

CRANE MOUNTED SINGLE POLE GRAB

MANUAL SPARE PARTS



Published: 04 July 2024 ID: M070 2.0



These instructions give safety and operations information regarding the use of a Crane Mounted Single Pole Grab in conjunction with and Quick Hitch supplied by Autoguide Equipment. They contain the relevant information for products:

Product Code	Description	Maximum Pole Weight <i>(Kg)</i>
54538	Crane Mounted Single Pole Grab	800

To ensure optimum results when operating this equipment it is very important to read this manual carefully, the information will prepare you to do a better, safer job.

Before operating the machine you should familiarise yourself with the instructions in this manual. Incorrect use can lead to damage which is not covered by the Warranty Conditions. This may create a dangerous situation or lead to unsatisfactory results.

These operating instructions **MUST** always be made available to the person or persons operating this equipment.

To assist in the ordering of spares, or other communications with our company, the serial number of the relevant equipment supplied, has been recorded below for your information.

Model No:-

Serial No:-

Date of Delivery:-



Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury.



Do not allow persons to operate this product until they have read this manual and developed a thorough understanding of how the product works.



The warnings, cautions and instructions in this manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

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INFORMATION

Your Crane Mounted Single Pole Grab has been individually built with great emphasis on quality, strength and simplicity of design and with routine care will give many years of trouble free operation.

The following instructions have been written to cover the use and maintenance of the machine. Care should be taken to ensure that you are referring to the correct section of your machine before carrying out any adjustments, or when ordering spare parts.

Like all mechanical products, regular cleaning, lubrication and maintenance will ensure a longer trouble free life. These instructions make no attempt to go beyond routine maintenance, and it is strongly advised that you contact your dealer should any major repairs become necessary.

Use only genuine service parts; non genuine parts may not meet standards required for safe and satisfactory operation.



Observe all safety information in the manual and on decals fitted to the machine and power unit.

Warnings

- Improper operation and maintenance of this equipment can be hazardous and could result in serious injury of death.
- Do not modify the equipment in any way. Unauthorized modifications may impair the function and/or safety and could affect the life of the equipment.
- Operators and maintenance personnel should read this manual thoroughly before beginning operation and maintenance.
- Always keep this manual with the equipment and be sure to read and understand it thoroughly before performing operation and maintenance.
- Some actions involved in operation and maintenance of the machine can cause serious accident of they are not done in the manner described in this manual.
- If this manual has been lost or has become dirty and cannot be read, request a replacement manual from Autoguide Equipment Ltd.
- If you lend this equipment to another person, always have that person read the operation manual and make sure that they understand the content of the manual before starting operation. Be particularly careful to ensure that they follow the safety regulations when operating.

Description

The pole grab has been designed to handle utility poles, enabling users to safely load from pole dumps onto Pole Erection Vehicles and unload at sites. The design incorporates a hydraulic set of jaws for gripping the pole and a rotator that enables the user, with the user of the crane to manoeuvre the pole for safe handling.

Dataplate Information

The machine is fitted with a data plate with the machine specifications and information.



The information for Crane Mounted Single Pole Grab is:

Model	54538	
Rated Capacity	800	KG
Weight	150	KG
Max Pressure	200	Bar
Max Flow	30	L / Min

DECLARATION OF CONFORMITY



Page | 1

Ver: 1.0

Date: 04/07/2024

Declaration of Conformity (UKCA Marking)



Name & Address of Manufacturer:

Name & Address of person to compile the Technical File:

Autoguide Equipment Ltd, Stockley Road, Heddington, CALNE, Wiltshire, SN11 0PS, UNITED KINGDOM Mr Adam Sandey, Lead Design Engineer, Autoguide Equipment Ltd, Stockley Road, Heddington, CALNE, Wiltshire, SN11 0PS, UNITED KINGDOM

Name & Address of Authorised Representative if one has been mandated by the manufacturer:

N/A

Name, Address, and identification number of the Approved Body, where applicable:

N/A

Description of the Equipment:

54538 - Single Crane Grab & 55061 - Stowage Frame

The transposed harmonised standards (Designated Standards BS prefix) used:

EN ISO 12100:2010 - Safety of machinery - Human physical performance - Part 2. Manual Handling of machinery and component parts of machinery

BS EN ISO 4413:2010 - Hydraulic fluid power — General rules and safety requirements for systems and their components

BS EN 13155:2020 - Crane - Safety - Non-fixed load lifting attachments

The British National standards and any technical specifications used (Specify);

N/A

Place of Declaration: Calne, United Kingdom

Date of Declaration: 2nd July 2024

I declare that the above equipment meets the Essential Health and Safety requirements of the Supply of Machinery (Safety) Regulations 2008 and 2006/42/EC Machinery Directive

Name: Mr Robert Robinson

Position: Managing Director

Autoguide Equipment Ltd, Stockley Road, Heddington, Nr Calne, Wiltshire, SN110PS.

Tel: +44 (0) 01380 850885 fax: +44 (0) 1380 850010 www.autoguide.co.uk

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MACHINE SAFETY

The machine is fitted with numerous safety stickers highlighting the potential dangers. Please take note of these warnings as they are there to protect from dangers.



Operator Manual Must be read before operation.



Toe Protection Footwear Mandatory



Hard Hat Mandatory



High Visibility Clothing Mandatory

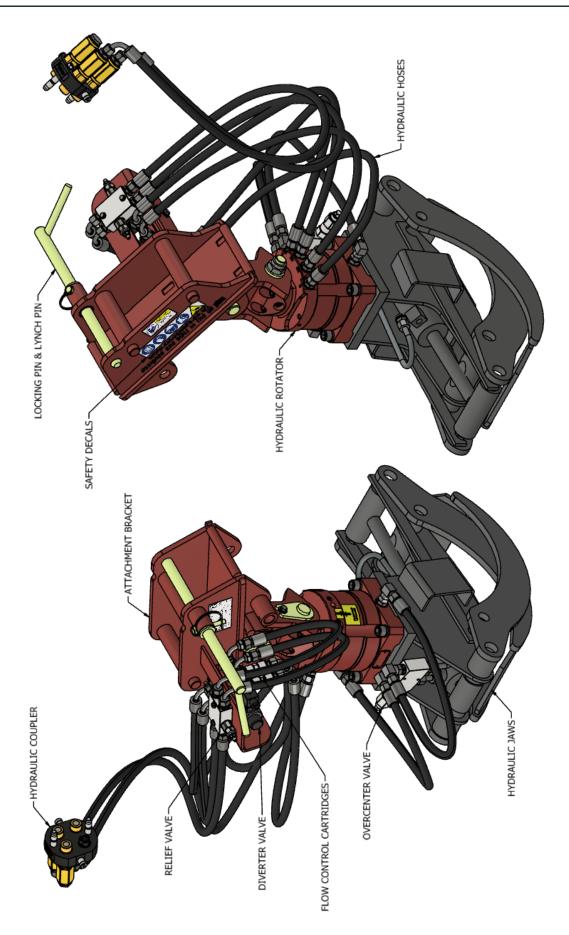


Gloves Mandatory



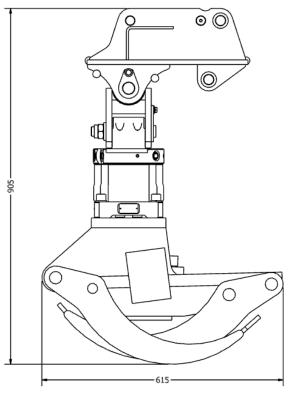
Crush Hazard. Keep Hands Clear Of Moving Parts.

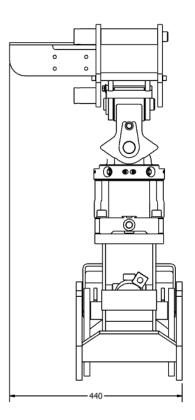
MACHINE FAMILIARISATION

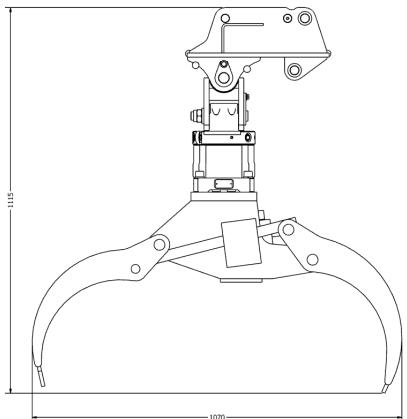


TECHNICAL DATA

Dimensions







Weight

The weight of the pole grab is 150 Kg.

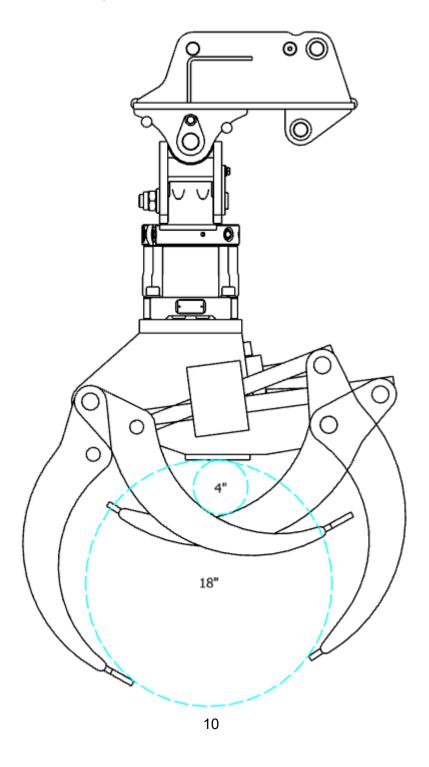
The maximum lifting capacity must not exceed 800kg.

Freedom of Movement

The jaw assembly is fitted with a set of claws that work in tandem to grip the pole. They can hold poles ranging in diameter from 4" to 18".

The jaws produce 800kg of clamping force. The ram is protected via a valve to prevent unwanted opening or creeping.

The rotator can rotate continuously.



MACHINE OPERATION

General Precautions



Failure to follow these general safety precautions may lead to a serious accident.



The safe operation of this machine is the responsibility of the operator, who should be familiar with the principles of pile installation, the power unit and all safety practices before starting operations.

Safety Rules

- Only trained and qualified personnel or personnel authorised by the company (or superior) can operate and maintain the machine.
- Read and understand this operator's manual prior to operating the machine and keep it in a convenient place for future reference.
- Follow all safety rules, prohibitions, precautions, procedures and instructions when operating or performing maintenance on the machine and pay careful attention to safety.
- Operating the machine when you are not in good physical condition reduces the power of judgment needed to avoid danger and leads to accidents.
- People in the following conditions should not operate the machine.
 - People who cannot operate normally because they are ill, or suffering from the effects of medication.
 - People who have been drinking
 - o Pregnant women
- All oil spills, however small must be cleaned up straight away to prevent becoming a slip hazard.
- Ensure daily checks are completed prior to machine use.

Safety Features

- Be sure that all safety features are in there proper position. Have repaired if damaged.
- Improper use of safety features could result in serious bodily injury or death.

Personal Protection

- Always wear properly fitting clothes which allow ease of movements.
- Avoid loose clothing, towels, jewellery and loose long hair. They can catch on controls or in moving parts and cause injury or death.
- Also, do not wear oily clothes; they can easily catch fire.
- Wear a hard hat, non-slip safety shoes and gloves when operating the machine. Safety glasses are advised when performing routing maintenance.

• It is advised that no untrained persons be allowed on the site whilst the machine is in operation.

How Not to Use the Machine

- The machine should only be used for its intended purposes.
- The grab should not be used to extract a pole from a hole.
- The grab should not be used to extract a pole from a pole dump where one end is trapped or beneath other poles.
- The grab should not be used to manipulate a pole whose base is placed in a hole to manipulate the orientation of the pole.

Unauthorised Modification

- Any modifications made without authorisation from Autoguide Equipment can adversely affect the performance of the machine and they may also create hazards.
- Before making a modification, consult Autoguide Equipment. Autoguide Equipment will not be responsible for any injury or damage caused by any unauthorised modification.

Noise and Vibration Reduction

The pole grab produces noise at less than 75dB.

Operator Position

- The operator should be positioned so that they have an un-interrupted view of the equipment and pole at all times.
- Any additional trained banksman must stay a minimum of 10m away from the moving equipment and pole and be wearing the appropriate PPE at all times.

Quick Hitch Information

The safe operation of this equipment is the responsibility of the operator, who should be familiar with the lifting process, the power unit and all safety practices before starting operations.

The Autoguide 'Quick Hitch' has been designed to enable 'attachments' for lorry-mounted cranes to be fitted or changed more easily utilising hydraulic power from the base unit.



Never place any part of your body where it could get trapped, crushed or injured. This quick hitch is designed to make attachment of accessories to cranes safer than existing methods, utilising hydraulic power where manual intervention was previously necessary. Careful operation and a common sense approach will ensure you achieve these objectives.



The 'Quick Hitch' unit is a welded construction and therefore cannot be dismantled for servicing. In the unlikely event that a problem arises, the unit must be returned to Autoguide Equipment Ltd for any repair or service work.

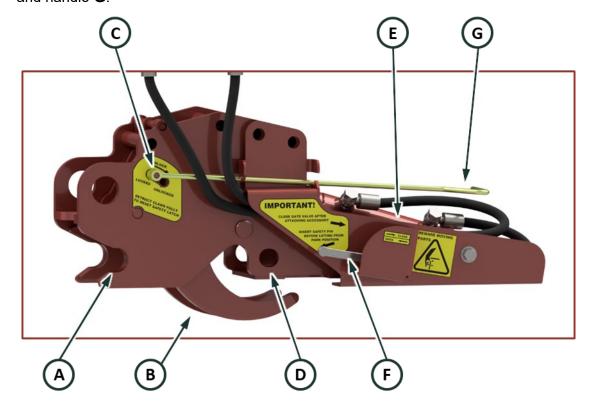


The "Pole Grab" can only be mounted to a lorry-mounted crane via a "Quick Hitch". Any other methods of mounting could cause serious injury or death.

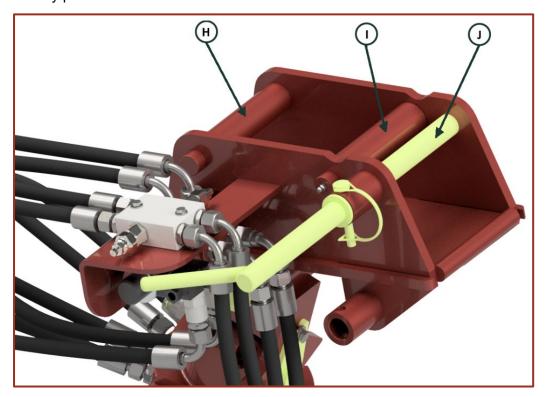
Principle of Operation

The Hitch comprises two separate assemblies:

 The Quick Hitch – this is bolted onto the crane boom using a set of boom clamp plates and has a hydraulic powered claw to grip the attachment. It consists of a fixed jaw A, a rotating claw B, a safety catch C, a safety pin hole D, a hydraulic cylinder E, locking/isolator valve F, and handle G.



2. The attachment – each separate Autoguide attachment has an integrated attach plate on the top which the quick hitch grabs and latches onto. It consists of a fixed pin **H**, rolling sleeve **I** and safety pin **J**.



The quick hitch locates the fixed pin of the attachment into its fixed jaw, before the claw is powered by the hydraulic cylinder to grab and locate the attachment in the hitch. The ram is then sealed using the isolator valve, before the safety pin is inserted through both parts and secured.



The hitch may only be operated with the hydraulic coupler disconnected

Preparation

Before using the Crane Mounted Single Pole Grab, all daily checks should be completed as detailed in Daily Service Items on page **Error! Bookmark not defined.**.

Site Restrictions

Prior to use of the Pole Grab for pole manipulation, it is recommended to cordon off the immediate vicinity to a minimum of 10m or 1.5 times the length of the pole, whichever is longer, from the location of the pole and vehicle. This area should be clearly marked to prevent unauthorised or untrained personal from entering the work area.

Overhead Infrastructure

When working at heights with Pole Erection Vehicles, care should be taken to identify all the overhead lines and or infrastructure, and plan lifts according to operational standards. Further advice regarding working near overhead lines is available from the HES website and details the precautions that need to be taken.

Set Up

Machine Requirements

The hydraulic requirements of the crane to power the Crane Mounted Single Pole Grab is 200 Bar and a maximum of 30Lpm.

Attaching the Pole Grab

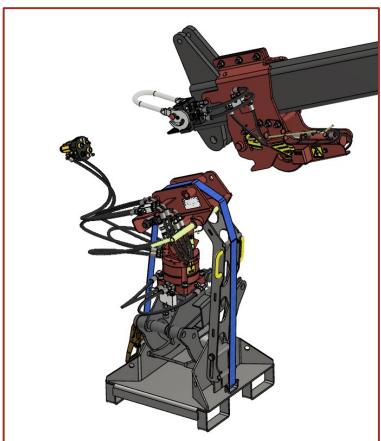








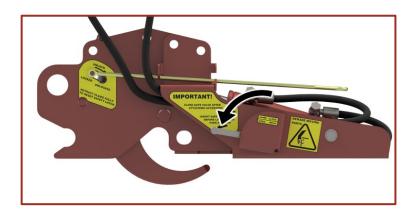
1. The pole grab must be positioned on a suitable flat surface and aligned such that its mounting plate is presented at a suitable angle to the crane boom.



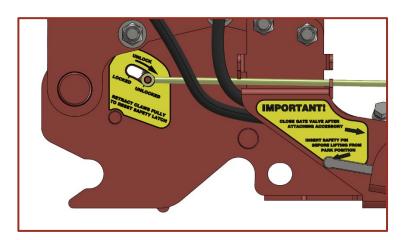


Do not at this stage connect the 3-way hydraulic coupler.

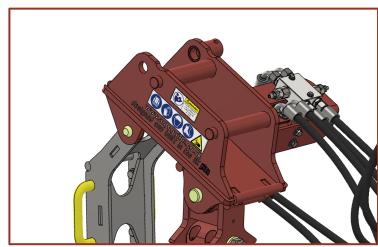
2. Set the lock valve **F** to OPEN (Handle horizontal).



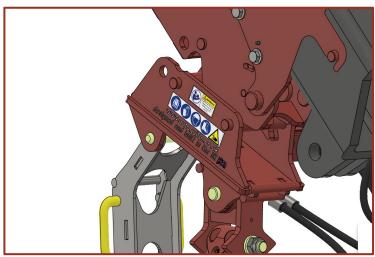
3. If the rotating claws **B** are closed, unlock the safety latch **C** by pulling the handle **G** out. It may be necessary to 'pressurise' the claws into the closed position first, then rotate the claws to the fully open position.



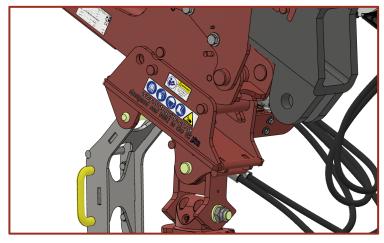
4. Release the ratchet strap on the stowage frame.



5. Move the crane so that the fixed jaws **A** capture the attachment pin **H**.

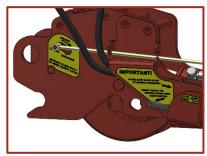


6. Operate the hydraulics to close the claws around the second shaft **I**, lifting the crane boom slightly to aid the movement of the claws. This process is not visible but a claw rotates to secure the second shaft.





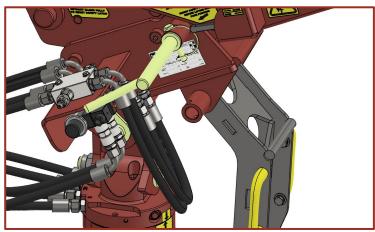




7. Once the claws are fully engaged the safety catch will click into the locked position.



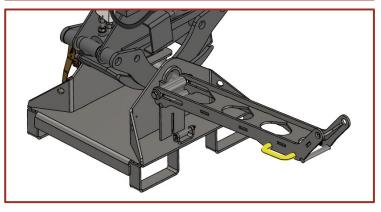
8. Supporting the stowage frame arm using the handles, remove the safety pin **J** and fit into safety pin hole **D** and secure with lynch pin.



9. Set the lock valve **F** to CLOSED (Handle vertical).



10. Tilt stowage pallet support arm clear on the pole grab.



Hydraulic Attachment

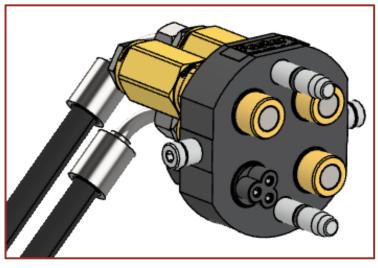








1. Clean the hydraulic couplers on both the crane and pole grab.





Not cleaning the quick couplers may enable dirt to enter the system and damage the hydraulic components, reducing performance and efficiency.

2. Connect the hydraulic connector to supply power to the attachment.

Ensure the handle is pulled over until the red pin locks into place and the handle can't be lifted.



Removing Pole Grab from the Stowage pallet



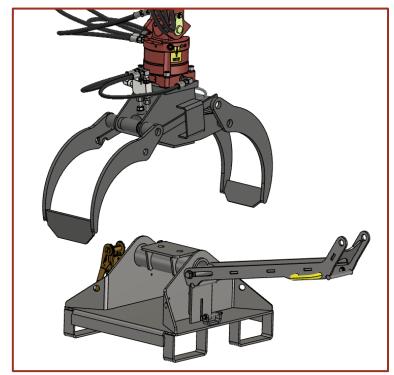




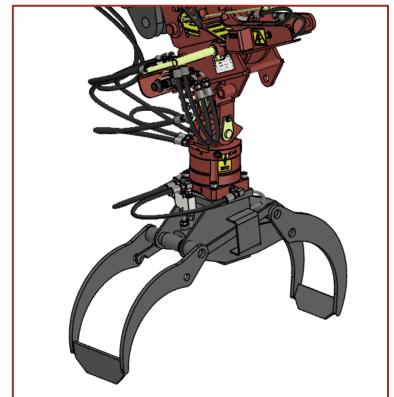


1. Press and hold the switch on the crane control remote that activates the jaws.

Using the auxiliary hydraulic circuit slowly open the jaws at the same time as raising the pole grab in order to clear the stowage pallet.



Release the switch on the remote.
 Using the auxiliary circuit rotate the pole grab to ensure functionality.
 Your pole grab is now ready to use.



Manoeuvring a Pole











Ensure the pole is free from any objects, not underneath other poles and can be lifted without restrictions prior to attempting to grab and manoeuvre it.



It is advisable to have a rope line attached to one end of the pole prior to picking up and manoeuvring with the pole grab. If the pole is not grabbed in the centre then it could cause the grab to rotate due to the imbalance of the weight of the pole

 Manoeuvre the crane to above the centre of gravity of the pole and rotate the jaw so that it is in line with the pole.

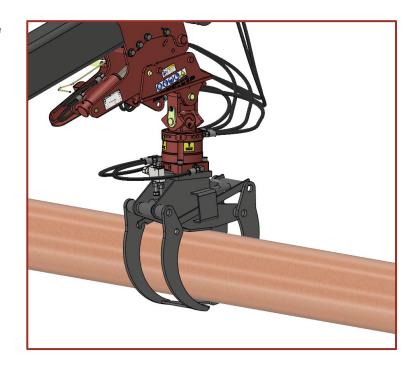


2. Lower the grab to be just above the pole and operate the jaws to tightly close around the pole. The crane may have to be raised or lowered as the jaws close.



3. Gently lift the crane to ensure the pole has been grabbed in the centre of gravity and is balanced when lifted.

If the pole is not balanced lower to the ground and adjust the position of the pole grab until a good balance is achieved.

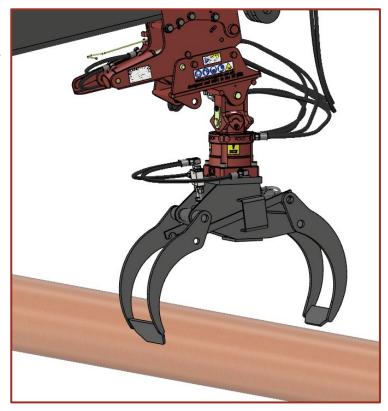




If the pole is not picked up in the centre of gravity and balanced correctly it may prevent rotation due to unequal forces.

4. Once the pole has been manoeuvred to the desired position slowly open the jaws of the pole grab to release the pole.

Ensure the pole is well supported and will not roll before releasing the jaws.





Depending on where the pole is place it may roll, if required close the jaws and reposition the pole.



The pole will lower as it is released, therefore lift the pole grab as the pole is released as not to hit the jaws on the ground.

SERVICE INFORMATION

Service Schedule

The service schedule of machine items is as follows:

		Service Interval			
	Service Item		50 Hours <i>Weekly</i>	100 Hours <i>Monthly</i>	1000 Hours <i>Annually</i>
ulics	Hydraulic Hoses	Visual Inspection			Thorough Examination
Hydraulics	Quick Couplers	Visual Inspection			Thorough Examination
	Fasteners	Visual Inspection		Re-Torque	
	Clips and Pins	Visual Inspection			Thorough Examination
Other	Lubricate All Grease Points	Grease			
	Pivot Points		Check Movement		
	Metalwork	Visual Inspection			Thorough Examination

Daily Check Sheet

Crane Mounted Pole Grab Daily Check Sheet

Serial No.	Date
Name	Signature

Item	Description	Tick
Crane Fitment	Unit is securely attached to crane	
Bolt Torque	All tight and present. No signs of corrosion.	
Metalwork	All in good condition, handles straight, holes round and not elongated. No broken welds	
Clips and Pins	All pins present, in good condition and functioning as designed	
Hydraulics	All hoses in good condition. No leaks	
Quick Couplers	Couplers in good condition and free from dirt	
Lubricate	Lubricate all grease points with high performance lithium grease.	

Bolt Tightening

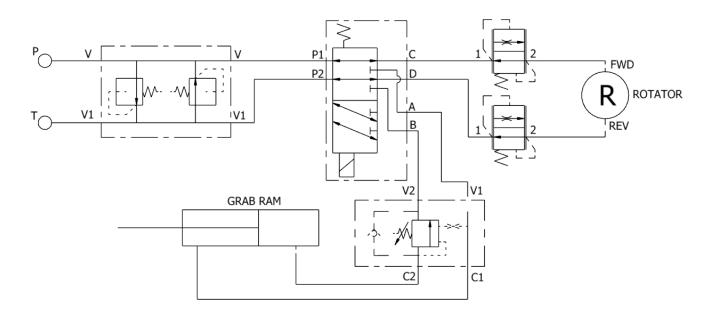
Due to the nature of the environment in which the pole grab is used, it is possible the bolts can work loose during operation. It is therefore critical that all bolts and grub screws are re-torqued at regular intervals.

If tightening the bolts please use the torque values listed in the table below.

	Tightening Torque (Nm)			
Bolt Size	Hex Head Bolt Grade 8.8 – Zinc Plated	Cap Head Bolt Grade 12.9	Bolt in Aluminium Tapped hole	
M6	8	16	6	
M8	20	40	17	
M10	40	80	33	
M12	70	140	60	
M14	112	225	94	
M16	175	350	-	
M18	241	480	-	
M20	341	680	-	
M24	590	1150	-	
M30	1171	2300	-	

Hydraulic Oil

Hydraulic System Schematic



Hydraulic Oil

The machine is powered by Hydraulic Oil. Clean oil and filters are essential for reliability and performance.

The machine runs on **HLP 46 Grade Hydraulic Mineral Oil**. Ensure the crane is using the same grade of oil.

Lubrication

There are multiple grease points located on the machine. It is important that these grease points are all lubricated frequently, either after every 10 hours of service or daily, whichever is first. Steps should be taken to clean up excess grease.

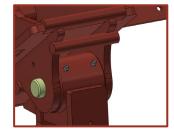
All points can be greased manually with a grease gun using a multipurpose lithium based grease.

List of Grease Points

Attachment Bracket Roller



Main Pivot x 2



Rotator Pivot



Jaw Pivots x 9



TROUBLESHOOTING

Symptom	Possible Cause	Action	
	No oil flow	Check that quick release couplers are correctly engaged and locked together.	
	NO OII IIOW	Check that hydraulic system is operating correctly and has sufficient oil of the correct grade.	
	Restricted oil flow	Check for damaged or incorrect hydraulic hoses and connections.	
	Blocked hydraulic filter	Change filter and oil.	
No Rotation or Jaw Function	Back pressure too high	Ensure ½" Hydraulic feed hoses are being used to reduce back pressure.	
	Faulty manual or remote switch	Check switch functionality and voltage output.	
	Valve spool not switching	Check supply voltage to valve.	
	Broken or failing rotator	Return to Autoguide Equipment for assessment.	
	Broken or failing jaws	Return to Autoguide Equipment for assessment.	
	Spool Valve leaking	Replace the spool valve	
Unexpected	Spool Valve not returning to neutral	Replace the spool valve	
Movement	Jaws opening under load	Replace the jaw ram check valve	
	Excessive Hydraulic Flow	Check the specification of the hydraulic system to ensure output is correct	
	Insufficient oil flow from hydraulic system	Check that hydraulic system is operating correctly and has sufficient oil of the correct grade.	
Slow Movement	Hoses too small for flow	Ensure ½" Hydraulic feed hoses are being used to reduce back pressure.	
	Broken or failing rotator	Return to Autoguide Equipment for assessment.	
Jerky	Cold oil	Let hydraulic system run with the flow on to allow time for the engine and oil to warm up	
Movement	Air in pipes	Check oil in the reservoir.	

	Loose Fittings	Check and tighten hydraulic fittings.
Oil leaks	Damaged Hoses	Replace if leaking. Ensure suitable hose of the correct pressure rating is used.
	Pressure Too High	Ensure the hydraulic supply is suitable for the machine specifications and that they do not exceed the maximum flow and pressure on the data plate.

Please contact Autoguide Equipment if there are any issues that cannot be resolved with the advice above.



SERVICING

Autoguide Equipment prides itself not only on the quality of its products but also on the comprehensive support it provides to you, our customers. As part of our commitment to ensuring maximum performance and longevity, Autoguide offers servicing for all products within our extensive range. Whether it's hydraulic powerheads, augers, or other machinery, customers can rely on Autoguide for topnotch maintenance.

One of the standout features of Autoguide's servicing is its flexibility. Customers have the option to have their equipment serviced either on-site or at Autoguide's well-equipped workshop. This flexibility ensures minimal disruption to operations, as customers can choose the option that best suits their needs and schedule. Whether it's a routine check-up or addressing specific issues, Autoguide's team of skilled technicians is dedicated to delivering prompt and reliable servicing to keep equipment running smoothly.

With Autoguide Equipment, customers not only invest in cutting-edge machinery but also in the assurance of ongoing support and maintenance, maximising the value and efficiency of their equipment over the long term.



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END OF LIFE

When the machine reaches the end of its useable lifetime it is important that the independent elements of the machine are reused, recycled or disposed of suitably.

Component	What to do?
Metals	All metals should be recycled with an appropriate scrap metal merchant, preferable sorted into metal type.
Electronics	All electrical components should be recycled at an appropriate facility according to the WEEE Directive and Regulations 2013
Oils	Oil waste is classed as Hazardous and therefore must be stored separately and according to legal regulations (that differ dependent on country). It must be disposed of be a suitable Waste Oil collection company.
Hydraulic Hoses	Hydraulic hoses should be drained of oil, metal ends removed and then recycled with a suitable specialist recycling company. Metal ends can be sent to metal recycling centers.
Plastics	All plastics should be sorted into recyclable and no recyclable and then either sent to suitable recycling facilities or landfill.

WARRANTY

Coverage

Autoguide Equipment warrants the product against defects in materials and workmanship for 12 months from the date of purchase, applicable to the original purchaser only, when paid in full.

What's Covered

We will repair or replace, at our discretion, any defective parts or the entire product during the warranty period, free of charge determined as defective by Autoguide. The customer is responsible for returning the product for warranty inspection to the Autoguide's facility. Parts should not be delivered without the prior agreement from Customer Services. Autoguide are not liable for any associated costs relating to a warranty failure. Parts repaired or replaced by Autoguide are then covered by this warranty for the remainder of the original warranty as if such parts were original parts.

Exclusions

Damage resulting from misuse, abuse, unauthorised modifications, normal wear and tear, or external causes is not covered. This warranty is void if any attempt is made to make field repairs unless these have been preapproved, or the data plate has been removed.

Obtaining Service

Contact Customer Services for warranty service, providing proof of purchase, product serial number (located on the data plate) and a description of the problem.

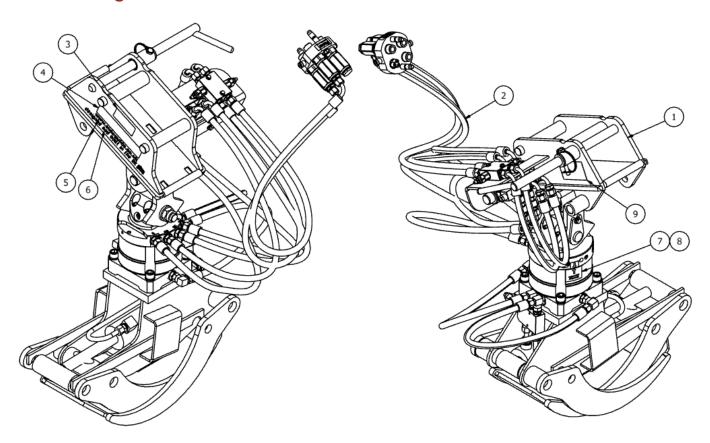
Limitation of Liability

Autoguide Equipment shall not be liable for incidental, consequential, or special damages arising from product use.

General Terms & Conditions: Refer to our standard T&C's https://www.autoguideequipment.co.uk/tcs-ag-v2-8

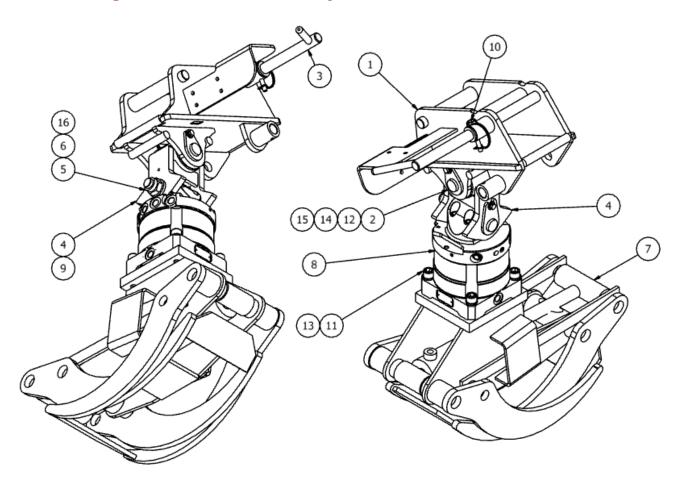
SPARE PARTS

54538 - Single Crane Grab GA



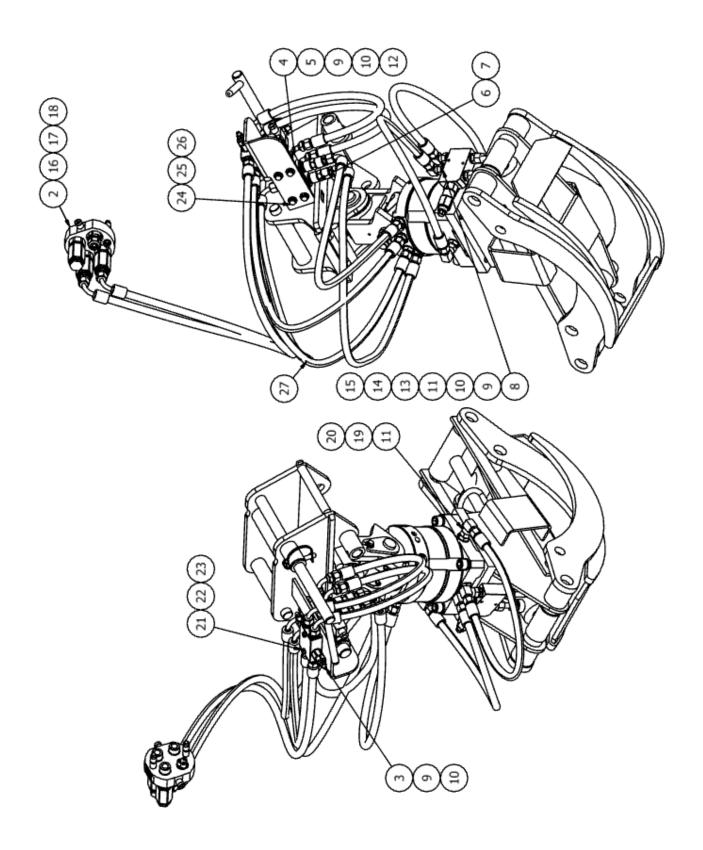
No.	Code	Description	Quantity
1	54537	Single Crane Grab Assembly	1
2	55027	Single Crane Grab Hydraulics	1
3	54836	Read Manual Decal	1
4	55028	Safety Decal	1
5	51731	Website Decal	1
6	51729	Designed In UK Decal	1
7	55331	Stowage Upper Decal	1
8	55330	Stowage Lower Decal	1
9	47394	Data Plate	1

54537 – Single Crane Grab Assembly



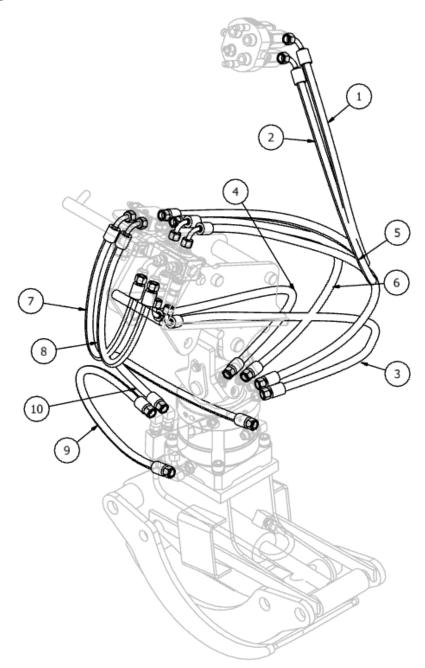
No.	Code	Description	Quantity
1	54422	Single Grab Quick Hitch	1
2	52608	Swivel Pin Quick Hitch	1
3	50471	Locking Pin	1
4	54429	Single Grab Swivel	1
5	54935	Swivel Washer	1
6	54432	Swivel Pin	1
7	12813	Grab	1
8	13102	Rotator	1
9	13016	Steel Bush	2
10	05591	Shaft Locking Pin	1
11	10796	Bolt Cap M16 x 65	4
12	02449	Bolt Set M8 x 20	2
13	02808	Washer Spring M16	4
14	02521	Washer Spring M8	2
15	02977	Washer Flat M8 Form C	2
16	13015	Nut Nyloc M24 x 1.5 Thin	1
17	02137	Nipple Grease Nipple	3

55027 - Single Crane Grab Hydraulics



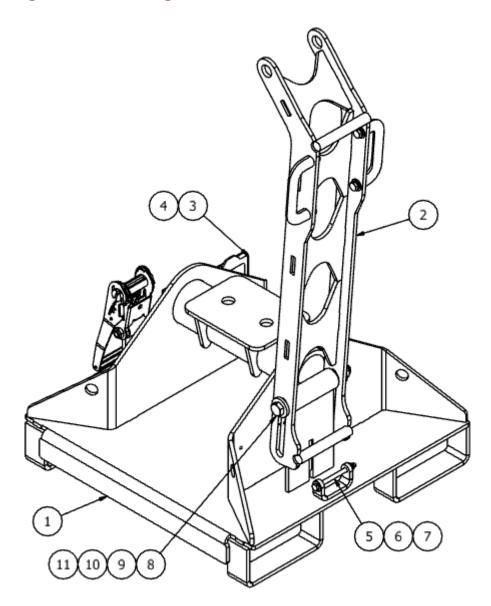
No.	Code	Description	Quantity
1	55026	Grab Ram Tube	1
2	04530	Hydraulic Coupler	1
3	08637	Relief Valve	1
4	08712	Diverter Valve	1
5	10155	LED Indicator	1
6	13403	Flow Control Cartridge Housing	2
7	13402	Flow Control Cartridge	2
8	10828	Single Overcentre Valve	1
9	01812	Seal Bonded 3/8"	18
10	01095	Adaptor MM 3/8"	12
11	01120	Compact Elbow MF 3/8"	2
12	01121	Swept Elbow MF 3/8"	2
13	12873	Standpipe 3/8" 12S	1
14	08846	Coupling Stud 3/8" Male 12S	1
15	04220	Coupling Stud 3/8" Male 12L	2
16	02182	Seal Bonded 1/2"	3
17	01096	Adaptor MM 3/8" to 1/2"	2
18	02273	Plug 1/2"	1
19	03163	Seal Bonded M18	6
20	10776	Adaptor MM 3/8" to M18	6
21	12524	Bolt Hex M6 x 55	2
22	02350	Washer Flat M6 Form C	4
23	02513	Nut Nyloc M6	2
24	02449	Bolt Set M8 x 20	4
25	02521	Washer Spring M8	4
26	02977	Washer Flat M8 Form C	4
27	55031	Single Crane Grab Hose Kit	1

55031 - Single Crane Grab Hose Kit



No.	Code	Description	Quantity
1	55032	Hose 1	1
2	55033	Hose 2	1
3	55034	Hose 3	1
4	55035	Hose 4	1
5	55036	Hose 5	1
6	55037	Hose 6	1
7	55038	Hose 7	1
8	55039	Hose 8	1
9	55040	Hose 9	1
10	55041	Hose 10	1

55061 - Single Grab Stowage Frame



No.	Code	Description	Quantity
1	55057	Single Grab Stowage Base	1
2	55098	Cradle Arm	1
3	04553	Coupler Stowage	1
4	12819	Bolt Cap M8 x 12	2
5	02457	Bolt Hex M8 x 100	1
6	02977	Washer Flat M8 Form C	2
7	02496	Nut Nyloc M8	1
8	02792	Bolt Hex M16 x 180	1
9	13408	Washer Nylon Flat M16 Form A	4
10	13409	Washer Flat M16 DIN 7349	2
11	03941	Nut Nyloc M16	1
12	10935	Ratchet Strap	1



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