



User`s manual

ORIGINAL INSTRUCTIONS

Please Read This Document Before Operating The Machinery

Wheatway Solutions Ltd would like to take this opportunity to thank you for choosing a Gyru-Star product, which is built to high quality standard and designed for durability. we are confident the product will give you an excellent service.

Please see and sign back page for you warranty cover

This manual covers;

- Installation
- Maintenance
- Adjustment
- Operation
- Troubleshooting
- Specifications

Gyru-Star compact screening system

Models covered

**2-50E, 3-60E, 3-80E, 3-100HE, 3-100L, 3-100SL, 3-120HE, 3-120MAX,
3-120A, 3-120L, 3-120SL, 3-150HDX, 3-150MAX, 3-150L, 3-150SL,
4-100HE, 4-120HE, 4-120MAX, 4-150HDX, 4-150MAX, 6-150HDX,
6-150MAX**

Manufactured By
Wheatway Solutions Ltd

B3 Brearley, Baird Road
Waterwells Business Park
Gloucester, GL2 2AF
England



Changes

Version No	Date changed	Description of change	Owner
2	03/2020	New bucket drill patterns, addition of new models information, new bucket hydraulic flow diagrams, addition of optional accessories and warranty agreement terms.	WSL



Table of contents

Introduction	Introduction.....Page 1
	Intended purpose.....Page 1
Product Description	scopePage 2
CE certification	CE plate.....Page 3
	CE certificate.....Page 4
Technical data	Bucket Carrier`s.....Page 5
	Capacities and dimensions.....Page 7
	Hydraulic requirements.....Page 15
Warnings	WarningsPage 18
Safety instructions	Operating requirements.....Page 19
	Environmental concernsPage 23
Safety Decals	Safety decal location.....Page 24
	Explanation of warning signs.....Page 28
Advisory Decals	Advisory decal location.....Page 29
	Advisory decal explanation.....Page 30
Lifting and handling	General operation.....Page 31
	Shipping.....Page 35
Installation instructions	Skid steer interface.....Page 37
	Kustom Konnect interfaces.....Page 39
	Quick couplers.....Page 40
	Oil flowPage 40
	Option hydraulic flow control valvesPage 40
	Hydraulic connections.....Page 41



Table of contents

Operation instructions

General	Page 42
Rotation angle.....	Page 43
Material handling.....	Page 44

Maintenance

Daily maintenance.....	Page 47
Periodic/ monthly maintenance.....	Page 47
Long term storage	Page 47
Hydraulic system.....	Page 48
Hydraulic oil.....	Page 48
Welding.....	Page 49
Flexi-star replacement.....	Page 48

Trouble shooting

Rotors do not rotate 10.1.....	Page 54
Rotors do not rotate 10.2.....	Page 55
Rotors do not rotate 10.3.....	Page 56

Hydraulic circuits

2 and 3 rotor Bucket hydraulic circuit.....	Page 57
4 rotor Bucket hydraulic circuit.....	Page 57
6 rotor Bucket hydraulic circuit	Page 58
Optional over run valve.....	Page 59
Optional flow regulator.....	Page 59

Drill patterns

2-50 bucket drill pattern.....	Page 60
3-60E, 3-80E rotor drill pattern.....	Page 60
3-100, 3-120, 3-150, 4-100... drill pattern.....	Page 61
6 rotor drill pattern.....	Page 62

Warranty

Over view.....	Page 65
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Warranty registration Please SIGN THIS
CE certificate



Introduction

These operation instructions for the Gyru-Star compact screening system are designed to help the user become familiar with the technical details, operating procedure, safety precautions and maintenance to ensure the Gyru-Star compact screening system is used safely, correctly and for its intended purpose.

Operating instructions are intended for operators and maintenance personnel.

Operating instructions should be available at the location of the Gyru-Star compact screening system at all times.

This document is based on current information at the time of printing.

Each person working on/with the Gyru-Star compact screening system must;

- Have read and understood these operating instructions before starting work on the Gyru-Star compact screening system.
- Must observe and apply the instructions and safety warnings to the work site.

The Gyru-Star compact screening system may only be operated under the conditions described in this manual. Under no circumstances may the specified limit values be exceeded. Your safety and the safety of others is dependant on your how you operate your Gyru-Star compact screening system.

Intended Purpose

The Gyru-Star compact screening system is to be used for the screening, aerating, separating and mixing of soils, aggregates and compost.

The Gyru-Star compact screening system is to be used exclusively for the purpose intended, e.g. Not to be used as a primary digging bucket. The operator of the Gyru-Star compact screening system is responsible for damage resulting from the Gyru-Star compact screening system not being used for the purpose intended. This also includes following the manufacturer's instructions for the operation and maintenance of the Gyru-Star compact screening system.



Scope

The Gyru-Star compact screening system is a bucket type attachment fitted either to a hydraulic excavator or a wheeled loader replacing the standard digging bucket.

The bucket shell is a steel structure with welded joints, integrated driveline cavities, triple skin floor and wear resistant cutting edge. The shell has been tested up to 1.5x maximum permissible load.

The horizontal shafts fitted with Polyurethane flexi-stars that rotate in the same upwards direction. The rotors are supported at each end by a sealed bearing unit and is driven by a hydraulic motor via a carbon chain belt and drive pulley system.

The hydraulic motor, driveline and bearings are all housed within the main structure of the bucket with access via a bolted panel. The hydraulic power is produced by the excavator or wheeled loader's hydraulic pump and control system via its auxiliary/option circuit, and is transferred through by flexible hoses to the Gyru-Star compact screening system's hydraulic motors.

The Non-Hazardous material to be screened is loaded into the Gyru-Star compact screening system in the same manner as a standard excavator or wheeled loader bucket. Once the bucket has been loaded with material to be screened and positioned, the excavator or wheeled loaders auxiliary hydraulic circuit is activated causing the star rotors to turn in an upwards direction.

The efficient screening process is created by the star rotors agitating the material, causing the fines to flow through the rotating stars leaving the oversize material in the bucket.


Once the screening process is completed the oversize material is tipped out and the process is repeated.



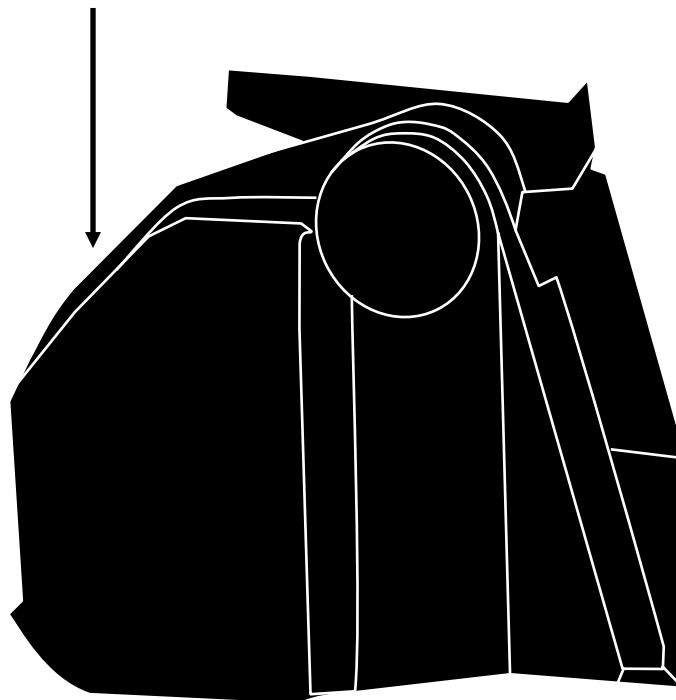
CE Certification

The CE certification indicates that the Gyru-Star compact screening system fulfils the relevant machinery directives and recognised safety regulations.

<i>Gyru-Star Screening Bucket</i>		
<input type="text"/>	<input type="text"/>	<input type="text"/>
Model	Serial Number	Weight
<input type="text"/>	<input type="text"/>	<input type="text"/>
Year of Mfg	Max Pressure	Max Flow
Wheatway Solutions Ltd		
B3 Brealey Place, Baird road, Gloucester GL2 2AF		



The CE plate is located on the top right hand side of the bucket when looking at the bucket with the flexi-stars closest to you.



This certificate is supplied with this manual and warranty documents.
This holds information which is also listed on the CE Plate.



EC DECLARATION OF CONFORMAITY



Name and Address of the Manufacturer

Wheatway Solutions Ltd
Unit B2-B3 Brearley Place, Waterwells Business Park
Gloucester GL2 2AF
Not applicable

**Name and Address of the Manufacturer of the
Authorised Representative in European Community**

**Name and Address of person authorised
to complete the technical file**

As above

Description of Equipment

Gyru-star aggregate and soil screening bucket attachment for 1,000kg-30,000kg
excavators, telehandlers and wheeled loaders

Models Covered by declaration of conformity

2-50E, 3-60E, 3-80E, 3-100HE, 3-100L, 3-100SL, 3-120HE, 3-120MAX, 3-120A, 3-120L, 3-120SL, 3-150HDX,
3-150L, 3-150SL, 3-150MAX, 4-100HE, 4-120HE, 4-120MAX, 4-150HDX, 4-150MAX, 6-150HDX, 6-150MAX

Model / Type / Serial Number

Model **Serial Number**

Directives / Conformity Assessment Procedure

Machinery Safety Directive (2006/42/EC) / Annex VIII / Module A

Technical standards and specifications

BS EN 474-1 : 2006 + A1 2009 - Earth moving machinery - safety-Part 1 General Requirements
BS EN 474-1 : 2006 + A3 2009 - Earth moving machinery - safety-Part 3 Requirements for Loaders

Declaration

**the person signing below declares that the above named equipment fulfils all relevant
provisions of the stated directives**

Authorised Signature

Name Mr C Smith **Position** Managing Director **Signature**

Place of Declaration

Wheatway Solutions Ltd Gloucester UK

Date

06/03/2020



Technical Data

The operator is responsible for ensuring the Gyru-Star compact screening system is suitable for the intended carrier. The Gyru-Star compact screening system should never exceed the carrier's safe working capacity limit when fully loaded.

E	Carriers	
	Excavator (Kg)	Loader (Kg)
2-50E	1,000 - 2,000	-
3-60E	2,000 - 4,000	-
3-80E	3,000 - 5,000	-

HE	Carriers	
	Excavator (Kg)	Loader (Kg)
3-100HE	4,000 - 6,000	1,000 - 2,000
3-120HE, A	5,000 - 7,000	1,000 - 3,000
4-100HE	8,000 - 10,000	4,000 - 6,000
4-120HE	10,000 - 13,000	6,000 - 8,000

HDX	Carriers	
	Excavator (Kg)	Loader (Kg)
3-150HDX	7,000 - 10,000	2,000 - 5,000
4-150HDX	13,000 - 18,000	9,000 - 12,000
6-150HDX	16,000 - 20,000	-



L/ SL	Carriers	
	Excavator (Kg)	Loader (Kg)
3-100L/SL	4,000 - 6,000	1,000 - 2,000
3-120L/SL	5,000 - 7,000	1,000 - 3,000
3-150L/SL	7,000 - 10,000	2,000 - 5,000

MAX	Carriers	
	Excavator (Kg)	Loader (Kg)
3-120MAX	5,000 - 7,000	1,000 - 2,000
3-150MAX	7,000 - 10,000	2,000 - 5,000
4-120MAX	10,000 - 13,000	6,000 - 8,000
4-150MAX	13,000 - 18,000	9,000 - 12,000
6-150MAX	20,000 - 30,000	-



Capacity

E	Capacity (m³)
2-50E	0.06
3-60E	0.13
3-80E	0.19

HDX	Capacity (m³)
3-150HDX	0.35
4-150HDX	0.60
6-150HDX	1.20

HE	Capacity (m³)
3-100HE	0.23
3-120HE	0.26
4-100HE	0.35
4-120HE	0.40

MAX	Capacity (m³)
3-120MAX	0.46
3-150MAX	0.55
4-120MAX	0.55
4-150MAX	0.80
6-150MAX	1.60

L/ SL	Capacity (m³)
3-100L/ SL	0.23
3-120L/ SL	0.26
3-150L /SL	0.35



Weight

E	Weight (Kg)
2-50E	155
3-60E	240
3-80E	290

HDX	Weight (Kg)
3-150HDX	600
4-150HDX	860
6-150HDX	1,360

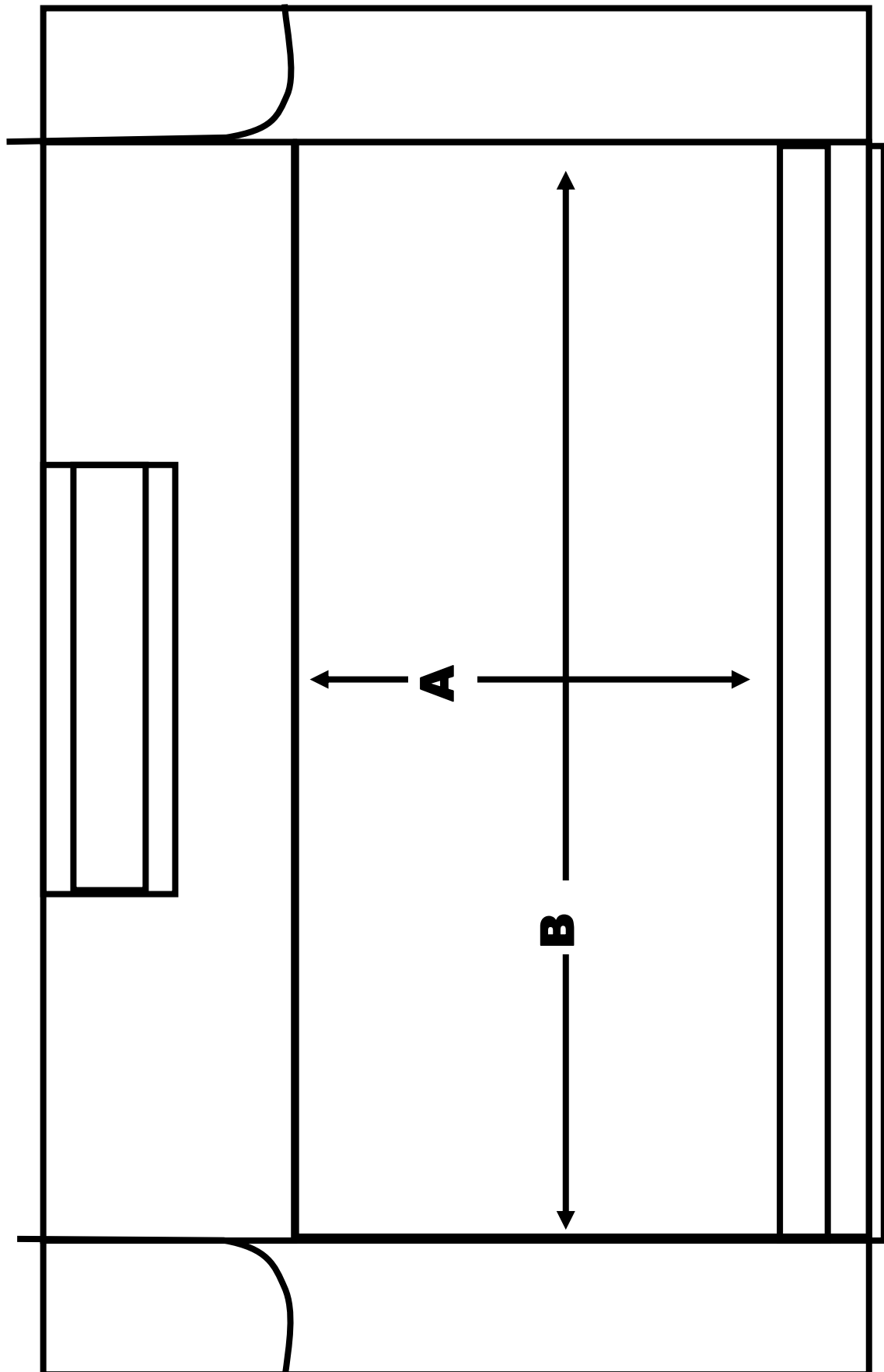
HE	Weight (Kg)
3-100HE	360
3-120HE	405
4-100HE	560
4-120HE	600

MAX	Weight (Kg)
3-120MAX	580
3-150MAX	640
4-120MAX	740
4-150MAX	980
6-150MAX	1,450

L/ SL	Weight (Kg)
3-100L/ SL	360
3-120L/ SL	390
3-150L/ SL	600



Screening area





E	Screening Area (mm)	
	A	B
2-50E	300	480
3-60E	430	560
3-80E	430	800

HDX	Screening Area (mm)	
	A	B
3-150HDX	430	1,500
4-150HDX	615	1,500
6-150HDX	1,030	1,500

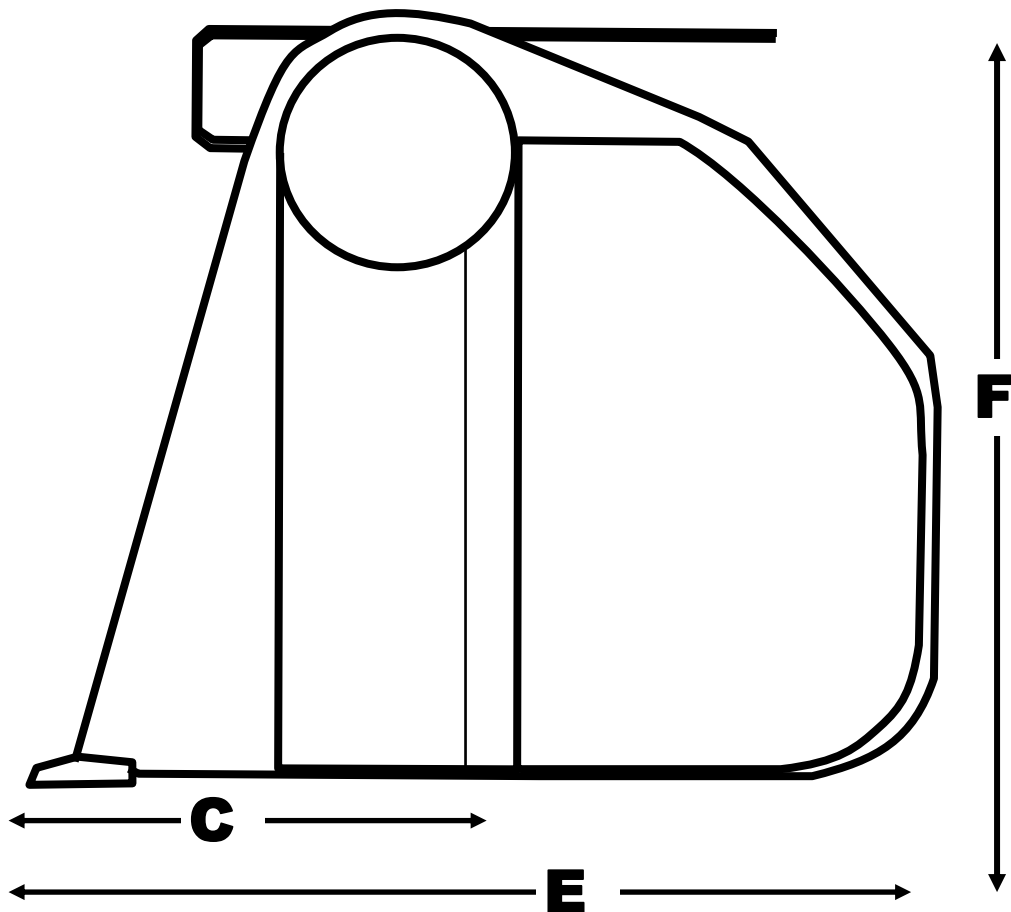
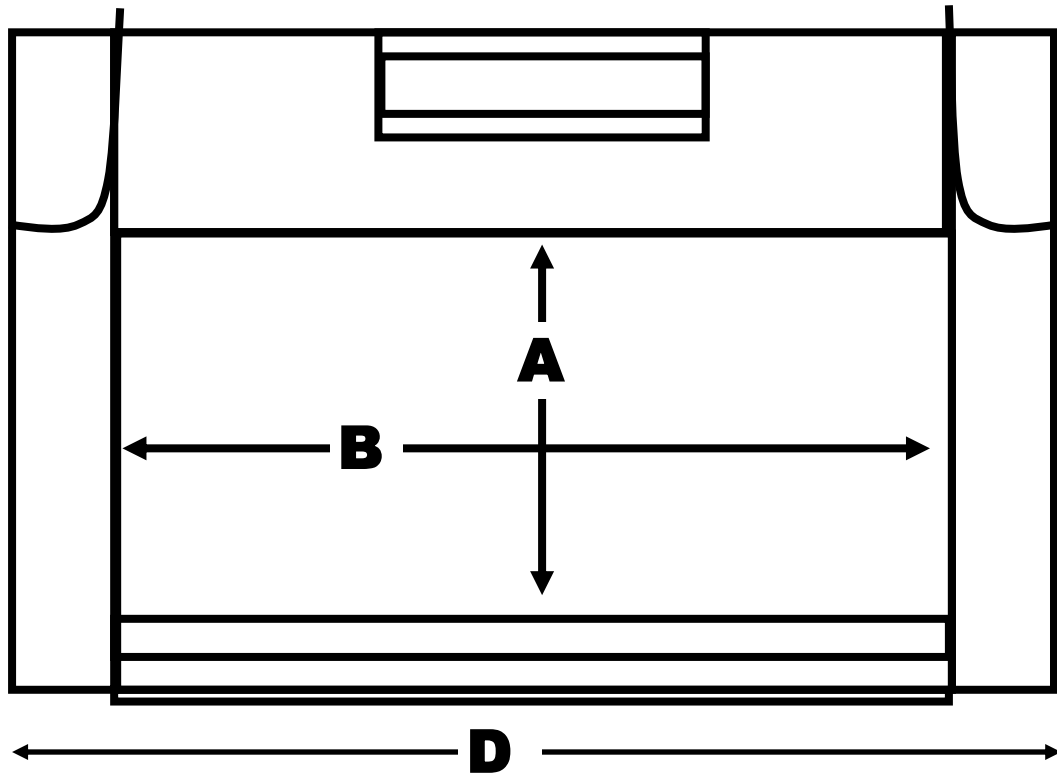
HE	Screening Area (mm)	
	A	B
3-100HE	430	1,000
3-120HE	430	1,200
4-100HE	615	1,000
4-120HE	615	1,200

MAX	Screening Area (mm)	
	A	B
3-120MAX	430	1,200
3-150MAX	430	1,500
4-120MAX	615	1,200
4-150MAX	615	1,500
6-150MAX	1,030	1,500

L/ SL	Screening Area (mm)	
	A	B
3-100L/ SL	430	1,000
3-120L/ SL	430	1,200
3-150L/ SL	430	1,500



Dimensions





Under no circumstances may the specified limit values be exceeded.

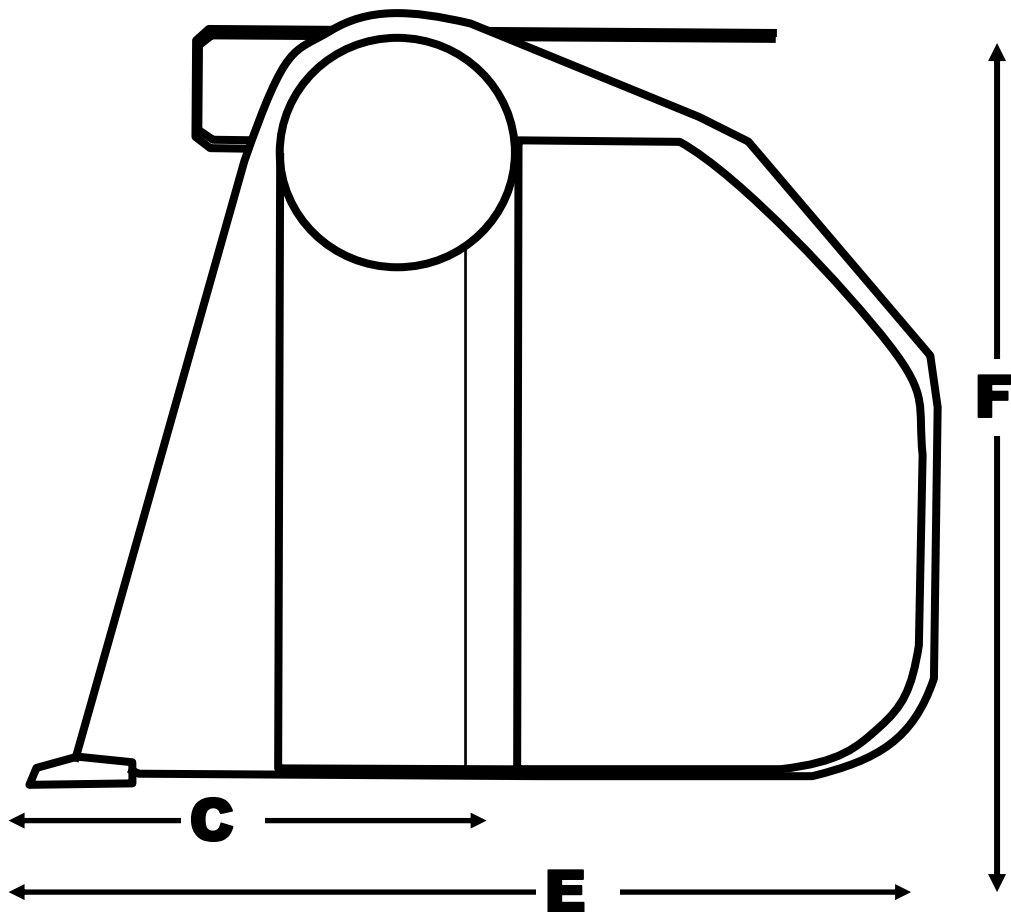
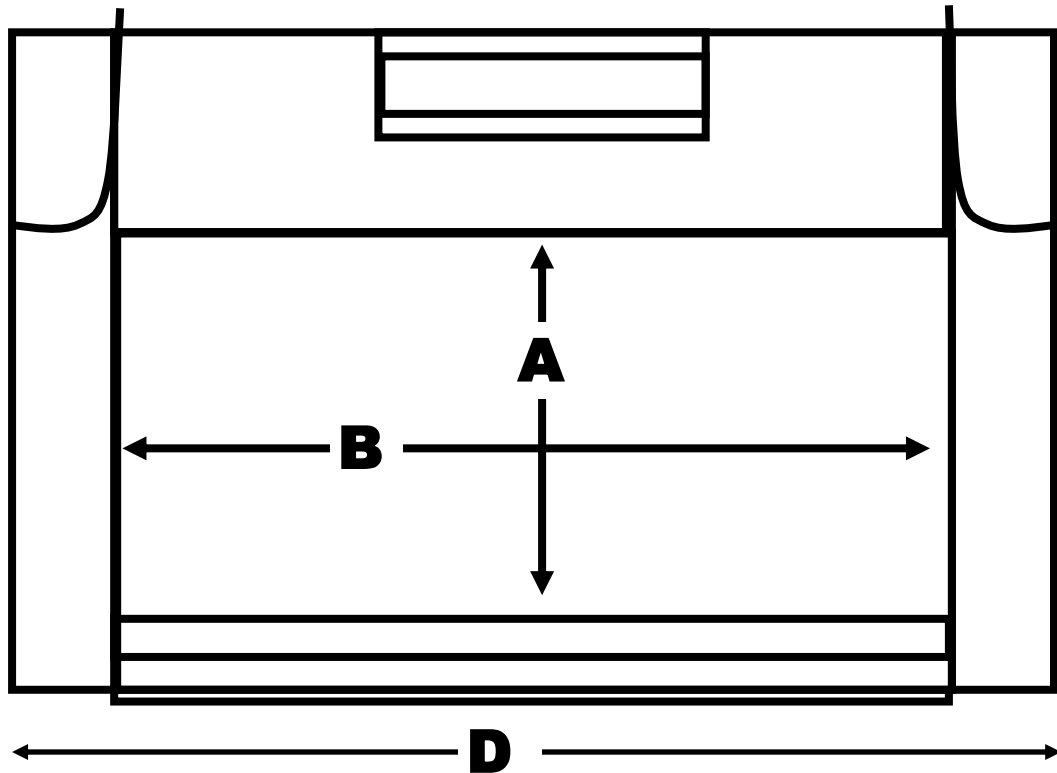
E	General Dimensions (mm)			
	C	D	E	F
2-50E	350	720	520	510
3-60E	500	810	760	640
3-80E	500	1,010	760	640

HE	General Dimensions (mm)			
	C	D	E	F
3-100HE	500	1,250	760	640
3-120HE, A	500	1,410	760	640
4-100HE	570	1,350	820	880
4-120HE	570	1,550	820	880

HDX	General Dimensions (mm)			
	C	D	E	F
3-150HDX	500	1,870	760	640
4-150HDX	570	1,870	820	880
6-150HDX	900	1,870	1,340	1,300



Dimensions





Under no circumstances may the specified limit values be exceeded.

L/ SL	General Dimensions (mm)			
	C	D	E	F
3-100L, SL	500	1,250	760	640
3-120L, SL	500	1,410	760	640
3-150L, SL	500	1,870	760	640

MAX	General Dimensions (mm)			
	C	D	E	F
3-120MAX	500	1,410	1,200	640
3-150MAX	500	1,870	1,400	640
4-120MAX	570	1,550	1,200	880
4-150MAX	570	1,870	1,400	880
6-150MAX	900	1,870	1,600	1,300



Hydraulic Requirements

Optional pressure compensated flow regulator will be required if the carriers auxiliary hydraulic circuit exceeds the maximum permissible flow.

Optional pressure relief valve will be required if the carriers auxiliary hydraulic circuit exceeds the maximum permissible pressure.

E	Hydraulic Requirement	
	Flow (L/m)	Pressure (Bar)
2-50E	40	200
3-60E	55	200
3-80E	55	200

HE	Hydraulic Requirement	
	Flow (L/m)	Pressure (Bar)
3-100HE	65	200
3-120HE	65	200
4-100HE	90	200
4-120HE	90	200



Hydraulic Requirements

HDX	Hydraulic Requirement	
	Flow (L/m)	Pressure (Bar)
3-150HDX	70	200
4-150HDX	90	200
6-150HDX	160	200

L	Hydraulic Requirement	
	Flow (L/m)	Pressure (Bar)
3-100L	65	200
3-120L	65	200
3-150L	70	200

SL	Hydraulic Requirement	
	Flow (L/m)	Pressure (Bar)
3-100SL	65	200
3-120SL	65	200
3-150SL	70	200



Hydraulic Requirements

MAX	Hydraulic Requirement	
	Flow (L/m)	Pressure (Bar)
3-120MAX	65	200
3-150MAX	70	200
4-120MAX	90	200
4-150MAX	90	200
6-150MAX	160	200



WARNINGS

Throughout this manual these symbols & notes are used to indicate the following;



DANGER

Imminent danger that is likely to cause serious injury or loss of life.



WARNING

Safety situations that may cause serious injury or loss of life.



CAUTION

Safety situations that may cause problems or damage to the equipment.



NOTE

To draw attention to procedures or information which it is essential to observe for correct operation.



Safety Instructions



WARNING

General

- Wear suitable PPE (hard hat, safety glasses and high visibility clothing). Under no circumstances should any personnel work around the Gyru-Star compact screening system without suitable PPE.
- The Gyru-Star compact screening system should only be operated by trained and competent personnel.
- The operator must have read and understood the operating manual before working with the Gyru-Star compact screening system, or carrying out any maintenance work.
- Special attention must always be paid to the safe use and maintenance of the Gyru-Star compact screening system.
- Do not use, the Gyru-Star compact screening system for anything other than its intended purpose e.g. lifting, or use as a primary digging bucket.
- National laws and health and safety regulations applying to the country in which the Gyru-Star compact screening system is being operated must be adhered to.
- Learn and apply site rules relative to the work site.
- Establish communications with other personnel in case of incident, accident or fire.
- Do not allow unauthorised personnel onto the work site.



Safety Instructions



WARNING

Before operation

- Before use, the operator is responsible for ensuring the screening bucket is suitable for the intended carrier. The Gyru-Star compact screening system should never exceed the carrier's safe working capacity limit when fully loaded.
- The Gyru-Star compact screening system must be fitted correctly to the excavator or wheel loader before use. The operator is responsible for ensuring that all locking devices, mounting pins, and hydraulic connections are made and fitted correctly.
- A visual Inspection must be carried out before operating, by qualified personnel, to ensure the Gyru-Star compact screening system and hydraulic hoses are in a safe and working order.
- Guard's need to be fitted correctly and inspected before use. Any defects need to be reported and rectified, before operating the Screening Bucket.
- The Gyru-Star compact screening system is to only be used for the intended purpose of; screening, aerating, separating and mixing of soils, aggregates, woodchip and compost.
- The operator must wear appropriate PPE (hard hat and safety glasses) when used with a carrier without a full operators cabin.
- Clear the working area with a distance of 10m from obstacles and other potential hazards.



Safety Instructions



WARNING

During operation

- Always ensure a safe working area of 10 meters in case of flying material.
- Test run the Gyru-Star compact screening system with the unit empty.
- Under no circumstances should anybody stand, or walk underneath the suspended bucket.
- Under no circumstances should the Gyru-Star compact screening system swing over anybody or the cabs of other machinery.
- Do not leave the excavator or wheeled loader Unattended while the rotors are turning.
- Do not operate the Gyru-Star compact screening system when visibility is reduced by; fog, dust or smoke.
- Do not operate the Gyru-Star compact screening system when it is overloaded.
- If loading into a truck or trailer ensure you do not hit the side.
- Under no circumstances should the Gyru-Star compact screening system be used as a battering ram.
- Do not operate the Gyru-Star compact screening system at a speed which cannot be controlled.
- Only operate the Gyru-Star compact screening system while safely inside the carrier.



Safety Instructions



WARNING

After operation

- Lower the Gyru-Star compact screening system onto flat level ground; free from falling material and flooding.
- Allow hydraulic oil to cool down and any pressures to decay before disconnecting the hydraulic hoses. Ensure that correct PPE is worn when handling any hydraulic hoses.
- Clean and inspect the Gyru-Star compact screening system for abnormalities.

Maintenance

- Do not carry out any inspections, maintenance, adjustments, or cleaning until the excavator or wheeled loader has fully stopped and the auxiliary hydraulics has been isolated.
- Ensure the Gyru-star compact screening system is on a flat level surface before carrying out any maintenance, cleaning or adjustments.



Safety Instructions

Operators Requirements

- Operators must have reached the minimum legal age.
- Operators must be physically and mentally fit
- Operators must not be under the influence of drugs or alcohol.
- Operators must observe Instructions and safety warnings.
- Operating instructions must be read and understood before using the Gyru-Star compact screening system.

Environmental Concerns

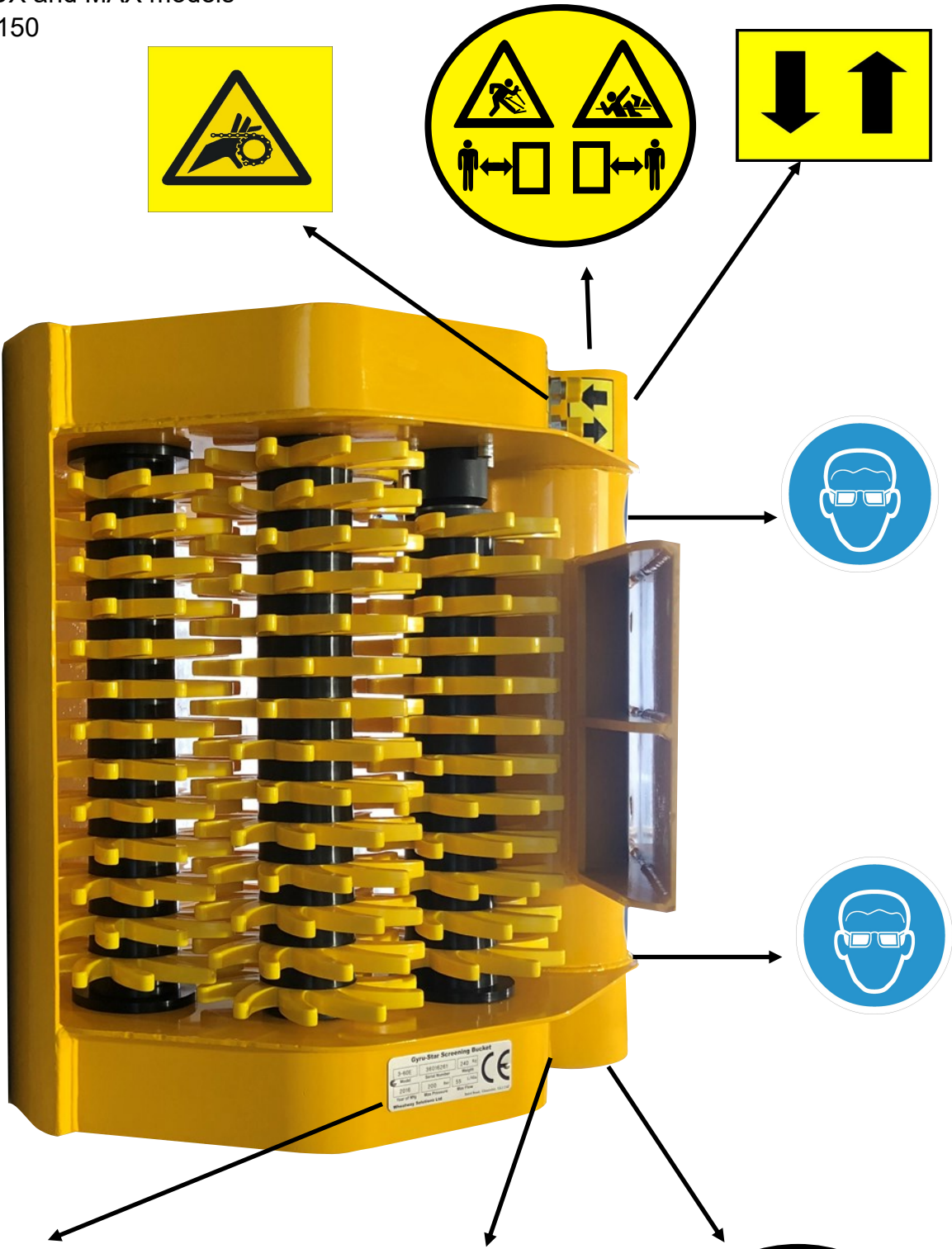
National Laws applying to hazardous materials in the country in which the Bucket is being operated must be observed and upheld.

Hydraulic oil is a hazardous material and must be disposed of properly according to the regulations of the local authorities.



Safety Decals

All E, HE, HDX and MAX models
Excluding 6-150



Gyru-Star Screening Bucket

<div></div>	<div></div>	<div></div>
Model	Serial Number	Weight
<div></div>	<div></div>	<div></div>
Year of Mfg	Max Pressure	Max Flow

Wheatway Solutions Ltd

B3 Brealey Place, Baird road, Gloucester GL2 2AF

CE

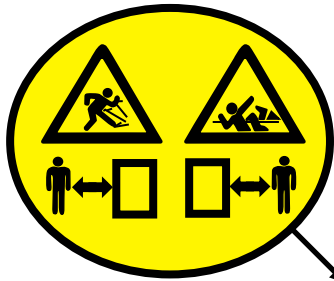
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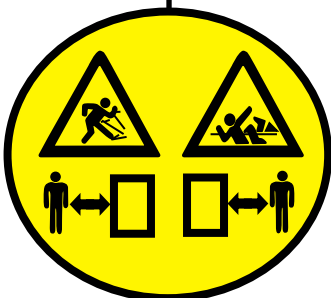
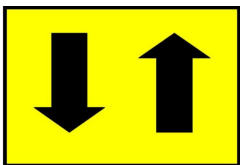
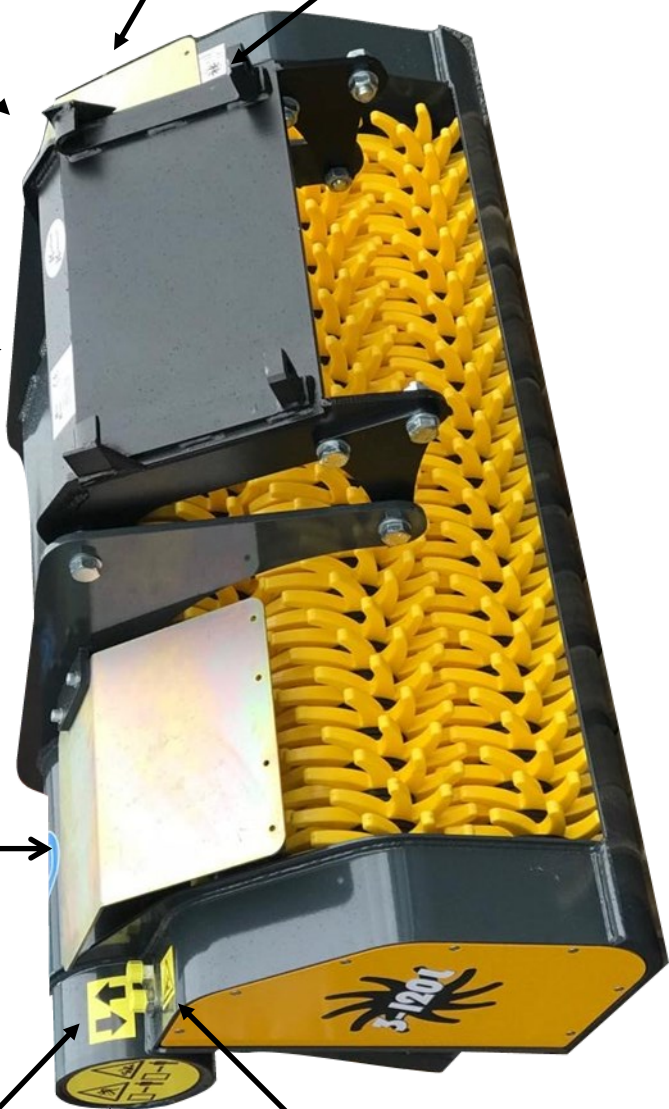
Safety Decals

All L models



Gyrus-Star Screening Bucket

<input type="text"/>	<input type="text"/>	<input type="text"/>	
Model	Serial Number	Weight	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Year of Mfg	Max Pressure	Max Flow	
Wheatway Solutions Ltd			B3 Brealey Place, Baird road, Gloucester GL2 2AF

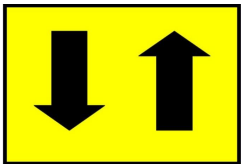




Safety Decals

All SL models

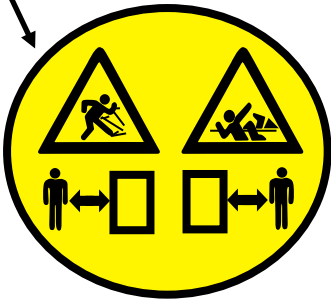
**Transport
only**



Gyru-Star Screening Bucket

<input type="text"/>	<input type="text"/>	<input type="text"/>
Model	Serial Number	Weight
<input type="text"/>	<input type="text"/>	<input type="text"/>
Year of Mfg	Max Pressure	Max Flow

Wheatway Solutions Ltd B3 Brealey Place, Baird road, Gloucester GL2 2AF





Safety Decals

All 6-150, models





Safety Decals



Wear eye protection



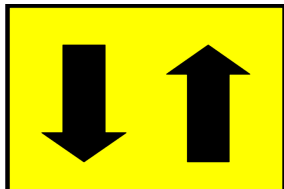
Thrown or flying objects stay at safe distance.



Warning!



Read operations manual



Oil flow direction



Turn off machinery and isolate auxiliary oil flow.



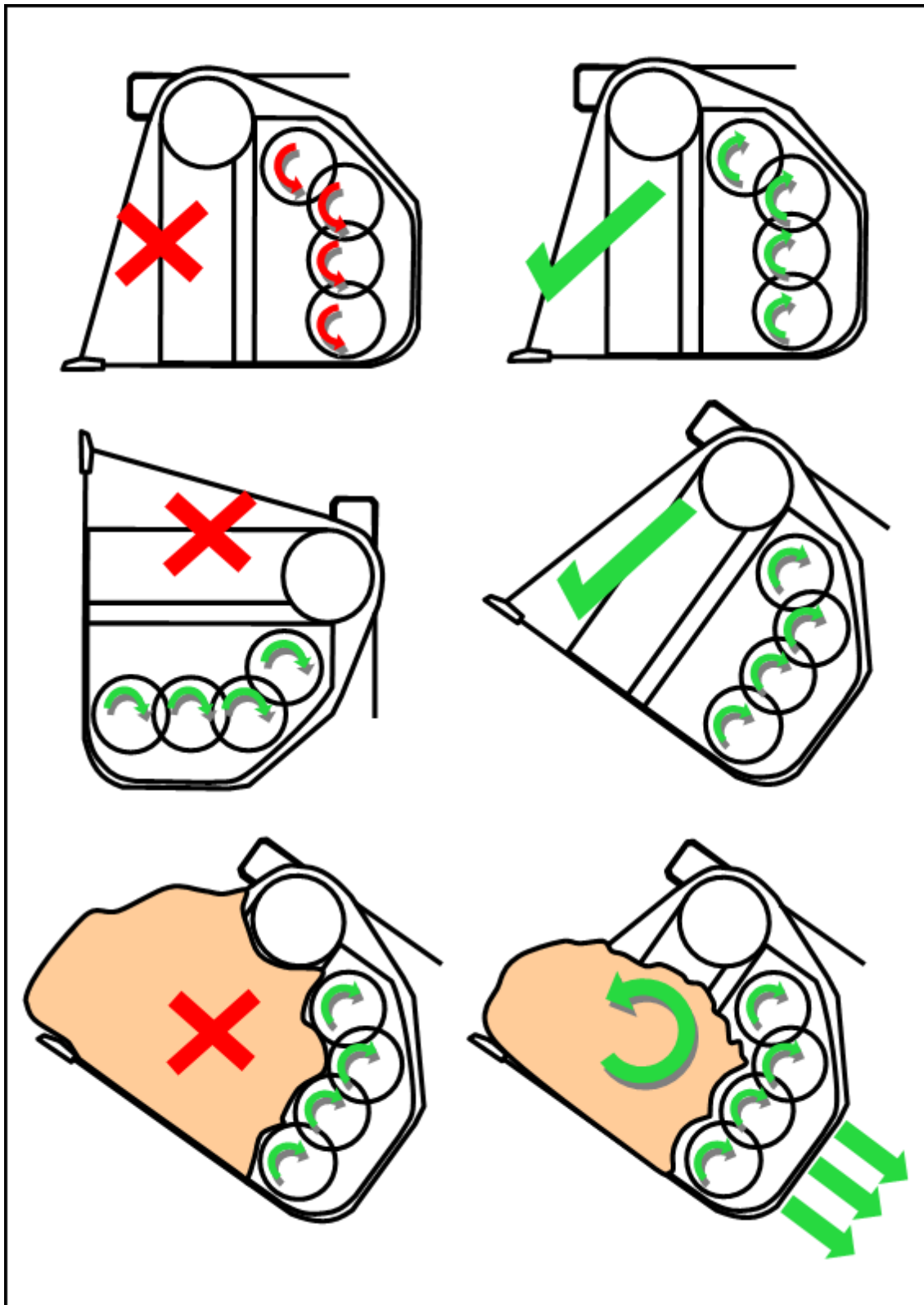
**Entanglement in machinery
Stay safe distance away from hazard.**



**Warning!
Entanglement in belt drive**



Advisory Decal location

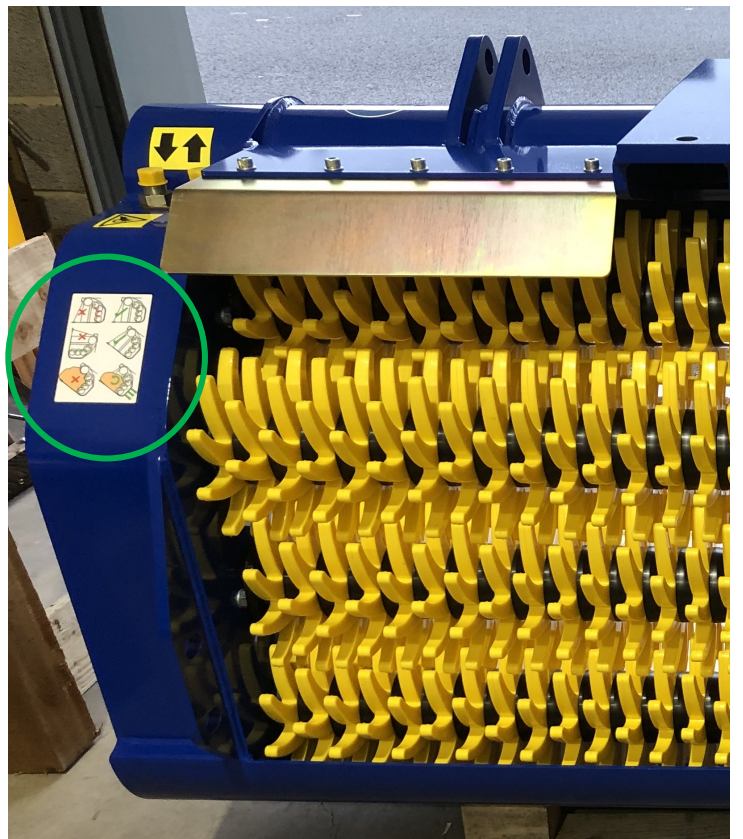


For description please see operating instructions



Advisory Decal location

On all models this decal is found on the left side of the bucket on the belt box when standing with the stars closest to you.





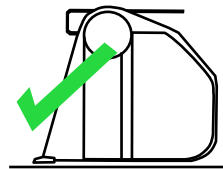
Lifting and Handling Instructions



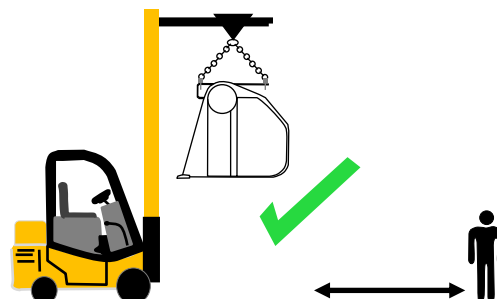
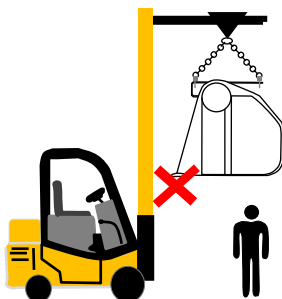
WARNING

General operation

- The Gyru-Star compact screening system should only be lifted or moved by its carrier interface bracket securely attached to the carrier.
- The Gyru-Star compact screening system must be sited on firm and level ground when it is detached from the carrier.



- Never stand or walk underneath a suspended load.



- National Laws and Transport regulations of the country in which the Gyru-Star compact screening system is being transported are observed and adhered to.



Lifting and Handling Instructions

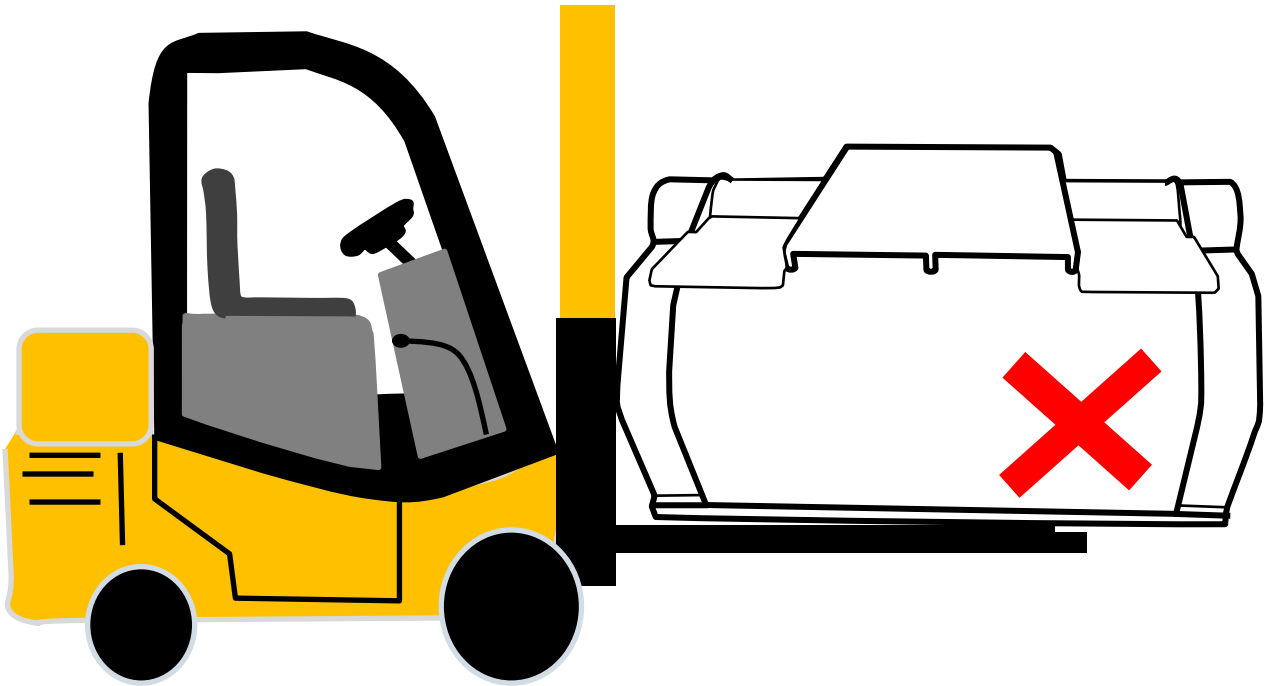


WARNING

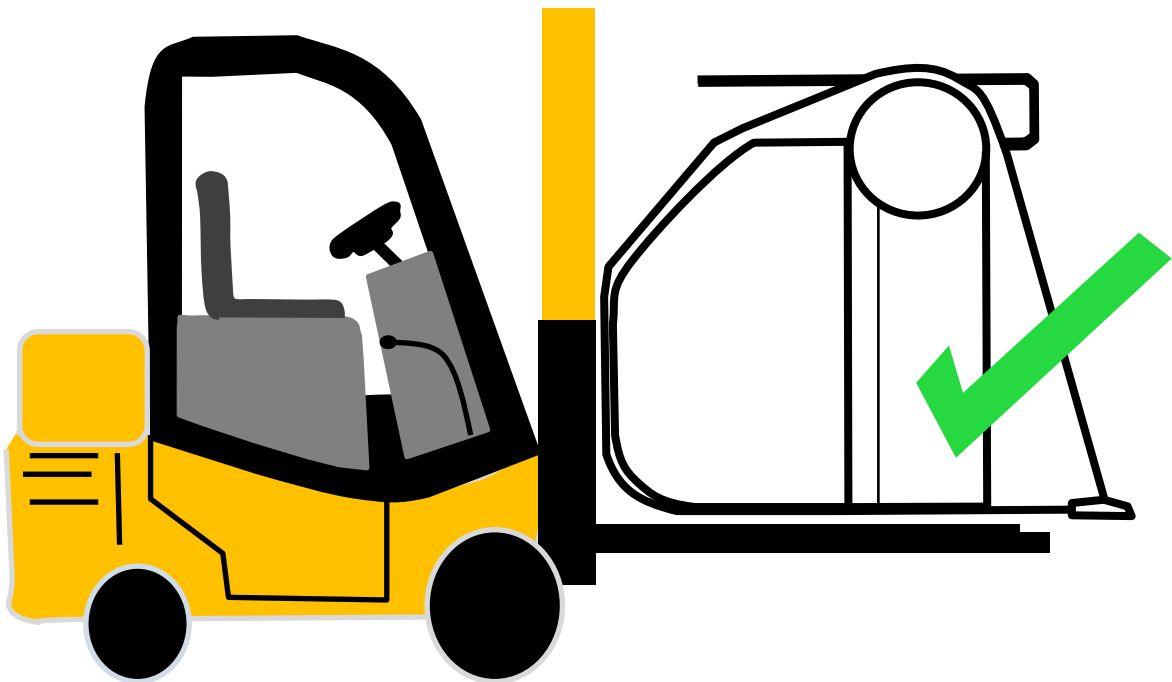
- Pallets and shipping crates must comply with the Laws and regulations of the country in which the Gyru-Star compact screening system is being transported e.g. the pallet must be made from treated wood.
- The combined weight of the Gyru-Star compact screening system and packaging must not exceed the maximum weight limit of the transport vehicle.
- The transport vehicle should never be driven in excess of its maximum permissible speed.
- Lifting accessories should be checked for defects or damage and be repaired or replaced before use.
- All Lifting accessories should be checked prior to lifting.



Lifting using a forklift



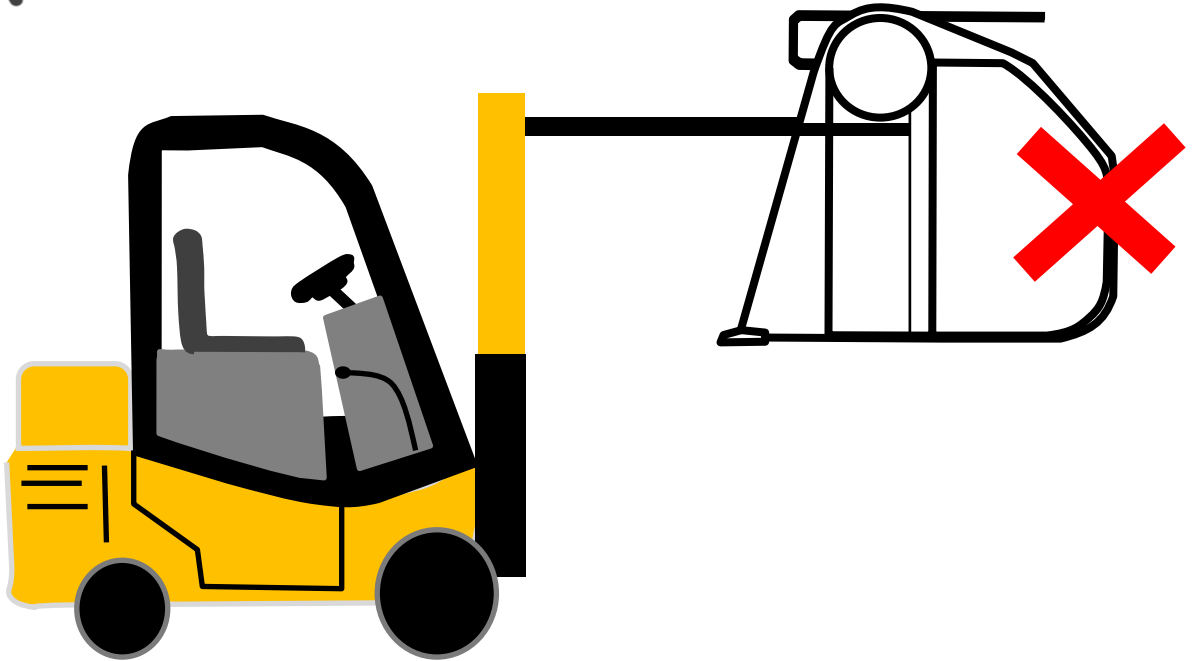
Under no circumstances should the Gyru-Star compact screening system be picked up from the sides.



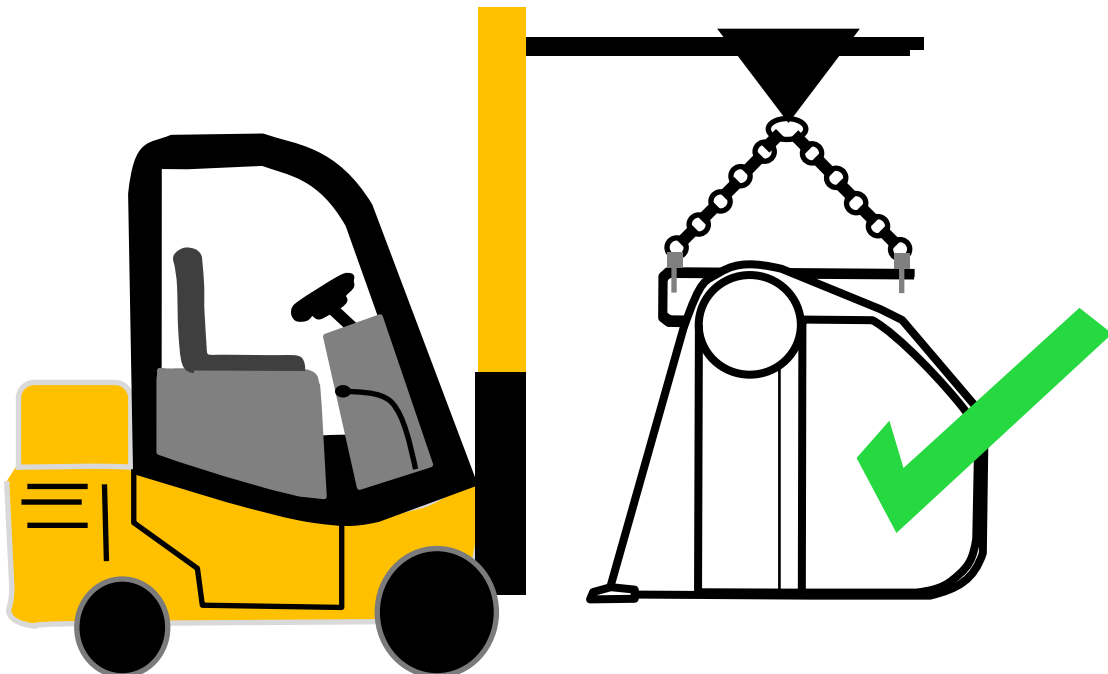
It is advised to keep the weight of the bucket on the back of the forks when being lifted.



Lifting using a forklift



Under no circumstances should the Gyru-Star compact screening system be lifted by tines reaching inside the bucket; e.g. the top tube.



When moving the Gyru-Star compact screening system, without a pallet, use a lifting appliance to fix into the interface plate.

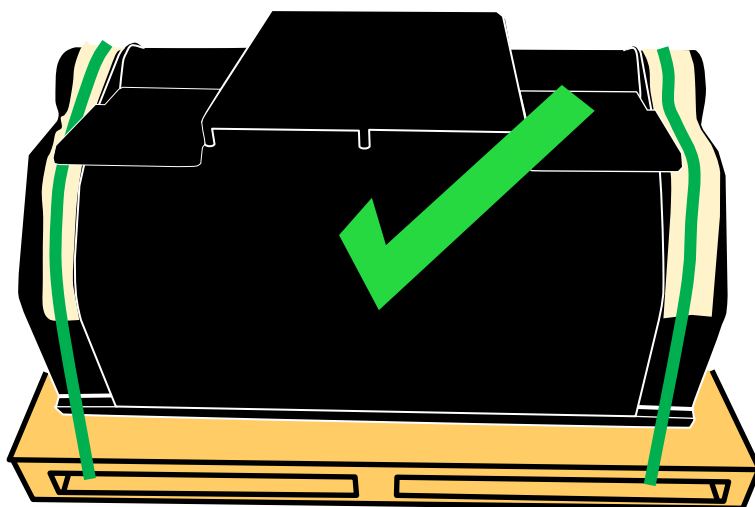
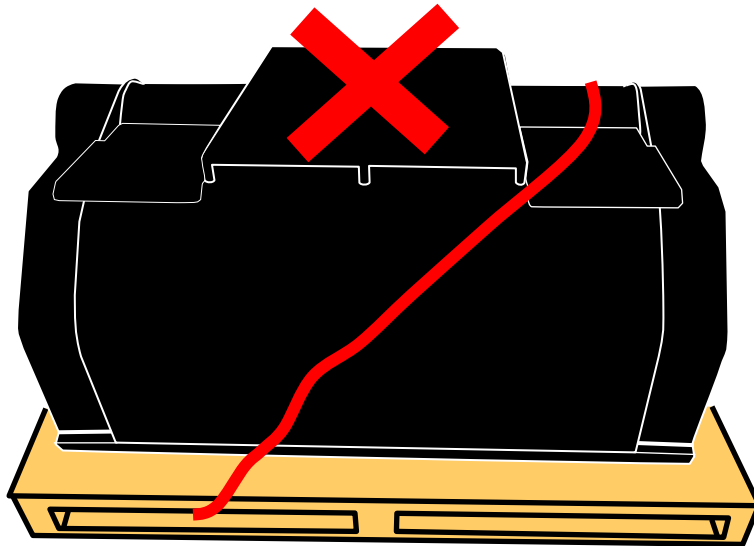


Shipping

The Gyru-Star compact screening system should be securely fastened to a standard shipping pallet with steel banding and a shrink wrap cover sheet over the bucket.

Lifting and moving should only be done with a suitable forklift with a lift capacity capable of handling the combined weight of the Bucket and packaging.

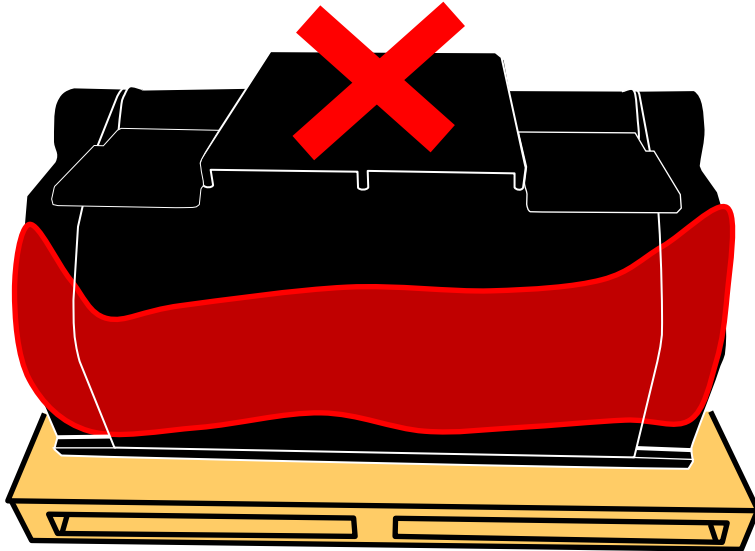
Banding



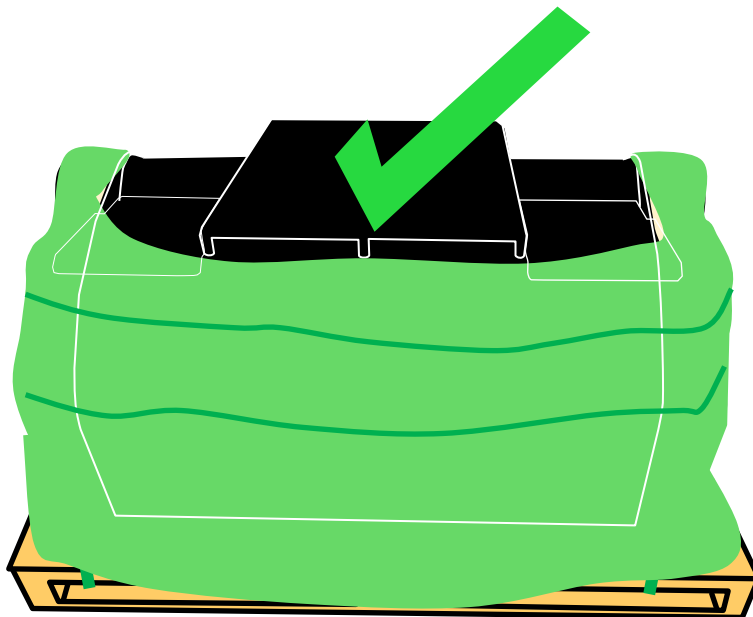
Banding should be tight around the bucket. It is advised to use cardboard underneath the steel strapping to prevent damaged to the shell.



Shrink wrap



The Shrink wrap should completely cover the outside of the bucket, leaving no gaps for fluids to enter.





Instillation Instructions



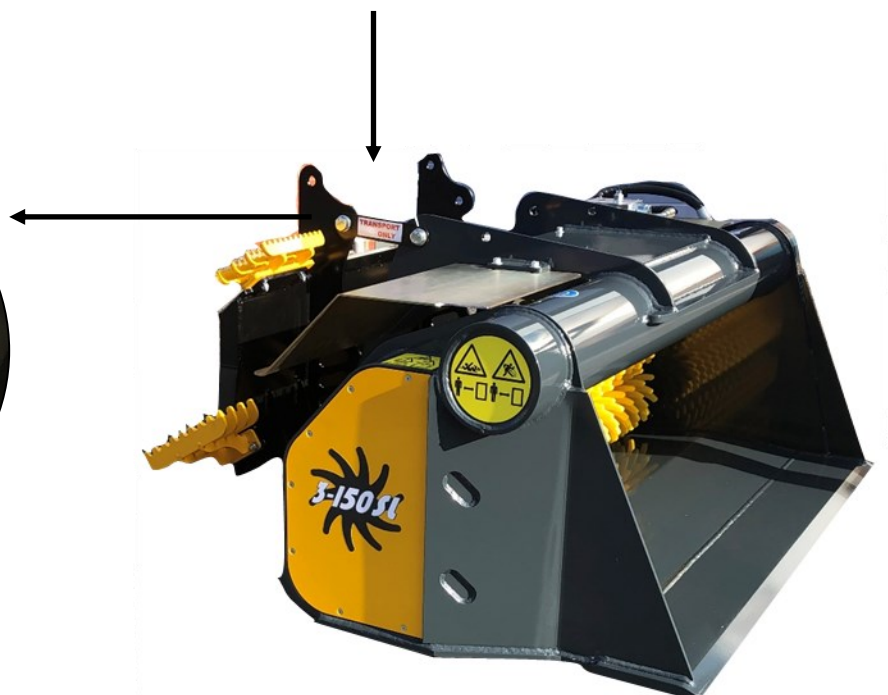
CAUTION

The Gyru-Star compact screening system is connected to the carrier by its dedicated carrier interface bracket.

Skid steer interface

All skid steer models will be transported with the following plate, this limits the space needed during transportation.

Do NOT attempt to attach your Gyru-star screening bucket with the transport plate on.





Instillation Instructions

Before attaching the Gyru-Star compact screening system to your skid steer;

- Remove this plate.
- Tilt the interface forward to meet the top hole.
- Secure with the bolts removed from the plate.





Instillation Instructions



CAUTION

The Gyru-Star compact screening system is connected to the carrier by its dedicated carrier interface bracket.

Kustom Konnect Interfaces



Each interface is fitted with the following:

Kustom Konnect

CE

Part No

Serial No YOM

Product Code

Wheatway Solutions Ltd B3 Brearley Place, Baird Rd Gloucester GL2 2AF

This CE certification indicates that the Kustom Konnect interface fulfils the relevant machinery directives and recognised safety regulations.

**Tighten interface bolts
after 8 hours use and
periodically thereafter**



This safety decal indicates when adjustments and maintenance checks should be carried out on your interface.

Carry out regular inspections of your buckets dedicated carrier interface bracket, report and replace any defect found.

Ensure all bolts and fixings are secure before operating machinery.



Instillation Instructions



CAUTION

The Gyru-Star compact screening system is connected to the carrier by its dedicated carrier interface bracket.

Quick Couplers

Carry out a visual inspection to ensure all semi-automatic and automatic locking systems have locked the carrier/bucket interface bracket correctly (see carrier operator's manual for correct operating and locking instructions).

Once the Gyru-Star compact screening system is connected to the carrier by its dedicated carrier interface bracket, lower the Bucket on to a suitable flat level site.

Stop the carrier and ensure all hydraulic pressure in the auxiliary circuit is released (see carrier operator's manual for instructions) before making the hydraulic connections.

Oil Flow

Connect oil supply and return hoses to the Gyru-Star compact screening system as the decal indicates.

Optional hydraulic Control Valves

The Gyru-Star compact screening system is designed to operate within fixed oil flow and pressure parameters for each model with an open tank line for the return oil.

Ensure the appropriate optional hydraulic valve is fitted if the installation is outside of the required parameters.



Hydraulic Connections

Connect the Bucket hydraulic supply and return hose quick coupler to the carrier's auxiliary supply and return quick couplers (see carrier operators manual for instructions).

Model	Supply	Return
	Inch BSP	Inch BSP
2-50	1/2 BSP	1/2 BSP
3-60	1/2 BSP	1/2 BSP
3-80	1/2 BSP	1/2 BSP
3-100	1/2 BSP	1/2 BSP
3-120	1/2 BSP	1/2 BSP
3-150	1/2 BSP	1/2 BSP
4-100	3/4 BSP	3/4 BSP
4-120	3/4 BSP	3/4 BSP
4-150	3/4 BSP	3/4 BSP
6-150	1 BSP	1 BSP

Hydraulic connections should never exceed the limits stated in the technical data section.



Operating Instructions



NOTE

The Gyru-Star compact screening system is designed as a re-handling bucket only for the screening, aeration and mixing of Non Hazardous, pre dug material.

It is not to be used as a primary digging bucket or used in contaminated areas.

The material to be screened is loaded in to the Gyru-Star compact screening system in the same manner as a standard excavator or wheeled loader bucket.

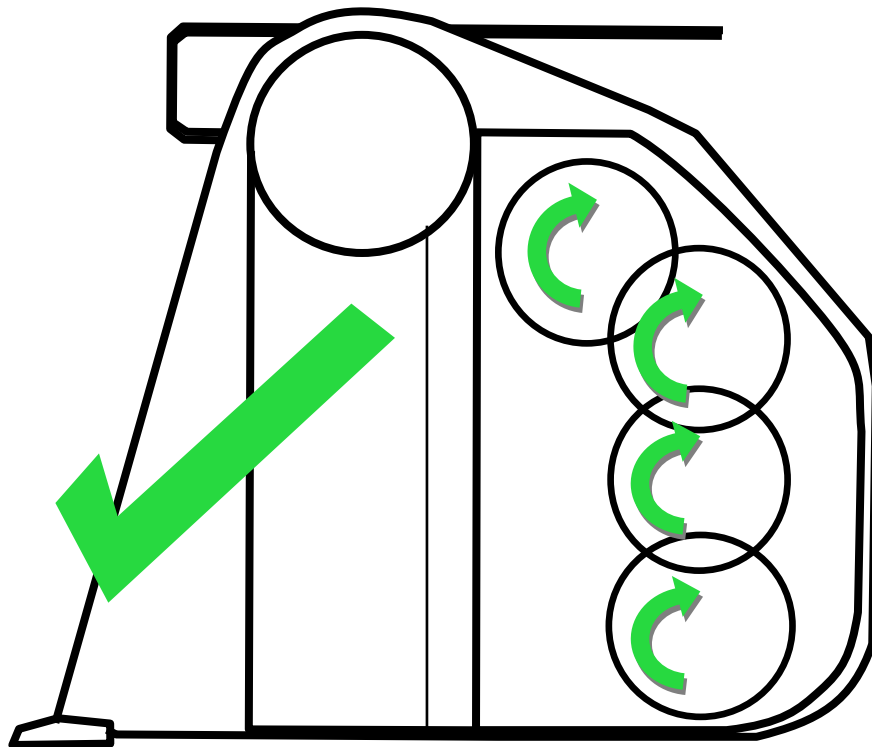
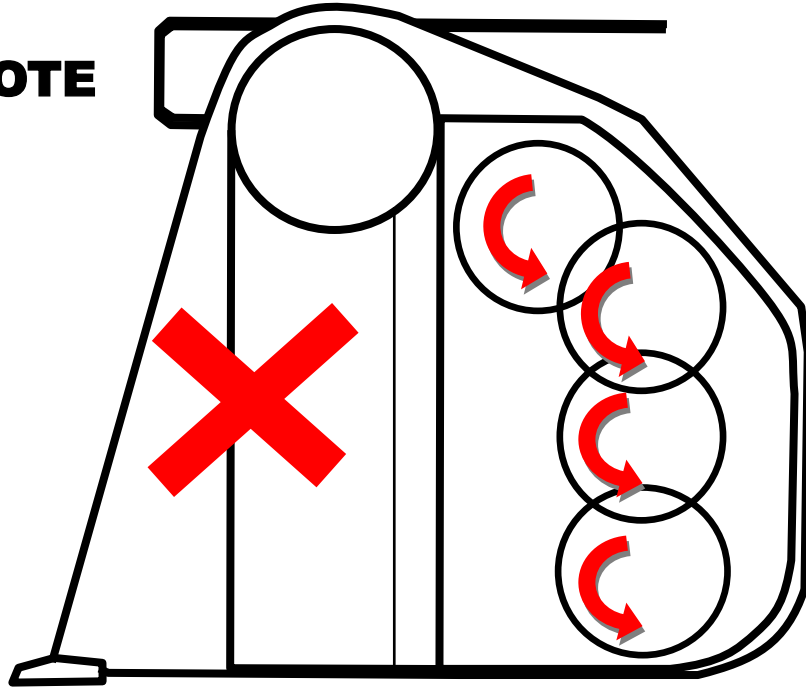
Once the bucket has been loaded with material to be screened and positioned the excavator or wheeled loaders auxiliary hydraulic circuit is activated causing the star rotors to turn in an upwards direction.



Rotor direction



NOTE

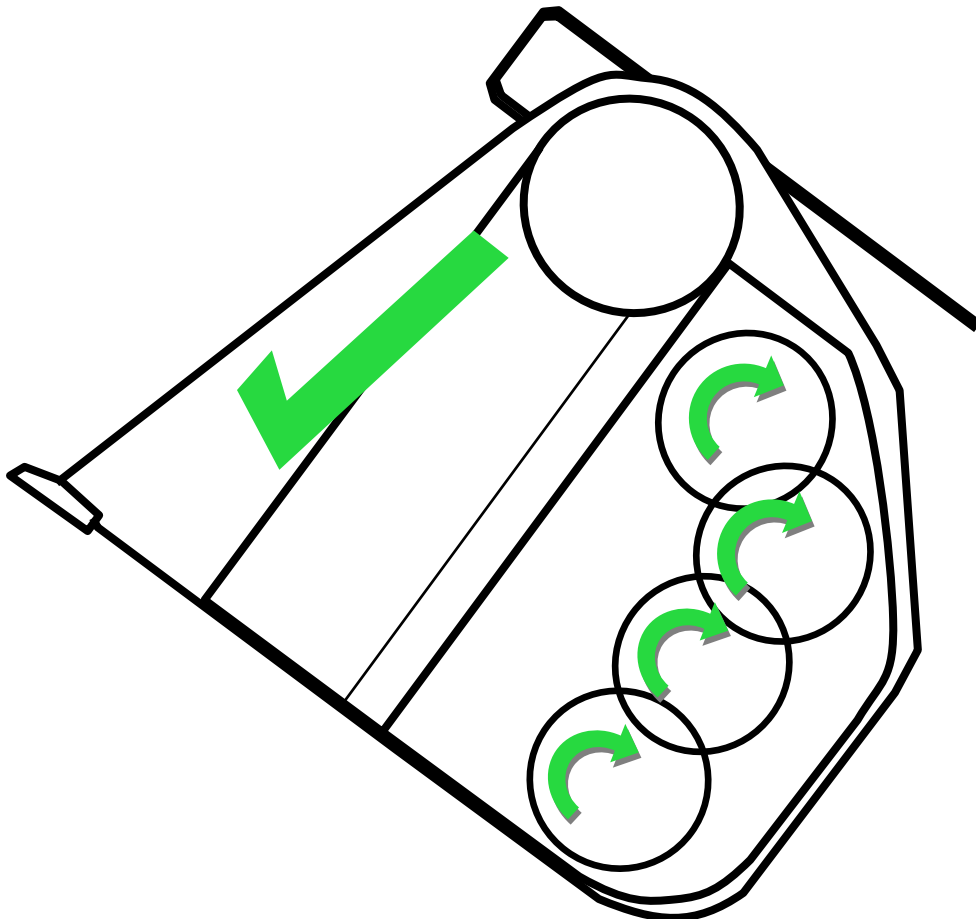
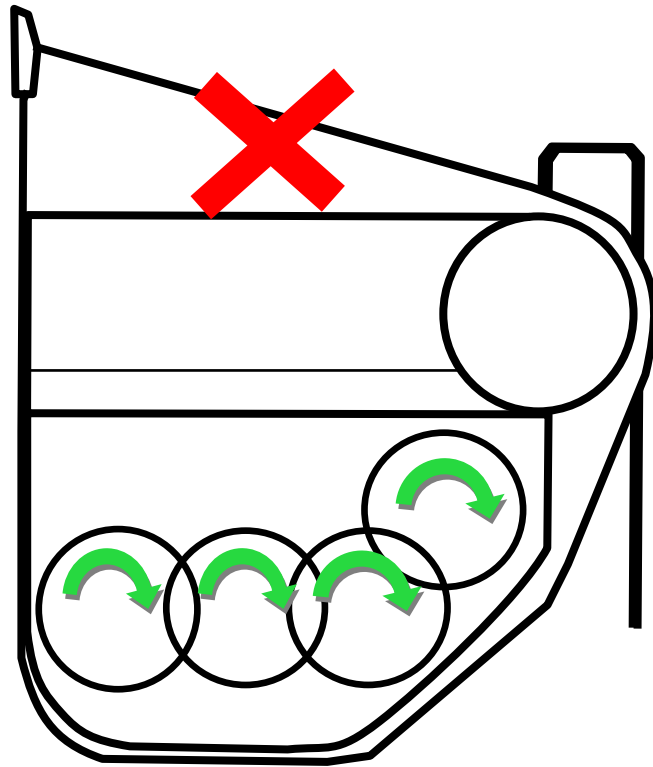




Operation angle



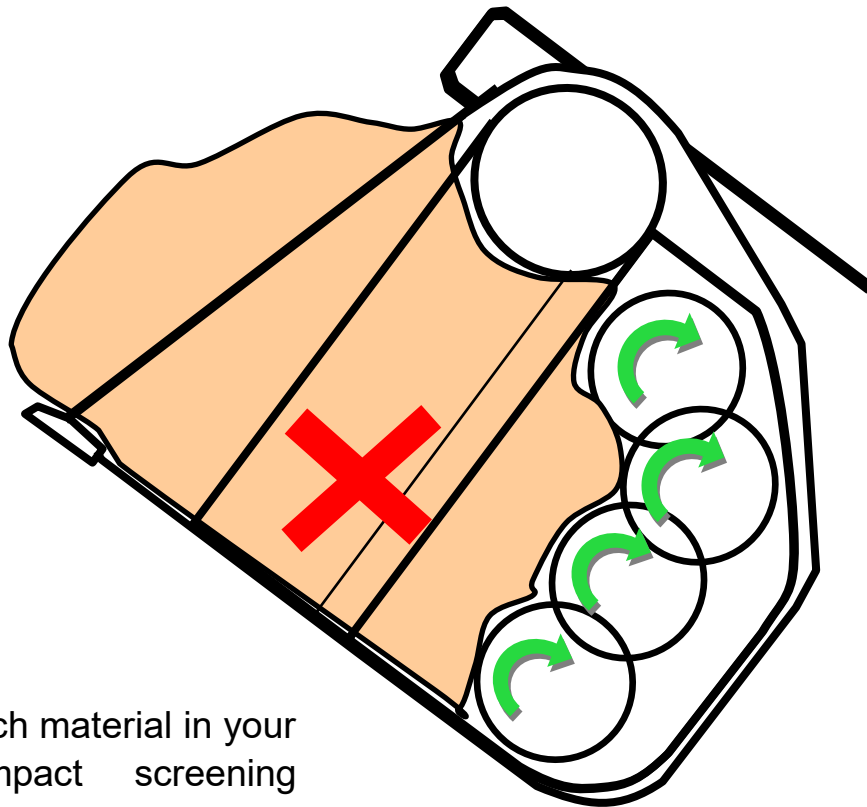
NOTE





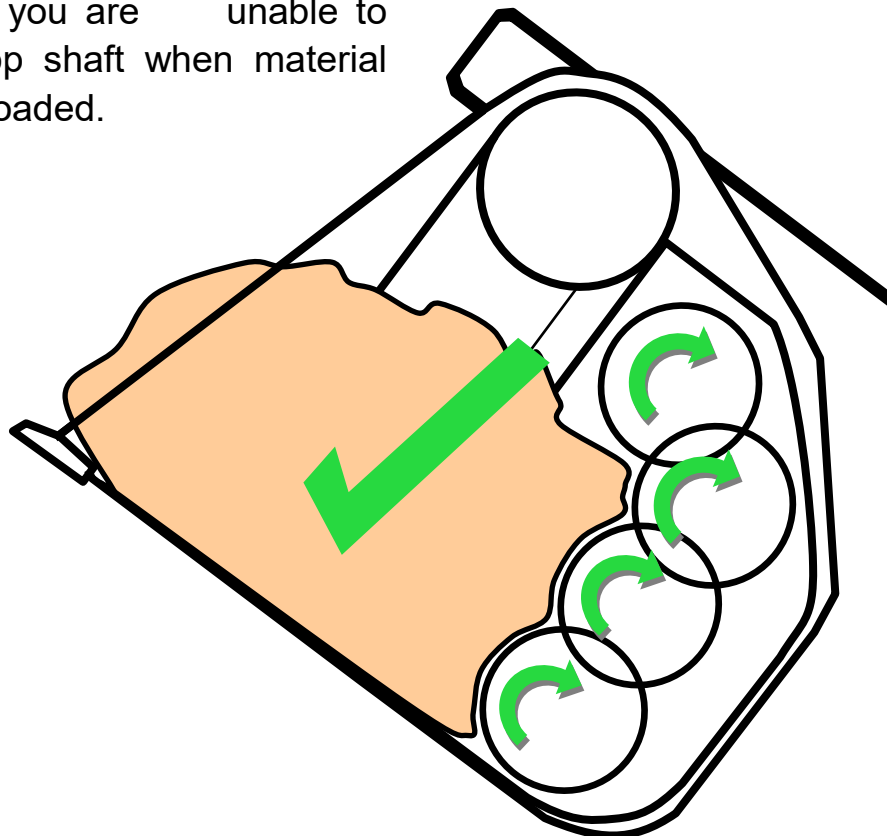
Material handling

Do not over fill the Bucket as this will reduce the performance of the screening process and can damage your Gyru-Star compact screening system.



Tip

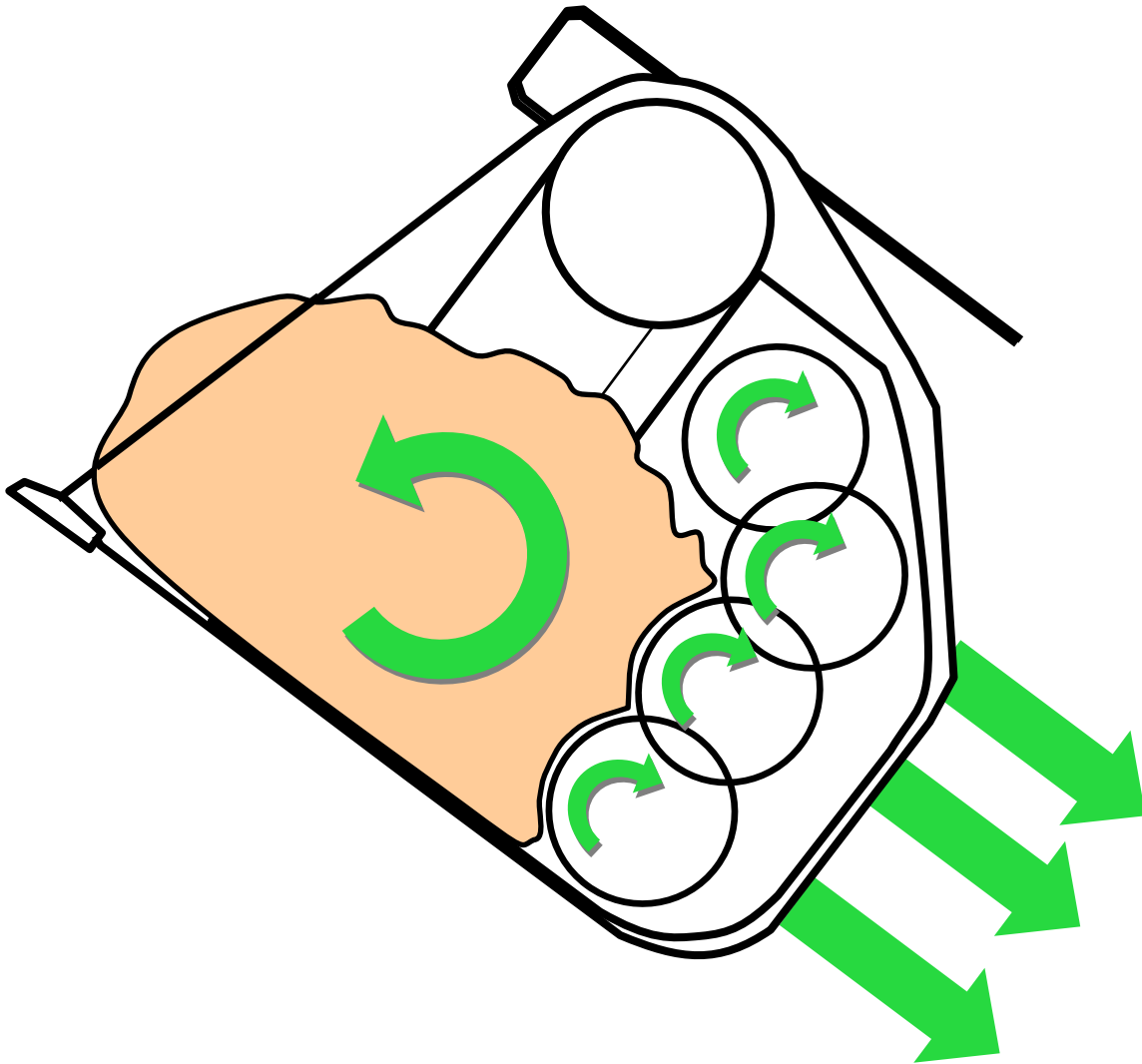
There is too much material in your Gyru-Star compact screening system if you are unable to see the top shaft when material has been loaded.





Material handling

The Gyru-Star compact screening system's efficient screening process is created by the star rotors, rotating the pre screened material in the bucket, allowing fines to flow through the star rotors leaving the oversize material in the bucket.



Less material in the = more production
Gyru-Star compact
screening system

Once the screening process is completed, the oversize material is tipped out and the process is repeated.



Maintenance



SERVICING DESCRIBED IN THIS MANUAL IS ONLY TO BE PERFORMED BY A QUALIFIED PERSON.

Daily Maintenance

Carry out visual inspection ensuring that the excavator or wheeled loader fixing pins, and fixing pin securing devices are fitted correctly (check carriers operators hand book for more information).

Inspect hydraulic hoses for damage and leaks. Replace the hoses if they are damaged or leaking.

Remove any material wrapped around the flexi-star rotor shafts.

Periodic or Monthly Maintenance

Check the flexi-star rotor bearings for wear and replace if necessary.

Check rotors for damaged flexi stars and replace flexi stars if necessary.



NOTE

Long Term Storage

Place the Gyru-Star compact screening system on firm and level ground.

Power-wash the Gyru-Star compact screening system carefully. Avoid prolonged high pressure water around the flexi-star rotor bearings.

Ensure hydraulic lines are suitably plugged.

Apply a suitable anticorrosion product to all bright metal surfaces.



Maintenance Instructions



WARNING

General Information

Before commencing any repairs or servicing ensure the Gyru-Star compact screening system is sited on firm and level ground if it's detached from the excavator or wheeled loader.

If attached to the excavator or wheeled loader ensure the Gyru-Star compact screening system is both lowered to the ground and sitting flat on its base, ensuring that the excavator or wheeled loader has been suitably isolated to prevent unexpected operation.

Hydraulic system

Ensure all hydraulic pressure has decayed before carrying out any repair or maintenance. Follow procedures in the carrier's operators hand book. If unsure, contact the carrier's technical centre.

Ensure hydraulic oil temperature has cooled sufficiently before carrying out any repair's or maintenance.

Hydraulic oil

Avoid skin contact where ever possible; wash exposed skin with a suitable detergent and water.

Always use correct protective equipment when handling mineral oils.

Clean up any spills immediately with a suitable absorbent material and dispose of correctly to prevent damage to the environment.

Consult oil suppliers Data Sheet for more detailed information.



CAUTION

Welding

Connect the earth clip as close to the weld as possible, making sure that the welding current doesn't travel through the flexi-star bearings or hydraulic motor.

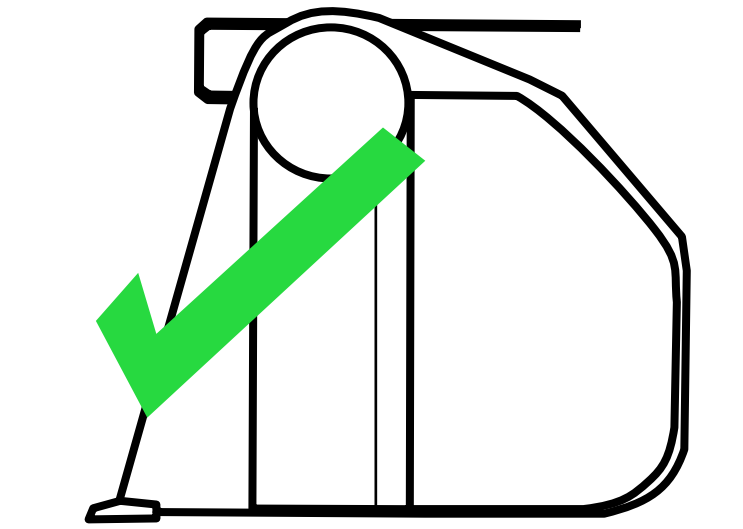
If attached to the excavator or wheeled loader check the manufactures hand book for welding procedure to prevent damage to PLC units.



NOTE

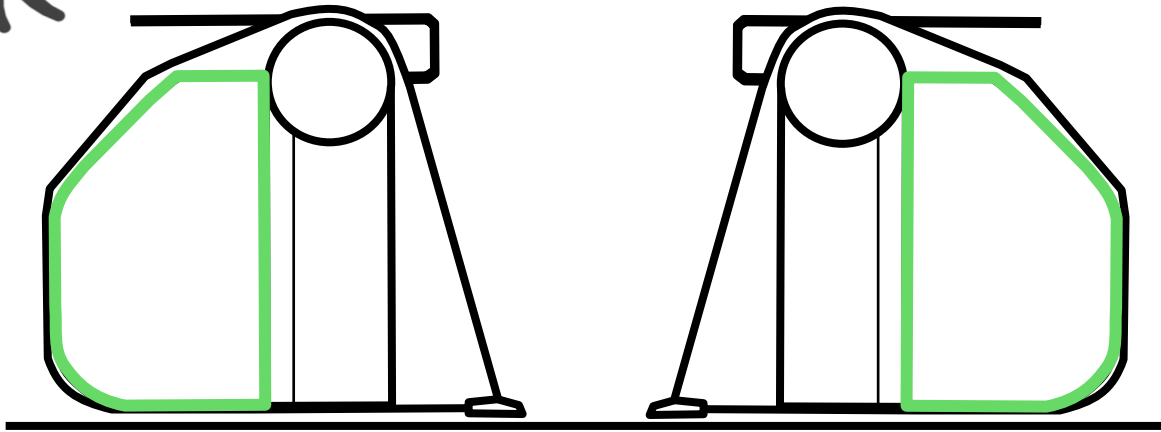
Flexi-Star replacement

Before commencing flexi-star replacement, ensure the Gyru-Star compact screening system is sited on firm and level ground and detached from the excavator or wheeled loader.

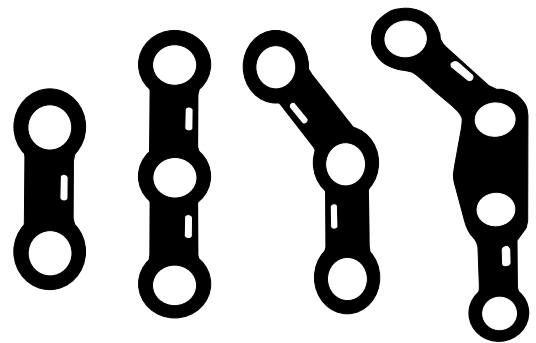




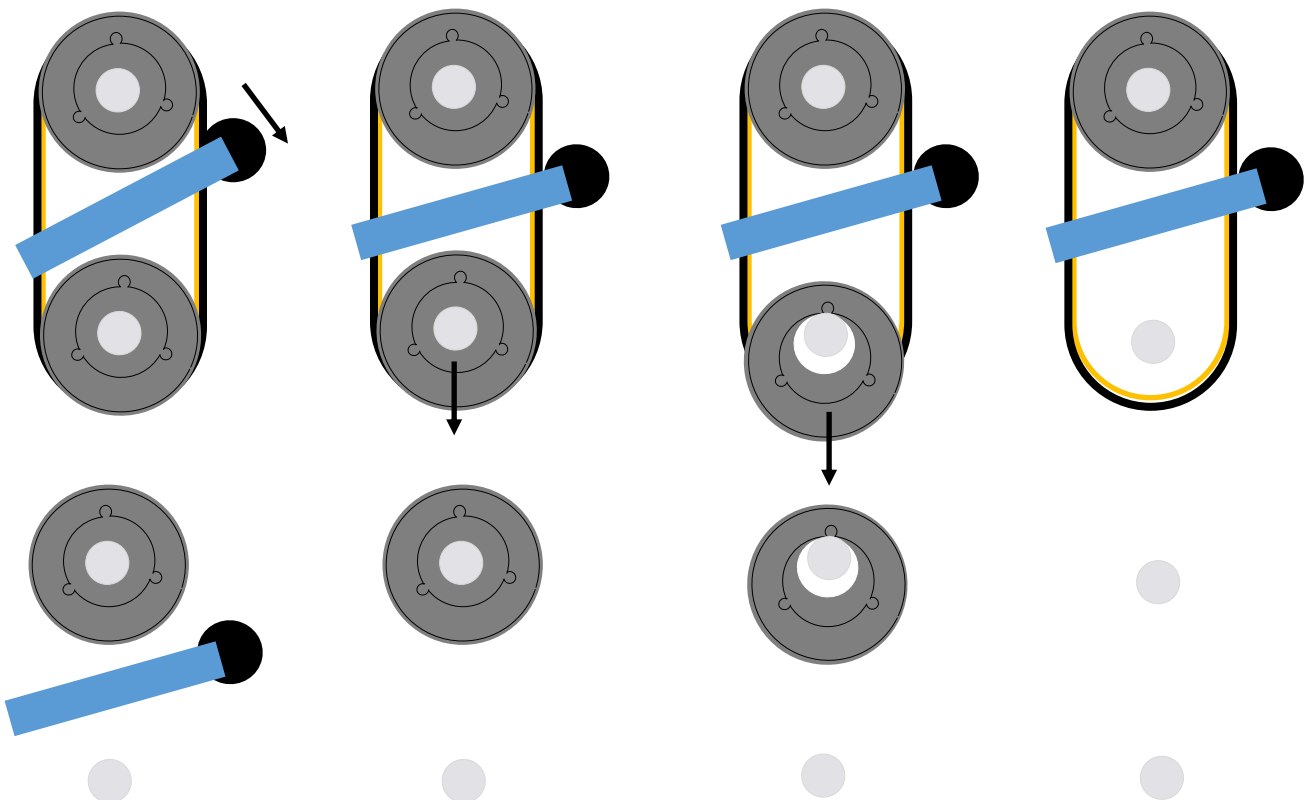
Remove both drive line covers.



Next, remove the bearing support plate.

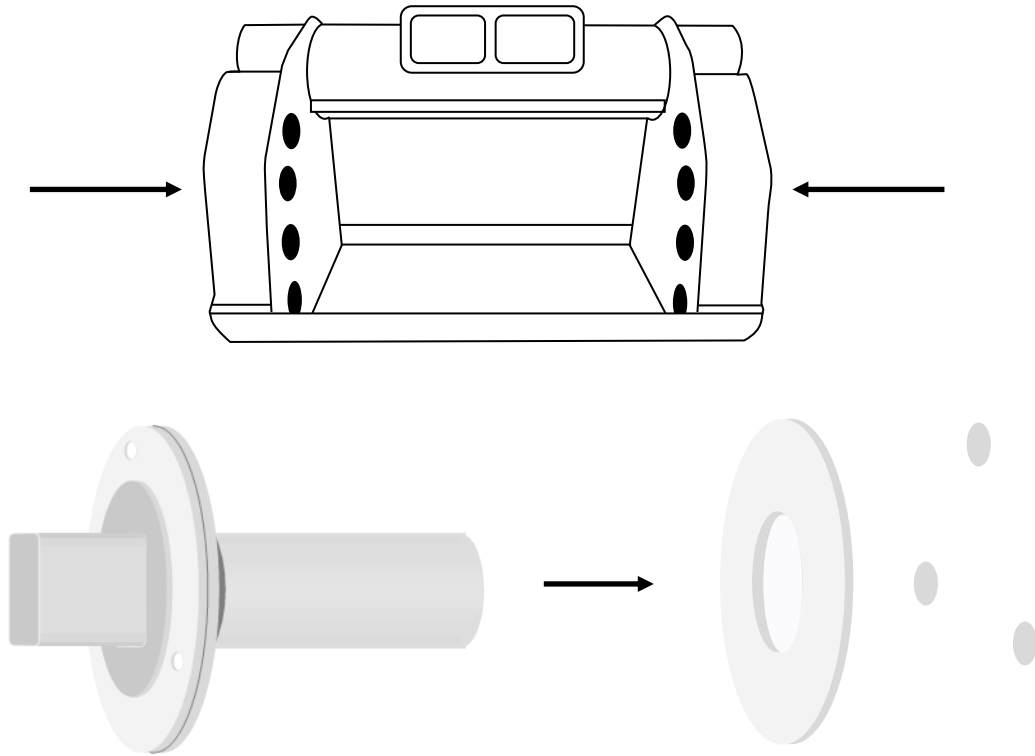


Then remove the carbon chain belt and drive wheel by releasing the belt adjuster of the intended rotor.

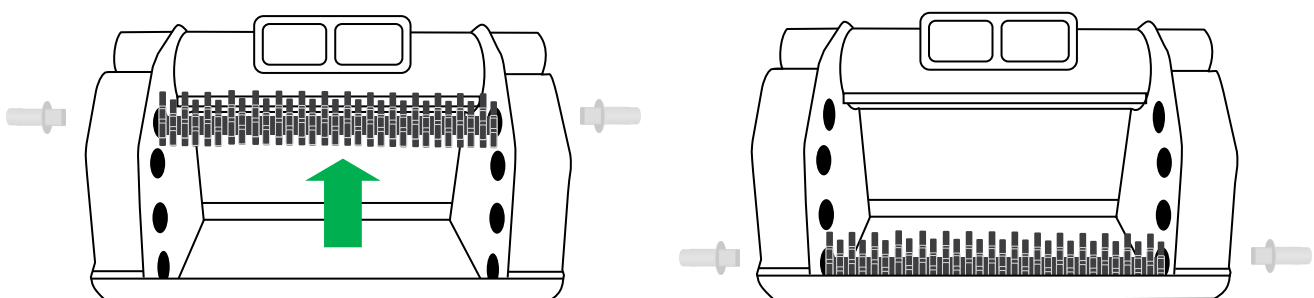


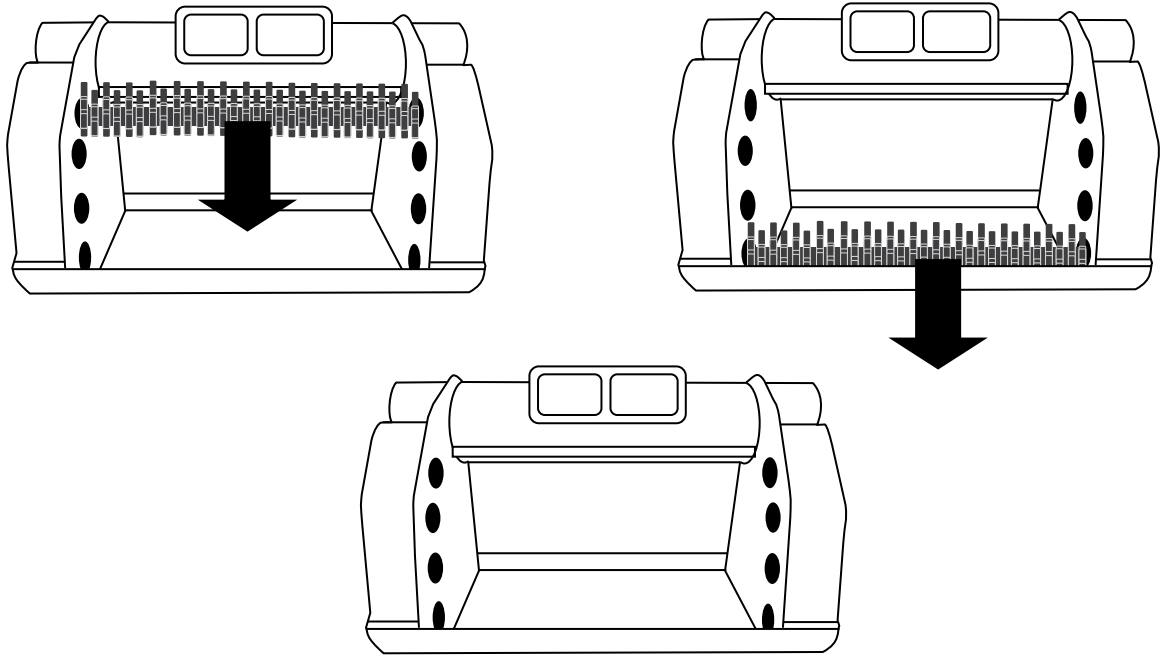


Support the flexi-Star rotor and remove both rotor support bearing fixings. This will be a bearing support plate and 3 flange nuts or 3 bolts.

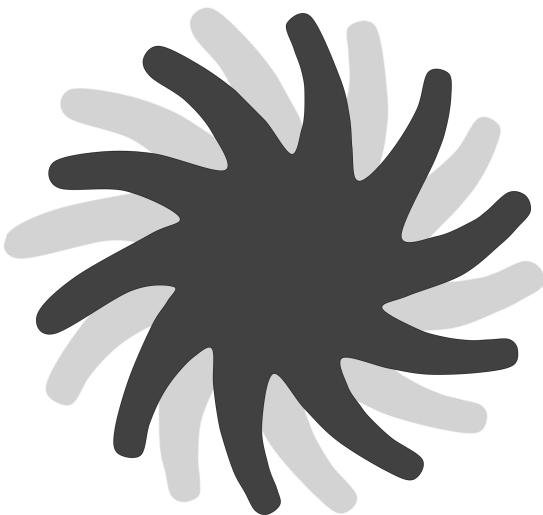


With the rotor supported, pull out both stub shaft assemblies complete with bearings out from the rotor shaft. From this lift out the rotor shaft.

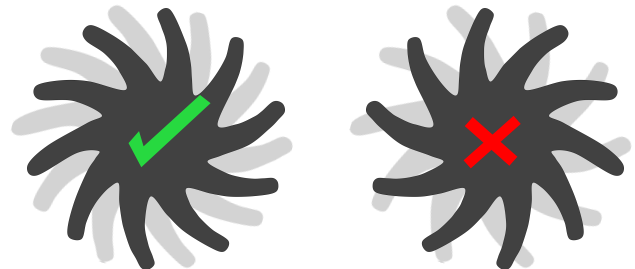




Slide the flexi-star discs from the square section of shaft observing the staggered pattern.



Ensure all the stars “face” the same way in the staggered pattern.



To reassemble repeat above instructions in reverse.

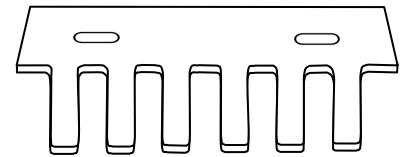


Stripper plate and combs

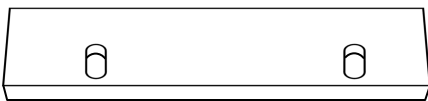
Your Gyru– Star screening bucket will have been fitted with combs or a stripper plate.

Which is which?

Combs will be fitted on 0-15mm and 0-10mm kits on your bucket or if request by yourself.

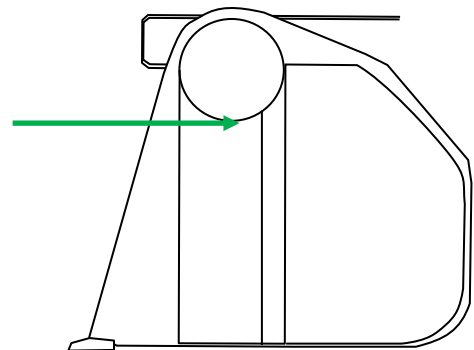
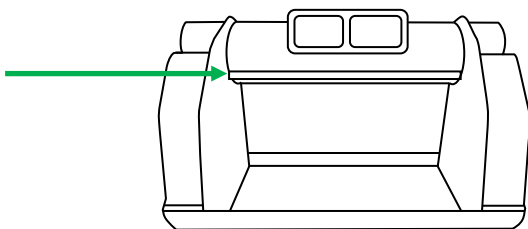


The stripper plate is fitted as standard and is the only adjustable option.



Where to find them

They lie between the top shaft and the tube.
Fixed with one bolt, spring and flat washer.



As the stars on the top shaft wear, the gap between the stars and the stripper plate will get bigger adjust the stripper plate so that the gap is no more than 5mm.

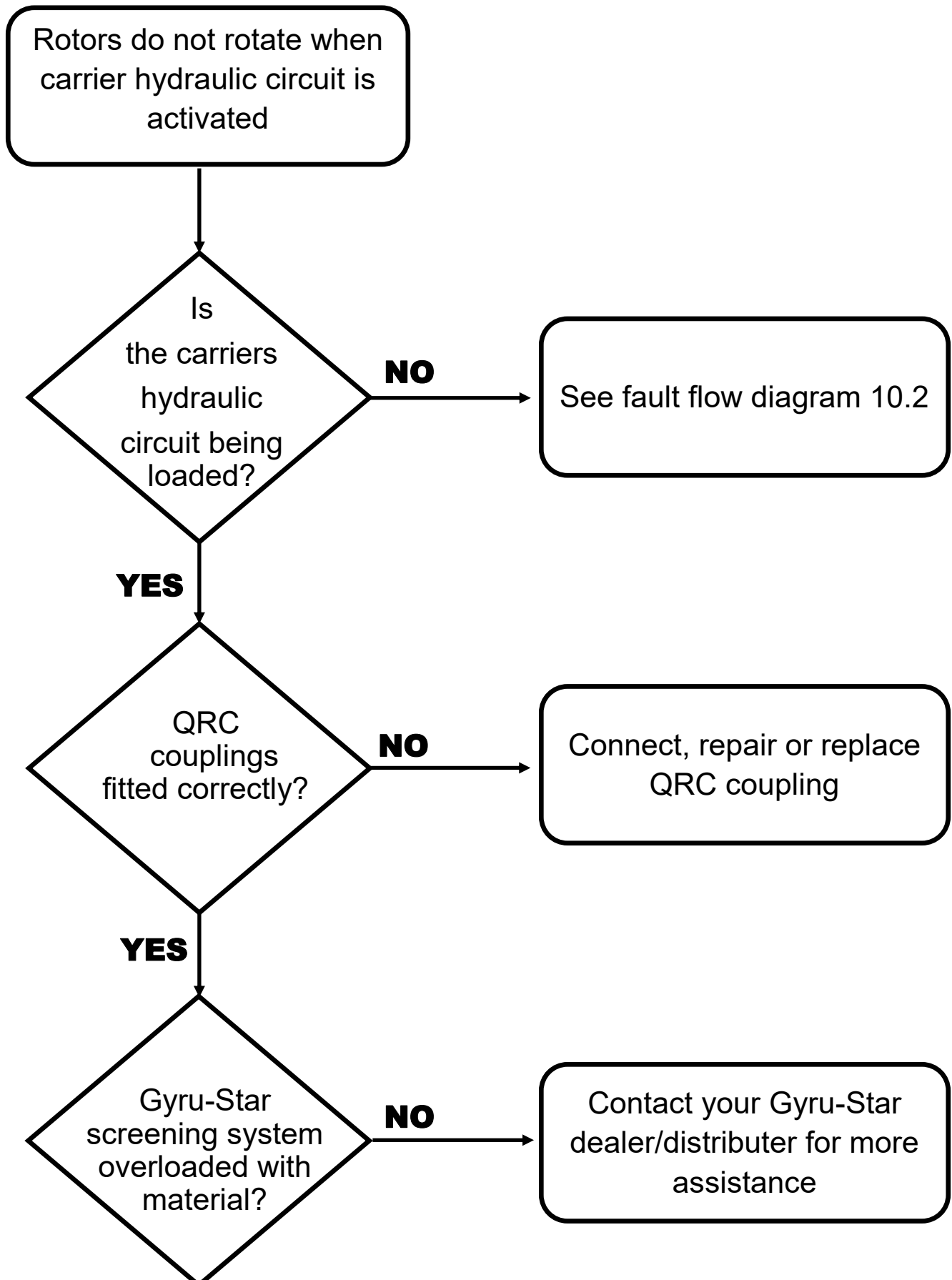
To do this loosen the bolts securing the stripper plate and slide until the gap is no more than 5mm.

It is important to check the gap is correct before using the bucket.



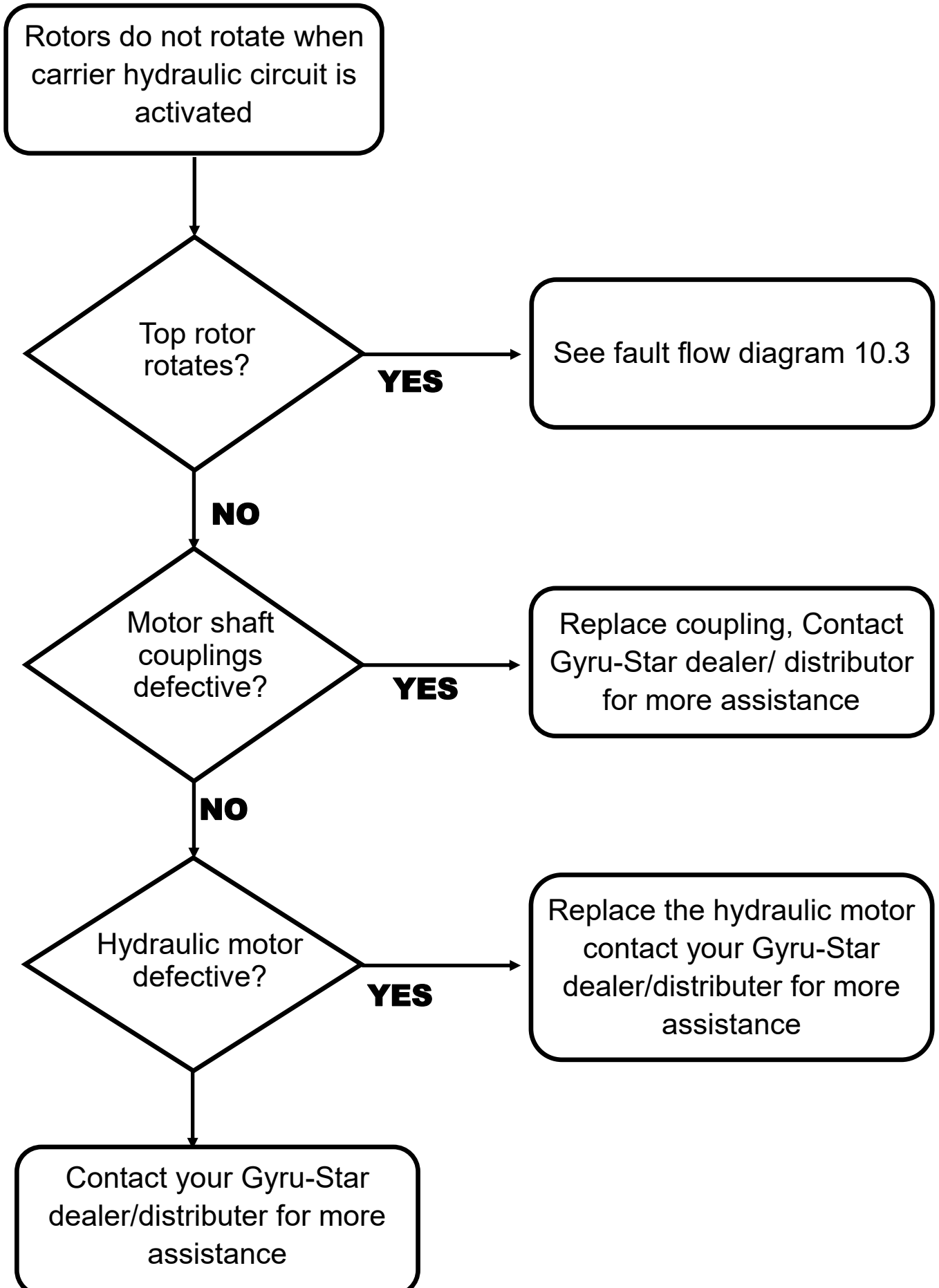
Troubleshooting

ROTORS DO NOT ROTATE



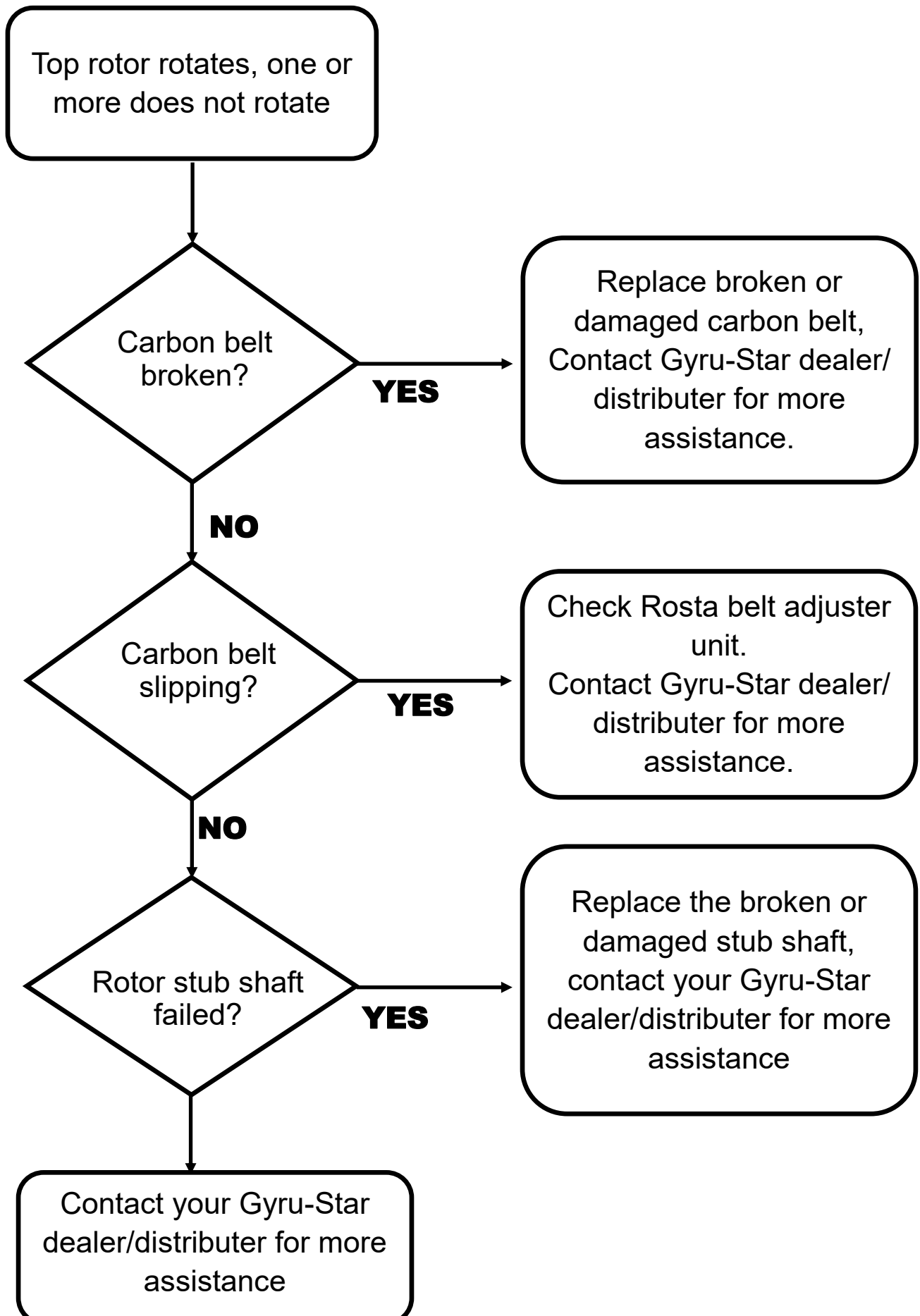


ROTORS DO NOT ROTATE



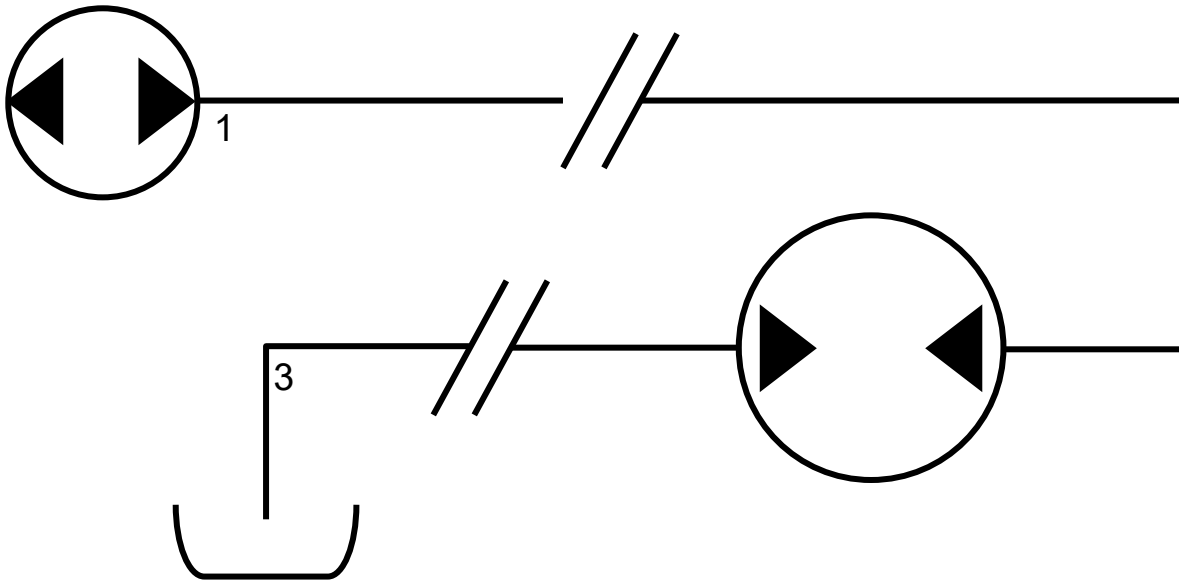


ROTORS DO NOT ROTATE

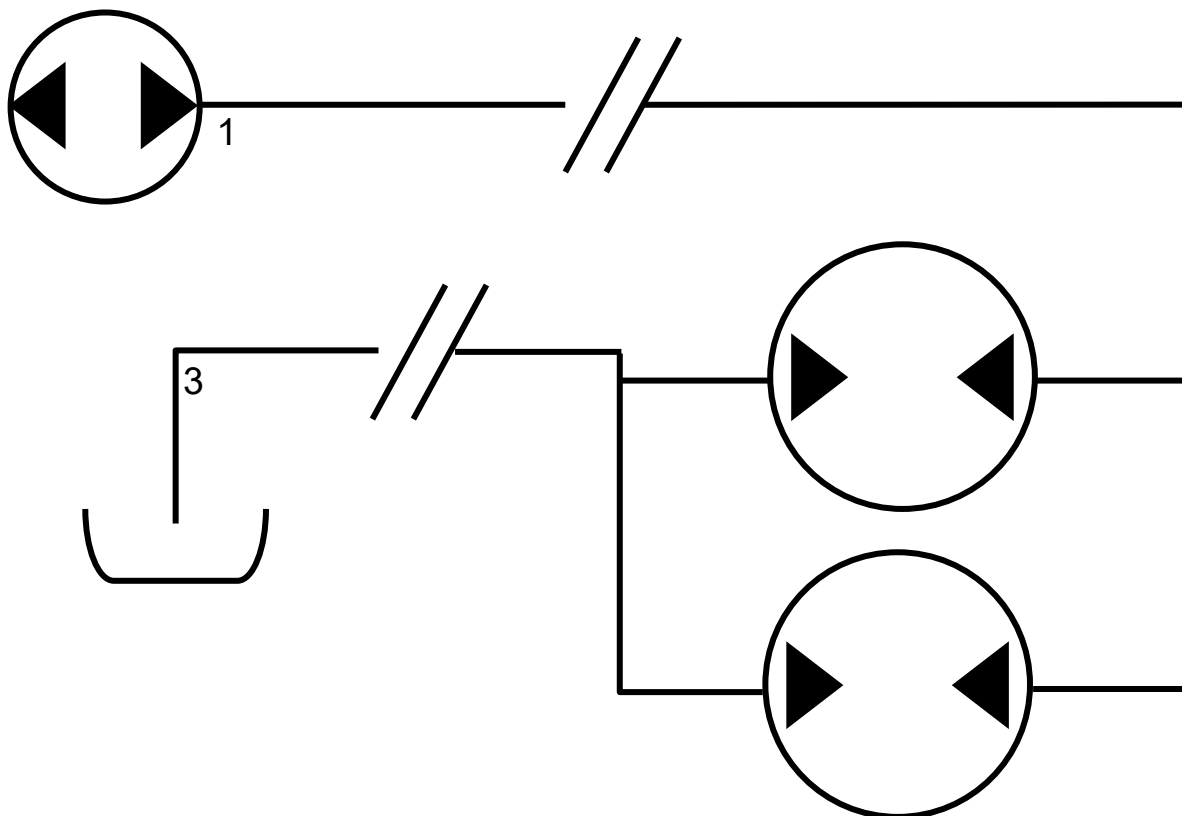




Hydraulic Circuits



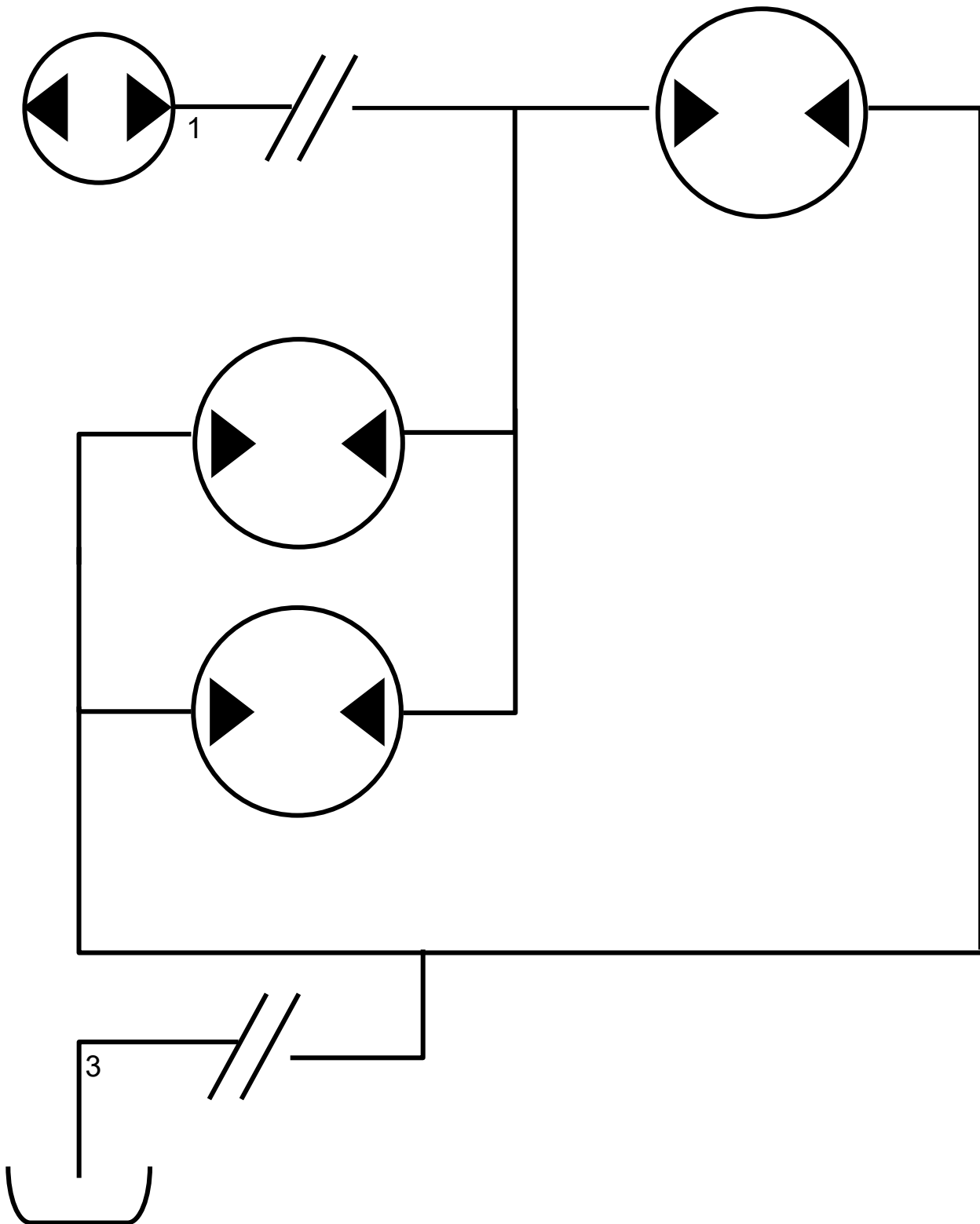
Hydraulic Circuit for; 2-50E, 3-60E, 3-80E, 3-100, 3-120, 3-150.



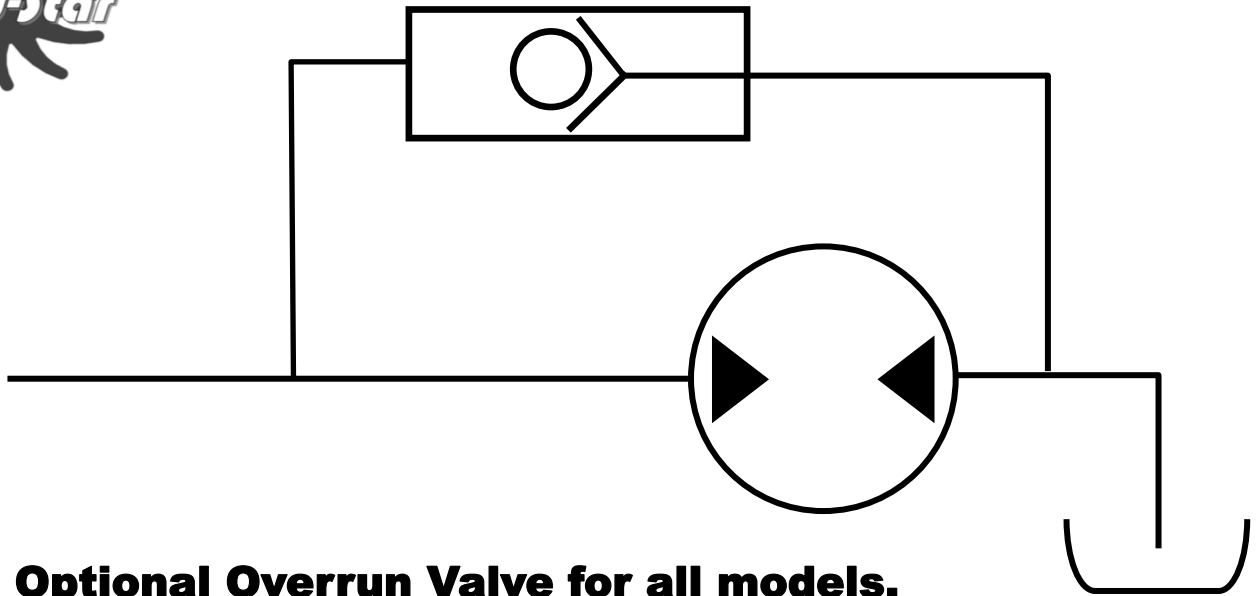
Hydraulic Circuit for 4-100, 4-120, 4-150.



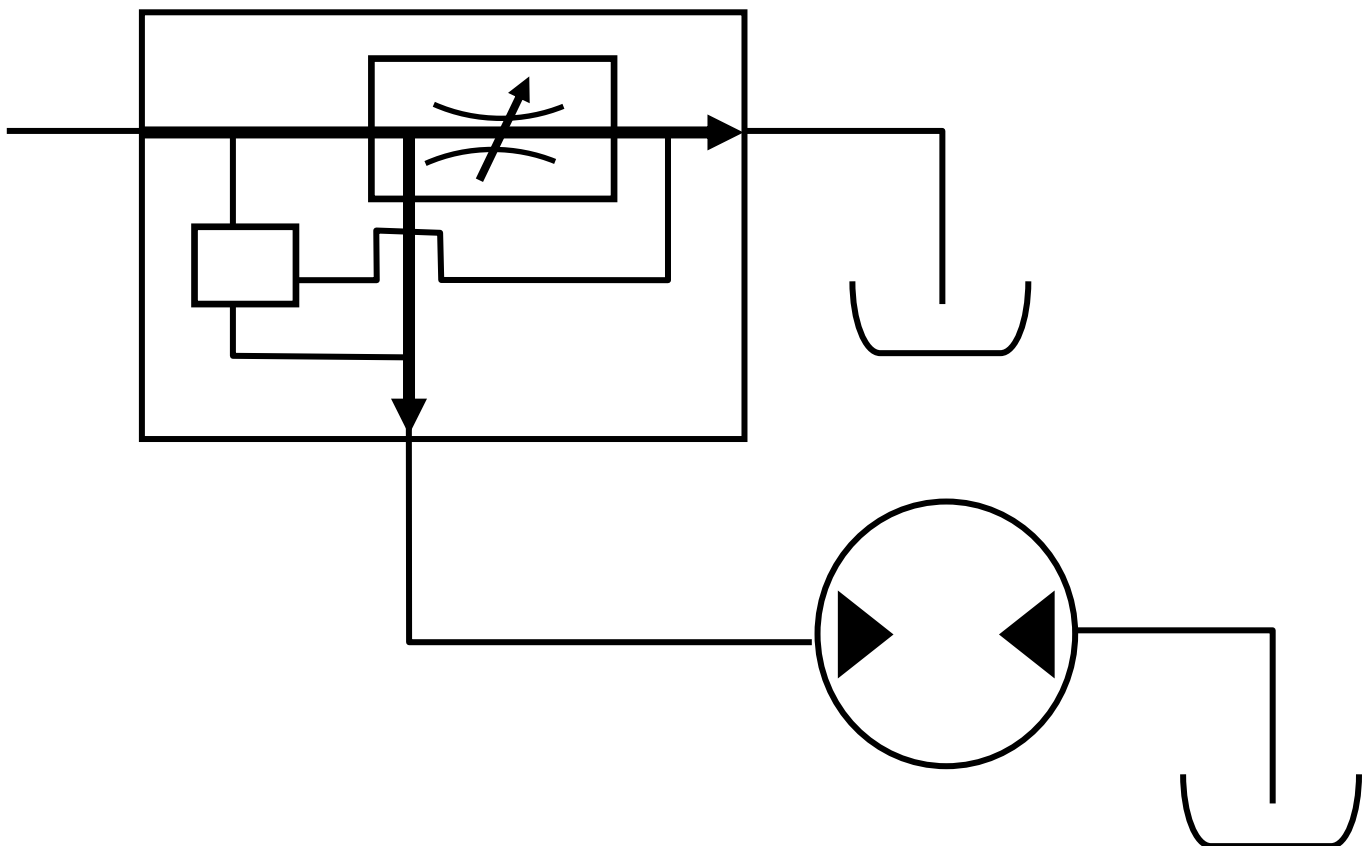
Hydraulic Circuits



Hydraulic Circuit for; 6-150.



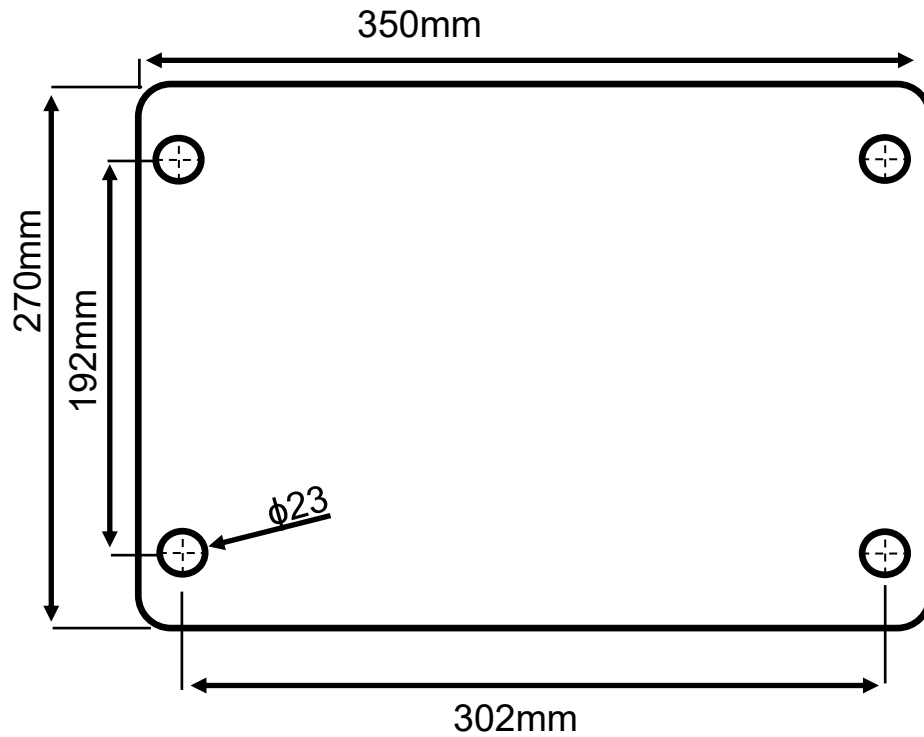
Optional Overrun Valve for all models.
Oil is returned via the carrier's control spool.



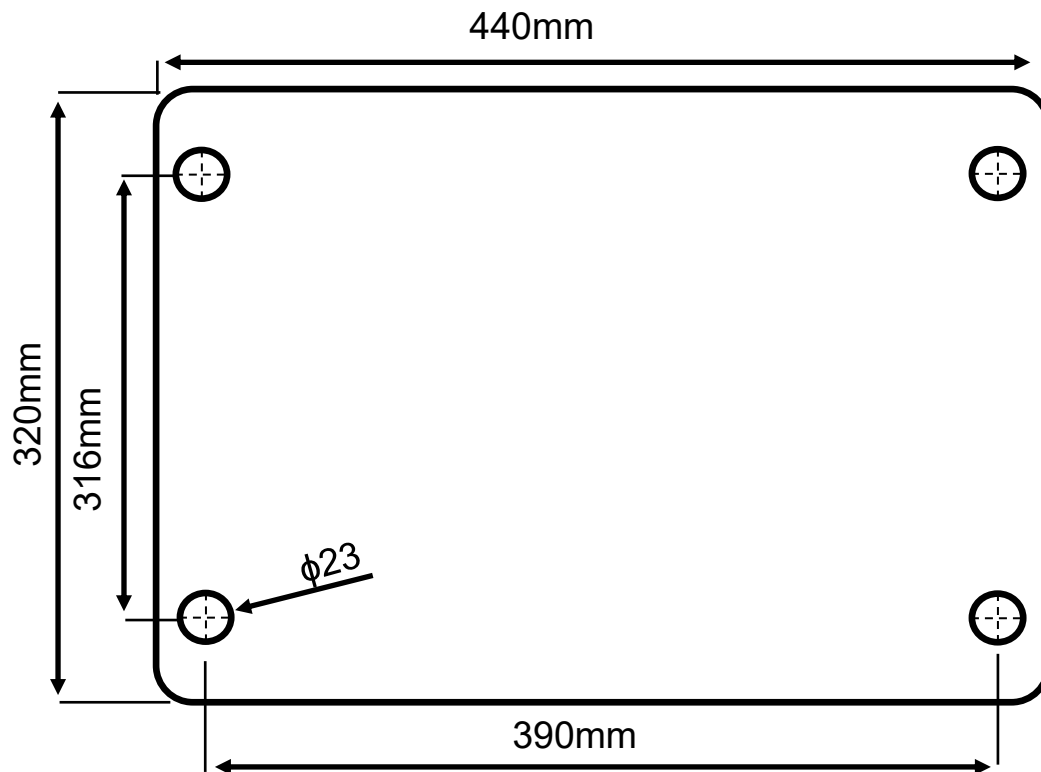
Optional Flow Regulator with Relief Valve for series SL & L
Where oil flow and pressure available exceed permissible parameters for the screen bucket model.



Drill Pattern



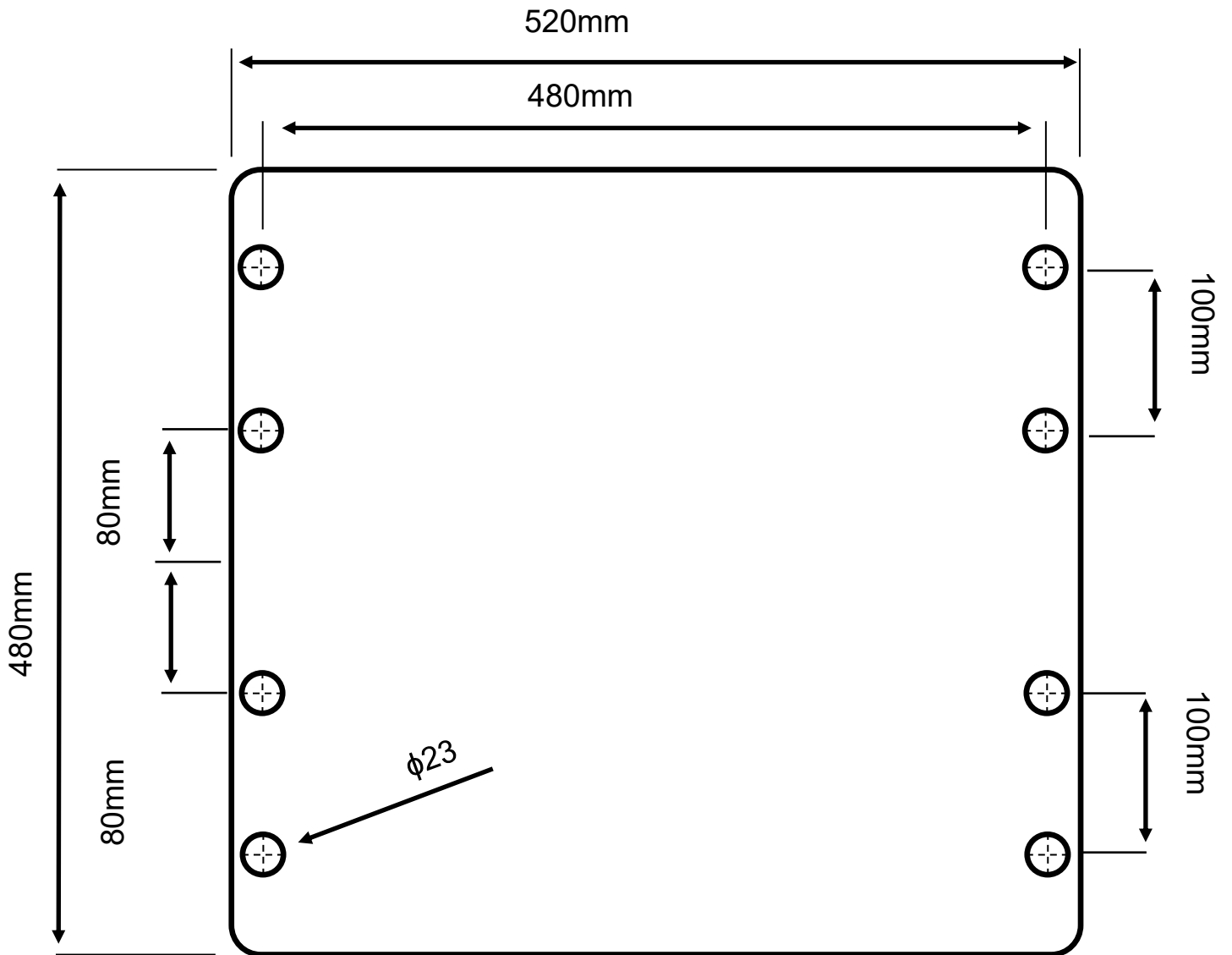
Model; 2-50E Drill Pattern.



Model; 3-60, 3-80 Drill Pattern.



Drill Pattern



Model; 3-100, 3-120, 3-150, 4-100, 4-120, 4-150 Drill Pattern.





Manufacture's limited warranty

Wheatway Solutions Ltd, a manufacturer of Gyru-Star compact screening systems, warrants new Gyru-Star screening product at the time of delivery to the original purchaser, to be free from defects in material and workmanship in accordance with the recommendations set forth by Wheatway Solutions Ltd for a period of 12 months only.

The warranty covers a repair or replacement of components that are defective in material or manufacture, according to the manufactures exclusive judgement.

The warranty does not cover any consequential or incidental cost e.g. working costs, possible delays in work or consumable items.

The warrant does not cover any parts subject to wear or any damage caused by misuse or incorrect operation.

The warranty is cancelled and the manufacture / distributor / dealer are relieved from liability if the user makes any alterations or additions to the product without written permission.

The warranty is cancelled and the manufacture / distributor / dealer are relieved from liability if the product is used in an environment that is not mentioned in the operator's manual without written permission.

The warranty is cancelled and the manufacture / distributor / dealer are relieved from liability if maintenance schedules are not adhered to and incorrect or inadequate repairs are carried out.

This warrant does not affect your statutory rights and we wish you continuing success in your enterprise and sincerely appreciate our `partnership` both now and the future.

WARRANTY CLAIM

All warranty claims must go through your authorized Gyru-Star dealer.