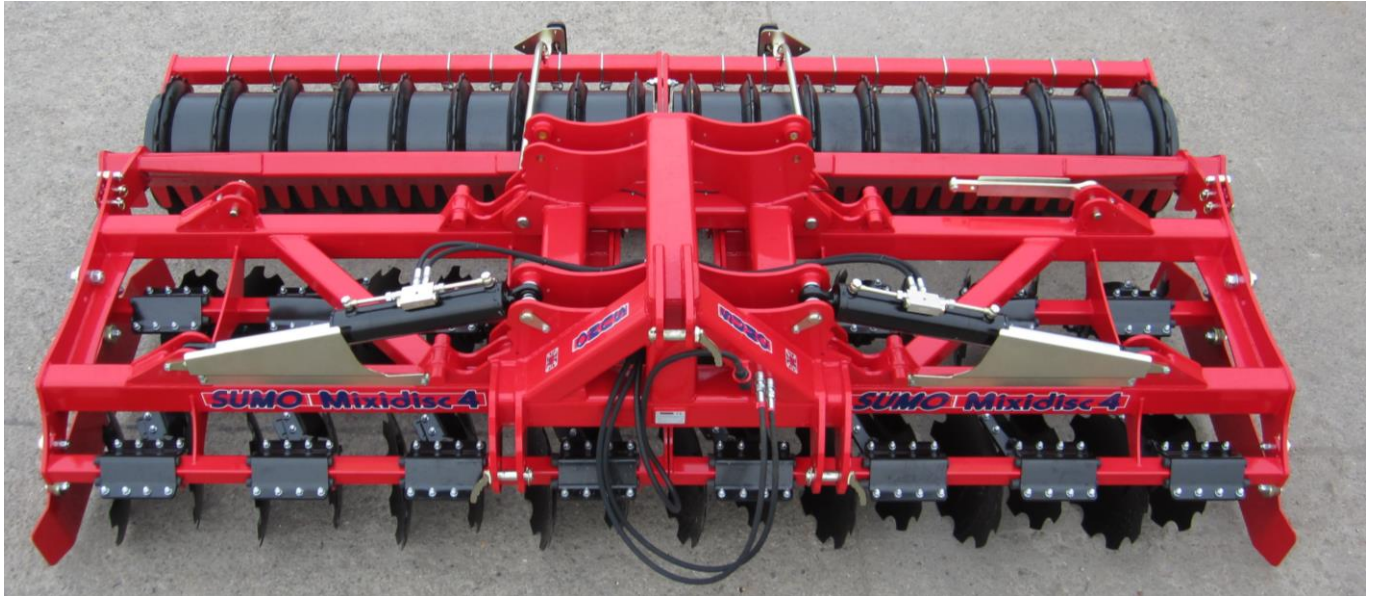


SUMO sumo1.com **Mixidisc**



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.



Sumo Mixidisc Registration Document

NAME:

ADDRESS:

Postcode:

Telephone Number:

DATE:

SUMO SERIAL No.
(Serial plate on
side of headstock)

DEALERSHIP
NAME AND
BRANCH:

COMMENTS:



In order to obtain your free pair of Sumo overalls and baseball cap please 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 Mixidisc is a mounted machine designed for high speed stubble cultivation to quickly incorporate and mulch large volumes of crop residues and create a micro tilth in the soil for fast germination of volunteers and weed seeds in one pass

It can also be used for seedbed preparation, straw harrowing or furrow levelling with low power requirement

Firstly

A double row of 500mm concave discs, mounted 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.

Secondly

The patented Multipacker is uniquely designed to fulfil a number of criteria, comprising, 508mm 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 660mm. The ring shoulders feature a convex shape adjacent to the barrel, creating consolidation and cracking even on the top of the ridge. Further to this is the ability to unbolt every individual packer quadrant for replacement without having to use any heat or cutting equipment. 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 Mixidisc 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, 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

- 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.

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 wide overhang 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 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. Ensure stands are raised to their transport 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.
- Driving, steering and braking characteristics are influenced by mounted machines and ballast weights. Therefore, ensure adequate steering and braking ability.
- If there is a requirement to lift the Sumo Mixidisc, appropriate lifting apparatus must be attached through the lifting eye in the centre of the machine. The 4m Mixidisc weighs approximately 3220kg.
- When making adjustments to the machines care should be taken not to trap any body parts in moving or pivoting parts.

Top Link Pin

Due to the physical nature and weight distribution of the Sumo Mixidisc a **category three enclosed ball top link** is highly recommended.

Due to the exaggerated loads experienced during normal working conditions, the top link pin is considered as a consumable part and should be checked for wear on a regular basis.

4.0 Operation and Adjustment

4.1 Operation

The top link should be as short as possible whilst remaining as close to horizontal as is achievable. It is important to ensure the machine is running level to allow the optimum level of soil disturbance as well as to prolong the life of the wearing parts.

Bearings should be greased (see 5.0 Maintenance); stands must be in the raised position and all relevant pins in the correct holes prior to commencing work.

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

4.2 Adjustments

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.

5.0 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 discs should be regularly monitored in order to maintain the most efficient use of the machine.

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.

Hydraulic cylinders - Exposed chrome ram rods should also be lightly greased occasionally to prevent these valuable parts from rusting and causing costly oil leaks.

5.1 Spares

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

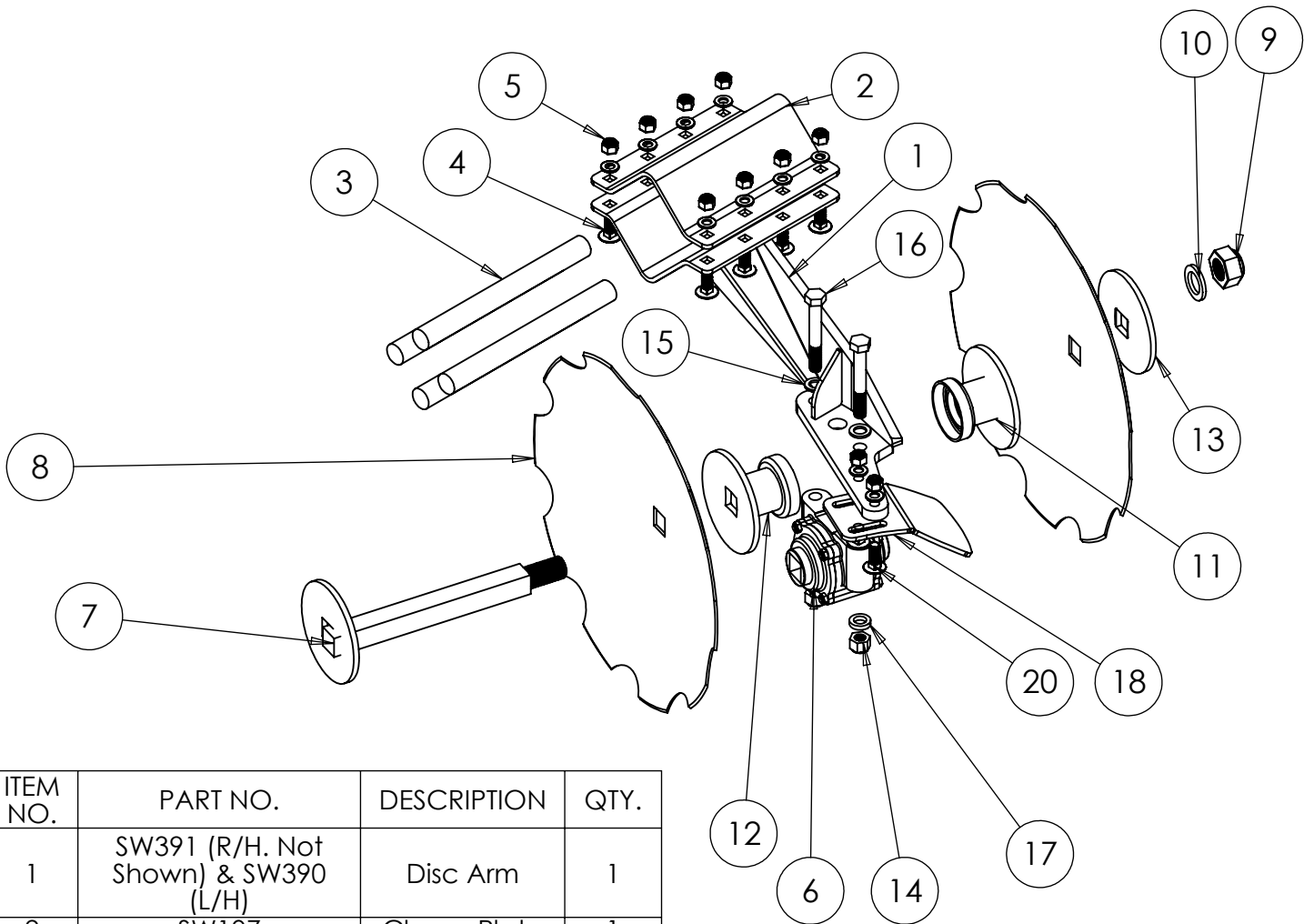
5.2 Winter storage

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.

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!

6.1 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 Mixidisc

TITLE:

Twin Disc Unit Assembly



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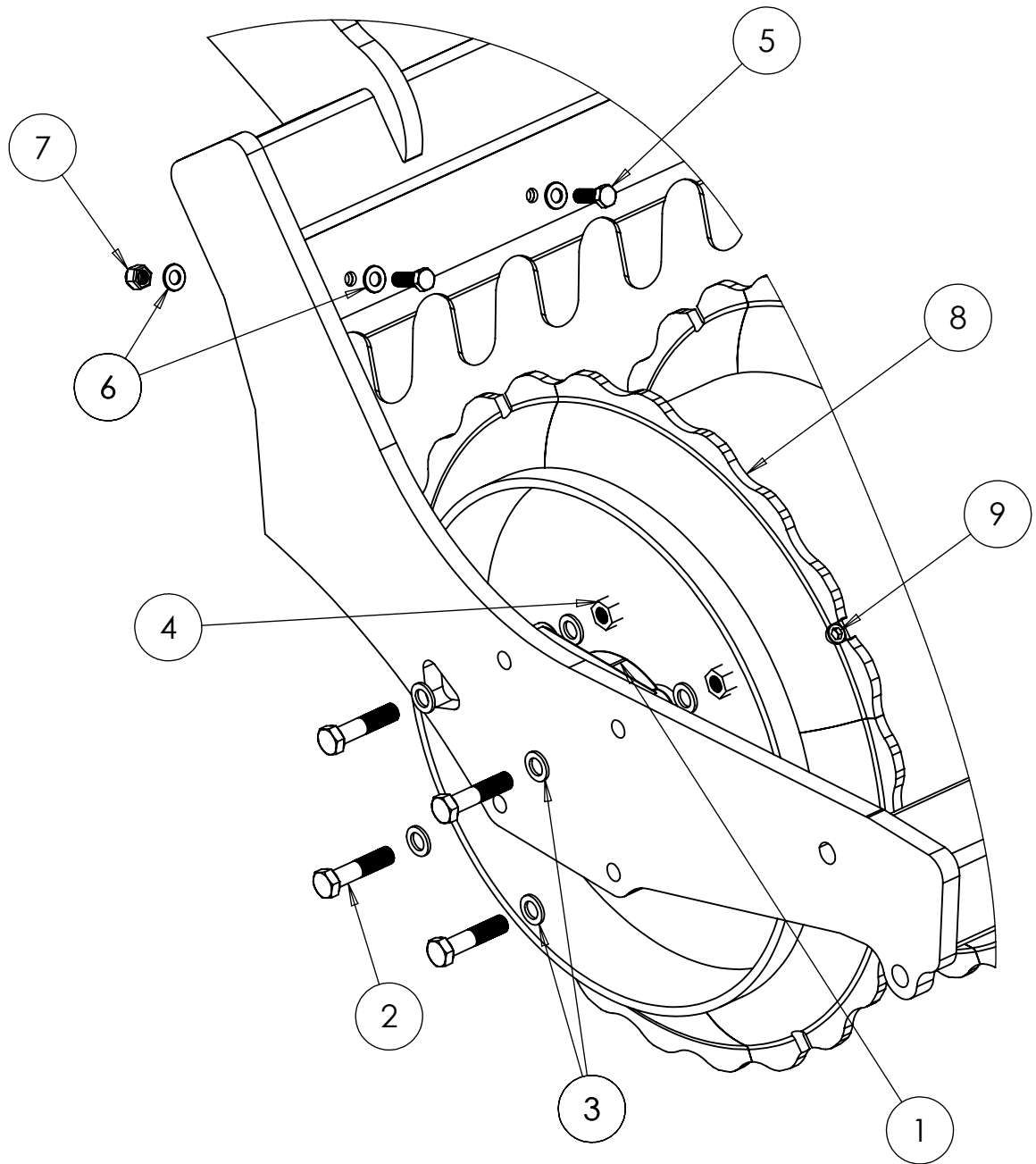
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REVISION:

DATE: 09/06/14

INITIAL: TW

6.2 Packer Bearing Assembly



| ITEM NO. | PART NO. | DESCRIPTION | QTY. |
|----------|------------|---------------------------------------|------|
| 1 | SWB104 | Packer Bearing | 1 |
| 2 | SWM1670 | M16 x 70 Bolt | 4 |
| 3 | SWM16001 | M16 Flat Washer | 8 |
| 4 | SWM16004 | M16 Nylock Nut | 4 |
| 5 | SWM1240 | M12 x 40 Bolt | 10 |
| 6 | SWM12001 | M12 Flat Washer | 20 |
| 7 | SWM12004 | M12 Nylock Nut | 10 |
| 8 | SWB331 | 508 Packer Quadrant | 36 |
| 9 | SWM1240CH | M12 x 40 Cap Head Bolt | 36 |
| 10 | SWM1670CSK | M16 x 70 Countersunk Bolt (not shown) | 4 |

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MACHINE/COMPONENT:

Sumo Mixidisc

TITLE:

Packer Bearing Assembly



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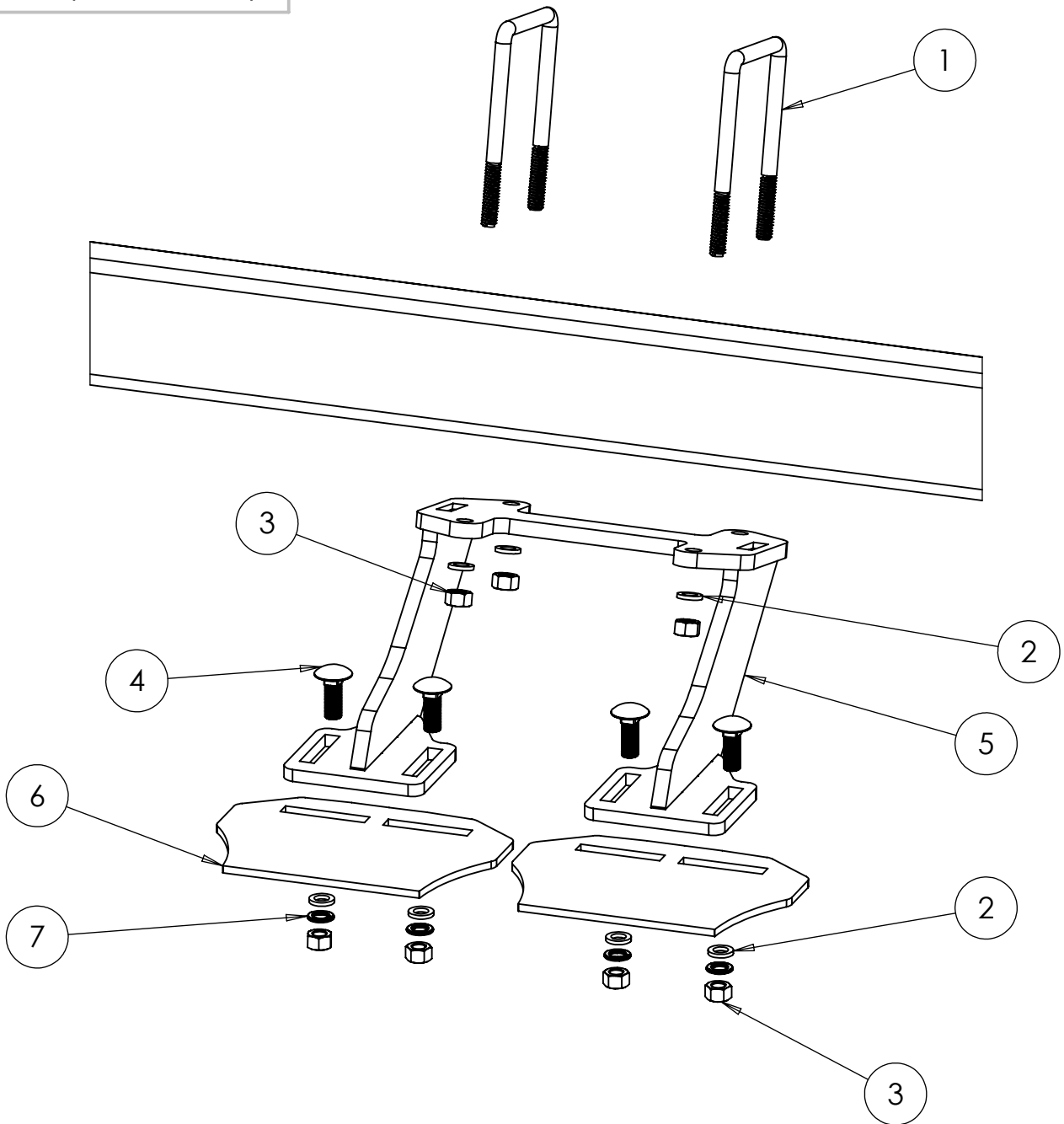
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REVISION:

DATE: 09/06/14

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6.3 Scraper Assembly



| ITEM NO. | PART NO. | DESCRIPTION | QTY. |
|----------|-------------|-----------------------------------|------|
| 1 | SWM12100ub | M12 x 100 U-Bolt | 2 |
| 2 | SWM12001 | M12 Washer | 8 |
| 3 | SWM12004 | M12 Nylock Nut | 8 |
| 4 | SWM1235CHSQ | M12 x 35 Cup Head Square Bolt | 4 |
| 5 | SW1044 | Double Scraper Hanger | 1 |
| 6 | SW1043 | Scraper | 2 |
| 7 | SWM12002 | M12 Spring Washer | 4 |
| 8 | SW1045 | Triple Scraper Hanger (not shown) | 1 |

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MACHINE/COMPONENT:

Sumo Mixidisc

TITLE:

Scraper Assembly



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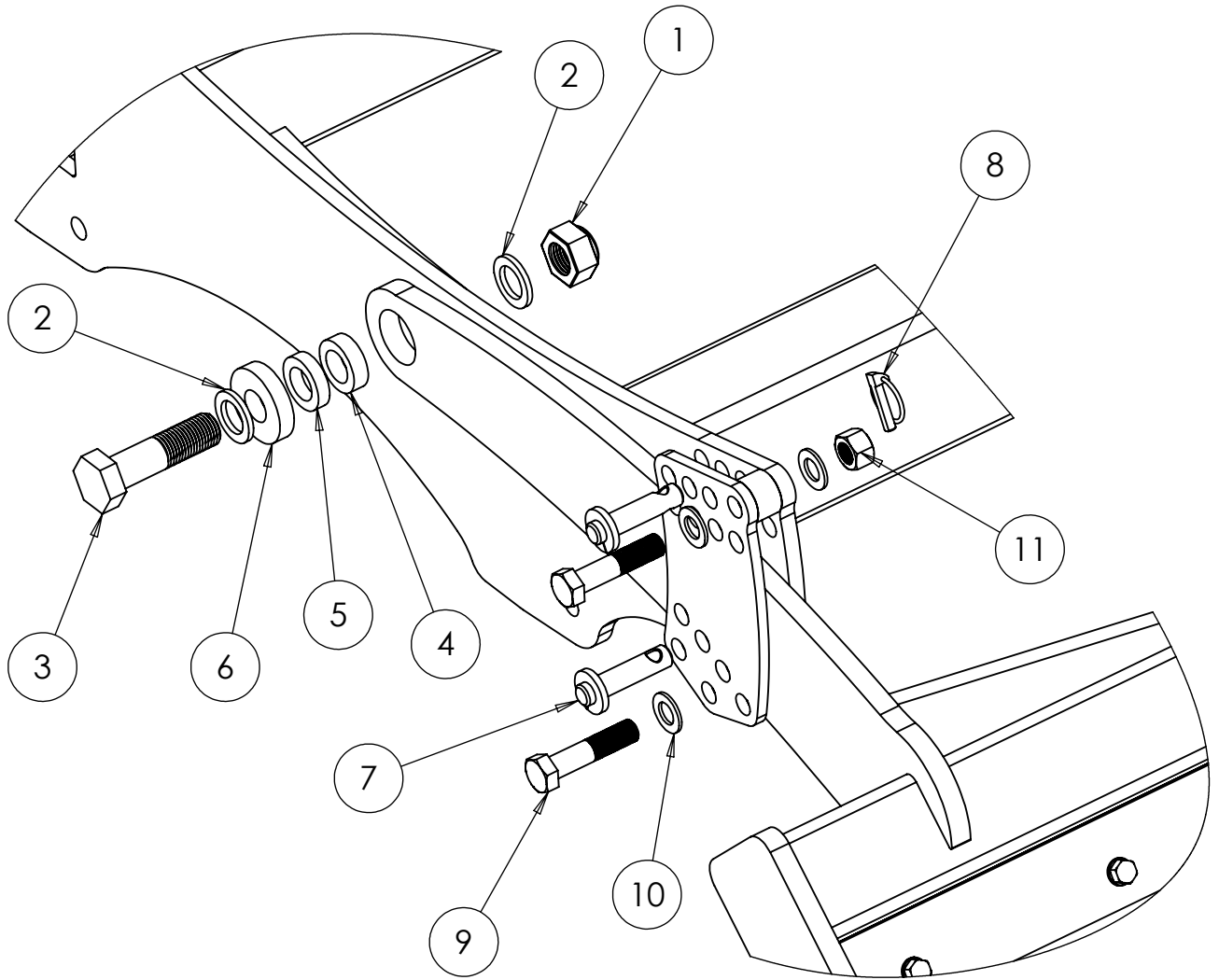
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DATE: 09/06/14

INITIAL: TW

6.4 Packer Depth Control



| ITEM NO. | PART NO. | DESCRIPTION | QTY. |
|----------|----------|-------------------|------|
| 1 | SWM30004 | M30 Nylock Nut | 1 |
| 2 | SWM30001 | M30 Washer | 2 |
| 3 | SWM30110 | M30 x 110 Bolt | 1 |
| 4 | SW723 | 12mm Small Spacer | 1 |
| 5 | SW722 | 10mm Small Spacer | 1 |
| 6 | SW129 | 15mm Large Washer | 1 |
| 7 | SW1367 | Packer Depth Pin | 2 |
| 8 | SWB105 | Lynch Pin | 2 |
| 9 | SWM2090 | M20 x 90 Bolt | 2 |
| 10 | SWM20001 | M20 Flat Washer | 2 |
| 11 | SWM20004 | M20 Nylock Nut | 2 |

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MACHINE/COMPONENT:

Sumo Mixidisc

TITLE:

Packer Depth Control



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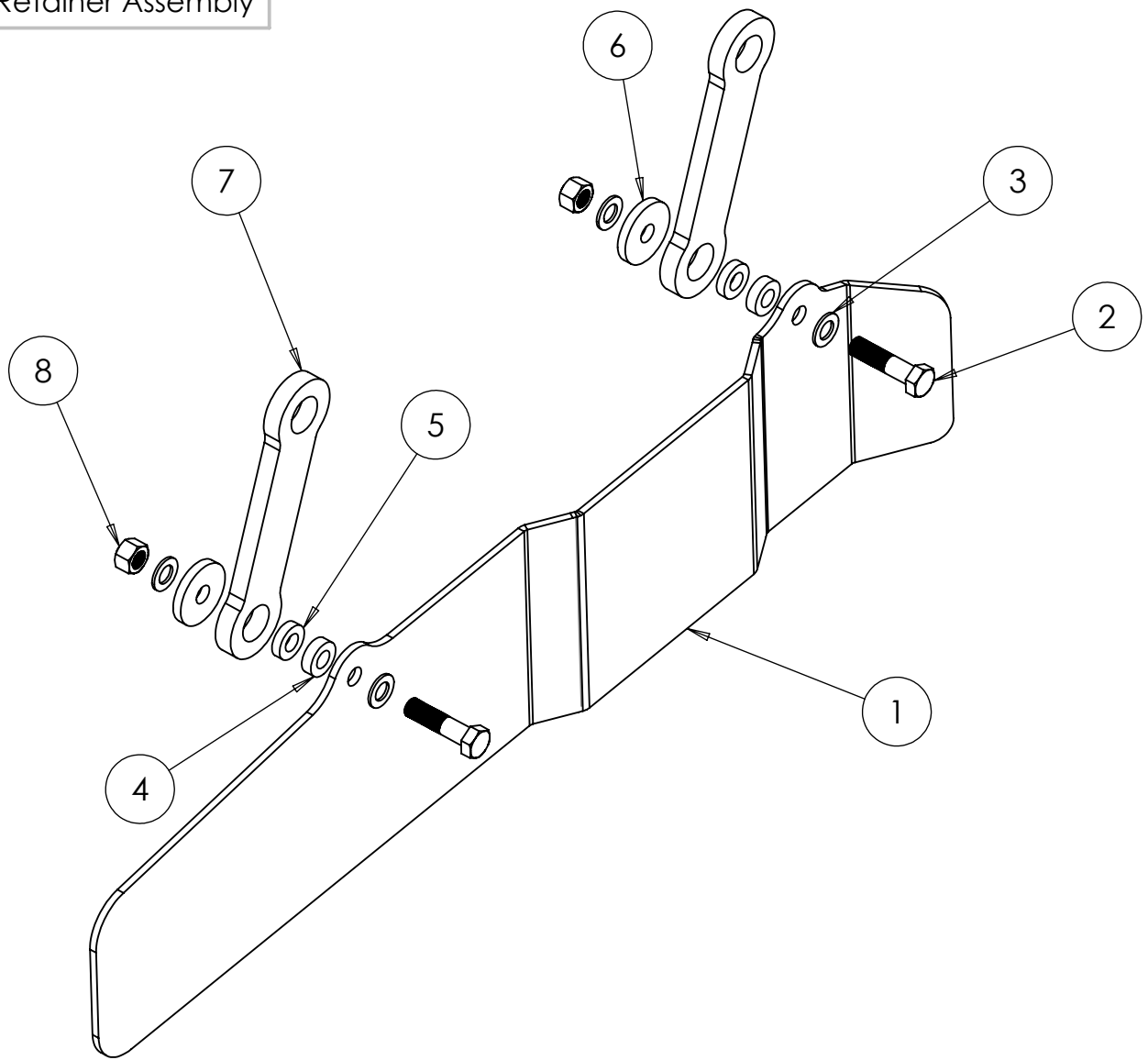
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DATE: 09/06/14

INITIAL: TW

6.5 Soil Retainer Assembly



| ITEM NO. | PART NO. | DESCRIPTION | QTY. |
|----------|----------|-------------------------------|------|
| 1 | SW1984 | R/H Soil Retainer | 1 |
| 2 | SWM2080 | M20 x 80 Bolt | 2 |
| 3 | SWM20001 | M20 Flat Washer | 4 |
| 4 | SW125 | 12mm Small Spacer | 2 |
| 5 | SW126 | 10mm Small Spacer | 2 |
| 6 | SW123 | 12mm Large Spacer | 2 |
| 7 | SW1049 | Soil Retainer Hanger | 2 |
| 8 | SWM20004 | M20 Nylock Nut | 2 |
| 9 | SW1983 | L/H Soil Retainer (not shown) | 1 |

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MACHINE/COMPONENT:

Mixidisc

TITLE:

Soil Retainer Assembly



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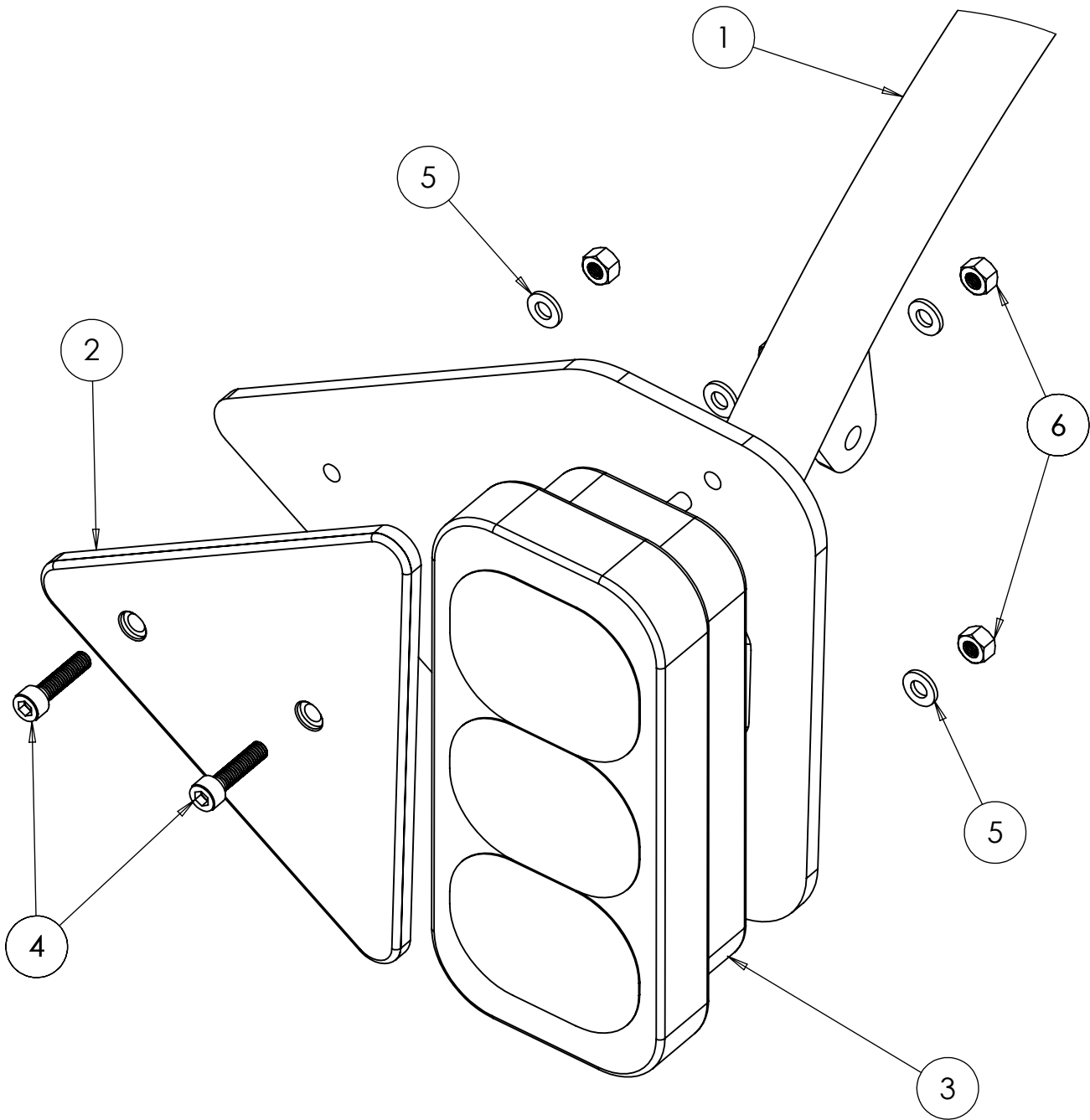
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REVISION:

DATE: 16/09/14

INITIAL: TW

6.6 Lights



| ITEM NO. | PART NO. | DESCRIPTION | QTY. |
|----------|-----------|---------------------------------------|------|
| 1 | SW1505 | LH Mixidisc Light Bracket | 1 |
| | SW1506 | RH Mixidisc Light Bracket (not shown) | 1 |
| 2 | SWB162 | Warning Triangle | 1 |
| 3 | SWB174 | Rear Light | 4 |
| 4 | SWM625AKH | M6 x 25 Allen Key Head Bolt | 2 |
| 5 | SWM6001 | M6 Flat Washer | 4 |
| 6 | SWM6004 | M6 Nylock Nut | 4 |
| 7 | SWB175 | Light Wiring Loom (not shown) | 1 |

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MACHINE/COMPONENT:

Sumo Mixidisc

TITLE:

Light Bracket Assembly



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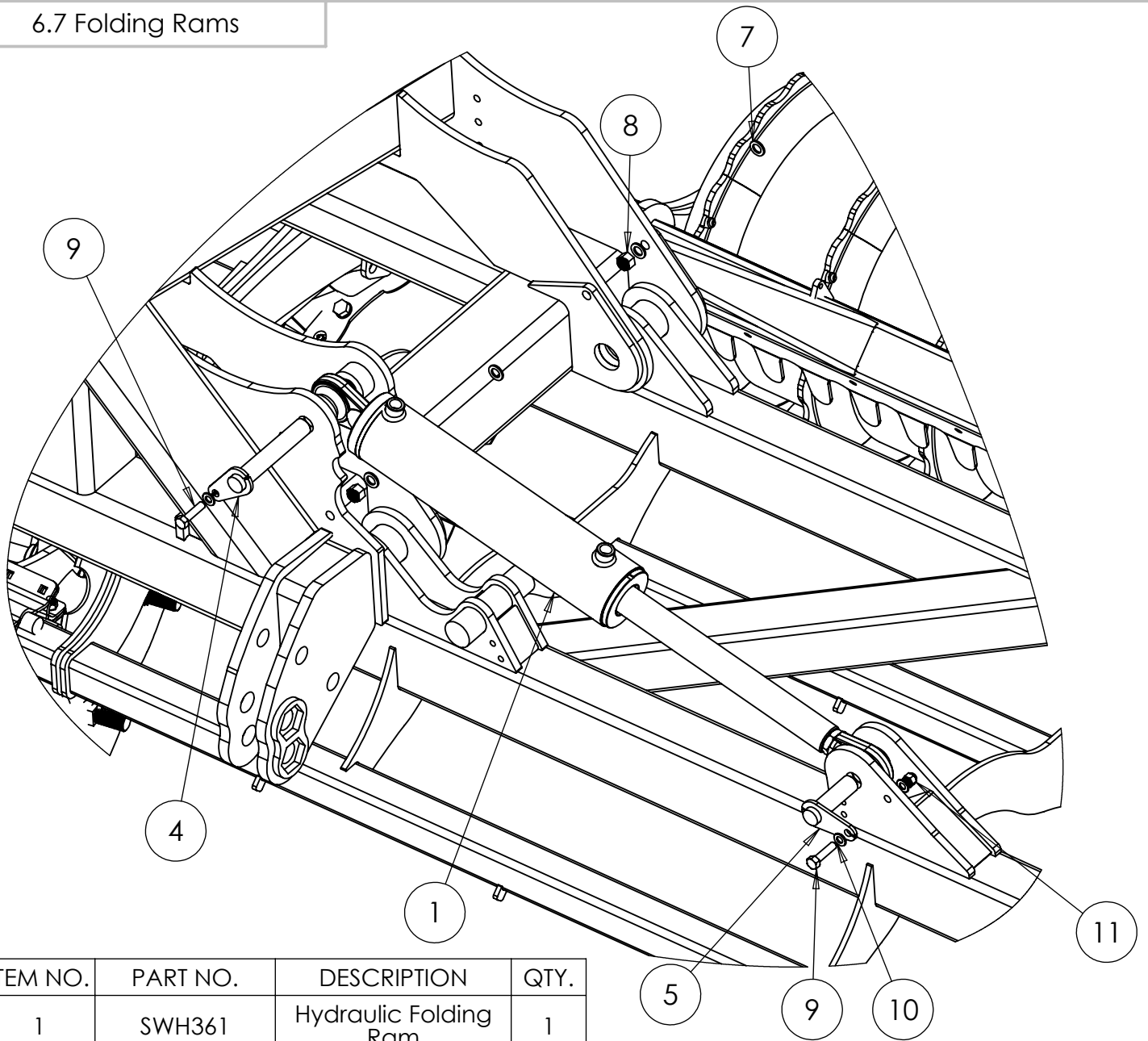
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INITIAL: TW

6.7 Folding Rams



| ITEM NO. | PART NO. | DESCRIPTION | QTY. |
|----------|-------------|-----------------------------------|------|
| 1 | SWH361 | Hydraulic Folding Ram | 1 |
| 2 | SWP50x190 | 50 x 190 Tabbed Pin (not shown) | 1 |
| 3 | SWP50x170 | 50 x 170 Tabbed Pin (not Shown) | 1 |
| 4 | SWP30x170 | 30 x 170 Tabbed Pin | 1 |
| 5 | SWP30x95 | 30 x 95 Tabbed Pin | 1 |
| 6 | SWM1670 | M16 x 70 Bolt (not shown) | 2 |
| 7 | SWM16001 | M16 Flat Washer | 4 |
| 8 | SWM16004 | M16 Nylock Nut | 2 |
| 9 | SWM1250 | M12 x 50 Bolt | 2 |
| 10 | SWM12001 | M12 Flat Washer | 4 |
| 11 | SWM12004 | M12 Nylock Nut | 2 |
| 12 | SWP30x170DB | 30 x 170 Dog Bone Pin (not shown) | 2 |
| 13 | SW1998 | Dog Bone (not shown) | 2 |
| 14 | SW1999 | Dog Bone Holder (not shown) | 1 |

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MACHINE/COMPONENT:

Sumo Mixidisc

TITLE:

Folding Rams



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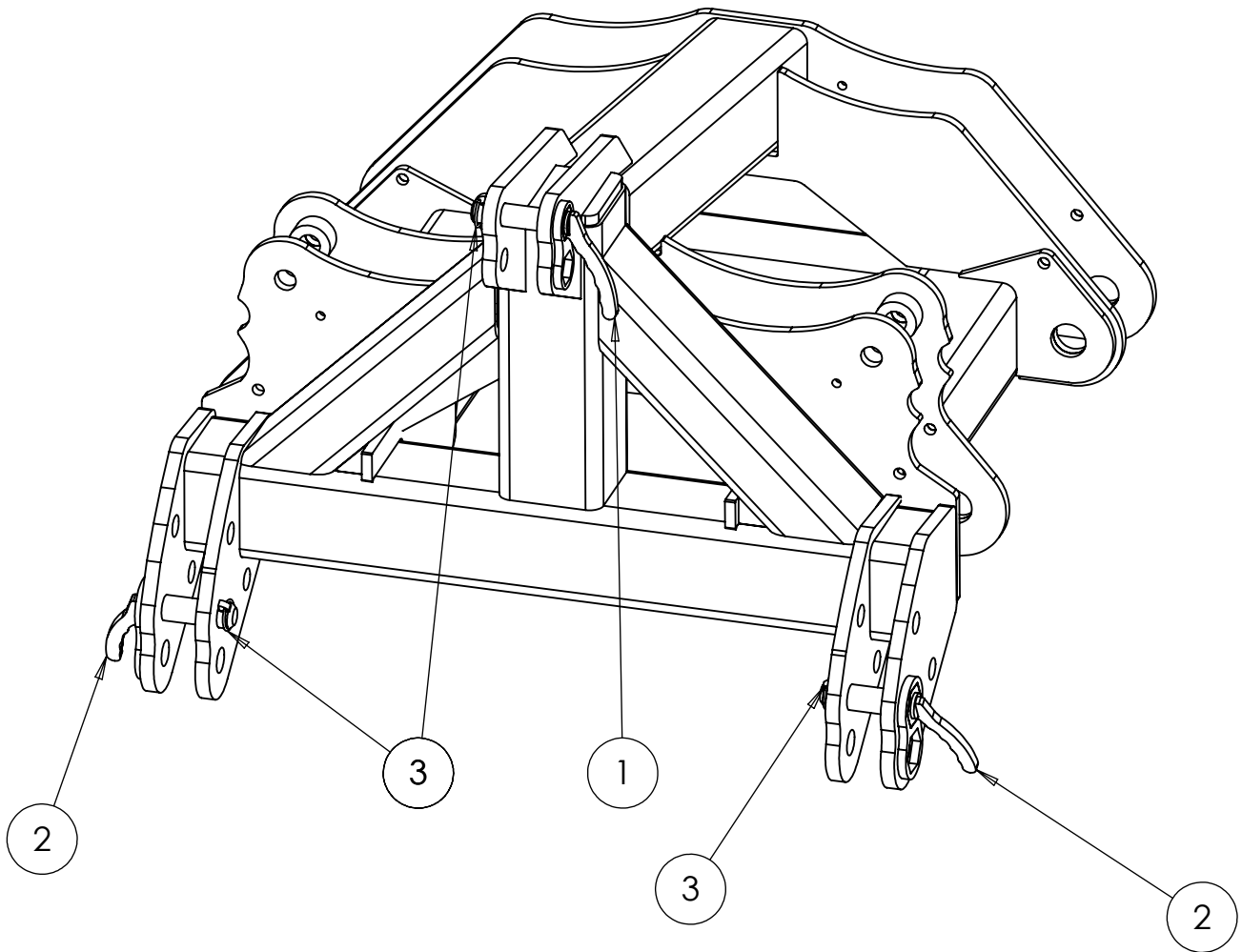
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DATE: 09/06/14

INITIAL: TW

6.8 Linkage Pins



| ITEM NO. | PART NO. | DESCRIPTION | QTY. |
|----------|----------|-------------------------|------|
| 1 | SW627 | Cat III Top Link Pin | 1 |
| 2 | SW626 | Cat III Bottom Link Pin | 2 |
| 3 | SWB105 | Cat III Lynch Pin | 3 |

| | |
|--|---------------|
| DO NOT SCALE DRAWING | |
| MACHINE/COMPONENT: | Sumo Mixidisc |
| TITLE: | Linkage Pins |
|  | |
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| SCALE 1:10 | REVISION: |
| DATE: 09/06/14 | INITIAL: TW |

6.9 Stickers and Paint

| Sticker | Description | Quantity | Part No. |
|---|--|-----------|----------|
|  | Big Sumo horizontal sticker 450 x 125mm | 2 | SWB125 |
|  | Large Mixidisc sticker 320 x 125mm | 4 | SU095 |
|  | Small Mixidisc Sticker | 4 | SU096 |
|  | 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 | 6 | SWB130 |
| Sumo touch up paint | Sumo Red | 1/2 Litre | SWB131 |
| | Sumo Black | 1/2 Litre | SWB132 |