# **TWOSE**

Front Mounted Furrow Press Fixed & Folding Models Operation & Parts Manual

Publication 722 (Rev.11.03.13) Part No. 22675.22

# **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**, 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	ə:

#### **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 Front Mounted Presses
Product Code; TFMP
Serial No. & Date
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.

Status: General Manager Date: September 2015

# LIST OF CONTENTS

Operator Section	
General Information	1
Machine Description	2
Machine Identification	2
Specifications	3
Safety Information	4
General Instructions	7
Machine Attachment	8
Machine Removal	9
Parts Section	
FP1530 Assembly	12
FP1545 Assembly	14
FP3030 Assembly	16
FP3045 Assembly	19
FPF3030 Assembly	20
FPF3045 Assembly	22
FP4030 Assembly	24
FP4045 Assembly	26
FPF4030 Assembly	28
FPF4045 Assembly	30
Hydraulic Rams	32
Hydraulic Installation Kit	33

Always read this manual before fitting or operating the machine – whenever any 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

Record the Serial Number of your machine on this page and always quote this number when ordering parts. Whenever information concerning the machine is requested remember also to state the make and model of tractor to which the machine is fitted.					
Machine Serial Number:	Installation Date:				
Machine Model details:					
Dealer Name:					
Dealer Address:					
Dealer Telephone No:					
Dealer Email Address:					

#### MACHINE DESCRIPTION & PURPOSE OF USE

The Furrow Press is a machine designed for fitting to the 'Front Mounted' tractor linkage only. The purpose for which the machine is intended is to prepare ploughed land to seed bed standards.

When used on land that has been ploughed ready for cultivation, the Furrow Press (fitted to the front linkage of tractor) together with a Cultivator/Combination Seed Drill (fitted to the rear linkage of tractor) can produce a total cultivating unit which will cultivate and seed the land in a 'one-pass' operation.

The Front Furrow Press width for 'one pass' operation should be chosen to match the width of the rear mounted Seed Drill.

The attachment of the Furrow Press to the front linkage of the tractor is the same system as generally used for rear mounted three point linkage implements, namely; 2 lower link arms plus an adjustable central top link arm.

The smaller (narrower) press machines are of a fixed width design, and the larger machines (up to 4m) are of a design that uses three frame sections; main centre frame plus 2 wings. Wings are operated by hydraulic rams allowing them to be raised and lowered into position.

Press rings are available in a choice of either 30° or 45° angles, the angle chosen will be determined by preferential choice and the specific land conditions - they have to give good clod breaking action and produce a below surface preparation.

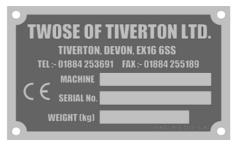


#### MACHINE IDENTIFICATION

Each machine is fitted with an identification plate with the following information:

- 1. Machine (Part Number)
- 2. Machine Serial No.
- 3. Machine Weight

When ordering spares or replacement parts from your local dealer it is important to quote both Part Number and Serial Number as stated on the identification plate so the machine and model can be quickly and correctly identified.



**Machine Identification Plate** 

# **SPECIFICATIONS**

#### **Fixed Models**

Model	Working Width	Length	Height	Ring Profile	Weight
FP1530	1.5m <i>(4'11")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	30°	863kg
FP1545	1.5m <i>(4'11")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	45°	936kg
FP3030	3.0m <i>(9'10")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	30°	1430kg
FP3045	3.0m <i>(9'10")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	45°	1660kg
FP4030	4.0m <i>(13'1")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	30°	1760kg
FP4045	4.0m <i>(13'1")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	45°	2000kg

# **Folding Models**

Model	Working Width	Length (*)	Height (*)	Ring Profile	Weight
FPF3030	3.0m <i>(9' 10")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	30°	1480kg
FPF3045	3.0m <i>(9' 10")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	45°	1670kg
FPF4030	4.0m <i>(13'1")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	30°	1760kg
FPF4045	4.0m <i>(13'1")</i>	1.3m <i>(4'3")</i>	1.37m <i>(4'6")</i>	45°	2000kg

(\*) unfolded



#### **DANGER**

Never attempt to assemble, couple up, or operate machinery until you understand fully the functions, controls and safety precautions required, as shown in the operator's manual.



#### **DANGER**

Always follow and adhere to tractor safety operations and instructions carefully. Never take risks and never leave tractor seat whilst the engine or machine is running.



#### **CAUTION**

Be aware of all warning and instruction decals on machine as care must be taken and instructions obeyed.



#### **CAUTION**

Contact your dealer should you need advice, assistance, or if you do not understand the manual or machine. Never assume; if you are unsure...ask.



#### **CAUTION**

The machine must not be altered or modified in any way without permission. No liability will be accepted in respect of a machine that has been modified without the manufacturers' permission.



#### **DANGER**

Never drive machinery at speeds that could cause danger to other persons or properties, or in a manner that may cause accidents.



#### **DANGER**

Never attempt to service, adjust, or work on any machinery in an unsupported state; ensure that all machinery is safely supported and propped using suitable equipment.



#### DANGER

Always ensure that the wheels of a wheeled implement/machine are 'chocked' firmly to ensure there is no risk of the implement moving before attempting any service or maintenance work on it.



#### **CAUTION**

Always 'switch off' the tractor engine and remove the starting key before attempting to carry out inspections, repairs or service on the machine.

# DANGER



Always be aware of your surroundings and operate machinery accordingly. Beware of confined tight areas, low height restrictions, buildings and overhangs etc. Also drive and operate bearing in mind weather conditions such as sun, rain, ice, snow, and wind etc. - Make allowances in all situations.



#### **CAUTION**

Never operate machine in a reckless or uncaring manner. Respect other road users and be patient.



#### **CAUTION**

Never carry passengers on machinery or tractor. Ensure bystanders/onlookers are kept well away from operational area of the machinery.



#### **CAUTION**

Never climb underneath an unsupported or suitably propped machine for any reason, especially if the unit is still operating. Never rely on tractor hydraulics to raise and support a machine for service or maintenance. Always use suitable equipment specifically designed for the task.



#### **CAUTION**

Always select a firm level site for parking, removal or storage of the machine. Chock and prop the machine to ensure it is left in a safe and secure state. Ensure that all stand legs on the machine are correctly locked into position.



#### **CAUTION**

Never allow children to play on or around parked or stored machinery.



#### **CAUTION**

Never wear loose fitting or ragged clothing which could get caught up in machinery or on controls.



#### **CAUTION**

Ensure visibility is clear through cab-screens at all times.



#### **CAUTION**

Always dispose of discarded or worn out parts thoughtfully by disposing of them in an approved and specified legal scrap site, bin or skip.



#### **CAUTION**

Worn out and spent waste oil, grease and other obnoxious substances must always be disposed of in suitable and legally approved dumping containers suitable for the waste in question.

#### **Highway Use**

When operating machinery on the Highways the 'Local Highways Department' should be consulted for approval and notification as rules and regulations vary from local authority area to area. Highways Department regulations must be followed.

Have respect for 'passing' traffic and keep 'passing' lane free from obstruction.

Allow time for walkers and cyclists to clear site.

When using on the Highway consult the 'Lighting Regulations' for correct procedures.

#### **Transport Speed**

The acceptable speed of transport will vary greatly depending upon the ground conditions. In any conditions avoid driving at a speed which causes exaggerated bouncing as this will put unnecessary strain on the tractors top hitch position.

When transporting the machine on the highway it is important that transport speed be kept to a low sensible figure (12-15mph maximum).

#### **GENERAL INSTRUCTIONS**

- 1. Always select a firm level site for attachment and removal of the machine to the tractor.
- 2. Ensure bystanders are kept at a safe distance from all machinery during the attachment procedure.
- 3. When manoeuvring the tractor ensure there are no persons in the close vicinity make known your intentions and keep a look out at all times when reversing and aligning up to the machine for 'coupling up'.
- 4. Always secure tractor into selected position by ensuring that brakes are applied correctly.
- 5. Make sure that the lift arms and top link ball ends of the tractor are properly fitted to the machine/implement by using correct adapter sleeves where necessary, and that retaining pins of the correct type are used on all three point linkage points. Secure pins with relevant pin and ring assembly.
- 6. Should it be necessary to make any adjustments or service on the machine whilst it is raised on the tractor linkage, trestles or suitable supports must be positioned to support machine to prevent accidental dropping of the lift arms or mechanical failure; the machine must always be 'propped and chocked'.
- 7. Never attempt to repair, adjust or service machinery of any kind whilst it is still running or working. Always stop the machine and stop the tractor engine before any service/repairs begin. Switch off tractor engine before leaving the tractor seat.
- 8. In transit always use transport stays or locking devices where provided.
- 9. If required, ensure the tractor is suitably ballasted in order to maintain stability of the unit.
- 10. Always use machines in a sensible and reasonable manner and do not attempt to use them in work for which they are not intended. Avoid overloading and abusing them as this can cause damage to machine and tractor and can be very dangerous.
- 11. When unhitching/detaching a machine from a tractor three point linkage ensure that any stands or legs are securely positioned and that the machine is parked where it will not be a safety hazard or cause annoyance to others. Ensure that the chosen parking site is firm and level.
- 12. Carry out regular periodic maintenance to ensure the machine continues to perform correctly and safely. Ensure regular maintenance procedures are maintained for the lifetime of the machine.

Health and Safety Rules and Regulations relating to Agricultural Machinery must be respected at all time.

#### ATTACHING THE MACHINE

Ensure machine is parked on a firm and level site. Keep all bystanders at a safe distance.

- 1. Remove spring pins and lift pins (supplied with the machine) from lower link positions of linkage frame.
  - NOTE: On applications using automatic quick 'crook-on' lower links, the lower link balls and eyes will need to be assembled on the lift pins and re-attached to the lower connection points on the machine's frame.
- 2. Slowly and carefully drive the tractor forward towards the machines linkage frame.

#### **Pin Type Connections only**

- 3. Ensure that tractor lower link ball eyes fit between lower jaws of linkage frame and that pin holes are aligned.
- 4. Fit linkage/lift pins through both sides of machine to couple the tractor lower link arms to lift position and secure pins in position with lynch pins.

#### **Crook-on Type Connections only**

- 3. Ensure that tractor lower link crooks are positioned directly below the pin and ball assemblies on the machines lift positions.
- 4. Slowly raise the tractor's lift arms to a position where the balls engage correctly within their housings on the lift arms.

#### **All Connections Types**

- 5. Connect top link assembly between the machine and the tractor's top link position, secure at both ends by fitting top link pins and secure with lynch pins.
- 6. Adjust top link by turning its central tube to give a length that allows the machine to be level when lifted.
- 7. Raise machine on the linkage to a height that will permit removal of the stand legs; remove legs and refit them upside-down in their stowed position, secure in place with security pins provided.

#### **Hydraulic Models only**

8. Couple-up the machine's hydraulic hoses for operation of the hydraulic rams to the tractor's auxiliary supply, use extension hoses if required. Operate the rams to ensure they are functioning correctly.

#### REMOVING THE MACHINE

Ensure machine is parked on a firm and level site. Keep all bystanders at a safe distance.

- 1. Raise tractor front linkage to position the machine at a height that will allow the stand legs to be fitted.
- 2. Remove the stand legs from their stowed locations and replace them in their support positions, secure in place with pins provided.
- 3. Lower the machine slowly until the stand legs are resting on the ground.

  It may be necessary to adjust the top link to ensure the machine is resting on all legs.
- 4. Remove the top link assembly and store in a safe location.

#### **Hydraulic Models only**

5. Disconnect hydraulic hoses from the tractor's auxiliary system. Stow the hose neatly in a location where they will not foul on components when parting the tractor from the machine.

#### **Pin Type Connections only**

6. Remove lower link pins.

#### **Crook-on Type Connections only**

6. Release the catches on the tractor's lower links and carefully lower the link arms to separate the link arms from the pin and ball assemblies.

#### **All Connections Types**

- 7. Slowly and carefully reverse the tractor away from the machine.
- 8. Replace linkage pins into their relevant holes for safe keeping.
- 9. Carefully check to ensure that the machine is left in a safe, stable condition.

#### **Machine Storage**

For extended periods of storage it is advisable that the machine be kept in a clean dry environment protected from the elements to avoid risk of corrosion.

The machine should be thoroughly cleaned and lubricated prior to storage. At this point it is good practice to check the machine for worn or damaged components - any parts that require replacing should be ordered and fitted at the earliest opportunity so the machine is fully prepared for the next seasons work.

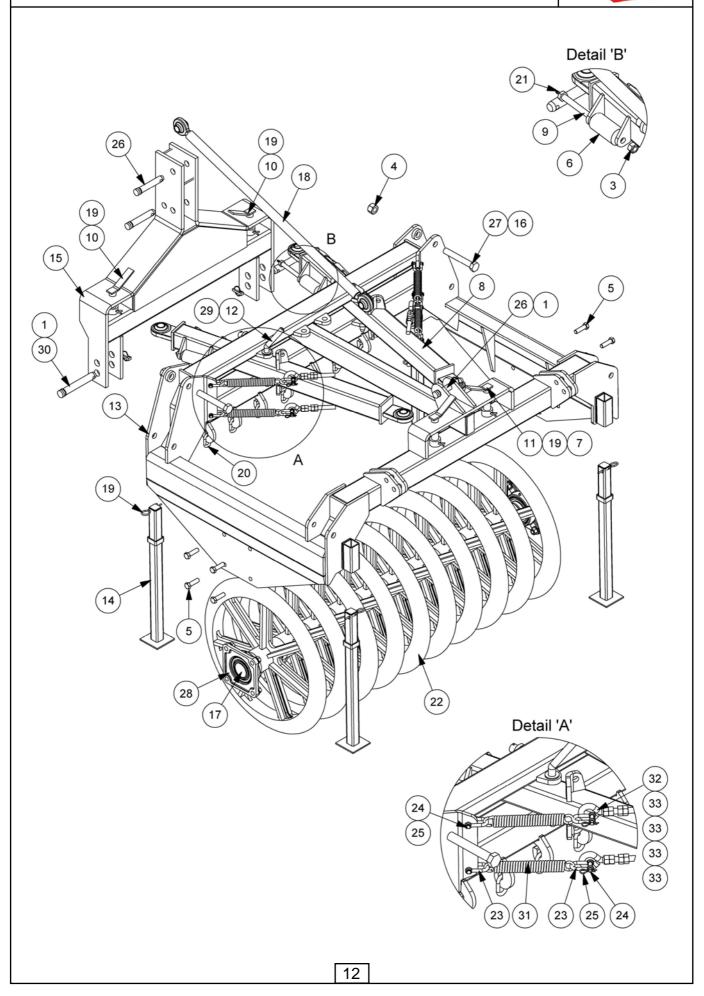
# FRONT MOUNTED FURROW PRESS

(Fixed & Folding Frame Models)

Parts Manual

# FRONT MOUNTED FURROW PRESS - FP1530 Model





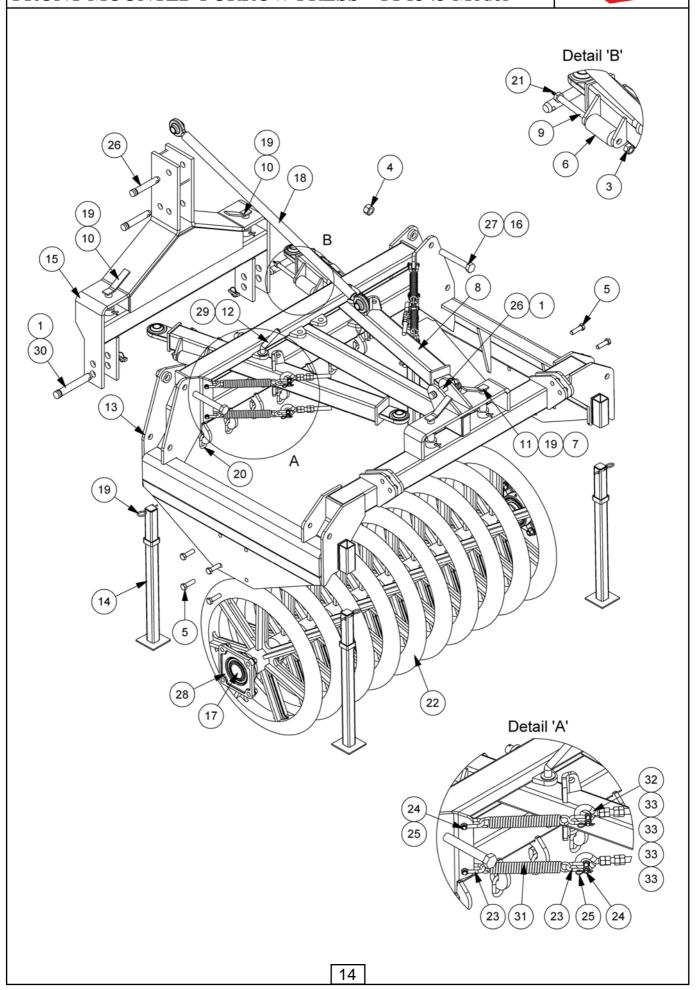




REF.	QTY.	PART No.	DESCRIPTION
		UFP1530	1.5M FRONT MOUNTED PRESS
1	5	00.372.01	LINCH PIN
2	8	05.281.04	FLAT WASHER
3	12	05.287.04	SELF-LOCKING NUT
4	2	05.287.06	SELF-LOCKING NUT
5	8	05.291.36	BOLT
6	4	189.004	ARM ROLLER
7	2	189.005	SPACER
8	2	189.007	ARM
9	4	189.008	GREASER BOLT
10	2	189.009	PIN
11	2	189.010	PIN
12	2	189.011	PIN
13	1	189.013	MAINFRAME
14	4	189.014	STAND LEG
15	1	189.016	HEADSTOCK
16	4	189.019	SPACER
17	1	189.020A	CENTRE SHAFT
18	1	189.061	LINK BAR - Builds 12/05 ▶
	1	189.015	LINK BAR - Builds ► 11/05
19	8	30.054.00	R CLIP
20	9	7986.1	CHAIN
21	4	T0811	GREASE NIPPLE
22	10	T1890002	PRESS RING (30°)
23	8	T2433	D SHACKLE
24	8	T2434	CLEVIS PIN
25	8	T2435	R CLIP
26	3	T2584	TOP LINK PIN
27	2	T3445	BOLT
28	2	T6077	BEARING
29	2	T6573	R CLIP
30	2	T7482	LOWER LINK PIN - CAT. 2
31	4	T8110	TENSION SPRING
32	4	T8111	EYEBOLT
33	16	T8118	NUT

# FRONT MOUNTED FURROW PRESS - FP1545 Model





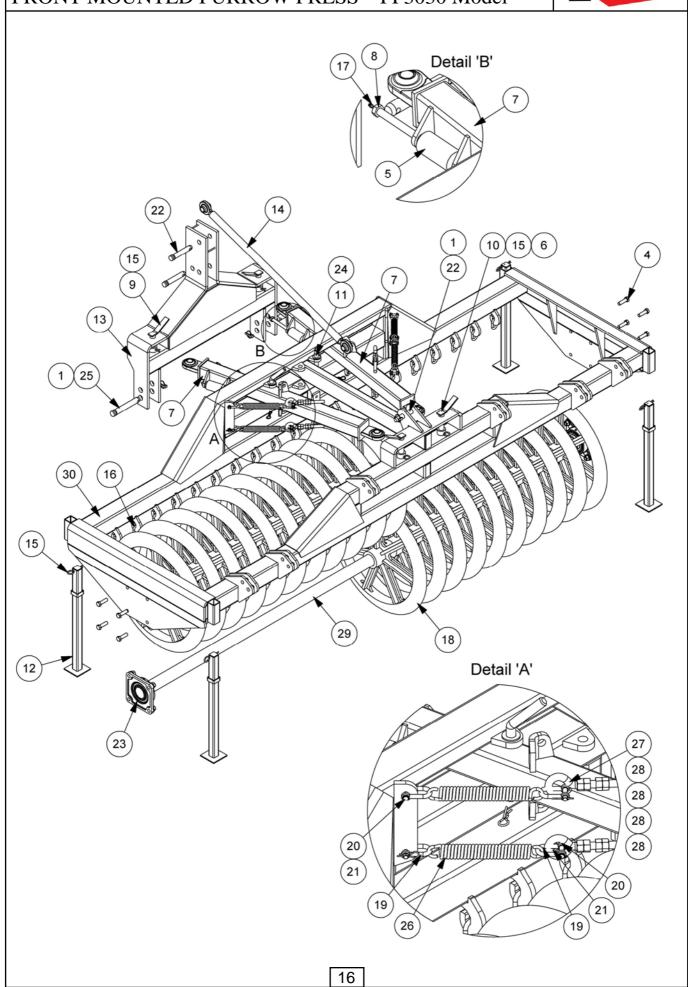




	REF.	QTY.	PART No.	DESCRIPTION
			UFP1545	1.5M FRONT MOUNTED PRESS
	1	5	00.372.01	LINCH PIN
	2	8	05.281.04	FLAT WASHER
	3	12	05.287.04	SELF-LOCKING NUT
	4	2	05.287.06	SELF-LOCKING NUT
	5	8	05.291.36	BOLT
	6	4	189.004	ARM ROLLER
	7	2	189.005	SPACER
	8	2	189.007	ARM
	9	4	189.008	GREASER BOLT
	10	2	189.009	PIN
	11	2	189.010	PIN
	12	2	189.011	PIN
	13	1	189.013	MAINFRAME
	14	4	189.014	STAND LEG
	15	1	189.016	HEADSTOCK
	16	4	189.019	SPACER
	17	1	189.020A	CENTRE SHAFT
	18	1	189.061	LINK BAR - Builds 12/05 ▶
		1	189.015	LINK BAR - Builds ► 11/05
	19	8	30.054.00	R CLIP
	20	9	7986.1	CHAIN
	21	4	T0811	GREASE NIPPLE
	22	10	T1890001	PRESS RING (45°)
	23	8	T2433	D SHACKLE
	24	8	T2434	CLEVIS PIN
	25	8	T2435	R CLIP
	26	3	T2584	TOP LINK PIN
	27	2	T3445	BOLT
	28	2	T6077	BEARING
	29	2	T6573	R CLIP
	30	2	T7482	LOWER LINK PIN - CAT. 2
	31	4	T8110	TENSION SPRING
	32	4	T8111	EYEBOLT
	33	16	T8118	NUT
1				

# FRONT MOUNTED FURROW PRESS – FP3030 Model





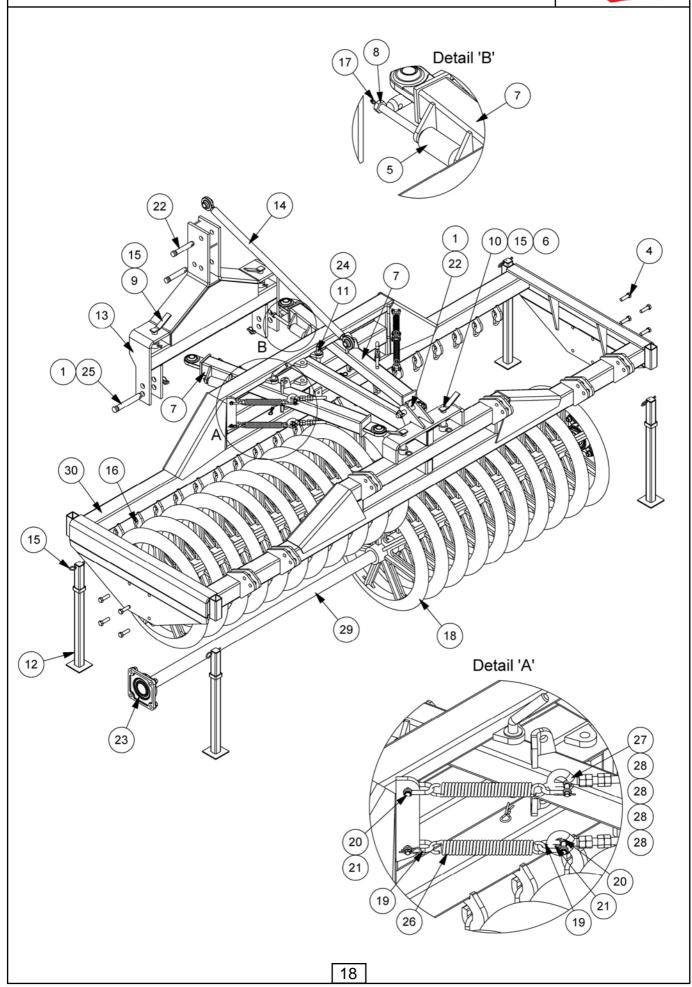




	REF.	QTY.	PART No. UFP3030	DESCRIPTION 3.0M FRONT MOUNTED PRESS
	1	5	00.372.01	LINCH PIN
	2	8	05.281.04	FLAT WASHER
	3	12	05.287.04	SELF-LOCKING NUT
	4	8	05.291.36	BOLT
	5	4	189.004	ARM ROLLER
	6	2	189.005	SPACER
	7	2	189.007	ARM W/A
	8	4	189.008	GREASER BOLT
	9	2	189.009	PIN
	10	2	189.010	PIN
	11	2	189.011	PIN
	12	4	189.014	STAND LEG
	13	1	189.016	HEADSTOCK
	14	1	189.061	LINK BAR - Builds 12/05 ▶
		1	189.015	LINK BAR - Builds ► 11/05
	15	8	30.054.00	R CLIP
	16	21	7986.1	CHAIN
	17	4	T0811	GREASE NIPPLE
	18	21	T1890002	PRESS RING (30°)
	19	8	T2433	D SHACKLE
	20	8	T2434	CLEVIS PIN
	21	8	T2435	R CLIP
	22	3	T2584	TOP LINK PIN
	23	2	T6077	BEARING
	24	2	T6573	R CLIP
	25	2	T7482	LOWER LINK PIN - CAT. 2
	26	4	T8110	TENSION SPRING
	27	4	T8111	EYEBOLT
	28	16	T8118	NUT
	29	1	189.020E	SHAFT
	30	1	189.021	3M RIGID FRAME
I				

# FRONT MOUNTED FURROW PRESS – FP3045 Model





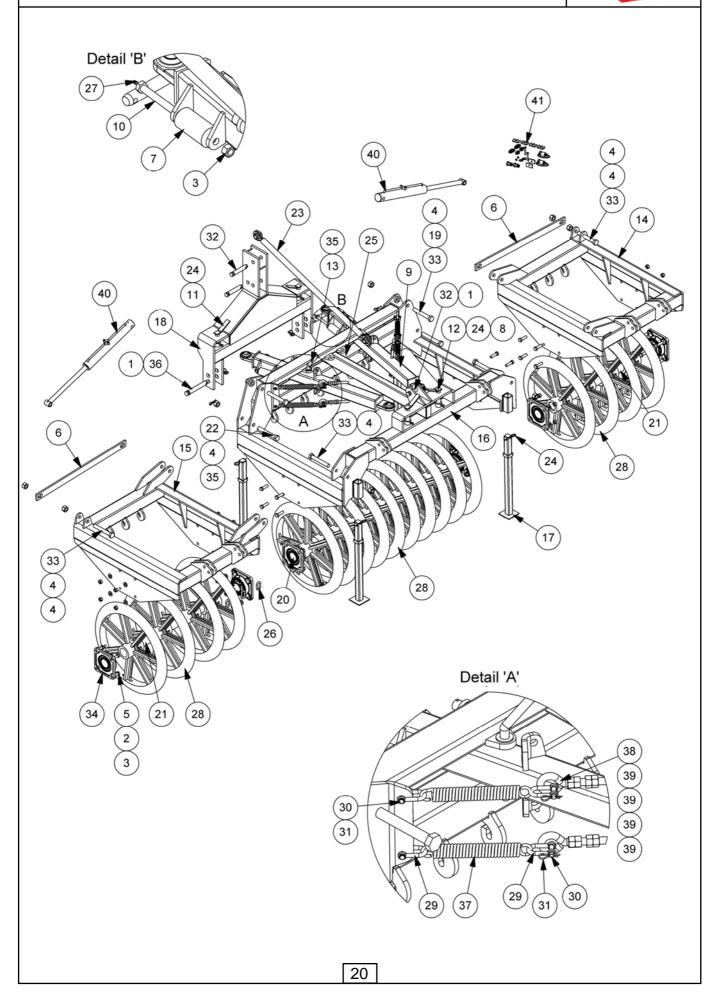




REF. QTY. PART No. DESCRIPTION UFP3045 3.0M FRONT MOUNTED	PRESS
1 5 00.372.01 LINCH PIN	
2 8 05.281.04 FLAT WASHER	
3 12 05.287.04 SELF-LOCKING NUT	
4 8 05.291.36 BOLT	
5 4 189.004 ARM ROLLER	
6 2 189.005 SPACER	
7 2 189.007 ARM W/A	
8 4 189.008 GREASER BOLT	
9 2 189.009 PIN	
10 2 189.010 PIN	
11 2 189.011 PIN	
12 4 189.014 STAND LEG	
13 1 189.016 HEADSTOCK	
14 1 189.061 LINK BAR - Builds 12/05 ▶	
1 189.015 LINK BAR - Builds ► 11/0.	5
15 8 30.054.00 R CLIP	
16 21 7986.1 CHAIN	
17 4 T0811 GREASE NIPPLE	
18 21 T1890001 PRESS RING (45°)	
19 8 T2433 D SHACKLE	
20 8 T2434 CLEVIS PIN	
21 8 T2435 R CLIP	
22 3 T2584 TOP LINK PIN	
23 2 T6077 BEARING	
24 2 T6573 R CLIP	
25 2 T7482 LOWER LINK PIN - CAT. 1	2
26 4 T8110 TENSION SPRING	
27 4 T8111 EYEBOLT	
28 16 T8118 NUT	
29 1 189.020E SHAFT	
30 1 189.021 3M RIGID FRAME	

# FRONT MOUNTED FURROW PRESS - FPF3030 Model





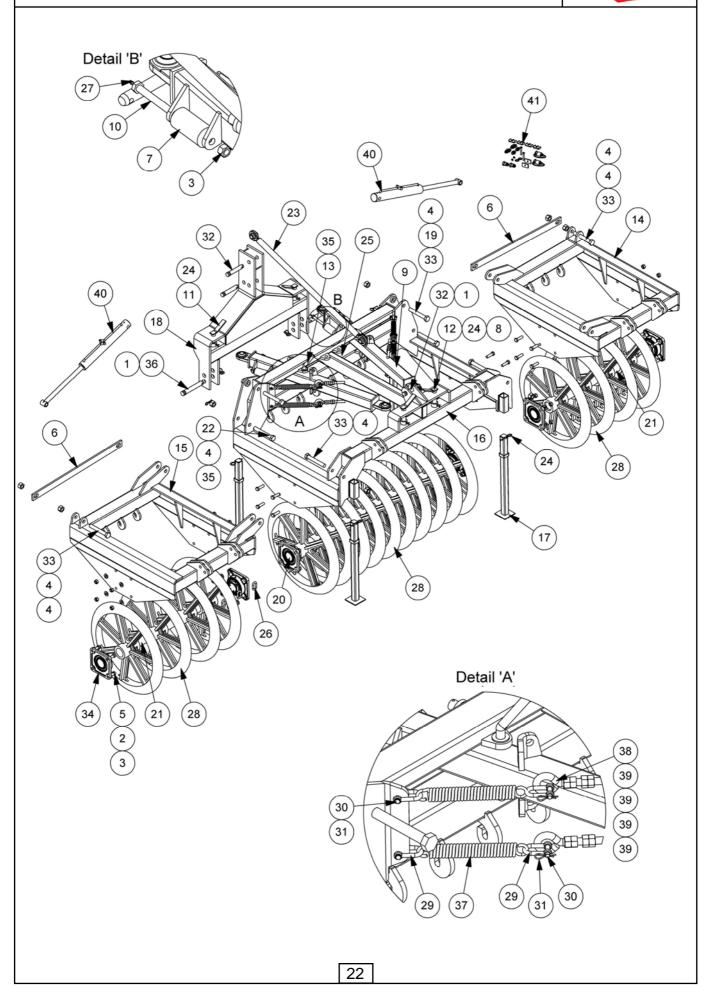




REI	F. QTY.	PART No.	DESCRIPTION
		<b>UFPF3030</b>	3.0M FRONT MOUNTED PRESS
1	5	00.372.01	LINCH PIN
2	24	05.281.04	FLAT WASHER
3	28	05.287.04	SELF-LOCKING NUT
4	10	05.287.06	SELF-LOCKING NUT
5	24	05.291.36	BOLT
6	2	189.006	PLATE
7	4	189.004	ARM ROLLER
8	2	189.005	SPACER
9	2	189.007	ARM
10		189.008	GREASER BOLT
11		189.009	PIN
12		189.010	PIN
13		189.011	PIN
14		189.012L	LH 3.0M WING
15	1	189.012R	RH 3.0M WING
16		189.013	MAINFRAME
17	4	189.014	STAND LEG
18	1	189.016	HEADSTOCK
19		189.019	SPACER
20	1	189.020A	CENTRE SHAFT
21		189.020C	OUTER WING SHAFT
22	2	189.022	BOLT
23	1	189.061	LINK BAR - Builds 12/05 ►
	1	189.015	LINK BAR - Builds ► 11/05
24	8	30.054.00	R CLIP
25	9	7986.1	CHAIN
26	6	7986.2	CHAIN
27		T0811	GREASE NIPPLE
28		T1890002	PRESS RING (30°)
29		T2433	D SHACKLE
30		T2434	CLEVIS PIN
31		T2435	R CLIP
32		T2584	TOP LINK PIN
33		T3445	BOLT
34		T6077	BEARING
35		T6573	R CLIP
36		T7482	LOWER LINK PIN - CAT. 2
37		T8110	TENSION SPRING
38		T8111	EYEBOLT
39		T8118	NUT
40		189.206	HYDRAULIC RAMS MODULE
41		189.209	HYDRAULIC INSTALLATION KIT
42		10.003.22	HOSE - 3/8" BSP FS/FS x 1200mm
43	4	10.004.21	HOSE - 3/8" BSP FS/F90 x 1100mm
			21

# FRONT MOUNTED FURROW PRESS - FPF3045 Model





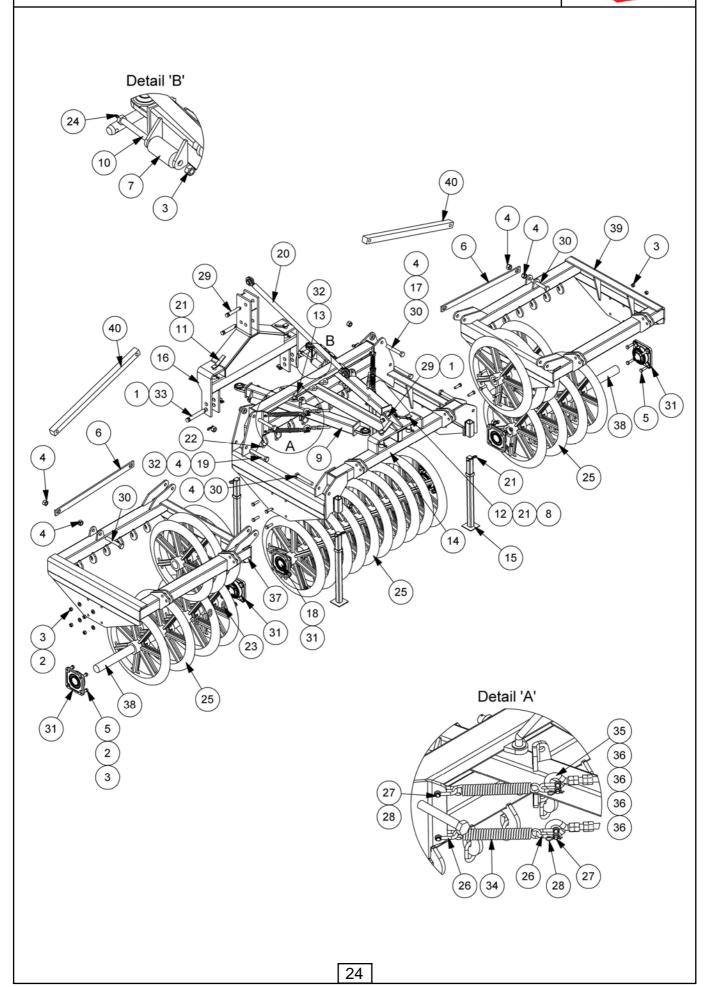




REF.	QTY.	PART No.	DESCRIPTION
		UFPF3045	3.0M FRONT MOUNTED PRESS
1	5	00.372.01	LINCH PIN
2	24	05.281.04	FLAT WASHER
3	28	05.287.04	SELF-LOCKING NUT
4	10	05.287.06	SELF-LOCKING NUT
5	24	05.291.36	BOLT
6	2	189.006	PLATE
7	4	189.004	ARM ROLLER
8	2	189.005	SPACER
9	2	189.007	ARM
10	4	189.008	GREASER BOLT
11	2	189.009	PIN
12	2	189.010	PIN
13	2	189.011	PIN
14	1	189.012L	LH 3.0M WING
15	1	189.012R	RH 3.0M WING
16	1	189.013	MAINFRAME
17	4	189.014	STAND LEG
18	1	189.016	HEADSTOCK
19	4	189.019	SPACER
	20 1		CENTRE SHAFT
21	2	189.020C	OUTER WING SHAFT
	22 2 18		BOLT
23	1	189.061	LINK BAR - Builds 12/05 ▶
	1	189.015	LINK BAR - Builds ► 11/05
24	8	30.054.00	R CLIP
25	9	7986.1	CHAIN
26	6	7986.2	CHAIN
27	4	T0811	GREASE NIPPLE
28	18	T1890001	PRESS RING (45°)
29	8	T2433	D SHACKLE
30	8	T2434	CLEVIS PIN
31	8 3	T2435	R CLIP
32 33	5 6	T2584 T3445	TOP LINK PIN BOLT
33	6	T 3443 T 6077	BEARING
35	6 4	T6573	R CLIP
36	2	T7482	LOWER LINK PIN - CAT. 2
37	4	T8110	TENSION SPRING
38	4	T8111	EYEBOLT
39	16	T8118	NUT
40	10	189.206	HYDRAULIC RAMS MODULE
41	1	189.200	HYDRAULIC INSTALLATION KIT
42	2	10.003.22	HOSE - 3/8" BSP FS/FS x 1200mm
43	4	10.003.22	HOSE - 3/8" BSP FS/F90 x 1100mm
	r	10.001.21	
			23

# FRONT MOUNTED FURROW PRESS - FP4030 Model





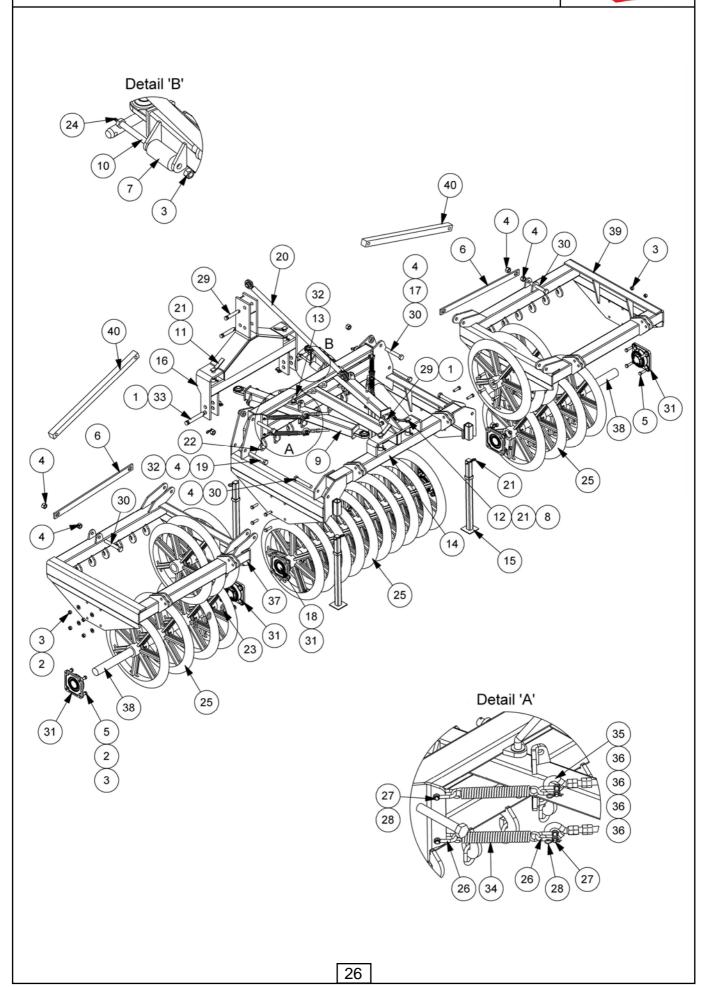




REF.	QTY.	PART No. UFP4030	DESCRIPTION 4.0M FRONT MOUNTED PRESS
1	5	00.372.01	LINCH PIN
2	24	05.281.04	FLAT WASHER
3	28	05.287.04	SELF-LOCKING NUT
4	10	05.287.06	SELF-LOCKING NUT
5	24	05.291.36	BOLT
6	2	189.006	PLATE
7	4	189.004	ARM ROLLER
8	2	189.005	SPACER
9	2	189.007	ARM
10	4	189.008	GREASER BOLT
11	2	189.009	PIN
12	2	189.010	PIN
13	2	189.011	PIN
14	1	189.013	MAINFRAME
15	4	189.014	STAND LEG
16	1	189.016	HEADSTOCK
17	4	189.019	SPACER
18	1	189.020A	CENTRE SHAFT
19	2	189.022	BOLT
20	1	189.061	LINK BAR - Builds 12/05 ►
	1	189.015	LINK BAR - Builds ► 11/05
21	8	30.054.00	R CLIP
22	9	7986.1	CHAIN
23	6	7986.2	CHAIN
24	4	T0811	GREASE NIPPLE
25	24	T1890002	PRESS RING (30°)
26	8	T2433	D SHACKLE
27	8	T2434	CLEVIS PIN
28	8	T2435	R CLIP
29	3	T2584	TOP LINK PIN
30	6	T3445	BOLT
31	6	T6077	BEARING
32	4	T6573	R CLIP
33	2	T7482	LOWER LINK PIN - CAT. 2
34	4	T8110	TENSION SPRING
35	4	T8111	EYEBOLT
36	16	T8118	NUT
37	1	189.018R	RH FOLDING WING
38	2	189.020D	OUTER SHAFT
39	1	189.018L	LH FOLDING WING
40	2	189.025	DUMMY RAM

# FRONT MOUNTED FURROW PRESS - FP4045 Model





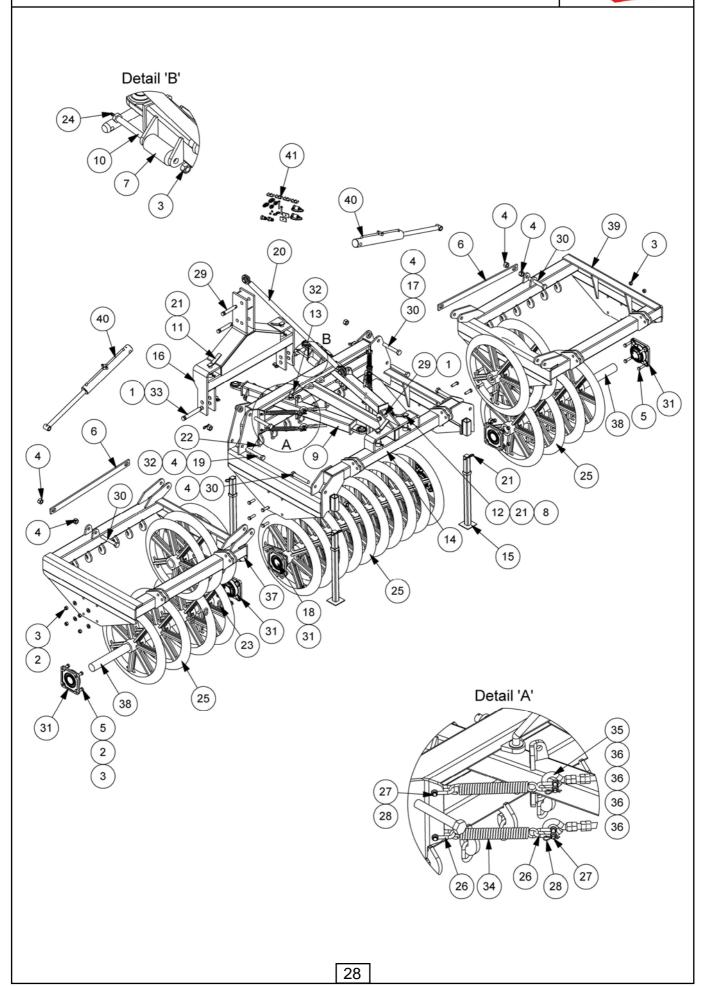




REF.	QTY.	PART No.	DESCRIPTION  A OM EDONT MOUNTED DDESS
1	5	UFP4045	4.0M FRONT MOUNTED PRESS
1 2		00.372.01	LINCH PIN FLAT WASHER
	24	05.281.04	
3	28	05.287.04	SELF-LOCKING NUT
4	10	05.287.06	SELF-LOCKING NUT
5	24	05.291.36	BOLT
6	2	189.006	PLATE
7	4	189.004	ARM ROLLER
8	2	189.005	SPACER
9	2	189.007	ARM
10	4	189.008	GREASER BOLT
11	2	189.009	PIN
12	2	189.010	PIN
13	2	189.011	PIN
14	1	189.013	MAINFRAME
15	4	189.014	STAND LEG
16	1	189.016	HEADSTOCK
17	4	189.019	SPACER
18	1	189.020A	CENTRE SHAFT
19	2	189.022	BOLT
20	1	189.061	LINK BAR - Builds 12/05 ▶
	1	189.015	LINK BAR - Builds ► 11/05
21	8	30.054.00	R CLIP
22	9	7986.1	CHAIN
23	6	7986.2	CHAIN
24	4	T0811	GREASE NIPPLE
25	24	T1890001	PRESS RING (45°)
26	8	T2433	D SHACKLE
27	8	T2434	CLEVIS PIN
28	8	T2435	R CLIP
29	3	T2584	TOP LINK PIN
30	6	T3445	BOLT
31	6	T6077	BEARING
32	4	T6573	R CLIP
33	2	T7482	LOWER LINK PIN - CAT. 2
34	4	T8110	TENSION SPRING
35	4	T8111	EYEBOLT
36	16	T8118	NUT
37	10	189.018R	RH FOLDING WING
38	2	189.020D	OUTER SHAFT
39	1	189.020D 189.018L	LH FOLDING WING
40	2	189.016L 189.025	DUMMY RAM

# FRONT MOUNTED FURROW PRESS - FPF4030 Model





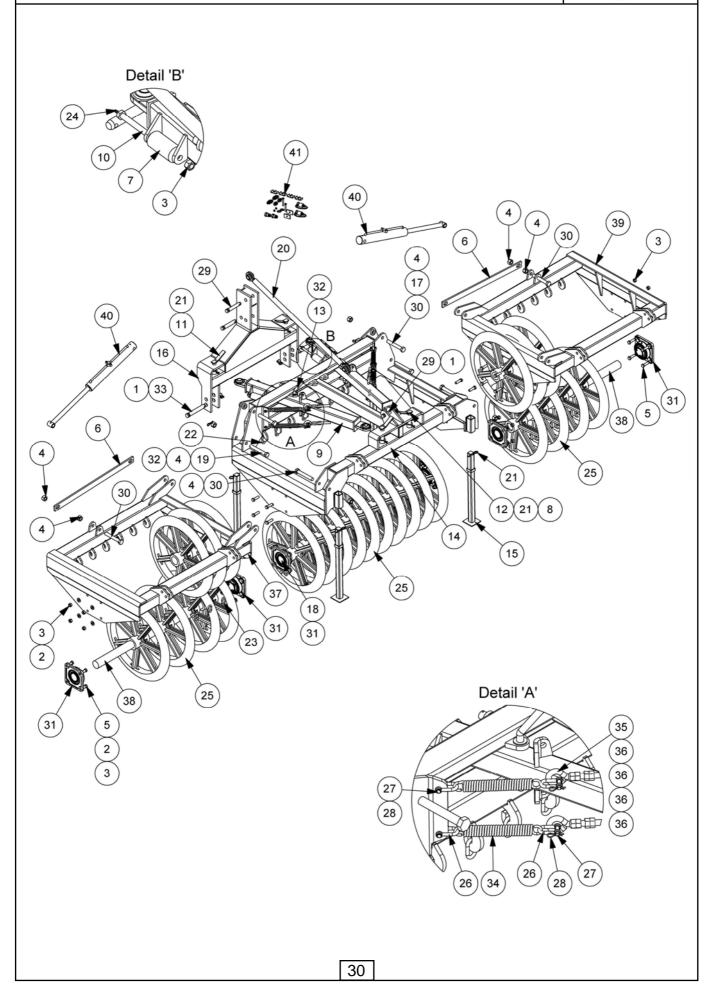




REF.	QTY.	PART No.	DESCRIPTION
		<b>UFPF4030</b>	4.0M FRONT MOUNTED PRESS
1	5	00.372.01	LINCH PIN
2	24	05.281.04	FLAT WASHER
3	28	05.287.04	SELF-LOCKING NUT
4	10	05.287.06	SELF-LOCKING NUT
5	24	05.291.36	BOLT
6	2	189.006	PLATE
7	4	189.004	ARM ROLLER
8	2	189.005	SPACER
9	2	189.007	ARM
10	4	189.008	GREASER BOLT
11	2	189.009	PIN
12	2	189.010	PIN
	2		
13		189.011	PIN MAINEDAME
14	1	189.013	MAINFRAME STAND LEC
15	4	189.014	STAND LEG
16	1	189.016	HEADSTOCK
17	4	189.019	SPACER
18	1	189.020A	CENTRE SHAFT
19	2	189.022	BOLT
20	1	189.061	LINK BAR - Builds 12/05 ▶
	1	189.015	LINK BAR - Builds ► 11/05
21	8	30.054.00	R CLIP
22	9	7986.1	CHAIN
23	6	7986.2	CHAIN
24	4	T0811	GREASE NIPPLE
25	24	T1890002	PRESS RING (30°)
26	8	T2433	D SHACKLE
27	8	T2434	CLEVIS PIN
28	8	T2435	R CLIP
29	3	T2584	TOP LINK PIN
30	6	T3445	BOLT
31	6	T6077	BEARING
32	4	T6573	R CLIP
33	2	T7482	LOWER LINK PIN - CAT. 2
34	4	T8110	TENSION SPRING
35	4	T8111	EYEBOLT
36	16	T8118	NUT
37	10	189.018R	RH FOLDING WING
38	2	189.020D	OUTER SHAFT
			LH FOLDING WING
39	1	189.018L	
40	1	189.206	HYDRAULIC RAMS MODULE
41	1	189.209	HYDRAULIC INSTALLATION KIT
42	2	10.003.22	HOSE - 3/8" BSP FS/FS x 1200mm
43	4	10.004.21	HOSE - 3/8" BSP FS/F90 x 1100mm
		29	9

# FRONT MOUNTED FURROW PRESS - FPF4045 Model





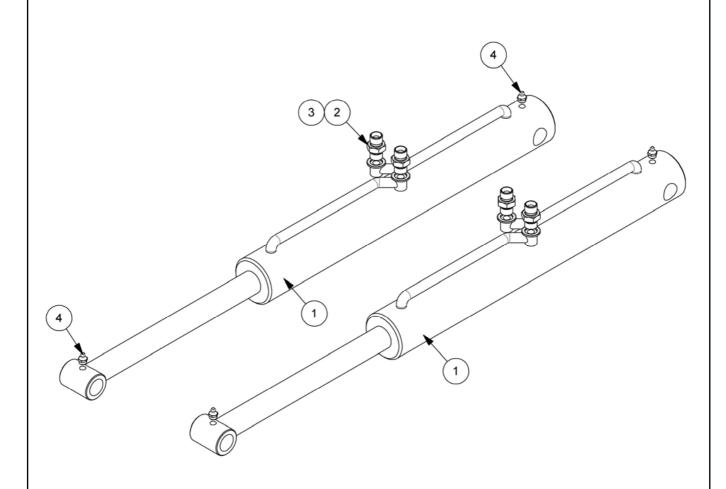




REF.	QTY.	PART No.	DESCRIPTION
	<b>Q</b> ==-	<b>UFPF4045</b>	4.0M FRONT MOUNTED PRESS
1	5	00.372.01	LINCH PIN
2	24	05.281.04	FLAT WASHER
3	28	05.287.04	SELF-LOCKING NUT
4	10	05.287.06	SELF-LOCKING NUT
5	24	05.291.36	BOLT
6	2	189.006	PLATE
7	4	189.004	ARM ROLLER
8	2	189.005	SPACER
9	2	189.007	ARM
10	4	189.008	GREASER BOLT
11	2	189.009	PIN
12	2	189.010	PIN
13	2	189.011	PIN
14	1	189.013	MAINFRAME
15	4	189.014	STAND LEG
16	1	189.016	HEADSTOCK
17	4	189.019	SPACER
18	1	189.020A	CENTRE SHAFT
19	2	189.022	BOLT
20	1	189.061	LINK BAR - Builds 12/05 ►
	1	189.015	LINK BAR - Builds ► 11/05
21	8	30.054.00	R CLIP
22	9	7986.1	CHAIN
23	6	7986.2	CHAIN
24	4	T0811	GREASE NIPPLE
25	24	T1890001	PRESS RING (45°)
26	8	T2433	D SHACKLE
27	8	T2434	CLEVIS PIN
28	8	T2435	R CLIP
29	3	T2584	TOP LINK PIN
30	6	T3445	BOLT
31	6	T6077	BEARING
32	4	T6573	R CLIP
33	2	T7482	LOWER LINK PIN - CAT. 2
34	4	T8110	TENSION SPRING
35	4	T8111	EYEBOLT
36	16	T8118	NUT
37	1	189.018R	RH FOLDING WING
38	2	189.020D	OUTER SHAFT
39	1	189.018L	LH FOLDING WING
40	1	189.206	HYDRAULIC INSTALLATION VIT
41	1	189.209	HYDRAULIC INSTALLATION KIT
42	2	10.003.22	HOSE - 3/8" BSP FS/FS x 1200mm HOSE - 3/8" BSP FS/F90 x 1100mm
43	4	10.004.21	
			31

# HYDRAULIC RAMS MODULE

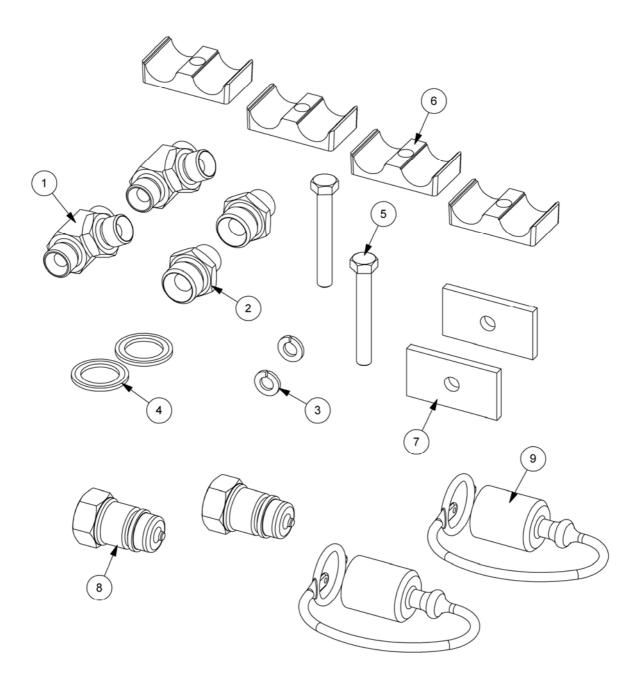




REF.	QTY.	PART No.	DESCRIPTION
		189.206	HYDRAULIC RAMS MODULE
1	2	T1890003	HYDRAULIC RAM
2	4	05.124.01	ADAPTOR
3	4	05.290.04	BONDED SEAL
4	4	05.953.03	GREASE NIPPLE
		1890003.1	SEAL KIT

# HYDRAULIC INSTALLATION KIT





REF.	QTY.	PART No.	DESCRIPTION
		189.209	HYDRAULIC INSTALLATION
1	2	04.056.05	ADAPTOR TEE
2	2	05.123.01	ADAPTOR
3	2	05.282.01	SPRING WASHER
4	2	05.290.05	BONDED SEAL
5	2	05.291.07	BOLT
6	4	06.430.04	HOSE CLAMP
7	2	3758.2	TOP PLATE
8	2	5485	QUICK RELEASE COUPLING
9	2	T5385	DUST CAP FOR QR COUPLING