

Penner Transfers and Stretcher

Safe Operation & Maintenance Manual

380745 Rev. G 10-16-2020



PENNER

BATHING

Bathing Solutions for Every Need

Penner Patient Care

101 Grant St

Aurora, NE 68818

Service help call 1-800-732-0717 or 1-866-736-6377

www.pennerbathingspas.com



Operation Video

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Models: 382000-1, 382000-1L, 382010-1, 382010-1L
383000-1, 383000-1L, 383010-1, 383010-1L
382510-1, 382510-1L, 383510-1, 383510-1L

Transfer Lift Technical Description

The Penner Transfer Lift System is used with Whirlpool or Aqua-Aire (Air bubbling) bathing system intended for use in nursing homes, hospitals, and assisted living facilities to transfer or lift patients under the direct supervision of trained staff. The Transfer is available with or without scale. The Transfer Lift has two locking casters on the rear (pillar end). All Transfers have Swing-away and removable arms. All have a removable open concept seat pad that locks into position during use.

Manufacturer: Penner Manufacturing Inc.
101 Grant St / PO Box 503
Aurora, NE 68818
(402) 694-5003
Nearest Distributor call 1-800-732-0717 or 1-736-6377

Transfer Ratings: 28 Volts DC (Rechargeable)
5.2 Amps
400 Lbs. Maximum Capacity (600 Lbs. Bariatric Models)
Duty Cycle: 10% Int. with 1 minute on/ 9 minutes off
16" minimum clearance from floor
39.5" inches maximum clearance from floor
(Note: There is a two (2) inch adjustment to these clearances)

AC Adapter Transfer Charger Rating: 120 Volts AC Input – 28 Volts Output (For Charging Only)
Input – AC adapter .5 amps

Regulatory Data In Accordance with the Standard For Safety of Medical Electrical Equipment UL 606001-1, CSA C22.2 NO. 601.1, IEC 60601-1

UL Classification: Class I Internally Powered Equipment Type B

Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.



Medical Equipment with respect to electric shock fire and mechanical hazards only in accordance with UL2601-1, UL60601-1, IEC60601-1, and CAN/CSA C22.2 NO. 601.1



WARNING

This equipment is not suitable for use in the shower. Using in the shower will cause damage to the Transfer Scale and electrical components.





WARNING

This equipment is not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.




Safety Information and Patient Assessment for the Penner Transfer Lift Systems.

 Penner Transfer Lifts are designed and manufactured to meet or exceed the safety requirements for patient care equipment. In addition, they have been tested to insure their safety. It is important, however to know that materials can fail due to normal wear caused by use over time. Therefore before each patient transfer, it is required that the nursing staff inspect for proper operation and missing or worn parts such as safety belts, cushions, arms, and casters. It is also required that a qualified maintenance staff inspect the lift at least monthly for missing parts or excessive wear that might cause the transfer lift to fail. A permanent record of each inspection and repairs should be kept by the facility.

 Only personnel who have been thoroughly trained in the operation of the Penner Transfer Lift System should operate this equipment. Operation of this equipment by untrained personnel could result in injury to the operator or patient. Your Penner Patient Care distributor is available at your request to provide complete in-service training on the equipment's proper operation.

Patient Assessment for the Penner Transfer Lift Systems.

 Before using the Penner Transfer Lift System, patients must be assessed by the facility's professional nursing or professional rehabilitation staff to determine which patients are suitable for transfer, which type of transfer to use, and the number of staff members necessary to transfer each patient. Although one person can perform patient transfers, certain patients or situations may require the help of one or more additional staff members. For example, patients with unpredictable behavior due to dementia may require additional help if their behavior poses risk of injury to themselves or to staff members, patients being transported in the Penner Transfer with or without scale outside of the patient's room. The above information must be recorded in the patient's record and must be communicated to the staff.

Penner Transfer Lift Criteria

The patient must:

- a. Have no injuries or medical conditions that might be aggravated by the Penner Transfer Lift procedure.
- b. Weight less than 400 lbs (less than 600 lbs on bariatric models)
- c. Be able to follow simple directions.
- d. Be able to sit upright by the optional chest safety belt.
- e. Evaluated for safety of extremities that are rigid or any problem he or she has that could cause injury or conflict with the safe operation of the Penner Transfer Lift System.

- The Penner Patient Transfer Lift System is designed to significantly improve the efficiency and environmental safety of your nursing care operation. However, the benefits designed into the Transfer Lift System will be realized only if the system is operated and cared for properly. The purpose of this is to provide you with a recommended procedure to help you obtain the maximum efficiency and safety from your Transfer Lift System.

- **Symbols and Terms**

-  **WARNING**

- The warning symbol identifies important safety messages. Failure to obey a safety warning may result in injury to you or to others.

- **CAUTION**

- The caution heading identifies important maintenance and operation information. Failure to obey a caution warning may result in damage to the Penner Transfer System and may void the warranty.

- **LEFT or RIGHT**

- When the terms “left” or “right” are used with reference to the tub, this means left or right as you look at the control panel from the seat end of the spa. On the Transfer, “left” or “right” is as the resident sits.

 **WARNING**

Only personnel who have been thoroughly trained in the operation of the Superior Transfer Lift System should operate this equipment. Operation of this by untrained personnel could result in injury to the operator or patient. Our Penner Bathing Distributor is available at your request to provide complete in-service training on the equipment’s proper operation.

Before starting to transfer the patient from bed to bath, prepare and fill the reservoir of your Penner Bathing System by following the operators manual instructions that came with your Penner Spa. If you do not have one, call your Penner Bathing Distributor to obtain one or visit PennerBathing.com.

⚠ WARNING

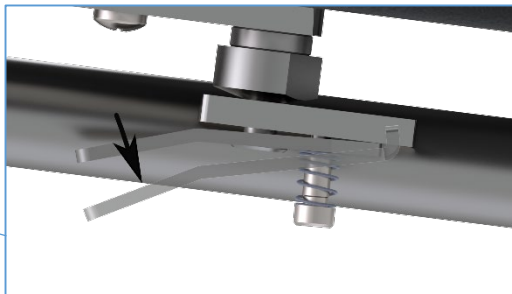
Do not overfill the spa by adding more water. Adding too much water may overflow the spa and could result in injury to the operator or patient.

Transferring from Bed to Bath, and/or lifting with Standard Penner Transfer System.

You are now ready to prepare for transferring the resident from the bed to the bath.



1. Install the seat pad by inserting the pins on the bottom of the seat into the chair frame holes by rotating it downwards.
2. Then push seat back until it latches into the release lever.
3. To remove seat, push release lever down and then pull seat forward and lift off chair frame.



⚠ WARNING

Failure to ensure that the Penner Transfer seat is securely locked to the Penner Transfer chair before the resident is transferred could result in injury to the operator or patient.



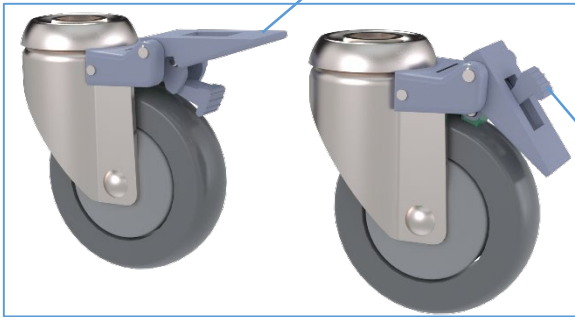
The arm rest of the Penner Transfer can swing upwards and back, or be removed to provide a variety of options in providing care.

4. Push the Penner Transfer to the resident's bed and position it for a normal bed-to-wheel chair transfer.

5. Lock the brakes by stepping down on the lock-arm tab located on the back of the rear casters as shown in the picture.

6. Unlock the caster by depressing the center tab on caster.

Lock Arm Tab



Release Tab

⚠ WARNING

Failure to lock the caster brakes before the resident is transferred could result in injury to the operator or patient.



7. Route the safety belt through the safety belt loops of the chair frame prior to placing the resident into the chair.

8. Transfer the resident into the Penner Transfer using the proper nursing transfer techniques. Bring the safety belt around the resident to the buckle connector.

9. **All** residents must always be securely safety belted at the waist when using any of the Penner Lift Systems. Ensure that the safety belt is routed through the loose buckle end as shown in the picture to the left. Pay close attention to the placement of the serrations of the buckle. If routed the opposite way, the safety belt will slip. Tighten safety belt by pulling on the loose end of the safety belt.



⚠ WARNING

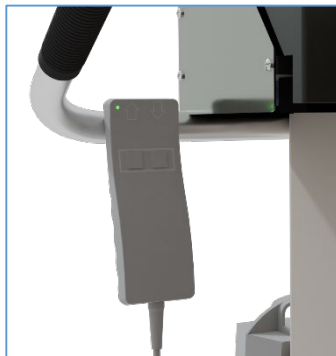
Failure to secure the resident properly with the safety belt could result in injury to the resident or operator.

For residents who are unable to support themselves in an upright position, Penner supplies a second (chest) safety belt which allows you to secure the resident in an upright position as shown in the pictures below.



10. Unlock the caster brakes and push the resident to the bathing area, being careful to avoid objects in the hallways or uneven floors.

11. If the residents feet are touching the floor, raise the lift until they clear the floor. Always transport in the lowest position.



⚠ WARNING

Failure to insure hands, arms and legs are clear of any objects when transporting or lifting could result in injury to the resident or operator. Push the emergency stop button, on the Control unit at any time during raising and lowering of the resident.

⚠ WARNING

Failure to transport in the lowest position with residents feet clearing the floor could result in injury to the resident or operator.



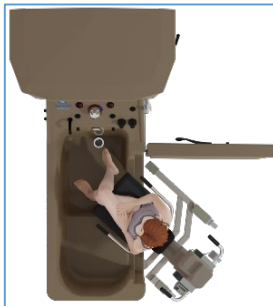
12. At the bathing area, position the Penner Transfer near the access water door of the Cascade Spa. Ensure the water door is open wide to allow easy access (**Not over the Rail**). Press the “Red Emergency Button” to stop the transfer if needed anytime during raising or lowering.



13. With the Resident properly secured with the safety belt and facing the deck of the spa, raise the Transfer to the appropriate height to clear the top of the seat inside the spa. Unlock the casters and slowly move the transfer to a position to place the resident into the spa. Move the Transfer carefully into the spa, ensuring the base guides of the Transfer align with the legs of the Spa legs. On Side Entry spas, turn the Transfer at an angle and bring the legs and feet in first. On End Opening Spas, lift the legs and feet in first. Assist placing the resident's legs into the foot well of the spa and position the resident to face the service deck of the spa. Position the Transfer chair in center of the spa and as far forward as it will go. **Always ensure the residents limbs are clear** and no objects interfere with entry operation.

Reference these illustrations when following procedures to move resident into Spa

Side Entry Spa



1

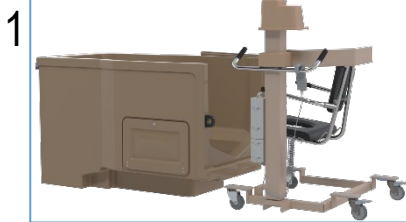


2



3

End Opening Spa



1



2



3

Superior or Pacific Spa



1



2



3

14. Once the Transfer is in the correct position lower the resident by pressing the down button until the chair is just above the seat of the Spa. Lock the casters and **again ensure the residents hands, arms, and legs are all clear.** Close the water door and lock it by pressing the handle downward.

15. You may now fill the spa using the reservoir per your operators manual that came with your Penner Spa. Monitor the water temperature on the reservoir temperature gauge and by allowing the water to run over your wrist.

16. Follow the Bathing Procedure as outlined in you Safe Operation & Maintenance Instructions that were included with your Penner Spa. If you do not have this manual, one may be acquired through your Penner Bathing Distributor.

17. Upon Completion ensure the residents hands, arms, and legs are clear before raising the lift. Push the up button to raise the resident slightly if needed, and then drain the water from the spa.

CAUTION Going over the rail, or not ensuring the base is aligned correctly with the spa legs when moving the Transfer into the spa could cause damage that may not be covered through warranty.

⚠ WARNING

Going over the rail or failure to ensure that the residents limbs are clear and there are no obstructions while transporting or lowering the resident into the Penner Spa could cause injury to the resident and/or operator.

18. You may now rinse the residents body with the shower sprayer.

19. Pat the resident dry with a soft towel. No rubbing is necessary.

20. You may now open the water door by pulling up on the lock at the same time pulling up on the door handle. Use the towel to dry and clean the underside of the chair. This will prevent water form dripping on the floor and residue build up under the seat.

21. Before you move the Transfer away from the spa, make sure the lower extremities have been toweled dry so the bath floor stays dry. Insure the Transfer is raised high enough to clear the spa seat. You may now unlock the casters and move the Transfer out of the spa and away, ensuring the resident is still safety belted correctly and the residents hands, arms, and legs are all clear.

22. Once the Transfer is clear of the spa, lower the Transfer to the lowest position and push the resident back to their area.

23. Position the Penner Transfer for a transfer back to bed or to another chair. Lock the Casters.

24. Release the safety belts from around the resident and transfer the resident using proper nursing techniques and assistance if required.



⚠ WARNING

The Transfer operation should be checked daily. In the event the hand control fails during lifting, depress the “Emergency Lowering” button located at the bottom of the charging unit on the transfer.



1. Before seating the resident in the chair, ensure all the pads and safety belts are on the chair.
2. Press the "On/Zero" button once to turn scale on. Press again to zero.
3. The scale weighs in increments of ½ lb accuracy +/- 1 lb.
4. The display should show "0". This should only need to be done once a day or when an empty seat indicates anything other than zero.
5. If indicator reads anything other than zero, start over and zero again. If it does not read "0" the scale may need to be recalibrated. (Negative weights are indicated by the weight flashing on and off)
6. Pressing the Penner Bathing logo is the recall button. It will recall the last weigh which was "Held".
7. Press the "Lb/Kg" button and hold to convert to Lb or Kg.
8. Once the patient is in the seat, ensure that the arms, legs, or feet are not touching anything. This would give an inaccurate reading.
9. After the resident is stabilized and the scale indicates "HOLD", a reading of the weight may now be taken.
10. The next resident may then be weighed providing the seat and safety belts are still in place.
11. The battery for the Scale Read out is located in the bottom of the readout assembly. There are four AA batteries. New readouts will use a 9 volt battery.

Refer to the enclosed Parts and Service manual for the following information:

- a. General Arrangement
- b. Safety Compliance
- c. Breakdown of parts and service pieces for scale unit.
- d. Breakdown of parts and service pieces for actuator motor and control devices.

For your nearest Distributor call
1-800-732-0717 or 1-866-736-6377

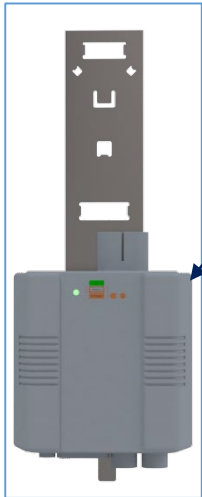


Control Unit (Mobilette)- Emergency stop button stops operation at any time. (Fig. 1)

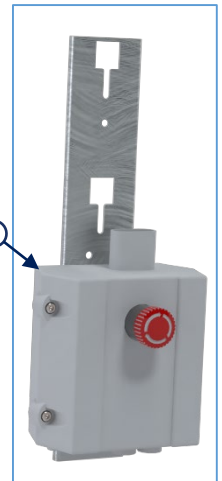
Wall Charging Unit- Mounts on the wall for easy charging of batteries. (Fig. 2)

Mobilette- Pillar Actuator, Battery Charge Adaptor, and Hand Control all plug in bottom. (Fig. 3)

Emergency Lowering Button- (Bottom View) If lift were to fail in up position, it may be lowered by depressing this yellow button. (Fig. 4)



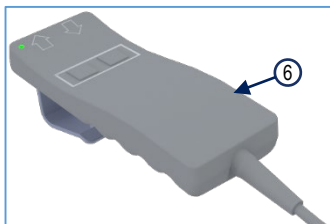
Transfer Battery- (Two Each) Slides into top of Mobilette and Wall Charger. Must be charged daily on wall charger. (Fig. 5)



Hand Control- To raise or lower the lift system. Plugs into Mobilette. (Fig. 6)

A/C Adaptor- For wall charging unit, however can be used on the Mobilette for charging only. (Fig. 7)

Caution- The Penner Patient Lift is intended to be operated by internal power only. The Lift becomes less mobile when A/C Adaptor is plugged into the Mobilette instead of the Wall Charger.



⚠ WARNING

If any part of the Transfer system is not functioning properly, cease all transferring activities until the problem is corrected by maintenance. The system must be maintained on a scheduled bases to ensure it is functioning properly. Failure to heed these precautions could result in injury to the operator or resident.

Transfer Cleaning (After every bath)

- Clean and disinfect the Transfer after every bath with Penner Cleaner/Disinfectant as follows:
 - Position the transfer into the Penner Spa. Detach the chair pad and backrest. Use the disinfectant solution remaining in the spa from disinfecting the spa and use the long handled brush to scrub the chair pad, backrest, and other parts of the transfer that come in contact with the resident and water while giving a bath. Allow proper disinfectant contact time per manufacturers directions (usually 10 minutes). Rinse the chair pad and backrest with fresh water and replace components.
 - Or
 - Spray transfer with approved disinfectant remembering to detach the chair pad as well as all other parts of the transfer that come in contact with the resident or water while giving a bath. Allow proper disinfectant contact time per manufacturers directions (may not always be the same cleaner as spa cleaner, times may vary). Wipe or rinse approved disinfectant from transfer per approved disinfectant directions.

Note: Penner Cleaner/Disinfectant is a special non-abrasive cleaning and disinfecting solution that will not harm the transfer chair. Penner Cleaner/Disinfectant is specially designed and recommended for use with your Penner Transfer.

WARNING

Housekeeping personnel should wear protective glasses and gloves to prevent disinfectant from damaging their eyes or skin. If disinfectant gets on the skin or in the eyes, rinse thoroughly with plenty of water. Seek medical advice if irritation occurs.

Maintenance and Adjustments

Routine Maintenance

Suggested maintenance to be performed on unit. Contact your Authorized Penner Spa Distributor for periodic updates to this revision.

Tub Model # _____ **Tub Serial #** _____
Reservoir Model # _____ **Reservoir Serial #** _____
Transfer Model# _____ **Transfer Serial #** _____

Checklist	Monthly	Quarterly	Semi-Annually	Yearly
Spa				
Check hoses and connections for leaks or damage.			X	
Check Aqua-Aire functions and controls.			X	
Check disinfectant system		X		
Check Thermometers accuracy with calibrated probe thermometer.			X	
Inspect electrical connections. (GFCI, Circuit breakers)	X			
Check mixing valve for proper temperature. Use a calibrated probe thermometer to verify.			X	
Check Screens and water supply connections.			X	
Transfer				
Inspect Batteries for Transfers	X			
Check E-Stop to make sure it functions properly	X			
Check function of Emergency lowering button		X		
Belts for transfers and lifts should be free from tears.	X			
Castors should be kept clean and make sure the brakes hold securely.		X		
Hand control is functioning correctly		X		
Batteries for Scales (4 AA)			X	
Scale is calibrated regularly or when variance are observed. (May be more or less according to Facility regulations) Use a calibrated 25 or (50lb for Bariatric) weight to do calibrations.		X		
Reservoir				
Reservoir Tank- Clean/Disinfect as needed.	X			

The above items should be adjusted if issues occur more frequently. Each facility is different so quality of water plays an important role in many of these checks. Many of the items listed above are in your manuals. The manuals are a great source of information regarding making adjustments to temperatures installing and operating. Also your facility or state and local codes may require more frequent inspections.

If help is needed with checking or making adjustments please call your local distributor or you may also call Penner Manufacturing directly for assistance.

Penner Manufacturing Inc.
1-402-694-5003

101 Grant St.

Aurora, Ne 68818
1-800-732-0717

www.pennerbathingspas.com

Control Components for the DC Version of the Linear Actuator

Compliance with the Technical Instructions

This unit must only be handled by personnel who are fully conversant with this Technical Instructions and in accordance with the instructions contained therein. The unit must only be used as described and should only be installed and connected by qualified technical personnel!

Liability for Function or Damage

In every case, the owner or operator of the unit shall be liable for its function if the unit has been incorrectly maintained or repaired by persons who are not employed by the Magnetic Service Department or if the unit has not been handled in accordance with its specified application.

Magnetic Aktiengesellschaft shall not be liable for any damage resulting from failure to observe these Instructions. These Instructions shall not be regarded as an extension of the warranty and liability terms set out in the Conditions of Sale and Supply applied by Magnetic Aktiengesellschaft.

The product is not subject to the labeling obligation defined in CE or EMC Directives. The requisite EMC procedures must be applied to the end product – with reference to the conditions of installation, wiring and control – by the manufacturer of the end product and they must be verified in accordance with the intended application. The manufacturer of the machine or system shall be responsible for compliance with these instructions.

Application

The MOBILETTE 'Lifter Control Unit' is solely intended for controlling the DC Version of the Magnetic series of linear actuators:

- MAX1
- MAX3
- MAT1/2
- THG1
- TLG1

Product Package

The MOBILETTE 'Lifter Control Unit' consists of the:

- accumulator unit,
- control unit and
- fixing profile.

The mains adapter (3) is available as an option (see Sheet I).

Function

The 24 V DC charging voltage is fed into the control unit via the mains adapter connected to the mains power supply or via a mains cable and the integral transformer. The fitted accumulator unit is then charged in order to maintain the power supply to the linear actuator.

An integral current cut-off protects the actuator against overload.



These devices must not be operated in potentially explosive atmospheres!

Connections

The control unit is equipped with clearly-marked sockets for:

- the mains adapter or mains cable,
- 1 or 2 linear actuators and
- the handswitch.

Safety Devices

'Emergency OFF' and 'Emergency Lowering'

The control unit incorporates two different emergency functions: 'Emergency OFF' and 'Emergency Lowering'.

It is important for every operator to be familiar with the different reactions to the two commands.

'Emergency OFF'

The linear actuator is isolated from the power supply and immediately comes to rest. The 'Emergency OFF' function should only be deployed in the event of an immediate danger.

'Emergency OFF' pushbutton:

- red domed button on a grey background
- latches when pressed
- to unlock: turn the red knob in the direction of the arrow.

'Emergency Lower' linear actuator (option)

In the event of a defect in the control unit, it is bypassed and the linear actuator can be electrically lowered (retracted) by pressing the 'Emergency Lower' pushbutton.

'Emergency Lower' pushbutton:

- Grey pushbutton on a grey background

'Emergency Lower' mounting location

As an option, the pushbutton can be mounted next to the connections on the MOBILETTE 'Lifter Control Unit'.

Overload cut-off

An overload cut-off is incorporated in the built-in electronics module and, in the event of excessive current consumption, the actuator is automatically shut down. The maximum permissible current consumption of the actuators is indicated on the type key.



The output current of the control unit (see rating label) should not exceed the max. current of the actuator (see data label).

If the current consumption exceeds this value, the linear actuator will become overloaded and may be permanently damaged!



The maximum current consumption under full load should be measured at the installation stage. It should not exceed the value specified on the type key. If the current consumption exceeds this value, the linear actuator will become overloaded and may be permanently damaged!

Installation

The control unit must be mounted on the brackets provided for this purpose on the fixing profile, in such a way that it is free from mechanical stress and vibrations.



All the cables must be secured so that the connectors on the control unit are not subject to load. Incorrectly-seated connectors will not provide a satisfactory seal and can result in permanent damage to the control unit!

Possible mounting positions include:

- I) Vertically, with the accumulator pack above the control unit,
- II) Horizontally, lying flat,
- III) Horizontally, standing up,
- IV) Horizontally, suspended.

A vertically suspended mounting position, with the accumulator pack located beneath the control unit, is not possible because the battery pack could become dislodged and fall out.

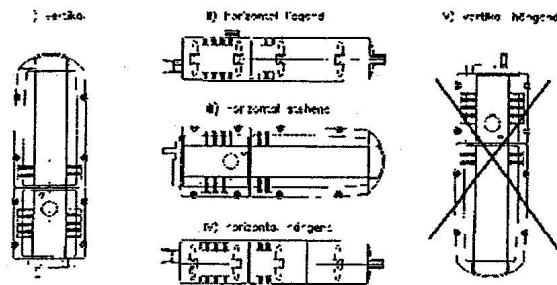


Fig. 1 Attachment and mounting position

Accumulator Pack

The linear actuator derives its power from the accumulator pack. The accumulator pack is secured to the control unit by means of a latching spring.

The accumulator pack consists of two 12 Volt 4.5 Ah accumulators, wired in series and with an output of 24 Volts.

Only accumulators and battery chargers approved by the manufacturer should be used.

The service life of the accumulators is dependent on the load and the state of charge; in ideal conditions, they can be used for up to five years.



A ventilation hole is provided in the accumulator pack in order to dissipate the gases generated by the accumulators. The ventilation hole should not be damaged, blanked off or painted over. Beware of hazards due to the ingress of fluid or obstruction of the ventilation hole!



The accumulator and control unit housing should only be opened by Magnetic personnel!



Discharged accumulators should be recharged without delay. Accumulators in storage should be recharged every 6 months.

The accumulators should only be replaced by Magnetic personnel!

Charging and discharging the accumulators



The accumulators should only be recharged in well-ventilated areas, due to the potential hazard from the release of explosive gases!

The accumulator charging process is initiated when the mains adapter or the mains cable is connected or if the accumulator pack is connected with the mains adapter or the mains cable plugged in.

The LED indicates the state of charge of the accumulators. These LEDs have two different display functions.

Mains power supply connected:

LED	Function
Yellow	Accumulators being charged, mains power 'on'. Note: If the charging cycle is longer than 20 hours, the battery or the control unit is defective. Remove the mains adapter from the mains socket outlet.
Green	Accumulators have been recharged, mains power 'on'.
Not lit	No mains power supply.

During rotation of a motor:

LED	Function
Not lit	Accumulators are ready for operation.
Flashing yellow	Accumulators must be recharged, as only approx. 20 % of the residual capacity is available!
Beep tone	Accumulator capacity is sufficient for at least one double stroke. The accumulators must be recharged, otherwise the deep discharge protection will disable the actuator!

Replacing the accumulator pack

Defective or exhausted accumulators and chargers will be exchanged by the Magnetic Service Department.



Accumulators must be recycled, properly disposed of or returned to Magnetic Liestal AG. They should not be discarded with domestic refuse!

Pull the handle to overcome the spring force, then remove the accumulator pack from the front of the fixing profile.

To replace the accumulator pack, insert it into the guides in the fixing profile and push it in the direction of the control unit.



The accumulator unit must be locked securely in position, otherwise the accumulator pack could become dislodged and fall out!

Connecting the Handswitch

The handswitch is connected to the control unit with the D-Sub connector. It can be replaced.

Once it has been plugged into the mains socket outlet, the handswitch cable is strain-relieved and sealed by means of the integrally-cast cam. The cam engages with the retaining clip.



The connector for the handswitch cable must be inserted in the correct socket, otherwise the socket outlet in the control unit will be displaced and permanently damaged. Note the configuration of the connector!



When the handswitch cable is inserted or disconnected, the retaining clip should only be pressed lightly downward (see Fig. 2).

Excessive downward pressure will break the retaining clip, with consequent loss of strain relief!

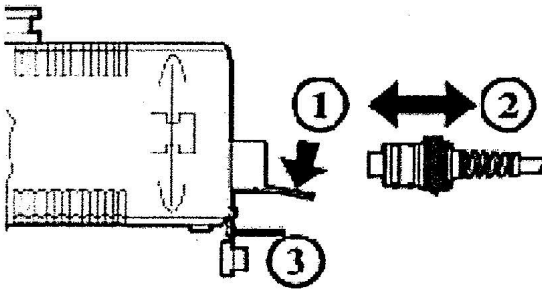


Fig. 2 Plugging in/removing the handswitch cable

Connecting the Motors

The control unit is equipped with two socket connectors for linear actuators 1 and 2.



The connectors must be inserted into the control unit until the O-rings are no longer visible. Once they have been inserted, use the Magnetic special plug disassembling tool, Part No. 140375, to rotate them by approx. 30° to the right as far as the limit stop. Failure to do so will result in loss of strain relief and sealing capacity (see Fig. 3)!

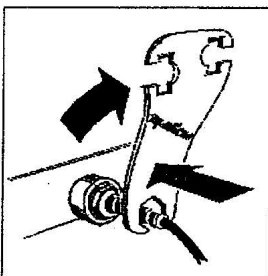


Fig. 3 Securing the motor connector

Motor connections which are not required are sealed at the factory with waterproof blanking plugs. These should not be removed.

Before each connection is made, the sealing rings of the control switch connectors and motor connectors must be checked for damage and, if necessary, they must be replaced (refer to the Spare Parts Lists).

The control unit will be permanently damaged by the ingress of fluids!



The sealing rings of the connectors should be lightly lubricated with Klübersynth VR-252, Magnetic Order No. R50014. The use of other low-friction lubricants may damage the sealing rings and the plastic housing!

Cleaning

Protection from water, cleaning, disinfection

The control unit is protected to IPX4.



The control unit must only be cleaned while the motors and control switches are properly connected and while the adapter input is sealed with blanking plugs (3, Fig. 2). The control unit will be permanently damaged by the ingress of fluids. At regular intervals (every six months), the plastic housing must be checked for signs of mechanical damage (cracks)! Sealing points should be periodically checked for signs of damage.

Maximum cleaning and drying temperature: 65 °C!

As soon as possible after use, the unit must be cleaned in order to prevent the accretion of residues!

- The unit should be cleaned by hand with a damp cloth and water, without the use of cleaning agents.



The Magnetic Special Instructions ML 0111/87 must be observed. Washing water with chemical additives must be pH-neutral. Excessively acidic or alkaline washing water can permanently damage the metal and plastic components of the control unit. Manually-controlled and mechanical high pressure cleaning equipment must not be used. Only isopropyl alcohol should be used as a cleaning agent for wipe-over disinfection.

Maintenance



The control unit and accumulator unit should only be maintained by Magnetic Customer Service personnel!

Technical Data

Refer to the brochures:

'Control Unit' Type MCU.-
'Charging Station' Type ZLA –
142221

Troubleshooting

Error	Cause	Measure
All actuators do not work	Emergency-OFF on	Cancel emergency-OFF with a rotary movement
	Deep discharge protection of the control unit is activated (display flashes yellow, control unit signals audibly when a key is pushed)	Charge battery or replace battery with a full one.
	No battery placed	Place battery
	Battery does not make contact	Place battery correctly and check position
Single actuator does not work	Bad connector contact of operation element plug	Check operation element plug and connect the plug once again
	Bad connector contact	Check motor plug and connect the plug once again
Batteries do not charge	Actuator cable damaged	Check cable and replace the actuator, if necessary
	Battery full (LED indicates green)	Recharge can be started again by short removal of the mains voltage or the battery
	Battery is not or incorrectly placed (LED indicates green)	Place battery and check position
Actuator shuts down at operation	Dark display	Check mains adapter or mains cable for damages Check mains supply (house fuses)
	Actuator overload in load direction	Reduce actuator load
	Batteries are empty (LED flashes yellow and control indicates a buzzing signal when a key is pushed (deep discharge protection of the battery))	Charge battery or replace battery pack