

# Lightweight Load Lift Electric

Operating & maintenance instructions



# Welcome

Thank you for purchasing a Penny Hydraulics loading platform.

All our products are designed, developed and manufactured to stringent quality and safety standards at our purpose built UK facility.

We understand that you need the peace-of-mind of a planned maintenance programme in order to achieve full compliance with Euro pean legislation, so we offer a choice of extremely cost- effective service packages which include examination and test ing - more details can be found on the inside back cover of this booklet. We can also offer additional support in the form of our specialist training services - please contact us for more details .

## Accessories

If you also run vehicles with lorry loader cranes, you might be interested to know that we supply a wide range of lifting accessories including slings. shackles and special attachments such as kerb grabs, barrel slings and dumpy bag lifters.

Visit our online parts shop to find out more -

<https://shop.pennyhydraulics.com>



# Lightweight Load Lift

## Operating and Maintenance Instructions



Station Road  
Clowne  
Chesterfield  
Derbyshire  
S43 4AB  
Tel: 01246 811475  
Fax: 01246 810403

E-mail: [sales@pennyhydraulics.com](mailto:sales@pennyhydraulics.com)

Website: [www.pennyhydraulics.com](http://www.pennyhydraulics.com)

## Safety Warning



**In the interest of safety, all personnel involved in the operation of the Lightweight Load Lift must read and understand this operation manual. If they do not then they must not operate the equipment.**

- Before any operation, check that the relevant documentation is available, in order and current.
- As a minimum statutory requirement the **Lightweight Load Lift** should be thoroughly examined every six months by a competent person. See “Maintenance” in this manual for full Statutory responsibilities.
- The **Lightweight Load Lift** must not be overloaded. Refer to the safe working load signs attached to the equipment.
- The **Lightweight Load Lift** must only be operated by trained and competent personnel. Training is offered by Penny Hydraulics and a training register is included at the back of this manual.
- During operation of the **Lightweight Load Lift**, access to the area should be restricted to those personnel essential to the operation only.
- Do not leave any load suspended between lifting / lowering operations.
- All safety notices must be adhered to at all times.
- Never interfere with the unit. It should run smoothly at all times, if in doubt call the HELPLINE telephone number 01246 811475.
- Keep the **Lightweight Load Lift** properly maintained by a competent person. See the “Maintenance” section in this manual.
- Do not adjust or interfere with any factory settings.
- Isolate and immobilize the equipment before commencing any maintenance routine.

Do not modify or re-install this machine without seeking guidance from Penny Hydraulics Ltd

# CONTENTS

Page

2. Safety Warning
3. Contents
4. Introduction
5. Operation
6. Fault Finding
7. Warranty Policy
8. Maintenance, Recommended Spares, Recommended Lubricants
9. Statutory Obligations
11. Service Contract
12. Technical Data
14. Declaration of Conformity
15. Signs
17. Parts List
18. Electrical Schematic
20. Training Register
21. Work Record

## Introduction

Thank you for purchasing a Penny Hydraulics **Lightweight Load Lift**.

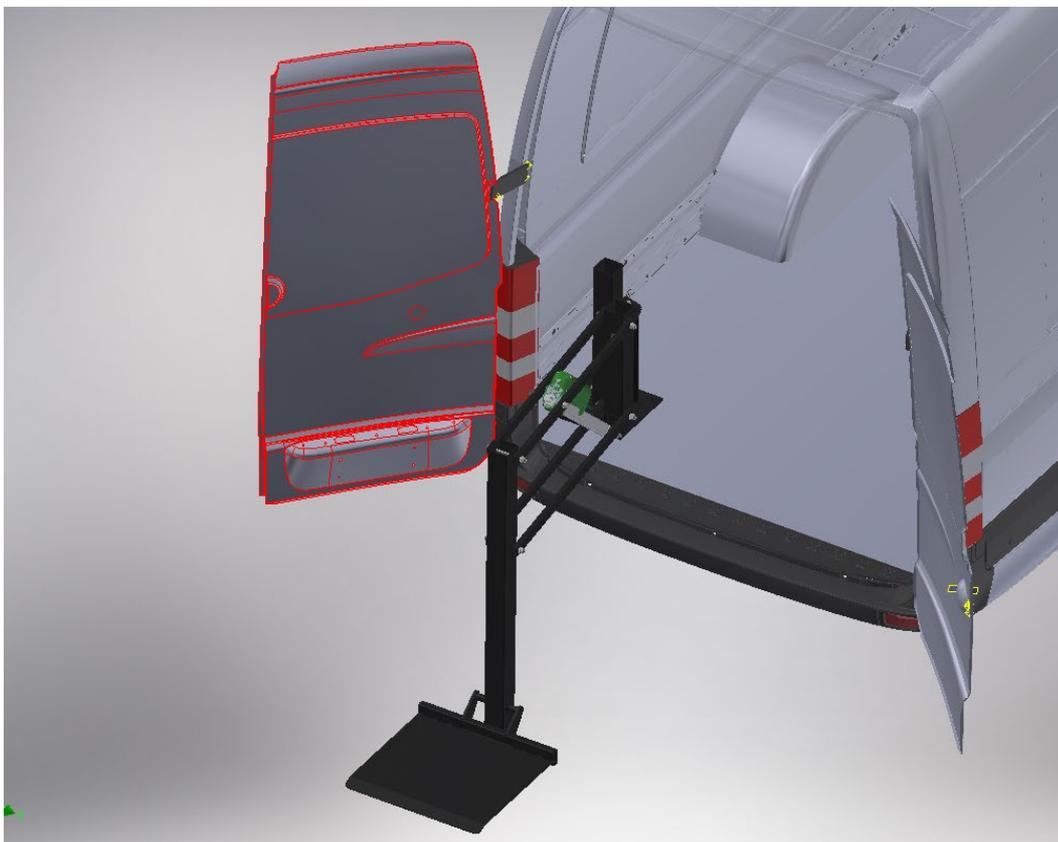
The **Lightweight Load Lift** is a vehicle mounted loading platform designed and manufactured at our factory in Clowne, Chesterfield to safely lift loads of up to 100Kg., subject to model type It can also be adapted for use in fixed and static applications.

Operation is by fail safe, pendant pushbutton control. All functions are protected by inbuilt overload features.

These operating instructions tell you what you need to know about its operation along with guidance on safety and general care, please study them carefully.

Due to our company's policy of continuous improvement, the following descriptions and illustrations used in this manual and parts book are without prejudice. We reserve the right to make alterations in order to increase the performance of our product, or for any other reason. We are not obliged to alter these instructions accordingly. These instructions do not assert to be complete

## Lightweight Load Lift



© This document is the property of Penny Hydraulics Limited and must not be copied or amended in part or in whole unless prior, express written permission is obtained from the Company

## Method of Operation

- 1) Before operation, please read the operating instructions and ensure all persons involved in the lift are familiar with the equipment and local requirements. 
- 2) Ensure the vehicle is on firm and level ground with the handbrake applied and wheel chocks deployed where necessary.
- 3) Before operating check for potential hazards, around the area where the platform will land.
- 4) Check the unit visually for signs of defects.
- 5) Release the platform locking latches and extend the platform (if applicable).
- 6) Check the area is clear and from a safe position, use the push button control to position the platform at either the top for unloading or bottom for loading operations.
- 7) Place the load on the platform as centrally as possible.
- 8) Raise or lower the load using the push button control taking care to observe and monitor the equipment for malfunction or interference. Keep clear of the moving components at all times.
- 9) On completion of the loading / unloading operations, raise the **Lightweight Load Lift** into the transport position, fold the platform and secure with the latches.
- 10) Always double check that the platform is securely stored and locked in position and the isolating switch in the cab is off before driving the vehicle. 

## Fault Finding

FAULT	CAUSE	RECTIFY
System Will Not Energize	Faulty Earth  Faulty Supply From Battery	Check Earth Connections, Clean And Re Make. Check Fuses And Replace If Necessary
System Energizes But Lift Will Not Operate	Faulty Supply From Control Box Faulty Earth At Control Box	Check Fuses And Replace If Necessary Check Earth Connection At Control Box, Clean And Re Make
Actuator Energizes But Lift Will Not Raise	Overload On Platform	Reduce Load
Actuator Energizes But Lift Raises Slowly	Overload On Platform	Reduce Load

## **Penny Hydraulics Limited Warranty Policy**

This Policy is intended to provide our customers with the best possible support to ensure trouble free use of their new Penny Hydraulics lifting equipment.

Products sold by the Company are guaranteed to be free from defective material and workmanship for a period of one year from the date of invoice or from the date of the commissioning certificate.

This warranty applies only under the following conditions:

- a) The unit or part must not have been subject to neglect or abuse, or operated under abnormal conditions or in an unapproved application.
- b) The responsibility of the Company is restricted to what is, in their judgement an adequate repair or replacement of the Company's product.
- c) An authorised engineer must carry out a six monthly inspection.
- d) The warranty is void if examination reveals that the unit or part has been repaired or adjusted other than by an authorised engineer.
- e) Normal service repairs carried out by authorised engineers are supported by their own warranty.
- f) Warranty does not extend to consumable items requiring replacement due to normal wear and tear.

Any claim under warranty must be made in the first instance by contacting Penny Hydraulics Ltd Service Department on 01246 811475 or via email at [service@pennyhydraulics.com](mailto:service@pennyhydraulics.com). The decision will then be made on how best to proceed after consultation with the customer.

### **UK Mainland**

We will normally have one of our own engineers based around the country visit the site to rectify the problem. This policy may be varied at our discretion but it is our aim to give the very best possible response to minimize product downtime and inconvenience.

### **Other Locations**

Warranty is limited to a parts only service but in certain areas we have service partners who may be able to assist. Any defective item should be returned to Penny Hydraulics Ltd for inspection and any valid warranty claim will include reasonable carriage costs both ways. A replacement part will then be sent to the customer.

No variation of the warranty as stated in the Company's Standard Terms and Conditions of Sale is authorised unless agreed in writing by a Director of the Company. This is the only warranty given and the Company accepts no other responsibility.

## Maintenance

Your **Lightweight Load Lift** is subject to the LIFTING OPERATIONS AND LIFTING EQUIPMENT (LOLER) regulations 1998 which is a statutory requirement to record on a formal document, the safe working condition of the **Lightweight Load Lift**, attachments and mounting structure.

Penny Hydraulics Ltd. Support Team offers a service package to meet customer requirements and conform to LOLER certification. Please see Service Contract form enclosed.

The following Planned Maintenance Schedule is designed to monitor the safe working order of the **Lightweight Load Lift** and includes a Thorough Examination by a Competent Person required by LOLER.

LOLER also requires that a Thorough Examination is carried out following any exceptional circumstance that may affect the safety of the equipment.

Any defects found whilst carrying out the Planned Maintenance Schedule must be reported and recorded and the equipment taken out of operation until action by a Competent Person is undertaken.

The Planned Maintenance Schedule may require the use of parts and consumables.

A list of recommended spares and lubricants is attached.

### Planned Maintenance Schedule

On receipt of a new machine and before it is put into service, check that there is no transit damage or evidence of mishandling.

Before any work is undertaken, ensure the site supervisor is informed and that all safety precautions are observed and adhered to.

Pay attention to site specific safety and PPE requirements.

Unless dynamic checks, tests or setting up procedures are being carried out, always isolate the machine from the power supply.

Where dynamic checks are being performed, it is advisable to appoint an assistant to be available on request.

Ensure a clean working area and sufficient cleaning materials.

Ensure the work area is cordoned off, paying particular attention to the sweep areas required for dynamic testing.

Daily / Before Use.

- 1) Check visually for signs of external damage.
- 2) Check all guards are securely in place.
- 3) Check for loose or missing nuts, bolts and fasteners.
- 4) That vehicle battery is charged.

- 5) Check for damage to electrical cables and connectors

Weekly.

- 1) Check all as for Daily.
- 2) Thoroughly clean the support structure and check the security of the interface with the vehicle.

6 Monthly.

The 6 monthly Thorough Examination is a statutory requirement to conform with LOLER regulations for lifts carrying persons and must be carried out by a Competent Person who must sign the relevant documentation.

- 1) Check all as for Daily, Weekly.
- 2) Thoroughly examine the main structures and sub frames for soundness and signs of deflection.
- 3) Thoroughly inspect all welds.
- 4) Thoroughly check the security of all fixings on the main body and sub frames.
- 5) Thoroughly examine all pivot points for excessive play. Remove the pivot pins and thoroughly inspect the condition of the pins, bearings and linkages and replace where necessary.
- 6) Thoroughly examine all electrical components, cables and connectors.

### **Load Test**

It is recommended that a load test is carried out as part of the Thorough Examination to assess the integrity of the **Lightweight Load Lift** and its supporting structures. Any defects or signs of potential failure must be rectified before the machine is allowed back into service.

### **Method**

- 1) Prepare the vehicle for operation in a safe working area, with the brakes firmly applied and cordon off with appropriate barriers and work in progress signs.
- 2) Prepare the maximum prescribed test weights as determined by the **Lightweight Load Lift** model number.
- 3) Clear the site and admit power.
- 4) Without load, operate the **Lightweight Load Lift** through its full extent to ensure correct operation.
- 5) Place the test load centrally on the platform and raise and lower to its full extents as before.
- 6) Check for signs of excessive flexing, structural deformation, paint flaking and excessive play in the joints.

On completion of the tests, restore the vehicle to its normal driving position, restore the working area and complete the necessary documentation.

## Overload Test

An overload test is carried out on all new **Lightweight Load Lift** at the factory and forms part of the test certificate requirements.

If the **Lightweight Load Lift** is fitted to the vehicle by Penny Hydraulics Ltd. or one of its authorized dealers, the system, including the sub structure and vehicle interface, will be Overload Tested as part of the test procedure.

An Overload Test must be carried out if:

- 1) The **Lightweight Load Lift** is fitted to a new or modified structure.
- 2) Any Modifications have been carried out to the **Lightweight Load Lift** or support structure.
- 3) Following any incident which may have caused damage to the **Lightweight Load Lift** or its supporting structure.

To carry out an Overload Test, elements of the system protection features have to be overridden and therefore must only be carried out by a competent person.

In severe or extreme conditions, it is recommended that an Overload Test is incorporated into the Annual Load Test of **Lightweight Load Lift** and its supporting structure

Please contact Penny Hydraulics Ltd. for further information.

## Service Contract

Date

<b>Lift location</b>	
<b>Contact Telephone</b>	<b>Post code</b>
	<b>Email</b>

<b>Invoice address</b>	
<b>Contact Telephone</b>	<b>Post code</b>
	<b>Email</b>

Penny Hydraulics Ltd agrees to carry out one annual service and one interim inspection on the lift in any twelve-month period. A test certificate will be left on site and a copy sent with the invoice.

In the event of a problem arising in-between scheduled visits the customer should telephone the Helpline on 01246 811475 as soon as possible so that appropriate action can be taken by us. There will be no charge for the call-out or for labour unless the problem is due to abuse or misuse. Parts may be added to the next invoice due.

The customer will be invoiced following each visit and by signing this document agrees to make full payment within 30 days of the invoice date in accordance with the agreed scale of charges, which may vary from time to time. This service contract will continue until cancelled in writing by either party.

Signed: ..... Print name: .....

Position: ..... Order number: .....

More details are available online.

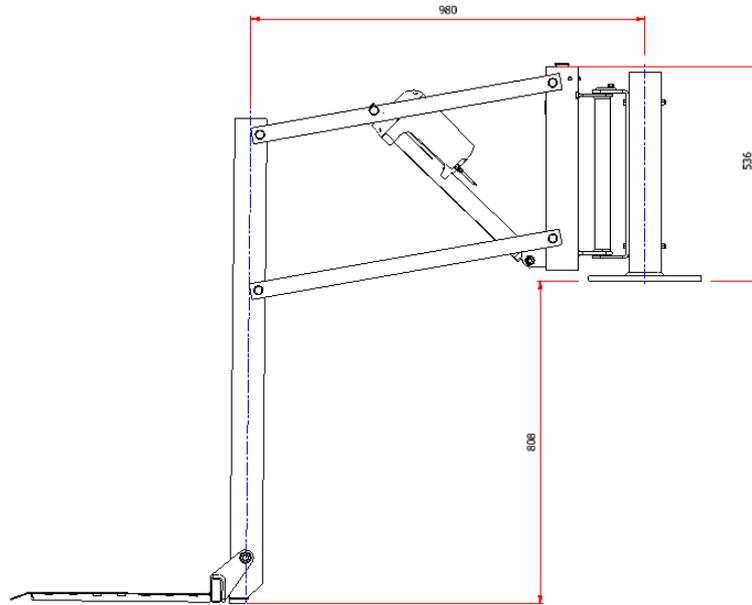
Please fax, post or email this form to the office below.

Penny Hydraulics Ltd  
Tel 0044 (0) 1246 811475  
Fax 0044 (0) 1246 810403  
Email [service@pennyhydraulics.com](mailto:service@pennyhydraulics.com)  
Web [www.pennyhydraulics.com](http://www.pennyhydraulics.com)

## Technical Data

### General Dimensions / Loading Chart

Dimensions Will Vary Subject To Model Type



### Power Supply

Standard **Lightweight Load Lifts** require a 12volt (24V Optional) DC electrical supply. Any circuit breakers employed in the system must be of a type that can cope with the surge of the electric motor.

### Electrical Specification

12 volts DC 40A  
24 volt optional

### Typical Weights

Standard **Lightweight Load Lift** 45kg subject to specification.

### Maximum Safe Working Load

Each **Lightweight Load Lift** is marked individually with its Maximum Working Load.

### **Noise Levels**

A survey sheet giving full details is available on request. Briefly, the results are as follows: -

Actuator	65dB(A)
----------	---------

These levels are well below those at which hearing can be damaged and below levels at which action is required under the noise at work regulations.

COSHH

### **Terminal Disposal**

Penny Hydraulics will remove and dispose of the entire lift in an environmentally sound manner when required.

## EC DECLARATION OF CONFORMITY

This declaration relates exclusively to the machinery in the state in which it was supplied, and excludes components, which are added, and/or operations carried out subsequently by the final user.

**We Penny Hydraulics Limited**

*Station Road Industrial Estate, Station Road, Clowne, S43 4AB.*

Hereby declare that the product(s) listed below: -

---

Model: **Lightweight Load Lift** Series

---

Serial No.

---

Conforms to the essential requirements of 2008 / 1597, The Supply of Machinery (Safety) Regulations 2008 and the following Directives, Standards and other Normative Documents where appropriate.

EU Directives/Regulations	Machinery Directive 2006/42/EC Electrical Equipment (Safety) Regulations 1994 European Council EMC Directive 89/336/EEC
Standard(s)	BS EN 12999 Cranes, Loader Cranes, BS 7121 Parts 1,2 and 4 BS EN 982 Safety of Machinery EN 50081-1: 1997; Electromagnetic Compatibility, General Standard Radiated RF Emissions Class B (30MHz – 300MHz)
Normative Documents	DIN 15018 Steel Structures BS 2573 Rules for design The Lifting Operations and Lifting Equipment Regulations 1998. The Provision and Use of Work Equipment Regulations 1998.

---

All information is given within a Technical File compiled by: Mr Terry Brocklehurst  
c/o Penny Hydraulics Ltd.

---

---

Place: - *Penny Hydraulics Limited*

---

Signature: - 

---

Date: -

---

Full Name: - J. D. Penny

---

Position: - M.D.

---

BS EN ISO 9001: 2000 British Standards Institute Registered Company  
Certificate No. FM

## Recommended Spares

Description	Part No.	Qty.
12v Actuator	090-000001	2
70Amp Fuse	QE91	2

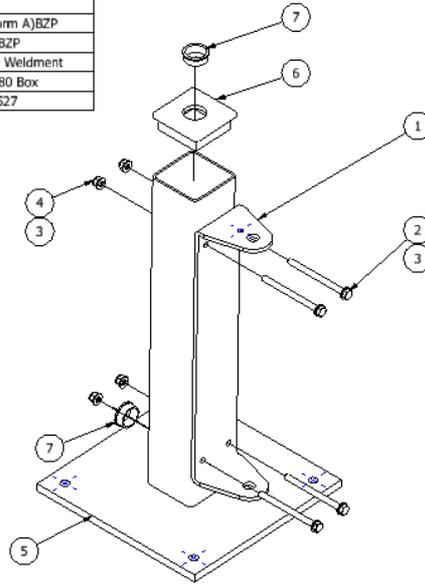
## Recommended Lubricants

DUTY	LUBRICANT	SPECIFICATION
General Lubrication	Grease	LEP2

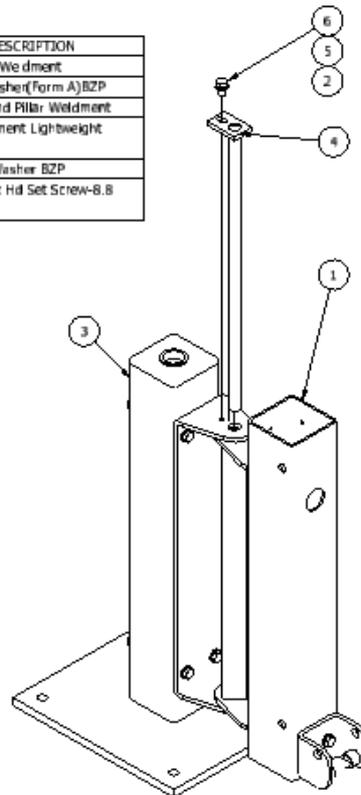
## Parts Lists

ALWAYS CONFIRM MODEL AND SERIAL NUMBER WHEN ORDERING SPARE PARTS

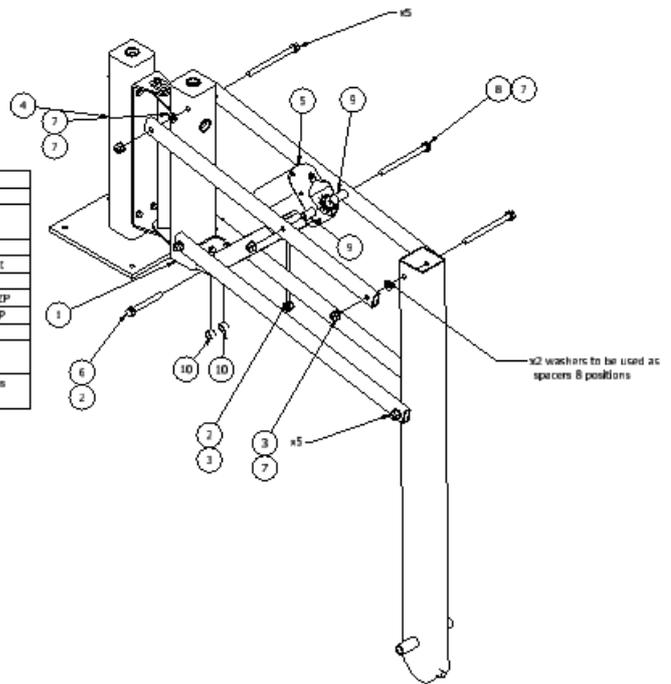
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	011-001038	Pivot Bracket
2	4	BS 3692 - M8 x 100	Precision hexagon bolts and screws
3	8	761-08A002	M8 Plain Washer(Form A)BZP
4	4	253-080802	M8 Nyloc Grade 8 BZP
5	1	541-000301	Baseplate and Pillar Weldment
6	1	537-000093	End cap to suit 80x80 Box
7	2	110527	Plastic Part No 110527



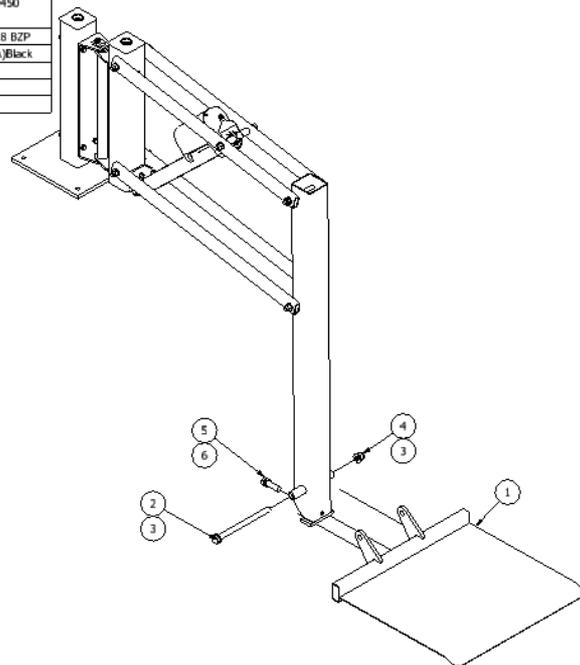
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	052-003623	Pillar Assy - Weldment
2	1	761-08A002	M8 Plain Washer(Form A)BZP
3	1	541-000301	Baseplate and Pillar Weldment
4	1	158-000052	Hinge Weldment Lightweight Loadlift
5	1	770-08SC02	M8 Spring Washer BZP
6	1	406-080162	M8 x 16 Hex Hd Set Screw-8.8 BZP



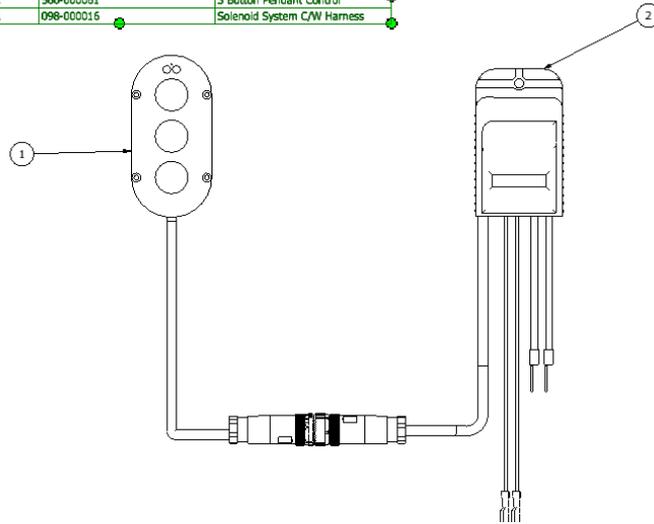
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	062-000623	Riser Assy. Weldment
2	2	05-4320 - M12 (Form A)	Slight metal washers - Metric series
3	6	253-120802	M12 Nylon Grade 8 BZP
4	1	541-0000101	Scrapplate and Pilar Weldment
5	1	002-000067	PRO20
6	1	206-121002	M12 x 100 hex rid bolt-8.8 BZP
7	26	761-12M002	M12 Plain Washer(Form A)BZP
8	5	200-000060	M12x153
9	2	045-000548	20 OD 3mm Wal Thickness 31mm Long
10	2	045-000549	20mm OD 3mm Wal thickness 14mm Long



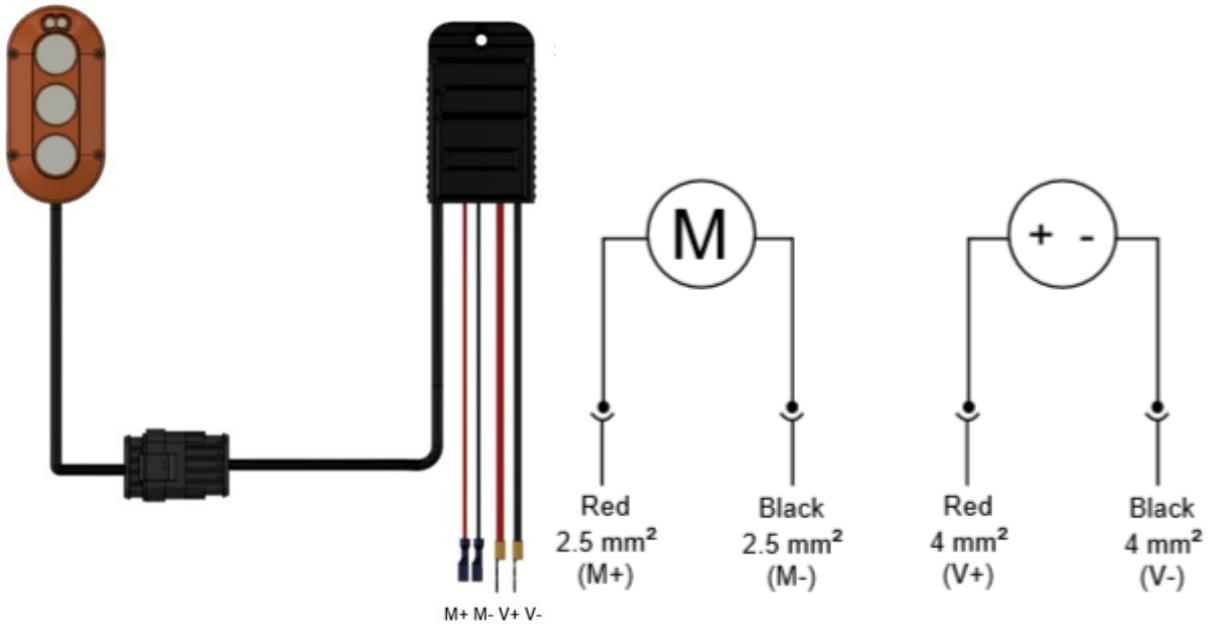
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	028-000813	Standard Single Toe 550x450 Platform
2	1	206-162202	M16 x 220 Hex Hd bolt-8.8 BZP
3	2		M16 Plain Washer(Form A)Black
4	1	253-160802	M16 Nylon Grade 8 BZP
5	1	400-000018	Special Screws- M16 x 55
6	1	QN27	M16 Locknut



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	560-000051	3 Button Pendant Control
2	1	098-000015	Solenoid System C/W Harness



### Electrical Schematic Circuit Diagram







## Service

Current legislation requires that each item of lifting equipment be thoroughly examined at least once in every 12 month period by a competent person. Our service contract will ensure continued, safe, reliable use of the equipment and full compliance with current legislation.

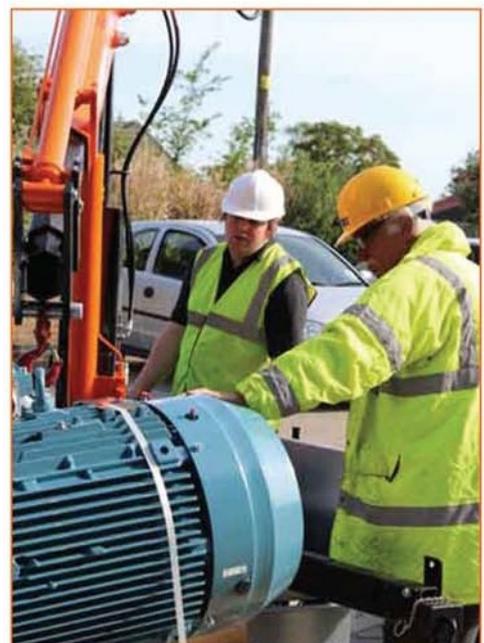
Key benefits of a Penny Hydraulics service contract include...

- **Combined maintenance and statutory inspection saves time and money**
- **Nationwide coverage**
- **Statutory inspections completed**
- **OEM spares available ex-stock**
- **High first time fix rate**
- **Reduced vehicle downtime**

## Training

The latest health & safety legislation requires that all employers ensure all people using or supervising the use of work equipment have received adequate training in method, risk and precautions.

Penny Hydraulics offer nationwide training by qualified instructors for their comprehensive range of lifting equipment. Training includes practical and theoretical input from the delegates with a certificate of competence issued on successful completion of the course.



Penny Hydraulics Limited

Station Road | Clowne | Chesterfield | Derbyshire | 543 4AB

t +44 IOI 1246 811475 | t +44 IOI 1246 810403

e sales@pennyhydraulics.com | w pennyhydraulics.com

This document and all designs, images, words, logos and products contained therein are the property of Penny Hydraulics Limited and must not be copied or amended in part or in whole unless prior, express written permission is obtained from the Company. © Penny Hydraulics Limited 2012.