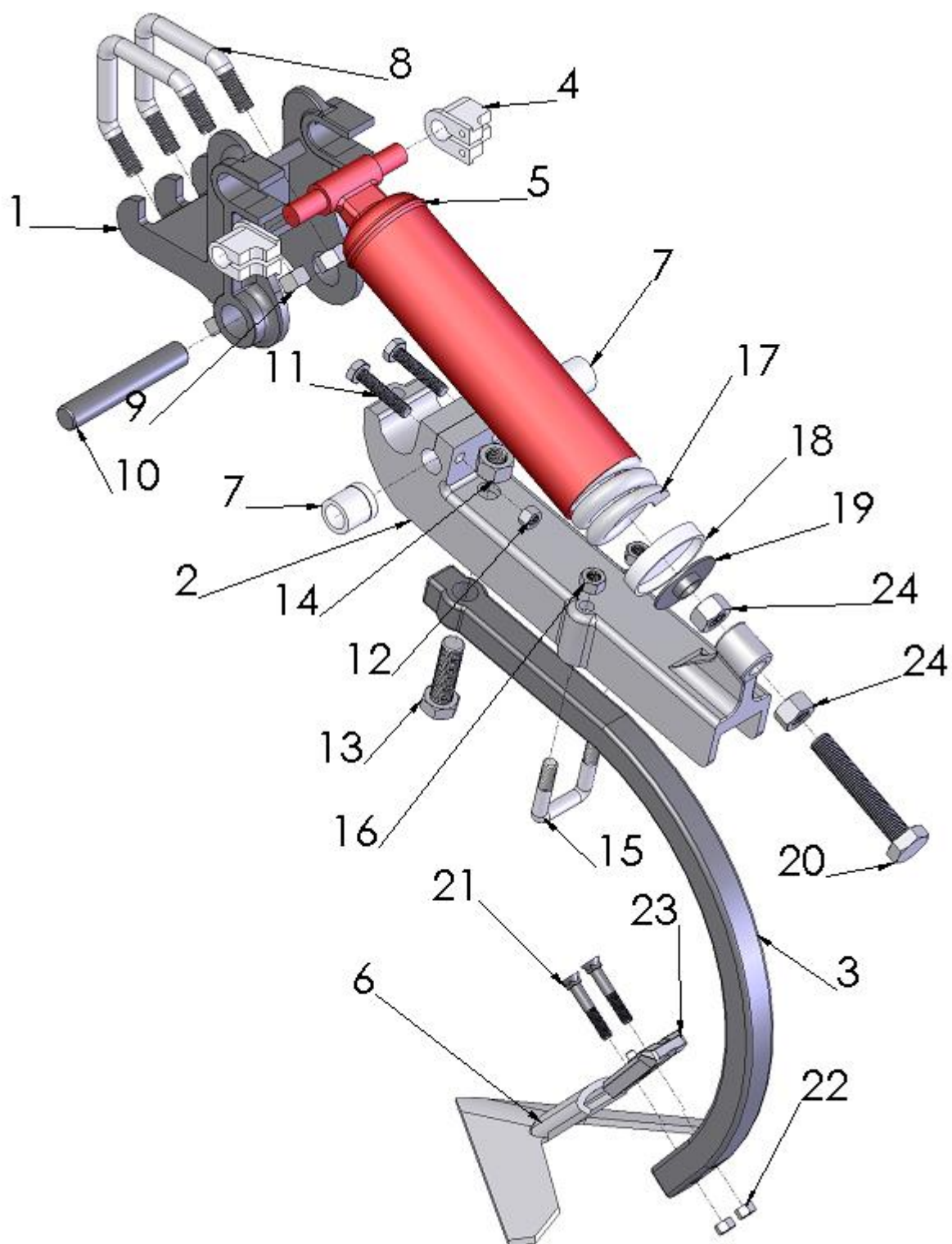
Item	Part No.	Description	Quantity
1	SW258	Drawbar box	1
2	SW259	Lower parallel link	1
3	SW134	Drawbar hitch unit	1
4	SW135	Towing eye	1
5	SWB105	Linch pin	1
6	SWB108	50x58x50 PB1 bush	4
7	SW136	Stand	1
8	SWM30180	M30 x 180 bolt	1
9	SWM30001	M30 flat washer	2
10	SWM30004	M30 nylock nut	1
11	SWM16160	M16 x 160 bolt	1
12	SWM16001	M16 flat washer	6
13	SWM16004	M16 nylock nut	3
14	SW137	20mm straight stand pin	1
15	SW1660	M16 x 60 bolt	1
16	SW1670	M16 x 70 bolt	1
17	SW138	50 x 180 tabbed pin	1
18	SW139	50 x 225 tabbed pin	1

6.3 Drawbar hinge



Item	Part No.	Description	Quantity
1	SW140	Multipress Chassis	1
2	SW258	Drawbar	1
3	SW259	Parallel lower link	1
4	SWH136	707/5 ram	1
5	SW139	50 x 225 tabbed drawbar pin	2
6	SW141	50 x 402 tabbed drawbar pin	1
7	SW142	40 x 210 tabbed ram top pin	1
8	SW143	40 x 148 tabbed ram bottom pin	1
9	SW144	Ram slice	30
10	SWB109	Slice spring	1
11	SWM20001	M20 flat washer	1
12	SWM20004	M20 nylock nut	1
13	SWB142	50 x 58 x 50 oilite bush	6
14	SW145	8mm hinge spacer	4
15	SW146	6mm hinge spacer	2
16	SWM16001	M16 washer	10
17	SWM16004	M16 nylock nut	5
18	SWM1655	M16 x 55 bolt	2
19	SWM1670	M16 x 70 bolt	3

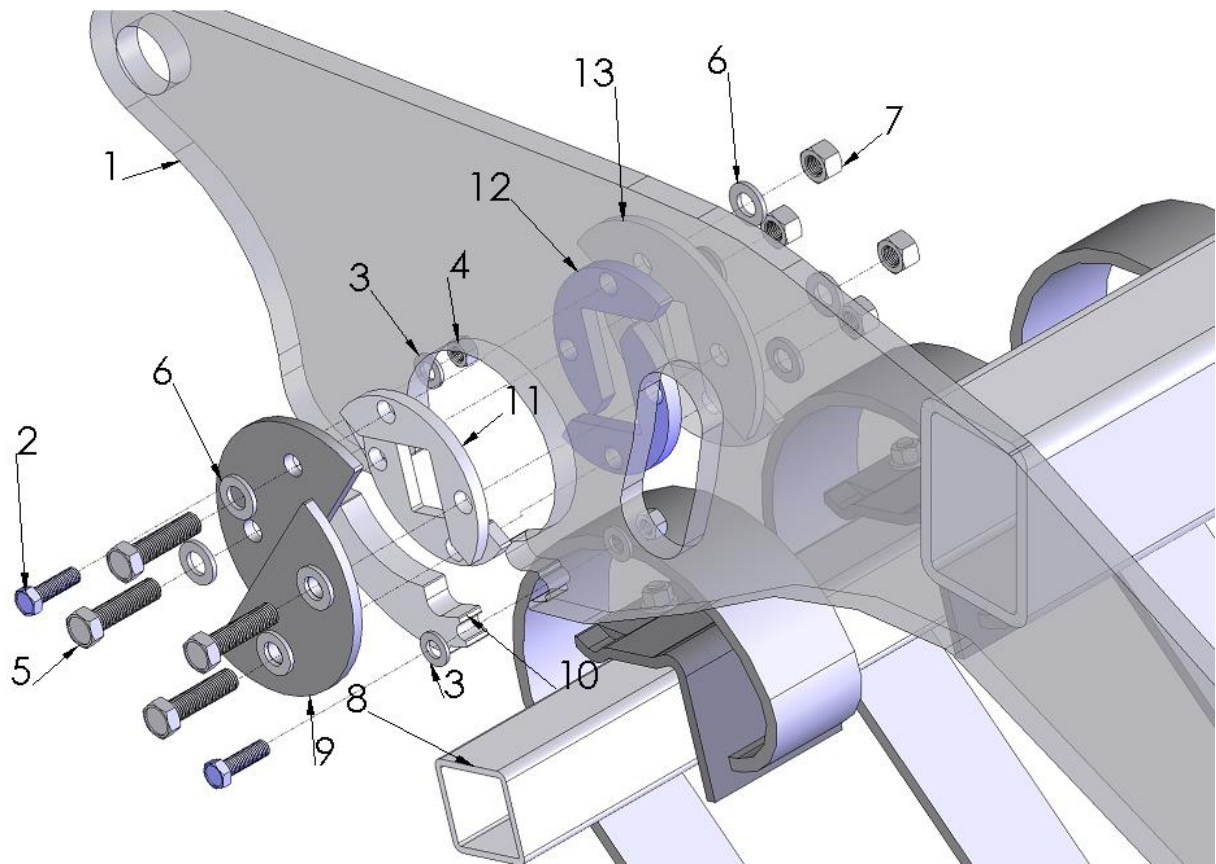
6.4 Spring tine



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

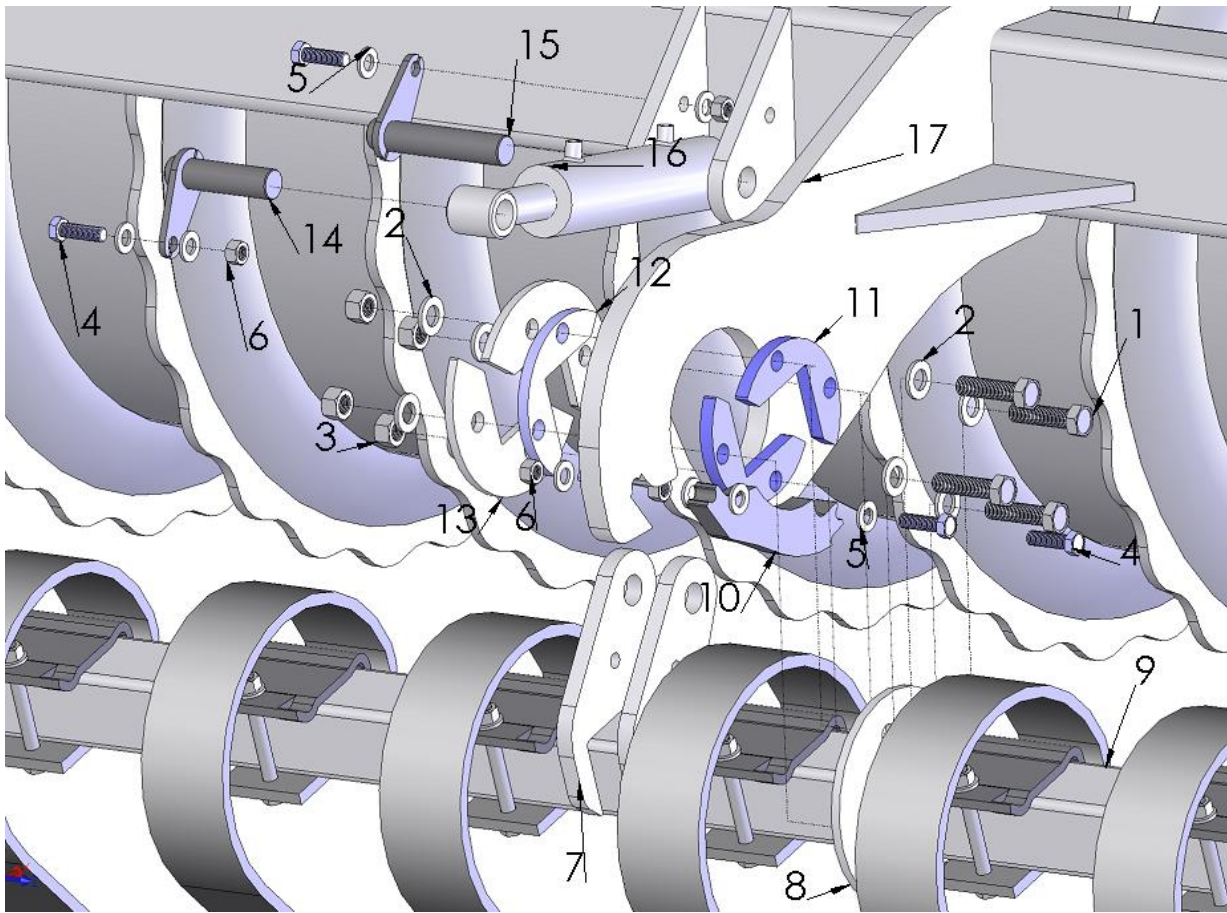


6.5 Paddle angle adjustment rig (outside)



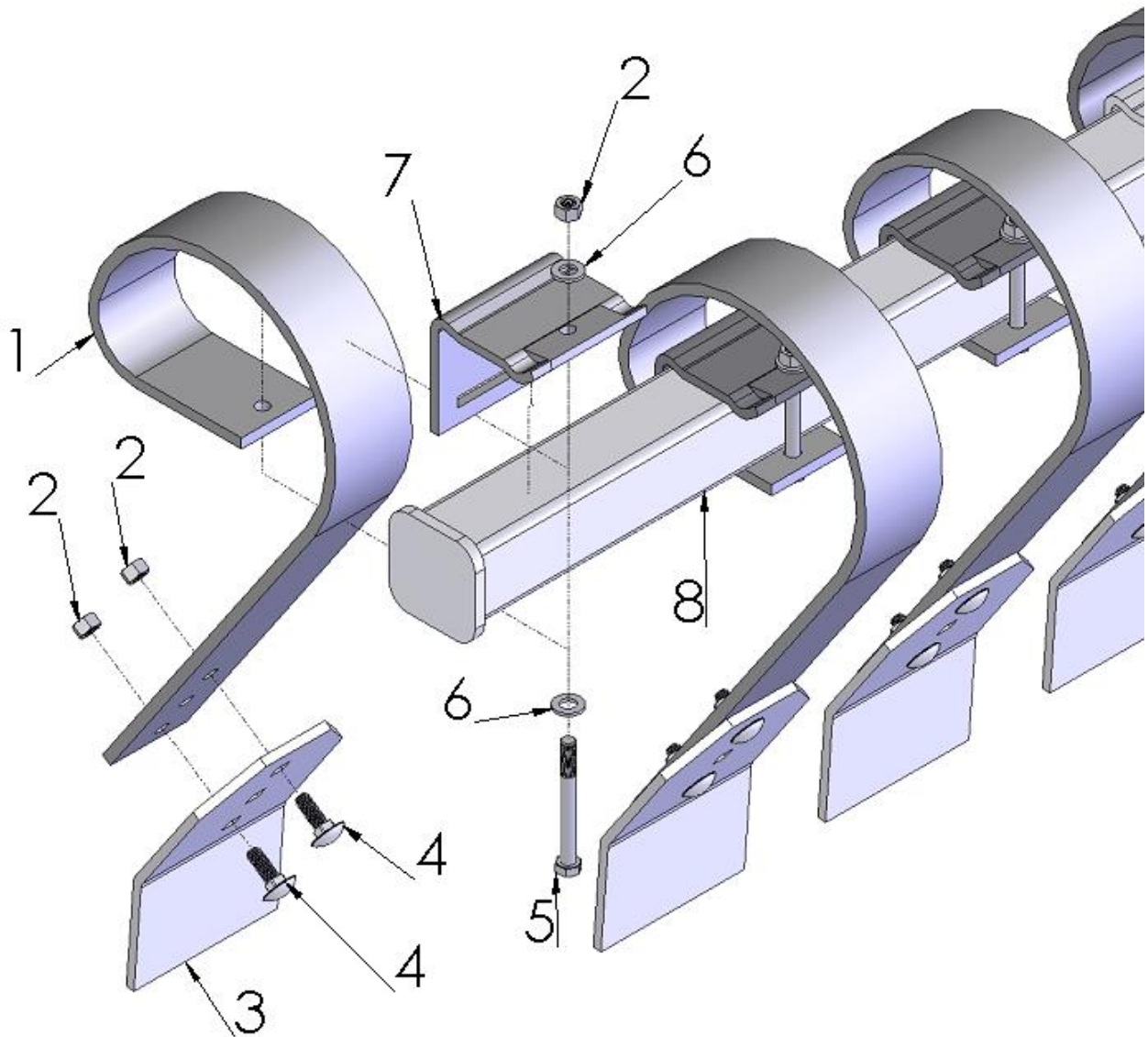
Item	Part No.	Description	Quantity/4.6m machine	Quantity/5.6m machine	Quantity/6.6m machine
1	SW147	5.6m Packer frame	N/A	2	N/A
	SW205	3.3m Packer frame (not shown)	N/A	N/A	N/A
	SW206	4.6m Packer frame (not shown)	2	N/A	N/A
	SW207	6.6m Packer frame (not shown)	N/A	N/A	2
2	SWM1240	M12 x 40 bolt	12	12	16
3	SWM12003	M12 flat washer	24	24	32
4	SWM12004	M12 Nylock nut	12	12	16
5	SWM1660	M16 x 60 bolt	24	24	32
6	SWM16001	M16 flat washer	48	48	64
7	SWM16004	M16 Nylock nut	24	24	32
8	SW148	5.6m Paddle box	N/A	2	N/A
	SW207	3.3m Paddle box (not shown)	N/A	N/A	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
9	SW149	Turn rig outer profile	4	4	4
10	SW150	Turn rig lock piece	6	6	8
11	SW151	Turn rig 10mm surround	12	12	16
12	SW152	Turn rig 12mm surround	12	12	16
13	SW153	Turn rig straight through profile	20	20	24

6.6 Paddle angle adjustment rig (straight through)



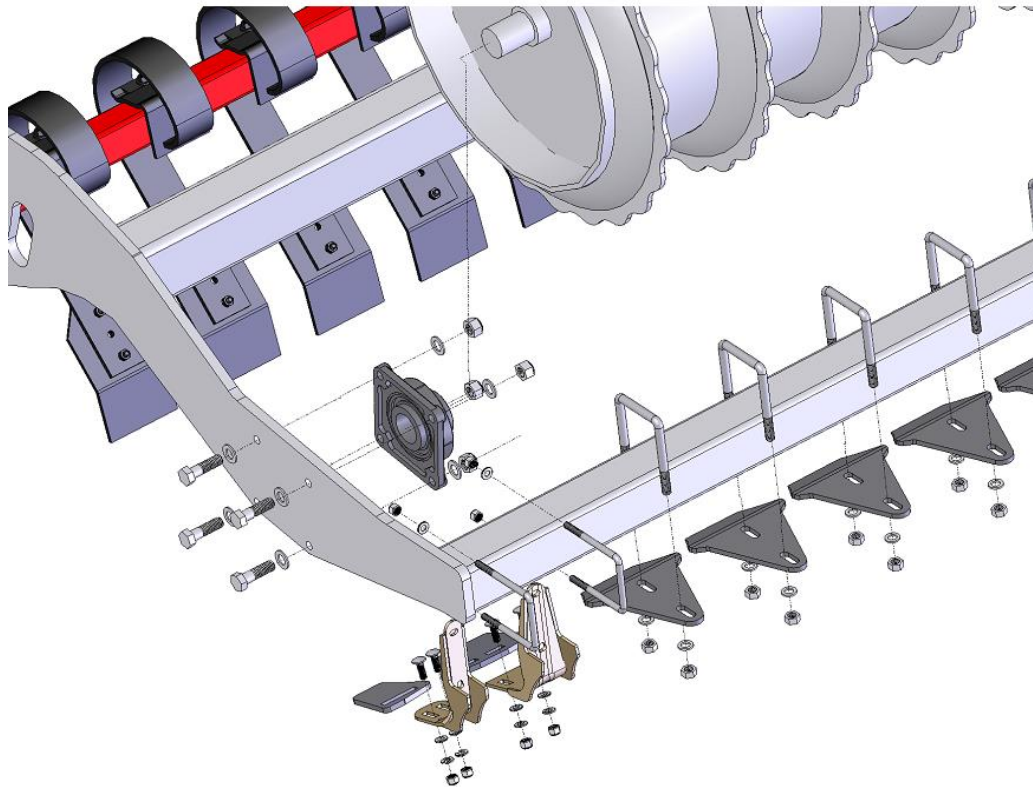
Item	Part No.	Description	Quantity/4.6m machine	Quantity/5.6m machine	Quantity/6.6m machine
1	SWM1660	M16 x 60 bolt	24	24	32
2	SWM16001	M16 flat washer	48	48	64
3	SWM16004	M16 Nylock nut	24	24	32
4	SWM1240	M12 x 40 bolt	12	12	16
5	SWM12003	M12 flat washer	24	24	32
6	SWM12004	M12 Nylock nut	12	12	16
7	SW154	Paddle box ram mount profile	4	4	4
8	SW153	Turn part straight through (welded on)	4	4	4
9	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
10	SW150	Turn rig lock piece	6	6	8
11	SW152	Turn rig 12mm surround	12	12	16
12	SW151	Turn rig 10mm surround	12	12	16
13	SW153	Turn part straight through	20	20	24
14	SW155	25mm x 80 ram pin	2	2	2
15	SW156	25mm x 110mm ram pin	2	2	2
16	SWH106	702/1 ram	2	2	2

6.7 Levelling Paddles



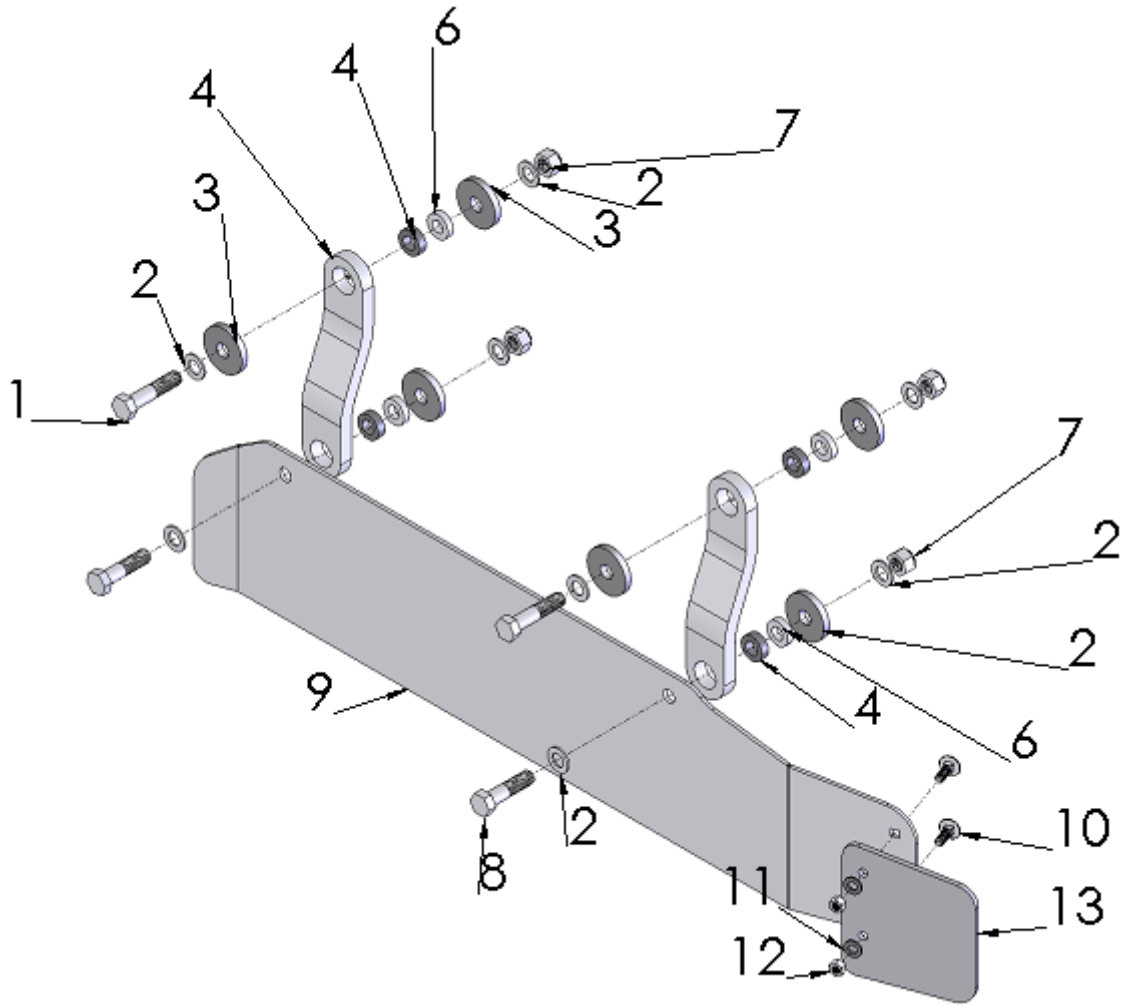
Item	Part No.	Description	Quantity/4.6m machine	Quantity/5.6m machine	Quantity/6.6m machine
1	SWB121	Paddle spring	19	23	29
2	SWM12004	M12 Nylock nut	57	69	87
3	SWB122	Paddle plate	19	23	29
4	SWM1235chsq	M12 x 35 cuphead square bolt	38	46	58
5	SWM12110	M12 x 110 bolt	76	92	116
6	SWM12001	M12 flat washer	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 Packer Assembly



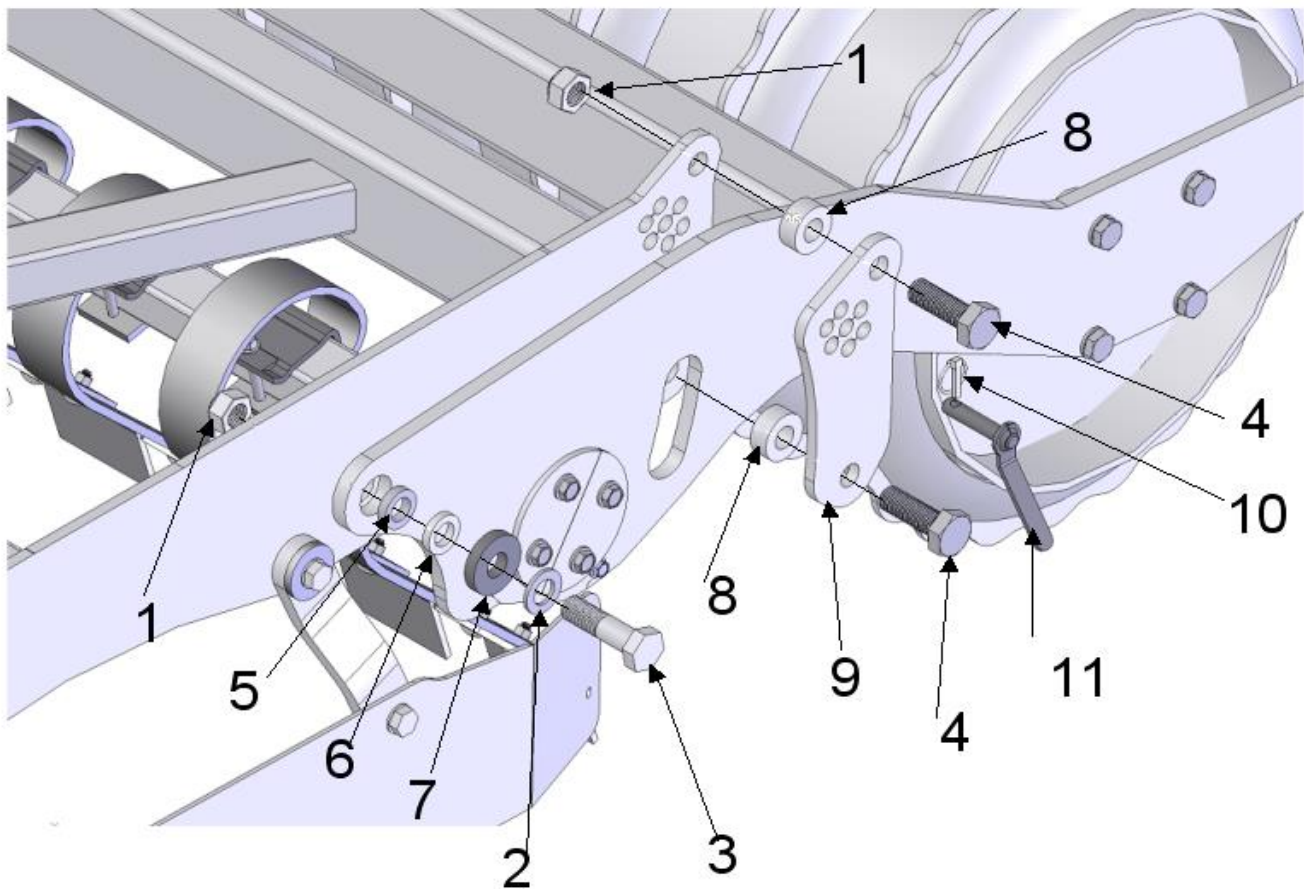
Item	Part No.	Description	Quantity/4.6m machine	Quantity/5.6m machine	Quantity/6.6m machine
1	SWM2070	M20 x 70 bolt	8	8	8
	SWM2070csk	M20 x 70 Countersunk bolt (not shown -inside bearings)	8	8	8
2	SWM20001	M20 flat washer	24	24	24
3	SWM20004	M20 Nylock nut	16	16	16
4	SWB104	Packer bearing	4	4	4
5	SWM16100ub	M16 x 100 U-bolt	18	22	26
6	SW162	5.6m Packer	N/A	2	N/A
	SW212	4.6m Packer (not shown)	2	N/A	N/A
	SW213	6.6m Packer (not shown)	N/A	N/A	2
7	SWM12004	M12 nylock nut	80	96	112
8	SWM12001	M12 flat washer	80	96	112
9	SWM12100ub	M12x100 U-bolt	20	24	28
10	SW650	2009 scraper mount	18	22	26
11	SW651	2009 scraper plate	18	22	26
12	SWM12002	M12 spring washer	40	48	56
13	SWM1235chsqa	M12x35 cup head square bolt	40	48	56
14	SW664	2009 half scraper plate	2	2	2
15	SW691	2006 half scraper mount	2	2	2

6.9 Soil Retainer



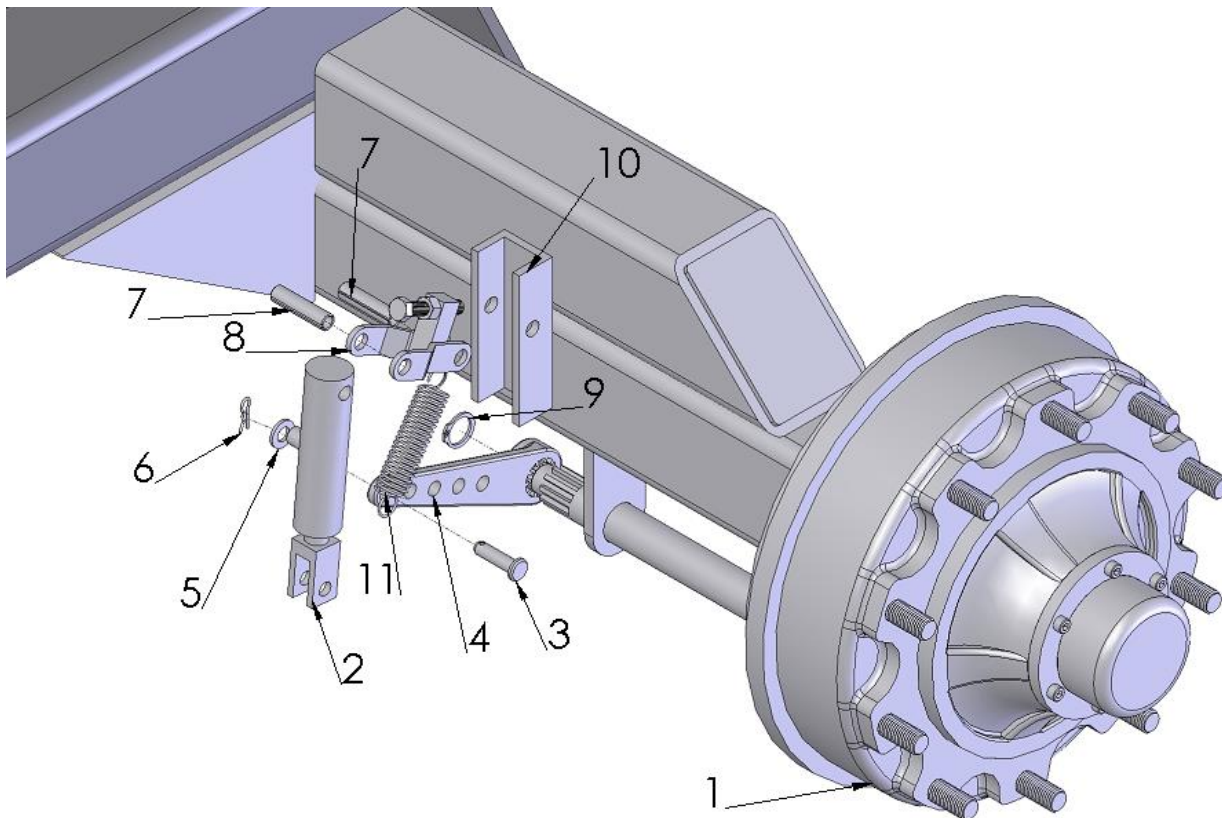
Item	Part No.	Description	Quantity/machine
1	SWM2090	M20 x 90 bolt	4
2	SWM20001	M20 flat washer	16
3	SW123	12mm spacer lg	8
4	SW124	Crank arm	4
5	SW125	12mm spacer sm	8
6	SW126	10mm spacer sm	8
7	SWM20004	M20 Nylock nut	8
8	SWM2080	M20 x 80 bolt	4
9	SW127	Soil retainer left	1
	SW128	Soil retainer right (not shown)	1
10	SWM1235chsq	M12 x 35 cup head square bolt	4
11	SWM12001	M12 flat washer	4
12	SWM12004	M12 Nylock nut	4
13	SW163	Optional soil retainer extension	2

6.10 Depth Control



Item	Part No.	Description	Quantity/machine
1	SWM30004	M30 Nylock nut	12
2	SWM30001	M30 flat washer	8
3	SWM30100	M30 x 100 bolt	4
4	SW3090	M30 x 90 bolt	8
5	SW125	12 spacer small	4
6	SW126	10mm spacer small	4
7	SW129	15mm spacer/washer large	4
8	SW160	Depth control spacer	8
9	SW161	Depth control outer hole plate	4
10	SW105	Linch pin	4
11	SW130	Depth pin	4





6.11 Wheel Hub



Item	Part No.	Description	Quantity/machine
1	SWB133	10 stud braked hub	2
2	SWB134	Brake ram	2
3		12mm clevis pin	2
4		Brake arm	2
5	SWM12001	M12 flat washer	2
6		Small R-clip	2
7		14x60 roll pin	4
8		Ram mount /adjuster	2
9		Circlip	2
10		Ram mount base	2
11		Spring and Clip	2

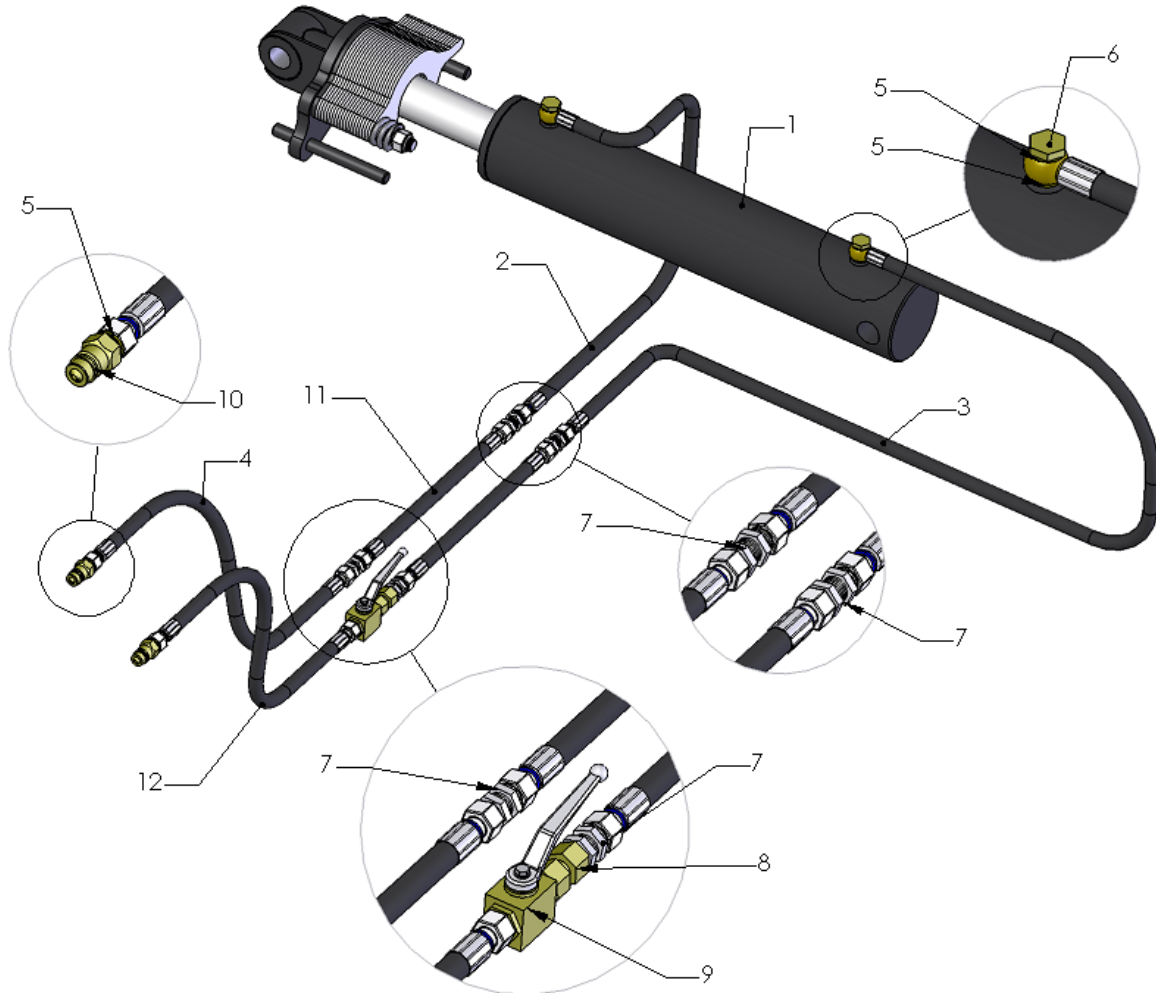
Fitted with 10 stud 500/60 22.5 transport wheels and tyres

6.12 Stickers and Paint

Sticker	Description	Quantity	Part No.
	Big Sumo horizontal sticker 450 x 125mm	6	SWB125
	Big Multipress sticker 500 x 130mm	6	SWB135
	Big Union Jack sticker 150 x 100mm	2	SWB127
	Small Sumo Horizontal sticker 300 x 80mm	4	SWB130
Touch up paint	Sumo Red	1/2 litre	SWB131
	Sumo Black	1/2 litre	SWB132

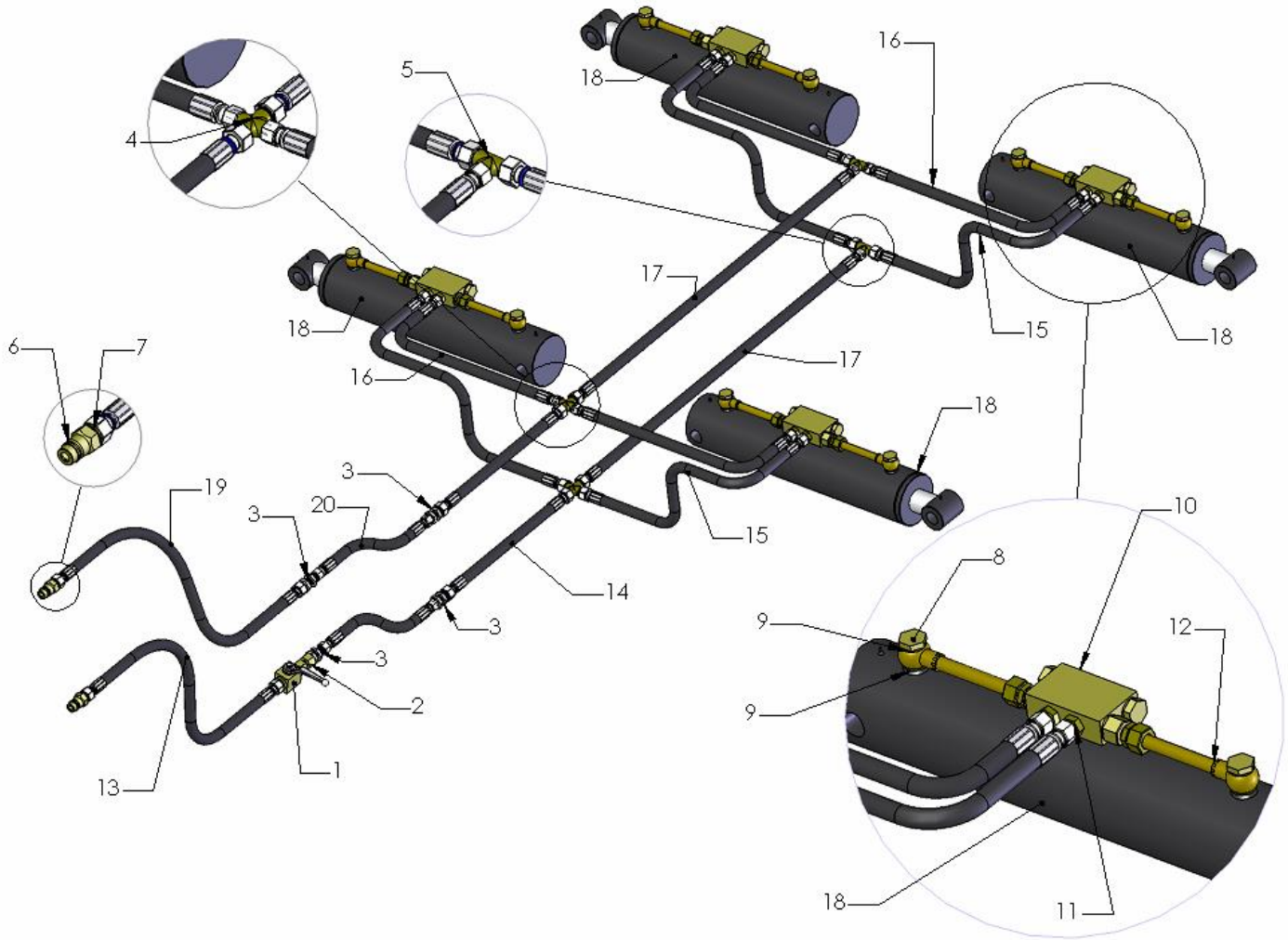
7.0 Hydraulics

7.1 Drawbar



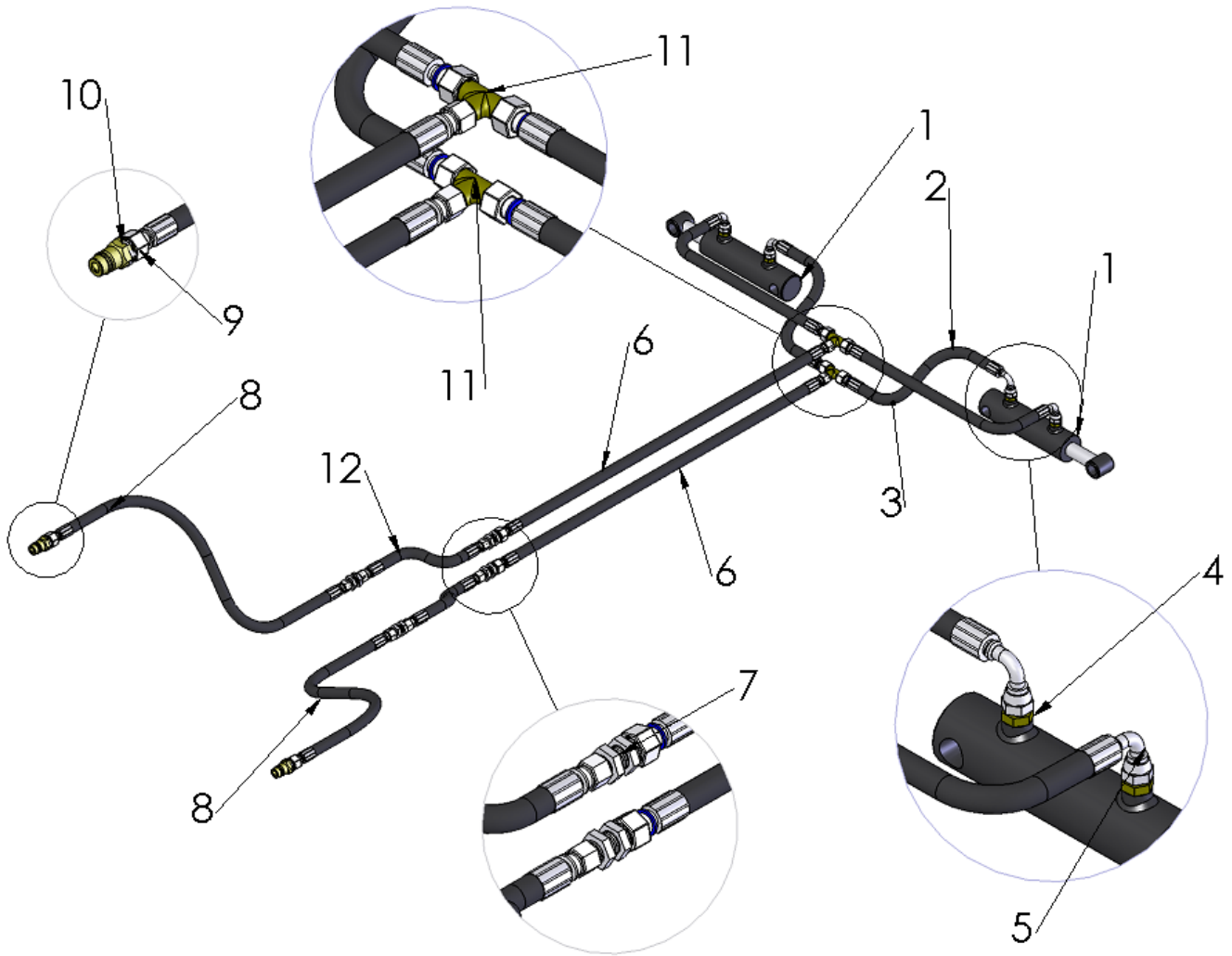
Item	Part No.	Description	Quantity
1	SWH136	707/5 Ram	1
2	SWH140	1/2" Hyd hose top ram to bulk head	1
3	SWH139	1/2" Hyd hose bottom ram to bulk head	1
4	SWH141	1/2" Hyd hose bulk head to spools	1
5	SWH142	1/2" dowty washer	6
6	SWH143	1/2" banjo bolt	2
7	SWH144	15L bulk head fitting	4
8	SWH171	15L female to female fitting	2
9	SWH145	15L tap	2
10	SWH147	Male quick coupler	2
11	SWH234	1/2" Hyd Hose Bulk head to bulk head	2
12	SWH233	1/2" Hyd hose bulk head to spools	1

7.2 Wings



Item	Part No.	Description	Quantity
1	SWH145	15L tap	1
2	SWH171	15L female to female fitting	1
3	SWH144	15L bulk head fitting	2
4	SWH155	12L cross	2
5	SWH156	12L Tee	2
6	SWH147	Male quick coupler	2
7	SWH142	1/2" dowty washer	2
8	SWH143	1/2" banjo bolt	8
9	SWH169	3/8" dowty washer	16
10	SWH154	Pilot operated check valve	4
11	SWH157	12L - 3/8" M fitting	8
12	SWH229	15L 1/2" banjo pipe	8
13	SWH148	3/8" Hyd hose bulk head to spools	2
14	SWH150	3/8" Hyd hose bulk head to front cross	2
15	SWH152	3/8" Hyd hose supply to far port	4
16	SWH151	3/8" Hyd hose supply to near port	4
17	SWH149	3/8" Hyd hose front cross to rear t-piece	2
18	SWH132	706/4 ram	4
19	SWH148	3/8" Hyd hose bulk head to spools	1
20	SWH150	3/8" Hyd hose bulk head to bulk head	2

7.3 Leveling Paddles



Item	Part No.	Description	Quantity
1	SWH106	702/1 ram	2
2	SWH160	3/8" Hyd hose t-piece to near ram port	2
3	SWH161	3/8" Hyd hose t-piece to far port ram port	2
4	SWH157	12L - 3/8" M fitting	4
5	SWH159	3/8" Swept 90	4
6	SWH162	3/8" Hyd hose bulk head to t-piece	2
7	SWH158	12L bulk head fitting	2
8	SWH163	3/8" Hyd hose bulk head to quick coupler	2
9	SWH142	1/2" dowty washer	2
10	SWH147	Male quick coupler	2
11	SWH156	12L Tee branch	2
12	SWH245	3/8" Hyd hose bulk head to bulk head	2