

CE

OPERATING INSTRUCTIONS

for

CityFix

- o 500KG (1100 LBS)capacity
- o Sensor-controlled electrical system
- o Remote control; four function buttons plus power enable button



WARNING!
Keep operating instructions in vehicle

Enclosed:

Hydraulic diagram

Electrical wiring diagram

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1. General

This manual contains warranty information, safety precautions, and operating instructions. For safety reasons, it is important that the lift operator be completely familiar with the operating instructions. Once the lift is installed, it is also important that the lift be properly maintained by following the MBB recommended cleaning, maintenance, and inspection instructions.

Before operating the CityFix, read the operating instructions and become familiar with the functioning and handling of the lift. Operation of the lift by someone who is not trained can create a hazard for the operator and for people in the vicinity.

Regularly lubricate and service the lift. Malfunctioning of the CityFix is typically due to insufficient care or improper use.

Refer to Diagram 1. The right, left, front, and rear direction references used in the text and diagrams refer to viewing the deployed lift from behind the vehicle while looking towards the front of the vehicle.

Keep the operating instructions in the vehicle.

The CityFix must not be used to transport people, including the operator.

1.1 General view

Major CityFix component references used throughout this manual are illustrated in Diagram 1. Refer to the CityFix description section for further information on each component.

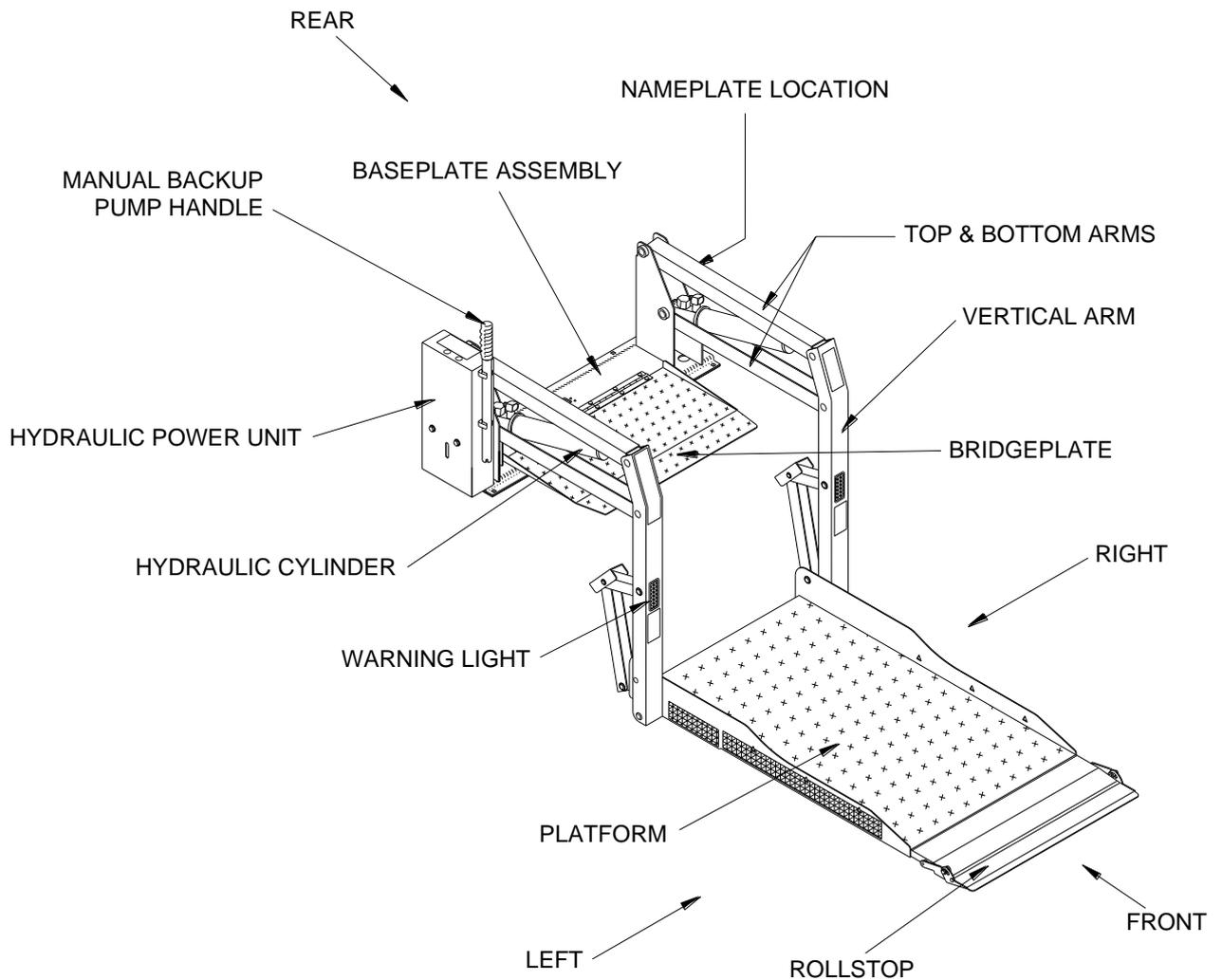


Diagram No. 1

2. Details of the CityFix

These operating instructions apply to the following model:

C5052-S000 CityFix

2.1 Nameplate

Refer to Diagram 1 for the location of the nameplate on the lift. Refer to Diagram 2 for the nameplate. The model and serial number information on the lower tear-off strips are applied to the lift in other locations. Refer to the decal locations and part numbers diagram for the locations.

		29287
CORPORATION		
7900 NELSON ROAD, PANORAMA CITY, CA 91402		
CARGO LIFT		
MAXIMUM LOAD CAPACITY: 500KG		
model		s.n.
<input type="text"/>		<input type="text"/>
		
Date mfd:		Made in U.S.A.
model		s.n.
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model		s.n.
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model		s.n.
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Diagram No. 2

3. Operation

3.1 Platform motions

Refer to Diagrams 3 and 4 for explanations and descriptions of the four platform motions. Press an appropriate button on the control pendant to initiate a motion. Refer to following page for a detailed description of control pendant.

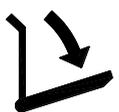
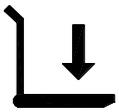
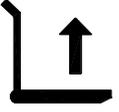
MOTION		DESCRIPTION
	DEPLOY	Platform unfolds, or deploys, out of vehicle from its stowed position.
	LOWER	Platform lowers from floor level to ground level. Platform must be fully deployed to initiate this motion.
	RAISE	Platform rises from ground level to floor level.
	STOW	Platform folds into the stowed position. Platform must be at floor level to initiate this motion.

Diagram No. 3

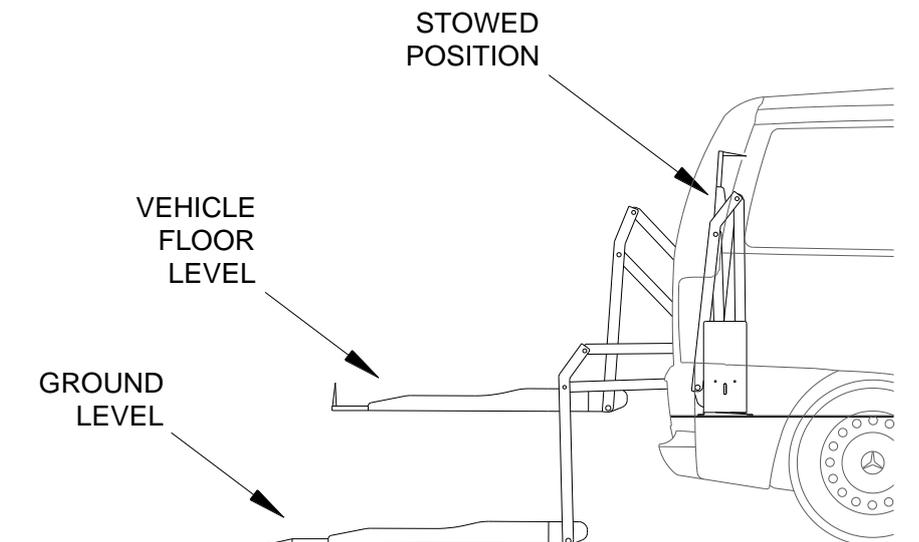


Diagram No. 4

3.2 Controls and indicators

3.2.1 Control pendant

Refer to Diagram 5. The lift can be operated with four buttons and a switch located on the hand-held, hard-wired remote-control pendant. Press an appropriate button, after turning on the POWER switch, to control each lift motion.

The POWER switch enables the pendant by providing power to it and must be turned on before the lift can be operated. When turned on, the power switch and each button illuminate.

Pressing the DEPLOY button unfolds the platform from the vehicle, and pressing the STOW button folds the platform back into the vehicle. Pressing the LOWER button lowers the platform towards the ground, and pressing the RAISE button raises the platform towards the floor.

A button must be held depressed until the motion is completed. Movement of the platform can be halted at any time by releasing the button.

The pendant is typically stowed on a wall-mounted clip inside the vehicle, near the lift.

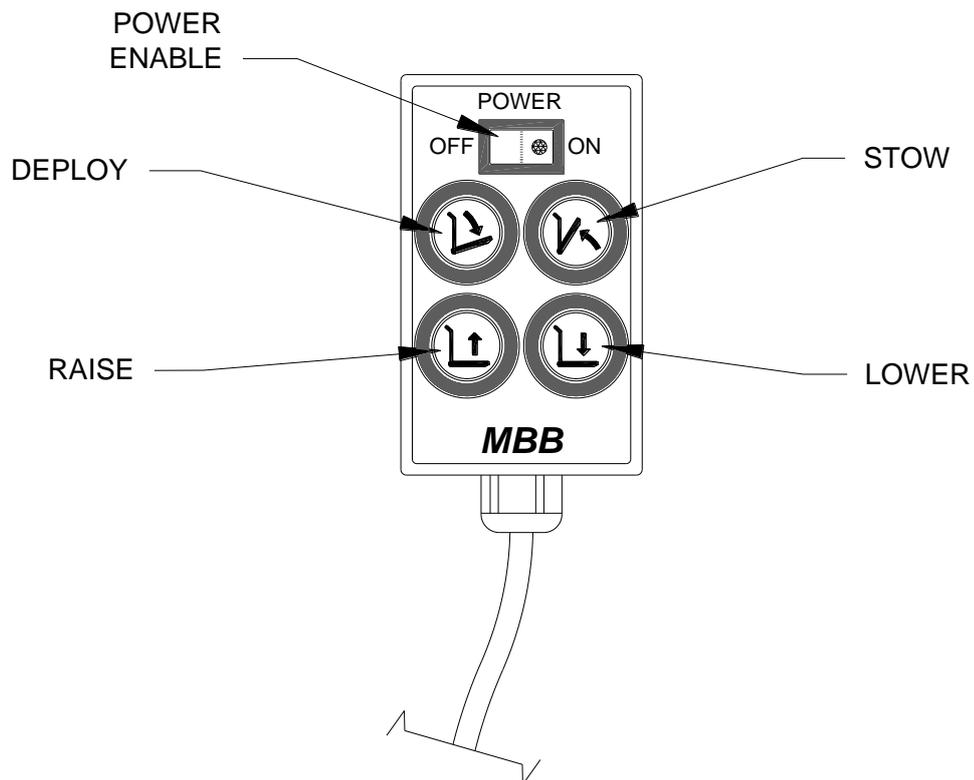


Diagram No. 5

3.2.3 Power indicator light

Refer to Diagram 7. A power indicator light is located on the top surface of the pump assembly enclosure. It illuminates green when electrical power is present at the lift. Power to the lift is typically controlled with a switch located on the vehicle instrument panel.

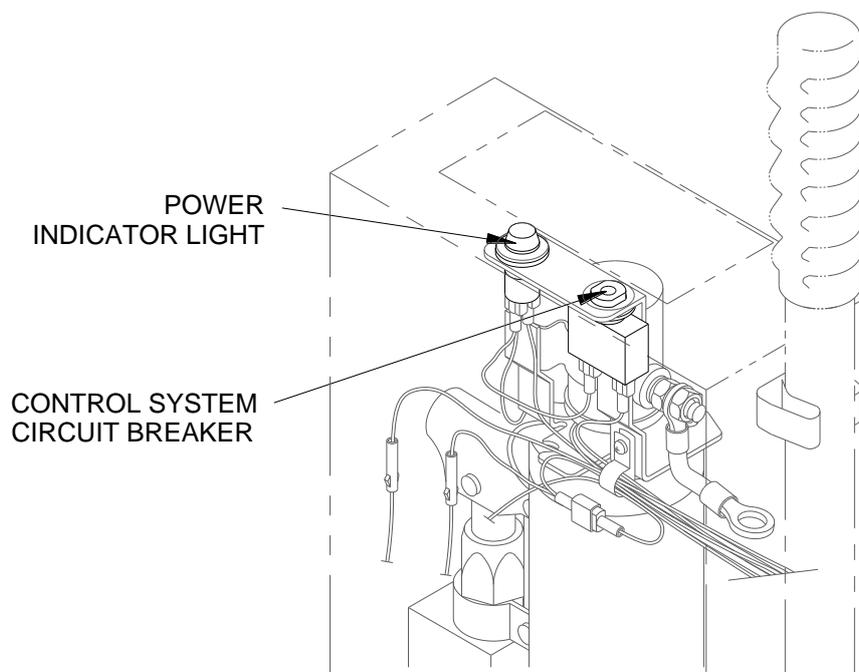


Diagram No. 7

3.2.4 Control system circuit breaker

Refer to Diagram 7. The control system 8 amp circuit breaker is located on the hydraulic pump assembly. When a short circuit occurs in the control system, the circuit breaker button will pop up. Press the button and then release it to reset. DO NOT press and hold button if pressing and releasing does not reset power. Contact an authorized MBB service technician for repair.

3.2.5 Main circuit breaker

Refer to Diagram 8 on following page. The 90 amp main circuit breaker is typically located in the vehicle engine compartment near the battery and interrupts electrical power to the lift electrical system when a short circuit occurs. When a short circuit occurs, the circuit breaker reset tab will rotate 90° clockwise. Rotate tab 90° counterclockwise to reset. If rotating reset tab does not reset power, DO NOT press and hold tab. Contact an authorized MBB service technician for repair.

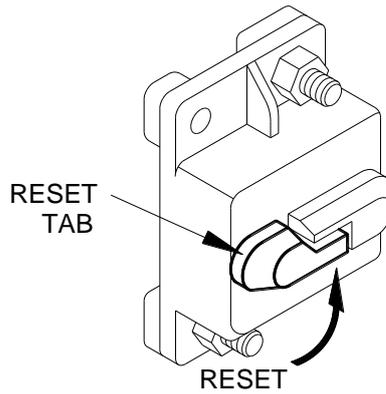


Diagram No. 8

3.2.6 Manual backup pump

Refer to Diagram 9. The manual backup pump can be used to operate the lift when electrical power is not functional. The manual backup system is intended for unloading cargo, however, a loaded platform can be raised with a manual pump handle of appropriate length (630mm minimum).

The manual pump is fastened to the main hydraulic pump assembly, which is inside the rectangular cover at the left side of the lift. The controls for the pump consist of a pump handle for raising the platform and a pressure release valve for lowering it. Instructions for operating the manual pump are provided in the Manual operation paragraph, which is part of the following Lift operation section. There is also a decal on the top of the pump housing that illustrates how to operate the backup pump.

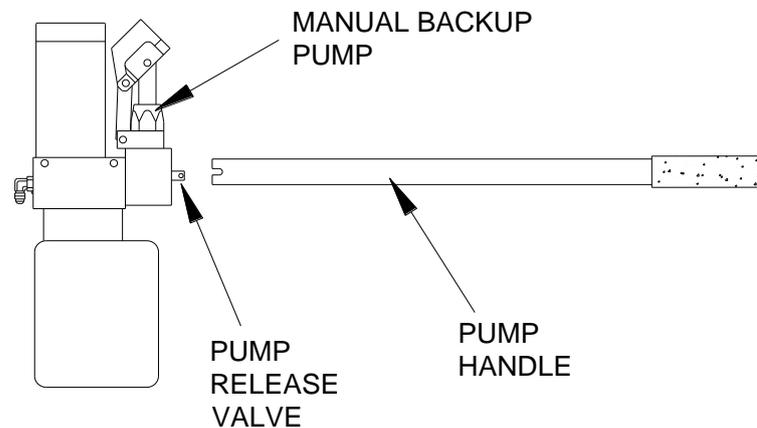


Diagram No. 9

3.3 Lift operation

- Open and secure rear doors.
- A fully charged vehicle battery is necessary for proper lift performance, and the vehicle engine should be running while the lift is operated.
- Supply power to lift by turning the interlock switch (typically located on the vehicle instrument panel) to the ON position. The power indicator light (located on the top surface of the pump assembly enclosure) illuminates when power is present at lift. Turn interlock switch off after load has been removed from platform and platform is folded back into the stowed position.

3.3.1 Loading and unloading vehicle using control pendant

3.3.1.1 Load cargo



WARNING!

Do not use lift to transport people.

Do not exceed rated load capacity of 500kgs. (1100 LBS)

NOTE: The POWER switch (located on the pendant) enables the pendant by providing power to it and must be turned on before the DEPLOY, LOWER, or RAISE buttons are pressed.

1. Deploy platform - Press and hold DEPLOY button until platform completely unfolds from vehicle.
2. Lower platform - Press and hold LOWER button until platform contacts ground.
3. Place cargo in center of platform. Be certain cargo does not extend beyond platform perimeter and does not interfere with operation of roll stop.



CAUTION!

If a heavy load is placed on the platform that could have a tendency to move, then secure the load by lashing it to the platform.

4. Raise platform - Press and hold RAISE button until platform rises and stops automatically at floor level.
5. Transfer cargo to vehicle interior.
6. Refer to “Stow platform” section on next page to stow platform.

3.3.1.2 Unload cargo



WARNING!

Do not use lift to transport people.

Do not exceed rated load capacity of 500kgs. (1100 LBS)

NOTE: The POWER switch (located on the pendant) enables the pendant by providing power to it and must be turned on before the DEPLOY or LOWER buttons are pressed.

1. Deploy platform - Press and hold DEPLOY button until platform completely unfolds from vehicle at floor level. Verify that platform is at vehicle floor level and roll stop is up and locked.
2. Transfer cargo from vehicle interior to center of platform. Be certain cargo does not extend beyond platform perimeter and does not interfere with operation of roll stop.



CAUTION!

If a heavy load is placed on the platform that could have a tendency to move, then secure the load by lashing it to the platform.

3. Lower platform - Press and hold LOWER button until platform settles at ground level and roll stop opens completely.
4. Remove cargo from platform.
5. Refer to “Stow platform” section below to stow platform.

3.3.1.3 Stow platform

NOTE: The POWER switch (located on the pendant) enables the pendant by providing power to it and must be turned on before the RAISE or STOW buttons are pressed.

1. If platform is at ground level, press and hold RAISE button until platform rises and stops automatically at floor level.
2. Press and hold STOW button until platform folds completely into vehicle.



CAUTION!

Be certain platform has folded completely before attempting to close rear doors. To prevent damage to doors, do not release button until hydraulic pump motor has stopped operating.

3. Close rear doors.

3.3.2 Loading and unloading vehicle using control panel

3.3.2.1 Load cargo



WARNING!

**Do not use lift to transport people.
Do not exceed rated load capacity of 500kgs.**

1. Deploy platform - Press and hold BUTTON 1 until platform completely unfolds from vehicle.

2. Lower platform - Press and hold BUTTON 2 until platform contacts ground.
3. Place cargo in center of platform. Be certain cargo does not extend beyond platform perimeter and does not interfere with operation of rollstop.



CAUTION!

If a heavy load is placed on the platform that could have a tendency to move, then secure the load by lashing it to the platform.

4. Raise platform - Press and hold both BUTTONS 2 and 3 until platform rises and stops automatically at floor level.
5. Transfer cargo to vehicle interior.
6. Refer to “Stow platform” section below to stow platform.

3.3.1.2 Unload cargo



WARNING!

Do not use lift to transport people.

Do not exceed rated load capacity of 500kgs. (1100 LBS)

1. Deploy platform - Press and hold BUTTON 1 until platform completely unfolds from vehicle at floor level. Verify that platform is at vehicle floor level and roll stop is up and locked.
2. Transfer cargo from vehicle interior to center of platform. Be certain cargo does not extend beyond platform perimeter and does not interfere with operation of roll stop.



CAUTION!

If a heavy load is placed on the platform that could have a tendency to move, then secure the load by lashing it to the platform.

3. Lower platform - Press and hold BUTTON 2 until platform settles at ground level and roll stop opens completely.
4. Remove cargo from platform.
5. Refer to “Stow platform” section below to stow platform.

3.3.1.3 Stow platform

1. If platform is at ground level, press and hold both BUTTONS 2 and 3 until platform rises and stops automatically at floor level.
2. Press and hold both BUTTONS 1 and 3 until platform folds completely into vehicle.



CAUTION!

Be certain platform has folded completely before attempting to close rear doors. To avoid damage to doors, do not release buttons until hydraulic pump motor has stopped operating.

3. Close rear doors.

3.4 Manual operation

The lift can be operated manually if electric power is not available to the lift.



WARNING!

Do not use lift to transport people.

3.4.1 Preparation

- o Be certain vehicle is on a level area and away from traffic. Allow adequate space for platform movement.
- o Verify that obstacles are not in path of platform.
- o Open rear doors.



WARNING!

If using lift to raise a loaded platform, be certain that the pump handle length is at least 630mm.

- o Follow the safety precautions in the Safety notes for operation section when using the manual backup system.

3.4.2 Deploy Platform

1. Refer to Diagram 10. Insert notched end of pump handle into round hole on rear face of hydraulic pump cover and engage pressure release valve.

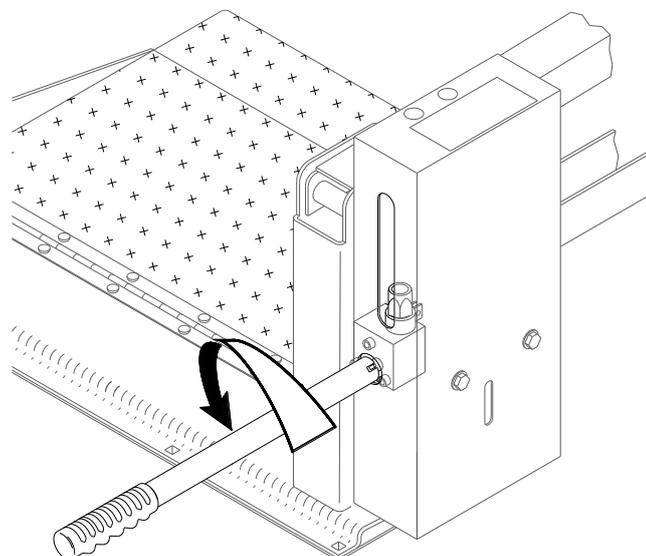


Diagram No. 10



CAUTION!

Do not open pressure release valve more than 1/4-turn. Opening valve further may cause it to disengage from pump body, which will disable pump.

2. Turn valve 1/4 turn counter-clockwise to begin deploying platform. When platform is at vehicle floor level turn valve clockwise to close. Do not over-tighten valve, and do not lower platform below vehicle floor level. The front edge of the bridge plate must rest flat on the rear of the platform.
3. Transfer cargo from vehicle interior to center of platform. Be certain cargo does not extend beyond platform perimeter and that it cannot interfere with operation of roll stop.
4. Lower platform by again turning pressure release valve 1/4 turn counter-clockwise. Hold valve open until platform settles at ground level. Turn handle clockwise to close valve but do not over-tighten valve.

3.4.3 Raise and Stow Platform

1. Refer to Diagram 11. Verify that pressure release valve is closed, but do not over-tighten valve.

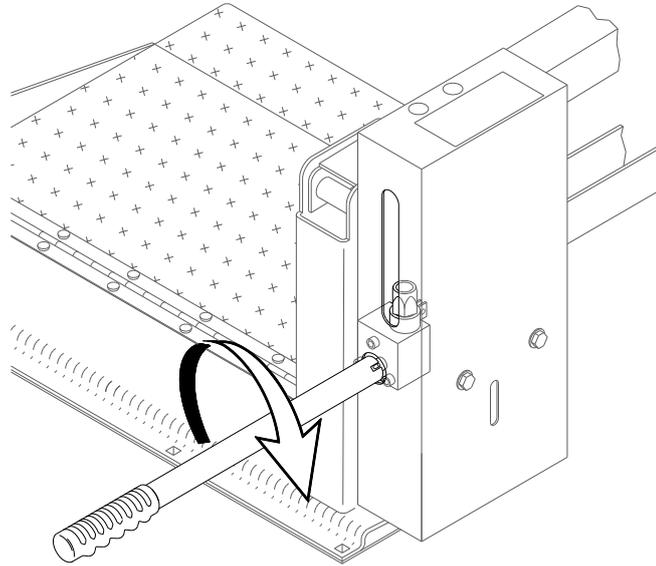


Diagram No. 11

2. Refer to Diagram 12. Insert pump handle into pump handle socket (accessible through vertical slot on rear side of pump cover). Operate pump to raise platform.

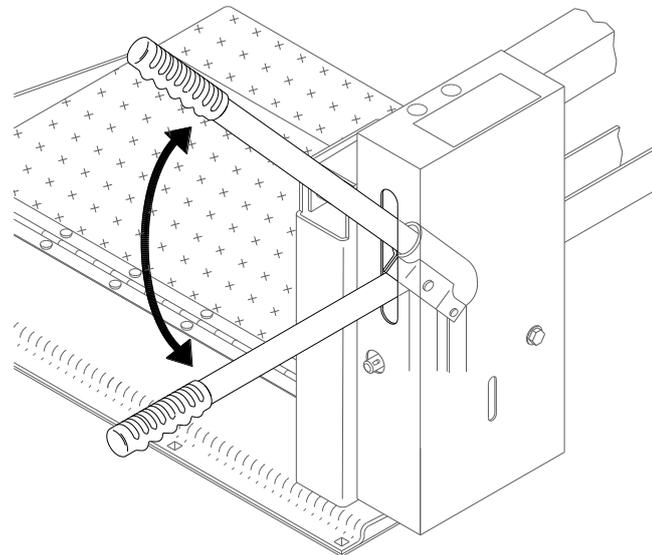


Diagram No. 12

3. Continue to operate pump until platform rises above the interior floor level and completely folds into the stowed position.
4. Turn release valve clockwise to close, but do not over-tighten valve.
5. Stow pump handle. Close rear doors.

3.5 Load capacity



CAUTION!

Refer to Diagram 13. Do not locate load within 76mm (3") of rear edge of platform. The load might interfere with the bridge plate when the platform is at floor level (the front edge of the bridge plate is supported by the rear edge of the platform when the platform is at floor level).

Do not place any part of load on roll stop. The roll stop is not designed to be a load-supporting component.

Refer to Diagram 13. The lift has a maximum weight capacity rating (Q max) of 500kgs when the load is placed at the center of the platform (the center of the platform is marked with a small circle). The capacity decreases if the load is placed closer to the rollstop or off to either side. Under normal work conditions, place the load towards the rear of the platform and center it between the left and right sides of the platform.

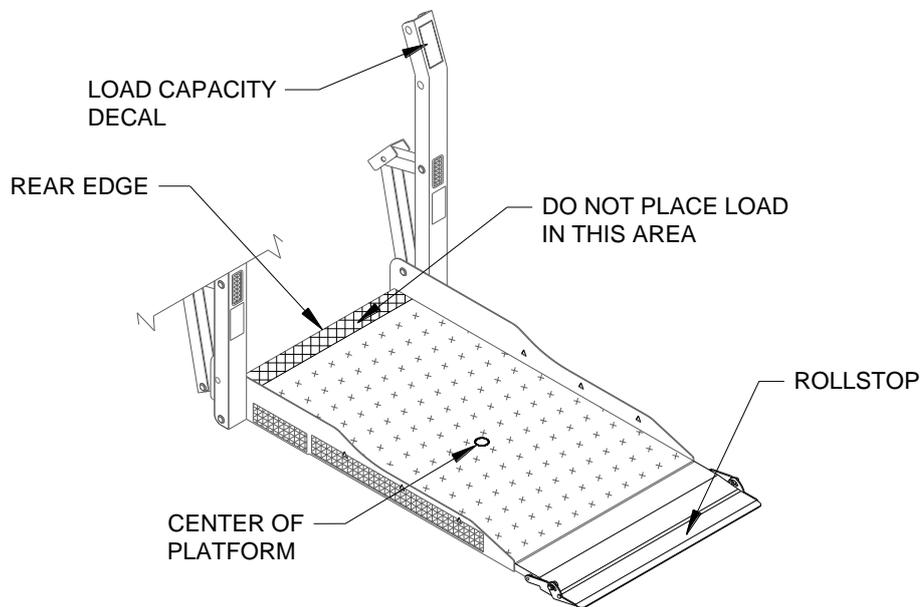
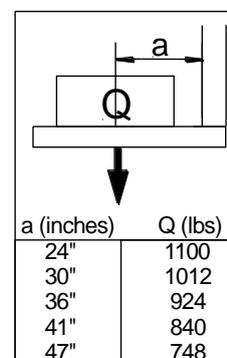


Diagram No. 13

Refer to Diagram 14.

This illustration lists the decreased load ratings that occur when a load is positioned forward from the center of the platform (towards roll stop).



4. General safety notes

Read and observe the operating instructions and safety notes prior to lift operation.

Warning symbol:  **CAUTION!** or **WARNING!**

Important safety points in these operating instructions are marked with this symbol.

4.1 General hazards

The CityFix is very safe if used properly and in accordance with the operating instructions. However, these hazards are possible if the CityFix is improperly used:

- Hazard due to falling off or jumping from the platform.
- Hazard due to stumbling or slipping on the platform
- Hazard due to freight moving on platform or slipping off of platform
- Hazard of a person becoming crushed, cut, or jolted
- Hazard due to CityFix damage due to overloading
- Hazard due to road traffic
- Hazard due to a combination of any of the above mentioned hazards

4.2 Proper use

The CityFix is designed only for loading and unloading goods. Any other use, such as transporting people (including the operator) is inappropriate. The manufacturer is not liable for any damage resulting from improper use; the user alone bears the risk.

Proper use also includes following the manufacturer operating, maintenance, and service instructions.

The CityFix must be used, maintained, and serviced by persons over the age of 18 years. These persons must be familiar with the CityFix and aware of the dangers involved. The operator must have the written permission of the employer before operating the CityFix.

Pertinent accident prevention regulations as well as generally acknowledged safety regulations, industrial medical rules, and traffic regulations must be observed and followed.

Alterations to the CityFix carried out by the user results in the manufacturer no longer being liable for any resulting consequential damage.

4.3 General safety and accident prevention regulations

- Check the operating safety and roadworthiness of the CityFix before each use.
- Read and thoroughly understand the operating instructions before use.
- In addition to observing the notes in these operating instructions, also follow the generally acknowledged safety and accident prevention regulations.
- Observe and follow the relevant regulations when traveling on public roads.
- Only use the CityFix for its intended purpose.
- Do not use the CityFix if it is defective, particularly if safety devices are out of order.
- Check the immediate area below and around the platform (i.e., for the presence of children) before use.
- The product requires regular maintenance. A thorough inspection is recommended at least once every six months. The product should be maintained at a high level of performance.

4.4 Prohibiting the transportation of people

Refer to Diagram 15. The CityFix must not be used to transport people, including the operator.



Diagram No. 15

4.5 Maintenance

- High-pressure fluids (hydraulic oil) that are emitted under great pressure, can pierce the skin and cause serious injury. In case of such an accident, seek a physician immediately because there is risk of serious infection.
- Dispose of hydraulic oil and maintenance disposables (rags, towels, cans, etc) in a manner consistent with local regulations.
- Verify that interlock switch (main lift power switch) is off before climbing within the working range of the CityFix. Protect interlock switch against being inadvertently switched on again. If necessary, support the platform.

- Switch off the interlock switch (main lift power switch) or remove the ground (negative) cable from the battery when working on the electrical system.
- Use only original spare parts that are approved by the manufacturer, because these parts meet the technical requirements for the lift. The manufacturer accepts no liability for other parts used.

5. Safety notes for operation



CAUTION!

The following safety notes can lead to serious injury or material damage if not followed.

The following safety precautions must be complied with at all times when operating lift:

- Refer to Diagram 16. Loading and unloading cargo when vehicle is on sloped ground is hazardous. Load and operate lift with vehicle parked on level ground.

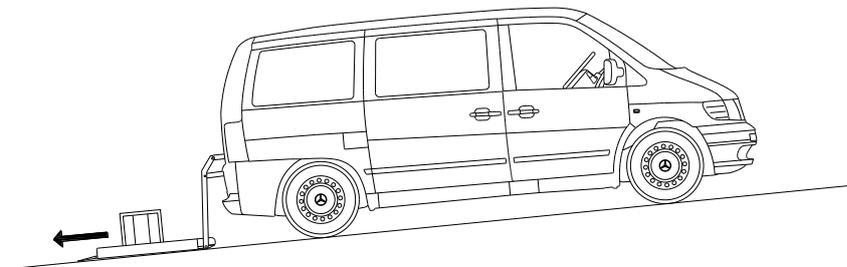


Diagram No. 16

- Vehicle must be safely parked with parking brake set before using lift. Place wheel chocks under tires, if necessary.
- If vehicle is being loaded or unloaded in a high-traffic area, place an appropriate sign, flag, or light near lift as a warning to traffic and pedestrians.
- Inspect lift before use. DO NOT use lift if an unsafe condition exists, or unusual noises or movements are noticed.
- When unloading cargo from vehicle, verify that platform is at same height as floor and rollstop is up and locked.
- The raised rollstop helps to prevent unintentional movement of cargo from platform.
- Be certain cargo fits safely on platform; it must not extend beyond edges or interfere with operation of rollstop.
- Do not operate lift with a load in excess of 500 kg (1100 lbs).
- Keep arms, legs, and clothing away from moving lift parts.

- Refer to Diagram 17. Do not stand behind lift while deploying platform.

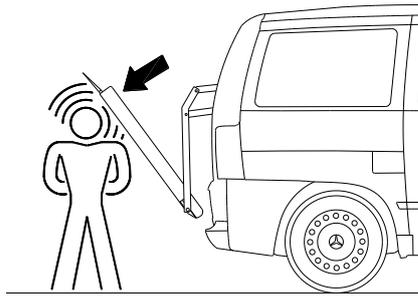


Diagram No. 17

- Keep others clear while operating lift.
- Do not allow an untrained person to operate lift.
- Careful supervision is necessary if used near children.
- Do not leave platform outside of vehicle; return lift to stowed position after use.
- Read and comply with all warning labels and symbols affixed to lift.
- All safety and warning devices must be present and in working order. They must be checked daily before starting work. Any fault must be immediately remedied.
- Observe the area between the platform and road surface where crushing could occur.
- Never move freight from the truck loading area before you are sure that the platform is in the uppermost position.
- Avoid placing load off to one side of platform whenever possible. The permissible load in this case is 50% of the maximum load.
- The load must be secured against slipping or rolling away.
- A wheeled container without brakes must not be transported unless anti-rolling devices are attached to container.
- Do not jump onto or off of the raised platform.
- Do not move the vehicle when the platform is deployed.
- Do not use the CityFix as an elevated work platform.
- If the CityFix malfunctions, stop using lift and disable it from further use. Contact an authorized repair technician.

- Read and understand these safety precautions. Review them periodically and ask other operators to read them as well. Contact an MBB authorized technician or MBB Product Service if there are questions.

5.1 Daily safety check

Inspect lift before each use and verify that the following conditions are met before operating:

- All functions operate properly. Do not use lift if unusual noises or movements exist, and contact a MBB authorized service technician for inspection.
- No objects are present that may interfere with lift operation.
- General appearance and lubrication are satisfactory and all fasteners are tight.

6. **Improper use**

It is not permitted to use the CityFix:

- to transport people
- as an elevated work platform
- to push loads
- to clear snow

7. CityFix description

This CityFix assists with loading cargo into small utility vehicles. The lift has a load capacity of 500 kilograms (when load is placed near center of platform), and is operated by the driver with a hand-held controller. The lift is not designed for transporting people.

The platform is 864mm wide by 1200mm long, and has a heavy-duty load-bearing surface. The parallel arm design maintains the platform in a horizontal position as it moves through its range of motion. A plate automatically bridges the gap between the raised platform and vehicle floor. An electro-hydraulic pump provides the force required to lift the platform.

Refer to Diagram 1 for the location on the lift of the following components.

7.1 Hydraulic cylinders (left and right sides)

Two telescoping single-acting cylinders convert hydraulic pressure produced by hydraulic power unit into platform lifting and folding force. Platform is unfolded and lowered by releasing fluid from cylinders through a flow control valve (valve provides steady and controlled lowering of the platform).

7.2 Hydraulic power unit

Contains hydraulic pump driven by electric motor that produces pressure to raise and fold lift, and a pressure release valve to unfold and lower it. Also contains deceleration control valve, pressure release valve, manual backup pump, and manual pressure release valve.

7.3 Manual backup pump handle

Use to operate manual back-up pump and manual pressure release valve when normal electrical power is not available. Handle is stored on clips fastened to front side of hydraulic power unit enclosure.

7.4 Base plate assembly

Welded base assembly of lift that is securely bolted to vehicle floor. Provides pivot points for top and bottom arms.

7.5 Top and bottom arms (left and right sides)

Pairs of upper and lower parallel links that connect vertical arms to base assembly. Hydraulic cylinders attach to baseplate and to outer end of top arm. Parallel arrangement maintains platform in a horizontal attitude as it is raised and lowered. Maintenance-free pivot bushings are employed at inner and outer ends of each arm.

7.6 Vertical arms (left and right sides)

Arms connect outer ends of top and bottom arms to platform. Included in each arm are links that fold, or unfold, platform. A warning light is present on front face of each arm.

7.7 Control pendant

Hand-held device used to control platform motions. Refer to Controls and indicators section for additional description.

7.8 Roll stop

Front barrier helps to prevent cargo from sliding off front of platform during platform movement. Rollstop opens automatically when platform contacts ground, and closes when platform lifts away from ground. Rollstop has a light-reflecting strip on its face for nighttime visibility.

7.9 Platform

Rectangular area where cargo is placed. Roll stop pivots on front edge. Front edge of bridge plate rests on rear edge of platform. Curbs along sides of platform help to keep cargo confined to platform area. Curbs have light reflecting strips on outer faces for nighttime visibility.

7.10 Bridge plate

Plate that bridges gap between base plate and platform when platform is at floor height. It pivots on front edge of base plate and rises out of the way when platform folds into vehicle.

7.11 Electrical system

The 12VDC electrical current for the pump motor and electrical control circuits are supplied from the vehicle. Refer to the electrical system diagram in the Maintenance and care section.

7.12 Safety devices

The safety devices meet current safety regulations.

The following safety devices are provided:

- Slide-proof surface on platform
- Roll stop on platform
- Warning lights located on each vertical arm are optional and may not be present on your lift
- Stop valves on lifting cylinders to protect the CityFix in case of leakages or hydraulic hose damage
- Flow control valves to limit platform lowering speed
- Remote control pendant with power enable switch

8. Maintenance and care

Regular maintenance of the MBB CityFix will help optimize its performance and reduce the need for repairs.



CAUTION!

Place a sturdy object under platform when it is elevated and maintenance is performed on it. Do not rely on hydraulic system to hold platform in place.

8.1 Maintenance schedule

Refer to Diagram 18. Under normal operating conditions, maintenance inspections are required at least every six months (1750 cycles) and a thorough inspection should be performed at service intervals in Diagram 17. Service should be increased under conditions of heavier use (more than 10 cycles per day).



CAUTION!

Dispose of hydraulic oil and maintenance disposables (rags, towels, cans, etc) in a manner consistent with local regulations.

SERVICE POINT	ACTION TO PERFORM
DAILY SAFETY CHECK	
Overall condition	Listen for abnormal noises as lift operates (i.e. grinding or binding noises.)
Control pendant	Verify that control pendant is undamaged and its cable connections are secure.
TWO WEEK SAFETY CHECK	
Overall condition	Inspect underside of vehicle for anything that is out of place.
Electrical wiring	Inspect electrical wiring for frayed wires, loose connectors, etc.
Decals	Verify that lift decals are properly affixed, clearly visible, and legible. Replace defective decals, if present.
Lift mounting points	Verify that lift mounting and support points are undamaged. Verify that mounting hardware is sufficiently tight.
Main lifting pivots	Verify that lifting arm pins are properly installed, free from damage, and locked in position.
Platform pivot points	Verify that platform moves freely, without binding, and does not wobble.
Bridgeplate	<ul style="list-style-type: none"> ▪ Verify that bridge plate operates without binding during lift functions. ▪ Verify bridge plate rests flat against rear edge of platform.
Rollstop	<ul style="list-style-type: none"> ▪ Verify that roll stop opens completely when platform contacts ground. ▪ Verify that roll stop closes and locks when platform leaves ground.

SERVICE POINT	ACTION TO PERFORM
	<p>NOTE: Check and add fluid when platform is at GROUND level. Fluid added while platform is raised will overflow when platform is lowered.</p> <ul style="list-style-type: none"> ▪ Verify that pump hydraulic fluid level is at FULL mark when platform is at ground level. Add Texaco 01554 Aircraft Hydraulic Oil or equivalent U.S. mil spec H5606G fluid. ▪ Verify there are no hydraulic fluid leaks. ▪ Verify manual pressure release valve is closed. Do not over tighten.
SIX MONTH SAFETY CHECK (or 1750 cycles of operation)	
Cleaning and lubrication	<ol style="list-style-type: none"> 1. Clean lift with mild soap and water and wipe dry. Prevent rust by coating all surfaces with light oil. Remove excess oil. 2. Lubricate the lift as specified in the following lubrication section.
 <p>CAUTION! An authorized MBB service technician must perform the annual safety check.</p>	
ANNUAL SAFETY CHECK (or 3500 cycles of operation)	
Hydraulic cylinder, hoses and fittings	<ul style="list-style-type: none"> ▪ Check hydraulic cylinder for evidence of leaks. ▪ Inspect hydraulic hoses for damage. ▪ Verify that all fittings are tight.

Diagram No. 18

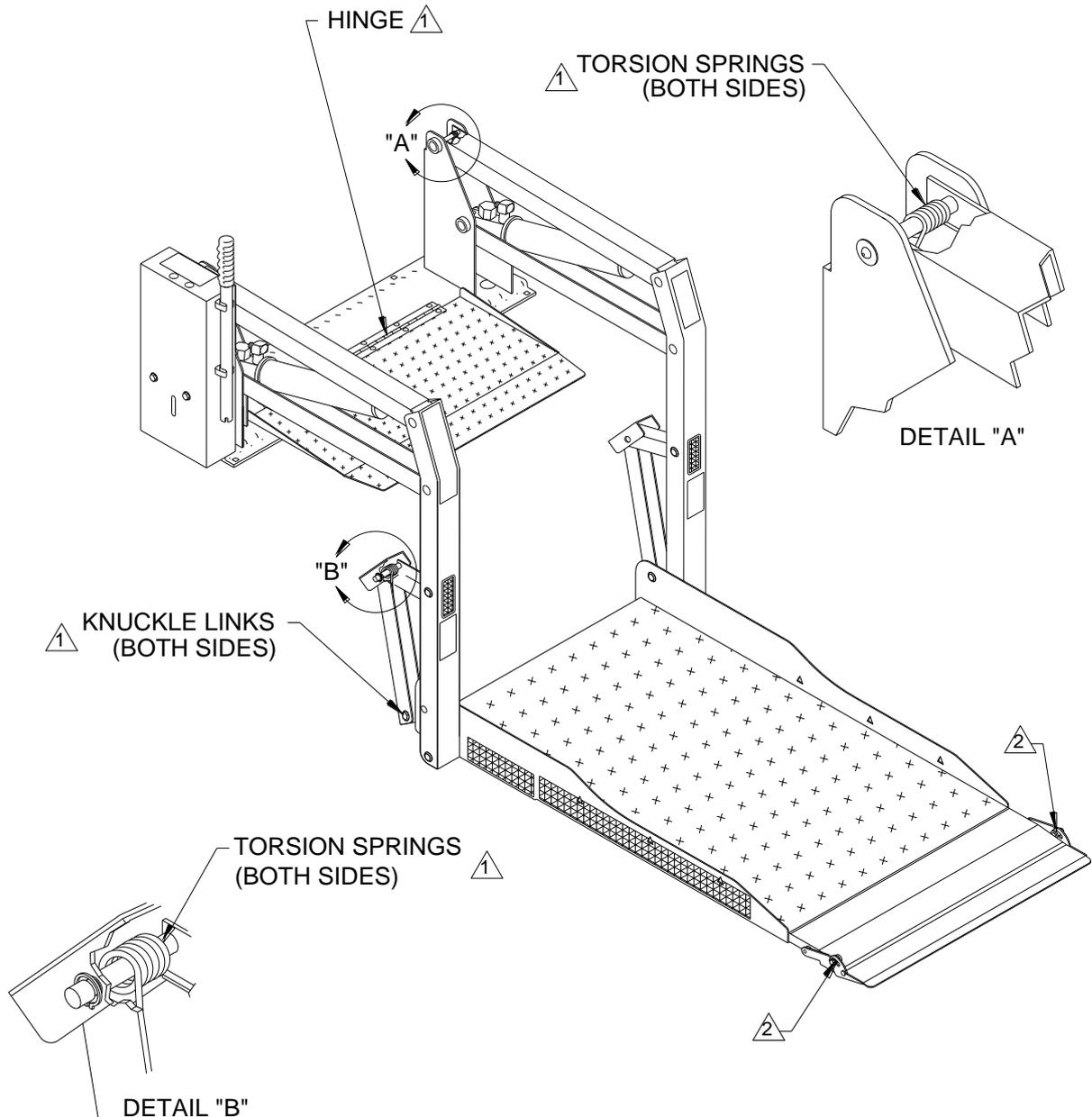
8.2 Cleaning

Regular cleaning with mild soap (i.e. dish soap or car wash liquid) and drying thoroughly will protect the lift painted surfaces. Cleaning is especially important in areas where roads are salted in winter.

8.3 Lubrication

Lubrication should be performed at least every six months, or sooner depending on usage. Refer to Diagram 19 and the previous Maintenance Schedule. Lubricate lift at points specified using lubricants described on diagram.

CAUTION!  Do not lubricate motor or other electrical components. Lubricating oil will accumulate dust and dirt that may create short circuits.



-  LUBRICATE WITH A PENETRATING OIL
-  LUBRICATE WITH DRY LUBRICANT (GRAPHITE)

Diagram No. 19

8.4 Hydraulic system

Refer to Diagram 20 for the overall hydraulic schematic of the CityFix. Note that a test port is provided for connecting a gauge to monitor system pressure.



CAUTION!

Add only Texaco 01554 Aircraft Hydraulic Oil or equivalent U.S. mil spec H5606G fluid to system.

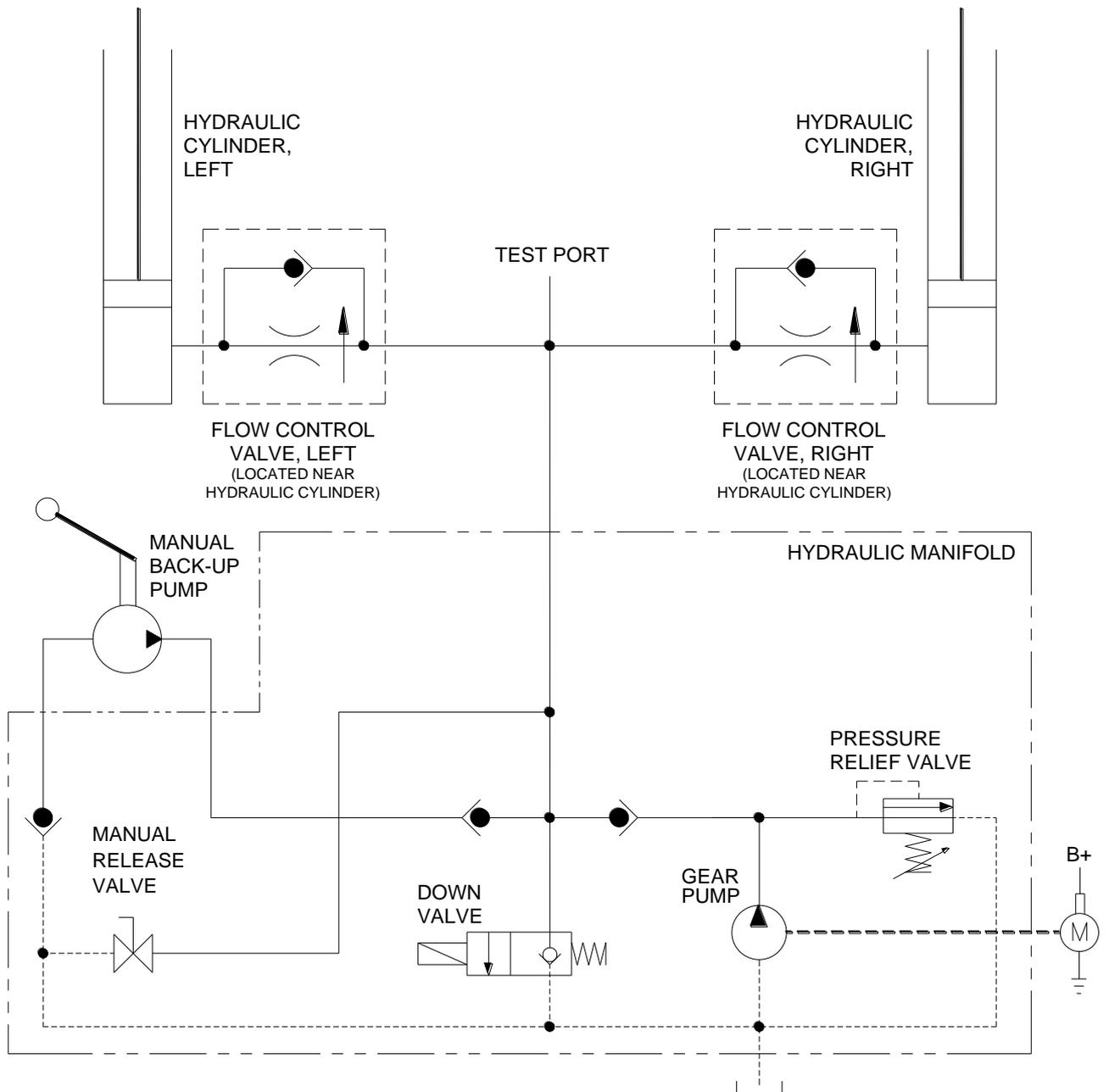


Diagram No. 20

8.5 Electrical system

8.5.1 S-Series Limit Switch States

Limit switch actuation is illustrated in Diagram 21, which shows the state of the three limit switches as the platform travels from fully stowed, to vehicle floor level, and to ground level. The solid line indicates that the normally closed portion of switch is carrying current, and the open line indicates that the normally open portion of switch is carrying current.

The dotted lines show switch states beyond normal travel boundaries of platform. This is useful in showing the operation of switches that change states at folded or ground level positions. For proper operation of lift, the switch actuations must overlap as shown.

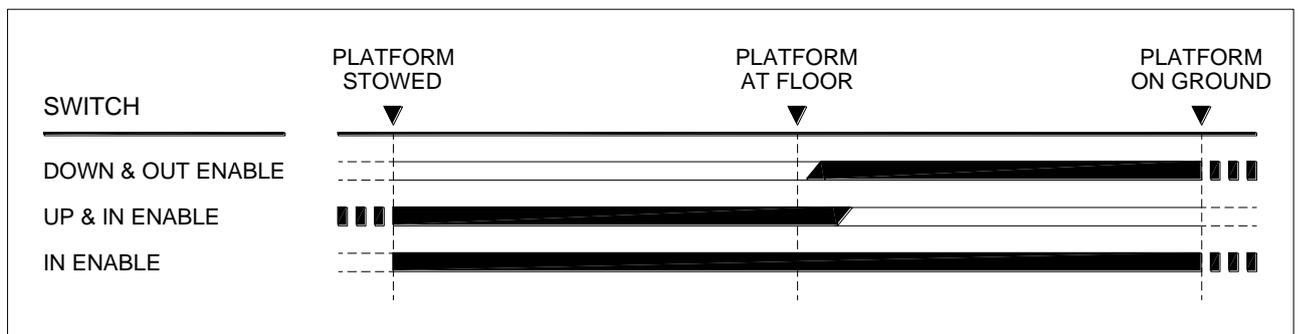


Diagram No. 21

8.5.2 Electrical Symbols

Diagram 22 describes the electrical symbols used on the schematic.

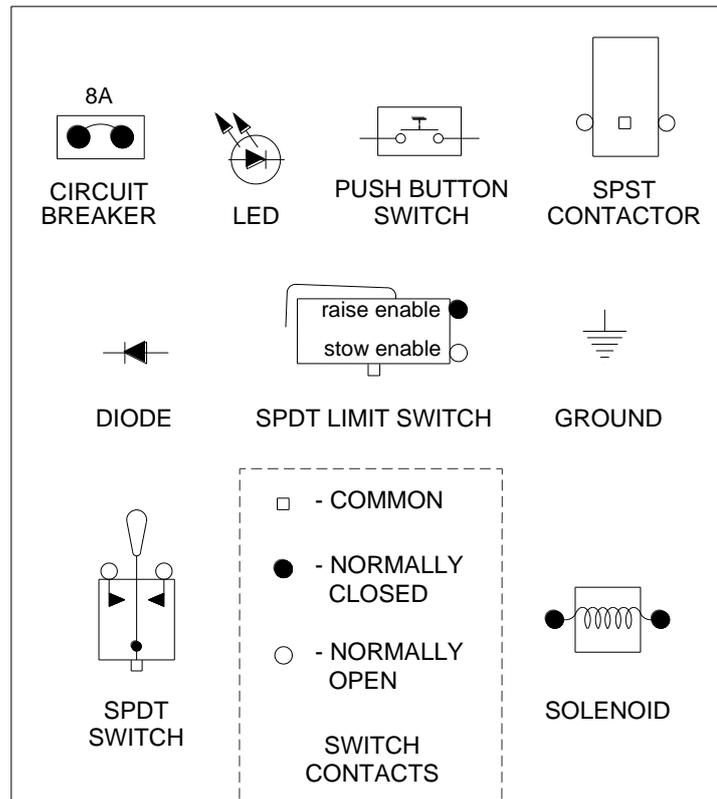


Diagram No. 22

8.5.3 Electrical Schematic

Diagram 23 illustrates the lift and related electrical circuitry plus pendant circuitry for both the hand-held control pendant and the control panel.

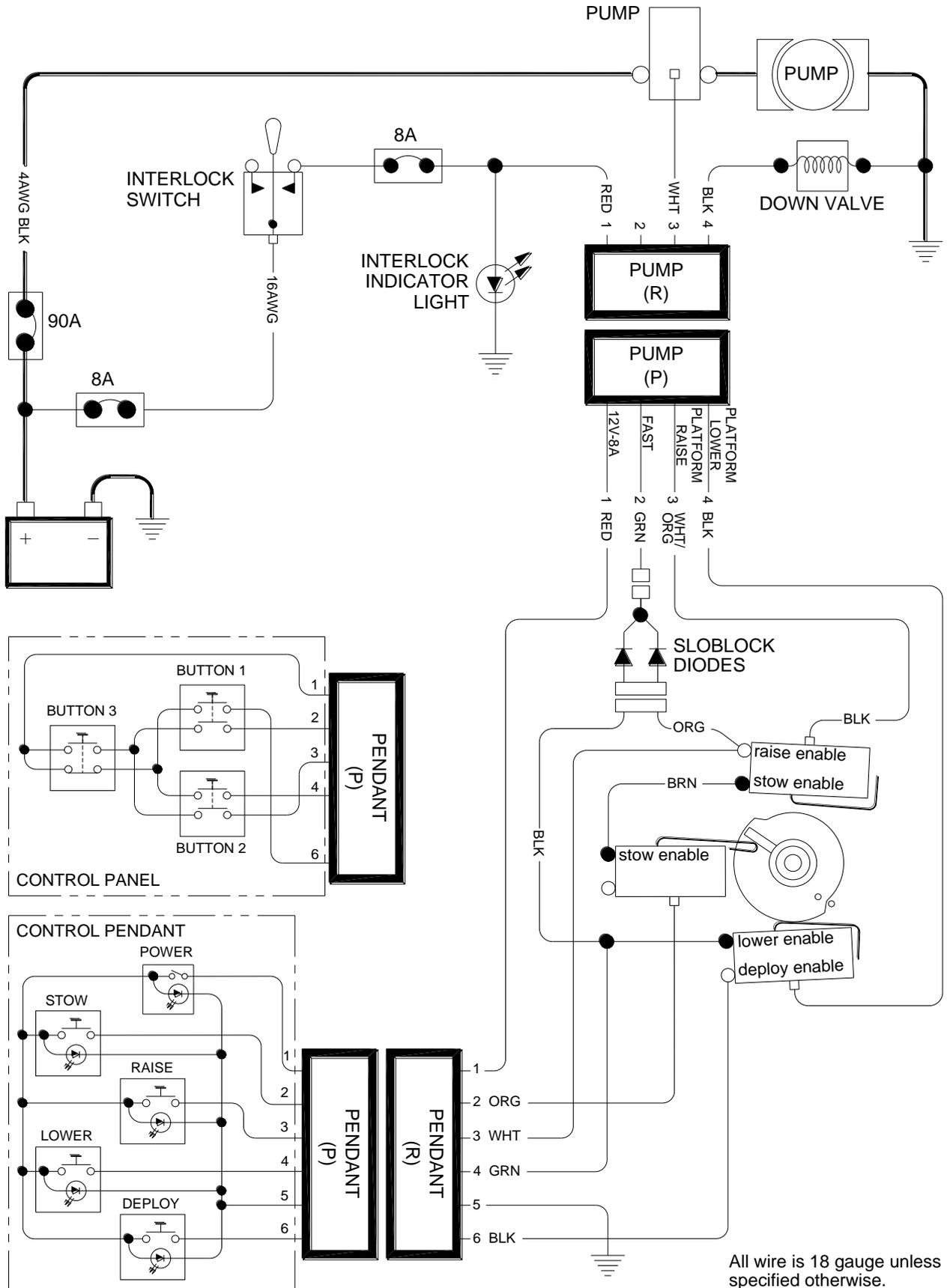


Diagram No. 23
30.

8.6 Decal locations and part numbers

Refer to Diagram 24 and verify decals are properly affixed and located as shown.

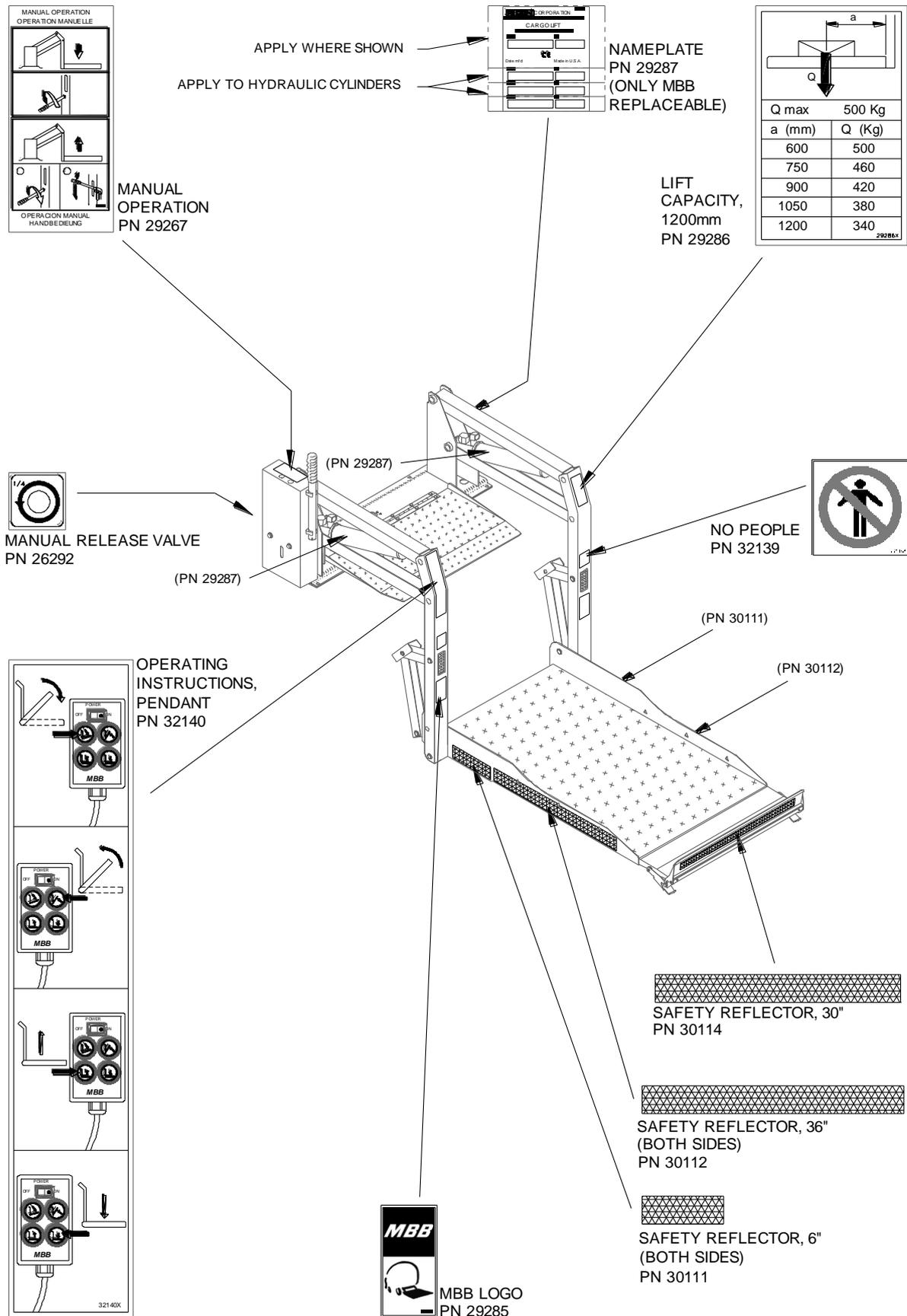


Diagram No. 24

8.7 Troubleshooting

The troubleshooting guide is designed to provide logical starting points to locate general problems that could occur with lift. However, not all possible problems or combinations of problems are listed. For troubleshooting lift, refer to Diagram 25. The guide does not incorporate routine safety precautions or preliminary procedures and assumes that vehicle battery is fully charged and battery terminals are clean and tight.



WARNING!

The troubleshooting guide does not incorporate routine safety precautions or preliminary procedures. During the warranty period a trained, authorized service technician must perform troubleshooting. After the warranty period, it is recommended that troubleshooting continue to be performed by an authorized service technician.



CAUTION!

Disconnect the negative cable from the battery before working on the electrical system.

SYMPTOM		POSSIBLE CAUSE	REMEDY
Hydraulic fluid leaks		Loose hydraulic fitting.	Make sure fitting is properly tightened.
		Hydraulic component defective.	Discontinue use of lift until a Ricon authorized service technician makes repairs.
Rollstop does not open		Obstruction of roll stop release latch.	Raise lift and remove obstruction.
Lift functions	Abnormal operation	Obstruction in lifting frame.	Remove obstruction and check for any damage
		Backup pump manual release valve open.	Turn manual release valve clockwise until slightly snug.
		Hydraulic fluid may be low.	While platform is at ground level, be certain that pump hydraulic fluid level is maintained at required full level. Add only Texaco 01554 Aircraft Hydraulic Oil or equivalent U.S. mil spec H5606G fluid.
		Air may be trapped in hydraulic system.	Purge hydraulic system by operating lift through its maximum range of travel for at least four complete cycles. (For vehicles that do not use full travel of lift, the maximum range of travel is accomplished by raising vehicle on a service hoist or ramp.)

	No operation	Control system circuit breaker tripped.	Reset circuit breaker.
		Backup pump manual release valve open.	Turn manual release valve clockwise until slightly snug.
		Hydraulic hose or fitting leak.	Contact an authorized Ricon service technician for repair.
		Hydraulic fluid may be low.	While platform is at ground level, be certain that pump hydraulic fluid level is maintained at required FULL level. Add only Texaco 01554 Aircraft Hydraulic Oil or equivalent U.S. mil spec H5606G fluid.
		Air may be trapped in hydraulic system.	Purge hydraulic system by operating lift through its maximum range of travel for at least four complete cycles. (For vehicles that do not use full travel of lift, the maximum range of travel is accomplished by raising vehicle on a service hoist or ramp.)

Diagram No. 25

