



NYC PT1100

HIGH-PERFORMANCE REAR LOADER

OPERATION MANUAL

ISSUED APRIL 2025

WARNING

Failure to follow all instructions and safety precautions in this manual, in the Service Manual, in other manufacturers' manuals and on the safety decals attached to the product could result in serious injury or death to operators or bystanders and/or damage to property.

DO NOT operate this vehicle before you READ and UNDERSTAND this Operation Manual, the Service Manual for this unit, other applicable manufacturers' manuals, and the safety decals on the product.

Each operator of this unit must read and understand all directions in this manual before they first operate this vehicle.

Keep this manual in the cab for new operators and to remind all operators about safe use.





READ THIS MANUAL!

EVERY PERSON who will **OPERATE, MAINTAIN, REPAIR, OR OTHERWISE WORK** with the Heil unit **MUST READ AND UNDERSTAND** this entire Operator's Manual before starting the engine or activating any switches or controls. **MAKE SURE** to read the Service Manual for the unit **BEFORE** you do any maintenance or repair procedures.

ALL USERS of this equipment must be trained professionals who understand how the machine operates and know how to avoid the risks associated with driving the vehicle and with picking up, compacting, and dumping refuse in an ever-changing traffic environment.

If you do not understand an operation or instruction, seek additional help or instruction from a qualified source **BEFORE** you operate the unit.

TABLE OF CONTENTS

Introduction

Section Preview	4
How to Use This Manual	5
To the Owner	6
To the Operator	7
To the Operator (Continued) / To the Mechanic	8
To the Mechanic (Continued)	9
Warranty Claims and Inquiries	10
Customer Service and Repair Parts Contact Information	11
Models	12
Serial Plate Location	13
Reading the Serial Plate	14
Product Nomenclature	15
Product Nomenclature (Continued)	16
Product Nomenclature (Continued)	17
Product Nomenclature (Continued)	18
Glossary	22

Safety Messages and Decals

Section Preview	26
Precautionary Statements	27
General Safety Precautions	28
General Safety Precautions (Continued)	29
Decals	32
Decal Placement	33
Decal Images	37
Reflective Safety Materials	44
Care of Decals	45
Pressure Washer Technique	46

TABLE OF CONTENTS

Alternative Cleaning Procedure	47
Lock-Out/Tag-Out Procedure	
Section Preview	50
Locking Out the Unit	51
Locking Out the Unit (Continued)	52
Locking Out the Unit (Continued)	53
Controls, Switches, and Indicator Lights	
Section Preview	56
Controls / In-Cab Control Panel	57
In-Cab Control Panel (Continued)	58
Standard Outside Controls	59
Standard Outside Controls (Continued)	60
Standard Outside Controls (Continued)	61
Standard Outside Controls (Continued)	62
Standard Outside Controls (Continued)	63
Standard Outside Controls (Continued)	64
Standard Outside Controls (Continued)	65
Standard Outside Controls (Continued)	66
Body and Tailgate Props	
Section Preview	68
Propping the Tailgate	69
Propping the Tailgate (Continued)	70
Propping the Tailgate (Continued)	71
Daily Checklist	
Body Daily Checklist	74
Before Going on Route	
Section Preview	78

TABLE OF CONTENTS

Battery Disconnect Switch / Daily Checklist	79
Before Starting a Route / Warming up the Hydraulic Oil	80
Check the Hydraulic Oil Level	81
Hydraulic Oil Tank with Sight Gauge	82
Cycle All Hydraulic Functions	83
Check the Traveling or "In-transit" Position	84
On-Route Operation Procedures	
Section Preview	86
Driving to Pick-up Locations	87
Before Loading	88
Loading Refuse Manually	89
Loading Refuse Manually (Continued)	90
Loading Refuse Manually (Continued)	91
Achieving Payloads / Leaving the Route for the Landfill / Transfer Station	92
Landfill/Transfer Station/Recycle Center Procedures	
Section Preview	94
Overview of Landfill/Transfer Station/Recycle Center Procedures	95
Unlocking the Tailgate / Unloading Refuse	96
Unloading Refuse / Lowering the Tailgate	97
Lower the Tailgate	98
Lock the Tailgate	99
End of Day Procedures	
Section Preview	102
Parking the Unit	103
Index	105

NYC PT1100

NOTES:

NYC PT1100

OPERATION MANUAL

ISSUED APRIL 2025

TP1NYCPT11-OM-0425

NOTES:

SECTION 1

INTRODUCTION

PREVIEW

Read this section to learn about:

- The responsibilities of the owner, the operator, and the mechanic
- Warranty information
- Telephone numbers and website URL for parts, technical support, warranty claims, training and manuals
- Identifying the different models
- Identifying the left (street side) of the unit
- The unit serial plate
- Various parts of the unit

HOW TO USE THIS MANUAL

Product Variance

The location and appearance of the controls on your unit may be different than those shown in this manual due to chassis cab changes. Make sure you know the location of the controls and how you operate the controls on your unit before operation.

Manual Sections

This manual is divided into twelve (10) sections.

1. Introduction
2. Safety Messages and Decals
3. Lock-Out/Tag-Out Procedures
4. Controls, Switches, and Indicator Lights
5. Body and Tailgate Props
6. Daily Checklist
7. Before Going on Route
8. On-Route Operation Procedures
9. Landfill/Transfer Station/Recycle Center Procedures
10. End of Day Procedures

Terminology

This manual uses terminology that is defined in the **Glossary** which is in Section 1, Introduction.

Directives

When we give directions for using the equipment, we capitalize key words. These words are usually a command followed by a result.

For example, “MOVE the body raise switch to LOWER ...”.

Use of **Bold** and CAPITAL Letters

We also put some words in **BOLD AND CAPS** for emphasis, usually related to safety or something of other importance, such as “**MAKE SURE** you close the side doors”.

We put some words in just bold for emphasis, such as “All warranty repairs **must** be performed by ...”.

Each DANGER, WARNING, and CAUTION notice precedes its applicable text.

TO THE OWNER

This manual is designed to help ensure safe, efficient and proper operation of The Heil Co. d/b/a Heil Environmental ("Heil") NYC PT1100 refuse collection vehicle (or the unit).

The manual will familiarize you with the unit and will give you proper operating procedures and tips.

- For chassis operation and maintenance instructions, see the Chassis Manufacturer's Manual. For maintenance of the body see the NYC PT1100 Service Manual.

As the owner, you have several responsibilities:

- You must complete and return the warranty registration for the unit to Heil.
- You must make sure that each operator has the proper driver's license.
- You must make sure that the operator does not operate the unit under the influence of drugs or alcohol.
- You must make sure that the unit is properly maintained to meet all local, state and federal requirements.
- You must keep the vehicle maintained and properly adjusted to meet the manufacturer's standards and recommendations.
- You must keep accurate records of daily inspections, breakdowns, malfunctions, maintenance and repairs of the unit.

- You must make sure that repairs are made that may affect the safe operation of the unit before it is made available for operation.
- You must provide adequate lighting on the unit for safe operation under low light or night conditions.
- You must provide adequate training for each operator and mechanic that will operate the unit BEFORE an operator goes on route or BEFORE a mechanic performs maintenance or repair procedures.
- You must determine if an operator or mechanic has difficulties reading or understanding this manual. If a person has difficulties reading or understanding this manual, you must provide adequate assistance to ensure that the person understands the material in this manual.
- You must ensure that each operator uses the equipment on a route per the instructions in this manual and other manufacturers' manuals.
- You must provide on-going training for each operator and mechanic that operates the unit.
- You must ensure that this manual stays with the vehicle at all times.

Proper operation and maintenance of your NYC PT1100 unit will be a key to providing years of low-cost, trouble free service.

TO THE OPERATOR

DANGER

Do not operate the unit or perform repair or maintenance procedures on the unit until you read and understand all of the instructions in this manual. Failure to do so may result in injury or death to operators or bystanders.

As the operator of the unit, your responsibilities are:

- Have a valid driver's license.
- Understand and follow all manufacturers' instructions for equipment operation.
- Observe all pertinent laws and regulations.
- Not use drugs or alcohol while operating the unit.
- Read, study and understand all procedures and requirements of this Operation Manual before you initially operate the unit. If you do not understand or have difficulty reading this manual, YOU MUST notify the owner or the designated person before you operate the unit. DO NOT operate the unit until you understand the procedures and requirements of this manual.

- Receive proper training before you operate (or service and maintain) the unit. If you have not received proper training, notify the owner.
- Perform a daily inspection of the unit before you go on route. Refer to the **Daily Checklist**.
- Ensure all decals and labels are clean and readable.
- Report to the owner or the designated person any and all deficiencies, malfunctions or problems found during the daily inspection.
- Read, understand and obey all safety messages and decals on the outside or in the cab of the unit.

TO THE OPERATOR (CONTINUED)

- Always use your employer's Lock-Out/Tag-Out procedures. If your employer does not have Lock-Out/Tag-Out procedures, use the **Lock-Out/Tag-Out Procedure** in this manual.
- Before you start the engine or initially operate the unit:
 - Clear the area of other people.
 - Learn and practice safe use of all controls and indicators before operating the unit in a collection route environment or prior to performing repair or maintenance procedures.
- Before you operate the unit in reverse, ensure the area behind the unit is clear of other people, vehicles or obstructions.
- Ensure the unit is on hard, stable ground while unloading refuse at the landfill or transfer station.

TO THE MECHANIC

WARNING

Do not operate the unit or perform repair or maintenance procedures on the unit until you read and understand all of the instructions in this manual. Failure to do so may result in injury or death to operators or bystanders and/or damage to the unit or other property.

WARNING

A unit that needs service or repair can malfunction and create a dangerous condition. A failure of a part(s) during operation can cause serious injury or death to a person or damage to the unit. Repair or replace any failed or defective part(s) immediately.

NOTICE

If you do not understand a procedure or instruction, notify the owner or the designated person immediately. Do not operate the unit if you do not understand all procedures and instructions in this manual. The owner or the designated person can contact your Heil dealer or Heil for additional assistance. See **Customer Service and Repair Parts Contact Information**.

TO THE MECHANIC (CONTINUED)

As the mechanic of the unit, your responsibilities are:

- Have a valid driver's license if you operate the unit on a public road.
- Understand and follow all manufacturers' instructions for equipment operation.
- Observe all pertinent laws and regulations.
- Not use drugs or alcohol while you service or operate the unit.
- Read, study and understand all procedures and requirements of this Operation Manual and the Service Manual before you operate or service the unit for the first time.
- If you do not understand or have difficulty reading this manual or the Service Manual, notify the owner or the designated person before you operate or service the unit.
- Receive proper training before you operate, service or maintain the unit. If you have not received proper training, notify the owner or the designated person.
- Read, understand and obey all safety messages and decals that are on the outside or in the cab of the unit.

- Always use your employer's Lock-Out/Tag-Out procedures. If your employer does not have Lock-Out/Tag-Out procedures, use the **Lock-Out/Tag-Out Procedure** in this manual.
- Before you start the engine or initially operate the unit:
 - Clear the area of other people.
 - Learn and practice safe use of all controls and indicators prior to operating the unit or performing repair or maintenance procedures.
- Before you operate the unit in reverse, ensure the area behind the unit is clear of other people, vehicles or obstructions.

WARNING

A unit that needs service or repair can malfunction and create a dangerous condition. A failure of a part(s) during operation can cause serious injury or death to a person or damage to the unit. Repair or replace any failed or defective part(s) immediately.

WARRANTY CLAIMS AND INQUIRIES

The HEIL ENVIRONMENTAL WARRANTY STATEMENT is printed on the inside, back cover of this manual. Should a failure occur that is covered by this warranty, contact your Heil dealer for warranty repair unless otherwise authorized by Heil.

For all parts, warranty claims, and inquiries, please provide the dealer or service center the unit's model and serial number located on the body serial plate. See **Serial Plate Location** page for the location of the body serial plate.

CONTACT INFORMATION

Customer Care

Phone: 866-275-4345

Technical Service

Phone: 866-310-4345

Parts Central

Phone: 800-528-5308

4301 Gault Avenue North
Fort Payne, AL 35967
www.heil.com

MODELS

The NYC PT1100 is a Rear End Loader (REL) and has one body model; the eject model. See the figure below.

The (packer) blade and slide assembly open the hopper to load refuse into the hopper, sweep the refuse into the body and compact the refuse.

The unit has an eject mode for dumping the refuse from the body. To remove the refuse from the body, raise the tailgate, then operate the ejector panel to push the refuse from the body.

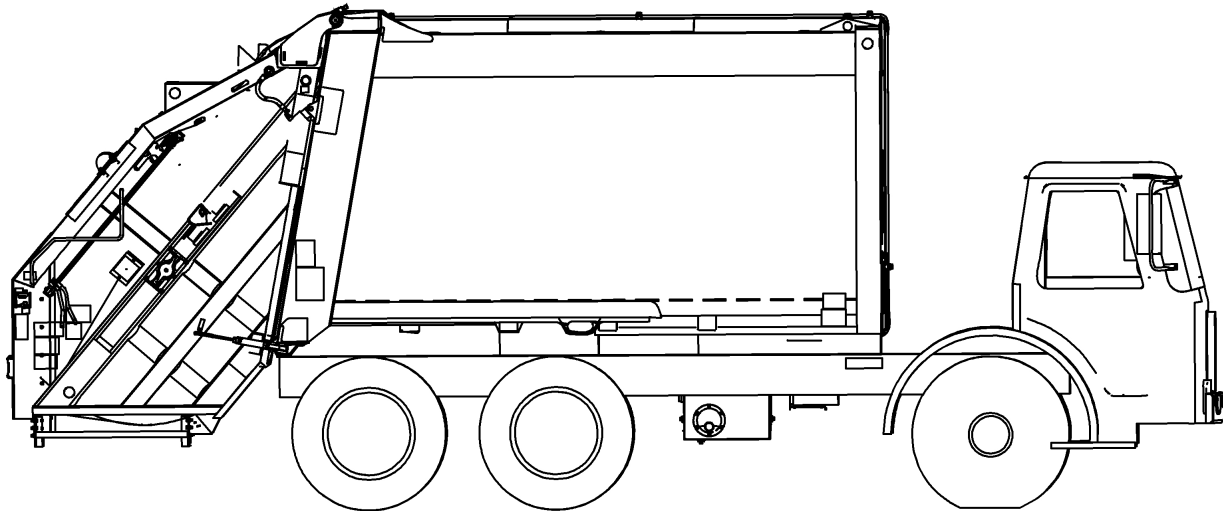


Figure 1. NYC PT 1100 Eject Model

SERIAL PLATE LOCATION

Determine the sides of the unit by facing the direction of forward travel. The left side is the “street side” and the right side is the “curb side”. The figure below shows the locations of the serial plates on the street side of the unit’s body and tailgate. See the next page for a description of the information on the serial plate.

**BODY SERIAL PLATE
LOCATED STREETSIDE ON FRONT HEAD**

**TAILGATE SERIAL PLATE
LOCATED ON SIDE OF TAILGATE
(NOT SHOWN HERE)**



Figure 2. Serial Plate Locations

READING THE SERIAL PLATE

The serial plate is the “birth certificate” of the unit. See the figure below.



Figure 3. Reading the Serial Plates



Figure 4. Reading the Serial Plates

Information stamped in the boxes on the serial plate indicates:

Model number:
612-nnnn (“n” is any single-digit number)

Unit’s unique serial number

Body size (cu. yd.)

Date of manufacture (last number of the year followed by the number of the day of the year, e.g. J078 is year 2018 and the 78th day of 2018).

NOTICE

The code for the year of manufacture is in accordance with FMVSS 115. See the following table.

Year of Manufacture			
Year Code	Year	Year Code	Year
5	2005	F	2015
6	2006	G	2016
7	2007	H	2017
8	2008	J	2018
9	2009	K	2019
A	2010	L	2020
B	2011	M	2021
C	2012	N	2022
D	2013	P	2023
E	2014	R	2024

PRODUCT NOMENCLATURE

The figure below shows the major curb side body and tailgate components.

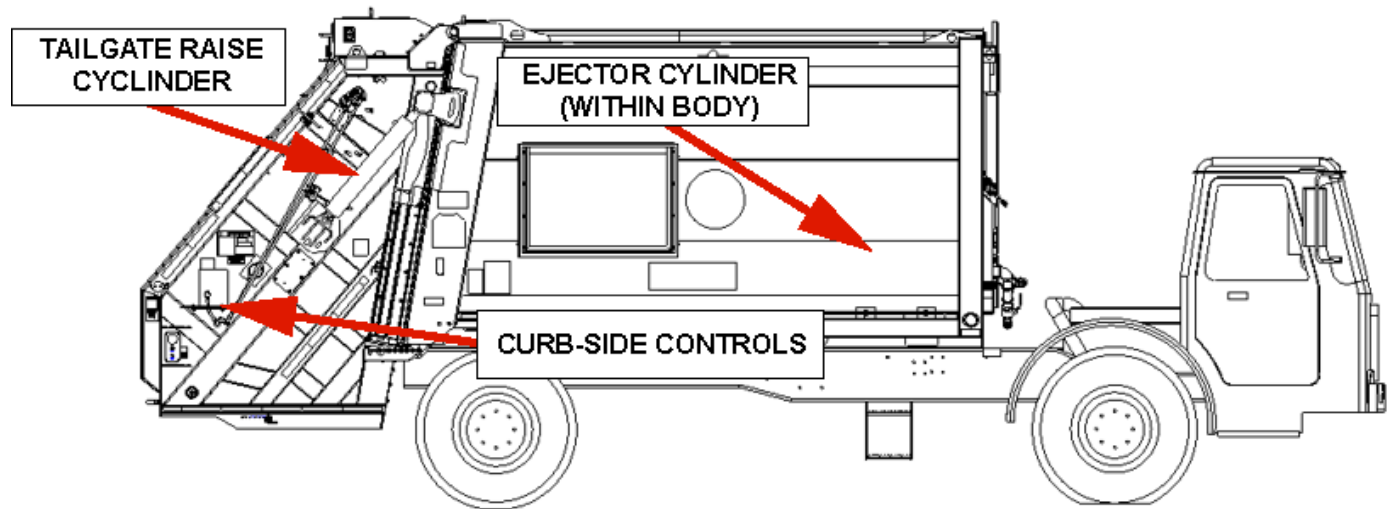


Figure 5. Product Nomenclature Curb Side

PRODUCT NOMENCLATURE (CONTINUED)

The figure below shows the major street side body and tailgate components.

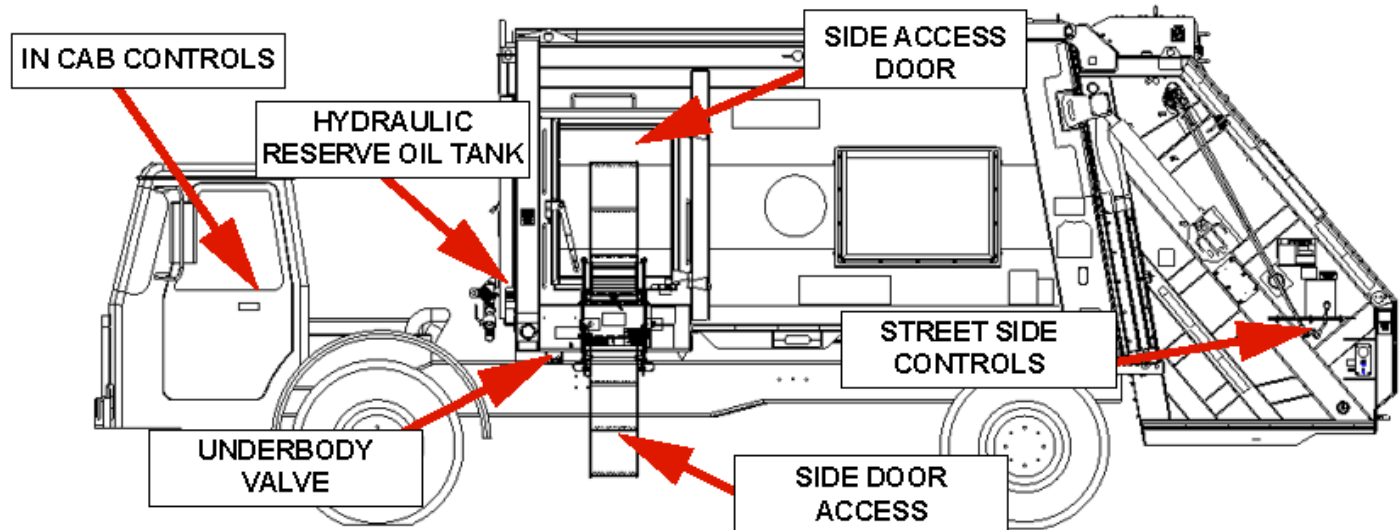


Figure 6. Product Nomenclature Street Side

PRODUCT NOMENCLATURE (CONTINUED)

The figure below shows the major tailgate components.

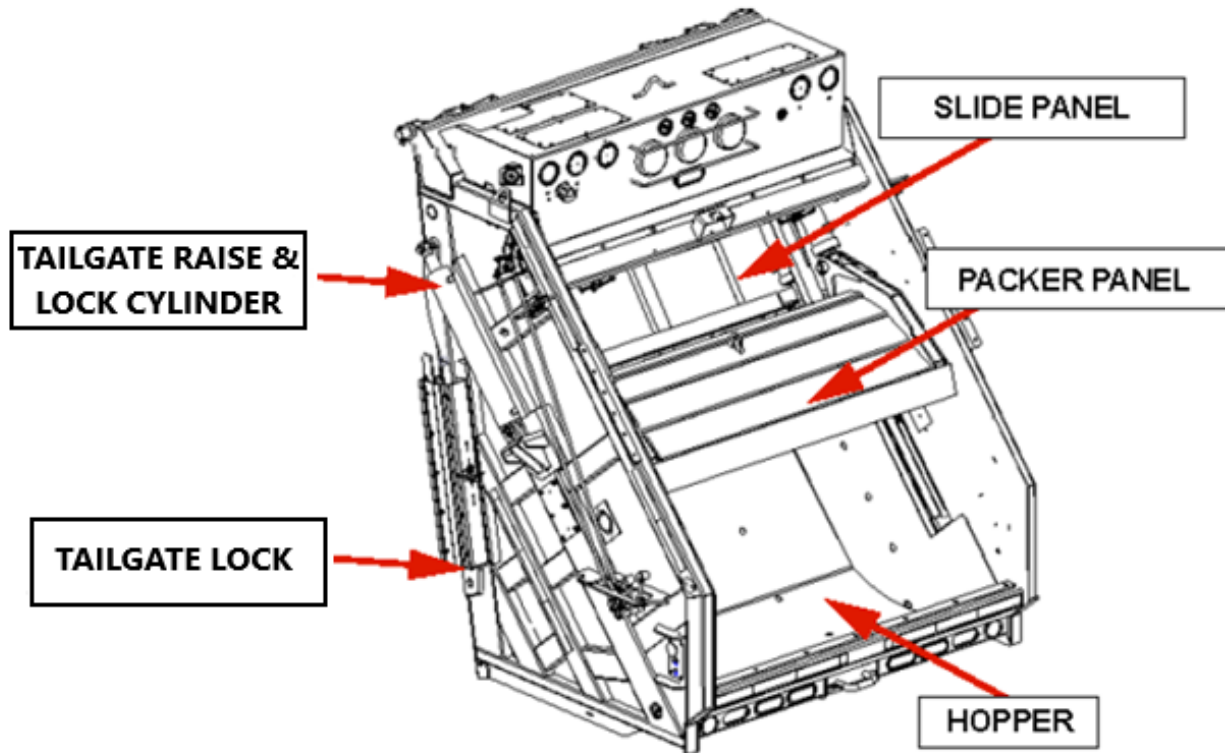


Figure 7. Product Nomenclature Tailgate

PRODUCT NOMENCLATURE (CONTINUED)

DANGER

Ensure the unit is in the Lock-Out/Tag-Out mode before you enter the body. If the unit is not in the Lock-Out/Tag-Out mode and a person is in the body, the packer/ejector panel can still be operated. Serious injury or death may occur if the packer/ejector panel moves while a person is in the body.

DANGER

When available, use the side door for entry into the body. When there is no side door, use the front head for entry into the body.

Body – The body stores the compacted refuse until you dump the refuse at the landfill. **DO NOT** enter the body from the hopper. Use the space available at the front head or, if equipped, the side access door.

Cab Controls – The standard control panel in the cab has controls to enable the hydraulic pump and has an indicator light for the pump and an alarm for an unlocked tailgate. See **Cab Controls, Switches and Indicator Lights** for the different controls that may be installed in your unit.

NOTICE

Do not use the ejector panel to pack refuse against a closed tailgate (backpack). Packing refuse against a closed tailgate may result in damage to body or ejector cylinder.

Ejector Panel & Cylinder – The ejector panel and cylinder push the refuse out of the body when the tailgate is OPEN.

Tailgate Controls – The tailgate raise and lock controls are under street side of the body, towards the front. Use these to unlock and raise the tailgate.

Ejector Controls – The ejector controls are outside under the street side Underbody Valve. Use these to push the refuse out of the unit and RETRACT the ejector panel.

PRODUCT NOMENCLATURE (CONTINUED)

Front Head – The open area at the front of the body. The ejector panel is visible from the cab through the front head. Use this opening to access the body, **ESPECIALLY** when the unit does not have the optional side access door.

DANGER

Ensure the unit is in the Lock-Out/Tag-Out mode before you enter the hopper. If the unit is not in the Lock-Out/Tag-Out mode, the packer/ejector panel can still be operated. Serious injury or death may occur if the packer/ejector panel moves while a person is in the hopper.

Hopper – The refuse loading chamber of the tailgate. NEVER use the hopper as an entrance to the body.

Hopper Sill – A lip on the hopper over which the refuse is dumped into the hopper. The lip provides a resting spot for manual loading of residential refuse containers. NEVER climb or stand on the hopper sill.

Hydraulic Oil Tank - The reservoir for the hydraulic oil which operates all hydraulic cylinders described above.

WARNING

Operating the unit's controls with a suspended load, such as a raised tailgate or a container on a lift mechanism, will allow the load to move even if the hydraulic pump is OFF.

Hydraulic Pump – The unit's hydraulic pump provides the oil flow for the hydraulic system. It is located in front of the unit's engine. With a front-mount pump, the operator turns the pump ON and OFF as needed with the SYSTEM POWER switch located on the in-cab control panel. The hydraulic oil may flow through the system when the pump is off, however, the operator controls are inoperative and the system hydraulic oil pressure is not sufficient to operate the unit's functions.

PRODUCT NOMENCLATURE (CONTINUED)

DANGER

The packer blade and slide assembly are dangerous. They can cause serious injury or death if a person is inside the hopper. Make sure no one is inside the hopper before you begin a packer function. Put the unit in the lock-out mode if a person is in the hopper.

DANGER

Stand clear when the ejector panel is in motion. Keep side access door closed when ejector panel is in motion. Failure to do so may result in severe injury or death.

Slide and Packer Panels – With the packer panel IN and the slide assembly UP, load refuse into the hopper. Then MOVE the packer panel OUT while you move the slide assembly completely DOWN. Move the packer panel IN and the slide panel up to sweep refuse from the hopper into the body.

Slide/Panel Controls – Use these controls to operate the slide assembly and the packer panel to open the hopper to load refuse and to move refuse from the hopper into the body.

DANGER

A tailgate in motion is dangerous. Serious injury or death may occur if a person is struck by a moving tailgate or is trapped between the tailgate and the body. Clear the area near the tailgate of all unnecessary people prior to raising or lowering the tailgate.

Tailgate – Raise the tailgate at the landfill or transfer station to unload the refuse.

Tailgate Lock alarm inside the cab alerts the operator when the tailgate is UNLOCKED. The Tailgate Lock alarm sounds when the tailgate is UNLOCKED. The alarm stops when the tailgate is LOCKED.

PRODUCT NOMENCLATURE (CONTINUED)

DANGER

Always prop a tailgate if it is raised for maintenance, service or cleaning procedures. Any part of your body between the unit's body and the tailgate while you prop the tailgate or when the tailgate is propped is dangerous. Serious injury or death may occur if the operator is between the tailgate and the body and the tailgate closes suddenly.

Tailgate Props – Always use both tailgate props, one on each side of the unit, if the tailgate is raised for maintenance or service procedures.

Tailgate Raise/Lower and Lock Cylinders – Use these cylinders to UNLOCK and RAISE the tailgate before you unload the compacted refuse at the landfill. After unloading the refuse, use the cylinders to LOWER and LOCK the tailgate.

Throttle Advance – The throttle advance is automatically engaged during the tailgate packing cycle. The operator cannot use the engine foot feed, the toggle switch located at the front head just beside the body controls, to raise the engine speed up to 900 RPM while ejecting the load or raising the tailgate.

GLOSSARY

TERM	DEFINITION
accident	An incident that results in unintended harm.
auto neutral (force to neutral)	A feature that allows an operator to place the transmission in neutral and remain in neutral until commanded to go into drive.
bin	The refuse collection container
body	The complete body assembly or the area of the body where the refuse is stored.
CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
collapsed position	The fully retracted position of a cylinder
DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
extend/EXTEND	Make a cylinder rod move out its base / Command to move the packer panel towards the body
front head	The part of the body that allows access to the body from the front of the body. This is the ONLY access to the body when the unit does not have an optional side access door.
FULLY RETRACTED POSITION	The packer/extend cylinder is fully retracted and the packer panel is all the way to the front of the hopper. May also be referred to as "Home Position" or "Front Head".
harm	An action that causes death, injury or property damage.
hazard	A potential source of harm.
hopper	The loading chamber of the unit in front of the packer panel where you dump the refuse material.
illuminate	Make a lamp shine light (the lamp is on).
incident	An unintended and undesired event that has the potential to harm.

GLOSSARY

TERM	DEFINITION
LATCHED	The condition when the tailgate is fully CLOSED, thereby locking the tailgate.
LOAD POSITION	Applicable to Rear End Loaders (RELs), the packer panel is UP and the slide assembly is IN. This opens the hopper for loading.
may	You are allowed to do the action, but it is not mandatory. It is understood to be permissive.
must	The action is mandatory.
NOTICE	Alerts you to practices not related to personal injury, such as damage to the unit or other equipment.
off/OFF	When a light or lamp does not illuminate / The position of a switch or other control to stop a function
on/ON	When a light or lamp illuminates / The position of a switch or other control to start a function
operator	Any person who uses the unit and its equipment. One who controls the operation of various unit accessories and mechanisms, loads material, performs functions such as operating the loader, cart tipping and packing of wastes or recycled products, and who may also drive the unit along the route during the collection process. The operator may also be the driver.
PACK POSITION	Applicable to Rear End Loaders (RELs) The packer panel is DOWN and the slide assembly is IN. The operator uses this position, repeated as necessary, to sweep refuse from the hopper and compact the refuse in the body.
PTO	Power Takeoff
raise/RAISE	Move the tailgate up / Command to move the tailgate up
REL	Rear End Loader

GLOSSARY

TERM	DEFINITION
retract/RETRACT	Make a cylinder rod go into its base / Command to move the packer panel towards the hopper
RPM	Revolutions Per Minute
should	The action is advised.
side access door	The side access door is located on the street side of the unit. This is the preferred access into the body. ALWAYS Lock-Out/Tag-Out the unit BEFORE entering the body.
tailgate access covers	Covers on each side of the tailgate that protect an operator from pinch points during normal operation.
unit	The Heil NYC PT1100 refuse collection vehicle referred to in this manual.
UNLATCHED	The side access door is not closed or secured.
upper panel	The assembly that moves refuse into the body. The upper panel works with the blade to open the hopper, move refuse into the body, compact the refuse and to close the hopper.
WARNING	Indicates a hazardous situation, which if not avoided, could result in death or serious injury.

SECTION 2

SAFETY MESSAGES AND DECALS


PREVIEW

Read this section to learn about:

- General safety precautions for the safe operation and maintenance of the unit
- The safety precautions for NOT towing another vehicle or machine
- Safety decals on the unit

PRECAUTIONARY STATEMENTS

Read this entire manual and especially this safety section before operating the vehicle. Failure to follow these important precautions could result in serious injury, death, and/or property damage.

 This safety alert symbol indicates important safety messages in this manual and on safety decals attached to the equipment. Read all safety messages and follow the instructions and precautions.

In the general text of the manual and in the safety labels attached to the product, signal words indicate the type and seriousness of risk that you could encounter if you do not follow the precautions. The signal words and their definitions follow:

DANGER

DANGER indicates a hazardous situation which, if not avoided, WILL result in DEATH or SERIOUS INJURY.

WARNING

WARNING indicates a hazardous situation which, if not avoided, COULD result in DEATH or SERIOUS INJURY.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, COULD result in MINOR or MODERATE INJURY.

NOTICE

NOTICE addresses practices not related to personal injury, such as property damage or damage to the equipment.

The following pages provide a summary of some of the more important safety precautions that are in this manual. There are additional safety precautions in other sections of this manual that are not contained in this section. You must read, understand and follow all safety messages.



GENERAL SAFETY PRECAUTIONS

- **DO NOT** operate the unit under the influence of alcohol or drugs. **DO NOT** operate the unit when extremely tired and/or not alert. This may result in an accident that can cause serious injury or death.
- **DO NOT** operate the unit without proper training and vehicle operator license.
- **ALWAYS** carry and maintain a fire extinguisher and first aid kit in the unit. **MAKE SURE** you know how to use them.
- **CLEAN AS NECESSARY** any safety decals that you cannot read at a safe viewing distance from the hazard. If any decals are illegible from damage or wear, **REPLACE** them **IMMEDIATELY**. Get decals from your Heil dealer or Heil.
- **DO NOT** use this refuse collection vehicle to TOW another vehicle or equipment. It **IS NOT DESIGNED** or equipped to tow another vehicle or other equipment. Towing another vehicle or equipment may result in injury or death to the operator, other people and/or damage to the unit.
- **ENSURE** all individuals are clear of any moving parts, mechanisms or components of the unit before you operate the controls.

- **DISENGAGE** the pump switch and shut off the pump while the unit is not in use, while repairing the unit, while working on the unit, or when traveling in the unit for longer than two minutes.
- **ENGAGE** the pump switch **ONLY** while on route **OR** as necessary to perform repairs.
- When the unit is stored or not in use, you **MUST** do the following:
 - SET ALL lift cylinders to the midway position.
 - Flip the toggle switch to OFF position and shut off the pump.
 - **REMOVE** the key from the ignition to prevent tampering by unauthorized persons.
 - Refer to **Lock-Out/Tag-Out Procedure**.
- Be attentive at all times while operating the controls and be ready to stop or reverse the function if necessary.



BEFORE OPERATING THE EQUIPMENT

- **DO NOT** operate or service this machine before receiving proper training and have read and understand this entire manual.
- **NEVER** operate the unit **UNLESS** you are fully knowledgeable of all control functions. See the Controls, Switches, and Indicator Lights ⁽⁵³⁾ of this manual.
- **MAKE SURE BEFORE** you operate the vehicle or its controls that all individuals are at a safe distance away from the unit.
- **DO NOT** operate the unit when it needs service or repair.
- **DO A VISUAL CHECK** at the beginning of each shift of the unit and run it through several cycles to find fluid leaks, broken, missing, malfunctioning, and/or excessively worn components (including hoses). See the **Daily Checklist section** of this manual. If you find leaks, broken, missing or malfunctioning, and/or excessively worn components, immediately stop and get the component repaired or serviced.



USE PERSONAL PROTECTIVE EQUIPMENT

- **ALWAYS WEAR** the proper safety equipment, such as hard hats, safety shoes, protective eye wear, reflective clothing and gloves. Confirm with the owner/operator that you are using proper safety equipment.
- **WEAR PROPER EYE PROTECTION** and avoid contact with oil, if possible, while working on hydraulic lines or components. **NEVER** check for oil leaks with bare hands.



BEWARE OF OVERHEAD OBSTRUCTIONS

- **KNOW** the clearance required for **ALL** overhead obstructions (such as viaducts and bridges) that you may encounter when driving the unit. See the decal in the chassis cab for your unit's overall height.
- **NEVER** drive the unit under any overhead obstruction of unknown height clearance.
- Become familiar with the route. Be aware of all overhead trees and obstructions that could cause problems during refuse collection.

- **CHECK** the height of the unit after any modifications to the chassis suspension. Any chassis suspension modification could change the height of the unit. See Tables 1 and 2.
- **LOOK UP AND LIVE. MAKE SURE** there is enough clearance between a lowered or raised container and overhead power lines. Electricity can pass through the unit without touching electric cables. See Tables 1 and 2.
- **STAY IN THE CAB** and **KEEP AWAY FROM ALL METAL PARTS OF THE UNIT** if the unit comes in contact with a power line. **STAY IN THE UNIT UNTIL HELP ARRIVES.**

OVERHEAD CLEARANCES

NOTICE

Table 1 and 2 is in accordance with OSHA 29CFR 1910.333. (Also refer to ANSI Standard B30.5-2004, 5-3.4.5.) If local rules and laws require more clearance, follow the local rules and laws.

Table 1. Overhead Clearances When Operating the Unit

Voltage of Electric Line	Minimum Clearance
50,000 or less	10 feet (3 m)
Above 50,000 to 200,000	15 feet (4.6m)
Above 200,000 to 350,000	20 feet (6.1 m)
Above 350,000 to 500,000	25 feet (7.6 m)
Above 500,000 to 750,000	35 feet (10.7 m)
Above 750,000 to 1,000,000	45 feet (13.7 m)

Table 2. Overhead Clearances When Driving the Unit

Voltage of Electric Line	Minimum Clearance
750 or less	4 feet (1.2 m)

Table 2. Overhead Clearances When Driving the Unit

Voltage of Electric Line	Minimum Clearance
Above 750 to 50,000	6 feet (1.8 m)
Above 50,000 to 345,000	10 feet (3 m)
Above 345,000 to 750,000	16 feet (4.9 m)
Above 750,000 to 1,000,000	20 feet (6.1 m)

LOADING REFUSE INTO THE UNIT

- **BE ATTENTIVE** at all times while loading refuse and be ready to stop or reverse the function if necessary.
- **ALL PERSONS MUST STAND CLEAR** when the tailgate is in motion and during the unloading cycle. **MAKE SURE** no one stands under or crosses under a raised tailgate.
- **LOOK UP AND LIVE.** Ensure there is enough clearance between a raised container and overhead power lines. Refer to Tables 1 and 2.

UNLOADING

- **MAKE SURE** the unloading area is clear of all personnel.
- **ALL PERSONS MUST STAND CLEAR** when the tailgate is in motion and during the unloading cycle. **MAKE SURE** no one stands under or crosses under a raised tailgate.

TOWING OF ANY EQUIPMENT

- Heil DOES NOT recommend towing any kind of equipment with the unit. The unit is NOT DESIGNED nor intended for towing.

DECALS

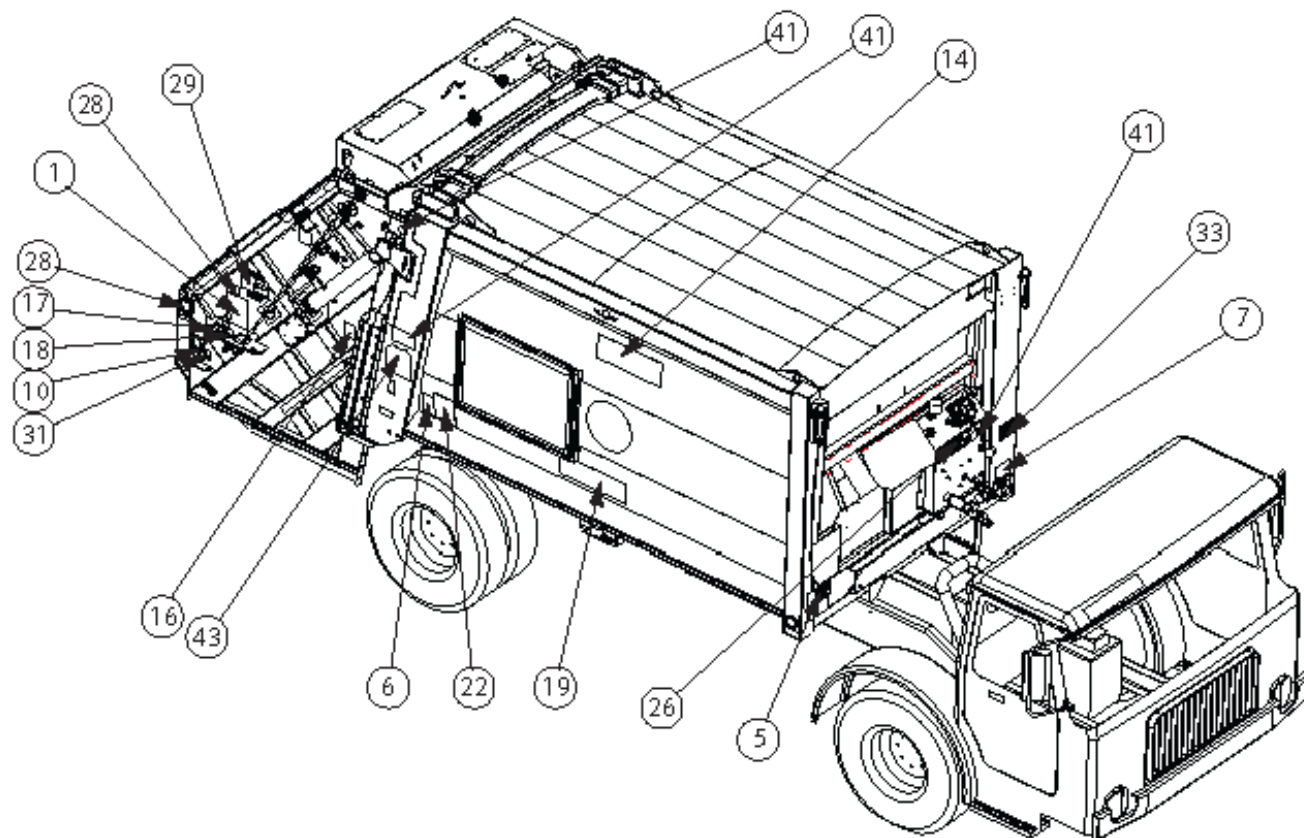
The following pages show the DANGER, WARNING and CAUTION decals and list the reflective safety materials that are on the vehicle. See the Parts and Service Manual for the location and part numbers of all decals on the unit.

NOTICE

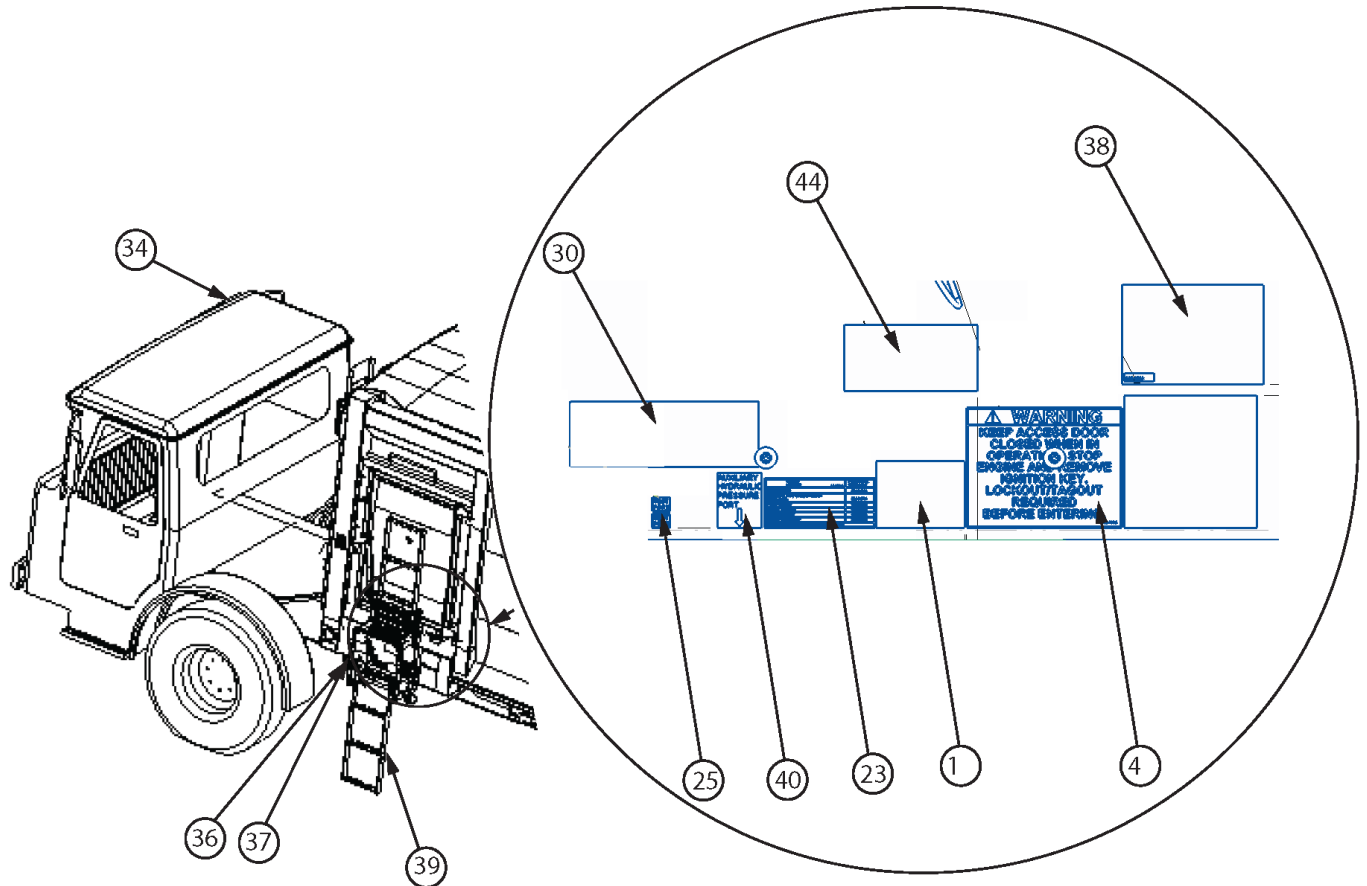
Replace any decal if the decal is lost, destroyed, painted over or cannot be read. When you replace a part with decals, make sure to install new decals on the replacement part. Decal part numbers can be found below and in the Parts Manual. You can purchase replacement decals from your **Heil Dealer** or from the **Heil Parts Central**, 800-528-5308.

There are informational decals on the unit's body or in the unit's cab. They are not illustrated in this manual. Refer to the Parts and Maintenance/Adjustments (Service) Manual for the location of these decals. These decals give information about:

DECAL PLACEMENT



DECAL PLACEMENT (CONTINUED)



NYC PT1100

35

Decal Placement (Continued)

ITEM	PART NO.	DESCRIPTION	EFF	QTY
	212-3512	KIT, Vendor Installed, Decal, PT, NYC	-	REF
	212-3511	DECAL INSTALLATION, PT 1100, NYC		
1	212-0735	DECAL, INFORMATION IN CB	-	4
2	212-0984	DECAL, A.N.S.I. STANDARDS	-	1
3	212-1115	DECAL, DANGER, STAND CLEAR WHEN PACKER PANEL IN MOTION	-	4
4	212-1116	DECAL, DANGER, ACCESS DOOR LOCKOUT/TAGOUT	-	1
5	212-1205	DECAL, CAUTION, STAND CLEAR PANEL	-	2
6	212-1576	DECAL, DANGER, STAND CLEAR TAILGATE	-	2
7	212-1608	DECAL, CAUTION STOP ENG/REMOVE KEY	-	3
8	212-1719	DECAL, CAUTION, WIDE TURN	-	1
9	212-1821	DECAL, DANGER TOWING	-	1
10	212-1903	DECAL, BUZZER	-	2
11	212-1907-001	DECAL, DANGER, ACCESS DOOR	-	1
12	212-1909-001	DECAL, WARNING, OVERALL HEIGHT	-	1
13	212-1918-001	DECAL, SAFETY INSTRUCTIONS	-	1
14	212-2195	DECAL, "SANITATION"	-	2
15	212-2205	DECAL, GREASE FITTING	-	2
16	212-2228	DECAL, PROX.SWITCH ADJUSTMENT	-	4
17	212-2255	DECAL, T/G CONTROLS	-	1
18	212-2256	DECAL, T/G CONTROLS	-	1
19	212-2264	STENCIL, NYC	-	2
20	212-2448	DECAL, DIS. BEFORE WELDING	-	7
21	212-2460	STENCIL, FULL	-	1
22	212-2618	DECAL, DANGER-T/G PROP	-	3
23	212-2687-001	DECAL, PRESSURE SETTINGS	-	1

NYC PT1100

36

Decal Placement (Continued)

ITEM	PART NO.	DESCRIPTION	EFF	QTY
24	212-2689	DECAL, FLAG	-	1
25	212-2737	DECAL, TEST PORT	-	2
26	212-2932	HYD. OIL ONLY, STENCIL	-	1
27	212-3003-001	DECAL, SLOW DOWN	-	1
28	212-3011	DECAL, CROSS OR STAND BEHIND VEHICLE	-	2
29	212-3019	DECAL, E-STOP OPERATION	-	2
30	212-3045	DECAL, BODY CONTROLS	-	1
31	212-3180	LABEL, HOPPER LIGHT	-	2
32	212-3218	STENCIL FOR PULLING ONLY	-	1
33	212-3222	DECAL, NOTICE, OIL TANK OVERFLOW	-	1
34	212-3226	STENCIL, UNIT DESIGNATION NUMBER, 24"X4"	-	1
35	212-3226-001	STENCIL, UNIT DESIGNATION NUMBER, 24"X3.25"	-	1
36	212-3312	LABEL, THROTTLE	-	1
37	212-3313	LABEL, TAILGATE CLEAR	-	1
38	212-3316	DECAL, WARNING, BODY LADDER OPERATION	-	1
39	212-3475	DECAL, NOTICE, REMOVE/INSERT PIN	-	2
40	212-3503	DECAL, AUXILIARY HYDRAULIC, PRESSURE PORT	-	1
41	212-3504	DECAL, AUXILIARY HYDRAULIC, SUCTION PORT	-	1
42	212-3511-001	DECAL, LUBRICATION GUIDE	-	2
43	212-3556	DECAL, TAILGATE LOCK, NYC	-	2
44	212-3566	DECAL, TRANSFUSION PROCEDURE	-	1

DECAL IMAGES

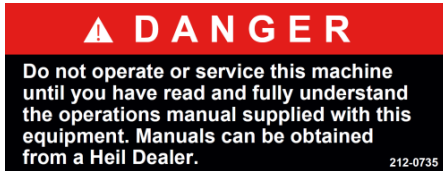


Figure 8. Danger: Do Not Operate,
PN 212-0735



Figure 9. ANSI, PN 212-0984



Figure 10. Danger:
Stand Clear Packer,
PN 212-1115

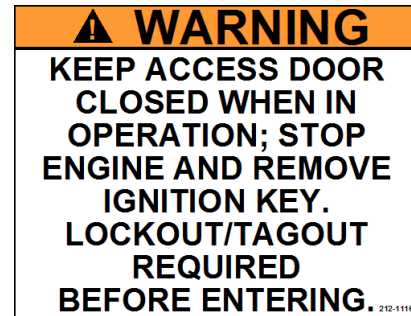


Figure 11. Warning: Keep
Access Door Closed, PN
212-1116

DECAL IMAGES (CONTINUED)



Figure 12. Caution: Stand Clear, PN 212-1205

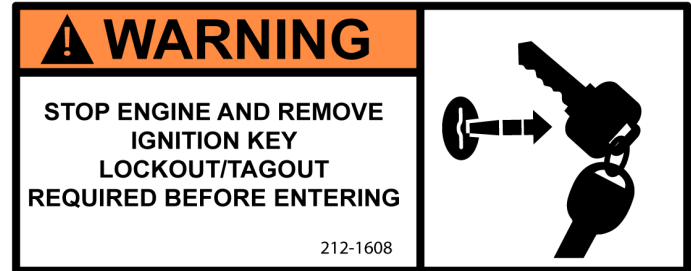


Figure 13. Warning: Stop Engine Before Entering Body, PN 212-1608



Figure 14.
Danger: Stand Clear of Tailgate, PN 212-1576



Figure 15. Caution: Wide Turns, PN 212-1719

DECAL IMAGES (CONTINUED)

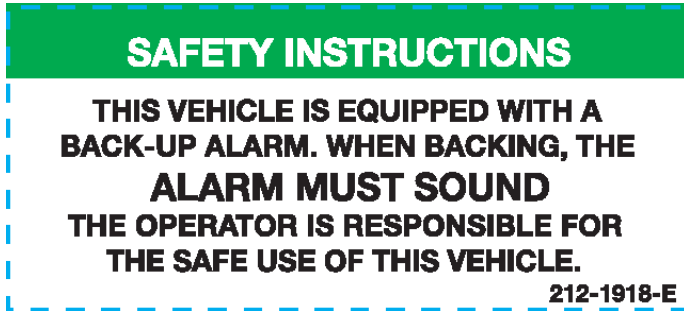


Figure 16. Safety Instructions, PN 212-1918-001



Figure 17. Grease Fitting, PN 212-2205

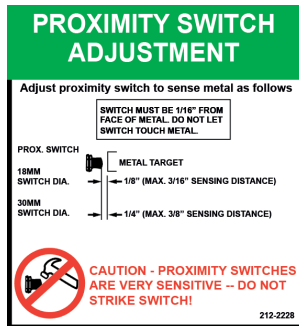


Figure 18. Proximity Switch Adjustment, PN 212-2228



Figure 19. Caution; Disconnect Battery Before Welding, PN 212-2448

DECAL IMAGES (CONTINUED)

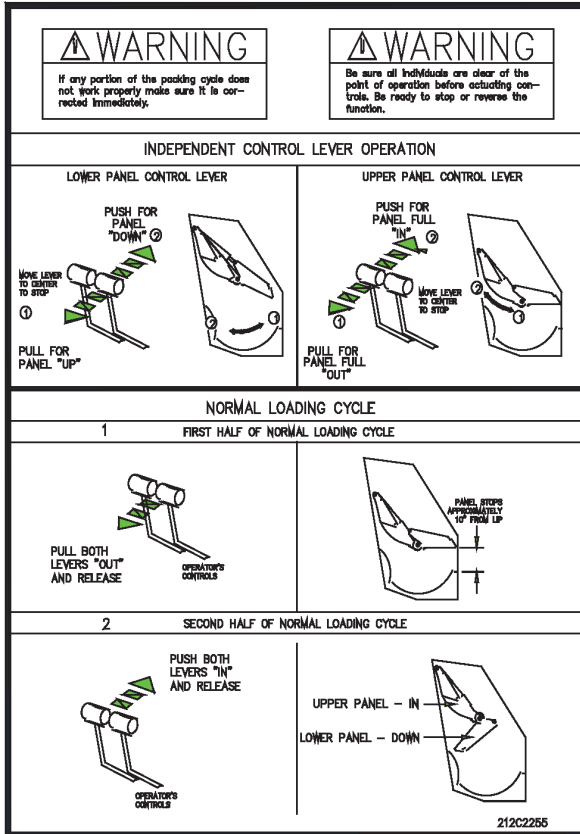


Figure 20. Street Side Controls, PN 212-2255

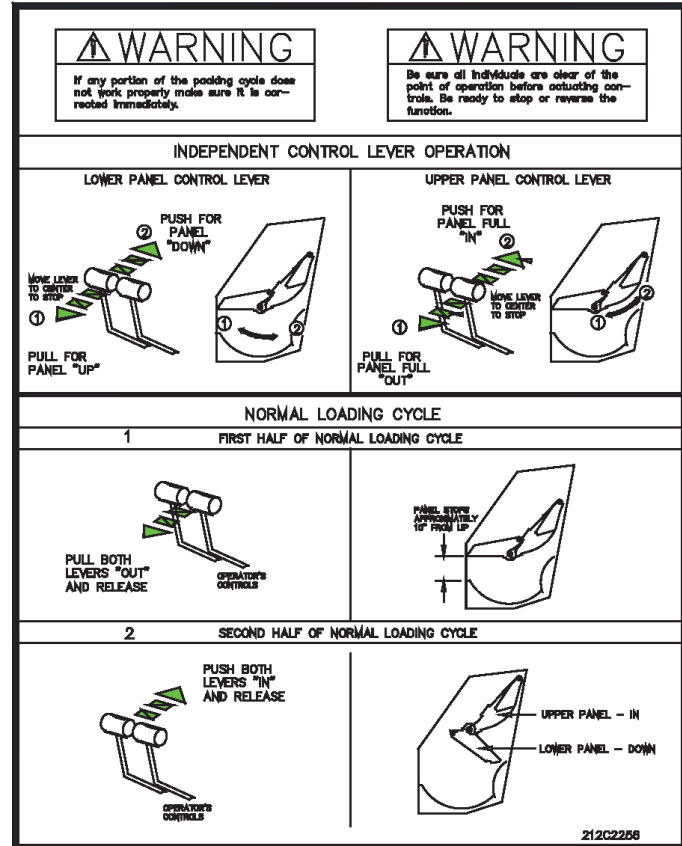


Figure 21. Curb Side Controls, PN 212-2256

DECAL IMAGES (CONTINUED)

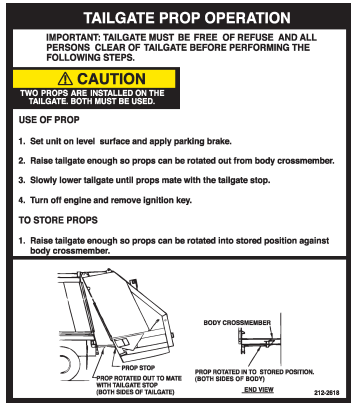


Figure 22. Caution: Tailgate Prop Operation, PN 212-2618



Figure 23. Warning: Do Not Cross or Stand Behind, PN 212-3011

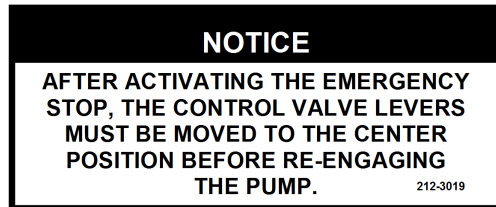


Figure 24. Notice After Activating The Emergency Stop, PN 212-3019



Figure 25. Ejector / Tailgate, PN 212-3045

DECAL IMAGES (CONTINUED)



Figure 26. Hopper Light, PN 212-3180



Figure 27. For Pulling Only, PN 212-3218



Figure 28. Notice: Check Oil Level, PN 212-3222



Figure 29. Throttle ,PN 212-3312

DECAL IMAGES (CONTINUED)



Figure 30.
Auxiliary
Hydraulic
Pressure Port ,PN
212-3503



Figure 31. Auxiliary
Hydraulic, PN
212-3504

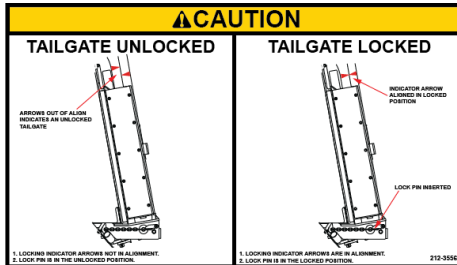


Figure 32. Caution Tailgate Locked
and Unlocked, PN 212-3556

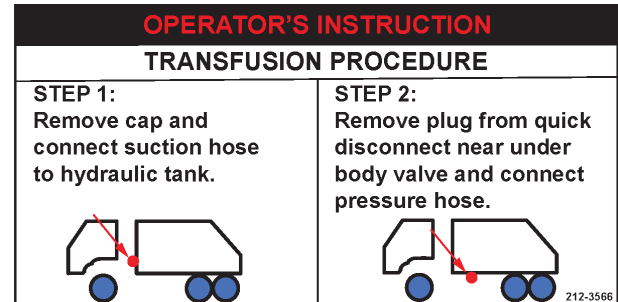


Figure 33. Operator's Instruction, PN 212-3566

REFLECTIVE SAFETY MATERIALS

See the EPC (Electronic Parts Catalog) and Service Manual for the location and part numbers of the reflective safety materials on the unit.

NOTICE

Replace any safety material if the safety material is lost, destroyed, painted over or cannot be read. When you replace a part with safety material, make sure to install new safety material on the replacement part. See the Parts and Service Manual for all part numbers and location of the safety materials.

You can purchase replacement safety material from your **Heil Dealer** or from the **Heil Parts Central, 800-528-5308**.

CARE OF DECALS

It is important that decals are properly cleaned to ensure they can be read and/or do not come off the unit. Use the following steps to clean the decals.

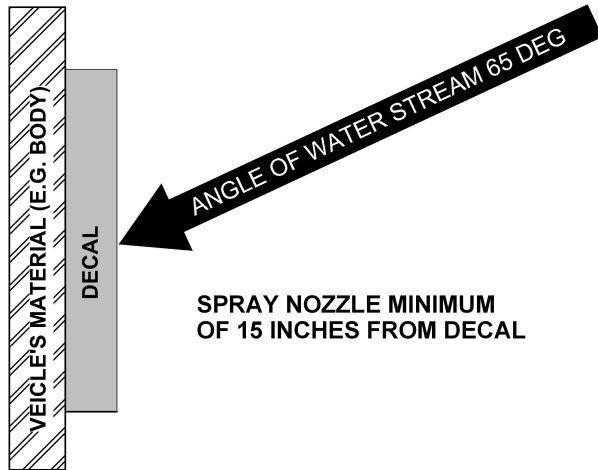
General Instructions

- Wash the decals with a blend of mild car wash detergent and clean water.
- Rinse with clean water.
- Let the vehicle air-dry or dry with a micro-fiber cloth.
- Do not allow fuels to stay in contact with decals for an extended period of time. Remove the fuel contamination as quickly as possible.
- Do not use carnauba-based wax over the decals.
- Do not use a mechanical brush while washing the decals.

Pressure Washer Precautions

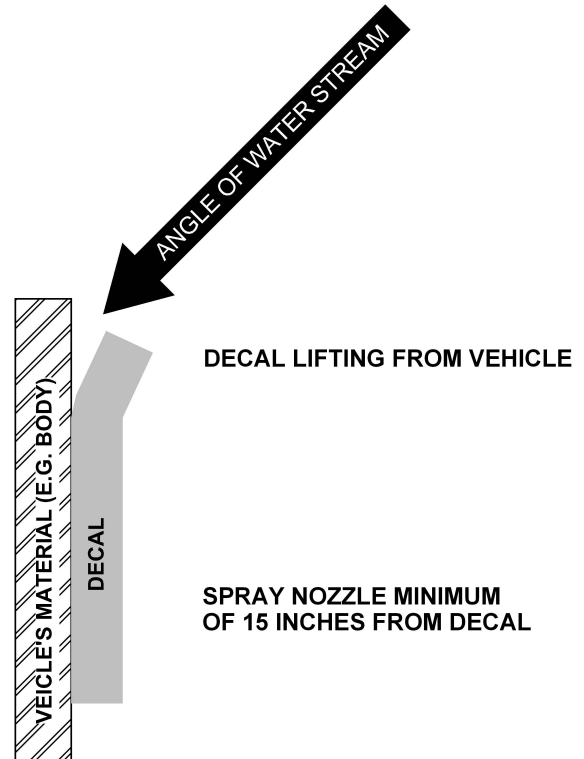
- Pressure washing can cause damage to decals. It can cause the edges of the decals to lift and peel from the unit. Over time, the decals can fade, crack or chip away.
- See the following figures for correct and incorrect methods of pressure washing.
- Use pressure washing only when other cleaning methods are not effective. If you use a pressure washer, use the following precautions.
 - Spray nozzle opening: 40° wide pattern
 - Spray angle: 65° from vehicle's body
 - Distance of nozzle to decal: 15" minimum
 - Water pressure: <= 800 psi
 - Length of time: not more than 30 sec.
 - Do not use sharp angles to clean the decals – this can lift the decals from the unit.
 - NEVER use a “turbo pressure nozzle”.

PRESSURE WASHER TECHNIQUE



RECOMMENDED TECHNIQUE

Figure 34. Recommended Technique



INCORRECT TECHNIQUE

Figure 35. Incorrect Technique

ALTERNATIVE CLEANING PROCEDURE

When normal cleaning procedures do not remove difficult debris from the decals, try the following:

WARNING

Isopropyl alcohol is flammable and is harmful to the eyes and skin. Keep isopropyl alcohol away from heat or open sources of ignition. Flush eyes and skin with water for 15 minutes after contact. Seek immediate medical help.

- Spot clean the decal with isopropyl alcohol and a micro-fiber cloth (rag).
- If these methods do not work on a problem area, call a Heil Dealer or Heil Customer Service.

NOTES:

SECTION 3

LOCK-OUT/TAG-OUT PROCEDURE

PREVIEW

Read this section to learn about the proper Lock-Out/Tag-Out procedures.

You MUST Lock-Out/Tag-Out a unit BEFORE:

- You enter the body
- Do maintenance or repair procedures.

LOCKOUT/TAGOUT PROCEDURE

DANGER

This procedure **MUST** be followed before entering the units body or performing any maintenance repair or cleaning procedures on the unit.

WARNING

If you do not have functioning Lockout/Tagout gear and/or are not an authorized employee, **STOP** and **DO NOT** initiate any service on the unit. Contact your supervisor immediately.

NOTICE

This Lockout/Tagout procedure represents Heil's minimum recommendation and should be used in conjunction with and should not supersede additional or more stringent safety requirements called out by your company's policy. Please check with your supervisor to determine if your company has a specific Lockout/Tagout procedure. Contact your supervisor, Heil Technical Service, or reference OSHA Regulation 1910.147 if you have any questions about Lockout/Tagout.

Watch the Service Shack Video online at www.Heil.com/Heil-Service-Shack by selecting **Lock-Out/Tag-Out**.

1. Put the unit in a Lockout/Tagout mode:
 - BEFORE you enter the unit's body
 - BEFORE you perform ANY maintenance, repair or cleaning procedures on the unit.
2. All stored energy must be removed and/or protected against, common sources found on Heil units (Including, but not limited to):
 - Hydraulics
 - Electrical
 - Gravity
 - Pneumatics
 - Mechanical
3. Examples of some basic equipment required (see figure on next page):
 - Multi-hasp
 - Single-keyed red lock
 - Lockout tag

LOCKING OUT THE UNIT (CONTINUED)



Figure 36. Examples of Lockout/Tagout Gear.

Follow These Steps:

1. APPLY the brakes. MAKE SURE the brakes do not let the unit move and they work properly.
2. Chock all wheels.
3. SET the tailgate props when the tailgate is raised for any service, maintenance or cleaning.
4. SET the body props when the body is raised for any service, maintenance or cleaning.

5. BEFORE disconnecting main battery power, VERIFY all the following stored energy sources are depleted according to your company policy:
 - a. Hydraulic (Such as forks or grabber arm in stowed position)
 - b. Pneumatic (Such as tag axles).
 - c. Mechanical (Such as springs)
 - d. Gravity (Such as tailgate raised)
6. REMOVE the key from the ignition and store it in your pocket, or another secured location for your safety.
7. Disconnect the battery power by flipping the battery box disconnect switch to OFF.
 - a. VERIFY all electrical stored energy is depleted according to your company procedure.
8. INSERT the multi-hasp into the disconnect switch.
9. ATTACH your red single-keyed Lockout/Tagout lock with your tag exposed and visible to the multi-hasp.
 - a. ALWAYS use individually assigned locks and tags when performing ANY service or maintenance with other authorized employees. Each employee MUST place their personally assigned tag and lock to the multi-hasp connected to the disconnect switch.

LOCKING OUT THE UNIT (CONTINUED)

NOTES:

10. REMOVE your lock key and put it in your pocket for your safety.

- a. ONLY the person who placed the lock and tag on the multi-hasps is authorized to remove it.
- b. NEVER remove another employee's Lockout/Tagout gear without approval from the authorized person responsible.
- c. Shift or personnel changes: Off-going employees MUST provide all details pertaining to the unit's status to the oncoming employee(s). The oncoming employee(s) MUST perform the Lockout/Tagout procedure to verify all stored energy is removed from the unit BEFORE applying their Lockout/Tagout gear.

11. BEFORE removing your Lockout/Tagout gear to return the unit to service, follow these steps:

- a. INSPECT the work area to ensure all nonessential items have been removed.
- b. VERIFY all unit components are operationally intact.
- c. ENSURE all employees are safely positioned or removed from the area.
- d. NOTIFY all affected employees that the Lockout/Tagout devices are being removed.

NOTES:

SECTION 4

FEATURES, CONTROLS, SWITCHES, AND INDICATOR LIGHTS

PREVIEW

Read this section to learn about the operation of the in-cab and outside controls, switches, buttons, and indicator lights.

NOTICE

The location and appearance of the controls may be different than those shown in this manual. Make sure you know the location of the controls and the how you operate the controls on your unit before you use the vehicle.

In this section:

- Learn about the unit's features and operation specifications
- Learn the in-cab cab controls, switches and buttons
- Learn how the in-cab controls work
- Learn the in-cab indicator lights available
- Learn the outside controls and how they work

CONTROLS

The unit's standard controls are located on the In-Cab Control Panel and on the body. The standard controls in the cab enable the hydraulic pump and the throttle advance. The hydraulic controls are installed on both sides of the tailgate.

IN-CAB CONTROL PANEL

There is one basic main control panel for different models of truck chassis. The control panel can be assembled in various enclosures or locations depending on the truck chassis.

The control panel has labels or markings that identify each standard function and its operations. The panel has the capacity for two options, an indicator light for a filter bypassed condition and a switch to operate a strobe light. Make sure you are familiar with the control panel in your unit. The labeling/marketing scheme is straight-forward and identifies a function and its operations. For example, look at the figure below and find the PACKER switch and its ON operation. The marking identifies the function (PACKER) and its operation (ON). When you want to enable the pump, for example, you MOVE the PUMP ON switch to the ON position.

Similarly, the following instructions tell you to MOVE a switch to a position (as given by the panel's label/marketing) for the operation shown on the panel's label/marketing. If the PLOW MODE is ON and the PACKER is also ON, the PACKER may not work and the PLOW will be prioritized.



Figure 37. In-Cab Control Panel

IN-CAB CONTROL PANEL (CONTINUED)

Use the switches and indicator lights described in the following paragraphs to enable the standard hydraulic pump and throttle advance functions and to monitor standard indicator lights.

Standard Toggle Switches

The following paragraphs describe the standard toggle switches that are on your unit.

While the control panel may be in different locations in different cabs, the panel and its label/markings will look similar.

1. PUMP ON – select the pack mode and engage the work brake
 - MOVE the switch to the ON position to enable the hydraulic pump.
 - MOVE the switch to the OFF position to disable the hydraulic pump.
2. TOGGLE SWITCH – This toggle switch activates the pump.

Standard Indicator Lights

The following paragraphs describe the standard indicator lights that are on your unit.

While the control panel may be in different locations in different cabs, the panel and its label/markings will look similar to the panel and labels/markings shown on the figure below.

1. PUMP INDICATOR – This green indicator light on the switch illuminates (turns ON) when the pump is ON. When the pump is OFF, the light is OFF.
2. TAILGATE OPEN – This red light illuminates when the tailgate is UNLOCKED. The light is OFF when the tailgate is LOCKED. When the tailgate is NOT FULLY CLOSED, an alarm sounds in the cab.



Figure 38. In-Cab Control Panel

STANDARD OUTSIDE CONTROLS

The standard outside controls for the unit are located on both sides of the tailgate.

The slide and packer blade levers have detents. Once you push or pull the lever past the detent (fully push or pull the lever), the selected operation continues and you can release the lever. The lever will self-center at the end of the commanded operation by way of internal hydraulic pressure. You can reverse the direction of a function at any time when you push or pull the lever past the detent in the opposite direction. You must move the tailgate and ejector levers in the direction of travel you want and hold the lever at that position until the tailgate or ejector reaches the desired position then release the lever. You can stop an operation at any time by releasing the lever.

DANGER

Your body or clothing can be caught by the blade while it moves. Serious injury or death may occur if a person is in or near the hopper when the blade move. Clear the area near the hopper of all unnecessary people before you move the blade and keep all parts of your body away from the blade.

A. Packer Blade Lever

This lever is on both sides of the tailgate next to the SLIDE lever. It is the lever closest to the end of the tailgate. See Figure 39.

1. PULL the lever DOWN to MOVE the blade UP.
2. PUSH the lever UP to MOVE the blade DOWN.
3. MOVE the lever in the opposite direction to stop an UP or DOWN operation at any time.
4. The PACKER BLADE lever is usually operated in conjunction with the SLIDE lever to:
 - a. OPEN the hopper to load refuse
 - b. CLOSE the hopper for the in-transit position
 - c. MOVE and COMPACT the refuse in the hopper to the body.

B. Slide Lever

This lever is on the curb side of the tailgate next to the PACKER BLADE lever. See Figure 40.

1. PUSH the lever UP and RELEASE it to MOVE the slide assembly IN.
2. PULL the lever DOWN and RELEASE it to MOVE the slide assembly OUT.
3. MOVE the lever in the opposite direction to stop an IN or OUT operation at any time.
4. The SLIDE lever is usually operated in conjunction with the PACKER BLADE lever to:
 - a. OPEN the hopper to load refuse
 - b. CLOSE the hopper for the in-transit position
 - c. MOVE and COMPACT the refuse in the hopper to the body.

STANDARD OUTSIDE CONTROLS (CONTINUED)

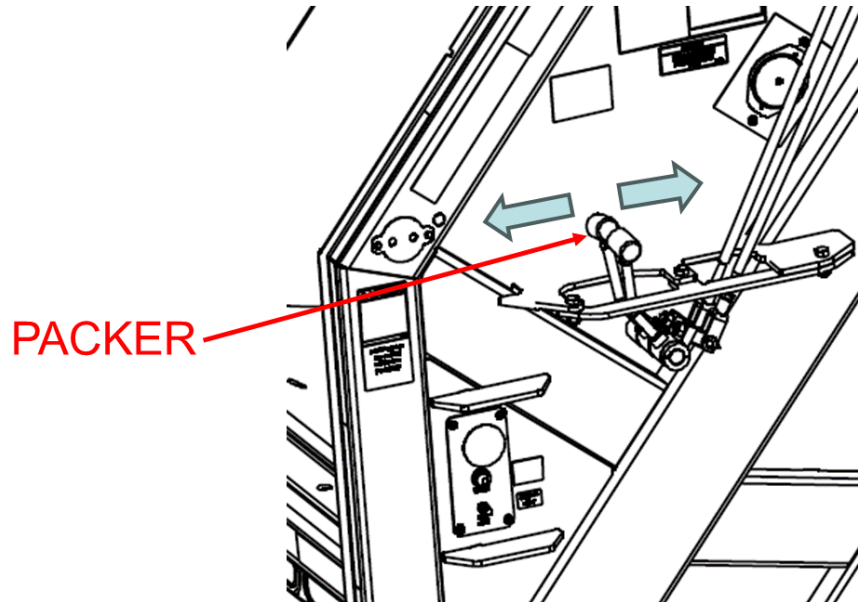


Figure 39. Packer Blade Control Lever

STANDARD OUTSIDE CONTROLS (CONTINUED)

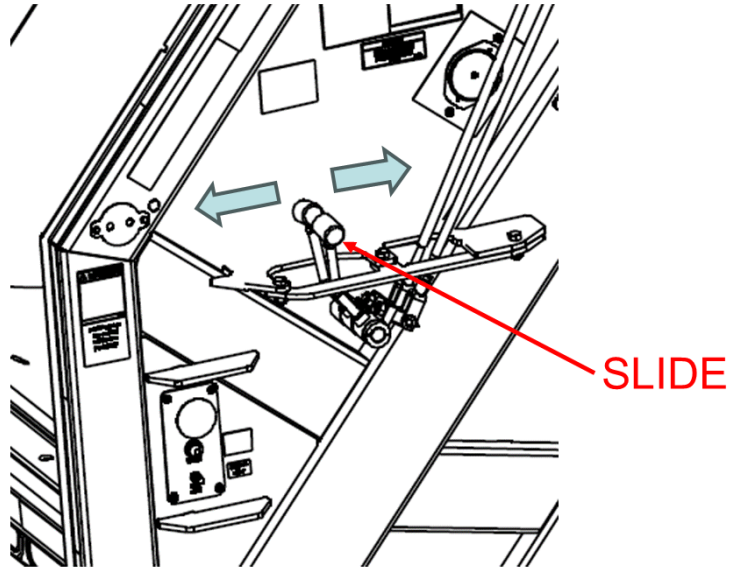


Figure 40. Slide Control Lever

STANDARD OUTSIDE CONTROLS (CONT)

DANGER

A tailgate in motion is dangerous. Serious injury or death may occur if a person is struck by a moving tailgate or becomes trapped between the tailgate and the body. Clear the area near the tailgate of all unnecessary people before lowering the tailgate.

C. TAILGATE Lever

This lever is on the front, street side of the body and controls the raising/lowering and locks/unlocks the tailgate. See **Figure 41**.

1. Remove the safety pins to unlock the tailgate.
2. Activate the pump using the throttle advance/pump activation toggle switch and hold it while moving the red lock.
3. PULL the lever UP and HOLD it there to unlock and raise the tailgate.
4. PUSH the lever DOWN and HOLD it there to lower the tailgate.
5. RELEASE the lever to stop an UP/DOWN operation at any time or when the tailgate is fully raised or lowered.
6. The TAILGATE red indicator light is ON when the tailgate is NOT COMPLETELY LOCKED and goes OFF when it is fully LOCKED.
7. Re-install both safety pins.

DANGER

Stand clear when the ejector panel is in motion. Keep side access door closed when ejector panel is in motion. Failure to do so may result in severe injury or death.

NOTICE

Do not use the ejector panel to pack refuse against the tailgate (backpack). Packing refuse against the tailgate may result in damage to the body or ejector cylinder.

D. EJECTOR Lever

This lever is on the front, street side of the body and is next to the TAILGATE lever. This lever controls the EXTEND/RETRACT functions of the ejector panel. EXTEND the ejector panel to push refuse out of the body. RETRACT the ejector panel after body is empty of refuse. The position of the ejector panel should be set at the start of a route before loading any refuse. See **Figure 41**.

1. Activate the pump using the throttle advance/pump activation toggle switch and hold it while moving the handle.
2. PULL the lever UP and HOLD to EXTEND the ejector panel and push refuse out of the body.
3. PUSH the lever DOWN and HOLD to RETRACT the ejector panel.
4. RELEASE the lever to stop an EXTEND/RETRACT operation at any time or when the ejector panel is fully EXTENDED/RETRACTED.

STANDARD OUTSIDE CONTROLS (CONTINUED)

E. PUMP Switch

Use this switch to turn the pump on for flow of hydraulic fluid when you use the ejector panel to push refuse out of the body. You must enable this switch by MOVING the THROTTLE ADVANCE enable switch to ON. See the figure below. TAILGATE CLEAR is used when unloading with the tailgate up. This switch will enable a half cycle.

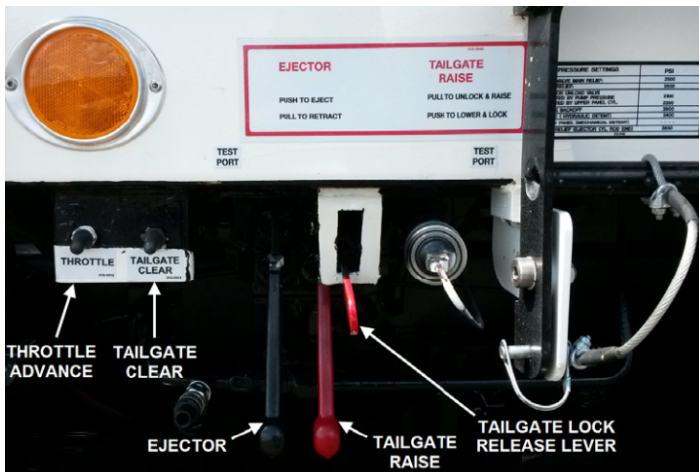


Figure 41. Front Street Side Controls

F. BUZZER Switch

Without any options, this switch is located on curb side of the tailgate near the grab handle. This switch may be located in different areas depending on optional container lifting devices. See the figure below.

1. PUSH the switch IN to activate the buzzer in the cab when the helper is on the riding step and ready for the unit to move to the next pickup location.
2. RELEASE the switch to stop the buzzer in the cab.
3. MAKE SURE the helper is ready for the unit to move. Observe the safety messages for using the riding step.

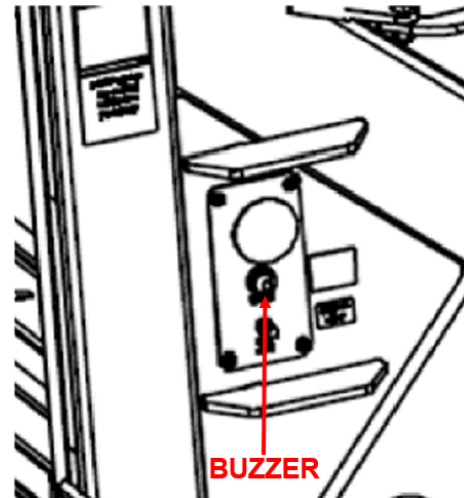


Figure 42. Buzzer Switch Location

STANDARD OUTSIDE CONTROLS (CONTINUED)

G. CART TIPPER Controls

For the following standard outside controls, refer to the figure on the next page. These controls are located on both sides of the tailgate and are used to raise and lower the cart tippers.

DANGER

Container lifting equipment in motion is dangerous. Serious injury or death may occur if a person is struck by a refuse container or the lifting equipment. Clear the area near the tailgate of all unnecessary people before you use the container lifting equipment.

WARNING

A refuse container that is not in good condition with retaining washers in place may not be secured with the latch bar and can suddenly move. Death or serious injury can occur when a person is struck by a moving container that is not properly secured. Make sure the refuse container is properly secured to the latch bar before you raise or lower the container.

WARNING

To prevent serious injury, death or equipment damage:

- Operator and bystanders should stand clear when lift is operating.
- Read and follow all safety precautions in the manual.

NOTICE

- Maximum Load Weight: 400 LBS
- Compatible containers: ANSI Z245.60-2008 Type B Containers (Domestic 2-Bar Carts)
- This lifter complies with the requirements of ANSI Z245.30-2008

STANDARD OUTSIDE CONTROLS (CONTINUED)

NOTICE

Cart lifters can hang very low to the ground at certain points in their lift cycle. It is the operator's responsibility to move the lifter to a safe position before driving, such as raising it fully or placing it in the storage position. Lifters left hanging low risk bottoming out on the street, road, or alley. This can cause serious damage. Damage from bottoming out is not covered by the warranty.

K. CART TIPPER Controls (Continued)

The push button controls for each cart tipper will be located on both the curb and street sides of the tailgate. The buttons with the red plate will control the near side tipper (tipper closer to the operator). The buttons with the white plate will control the far side tipper (tipper further from the operator). See the image to the right and on the next page.

1. Bring the refuse container to the cart tipper and secure the container to the cart tipper with the cart tipper lock.
2. Make sure the container latch bar is over the cart tipper saddle BEFORE you RAISE the container. PRESS and HOLD the UP button to RAISE the cart tipper. The cart tipper will RAISE and (by continuing to HOLD the button) tip the container, thereby dumping the refuse in the hopper.

3. Make sure the cart tipper slider latch EXTENDS and LOCKS the container when you RAISE the container. If the latch does not extend, PRESS and HOLD the DOWN button to LOWER the container, make sure the container latch bar is over the cart tipper saddle and RAISE the container again. DO NOT continue to RAISE a refuse container when the slider latch does not extend and lock the container.
4. When the refuse container is empty, PRESS and HOLD the DOWN button to LOWER the cart tipper. At the end of the LOWER cycle, the cart tipper will stop lowering.

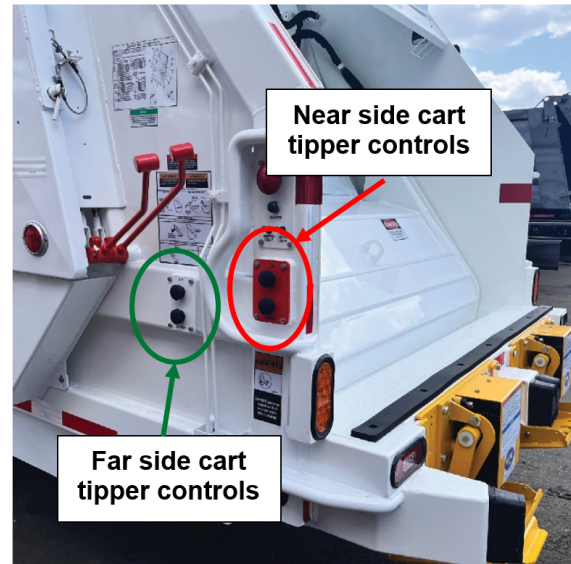


Figure 43. Curb Side Cart Tipper Controls

STANDARD OUTSIDE CONTROLS (CONTINUED)

K. CART TIPPER Controls (Continued)

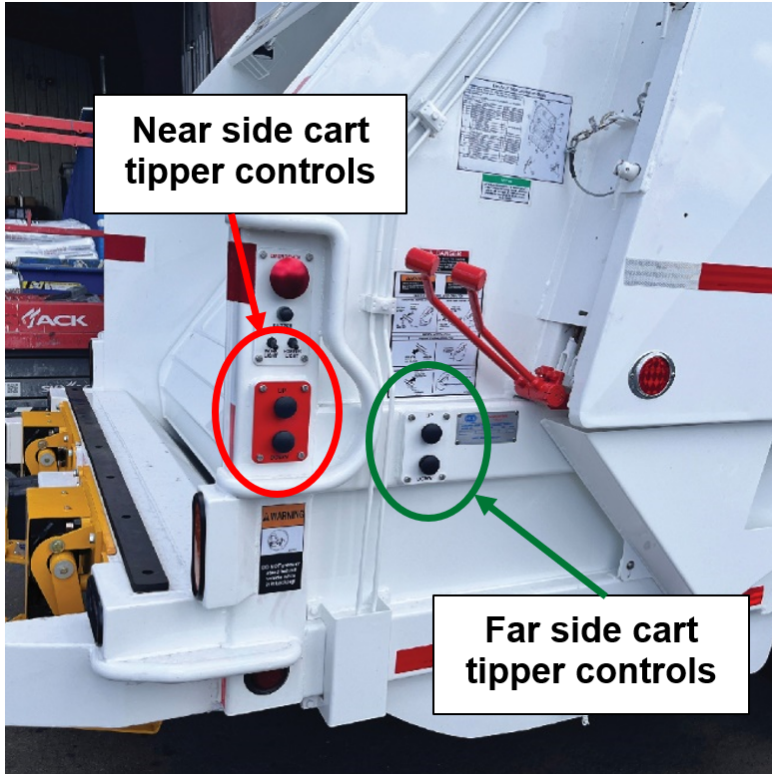


Figure 44. Street Side Cart Tipper Controls

SECTION 5

BODY AND TAILGATE PROPS

PREVIEW

Read this section to learn about:

- Using the body props
- Using the tailgate props

PROPPING THE TAILGATE

YOU MUST prop the tailgate when you open it for service or maintenance. Use the instructions that follow and prop the tailgate with the factory-installed tailgate props.

Observe and adhere to the following DANGER and WARNING notices while you prop the tailgate with the factory tailgate props.



A tailgate is dangerous while it is being raised or lowered. A prop may fail and cause the tailgate to close suddenly resulting in serious injury or death. Do not walk under or go between the body and the tailgate when the tailgate is in motion, while propping the tailgate or while the tailgate is propped.

Factory Tailgate Props

YOU MUST USE BOTH of the two support props at the rear of each unit whenever you open the tailgate for service or maintenance.

MAKE SURE the unit is on flat, stable ground and apply the parking brake and chock the wheels. Then follow the instructions on the Tailgate Prop Operation Decal on the unit (also shown on the next page).

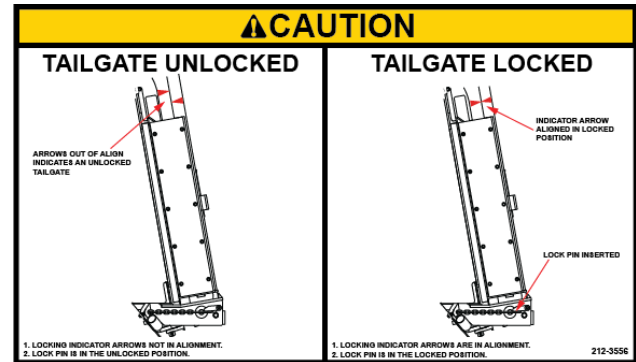
PROPPING THE TAILGATE (CONTINUED)

DANGER

Always prop the tailgate when it is raised for maintenance, service or cleaning procedures. Any part of the operator between the unit's body and the tailgate while propping the tailgate or when the tailgate is propped is dangerous. Serious injury or death may occur if the operator is between the tailgate and the body, and the tailgate suddenly closes.

1. Remove the safety pins to unlock the tailgate.
2. Activate the pump using the throttle advance/pump activation toggle switch and hold it while moving the red lock.
3. PULL the lever UP and HOLD to raise the tailgate.
4. Put the unit in the Lock-Out/Tag-Out mode and remove the ignition keys. Refer to **Lock-Out/Tag-Out Procedure**.
5. After completing the service or maintenance action, take the unit out of the Lock-Out/Tag-Out mode, insert the ignition key and start the engine.
6. RAISE the tailgate enough so that you can swing each prop towards the frame (body) and secure the props in the prop brackets in the stored position. See the figures on the next page.

7. PUSH the TAILGATE RAISE/LOWER control lever until the tailgate is completely CLOSED and locked.
8. The TAILGATE UNLOCK alarm and light is OFF.



PROPPING THE TAILGATE

Two support props are on the unit and must be used whenever the tailgate is opened for service or maintenance. Both props must be used. Refer to the procedure on the previous page.

DANGER

A tailgate is dangerous during raise/lower function. A prop may fail and cause the tailgate to close suddenly which can result in serious injury or death if you an operator is trapped between the tailgate and the body. Do not walk under or go between the body and the tailgate when the tailgate is in motion, while the tailgate is BEING propped or while the tailgate IS propped.

DANGER

Do not walk under or go between the body and the tailgate when the tailgate is in motion, while the tailgate is BEING propped or while the tailgate IS propped. Always prop the tailgate when you leave it raised for maintenance, service or cleaning procedures. Serious injury or death may occur if any part of the operator is between the tailgate and the body if the tailgate suddenly closes.

CAUTION

Two props are installed on the unit. Both props must be used!

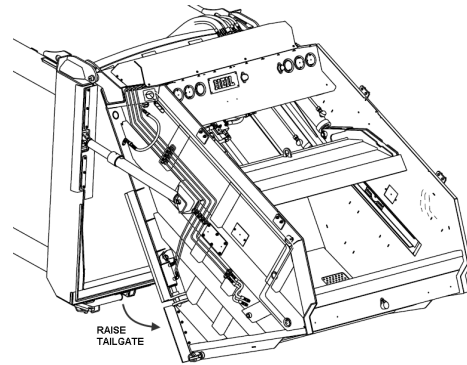


Figure 45. Tailgate Raised Enough to Rotate Out the Props

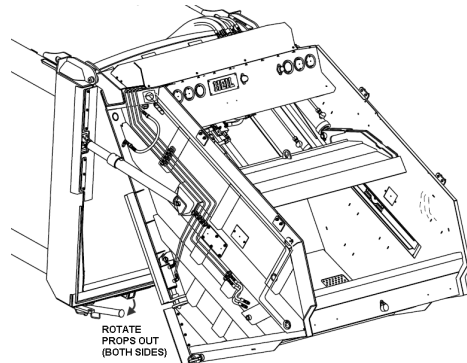


Figure 46. Rotate Tailgate Support Props until Perpendicular to Body

NOTES:

SECTION 6

DAILY CHECKLIST

DAILY CHECKLIST

Perform a daily check of the unit. Make copies of the **Refuse Vehicle Daily Inspection** on the next page to have the operator mark completed items before each route. Many checks in the Daily Checklist are maintenance related, such as checking tire pressures and hoses for wear and damage.

Refer to the **Daily Checklist Maintenance Items Chart** below for items to check and the required action.

DAILY CHECKLIST MAINTENANCE ITEMS	
Item	Required Action
Low air pressure in tires	Inflate the tire to the correct air pressure.
Worn tire	Replace when the wear is greater than allowed by law or before the tread is no longer visible.
Damaged tire	Replace immediately BEFORE going on route.
Hydraulic pump leaks	Determine the cause of the leak and repair immediately.
Damaged hydraulic pump	Repair or replace immediately.
Loose or missing hardware for the hydraulic pump	Tighten loose hardware. Replace missing hardware immediately.
Damaged decal or decal not readable	Replace decal immediately.
Low level of hydraulic oil	Fill the hydraulic oil tank immediately.
Worn or damaged hoses	Replace immediately.
Leaks at cylinders, hoses or fittings.	Tighten loose connection.
Loose or missing hardware	Tighten loose connections. Replace missing hardware.
Worn fiber guards	Replace hoses/fittings as necessary. Install new fiber guard on new hoses.
Worn or damaged tailgate lock components	Replace worn or damaged components.
Loose or missing tailgate lock hardware	Tighten loose hardware. Replace missing hardware.

DAILY CHECKLIST MAINTENANCE ITEMS	
Item	Required Action
Damaged tailgate seal	Replace seal.
Body structure has loose or missing hardware	Tighten loose hardware. Replace missing hardware.
Body structure has cracked weld joints	Repair immediately.
Body mounting brackets have loose hardware, damaged hardware or cracked welds	Tighten loose hardware. Replace missing hardware. Repair cracked welds.
Air regulator (typically located at front of body)	90 PSI

NOTES:

SECTION 7

BEFORE GOING ON ROUTE

PREVIEW

Read this section to learn proper procedures for:

- Checking the unit each day
- Starting the unit in cold weather
- Setting the unit up for the route
- Removing power to the unit when not in use

BATTERY DISCONNECT SWITCH

The battery box is typically located on the street side of the chassis frame near the front of the body, however it can be mounted at a different location on a different chassis. Become familiar with the location of the battery box and battery disconnect switch on the unit.

1. Turn the battery disconnect switch OFF when the unit is shut off for any length of time – especially when the unit will be left unattended.
2. Turn the battery disconnect switch ON when the unit is in use.
3. Check the position of the battery disconnect switch as part of the daily inspection.

NOTICE

Battery cables must be securely anchored and not rubbing other equipment. Cable insulation must be free of damage and abrasion. Inspect weekly.

NOTICE

Always disconnect the battery before welding on the chassis or body.

DAILY CHECKLIST

See the **Daily Check section** for the daily checks and procedures checklist. Make a copy of the check list.

WARNING

A unit that needs service or repair can malfunction and create a dangerous condition. A part failure during operation can cause serious injury or death to a person or damage to the unit. Repair or replace any failed or defective part immediately.

BEFORE STARTING A ROUTE

Before you start a route, do the following:

- ☐ Perform an inspection of the unit with the **Daily Checklist**.
- ☐ Check the **Hydraulic Oil Level**.
- ☐ Cycle all **Hydraulic Functions**.
- ☐ Check the “**In-transit**” **Settings**.

Use the Daily Checklist to Inspect the Unit

It is the operator’s responsibility to do a visual inspection of the unit and make sure the unit is in good operating condition before you start a route.

The requirements for the daily checks are given in the **Daily Checklist section**. Make sure you complete the inspections on the checklist and you make all entries, including your signature.

COLD WEATHER WARMUP PROCEDURE

When ambient air temperature is cold (below 0 degrees F), it is necessary to warm up the unit’s hydraulic oil before you start your daily route operation or to check the oil level. The hydraulic oil is sufficiently warmed when the temperature is between 120° and 160°F.

WARNING

Moving parts on the unit are dangerous. Serious injury or death can occur if a person is struck by the equipment. Clear all people from the area before you operate the unit

Follow the steps below to warm up the hydraulic oil.

1. START the TRUCK and let the engine idle.
2. APPLY the PARKING BRAKE and make sure it holds.
3. MAKE SURE the AREA IS CLEAR of all unnecessary people BEFORE you operate the controls.
4. OPERATE the PACKER EXTEND and PACKER RETRACT functions through ten (10) cycles while the engine idles. Also run the Tailgate functions; BLADE and SLIDE.
5. Make sure the oil temperature on the sight gauge is between 120° and 160°F. If not, repeat step 5.
6. Check for fluid leaks. Repair if necessary.

PREPARING THE UNIT TO CHECK THE HYDRAULIC OIL LEVEL

Before checking the oil level or adding oil, make sure the oil is warmed up and the unit is in the following position with all cylinders collapsed:

- Truck – on level ground
- Tailgate and Body – fully down and locked
- Ejector Panel – at the front of the body
- Packer Panel – in the in-transit position with all cylinders retracted

CHECK HYDRAULIC OIL LEVEL

Check the hydraulic oil level (after warming up the oil) daily or every eight (8) hours, whichever comes first. Fill as necessary.

Cycle All Hydraulic Functions

☒ Follow These Steps:

1. Operate the packing panel, and body and tailgate functions two or three times each. See **Section 3** for proper operation of controls.
2. Put the unit back in the position described above and check the oil level again.

3. Add oil if necessary. Refer to the Service Manual for instructions for filling the oil tank.

Current Heil standard hydraulic oil is **Shell Tellus S2 VX 32**. Please see product TDS and MSDS for more detail information about it. We strongly recommend to use it on Heil products to get best system performance and oil service life. Refer to the Service Manual for other approved hydraulic oils.

NOTICE

Cold weather operation requires special oil considerations. Viscosity should not exceed 7500 SSU at lowest startup temperature. Continuous operation should range between 40–1000 SSU for all temperature ranges.

NOTICE

Contamination is a hydraulic system's worst enemy. DO NOT let dirt enter the system. Use a clean rag and remove dirt or other contamination around any system component before you disconnect or remove it. While you fill the reservoir, filter the oil through a 200 mesh (or finer) screen. NEVER use a cloth to filter the oil.

HYDRAULIC OIL TANK WITH SIGHT GAUGE

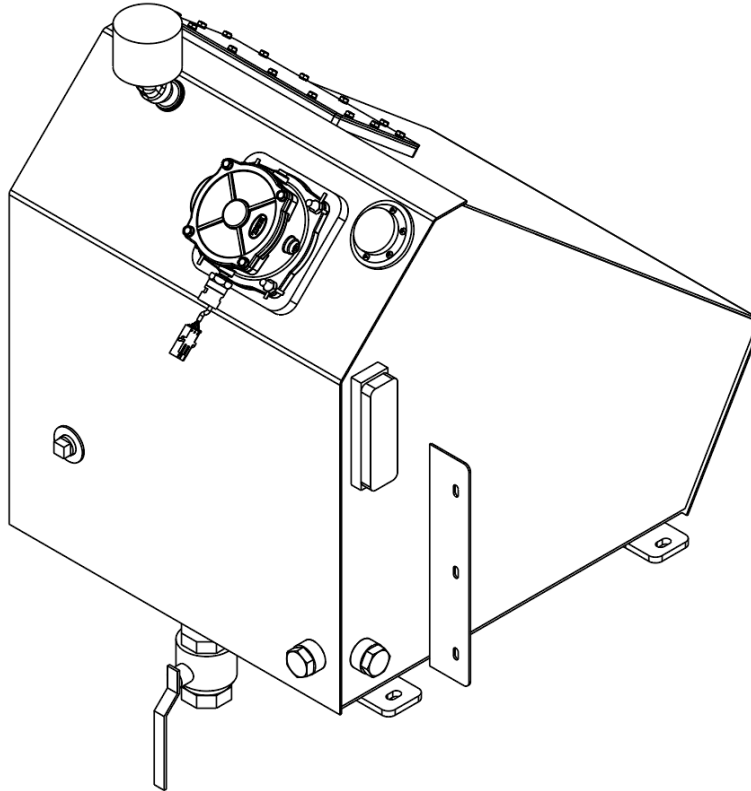


Figure 47. Typical Hydraulic Oil Tank (External Filter)

CYCLE ALL HYDRAULIC FUNCTIONS

Check the operation of all hydraulic controls on the unit.
See **Section 4** for proper operation of controls.

WARNING

Moving equipment can be dangerous to bystanders. Serious injury or death can occur if a person is in the wrong area or is not attentive to the operations. Clear the area of all unnecessary people before you operate the controls.

Perform These Steps:

DANGER

Your body or clothing can be caught by the packer blade while it moves. Serious injury or death may occur if a person is in or near the hopper when the packer blade move. Clear the area near the hopper of all unnecessary people before you move the packer blade and keep all parts of your body away from the packer blade.

1. Use the controls and MOVE the packer/ejector through at least one cycle of the start, sweep and pack positions.

DANGER

A tailgate in motion is dangerous. Serious injury or death may occur if a person is struck by a moving tailgate or becomes trapped between the tailgate and the body. Clear the area near the tailgate of all unnecessary people before you lower the tailgate.

2. Tailgate Raise Cycle

If the body is empty, remove the safety pins and do a tailgate RAISE and LOWER cycle. DO NOT raise the tailgate with refuse in the body or in the hopper.

DANGER

Stand clear when the ejector panel is in motion. Keep side access door closed when ejector panel is in motion. Failure to obey may result in severe injury or death.

NOTICE

Do not use the ejector panel to pack refuse against a closed tailgate (backpack). Packing refuse against a closed tailgate may result in damage to body or ejector cylinder.

3. Ejector Panel

Do not operate the ejector panel if the body has refuse. When the body does not have refuse, UNLOCK and RAISE the tailgate, then do at least one EJECTOR PANEL cycle, which includes a full EXTEND cycle and a full RETRACT cycle.

CHECK THE TRAVELING OR “IN-TRANSIT” POSITION

NOTICE

BEFORE driving any distance greater than one (1) mile or BEFORE you park a unit, make sure that the upper panel (slide) and sweep blade control levers are in the NEUTRAL position. If the control levers are not in the NEUTRAL position, heat may build up in the body hydraulics that could potentially cause damage to the unit.

When traveling to and from the landfill or transfer station, ensure the unit is in the "in-transit" mode as follows (see the figure to the right):

- The tailgate is fully LOWERED/CLOSED and LOCKED with the safety pins inserted. Check the TAILGATE OPEN light in the cab. It must be OFF.
- For a unit with refuse, the slide panel is up and the Packer panel is closed tight against refuse. For a unit with no refuse, the blade is at the START POSITION.
- The ejector panel is at the front of the body.

- The PACKER SWITCH is OFF.
- Properly ADJUST and CLEAN the mirrors.
- All outside lights turn ON and OFF.
- If equipped, the side access door is CLOSED and LOCKED.

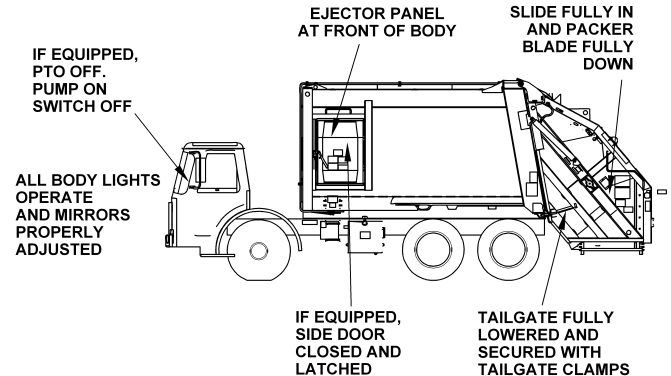


Figure 48. In-Transit Position

SECTION 8

ON-ROUTE OPERATION PROCEDURES

PREVIEW

Read this section to learn about:

- Setting up the unit for a route
- Loading refuse
- Packing the load
- Washout system
- Setting up the unit for the landfill or transfer station

DRIVING TO PICK-UP LOCATIONS

Whenever you drive the unit to and from a route, along the route, to the landfill, etc., make sure the unit is set up as follows:

- The tailgate is fully lowered and CLOSED. Check the TAILGATE UP light in the cab. It must be off.
- The tailgate is fully locked and the safety pins are inserted.
- For a unit with refuse, the blade is tight against the refuse. For a unit with no refuse, the blade is at the START POSITION.
- For a unit with refuse, the ejector panel is tight against the refuse. For a unit with no refuse, the ejector panel should be at the front of the body.
- If equipped, the PTO is disengaged.
- The PUMP ON switch is OFF.
- Properly ADJUST and CLEAN the mirrors.
- All outside lights turn ON and OFF.
- If equipped, the side access door is CLOSED and LOCKED.

Use of Curb Side Drive

If equipped, drive from the curb side driver position **ONLY** on the collection route. **DO NOT** use this station during travel to or from a route, landfill or transfer station.

BEFORE LOADING

Before starting to load refuse, ensure the packing mechanism is in the correct position.

1. If equipped, the PTO is engaged. The PUMP ON switch is ON.

DANGER

Stand clear when the ejector panel is in motion. Keep side access door closed when ejector panel is in motion. Failure to obey may result in severe injury or death.

NOTICE

The ejector panel should never be used to “backpack” (operating the ejector extend function with the tailgate closed against refuse in a fully or partially loaded unit). This can possibly result in damage to the unit including structural components and cylinder failure. The resulting damage will NOT be covered by warranty.

2. The ejector panel should be:
 - For normal route pickup, about three (3) feet from the tailgate.
 - If starting with bulk refuse, the ejector panel should be about six (6) feet from the tailgate.

3. The packing mechanism should be in the START POSITION with the slide fully IN and the packer blade fully DOWN. See the figure below.

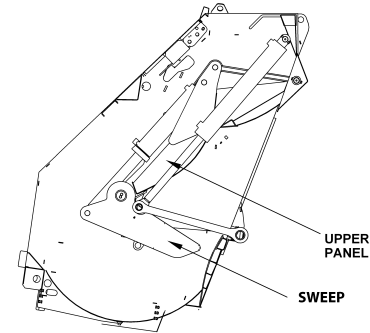


Figure 49. Packer Blade Starting Position

LOADING REFUSE MANUALLY (CONTINUED)

Use the following procedures at each stop along the route to manually load refuse into the unit with the lift arm. Observe the DANGER and WARNING notices

If the unit is equipped with tailgate lever controls, refer to **Tailgate Lever Controls**. If the unit is equipped with tailgate push button controls, refer to the information below.

DANGER

The operator and/or clothing can become caught by the blade when it moves. Serious injury or death may occur if a person is in or near the hopper when the blade and panel move. Clear the area near the hopper of all unnecessary people before moving the blade and panel, and keep all parts of operator's body away from the blade.

DANGER

The in/out and blade up/down operations can push refuse out of the hopper or break objects. Refuse broken by the blade can cause severe injury or death. Stand clear of the packer panel and to the side of the hopper when operating packing mechanism.

DANGER

Do not ride on or in the hopper opening.

3. Sweep the refuse from the hopper and pack it into the body.
4. Use the handles to raise and slide out the blade.
5. Verify that the pinch point between the packer blade tip and the hopper lip is clear. Use handles to lower the blade.
The Blade Down and Slide In functions will operate in sequence.
6. Repeat Steps 2 and 3 as necessary to compact the refuse.

LOADING REFUSE MANUALLY (CONTINUED)

WARNING

Moving equipment can be dangerous. Serious injury or death may occur if a person is in the wrong area or is not attentive to the operations. Clear the area of all unnecessary people before you operate the controls.

7. Leave the blade against the refuse.
8. Each helper must PRESS the buzzer on their side of the tailgate and let the driver know each helper is ready to move to the next location.

DANGER

Do not ride on or in the hopper opening.

9. Go to the next stop on the route.

Use the following procedures at each stop along the route to manually load refuse into the unit with the lift arm. Observe the DANGER and WARNING notices.

DANGER

Body and/or clothing can be caught by the blade when it moves. Serious injury or death may occur if a person is in or near the hopper when the blade and panel move. Clear the area near the hopper of all unnecessary people before you move the blade and panel, and keep all parts of your body away from the blade.

DANGER

The in/out and blade up/down operations can push refuse out of the hopper or break objects. Refuse broken by the blade can cause severe injury or death. Stand clear of the packer panel and to the side of the hopper when operating packing mechanism.

LOADING REFUSE MANUALLY (CONTINUED)

Tailgate Lever Controls

1. Move the slide and packer panel into the START position. See figure 48.
 - PUSH the slide and packer panel levers at the same time and RELEASE the levers. The levers will self-center at the end of the commanded position by way of valve internal hydraulic pressure.
 - The slide will move IN and the blade will move DOWN.
 - The hopper is now ready to receive refuse.
2. Load the refuse from a container into the hopper and then move the container to the pick-up location.
3. Sweep the refuse from the hopper and pack it into the body.
 - PULL the slide and blade levers at the same time and RELEASE the levers. The levers will self-center at the end of the commanded position by way of valve internal hydraulic pressure. See the figure 49.
 - The slide will move OUT and the blade will move UP. STOP the blade UP operation when the blade is at the pinch point with the hopper sill.
 - Watch for refuse that is pushed out of the hopper.

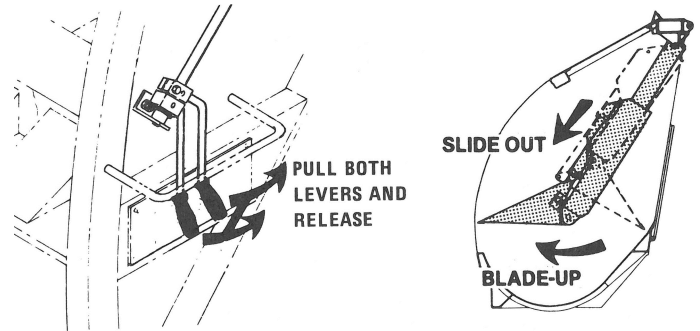


Figure 50. Starting the packing procedure.

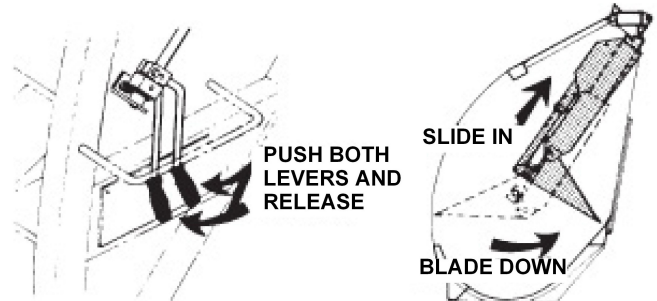


Figure 51. Packing the Refuse

4. Repeat Steps 1 and 3 as necessary to compact the refuse.
5. Leave the blade against the refuse.
6. Move the refuse container to its pick-up location.

ACHIEVING PAYLOADS

Read this section for advice and tips on how to pack the most efficient loads with the unit.

Payloads in any refuse/waste handling vehicle will vary, depending on the type of material loaded. Dry bulk cardboard and reconstruction/building materials, Styrofoam, foam packing materials, loose plastic, etc. cannot be compressed and packed as efficiently as wet, soft, garbage type materials. If dry materials can be mixed with some wet material, more efficient payloads can be achieved.

Follow these techniques to attain greater efficiency in packing the load in your unit:

1. After you empty the first few bins, the body begins to fill and material can begin to “fall back” into the hopper
2. If the route allows, mix some wet bins in with dry bins. This helps compact the dry material. Wet material also helps lubricate the body, which results in better packing.

LEAVING THE ROUTE FOR THE LANDFILL/ TRANSFER STATION

At the end of the route, or when the unit has a full load, prepare the unit to go to the landfill. See **Driving to Pick-up Locations** and ensure the unit is properly set up for travel.

- The tailgate is fully LOWERED and CLOSED. Check the TAILGATE UP light in the cab. It must be OFF.
- If equipped with a winch or reeving mechanism, the cable hook is secured in the eye on the tailgate.
- For a unit with refuse, the blade is up against refuse. For a unit with no refuse, the blade is at the START POSITION.
- If equipped, the PTO is disengaged.
- The PUMP ON switch is OFF.
- Properly ADJUST and CLEAN the mirrors.
- All outside lights turn ON and OFF.
- If equipped, the side access door is CLOSED and LOCKED.

SECTION 9

LANDFILL/TRANSFER STATION/ RECYCLE CENTER PROCEDURES

PREVIEW

Read this section to learn about:

- Setup conditions to dump the refuse
- Unloading the refuse
- Using the sump and (optional) washout system
- Preparing the unit to return to route.

OVERVIEW OF LANDFILL/TRANSFER STATION/RECYCLE CENTER PROCEDURES

Use the following information as an overview of the steps to follow when you unload refuse at the landfill.

For each step in this overview, read and follow the detailed instructions that follow the overview:

1. Set the unit in position for unloading.
2. Remove the safety pins and unlock and fully RAISE the tailgate.
3. Fully EXTEND the EJECTOR panel.
4. Fully LOWER and secure the tailgate by re-installing the safety pins.
5. Prepare the unit to return to the route.

NOTICE

The location of the controls on your unit may be different than those shown in this manual. Make sure you know your unit's control pattern before you operate the the unit.

SETTING UP THE UNIT FOR UNLOADING

After you position the unit on firm ground for unloading at the landfill, set it up properly before dumping the refuse.

☑ Follow These Steps:

1. Some chassis allow more movement than others. Always stop the unit on the most stable, hard, dry and level surface before emptying the refuse.

2. Shift the transmission to NEUTRAL.
3. SET the parking brake.
4. MOVE the PUMP ON switch to ON. Apply WORK BRAKE so the pump engages.
5. MOVE the THROTTLE ADVANCE/PUMP switch located outside by the handles to ON.
6. If there is refuse in the hopper, cycle the blade until the hopper is clear of refuse.

UNLOADING REFUSE

A. Unlocking and Raising the Tailgate

DANGER

A tailgate in motion is dangerous. Serious injury or death may occur if a person is struck by a moving tailgate or becomes trapped between the tailgate and the body. Clear the area near the tailgate of all unnecessary people before you lower the tailgate.

1. Remove both safety pins. PULL the TAILGATE lever UP and HOLD.
2. PRESS and HOLD the PUMP switch (at the front of the body) while you HOLD the TAILGATE lever UP.

UNLOADING REFUSE (CONTINUED)

A. Unlocking and Raising the Tailgate (Continued)

3. HOLD the lever until the tailgate is COMPLETELY raised.
4. RELEASE the TAILGATE LEVER and the THROTTLE ADVANCE switch.

NOTICE

The TAILGATE UP light turns ON and the in-cab alarm will sound to indicate the tailgate is open.

CAUTION

Do not drive the unit for an extended distance. The unit may become unstable and you may cause damage to the tailgate cylinders.

B. Ejecting Refuse

1. Extend the Ejector Panel
 - a. PRESS and HOLD the pump switch while you PULL the EJECT lever UP and HOLD until the ejector panel fully EXTENDS and comes to a complete stop.
 - b. The refuse is now unloaded from the unit.
 - c. RELEASE the EJECT lever and the THROTTLE ADVANCE switch.
2. Retract the Ejector Panel
 - a. Activate the pump activation switch. PUSH the EJECT lever DOWN and HOLD until the ejector panel is fully RETRACTED and at the front of the body.
 - b. RELEASE the eject lever.

UNLOADING REFUSE (CONTINUED)

C. Clean and Inspect the Tailgate



Always prop the tailgate when you leave it raised for maintenance, service or cleaning procedures. Any part of the operator between the unit's body and the tailgate while propping the tailgate or when the tailgate is propped is dangerous. Serious injury or death may occur if any part of the operator is between the tailgate and the body if the tailgate suddenly closes.

- **BEFORE** lowering the tailgate, **MAKE SURE** the area where the tailgate seal mates with the body is **CLEAN AND FREE** of any refuse and debris.
- **DO NOT** drive the unit for an extended distance if you must move the vehicle to another area to clean and inspect the tailgate seal.
- **DO NOT** go under the tailgate to clear refuse, instead, use a broom or pole to clean the tailgate seal.
- Inspect the seal for possible wear or damage and replace if necessary.

NOTES:

UNLOADING REFUSE (CONTINUED)

D. Lowering the Tailgate

DANGER

A tailgate in motion is dangerous. Serious injury or death may occur if a person is struck by a moving tailgate or becomes trapped between the tailgate and the body. Clear the area near the tailgate of all unnecessary people before you lower the tailgate.

1. Activate throttle advance/pump switch. PUSH the TAILGATE lever to LOWER the tailgate.
2. HOLD the TAILGATE lever until the tailgate is COMPLETELY down and locked then RELEASE the switch. Re-install safety pins.

NOTICE

The TAILGATE OPEN warning light will go OFF and the alarm will stop when body is FULLY locked and the tailgate is completely closed.

NOTES:

UNLOADING REFUSE (CONTINUED)

E. Locking the Tailgate

Re-install the safety pins to completely lock the tailgate.

F. Clean and Inspect the Hopper and Packer Panel

1. Put the unit in the Lock-Out/Tag-Out mode, turn the engine OFF and REMOVE the ignition keys.
2. Remove any remaining refuse in the hopper.
3. INSPECT the packer panel and hopper floor for excessive wear or possible damage. If there is excessive wear or damage, replace the part or repair the damage as soon as possible.
4. Take the unit out of Lock-Out/Tag-Out, then use the ignition keys and start the unit.
5. MOVE the packer on/off switch to ON and work the brake.
6. Use the blade and panel controls and do at least one cycle of the blade and panel: STARTING POSITION, OPEN and PACK. If the blade and panel do not operate correctly, report the problem to your supervisor for maintenance action.

G. Remove Refuse from the Engine and Exhaust Areas

IMPORTANT! Inspect unit for refuse on or about the engine or exhaust components. Remove all refuse to prevent a fire.

H. Sump Doors and Washout System

The NYC PT1100 unit does not have sump doors.

If equipped, use the optional washout system to clean out the body and hopper at the end of a work day.

I. Preparing to Return to Route

See **Driving to Pick-up Locations** and make sure the unit is properly set up for travel.

- The tailgate is fully LOWERED and CLOSED. Safety pins must be re-installed. Check the TAILGATE OPEN light in the cab. It must be OFF.
- For a unit with refuse, the blade is up against refuse. For a unit with no refuse, the blade is at the START POSITION.
- The PUMP ON switch is OFF.
- Properly ADJUST and CLEAN the mirrors.
- All outside lights turn ON and OFF.
- If equipped, the side access door is CLOSED and LOCKED.

NOTES:

SECTION 10

END OF DAY PROCEDURES

PREVIEW

Read this section to learn about:

- Parking the Unit
- Washout System
- Final Inspection
- Report to Employer/Supervisor
- Ignition Keys

END OF DAY PROCEDURES


Parking the Unit

1. Park the unit in the space designated by your employer/supervisor.
2. Set the parking brake.

Final Inspection

Perform a final inspection of the unit:

1. Clear the area of all people.
2. Start the engine if it is not running.
3. Make sure all lights and in-cab control switches operate correctly.
4. Put the transmission in reverse while you press the service brake. The backup alarm should sound in the cab. If the alarm does not sound in the cab, report this to your employer/supervisor immediately.
5. Check the unit for fluid leaks from the hoses, cylinders, valves, pump and fittings. Report any leaks to your employer/supervisor.

6. Make sure all cylinders (except tailgate lock cylinders) are in their retracted position.
7. APPLY the parking brake.
8. Put the transmission in neutral and turn the engine OFF.
9. Put the unit in the **Lock-Out/Tag-Out mode** .
10. Open the air tank drain valve.
11. Turn the battery disconnect switch to OFF.
12. Follow the company policy for locking the cab doors.

Reports to Employer/Supervisor

Complete any reports required by your employer/supervisor. If you found any problems during the final inspection, prepare the necessary report for the employer/supervisor.

Ignition Keys

Put the ignition keys in a secure storage area designated by your employer/supervisor.

NOTES:

A

accident 22
achieving payloads 92
arm mechanism 22

B

battery disconnect switch 79
before loading 87, 88
before operating the equipment 29
before starting a route 80
beware of overhead obstructions 29
bin 22
blade 22
blade control lever 60, 61
blade lever 59
body 22
buzzer switch 63

C

callapsed position 22
care of decals 45
cart tipper 22
caution 22, 27
check the hydraulic oil level 81
clean and inspect the hopper and packer panel 99
clean and inspect the tailgate 97
cold weather warmup procedure 80
contact information

Customer Care 11

Parts Central 11

Technical Service 11

controls 57
cycle all hydraulic functions 81, 83

D

daily checklist 74, 79
danger 22, 27
decals placement 33, 34, 35, 36
driving to pick-up locations 87

E

ejector panel 83
end of day procedures 103
extend/EXTEND 22

F

factory body props 69
factory tailgate props 70, 71
final inspection 103
front head 22
FULLY RETRACTED POSITION 22

G

glossary 22

H

hand holds (grab handles) 22
harm 22
hazard 22
hopper 22
how to use this manual 5
hydraulic oil tank 82

I

ignition keys 103
illuminate 22
important safety precautions 28
IN 22
in-cab control panel 57, 58
incident 22
informational decals 32
in-transit position 84

L

latch bar 22
LATCHED 22
LOAD POSITION 22
loading refuse manually 89, 90, 91
locking out the unit 51
locking the tailgate 99
Lock-Out/Tag-Out 49
Lock-Out/Tag-Out procedure 51
lower/LOWER 22

lowering the tailgate 98

M

may 22
must 22

N

notice 22, 27

O

off/OFF 22
on/ON 22
operator 22
overhead clearances 29
overview of landfill/transfer station/recycle center
procedures 95

P

PACK POSITION 22
packer blade 22
packer panel 22
packing on-the-move 92
parking the unit 103
precautionary statements 27
preparing the unit to check the hydraulic oil level 81
preparing to return to route 99
pressure washer precautions 45
product nomenclature 18

product nomenclature 18
 curb side components 15
 street side components 16
 tailgate components 17
propping the tailgate 69, 70, 71
PTO 22

R

raise/RAISE 22
raising the tailgate 96
recommended hydraulic oil 81
reeving mechanism 22
reflective safety materials 44
REL 22
remove refuse from the engine and exhaust areas 99
reports to employer/supervisor 103
retract/RETRACT 22
riding step 22
roll bar assembly 22
RPM 22

S

safety decals 32
serial plate 14
serial plate location 13
setting up the unit for dumping 95
should 22
side access door 22
sight gauge 82

standard indicator lights 58
standard outside controls 59, 60, 61, 63
standard toggle switches 58
streetside vs. curbside 13
sump doors and washout system 99

T

tailgate access covers 22
tailgate lever controls 91
tailgate push button controls 89, 90
tailgate raise cycle 83
throttle advance 22
throttle advance switch 63
to the mechanic 9
to the operator 7, 8
to the owner 6
traveling position 84

U

unit 22
UNLATCHED 22
unloading 29
unloading refuse 95, 96, 97, 98, 99
unlocking and raising the tailgate 95
upper panel 22
upper panel lever 59
use of curb side drive 87
use personal protective equipment 29

W

warming up the hydraulic oil 80
warning 22, 27
warranty claims and inquiries 10
washout system 103
when working in or around the vehicle 29
winch 22



HEIL ENVIRONMENTAL WARRANTY STATEMENT

Our products are subject to a limited warranty as outlined in the document linked below – please see the linked Heil Warranty Policies & Procedures for our full, limited warranty.

As a summary, The Heil Co. d/b/a Heil Environmental (“Heil”) warrants its solid waste collection equipment to be free from defects in material and workmanship under normal use for a period of one (1) year or 2000 hours of operation (whichever comes first) from the date of equipment In-Service or during the period of coverage offered by an extended warranty program (if one is offered on a particular product), when proper service and maintenance as described in Heil Service Bulletins and Parts & Service Manuals are performed. The standard or extended equipment warranty is not transferable except for sales demonstration units. Heil only warrants the collection body. Please consult respective chassis manufacturer for respective specifics on chassis.

Ask your local Heil Dealer about our Extended Warranty offerings or contact Heil Customer Care at 866-ASK-HEIL (866.275.4345). For Warranty programs for international accounts outside of North America please consult with your Regional Manager for further details and/or appropriate policies.

EXCEPT AS CONTAINED IN THE HEIL WARRANTY POLICIES AND PROCEDURES, HEIL MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE. HEIL DOES NOT ASSUME ANY LIABILITY FOR LOSS OF PROFITS, PRODUCT, TIME, OR ANY OTHER DIRECT, INCIDENTAL, OR INDIRECT CONSEQUENTIAL LOSSES, DAMAGES OR DELAYS. ANY IMPROPER USE, OPERATION BEYOND RATED EQUIPMENT/COMPONENT CAPACITY, SUBSTITUTION OF PARTS THAT ARE NOT HEIL APPROVED, OR ANY ALTERATION OR REPAIR BY OTHERS IN SUCH A MANNER AS IN HEIL’S SOLE JUDGMENT AFFECTS THE PRODUCT OPERATION OR INTEGRITY SHALL VOID THE WARRANTY.

Heil retains the right to modify its factory warranty program at any time. The warranty in place at the time of your respective purchase applies.

Please see the full limited warranty as outlined at <https://www.heil.com/warranty/> under Heil Warranty Policies and Procedures.

Revised 9/2023



WE NEVER STOP WORKING FOR YOU

www.heil.com

Customer Care:
866-ASK-HEIL
(866-275-4345)

The Heil Co.
4301 Gault Avenue North
Fort Payne, AL 35967-9984

Parts Central:
800-528-5308

Technical Service:
866-310-4345
TechSupport@DoverESG.com