



Denali Power-Driven Mobile Lift

Model No. 52300 & 52400

Operator's Manual

52363 R06 / AN 250602

June 2025

WARRANTY

Wy'East Medical Corporation (Wy'East) warrants to the original user the Denali Power-Driven Mobile Lift manufactured by the company is free from defects in material and workmanship under normal use and service. The term of warranty from the date of product receipt is for a period of two (2) years on mechanical lift components, one (1) year on electronic components, and one (1) year for the battery. During this term Wy'East will provide to the user, at Wy'East's option, new or repaired replacement components.

In order to initiate a warranty claim, original user must notify Wy'East within the applicable warranty period specifying the nature of the claim. Wy'East will issue instructions as to the procedure to follow. Wy'East reserves the right to confirm the existence of any claimed defect and to determine whether any damage was caused by neglect, misuse, unauthorized alteration or failure to follow maintenance instructions. With respect to a claim covered by this warranty, the defective part will be replaced or repaired at no charge, provided the defective part is returned to Wy'East. The user has the responsibility for installation. Assistance is available by calling [\(503\) 657-3101](tel:5036573101) or through email at info@wyeastmed.com. This is the exclusive remedy for a claim under this warranty and in no event shall Wy'East be liable for consequential damages. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED.

PLEASE

Read this entire manual before operating the Denali Power-Driven Mobile Lift.

This warranty applies to the Wy'East Denali Power-Driven Mobile Lift only.
For questions or information regarding the Denali Power-Driven Mobile Lift, contact:

Wy'East Medical Corporation
16700 SE 120th Ave.
Clackamas, OR 97015, USA
[\(503\) 657-3101](tel:5036573101)
[\(800\) 255-3126](tel:8002553126)

wyeastmedical.com
info@wyeastmed.com

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Consistent with our policy of continuing product improvement, WY'EAST MEDICAL CORPORATION reserves the right to change these specifications without notice or obligation.

INTRODUCTION

HOW TO USE THIS MANUAL

This manual is designed to familiarize you with the operation of the Denali Power-Driven Mobile Lift. Read it thoroughly before using or servicing the equipment. Keep the manual for future reference and for new members of your staff.



DO NOT ATTEMPT TO USE EQUIPMENT WITHOUT UNDERSTANDING THIS MANUAL

To ensure safe operation, read carefully the entire manual, before installing, operating, or servicing this equipment.

If anything is not completely understood, please contact your supplier for more details. Failure to comply with warnings in this manual may result in injury.

Keep this manual with the Denali Power-Driven Mobile Lift and refer to it as required. Contents of this manual are subject to change without prior notice to users.

DEFINITIONS

The words **WARNING**, **CAUTION**, and **NOTE** carry specific meanings and should be carefully reviewed.

WARNING: The personal safety of the patient or user may be involved. Disregarding this information could result in injury to the patient or user.

CAUTION: These instructions point out special procedures or precautions that must be followed to avoid damaging the Denali lift or it's components.

NOTE: This provides special information to make maintenance easier or important instructions more clear.

MEANING OF SYMBOLS

	Caution		Safe working load (SWL)
	Consult instructions for use (IFU)		Do not step on surface
	Important		

Introduction: How To Use This Manual

Your Denali Power-Driven Mobile Lift is designed for transferring and repositioning patients by utilizing a sling or other assistive device.

- Low clearance for greater bed or stretcher access.
- Adjustable leg width for easy access to wheelchair or commode.
- Sling bar safety pad.
- Multi-directional power drive for easy mobility.

The Denali is a mobile patient lift for people with impaired mobility. Used in conjunction with the proper sling or other assistive device, the Denali will transfer or reposition a patient with comfort and convenience.

The Denali has a compact footprint and multi-directional drive system, allowing for greater maneuverability in tight spaces.



Intended for use in acute care, long-term care, outpatient care, and home care. It is not recommended for use in a shower or other wet environment.



Prior to using the Denali for transfer or any other procedure, the patient must be assessed by a qualified professional to determine the suitability of using the Denali with that patient.



Cables must be fixed to the application or placed in such a way that users cannot stumble and injure themselves.





SAFETY CONSIDERATIONS FOR ALL PROCEDURES

1. The Denali is designed to be used for lifting **ONLY** on level surfaces and driven on **NO MORE THAN** a 10 degree incline.
2. Inspect the lift functions prior to any patient use. Ensure all functions are in proper working order.
3. Prior to using the Denali for transfer, the patient must be assessed by a qualified professional to determine the suitability of using the Denali with that patient.
4. Never leave the patient unattended while in the Denali, or during any portion of the lift procedure.
5. Ensure the patient sling is used according to the sling IFU.
6. Never move the lift using anything except the driving function or manually with the handlebars.
7. Never exceed the safe working load. SWL is 600 lbs.
8. Do not power wash the Denali.
9. When cleaning and disinfecting, use a 5% chlorine bleach dilution or an EPA registered Hard Surface Disinfectant on painted and plastic surfaces. On all other surfaces, use an EPA registered Hard Surface disinfectant wipe that does not contain sodium hypochlorite (bleach).
10. Warranty applies only if repairs or alterations are performed by an authorized technician.

PRIOR TO FIRST USE



The battery will be fully charged prior to shipment to the user. Charging time is 10 hours for a full charge and 2 hours for a quick charge. In order to prolong the lifetime of the battery, ensure that it is charged as frequently as possible.



The duty cycle on the product label must always be noted otherwise there is a risk of damaging the lift. Exceeding the duty cycle will result in a dramatic reduction of the lifetime of the lift. Duty cycle for lifting functions is 15% - 85% (run 2 min – off 18 min). Duty cycle for driving functions is 50% - 50% (run 10 min – off 10 min).



If any individual parts are suspected to be damaged, do not use them.

SAFETY FEATURES



Emergency Stop Button

To stop all functions, push the red button until it locks.

To resume functionality, turn the button clockwise until it clicks.



Emergency Lowering of Sling Bar

In the event of a handset malfunction, push the black button to lower the sling bar.



Manual Lowering:

In the event of a handset and EMERGENCY LOWERING function malfunction, i.e. a battery issue, turn the handle counter-clockwise to manually lower the sling bar.

Slack in the Sling Bar Strap:

All lift arm and sling bar movement functions are disabled if excessive slack is present in the sling bar strap.

Apply tension to the sling bar strap to restore all function.

Twist in the Sling Bar Strap:

The lift arm can only be raised and the sling bar can only be lowered if the sling bar strap is twisted.

Straighten the twisted strap to restore all function.

Battery Charging Inhibits Driving Function:

Only applicable on Denalis made prior to serial number **DL00157**.

The lift cannot be driven if the battery charger is connected to the battery.

Disconnect the charger cable from the battery to restore function.

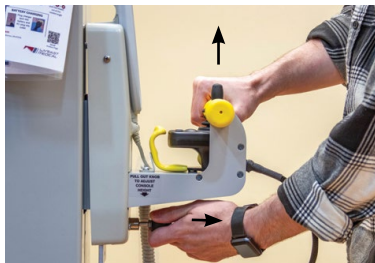
SLING USAGE



Refer to the sling IFU prior to use with the lift.

Be sure the safety latches on the sling bar hooks are closed after attaching sling straps

PREPARING TO USE



Adjusting the Control Console

To adjust the control console height support it with one hand while pulling out the lock knob with the other and slide the console to the desired position. Release the lock knob to secure.

The drive control joystick and the lift control handset can be removed from their cradles for ease of use around the lift.



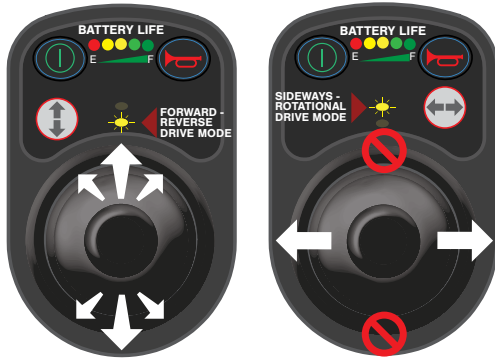
Lock Both Wheels

To use drive functions both wheel locking levers must be in the down position to lock the wheels.

Move the locking levers up to unlock the wheels in order to manually move the lift.

It is recommended that the wheels remain locked at all times except when needing to manually move the lift.

DRIVING FUNCTION



The drive control joystick controls driving speed and direction. It also provides a warning horn.

The more the knob is moved in a given direction the faster the speed in that direction i.e. moving the knob all the way forward achieves the fastest speed in that direction.

The five horizontal lights indicate the battery charge state. Red, yellow and green lights indicate full charge. Just red and yellow lights mean battery needs charged soon. Only red lights mean battery must be charged immediately.

The two vertical lights indicate drive wheel orientation (forward-reverse or sideways-rotational drive).



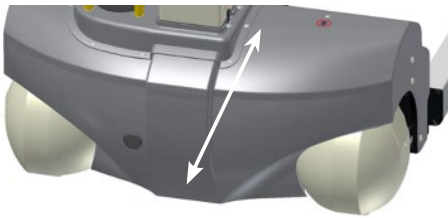
Drive Wheel Position Control Buttons

Press any button once to power lift on. Press again to operate pendant controls.

The lift control handset controls the orientation of the drive wheels.

Push the buttons to position the drive wheels for the desired direction of travel.

Refer to the instructions below.



Push button to move wheels for forward/reverse driving.



Push button to move wheels for rotational driving.



Push button to move wheels for sideways driving.





Leg Position
Control Buttons

The lift control handset controls the orientation of the legs.

Push the buttons to move the legs to the desired position.

Refer to the instructions below.



Push button to move legs closed.



Push button to move legs open.

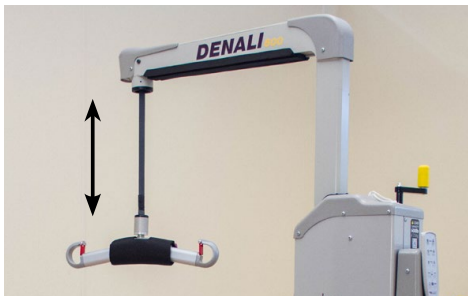


LIFTING FUNCTION

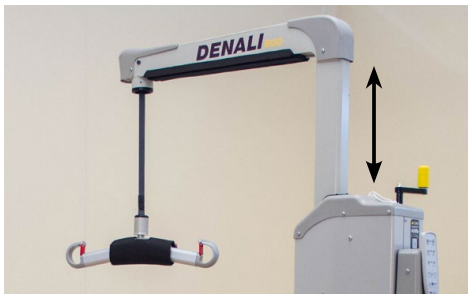


The lift control handset controls the lifting functions.

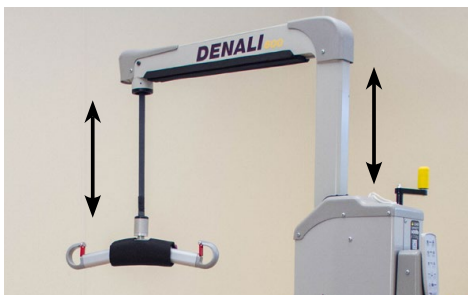
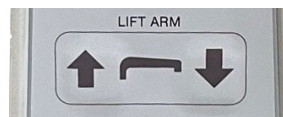
Refer to the instructions below



Push buttons to move the sling bar up or down.



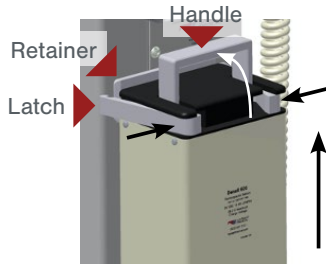
Push buttons to move the lift arm up or down. The sling bar remains in its position.



Push buttons to move the lift arm and sling bar together up or down.

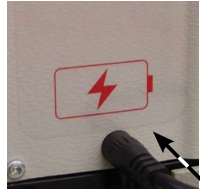
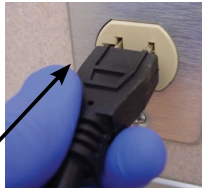


BATTERY FUNCTION



Lift handle, press in latches and lift the battery up to remove it.

To install battery hold with handle and align with socket on lift. Lower straight down onto the socket. Press in latches and secure them over the retainer. Lower the handle to lock the latches.



To charge the battery plug the charger AC power cord into an outlet and the charger battery cable into the battery.

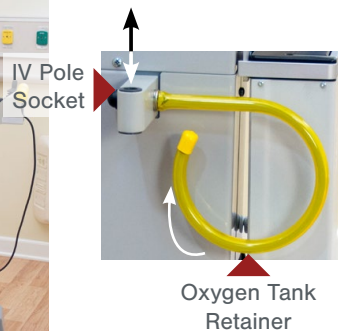
The battery may be charged while on the lift or removed from the lift.

A full charge takes 10 hours. A quick charge takes 2 hours.



Pull the battery charger straight out to remove it from the Velcro retainer on the lift.

OXYGEN TANK & IV POLE HOLDER (OPTIONAL)



Socket for standard 1/2" diameter IV pole.

Rotate the oxygen tank retainer up to hold the tank in place.

OPERATING THE DENALI POWER-DRIVEN MOBILE LIFT

1. Refer to the sling IFU prior to use with the lift.
2. OPEN the LEGS of the Denali to an appropriate width to maneuver the lift around a chair, wheelchair or bed.
3. Position the Denali as instructed by the sling IFU. (Fig. 1).
4. Place the sling loop over the sling bar hook and ensure the safety latch closes. Repeat loop placement per the sling IFU. (Fig. 2.)
5. Raise the patient to the desired position.
6. Move the lift to the location of intended transfer.
7. Follow the sling IFU when lowering the patient and removing the sling loops from the sling bar hooks.
8. Once the sling is no longer attached to the lift, move the lift clear of the patient.
9. CLOSE LEGS.
10. PLUG IN MAINS (plug into a wall outlet) to ensure battery is fully charged for next use.



Figure 1

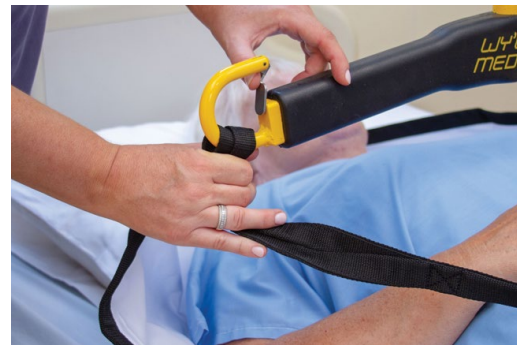
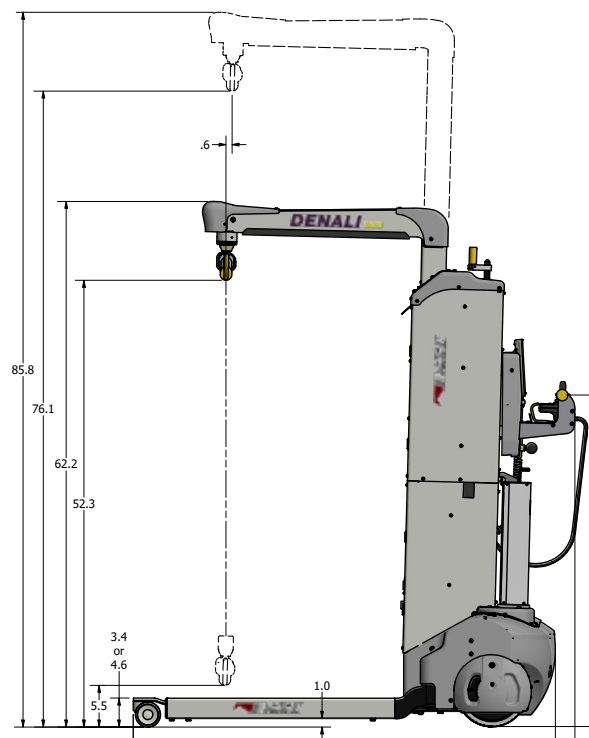
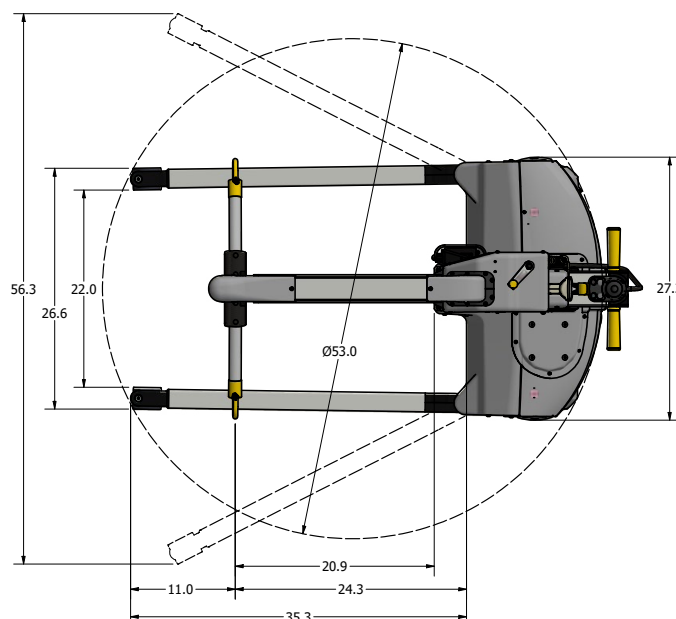


Figure 2

Technical Specifications:

PARAMETER

- SWL  600 lbs
- Device Part Number (3" casters) 52300
- Device Part Number (4" casters) 52400
- Battery 24 V 15 Ah LiFePO₄
- Number of Lifts per Charge 200
- Charge Time Quick 2 hr
Full 10 hr
- Lift 15% - 85% Intermittent Usage Run 2 min continuous
Off 18 min
- Drive 50% - 50% Intermittent Usage Run 10 min continuous
Off 10 min
- Total Weight w/ Battery 286 lbs
- Wheels Diameter, Front 3" or 4"
- Wheels Diameter, Rear 8"
- Turning Diameter 53"
- Leg Under Bed/Stretcher Clearance 3.4" or 4.3"
- Standard Door Width Clearance 28"
- Lifting Speed Unloaded 1.75 in/s
- Driving Speed 1.4 mph
- 3 Sling Bar Options 15", 24" or 4 point
- Frame Steel & Aluminum
- FDA Device Class Class 1
- FDA Product Code FSA
- FDA Regulatory Number 880.5510



Environmental Conditions

	FOR SHIPMENT AND STORAGE	FOR USE
Temperature	14°F to 104°F (-10°C to 40°C)	41°F to 104°F (5°C to 40°C) ambient
Relative Humidity	20% to 80% non-condensing	20% to 80% non-condensing
Atmospheric Pressure	70 kPa to 106 kPa	70 kPa to 106 kPa

Note: Li-Ion batteries must be stored without exposure to direct sunlight

PERIODIC MAINTENANCE

The following scheduled maintenance and inspections will help to ensure trouble-free operation of your Denali Power-Driven Mobile Lift.



Not recommended for use in shower or wet environment.
Do not pressure-wash the unit.

ONCE A DAY

- Charge the battery.

ONCE A MONTH

- Check the sling bar strap for damage or fraying.
- Check for loose or missing fasteners or other parts.
- Clean unit – wipe off dust.

ONCE A YEAR

- Perform load testing.

EVERY TWO YEARS

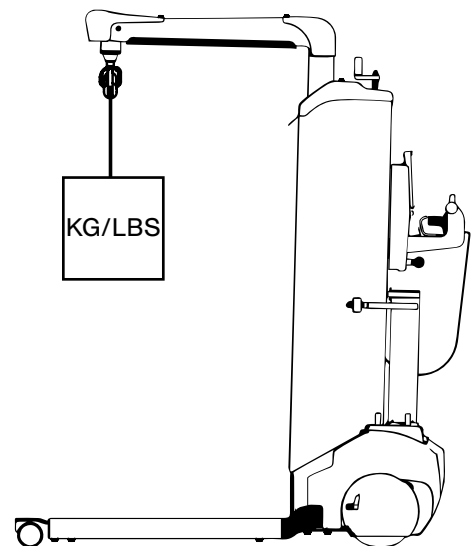
- Replace the sling bar strap.

Load Test:

Following tests are to be performed with specified load on sling bar.*

1. Load test for 1 min. Sling bar does not drift down
2. Move the lift arm up/down
3. Move the sling bar up/down
4. Move legs open/close
5. Legs are square with base when closed
6. Position wheels for rotation driving
7. Drive rotationally
8. Position wheels for sideways driving
9. Drive sideways
10. Position wheels for forward/reverse driving
11. Drive forward/reverse
12. Joystick throw controls driving speed
13. Power emergency lowering
14. Manual emergency lowering

Test Load*: 272 KG / 600 LBS



ELECTRONICS

BATTERY CARE AND CAUTIONS:



Handle batteries carefully.



Battery packs may emit hydrogen gas. Do not bring fire or a heated object close to the battery pack, and never use the battery near a spark, fuses and/or equipment that emits sparks. Further, do not store the battery in a closed environment or incorporate it into a closed structure of an enclosure. Doing so may cause an explosion, fire, equipment damage, and bodily injury.

STANDBY MODE

When the BAJL Li-Ion is not being used for a longer period - more than a week - or when it is on stock, it enters into a standby mode to save power and protect the battery from deep discharge.

- Connect the charger for approx. 15 seconds to exit the standby mode before use.
- There is no audio signal to indicate the standby mode or to indicate exit of standby mode.

AFTER EXIT OF THE STANDBY MODE

If there is still no power on, the battery needs to be charged.

After charging, the hand control and/or the control box will indicate the battery capacity level again.



DEEP DISCHARGE PROTECTION

The BAJL Li-Ion has a deep discharge protection to extend the battery life.

The deep discharge protection is activated when the battery is discharged.

- Connect the charger for approx. 15 seconds to exit the deep discharge mode before use.

If the battery is completely discharged, the charging will be started at a very small rate to protect the battery. This small charging rate is not sufficient to turn on the light in the charger, and therefore the user may believe the system has not yet started.

Depending on the battery state, it may take several hours to get to the normal charging state. The orange light of the control box will not be turned on as the operation is analogue. It is therefore not possible to see the charging has started, however, only at a low level.



Do not connect the positive terminal and the negative terminal of the battery packs with a wire or other metals.

Short-circuiting the terminals of the battery can cause burn injuries, damage to the storage battery or trigger explosions.



Never connect the battery packs directly to a power supply socket or an automobile's cigarette lighter without using a charger as a medium.

Connecting the battery directly can cause the battery to leak fluid, generate heat, explode, cause fires, or bodily burns and injuries.



Battery packs contain dilute sulphuric acid, which is a toxic substance. If battery fluid leakage were to occur and make contact with skin or clothing, wash completely with clean water. Additionally, if the fluid gets in your eyes, wash them with clean water immediately, and see a doctor. When dilute sulphuric acid enters the eye, it can cause a loss of eyesight and skin exposure can cause a burn on your skin.



Do not use or store LINAK battery packs where the surrounding temperature exceeds 50°C, such as inside a hot automobile, in direct sunlight, or in front of a stove or a source of intense heat. Doing so can shorten battery life, lower its performance level, cause the battery to leak fluid, become damaged, or deform.

ELECTRONICS ENVIRONMENTAL CONDITIONS:

OPERATING:

Temperature _____ 5°C to 40°C
Relative humidity _____ 20% to 90% @ 30°C – not condensing
Atmospheric pressure _____ 70 to 106 kPa

STORAGE:

Temperature _____ -10°C to +50°C
Relative humidity _____ 20% to 90% @ 30°C – not condensing
Atmospheric pressure _____ 70 to 106 kPa

TRANSPORT:

If the actuator is assembled in the application and is exposed to push or pull during transportation, the actuator may be damaged. Do not drop an actuator or otherwise damage the housing during disassembly or transportation. We do not recommend using an actuator which has been damaged.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	ACTION
No power for driving or lifting.	Battery is not fully charged.	Charge battery.
	Battery is damaged.	Replace battery.
	Red Emergency Stop switch is pushed in.	Turn switch clockwise to reset.
Unresponsive steering or jerky motion when driving.	One or both wheel locking levers not in locked (down) position.	Push both wheel locking levers to locked (down) position.
Battery will not charge.	Battery is damaged.	Replace battery.
Light flashing on drive control joystick.	Charger is connected to battery. Only applicable on Denalis made prior to serial number DL00157.	Disconnect charger from battery.
Sling bar will not raise or lower.	Slack in sling bar strap.	Remove slack in strap.
	Bad actuator or controls.	Contact Wy'East for service.
Sling bar will not raise.	Twist in sling bar strap.	Remove twist in strap.
Lift arm will not raise or lower.	Slack in sling bar strap.	Remove slack in strap.
	Bad actuator or controls.	Contact Wy'East for service.
Lift arm will not lower.	Twist in sling bar strap.	Remove twist in strap.
Legs will not open or close.	Bad actuator or controls.	Contact Wy'East for service.
Unresponsive lift control handset.	Bad handset or controls.	Contact Wy'East for service.
Unresponsive drive control joystick.	Bad joystick or controls.	Contact Wy'East for service.

FACTORY ASSISTANCE

Expected lifetime: 8-10 years

REPLACING PARTS:

To order replacement parts, contact Wy'East Medical Customer Service.

Include the following information with your request:

1. Serial and Model numbers of your Denali Power-Driven Mobile Lift.
2. Purchase date, if available.
3. Part number and description of the replacement part needed (see "Replacement Parts" section "REPLACEMENT PARTS:" on page 20 of manual).
4. Shipping and billing instructions, including complete address.

Contact information:

Telephone: [\(503\) 657-3101](tel:5036573101)

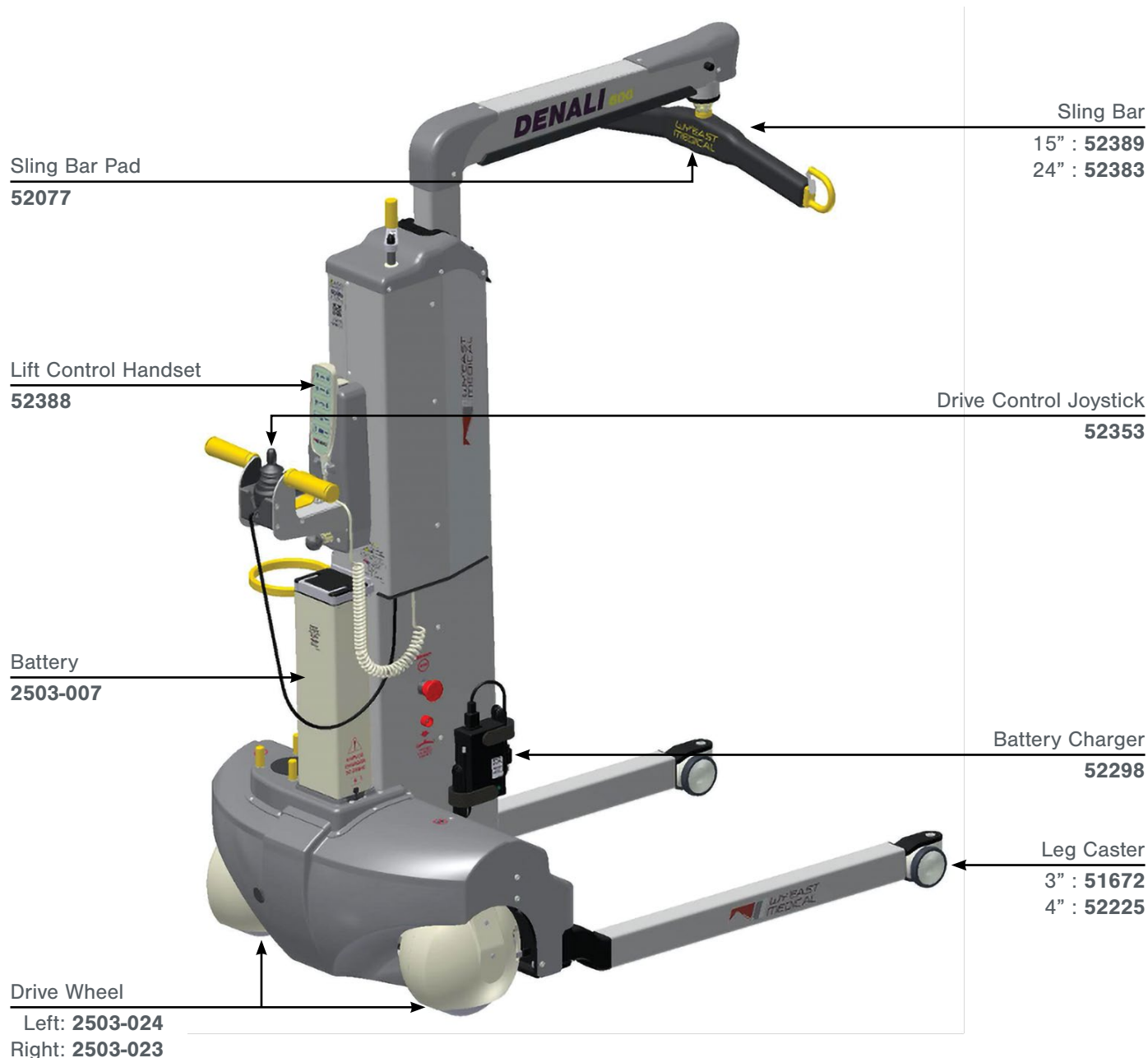
Email: customerservice@wyeastmed.com

WARNING:

No unauthorized modification of this equipment is allowed. Contact Wy'East Medical prior to any modification of this equipment.

REPLACEMENT PARTS

This manual provides maintenance and service information for the Denali Power-Driven Mobile Lift. If replacement parts are required, contact WY'EAST MEDICAL with the serial number of your Denali Power-Driven Mobile Lift to ensure the accuracy of replacement parts.



BIO MED/CLINICAL ENGINEERING CHECKLIST

- Inspect lift functions (Quarterly) – Check to ensure that the lift is free from damage.

Before patient Use:

- Check sling bar connection and safety latches.
- Check that the lift strap is not twisted or damaged.
- Check to ensure that the battery pack is correctly installed. (Is securely latched at mounting point).
- Power on lift (Power button on joystick puck) Make sure Emergency stop knob is disengaged.
- Test all operating functions on hand pendant.
- Test both Emergency lowering functions: Emergency Powered down on Mast, below Emergency stop button, Manual Emergency lowering handle on top of mast.

Serial Number on the lift:

- The serial number is located on the product label below the control panel and above the battery pack.

Lift Maintenance:

- Clean the Denali 600 when necessary. Do not use cleaning agents that contain phenol or chlorine, as these can damage aluminum and polyamide materials. The lift can be cleaned with rubbing alcohol or mild soap and water.
- The lift strap can be cleaned. See operators manual for detailed instructions.

Transport and storage:

- If the lift is not going to be used for (Weeks/Months) or transported to a different location, it is recommended that the emergency stop button is engaged and the battery pack is removed for transport.
- Store the lift at a temperature above freezing and not exceeding normal relative humidity (about 60%).

Denali 600 Technical Faults:

- Please note that most technical faults that may occur with the Denali 600 concern accessories or components that are not located under the protective body panels. Listed below are parts and functions that should be checked before removing the covers:
- Charger cables and contacts
- Maneuvering and problems with travel functions:
- Resetting the system through the emergency stop button
- Twisted or damaged lift strap
- Brake levers on the drive wheels

Description of Mechanical system:

- Lift Strap – The lift strap system runs through the arm and mast through a sequence of rollers.
- Motors and Actuators – The Denali 600 has 2 motors and 5 actuators
- Drive wheels with brakes, (2pcs) – wheels power the lift forward/backwards/side to side/ turn on axis.
- Actuator in the mast (1pc) controls the lift strap function.
- Actuator in the mast (1pc) control the boom arm up/down.
- Actuator for wheel positioning (1pc) – positioned laterally through the lift and connects the drive wheels. Sets the wheels in the desired direction of travel.
- Actuator for expanding the legs (2pc) Located in the chassis under the cross member on both sides. When activated, they move the legs of the base in and out (wider or narrower). One actuator for each leg, working in tandem.

Lifting:

- The actuator inside of the lift arm tube controls raising and lowering of the lift arm. The lifting arm slides in the mast via 4 bearings and runs up and down. The lift arm cannot be lifted manually. The lift strap actuator can be controlled manually in Emergency situations.

Driving:

- Driving is controlled via the joystick puck on the console, the joystick is connected to the VR2 control unit, the black unit located to the right of the mast on top of the base frame under the protective covers. Direction of driving is controlled through the Pendant (last set of buttons) these buttons activate the dual-action actuator located on the back of the base frame. The wheels are thereby turned in/out for desired drive position.

Charger and Connections:

- Battery discharge is a typical fault. Make sure the battery is fully charged, power on the lift and check the display for information. Battery lights are on the joystick puck. If the battery is not charged, charge it for at least 2 hours before inspection.
- If the problem seems to be electrical, it is important to ensure that all plugs are securely connected and that the charger or insulation are not damaged (bare wires visible).

NOTES



CONTACT INFORMATION

For questions or information regarding other Wy'East Medical products, contact:

Wy'East Medical Corporation

16700 SE 120th Ave.
Clackamas, OR 97015, USA

(503) 657-3101

(800) 255-3126

wyeastmedical.com

info@wyeastmed.com

