

















OPERATOR'S MANUAL



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Introduction

The purpose of this manual is to introduce operators to the operational procedures of the 2R-II[™] rear-loader garbage truck. For information regarding maintenance procedures, refer to the related 2R-II[™] *Maintenance Manual*.

Introducing the 2R-II™

2R-II[™] units are rear-load refuse collection vehicles used for residential, commercial and demolition garbage pick-ups. Once the body is full, all its content is unloaded at a waste management landfill or other appropriate site (e.g. transfer station, incinerator, recycling station). These units are designed to improve every aspect of your garbage collection operation, and they use a series of hydraulic, mechanical, and electrical systems to perform their work routine.

Depending on the type of collection for which it is intended, the 2R-II[™] is offered in two main collection configurations: semi-automated and manual.

Vehicles destined for semi-automated collection are equipped with a cart tipper, and vehicles destined for manual collection benefit from the lowered hopper load sill.

All other major options and body configurations are explained in the following pages.

Product Overview

The 2R-II[™] is a tough, reliable and user-friendly collection truck. It has everything you need to perform your work efficiently: a large hopper, fast packing cycles, an efficient open-and-eject process and great versatility for use not only in residential and commercial waste collection but also in demolition waste collection.

Figure 1-1 Cart tippers



Body's main components are the hopper (see Figure 1-3), the packer (see Figure 1-2), the tailgate (see Figure 1-2), the pushout panel (see Figure 1-4), and the carrier panel (see Figure 1-3).

Some trucks may be equipped with one or two cart tippers (see Figure 1-1). Or they may be equipped with a push bar. If the latter is installed, a reeving cylinder or winch is provided.

The hopper is the area of the body where the refuse is dumped. The packer is the piece of equipment that pushes the refuse into the body. The pushout (or ejection) panel is the piece of equipment that is used to eject garbage at landfill sites. The tailgate is the rear pivotal door that prevents refuse from exiting the body during collection. At landfill, the tailgate is raised to enable discharge of the refuse.

Figure 1-2 Tailgate (left); Packer (right)



Figure 1-3 Hopper (left); Carrier panel (right)



Figure 1-4 Pushout panel



In the cab, you will find the console on which the engine speed-up switch and the hydraulic pump switch are located (see Figure 1-5).

Figure 1-5 2R-II[™] cab



Operating controls for the packer, carrier panel, and container handling system are located on the right-hand side of the tailgate.



Figure 1-6 Operating controls (packer, carrier panel, container handling system)

Operating controls for the pushout panel and tailgate are located on the left-hand side of the body, not far from the cab.

Figure 1-7 Pushout panel and tailgate operating controls



To Contact Labrie Plus

In the U.S.

Address:

	Oshkosh, WI 54904	
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, 7:00 AM to 7:00 PM Central Standard Time	
Technical Support Service:	Available 24 hours	

1981 W. Snell Road

In Canada

E-mail:

Address:	175 Route du Pont
	St-Nicolas, 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

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.

sales@labriegroup.com



Safety Precautions

General

IMPORTANT: This manual contains safety information that could prevent accidents. Read and thoroughly understand it before operating the unit.

To us all at Labrie Enviroquip Group, the safety of vehicle operators is one area of great importance.

This vehicle was built in accordance with the American National Standards Institute (ANSI) standard for Mobile Refuse Collection and Compaction Equipment – Safety Requirements, ANSI Z245.1 – 1999.

Also, since 2R-II[™] vehicles are heavy duty pieces of equipment, they require that a certain number of safety precautions be taken.

The 2R-II[™] has been designed with the operator in mind. However, as with any industrial machinery, especially those that are large and apply forces through hydraulic pressures, the ultimate responsibility for safety rests with you, the operator.

An alert, conscientious attitude, and observance of all known safe operating practices are the best ways to prevent accidents. It is the operator's responsibility to be familiar with, and ensure that operation is in accordance with safety requirements and codes including all applicable Occupational Safety & Health Act (OSHA) and ANSI regulations.

Additional safety precautions, along with all the necessary instructions and conventions, are presented in the following pages.

Conventions

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





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



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

The word "NOTE" is also used throughout the manual. It precedes information that provides special emphasis or clarification on a specific operation or procedure.

Basic Safety Notions

The following safety notions are related to the use of the 2R-II[™]. 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 affixed to the vehicle.



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 2R-II[™].



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 38).



Always wear safety glasses, gloves and proper footwear while collecting waste. Explosive objects, pressurized cans, and fluorescent tubes can be present and pose a danger. *Be alert!*

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/state and federal safety standards.
- To supply adequate instructions and training for the safe use of the vehicle and its equipment before assigning an employee to such vehicle/equipment.
- 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 any 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 2R-II[™] only after having received proper instructions 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 mirrors, windows, lights, and monitor equipment are clean and adjusted properly.
- 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 raising tailgate.
- 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 38).
- Do not drive with the tailgate fully open unless it is to unload refuse at the landfill.

Safety Precautions

Danger!

Operators must adhere to the following safety 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 PTO system 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 38.
- Proper servicing requires specialized tools and procedures. Service must be performed by authorized personnel only following procedures in the 2R-II[™] *Maintenance Manual*.
- Walk completely around the vehicle to make sure all persons and obstructions are clear before starting the unit.
- The container handling system is a critical component of the unit. Use only the proper replacement parts.
- Inspect all hooks, chains and cables daily to ensure serviceable condition. Replace damaged or worn parts.
- Before operating the vehicle the driver must be thoroughly familiar with the employer's safety program concerning traffic rules, warning devices and hand signals.
- Be sure to know where to get assistance in the event of an emergency.
- Know your machine. Know the location and function of all controls, gauges, instruments and protective devices.
- Should the height of a refuse collection vehicle be altered by installing a container handling system, be sure the overall height is rechecked and overall height plus 3 inches is noted on the decals.

General Operation

- It is the employer's responsibility to ensure that *only* qualified employees are assigned to 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 Occupational Safety and Health Act (OSHA) and American National Standards Institute (ANSI) regulations.
- Do not attempt to operate this equipment without proper training.
- 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.

- Move the vehicle as slowly as possible without stalling when traveling in reverse.
- Always make sure the area behind the unit is clear before traveling in reverse.
- Do not travel in reverse for distances greater than those dictated by local ordinances. If reverse travel exceeds 10 feet, use a "spotter" or move the vehicle in 10 foot increments only, and then check to make sure the area behind the unit is clear between increments.
- Do not attempt to dislodge any material above waist level unless wearing eye protection such as "approved" side shielded safety glasses or a full face shield.
- Never use the unit to push or tow another vehicle.
- Never unload uphill or against a pile of refuse or into the bank of a hill.
- Never place head, body, fingers or any limbs into a scissors point or pinch point on the equipment.
- 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 where to get assistance in the event of an emergency.
- Know your machine. Know the location and function of all controls, gauges, instruments and protective devices.
- Do not operate this vehicle if there are any signs of damage or incomplete repairs.
- Report any doubts that you might have and any safety service requirements regarding this vehicle to a supervisor.
- When removing nylon locknuts, *always* replace them by new ones.
- Start the engine following the manufacturer's recommended procedure.
- Wear your seat belt.
- When driving the vehicle, keep both hands on the steering wheel at all times.
- *Never* drive this vehicle with the tailgate unlocked.
- Always set the parking brake before leaving the cab.
- When the vehicle is parked, the parking brake *must* be applied.
- Turn on appropriate warning lights, put on a safety vest, protective glasses and protective shoes.
- All service opening covers and access doors must be maintained and latched in place while operating equipment.
- Ensure all co-workers are in view before operating or moving any controls or the unit.
- Ensure that there is sufficient overhead clearance before operating the unit.
- Ride only in the cab or on riding platforms designed for that purpose. Riding steps shall not be used when speeds are expected to exceed 10 mph (16 km) or when distance traveled without stopping will exceed 2/10 of one mile. Do not get on/off riding step when vehicle is in motion.
- Never allow anyone to ride on the steps when the vehicle is backing up.
- Stop the vehicle immediately if warning lights for the TAILGATE AJAR system come on.
- Never use controls or hoses for hand holds when getting on/off. Controls and hoses are movable. They do not provide proper support and may cause accidental equipment movement.
- Make sure the backup alarm is working properly.
- Always ensure that all persons are clear before raising or lowering the tailgate. It is the operator's responsibility to warn all persons not to stand or cross under a raised tailgate.

- Do not move the vehicle with the tailgate raised except during unloading and then only as necessary to clear the load before lowering.
- Stand clear when the tailgate is being raised or lowered and during the unloading cycle. If it is necessary to manually clear debris from the hopper, use a long metal probe and DO NOT stand under the tailgate.
- Never load the hopper above the loading sill.
- Never allow material to extend outside of the hopper when packing.
- Allow the packer panel control lever and carrier panel control lever to shift back automatically.
- To avoid possible bodily injury or equipment damage, lower the tailgate slowly.
- Never enter the body unless the pushout panel clamp or the telescopic ejection system cylinder is released, PTO disengaged and ignition key removed and placed in your pocket. For more information, see *Locking Out and Tagging Out the Vehicle* on page 38.
- Do not attempt to load refuse into the hopper after the packing cycle has begun. The packer panel must be in the "home" position and stopped before loading the hopper.
- The speed-up switch on the console must be "OFF" between pickups or when parked. This prevents inadvertent engine speed-up if the tailgate carrier panel control lever is shifted.
- The tailgate clamps must be tightened securely before starting to load.
- Do not step on the throttle pedal while the speed-up system is engaged.
- Vehicles with automatic transmission require the shift lever to be in gear to engage the PTO and then shifted to neutral to activate the PTO/pump.
- Never use a rear loader to transport a container.
- Follow all safety directions listed in the refuse body Operator and Maintenance Manual under SAFETY PRECAUTIONS.
- Never use container handling chains or cable for towing or pulling.
- When not handling containers, keep the container attachment closed and latched.
- Do not operate the rear loader's packing mechanism with a container off the ground.
- If it is necessary to manually free debris from the container, use a long metal probe while the container is on the ground, and DO NOT place yourself between the container and the packer body.
- Secure the drum winch or reeving cylinder hook to the tailgate and take up the excess slack when not in use.
- Never hold the hook on an attachment point while taking up slack.
- Take up excess cable slack before moving the vehicle.
- Check overhead clearance before dumping a container.
- Do not move the vehicle with a container attached.
- Always set the vehicle parking brake before attaching or lifting a container.
- Never lift a container which is non-compatible with the Leach container attachment.
- Never lift a container without first latching both container latch arms.
- Raise the container with a smooth even movement. Do not bounce the container.
- Do not slam the container against the packer tailgate or bump bar.

- Do not attach the hook to any lift point which will not be completely encircled by the hook with the safety latch closed. Do not remove the hook safety latch.
- Read and obey all container decals issued by the container manufacturer.
- Read and follow container manufacturer's information on accepted use practices.
- Do not attempt to lift overloaded containers.
- Center the container on the attachment.
- All containers should be inspected for serviceability and repaired if not in safe, usable condition.
- Do not use non-standard or damaged trunnion bar.
- Never cross under a raised container.
- Stand clear when dumping containers.
- Before attempting to lift a container below 32 °F (0 °C) make sure it is not frozen to the ground.
- When using an eye type container attachment point, the base of the hook must be positioned to lift on the inside of the eye.
- Place the container on a flat, level surface.
- Do not get into the hopper compartment or try to repair anything on the packer when it is moving or 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 38.

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

- Anytime a loaded vehicle is *brought inside a garage,* fire extinguishers shall be close at hand.
- The employer must inform employees of an appropriate place to unload the body near the maintenance facility (preferably away from traffic, surface drains, and ditches).
- Keep a fire extinguisher accessible at all times.
- Never use lighted smoking materials, open flame or sparks around when working with flammable materials such as fuel tanks or storage batteries.
- Never have an open flame as a light source.

- Never load ashes or other materials which might be smoldering. These materials could ignite refuse in the packer body.
- NOTE: 2R-II[™] vehicles are equipped with a 5-lb fire extinguisher, which is located inside the cab. A 20lb fire extinguisher may also be installed as an option. Each fire extinguisher must be checked regularly by qualified personnel.

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

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



Housekeeping

Good housekeeping habits are a major factor in accident prevention.

- Keep handrails and steps clean and free of grease or debris.
- Do not store brooms or other equipment where they could inadvertently activate the packer controls.
- Rubbish, scrap paper and litter are highly combustible. Such material should be stored in metal containers entirely clear of sparks and flames.
- Clean all lights and safety decals so you and the surrounding pedestrians and drivers will be aware of the truck at all times.
- Ensure that the equipment works properly by removing any compacted garbage in the packer area after each body unloading.
- If you need to clean debris from the edges of the tailgate, use a pole while standing to the side.
- If installed, use the drain under the curbside of the tailgate to let water and other liquids out of the tailgate.



Safety and Informative Decals

Pay careful attention to all safety, warning and informative decals while working in and around the 2R-II[™]. 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



104059 104058 - Spanish 104060 - French



47304 120989 - English/Spanish 79846 - English/French



104549 104057 - Spanish 104056 - French



104504 84278 - English/Spanish

84277 - English/French

ENGINE SPEED-UP REV. D LABRIE 104035

104035 104036 - Spanish 104034 - French

FILTER ELEMENT CHANGE

To ensure oil cleanliness and longer machine life, change the element after 20 hours, 50 hours and then at 250 hours intervals.

104029 104030 - Spanish 104028 - French



IN	ISPEC	TED O	N		
D	ATE:				
REV	A	LABRIE	10404		
10404	1				
10404	2 - Spanish				
10404	0 - French				
		ANK CA	PACIT	Υ/	
CAP	ACITÉ		FRVO		1
CAPAC	idad d		IQUE L	JE ACE	
35)
30					
42	US GAL	, / GAL	US/GA	L. US	
159	LITERS	/ LITRES	5/LITRO	DS	

84488



104068

104531

104532 - Spanish

84166 - English/Spanish 84165 - English/French



104092 104093 - Spanish 104091 - French



32272



47520 47521 - French



32411 Optional



159828 Optional SHUT OFF VALVE LOCATED ON SUCTION LINE BEHIND THE HYDRAULIC TANK



121349



47256 84419 - Spanish 159761 - French Optional



121344



	DEFUELING PROCEDURE	
1.	Make sure the vehicles are in an open and safe area and that they are grounded using a post set in the ground.	
2.	Make sure the 3 way valve on the dispensing vehicle is shut OFF.	
3.	Connect the defueling hose to the defueling port quick connector on the dispensing vehicle.	
4.	Connect the defueling hose on the NGV1 receptacle of the receiving vehicle.	
5.	Make sure the main shut off valve on the receiving vehicle is turned ON.	
6.	Gradually turn the 3 way valve on the dispensing vehicle to the "Gas transfer" position.	
7.	Let the gas flow from the dispensing vehicle to the receiving vehicle until the pressure in both vehicle is equal.	
8.	Once equilibrium is reached, turn the main shut off valve on the receiving vehicle OFF.	
9.	Gradually turn the 3 way valve to the "Exhaust" position. This operation will drain the transfer hose thru a muffler on the 3 way valve on the dispensing vehicle.	ð
10.	Once the transfer hose is completely drained, turn the 3 way valve OFF.	
11.	Disconnect the transfer hose from the receiving vehicle.	
12	Disconnect the transfer hose from the dispensing vehicle.	
V.1	LABRIE 1	1598

159852 58704 - French Optional



104560

104561 - Spanish 104559 - French



104519

84284 - English/Spanish 84283 - English/French







84032 84031 - English/French 104539 - English/French/Spanish



104569

84294 - English/Spanish 84293 - English/French



104589 84286 - English/Spanish 84285 - English/French



104566

104567 - Spanish 104565 - French Optional





This vehicle conforms to all ANSI Z 245.1 safety requirements effective on the manufacturing date.

LABRIE

104044

rev. c 104044

104045 - Spanish 104043 - French

Decals on Tailgate



32411 Optional



104525 104526 - Spanish 104524 - French



104083

104084 - Spanish 104082 - French

DRIVER SIGNAL			
REV, B	LABRIE	104032	
104032 104033 - Spanish 104031 - French	I		
M	/INCH		
REV, B	LABRIE	104048	

104048 104049 - Spanish 104047 - French



104035

104036 - Spanish 104034 - French



104054 104055 - Spanish 104053 - French





104186 104187 - Spanish 104185 - French





104098 104099 - Spanish 104097 - French

104519 84284 - English/Spanish 84283 - English/French

activated from LABRIE

104080 104081 - Spanish 104079 - French



DANGER Stand clear of container dumping mechanism when it is in motion.

104089 104090 - Spanish 104088 - French 104095 84290 - English/Spanish 84289 - English/French

DANGER Stand clear of cable while cable is loaded

104507 104508 - Spanish 104506 - French



47266 120973 - English/Spanish 79835 - English/French



104516 84292 - English/Spanish 84291 - English/French



104589 84286 - English/Spanish 84285 - English/French



104513 84282 - English/Spanish 84281 - English/French



104051 104052 - Spanish 104050 - French



84032 84031 - English/French 104539 - English/French/Spanish 104510 84280 - English/Spanish 84279 - English/French

CAPACITÉ MAXIMUM CAPACIDAD MAXIMALE CAPACITY MÁXIMA 5443 kg 12000 lb

104641

THIS VEHICLE IS POWERED BY NATURAL GASS

32414 84418 - Spanish 159760 - French Optional

Decals inside Cab



84328 104665 - French



84329



84330 104666 - French



84331



84332 104667 - French





FRONT WORK LIGHTS ON OFF REV. @ LABRIE 84335

104669 - French



159765 104670 - French



84032 84031 - English/French 104539 - English/French/Spanish


84189 84188 - English/French

1 DANGER

- Do not transport containers with the lifting devices.

- Transporting a container could result in personal injury or property damage.

104071 104072 - Spanish 104070 - French



104510 84280 - English/Spanish 84279 - English/French

A CAUTION

To prevent pump damage, do not drive at high speed when the pump is engaged.

When pump is engaged, the vehicle must not be operated at a speed exceeding 10 mph (16 km/h).

104038 84164 - English/Spanish 84163 - English/French

104001 104002 - Spanish 104000 - French



CARRIER CYLINDER ROD SIDE ATTACHMENT

CARRIER CYLINDER PISTON SIDE ATTACHMENT

PACKER CYLINDER ROD SIDE ATTACHMENT

PACKER CYLINDER PISTON SIDE ATTACHMENT

PACKER / CARRIER BEARING POINT

104671 104672 - French



104092 104093 - Spanish 104091 - French



47420 84420 - Spanish 159755 - French Optional



104089 104090 - Spanish 104088 - French



in excess of 20 mph (32 km/h) from the stand-up position

LABRIE

REV. C

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Safety Features

Back Up Alarm

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

Tailgate Safety Props

The tailgate safety props are used to support and keep the tailgate open during inspection or maintenance procedures. It is mandatory to set the safety props every time the tailgate is open for such purposes.

The tailgate safety props are located under the tailgate, one on each side.

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



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

Setting the Tailgate Safety Props (for units equipped with standard tailgate clamps)

To set the tailgate safety props:

- **1.** Make sure that the body is empty.
- **2.** Remove the tailgate clamps. To do so:
 - **2 a.** Loosen the clamp.
 - **2 b.** Swing the clamp away from the body.

Figure 2-2 Tailgate clamp



3. Start the engine.

4. Turn the pump ON.



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

5. Using the TAILGATE lever raise the tailgate about 3 feet (enough to swivel both safety props towards the body).

Figure 2-3 TAILGATE/PUSHOUT levers



6. Unlatch each prop from its stored position and swivel it towards the body (see Figure 2-4).



Figure 2-4 Props in stored position (left) and in service position (right)



7. Lower the tailgate until both safety props lean against the body base using the TAILGATE lever.

Figure 2-5 Props leaned against body base



Putting the Tailgate Safety Props Back in Place (for units with tailgate clamps)

To put the tailgate safety props back into their stored position:

- **1.** Start the engine.
- 2. Turn the pump ON.
- **3.** Raise the tailgate by about 3 feet using the TAILGATE lever (see Figure 2-3).
- **4.** Swivel back each safety prop and latch it into place under the tailgate (see Figure 2-6 and Figure 2-7).

Danger! Stand clear of tailgate path while putting the safety props back into their stored position.

Figure 2-6 Putting back props into stored position



Figure 2-7 Props in stored position



IMPORTANT: Secure each prop using the provided latch.

5. Using the TAILGATE lever (see Figure 2-3), completely close the tailgate. The TAILGATE OPEN light indicator should turn off.

Figure 2-8 TAILGATE OPEN light indicator



- 6. Put the tailgate clamps back in place (see Figure 2-2). To do so:
 - **6 a.** Swivel back the clamp against the body.
 - **6 b.** Tighten the clamp properly.

Setting the Tailgate Safety Props (for units equipped with the optional hydraulic tailgate locking mechanism)

To set the tailgate safety props:

1. Make sure that the body is empty.

- **2.** Start the engine.
- **3.** Turn the pump ON.



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

4. Using the tailgate unlatch button on the body left-side corner near the access door, unlock the tailgate.

Figure 2-9 Tailgate locking/unlocking controls



- **NOTE:** When the tailgate is unlocked, both locking mechanism cylinders are retracted. They are extended when the tailgate is locked.
- Figure 2-10 Locking mechanism cylinder



5. Using the TAILGATE lever raise the tailgate about 3 feet (enough to swivel both safety props towards the body) [see Figure 2-3].

6. Unlatch each prop from its stored position and swivel it towards the body (see Figure 2-4).



7. Lower the tailgate until both safety props lean against the body base using the TAILGATE lever (see Figure 2-5).

Putting the Tailgate Safety Props Back in Place (for units equipped with the optional hydraulic tailgate locking mechanism)

To put the tailgate safety props back into their stored position:

- **1.** Start the engine.
- **2.** Turn the pump ON.
- **3.** Raise the tailgate by about 3 feet using the TAILGATE lever (see Figure 2-3).
- **4.** Swivel back each safety prop and latch it into place under the tailgate (see Figure 2-6 and Figure 2-7).



Stand clear of tailgate path while putting the safety props back into their stored position.

IMPORTANT: Secure each prop using the provided latch.

- **5.** Using the TAILGATE lever (see Figure 2-3), completely close the tailgate. The TAILGATE OPEN light indicator should turn off (see Figure 2-8).
- **6.** Using the tailgate latch button on the body left-side corner near the access door (see Figure 2-9), lock the tailgate.
- **NOTE:** When the tailgate is unlocked, both locking mechanism cylinders are retracted. They are extended when the tailgate is locked.

Camera System

2R-II[™] units can be equipped with up to two (2) cameras. These cameras can be installed:

- on the upper part of the tailgate (standard feature) [see Figure 2-11, right], and
- on the left-hand side mirror (optional feature) [see Figure 2-11, left].

The operator can switch from one camera to the other using a selector switch located on the in-cab 7" LCD color monitor.

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



Figure 2-11 Camera on the left-hand side mirror (left), and on the tailgate (right)

Tailgate Open Proximity Switch Test

The Tailgate Open Proximity Switch Test should be part of your daily inspection. Successful completion of this test ensures that your unit is safe to operate. If this test fails, do not operate your unit until the appropriate adjustment or service has been completed.

IMPORTANT: Your rear loader unit may require other safety tests not mentioned herein. Consult your supervisor and/or maintenance department if you have questions or you are in doubt.

- A. For this test, proceed as follows (on units equipped with standard tailgate clamps):
- **1.** Make sure that the body is empty.
- **2.** Remove both tailgate clamps (see Figure 2-2). To do so:
 - **2 a.** Loosen the clamp.
 - **2 b.** Swing the clamp away from the body.
- 3. Start the truck.
- **4.** Engage the pump.
- **5.** Using the TAILGATE lever (see Figure 2-3), raise the tailgate by a few feet.



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

When the tailgate is raised, the in-cab buzzer and the backup alarm should sound and the TAILGATE OPEN indicator light on the dashboard (or on the console) should turn on. Check they are all working. If for some reason any of these elements are not activated, report this to your supervisor or maintenance personnel.

6. Using the TAILGATE lever, lower and close the tailgate.

The in-cab buzzer and the backup alarm should stop sounding, and the TAILGATE OPEN indicator light should go off.

7. Put both tailgate clamps back to their lock position.

B. For this test, proceed as follows (on units equipped with the optional hydraulic tailgatelocking mechanism):

- **1.** Make sure that the body is empty.
- **2.** Start the truck.
- 3. Engage the pump.
- **4.** Using the tailgate unlatch button on the body left-side corner near the access door (see Figure 2-9), unlock the tailgate.
- **5.** Using the TAILGATE lever (see Figure 2-3), raise the tailgate by a few feet.



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

When the tailgate is raised, the in-cab buzzer and the backup alarm should sound and the TAILGATE OPEN indicator light on the dashboard (or on the console) should turn on. Check they are all working. If for some reason any of these elements are not activated, report this to your supervisor or maintenance personnel.

6. Using the TAILGATE lever, lower and close the tailgate.

The in-cab buzzer and the backup alarm should stop sounding, and the TAILGATE OPEN indicator light should go off.

7. Using the tailgate latch button on the body left-side corner near the access door (see Figure 2-9), lock the tailgate.

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 a 2R-II[™] unit:

1. Park the vehicle on safe level ground, and apply the parking brake (see Figure 2-12).

Figure 2-12 Parking brake sign



- **2.** Make sure that the body is completely unloaded.
- **3.** Switch off the hydraulic pump.

- **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.

IMPORTANT: The battery set of the 2R-II[™] is equipped with a master switch (see Figure 2-13) that must be turned off.

Figure 2-13 Master switch



- **6.** Chock all wheels.
- 7. Put an "OFF SERVICE" tag on the driver's wheel and on the front windshield.
- **8.** Use safety props to block an open tailgate to prevent movement due to gravity.
- **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 2-12).
- 2. Make sure that all moving parts are in their "home" position (tailgate, packer, etc.).
- **3.** Turn off, in sequence, the hydraulic pump (see Figure 2-16), the electrical system, the engine and the master switch (see Figure 2-13).
- **4.** Drain all air tanks.

Figure 2-14 Drain valve on air tank



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 2-15).

Figure 2-15 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. Engage the hydraulic system by switching on the Pump ON/OFF switch on the cab dashboard or on the console (see Figure 2-16).





Once the engine is started, wait for air pressure to build up to at least 70 psi.





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



Controls, Indicators and Processes

The 2R-II[™] has a series of controls and indicators that allow easier operation of the different functions that come with the vehicle. The indicators are mainly located on the in-cab console or on the dashboard, while the operating controls are mostly located on the right side of the tailgate and some on the front body left side near the access door.

It is imperative that the operator familiarize himself with the layout and function of all the controls required to operate the 2R-II[™].

Also, at the end of this section, you will find basic information on the container/waste handling processes as well as terms that are commonly used in this field.

In-Cab Controls

While most of the controls of the 2R-II[™] are located on the tailgate and on the body, a few are found inside the cab.

The following are the in-cab controls:

Parking Brake

The parking brake, located on the dashboard, must be used every time the 2R-II[™] is stopped on idle position except at regular traffic stops.



1 Parking brake



Pump Switch

This switch, which is also called PTO switch, engages and disengages the hydraulic pump that powers all body and tailgate functions.

- Turn on this switch to activate the hydraulic pump.
- Turn off this switch to deactivate the hydraulic pump.





NOTE: Even if the PTO switch is turned off, the pump may still be turning whatever the engine's RPM. This is particularly the case when the pump is mounted at the front end of the truck. It is very important not to let the pump run dry or without oil. Otherwise, the pump will be seriously damaged or even destroyed.



Do not close the main valve on the hydraulic tank even if the PTO switch is turned off. The pump may still be turning whatever the engine's RPM, especially when the pump is mounted at the front end of the truck. Failure to do so may seriously damage or even destroy the pump.

Caution!

Prior to attempting any operation of the unit, make sure you are familiar with all of the safety information contained in Section 2: *Safety Precautions*. Also, be sure to read all safety decals associated with the Pump/PTO before attempting

Also, be sure to read all safety decals associated with the Pump/PTO before attempting operation.

ENGINE SPEED-UP Switch

This switch energizes the engine speed-up system. It is located either on the in-cab console or on the dashboard (see Figure 3-3).

The speed-up feature is used to rev up the pump providing additional flow to the hydraulic features and reducing cycle times.

- Toggle this switch up to activate the engine speed-up system.
- Toggle this switch down to deactivate the engine speed-up system.

Figure 3-3 SPEED-UP switch



AUTO-NEUTRAL Switch (optional)

The auto-neutral system is available on units equipped with an Allison electronic transmission. The auto-neutral allows the driver to shift from "drive" to "neutral" automatically without touching the shifter lever. For more information on this, refer to the chassis manufacturer's manual.

- To activate the auto-neutral function, toggle the AUTO-NEUTRAL control switch up.
- To deactivate the auto-neutral function, toggle the AUTO-NEUTRAL control switch down.

The optional AUTO-NEUTRAL switch is located on the in-cab console (see Figure 3-4).

Figure 3-4 AUTO-NEUTRAL switch



REAR WORK LIGHT Switch (optional)

This switch (see Figure 3-5) turns on/off the rear work light if installed on your 2R-II™.

- Pressing the toggle upward will turn the rear work light on.
- Pressing the toggle down will turn the rear work light off.

Figure 3-5 REAR WORK LIGHT switch



FRONT WORK LIGHT Switch (optional)

This switch (see Figure 3-6) turns on/off the front work light if installed on your 2R-II™.

- Toggle the switch up to turn on the front work light.
- Toggle the switch down to turn off the front work light.

Figure 3-6 FRONT WORK LIGHT switch



HOPPER LIGHT Switch (optional)

This switch (see Figure 3-7) turns on/off the hopper light if installed on your 2R-II™.

- Toggle the switch up to turn on the hopper light.
- Toggle the switch down to turn off the hopper light.

Figure 3-7 HOPPER LIGHT switch



FLASHING LIGHT Switch (optional)

This switch (see Figure 3-8) activates and deactivates the flashing lights.

- Toggle the switch up to turn on the flashing lights.
- Toggle the switch down to turn off the flashing lights.





STROBE LIGHT Switch (optional)

This switch (see Figure 3-9) activates and deactivates the strobe light mounted on the tailgate.

- Toggle the switch up to turn on the strobe light.
- Toggle the switch down to turn off the strobe light.

Figure 3-9 STROBE LIGHT switch



Indicators

TAILGATE OPEN Light

This warning light, located either on the dashboard or on the console, will illuminate if the tailgate is ajar. Having the tailgate ajar will also sound the backup alarm and illuminate the backup lights.

Figure 3-10 TAILGATE OPEN light





Warning! Operation of the unit with an illuminated or defective warning system can result in personal injury and/or equipment damage.



Outside Controls

Engine Speed-Up Push Button

When depressed, this push button switch (see Figure 3-11) will cause the engine to speed-up and provide additional flow to the hydraulic system. Located on the lower front left side of the body, this button is depressed by the operator when operating either the ejection (pushout) lever or the tailgate lever.

NOTE: Additional speed-up control buttons may be installed on the 2R-II[™] with optional winches and container handling attachments.

Figure 3-11 Controls on the body left side



Front Control Valve

The front control valve is located behind the access door on the front left side of the body (see Figure 3-11). The control levers for this valve extend out through a cutout in the door. This valve allows the ejection (pushout) panel to move and the tailgate to rise.

Ejection (Pushout) Lever

The upper lever (see Figure 3-11) controls the movement of the pushout panel. Moving the control lever rearward (toward the tailgate) will move the pushout panel to the rear. Moving the control lever forward (toward the cab) will move the pushout panel to the front.

Tailgate Lever

The lower lever (see Figure 3-11) controls the tailgate. Moving the lever rearward (toward the tailgate) will raise the tailgate. Moving the lever forward (toward the cab) will lower the tailgate.

IMPORTANT: The tailgate must be unlocked before attempting to raise it. To know how to unlock the tailgate, see Step 2 on Page 31 (if tailgate clamps are installed) or Steps 2, 3 and 4 on Page 35 (if the optional hydraulic locking mechanism is installed).

Tailgate Clamps

Tailgate clamps are located on each side of the tailgate at the bottom where the tailgate rests against the body (see Figure 3-12). They are used to secure the tailgate to the body during operation. These clamps must be manually loosened and swung away from the body before raising the tailgate.

Figure 3-12 Tailgate clamps





Before attempting to loosen the tailgate clamps, pressure against the tailgate must be relieved by opening the packer panel to the "interrupted cycle" stop position.

Hydraulic Tailgate-Locking Mechanism Buttons (optional)

These optional buttons, located on the forward left side of the body (see Figure 2-9), are used to lock/unlock the tailgate.

- Press and hold the Unlatch button to unlock the tailgate. Both locking cylinders will retract.
- Press and hold the Latch button to lock the tailgate. Both locking cylinders will extend.

Driver Signal Push Buttons

The standard push button is located on the curbside of the tailgate. An optional push button may also be located on the streetside of the tailgate. These buttons (see Figure 3-13) are connected to a buzzer mounted under the driver's seat or under the dash in the chassis cab. The operator depresses one of these push buttons to signal the driver when the loading operation is completed and the truck is ready to go.

Figure 3-13 Driver signal buttons



Packer and Carrier Panel Levers

Packer Panel Lever

The packer panel control lever is located on the right side of the tailgate (see Figure 3-14). It is used by the operator to move the packer panel into position either open or closed during the compaction cycle.

NOTE: The engine speed-up system does not engage if only the packer panel lever is shifted. The carrier panel lever must also be shifted to engage the engine speed-up system.

Carrier Panel Lever

The carrier panel control lever is located on the right side of the tailgate (see Figure 3-14). It is used by the operator to move the carrier panel into position either up or down during the compaction cycle.

NOTE: The engine speed-up system automatically engages any time the carrier panel lever is shifted.

Figure 3-14 Packer and carrier panel levers



Compaction Cycle

Both the packer panel lever and the carrier panel lever are shifted simultaneously inward to open the packer panel and lower the carrier panel to the "interrupted cycle" position. Both levers are shifted outward to sweep the load from the hopper and pack it against the pushout panel. Any time the carrier panel lever is shifted, the engine speed-up automatically engages. The packing cycle may be stopped at any point by moving both operating levers to neutral. The packer or carrier panel can be moved independently.

Container Handling Control Levers (optional)

These control levers are provided when container handling attachments (drum winch, reeving cylinder or container push bar) are added to the unit. They are used to raise and lower the container causing the refuse to be deposited into the hopper for compaction. The levers are located on the right side of the tailgate directly above the packer and carrier panel control levers (see Figure 3-15). A refuse vehicle may have none or one or two control levers, depending on the configuration of the unit.

Figure 3-15 Container handling control levers



Tipper Lever (optional)

If one or two cart tippers are installed on the hopper sill, a tipper control valve is provided and mounted on the right side of the tailgate near the hopper (see Figure 3-16). A second control valve may also be mounted on the left side of the tailgate (see Figure 3-16).

Tipper Control on Tailgate Right Side

- Move the tipper lever to the left to lift the cart.
- Move the tipper lever to the right to lower the cart.

Tipper Control on Tailgate Left Side

- Move the tipper lever to the right to lift the cart.
- Move the tipper lever to the left to lower the cart.



Figure 3-16 Tipper lever on tailgate right side (1), on tailgate left side (2)

Terms You Will Need To Know

The main purpose of a refuse body is to load, compact, transport and unload refuse. To assist in loading of refuse in containers, various container handling systems are available to be mounted on 2R-II[™] rear loaders.

A refuse container may be a mobile residential one (1) cubic yard container with casters or a ten (10)cubic yard stationary commercial container. The equipment required to lift and empty these containers will vary according to the container's type and size.

Before going further, become familiar with the container handling terms you will need to know.

Container Attachment

The 2R-II[™] Container Attachment System consists of a loading edge with a latch assembly and a guide ear on each side of the tailgate. The latches and ears are installed to accommodate containers from one (1) to ten (10) cubic yard capacity. The standard container for use with the 2R-II[™] rear loader must have an ANSI Standard 1 1/4" - 1 3/4" diameter trunnion bar, with a 77 1/2" to 78" end-toend distance. This trunnion bar will center the container between the "ears" and prevent it from moving sideways. The latch arms must be manually raised and secured by the arm upper latch. The latches and ears, when properly used, will efficiently secure the container to the tailgate while dumping.

Warning! Only containers that meet the American National Standards Institute (ANSI) regulations should be used in conjunction with the 2R-II[™] Container Handling Systems.



Container Handling Systems

To lift or dump a container, several systems are available.

The following are some handling systems that could be used:

- A hydraulically operated container push bar for containers of 1 to 3 cubic yard capacity.
- A drum winch or roof-mounted container lifting cylinder for containers with capacities of four (4) or more cubic yards.

Drum winches are rated at various pounds of pull. The 2R-IITM drum winch and lifting cylinder are rated at 12,000 lbs.

NOTE: LeachTM bodies can be equipped with more than one container handling system.



Hook

- 1. Throat Opening
- 2. Back
- 3. Heel
- 4. Hook Safety Latch
- 5. Tip
- 6. Base



Container

- 1. Trunnion Bar
- 2. Hook Attachment
- 3. Lid



Container Attachment

- 1. Loading Sill
- 2. Arm
- 3. Latch
- 4. Guide Ear



Winch

- 1. Control Levers
- 2. Engine Speed-Up Button
- 3. Winch Lifting Cable
- 4. Winch Assembly
- 5. Container Attachment
- 6. Stop Bar/Lid Guard



Container Lifting Cylinder (CLC)

0

- 1. Control Levers
- 2. Engine Speed-Up Button
- 3. Cylinder Cable Roller Guide
- 4. Cylinder Cable
- 5. Lifting Cylinder Assembly
- 6. Container Attachment
- 7. Stop Bar/Lid Guard





Container Push Bar (CPB)

- 1. Control Levers
- 2. Push Bar
- 3. Lift Roller
- 4. Push Bar Cylinders
- 5. Stop Bar/Lid Guard
- 6. Container Attachment



Other Terms You Will Need To Know





Container Handling Process

All LeachTM container handling systems have three (3) basic operation steps:

Attaching

The first step in container handling is to attach the container to the rear loader by securing it with the latch arms of the container attachment.

Attaching container



Dumping

A container handling system is used to raise the container and empty its content into the hopper of the rear loader.



Releasing

When the container is empty, it is lowered to the ground, the latch arms released and the truck is moved forward.



Waste Handling Process

The main purpose of the 2R-II[™] is to safely and efficiently load, pack, transport and unload refuse. The following describes how the unit performs those tasks in the most basic terms. For a more detailed description of the unit and its components, refer to the 2R-II[™] *Maintenance Manual*. Before going further, take a look at the following illustrations. They will help you understand the fundamentals of the waste handling process and how they relate to one another.

Loading

Refuse is first loaded into the hopper of the tailgate assembly. The carrier and packer panels, which sweep up and pack the refuse from the hopper, will be in the "home" position.



Packing

When the operator starts the packing cycle, the carrier and packer panels move rearward over the load.



Next, the carrier and packer panels automatically stop at the "interrupted cycle" position.



The operator again activates the packing cycle. The carrier and packer panels move forward and sweep the refuse from the hopper up into the body and pack it against the pushout panel. Having completed a cycle, the carrier and packer panels are back into the "home" position and the hopper is cleared for more refuse.



Also, during the packing cycle, considerable hydraulic pressure is applied to the cylinders which control movement of the carrier and packer panels. This causes the refuse to be compacted tightly allowing for a large carrying capacity.

On units with the standard clamp pushout system, the operator must manually release the pushout panel clamping system to allow movement of the pushout panel.

Once the body is full, the 2R-II[™] can be moved to the dumpsite for unloading.



Unloading

At the dumpsite, the unit is unloaded in two easy steps:

- 1. The tailgate is raised by the operator.
- 2. The pushout panel is moved to the rear of the body, pushing out the load.





After unloading, on telescopic units, the tailgate is lowered and "latched" to the body.

On clamp style units, the pushout cylinder is retracted and then the clamp is set by extending the cylinder a couple of inches. The tailgate is then lowered and "latched" to the body.



Operating the 2R-II™

The different methods, procedures and necessary actions to operate the 2R-II[™] are presented in this section.

Warning!



Always read and understand the *Operator's Manual* before operating the unit.

Before operating the 2R-II[™], the operator 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.

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 2R-II^{rs}.

Obey all speed restrictions and regulations.

Pre-Operating Walk-Around Inspection

Each day, before starting the unit, perform the following "walk-around" inspection.

• Make sure all decals are in place and readable. Replace any decals that are not. Refer to "Safety and Informative Decals" on page 16 for a list of decals.

NOTE: A decal kit is available from your local authorized Labrie distributor.

• As you are checking for decals, also look for fluid leaks on and around the unit. Check for fluid leaks at the hydraulic cylinders, valves and fittings.

- Inspect the mounting sills and attaching hardware. Make sure everything is tight and that there are no broken or excessively worn parts. Check capscrews and fasteners for looseness, visible welds for cracks and control levers for each movement.
- Make sure the tailgate clamps are in the closed position and securely tightened (see *Tailgate Clamps* on page 50). If the optional hydraulic tailgate-locking mechanism is used instead of tailgate clamps, make sure this mechanism has been engaged to the locked position.

NOTE: When the tailgate is unlocked, both locking mechanism cylinders are retracted. They are extended when the tailgate is locked.

- Check the hydraulic tank gauge to make sure the fluid is in the "safe" range. Add fluid, if necessary. The pushout cylinder must be retracted, the tailgate down, the carrier and packer panels in the "interrupted cycle" position to check the hydraulic fluid level.
- Make sure all operating levers are in the neutral position.

Check:

- Packer panel lever (see Figure 3-14)
- Carrier panel lever (see Figure 3-14)
- Pushout lever (see Figure 3-11)
- Tailgate lever (see Figure 3-11)

Caution!

Never operate the 2R-II[™] with any part of the control system or levers removed or serious damage will result.





Never under any circumstances enter the body if the truck is running. Open the packer panel and release the pushout panel clamp before entering the body. Always make sure the truck engine is off and the keys are in your pocket before entering the body (see *Locking Out and Tagging Out the Vehicle* on page 38).

- Start the truck according to the chassis manufacturer's instructions and while it is warming up, continue the walk-around inspection.
- Check all of the operating and running lights. Make sure none are missing and that there are no burned-out bulbs.



Warning! The TAILGATE OPEN warning light should be off. Do not operate the unit if the light is illuminated.








Never hold the packer or the carrier panel lever in position by hand. Always engage and let go immediately. The only exception is at the end of a load.

- Move both the packer panel lever and carrier panel lever inward and let go. Check for the following:
 - Engaging the carrier panel lever will activate an engine speed-up switch; you should hear the engine speed-up.
 - Observe the carrier and packer panel movement; it should be smooth. The panels should stop automatically at the "interrupted cycle" position.



- Move both the packer panel lever and carrier panel lever outward and let go. Observe the carrier and packer panel movement; it should be smooth. The panels should stop automatically at the "home" position.
- Depress the two driver signal push-buttons located on both sides of the tailgate to make sure that the audible alarm located in the cab is working (see Figure 3-13).
- Back the unit up a few feet to ensure that the backup alarm is working properly.
- Loosen the tailgate clamps and swing them out (see Figure 3-12). Raise the tailgate approximately 6" and check to see if the TAILGATE OPEN light on the dash is on and if the backup alarm is audible. (Do not have the unit in reverse.)

On units with a hydraulic locking mechanism, unlock the tailgate first before attempting to open the tailgate. Use the locking/unlocking controls (see Figure 2-9) on the forward left side of the body to lock/unlock the tailgate.

 Report any problems found during the pre-operation "walk-around" inspection to the maintenance supervisor for service or repair, place a tag on the steering wheel, using a nonreusable fastener, stating the unit is inoperative and remove the keys (see Locking Out and Tagging *Out the Vehicle* on page 38).



Warning! Do not operate a unit that is in need of service or repair.



Walk-Around Inspection Checklist

- Decals in place and readable.
- Look for any fluid leaks.
- Mounting hardware tight and in place.
- Tailgate clamps closed and tightened.
 - Or, hydraulic tailgate-locking mechanism engaged.
- Hydraulic fluid reservoir at correct level.
- All operating levers in neutral positions.
- Pushout panel area clear of debris.
- Engine warmed up according to manufacturer's instructions.
- All operating and running lights functioning.
- Engine speed-up buttons operational.
- Packing cycle operates properly.
- Driver signal alarm can be heard.
- Back-up alarm and TAILGATE OPEN light are operable.
- Report any problems to proper personnel.

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 an inspection sheet, ask for their permission before using this example sheet.

VEHICLE CONDITION REPORT										
Date:		Unit	:							
Driver:			_ Demo:	Demo:						
Mileage in:			_ Eligine r Mileage	Mileage out:						
Start T	ime:		ivineage	out	Fir	nish Time	2:			
Start										
FLUID LEVELS										
PRE	POST		Amount A	ided	PRE	POST			An	nount Added
Ц	Ц	Engine Oil	Qt			Ц	Fuel		Ga	l
H	H	Hydraulic Oil	Qt	_	H	H	Transm	ission	Qt.	
		Coolant	Qt	A P INS	DFCT		water		Qt.	
If items need repair, check below and describe. TIRES										
PRE	POST	repuil, encer beit	in und dest	PRE	POST				Indicate a	ny defects.
		All gages/gage ligh	nts			Cab hor	n			J
		Low oil pressure				Exterior	back-up	o horn		Π
		Low oil warning li	ght/buzzer			Windsh	ield crac	ks		
Ц	H	Seat and seat belt	1 \	Н	Ц	Windsh	ield wipe	ers		
H	H	Liconso/registration	uggier)	H	H	Heat/De	errost	las		
H	H	Service brakes adju	isted	H	H	Steering	ve triang	sics		
Н	Н	Parking brakes ope	erational	Н	Н	Radio	, pluy			
		Low air warning li	ght/buzzer			Camera				
		Air compressor add	equate							
VISUAL BODY WALK-AROUND										
		Dottom: diagona of		DST I EL		ii			Commonto	
H	H	Battery disconnect] Ele] Fir	e Extin	wiring	H	H	Hydraulic	r working leaks
H	H	Cab damage	HH	I Fu	el tank	lines	H	H	Hydraulic	pressure
		Air lines		Ex	haust				Hydraulic	hoses
		Air compressor		En	gine				Wheel/Rin	ns
		Air dryer] Sta	arter				Seals	
Ц	Ц	Head lights] Tu	rn sign	al	Ц	Ц	Transmiss	ion
H	H	Marker lights		Ca	mera	-1	H	H	Mirrors	
H	H	Suspension		j Ca	m	OKS	H	H	Safety dev	rices
H	H	Hopper clean		Bo	dv clea	n	H	H	Safety dev	als
П	П	Tailgate		Pa	cker		П	Н	Cart tipper	r
		Safety Interlock sw	vitches							
PRE	POST	N. D.C. (M. 1	1. 0. 1.1		C 4					
		No Defects – Veni	cle Conditio	n Satisi	ESCE	IDTION				
			DEF		LOUK					
_										
	bove de	fects corrected								
☐ Above defects need not be corrected for the safe operation of vehicule.										
Mechanic's Comments :										
DRIVER'S SIGNATURE DATE										
DRIVER O DIGITI UNE						-				
DISTRIBUTOR SIGNATURE				DATE						
DRIVER'S REVIEW SIGNATURE DATE										

Operating Instructions

Starting Up

1. Inspect and start the truck as described in the pre-operational "walk-around" inspection.



2. Engage the Pump/PTO switch (to start the hydraulic pump) [see *Pump Switch* on page 44].

3. Place the Engine Speed-Up switch in the ON position (see *Engine Speed-Up Switch* on page 44).

Positioning the Pushout Panel

To load the unit, the pushout panel must be positioned toward the rear of the body.



Check the tailgate clamps to make sure both are securely tightened (see Figure 3-12). On units with a hydraulic tailgate-locking mechanism, make sure the tailgate is properly locked. Both tailgate cylinders must be extended (see Figure 2-10).

To position the pushout panel correctly:

1. Depress and hold the speed-up push-button.



2. Push the pushout lever rearward until the pushout cylinder is fully extended.



NOTE: On units with a telescopic pushout cylinder, the pushout panel is now in position for loading.

- 3. Release the speed-up button and pull the pushout lever forward until the pushout cylinder is fully retracted.
- 4. Repeat steps 2, 3 and 4 until the pushout panel is as far back as it will go and then pull forward on the pushout lever to fully retract the pushout cylinder. Now extend the cylinder a few inches to reset the clamp.

Loading the Hopper

There are only a few but important points to remember during loading of refuse:

- Load the hopper evenly on both sides.
- Load heavy objects in the center of the hopper.
- Do not load refuse higher than the loading edge.

Warning! Always follow proper loading procedures.



Attaching a Container to the Tailgate

Place the container on a flat, level surface. For large non-moveable containers the driver should back the unit toward the container following all vehicle and refuse body safety restrictions.

The vehicle should be backed with the latch arms open until the container trunnion bar (see Container on page 55) is between the guide ears (see Container Attachment on page 55) and within the latch assembly. Center the container on the attachment.



After setting the vehicle parking brake, the right and left container latch arms must be engaged.





Warning! Lifting a container without both latch arms properly secured can allow the container to swing away from the unit and cause severe injury or death.

NOTE: If the container is equipped with wheels, it should be rolled into position only after the vehicle parking brake has been set.

NOTE: Even small containers must be secured to the tailgate with the latch arms.

Using a Winch or a Container Lifting Cylinder

Once the container is secured within the latch assembly, the lifting cable should be attached. Place the load in the base of the hook with the safety latch closing the throat opening (see *Hook* on page 55).



IMPORTANT: Hooks must be used in a proper manner. Proper use of a lifting hook not only includes placing the load in the base of the hook, but also includes ensuring that the hook is lifting on the proper area of the attachment point.

The hook must completely encircle the attachment point. Equally as important, at the time load is applied to the base of the hook, the positioning must be correct to prevent the hook from dislodging. When using an eye type attachment point the base of the hook must be positioned to lift on the inside of the eye. The following illustration shows both correct and incorrect positioning of the hook.



IMPORTANT: For safety reasons, make sure the hook is positioned properly as slack is removed from the chain/ cable before lifting.

Slack should be removed from the cable, without the use of the engine speed-up button, by moving the winch control lever in the direction shown on the instruction decal to raise the container. When the cable is tight, the speed-up button (see Figure 4-1) should be depressed and held to provide sufficient hydraulic power to lift the container.



The container should be raised until the contents begin to slide into the hopper of the packer or until it is resting against the container bump bar.

Do not overfill the hopper. After assuring that all persons are standing clear lower the container to check the load condition of the container and the hopper. Lower the container enough to see between the container and the tailgate while standing on the ground without placing yourself between them.

Figure 4-1 Engine speed-up button



NOTE: On units with a roof-mounted container lifting cylinder, the speed of the device is limited during both the up and down movement. This speed reduction is for safety considerations.

When the hopper is full, lower the container to the ground, assure all persons are standing clear and then engage the packer mechanism (see *Packing the Load* on page 73).

After the packer panel has passed the loading sill, the container may be raised to again fill the hopper. Repeat this process until the container is empty.



Using a Container Push Bar (CPB)

Once the container is secured within the latch assembly the container is ready to be dumped. After assuring that all persons are standing clear, the operator moves the CPB control lever in the direction shown on the instruction decal to raise the container. When raising a container with the push bar, it is normal for the container to first lift upward within the container latch assembly, then tip toward the hopper and finally lower or drop to the bottom of the latch slots.



Do not overfill the hopper. After assuring that all persons are standing clear lower the container to check the load condition of the container and the hopper. Lower the container enough to see between the container and the tailgate while standing on the ground without placing yourself between them.

Releasing the CPB control handle when the container begins to tip will allow the container trunnion bar to lower within the latch slots with ease.

Packing the Load

NOTE: The packing cycle can be stopped at any time by moving both the packer panel lever and the carrier panel lever to the center (neutral).



To pack the load:

1. Cycle the packer panel and the carrier panel by moving both the packer panel lever and the carrier panel lever inward, toward the tailgate, then let go.

The packer panel will open and the packer panel lever will automatically shift back to neutral. The carrier panel will then move down to above the loading edge, stop in the "interrupted cycle" position and the carrier panel lever will automatically shift back to neutral.

2. Move both the packer panel lever and the carrier panel lever outward, away from the tailgate, then let go to finish the cycle.

The packer panel will sweep the hopper and the packer panel lever will automatically shift back to neutral. The carrier panel will then move up into the body and stop in the home position and the carrier panel lever will automatically shift back to neutral.





3. Repeat steps 1 and 2 each time the hopper is filled to, but not above, the loading edge.

Pushout Panel Operation during Packing

The 2R-II[™] telescopic pushout cylinder will normally move toward the front of the body automatically. When the resistance circuit is adjusted to produce maximum load density, it may become necessary to manually retract the telescopic pushout cylinder in order to allow the compacted refuse to move forward in the body. Also, if the packer panel stops short of the "home" position, the carrier panel operating lever may need to be held (overridden) to allow the refuse to move the pushout panel toward the front of the body. When the pushout panel has reached the front of the body, neither the packer panel operating lever nor the carrier panel lever should be overridden except to clear the final hopper load.



Releasing the Container

Once the container is empty, it should be lowered to the ground, the latch arms released and the cable disconnected.



Unloading at Dumpsite



Do not unload uphill or against a pile of refuse.

1. Apply the brakes, engage the PTO and ensure the transmission is in neutral. Relieve the pressure on the tailgate by moving the packer panel to the "interrupted cycle position".

- 2. Loosen both tailgate clamps and swing them out and forward as far as they will go.
- **NOTE:** On units with a hydraulic locking mechanism, unlock the tailgate first before attempting to open the tailgate. Use the locking/unlocking controls (see Figure 2-9) on the forward left side of the body to lock/unlock the tailgate.



Lifting the Tailgate



Stand clear when the tailgate is raised! If you need to clean debris from the edges, use a pole while standing to the side.

To lift the tailgate:

- 1. Depress and hold the engine speed-up button.
- 2. Push the tailgate lift lever rearward and hold until the tailgate is fully raised.





Ejecting the Load

To eject the load:

1. Depress and hold the engine speed-up button, push the pushout lever rearward and hold until the pushout panel stops.

NOTE: On units with a telescopic pushout cylinder this will eject the entire load — go on to step 4.

- 2. Release the speed-up button and pull the pushout lever forward until the pushout cylinder is fully retracted.
- 3. Repeat steps 1 and 2 until the pushout panel is as far back as it will go; completely ejecting the load.

- 4. Slowly pull the unit ahead to clear the refuse pile when the tailgate is lowered.
- 5. Clear debris from the edges with a pole while standing clear off to one side.

Warning! Never drive the unit more than 10 feet with the tailgate raised.



6. Pull the pushout lever forward to completely retract the pushout cylinder. Now push the pushout lever rearward extending the pushout cylinder a few inches, thus clamping the bar to the pushout panel.





With the telescopic circuit, the pushout cylinder remains fully extended. If the unit is going to travel over one mile empty, completely retract the cylinder. When packing is about to resume extend the cylinder and start packing.



Lowering the Tailgate

To lower the tailgate:

1. Pull forward on the tailgate lifting lever slowly and in small increments lower the tailgate a little at a time.

AVOID SLAMMING SHUT the tailgate.

2. Place the tailgate clamps in the closed position and tighten securely.

On units with a hydraulic locking mechanism, lock the tailgate using the locking/unlocking controls (see Figure 2-9) on the forward left side of the body.

NOTE: The TAILGATE OPEN light, backup lights and backup alarm should be off once the tailgate is closed.



Shutting Down the Truck

To shut down the truck:

- 1. Move the packer panel lever and carrier panel lever to place the packer panel in the "home" position.
- 2. Put all controls in neutral.
- 3. Set parking brake.
- 4. Turn off the engine speed-up switch.
- 5. Disengage pump/PTO.
- 6. Shut off engine.
- 7. Remove key.
- 8. Lock truck.



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