



G2 & G2X2 Bale Feeder

Operation & Parts Manual



Part Number: 595-0045

Giltrap Engineering Ltd
7 Main North Rd
Otorohanga, 3900, New Zealand
Phone: +64 7 873 4199
Fax: +64 7 873 8131
Email: info@giltrapag.co.nz
Website: www.giltrapag.co.nz

Disclaimer

Although every endeavour has been made to compile as near to complete records as possible for the machine described, it is possible some information is incomplete or missing.

Giltrap Engineering request that you treat this book as a guide only, and offer any assistance necessary to procure the information or part you may require.

For parts or service enquiries, please contact the applicable numbers on the previous page.

Produced June 2020

Copyright © 2020 by Giltrap Engineering Ltd.
Printed in New Zealand

Table of Contents

INTRODUCTION	4
DELIVERY	4
WARRANTY	5
CLAIMS	6
SAFETY - GENERAL.....	7
SAFETY – MACHINE SPECIFIC	10
SETUP & OPERATING INSTRUCTIONS – 3 PT LINKAGE MODEL	11
<i>Hydraulic Requirements</i>	<i>11</i>
<i>Setup</i>	<i>11</i>
<i>Loading Instructions</i>	<i>11</i>
<i>Feeding Out</i>	<i>11</i>
SETUP & OPERATING INSTRUCTIONS – TRAILED MODEL.....	12
<i>Hydraulic Requirements</i>	<i>12</i>
<i>Setup</i>	<i>12</i>
<i>Loading Instructions</i>	<i>12</i>
<i>Feeding Out</i>	<i>12</i>
<i>Settings for different sized bales</i>	<i>13</i>
<i>Lubrication – 3 point linkage model.....</i>	<i>14</i>
<i>Lubrication – Trailed model</i>	<i>15</i>
<i>Lubrication – Trailed Model Cont.</i>	<i>16</i>
<i>Feed Chain Adjustment.....</i>	<i>16</i>
<i>Chain Tension.....</i>	<i>17</i>
<i>Before Storing.....</i>	<i>17</i>
PARTS SECTION	18
TRANSFERS – 3 POINT LINKAGE MODEL	18
TRANSFERS – TRAILED MODEL.....	20
FORK ASSEMBLY	21
CRADLE ASSEMBLY.....	22
FEED CHAINS	23
TRAILED CRADLE ASSEMBLY.....	25
50MM 6 STUD HUB MONROC	27
50MM 6 STUD HUB ADR.....	29
BOOM ASSEMBLY	31
FORK ASSEMBLY	33
CONTROL VALVE ASSEMBLY – SHL18284.....	34
CONTROL VALVE ASSEMBLY – SHL16371.....	35

Introduction

Thank you for purchasing a Giltrap product. Giltrap Engineering Ltd has enjoyed a long-standing success with their machinery. We would like you to enjoy the benefits of owning a Giltrap too. By following the guidelines laid out in this book, you will ensure trouble free, low maintenance operating for years.

Giltrap Engineering Ltd is a progressive company that continually strives to satisfy your needs, so we welcome any feedback which you can provide to help us improve our products and services and to ensure that they perform to your expectations. Any constructive comments about this operator's manual are also welcome.

Your machine has been designed to perform its task efficiently and with a minimum of maintenance. This handbook provides safety guidelines, instructions, maintenance requirements and parts listings. We recommend that you read the entire handbook, before operating the machine as this will enable you to take full advantage of your new machine's considerable potential.

Delivery

Before you begin to use your machine, please check it to make sure there is no delivery damage. If damage is evident, contact the dealer who supplied the machine so that they can make the appropriate claims.

If you have any other queries, please contact your dealer or Giltrap Engineering Ltd (0800 80 GILTRAP). All Giltrap products are covered by a 36 month warranty (see next page) on parts and labour, subject to normal use.

Please fill in the details below for future reference.

Model:

Serial No:

Delivery Date:

Dealer:

Warranty

Subject as hereunder provided, Giltrap Engineering Limited (Hereafter called the Seller) undertake to correct either by repair, or at their election, by replacement, any defect of material or workmanship which occurs in any of its goods within twenty four months after delivery of such goods to a first user, with the exception of contractors or commercial users when the warranty period is limited to six months.

In addition to the primary 24 month warranty, the Seller undertake to correct either by repair, or at their election, by replacement, any defect of material or workmanship which occurs in any structural assembly in any of its goods within thirty six months after delivery of such goods to a first user, with the exception of contractors or commercial users when the warranty period is limited to six months.

The term goods when used in this document means the article or articles described in invoice as sold by the Seller but does not include equipment or proprietary parts or accessories not manufactured by the Seller. The Seller, however, undertakes to pass on so far as they legally can to the first user the benefit of any warranty given to the Seller by the suppliers of such equipment, parts or accessories.

This understanding shall not apply to:

- Any goods which have been sold by the first user.
- Any goods which have been damaged by unfair wear and tear, neglect or improper use.
- Any goods the identification marks of which have been altered or removed.
- Any goods, which have not received maintenance as, set out in this book also such basic normal maintenance such as tightening of bolts, nuts, hose connections and fittings and normal lubrication with the recommended lubricant.
- Any goods which have been altered or repaired other than on instruction or with the written approval of the Seller or to which any part not manufactured or having written approval by the Seller has been fixed.
- Any second-hand goods or part thereof.

Any allegedly defective part or parts returned to the Seller must be sent freight paid. No claim for repair or replacement will be entertained unless, upon discovery of the alleged defect written notification is sent to the Seller, giving at the same time, the name of the Buyer from whom the goods were purchased and the date of purchase, together with full details of the alleged defect and the circumstances involved, and also the serial number of the machine.

The Seller shall not be under liability to their Buyers and first and subsequent users of their goods or to any other person or persons for loss or damages howsoever arising in respect of either personal injuries or for special or consequential damage of any kind or from any cause whatsoever arising out of, or in any way connected with or arising from the manufacture, sale, handling, repair, maintenance, replacement or use of its goods or the failure or malfunction of any of its goods. Representation and/or warranties made by any person (including Buyers and employees and other representatives of the Seller) which are inconsistent or conflicting with these conditions are not binding upon the Seller unless given in writing and signed by a Director of the Seller.

Claims

- If you wish to make a claim under warranty:
 - Immediately stop using the machine.
 - List details of the machine and damaged item including serial numbers and date of purchase.
 - Consult with your Giltrap dealer (supplier) and have him forward your claim and the damaged item to Giltrap Engineering Ltd.
 - No warranty to be undertaken unless an order number is obtained from the Seller (Giltrap Engineering Ltd) prior to any work being done.
-

Safety - General

This section of the manual offers general guidelines for the safe operation of machinery.

It does not replace local safety regulations. These guidelines were current at the time of publication, but may be superseded by later regulations.

Giltrap Engineering has made every effort to highlight all risks to personnel or property. Owners and operators have a responsibility to exercise care and safe work practices at all times in the vicinity of the machine.

Owners are advised to keep up to date on safety issues and to communicate these to all users of the machine.

Contact the Occupational Safety and Health Service (OSH) for further information about general safety aspects. If you have safety concerns specifically related to this machine, contact your dealer immediately.

Operator Safety

Read this manual carefully before operating new equipment. Learn how to use this machine safely. Be thoroughly familiar with the controls and the proper use of the equipment before using it. Take careful note of all safety instructions both in this manual and on the machine itself. Failure to comply with instructions could result in personal injury and/or damage to the machine. Replace missing or damaged safety signs on the machine and ensure that these remain clearly visible.

It is the owner's responsibility to ensure that anyone who operates, adjusts, lubricates, maintains, cleans or uses the machine in any way has had suitable instruction and is familiar with the information in this manual (particularly with regard to safety aspects).

Operators and other users of the machine should be aware of potential hazards and operating limitations.

Be Prepared for Emergencies

Keep a first aid kit and fire extinguisher handy. Keep emergency numbers for doctors, ambulance, hospital and fire department near your telephone.

Appropriate Dress

Wear close fitting clothing and avoid rings or other forms of jewellery which could become caught in the machinery.

People with long hair must have it securely fixed and confined close to the head.

Refer to local safety standards for protective clothing and recommended safety equipment.

Adequate protection, such as a face mask, should be worn if operating this machine in dry and dusty conditions.

Transport This Machine Safely

Ensure that all linkage pins and security clips are fitted correctly.

With trailing machines tow with the drawbar only, as this is the only safe towing point on the machine.

Always check that bystanders (especially children) are well clear (front and rear) before starting and moving the tractor and the machine.

Plan safe routes of travel, and be aware of power lines and other roadside hazards.

Take particular care when towing implements on hillsides.

Do not ride or allow passengers on the machine. This machine is not designed to carry passengers, and no riders are permitted.

Road transport

On public roads,

- A speed of 40km/h must not be exceeded.
- Do not operate during the hours of darkness unless standard lights are fitted and clearly visible. (This also applies when visibility is limited, e.g., in foggy conditions.)

See the guidelines in the *Vehicle Dimensions and Mass Rule* issued by the Land & Transport Safety Authority.

Avoid tip-overs

Run the machine along hillsides with the elevator on the high side of the hill. Avoid holes, ditches and obstructions which may cause the machine to tip over, especially on hillsides. Never drive near the edge of a gully or steep embankment - it might cave in. Slow down for hillsides, rough ground and sharp turns.

Handle Agricultural Chemicals Safely

All farm chemicals should be stored, used, handled and disposed of safely and in accordance with the supplier's/manufacturer's recommendations.

Read the product label before using, noting any warnings or special cautions, including any protective clothing or equipment that may be required, i.e. respirator.

Do not eat or smoke while handling sprays, fertilisers, coated seeds, etc. Afterwards, always wash your hands and face before you eat, drink, smoke, or use the toilet.

Store sprays, fertilisers, coated seeds, etc. out of reach of children and pets, and away from food and animal feeds.

Any symptoms of illness during or after using chemicals should be treated according to the supplier's/manufacturer's recommendations. If severe, **call a physician or get the patient to hospital immediately.** Keep the container and/or label for reference.

Avoid High Pressure Fluids

Avoid any contact with fluids leaking under pressure, because the fluids can penetrate the skin surface. Any fluid which penetrates the skin will need to be **removed immediately by a medical expert.** Seek specialist advice on this type of injury.

Relieve the pressure before disconnecting any hydraulic or other lines. Make all repairs and tighten all fittings before re-connection to pressurised fluid.

Keep your hands and body away from any pinholes or high pressure jets. Search for leaks with a piece of cardboard instead of using your hand directly.

Safe Work Practices

All farm machinery is potentially dangerous and should be treated with caution and respect. Before starting the machine, ensure that all controls are placed in neutral and that bystanders are well clear. Check that the guards have been securely fitted and that any adjustments have been made correctly.

Where possible, disconnect or isolate the drive mechanism to the implement. Lower the machine onto the ground when not in use.

Do not operate this equipment when severe weather conditions appear imminent.

Practice Safe Maintenance

Keep the machine in safe working condition. Routine maintenance and regular servicing will help reduce risks and prolong the life of the machine.

General Maintenance

Accidents occur most frequently during servicing and repair. The following general rules must be followed when maintaining or working with machinery:

- All operating and maintenance manuals must be read before and referred to while using or servicing any piece of equipment.
- Turn off all machinery power sources and isolate the machine before making adjustments, doing lubrication, repairs or any other maintenance on the machine.
- Ensure that the machine hydraulics are disconnected from the power source.
- Wear gloves when handling components with cutting edges, such as any ground cutting components.
- Beware of hazards created by springs under tension or compression when dismantling or maintaining the machine.
- It is recommended that you clean the machine with a water blaster or similar apparatus before commencing maintenance.

Make Sure the Machine is Well Supported

When machinery is fitted with hydraulics, do not rely on the hydraulics to support the machine. During maintenance or while making adjustments under the machine, always lock the hydraulics and support the machine securely. Place blocks or other stable supports under elevated parts before working on these.

Electrical Maintenance

Disconnect the electrical supply from the tractor before doing any electrical maintenance.

Welding

With electronic equipment in modern tractors it is advisable to disconnect the machine from the tractor, or at least disconnect the alternator and battery before attempting any welding.

Use Only Genuine Spare Parts

Unauthorised modifications or non-genuine spare parts may be hazardous and impair the safe operation and working life of the machine.



Excess lubricants must be disposed of safely so as not to become a hazard.

Safety – Machine Specific




The lists below are not all-inclusive and serve only to highlight the more obvious areas of risk. The labels attached to the machine are a general reminder that there are hazardous areas on the machine, rather than specifically highlighting all possible hazards.

The machines have been supplied with the following warning labels. It is the user’s responsibility to keep them in visible condition. For label locations on the machine, refer Page 19 onwards.

G2

<p>Keep Clear Hazardous areas include:</p> <ul style="list-style-type: none"> • Sharp headstock tines while feeder is separated during loading • General area around the machine while it is operating • Keep off machine while it is moving • High pressure hydraulic hoses 	
<p>Rotating Chains & Bars</p> <ul style="list-style-type: none"> • Beware of moving parts • Beware of sharp points 	

G2X2

<p>Pinch Points/Moving Parts Hazardous areas include:</p> <ul style="list-style-type: none"> • Lifting and lowering of main boom • Unsupported bale dropping 	
<p>Keep Clear Hazardous areas include:</p> <ul style="list-style-type: none"> • Area between machine and tractor • General area around the machine while it is operating • Keep off machine while it is moving • High pressure hydraulic hoses 	
<p>Rotating Chains & Bars</p> <ul style="list-style-type: none"> • Beware of moving parts • Beware of sharp points 	

Setup & Operating Instructions – 3 Pt Linkage Model

Hydraulic Requirements

Most tractors today are fitted with remote hydraulic pressure and return outlets at the rear. If your tractor is not fitted up as such, contact your local tractor dealer for a conversion kit so that the machine can be operated in both directions. It is important to use the correct type of quick release coupling ends to suit your tractor couplings as some brands of couplings have different spring tension within the coupling which may impede full oil flow - it pays to check this.

IMPORTANT:

Giltrap feeders are fitted with the best type of oil drive motors available, which will give years of trouble free usage, provided they are used with clean non-contaminated oil. To avoid costly damage to the motor and also to your tractor pump, ensure the oil used is of the recommended grade and is clean.

It is advisable to drain and flush the hydraulic oil system within the tractor if this has not been done recently.

Setup

Fit bale forks to your tractor's 3 point system - place feeder on fairly level ground and adjust the top link so that forks are in parallel to the mounting tubes in the feeder.

Loading Instructions

Lift Bale by cradling it with the prongs. CAUTION: make sure bale is hard up against headstock before lifting as damage may occur if used to lift loads on ends of prongs.

Load bale into feeder - Insert fork prongs into feeder frame tubes - MAKING SURE THE LOCKING CATCH IS FULLY LOCKED IN. If the motor drive dog is not fully engaged, rotate motor slowly until it springs into full engaged position.

Cut and remove all twine before feeding out. This is more easily done by cutting all the twine at the chain side, and pulling through from the opposite side.

Feeding Out

Operate the tractor hydraulics so the machine is running at approximately 25 litres per minute flow. The feeder is designed to handle as many types of bales as possible

Setup & Operating Instructions – Trailed Model

Hydraulic Requirements

Most tractors today are fitted with remote hydraulic pressure and return outlets at the rear. If your tractor is not fitted up as such, contact your local tractor dealer for a conversion kit so that the machine can be operated in both directions. It is important to use the correct type of quick release coupling ends to suit your tractor couplings as some brands of couplings have different spring tension within the coupling which may impede full oil flow - it pays to check this.

IMPORTANT:

Giltrap feeders are fitted with the best type of oil drive motors available which will give years of trouble free usage, provided they are used with clean non-contaminated oil. To avoid costly damage to the motor and also to your tractor pump, ensure the oil used is of the recommended grade and is clean. It is advisable to drain and flush the hydraulic oil system within the tractor if this has not been done recently.

Setup

Park the feeder on level ground. Adjust the swivel drawbar assembly so the drawbar of the feeder remains level when hitched to the tractor.

Loading Instructions

Lower the forks fully ensuring the tines are level. Reverse into the bale ensuring both tines are fully inserted into the bale before lifting as damage may occur if used to lift loads on ends of tines.

Begin lifting the bale onto feeder. Once the large lift ram has reached the end of its stroke, the bale will begin lowering on the bed. Return the hydraulic lever to neutral when the bale is approx. 500mm away from the bed. The bale should stop moving allowing the operator to cut and remove any plastic or net wrap.

After removing the wrap, engage the lever once more to lower the bale to the bed.

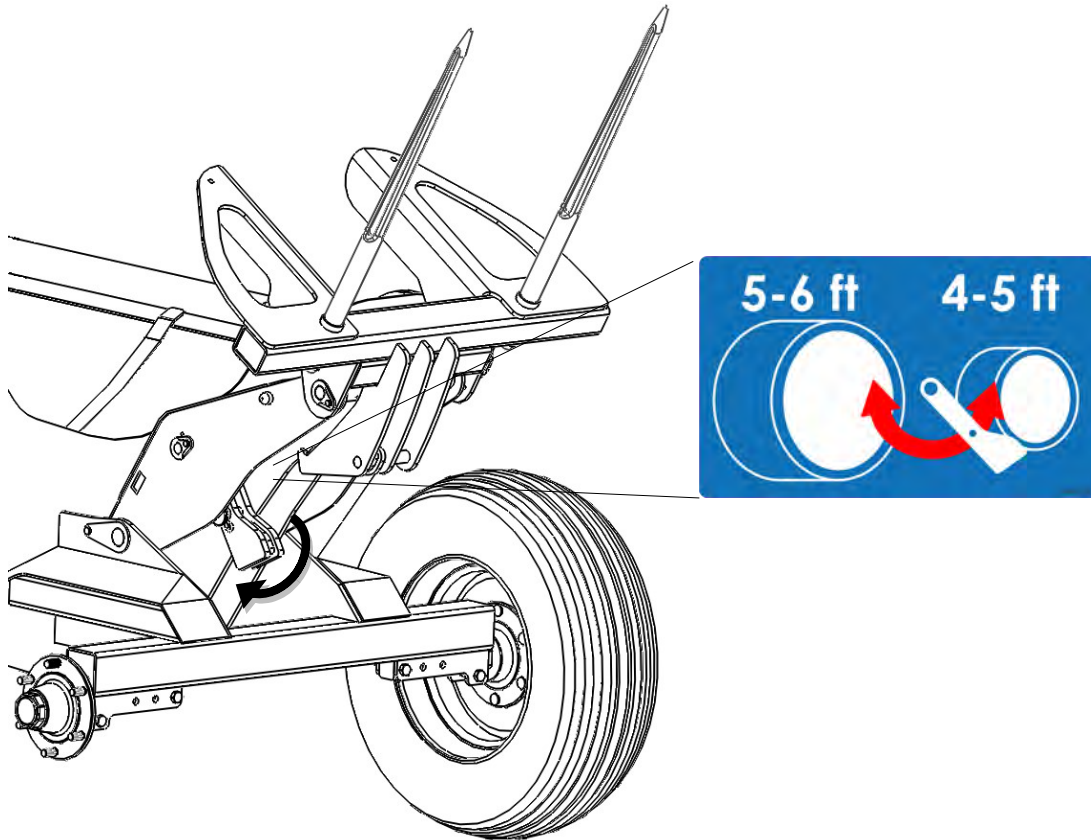
Reverse the hydraulic lever to remove the tines from the bale. *Note: The fork does not have to be fully retracted to horizontal at this stage.*

Return forks to horizontal position before loading next bale. Hold forks in the lowered position for 3 seconds to fully recharge cylinder.

Feeding Out

Set the tractor hydraulics so the machine is running at 25-30 litres per minute flow. The bale feeder is capable of feeding out to the left or right, depending on the direction the tractors hydraulic spool valve is operated.

Settings for different sized bales

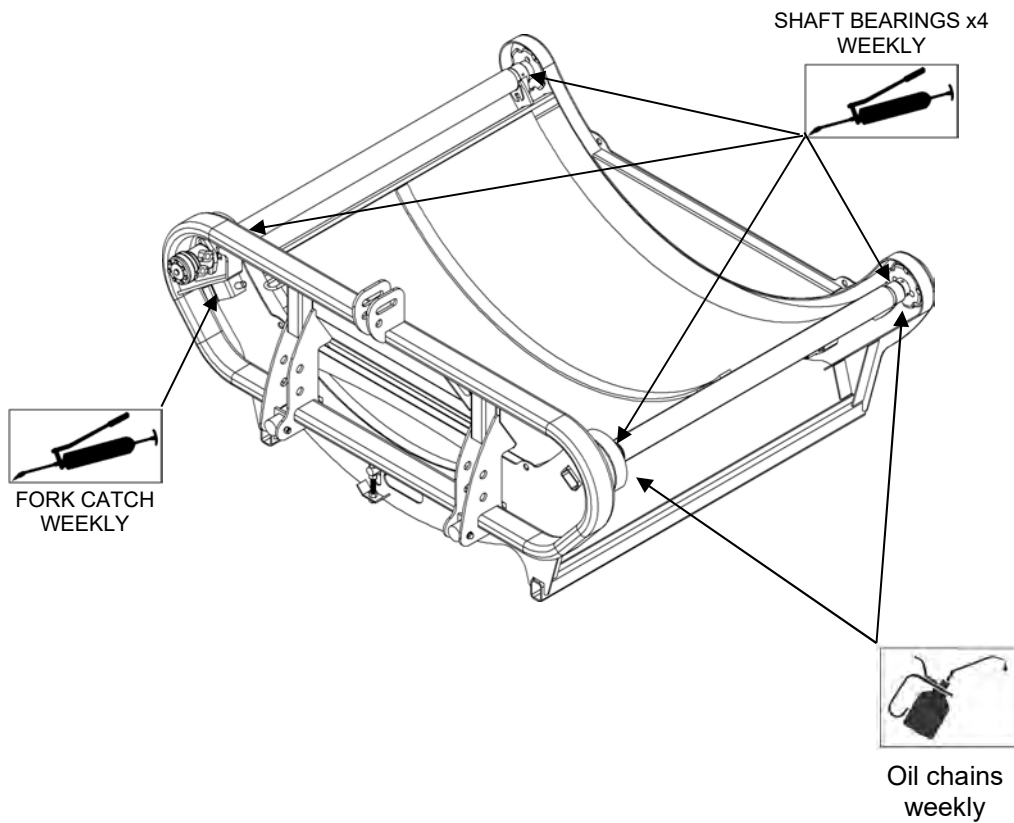


In order to set the G2x2 feeder up to load larger diameter round bales (5-6ft) it is necessary to lower the boom leg, to do this the boom must be in the fully raised position. Pull out the pin and rotate the leg down and lock it back into place. For loading smaller diameter bales, this leg must be folded back up

Maintenance

The Giltrap Bale Feeder is designed for minimal maintenance.

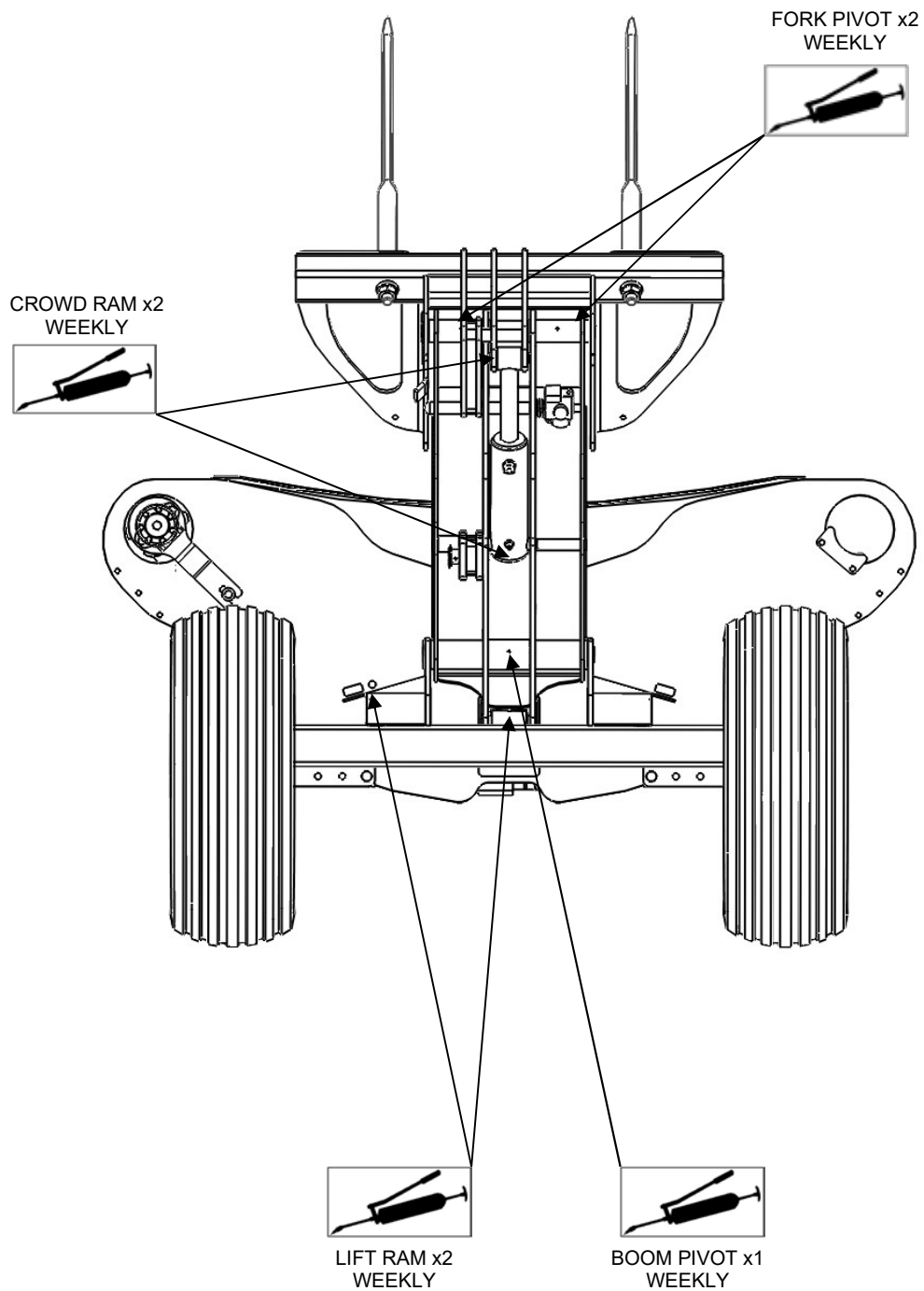
Lubrication – 3 point linkage model



The feed chains should be lubricated on a weekly basis to prolong operational lifespan. Giltrap Engineering recommends the use of food grade chain oil to avoid contamination of livestock feed. To lubricate the chains the machine should be turned over at slow speed, and oil applied to the chains. Care must be taken to avoid contact with the machines moving parts.

Lubrication – Trailed model

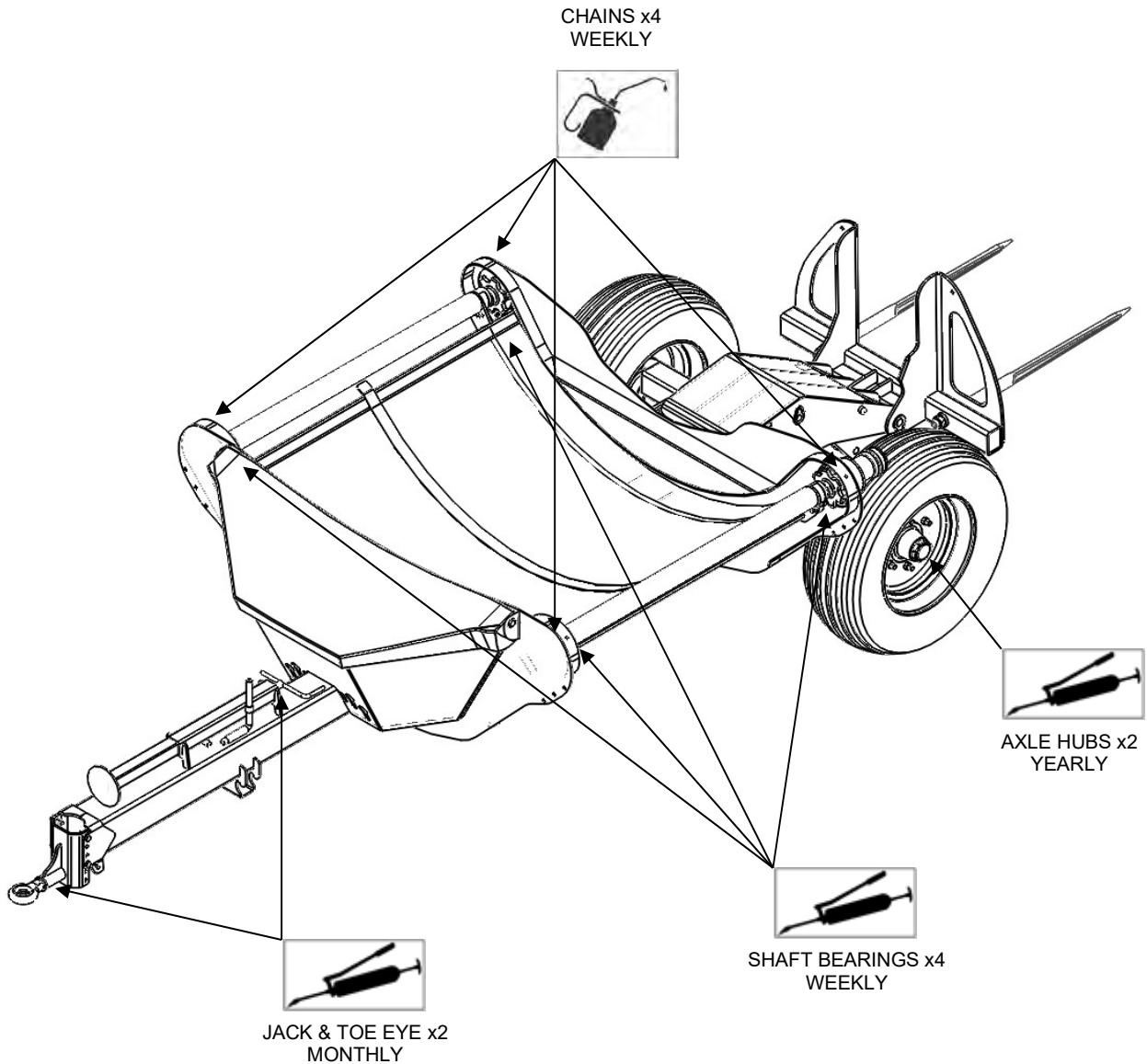
The G2x2 is designed so that all grease points on the lift mechanism are accessible from the rear of the machine.



Lubrication – Trailed Model Cont.

The feed chains should be lubricated on a weekly basis to prolong operational lifespan. Giltrap Engineering recommends the use of food grade chain oil to avoid contamination of livestock feed.

To lubricate the chains the machine should be turned over at slow speed, and oil applied through the lubrication holes located above the sprocket mounts. Care must be taken to avoid contact with the machines moving parts.

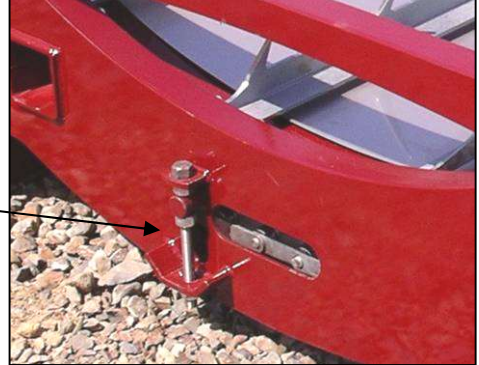


Chain Tension

3 pt linkage model

Feed chain adjuster (same at both ends)

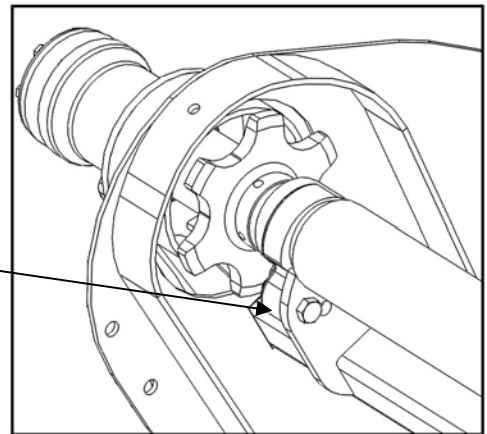
Loosen adjuster nut and adjust until chain slack has been minimised.



Trailed model

Feed chain adjuster (same at all four corners)

Remove the bolts from the bearing legs and rotate the bearing until the chain slack has been minimised.



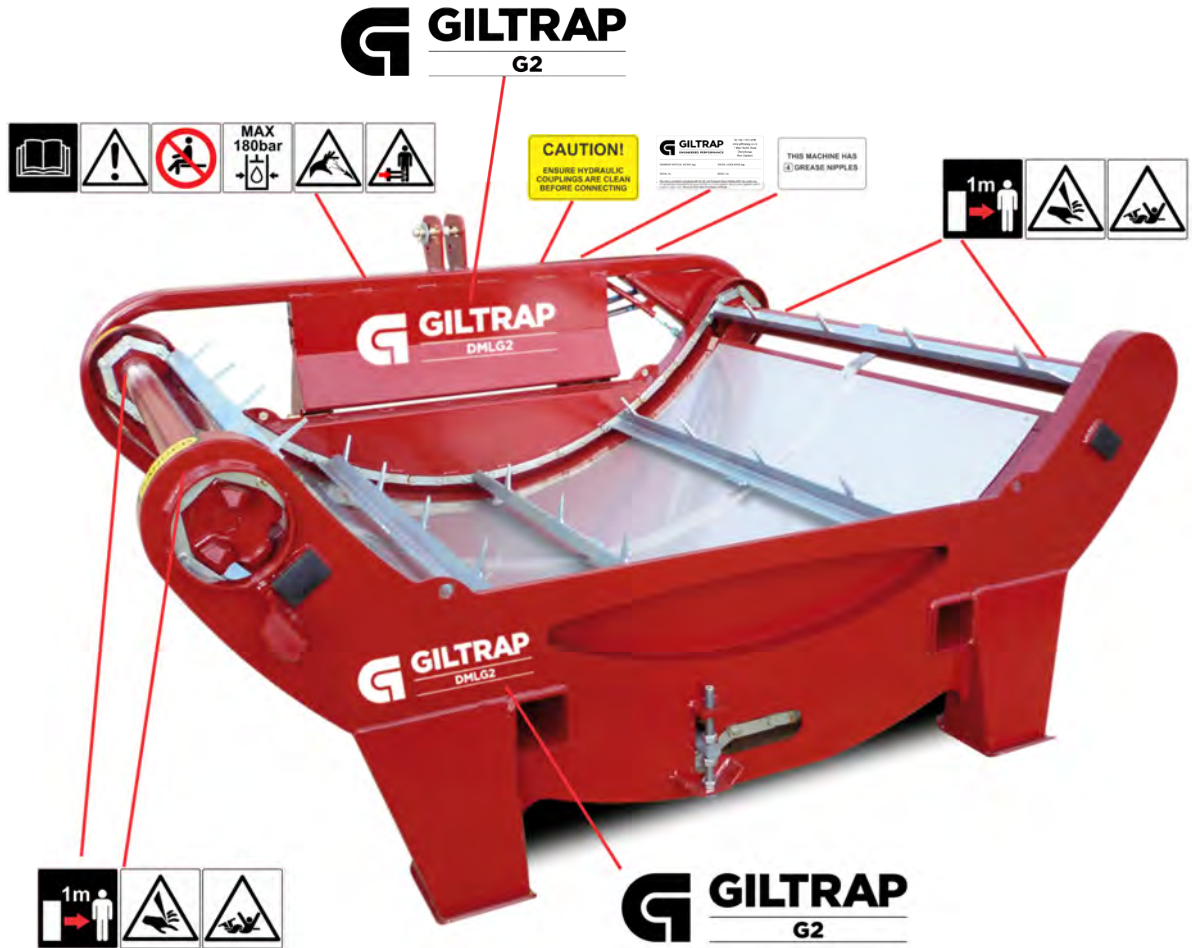
Before Storing

- Clean off any debris etc. and wash machine down, then let machine dry.
 - Grease all moving parts and bearings.
 - Oil the fork catch assembly (3 pt linkage model only).
 - Apply oil liberally to the floor chains, adjust tension if necessary.
-

Parts Section



Transfers – 3 Point Linkage Model



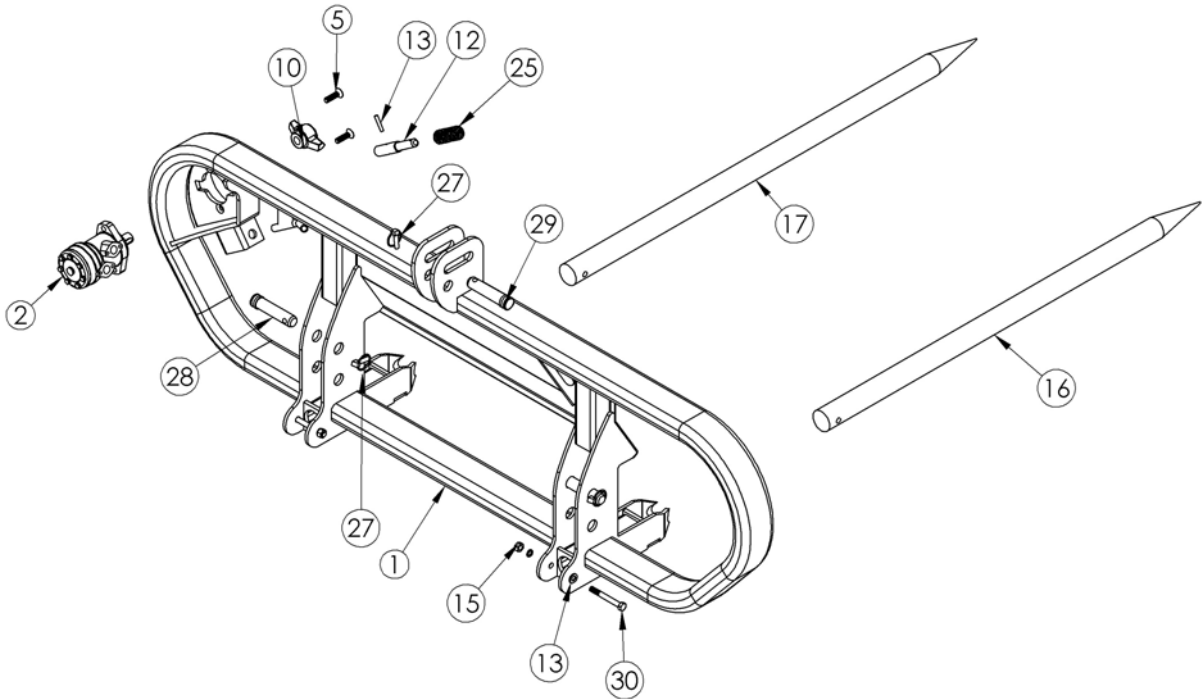
Item	Part Number	Description	Quantity
1	995-1275	G2 Transfer - small	2
2	995-1274	G2 Transfer - large	1

Transfers – Trailed Model



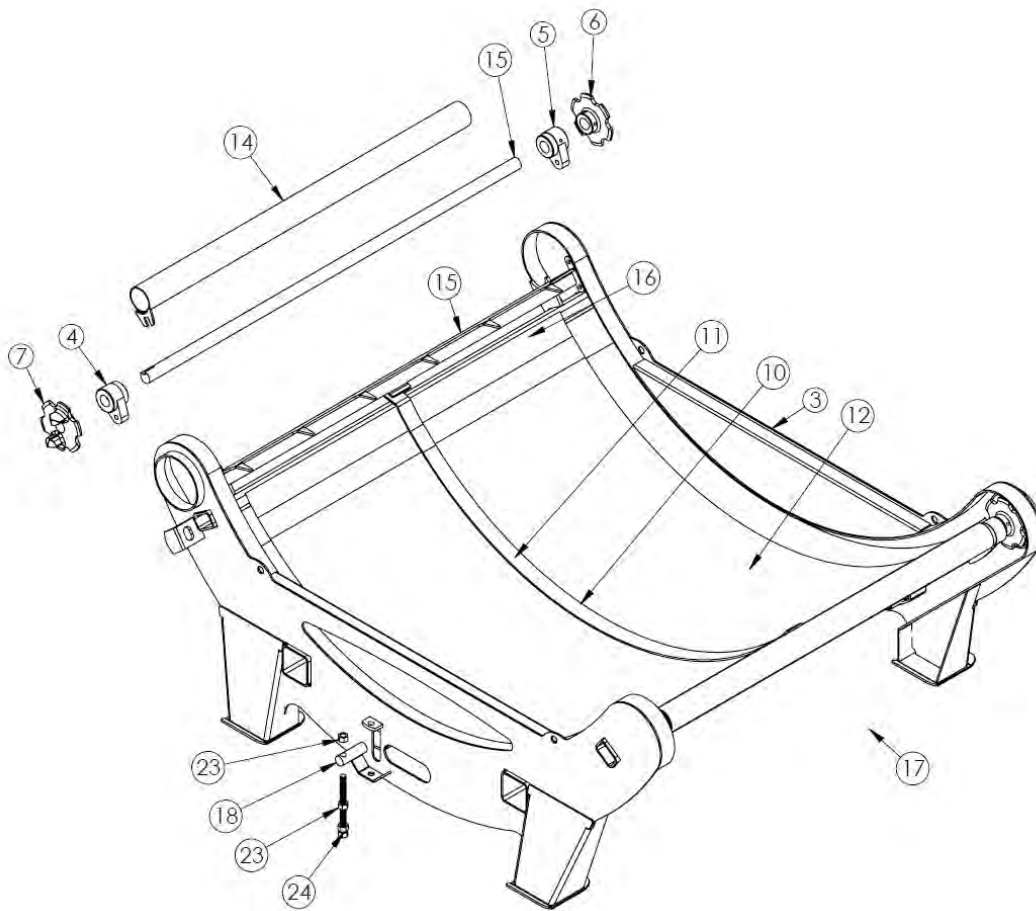
Item	Part Number	Description	Quantity
-	-	GENERATION 2X2 Sticker Kit	1

Fork Assembly



Item	Part Number	Description	Quantity
1	-	Headstock	1
2	HYM300-PT	Hydraulic motor 1" shaft	1
2	HYM400-PT	Hydraulic motor 25mm shaft	1
5	SC12X45ACS	M12x45 Countersunk bolt, nut & spring washer	2
10	127-0011	Drive dog, 1" bore	1
10	127-0011-2	Drive dog, 25mm bore	1
12	127-0214-1	Pin	1
13	RP8X60	Roll pin	1
15	WA20	Flat Washer	1
16	127-0071-1	Tine LH - 1270mm	1
17	127-0071	Tine RH - 1370mm	1
25	SGC80X27X3	Spring	1
-	ROPE6	Rope	2.2m
27	FP10.013	Lynch Pin	3
28	FP10.412	Pin, 110mm, Cat 2	2
29	FP10.356	Pin, 90mm, Cat 2	1
30	B12X90	Bolt, Nut & Spring Washer	2

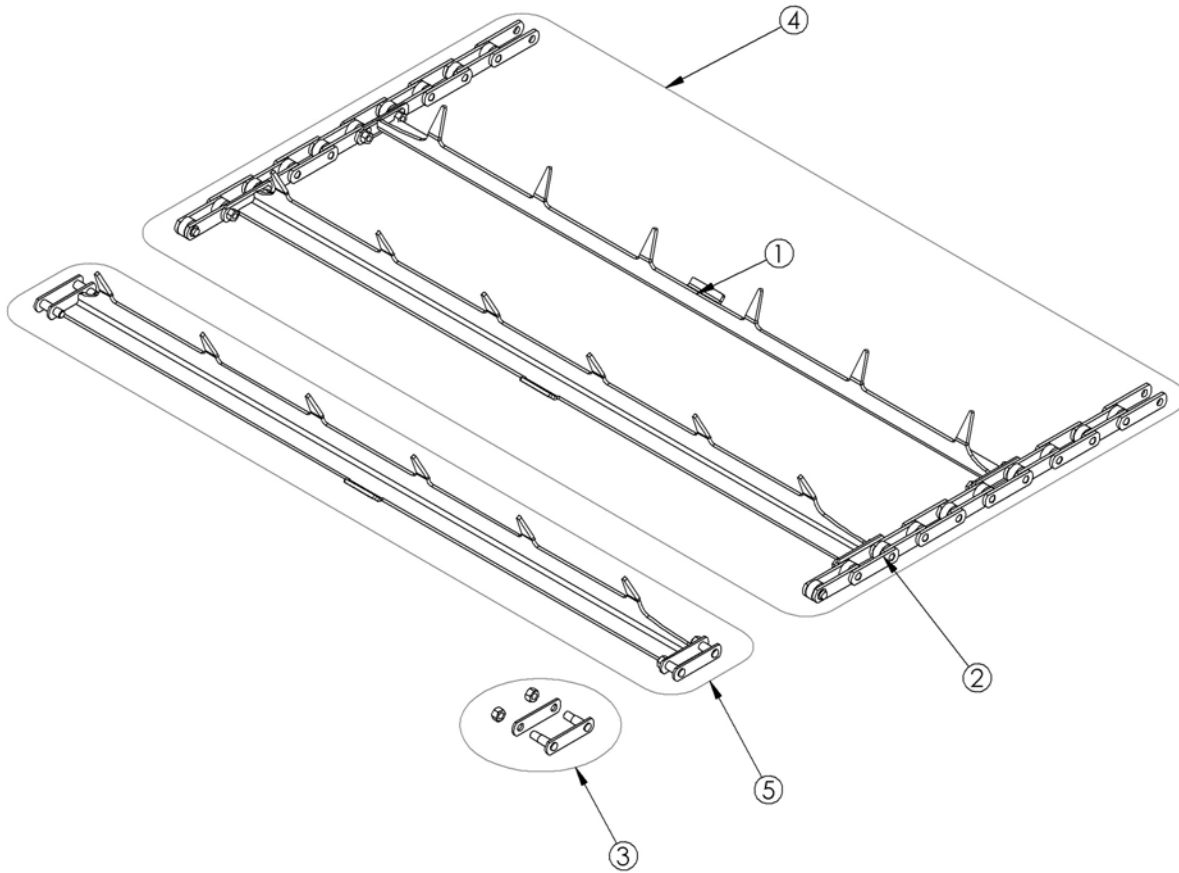
Cradle Assembly



Item	Part Number	Description	Quantity
3	-	Cradle	1
4	615-1996	Deadeye bearing, RH	2
5	615-1997	Deadeye bearing, LH	2
6	127-0217-1	Sprocket (welded to shaft)	2
7	127-0215-1	Sprocket (comes with drive pins)	2
10	127-0225	Stainless wear strip	1
11	RIVIT-MGL100-U8-12	Rivit SS 1/4"	5
12	127-0226	Stainless panel	1
13	RIVIT-2711-0617	Rivit SS 3/16"	14
14	127-0280	DML G2 shaft cover	2
15	127-0216	Shaft	2
16	2711-0617	Rivet S/S	8
17	127-0230	Foot skid	2
18	127-0218	Pin	2
23	N16	Nut (included with #24)	6
24	596-1004	Threaded adjuster	2
	127-0305	Plastic Cap 75x50	4

Note: Shafts and sprockets are identical on both sides.

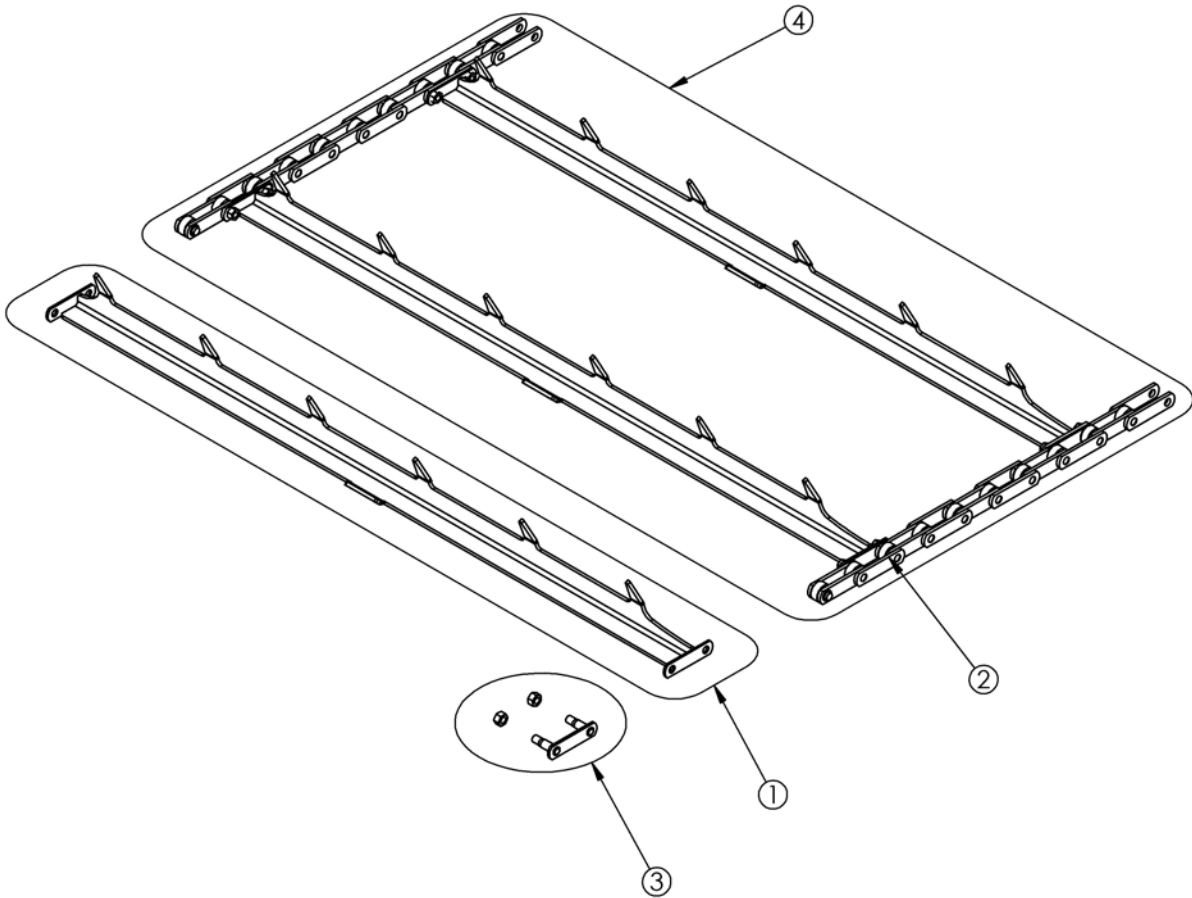
Feed Chains – DMLG2



NOTE: If replacing bars on G2 bale feeder, item 5 must be used to guarantee correct compatibility

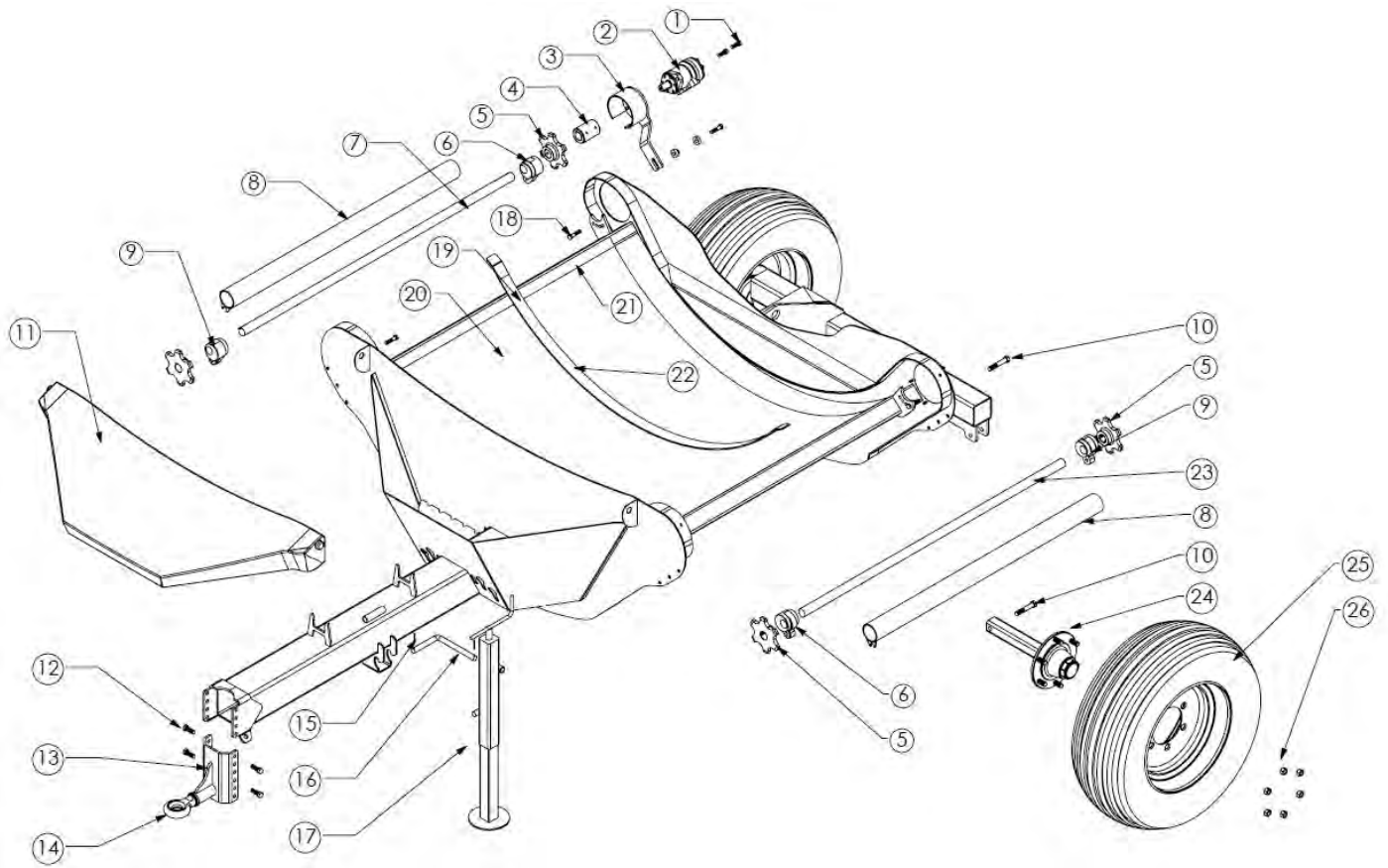
Item	Part Number	Description	Quantity
1	127-0220-5	DMLG2 Spiked Bar, Zinc Plated	10
2	CH7500-3/60	3”P7500LB S/pin conv chain	2
3	CH7500-3CONNECTOR	3” chain connector for DMLG2 - 7500LBS	20
4	127-0227	Complete Chain & Bar Set – DMLG2	1
5	127-0228	7500LBS Bars and Connectors	10

Feed Chains – DMLG2X2



Item	Part Number	Description	Quantity
1	127-0255	DMLG2X2 Spiked Bar c/w Plates Welded, Zinc Plated	10
2	CH15000-3/60	3”P15000LB S/Sin Conv Chain	2
3	CH15000-3CONNECTOR	3” Chain Connector for DMLG2X2-15000LBS	20
4	127-0260	G2X2-15000LBS Complete Chain & Bar Set	1

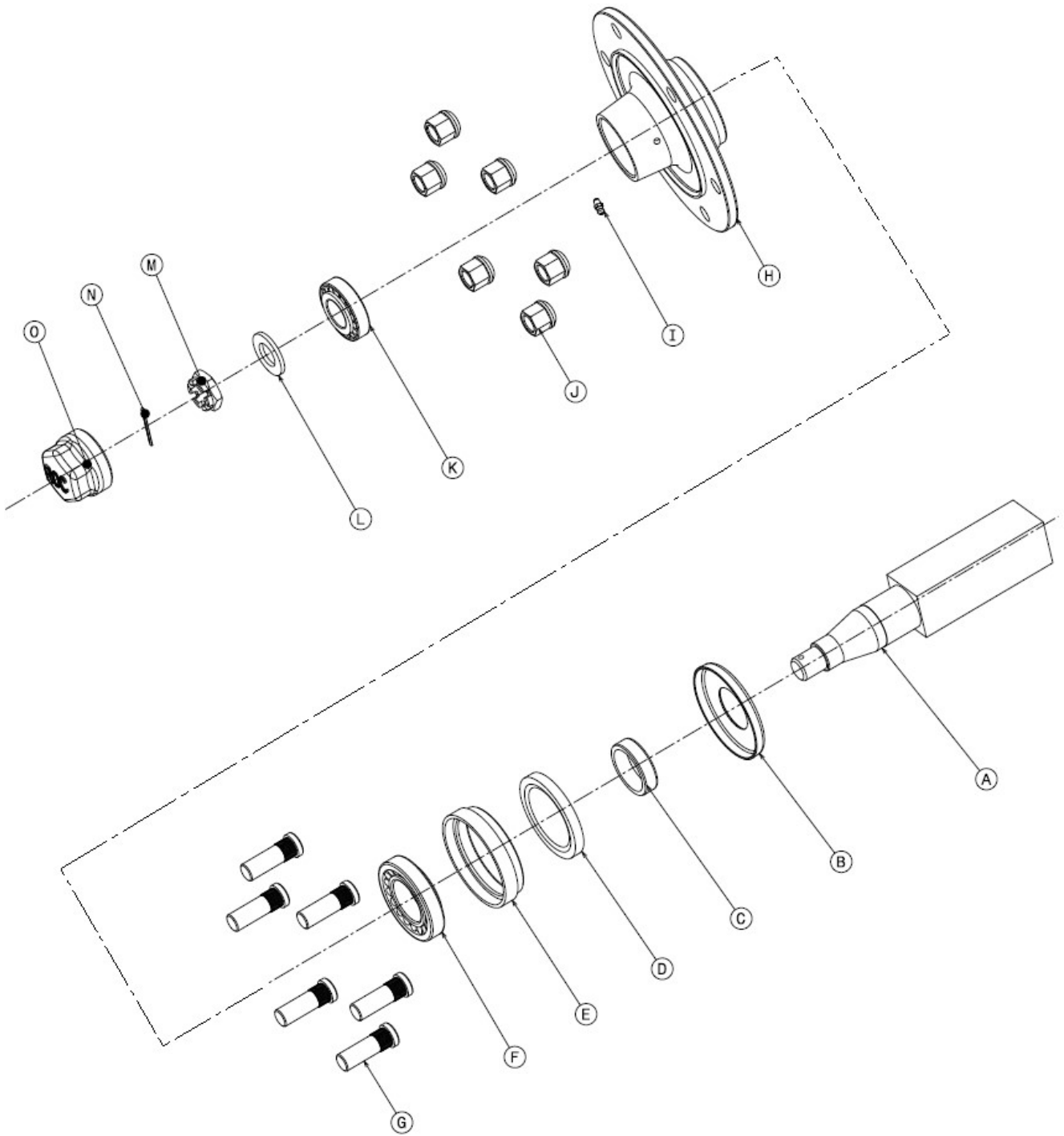
Trailed Cradle Assembly



Trailed Cradle Assembly

Item	Part Number	Description	Quantity
1	B12x	Bolt, nut & spring washer	2
2	HYM400-PT	Hydraulic motor – 400cc	1
3	127-0270	Motor mount with guard	1
4	127-2502	Motor drive coupling – 25mm	1
5	127-0265	Cast drive sprocket	4
6,9	615-2005	Cast bearing 35mm, Multi fit	4
7	127-0216-1	G2x2 long shaft	1
8	127-0275 DMLG2x2	Shaft cover	2
10	B16x90	M16X90 bolt, nut & spring washer	4
11	127-1542	Lid	1
12	B14x35	Bolt, nut & spring washer	8
13	127-2521	G2x2 adjustable towing hitch	1
13	14403	Clevis Hitch (US Export Models)	1
14	TE-07.905	Towing eye swivel	1
15	RP4x24	Roll pin 4x24 51.610	2
16	301-1011	Jack shaft	1
17	301-1010	G2x2 Jack	1
18	B12x50	Bolt, nut & spring washer	4
19	127-1558	Stainless wear strip	1
20	127-0226	Stainless panel	1
21	RIVET-2711-0617	Rivet SS 3/16"	14
22	RIVET-MGL100-U8-12	Rivet SS 1/4"	5
23	127-0216	G2x2 short shaft	1
24	127-2550	50mm 6 stud hub with locator hole	2
25	WHLA11.5/80-12	11.5/80-12 Wheel assembly	2
26	Wheel nuts		12
27	B16x90	M16x90 bolt, nut & spring washer	4

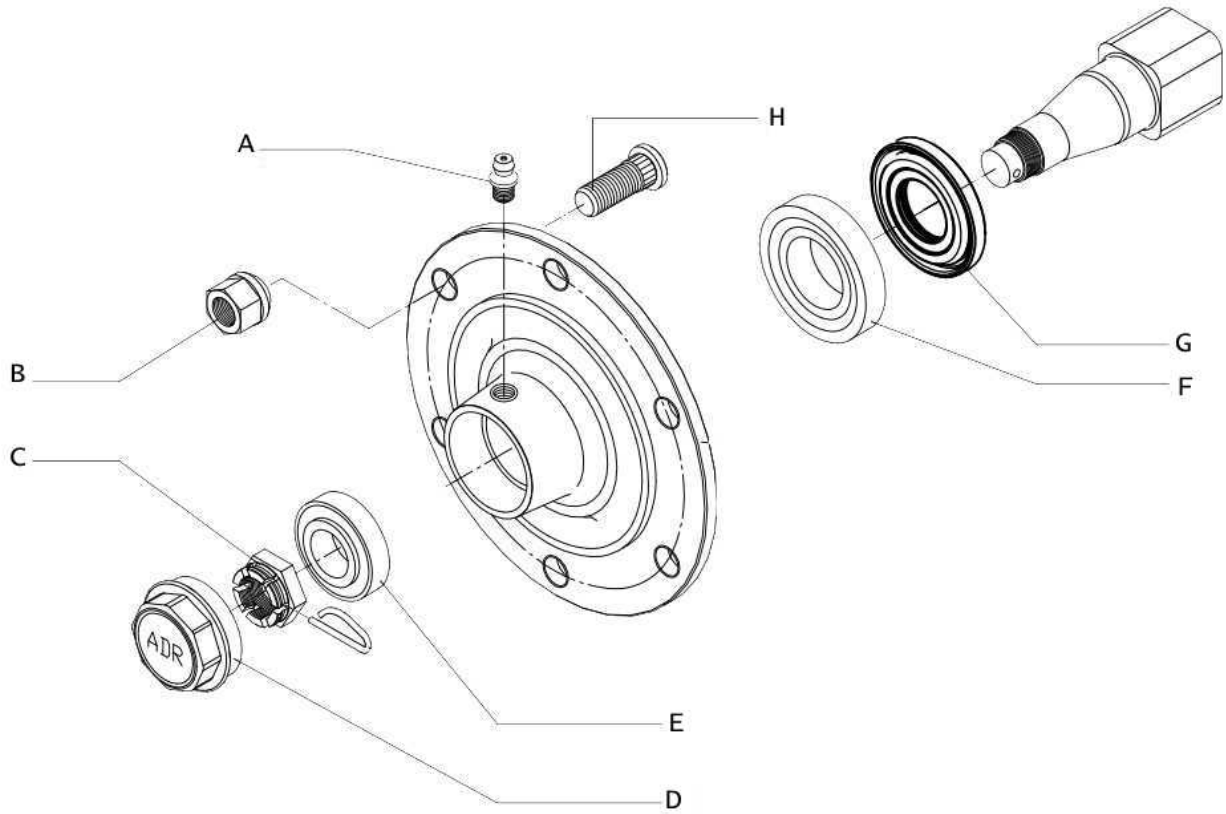
50mm 6 Stud Hub Monroc



50mm 6 Stud Hub Monroc

Item	Code	Description	Quantity
A	479555Q010-L	Body Stub Axle Square 50 01	1
B	3512004000	Washer – 45x96x2	1
C	416701Q00A	Ring seal contact 45x55x14.5	1
D	339101Q002	Seal AS NBR 55x88x10	1
E	416700Q00A	Ring seal support 93x88	1
F	30209	Bearing 30209	1
G	3351008000	Stud M18x50	6
H	412905Q000	Hub 506A ROV	1
I	3371001000	Grease nipple – M6 (optional)	1
J	3314007000	Wheel nut M18 x 50	6
K	30206	Bearing 30206	1
L	3513002000	Washer – 25x45x4	1
M	3302003000	Nut – HK – M24x2	1
N	3362004000	Pin – 4X40	1
O	3241003000	Cup – M63x150	1

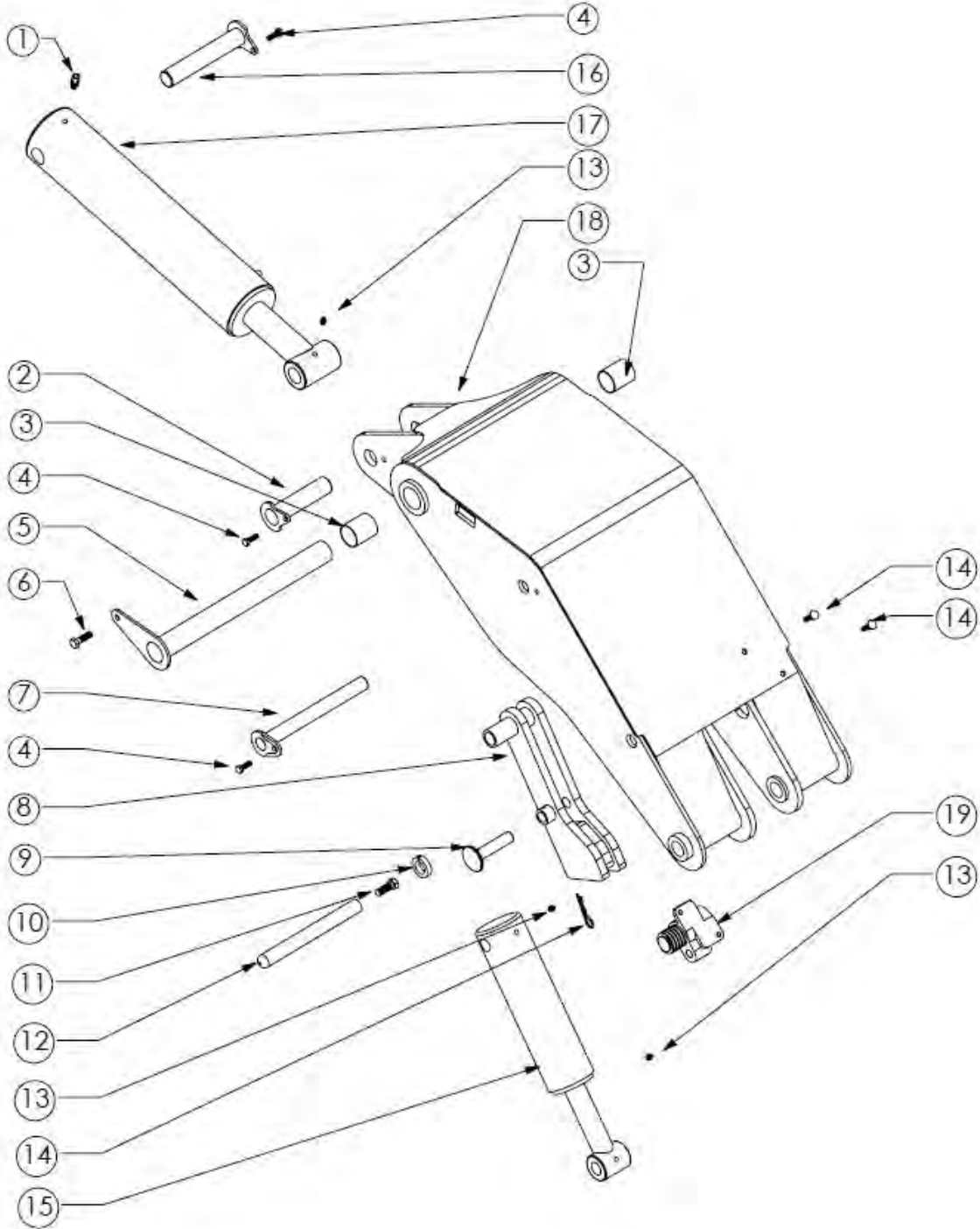
50mm 6 Stud Hub ADR



50mm 6 Stud Hub ADR

Item	Part Number	Description	Quantity
A	GRN8-45x1.25	M8 grease nipple	1
B	110-0917	M18 Wheel nut	6
C	110-1018	Crown nut M27x1.5 + spring pin	1
D	110-0843	Hub cap 62mm	1
E	BRG30206J2	Bearing 30206 ext dia 62mm int dia 30mm	1
F	BRG30209J2	Bearing 30209 ext dia 85mm int dia 45mm	1
G	110-0192	Seal ext dia 85mm int dia 45mm	1
H	110-0945	Stud M18x1.5	6

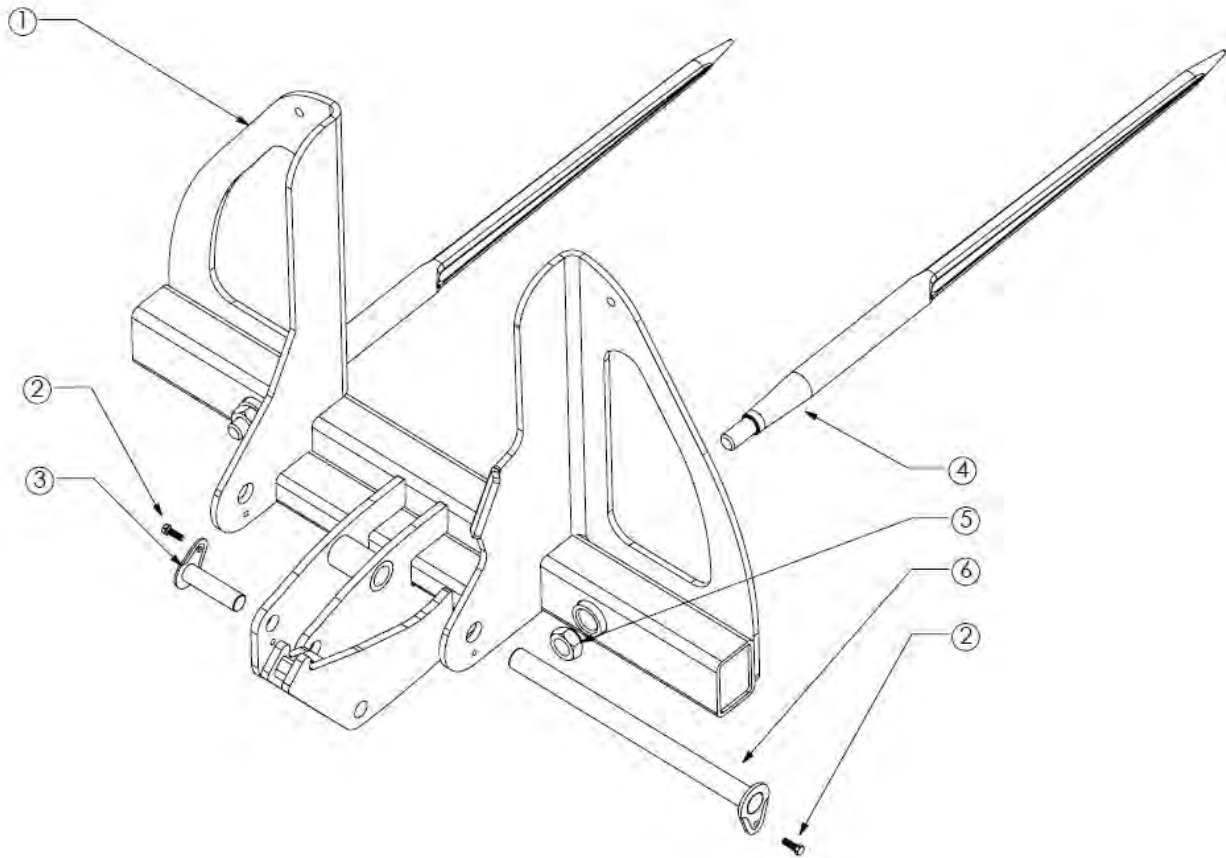
Boom Assembly



Boom Assembly

Item	Part Number	Description	Quantity
1	GDM-GLE6-1/8	Grease lube elbow 6mm-1/8"bsp	1
2	127-2506	Lift ram rod end pin	1
3	950-0036	Ezi glide bush	2
4	B8x25	Bolt, nut & washer	3
5	127-2505	Boom pivot pin	1
6	B10x30	Bolt, nut & washer	1
7	127-2507	Crowd ram base pin	1
8	127-2515	Lift boom stay	1
9	127-2517	Lift boom stay pin	1
10	135-4525	Shaft Clamp 25mm	1
11	B12x35	Bolt, nut & washer	1
12	127-2519	Lift boom push rod	1
13	GRN8-ST	Grease nipple 8x1 STRT	2
14	FP 10.106	R Clip	1
15	RAMBFG2x2CRD	Crowd ram	1
16	127-2514	Lift ram base pin	1
17	RAMBFG2x2LIFT	Lift ram	1
18	127-1504	Lift boom	1
19	127-2635	Float valve	1

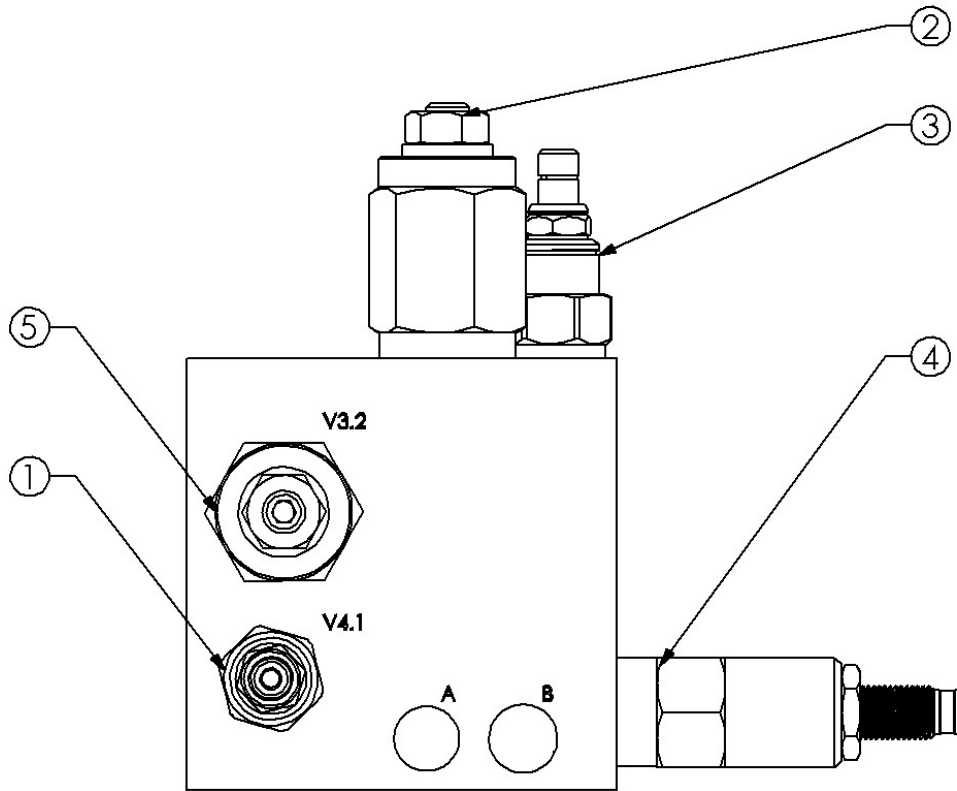
Fork Assembly



Item	Part Number	Description	Quantity
1	127-1507	Fork Assembly	1
2	B8x25	Bolt, nut & spring washer	2
3	127-2509	Crowd ram spear end pin	1
4	128-1155	Fork tine 810mm	2
5	M28x1.5NUT	M28x1.5 to fit on fork tine	2
6	127-2501	Fork pivot pin	1

Control Valve Assembly – SHL18284

(Fitted from serial number DOCK12193 onwards)



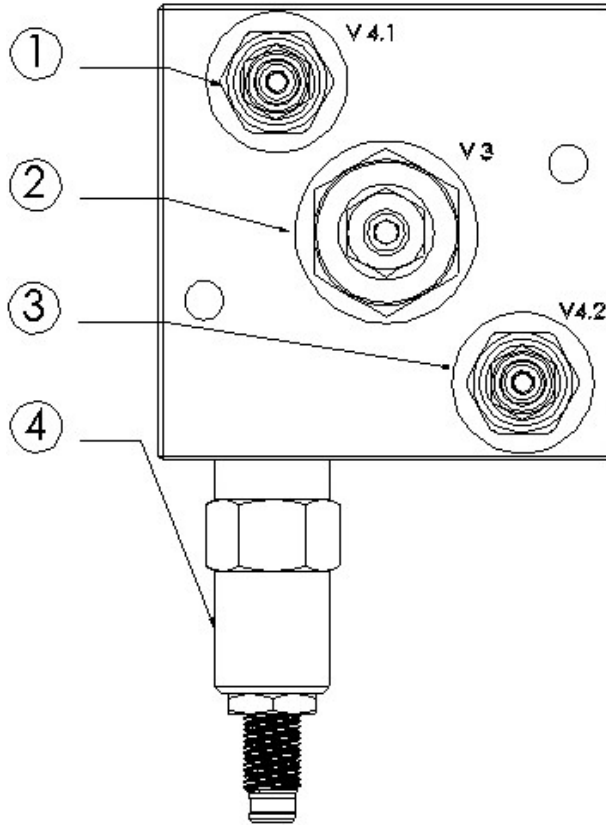
tem	Quantity	Part Number	Description	Setting
1	1	PSVP-10-N-S-0-30	Sequence Valve V4.1	1800psi (Screw CCW out fully then in CW 4 & ¼ turns.)
2	1	1CE90F20S4	Counterbalance Valve Valve V3.1	2600psi (Screw CW in fully then out CCW 6 & ¾ turns.)
3	1	PSVP-10-N-S-0-30	Sequence Valve Valve V4.2	1200psi (Screw CCW out fully then in CW 3 & 1/3 turns.)
4	1	RV3A-10-S-0-36	Relief Valve Valve V1	1600psi (Screw CCW out fully then in CW 3 & ¾ turns.)
5	1	1CE90F20S4	Counterbalance Valve Valve V3.2	2600psi (Screw CW in fully then out CCW 6 & ¾ turns.)

Note: ‘Number of turn’ settings are approximate and will need test bench setting for accurate results.

CW = Clockwise

CCW = Counter clockwise

Control Valve Assembly – SHL16371



Item	Quantity	Part Number	Description	Setting
1	1	PSVP-10-N-S-0-30	Sequence Valve V4.1	1800psi (Screw CCW out fully then in CW 4 & ¼ turns.)
2	1	1CE90F20S4	Counterbalance Valve V3	2600psi (Screw CW in fully then out CCW 6 & ¾ turns.)
3	1	PSVP-10-N-S-0-30	Sequence Valve V4.2	1200psi (Screw CCW out fully then in CW 3 & 1/3 turns.)
4	1	RV3A-10-S-0-36	Relief Valve V1	1600psi (Screw CCW out fully then in CW 3 & ¾ turns.)

Note: ‘Number of turn’ settings are approximate and will need test bench setting for accurate results.

CW = Clockwise

CCW = Counter clockwise

Notes:
