

denka dl25

shortform operating instructions



road towable access

This book is designed as a guide to enable you to start work quickly and safely. It is not intended to replace the full manufacturer’s operating instructions (a copy of which should be with your machine) which should be read and understood by anyone operating the machine.

SAFETY TIPS

ALWAYS

- Inspect your machine before use.
- Check all operations including ground controls.
- Check ground conditions.
- Check clearance from overhead obstructions (power cables, building projections etc).
- Plan your task/job.
- Use sole boards under your outriggers at all times regardless of ground conditions.
- Stabilise and level machine before use.
- Wear a safety harness connected to a suitable anchorage point inside the platform.
- Operate all controls smoothly.
- Warn other people that you are there by means of flashing lights, sign and cones.
- MAKE SAFETY YOUR No.1 PRIORITY.

NEVER

- Use an unsafe machine.
- Use an access platform to hoist loads like a crane.
- Overload cage/platform.
- Operate in strong winds (Check manufacturer’s recommendation).
- Rest the cage on a structure or object to gain extra support.
- Attach your safety harness to a structure outside of the platform.
- Throw or drop anything from the platform.
- Use boxes, ladders or stand on handrails to gain additional height, if you can’t reach, you need a bigger machine.
- Let an untrained person operate the access platform.
- Take unnecessary risks (hospitals and graveyards are full of dead heroes!)

**In the unlikely event that your machine develops a fault
please contact the Facelift Tech Team on 01444 881100**

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SAFETY REGULATIONS

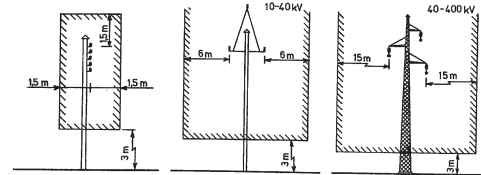
The lift's construction and control system prevents the user of a break down during general operation conditions. However, you still have to pay a great deal of attention while using the lift. Furthermore, it is most important to closely stick to the instructions in this manual. Do not in any way evade the safety functions of the lift.



A FAULTY OPERATION OR AN INCORRECT USE OF THE LIFT CAN CAUSE BREAK DOWN, PERSONAL INJURY OR MORTAL DANGER!

1. Read and understand this operator's manual and the instructions pasted on the lift.
2. Only trained persons (familiar to all lift functions) are allowed to operate the lift.
3. The lift must not be used by persons under the age of 18.
4. The lift must not be used by persons who are under the influence of alcohol/medicine/drugs.
5. To prevent an unauthorised use of the lift, never leave the lift unlocked and remember to take the key with you.
6. There must be a trained person present who is able to carry out an emergency lowering from the ground if necessary.
7. Never use a defective lift.
8. Prior to using the lift check its safety equipment.
9. Never exceed the basket's maximum load of 200 kg (equals to approx. 2 persons + 40 kg).
10. The basket's side forces must not exceed 320 N.
11. The lift has to be set up in a horizontal-level position and on a base capable of bearing.
12. Never install the lift on a slope exceeding $5^\circ = 8,75\%$.
13. When placing the lift on sloping ground always use scotches under the wheels for stabilisation.
14. Stops and thoroughfare below the basket are prohibited due to risk for falling objects.
15. Prior to using the lift check its proper set-up.
16. When placing or operating the lift on public areas a distinct marking or a barring of the workplace has to be done.
17. The lift's operator must ensure that nobody and nothing can be jammed.
18. When using the lift ensure that the basket's gate is securely closed.
19. Never use the lift as a crane.
20. Never increase the basket's load when the boom is outside the transportation position.
21. Never leave the basket when it is in its lifted position.
22. Never sit nor stand on the basket's railings.
23. Never increase the working height by ladders, planks or similar objects.
24. Never install plates or the like that might increase the wind area of the basket or the boom.
25. Materials and tools must be securely placed in the basket.

26. Avoid any contact or collision with fixed stanchions/buildings.
27. When working close to live wires the safety distances must be complied with.
28. The lift must not be used in environments with danger of explosion.
29. Never use the lift outdoors if wind velocity is exceeding 12,5 m/sec.
32. Never recharge the batteries near sparks or open fires. Batteries under charging procedure produce highly explosive hydrogen gas.
33. Always meet the date of the yearly security inspection.



According to the "Power Switch Regulations" the distances have to be closely observed for both persons as well as passenger lifts when working close to live supply plants. In case the work is requiring smaller distances the person in charge of the work should make an agreement in advance with the power supplier as to the performance of the work.

USING THE LIFT

PRIOR TO USING THE LIFT



THE LIFT HAS TO BE USED ACCORDING TO THIS OPERATOR'S MANUAL AND THE INSTRUCTIONS PASTED ON THE LIFT!

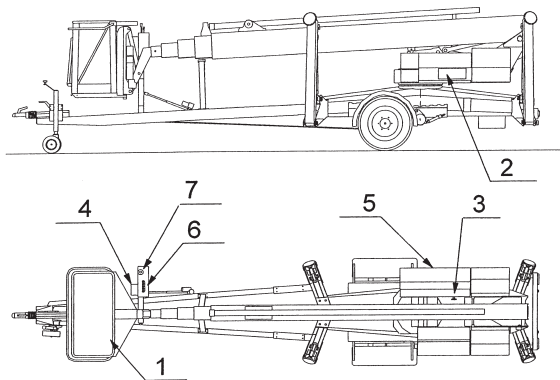
For a reliable use of the lift it is important that you stick to this instruction manual and the directions pasted on the lift. In chapter 8 you will find a specification of instruction labels available for your machine.

All lift operators must have studied this instruction manual or have been educated by a skilled user prior to working on this machine.

Before getting started always check that

- the batteries are fully charged,
- the deadline for the safety overhaul is not exceeded,
- all control devices are intact,
- all instructions pasted on the lift are clearly legible,
- the hydraulic system does not have any leakages,
- there are no visible damages on the hydraulic coils and pipes,
- there are no visible damages on the driving gear, wheels, chassis, slewing base, boom or basket,
- the light panel works faultlessly.

CONTROL PANELS



OPERATION PLACES

Position Function

- | | |
|---|---|
| 1 | The basket's control panel. (emergency stop, interrupts all controls) |
| 2 | The slewing base's control box. (emergency stop, interrupts all controls) |
| 3 | Emergency stop of the engine. (interrupts the lift's electric. engine) |
| 4 | Spirit Level. |
| 5 | Emergency operation. |
| 6 | Control lever for the support legs. (emergency stop, interrupts all controls) |
| 7 | Control of the self-driving device. (manoeuvre function) |



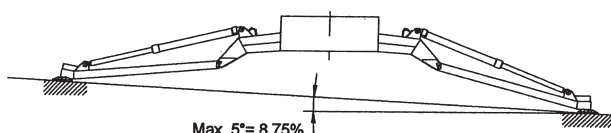
PRIOR TO USING THE LIFT CHECK ITS PROPER INSTALLATION! (CHAPTER 3.3)

When placing the lift for a longer period of time at the same place check that the lift is still in level and that all support legs are having contact with the ground before continuing your work with the lift.

Never use a defective lift. In case of doubt or if possible defects or damages are found the basket has to be taken down immediately. All defects and damages are to be repaired before the lift can be used again.

SETTING UP THE LIFT

BEFORE INSTALLATION



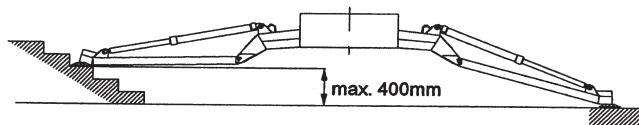
Always check that the base has sufficient load capacity and stands on ground with a slope of less than $8,75\% = 5^\circ$

With placement on loose ground always use base plates/scotches under the support legs for equal spread of the load.

In case that supporting the lift is necessary:

The load on one single support leg can reach up to 2500 kg under working operation. Thus the following recommendations should be followed:

Placement on:	Minimum demands for supporting	Surface pressure
Asphalt, concrete or flagging:	No special supporting necessary.	80 N/cm ²
Solar heated asphalt:	28mm plate of min. 40 x 40cm.	16 N/cm ²
Dry, firm lawn or tread-down gravel:	28mm plate of mm. 40 x 40cm.	16 N/cm ²
Loose soil, wet/damp lawn or other bases that are not firm:	Never place the lift on one of these surfaces as even minor changes of the ground condition can be dangerous.	
Ice:	Never place the lift on icy surfaces.	



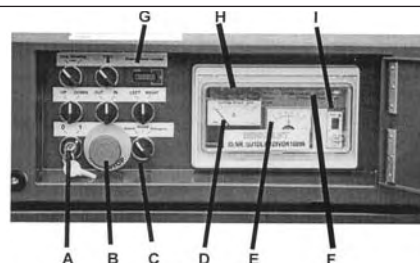
If it is necessary to equalise the level differences by base plates ensure that the scotches cannot slip or move. As the load on one support leg can vary from 0-2500 kg during the use of the lift, you have to be aware that the scotches might get loose.

Check that the rotating slewing base cannot collide with firm objects as e.g. walls or similar objects and neither with moving parts as cranes, ships, cars, etc. As a minimum the support leg square should be free. See dimension sketch 9.4.



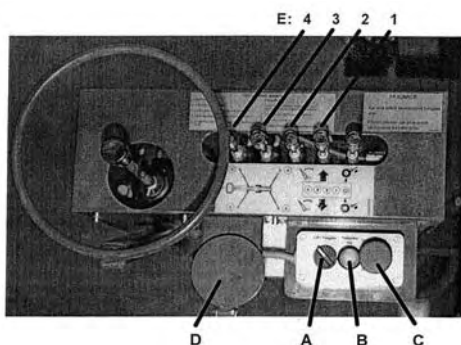
WHEN THE LIFT IS PLACED IN PUBLIC AREAS THE WORKPLACE HAS TO BE CLEARLY MARKED AND POSSIBLY BARRED!

CONTROL BOX AT THE SLEWING BASE



- A Key switch.
- B Emergency stop: Press to activate. Turn clockwise to stop.
- C Selection of operation place.
- D Ammetre. Current charging.
- E Volt metre. Battery current.
- F Pilot lamps.
 - Green Support legs o.k.
 - Red Batteries empty.
 - Green Batteries fully charged.
 - Yellow Load connected.
- G Hour counter.
- H Fuses.
- I Automatic fuse device.

OPERATION OF THE SUPPORT LEGS FROM THE BASKET



- A Selection/Choice of operation place. "LIFT/SUPPORT LEGS"
- B Pilot lamps.
 - Green: Support legs o.k.
- C Emergency stop: Push to activate. Turn clockwise to inactivate.
- D Spirit Level.
- E Support legs (seen from basket in direction chassis).
 - 1 Front right
 - 2 Front left
 - 3 Rear right
 - 4 Rear left

Push forward. Support legs move upwards.
Pull back. Support legs move downwards.

PLACING THE LIFT

- 1 Use the basket's control panel.
- 2 Pull the hand brake or activate the drive rolls for the self-driving function towards the wheels. (see chapter regarding manoeuvre function) When placing the lift on sloping grounds scotches must be used.
- 3 If possible always connect the charging cable.
- 4 Open the control box at the slewing base and turn the key to position "1".
- 5 When deciding on the operation placement turn the switch "BASKET/CHASSIS/SUPPORT LEGS" to pos. "BASKET" and the switch "LIFT/SUPPORT LEGS" next to the basket-support legs control to position "SUPPORT LEGS".

The hydraulic pump starts and stops after approx. 5 mm. automatically. By setting the switch to "LIFT" and back to "SUPPORT LEGS" the pump will start again.

6. With the control levers on the right side of the basket the front support legs are lowered first in order to protect against overload of the supporting wheel. All 4 support legs are lowered until the wheels are free from the surface and the green lamp on the control box "SUPPORT LEGS OK" is alight. To facilitate a quick, easy and proper installation we recommend to operate the support legs by pairs.
7. The adjustment of the support legs has to be continued until the lift is level (check the built-in spirit level). Make sure that all support legs are touching the surface. It is a good idea to finish the installation by a simultaneous brief downward push activation of all four operations to equalise pressure differences between the different legs.

At a setting up at the same place for a longer period a certain settling of the base and/or the support legs can be possible, thus before resuming the work it always has to be checked that the lift is still level and that all support legs are touching the surface before resuming the work.

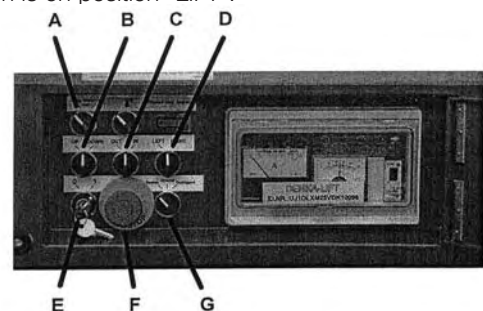
8. Place the switch "BASKET/CHASSIS/SUPPORT LEGS" on pos. "BASKET" or "CHASSIS" depending on the desired operation placement. The pump stops.

The lift is now ready for use.

OPERATING FROM THE CONTROL BOX

On the slewing base's left side there is a control box for lift operation. It is only allowed to use this slewing base control when the basket is unmanned or there is an emergency, for the basket movements are quite difficult to overlook in this situation.

Place the switch "BASKET/CHASSIS/SUPPORT LEGS" on "CHASSIS" to transfer the control to the control box. Check if the switch "LIFT/SUPPORT LEGS" at the support legs' operation is on position "LIFT".



When operating from the control box all functions are ON/OFF controlled. Therefore, the operation can cause violent movements of the basket and needs to be undertaken very carefully.

Functions of the operating levers on the control box

- A Emergency lowering, see instructions later in this manual
- B Boom UP/DOWN.
- C Boom OUT/IN.
- D Lift is slewing clockwise/counter-clockwise.
- E Key switch.
- F EMERGENCY SWITCH: Press to activate. Turn clockwise to deactivate.
- G Selection of operating placement.

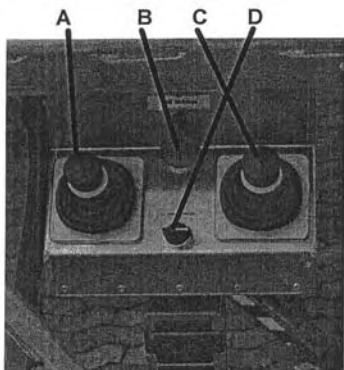
OPERATION FROM THE BASKET

Switch "BASKET/CHASSIS/SUPPORT LEG" to position "BASKET" to transfer control up to the basket. It is possible to operate the support legs and the manoeuvre function from the basket, see chapter 3.3 and 3.7.

Check if the switch "LIFT/SUPPORT LEGS" is on pos. "LIFT" and that the green lamp "SUPPORT LEGS O.K." light.

Make sure that the basket's entrance is securely closed and the ladder up before you use the lift.

The boom has to be retracted completely when you hear the alarm. Contact an authorised and trained service technician.



Functions of the operating levers on the control panel

A	Left joystick	Lift the white collar before activation.
	Push forward	Boom IN.
	Pull back	Boom OUT.
	Push left	Lift slews clockwise.
	Push right	Lift slews counter-clockwise.
B	Emergency stop	Push to activate. Turn clockwise to inactivate
C	Right joystick	Lift white collar before activation.
	Push forward	Boom UP.
	Pull back	Boom DOWN.
	Push left	Basket slews clockwise.
	Push right	Basket slews counter-clockwise.
D	Acoustic alarm	

The lift has proportional steering, i.e. movement speed (except for the basket slewing) is proportional to operating levers' movement. In order to ensure calm and stable basket movements we recommend the use of one function at a time. Slowly and constantly in or decrease speed at the beginning and end of a movement. Use UP before OUT and IN before DOWN movements.

Before and under lift operation it has to be checked that nothing or nobody is in danger of being squeezed or captured in the lift area | slewing base, boom or basket.

Keep safe distances to loose things such as lorries, trucks, cranes, ships and so on, for a collision can be dangerous or even lethal.

AFTER USING THE LIFT

Before retracting the support legs the boom has to be in transport position.



NEVER TRY TO RETRACT THE SUPPORT LEGS BEFORE THE BOOM IS PLACED IN THE TRANSPORT POSITION!

To bring the boom in transport position:

1. Run the boom completely in.
2. Set to centre position. This is indicated by 2 yellow marks.
3. Lower the boom onto the boom support.
4. Switch "LIFT/SUPPORT LEGS" to pos. "SUPPORT LEGS". Hydr. pump starts. Pump stops automatically after approx. 5mm. and can be started again by turning the switch to pos. "LIFT" and back to "SUPPORT LEGS".
5. Make sure that nothing and nobody can be jammed under the trailer lift.
6. Lift rear support legs first to avoid overload on support legs.
7. Lower the lift slowly with all 4 support legs at the same time.
8. Retract all support legs. Check that all support legs are **completely** up.
9. Switch "LIFT/SUPPORT LEGS" to pos. "LIFT". Pump stops.
10. Lift is ready for transport (see chapter 4.0 or chapt. reg. manoeuvre function 3.7).
11. At work end set switch "Oil" at the control panel to "0". Always remove the key.

CHARGING THE BATTERIES

After the use the lift should always be recharged. The charging cable delivered with the lift is to be connected between the charging input and a 230 V socket.

After connection is made check the proper function of the charging system.

The yellow lamp "charging connected" must be alight. The ammeter must show a deflection of 1-50 Amp. The deflection is variable depending on the charging condition of the batteries and on the size of the voltage supplied.

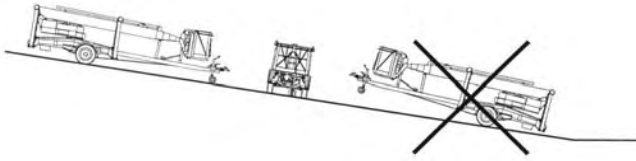
After charging (4-10 hours later) the green lamp "charging finished" alights and the yellow control lamp "charging connected" is turned off.

Fault possibilities: (no deflection on the ammeter and the pilot lamp "charging connected" is not turning on):

- A. Check that the 230 V connection is turned on and that the cable is correctly installed.
- B. Check the automatic fuse F1 in the control box and in case fuse is switched off undertake a reset.

SELF-DRIVING FUNCTION (MANOEUVRING)

To facilitate the transportation of the lift without attachment of lorry the lift may be provided with hydraulic driving rolls. Transporting on sloping ground support wheel must be in the lower than the max. climbing ability of 12-15%.



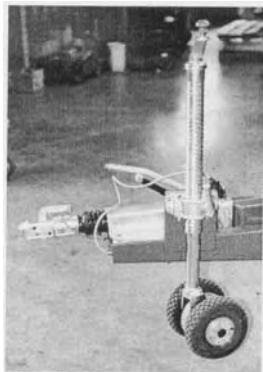
Use of the Hydraulic Self-Driving Function

Dismount the locking device from the driving rolls by removing the 2 splints. Is the locking device jammed it can be loosened by shortly activating the valve levers for the drive rolls. Stop the hydraulic pump and dismount the locking device.

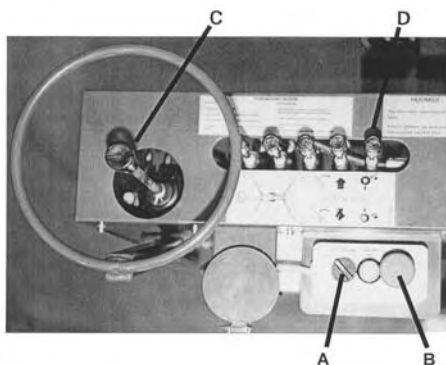


Locking Device with Splint

Support wheel has to be adjusted in height to level the lift before manoeuvring.



Support wheel



Operation of self-drive from basket

Functions of the Operation Levers for the Manoeuvre Function

- A Selection of operation placement.
- B EMERGENCY STOP: Press to activate. Turn clockwise to deactivate.
- C Manoeuvre lever.
 - Push forward Lift moves backwards.
 - Pull back Lift moves forward.
 - Push to the left Lift slows clockwise.
 - Push to the right Lift slows counter-clockwise.
- D Self-driving rolls.
 - Push forward Rolls move away from wheels.
 - Pull back Rolls move towards the wheels.

1. Turn key switch at the control box to p05. "1". Turn the switch "BASKET/CHASSIS/SUPPORT LEGS" onto position "BASKET" and switch 'LIFT/SUPPORT LEGS' to pos. "SUPPORT LEGS".

The hydraulic pump starts. After approx. 5 mm. the pump stops automatically and can be restarted by turning the switch to "CHASSIS" and back to "SUPPORT LEGS".

2. Actuate the valve levers for the drive rolls until they have good contact with the wheels.
3. Slacken the brake before manoeuvring the lift.
4. For direction control use the steering lever at the basket. Steer in the direction you want to manoeuvre the lift.

ATTENTION! The lift rotation can be very powerful.

For the setting-up it is not necessary to take out the driving rolls of the gear.

Always remember to pull the hand brake when the drive rolls are free of the wheels.

AFTER THE USE

1. Pull the hand brake before loosening the drive rolls from the wheels.

When placing the lift on sloping ground always use scotches.
2. Actuate the valve lever for the drive rolls upwards until the driving rolls are clear of the wheels and the hydraulic system briefly goes up/reaches overpressure.
3. Place the switch "LIFT/SUPPORT LEGS" on pos. "LIFT". The pump stops.
4. Mount the locking device.



**INSTALL THE LOCKING DEVICE BEFORE
TRANSPORTING THE LIFT WITH A DRAW-VEHICLE!**

TRANSPORTATION OF THE LIFT

The driving of the trailer installed lift will not cause any problems because it is very similar to driving with an ordinary trailer. The lift is provided with an overrun brake that automatically will be activated at the reverse.

Check your national legislation and act according to same.

Before driving the trailer lift check if you completed all necessary preparations.

In case of traffic damages the lift has to be checked for structural damages by a skilled machine inspector.

For transportation dimensions and weight see chapter 9.

PREPARATION FOR THE TRANSPORTATION:

1. Pull the hand brake. When placing the lift on sloping ground use scotches.
2. Set the switch "BASKET/CHASSIS/SUPPORT LEGS" to position "SUPPORT LEGS".

The hydraulic pump will start. After approx. 5 mm. the pump will stop automatically. By turning the switch to "CHASSIS" and back to "SUPPORT LEGS" the pump will start again.

3. Check that nothing below the trailer lift can be jammed.
4. Lift the rear support legs first to avoid overload on the support wheel.
5. Lower the lift with all 4 support legs at the same time.
6. Retract all support legs completely. Check if they are completely retracted.
7. Set the switch "BASKET/CHASSIS/SUPPORT LEGS" to position "BASKET" or "CHASSIS". The pump stops.
8. Always remove the key of the key switch.
9. Remove loose tools and other objects from the basket. Close all boxes and check that a possible opening during the transportation is impossible.

ATTACHMENT

The lift must be attached to the drawing device of the drawing vehicle. When being attached the supporting wheel is to be lifted and the plug for the vehicle headlight and the safety wires have to be installed. Check that the hand brake is slackened and the safety wire has been installed and works properly.



**BEFORE TRANSPORT BEHIND A DRAW-VEHICLE
CHECK IF THE LOCKING DEVICE AT THE DRIVE ROLLS
ARE MOUNTED! SEE CHAPTER 3.7.**

DISCONNECTION

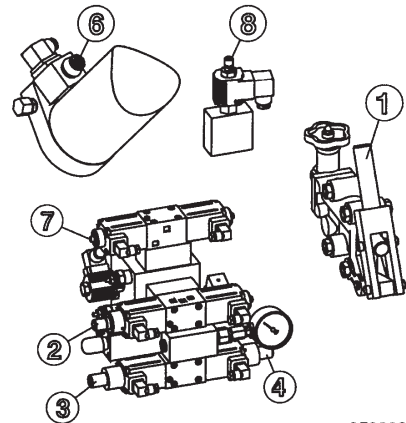
Pull the plug and take off the safety wires. Pull the hand brake.

The supporting wheel is lowered and by pulling the coupling lever and by down-screwing of the supporting wheel simultaneously the ball coupling is released.

When placing the lift on sloping surfaces scotches must be used.

EMERGENCY OPERATION OF LIFT

In case of a possible failure in the electrical system it is possible to bring down the basket by means of the emergency lowering. As the operation of the emergency lowering is only possible from the slewing base a person capable of this job must always be present.



Read and follow carefully the instructions pasted on the hydraulic box.

EMERGENCY LOWERING PROCEDURE

IMPORTANT: In case of emergency lowering the boom and basket **must** always be completely retracted before the boom can be lowered. In order to operate the lift by hand the red painted tube section is fitted onto the hand pump (pos.1) and operated as following.

1. **Boom in:** screw in emergency operation pos. 2 (clockwise). and activate the handpump.

Is a lowering of the boom not possible because of obstacles, the boom can be slewed by the hand pump.

2. **Slewing clockwise:** screw in emergency operation pos. 3 and activate the hand pump.
3. **Slewing counter-clockwise:** screw in emergency operation pos. 4 and activate the hand pump.

IMPORTANT! Remember always to screw (counter-clockwise) the emergency screws back into their original position after every movement.

4. **Boom down:** Turn-switch "emergency lowering" at the electrical control box has to be activated and the lowering of the boom starts.

When an emergency lowering is necessary because of current failure it is impossible to act according to "4", in this case read instructions under "5".

5. In case of electrical failure the boom can be lowered by pulling the button of valve pos. 8 and turning it 1/4 turn (any direction). After that the magnetic core in the levelling cylinder pos. 6 has to be pressed and held as well as at the control valve pos. 7.

WARNING! This procedure overrides all electrical safety devices.

IMPORTANT! The boom Must be completely retracted.

IMPORTANT! No basket levelling with this procedure!

After emergency operation all emergency screws have to be set back to their original positions (counter-clockwise).

EMERGENCY OPERATION OF THE SUPPORT LEGS

In case of a failure of the electrical or hydraulic system it is still possible to prepare the lift for the transportation to the service workshop.



NEVER TRY TO LIFT THE SUPPORT LEGS BEFORE THE BOOM IS PLACED IN THE TRANSPORTATION POSITION!

With sufficient power for pulling the solenoid valves use the hand pump to bring up the support legs. If there is insufficient power call an experienced and trained person.

To bring the boom into transportation position:

1. Run the boom completely in.
2. Turn into central position. This is indicated by 2 yellow marks.
3. Lower the boom onto the boom support/rest.

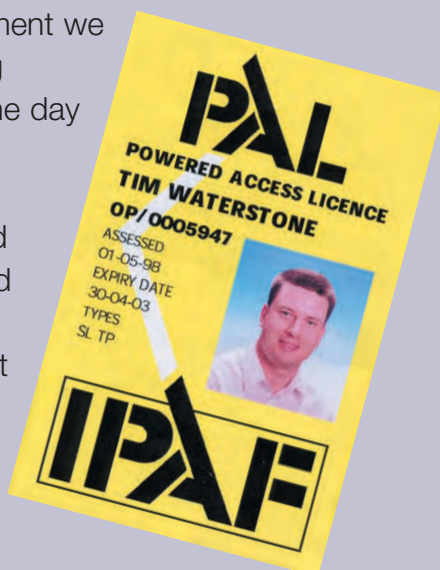
TROUBLESHOOTING

FAULT	CAUSE	REMEDY
Chassis inactive (no function at all)	Key in key switch removed or in pos. 0.	Set key to pos. 1.
	Emergency stop basket/chassis pushed in.	Release emergency stop.
	Main switch of hydraulic motor set on emergency stop.	Release emergency stop.
	Thermo sensor released.	Automatic re-connection after cooling time.
	Electrical/hydraulic fault.	Call an authorised service technician.
	Mains connection is not inserted.	Connect main cable.
Chassis inactive. (motor not running)	Priority button on control panel not in pos. chassis.	Priority button in pos. chassis.
	Boom not in boom support/rest.	Place boom in boom support.
	End stop E11 key not operating.	Adjust or replace end stop.
Hydraulic drive rolls without function	Hydraulic driving rolls placed in transport locking device.	Remove transport locking device from the drive rolls.
	Timer disconnecting after 5 min.	Reset
Hydraulic support legs stop right in working mode	Timer disconnected	Reset, switch on pos. BASKET and back on CHASSIS
No charging (no deflection on ammeter and yellow lamp switched off).	Connection defect.	Repair connection.
	Automatic fuse disconnecting.	Re-connection of automatic fuse.
	Thermo sensor released.	Wait - automatic re-connection after approx. 10-15 min.
	Charging finished.	Green lamp on.
Charging unit switching off.	Automatic fuse activated.	Push down again the automatic fuse.
Lift inactive.	Priority button "BASKET/CHASSIS/SUPPORT-LEGS" on the control panel on incorrect position.	Change the position of the priority button.

operator training centre

When hiring access equipment we strongly recommend taking advantage of one of our one day operator training courses

As Facelift is an accredited IPAF (Independent Powered Access Federation) training centre you can be sure that your staff will be trained to a high standard and receive an internationally recognised qualification.



Courses can take place on your own premises or at one of our training centres, situated in Hickstead, Iver, Southampton and Liverpool.

We can train your personnel on any of the following equipment:

- (SL) Scissor Lift
- (SPB) Self Propelled Boom
- (VMP26) Truck/Van mounted to 26m
- (VMP200) Truck mounted over 26m
- (VPP) Vertical Personnel Platform
- (TP) Trailer/Push around

The one day course* covers site safety, practical demonstration, sole usage and site risks and includes a theory test.

*(two day course for VMP200)

Successful candidates are issued with the IPAF PAL card, widely accepted by both the CITB and Health And Safety Executive.

For further information or to arrange a training course call us today on:
0800 0 72 55 72

