

# CABLE DRUM SPREADER BAR

# MANUAL SPARE PARTS

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



Published: 15 March 2023 ID: M021 1.3

These instructions give safety and operations information regarding the use of a Cable Drum Spreader Bar supplied by Autoguide Equipment. They contain the relevant information for products:

Product Code	Description	Maximum Capacity (kg)	Maximum Drum Width (mm)	Maximum Drum Diameter (mm)	Minimum Drum Hole Size (mm)	Bar Weight <i>(kg)</i>
39543	Cable Drum Spreader Bar 76/2	5000	1700	2600	80	22
39544	Cable Drum Spreader Bar 76/1.5	5000	1200	2300	80	17
39545	Cable Drum Spreader Bar 50/2	2500	1700	2600	55	11
39546	Cable Drum Spreader Bar 50/1.5	2500	1200	2300	55	8

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.

number of the	relevant equipme	nt supplied, has bee	ii recorded below for	i your imormation
Model No:-				

Serial No:-

Date of Delivery:-

# **CONTENTS**

Information	3
Safety Instructions	3
Limitations of Use	3
Daily Check Items	4
Operation	5
Attaching to the Crane	5
Attaching to the Cable Drum	5
Unrolling the Cable	5
Removing the Cable Drum	5
Storage of Equipment	6
Maintenance of Equipment	6
Repair & Spare Parts	6
End of Life	7
Spare Parts	8
39543 – Cable Drum Spreader Bar 76/2	9
39544 – Cable Drum Spreader Bar 76/1.5	10
39545 – Cable Drum Spreader Bar 50/2	11
39546 – Cable Drum Spreader Bar 50/1.5	12
Risk Assessment – Cable Drum Spreader Bar	i
Section 1: Assessment Information	i
Section 2: Likelihood/Severity of Injury	i
Section 3: Control Measures	ii
Further Action Required	ii

# **INFORMATION**

The Autoguide Cable Drum Lifter and Un-roller 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 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 using the equipment and keep it in a convenient place for future reference.
- 2. Keep untrained personnel away from the equipment whilst it is in operation.
- 3. Keep all guards and safety devices in place.
- 4. Do not operate machine with guards removed.
- 5. Keep hands, feet and loose clothing away from moving parts.
- 6. Always switch off the machine before making any adjustments or when carrying out lubrication and servicing.
- 7. Keep all nuts, bolts and fasteners tightened.
- 8. Check equipment regularly for damaged or worn parts.
- 9. If the equipment is left unattended ensure that it is locked or disabled to prevent use by untrained personnel.

### **Limitations of Use**

This equipment has been solely designed for lifting and un-rolling Cable Drums. Under no circumstances should the equipment be used for any other purpose.

Note: This equipment has a Working Load Limit of 5 tonnes or 2.5 tonnes as detailed previously. Under no circumstances should this load be exceeded!

### **Daily Check Items**

Check the unit is properly and securely attached to the crane/excavator unit.

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: Bearing Bolts to 220Nm; Spreader Bar bolts to 92Nm)

Check the condition and security of all chains and couplings.

# **OPERATION**

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.

### **Attaching to the Crane**

Attach the lifting equipment to the crane using the correct size of hook or swivel. Hook into the multilink, and ensure that the chain links are in line, with no twists.

### **Attaching to the Cable Drum**

- 1. Slide the aluminium spindle through the centre hole of the drum, ensuring approximately equal amounts of bar protruding from either side.
- 2. You can see that whilst the two cones are identical, the sleeve 3 & 4 are different. First locate the non-threaded sleeve in its cone on one end of the tube using the one shaft locking pin 6. Now go round to the other end of the shaft and slide on the other cone and backing nut. The sleeve can be located in such a way that you can gently tighten the nut to keep the cones in the drum centre bore. The cones don't need to be too tight as long as they are fully engaged in the bores.
- 3. Now slide the bearings onto the tube ends and lock in position using the pins and attached R clips.
- 4. The drum can now be carefully lifted

### Note: It will rotate so keep well clear.

- 5. Cable can be fed off the drum as required.
- 6. Extra holes for restraints are provided to keep the spindle aligned when necessary.

### **Unrolling the Cable**

The Cable drum should now be able to rotate freely on the bearings, and allow the unwinding of the cable. Extra restraining points are located on the bearing plates, and can be used to prevent lateral movement of the drum as the cable is unwound. These can be anchored to the specified anchor points on the lifting vehicle.

### **Removing the Cable Drum**

The process is self explanatory and the reverse of the method above. However, do not attempt to remove any locking pin or slacken the backing nuts until the drum is fully supported, chocked and the chains are slack.

It should be possible to unwind the backing nut and remove all components entirely by hand.

Note: The cones are part plastic and part steel, were they all plastic the thin end would be easily damaged. All steel and they would be too heavy.

### **Storage of Equipment**

It is recommended that the spindle, collars and shaft locking pins are assembled onto the spreader bar before detaching from the crane. All components are then kept in place and the chance of losing parts is reduced. Store the equipment in an area where it will not get accidentally damaged.

### **Maintenance of Equipment**

It is advised that the following maintenance routine be followed MONTHLY.

- The equipment should be regularly checked for any signs of damage or fatigue.
- Check the lifting chains and coupling links for signs of wear.
- Inspect Spreader bar for straightness, or any signs of damage.
- Check that bearings revolve smoothly.
- Ensure all nuts and bolts are correctly tightened (Bearing Bolts 220Nm, Spreader Bar Bolts 92Nm).
- The bearings should be greased after every 50 HOURS via the nipple on the flange. Only pump in grease until the grease starts to appear around the seals. DO NOT OVERGREASE.

### **Repair & Spare Parts**

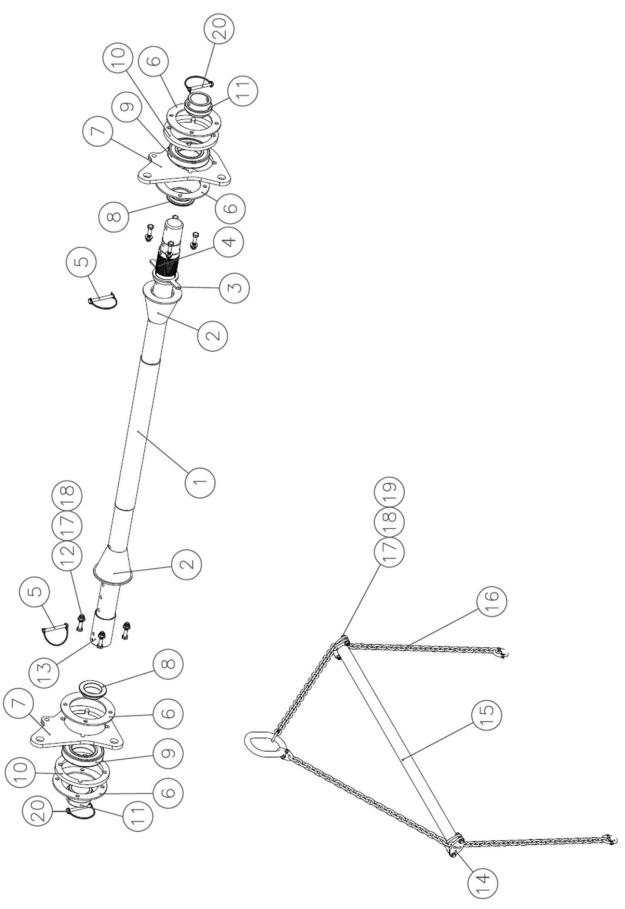
Use only original Autoguide Spare Parts. Do not attempt to repair or alter any part of this lifting equipment.

# **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.

# **SPARE PARTS**



# 39543 – Cable Drum Spreader Bar 76/2

No.	Code	Description	Quantity
1	38318	CABLE DRUM BAR 70/2M	1
2	35960	CONE ASSY	2
3	35957	BACKING NUT W/A	1
4	35507	THREADED SLEEVE	1
5	07812	PIN SHAFT LOCKING 89 X 11MM	2
6	39087	SPREADER BAR BEARING CLAMP	4
7	39085	SPREADER BAR BEARING PLATE	2
8	39088	SPREADER BAR INNER TOP HAT SPACE	2
9	10691	BEARING	2
10	39086	SPREADER BAR BEARING SPACER	2
11	39089	SPREADER BAR OUTER TOP HAT	2
12	02476	BOLT M012 X 065	8
13	35508	NON-THREADED SLEEVE	1
14	34949	CAPTURE PLATE	2
15	39096	SPREADER BAR 2014 W/A	1
16	38316	DRUM LIFTING CHAINS (2M)	1
17	04021	NUT M012 X 1.5 NYLOC	12
18	02105	WASHER M012 FLAT FORM C	12
19	01207	BOLT M012 X 060	4
20	39243	LOCKING PIN 07812	2

# 39544 - Cable Drum Spreader Bar 76/1.5

No.	Code	Description	Quantity
1	35929	CABLE DRUM BAR 76/1.5	1
2	35960	CONE ASSY	2
3	35957	BACKING NUT W/A	1
4	35507	THREADED SLEEVE	1
5	07812	PIN SHAFT LOCKING 89 X 11MM	2
6	39087	SPREADER BAR BEARING CLAMP	4
7	39085	SPREADER BAR BEARING PLATE	2
8	39088	SPREADER BAR INNER TOP HAT SPACE	2
9	10691	BEARING	2
10	39086	SPREADER BAR BEARING SPACER	2
11	39089	SPREADER BAR OUTER TOP HAT	2
12	02476	BOLT M012 X 065	8
13	35508	NON-THREADED SLEEVE	1
14	34949	CAPTURE PLATE	2
15	35518	SPREADER BAR II W/A	1
16	35190	DRUM LIFTING CHAINS (MKII)	1
17	04021	NUT M012 X 1.5 NYLOC	12
18	02105	WASHER M012 FLAT FORM C	12
19	01207	BOLT M012 X 060	4
20	39243	LOCKING PIN 07812	2

# 39545 - Cable Drum Spreader Bar 50/2

No.	Code	Description	Quantity
1	38315	CABLE DRUM BAR 50/2M	1
2	38304	CONE ASSY (50MM)	2
3	35957	BACKING NUT W/A	1
4	38306	THREADED SLEEVE (50MM)	1
5	07812	PIN SHAFT LOCKING 89 X 11MM	2
6	39087	SPREADER BAR BEARING CLAMP	4
7	39085	SPREADER BAR BEARING PLATE	2
8	39550	SPREADER BAR INNER TOP HAT SPACE	2
9	10691	BEARING	2
10	39086	SPREADER BAR BEARING SPACER	2
11	39551	SPREADER BAR OUTER TOP HAT	2
12	02476	BOLT M012 X 065	8
13	38308	NON-THREADED SLEEVE (50MM)	1
14	34949	CAPTURE PLATE	2
15	39096	SPREADER BAR 2014 W/A	1
16	38316	DRUM LIFTING CHAINS (2M)	1
17	04021	NUT M012 X 1.5 NYLOC	12
18	02105	WASHER M012 FLAT FORM C	12
19	01207	BOLT M012 X 060	4
20	39243	LOCKING PIN 07812	2

# 39546 - Cable Drum Spreader Bar 50/1.5

No.	Code	Description	Quantity
1	38303	CABLE DRUM BAR 50/1.5	1
2	38304	CONE ASSY (50MM)	2
3	35957	BACKING NUT W/A	1
4	38306	THREADED SLEEVE (50MM)	1
5	07812	PIN SHAFT LOCKING 89 X 11MM	2
6	39087	SPREADER BAR BEARING CLAMP	4
7	39085	SPREADER BAR BEARING PLATE	2
8	39550	SPREADER BAR INNER TOP HAT SPACE	2
9	10691	BEARING	2
10	39086	SPREADER BAR BEARING SPACER	2
11	39551	SPREADER BAR OUTER TOP HAT	2
12	02476	BOLT M012 X 065	8
13	38308	NON-THREADED SLEEVE (50MM)	1
14	34949	CAPTURE PLATE	2
15	35188	SPREADER BAR 2014 II W/A	1
16	35190	DRUM LIFTING CHAINS (MKII)	1
17	04021	NUT M012 X 1.5 NYLOC	12
18	02105	WASHER M012 FLAT FORM C	12
19	01207	BOLT M012 X 060	4
20	39243	LOCKING PIN 07812	2

# RISK ASSESSMENT - CABLE DRUM SPREADER BAR

### **Section 1: Assessment Information**

Assessment Date	11/04/17
Activity / Item / Area	Cable Drum Spreader Bar
Person at Risk	Operator/User
Total Number of People at Risk	1+
Responsible Person	Crane Operative, Installation Operative
Assessor	Adam Sandey

## Section 2: Likelihood/Severity of Injury

	Significant Risks	Likelihood	Severity	Residual Risk
1.	Injury caused by crushing	2	4	8
2.	Manual Handling	3	2	6
3.	Injury caused by rotation	2	3	6
4.	Injury caused by lifting	1	6	6

		Severity				
		Minor Serious Major Fatality Mult				
Likelihood		1	2	3	4	5
Rare	1	1	2	3	4	5
Unlikely	2	2	4	6	8	10
Moderate	3	3	6	9	12	15
Likely	4	4	8	12	16	20
Certain	5	5	10	15	20	25

Low Risk	Moderate Risk	Significant Risk	High Risk
----------	------------------	---------------------	-----------

Likelihood X Severity = Residual Risk

### **Section 3: Control Measures**

- 1. Appropriate PPE to be worn including Hard Hat, Eye Glasses, Gloves and High Visibility Clothing.
- 2. Crane operative to keep a clear line of sight with spreader bar at all points.
- Hands will be kept away from connecting parts. Connecting parts such as pins will be maintained in good order. Safety clips and other appropriate fittings will be fitted at all times.
- 4. Operators will ensure that all unauthorised persons are kept away from the work area, by bounding off the area if practicable. Cranes to be operated in no such way as to "swing" the cable drum spreader bar and mounted drum if applicable and any other potential hazardous process.
- All fittings to be kept in good working orders, checked for tightness and PPE will be worn when fitting, maintaining or repairing. Any faults will be reported and a record kept.
- 6. All users to have appropriate training to warn of potential hazards and on maintenance and how to use the equipment in a safe and effective behaviour.

### **Further Action Required**

NO FURTHER ACTION REQUIRED

### **Prepared By**

Adam Sandey Autoguide Equipment



Autoguide Equipment Stockley Road Heddington Nr. Calne Wiltshire SN11 0PS England

Tel: +44 (0) 1380 850885

Website: www.autoguide.co.uk

