

<p>Mobilift AX / AXR</p> <p>Mobile Wheelchair Lift</p> <p>Horizontal bridge ramp deployment</p>

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MAXIMUM CAPACITY 600 POUNDS

READ THIS MANUAL BEFORE OPERATING OR ADJUSTING THE WHEELCHAIR LIFT

Replacement parts are available within 24 hours to most North American locations

419 – 34th Ave. S.E., Calgary, Alberta, Canada T2G 1V1

(403) 243-9400 1-800-448-4652 Fax: (403) 243-9455 E-mail: info@adaptivelifts.com

1. WARRANTY

Adaptive Engineering Inc. warrants each Mobilift AX and AXR to be free from manufacturing or material defects for two years from the date the product was put into service. Damage caused by vandalism or abuse is not covered by this warranty.

For assistance, parts or repair information please call 1-800-448-4652 or 1-403-243-9400.

2. CAUTIONS

General

- It is the responsibility of operating staff to ensure that the aircraft is not damaged while the wheelchair lift is in use.
- All precise manoeuvring (i.e. alignment with aircraft or parking) should be performed using the push handles. Do not tow the lift close to any aircraft.
- Do not attempt to crank up the lift platform from on the lift. A lift operator on the ground is required.
- When parked, the lift should be cabled and locked to a permanent structure if it is accessible to vandalism or susceptible to jet blasts. (See general operating notes.)
- The platform crank handle should always be returned to the vertical position and folded in except when it is being cranked.
- Wheelchair passengers must be accompanied by an attendant on the lift to stabilize the wheelchair while the lift is raised and lowered.
- When used with the Beech 1900 C and D models and the Fairchild Metro, a spotter must be used to guard the propeller. The configuration of both planes requires particular care. Please refer to the end of the Operating section for detailed instructions.
- The platform must be cleared of ice and snow in winter and gravel in the summer.

Bridge Ramp and Ground Ramp

- Do not attempt to extend or retract the ramps while on the lift deck or from inside the aircraft, this must be done by the lift operator on the ground.
- Raise the platform before retracting the bridge ramp from the aircraft's door sill to avoid dragging and dropping the bridge ramp.
- The bridge ramp must be supported by at least a 3" overlap on the sill of the aircraft over the entire width of the ramp.
- The end of the ground ramp should rest flat on the ground or it may become damaged when loading or unloading passengers from the lift platform.
- Raise ground ramp prior to elevating the wheelchair platform.

Towing

- No passengers or equipment are to ride on lift while being towed.

- Maximum towing speed is 8 km/hr (5 mph).
- Wheels must be fully lowered prior to towing.

Counterbalance Springs and Gas Cylinders

A large amount of energy is stored in the springs and gas cylinders used for the platform and wheel counterbalances (respectively). **Improper servicing can result in serious injury.** In all cases, contact Adaptive Engineering Inc. for detailed information regarding servicing of these components.

3. FEATURES

Convenience

- ***Cranking System***
The high-efficiency crank system is counter-balanced to allow two adults to be lifted to maximum height with very little effort in less than 45 seconds.
- ***Self-levelling Ground Contacts***
Automatic self-levelling of lift on uneven ground.
- ***Tow Bar***
Tow bar with integral brake release allows towing by tarmac tractors.
- ***Spare Tire***
A spare tire is attached to the Mobilift. The “quick release” design allows a wheel to be changed in less than 2 minutes without tools.

Safety

- ***Outriggers***
Safety features that reduce the chance of overturning should a jet blast strike the lift. The lift is designed not to overturn in a 90 mile per hour wind.
- ***Platform Interlock***
The lift platform cannot be raised unless the outriggers are extended.
- ***Bridge Ramp Gate***
The bridge ramp gate opens automatically when the bridge ramp is lowered onto the aircraft doorsill.
- ***Parking Brake***
Automatically prevents the lift from rolling when unattended.
- ***Emergency Lowering Crank***
The lifting mechanism of the Mobilift AX / AXR is designed to lock in place in the unlikely event of a mechanical failure. The self-braking system can be overridden using the emergency lowering crank to lower the platform to the ground.
- ***Bumper Pad***
Non-marking urethane bumpers cushion inadvertent contact with the aircraft reducing risk of damage.

4. MOBILIFT AX / AXR SPECIFICATIONS

Model	AX	AXR
Weight	880 lb.	920 lb.
Overall Height	87"	117"
Width	72"	72"
Length	90"	90"
Lift platform size	15"x 60"	15"x 60"
Ground ramp length	38" (slope 1:8)	38" (slope 1:8)
Bridge ramp length	77"	77"
Maximum lifting height	78"	108"
Capacity	600 lb. (tested to 3,000 lb. - certified test results available on request)	
Materials	6061 T6 aluminum space frame construction stainless steel cables (7x19 aircraft style) powder coated steel sealed ball bearings industrial duty wheels stainless steel fasteners and fittings	
Typical deploying time	under 1 minute	
Typical lifting time	under 45 seconds to maximum height	
Minimum safety factors	cables: 12.0 other load-carrying components: 4.0	
Features	easy set up and operation by one attendant automatic self-levelling on uneven ground auto fail-safe crank with 2 load-activated drum brakes automatic parking brake to prevent rolling interlocked outrigger/crank system designed to withstand 90 mph jet blast quick change spare tire slip-resistant surfaces reflective marking tape	
Options	shed enclosure color of powder-coated components Markings canopy on AX	
Service requirements	minimal, can be handled by technician	
Parts delivery	Overnight (typical)	
Patents	5,040,638 and 4,926,973 (others pending, all rights reserved)	

Specifications are subject to change without notice.

5. OPERATING INSTRUCTION PICTOGRAMS

TO MOVE LIFT

1. Crank lift onto wheels.
2. Pull handles down to release brake.



3. Push lift to aircraft.



4. Extend outriggers.



5. Crank to lower outriggers.



TO RAISE LIFT

1. Lower ground ramp, then board lift.
2. Raise and latch ground ramp.



3. Crank lift up above sill height.



4. Extend bridge ramp into doorway.



5. Lower bridge ramp onto sill of door until gate opens.

REVERSE STEPS FOR OFF-LOADING.

NOTE

- The decals on the lift may refer to the platform as the “deck”.

6. OPERATING DETAILS

Bracketed numbers refer to parts that are labelled on figures in Section 10.

Operators who are using the lift with the Beech 1900 and Fairchild Metroliner must refer to special instructions at the end of this section.

Moving the Lift

Raising Lift onto Wheels

1. Crank the lift up onto its wheels. To do this, turn the wheel crank handle [16] clockwise until the wheels are in the full down position.
2. Visually inspect the main tires to make sure they are not under-inflated. If a tire is under-inflated, the spare can be used or the tire can be re-inflated to the proper operating pressure. (See Tires, in the Maintenance Section).
3. Check that the outriggers are locked in the fully retracted position. The locking handles [42] must be engaged into the keyhole slots [43] to prevent vibrations from causing the outriggers to extend while moving the lift.

Moving Lift Using Push Handles

1. To release the automatic parking brake, pull both push handles [17] down. The purpose of this parking brake is to prevent the lift from rolling when it is not in use. If there is any indication that a brake is not operating properly, it must be repaired immediately.
2. To move the lift, apply a slight downward force on the push handles and push or pull as necessary. (If the lift is being pushed on rough ground it can be quite noisy from cable rattle. This is normal.)

Towing Lift behind a Vehicle

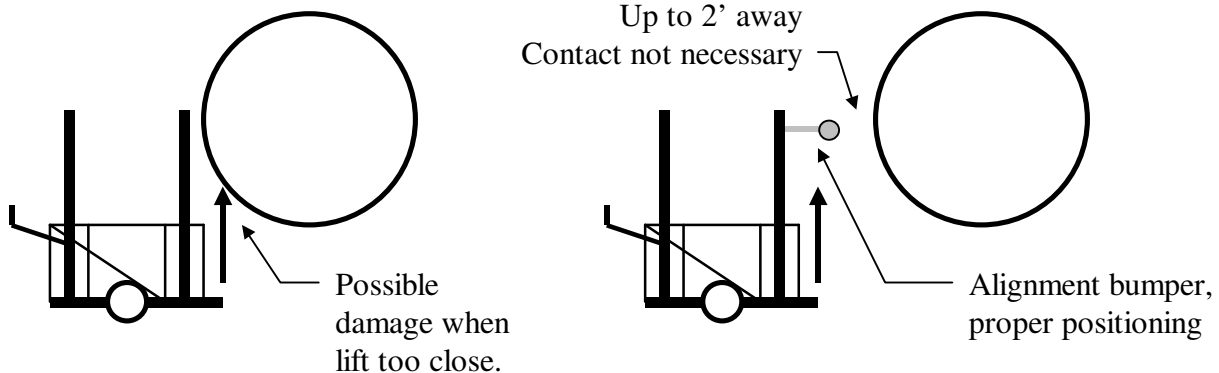
1. Maximum towing speed of the lift is 8 km/hr (5 mph).
2. Lowering the tow bar [20] to attach to the towing vehicle will automatically release the parking brake.
3. The tow bar is designed with a rubber cushioned tow ring, 1-7/8 inches inside diameter at a height of 18 inches. Contact Adaptive Engineering if your towing equipment does not match the supplied tow ring.

NOTES

- No passengers or equipment are to ride on lift while being towed.
- Maximum towing speed is 8 km/hr (5 mph).
- Wheels must be fully lowered prior to towing.
- Perform all fine manoeuvring with the push handles only. Do not tow the lift close to any aircraft.
- Do not tow or place the lift under jet bridges.

Aligning Lift with Aircraft

1. Carefully push the lift toward the aircraft and align the ramp with the doorway.
2. If there are stairs in place, bring the lift as close as possible to them. There is a bumper [47] on the front of the tow bar to reduce the chance of damaging the stair or lift if contact is made.
3. If there are no stairs in place, bring the lift close to the fuselage of the aircraft.
 - **Ensure that the end of the lift is not under the fuselage.**
 - **The high alignment bumper [46] will set the minimum spacing for the Boeing 737 and MD80.**



4. Once the lift is in position, release the push handles allowing them to return to the upright position. This automatically applies the parking brakes.
5. Extend the outriggers by releasing the safety locking handles and pulling the outrigger handles outward to the fully extended position. As a safety feature, the lift platform cannot be raised unless the outriggers are extended. The two outriggers on each side of the lift are interconnected to make them move at the same time. Watch that the outriggers do not contact the propeller, landing gear, or other obstacles while extending.
6. Lower the lift to the ground by turning the wheel crank handle [16] counter-clockwise. Note that the lift is designed to rest on its frame at the tow bar end, and on the automatic levelling device on the other end. The outriggers contact the ground but do not take load unless strong tipping forces are applied to the lift.

NOTE

- Use extreme caution when approaching the aircraft to avoid damaging contact between the lift and any part of the aircraft.
- Perform all manoeuvring near the aircraft with the push handles only. Do not tow the lift directly up to the aircraft.

Stowing the Lift

1. Park the lift away from aircraft with the wheels up or in an enclosure. This ensures that there is no possibility of it causing damage to aircraft or other airport equipment.
2. Never park the lift underneath a jet bridge.
3. If the lift could be subjected to high winds it should be fastened securely to a permanent fixture or be stowed inside an enclosure.
4. The Mobilift is designed for durable reliability however it can be damaged by foreign object debris (FOD). Store the lift at a location that minimizes this hazard.

Loading Wheelchair Passengers

Transferring a Passenger to a Boarding Chair

Consult the boarding chair manufacturer's instructions for the proper procedures for transferring passengers to and from the boarding chair.

Lowering the Ground Ramp

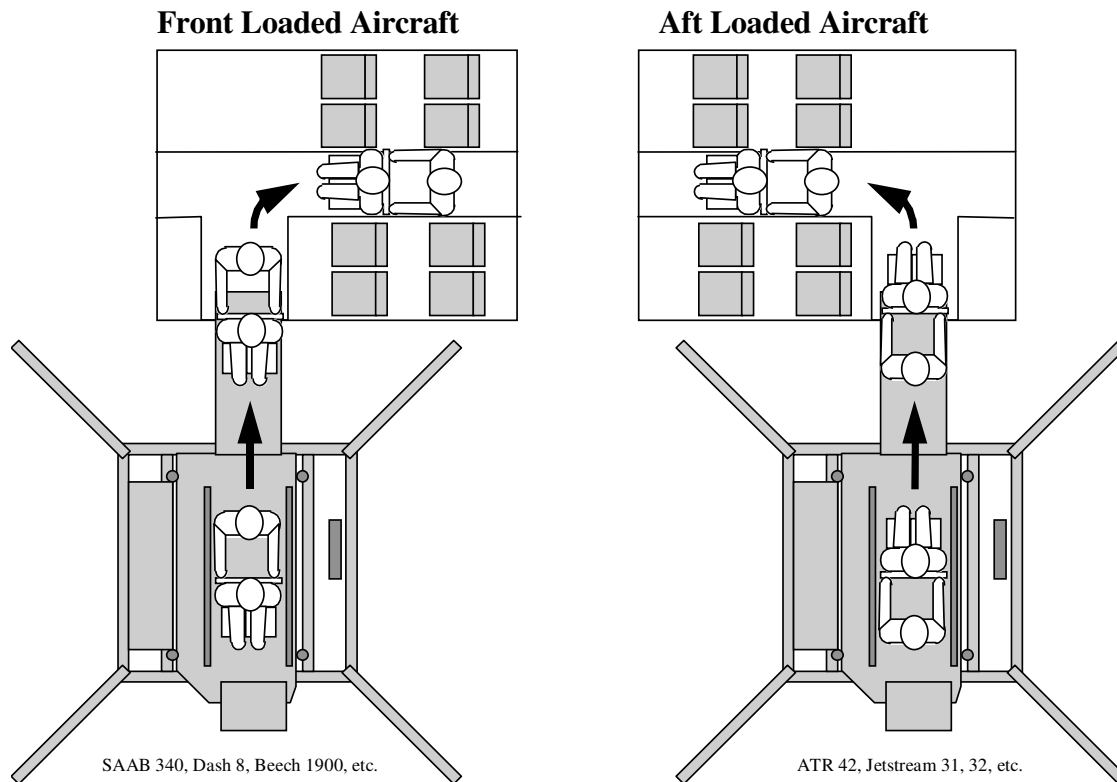
Release the ground ramp [12] by unlatching the blue handgrip from its keyhole. Lower the ground ramp to ground level.

NOTE

- The end of the ground ramp should rest flat on the ground or it may become damaged when loading or unloading passengers from the lift platform.

Positioning the Passenger and Attendant on Lift

The fore and aft location of the aircraft entrance will determine whether the passenger should be loaded onto the lift facing towards or away from the aircraft. If the entrance door is forward of the passenger seating, the passenger should be backed onto the lift facing away from the aircraft. If the entrance door is aft of the passenger seating, the passenger should be loaded onto the lift facing towards the aircraft.



When the passenger and attendant are positioned properly on the platform with the wheelchair brakes locked, the ground ramp is then raised and the handle latched.

People with crutches or canes can also use the lift. They should stabilize themselves with the platform handrails while the platform is raised and lowered.

NOTE

- Passengers should keep their arms on their laps to avoid contacting the moving components.
- An attendant should accompany any wheelchair passenger on the lift to stabilize the wheelchair while the lift is raised and lowered.
- It is the responsibility of the operator to determine whether other non-wheelchair passengers require an attendant while on the lift.

Raising the Lift

To raise the wheelchair platform, pull the platform crank handle [15] out and turn it clockwise until the platform is 2 or 3 inches above the sill of the aircraft door. (Note: When the platform height and lift position for a particular aircraft is established, the operator may mark the platform height on the lift post for future convenience.)

NOTE

- Ensure that the platform and its attachments do not contact the aircraft when raising or lowering the platform.
- The lift crank handle should be folded in the vertical position when not in use.
- Keep a slight outward pull on the handle when cranking to prevent it from folding in.
- Do not attempt to crank up the lift platform while on the lift.
- The lift may squeak under normal operating conditions.
- **Do not lubricate any parts of the lift. Lubrication can damage braking components causing a safety hazard.**

Extending the Bridge Ramp

1. With the platform set 2 or 3 inches above the sill of the aircraft door, the bridge ramp [13] can be extended into the doorway by turning the bridge ramp extension crank [19] counter-clockwise.
2. Check that the ramp is properly aligned with the doorway and no part of the ramp contacts the aircraft. Several inches of sideways float allows the attendant to position the ramp within the doorway by pushing or pulling the ramp to the side.
3. Ensure that the end of the bridge ramp is extended so that it overlaps the sill by at least 3" for the entire width of the ramp.
4. When the bridge ramp is in position, the platform must be lowered (turning the lifting crank [15] counter-clockwise) so that the end of the bridge ramp rests securely on the doorway sill. As the bridge ramp is lowered into position, the bridge ramp gate [52] will automatically open.

NOTE

- The bridge ramp must be properly aligned with the doorway. Extending the ramp into the side of the aircraft can cause damage to the aircraft.
- The entire width of the bridge ramp must overlap the doorway sill by at least 3".
- Do not attempt to extend or retract the bridge ramp while on the wheelchair platform.
- If the bridge ramp gate does not automatically fully open, re-check the ramp overlap and platform height.
- The AX lift can be used to transfer passengers to aircraft floor heights up to 73". The AXR can access aircraft floor heights up to 110".

Transferring the Passenger to the Aircraft

With the bridge ramp in position, the attendant on the lift can move the passenger across the ramp and into the aircraft.

Retracting the Bridge Ramp

Once the passenger and attendant are inside the aircraft and off the bridge ramp:

- Raise the wheelchair platform clear of the sill (2 or 3 inches).
- Crank the bridge ramp crank clockwise to retract the bridge ramp.

NOTE

- | |
|--|
| <ul style="list-style-type: none">• Retract the bridge ramp before lowering the wheelchair platform.• Do not drag the Bridge Ramp off the sill of the aircraft. |
|--|

Lowering the Platform

Once the bridge ramp is fully retracted, the platform can be lowered. Swinging the platform crank handle out and turn it counter-clockwise until the platform is in the full down position.

Raising Lift onto Wheels

See Chapter 6, “To Move the Lift” section, Item I.

Retracting and Locking Outriggers

Once the platform is lowered and the Mobilift AX / AXR is raised onto its wheels, the outriggers can be retracted and locked into position with the safety handles.

Releasing the Brake and Moving the Lift From Aircraft

To move the lift, pull down and apply a slight downward force on the push handles and push or pull as necessary.

Unloading Wheelchair Passengers

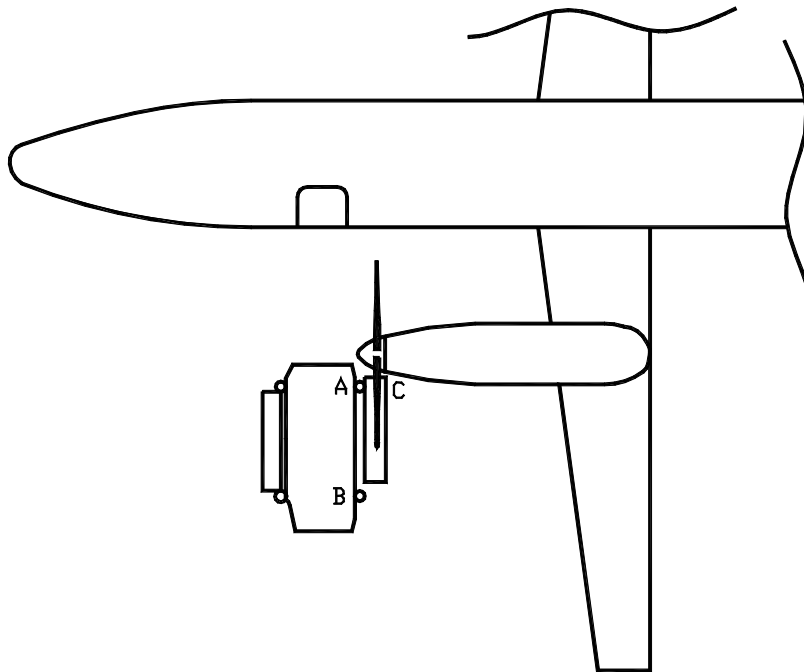
The steps for assisting a person in a wheelchair off the aircraft are the reverse of those described above.

Operating Lift with Beech 1900 and Fairchild Metroliner

Operators using either of these aircraft must note the following special instructions for these difficult-to-access planes. In both cases, an experienced spotter must be positioned at the propeller to protect it from contacting the lift.

Beech 1900

1. The Mobilift should be moved towards the aircraft in line with the door, and stopped when lift post A is 10 to 12 inches away from the spinner tip.
2. Spinner must not project inside of a line drawn from lift post A to lift post B. (If it does, it could be damaged by the handrail as the lift is raised.) See drawing below.
3. The bridge ramp will extend to cover the distance to the sill. When deploying the bridge ramp, bring it in above the support arms for the door cables until it sufficiently overlaps the sill and then lower it down. The spotter must watch ramp, spinner and air stair cables during this process. The cables may need to be held apart to allow the ramp to pass. Reverse this step by raising the ramp up clear of the support arms before retracting it.

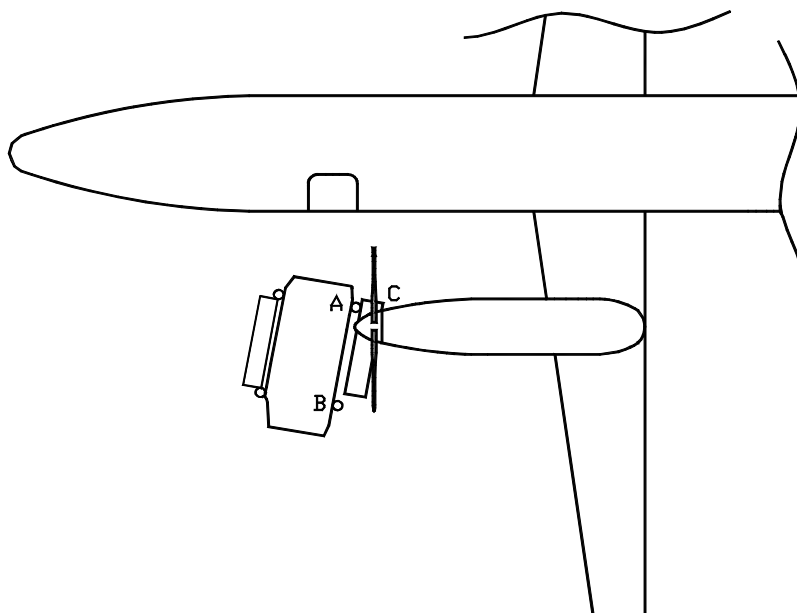
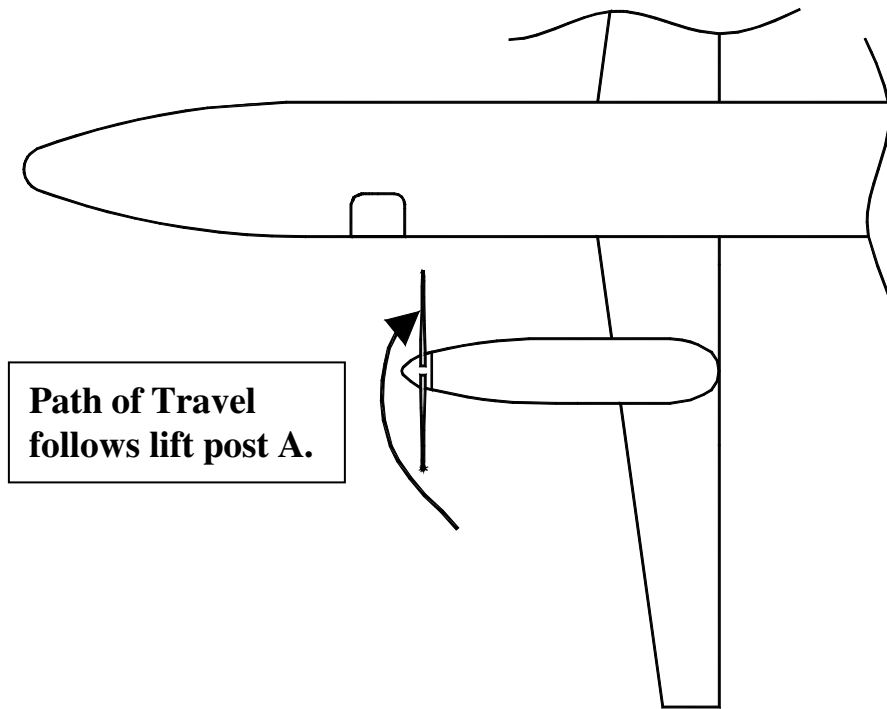


Fairchild Metro

With the Metro, proceed as follows and refer to diagrams at the end of these instructions:

1. Station a spotter at the propeller to be sure the lift does not touch the blades or spinner.
2. The purpose is to get the lift pointing at the door, but sitting at an angle of about 10° . In order to do this, lift post A must be about one foot ahead of the spinner tip - that is between the spinner and the plane.
3. One blade of the propeller should be set at 5 o'clock (when facing the spinner) to allow the right shroud to sit between the blades once the lift is in position.
4. The lift is brought to the plane door on a curve around the spinner. See the path of movement in the diagram. Do not contact the spinner with the lift post A. The shroud point C will clear the outside propeller blade by about 3 inches as it moves past. As the lift is being moved, watch the blades to avoid contact with the shroud on the right side of the lift. The shroud will sit exactly between the two propeller blades when the lift is in position.
5. The spinner must not project inside a line drawn from lift post A to lift post B. (If it projects in, it will be hit by the deck handrail when the lift is being raised, which could seriously damage the spinner.)
6. The lift is now ready for use with a wheelchair and can be operated as described in the manual.
7. Note that the spotter person remains at the propeller through the entire process to ensure that the lift does not contact the plane while the platform and ramp are moving.
8. The bridge ramp will go into the door on an angle (the ramp moves side to side to allow this). The spotter should watch and help guide it into place if necessary. Watch the ramp handrails, not just the ramp end. Remember to get 3 full inches of overlap onto the sill. It may be necessary to hold the air stair cables apart to allow the ramp to pass.
9. Use the same path of travel when moving the lift away from the plane - again guarding the spinner and propeller.
10. It is strongly recommended that the operator take time to practice this before doing it with the additional pressure of a short return time and a passenger waiting.

Fairchild Metroliner



7. GENERAL OPERATING NOTES

- While using the platform crank handle, the operator should maintain a slight outward pull to stop the handle from folding in.
- Blue Handles are used on all operating crank handles and latches. Place hands only on parts of the lift with blue handles.
- Follow the instruction decals located near each operating handle.
- Cranking the lift up or down requires more force when there is weight on the platform. There are patented load-activated brakes in the drive mechanism that are an essential safety feature.
- The platform crank handle must be folded in the vertical position when not being cranked.
- Critical components of the lift have been tested to -60 degrees Fahrenheit and controls are designed for use with heavy gloves or mitts.
- To operate the Outriggers (move them in and out), the lift must be in the Travel position.
- Persons in wheelchairs must feel safe when being lifted. If the disabled traveller appears uncertain, the operator should assure them of the following:
 - ✓ Every lift is load tested to over 3,000 lb. (about the weight of a car).
 - ✓ Each lift undergoes a 200-point quality assurance check.
 - ✓ There is no single component in the lift that can allow the platform to drop in the event of failure.
 - ✓ The lift is designed, built and tested according to regulations governing devices that lift people.

8. MAINTENANCE

- The wheelchair lift is considered to be safety equipment. It must be inspected officially at least once a year, or in high use areas, after every 500 uses.
- Parts used for the purpose of repair and maintenance must be authorized by Adaptive Engineering Inc. Adaptive Engineering Inc. accepts no liability for any failures, damages or injuries to or from the equipment as a result of substituting parts other than those authorized.
- Operators should make a habit of visually inspecting the cables on the left side of the lift for signs of wear or damage.
- A suggested inspection report form is included at the end of this manual. Airlines and airports with an established preventive maintenance system can incorporate these requirements as necessary.
- The Mobilift is intentionally designed with open accessible parts and simple mechanisms. Adjustments and replacements can be made by any experienced mechanic using standard tools and due care. If you need any help, contact Adaptive Engineering Inc. for assistance.

Cleaning

Sand and other debris may build up on the platform of the Mobilift and affect the bridge ramp operation. The aluminum main platform should be cleaned with pressurized air or water on a regular basis.

Lubrication

There are no parts on the Mobilift that require lubrication. Wheel bearings and pulley bearings are sealed and do not require lubricating. Lubrication can damage some components.

UNDER NO CIRCUMSTANCES should the brakes be cleaned with solvents or lubricated with any products. The brakes may squeal occasionally as the lift is being cranked, in the same way that automobile brakes squeal. This is normal.

Serial Numbers

The serial numbers for the lifts are on the lower left rear of the lift's frame. This serial number should be used in recording all maintenance inspection and work. It must also be given when ordering parts.

Wheels

Tire Pressure

Check that the tires are inflated to the pressure specified on the tire's sidewall on a regular basis.

Wheel Bearings

Wheel bearings are sealed and do not require any lubrication

Spare Tire

In the event that the spare tire is required, the following procedure should be followed.

- 1) Crank the lift down off of its wheels. Continue cranking until the tires are clear of the ground.
- 2) Remove the spare tire by pulling off the retaining pin and sliding the wheel off the mounting axle.
- 3) Disengage the parking brake on the tire being changed by pulling down on the push handle.
- 4) Remove the retaining pin and extract the axle from the tire to be changed.
- 5) Remove the tire and replace it with the spare tire. Reinsert the axle and retaining pin.
- 6) Have the tire serviced immediately and reinstall on the lift so that a spare tire is available.

Tire Replacement

Should the tires become excessively worn or weathered, replacement tires (size 4.80/4.00-8 or K-301M-023) can be obtained from any tire supplier. It is recommended that a tube be used even with tubeless tires for additional reliability. The Mobilift AX / AXR is delivered with special valve stem caps that provide additional sealing reliability. These should be replaced with any new tires.

Adjustments

The adjustments covered in this section refer only to those items where parts are not required. If new parts are required, they will be supplied by Adaptive Engineering Inc. with detailed instructions on installation and adjustment. If the lift has been vandalized or damaged such that welding or machining is required, it must be carried out by qualified trades people, who should also refer to the manufacturer's literature and discuss the repairs with the manufacturer.

1) *Lifting and Return Cables*

These four cables are critical because each supports 1/8 the load of the lift. As illustrated, the lifting cables [22] go from the main winding drum [32] up through the top of the drive shroud over the upper lift pulleys [39], then down under the platform. If the inspection indicates need for adjustment, contact Adaptive Engineering Inc. for detailed instructions.

2) *Platform Paralleling Cable Adjustments*

These four cables are critical because each supports 1/4 the load of the lift. If the inspection indicates that the platform is not level or that the paralleling cables require adjustment, contact Adaptive Engineering Inc. for detailed instructions.

3) *Parking Brakes*

The parking brakes are an important safety feature of the lift. They are a “normally on” design that release only when the push-handles [17] or tow bar [20] are lowered.

Adjust the brake cables so they are tight enough to pull the brake cylinder clear of the tire but are slack when the push handles and the tow bar are in the upper (braking) position.

If the brakes do not release, or drag when the push handles or tow bar are down, the cables require tightening. Check your brakes if they do not hold the lift or release properly. Adjust each brake release system individually (4 cables overall). Retighten all cable adjustment locking nuts.

If the brakes do not provide sufficient braking force when the push handles and tow bar are released, the following adjustment should be performed:

- a. With the tow bar and push handles released, check that each cable leading to the brake lever is slack.
- b. If one or more cables are still tight, check that there is no damage to the cables or to the lift that may be causing this tension. Check the routing of the cables. If no damage is present and the routing is correct, adjust the tight cable(s) until slack. Check that the brake is still clear of the tire when the brake is released and retighten all cable adjustment locking nuts.

4) *Outrigger Cable Adjustment*

The two cables on each side of the lift should be adjusted together so that the outriggers reach the extension and retraction limits at the same time.

The cables should be adjusted to provide enough tension to stay on their sheaves but be loose enough that they do not bind.

Be sure to retighten all cable anchor locking nuts and run the outriggers through one full cycle after adjustment to check function.

Springs and Gas Cylinders

Two springs are used to counterbalance the load of the platform. These components are designed to provide trouble-free operation and long life. Should a spring break, the platform crank will require more force, but the lift does not have to be taken out of service.

Gas cylinders (also known as gas springs) are used to assist with raising the lift onto its wheels. If the force required to raise the lift onto its wheels becomes too high, one or more of the gas cylinders may need replacing

The springs and gas cylinders store large amounts of energy. Improper servicing can result in serious bodily injury. In any case requiring work on or near springs or gas cylinders, contact Adaptive Engineering for replacement parts and procedures.

NOTE

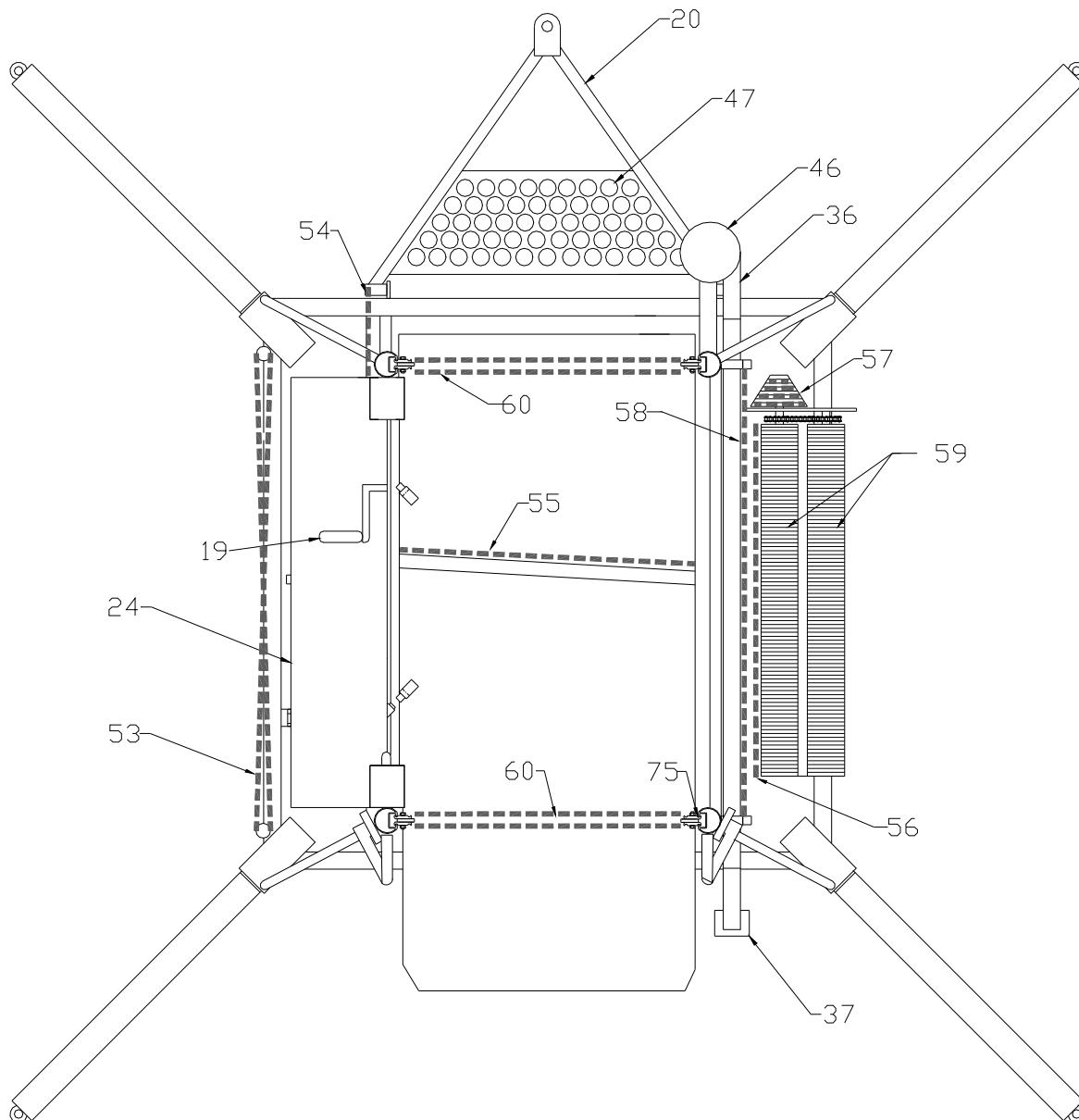
- Do not attempt to replace or adjust the steel springs or gas cylinders without complete and proper instructions from Adaptive Engineering Inc.

WARNING!

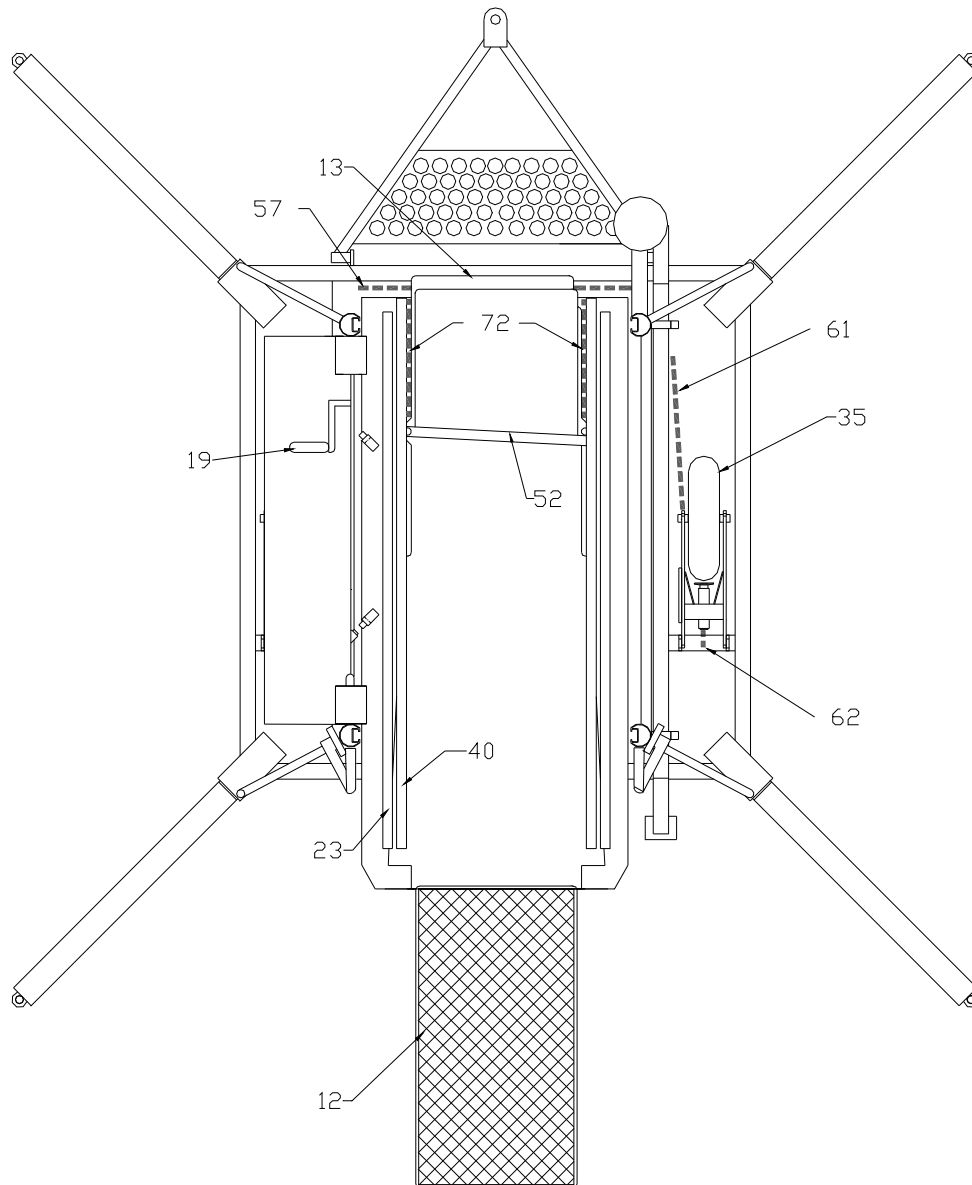
- **Improper service of steel springs or gas cylinders can result in serious bodily injury!**

9. MOBILIFT AX / AXR COMPONENTS

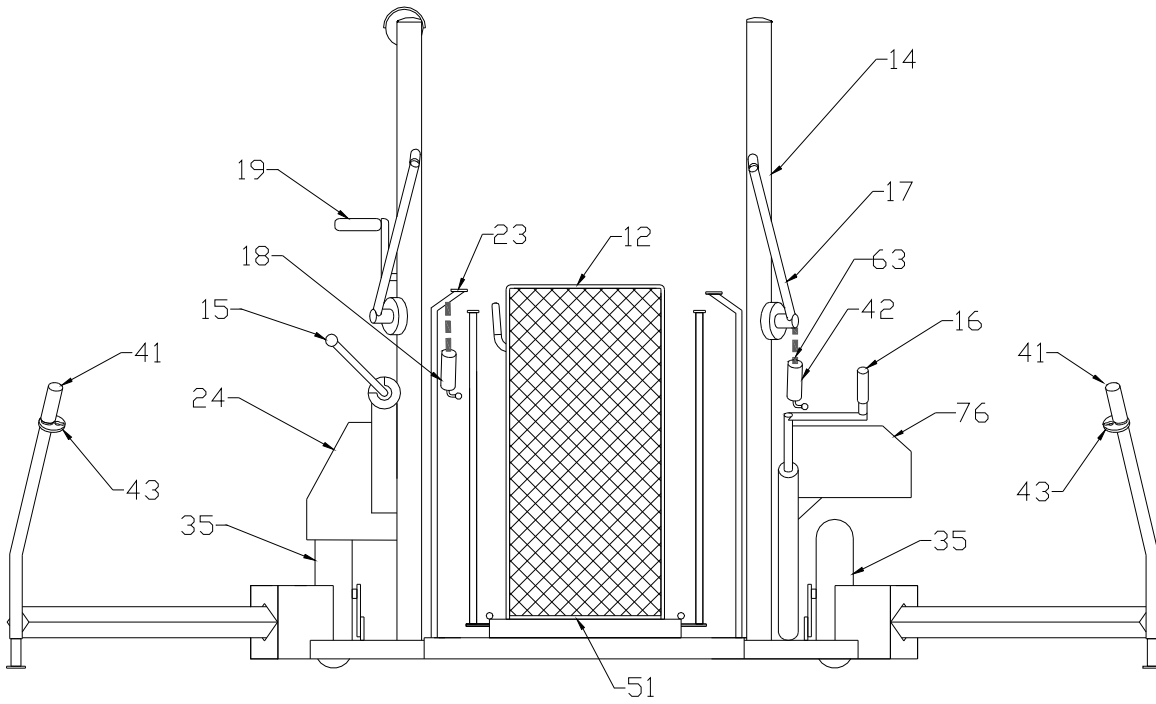
Top View 1 (Platform not shown)



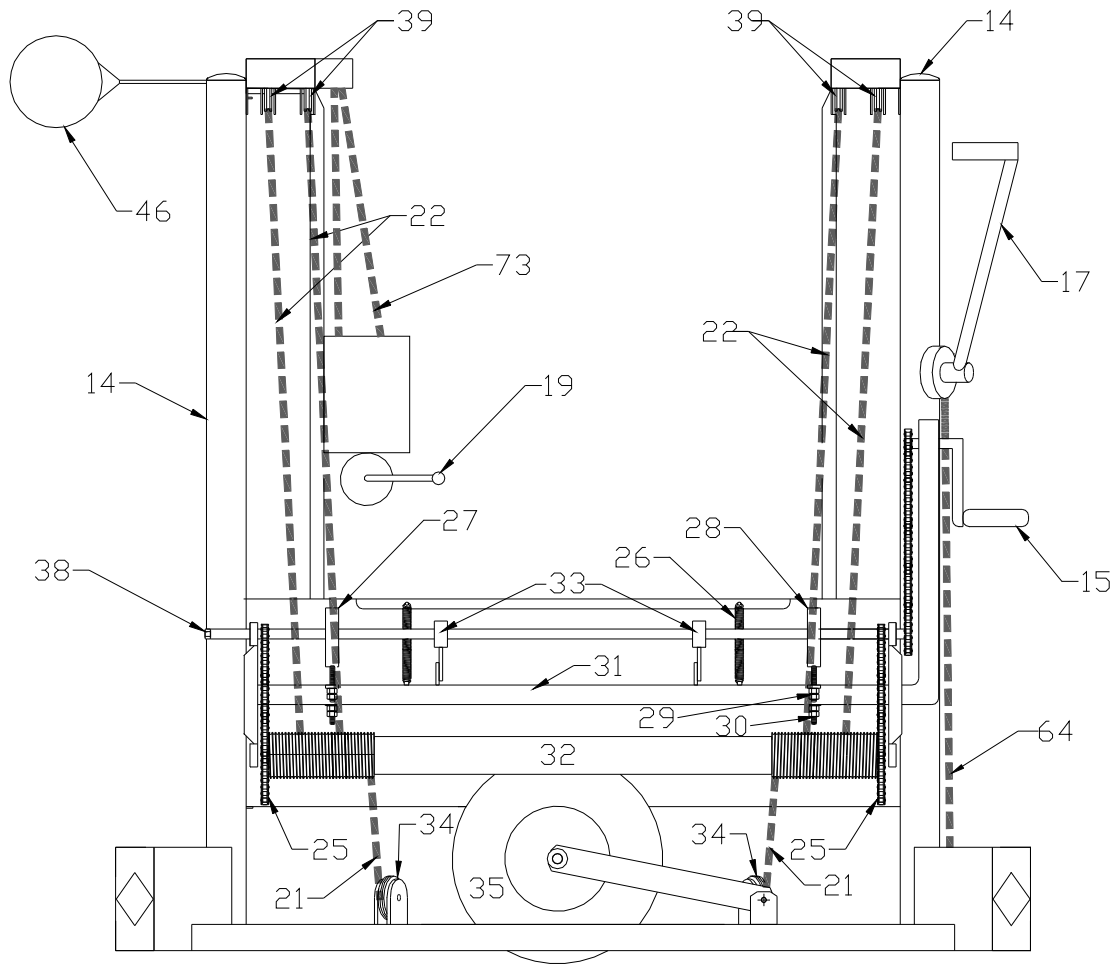
Top View 2



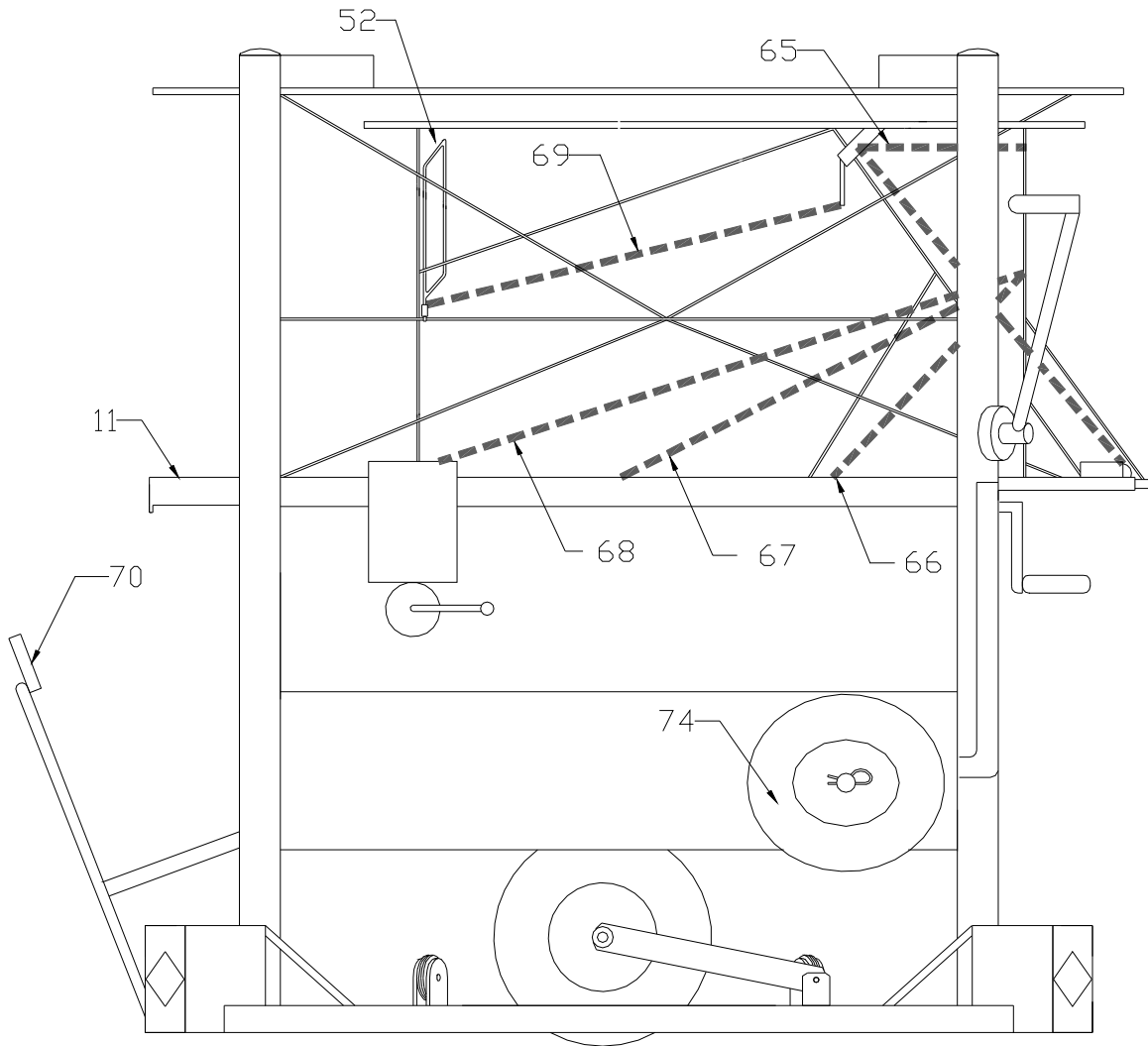
Rear View



Drive System



Side View



Parts List

11. Main Platform
12. Ground Ramp
13. Bridge Ramp
14. Corner Post (4)
15. Platform Crank Handle (Thruster)
16. Wheel Crank Handle
17. Push Handle
18. Ground Ramp Release Handle
19. Bridge Ramp Extension Crank
20. Tow Bar
21. Return Cable (2)
22. Lifting Cable (4)
23. Platform Handrail (2)
24. Drive Shroud
25. Drive Chain (2)
26. Balance Spring (2)
27. Front Lift Brake
28. Rear Lift Brake
29. Brake Adjuster
30. Frame Adjuster
31. Drive Frame
32. Main Cable Drum
33. Steady Bearings (2)
34. Return Pulleys (2)
35. Main Travel Wheels (2)
36. Idler Wheel
37. Idler Caster, pivoting
38. Lift crank over-ride
39. Lift Pulleys (4)
40. Bridge Ramp Handrail
41. Outrigger Handles (2)
42. Outrigger Retaining Handles (2)
43. Outrigger Retaining Keyhole (2)
46. High Alignment Bumper (AXR only)
47. Bumper Pad
51. Wheelchair Platform
52. Bridge Ramp Gate
53. Outrigger Cable (4)
54. Tow Bar to Brakes Cable (2)
55. Main Wheel to Wheel Connector Cable
56. Wheel Counterbalance Cable
57. Platform Counterbalance Cable
58. Thruster to Rear Wheel Cable
59. Counterbalance Springs
60. Paralleling Cable (4)
61. Thruster to Front Wheel Cable
62. Brake Plunger Cable (2)
63. Outrigger Restraints Cable (2)
64. Brake Handles to Brake Cable (2)
65. Bridge Ramp Z Cable (2)
66. Rear Chair Deck Suspension Cable (short)(2)
67. Middle Chair Deck Suspension Cable (med)(2)
68. Front Chair Deck Suspension Cable (long)(2)
69. Bridge Ramp Gate Activation Cable (1)
70. Tow Hitch
72. Bridge Ramp Centering Cable (2)
73. Bridge Ramp Extension Cable (2)
74. Spare Tire
75. Post Guides
76. Counterbalance Shroud

10. SUGGESTED MINIMUM INSPECTION REPORT

Mobilift AX / AXR Wheelchair Lift, (Minimum inspection once per year)

<input type="checkbox"/>	1. Perform a complete general visual inspection for loose fasteners and for damaged or missing components.
<input type="checkbox"/>	2. With the wheelchair platform at ground level, a 10 lb. (5 kg) pull on the <u>middle</u> of each of the outer lifting cables should separate the cables between 3-1/4 and 3-3/4 inches (8 and 10 cm) for the AX and between 3-3/4 and 4-1/4 inches (9 to 11 cm) for the AXR.
<input type="checkbox"/>	3. Check the full visible length of each lifting cable with the platform at ground level and at two feet from ground level for corrosion or fraying, with particular attention to the point at which the cables turn in under the deck.
<input type="checkbox"/>	4. With the lift platform about half way up with no load, measure the distance from the platform to the top of the main frame at each corner. The two rear measurements (near the ground ramp) should be within 1/2 inches (1 cm). The two front measurements (near the bridge ramp) should also be within 1/2 inches (1 cm). The front should be $1 \pm 1/4$ inches (2 to 3 cm) higher than the rear.
<input type="checkbox"/>	5. Check by looking under the shroud that the cables are in their grooves on the winding drum. Crank the platform to full height with no load and recheck the cables on the winding drum.
<input type="checkbox"/>	6. Visually inspect all threaded cable anchors (35 in total) to ensure they are secure and have properly installed lock nuts: Frame and Wheel Anchor Points: <input type="checkbox"/> Outrigger Cables (4) <input type="checkbox"/> Wheel Activation Cables (located underneath the wheel crank side wheel bracket) (3) <input type="checkbox"/> Tow bar/Brake Handle Activation Cables (4) <input type="checkbox"/> Main Deck Paralleling Cables (4) Under Main Platform Anchor Points: <input type="checkbox"/> Lifting Cables (4) <input type="checkbox"/> Return Cables (2) <input type="checkbox"/> "Z" Cables (which support the Bridge Ramp when extended) (2) <input type="checkbox"/> Bridge Ramp Centering Cables (there are 2 cables with a total of 4 threaded anchors) Main Platform Anchor Points: <input type="checkbox"/> Bridge Ramp Drive Cables (2) <input type="checkbox"/> Wheelchair Platform Bracing Cables (6)
<input type="checkbox"/>	7. Where possible, inspect all the non-threaded anchors for the cables listed above.
<input type="checkbox"/>	8. Check that the paralleling cables are on all four pulleys, are not frayed, and have no slack.
<input type="checkbox"/>	9. Crank the platform up 34" from ground level. Pull the paralleling cable at 17" from the bottom of the post (midpoint between the ground and the platform) with 10 lbs force. Measure the deflection caused by this pull. The deflection should be 3/4" to 1" for both the paralleling cables on the right side (counter balance side) and 1/4" to 1/2" on the left side (drive side).
<input type="checkbox"/>	10. Check that the paralleling cable pulleys can not scrape on the sides of the posts.
<input type="checkbox"/>	11. With the platform at ground height, check that the counter balance cable is under tension and shows no signs of fraying or damage. Repeat this test with the platform at full height.
<input type="checkbox"/>	12. Check that the lifting crank handle springs in and locks automatically when released.
<input type="checkbox"/>	14. Crank the platform to full height and back down with a 400 to 500 lb. (180 to 230 kg) (three people) load on board (a full up and down cycle should take no more than two minutes).
<input type="checkbox"/>	15. With the platform at approximately 36" (90 cm) off the ground and above weight on board, using a spring scale or weight, check the force on the crank handle, the force cranking up should be between 15 and 20 lb. (7 and 9 kg). The force to crank down should be between 1/3 and 1/2 of the force to crank up.
<input type="checkbox"/>	16. Did the platform crank smoothly up and down? (On the down movement it is normal to have a slight squeal or chatter from the brakes as with automobile brakes).
<input type="checkbox"/>	17. Inspect the tires, including the spare, for damage or wear. They should have between 28 and 32 p.s.i. (190 and 220 kPa) pressure at 70°F (20°C).
<input type="checkbox"/>	18. Crank the wheels down to raise the lift off the ground. Check for full movement and smooth operation of the wheel crank mechanism.
<input type="checkbox"/>	19. With the wheels in the full down position, measure the distance from the ground to the frame next to the wheel axle on each side of the lift. These two measurements should be within 1/2 of an inch (1.25 cm) of each other.
<input type="checkbox"/>	20. Check the action of the front and rear idler wheels. With the main travel wheels cranked fully down, the rear idler caster should be in a position to hold the lift essentially horizontal with no part of the frame contacting the ground. The front idler wheel should prevent the frame from contacting the ground when the lift is tipped forward, but should normally be 1/2 to 1 inch (1 to 2.5 cm) above ground height.
<input type="checkbox"/>	21. With the lift in the "travel" mode, check that the lift rolls easily with push handles down and that it stops immediately when these are released. Check that the lift rolls easily with the tow bar pulled down to 45° and that the lift stops when the tow bar is released.
<input type="checkbox"/>	22. Check the action of the left and right outrigger pairs. The outriggers on each side should extend and retract to their limits smoothly and in unison.

