



# **UNI-lite™**

## **Personal Use Wheelchair Lift**

### **DOT - Private Use Lift**



**Owners Manual**

[PRINT](#)



**This VMI product must be installed and serviced by authorized VMI service technicians.**

**The operator must refer to this manual for operating instructions, and retain it for future reference.**

“DOT – Private Use Lift” verifies that this platform lift meets only the private use lift requirements of FMVSS no. 403. This lift may be installed on all vehicles appropriate for the size and weight of the lift, except for buses, school buses, and multi-purpose passenger vehicles other than motor homes with a gross vehicle weight rating (GVWR) that exceeds 10,000 lbs (4,536 kgs).

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U. S. Patent No. 5,234,311

Printed in the United States of America

Customer Name: \_\_\_\_\_  
Installing Dealer: \_\_\_\_\_  
Date Installed: \_\_\_\_\_  
Serial Number: \_\_\_\_\_

## REVISION RECORD

REV	PAGES	DESCRIPTION OF CHANGE	ECR/ECO
32DULP03. A 06/08/05	All	New release.	
<b>END OF LIST</b>			

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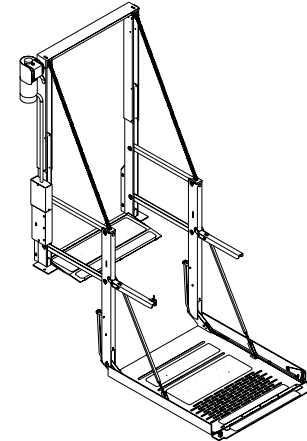
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## I. INTRODUCTION

This manual provides operating and maintenance instructions for the Vantage Mobility International (VMI) UNI-lite Private Use wheelchair lift. The wheelchair lift provides wheelchair access to personal vans. With its lightweight aluminum alloy construction it has little effect on vehicle handling. The lift is designed to be operated by a person in a wheelchair, or by an attendant. The unique, adjustable post design means that a UNI-lite fits standard and raised doors of most full-size vans and some minivans. The lift can be installed in either the side door or the rear door. The large non-skid platform accommodates most wheelchairs, yet intrudes very little into interior space. The UNI-lite lifts up to 600 pounds (273 kilograms).



Standard features of the UNI-lite are an auxiliary control switch mounted on switch arm, a powerful electric motor, gear reduction drive, and a powered outer rollstop. The UNI-lite also contains a built-in manual backup system.

This manual contains operation and maintenance instructions for the UNI-lite. It is important that operators be completely familiar with the Operating Instructions chapter of this manual. For installation instructions and spare parts, please refer to the service manual 32DULP04. Once the UNI-lite is installed, it is important that the lift be properly maintained by following the recommended cleaning, lubrication, and inspection procedures.

If there are questions about this manual or additional copies are needed, please contact VMI Product Support at one of the following locations:

### A. VMI SERVICE SUPPORT

If there are questions regarding this manual, or you need additional copies, please contact VMI Service Support at the following location:

#### VMI

5202 S. 28<sup>th</sup> Place

Phoenix, AZ 85040 .....(602) 243-2700

Outside 602 Area Code .....(800) 348-8267

World Wide Website ..... [www.vantagemobility.com](http://www.vantagemobility.com)

## B. VMI FIVE-YEAR LIMITED WARRANTY

### VMI CORPORATION UNI-lite FIVE-YEAR LIMITED WARRANTY

Vantage Mobility International (VMI) warrants to original purchaser of this product that VMI will repair or replace, at its option, any part that fails due to defective material or workmanship as follows:

- Repair or replace lift power train parts for a period of five years from the date of purchase. A list of parts covered can be obtained from your authorized VMI dealer.
- Labor costs for specified parts replace under this warranty for a period of one year from the date of purchase. A VMI rate schedule determines the parts covered and labor allowed.
- Repair or replace parts for a period of one year from the date of purchase.

**If you need to return a product:** Return this VMI product to your installing dealer. Please give as much advance notice as possible, and allow a reasonable amount of time for repairs.

**If you are traveling:** All authorized VMI dealers honor this warranty. Consult telephone directory or call our Product Support department for the name of nearest authorized VMI dealer.

**This warranty does not cover:** Malfunction or damage to product parts caused by accident, misuse, lack of proper maintenance, neglect, improper adjustment, modification, alteration, the mechanical condition of vehicle, road hazards, overloading, failure to follow operating instructions, or acts of nature (i.e., weather, lightning, flood).

**Note:** VMI recommends that this product be inspected by an authorized VMI service technician at least once every six months, or sooner if necessary. Any required maintenance should be performed at that time.



#### WARNING

THIS PRODUCT HAS BEEN DESIGNED AND MANUFACTURED TO EXACT SPECIFICATIONS.  
MODIFICATION OF THIS PRODUCT IN ANY RESPECT CAN BE HAZARDOUS.

***This warranty is void if:***

- The product has been installed or maintained by someone other than an authorized VMI service technician.
- The product has been modified or altered in any respect from its original design without written authorization by VMI.

***VMI disclaims liability for any personal injury or property damage that results from operation of a VMI product that has been modified from the original VMI design. No person or company is authorized to change the design of this VMI product without written authorization by VMI.***

***Ricon's obligation under this warranty is exclusively limited to the repair or exchange of parts that fail within the applicable warranty period.***

***VMI assumes no responsibility for expenses or damages, including incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply.***

***Important: The warranty registration card must be completed and returned to VMI within 20 days after installation of this VMI product to validate the warranty. The warranty is not transferable.***

***The warranty gives specific legal rights, and there may be other rights that vary from state to state.***

### **C. SHIPMENT INFORMATION**

VMI does not sell directly to the user because of the specialized nature of the product. Instead, the product is distributed through the worldwide network of authorized VMI dealers, who perform the actual installation.

- When the product is received, unpack the product and check for freight damage. Claims for any damage should be made to the freight carrier immediately.
- Be sure the installation kit contains all items listed on the kit packing list. Please report any missing items immediately to the VMI Product Support department. The warranty and owner registration cards must be completed and returned to VMI within 20 days to validate the warranty.

**NOTE:** Sales or Service personnel must review the Warranty and this Operator Manual with the user to be certain they understand how to safely operate the product. Instruct the user to follow the operating instructions without exception.

### **D. GENERAL SAFETY PRECAUTIONS**

The following general safety precautions must be followed during operation:

- To avoid injury, always exercise caution when operating and be certain that hands, feet, legs, and clothing are not in path of product movement.
- Read and thoroughly understand operating instructions before attempting to operate.
- Inspect product before each use. If an unsafe condition, unusual noises, or movements are present, do not use it until problem is corrected.
- Stand clear of doors and platform and keep others clear during operation.
- The product requires regular periodic maintenance. A thorough inspection is recommended at least once every six months. The product should be maintained at the highest level of performance.



## E. MAJOR LIFT COMPONENTS

The references used throughout this manual are illustrated in **Figure 1-1** and defined in **Table 1-1**. Refer to Service Manual, Chapter IV "Parts Diagrams and Lists" for more detail.

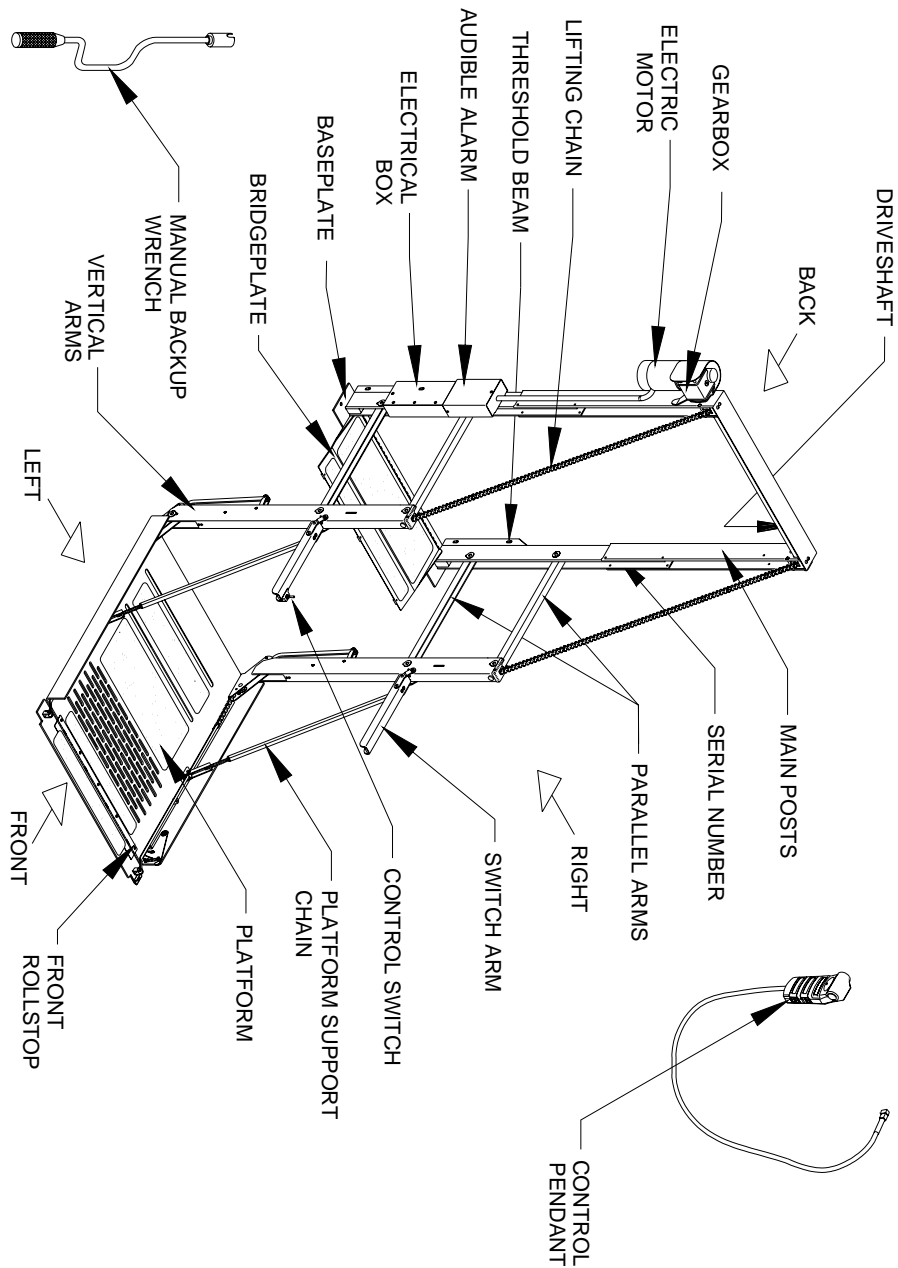


FIGURE 1-1: UNI-lite PERSONAL USE WHEELCHAIR LIFT

<b>TABLE 1-1: UNI-lite PERSONAL USE LIFT TERMINOLOGY</b>	
<b>NAME</b>	<b>DESCRIPTION</b>
Front, Back, Left, Right	Reference points from outside the vehicle looking inward at installed lift.
Audible alarm	(inside electrical box) Announces when something has passed over threshold. Activated by threshold beam.
Baseplate	Bolts to vehicle floor; provides secure foundation for lift structure.
Bridgeplate	Pivots on baseplate and bridges gap between platform and baseplate when platform is at floor level.
Control pendant	Hand-held pendant containing switches used to control platform motions.
Control switch	Allows passenger to control "Up" and "Down" platform motions.
Driveshaft	Sprockets on driveshaft engage lifting chains, which raise and lower platform.
Electrical box	Contains lift controller and electric circuit breakers.
Electric motor and gearbox	12VDC motor and gearbox rotate driveshaft to close rollstop, and raise and fold platform.
Front rollstop	Front barrier prevents wheelchair from inadvertently rolling off of platform during platform movement.
Lifting chain	(left and right) Moved by electric motor. Chains raise and lower platform and open and close rollstop.
Main post	(left and right) Vertical support posts are rigidly attached to vehicle at bottom and top.
Manual backup wrench	Use this wrench to manually raise platform if electrical power is not available.
Parallel arms	(left and right) Upper and lower arms connect main posts to vertical posts.
Platform	Component of lift where wheelchair and occupant are situated during "Up" and "Down" motions.
Platform support chain	Supports platform in horizontal position.
Serial number	Location of serial number decal on outside of right main post.
Switch arm	(left and right) One arm supports control switch; both arms provide a handhold for passenger.
Threshold beam	Light-beams detect presence of objects in threshold area. Part of Threshold Warning System.
Vertical arm	(left and right) Connect platform to parallel arms; support handrails.
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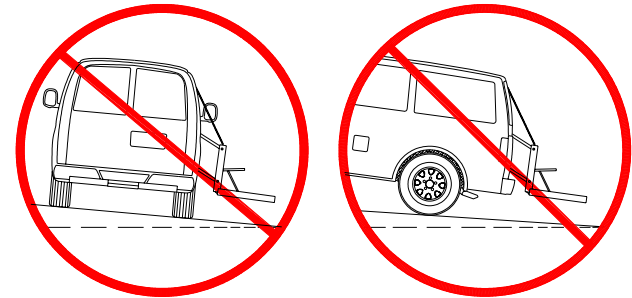
## II. OPERATING INSTRUCTIONS

This chapter contains safety precautions, daily safety check instructions, control and indicator descriptions, and operating instructions for the VMI UNI-lite Private Use wheelchair lift. Read this chapter thoroughly before using the UNI-lite.

### A. SAFETY PRECAUTIONS

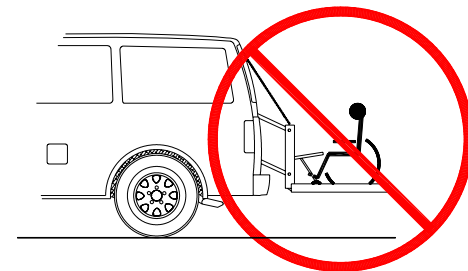
The safety precautions must be complied with at all times when operating the UNI-lite:

- Refer to **Figure 2-1**. A hazardous situation will exist if you use the lift when the vehicle is parked on a slope. Always operate the lift with the vehicle on level ground.



**FIGURE 2-1: SLOPED PARKING HAZARD**

- Vehicle must be safely parked with parking brake set before using lift.
- Inspect lift before use. Do not use lift if an unsafe condition exists, or unusual noises or movements are noticed, and contact a VMI authorized dealer for lift repair.
- Read and comply with all warning labels and symbols affixed to wheelchair lift.
- Do not operate with a load in excess of 600 lbs (273 kgs).
- Refer to **Figure 2-2**. Wheelchair occupant must FACE OUTWARD when entering or exiting vehicle.



**FIGURE 2-2: DO NOT FACE INWARD**

- Do not load an oversize wheelchair into vehicle if it is too large to pivot freely inside vehicle.
- Be certain wheelchair fits safely on platform; it must not extend beyond edges or interfere with operation of front rollstop.
- When exiting vehicle, verify that platform is at same height as floor and front rollstop is up and locked.
- Do not place equipment or furniture inside vehicle that may prevent pivoting of your wheelchair. Being able to pivot assures that you can safely exit facing outward.

- Do not rely on a threshold-warning device (audible, or other) to confirm that it is safe to exit backwards. This device may be inoperative or unheard, and you might exit backwards when the platform is on the ground!
- The raised front rollstop prevents slow and unintentional rolling off of the platform. It is not intended to stop a fast-moving wheelchair, which might tip forward if the small front wheels collide with the rollstop.
- Keep arms, legs, and clothing away from moving lift parts.
- The lift is intended for one wheelchair and its occupant. It is not designed to transport standing passengers.
- Refer to **Figure 2-3**. Do not stand in front of lift while deploying platform.



**FIGURE 2-3: STAND CLEAR OF PLATFORM**

- Keep others clear while operating lift.
- Do not allow an untrained person to operate lift.
- Careful supervision is necessary if used by or near children.
- Do not allow anyone to stand on bridgeplate prior to lowering platform.
- Lock wheelchair brakes when on platform (power chair users must turn off power and set brake).
- Use great care in wet conditions, because the wheelchair brakes are less effective if wheels or platform are wet.
- Never leave platform outside of vehicle. Return platform to stowed position after use.

Read and understand these safety precautions. Review them periodically and ask other operators to read them as well. Contact a VMI authorized dealer or VMI Product Support if you have questions.





## **B. DAILY SAFETY CHECK**

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

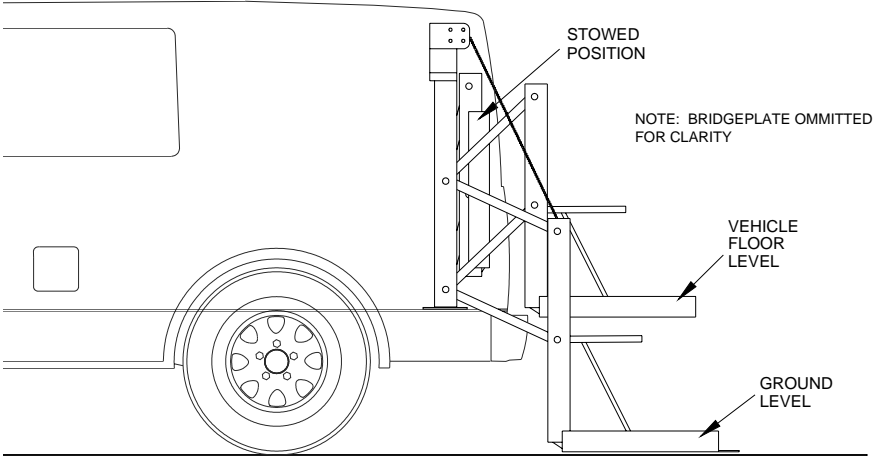
- All functions operate properly. **DO NOT** lift use if unusual noises or movements are present, and contact an authorized VMI dealer for repair.
- Vehicle interlock is operating properly.
- No objects that may interfere with operation are present.
- General appearance and lubrication are satisfactory, and all fasteners are tight

**C. PLATFORM MOTIONS AND POSITIONS**

Refer to **Table 2-1** and **Figure 2-4**. The table describes the four platform motions and the figure shows two typical platform heights plus the stow position.

TABLE 2-1: PLATFORM MOTIONS	
MOTION	DESCRIPTION
 / DEPLOY	Platform unfolds and deploys out of vehicle from the stowed position. (If equipped with a VMI power door operator, the doors automatically open before the platform deploys.)
 / DOWN	Platform is lowered from vehicle floor level to ground level (rollstop automatically lowers when platform reaches ground level.)
 / UP	Platform is raised from ground level to vehicle floor level (rollstop automatically rises when platform leaves ground level).
 / STOW	Platform folds and stows at vehicle floor level into the stowed position. (If equipped with a VMI power door operator, the doors automatically close after the platform stows.)
<b>END OF TABLE</b>	

**NOTE:** Up and down motions are possible only when platform is deployed. The four motion icons shown above appear on the pendant face.



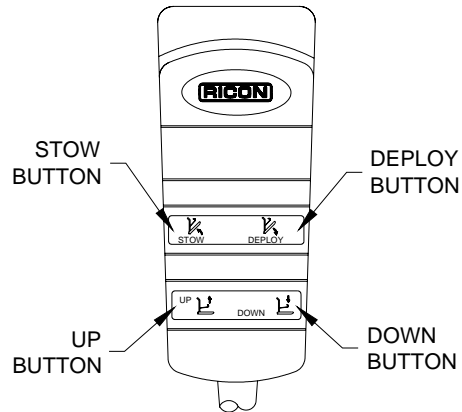
**FIGURE 2-4: TYPICAL PLATFORM POSITIONS**

## D. CONTROLS AND INDICATORS

### 1. CONTROL PENDANT

Refer to **Figure 2-5**. The lift is controlled with a hand held, hard-wired remote control pendant. It has two dual-position rocker switches, and the ends of the switches are referred to here as buttons. The lift functions are performed by pushing and holding one of the buttons. 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.

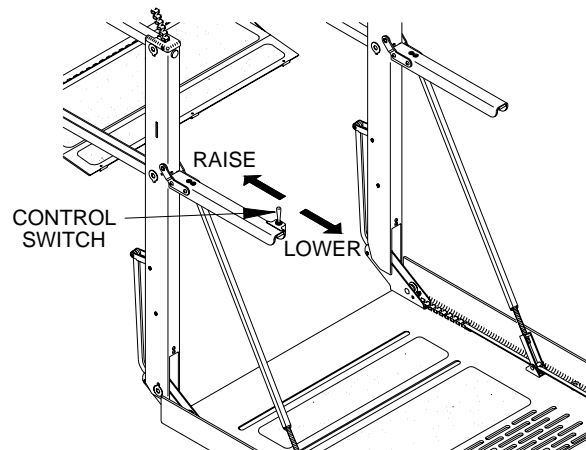
Pushing the DEPLOY button unfolds the platform from the vehicle and places it at floor level. Pushing the DOWN button lowers the platform towards the ground, and pushing the UP button raises platform towards the floor. Pushing the STOW button folds the platform into the vehicle when it is at floor level. The pendant is stowed on a wall-clip inside vehicle, usually near lift.



**FIGURE 2-5: CONTROL PENDANT**

### 2. CONTROL SWITCH

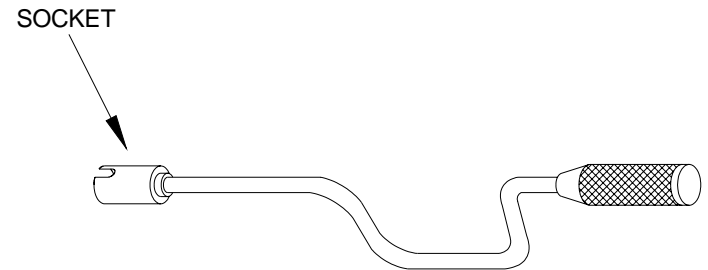
Refer to **Figure 2-6**. The control switch supplements the control pendant and may be used by the platform occupant to control UP and DOWN motions of the platform. The switch is on the left switch arm (optional location on right switch arm). Push and hold the switch forward to lower the platform, and pull the switch back to raise the platform.



**FIGURE 2-6: HANDRAIL SWITCH**

### 3. MANUAL BACKUP WRENCH

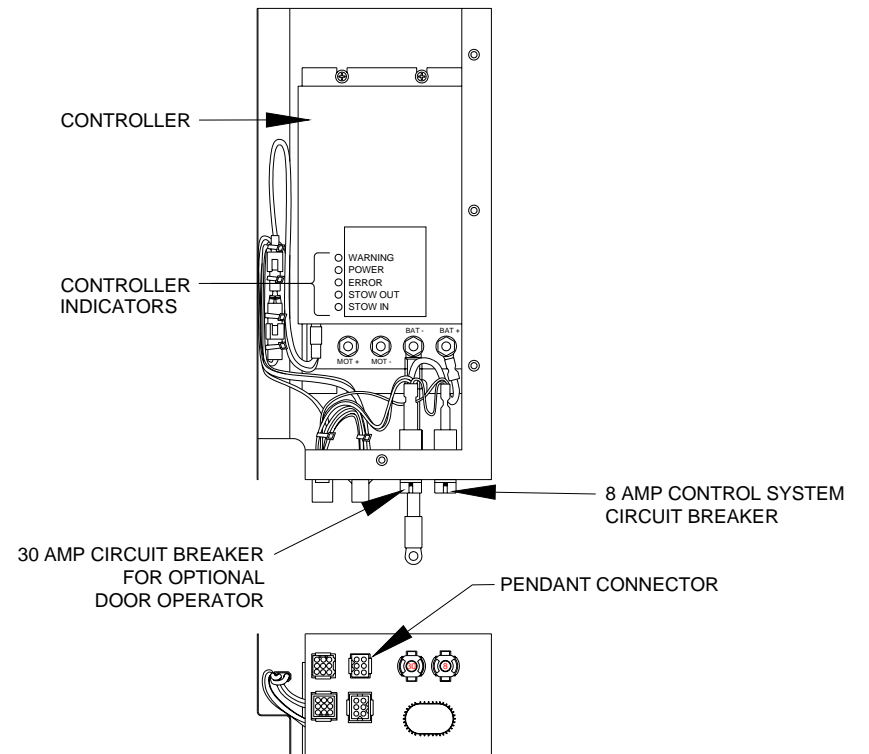
Refer to **Figure 2-7**. The manual backup wrench is used to turn the lift motor in the event of electrical failure. The wrench socket engages the motor-shaft and is turned by hand counter-clockwise to DEPLOY the platform, or clockwise to STOW the platform. Refer to the Manual Operation section for instructions on its use.



**FIGURE 2-7: MANUAL BACKUP WRENCH**

### 4. ELECTRICAL CONTROLS AND INDICATORS

Refer to **Figure 2-8**. The electrical controller is inside the lower electrical box assembly, which is located near the base of the left main post. Accessing the controller requires removing the electrical box cover.



**FIGURE 2-8: ELECTRICAL BOX ASSEMBLY**



**a. Controller Indicator Lights**

Refer to back to **Figure 2-8**. The controller indicator lights are located on the controller (behind the electrical box assembly cover). Refer to **Table 2-2** for descriptions of what each light indicates.

<b>TABLE 2-2: CONTROLLER INDICATORS</b>		
<b>INDICATOR</b>	<b>COLOR</b>	<b>DESCRIPTION</b>
WARNING	RED	Lights continuously when vehicle battery voltage is low (less than 9.5 volts). It flickers during controller operation if there is a low voltage problem.
POWER	GREEN	Lights continuously when correct voltage is applied to lift.
ERROR	RED	Lights when vehicle battery voltage is high (greater than 15.0 volts).
STOW OUT	YELLOW	Lights when the DEPLOY or DOWN button is pressed if the position of the platform is appropriate for that function. For example: When the platform is stowed, the DOWN button will not do anything and will not light the indicator, however the DEPLOY button will lower the platform and light the indicator.
STOW IN	YELLOW	Lights when the STOW or UP buttons are pressed, and in the same manner as stow out.
<b>END OF TABLE</b>		

**b. Control System Circuit Breaker**

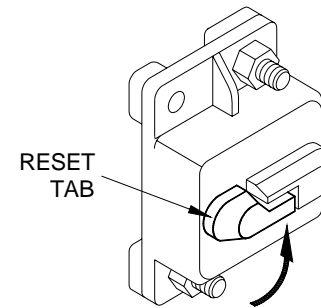
Refer to **Figure 2-8**. The control system circuit breaker is rated at 8 amps and interrupts electrical power to the control system in the event of a short circuit. If a short circuit occurs, the circuit breaker button will “pop-up”. Wait 10-15 seconds before attempting to reset. If pressing and releasing the button does not restore power, DO NOT CONTINUE TO PRESS AND HOLD. Contact an authorized VMI service technician for repair.

**c. Circuit Breaker for Optional Door Operator**

Refer to **Figure 2-8**. The circuit breaker for the optional door operator is rated at 30 amps and interrupts electrical power to the door operator in the event of a short circuit. If a short circuit occurs, the circuit breaker button will “pop-up”. Wait 10-15 seconds before attempting to reset. If pressing and releasing the button does not restore power, DO NOT CONTINUE TO PRESS AND HOLD. Contact an authorized VMI service technician for repair.

**d. Main Circuit Breaker**

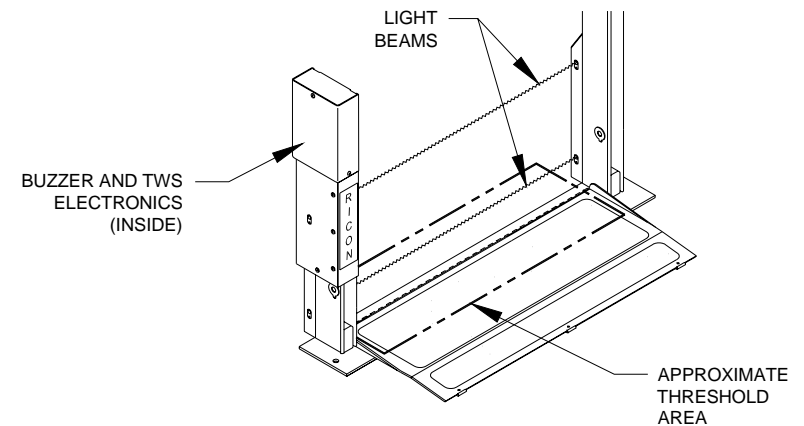
Refer to **Figure 2-9** on the following page. The main circuit breaker is rated at 50 amps (located in the vehicle engine compartment) and interrupts electrical power to the entire lift in the event of a short circuit. If a short circuit occurs (particularly in the electric motor), the circuit breaker reset tab will flip-down. Wait at least 30 seconds before attempting to reset. If lifting the reset tab UP and releasing does not restore power, DO NOT CONTINUE TO PRESS AND HOLD. Contact an authorized VMI service technician for repair.



**FIGURE 2-9: MAIN CIRCUIT BREAKER**

## 5. THRESHOLD SAFETY WARNING SYSTEM

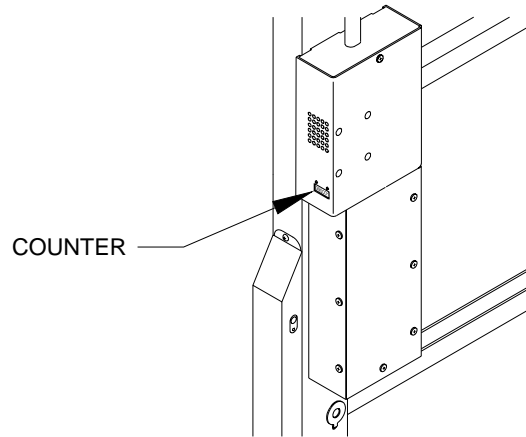
Refer to **Figure 2-10** for the location of threshold warning system (TWS) components. The main posts incorporate light beams that detect the presence of a passenger (or object, such as a wheelchair) if they are in the vicinity of the threshold area (lift baseplate). The beams are enabled when the platform is one inch, or more, below the vehicle floor level, and if someone passes through either beam an audible buzzer is actuated. This system provides a margin of safety for lift users by warning them when the platform is not at floor level. The platform must be at floor level when boarding the platform prior to exiting the vehicle.



**FIGURE 2-10: THRESHOLD WARNING SYSTEM**

## 6. LIFT CYCLE COUNTER

Refer to **Figure 2-11**. The cycle counter is located inside the electrical box and visible through a slot on the rear side. The counter advances each time the platform moves through a complete cycle, which consists of the platform moving from the vehicle floor to the ground and back to the floor. The number of cycles displayed is used to schedule maintenance operations.

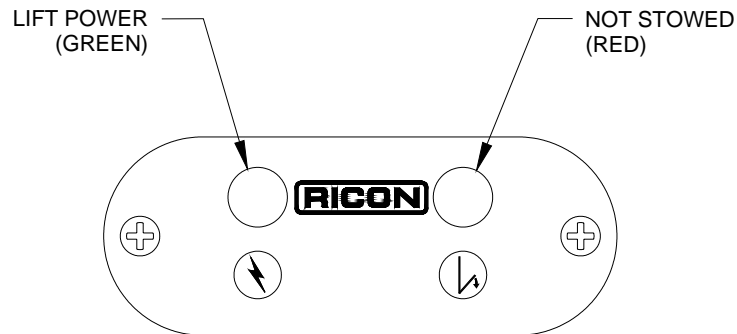


**FIGURE 2-11: CYCLE COUNTER**

## 7. INTERLOCK SYSTEM

Refer to **Figure 2-12**. The UNI-lite lift provides an electrical interlock signal between the vehicle and the lift that:

- Prevents movement of the vehicle unless the platform is fully stowed.
- Supplies power to the lift only when the vehicle parking brake is set and the transmission is in NEUTRAL.



**FIGURE 2-12: INTERLOCK DISPLAY PANEL**

The figure above shows an LED display panel that is attached to your vehicle dashboard. The Lift Power LED lights green when the vehicle transmission is in PARK and the parking brake is set. While the LED is green the lift is powered and the platform can be deployed. The Not Stowed LED lights red when the platform is not fully stowed into the vehicle. While the LED is red the transmission cannot be shifted out of PARK. Connection of the interlock circuit is mandatory.



## WARNING

BEFORE USING THE FOLLOWING PROCEDURE YOU MUST VERIFY THAT THE PLATFORM IS IN FACT FULLY STOWED INTO THE VEHICLE. FAILURE TO DO SO CAN RESULT IN VEHICLE OR LIFT DAMAGE AND COULD SUBJECT THE OPERATOR, OR OTHERS, TO PERSONAL INJURY.

If a failure occurs in the interlock or lift circuitry that results in the red Not Stowed LED lighting (which also prevents vehicle movement) the following procedure will override the interlock system:

- a. Turn vehicle ignition key to the ON position.
- b. Shift vehicle transmission to neutral.
- c. Start vehicle.
- d. Shift to drive and proceed to a dealer for service.

### E. NORMAL LIFT OPERATION



## WARNING

IMPROPER USE OF LIFT CAN RESULT IN PERSONAL INJURY. USERS MUST READ AND FOLLOW OPERATING INSTRUCTIONS IN THIS OPERATOR MANUAL. COPIES OF THE OPERATOR MANUAL ARE AVAILABLE FROM:

**VMI**  
**5202 S. 28<sup>th</sup> Place**  
**Phoenix, AZ 85040**  
**(602) 243 2700 or (800) 348-8267**

- DO NOT EXCEED RATED LOAD CAPACITY OF 600 POUNDS (273 KG).
- PRIOR TO USE, INSPECT WHEELCHAIR LIFT FOR PROPER FUNCTION, REQUIRED MAINTENANCE, OR DAMAGE. IF A PROBLEM EXISTS, DO NOT USE LIFT AND CONTACT AN AUTHORIZED VMI DEALER FOR REPAIR.
- THIS LIFT IS DESIGNED FOR USE BY WHEELCHAIR OCCUPANTS, ONLY. DO NOT USE FOR STANDING PASSENGERS.

VMI CORPORATION DISCLAIMS LIABILITY FOR DAMAGE OR PERSONAL INJURY RESULTING FROM MODIFICATION TO THE LIFT, LACK OF MAINTENANCE, REPAIR, NEGLIGENCE, ABUSE, OR FAILURE TO FOLLOW LIFT OPERATING INSTRUCTIONS.

- Before operating lift, be certain vehicle is safely parked on a level area away from traffic. Provide space for lift operation and passenger boarding.
- The lift operator must take special care to be certain that area is clear before deploying platform. Be certain there are no obstacles in area where platform will contact ground.
- If vehicle is not equipped with a power door operator, open doors completely and secure. If equipped with a power door operator, the vehicle doors will automatically open before platform deploys and close after platform is stowed.
- If equipped with a safety interlock system, be certain that the vehicle mechanisms monitored by the system (e.g. transmission, parking brake, etc.) are in the proper state before attempting to operate lift. The lift will not operate until the requirements of this feature have been met.

- The electric motor installed in the lift causes a heavy drain on the vehicle battery. Avoid operating the lift more than once during ten minutes of vehicle driving. This is necessary regardless of the battery system. If the lift is used more frequently it can result in the battery being unable to supply the electrical current needed by the lift.



### 1. ENTER VEHICLE:

- DEPLOY PLATFORM** - Push and hold the DEPLOY button until the platform fully unfolds and stops at floor level.
- LOWER PLATFORM** - Push and hold the DOWN button until the platform settles at ground level and the outer rollstop opens completely.



- Carefully place wheelchair in center of platform, facing outward, and lock wheelchair brakes.
- RAISE PLATFORM** - Push and hold the UP button until the platform rises to floor level and stops. Note that the front rollstop must close as platform lifts away from ground.
- Verify that front edge of the bridgeplate rests on the rear area of the platform. Release wheelchair brakes and carefully enter vehicle.
- Refer to “Stow Platform” section below to stow platform.

### 2. EXIT VEHICLE:



- DEPLOY PLATFORM** - Push and hold the DEPLOY button until the platform fully unfolds and stops at floor level. Verify that front edge of the bridgeplate rests on the rear portion of the platform.
- Carefully place wheelchair in center of platform, facing outward (away from vehicle), and lock wheelchair brakes.
- LOWER PLATFORM** - Push and hold the DOWN button until the platform settles at ground level and the outer rollstop opens completely.
- Release wheelchair brakes and carefully exit platform.
- Refer to “Stow Platform” section below to stow platform.

### 3. STOW PLATFORM:

If necessary, raise the platform to vehicle floor level. Push and hold the STOW button while the platform folds into the stowed position. Be certain platform has stowed completely before closing vehicle doors.

- On vehicles equipped with power doors, continue to push the STOW button until the vehicle doors close completely.

#### F. MANUAL OPERATION:

In the event the lift becomes inoperable under its own power, it can be operated using the following manual backup procedure. VMI recommends that manual operation be used only for passengers exiting from vehicle.

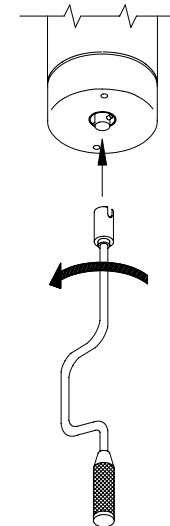
- Be certain vehicle is on a level area and away from traffic. Allow space for platform movement plus space to exit from platform.
- The vehicle operator must summon assistance to move vehicle to a safe area if a break down situation exists where vehicle cannot be moved under its own power.
- Open doors manually if vehicle is not equipped with a power door operator. If equipped with a power door operator, refer to its operator manual for manual operation directions.
- Disconnect the heavy, 4GA power cable at the lifts 50A circuit breaker (located in engine compartment), or disconnect either battery cable.

**NOTE:** Be prepared for the possibility that you may have to operate the lift manually. Have the appropriate tools necessary to disconnect the cables described above in the vehicle at all times.

 <b>WARNING</b>
<p>REMOVE MANUAL BACKUP WRENCH BEFORE RECONNECTING POWER CABLE TO CIRCUIT BREAKER. DO NOT ATTEMPT TO OPERATE LIFT AT ANY TIME WITH WRENCH ATTACHED; IT MAY DISENGAGE AND BE THROWN, CAUSING DAMAGE AND POSSIBLE INJURY.</p>

#### a. Deploying and Lowering Platform

- 1) Refer to **Figure 2-13**. Engage shaft of electric motor with manual backup wrench and turn motor counterclockwise until the platform reaches vehicle floor level.



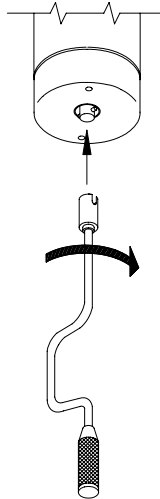
**FIGURE 2-13: LOWERING PLATFORM**

- 2) Board passenger onto center of platform following the safety precautions at the beginning of this chapter.
- 3) Continue to turn motor counterclockwise until platform settles at ground level and the rollstop opens completely.
- 4) Assist passenger off of platform.

**b. Raising and Stowing Platform:**

 <b>CAUTION</b>
The lift passenger or attendant must follow the lift operation instructions described in this manual to enter or exit the vehicle.

- Refer to **Figure 2-14**. Engage shaft of electric motor with manual backup wrench and turn motor clockwise until the platform is completely folded inside the vehicle. Be certain lift has stowed completely before closing vehicle doors.



**FIGURE 2-14: RAISING AND STOWING PLATFORM**

### III. MAINTENANCE

Regular maintenance of the VMI UNI-lite Private Use wheelchair lift will provide optimum performance in addition to reducing the need for repairs. VMI products are highly specialized and maintenance and/or repairs must be performed by an authorized VMI service technician using VMI replacement parts. During the VMI warranty period maintenance inspections are required every six months, or sooner depending on usage.

#### A. MAINTENANCE INFORMATION

Additional maintenance information is available in the UNI-lite Personal Use Service manual, part number 32DULP04. This manual is available from VMI in printed hard copy, or at the Ricon website in PDF format. The website is located at [www.riconcorp.com](http://www.riconcorp.com). At the website, click on "Technical Documents", "I agree", and then "Service Manuals".

#### B. CLEANING AND LUBRICATION

- The lift is designed and manufactured for low maintenance. Cleaning and lubrication of all moving parts must be performed at least every six months, or sooner if usage is high.
- Cleaning lift regularly is an important part of its maintenance, and will protect its surfaces. All moving parts must be kept clean and lubricated.



#### WARNING

SPRAYABLE SOLVENTS ARE EXTREMELY FLAMMABLE AND CONTAIN HARMFUL VAPORS. TO AVOID INJURY, FOLLOW SAFETY WARNING PRINTED ON LABEL.

- Chains must be clean and very lightly lubricated. Chains can be cleaned with a sprayable penetrating solvent (such as WD-40). Do not saturate chains or leave wet as this attracts dirt and dust. Wipe chains dry after cleaning.
- Do not lubricate motor or electrical components.

#### C. ELECTRICAL SYSTEM

No general maintenance is required on the electrical system. However, this system should be inspected at least every six months for short circuits, frayed wires, loose connectors, etc.

#### D. MAINTENANCE SCHEDULE

TABLE 3-1: ROUTINE INSPECTION	
INSPECTION	ACTION
<b>10 CYCLES</b>	
Overall condition	Listen for abnormal noises as lift operates (i.e. grinding or binding noises.)
Control pendant	Verify control pendant is undamaged and cable connector is tight.
Threshold warning system	Verify system properly detects objects in threshold area and actuates the audible alarm.
Bridgeplate load sensor	Verify sensor inhibits downward movement of platform when a weight is present on lowered bridgeplate.

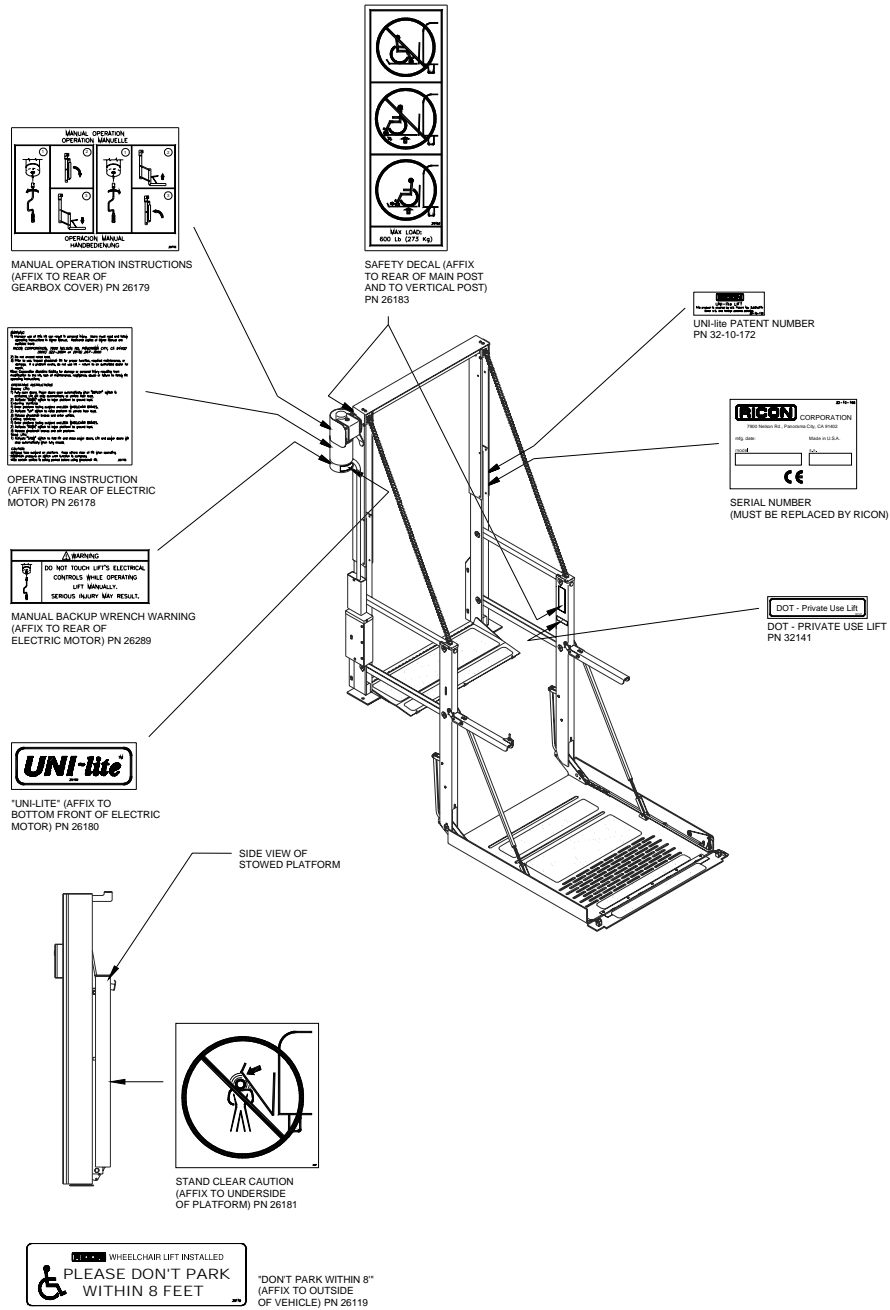


**TABLE 3-1: ROUTINE INSPECTION**

<b>150 CYCLES</b>	
Electrical wiring	Inspect electrical wiring for frayed wires, loose connectors, broken tie wraps, etc.
Vehicle interlock	Place vehicle in a non-interlock mode and verify that lift cannot be operated.
Decals	Verify lift decals are properly affixed, clearly visible, and legible. Replace, if necessary.
Handrails	Verify handrail fasteners are properly tightened.
Lift mounting points	<ul style="list-style-type: none"> <li>▪ Verify vehicle mounting and support points are undamaged.</li> <li>▪ Verify mounting bolts are sufficiently tight and free of corrosion.</li> </ul>
Main lifting pivots	Verify link pins at ends of parallel arms are properly installed, free from damage, and locked in position.
Platform pivot points	Verify platform moves freely, without binding, and does not wobble.
Bridgeplate	<ul style="list-style-type: none"> <li>▪ Verify bridgeplate is down when platform deploys to floor level.</li> <li>▪ Verify bridgeplate rests flat against rear area of platform.</li> </ul>
Front rollstop	<ul style="list-style-type: none"> <li>▪ Verify rollstop is opened completely when platform contacts ground.</li> <li>▪ Verify rollstop closes when platform rises from ground.</li> </ul>
<b>1800 CYCLES</b>	
Cleaning and lubrication	<ol style="list-style-type: none"> <li>1. Clean lift with mild soap and water and wipe dry. Prevent rust by coating all surfaces with a lightweight oil. Remove excess oil.</li> <li>2. Spray penetrating oil (Curtisol® Red Grease 88167 or WD-40®) where specified in the service manual 32DULP04 following directions on container. Remove excess grease from surrounding areas.</li> </ol>
<b>END OF TABLE</b>	

### E. LIFT DECALS

Refer to **Figure 3-1**. Inspect decals at interval in **Table 3-1**. Inspect for chipping, peeling, fading, and illegibility. Order replacement decals with part number given in **Figure 3-1**, and apply where shown.



**FIGURE 3-1: DECAL LOCATIONS AND PART NUMBERS**

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