Jeff Tellez  After Sales Field Trainer
Who Are We?
Incredibly Spacious, Impressively Refined

The BraunAbility Toyota XT gives more space, better visibility, and the smooth, comfortable ride you deserve.

Learn More
Commercial Wheelchair Lifts for School Buses

BraunAbility offers several wheelchair lifts for School Bus applications, depending on the platform size and floor-to-ground height. All BraunAbility Wheelchair Lifts are NHTSA-approved. And all BraunAbility Wheelchair Lifts are engineered for long-term reliability and durability.

BraunAbility has been pioneering commercial wheelchair lifts and commercial wheelchair vehicles since 1963. Our products set the standard for commercial and public-use transportation for the disabled around the world.

Our wheelchair lifts and accessible vans cover a wide variety of commercial and public-use applications, including Transit Bus and Motorcoach, School Buses, Commercial Paratransit, Cutaway Buses, and public-use wheelchair accessible vans.

We invite you to place your trust in BraunAbility’s entire line of commercial mobility products. Browse the website for product application information, the location of your nearest BraunAbility Commercial dealer, customer support, and information about BraunAbility.
Commercial Product Manuals

NHTSA Public Use Lifts  Ramps  Commercial Entervan

Millennium Series

Millennium 2 Series
Century Series
Century 2 Series
Vista Series
Vista 2 Series
UVL Series
NL500 Series
NL501 Series

NL Millennium Series

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<tbody>
<tr>
<td>31667</td>
<td>Rev. A - Series 01 Service Manual</td>
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LIFT INTRO AND SERVICE PRESENTATION
COMMERCIAL DPA LIFTS
This course is informational in nature only and does not replace anything found in your owners or service manuals. By completing this presentation, you as an end user are not authorized to perform warranty work, purchase parts directly from the Braun Corporation or are otherwise authorized to perform any repairs related to your product. This is not a “certification” course.
OPERATION BASICS

- All vehicle interlocks must be made.
- Lift mounted ON/OFF switch must be in the “ON” position.
- Lift Tite operation.
- Fully automatic, electric/hydraulic operation.
- 800 & 1000 Pound lifting capacity.
- Safety features will affect lift operation.
- Back-up system.
INTERLOCK SYSTEM

- Receives information from vehicle components.
- When vehicle is “secure” it will power the lift.
- Will not allow the vehicle to be driven when lift is in use.
- *Ensure the vehicle engine is running when the lift is in use!*
OPERATION cont.

CYCLE COUNTER
OPERATION cont.

- ALL LIFTS USE LOW PROFILE PENDANT.
  - Gray switches are for electronic lift.
  - Black switches are for non electronic lift.
LIFT MONITORS THREE ITEMS

• Threshold Plate
• Outer Barrier
• Inner Barrier
• Lift should not fold when occupied with 50 pounds or more anywhere on the platform.

• Check this regularly!
• LIFT TITE SYSTEM.
• Lift in the fully stowed position.

• LIFT TITE SYSTEM.
• LIFT TITE SYSTEM.

• Lift drifted.
Manual back up pump and handle.
BASIC ELECTRICAL CONNECTIONS, ALL LIFTS.
WHERE IS THE POWER COMING FROM?

LIFT SHOULD HAVE CONSTANT POWER & GROUND.
BASIC ELECTRICAL COMPONENTS

- FOLD RELIEF RELAY (BEHIND).
- PLATFORM LIGHT/MAIN POWER RELAY.
- FLASHER.

5amp INTERLOCK FUSE

- 15amp MAIN POWER FUSE.
ELECTRICAL SYSTEM cont...

REDUNDANT RELAY SYSTEM

REDUNDANT RELAY

REDUNDANT RELAY BREAKER

Circuit Breaker
TOWER SWITCHES.

- TOWER 1 IS "UNFOLD" & "DOWN" SWITCH.

Note: Review adjustment procedures below and adjust as needed only.

Note: Left (rear) pump lift depicted. Right (front) pump lift is a mirrored image.
TOWER SWITCHES.

- TOWER 2 IS “UP” and “FOLD” SWITCH.

**Note:** Review adjustment procedures below and adjust as needed **only**.

**Note:** Left (rear) pump lift depicted. Right (front) pump lift is a mirrored image.
TOWER SWITCHES.

• TOWER 3 ACTIVATES THRESHOLD ALARM.

• ADJUSTED APPROX. 1 inch BELOW FLOOR LEVEL.

• ADJUST WITH PLATFORM AT 45 deg OFF DUAL RELIEF SYSTEM.
TOWER SWITCHES.

TOWER 1 & 2.

NOTICE #4 IS BACKED OFF

TOWER 4 & 3.

NOTICE #4 IS BACKED OFF
TOWER SWITCHES.

REMOVE TWO BUTTON HEAD BOLTS TO SERVICE SWITCH ASSEMBLY.
THRESHOLD SWITCHES.

Threshold Strip Switch
33337A
THRESHOLD SWITCHES.

THRESHOLD SWITCH.

ZIP TIES.
OB OCCUPIED/RAISED SWITCH.

Outer Barrier
Occupied / Raised
Microswitch
33775A
O.B OCCUPIED/RAISED SWITCH.

SWITCH ARM RELEASED WITH ROLL STOP DEPLOYED.
CENTURY/VISTA LIFT PENDANT POWER FLOW.
ADDITION OF OUTER BARRIER SWITCH.

12v FROM LIGHT RELAY
IB OCCUPIED SWITCH ASSEMBLY.

Stow Interlock Microswitch

IB Occupied Microswitch

IB Occupied & Stow Interlock Assy.
32514NA
IB OCCUPIED SWITCH ASSEMBLY.

LIFT STOWED/DEPLOYED SWITCH

I.B. OCCUPIED SWITCH
ELECTRICAL SYSTEM cont...

NOT OCCUPIED.

OCCUPIED.
IB RAISED SWITCH.

IB Raised Switch
32519A
IB RAISED SWITCH.

I.B. RAISED SWITCH.

ACTUATOR BUMPER.
CENTURY/VISTA LIFT PENDANT POWER FLOW.
ADDITION OF OUTER BARRIER SWITCH.

12v FROM LIGHT RELAY
I.B. OCCUPIED & I.B. RAISED SWITCHES CONTROL POWER GOING TO PENDANT.
GROUND DETECT & OUTER BARRIER RAISED SWITCHES.

Ground Detect Microswitch 32859A

Outer Barrier Raised Microswitch 32859A
GROUND DETECT & OUTER BARRIER RAISED SWITCHES.

• GROUND DETECT SWITCH ALLOWS ROLL STOP TO DEPLOY.
• OUTER BARRIER RAISED SWITCH SHUTS OFF O.B. DUEL RELIEF FUNCTION.
  • LIFT WILL NOT RAISE IF SWITCH FAILS.
HYDRAULIC SYSTEM
HYDRAULIC SYSTEM BASICS

- POWER UP, GRAVITY DOWN.
- MAX LIFTING CAPACITY 800 or 1000 LBS.
- DUAL RELIEF SYSTEMS.
- RESTRICTED FITTING.
- HOSE ROUTING.
- 32840KS, COLD WEATHER FLUID.
- COMMON HYDRAULIC ISSUES.
• FLUID LEVEL SHOULD BE APPROX. ONE INCH BELOW FILLER NECK.
• CHECK FLUID LEVEL WITH PLATFORM ON THE GROUND.
• 32840KS COLD WEATHER FLUID MUST BE USED.

### Hydraulic Fluid

| When adding or changing hydraulic fluid, use Braun 32840-QT (Exxon® Univis HVI 26) hydraulic fluid (**do not mix** with Dextron III or other hydraulic fluids). |
DUAL RELIEF SYSTEM

- DUAL RELIEF SYSTEM PREVENTS MORE THAN 50 LBS. OF WEIGHT FROM BEING FOLDED.
- ADJUSTED, MECHANICALLY ON PUMP.
FOLD DUAL RELIEF VALVE GEN 2 MILLENNIUM LIFTS ONLY!!!

Platform Fold

Outer Barrier Fold
HOSES & HARNESS EXPOSED
PLATFORM DRIFTING ISSUES

- BACK UP PUMP VALVE TIGHT.
- EXTERNAL FLUID LEAKS.
- CYLINDERS FOR FLUID BYPASS.
- MAIN PUMP/B.U. PUMP INTERNAL LEAK.
• BACK UP PUMP VALVE SHOULD BE TIGHTENED AS SHOWN ABOVE.

• IF NOT, LIFT WILL DRIFT.
EXTERNAL FLUID LEAKS

CHECK ALL FITTINGS, HOSES, CYLINDERS, & PUMP COMPONENTS.

• LEAKING FLUID MAY COLLECT IN THESE SPOTS…
• ESPECIALLY CHECK B.U. PUMP AREA FOR LEAKS.
• SOME PUMP COMPONENTS CAN BE RE-SEALED.
REMOVE VENT LINE FROM REAR OF ALL CYLINDERS.

- CHECK WITH PLATFORM OFF OF GROUND AND DURING UP FUNCTION WITH WEIGHT.
- IF STEADY DRIP OR STREAM OF FLUID IS PRESENT, REPLACE CYLINDERS.
• INTERNAL COMPONENT LEAKAGE IN PUMP MODULE MAY CAUSE DRIFTING.

• CONSULT BRAUN CORPORATION BEFORE REPLACING PUMP MODULE
ADJUSTMENTS & MAINTENANCE
MAINTENANCE & LUBRICATION

- MAINTAIN LIFT EVERY 750 CYCLES.
  - UTILIZE CYCLE COUNTER.
- CYCLE LIFT TO CHECK ALL FEATURES.
- LIGHT OIL VS. GREASE.
- PROPER INTERLOCK OPERATION.
- CLEAN & INSPECT POWER/GROUND CABLES.
- INSPECT WIRING, HOSES, LIFT COMPONENTS, AND FLUID LEVEL.
- INSPECT MOUNTING COMPONENTS.
ADJUSTMENT SCREW LOCATION

CHECK FLOOR LEVEL ELECTRICAL ADJUSTMENT PRIOR TO ADJUSTING PLATFORM ANGLE!!
Platform Angle

Adjustment Screws

Turn counterclockwise to lower outboard end of platform

Turn clockwise to raise outboard end of platform

Adjustment Screw

Allen Head
QUIET RIDE

- MAIN BUMPER ADJUSTMENT.
- REPLACE MAIN BUMPERS WITH KIT PN 28751A.
QUIET RIDE

• INSPECT ALL SMALL BUMPERS.
QUIET RIDE

- HANDRAILS ADJUSTED USING AN ALLEN WRENCH.
QUIET RIDE

- REPLACE WITH PROPER RIVET PN 15244.
- INSPECT SCREWS FOR TIGHTNESS TO PREVENT RATTLES.
QUIET RIDE

• ADJUST CYLINDER ROD
MAINTENANCE & LUBRICATION cont...

- LUBE ALL PIVOT POINTS WITH LIGHT OIL EXCEPT FOLD ARM TUBES.
- LUBE FOLD ARM TUBES WITH GREASE.
APPLY GREASE TO FOLD ARM TUBES TO PREVENT WEAR.

IF TUBES ARE NOT GREASED, WEAR WILL OCCUR.
INSPECT & CLEAN GROUND.

- AT PUMP.
- AT CHASSIS.
MAINTENANCE & LUBRICATION cont...

- INSPECT AND CLEAN GROUND.
- AT SECONDARY GROUND STRAP.
MAINTENANCE & LUBRICATION cont…

- INSPECT AND CLEAN POWER CABLE.
- AT POWER FEED STUD.
- AT BATTERY AND CIRCUIT BREAKER.
• REMOVE THE COVER AND INSPECT ALL PUMP COMPONENTS & FLUID LEVEL.
Thank you for attending!

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