



TELESCOPIC SYTEMS
Quick Release Shackles

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QR LIFTING SHACKLES

FOR

TELESCOPIC SHAFTS



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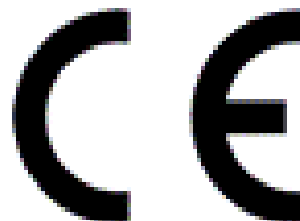
1.0 Conformity

Declaration of Conformity

We Marton Geotechnical Services Ltd at above address declare under our sole responsibility that the product detailed below to which this declaration relates complies with the protection requirements of the EU Machinery Directive 98/37/EC.

Machinery Directive 98/37/EC

<i>Equipment description</i>	Lifting Accesory
<i>Make/Brand</i>	MGS
<i>Models</i>	QRS



A technical file for this equipment is retained at the above address

Bury St Edmunds, UK , October 2008
Martin Clegg
Director



2.0 Markings

QR Shackles are marked with the following information:-

1. Manufacturers details
2. Safe Working Load (SWL = 225 Kg)
3. Year of manufacture
4. Serial number
5. Model
6. CE mark



ALWAYS USE CERTIFIED LIFTING CHAINS, SHACKLES OR STRAPS IN CONJUNCTION WITH THE QR SHACKLES



BEFORE INSTALLING AND OPERATING THE QUICK RELEASE SHACKLES ALWAYS READ THE INSTRUCTIONS MANUAL AND CONSULT MGS IF YOU HAVE ANY DOUBTS REGARDING THEIR FUNCTIONING



ONLY SUITABLY TRAINED/QUALIFIED PERSONNEL SHOULD USE QRS SHACKLES



SUITABLE PERSONAL PROTECTIVE CLOTHING INCLUDING SAFETY GOGGLES, FOOTWEAR AND GLOVES MUST BE WORN

3.0 Introduction

This manual is intended for all users of the **QR Shackles** manufactured by MGS Ltd and provides information on installation, operation and maintenance.

3.1 QR Shackles general description

QR Shackles are designed only for the **on site** lifting into place of MGS Telescopic shaft sections.

They consist of a steel fabricated lifting yoke frame with a spring loaded pin and a pull to release rope attached to an eye bolt on the underside of the pin housing.

The **QR Shackles** enables telescopic shaft sections to be lifted into position and when held securely in position subsequently released quickly and safely from a remote location on the ground. The shackles avoid the costly delay and inherent hazards of putting a person up to the release position.

The **QR shackles** should not be used for any other reason than a static lift as using them to transport telescopic sections is potentially dangerous due to the pins being able to be released under shock loading.



ONLY TO BE USED FOR LIFTING TELESCOPIC SHAFT SECTIONS INTO POSITION



UNDER NO CIRCUMSTANCES SHOULD THE QRS SHACKLES BE USED FOR TRANSPORTING TELESCOPIC SHAFT SECTIONS

4.0 Packaging, handling and storage

4.1 Packaging

The **QR Shackles** should be removed from their packaging prior to use.

4.2 Handling

The **QR Shackles** should always be handled with care during use to avoid physical damage and ingress of detritus into the pin housing.



DO NOT DROP AS THIS MAY CAUSE DAMAGE TO INTERNAL COMPONENTS

4.3 Storage

The **QR Shackles** should be stored in a suitable dry storage area such as a toolbox, chain racking or shelving.



DO NOT STORE ANY OTHER ITEMS ON TOP OF THE QR SHACKLES

5.0 Installation

THE QR SHACKLES SHOULD ALWAYS BE USED IN ACCORDANCE WITH THE FOLLOWING:-

The Provision and Use of Work Equipment Regulations 1998 (P.U.W.E.R.)

The Lifting Operations and Lifting Equipment Regulations (L.O.L.E.R.)

The Health & Safety at Work Act 1974

Local site Health & Safety Regulations

5.1 Getting started

In order to operate the QR Shackles you will need the following:-

1. Suitably rated set of lifting chains or straps
2. Suitably rated lifting equipment such as a crane or excavator
3. Release pull rope



ALWAYS ENSURE THAT THE QR SHACKLES ARE USED IN A WELL VENTILATED ENVIRONMENT TO REDUCE THE LIKELIHOOD OF SPARKING.

ALWAYS ENSURE THAT THE PINS ARE WELL GREASED BEFORE USE



ALWAYS TEST THE OPERATION OF THE QR SHACKLE BEFORE USE



WHEN THE "RELEASE" IS ACTIVATED, THE SHAFT WILL EXTEND SUDDENLY AND COULD CAUSE MINOR INJURY IF IT IMPACTS SOMEONE.... THIS IS ONLY REALLY APPLICABLE WHEN THEY ARE TESTING THE UNIT ON THE GROUND SINCE NORMALLY IT WILL BE INACCESSIBLE.

5.2 Using the QR Shackles

STEP 1

Slide the yoke over the end of pipe and align with lifting holes



TAKE CARE NOT TO TRAP FINGERS/GLOVE IN COMPRESSION SPRING

STEP 2

Firmly push in the spring loaded pin until fully home.

You will here a "click" once this is done and the spring will stay compressed

STEP 3

Attach suitable lifting chains/straps



5.2 Using the QR Shackles contd..

STEP 4

Slowly and carefully lift the telescopic shaft section into position.



DURING LIFTING ENSURE THAT THE PULL ROPE DOES NOT BECOME TANGLED



NEVER LIFT A SECTION IF THE RELEASE ROPE IS TANGLED OR CAUGHT ON SOMETHING AS THIS COULD CAUSE PREMATURE RELEASE OF THE SHACKLE

STEP 5

Once in position pull firmly down on the rope to release pins.



STEP 6

Slowly and carefully lift away shackles to ensure pins are fully retracted.

If pins fully retracted lift away lifting assembly and shackles.





6.0 Fault finding

SYMPTOM	POSSIBLE CAUSE	REMEDY
Pin will not push home	Ingress of debris in pin housing	Clean pin & housing
	Pin bent	Return to manufacturer
Pin will not release	Ingress of debris in pin housing	Clean pin & housing
	Pin bent	Return to manufacturer
	Pin still under load	Check if section is lowered totally
Pin does not stay in lift position	Ingress of debris in pin housing	Clean pin & housing
	Pin bent	Return to manufacturer
	Spring broken	Return to manufacturer

7.0 Specification

Yoke material	Mild steel
Pin	Stainless steel
Pin housing	Stainless steel
Spring	Stainless steel
Maximum safe working load	225Kg
Minimum safe working load	
Release force (no load)	6 Kgf
Release force at minimum safe working load	Kgf
Pull rope	Stainless steel
Unit weight	3Kg



8.0 Assembly - disassembly

Dismantling and re-assembling of the **QR Shackle** should only be done by the manufacturer.

If a problem arises with the **QR Shackle** please contact MGS.

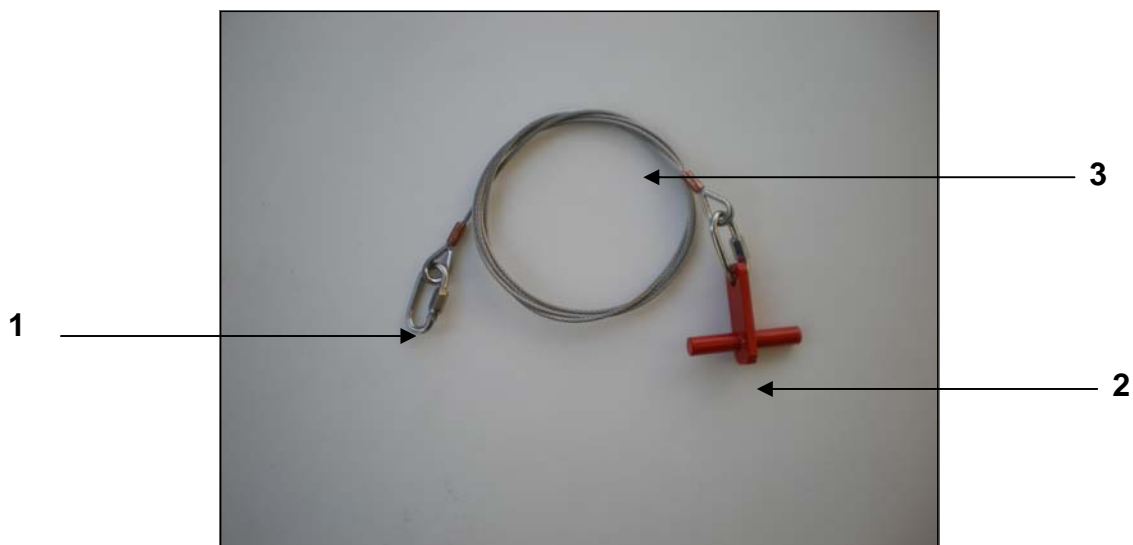


UNDER NO CIRCUMSTANCES DISMANTLE OR RE-ASSEMBLE THE QR SHACKLE

9.0 Spares

No spare parts are available for the **QR Shackle** itself as **ALL** repairs should be carried out by the manufacturer but the following accessories are available:-

Item	Part number	Description
1	M47-010	5mm rapid links
2	M0669	Handle
3	M0668	Pull cord
4	M48-021	Pull cord assembly





10.0 Return of goods

10.1 Returns procedure

If goods are to be returned for either service/repair or warranty, the customer should contact MGS Ltd for a **Returns Authorisation Number** and request a **Returned Equipment Report Form QF034** and **Returned Goods Health and Safety Clearance Form QF038** prior to shipment. This number is to be clearly marked on the outside of the shipment.

Complete the **Returned Equipment Report Form QF034**, including as much detail as possible, and enclose it with the returned goods.

10.1.1 Chargeable Service or Repairs Inspection & estimate

It is the policy of MGS Ltd that an estimate is provided to the customer prior to any repair being carried out and therefore a set charge for inspecting the **QR Shackle** and providing an estimate is also chargeable.

10.1.2 Warranty Claim (See Limited Warranty Conditions)

This covers defects which arise as a result of a failure in design or manufacturing. It is a condition of the warranty that the **QR Shackle** must be installed and used in accordance with the manufacturer's instructions and has not been subject to misuse.

In order to make a warranty claim, contact MGS Ltd and request a **Returned Equipment Report Form QF034**. Tick the warranty claim box and return the form with the goods as above. You will then be contacted and informed whether your warranty claim is valid.

10.2 Packaging and Carriage

All used goods shipped to the factory **must** be sealed inside a clean plastic bag and packed in a suitable carton. If the original packaging is not available, MGS Ltd should be contacted for advice. MGS Ltd will not be responsible for damage resulting from inadequate returns packaging under any circumstances.

10.3 Transport & Storage

All goods should be adequately packaged to prevent damage in transit or intermediate storage.



11.0 Maintenance Schedule

Below is the manufacturers recommendations but individual site Health & Safety maintenance schedules should also be adhered to whenever applicable

DESCRIPTION	INTERVAL
Check general condition	4 monthly
Check pin mechanism	Before use & 4 monthly
Test safe working load	Annually



Limited Warranty

The manufacturer, **Marton Geotechnical Services Limited (MGS)**, warrants the **QR Shackles** manufactured by it, under normal use and service, to be free from defects in material and workmanship under the following terms and conditions:-

The **QR Shackles** equipment shall be used in accordance with the manufacturer's recommendations.

The equipment is warranted for 1 year from the date of shipment from the manufacturer to the purchaser.

The warranty is limited to replacement of part or parts which, are determined to be defective upon inspection at the factory. Shipment of defective part or parts to the factory shall be at the expense of the Purchaser. Return shipment of repaired/ replaced part or parts covered by this warranty shall be at the expense of the Manufacturer.

Unauthorised alteration and/or repair by anyone which, causes failure of the unit or associated components will void this **LIMITED WARRANTY** in its entirety.

The Purchaser warrants through the purchase of the QR Shackles lifting equipment that he is familiar with the equipment and its proper use. In no event shall the manufacturer be liable for any injury, loss or damage, direct or consequential, special, incidental, indirect or punitive, arising out of the use of or inability to use the equipment sold to the Purchaser by the Manufacturer.

The Purchaser assumes all risks and liability whatsoever in connection with the lifting equipment from the time of delivery to Purchaser.

Lifting Systems



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