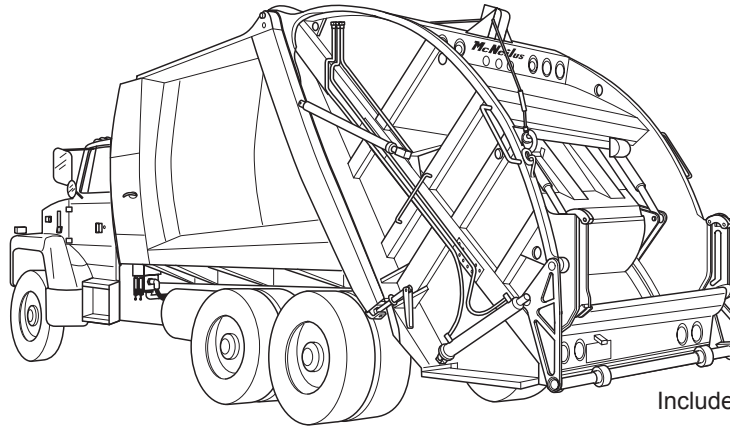




An Oshkosh Corporation Company

# OPERATOR'S MANUAL

## Standard Rear Loader



Includes the Following Models:

- Standard Rear Loader
- Rear Loader with Tag Axle
- XC Rear Loader
- XXC Rear Loader
- HD Rear Loader
- HD Rear Loader (3.5 YD Hopper)

**Disclaimer:**

This manual must not be used to repair your vehicle. Repair information is available by calling McNeilus Customer Service at (888) 686-7278.

The information in this Operator's Manual will be your guide to operation and operator maintenance for this equipment.

All information, illustrations, and specifications in this manual are based on the information available at the time this manual was published. The illustrations used in this manual are intended as representative reference views only. Because of our continuous product improvement policy, we may modify information, illustrations, and/or specifications to explain and/or exemplify a product, service, or maintenance improvement. We reserve the right to make any change at any time without notice. Go to [www.streetsmartparts.com](http://www.streetsmartparts.com) for current information.

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For assistance in ordering the Waste Collection Vehicle Safety Guide, contact:  
National Waste and Recycling Association  
1550 Crystal Drive • Suite 804  
Arlington, VA 22202  
Telephone: 800-424-2869 • Fax: 202-966-4824

For assistance in ordering OSHA Publications, contact:  
U.S. Department of Labor/OSHA  
OSHA Publications  
P.O. Box 37535  
Washington, D.C. 20210  
Telephone: 202-693-1888 • Fax: 202-693-2498

## 1.0 Identification Plate

A McNeilus Truck and Manufacturing, Inc. identification plate (Figure 1, Item 1) is located on the left front side of the refuse vehicle body. The identification plate contains the Model Number and Serial Number of your refuse vehicle.

To serve you better, please fill out the following information and have it ready when calling McNeilus Truck and Manufacturing, Inc. for parts or product information:

**Date of Purchase:** \_\_\_\_\_

**McNeilus Branch:** \_\_\_\_\_

**Model Number:** \_\_\_\_\_

**Serial Number:** \_\_\_\_\_

**VIN\*:** \_\_\_\_\_

\*Refer to chassis manufacturer literature for location.

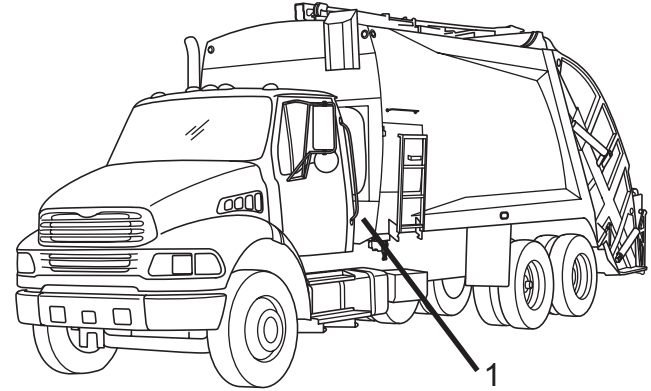


Figure 1



 **WARNING**

**The operator of this vehicle must be properly licensed and trained to operate this vehicle.**

**If you do not have the proper training and licensing to operate this vehicle, you are putting yourself and others at risk of serious injury or death.**

**If you are uncertain how to operate this Packer, inform your supervisor or contact McNeilus Truck and Manufacturing, Inc. at 888-686-7278.**

**NOTE**

**This manual is limited to the operation and light maintenance of the refuse collection system only.**

**This manual does not include the operation or maintenance of the chassis vehicle upon which the refuse collection system is mounted.**

## 4.0 Scope

This manual provides information for use by the equipment operator under the following headings:

1. **Safety.** Includes important safety information.
2. **General.** Includes equipment identification.
3. **Operation.** Includes control functionality and normal equipment operation.
4. **Preventive Maintenance.** Includes basic preventive maintenance information for the operator.
5. **Troubleshooting.** Includes basic troubleshooting information for the operator.

To order a replacement manual or safety signs, call the McNeilus parts and service number listed in the Foreword of this manual.

## 5.0 Parts and Service

Contact your McNeilus Parts and Service branch locations to order parts, receive service information, or for other assistance.

**Contact by phone or visit [www.streetsmartparts.com](http://www.streetsmartparts.com).**

We have factory owned parts and service centers near you.

**Phone Number 888-686-7278**

<b>State</b>	<b>City</b>	<b>State</b>	<b>City</b>
CA	Colton	OH	Cincinnati
CT	East Granby	OH	Columbus
FL	Tampa	PA	Morgantown
GA	Villa Rica	TX	Houston
IL	Sugar Grove	TX	Hutchins
IN	Fort Wayne	UT	West Valley City
MN	Dodge Center	WI	Oshkosh
NY	Bronx		

### Canada

Ontario and Western Provinces	800-265-1089
Quebec and Maritime Provinces	800-996-4937

## 6.0 Corporate Headquarters

Contact McNeilus Truck and Manufacturing, Inc. directly at our corporate headquarters at the following address, phone number, and website.

McNeilus Truck and Manufacturing, Inc.  
524 County Road 34 East  
Dodge Center, MN 55927

Telephone: 507-374-6321

Corporate Website: [www.mcneiluscompanies.com](http://www.mcneiluscompanies.com)

Parts and Service Website: [www.streetsmartparts.com](http://www.streetsmartparts.com)

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## 1.0 Important Safety Information

**READ AND UNDERSTAND THIS ENTIRE MANUAL BEFORE OPERATING, REPAIRING, OR ADJUSTING YOUR MCNEILUS EQUIPMENT.**

**THOSE WHO USE AND MAINTAIN THIS EQUIPMENT MUST BE THOROUGHLY TRAINED AND FAMILIAR WITH THE PRODUCT.**

**IF INCORRECTLY USED OR MAINTAINED, THIS EQUIPMENT CAN CAUSE SEVERE INJURY.**

Always keep this manual in a location where it is readily available for persons who operate or maintain the product. Additional copies of this manual are available from McNeilus Truck and Manufacturing, Inc. Please contact McNeilus Truck and Manufacturing, Inc. if you require additional manuals or if you have any questions about the information in this manual, this product, or safe operating procedures.

**THESE SAFETY PROCEDURES ARE FOR YOUR OWN PROTECTION.**

Do not operate this equipment until you have read its contents thoroughly. Read and understand the Waste Collection Vehicle Safety Guide that is placed in the vehicle's cab. Please contact McNeilus Truck and Manufacturing, Inc. if you require assistance.

Should operators of this equipment have a reading or learning disability, dyslexia, or other such condition, they must be assigned a mentor/trainer to read and explain to them the entire contents of this manual as well as the safety guidelines, danger, caution, and warning safety signs on this unit. Such individuals should not be allowed to operate this equipment until they thoroughly understand all of these materials. Failure to do so can result in serious injury or death.

Refer to your company's safety rules and procedures. Safety and safe working procedures must be followed at all times.

Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 Lockout/Tagout and 1910.146 Confined Space as appropriate.

## 1.1 Battery Disconnect Switch

If your vehicle is equipped with a BATTERY DISCONNECT switch, it may be located near the battery box. Use the battery disconnect switch when performing any maintenance so the vehicle cannot be accidentally started.

1. Turn the battery disconnect switch (Figure 1, Item 1) counterclockwise so the hole on the switch aligns with the hole in the bracket (Figure 1, Item 2).
2. Install the safety lockout device ring (Figure 2, Item 1) through the holes on the battery disconnect switch and the bracket.
3. Install a padlock (Figure 2, Item 2) onto the safety lockout device ring, lock it, and put the key in your pocket. If more than one person is working on the vehicle, each person must install their own padlock.

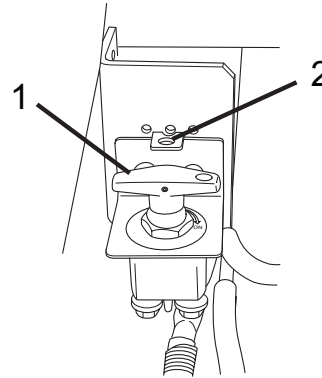


Figure 1

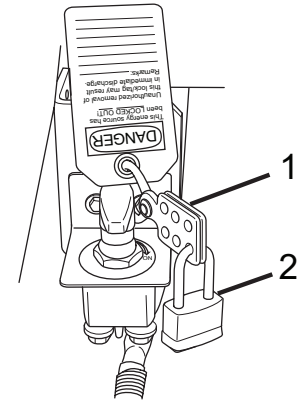


Figure 2



### 1.1.1 Battery Cable Disconnect

If the refuse vehicle is not equipped with a battery disconnect switch, disconnect the negative (black) battery cable first, then disconnect the positive (red) cable.

#### **WARNING**

**For trucks without a battery disconnect switch, to prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative cable first) before proceeding.**

**Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury.**

## 1.2 Safety Equipment

Some McNeilus Refuse Trucks come equipped with a five pound fire extinguisher, which has a rating of B:C, and a reflective warning triangle kit containing three triangles.

The fire extinguisher may already be mounted to the refuse vehicle, otherwise it is temporarily placed into the cab of your truck along with the reflective triangle kit.

If you are supplying your own fire extinguisher, it must comply with DOT FMCSA regulation 173.309 and 393.95 for rating and placement on the vehicle.

You are responsible for permanent mounting of this equipment. The fire extinguisher is required to be securely mounted to prevent sliding, rolling, or vertical movement. The placement and mounting location of the reflective triangles are at your discretion.

## 1.3 Reporting Safety Defects

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying McNeilus Truck and Manufacturing, Inc., and the chassis manufacturer.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, McNeilus Truck and Manufacturing, Inc., or the chassis manufacturer.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to: <http://www.safercar.gov> or write to: Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. You can also obtain other information about motor vehicle safety from: <http://www.safercar.gov>.

## 2.0 Safety Notices

Safety notices are one of the primary ways to call your attention to potential hazards.



Safety Alert Symbol

**THIS SAFETY SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THIS MANUAL.**

**WHEN YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSAGE THAT FOLLOWS.**

**BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY OR DEATH.**

The following safety notices are used throughout this manual.



**DANGER**

**Danger indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. Danger is used in the most extreme situations.**



**WARNING**

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



**CAUTION**

**Caution indicates a situation that might result in property damage.**

**SAFETY NOTICE**

**OPERATOR'S INSTRUCTION**

The “signal words” of DANGER, WARNING, and CAUTION have specific meanings to alert you to the relative level of hazard.

Take the safety warnings seriously. If you do not understand them or have questions about them, call McNeilus Truck and Manufacturing, Inc.

## 3.0 Product Safety Information

Read, understand, and follow the safety guidelines and heed dangers and warnings listed below and contained in this manual as well as on the refuse vehicle itself to promote reliable operation and prevent serious personal injury.

Contact McNeilus Truck and Manufacturing, Inc. if you require assistance or have questions.

### 3.1 Safety

#### **WARNING**

**Safety decals must be replaced anytime they are damaged, missing, or cannot be read clearly. Failure to have proper decals in place can result in serious injury or death. If you require safety decals, please contact McNeilus Truck and Manufacturing, Inc. at 888-686-7278.**

#### **WARNING**

**The Packer must not be modified in any way without authorization from McNeilus Truck and Manufacturing, Inc. Modifications may not comply with safety standards, including ANSI safety standards, and may result in serious personal injury. Please contact McNeilus Truck and Manufacturing, Inc. at 888-686-7278 if you require assistance.**

#### **WARNING**

**Wear Personal Protective Equipment (PPE) such as hard hats, safety glasses or goggles, sturdy gloves, hearing protection, steel toed boots, and snug fitting sturdy long-sleeve shirt and long pants when operating or maintaining the Packer. Reflective clothing is recommended for drivers and employees while packing during hours of darkness. Serious injury can result without proper PPE.**

**⚠ WARNING**

Operating, servicing, and maintaining this vehicle or equipment can expose you to chemicals including exhaust, carbon monoxide, phthalates, and lead, which are known to the state of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle or equipment in a well ventilated area and wear gloves or wash hands frequently when servicing. For more information, go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

**⚠ WARNING**

Read, understand, and follow all aspects of OSHA 1910.146 Confined Space and Permit-Required Confined Space. Check your local and state regulations.

Information is found in the Safety section of this manual.

Failure to follow regulations may cause serious personal injury or death.

**Overhead Clearance for Electric Cables**

Voltage of Electric Cables	Minimum amount of clearance from electric cables when unit is working	Minimum amount of clearance from electric cables when driving the unit between jobs
50,000 volts or less	10 feet (3 m)	4 feet (1.2 m)
Over 50,000 volts	10 feet (3 m) plus 1/2 inch (10 mm) for every 1,000 volts over 50,000 volts	10 feet (3 m)
345,000 - 750,000 volts		16 feet (5 m)

**NOTE:** If local rules and laws require more clearances, you must follow them.

## 3.2 Cab Operation

### DANGER

If the Packer comes into contact or close proximity with a power line or there is any arcing, stay in the truck cab and keep away from the metal parts of the unit. Do not let anyone come close to the truck. Do not attempt to jump clear of the truck. Stay in the cab. The power company must disconnect the power before you can safely leave the cab.

Minimum clearance from power lines:

50,000 Volts or Less	4 Feet
50,000 + Volts	10 Feet
345,000 - 750,000 Volts	16 Feet

Know the clearance of overhead obstructions. Never drive the Packer under any overhead obstruction. Failure to do so may result in damage to the Packer body or truck, and may result in serious personal injury or death.

### DANGER

If chassis is equipped with a stand-up drive position, use stand-up position only during refuse pick-up or collection activities for distances of less than 2/10 mile (0.32 km). Failure to heed this warning may result in serious personal injury or death.

### DANGER

DO NOT operate vehicle in excess of 20 MPH from stand-up position. Failure to do so can result in serious personal injury or death.

### DANGER

Always drive defensively. Never exceed posted speeds. Use lower speeds when going around curves, corners, or freeway on/off ramps. You are carrying a high center of gravity load. Failure to comply can lead to a roll over or other loss of control of the vehicle resulting in serious personal injury or death.

**⚠️ WARNING**

Operators must comply with Employee Responsibilities as outlined in ANSI Z245 and state, federal, and other safety and transportation regulations (e.g. OSHA, DOT, Motor Carrier, and FMVSS) when operating this refuse vehicle. Failure to comply may result in serious personal injury or death.

**⚠️ WARNING**

Be sure all non-operator personnel are at least 20 feet (6 meters) away from all areas of the Packer.  
Serious personal injury or death may occur.

**⚠️ DANGER**

Make sure that the tailgate is closed and locked before driving the truck at any speed.  
Failure to heed this warning may result in serious personal injury or death.

**⚠️ WARNING**

If equipped with optional camera or object detection system, do not rely exclusively on the camera or object detection system. Follow all other safe driving procedures. Failure to heed this warning may result in serious personal injury or death.

**⚠️ WARNING**

No passenger is allowed in the cab unless a manufacturer's approved passenger seat and seat belt are provided. Serious injury or death can result.

**⚠️ WARNING**

At the landfill or when operating off-road, use the lowest transmission gear and proceed at low speed (3 mph maximum). Failure to comply can cause serious injury.

**⚠ WARNING**

It is important that the pump ON indicator light is working. No damage will be done to the hydraulic system if the Packer is driven with the pump in the ON position. However, the controls will function if accidentally bumped. This can cause serious injury or death.

**⚠ CAUTION**

Always check indicator lights in the chassis cab or on the control panel at the front of the Packer. Replace bulbs or lights when required. (Note: All models may not have indicator lights.) Failure to inspect indicator lights may lead to more serious conditions.

**⚠ DANGER**

Never stand or position yourself under any raised hydraulic component. Moving the control lever of any raised hydraulic component will cause the component to suddenly lower, whether the E-Stop is pressed or not.

**Serious personal injury or death may occur.**

**⚠ WARNING**

Do not leave the truck unattended until the parking brake has been securely set and all reasonable precautions have been taken to prevent the movement of the truck. The operator must chock the truck wheels anytime he is away from the vehicle for an extended period of time. Wheel chocks are available for purchase from McNeilus Truck and Manufacturing, Inc. by calling 888-686-7278.

Failure to comply may result in serious personal injury or death or damage to equipment.

**⚠ WARNING**

All owners and supervisors should make sure all drivers, operators, and maintenance personnel have read and thoroughly understand the decals affixed to this Packer as well as the safety information and instructions in the McNeilus Operator Manual. Owners and supervisors must comply with ANSI Z245.1 Regulations.

**⚠ WARNING**

Tailgate **MUST** be closed during transit. Tailgate open indicator light will be ON and backup alarm will sound if tailgate is not closed. Close tailgate as soon as load is ejected and cleanup is completed.

Failure to comply may result in personal injury or death or damage to equipment.

**⚠ WARNING**

Never walk or stand behind vehicle while it is backing up. Failure to heed these instructions/warnings may result in serious personal injury or death.

**⚠ WARNING**

Be sure all non-operator personnel are clear of the area around the Packer before operating the Packer. Remain attentive at all times when operating the controls. Watch the mirrors for activity. Never back up the Packer unless and until you are completely sure it is safe. Use a spotter/observer and/or get out and check yourself, if necessary, to ensure it is safe to do so. Thoroughly understand the controls before operating the Packer. Failure to heed this warning may result in serious personal injury or death.

### 3.3 Outside Operation

**⚠ DANGER**

Never attempt to clear a jammed Packer or container lift, enter a body or open an access door unless power is shut down, LOCKOUT/TAGOUT procedures have been complied with, and the employee is authorized, trained, and competent to perform such activities. Failure to comply may result in serious personal injury or death.



 **DANGER**

Make sure the area above the vehicle is clear of objects and power lines before raising or opening the tailgate.  
Serious personal injury or death may occur.

 **WARNING**

Keep access door closed when in operation.  
Do not open access door unless:

1. Engine is stopped.
2. Key is removed from ignition
3. Hydraulic pressures are relieved.
4. OSHA LOCKOUT/TAGOUT Regulations are complied with.

Failure to heed these instructions/warnings may result in serious personal injury or death.

 **WARNING**

Before opening the tailgate, be sure you have adequate clearance above the tailgate to prevent contact with buildings, electrical lines, and any other overhead obstructions. Failure to comply can cause damage to the vehicle and serious personal injury.

 **WARNING**

Do not use the riding step when speeds are expected to exceed 10 mph (16 kph) or when distance traveled is in an excess of two-tenths of one mile (0.32 km).  
Riding step shall not be used when the vehicle is moving backwards.

Do not mount or dismount riding step when vehicle is in motion or when ladders or platforms are wet and slippery.

Serious personal injury or death can occur due to a fall.

**⚠ WARNING**

Always keep hands and feet and other parts of your body clear of revolving or moving parts. Failure to comply can cause serious injury.

**⚠ WARNING**

Wear Personal Protective Equipment (PPE) such as hard hats, safety glasses or goggles, sturdy gloves, hearing protection, steel toed boots, and snug fitting sturdy long-sleeve shirt and long pants when operating or maintaining the Packer. Reflective clothing is recommended for drivers and employees while packing during hours of darkness. Serious injury can result without proper PPE.

**⚠ WARNING**

The Packer and chassis should never be overloaded. Do not exceed the manufacturer's recommended gross vehicle weight. Do not overload the Packer and chassis. Gross weights must meet federal, state, and local laws. Failure to comply can cause serious injury.

**⚠ DANGER**

Use a three point stance with both feet firmly on the riding step and hands on the hand holds. Failure to comply may cause serious personal injury or death.

**⚠ WARNING**

Never operate the hydraulic system if a leak is present. Serious injury may result.

**⚠ WARNING**

Never drive the truck with the water tank pressurized.  
Serious personal injury or death may occur.

 **WARNING****IMPORTANT ALUMINUM AND STEEL WATER TANK INFORMATION.**

1. Inspect water tank on a daily basis for any damage including, but not limited to, dents, gouges in metal, or leaks.
2. Do not weld on or repair water tank. Instead, replace water tank with a new OEM water tank.
3. Never pressure test an empty water tank. Only pressure test a full water tank.
4. Never remove pressure regulator or pressure safety valve from tank.
  - If regulator or safety valve is defective, it must be replaced before Packer is put into service.
5. Do not pressurize water tank beyond its working pressure.
  - If pressure exceeds the working pressure, immediately depressurize water tank and replace pressure regulator and pressure safety valve.

 **WARNING****CONTINUED**

6. Never drive the truck with the water tank pressurized.
  - Depressurize water tank prior to transit to or from job site.
  - Water tank should be pressurized only when being used.
7. Never modify water tank in any way.
8. Immediately replace safety decals with McNeilus decals if decals are missing or difficult to read.
9. Refer to the McNeilus Operator's Manual or contact McNeilus at 1-888-686-7278 if you have questions or require assistance.

 **WARNING**

**Never pressurize an empty water tank.  
Serious personal injury or death may occur.**

**⚠ CAUTION**

Be sure to drain the water tank, hoses, and pipes when operating in temperatures below freezing.

Failure to drain the system may cause damage to equipment.

**⚠ WARNING**

Never pressurize water tank in excess of 55 psi (380 kPa). If pressure exceeds 55 psi (380 kPa), depressurize the water tank immediately and adjust or replace the air regulator valve.

Serious personal injury or death may occur.

**⚠ WARNING**

Do not drink the water.

Serious internal injury may result.

**⚠ WARNING**

Never allow the water from the tank to drain onto a public sidewalk or roadway. Water may cause the sidewalk or roadway to become slippery. Always drain the water system at a location designated by the job site manager or in compliance with your company policy.

Failure to comply may result in serious personal injury or death.

**⚠ WARNING**

Pressure in the water tank should never exceed 55 psi. If pressure exceeds 55 psi, depressurize tank immediately and replace with new McNeilus air regulator valve.

**NEVER** pressurize an empty tank.

**NEVER** modify tank in any way.

Operating in excess of 55 psi, pressurizing an empty tank, or modifying the tank may cause serious personal injury or death.

**⚠ WARNING**

Stand clear when tipper is in motion.  
Failure to comply can result in personal injury.

**⚠ CAUTION**

NEVER operate the tipper faster than a 6 second cycle time.  
Faster cycle time will void your warranty.  
Failure to comply can result in equipment damage.

**⚠ CAUTION**

Do not use tipper bar to lift 3 yard or larger containers. Only lift containers that are compatible with ANSI Z245.60-1999 type T containers.  
Damage to property or equipment may occur.

**⚠ WARNING**

Only hook winch where designated.  
Hooking winch anywhere else could result in serious personal injury.

**⚠ WARNING**

Crush or Pinch Hazard.  
Lifting or dragging uncontrolled items with hook and cable may cause items to move in a way that can pinch or crush the operator.  
Use winch or reeving cylinder hook and cable for dumping properly restrained ANSI Type T containers only.  
Never use hook and cable for any other purpose.  
Failure to comply may injure or kill.

**⚠ CAUTION**

Never attempt to prop a body or tailgate unless completely empty.  
Never walk or work under a raised body or tailgate unless props are in place.  
Failure to do so may result in serious personal injury or equipment damage.

**⚠ CAUTION**

If you detect a problem with any control function, it must be repaired immediately. **DO NOT** operate the Packer with malfunctioning controls. Damage to property or equipment may occur.

**⚠ CAUTION**

Tailgate must be locked with turnbuckles or (OPTIONAL) hydraulic locks before loading trash into the body. Failure to comply can result in property or equipment damage.

**⚠ CAUTION**

If chassis is equipped with a battery disconnect switch, it must be turned off anytime the equipment is parked overnight, in a shop, or out of service for any extended period of time. Failure to do so may result in a fire and personal injury or property damage.

**3.4 Maintenance****SAFETY NOTICE**

Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate.

**⚠ WARNING**

Packer must be disabled by the following steps before proceeding.

1. Place transmission in NEUTRAL.
2. Apply chassis parking brake.
3. Shut engine OFF.
4. Remove chassis ignition key and maintain in personal possession.
5. Turn chassis BATTERY switch OFF.

Failure to disable the Packer may result in serious personal injury or death.

 **DANGER**

LOCKOUT/TAGOUT procedures must be followed when working on this equipment including, but not limited to, cylinders being changed or maintained. Failure to heed these instructions/warnings can result in serious personal injury or death.

 **CAUTION**

Disconnect battery before welding on body. Failure to do so might result in personal injury or damage to property or equipment.

 **DANGER**

If the hydraulic or electrical system on the Packer fails to operate for any reason, call a competent technician to repair the problem. Never let any untrained or incompetent personnel attempt to fix any problems or malfunctions that may occur. If you are not trained or do not have the competence, never attempt to fix any problems or malfunctions that may occur. Never alter the original equipment manufacturer's design.

 **DANGER**

Auxiliary pusher or tag axles must be supported with jack stands, blocks, or similar devices while being serviced or maintained to prevent serious personal injury or death if auxiliary axle drops unexpectedly. Failure to do so may result in serious personal injury or death.

 **DANGER**

Use the three-point rule when climbing the ladder. Failure to heed may cause serious personal injury.

 **WARNING**

Inspect ladder bolts every 30 days for wear and replace if necessary.

Failure to do so may result in serious personal injury or death.

 **WARNING**

Daily inspections should be performed on the Packer. This includes proper operation of the controls, hydraulic systems, electrical systems, optional cameras are clean and working, camera lens is clean, lighting system including turn signals, back up alarm, brake lights, clearance lights, head lamps, tail lamps, safety equipment, and work lights are all operational. The Packer's air system must operate properly and have no leaks. Water and moisture should be drained from the Packer's air system daily. Failure to ensure all systems are operating properly can result in serious personal injury or death.

 **DANGER**

Whenever the tailgate is in a raised position, it must be securely propped or blocked so it cannot fall on anyone.

Serious personal injury or death may occur.



 **DANGER**

Stand clear when the tailgate is in motion and during the unloading cycle. Do not stand under or cross under the raised tailgate.

Serious personal injury or death may occur.

 **WARNING**

Anytime a tailgate is raised in the shop or for maintenance, the tailgate must be supported to prevent the tailgate from coming down unexpectedly. Never allow anyone to work around or enter the tailgate area unless the tailgate is raised and supported! Failure to follow this procedure can result in serious injury or death.

 **WARNING**

Never place yourself between the tailgate and the body. Always engage both tailgate props when performing maintenance or inspections in or around the open tailgate area.

Failure to engage both tailgate props may result in serious personal injury or death.

 **DANGER**

Never attempt to use extraneous sources of power or extraneous machines to overcome a malfunctioning system.

Never override with overhead cranes, forklifts, jacks, etc. or alter or modify systems or equipment that may be malfunctioning.

Failure to heed these instructions/warnings can result in serious personal injury or death.

 **CAUTION**

Correct all identified deficiencies **BEFORE** operating the Packer. Failure to correct deficiencies may cause damage to equipment.

 **WARNING**

Do not wear watches, rings, and jewelry while working with electrical and mechanical equipment. These items can be hazardous and can cause serious and painful injuries if they come into contact with electrical wires, moving parts, or hydraulic equipment.

 **WARNING**

Use only the access door for entry to the Packer. Remember to follow the **LOCKOUT/TAGOUT** procedures when entering the Packer body. Only exit the Packer body through the access door.

 **WARNING**

If equipped with optional camera, camera lens must be kept clean at all times to help achieve good monitor pictures. Failure to heed this warning may result in serious personal injury or death.

 **WARNING**

Electrical wiring, battery wiring, and electrical cable must be inspected on a daily basis for cuts, abrasions, damage, aging, improper clearance and along the frame for hidden damage. If you find electrical wiring or electrical cable with any such adverse conditions or damage, they must be replaced with electrical wiring or electrical cable of equivalent specifications before the Packer is returned to service. Failure to properly inspect and maintain your Packer may result in serious personal injury or death.

**⚠ WARNING**

When working on the Packer, the wheels must be blocked, the parking brake on, LOCKOUT/TAGOUT procedures in effect, and the keys out of the truck's ignition. Failure to do so may result in serious personal injury or death.

**⚠ WARNING**

Do not repair or weld steel or aluminum water tanks. Inspect the water tank for rust or corrosion every 30 days. Inspect the water tank under the straps, on the exterior, and on the interior by removing the flopper. If any rust or corrosion is found, replace the water tank with an OEM water tank from McNeilus. Failure to maintain water tanks may result in serious personal injury or death.

### 3.5 Hydraulics

Call McNeilus Truck and Manufacturing, Inc. at 888-686-7278 anytime you have questions concerning hydraulic hoses, tubes, or pipes.

**⚠ DANGER**

Hydraulic systems operate under very high pressure. Hydraulic fluid escaping from a pressurized system can penetrate unprotected body tissue. Never inspect for hydraulic leaks with bare hands or other exposed body parts. As a minimum, wear leather gloves and use cardboard or wood to inspect for leaks. If leaks are present, relieve pressure and allow system to cool prior to servicing. If injured by escaping hydraulic oil, contact a physician immediately. Serious complications may arise if not treated immediately.

 **WARNING**

Hydraulic hoses and tubing must be inspected on a daily basis for leaks, cuts, abrasions, damage, aging, improper clearance, and along the frame for hidden damage. If you find hoses with any such adverse conditions or damage, they must be replaced before the vehicle is returned to service! Failure to properly inspect and maintain your vehicle may result in serious personal injury or death.

 **WARNING**

Hydraulic systems are hot. **DO NOT TOUCH!** Serious personal injury or death may result from hot oil. When you have completed working on the hydraulic systems, thoroughly clean any spilled oil from the equipment. Do not spill any hydraulic fluid on the ground. Clean any hydraulic fluid from your skin as soon as you have completed your maintenance and repairs. Dispose of used oil and filters as required by law.

 **WARNING**

The hydraulic cylinders can be holding a function in a certain position when the engine is OFF. An example of this would be a function being held in the lift or partial lift position by the cylinders. If a hydraulic line is removed or the hydraulic circuits or controls are being worked on, gravity may allow the function being held in position to drop. All workers and personnel must remain clear of these areas when working on or operating the McNeilus equipment. Block and secure all applicable devices and functions before beginning work or operation. Failure to comply with this can result in serious injury or death.

**⚠ WARNING**

All hydraulic pressure must be relieved from the hydraulic system prior to removing any components from the system. To relieve the hydraulic pressure from the hydraulic system, turn the chassis engine OFF and operate the Packer controls with the key in the ON position. This will allow the spools to shift and relieve the hydraulic pressure. Failure to comply can result in serious injury or death.

**⚠ WARNING**

Hydraulic hoses have the SAE ratings marked on the hose to assist in selecting the correct hose. Replacement hydraulic hose and fitting components must be supplied by the same manufacturer to prevent serious injury or death. An example: Brand "A" hose and brand "B" fitting will not normally be compatible.

**⚠ WARNING**

Hydraulic systems operate under high pressure. Only qualified, experienced people properly trained in hydraulic system maintenance should attempt repairs or troubleshoot hydraulic systems. Use the proper tools and equipment when servicing the hydraulic system. Failure to comply can cause serious injury. Please contact McNeilus Truck and Manufacturing, Inc. at 888-686-7278 if you require assistance.

**⚠ WARNING**

Increasing hydraulic pressure beyond the recommendations may result in serious damage to the Packer or serious personal injury or death and may void the Packer Warranty.

**⚠ WARNING**

All hydraulic pressures must be relieved from the hydraulic system prior to removing any components from the system to prevent oil from spraying or functions or systems from falling. Failure to follow this procedure can result in serious personal injury or death.

**⚠ WARNING**

Do not steam clean or pressure wash the pump or hydraulic hose. Cleaning the pump with a high pressure washer or steam cleaning may damage the pump's seals and allow water to enter the hydraulic system. Cleaning the hydraulic hose with a high pressure washer or steam cleaning will damage the hose's outer covering and steel braid and lead to premature failure. The pump and hydraulic hose should be wiped with a clean lint-free cloth rather than washed.

**⚠ WARNING**

Do not heat hydraulic tubing. The carbon content of this steel tube is such that if heated for bending, and either water or air is quenched, the tubing may lose its ductility and thereby be subject to failure under high pressure or hydraulic shock conditions. Serious injury can result. Damaged or leaking tubing must be replaced before the Packer is returned to service. Please contact McNeilus Truck and Manufacturing, Inc. at 888-686-7278 if you require assistance or have questions.

**⚠ WARNING**

Hydraulic components can be heavy. Use caution while lifting these components. Serious personal injury can be avoided with proper handling of the components.

**⚠ WARNING**

Use correct hoses, fittings, and adapters with the correct SAE rating when replacing hoses to prevent possible serious injury. Always replace hoses, fittings, and adapters with replacements that have a proper, suitable, working pressure rating. Replacement hoses must be of the correct length and must comply with the hose manufacturer's installation guidelines and recommendations. Consult hose and fitting manufacturers for correct specifications or contact McNeilus at 888-686-7278.

**⚠ WARNING**

Any hydraulic tubing that is replaced must conform to SAE J1065 specifications. If incorrect hydraulic tubing is installed, the hydraulic system may fail, serious injury or death can result. Damage or leaking tubing must be replaced before the Packer is returned to service.

**⚠ WARNING**

When performing hydraulic test procedures, use the proper hydraulic gauges. Installing an incorrect test gauge could result in serious injury or death if the gauge fails. Use properly rated hydraulic hoses with adequate length to allow the test gauge to be used far enough away from moving parts and functions.

**⚠ WARNING**

Allow no twist when installing hoses. Remember that 7° of twist per foot decreases hose life by 95%. When installing hydraulic hose, use a wrench to hold the hose in its natural position before tightening the fittings. Failure to comply can result in serious injury or death.

**⚠ WARNING**

Many hose coverings are available. Choose the hose manufacturer's covering which is most resistant to acid wash. Failure to comply can result in serious injury or death. Some hose coverings may retain acid wash and cause premature failure of the hose.

**⚠ WARNING**

Anticipate a 4% hose shrinkage factor when determining hose length. When a hose pressurizes, it expands and becomes shorter. Hose style shrinkage rates vary among different size and brand hoses. Allowing 4% will prevent the hose from tugging on the fittings when the hose is pressurized. Failure to comply can result in serious injury or death. Example: A 50" hose would have to be 4% longer or 52" total length.

**⚠ WARNING**

The tailgate cylinders and body lift cylinders have orifices installed in the barrel end ports. These orifices limit the amount of hydraulic flow, which controls the speed of the cylinders. The orifices must remain in the cylinders. If a cylinder is changed, the replacement cylinder must have an orifice installed to ensure safe and proper operation. Removal of the orifice can cause rapid retraction of the cylinder. This can cause severe injury or death. Check all replacement cylinders to ensure the orifice is in place before installation and operation.



### 3.6 Electrical

** WARNING**

Proximity switches must remain functional for safe operation of the Packer. If a switch does not work, it must be replaced immediately with an OEM switch before the Packer returns to service. Failure to comply can result in serious injury or death. Contact McNeilus Truck and Manufacturing, Inc. at 888-686-7278 for assistance if required.

** WARNING**

If a prox switch does not work, it should be replaced with an OEM switch. Non-OEM switches may not be correct and may result in an accident.

Failure to follow regulations may cause serious personal injury or death.

## 4.0 Safety Signs

The following safety signs are found on your refuse vehicle and warn of hazards related to the use of this equipment. Read and understand all safety signs before operating this equipment.

### NOTE

**Depending on the Packer configuration and optional equipment, the actual location of decals and/or placards may vary slightly from the examples shown.**

If any safety signs on the equipment are not clearly readable, contact McNeilus parts and service at 888-686-7278 or [www.streetsmartparts.com](http://www.streetsmartparts.com) to order replacements. Use only McNeilus replacement safety signs.

The table below contains part numbers for the individual safety signs. See the Figures in this section for safety sign locations.

### NOTE

**Specifications, appearance, and part numbers for safety decals are subject to change without notice.**

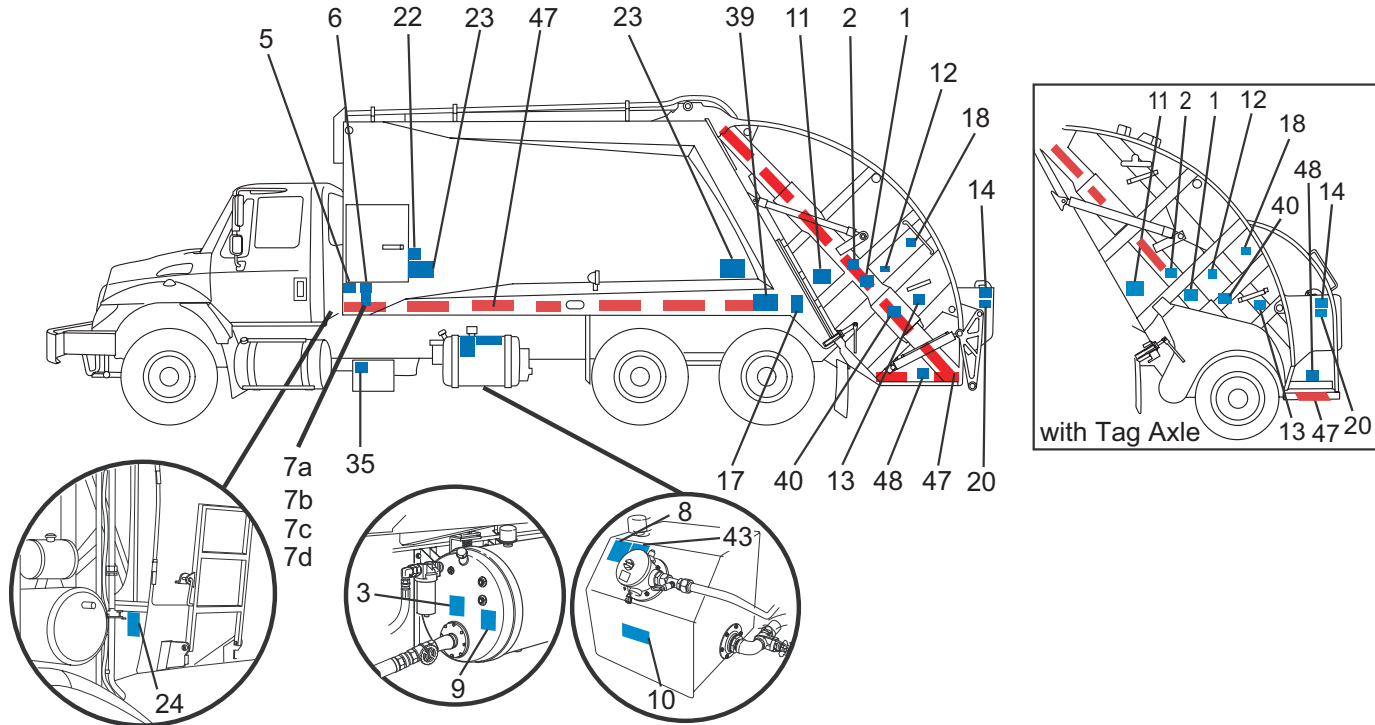
No.	Part Number	Qty.	Comments
1	1107162	2	
2	1108424	2	
3	1109764	1	
4	0614261	1	
5	0215059	2	
6	780.214500	2	
7a	0602742	1	Standard vertical two lever configuration
7b	1235986	1	Placed on optional vertical three lever component
7c	1519026	1	Placed on optional horizontal two lever component
7d	1519027	1	Placed on optional horizontal three lever component
8	1140908	1	
9	9090.614548	1	
10	0601926	1	
11	0602688	1	
12	1394100	3	
13	1394098	2	Placed on optional component
14	1394102	2	
15	0601307	1	

No.	Part Number	Qty.	Comments
16	0601060	1	Placed on optional component
17	0601914	3	
18	0602744	2	Placed on optional component
19	9090.614452	1	
20	0601934	2	
21	0602749	1	
22	0614274	1	
23	0602616	4	
24	0614305	1	
25	0601403	2	
26	0601932	2	
27	0602689	2	
28	0601969	1	
29	0602621	1	
30	0602617	1	
31	0614413	1	
32	0601929	1	
33	0602618	1	
34	0602751	1	
35	0214618	1	
36	0614547	1	

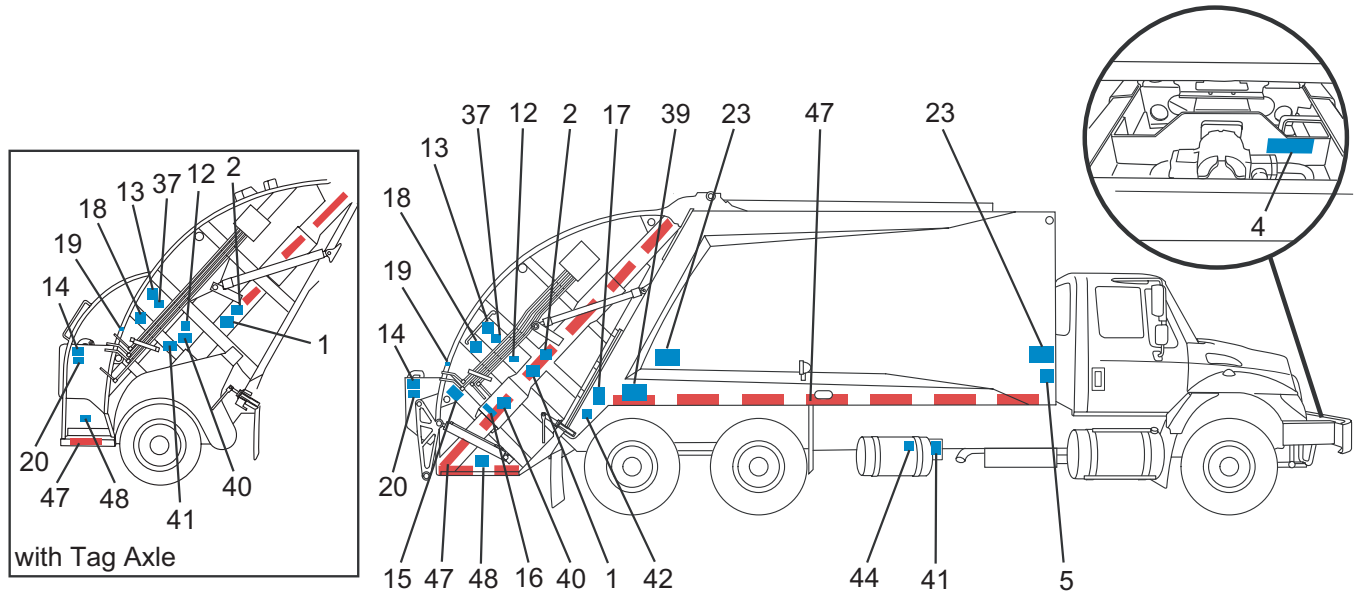
No.	Part Number	Qty.	Comments
37	0614549	2	Placed on optional component
38	0614383	1	
39	1225787	2	
40	0614568	2	Placed on optional component
41	1327939	1	Placed on optional component
42	1104395	1	Placed on optional component
43	1397069	1	
44	1104412	1	Placed on optional component
45	1265704	Varies	2" White Conspicuity Tape
46	1260913	Varies	1" Red/White Conspicuity Tape Bumper Only
47	1260914	Varies	2" Red/White Conspicuity Tape
48	1499696	2	Placed on optional component

## 4.1 Safety Sign Locations

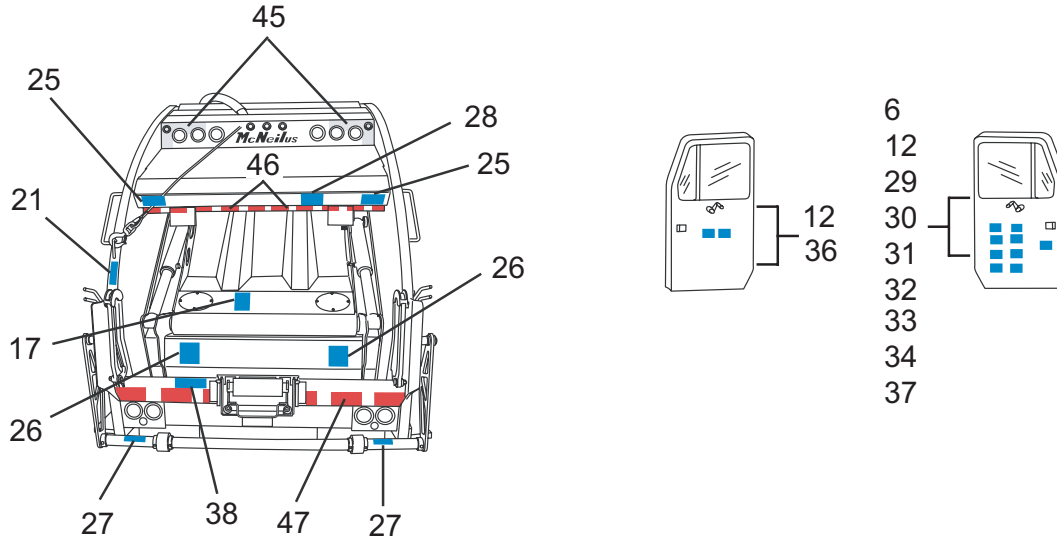
### 4.1.1 Street Side Signs



**4.1.2 Curb Side and Front Signs**

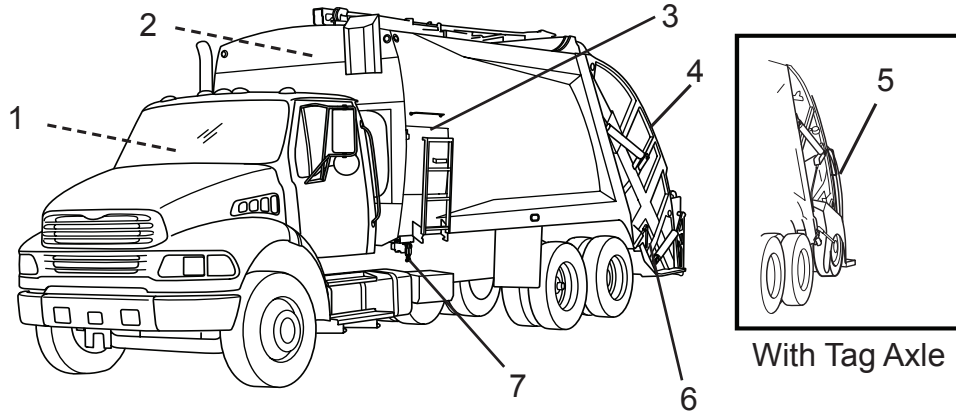


4.1.3 Rear and Door Signs



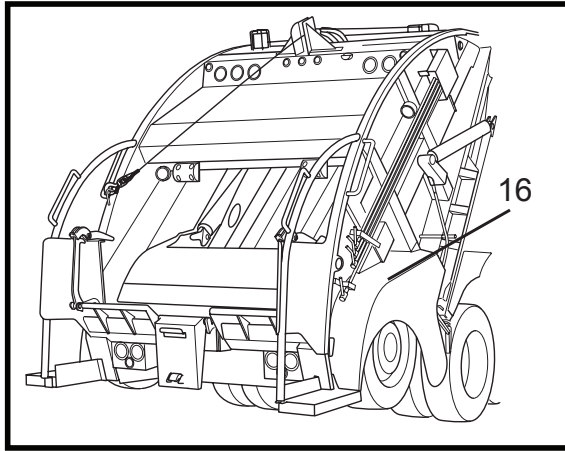
# 1.0 Exterior Systems Arrangement

## 1.1 Street Side View

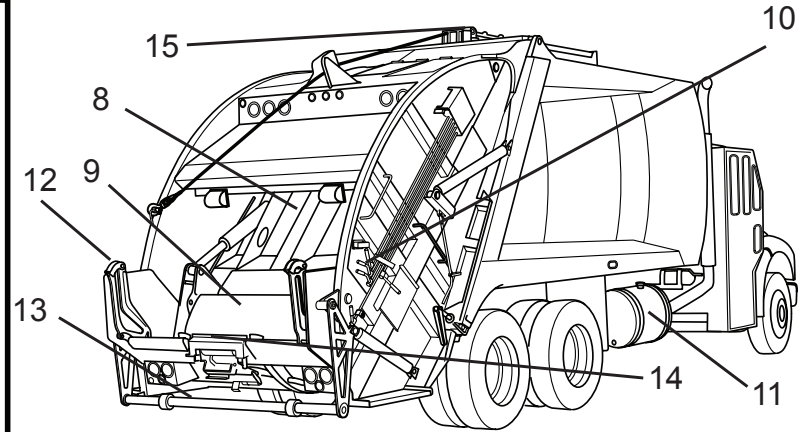


Ref No.	System Description
1	In-Cab Controls
2	Ejector and Cylinder
3	Side Access Door
4	Tailgate
5	Tailgate with Tag Axle (Optional)
6	Turnbuckle
7	Outside Front Controls

## 1.2 Curb Side View



With Tag Axle



Ref No.	System Description	Ref No.	System Description
8	Slide Panel	13	Commercial Container Tipper Bar (Optional)
9	Sweep Panel	14	Residential Cart Tipper (Optional)
10	Outside Rear Controls	15	Reeving Cylinder or Winch (Optional)
11	Hydraulic Reservoir - Position May Vary	16	Tailgate with Tag Axle (Optional)
12	Commercial Container Guide and Locks (Optional)		



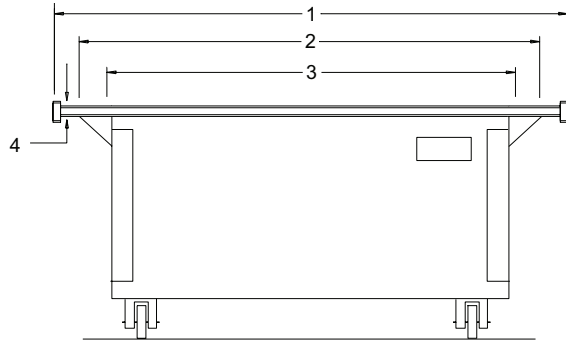
## 1.3 T-Type Container Specifications

### 1.3.1 Type T Container 3 yd<sup>3</sup> or Less Capacity

Only lift containers that are compatible with ANSI Z245.60-2008 type T containers of 3 yd<sup>3</sup> or less capacity. Before lifting, ensure that the container meets the dimensional requirements as described in the following table and detailed in Figure 3.

No.	Description	Specification
1	Total length of the trunnion bar including washers if provided. If washers are provided, their diameter should be 2-1/4 in.	Min: 77-1/2 in. Max: 78 in.
2	Width of container and all the supporting gussets attached to the trunnion bar.	Max: 72 in.
3	Width of the container body including structural supporting side members ("side rails"). This dimension excludes handles and gusset supports.	Max: 66 in.
4	Diameter of trunnion bar at latch-up points.	Min: 1-1/4 in. Max: 1-3/4 in.
5	The distance from the center line of the trunnion bar to the ground. The top of the trunnion bar should coincide with the top of the container on the side where the trunnion bar is located.	Min: 45 in. Max: 49 in.

No.	Description	Specification
6	Horizontal distances from the lower front edge of the container body to a perpendicular originating at the upper front edge of the container (excluding the trunnion bar). <b>NOTE:</b> This distance is to be measured at ground level.	Min: 2 in.
7	Vertical distance between the uppermost part of the handle on the side of the container and the centerline of the trunnion bar.	Max: 3 in.
8	The distance between the center line of the trunnion bar and the front of the lift point. <b>NOTE:</b> Lift points should not extend beyond dimension B out from the side of the container.	Min: 10 in. Max: 17 in.
9	The maximum diameter (thickness) of an attachment through which a cable may be hooked to the container.	Max: 1-1/4 in.
10	The distance from inside of side handle to the outside of the container.	Min: 2 in.



Side Handle Top View

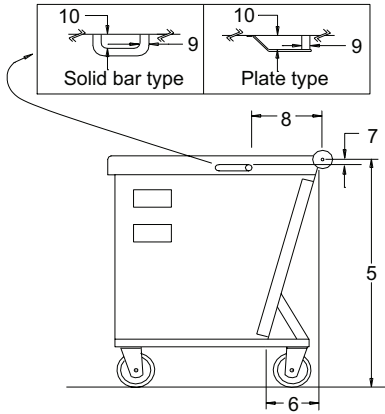


Figure 3

**1.3.2 Type T Container More Than 3 yd<sup>3</sup> and Less Than 10 yd<sup>3</sup> Capacity**

Only lift containers that are compatible with ANSI Z245.60-2008 type T containers greater than 3 yd<sup>3</sup> and less than or equal to 10 yd<sup>3</sup> capacity. Before lifting, ensure that the container meets the dimensional requirements as described in the following table and detailed in Figure 4.

No.	Description	Specification
1	Total length of the trunnion bar including washers if provided. If washers are provided, their diameter should be 2-1/4 in.	Min: 77-1/2 in. Max: 78 in.
2	Width of container and all the supporting gussets attached to the trunnion bar.	Max: 72 in.
3	Width of the container body including structural supporting side members ("side rails"). This dimension excludes handles and gusset supports.	Max: 66 in.
4	Diameter of trunnion bar at latch-up points.	Min: 1-1/4 in. Max: 1-3/4 in.
5	The maximum diameter (thickness) of an attachment through which a cable may be hooked to the container.	Max: 1-1/4 in.
6	The inside width of an attachment through which a cable may be hooked to the container.	Min: 2 in. Max: 3 in.

No.	Description	Specification
7	The distance from the center line of the trunnion bar to the ground. The top of the trunnion bar should coincide with the top of the container on the side where the trunnion bar is located.	Min: 45 in. Max: 49 in.

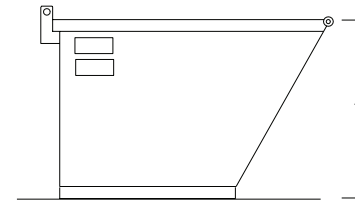
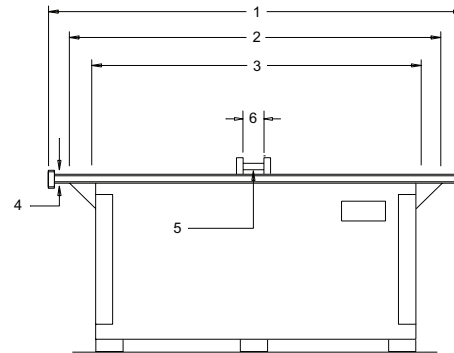


Figure 4

## NOTES

## 1.0 Instruments and Controls

The following figures and tables identify and describe the controls used on the equipment. Not all of the instruments and controls shown here are on your equipment. Items covering various models and options are illustrated.

To make sure you understand proper operating procedures, read this section and carefully practice with the controls and instruments to learn how to safely operate the equipment.

### 1.1 Cab Controls

The in-cab controls consist of a control panel mounted either between the seats, in the dash, or under the dash, depending on chassis configuration (Figure 5, Item 1).

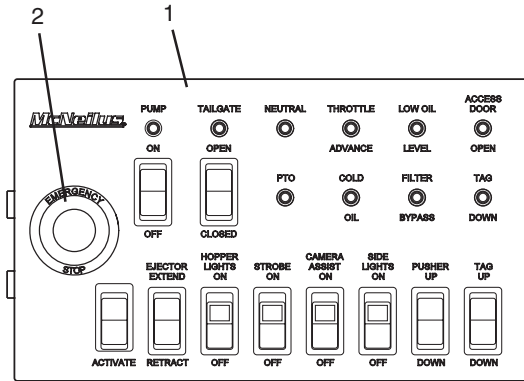


Figure 5

No.	Position	Normal Use or Reading
2	E-STOP Button	<p>Disables all hydraulic and electric refuse vehicle Functions with the exception of the lights and alarms.</p> <p>The E-STOP button (Figure 5, Item 2) has two positions: IN and OUT (Figure 6).</p> <p>Push IN to disable operation of functions.</p> <p>Pull OUT to enable operation of functions.</p> <p>If your rear loader has the optional side door ladder, the door will be equipped with a proximity switch. If the side door is open, the proximity switch stops Hydraulic Functions during normal operation. To resume Hydraulic Functions, ensure the side door is closed and the control box E-STOP is in the OUT position.</p>

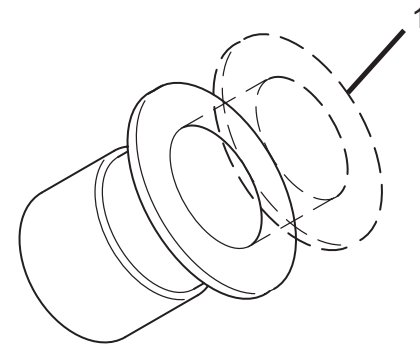


Figure 6

## 1.1.1 Rocker Switches

Accessories, refuse vehicle functions, and some options are operated by rocker switches on the control box (Figure 7). The location of your switches may be different than shown, depending on the type of truck chassis and other options.

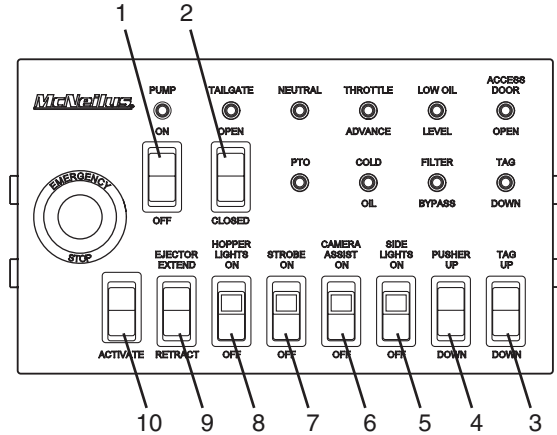


Figure 7

The following table describes each item shown in Figure 7.

No.	Position	Normal Use or Reading
1	PUMP Rocker Switch	Press ON to activate Hydraulic Functions. Press OFF to disable Hydraulic Functions.
2	TAILGATE Rocker Switch	Press and hold OPEN to open tailgate. Press and hold CLOSE to close tailgate.
3	TAG AXLE Rocker Switch	Press UP to raise tag axle. Press DOWN to lower tag axle.
4	PUSHER AXLE Rocker Switch	Press UP to raise pusher axle. Press DOWN to lower pusher axle.
5	SIDE LIGHTS Rocker Switch	Press ON to activate side lights. Light in rocker switch indicates side lights are ON. Press OFF to turn side lights OFF.
6	CAMERA ASSIST Rocker Switch	Press ON to activate camera. Light in rocker switch indicates camera is ON. Press OFF to turn camera OFF.
7	STROBE LIGHT Rocker Switch	Press ON to activate strobe light. Light in rocker switch indicates strobe lights are ON. Press OFF to turn strobe light OFF.
8	HOPPER LIGHTS Rocker Switch	Press ON to activate hopper lights. Light in rocker switch indicates hopper lights are ON. Press OFF to turn hopper lights OFF.
9	EJECTOR Rocker Switch	Press EXTEND to extend the ejector. Press RETRACT to retract the ejector.
10	ACTIVATE Rocker Switch	Press ACTIVATE and hold to enable the tailgate and ejector functions.

**1.1.2 Indicator Lights**

The indicator lights (Figure 8) display the status of various functions.

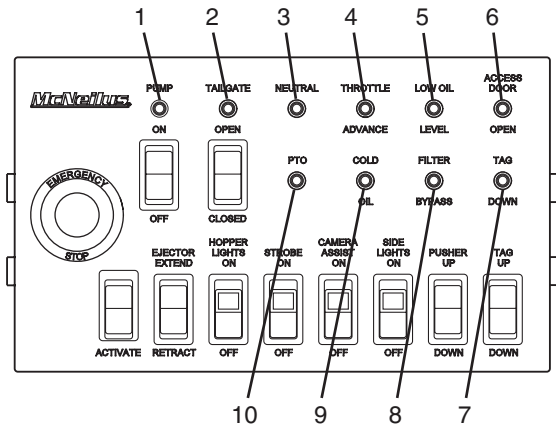


Figure 8

The following table describes each item shown in Figure 8.

No.	Position	Normal Use or Reading
1	PUMP ON Indicator Light	Light indicates when the pump is ON.
2	TAILGATE OPEN Indicator Light	Light indicates when tailgate is not in the CLOSED position.
3	NEUTRAL Indicator Light	Light indicates when the transmission is in NEUTRAL.
4	THROTTLE ADVANCE Indicator Light	Light indicates when the throttle advance is being used.
5	LOW OIL LEVEL Indicator Light	Light indicates that the hydraulic oil level is low.
6	ACCESS DOOR OPEN Indicator Light	Light indicates when the access door is not in the CLOSED position.
7	TAG DOWN Indicator Light	Light indicates when the tag axle is DOWN.
8	FILTER BYPASS Indicator Light	Light indicates when the hydraulic filter is restricted and is being bypassed.
9	COLD OIL Indicator Light	Light indicates when the hydraulic oil is cold and is not sufficiently warmed up.
10	PTO Indicator Light	Light indicates when the PTO is engaged.

## 1.1.3 Fuse Panel

The fuse panel (Figure 10) is located inside the Power Distribution Model (PDM) (Figure 9, Item 1). The fuse panel protects the control box from an electrical overload condition. The PDM is located on the street side head frame behind the cab. Open the PDM cover to gain access to the fuse panel.

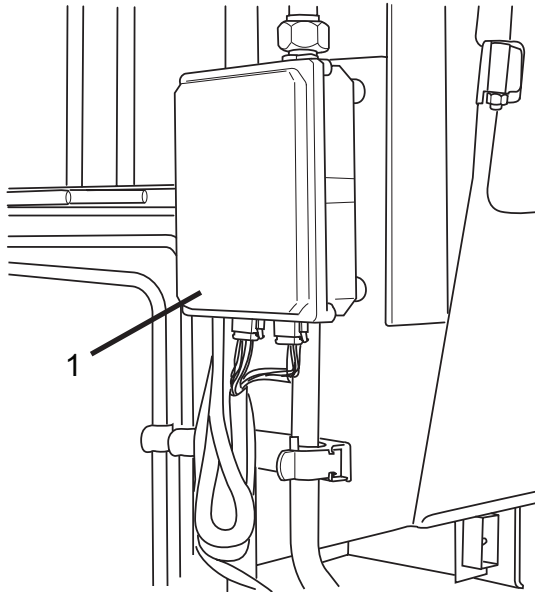


Figure 9

The following table describes the fuse locations shown in Figure 10.

No.	Amp	Description
1	5	Front Strobe Light
2	5	Strobe/Pump
3	3	Reverse Alarm
4	3	Reverse Alarm
5	2	Tag Axle
6	2	Pusher Axle
7	2	Work Light
8	15	Heater Power
9	10	Light and Spare
10	15	Switch Power
11	2	Buzzer
12	5	Spare
13	5	Proximity Switch Power
14	10	Control Power



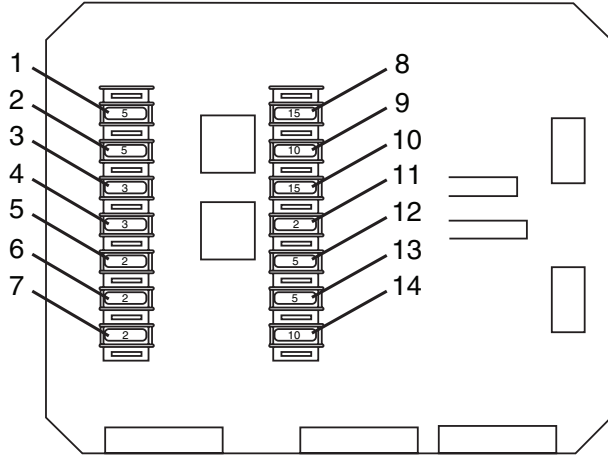


Figure 10

## 1.2 Outside Rear Controls

These controls are normally located on the curb side of the vehicle near the rear of the tailgate (Figure 11). Your Rear Loader may also be ordered with outside controls on the street side. The operator must follow ANSI Z245.1 packing and material handling controls standard, which includes directives that all personnel are clear of the hopper or lifting mechanism (if equipped) before starting any packing cycle or material lifting or handling. The operator must remain at the controls during the packing cycle and be ready to stop the packing cycle or lifting operation if there is a potential point of operation hazard.

### NOTE

The function of the levers may vary on your truck based on the options ordered. Be familiar with the location and functions of the controls on your Packer before operating.

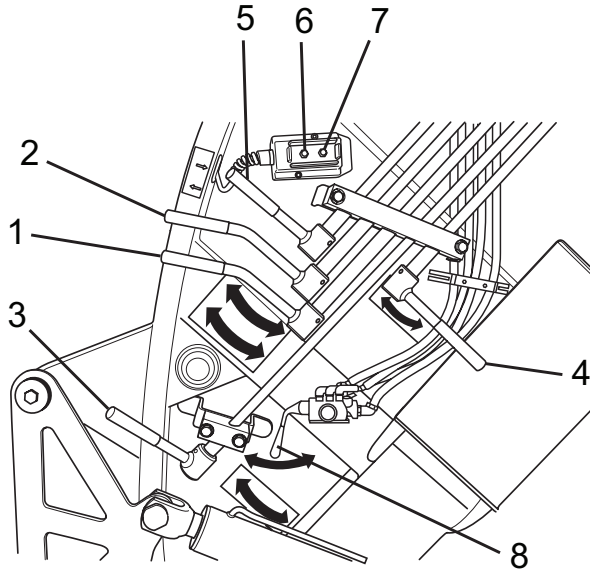


Figure 11

The following table describes the controls shown in Figure 11.

No.	Position	Normal Use or Reading
1	SWEEP/PACKER Lever	Push control lever FORWARD to raise the sweep panel. Pull control lever BACK to lower the sweep panel.

No.	Position	Normal Use or Reading
2	SLIDE Control Lever	Push control lever FORWARD to retract slide panel. Pull control lever BACK to extend slide panel.
3	CART TIPPER Control Lever (Optional)	Push control lever FORWARD to lower cart tipper. Pull control lever BACK to raise cart tipper.
4	TIPPER BAR Control Lever (Optional)	Push control lever FORWARD to lower tipper bar. Pull control lever BACK to raise tipper bar.
5	WINCH or REEVING CYLINDER Control Lever (Optional)	Push control lever FORWARD to retract cable. Pull control lever BACK to extend cable.
6	WORK LIGHTS (Optional)	Turn on work lights as equipped.
7	CAB BUZZER (Optional)	Push and hold to sound buzzer in cab.
8	CONTAINER STOP Control Lever (Optional)	The container stop lever may be in locations 3, 4, 5, or 8 depending on the truck options.

### 1.3 Outside Front Controls

These front controls are located near the cab on the street side of the vehicle below the side access door (Figure 12). The operator must follow ANSI Z245.1 packing and material handling controls standard, which includes directives that all personnel are clear of the hopper or lifting mechanism (if equipped) before starting any packing cycle or material lifting or handling. The operator must remain at the controls during the packing cycle and be ready to stop the packing cycle or lifting operation if there is a potential point of operation hazard.

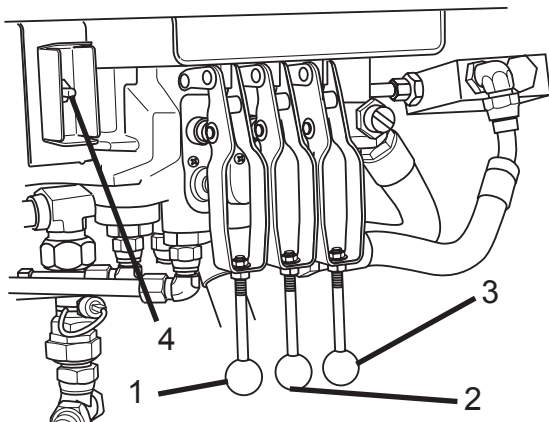


Figure 12

The following table describes the controls shown in Figure 12.

No.	Position	Normal Use or Reading
1	Ejector Control Lever	Push control lever FORWARD to extend ejector. Pull control lever BACK to retract ejector.
2	TAILGATE Control Lever	Push control lever FORWARD to lower tailgate. Pull control lever BACK to raise tailgate.
3	TAILGATE LOCK Control Lever (Optional)	Push control lever FORWARD to lock tailgate. Pull control lever BACK to unlock tailgate.
4	THROTTLE ADVANCE Toggle Switch	Push and hold to increase chassis engine rpm.

## 2.0 Control Functions

### 2.1 E-STOP (Emergency Stop) Function

The E-STOP button is red and is located on the cab control box (Figure 13). In addition, your Rear Loader may be ordered with a tailgate E-STOP(s) (Figure 14), which is located on the tailgate on either or both sides. Pressing any E-STOP button IMMEDIATELY DISABLES refuse vehicle functions requiring hydraulic pressure.

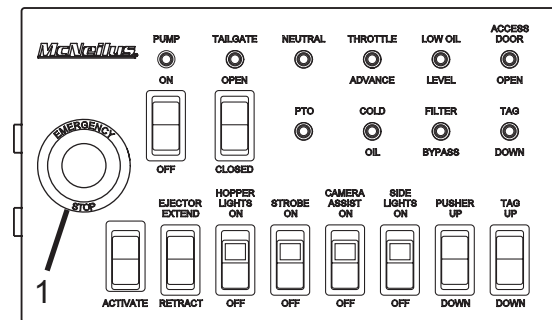


Figure 13

### WARNING

**Never stand or position yourself under any raised hydraulic component. Moving the control lever of any raised hydraulic component will cause the component to suddenly lower whether the E-STOP is pressed or not.**

**Serious personal injury or death may occur.**

### NOTE

**The E-STOP button remains in a locked DOWN position until it is manually released.**

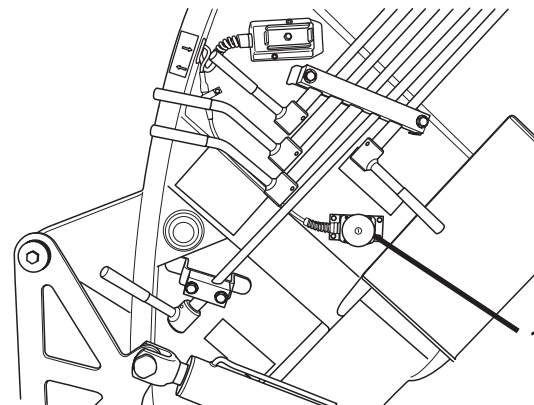


Figure 14

### 2.1.1 E-STOP Button In-Cab Control Box

The E-STOP on the control box has two position: DOWN (Figure 15, Item 1) to disable refuse vehicle functions, and UP (Figure 15, Item 2) for normal operation.

#### NOTE

If your rear loader has the optional side door ladder, the door will be equipped with a proximity switch. The proximity switch will stop hydraulic functions during normal operation if the side door is opened. To resume hydraulic functions, the side door must be closed and the pump switch must be pressed to enable hydraulic functions.

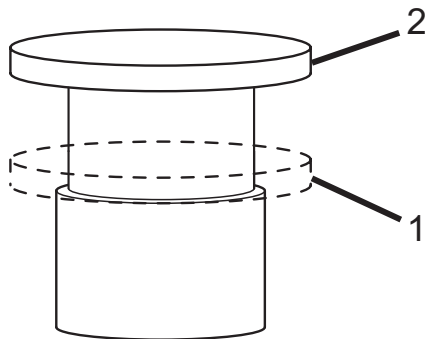


Figure 15

### 2.2 Sweep Functions

The packing cycle of the sweep panel (Figure 16) is controlled by the sweep lever located in the external rear controls group on the curb side of the vehicle. The operator must follow ANSI Z245.1 packing and material handling controls standard, which includes directives that all personnel are clear of the hopper before starting any packing cycle or material handling. The operator must remain at the controls during the packing cycle and be ready to stop the packing cycle if there is a potential point of operation hazard.

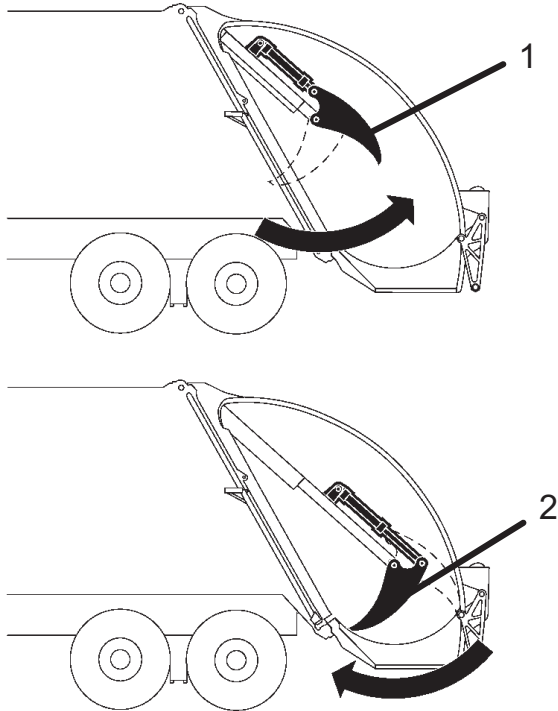
#### **⚠ DANGER**

Use extreme caution around the sweep and slide area on the rear of the vehicle. Be sure the area in the hopper is clear before operating the controls.

Serious personal injury or death may result if someone is caught in the sweep or slide panels.

#### CONDITIONS

- E-STOP(s) pulled OUT
- Pump switch ON
- Ensure that the side door is closed if equipped with side door proximity switch
- Engine speed must be below 1400 RPM



*Figure 16*

1. Sweep panel up and open.
2. Sweep panel down and closed.

## 2.3 Slide Functions

Cycling of the Sweep and Slide Functions are controlled by the sweep and slide levers, which are located at the rear of the vehicle on the curb side. The operator must follow ANSI Z245.1 packing and material handling controls standard, which includes directives that all personnel are clear of the hopper before starting any packing cycle or material handling. The operator must remain at the controls during the packing cycle and be ready to stop the packing cycle if there is a potential point of operation hazard.

### DANGER

**Use extreme caution around the sweep and slide area on the rear of the vehicle. Be sure the area in the hopper is clear before operating the controls.**

**Serious personal injury or death may result if someone is caught in the sweep or slide panels.**

1. PUSH the slide lever to LOWER the panel down (Figure 17, Item 1). The function stops automatically when it hits the fully lowered position, and the control lever returns to its centered position.
2. PULL the slide lever to RAISE the slide panel up and complete the packing cycle. This cycles the sweep and slide panels up together (Figure 17, Item 2). The function

stops automatically when it hits the fully raised position, and the control lever returns to its centered position.

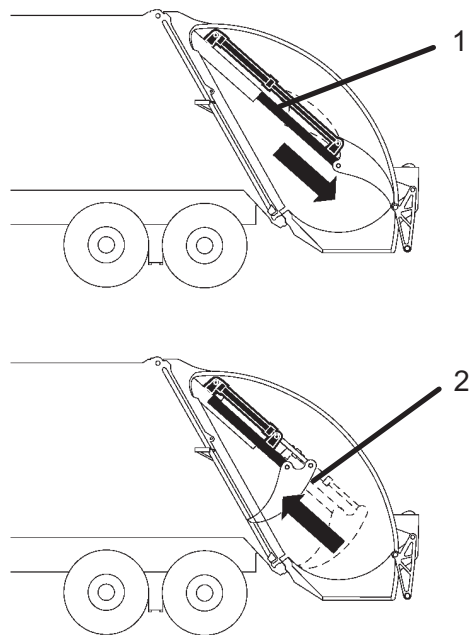


Figure 17

1. Slide panel in the down position.
2. Sweep panel in the up position.

## 2.4 Turnbuckle and Optional Hydraulic Tailgate Lock Operation

### NOTE

**The warble alarm sounds when the tailgate is opening and remains on until the tailgate is closed.**

**The alarm does not sound if the ignition switch is OFF or any of the E-STOP buttons are pressed down.**

### 2.4.1 Trucks Without Tag Axle (Turnbuckle)

One turnbuckle is present on each side of the lower rear tailgate. These turnbuckles are safety devices that clamp down and secure the tailgate to the collector body.

### DANGER

**Be sure all individuals are clear of the tailgate area before opening the tailgate.**

**Remain attentive at all times.**

**Be sure you have adequate clearance above the tailgate to prevent contact with buildings or electrical lines.**

**Serious injury or death may result if someone is caught in the path of the tailgate.**

1. To unlock the turnbuckle, turn the handle *counterclockwise* several times until it is loose.
2. Push the turnbuckle down to allow the tailgate to be opened.
3. Repeat Steps 1 and 2 for the turnbuckle on the opposite side of the vehicle.
4. Operate the tailgate controls to hydraulically open and close the tailgate.
5. To lock the turnbuckle once the tailgate is closed, pull the turnbuckle up and into the slot.
6. Turn the handle clockwise several times to clamp and lock it in position.
7. Repeat Steps 5 and 6 on the opposite side of the tailgate.



### 2.4.2 Trucks With Tag Axle (Turnbuckle)

One turnbuckle is present on each side of the lower tailgate (Figure 18). These turnbuckles are safety devices that clamp down and secure the tailgate to the collector body.

#### **⚠ DANGER**

**Be sure all individuals are clear of the tailgate area before opening the tailgate. Remain attentive at all times.**

**Be sure you have adequate clearance above the tailgate to prevent contact with buildings or electrical lines.**

**Serious injury or death may result if someone is caught in the path of the tailgate.**

1. Remove hair pin clip (Figure 18, Item 1) from the safety pin (Figure 18, Item 2) and remove the safety pin.
2. To unlock turnbuckle, turn the handle (Figure 18, Item 3) counterclockwise several times until the turnbuckle is loose.
3. Push turnbuckle down to allow the tailgate to be opened.
4. Repeat Steps 1, 2, and 3 for the turnbuckle on the opposite side of the vehicle.
5. Operate the tailgate controls to open and close the tailgate hydraulically.

6. To lock the turnbuckle once the tailgate is closed, pull the turnbuckle up into the slot.
7. Turn the handle (Figure 18, Item 3) clockwise until tight to clamp and lock tailgate into position.
8. Replace the hair pin clip (Figure 18, Item 1) into the safety pin (Figure 18, Item 2).
9. Repeat Steps 6, 7, and 8 on the opposite side of the tailgate.

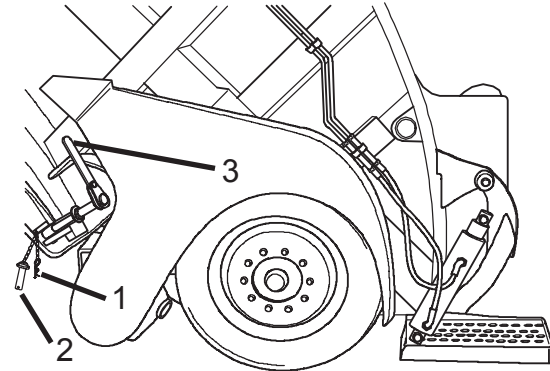


Figure 18

### 2.4.3 Hydraulic Tailgate Locks (Optional)

An optional hydraulic tailgate latch is available. The latches are installed on both sides of the tailgate. The tailgate lock function is controlled by a tailgate lock control lever usually located at the outside front controls.

#### 2.4.3.1 Unlock Tailgate (Hydraulic Locks)

1. To unlock tailgate, remove the pin (Figure 19, Item 1) from latch (Figure 19, Item 2) and swing latch away from tailgate lock (Figure 19, Item 3). Repeat this step for the other side.
2. Lift up and hold control lever lock for tailgate lock control lever.
3. Pull and hold the tailgate lock control lever to unlock the tailgate lock.

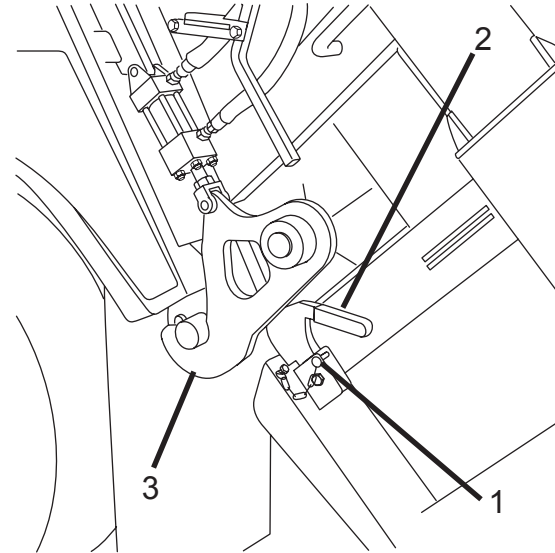


Figure 19

### 2.4.3.2 Lock Tailgate (Hydraulic Locks)

1. To lock tailgate, lift up and hold control lever lock for the tailgate lock control lever.
2. Push and hold the tailgate lock control lever to lock the tailgate lock (Figure 20, Item 1).
3. Move the latch (Figure 20, Item 2) back against the lock and install the pin (Figure 20, Item 3) in the latch. Repeat this step for the other side.

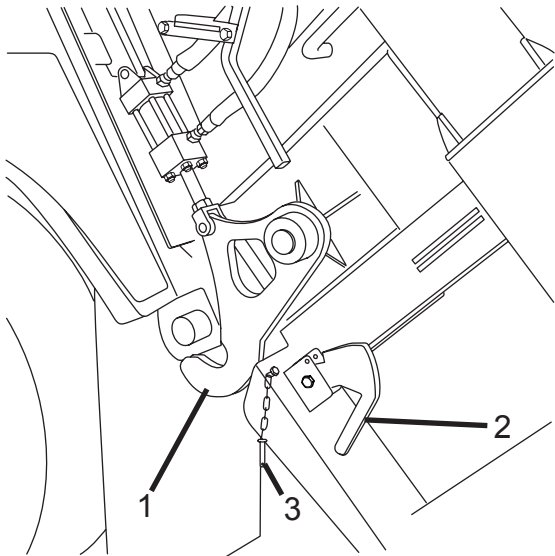


Figure 20

## 2.5 Tailgate Functions

Raising and lowering functions for the tailgate are controlled by the tailgate lever on the street side of the vehicle.

### **⚠ DANGER**

**Be sure all individuals are clear of the tailgate area before opening the tailgate. Remain attentive at all times.**  
**Be sure you have adequate clearance above the tailgate to prevent contact with buildings or electrical lines.**  
**Serious injury or death may result if someone is caught in the path of the tailgate.**

### **NOTE**

**The turnbuckle locks must be manually opened before the tailgate can be raised, and must be manually latched and secured before resuming travel or operation, or before the truck is driven.**

1. To RAISE the tailgate, ensure that the turnbuckles or optional hydraulic locks have been opened, then PULL out the tailgate lever until the tailgate reaches the fully open position (Figure 21).

## NOTE

**The warble alarm sounds when the tailgate is opening and remains on until the tailgate is closed.**

**The alarm does not sound if the ignition switch is OFF or any of the E-STOP buttons are pressed down.**

2. To LOWER the tailgate, PUSH in the tailgate lever until the tailgate reaches the fully closed position. After the tailgate is lowered, be certain to latch and secure the turnbuckles or the optional hydraulic locks before travel.

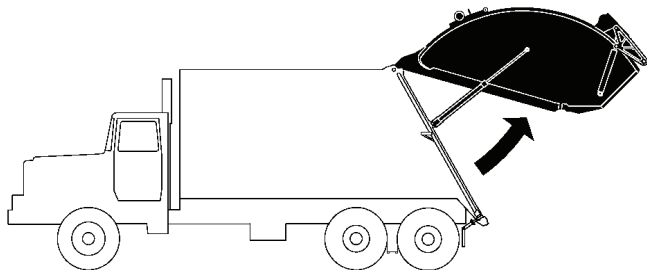


Figure 21

## 2.6 Ejector Functions

The ejector performs packing and retracting functions while the collector is loaded, and ejecting the load when dumping. The Smart-Pak® functions (Figure 22, Item 1) operate automatically as the slide panel packs the container. A Smart-Pak cartridge detects the amount of pressure being used. When this reaches a pre-determined setting, the ejector retracts to allow additional refuse to be packed. The functions for the ejector are controlled by the ejector lever located on the front external controls.

## ⚠ DANGER

**Be sure all individuals are clear of the tailgate area before opening the tailgate.**

**Remain attentive at all times.**

**Be sure you have adequate clearance above the tailgate to prevent contact with buildings or electrical lines.**

**Serious injury or death may result if someone is caught in the path of the tailgate.**

## NOTE

**The ejector contains an ejector force limiter assembly which automatically controls the maximum amount of force the ejector will develop on Extend mode.**

1. To eject a load (Figure 22, Item 2), PUSH in the ejector lever until the ejector reaches the full ejection of the load.
2. To manually retract the ejector toward the front of the container, PULL the ejector lever out.

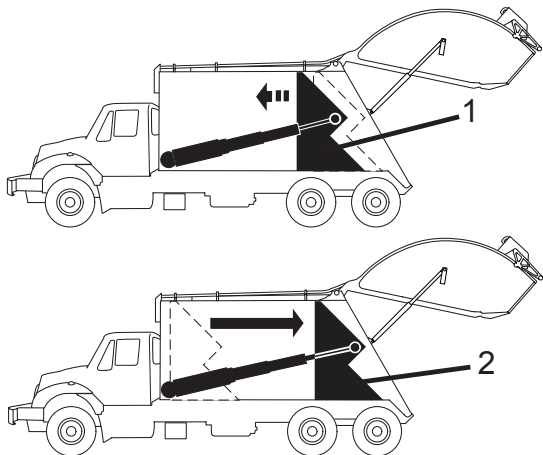


Figure 22

1. Ejector direction during loading.
2. Ejector direction during unloading.

### 3.0 Operating Procedures

#### **⚠ WARNING**

Be sure all non-operator personnel are at least 20 feet (6 meters) away from all areas of the Packer.  
Serious personal injury or death may occur.

#### **⚠ DANGER**

Make sure the area above the vehicle is clear of objects and power lines before raising or opening the tailgate.  
Serious personal injury or death may occur.

#### **NOTE**

Turn the pump ON and idle the truck for a minimum of five minutes before operating the hydraulic functions when the air temperature is 50° F (10° C) or below.

**⚠ WARNING**

Do not leave the truck unattended until the parking brake has been securely set and all reasonable precautions have been taken to prevent the movement of the truck. The operator must chock the truck wheels anytime he is away from the vehicle for an extended period of time. Wheel chocks are available for purchase from McNeilus Truck and Manufacturing, Inc. by calling 888-686-7278.

Failure to comply may result in serious personal injury or death or damage to equipment.

### 3.1 Start-Up Procedure

Before starting the vehicle, make sure that:

1. Master battery switch is ON.
2. Daily Operator's Checks have been completed and verified.

### 3.2 Warm-Up Procedure

At start-up of the equipment each morning, it is important to cycle through each of the main hydraulic circuits to be certain each circuit is functioning properly. Cycling through each

operation also helps ensure that hydraulic fluid, which is up to operating temperature, is also present throughout the system.

**⚠ CAUTION**

If you detect a problem with any control function, it must be repaired immediately. Do NOT operate the Packer with malfunctioning controls.

1. Cycle through each of the following operations:
  - a. Sweep/Pack Functions - Cycle three (3) times
  - b. Slide Functions - Cycle three (3) times
  - c. Tailgate Lock Functions - Cycle one (1) time
  - d. Tailgate Functions - Cycle one (1) time
  - e. Ejector Functions - Cycle one (1) time
  - f. Optional Functions - Cycle one (1) time
2. After completing the cycle tests, inspect the refuse vehicle for any hydraulic leaks. If leaks are detected, correct them BEFORE the refuse vehicle is placed into service.

**⚠ WARNING**

Never disable neutral safety or interlocks. Failure to comply may result in serious injury or death or damage to equipment.

### 3.3 Traveling Procedure

Before beginning travel, be sure that all hydraulic functions are turned OFF. This means that:

1. Pump switch is in the OFF position.
2. Throttle master switch is in the OFF position.
3. Tailgate is closed and turnbuckle is locked.
4. Winch or Reeving Cylinder cable (if equipped) is retracted and latched to the correct location on the rear of the vehicle.

**DANGER**

**Turn the master switch in the cab to the OFF position when the truck is being driven. Failure to do so may result in serious personal injury or death if the throttle engages while the truck is being driven.**

### 3.4 Before Starting The Route

If necessary, turn WORK lights ON to enhance vision.

#### Conditions

1. Turn PUMP rocker switch ON
2. Turn THROTTLE MASTER rocker switch ON
3. Extend ejector to rear of the body
4. Verify that the tailgate is locked
5. Turn STROBE light ON
6. Tailgate must be closed and locked.

### 3.5 Refuse Loading Procedure

Several distinct manners of loading refuse are included in this operation, some of these involve optional equipment. (Specific information on the functions for these options are covered in Section 1.0 Instruments and Controls.)

#### 3.5.1 Manual Trash Pick-Up

1. For general pick-up and processing of refuse.
  - a. Manually dump or place refuse into the hopper area.
  - b. Travel to the next pick-up site.
  - c. When the hopper area is sufficiently filled, perform the Refuse Packing Procedure as shown in Section 3.6 Refuse Packing Procedure.

**3.5.2 Residential Cart Loading (Optional Cart Tipper)**

1. For pick-up and processing of refuse when equipped with the optional residential cart tipper.
  - a. Wheel the residential cart to the back of the cart tipper.
  - b. Latch the cart onto the cart tipper (Figure 23, Item 1).
  - c. Pull the cart tipper dump lever to tip the cart and dump refuse into the hopper (Figure 23, Item 2).
  - d. Unlatch and remove the cart.
  - e. Travel to the next pick-up site.
  - f. When the hopper area is sufficiently filled, perform the Refuse Packing Procedure as shown in Section 3.6 Refuse Packing Procedure.

Optional Street Side control is available.

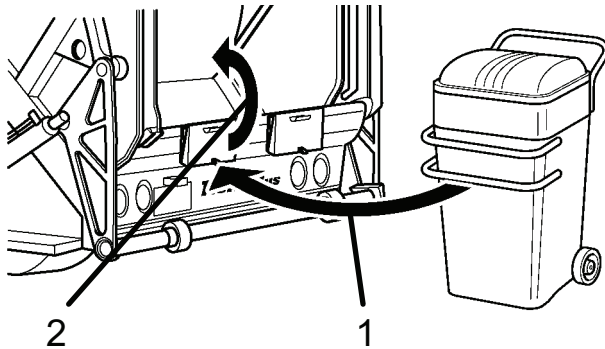


Figure 23

**3.5.3 Commercial Container Loading**

**⚠ WARNING**

**Be sure all non-operator personnel are clear of the area around the truck before operating the Packer. Remain attentive at all times when operating the controls. Watch the mirrors for activity. Never back up the Packer unless and until you are completely sure it is safe. Use a spotter/observer and/or get out and check yourself, if necessary, to ensure it is safe to do so. Thoroughly understand the controls before operating the Packer. Failure to heed this warning may result in serious personal injury or death.**



**WARNING****Crush or Pinch Hazard.**

**Lifting or dragging uncontrolled items with hook and cable may cause items to move in a way that can pinch or crush the operator.**

**Use winch or reeving cylinder hook and cable for dumping properly restrained ANSI Type T containers only.**

**Never use hook and cable for any other purpose.**

**Failure to comply may injure or kill.**

1. For all pick-up of refuse when equipped with a Commercial Container option.
  - a. Position the vehicle in line with the commercial container.
  - b. Connect the container to the container lock (see Section 4.2 Container Lock).
  - c. Winch or Reeving Cylinder - If equipped, use the Winch or Reeving Cylinder functions to tip the container (Figure 24, Item 1). See Section 4.4 Winch or Reeving Cylinder for more information.
  - d. Tipper - If equipped, use the Tipper functions to tip the container (Figure 24, Item 2).
  - e. When tipping process is complete, return the container to the ground, and detach it from the lock mechanism.

- f. Perform Refuse Packing Procedure as shown in Section 3.6 Refuse Packing Procedure.
- g. Travel to next pick-up site.

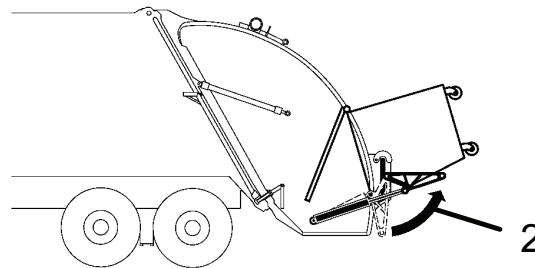
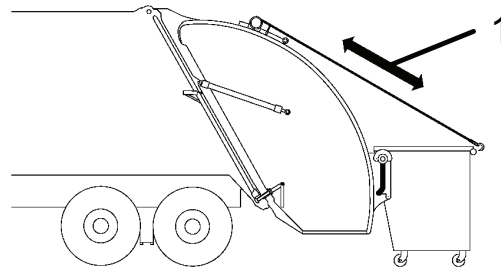


Figure 24

### 3.6 Refuse Packing Procedure

Packing the refuse from the hopper employs a standard process regardless of the manner in which the hopper was filled. See Section 2.0 Control Functions. The sweep and slide panels are normally in the up and packed position. The operator must follow ANSI Z245.1 packing and material handling controls standard, which includes directives that all personnel are clear of the hopper before starting any packing cycle or material handling. The operator must remain at the controls during the packing cycle and be ready to stop the packing cycle if there is a potential point of operation hazard.

To begin the packing procedure:

 **DANGER**

**Use extreme caution around the sweep and slide area on the rear of the vehicle. Be sure the area in the hopper is clear before operating the controls.**

**Serious personal injury or death may result if someone is caught in the sweep or slide panels.**

**NOTE**

**Your vehicle is equipped with an ejector force limiter which prevents the ejector from overpacking the load and damaging the Packer body.**

1. Retract the sweep panel to the open position (Figure 25, Item 1).
2. Extend the slide panel to the lower position (Figure 25, Item 2).
3. Extend the sweep panel to the closed (pack) position (Figure 25, Item 3). This “sweeps” the hopper area and begins to pack the refuse.
4. Retract the slide panel to the raised position (Figure 25, Item 4).

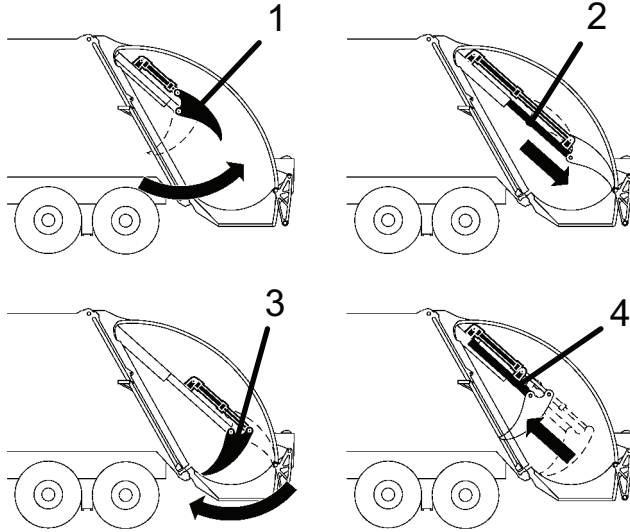


Figure 25

1. Sweep panel in open position.
2. Slide panel in lower position.
3. Sweep panel in closed position.
4. Slide panel in raised position.

### 3.7 Refuse Ejector Procedure

Ejecting refuse from the vehicle involves multiple functions.

#### **⚠ DANGER**

**Do not back up until you are sure the area behind the vehicle is clear.**

1. Position rear loader appropriately for ejecting refuse.

#### **⚠ WARNING**

**Be sure the area around the vehicle is clear of non-operator personnel before and while performing the refuse eject procedure. Serious personal injury or death may result if someone is near these areas while they are in operation.**

2. Unlock the turnbuckle (or optional hydraulic locks) and open the tailgate. See Section 2.4 Turnbuckle and Optional Hydraulic Tailgate Lock Operation and Section 2.5 Tailgate Functions for details.
3. Push the ejector control lever to dump the load (Figure 26).
4. Close the tailgate and lock the turnbuckle or optional hydraulic lock.
5. Pull the ejector control lever to retract the ejector.

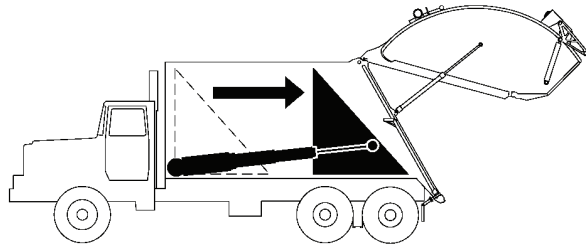
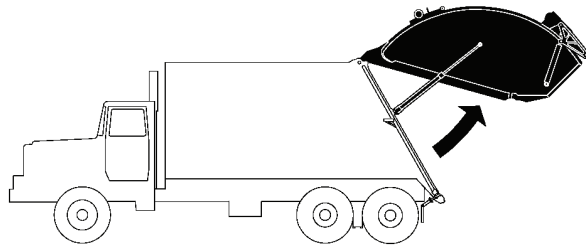


Figure 26

1. Tailgate Open Function.
2. Eject Function.

### 3.8 End of Day Checks

At the end of the day, make sure:

1. Tailgate is closed, turnbuckles are tight, or optional hydraulic locks are closed.
2. All equipment is properly shut down (see the Vehicle Operator's Manual for more information on proper shut down procedures for the engine).

## 4.0 Optional Equipment

### 4.1 Residential Cart Tipper Panel

Controls for the cart tipper panel option are typically located externally on the back of the truck, and consist of one or two dump panels that can be attached in the center (for one) or side-by-side (for two). The function is controlled by the cart tipper lever, which is located at the rear of the vehicle on the curb side.

#### **WARNING**

**Be sure non-operator personnel are clear of the hopper areas when operating the cart dump panel. Serious personal injury or death may result if someone is near the cart when the function is operating.**

1. PULL the cart tipper lever up to dump the residential cart contents into the hopper (Figure 27).
2. PUSH the cart tipper lever down to lower the cart to the ground.

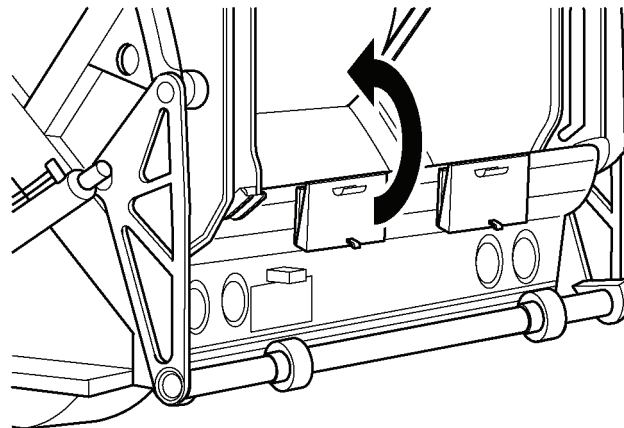


Figure 27

## 4.2 Container Lock

The container lock option is used in combination with either the container tipper option, the winch, or reeving cylinder option, and is used to secure and guide the collection of refuse from commercial collection containers in a manner that is both safe and efficient. To properly secure a commercial container:

### DANGER

**Do not back up until you are sure the area behind the vehicle is clear.**

1. With the lock lugs open and the Container Latch guide bars lowered (Figure 28, Item 1), back up the truck or roll the container into position. Make certain the pins on the container sides are correctly positioned tightly against the guide bars on the vehicle.
2. Raise the container latch guide bars into position on each side of the container (Figure 28, Item 2).
3. Lower and lock the lugs onto the container latch guide bars on each side of the container (Figure 28, Item 3). Make certain that both of the container latch guide bars are securely latched.
4. Use the container tipper, winch, or reeving cylinder to empty the container into the hopper (Figure 28, Item 4).

### NOTE

**The front of the container will slide down along the guide rails as the rear of the container is raised.**

5. To release the container, reverse Steps 1 through 4.

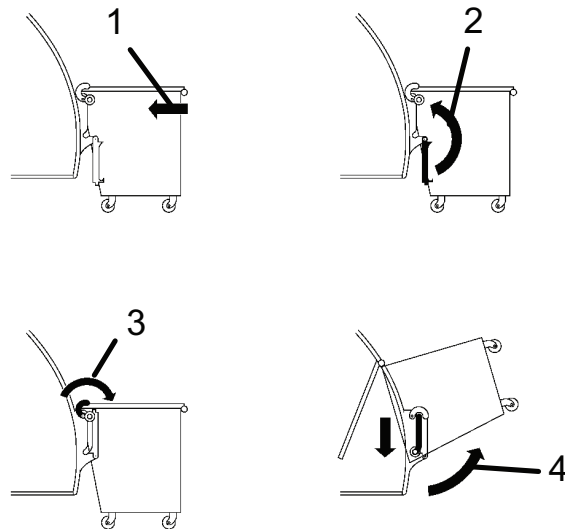


Figure 28

### 4.3 Container Tipper

This option is used in conjunction with the container latch to safely and efficiently dump the contents of large containers into the hopper. To dump the contents of the container into the hopper with the tipper:

#### **WARNING**

**Be sure non-operator personnel are clear of the hopper and area surrounding the cart when operating the Tipper Functions. Serious personal injury or death may result if someone is near the cart when the tipper is operating.**

1. Guide the container pins (one on each side) into the container latch. (See Section 4.2 Container Lock.)

#### **NOTE**

**The tipper lever will return to center as soon as it is released. It must be held for continuous operation.**

2. To empty the container, PULL and HOLD the tipper lever out to slowly raise the container into the dump position. Release the control lever when the container reaches the dump position (Figure 29).

3. When the container has been emptied, PUSH and HOLD in the tipper lever to slowly lower the container. Release the container lever when the container is lowered to ground level.
4. Release the container latch on each side of the container. (See Section 4.2 Container Lock.)

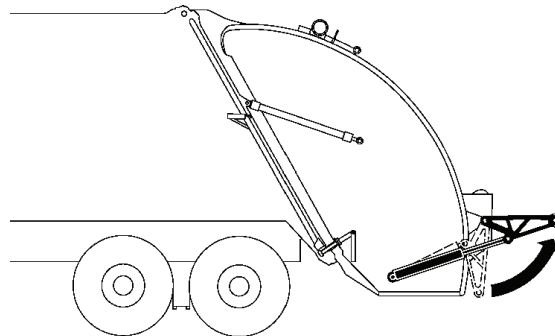


Figure 29

## 4.4 Winch or Reeving Cylinder

The winch or reeving cylinder options are used for dumping the contents of large containers into the hopper. The winch or reeving cylinder are controlled by a lever, located at the curb side rear of the vehicle.

Your rear loader refuse truck may be equipped with a hook and cable used for tipping commercial refuse containers into the hopper. This hook and cable is specifically designed to work with ANSI Type T containers equipped with trunnion bars and a lifting eyelet only when the container is properly restrained with the trunnion bars in their receivers and the latch bars engaged and locked. The hook should always be attached directly to a lifting eye designed for this purpose, never wrapped around an object and hooked back onto the cable. The hook and cable are not intended for any other purpose than dumping a Type T container into the hopper. The hook and cable should not be used for lifting, dragging, or manipulating containers, appliances, or other large items toward or into the hopper.

### **WARNING**

**Be sure non-operator personnel are clear of the hopper and area surrounding the cart when operating the Winch Functions. Serious personal injury or death may result if someone is near the cart when the winch is operating.**

### **WARNING**

**Crush or Pinch Hazard.**

**Lifting or dragging uncontrolled items with hook and cable may cause items to move in a way that can pinch or crush the operator.**

**Use winch or reeving cylinder hook and cable for dumping properly restrained ANSI Type T containers only.**

**Never use hook and cable for any other purpose.**

**Failure to comply may injure or kill.**

1. Guide the container pins (one on each side) into the container latch. (See Section 4.2 Container Lock.)

### **NOTE**

**The winch lever will return to center as soon as it is released. It must be held for continuous operation.**

2. To empty the container, unhook the cable from its storage latch, and then PULL and HOLD the winch/reeving lever to extend the cable. Release the winch/reeving lever when enough cable has been extended.
3. Attach the hook of the cable to the rear of the container (Figure 30).



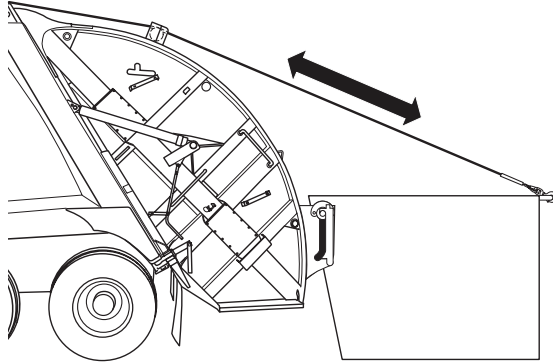


Figure 30

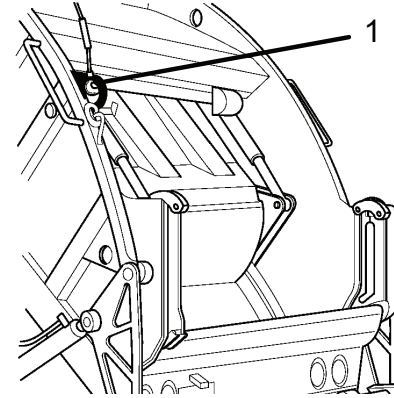


Figure 31

4. PUSH and HOLD in the winch/reaving lever to retract the cable and slowly raise the container to dump position. Release the winch/reaving lever when the container reaches the dump position.
5. When the container has been emptied, PULL the winch/reaving lever to extend the cable and slowly lower the container. Raise the winch/reaving lever when the container is lowered to ground level.
6. Unhook the cable from the container, then carefully retract and latch the hook to the cable ring provided (Figure 31). Retract the cable further, just enough to “snug” it securely to the ring.
7. Release the container latch on each side of the container (See Section 4.2 Container Lock.).

## 4.5 Lateral Protection Device

The lateral protection device (LPD) is designed to be removed for service or rotated up or tilted forward for access to components on the vehicle such as tool boxes, battery boxes, hydraulic oil tanks. **IMPORTANT:** The only time the LPD should be removed, rotated, or tilted is when the vehicle is stationary. Return the LPD to its original position before moving the vehicle or going on route.

### **Remove the LPD for Service**

1. To remove the entire device to perform service work on the vehicle, remove all four (4) hinge pins and move the device out of the way.
2. Reinstall the device and all four (4) hinge pins to return the LPD to its original position before moving the vehicle or going on route.

### **Rotate the LPD Up**

1. To rotate the lateral protection device up for access to components, holding onto the rail assembly, remove the **lower hinge pin** from both LPD mount supports.
2. Rotate the rail assembly up until the open holes on the LPD mount support and the chassis mount align.
3. Install each lower hinge pin through the open holes in the top hole of each LPD mount supports and mount weldments (Figure 32).

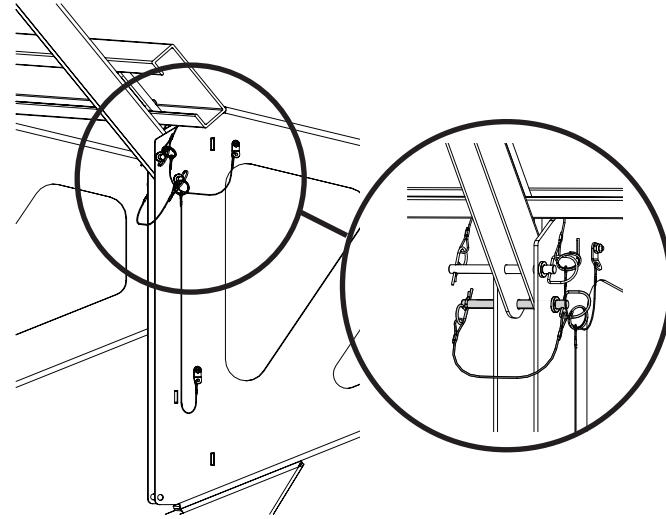


Figure 32

4. Reverse all steps to return the LPD to its original position before moving the vehicle or going on route.

### **Tilt the LPD Down**

1. To tilt the lateral protection device down for top side access to frame mounted components, holding onto the rail assembly, remove the top hinge pin from both LPD rail supports.

2. Tilt the LPD down, keeping it hinged to the mount weldments by the lower hinge pins (Figure 33).

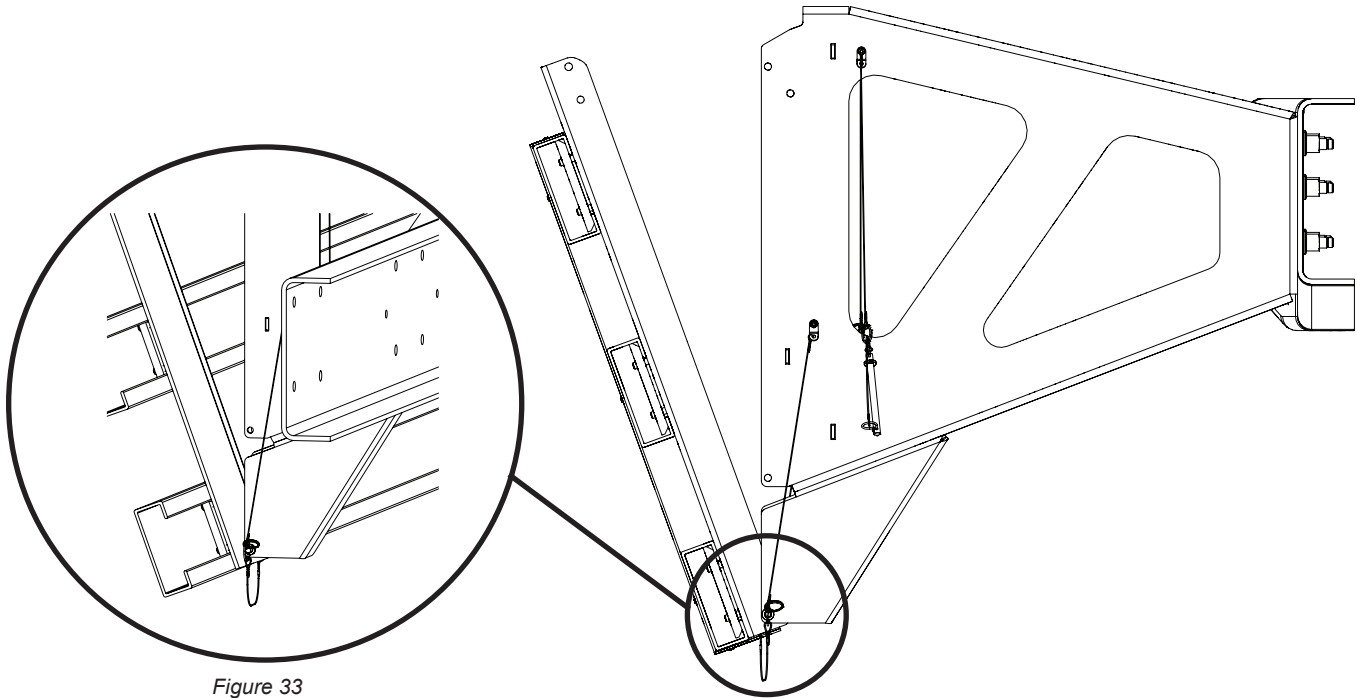


Figure 33

3. Reverse the step to return the LPD to its original position before moving the vehicle or going on route.

## 4.6 Auxiliary Axle

### NOTE

**The following information is for auxiliary axles installed by McNeilus Truck and Manufacturing, Inc. Refer to chassis manufacturer information for axle installed by the chassis manufacturer or a third party.**

The auxiliary axle down force is controlled by regulated air pressure to the axle suspension air springs. The regulated air pressure is preset at the factory to a common pressure setting. Determine the actual regulated air pressure by driving the vehicle over a truck scale at the various weights the vehicle will be operated at up to the GVWR as shown on the Final Stage Manufacturer Label located on the driver's side cab doorjamb (see Section 2 in the Foreword). Adjust the regulated air pressure according to the auxiliary axle manufacturer's pressure/weight chart located in the cab information packet supplied with the vehicle. The air pressure gauge is located in the cab of the vehicle and may also be located outside of the cab.

Always follow your company's policies and procedures when adjusting the air pressure. If you have any questions, call McNeilus Parts and Service branches at 888-686-7278.

### **WARNING**

**Do not operate your vehicle until you have determined the actual regulated air pressure for the auxiliary axles. Improper regulated air pressure will affect handling of the vehicle. Failure to adjust and maintain the regulated air pressure correctly may result in serious personal injury or death.**

A pusher axle option is mounted in front of the rear drive axle. A tag axle option is mounted behind the rear drive axle. Either axle is pneumatically applied, and is controlled by an option switch on the cab console (see Section 1.0 Instruments and Controls).

### NOTE

**Only lower the pusher axle after you have started your route. Never lower the axle when the packer is empty. When emptying the packer, the pusher axle must be in the raised position.**

#### **4.6.1 Lowering the Pusher or Tag Axle**

1. Bring the truck to a complete stop and apply the parking brake (refer to the chassis manufacturer's procedure).
2. Press DOWN on the PUSHER rocker switch or the TAG rocker switch to lower the appropriate axle.
3. Resume normal operations.

<b>NOTE</b>
<b>The pusher axle is designed to lift automatically when the vehicle is put in reverse. The axle must be lowered again before beginning forward travel.</b>

#### **4.6.2 Raising the Pusher or Tag Axle**

1. Bring the truck to a complete stop and apply the parking brake (refer to the chassis manufacturer's procedure).
2. Press UP on the PUSHER rocker switch or the TAG rocker switch to raise the appropriate axle.
3. Resume normal operations.

## 4.7 Water Tank

### 4.7.1 Water Tank Safety

#### **WARNING**

##### **IMPORTANT ALUMINUM AND STEEL WATER TANK INFORMATION.**

1. Inspect water tank on a daily basis for any damage including, but not limited to, dents, gouges in metal, or leaks.
2. Do not weld on or repair water tank. Instead, replace water tank with a new OEM water tank.
3. Never pressure test an empty water tank. Only pressure test a full water tank.
4. Never remove pressure regulator or pressure safety valve from tank.
  - If regulator or safety valve is defective, it must be replaced before Packer is put into service.
5. Do not pressurize water tank beyond its working pressure.
  - If pressure exceeds the working pressure, immediately depressurize water tank and replace pressure regulator and pressure safety valve.

#### **WARNING**

##### **CONTINUED**

6. Never drive the truck with the water tank pressurized.
  - Depressurize water tank prior to transit to or from job site.
  - Water tank should be pressurized only when being used.
7. Never modify water tank in any way.
8. Immediately replace safety decals with McNeilus decals if decals are missing or difficult to read.
9. Refer to the McNeilus Operator's Manual or contact McNeilus at 1-888-686-7278 if you have questions or require assistance.

### 4.7.2 Introduction

Your vehicle may be equipped with a pressurized water tank. This tank is used to rinse debris off the vehicle. Air pressure from the vehicle's brake system is used to provide pressure to the tank. Use these instructions for the safe operation and inspection of all McNeilus, Oshkosh, and London pressurized water tanks.

If your vehicle is equipped with a non-pressurized water tank (a system that uses a water pump to provide pressure), refer to the instructions provided with the vehicle.

### 4.7.3 Daily Inspection

- Inspect tank daily for damage or leaks.
- Replace (do not repair) damaged or leaking tank.
- Drain pressure before driving.
- Do not weld or repair tank.
- Never exceed stated PSI in tank.
- Bursting tank may injure or kill.

#### 4.7.3.1 Tank Integrity

##### At the start of each shift:

- **Inspect Interior:** Drain the tank of water and use a flashlight to look into the tank through the fill opening. Look for signs of corrosion on the inside of the tank which may indicate that the tank has been weakened and is in need of replacement.
- **Inspect Exterior without Pressure:** If the interior inspection indicates that the tank is in good condition, fill the tank with water and inspect the exterior of the tank thoroughly for signs of leaks. Inspect the filler neck and fill opening. Look for signs of damage. Look for cracks in the weld joints or seams. Check that all fastening hardware is tight and undamaged. Inspect fittings for signs of damage, cracks, or looseness.
- **Inspect Exterior with Pressure:** If there are no signs of damage or exterior leakage, pressurize the tank and repeat the inspection.

- **Depressurize Tank:** Release the pressure in the tank as soon as you are finished inspecting and before moving the truck.

**Replace Defective Tank:** Water tanks with any leak or significant signs of internal or external damage or corrosion should be replaced. DO NOT ATTEMPT TO REPAIR.

#### 4.7.3.2 Pressure Regulator Valve

- **Inspect Pressure Regulator:** The pressure regulator is used to reduce the air brake system pressure to a pressure that is safe to be used in the water tank. It must be undamaged and in proper working order. Look and listen for signs of leaking. Ensure that the valve and associated hoses and fittings are undamaged.
- **Adjust Pressure to Correct Setting:** Many pressure regulators are set at the factory and cannot be adjusted. If your water tank has an adjustable regulator, set it to 50 psi. When setting the regulator, always begin by turning the adjusting knob counterclockwise first to reduce the pressure slightly. Then turn it clockwise slowly to bring the pressure up to the correct setting. Never continue to turn the valve past the correct setting.
- **Replace Defective Regulator Valve:** Any water tank with a damaged or missing pressure regulator valve must be removed from service immediately. Do not pressurize the tank until a functioning pressure regulator valve has been installed.

### 4.7.3.3 Pressure Relief Valve

- **Inspect the Relief Valve:** The pressure relief valve is a safety device that will release air or water from the tank if it is inadvertently pressurized over the relief setting. The relief setting on most water tanks is set at the factory and cannot be adjusted. Identify the pressure relief valve and ensure that it has not been damaged or tampered with.
- **Replace Defective Relief Valve:** Any water tank with a damaged or missing pressure relief valve must be removed from service immediately. Do not pressurize the tank until a functioning pressure relief valve has been installed.

### 4.7.4 Daily Operation

The water tank is designed to be used during stationary operation at the yard or the landfill site only. Do NOT pressurize the tank while driving. A pressurized water tank is an added hazard in the event of a crash or a rollover.

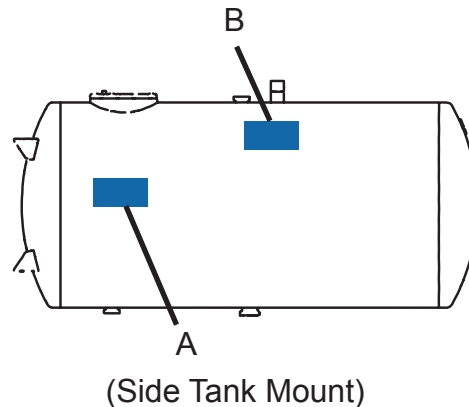
### 4.7.5 Vehicle Handling Characteristics

Safe operation of any vehicle is the responsibility of the driver. The water tank is a fluid load that can increase the rollover tendency if the truck is driven with the water tank partially full. To reduce the risk of rollover, only drive the truck with the water tank either completely full or completely empty. Avoid making sharp turns at excessive speeds and other abrupt maneuvers.

In the event of a rollover or crash, an unbelted person is significantly more likely to become injured or die than a person wearing a seat belt. ALWAYS WEAR YOUR SEAT BELT.

### 4.7.6 Water Tank Sign Identification

Item	Part Number	Qty.	Comments
A	1449162	1	Use if equipped with 55 PSI tank.
A	1449165	1	Use if equipped with 95 PSI tank.
A	1503949	1	Use if equipped with 120 PSI tank.
B	1449164	1	Use on all tanks.





### 4.7.7 Water Tank Operation

The water tank (Figure 34, Item 1) can be mounted in any one of several locations, depending on the options your refuse vehicle is equipped with. The system will be equipped with a pressure gauge (Figure 34, Item 2), an air pressure control valve (Figure 34, Item 3), and a drain valve (Figure 34, Item 4).

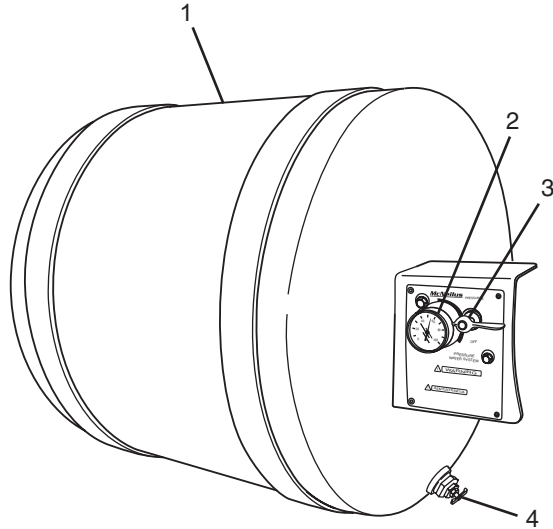


Figure 34

### 4.7.7.1 Filling the Tank

The tank can be filled through the flopper valve (Figure 35, Item 1) or through the optional gate valve (Figure 35, Item 2).

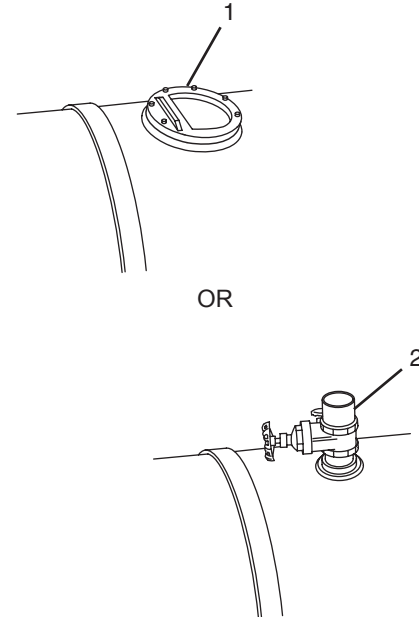


Figure 35

**4.7.7.2 Pressurizing the Water Tank**

**⚠ WARNING**

**Never drive the truck with the water tank pressurized.**

**Serious personal injury or death may occur.**

**⚠ WARNING**

**Never pressurize an empty water tank.**

**Serious personal injury or death may occur.**

1. Fill the tank to the desired level.

**⚠ WARNING**

**Pressure in the water tank should never exceed 55 psi. If pressure exceeds 55 psi, depressurize tank immediately and replace with new McNeilus air regulator valve.**

**NEVER pressurize an empty tank.  
NEVER modify tank in any way.**

**Operating in excess of 55 psi, pressurizing an empty tank, or modifying the tank may cause serious personal injury or death.**

2. Turn the air pressure control valve to the PRESSURIZE position (Figure 36, Item 1). The water tank will be pressurized from the chassis air system.
3. The air gauge (Figure 36, Item 2) will read the pressure in the water tank. The pressure must not exceed 55 psi.

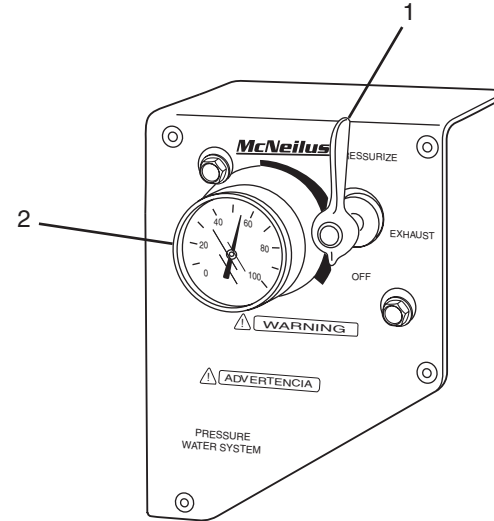


Figure 36

4. Connect a hose to the fitting (Figure 37, Item 1).

**⚠ WARNING**

**Do not drink the water.**

**Serious internal injury may result.**

5. Open the valve (Figure 37, Item 2).

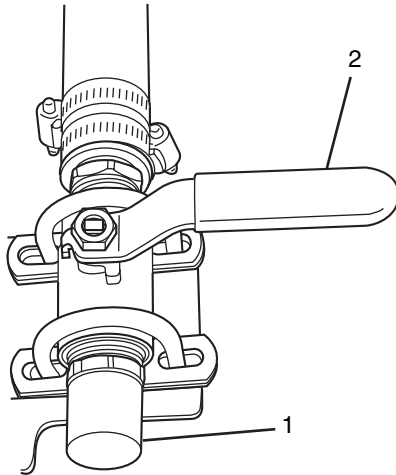


Figure 37

### 4.7.7.3 Depressurizing the Water Tank

1. Turn air pressure control valve to the EXHAUST position (Figure 38, Item 1). Make sure the gauges (Figure 38, Item 2) read 0 psi.

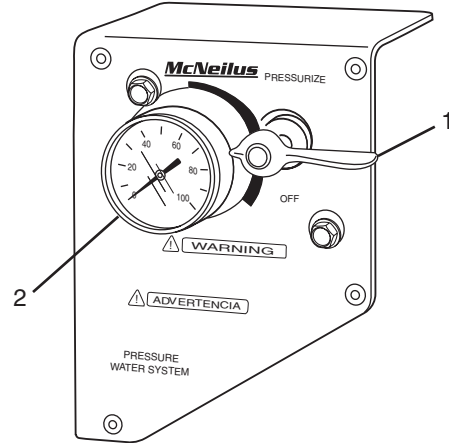


Figure 38

- After pressure in the water tank has been completely exhausted, turn the air pressure control valve to the OFF position (Figure 39, Item 1).

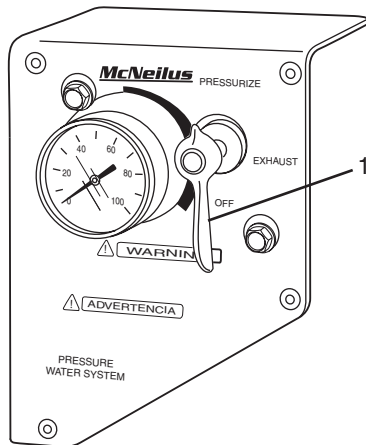


Figure 39

### 4.7.7.4 Draining the Water Tank

#### **⚠ WARNING**

Never allow the water from the tank to drain onto a public sidewalk or roadway. Water may cause the sidewalk or roadway to become slippery. Always drain the water system at a location designated by the job site manager or in compliance with your company policy.

Failure to comply may result in serious personal injury or death.

#### **⚠ WARNING**

Do not drink the water.

Serious internal injury may result.

#### **⚠ CAUTION**

Be sure to drain the water tank, hoses, and pipes when operating in temperatures below freezing.

Failure to drain the system may cause damage to equipment.

When operating in temperatures below freezing, drain the water system after every use.

1. Depressurize the water tank.
2. Open the tank drain valve (Figure 40, Item 1) and allow the water to drain. When water is drained, close the drain valve.

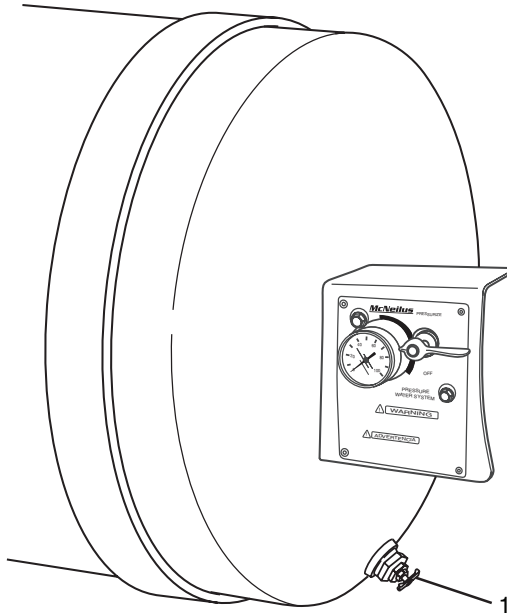


Figure 40

3. Open gate valve(s) (Figure 41, Item 1) and drain all hose(s) and pipe(s). Operate hose to drain hose and pipes.

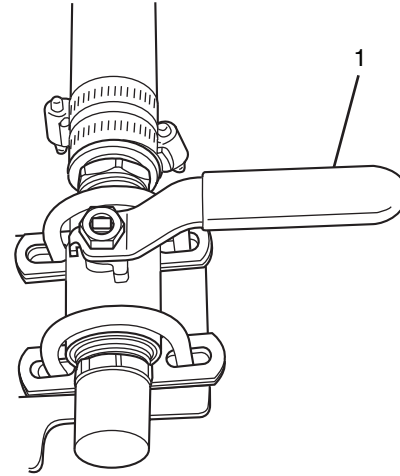


Figure 41

## NOTES

## 1.0 Preventive Maintenance

Check or inspect the unit each day or before each new shift of operation. Report any deficiencies to your Maintenance Department for correction by skilled service personnel.

### CAUTION

**Correct all identified deficiencies BEFORE operating the Packer. Failure to correct deficiencies may cause damage to equipment.**

### 1.1 DOT Pre-Trip

Perform pre-trip inspection of chassis and refuse vehicle according to all federal, state, and local laws.

## 2.0 Preventive Maintenance Intervals

Performing preventive maintenance on your refuse vehicle will prolong the life of its equipment, help prevent expensive downtime, and minimize the potential for problems arising on the route.

The following Preventive Maintenance Chart summarizes the requirements to properly maintain your refuse vehicle.

The chart specifies the recommended interval when each item should be performed.

Intervals are listed in calendar and hours-of-use increments. Maintenance should be performed at the increment that occurs first.

The preventive maintenance intervals listed under the **Service** group heading are the maximum days or hours allowed for each maintenance procedure. Continue to repeat the maintenance procedures at the listed intervals.

### NOTE

**If the Packer is operated more hours per day or double-shifted, the maintenance interval must be adjusted accordingly.**

The Preventive Maintenance Chart identifies the responsibilities to be performed by both the operator and service personnel.

Some maintenance procedures are listed under both the **Operator** group heading and **Service** group heading.

The Daily Checks under the **Operator** group heading identify procedures that can be performed by either the operator or skilled service personnel.

All intervals listed under the **Service** group heading must be performed by skilled personnel. Refer to the product Service Manual for descriptions of maintenance procedures.

Maintenance procedures are listed under the appropriate affected refuse vehicle system.



**LEGEND**

**R** Replace

**I** Inspect

**T** Torque

**P** Perform

**L** Lubricate

**C** Clean

**Operator**

**Service**

Daily Checks

Daily  
(10 Hours)

Weekly  
(50 Hours)

Scheduled PM  
(150 Hours)

Semi-Annual  
(1250 Hours)

Annually  
(2500 Hours)

Bi-Annual  
(5000 Hours)

<b>Hydraulic System</b>							
	Daily Checks	Daily (10 Hours)	Weekly (50 Hours)	Scheduled PM (150 Hours)	Semi-Annual (1250 Hours)	Annually (2500 Hours)	Bi-Annual (5000 Hours)
Hydraulic Oil Level		<b>P</b>			<b>P</b>		
Hydraulic System and Components		<b>I</b>			<b>I</b>		
Hydraulic Hoses		<b>I</b>			<b>I</b>		
Hydraulic Tubes and Pipes		<b>I</b>			<b>I</b>		
Breather Filter				<b>I/R</b>	<b>R</b>		
Return Line Filter					<b>R</b>		
Hydraulic Oil Test					<b>P</b>		
HOC Operation Test					<b>P</b>		
Main Relief Valve Setting					<b>P</b>		
Hydraulic Oil					<b>R</b>	<b>R</b>	
Reservoir Drain Plug					<b>I/P</b>	<b>I/P</b>	
Suction Line Strainer					<b>R</b>	<b>R</b>	
Complete all prior maintenance items before proceeding to any hourly service interval.							

**LEGEND**

- R Replace      P Perform
- I Inspect      L Lubricate
- T Torque      C Clean

		Operator			Service		
		Daily Checks	Daily (10 Hours)	Weekly (50 Hours)	Scheduled PM (150 Hours)	Semi-Annual (1250 Hours)	Annually (2500 Hours)

<b>Electrical System</b>							
Lighting System	I		I				
Wire Harness	I		I				
Audible Back-up Alarm	I						
<b>Mechanical</b>							
Refuse Vehicle Body and Components	I		I				
Tailgate Seal Condition	I	C					
Sweep and Slide Panels			I				
Ejector Track Clearance				I			
Automatic Neutral Interlock	I	I					
Winch Gearbox Oil				I	P/C		
Cylinder pins, bolts, and fasteners				I			
Winch or Reeving Cylinder Cable Inspect for excessive wear, corrosion, kinks				I			
Complete all prior maintenance items before proceeding to any hourly service interval.							

**LEGEND**

**R** Replace

**I** Inspect

**T** Torque

**P** Perform

**L** Lubricate

**C** Clean

Operator				Service			
Daily Checks	Daily (10 Hours)	Weekly (50 Hours)	Scheduled PM (150 Hours)	Semi-Annual (1250 Hours)	Annually (2500 Hours)	Bi-Annual (5000 Hours)	

<b>Operation</b>							
Refuse Vehicle Controls	<b>P</b>			<b>P</b>			
Trash Behind Ejector	<b>I/P</b>			<b>I/P</b>			
Safety Signs	<b>I</b>						
<b>Lubrication</b>							
Daily		<b>L</b>					
Scheduled PM				<b>L</b>			
Complete all prior maintenance items before proceeding to any hourly service interval.							

## 3.0 Daily Preventive Maintenance Checks

### 3.1 Hydraulic System

Make sure all necessary service and maintenance is complete before the truck leaves the facilities and before operation.

#### SAFETY NOTICE

Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate.

#### 3.1.1 Hydraulic Oil Level

- **Daily Checks** - The oil level is checked by the operator or skilled service personnel.

#### NOTE

Check hydraulic oil level during start-up when the oil temperature is still cold.

- Check the hydraulic oil level with all hydraulic cylinders in their fully RETRACTED position.

#### 3.1.1.1 Temperature/Level Sight Gauges

Use the temperature/level gauge (Figure 42, Item 1 and Item 2) to determine how much oil is in the reservoir.

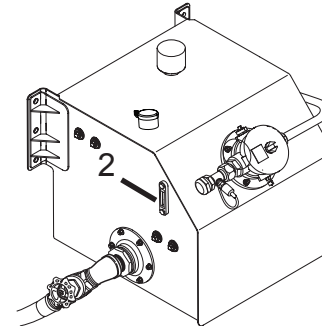
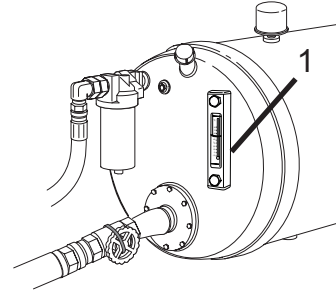


Figure 42

The gauge contains a thermometer which indicates the temperature of the hydraulic oil in the reservoir. The reservoir could have one of two gauges. The first type (Figure 43) is distinguished by the word “LOW” below the sight glass. The second type (Figure 44) does not have the word “LOW” on the gauge.

The hydraulic oil must be checked with all the hydraulic cylinders in the fully RETRACTED position.

On a reservoir with a temperature/level sight gauge option (Figure 43), oil level at 60 - 70°F should be at the black line in the center of the green zone (Item 1). Oil should not be above the “Max Fill Hot” line (Figure 43, Item 2) when the system is at operating temperature. If there is too much oil in the reservoir (above the “Max Fill Hot” line), there is a possibility of the oil coming out of the breather at the top of the hydraulic reservoir. Do not operate the system with oil below the “low” line (Figure 43, Item 3) or damage to the system may result.

### CAUTION

**Do not operate the hydraulic system with oil below the “low” line on the temperature/level sight gauge.**

**Damage to the system may result.**

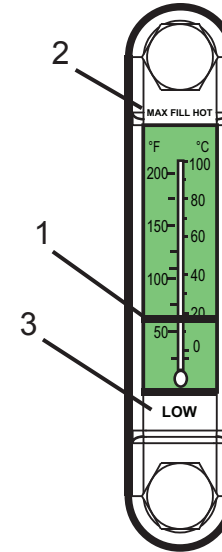


Figure 43

The second type of temperature/level sight gauge (Figure 44, Item 1) will not have the word “LOW”. Keep the oil level to the top of the black line (Full) (Figure 44, Item 2), but don’t over fill. If the oil level gets to the red line (Figure 44, Item 3), oil must be added.

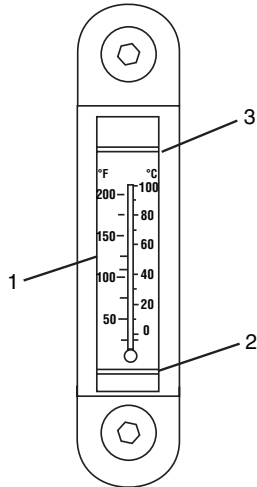


Figure 44

## 3.2 Electrical System

### SAFETY NOTICE

**Perform your company’s Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate.**

### 3.2.1 Lighting System

- **Daily Checks** - The lighting system is inspected by the operator or skilled service personnel.

Check to ensure that all exterior lights on the refuse vehicle and chassis are functioning correctly. Replace any burned out bulbs with the same type.

### 3.3 Pneumatic System

#### SAFETY NOTICE

Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate.

#### 3.3.1 Coalescing Filter

- **Daily Checks** - The coalescing filter is drained by the operator or skilled service personnel.

Locate the drain fitting (Figure 45, Item 1) on the bottom of the coalescing filter.

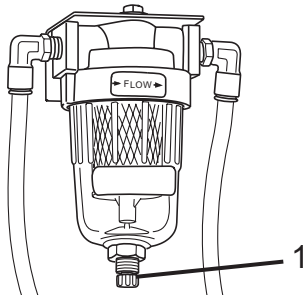


Figure 45

Drain the filter by turning the drain fitting counterclockwise. Turn the drain fitting clockwise after all moisture and contaminants have drained from the canister.

### 3.4 Mechanical System

#### SAFETY NOTICE

Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate.

#### 3.4.1 Refuse Vehicle Body and Components

- **Daily Checks** - The body and components are inspected by the operator or skilled service personnel.

Inspect the body and all components for binding, damage, loose, or missing parts.

### 3.4.2 Tailgate Seal

- **Daily Checks** - The tailgate seal is inspected by the operator or skilled service personnel.

The tailgate should be open and correctly propped for seal inspections. See Section 3.8.1 Engaging the Tailgate Prop (No Tag Axle) or Section 3.8.3 Engaging the Tailgate Prop (With Tag Axle).

Inspect the tailgate seal for tears, damage, or excessive wear. Ensure that the seal is fully seated in the tailgate channel. Clean the tailgate seal as needed. Inspect the mounting straps to ensure they are secure.

## 3.5 Operation

### WARNING

**Be sure all non-operator personnel are at least 20 feet (6 meters) away from all areas of the Packer.  
Serious personal injury or death may occur.**

### DANGER

**Make sure the area above the vehicle is clear of objects and power lines before raising or opening the tailgate.  
Serious personal injury or death may occur.**

### 3.5.1 Refuse Vehicle Controls

- **Daily Checks** - The controls are checked for proper operation by the operator or skilled service personnel.

Operate all functions to validate they are operational. Verify that all indicator lights and alarms are operational.

## 3.6 Trash Behind Ejector

- **Daily Checks** - The refuse vehicle is inspected for trash behind the ejector by the operator or skilled service personnel. Conduct daily checks to the ejector.

### CAUTION

**When the Packer is operated on the route, trash can pass by the ejector. If the trash is not cleaned from behind the ejector, the Packer can be damaged.**

1. Start the chassis engine.
2. Turn the PUMP rocker switch to ON.
3. Extend the ejector far enough to clear the side door.
4. Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 Lockout/Tagout and 1910.146 Confined Space as appropriate.
5. Fold down the ladder (Figure 46, Item 1) (if equipped) to gain access to the side door.



6. Open the side door (Figure 46, Item 2)

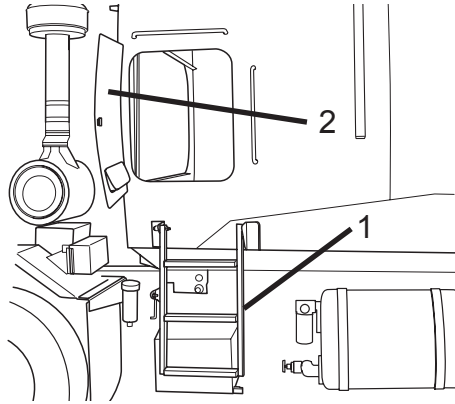


Figure 46

7. Inspect behind the ejector for accumulation of trash.
8. Remove trash from behind the ejector using a clean out tool or plastic shovel.
9. After trash is removed, close and secure the side door, fold up the ladder, and lock it in place.
10. Remove your company's Lockout/Tagout per your company's procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 Lockout/Tagout and 1910.146 Confined Space as appropriate.

### 3.7 Safety Signs

- **Daily Checks** - A complete walk around of the vehicle to inspect safety signs should be performed every day before operation. If any safety signs are damaged, illegible, or missing, they must be replaced before operation.

For the proper location and part numbers of safety signs for the refuse vehicle (see Section 4.1 Safety Sign Locations). If you are unable to determine the proper safety sign or its placement on the refuse vehicle, call McNeilus Truck and Manufacturing, Inc. at 888-686-7278. If any safety signs on the equipment are not clearly readable, contact McNeilus Parts and Service at 888-686-7278 or [www.streetmartparts.com](http://www.streetmartparts.com) to order replacements. Use only McNeilus replacement safety signs.

For information on any of the chassis safety signs, please contact the chassis manufacturer.

### 3.8 Propping the Tailgate

When performing maintenance procedures that require the tailgate to be open, use the following procedure to open and prop the tailgate.

#### **WARNING**

**Be sure all non-operator personnel are at least 20 feet (6 meters) away from all areas of the Packer.  
Serious personal injury or death may occur.**

#### **DANGER**

**Whenever the tailgate is in a raised position, it must be securely propped or blocked so it cannot fall on anyone.  
Serious personal injury or death may occur.**

#### **DANGER**

**Make sure the area above the vehicle is clear of objects and power lines before raising or opening the tailgate.  
Serious personal injury or death may occur.**

#### **DANGER**

**Stand clear when the tailgate is in motion and during the unloading cycle. Do not stand under or cross under the raised tailgate.  
Serious personal injury or death may occur.**

#### 3.8.1 Engaging the Tailgate Prop (No Tag Axle)

1. Start the chassis engine.
2. Turn PUMP and PARK BRAKE ON.
3. Unlock the tailgate (manual or hydraulic as equipped).
4. Open the tailgate just far enough to allow the tailgate prop (Figure 47, Item 1) to fit around the cylinder rod (Figure 47, Item 2).

#### **CAUTION**

**There is a tailgate prop on each side of the body. This propping procedure must be performed on both sides of the body.  
Damage or injury may occur if both props are not used.**

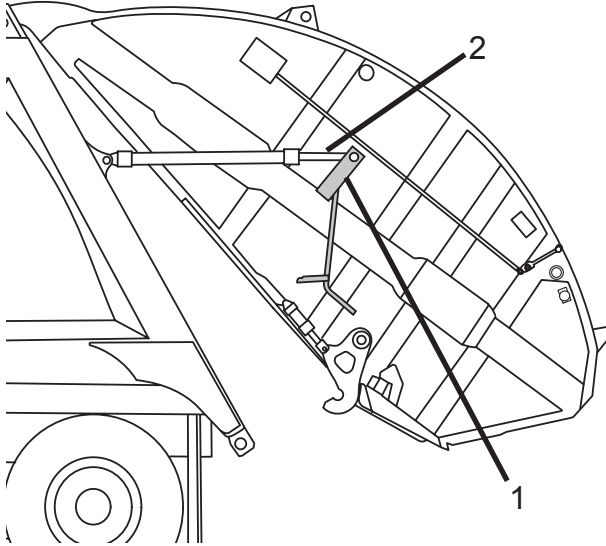


Figure 47

5. Shut the chassis engine off and disable refuse vehicle.
6. Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 Lockout/Tagout and 1910.146 Confined Space as appropriate.
7. Push up on the prop lever (Figure 48, Item 1) to place prop (Figure 48, Item 2) around the cylinder rod. Repeat the procedure for the other side.

8. Turn ignition switch to the ON position. Do not start engine. Lower the tailgate until the props (Figure 48, Item 2) are seated against the cylinder barrel (Figure 48, Item 3).

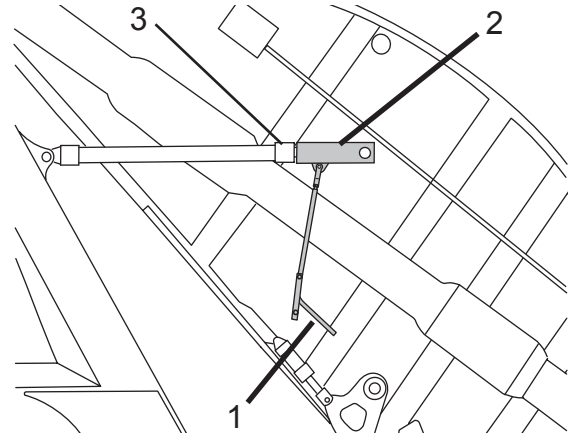


Figure 48

### DANGER

**Verify that the tailgate props are properly seated in the pockets off the body compartment.**

**Serious personal injury or death may occur.**

9. Turn ignition switch to the OFF position.

10. Always use a stick, shovel, or long handled brush to clear trash from the props and seal areas of tailgates and doors.

### 3.8.2 Disengaging the Tailgate Prop (No Tag Axle)

After completing the maintenance procedures on the body that require the tailgate to be propped, use the following procedure to disengage the prop and close the tailgate.

1. Remove your company's Lockout/Tagout per your company's procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 Lockout/Tagout and 1910.146 Confined Space as appropriate.
2. Start the chassis engine.
3. Turn PUMP and PARK BRAKE ON.
4. Open the tailgate as needed to provide the necessary clearance to rotate and disengage the tailgate prop from the tailgate lift cylinder barrel.
5. Shut the engine OFF and put the key in your pocket.
6. Pull the prop lever (Figure 49, Item 1) down to remove the prop (Figure 49, Item 2) from around the cylinder rod.

**CAUTION**

**There is a tailgate prop on each side of the body. This propping procedure must be performed on both sides of the body. Damage or injury may occur if both props are not used.**

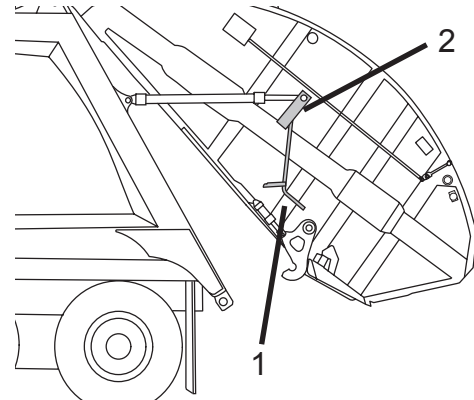


Figure 49

7. Start the chassis engine.
8. Turn PUMP and PARK BRAKE ON.
9. Close and lock the tailgate.

**3.8.3 Engaging the Tailgate Prop (With Tag Axle)**

1. Remove the hair pin clip (Figure 50, Item 1) from the safety pin (Figure 50, Item 2) and remove the safety pin. Repeat this step on the other sides of the tailgate.
2. Loosen and swing the turnbuckle (Figure 50, Item 3) out of the slot and away from the tailgate.

**⚠ CAUTION**

**There is a tailgate prop on each side of the body. This propping procedure must be performed on both sides of the body. Damage or injury may occur if both props are not used.**

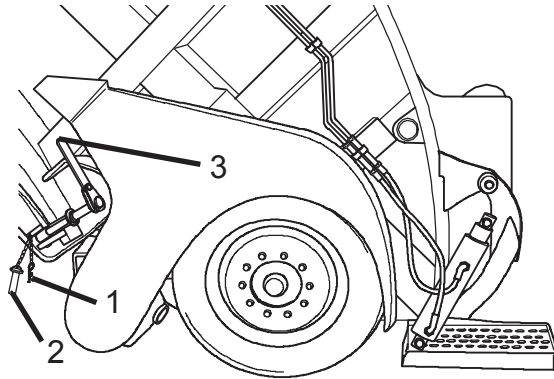


Figure 50

1. Start the chassis engine.
2. Open the tailgate far enough to allow the tailgate prop (Figure 51, Item 1) to fit around the cylinder rod (Figure 51, Item 2).

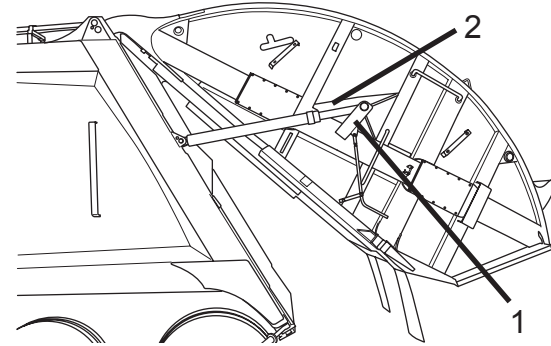


Figure 51

3. Shut the engine OFF and disable the refuse vehicle.
4. Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 Lockout/Tagout and 1910.146 Confined Space as appropriate.
5. Push up on the prop lever (Figure 52, Item 1) to place prop (Figure 52, Item 2) around the cylinder rod. Repeat the procedure for the other side.

- Turn ignition switch to the ON position. Do not start engine. Lower the tailgate until the props (Figure 52, Item 2) are seated against the cylinder barrel (Figure 52, Item 3).

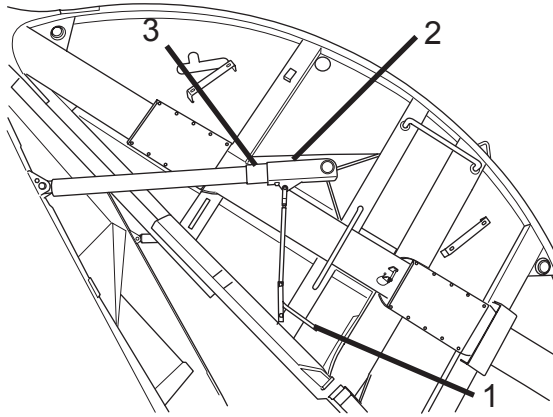


Figure 52

**⚠ DANGER**

**Verify that the tailgate prop is properly seated against the cylinder barrel. Failure to comply may result in serious personal injury or death.**

- Turn the ignition switch to the OFF position.

- Always use a stick, shovel, or long handled brush to clear trash from the props and seal areas of tailgates and doors.

### 3.8.4 Disengaging the Tailgate Prop (With Tag Axle)

After completing the maintenance procedures on the body that required the tailgate to be propped, use the following procedures to remove the prop and close the tailgate.

- Remove your company's Lockout/Tagout per your company's procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 Lockout/Tagout and 1910.146 Confined Space as appropriate.
- Start the chassis engine.
- Turn the PUMP switch ON.
- Open the tailgate to provide the necessary clearance to disengage the prop from the cylinder.
- Shut off the engine and put the key in your pocket.
- Pull the prop lever (Figure 53, Item 1) down to remove the prop (Figure 53, Item 2) from around the cylinder rod.

## CAUTION

There is a tailgate prop on each side of the body. This propping procedure must be performed on both sides of the body. Damage or injury may occur if both props are not used.

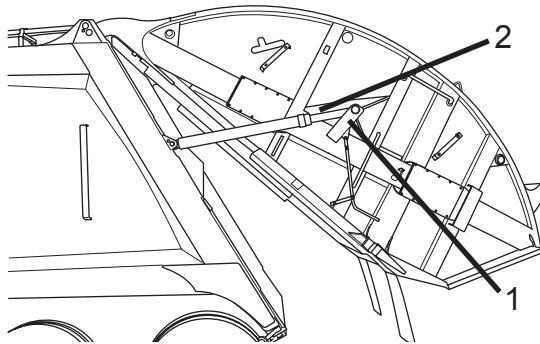


Figure 53

7. Start the chassis engine.
8. Turn the PUMP switch ON.
9. Close the tailgate.
10. Swing the turnbuckle (Figure 54, Item 3) into the slot and tighten. Repeat the procedure for the other side.

11. Install the safety pin (Figure 54, Item 2) on both sides of the tailgate. Install the hair pin clip in the safety pin (Figure 54, Item 1).

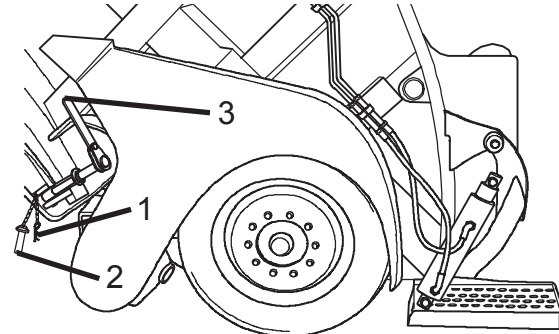


Figure 54

### 3.9 Draining the Leachate Fluid Tank

This procedure describes how to drain the leachate fluid collection tank. The tank collects waste water at the front of the body to limit waste water from draining out of the body or tailgate. **NOTE:** Tank location may vary to fit with chassis components.

The tank should be drained daily.

1. Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate.
2. Place a drain basin under the valve to collect the contents of the tank.
3. For tanks with the 4" ball valve, turn the valve lever clockwise 1/4 turn to open the valve (Figure 55).

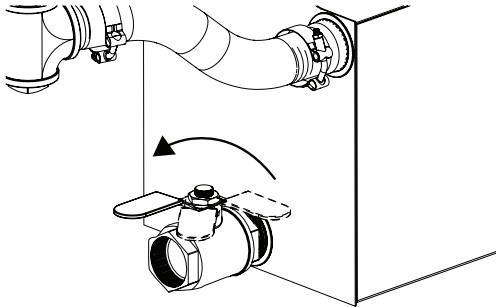


Figure 55

4. Drain the tank.
5. Turn the valve lever counterclockwise 1/4 turn to close the valve (Figure 56).

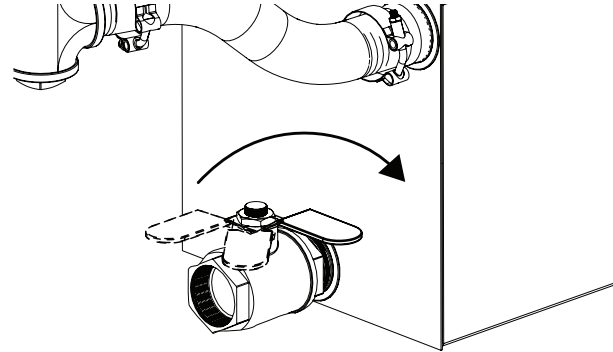


Figure 56

6. Dispose of drain basin contents in accordance with all applicable local, state, or federal waste water regulations. DO NOT allow the discharge of these contents to the storm water or any other natural water resource.
7. Draining the tank is complete. Remove your company's Lockout/Tagout per your company's procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate. Return truck to service.



## 3.10 Adding Hydraulic Oil

### 3.10.1 Standard Hydraulic System

Check the oil level with all hydraulic cylinders in their fully RETRACTED positions.

- Ejector in HOME or RETRACTED position
- Tailgate in DOWN position
- Slide panel completely UP
- Sweep panel completely RAISED
- Optional reeving cylinder RETRACTED
- Optional tipper bar LOWERED

#### **NOTE**

**If it is necessary to add hydraulic oil often or in large quantities, inspect the hydraulic system for leaks and repair before operating the refuse vehicle.**

#### **NOTE**

**When adding hydraulic oil, take every precaution to prevent contaminants from entering the hydraulic system. Cleanliness is extremely important when working with hydraulics.**

To add hydraulic oil, retract all cylinders, open the filler cap (Figure 57, Item 1) or remove the breather filter (Figure 57, Item 2) as equipped and add oil as necessary.

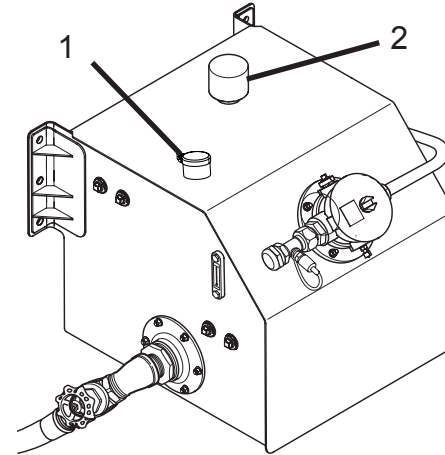


Figure 57

### 3.10.2 Clean-Fill Hydraulic System (Optional)

To add oil, the system uses two quick disconnects (Figure 58, Items 1 and 2) and requires a mobile filtration system. The quick disconnects are provided to connect the mobile filtration system.

To add hydraulic oil, connect the mobile filtration system to the quick disconnects. The oil that you add is filtered through the in-tank hydraulic return filter (Figure 58, Item 3).

#### NOTE

If it is necessary to add hydraulic oil often or in large quantities, inspect the hydraulic system for leaks and repair before operating the refuse vehicle.

#### NOTE

When adding hydraulic oil, take every precaution to prevent contaminants from entering the hydraulic system. Cleanliness is extremely important when working with hydraulics.

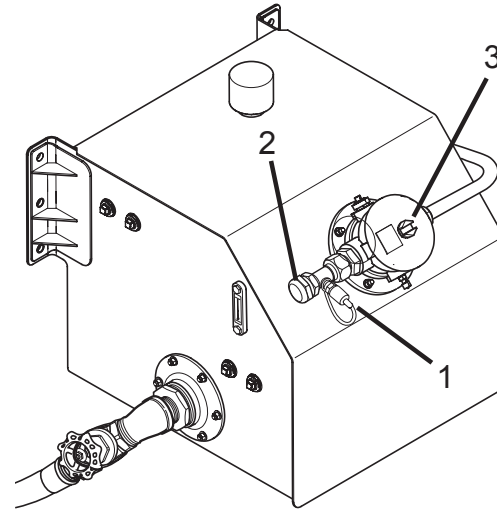


Figure 58

## 4.0 Lubrication

### 4.1 Daily Lubrication

Lubricate all the following points with a high quality EP No. 2 lithium grease.

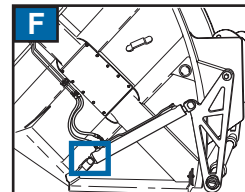
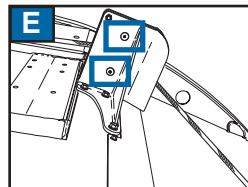
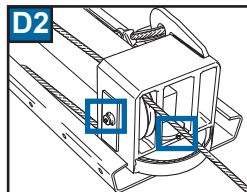
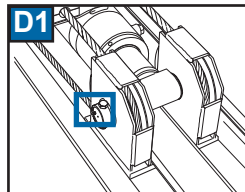
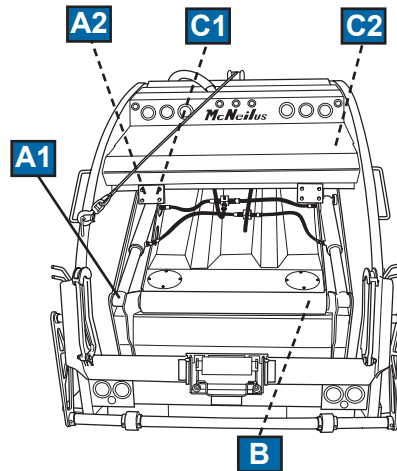
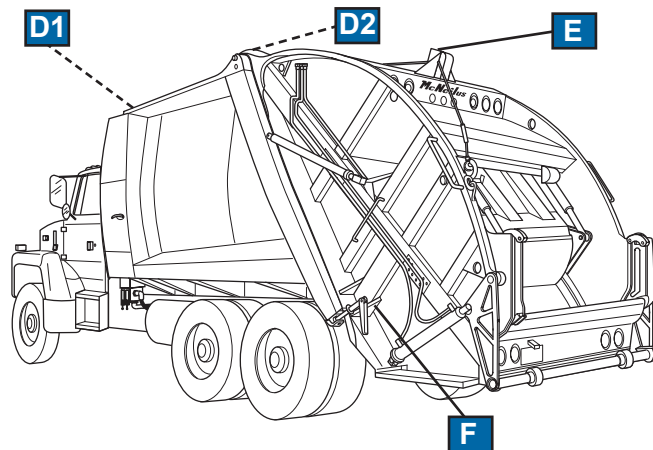
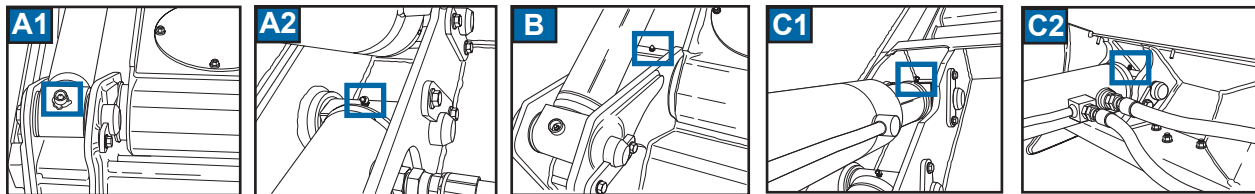
Daily lubrication intervals are based on a 10-hour day. If the refuse vehicle is operated more hours per day or double-shifted, adjust the maintenance interval accordingly.

#### **SAFETY NOTICE**

**Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate.**

If your refuse vehicle is equipped with a tag axle, refer to the Operator and the Maintenance Manual supplied by the manufacturer for the proper lubrication and maintenance.

Daily Lubrication Points		Lubricate Daily or Every 10 Hours	
Ref.	Description	No. of Fittings	Comments
A1	Sweep Cylinder - Rod End	2	Two Cylinders - One Per Side
A2	Sweep Cylinder - Base End	2	Two Cylinders - One Per Side
B	Sweep Panel Pivot Pins	2	Two Pivot Pins - One Per Side
C1	Slide Cylinder - Rod End	2	Two Cylinders - One Per Side
C2	Slide Cylinder - Base End	2	Two Cylinders - One Per Side
D1	Reeving Cable Cylinder Rod End Pulleys - Front (Optional)	2	Two Pulleys - One Per Side
D2	Reeving Cable Cylinder Base End Pulleys - Rear (Optional)	2	Two Pulleys - One Horizontal, One Vertical
E	Reeving Cable Guide Pulleys (Optional)	2	Two Pulleys
F	Tipper Cylinder - Base End (Optional)	2	Two Cylinders - One Per Side



### 4.2 Scheduled PM Lubrication

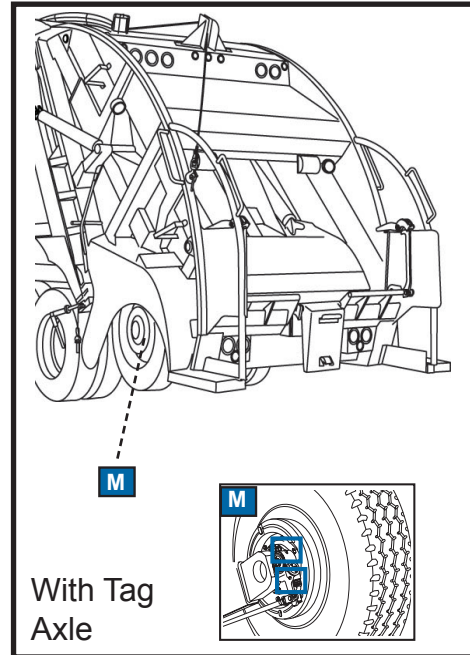
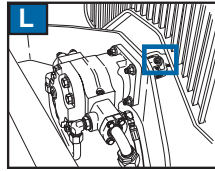
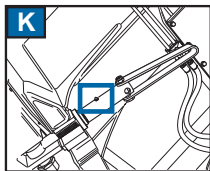
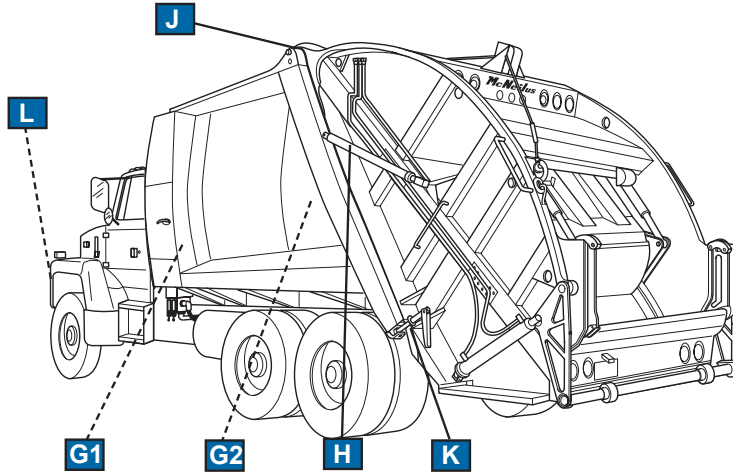
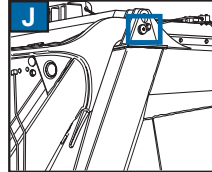
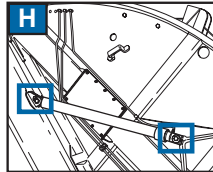
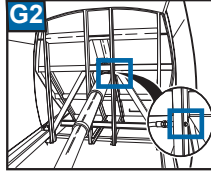
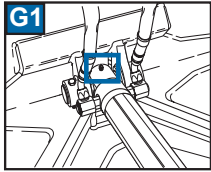
Lubricate all the following points with a high quality EP No. 2 lithium grease.

Scheduled PM lubrication intervals are based on 3 weeks or 150 hours. If refuse vehicle is operated more hours or double shifted, the maintenance interval must be adjusted accordingly.

#### **SAFETY NOTICE**

**Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate.**

Scheduled PM Lubrication Points		Lubricate Every 3 Weeks or 150 Hours	
Ref.	Description	No. of Fittings	Comments
G1	Ejector Cylinder - Rod End	1	
G2	Ejector Cylinder - Base End	1	
H	Tailgate Cylinder - Base End	2	Two Cylinders - One Per Side
H	Tailgate Cylinder - Rod End	2	Two Cylinders - One Per Side
J	Tailgate Hinge Pin	2	Two Hinge Pins - One Per Side
K	Turnbuckle	2	Two Turnbuckles - One Per Side
L	PTO Shaft	3	All Moving Parts
M	Tag Axle (Option) Brake Slack Adjusters	4	Two Adjusters - Two Fittings Per Side





## 1.0 Troubleshooting

When a problem or malfunction occurs, follow these steps. The sequence below will help isolate the problem and often permit a quick repair. If further assistance is required, refer to the applicable section of this manual or call the McNeilus Parts and Service at 888-686-7278.

### NOTE

**Isolate the problem before taking any remedial actions.**

1. Unless further damage will occur, repeat the steps that caused the problem. Refer to the Operation Section of this manual to be sure that the correct operating procedures have been followed. Often a simple step in the standard operating procedure has been forgotten.
2. Use the Troubleshooting Chart which is organized in a logical sequence and designed to help you troubleshoot problems at your location. Look under the appropriate equipment section, and for the specific problem within the chart.
3. Perform the checkout procedure and remedial actions listed within the chart to isolate the problem.

4. If your particular problem is not listed, or remedial actions provided do not resolve the problem, we suggest you take the vehicle to a service shop, refer to the appropriate service manual, or contact McNeilus Truck and Manufacturing, Inc. for service assistance.
5. If you have questions or need help, please call the McNeilus Parts and Service at 888-686-7278.

### SAFETY NOTICE

**Perform your company's Lockout/Tagout procedure. If your company does not have a Lockout/Tagout procedure, follow OSHA 1910.147 and 1910.146 Confined Space as appropriate.**

## 1.1 Troubleshooting Chart

Problem	Probable Cause	Action
All functions not working	IGNITION switch is OFF. Side door is OPEN if equipped with side door proximity switch. E-STOP button(s) is not reset. System problem.	Turn IGNITION switch ON. CLOSE side door.  Reset E-STOP button(s) Requires shop service and repair.
Hydraulic Functions operating slowly	THROTTLE MASTER rocker switch is OFF. Engine RPM is too LOW. Hydraulic oil level is low. System problem.	Turn THROTTLE MASTER rocker switch ON. Use THROTTLE ADVANCE switch. Check hydraulic oil level. Requires shop service and repair.
Sweep and Slide Functions not working	Side door is OPEN if equipped with side door proximity switch. E-STOP button(s) is not reset. Engine RPM is too HIGH. System problem.	CLOSE side door.  Reset E-STOP button(s). Reduce engine RPM below 1400 RPM. Requires shop service and repair.
Ejector Functions not working	Side door is OPEN if equipped with side door proximity switch. E-STOP button(s) is not reset. Engine RPM is too HIGH. System problem.	CLOSE side door.  Reset E-STOP button(s). Reduce engine RPM below 1400 RPM. Requires shop service and repair.
Throttle advance not working	THROTTLE MASTER rocker switch is OFF. System problem.	Turn THROTTLE MASTER rocker switch ON. Requires shop service and repair.
Optional Cart Tipper or Container Tipper Functions not working	Side door is OPEN if equipped with side door proximity switch. PUMP rocker switch is OFF. Engine RPM is too HIGH. System problem.	CLOSE side door.  Turn PUMP rocker switch ON. Reduce engine RPM below 1400 RPM. Requires shop service and repair.

<b>Problem</b>	<b>Probable Cause</b>	<b>Action</b>
Tailgate Functions not working	Side door is OPEN if equipped with side door proximity switch. E-STOP button(s) is not reset. Engine RPM is too HIGH. System problem.	CLOSE side door.  Reset E-STOP button(s). Reduce engine RPM below 1400 RPM. Requires shop service and repair.
Load will not eject	Linkage on control is binding.  If other hydraulic functions do not work, then basic system problem. Hydraulic system leak, malfunction, or component malfunction.	Check linkage. Free up and/or lubricate linkage on control as necessary.  See “No hydraulic functions” trouble stated above. Requires shop service and repair.
In-Cab controls not working	Ignition switch is OFF. Optional side access door is OPEN. Short or other problem in circuit.	Turn ignition switch to ON. CLOSE and latch side access door. Requires shop service and repair.
Rocker switch light failure	Switch is in OFF position. Ignition switch is OFF. Circuit breaker has been tripped. Light burned out. Short in circuit. Switch is damaged.	Place switch in ON position. Turn ignition switch to ON. Reset circuit breaker. Requires shop service and repair. Requires shop service and repair. Requires shop service and repair.

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