

AUTOGUIDE EQUIPMENT

FRONT MOUNTED **POLE GRAB**

MANUAL

SPARE PARTS

Autoguide Equipment Ltd Stockley Road, Heddington, Calne, Wiltshire, UK, **SN11 0PS** +44(0)1380 850885 www.autoguide.co.uk



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These instructions give safety and operations information regarding the use of a Digger Mounted Postmaster supplied by Autoguide Equipment. They contain the relevant information for products:

Product Code	Description	Force (Tm)
48592	Front Mounted Pole Grab	3.5

To ensure optimum results when operating this machine 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 machine.

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:-

CONTENTS

Information	3
Safety Instructions	3
Daily Check Items	4
Installing The Pole Grab	5
Electrical Installation	5
Attaching the Pole Grab to the Backhoe Loader	6
Detaching the Pole Grab from the Backhoe Loader	6
Handling Poles	7
Service Information	9
Troubleshooting1	0
End of Life1	1
Spare Parts List12	2
Pole Grab Final Assembly12	2
Pole Grab Initial Assembly1	3
Mount Frame Assembly1	4
Jaw Frame Assembly1	5
Jaw Ram Assembly1	6
Pole Grab Hydraulics1	7

INFORMATION

Your 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.

Safety Instructions

- 1. Read and understand this operator's manual prior to operating the machine and keep it in a convenient place for future reference.
- 2. Keep untrained personnel away from the machine whilst it is in operation.
- 3. Keep all guards and safety devices in place.
- 4. Do not operate machine with guards removed.
- 5. Beware, pressured hydraulic oil can be very dangerous and can penetrate the skin TAKE THE UTMOST CARE.
- 6. Keep hands, feet and loose clothing away from moving parts.
- 7. Always switch off the machine before making any adjustments or when carrying out lubrication and servicing.
- 8. Keep all nuts, bolts and fasteners tightened.
- 9. Check machine regularly for damaged or worn parts.
- 10. If the machine is left unattended ensure that it is locked or disabled to prevent use by untrained personnel.

Daily Check Items

- 1. Check the unit is properly and securely attached to the Power unit.
- 2. Checks that all nuts and bolts are secure, mounting pins are properly retained, and all safety shields are in place. (All nuts and bolts should be checked after the first 10 hours of operation.)
- 3. Check the condition of hydraulic hoses and couplers
- 4. Lubricate all grease nipples.

INSTALLING THE POLE GRAB

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.

Electrical Installation

For the operation of the Pole Grab a switch is required to be installed within the cab to enable to operator to switch between hydraulic functions. This switch is connected to a socket that is mounted on the front arm which the pole grab can be plugged into.

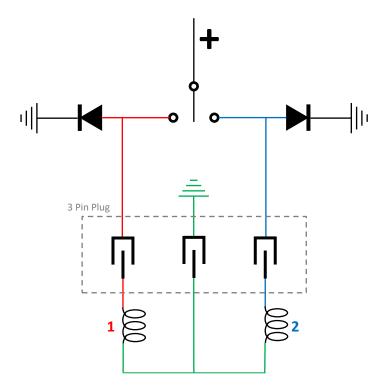
Supplied with the pole grab are a 3 position On-Off-On rocker and toggle switch, giving the user preference to which to install along with 10m of 3 core cable and a 110V Socket.

To install:

- 1. Decide where to install the switch in the cab and remove the required fascia if necessary.
- 2. Locate a 12V supply on the machine that is powered only when the ignition is "On" and run a feed to the switch position.
- 3. From the switch position run the supplied 3 core cable along the front arms to the end.
- 4. Install the 110V socket onto the front arm, next to the hydraulic quick couplers.



5. Wire the switch to the socket, using the wiring diagram below.



- 6. Connect the return wire from the socket to ground.
- 7. Test the circuit using a multimeter to ensure correct installation.
- 8. Install the switch in the cab and replace fascia's if required.

Attaching the Pole Grab to the Backhoe Loader

- 1. Ensure that the Pole Grab is parked on even and level ground.
- 2. Drive the backhoe loader up to the grab and position the mounting frame so that the location pin holes are aligned.
- 3. Fully switch off the power unit and depressurise the hydraulic auxiliary circuit.
- 4. Insert pins through the grab and front arm, securing with supplied bolts. NOTE: If using a quick hitch activate pins and physically check to ensure correct insertion.
- 5. Connect the hydraulic hoses and plug the electrical plug into the socket.
- 6. Check the hoses are suitable positioned and won't get trapped during use.
- 7. Switch on the backhoe loader and test the unit to ensure correct functionality.

Detaching the Pole Grab from the Backhoe Loader

- 1. Lower the Pole Grab unit onto even and level ground.
- 2. Ensure the front frame is set horizontal and parallel to the rear frame, and the jaws are fully closed.
- 3. Fully switch off the power unit, and release the pressure in the hydraulic hoses.

HANDLING POLES

- 1. Ensure the size and weight of the pole does not exceed the maximum capacity of the Handler/Power unit.
- 2. Ensure poles are stored in accessible positions so they can be picked up easily and without the need for manual intervention. If poles are stacked, ensure spacers are used with adequate 'chocks'.
- 3. With the jaw arms open, manoeuvre to the pole and using the front arms position the jaw frame under pole.



- 4. Tilt the grab backwards to roll the pole into the jaw frame and shut the jaw arms to clamp the pole in the grab.
- 5. Reverse and then rotate the pole to be parallel to the backhoe loader for transport. If the transport cradle is fitted above the cab rest the pole in the cradle.



6. At pole planting location, tilt the polegrab so that the pole is vertical and position above predug hole.



- 7. Place the butt of the pole in the hole and ensure all bystanders are clear. Without opening the jaws completely, gently release the jaws to enable the pole to fall through and into the hole.
- 8. Use the polegrab rotate and front arm tilt to ensure the pole is installed vertically.
- 9. Backfill and tamper the hole.
- 10. Once the pole is stable and secured, the jaws can be fully opened and the pole released.

SERVICE INFORMATION

The service schedule of machine items is as follows:

Service Item		First 50 hour service	Service Interval			
			10 Hours <i>Daily</i>	50 Hours <i>Weekly</i>	500 Hours 6 Months	1000 Hours Annually
ics	Hydraulic Oil		Check			Change
Hydraulics	Rams			Inspect		
Hyo	Pipes			Inspect		
er	Lubricating Points	Check		Check		
Other	Fasteners	Check		Check		

TROUBLESHOOTING

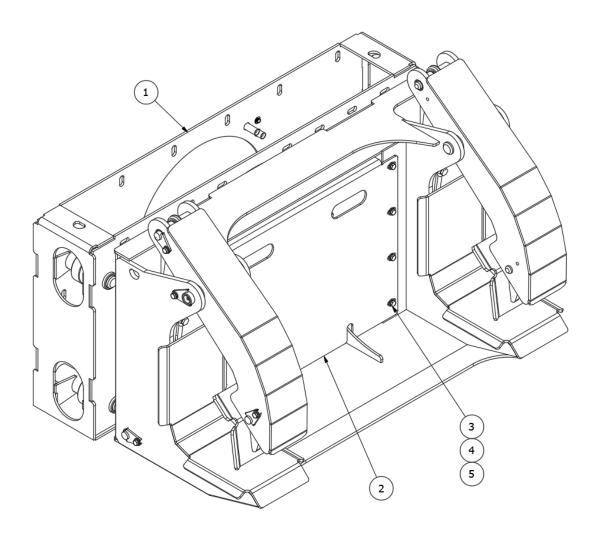
Symptom	Possible Cause	Action
Jerky	Cold Oil	Allow time to warm up
	Air in Pipes	Check oil Level
	Non Compatible Quick Couplers	Use Matched pairs
	Non Compatible Quick Couplers	Replace
	Hoses too small for flow	Replace
Slow	Pump Failing	Carry Out flow and Pressure Check
	Oil Filter Blocked	Carry Out flow and Pressure Check
	Dirt Contamination	Service Exchange Motor
Deen Lifting	Low Hydraulic Pressure	Carry Out Flow and Pressure Check
Poor Lifting Capability	Excessive Oil Temperature	Check Pump, Check Hose Sizes, Use Correct Powerhead
	Loose Fittings	Tighten Up Fittings
Oil leaks	Leaky Connections	Reseal or check Configuration
	Pressure Too High	Use compatible head and fittings
	Lose Plug	Re-plug in electric connection
No functionality	No electronic feed to switch	Check using multimeter to ensure 12V feed
	Valve malfunctioning	Check to see if LED indicators on valve are alight when functions are selected

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 electronical 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.

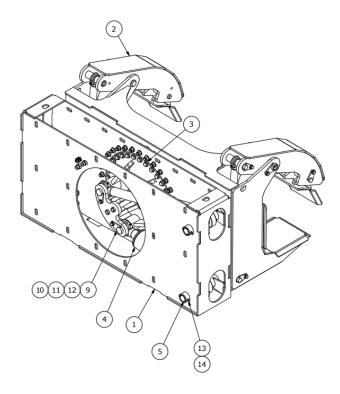
Pole Grab Final Assembly

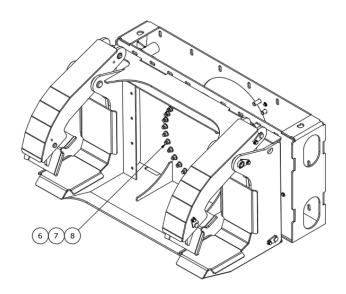


Code	Description	
48592	Pole Grab Assembly Stage 2	

No.	Code	Description	Quantity
1	48593	Pole Grab Assembly Stage 1	1
2	48645	Cover Plate	1
3	01158	Bolt Set M10 x 30	8
4	02702	Washer M10	8
5	02525	Washer Spring M10	8
6	48660	Pole Grab Electronics	1

Pole Grab Initial Assembly

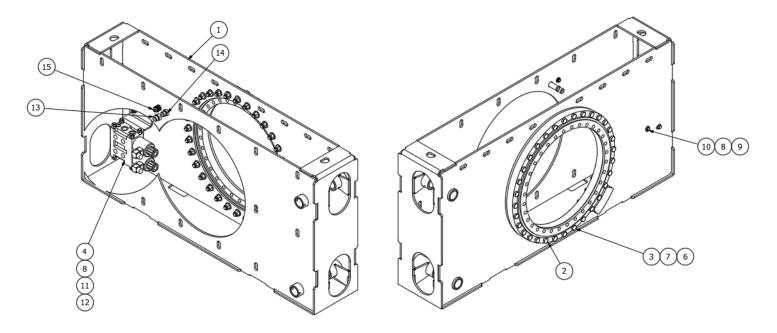




Code **48592** Description
Pole Grab Assembly Stage 1

No.	Code	Description	Quantity
1	48595	Mount Frame Assembly	1
2	48601	Jaw Frame Assembly	1
3	48588	Rotator WA Stage 3	1
4	12254	Pivot Ram	2
5	48614	Rotate Ram Butt Pin	2
6	03008	Washer M14	64
7	03006	Nut Nyloc M14	32
8	10877	Bolt Hex M14 X 100	32
9	48590	Rotate Ram Head Pin WA	2
10	02702	Washer M10	2
11	02525	Washer Spring M10	2
12	01158	Bolt Set M10 X 30	2
13	02455	Bolt Hex M8 X 70	2
14	02496	Nut Nyloc M8	2

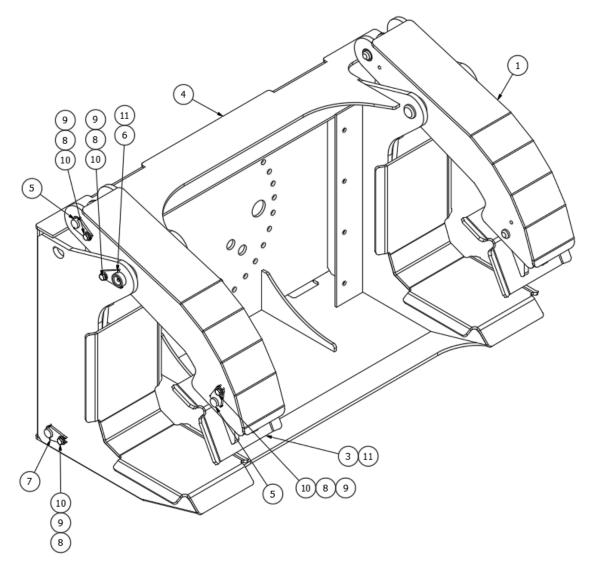
Mount Frame Assembly



Code **48595** Description Mount Frame Assembly

No.	Code	Description	Quantity
1	48594	Mount Frame WA	1
2	10523	Ring Bearing	1
3	11964	Bolt Hex M14 X 75	32
4	10802	Valve	1
5	48659	Valve Mount	1
6	03008	Washer M14	32
7	03006	Nut Nyloc M14	32
8	02977	Washer M8	8
9	02496	Nut Nyloc M8	2
10	02992	Bolt Set M8 X 30	2
11	02521	Washer Spring M8	4
12	02449	Bolt Set M8 X 20	4
13	04578	Bulkhead 008 MM BSP	1
14	02242	Bulkhead 008 MM BSP EXT	1
15	11771	Gland Cable M016 Black	1

Jaw Frame Assembly

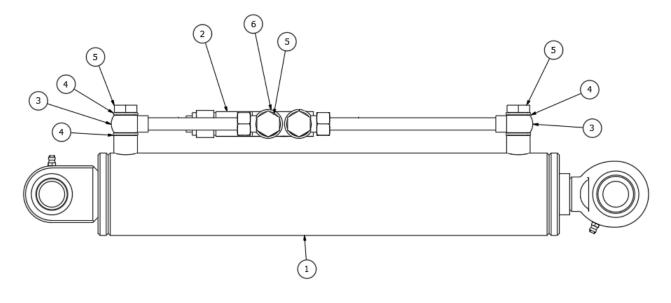


Code **48601**

Description
Jaw Frame Assembly

No.	Code	Description	Quantity
1	48605	Arm WA	2
2	48596	Jaw Ram Assembly	2
3	48586	Jaw WA	2
4	48599	Jaw Frame WA Stage 2	1
5	48597	Jaw Pin WA	4
6	48606	Arm Pin WA	2
7	48591	Ram Pin WA	2
8	02702	Washer M10	8
9	02525	Washer Spring M10	8
10	02329	Bolt Set M10	8
11	02137	Grease Nipple M6X1	4

Jaw Ram Assembly



Code **48596** Description
Jaw Ram Assembly

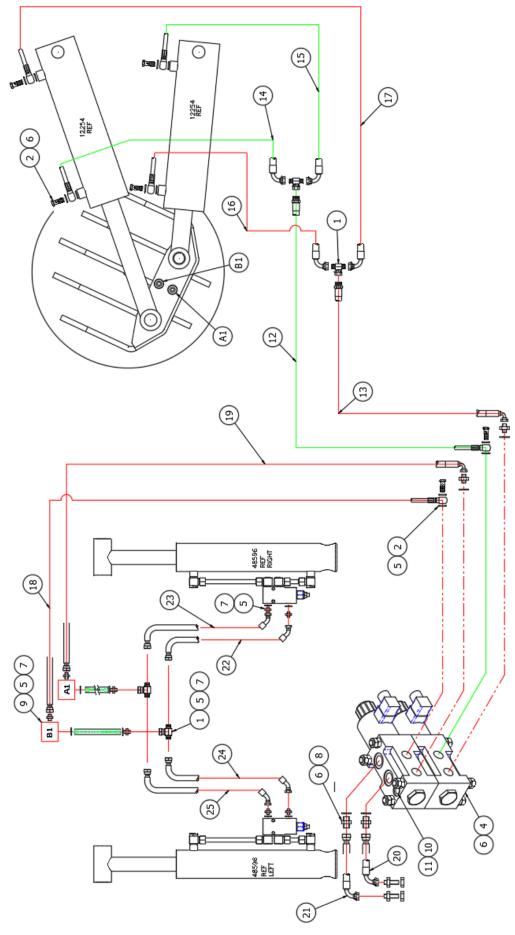
No.	Code	Description	Quantity
1	12253	Pivot Ram	1
2	10828	Valve	1
3	11954	Fitting 006 Banjo Tube 199L	2
4	01812	Seal Bonded 006	8
5	05601	Fitting 006 Banjo Bolt	4
6	11956	Fitting 006 Banjo Nut Olive	2

Pole Grab Electronics

Code	Description
48660	Pole Grab Electronics

No.	Code	Description	Quantity
1	04999	12V LED Indicator	2
2	10830	Socket 110V 16A 3 Pin	1
3	10727	Plug 110V 16A 3 Pin	1
4	03984	Switch Toggle On-Off-On	1
5	11972	Switch Rocker On-Off-On	1
6	11971	Switch Rocker Lens Actuator	1

Pole Grab Hydraulics



Code **48592 - HYD**

Description Pole Grab Hydraulics

No.	Code	Description	Quantity
1	01133	Tee 006 MMF BSP	4
2	01923	Fitting 008 Banjo Bolt	4
3	05601	Fitting 006 Banjo Bolt	2
4	01677	Plug 006	2
5	01812	Seal Bonded 006	20
6	2182	Seal Bonded 008	8
7	01095	3/8" MM Adaptor	10
8	01096	3/8"-1/2" MM Adaptor	2
9	10787	Swivel BSP 006 90 Deg	2
10	01813	Seal Bonded 004	1
11	02132	Plug 004	1
12	48878	Hose 1	1
13	48879	Hose 2	1
14	48880	Hose 3	1
15	48881	Hose 4	1
16	48882	Hose 5	1
17	48883	Hose 6	1
18	48884	Hose 7	1
19	48885	Hose 8	1
20	48886	Hose 9	1
21	48887	Hose 10	1
22	48888	Hose 11	1
23	48889	Hose 12	1
24	48890	Hose 13	1
25	48891	Hose 14	1



Autoguide Equipment Stockley Road Heddington Nr. Calne Wiltshire SN11 OPS England

Tel: +44 (0) 1380 850885

Website: www.autoguide.co.uk

