

**TWOSE**  
**BALE HANDLER**  
Models: ABH11 & ABH11E8  
  
Operator & Parts Manual

Publication 696 (Part No. 22674.96)

December 2011



# IMPORTANT VERIFICATION OF WARRANTY REGISTRATION



## DEALER WARRANTY INFORMATION & REGISTRATION VERIFICATION

It is imperative that the selling dealer registers this machine with Twose of Tiverton Limited before delivery to the end user – failure to do so may affect the validity of the machine warranty.

To register machines go to the Twose web site at [www.twose.com](http://www.twose.com), log onto 'Dealer Inside' and select the 'Machine Registration button' which can be found in the Service Section of the site. Confirm to the customer that the machine has been registered in the section below.

Should you experience any problems registering a machine in this manner please contact the Twose Office on 01884 253691.

### Registration Verification

Dealer Name: .....
Dealer Address: .....
Customer Name: .....
Date of Warranty Registration: ...../...../..... Dealer Signature: .....

### NOTE TO CUSTOMER / OWNER

*Please ensure that the above section above has been completed and signed by the selling dealer to verify that your machine has been registered with Twose of Tiverton Limited.*

**IMPORTANT:** During the initial 'bedding in' period of a new machine it is the customer's responsibility to regularly inspect all nuts, bolts and hose connections for tightness and re-tighten if required. New hydraulic connections occasionally weep small amounts of oil as the seals and joints settle in – where this occurs it can be cured by re-tightening the connection – *refer to torque settings chart below*. The tasks stated above should be performed on an hourly basis during the first day of work and at least daily thereafter as part of the machines general maintenance procedure.

### TORQUE SETTINGS FOR HYDRAULIC FITTINGS

HYDRAULIC HOSE ENDS		
BSP	Setting	Metric
1/4"	18 Nm	19 mm
3/8"	31 Nm	22 mm
1/2"	49 Nm	27 mm
5/8"	60 Nm	30 mm
3/4"	80 Nm	32 mm
1"	125 Nm	41 mm
1.1/4"	190 Nm	50 mm
1.1/2"	250 Nm	55 mm
2"	420 Nm	70 mm

PORT ADAPTORS WITH BONDED SEALS		
BSP	Setting	Metric
1/4"	34 Nm	19 mm
3/8"	47 Nm	22 mm
1/2"	102 Nm	27 mm
5/8"	122 Nm	30 mm
3/4"	149 Nm	32 mm
1"	203 Nm	41 mm
1.1/4"	305 Nm	50 mm
1.1/2"	305 Nm	55 mm
2"	400 Nm	70 mm

# WARRANTY POLICY

## WARRANTY REGISTRATION

All machines must be registered, by the selling dealer with Twose of Tiverton Ltd, before delivery to the end user. On receipt of the goods it is the buyer's responsibility to check that the Verification of Warranty Registration in the Operator's Manual has been completed by the selling dealer.

### 1. LIMITED WARRANTIES

- 1.01. *All machines supplied by Twose of Tiverton Ltd are warranted to be free from defects in material and workmanship from the date of sale to the original purchaser for a period of 12 months, unless a different period is specified.*
- 1.02. *All spare parts supplied by Twose of Tiverton Ltd and purchased by the end user are warranted to be free from defects in material and workmanship from the date of sale to the original purchaser for a period of 6 months. All parts warranty claims must be supported by a copy of the failed part invoice to the end user. We cannot consider claims for which sales invoices are not available.*
- 1.03. *The warranty offered by Twose of Tiverton Ltd is limited to the making good by repair or replacement for the purchaser any part or parts found, upon examination at its factory, to be defective under normal use and service due to defects in material or workmanship. Returned parts must be complete and unexamined. Pack the component(s) carefully so that any transit damage is avoided. All ports on hydraulic items should be drained of oil and securely plugged to prevent seepage and foreign body ingress. Certain other components, electrical items for example, may require particular care when packing to avoid damage in transit.*
- 1.04. *This warranty does not extend to any product from which Twose of Tiverton Ltd's serial number plate has been removed or altered.*
- 1.05. *This warranty does not apply to any part of the goods, which has been subjected to improper or abnormal use, negligence, alteration, modification, fitment of non-genuine parts, accident damage, or damage resulting from contact with overhead power lines, damage caused by foreign objects (e.g. stones, iron, material other than vegetation), failure due to lack of maintenance, use of incorrect oil or lubricants, contamination of the oil, or which has served its normal life. This warranty does not apply to any expendable items such as blades, belts, clutch linings, filter elements, flails, flap kits, skids, soil engaging parts, shields, guards, wear pads, pneumatic tyres or tracks.*
- 1.06. *Temporary repairs and consequential loss - i.e. oil, downtime and associated parts are specifically excluded from the warranty.*
- 1.07. *Warranty on hoses is limited to 12 months and does not include hoses which have suffered external damage. Only complete hoses may be returned under warranty, any which have been cut or repaired will be rejected.*
- 1.08. *Machines must be repaired immediately a problem arises. Continued use of the machine after a problem has occurred can result in further component failures, for which Twose of Tiverton Ltd cannot be held liable, and may have safety implications.*
- 1.09. *If in exceptional circumstances a non Twose of Tiverton Ltd part is used to effect a repair, warranty reimbursement will be at no more than Twose of Tiverton Ltd's standard dealer cost for the genuine part.*
- 1.10. *Except as provided herein, no employee, agent, dealer or other person is authorised to give any warranties of any nature on behalf of Twose of Tiverton Ltd.*
- 1.11. *For machine warranty periods in excess of 12 months the following additional exclusions shall apply:*
  - 1.11.1. *Hoses, exposed pipes and hydraulic tank breathers.*
  - 1.11.2. *Filters.*
  - 1.11.3. *Rubber mountings.*
  - 1.11.4. *External electric wiring.*
  - 1.11.5. *Bearings and seals.*

- 1.12. All service work, particularly filter changes, must be carried out in accordance with the manufacturer's service schedule. Failure to comply will invalidate the warranty. In the event of a claim, proof of the service work being carried out may be required.
- 1.13. Repeat or additional repairs resulting from incorrect diagnosis or poor quality previous repair work are excluded from warranty.

**NB Warranty cover will be invalid if any non-genuine parts have been fitted or used. Use of non-genuine parts may seriously affect the machine's performance and safety. Twose of Tiverton Ltd cannot be held responsible for any failures or safety implications that arise due to the use of non-genuine parts.**

## **2. REMEDIES AND PROCEDURES**

- 2.01. The warranty is not effective unless the Selling Dealer registers the machine, via the Twose of Tiverton Ltd web site and confirms the registration to the purchaser by completing the confirmation form in the operator's manual.
- 2.02. Any fault must be reported to an authorised Twose of Tiverton Ltd dealer as soon as it occurs. Continued use of a machine, after a fault has occurred, can result in further component failure for which Twose of Tiverton Ltd cannot be held liable.
- 2.03. Repairs should be undertaken within two days of the failure. Claims submitted for repairs undertaken more than 2 weeks after a failure has occurred, or 2 days after the parts were supplied will be rejected, unless the delay has been authorised by Twose of Tiverton Ltd. Please note that failure by the customer to release the machine for repair will not be accepted as a reason for delay in repair or submitting warranty claims.
- 2.04. All claims must be submitted, by an authorised Twose of Tiverton Ltd Service Dealer, within 30 days of the date of repair.
- 2.05. Following examination of the claim and parts, Twose of Tiverton Ltd will pay, at their discretion, for any valid claim the invoiced cost of any parts supplied by Twose of Tiverton Ltd and appropriate labour and mileage allowances if applicable.
- 2.06. The submission of a claim is not a guarantee of payment.
- 2.07. Any decision reached by Twose of Tiverton Ltd is final.

## **3. LIMITATION OF LIABILITY**

- 3.01. Twose of Tiverton Ltd disclaims any express (except as set forth herein) and implied warranties with respect to the goods including, but not limited to, merchantability and fitness for a particular purpose.
- 3.02. Twose of Tiverton Ltd makes no warranty as to the design, capability, capacity or suitability for use of the goods.
- 3.03. Except as provided herein, Twose of Tiverton Ltd shall have no liability or responsibility to the purchaser or any other person or entity with respect to any liability, loss, or damage caused or alleged to be caused directly or indirectly by the goods including, but not limited to, any indirect, special, consequential, or incidental damages resulting from the use or operation of the goods or any breach of this warranty. Notwithstanding the above limitations and warranties, the manufacturer's liability hereunder for damages incurred by the purchaser or others shall not exceed the price of the goods.
- 3.04. No action arising out of any claimed breach of this warranty or transactions under this warranty may be brought more than one (1) year after the cause of the action has occurred.

## **4. MISCELLANEOUS**

- 4.01. Twose of Tiverton Ltd may waive compliance with any of the terms of this limited warranty, but no waiver of any terms shall be deemed to be a waiver of any other term.
- 4.02. If any provision of this limited warranty shall violate any applicable law and is held to be unenforceable, then the invalidity of such provision shall not invalidate any other provisions herein.
- 4.03. Applicable law may provide rights and benefits to the purchaser in addition to those provided herein.



# DECLARATION OF CONFORMITY

*Conforming to EU Machinery Directive 2006/42/EC*

We,

**TWOSE of TIVERTON LIMITED,**  
6 Chinon Court, Lower Moor Way,  
Tiverton Business Park, Tiverton, Devon, EX16 6SS, UK

*Hereby declare that:*

The Product; *Tractor Mounted Bale Handling Attachment*

Product Code; *TBAL*

Serial No. & Date ..... Type .....

Manufactured in; *United Kingdom*

Complies with the required provisions of the Machinery Directive 2006/42/EC  
The machinery directive is supported by the following harmonized standards;

- BS EN ISO 12100 (2010) Safety of machinery – General principles for design – Risk assessment and risk reduction.
- BS EN 349 (1993) + A1 (2008) Safety of machinery - Minimum distances to avoid the entrapment with human body parts.
- BS EN 953 (1997) + A1 (2009) Safety of machinery - Guards general requirements for the design and construction of fixed and movable guards.
- BS EN 4413 (2010) Hydraulic fluid power. Safety requirements for systems and their components.

Signed  ..... *Responsible Person*  
*CHRISTIAN DAVIES on behalf of TWOSE OF TIVERTON LIMITED*

Status: *General Manager*

Date: *September 2015*

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## GENERAL INFORMATION

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Always read this manual before fitting or operating the machine – whenever doubt exists contact your dealer or the Twose Service Department for advice and assistance.

### **Use only Twose Genuine Service Parts on Twose Equipment and Machines**

**DEFINITIONS** – *The following definitions apply throughout this manual:*

#### **WARNING**

An operating procedure, technique etc. which can result in personal injury or loss of life if not observed carefully.

#### **CAUTION**

An operating procedure, technique etc. which can result in damage to either machine or equipment if not observed carefully.

#### **NOTE**

An operating procedure, technique etc. which is considered essential to emphasis.

#### **LEFT AND RIGHT HAND**

This term is applicable to the machine when attached to the tractor and is viewed from the rear – this also applies to tractor references.

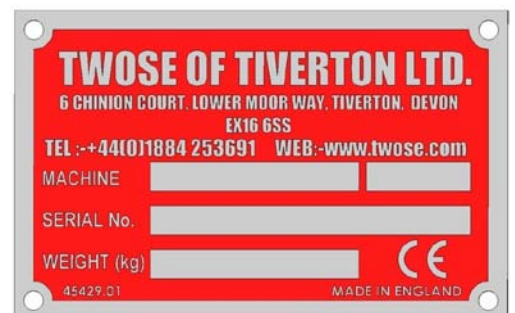
## MACHINE & DEALER INFORMATION

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<i>Record the Serial Number of your machine on this page and always quote this number when ordering parts.</i>	
<b>Machine Serial Number:</b>	<b>Installation Date:</b>
<b>Machine Model details:</b>	
<b>Dealer Name:</b>	
<b>Dealer Address:</b>	
<b>Dealer Telephone No:</b>	
<b>Dealer Email Address:</b>	

#### **SERIAL PLATE**

The machine is fitted with a Serial Number Plate stating the manufacturers name, machine, serial number and weight – when ordering parts or requesting advice please quote the machine name and serial number as stated on the plate.







*This machine has the potential to be extremely dangerous - in the wrong hands it can kill or maim; It is therefore imperative that both owner and operator of the machine reads and understands the following section to ensure they are fully aware of the dangers that do, or may exist, and their responsibilities surrounding the use and operation of the machine.*

*The operator of this machine is responsible not only for their own safety but equally for the safety of others who may come into the close proximity of the machine, as the owner you are responsible for both.*

*When the machine is not in use it should be lowered to rest on the ground. In the event of any fault being detected with the machine's operation it must be stopped immediately and not used again until the fault has been corrected by a qualified technician.*

### **RISKS ASSOCIATED WITH THE OPERATION OF THIS MACHINE**

- ▲ Being hit or trapped by moving parts.
- ▲ Electrocution from Overhead Power Lines (*by contact with or 'flashover' from*).
- ▲ Becoming trapped between loader and machine when hitching or unhitching.
- ▲ Tractor overbalancing when laden machine is extended.
- ▲ Injection of high-pressure oil from hydraulic hoses or couplings.
- ▲ Machine overbalancing when freestanding (*out of use*).

## GENERAL SAFETY PRECAUTIONS

- ▲ Never attempt to assemble, couple up, or operate the machine until you understand fully the functions, controls and safety precautions required, as shown in the operation manual.
- ▲ Never leave the tractor seat whilst engine or machine is running.
- ▲ Never use the machine to perform tasks it is not designed to do.
- ▲ Never attempt to use the machine to lift objects it is not designed to handle.
- ▲ Never attempt to lift weights beyond the machines capability.
- ▲ Never carry passengers on the machine.
- ▲ Never allow children to play on the machine even when in storage.
- ▲ Never drive machinery at speeds that could cause danger to other persons or properties, or in a manner that may cause accidents.
- ▲ Never operate the machine under or within 9m horizontal distance of overhead power lines and always lower loading equipment fully before passing under them.
- ▲ Do not carry bales in a position that will obstruct your vision.
- ▲ Ensure the tractor is fitted with a glazed safety cab and suitable protection from falling objects.
- ▲ Ensure that the tractor and loader used are suitably counterbalanced.
- ▲ Always follow tractor safety operations and instructions carefully.
- ▲ Always lower the loader when transporting bales.
- ▲ Always keep persons clear of a working or raised machine at all times; if people approach a working machine lower it to the ground and switch off the machine and tractor immediately. Do not attempt to restart work until they are clear of the work zone.
- ▲ Always be aware of your surroundings and operate the machine accordingly. Beware of confined spaces, tight areas, buildings, overhangs and low height restrictions.
- ▲ Always lower the machine to the ground and switch off the tractor engine before attempting to carry out adjustments, service or inspection of the machinery.
- ▲ Always ensure a raised machine is safely supported and secured before attempting to carry out adjustment or service repairs and inspections beneath it. Use suitable blocks and props that are capable of supporting the machines weight.
- ▲ Always ensure when parking up or storing the machine that a firm level site is selected. The machine should be propped and chocked in a safe secure position without risk of falling.

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***Although the information stated here covers a wide range of safety subjects it is impossible to predict every eventuality that can occur under differing circumstances whilst operating this machine. No advice given here can replace 'good common sense' and 'total awareness' at all times, but will go a long way towards the safe use of your Twose machine.***

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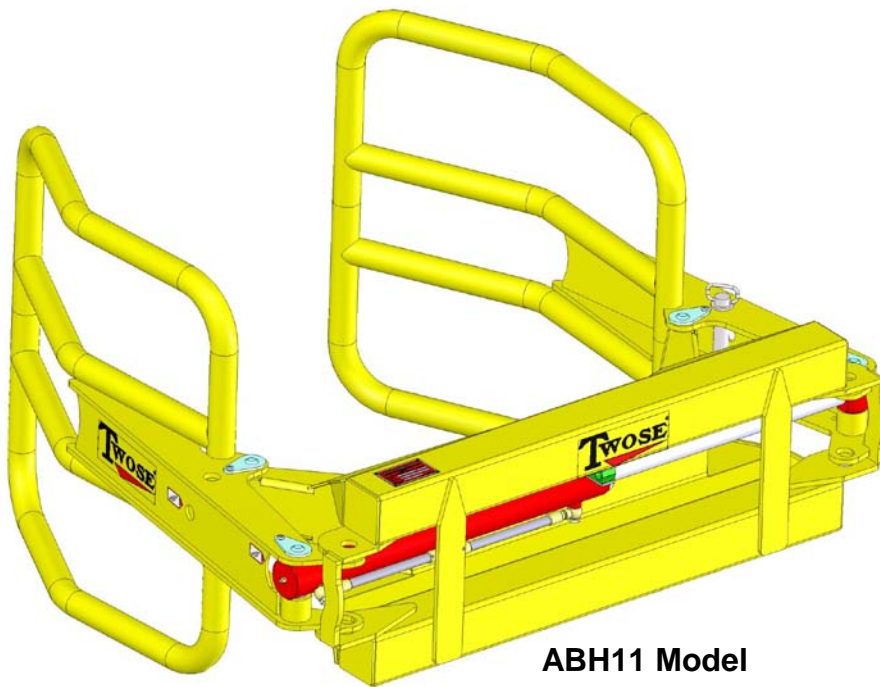
## MACHINE OVERVIEW

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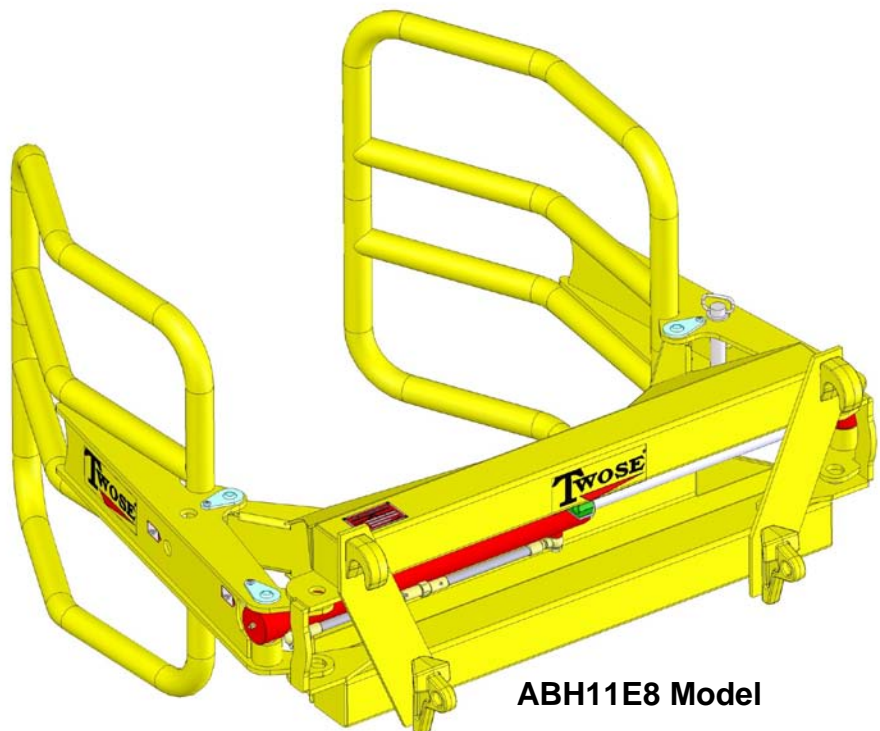
The Twose ABH11 is a front loader mounted bale handler designed for lifting, transporting and stacking 1.2m wrapped or unwrapped round bales. The machine features two hydraulically operated curved gripping arms that clamp the bale for lifting and transportation.

Each arm can be individually 'locked' allowing the machine to operate efficiently with closely stacked bales or tight to a wall or building on either side of the machine.

The machine is available in two models; the ABH11 which is a standard handler with no hitches and the ABH11E8 which is supplied complete with a Euro 8 type hitch.



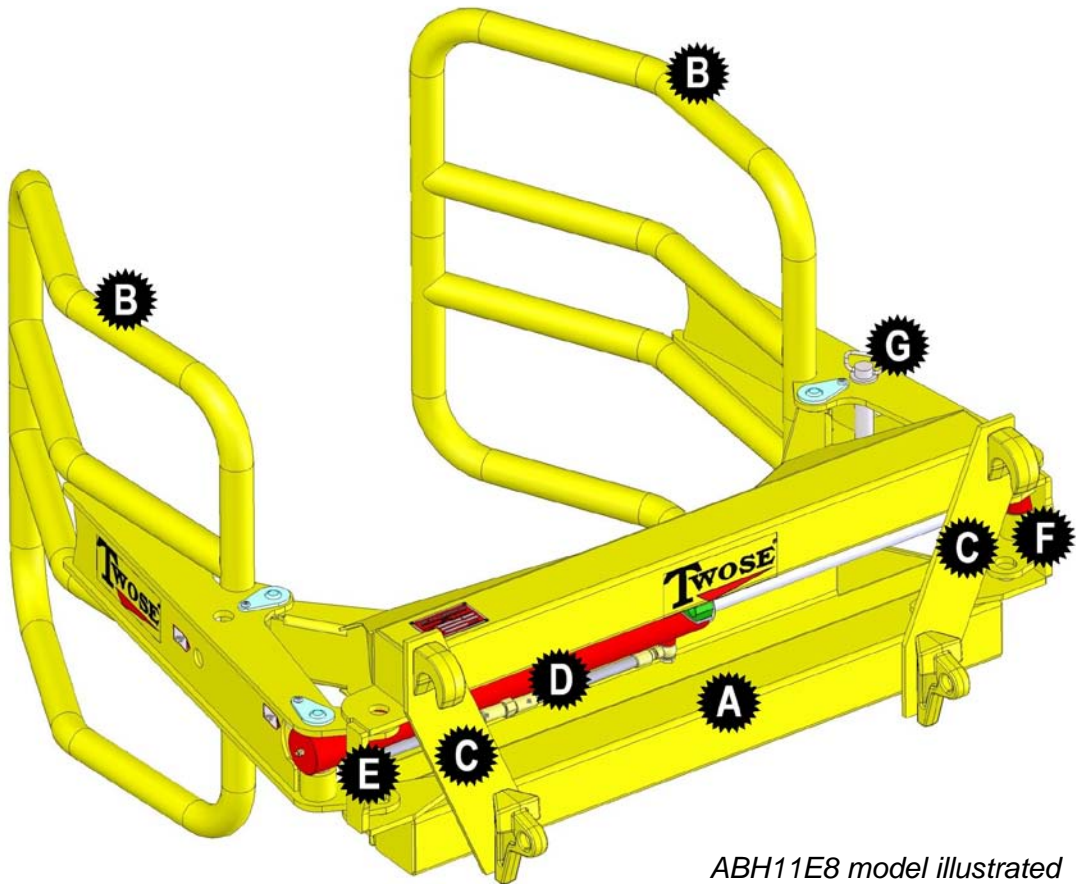
**ABH11 Model**



**ABH11E8 Model**

## COMPONENT IDENTIFICATION

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- A) Mainframe
- B) Handler Arms
- C) Euro 8 Hitch (ABH11E8 Model only)
- D) Hydraulic Ram
- E) Lock Pin Location (Left Arm Lock)
- F) Lock Pin Location (Right Arm Lock)
- G) Lock Pin Stowage Location

## MACHINE ATTACHMENT

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### **Attachment of ABH11 Models**

Before starting ensure that the machine is on a flat, level hard standing with plenty of room to manoeuvre.

1. Measure the centre distance of both loader arms and crowd links.
2. Position the lift brackets (not provided) on the bale handler frame to suit the dimension above and ensure they are equal distance from each end of the frame.
3. Secure brackets to bale handler frame and tighten nuts fully.
4. Carefully position the loader squarely to bale handler frame so the holes in the lower brackets correspond with the holes in loader arms, ensure all hydraulic hoses are clear of the attachment area.
5. Fit suitable pins and spacers and secure with linch pins and rings.
6. Fit crowd links into brackets and align holes.
7. Fit suitable pins and spacers and secure with linch pins and rings.  
*The bale handler is now securely attached to the loader.*
8. Connect 2 hydraulic hoses (not supplied) from the existing hoses on the bale handler ram to a suitable double acting hydraulic service on the tractor.
9. Route the hoses and secure to prevent damage,
10. Test that the loader lifts correctly and the hydraulic ram on the bale handler functions correctly, If necessary reverse the hoses on the ram.
11. If necessary, fit ballast weights to the rear of the tractor.

### **Attachment of ABH11E8 Models**

These models are manufactured with Euro 8 type hitches pre-fitted to the machine; therefore attachment requires the operating loader to have a compatible Euro 8 mounting bracket.

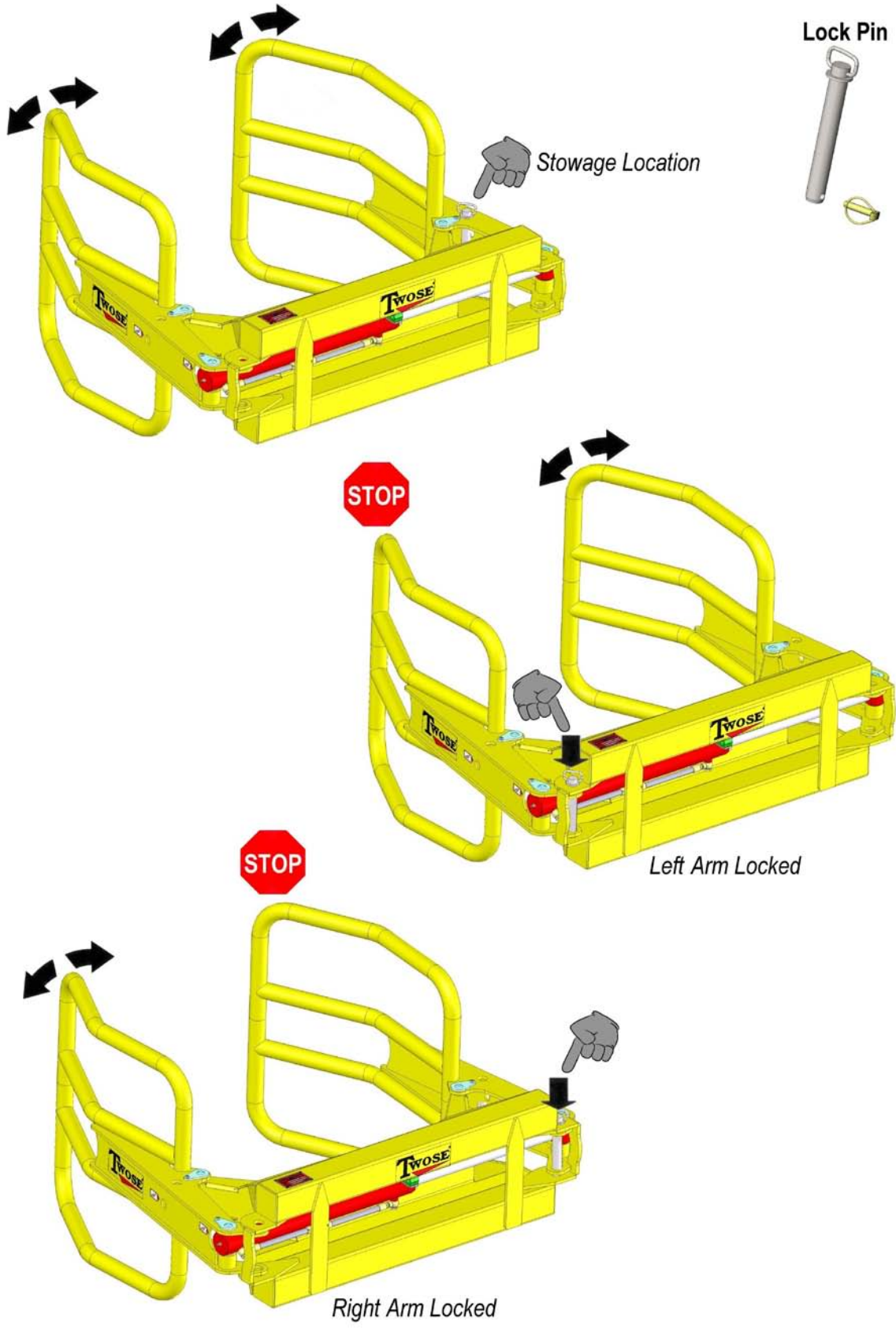
The procedure for attachment is as follows;

Before starting ensure that the machine is on a flat, level hard standing with plenty of room to manoeuvre.

1. With the loaders attachment bracket 'crowded' forward carefully drive the loader squarely to the bale handler with the upper lugs located just below their receiving positions on the bale handlers mainframe, ensure all hydraulic hoses are clear of the attachment area.
2. When lugs are directly below lift points, raise the loader slowly until the lugs fully connect.
3. Operate the loader to tilt the bracket backwards until the lower hole positions are aligned.
4. Fit suitable pins and spacers to lower positions and secure with locking pins.  
*The bale handler is now securely attached to the loader.*
5. Connect 2 hydraulic hoses (not supplied) from the existing hoses on the bale handler ram to a suitable double acting hydraulic service on the tractor.
6. Route the hoses and secure to prevent damage,
7. Test that the loader lifts correctly and the hydraulic ram on the bale handler functions correctly, If necessary reverse the hoses on the ram.
8. If necessary, fit ballast weights to the rear of the tractor.

# OPERATION

The opening and closing actions of the machine are operated using the tractor's control lever for the double acting service that the hoses are connected to. In normal operating mode both arms work in unison to grip and clamp the bale for transportation and stacking duties. In locked mode one or other of the arms can be 'fixed' in the open position by using the lock pin supplied allowing the opposing arm to operate solely. Refer to illustrations below.



## MAINTENANCE

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Regular maintenance will prolong the working life of the machine and ensure it remains in a safe useable condition. The machine should be checked on a daily basis prior to work and the following maintenance tasks performed at the intervals stated below.

### **Daily Maintenance**

- Grease all pivot points.
- Check all nuts and bolts for tightness.

### **Weekly Maintenance**

- Check hydraulic ram for leaks and hose for damage or wear – *replace if necessary*.

### **2 Months Maintenance**

- Check plastic bushes for wear.

### **Machine Storage**

Prior to storage the machine should be thoroughly cleaned and greased, coat bright metal parts with grease or oil to prevent corrosion. Check the machine for damaged or broken parts so that replacements can be ordered and fitted in preparation for the next seasons work.

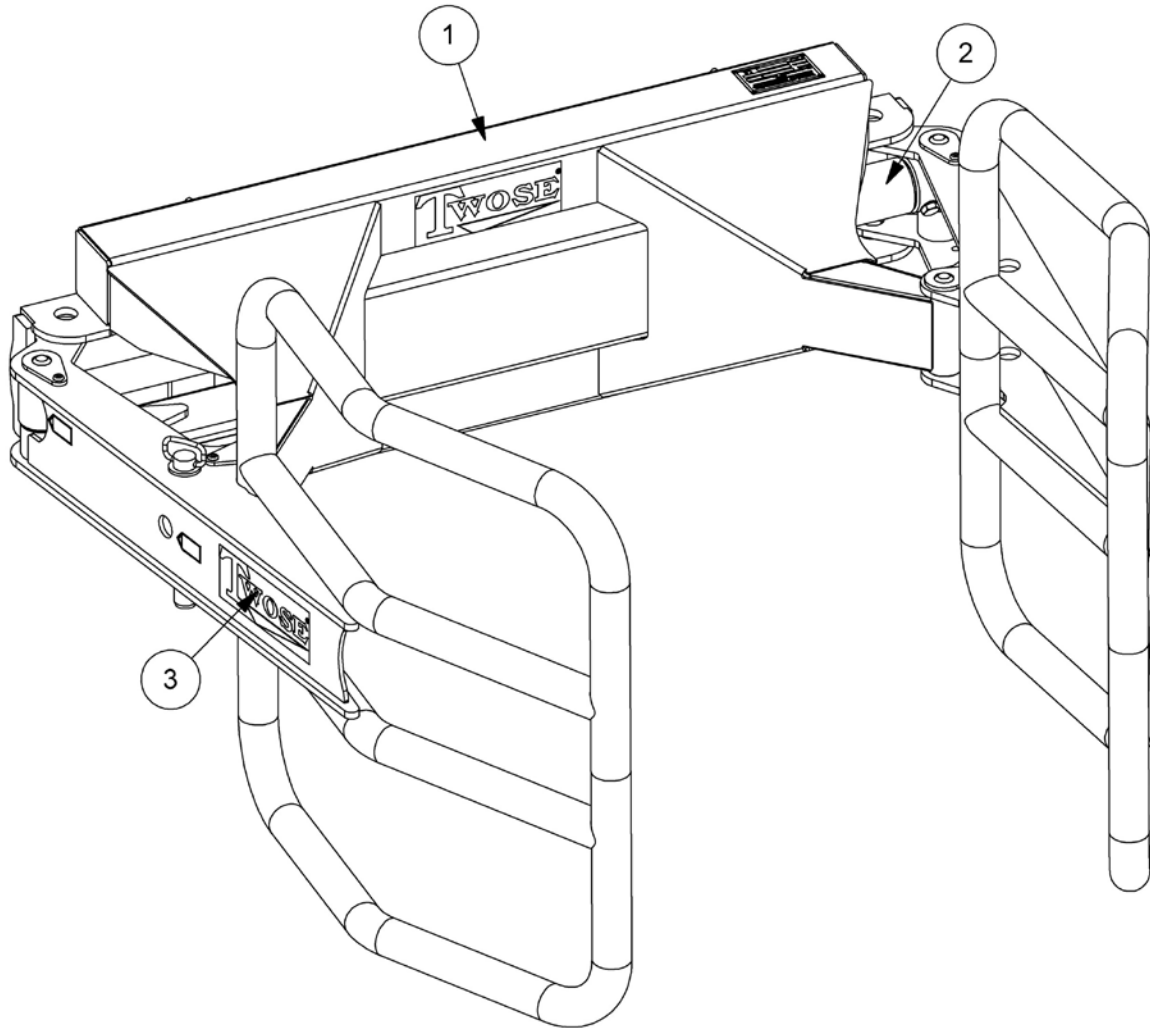
The machine should be stored on a level hard standing and safely supported. Ideally, it should be stored in a clean dry environment where it is protected from the elements.





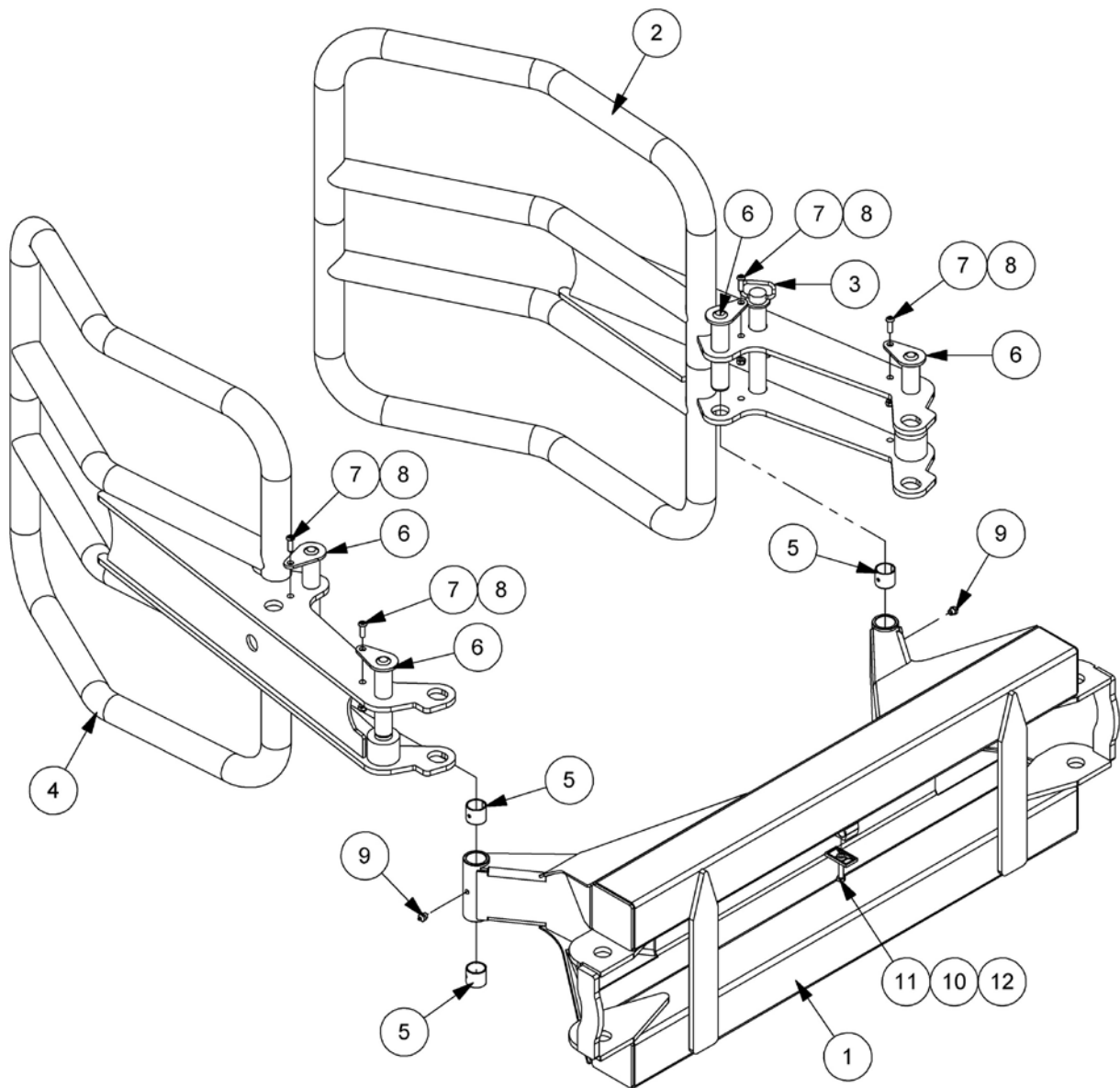
Parts Manual for  
TWOSE BALE HANDLERS  
Models: ABH11 & ABH11E8

ABH11 - BALE HANDLER



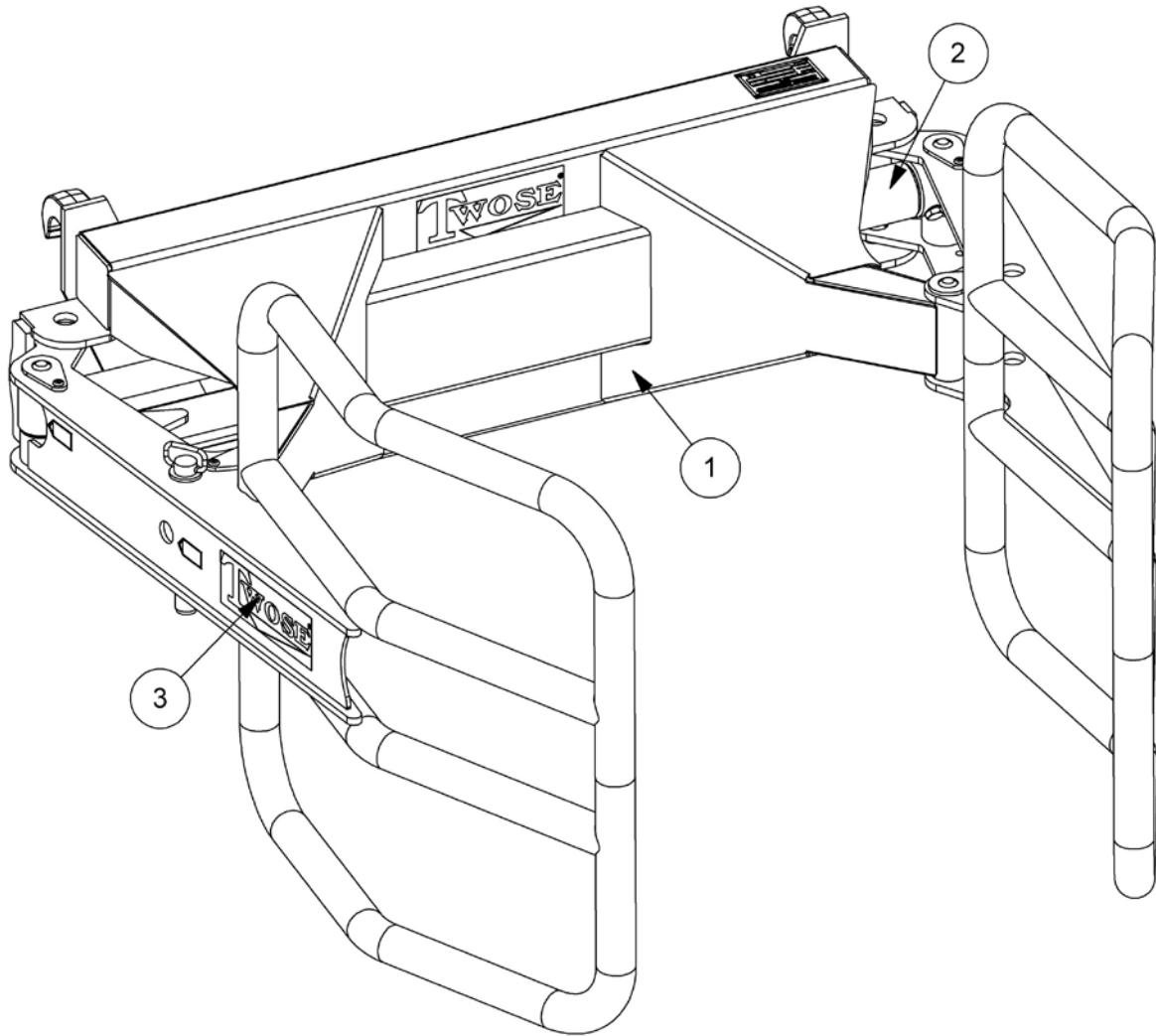
REF.	QTY.	PART No.	DESCRIPTION
		<b>ABH11</b>	<b>ABH11 BALE HANDLER</b>
1	1	218.200	FRAME & ARM MODULE
2	1	218.201	HYDRAULIC MODULE
3	1	218.202	DECAL MODULE

ABH11 - FRAME & ARM ASSEMBLY



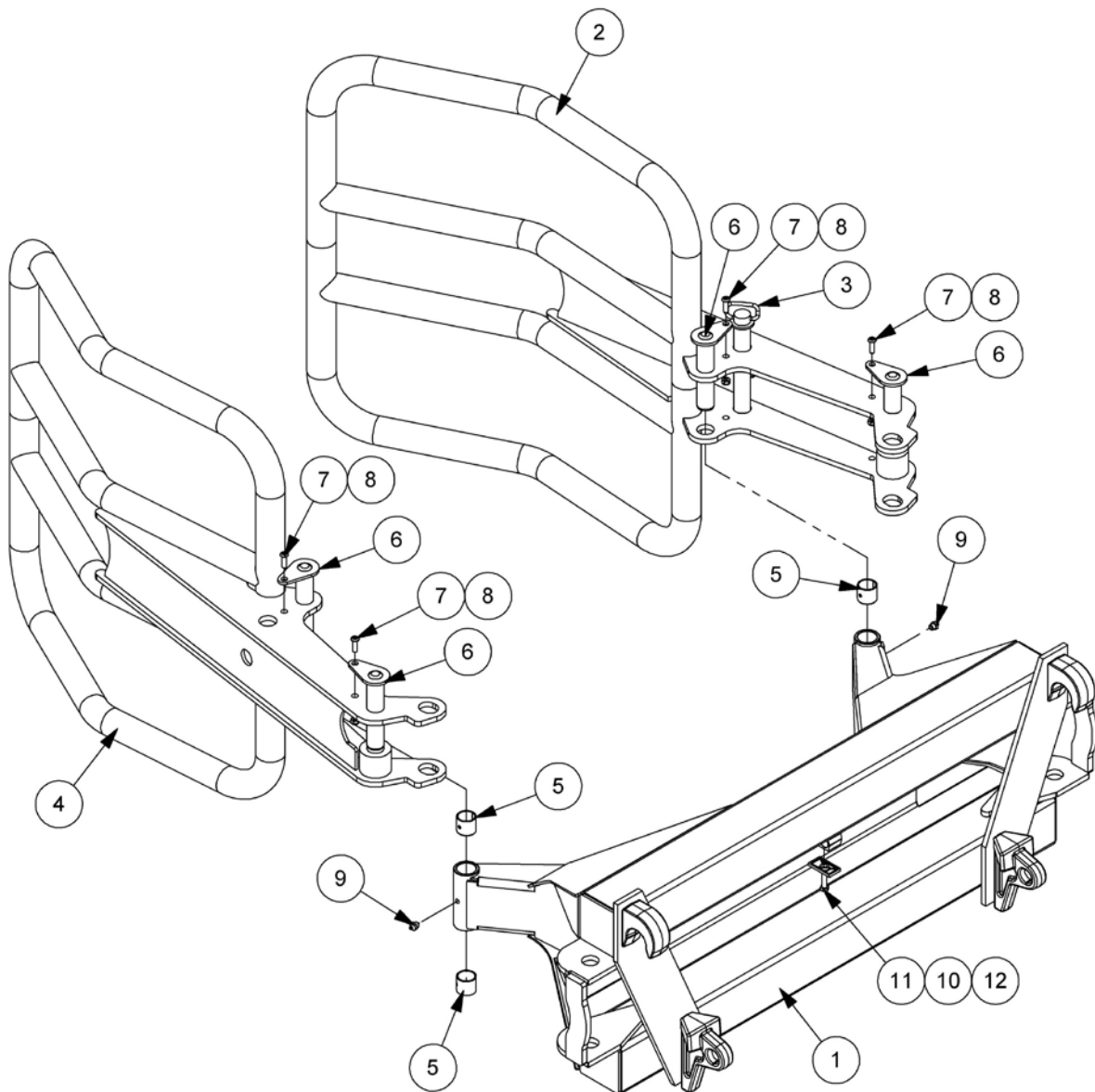
REF.	QTY.	PART No.	DESCRIPTION
		<b>218.200</b>	<b>ABH11 FRAME &amp; ARM ASSEMBLY</b>
1	1	218.001	MAINFRAME
2	1	218.002	RH ARM
3	1	218.005	PIN C/W LINCH PIN AND CHAIN
4	1	218.006	LH GRAB ARM
5	4	42654.01	BUSH
6	4	199.040	SLEW PIN
7	4	9300158	BUTTON HEAD CAP SCREW
8	4	9163004	NYLOC NUT
9	2	05.953.03	GREASE NIPPLE
10	1	5351.1	TOP PLATE
11	1	9313074	SETSCREW
12	1	42024.25	HOSE CLAMP

ABH11E8 - BALE HANDLER (EURO 8 HITCH)



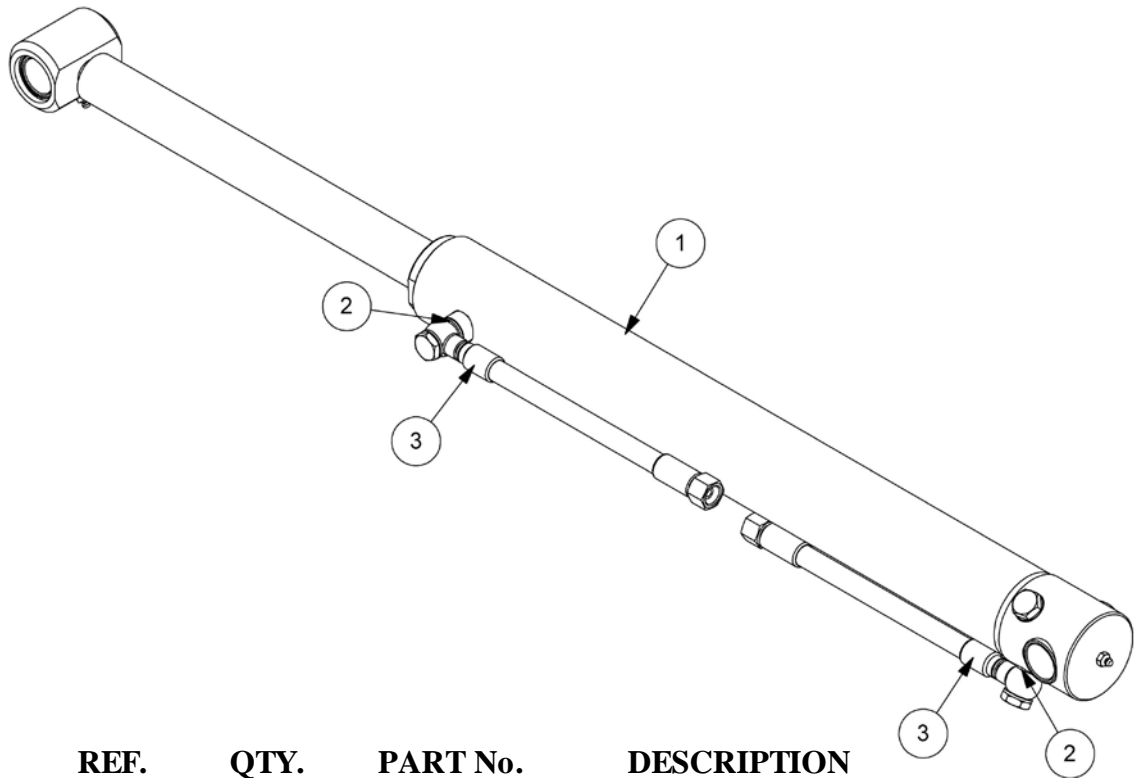
REF.	QTY.	PART No.	DESCRIPTION
		<b>ABH11E8</b>	<b>ABH11E8 BALE HANDLER (EURO 8 HITCH)</b>
1	1	218.203	BALE HANDLER ASSEMBLY (EURO 8)
2	1	218.201	HYDRAULIC MODULE
3	1	218.202	DECAL MODULE

ABH11E8 - FRAME & ARM ASSEMBLY

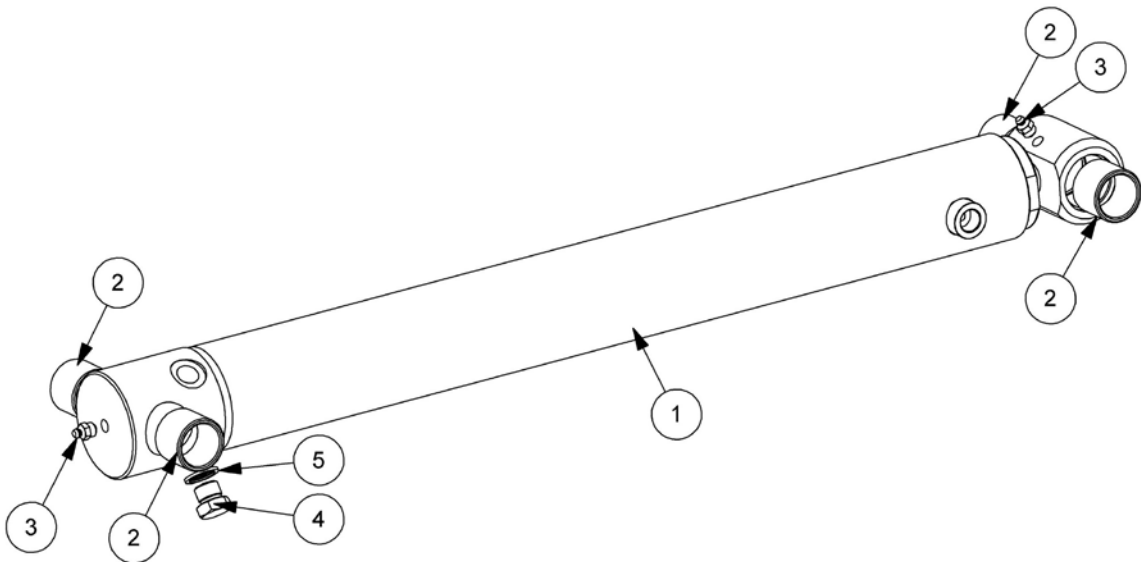


REF.	QTY.	PART No.	DESCRIPTION
		<b>218.203</b>	<b>ABH11E8 FRAME &amp; ARM ASSEMBLY</b>
1	1	218.001E8	MAINFRAME
2	1	218.002	RH ARM
3	1	218.005	PIN C/W LINCH PIN AND CHAIN
4	1	218.006	LH GRAB ARM
5	4	42654.01	BUSH
6	4	199.040	SLEW PIN
7	4	9300158	BUTTON HEAD CAP SCREW
8	4	9163004	NYLOC NUT
9	2	05.953.03	GREASE NIPPLE
10	1	5351.1	TOP PLATE
11	1	9313074	SETSCREW
12	1	42024.25	HOSE CLAMP

HYDRAULIC MODULE

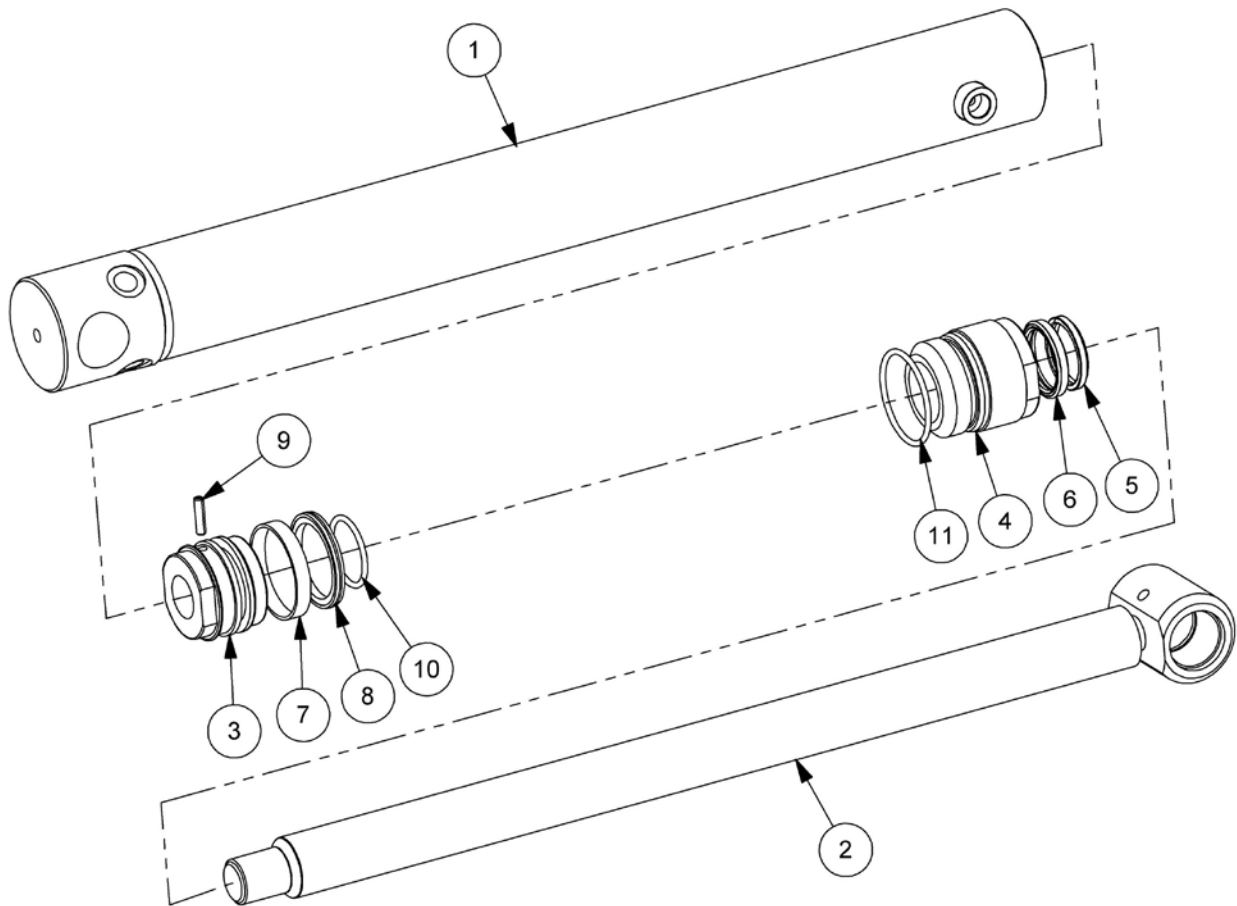


REF.	QTY.	PART No.	DESCRIPTION
		<b>218.201</b>	<b>HYDRAULIC MODULE</b>
1	1	218.004	RAM ASSEMBLY
2	2	8650103	BONDED SEAL
3	2	8501412	HOSE - 3/8" BSP BANJO/FS x 850mm



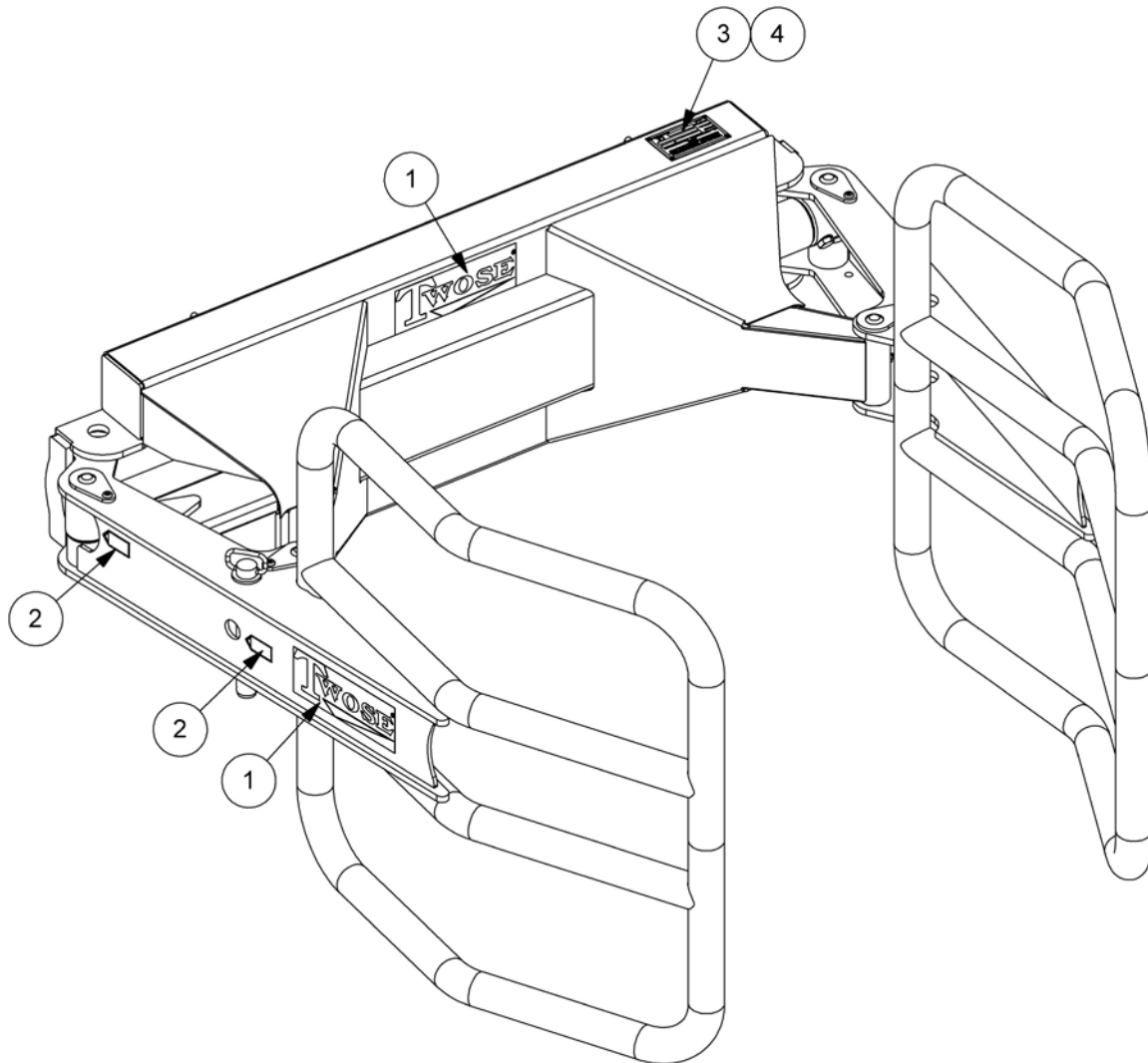
REF.	QTY.	PART No.	DESCRIPTION
		<b>218.004</b>	<b>HYDRAULIC RAM</b>
1	1	21106.01AP	RAM
2	4	08.297.04	BUSH
3	2	0901121	GREASE NIPPLE
4	1	05.433.01	BLANKING PLUG
5	1	8650103	BONDED SEAL

RAM ASSEMBLY



REF.	QTY.	PART No.	DESCRIPTION
		<b>21106.01AP</b>	<b>HYDRAULIC RAM ASSEMBLY</b>
1	1	21106.02	BARREL
2	1	21106.03	PISTON ROD
3	1	43317.31	PISTON
4	1	43317.32	GLAND HOUSING
5	1	8629208	SCRAPER RING
6	1	8629225	GLAND SEAL
7	1	8629157	GUIDE RING
8	1	8629156	PISTON SEAL
9	1	42775.01	DOWEL
10	1	8600301	O RING
11	1	8600306	O RING
		<b>43317.01</b>	<b>SEAL KIT</b>

DECAL MODULE



REF.	QTY.	PART No.	DESCRIPTION
		<b>218.202</b>	<b>DECAL MODULE</b>
1	4	200.007	DECAL - TWOSE (SMALL)
2	4	T410201	DECAL - GREASE GUN
3	1	45429.01	SERIAL No. PLATE
4	4	7103230	POP RIVET