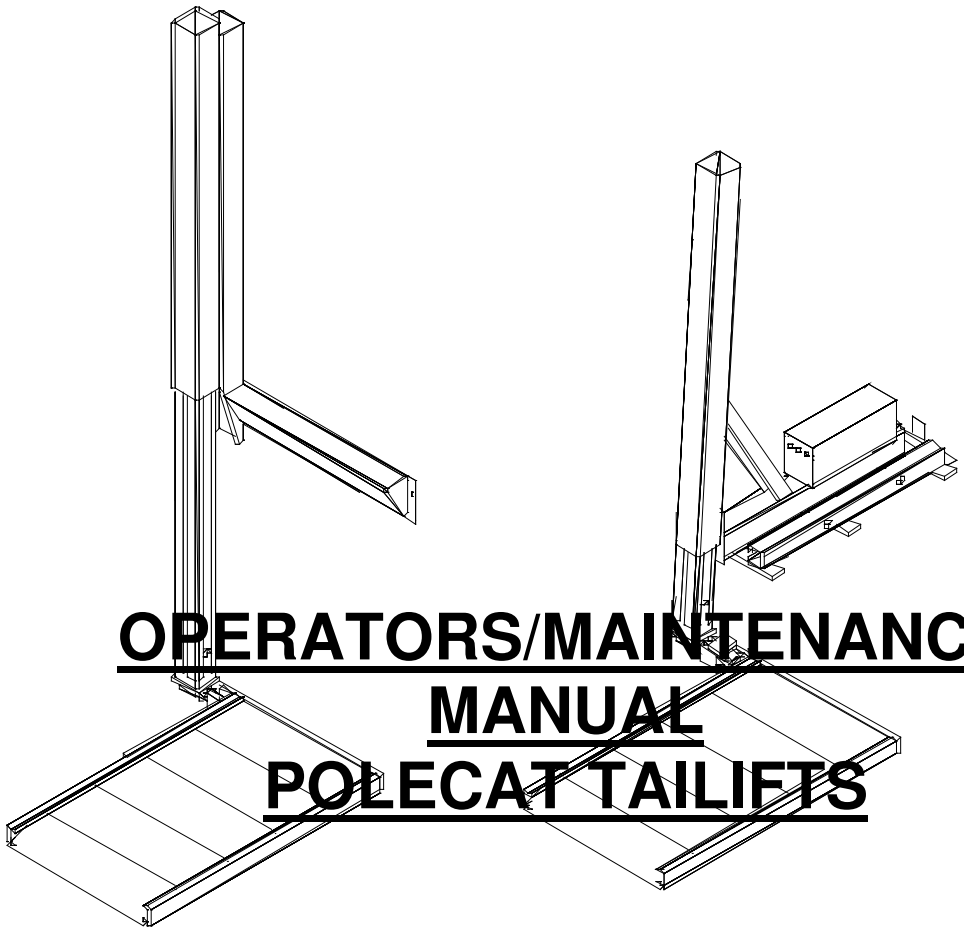
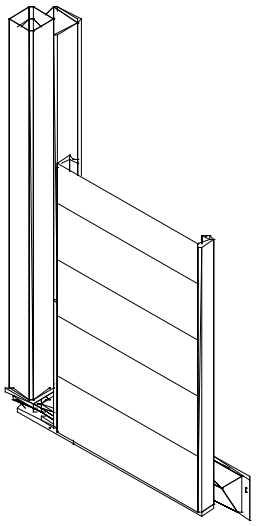
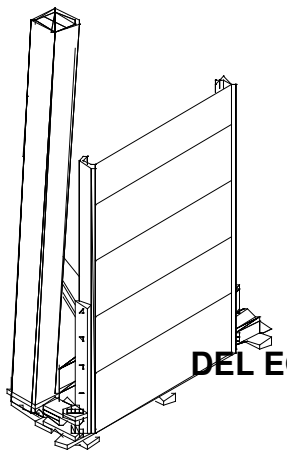
DEL TAILIFTS

Quick Response TEAM



OPERATORS/MAINTENANCE MANUAL POLECAT TAILIFTS





DEL EQUIPMENT (U.K.) LTD
Unit 2, Avenue 3
Station Lane, Witney
Oxon, OX28 4BP
TEL: 01993 708811
FAX: 01993 708787
EMAIL: tailifts@del-uk.com
WEBSITE: www.del-uk.com
INTERNATIONAL: http://www.liftgate.com

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ISSUE 3

INTRODUCTION

This manual covers the operation and maintenance of the Polecat tailift range PC300EL, PC300L, PC300H and PC300H. The procedures detailed in this manual must be understood before the tailift is used. The manual should be kept with the vehicle and records of regular maintenance must be entered in the spaces provided to form a service record for the lift.

IMPORTANT

This manual forms part of the Inspection record for the tailift, and should be passed on to the end user, together with the installation handbook.

CONTENTS

1. WARRANTY

The lift you have purchased is one of the DEL Equipment range of Tailifts. We are pleased you have chosen DEL and would like to ensure that you have the best service throughout the life of the lift.
Our lifts are covered by a 12-month warranty against faulty parts or assembly, subject to our conditions below and our normal conditions of sale. To obtain details of your nearest service centre plus updated information of the DEL range please complete and return the enclosed registration form.

ONE YEAR LIMITED WARRANTY

DEL Equipment (UK) Ltd (Herein called "DEL") warrants the distributor and/or the original purchaser of the product, that it will repair/replace in its factory or through one of its approved service centres, without charge, any original part of any DEL tailift found to be faulty within twelve months after the date of sale by the distributor and is proven to the satisfaction of DEL to have been defective at the time within the 12 month period, provided that all parts claimed defective have been returned, properly identified, to the said factory or distributor. Charges for labour to install such parts shall be paid in accordance with DEL's repair time schedule and will be reimbursed at the distributor's flat labour rate. DEL's obligations under this warranty shall not include any costs incurred by anyone for consequential damages in any form.
In a situation where the vehicle is driveable, i.e. the platform is or can be stowed in its catches, then every effort must be made to take the vehicle into the nearest authorised service agent.

This warranty applies only to new and unused tailifts, which after shipment from our factory have not been altered, changed, repaired or treated in any way whatsoever. No warranty of any kind applies to DEL tailifts or parts which have been damaged or have failed through neglect, lack of maintenance or service or lubrication, wear, misuse, overloading, accident or improper installation.

Any parts of the DEL tailift not manufactured by DEL are covered by the standard warranty subject to confirmation by the manufacturer that the part was faulty due to error in manufacture or assembly.

2. OPERATING PRINCIPALS

The polecat model of lift is a single pillar telescopic lift designed to lift loads (up to the safe working load) vertically from the ground to the vehicle bed and vice versa. The polecat consists of an outer tube and inner tube. The top of the ram is mounted to the outer tube and the lower end mounted to the inner tube, which is connected to the platform via a hinge assembly. The ram extends or contracts the inner tube with respect to the outer tube in order to lift or lower the platform. The external polecat is mounted, either weld or bolt on, directly to the rear of the vehicle. The internal polecat is mounted inside the vehicle on an extending track, which enables it to be pulled clear of the rear of the vehicle for use, then folded back inside.

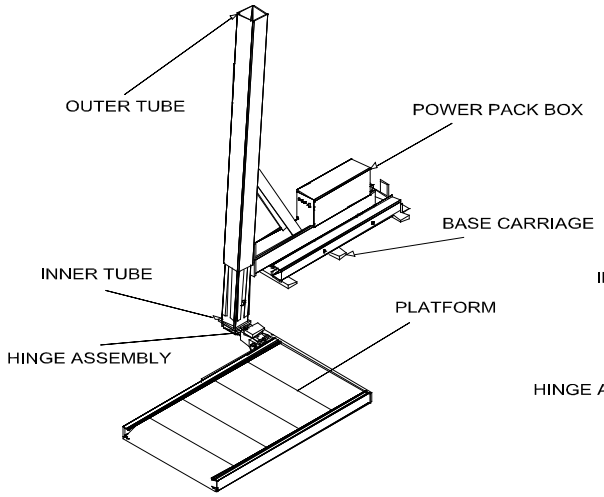
The external polecat utilises a part width platform, which when folded vertically still leaves half of the vehicle's door clear. The internal model has a double hinge action which folds the platform vertically and also parallel to the vehicle side walls, hence having a very small-stowed area.

Power is provided to the hydraulic power pack from the vehicle battery. The power pack supplies pressurised hydraulic fluid to the ram, which makes the ram contract.

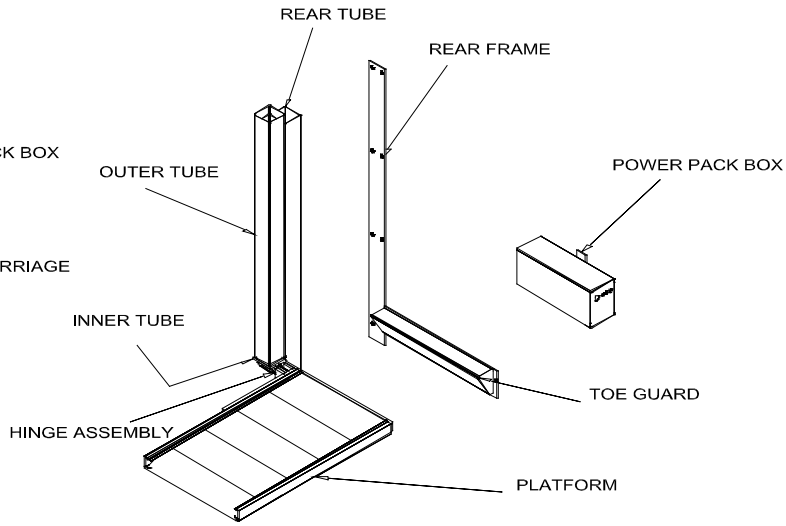
Activation of the down control switch releases hydraulic fluid back to the power pack from the ram. The ram extends and the platform lowers by its own weight.

The powerpack is chassis mounted for the external polecat and mounted on the lift itself for the internal version.

Internal polecat



External polecat



3. SAFETY FEATURES

Before operating the tailift be sure you understand the safety devices fitted, and ensure that they are in good working order by following the regular maintenance program.

CIRCUIT BREAKERS
Fuses protect the electrical circuits. In the case of any electrical fault they will protect the tailift from any damage to its electrical systems.

LIFTING LOADS - RELIEF VALVE
The power pack is equipped with a pressure relief valve, which ensures that a gross overload of the lift, which may damage critical parts cannot be lifted. This valve is set on installation to 10% above the safe working load.

LOWERING LOADS – FLOW REGULATOR
The returning oil from the ram passes through a flow regulator valve, ensuring the platform lowers at a controlled speed irrespective of the load.
Note – The platform must not be overloaded on lowering as this will cause permanent damage to the lift operation.

3 WAY FOLDING RAMP/CART STOP
On platforms equipped with a 3 way folding ramp, the edge of the ramp can be fixed in a vertical position to ensure that loads cannot roll/fall from the loading edge of the platform whilst lifting or lowering. A platform fitted with ‘cart stops’ has a similar effect.

CONTROL BOXES
The buttons are designed so they are just large enough to be operated by one finger. This prevents accidental operation by other objects hitting the control box.

TOE GUARD (EXTERNAL POLECAT ONLY)
The toe guard is angled in such a way so to reduce the risk of feet being crushed while the lift is being raised.

PLATFORM
The platform has a rough surface, which ensures that the platform is not slippery in most weather conditions.

STOW INDICATOR (EXTERNAL POLECAT ONLY, IF FITTED)
The stow indicator in the drivers cab activates when the platform is not in its stowed position. Ensure that it is not active before driving the vehicle. If it activates whilst driving, stop as soon as possible and check that the platform is stowed correctly.

4. INTENDED USES

The Polecat range of lift is intended for -

- Lifting of loads vertically from the ground to vehicle bed height and vice-versa.
- Lifting of the load and the operator only, where the operator has been trained to use the lift following all safety procedures.
- Lifting of loads no heavier than the safe working load of the lift fitted.

UNSAFE USES

The following are unsafe practices, which may damage the lift and cause risk of personnel injury: -

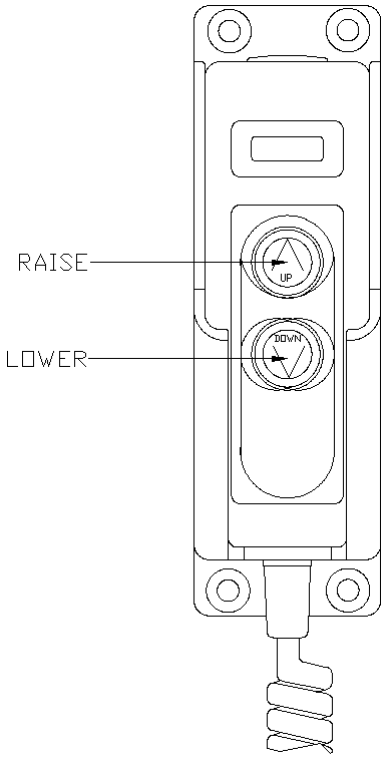
- Driving a forklift onto the platform.
- Using the lift as a jack.
- Using the platform as a step to the truck bed.
- Lifting unstable/wheeled loads without special precautions
- Use as a passenger lift
- Driving the vehicle with the platform open.

5. SAFETY PROCEDURE

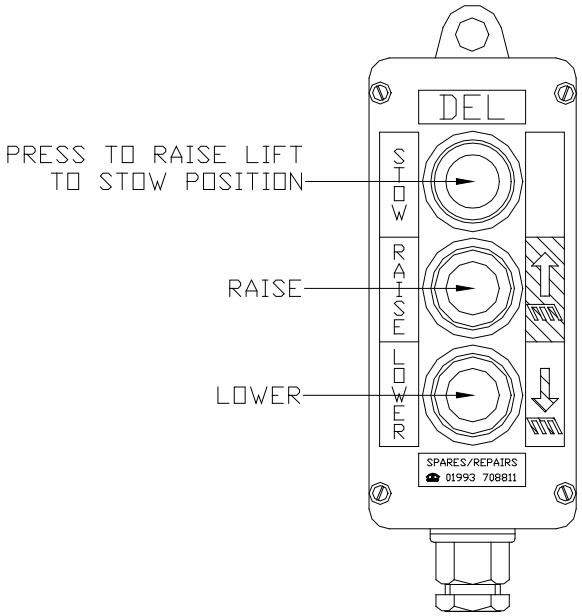
Before operating the lift be sure to understand the following instructions: -

1. Read and be familiar with the safety instructions and warning decals before operating the lift.
2. Be sure the vehicle is securely braked.
3. Inspect the lift for maintenance or damage. If there are any signs of damage do not use the lift or attempt repairs unless you have been specifically trained.
4. Clear the working area of any obstructions.
5. Do not overload the lift. Note that the safe working load of the lift applies to both lifting and lowering operations.
6. Make sure the centre of the load is placed as near to the centre of the platform as possible. If wheeled loads are lifted ensure these are securely braked and that available safety devices are used (3 way folding ramp/cart stop)
7. Make sure that you only ride the platform when no load is being lifted
8. Make sure the platform is securely stowed in its travelling locks and that the stow indicator (where fitted) is out before driving the vehicle
9. Always isolate the lift (with the in-cab switch or by un-plugging the wanderlead control) after use.

6. HAND CONTROL



Standard wanderlead hand control



Hand control with automatic stop function

7. WORKING AREA

The push button controls are located is such a position to give: -

- A good view of the working and surrounding areas.
- A secure position away from passing traffic

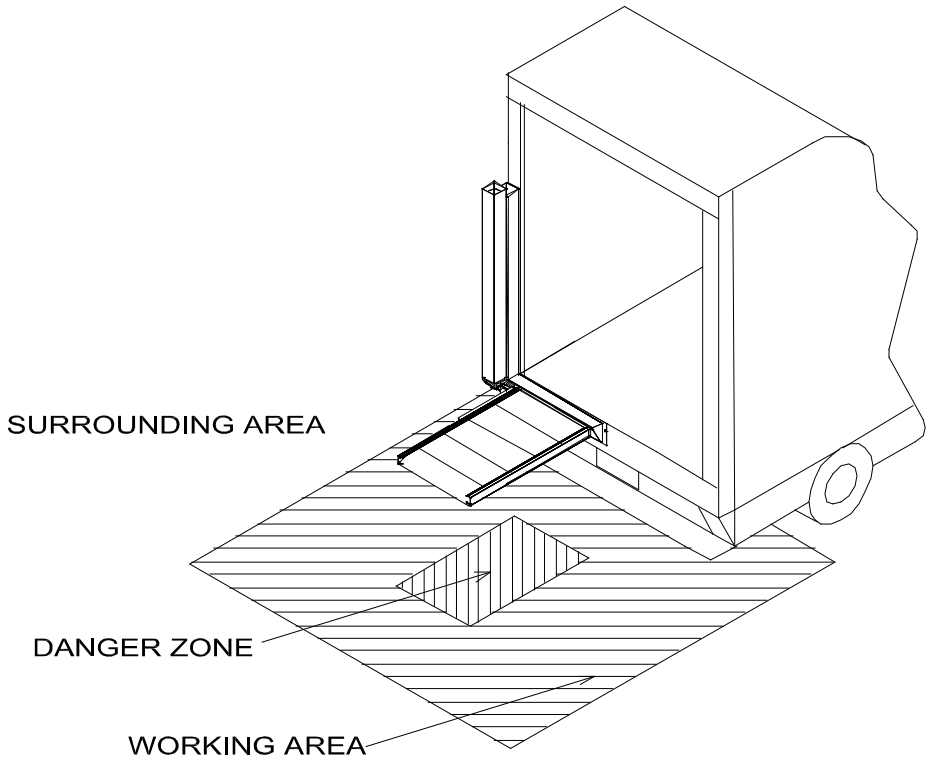
The position of the controls should not be changed.

NOTE

The danger zone is the area in which the platform travels, and under no circumstances should this be entered while the platform is in its operating position.

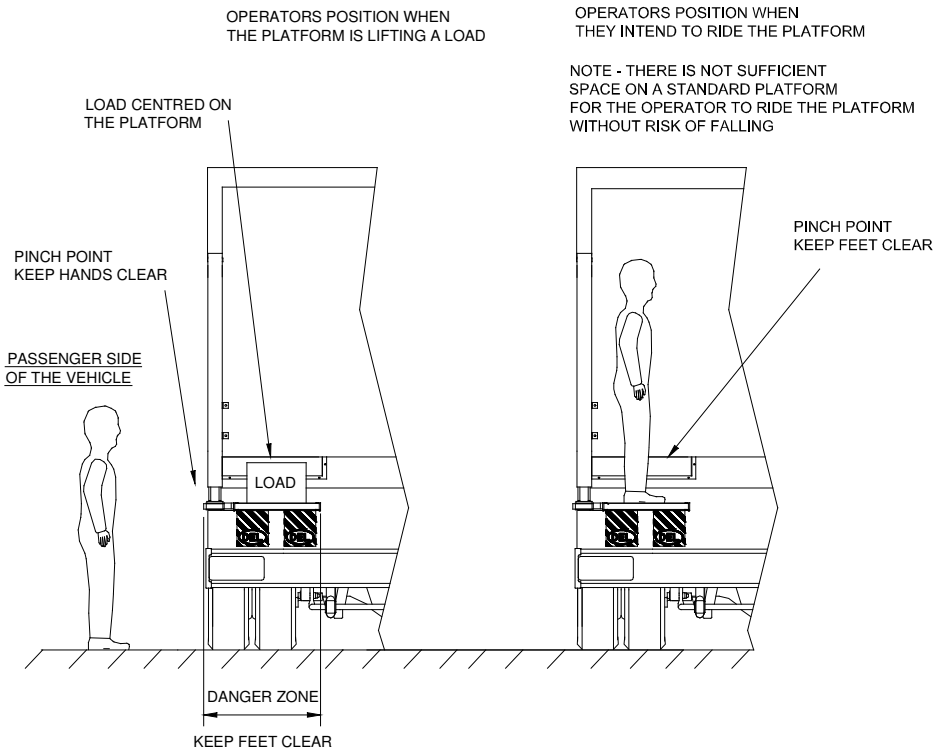
The working area is the area around the platform in which the operator can stand while the platform is in its operating position. If anyone other than the operator enters this area while the lift is in use, any lifting operation which is being performed must be stopped.

Surrounding area is the area around the working area. The operator should be aware of the surrounding area and look for and potential hazards.



8. OPERATORS POSITIONS

NOTE – The standard polecat platform is not large enough for the operator to stand on the platform without risk of falling, so it is recommended that if loads are to be lifted then the operator should not ride the platform.



When the operator does not intend to ride the platform, they should stand on the passenger side of the vehicle ensuring that they are clear of the danger zone and have a good view of the load and the working area.

9. OPERATING PROCEDURES

INTERNAL POLECAT

1. Open the platform using the method detailed below.
2. Lower the platform down to the ground.
3. Open the bridging plate and activate the auto tilt ramp (where fitted)
4. Evenly distribute the load on the platform as close to the centre as possible.
5. Make sure that wheeled loads are securely braked.
6. Make sure that all safety devices such as platform stops are used.
7. Power the lift up keeping feet away from the edge of the platform (if the operator is riding the platform).
8. When the platform reaches bed height release the control button. For lifts with the automatic stop function, the platform will automatically stop when it reaches bed level.
9. Move the load into the vehicle, working from inside the vehicle.

10. When loading from the vehicle onto the platform ensure that the safe working load of the lift is not exceeded as the overload may damage the platform.
11. When closing the platform ensure that it is securely stowed in its locks (following the closing instructions below).

EXTERNAL POLECAT

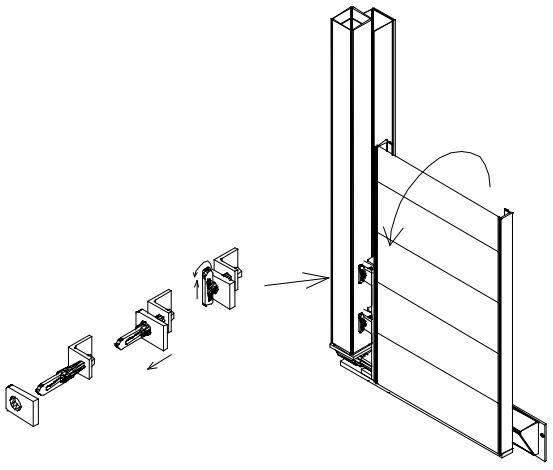
1. Open the platform using the method detailed below.
2. Lower the platform down to the ground.
3. Evenly distribute the load on the platform as close to the centre as possible.
4. Make sure to leave enough room to stand when intending to ride the platform and ensure that wheeled loads are securely braked.
5. Power the lift up keeping feet away from the edge of the platform.
6. When the platform reaches bed height release the control button. Holding the control button on when the platform has reached its stop can damage the lift.
7. When loading from the vehicle onto the platform ensure that the safe working load of the lift is not exceeded as the overload may damage the platform.
8. When closing the platform ensure that it is securely stowed in its locks (following the closing instructions).

10. OPERATING INSTRUCTIONS - EXTERNAL POLECAT

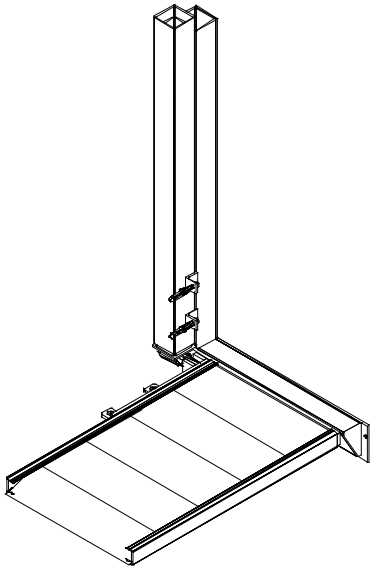
TO OPEN

1. Ensure the working area is clear and free from obstructions.

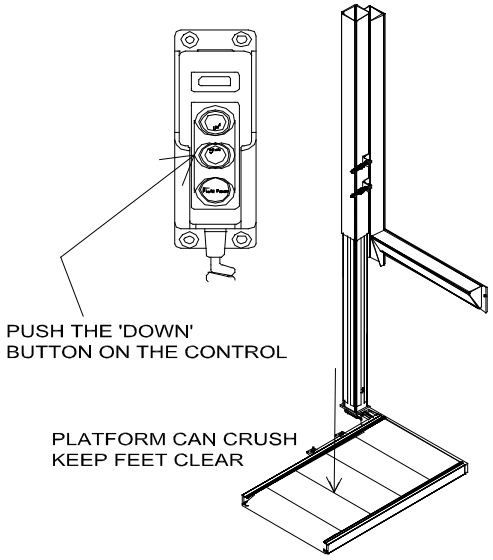
2. Standing to the curbside of the platform, grasp the platform with one hand, and open the anti-luce catches.
   NOTE – The catches are sprung loaded to prevent the platform from releasing due to the vibration from a moving vehicle. As such the platform may need to be pushed inwards, compressing the spring, to allow the catches to be released.



3. Lower the platform to its horizontal position



4. Press the down button on the control to lower the platform down to the ground.



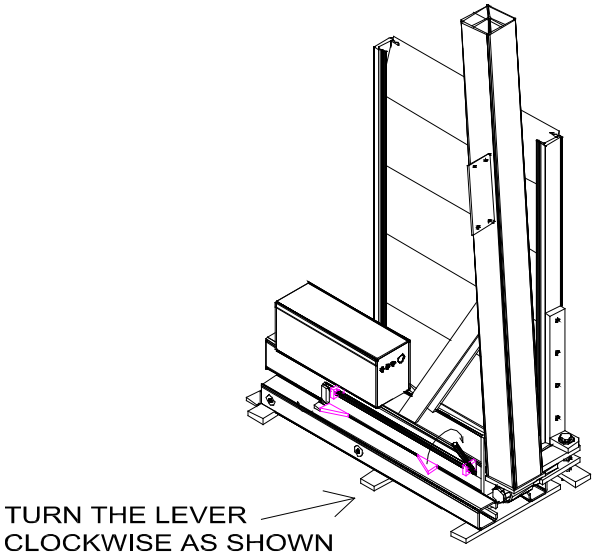
TO CLOSE

1. Press the raise button to raise the platform as high as it will go.
2. Fold the platform up to its vertical position and engage the anti-luce locks.
3. Disconnect the wander-lead hand control.

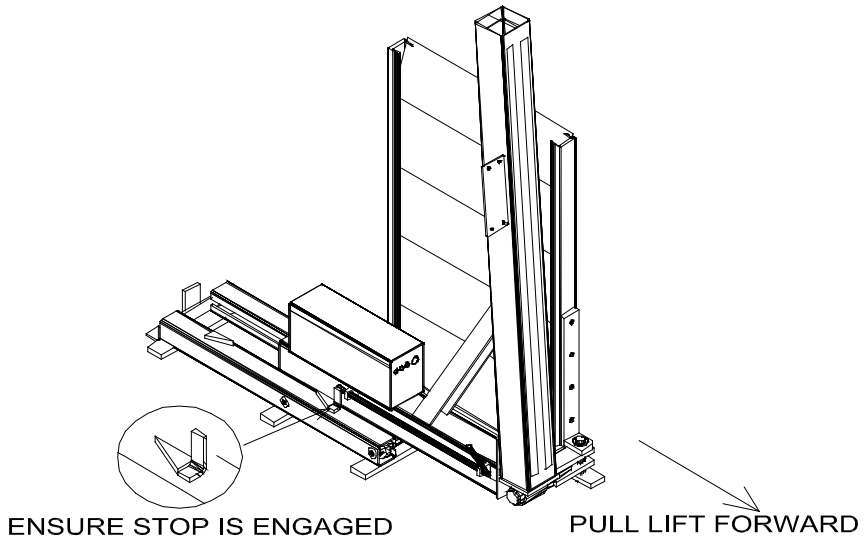
11. OPERATING INSTRUCTIONS – INTERNAL POLECAT

TO OPEN

1. Open the vehicle doors and ensure that the working area is clear and free from obstructions.
2. Release the polecat by turning the lever on the left-hand side of the polecat clockwise as shown.



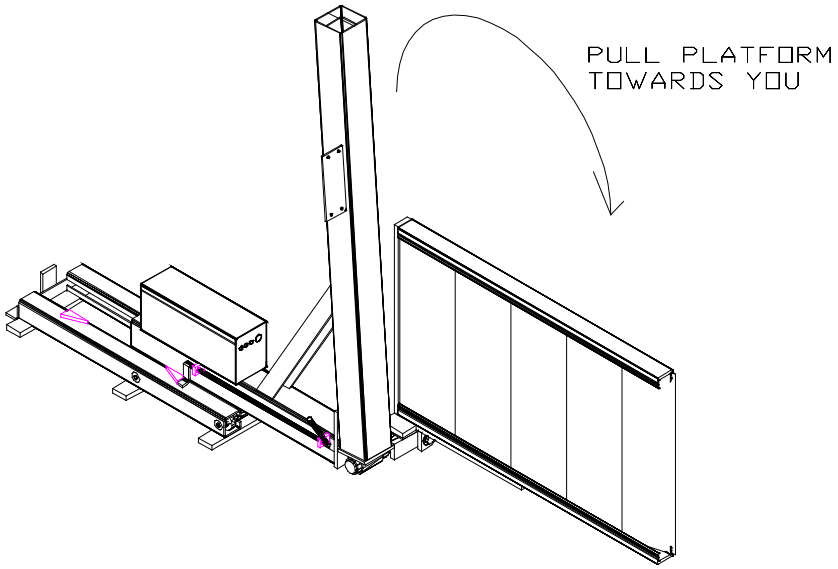
3. Pull the pole with the platform assembly towards you until it completely clears the floor of the vehicle. Ensure that the sprung loaded lever engages its forward stop.



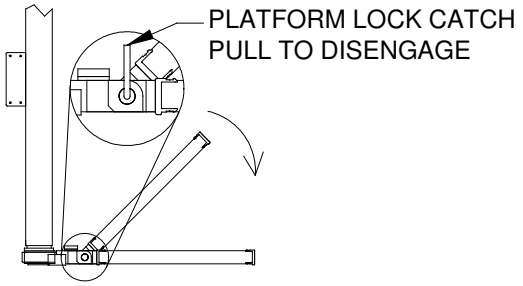
CAUTION

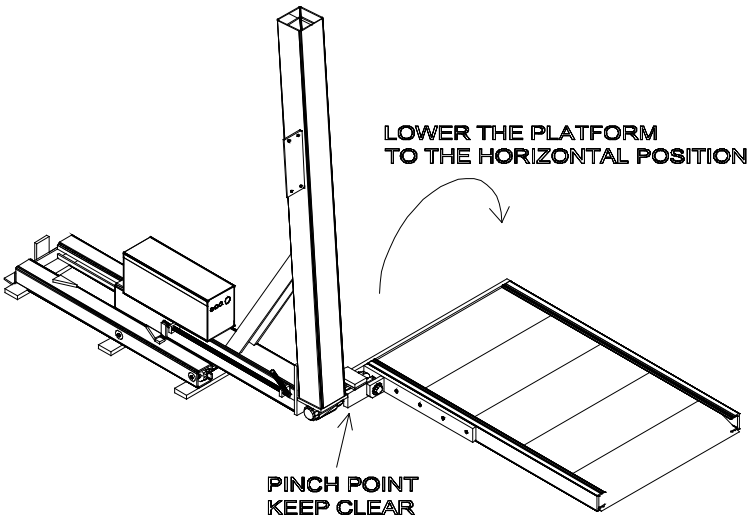
Avoid pinching hands and feet. Keep clear of the sliding track and the platform assembly.

4. Grip the top of the platform and pull it towards you, keeping hands clear of the hinge assembly.

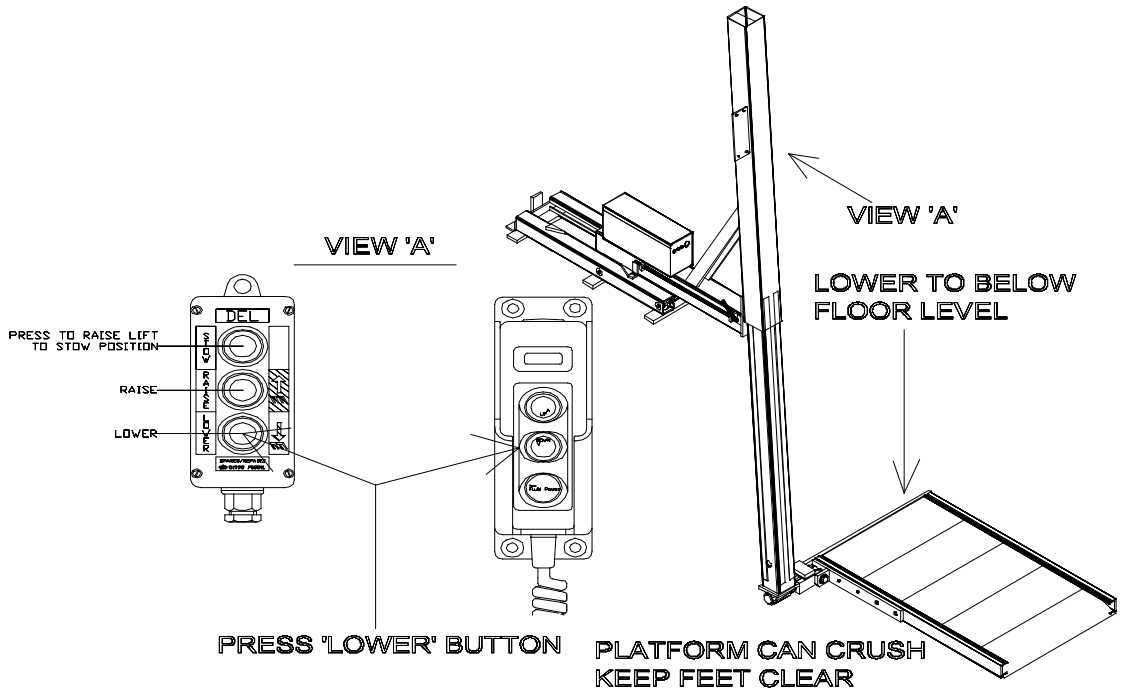


5. From the right hand side of the lift, take hold of the platform and lower it to its horizontal position. On large platforms with torsion assistance, pull the lock catch towards you before rotating the platform clockwise to the horizontal position.

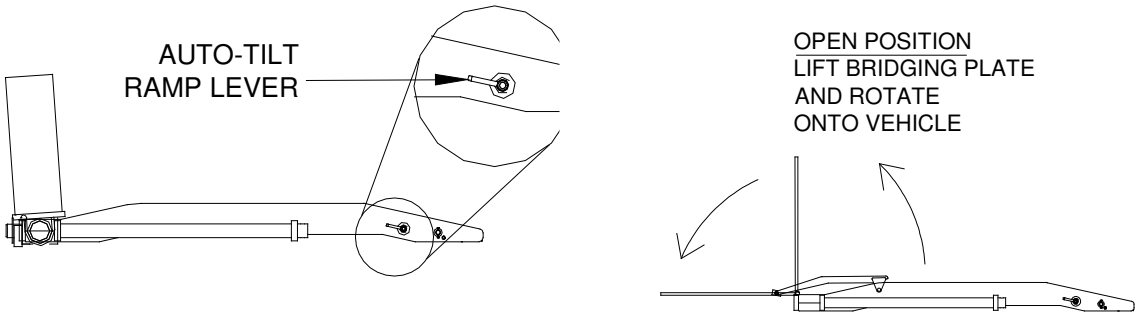




6. Using the hand control, lower the platform to below vehicle floor level.



7. Open the bridging plate. This will either be located on the bed of the vehicle, or on the vehicle edge of the platform. Activate the auto-tilt ramp (where fitted) by rotating its lever through 180 degrees and continue to lower the platform to the floor.

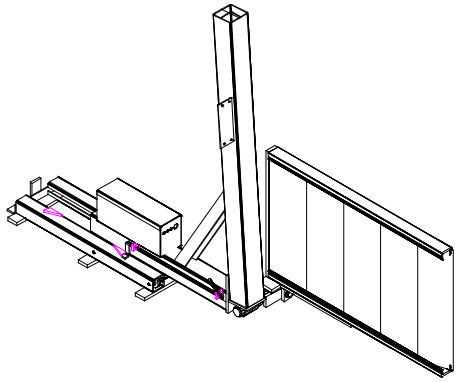


TO CLOSE

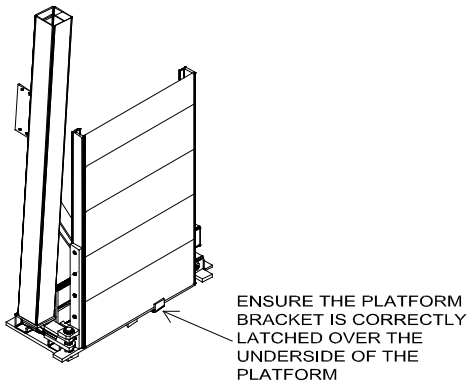
1. Power the lift up as far as possible. On lifts fitted with the automatic stop function, the platform will stop level with the floor of the vehicle. To stow the platform, it must be in its fully raised position. This is achieved by pressing the stow and raise buttons together until the platform reaches the full extent of its upward travel.

2. Close the bridging plate and lock the auto-tilt ramp (where fitted) in its stowed position.

3. Fold the platform anti-clockwise to the vertical position. Note that on platforms with torsion assistance the platform lock catch will need to be disengaged (as described above) to fold the platform. Ensure that after the platform has been rotated to the position shown below, that the platform lock catch is engaged to hold the platform in this position.



4. Rotate the platform up and away from you, ensuring that the platform is located in its stow bracket.



5. Turn the locking handle on the left-hand side of the polecat and push the pole with the platform assembly away from you, ensuring that the sprung loaded stop has engaged on its rear stop position and the platform is securely held in its retaining bracket.

MAINTENANCE HANDBOOK

1. INTRODUCTION

Low maintenance requirements are an important benefit of the DEL tailift. There is a minimum of moving parts and no cables to fray. However, low maintenance does not mean NO MAINTENANCE – Attention to the simple monthly, seasonal and yearly program should ensure years of safe, trouble free work from your DEL tailift.

IMPORTANT

The “duty holder” (owner/user /operator) of the tailift has a legal responsibility to ensure that the lift is safe to use at all times. These duties and responsibilities are documented in some detail in the LOLER 1998 and PUWER 1998 Regulations. Del has produced a document to provide advice to “duty holders” (tailift owners and users) to assist them to comply with Government Health & Safety Regulations. It also provides useful information for service engineers. This document (guide No. 4001.1) is available on request.

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2. KEY NOTES ABOUT LOLER AND PUWER REGULATIONS

RESPONSIBILITY

The DEL Polecat Tailift has been built to offer trouble-free and safe service for many years provided it is properly cared for. The "duty holder" (owner/user /operator) of the tailift has a legal responsibility to ensure that the lift is safe to use at all times. These duties and responsibilities are documented in some detail in the LOLER 1998 and PUWER 1998 Regulations. A copy of these Regulations and the relevant ANNEX 12: Thorough examination of a lorry tail lift are available from HSE Books.

LIFTING OF PERSONS

The DEL Polecat lift has been designed primarily as a goods lift. We do not authorise its use as a passenger lift but it can be safely used to lift and lower the (properly trained) operator. There should never be more than one person (the operator) on the platform when it is being raised or lowered. When on the platform, the operator must have sole control of the upwards and downwards movements of the platform, this will minimise the risk of a fall or of trapping or crushing. Safety gates can be obtained, as an option, where the user believes there is a risk that the operator might fall from the raised platform. As an additional safety measure we recommend that the operator wears suitable safety shoes or boots, which are fitted with steel caps.

THE COMPETENT PERSON

The LOLER Regulations make several references to a competent person. This person or persons has two separate responsibilities. The first one is to devise an ***examination scheme*** in terms of scope and frequency of examination for the tailift. The second is to carry out the recommended *Thorough Examinations* and inspections. This could be, but is not necessarily the same person, the skills and level of knowledge of the person is all-important. It is also very important that the competent person(s) who conducts the thorough examination is "independent" and free to report any faults without fear of recrimination.

EXAMINATION SCHEME

This documented procedure provides details of what should be inspected and at what intervals. The person(s) who prepares the scheme must have a very good working knowledge of our Polecat lift. The Regulations provide a basic scheme for a *thorough examination* but if you are suitably qualified you may alter the frequency of inspections (within certain limits) and you may add other elements to the examination if you think it necessary. If you do not have easy access to a qualified person to prepare a suitable *examination scheme*, you may adopt this scheme, as detailed below. This scheme has been prepared by a "competent person" i.e. DEL's own engineer(s) and if followed properly, it will comply with the LOLER Regulations. You will still be responsible for ensuring the examinations are carried out per schedule and for ensuring that an "independent" competent person carries out the inspections.

TORSION BAR (WHERE FITTED)

Some Polecat platforms are fitted with a torsion bar, which assists when opening and closing the platform. The torsion bar is pre-set on manufacture and is housed on the side of the platform. The tension in the bar should only be adjusted by someone who has been specifically trained to do so. It is NOT a user serviceable part. Note that the platform is heavy and is very difficult to close large platforms without torsion assistance, extreme care must be taken when opening a platform, which does not have any torsion assistance.

WARNING – Torsion bars are brittle and can shatter if not handled correctly. Even when the platform is closed there is still a significant force on the bar and other components attached to it, these components (i.e. locking tab and hinge pin) should not be altered while the bar is under torsion.

SPRINGS

There are springs located on the carriage stop catch. The correct operation of this spring should be regularly checked to ensure that the platform is always safely stowed.

HYDRAULIC SYSTEM

The hydraulic system uses high operating pressures and as such should be treated with caution. Never work on the lift while the system is under pressure, always lower the platform onto the ground before any maintenance of the system.

WARNING – High-pressure ejection of hydraulic fluid can cause serious injury. A ram in operation/under pressure has a large amount of stored energy.

4. MAINTENANCE PROCEDURE

1. On a daily and weekly basis perform the checks as described below.
2. Before carrying out the service the tailift should be cleaned and inspected. We also recommend that it receive a Thorough Examination, just prior to the service. If the service engineer is shown a copy of a very recent *Thorough Examination* Report (within the last 7 days), and if he accepts that the *Thorough Examination* has been completed by a "competent person", he may decide not to repeat some or all of the checks in the service.
3. The service schedule gives details of regular service procedures. All of the procedures should be carried out at each service except the hydraulic oil change, which only needs to be done every 24 months. The appropriate part of the service record should be completed after each service.
4. Where major repairs are needed (see below); the additional service sheets should be completed. The post installation tests which refer to the replaced part need to be repeated i.e. if the power pack is replaced, the overload, drift and operating speed tests need to be repeated.

USAGE

The maintenance schedule for column lifts is given below. The time scale for the schedule is given below

Light use - An average of about 10 cycles per day at loads well below the safe working load of the lift - Service twice per year.

Normal use – An average of about 30 cycles per day at loads mostly below the safe working load – Service 3 times per year

Heavy use – An average of about 60 cycles or more per day at loads on or close to the safe working load – Service 4 times per year

The times given for the schedule are taken from the date of installation.

The need for regular, preventative maintenance is essential to the working life of the lift.

MAJOR ALTERATIONS/REPAIRS

In the case of a major repair the service report (see page 28) should be completed. After such repair the tests after installation should be carried out to ensure the lift is set up and operating correctly and safely after the repair. A major repair is classed as one, which involves the replacement of parts due to failure or malfunction.

REPLACEMENT PARTS

A complete list of service replacement parts can be obtained by contacting DEL Service.

DAILY INSPECTIONS

At the beginning of each shift or working day that the equipment is in use the following routine inspections should be carried out, **by the trained and authorised person who will use the equipment (usually the truck driver).** There is no need to keep any records of the inspection but if any faults or defects are found they must be communicated to the business manager/owner. This routine inspection, done at the depot, should normally take no more than a few minutes and could eliminate a lot of time and effort later in the day. If in any doubt the equipment should not be used until any serious defect has been dealt with. This may mean involving a "competent person" to inspect the lift.

- Ensure the lift is properly secured on the body, i.e. that the welds and or bolts are secure and tight.
- Check that the two warning flags are in place on the platform, if not ask for them to be ordered immediately.
- Check that the TOEGUARD (External Polecat only) is securely fastened and is not deformed.
- Check that the floor plate (Internal Polecat only) is securely fastened and not deformed.
- On external Polecats look on the ground, under the power pack box, ensure there is no oil leaking from the system. For Internal polecats check under the lift carriage to see if there is any oil leaking from the system.
- Inspect the control buttons to ensure they work properly.
- Carefully open the platform and ensure that the platform surface is not slippy. Also check the action of any folding ramps/stops which may be fitted.
- Lower the platform to the ground then immediately raise it back to bed level. Ensure the movement is smooth with no grinding noises or unusual motor or pump noises.
- Close the platform ensuring the effort is within normal limits i.e. that any TORSION BAR(S) fitted are still operational.
- Close the platform and ensure it is secure.

WEEKLY INSPECTIONS

Once a week, when the equipment is in use, the following additional checks should be carried out. These can be done by the user (truck driver) or by another suitably qualified person. **NB It is not necessary to employ a fully qualified service agent to complete this work.**

- Check that all the warning decals are in the correct place.
- Check that the DEL plate is visible indicating the SWL.
- Check that the inner pole of the lift is lubricated with a light oil.

The user should inform his business manager/owner of any problems. The business manager is responsible for ensuring proper action is taken.

It is not essential to log the outcome of these weekly inspections but it is sensible to note any faults found and later comment when the fault has been put right.

5. THOROUGH EXAMINATION

Who may conduct the Thorough Examination?

Only a "competent person" may conduct the *Thorough Examination*. This person can be an employee of the business or (s)he can be brought in from outside the company, it is the skill, knowledge and "independence" of the person that is all important. DEL recommend that you use a service agent who has been approved by us to service and/or repair DEL Tailifts. This person will already have the necessary level of knowledge to service the lift and will be competent to go through our recommended *Thorough Examination* procedure (as detailed below) and document the results. A comprehensive list of DEL approved agents is available on request.

When should the thorough examinations take place?

DEL authorise the tailift operator (but only the operator) to stand on the tailift in motion, and consequently the *Thorough Examination* must be done at least every six months. In exceptional circumstances the duty holder may be able to ensure that no person will ever stand on the tailift in motion, and may therefore decide that an annual *Thorough Examination* will suffice. In practise we believe that this would be very difficult to enforce and consequently we strongly advise that the examinations take place a minimum of every six months. In those situations where a tailift is subjected to arduous use (long periods of repeated usage with loads close to the rated capacity of the tailift), it will require more frequent examination. A Thorough Examination is also required after substantial or significant modification or repair.

Depending on the use of the lift, we recommend that the tailift is serviced between two and four times per year. We further recommend that the *Thorough Examination* is done by one of our approved service agents, it makes sense to have him conduct the *Thorough Examination*, prior to the service. It is essential however to ensure that the agent first conducts the *Thorough Examination*, then completes the necessary paperwork and then carries out the service. In the process the agent will put right any of the faults found, although more than one visit may be required if replacement components are necessary. The process might also involve making contact with DEL for advice and/or assistance. It is essential that the *Thorough Examination* report is written and filed prior to any service work being done. A competent person who fails to report a defect, simply because it has been remedied on the spot, is disguising a potentially dangerous situation.

Since much of the work involved with a *Thorough Examination* is required during a service, we recommend that a *Thorough Examination* is done prior to each service, i.e. twice, three or four times per year. If however you decide to separate the *Thorough Examinations* from the services you must ensure that a *Thorough Examination* is performed at least every six months.

What should be examined?

Below is a list of what we recommend should be examined. The examiner may decide to expand on this list if he suspects a fault might exist elsewhere. We can presume a good deal of knowledge and skill from our approved service agents and hence it is not necessary to explain in detail, in this procedure, exactly how to perform the examination, in fact we want to discourage the enthusiastic amateur from "having a go".
Before commencing the examination the tailift should be cleaned to ensure no faults are hidden by dirt.

- Check that all decals and warning flags are present and in their proper place.
- Ensure the lift carriage/frame is properly secured on the body, i.e. that the welds and/ or bolts are secure and tight.
- Check the inner and outer poles for straightness and damage.
- Check the vehicle chassis/floor is sound that all bracing is intact and secure.
- Check that the TOEGUARD (external polecat only) is securely fastened and is not deformed.
- Check the condition of all switch controls. Are all buttons intact, the casing, control box (if fitted) and battery cables undamaged and that there are no loose wires.
- Carefully open the platform and ensure that the platform surface is non-slip. Also check the action and condition of any folding ramps/stops which may be fitted.
- Lower the platform to the ground then immediately raise it back to bed level. Ensure the movement is smooth with no grinding noises or unusual motor or pump noises.
- Check that the tailift comes up to bed height and that the platform is level.
- Check the condition of the inner tube; ensure it is not excessively worn.
- Check that the inner pole is lubricated with a light oil.
- On Internal Polecat lifts, check that the carriage slides in its tracks smoothly and that all the bearings are in good order. Check that the forward and back stops operate correctly.
- Lower the platform approximately half way to the ground, then release the button and confirm the lift stops immediately. Raise the platform and before it reaches bed height release the button and confirm the lift stops immediately.
- Open and close the platform ensuring the effort is within normal limits i.e. that the TORSION BAR(S) (if fitted) are still operational.
- Operate the controls to stow the platform, ensure it is safely retained in its locks.
- Check Power Pack, solenoids etc for loose wires. Check that the tamper proof cap is still intact on the Pressure Relief Valve, or that the valve may only be adjusted with a special tool. NB the Power pack may be housed separately, if so remove the cover and carry out the inspection.
- Check all hose connections to the RAM.
- Check the oil level in the tank is correct and that there are no oil leaks.

The “standard” Thorough Examination is now complete. (see Weight Test point 1.5.3.4)
If a service is not to follow, all covers should be re-fitted and the paperwork competed and distributed.
If, as we recommend, the service agent has already been authorised to conduct a service (see point 1.6), the covers can be left off and the paperwork completed and distributed. The service agent will then already know if any components need repair or replacing and with the covers off he can commence work straightaway. The time to service the tailift is therefore minimised without compromising safety.

LOAD (OR WEIGHT) TEST

Provided the examiner can see that the tailift is in good condition and that it plus its bracing/fixings have not undergone any structural repair, and if he has evidence that the tailift has been Load Tested at least once in the past (every tailift should have been load tested just after installation), **there is no need to carry out any further Load Tests.**
If however the examiner has reason to believe the tailift has deteriorated (or the lift has undergone substantial modification) since the last Load Test, he should inform the duty holder and request a Load Test be arranged immediately. In such instances we recommend the examiner should forbid the use of the tailift until the tailift has passed the Load Test.
It has been “custom and practise” to have tailifts Load Tested annually (or in some cases every six months), for example this may be a condition of your insurance policy. In such circumstances you should comply with your insurer’s demands.
The DEL service agent will be trained and authorised carry out the Weight Test. Damage can be caused to the tailift should the Load Test be performed by an untrained person.

PAPERWORK FLOW

The “competent person” will be fully conversant with the Regulations and will ensure that any faults are properly recorded and communicated to the relevant responsible people. He is responsible for determining the timing by when all faults need to be corrected and in extreme circumstances he must be given the authority to forbid the use of the tailift until the necessary repairs are done.
The DEL agent will normally have his own company forms on which to record any faults and his comments, however a standard DEL form (D007), which meets the Regulations is available.

6. SERVICING THE TAILIFT

How often should it be serviced?

Although the servicing of a DEL Polecat lift is straightforward, we strongly recommend it is done only by trained and authorised DEL service agents. The frequency of the services will depend on the how often the tailift is used and how often it is required to lift loads close to the SWL.
We recommend that it be serviced either three or four times per year. This will be satisfactory in the vast majority of cases, but if in practise this proves to be insufficient, we recommend you contact the DEL Technical Department for advice (in case there is a fault). In exceptional circumstances the frequency of services could be increased.
If the tailift sees only "light use" i.e. the load is usually well below the SWL and the tailift is used only a few times per day, it may be sufficient to carry out the service every six months. In no circumstances would we recommend servicing the lift less than twice per year.
In all cases the tailift will perform best and the life of components will be greatly enhanced if the inner pole is Lubricated. We recommend you use a light oil and because this is a straightforward operation (a service engineer is not required) it could be even be done weekly at the time of the weekly inspection. This may be especially beneficial if the tailift is power washed regularly.

THE SCOPE OF THE TAILIFT SERVICE.

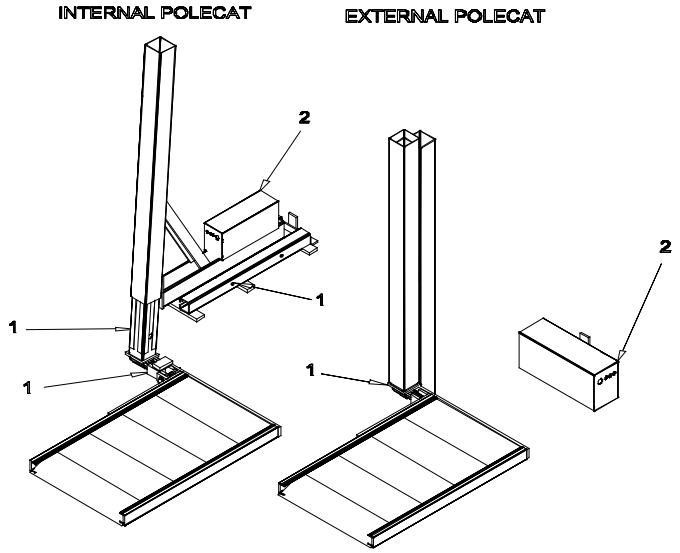
Before carrying out the service the tailift should be cleaned and inspected. We also recommend that it receive a Thorough Examination, just prior to the service.
The service agent should refer to his recent Thorough Examination report before starting work. If no report can be made available, and if he has not been contracted to carry out a Thorough Examination, the service engineer will have to carry out an inspection, as part of the service, to establish if any faults need correction. There are therefore two levels of service.

Service immediately following a Thorough Examination

- Replace any damaged or missing warning decals or flags.
- Tighten or replace any loose or missing nuts or bolts
- Open the platform and lower it to the ground. First clean the inner tube of any debris then liberally apply a light oil.
- Apply light oil to the platform hinge assembly and to any other hinges or joints on ramps or stops.
- Add hydraulic oil (ATF Dextron 2) to the tank if necessary.
- If necessary re-align the platform
- Operate the lift a couple of times and ensure everything operates smoothly.
- Make a note of any further faults found which have come to light after the Thorough Examination has been documented, and list any work which has

not been completed together with any replacement components, which may be required.

- Complete the standard paperwork and file your report.



The above list represents the "Standard DEL Recommended Service", ensure you ask your chosen DEL service agent to include for all of the above in his quoted price. The cost of any additional repair work, including that identified on the Thorough Examination, which needs to be done and any replacement components required will not normally be included in the price for the service. If the work is not being done under warranty or under a maintenance agreement the additional work will be charged for, either on a time and materials basis or for an agreed fixed price.

Service undertaken without the inclusion of a Thorough Examination.

The duty holder may decide to engage another qualified "competent person" to carry out the Thorough Examination and may want the DEL service engineer to only carry out the service. Del, however, do not recommend that a service be done "blind" and hence an inspection of the tailift is essential in order to ensure the lift will operate properly and safely. Nor can we recommend that any of the checks, which are listed in the Thorough Examination, be omitted from this inspection. The service engineer will therefore need to go through the same checks as in the Thorough Examination (without the need to record his findings on the form) and then complete the service as described above.
If the service engineer is shown a copy of a very recent *Thorough Examination* Report (within the last 7 days), and if he accepts that the *Thorough Examination* has been completed by a "competent person", he may decide not to repeat some or all of the checks, and instead carry out the service as though he had completed the *Thorough Examination* himself.

7. TAILIFT SERVICE RECORD

Vehicle reg. No…….. Tailift Model…….
Lift Serial No…….. Date of Manufacture……..

Service 1 (4 Months)
Date……
Company……
Address……..
Signed…….
Pint Name……..
Comments……..
……..
……..

Service 2 (8 Months)
Date……
Company……
Address……..
Signed…….
Pint
Name……
Comments……..
……..
……..

Service 3 (12 Months)
Date……
Company……
Address……..
Signed…….
Pint
Name……
Comments……..
……..
……..

Service 4 (16 Months)
Date……
Company……
Address……..
Signed…….
Pint
Name……
Comments……..
……..
……..

Service 5 (20 Months)
Date……
Company……
Address……..
Signed…….

Pint
Name……
Comments……..
……..
……..

Service 6 (24 Months)
Date……
Power pack hydraulic oil changed?.....Y/N
Company……
Address……..
Signed……
Pint Name……
Comments……..
……..
……..

Service 7 (28 Months)
Date……
Company……
Address……..
Signed……
Pint
Name……
Comments……..
……..
……..

Service 8 (32 Months)
Date……
Company……
Address……..
Signed……
Pint
Name……..
Comments……..
……..
……..

Service 9 (36 Months)
Date……
Company……
Address……..
Signed……
Pint
Name……...
Comments……..
……..
……..

8. RECORD OF MAJOR REPAIRS

DATE……

FAULT……

……

……

CLAIMED UNDER WARRANTY YES/NO?

PARTS PURCHASED……

……

……

TESTS COMPLETED ON PARTS FITTED

……

REPAIRED BY……

COMPANY NAME & ADDRESS……..……..

……

……

DATE……

FAULT……

……

……

CLAIMED UNDER WARRANTY YES/NO?

PARTS PURCHASED……

……

……

TESTS COMPLETED ON PARTS FITTED

……

REPAIRED BY……

COMPANY NAME & ADDRESS……..……..

……..

……..

9. FAULT FINDING CHART

FAULT	REASON	
Will not Lift	Motor not running	- Fuse blown - Check power to motor - Check starter switch - Check wiring to starter switch - Faulty earth - Faulty push button - Seized pump
	Motor runs fast	- Pump scored and slipping - Solenoid valve contaminated - Relief valve contaminated or not set high enough - Ram seal or rod scored - Coupling between pump and motor broken - No oil/low oil level
	Motor runs slowly	- Bad electrical connection to battery or earth - Battery flat - Motor bushes worn - Hydraulic line blocked, hose collapsed, flow control closed or incorrectly fitted - Wrong size of pump fitted - Mechanical damage to tailift - Suction filter blocked
Lift will not lift load or part load		- Relief valve setting too low or contaminated - Pump scored - Oil too thin - Low oil level - Solenoid valve contaminated
Lift will not lower		- Solenoid wire or coil failure - Electrical push button failure in switch or wiring - Mechanical damage
Lift lowers slowly		- Oil too thick - Collapsed hose or blocked hydraulics line - Solenoid valve jamming or incorrectly set by manufacturer

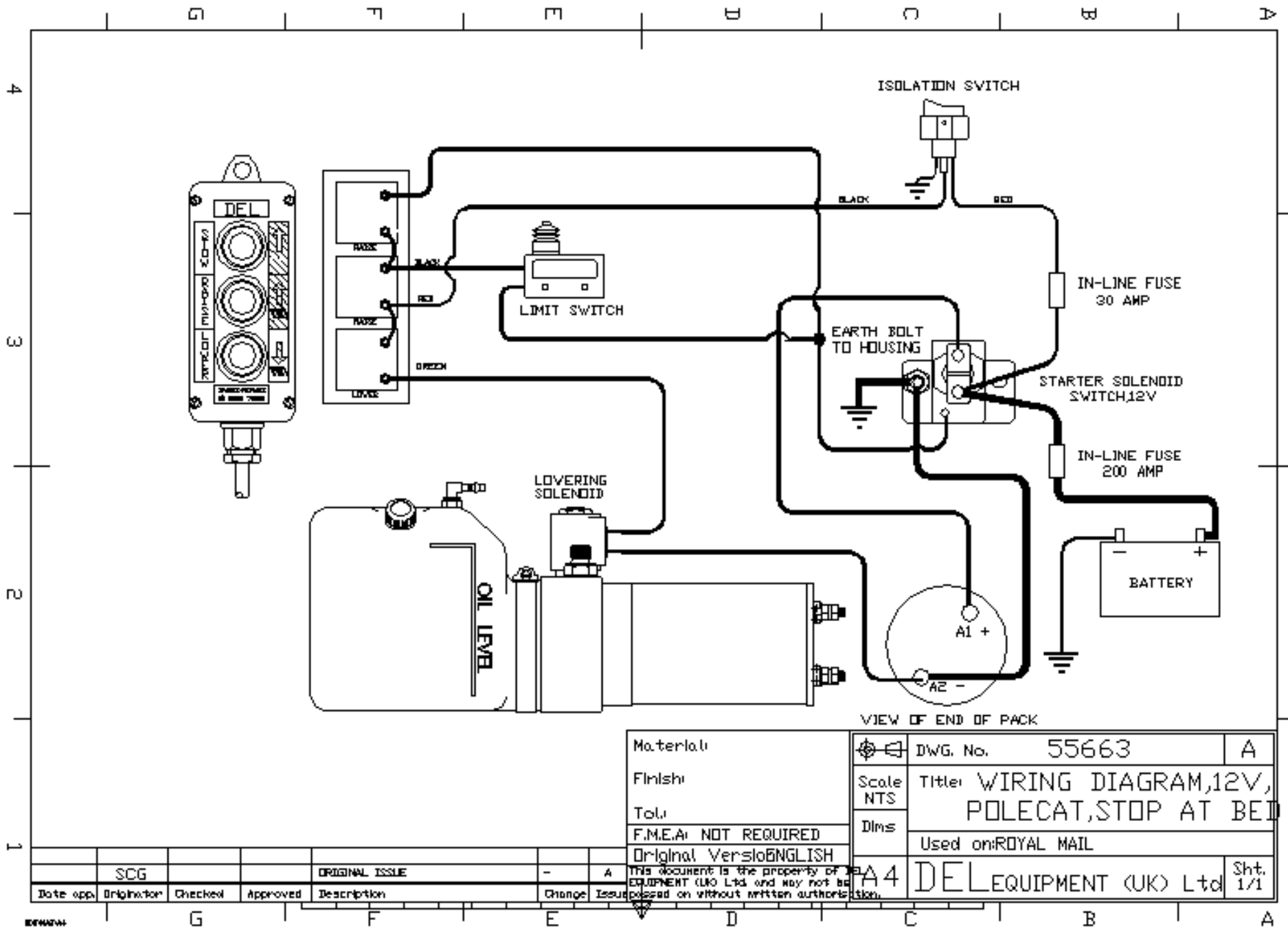
	-	Flow control blocked or incorrectly set or fitted.
Lift creeps down	-	Solenoid valve leaking
	-	Check valve leaking
	-	Oil leak
	-	Pipe leaking
	-	Ram seal leaking
	-	Pump casting porous
Lift only raising partially	-	Not enough oil
	-	Suction filter blocked
	-	Tank filter breather blocked or shipping plug fitted
	-	Mechanical damage
	-	Relief valve set too low
Pump unit noisy	-	Oil too thick
	-	Not enough oil
	-	Suction filter blocked
	-	Relief valve not set high enough
	-	Motor bearing or bushes worn

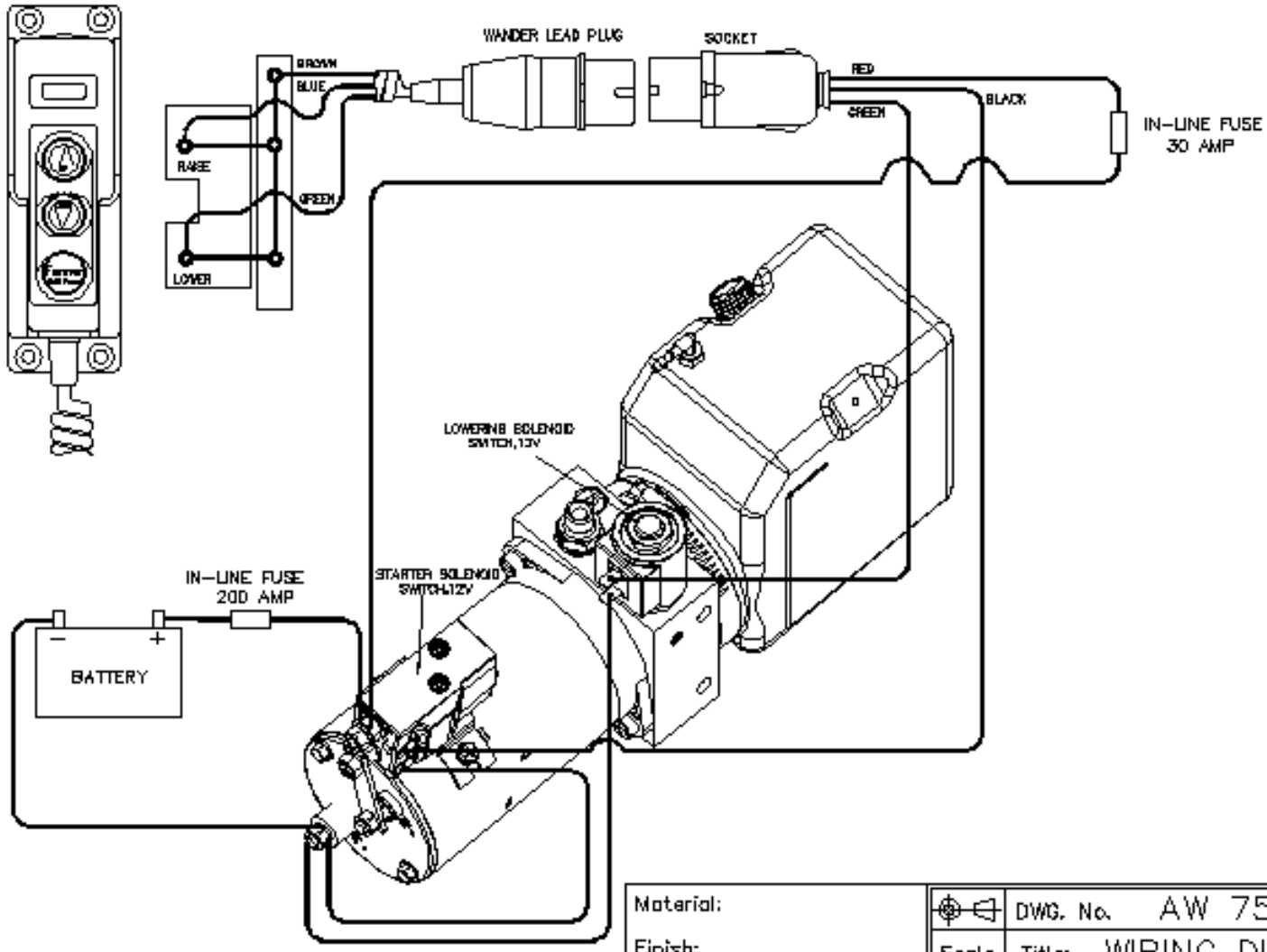
CHECK PROCEDURES

Tools	-	Pressure gauge
	-	Avo meter
	-	Earth strap

(1) Ensure a good electrical supply is reaching the motor and control switches, good earth is essential.

(2) Check hydraulic pressure when lifting an empty load, full load and at relief valve setting. Relief pressure should be approximately 10% higher than maximum pressure when lifting Safe Working Load (SWL).





	MJS			PACK SHOWN CHANGED	D008040	B
	MJS			ORIGINAL ISSUE	-	A
Date app.	Originator	Checked	Approved	Description	Change	Issue

Material:

Finish:

Tol.: GEN. ± 1.5 u.o.s.

F.M.E.A: NOT REQUIRED

Original Version: ENGLISH

DWG. No. AW 75302 B

Scale NTS

Title: WIRING DIAGRAM,12V– WANDERLEAD CONTROL

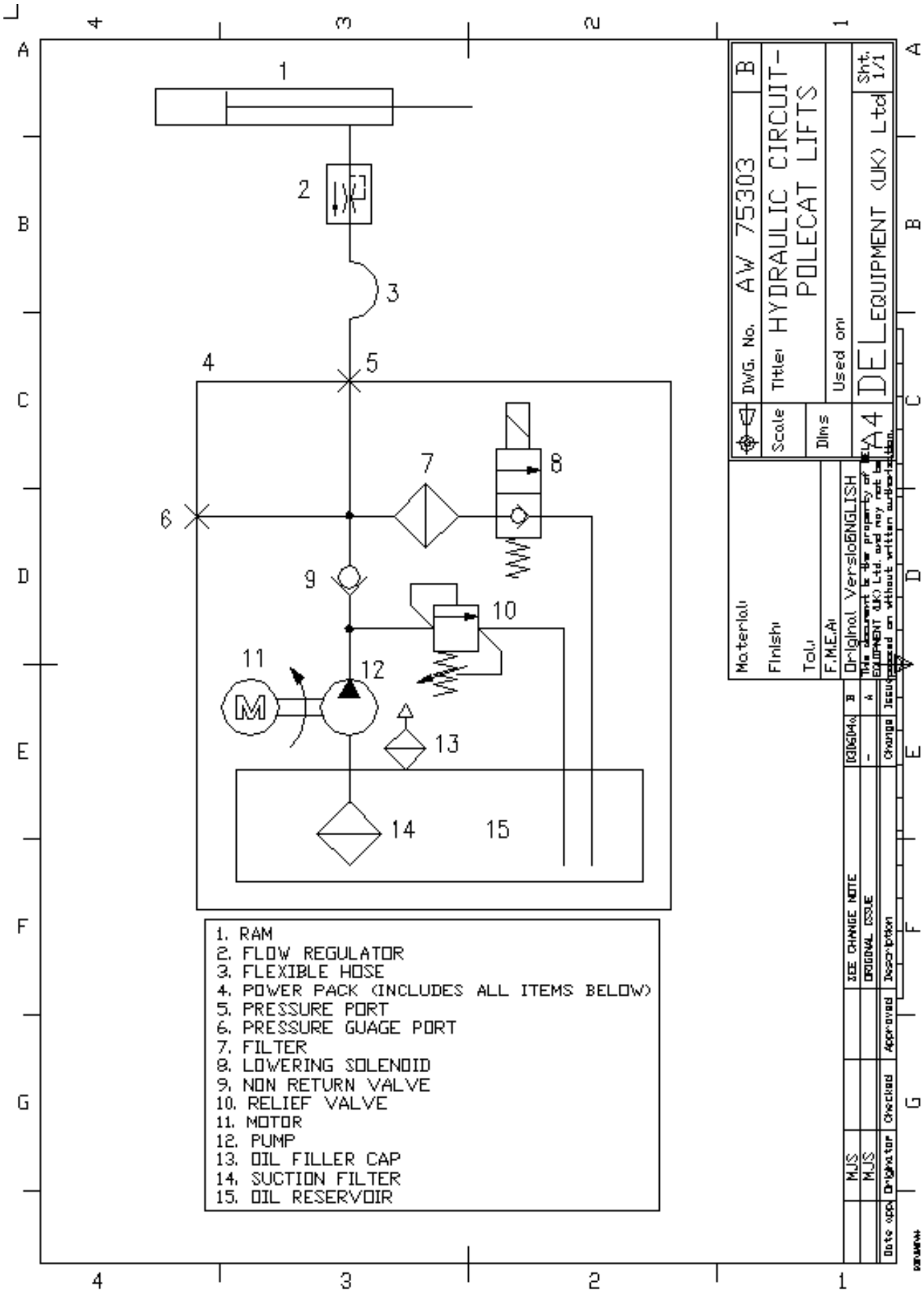
Dims mm

Used on: POLECAT

A4

DEL EQUIPMENT (UK) Ltd.

Sht. 1/1


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
M
1. RAM
2. FLOW REGULATOR
3. FLEXIBLE HOSE
4. POWER PACK (INCLUDES ALL ITEMS BELOW)
5. PRESSURE PORT
6. PRESSURE GUAGE PORT
7. FILTER
8. LOWERING SOLENOID
9. NON RETURN VALVE
10. RELIEF VALVE
11. MOTOR
12. PUMP
13. OIL FILLER CAP
14. SUCTION FILTER
15. OIL RESERVOIR
DWG. No. AW 75303 B
Title: HYDRAULIC CIRCUIT- POLECAT LIFTS
Scale
Dims
Used on:
Sht. 1/1
DEL EQUIPMENT (UK) Ltd
A4
Material:
Finish:
Tol.:
F.M.E.A:
Original Version ENGLISH
SEE CHANGE NOTE
ORIGINAL ISSUE
Description
Approved
Checked
Originator
MJS
Date appd