

# LoadLift range

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.

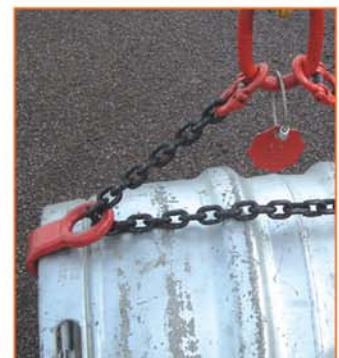
We understand that you need the peace-of-mind of a planned maintenance programme in order to achieve full compliance with European legislation, so we offer a choice of extremely cost-effective service packages which include examination and testing - more details can be found on the inside back cover 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>**



# LoadLift Y250

## Royal Mail

### 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 LoadLift 250 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 **LoadLift 250** should be thoroughly examined every six months by a competent person. See “Maintenance” in this manual for full Statutory responsibilities.
- The **LoadLift 250** must not be overloaded. Refer to the safe working load signs attached to the equipment.
- The **LoadLift 250** 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 **LoadLift 250**, 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 **LoadLift 250** 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

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## Introduction

Thank you for purchasing a Penny Hydraulics **LoadLift 250**.

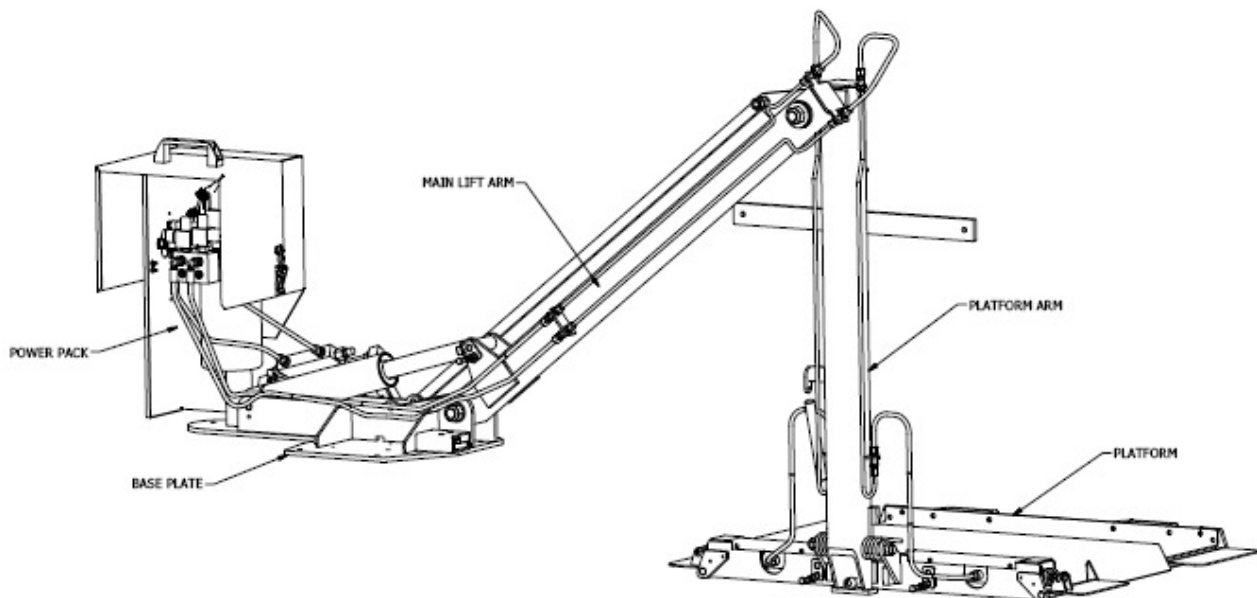
The **LoadLift 250** is a vehicle mounted loading platform designed and manufactured at our factory in Clowne, Chesterfield to safely lift loads of up to 250kg. It can also be adapted for use in fixed applications.

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

### Load Lift 250



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## 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) Power to the **LoadLift 250** is activated by opening the vehicle door.
- 4) Before operating check for potential hazards, in particular around the area where the platform will land.
- 5) Check the unit visually for signs of defects.
- 6) Release the platform locking latches and extend the platform.
- 7) 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.
- 8) Place the load on the platform as centrally as possible.
- 9) 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.
- 10) On completion of the loading / unloading operations, raise the **LoadLift 250** into the transport position, fold the platform and secure with the latches.
- 11) Power to the **LoadLift 250** will be switched off when the vehicle door is closed.
- 12) Always double check that the platform is securely stored and locked in position before driving the vehicle. 

## Fault Finding

FAULT	CAUSE	RECTIFY
System Will Not Energize When Cab Isolator Is Switched On (No Audible Warning)	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 5A Fuses And Replace If Necessary Check Earth Connection At Control Box, Clean And Re Make
Power Pack Energizes But Lift Will Not Raise	Overload On Platform Low Oil Level In Power Pack	Reduce Load Top Up Oil Level
Power Pack Energizes But Lift Raises Slowly	Overload On Platform Low Oil Level In Power Pack Faulty Power Pack	Reduce Load Top Up Oil Level Replace Power Pack



## **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 **LoadLift** 250 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 **LoadLift** 250, 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 **LoadLift** 250 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) Check for external oil leaks.
- 5) If any leaks are evident, check the hydraulic oil level.

- 6) 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.
- 7) Replace the hydraulic oil in the power pack.

### **Load Test**

It is recommended that a load test is carried out as part of the Thorough Examination to assess the integrity of the **LoadLift 250** 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 **LoadLift 250** model number.
- 3) Clear the site and admit power.
- 4) Without load, operate the **LoadLift 250** 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 **LoadLift** 250 at the factory and forms part of the test certificate requirements.

If the **LoadLift** 250 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 **LoadLift** 250 is fitted to a new or modified structure.
- 2) Any Modifications have been carried out to the **LoadLift** 250 or support structure.
- 3) Following any incident which may have caused damage to the **LoadLift** 250 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 **LoadLift** 250 and its supporting structure

Please contact Penny Hydraulics Ltd. for further information.

## Service Contract

Date

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

<b>Invoice address</b>	
<b>Contact</b>	<b>Post code</b>
<b>Telephone</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: .....

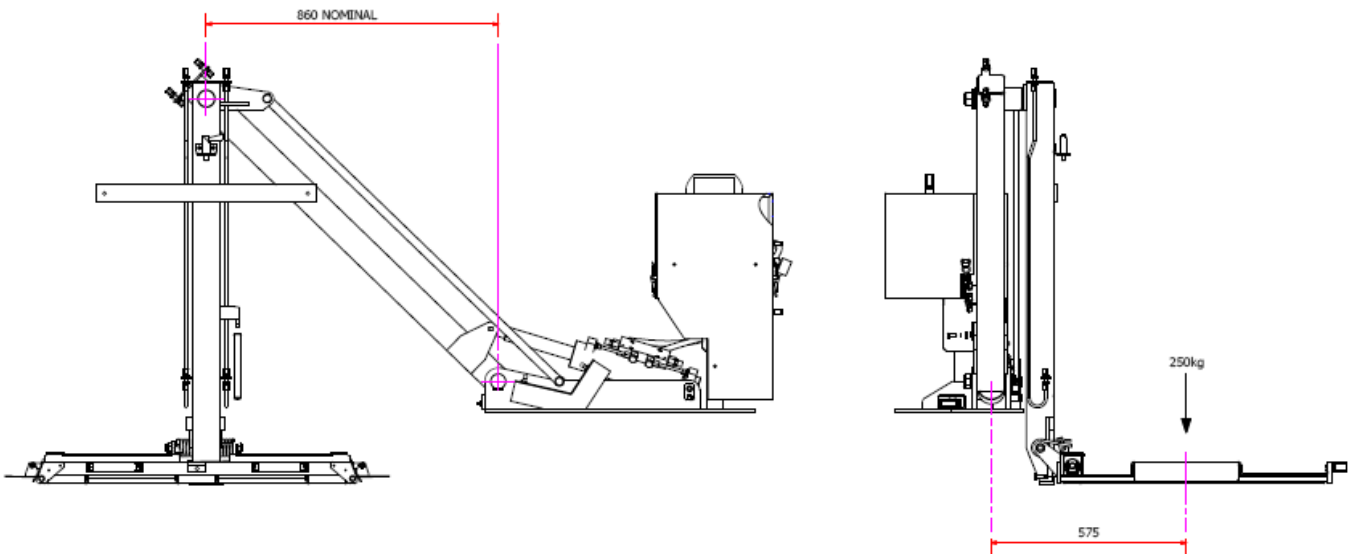
Position: ..... Order number: .....

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



### Power Supply

Standard **LoadLift 250s** require a 12volt (24V Optional) DC electrical supply. This should be terminated in a 50A SB plug. 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  
240 volt – contact Penny Hydraulics Ltd.

### Typical Weights

Standard **LoadLift 100kg** subject to model type and specification.

### Maximum Safe Working Load

Each **LoadLift 250** 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: -

Power Pack Running      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: **LoadLift 250**

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Serial No.

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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.

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

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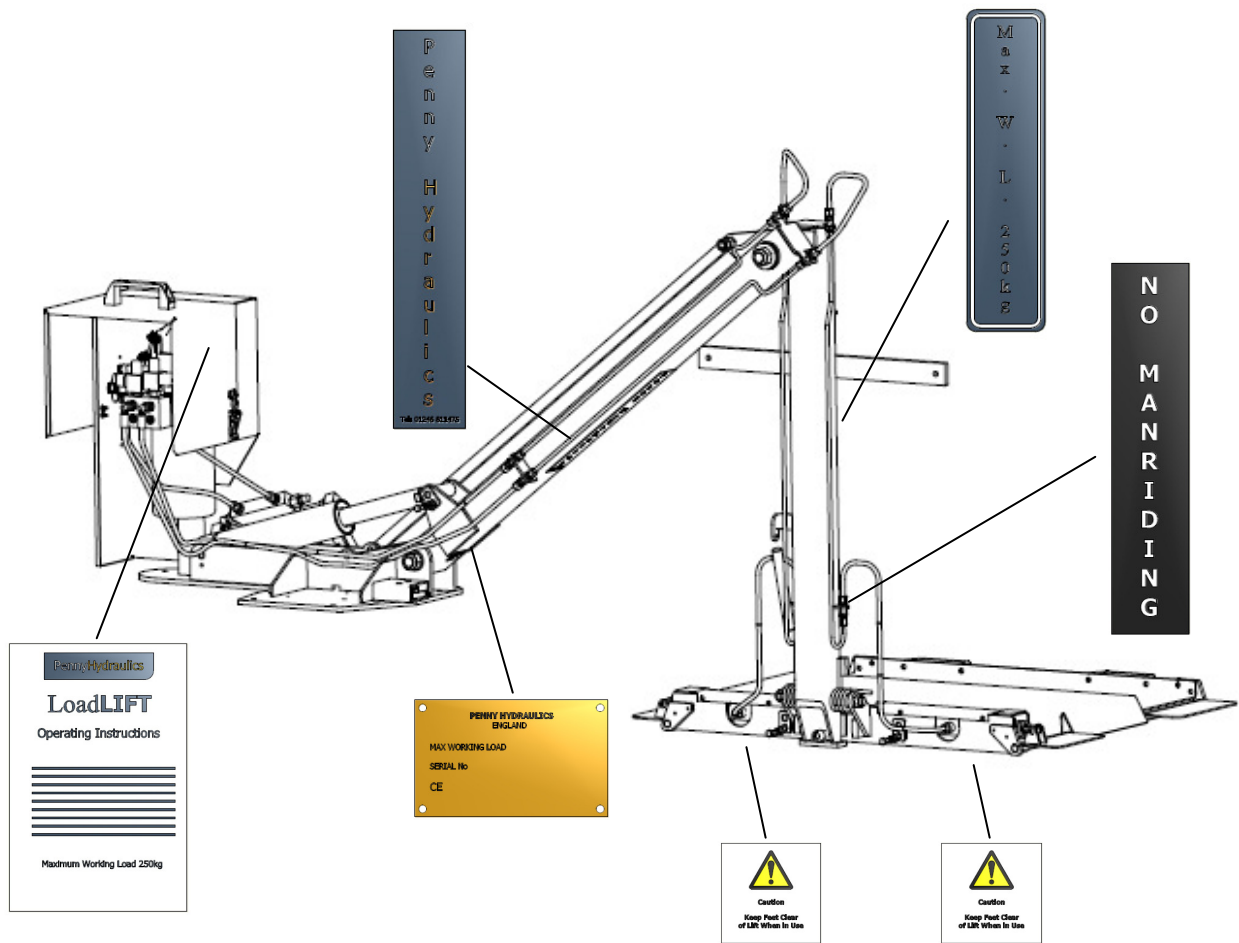
Place: - <i>Penny Hydraulics Limited</i>	Signature: - 
Date: -	Full Name: - J. D. Penny
	Position: - M.D.

---

BS EN ISO 9001: 2000 British Standards Institute Registered Company  
Certificate No. FM 20203



# Signs



Read the Manual



Refer to the Manual



Caution



### Recommended Spares

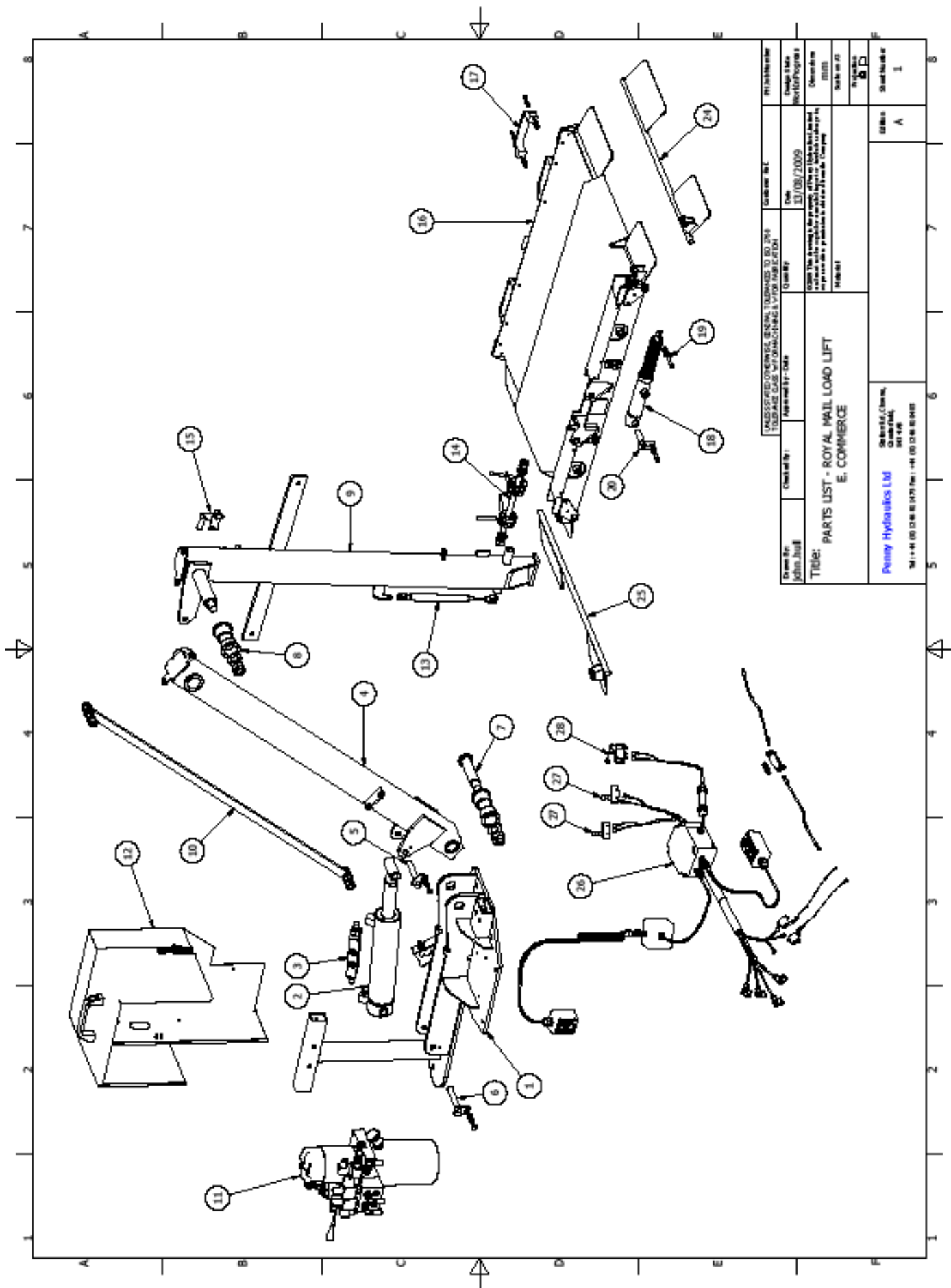
Description	Part No.	Qty.
5A Fuse Assembly	090-000001	2
125A Fuse Assembly	090-000003	2
539-000019	Pin Assembly - Lift Ram - 100mm	1
539-000020	Pin Assembly - Lift Ram - 110mm	1
692-000002	Lift Arm Limit Switch	1
692-000004	Door Limit switch	1

### Recommended Lubricants

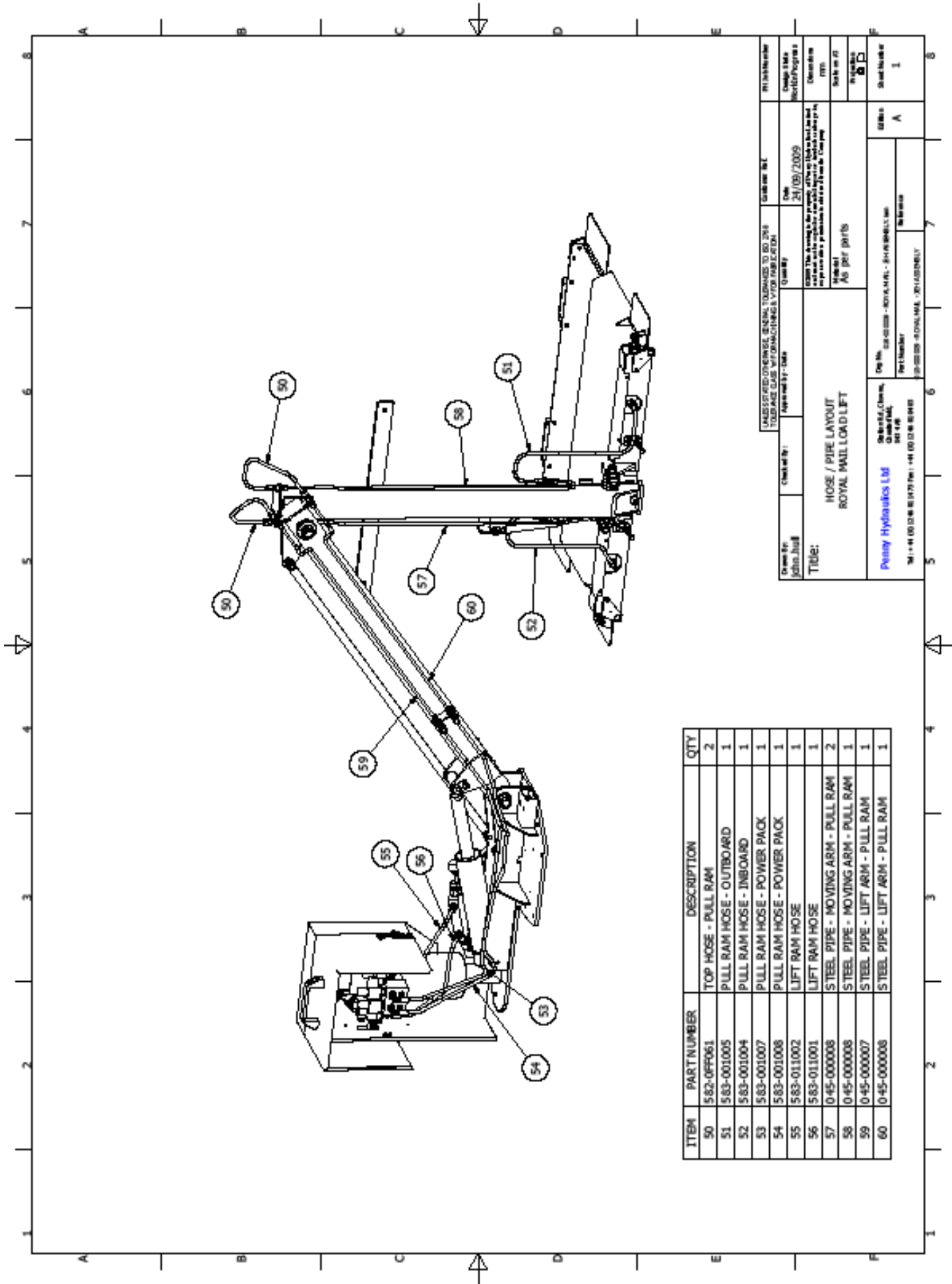
DUTY	LUBRICANT	SPECIFICATION
Hydraulic Power Pack	Mineral Hydraulic Oil	HM32
General Lubrication	Grease	LEP2

ALWAYS CONFIRM MODEL AND  
SERIAL NUMBER WHEN  
ORDERING SPARE PARTS

PARTS LIST - E. COMMERCE - LOAD LIFT			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	028-000007	Base plate	1
2	002-000010	Moving Arm Ram	1
3	752-621203	Dual Over Centre Valve	1
4	018-000004	Lift Arm	1
5	539-000019	Pin Assembly - Lift Ram - 100mm	1
6	539-000020	Pin Assembly - Lift Ram - 110mm	1
7	539-000159	Bottom Pivot Shaft Assembly	1
8	035-000071	Service Kit - Platform Arm Bearings	1
9	018-000008	Platform Arm	1
10	018-000029	Over Centre Arm Assembly	1
11	551-000012	Power Pack - See nameplate	1
12	123-000008	Guard assembly	1
13	065-000002	Hydraulic Damper	1
14	017-000065	Platform Coupling Pin Assembly	1
15	079-000016	Catch Bracket Assembly - Platform Arm	1
16	028-000009	Platform Assembly	1
17	171-000024	Pull Handle Assembly	1
18	002-000011	Toe Retract Ram	1
19	539-000160	Toe Ram Pin	1
20	539-000009	Pin Assembly - Retract Ram	1
21	406-080202	M8 x 20 Hex Hd Screw-8.8 BZP	2
22	770-08SC02	M8 Spring Washer BZP	2
23	761-08A002	M8 Plain Washer(Form A)BZP	2
24	631-000003	Out Board Ramp Assembly	1
25	631-000004	Inboard Ramp assembly	1
26	195-000019	Electrical Installation Kit	1
27	692-000002	Lift Arm Limit Switch	2
28	692-000004	Door Limit switch	1



Drawn by: John Bush	Checked by: Approved by: Date	Quantity	Customer Ref:	Part Number
			Code 13/08/2009	Check Date 13/08/2009
Title: PARTS LIST - ROYAL MAIL LOAD LIFT E. COMMERCE		Description LIFTING THE LIFTING & LOWERING MECHANISM TO THE PLATFORM AND LOWERING THE PLATFORM TO THE GROUND. OPERATION IS PERFORMED BY A CONTROL PANEL ON THE PLATFORM. PARTS LIST - ROYAL MAIL LOAD LIFT		
Penny Hydraulics Ltd Deborah Clarke, General Mgr, 01453 611111		Scale: 1:1 Project No: Sheet No: 1		



ITEM	PART NUMBER	DESCRIPTION	QTY
50	582-0FF061	TOP HOSE - PULL RAM	2
51	583-001005	PULL RAM HOSE - OUTBOARD	1
52	583-001004	PULL RAM HOSE - INBOARD	1
53	583-001007	PULL RAM HOSE - POWER PACK	1
54	583-001008	PULL RAM HOSE - POWER PACK	1
55	583-011002	LIFT RAM HOSE	1
56	583-011001	LIFT RAM HOSE	1
57	0-45-000008	STEEL PIPE - MOVING ARM - PULL RAM	2
58	0-45-000008	STEEL PIPE - MOVING ARM - PULL RAM	1
59	0-45-000007	STEEL PIPE - LIFT ARM - PULL RAM	1
60	0-45-000008	STEEL PIPE - LIFT ARM - PULL RAM	1

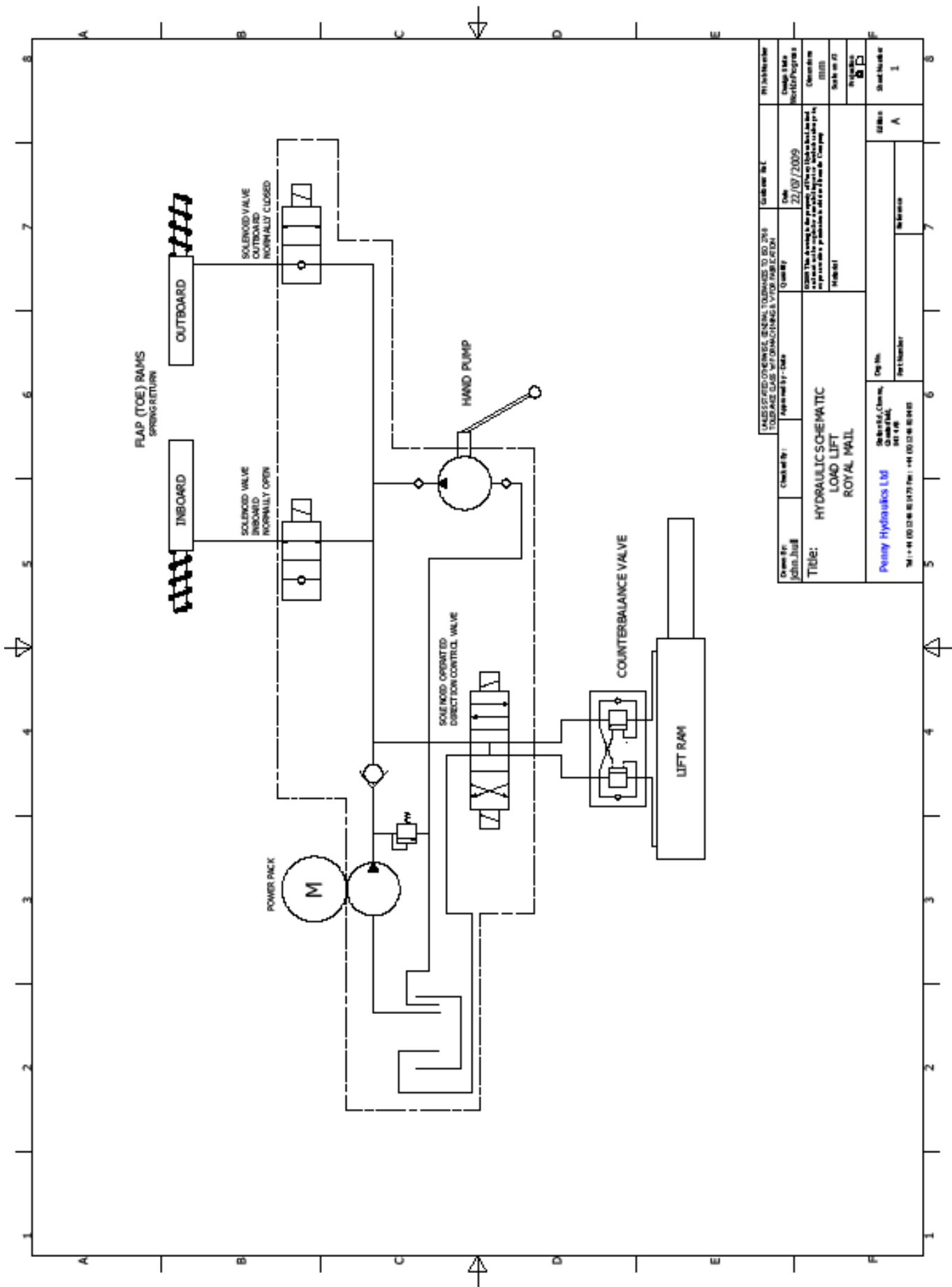
Drawn By: John Hill	Checked By:	Quantity	Customer Ref:	PI Job Number
TITLE: HOSE / PIPE LAYOUT ROYAL MAIL LOAD LIFT		Date: 21/09/2009	Order No: 21/09/2009	Order Title: ROYAL MAIL LOAD LIFT
Project: ROYAL MAIL LOAD LIFT		Description: HOSE / PIPE LAYOUT	Order No: 21/09/2009	Order Title: ROYAL MAIL LOAD LIFT
Part Number: 21-00209-ROYAL MAIL - 21-ASSEMBLY		Revision: A	Order No: 21-00209-ROYAL MAIL - 21-ASSEMBLY	Order Title: ROYAL MAIL LOAD LIFT
Supplier: Pusey Hydraulics Ltd Tel: +44 (0)1328 819791 Fax: +44 (0)1328 819818		Order No: 21-00209-ROYAL MAIL - 21-ASSEMBLY	Order Title: ROYAL MAIL LOAD LIFT	Order Title: ROYAL MAIL LOAD LIFT

## OPERATION

### ROYAL MAIL LOAD LIFT

- 1) Start position with the Load Lift secured in the vehicle and the door closed. The Door Limit Switch breaks the supply to the Load Lift control circuit but depending on the position of the Main Isolator, the main supply may still be available at the Power Pack Solenoid.
- 2) Opening the door activates the Door Limit Switch and allows power to the control circuit via the Control Box.
- 3) In this position, the Inboard Limit Switch is activated by the Lift Arm and is in the open position. The Inboard Solenoid Valve is open releasing the pressure from the Inboard Toe Ram allowing the Return Spring to lower the Inboard Toe.
- 4) The Outboard Toe has pressure locked in the Outboard Toe Ram via the Outboard Solenoid Valve and is locked in the raised position.
- 5) Selecting the Lower (OUT) Button energises the Power Pack and the Solenoid Direction Control Valve allowing the Lift Arm to move away from the Inboard Limit Switch and energise the Inboard Solenoid Valve. Pressure is admitted to both Toe Rams, raising the Inboard Toe and maintaining the Outboard Toe in the raised position.
- 6) If the button is released during operation, both Inboard and Outboard Toes will remain in the raised position, the Inboard one being held by the energised Inboard Solenoid Valve. This valve is energised whenever the Lifting Arm is not activating the Inboard Limit Switch and will become naturally warm.
- 7) When the platform reaches full extent, the Outboard Limit Switch is activated by the Lift Arm which energises the Outboard Solenoid Valve releasing pressure from the Outboard Toe Ram allowing the Return Spring to lower the Outboard Toe. The Inboard Toe is still locked in the raised position by the energised Inboard Solenoid Valve.
- 8) If the platform cannot reach its full extent and the Lift Arm does not activate the Outboard Limit Switch, an override switch is available on the 3 Button Remote Handset which, when selected, energizes the Outboard Solenoid Valve independently of the Outboard Limit Switch, releasing pressure from the Outboard Toe Ram and allowing the Return Spring to lower the Outboard Toe.
- 9) Selecting the Raise (IN) Button energizes the Power Pack and the Solenoid Direction Control Valve allowing the Lift Arm to move away from the Outboard Limit Switch and break the circuit to the Outboard Solenoid Valve. Pressure is admitted to both Toe Rams causing the Outboard Toe to raise and allow both Toes to be locked in the raised position.
- 10) When the platform reaches the full inboard position, the Lift Arm activates the Inboard Limit Switch which breaks the circuit to the Inboard Solenoid Valve, releasing pressure from the Inboard Toe Ram via the Solenoid Direction Control Valve, allowing the Return Spring to lower the Inboard Toe.
- 11) After use, closing the vehicle door activates the Door Limit Switch and breaks the supply to the control circuit.





Drawn By: John Bull	Checked By:	Approved By - Date:	Quantity:	Customer Ref.:	PI Job Number:
TITLE: HYDRAULIC SCHEMATIC LOAD LIFT ROYAL MAIL			Date: 22/09/2009	Order Ref. No.:	Order Ref. No.:
Peasey Hydraulics Ltd 26 Berryl Close, Gillingham, Kent ME16 7UB Tel: +44 (0) 1843 82 1470 Fax: +44 (0) 1843 82 1445			DATE: This drawing is for information only. It is not to be used for manufacturing purposes without the approval of the design engineer.	Description: 00000	Scale: as shown 1:1
Title No. _____ Part Number _____			Drawing No. _____		Sheet No. of _____ 1







## 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 | S43 4AB**

**t +44 (0) 1246 811475 | f +44 (0) 1246 810403**

**e sales@pennyhydraulics.com | w pennyhydraulics.com**

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