













AUTOMIZER RIGHT-HANDTM

OPERATOR'S MANUAL



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Table of Contents

le of Contents	
oduction	
Pre-Operating Instructions	
Aission Statement	
/ision Statement	
atroducing the Automizer Right-Hand TM	
Product Overview	
Multiplexed System	
tandard Limited Product Warranty	
o Contact Labrie Plus	
In the U.S.	
In Canada	
4	
' ty	
onventions	
esponsibilities	
Employer Responsibilities	
Employee Responsibilities	
hings to Do	
hings to Avoid	
afety Precautions	
Prior to Start-Up	
General Operation	
Hvdraulics	
Fire Protection	
Safety Kits	
afety and Informative Decals	
Decals on Body	
Decals on Tailgate	
Decals outside Cab	
Decals inside Cab	
Multiplex Switch Actuators (1)	
Multiplex Switch Actuators (2)	
afety Features	
Back Up Alarm	
Body Safety Prop	
Tailgate Safety Prop	
Camera System	
Tailgate Holding Valve	
leanliness	
ocking Out and Tagging Out the Vehicle	
hutting Down the Vehicle	
rior to Start Up	
Priving the Vehicle	

ntrols and Indicators	4
Labrie's Multiplexed System	
Main Page	
Main Menu	
Operational diagram of the Multiplexed System	
Control Panel	
PUMP Switch	
BODY UP Switch	
BODY DOWN Switch	
TAIL GATE UP Switch	
TAIL GATE DOWN Switch	
Crusher Panel Down Switch	
Crusher Panel Un Switch	
PACKER MULTICYCLE Switch	
10-SECOND INHIBIT Switch	
AUTO-PACKING Switch	
In-Cab Packer Control Station	
Stop Push-Button (red)	
Pack Push-Button (green)	
Retract Push-Button (vellow)	
lovstick Controls	
Arm lowstick	
Ann Joystick	
CdD DdshDodra	
Parking Brake ARM EXTENDED Warning Lights	
Parking Brake ARM EXTENDED Warning Lights erating the AUTOMIZER RIGHT-HAND TM	
Parking Brake ARM EXTENDED Warning Lights erating the AUTOMIZER RIGHT-HAND TM Daily Inspection	
Parking Brake Parking Brake ARM EXTENDED Warning Lights erating the Automizer Right-Hand TM Daily Inspection Approaching the Vehicle	
Parking Brake ARM EXTENDED Warning Lights erating the Automizer Right-Hand TM Daily Inspection Approaching the Vehicle Visual Inspection	
Parking Brake ARM EXTENDED Warning Lights erating the Automizer Right-Hand TM Daily Inspection Approaching the Vehicle Visual Inspection Starting the Vehicle	
Parking Brake ARM EXTENDED Warning Lights erating the Automizer Right-Hand TM Daily Inspection Approaching the Vehicle Visual Inspection Starting the Vehicle Body Inspection Procedure	
Parking Brake Parking Brake ARM EXTENDED Warning Lights erating the Automizer Right-Hand TM Daily Inspection Approaching the Vehicle Visual Inspection Starting the Vehicle Body Inspection Procedure Arm Inspection Procedure	
Parking Brake Parking Brake ARM EXTENDED Warning Lights erating the Automizer Right-Hand TM Daily Inspection Approaching the Vehicle Visual Inspection Starting the Vehicle Body Inspection Procedure Arm Inspection Procedure Inspection Sheet	
Parking Brake	

95

I roubleshooting Quick Reference	Troubleshooting	Quick Reference			
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Introduction

The purpose of this manual is to introduce operators to the operational procedures of the AUTOMIZER RIGHT-HANDTM. For information regarding maintenance procedures, refer to the maintenance manual delivered with your truck (see CD inside cab).

Pre-Operating Instructions

It is imperative that you have carefully reviewed this manual prior to operating and/or performing any maintenance on your new AUTOMIZER RIGHT-HANDTM Automated Side Loader.

Upon receipt of your new AUTOMIZER RIGHT-HANDTM, perform a complete lubrication of the unit. Mechanisms must be properly lubricated (see lubrication decal affixed to the side of body for details). Factory lubrication is adequate for production and transport purposes only. In addition, the return filter element must be replaced after 50 hours of use. Refer to the maintenance manual for instructions.



AUTOMIZER RIGHT-HANDTM units must be operated by only one person.

Mission Statement

Labrie Enviroquip Group is dedicated to provide innovative designs, customized quality equipment and elite customer service.

Vision Statement

The team at Labrie Enviroquip Group will successfully lead the way the world views waste management. We will excel at enhancing our community and protecting the global environment. We are committed to being a profitable company for our customers, shareholders and employees.

Introducing the AUTOMIZER RIGHT-HAND[™]

The AUTOMIZER RIGHT-HANDTM is a straight-frame, side-loading vehicle, manufactured to the highest standards, and designed to collect residential and commercial refuse and recycling materials.

Product Overview

The AUTOMIZER RIGHT-HANDTM is equipped with an automated arm that is unmatched in quality and durability. This automated arm offers many advantages, including smooth pick-up and dump cycles as well as low operational noise.

Thanks to its unique tapered body, the AUTOMIZER RIGHT-HANDTM has the best compaction and load distribution available on today's market. The tapered body design also results in a smoother, simplified unloading process at the landfill or transfer station. Less time spent at the landfill means more bins collected per day.

Figure 1-1 The Automizer Right-Hand[™]



Figure 1-2 Right-Hand[™] arm



The body of the AUTOMIZER RIGHT-HANDTM is composed of the following main components: the hopper (see Figure 1-4), the packer (see Figure 1-3), the crusher panel (see Figure 1-5) and the tailgate (see Figure 1-3).

The hopper is the area of the body where refuse is dumped. The packer is the piece of equipment that pushes refuse into the body. The crusher panel is used to crush bulky items and can be used concomitantly with the packer blade for a more powerful crushing effect. The tailgate is the rear pivotal door that prevents refuse from exiting the body during collection. At landfill, the tailgate is raised to enable the discharge of refuse.

Figure 1-3 Packer panel (left); tailgate (right)







Figure 1-5 Crusher panel



In the cab, you will find the control panel on which the auto-pack and hydraulic pump switches are located (see Figure 1-6), and the arm joystick (see Figure 1-7).

Figure 1-6 In-cab control panel



NOTE: The design of the in-cab control panel may vary from one unit to the other. Also, the layout of the controls and indicators may differ from the one illustrated above.

Figure 1-7 Arm joystick



Multiplexed System

The AUTOMIZER RIGHT-HANDTM is equipped with an electronic monitoring system called the *Multiplexed System*.

The Multiplexed system used by Labrie is a CAN-based system that integrates a monitor, a control panel and a number of electronic modules. This whole system has been designed to help you operate your unit in an efficient and easy way. See *Labrie's Multiplexed System* on page 49 for more details.

IMPORTANT: AUTOMIZER RIGHT-HAND[™] units must be operated by only one person.

Standard Limited Product Warranty

Subject to the other provisions hereof, LABRIE ENVIROQUIP GROUP, hereinafter called "Labrie" warrants that all new Labrie products (the "Product") shall be free of defects in material and workmanship under normal use and service for a period of ONE (1) YEAR after delivery to the first registered customer/end-user.

WITHOUT LIMITATION TO THE OTHER PROVISIONS HEREOF, THIS PRODUCT WARRANTY DOES NOT COVER:

- Any and all components or parts of the Product, including without limitation the vehicle chassis, which are not manufactured and installed by Labrie, whether or not they are covered by an original manufacturer's or supplier's warranty;
- Paint;
- Damages resulting from abuse, misuse of the Product or from negligence or accidents;
- Damages resulting from use of the Product other than for its intended purpose or in a manner other than its intended normal use and service;
- Damages caused by improper maintenance of the Product including, without limitation, failure to comply with the maintenance requirements set forth in the Product's Parts and Maintenance Manual;
- Damages caused by the operation of the Product with parts or components known by the customer/end-user to be defective or in need of maintenance;

- Parts, components or systems which have been modified without the express authorization of Labrie or of an authorized Labrie distributor;
- Repairs which are not completed or otherwise expressly authorized by Labrie or an authorized Labrie distributor;
- Repairs or modifications which have been authorized by Labrie or an authorized Labrie distributor that are performed by personnel which is not qualified to perform such repairs or modifications;
- Normal wear item parts including, without limitation, oils, fluids, filters, tracks, rollers, wear shoes, tailgate seals, chains, divider blades and normal wear of the steel structure;
- Any and all adjustments and maintenance resulting from normal use and service of the products.

For the purposes of this warranty, normal use and service means the operation of the new Product for fifty (50) hours per week for its intended purpose and in compliance with the operation and maintenance instructions which are provided by Labrie in the Product's operation and maintenance manuals. It is the customer/end-user's responsibility to make sure that all operators are familiar and comply with the operation manual and the warning decals on the Product.

In the event a part or component of the Product fails or becomes defective during the warranty period and, in the opinion of Labrie, such failure or defect results from Labrie's material or workmanship, the part or component shall be repaired or replaced by Labrie or an authorized distributor at no cost provided that the unit is brought to an authorized distributor's service facility. However, the aforementioned repair or replacement of parts or components may be performed by the customer/ end-user as provided herein if specifically authorized by Labrie or an authorized Labrie distributor.

Because the Product is engineered to work only with genuine Labrie parts and components, this warranty shall be void and of no effect if i) the Product is modified other than by Labrie or by an authorized Labrie distributor or other than in accordance with a specific authorization and instructions from Labrie or from an authorized Labrie distributor or ii) if parts and components of any other manufacturer are used as substitutes for genuine Labrie parts and components.

LABRIE MAKES NO WARRANTY AS TO MERCHANTABILITY, FITNESS FOR USE, LEGALITY OF OPERATION IN ANY JURISDICTION OR ANY IMPLIED WARRANTY OF ANY KIND OR NATURE. LABRIE SHALL NOT BE LIABLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR NATURE. NO OTHER PERSON, FIRM, CORPORATION, INCLUDING THE LABRIE DISTRIBUTOR, CAN BIND LABRIE TO ANY WARRANTY OTHER THAN THIS WARRANTY OR OTHERWISE MODIFY SAID WARRANTY.

Labrie reserves the right to redesign and/or discontinue the manufacture of parts, components, and Products.

This limited warranty may be transferred to subsequent end-users within fifteen (15) days of the Product transfer provided that Labrie is notified in writing within the said fifteen (15) day period.

To Contact Labrie Plus

In the U.S.

Address:	1198 Shattuck Industrial Blvd.	
	LaFayette, GA 30728	

Toll Free:	1-800-231-2771
Telephone:	1-920-233-2770
General Fax:	1-920-232-2496
Sales Fax:	1-920-232-2498

Parts and warranty:	During business hours, 8:00 AM to 6:00 PM Eastern Standard Time
Technical Support Service:	Available 24 hours

In Canada

Address:	175A Route Marie-Victorin
	Levis, QC G7A 2T3
Toll Free:	1-877-831-8250
Telephone:	1-418-831-8250
Service Fax:	1-418-831-1673
Parts Fax:	1-418-831-7561
Parts and warranty:	During business hours, 8:00 AM to 5:00 PM Eastern Standard Time
Technical Support Service:	Available 24 hours

Website:	www.labriegroup.com
E-mail:	sales@labriegroup.com

IMPORTANT: For technical support and parts ordering, the serial number of your vehicle is required. Therefore, Labrie Enviroquip Group recommends to keep record of the information found on the VIN plate, which is located in the cab.



Safety

Safety is always of prime importance when operating any type of equipment. All operators working with the AUTOMIZER RIGHT-HANDTM must be aware of the safety practices and features detailed in this section.

Conventions

Danger!

Indicates a hazardous situation which, if not avoided, **will** result in serious injury or death.

Warning!

Indicates a hazardous situation which, if not avoided, *could* result in serious injury or death.

Caution!

Indicates a hazardous situation which, if not avoided, may result in *minor or moderate injury*.

Basic Safety Notions

The following safety notions are related to the use of the AUTOMIZER RIGHT-HANDTM. It is important to point out that the safe use of the vehicle remains the user's responsibility. He must heed all safety notions explained in this manual and on the decals on the vehicle.

Danger!



Always be aware of the vehicle's surroundings to make sure that no pedestrians, passersby, bystanders, or other people or vehicles are in any way exposed to any danger caused by the use of the AUTOMIZER RIGHT-HANDTM.

Danger!

Never get in the hopper area when the engine is running. Only authorized personnel may do so following a lockout/tagout procedure (see *Locking Out and Tagging Out the Vehicle* on page 40).

Responsibilities

Safety is everybody's responsibility. Both employer and employee must play their part to ensure the safety of the operator, the vehicle, and its immediate surroundings.

Employer Responsibilities

It is the responsibility of the employer:

- To ensure that employees are qualified for operating the vehicle and its equipment, and that they all take safety measures before using them.
- To properly maintain all mobile equipment to meet all provincial and federal safety standards.
- To supply the operator with adequate knowledge and skills to operate the vehicle and its equipment safely.
- To keep the vehicle maintained and properly adjusted to meet the manufacturer's standards and recommendations. For help or for more information, please contact the manufacturer or any of its authorized representatives.
- To keep records of all vehicle breakdowns and malfunctions, as well as any inspection and maintenance.
- To ensure that all failures or malfunctions that may be affecting the safe use of the vehicle are repaired before the vehicle is put back into operation.
- To meet the appropriate lighting requirements for night shift work (if permitted).
- To regularly accompany the vehicle operator and take measures to ensure the smooth and safe operation of the vehicle.
- To make sure that the backup alarm works properly when the vehicle is in reverse.
- To take necessary measures to correct any damage or malfunction reported by an employee.
- To establish a "lockout/tagout" procedure and ensure its application any time inspection, repair or maintenance is performed on the vehicle, regardless of whether it takes place on the road or in the garage.

Employee Responsibilities

It is the responsibility of the employee:

- To enforce all safety measures to meet the requirements established by the employer.
- To operate the AUTOMIZER RIGHT-HANDTM only after having received instruction and training.
- To perform routine daily unit inspections.
- To make sure that nobody is near the vehicle before activating any of the controls, and to be prepared to stop at any indication of possible danger.

- To immediately report any damage or malfunction of the vehicle to the employer or supervisor.
- To know where to get assistance in the event of an emergency.

IMPORTANT: Do not use damaged equipment.

Things to Do

- Inspect the body and all systems at the beginning of each day.
- Make sure that the area is clear of any people or possible obstructions.

IMPORTANT: Be extremely cautious in areas where small children may be present.

- Wear safety glasses and footwear, gloves, and any other safety equipment when loading and packing refuse.
- Check if mirrors, windows, lights, and monitor equipment are clean and properly adjusted.
- Check for explosive trash (e.g. television sets, paint cans, fluorescent light tubes, etc.).
- Use caution when driving with an unevenly distributed load.
- Inspect for overhead hazards (e.g. power lines) prior to hoisting the body or climbing on it.
- Always use the body safety prop when servicing under the body.
- Always use the tailgate safety prop before entering the area between the main body and the tailgate.
- Obey all warning and operation stickers.

Things to Avoid

- Do not operate any vehicle while under the influence of alcohol, narcotics or other intoxicants.
- Do not talk on a cell phone or listen to loud music while driving.
- Do not wear jewelry or loose clothing.
- Do not leave the vehicle before it is brought to a complete stop and work brake or parking brake is applied.
- Do not enter the hopper or main body unless the engine is shut off, the key is removed and there is an out-of-service tag on the steering wheel (see *Locking Out and Tagging Out the Vehicle* on page 40).
- Do not hoist the body on uneven ground.
- Do not drive with the tailgate fully open unless it is to unload refuse at the landfill.
- Do not drive with the tailgate fully open.
- Do not use the body safety prop to prop a *loaded* body.

Safety Precautions

Danger!

Operators must adhere to the following precautions *at all times*. Failure to do so may result in vehicle and/or property damage, personal injury, or even death.

Prior to Start-Up

- Never operate machinery while wearing jewelry or loose clothing. These items may become caught by or entangled in the machinery causing serious injury. Wear proper safety equipment as required by your employer.
- Never operate machinery while under the influence of alcohol, narcotics or other mood altering substances. Workers who operate machinery while under the influence are a hazard to themselves and others.
- Perform a pre-operation "walk around" inspection of the truck chassis in accordance with the chassis manufacturer's guidelines. Perform a "walk around" inspection of the refuse packer. Never start or operate any equipment found to have malfunctions.
 - Report any malfunctions immediately to the proper authorities.
 - Prior to leaving any malfunctioning unit, the parking brakes must be set, the pump switch disengaged, the engine turned off, the ignition key removed, and using a nonreusable fastening device, place a sign on the steering wheel indicating the unit is inoperative. For more information, see *Locking Out and Tagging Out the Vehicle* on page 40.
- Walk around the vehicle to make sure all persons and obstructions are clear before starting the unit.
- Before operating the vehicle the driver must be thoroughly familiar with the employer's safety program concerning traffic rules, warning devices and hand signals.
- Know your machine. Know the location and function of all controls, gauges, instruments and protective devices.

General Operation

- It is the employer's responsibility to ensure that *only* qualified employees operate this vehicle.
- It is the operator's responsibility to ensure that operation of the unit is in accordance with the guidelines contained in the Operator's manual and in accordance with all applicable codes including the Occupational Safety and Health Act (OSHA) and the American National Standards Institute (ANSI) regulations.
- Read and make sure that you fully understand this manual and all safety decals before operating this vehicle. Maintenance personnel must also read and understand the Maintenance Manual for this vehicle. In case of doubt, ask a supervisor for clarifications.
- Before every work day, inspect the body, the packing system, and any system that might compromise public and/or operator safety.

- Verify that the accelerator pedal, the steering wheel, mirrors, brakes, and turn signals are in good working order.
- Do not operate this vehicle if there are any signs of damage or incomplete repairs.
- Start the engine following the manufacturer's recommended procedure.
- Turn on appropriate warning lights, put on a safety vest, and protective glasses and shoes.
- *Never* drive this vehicle with the tailgate unlocked.
- When driving the vehicle, keep both hands on the steering wheel at all times.
- Stop the vehicle completely and put on the parking brake before leaving the driving position.
- When the vehicle is parked, the parking brake *must* be applied.
- Before activating the automated arm, operators shall make sure that people and obstructions are far away from the vehicle. Operators must be able to stop the arm at all times.
- AUTOMIZER RIGHT-HANDTM vehicles are primarily designed to be operated *by only one person*. However, if Labrie Enviroquip Group customers elect to operate the vehicle with more than one worker, additional safety items shall be installed *to protect the co-worker* from hazardous situations.

IMPORTANT: In such cases, Labrie Enviroquip Group *must be informed* of every and all units that will be operated by more than one worker. Labrie Enviroquip Group will then determine and supply, at the customer's expense, the required safety items. For additional information, please contact Labrie*Plus* at 1-877-831-8250 in Canada or 1-800-231-2771 in the U.S.

- Report any doubts that you might have and any safety service requirements regarding this vehicle to a supervisor.
- When removing nylon lock nuts, *always* replace them with new ones.
- During waste collection, do occasional walkarounds to check for problems (tires, lights, etc.) and listen for air leaks.
- For any work (including cleaning and inspecting) that has to be done between the body and the chassis, *always* use the body safety prop. Also, the vehicle *must* be on level ground.
- Before opening and closing the tailgate and/or raising the body, make sure no one is behind the vehicle.
- Stand clear when the tailgate is being raised or lowered and during the unloading cycle. If it is necessary to manually clear the debris from the tailgate, use a long metal probe and DO NOT stand under the tailgate.
- Make sure the backup alarm is working properly.
- Do not get into the hopper compartment or try to repair anything inside when the hydraulic pump is still running. Personnel authorized to get into the hopper *must* first lock out and tag out the vehicle, as required by the employer. For more information, see *Locking Out and Tagging Out the Vehicle* on page 40.
- *Never* stand near or underneath a raised arm or grabber, since no arm cylinder is equipped with a holding valve.

• *Never, under any circumstances* (maintenance or otherwise), stand underneath a *loaded* body.



Hydraulics

- Hydraulic fluid operates under high temperatures. Avoid contact with piping, hoses or cylinders to prevent burns.
- Never use hands to check for leaks. Hydraulic fluid escaping under pressure may cause injury.
- In case of injury seek proper medical treatment immediately.

Fire Protection

The employer must inform and train all personnel on the measures that must be taken in case of a vehicle and/or loaded body catching fire.

Anytime a loaded vehicle is *brought inside a garage*, fire extinguishers shall be close at hand.

The employer must also inform employees of an appropriate place to unload the body near the maintenance facility (preferably away from traffic, surface drains, and ditches).

AUTOMIZER RIGHT-HANDTM vehicles are equipped with a 5-lb fire extinguisher, which is located inside the cab. A 20-lb fire extinguisher may also be installed as an option. Each fire extinguisher must be checked regularly by qualified personnel.



Figure 2-1 20-lb fire extinguisher (left); 5-lb fire extinguisher (right)

Safety Kits

A first aid kit and a triangle kit are provided with the truck.

Safety and Informative Decals

Pay careful attention to all safety, warning and informative decals while working in and around the AUTOMIZER RIGHT-HANDTM. Keep your decals clean and in good condition at all times. For replacement decals, please call Labrie*Plus*. Decals may vary from one unit to another depending on the options and features installed on the unit. The following is an illustrated list of decals, but not limited to.

Decals on Body



84459

84458 - English/French



47260

120977 - English/Spanish 79833 - English/French



120989 - English/Spanish 79846 - English/French



47312

- 84011 English/Spanish 84010 - English/French
- ABRIE

32307



47272

84053 - English/Spanish 79838 - English/French



84470 84469 - English/French

	A PELIGRO
Stop truck	Apague el
engine and	motor y retire
remove ignition	contacto antes
key before	de ingresar en
servicing the	la tolva de
hopper area.	carga.
Ĭ	∏⇔¶
ADANGER	APELIGRO
ADANGER Crush Hazard	APELIGRO Peligro de
ADANGER Crush Hazard Stand clear	APELIGRO Peligro de aplastamiento
ADANGER Crush Hazard Stand clear when packer	APELIGRO Peligro de aplastamiento Manténgase alejado cuando
▲DANGER Crush Hazard Stand clear when packer panel is in	APELIGRO Peligro de aplastamiento Manténgase alejado cuando el panel del
▲DANGER Crush Hazard Stand clear when packer panel is in motion.	APELIGRO Peligro de aplastamiento Manténgase alejado cuando el panel del empacador esté
ADANGER Crush Hazard Stand clear when packer panel is in motion. Failure to	APELIGRO Peligro de aplastamiento Manténgase alejado cuando el panel del empacador esté en movimiento.
ADANGER Crush Hazard Stand clear when packer panel is in motion. Failure to comply will	APELIGRO Peligro de aplastamiento Manténgase alejado cuando el panel del empacador esté en movimiento. La falta de cumplimiento
ADANGER Crush Hazard Stand clear when packer panel is in motion. Failure to comply will injure or kill.	APELIGRO Peligro de aplastamiento Manténgase alejado cuando el panel del empacador esté en movimiento. La falta de cumplimiento dañará o matará.

⁸⁴⁴⁶⁸ 84467 - English/French



43800 84039 - English/Spanish 79867 - English/French



47270 120981 - English/Spanish 79837 - English/French



47262 120978 - English/Spanish 79834 - English/French



47268 120974 - English/Spanish 79836 - English/French



DANGER

Do not enter hopper while truck engine running.



47282

47308

84059 - English/Spanish

79847 - English/French

120983 - English/Spanish 79842 - English/French

47280

120982 - English/Spanish 79841 - English/French



CAUTION DIESEL FUEL ONLY

47286

84054 - English/Spanish 79844 - English/French



WARNING

Remove all control levers from automated arm valve. Use these control levers for maintenance purposes only. Even with pump switch off, or red button pushed in, automated arm remains operable.

47314

84060 - English/Spanish 79848 - English/French 47348

84015 - English/Spanish 84014 - English/French



WARNING

Install safety pins

on tailgate locking

mechanism after

each unloading.

47350 84072 - English/Spanish 79850 - English/French



WARNING

safety prop when cleaning or servicing under

47352 84073 - English/Spanish 79851 - English/French



safety pin to prevent floating panel from falling back in place.

47424

84077 - English/Spanish 79854 - English/French



47554

47422

121033 - English/Spanish

79853 - English/French

79768 - English/Spanish 79856 - English/French



47562 47795 - English/Spanish 79776 - English/French



BODY PROP INSTALLATION INSTRUCTIONS 1- RAISE THE BODY TO BE ABLE TO TILT THE SAFETY PROP UNDER THE BODY (8 FEET) 2- RELEASE THE SAFETY PROP USING THE HANDLE 3- SET THE SAFETY PROP INTO POSITION 4- LOWER THE BODY ON THE SAFETY PROP

5- REVERSE THE ABOVE INSTRUCTIONS TO STORE THE SAFETY PROP

43816

84040 - English/Spanish 79865 - English/French

79781

79782 - English/Spanish 84099 - English/French

NO DRILLING Electrical wiring inside.

84321

159775 - English/Spanish 159855 - English/French



178649





32411 Optional



84419 - Spanish 159761 - French Optional

47564

EMERGENCY PROCEDURE

- Stop the engine.
- · Close the manual shut off valve.
- · Call maintenance personnel or advise your supervisor.
- The vehicle should be inspected by qualified personnel before restarting the engine.
- If the vehicle is parked inside a facility, ventilation of the building should be performed.
- Move the vehicle outside for
- See CNG Fuel Supplement Manual for leak detection procedure.

inspection.

REFUELING PROCEDURE

- Refueling of this vehicle must be done by QUALIFIED and AUTHORIZED personnel only.
- · Always apply the parking brake.
- · Stop the truck's engine.
- At the dispenser, follow the mandatory safety and filling procedures of the station, Do not over pressure gas containers (Max. 3600PSI).
- · When finished re-install the dust cap on the filling port.

Installation of tanks, fitting and natural gas line must be performed by a qualified mechanic with a valide certificate of the following: gas carburation technical certificate.

WARNING

Prior to performing repairs, refer to the manufacturer service manual regarding the depressurisation of the CNG system. LABRIE

97832

REV.1

84447 - Spanish 159759 - French

Optional

Zlabrie				
POSITION	AU	EX	FL	мм
1	TAILGATE CLOSE	TAILGATE CLOSE	TAILGATE CLOSE	TAILGATE CLOSE
2	TAILGATE OPEN	TAILGATE OPEN	TAILGATE OPEN	TAILGATE OPEN
3	BODY RAISE	BODY RAISE	TOP DOOR CLOSE	BODY RAISE
4	BODY LOWER	BODY LOWER	TOP DOOR OPEN	BODY LOWER
5	N/A	CRUSHER PAN. RAISE	FORKS INCREASE	BOX LOCK
6	PACK	PACK	PACK	PACK
7	RETURN	RETURN	RETURN	RETURN
8	SPARE OUT 1	RH CRUSHER PAN. RAISE	ARMS UP OUT	DUAL PRESSURE
9	SPARE IN 1	NOT USED	ARMS UP IN	NOT USED
10	CHUTE LOCK	RH CRUSHER PAN. LOWER	JOYSTICK CUT OUT	PIVOT FLOAT
11	N/A	CRUSHER PAN. LOWER	FORKS DECREASE	BOX UNLOCK



SHUT OFF VALVE

LOCATED ON

SUCTION LINE

BEHIND THE

HYDRAULIC TANK

121349

97832

121350 - French

84457 84456 - English/French

84482



47702

159772 - Spanish 47703 - French 169361 - English/French



84272

159782 - Spanish 84336 - French 169363 - English/French

Decals on Tailgate



32307



120973 79835 - English/French



Stand clear of tailgate when in raised position.

47268 120974 - English/Spanish 79836 - English/French

THIS VEHICLE IS POWERED BY NATURAL GAS

32414A

84418 - Spanish Optional 159760 - French



47274 47777 - English/Spanish 79839 - English/French Optional

Decals outside Cab





47308 84059 - English/Spanish 79847 - English/French

Decals inside Cab



84078 - English/Spanish 79855 - English/French 159812 - English/French

ARM EXTENDED

LABRIE

43882

47877

43882 84491 - English/Spanish 84009 - English/French

REV.1

REV.5

43764



CRUSHER PANEL INTERLOCK

TO OPERATE THE CRUSHER PANEL, MEET THE FOLLOWING CONDITIONS:

PACKER FULLY RETRACTED

159776 - English/Spanish 84030 - English/French

43764

- ARM BELOW MID-HEIGHT POSITION
- CHUTE IN POSITION OPPOSITE THE CRUSHER PANEL.

CRUSHER PANEL INTERLOCK NOTE:

IF THE CRUSHER PANEL IS NOT IN THE FULLY RAISED POSITION, THE ARM AND THE CHUTE BECOME INOPERABLE.

47878 Optional 159777 - English/Spanish 84029 - English/French

+7420	
	A WARNING

BODY RAISED INHIBITOR

WHEN ARM IS OUT.

LABRIE



156068

159814 - English/French

Optional



156067

159813 - English/French



84021 - English/Spanish 84020 - English/French







185520 - English/French



43850 84001 - English/Spanish 79822 - English/French



43910

84013 - English/Spanish 84012 - English/French



104539 84032 - English/Spanish 84031 - English/French


47284 120980 - English/Spanish 79843 - English/French



43972

84148 - English/Spanish 79831 - English/French



43764_R4

159834



43794

84147 - English/Spanish 79819 - English/French





CHUTE OVERRIDE Press when chute is not responding 47250 rev. 0

Optional

47250 47251 - French

ARM OVERRIDE Press when arm is not responding 47998 rev, 0

47998 84018 - English/French





84158 - English/Spanish 84157 - English/French

47600

47601 - French



84373 84372 - English/French



84406 84407 - French

Optional



84397 84396 - English/French



43792 84023 - English/Spanish 84022 - English/French





Multiplex Switch Actuators (1)

NOTE: Multiplex switch actuators and their location on the control panel vary according to the options installed on the unit.



Multiplex Switch Actuators (2)



NOTE: This illustration and the preceding one were taken from the PDF file no 159535.

NOTE: 1- All symbols to be negative lens.2- Electronic file for the symbols available on request from Labrie Enviroquip Group only.

Safety Features

Back Up Alarm

The back up alarm sounds when the truck is in reverse or when the hopper is being raised.

Body Safety Prop

Safety props ensure that heavy body parts will not move inadvertently.

Setting the Body Safety Prop

The body safety prop ensures that an *empty* body will not lower when you are working underneath it.



Always set the body safety prop when performing maintenance underneath a raised body. Failure to do so may result in severe injury, or even death.

Figure 2-2 Body safety prop



To set the body safety prop:

- 1. Make sure that there is enough clearance above the body to raise it safely.
- **2.** Start the engine.
- **3.** Turn ON the pump (see *Pump Switch* on page 68).
- **4.** With the BODY UP switch on the control panel (see *Body Up Switch* on page 69), raise the body until the safety prop is free to tilt under it.

5. Release the safety prop using the safety prop handle and position it adequately.

Figure 2-3 Safety prop handle



- **6.** With the BODY DOWN switch on the control panel (see *Body Down Switch* on page 69), lower the body until it rests on the safety prop.
- 7. Lock out and tag out the vehicle (see *Locking Out and Tagging Out the Vehicle* on page 40).

You can now work safely underneath the body.

Putting the Body Safety Prop Back in Place

To put the body safety prop back in its home position:

- **1.** Make sure that there is enough clearance above the body to raise it safely.
- **2.** Start the engine.
- **3.** Turn ON the pump (see *Pump Switch* on page 68).
- **4.** With the BODY UP switch on the control panel (see *Body Up Switch* on page 69), raise the body until the safety prop can move freely.
- **5.** Put the safety prop back in its place.
- **6.** With the BODY DOWN switch on the control panel (see *Body Down Switch* on page 69), lower the body until it rests on the chassis.

Tailgate Safety Prop

The tailgate safety prop (see Figure 2-4) is used to support and keep the tailgate open during inspection or maintenance procedures. It is mandatory to set the safety prop every time the tailgate is open for such purposes.

IMPORTANT: Make sure that the body is empty before installing the safety prop.



The tailgate safety prop shall be set each time the tailgate is open for inspection and maintenance purposes.

Setting the Tailgate Safety Prop

To set the tailgate safety prop:

- **1.** Make sure that the body is empty.
- 2. Remove the safety pins.

Figure 2-4 Safety pin & prop



- **3.** Start the engine.
- 4. Turn ON the pump (see *Pump Switch* on page 68).



Prior to raising the tailgate, make sure that no one is standing behind the vehicle and that the body is empty.

- **5.** With the TAILGATE UP switch on the control panel (see *Tailgate Up Switch* on page 70), raise the tailgate high enough to be able to move the safety prop freely.
- 6. Pull the safety prop upward and set it down (see Figure 2-5).

Figure 2-5 Pulling the safety prop upward (left) and setting it down (right)



7. Lower the tailgate onto the safety prop using the TAILGATE DOWN switch on the control panel (see *Tailgate Down Switch* on page 71).

Putting the Tailgate Safety Prop Back in Place

To put the tailgate safety prop back in its home position:

- **1.** Start the engine.
- 2. Turn ON the pump (see *Pump Switch* on page 68).
- **3.** With the TAILGATE UP switch on the control panel (see *Tailgate Up Switch* on page 70), raise the tailgate high enough to be able to move the safety prop freely.
- **4.** Raise the tailgate safety prop.

Figure 2-6 Raising the tailgate safety prop



5. Release your grip on the safety prop to set it in its home position.

Figure 2-7 Setting the safety prop in its home position



6. With the TAILGATE DOWN switch on the control panel (see *Tailgate Down Switch* on page 71), fully close the tailgate.

The TAILGATE OPEN message on the monitor screen should disappear.

7. Put the safety pins back in place.

Camera System

Your AUTOMIZER RIGHT-HANDTM unit may be equipped with several cameras. Examples of the locations where a camera can be installed on the truck are the following: inside the hopper (Figure 2-8), on the tailgate (see Figure 2-9), on or near the rear/front right side hopper post (Figure 2-10), and on the left-hand side mirror (Figure 2-11).

The operator can switch from one camera to the other using a selector switch located on the 9" LCD color monitor installed in the cab.

Refer to the camera manufacturer's manual for more information.

Figure 2-8 Camera inside hopper



Figure 2-9 Camera on tailgate



Figure 2-10 Camera next to hopper post



Figure 2-11 Camera on left-hand side mirror



Tailgate Holding Valve

Located under the rear section of the body, this holding valve ensures that the tailgate will not open during the packing cycle.



Cleanliness

Cleanliness is part of safety. Ensure that the equipment works properly by removing any compacted garbage in the packer area after each body unloading.

Clean all the lights and safety decals so you and the surrounding pedestrians and drivers will be aware of the truck at all times. Use the hoe to rake dirt out of clean-out traps on each side of the vehicle.

Figure 2-12 Removing debris through the clean-out trap



Locking Out and Tagging Out the Vehicle

For any inspection, repair or general maintenance being done on the vehicle, whether on the road or at the shop, it is the employer's responsibility to establish and see to the application of a proper lockout and tagout procedure.

To lock out and tag out your AUTOMIZER RIGHT-HANDTM vehicle:

1. Park the vehicle on safe level ground and apply the parking brake (see Figure 2-13).

Figure 2-13 Parking brake knob



- 2. Make sure that the body is completely unloaded.
- **3.** Turn OFF the hydraulic pump (see *Pump Switch* on page 68).
- **4.** Turn OFF the engine, remove the key from the ignition, store it in a safe and controlled area (preferably on yourself), and tape over the ignition switch.
- **5.** Turn OFF and lock the master switch.
- **6.** Chock all wheels.

IMPORTANT: The battery set of the AUTOMIZER RIGHT-HAND[™] is equipped with a master switch (see Figure 2-14) that must be turned off.

Figure 2-14 Master switch



- **7.** Put an "OFF SERVICE" tag on the driver's wheel and on the front windshield.
- 8. Use safety props to block any system that could move by gravity (open tailgate, raised body, etc.).
- **9.** Drain all air tanks.
- **10.** Verify and inspect any security device and/or mechanism to make sure that there is no bypass and that they are all functional.

Shutting Down the Vehicle

If the vehicle has to be stored for an extended period of time, follow the chassis manufacturer's shutdown and maintenance requirements.

Also:

- **1.** Park the vehicle on a hard level surface, and apply the parking brake (see Figure 2-13).
- 2. Make sure that all moving parts are in their home position (tailgate, arm, packer, etc.).
- **3.** Turn OFF, in sequence, the hydraulic pump (see Figure 2-17), the electrical system, the engine and the master switch (see Figure 2-14).
- **4.** Drain all air tanks.

Figure 2-15 Drain valves on air tank (left) and water trap (right)



Prior to Start Up

Before starting the vehicle:

- 1. Make sure no system will engage and/or start to operate as you start the engine.
- **2.** Make sure the shut-off valve on the hydraulic tank is fully open before starting the vehicle (see Figure 2-16).

Figure 2-16 Suction line shut-off valve



NOTE: The hydraulic tank model may vary according to the options installed on the vehicle.



Failure to fully open the main valve will cause immediate damage to the pump, even if the pump is turned off.

- 3. Start the engine according to the chassis manufacturer's recommendations.
- 4. Once the engine is started, wait for the air pressure to build up to *at least* 70 psi.

IMPORTANT: In cold weather, let the engine turn at idle a few minutes to warm up the hydraulic oil sufficiently before engaging the pump.

5. Engage the hydraulic system by turning ON the pump switch (see Figure 2-17).

Figure 2-17 Hydraulic pump ON/OFF switch



IMPORTANT: Do not operate or move the vehicle until the air pressure has reached 70 psi.

- 6. Turn ON all light switches.
- 7. Report any defective system to the maintenance personnel.

Driving the Vehicle

The AUTOMIZER RIGHT-HANDTM may be equipped with two (2) steering wheels, one on the left and one on the right. The right-hand side steering wheel makes waste collection easier by a single person. It is provided along with an accelerator pedal, a foot brake pedal, a turn signal control and a horn. Before using the right-hand side driving position make sure that all controls are properly set.

Driving Speed

If the cab of the vehicle has been modified by Labrie Enviroquip Group (w/ right-hand side driving position) for door-to-door waste collection, the maximum speed limit while driving at the right-hand side is, if permitted, 20 mph (32 km/h). Therefore, it is recommended to drive on the left-hand side for any long distance driving (if the truck is equipped with a left-hand side driving position).





Figure 2-19 Right-hand side driving position installed by Labrie



NOTE: If the cab has been modified, or the right-hand side driving position has been installed, by the chassis manufacturer, the operator MUST follow the chassis manufacturer's recommendations.



If the vehicle has to be parked for an extended period of time, always apply the parking brake (see Figure 2-19).

Changing to Right-Hand Side Driving Position

The following procedure applies **ONLY** to cabs that had been modified by Labrie Enviroquip Group. It must be followed at the beginning, but also at the end of the collection route in order to revert to the left-hand side driving position.

NOTE: This procedure applies only to vehicles that had been modified by Labrie Enviroquip Group and that are equipped with dual driving position. Some units are designed only with a single driving position.

If the cab has been modified by the chassis manufacturer, the operator **MUST** ignore the following procedure and rather follow the chassis manufacturer's recommendations.

Before using the right-hand side driving position, do the following:

- 1. Drive the vehicle to the beginning of the collection route using the left-hand side steering wheel.
- **2.** Stop the vehicle and apply the parking brake.
- **3.** Press the emergency stop button on the packer control station (see Figure 3-23).
- **4.** Turn OFF the engine.
- **5.** Move to the right-hand side driving position.
- **6.** Shift the driving position switch to the right.

All the electrical accessories of the right-hand side driving position are then enabled.

Figure 2-20 Driving position switch (optional)



7. Enable the right-hand side joystick by moving the joystick selector switch to the right (if installed).

On some trucks, selecting the appropriate joystick is done using the joystick selector switch located on the control panel (see Figure 2-21).

- Press the top part of the switch to enable the right-hand side joystick.
- Press the bottom part of the switch to enable the left-hand side joystick.

A blue-lighted switch means the corresponding function is disabled.

A green-lighted switch means the corresponding function is enabled.

Figure 2-21 Joystick selector switch (optional)



8. Adjust mirrors properly.

Use Figure 2-22 to help you achieve the appropriate adjustment.



48 Safety



Controls and Indicators

The AUTOMIZER RIGHT-HANDTM has a series of controls and indicators that allow easier operation of the different functions that come with the vehicle. These controls and indicators are mainly located on the in-cab control panel and on the dashboard.

Labrie's Multiplexed System

Labrie has equipped your AUTOMIZER RIGHT-HANDTM unit with a CAN bus-based multiplexed system, which integrates a monitor, a control panel, a joystick, and a set of electronic modules. This whole system has been designed to help you operate your unit in an efficient and easy way. Labrie's multiplexed system is reliable and safe, and it requires less wiring harnesses to operate. It can also monitor various function status of the body and display warning and caution messages.

Through its monitor (see Figure 3-1), Labrie's multiplexed system informs you of any malfunctions that may occur during the operation of the truck. Various caution and warning messages can be displayed on the monitor, depending on the seriousness of the situation. Yellow-highlighted messages indicate that caution should be used while red-highlighted messages indicate a warning situation that must be dealt with quickly.

Figure 3-1 Monitor



Each time the operator turns the ignition key on, a complete bit test of the multiplexed system is conducted. This test takes about 5 seconds to complete.

NOTE: A flashing green light on the monitor indicates that the power is on. This light should be blinking steadily at 2 Hz during normal operation. If it blinks at a faster rate, it is a sign of a problem with the monitor. A flashing red light on the monitor is also a sign of a problem. Call Labrie*Plus* for support.

The logo of Labrie Enviroquip Group appears momentarily on the monitor screen at the start of the system (see Figure 3-2).





- **NOTE:** If the Welcome Screen with the Labrie logo stays on continuously, there may be a communication problem between the monitor and the master control module. Report this problem to the maintenance personnel.
- **NOTE:** The monitor screen works even if the engine is not started. All it needs is electrical power. However, if you start the engine, the monitor will reboot to reflect the changes caused by the starting of the truck.

Main Page

The next page that comes up after the Welcome Screen is the Main Page (see Figure 3-3). Here you will find a link that will give you access to the Main Menu (see *Main Menu* on page 56). Any warning or error messages that may occur while the truck is being operated are also displayed on this page. The following optional indicators, when provided, are also found on the Main Page : Cart Counter, Time and Date Indicator and Hydraulic Oil Temperature Indicator.

Cart Counter (optional)

This indicator tells you how many carts have been emptied so far.

Figure 3-3 Cart counter



Press the far right button to reset the counter display to zero.

Time and Date Indicator (optional)

A time and date indicator may be found on the upper left-hand side corner of the screen. The availability of this indicator is based on the chassis on which the body is mounted. If the chassis provides real-time clock information through J1939 bus, time and date will appear on the screen. To set the Time and Date indicator, go to the Main Menu and choose Time Adjust.

Hydraulic Oil Temperature Indicator (optional)

This optional indicator, when provided, shows you the current hydraulic oil temperature. This indicator is found on the upper right-hand side corner of the screen.

Warning and Caution Messages

On the monitor screen, yellow-highlighted messages indicate that caution should be used and redhighlighted messages indicate a warning situation that must be dealt with quickly.

Figure 3-4 Warning and caution messages on monitor

	Comm. I	Lost with	Master	
	Max 15	can with Mas	W.	
Mei	Righ u Press (It Counter	r:0 Narms Ret	set

See Table 1 for a list of warning and caution messages. Please note that this list is not exhaustive.

Table 1 Warning messages

Warning and Caution Messages	Solution
Arm:Body Raised	Lower Body
Arm:Hopper Door Not Close	Close Hopper Door
Arm:Pump Not Started	Engage Pump
Arm:Tailgate Unlocked	Lock Tailgate
Body:Pump Not Started	Engage Pump
Buzzer:Arm Not Stow	Retract Arm to Stowed Position
Buzzer:Body Raised	Lower Body
Buzzer:TailGate Unlocked	Lock Tailgate
Crusher:Arm Too High	Lower Arm
Crusher:Hopper Door Not Closed	Close Hopper Door
Crusher:Packer Not Retracted	Retract Packer
Crusher:Pump Not Started	Engage Pump
ESTOP:Aux Cab EStop	Pull Out Aux Cab EStop Button
ESTOP:Cab EStop	Pull Out Cab EStop Button
Gripper Open:Arm Too High	Lower Arm
High Hydraulic Oil Temp.	Turn Off Engine and Refer to your Maintenance Personnel
Low Hydraulic Oil	Add Hydraulic Oil
Miss 1 Scan with Master	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Packer Extend:Air Weigh Signal	Unload Body
Packer:Already Extended	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Packer:Already Retracted	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Packer:Pump Not Started	Engage Pump
Packer:Tailgate Not Open	Open Tailgate

Table 1 Warning messages (cont'd)

Warning and Caution Messages	Solution
Pump Not Started:Aux Cab Estop	Pull Out Aux Cab EStop Button
Pump Not Started:Cab EStop	Pull Out Cab EStop Button
Pump Not Started:Hopper Door Not Closed	Close Hopper Door
Pump Not Started:Main Air Pressure	Let the Air Build Up to Required Pressure
Pump Not Started:RPM to High	Lower Engine Speed Below 900 RPM
Pump:Aux. CloseGripper Switch ON	Release Aux. CloseGripper Switch prior to Engaging Pump
Pump:Aux. Deadman Switch ON	Release Aux. Deadman Switch prior to Engaging Pump
Pump:Aux. OpenGripper Switch ON	Release Aux. OpenGripper Switch prior to Engaging Pump
Pump:BodyLower Switch ON	Release BodyLower Switch prior to Engaging Pump
Pump:BodyRaise Switch ON	Release BodyRaiseSwitch prior to Engaging Pump
Pump:Hopper Door Not Close	Close Open Door
Pump:CrusherDown Switch ON	Release CrusherDown Switch prior to Engaging Pump
Pump:CrusherUp Switch ON	Release CrusherUp Switch prior to Engaging Pump
Pump:J1 CloseGripper Switch ON	Release J1 CloseGripper Switch prior to Engaging Pump
Pump:J1 Deadman Switch ON	Release J1 Deadman Switch prior to Engaging Pump
Pump:J1 OpenGripper Switch ON	Release J1 OpenGripper Switch prior to Engaging Pump
Pump:J2 CloseGripper Switch ON	Release J2 CloseGripper Switch prior to Engaging Pump
Pump:J2 Deadman Switch ON	Release J2 Deadman Switch prior to Engaging Pump

Table 1 Warning messages (cont'd)

Warning and Caution Messages	Solution
Pump:J2 OpenGripper Switch ON	Release J2 OpenGripper Switch prior to Engaging Pump
Pump:Packer Extend Switch ON	Release Packer Extend Switch prior to Engaging Pump
Pump:Packer Retract Switch ON	Release Packer Retract Switch prior to Engaging Pump
Pump:PTO or Trans. Not OK	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Pump:RPM Too High	Lower Engine Speed Below 900 RPM
Pump:TailgateDown Switch ON	Release TailgateDown Switch prior to Engaging Pump
Pump:TailgateUp Switch ON	Release TailgateUp Switch prior to Engaging Pump
Raise Body:Arm Not Stow	Retract Arm to Stowed Position
Raise Body:Truck Moving	Bring Truck to a Standstill
Service Oil Filter #1	Replace Oil Filter #1
Service Oil Filter #2	Replace Oil Filter #2
TailGate Up: Truck Moving	Bring Truck to a Standstill
TailGate:Packer Not Retracted	Retract Packer
TailGate:Pump Not Started	Engage Pump

Table 2 Error messages

Error Messages	Solution
Button Pack 12 is disconnected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Button Pack 13 is disconnected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Button Pack 14 is disconnected	Refer to Maintenance Personnel or Labrie <i>Plus</i>

Table 2 Error messages (cont'd)

Error Messages	Solution
Button Pack 15 is disconnected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
CAN Error Level 1	Refer to Labrie <i>Plus</i>
CAN Error Level 2	Refer to Labrie <i>Plus</i>
CAN Error Level 3	Refer to Labrie <i>Plus</i>
Comm. Lost with Master	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 11 is disconnected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 11 not Connected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 20 is disconnected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 20 not Connected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 30 is disconnected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 30 not Connected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 50 is disconnected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 50 not Connected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 60 is disconnected	Refer to Maintenance Personnel or Labrie <i>Plus</i>
Module 60 not Connected	Refer to Maintenance Personnel or Labrie <i>Plus</i>

Should the system issue a warning or caution message, it will appear on the Main Page.

For example, if the following caution message "Pump Not Started: Main Air Pressure" is issued by the system, it will appear on the Main Page of the monitor. An action that could be taken by the operator, when faced with such a situation, would be to wait until the required main air pressure level is reached.

For a specific problem or condition that requires special attention, the multiplexed system can alert the operator to a possible cause, which appears in bold and large print on the monitor screen (active cause). The operator should check if the problem stems from the highlighted or active cause. One possible cause is highlighted at a time. What is shown in light and small print in the lower part of the screen are causes that have already been dealt with (non active causes) [see Figure 3-5].

Figure 3-5 Example of possible cause



- **NOTE:** If the system detects a problem, a beep will sound and a message will appear on the monitor screen.
- **NOTE:** To go back to the Main Page or Main Menu, press "Esc" as needed until the desired page is displayed.

Main Menu

To access the Main Menu, press the far left button when the Main Page is displayed.

When the Main Menu is displayed, you can have access to the following sections:

- Multicycle
- I/O Status
- Program Version
- Pump Usage (optional)
- Time Adjust (available according to chassis)

Displayed in the lower center of the screen is an indicator that monitors traffic on the network. This indicator is called Network Load, and it shows values that reflect such traffic.

NOTE: The higher the network load value is, the heavier the traffic is on the network.

To exit this page and return to the Main Page, press "Esc". To choose a section from the Main Menu, highlight the desired section using the up/down arrows and press the "OK" button.

Multicycle

The monitor used in Labrie's multiplexed system is user-friendly. Say you want to change the multicycle settings of the packer. All you have to do is select MAIN MENU by pressing the corresponding button at the bottom left corner of the monitor. From the displayed menu, choose the option SELECT THE NUMBER OF CYCLES. If need be, use the arrow to choose that option and press "OK". The multicycle settings can be changed from two to eight cycles. Choose the desired number of cycles and press "OK". It could not be easier!





NOTE: The packer multicycle function has been preset at the factory to carry out three cycles.

When the MULTICYCLE switch on the control panel is on and the packer is activated, the packer will move according to the default number of cycles (that is 3) or to the number of cycles you chose (up to 8 cycles).



Figure 3-7 Control panel

To test the new settings of the packer:

- 1. On the control panel press the MULTICYCLE switch and the green START CYCLE button.
- **2.** Once the packer has completed its cycles and come to a stop, switch OFF the hydraulic pump and turn OFF the engine.

The number of cycles needs to be adjusted depending on the type of collection route used by the vehicle. For example, in a residential area, if the houses are numerous and close one to another, it may be required to increase the number of cycles. This will allow the hopper to be clear for the next house pickup.

Each time the packer completes a full cycle, the proximity switch located on the right-hand side, behind the packer, sends a signal to the electronic controller. The controller then counts the amount of cycles that the packer does, and will stop the packer after the preset amount of cycles has been reached.

I/O Status

In this section, you will find helpful information to troubleshoot body-related problems that you may face during your day-to-day tasks. These problems can be of any nature, from hydraulic to mechanical, electrical or pneumatic.

Select the control module corresponding to the part of the truck that needs to be checked.

For example, if you want to check all functions that are found in the cab, choose module #10. For all functions that pertain to the chassis, choose module #20, etc.

To choose a particular module, use the up/down arrows to select it and press "OK".

NOTE: Pressing "OK" can be done two ways: either press the far right button or the "OK" button.

Press "Esc" to return to the preceding page.

Figure 3-8 Module I/O Status page



Input Status

The Input Status page is accessible from the Module I/O Status page. After selecting the desired module and pressing "OK", the Input Status page of the selected module is displayed (see Figure 3-9).

Figure 3-9 Input Status page



The Input Status page contains a set of rectangles. Each of these rectangles represents input elements, which in turn correspond to a particular function of the truck. For example, if you select rectangle I00, a short description appears in the lower part of the screen, which indicates that this rectangle relates to the input element coming from the service brake pressure switch.

NOTE: Each rectangle is numbered and relates to a specific function of the truck. However, for a given number, the related function may vary from truck to truck.

Rectangles (inputs)	Function Status
Blue	Inactive
Green	Active

Table 3 Colored rectangles

Press "Esc" to return to the preceding page.

Press the "Output" button to display the Output Status page.

Output Status

The Output Status page (Figure 3-10) is accessible from the Input Status page.

Figure 3-10 Output Status page



The rectangles on this page are used to check the status of different outputs.

NOTE: Each rectangle is numbered and relates to a specific function of the truck. However, for a given number, the related function may vary from truck to truck.

Table 4 Colored rectangles

Rectangles (outputs)	Function Status
Blue	Inactive
Green	Active
Red	Closed short-circuit
Yellow	Open circuit

Press "Esc" to return to the preceding page.

Press the "Force" button to display the Force page.

NOTE: To go back to the Main Page or Main Menu, press "Esc" as needed until the desired page is displayed.

Force

The Force page is accessible from the Output Status page. Just press the corresponding button to access the Force page.

But before the Force page is displayed, a warning message appears on the monitor screen (see Figure 3-11).

Figure 3-11 Warning message



This message stays on for 15 seconds. Then an "OK" prompt appears on the lower right-end corner of the screen.

IMPORTANT: It is very important to read this message entirely before accessing the next page.

Figure 3-12 Warning message w/ "OK" prompt



Press "OK" to go to the Force page or "Esc" to return to the preceding page.

After pressing "OK", the Force page appears on the screen.





As no input function can be forced to be active or inactive, the operator must press the "Output" button to go to the following page (see Figure 3-14).

Figure 3-14 Force page (output)



The Force page allows the operator to force a function to be overridden, that is, to make an inactive function active and an active function inactive.

This page contains a set of rectangles. Each of these rectangles is numbered and corresponds to a specific function of the truck.

Colors are used to indicate whether the corresponding function is active or not:

- a blue rectangle means the corresponding function is inactive
- a green rectangle means the corresponding function is active

Also:

- a red rectangle means there is a closed short-circuit
- a yellow rectangle means there is an open circuit

A white-bordered rectangle means that this rectangle is selected. Use the directional arrows to select a specific rectangle or function. When a rectangle is selected, a short description of the corresponding function appears at the bottom of the screen.

After selecting a rectangle:

- press "ON" to activate the corresponding function (rectangle turns from blue to green)
- press "OFF" to deactivate the corresponding function (rectangle turns from green to blue)
- press "RESET" to have the software control the status of the corresponding function
- **NOTE:** To cancel changes made in this page and restore the default values, all you have to do is cut power to the multiplexed system by turning the ignition key off.
- **NOTE:** To go from a module to another (e.g. from module 10 to 20), the operator has to go back to the Module I/O Status page (see Figure 3-8) and select module 20.

Press "Esc" to return to the preceding page.

Joystick

The Joystick page is accessible from the Module I/O Status page (see Figure 3-8). From that page select "Joystick" using up/down arrows and press "OK". The Joystick page opens (see Figure 3-15).

Figure 3-15 Joystick page



The Joystick page allows the operator to check if all functions of the joystick are working correctly. If one joystick is installed on your vehicle, it will be represented on the monitor screen by joystick 127. However, if two joysticks are installed on your vehicle, any of the two joystick numbers (127 and 72) can represent either joystick on the screen.

If you press a joystick button, the corresponding button on the monitor will turn green. If nothing happens, there may be a communication problem between the joystick and the master control module. Refer to the maintenance personnel or Labrie*Plus*.

Also, if you move the joystick backwards, forwards or sideways, you should see the values under the illustration changing. If no change occurs when moving the joystick, a communication problem between the joystick and the master control module may be the cause. Refer to the maintenance personnel or Labrie*Plus*.

Press "Esc" to return to the preceding page.

<u>J1939</u>

The J1939 page is useful when you need some specific information (e.g. current gear, road speed, brake status).

Figure 3-16 J1939 page



Your vehicle is equipped with 2 different CAN-based communication buses:

- the J1939 bus, which is used for the chassis equipment; and
- the **CANopen bus**, which is used for the body.

These 2 communication buses are completely independent of one another, except for some specific data that are transferred from the chassis J1939 bus to Labrie's multiplexed system, where they are used. These specific data are the following:

- selected gear
- current gear
- road speed
- engine RPM
- brake
- parking brake

Press "Esc" to return to the preceding page.

Module Software Version

On the Module Software Version page, you will find the software version currently used by each of the modules installed on the truck and by the master control module.

Figure 3-17 Program Version page



With the information on this page it is possible for the operator or maintenance personnel to determine the electrical schematic number of a specific vehicle. Looking at Figure 3-17 above you will notice the following digit string 8-6-5-1 between, for example, 10 and R1. As all Labrie electrical schematics begin with ZS00, you simply add those digits to that base number to get the corresponding electrical schematic number. So, in this case, the electrical schematic number is ZS008651.

Press "Esc" to return to the preceding page.

Pump Usage

This section contains an optional hour meter that tracks pump usage for maintenance purposes.

Press "Esc" to return to the preceding page.

Time Adjust

This section allows you to set the Time and Date indicator.
Press "Esc" to return to the preceding page.

NOTE: To go back to the Main Page or Main Menu, press "Esc" as needed until the desired page is displayed.

Operational diagram of the Multiplexed System

Labrie Enviroquip Group has elaborated a document that illustrates the way the multiplexed system works. Particularly, it visually shows how this system reacts to different situations and how it manages the various lockouts that are on the AUTOMIZER RIGHT-HANDTM. It also makes reading and understanding related ladder logic diagrams much easier. The following are the first two pages of this document. If you are interested in receiving the entire document, call Labrie*Plus* (see *To Contact Labrie Plus* on page 7).





Control Panel

The control panel is located at the center of the cab for easy access during collection and operation. The following is a description of the control switches and indicators mounted on this panel.

Figure 3-18 Control panel (part 1)



Figure 3-19 Control panel (part 2)



NOTE: The switches and controls on the control panel vary according to the options installed on the vehicle.

PUMP Switch

This switch (see Figure 3-18) engages and disengages the hydraulic pump, all the body functions (packer, body hoist, tailgate) and the joystick that controls the arm.

NOTE: The switch turns green when the pump is engaged.

• Press the switch to activate the hydraulic pump.

- Press the same switch again to deactivate the hydraulic pump.
- **NOTE:** Do not close the main shut-off valve on the hydraulic tank even if the PUMP switch is turned off. The pump is always turning whatever the engine RPM. It is very important not to let the pump run dry or without oil. Otherwise, the pump will be seriously damaged or even destroyed.

Figure 3-20 Main shut-off valve



IMPORTANT: In case of a leak in the hydraulic system, and if the vehicle has to be driven somewhere else, take off the drive shaft between the pump and the engine. Call maintenance facility and refer to the Maintenance Manual.

BODY UP Switch

This control switch (see Figure 3-18) is used to raise the body. Press and keep down this switch to raise the body to the desired height.

IMPORTANT: Before using this switch, make sure that the truck is parked on a safe level ground.

When the body is raised a buzzer sounds.



Always use the body safety prop when performing maintenance under a raised body. Failure to do so may result in severe injury or even death.

BODY DOWN Switch

This control switch (see Figure 3-19) is used to lower the body. Press and keep down this switch to lower the body to the desired height. When the body touches the rod of the limit switch, the buzzer stops sounding.

TAILGATE UP Switch

This control switch (see Figure 3-18) is used to raise the tailgate. Press and keep down this switch to raise the tailgate to the desired height.

IMPORTANT: Before using this switch, make sure that the truck is parked on safe level ground.

IMPORTANT: Remove both tailgate-locking pins before using this control switch.



- **NOTE:** When the tailgate is unlocked both the in-cab buzzer (see Figure 3-21) and the backup alarm will start sounding off. A red warning light, located on the buzzer, will also blink.
- **NOTE:** Each time the tailgate is unlocked, the message "Tailgate Unlocked" appears on the monitor screen.
- Figure 3-21 Buzzer w/ red warning light



- **NOTE:** If the upward movement of the tailgate is stopped at any position except the fully open position, both TAILGATE UP and TAILGATE DOWN switches will flash red.
- **NOTE:** When the tailgate reaches the fully open position, the TAILGATE UP switch will turn green while the TAILGATE DOWN switch will turn blue.

TAILGATE DOWN Switch

This control switch (see Figure 3-19) is used to lower the tailgate. Press it and keep it down to completely close and lock the tailgate or to lower it until it rests on the tailgate safety prop.

IMPORTANT: When the tailgate is completely closed and locked, put both tailgate-locking pins back in place.

- **NOTE:** If the downward movement of the tailgate is stopped at any position except the fully closed and locked position, both TAILGATE UP and TAILGATE DOWN switches will flash red.
- **NOTE:** Each time the tailgate is unlocked, the message "Tailgate Unlocked" appears on the monitor screen.
- **NOTE:** When the tailgate is locked back, both the in-cab buzzer (see Figure 3-21) and the backup alarm will stop sounding off. The red warning light, located on the buzzer, will also stop blinking.
- **NOTE:** When the tailgate is completely closed and locked, the TAILGATE DOWN switch will turn green while the TAILGATE UP switch will turn blue.

Crusher Panel Down Switch

Press and keep down this switch (see Figure 3-19) to lower the crusher panel to the desired position.

The crusher panel is an option that may be installed on an AUTOMIZER RIGHT-HANDTM vehicle. If your unit is equipped with this option, we suggest you to use it only for bulky items. In many cases, unnecessary use will slow down the operation. Bulky items can be maintained in place with the crusher panel while the packer crushes them.

The crusher panel can be lowered upon the refuse to prevent it from popping up in front of the packing ram, thus increasing the compaction effect during the load breaking sequence.

To help during the unloading process, a good amount of garbage should be left in front of the packer and under the lowered crusher panel as you finish your collection route. Once the body is raised at landfill, you can activate the packing ram to help clear whatever could be jammed in the hopper. This procedure can also be done without the crusher panel.

Crusher Panel Up Switch

Press and keep down this switch (see Figure 3-18) to raise the crusher panel to the desired position.

Figure 3-22 Crusher panel



PACKER MULTICYCLE Switch

When activated, this switch (see Figure 3-19) allows the packer to run a preset number of cycles (from 2 to 8, 3 being the default setting) with just the single touch of the green button (see Figure 3-24). Cycles can be stopped anytime by pressing the red button or by turning OFF the multicycle control switch. When turning OFF this switch, the packer completes the ongoing cycle in order to get back to the fully retracted position, and then stops.

- A green switch means it is activated.
- A blue switch means it is not activated.

STROBE LIGHT Switch

This switch (see Figure 3-18) turns on/off the strobe light installed on the tailgate.

- Press the switch once to turn ON the strobe light (switch turns green).
- Press the switch again to turn OFF the strobe light (switch turns blue).

HOPPER WORK LIGHT Switch

This switch (see Figure 3-19) activates and deactivates the hopper work light.

- Press the switch once to turn ON the hopper work light (switch turns green).
- Press the switch again to turn OFF the hopper work light (switch turns blue).

10-SECOND INHIBIT Switch

This switch (see Figure 3-18), also known as grabber auto-close override, allows the operator to open the grabber inside the hopper in order to dump the object it holds directly in it. It also allows the operator to pick up elevated carts.

To enable this feature, press the INHIBIT switch. This switch will then turn from blue to green.

Then press the GRIPPER OPEN button on the joystick (see Figure 3-27). The grabber will open for 10 seconds, then close automatically.

To deactivate this feature, press the INHIBIT switch again. This switch will then turn from green to blue.



The inhibit feature overrides all safety features. The operator must be aware of all applicable safety instructions and all potential consequences related to its misuse. Major equipment damage and/or injury may occur.

AUTO-PACKING Switch

The AUTO-PACKING switch (see Figure 3-19) enables the packer to automatically start cycling 2 seconds after the grabber reaches the mid-height position on its way up. If the packer is cycling at the time the arm moves a container towards the hopper, the packer retracts immediately to its fully retracted position no matter where it was in the hopper. This is to prevent waste from being dumped onto the packer. The only exception is that the packer will not retract if, for 3 consecutive packer cycles, the fully extended limit switch is not reached.

When the auto-packing feature is used simultaneously with the multi-cycle feature (refer to "Packer Multicycle Switch" on page 72), the packer will run the preset number of cycles until the arm lifts a new container towards the hopper. The multi-cycle feature is then reset.

When a cycle has been interrupted and the packer has returned to its home position, cycling resumes 2 seconds after the grabber reaches the mid-height position on its way up.

In-Cab Packer Control Station

The AUTOMIZER RIGHT-HANDTM has a packer control station located on the in-cab control panel. Here is a description of all three buttons on the packer control station.

Stop Push-Button (red)

The EMERGENCY STOP button (see Figure 3-23) will stop all hydraulic functions on the truck (body, tailgate, packer, etc.). By pressing the red button, the packer will stop where it is. The red button has to be manually pulled out to reactivate the hydraulic system.

Figure 3-23 Stop push-button



Pack Push-Button (green)

The PACKER START CYCLE button activates the packer for one complete cycle. A complete cycle takes about 20 seconds at idle.

Figure 3-24 Pack push-button



Retract Push-Button (yellow)

The PACKER RETRACT button (see Figure 3-25) will retract the packer to its fully retracted position. This control is useful when the body is full and the material prevents the packer from reaching the end of its stroke. Manual retraction of the packer is necessary to bring back the packer.

Figure 3-25 Retract push-button



Joystick Controls

Arm Joystick

The joystick is used to control the RIGHT-HANDTM arm of the AutomizerTM. It can be located either on the console at the center of the cab or near the right-hand side door. In some units, two joysticks are installed in the cab: one on the console, the other near the right-hand side door.

The controls on the joystick are the handle, the front, top and backside buttons, and the deadman switch (see Figure 3-26).

- The handle is used to control the horizontal and vertical movements of the arm's two main components.
- The backside buttons are used to control the opening and closing movement of the grabber: the right button is used to open the grabber; the left button to close the grabber.
- The top buttons are used to control the chute (standard setup) if such a device is installed on the vehicle. The left button moves the chute to the left side of the hopper while the right button moves it to the right side. If no chute is installed on the vehicle, other functions can be controlled by these buttons based on the type of setup that is installed (crusher panel, packer, etc.).

NOTE: The chute is a piece of equipment that is optional. It can only be installed on a "co-mingle" type vehicle.

- The front buttons can be used to control the crusher panel (standard setup): the left button used to raise it, the right button to lower it. If the crusher panel is controlled using the control panel instead of the joystick, other functions can be operated by these buttons based on the type of setup that is installed on the truck (packer, work lights, Auto-DumpTM, etc.).
- The deadman switch is used as a safety device to ensure that every movement of the arm is absolutely wanted and controlled by the operator. That is, if the operator is not pressing the deadman switch while trying to move the arm with the joystick, no movement will occur. With such a safety feature, an accidental movement of the joystick will not be transmitted to the arm. Also, all buttons on the joystick are operational only if the deadman switch is depressed.

Joysticks operate at 45° and 90° angles. As a result, you can perform two functions at the same time; for example, you can move the arm and the grabber simultaneously.



Figure 3-26 Automated arm joystick

IMPORTANT: Deadman switch must be depressed to activate in/out and up/down commands.

- Shift the joystick forward at 90° toward the grabber down lettering (see Figure 3-27) to lower the grabber.
- Shift the joystick forward at 45° between the grabber down and arm extend lettering to lower the grabber and extend the arm.
- Shift the joystick toward the streetside at 90° to the arm retract lettering to retract the arm only.
- Shift the joystick backward at 45° between the grabber up and arm retract lettering to raise the grabber and retract the arm at the same time.
- Shift the joystick backward at 90° to the grabber up lettering to raise the grabber only
- Shift the joystick toward the curbside at 90° to the arm extend lettering to extend the arm only.



Figure 3-27 Automated arm joystick control decal

Cab Dashboard

The following is a description of the controls and buttons found on the dashboard.

Parking Brake

The parking brake must be used every time the AUTOMIZER RIGHT-HANDTM is stopped on idle position other than at regular traffic stops (see Figure 3-28).

Figure 3-28 Parking brake



ARM EXTENDED Warning Lights

1 or 2 ARM EXTENDED warning lights are found on the cab dashboard. When these lights are flashing, they indicate that the automated arm is not completely retracted alongside the hopper. Do not move the vehicle in such a situation. Completely retract the arm until these lights stop flashing before moving the vehicle.

Figure 3-29 Arm Extended warning lights



NOTE: The above picture shows a cab setup that may be different from the one installed on your truck. This picture is for illustration purpose only.

Warning!

Never drive this vehicle if the automated arm is not parked alongside the truck. The unit would be too high and/or too wide to be driven safely. Failure to retract the arm could result in unit and/or property damage, personal injury or even death. The ARM EXTENDED warning lights flash when the arm is not retracted completely.



Operating the AUTOMIZER RIGHT-HANDTM

The different methods, procedures and necessary actions to operate the AUTOMIZER RIGHT-HANDTM are presented in this section.

Warning!

You must read and understand the Operator's Manual before operating the vehicle and its equipment.

Before operating the AUTOMIZER RIGHT-HANDTM, you must be completely familiar with all safety procedures, and the location, operation and functions of all controls and indicators related to the operation of the unit.

Also, you must complete the daily inspection before starting the vehicle. It is your responsibility to report any malfunctions or concerns to your supervisor and maintenance personnel.

Consult with your supervisor for specific rules of driving the AUTOMIZER RIGHT-HANDTM.

Obey all speed restrictions and regulations.

Daily Inspection

Approaching the Vehicle

As you approach the vehicle, look for any object under or against the vehicle and check the surroundings for people, other vehicles, as well as ground and overhead obstructions. Ensure that the truck is parked at the most convenient place where you will have all the clearance required to perform a complete start-of-theday inspection. During the daily inspection, look for any structural damage. Inspect tires and check the hydraulic tank for air leaks.

Visual Inspection

Before starting the vehicle, the operator MUST perform a visual inspection of the truck.

This inspection should include the following:

- Ensure the engine is not running and the parking brake is set.
- Ensure the cleanliness of lamps, safety labels, camera lenses, mirrors, windows, and the vehicle in general.
- Ensure that safety equipment is present (e.g. fire extinguisher).
- Ensure there is no structural damage.
- Ensure that body mounts to chassis are tight and that there are no cracks on it or on the structure around it.
- Ensure that there is no unusual wear, distortion, cracking, leaning, leaking on the vehicle.
- Ensure that the hydraulic oil level (sight gauge on tank) is as recommended (cylinders must be collapsed).
- Ensure that the hydraulic cylinders do not leak and that the mounting pins are secure.
- Ensure the hydraulic tank shut-off valve is fully open.
- Ensure there is no mechanical problem: structure, rollers, hinges, door locks, wear items, etc. Report any defective system to the maintenance personnel.
- Ensure there are no leaks, cracks or other types of problems on the frame area, fuel tank, hydraulic tank, air tanks (air tanks must be drained every day), cleaning trap and wheels.
- Ensure the tailgate is fully closed and BOTH tailgate safety pins are in place.

Once the visual inspection is over, you must start the engine to check if the systems are working properly.

Starting the Vehicle

To start the AUTOMIZER RIGHT-HANDTM:

- **1.** Before starting the engine, check the following items:
 - **1 a.** Transmission shifter is on neutral.
 - **1 b.** Parking brake is on (see *Parking Brake* on page 77).
 - **1 c.** Hydraulic system is off (see *Pump Switch* on page 68).
- 2. Start the vehicle as stated in the chassis manufacturer's manual.
- **3.** Switch ON the pump to engage the hydraulic system.

Before switching ON the pump, the air pressure must have reached a minimum of 70 psi (see *Pump Switch* on page 68).

IMPORTANT: In cold weather, let the engine turn at idle a few minutes to warm up the hydraulic oil sufficiently before engaging the pump.

- **4.** Turn ON all light switches.
- 5. If required, move the truck to an appropriate area to perform the daily inspection.

6. Report any defective system to the maintenance personnel.

Body Inspection Procedure

Exit the cab to continue your inspection. Bring a rag along to clean all accessible lights, labels, camera lenses, etc. Check for mechanical problems: rollers, hinges, door locking mechanisms, wear items, etc. Report any defective system to the maintenance personnel.

Body inspection procedure:

- **1.** Activate the packer for a full cycle.
- **2.** Check the automated arm operation.
- 3. Check if the tailgate safety pins are in place. Put them in place to lock the tailgate properly.
- **4.** As you walk along the side of the truck, clean all safety labels.
- **5.** Check the frame area, fuel tank and air tanks (air tanks must be drained every day), cleaning traps and wheels for leaks, cracks or other type of problems.
- **6.** At the front end, check lights and mirrors.
- 7. Go around and check lights, clean camera lenses, labels, lights, etc.
- **8.** Check for hydraulic leaks.

Arm Inspection Procedure

On a daily basis, perform a visual inspection of the automated arm, looking for leaks, cracks or premature wear of the moving parts. Refer to the *Lubrication section* in the Maintenance Manual for detailed greasing points.

Figure 4-1 Automated arm





Do not stand directly in the path of the arm while performing the inspection.





Apply the lockout/tagout procedure at all times. See *Locking Out and Tagging Out the Vehicle* on page 40

Apply the following inspection procedure:

- 1. Make sure to park the vehicle on safe, level ground.
- **2.** Ensure that the parking brake is set.
- **3.** Start the engine and engage the hydraulic pump (see *Pump Switch* on page 68).
- **4.** Fully extend the arm.

Figure 4-2 Extended arm



- 5. Turn OFF the hydraulic pump and the engine.
- **6.** Lock out and tag out the vehicle (See *Locking Out and Tagging Out the Vehicle* on page 40).
- **7.** Perform a visual inspection of the following items:

• Mounting bolts;



• Rollers and bearings;



• Bolt locks;



• Hoses and connections.



- Cylinders;
- Grabber;
- Pivots.
- **8.** Check for loose nuts and bolts.
- **9.** Check both limit switches.

Figure 4-3 Limit switches



Inspection Sheet

The following is an example of an inspection sheet. The operator MUST follow the inspection sheet provided by his employer. If the employer does not have any, ask for his permission before using this example sheet.

VEHICLE CONDITION REPORT										
Date:		Unit	:							
Driver: De			Demo:							
Engine Hrs in: Er			_ Engine F	Irs out:						
Mileag	ge in: _		_ Mileage	out:						
Start T	ime:				Fin	ish Time	:			
FLUID LEVELS										
PRE	POST		Amount Ac	dded	PRE	POST			Amount Added	
		Engine Oil	Qt				Fuel		Gal.	
		Hydraulic Oil	Qt.				Transmissio	n	Qt.	
\square	\square	Coolant	Qt.		\square	Π	Water		Qt.	
CAB INSPECTIONS										
If iten	1s need	repair, check belo	w and desc	ribe.					TIRES	
PRE	POST	• ·		PRE	POST			Ind	licate any defects.	
		All gages/gage light	nts			Cab hor	n		·	
\Box	\Box	Low oil pressure			\square	Exterior	back-up hor	'n		
H	H	Low oil warning li	oht/huzzer	H	H	Windsh	ield cracks			
H	H	Seat and seat helt	Bill Ouzzoi	H	H	Windshi	ield winers			
H	H	Clutch free play (I	uggler)	H	H	Heat/De	frost			
H	H	Liconco/registratio	uggici)	H	H	Deflecti	vo trionalog		\square \square	
H	H	Camica hughas adi	ii papers	H	H	Staaring	ve triangles			
H	H	Service brakes adju		H	H	Steering	; play			
H	H	Parking brakes ope		H	H	Radio				
님	님	Low air warning li	ght/buzzer			Camera				
		Air compressor ad	equate	DODY						
DDE	DOGT		VISUAL	BODY	WAL	K-AROU		CT		
PRE	POST	- "	PRE PC	181			PRE PO	51		
		Battery disconnect			ectrical	wiring		Co	mpactor working	
Ц	Ц	Body damage		- Fii	re Extin	guisher		Hy	draulic leaks	
Ц	Ц	Cab damage] Fu	el tank/	lines		Hy	draulic pressure	
Ц	Ц	Air lines		Ex Ex	haust			Hy	draulic hoses	
		Air compressor] En	igine			Wh	ieel/Rims	
		Air dryer		Sta	arter			Sea	ıls	
		Head lights		Tu	ırn signa	al		Tra	nsmission	
		Marker lights] Ca	mera			Mi	rrors	
		Brake lights] Ca	ble/Hoo	oks		Rac	diator	
		Suspension] Ar	m			Saf	ety devices	
		Hopper clean] Bo	dy clea	n		Saf	ety decals	
	\Box	Tailgate		Pa	cker			Car	rt tipper	
	\Box	Safety Interlock sv	vitches	-						
		,								
PRE	POST									
		No Defects - Vehi	cle Conditio	n Satist	factory					
			DEF	ECT D	ESCRI	PTION				
	bove de	efects corrected								
	bove de	efects need not be co	prrected for	the safe	operati	on of ve	hicule			
Mechanic's Comments ·										
weename s comments .										
DBIA	/FR'S	SIGNATURE	г)ATF						
DIVI	ER B	SIGNATURE	L							
דפות	THIDI	TOD SICNATION		ATE						
0151	KIDU	I OK SIGNATURI	L L	AIL						
חחח	TEDIC	DEVIEW CLONA	FUDE P	ATE						
DRIVER'S REVIEW SIGNATURE DATE										

Loading and Packing

Once you have finished the start-of-the-day inspection and made sure that your AUTOMIZER RIGHT-HANDTM is ready for a work day, you can drive to the loading area to start collecting refuse.

IMPORTANT: Ensure that all malfunctions or concerns are reported to your supervisor and/or maintenance department.

Planning your Route

It is important to plan your route in order to be efficient. Planning your route will shorten your collection time and prevent from being caught in a traffic jam. Remember that the AUTOMIZER RIGHT-HANDTM was designed exclusively to pick up roller carts.

Prior to starting your route, consult with your supervisor for specific driving rules.

IMPORTANT: Remember to obey all speed restrictions and road regulations.

NOTE: All persons operating the AUTOMIZER RIGHT-HANDTM must have the proper state/provincial issued license to drive the chassis that the AUTOMIZER RIGHT-HANDTM body is mounted to, which includes certification to operate vehicles equipped with air brakes.

Safety while Using the Packing System



Danger!

Never attempt to reach inside the hopper area when either the packer blade or the arm is in motion. Severe injury or death may occur.



Wear protective safety equipment (e.g. safety glasses and gloves) when you are working close to the hopper area.



Always apply the lockout/tagout procedure before entering the hopper area. See *Locking Out and Tagging Out the Vehicle* on page 40

Loading Refuse

IMPORTANT: Before undertaking the loading process with your AUTOMIZER RIGHT-HAND[™] unit, ensure that you have been provided with the proper training related to the safe operation of the vehicle. As an operator, you must be familiar with the location, operation and function of all controls and warning indicators provided and adhere to all safety rules and procedures.

Using the arm to load the hopper, fill up the garbage as high as the packer and then press the green button to get a complete cycle. Be careful of explosive projectile objects and watch for overspills. See "Pack on the Go" on page 89.

While collecting roller carts, you should start the packer cycle every time a cart has been emptied into the hopper. See *Loading Procedure* on page 88.

Packer Description

The packer, made of high strength steel, travels the hopper to push the refuse into the body. If any piece of garbage exceeds above the packer, it will be crushed or bent against the rear breaker bar, located just above the opening of the body.

Whatever piece of garbage that is not pushed inside the body on a given stroke of the packer will fall back in the hopper when the packer retracts. As another cycle is activated by the operator, what was left in the hopper in the previous stroke of the packer will be pushed into the body.

If the packer does not cycle:

- Check the multiplexed monitor screen (see Figure 3-1) for an error/warning message (see Table 1 on page 52 for a solution to that error/warning message if displayed).
- Ensure the hydraulic system is engaged.

The PUMP switch on the control panel must be green-lighted.

• Check the EMERGENCY red button on the control panel.

If pushed down, pull it out then press the PUMP switch to reengage the hydraulic system.

- Press the yellow button to ensure the packer is completely retracted.
- Check around the packer for any obstruction preventing it from moving freely.
- Check fuses and breakers in the console.
- Report your findings to the maintenance personnel.

Loading Procedure



g! Improper use of the truck, including the packer and the lifting arm, can result in serious injury.

To load refuse into the hopper:

- **1.** Bring the truck to the roller cart to be dumped.
- 2. Slow down when near the cart.
- 3. Align the lifting arm on the vehicle with the roller cart that you intend to pick up.
- **4.** With the arm parked alongside the truck, use the joystick to reach the cart. Extension of the arm may be needed to reach the cart.

NOTE: See Figure 3-27 for proper operation of the lifting arm with the joystick.

If need be, close the grabber just enough to avoid slamming on adjacent carts. To do so, apply short presses on the close grabber button on the joystick (see Figure 4-4).

IMPORTANT: The operator *must* push on the deadman switch in order to enable joystick functions (see Figure 4-4).



Never by-pass the deadman switch with tape, tie-wrap, or anything else in order to operate the arm.

- **5.** When the arm has reached the cart, close the grabber by pressing the close grabber button on the joystick (see Figure 4-4).
- **6.** Raise the cart about two feet from the ground.
- 7. Fully retract the lifting arm and raise it until the cart tips into the hopper, emptying all its content.

NOTE: Full retraction of the arm is only needed when the arm is not already alongside the hopper.

NOTE: Retracting the arm and lifting the grabber can be done simultaneously. See page 75 for details on how to proceed.

Figure 4-4 Joystick



- **8.** Lower back the cart to about 2 feet above the ground. Ensure that the cart is empty before lowering the grabber.
- **9.** Extend and lower the lifting arm to place the cart back to where it was.
- **10.** Open the grabber to release the cart using the open grabber button on the joystick (see Figure 4-4).
- 11. Fully retract the lifting arm to park it alongside the vehicle with the grabber wide open.



Never drive the AUTOMIZER RIGHT-HANDTM with the lifting arm extended and/or the grabber closed and popping out.

Warning!

Do not open the grabber while lifting up a roller cart because the cart will fall down. This may result in equipment damage and/or injury.

Pack on the Go

It may be useful to expedite the collection process and be more efficient. The AUTOMIZER RIGHT-HANDTM gives you the possibility to pack on the go or allow the packer to cycle while you drive.

As you are finished loading the hopper, you can activate the Multicycle switch (see *Packer Multicycle Switch* on page 72) and press the start cycle button (green button). This will allow the packer to cycle, even if you are moving the vehicle to the next pickup. When moving the vehicle, the hydraulic pump will turn at engine RPM, which depends on truck speed.

The multicycle function allows the packer to perform up to 8 cycles when pressing the start cycle button (green button). Standard factory preset of the module is 3 cycles.

Unloading

Unloading Procedure

Once you have completed your collection route, make sure the automated arm is fully retracted alongside the truck and the crusher panel (if installed) is lowered. Keep some garbage not packed in front of the packer in order to facilitate the unloading process.

Warning! Ensure the overhead is clear before raising the body.



The following is the standard unloading procedure:

- **1.** Drive the vehicle to the landfill.
- **2.** Ensure the vehicle is on safe, stable and level ground.
- 3. Check the overhead clearance before opening the tailgate and raising the body.
- 4. Remove both tailgate safety pins.

Figure 4-5 Safety pin



- **5.** Open the tailgate completely by pressing and holding down the TAILGATE UP switch on the incab control panel (see Figure 3-18).
- 6. Once the tailgate is completely open, raise the body by pressing and holding down the BODY UP switch on the in-cab control panel (see Figure 3-18). Garbage should slide out.

7. Slowly move the vehicle forward to prevent the garbage from piling up under the tailgate.

IMPORTANT: This is the only time you can move the truck with the body raised. Do it very cautiously and cover the shortest distance possible. Always be aware of the overhead clearance.

8. Cycle the packer to help eject the garbage.

NOTE: It may be helpful to have some garbage left in the hopper to enhance the effect of the packer cycle on the garbage.

- **9.** When unloading is completed, lower the body by pressing and holding down the BODY DOWN switch on the in-cab control panel (see Figure 3-19).
- **10.** Close the tailgate completely by pressing and holding down the TAILGATE DOWN switch (see Figure 3-19).
- **11.** Apply the parking brake.
- **12.** Put both safety pins back in place.
- **13.** Drive away from the unloading site.
- 14. Perform the end-of-the-day inspection (see *End-of-the-Day Cleaning and Inspection* on page 93).

Never move the truck backwards with the body in raised position.



Never raise the body if the tailgate is not fully open.

Danger!

Always use the tailgate safety prop while working under a raised tailgate. The safety prop should be used even if the tailgate is in fully raised position.

Unloading Corrective Actions

As you are unloading the body, some garbage may fall or be blown away between the chassis and the body.

Apply the following procedure for the remaining garbage stuck on or between the chassis and the body:

- 1. Lift the body until the safety prop is clear to tilt under the body (see Figure 4-6).
- **2.** Release the safety prop by pulling the prop release handle (see Figure 4-6).
- **3.** Pull down the safety prop towards the body.

Figure 4-6 Body safety prop



- **4.** Slowly lower the body so it rests on the prop.
- 5. Proceed with the necessary cleaning of the chassis.
- 6. Once finished, slightly raise the body and put the safety prop back to its vertical position.
- **7.** Lock the safety prop.
- 8. Lower the body onto the chassis before moving the vehicle.

Unloading Emergency Actions

If the truck starts to sink on one side as you unload:

Danger!

UNLOADING EMERGENCY ACTIONS

- **1.** Stop all movement of the equipment.
- **2.** Start or continue lowering the body.
- 3. If the equipment does not stop sinking, stay inside and protect yourself.

Danger!

Do not use the safety prop with a loaded body. Never stand under a raised loaded body.

If the body does not raise:

• Check the multiplexed monitor screen (see Figure 3-1) for an error/warning message (see Table 1 on page 52 for a solution to that error/warning message if displayed).

- Ensure the hydraulic system is engaged.
 - The PUMP switch on the control panel must be green-lighted.
- Make sure the air pressure is above 70 psi.
- Check all fuses in the console.
- Air suspension needs to be dropped.
- Contact the maintenance facility if there is no change.

Emergency Actions

Hydraulic Oil Spill

In the event of a hydraulic spill, do the following:

- **1.** Press the Emergency red button on the packer control station.
- **2.** Turn OFF the truck engine.
- **3.** Close the shut-off valve on the hydraulic tank (see Figure 2-16).
- **4.** Carefully inspect and find the cause of the leak.
- 5. Call the maintenance facility and report your findings.
- **6.** If the leak cannot be repaired on site and the vehicle cannot be towed, remove the pump drive shaft before restarting the engine.
- **7.** When it is time to restart the pump after repair, ensure that the shut-off valve on the hydraulic tank is fully open and that there is sufficient oil in the hydraulic tank.

End-of-the-Day Cleaning and Inspection

Daily Hopper Cleaning

Cleanliness is a key part of safety and critical to the proper maintenance of the vehicle.

Daily cleaning of the hopper and chassis is crucial because it will minimize breakdowns and maintenance expenses. Daily wiping down of all truck lights, warning lights and safety stickers will make your vehicle more visible and safer for surrounding pedestrians and drivers.

IMPORTANT: Before performing any cleaning on the vehicle, always make sure that it is parked on level ground and that the parking brake is applied.

The procedures described in this section are necessary for the vehicle to be well maintained and for the operator to be safe while cleaning the vehicle.

Hopper cleaning procedure:

- 1. Park the vehicle on level ground and apply the parking brake.
- 2. Fully extend the arm and the packer.

- **3.** Lower the crusher panel (if installed) and clean all accumulated dirt. Then, raise the crusher panel completely.
- 4. Perform the lockout/tagout procedure (see Locking Out and Tagging Out the Vehicle on page 40).
- 5. Open the clean-out traps located on each side of the truck.
- **6.** Clean all accumulated dirt under cylinder brackets and inside the side tracks using the hoe and pressurized water if necessary. Be careful with proximity switches to prevent misalignment.
- 7. Perform a visual inspection for leaks or wear in this area.
- **8.** Rake small pieces of garbage out of the clean-out trap using the provided hoe.

Figure 4-7 Clean-out trap and hoe



9. Finish cleaning the area with pressurized water.

Daily Chassis Cleaning

The following is the daily chassis cleaning procedure:

- **1.** Start the engine.
- **2.** Engage the hydraulic pump by pressing the PUMP switch on the control panel (see Figure 3-18). The switch turns green.
- **3.** Using the BODY UP switch on the control panel (see Figure 3-18), raise the body until the safety prop is free to tilt under the body.
- 4. Release the safety prop using the prop release handle (see Figure 4-6).
- **5.** Pull down the safety prop towards the body.
- 6. Slowly lower the body until it rests on the prop using the Body Down switch on the control panel (see Figure 3-19).
- 7. Turn OFF the pump and the truck engine.
- **8.** Apply the lockout/tagout procedure (see *Locking Out and Tagging Out the Vehicle* on page 40).
- 9. Clean with pressurized water between the body and the frame.
- **10.** Clean the rear of the cab.
- **11.** Perform a visual inspection for leaks or wear in this area.
- **12.** When finished, start the engine and reengage the hydraulic pump.

- **13.** Raise the body just enough to bring the safety prop back to its vertical position, then lower the body until it rests on the frame.
- **14.** Turn OFF the pump and the truck engine.
- **15.** Clean the body all around with water and soap.
- **16.** Rinse.

Water Trap Bleeding

Usually located on the right-hand side truck frame, just under the arm slide, the water trap must be drained at the end of every workday. Just slacken off both water trap bleed screws under the bowls and catch the water and oil that flow out with a rag. The water trap helps keep moisture out of the air system.

Figure 4-8 Water trap



Troubleshooting Quick Reference

If an electrical failure occurs and prevents the operator from retracting the arm, the following procedure can be applied:

- 1. Set the parking brake and put the transmission to neutral.
- Remove the proportional valve cover (see Figure 4-9).
 4 bolts hold the cover to the valve support.
- **3.** Locate the arm extend/retract section on the proportional valve (see Figures 4-10, 4-11 or 4-12 [depending the valve having 3, 4 or 5 sections]).
- **4.** Install a control lever on the arm extend/retract section of the proportional valve.
- 5. Using the control lever retract the arm slowly until it reaches its "home" position.



Stay clear of the path of the arm at all times and do not open the grabber in mid-air when performing this procedure.

Figure 4-9 Proportional valve cover



6. Contact your Service Center and refer to the Troubleshooting section of the *Maintenance Manual*.



Never drive this vehicle if the automated arm is not retracted to its "home" position. The vehicle would be too high and/or too wide to be driven safely. Failure to completely retract the arm will result in unit and/or property damage, personal injury or death. Warning red lights on dashboard start flashing as soon as the arm begins to extend.

Figure 4-10 3-section proportional valve





Figure 4-12 5-section proportional valve



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