

## AUTOMIZER RIGHT-HAND<sup>TM</sup>

## **OPERATOR MANUAL**



6/8/09 PART NUMBER: #90408

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## INTRODUCTION

#### **LIABILITY**

Labrie Environmental Group assumes no liability for any incidental, consequential or other liability from the use of this information. All risks and damages, incidental or otherwise, arising from use or misuse of the information contained herein are entirely the responsibility of the user. Although careful precaution has been taken in the preparation of this material, we assume no responsibility for errors or omissions.

# INTRODUCING THE AUTOMIZER RIGHT-

The AUTOMIZER RIGHT-HAND™ is a straight-frame, side-loading vehicle, manufactured to the highest standards, designed to fully-automate the collection of residential and commercial refuse and recycling materials.

The Right-Hand<sup>™</sup> arm, which is a zero-grab arm, is ideal for narrow streets. It's longest reach on the market, is unmatched by any other manufacturer facilitating bin collection even between parked cars.

## **AWARNING**

THE AUTOMIZER RIGHT-HAND<sup>TM</sup> UNITS <u>MUST BE</u> OPERATED BY ONLY ONE PERSON.

#### To CONTACT LABRIE PLUS

labrie plus

Address 3630 Stearns Drive

Oshkosh, WI 54904

Toll free: 1-800-231-2771

**Telephone:** 1-920-233-2770

**General Fax:**1-920-232-2498

**Sales Fax:** 1-920-232-2498

Parts, service and warranty (during business hours, 7 am through 7 pm Central Standard Time)

Technical support service (24 hours)

Web Site: 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 ENVIRONMENTAL 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 this unit must be aware of the safety practices and features detailed in this section.

#### SAFETY IS EVERYONE'S BUSINESS

Personnel are not to use the equipment if they are not well acquainted with the operations as well as all the safety precautions of such operations.

## **▲** DANGER

INDICATES AN IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN SERIOUS INJURY OR DEATH.

## **AWARNING**

INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN SERIOUS INJURY OR DEATH.

## **ACAUTION**

INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY.

## **NOTICE**

ADDRESSES PRACTICES NOT RELATED TO PERSONAL INJURY.

#### **EMPLOYER RESPONSIBILITY**

- 1. Regularly unit inspection, including all safety equipment.
- 2. Repair any present or potential mechanical malfunction.
- 3. Keep records of unit inspections, maintenance, repairs and malfunctions.
- 4. Ensure the unit is equipped with appropriate lighting.
- 5. Provide adequate training to all operators.
- 6. Monitor the employees operation of equipment and take appropriate action to ensure proper and safe use of the equipment.

#### **EMPLOYEE RESPONSIBILITY**

- 1. Learn the safe operating procedures for the unit, and consult your supervisor if any procedure is unclear.
- 2. Use the unit as per manufacturer's guidelines only.
- 3. Perform routine daily unit inspections.
- 4. Report any malfunctions or concerns immediately to his supervisor.

#### NOTICE

DO NOT USE DAMAGED EQUIPMENT.

#### GENERAL SAFETY

#### Do

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



## Note: Small children are especially difficult to see. Be extremely cautious in areas with small children.

- 3. Wear gloves, safety glasses, safety boots and any other safety equipment when loading and packing refuse.
- 4. Check mirrors, windows, lights and monitor equipment to ensure they are clean and adjusted properly.
- 5. Check for explosive trash, for example, televisions, paint cans and fluorescent light tubes.
- 6. Be cautious while driving with an unevenly distributed load.
- 7. Inspect for overhead hazards, that is, power lines, prior to hoisting body, using arm or climbing on main body.
- 8. Use the body safety prop when servicing under the body.
- 9. Use the tailgate safety prop before entering the area between the main body and tailgate.
- 10. Obey all warning and operation decals.

#### Don't

- 1. Do not operate any unit while under the influence of alcohol, narcotics or other intoxicants.
- 2. Do not talk on a cell phone and/or listen to loud music while driving. Cell phones and a loud radio can be a distraction that can have fatal consequences.
- 3. Do not wear jewelry or loose clothing.
- 4. Do not leave the unit before it is brought to a complete stop and work brake or parking brake is applied.
- 5. 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. Refer to the lockout/tagout procedure.
- 6. Do not hoist the body on uneven ground.

- 7. Do not back up the truck when the body is raised.
- 8. Do not drive with the tailgate fully open other than to remove trash at the landfill.

9. Do not use body safety prop to prop a loaded body.

#### SAFETY PRECAUTIONS

- 1. Do not operate this vehicle before having read and completely understood this manual and the safety labels on the vehicle. Maintenance personnel must also read and understand the *Maintenance Manual* for this vehicle (and the maintenance related information in this manual). In case of any doubt, see your supervisor for clarification.
- 2. The Automizer™ units equipped with the Right-Hand™ Lifting Arm units must be operated by only one person.
- 3. The operator of the unit must have a clear view of the operation of the lifting arm at all times. The operator must be able to stop the motion of the arm at any time, in order to prevent injury to surrounding people, damage to property or to the lifting arm itself.
- 4. The operator of the Right-Hand™ lifting arm shall make sure that any people or obstructions are far away from the arm before moving it. Failure to do so may result in unit and/or property damage, personal injury or even death.
- 5. At the beginning of every working day, inspect the body, the packing system and any system that might endanger the safety of the public and/or the operator.
- 6. Verify that the mirrors, brakes, accelerator pedal, steering wheel and turn signals are in good working order.
- 7. Do not operate this equipment if there are any signs of damage or incomplete repairs.
- 8. Report any doubts and any equipment safety service requirements to your supervisor.
- 9. Keep both hands on the steering wheel at all times for better control.
- 10. Do not leave the driving position until the vehicle is completely stopped and the parking brake applied.
- 11. When the vehicle is parked, the parking brake must be applied.
- 12. For any work, cleaning or inspecting being done between the body and the chassis, the body safety prop MUST be used. The vehicle must also be on level ground.

13. Watch and be sure that there are no people at the rear of the vehicle when opening and closing the tailgate(s) and/ or when raising the body.

## **A DANGER**

- 14. Do not get into the hopper compartment or try to repair anything behind the packer when it is working or when the hydraulic pump is still running. Personnel authorized to get into the hopper MUST first complete the lockout/ tagout procedures required by the employer.
- 15. NEVER stand underneath a raised arm/grabber, since no arm cylinder is equipped with a holding valve. Should a hydraulic component break, such as an hydraulic hose, failure to stay away from the arm may result in personal injury or even death.

## **AWARNING**

DO NOT OPERATE OR SERVICE THE LIFTING ARM UNTIL YOU HAVE BEEN FULLY TRAINED, AND HAVE READ AND UNDERSTOOD THE OPERATOR AND MAINTENANCE MANUALS SUPPLIED WITH THIS UNIT.

## **AWARNING**

MAKE SURE THAT ALL PEOPLE OR ANY OBSTRUCTIONS ARE SUFFICIENTLY CLEARED FROM THE AUTOMATED ARM BEFORE MOVING IT. FAILURE TO DO SO MAY RESULT IN UNIT AND/OR PROPERTY DAMAGES, PERSONAL INJURY OR DEATH.

#### **AWARNING**

MAKE SURE THERE IS ENOUGH CLEARANCE BETWEEN RAISED CONTAINER AND OVERHEAD POWER LINES. THE AUTOMATED ARM OR THE CONTAINER MUST NOT COME IN DIRECT CONTACT WITH THE ELECTRICAL CABLES FOR THE POWER TO GO THROUGH THE UNIT. IF THE UNIT COMES IN CONTACT WITH A POWER LINE, STAY IN THE CAB AND KEEP AWAY FROM ANY METAL PARTS.

## **A** DANGER

NEVER DRIVE THIS VEHICLE IF THE LIFTING ARM IS NOT FULLY RETRACTED ALONGSIDE THE TRUCK. THE UNIT WOULD BE TOO HIGH AND/OR TOO WIDE. FAILURE TO RETRACT THE ARM WILL RESULT IN UNIT AND/OR PROPERTY DAMAGE, SEVERE INJURY OR EVEN DEATH. FLASHING LIGHTS (RED) ON DASHBOARD TURN ON WHEN THE ARM IS EXTENDING.

## **AWARNING**

REMOVE ALL CONTROL LEVERS FROM THE PROPORTIONAL VALVE. THESE CONTROL LEVERS SHOULD BE USED FOR MAINTENANCE PURPOSES ONLY.

## **AWARNING**

PRIOR TO CHANGING DRIVING POSITION, STOP THE VEHICLE, APPLY PARKING BRAKE, PUSH EMERGENCY PUSH BUTTON AND STOP THE ENGINE. PROPERLY ADJUST MIRRORS AND SET DRIVING CONTROL SWITCHES INCLUDING ARM CONTROL JOYSTICK (IF APPLICABLE) TO THE NEW DRIVING POSITION BEFORE STARTING THE ENGINE. THIS WILL ENSURE THAT THE AUTOMATED ARM IS COMPLETELY INOPERATIVE.

#### FIRE EXTINGUISHER



The fire extinguisher provided is 5 lbs (minimum capacity) and it is located inside the cab. It must be checked regularly by qualified personnel.

Some units can be equipped with a 20-lbs fire extinguisher (optional), which, in that case, is located on the rub rail (streetside or curbside).



#### SAFETY KITS

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

#### SAFETY LABELS LOCATION

Pay careful attention to all safety labels and warnings while working in and around the AUTOMIZER RIGHT-HAND™. Keep your labels clean and in good condition at all times. For replacement labels, please call Labrie Plus.

#### LABELS ON BODY

43800



47260



47262



47270



84039 (English and Spanish) 79867 (English and French)



120977 (English and Spanish) 79833 (English and French)



120978 (English and Spanish) 79834 (English and French)



120981 (English and Spanish) 79837 (English and French)





47282



47286



47304



120982 (English and Spanish) 79841 (English and French)



120983 (English and Spanish) 79842 (English and French)



84054 (English and Spanish) 79844 (English and French)



120989 (English and Spanish) 79846 (English and French)



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OR

OR

OR



OR

84059 (English and Spanish) 79847 (English and French)



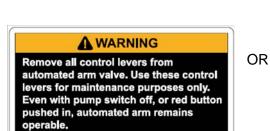
47312



47314



47348



OR



84060 (English and Spanish)

79848 (English and French)

84015 (English and Spanish) 84014 (English and French)





47352



47422



47424



84072 (English and Spanish) 79850 (English and French)



84073 (English and Spanish) 79851 (English and French)



121033 (English and Spanish) 79853 (English and French)



84077 (English and Spanish) 79854 (English and French)





OR

47562



47564



79856(English and French)



47795 (English and Spanish) 79776 (English and French)



47877 (optional)

#### **CRUSHER PANEL INTERLOCK**

TO OPERATE THE CRUSHER PANEL, MEET THE FOLLOWING CONDITIONS:

- PACKER FULLY RETRACTED
- ARM BELOW MID-HEIGHT POSITION
- CHUTE IN RIGHT-HAND SIDE POSITION

LABRIE

47878 (optional)

#### CRUSHER PANEL INTERLOCK NOTE:

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

LABRIE

79781



84030 (English and French)

#### CRUSHER PANEL INTERLOCK

To operate the crusher panel, meet the following conditions:

- Packer fully retracted
- Arm below mid-height position
- Chute in right-hand side position

#### INTERVERROUILLAGE DU PANNEAU BROYEUR

Les conditions suivantes doivent être remplies pour que le panneau broyeur fonctionne:

- Compacteur complètement rétracté
- Bras sous la position mi-hauteur Chute du côté droit

84029 (English and French)

#### **CRUSHER PANEL INTERLOCK**

If the crusher panel is not in the fully raised position, the arm and the chute become inoperable.

#### INTERVERROUILLAGE DU **PANNEAU BROYEUR**

REMARQUE:

Si le panneau broyeur n'est pas complètement levé, le bras et la chute ne fonctionneront pas.

79782 (English and Spanish) 84099 (English and French)

#### SAFETY PROP INSTALLATION

- REMOVETAL GATE LOCKING MECHANISM SAFETYPINS.
- 2- RAISETHETAILGATE 3 FEET (ENOUGH TO RAISETHE SAFETYPROP).
- 3- SETTHE SAFETYPROP.
- LOWERTHETAILGATE ONTO THE SAFETY PROP.

5- REVERSETHE ABOVE INSTRUCTIONS TO STORETHE SAFETY PROP.



#### INSTALLATION DE LA BÉQUILLE DE SÉCURITÉ

- 1. RETIRERLES GOUPILLES DE SÉCURITÉ DU MÉCANISME DE VERROUILLAGE DU PANNEAU ARRIÈRE.
- 2. LEVER LE PANNEAU ARRIÊRE D'ENVIRON 1 M (3 PI), SOIT SUFFISAMMENT POUR SOULEVER LABÉQUILLE DE SÉCURITÉ.
- 3- PLACERLABÉQUILLE DE SÉCURITÉ.
- 4- ABAISSER LE PANNEAU ARRIÈRE SUR LA BÉQUILLE DE SÉCURITÉ.
- 5- EFFECTUER L'OPÉRATION INVERSE POUR RANGER LABÉQUILLE DE SÉCURITÉ.

1

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OR

OR

OR

#### **LABELS ON TAILGATE**

32307



OR

47266



47268



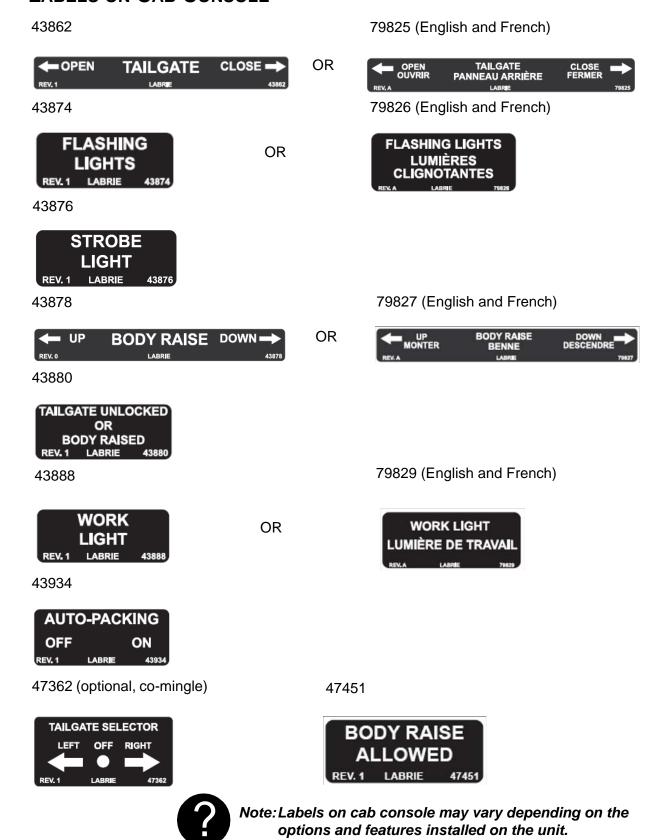
120973 (English and Spanish) 79835 (English and French)



120974 (English and Spanish) 79836 (English and French)



#### LABELS ON CAB CONSOLE



#### LABELS LOCATED INSIDE CAB

43764



43790



OR

OR

43794



43798



79818 (English and French)



84147 (English and Spanish) 79819 (English and French)



79821 (English and 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

43856



43882



43892 (optional, co-mingle)



## 84040 (English and Spanish) 79865 (English and French)



79823 (English and French)



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OR



43972



47250 (optional, co-mingle)

CHUTE OVERRIDE

Press when chute is not responding

47276



OR

OR

120980 (English and Spanish) 79843 (English and French)

84148 (English and Spanish) 79831 (English and French)



79840 (English and French)

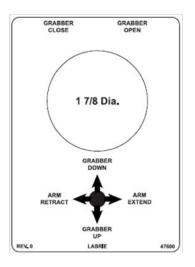




47440



47600



47998



OR

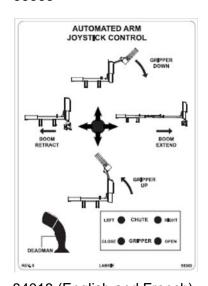


84078 (English and Spanish) 79855 (English and French)



55363

OR



84018 (English and French)



#### SAFETY FEATURES

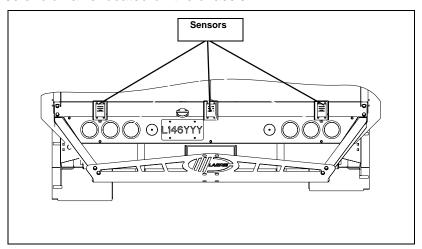
#### GLOBAL MOTION SENSORS (OPTIONAL)

This OPTIONAL safety system is used to detect objects located behind the truck. This system is turned on by placing the transmission in reverse.

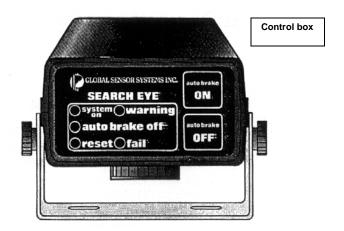
### **AWARNING**

THE OPERATOR MUST READ THE INSTALLATION MANUAL OF THE SYSTEM MANUFACTURER BEFORE USING THE SYSTEM.

The main components of this system are a control box, located in the cab, sensors, located on the rear bumper and the solenoid valve located on the chassis.



When the system is on, a green light on the cab control box illuminates to indicate that the system is operating. When an object is detected, a yellow light comes on, an audible alarm is heard, and the vehicle brakes are automatically applied. The brakes can be disabled by pressing the AUTO BRAKE OFF switch on the control box. This will cause a red warning light to illuminate indicating the brakes will not automatically engage. The yellow light and audible alarm will still operate in this mode as a safety precaution.



## **WARNING**

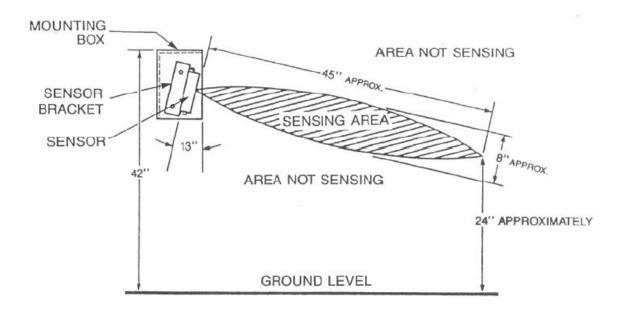
SENSORS LENSES MUST BE KEPT CLEAN TO ENSURE PROPER OPERATION OF THE SYSTEM. IF THE LENSES ARE ALLOWED TO BECOME DIRTY, SYSTEM RANGE WILL BE DECREASED.

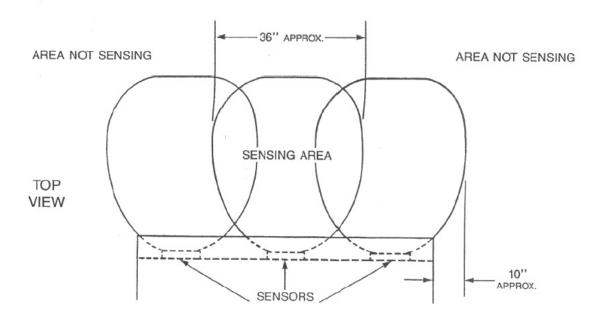
The sensors are installed on the rear bumper and adjusted in order to obtain low coverage to ground.

To adjust the sensors, refer to the *Installation Manual* of the manufacturer.

#### **Troubleshooting and Maintenance**

Refer to the *Troubleshooting Guide* of Gobal Sensor Systems Inc.





Note: Illustrations taken from the Installation Manual of Global Sensor Systems Inc.

#### **BACK UP ALARM**

The back up alarm sounds when the transmission is put into reverse or when the tailgate opens.

#### **BODY SAFETY PROP**

The body safety prop ensures that the body will not lower when you are working beneath it.



## **Setting the Body Safety Prop**

#### **A** DANGER

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.

- 1. Start the engine.
- 2. Make sure there is enough clearance before raising the body.
- 3. Raise the body until the safety prop is free to tilt under the body.
- 4. Release the safety prop using the safety prop handle.
- 5. Place the body safety prop properly.
- 6. Lower the body until it rests on the safety prop.

7. Apply the lockout/tagout procedure before performing maintenance under the body.

# TAILGATE SAFETY PROP Setting the Tailgate Safety Prop

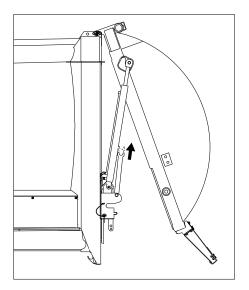
To set the tailgate safety prop, apply the following procedure:

- 1. Make sure there is no garbage inside the body.
- 2. Remove the tailgate locking mechanism safety pins.

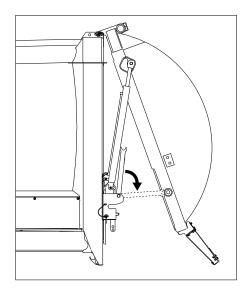
## **A** DANGER

MAKE SURE THAT NO ONE IS STANDING BEHIND THE TRUCK AND THAT THERE IS NO WASTE MATERIAL IN THE BODY PRIOR TO RAISING THE TAILGATE.

- 3. Start the engine.
- 4. Turn the pump switch ON.
- 5. Open the tailgate and raise it about 3 feet high (enough to raise the safety prop) by using the tailgate control lever in the cab console.
- 6. Pull the safety prop upward.



7. Set the safety prop.

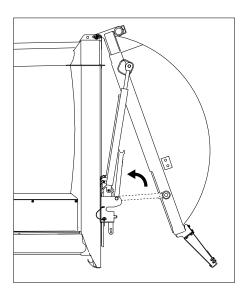


8. Lower the tailgate onto the safety prop.

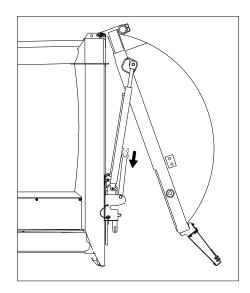
# **Putting the Tailgate Safety Prop Back in Place**

To put the tailgate safety prop in its home position, apply the following procedure:

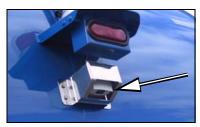
- 1. Start the engine.
- 2. Turn the pump switch **O**N and raise the tailgate about 3 feet high.
- 3. Raise the tailgate safety prop.



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



- 5. Completely close the tailgate by using the tailgate control lever in the cab console. The TAILGATE OPEN light indicator shall turn off.
- 6. Put the safety pins back in place.



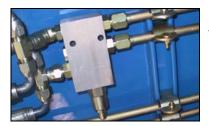




#### CAMERA SYSTEM (OPTIONAL)

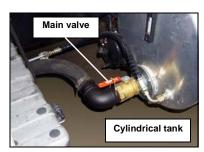
Optional monitor and cameras can be installed inside the cab and throughout the vehicle. The AUTOMIZER RIGHT-HAND™ can be equipped with up to three (3) cameras.

The operator can choose between the camera on the tailgate, the one inside the hopper and the one aimed at the arm. The monitor controls each of these cameras using a camera selector switch. There's also an automatic mode (when the truck is equipped with 3 cameras) that allows the cameras to switch automatically (rear camera when the truck is in reverse, camera in the hopper when the arm is lifting, camera aimed at the arm when the arm is going down). Since many types of monitors and cameras can be installed on the vehicle, refer to the camera manufacturer manual provided with the vehicle.



#### TAILGATE LOCK VALVE

This lock valve ensures that the tailgate will not open during the packing cycle. It is located under the rear section of the body.



#### PRIOR TO START UP

Before starting the vehicle, ensure that no system will engage and begin to operate as you are starting the engine. All electrical controls should be turned off and the hydraulic pump disengaged.

The main valve on the hydraulic tank should be open.

Once the engine is started, wait until the air pressure is **above** 70 PSI; the audible alarm will stop as the air pressure reaches 70 PSI. You can then operate the equipment.



#### **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 truck's lights and safety stickers, so you and the surrounding pedestrians and vehicles will be aware of the truck at all times. Use the hoe to rake dirt out of cleaning traps on each side of the vehicle.

See "End of the Day Cleaning and Inspection" on page 64.

If the truck is equipped with cameras without lens protector, make sure that all lenses are clean.

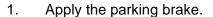
#### LOCKOUT/TAGOUT PROCEDURE

This recommended lockout/tagout procedure should be followed whenever you are inspecting, cleaning or repairing the AUTOMIZER RIGHT-HAND<sup>TM</sup>.

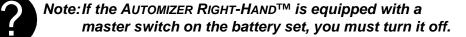
# **AWARNING**

FAILURE TO FOLLOW THE LOCKOUT/TAGOUT PROCEDURE MAY RESULT IN SERIOUS INJURY OR DEATH.

#### To lockout and tagout an AUTOMIZER RIGHT-HAND™ unit:



- 2. Switch OFF the hydraulic pump.
- 3. Move any of the hydraulic or pneumatic controls to relieve any residual pressure in the system.
- 4. Shut off the engine, remove keys from ignition and store keys in a safe controlled area (preferably on your person).
- 5. Turn off and lock the battery switch.
- 6. Chock all the wheels.



- 7. Put an OFF SERVICE tag on the driver's wheel.
- 8. Put an OFF SERVICE sign on the front windshield.
- 9. Use a safety prop to block any system that could move by gravity (open tailgate, etc.).
- 10. Drain all air tanks.





#### SHUT DOWN PROCEDURE

If the truck is parked for an extended period of time, follow the chassis manufacturer's shutdown procedure as well as maintenance requirements and ensure the following procedure:

- 1. Park on a hard and level ground.
- 2. Apply the parking brake.
- 3. Make sure that all moving parts are in their "home " position (tailgate, arm, body, packer, etc.).
- 4. Turn off the hydraulic pump.
- 5. Turn off the electrical systems.
- 6. Turn off the engine.
- 7. Turn off the battery master switch (if equipped).

#### DRIVING THE VEHICLE

The AUTOMIZER<sup>TM</sup> side loader 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 Environmental Group (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).

Note: If the cab has been modified by the chassis manufacturer, the operator MUST follow chassis manufacturer's recommandations.

#### **▲** WARNING

IF THE VEHICLE HAS TO BE PARKED FOR AN EXTENDED PERIOD OF TIME, ALWAYS APPLY THE PARKING BRAKE.



#### RIGHT-HAND SIDE DRIVING POSITION

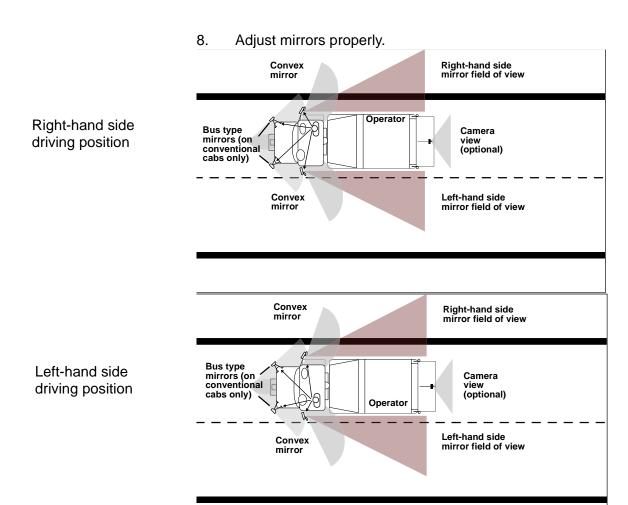
The following procedure applies **ONLY** to cabs that had been modified by Labrie Environmental Group. It must be followed at the beginning, but also at the end of the collection route in order to revert to the left-hand side driving position.

Note: This procedure applies only to vehicles that had been modified by Labrie Environmental 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** forget the following procedure and follow chassis manufacturer's recommandations.

#### Before using the right-hand side driving position:

- 1. Drive the vehicle to the beginning of the collection route.
- 2. Stop the vehicle and apply the parking brake.
- 3. Turn off the hydraulic pump.
- 4. Turn off the engine.
- 5. Move to the right-hand side driving position.
- 6. Shift the Shift mode control switch to the right-hand side. This switch enables all the electrical accessories of the selected driving position.
- 7. Switch the arm control joystick on the right-hand side of the cab.



# **CONTROLS AND INDICATORS**

The AUTOMIZER RIGHT-HAND™ has a series of controls and indicators that allows easier operation of the different functions installed on the vehicle. Such controls and indicators are mainly located in the cab and the following is a description of each one of them.

#### PARKING BRAKE

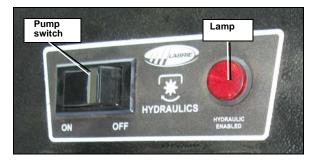


The parking brake located in the cab, usually in the center of the dashboard, must be used every time the AUTOMIZER RIGHT-HAND^ $^{\text{TM}}$  is stopped on idle position other than the regular traffic stops.

#### **PUMP SWITCH**

This switch, which is also called PTO switch, engages and disengages the hydraulic pump, all the body functions (packer, tailgate(s), body hoist) and the joystick that controls the arm. A lamp next to the switch illuminates when the pump is active.

- Press the left-hand side of the switch to activate the hydraulic pump.
- Press the right-hand side of the switch to deactivate the hydraulic pump.





Note: Even if the PTO switch is turned off, the pump is always turning whatever the engine's 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.

# **NOTICE**



Cylindrical tank shown

DO NOT CLOSE THE MAIN VALVE ON THE HYDRAULIC TANK EVEN IF THE PTO SWITCH IS TURNED OFF. THE PUMP IS ALWAYS TURNING WHATEVER THE ENGINE'S RPM. FAILURE TO DO SO MAY SERIOUSLY DAMAGE OR EVEN DESTROY THE PUMP.

# **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.

#### **CAB CONSOLE**

The cab console is located in the middle of the cab for easy access during waste collection and operation.

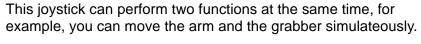
The *In-Cab Console Controls* section provides an overview of the console controls with some optional features. The layout of the console may change depending on features installed on the vehicle.

The AUTOMIZER™ has a single packer control station located **on the cab console**. Here is the description of all the controls and buttons found on the packer control station.

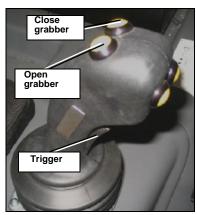


#### **JOYSTICK CONTROLS**

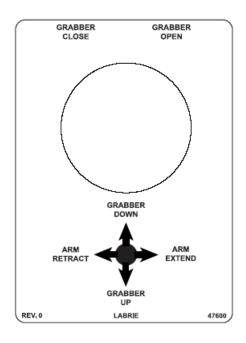
#### **Arm Joystick**

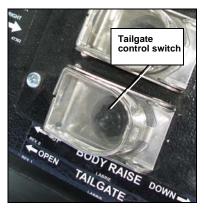


- Shift the joystick forward at 90° towards the GRABBER DOWN lettering (see sticker below) to lower the grabber.
- Shift the joystick forward at 45° between the GRABBER DOWN and ARM EXTEND lettering to lower the grabber and extend the arm at the same time.
- Shift the joystick towards the streetside at 90° to the ARM RETRACT lettering to retract the arm only.
- Shift the joystick forward at 45° between the GRABBER DOWN and ARM RETRACT lettering to lower the grabber and retract the arm at the same time.



- 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 backward at 45° between the GRABBER UP and ARM EXTEND lettering to raise the grabber and extend the arm at the same time.
- Shift the joystick torwards the curbside at 90° to the ARM EXTEND lettering to extend the arm only.





#### Tailgate Control (single and dual)

The Tailgate Control switch allows the operator to control the tailgate. This 3-position switch is covered with a plastic cap in order to prevent any accidental opening of the tailgate.

When the truck is equipped with two tailgates, an electrical switch allows the operator to choose between the right or left tailgate. The same control switch is used for both tailgates.



# **NOTICE**

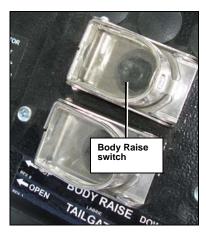
REMOVE TAILGATE LOCKING PINS BEFORE USING THIS CONTROL.

# **AWARNING**

DO NOT DRIVE THE VEHICLE WHEN THE TAILGATE IS NOT FULLY CLOSED.

When the tailgate is unlocked, the Tailgate unlocked or body raised warning lamp turns on and a buzzer sounds.





#### **Hoist Control**

The Body Raise control switch is located on the cab console. This 3-position switch allows the operator to control the body. The switch is covered with a plastic cap in order to prevent any accidental body hoist.

When the body is raised, the Tailgate unlocked or body raised warning lamp turns on and a buzzer sounds.

# **▲** DANGER

ALWAYS USE BODY SAFETY PROP WHEN PERFORMING MAINTENANCE UNDER A RAISED BODY. FAILURE TO DO SO MAY RESULT IN SEVERE INJURY OR EVEN DEATH.

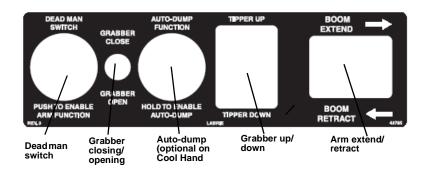
#### **AUXILIARY ARM CONTROLS**



Some trucks are equipped with an auxiliary control under the right-hand side seat, which allows the operator to control the arm from outside the cab.

This auxiliary control has the same functions as the joystick. It contains buttons and switches that allows the operator to control the arm, the grabber and the Auto-dump function (if equipped). To use this auxiliary control, the operator has to select it (on the console).

Below is the sticker of the auxiliary control, which presents the position of all it's buttons and switches.



#### IN-CAB CONSOLE CONTROLS

Three buttons located on the console control the different packer functions.

#### **Stop Push Button (red)**



The Emergency Stop button (red) will stop all hydraulic functions on the truck (tailgate, arm etc.). By pressing the red button, the packer and the arm will stop where they stand. The red button has to be manually pulled back to reactivate the hydraulic system.

# The state of the s

#### Pack Push Button (green)

The packer start cycle button (green) activates the packer for one complete cycle. A complete cycle takes about 12 seconds.



#### **Return Push Button (yellow)**

The packer retract button (yellow) will retract the packer at the beginning of its stroke. 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.

#### **Multi-Cycle Control**



This optional function allows the packer to cycle a preset number of cycles (from 2 to 8, 3 being the standard) by pressing the green button once. Cycles can be stopped anytime by pressing the red button or turning off the multi-cycle control button. When turning off the multi-cycle control button, the packer completes the ongoing cycle in order to get back to the fully retracted position, and then stops.

# **Crusher Panel Control (optional)**

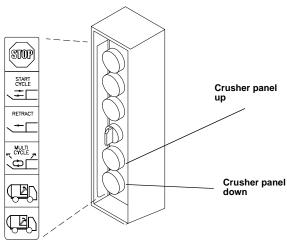


The control for the crusher panel is fully manual and is located inside the cab on the packer control station. One button lowers the crusher panel and another one moves it up.

# **IMPORTANT**

THE PACKER MUST BE FULLY RETRACTED TO ALLOW THE CRUSHER PANEL TO MOVE DOWN. THE CRUSHER PANEL NEEDS TO BE IN THE PARKED POSITION TO LET THE ARM DUMP A CART.

The following illustration presents the control buttons of the crusher panel. The model of the control station varies according to the options installed.



The crusher panel is an option that may be installed on the vehicle. If it is installed, we suggest you to use it only for bulky items and breaking the load. 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 the refuse from popping up in front of the packing ram, increasing the compaction at any time and also during the load breaking sequence.

To help during the unloading sequence, you should leave a good amount of garbage in front of the packer and under the lowered crusher panel, as you finish your route. Once you are at the landfill and the body is raised, 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.



Auto-packing switch

# **Auto-Packing (optional)**

The Auto-packing switch enables the packer to automatically start cycling about 4 seconds after the grabber is closed. This gives the arm enough time to reach the hopper and dump the cart before the packer starts to pack.

If the unit is equipped with the multi-cycle function (refer to "Multi-Cycle Control" on page 43), the packer will complete the preset number of cycles until the operator closes the grabber. When the operator closes the grabber, the multi-cycle function is reset.

If the grabber is being closed in the middle of a cycle, the packer interrupts the current cycle, returns to its fully retracted position, and then restarts the next cycle. When a cycle is interrupted and the packer has returned to the home position, there is no delay before the packer restarts the next cycle. The four-second reset applies only when the packer has completed all its cycles (2 to 8) and when it has returned to the home position.

Interrupting a cycle prevents dumping carts directly over the packer. Piled material over the packer could damage the follower panel.



#### **Gripper Auto-Close Override**

The Gripper (or grabber) Auto-Close Override function (standard) allows the operator to open the grabber in the hopper in order to throw away the grabbed object directly in it. It also allows to pick up elevated carts.

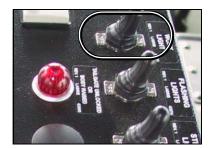
To enable the Gripper Auto-Close Override function, push on the Gripper Auto-Close Override button on the cab console.

The Gripper Auto-Close Override function allows the gripper to be open for 10 seconds. After 10 seconds, the gripper closes automatically.

# **ACAUTION**

THE GRIPPER AUTO-CLOSE OVERRIDE FUNCTION 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.

#### **Work Lights Switch (optional)**



When installed, this switch activates and deactivates the work lights.

- Shift the switch up to illuminate the work lights.
- Shift the switch down to turn off the work lights.

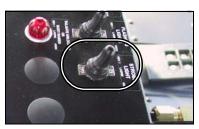


# Flashing Lights Switch (optional)

This switch activates and deactivates the flashing lights.

- Shift the switch up to illuminate the flashing lights.
- Shift the switch down to turn off the flashing lights.

#### **Strobe Light Switch (optional)**



This switch activates and deactivates the strobe light mounted on the tailgate.

- Shift the switch up to illuminate the strobe light.
- Shift the switch down to extinguish the strobe light.

Important: Always switch on the strobe light when the vehicle is in working mode.



#### **Light Bar Switch (optional)**



This switch activates and deactivates the strobe light mounted on the tailgate.

- Shift the switch up to illuminate the light bar.
- Shift the switch down to extinguish the light bar.

#### **Arm Extended Warning Lights**



Two warning lights on the dashboard indicate to the operator when the arm is out. Do not move the vehicle until these lights stop flashing.

# **AWARNING**

NEVER DRIVE THIS VEHICLE IF THE AUTOMATED ARM IS NOT PARKED ALONGSIDE THE TRUCK. THE UNIT WOULD BE TOO HIGH AND/OR TOO WIDE. FAILURE TO RETRACT THE ARM COULD RESULT IN UNIT AND/OR PROPERTY DAMAGE, PERSONNAL INJURY OR EVEN DEATH. FLASHING LIGHTS ON THE DASHBOARD COME ON AS THE ARM IS EXTENDING.

#### **Cart Counter (optional)**



Some units are equipped with a cart counter, which counts the number of carts dumped. The counter (if equipped) is located on the cab console.

# OPERATING THE AUTOMIZER RIGHT-HAND<sup>TM</sup>

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

#### **AWARNING**

ALWAYS READ AND UNDERSTAND THE OPERATOR MANUAL BEFORE OPERATING THE EQUIPMENT.

Before operating the AUTOMIZER RIGHT-HAND<sup>TM</sup>, the operator must be completely familiar with all safety procedures, and the location, operation and function of all controls and indicators related to the operation of the unit.

Please note that some of these are options and may not be installed on your AUTOMIZER RIGHT-HAND™.

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 department.

Consult with your supervisor for specific rules of driving the AUTOMIZER RIGHT-HAND $^{\text{TM}}$  in your location.

Obey all speed restrictions and regulations.

#### **DAILY INSPECTION**

#### Approaching the Vehicle

As you approach, look for any object under or against the vehicle and check the surroundings for people, other vehicles, under 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-the-day inspection. During the daily inspection, look for any structural damage. Inspect tires and check the hydraulic tank for air leaks (when the hydraulic tank is under the pump level).

#### Visual inspection

Before starting the vehicle, the operator MUST perform a visual inspection of the truck. Ensure the engine is not running and the parking brake is set.

- 1. Ensure the cleanliness of lamps, safety labels, camera lenses, mirors, windows, and the vehicle in general.
- 2. Ensure that safety equipment is present (i.e. fire extinguisher, first aid kit).
- 3. Ensure there is no structural damage.
- 4. Ensure that there is no unusual wear, distortion, cracking, leaning, leaking on the vehicle.
- 5. Ensure that hydraulic oil level (sight gauge on tank) is as recommended (cylinders must be collapsed).
- 6. Ensure that the hydraulic cylinders do not leak, and ensure mounting pins are secure.
- 7. Ensure the hydraulic tank shut off valve is fully open.
- 8. Ensure there is no mechanical problem: structure, rollers, hinges, door locks, wear items, etc. Report any defective system to maintenance personnel.
- 9. 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.
- 10. Ensure the tailgate is fully closed, BOTH tailgate safety pins are in place and rollers are on main locking pins.
- 11. 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-HAND™:

- 1. Before starting the engine, check the following items:
  - Transmission shifter is on neutral.
  - Parking brake is on. See "Parking Brake" on page 37.
  - Hydraulic system is off. See "Pump Switch" on page 37.
- 2. Start the vehicle as stated in the chassis manufacturer manual.
- 3. Switch **ON** the pump (switch on the control console) to engage the hydraulic system (the air pressure has to be at a minimum of 70 PSI). See "Pump Switch" on page 37.
- 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, stickers, camera lens, etc. See for mechanical problems: rollers, hinges, door lock mechanisms, wear items, etc. Report any defective system to the maintenance personnel.

#### Body inpection 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, 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, mirrors and pump.

- 7. Go around and check lights, clean camera, labels, lights, etc.
- 8. Check for hydraulic leaks.

#### **Arm Inspection Procedure**

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

#### **A** DANGER

DO NOT STAND DIRECTLY IN THE PATH OF THE ARM WHILE PERFORMING THE INSPECTION.

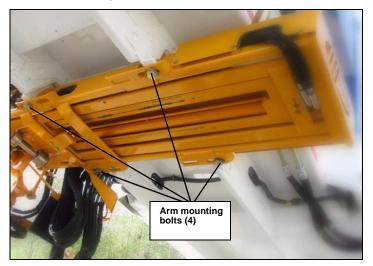
# **▲** DANGER

APPLY THE LOCKOUT/TAGOUT PROCEDURE AT ALL TIMES.

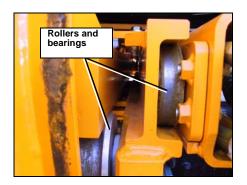
#### Apply the following inspection procedure:

- 1. Make sure to park the vehicle on a safe and level ground.
- 2. Ensure that the parking brake is applied and the vehicle is tagged out for maintenance purposes (refer to "Lockout/ Tagout Procedure" on page 32).
- 3. Start the engine and engage the hydraulic pump (PTO ON).
- 4. Fully extend the arm.
- 5. Turn off the hydraulic pump and the engine.
- 6. Perform a visual inspection of the following items:

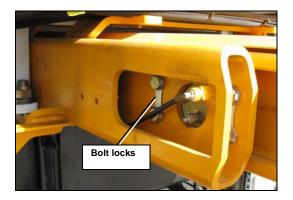
#### Mounting bolts;



Rollers and bearings;



Bolt locks;



- Pivots;
- Grabber;
- Hoses and connections;



- Cylinders;
- 7. Check for loose nuts and bolts.
- 8. Check limit switches. Refer to Maintenance Manual.

# **Cab Driving Controls Inspection Procedure**

Enter the right-hand side extension (if equipped) and operate the right-hand side driving controls. Report any defective system to maintenance personnel.

#### Right-hand side driving position inspection procedure:

- 1. Test the steering wheel by turning it left and right as you are slowly moving the truck forward.
- 2. Move forward and stop the vehicle by applying the foot brake.
- 3. Apply the parking brake, engage the transmission to Drive and try to get the vehicle moving by throttling up with the right-hand side accelerator pedal.
- 4. Throttle down to idle, apply foot brake and remove parking brake.

# **Inspection Sheet Example**

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

	Unit:					
river:		Demo:				
ngine Hrs ii	ı: ]	Engine Hrs	out:			
	1	Mileage out	:	inish Tim		
art Time:				inish 1 im	le:	
		FL	UID LEV	ELS		
RE POST	An	nount Adde				Amount Adde
	Engine Oil Qt.				Fuel	Gal.
	Hydraulic Oil Qt.				Transmission	Qt.
	Coolant Qt.				Water	Qt.
		CAB	INSPEC	TIONS		
	l repair, check below a					TIRES
RE POST		Pl	RE POS			Indicate any defects.
. ∐	All gages/gage lights	L		Cab ho		
<u> </u>	Low on pressure				r back-up horn	ПП
-	Low oil warning light	/buzzer _	]		ield cracks	
H H	Seat and seat belt	100	- H	Windsh Heat/D	nield wipers	
-	Clutch free play (Jugg		1 H		efrost ive triangles	
+ +	License/registration pa		<del> </del>			шш
: H	Service brakes adjuste Parking brakes operati		: H	Radio	g play	
† H	Low air warning light		1 H	Camera		
i H	Air compressor adequ			Camera		
		/ISUAL BO	DDY WAI	K-ARO	UND	
RE POST		RE POST			PRE POST	,
1	Battery disconnect			d wiring		Compactor working
i П	Body damage	5 5		inguisher		Hydraulic leaks
i П	Cab damage	<b>=</b> =	Fuel tank		<b>一</b> 一	Hydraulic pressure
	Air lines		Exhaust			Hydraulic hoses
	Air compressor		Engine			Wheel/Rims
	Air dryer		Starter			Seals
	Head lights		Turn sig			Transmission
	Marker lights		Camera			Mirrors
	Brake lights		Cable/H	ooks		Radiator
	Suspension		Arm			Safety devices
	Hopper clean		Body cle	ean		Safety decals
<u>.</u>	Tailgate		Packer			Cart tipper
	Safety Interlock switch	hes				
D. DOOM						
RE POST	No Defects – Vehicle	O 1545 6				
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#### LOADING, PACKING AND UNLOADING

# **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-HAND<sup>TM</sup> was designed exclusively to pick up roller carts.

# Safety While Using the Packing System

#### **▲** WARNING

ALWAYS KEEP THE WARNING LIGHTS AND/OR FOUR WAY FLASHERS ON WHEN COLLECTING REFUSE.

# **▲** 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.

# **AWARNING**

WEAR PROTECTIVE SAFETY EQUIPMENT, LIKE SAFETY GLASSES AND GLOVES, AT ALL TIMES WHEN YOU ARE WORKING CLOSE TO THE HOPPER AREA.

# **AWARNING**

ALWAYS COMPLETE THE LOCKOUT/TAGOUT PROCEDURE BEFORE ENTERING THE HOPPER AREA.

#### **Hopper Description and Loading**

The AUTOMIZER RIGHT-HAND™ has a packer swept volume of 1.75 cubic yards. The packer swept volume is reached by using a 24-inch height packer blade with a 52-inch stroke.

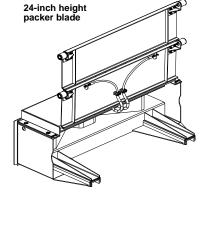
Using the arm to load the hopper, fill up garbage as high as the packer and then press the green button to get a complete cycle. Be careful of explosive projectile objects and watch for over spill. See "Pack on the Go" on page 60.

While collecting roller carts, you should start the packer cycle every time you have finished emptying one cart in the hopper. See "Loading Procedure" on page 58.

# **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 crusher bar, located just above the opening of the body.

Whatever debris is not pushed inside the body on a given stroke of the packer, refuse material will fall back in the hopper as the packer will retract. 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.









- 1. Stop the vehicle so that the arm is lined up with the roller cart.
- With the arm parked along the truck, use the joystick to open the grabber and pick up the cart. The operator MUST push on the trigger in order to enable the joystick functions.

#### **AWARNING**

NEVER TAPE THE TRIGGER IN ORDER TO OPERATE THE ARM.

- 3. Close the grabber by pressing on the push-button switch.
- Raise the roller cart.
- 5. Pull the joystick to raise the grabber inside the hopper. The garbage should then fall down.
- 6. Ensure that the roller cart is empty before returning it back to the ground.
- 7. Retract the arm (if extended) and open the grabber near the vehicle.

#### **▲** WARNING

DO NOT OPEN THE GRABBER WHILE LIFTING UP THE ROLLER CART; IT WILL FALL DOWN. THIS MAY RESULT IN EQUIPMENT DAMAGE AND/OR INJURY.

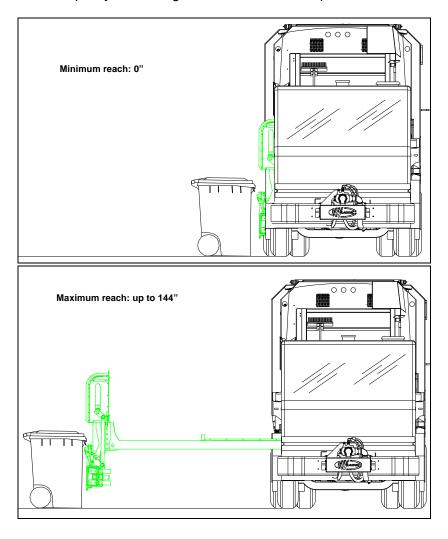
#### **AWARNING**

DO NOT MOVE THE VEHICLE IF THE ARM IS NOT FULLY RETRACTED ALONG THE HOPPER.

# **Loading Corrective Actions**

#### If the packer does not cycle:

- 1. Ensure the hydraulic system is engaged.
- 2. Check the emergency red button.
- 3. Press the yellow button to ensure the packer is completely retracted.
- 4. Check around the packer for any obstruction preventing it to move freely.
- 5. Check fuses and breakers in the console.
- 6. Report your findings to the maintenance personnel.



#### **Emergency Actions**

#### **Hydraulic Oil Spill**

- 1. Press the emergency red button.
- 2. Turn off the pump switch and stop the truck's engine.
- 3. Close the main valve on the hydraulic tank.
- 4. Carefully inspect and find the cause of the leak.
- 5. Call the maintenance facility and report your findings.
- 6. If the leak can not be repaired on site, and the vehicle can not be towed, remove the pump drive shaft before restarting the engine.
- 7. When the time has come to restart the pump, ensure that the valve on the hydraulic tank is fully open and that there is sufficient oil in the hydraulic tank.

#### Someone is Trapped in Packer System

- 1. Hit the emergency stop button (red).
- 2. Call for help then proceed with first aid.

#### Pack on the Go

It may be useful to expedite your work and be more efficient: pack on the go or allow the packer to cycle when driving.

As you are finished loading the hopper, you can activate the multi-cycle button and press the start cycle button (green). This will allow the packer to cycle, even if you are moving the vehicle to the next pick up. When moving the vehicle, the hydraulic pump will turn at engine's RPM, which depends on truck speed.

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

#### **Standard Unloading Procedure**

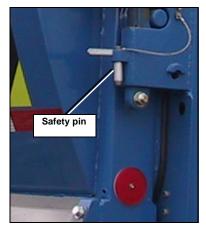
Once you have finished your route, make sure that the arm is parked along the truck and that the crusher panel is lowered (if equipped). Keep some garbage not packed in front of the packer in order to help during the unloading procedure.

# **AWARNING**

ENSURE THE OVERHEAD IS CLEAR BEFORE OPENING THE TAILGATE AND RAISING THE BODY.

#### Standard unloading procedure:

- 1. Drive the vehicle to the landfill.
- 2. Ensure the vehicle is on a safe, stable and level ground.
- 3. Check the overhead clearance before opening the tailgate and raising the body. Make sure that the air suspension is dropped or the tag axle is down (if equipped).
- 4. Remove tailgate safety pins.
- 5. Fully open the tailgate.
- 6. Raise the body. The material should slide out.
- 7. Slowly move the vehicle forward to prevent the garbage from piling up under the tailgate. This is the only time you can move the truck with 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. It may be helpful to have some garbage left in the hopper to enhance the effect of the packer cycle on the garbage.
- 9. Lower the body and close the tailgate.
- 10. Put safety pins back in place.
- 11. Drive away from the unloading site.



12. Perform the end of the day inspection. See "End of the Day Cleaning and Inspection" on page 64.

# **AWARNING**

NEVER MOVE THE TRUCK BACKWARDS WITH THE BODY IN THE RAISED POSITION.

NEVER RAISE THE BODY IF THE TAILGATE IS NOT FULLY OPEN.

# **▲** DANGER

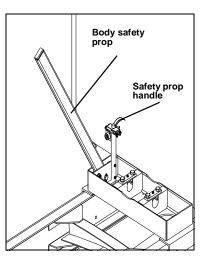
ALWAYS USE THE SAFETY PROP WHILE WORKING UNDER A RAISED TAILGATE. THE SAFETY PROP SHOULD BE INSTALLED EVEN IF THE TAILGATE IS IN THE FULLY RAISED POSITION.

# **Unloading Corrective Actions**

As you are unloading the refuse unit, 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.

#### Garbage Between Chassis and Body:

- 1. Lift the body until the safety prop is clear to tilt under the body.
- 2. Release the safety prop by pulling the handle.
- 3. Then pull down the safety prop towards the body.
- 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; return the safety prop 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:

# **A 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.

# **NOTICE**

#### THE BODY DOES NOT RAISE

- 1. Ensure the hydraulic system is engaged.
- 2. Make sure the tailgate is fully open.
- 3. Make sure the air pressure is above 70 psi.
- 4. Check all fuses in the console.
- 5. Contact the maintenance facility if there is no change.
- 6. If equipped with air suspension, it needs to be lowered.
- 7. If equipped with a tag axle, it must be dropped.

# **A** DANGER

DO NOT USE SAFETY PROP WITH A LOADED BODY. NEVER STAND UNDER A RAISED LOADED BODY.

# END OF THE DAY CLEANING AND INSPECTION

#### **Hopper Daily Cleaning**

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



Clean-out

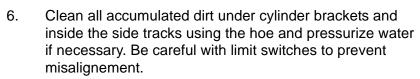
Daily cleaning of the hopper and chassis is crucial because it will minimize breakdowns and maintenance expenses. Daily wiping down of all truck lights, warning lights and safety stickers will make your vehicle more visible so that surrounding pedestrians and vehicles will be safer around the vehicle.

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 a level ground and apply the parking brake.
- 2. Fully extend the arm and the packer.
- 3. Lower the crusher panel and clean all accumulated dirt. Then, raise the crusher panel all way (if equipped).
- 4. Perform the lockout/tagout procedure.





- 7. Perform a visual inspection for leaks or wear in this area.
- 8. Rake small pieces of garbage out of the clean-out doors using the hoe.
- 9. Finish cleaning the area with pressurized water.



## **Chassis Daily Cleaning**

#### Chassis daily cleaning procedure:

- 1. Start the engine.
- 2. Raise the body until the safety prop is free to tilt under the body.
- 3. Release the safety prop using the prop handle.
- 4. Apply the lockout/tagout procedure.
- 5. Clean with pressurized water between the body and the frame.
- 6. Clean the rear of cab.
- 7. Perform a visual inspection for leaks or wear in this area.
- 8. When finished, start the engine, lift the body and bring the safety prop back to its vertical position, then lower the body.
- 9. Clean the body all around with water and soap.
- 10. Rinse.

## **Water Trap Bleed**



Safety prop handle

Body safety prop

Located in front of the console, the water trap bleed must be drained at the end of every working day. Using a rag, unscrew the tip to collect the water that will come out. This water trap helps to keep moisture out of the air system.

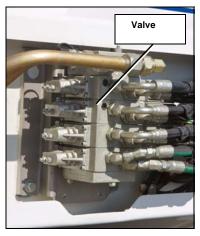


Note: If the truck is equipped with an electrical valve, there is no water trap.

#### TROUBLESHOOTING QUICK REFERENCE

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

- Apply the parking brake and put the transmission to neutral.
- 2. Install the control lever on the valve located on the righthand side of the vehicle, on the arm extend/retract section. Using the manual control, retract the arm slowly in order to bring it back to its rest position.



#### **▲** DANGER

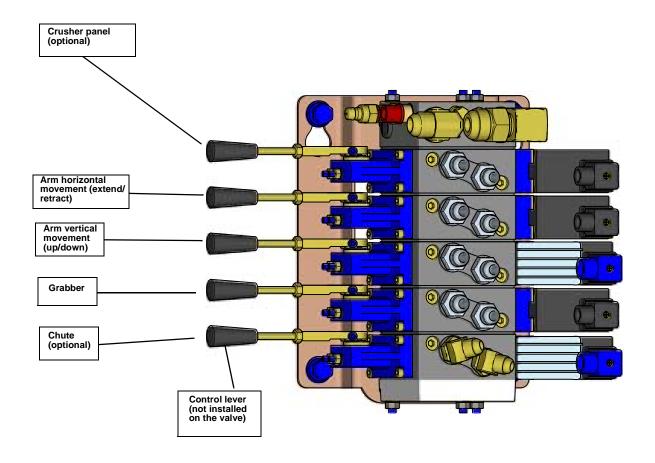
STAY CLEAR OF THE PATH OF THE ARM AT ALL TIMES AND DO NOT OPEN THE GRABBER IN MIDAIR WHEN PERFORMING THIS PROCEDURE.

3. Contact your service center and refer to the troubleshooting section of the *Maintenance Manual*.

## **▲** DANGER

NEVER DRIVE THIS VEHICLE IF THE AUTOMATED ARM IS NOT PARKED ALONGSIDE THE TRUCK. THE UNIT WOULD BE TOO HIGH AND/OR TOO WIDE. FAILURE TO RETRACT THE ARM WILL RESULT IN UNIT AND/OR PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. FLASHING LIGHTS (RED) ON DASHBOARD WILL COME ON AS THE ARM IS EXTENDING.

Note: The valve illustrated below has 5 sections (maximum value). The number of sections depends on options installed.



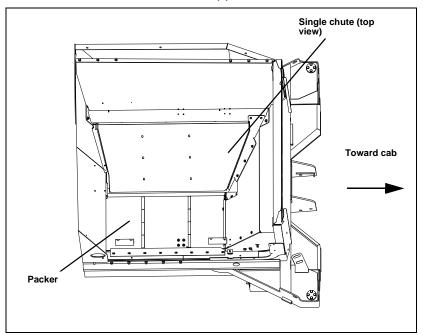
#### Co-Mingle Split Body Operation

#### Introduction

The Co-Mingle version of the AUTOMIZER RIGHT-HAND™ is a dual compartment unit equipped with a hopper divider and dual tailgate. The vehicle was designed to collect different materials on the same route.



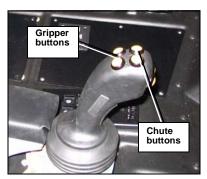
A mobile chute located in the middle of the hopper diverts material into either side of the hopper.



The chute is controlled by the operator from inside the cab, using push buttons located on top of the joystick.

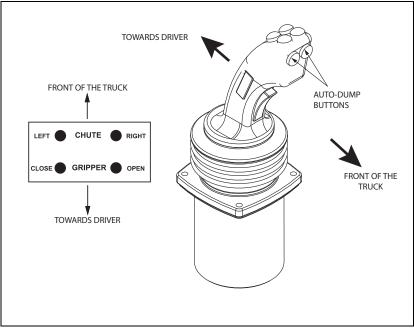
Also available in option, the split chute operation and description are outlined in Dual Chute Operation on page 74.

# **Joystick Description**



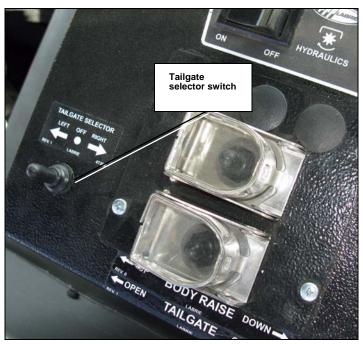
In this section, you will find the description of the joystick installed on the AUTOMIZER™. Other AUTOMIZER™ cab controls are outlined in In-Cab Console Controls on page 43.

The joystick, which controls the arm, is equipped with six push buttons. Two of these buttons allow the operator to control the position of the chute inside the hopper. There's also two other buttons that allow to open and close the grabber of the arm. Finally, the two buttons located at the front of the joystick are used for the Auto-dump function (on Cool Hand<sup>TM</sup> only).



## **Tailgate Selector Switch**

Located on the console, the tailgate selector switch enables the operator to choose between unloading the right or the left side of the body. Before opening one tailgate, the operator moves the switch towards the left or right and then uses the tailgate control switch, also located on the console.



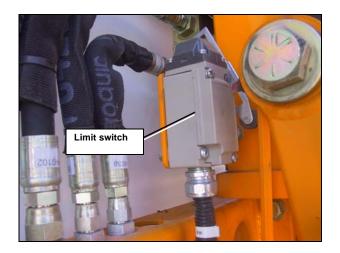


Note: For some units equipped with an optional split chute, a locking mechanism switch is added on the console. See "Dual Chute Operation" on page 74.

## **Safety System**

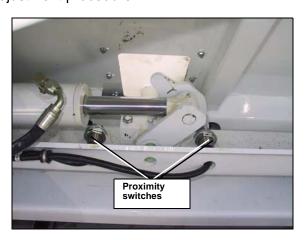
The AUTOMIZER™Co-Mingle is equipped with an interlock system designed to prevent the arm from colliding with the chute. The system uses proximity switches to detect the position of the chute and the arm.

If the chute is not in the proper position, the proximity switch in the hopper stops the arm before the collision occurs with the chute.



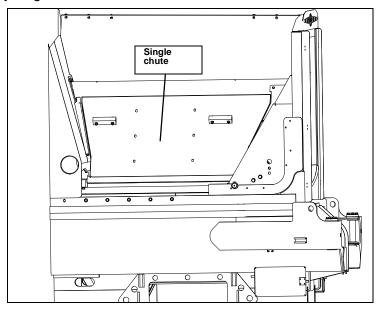
The limit switch on the side of the Right-Hand™ arm for autoclosing will stop the arm from dumping if the chute is not in the proper position.

Two proximity switches are used to detect the position of the chute (left and right position). They are located behind the hopper front wall. Refer to the *Maintenance Manual* for limit switch adjustment procedure.



#### Single Chute Operation

The chute located in the middle of the hopper diverts material to the left or the right side of the hopper. Before collecting material, the operator must know exactly what type of material to load in, and to change the position of the chute accordingly. Loading material on the wrong side of the hopper can contaminate recycling material with unwanted substance.



Before dumping a cart, change the position of the chute to the proper side of the hopper using one of the yellow buttons on top of the joystick.

Push the button once and wait until the chute position indicator on the dashboard lights up. There is no need to hold the button until the chute comes into position.

The time required by the chute to travel from one side to another is about 3 to 4 seconds. Afterwards, the chute position indicator on the dashboard lights up indicating the chute has reached its position. If the warning light does not light up after that delay, this indicates that the chute is stuck somewhere along piled material in the hopper and that it cannot reach the desired position.

If that happens, it will NOT be possible to bring back the chute to the other side unless overriding the chute.



Note: If the chute is not positioned properly, the arm is no longer capable of reaching the hopper. An interlock system prevents the grabber from colliding with the chute inside the hopper. See "Safety System" on page 70.

#### **Chute Override**

The chute override button is used when the chute cannot reach its position (caused by piled material in the hopper). It is possible to operate the chute manually by pressing the chute override button on the console.

When the override button is pressed, the operator can return the chute back to its original position by pressing one of the two yellow buttons on the joystick and wait until the packer finished packing material allowing the chute to move freely.



The push button on the console is spring return and must be held to give full control of the chute in both directions. When holding the override, the operator can move the chute back and forth to help unblock pilled material.

#### **Split Carts**

The split cart has a center divider that allows collection of two different types of material.

For that purpose, the vehicle can be equipped with a dual chute system that enables the operator to collect split carts and put different types of recyclable material simultaneously in both sides of the hopper without moving the chute.

#### **Dual Chute Operation**

When recycling material requires being loaded in both sides of the hopper at the same time (when dumping split carts), an air locking mechanism is used to release the rear section of the chute allowing the operator to move the front section of the chute to the opposite side of the hopper.

One half of the chute will divert material on the curbside and the other section on the streetside. The locking mechanism is controlled from inside the cab, using the toggle switch located on the console.



Note: The chute can be unlocked whether it is positioned on the left or the right side of the hopper.

The dual chute (optional) is operated using two yellow buttons on top of the joystick. Before dumping a cart, change the position of the chute to the proper side of the hopper. Push the button once and wait until the chute position indicator on the dashboard lights up. There is no need to hold the button until the chute comes into position.

The time required by the chute to travel from one side to the other is about 3 seconds. Afterwards, the warning light on the dashboard lights up, indicating that the chute has reached its position. If the warning light does not light up after that delay, this indicates that the chute is stuck somewhere with piled material in the hopper and cannot reach the desired position.

If that happens, it will NOT be possible to bring back the chute to the other side unless overriding the chute. See "Chute Override" on page 73.



Note: If the chute is not positioned properly, the arm is no longer capable of reaching the hopper. An interlock system prevents the grabber from colliding with the chute inside the hopper. See "Safety System" on page 70.

#### Separating the Chute

To separate the rear chute, bring it to the proper side of the hopper (either streetside or curbside), and flip the rocker switch on the console. Move back the front part of the chute to the other side. Releasing the rear part of the chute enables the operator to load split-cart simultaneously into both sides of the hopper. When the chute is separated, the chute position indicator on the dashboard indicates only the position of the forward part of the chute. Make sure to align the front part of the chute with the rear part before locking both sections.

# Co-Mingle Body Unloading Procedure

Once you have finished your route, make sure that the Right-Hand™ arm is parked alongside the truck. keep some unpacked garbage in front of the packer in order to facilitate the unloading procedure.

### **NOTICE**

ENSURE THAT THE OVERHEAD IS CLEAR BEFORE OPENING THE TAILGATE AND RAISING THE BODY.

#### Co-mingle body unloading procedure:

- 1. Drive the vehicle to the landfill or the material recycling facility.
- 2. Make sure that the vehicle is on a safe, stable and level ground.
- 3. Check the overhead clearance and the back of the vehicle before opening the tailgate and raising the body.
- 4. Remove both tailgate safety pins.
- Select the proper tailgate (left or right) using the tailgate selector switch on the console. If one of the tailgate is equipped with a full ICC bumper, always select that one first.
- 6. Fully open the tailgate.
- 7. Raise the body (the material should slide out);



8. Move slowly the vehicle forward to prevent the garbage from piling up under the tailgate. This is the only time you can move the truck with body raised. Do it very cautiously and cover the shortest distance possible. Always be aware of the overhead clearance;



- 9. Cycle the packer blade to help eject the garbage. It may be helpful to have some garbage left in the hopper to enhance the effect of the packer pushing on the garbage;
- 10. Lower the body and close the tailgate;
- 11. Repeat the procedure for the other side of the body<sup>1</sup>;
- 12. Put safety pins back in place;

IMPORTANT: If a full ICC bumper is installed on one of the tailgates, always fully open the tailgate on which it is installed before unloading the opposite compartment. If the tailgate on which the full ICC bumper is installed is not fully open, it will not be possible to raise the body.

- 13. Drive away from the unloading site;
- 14. See "End of the Day Cleaning and Inspection" on page 64.